

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406 SCHAUMBURG, ILLINOIS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

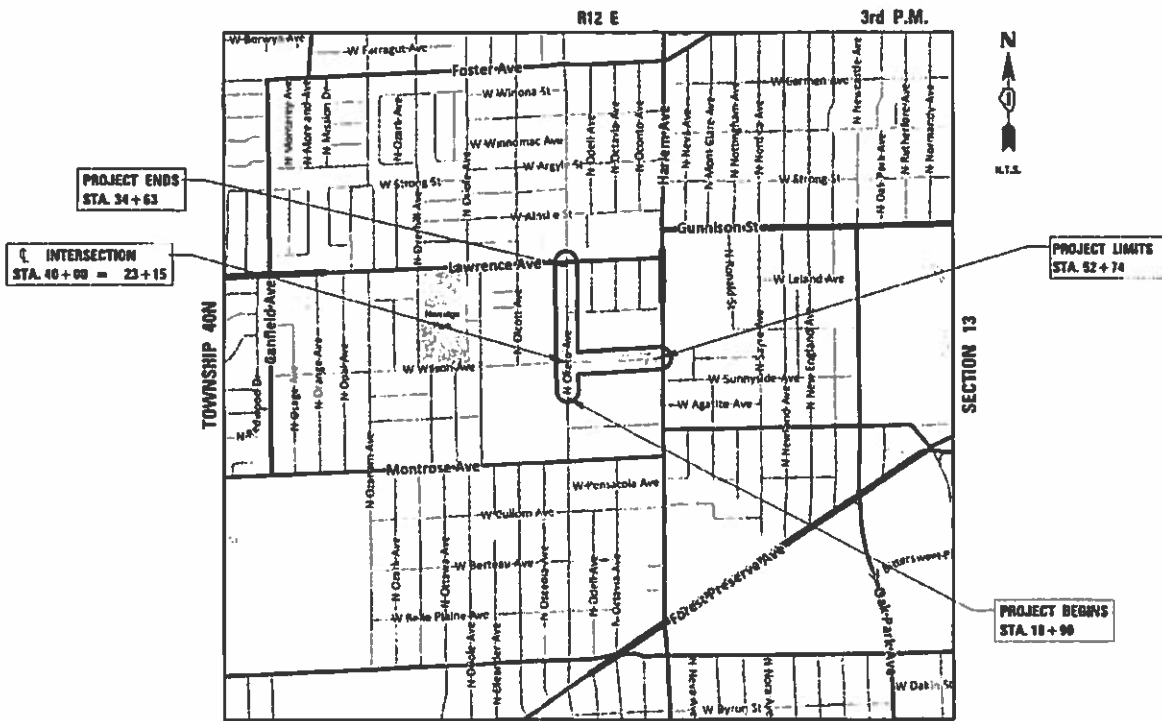
FOR LIST OF APPLICABLE HIGHWAY STANDARDS
SEE SHEET 2

01/19/2018 LETTING ITEM 073

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

MUN 1090 (OKETO AVENUE)
FAU 1362 (LAWRENCE AVE) TO FAU 2729 (MONTROSE AVE)
MUN 4020 (WILSON AVENUE)
FAU 1090 (OKETO AVE) TO FAU 348 (HARLEM AVE)
RESURFACING
SECTION NO. 17-00060-00-RS
PROJECT NO. VC71(125)
JOB NO. C-91-066-18
VILLAGE OF HARWOOD HEIGHTS
COOK COUNTY



NORWOOD PARK TOWNSHIP

LOCATION MAP

OKETO AVENUE AND WILSON AVENUE
GROSS LENGTH OF PROJECT = 3,097 LINEAL FEET (0.59 MILES)
NET LENGTH OF PROJECT = 3,097 LINEAL FEET (0.59 MILES)

TRAFFIC DATA

OKETO AVENUE
ADT (YEAR) = 7,300 (2014)
POSTED SPEED LIMIT = 30 MPH
WILSON AVENUE
ADT (YEAR) = 4,000 (2014)
POSTED SPEED LIMIT = 30 MPH

DESIGN DESIGNATION:
MAJOR COLLECTOR (NORTH OKETO AVENUE)
MINOR COLLECTOR (WEST WILSON AVENUE)



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.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
8-1-1 OR 1-800-892-0123

CB CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018 (847) 823-0500

PROFESSIONAL DESIGN FIRM NO. 184-001175
EXPIRATION DATE: 04/30/19

CONTRACT NO. 61E19

MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 AND 4020	17-00060-00-RS	COOK	35	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO.	61E19	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED: *[Signature]* 01/2/2017
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

PASSED: *[Signature]* 01/23/2017
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR
BID BASED ON
LIMITED REVIEW: *[Signature]* November 2017
REGIONAL ENGINEER

LEE M. FELL
062-053708
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

ENGINEER: *[Signature]* 11/30/17
DATE

LEE M. FELL
ILLINOIS REGISTRATION No. 062-053708
EXPIRATION DATE: 11/30/2017

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE LATEST REVISION; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", (IMUTCD); "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JUNE 2014 SEVENTH EDITION, THE "DETAILS" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.

CODES OF THE IEPA TITLE 35, AND O.S.H.A. SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

ALL REQUIRED PERMITS FROM THE PROPER GOVERNING AGENCY SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITY 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 CONTRACTOR 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 APPROXIMATE, AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS/HER 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. THIS WORK SHALL BE COVERED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE.

THE CONTRACTOR SHALL CONTACT IDOT'S BUREAU OF MATERIALS (PHONE 847-705-4337) AT LEAST 24 HOURS BEFORE PLACING HOT-MIX ASPHALT OR PORTLAND CEMENT CONCRETE.

MISCELLANEOUS

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 PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT, AND STRUCTURES TO BE ADJUSTED WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND WILL NOT EXCEED THE PLANNED QUANTITY.

THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASIS ON WHICH THEY ARE TO BE PLACED. PLAN THICKNESSES SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.

DETECTABLE WARNINGS SHALL BE INSTALLED AT INTERSECTING STREETS, DRIVEWAYS, AND ALLEYS AS SHOWN ON THE PLANS (SEE DETAILS ON SHEETS 16&17).

PAVEMENT GRADES: THE ELEVATIONS INDICATED ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

CONTRACTOR SHALL NOT PLACE SOD UNTIL THE TEMPERATURE IS 80 OR LESS AND THE FORECAST FOR THE NEXT 7 DAYS SHOWS TEMPERATURES OF 80 OR LESS. IF ALL OTHER PAY ITEMS ARE COMPLETED, THE CONTRACTOR WILL NOT BE CHARGED WORKING DAYS FOR DELAYS IN PARKWAY RESTORATION DUE TO TEMPERATURE.

NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.

AT NO TIME SHALL LESS THAN HALF OF THE STREET BE AVAILABLE FOR PARKING.

CONCRETE FILL BETWEEN NEW CURB AND GUTTER AND EXISTING PAVEMENT: FILLING THE GAP BETWEEN THE EXISTING PAVEMENT AND PROPOSED CURB AND GUTTER REMOVAL AND REPLACEMENT SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 606001.

ALL DETECTABLE WARNING TACTILES SHALL BE FIELD VERIFIED AND THE SIZE TO BE DETERMINED BY THE CONTRACTOR PRIOR TO ORDERING.

		DATE SENT TO UTILITY COMPANY	RESPONSE DATE	COMMENTS
AT&T (DISTRIBUTION)	1000 COMMERCE DRIVE, FLOOR 1 OAKBROOK, ILLINOIS 60523 ATTN: STEVE LARSON Office: 630-573-5450	7/24/2017	8/14/2017	NO CONFLICTS ANTICIPATED
COMCAST	688 INDUSTRIAL DRIVE ELMHURST, IL 60126 ATTN: MARTHA GIERAS Office: 630-600-6352	7/24/2017	7/31/2017	NO CONFLICTS ANTICIPATED
COMED	7601 S. LAWNDAL E AVENUE CHICAGO, IL 60652 ATTN: PETER KRATZER Mobile: 708-518-6209	7/24/2017		
G4S TECHNOLOGY	565 WILLOWBROOK CENTRE PARKWAY WILLOWBROOK, IL 60527 ATTN: DOUG GONES Office: 630-343-2826	7/24/2017		
HBK ENGINEERING	921 W. VAN BUREN STREET CHICAGO, IL 60607 ATTN: JAMES NORTON Office: 312-432-0076	7/24/2017		
NICOR GAS	1844 FERRY ROAD NAPERVILLE, IL 60563 ATTN: BRUCE KOPPANG Office: 630-388-3046	7/24/2017	8/18/2017	NO CONFLICTS ANTICIPATED
SPRINT NEXTEL CORPORATION	5600 N. RIVER ROAD, SUITE 200 ROSEMONT, IL 60018 ATTN: JIM BURTON Mobile: 708-955-6659	7/24/2017	7/26/2017	NO CONFLICTS ANTICIPATED

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HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-10	CURB RAMPS FOR SIDEWALKS
424006-03	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-04	MID-BLOCK CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
604001-04	FRAME AND LIDS TYPE 1
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS

DISTRICT 1 STANDARDS

BD-08	FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND HIGHWAY STANDARDS					MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\HARWOOD\HEIGHTS\170194\Civil\not.170194-01.sht		DRAWN - JEH	REVISED -							1090 & 4020	17-00060-00-RS	COOK	35	2
Default	PLOT SCALE = 20'	CHECKED - LMF	REVISED -		CONTRACT NO. 61E19									
	PLOT DATE = 11/7/2017	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES

			CONSTRUCTION CODE 0005
CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20800150	TRENCH BACKFILL	CU YD	50
28000510	INLET FILTERS	EACH	43
40600290	BITUMINOUS MATERIALS (TACK COAT)	FOUND	9000
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	175
40600625	LEVELING BINDER (MACHINE METHOD), NS0	TON	693
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	170
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NS0	TON	1385
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	497
42400800	DETECTABLE WARNINGS	SQ FT	300
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	11200
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	497
44000600	SIDEWALK REMOVAL	SQ FT	4164
44201713	CLASS D PATCHES, TYPE I, 6 INCH	SQ YD	250
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	250
44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	250
44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	250
550A2320	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12"	FOOT	185
60206905	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	1
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	8
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	7
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	9
67100100	MOBILIZATION	LSUM	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	50
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	100
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	235
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	205
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	340
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
88600600	DETECTOR LOOP REPLACEMENT	FOOT	120
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1868
Z0013798	CONSTRUCTION LAYOUT	LSUM	1
Z0018700	DRAINAGE STRUCTURE TO BE REMOVED	EACH	8
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	100
X0326862	STRUCTURES TO BE ADJUSTED	EACH	5
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	21
X4023000	TEMPORARY ACCESS (ROAD)	EACH	6
X4240430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	4164
X6022712	CATCH BASINS, TYPE A, 4'-DIAMETER WITH SPECIAL FRAME AND GRATE	EACH	14
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	18
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	35
XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	221
* INDICATES SPECIALITY ITEM			
~ INDICATES SPECIAL PROVISION			

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -
N:\HARWOODHEIGHTS\170194\Civil\qua_170194-01.sht		DRAWN - JEH	REVISED -
	PLOT SCALE = 20'	CHECKED - LMF	REVISED -
Default	PLOT DATE = 11/7/2017	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

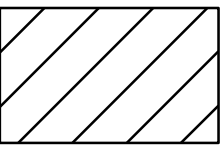
SUMMARY OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS
STA.		TO STA.	

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 & 4020	17-00060-00-RS	COOK	35	3
CONTRACT NO. 61E19				
[ILLINOIS] FED. AID PROJECT				

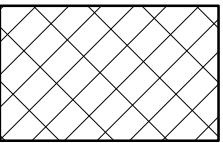
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR.
LEVELING BINDER (MACHINE METHOD), N50 - 1"	4% @ 50 GYR.
CLASS D PATCHES, 6 INCH	4% @ 70 GYR.

NOTE:

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SY/IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" 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.
- THE HIGH SIDE OF THE ROADWAY SHALL BE PAVED FIRST.



REMOVAL ITEMS: 2.75"

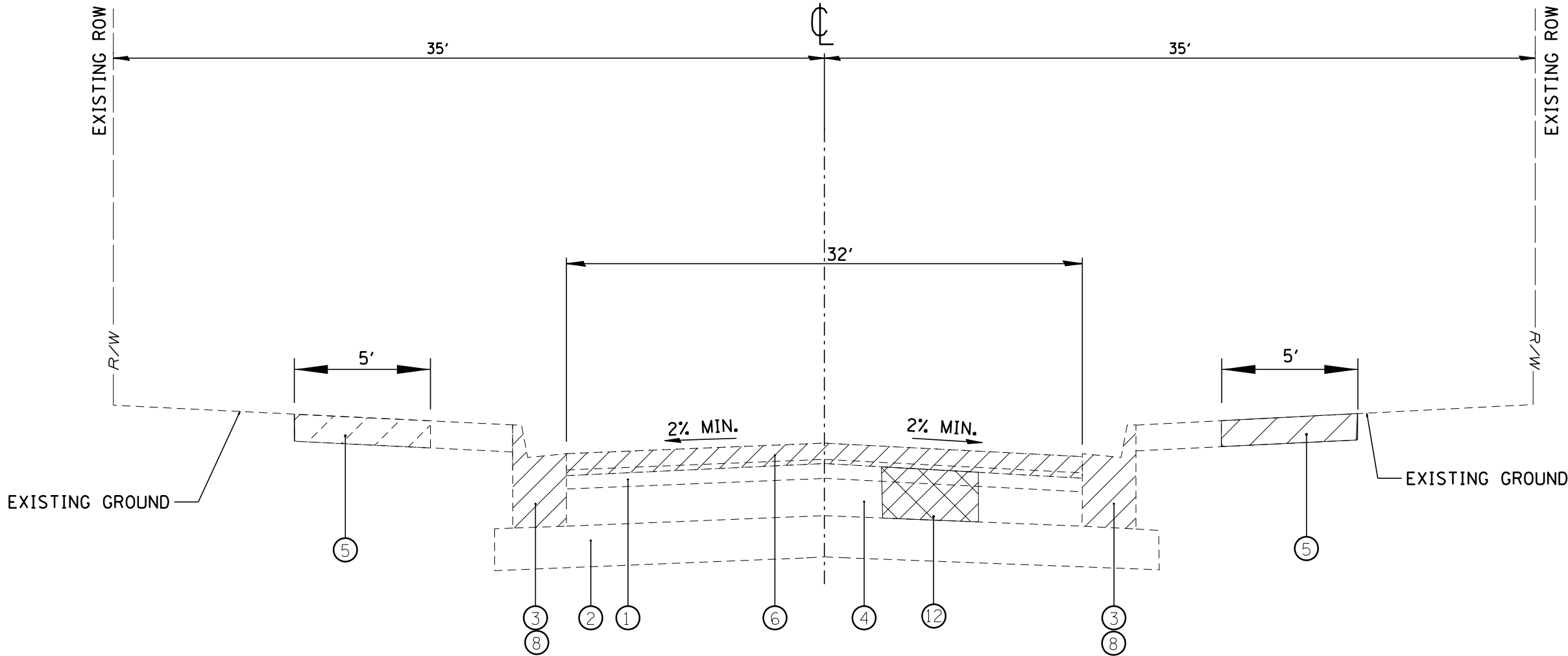


CLASS D PATCHES

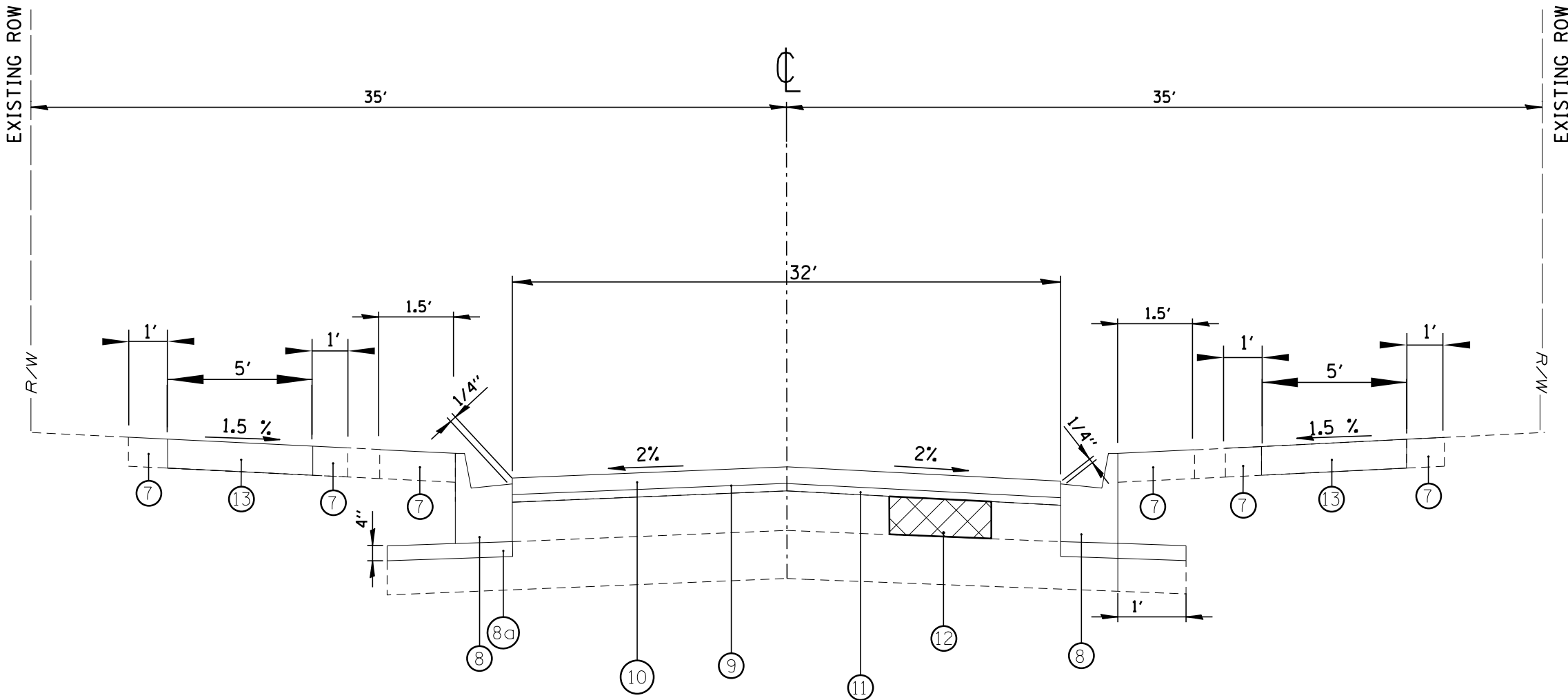
CORE DETAILS

	CORE STATION	CORE NUMBER	ASPHALT TOTAL THICKNESS	SUBBASE THICKNESS
OKETO AVE. PAVEMENT CORES	35+48.68	1	8.0"	14"
	32+91.02	2	11.7"	14"
	29+38.08	3	10.8"	NP
	26+83.78	4	11.9"	16"
	24+55.64	5	13.0"	NP
	22+21.20	6	12.1"	NP
	15+54.22	7	4.0"	6"
	12+01.58	8	4.0"	9"
WILSON AVE. PAVEMENT CORES	23+20.80	9	13.7"	1"
	23+29.49	10	11.3"	NP
	23+41.18	11	12.6"	NP
	23+53.62	12	15.3"	NP
	23+60.71	13	8.8"	NP

AVG. (OKETO) 9.4" 7.4"
AVG. (WILSON) 12.3" 1"
•NP = GRANULAR BASE NOT PRESENT



EXISTING TYPICAL SECTION
STA. 18+90 TO STA. 34+63, OKETO AVENUE



PROPOSED TYPICAL SECTION
STA. 18+90 TO STA. 34+63, OKETO AVENUE

NOTES:

- PAVING OF THE FULL ROADWAY WIDTH SHALL BE COMPLETED AT THE END OF EACH DAY OF PAVING TO PREVENT A LONGITUDINAL COLD JOINT FROM APPEARING WHEN OPPOSITE SIDES OF THE ROAD ARE PAVED ON DIFFERENT DAYS. THE CONTRACTOR SHALL ALSO ENSURE THAT AT THE END OF EACH DAY EACH PASS ENDS AT APPROXIMATELY THE SAME STATION TO PREVENT A COLD JOINT.
- ALL CURB AND GUTTER AND SIDEWALK REMOVAL AND REPLACEMENT SHALL BE SPOT REPAIR ONLY AS DIRECTED BY THE ENGINEER.

LEGEND

- ① EXISTING HOT-MIX ASPHALT PAVEMENT

② EXISTING AGGREGATE SUBBASE

③ EXISTING CURB AND GUTTER

④ EXISTING AGGREGATE BASE

⑤ EXISTING PCC SIDEWALK

⑥ HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"

⑦ SODDING, SALT TOLERANT (INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AND SIDEWALK REMOVAL AND REPLACEMENT PAY ITEMS)

••RESTORATION/LANDSCAPING PAY ITEMS AND BASIS OF PAYMENT WILL BE DECIDED IN PHASE 2

⑧ COMBINATION CONCRETE CURB AND GUTTER (B-6.12) REMOVAL AND REPLACEMENT (SPOT REPAIR) (AS DIRECTED BY THE ENGINEER)

⑧ 4" SUBBASE GRANULAR MATERIAL TYPE B. (INCLUDED IN COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT)
- ⑨ PROPOSED BITUMINOUS MATERIAL (TACK COAT)

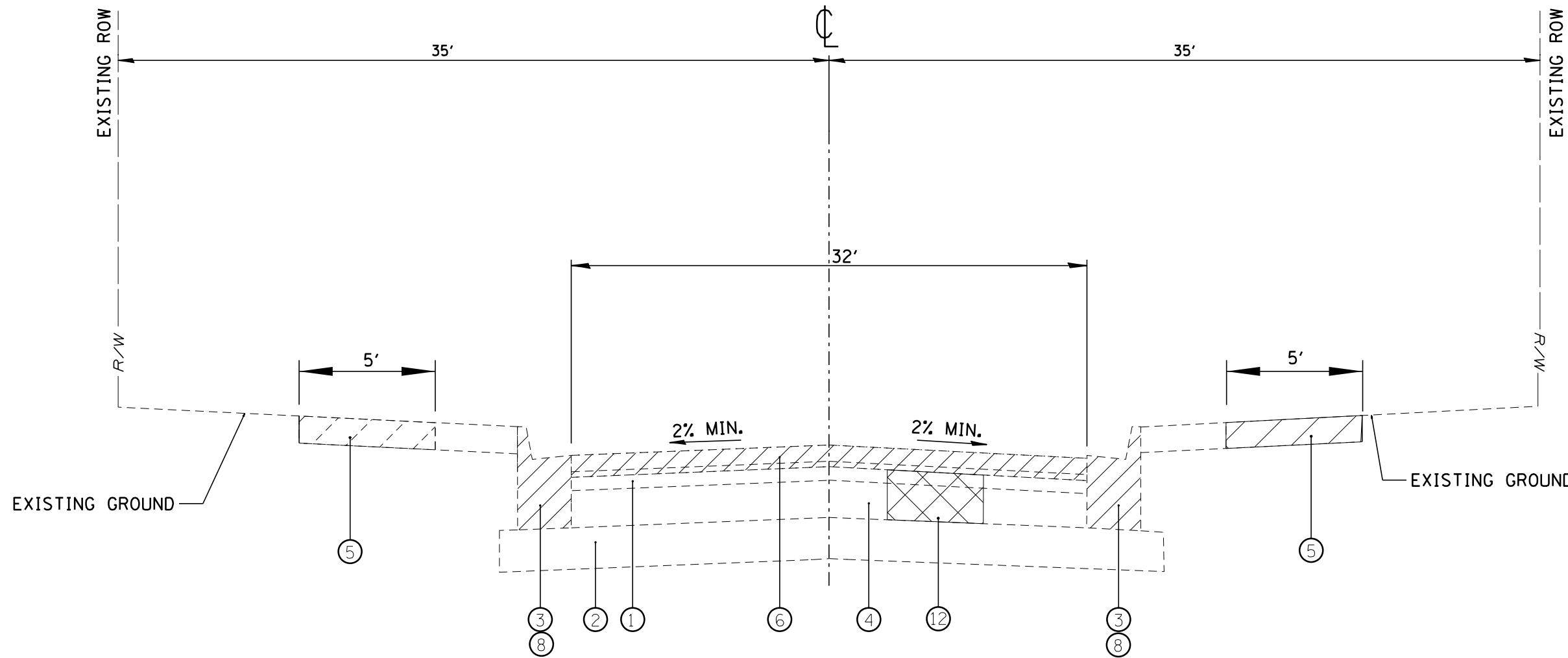
⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 - 2"

⑪ LEVELING BINDER (MACHINE METHOD), N50 - 1"

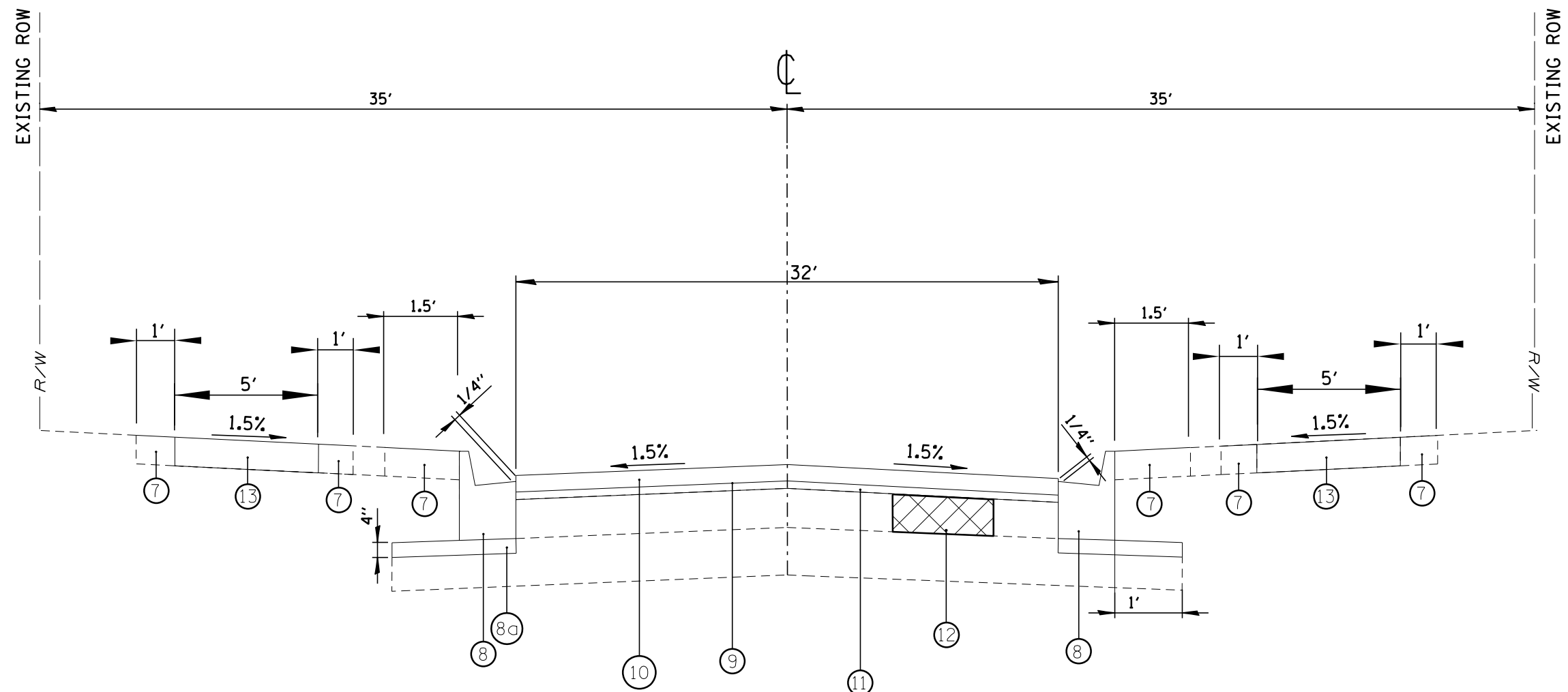
⑫ CLASS D PATCHES, 6 INCH

⑬ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (SPOT REPAIR AS DIRECTED BY THE ENGINEER) (SIDEWALKS THROUGH DRIVEWAYS SHALL BE 7 INCHES THICK - THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH)

FILE NAME = N:\HARWOODHEIGHTS\170194\Civil\Typical.04.dwg	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OKETO AVENUE TYPICAL SECTIONS					F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	eto,sght	DRAWN - JEH	REVISED -							1090 & 4020	17-00060-00-RS	COOK	35	4
	PLOT SCALE = NOT TO SCALE	CHECKED - LMF	REVISED -							CONTRACT NO.				
	PLOT DATE = 11/7/2017	DATE - 7/24/17	REVISED -							ILLINOIS FED. AID PROJECT				
SCALE: 50'					SHEET NO. 4 OF 35 SHEETS			STA. TO STA.						



EXISTING TYPICAL SECTION
STA. 40+00 TO STA. 52+74, WILSON AVENUE



PROPOSED TYPICAL SECTION
STA. 40+00 TO STA. 52+74, WILSON AVENUE

NOTES:

1. PAVING OF THE FULL ROADWAY WIDTH SHALL BE COMPLETED AT THE END OF EACH DAY OF PAVING TO PREVENT A LONGITUDINAL COLD JOINT FROM APPEARING WHEN OPPOSITE SIDES OF THE ROAD ARE PAVED ON DIFFERENT DAYS. THE CONTRACTOR SHALL ALSO ENSURE THAT AT THE END OF EACH DAY EACH PASS ENDS AT APPROXIMATELY THE SAME STATION TO PREVENT A COLD JOINT.
2. ALL CURB AND GUTTER AND SIDEWALK REMOVAL AND REPLACEMENT SHALL BE SPOT REPAIR ONLY AS DIRECTED BY THE ENGINEER.

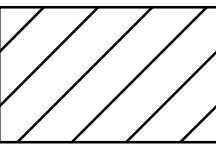
LEGEND

- | | | | |
|----|--|---|--|
| ① | EXISTING HOT-MIX ASPHALT PAVEMENT | ⑨ | PROPOSED BITUMINOUS MATERIAL (TACK COAT) |
| ② | EXISTING AGGREGATE SUBBASE | ⑩ | HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 - 2" |
| ③ | EXISTING CURB AND GUTTER | ⑪ | LEVELING BINDER (MACHINE METHOD), N50 - 1" |
| ④ | EXISTING AGGREGATE BASE | ⑫ | CLASS D PATCHES, 6 INCH |
| ⑤ | EXISTING PCC SIDEWALK | ⑬ | PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (SPOT REPAIR AS DIRECTED BY THE ENGINEER) (SIDEWALKS THROUGH DRIVEWAYS SHALL BE 7 INCHES THICK - THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH) |
| ⑥ | HOT-MIX ASPHALT SURFACE REMOVAL, 2.75" | | |
| ⑦ | SODDING, SALT TOLERANT (INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AND SIDEWALK REMOVAL AND REPLACEMENT PAY ITEMS) | | |
| | ••RESTORATION/LANDSCAPING PAY ITEMS AND BASIS OF PAYMENT WILL BE DECIDED IN PHASE 2 | | |
| ⑧ | COMBINATION CONCRETE CURB AND GUTTER (B-6.12) REMOVAL AND REPLACEMENT (SPOT REPAIR) (AS DIRECTED BY THE ENGINEER) | | |
| ⑧c | 4" SUBBASE GRANULAR MATERIAL TYPE B. (INCLUDED IN COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT) | | |

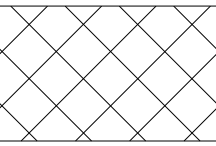
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR.
LEVELING BINDER (MACHINE METHOD), N50 - 1"	4% @ 50 GYR.
CLASS D PATCHES, 6 INCH	4% @ 70 GYR.

NOTE:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SY/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
4. THE HIGH SIDE OF THE ROADWAY SHALL BE PAVED FIRST.



REMOVAL ITEMS: 2.75"



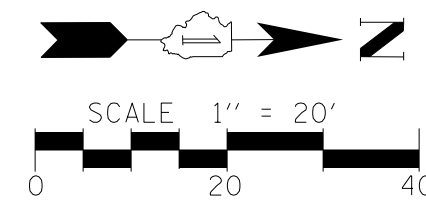
CLASS D PATCHES









CORE DETAILS

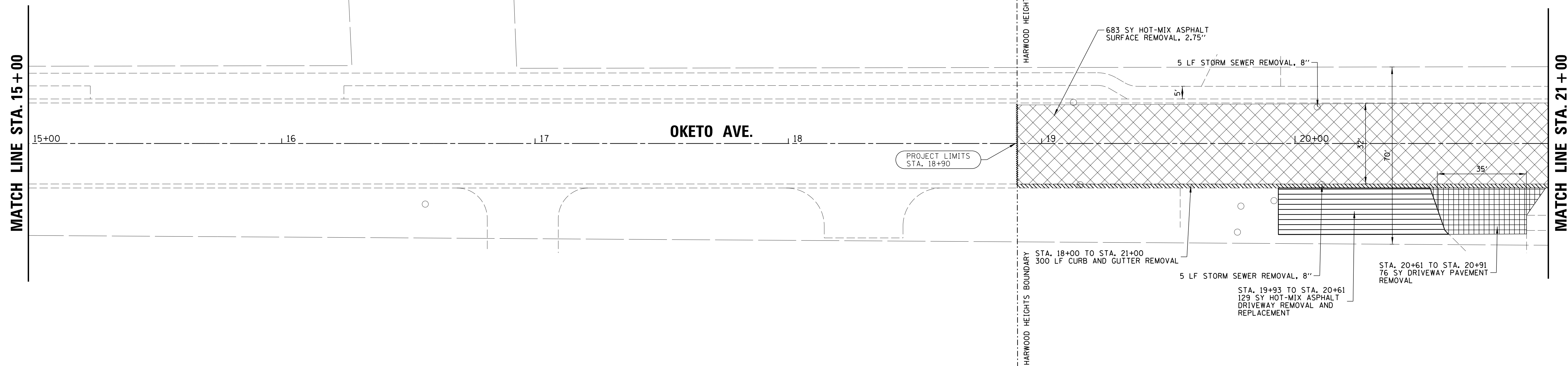
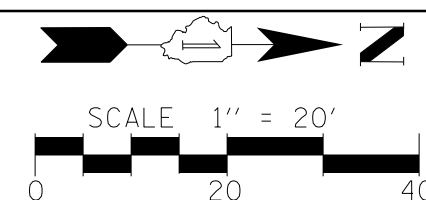
	CORE STATION	CORE NUMBER	ASPHALT TOTAL THICKNESS	SUBBASE THICKNESS
OKETO AVE. PAVEMENT CORES	35+48.68	1	8.0"	14"
	32+91.02	2	11.7"	14"
	29+38.08	3	10.8"	NP
	26+83.78	4	11.9"	16"
	24+55.64	5	13.0"	NP
	22+21.20	6	12.1"	NP
	15+54.22	7	4.0"	6"
	12+01.58	8	4.0"	9"
WILSON AVE. PAVEMENT CORES	23+20.80	9	13.7"	1"
	23+29.49	10	11.3"	NP
	23+41.18	11	12.6"	NP
	23+53.62	12	15.3"	NP
	23+60.71	13	8.8"	NP

AVG. (OKETO) 9.4" 7.4"
AVG. (WILSON) 12.3" 1"
•NP = GRANULAR BASE NOT PRESENT

FILE NAME = N:\HARWOODHEIGHTS\170194\Civil\Typical\Wilson.sht	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W WILSON AVENUE TYPICAL SECTIONS			F.A.U RTE. 1090 & 4020	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JEH	REVISED -					17-00060-00-RS	COOK	35	5	
	PLOT SCALE = NOT TO SCALE	CHECKED - LMF	REVISED -					CONTRACT NO.				
	PLOT DATE = 11/7/2017	DATE - 7/24/17	REVISED -					ILLINOIS FED. AID PROJECT				
				SCALE: 50'	SHEET NO. 5 OF 35 SHEETS	STA.	TO STA.					



- | | |
|---|---|
|  | CURB AND GUTTER REMOVAL |
|  | SIDEWALK REMOVAL |
|  | HOT-MIX ASPHALT
SURFACE REMOVAL,
2.75" |
|  | FRAMES AND LIDS TO BE
ADJUSTED |
|  | PCC DRIVEWAY REMOVAL |
|  | HMA DRIVEWAY REMOVAL |
|  | HOT-MIX ASPHALT SURFACE
REMOVAL - BUTT JOINT |
|  | DRAINAGE STRUCTURES TO BE
REMOVED |



FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>OKETO AVENUE EXISTING CONDITIONS AND REMOVAL PLAN</div>				MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\HARWOODHEIGHTS\170194\Civil\rem_oketo01.170194.sht	DRAWN - JEH	REVISED -	1090 & 4020						17-00060-00-RS	COOK	35	6	
	PLOT SCALE = 20'	CHECKED - LMF	REVISED -		CONTRACT NO. 61E19								
Default	PLOT DATE = 11/7/2017	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	

MATCH LINE STA. 21 + 00

MATCH LINE STA. 27 + 00

MATCH LINE STA. 27 + 00

MATCH LINE STA. 33 + 00

LEGEND:

- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- FRAMES AND LIDS TO BE ADJUSTED
- PCC DRIVEWAY REMOVAL
- HMA DRIVEWAY REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- DRAINAGE STRUCTURES TO BE REMOVED

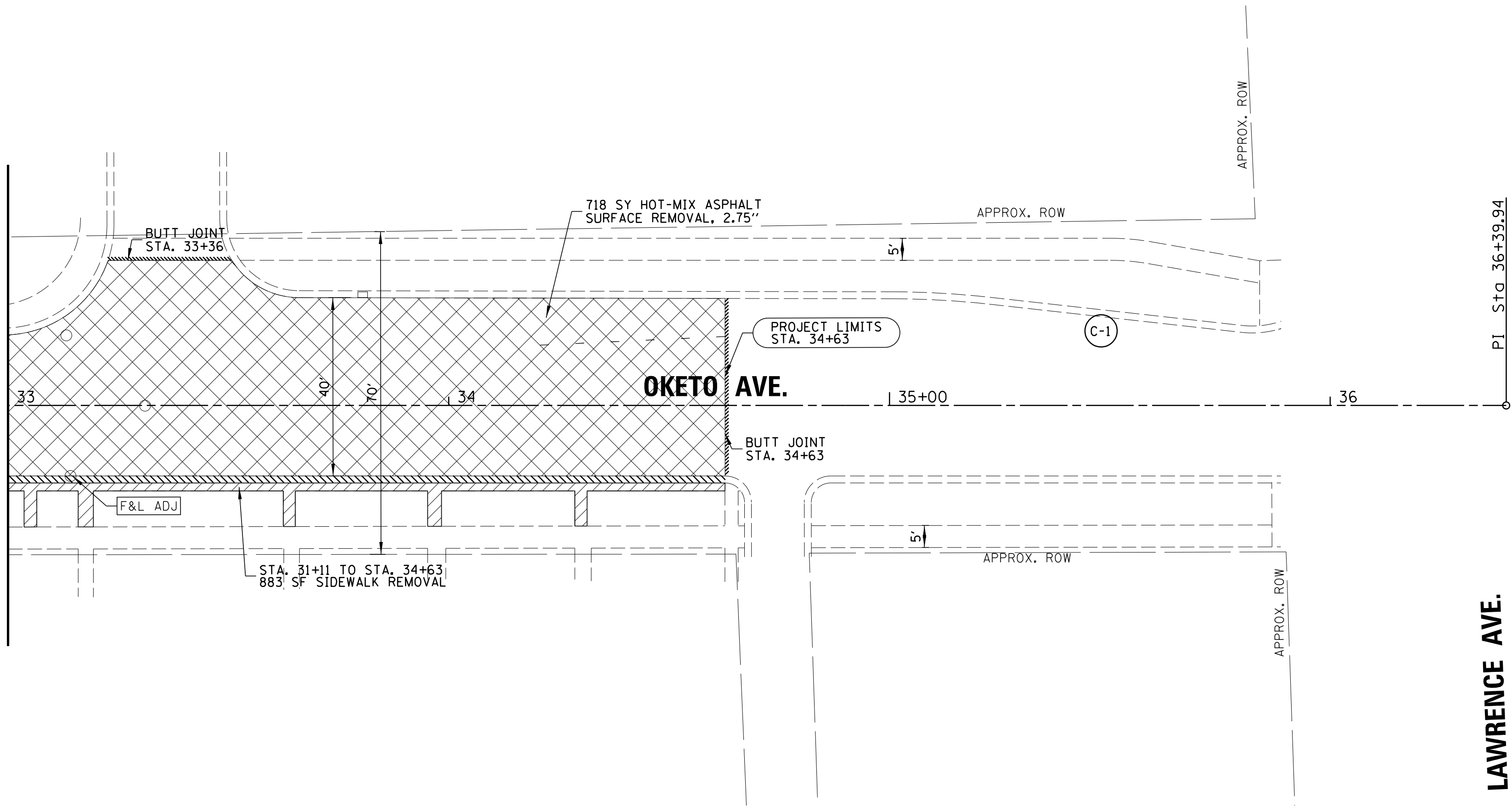
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN

MUN RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 7
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

MATCH LINE STA. 33 + 00



LEGEND:

- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- FRAMES AND LIDS TO BE ADJUSTED
- PCC DRIVEWAY REMOVAL
- HMA DRIVEWAY REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- DRAINAGE STRUCTURES TO BE REMOVED

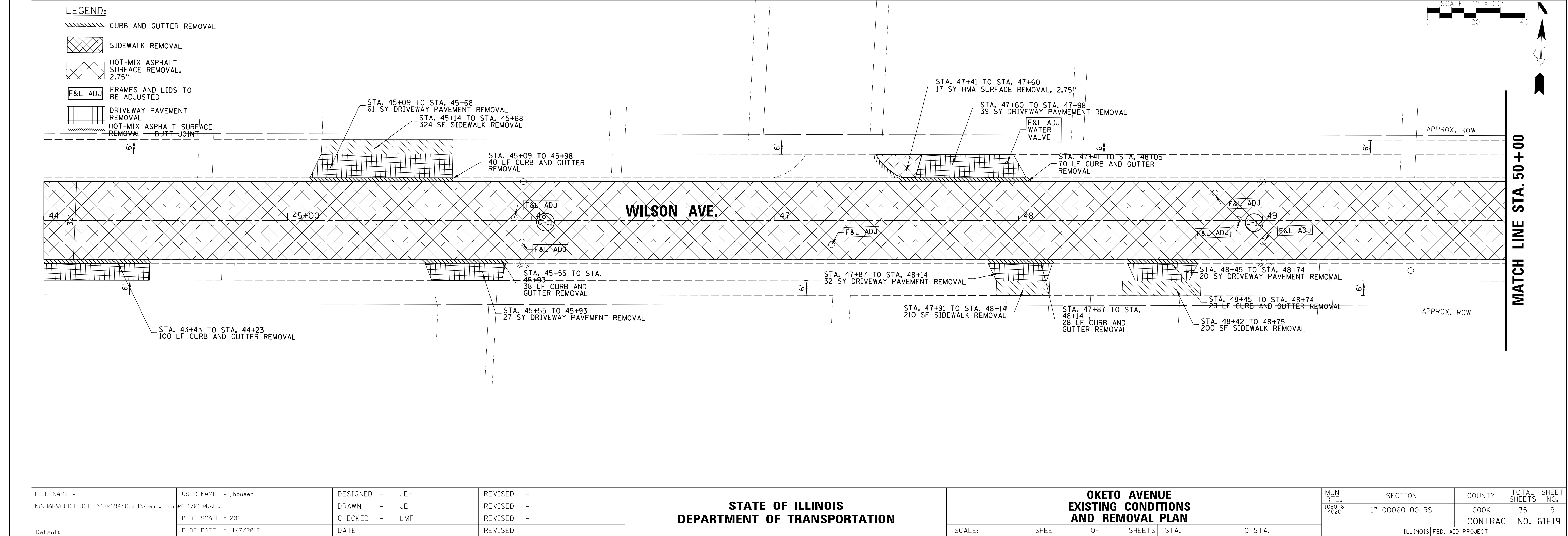
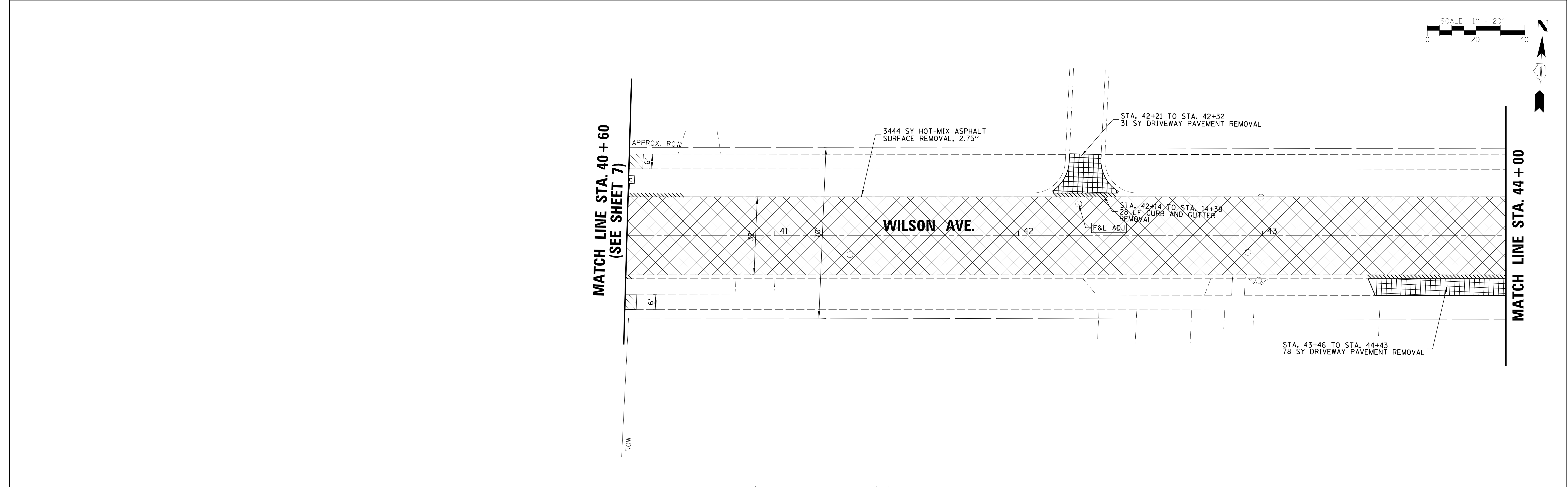
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Default	PLOT DATE = 11/7/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

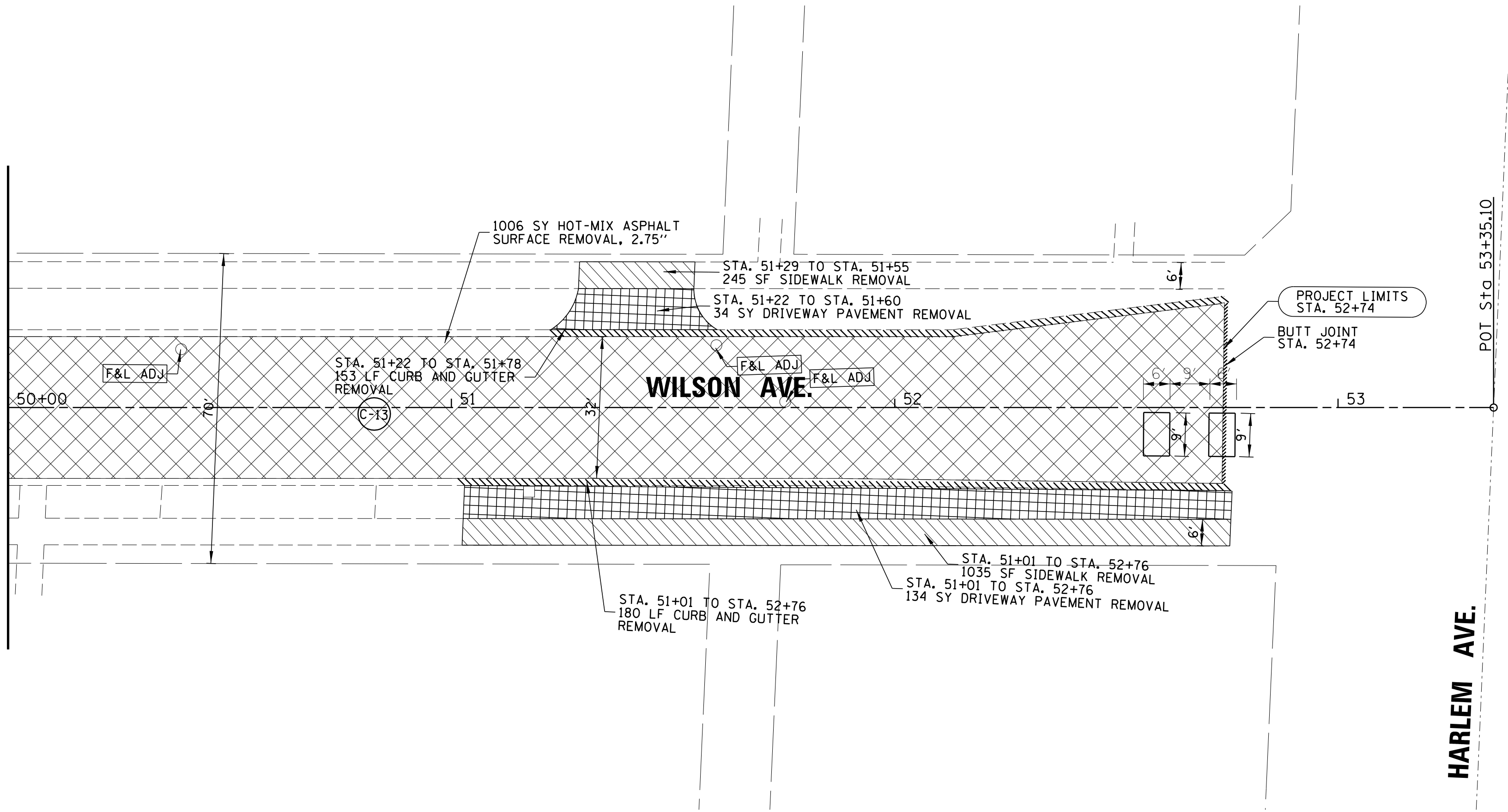
OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 & 4020	17-00060-00-RS	COOK	35	8
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				

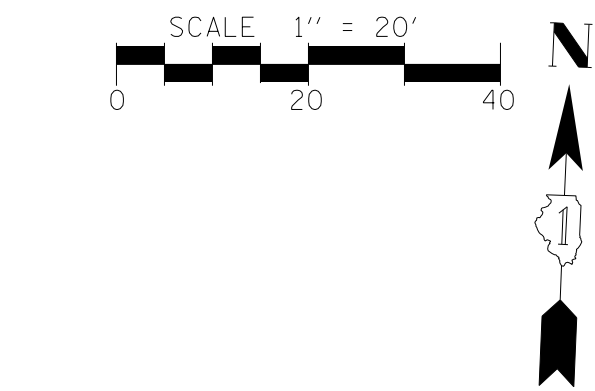


MATCH LINE STA. 50 + 00



HARLEM AVE.

POT Sta. 53+35.10



LEGEND:

- //// Curb and Gutter Removal
- XXXX Sidewalk Removal
- XXXX Hot-Mix Asphalt Surface Removal, 2.75"
- F&L ADJ Frames and Lids to be Adjusted
- XXXX Driveway Pavement Removal
- ===== Hot-Mix Asphalt Surface Removal - Butt Joint

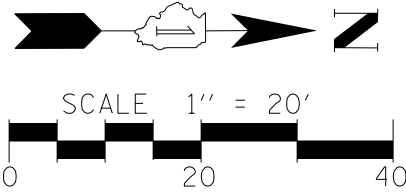
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	PLOT DATE = 11/7/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

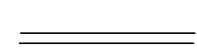

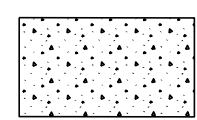

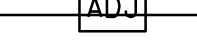
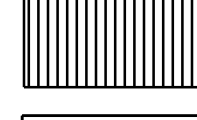
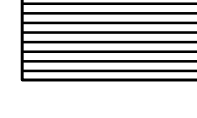
OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN

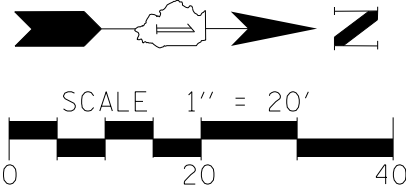
SCALE: SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 & 4020	17-00060-00-RS	COOK	35	10
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				



LEGEND:

-  COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
-  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
-  PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
-  DETECTABLE WARNING
-  STRUCTURES TO BE ADJUSTED
-  PCC DRIVEWAY REPLACEMENT
-  HMA DRIVEWAY REPLACEMENT



MATCH LINE STA. 15 + 00

MATCH LINE STA. 21 + 00

OKETO AVE.

PROJECT LIMITS
STA. 18+90

HARWOOD HEIGHTS BOUNDARY

ADJ.

ADJ.

ADJ.

ADJ.

129 SY HOT-MIX ASPHALT
DRIVEWAY REMOVAL AND
REPLACEMENT

76 SY PORTLAND CEMENT
CONCRETE DRIVEWAY
PAVEMENT, 7 INCH

FILE NAME = N:\HARWOODHEIGHTS\170194\Civil\p1n_oketo01.170194.sht Default	USER NAME = jhouseh	DESIGNED - JEH	REVISED -
		DRAWN - JEH	REVISED -
	PLOT SCALE = 20'	CHECKED - LMF	REVISED -
	PLOT DATE = 11/7/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OKETO AVENUE
PROPOSED PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 & 4020	17-00060-00-RS	COOK	35	11
		CONTRACT NO. 61E19		
ILLINOIS FED. AID PROJECT				

MATCH LINE STA. 21 + 00

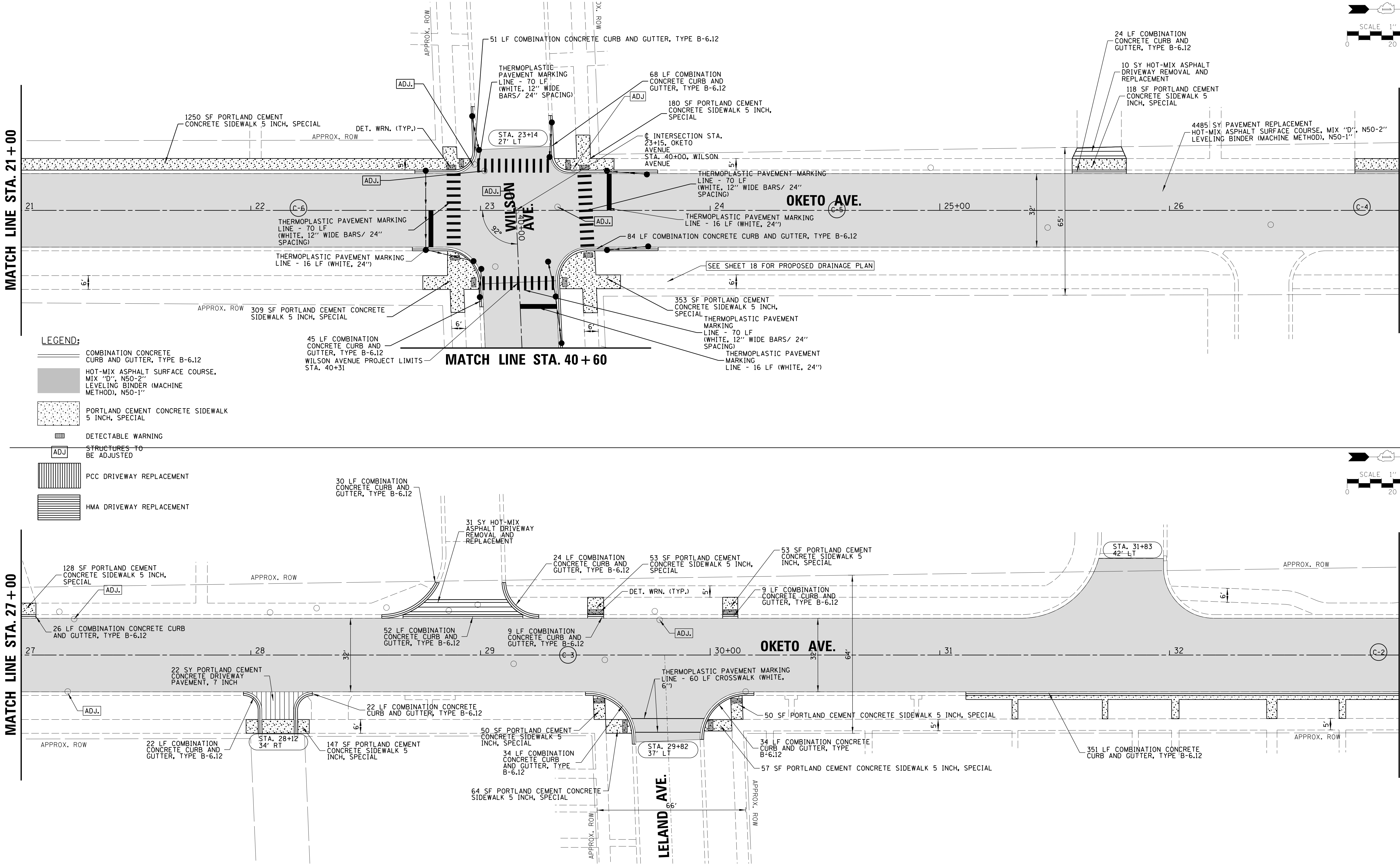
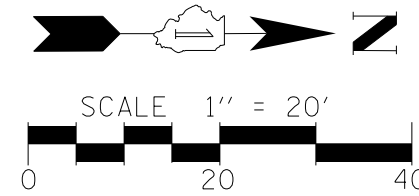
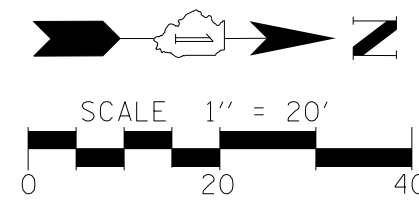
MATCH LINE STA. 27 + 00

MATCH LINE STA. 27 + 00

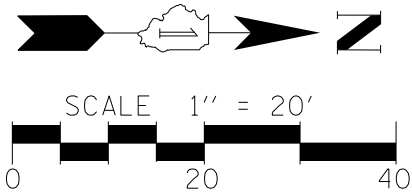
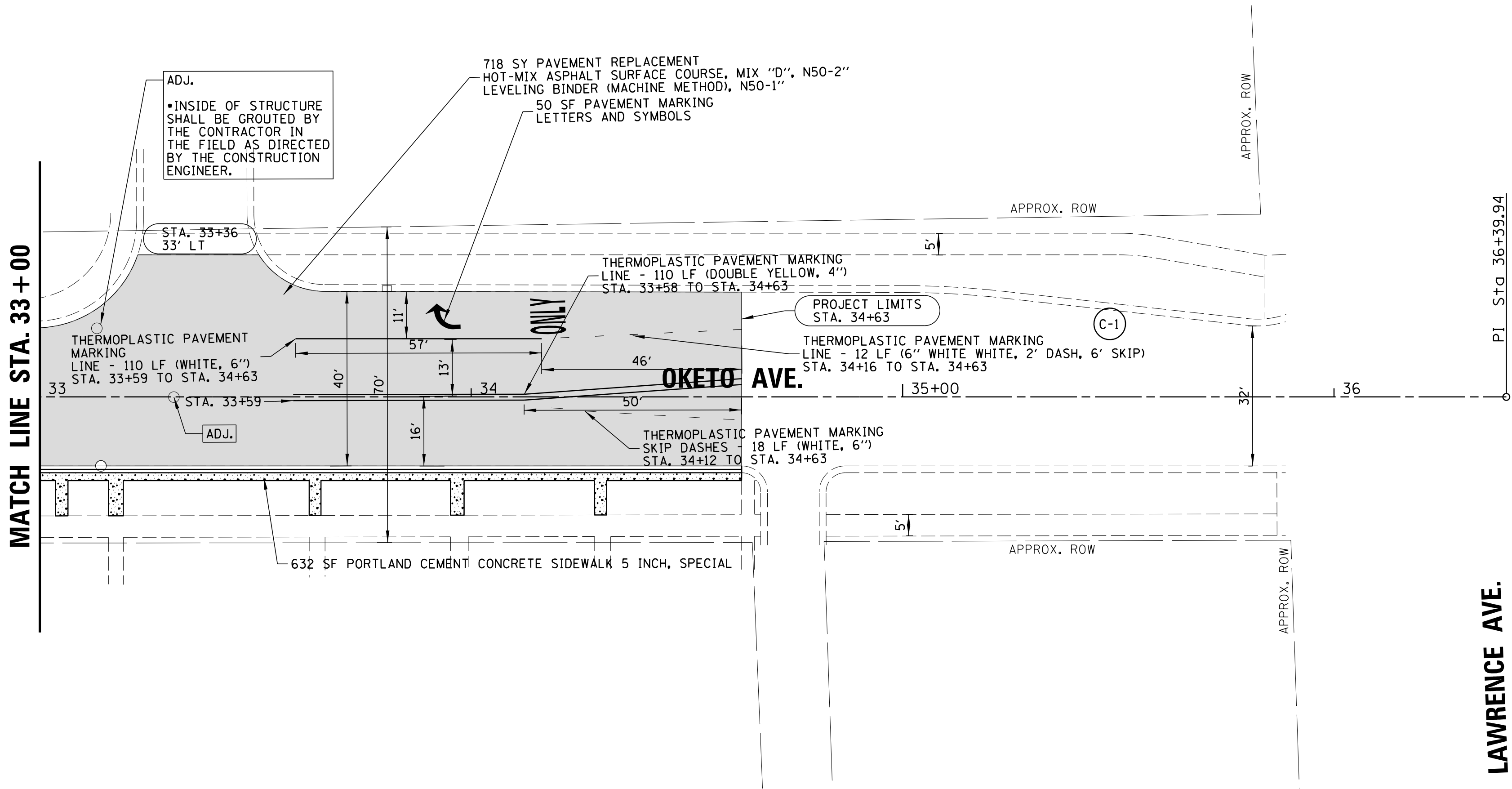
MATCH LINE STA. 33 + 00

LEGEND:

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
- DETECTABLE WARNING
- STRUCTURES TO BE ADJUSTED
- PCC DRIVEWAY REPLACEMENT
- HMA DRIVEWAY REPLACEMENT



FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OKETO AVENUE PROPOSED PLAN				MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT DATE = 11/7/2017	DATE -	REVISED -										
					SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		



- LEGEND:**
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
 - DETECTABLE WARNING
 - STRUCTURES TO BE ADJUSTED
 - PCC DRIVEWAY REPLACEMENT
 - HMA DRIVEWAY REPLACEMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

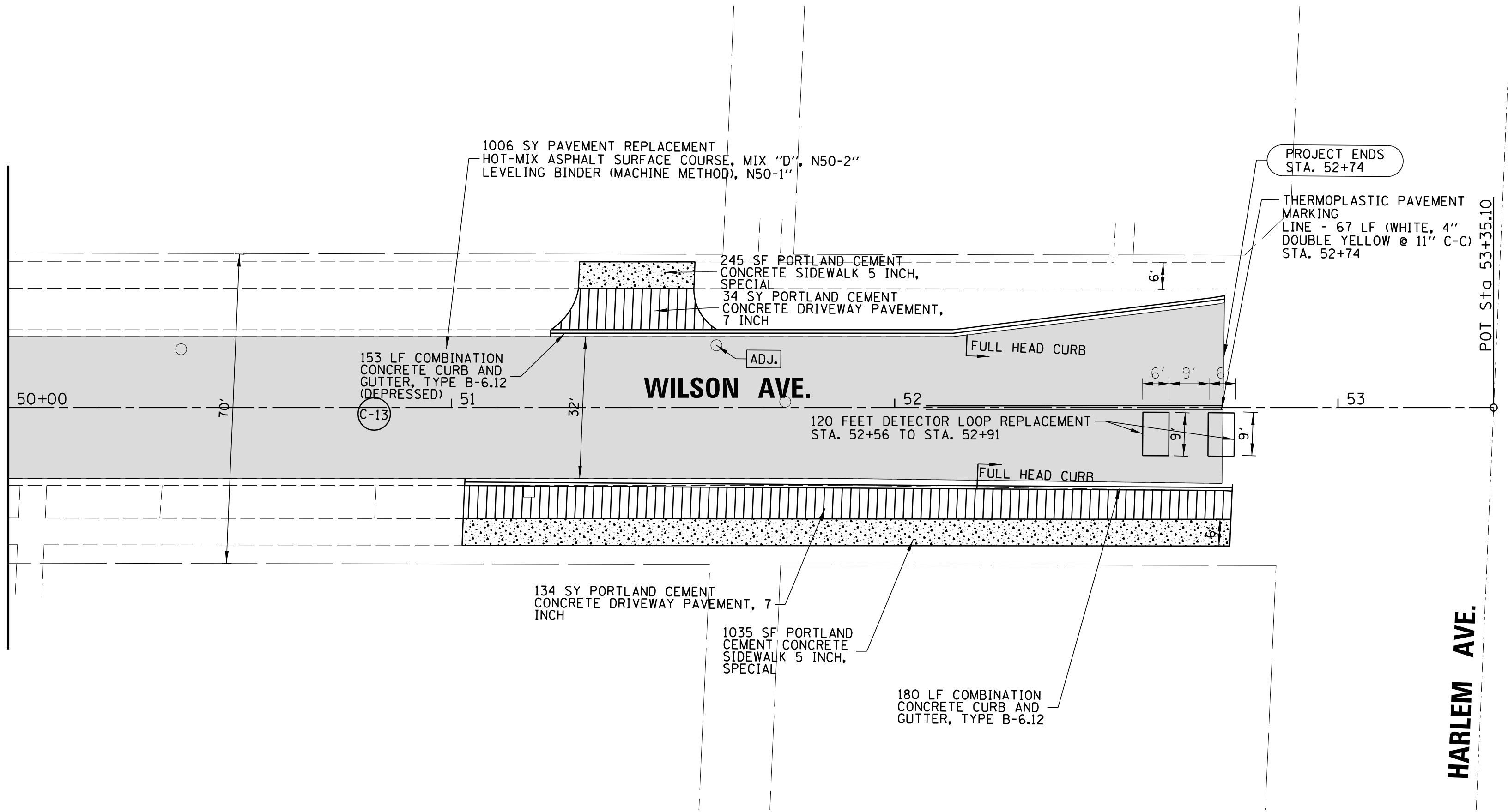
OKETO AVENUE
PROPOSED PLAN

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 13
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

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Default	PLOT DATE = 11/7/2017	DATE -	REVISED -

MATCH LINE STA. 50+00



- LEGEND:
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
 - DETECTABLE WARNING
 - STRUCTURES TO BE ADJUSTED
 - PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH

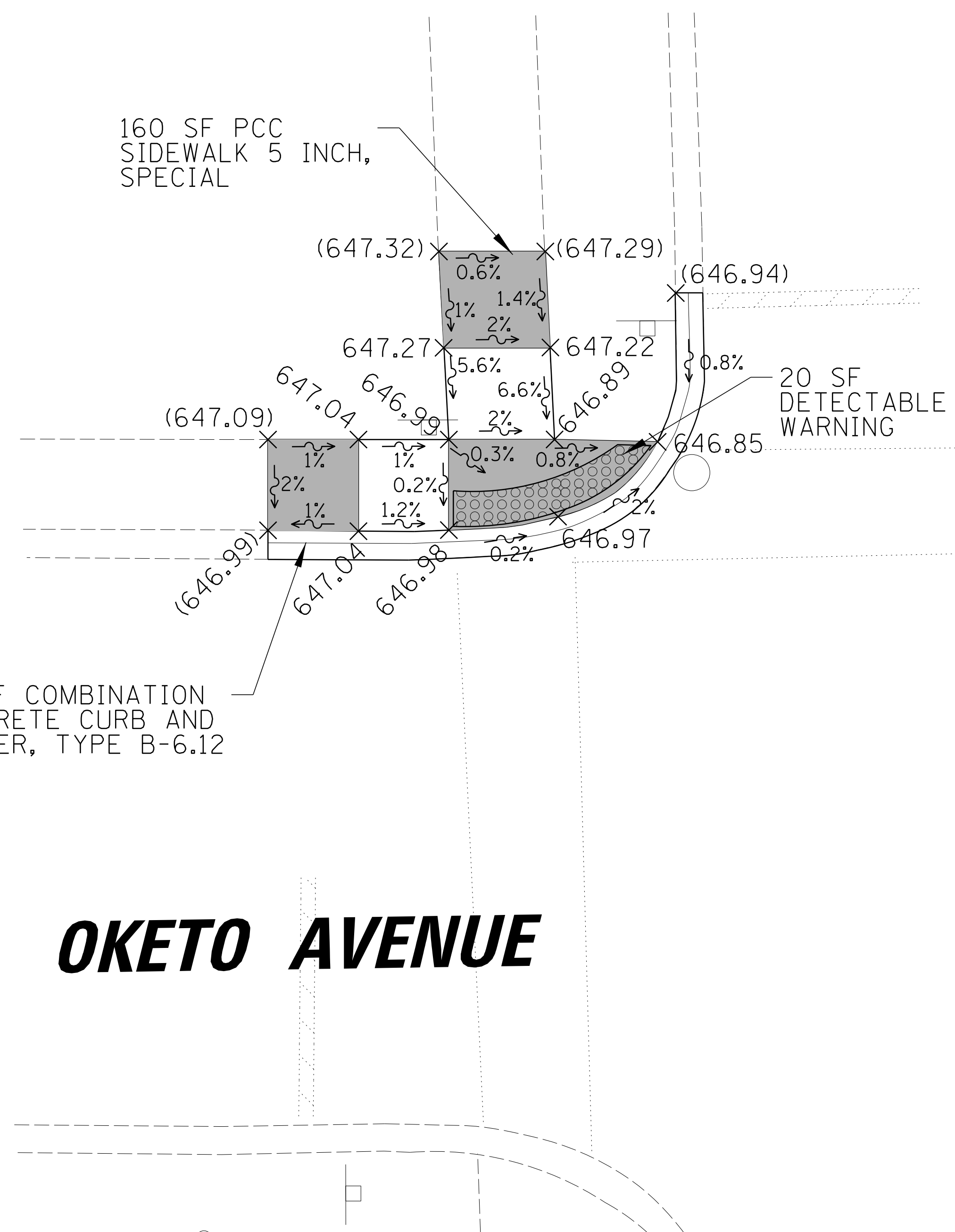
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILSON AVENUE
PROPOSED PLAN

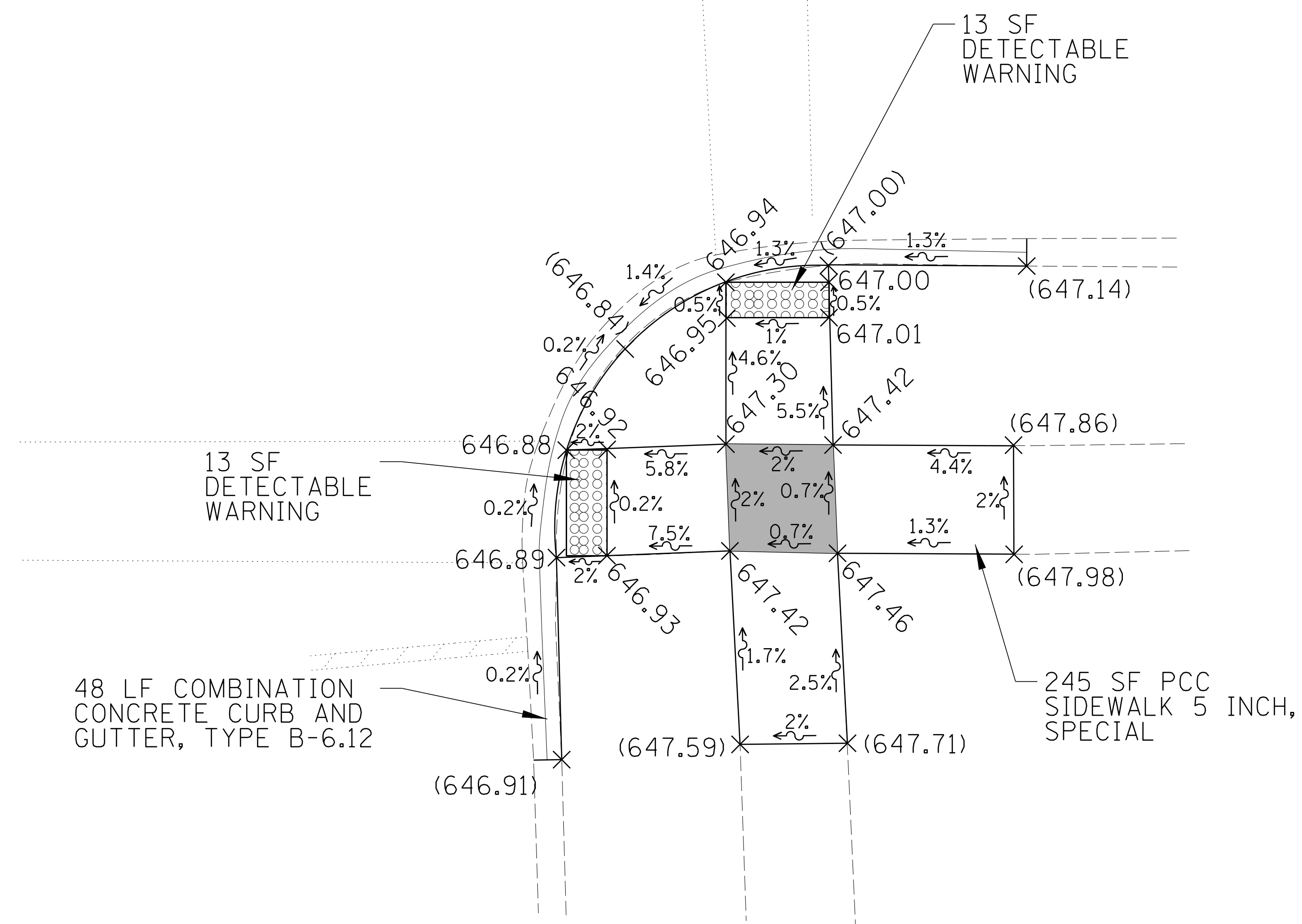
SCALE: SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 & 4020	17-00060-00-RS	COOK	35	15
CONTRACT NO. 61E19				ILLINOIS FED. AID PROJECT



WILSON AVENUE

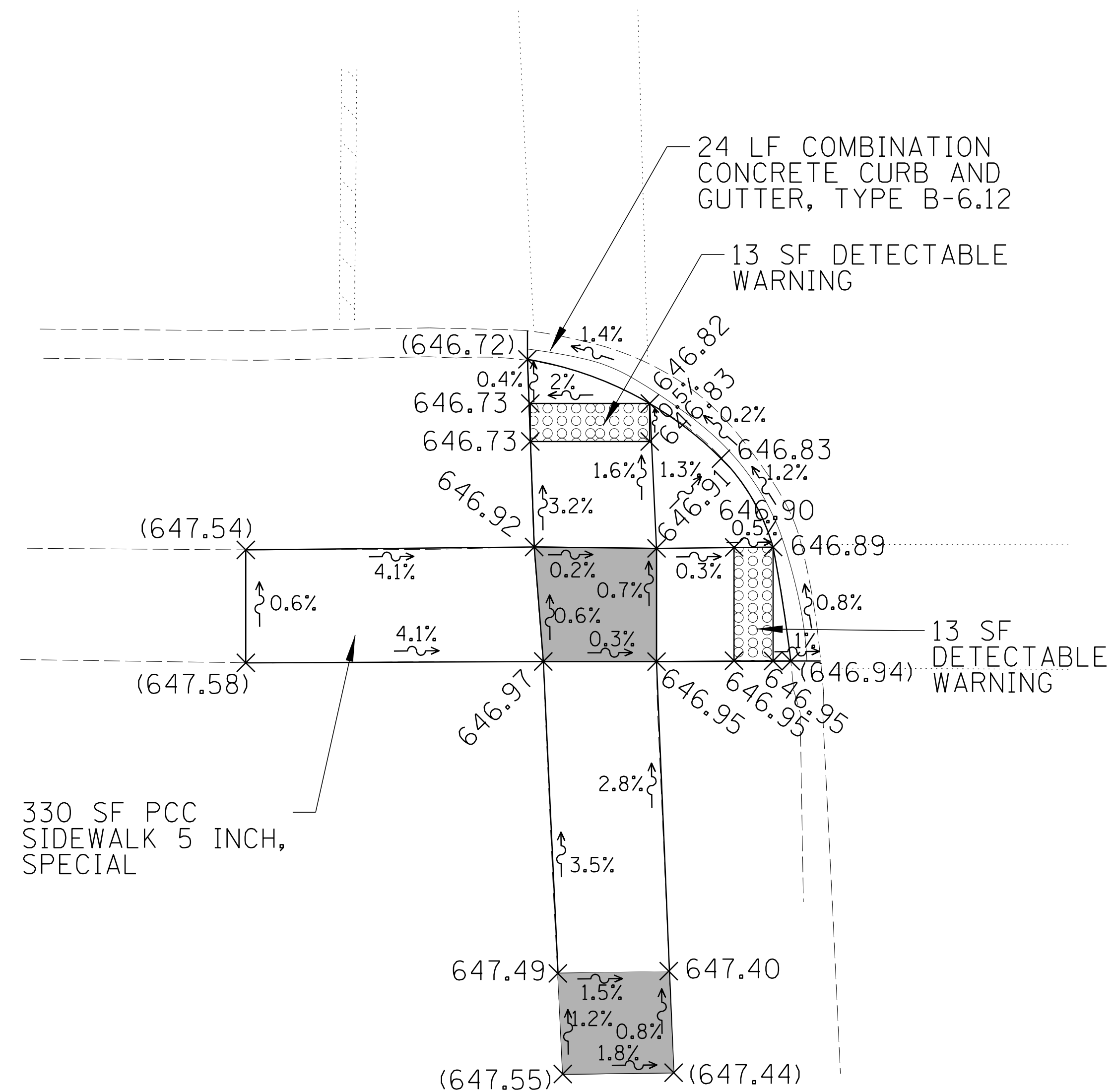
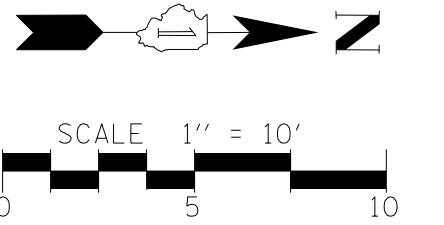
WILSON AVENUE



(XXX.XX) = EXISTING SPOT GRADE
XXX.XX = PROPOSED SPOT GRADE

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	<div>STATE OF ILLINOIS</div> <div>DEPARTMENT OF TRANSPORTATION</div>	<div>OKETO AND WILSON AVENUE</div> <div>SOUTHWEST AND NORTHEAST CORNER</div> <div>SIDEWALK REPLACEMENT PLAN</div>	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 5'	CHECKED - LMF	REVISED -	CONTRACT NO. 61E19							
Default	PLOT DATE = 10/5/2017	DATE -	SCALE:			SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		

OKETO AVENUE

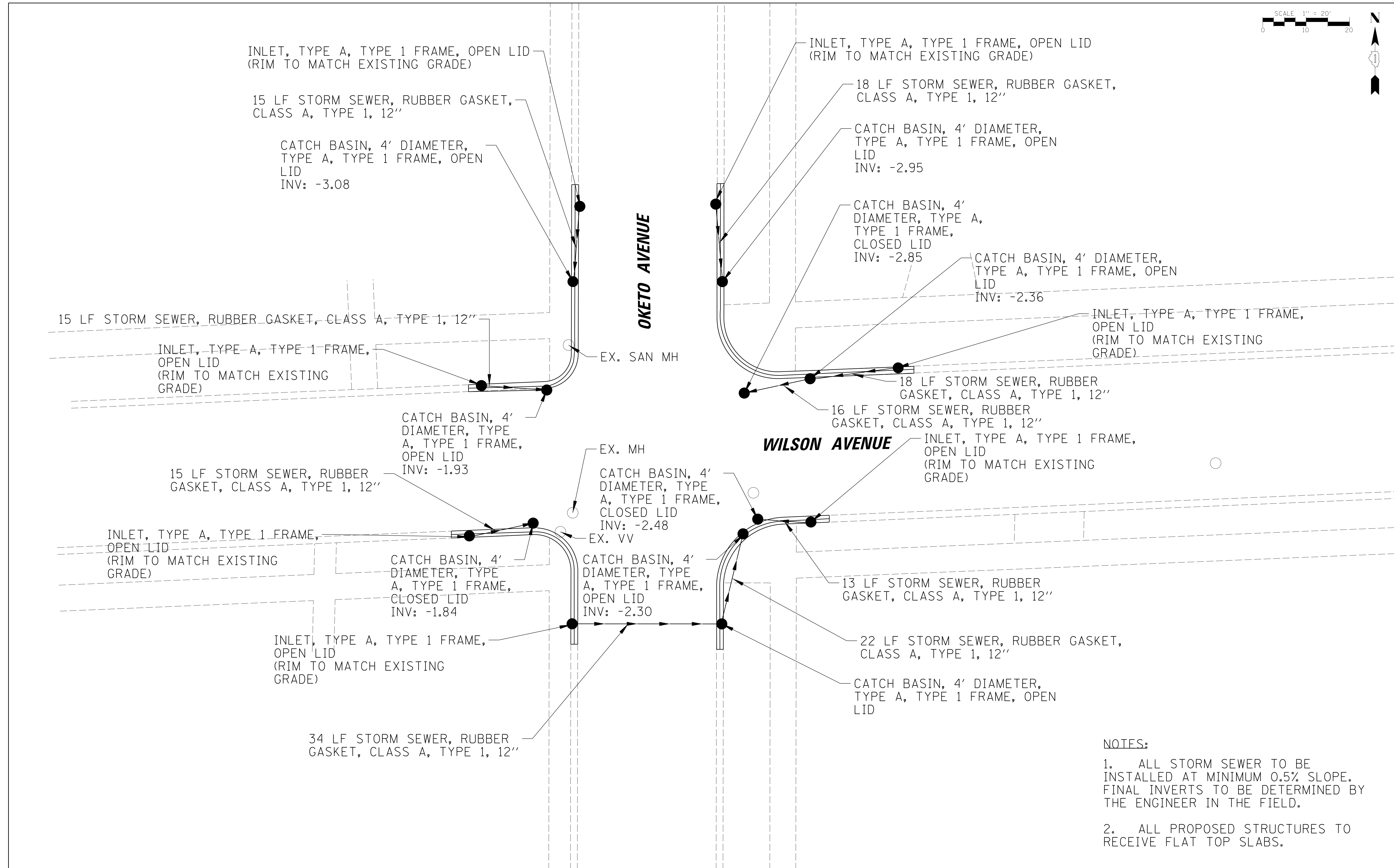
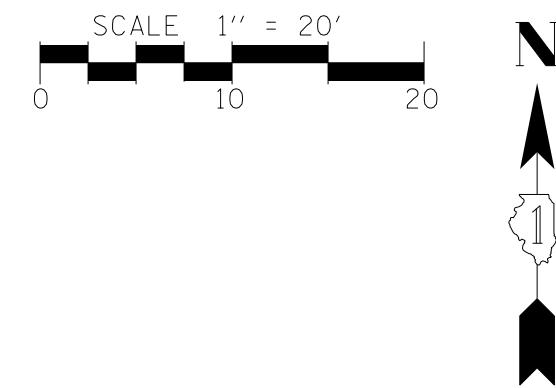


WILSON AVENUE

LEGEND:

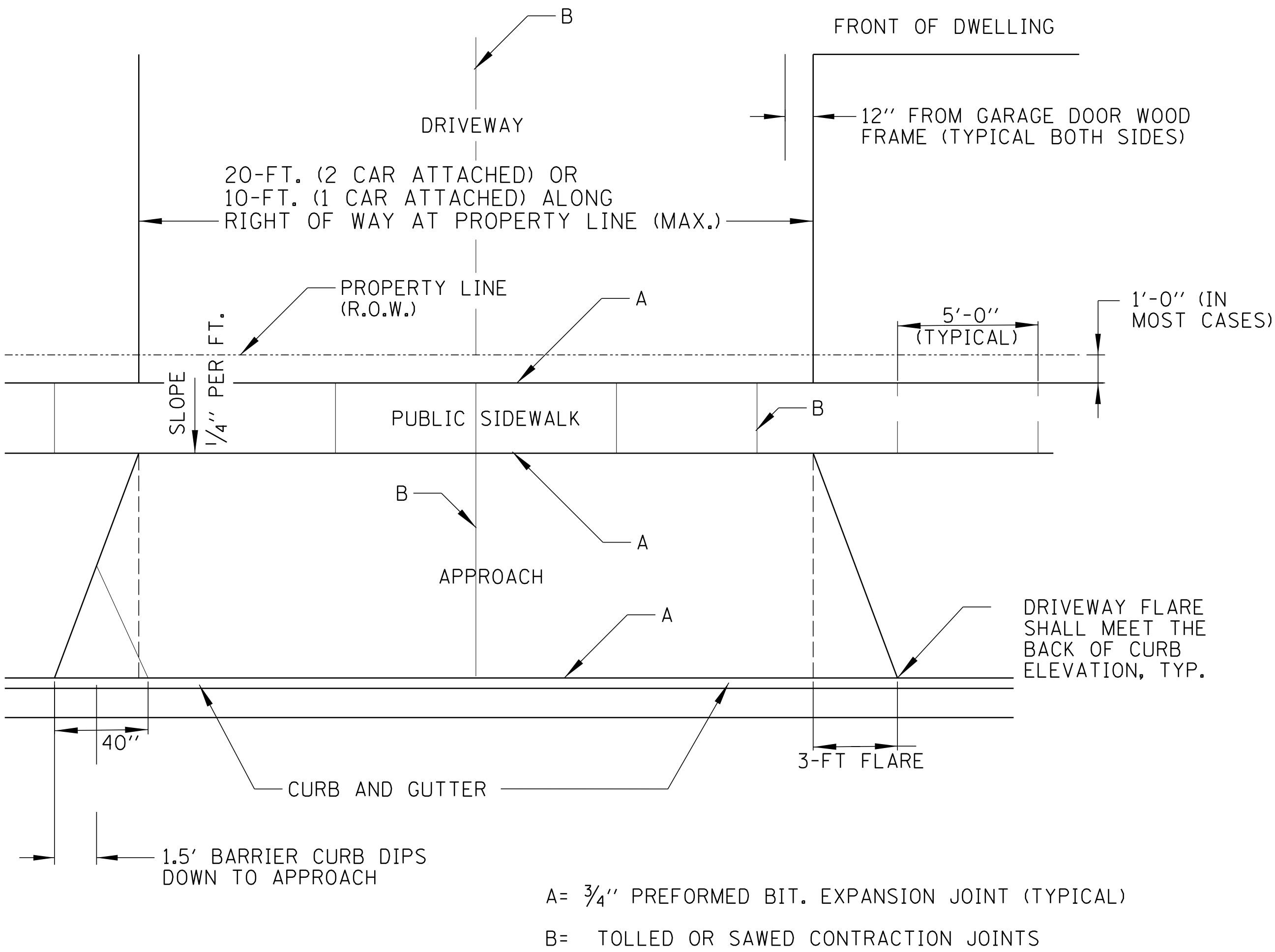
(XXX.XX) = EXISTING SPOT GRADE
XXX.XX = PROPOSED SPOT GRADE

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OKETO AND WILSON AVENUE SOUTHEAST CORNER SIDEWALK REPLACEMENT PLAN	MUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default	PLOT SCALE = 5'	CHECKED - LMF	REVISED -			CONTRACT NO. 61E19					
	PLOT DATE = 10/5/2017	DATE -	REVISED -			SCALE:	SHEET OF	SHEETS	STA. TO STA.	ILLINOIS/FED. AID PROJECT	



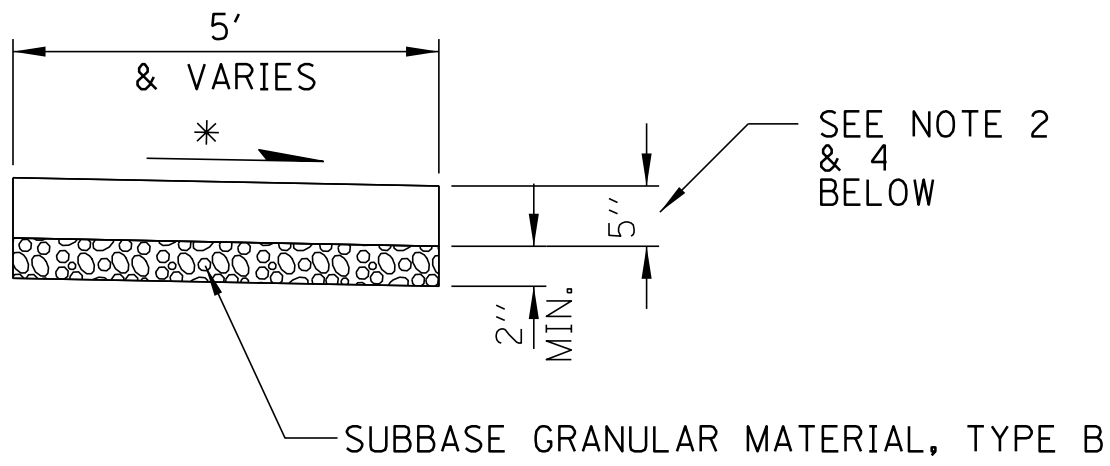
- NOTES:**
- ALL STORM SEWER TO BE INSTALLED AT MINIMUM 0.5% SLOPE. FINAL INVERTS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
 - ALL PROPOSED STRUCTURES TO RECEIVE FLAT TOP SLABS.

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED DRAINAGE PLAN					MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\HARWOODHEIGHTS\170194\Civil\exh01.170194.sht		DRAWN - JEH	REVISED -							1090 & 4020	17-00060-00-RS	COOK	35	18
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Default	PLOT DATE = 10/5/2017	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			



DRIVEWAY WITH A CURB AND GUTTER

- GENERAL NOTES:
1. DRIVEWAY SHALL HAVE A MIN. SLOPE OF 2% AND MAX. SLOPE OF 6%.
 2. APPROACH SHALL HAVE A MIN. SLOPE OF 2% AND MAX. OF 6%.
 3. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED. (95% PROCTOR)
 4. PUBLIC SIDEWALK SHALL BE 6" AT RESIDENTIAL DRIVEWAYS AND 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS. (NO WIRE MESH)
 5. MINIMUM THICKNESS FOR APPROACH. (NO WIRE MESH). THIS WILL BE PAID FOR BY THE FOLLOWING ITEMS:
 - A. 7" THK. P.C. CONCRETE ON 2" AGGREGATE BASE COURSE TYPE B OR
 - B. 3" THK. HOT-MIX ASPHALT SURFACE, MIX "D" N50 ON 6" AGGREGATE BASE COURSE TYPE B
 6. SODDING, SALT TOLERANT AND TOPSOIL, 4" (100) RESTORATION SHALL BE INCLUDED IN THE COST OF THIS WORK.



- CROSS SLOPE 2% OR AS SHOWN ON CROSS SECTIONS
1. ALL REQUIRED EARTH EXCAVATION TO CONSTRUCT P.C.C. SIDEWALK SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK 5 INCH, SPECIAL.
 2. WHEN FORMS ARE REMOVED FROM THE SIDEWALK EITHER THE SIDEWALK SHALL BE BARRICADED OR BACKFIELD WITHIN 24 HOURS.
 3. SODDING, SALT TOLERANT AND TOPSOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK 5 INCH, SPECIAL.
 4. PUBLIC SIDEWALK SHALL BE 6" AT RESIDENTIAL DRIVEWAYS AND 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS.

P.C.C. SIDEWALK DETAIL

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION DETAILS				MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\HARWOODHEIGHTS\170194\Civil\det.170194-01.sht		DRAWN - JEH	REVISED -						1090 & 4020	17-00060-00-RS	COOK	35	19
	PLOT SCALE = 7'	CHECKED - LMF	REVISED -		CONTRACT NO. 61E19								
Default	PLOT DATE = 10/5/2017	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

VARIABLE - TO MEET EXISTING
DIMENSIONS AND FIELD CONDITIONS
(SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT
IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF
SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL
PAY ITEM.

SEE STATE STANDARD 606001

EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) * *

18" (450)
MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN
SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100)
SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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 (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR
"COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

* 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.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE INCLUDED IN THE
COST OF THIS WORK.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING
CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE
PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ 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.

⑥ 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.

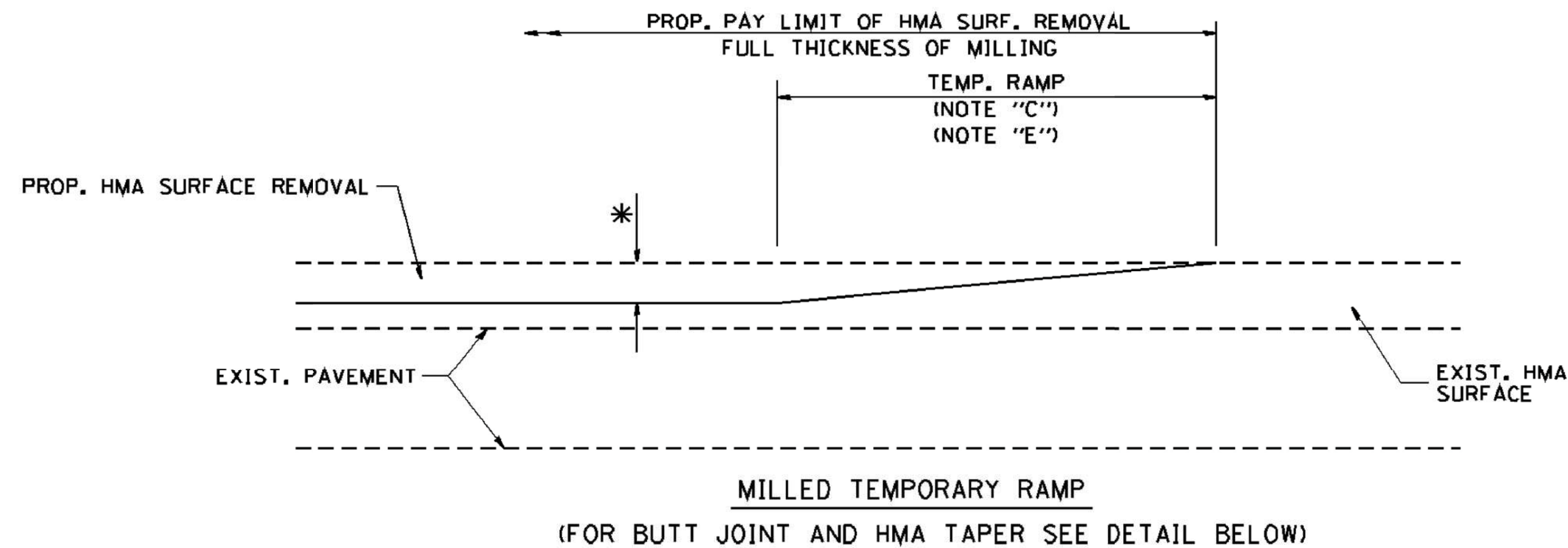
⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL
BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606
OF THE STANDARD SPECIFICATIONS.

⑧ 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.

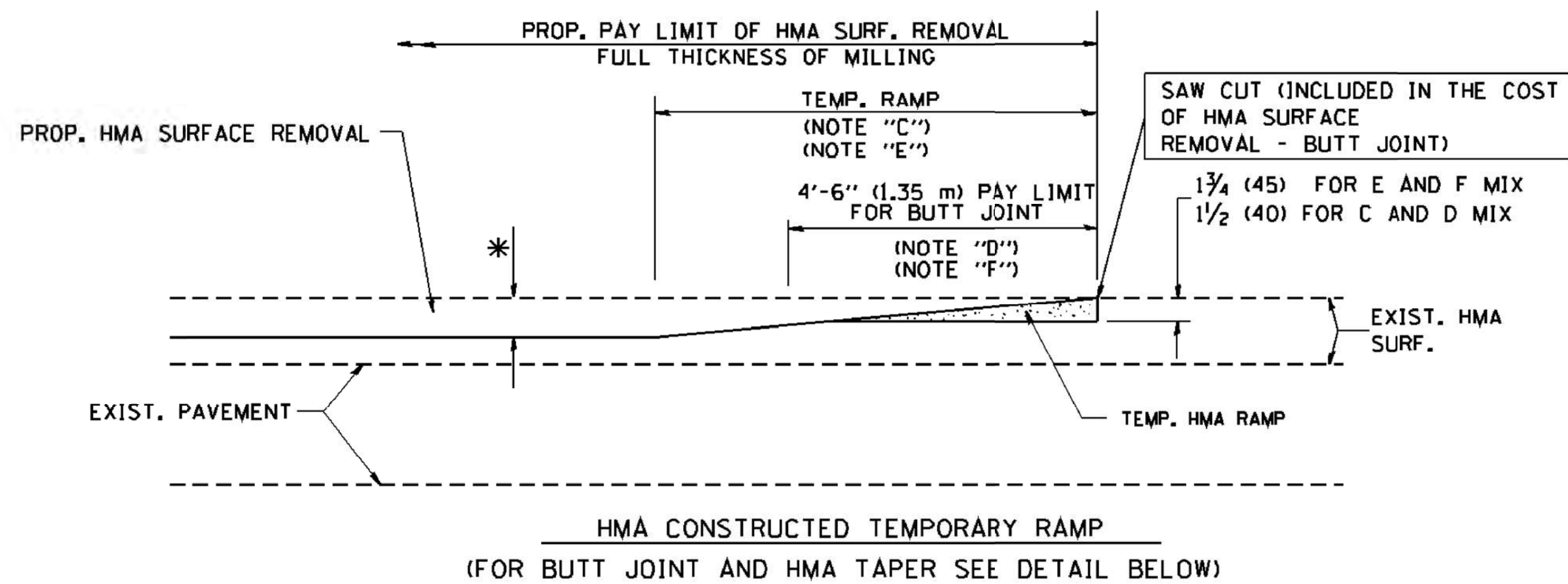
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\drivakosgn\0100315\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97							1090 AND 4020	17-00060-00-RS	COOK	35	20
PLOT SCALE = 50.000' / 1" IN.		CHECKED -	REVISED - M. GOMEZ 01-22-01							BD600-06 (BD-24)		CONTRACT NO. 61E19		
PLOT DATE = 12/15/2009		DATE - 03-11-94	REVISED - R. BORO 12-15-09							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

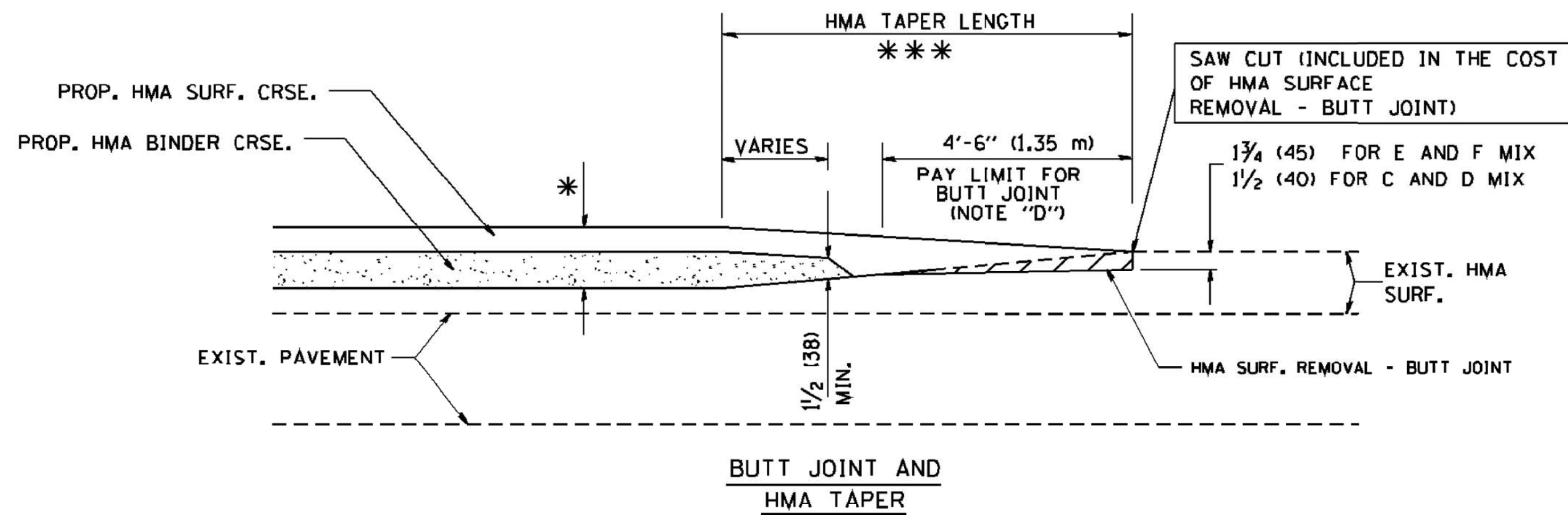


OPTION 1

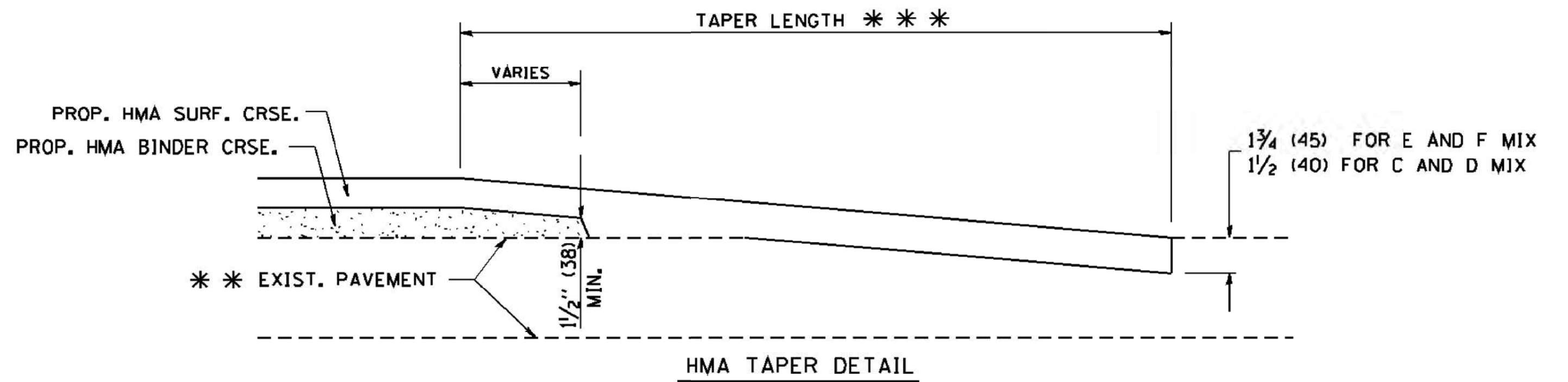
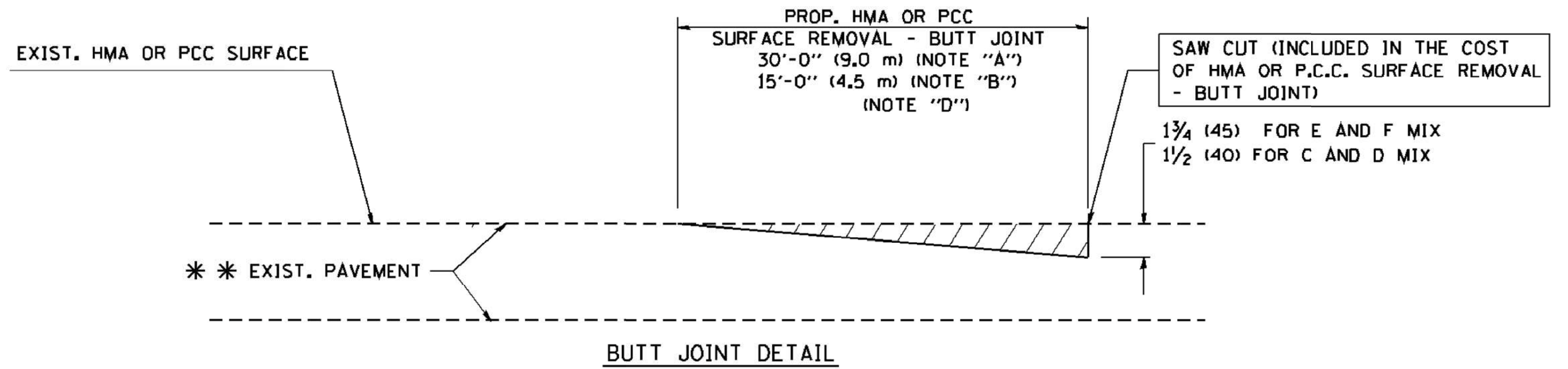


OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

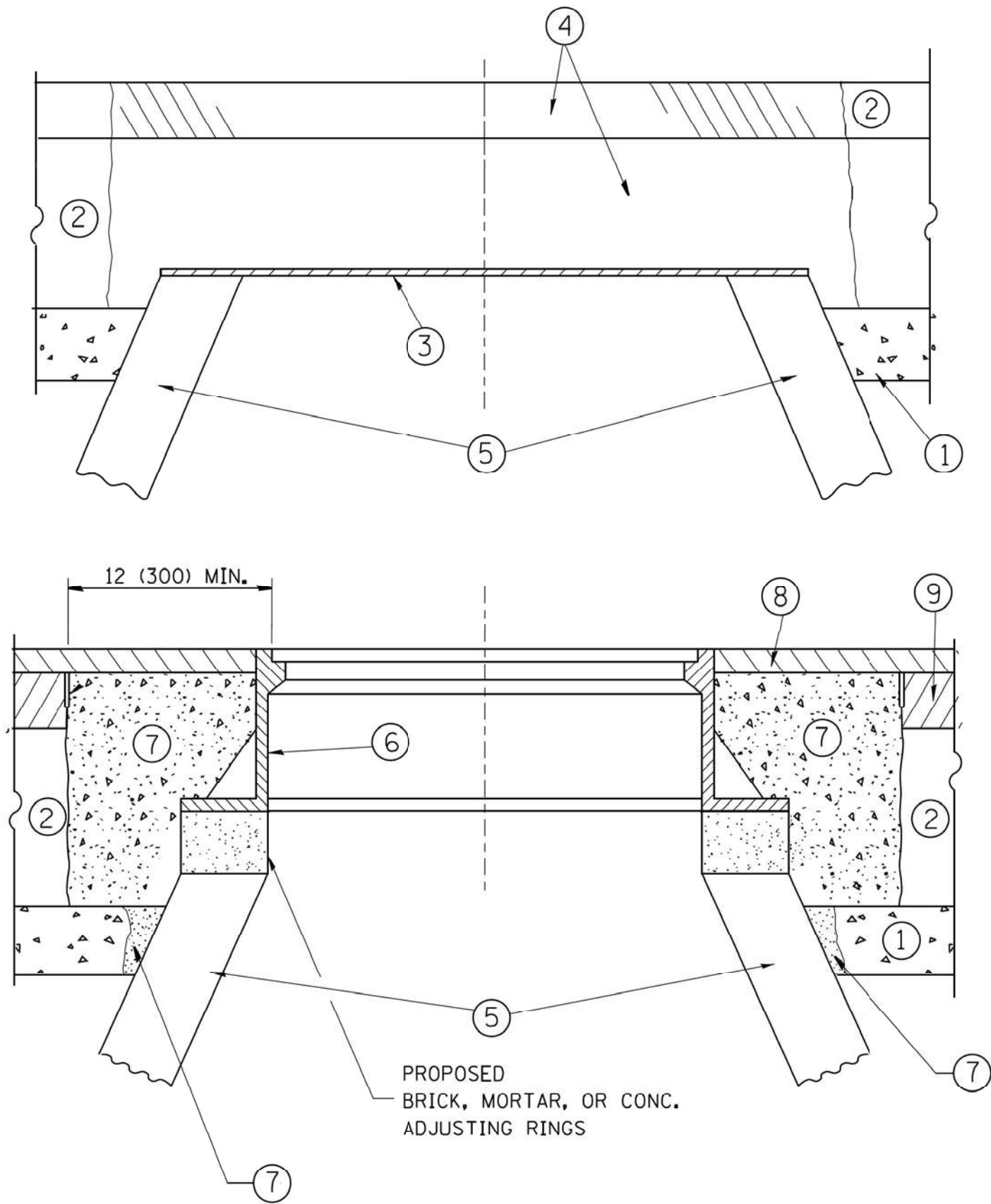
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (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:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS				F.A. - RTE. -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97						1000 AND 2000	17-00060-00-RS	COOK	35	21
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01		BD400-05 BD32		CONTRACT NO. 61E19						
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1		ILLINOIS/FED. AID PROJECT						
					SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.				



NOTES:

- EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
- VILLAGE OF HARWOOD HEIGHTS CASTINGS ARE THE PROPERTY OF THE VILLAGE AND THE CONTRACTOR SHALL NOTIFY THE VILLAGE 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

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

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 PP-1* CONCRETE
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:

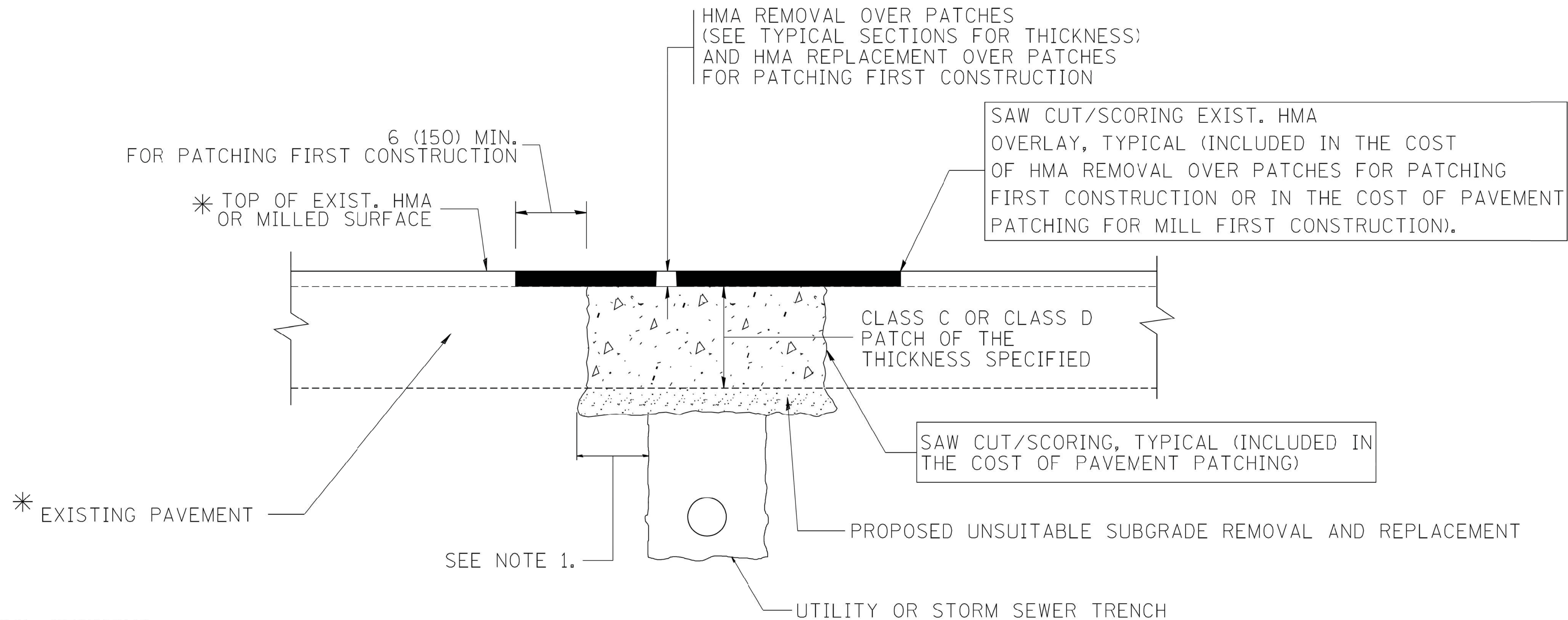
REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	F.A. . RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct\pw_work\pwidot\bauerdl\d0108315\bd08.dgn		DRAWN -	REVISED - R. BORO 01-01-07							17-00060-00-RS	COOK	35	22	
	PLOT SCALE = 1/68,500' / m	CHECKED -	REVISED - R. BORO 03-09-11							BD600-03 (BD-8)	CONTRACT NO.	61E19		
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11							FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

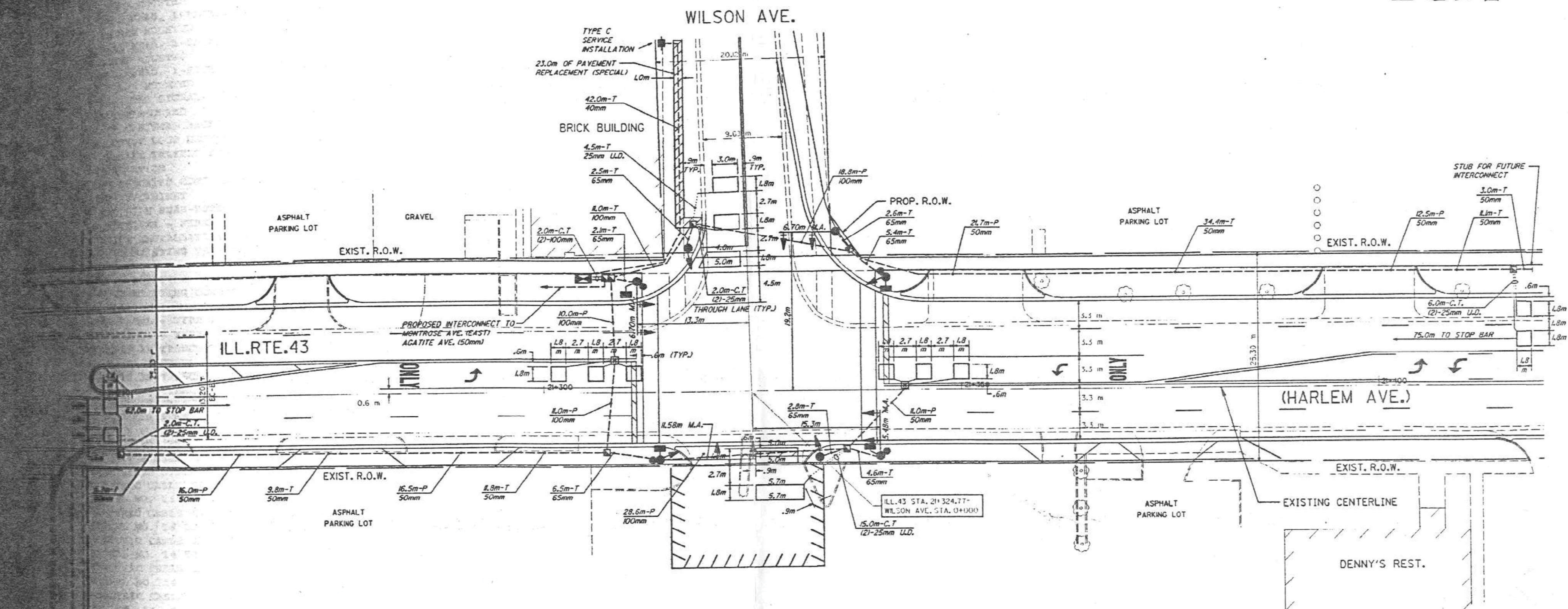
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bouerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A. RTE. 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 23
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - R. BORO 01-01-07					BD400-04 (BD-22)	CONTRACT NO. 61E19		
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.				

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	*	COOK	325	179
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (3134 & 3134 Y-1) R				



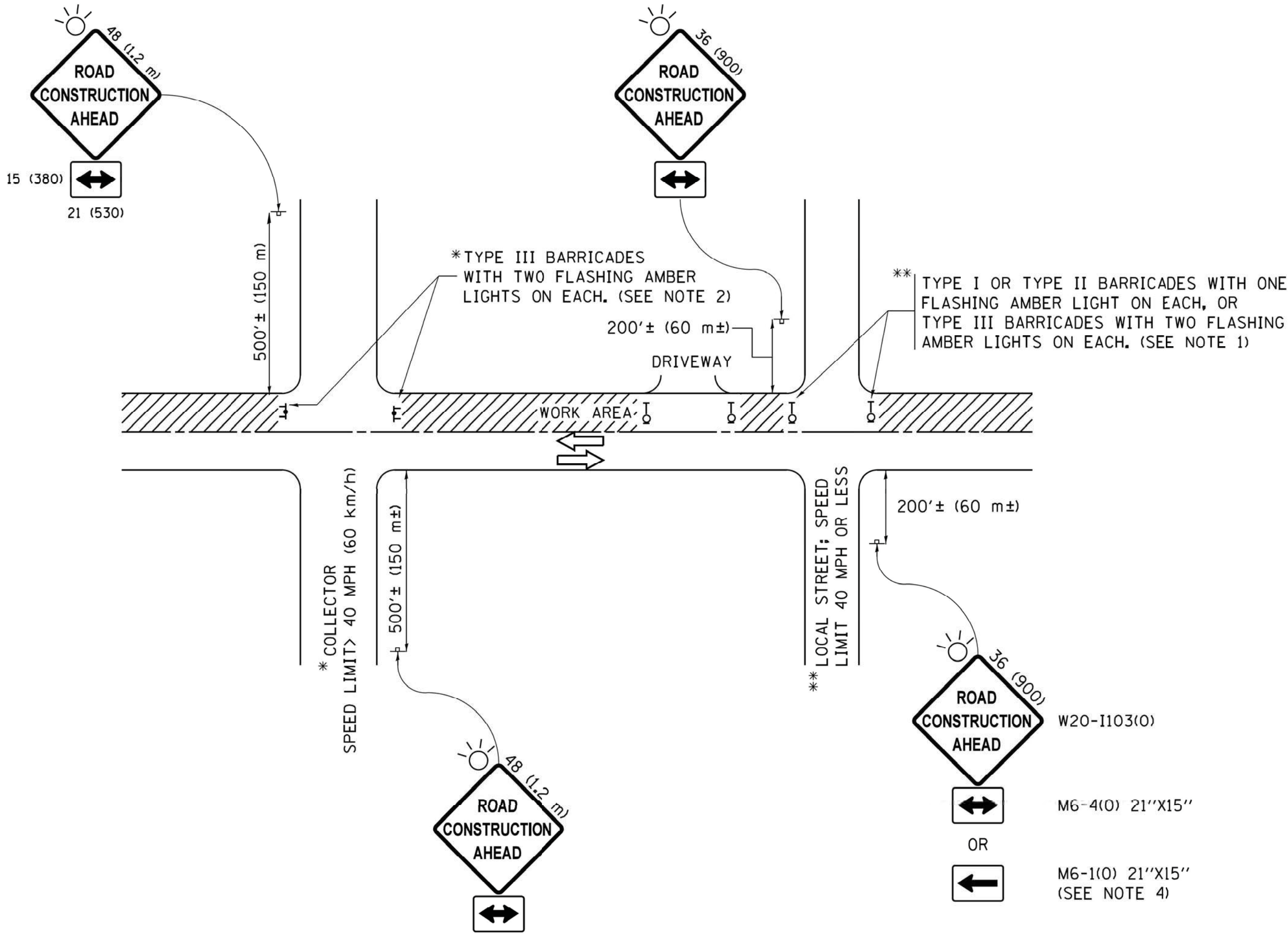
TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING		PROPOSED	EXISTING
		G.S. CONDUIT IN TRENCH OR PUSHED		
		PEDESTRIAN PUSHBUTTON DETECTOR		
		DETECTOR LOOP		
		CAST IRON JUNCTION BOX		
		EMERGENCY VEHICLE SYSTEM DETECTOR		
		CONFIRMATION BEACON		
		SIGNAL HEAD OPTICALLY PROGRAMMED		
		CONDUIT SPLICE		
		WOOD POLE		
		RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
		VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE		
		RAILROAD CONTROL CABINET		

NOTE:
PROPOSED CENTERLINE ALIGNMENT
IS OFFSET 2.34m LEFT OF EXISTING
CENTERLINE ALIGNMENT.

****THIS EXHIBIT IS FOR
INFORMATIONAL
PURPOSES ONLY****

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE		
		TRAFFIC SIGNAL INSTALLATION ILL. RTE. 43 (HARLEM AVE.) AT WILSON AVENUE	
		SCALE 1:250	DRAWN BY GW3
		DATE 7-3-96	DESIGNED BY JWD
			CHECKED BY JWC

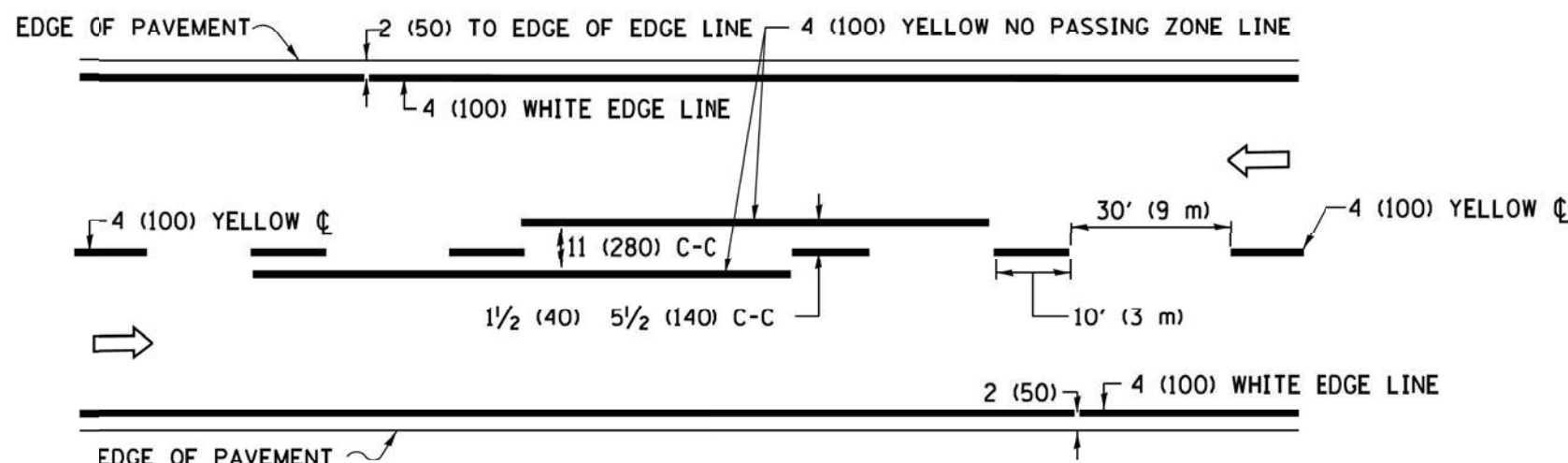


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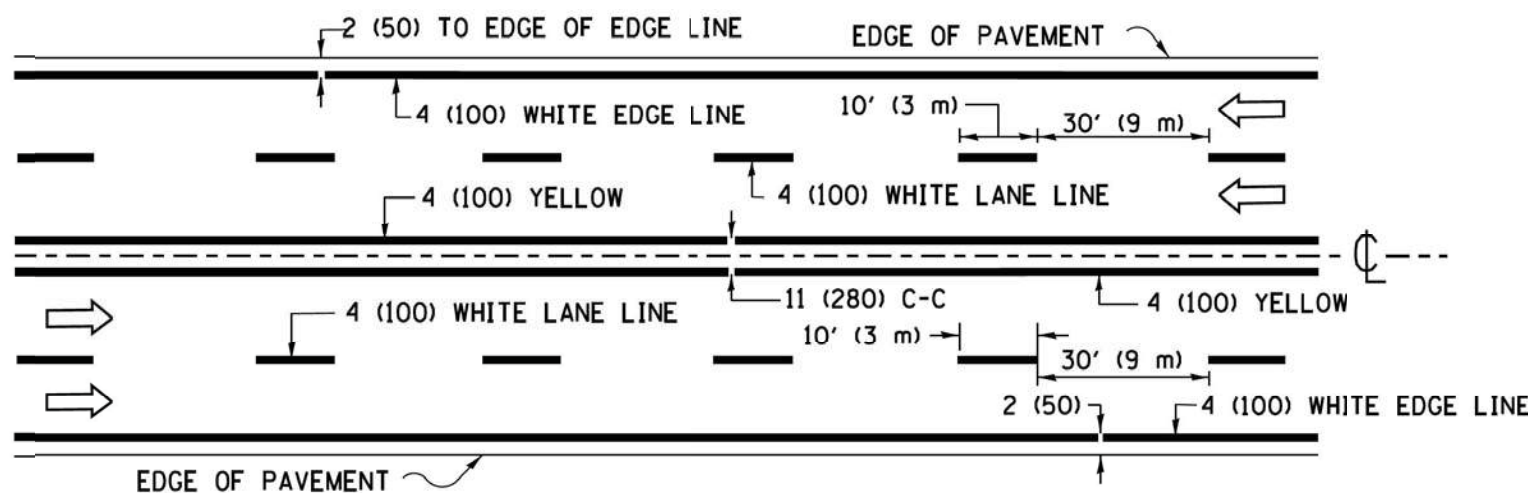
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 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).
- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

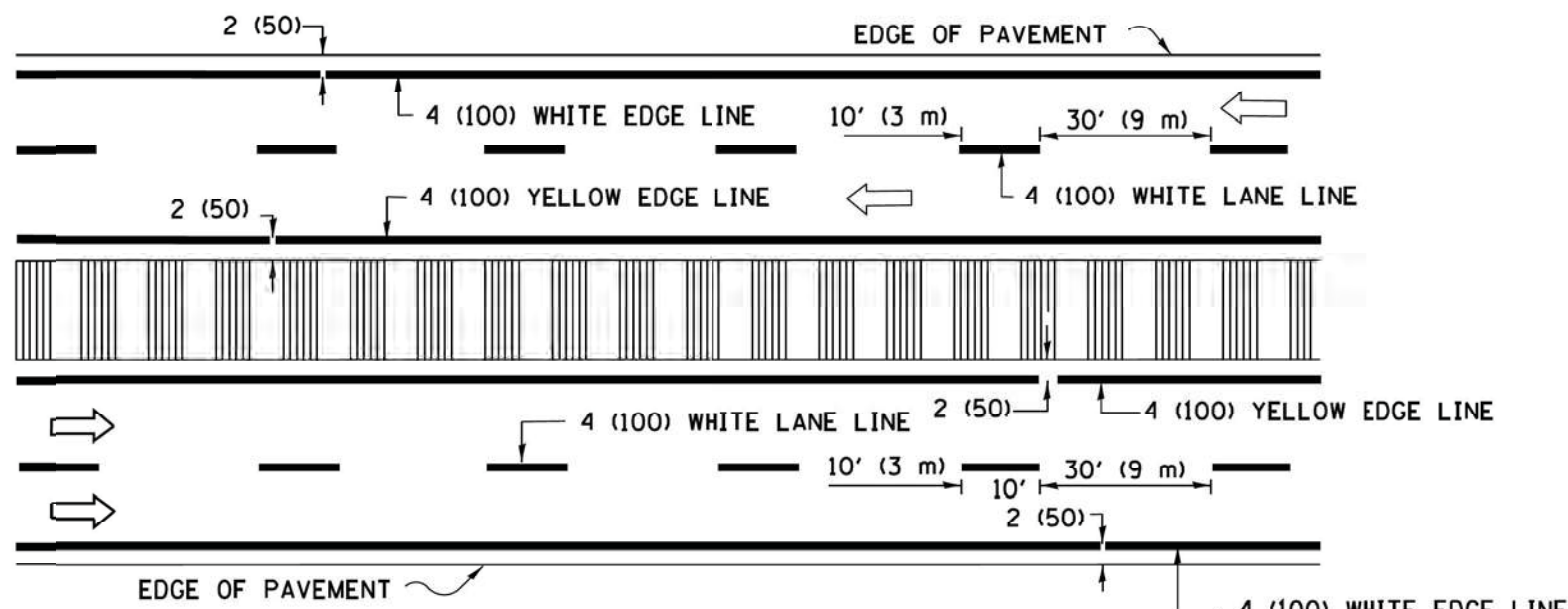
FILE NAME =	USER NAME = footenj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS					F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
pwt\1L084EBIDINTEC\Illinois.govtPWIDOT\Documents\IDOT Offices\District 1\Projects\District 1\Projects\17-00060-00-RS\17-00060-00-RS.dgn		DRAWN - CADData\CADsheets\tc10.dgn	REVISED - T. RAMMACHER 01-06-00		17-00060-00-RS	COOK	35	25						
	PLOT SCALE = 50.000' / 1 in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13											
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16											
				SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	TC-10		CONTRACT NO. 61E19		
										ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

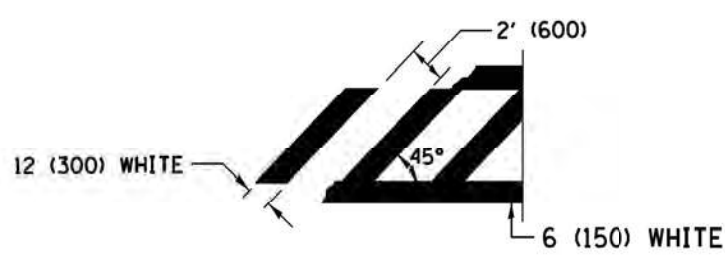
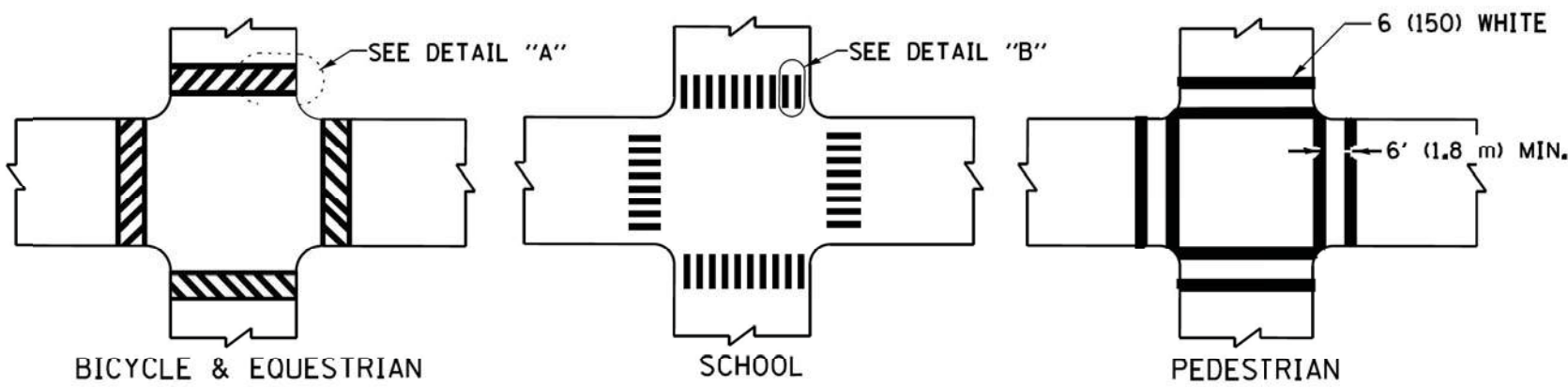


MULTI-LANE UNDIVIDED

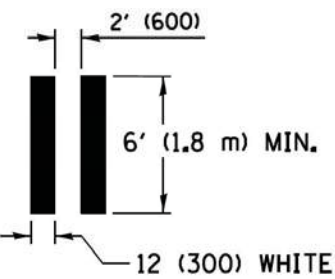


MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING



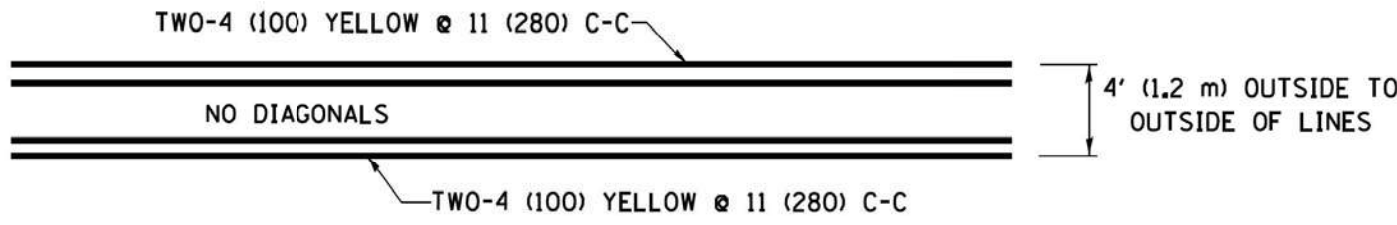
DETAIL "A"



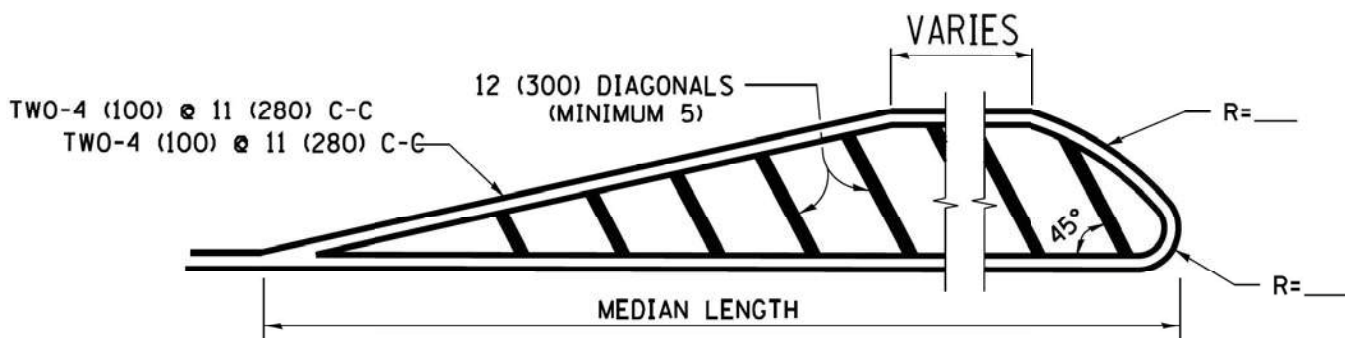
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



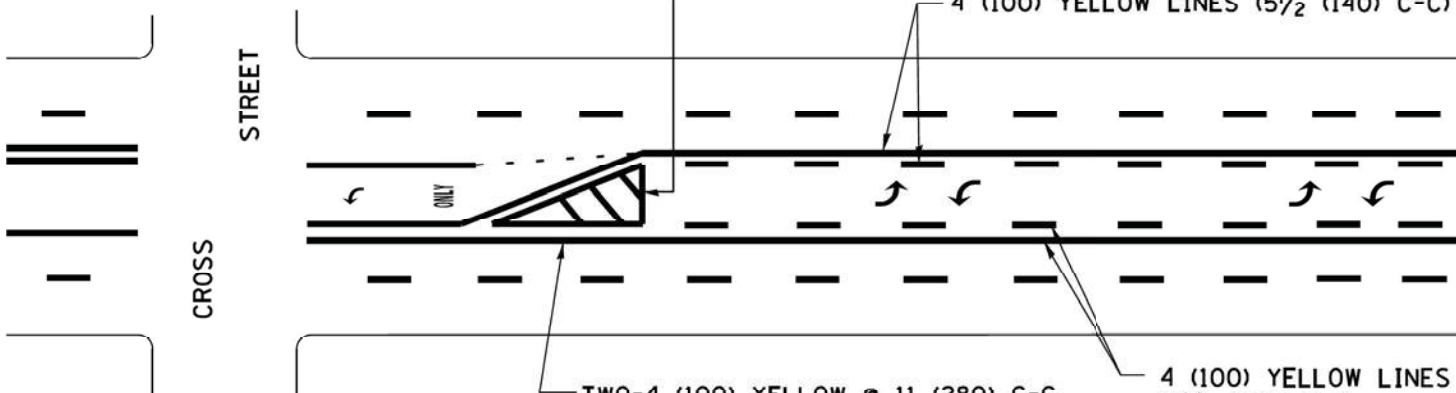
4' (1.2 m) WIDE MEDIANS ONLY



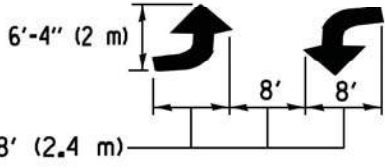
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

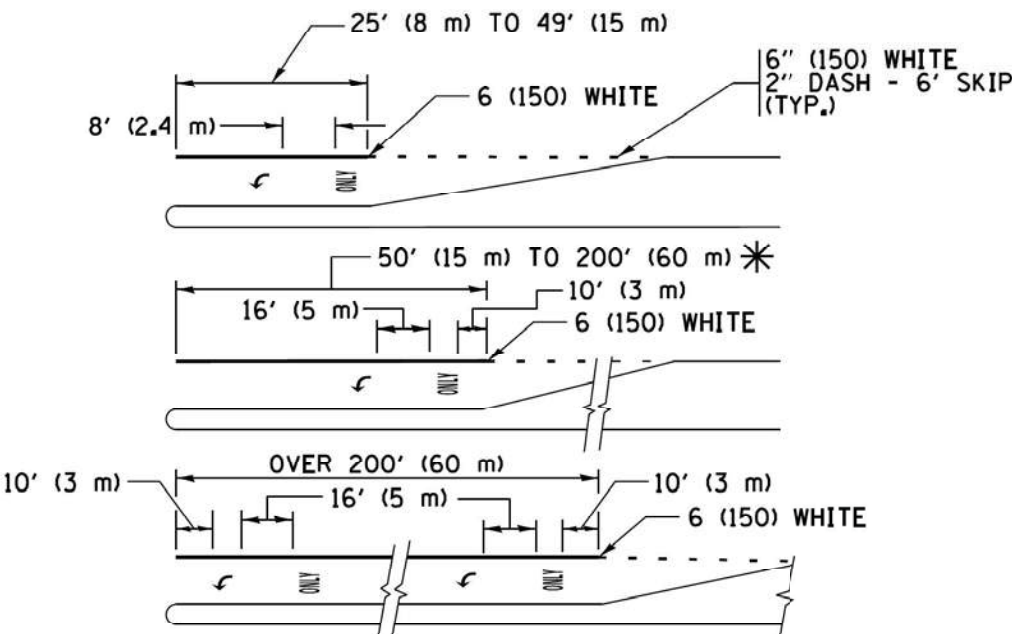


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

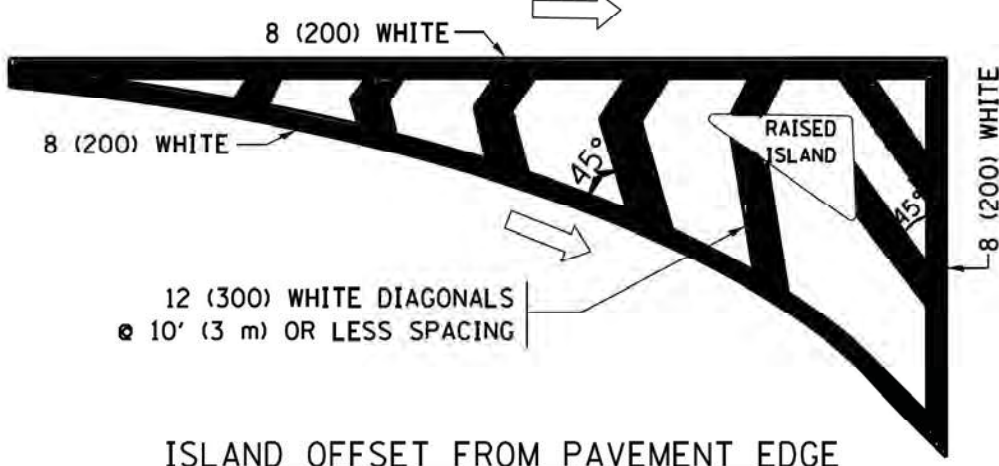


TYPICAL LEFT (OR RIGHT) TURN LANE

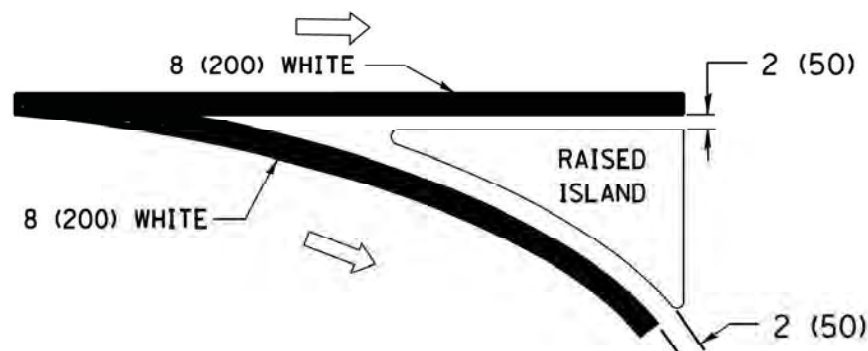
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* 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 TURN LANE MARKING

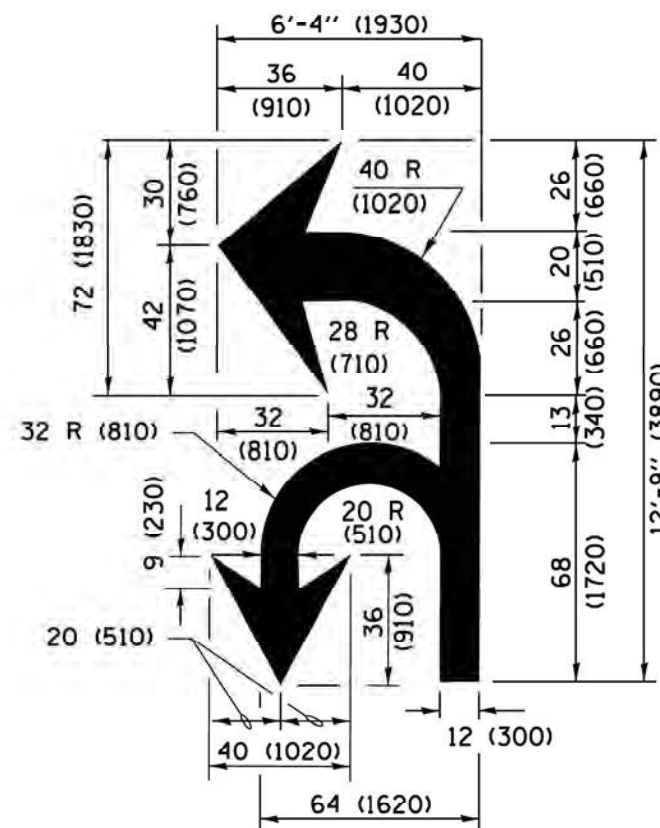


ISLAND OFFSET FROM PAVEMENT EDGE

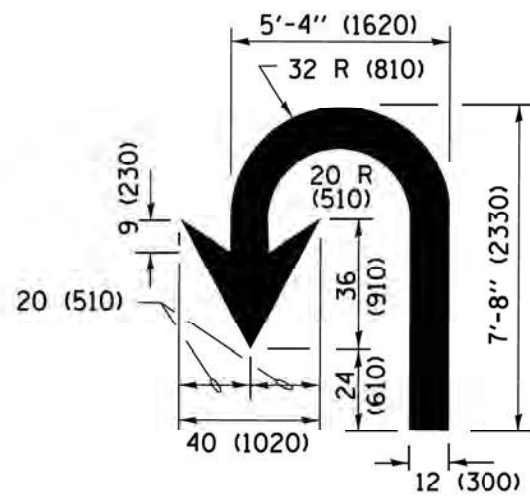


ISLAND AT PAVEMENT EDGE

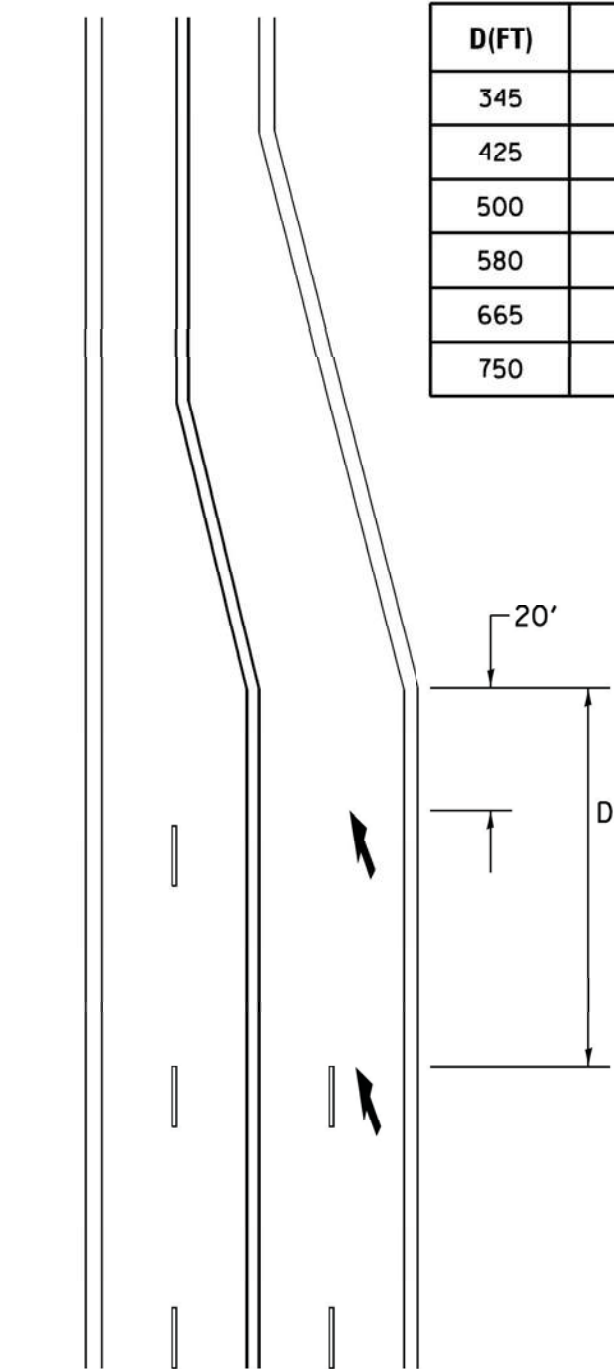
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN



LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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 1/2 (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 MEDIANS IN YELLOW
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 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 @ 4 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R": 3.6 SQ. FT. (0.33 m ²) EACH "X": 54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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.

FILE NAME =	USER NAME = fontamj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pwt\IL084EBID\INTEG\Illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\District 1\CAD\Detail\CAD\sheet\c13.dgn		DRAWN	REVISED - C. JUCIUS 07-01-13
PLOT SCALE = 50,000 '"/in.		CHECKED -	REVISED - C. JUCIUS 12-21-15
Default	PLOT DATE = 4/13/2015	DATE - 03-19-50	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-00060-00-RS	COOK	35	26	
TC-13	CONTRACT NO.	61E19		
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM	S	SP	FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM	I	IP	GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM		R			
SIGNAL HEAD			RELOCATE ITEM		RL			
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM		A			
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF			
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF			
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF			
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIMATION BEACON			WIRELESS ACCESS POINT					

FILE NAME = ts05.dgn	USER NAME = lsgsa	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A. RTE. 17-00060-00-RS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -						TS-05		COOK	35	28
Default		CHECKED - LP	REVISED -		SCALE: NONE				CONTRACT NO.		61E19		
		DATE - 9/29/2016	REVISED -		SHEET 1	OF 7 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

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.

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.

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.

ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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.

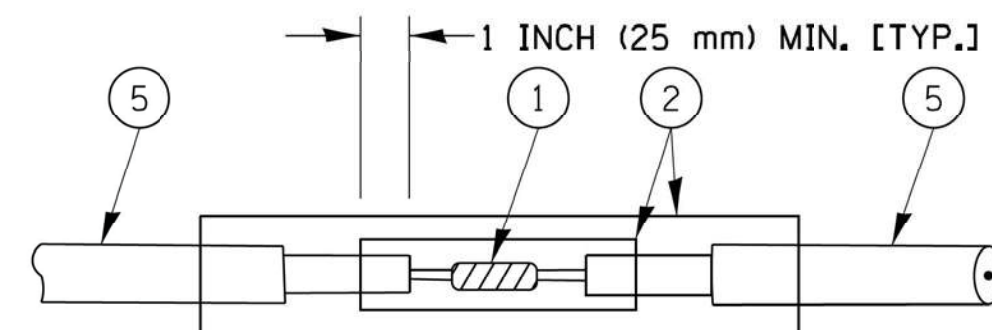
LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

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.

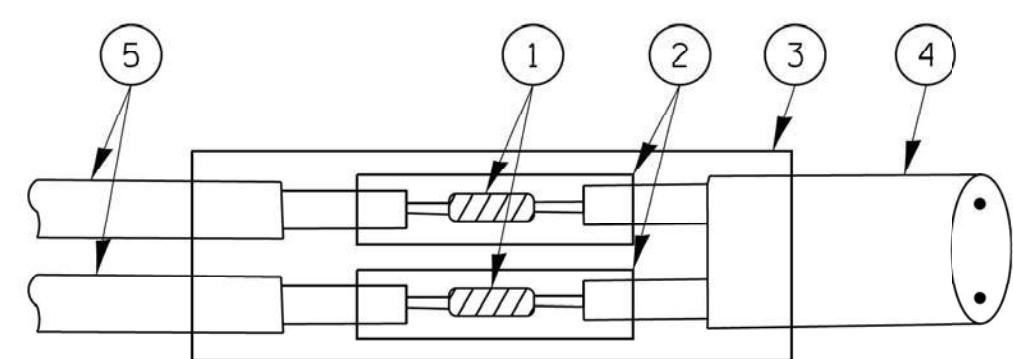
A schematic diagram of a loop structure. It consists of a central rectangular box. On the left side of the box, there is a vertical oval shape with two small circles at its top and bottom, representing a loop handle. On the right side of the box, there is a similar vertical oval shape. A horizontal cylinder, representing a tube, passes through the center of the box from left to right. The text 'LANE (A) LOOP (B)' is positioned above the cylinder, 'LOOP DIRECTION (C)' is positioned in the middle of the cylinder, and 'LOOP ROTATION (D)' is positioned below the cylinder.

-
- Diagram illustrating the wiring configuration for a loop detector system, showing three loops (Loop 1, Loop 2, Loop 3) connected to a junction box and a controller cabinet.
- Labels and components shown:
- VEHICLE MOVEMENT
 - LOOP 3
 - LOOP 2
 - LOOP 1
 - HANDHOLE OR JUNCTION BOX
 - LOOP TAG
 - STRANDED LOOP WIRE NO. 14 1/C IN EMPTY COILABLE NONMETALLIC CONDUIT [5 TWISTS/FT(MM)]
 - LOOP-TO-LOOP SPLICE (SEE DETAIL "A")
 - NO. 14 2/C TWISTED, SHIELDED LEAD-IN
 - CONTROLLER CABINET
 - AMPLIFIER
 - OUTPUT
 - LOOP DETECTOR SPLICE (SEE DETAIL "B")
 - LOOP POLARITY AS SHOWN MUST BE STRICTLY OBSERVED WHEN SPLICING LOOP WIRES TO THE NO. 14 2/C TWISTED, SHIELDED LEAD-IN.

- 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.



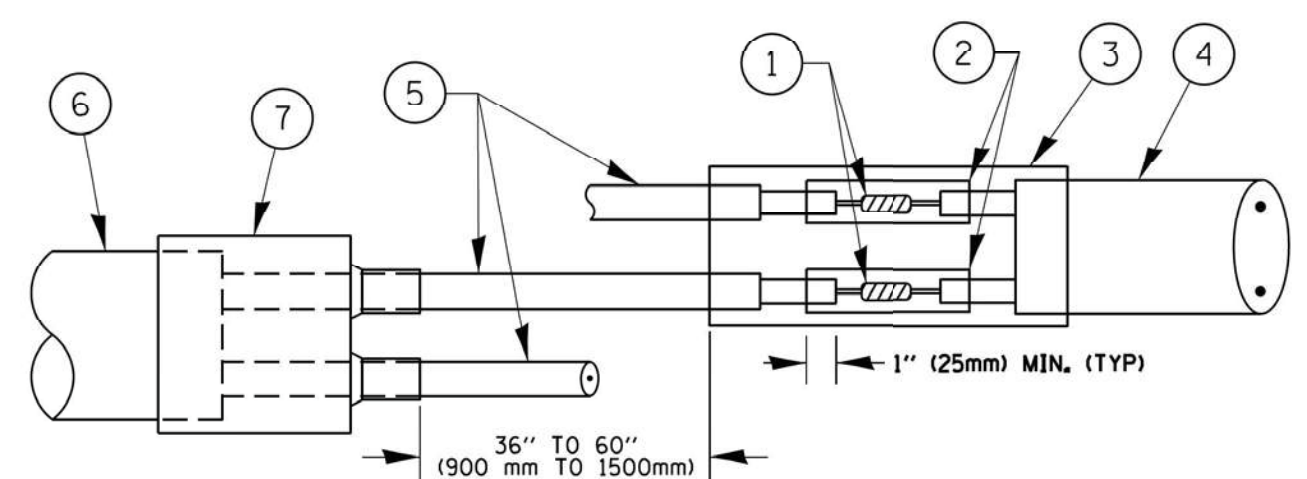
DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

This diagram illustrates a three-strapped ratchet tie-off system. It shows three parallel straps, each consisting of a webbing strap (1), a ratchet handle (2), and a ratchet head (3). The straps are connected to a central ratchet head (5) which is attached to a fixed point (6). The system is used to secure a load (7) by pulling the ratchet handle to tighten the webbing. Dimensions are provided for the strap length (36" TO 60" / 900 mm TO 1500 mm), the ratchet handle length (1" (25mm) MIN. (TYP)), and the ratchet head length (36" TO 60" / 900 mm TO 1500 mm).

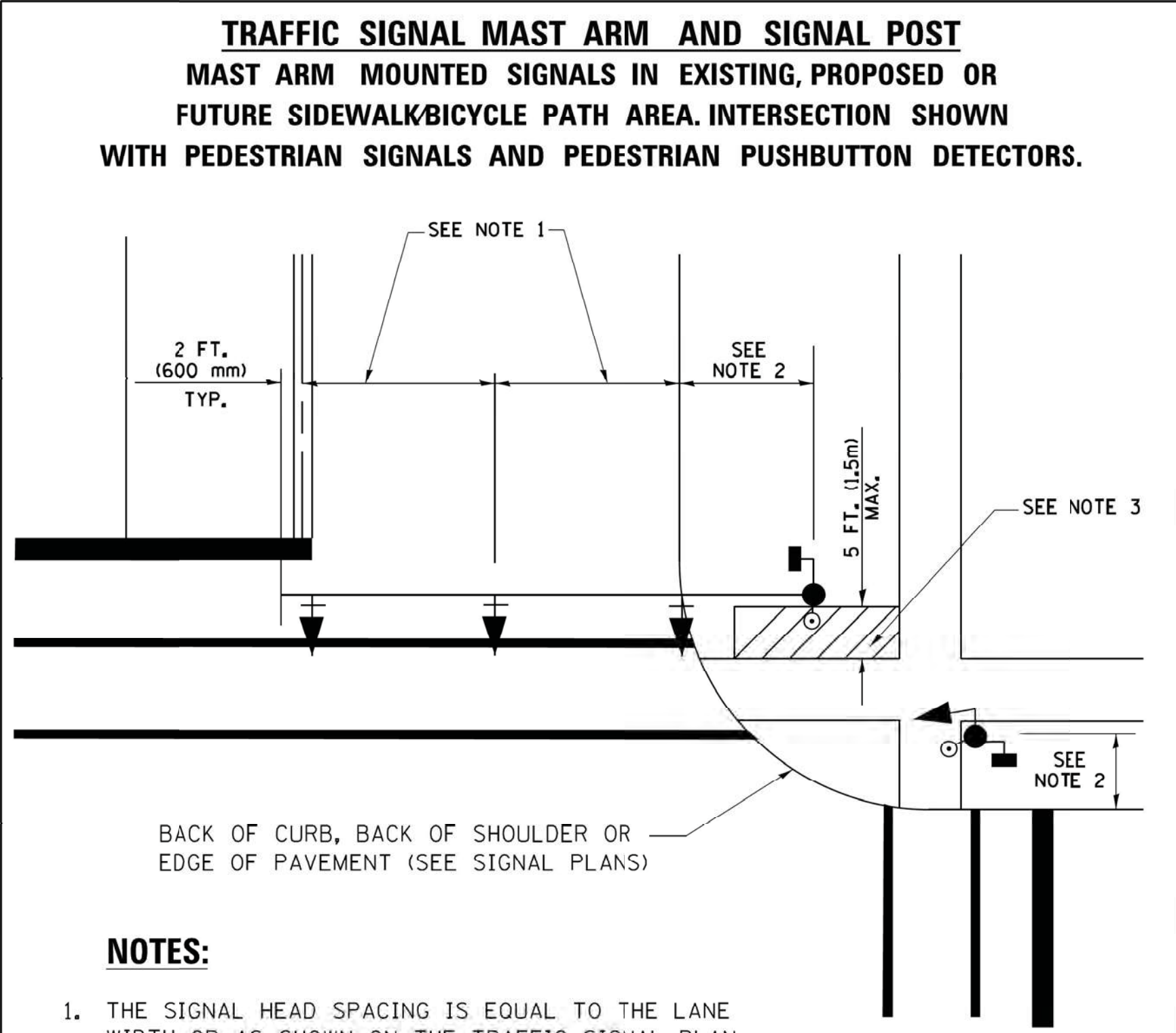
DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

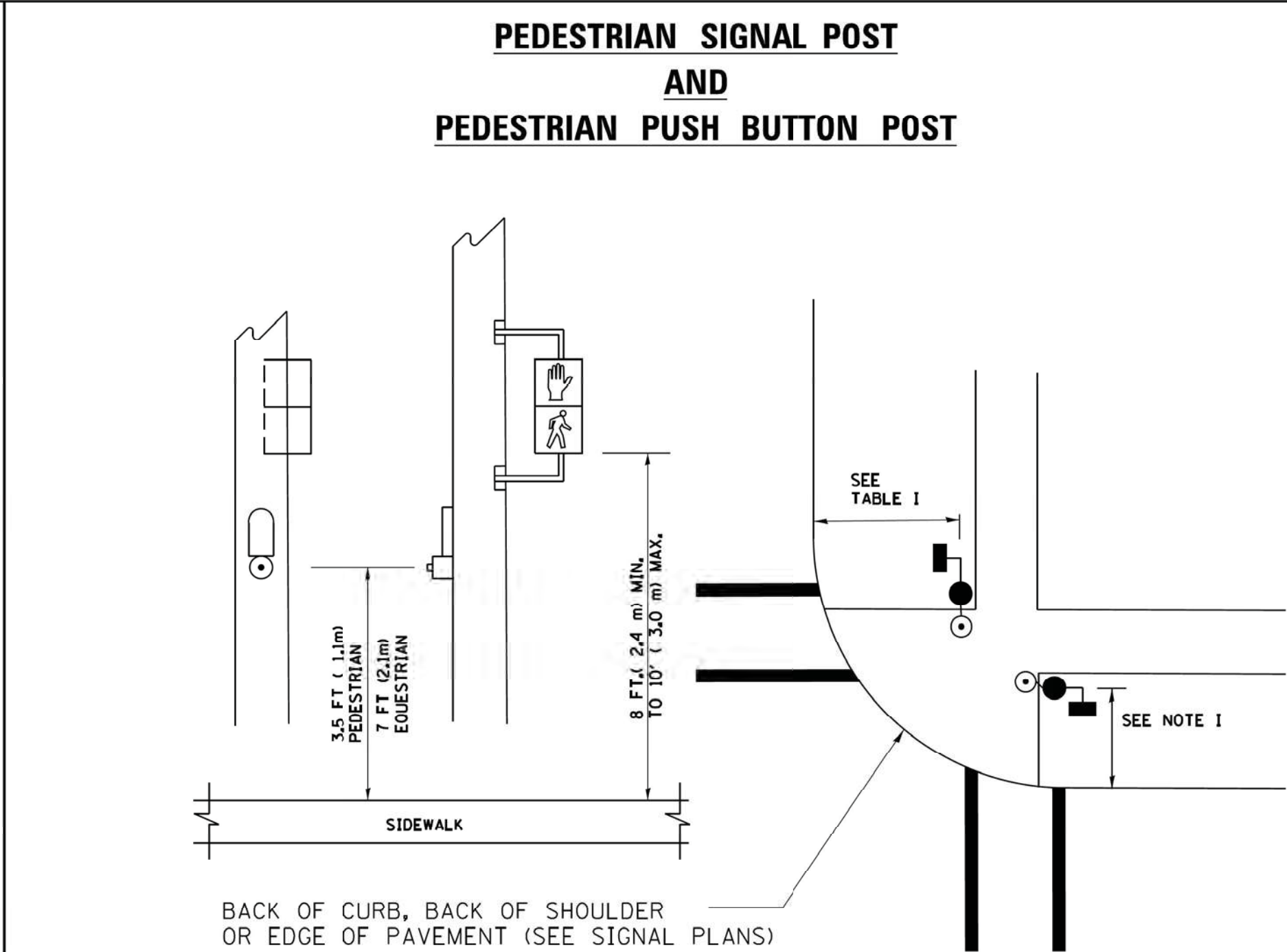
<p>① WESTERN UNION SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.</p> <p>② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.</p> <p>③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.</p> <p>④ NO. 14 2/C TWISTED, SHIELDED CABLE.</p>	<p>⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.</p> <p>⑥ PRE-FORMED LOOP</p> <p>⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL</p>
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FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw-work\pwidot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -			17-00060-00-RS	COOK	35	29	
PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -			TS-05	CONTRACT NO.	61E19		
PLOT DATE = 1/13/2014		DATE - 10-28-09	REVISED -			SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



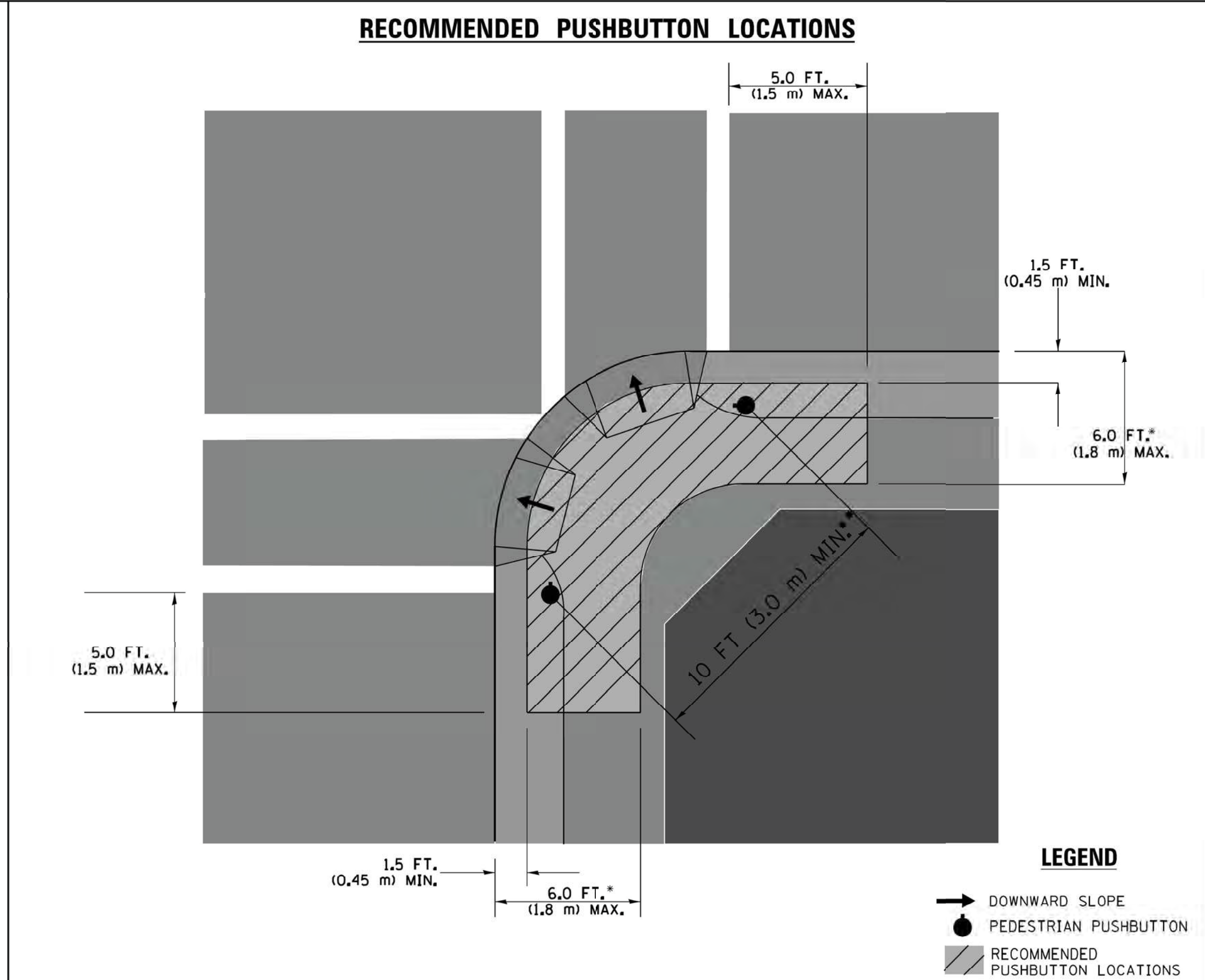
NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

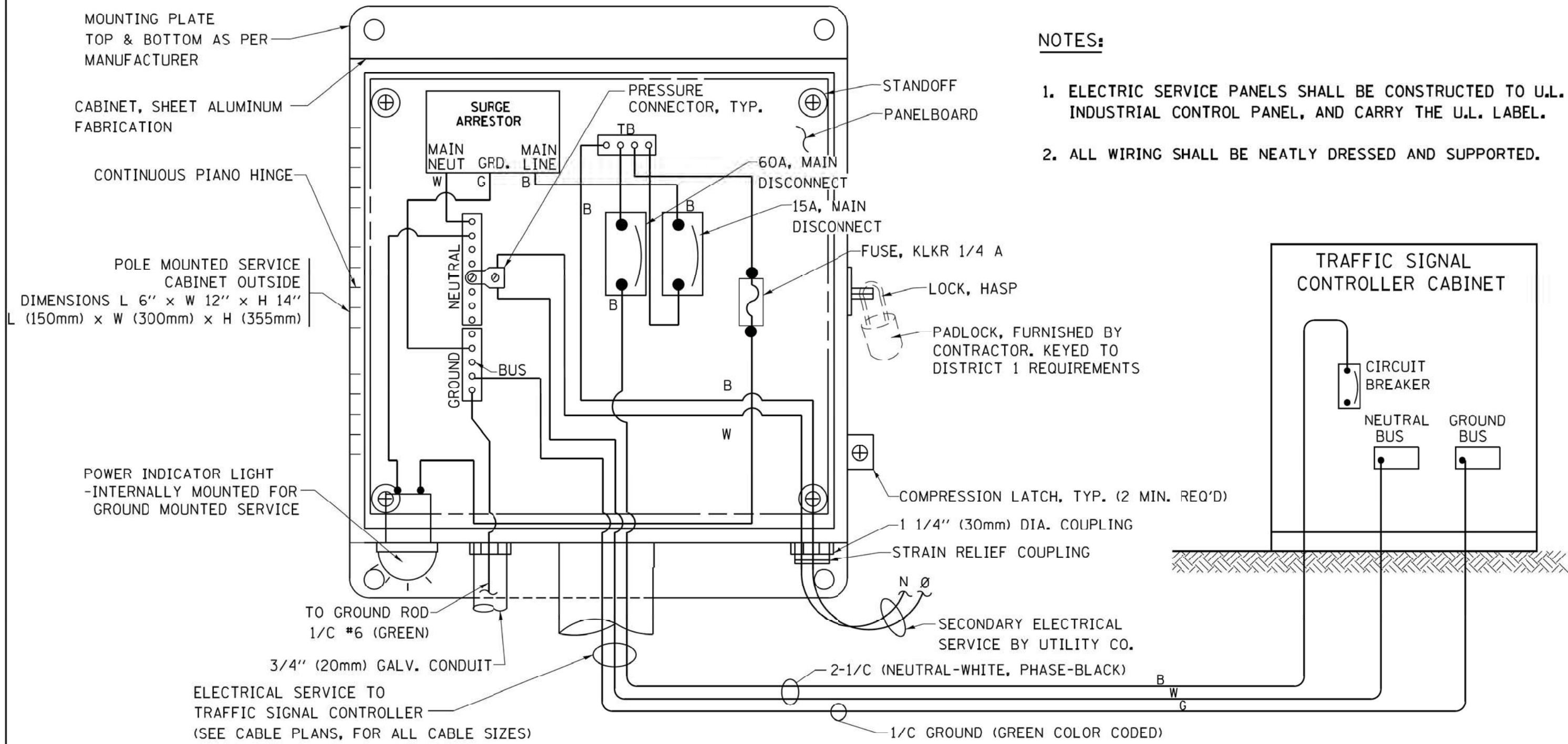
TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

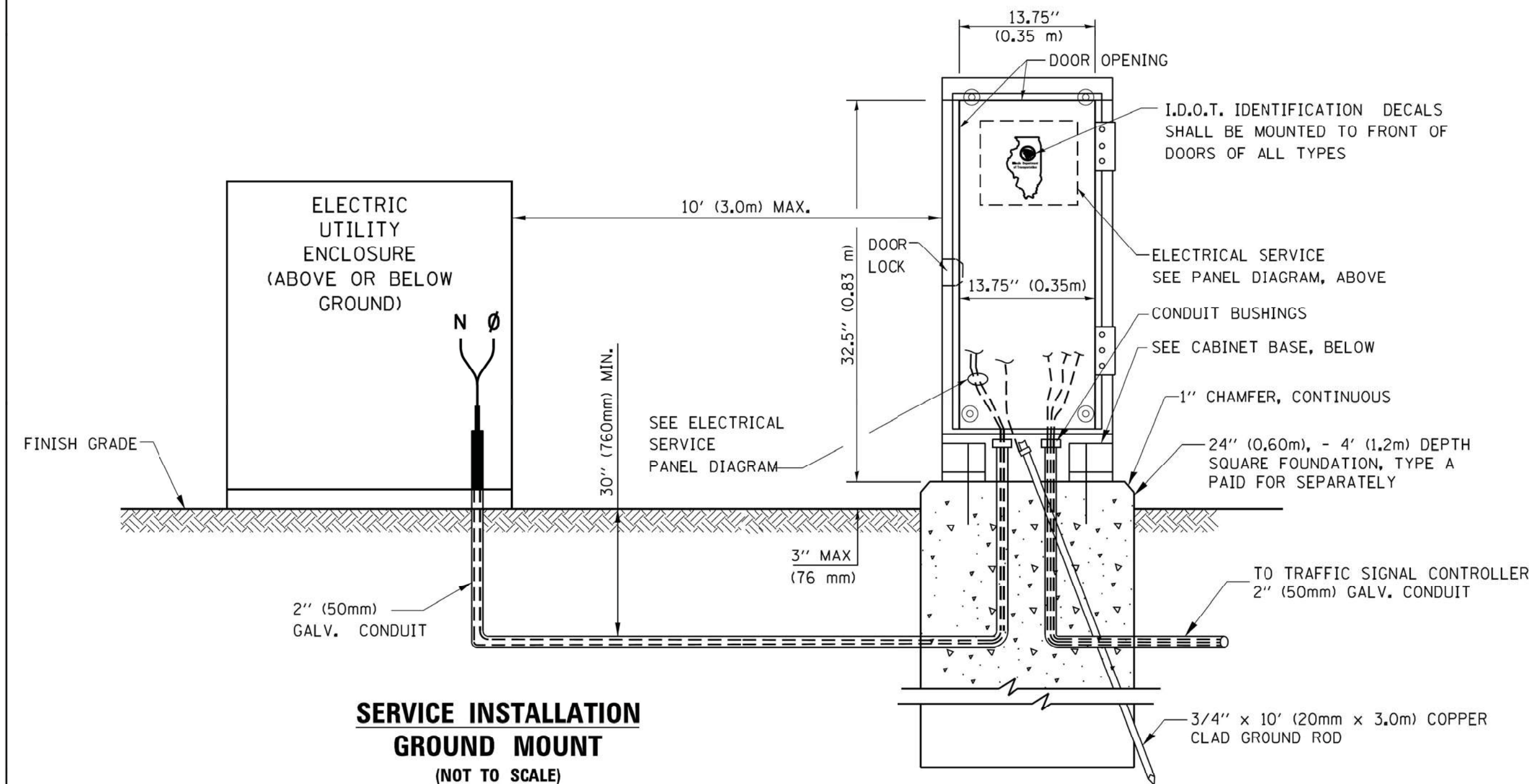
NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE					F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cz\pw_work\pwidot\Footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -		STANDARD TRAFFIC SIGNAL DESIGN DETAILS					1030 AND 1035	17-00060-00-RS	COOK	35	30
	PLOT SCALE = 50.0000' / 1 in.	CHECKED - DAD	REVISED -							TS-05		CONTRACT NO.	61E19	
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 3 OF 7 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

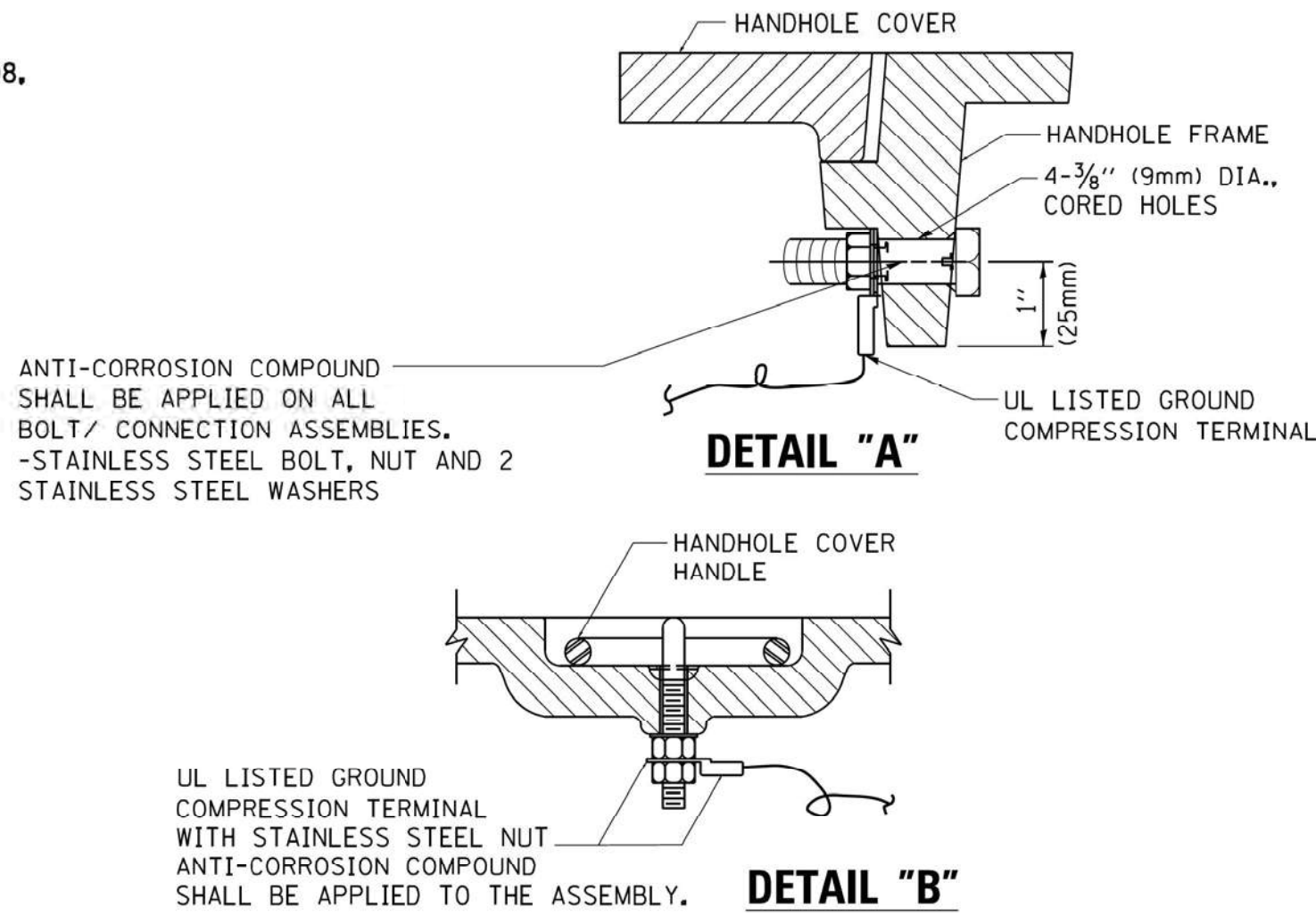
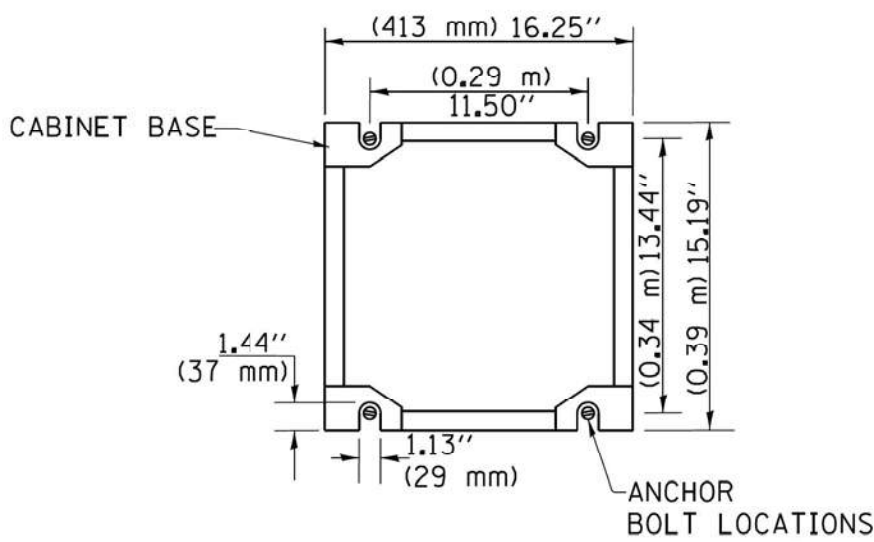


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)

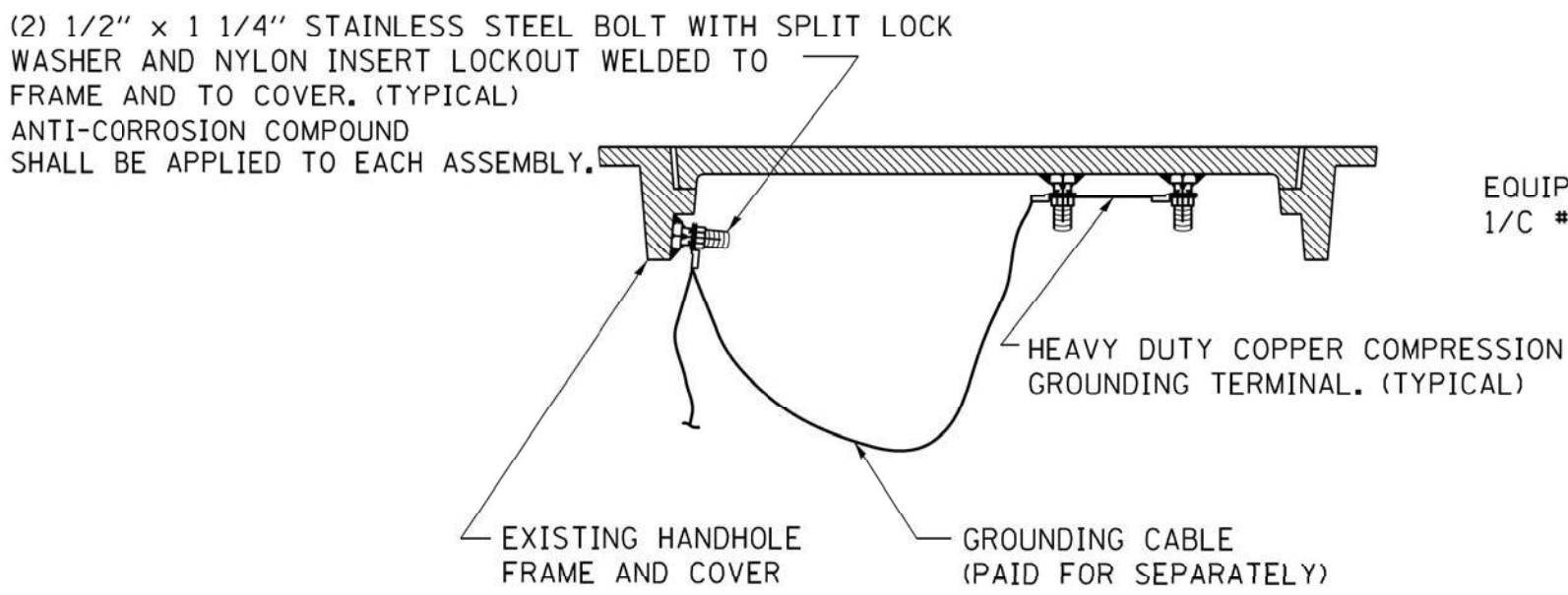


SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)

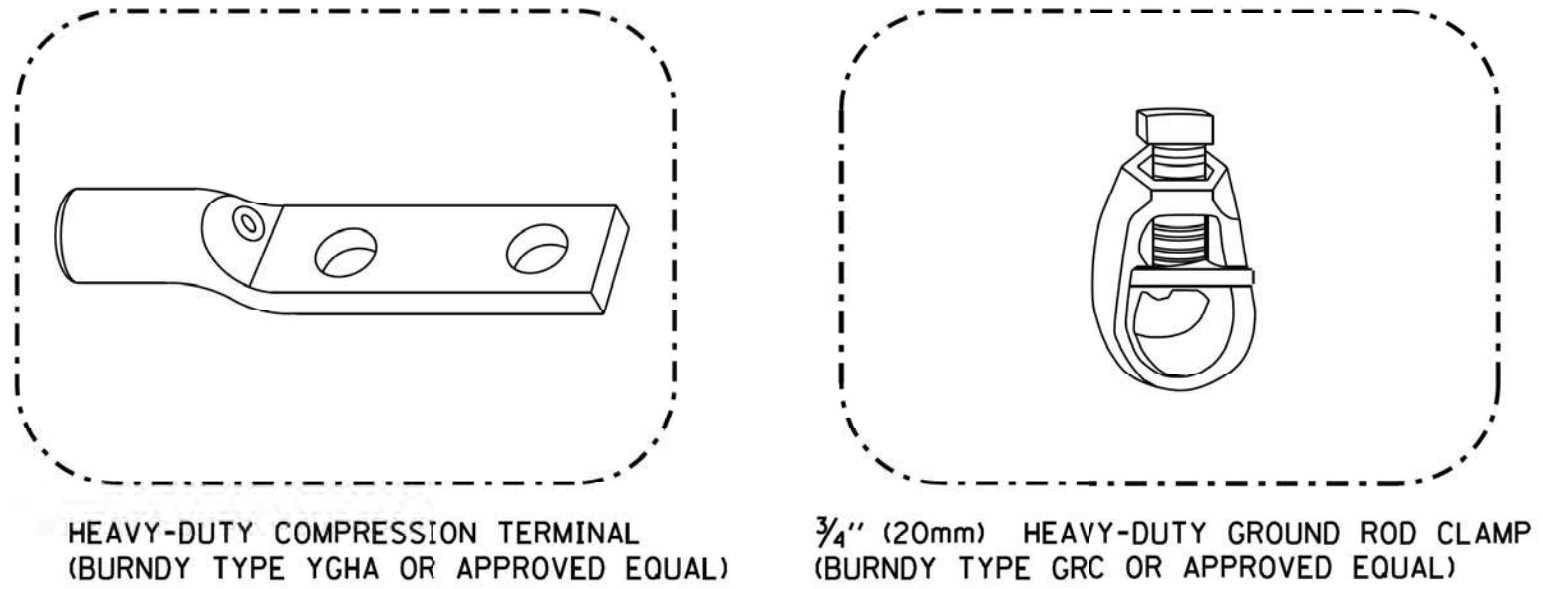
CABINET – BASE BOLT PATTERN
(NOT TO SCALE)



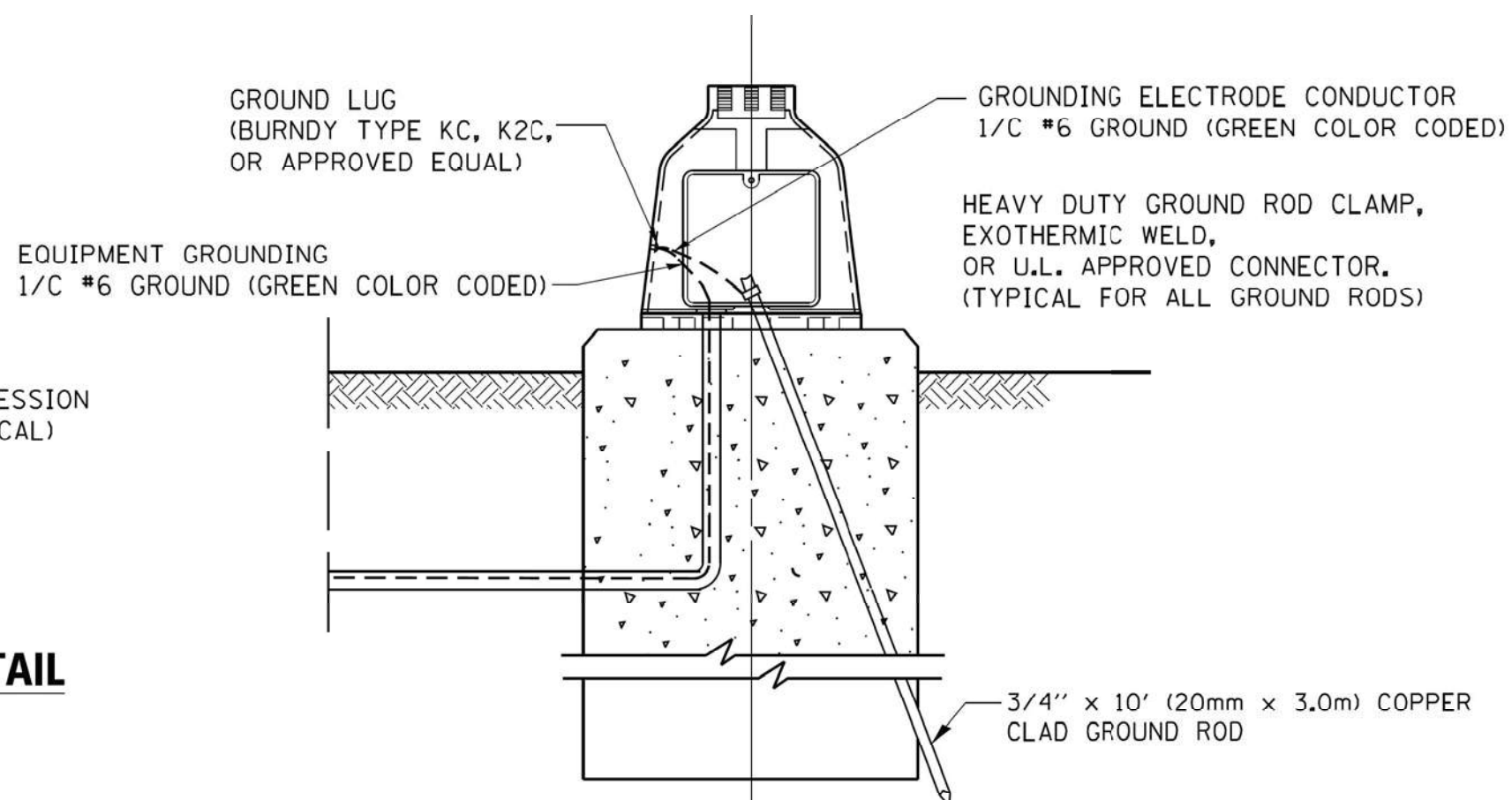
HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)

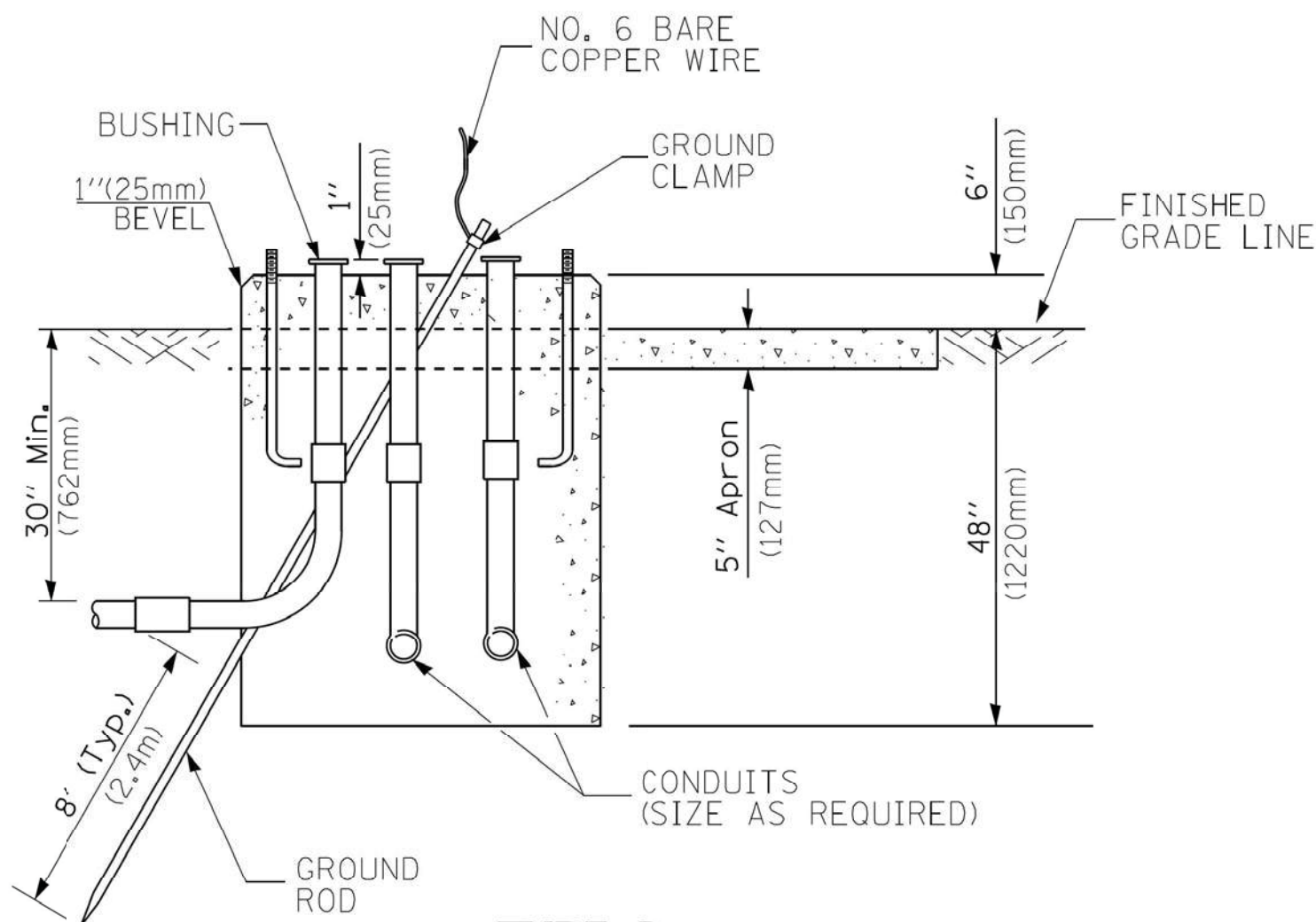
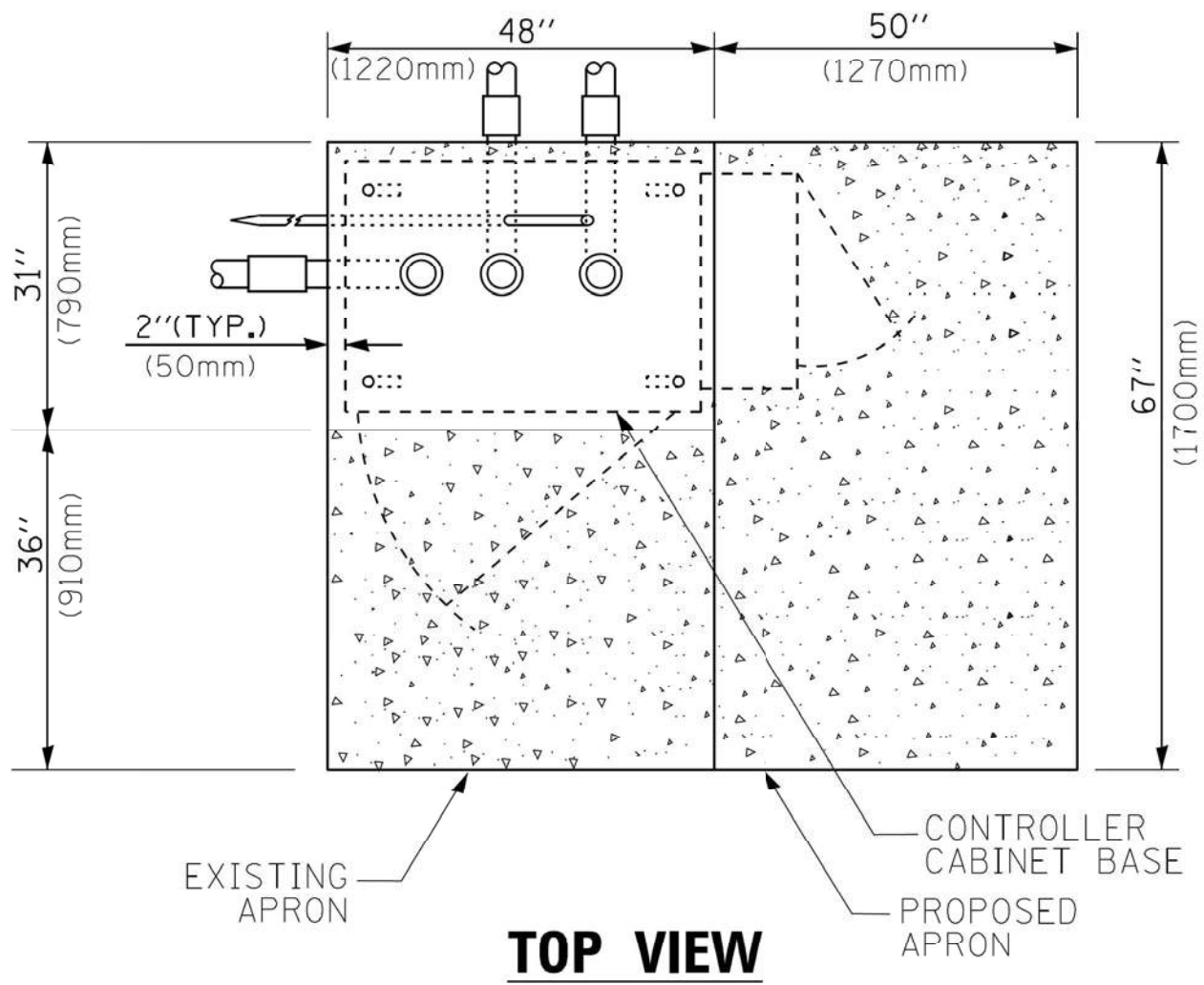


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

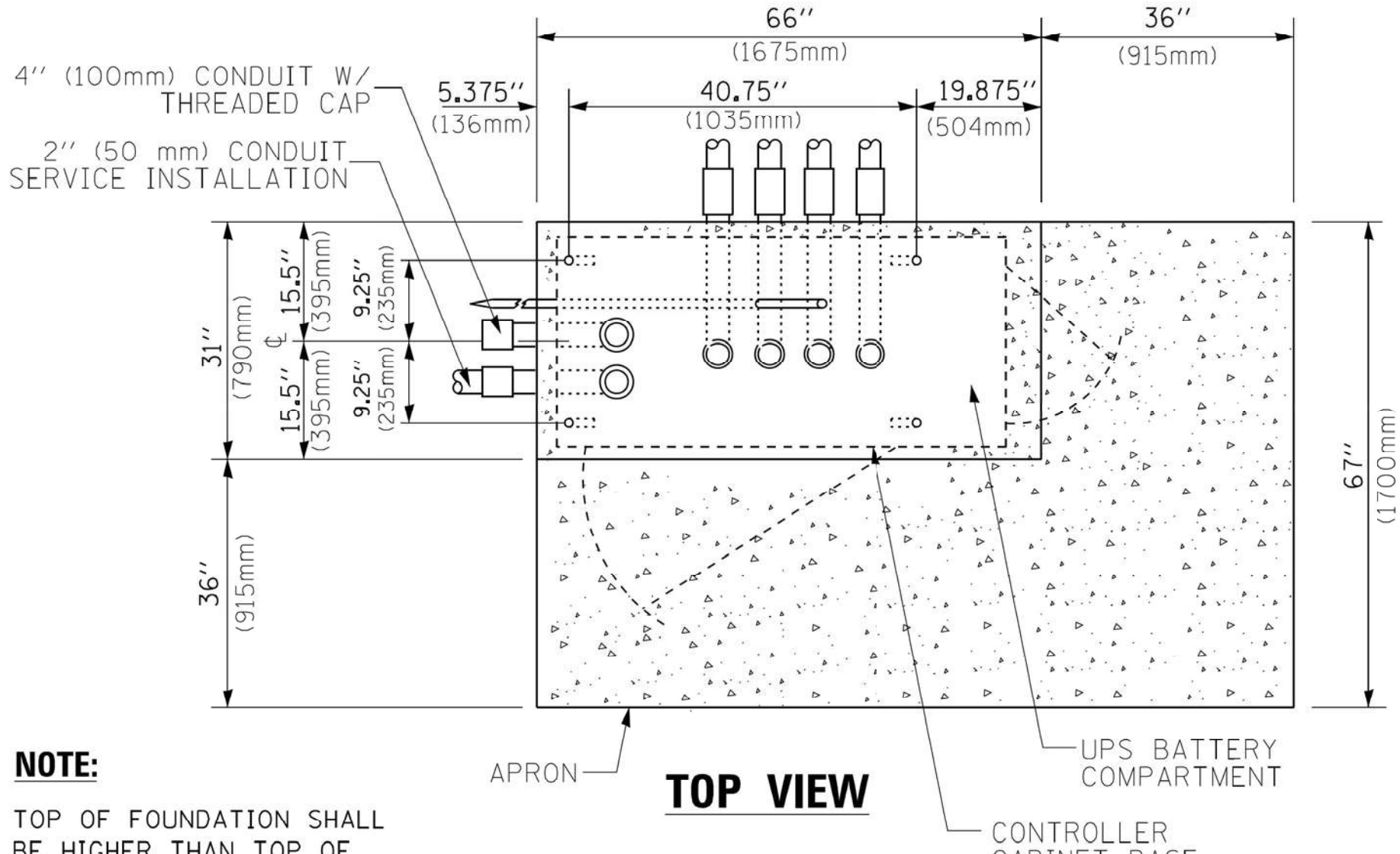


MAST ARM POLE / POST-GROUNDING DETAIL
(NOT TO SCALE)

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pwwork\pwwork\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -				17-00060-00-RS	COOK	35	31
		CHECKED - DAD	REVISED -				TS-05		CONTRACT NO. 61E19	
		DATE - 10-28-09	REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
				SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA.	TO STA.			

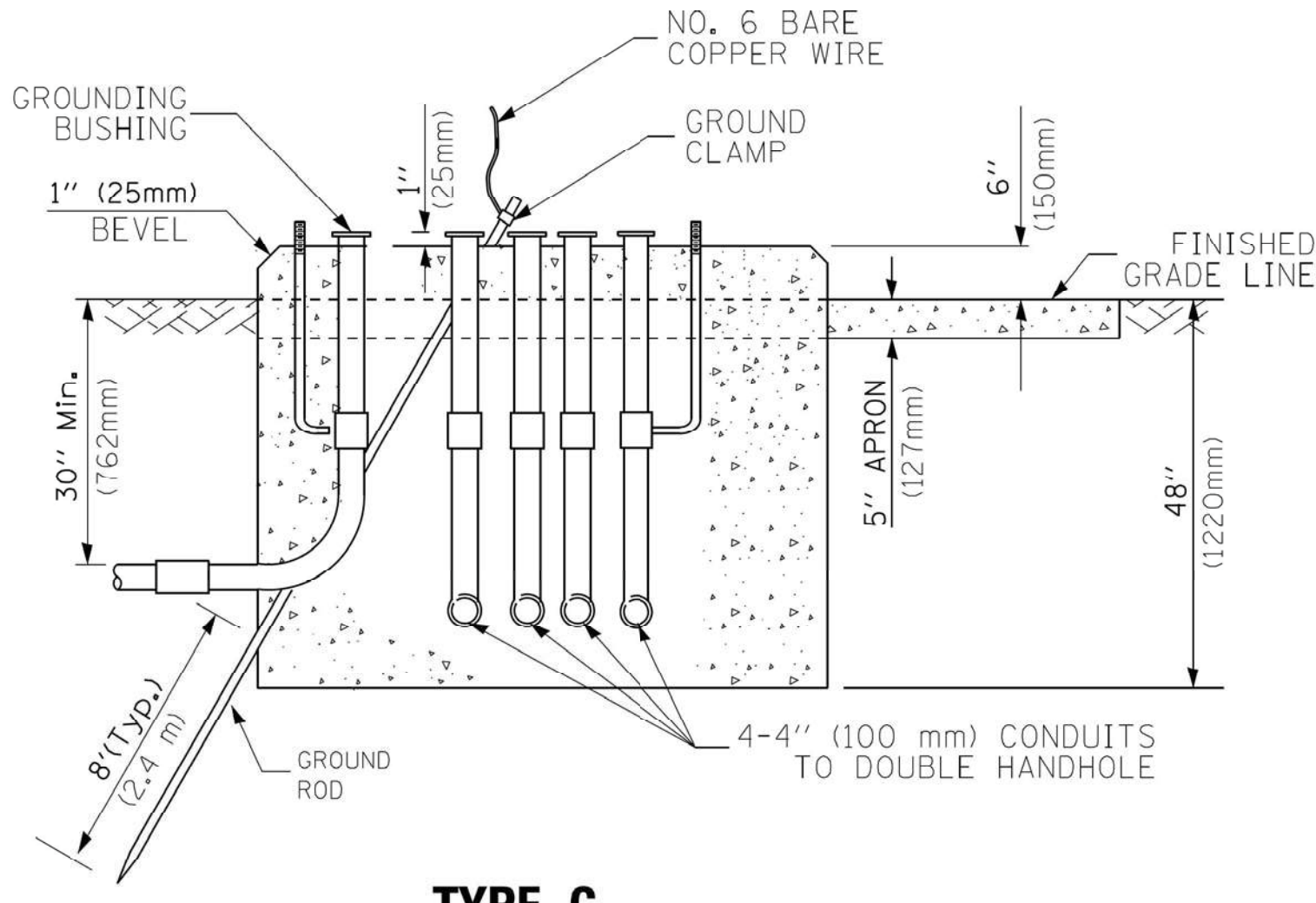


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

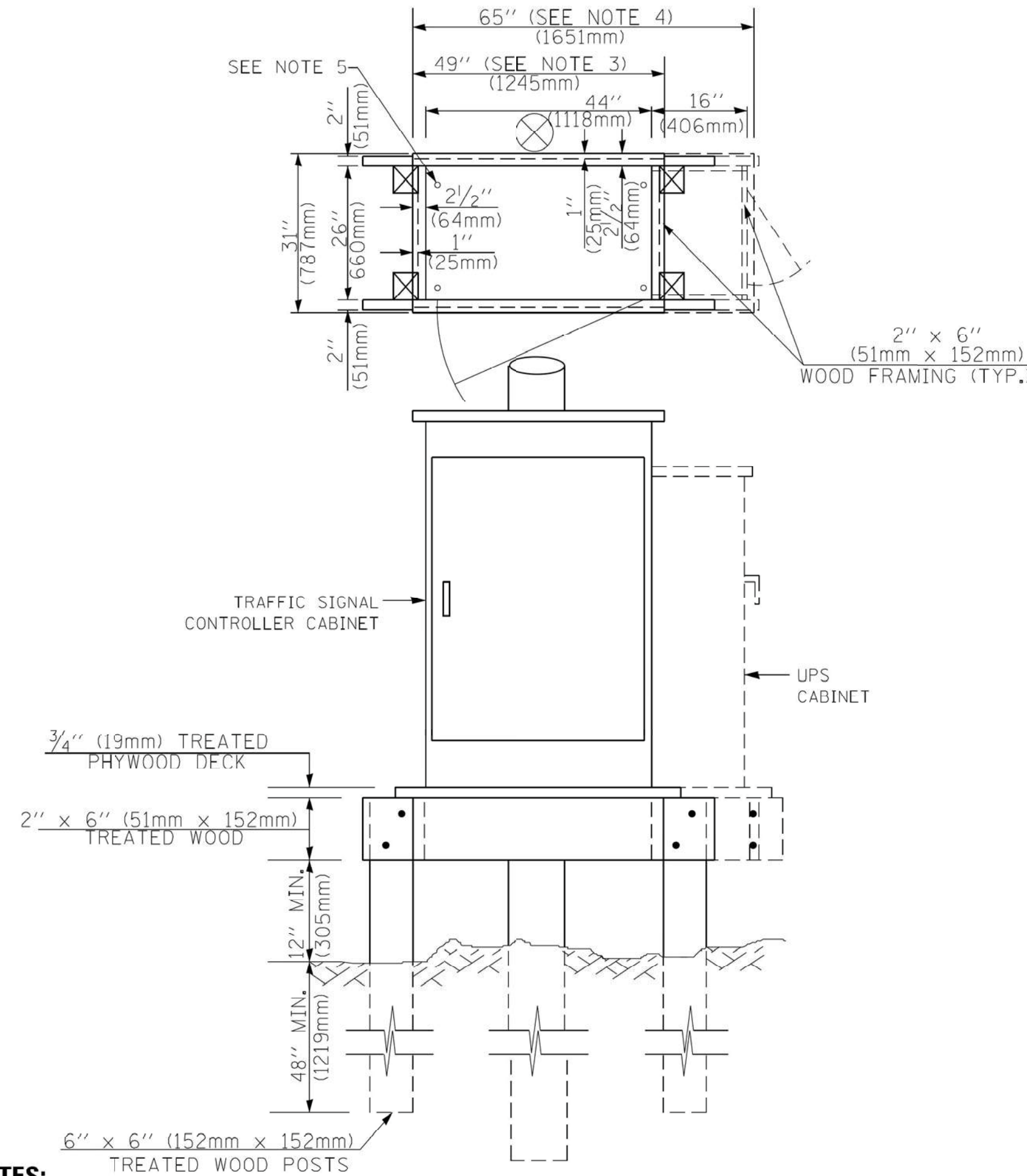


NOTE:

TOP OF FOUNDATION SHALL
BE HIGHER THAN TOP OF
DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

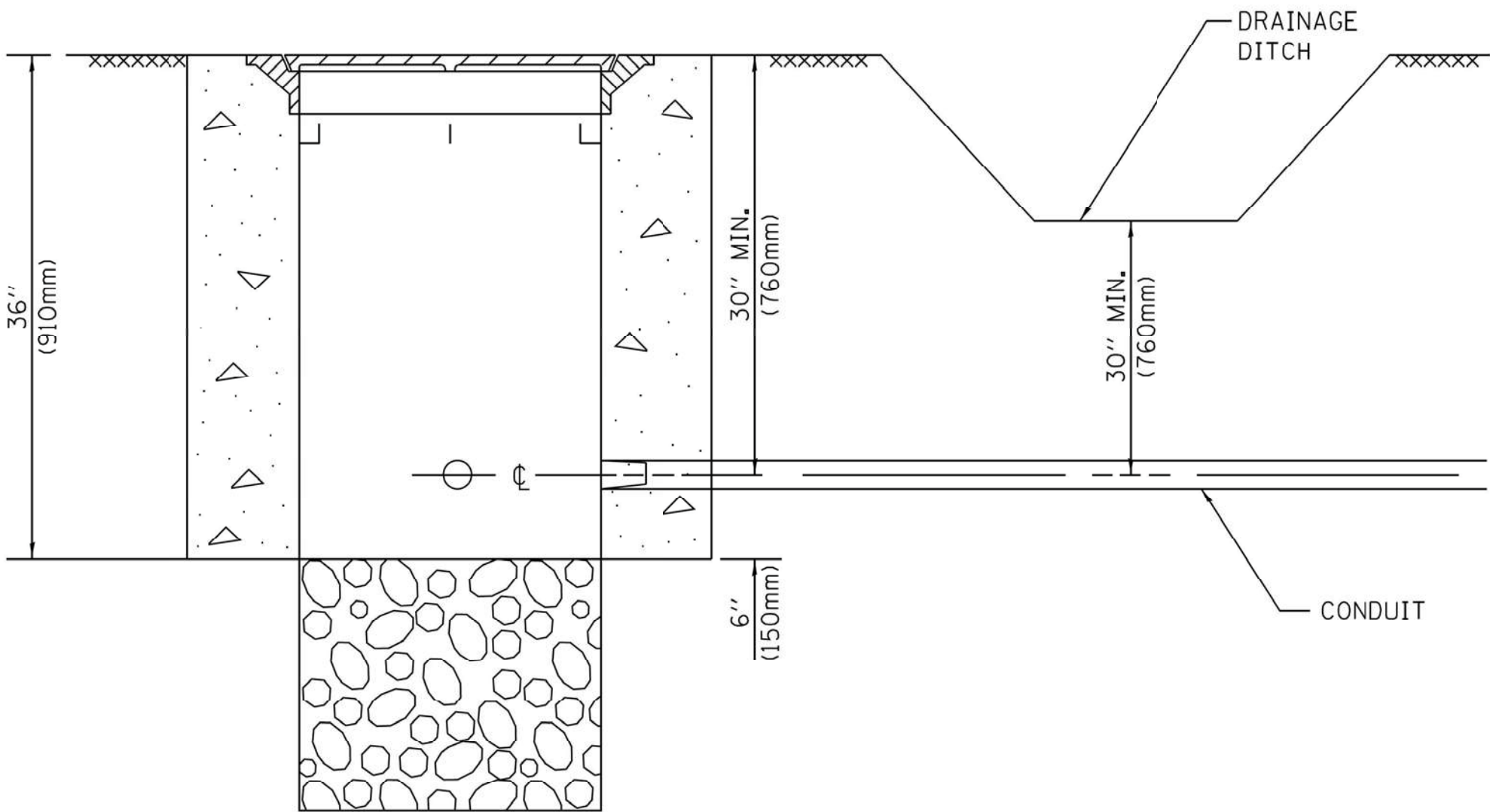
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an overage Unconfined Compressive Strength (q_u) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
4. For mast arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

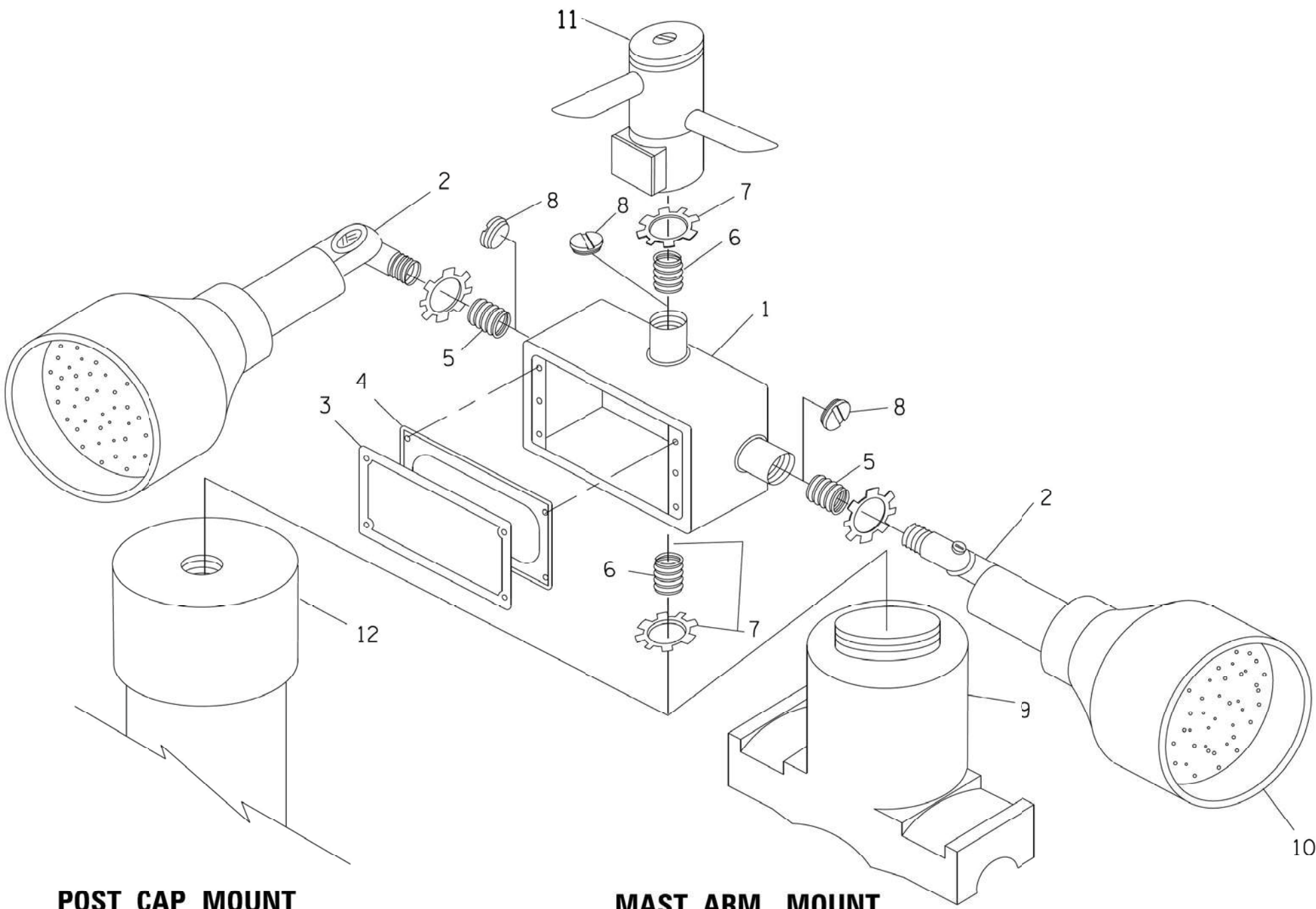
FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A. . RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw\work\p\idot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -					1030 AND 8026	17-00060-00-RS	COOK	35	32
	PLOT SCALE = 50,0000 ' / 1" =	CHECKED - DAD	REVISED -						TS-05	CONTRACT NO.	61E19	
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

- CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

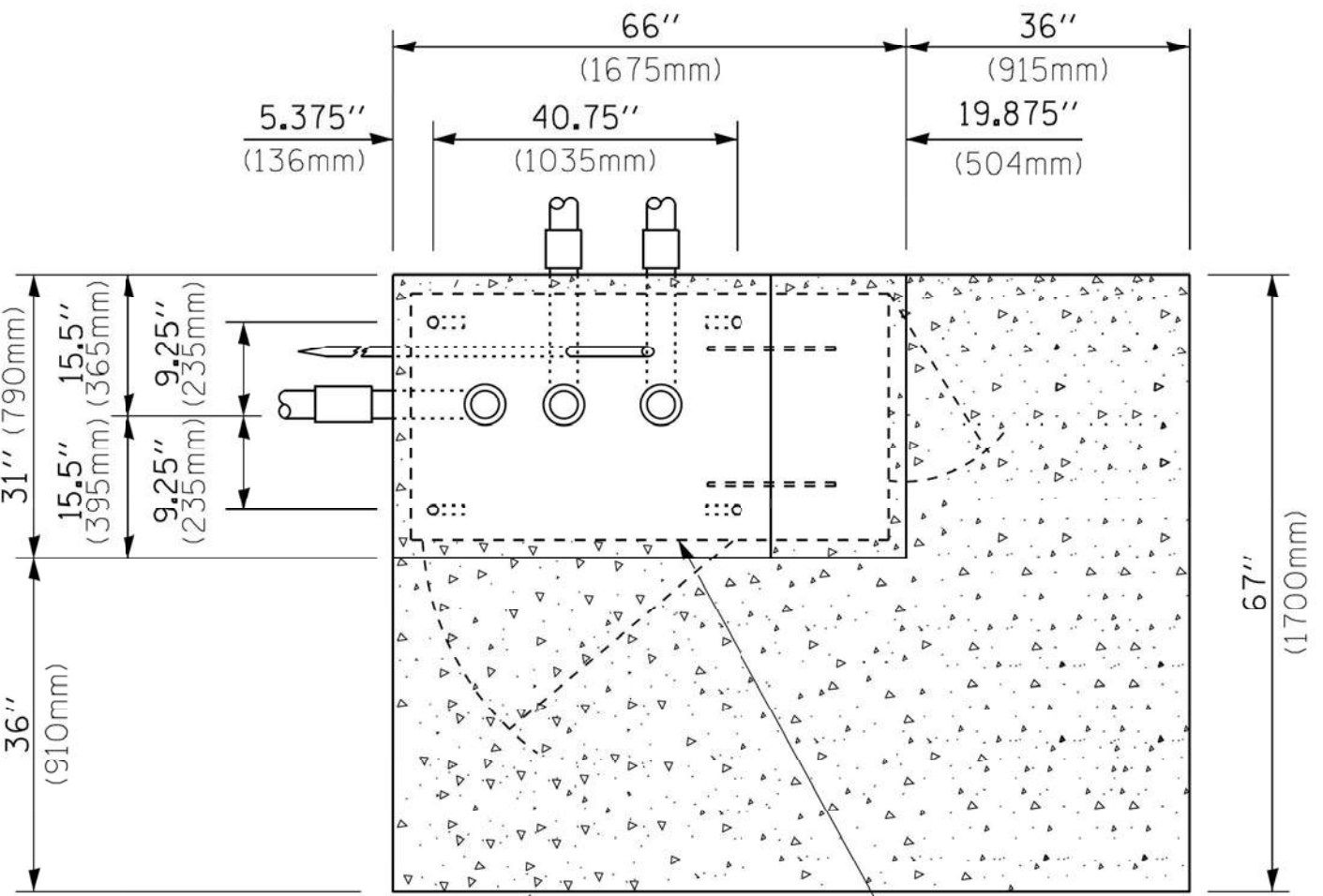
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



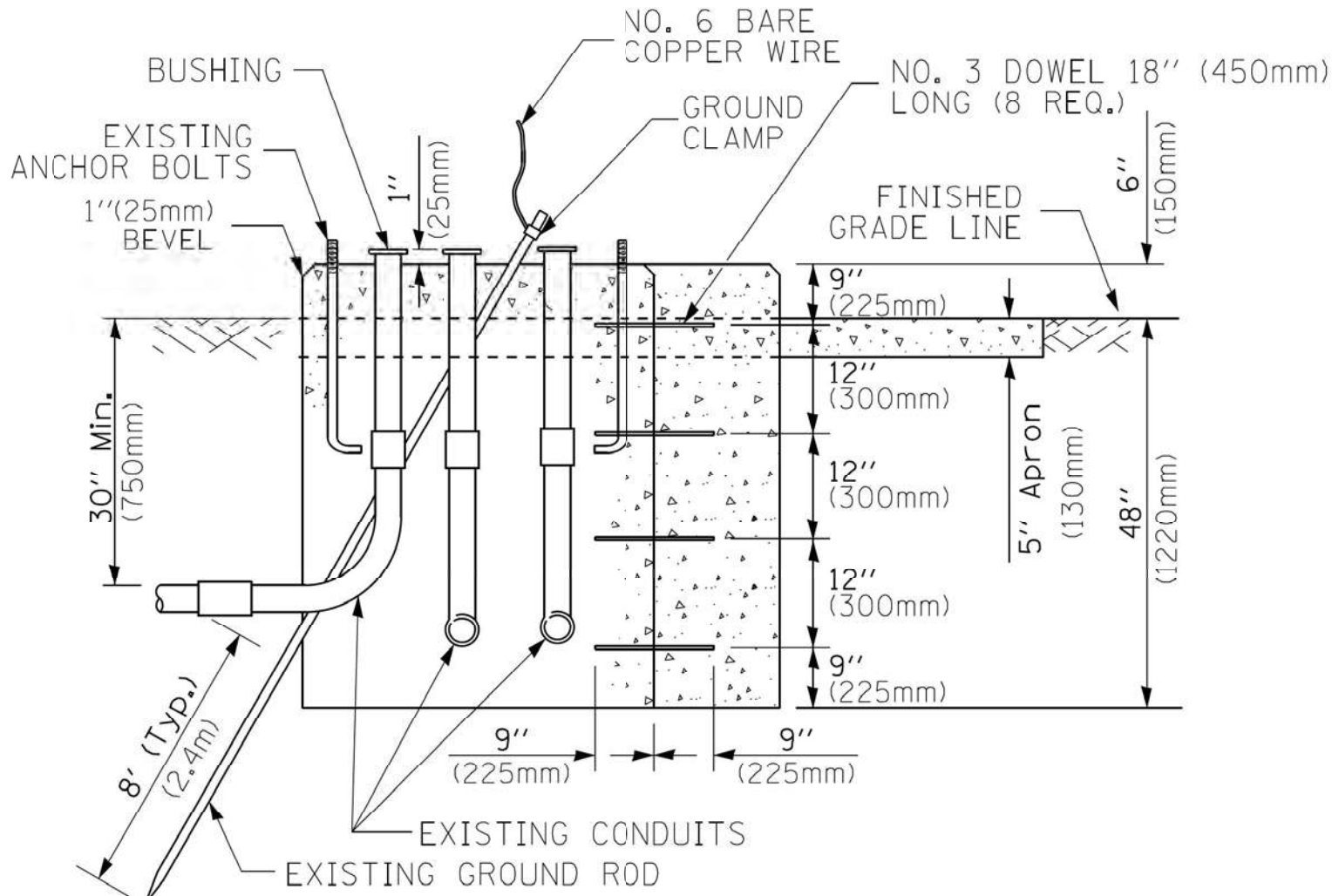
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

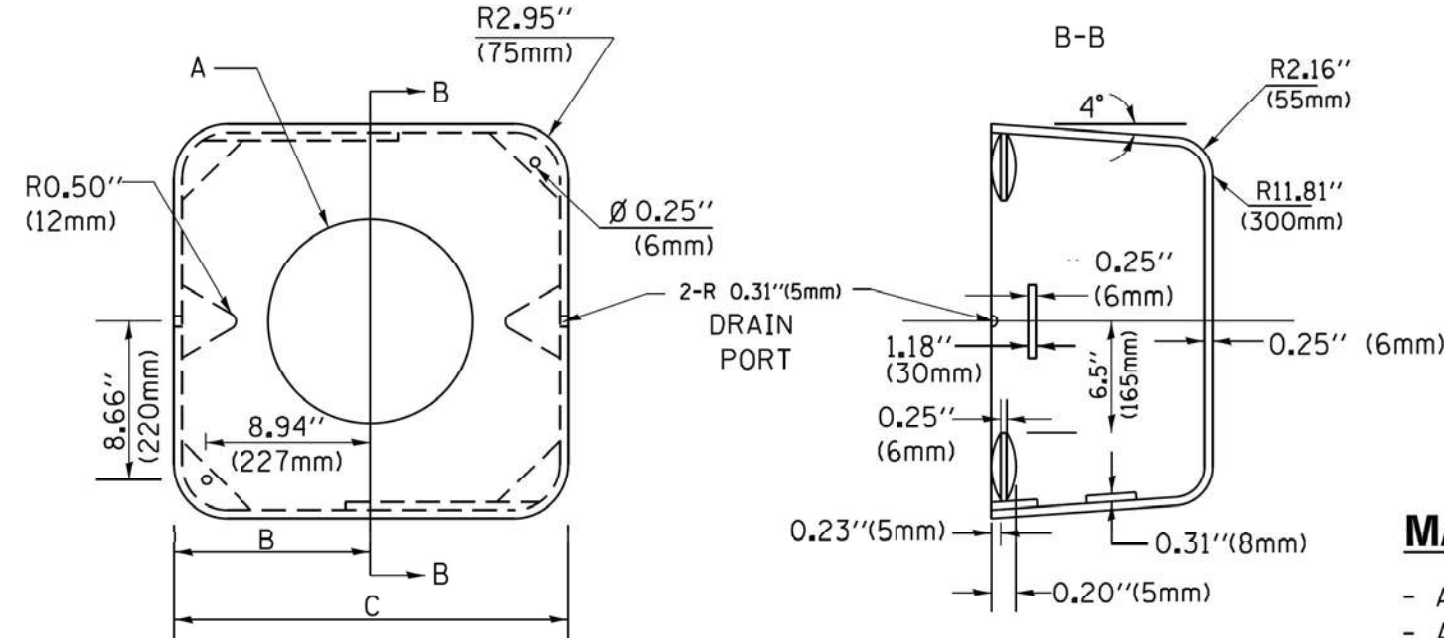


MODIFY EXISTING TYPE "D" FOUNDATION
TO TYPE "C" FOUNDATION
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

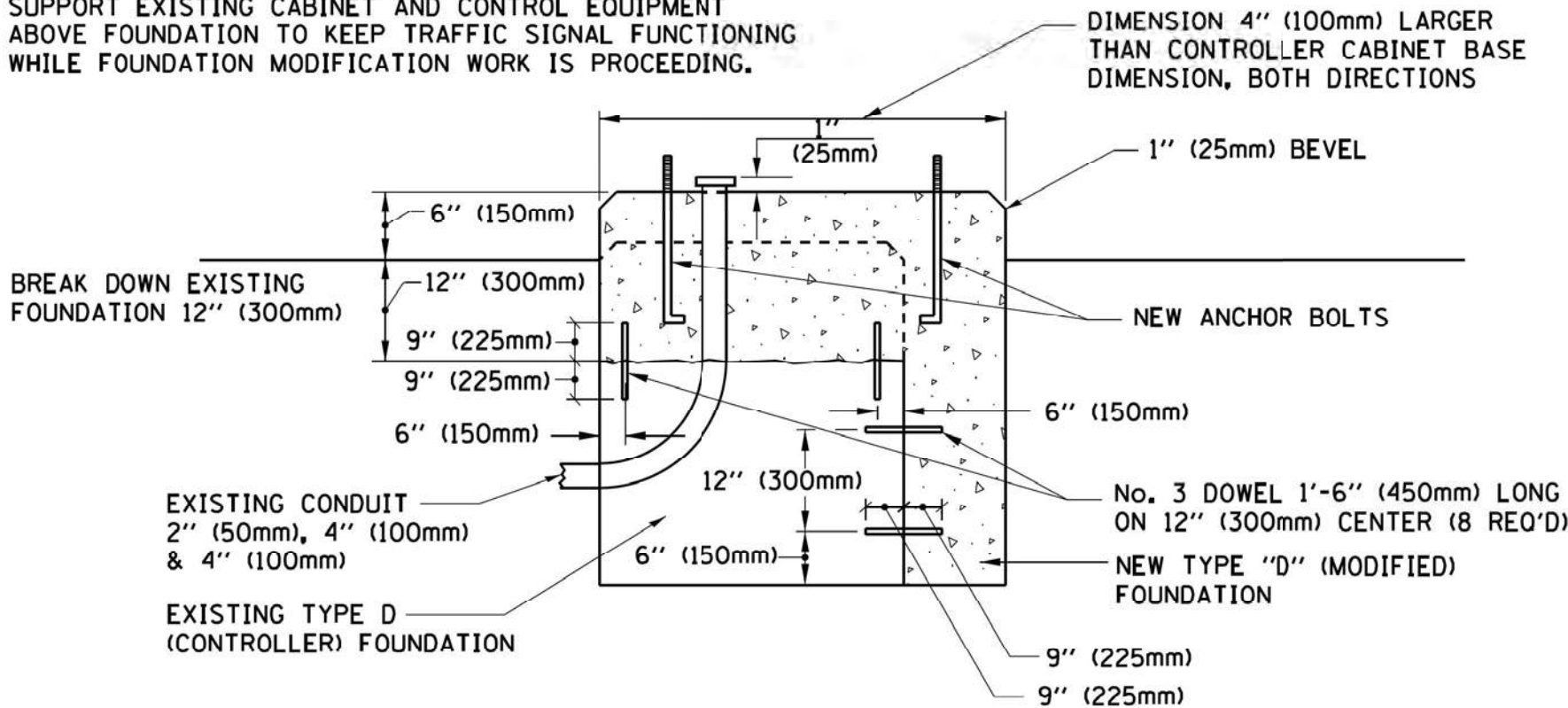
SHROUD

NOTES:

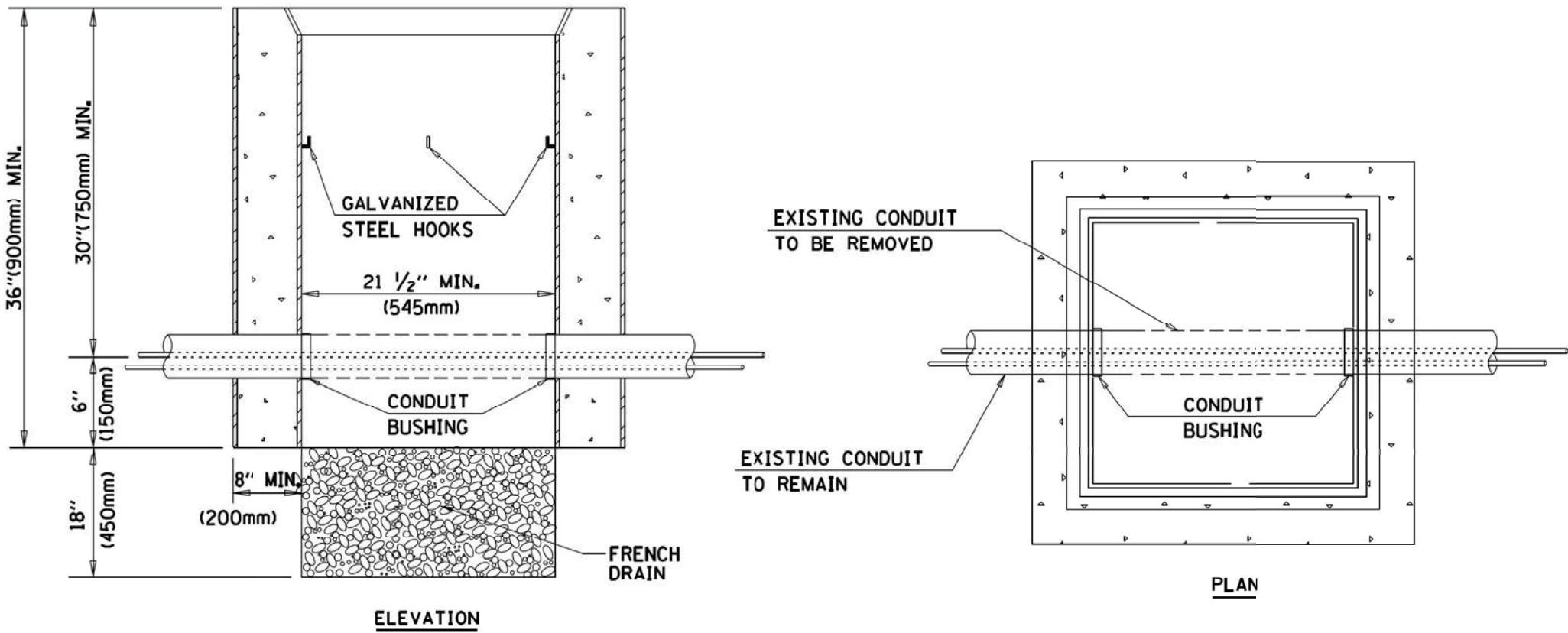
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

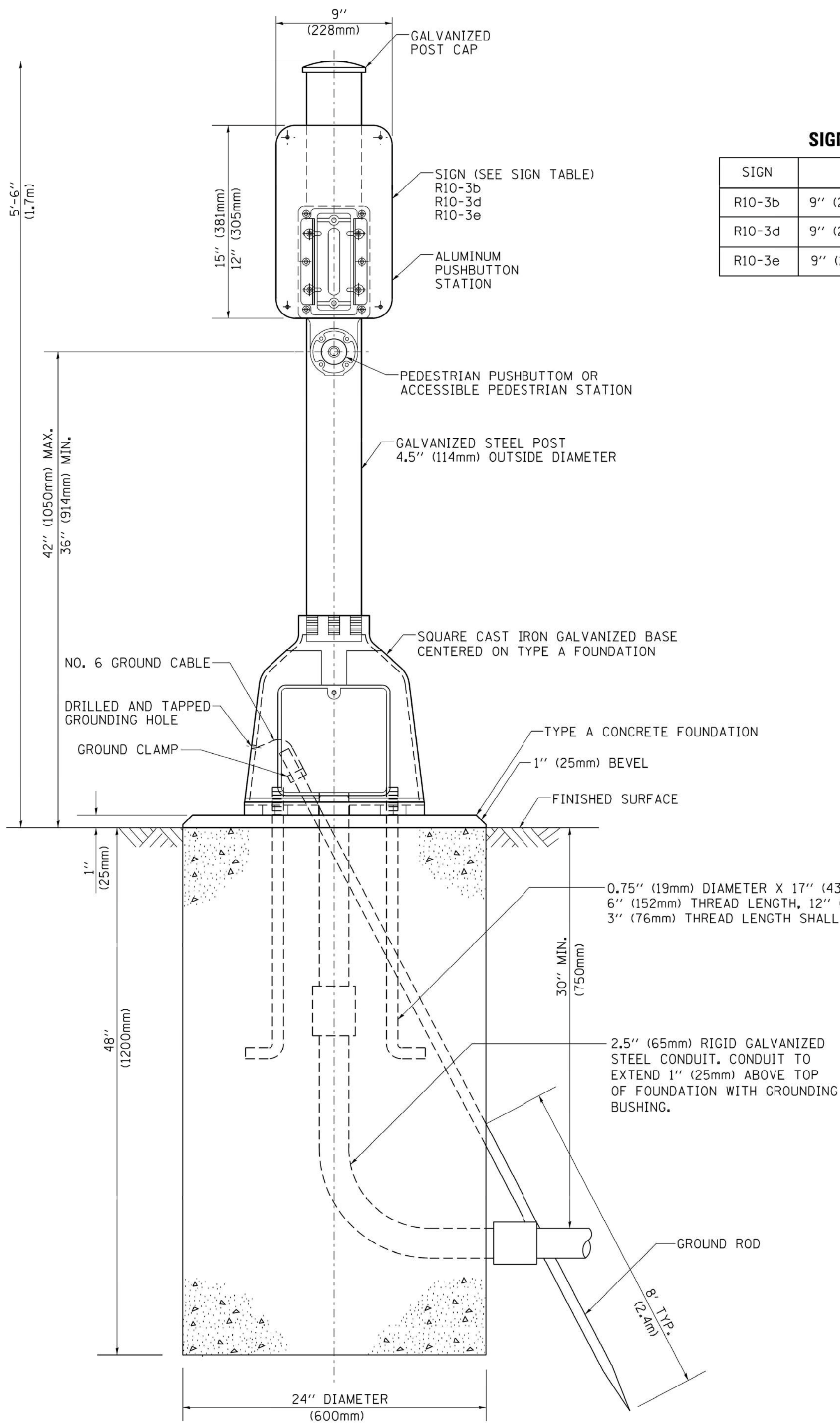
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	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

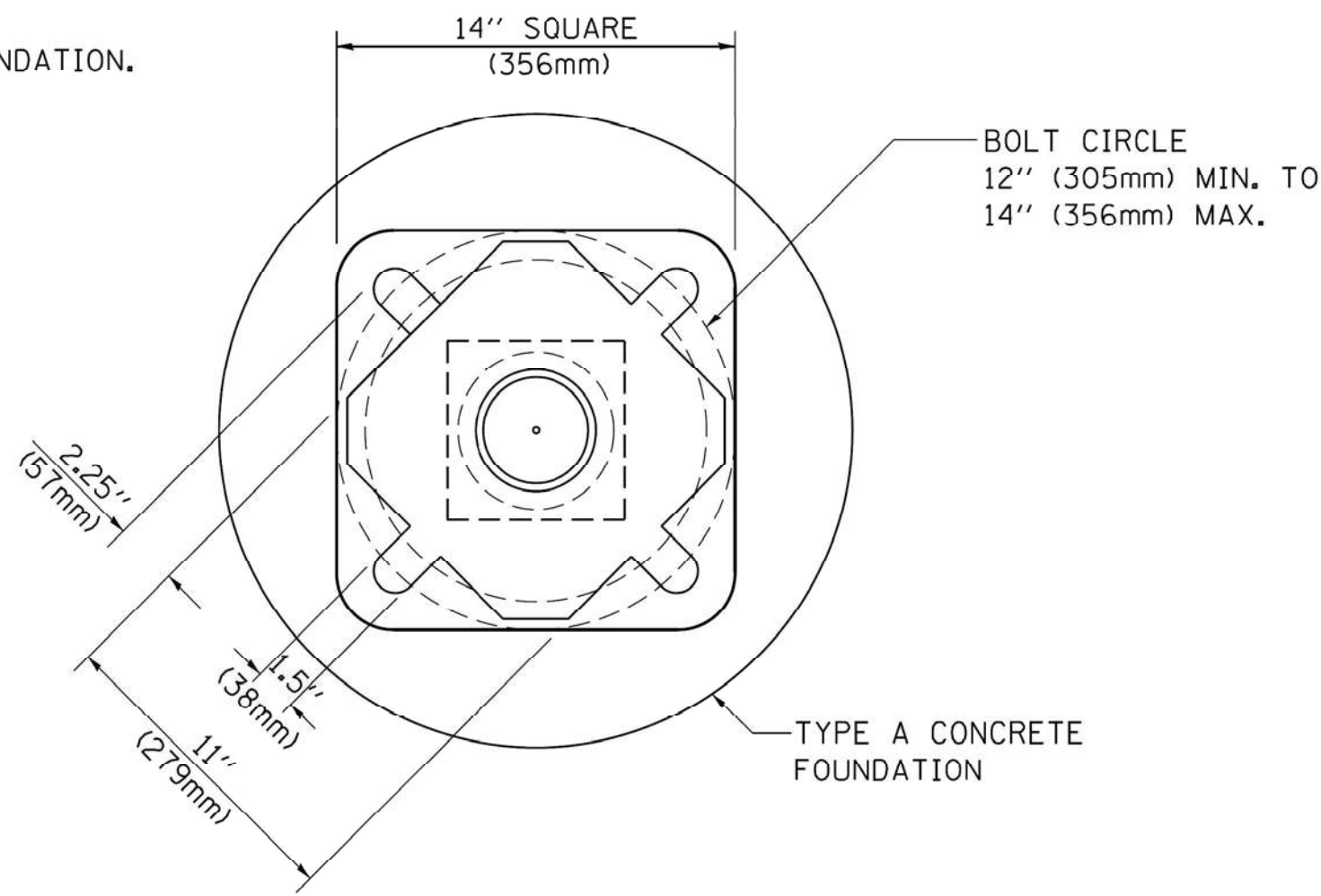
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-00060-00-RS	COOK	35	33	
TS-05	CONTRACT NO.	61E19		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



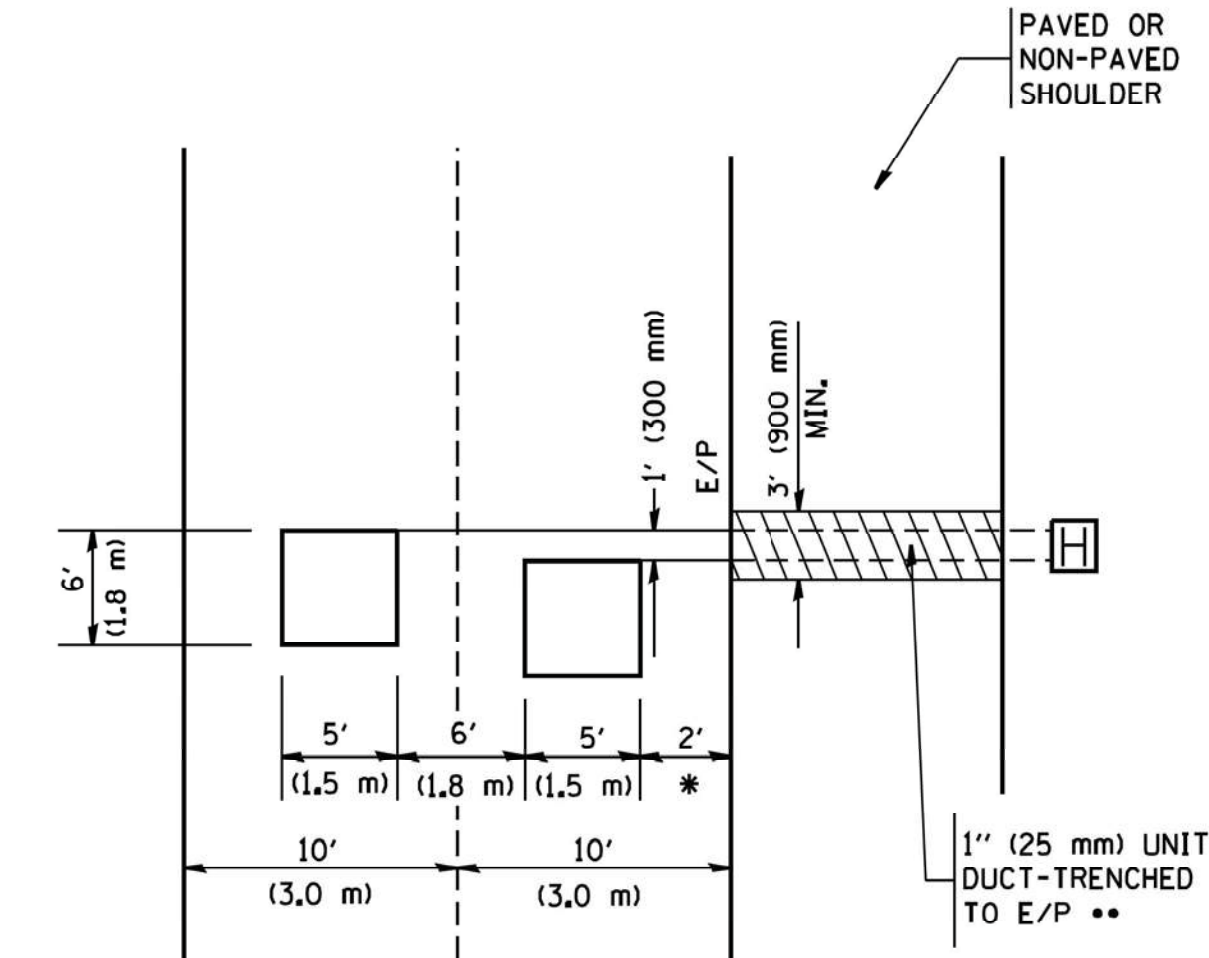
BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cs\pw\work\pwsdot\footemj\d0188315\ts05.dgn		DRAWN - GND	REVISED -						17-00060-00-RS	COOK	35	34	
	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -		TS-05		CONTRACT NO. 61E19						
	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -		SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT
NOTE WHICH SHOULD EQUAL
3' (900 mm) X WIDTH OF
PAVED SHOULDER.



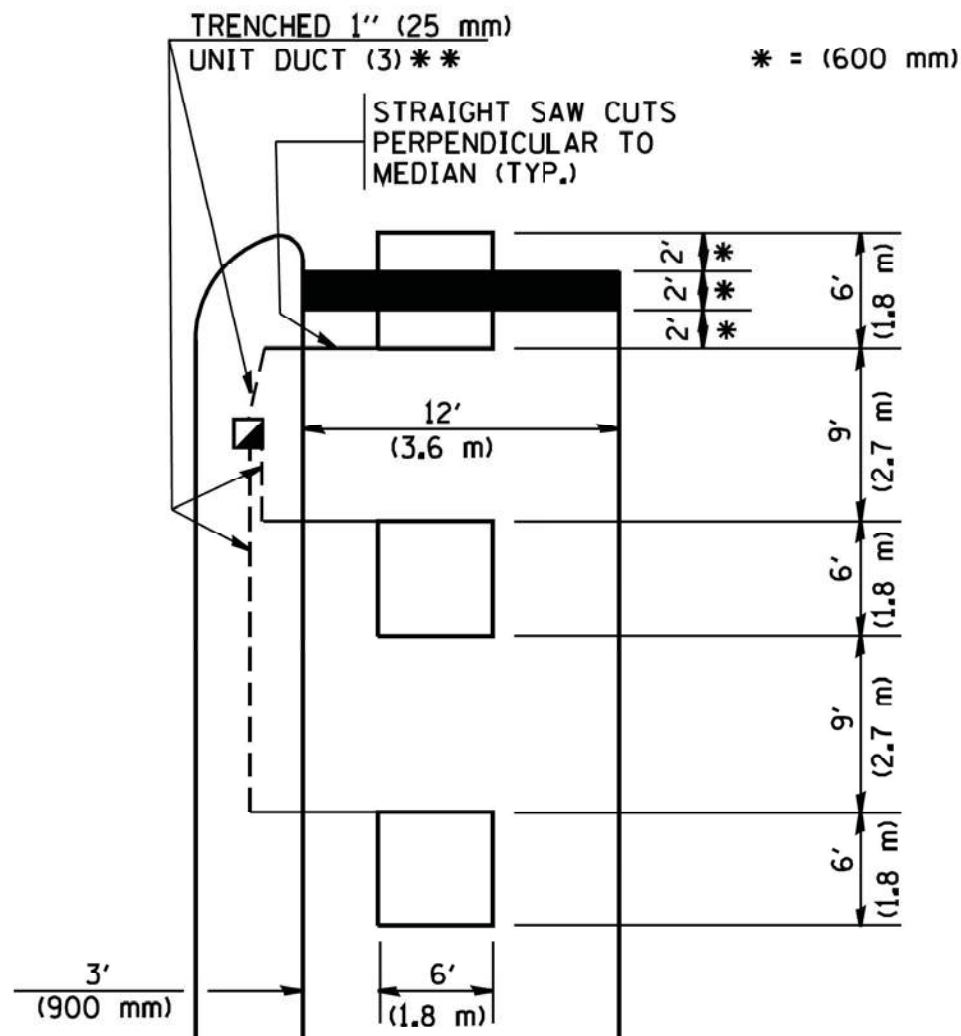
* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.

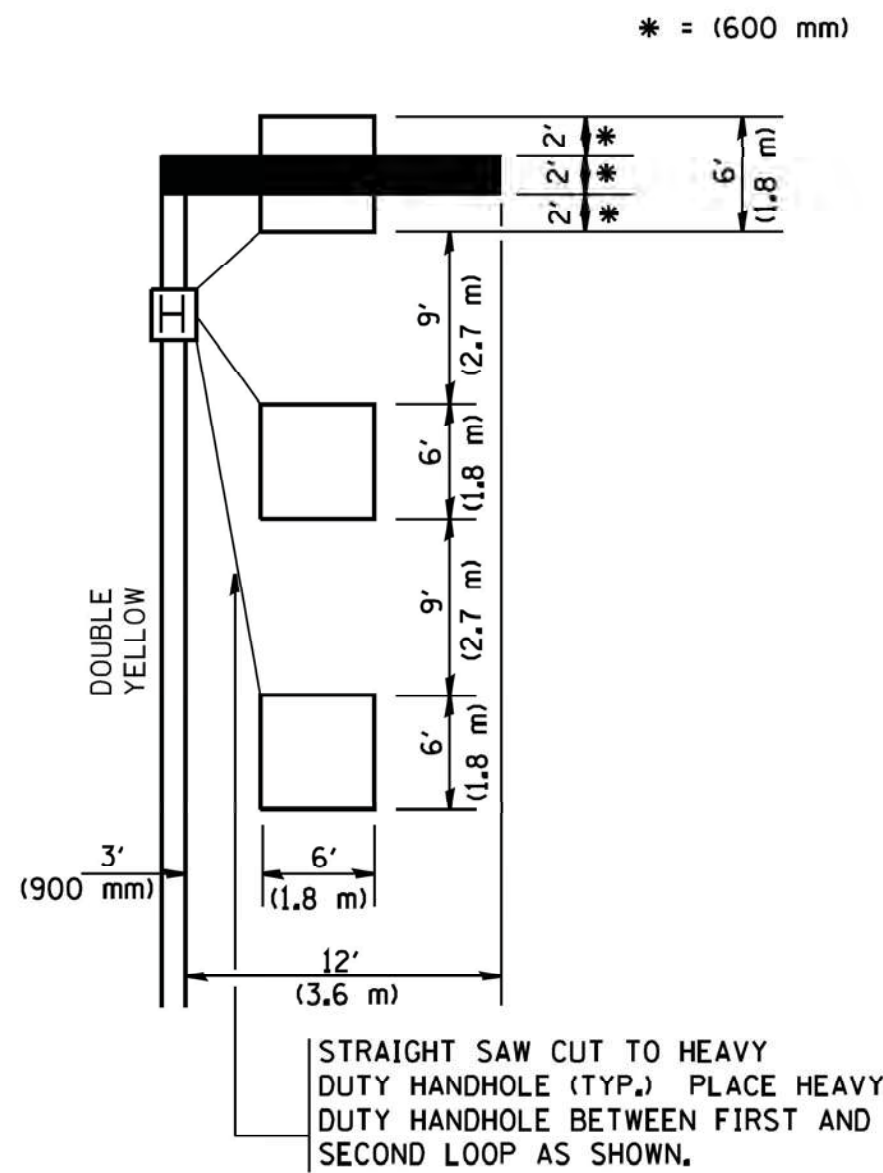


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

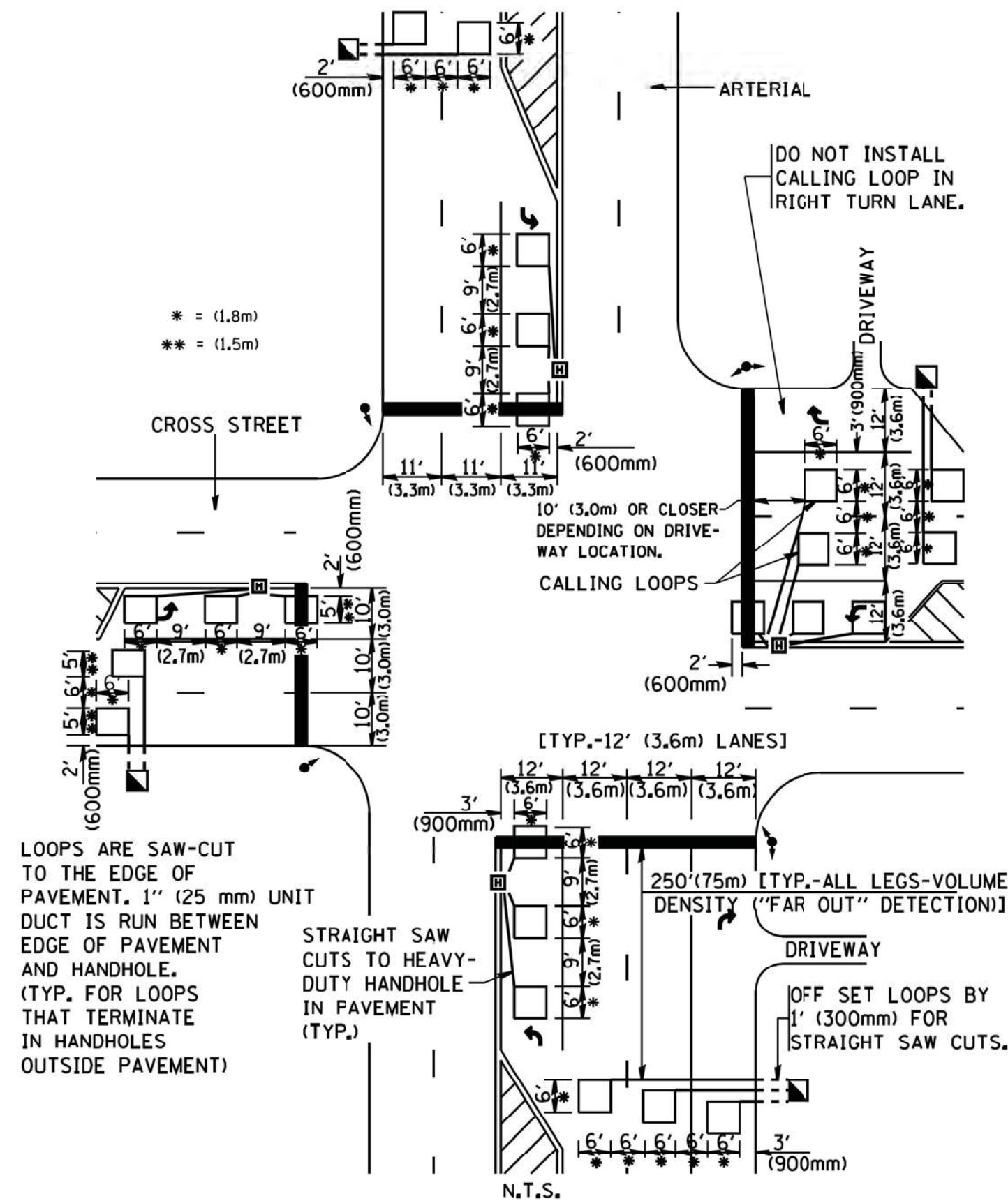
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



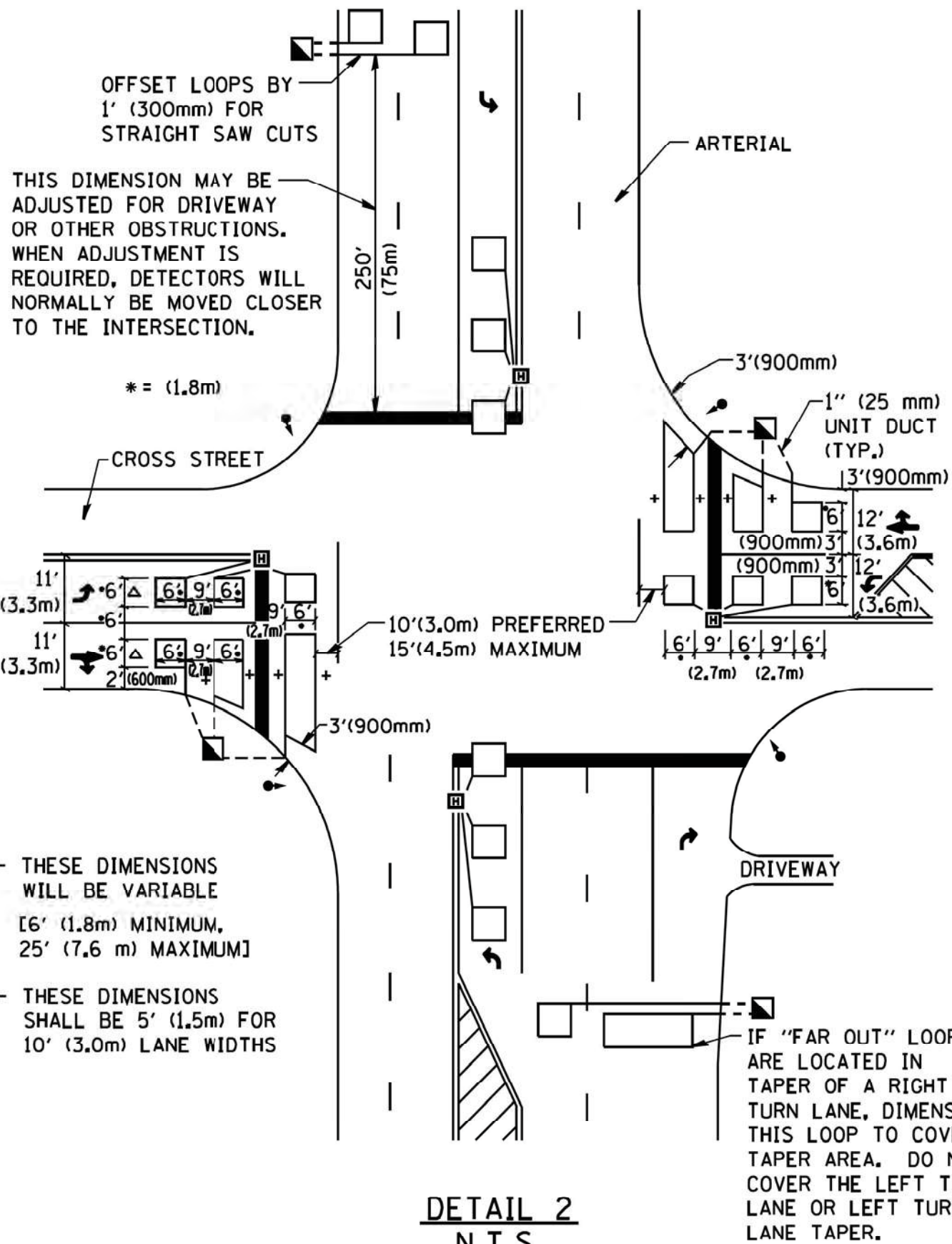
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



DETAIL 1
N.T.S.

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME = W:\diststd\22x34\ts07.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING			F.A. - RTE. 17-00060-00-RS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						17-00060-00-RS	COOK	35	35
	PLOT SCALE = 50.0000' / IN.	CHECKED - R.K.F.	REVISED -		TS-07				CONTRACT NO. 61E19			
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			