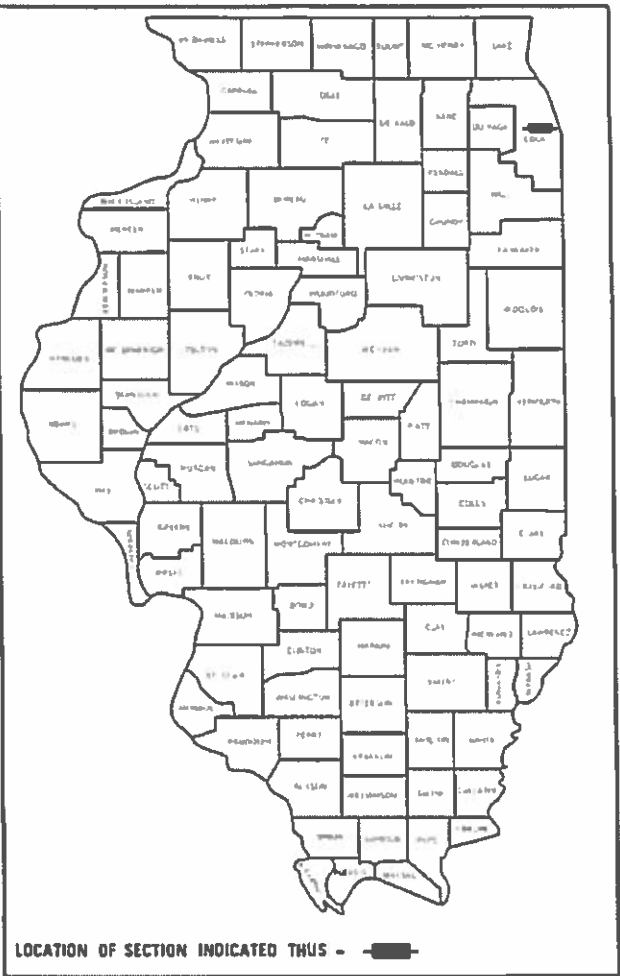


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.U. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	1
ILLINOIS			CONTRACT NO. 62G42	

85 + 14 = 99 TOTAL SHEETS

D-91-299-18

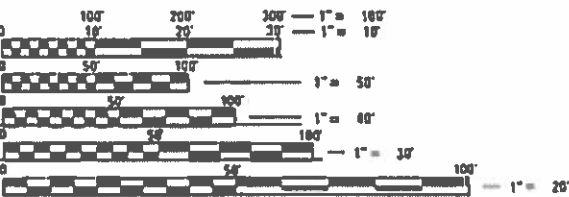


FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE  
THE VILLAGES OF SCHILLER PARK  
AND NORRIDGE

F.A.U. ROUTE 1362: LAWRENCE AVENUE  
E. OF MANNHEIM ROAD TO ROSE STREET,  
AND E. OF CANFIELD AVENUE  
SECTION: 3200RS&DR-5  
PROJECT: STP – HWFD(869)  
RESURFACING (3P), PEDESTRIAN RAMPS,  
STORM SEWER REPAIR, AND DRAINAGE IMPROVEMENTS  
COOK COUNTY

TRAFFIC DATA:  
2014 ADT = 17,600  
POSTED SPEED LIMIT = 35 MPH



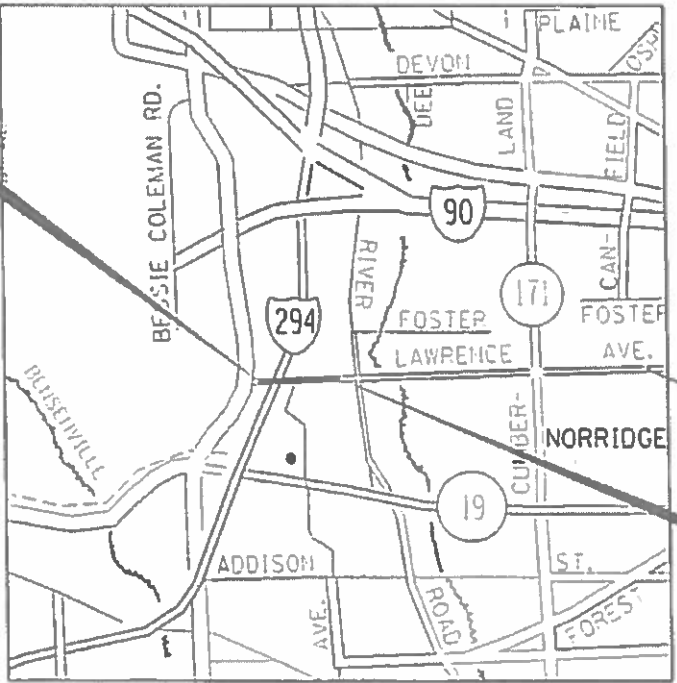
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER KARI SMITH (847) 705-4437  
PROJECT MANAGER FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 62G42

PROJECT BEGINS  
STA. 14 + 71.5



DRAINAGE  
IMPROVEMENT  
STA. 148 + 06

PROJECT ENDS  
STA. 38 + 92

LEYDEN AND NORWOOD PARK TOWNSHIPS

GROSS AND NET LENGTH = 2,420.5 FT. = 0.46 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
SUBMITTED *Sanjay K. 2019*  
*Anthony J. Wright / P.E.* SPECIAL ENGINEER  
*Aug 16 2019*  
*Aug 16 2019* ENGINEER OF DESIGN AND ENVIRONMENT  
*Paul J. Chaf* DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

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INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3 - 7	SUMMARY OF QUANTITIES
8 - 8	TYPICAL SECTIONS
9	SCHEDULE OF QUANTITIES
10	ROADWAY AND PAVEMENT MARKING PLANS
11 - 14	PROPOSED SIDEWALK RAMP DETAILS
15 - 18	STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
19	EROSION AND SEDIMENT CONTROL
20 - 27	DRAINAGE AND UTILITIES SHEETS
28 - 32	PROPOSED STRUCTURAL DETAILS
32A	SOIL BORINGS
33 - 69	EXISTING SOO RAILROAD BRIDGE DETAILS
70 - 71	DETECTOR LOOP REPLACEMENT PLANS
71A - 71J	TEMPORARY TRAFFIC SIGNAL DESIGN PLANS
71K	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER (BD-07)
72	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
73	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
74	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
75	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
76	HMA TAPER AT EDGE OF PCC PAVEMENT (BD-33)
77	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
78	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
79	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
80	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
81	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
82	ARTERIAL ROAD INFORMATION SIGN (TC-22)
83	DRIVEWAY ENTRANCE SIGNING (TC-26)
84	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAIL, SHEET 2 OF 7 (TS-05)
85	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

STATE HIGHWAY STANDARDS


STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-05	DEPRESSED CORNER FOR SIDEWALKS
442101-09	CLASS B PATCHES
442201-03	CLASS C AND D PATCHES
602001-02	CATCH BASIN TYPE A
602401-06	PRECAST MANHOLE TYPE A 6' (1.83 m) DIAMETER
602402-02	PRECAST MANHOLE TYPE A 6' (1.83 m) DIAMETER
602406-10	PRECAST MANHOLE TYPE A 6' (1.83 m) DIAMETER
602601-06	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-04	FRAMES AND LIDS TYPE 1
604051-04	FRAME AND GRATE TYPE 11
604086-03	FRAME AND GRATE TYPE 23
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-05	OFF-RD 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
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
701606-10	URBAN SINGLE LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF SCHILLER PARK.
- FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- THE CONTRACTOR SHALL CONTACT DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.

GENERAL NOTES (CONTINUED..)

- UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- FOR FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1v:3H.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- THE ENGINEER SHALL CONTACT CORY JUCIUS, ARTERIAL TRAFFIC FIELD ENGINEER AT CORY.JUCIUS@ILLINOIS.GOV A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
- THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.
- LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT [OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED IN THE PLANS)] WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CONTACT THE IDOT ROADSIDE DEVELOPMENT UNIT AT 847-705-4171 AT LEAST 2 WEEKS PRIOR TO BEGINNING LANDSCAPE AND FORESTRY WORK FOR LAYOUT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, OR CATCH BASINS. THEY SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. THEY SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET SHALL BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT ROADSIDE DRAINAGE SYSTEM IS BUILT AND IN SERVICE.
- THE ENGINEER SHALL REPORT CLEARANCES UNDER THE BRIDGES BEFORE AND AFTER RESURFACING.
- ANY GEOTECHNICAL INFORMATION REQUIRED FOR THE DESIGN OF THE TEMPORARY SOIL RETENTION SYSTEM (TSRS) IS INCLUDED IN THE COST OF THE TRS.

	USER NAME = paraynoal	DESIGNED -	REVISED -  ALP 4/11/19	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.) GENERAL NOTES AND INDEX SHEET	SCALE: 1"= 50'	SHEET	OF	SHEETS	STA.	TO STA.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -									1362	3200RS&DR-5	COOK	85	2
	PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -									CONTRACT NO. 62G42				
	PLOT DATE = 7/29/2019	DATE -	REVISED -									ILLINOIS				FED. AID PROJECT

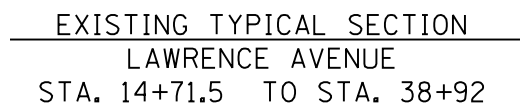
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SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE								
CODE NO	ITEM	UNIT		0005 80% FED 20% STATE						CODE NO	ITEM	UNIT		0005 80% FED 20% STATE								
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SO YD	137	137						550A0190	STORM SEWERS, CLASS A, TYPE 1 48"	FOOT	45	45								
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SO YD	1186	1186						550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	63	63								
44213000	PATCHING REINFORCEMENT	SO YD	652	652						550A0480	STORM SEWERS, CLASS A, TYPE 2 48"	FOOT	511	511								
44213200	SAW CUTS	FOOT	2867	2867						550A4000	STORM SEWERS, CLASS A, TYPE 1	FOOT	129	129								
											EQUIVALENT ROUND-SIZE 18"											
44213204	TIE BARS 3/4"	EACH	461	461																		
										550A4800	STORM SEWERS, CLASS A, TYPE 2	FOOT	325	325								
50102400	CONCRETE REMOVAL	CU YD	9	9							EQUIVALENT ROUND-SIZE 18"											
50200100	STRUCTURE EXCAVATION	CU YD	3	3						55100400	STORM SEWER REMOVAL 10"	FOOT	6	6								
50300225	CONCRETE STRUCTURES	CU YD	9	9						55100500	STORM SEWER REMOVAL 12"	FOOT	24	24								
50300300	PROTECTIVE COAT	SO YD	51	51						55100700	STORM SEWER REMOVAL 15"	FOOT	164	164								
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	660	660						55100900	STORM SEWER REMOVAL 18"	FOOT	116	116								
52200020	TEMPORARY SOIL RETENTION SYSTEM	SO FT	422	422						55101100	STORM SEWER REMOVAL 21"	FOOT	136	136								
54248510	CONCRETE COLLAR	CU YD	7	7						55101400	STORM SEWER REMOVAL 30"	FOOT	578	578								
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	43	43						60200105	CATCH BASINS, TYPE A, 4' -DIAMETER, TYPE	EACH	1	1								
											1 FRAME, OPEN LID											
550A0160	STORM SEWERS, CLASS A, TYPE 1 36"	FOOT	30	30																		
										60203805	CATCH BASINS, TYPE A, 5' -DIAMETER, TYPE	EACH	1	1								
550A0180	STORM SEWERS, CLASS A, TYPE 1 42"	FOOT	246	246							1 FRAME, OPEN LID											
FILE NAME =			USER NAME = parayroot		DESIGNED -		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.) SUMMARY OF QUANTITIES				F.A.U. RTE.		SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
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SUMMARY OF QUANTITIES				TOTAL QUANTITIES	CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES				TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	0005 80% FED 20% STATE								CODE NO	ITEM	UNIT	0005 80% FED 20% STATE							
60218400	MANHOLES, TYPE A, 4' -DIAMETER, TYPE 1	EACH	4	4							60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	8	8						
	FRAME, CLOSED LID																				
60221100	MANHOLES, TYPE A, 5' -DIAMETER, TYPE 1	EACH	3	3																	
	FRAME, CLOSED LID																				
60223700	MANHOLES, TYPE A, 6' -DIAMETER, TYPE 1	EACH	1	1																	
	FRAME, OPEN LID																				
60223800	MANHOLES, TYPE A, 6' -DIAMETER, TYPE 1	EACH	7	7																	
	FRAME, CLOSED LID																				
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	6	6																	
60236825	INLETS, TYPE A, TYPE 11V FRAME AND	EACH	1	1																	
	GRATE																				
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1																	
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1																	
60262700	INLETS TO BE RECONSTRUCTED	EACH	1	1																	
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	16	16																	
60404800	FRAMES AND GRATES, TYPE 11	EACH	1	1																	
60404940	FRAMES AND GRATES, TYPE 23	EACH	2	2																	
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	2	2																	

SUMMARY OF QUANTITIES				TOTAL QUANTITIES	CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES				TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	0005 80% FED 20% STATE								CODE NO	ITEM	UNIT	0005 80% FED 20% STATE							

[illegible]



- ## LEGEND
- 
- ① EXIST. PCC PAVEMENT,  $\pm 9''$
  - ② EXIST. PCC SIDEWALK, 5" (TYP.)
  - ③ EXIST. COMB. CONCRETE CURB AND GUTTER
  - ④ PROP. HMA SURFACE REMOVAL, 2  $\frac{1}{2}''$
  - ⑤ EXIST. HMA AFTER MILLING,  $\pm 1 \frac{3}{4}''$
  - ⑥ PROP. POLY. HMA SURFACE COURSE, SMA, 9.5, N80 1  $\frac{3}{4}''$
  - ⑦ PROP. POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50,  $\frac{3}{4}''$

## HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ N <sub>DES</sub>	QUALITY MANAGEMENT PROGRAM (QMP)
<b>ROADWAY MAINLINE AND SHOULDER RESURFACING:</b>		
POLY. HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, N80 (IL 9.5 mm)	3.5% AT 80 GYR.	QC/QA
POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% AT 50 GYR.	QC/QA

### HOT-MIX ASPHALT PATCHING:

CLASS D PATCHES (HMA BINDER IL-19 mm)	4% AT 70 GYR.	QC/OA
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**HOT-MIX ASPHALT REPLACEMENT OVER PATCHES:**

HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% AT 70 GYR.	OC/OA
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OMP Designation: Quality Control/Quality Assurance (QC/QA);  
Quality Control for Performance (QCP); Pay for Performance (PFP)

NOTES:

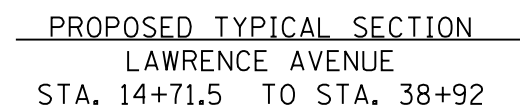
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED OVER THE POLYMERIZED LEVELING BINDER (MM), JL-4.75, N50, WHERE THE SURFACE JOINT WILL BE LOCATED.



NOTE:  
THE CONTRACTOR PATCH THE ROADWAY FIRST,  
THEN MILL, PER BD-22 DETAIL.

USER NAME = paraynoal	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/25/2019	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.)  
EXISTING AND PROPOSED TYPICAL SECTIONS.)**

SCALE: 1" = 50'	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	8
		CONTRACT NO. 62G42		
		ILLINOIS	FED. AID PROJECT	

**TREE PRUNING SCHEDULE**

TREE PRUNING (1 TO 10 INCH DIAMETER)			
STATION	OFFSET DIRECTION	QTY	UNIT
37+20	LT	1	EACH
TOTAL = 1 EACH			

TREE PRUNING (OVER 10 INCH DIAMETER)			
STATION	OFFSET DIRECTION	QTY	UNIT
30+80	LT	1	EACH
33+10	LT	1	EACH
33+40	LT	1	EACH
33+90	LT	1	EACH
34+30	LT	1	EACH
TOTAL = 5 EACH			

**NOTE:**

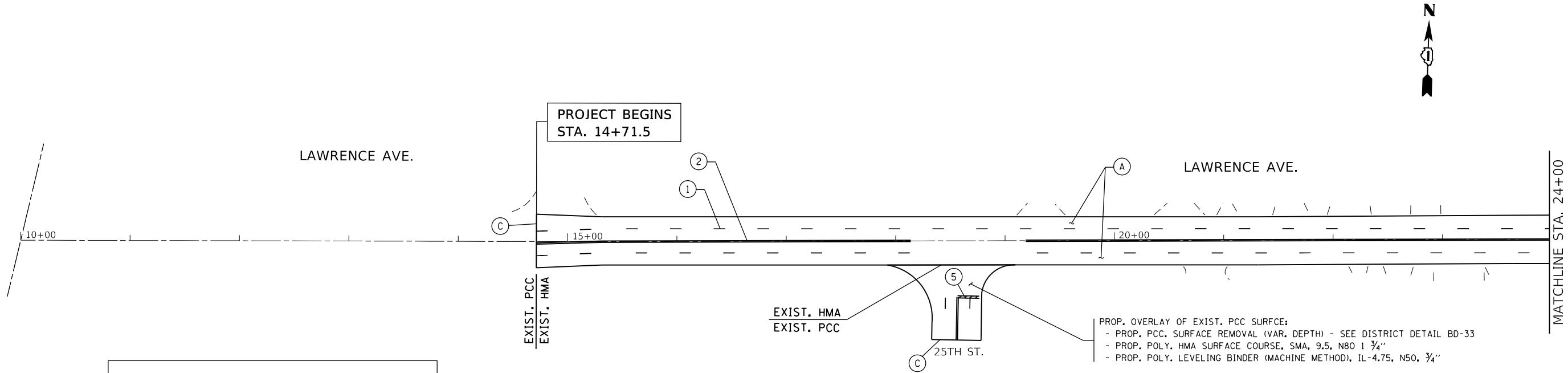
FOR OTHER LAYOUT DETAILS, INCLUDING OFFSET DISTANCES, REFER TO NOTE ITEM NO. 21

UNDER GENERAL NOTES ON THE INDEX SHEET.

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	USER NAME = paraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.) SCHEDULES OF QUANTITIES		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -				1362	3200RS&DR-5	COOK	85	9
	PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -				CONTRACT NO. 62G42				
	PLOT DATE = 1/30/2019	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
SCALE: 1"= 50"		SHEET	OF	SHEETS	STA.	TO STA.					

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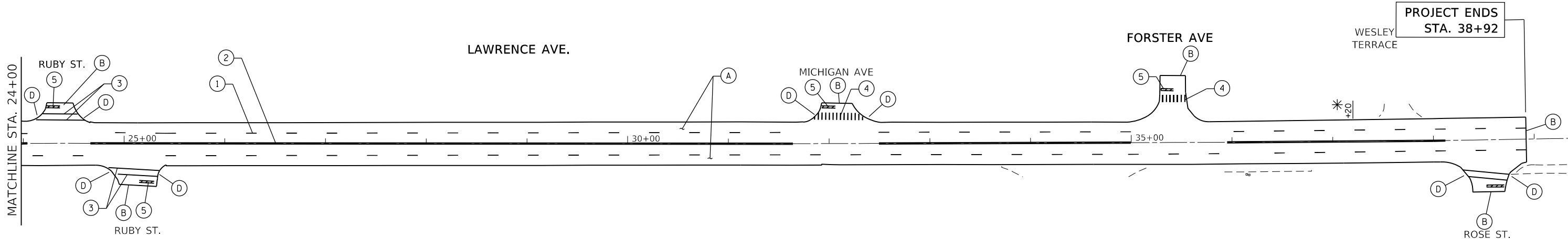
PAVEMENT MARKING LEGEND

- 1 PROP. THERMO. PVT. MRK.-4" 10' DASH - 30' SKIP, WHITE (TYP.)
- 2 PROP. THERMO. PVT. MRK.-4" CENTERLINE, DOUBLE YELLOW (TYP.))
- 3 PROP. THERMO. PVT. MRK.-6" 2 @ 6" SOLID LINE, WHITE
- 4 PROP. THERMO. PVT. MRK.-12" SCHOOL CROSSING BARS, WHITE (TYP.)
- 5 PROP. THERMO. PVT. MRK.-24" STOP LINE, WHITE (TYP.)

NOTE: ALL FINAL PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH DISTRICT ONE DETAILS TC-11 AND TC-13

ROADWAY PROPOSED WORK LEGEND

- A PROP. HMA SURFACE REMOVAL, 2 1/2" PROP. POLY. HMA SURFACE COURSE, SMA, 9.5, N80 1 3/4" PROP. POLY. LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- B PROP. HMA SURFACE REMOVAL - BUTT JOINT LIMIT OF RESURFACING
- C PROP. PCC SURFACE REMOVAL - BUTT JOINT LIMIT OF RESURFACING
- D PROP. PCC SIDEWALK CURB RAMP IMPROVEMENT (SEE DETAIL SHEETS)



NOTE:  
QUANTITIES FOR PROP. EXIST. HH TO REBUILD  
AND EXIST. HH TO REBUILD TO HEAVY DUTY HH ARE FROM  
CONSTRUCTION SURVEY. EXACT LOCATIONS ARE TO BE  
DETERMINED IN THE FIELD AS DIRECTED BY THE RESIDENT  
ENGINEER.

USER NAME = paraynoal	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2019	CHECKED -	REVISED -
	DATE -	REVISED -

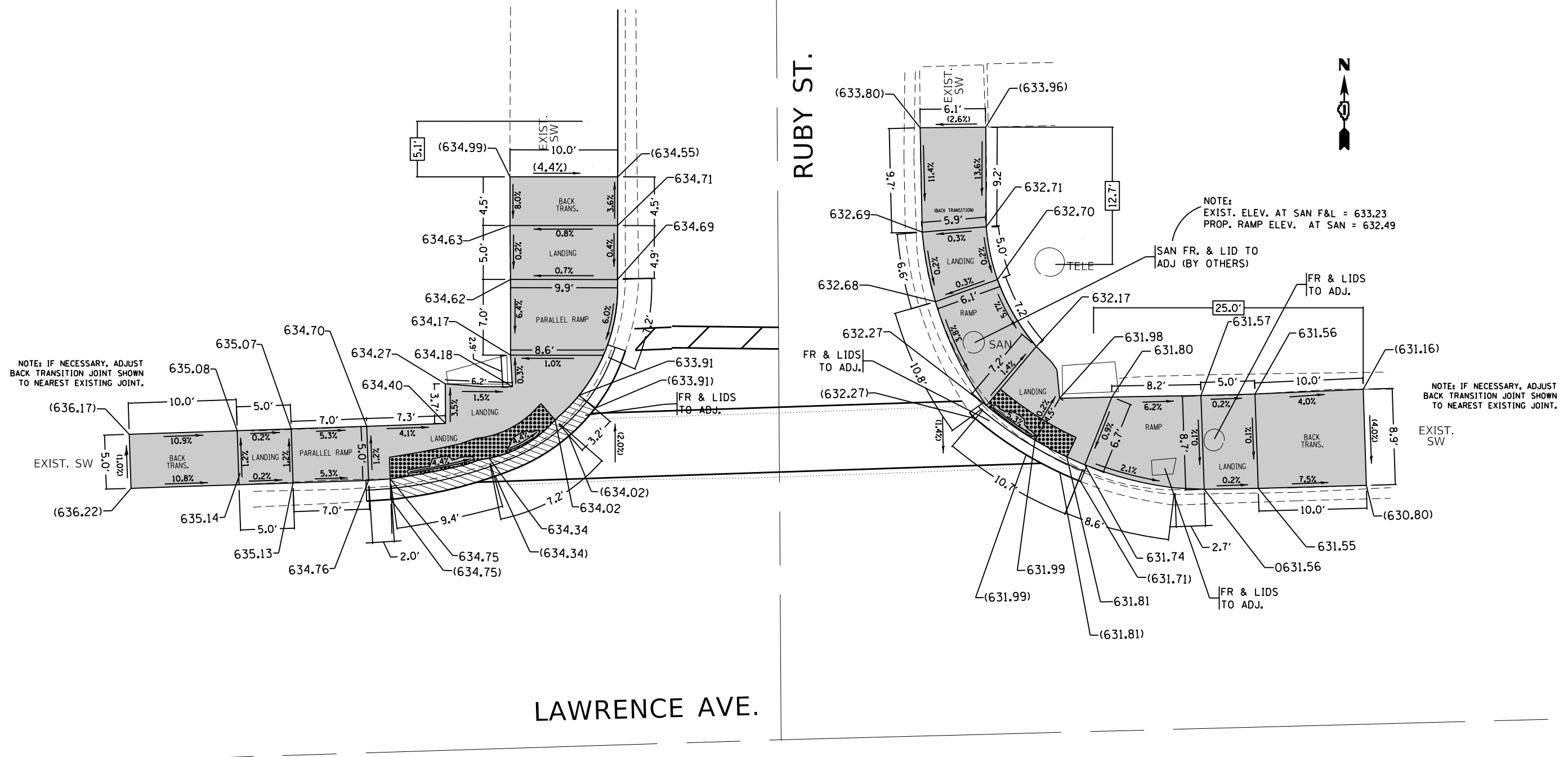
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROADWAY AND PAVEMENT MARKING PLAN  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	10
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
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REFERENCE BENCHMARK ELEV 637.552

BENCHMARK : SPINDLE OF FIRE HYDRANT

LOCATION : AT NORTHWEST CORNER OF LAWRENCE AVE. AND RUBY ST.

## LEGEND

xx.xx'

EXISTING LENGTH

==

PROPOSED SIDE CURB

( )

EXISTING ELEVATION/SLOPE



PROPOSED SIDEWALK



DETECTABLE WARNINGS



SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

ADA CORNER LOCATION AT RUBY ST AND LAWRENCE AVE. :

- NW CORNER IS AT STA. 24 +10 /30 LT
- NE CORNER IS AT STA. 24 +60 /30 LT

USER NAME = paraynoal	DESIGNED - PLP 10/04/2016	REVISED - PLP 11/07/2016
	DRAWN - PLP 10/04/2016	REVISED - PLP 08/11/2017
PLOT SCALE = 10.0000 ' / in.	CHECKED -	REVISED - PLP 09/14/2017
PLOT DATE = 7/22/2019	DATE -	REVISED - PLP 01/10/2018

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL PLAN  
LAWRENCE AVE. - (E. OF MANNHEIM RD. - ROSE ST.)

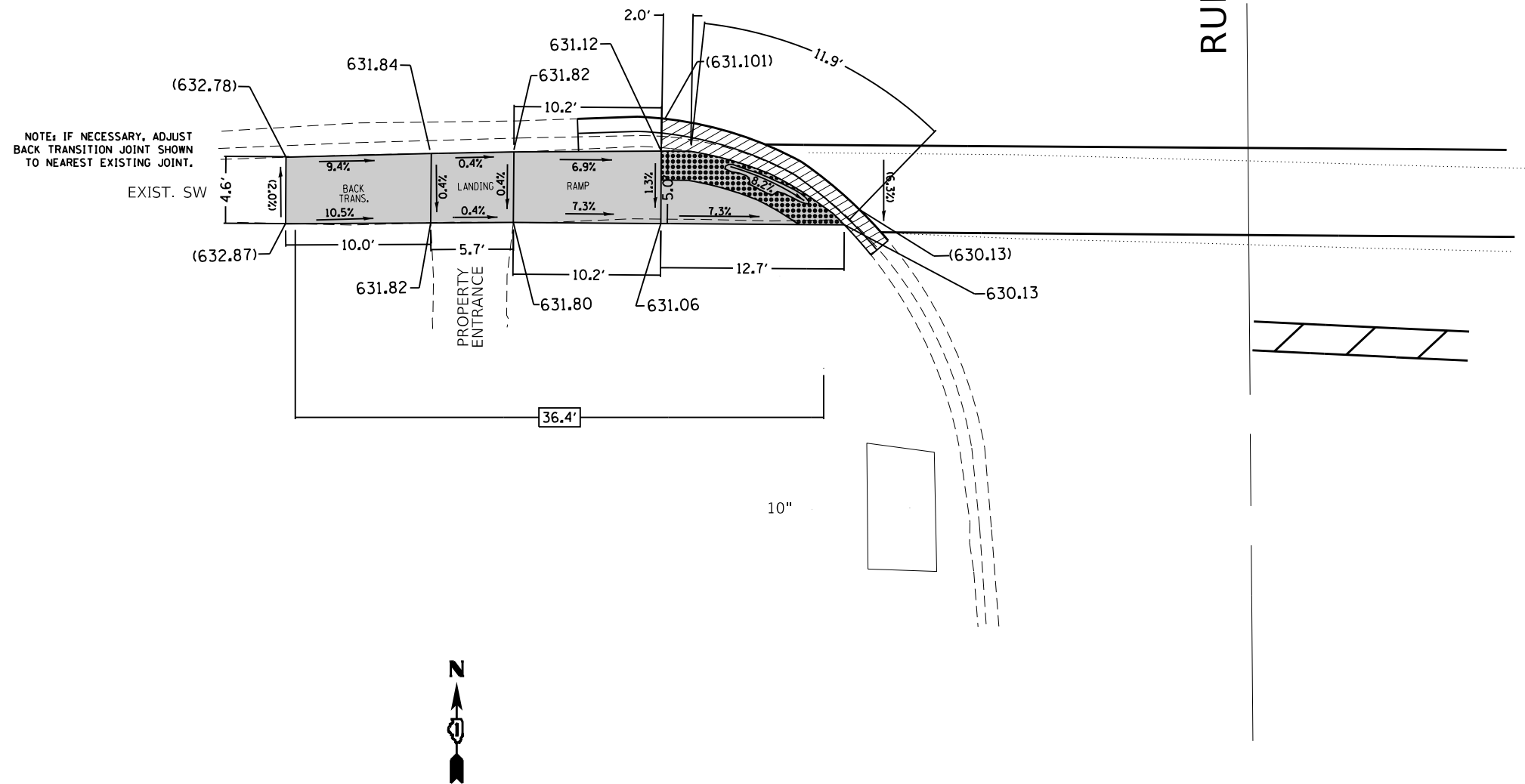
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	11
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

ENC.

LAWRENCE AVE.

RUBY ST.



REFERENCE BENCHMARK ELEV 637.552

BENCHMARK : SPINDLE OF FIRE HYDRANT

LOCATION : AT NORTHWEST CORNER OF LAWRENCE AVE. AND RUBY ST.

## LEGEND

xx.xx'

EXISTING LENGTH

==

PROPOSED SIDE CURB

( )

EXISTING ELEVATION/SLOPE



PROPOSED SIDEWALK



DETECTABLE WARNINGS



SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SOD

ADA CORNER LOCATION AT RUBY ST AND LAWRENCE AVE. :  
- SW CORNER IS AT STA. 24+80 /28 RT

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

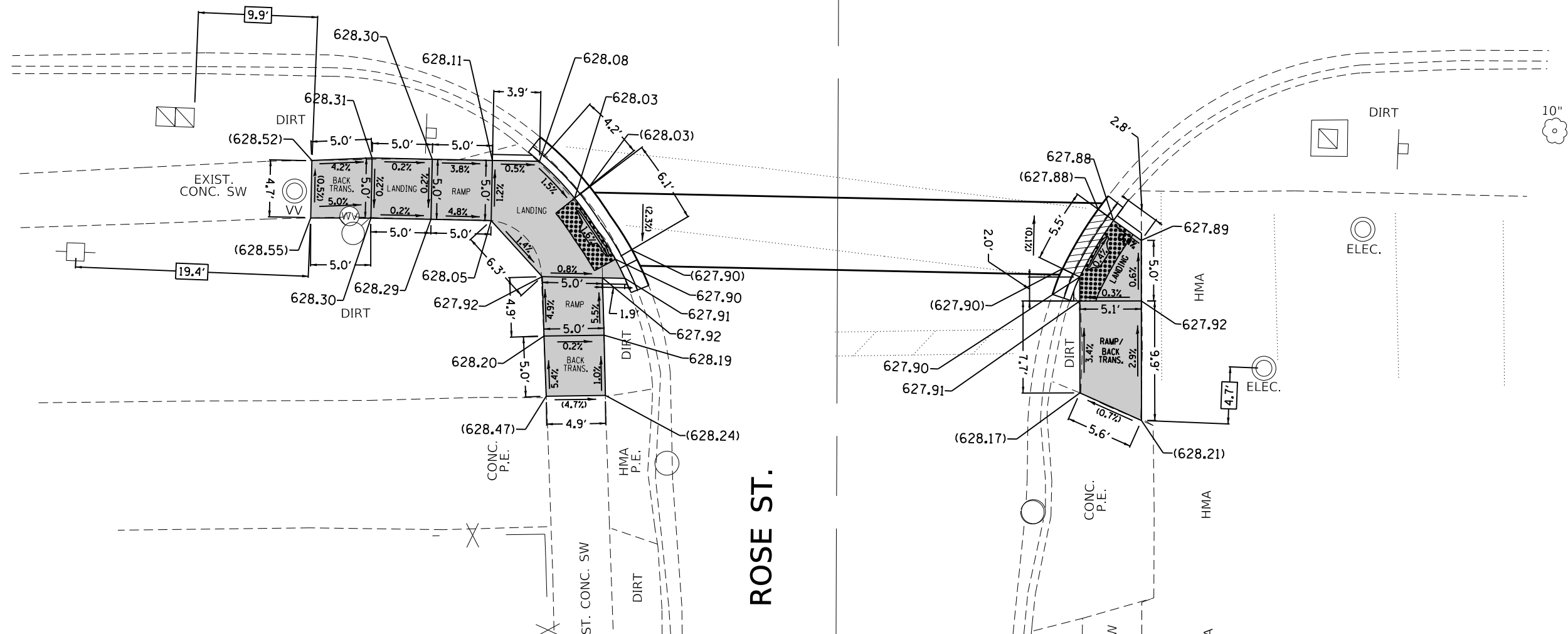
SIDEWALK DETAIL PLAN  
LAWRENCE AVE.- (E. OF MANNHEIM RD.- ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	12
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				



**LAWRENCE AVE.**



## LEGEND

XX.XX

EXISTING LENGTH

---

PROPOSED SIDE CURVE

(

EXISTING ELEVATION/SLOPE



PROPOSED SIDEWALK



## DETECTABLE WARNINGS



SIDEWALK REMOVAL  
REPLACE W/TOPSOIL & SO

**ADA CORNER LOCATION AT ROSE ST AND LAWRENCE AVE -**

- SW CORNER IS AT STA. 38+20 /26 L
- SE CORNER IS AT STA. 38+75 /27 LT

REFERENCE BENCHMARK FLEV 630.898

BENCHMARK : TOP SPINDLE OF FIRE HYDRANT

LOCATION - AT SOUTHWEST CORNER OF LAWRENCE AVE AND ROSE ST.

USER NAME = paraynoal	DESIGNED - PLP 10/04/2016	REVISED - PLP 11/07/2016
	DRAWN - PLP 10/04/2016	REVISED - PLP 08/11/2017
PLOT SCALE = 10,0000 ' / in.	CHECKED -	REVISED - PLP 09/14/2017
PLOT DATE = 7/22/2019	DATE -	REVISED - PLP 01/10/2018

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**SIDEWALK DETAIL PLAN**  
**LAWRENCE AVE. – (E. OF MANNHEIM RD. – ROSE ST.)**

SCALE:	SHEET	OF	SHEETS	STA.	TO ST
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	14
		CONTRACT NO. 62G42		
ILLINOIS		FED. AID PROJECT		

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MAINTENANCE OF TRAFFIC NOTES

- THE STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING THE EXECUTION OF THIS CONTRACT. ANY CHANGES TO THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH THE SPECIAL PROVISIONS, STATE STANDARDS, STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
- THE FURNISHING, INSTALLING, AND RELOCATION OF ALL TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE STANDARD SPECIFICATIONS.
- ACCESS TO PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. WHEN A DRIVEWAY MUST BE CLOSED TEMPORARILY FOR CONSTRUCTION OF THE DRIVEWAY APRON, PROPERTIES WITH MULTIPLE ENTRANCES SHALL HAVE ONLY ONE ENTRANCE CLOSED AT A TIME.
- ALL EXISTING SIGNS WITHIN THE LIMITS OF THE MAINTENANCE OF TRAFFIC WHICH ARE OBSCURED BY OR OTHERWISE INTERFERED WITH BY THE CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THE EXISTING FLASHING STOP LIGHTS, STOP AHEAD SIGNS, AND ROUTE SIGNS SHALL BE MAINTAINED/RELOCATED DURING STAGING. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

CONSTRUCTION SEQUENCE

STAGE 1:

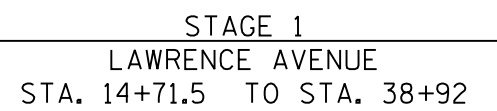
- APPLICABLE HIGHWAY STANDARDS FOR TRAFFIC CONTROL AND PROTECTION FOR DAY-TIME LANE CLOSURES SHALL BE UTILIZED TO PERFORM THE WORK LISTED BELOW.
- RELOCATION OF UTILITIES
  - CONSTRUCTION OF PROPOSED STORM SEWERS. SEE DRAINAGE AND UTILITY PLANS, AND ROADWAY PLANS FOR DETAILS.

STAGE 2:

- TRAVEL LANES ON LAWRENCE AVENUE SHALL BE SHIFTED TO THE NORTH WHILE MAINTAINING ONE LANE IN EACH DIRECTION.
- TRAVEL LANES THAT ARE THE SAME WIDTH AS THE EXISTING SHALL BE MAINTAINED AT ALL TIMES. EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE PAVEMENT MARKING TAPE, TYPE IV FOR STAGE I SHALL BE REMOVED. THIS WORK SHALL BE PAID FOR AS “PAVEMENT MARKING REMOVAL - GRINDING” OR “PAVEMENT MARKING REMOVAL - WATER BLASTING”. PROPOSED PAVEMENT MARKING TAPE, TYPE IV SHALL BE PLACED ACCORDING TO THE STAGE 2 MAINTENANCE OF TRAFFIC PLAN OR AS DIRECTED BY THE ENGINEER.

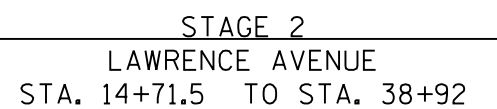
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USER NAME = paraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.) MAINTENENCE OF TRAFFIC (STAGE 1 AND 2)	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -			1362	3200RS&DR-5	COOK	85	15
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -			CONTRACT NO. 62G42				
PLOT DATE = 7/22/2019	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.
					ILLINOIS	FED. AID PROJECT			



	DIRECTION OF TRAFFIC
	WORK AREA
	TEMPORARY CONCRETE BARRIER
	PAVEMENT MARKING TAPE TYPE IV, 4", SOLID WHITE EDGE LINE
	PAVEMENT MARKING TAPE TYPE IV, 4", SOLID DOUBLE YELLOW LINES ( @ 11" C-C WITH TEMP. RAISED REFLECTIVE PVT. MARKERS )

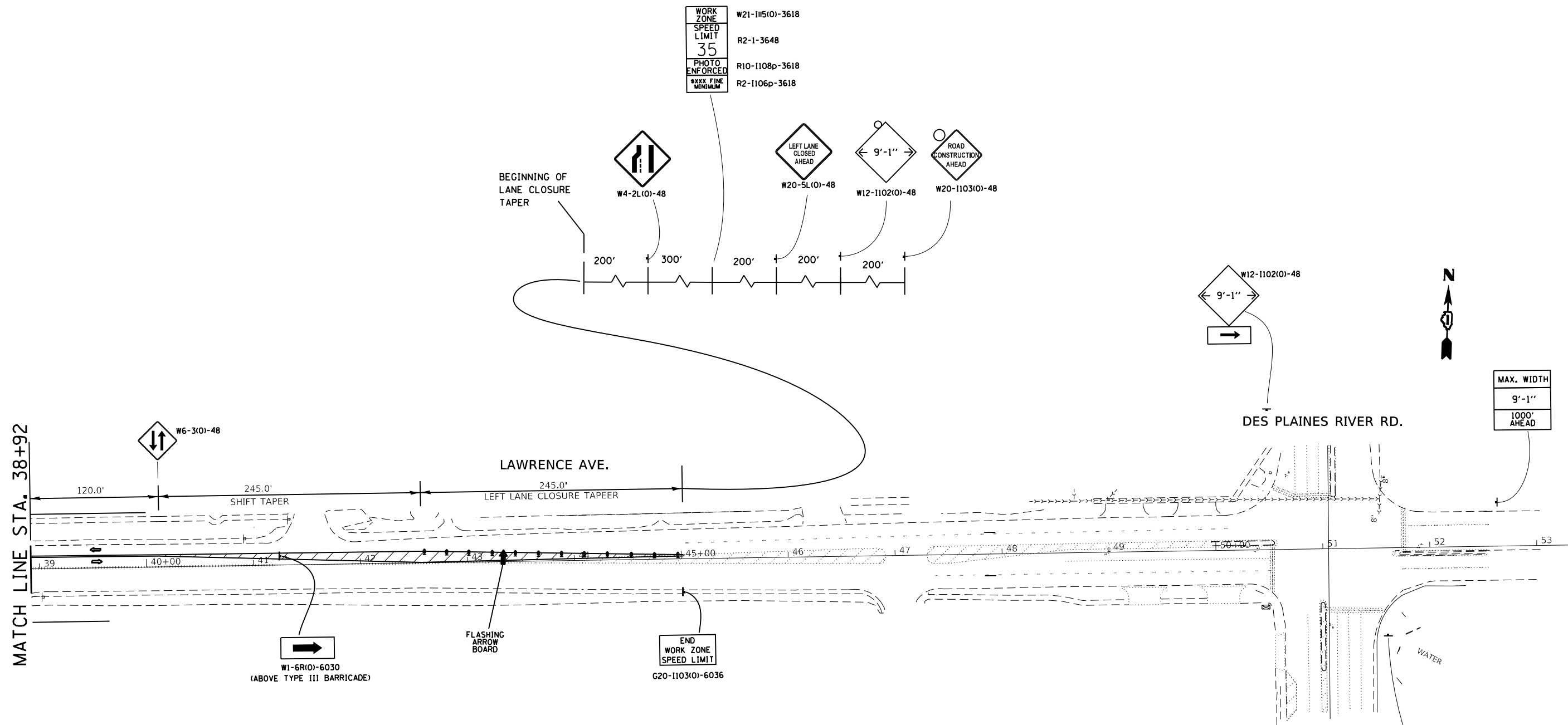
1. DURING STAGE I TRAFFIC CONTROL SHALL FOLLOW IDOT HIGHWAY STANDARD 701006 (OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE AS NEEDED.
2. TEMPORARY WEDGE SHALL BE PAID FOR AS TEMPORARY PAVEMENT (VARIABLE DEPTH). ITS REMOVAL SHALL BE PAID FOR AS PAVEMENT REMOVAL.
3. DURING STAGE I, TEMPORARY CONCRETE BARRIER SHALL BE PINNED FROM STA. 25+91 TO STA. 37+54 (LT).
4. DURING STAGE II, TEMPORARY CONCRETE BARRIER SHALL BE PINNED FROM STA. 26+40 TO STA. 31+28 (RT).



USER NAME = paraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.) MAINTENANCE OF TRAFFIC (STAGE 1 AND 2)				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -						1362	3200RS&DR-5	COOK	85	16
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -		SCALE:                      SHEET                      OF                      SHEETS                      STA.                      TO                      STA.				ILLINOIS                      FED. AID PROJECT				
PLOT DATE = 7/22/2019	DATE -	REVISED -										
							CONTRACT NO. 62G42					



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### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | DIRECTION OF TRAFFIC  |  | TEMPORARY CONCRETE BARRIER   |
|  | TYPE III BARRICADE WITH TWO (2) FLASHING LIGHTS   |  | IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 |
|  | SIGN  |  | WORK AREA  |
|  | TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE TO BE PLACED AT 50' CENTERS IN TANGENTS, 20' CENTERS IN TAPER, AND 10' CENTERS IN RADII/CURVES |  | FLASHING ARROW BOARD   |
|  |   |  | DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT   |

### NOTES

1. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
2. LIGHTS SHALL BE PLACED ON DEVICES AS REQUIRED PER THE "LIGHTS ON BARRICADES (BDE) SPECIAL PROVISION".
3. PAVEMENT MARKING TAPE TYPE IV, 4" SOLID WHITE EDGE LINE SHALL BE APPLIED ON THE EDGE OF DRIVEWAYS.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)  
MAINTENANCE OF TRAFFIC (STAGE 1)

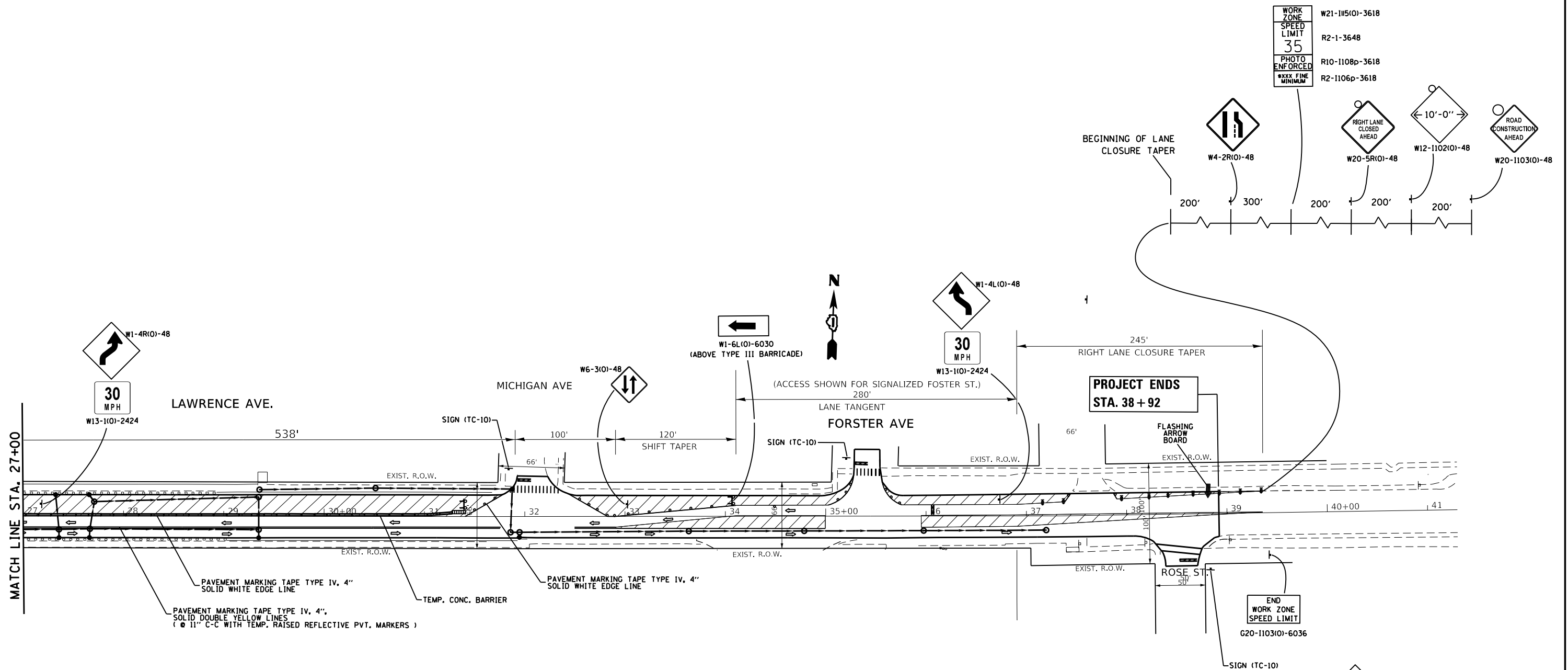
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	17A
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

USER NAME = paraynoal	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 7/22/2019	CHECKED -	REVISED -
	DATE -	REVISED -



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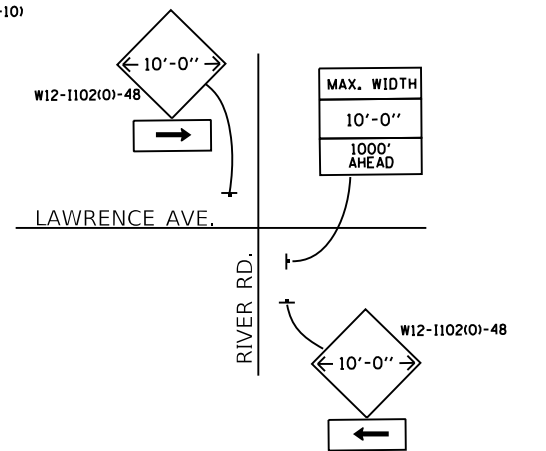


### LEGEND

- |   |  |
|---|--|
| DIRECTION OF TRAFFIC  | TEMPORARY CONCRETE BARRIER   |
| TYPE III BARRICADE WITH TWO (2) FLASHING LIGHTS   | IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 |
| SIGN  | WORK AREA  |
| TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE TO BE PLACED AT 50' CENTERS IN TANGENTS, 20' CENTERS IN TAPER, AND 10' CENTERS IN RADII/CURVES | FLASHING ARROW BOARD   |
|   | DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT   |

### NOTES

1. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
2. LIGHTS SHALL BE PLACED ON DEVICES AS REQUIRED PER THE "LIGHTS ON BARRICADES (BDE) SPECIAL PROVISION".
3. PAVEMENT MARKING TAPE TYPE IV, 4" SOLID WHITE EDGE LINE SHALL BE APPLIED ON THE EDGE OF DRIVEWAYS.

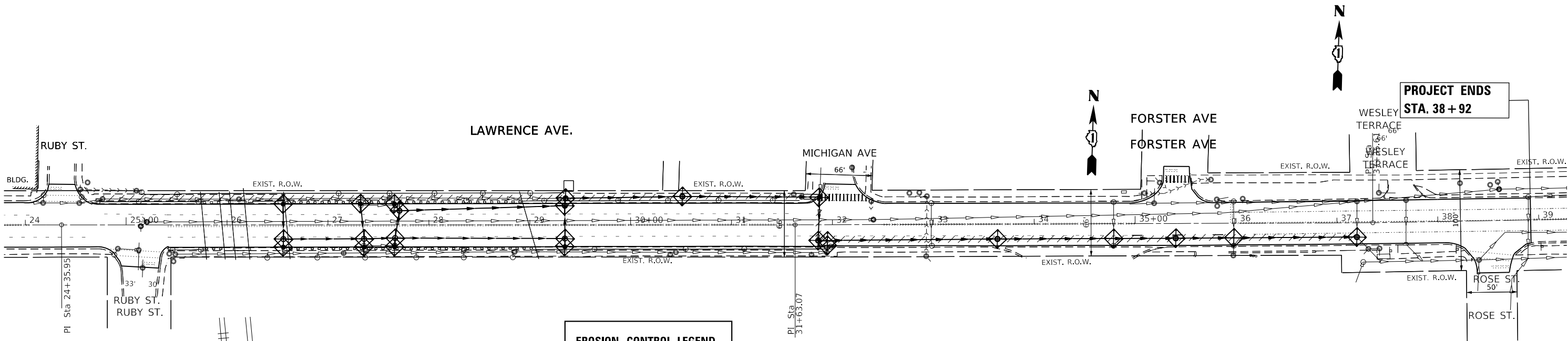


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION


LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)  
MAINTENANCE OF TRAFFIC (STAGE 2)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	18
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				



EROSION CONTROL LEGEND

 INLET FILTERS

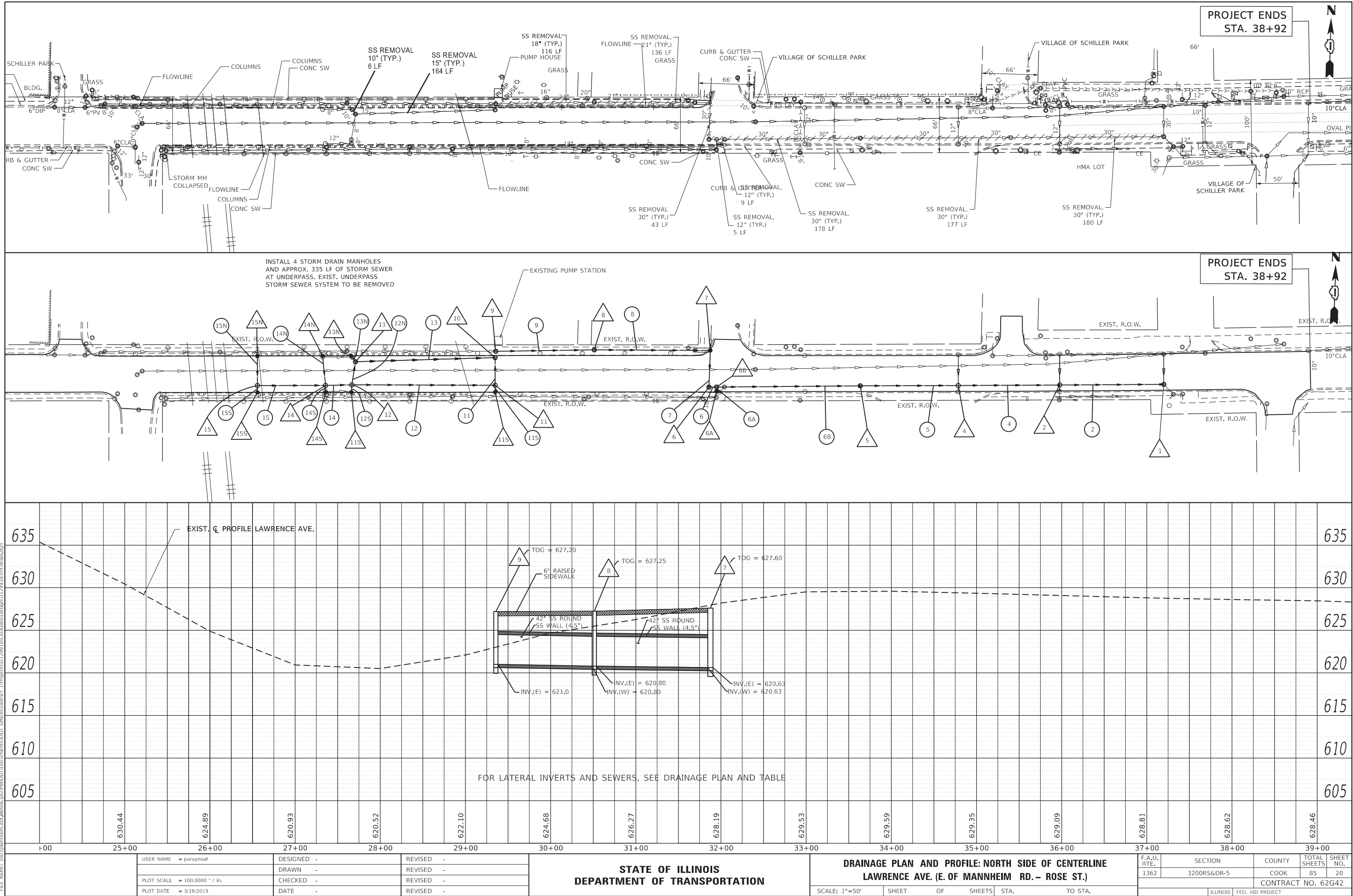
EROSION CONTROL GENERAL NOTES

1. TEMPORARY EROSION CONTROL SEEDING TO BE PROVIDED AT ALL ERODIBLE BARE EARTH AREAS.
2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN STORM DRAIN INLET FILTERS AND PIPE PROTECTION AT ALL DRAINAGE STRUCTURES AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. INLET PROTECTION SHALL BE PLACED IMMEDIATELY AFTER THE AREA INVOLVED HAS BEEN DISTURBED.
3. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE STATE STANDARD FOR THE ENTIRE DURATION OF THE CONTRACT OR UNTIL SUCH TIME AS DIRECTED BY THE ENGINEER.
4. AT ANY AREA WHERE THERE IS NO PROPOSED GRADING, THE EXISTING GROUND COVER SHALL REMAIN.
5. DURING CONSTRUCTION AND WHEN ERODIBLE SOILS ARE EXPOSED, ALL DRAINAGE STRUCTURES NOT PROTECTED WITH INLET OR PIPE PROTECTION SHALL BE KEPT SEALED TO PREVENT ACCESS FROM EROSION. THIS WORK SHALL BE CONSIDERED AS PART OF THE COST OF THE VARIOUS DRAINAGE STRUCTURES.
6. EROSION CONTROL ITEMS ARE CONSIDERED TO BE HIGH PRIORITY ITEMS ON THIS CONTRACT. THE ENGINEER WILL IMPLEMENT ALL PROVISIONS OF THE SPECIFICATION NECESSARY TO ASSURE THAT EROSION CONTROL ITEMS ARE CONSTRUCTED AND MAINTAINED IN A TIMELY WAY. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE BEGINNING ANY CONSTRUCTION ACTIVITIES WHICH POTENTIALLY CREATE ERODIBLE CONDITIONS.
7. THE EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THE PLANS ARE TO BE EXPECTED PENDING A JOBSITE INSPECTION BETWEEN THE CONTRACTOR AND THE DEPARTMENT.
8. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN SEDIMENT CONTROL MEASURES PRIOR TO STRIPPING EXISTING VEGETATION.
9. THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE/USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR WILL NEED TO SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11.5.A AND B OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BECONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
10. WHERE APPLICABLE, MULCH METHOD 4 SHALL BE APPLIED AS A TEMPORARY METHOD OF EROSION CONTROL PRIOR TO PERMANENT COVER, OR AS DIRECTED BY THE RESIDENT ENGINEER.

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		DRAWN    -	REVISED   -		LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.)				1362	3200RS&DR-5	COOK	85	19
	PLOT SCALE   = 100,0000 ' / in.	CHECKED   -	REVISED   -						CONTRACT NO. 62G42				
	PLOT DATE   = 3/18/2019	DATE       -	REVISED   -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS	FED. AID PROJECT

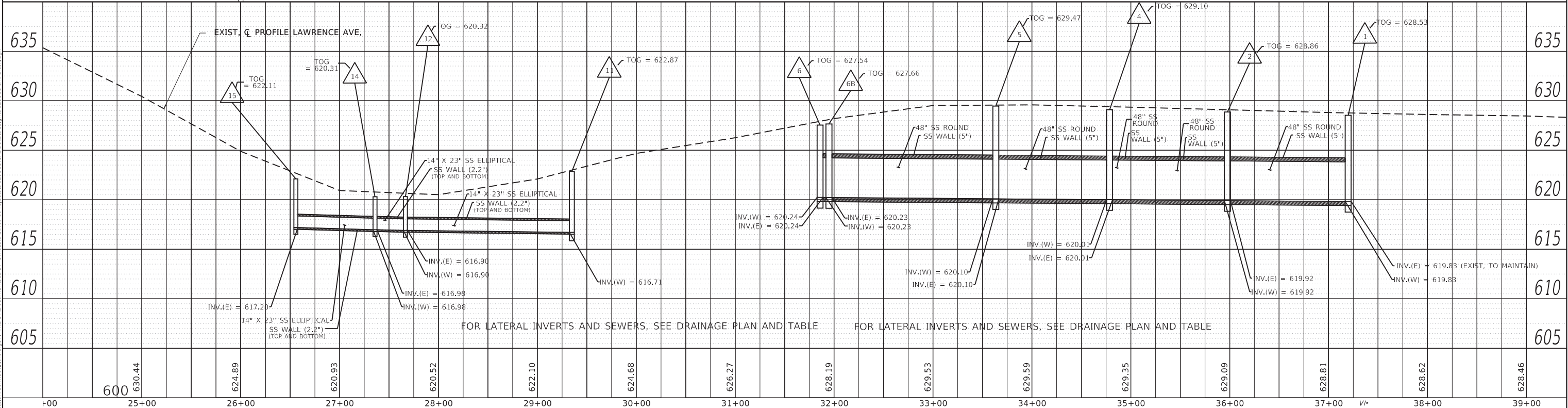
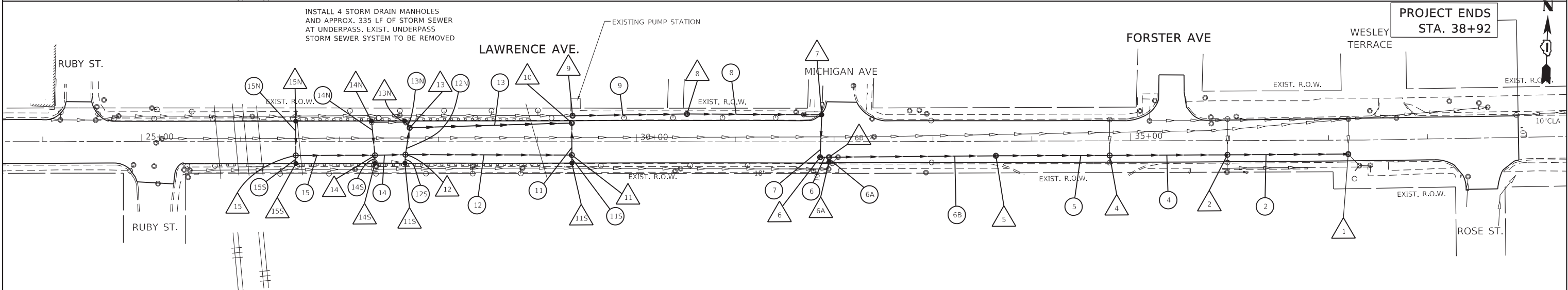
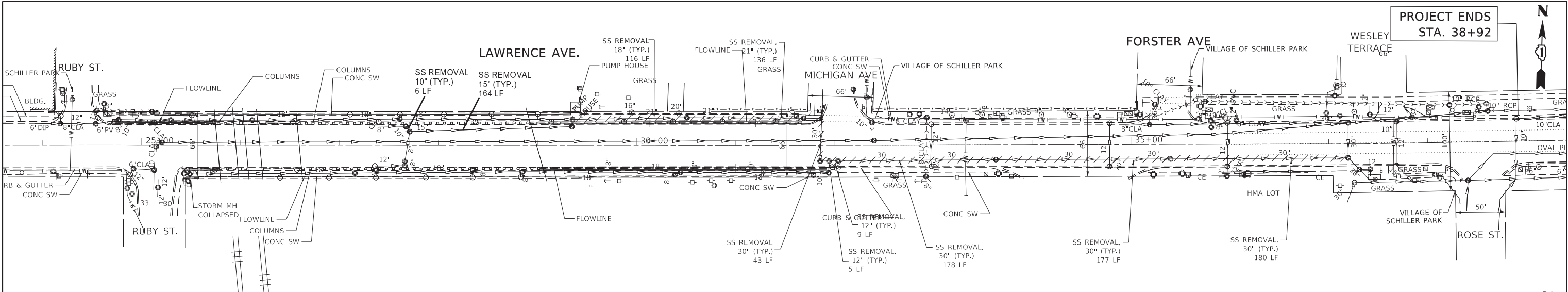
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	PLOTTED _____		
NOTE BOOK _____	GRADES CHECKED _____		
NO. _____	B.M. NOTED _____		
	STRUCTURE NOTATIONS CHKD _____		



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHNG	
	NOTE BOOK	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHNG	
	NOTE BOOK	
	NO.	

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		DRAWN	-	REVISED	-
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PLOT DATE	= 3/18/2019	DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN AND PROFILE: SOUTH SIDE OF CENTERLINE  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: 1"=50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	21
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

DRAINAGE STRUCTURES TABLE

FLAT  
TOP

1

MH, TYP. A 6' DIA. W/ F&L CL TYP. 1  
STA. 37+19.8 / 14.1 RT  
T.O.G. = 628.53  
INV.(W) = 619.83 (INFLOW)  
INV.(N) = 621.83 (EXIST. INFLOW, TO MAINTAIN)  
INV.(E) = 619.83 (EXIST. OUTFLOW, TO MAINTAIN)

FLAT  
TOP

2

MH, TYP. A 6' DIA. W/ F&L CL TYP. 1  
STA. 35+97.7 / 14.5 RT  
T.O.G. = 628.86  
INV.(N) = 623.88 (EXIST. INFLOW, MAINTAIN)  
INV.(S) = 623.88 (EXIST. OUTFLOW, TO MAINTAIN)  
INV.(W) = 619.92 (INFLOW)  
INV.(E) = 619.92 (OUTFLOW)

FLAT  
TOP

4

MH, TYP. A 6' DIA. W/ F&L CL TYP. 1  
STA. 34+78.6 / 14.7 RT  
T.O.G. = 629.10  
INV.(N) = 623.67 (EXIST. INFLOW, MAINTAIN)  
INV.(S) = 623.67 (EXIST. OUTFLOW, MAINTAIN)  
INV.(W) = 620.01 (INFLOW)  
INV.(E) = 620.01 (OUTFLOW)

FLAT  
TOP

5

MH, TYP. A 6' DIA. W/ F&L CL TYP. 1  
STA. 33+63.5 / 14.7 RT  
T.O.G. = 629.47  
INV.(W) = 620.10 (INFLOW)  
INV.(E) = 620.10 (OUTFLOW)

FLAT  
TOP

6B

MH, TYP. A 6' DIA. W/ F&L CL TYP. 1  
STA. 31+94.8 / 15.6 RT  
T.O.G. = 627.66  
INV.(N) = 620.23 (INFLOW)  
INV.(E) = 620.23 (OUTFLOW)

FLAT  
TOP

6A

CB, TYP. A 5' DIA. W/ F&L OL TYP. 1  
STA. 31+94.6 / 20.6 RT  
T.O.G. = 627.42  
INV.(N) = 620.29 (OUTFLOW)

FLAT  
TOP

6

MH, TYP. A 6' DIA. W/ F&L CL TYP. 1  
STA. 31+85.8 / 15.7 RT  
T.O.G. = 627.54  
INV.(N) = 620.24 (INFLOW)  
INV.(E) = 620.24 (OUTFLOW)

FLAT  
TOP

7

MH, TYP. A 6' DIA. W/ F&G OL TYP. 1  
STA. 31+87.6 / 27.5 LT  
T.O.G. = 627.60  
INV.(W) = 620.63 (INFLOW)  
INV. (N) = (EXIST. INFLOW, MAINTAIN.  
MAINTAIN EXIST. PIPE. NO DATA ON INVERT)  
INV.(S) = 620.63 (OUTFLOW)

NOTE: USE ADA COMPLIANT OPEN LID FOR STR. 7,  
PER HWY STD. 604001

FLAT  
TOP

8

MH TYP. A 6' DIA. W/ F&L, CL TYP. 1  
STA. 30+51.2 / 28.1 LT  
T.O.G. = 627.25  
INV.(W) = 620.80 (INFLOW)  
INV.(SE) = 622.20 (EXIST. INFLOW;  
MAINTAIN EXIST. 8" RCP)  
INV.(E) = 620.80 (OUTFLOW)

FLAT  
TOP

9

MH TYP. A 5' DIA. W/ F&L, CL TYP. 1  
STA. 29+35.6 / 26.3 LT  
T.O.G. = 627.20  
INV.(W) = 622.50 (EXIST. INFLOW, TO MAINTAIN)  
INV.(E) = 621.0 (OUTFLOW)  
INV.(N) 622.60 (EX. 6" D.I.P. TO MAINTAIN)

NOTE: STR. 9 TIES INTO EXIST. 6" D.I.P. DISCHARGE  
PIPE FROM PUMP STATION, TO BE MAINTAINED.

FLAT  
TOP

10

MH TYP. A 5' DIA. W/ F&L, CL TYP. 1  
STA. 29+34.8 / 19.0 LT  
T.O.G. = 622.58  
INV.(W) = 616.68 (INFLOW)  
INV.(S) = 616.68 (INFLOW)  
INV.(S) = 616.68 (EXIST. OUTFLOW, TO MAINTAIN)

NOTE: STR. 10 TIES IN TO EXIST. 15" PIPE  
THAT LEADS TO PUMP STATION.  
THIS PIPE HAS EXIST. INV = 616.68,  
TO MAINTAIN.

FLAT  
TOP

11

MH TYP. A 5' DIA. W/ F&L, CL TYP. 1  
STA. 29+34.9 / 13.5 RT  
T.O.G. = 622.87  
INV.(W) = 616.71 (INFLOW)  
INV.(S) = 616.71 (INFLOW)  
INV.(N) = 616.71 (OUTFLOW)

11S

CB TYP. A 4' DIA. W/ F&G OL TYP. 1  
STA. 29+34.9 / 21.6 RT  
T.O.G. = 622.71  
INV.(N) = 616.80 (OUTFLOW)

FLAT  
TOP

12

MH TYP. A 4' DIA. W/ F&G CL TYP. 1  
STA. 27+66.6 / 13.1 RT  
T.O.G. = 620.32  
INV.(W) = 616.90 (INFLOW)  
INV.(S) = 616.90 (INFLOW)  
INV.(N) = 616.90 (OUTFLOW)  
INV.(E) = 616.90 (OUTFLOW)

12S

INL TYP. A 2' DIA. W/ F&G OL TYP. 1  
STA. 27+66.1 / 21.8 RT  
T.O.G. = 620.14  
INV.(N) = 617.0 (OUTFLOW)

FLAT  
TOP

13N

INL TYP. A 2' DIA. W/ F&G OL TYP. 1  
STA. 27+65.7 / 20.9 LT  
T.O.G. = 620.04  
INV.(S) = 616.86 (OUTFLOW)

FLAT  
TOP

13

MH TYP. A 4' DIA. W/ F&G, CL TYP. 1  
STA. 27+70.9 / 14.0 LT  
T.O.G. = 620.11  
INV.(NW) = 616.80 (INFLOW)  
INV.(S) = 616.80 (INFLOW)  
INV.(E) = 616.80 (OUTFLOW)

14N

INL TYP. A 2' DIA. W/ F&G OL TYP. 1  
STA.27+65.7 / 20.9 LT  
T.O.G. = 620.04  
INV.(S) = 617.10 (OUTFLOW)

FLAT  
TOP

14

MH TYP. A 4' DIA. W/ F&L, CL TYP. 1  
STA. STA. 27+35.8 / 13.8 RT  
T.O.G. = 620.31  
INV.(N) = 616.98 (INFLOW)  
INV.(S) = 616.98 (INFLOW)  
INV.(W) = 616.98 (INFLOW)  
INV.(E) = 616.98 (OUTFLOW)

14S

INL TYP. A 2' DIA. W/ F&G OL TYP. 1  
STA. 27+35.8 / 22.0 RT  
T.O.G. = 620.19  
INV.(N) = 617.1 (OUTFLOW)

15N

INL TYP. A 2' DIA. W/ F&G OL TYP. 1  
STA. 26+55.6 / 20.6 LT  
T.O.G. = 622.01  
INV.(S) = 617.40 (OUTFLOW)

FLAT  
TOP

15

MH TYP. A 4' DIA. W/ F&L, CL TYP. 1  
STA. 26+55.8 / 14.1 RT  
T.O.G. = 622.11  
INV.(N) = 617.20 (INFLOW)  
INV.(S) = 617.20 (INFLOW)  
INV.(E) = 617.20 (OUTFLOW)

15S

INL TYP. A 2' DIA. W/ F&G OL TYP. 1  
STA. 26+55.8 / 22.1 RT  
T.O.G. = 621.98  
INV.(N) = 617.25 (OUTFLOW)

NOTES:

STORM SEWER OFFSET LOCATIONS GIVEN ON THE DETAIL PLANS ARE TO THE FOLLOWING POINTS:

A) STRUCTURES FALLING WITHIN THE CURB LINE ARE MEASURED TO THE EDGE OF PAVEMENT.

B) ALL OTHER STRUCTURES ARE MEASURED TO THE CENTER OF THE STRUCTURE.

THE INSTALLATION AND CONNECTION OF A PROPOSED STRUCTURE (CATCH BASIN/MANHOLE/INLET) OVER AN EXISTING STORM SEWER AND/OR A PROPOSED STORM SEWER CONNECTION TO AN EXISTING STRUCTURE, AND THE REMOVAL WORK REQUIRED TO MAKE THE CONNECTION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE ITEM BEING INSTALLED.

SHORTHAND AND SYMBOL LEGEND:

MH = MANHOLE  
CB = CATCH BASIN  
DIA. = DIAMETER, IN FEET  
F&G = FRAME AND GRATE  
F&L = FRAME AND LID  
CL = CLOSED LID  
OL = OPEN LID  
TYP. = TYPE  
STA. = STATION  
T.O.G. = TOP OF GRADE ELEVATION IN FEET  
INV. = INVERT ELEVATION IN FEET  
LT = OFFSET DISTANCE TO THE LEFT OF ALIGNMENT LINE, IN FEET  
RT = OFFSET DISTANCE TO THE RIGHT OF ALIGNMENT LINE, IN FEET

MODEL: Default  
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PROJECT: D:\29918\GADDData\Design\0129918-sh-drain.dgn

USER NAME = paraynoal	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 7/22/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRAINAGE STRUCTURES TABLE  
LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	22
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

DRAINAGE STRUCTURES AND STORM SEWERS TABLE

STORM SEWER PIPES	ADJUSTED LENGTH	PIPE LOCATION	
		STRUCTURE (DOWNSTREAM)	TO STRUCTURE (UPSTREAM)
2 PROP. PIPE CULVERT, CLASS A, TYPE 2, 48" TRENCH BACK FILL = 298.5 CUBIC YARDS	118.6'	FLAT TOP 1	TO FLAT TOP 2
4 PROP. PIPE CULVERT, CLASS A, TYPE 2, 48" TRENCH BACK FILL = 300.0 CUBIC YARDS	115.5'	FLAT TOP 2	TO FLAT TOP 4
5 PROP. PIPE CULVERT, CLASS A, TYPE 2, 48" TRENCH BACK FILL = 299.4 CUBIC YARDS	111.6'	FLAT TOP 4	TO FLAT TOP 5
6B PROP. PIPE CULVERT, CLASS A, TYPE 2, 48" TRENCH BACK FILL = 388.1 CUBIC YARDS	165.1'	FLAT TOP 5	TO FLAT TOP 6B
6A PROP. PIPE CULVERT, CLASS A, TYPE 2, 12" TRENCH BACK FILL = 2.4 CUBIC YARDS	1.4'	FLAT TOP 6B	TO FLAT TOP 6A
6 PROP. PIPE CULVERT, CLASS A, TYPE 1, 48" TRENCH BACK FILL = 10.1 CUBIC YARDS	5.3'	FLAT TOP 6B	TO FLAT TOP 6
7 PROP. PIPE CULVERT, CLASS A, TYPE 1, 48" TRENCH BACK FILL = 72.7 CUBIC YARDS	39.6'	FLAT TOP 6	TO FLAT TOP 7
8 PROP. PIPE CULVERT, CLASS A, TYPE 1, 42" TRENCH BACK FILL = 99.6 CUBIC YARDS	132.9'	FLAT TOP 7	TO FLAT TOP 8
9 PROP. PIPE CULVERT, CLASS A, TYPE 1, 42" TRENCH BACK FILL = 77.9 CUBIC YARDS	113.1'	FLAT TOP 8	TO FLAT TOP 9
NOTE: MAINTAIN EXISTING 15" PIPE AND ITS EXISTING SLOPE AND ELEVATION, CONNECTING PROP. STRUCTURE NO. 8 AND THE PUMP STATION.		EXIST. PUMP STATION	TO FLAT TOP 10
11 PROP. PIPE CULVERT, CLASS A, TYPE 1, 36" TRENCH BACK FILL = 41.4 CUBIC YARDS	29.1'	FLAT TOP 10	TO FLAT TOP 11
11S PROP. STORM SEWER, CLASS A, TYPE 2, 12" TRENCH BACK FILL = 5.2 CUBIC YARDS	3.8'	FLAT TOP 11	TO 11S
12 PROP. STORM SEWER, CLASS A, TYPE 2, EQUIV. ROUND SIZE 18", (14" X 23" ELLIPTICAL) TRENCH BACK FILL = 168.1 CUBIC YARDS	164.5'	FLAT TOP 11	TO FLAT TOP 12
12N PROP. STORM SEWER, CLASS A, TYPE 1, EQUIV. ROUND SIZE 18", (14" X 23" ELLIPTICAL) TRENCH BACK FILL = 9.1 CUBIC YARDS	24.2'	FLAT TOP 13	TO FLAT TOP 12
12S PROP. STORM SEWER, CLASS A, TYPE 1, 12" TRENCH BACK FILL = 1.4 CUBIC YARDS	4.0'	FLAT TOP 12	TO 12S

STORM SEWER PIPES	ADJUSTED LENGTH	PIPE LOCATION	
		STRUCTURE (DOWNSTREAM)	TO STRUCTURE (UPSTREAM)
13N PROP. STORM SEWER, CLASS A, TYPE 1, 12" TRENCH BACK FILL = 1.7 CUBIC YARDS	4.9'	FLAT TOP 13	TO 13N
13 PROP. STORM SEWER, CLASS A, TYPE 2, EQUIV. ROUND SIZE 18", (14" X 23" ELLIPTICAL) TRENCH BACK FILL = 93.5 CUBIC YARDS	160.2'	FLAT TOP 10	TO FLAT TOP 13
14N PROP. STORM SEWER, CLASS A, TYPE 1, 12" TRENCH BACK FILL = 10.1 CUBIC YARDS	30'	FLAT TOP 14	TO 14N
14 PROP. STORM SEWER, CLASS A, TYPE 1, EQUIV. ROUND SIZE 18", (14" X 23" ELLIPTICAL) TRENCH BACK FILL = 10.4 CUBIC YARDS	27.6'	FLAT TOP 12	TO FLAT TOP 14
14S PROP. STORM SEWER, CLASS A, TYPE 1, 12" TRENCH BACK FILL = 1.2 CUBIC YARDS	3.4'	FLAT TOP 14	TO 14S
15N PROP. STORM SEWER, CLASS A, TYPE 2, 12" TRENCH BACK FILL = 17.8 CUBIC YARDS	29.9'	FLAT TOP 15	TO 15N
15 PROP. STORM SEWER, CLASS A, TYPE 1, EQUIV. ROUND SIZE 18", (14" X 23" ELLIPTICAL) TRENCH BACK FILL = 38.6 CUBIC YARDS	76.8'	FLAT TOP 14	TO FLAT TOP 15
15S PROP. STORM SEWER, CLASS A, TYPE 2, 12" TRENCH BACK FILL = 2 CUBIC YARDS	3.3'	FLAT TOP 15	TO 15S

SINKHOLE REPAIR AT E. OF CANFIELD AVE. (SEE DETAIL SHEET)

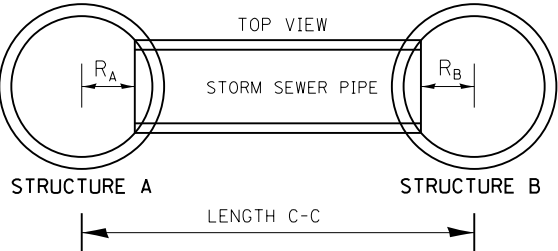
PROP. STORM SEWER, CLASS A TYPE 2, 12" TRENCH BACK FILL = 25.4 CUBIC YARDS	24'
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NOTES:

STORM SEWER OFFSET LOCATIONS GIVEN ON THE DETAIL PLANS ARE TO THE FOLLOWING POINTS:  
A) STRUCTURES FALLING WITHIN THE CURB LINE ARE MEASURED TO THE EDGE OF PAVEMENT.  
B) ALL OTHER STRUCTURES ARE MEASURED TO THE CENTER OF THE STRUCTURE.

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DESIGNER NOTE: STORM SEWER PIPE ADJUSTED LENGTH:  
= LENGTH C-C MINUS R<sub>A</sub> MINUS R<sub>B</sub>  
(SEE SKETCH BELOW)



MODEL: Default  
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MODEL: DEFENDANT  
FILE NAME: 000

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		DRAWN -	REVISED -						1362	3200RS&DR-5	COOK	85	23
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		CONTRACT NO. 62G42								
	PLOT DATE = 7/22/2019	DATE -	REVISED -		ILLINOIS FED. AID PROJECT								
	SCALE:		SHEET OF SHEETS							STA. TO STA.			

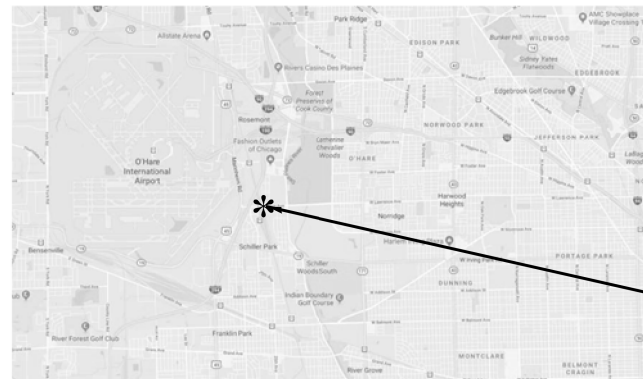
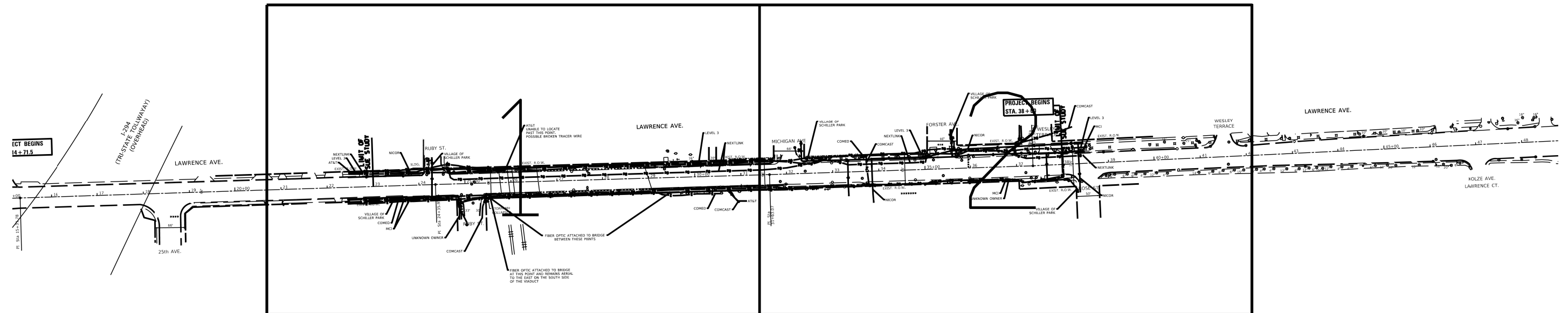


- EXACT LOCATION AND LAYOUT TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE RESIDENT ENGINEER
- MAINTAIN EXISTING INVERTS

FILE NAME: D:\PROJECTS\11362\11362.DWG	USER NAME = iparynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN LAWRENCE AVE. (E. OF CANFIELD ROAD)				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						1362	3200R5&DR-5	COOK	85	24
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		CONTRACT NO. 62G42								
	PLOT DATE = 7/22/2019	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			

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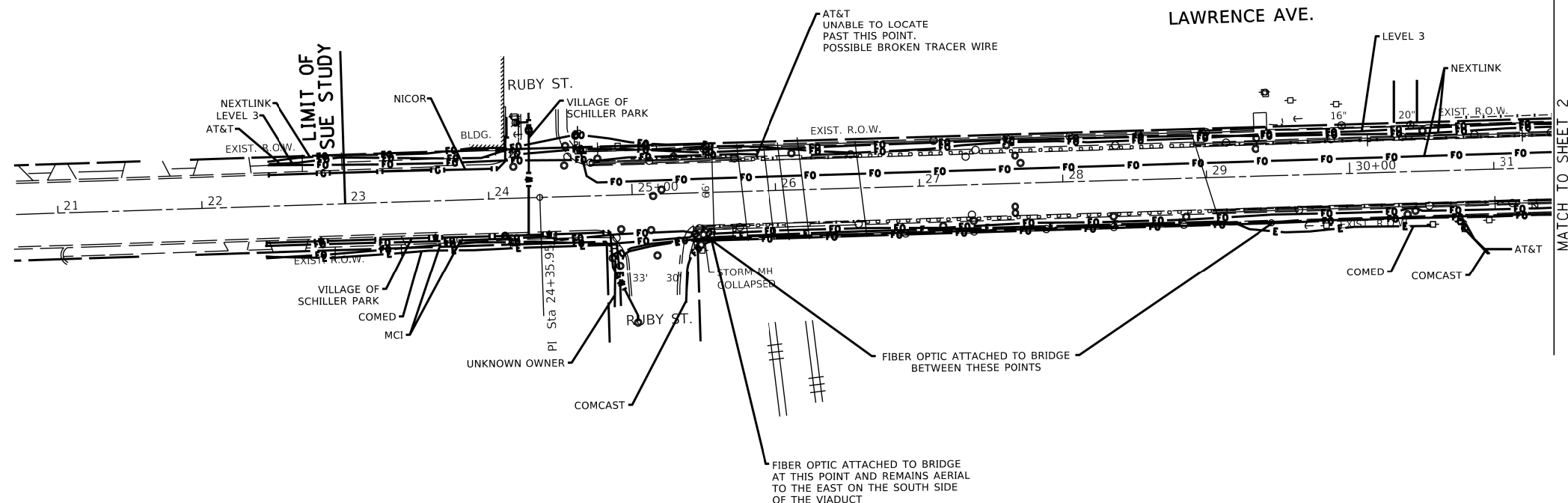
**I-294 & Lawrence Ave. – Mannheim Rd. to Rose St.  
Schiller Park, IL**



ALL UNDERGROUND UTILITIES SHOWN INVESTIGATED BY  
CARDNO ARE QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.

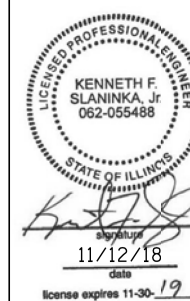
## — PROJECT LOCATION

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	AERIAL
	UNKNOWN
	OIL
	CABLE TV
	TELEPHONE
	GAS
	ELECTRIC
	TRAFFIC SIGNAL/LIGHTING
	WATER
	FORCE MAIN
	FIBER OPTIC
	CARDNO TEST HOLE
>EOI	END OF INFORMATION

UTILITY OWNERS
AT&T - FIBER OPTIC - TELEPHONE
COMED - ELECTRIC
COMCAST - CABLE TV
LEVEL 3 - FIBER OPTIC
NEXTLINK - FIBER OPTIC
NICOR - GAS
VILLAGE OF SCHILLER PARK - WATER



**CLAASSEN, WHITE & ASSOCIATES, P.C.**  
LAND SURVEYORS  
121 AIRPORT DRIVE, UNIT 1, JOLIET, ILLINOIS 60431  
(815) 744-3720 [claassenwhite@ccs-survey.com](mailto:claassenwhite@ccs-survey.com)

CARDNO Job No. IL09510775  
SIF Plan Page: 1 of 2

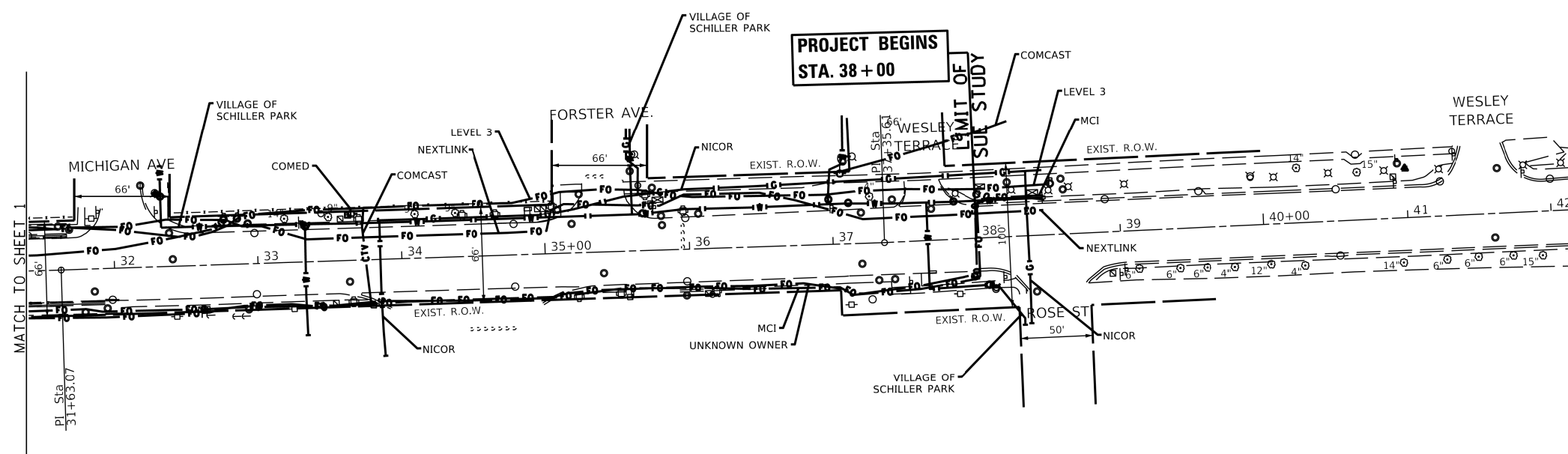
Utility Quality Level "A" : Visually Verified Test Hole
Utility Quality Level "B" : Designating/non Visually Verified Test Hole
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

DESIGNED	EJ
DRAWN	KLC
CHECKED	KFS
DATE	11/12/18

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-294 & Lawrence Ave. – Mannheim Rd. to Rose St.  
Schiller Park, IL**

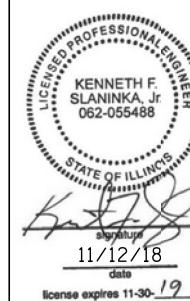
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR5	Cook	85	26
		Contract No. 62G42		
FED. ROAD DIST. NO.	ILLINOIS	IDOT	Project No.	



— A — A — A	AERIAL
— — — — —	UNKNOWN
— O — — — — O —	OIL
— CTv — — CTv — — CTv	CABLE TV
— T — — — — T — — T	TELEPHONE
— G — — — — G — — G	GAS
— E — — — — E — — E	ELECTRIC
— — — — —	TRAFFIC SIGNAL/LIGHTING
— W — — — — W — — W	WATER
— — — — —	FORCE MAIN
— FO — — — — FO — — FO	FIBER OPTIC
— — — — —	CARDNO TEST HOLE
EOI	END OF INFORMATION

UTILITY OWNERS
AT&T - FIBER OPTIC - TELEPHONE
COMED - ELECTRIC
COMCAST - CABLE TV
LEVEL 3 - FIBER OPTIC
NEXTELINK - FIBER OPTIC
NICOR - GAS
VILLAGE OF SCHILLER PARK - WATER

A number line illustrating the conversion of 20 meters to 200 feet. The top scale is in meters, with markings at 20, 0, 20, and 40. The bottom scale is in feet, with markings at 50, 0, 50, and 100. A shaded region from 20 meters to 0 meters corresponds to a shaded region from 200 feet to 0 feet.



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(815) 744-3720 [claassenwhite@casurvey.com](mailto:claassenwhite@casurvey.com)

CARDNO Job No. IL09510775  
SUE Plan Page: 2 of 2

Utility Quality Level "A": Visually Verified Test Hole
Utility Quality Level "B": Designating/non Visually Verified Test Hole
Utility Quality Level "C": Research with Survey
Utility Quality Level "D": Records Research

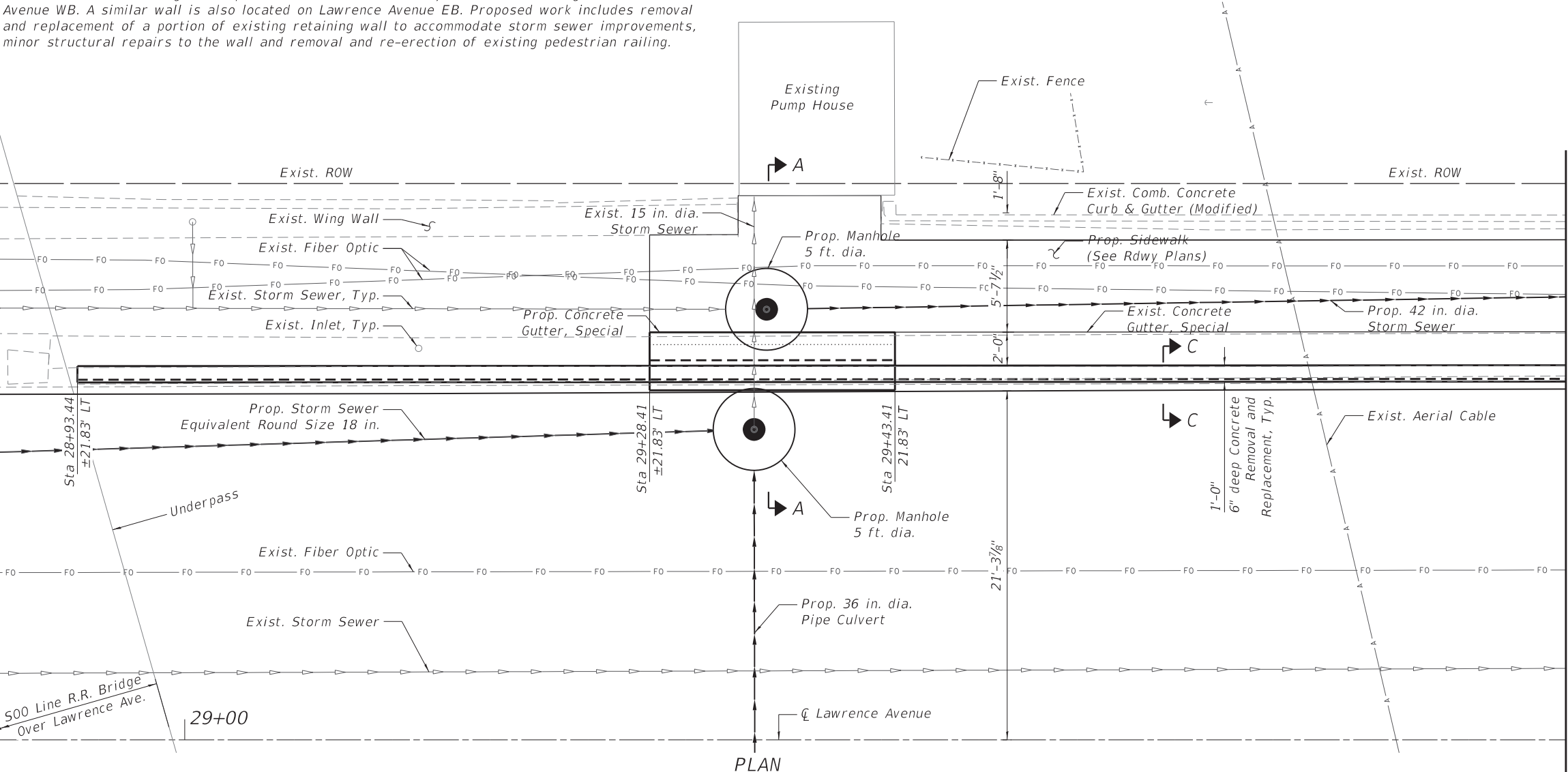
DESIGNED	EJ
DRAWN	KLC
CHECKED	KFS
DATE	11/12/18

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-294 & Lawrence Ave. – Mannheim Rd. to Rose St.  
Schiller Park, IL**

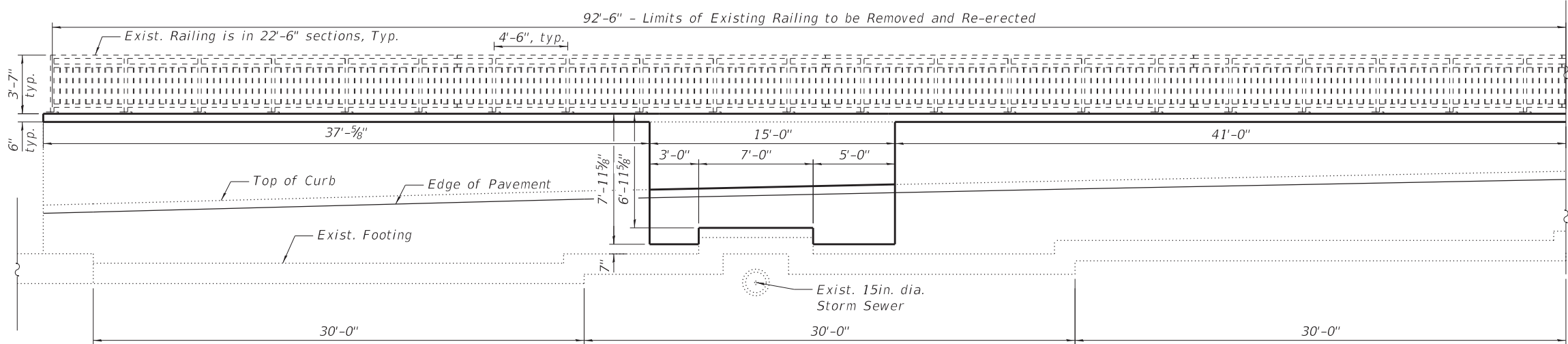
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR5	Cook	85	27
		Contract No. 62G42		
FED. ROAD DIST. NO.	ILLINOIS	IDOT	Project No.	

Existing Structure: The existing structure is a retaining wall of varying height along Lawrence Avenue WB between Ruby Street and Michigan Avenue in Schiller Park. This wall was reconstructed in 1988 and retains the grade separation between the roadway and sidewalk along Lawrence Avenue WB. A similar wall is also located on Lawrence Avenue EB. Proposed work includes removal and replacement of a portion of existing retaining wall to accommodate storm sewer improvements, minor structural repairs to the wall and removal and re-erection of existing pedestrian railing.



PLAN

(For Section A-A see Sheet S-4)  
(For Section C-C see Sheet S-5)

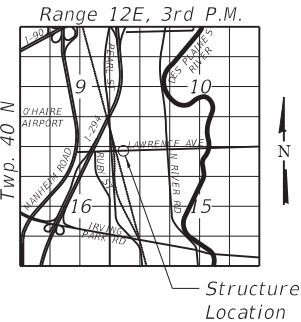


ELEVATION

**DESIGN SPECIFICATIONS**  
2002 AASHTO Standard Specifications  
for Highway Bridges, 17th Edition

**DESIGN STRESSES**  
FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)



LOCATION SKETCH

**GENERAL PLAN AND ELEVATION**  
**LAWRENCE AVENUE - RETAINING WALL**  
F.A.U ROUTE 1362  
SECTION 3200RS&DR-5  
COOK COUNTY  
STATION 29+35.60

MODEL: sMODELNAME5  
FILE NAME: s:\2018\181042-AES PH2 IDOT D1-PTB 185-02\Work Order-13 Lawrence Retaining Wall\CADD\CADD Sheets\XX\_62G42\_sh-c-s1-GPE-1.dgn  
3/14/2019 12:53:38 PM



QUIGG ENGINEERING INC

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			CHECKED	-	MS/MO	REVISED	-	___
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PLOT DATE	=	3/14/2019	CHECKED	-	MS/MO	REVISED	-	___

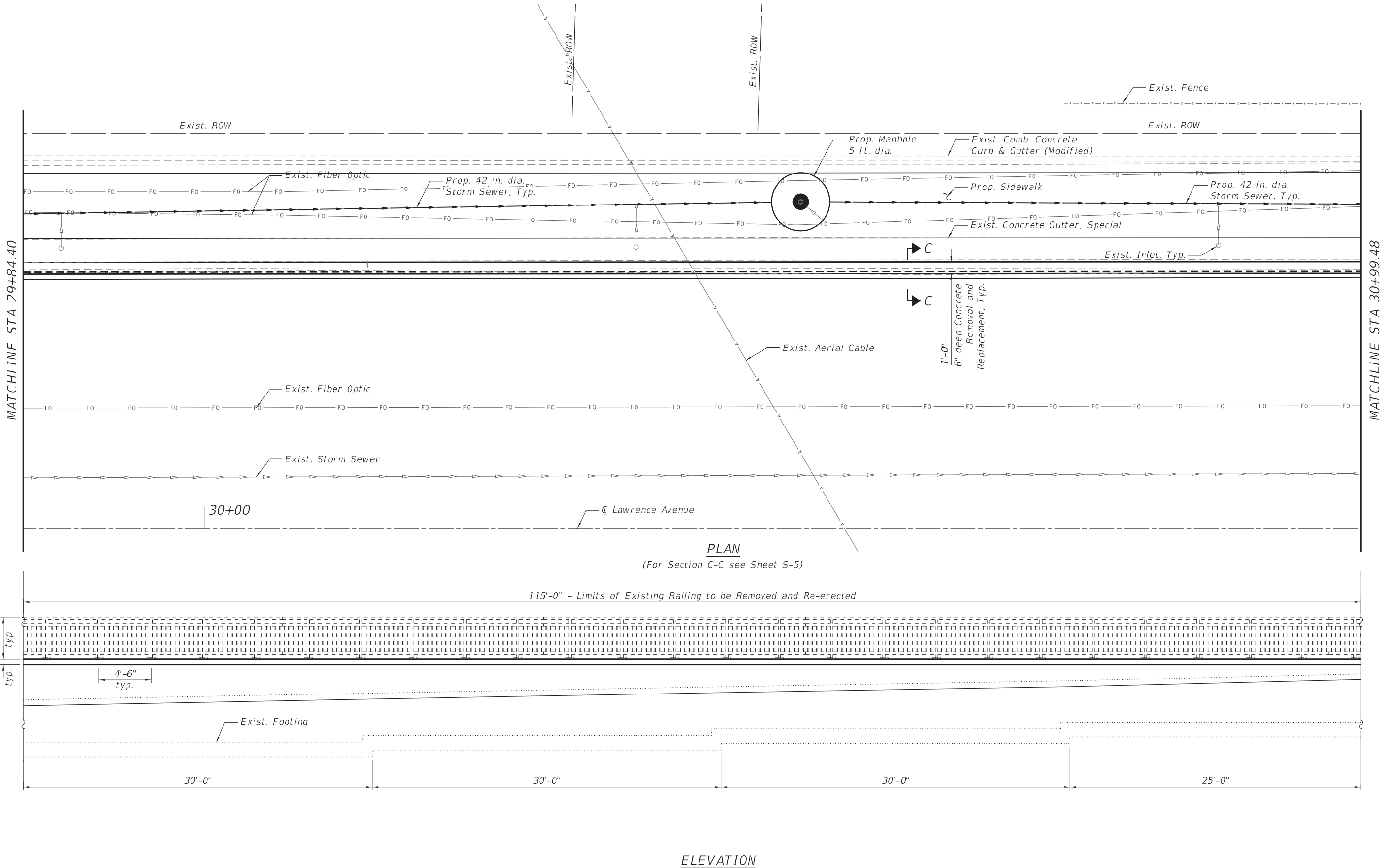
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION - 1 OF 3  
LAWRENCE AVENUE - RETAINING WALL AT PUMP HOUSE

SHEET S1 OF S5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	28
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

MODEL: s\MODEL\NAME5  
FILE NAME: s:\2018\181\042-AES PH2 IDOT D1-PTB 185-02\Work Order-13 Lawrence Retaining Wall\CADD\CADD Sheets\XX\_62G42\_shc-S2-GPE-2.dgn  
3/14/2019 12:53:19 PM



USER NAME	=	WMohammed	DESIGNED	-	AWM	REVISED	-	___
			CHECKED	-	MS/MO	REVISED	-	___
PLOT SCALE	=	8:0.0000 " / in.	DRAWN	-	AWM	REVISED	-	___
PLOT DATE	=	3/14/2019	CHECKED	-	MS/MO	REVISED	-	___

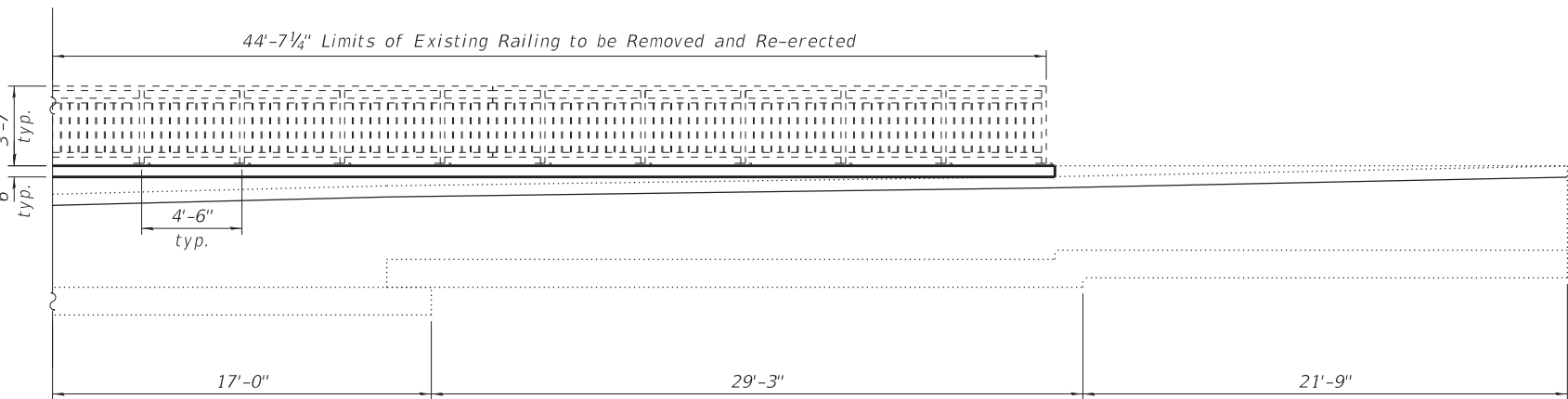
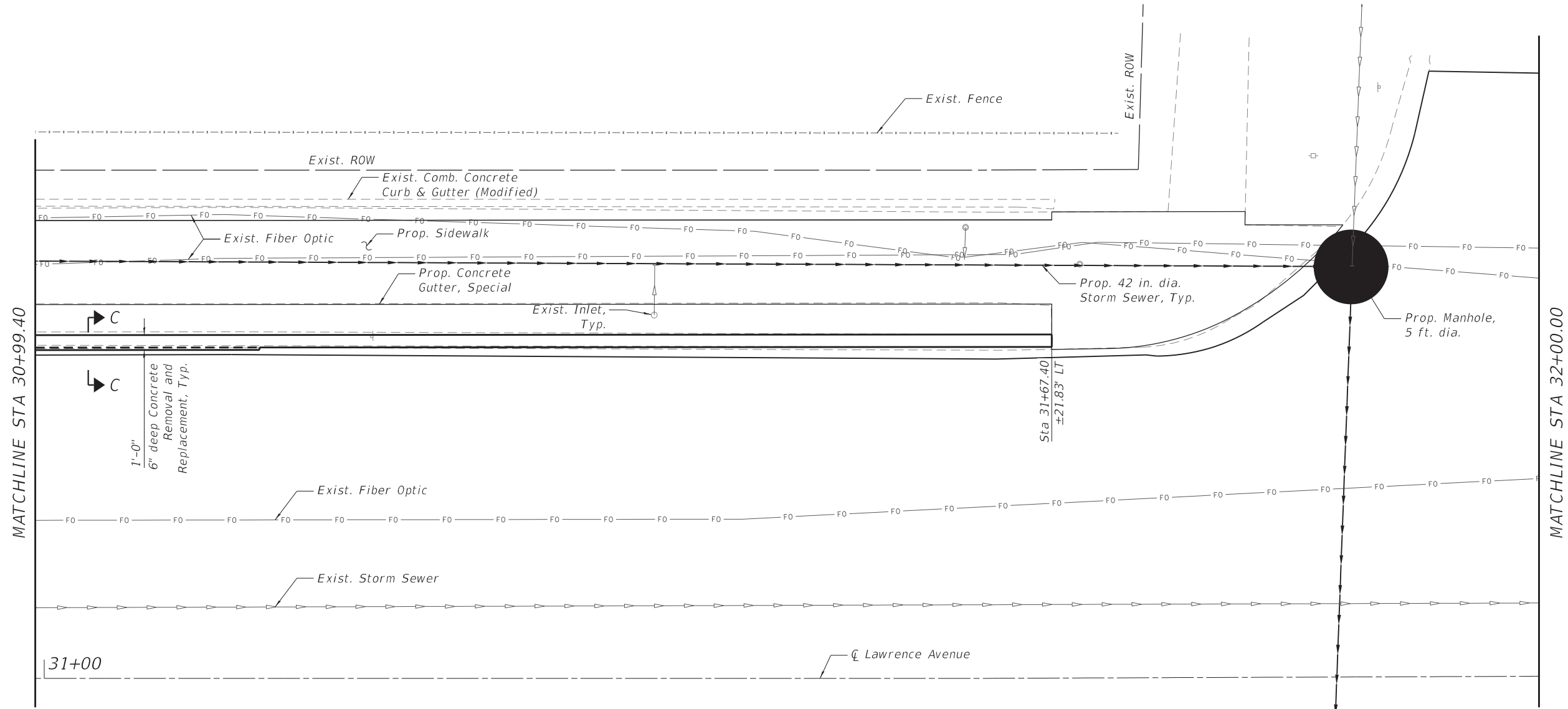
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION - 2 OF 3  
LAWRENCE AVENUE - RETAINING WALL AT PUMP HOUSE

SHEET S2 OF S5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	29
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

MODEL: sMODELNAME5  
FILE NAME: s:\2018\181042-AES PH2 IDOT D1-PTB 185-02\Work Order-13 Lawrence Retaining Wall\CADD\CADD Sheets\XX\_62G42\_shc-S3-GPE-3.dgn  
3/14/2019 12:53:20 PM



QUIGG ENGINEERING INC

USER NAME	=	WMohammed	DESIGNED	-	AWM	REVISED	-	___
			CHECKED	-	MS/MO	REVISED	-	___
PLOT SCALE	=	8:0.0000 " / in.	DRAWN	-	AWM	REVISED	-	___
PLOT DATE	=	3/14/2019	CHECKED	-	MS/MO	REVISED	-	___

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION - 3 OF 3  
LAWRENCE AVENUE - RETAINING WALL AT PUMP HOUSE

SHEET S3 OF S5 SHEETS

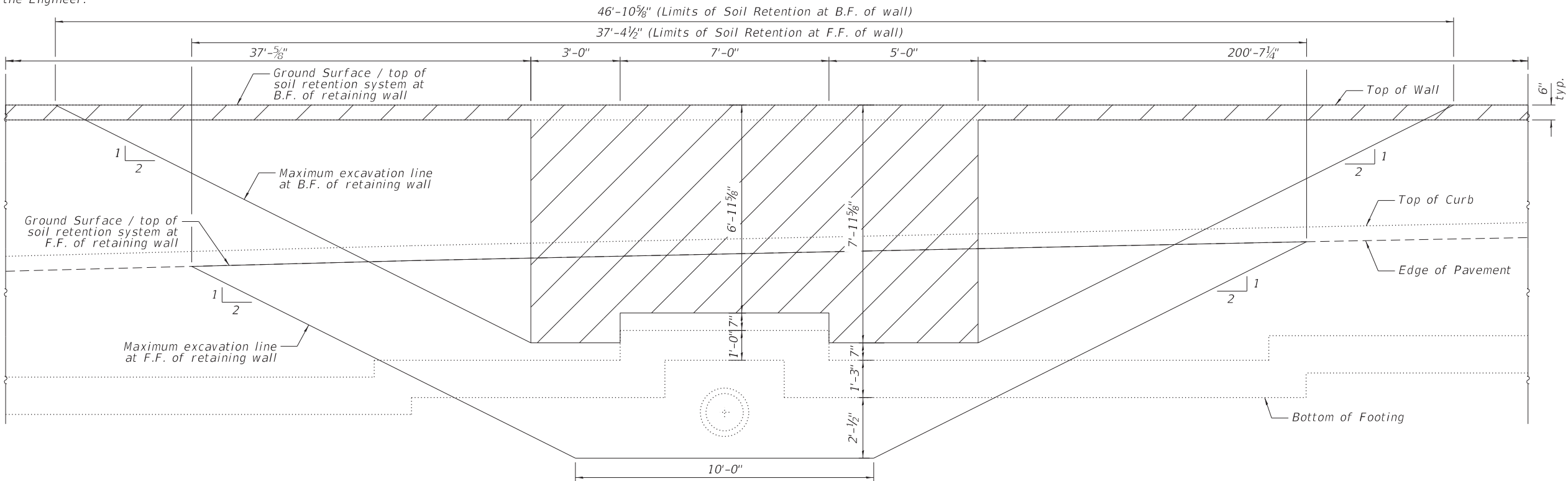
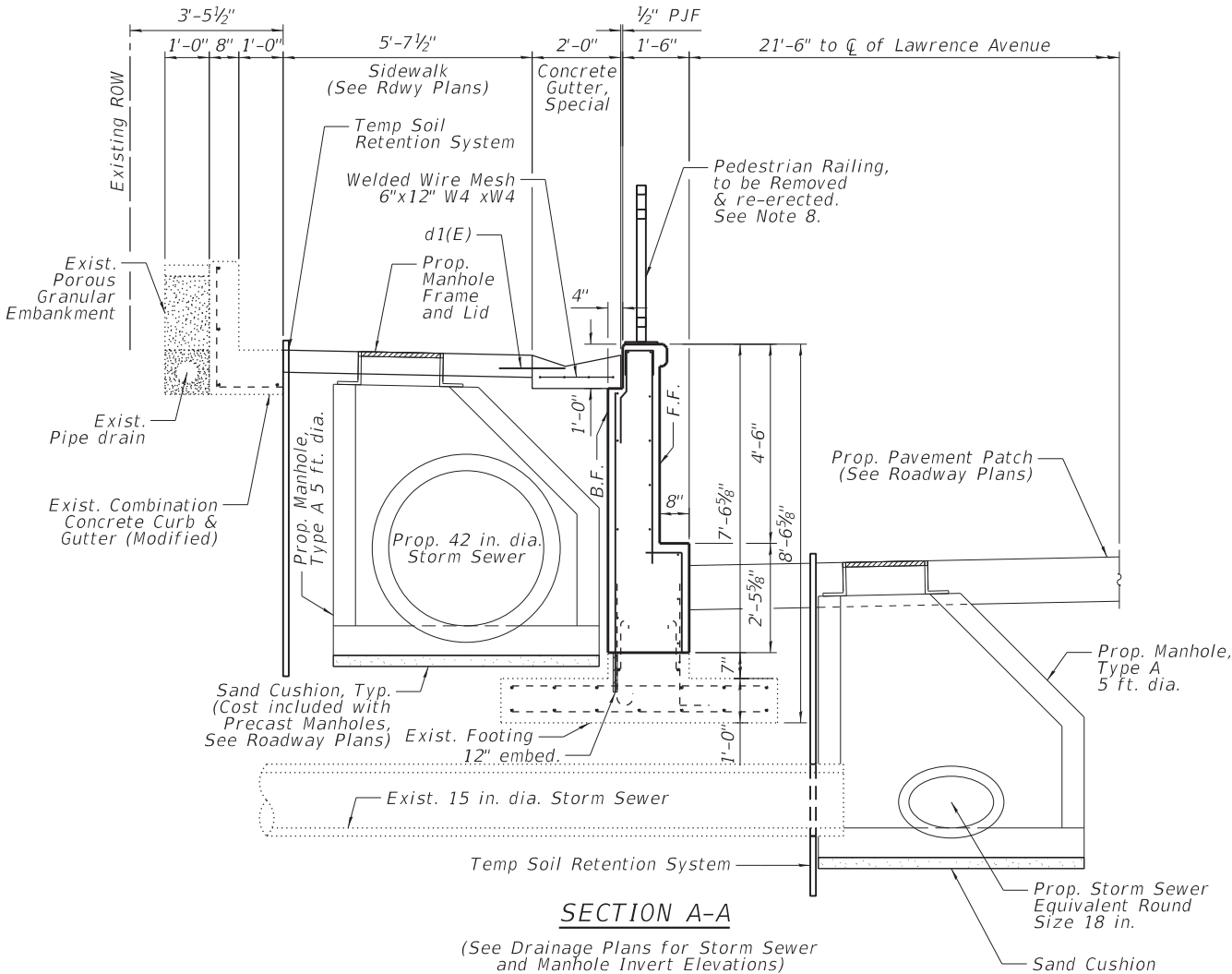
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	30
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES


1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Protective coat shall be applied to the exposed top and front face of the retaining wall.
4. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
5. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
6. Structure Excavation is measured only for the Front Face of the wall. Excavation for the back face is included in the work for installation of 42" dia. storm sewer. See roadway plans for details.
7. For sidewalk and wire mesh quantities see roadway plans.
8. Existing Railing shall be removed and the posts cut and welded to a 1¼" base plate, to match existing top of rail elevation. See details on sheet 55. Cost included with Removing and Re-Erecting Existing Railing.
9. The contractor shall exercise extreme precautions during construction to protect existing utilities. Any damage done during construction shall be repaired by the contractor at at no additional cost to IDOT and in a manner satisfactory to the Engineer.
10. The water seal(s) at existing joints shall be protected in place during concrete removal and construction and incorporated with the new concrete. Any damage done during construction shall be repaired by the contractor at at no additional cost to IDOT and in a manner satisfactory to the Engineer.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Welded Wire Reinforcement	Sq. Yd.	4
Concrete Removal	Cu Yd	11
Structure Excavation	Cu Yd	3
Concrete Structures	Cu Yd	11
Protective Coat	Sq Yd	51
Reinforcement Bars Epoxy Coated	Pound	660
Temporary Soil Retention System	Sq Ft	422
Concrete Gutter (Special)	Foot	15
Removing And Re-erecting Existing Railing	Foot	253



LEGEND

-  Concrete Removal
- F.F. Front Face
- B.F. Back Face

MODEL: sMODELNAME5  
FILE NAME: s:\2018\181LO42-AES PH2 IDOT D1-PTB 185-02\Work Order-13 Lawrence Retaining Wall\CADD\CADD Sheets\XX\_62G42\_shc-S4-General Notes, Details & Bill of Materials.dgn  
7/26/2019 4:01:10 PM



QUIGG ENGINEERING INC

USER NAME	=	WMohammed	DESIGNED	-	AWM	REVISED	-
			CHECKED	-	MS/MO	REVISED	-
PLOT SCALE	=	4:0.0000 " / in.	DRAWN	-	AWM	REVISED	-
PLOT DATE	=	7/26/2019	CHECKED	-	MS/MO	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, DETAILS AND TOTAL BILL OF MATERIALS  
LAWRENCE AVENUE - RETAINING WALL AT PUMP HOUSE

SHEET S4 OF S6 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	31
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				



[illegible]

SOIL BORING LOG B-01

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type <i>recovery</i>	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
A vertical soil profile diagram on the left side of the page. It shows various soil textures represented by patterns: horizontal dashes for silty clay loam at the top, stippling for sandy soils, and dots for saturated sands. A dashed line labeled '--TOP SOIL--' separates the top layer from the underlying silty clay loam. The bottom section is filled with dense stippling representing coarse sand. <div style="position: absolute; transform: rotate(-90deg); font-size: small;">WANGENG - 19900210.GPJ WANGENG.GDT 7/3/19</div>	630.3	10-inch thick, black SILTY CLAY LOAM, organic matter			1	PUSH	4.25 P	16									
		--TOP SOIL-- Stiff to hard SILTY CLAY, trace gravel; damp			2	PUSH	4.97 R	19									
			5		3	PUSH	5.73 B	19									
					4	PUSH	5.16 B	21									
					5	PUSH	2.87 B	25									
	621.6	Gray, fine to medium SAND; saturated	10		6	PUSH	5.44 B	18									
	620.4	Hard, gray SILTY CLAY LOAM;															
	619.4damp																
	Gray, fine SAND																
618.4					7	PUSH	1.50 P	15									
	Stiff, gray SILTY CLAY LOAM to SILTY LOAM; damp																
617.1					8	PUSH	NP	14									
	Gray, coarse SAND; saturated	15															
615.4																	
615.1	Gray SILTY CLAY LOAM																
	Boring terminated at 16.00 ft																
			20														
			25														
GENERAL NOTES									WATER LEVEL DATA								
Begin Drilling      06-24-2019                  Complete Drilling      06-24-2019									While Drilling        ∇                  9.50 ft								
Drilling Contractor     Wang Testing Services     Drill Rig .....									At Completion of Drilling    ▼                  NA								
Driller ..... R & E ..... Logger .... M. Sadowski ... Checked by Nesam.B									Time After Drilling              NA .....								
Drilling Method      .1" IDA Pneumatic Geoprobe LB Sampler.....									Depth to Water              ▼                  NA								
									The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.								

SOIL BORING LOG HA-01



MODEL: Default  
FILE NAME: \\P:\BID\BIDDING\ILLINOIS\GOV\FWID\DOT\Documental\DOT Office\District 1\Project\DD12919\CADD\1\Design\DD1291918.dwg  
BID DATE: 11/19/18

SUMMARY OF QUANTITIES			
ITEM NO.	QUANTITY	UNIT	PAY ITEM
1.	438.3	CU.YD.	CLASS X CONCRETE
2.	14,115	LB.	REINFORCEMENT BARS
3.	30,870	LB.	REINFORCEMENT BARS, EPOXY COATED
4.	2,176	SQ.YD.	PROTECTIVE COAT (SILANE)
5.	502	CU.YD.	CONCRETE REMOVAL
6.	831	EACH	ADHESIVE ANCHORAGE
7.	509	SQ.FT.	REPAIR CONCRETE STRUCTURES
8.	2,393	CU.YD.	STRUCTURE EXCAVATION MODIFIED
9.	1,680	CU.YD.	FINE OR COARSE AGGREGATE EMBANKMENT
10.	125	CU.YD.	POROUS GRANULAR EMBANKMENT
11.	86	LIN.FT.	PAVED DITCH (SPECIAL)
12.	387	SQ.YD.	PORTLAND CEMENT CONCRETE BASE COURSE 9 IN. (MODIFIED)
13.	483	LIN.FT.	PIPE UNDERDRAINS, WRAPPED PERFORATED CORRUTATED POLYETHYLENE TUBING, 6 IN.
14.	811	LIN.FT.	CLEANING AND PAINTING EXISTING STEEL RAILING (PIPE)
15.	480	LIN.FT.	REMOVAL AND RE-ERECTION OF STEEL RAILING (PIPE)
16.	161	LIN.FT.	FURNISHING AND ERECTING STEEL RAILING (PIPE)
17.	507	LIN.FT.	STEEL RAILING (H.S.S.T.)
18.	25	EACH	REMOVAL OF EXISTING RAILING UNIT AND REPLACEMENT
19.	8,800	SQ.FT.	PORTLAND CEMENT CONCRETE SIDEWALK 6 IN. (MODIFIED)
20.	1,662	LIN.FT.	CONCRETE GUTTER (SPECIAL)
21.	560	LIN.FT.	COMBINATION CONCRETE CURB AND GUTTER (MODIFIED)
22.	1,369	LIN.FT.	CONCRETE GUTTER REMOVAL
23.	11,818	SQ.FT.	CONCRETE SIDEWALK REMOVAL
24.	25	LIN.FT.	STORM SEWERS, TYPE 2 (CSP CLASS 1) 8 IN.
25.	25	LIN.FT.	STORM SEWERS, TYPE 2 (CSP CLASS 1) 10 IN.
26.	143	LIN.FT.	STORM SEWERS, TYPE 2 (RCCP CLASS III) 12 IN.
27.	1,192	LIN.FT.	STORM SEWERS, TYPE 2 (RCCP CLASS III) 18 IN.
28.	127	LIN.FT.	STORM SEWERS, TYPE 2 (RCCP CLASS III) 24 IN.
29.	25	LIN.FT.	STORM SEWERS, TYPE 1 (DUCTILE IRON PIPE AWWA C151) 6 IN.
30.	25	LIN.FT.	STORM SEWERS, TYPE 1 (DUCTILE IRON PIPE AWWA C151) 8 IN.
31.	50	LIN.FT.	EXPLORATION TRENCH (52 IN. DEPTH)
32.	9	EACH	CATCH BASINS, TYPE C, 2 FT. DIA. WITH FRAMES AND GRATES
33.	9	EACH	MANHOLES, TYPE A, 4 FT. DIA. WITH FRAMES AND GRATES
34.	5	SQ.YD.	PAVEMENT REPLACEMENT
35.	5	CU.YD.	TRENCH BACKFILL
36.	1	EACH	PLUGGING EXISTING DRAINS AND SEWERS (12 IN. OR LESS)
37.	1	EACH	PLUGGING EXISTING DRAINS AND SEWERS (OVER 12 IN.)
38.	29	EACH	CATCH BASINS, 18 IN. DIA. WITH FRAMES AND GRATES
39.	1	EACH	CATCH BASINS, TYPE A2, 4 FT. DIA. WITH FRAMES AND GRATES
40.	1	EACH	CATCH BASINS TO BE RECONSTRUCTED
41.	1	EACH	CATCH BASINS TO BE RECONSTRUCTED, SPECIAL
42.	1	EACH	CLEANING EXISTING CATCH BASINS
43.	1	EACH	MANHOLES TO BE RECONSTRUCTED
44.	1	EACH	MANHOLES TO BE RECONSTRUCTED, SPECIAL
45.	1	EACH	CLEANING EXISTING MANHOLES
46.	1	EACH	CLEANING EXISTING INLETS
47.	25	LIN.FT.	CLEANING EXISTING STORM SEWERS (12 IN.)
48.	25	LIN.FT.	CLEANING EXISTING STORM SEWERS (18 IN.)
49.	1	EACH	CATCH BASINS TO BE ADJUSTED
50.	1	EACH	MANHOLES TO BE ADJUSTED
51.	1	EACH	INLETS TO BE ADJUSTED
52.	2	EACH	MANHOLES, TYPE A, 5 FT. DIA. WITH FRAMES AND GRATES
53.	6,500	LIN.FT.	PAVEMENT MARKING TAPE, TYPE III-LINE
54.	500	SQ.FT.	REMOVAL OF PAVEMENT MARKINGS
55.	800	LIN.FT.	TEMPORARY CONCRETE BARRIER
56.	814	LIN.FT.	RELOCATE TEMPORARY CONCRETE BARRIER
57.	3,000	LIN.FT.	THERMOPLASTIC PAVEMENT MARKING-LINE 4 INCH
58.		LUMP SUM	TRAFFIC PROTECTION
59.	2	EACH	TEMPORARY CONCRETE BARRIER, TERMINAL SECTION
60.	4,050	SQ.YD.	BITUMINOUS SURFACE REMOVAL
61.	450	GAL.	BITUMINOUS MATERIALS (PRIME COAT)
62.	9	TON	AGGREGATE (PRIME COAT)
63.	500	TON	LEVELING BINDER (MACHINE METHOD)
64.	380	TON	BITUMINOUS CONCRETE BINDER COURSE
65.	174	LIN.FT.	CUTTING BITUMINOUS SURFACE
66.	380	TON	BITUMINOUS CONCRETE SURFACE COURSE, CLASS 1
67.	80	SQ.YD.	SODDING
68.	8	CAL.MO.	ENGINEER'S FIELD OFFICE, TYPE A
69.	507	LIN.FT.	RECONSTRUCTION OF PIER CURB
70.	387	SQ.YD.	PAVEMENT REMOVAL
71.	480	LIN.FT.	EPOXY CRACK SEALING
72.	1,382	LIN.FT.	SAWING P.C. CONCRETE PAVEMENT (FULL DEPTH)
73.		LUMP SUM	CONSTRUCTION LAYOUT STAKES
74.	75	LIN.FT.	COMBINATION CURB AND GUTTER REMOVAL
75.	75	LIN.FT.	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

FOR  
INFORMATION  
ONLY

#### SPECIFICATIONS

- THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED OCTOBER 1, 1983 AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED OCTOBER 1, 1986 ILLINOIS DEPARTMENT OF TRANSPORTATION.
- SPECIAL PROVISIONS.
- STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1983 AND 1985 INTERIM SPECIFICATIONS, AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, A.A.S.H.T.O.

#### GENERAL NOTES

- THE CONTRACTOR SHALL INSPECT THE PROJECT SITE, AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS, TRAFFIC AND OTHER ITEMS THAT EFFECT THE CONTRACT AND THE DETAILED REQUIREMENTS OF CONSTRUCTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- CLASS X CONCRETE SHALL BE USED THROUGHOUT.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O., M-31 OR M-53 GRADE 60.
- THE COST OF NON METALLIC WATER-SEALS PREFORMED FIBER JOINT FILLER SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE PER CUBIC YARD OF CLASS X CONCRETE. THIS ITEM SHALL NOT BECOME BENT, TORN, OR DISTORTED DURING CONSTRUCTION. THE CONTRACTOR'S METHOD OF SUPPORTING, BRACING AND PROTECTING THE PREFORMED FIBER JOINT SHALL BE APPROVED BY THE ENGINEER.
- THE BACK FACES OF RETAINING WALLS SHALL BE WATERPROOFED ACCORDING TO ARTICLE 503.11 OF THE STANDARD SPECIFICATIONS.
- THE NEW CONSTRUCTION SHALL MEET ELEVATION OF ADJACENT ROADWAY.
- FOR FINE OR COARSE AGGREGATE EMBANKMENT, SEE SPECIAL PROVISIONS.
- ALL EXISTING ROAD SIGNS, MARKERS, ETC. SHALL BE REMOVED AND RESET BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
- "SILANE" PROTECTIVE COAT SHALL BE APPLIED TO CONCRETE SIDEWALKS, GUTTERS, TOPS, EXPOSED VERTICAL FACES OF WALLS AND REPAIRED STRUCTURE AREAS. THE PROTECTIVE COAT SHALL CONSIST OF 40 PERCENT BY WEIGHT ALKYLTRIALKOXY SILANE IN ANHYDROUS ISOPROPANOL (MANUFACTURED BY ADVANCED CHEMICAL TECHNOLOGIES CO. OKLAHOMA CITY) OR EQUIVALENT, SEE SPECIAL PROVISIONS FOR SILANE PROTECTIVE COAT.
- APPLY EPOXY BONDING AGENT TO EXISTING CONCRETE WHERE PLACING NEW CONCRETE. COST INCIDENTAL TO CLASS X CONCRETE.
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY RESIN COATED.
- COARSE AGGREGATE IN THE CONCRETE WILL BE REQUIRED TO MEET THE QUALITY STANDARDS SPECIFIED IN ARTICLE 704.01 OF THE STANDARD SPECIFICATIONS, OCTOBER 1, 1983, EXCEPT USE OF CHERT AGGREGATE SHALL NOT BE PERMITTED.
- FOR CONCRETE REMOVAL, SEE SECTION 501 OF THE STANDARD SPECIFICATIONS. THE CONCRETE REMOVAL INCLUDES REMOVAL AND SATISFACTORY DISPOSAL OF CURB WALLS BY THE CONTRACTOR. CONCRETE REMOVED SHALL NOT BE USED AS BACKFILL IN THE PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CONCRETE REMOVAL.
- EXISTING REINFORCEMENT BARS TO REMAIN IN PLACE AS NOTED ON THESE PLANS SHALL BE THOROUGHLY CLEANED BY SANDBLASTING BEFORE BEING TIED TO NEW REINFORCEMENT BARS OF THE PREPARED AREA. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE BID PER CUBIC YARD OF THE "CONCRETE REMOVAL".
- FOR ANCHORAGE OF REINFORCEMENT BARS INTO EXISTING CONCRETE, SEE SPECIAL PROVISIONS FOR ADHESIVE ANCHORAGE.
- REMOVAL AND RE-ERECTION OF STEEL RAILING (PIPE): AS SHOWN ON THE PLANS, THE EXISTING STEEL PIPE RAILING TO BE REMOVED CAREFULLY, STORED, AND RE-ERECTED WHEN THE RETAINING WALL IS REBUILT. THE EXISTING HANDRAIL WILL BE RE-ERECTED ON NEW ANCHORAGES. SEE SPECIAL PROVISIONS. A 1/8 IN. FABRIC PAD WILL BE PROVIDED FOR EACH POST WHEREVER THE STEEL IS IN CONTACT WITH THE CONCRETE. COST INCIDENTAL TO THE RAILING PAY ITEM. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR REMOVAL AND RE-ERECTION OF STEEL RAILING (PIPE) MEASURED AS SPECIFIED WHICH PRICE SHALL BE PAYMENT IN FULL FOR REMOVAL AND ERECTION.
- CLEANING AND PAINTING EXISTING STEEL RAILING (PIPE): AS SHOWN ON THE PLANS, THE EXISTING STEEL RAILS BETWEEN THE COLUMNS OF THE SOO LINE RAILROAD BRIDGE AND THE EXISTING REMAINING RAILING, WILL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS. METHOD IT WILL BE USED FOR CLEANING THE RAILING, ALL LOOSE ABRASIVES, PAINT RESIDUE, SHALL BE REMOVED FROM THE STEEL SURFACES AND THE TOP OF SIDEWALKS, CURBS AND ROADWAY WITH A VACUUM SYSTEM. ALL RAILING, POSTS, PLATES, ANCHOR RODS AND NUTS SHALL BE PAINTED WITH ONE SHOP COAT OF LEAD CHROMATE FREE ALKYD PAINT PRIMER AND TWO FIELD COATS OF ALUMINUM PAINT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR CLEANING AND PAINTING STEEL RAILING (PIPE).
- PIPE HANDRAIL: STEEL PIPE HANDRAIL SHALL BE IN ACCORDANCE WITH SECTION 635 OF THE STANDARD SPECIFICATION, EXCEPT AS NOTED. ALL STEEL RAILING, RAIL SPLICES, PLATES, ANCHOR RODS AND NUTS SHALL BE PAINTED AFTER SHOP-FABRICATION WITH ONE COAT OF LEAD/CHROMATE FREE ALKYD PAINT PRIMER AND TWO FIELD COATS OF ALUMINUM PAINT. A 1/8 IN. FABRIC PAD WILL BE PROVIDED WHEREVER THE STEEL COMES IN CONTACT WITH THE CONCRETE. THE STEEL RAILING WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR FURNISHING AND ERECTING STEEL RAILING (PIPE) MEASURED AS SPECIFIED, WHICH PRICE SHALL BE PAYMENT IN FULL FOR ALL MATERIALS, FABRICATION, TRANSPORTATION AND ERECTION.
- PEDESTRIAN HANDRAILING: PIPE STEEL RAILING SHALL BE IN ACCORDANCE WITH SECTION 508 OF THE STANDARD SPECIFICATIONS, EXCEPT AS NOTED. HOLLOW STRUCTURAL STEEL TUBING (H.S.S.T.) SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A-500-GRADE B STRUCTURAL STEEL TUBING. ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO AASHTO M-183. ALL RAILING, RAIL SPLICES, PLATES AND ANCHOR RODS SHALL BE PAINTED AFTER SHOP-FABRICATION WITH ONE SHOP COAT OF LEAD CHROMATE FREE ALKYD PAINT PRIMER AND TWO FIELD COATS OF ALUMINUM PAINT. STEEL RAILING WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR STEEL RAILING (H.S.S.T.) MEASURED AS SPECIFIED WHICH PRICE SHALL BE PAYMENT IN FULL FOR ALL MATERIALS, FABRICATION, TRANSPORTATION AND ANCHORAGE. THE PRE-MEASURED EPOXY ADHESIVE GROUTING OF THE STEEL RAILING ANCHORAGE WILL BE IN ACCORDANCE WITH THE SPECIAL PROVISION FOR ADHESIVE ANCHORAGE EXCEPT THE EMBEDMENT WILL BE AS SHOWN ON THE PLANS, FURNISHING OF THE GROUT AND SETTING OF THE RAILING ANCHORS IN THE EPOXY GROUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STEEL RAILING (H.S.S.T.).
- REPLACING RAILING BETWEEN PIER COLUMNS: IF THE CONDITION OF THE RAILING BETWEEN PIER COLUMNS DOES NOT ALLOW TO USE THEM BECAUSE OF THE EXCESSIVE CORROSION, THIS RAILING UNIT SHALL BE REPLACED WITH A NEW ONE. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVAL OF EXISTING RAILING UNIT AND REPLACEMENT. THE UNIT CONSISTS OF A 4 FT. 8 IN. LONG, 3 IN. DIAMETER EXTRA STRONG STEEL PIPE WITH TWO STEEL CIRCULAR ANCHORAGE PLATES AND EIGHT ANCHOR BOLTS, FOUR AT EACH END. PAINTING IS INCLUDED IN CLEANING AND PAINTING EXISTING STEEL RAILING (PIPE).
- PLANS OF EXISTING FACILITIES ARE ON FILE AT THE COOK COUNTY HIGHWAY DEPARTMENT, 118 N. CLARK ST., CHICAGO, ILLINOIS 60602. IN ROOM 939. THE CONTRACTOR MAY SEE AND EXAMINE THEM FOR HIS INFORMATION.
- THE CONTRACTOR WILL BE REQUIRED TO FURNISH RAILROAD INSURANCE TO COMPLY WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ARTICLES 107.11 AND 107.12 AND SPECIAL PROVISION: RAILROAD INSURANCE REQUIREMENTS AND FLAG MAN PROTECTION.
- SODDING: SHALL BE PLACED ON A THREE (3) FOOT STRIP ADJACENT TO THE CURB AS SHOWN ON PLAN, INCLUDING FERTILIZER NUTRIENTS. SUPPLEMENTAL WATERING, WHICH IS TO BE USED AFTER THE INITIAL WATERING (AS SPECIFIED AND AS DIRECTED BY THE ENGINEER) SHALL BE USED AT THE RATE OF 10 GALLONS PER SQUARE YARD OF SODDING. SODDED SLOPES WHICH ARE 2:1 OR STEEPER SHALL BE STAKED.
- FERTILIZER NUTRIENTS: USE A FERTILIZER WITH AN ANALYSIS OF 10-6-4, OR SIMILAR 5-3-2 RATIO, AT THE FOLLOWING RATE PER ACRE:  
NITROGEN FERTILIZER NUTRIENT-80 LBS.  
PHOSPHORUS FERTILIZER NUTRIENT-48 LBS.  
POTASSIUM FERTILIZER NUTRIENT-32 LBS.  
3" TOP SOIL LAYER SHALL BE SPREAD AS INDICATED ON SECTION D-D ON SHEET NO. 13.
- PROVIDE SHEETING AND BRACING IF THE EXISTING SHEETING IS NOT ADEQUATE TO PROTECT THE HIGHER FOOTING DURING CONSTRUCTION. COST SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF STRUCTURE EXCAVATION (MODIFIED).
- THE CONTRACTOR SHALL PROVIDE SHORING OF THE COLUMNS DURING REPAIR WORK IF THE STRUCTURE ADEQUACY OF THE COLUMN IS REQUIRED.

#### REVISIONS

DATE	BY	DESCRIPTION

#### DEPARTMENT OF HIGHWAYS

GEORGE W. DUNNE  
PRESIDENT BOARD OF COMMISSIONERS  
RICHARD H. GUTTERMAN  
SUPERINTENDENT OF HIGHWAYS

#### GENERAL NOTES AND SUMMARY OF QUANTITIES

LAWRENCE AVE. UNDERPASS AT SOO LINE R.R.

COMPUTED BY D.W.D.  
CHECKED BY R.S.  
DRAWN BY A.G. JR.  
CHECKED BY R.S.  
SUBMITTED Jerry P. Smith  
DATE September 1, 1998  
STRUCTURAL DESIGN ENGINEER

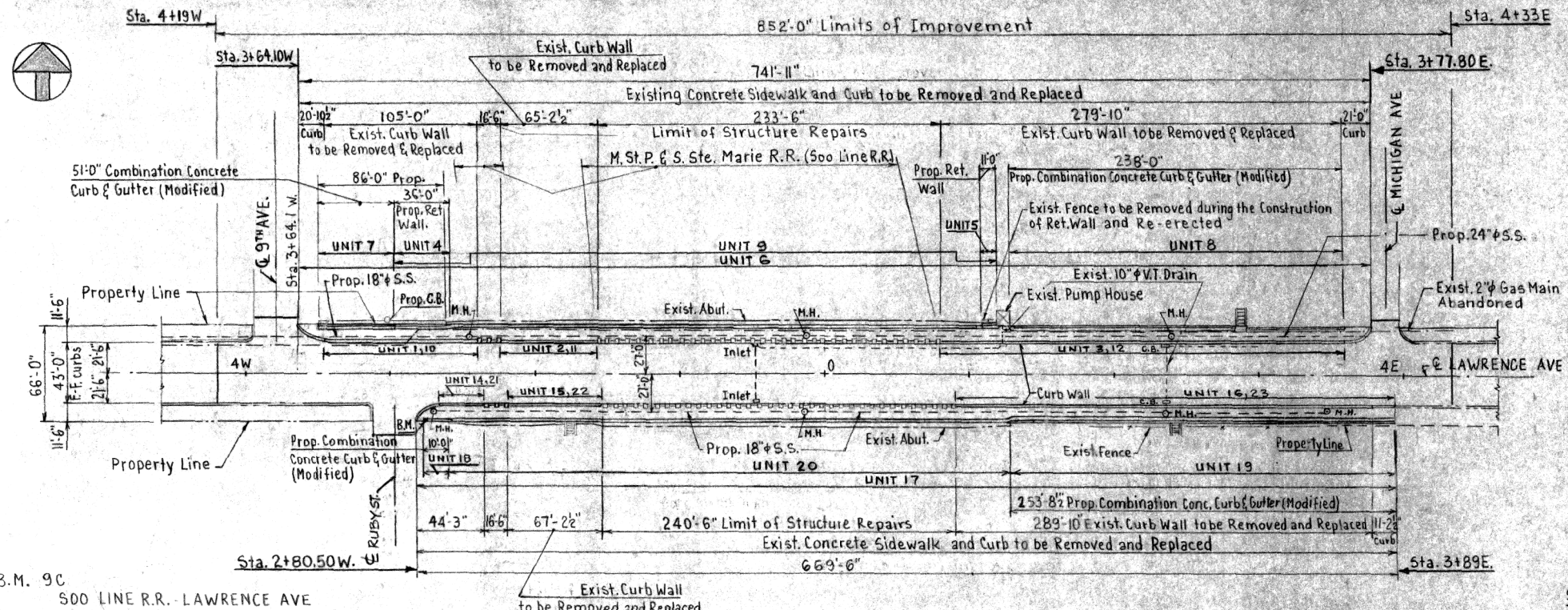
EXAMINED Scott B. 1997  
DATE August 10, 1997  
CHIEF ENGINEER OF DESIGN  
ROUTE 139 SECTION NUMBER 88-19321-01 SHEET NO. 2 TOTAL SHEETS 54 DRAWING NO. PR-1956

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

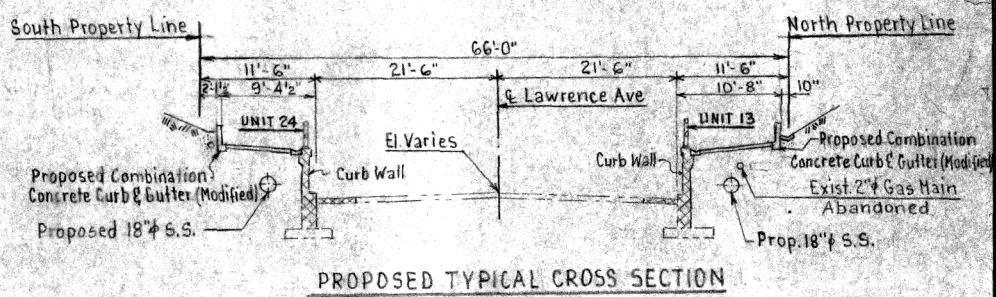
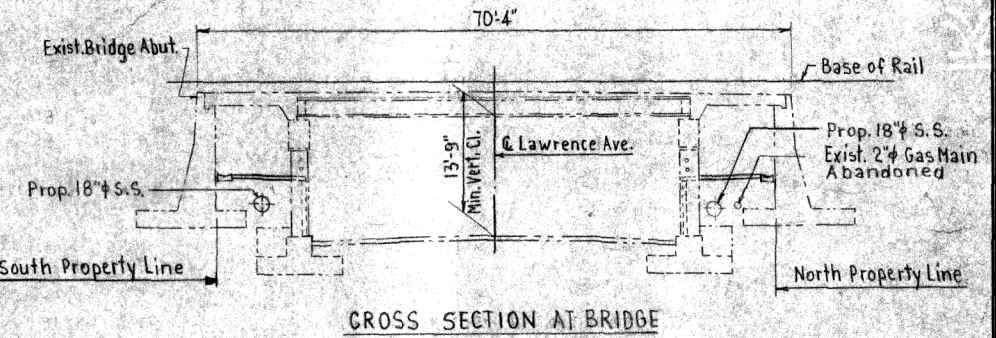
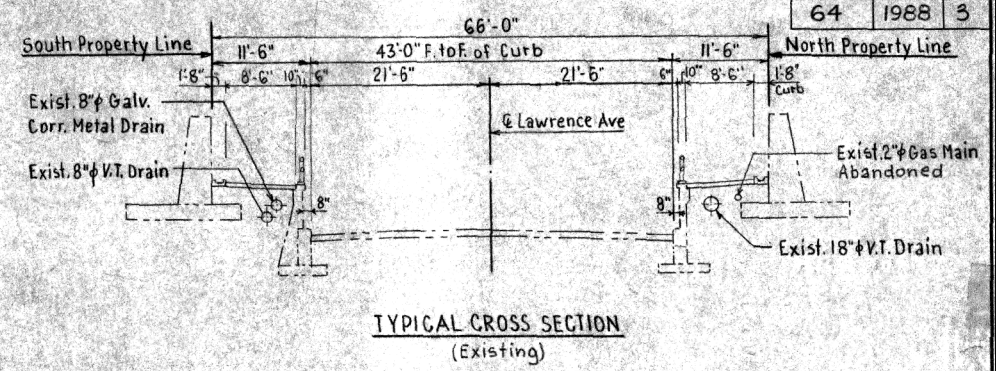
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
1362 3200R5&DR-5 COOK 85 34  
CONTRACT NO. 62G42  
ILLINOIS FED. AID PROJECT



B.M. 9C  
SOO LINE R.R. - LAWRENCE AVE  
Highest Point of a Reinforcing Rod on  
the lowest step of the South Wingwall  
at the West End of the Overpass  
about 4'-5" above the Sidewalk  
C.C.H.D. El. C33.066

PLAN  
SCALE: 1" = 50'



FOR INFORMATION ONLY

RECONSTRUCTION

NORTH SIDE

- UNIT 1 - CURB WALL AT WEST END
- UNIT 2 - CURB WALL BETWEEN RAILROAD BRIDGE PIERS
- UNIT 3 - CURB WALL AT EAST END
- UNIT 4 - RETAINING WALL EXTENSION OF EXISTING ABUTMENT'S WEST WING WALL
- UNIT 5 - RETAINING WALL EXTENSION OF EXISTING ABUTMENT'S EAST WING WALL
- UNIT 6 - CONCRETE SIDEWALK
- UNIT 7 - COMBINATION CONCRETE CURB AND GUTTER (MODIFIED) AT WEST END
- UNIT 8 - COMBINATION CONCRETE CURB AND GUTTER (MODIFIED) AT EAST END
- UNIT 9 - CONCRETE GUTTER ALONG THE ABUTMENT, WING WALL AND RETAINING WALLS FRONT FACES
- UNIT 10 - CONCRETE GUTTER ALONG THE CURB WALL AT WEST END
- UNIT 11 - CONCRETE GUTTER ALONG THE CURB WALL BETWEEN RAILROAD BRIDGE PIERS
- UNIT 12 - CONCRETE GUTTER ALONG THE CURB WALL AT EAST END
- UNIT 13 - HANDRAIL ON CURB WALLS AND PEDESTRIAN RAILING

SOUTH SIDE

- UNIT 14 - CURB WALL AT WEST END
- UNIT 15 - CURB WALL BETWEEN RAILROAD BRIDGE PIERS
- UNIT 16 - CURB WALL AT EAST END
- UNIT 17 - CONCRETE SIDEWALK
- UNIT 18 - COMBINATION CONCRETE CURB AND GUTTER (MODIFIED) AT WEST END
- UNIT 19 - COMBINATION CONCRETE CURB AND GUTTER (MODIFIED) AT EAST END
- UNIT 20 - CONCRETE GUTTERS ALONG THE ABUTMENT & WING WALLS FRONT FACES
- UNIT 21 - CONCRETE GUTTER ALONG THE CURB WALL AT WEST END
- UNIT 22 - CONCRETE GUTTER ALONG THE CURB WALL BETWEEN RAILROAD BRIDGE PIERS
- UNIT 23 - CONCRETE GUTTER ALONG THE CURB WALL AT EAST END
- UNIT 24 - HANDRAIL ON CURB WALLS AND PEDESTRIAN RAILING

STRUCTURE REPAIRS

NORTH SIDE

- UNIT 25 - PIER COLUMNS AND WALLS BETWEEN COLUMNS
- UNIT 26 - ABUTMENT & WING WALLS

SOUTH SIDE

- UNIT 27 - PIER COLUMNS AND WALLS BETWEEN COLUMNS
- UNIT 28 - ABUTMENT & WING WALLS

Note:  
For Locations of Catch Basins see  
Drainage and Utilities Drawings.

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS			
COOK COUNTY, ILLINOIS			
GENERAL PLAN			
LAWRENCE AVE. UNDERPASS AT SOO LINE RR			
COMPUTED CHECKED DRAWN CHECKED	SUBMITTED		STRUCTURAL DESIGN ENGINEER
EXAMINED	Route	SECTION NUMBER	Sheet No. Total Sheets Drawing No.
	139	88-1397-01 G.M.	S-1 54 PR-1957

MODEL: Default  
FILE NAME: \\PULB4848\UNITES\Illinois.gov\PROJECTS\Documents\DOT Office\District 1\Projects\12919\CADD\1\Design\01191918.dwg  
Bridges details.dgn

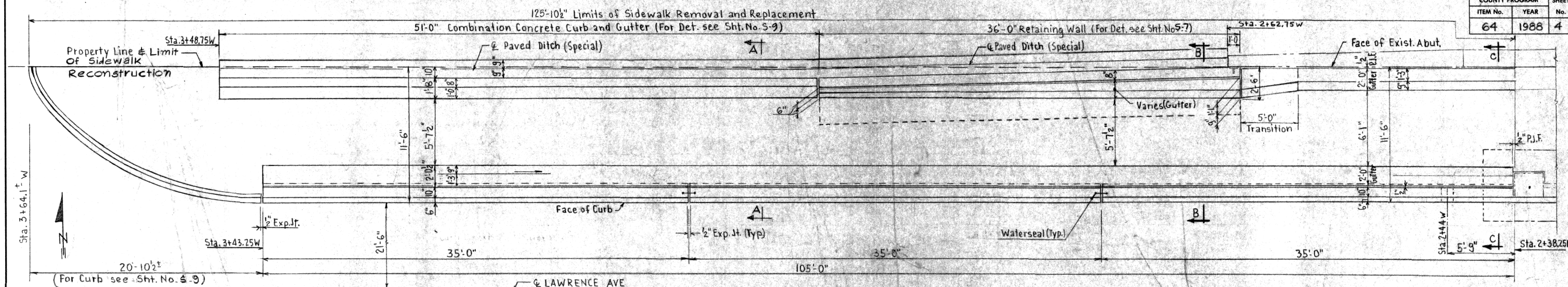
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	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

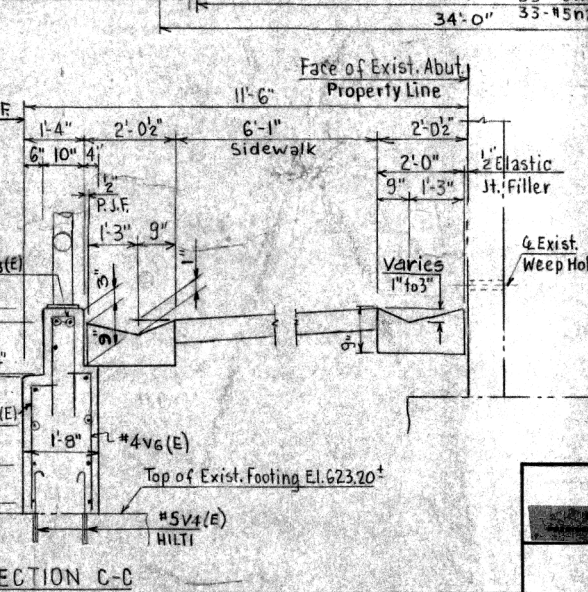
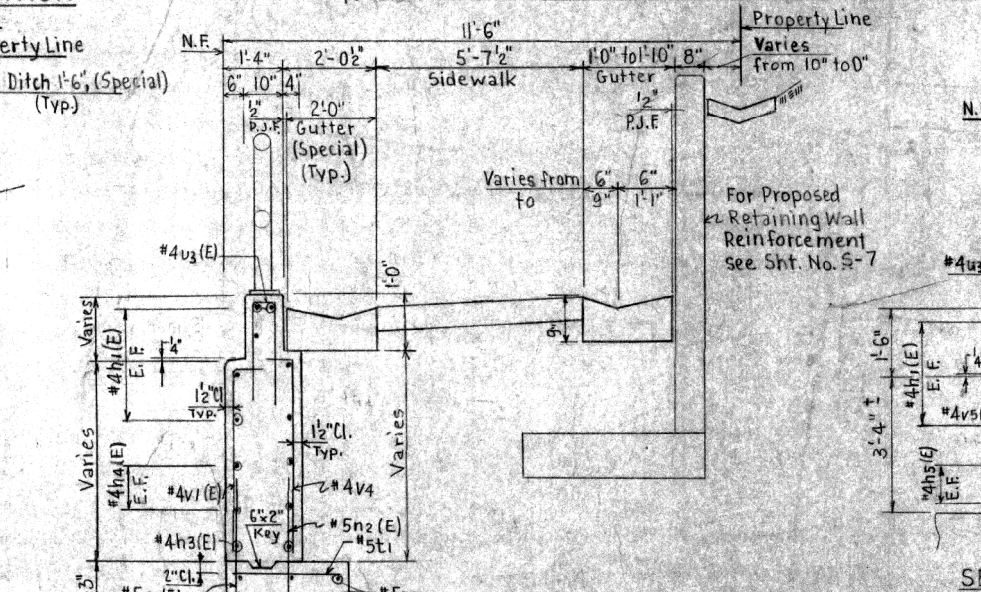
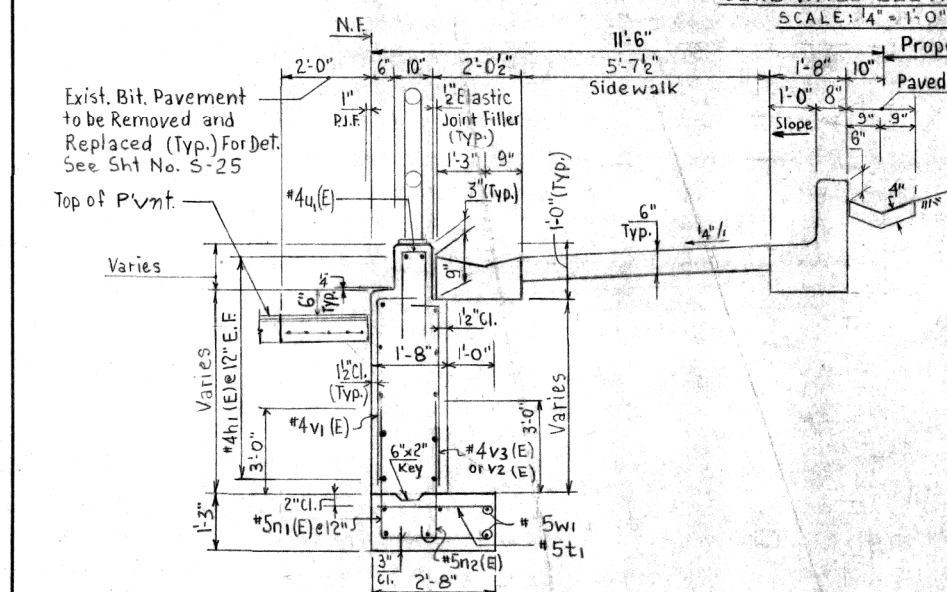
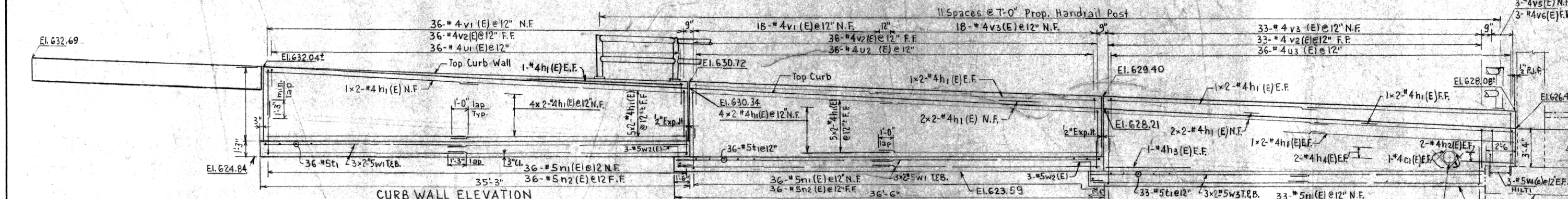
EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)  
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	35
CONTRACT NO. 62G42				
ILLINOIS / FED. AID PROJECT				

COUNTY PROGRAM		SHEET
ITEM No.	YEAR	No.
64	1988	4



FOR INFORMATION ONLY



- NOTES:-
1. For General Plan see Sht. No. S-1
  2. Work this Sheet with Sht's No. S-2, 3, 4, 5
  3. For Bar Schedule and Bill of Material for Curb Wall see Sht. No. S-6
  4. For Waterseal see Detail "A" Sht. No. S-7
  5. For Steel Handrailing Details see Sht. No. S-11
  6. For Bar Schedule and Bill of Material of Sidewalk, Curb, Combination Curb & Gutter and Handrail see Sht. No. S-6
  7. For Units description see General Plan Sht. No. S-1
  8. For Excavation Details see Sht. No. S-25
  9. For Drainage and Utility Information see Drainage Drawings.

DEPARTMENT OF HIGHWAYS  
COOK COUNTY, ILLINOIS

NORTH SIDE - UNIT I  
LAWRENCE AVE. UNDERPASS AT SOO LINE RR

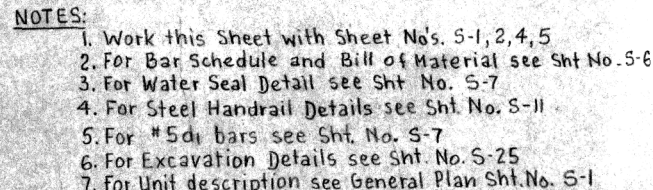
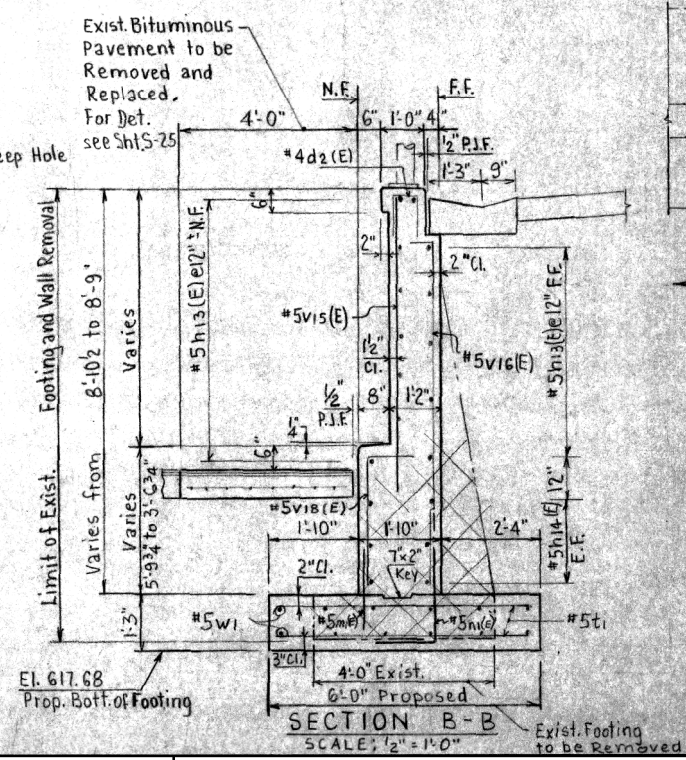
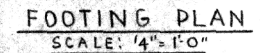
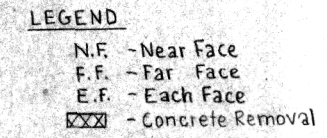
DATE	BY	DESCRIPTION

COMPUTED: E.E.B.  
CHECKED: J.K.E.  
DRAWN: J. Metzger  
CHECKED: U.E.

SUBMITTED: Jerry Perinich  
STRUCTURAL DESIGN ENGINEER

EXAMINED: 10/17/1989  
CHIEF ENGINEER OF DESIGN

Route: 139 SECTION NUMBER: 88-13921-01 G.M. Sheet No.: S-2 Total Sheets: 54 Drawing No.: PR-1958



**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

GEORGE W. DUNN

RICHARD N. GELBERMAN

DISTRICT ENGINEER

COUNTY ENGINEER

**NORTH SIDE-UNIT 2**

**LAWRENCE AVE. UNDERPASS AT 500 LINE RR.**

COMPUTED CEB  
CHECKED LKS  
DRAWN J. H. GEL  
CHECKED LKS

SUBMITTED Henry Darnell  
SEP 1998  
STRUCTURAL DESIGN ENGINEER

EXAMINED DAVID R. BIL  
Aug 12 1998  
CHIEF ENGINEER OF DESIGN

Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.
139	88-1392-01 C. M.	5-3	54	PR-1959



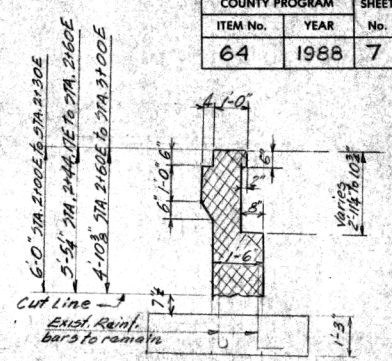
	from STA. 1+40.0E to STA. 1+70.0E	from STA. 1+70.0E to STA. 2+00.0E
H	7'-1 $\frac{3}{4}$ "	6'-7"
h	Varies 3'-0 $\frac{1}{2}$ " to 3'-7 $\frac{1}{2}$ "	varies 3'-0 $\frac{1}{2}$ " to 3'-7 $\frac{1}{2}$ "
h <sub>1</sub>	Varies 4'-1" to 3'-6 $\frac{1}{2}$ "	varies 3'-6 $\frac{1}{2}$ " to 2'-11"

USER NAME = peraymoal	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' = 1" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

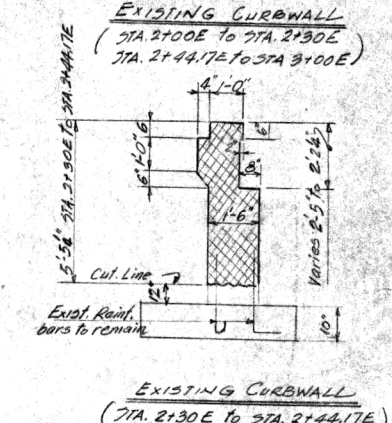
EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

COMPUTED <u>5.10</u>	SUBMITTED <u>10/1/68</u> <u>10/1/68</u> STRUCTURAL DESIGN ENGINEER				
CHECKED <u>LCS</u>					
DRAWN <u>B. J. GORDON</u>					
CHECKED <u>LCS</u>					
EXAMINED <u>10/1/68</u> <u>10/1/68</u> CHIEF ENGINEER OF DESIGN	Route 139	SECTION NUMBER 88-13921-01 G.M.	Sheet No. S-4	Total Sheets 54	Drawing No. PR196


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	38
		CONTRACT NO. 62G42		
ILLINOIS		FED. AID PROJECT		



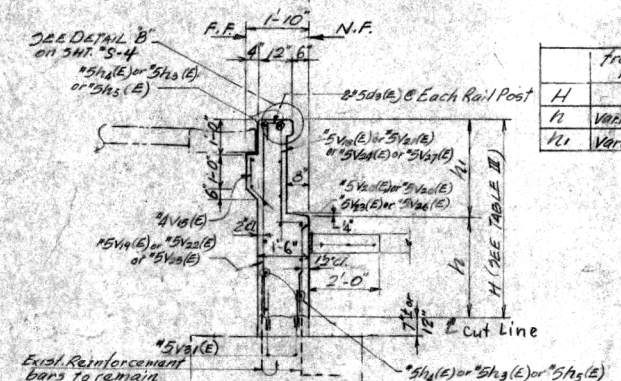
PLAN  
NORTH  
Scale 1/4" = 1'-0"



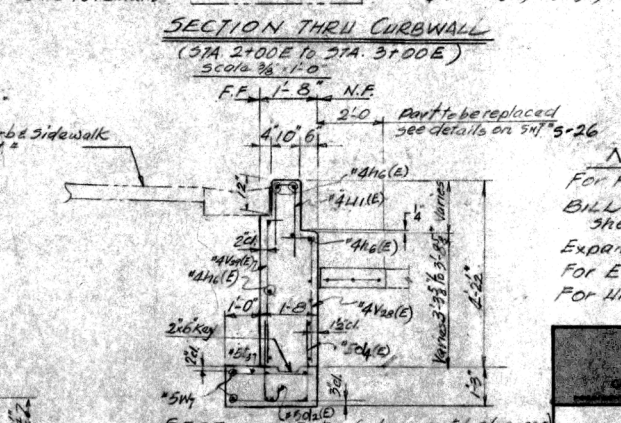
LEGEND

 — Concrete Removal

P.J.F - Preformed Joint Filler  
N.F - Near Face  
F.F - Far Face  
E.F - Each Face



	from STA. 2100E to STA. 2130E	from STA. 2130E to STA. 2160E	from STA. 2160E to STA. 2190E
H	6'-0"	5'-54"	4'-10 1/2"
f <sub>1</sub>	Varies 5'-0 1/2" to 5'-7"	Varies 5'-3" to 5'-44"	Varies 5'-11 1/2" to 3'-11 1/2"
f <sub>2</sub>	Varies 2'-4 1/2" to 2'-5"	Varies 2'-5" to 1'-11"	Varies 1'-11" to 0'-10 1/2"



**DEPARTMENT OF HIGHWAYS**  
**COOK COUNTY, ILLINOIS**

**GEORGE W. QUINN**  
 PRESIDENT, BOARD OF SUPERVISORS

**NORMAN S. WESTERMAN**  
 SUPERINTENDENT OF HIGHWAYS

SECTION E-E (Sta. 31+00 to 31+20)  
Scale 3/8" = 1'-0"

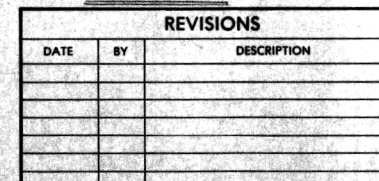
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CHECKED <i>LEE</i>					
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CHECKED <i>LEE</i>					
EXAMINED <i>Sept 8 1968</i>	Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.
<i>August 1968</i>	139	88-1392-01 G.M.	S-5	54	PR.1968
CHIEF ENGINEER OF DESIGN					

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	39
		CONTRACT NO. 62G42		

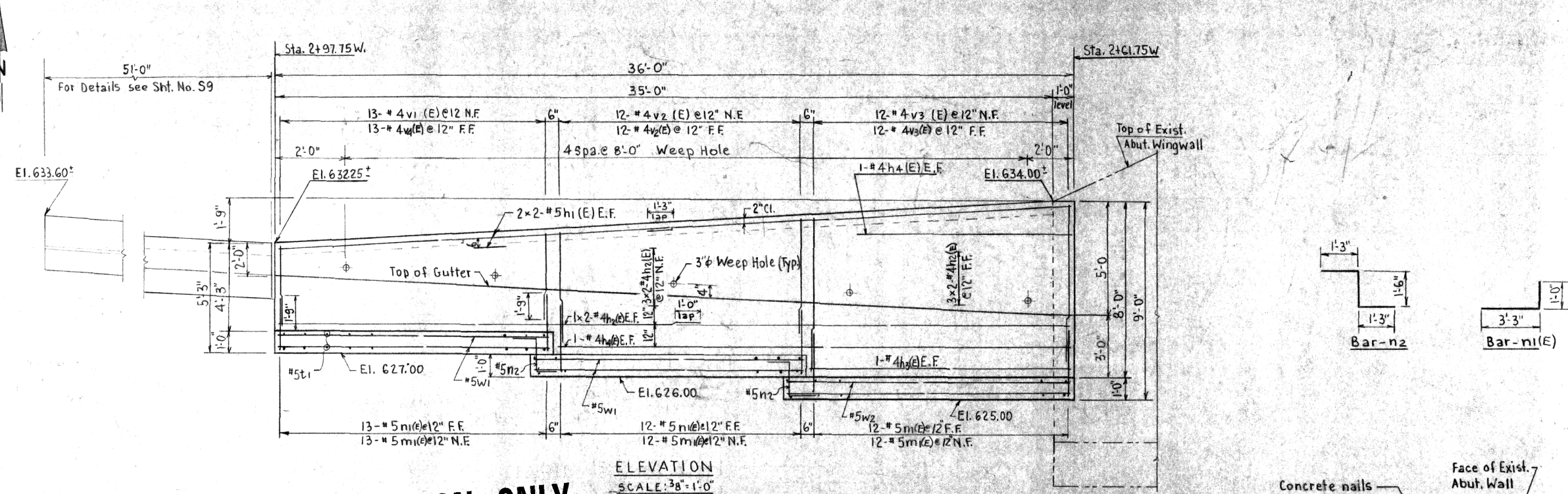
BAR SCHEDULE (FOR NORTH CURB WALL)															
MARK	EPOXY	CONN	NO	SIZE	LENGTH	SHAPE	TYPE								
								A	B	C	D	J	K	H	
		C1	8	4	3'-0"	—	Str.								
H1(E)			62	4	17'-10"	—	Str.								
H2(E)			4	4	5'-0"	—	Str.								
H3(E)			2	4	32'-2"	—	Str.								
H4(E)			4	4	28'-6"	—	Str.								
H1(E)			105	5	6'-4"	—	21		4'-0"	2'-4"					
H2(E)			105	5	4'-5"	—	1	7"	3'-0"		5"				
E1			105	5	2'-4"	—	Str.								
H1(E)			36	4	3'-1"	—	17		1'-3"	7"	1'-3"				
H2(E)			36	4	4'-1"	—	17		1'-9"	7"	1'-9"				
H3(E)			36	4	5'-1"	—	17		2'-3"	7"	2'-3"				
V1(E)			54	4	5'-1"	—	21		1'-0"	4'-1"					
V2(E)			105	4	4'-0"	—	21		9"	3'-3"					
V3(E)			51	4	3'-6"	—	21		9"	2'-9"					
V4(E)			6	5	3'-1"	—	1	7"	2'-6"		5"				
V5(E)			3	4	4'-0"	—	21		1'-0"	3'-0"					
V6(E)			3	4	4'-3"	—	21		9"	3'-6"					
W1			24	5	18'-9"	—									
W2			6	5	5'-1"	—			1'-6"	2'-1"	1'-6"				
W3			12	5	17'-8"	—									
G2(E)					3'-1"	—	17		1'-3"	7"	1'-3"				
H11(E)			12	5	16'-6"	—	Str.								
H12(E)			6	5	2'-6"	—	Str.								
H13(E)			24	5	24'-9"	—	Str.								
H14(E)			12	5	24'-0"	—	Str.								
H15(E)			32	5	2'-5"	—	1	7"	1'-10"		5"				
M1(E)			44	5	2'-6"	—	Str.								
L1(E)			44	5	4'-5"	—	21		1'-3"	3'-2"					
S1			12	4	11'-1"	—	71	42	4'-0"	1'-2"					
E1			90	5	5'-9"	—	Str.								
W1			24	5	23'-0"	—	Str.								
V1(E)			17	5	4'-0"	—	Str.								
V2(E)			17	5	5'-0"	—	Str.								
V3(E)			17	5	3'-2"	—	21		1'-3"	1'-11"					
V4(E)			17	4	1'-10"	—	19		10"	1'-0"		8 1/2"	8 1/2"		
V5(E)			25	5	6'-6"	—	Str.								
V6(E)			49	5	8'-0"	—	31		6"	7'-6"					
V7(E)			13	5	6'-4"	—	21		9"	5'-7"					

BILL OF MATERIAL (FOR NORTH CURB WALL)				
ITEM	UNIT	QUANTITIES		
		UNIT 1	UNIT 2	TOTAL
Class X Concrete	Cu. Yd	44.2	41.2	117.7
Reinforcement Bars	Lb	960	1200	4500
Reinforcement Bars, Epoxy Coated	Lb	2,980	2,790	13,530
Protective Coat (Silane)	Sq. Yd	30	33	224
Concrete Removal	Cu. Yd	60	32	273
Adhesive Anchorage	Each	6	32	217

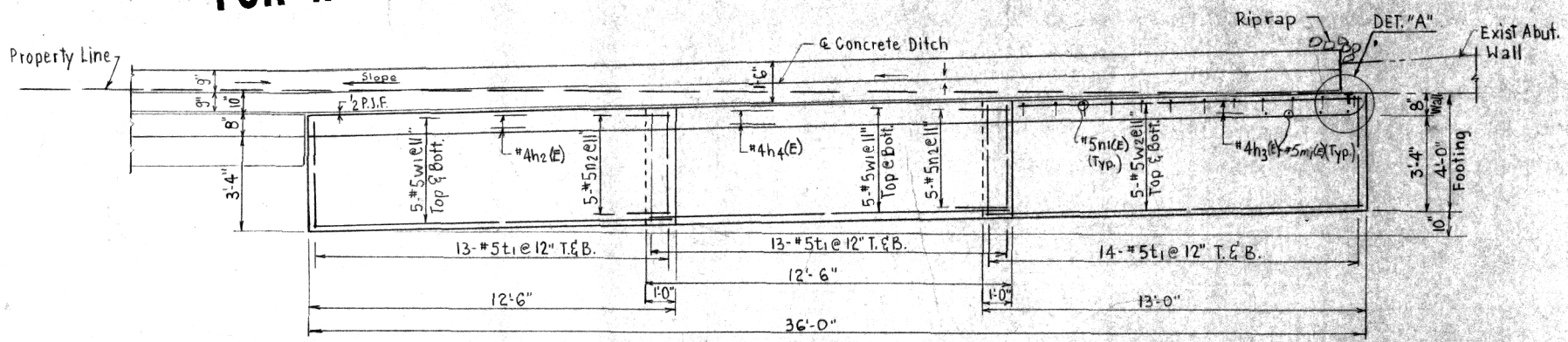
Note:  
North Curbwall Unit 1 Details, See Sht No. S-2  
North Curbwall Unit 2 Details, See Sht. No. S-3  
North Curbwall Unit 3 Details, See Sht No. S-4 & S-5



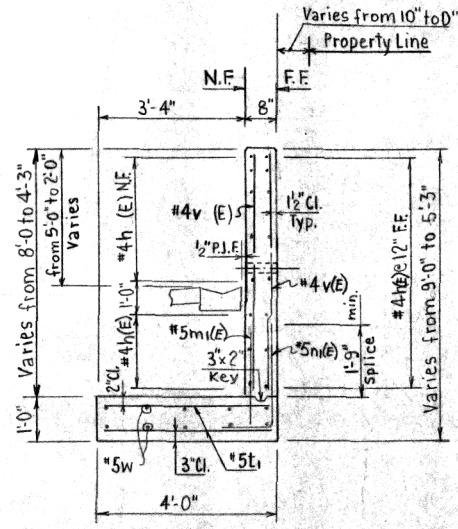
<b>DEPARTMENT OF HIGHWAYS</b> <b>COOK COUNTY, ILLINOIS</b>		<b>RICHARD H. GULTERMAN</b> <b>SUPERINTENDENT OF HIGHWAYS</b>											
<b>GEORGE W. DUNNE</b> <b>PRESIDENT BOARD OF COMMISSIONERS</b>													
<b>NORTH SIDE UNITS 1,2,3</b> <b>BILL OF MATERIAL &amp; BAR SCHEDULE</b> <b>LAWRENCE AVE. UNDERPASS AT SOO LINE RR.</b>													
COMPLETED <u>5-4</u> CHECKED <u>ELITE</u> DRAWN <u>5-4</u> CHECKED <u>ELITE</u>		SUBMITTED <u>John D. Smith</u> <u>September 6, 1988</u> <b>STRUCTURAL DESIGN ENGINEER</b>											
EXAMINED <u>5-8-8 1988</u> <u>John D. Smith</u> <b>CHIEF ENGINEER OF DESIGN</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Route</th> <th style="width: 25%;">SECTION NUMBER</th> <th style="width: 15%;">Sheet No.</th> <th style="width: 15%;">Total Sheets</th> <th style="width: 30%;">Drawing No.</th> </tr> <tr> <td style="text-align: center; font-size: 1.2em;">139</td> <td style="text-align: center; font-size: 1.2em;">88-13921-01 G.M</td> <td style="text-align: center; font-size: 1.5em;">S-6</td> <td style="text-align: center; font-size: 1.5em;">54</td> <td style="text-align: center; font-size: 1.5em;">PR-1362</td> </tr> </table>		Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.	139	88-13921-01 G.M	S-6	54	PR-1362
Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.									
139	88-13921-01 G.M	S-6	54	PR-1362									



FOR INFORMATION ONLY

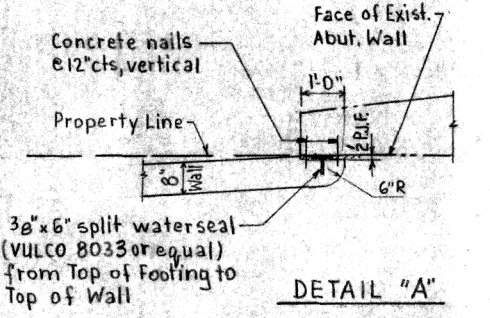


FOOTING PLAN  
SCALE: 3/8" = 1'-0"



TYPICAL WALL SECTION  
SCALE: 1/2" = 1'-0"

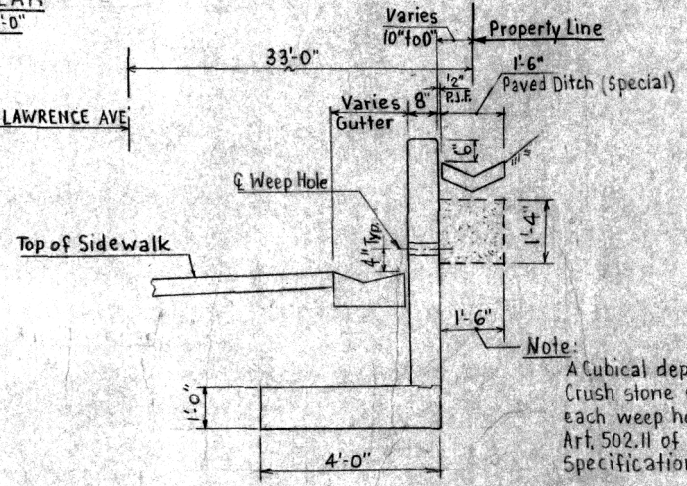
LEGEND:  
N.F. - Near Face  
F.F. - Far Face  
E.F. - Each Face  
P.J.F. - Preformed Joint Filler



DETAIL "A"

Note:  
The cost of 1/2 inch Preformed Joint Filler and split waterseal shall not be paid separately but shall be considered incidental to the Contract.

- NOTES:-
1. For Retaining Wall Location see General Plan Sht. No. S-1
  2. For Paved Ditch, Special see Sht. No. S-9
  3. For Unit description see Sht. No. S-1
  4. For Excavation Details see Sht. No. S-25
  5. For Riprap Removal see Note Sht. No. S-8



SECTION THRU WEEP HOLE  
SCALE: 1/2" = 1'-0"

BAR SCHEDULE (UNIT 4)					
MARK	NO	SIZE	LENGTH	SHAPE	REMARKS
h1(E)	8	5	18'-6"		
h2(E)	16	4	18'-6"		
h3(E)	2	4	11'-8"		
h4(E)	4	4	23'-2"		
m1(E)	37	5	2'-9"		
n1(E)	37	5	4'-3"		
n2	10	5	4'-0"		
t1	80	5	3'-9"		
w1	20	5	12'-2"		
w2	10	5	12'-8"		
v1(E)	13	4	4'-0"		
v2(E)	24	4	5'-4"		
v3(E)	24	4	7'-1"		
v4(E)	13	4	3'-7"		

Reinforcement Bars Designated (E) shall be Epoxy Coated.

BILL OF MATERIAL (UNIT 4)		
ITEM	UNIT	QUANTITY
Class X Concrete	Cu.Yd	13.4
Reinforcement Bars	Lb	760
Reinforcement Bars, Epoxy Coated	Lb	950
Protective Coat (Silane)	Sq.Yd	18

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS			
NORTH SIDE-UNIT 4 LAWRENCE AVE. UNDERPASS AT SOO LINE RR.			
COMPUTED	DATE	SUBMITTED	DATE
C.B. J.	10/1/88	J. J. D.	10/1/88
CHECKED	DATE	CHECKED	DATE
J. J. D.	10/1/88	J. J. D.	10/1/88
EXAMINED		ROUTE	SECTION NUMBER
J. J. D.	10/1/88	139	88-13921-01
CHIEF ENGINEER OF DESIGN		SHEET	TOTAL SHEETS
		54	54
		PR	PR
		1963	1963

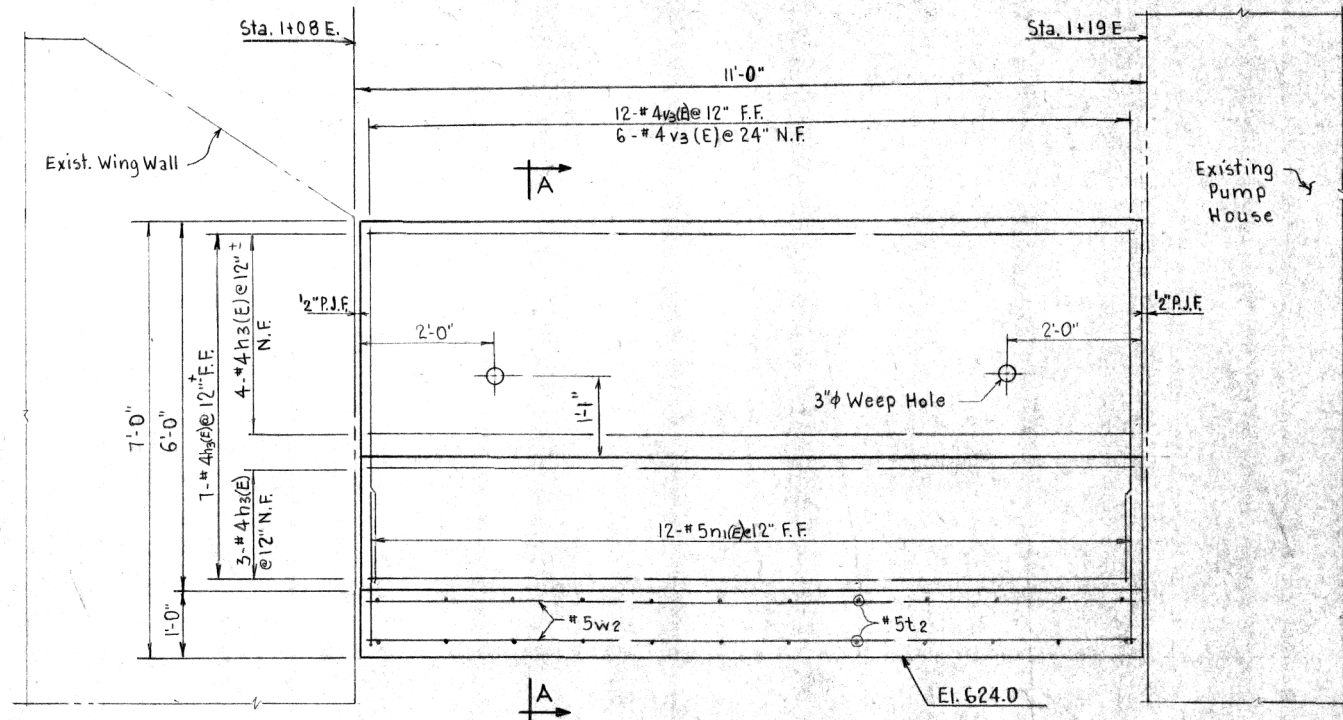
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DRAWN -	REVISED -	
PLOT SCALE = 100.0000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

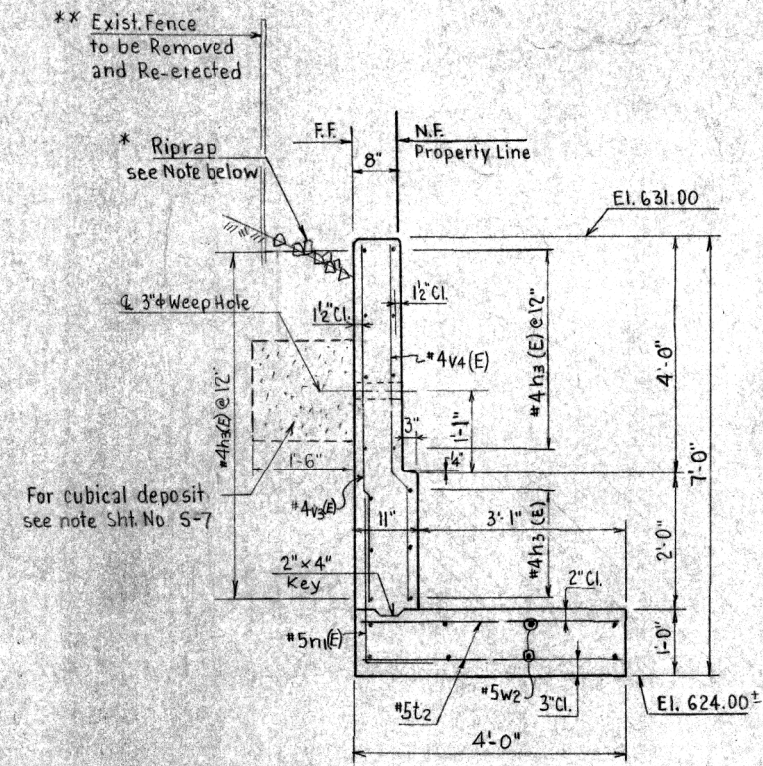
EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	41
CONTRACT NO. 62G42				
ILLINOIS / FED. AID PROJECT				

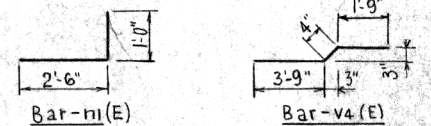


ELEVATION  
SCALE:  $\frac{3}{4}" = 1'-0"$



SECTION A-A  
SCALE:  $\frac{3}{4}" = 1'-0"$

Reinforcement Bars Designated (E)  
shall be Epoxy Coated.



BILL OF MATERIAL (UNIT5)		
ITEM	UNIT	QUANTITY
Class X Concrete	Cu.Yd	3.5
Reinforcement Bars	Lb	158
Reinforcement Bars, Epoxy Coated	Lb	242
Protective Coat (Silane)	Sq.Yd	5

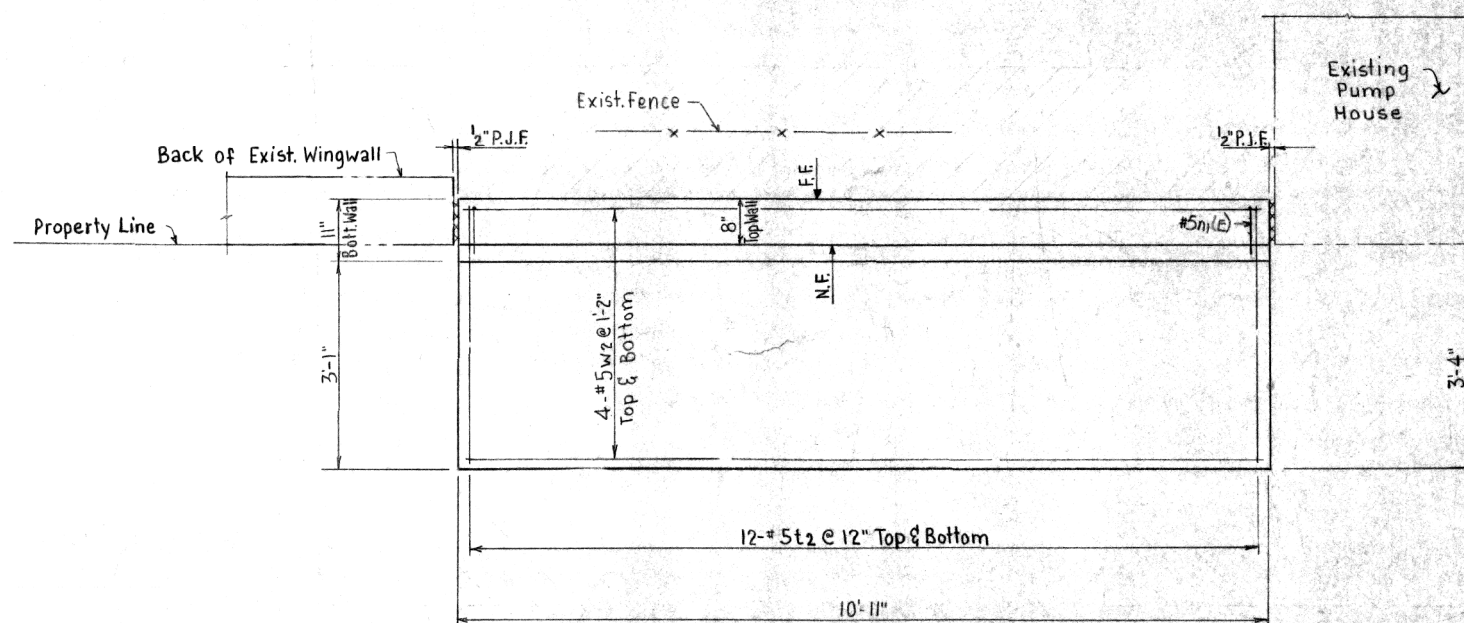
Notes:

- \* Riprap obtained at the end of Existing Abutment Wall and Pump House shall not be discarded, but shall be used on the top of the backfill of the Proposed Retaining Wall.
- \*\* The cost for the Removal and Re-erection of Existing Fence is to be included in the cost of Class X Concrete.

**FOR INFORMATION ONLY**

NOTES:

1. For Excavation Details and Bill of Material see Sht. No. S-25
2. For Unit description see General Plan Sht. No. S-1



FOOTING PLAN  
SCALE:  $\frac{3}{4}" = 1'-0"$

[illegible]

# DEPARTMENT OF HIGHWAYS

COOK COUNTY, ILLINOIS

GEORGE W. DUNNE

President, Illinois State Board of Transportation

RICHARD H. CRISTOFANI

Supervisor, Department of Highways

## NORTH SIDE-UNIT 5

## LAWRENCE AVE. UNDERPASS AT 500 LINE RR

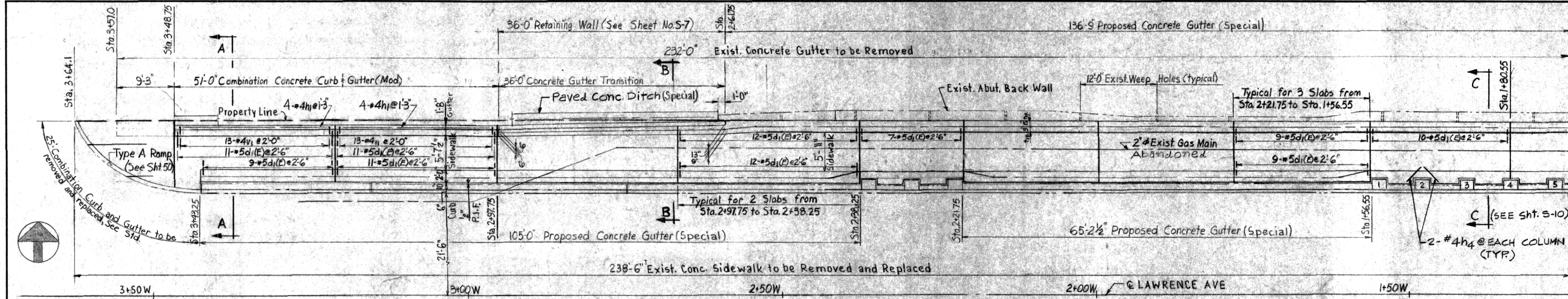
COMPUTED CCB  
 CHECKED LKC  
 DRAWN J. Metzger  
 CHECKED LKC

SUBMITTED Jerry Patrick  
September 1, 1968  
 STRUCTURAL DESIGN ENGINEER

EXAMINED Sept 8 1968  
Charles C. Hill  
 CHIEF ENGINEER OF DESIGN

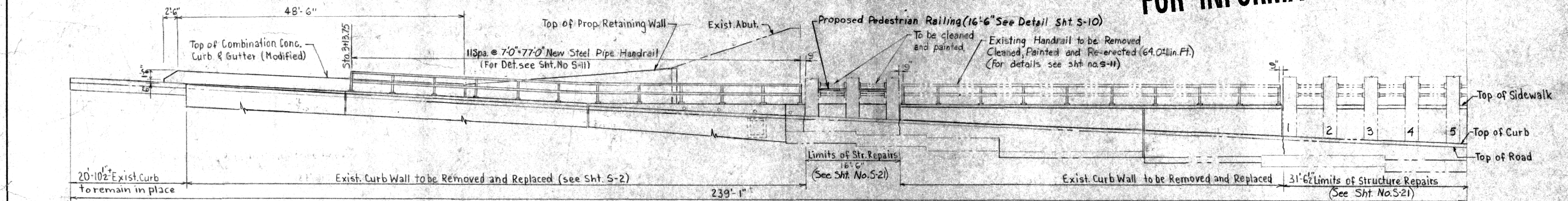
Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.
139	88-13921-01 C.M.	S-8	54	PR-1964

COUNTY PROGRAM		SHEET
ITEM No.	YEAR	No.
64	1988	11



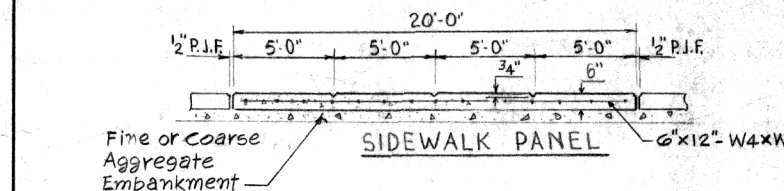
PLAN  
SCALE: 8" = 1'-0"  
(North Side)

FOR INFORMATION ONLY



ELEVATION  
SCALE: 8" = 1'-0"

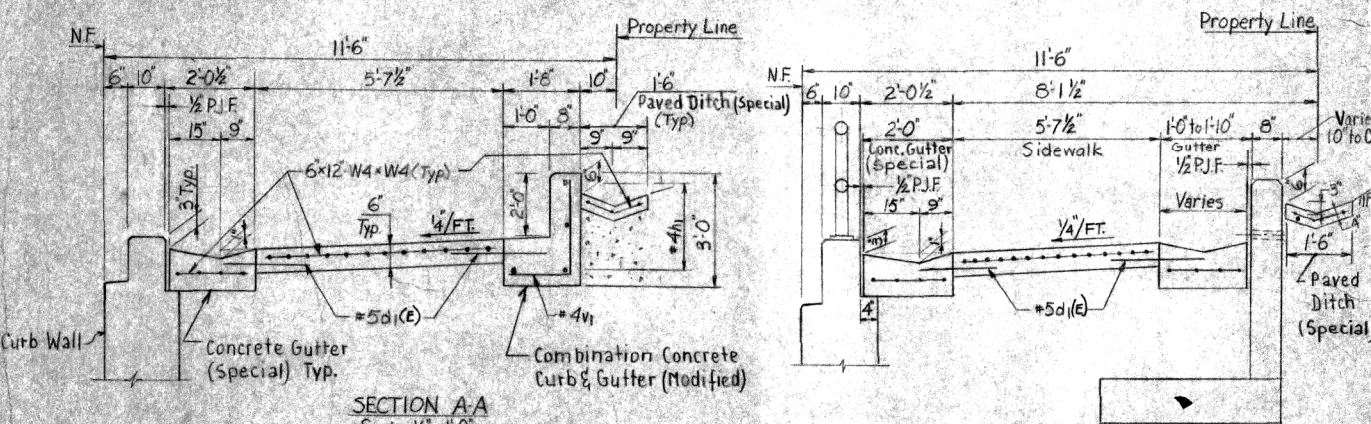
**NOTE:-**  
Portland Cement Concrete Sidewalk 6in. (Modified)  
The Sidewalk will be constructed in accordance with Section 624 of Standard Specifications except as shown on the plans. The wire mesh shall be lapped a minimum of 6 inches in all cases. The cost of furnishing and placing materials including wire mesh, expansion joints shall be included in the Contract Unit Price per Square foot for Portland Cement Concrete Sidewalk 6in. (Modified).



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
Reinforcement Bars	Lb.	1,284
Reinforcement Bars, Epoxy Coated	Lb.	1,286
Portland Cement Concrete Sidewalk 6in. (Modified)	Sq. Ft.	4,600
Furnishing and Erecting Steel Railing (Pipe)	Lin. Ft.	140
Removal and Re-erection of Steel Railing (Pipe)	Lin. Ft.	225
Cleaning and Painting Steel Railing (Pipe)	Lin. Ft.	368
Steel Railing (H.S.S.T)	Lin. Ft.	250
Concrete Gutter (Special)	Lin. Ft.	865
Combination Concrete Curb and Gutter (Modified)	Lin. Ft.	275
Concrete Gutter Removal	Lin. Ft.	703
Concrete Sidewalk Removal	Sq. Ft.	6,083
Protective Coat (Silane)	Sq. Yd.	922
Pipe Underdrains, Wrapped perforated Corrugated Polyethylene Tubing, 6 in.	Lin. Ft.	230
Removal of Existing Railing Unit and Replacement	Each	11
Paved Ditch (Special)	Lin. Ft.	86
Combination Curb and Gutter removal	Lin. Ft.	60
Combination Concrete Curb and Gutter Type B-6.12	Lin. Ft.	60

BAR SCHEDULE					
MARK	NO.	SIZE	LENGTH	TYPE	LOCATION
d1(E)	493	5	2'-6"	---	Curb and Gutter
h1	8	4	25'-2"	---	Curb and Gutter
h2	40	4	19'-8"	---	"
h3	4	4	15'-8"	---	"
h4	70	4	3'-0"	---	Sidewalk btwn. Col.
h5	4	4	7'-8"	---	Curb and Gutter
v1	150	4	4'-2"	L	Curb and Gutter

**Concrete Gutter (Special)**  
Concrete Gutter will be constructed in accordance with Section 616 of Standard Specifications except as shown on the plans. The wire mesh shall be lapped a minimum of 6 inches in all cases. The cost of furnishing and placing materials including wire mesh and joints shall be included in the Contract Unit Price per lineal foot for Concrete Gutter (Special)



**Notes:**  
1. For Excavation details see sht. no. S-25.  
2. For Unit description see General Plan Sht. S-1.  
3. Work this sheet with sheets no. S-10 & S-11.  
4. For Handrail Notes see General Notes Sht. No. 2.

REVISIONS		
DATE	BY	DESCRIPTION

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

**NORTH SIDE-UNITS 6,7,9,10,11,13**  
**LAWRENCE AVE UNDERPASS AT SOO LINE R.R.**

COMPUTED: CCB  
CHECKED: JAM  
DRAWN: JAM  
CHECKED: JAM

EXAMINED: JAM  
CHIEF ENGINEER OF DESIGN

ROUTE: 139  
SECTION NUMBER: 88-13921-01  
SHEET: 54  
TOTAL SHEETS: 54  
DRAWING NO.: PR-1965

USER NAME = pelaym	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

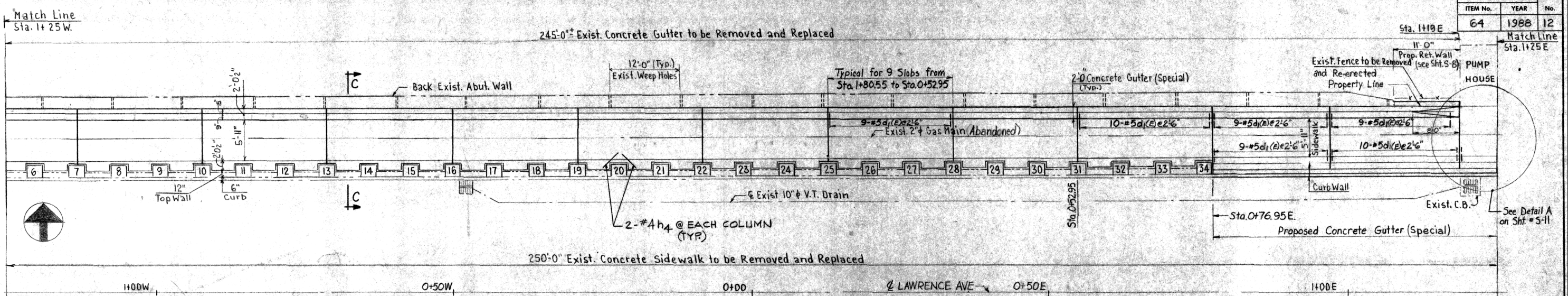
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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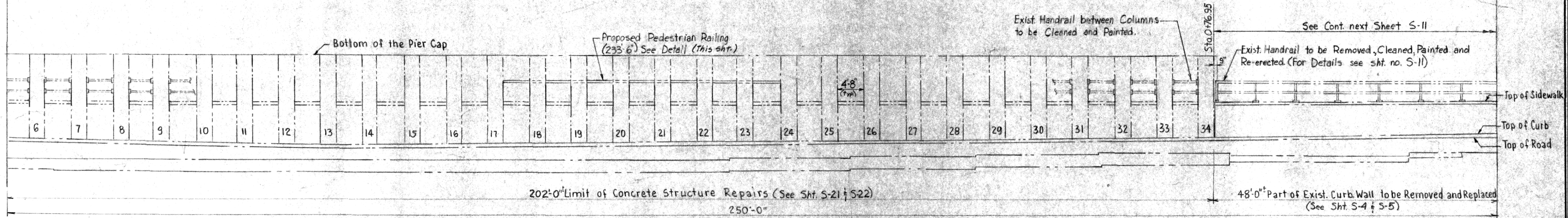
F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	43
CONTRACT NO. 62G42				
ILLINOIS / FED. AID PROJECT				

MODEL: Default  
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PROJECT: 1362 Lawrence Ave Underpass at Soo Line R.R. Sht. Bridge Details.dgn

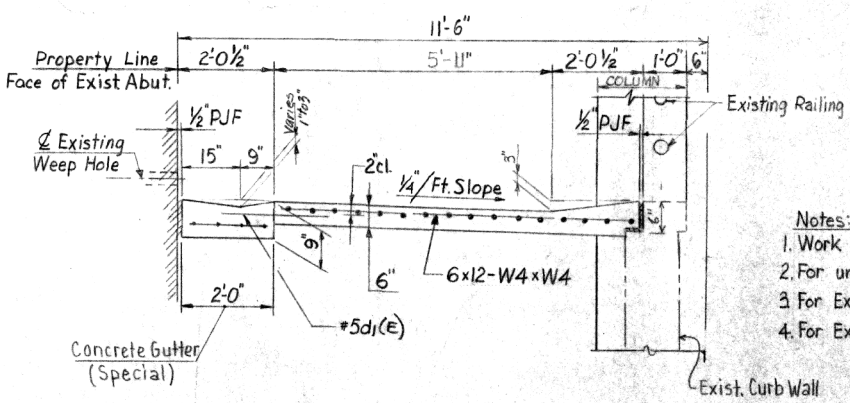


FOR INFORMATION ONLY

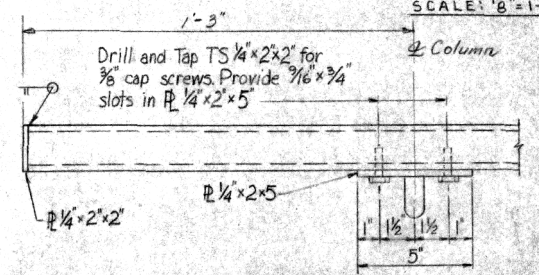
PLAN  
SCALE: 1/8" = 1'-0"  
(North Sidewalk)



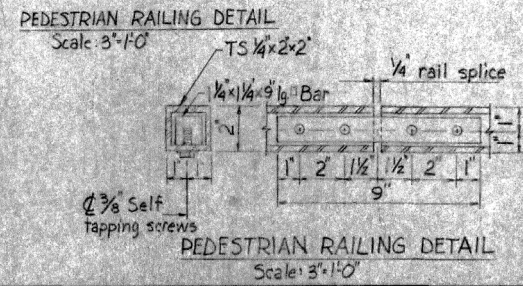
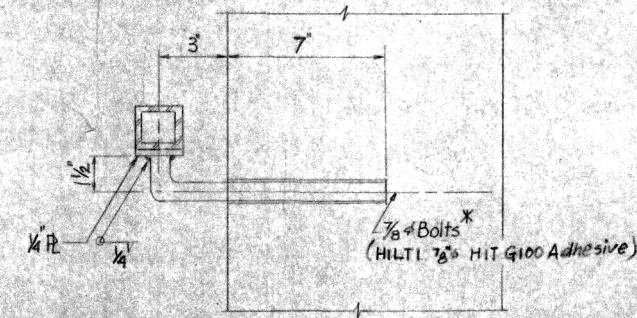
ELEVATION  
SCALE: 1/8" = 1'-0"



SECTION C-C  
Scale: 1/2" = 1'-0"



- Notes:
1. Work this sheet with sheets S-9 & S-11.
  2. For unit description see General Plan sheet S-1.
  3. For Excavation details see sheet S-25.
  4. For Existing railing details see sheet S-11.



- NOTES:
1. In cleaning and painting Existing Steel Railing (pipe) see General Note 18, Sheet No. 2
  2. For removal and re-erection of Steel Railing (pipe) see General Note 17, sheet No. 2
  3. For Pedestrian Handrailing see General Note 20 Sheet No. 2
  4. For Elevations, see sheet no. 3-27.
- \* The 3/8 in.  $\phi$  Bolts used to anchor the Pedestrian Handrailing shall be installed in 1 1/2" pre-drilled holes according to the special provision for Adhesive Anchorage to the depth shown on the plans. Care shall be used not to damage existing reinforcement. The Adhesive Anchorage will not be paid for separately, but will be included in the contract unit bid price for Steel Railing (H.S.S.T.)

DEPARTMENT OF HIGHWAYS			
COOK COUNTY, ILLINOIS			
NORTH SIDE-UNITS 6,9,13			
LAWRENCE AVE. UNDERPASS AT SOO LINE RR.			
COMPUTED	C.S.B.	SUBMITTED	
CHECKED	J.H.	J.H. 1/20/19	
DRAWN	METZGER & J. WIGES	STRUCTURAL DESIGN ENGINEER	
CHECKED	J.M. C.C.B.	STRUCTURAL DESIGN ENGINEER	
EXAMINED	J.H. 8/1/19	Route	139
CHIEF ENGINEER OF DESIGN	J.H. 8/1/19	SECTION NUMBER	68-13921-01
		Total Sheets	54
		Drawing No.	PR 1966

USER NAME	= pelaynoal	DESIGNED	-	REVISED	-
DRAWN	-	REVISION	-	REVISION	-
PLOT SCALE	= 100.0000" / in.	CHECKED	-	REVISION	-
PLOT DATE	= 1/30/2019	DATE	-	REVISION	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

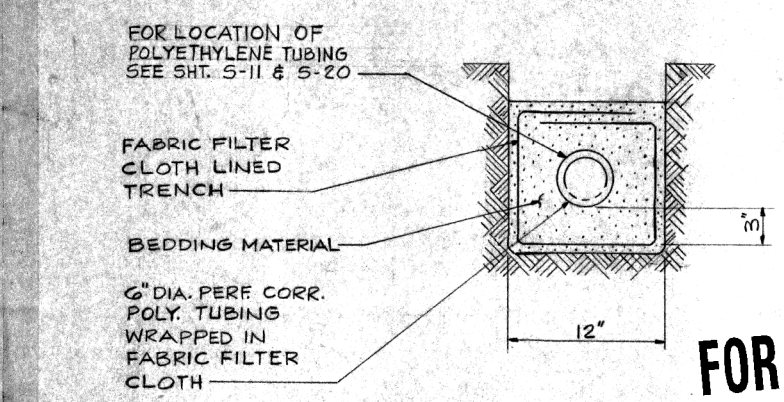
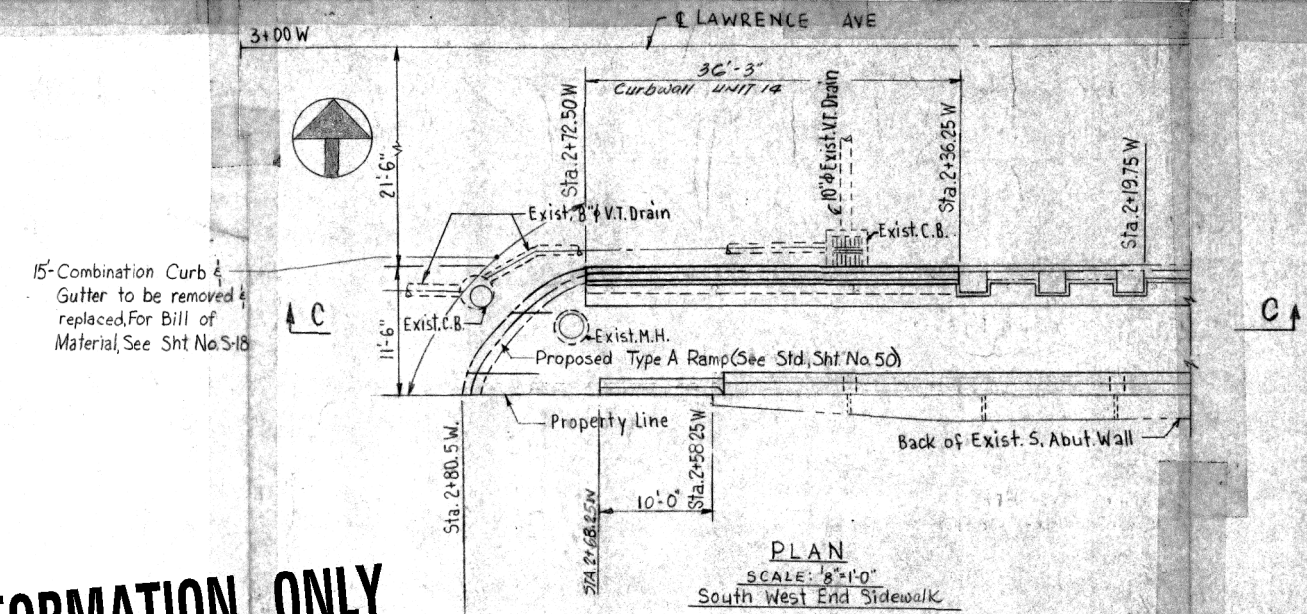
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	44
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

FOR INFORMATION ONLY



STANDARD EMBEDMENT DETAIL OF POLYETHYLENE TUBING  
TRENCH BACKFILL SHALL BE USED AS BEDDING MATERIAL THROUGHOUT TO BE LIMITED TO FA1 OR FA2.

NOTES  
THE 6 INCH DIAMETER WRAPPED PERFORATED CORRUGATED POLYETHYLENE TUBING (ASTM F405) SHALL BE INSTALLED AS SHOWN ON THE SHEET NOS. S-11 & S-20 ADJACENT TO THE COMBINATION CONCRETE CURB AND GUTTER (MODIFIED). THE SLOPE OF THE TUBING SHALL HAVE A MINIMUM OF .2 PERCENT SLOPE TO THE PROPOSED DRAINAGE STRUCTURE.  
BEDDING OF THE TUBING SHALL CONFORM TO ARTICLE 607.04 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE TRENCH WIDTH SHALL BE 1 FOOT IN LIEU OF 10 INCHES. THE BEDDING IS NOT TO BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER LINEAL FOOT FOR PIPE UNDERDRAINS, WRAPPED PERFORATED CORRUGATED POLYETHYLENE TUBING, 6 IN.

IT IS AT THE DISCRETION OF THE ENGINEER TO USE NONPERFORATED TUBING WHEN PASSING THROUGH AREAS WHERE ROOT GROWTH MAY CREATE AN OBSTRUCTION IN THE LINE. THE NONPERFORATED TUBING SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE PAID FOR AS PIPE UNDERDRAINS MENTIONED ABOVE.

THE TRENCH CONTAINING THE PIPE UNDERDRAIN SHALL BE LINED WITH FILTER FABRIC CLOTH THROUGHOUT.

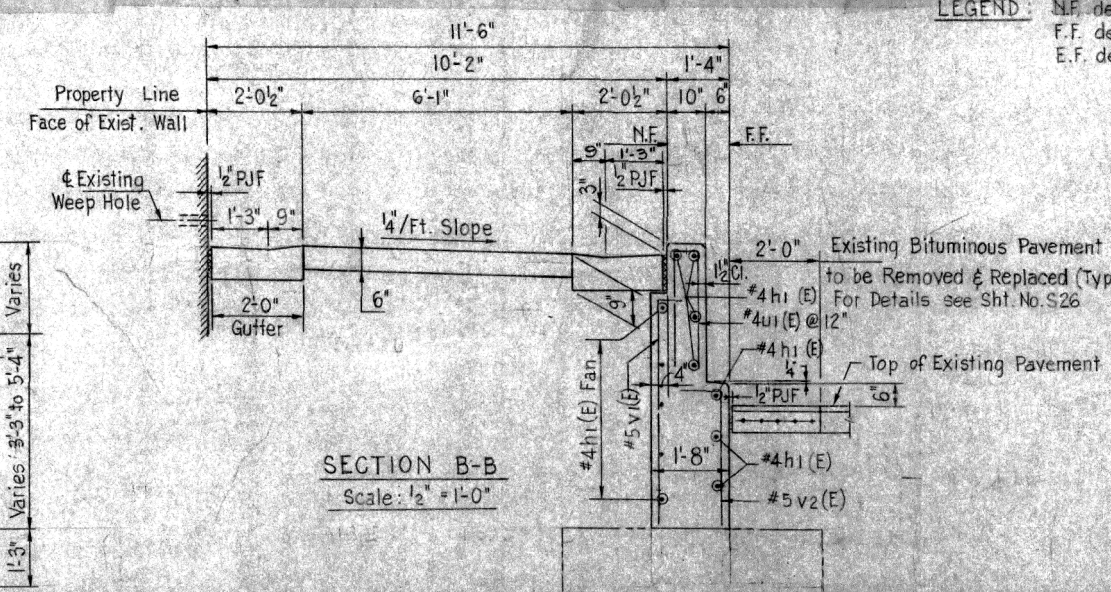
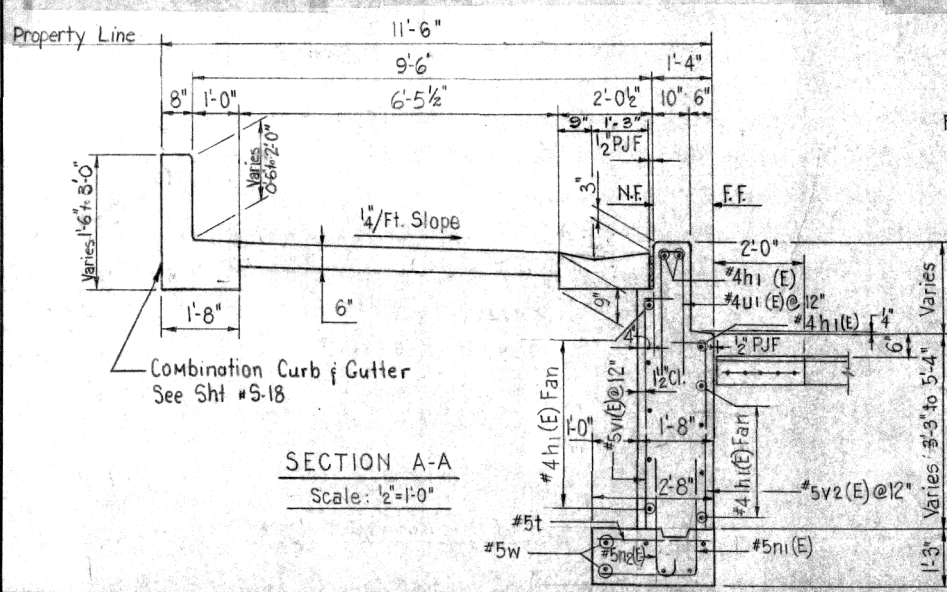
FITTINGS SHOULD BE INSTALLED IN ACCORDANCE WITH INSTRUCTIONS FURNISHED BY THE MANUFACTURERES. COUPLERS SHOULD BE USED AT ALL JOINTS AND FITTINGS, AT ALL CHANGES IN DIRECTION, AND AT THE ENDS OF LINES. ALL FITTINGS SHALL BE COMPATIBLE WITH THE TUBING. ALL BLIND TERMINATIONS ARE TO BE SEALED WITH SPLIT END CAPS. OUTLET PIPE NOT TO BE PERFORATED.

WHERE UNDERDRAINS ARE CALLED OUT TO BE CONNECTED TO MH'S, CB.'S OR LATERALS ON THE PLANS, 6 INCH "WYES" OR "T S" ARE TO BE USED TO COMPLETE THE CONNECTIONS. THESE ADDITIONAL FITTINGS SHALL NOT BE PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE UNIT PRICE BID PER LINEAL FOOT OF PIPE UNDERDRAINS, WRAPPED PERFORATED CORRUGATED POLYETHYLENE TUBING, 6 INCH.

INSTALLATION OF THE UNDERDRAINS SHALL BE IN ACCORDANCE WITH THE ABOVE AND WITH SECTION 607 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR'S ATTENTION IS ALSO CALLED TO A.S.T.M. F449-78 FOR ADDITIONAL INFORMATION.

SEE SPECIAL PROVISION REGARDING USE OF FABRIC FILTER CLOTH.

LEGEND: N.F. denotes Near Face.  
F.F. denotes Far Face.  
E.F. denotes Each Face.



- NOTES:
1. For General Plan see Sht. No. S-1
  2. Work this Drawing with Sht. No. S-13
  3. For Bar Schedule and Bill of Material see Sht. No. S-17
  4. For Drainage and Utility Information see Drainage Drawings.
  5. For Elevations, see sht. no. S-28

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS			
GEORGE W. DUNNE PRESIDENT, BOARD OF COMMISSIONERS		RICHARD H. GELBERMAN SUPERINTENDENT OF HIGHWAYS	
SOUTH SIDE-UNIT 14			
LAWRENCE AVE. UNDERPASS AT SOO LINE R.R.			
COMPUTED: G.C.B. D.W.	SUBMITTED: <i>[Signature]</i>		
CHECKED: <i>[Signature]</i>	STRUCTURAL DESIGN ENGINEER		
DRAWN: J.M. J.L.	Route	SECTION NUMBER	Sheet No.
CHECKED: G.C.B. D.W.	139	88-13921-01	S12 54
EXAMINED: <i>[Signature]</i>	PR	1968	62G42
CHIEF ENGINEER OF DESIGN			

USER NAME = peraynoal	DESIGNED -	REVISED -
DRAWN -	REVISOR -	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

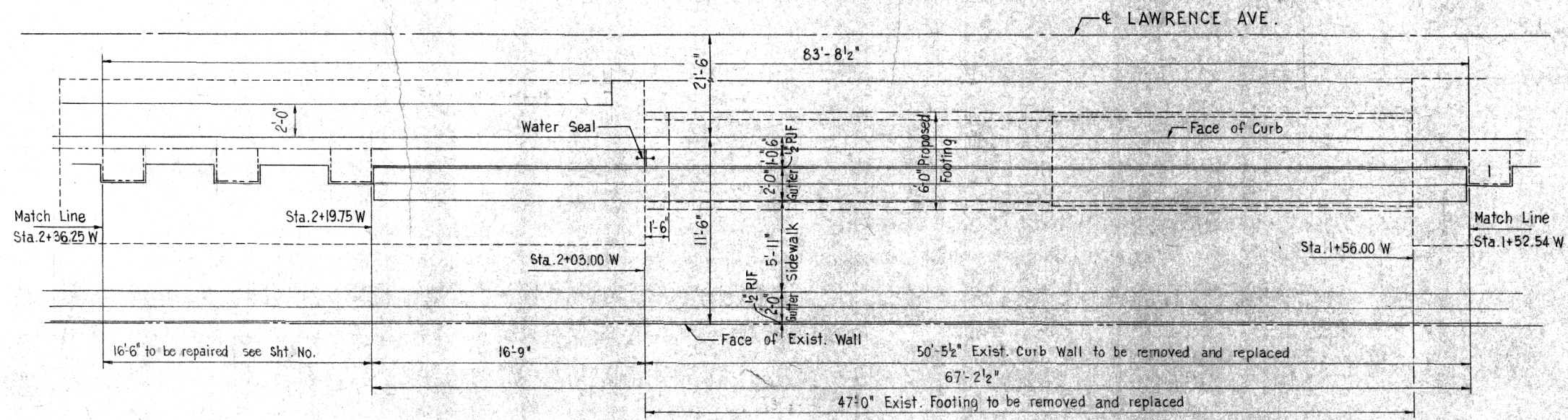
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.

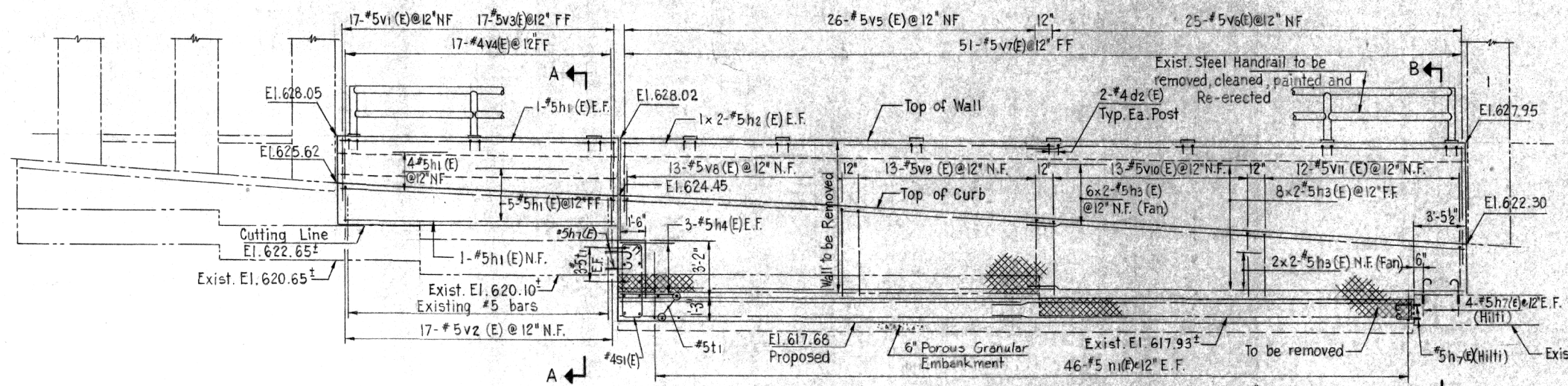
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	46
CONTRACT NO. 62G42				
ILLINOIS / FED. AID PROJECT				

MODEL: Default  
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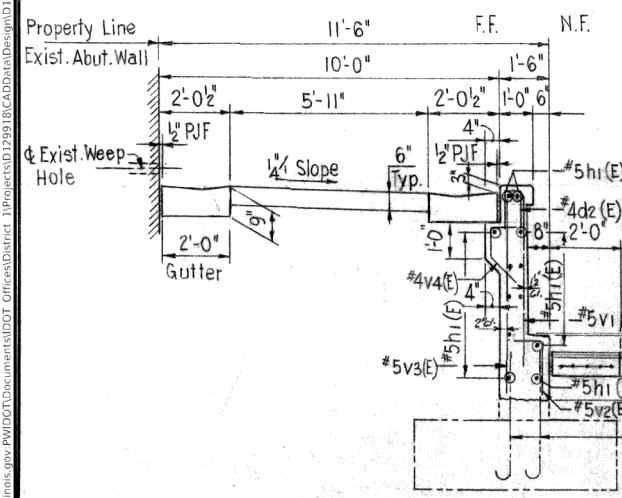
PLAN  
Scale: 1/4" = 1'-0"

FOR INFORMATION ONLY

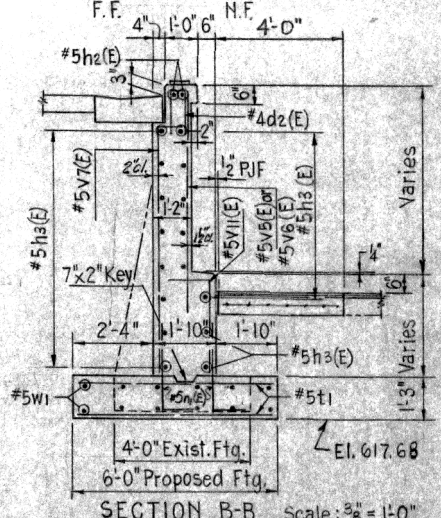


ELEVATION  
Scale: 1/4" = 1'-0"

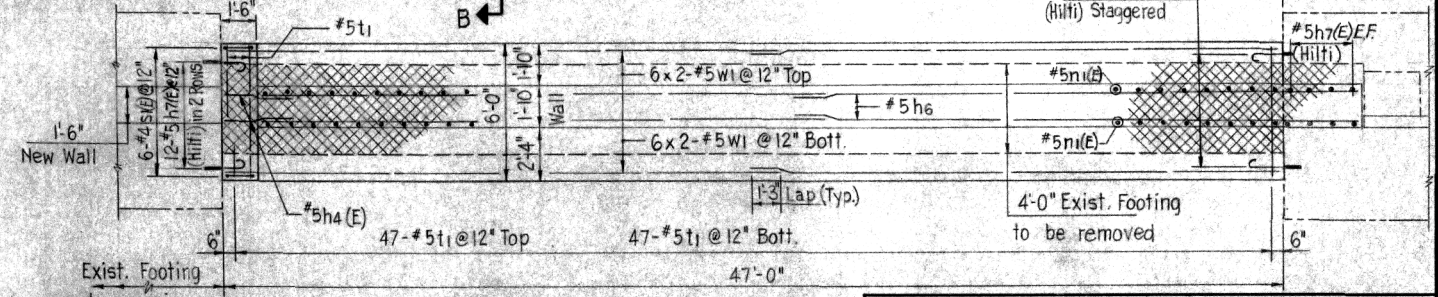
NOTE:  
For Limits of Structure Excavation (Modified) and Fill see Sht. No. S-26  
For Drainage and Utility Information see Drainage Drawings.



SECTION A-A  
Scale: 3/8" = 1'-0"



SECTION B-B  
Scale: 3/8" = 1'-0"



LEGEND: N.F. denotes Near Face  
F.F. denotes Far Face  
E.F. denotes Each Face

- NOTES:
1. Work this Drawing with Sht. No. S-12
  2. For Water Seal Details see Sht. No. S-4
  3. For Steel Handrail Details see Sht. No. S-20
  4. For Bar Schedule and Bill of Material see Sht. No. S-17
  5. For Pavement Replacement see Sht. No. S-26

FOOTING PLAN  
Scale: 1/4" = 1'-0"

DEPARTMENT OF HIGHWAYS			
COOK COUNTY, ILLINOIS			
COMPUTED BY: J. W. BURRILL		SUBMITTED BY: J. W. BURRILL	
CHECKED BY: J. W. BURRILL		STRUCTURAL DESIGN ENGINEER	
DRAWN BY: J. W. BURRILL		DATE: 1/1/88	
CHECKED BY: J. W. BURRILL		DATE: 1/1/88	
EXAMINED BY: J. W. BURRILL		DATE: 1/1/88	
CHIEF ENGINEER OF DESIGN		DATE: 1/1/88	
ROUTE: 139		SECTION NUMBER: 54	
TOTAL SHEETS: 85		DRAWING NO.: 1969	

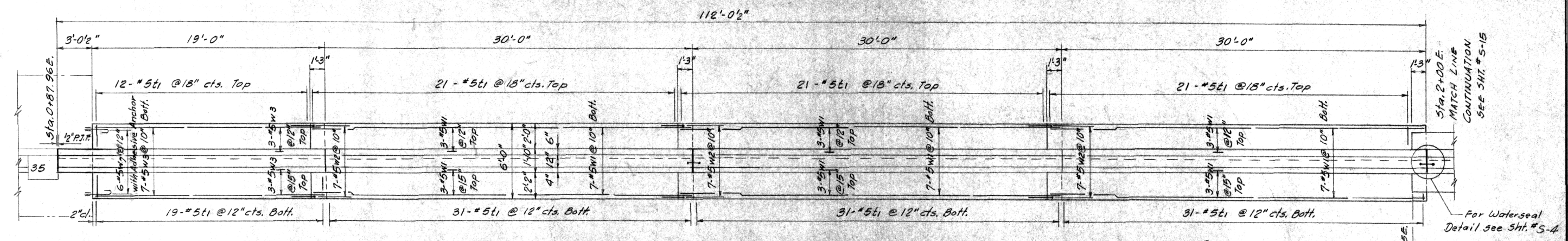
USER NAME	= pelaynoal	DESIGNED	-	REVISED	-
DRAWN	-	REVISOR	-	REVISOR	-
PLOT SCALE	= 100.0000" / in.	CHECKED	-	REVISOR	-
PLOT DATE	= 1/30/2019	DATE	-	REVISOR	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

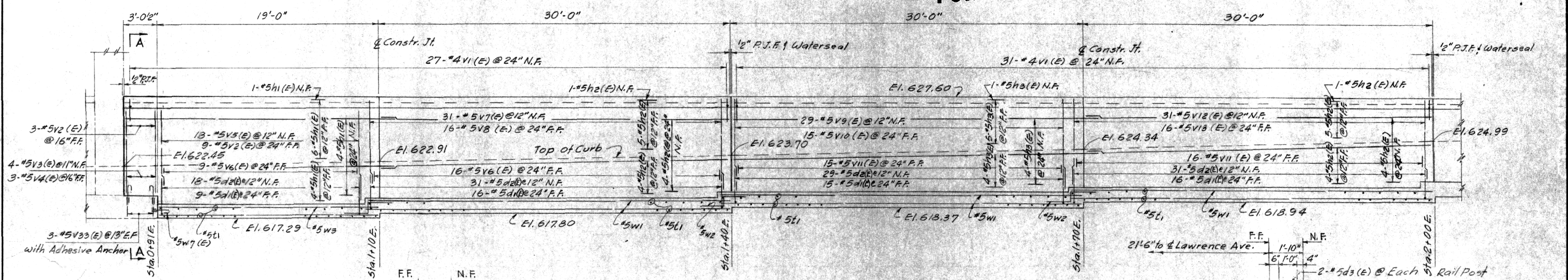
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	47
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				



PLAN  
Scale: 1/4" = 1'-0"

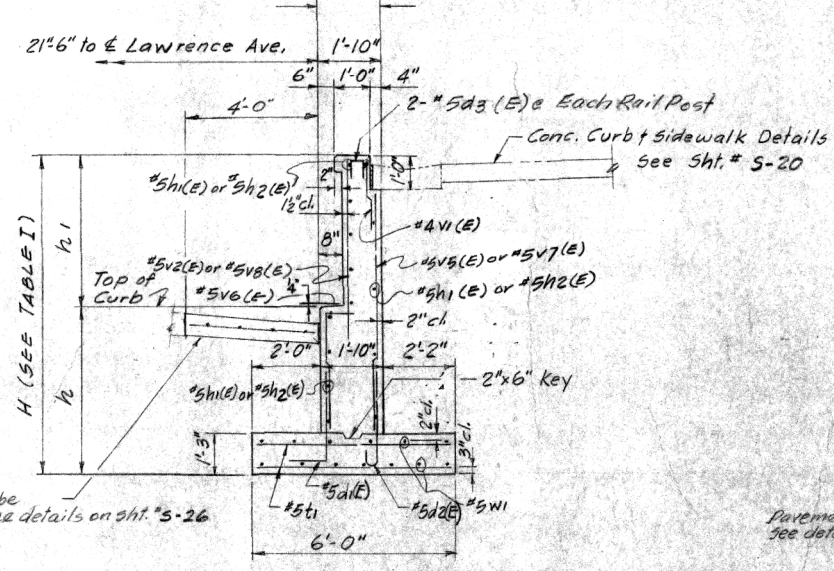
FOR INFORMATION ONLY



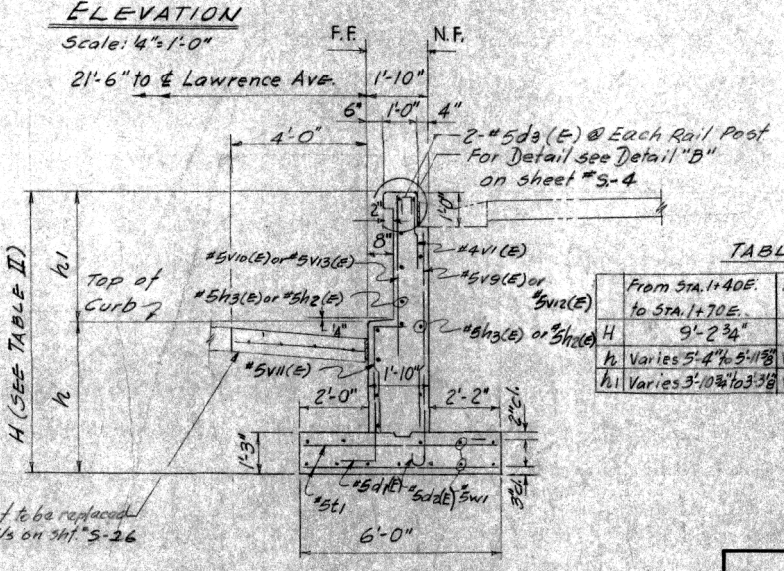
ELEVATION  
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TABLE I

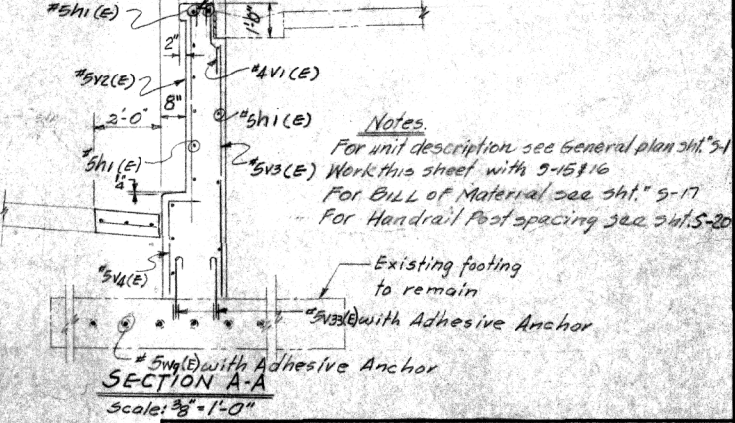
From STA. 0+91E. to STA. 1+10E.	From STA. 1+10E. to STA. 1+40E.
H 10'-3 3/4"	9'-9 3/8"
h 10'-2 1/2" to 5'-1 1/2"	Varies 5'-1 3/8" to 5'-10 3/8"
h1 10'-2 1/2" to 4'-8 1/4"	Varies 4'-8 1/4" to 3'-10 3/4"



SECTION THRU CURB WALL  
(STA. 0+91E. to STA. 1+40E.)  
Scale: 3/8" = 1'-0"



SECTION THRU CURB WALL  
(STA. 1+40E. to STA. 2+00E.)  
Scale: 3/8" = 1'-0"



SECTION A-A  
Scale: 3/8" = 1'-0"

DEPARTMENT OF HIGHWAYS  
COOK COUNTY, ILLINOIS

SOUTH SIDE UNIT 16  
LAWRENCE AVE. UNDERPASS AT SOO LINE RR.

REVISIONS

DATE	BY	DESCRIPTION

COMPUTED	K.W.W.	SUBMITTED	Kerry P. ...
CHECKED	K.W.W.	DATE	10/1/88
DRAWN	K.W.W.	STRUCTURAL DESIGN ENGINEER	
CHECKED	K.W.W.		
EXAMINED	K.W.W.	Route	139
CHIEF ENGINEER OF DESIGN		SECTION NUMBER	88-13921-01
		Sheet No.	514
		Total Sheets	54
		Drawing No.	PR-1970

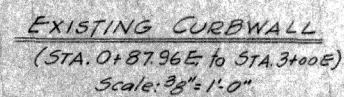
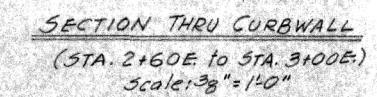
USER NAME	= perryroal	DESIGNED	-	REVISED	-
DRAWN	-	REVISION	-	REVISED	-
PLOT SCALE	= 100.0000" / in.	CHECKED	-	REVISED	-
PLOT DATE	= 1/30/2019	DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	48
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

[illegible]

<b>DEPARTMENT OF HIGHWAYS</b> <b>COOK COUNTY, ILLINOIS</b>	
<b>GEORGE W. DUNNE</b> <small>PROBATIONARY ASSISTANT CHIEF OF CONSTRUCTION</small>	<b>ROBERT H. GUTTMAN</b> <small>CHIEF OF CONSTRUCTION</small>

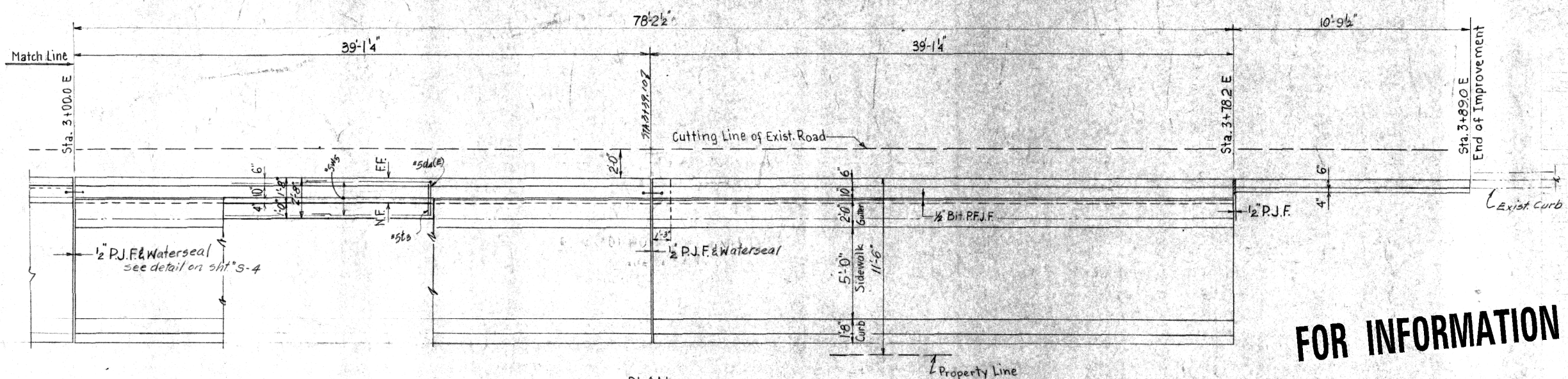
SOUTH SIDE UNIT 16

LAWRENCE AVE. UNDERPASS AT 500 LINE RR.

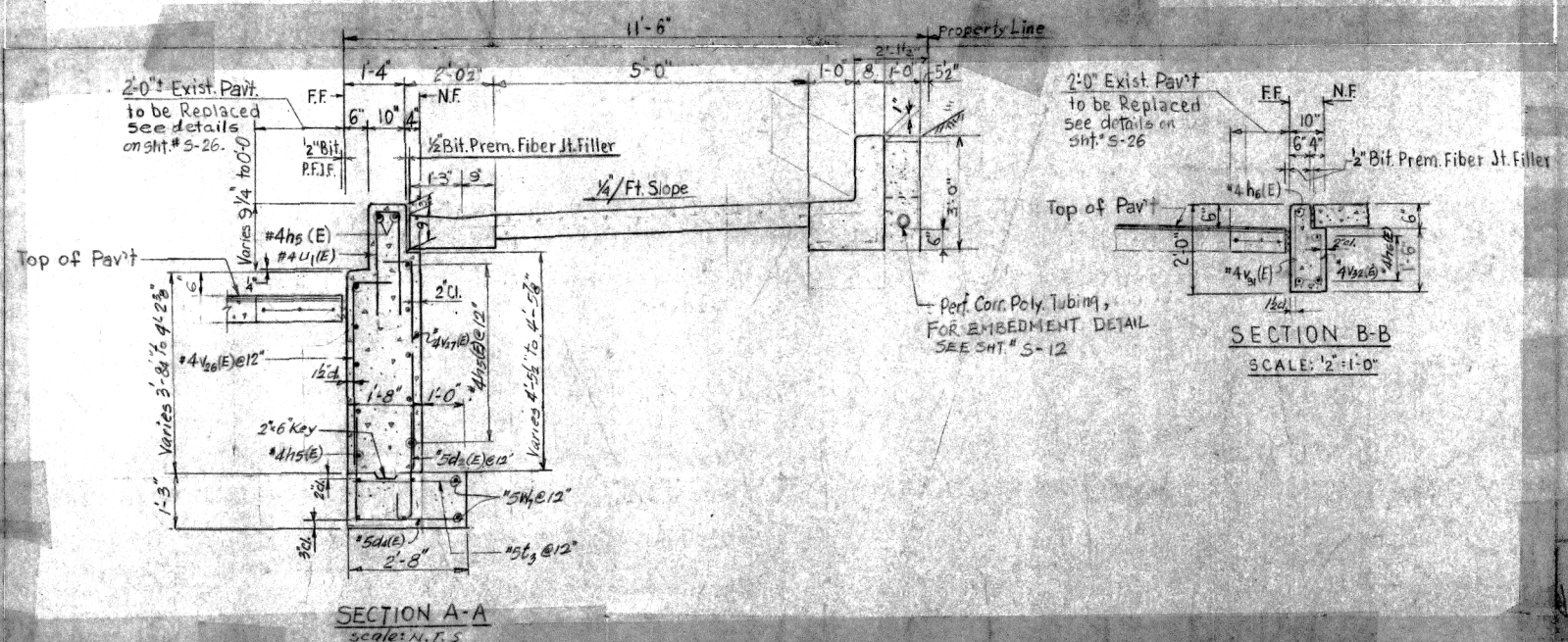
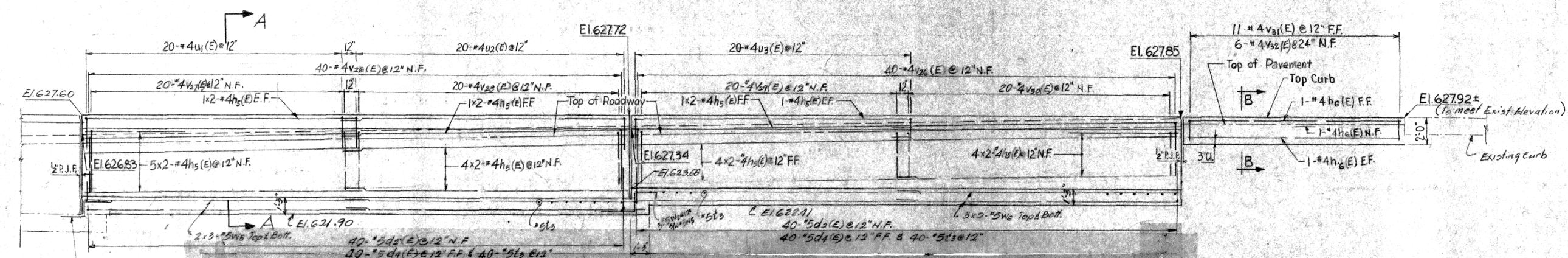
COMPUTED <u>K.W. W.</u> CHECKED <u>K.W. W.</u> DRAWN <u>K.W. W.</u> CHECKED <u>K.W. W.</u>	SUBMITTED <u>James P. ...</u> <u>Superintendent</u> STRUCTURAL DESIGN ENGINEER
---	--

EXAMINED <u>Jan 8 1988</u> <u>David ...</u> CHIEF ENGINEER OF DESIGN	Route 139	SECTION NUMBER 88-1392-01 G.M.	Sheet No.	Total Sheets	Drawing No. S15 54 PR-1971
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	49
		CONTRACT NO. 62G42		
ILLINOIS		FED. AID PROJECT		



FOR INFORMATION ONLY



Notes  
Work this sheet with sheet# 5-14, 5-15 & 5-17  
For unit description see General Plan, Sht. 5-1  
For Excavation details see Sht. 5-26  
For Bill of Material and Bar schedule see Sht. 5-17

DEPARTMENT OF HIGHWAYS			
COOK COUNTY, ILLINOIS		STANDARD DRAWING	
SOUTH SIDE-UNIT 16			
LAWRENCE AVE. UNDERPASS AT SOO LINE RR.			
COMPUTED	CCB, Dwi	SUBMITTED	Very Pannell
CHECKED	M. J. AM	DATE	10/1/88
DRAWN	LEE	STRUCTURAL DESIGN ENGINEER	
EXAMINED	10/1/88	Route	139
CHIEF ENGINEER OF DESIGN		SECTION NUMBER	516
		Sheet No.	54
		Total Sheets	50
		Drawing No.	PR-1972

USER NAME = peraynoal	DESIGNED -	REVISED -
DRAWN -	REVISOR -	
PLOT SCALE = 100,000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)  
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	50
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

BAR SCHEDULE (FOR SOUTH CURB WALL)

MARK	NO.	SIZE	LENGTH	SHAPE	TYPE	A	B	C	D	J	K	H
EPoxy CONV												
g1(e)	20	4	2'-0"	U	17		9"	6"	9"			
h1(e)	12	5	16'-5"	—	3tr							
h2(e)	4	5	25'-9"	—	3tr							
h3(e)	32	5	25'-11"	—	3tr							
h4(e)	6	5	2'-10"	—	3tr							
h7(e)	32	5	1'-6"	U	1	7"	11"			5"		
h21(e)	92	5	4'-6"	—	21		1'-6"	3'-0"				
51	6	4	11'-3"	□	71	4 1/2"	1'-2"	4'-1"				
61	100	5	5'-8"	—	3tr							
V1(e)	17	5	4'-0"	—	3tr							
V2(e)	17	5	2'-8"	—	21		1'-2"	1'-6"				
V3(e)	17	5	4'-6"	—	3tr							
V4(e)	17	4	2'-6"	—	12		10"	8"	1'-0"	7 1/8"	9"	
V5(e)	20	5	5'-6"	—	3tr							
V6(e)	25	5	6'-7"	—	3tr							
V7(e)	51	5	8'-0"	—	21		10"	7'-2"				
V8(e)	13	5	6'-3"	—	21		1'-6"	4'-9"				
V9(e)	13	5	5'-8"	—	21		1'-6"	4'-2"				
V10(e)	13	5	5'-2"	—	21		1'-6"	3'-8"				
V11(e)	12	5	4'-6"	—	21		1'-6"	3'-0"				
W1	24	5	24'-0"	—	3tr							

SOUTH CURB WALL (Sheet 5-2) UNIT 14  
(STA 2+58.25 TO STA 2+75.00)

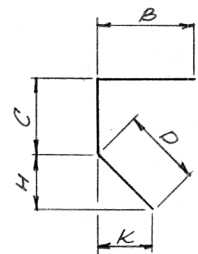
MARK	NO.	SIZE	LENGTH	SHAPE	TYPE	A	B	C	D	J	K	H
EPoxy CONV												
d1(e)	110	5	4'-1"	—	21	7"	1'-3"	2'-10"				
d2(e)	295	5	3'-7"	—	1	7"	3'-0"			5"		
d3(e)	66	5	3'-1"	—	17		1'-3"	7"	1'-3"			
d4(e)	80	5	4'-6"	—	21		2'-3"	2'-3"				
h1(e)	15	5	23'-1"	—	3tr							
h2(e)	42	5	29'-10"	—	3tr							
h3(e)	28	5	31'-3"	—	3tr							
h4(e)	36	5	20'-6"	—	3tr							
h5(e)	44	4	20'-1"	—	3tr							
h6(e)	4	4										
61	112	5	5'-9"	—	3tr							
62	72	5	4'-9"	—	3tr							
63	80	5	2'-4"	—	3tr							
V1(e)	20	4	3'-5"	—	17		1'-5"	7"	1'-5"			
V2(e)	20	4	3'-1"	—	17		1'-3"	7"	1'-3"			
V3(e)	20	4	2'-9"	—	17		1'-1"	7"	1'-1"			
V4(e)	58	4	2'-2"	—	3tr							
V5(e)	3	5	5'-8"	—	3tr							
V6(e)	4	5	7'-2"	—	3tr							
V7(e)	3	5	3'-9"	—	21		9"	3'-0"				
V8(e)	18	5	7'-10"	—	3tr							
V9(e)	25	5	4'-6"	—	21		9"	3'-9"				
V10(e)	31	5	7'-4"	—	3tr							
V11(e)	16	5	5'-2"	—	3tr							
V12(e)	29	5	6'-10"	—	3tr							
V13(e)	15	5	4'-5"	—	3tr							
V14(e)	15	5	4'-8"	—	21		9"	3'-11"				
V15(e)	31	5	6'-3"	—	3tr							
V16(e)	16	5	3'-9"	—	3tr							
V17(e)	51	4	1'-10"	—	19		10"	1'-0"		10"	6 3/8"	
V18(e)	29	5	6'-8"	—	3tr							
V19(e)	15	5	3'-2"	—	3tr							
V20(e)	15	5	4'-10"	—	21		9"	4'-1"				
V21(e)	31	5	6'-1"	—	3tr							
V22(e)	16	5	2'-9"	—	3tr							
V23(e)	16	5	4'-8"	—	21		9"	3'-11"				
V24(e)	41	5	5'-7"	—	3tr							
V25(e)	11	5	2'-0"	—	3tr							
V26(e)	11	5	4'-9"	—	21		9"	4'-0"				
V27(e)	10	5	1'-7"	—	3tr							
V28(e)	10	5	5'-2"	—	21		9"	4'-5"				
V29(e)	80	4	4'-1"	—	21		9"	3'-4"				
V30(e)	20	4	3'-9"	—	21		9"	3'-0"				
V31(e)	20	4	3'-7"	—	21		9"	2'-10"				
V32(e)	20	4	3'-4"	—	21		9"	2'-7"				
V33(e)	20	4	3'-2"	—	21		9"	2'-5"				
V34(e)	11	4	1'-9"	—	3tr							
V35(e)	6	4	1'-3"	—	3tr							
V36(e)	6	5	3'-7"	—	1	7"	3'-0"			5"		
W1	63	5	31'-0"	—	3tr							
W2	45	5	4'-5"	—	20		1'-6"	1'-4"	1'-6"			
W3	13	5	18'-8"	—	3tr							
W4	24	5	22'-1"	—	3tr							
W5	12	5	20'-0"	—	3tr							
W6	12	5	19'-5"	—	3tr							
W7(e)	6	5	2'-5"	—	1	7"	1'-10"			5"		

SOUTH CURB WALL (Sheet 5-14, 5-15 and 5-16) UNIT 15  
(STA 0+87.96 TO STA 3+89.00)

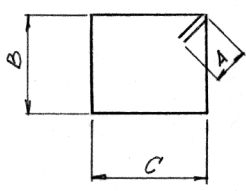
BILL OF MATERIAL (FOR SOUTH CURB WALL)

ITEM	UNIT	QUANTITIES			
		UNIT 14	UNIT 15	UNIT 16	TOTAL
Class X Concrete	Cu. Yd	15.9	42.4	166.0	224.3
Reinforcement Bars	Lb.	300	1,240	4,490	6,030
Reinforcement Bars, Epoxy Coated	Lb.	1,115	2,965	8,850	12,930
Protective Coat (Silane)	Sq. Yd.	19	71	163	253
Concrete Removal	Cu. Yd	12.2	41.8	175	229
Adhesive Anchorage	Each	6	32	12	50

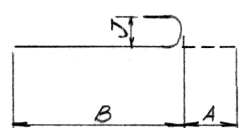
FOR INFORMATION ONLY



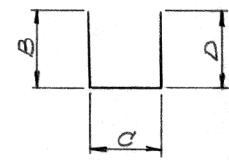
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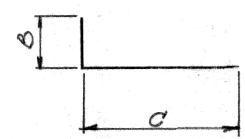
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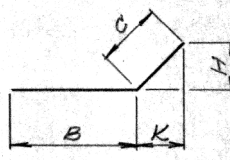
TYPE 1



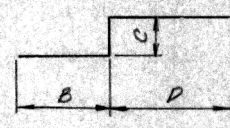
TYPE 17



TYPE 21



TYPE 19



TYPE 20

NOTES:

For unit description see General Plan, Sht #5-1.  
South Curbwall unit 14 details see Sht #5-12.  
South Curbwall unit 15 details see Sht #5-13.  
South Curbwall unit 16 details see Sht #5-14, 15, 16.

DEPARTMENT OF HIGHWAYS  
COOK COUNTY, ILLINOIS  
GEORGE W. DUNNE  
PRESIDENT BOARD OF COMMISSIONERS  
RICHARD H. GOLTERMAN  
SUPERINTENDENT OF HIGHWAYS  
SOUTH SIDE - UNITS 14, 15, 16  
BILL OF MATERIAL & BAR SCHEDULE  
LAWRENCE AVE UNDERPASS AT SOO LINE RR  
COMPUTED BY JY  
CHECKED BY JY  
DRAWN BY JY  
CHECKED BY JY  
SUBMITTED JY  
STRUCTURAL DESIGN ENGINEER  
EXAMINED JY  
CHIEF ENGINEER OF DESIGN  
Route 139  
SECTION NUMBER 3200R5&DR-5  
Sheet No. 5-17  
Total Sheets 54  
Drawing No. PR-1973

REVISIONS		
DATE	BY	DESCRIPTION

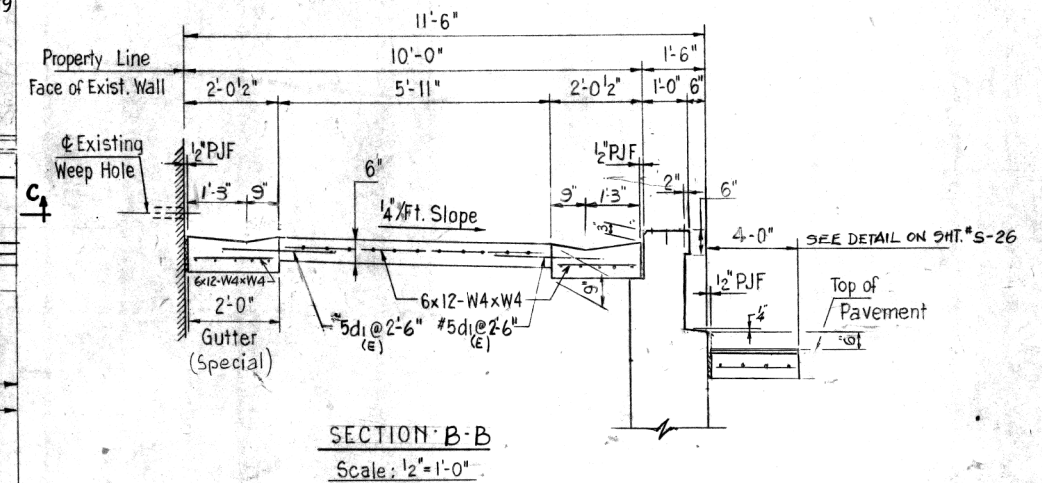
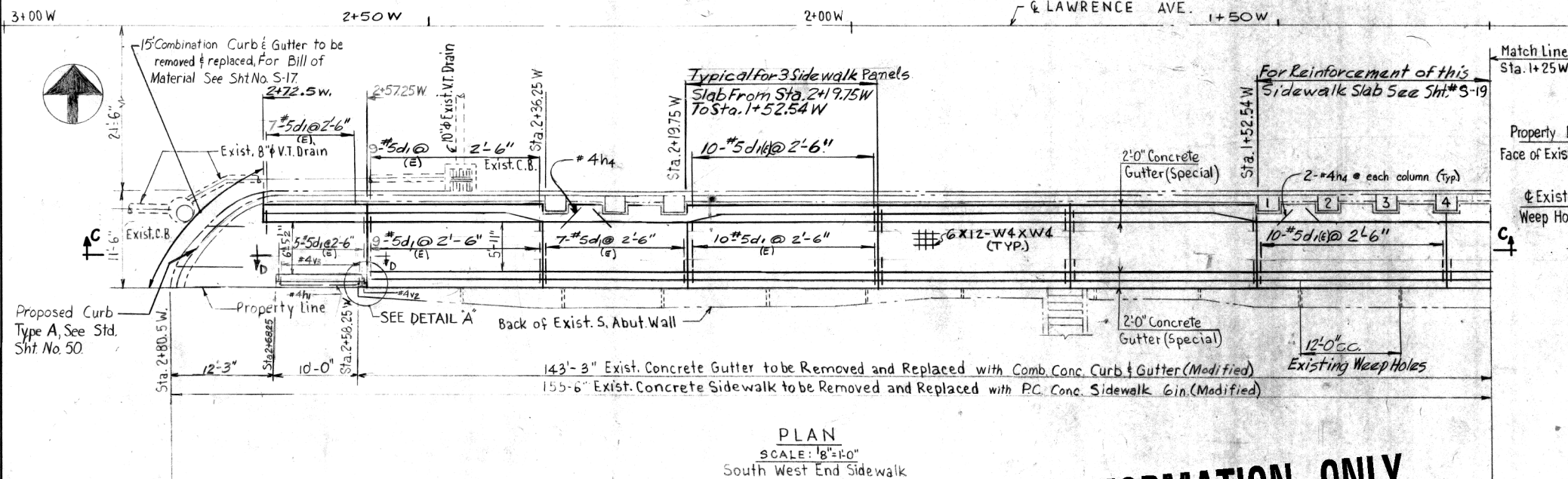
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

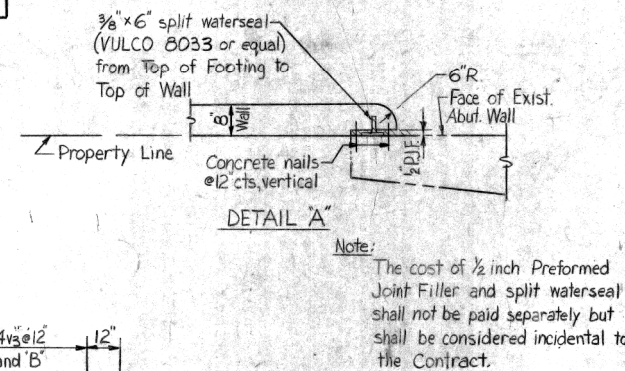
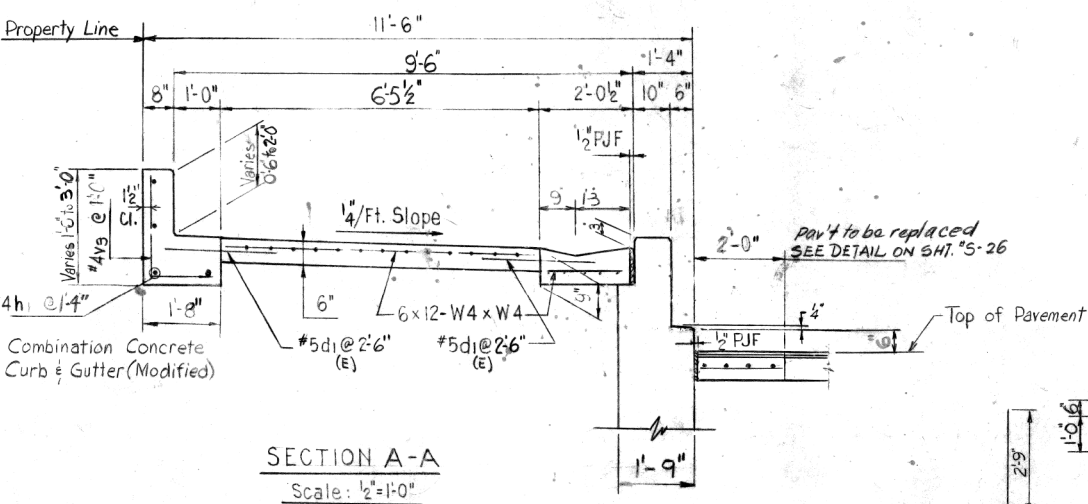
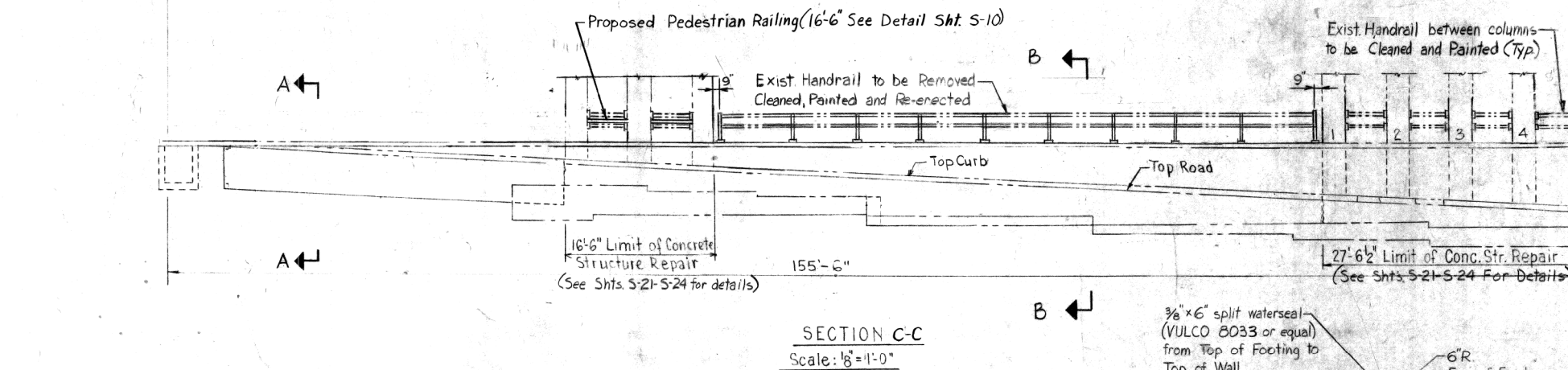
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	51
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

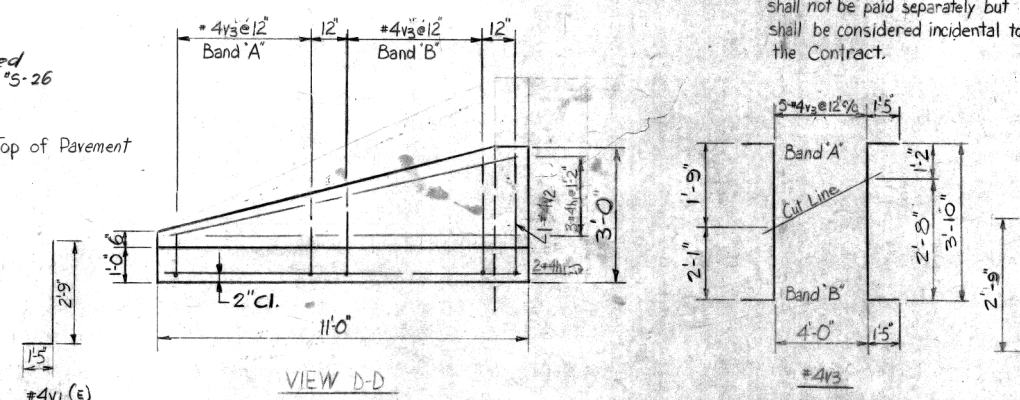
USER NAME = peraynoal	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 100,000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -



FOR INFORMATION ONLY



Note: The cost of 1/2 inch Preformed Joint Filler and split waterseal shall not be paid separately but shall be considered incidental to the Contract.



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
Combination Curb & Gutter removal	Lin. Ft.	15
Combination Concrete Curb & Gutter Type B-612	Lin. Ft.	15
Reinforcement Bars	LB	1,382
Portland Cement Concrete Sidewalk 6 in. (Modified)	Sq. Ft.	4,200
Removal and Re-erection of Steel Railing (Pipe)	Lin. Ft.	255
Cleaning and Painting Steel Railing (Pipe)	Lin. Ft.	423
Steel Railing (H.S.S.)	Lin. Ft.	257
Concrete Gutter (Special)	Lin. Ft.	797
Combination Concrete Curb and Gutter (Modified)	Lin. Ft.	285
Concrete Gutter Removal	Lin. Ft.	666
Concrete Sidewalk Removal	Sq. Ft.	5,735
Protective Coat (Silane)	Sq. Yd.	754
Pipe underdrains, wrapped perforated corrugated polyethylene tubing, 6 in.	Lin. Ft.	259
Furnishing and Erecting steel Railing (Pipe)	Lin. Ft.	21
Removal of Existing Railing Unit and Replacement	Each	14
Reinforcement Bars, Epoxy Coated	LB	1,228

BAR SCHEDULE				
MARK	NO.	SIZE	LENGTH	TYPE
d1 (E)	471	5	2'-6"	Curb & Gutter
h1	5	4	10'-9"	Curb & Gutter
h2	44	4	19'-8"	"
h3	4	4	18'-11"	"
h4	70	4	3'-0"	Sdwk blwn Col
h5	7	4	22'-9"	Curb & Gutter
V1 (E)	130	4	4'-2"	Curb & Gutter
V2	2	4	4'-2"	"
V3	5	4	6'-8"	"
V4	11	4	9'-5"	"

- Notes:
- For Note of Concrete Gutter (Special), see Sheet No. S-9
  - For Note of Portland Cement Concrete Sidewalk 6 in. (Modified), see Sheet No. S-9
  - For Elevations, see sheet No. S-28

LEGEND:  
P. J. F. - Preformed Joint Filler

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS	
GEORGE W. DUNNE PRESIDENT BOARD OF COMMISSIONERS	RICHARD H. GOLTERMAN SUPERINTENDENT OF HIGHWAYS
SOUTH SIDE-UNITS 17,18,20,21,22,24	
LAWRENCE AVE. UNDERPASS AT SOO LINE RR.	
COMPUTED: C.C.B., D.W.	SUBMITTED: Jerry J. Palmer
CHECKED: J.M. JAMES, J.P.	DATE: 6/1/88
CHECKED: C.C.B., D.W.	STRUCTURAL DESIGN ENGINEER
EXAMINED: 8/8/88	Route: 139
CHIEF ENGINEER OF DESIGN	SECTION NUMBER: 88-13921-01
	G.M.
F.A.U. RTE. 1362	SECTION 3200R5&DR-5
COUNTY COOK	TOTAL SHEETS 85
SHEET 52	DRAWING NO. PR-1974
CONTRACT NO. 62G42	
ILLINOIS FED. AID PROJECT	

USER NAME = peraynoal	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 100.0000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

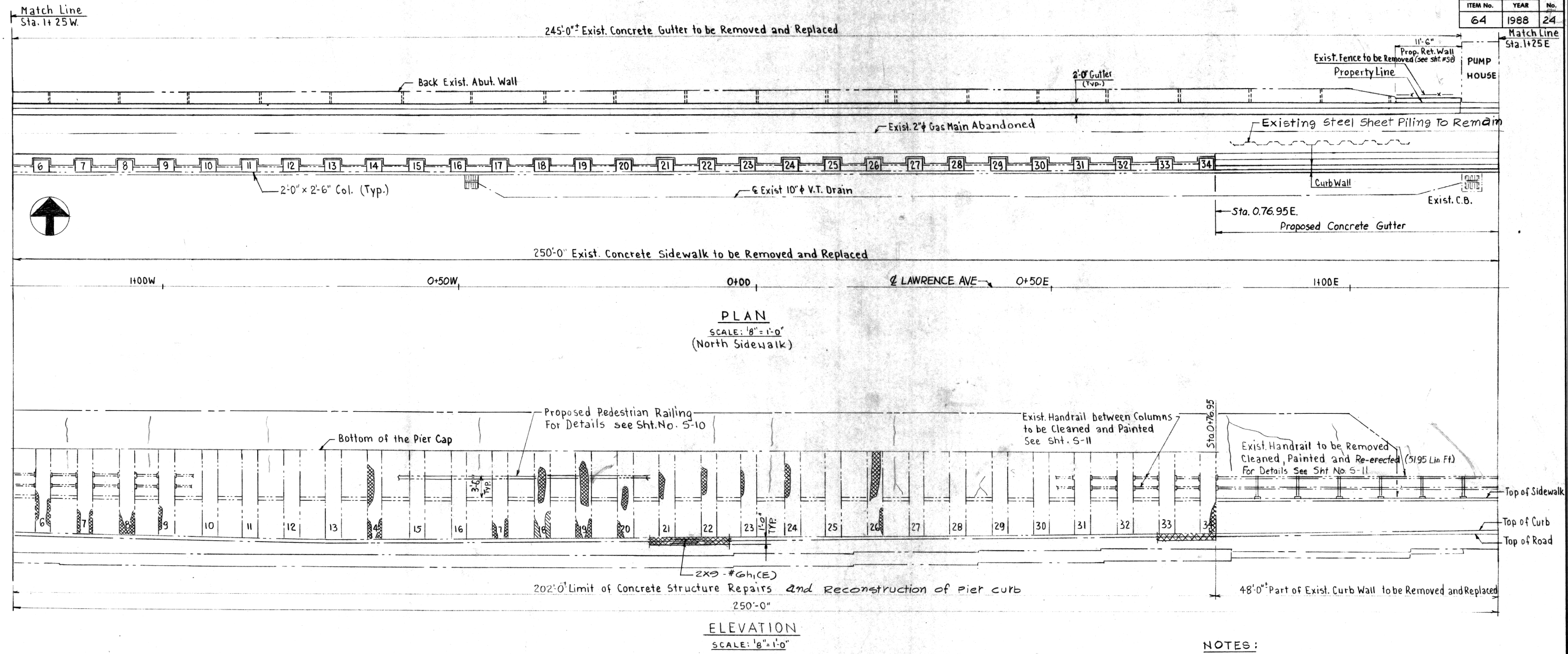
SCALE: SHEET OF SHEETS STA. TO STA.







COUNTY PROGRAM		SHEET
ITEM No.	YEAR	No.
64	1988	24

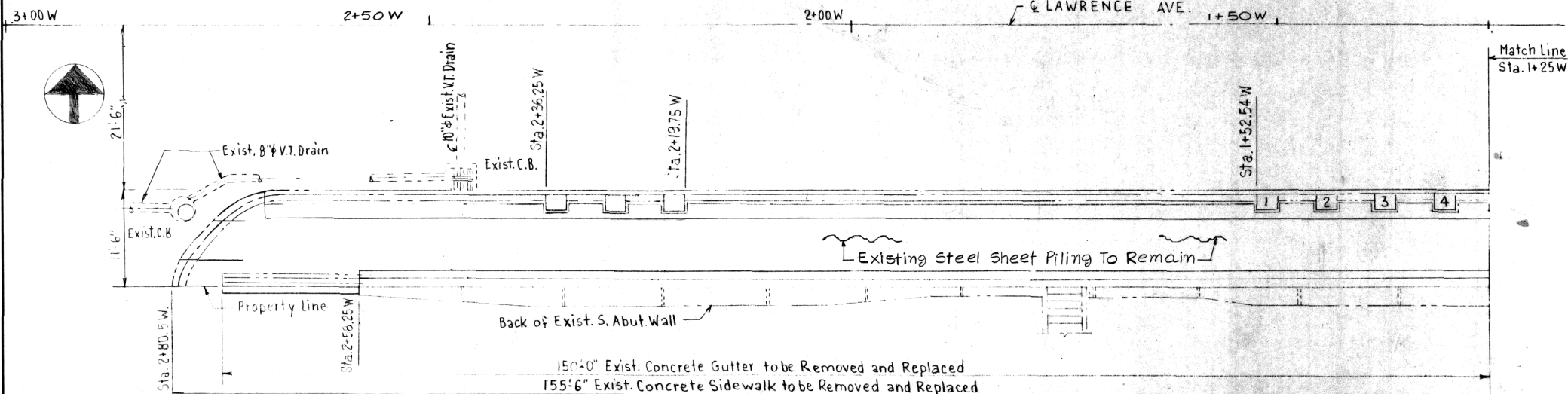


FOR INFORMATION ONLY

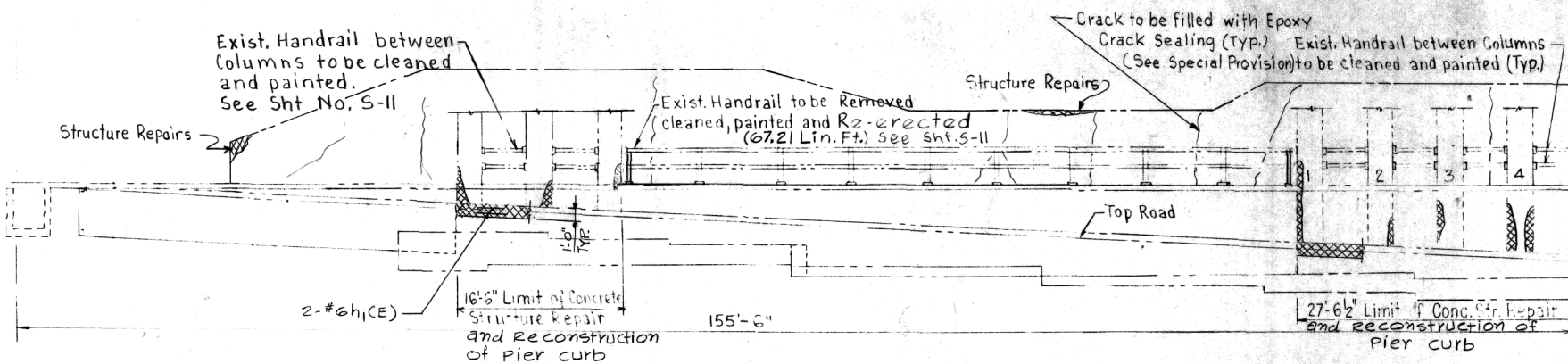
- NOTES:
1. Work this sheet with sheet No. S-26
  2. For Bill of Material see Sht. No. S-21
  3. For Typical Pier Column Repair, see sheet No. S-21
  4. For Unit Description see General Plan Sht. No. S-1
  5. For Typical Reconstruction of Pier Curb see Detail "A", Sht. No. S-21.
- Spalled Conc. Surface Area to be Removed and Repaired or Reconstructed.

DEPARTMENT OF HIGHWAYS			
GEORGE W. DUNNE PRESIDENT BOARD OF COMMISSIONERS		RICHARD H. GULTERMAN SUPERINTENDENT OF HIGHWAYS	
NORTH SIDE - UNIT 25,26			
LAWRENCE AVE. UNDERPASS AT SOO LINE RR			
COMPUTED	C.S.B.	SUBMITTED	Jerry Parvish
CHECKED	J.A.M.	DATE	September 1, 1988
DRAWN	J. HEITZGER & J. WIGER	STRUCTURAL DESIGN ENGINEER	
CHECKED	C.S.B.		
EXAMINED	Sept 8, 1988	Route	139
CHIEF ENGINEER OF DESIGN		SECTION NUMBER	88-13921-01
		Sheet No.	G.M.
		S22	54
		Total Sheets	PR-1978
		Drawing No.	

REVISIONS		
DATE	BY	DESCRIPTION



PLAN  
SCALE: 1/8" = 1'-0"  
South West End Sidewalk



SECTION  
Scale: 1/8" = 1'-0"

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
REPAIR CONCRETE STRUCTURES	SQ.FT	266
RECONSTRUCTION OF PIER CURB	LIN.FT.	257
REINFORCEMENT BARS, EPOXY COATED	LBS.	925
Epoxy Crack Sealing	Lin.Ft	230

- NOTES:
1. Work this sheet with Sheet No. S-21, 22
  2. For Typical Structure Repairs See Sht. No. S-21
  3. For Unit Description see General Plan Sht. No. S-1
  4. For Typical Construction of Pier curb see Detail "A" sht. No. S-21.

BAR SCHEDULE			
MARK	NO.	SIZE	LENGTH
h1(E)	22	6	28'-0"

FOR INFORMATION ONLY

REVISIONS		
DATE	BY	DESCRIPTION

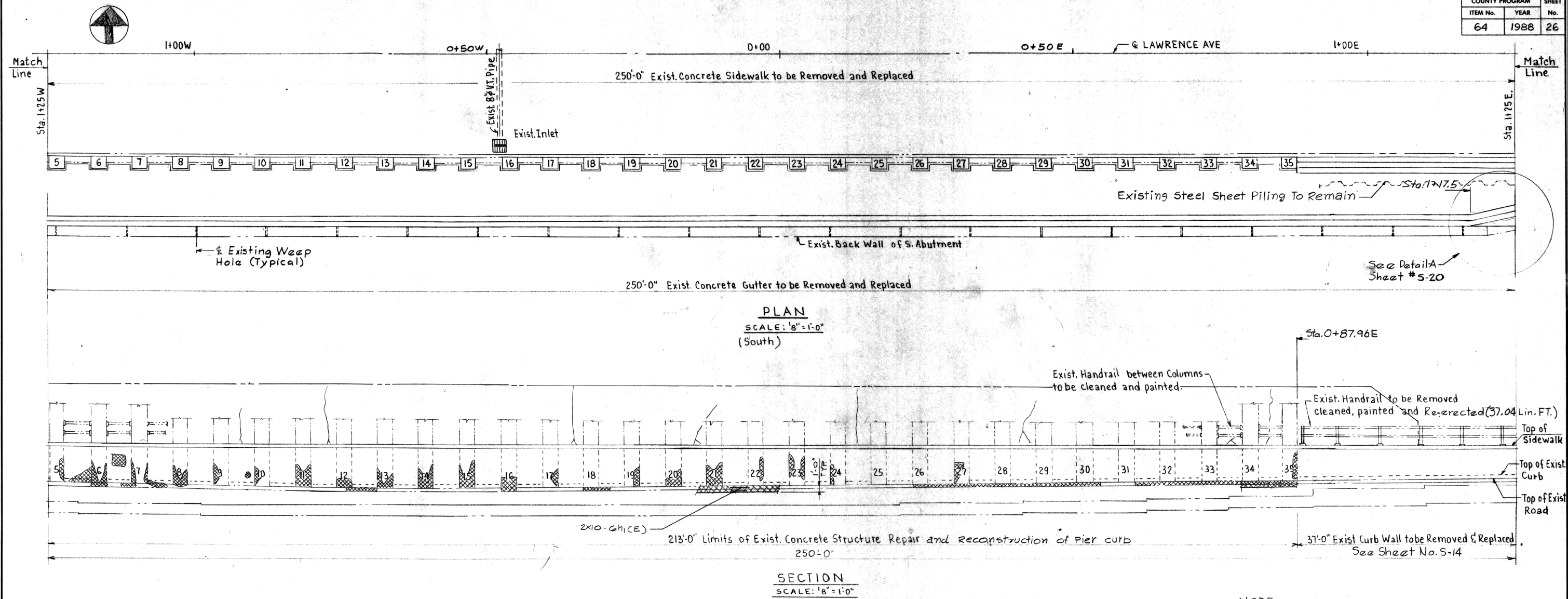
DEPARTMENT OF HIGHWAYS			
GEORGE W. DUNNE PRESIDENT BOARD OF COMMISSIONERS		RICHARD H. GOLTERMAN SUPERINTENDENT OF HIGHWAYS	
SOUTH SIDE-UNIT 27,28			
LAWRENCE AVE. UNDERPASS AT 500 LINE RR.			
COMPUTED CHECKED DRAWN CHECKED	SUBMITTED STRUCTURAL DESIGN ENGINEER		
EXAMINED CHIEF ENGINEER OF DESIGN	Route 139	SECTION NUMBER 523	Sheet No. 54
F.A.U. RTE. 1362		SECTION 3200R5&DR-5	COUNTY COOK
TOTAL SHEETS 85		SHEET NO. 57	
CONTRACT NO. 62G42			
ILLINOIS FED. AID PROJECT			

USER NAME = peraynoal	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 100.0000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.



- NOTE:
1. Work this sheet with sheets No. S-22, S-24
  2. For Typical Pier Column repair see Sht. No. S-21
  3. For Bill of Material see Sht. No. S-23
  4. For Unit Description see General Plan Sht. No. S-1
  5. For Typical Reconstruction of Pier curb see Detail "A" sht. No. S-21.

FOR INFORMATION ONLY

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS COOK COUNTY, ILLINOIS			
GEORGE W. DUNNE ILLINOIS BOARD OF SUPERVISORS		RICHARD H. GUTERMAN ILLINOIS BOARD OF SUPERVISORS	
SOUTH SIDE-UNIT 27,28 LAWRENCE AVE. UNDERPASS AT SOO LINE RR.			
COMPUTED CHECKED DRAWN CHECKED	SUBMITTED J. HETZGER STRUCTURAL DESIGN ENGINEER		
EXAMINED J. HETZGER CHIEF ENGINEER OF DESIGN	Route 139	SECTION NUMBER 88-13921-01 G.M.	Sheet No. 524 Total Sheets 54 Drawing No. PR-1980

USER NAME = pelaym001	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 100.0000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

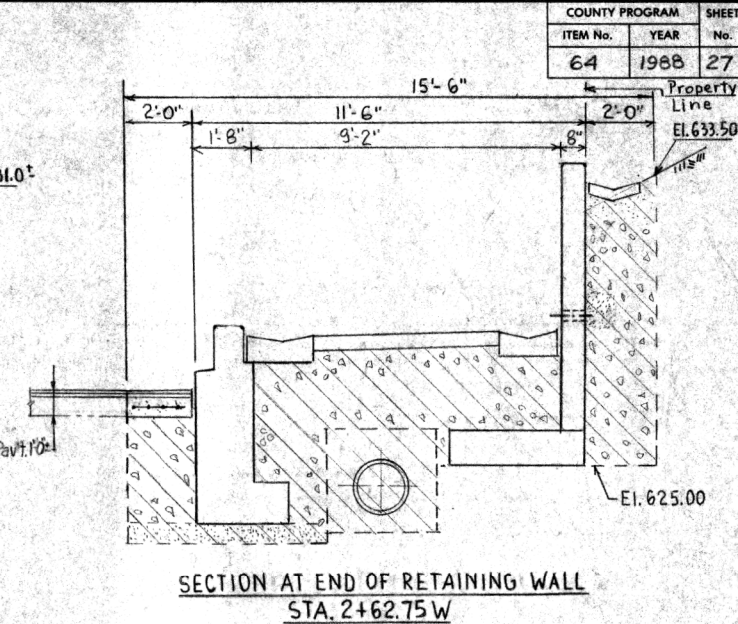
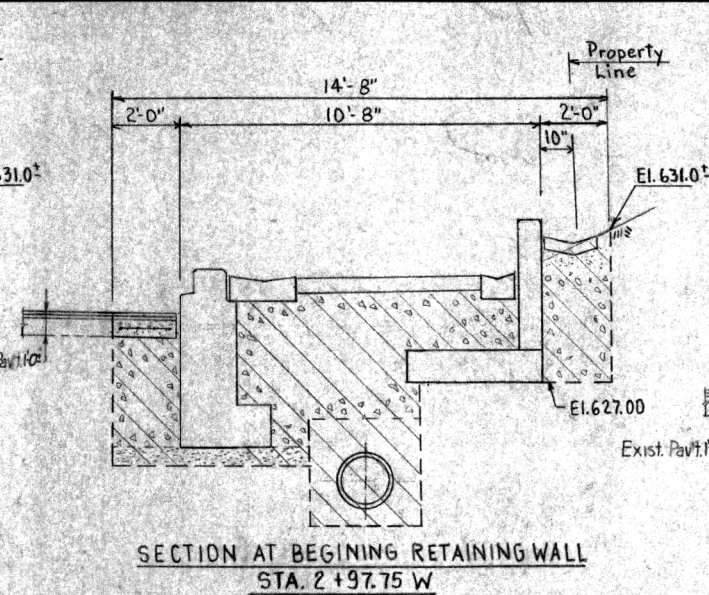
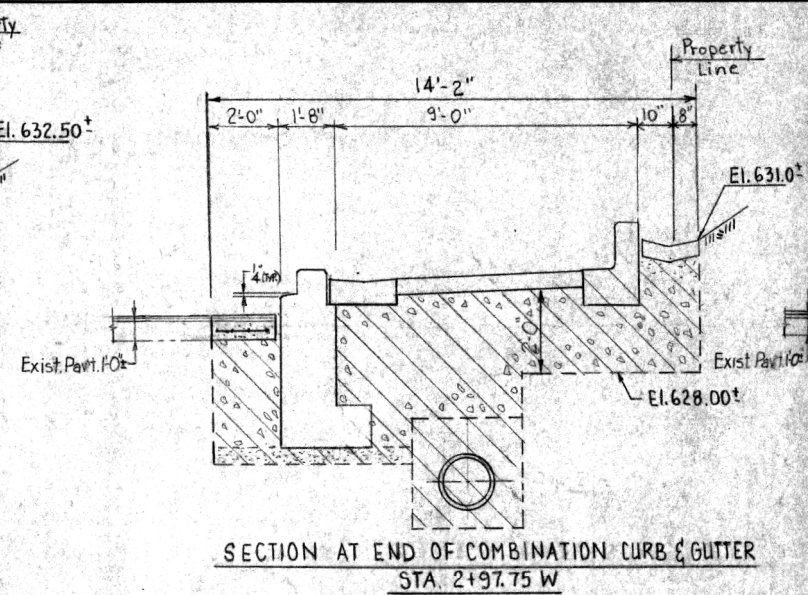
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.






F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	58
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

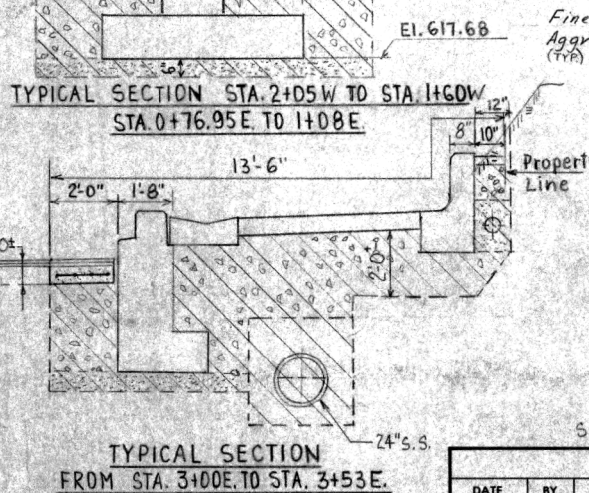
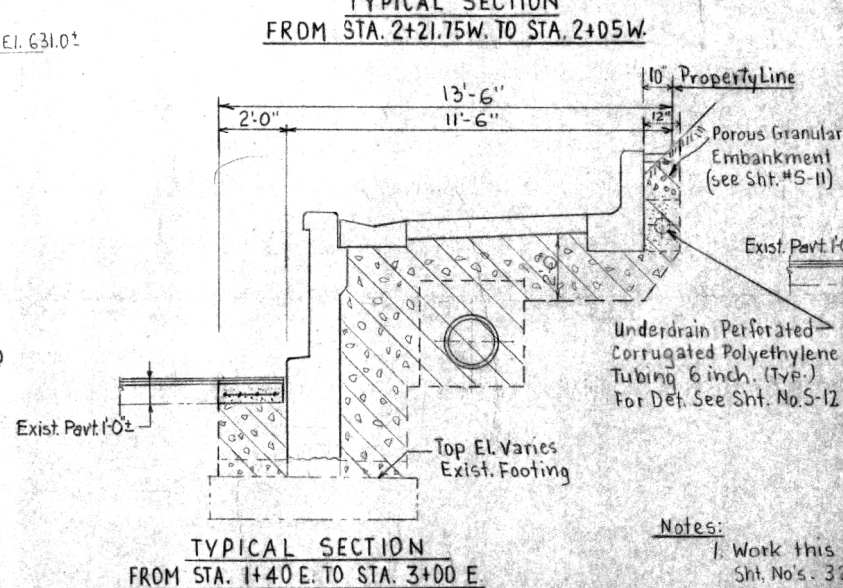
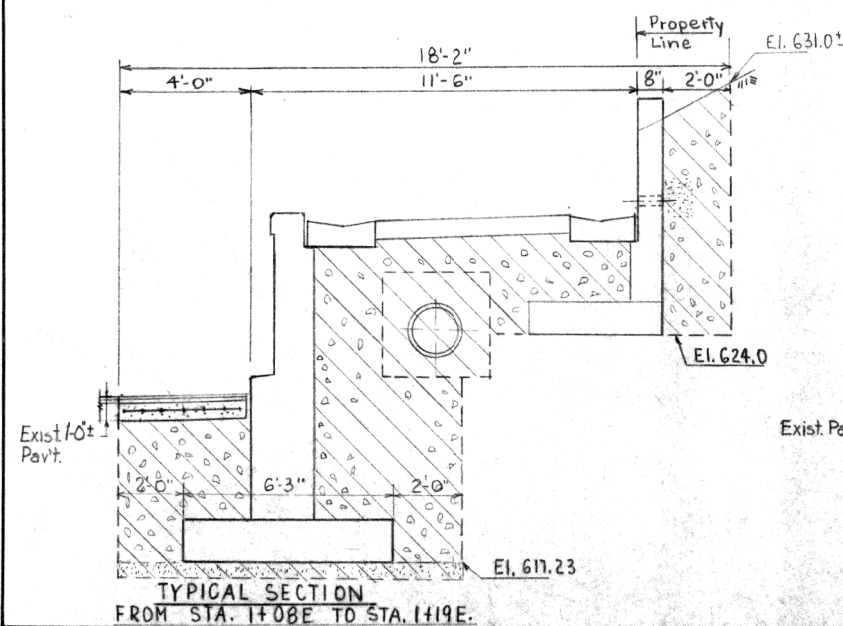
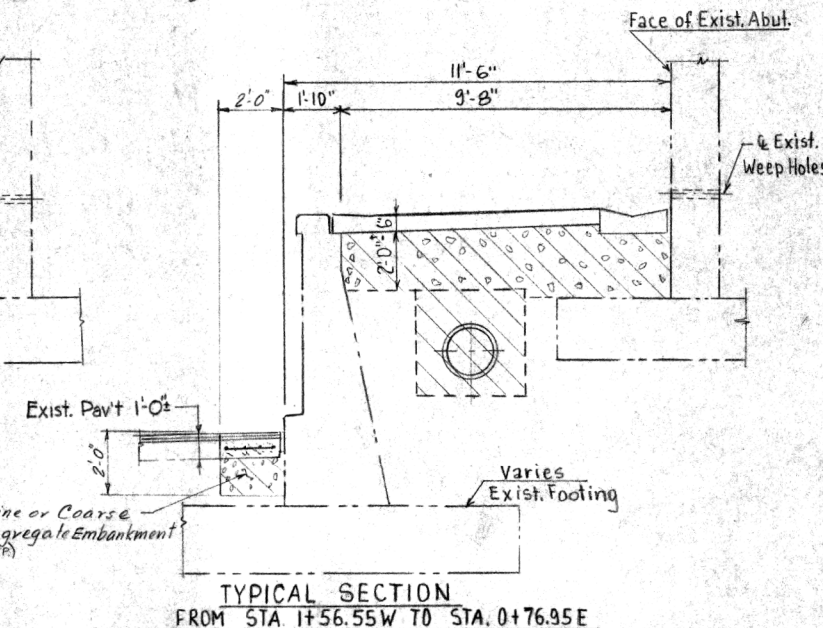
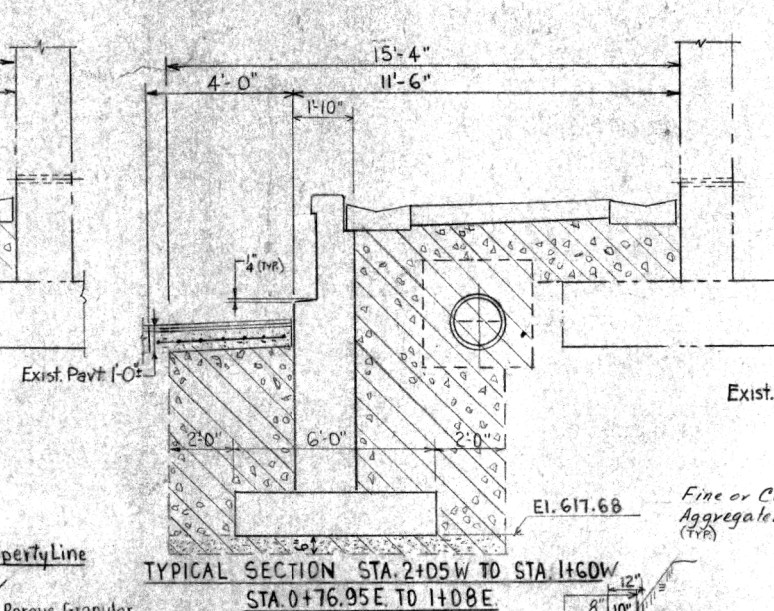
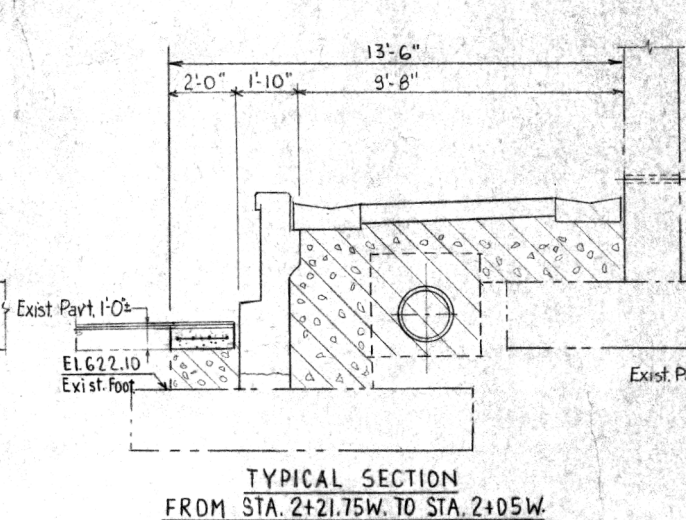
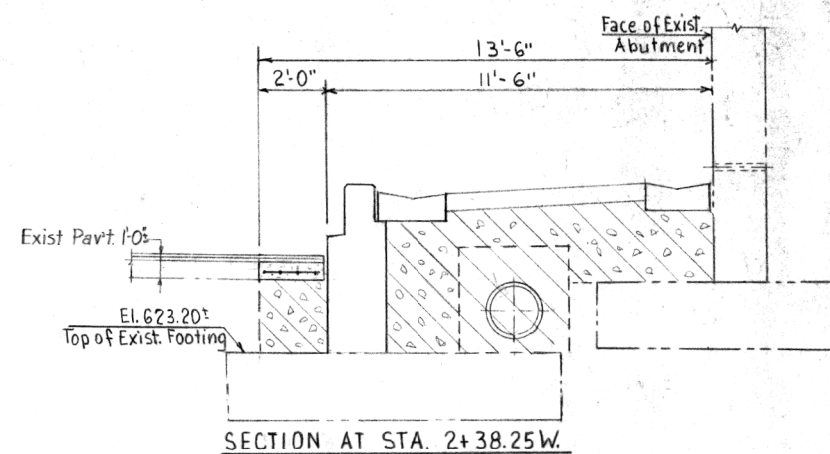
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**FOR INFORMATION ONLY**

LEGEND:

-  - Structure Excavation (Modified)
-  - Fine or Coarse Aggregate Embankment
-  - Porous Granular Embankment
-  - Portland Cement Concrete Base Course, 9 inch (Modified)
-  - Existing Structure



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
Structure Excavation, (Modified)	Cu. Yd	1,264
Fine or Coarse Aggregate Embankment	Cu. Yd	882
Porous Granular Embankment	Cu. Yd	48

**DEPARTMENT OF HIGHWAYS**  
COOK COUNTY, ILLINOIS

NORTH SIDE  
EXCAVATION DETAILS  
LAWRENCE AVE UNDERPASS AT SOO LINE R.R.

COMPUTED <i>GS</i>	SUBMITTED <i>Very Particular</i> <i>4/10/71</i> 1970 STRUCTURAL DESIGN ENGINEER										
CHECKED <i>J.M.</i>											
CHECKED <i>C.G.B.</i>											
EXAMINED <i>Very S. B. S.</i> <i>4/10/71</i> CHIEF ENGINEER OF DESIGN	<table border="1"> <thead> <tr> <th>Route</th> <th>SECTION NUMBER</th> <th>Sheet No.</th> <th>Total Sheets</th> <th>Drawing No.</th> </tr> </thead> <tbody> <tr> <td>139</td> <td>68-13921-01 G. M.</td> <td>S25</td> <td>54</td> <td>PR-198</td> </tr> </tbody> </table>	Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.	139	68-13921-01 G. M.	S25	54	PR-198
Route	SECTION NUMBER	Sheet No.	Total Sheets	Drawing No.							
139	68-13921-01 G. M.	S25	54	PR-198							

SCALE:  $3/8" = 1'-0"$

[illegible]

Notes:

1. Work this Sheet with Drainage and Utilities  
Sht. No's. 32, 33, 34
2. For Bill of Material of Portland Cement Concrete Base Course  
9inch (Modified). See Sht. No. 53.

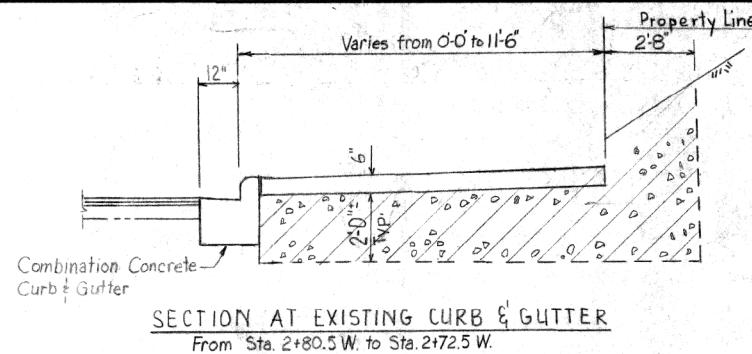
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**EXISTING STRUCTURAL DETAILS**  
**LAWRENCE AVE. (E. OF MANNHEIM RD. – ROSE ST.)**

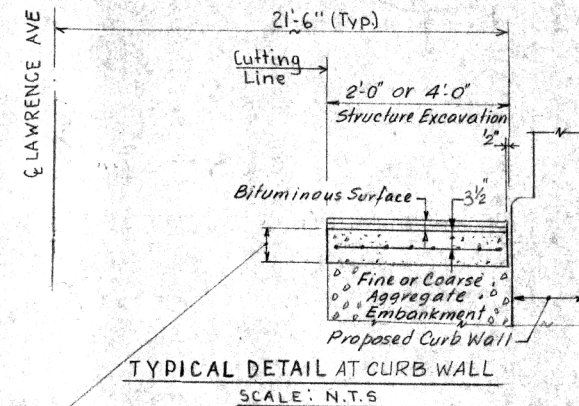
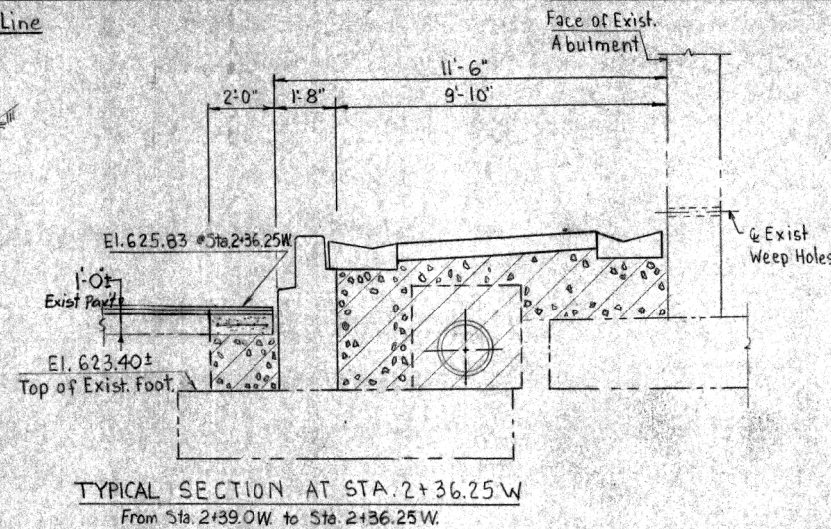
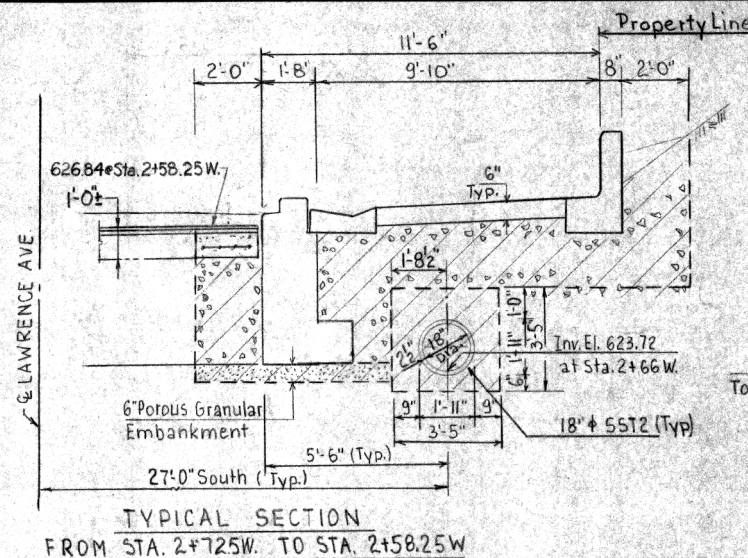
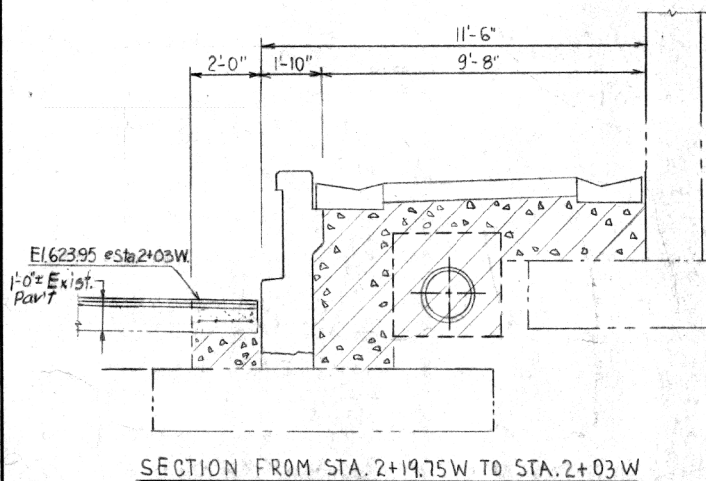
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	59
		CONTRACT NO. 62G42		
ILLINOIS		EED AID PROJECT		

ILLINOIS	FED. AID PROJEC
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**FOR INFORMATION ONLY**

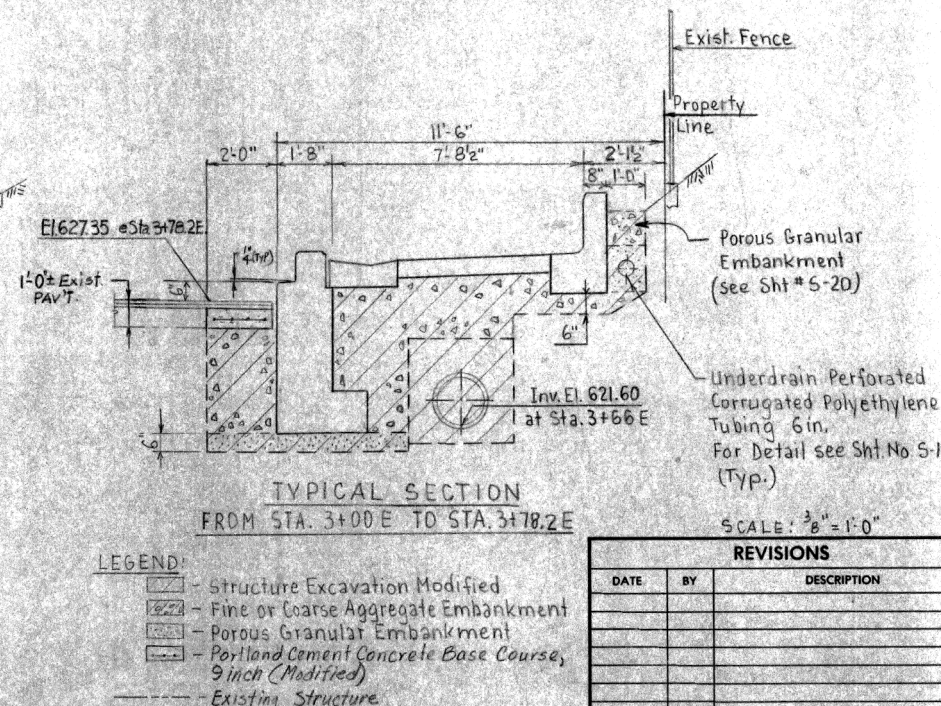
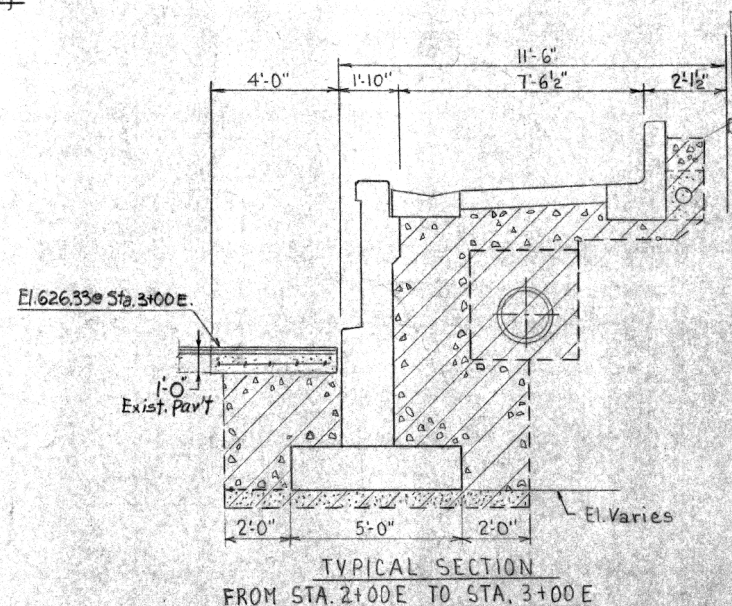
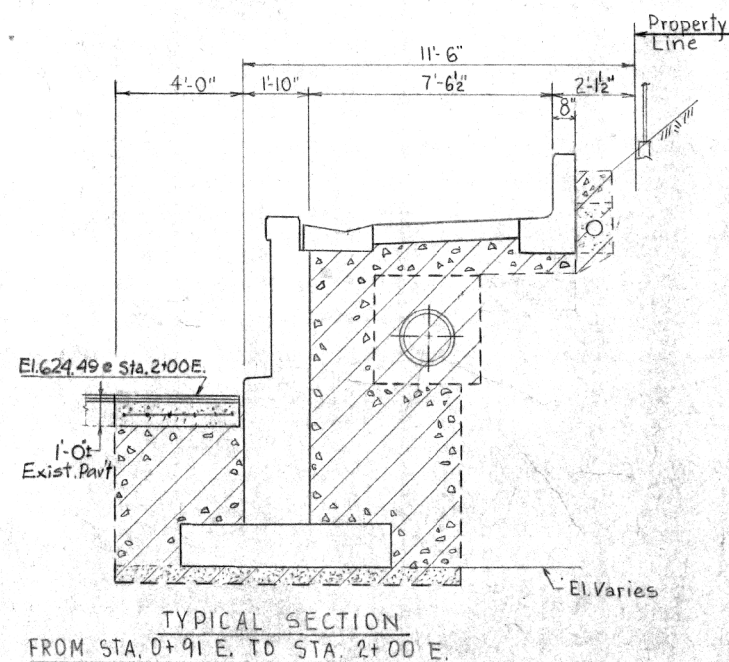


Portland Cement Concrete Base Course 9 inch (Modified) reinforced with 6x12xW4-W4 wire mesh. The cost of furnishing and placing of wire mesh shall be included in the contract unit price per square yard for Portland Cement Concrete Base Course 9 inch (modified).

BILL OF MATERIAL (South Side)		
ITEM	UNIT	QUANTITY
Structure Excavation (Modified)	Cu. Yd.	1,129
Fine or Coarse Aggregate Embankment	Cu. Yd.	798
Porous Granular Embankment	Cu. Yd.	77

**FOR INFORMATION ONLY**

- Notes:
1. Work this Sheet with Drainage and Utilities Sht. No's. 35, 36, 37
  2. For Bill of Material of Portland Cement Base Course, 9 inch (Modified), See Sht. No. 50.



- LEGEND:
- Structure Excavation Modified
  - Fine or Coarse Aggregate Embankment
  - Porous Granular Embankment
  - Portland Cement Concrete Base Course, 9 inch (Modified)
  - Existing Structure

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS			
GEORGE W. GUNNE PRESIDENT BOARD OF COMMISSIONERS		EDWARD H. GILL SUPERVISOR OF HIGHWAYS	
SOUTH SIDE EXCAVATION DETAILS			
LAWRENCE AVE. UNDERPASS AT SOO LINE R.R.			
COMPUTED: J.H.	CHECKED: J.H.	SUBMITTED: J.H.	DATE: 1/30/1988
DRAWN: J.H.	CHECKED: J.H.	STRUCTURAL DESIGN ENGINEER	
EXAMINED: J.H.	DATE: 1/30/1988	ROUTE: 139	SECTION NUMBER: 88-139-21-01
CHIEF ENGINEER OF DESIGN		SHEET: 54	PR-1982

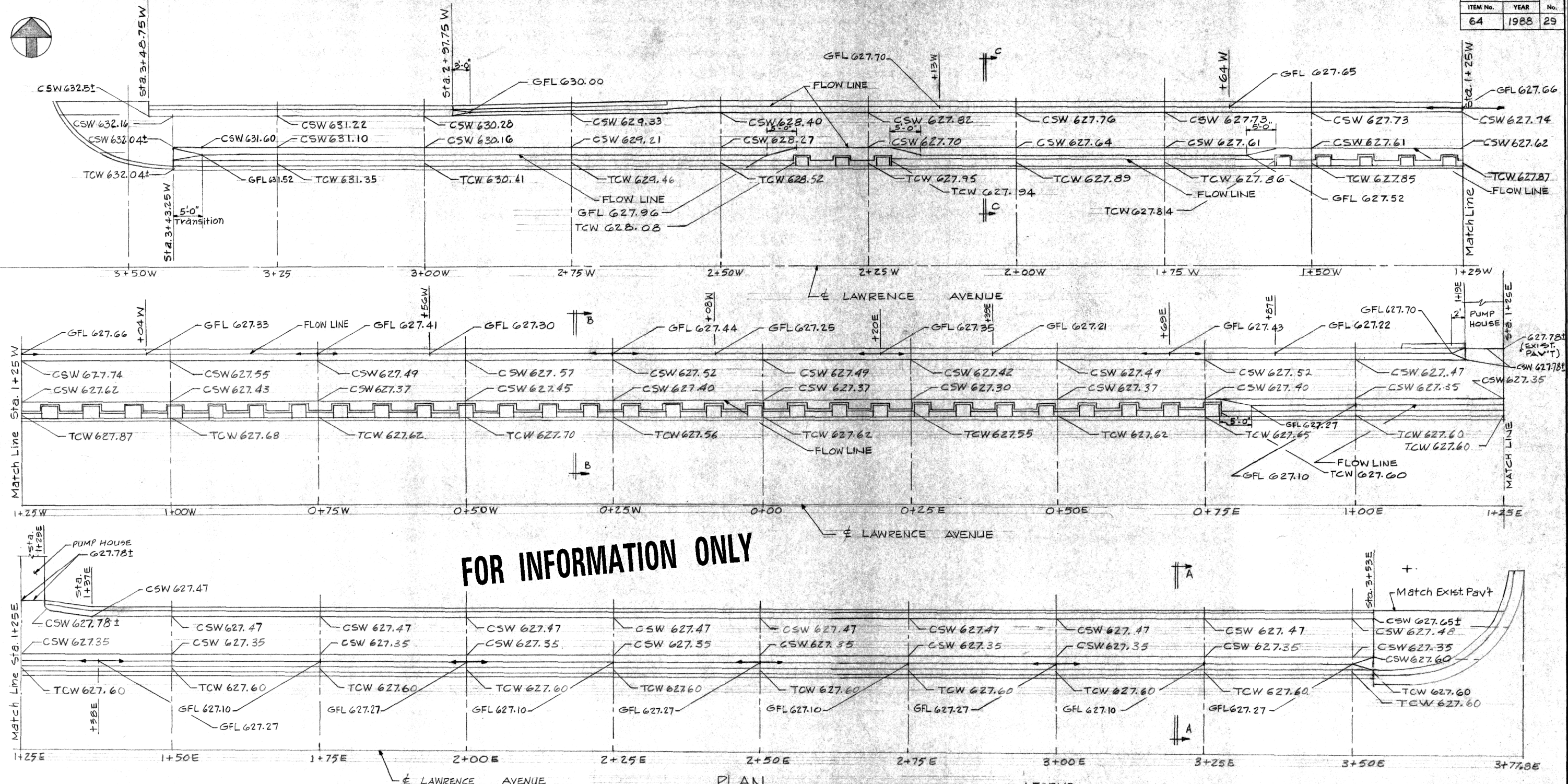
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DRAWN: -	REVISED: -	
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PLOT DATE: 1/30/2019	DATE: -	REVISED: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	60
CONTRACT NO. 62G42				
ILLINOIS / FED. AID PROJECT				



FOR INFORMATION ONLY

PLAN  
SCALE: 1/8" = 1'-0"  
NORTH SIDEWALK  
ELEVATION

LEGEND  
C.S.W. - CONCRETE SIDEWALK ELEVATION  
T.C.W. - TOP OF CURB WALL ELEVATION  
G.F.L. - GUTTER FLOW LINE ELEVATION  
NOTE:  
FOR LEGEND LOCATION SECTIONS A-A,  
B-B & C-C, SEE SHT. NO. S-2B.

FOR INFORMATION ONLY

REVISIONS		
DATE	BY	DESCRIPTION

DEPARTMENT OF HIGHWAYS			
COOK COUNTY, ILLINOIS		RICHARD H. GUTTERMAN SUPERINTENDENT OF HIGHWAYS	
NORTH SIDE ELEVATIONS			
LAWRENCE AVE UNDERPASS AT SOO LINE RR.			
COMPUTED JLP	CHECKED GAS	SUBMITTED Jenny Farwell	
DRAWN Jenny Farwell		STRUCTURAL DESIGN ENGINEER	
CHECKED GAS			
EXAMINED Jenny Farwell	Route 139	SECTION NUMBER 88-1392-01	Sheet No. 527
CHIEF ENGINEER OF DESIGN		Total Sheets 54	Drawing No. PR-1983

USER NAME = peraynoal	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 100.0000" / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

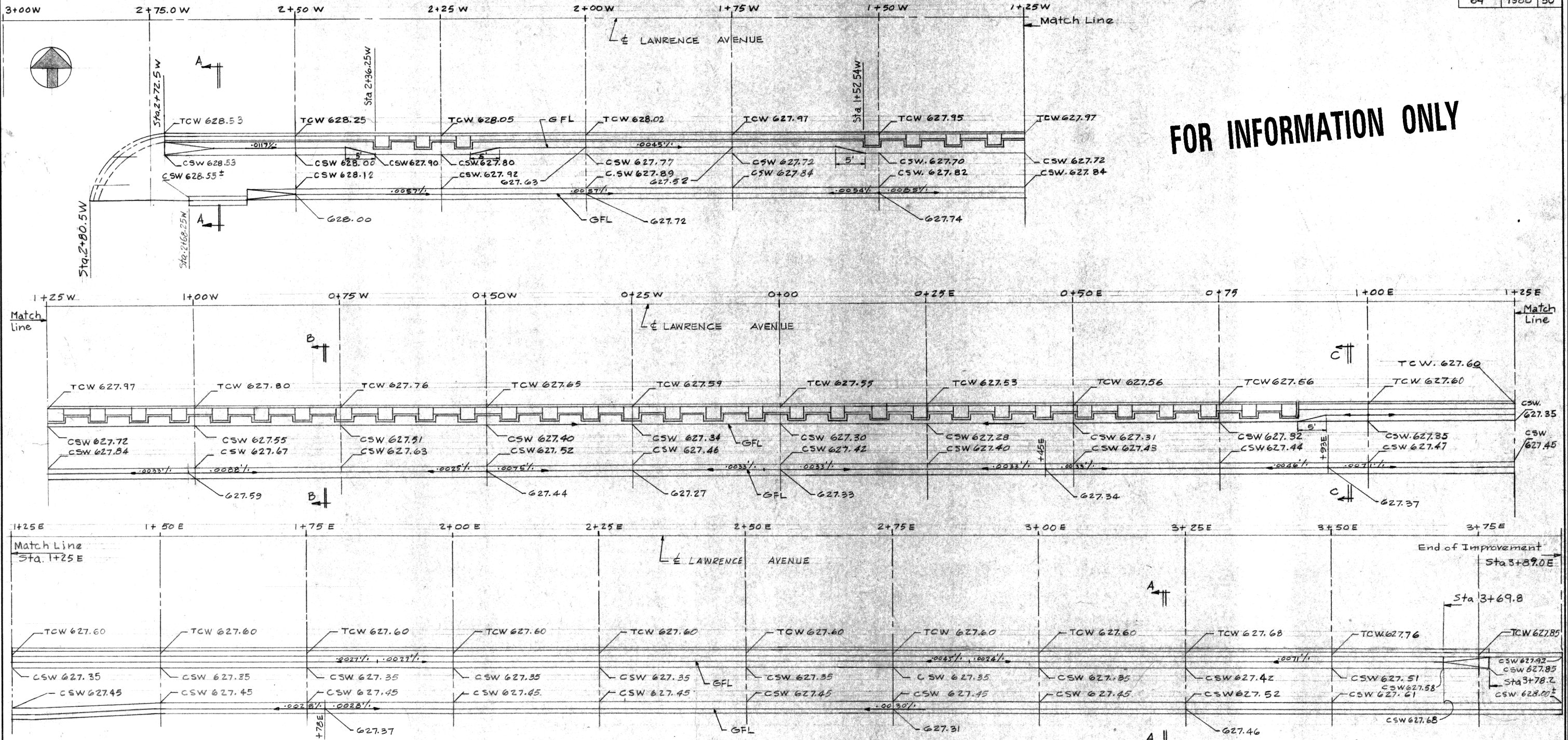
EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	61
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

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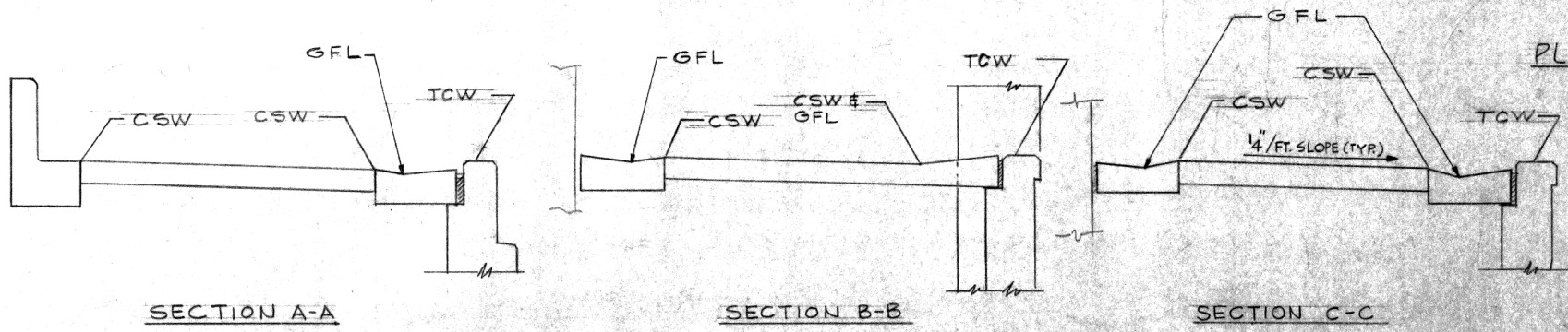
FOR INFORMATION ONLY



LEGEND:  
CONCRETE SIDEWALK ELEVATION - CSW  
TOP OF CONCRETE CURB WALL ELEV. - TCW  
GUTTER FLOW LINE ELEVATION - GFL

DEPARTMENT OF HIGHWAYS			
GEORGE W. DUNNE PRESIDENT BOARD OF COMMISSIONERS		RICHARD H. GUTERMAN SUPERINTENDENT OF HIGHWAYS	
SOUTH SIDE ELEVATIONS			
LAWRENCE AVE UNDERPASS AT SOO LINE R/R			
COMPUTED	JLP	SUBMITTED	John D. Smith
CHECKED	L.T.G.	APPROVED	1988
DRAWN	JOSEPH L. PERE	STRUCTURAL DESIGN ENGINEER	
CHECKED	L.T.G.		
EXAMINED	Sept 2, 1988	Route	139
CHIEF ENGINEER OF DESIGN		SECTION NUMBER	88-13921-01
		Sheet No.	54
		Total Sheets	54
		Drawing No.	PR-1984

REVISIONS			
DATE	BY	DESCRIPTION	



USER NAME	= peraynoal	DESIGNED	-	REVISED	-
DRAWN	-	REVISOR	-	REVISOR	-
PLOT SCALE	= 100.0000' / in.	CHECKED	-	REVISOR	-
PLOT DATE	= 1/30/2019	DATE	-	REVISOR	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	62
CONTRACT NO. 62G42				
ILLINOIS / FED. AID PROJECT				

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BRIDGE DETAILS

DRAINAGE AND UTILITIES

GENERAL NOTES

1. ALL STORM SEWERS AND PIPE CULVERTS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STATE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE AASHTO DESIGNATION M170 (ASTM DESIGNATION C76), WITH A MINIMUM OF CLASS III.
2. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
3. ALL BACKFILLING OPERATIONS SHALL CONFORM TO ARTICLE 603.08 OF THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS.
4. THE CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING IN THE AREA OF ABANDONED EXISTING PIPELINE FACILITIES SINCE RESIDUAL MATERIALS CONTAINED THEREIN MAY BE DANGEROUS. ANY ABANDONED LINES TO BE REMOVED DURING CONSTRUCTION DUE TO DIRECT CONFLICT WITH THE PROJECT SHOULD BE DONE BY THE COMPANY AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR SHOULD ASCERTAIN THE EXTENT AS NO EXTRAS OR DELAYS WILL BE GRANTED REGARDING THESE ACTIVITIES.
5. ADJUSTMENTS REQUIRED BY UTILITY COMPANIES WILL BE PERFORMED BY THE COMPANY INVOLVED OR ITS CONTRACTOR. PLANS FOR THESE ADJUSTMENTS WILL BE ON FILE IN THE OFFICE OF THE COOK COUNTY HIGHWAY DEPARTMENT, BUREAU OF CONSTRUCTION FOR INFORMATION AND USE.
6. CO-ORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT A PRE-CONSTRUCTION CONFERENCE.
7. THE TYPE OF FRAMES AND GRATES REQUIRED FOR ALL CATCH BASINS AND MANHOLES LISTED IN THE SUMMARY OF QUANTITIES MAY BE FOUND ON THE PLANS AT THEIR RESPECTIVE LOCATIONS. WHERE LIDS ARE CALLED FOR ON THE PLANS, THEY SHALL BE IN ACCORDANCE WITH ARTICLE 614.0 OF THE STANDARD SPECIFICATIONS AND THE TERM LID IS USED IN LIEU OF GRATES.
8. ON ALL IMPROVEMENTS THE FRAMES AND LIDS OF EXISTING CATCH BASINS, INLETS, MANHOLES AND VALVE VAULTS WHICH ARE TO BE ABANDONED DUE TO CONSTRUCTION OF THIS IMPROVEMENT ARE TO REMAIN THE PROPERTY OF THE OWNER OR THE COOK COUNTY HIGHWAY DEPARTMENT AND BE SALVAGED. THE OWNER SHALL BE NOTIFIED AS TO AVAILABILITY FOR PICK-UP.
9. PAVEMENT REPLACEMENT SHALL BE CONFINED TO ONE TRAFFIC LANE DURING THE CONSTRUCTION PERIOD IN ACCORDANCE WITH THE REQUIREMENT OF THE SPECIFICATIONS AND WITH THE APPROPRIATE STANDARDS FOR TRAFFIC CONTROL. MEASUREMENT FOR PAVEMENT REPLACEMENT WILL BE THE ALLOWABLE WIDTH OF TRENCH PLUS TWO FEET.
10. ALL LATERAL CONNECTIONS TO LATERALS OF EQUAL OR NEXT LARGER SIZE SHOULD BE INSTALLED USING A "WYE" SECTION. THE COST OF THE WYE SECTIONS SHALL BE INCIDENTAL TO THE COST OF THE LATERAL PIPE.
11. CHERT AGGREGATE SHALL NOT BE ALLOWED IN THE MANUFACTURE OF STORM SEWERS, END SECTIONS OR PRECAST DRAINAGE STRUCTURES.
13. THE CONTRACTORS ATTENTION IS CALLED TO THE FACT THAT ALL ELEVATIONS FOR FLOW LINES AND INVERTS FOR PROPOSED STRUCTURES AND SEWERS ARE APPROXIMATE. THE USE OF THESE ELEVATIONS IS TO BE DETERMINED BASED ON FIELD CONDITIONS AND POTENTIAL CONFLICTS WITH EXISTING UTILITIES AND/OR DRAINAGE FACILITIES. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR CHANGES IN ELEVATION AND THEY ARE TO BE DONE AT THE DIRECTION OF THE ENGINEER.
14. THE CONTRACTORS ATTENTION IS CALLED TO SPECIAL PROVISION 83, COOPERATION WITH UTILITIES.
15. THE EXISTING CATCH BASINS, MANHOLES, AND STORM SEWERS WHICH LIE IN THE SIDEWALKS EXCLUDING THE PIPE WHICH FLOWS TO AND FROM THE EXISTING PUMPING STATION SHALL BE REMOVED WITHIN THE CONTRACT LIMITS ALONG LAWRENCE AVENUE. THE COST FOR THE REMOVAL OF ALL STORM SEWERS, CATCH BASINS, AND MANHOLES; AND THE EXCAVATION NECESSARY FOR THE INSTALLATION OF THE PROPOSED STORM SEWER SHALL BE INCLUDED IN THE UNIT BID PRICE FOR STRUCTURE EXCAVATION (MODIFIED).
16. CAUTION SHALL BE USED IN THE AREA OF THE EXISTING PUMPING STATION SO AS TO NOT DISTURB THE EXISTING FACILITY. ANY DISCHARGE PIPES ENCOUNTERED, FLOWING FROM THE PUMPING STATION INTO THE EXISTING STORM SEWER SHALL BE CONNECTED INTO THE PROPOSED STORM SEWER. QUANTITIES FOR 6 AND 8 INCH DUCTILE IRON PIPE HAVE BEEN ADDED TO THE DRAINAGE BILL OF MATERIALS TO PROVIDE A BID PRICE FOR THE UNIT AND ARE TO BE USED ONLY IF FIELD CONDITIONS REQUIRE THEIR USE.
17. THE CONTRACTOR'S ATTENTION SHALL BE CALLED TO THE FACT THAT AN EXISTING 27 INCH COMBINATION SEWER LIES IN THE VICINITY OF THE EXISTING 30 INCH STORM SEWER AT MICHIGAN AND LAWRENCE AVENUE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CORRECT PIPE IN WHICH THE PROPOSED STORM SEWER IS TO DISCHARGE INTO.
18. QUANTITIES FOR PLUGGING EXISTING STORM SEWERS HAVE BEEN ADDED TO THE DRAINAGE BILL OF MATERIALS TO PROVIDE A BID PRICE FOR THE UNIT AND ARE TO BE USED ONLY IF FIELD CONDITIONS REQUIRE THEIR USE.
19. ANY PIPES NOT SHOWN ON THE PLANS THAT ARE FOUND FLOWING INTO THE EXISTING SIDEWALK STORM SEWERS FROM LAWRENCE AVENUE OR THE ADJOINING SIDE STREETS SHALL BE CONNECTED TO THE PROPOSED STORM SEWERS. QUANTITIES FOR 8 AND 10 INCH STORM SEWER HAVE BEEN ADDED TO THE DRAINAGE BILL OF MATERIALS TO PROVIDE A BID PRICE FOR THE UNIT AND ARE TO BE USED ONLY IF FIELD CONDITIONS REQUIRE THEIR USE.
20. THE ENGINEER IS TO VERIFY THE CONDITION OF THE EXISTING DRAINAGE STRUCTURES ON LAWRENCE AVENUE. ADDITIONAL QUANTITIES FOR CATCH BASINS TO BE ADJUSTED, MANHOLES TO BE ADJUSTED, INLETS TO BE ADJUSTED, CATCH BASINS, TYPE A2, 4 FOOT DIAMETER WITH FRAMES AND GRATES, CATCH BASINS TO BE RECONSTRUCTED, CATCH BASINS TO BE RECONSTRUCTED, SPECIAL, CLEANING EXISTING CATCH BASINS, CLEANING EXISTING MANHOLES, CLEANING EXISTING INLETS, MANHOLES TO BE RECONSTRUCTED, MANHOLES TO BE RECONSTRUCTED, SPECIAL, CLEANING EXISTING STORM SEWERS, (12 IN.), AND CLEANING EXISTING STORM SEWERS, (18 IN.) HAVE BEEN ADDED TO THE DRAINAGE BILL OF MATERIALS TO DETERMINE A BID PRICE FOR THE UNIT AND ARE TO BE USED ONLY IF FIELD CONDITIONS REQUIRE THEIR USE.
21. (RS) DEMOTES SPECIAL RECONSTRUCTION OF MANHOLES AND CATCH BASINS. THE SPECIAL RECONSTRUCTION OF MANHOLES, AND CATCH BASINS WHERE REQUIRED SHALL BE DONE AT THE DIRECTION OF THE ENGINEER. THE LIMITS OF SPECIAL RECONSTRUCTION WILL VARY FROM STRUCTURE TO STRUCTURE, BUT SHALL CONSIST OF THE REMOVAL AND REPLACEMENT OF AT LEAST THE TOP 30 INCHES OF THE EXISTING STRUCTURE. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE COOK COUNTY HIGHWAY DEPARTMENT STANDARDS FOR TYPE A MANHOLE, AND TYPE A2 CATCH BASIN. THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH MANHOLES, AND CATCH BASINS TO BE RECONSTRUCTED, SPECIAL, AND SHALL INCLUDE ALL NECESSARY LABOR, CLEANING AND MATERIALS.
22. WHERE TRENCH BACKFILL IS NOT CALLED FOR ON THE PLANS, SPECIAL BEDDING FOR STORM SEWERS IS TO BE USED, AND THE REMAINDER OF THE BACKFILL MATERIAL OVER THE STORM SEWERS IS TO BE FINE OR COARSE AGGREGATE. SEE SHEETS **27+28**

DRAINAGE AND UTILITIES

BILL OF MATERIALS

QTY	UNIT	ITEM
25	LIN.FT.	STORM SEWERS, TYPE 2 (CSP CLASS 1) 8 IN.
25	LIN.FT.	STORM SEWERS, TYPE 2 (CSP CLASS 1) 10 IN.
143	LIN.FT.	STORM SEWERS, TYPE 2 (RCCP CLASS III) 12 IN.
1192	LIN.FT.	STORM SEWERS, TYPE 2 (RCCP CLASS III) 18 IN.
127	LIN.FT.	STORM SEWERS, TYPE 2 (RCCP CLASS III) 24 IN.
25	LIN.FT.	STORM SEWERS, TYPE 1 (DUCTILE IRON PIPE AMWA C151) 6 IN.
25	LIN.FT.	STORM SEWERS, TYPE 1 (DUCTILE IRON PIPE AMWA C151) 8 IN.
50	LIN.FT.	EXPLORATION TRENCH (52 IN. DEPTH)
9	EACH	CATCH BASINS, TYPE C, 2 FT. DIA. WITH FRAMES AND GRATES
9	EACH	MANHOLES, TYPE A, 4 FT. DIA. WITH FRAMES AND GRATES
5	SQ.YD.	PAVEMENT REPLACEMENT
5	CU.YD.	TRENCH BACKFILL
1	EACH	PLUGGING EXISTING DRAINS AND SEWERS (12 IN. OR LESS)
1	EACH	PLUGGING EXISTING DRAIN AND SEWERS ( OVER 12 IN.)
29	EACH	CATCH BASINS, 18 IN. DIA WITH FRAMES AND GRATES
1	EACH	CATCH BASINS TYPE A2, 4 FT. DIA. WITH FRAMES AND GRATES.
1	EACH	CATCH BASINS TO BE RECONSTRUCTED.
1	EACH	CATCH BASINS TO BE RECONSTRUCTED, SPECIAL.
1	EACH	CLEANING EXISTING CATCH BASINS.
1	EACH	MANHOLES TO BE RECONSTRUCTED.
1	EACH	MANHOLES TO BE RECONSTRUCTED, SPECIAL.
1	EACH	CLEANING EXISTING MANHOLES.
1	EACH	CLEANING EXISTING INLETS.
25	LIN.FT.	CLEANING EXISTING STORM SEWERS (12 IN.)
25	LIN.FT.	CLEANING EXISTING STORM SEWERS (18 IN.)
1	EACH	CATCH BASINS TO BE ADJUSTED
1	EACH	MANHOLES TO BE ADJUSTED
1	EACH	INLETS TO BE ADJUSTED
2	EACH	MANHOLES, TYPE A, 5 FT. DIA. WITH FRAMES AND GRATES

FOR INFORMATION ONLY

DRAINAGE SHEET NO. D1	
COUNTY OF COOK	
DEPARTMENT OF HIGHWAYS	
PRESIDENT	SUPERINTENDENT
LAWRENCE AVENUE & SOOLINE RD	
DRAINAGE AND UTILITIES	
COMPUTED <u>RFM</u>	APPROVED <u>Aug 16 1988</u>
DRAWN <u>RFM</u>	<u>RFM</u>
CHECKED <u>DAP</u>	<u>RFM</u>
CHIEF ENGINEER OF DIVISION	

USER NAME = peraynoal	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

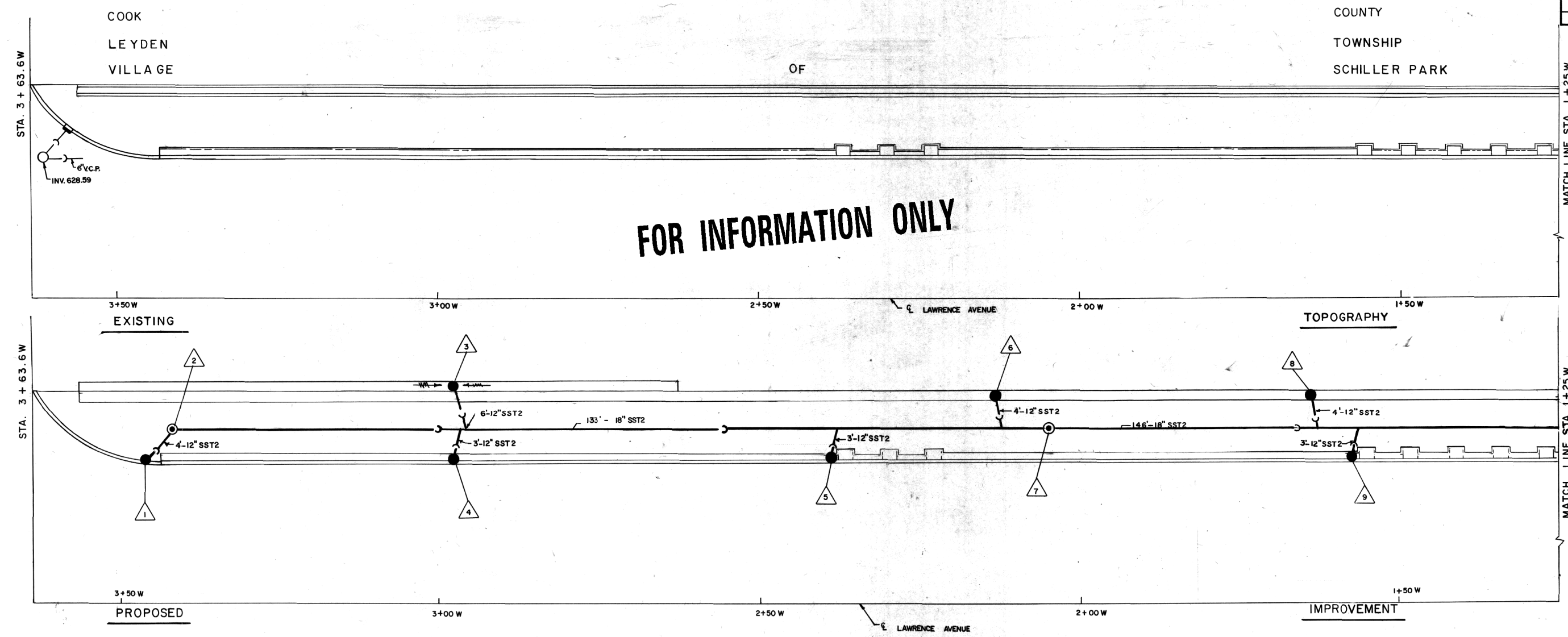
EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	63
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

COUNTY  
TOWNSHIP  
SCHILLER PARK

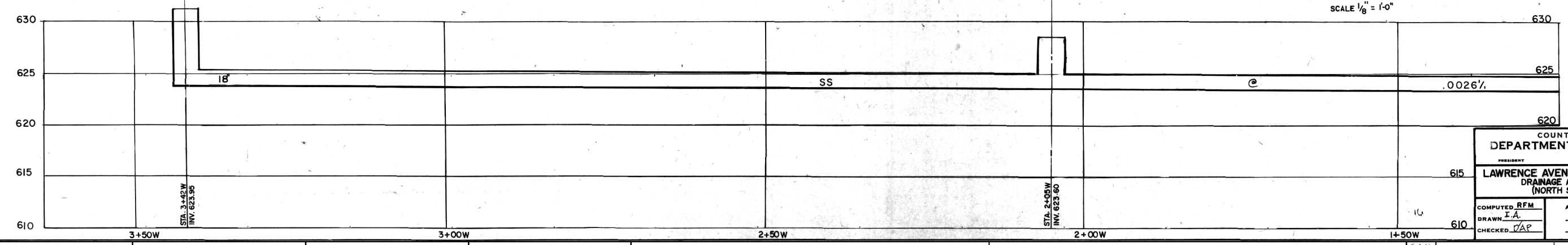
FOR INFORMATION ONLY



1	2	3	4	5	6	7	8	9
STA. 3+45.5 W C-IP EL. 632.10± FL. 626.58	STA. 3+42 W (27' N) A-48-IC EL. 632.08 INV. 623.95	STA. 3+00 W (32.5± N) C-IP EL. 631.16 FL. 625.66	STA. 3+00 W CB-18 - * EL. 630.08 FL. 624.59	STA. 2+44 W CB-18 - * EL. 627.96 FL. 624.00	STA. 2+13 W CB-18 - * EL. 627.70 FL. ABBR. SUMP	STA. 2+05 W (27' N) A-48-IC EL. 627.69 INV. 623.60	STA. 1+64 W CB-18 - * EL. 627.65 FL. ABBR. SUMP	STA. 1+62 W CB-18 - * EL. 627.52 FL. 624.00

- NOTES:
- 1) CB-18 DENOTES 18" DIAMETER CATCH BASIN SEE SHEET NO. 37
  - 2) \* THIS SYMBOL DENOTES CONCAVE INLET FRAME AND GRATE NEENAH TYPE R-3205 OR EQUIVALENT SEE SHEET NO. 35
  - 3) ABBR. SUMP DENOTES ABBREVIATED SUMP SEE NOTE # 3 ON SHEET 37

SCALE 1/8" = 1'-0"



DRAINAGE  
SHEET NO. 02

COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

PRESIDENT  
SUPERINTENDENT  
LAWRENCE AVENUE @ SOO LINE R. R.  
DRAINAGE AND UTILITIES  
(NORTH SIDEWALK)

COMPUTED, RFM  
DRAWN, I.A.  
CHECKED, JAR  
APPROVED, Aug 16, 1988  
T. J. Valentini  
JERRY SCHNEIDER OF DESIGN

USER NAME = peraynoal	DESIGNED -	REVISED -
PLOT SCALE = 100.0000" / in.	DRAWN -	REVISED -
PLOT DATE = 1/30/2019	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	64
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: s:\mll\848\ENGINEERING\mll\848\PROJECTS\DOT Office\Design\DOT 13921-01 GM\DOT 13921-01 GM.dgn  
DATE: 1/30/2019

County Highway	Fiscal Year	Sheet No.	Total Sheets
139	88	33	54

Section 88-13921-016M

COOK  
LEYDEN  
VILLAGE

COUNTY  
TOWNSHIP  
SCHILLER PARK

FOR INFORMATION ONLY

TOPOGRAPHY

EXISTING

PROPOSED

IMPROVEMENT

LAWRENCE AVENUE

1  
STA. 1+04W  
CB-18-#  
EL. 627.33  
FL. ABBR. SUMP

2  
STA. 1+56W  
CB-18-#  
EL. 627.30  
FL. ABBR. SUMP

3  
STA. 0+55W (27'N)  
A-48-1C  
EL. 627.48  
INV. 623.21

4  
STA. 0+08W  
CB-18-#  
EL. 627.25  
FL. ABBR. SUMP

5  
STA. 0+39E  
CB-18-#  
EL. 627.22  
FL. ABBR. SUMP

6  
STA. 0+87E  
CB-18-#  
EL. 627.27  
FL. ABBR. SUMP

7  
STA. 1+00E  
CB-18-#  
EL. 627.10  
FL. 623.35

8  
STA. 1+10E (27'N)  
A-48-1C  
EL. 627.40  
INV. 622.78

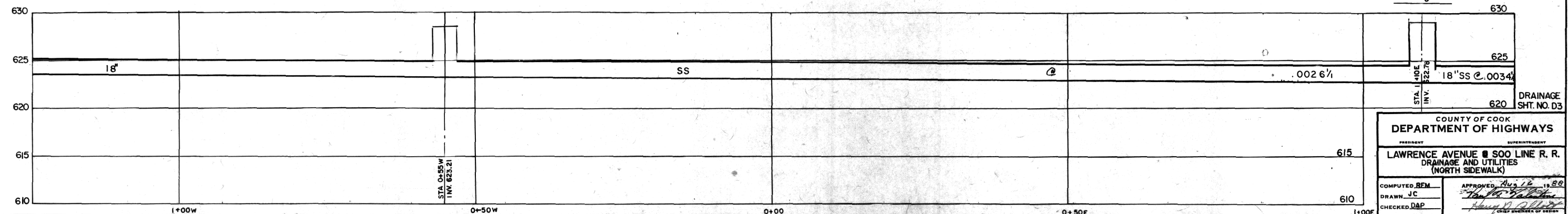
9  
STA. 0+75W (25'±N)  
C-1P  
EL. 627.37  
FL. ABBR. SUMP

10  
STA. 0+23E (25'±N)  
C-1P  
EL. 627.30  
FL. ABBR. SUMP

NOTES:

- 1) CB-18 DENOTES 18" DIA. CATCH BASIN. SEE SHT. NO. 37
- 2) \* THIS SYMBOL DENOTES CONCAVE INLET FRAME AND GRATE/NEENAH TYPE R-3205 OR EQUIVALENT SEE SHEET NO. 35
- 3) ABBR. SUMP DENOTES ABBREVIATED SUMP SEE NOTE #3 ON SHEET 37

SCALE: 1/8" = 1'-0"



USER NAME	= perryal	DESIGNED	-	REVISED	-
PLOT SCALE	= 100.0000' / in.	DRAWN	-	REVISED	-
PLOT DATE	= 1/30/2019	CHECKED	-	REVISED	-
		DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	65
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

OF

EXISTING 30" SS

MATCH LINE STA. 1 + 25 E

MATCH LINE STA. 1 + 25 E

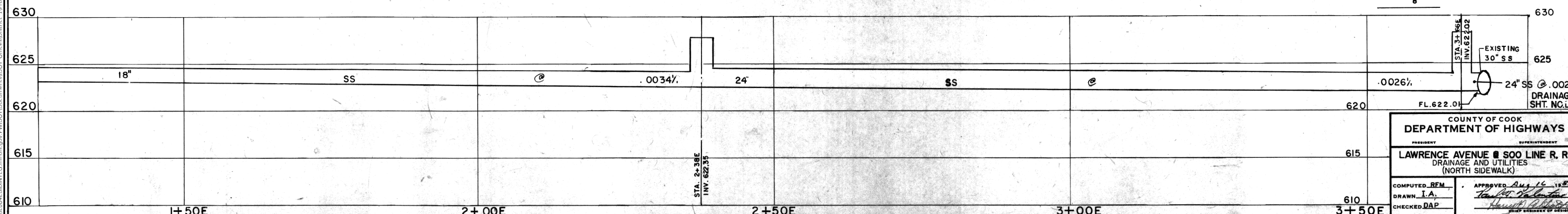
END OF IMPROVEMENT STA 3+77.85



NOTES:

- 1) CB-18 DENOTES CATCHBASIN 18" DIAMETER  
SEE SHEET NO. 37
- 2.) \* THIS SYMBOL DENOTES CONCAVE INLET FRAME AND  
GRATE, NEENAH TYPE R-320S OR EQUIVALENT.  
SEE SHEET NO. 35
- 3.) ABBR. SUMP DENOTES ABBREVIATED SUMP  
SEE NOTE # 3 ON SHEET 37

SCALE:  $\frac{1}{8}" = 1'-0"$



2+00E

2+50E

3+00E

3-50E

USER NAME	= paraynoal
PLOT SCALE	= 100.0000 ' / in
PLOT DATE	= 1/30/2019

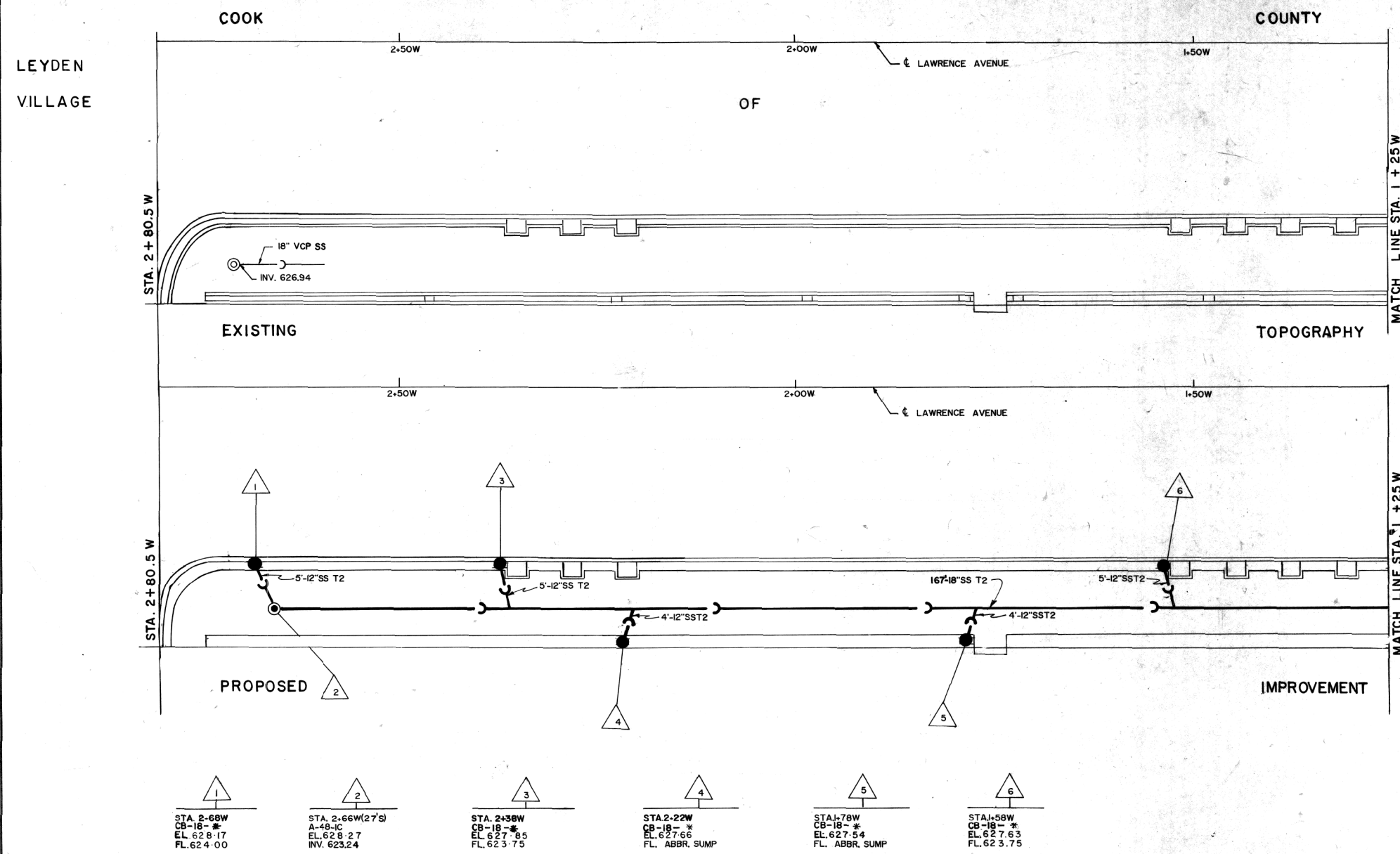
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

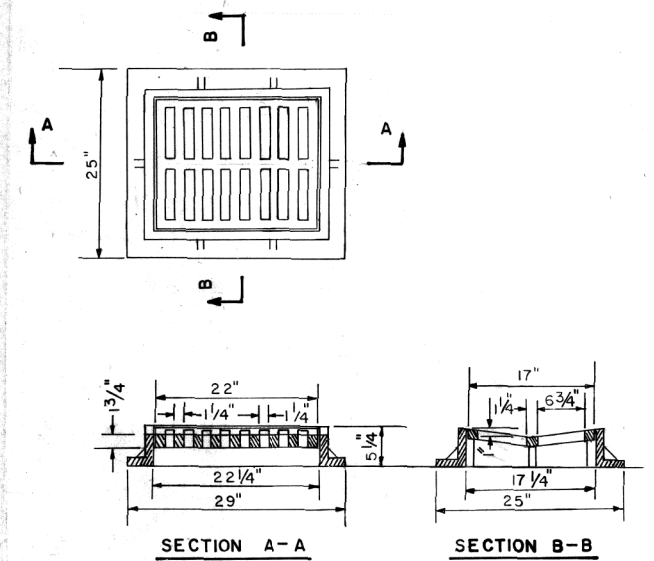
**EXISTING STRUCTURAL DETAILS**  
**LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	66
		CONTRACT NO. 62G42		
ILLINOIS		FED. AID PROJECT		

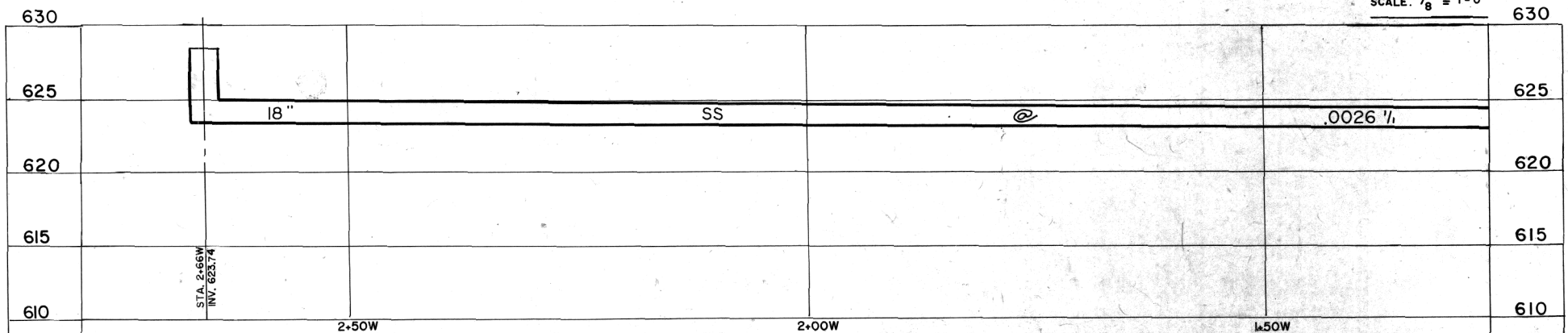


FOR INFORMATION ONLY



NEENAH R-3205 OR EQUIVALENT  
CONCAVE INLET FRAME AND GUTTER

- NOTES:
- CB-18 DENOTES 18 INCH DIAMETER CATCH BASIN SEE SHEET NO. 37 FOR DETAIL
  - \* THIS SYMBOL DENOTES CONCAVE INLET FRAME AND GRATE, NEENAH TYPE R-3205 OR EQUIVALENT. SEE DETAIL THIS SHEET.
  - ABBR. SUMP DENOTES ABBREVIATED SUMP SEE NOTE # 3 ON SHEET 37
- SCALE: 1/8" = 1'-0"



USER NAME	DESIGNED	REVISED
Drawn	Drawn	Revised
PLOT SCALE = 100,000" / in.	CHECKED	REVISED
PLOT DATE = 1/30/2019	DATE	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

DRAINAGE SHEET NO. D5  
COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

PRESIDENT: SUPERINTENDENT: *John B. [Signature]*

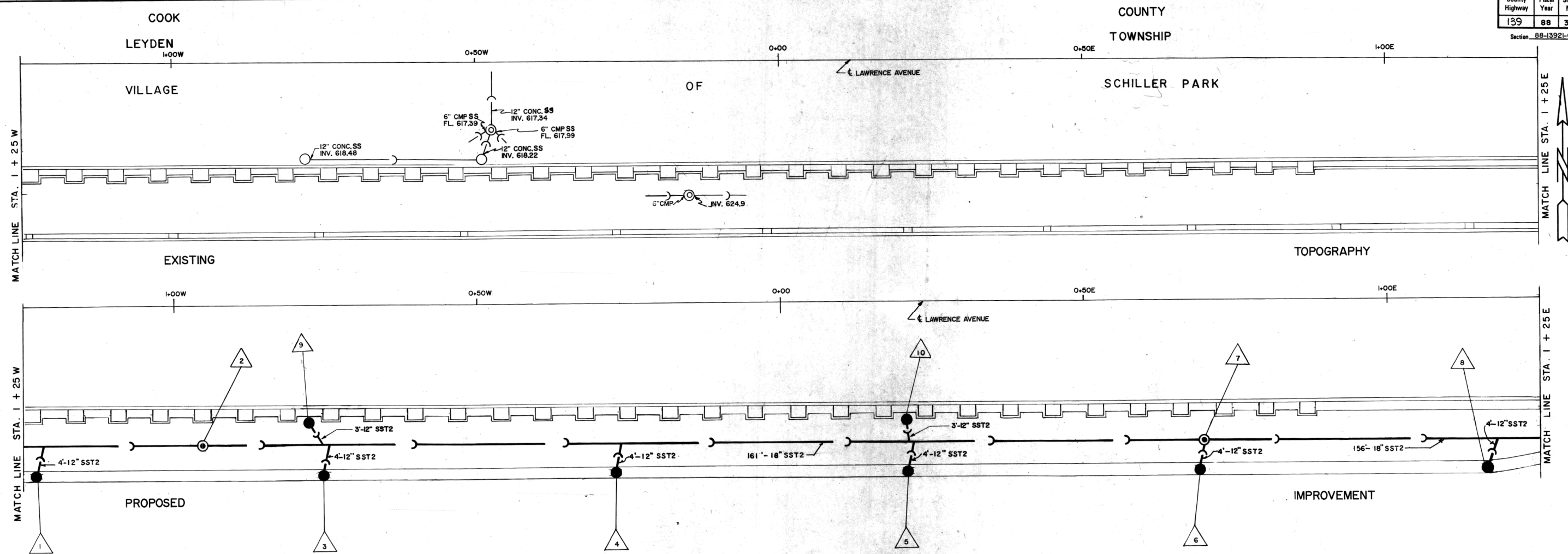
LAWRENCE AVENUE @ SOO LINE R. R.  
DRAINAGE AND UTILITIES  
(SOUTH SIDEWALK)

COMPUTED: RFM  
DRAWN: JMC/BLT  
CHECKED: DAP

APPROVED: *John B. [Signature]* 10/8/88  
CHIEF ENGINEER OF DESIGN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	67

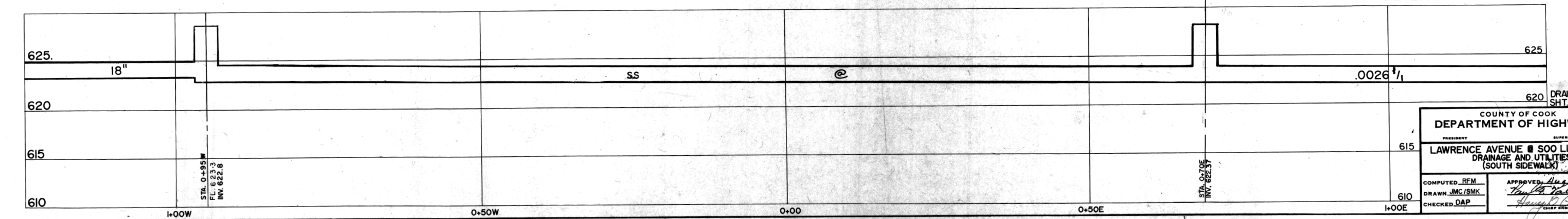
CONTRACT NO. 62G42  
ILLINOIS FED. AID PROJECT



**FOR INFORMATION ONLY**

- |   |   |   |   |   |   |   |  |  |  |
|---|---|---|---|---|---|---|--|--|--|
| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8  | 9  | 10   |
| STA. 1+23W<br>CB-18-#<br>EL. 627.58<br>FL. ABBR. SUMP | STA. 0+95W (27'S)<br>A-48-IC<br>EL. 627.60<br>INV. 622.8<br>FL. 623.3 | STA. 0+75W<br>CB-18-#<br>EL. 627.38<br>FL. ABBR. SUMP | STA. 0+27W<br>CB-18-#<br>EL. 627.21<br>FL. ABBR. SUMP | STA. 0+20.7E<br>CB-18-#<br>EL. 627.15<br>FL. ABBR. SUMP | STA. 0+69E<br>CB-18-#<br>EL. 627.18<br>FL. ABBR. SUMP | STA. 0+70E (27'S)<br>A-48-IC<br>EL. 627.38<br>INV. 622.44 | STA. 1+7E<br>CB-18-#<br>EL. 627.20<br>FL. ABBR. SUMP | STA. 0+78 W (25'S)<br>C-1P<br>EL. 627.51<br>FL. ABBR. SUMP | STA. 0+21 E (25'S)<br>C-1P<br>EL. 627.28<br>FL. ABBR. SUMP |

- NOTES:
1. CB-18 DENOTES 18 INCH DIAMETER CATCH BASIN. SEE SHEET NO. 37 FOR DETAIL
  2. \* THIS SYMBOL DENOTES CONCAVE INLET FRAME AND GRATE, NEENAH TYPE R-3205 OR EQUIVALENT. SEE SHEET NO. 35
  - 3) ABBR. SUMP DENOTES ABBREVIATED SUMP SEE NOTE # 3 ON SHEET 37
- SCALE: 1/8" = 1'-0"



COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

PRESIDENT: [Signature]  
SUPERINTENDENT: [Signature]

LAWRENCE AVENUE @ SOO LINE R. R.  
DRAINAGE AND UTILITIES  
(SOUTH SIDEWALK)

COMPUTED: RFM  
DRAWN: JMC/SMK  
CHECKED: DAP

APPROVED: [Signature]  
[Signature]  
[Signature]

USER NAME	= peraynoal	DESIGNED	-	REVISED	-
DRAWN	-	REVISION	-	REVISED	-
PLOT SCALE	= 100.0000" / 1"	CHECKED	-	REVISED	-
PLOT DATE	= 1/30/2019	DATE	-	REVISED	-

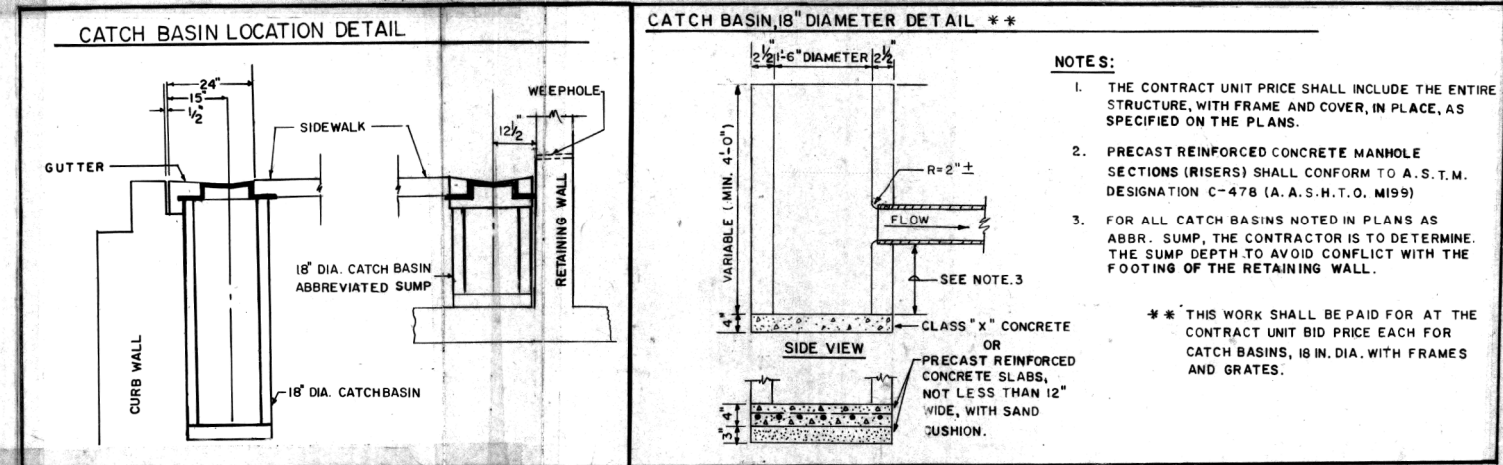
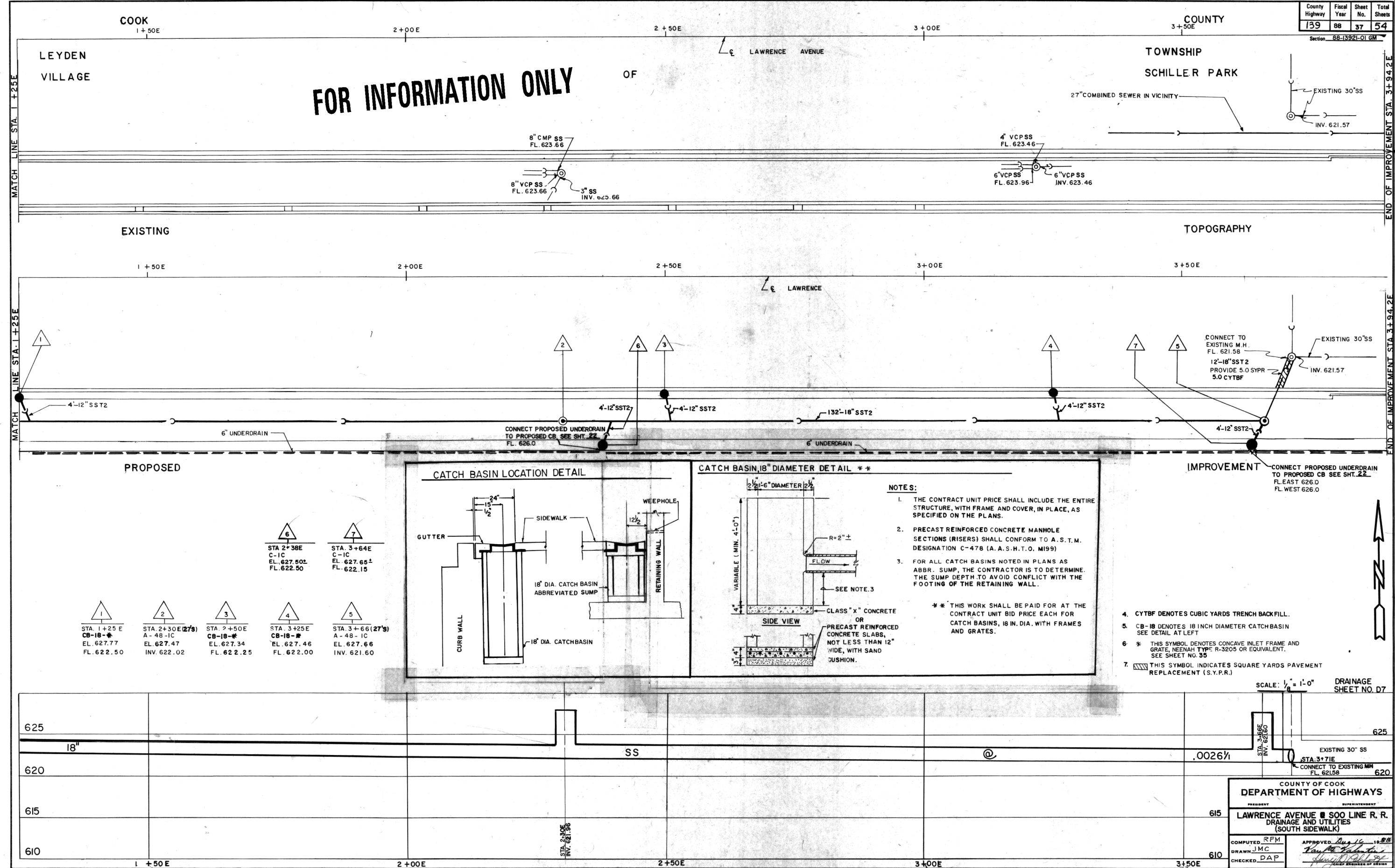
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL DETAILS  
LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)

SCALE: SHEET OF SHEETS STA. TO STA.

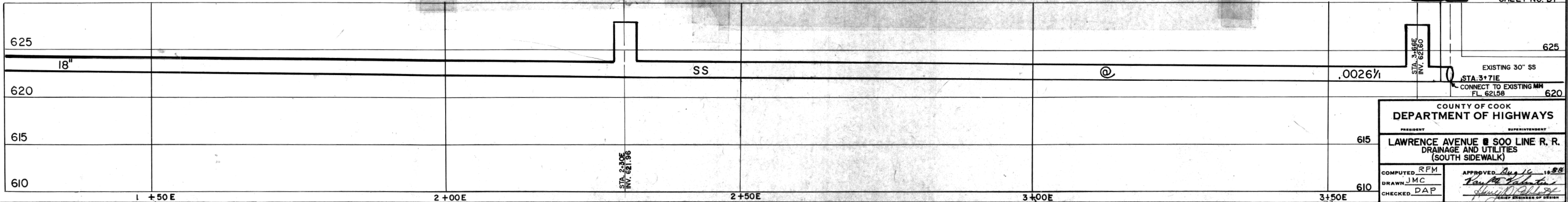
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	68
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY



- NOTES:**
1. THE CONTRACT UNIT PRICE SHALL INCLUDE THE ENTIRE STRUCTURE, WITH FRAME AND COVER, IN PLACE, AS SPECIFIED ON THE PLANS.
  2. PRECAST REINFORCED CONCRETE MANHOLE SECTIONS (RISERS) SHALL CONFORM TO A.S.T.M. DESIGNATION C-478 (A.A.S.H.T.O. M199)
  3. FOR ALL CATCH BASINS NOTED IN PLANS AS ABBR. SUMP, THE CONTRACTOR IS TO DETERMINE THE SUMP DEPTH TO AVOID CONFLICT WITH THE FOOTING OF THE RETAINING WALL.
- \*\*\* THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT BID PRICE EACH FOR CATCH BASINS, 18 IN. DIA. WITH FRAMES AND GRATES.

4. CYTBF DENOTES CUBIC YARDS TRENCH BACKFILL.
5. CB-18 DENOTES 18 INCH DIAMETER CATCH BASIN SEE DETAIL AT LEFT
6. \* THIS SYMBOL DENOTES CONCAVE INLET FRAME AND GRATE, NEENAH TYPE R-3205 OR EQUIVALENT. SEE SHEET NO. 35
7. THIS SYMBOL INDICATES SQUARE YARDS PAVEMENT REPLACEMENT (S.Y.P.R.)



COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

PRESIDENT: [Signature]  
SUPERINTENDENT: [Signature]

LAWRENCE AVENUE @ SOO LINE R. R.  
DRAINAGE AND UTILITIES  
(SOUTH SIDEWALK)

COMPUTED: RFM  
DRAWN: JMC  
CHECKED: DAP

APPROVED: [Signature]  
DATE: 8/16/18

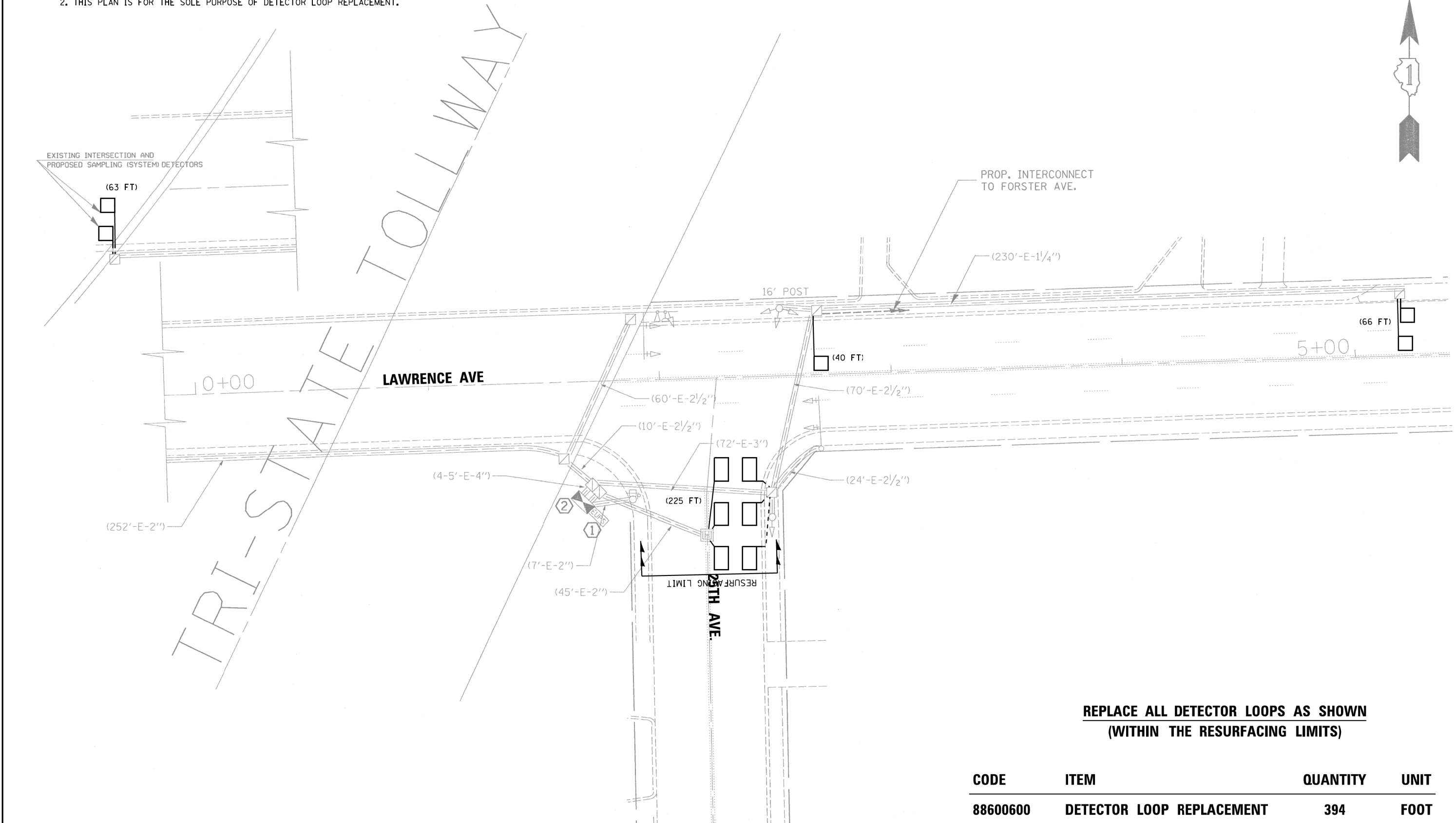
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DRAWN	-	REVISOR	-	REVISOR	-
PLOT SCALE	= 100.0000' / in.	CHECKED	-	REVISOR	-
PLOT DATE	= 1/30/2019	DATE	-	REVISOR	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		EXISTING STRUCTURAL DETAILS LAWRENCE AVE. (E. OF MANNHEIM RD. - ROSE ST.)		F.A.U. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.	
		SCALE: SHEET OF SHEETS STA. TO STA.		1362 3200R5&DR-5 COOK 85 69	
				ILLINOIS FED. AID PROJECT CONTRACT NO. 62G42	

MODEL: Default  
FILE NAME: g:\m\13921\01\13921-01\13921-01.dgn  
PROJECT: 13921-01  
OFFICE: District 1  
PROJECT: 13921-01  
DESIGN: 13921-01  
DATE: 1/30/2019

NOTES:

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.

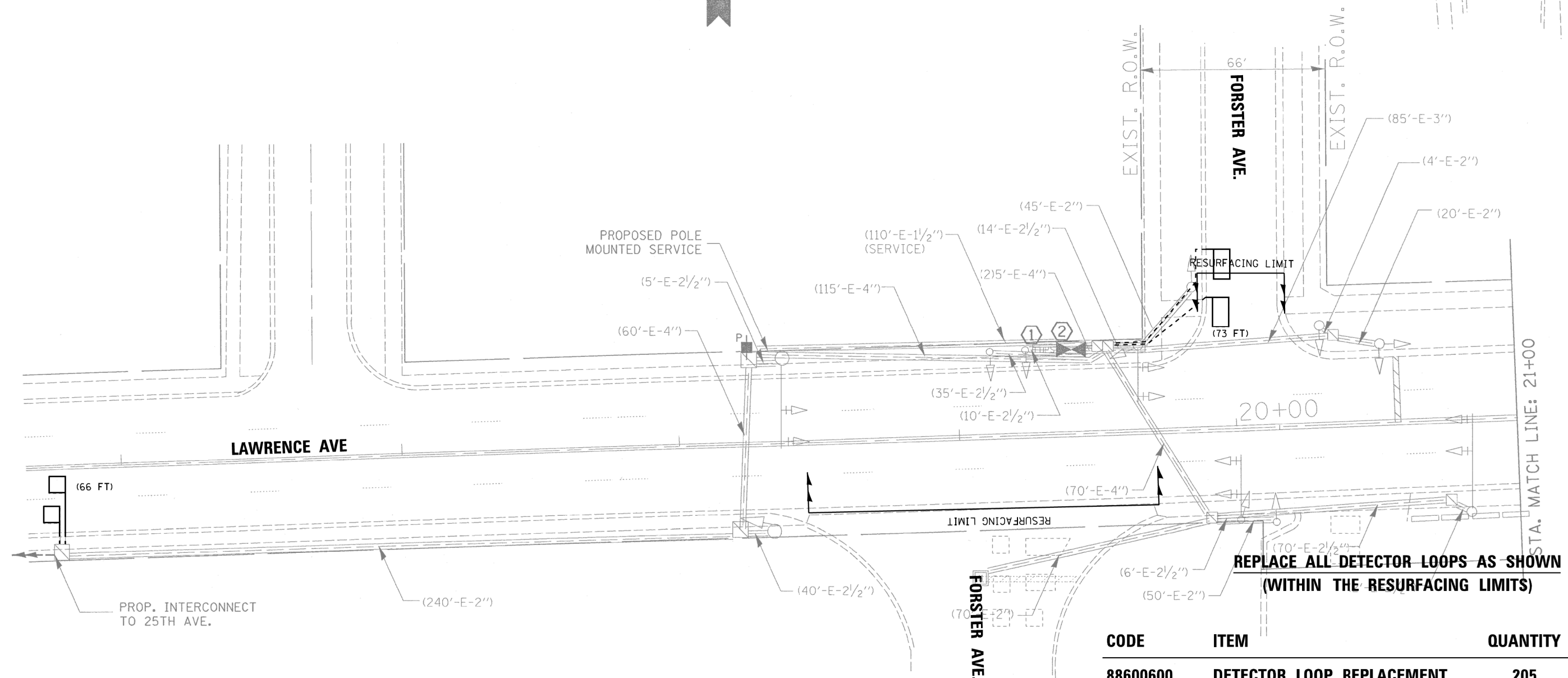
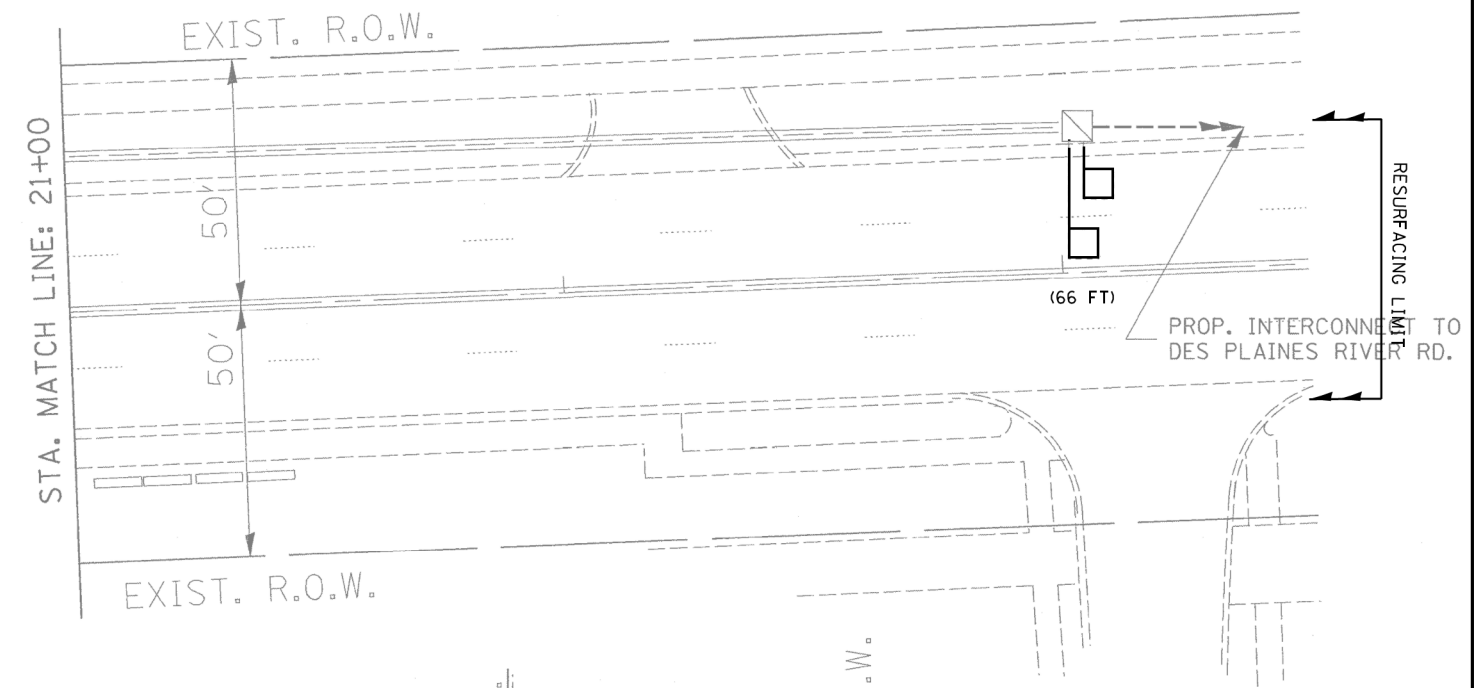


REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	394	FOOT

FILE NAME = 62G42 -Lawrence Ave. @ 25th Ave.dgn  Default	USER NAME = vargosa	DESIGNED - AV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN LAWRENCE AVE. AT 25TH AVE.				F.A.B. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AV	REVISED -						1362	3200RS&DR-5	Cook	85	70
	PLOT SCALE = 40.1205' / in.	CHECKED - LP	REVISED -						CONTRACT NO. 62G42				
	PLOT DATE = 10/16/2018	DATE - 09/17/2018	REVISED -						ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET	OF	SHEETS	STA.	TO STA.				

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.





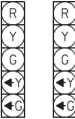
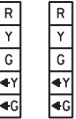




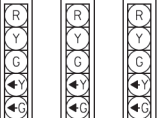
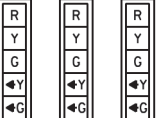





























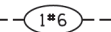



























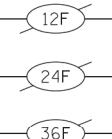
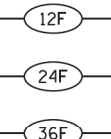




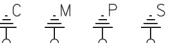













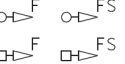
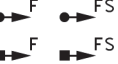






































CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	205	FOOT

FILE NAME =	USER NAME = vargasa	DESIGNED - AV	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN LAWRENCE AVE. AT FORSTER AVE.				F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
62042 -Lawrence Ave. @ Forster Avedgn		DRAWN - AV	REVISED -						1362	320ORS&DR-5	Cook	85	71
	PLOT SCALE = 40.0130' / 1"	CHECKED - LP	REVISED -		CONTRACT NO. 62G42								
Default	PLOT DATE = 12/4/2018	DATE - 09/17/2018	REVISED -										
				SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	[ILLINOIS] FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

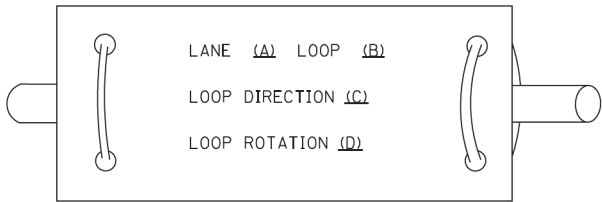
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	 P	 P
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	 P RB	 P RB
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	 G GM	 G GM	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		 BM	SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED	 F FS	 F FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	 APS	 APS	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					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

FILE NAME = ts05.dgn  Default	USER NAME = lcyss	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					1362	3200RS&DR-5	COOK	85	71A
	PLOT SCALE = 50,0000 ' / in.	CHECKED - LP	REVISED -					TS-05		CONTRACT NO. 62G42		
	PLOT DATE = 9/29/2016	DATE - 9/29/2016	REVISED -		SCALE: NONE	SHEET 1	OF 7 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT

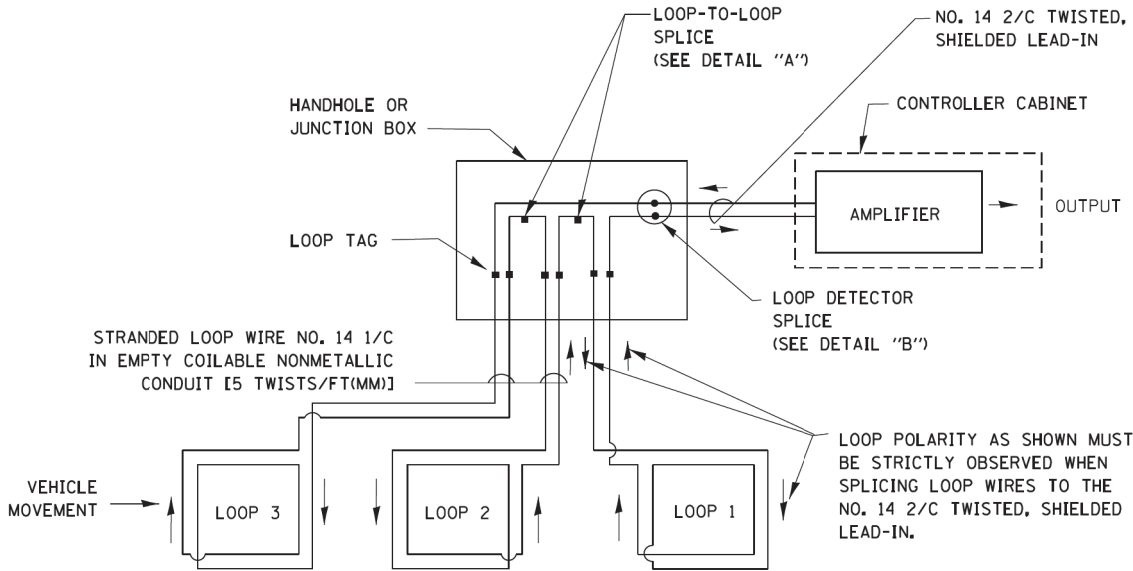
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

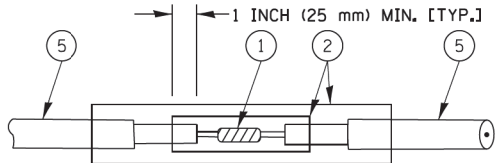


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

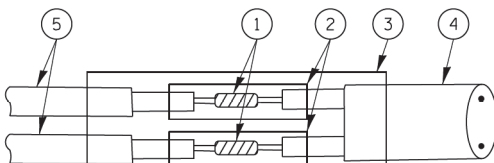


DETECTOR LOOP WIRING SCHEMATIC

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

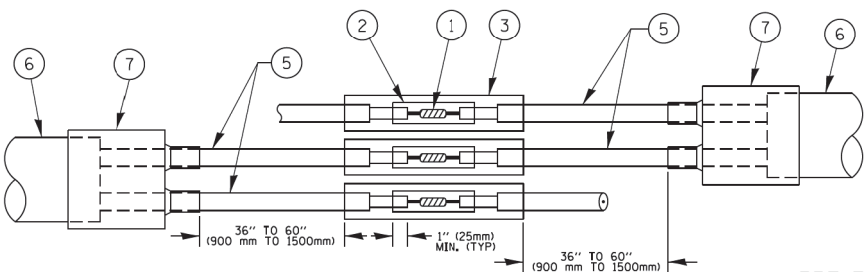


DETAIL "A"  
LOOP-TO-LOOP SPLICE

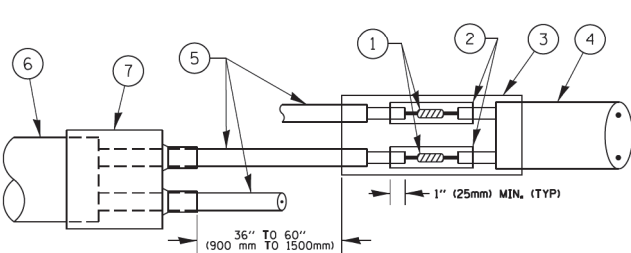


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

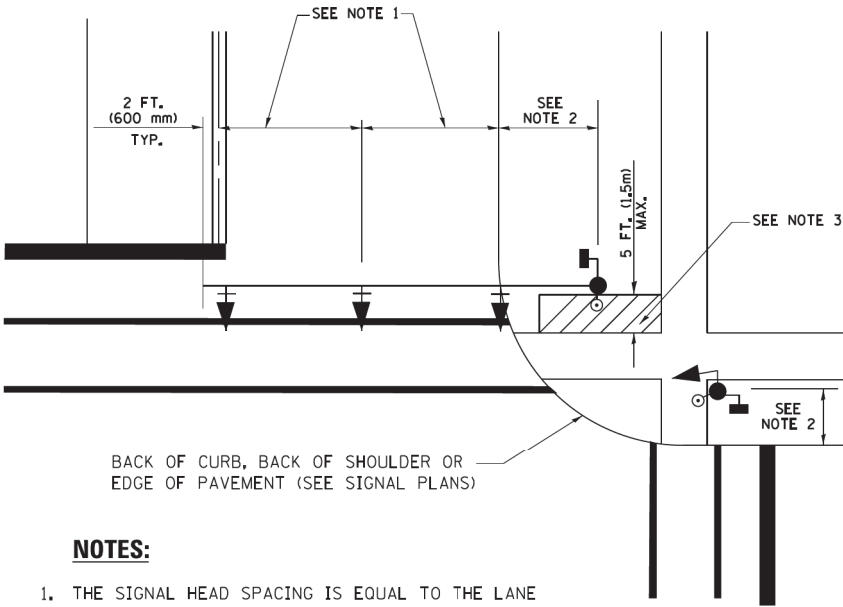
PRE-FORMED LOOP

LOOP DETECTOR SPLICE

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

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		DRAWN - BCK	REVISED -					1362	3200RS&DR-5	COOK	85	71B
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -		TS-05			CONTRACT NO. 62G42				
	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				

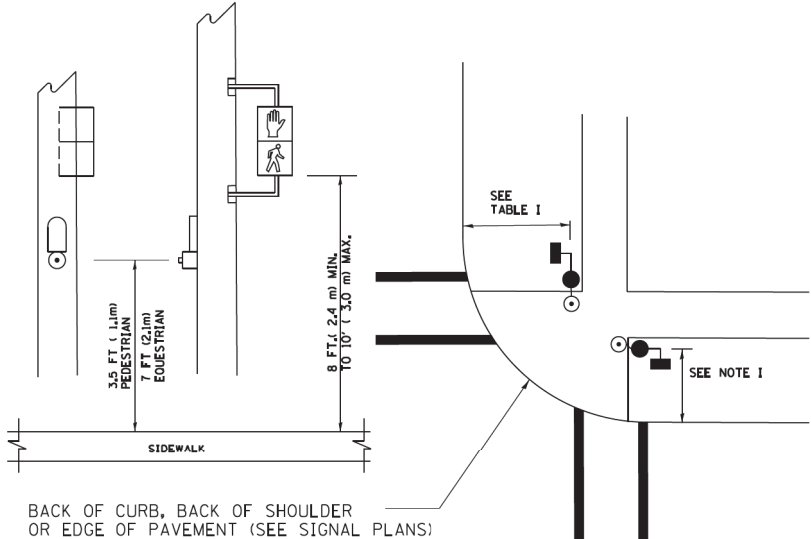
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

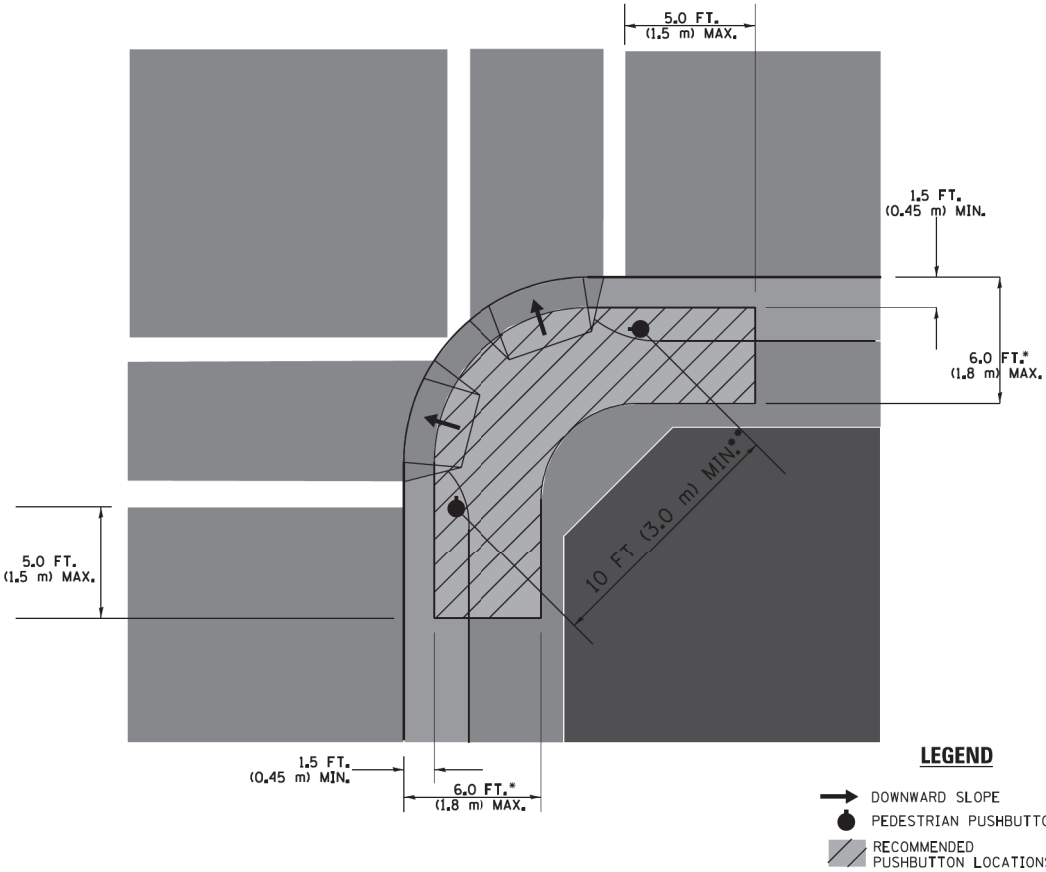
PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST



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."

RECOMMENDED PUSHBUTTON LOCATIONS



- 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.

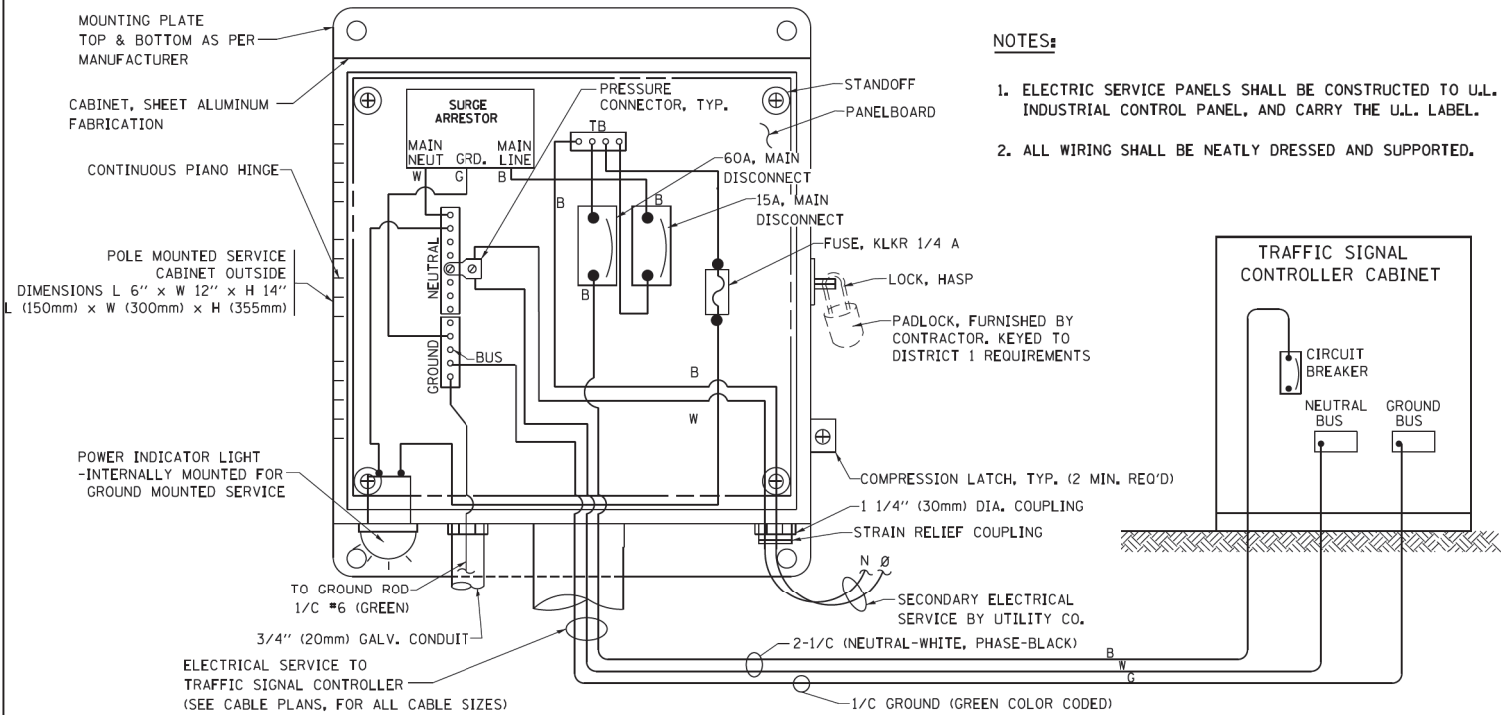
TRAFFIC SIGNAL EQUIPMENT OFFSET

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.

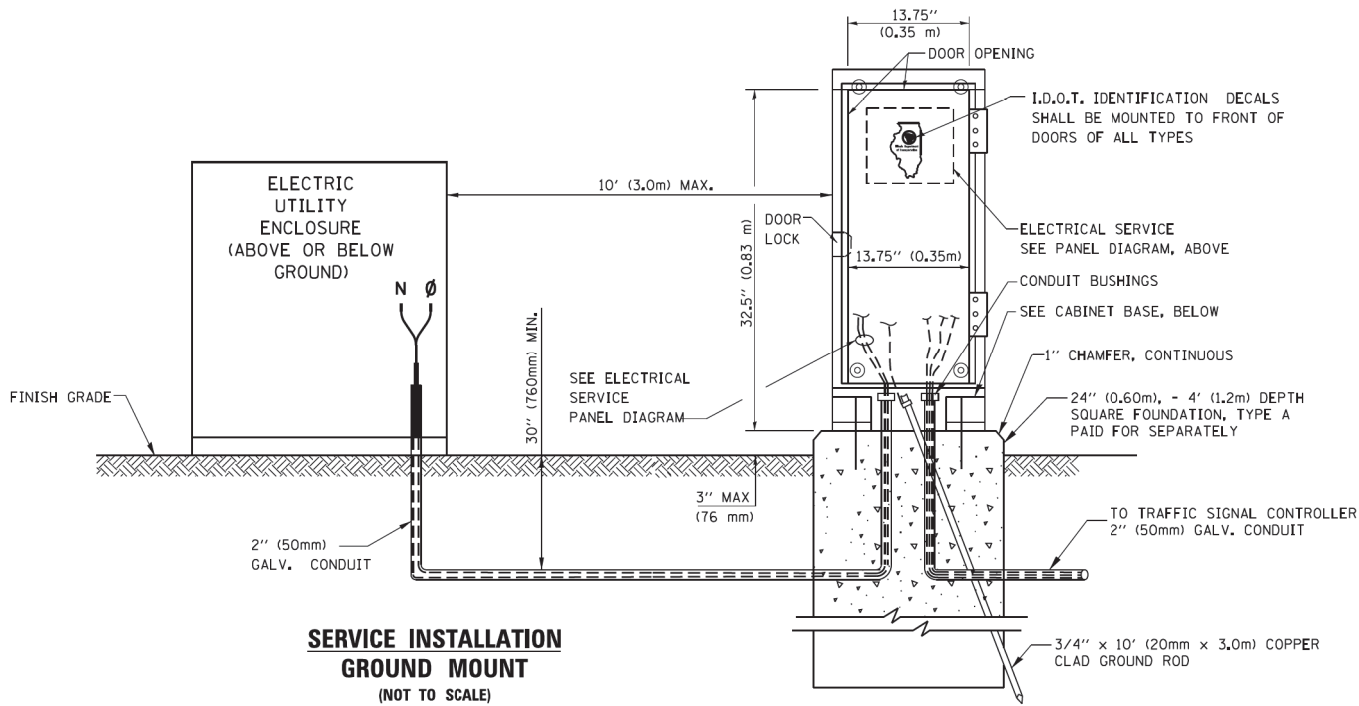
NOTES:

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 TOTHE 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 = c:\pwwork\pwwork\footemj\d0108315\ts05.dgn	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - BCK	REVISED -					1362	3200RS&DR-5	COOK	85	71C
	PLOT SCALE = 50.0000 ' / 1in.	CHECKED - DAD	REVISED -		SCALE: NONE			TS-05		CONTRACT NO. 62G42		
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SHEET NO. 3 OF 7 SHEETS			STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

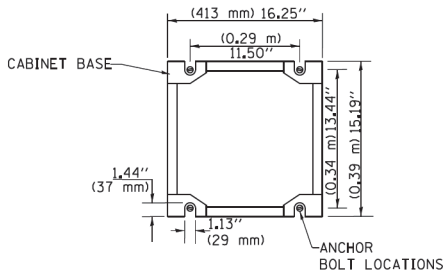


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
(NOT TO SCALE)



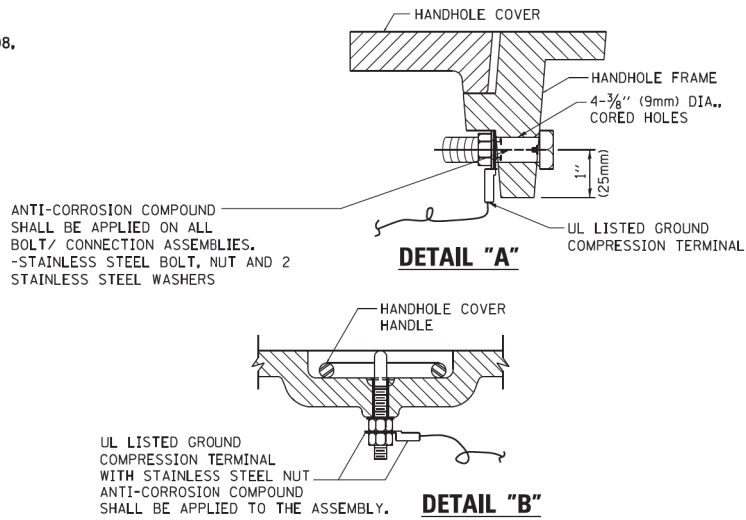
**SERVICE INSTALLATION GROUND MOUNT**  
(NOT TO SCALE)

**CABINET – BASE BOLT PATTERN**  
(NOT TO SCALE)

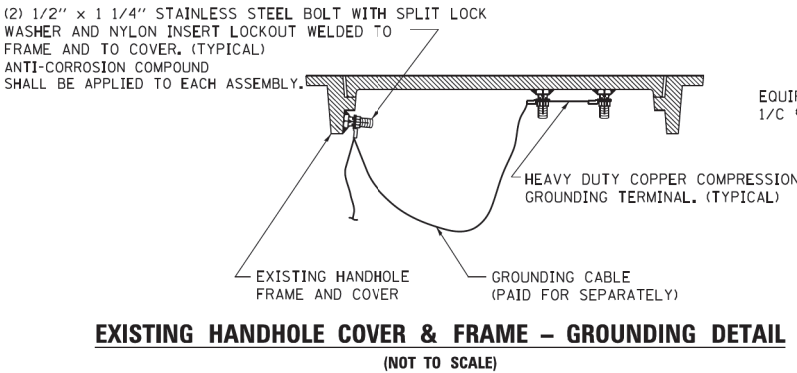


**NOTES:**

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



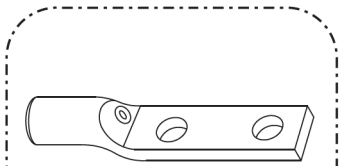
**HANDHOLE COVER & FRAME – GROUNDING DETAIL**  
(NOT TO SCALE)



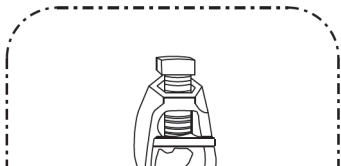
**EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL**  
(NOT TO SCALE)

**NOTES:**  
**GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



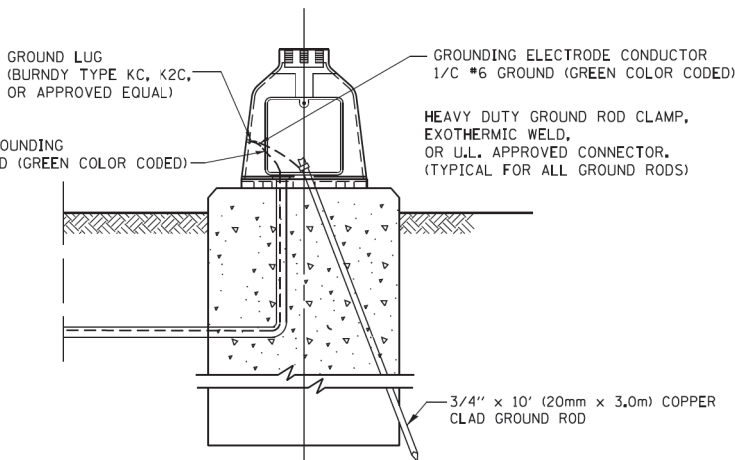
HEAVY-DUTY COMPRESSION TERMINAL  
(BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP  
(BURNDY TYPE GRC OR APPROVED EQUAL)

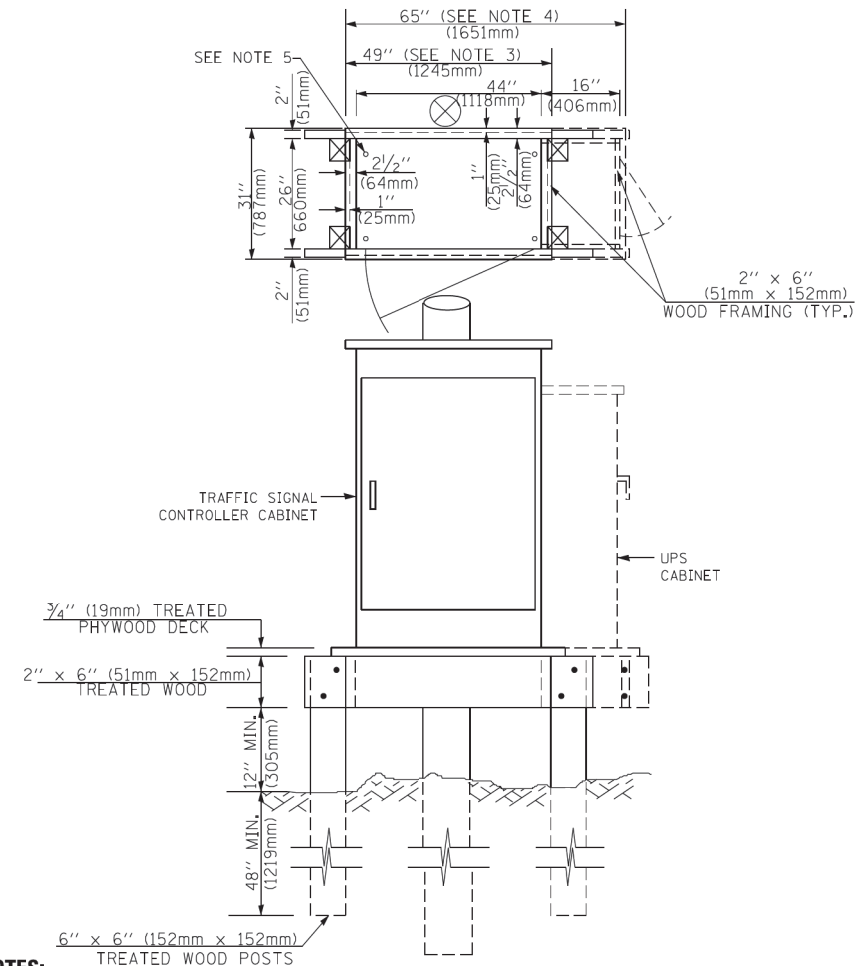
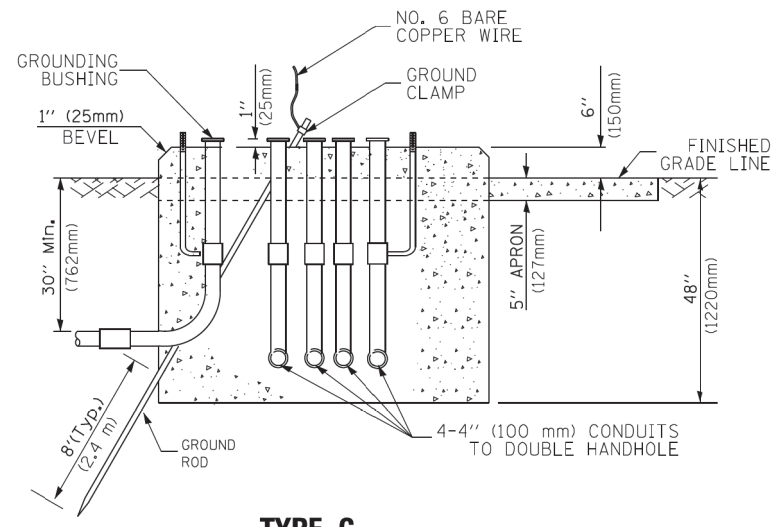
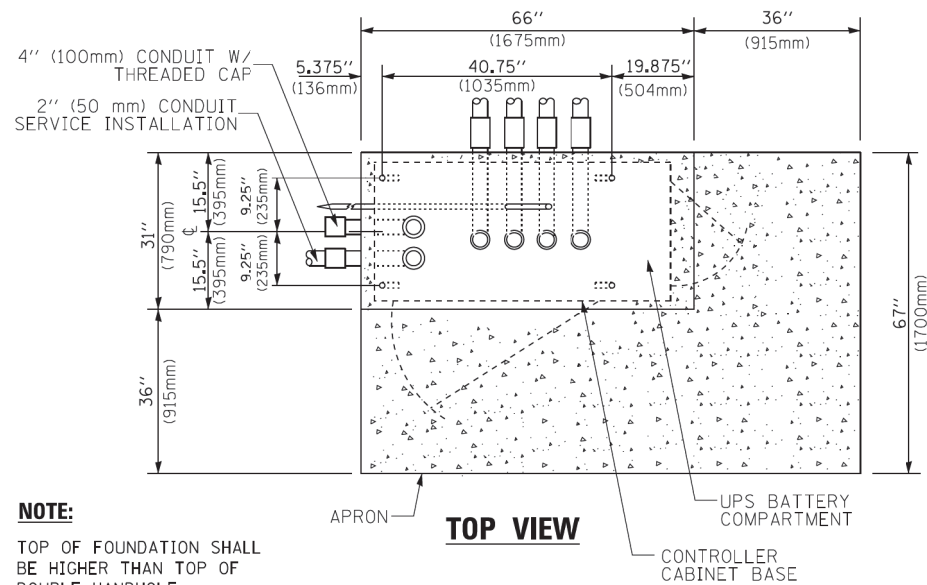
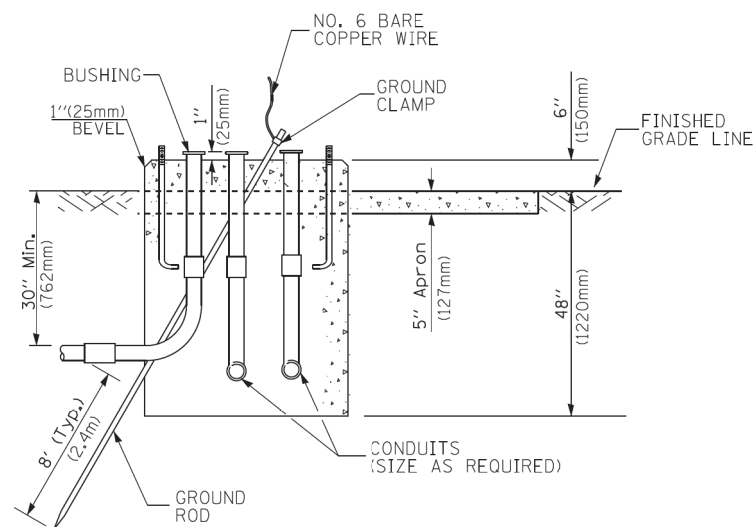
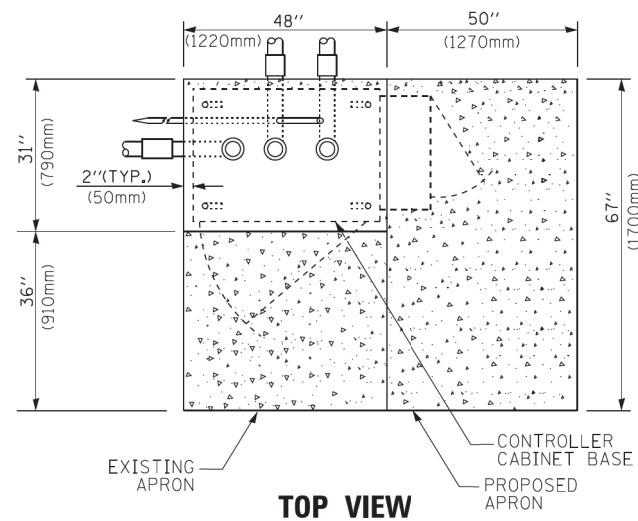
**NOTES:**

- 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 =  c:\pwwork\pwwid\footemj\d0108315\ts05.dgn	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.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -							TS-05				
	PLOT DATE = 1/13/2014	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.				



- 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..

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

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

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)

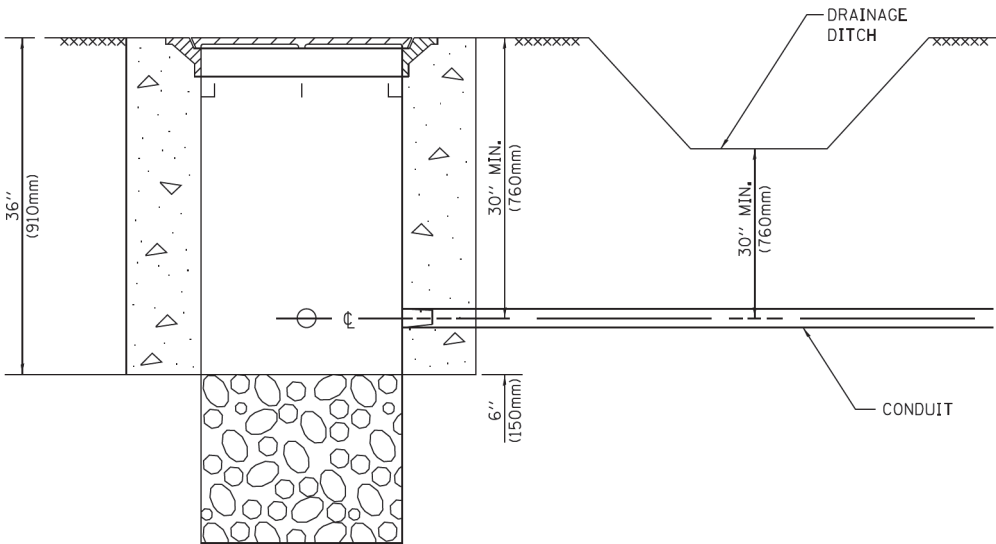
Most Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	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 average Unconfined Compressive Strength (Qu) > 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..

### CABLE SLACK

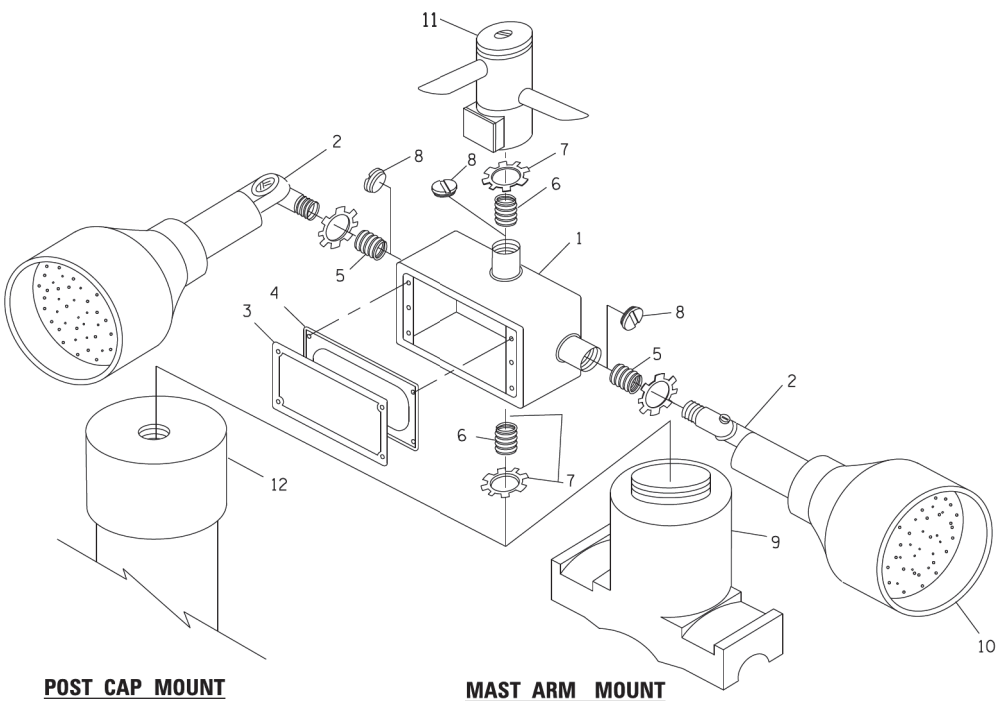
FILE NAME =  c:\pw\work\pwidot\footemj\dl0108315\ts05.dgn	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - BCK	REVISED -						1362	3200R5&DR-5	COOK	85	71E
	PLOT SCALE = 50.0000' / in.	CHECKED - DAD	REVISED -		TS-05					CONTRACT NO.	62G42		
	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.

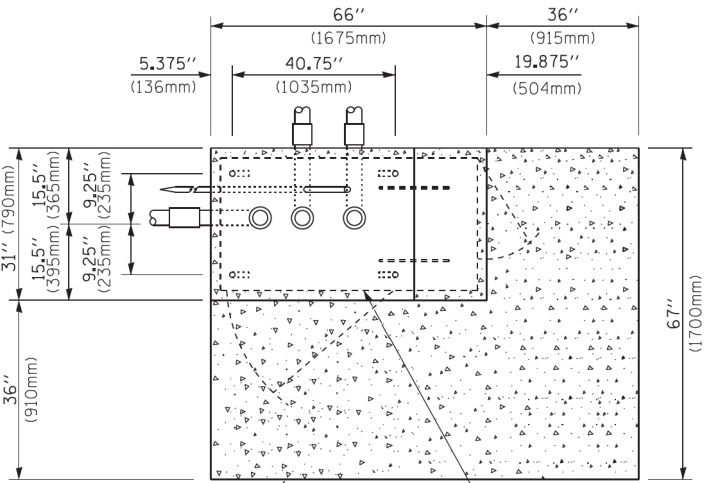
HANDHOLE WITH MINIMUM CONDUIT DEPTH  
(NOT TO SCALE)



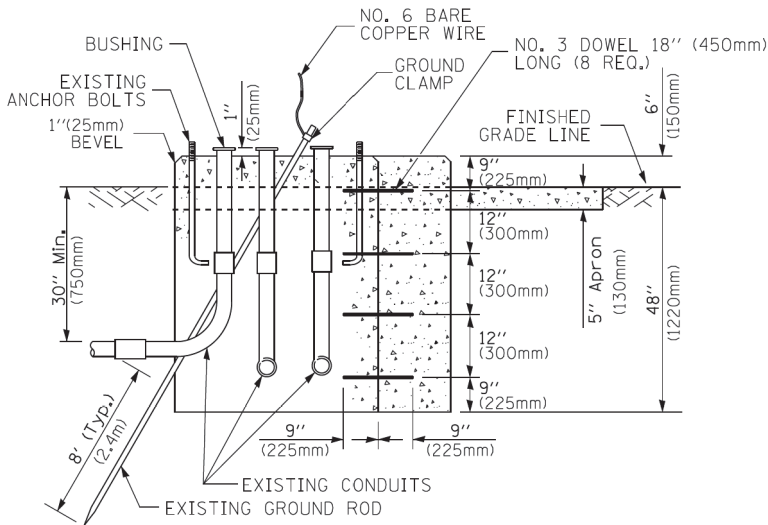
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW  
(NOT TO SCALE)

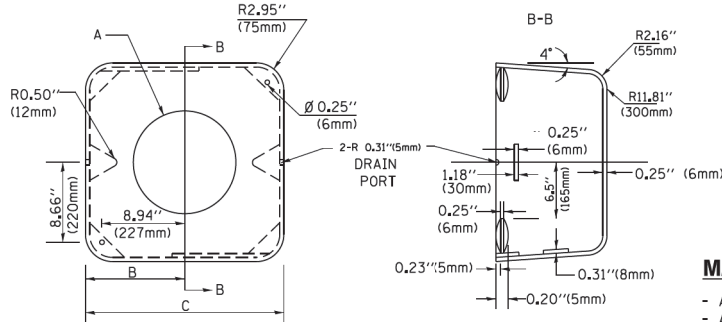


MODIFY EXISTING TYPE "D" FOUNDATION  
TO TYPE "C" FOUNDATION  
(NOT TO SCALE)

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)

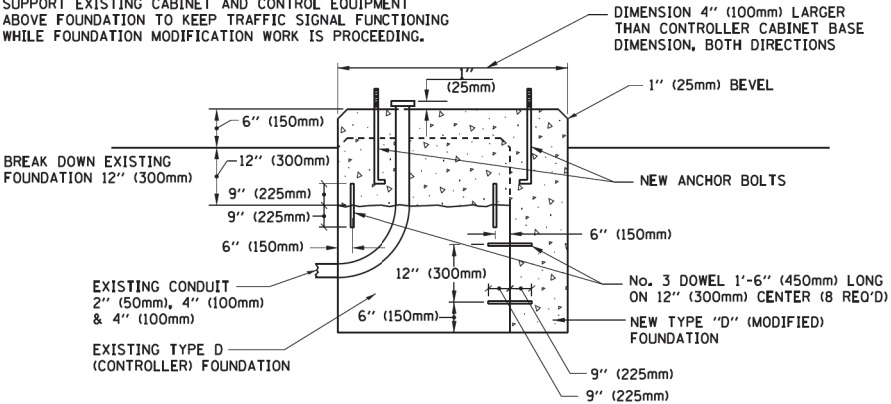
SHROUD

NOTES:

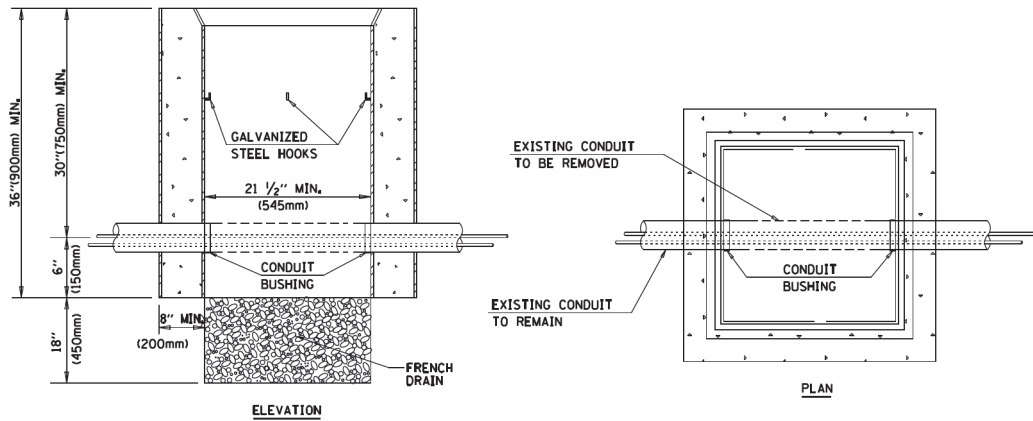
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

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

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pwwork\pwwork\footemj\00108315\ts05.dgn		DRAWN - BCK	REVISED -		STANDARD TRAFFIC SIGNAL DESIGN DETAILS			1362	3200RS&DR-5	COOK	85	71F
		CHECKED - DAD	REVISED -					TS-05		CONTRACT NO. 62G42		
		DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 6 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

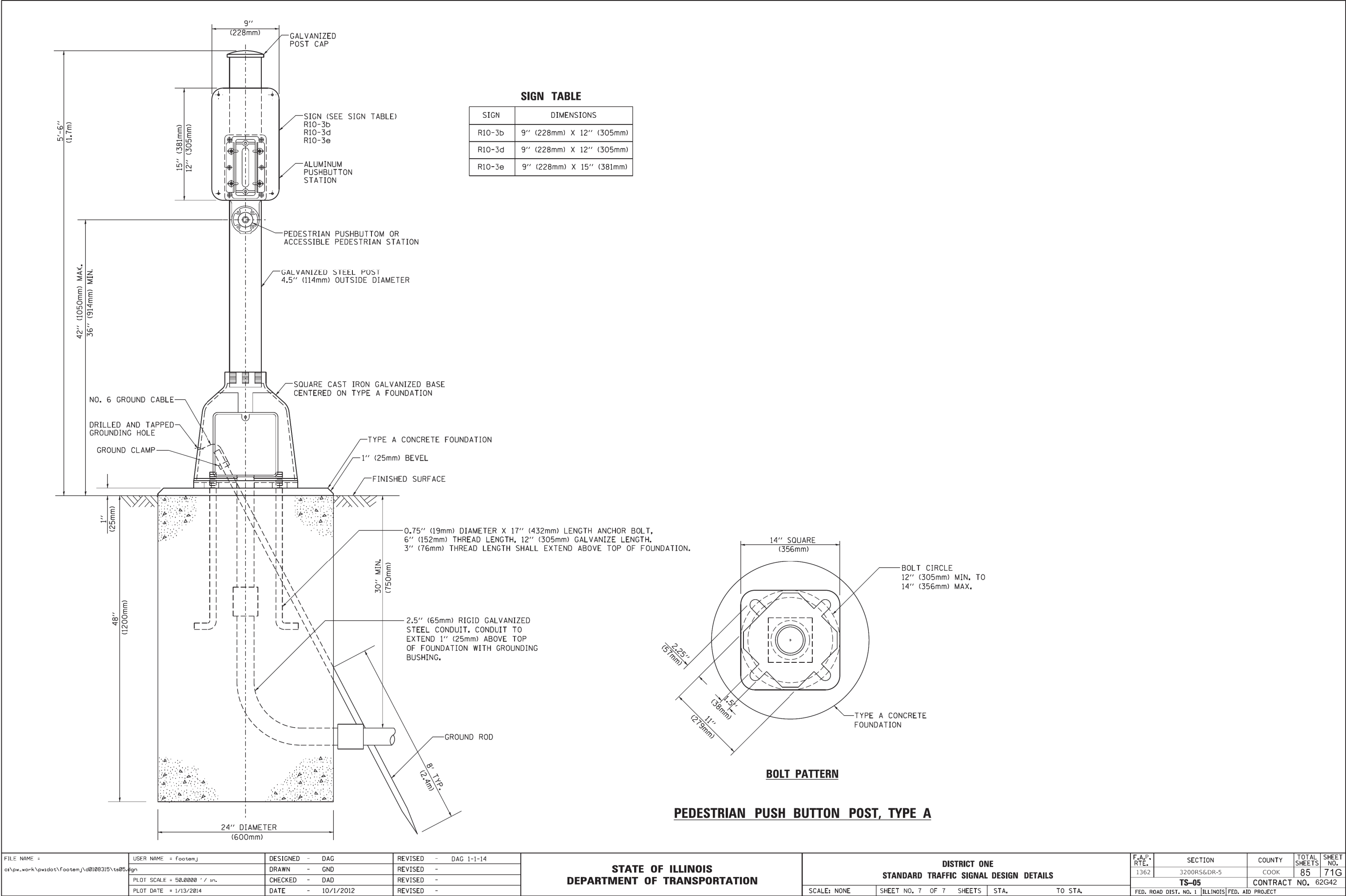
SIGN TABLE

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

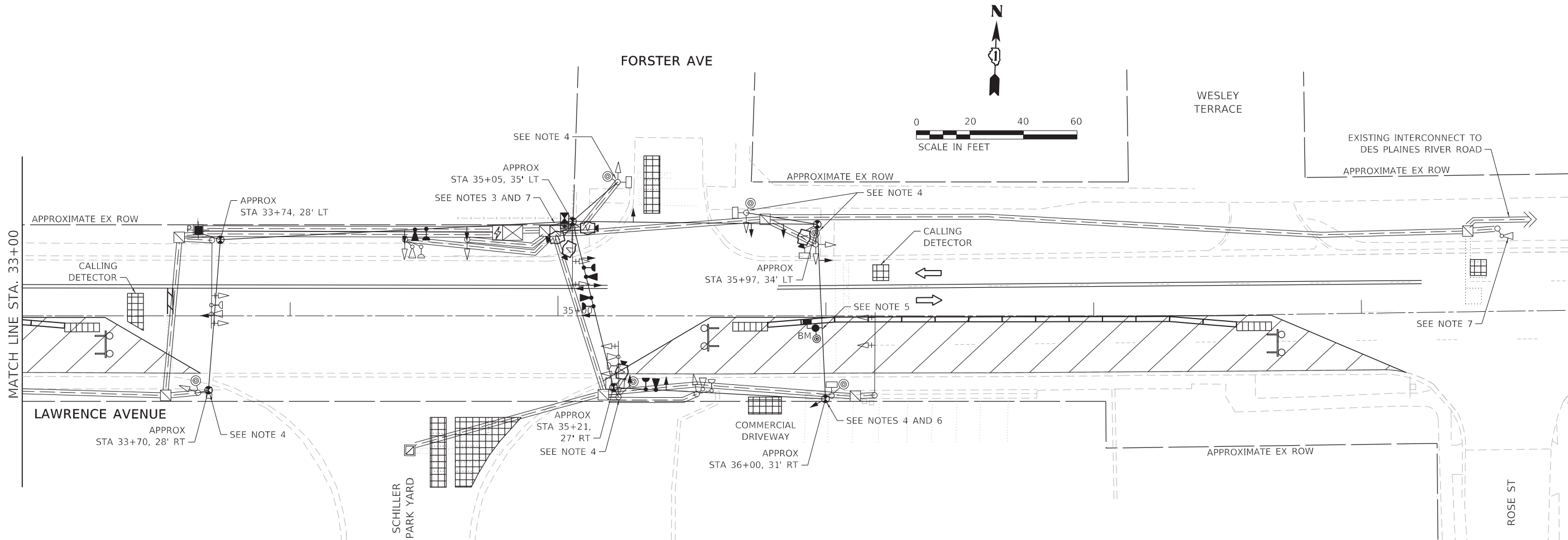
BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

TS SHT NO. 7

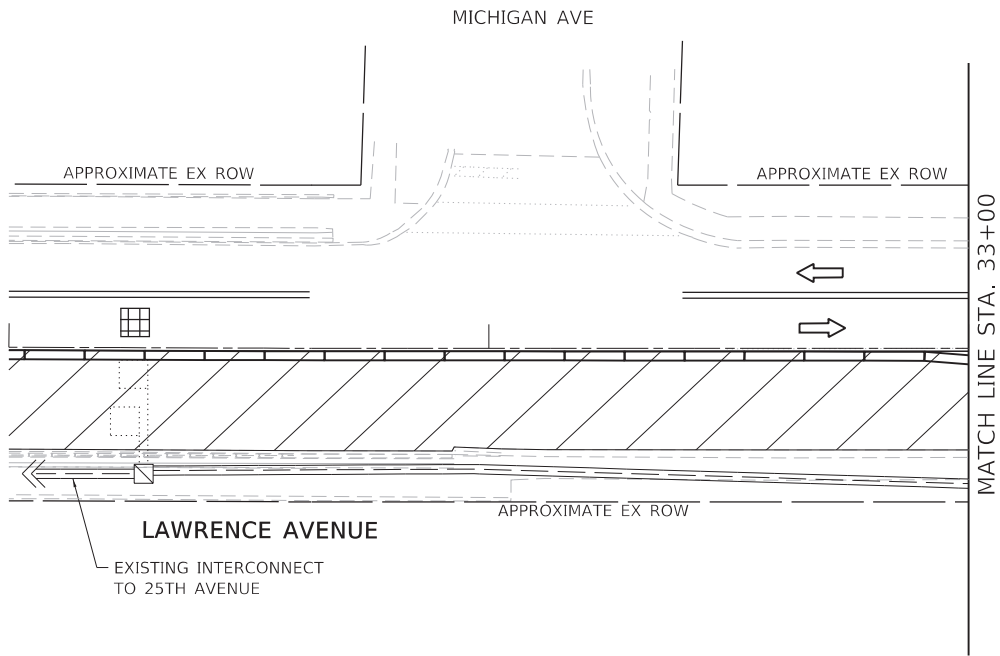


FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	<div>STATE OF ILLINOIS</div> <div>DEPARTMENT OF TRANSPORTATION</div>	<div>DISTRICT ONE</div> <div>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</div>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct\pwork\pwork\footemj\00108315\ts05.dgn	DRAWN - GND	REVISED -	1362					3200RS&DR-5	COOK	85	71G	
	PLOT SCALE = 50.0000' / 1 in.	CHECKED - DAD	REVISED -		TS-05		CONTRACT NO. 62G42					
	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -									
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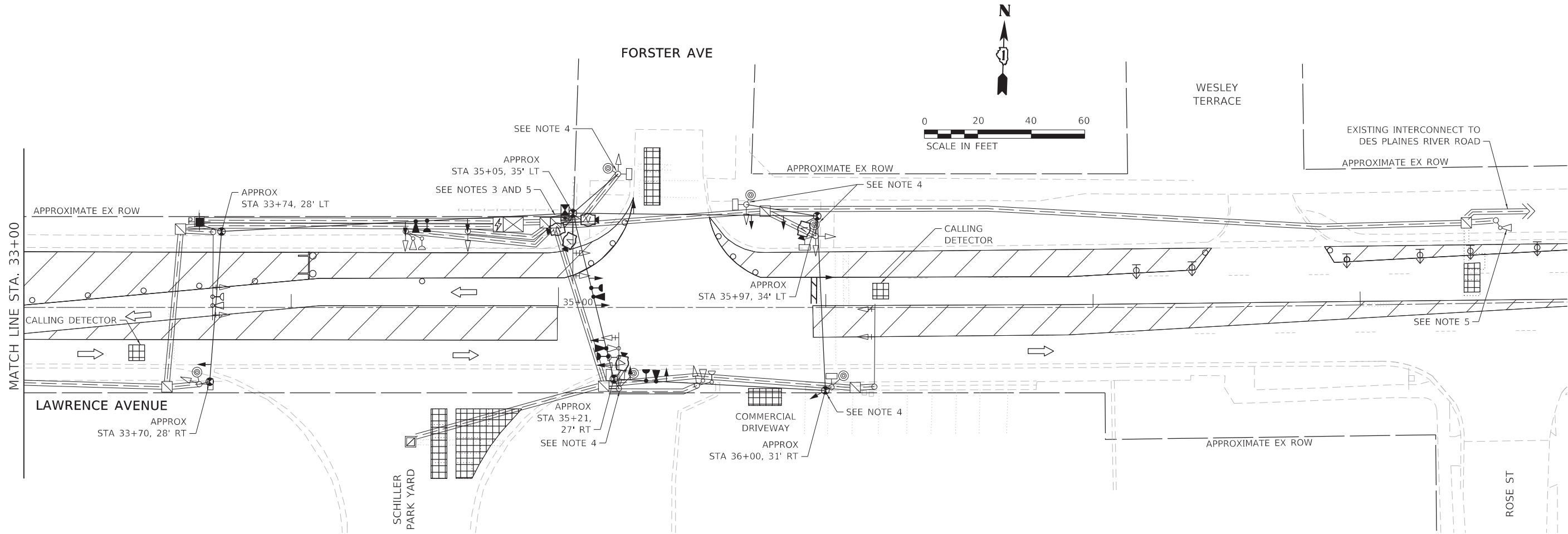


NOTES

1. THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL NOT BE OPERATED WITHOUT THE MOT STAGING SHOWN IN PLACE. THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL ONLY BE IN OPERATION CONCURRENT WITH THE MOT STAGING SHOWN AND IN PLACE. THE CONTRACTOR SHALL COORDINATE ALTERNATE TEMPORARY TRAFFIC SIGNAL INSTALLATION CONFIGURATIONS WITH THE ENGINEER FOR ANY DEVIATIONS TO THE MOT AS SHOWN, OBTAINING ENGINEER'S APPROVAL PRIOR TO IMPLEMENTING MOT DEVIATIONS OR ALTERNATE TEMPORARY TRAFFIC SIGNAL INSTALLATION CONFIGURATIONS. ALL CONFIGURATIONS OF TEMPORARY TRAFFIC SIGNAL INSTALLATION, INCLUDING COMPLETE RESTORATION OF EXISTING CONDITIONS IMPACTED BY THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
2. THE CONTRACTOR SHALL REMOVE, STORE, AND REINSTALL ANY EXISTING TRAFFIC SIGNAL EQUIPMENT IN ACCORDANCE WITH THE ENGINEER. EQUIPMENT DAMAGED DURING THE REMOVAL, STORAGE, OR REINSTALLATION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT. THE REMOVAL, STORAGE, AND REINSTALLATION OF EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMAINING IN PLACE DURING TEMPORARY TRAFFIC SIGNAL OPERATIONS SHALL BE BAGGED, DE-ENERGIZED, AND MADE INOPERABLE FOR THE DURATION OF THE TEMPORARY TRAFFIC SIGNAL OPERATIONS, AS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR SHALL INSTALL UNIT DUCT BETWEEN THE TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET AND EXISTING DOUBLE HANDHOLE. THE CONTRACTOR SHALL DISCONNECT THE EXISTING FIBER OPTIC INTERCONNECT FROM THE EXISTING CONTROLLER CABINET, REMOVE THE FIBER OPTIC CABLE TO THE DOUBLE HANDHOLE, INSTALL THE FIBER OPTIC CABLE TO THE TEMPORARY TRAFFIC SIGNAL CONTROL CABINET, AND RE-TERMINATE THE FIBER OPTIC CABLE FOR CONTINUED OPERATION OF THE INTERCONNECT IN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL REQUIRED EQUIPMENT FOR OPERATING THE EXISTING INTERCONNECT IN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE PROVIDED BY THE CONTRACTOR. UPON DEACTIVATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE CONTRACTOR SHALL RESTORE THE EXISTING INTERCONNECT CABLE CONNECTION INTO THE EXISTING TRAFFIC SIGNAL CABINET. ALL WORK REQUIRED TO COMPLY WITH MODIFYING, MAINTAINING, AND OPERATING THE EXISTING FIBER OPTIC CABLE INTERCONNECT TO THE SATISFACTION OF THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
4. THE CONTRACTOR SHALL INSTALL AERIAL CABLE BETWEEN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND THE EXISTING TRAFFIC SIGNAL SUPPORT VIA THE POLE CAP, TO OPERATE THE EXISTING PEDESTRIAN EQUIPMENT AS SHOWN ON THE PLANS. THE MANNER OF AERIAL CABLE INSTALLATION, SUPPORT, AND CONNECTION TO THE EXISTING EQUIPMENT SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL FULLY RESTORE THE EXISTING TRAFFIC SIGNAL SUPPORT AND WIRING TO THE EXISTING PEDESTRIAN EQUIPMENT, WHICH SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
5. A BARREL MOUNT TRAFFIC SIGNAL POST SHALL BE PROVIDED AS PART OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR OPERATING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON BEHIND THE PROPOSED TEMPORARY CONCRETE BARRIER AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL INSTALL AERIAL CABLE BETWEEN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND THE BARREL MOUNT POST. THE MANNER OF AERIAL CABLE INSTALLATION, SUPPORT, AND CONNECTION TO THE BARREL MOUNT POST SHALL BE APPROVED BY THE ENGINEER.
6. THE PEDESTRIAN EQUIPMENT ADJACENT TO THE COMMERCIAL DRIVEWAY SHALL BE OPERATED AS PART OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION IN LIEU OF THE BARREL MOUNT POST AND PEDESTRIAN EQUIPMENT IN ACCORDANCE WITH THE ENGINEER.
7. THE CONTRACTOR SHALL DISCONNECT THE EXISTING EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE FROM THE EXISTING CONTROLLER CABINET, REMOVE THE EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE TO THE DOUBLE HANDHOLE, INSTALL THE EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE TO THE TEMPORARY TRAFFIC SIGNAL CONTROL CABINET, AND RE-TERMINATE THE EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE FOR CONTINUED OPERATION OF THE EXISTING EMERGENCY VEHICLE PREEMPTION DETECTOR NEAR ROSE STREET AS PART OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL REQUIRED EQUIPMENT FOR OPERATING THE EXISTING EMERGENCY VEHICLE PREEMPTION DETECTOR NEAR ROSE STREET AS PART OF TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL BE PROVIDED BY THE CONTRACTOR. UPON DEACTIVATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE CONTRACTOR SHALL RESTORE THE EXISTING EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE CONNECTION AND EQUIPMENT OPERATION INTO THE EXISTING TRAFFIC SIGNAL CABINET. ALL WORK REQUIRED TO COMPLY WITH MAINTAINING AND OPERATING THE EXISTING EMERGENCY VEHICLE PREEMPTION DETECTOR SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
8. ALL WOOD POLE LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL USE EXTREME CAUTION AND EXPOSE ADJACENT UTILITIES IN ACCORDANCE WITH THE ENGINEER FOR CLOSE PROXIMITY TO EXISTING UTILITIES AND TRAFFIC SIGNAL EQUIPMENT. CONTRACTOR SHALL CLOSELY COORDINATE WOOD POLE INSTALLATION WITH UTILITIES AND PROVIDE ANY REQUIRED PROTECTION REQUIRED BY THE UTILITY. HAND EXCAVATION, OVER EXCAVATION, AND UTILITY PROTECTION SHALL BE IN ACCORDANCE WITH THE ENGINEER AND INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

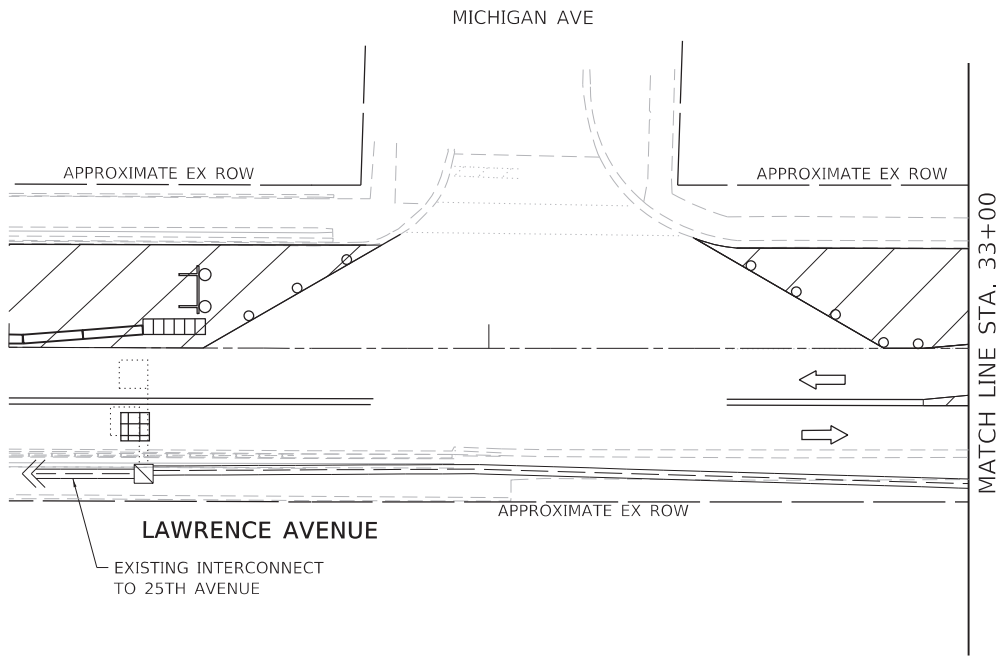


FILE NAME: D129918-sht-ts-signalplan-01.dgn	USER NAME = sjohnson	DESIGNED - BKS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN - STAGE 1 MOT LAWRENCE AVENUE AT FORSTER AVENUE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - SVJ	REVISED -					1362	3200RS&DR-5	COOK	85	71H
	PLOT SCALE = 40,0000 ' / in.	CHECKED - BKS	REVISED -		CONTRACT NO. 62G42			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 7/23/2019	DATE - 7/23/2019	REVISED -									
SCALE: 1"=20'		SHEET OF SHEETS		STA. TO STA.								



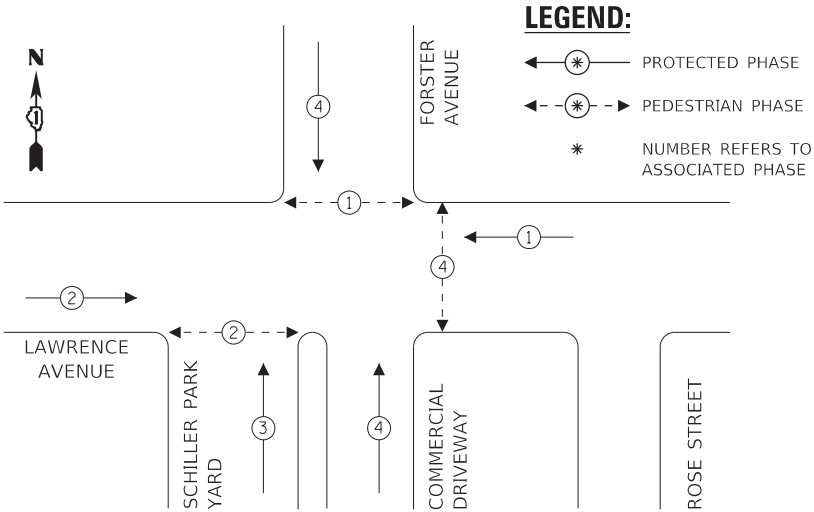
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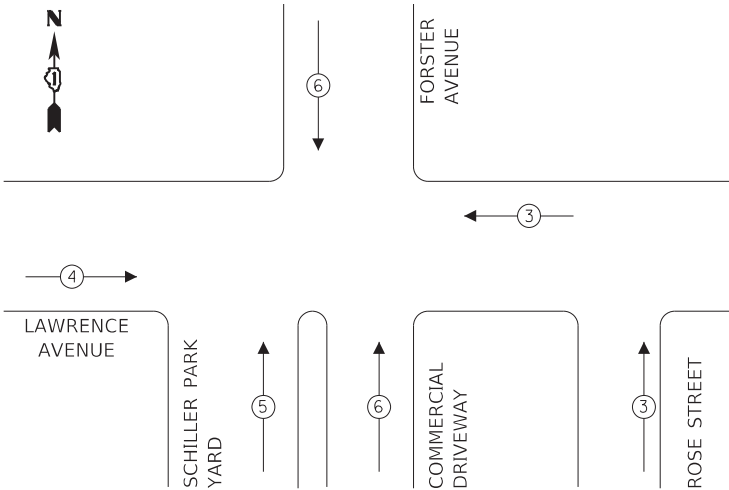


FILE NAME: D129918-sht-ts-signalplan-02.dgn	USER NAME = sjohnson	DESIGNED - BKS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN - STAGE 2 MOT LAWRENCE AVENUE AT FORSTER AVENUE			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - SVJ	REVISED -					1362	3200RS&DR-5	COOK	85	711
	PLOT SCALE = 40,0000 ' / in.	CHECKED - BKS	REVISED -					CONTRACT NO. 62G42				
	PLOT DATE = 7/23/2019	DATE - 7/23/2019	REVISED -					ILLINOIS FED. AID PROJECT				
				SCALE: 1"=20'		SHEET	OF	SHEETS	STA.	TO STA.		

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY EMERGENCY VEHICLE  
PREEMPTION SEQUENCE



TRAFFIC SIGNAL  
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77.0
(YELLOW)	14	20	5	14.0
(GREEN)	18	12	45	97.2
PERMISSIVE ARROW	-	10	10	16.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	-	-	-
FLASHER	-	-	-	-
STREET NAME SIGN	-	-	-	-
LUMINAIRE	-	-	-	-
TOTAL =				599.2

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAY / DISTRICT 1  
201 WEST CENTER COURT / SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: XXXXXX  
PHONE: (XXX) XXX-XXXX  
COMPANY: COMED  
ACCOUNT NUMBER: ---

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	3

DESIGNED - BKS	REVISED -
DRAWN - SVJ	REVISED -
CHECKED - BKS	REVISED -
DATE - 7/23/2019	REVISED -

NOTES

- EXISTING PEDESTRIAN EQUIPMENT SHALL BE CONNECTED TO THE TEMPORARY TRAFFIC SIGNAL CONTROLLER USING TEMPORARY AERIAL CABLES. CABLE CONNECTIONS BETWEEN THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND THE EXISTING TRAFFIC SIGNAL SUPPORTS SHALL BE AS SHOWN ON THE PLANS AND APPROVED BY THE ENGINEER.
- THE TEMPORARY PEDESTRIAN EQUIPMENT INSTALLED ON THE BARREL MOUNT POST SHALL ONLY BE OPERATED DURING MOT STAGE 1 OR AS APPROVED BY THE ENGINEER. UPON COMPLETION OF MOT STAGE 1 THE BARREL MOUNT POST AND TEMPORARY PEDESTRIAN EQUIPMENT SHALL BE DISCONNECTED AND REMOVED.
- THE EXISTING PEDESTRIAN EQUIPMENT ADJACENT TO THE COMMERCIAL DRIVE SHALL BE CONNECTED TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION UPON REMOVAL OF THE BARREL MOUNT POST OR AS DIRECTED BY THE ENGINEER.
- THE EXISTING EMERGENCY VEHICLE PREEMPTION DETECTOR CABLE (FAR DETECTOR NEAR ROSE STREET) AND FIBER OPTIC CABLES SHALL BE CONNECTED TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

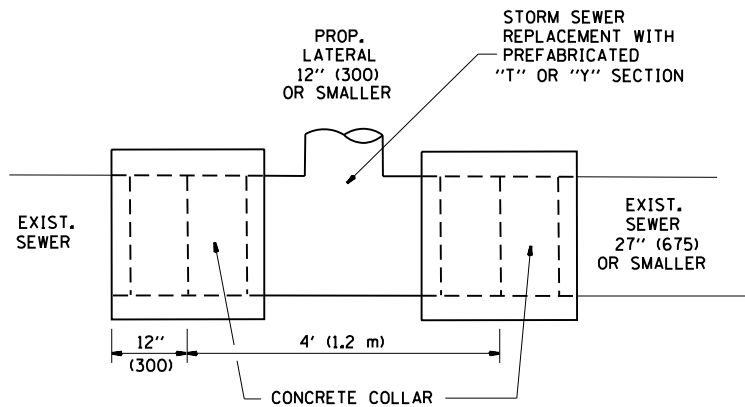
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM,  
TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE, & SCHEDULE OF QUANTITIES  
LAWRENCE AVENUE AT FORSTER AVENUE

SCALE: SHEET OF SHEETS STA. TO STA.

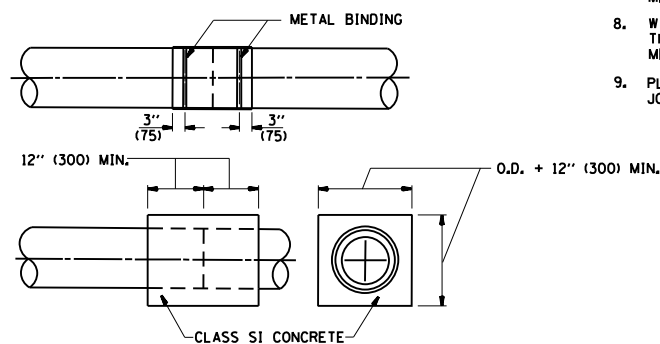
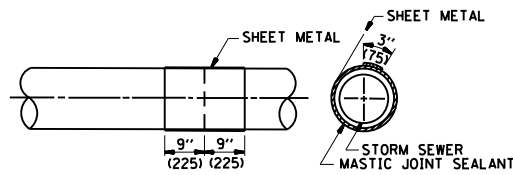
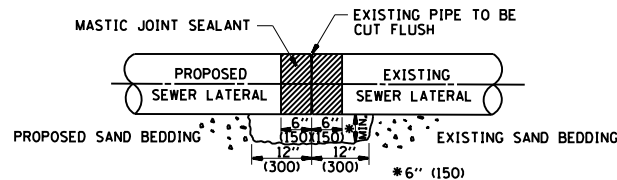
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200R5&DR-5	COOK	85	71J
CONTRACT NO. 62G42				
ILLINOIS FED. AID PROJECT				

TS 5440  
EAGLE 60



**DETAIL "A"**

LATERAL CONNECTION TO EXISTING SEWER  
OF 27" (675) OR SMALLER



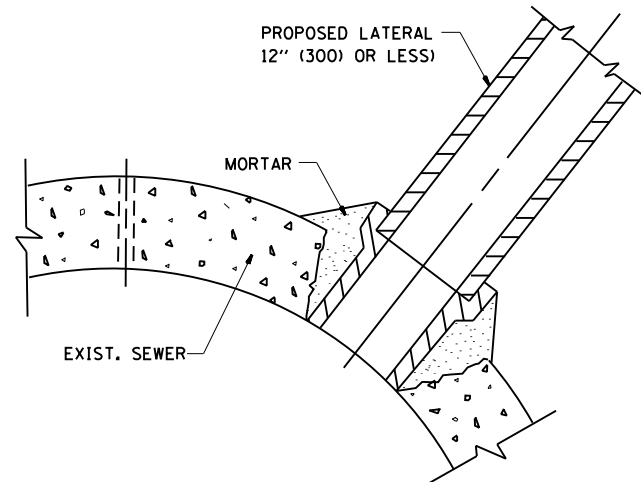
**DETAIL "B"**

CLASS SI CONCRETE COLLAR

**CONSTRUCTION SEQUENCE**

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

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



**DETAIL "C"**

PROPOSED LATERAL  
CONNECTION TO EXISTING SEWER  
OF 30" (750) OR LARGER

**NOTES**

**MATERIAL**

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

**CONSTRUCTION METHODS**

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

**GENERAL**

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

**BASIS OF PAYMENT**

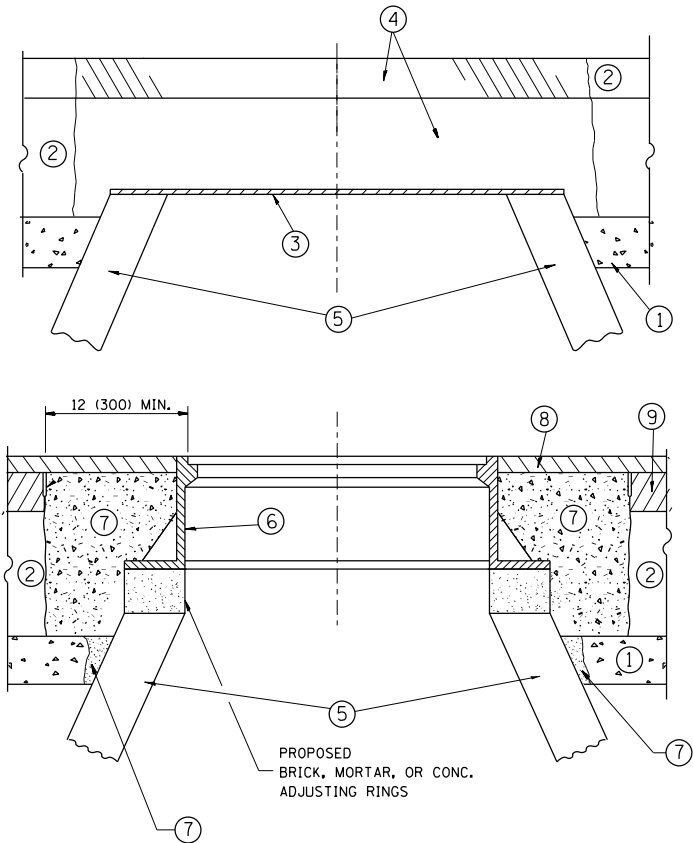
TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

FILE NAME =	USER NAME = paraynoal	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\w\planroom.dot\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\0129918\DRAWING\Design\DistStd.dgn		CHECKED -	REVISED - R. SHAH 09-09-94						1362	3200RS&DR-5	COOK	85	71K
	PLOT SCALE = 100.0000' / 1in.	DATE - 07-25-90	REVISED - R. SHAH 10-25-94		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.			BD500-01 (BD-7)		CONTRACT NO. 62G42			
	PLOT DATE = 7/25/2019		REVISED - R. SHAH 06-12-96					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



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.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS 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)."

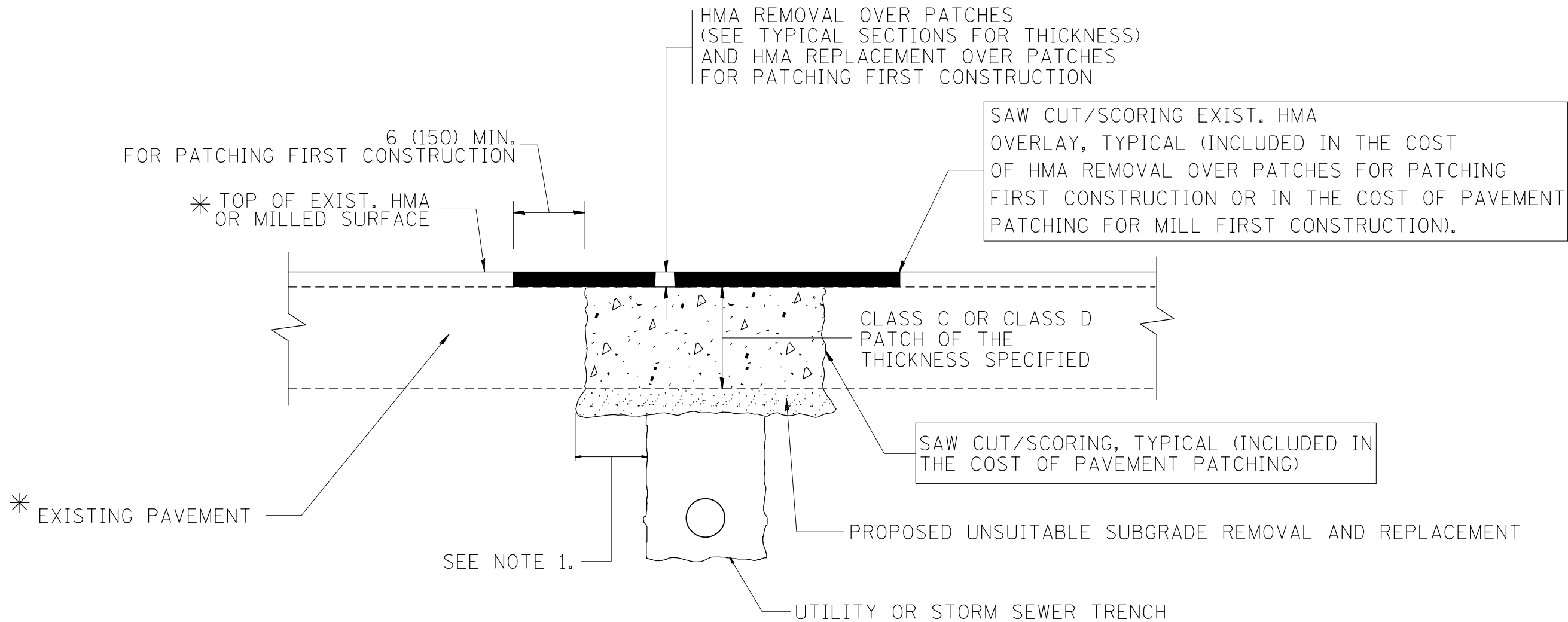
THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = p:\1\1084EBIDINTEG\Illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI299\BROWNS\Browns\Design\DistStd.dgn	USER NAME = paraynoal	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			REVISED - R. BORO 01-01-07					1362	3200RS&DR-5	COOK	85	72
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - R. BORO 03-09-11					BD600-03 (BD-8)		CONTRACT NO. 62G42		
	PLOT DATE = 1/30/2019		REVISED - R. BORO 12-06-11					FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.						



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

#### 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.

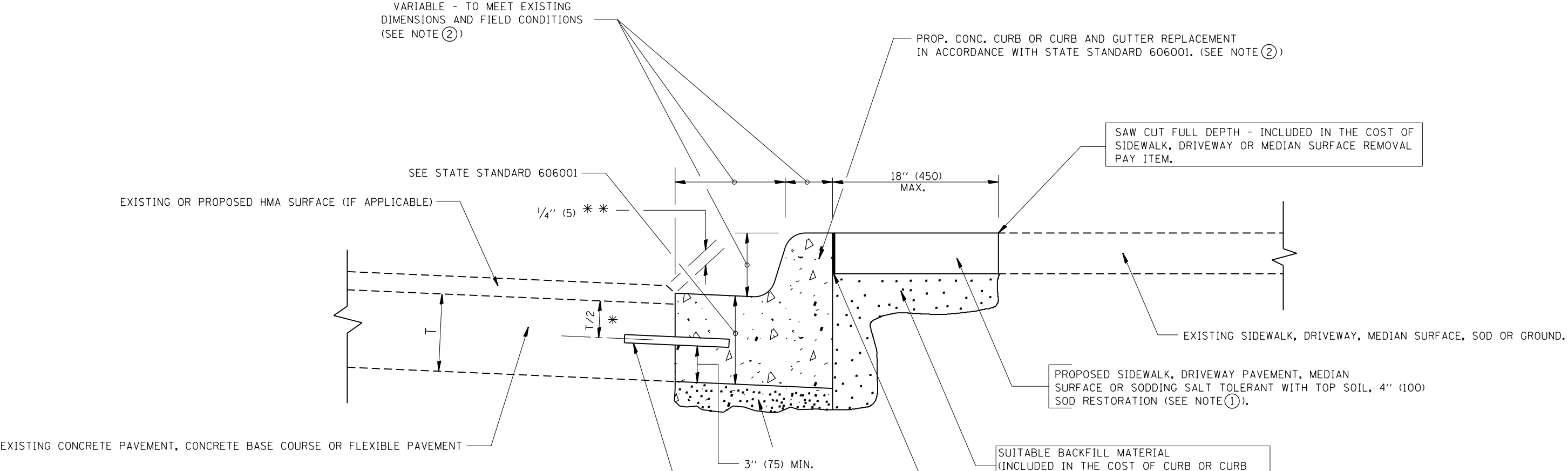
#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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 =	USER NAME = paraynoal	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBIDINTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI299\BROWNS\Design\DistStd.dgn			REVISED - R. BORO 01-01-07					1362	3200RS&DR-5	COOK	85	73
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 09-04-07					BD400-04 (BD-22) CONTRACT NO. 62G42				
	PLOT DATE = 1/30/2019	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



- \* 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 PAID FOR SEPARATELY.
- 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.

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.

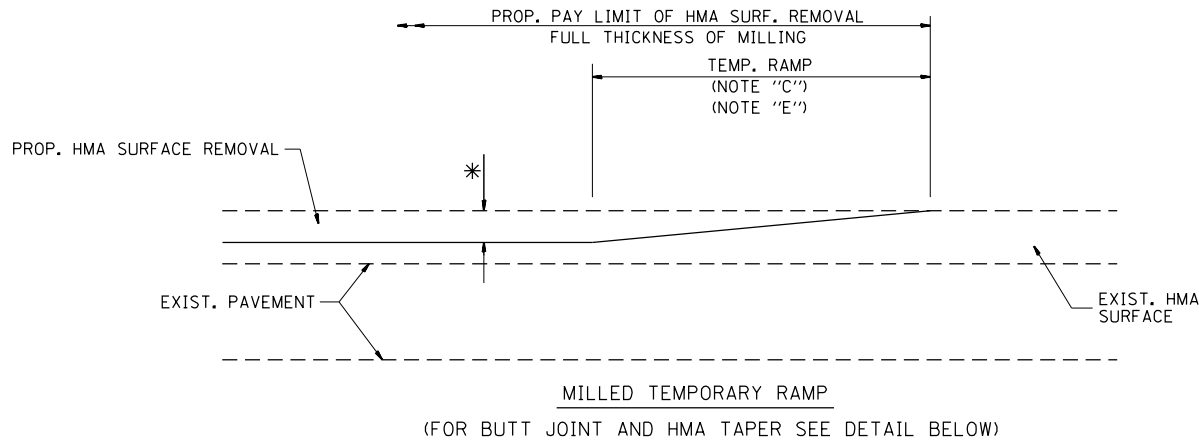
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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".

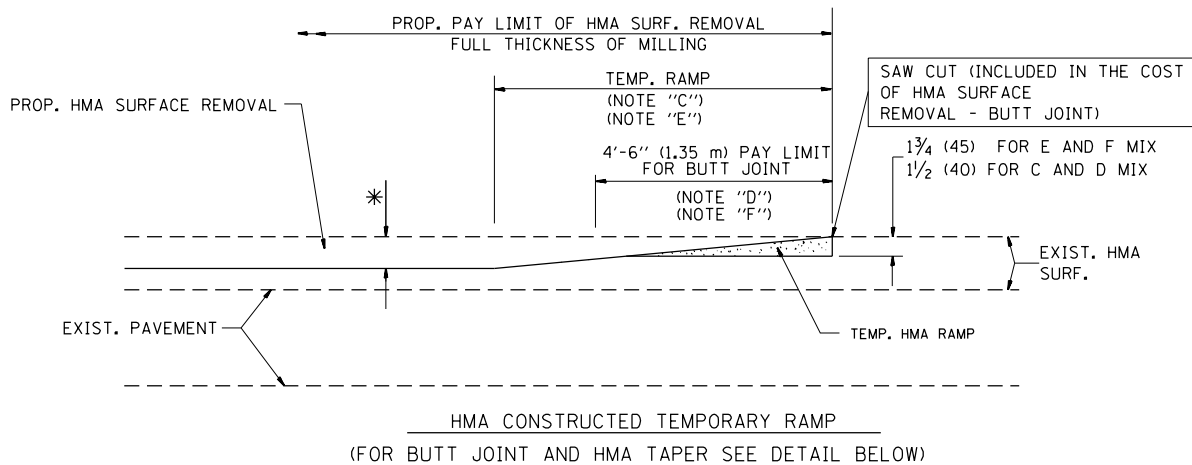
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = paraynoal	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBID\INTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI299\084EBID\Design\DistStd.dgn			REVISED - A. ABBAS 03-21-97					1362	3200RS&DR-5	COOK	85	74
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01					BD600-06 (BD-24)		CONTRACT NO. 62G42		
	PLOT DATE = 1/30/2019	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT	

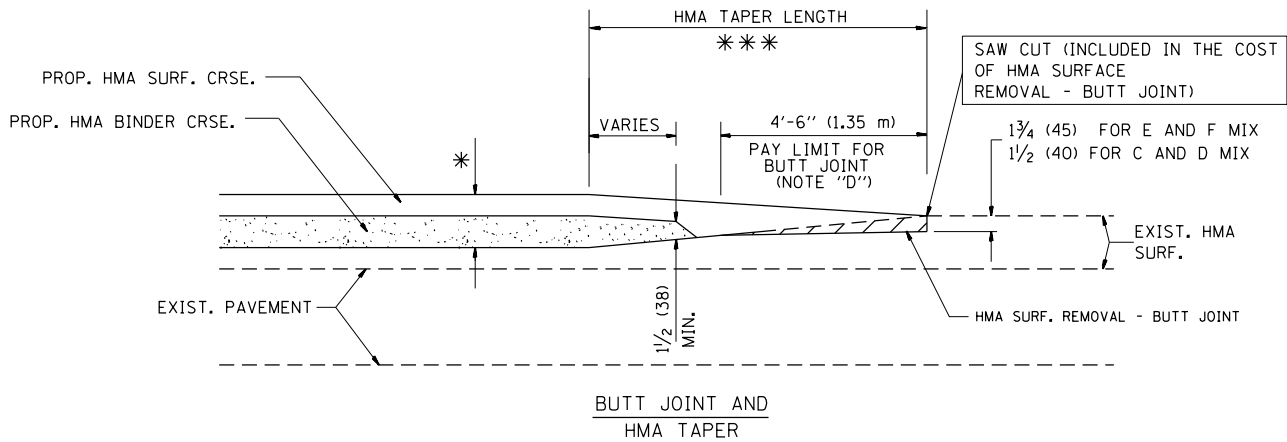


OPTION 1

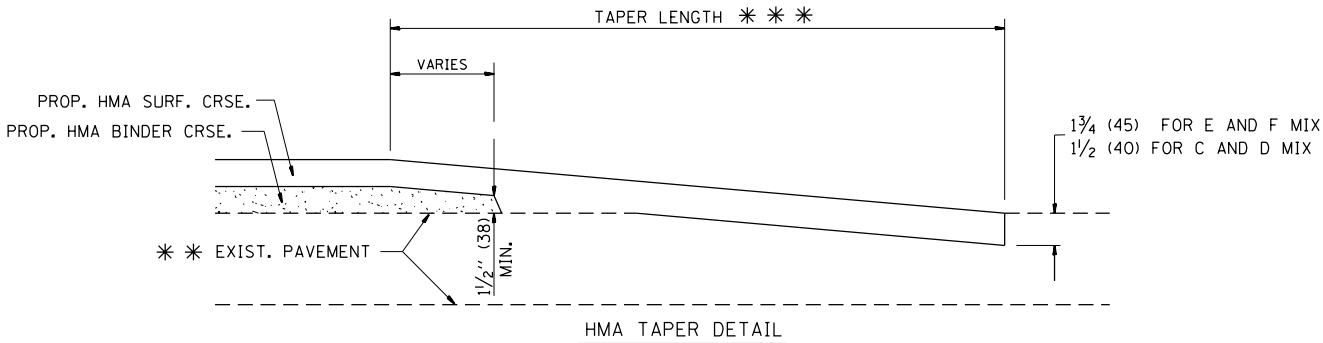
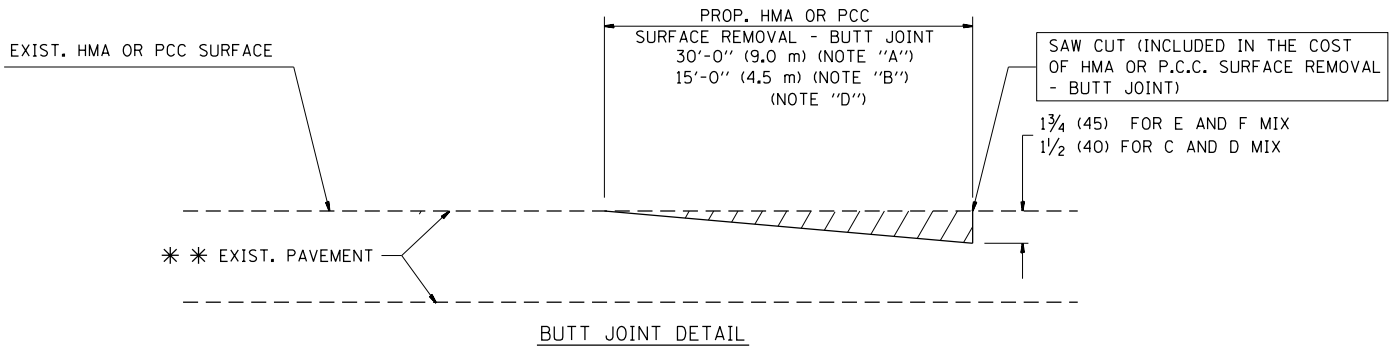


OPTION 2

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.

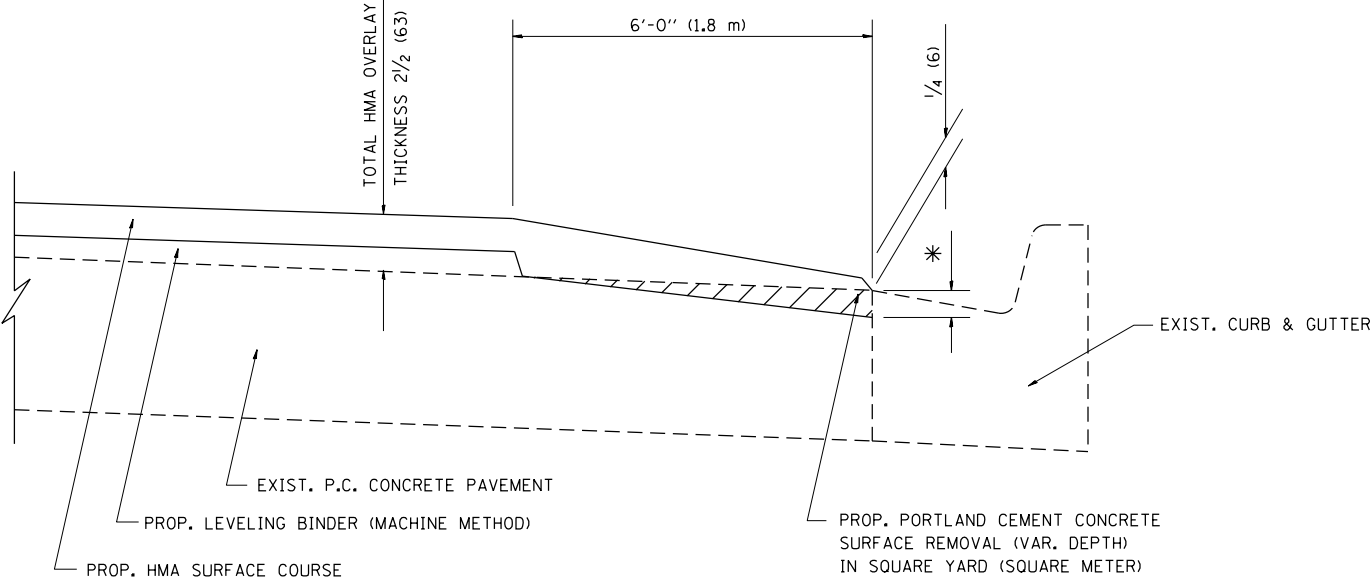
FILE NAME =	USER NAME = paraynoal	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
p:\1\1084EBID\INTEG\Illinois.gov\PI\DOT\Documents\IDOT Offices\District 1\Projects\DI299\BROWNS\Design\DistStd.dgn		REVISED - A. ABBAS 03-21-97	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/30/2019	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER DETAILS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	75
BD400-05 BD32		CONTRACT NO. 62G42		
FED. ROAD DIST. NO. 1 ILLINOIS		FED. AID PROJECT		



HMA TAPER AT  
EDGE OF P.C.C PAVEMENT

HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1 1/2 (38)	1 (25)	1 1/4 (33)
E	1 3/4 (44)	3/4 (19)	1 1/2 (38)

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

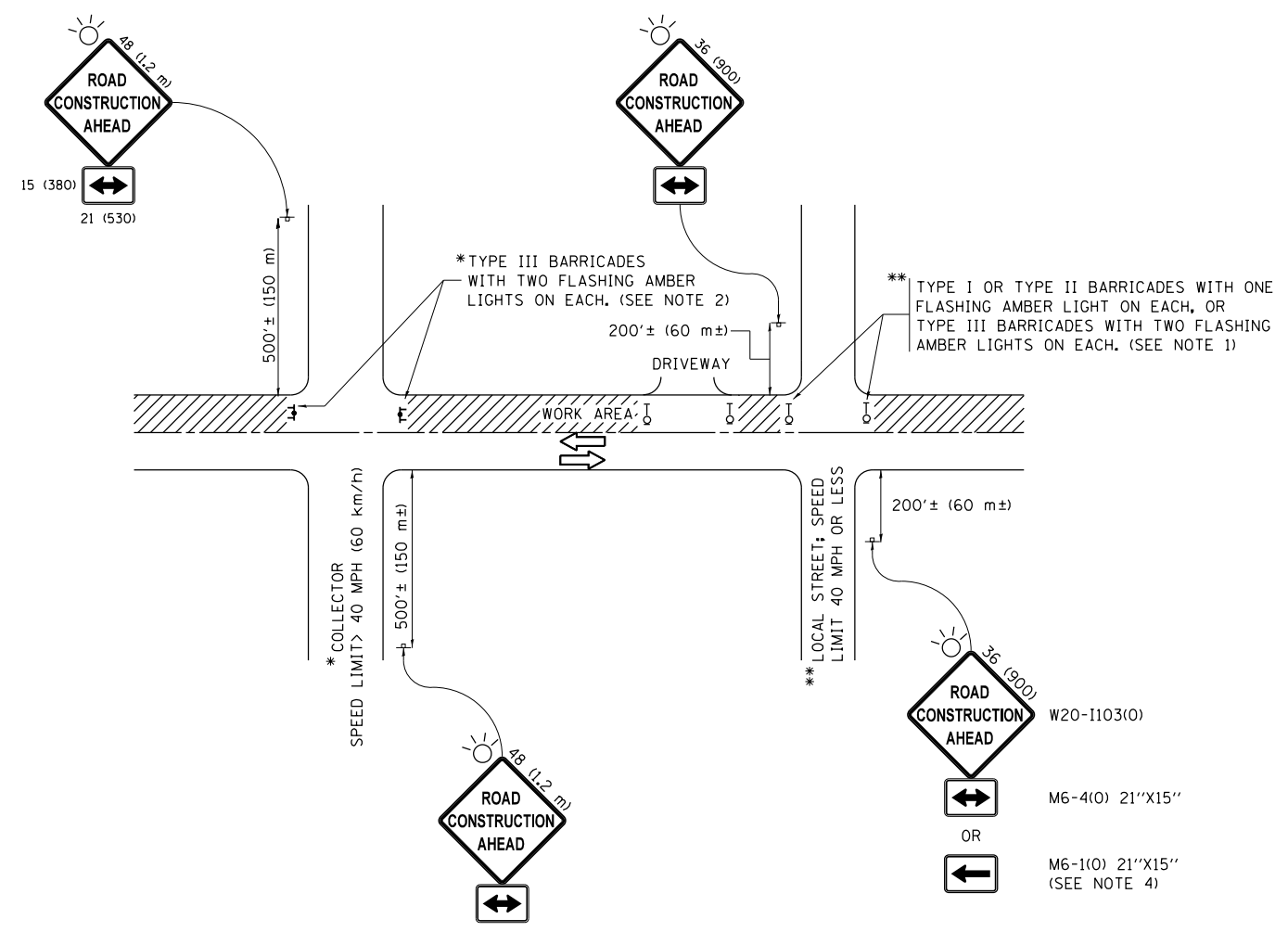
FILE NAME =	USER NAME = paraynoal	DESIGNED - R. SHAH	REVISED - A. ABBAS 05-05-9
p:\1\1084EBIDINTEG\Illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI299\Drawings\Design\115Std.dgn			REVISED - E. GOMEZ 12-21-00
Default	PLOT SCALE = 100.0000' / in.	CHECKED - A. ABBAS	REVISED - R. BORO 01-01-07
	PLOT DATE = 1/30/2019	DATE - 09-10-94	REVISED - JP CHANG 07-08-16

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HMA TAPER AT  
EDGE OF P.C.C PAVEMENT

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	76
BD400-06	(BD33)	CONTRACT NO.	62G42	
ILLINOIS FED. AID PROJECT				



NOTES:

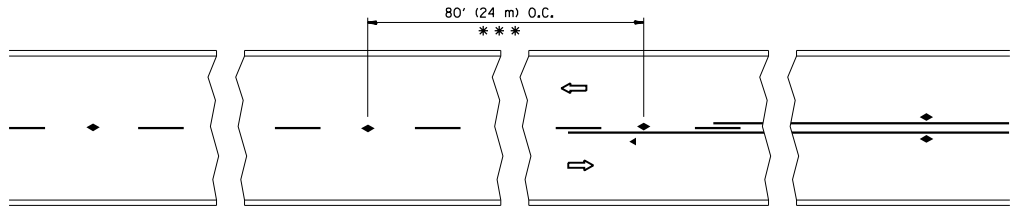
1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:  

a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.  
b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:  

a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.  
b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. 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.
4. 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).
5. 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.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

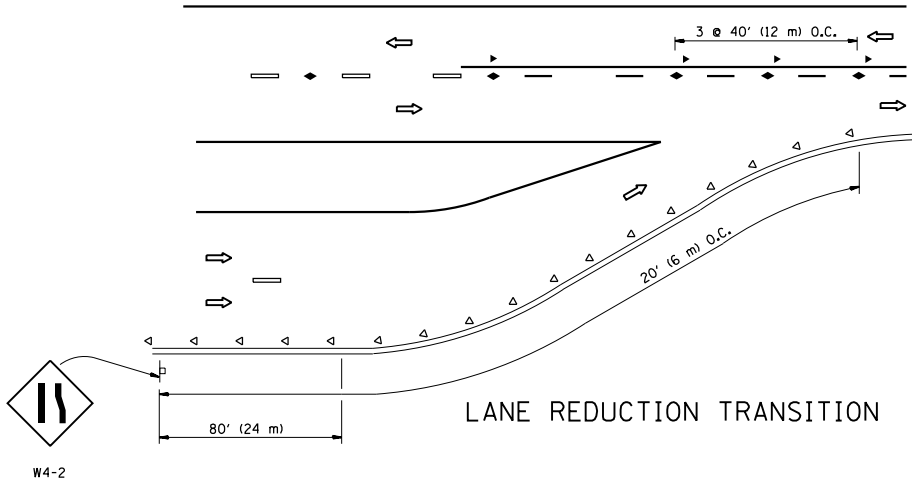
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = paraynoal	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS</div>	SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBID\INTEG\Illinois.gov\PI\DOT\Documents\IDOT Offices\District 1\Projects\DI299\084EBID\Design\DistStd.dgn	REVISED -T. RAMMACHER 01-06-00	1362	3200RS&DR-5									COOK	85	77		
PLOT SCALE = 100.0000' / in.	CHECKED -	TC-10										CONTRACT NO. 62G42				
PLOT DATE = 1/30/2019	DATE - 06-89	ILLINOIS FED. AID PROJECT														

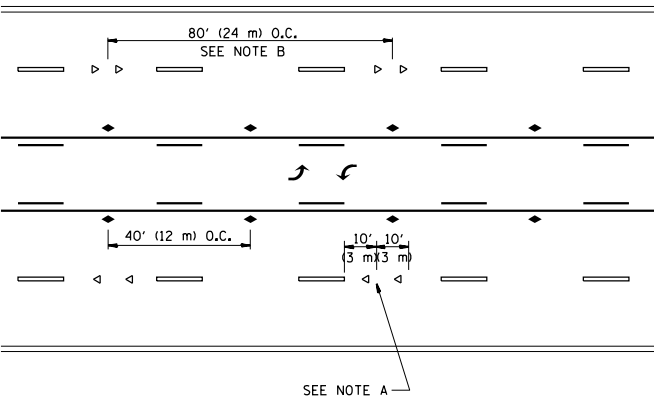


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

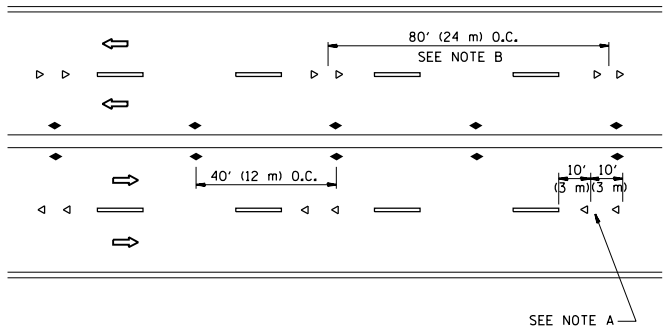
TWO-LANE/TWO-WAY



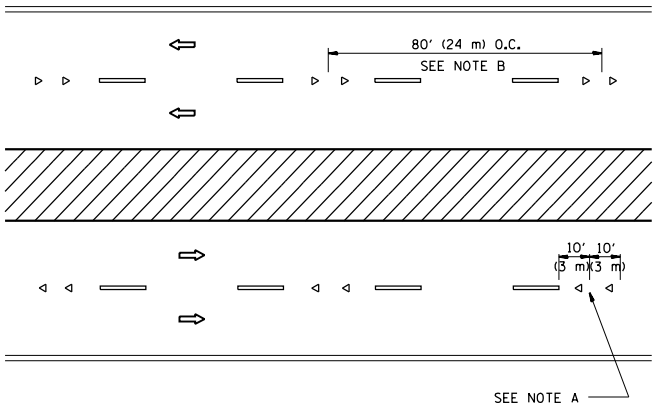
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

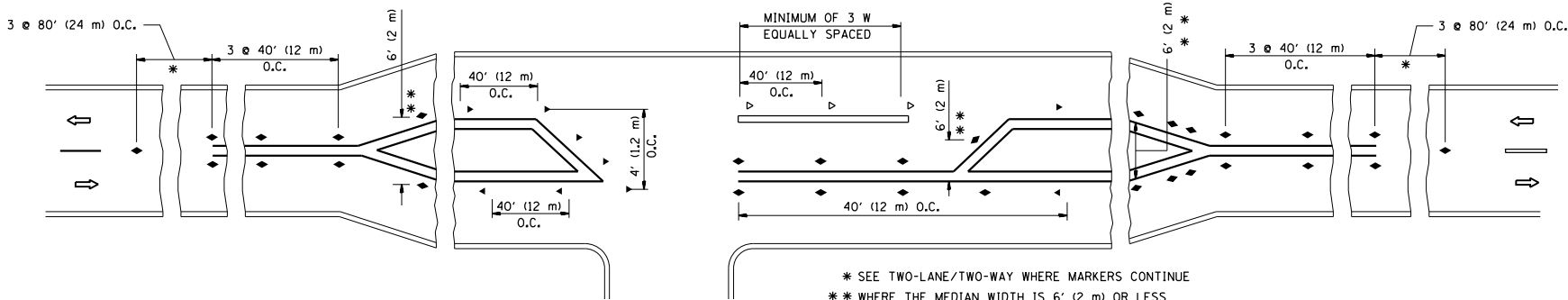
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

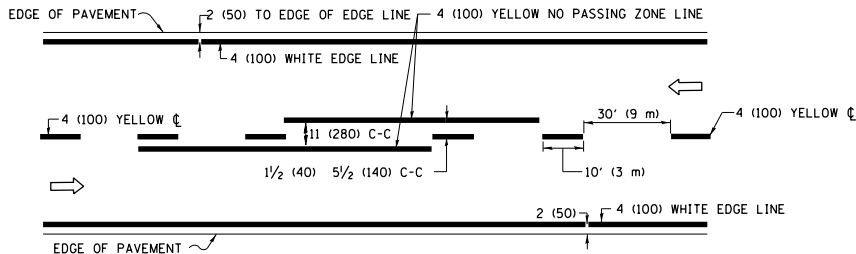


LEFT TURN

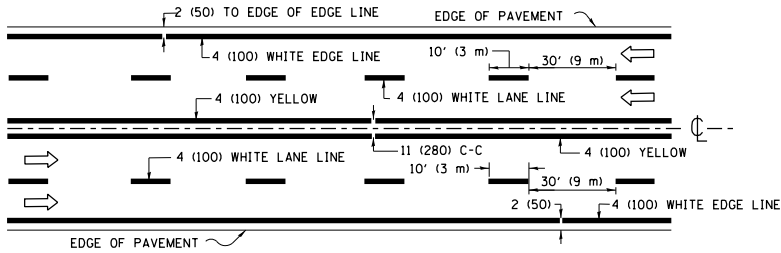
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
\*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS  
USE TWO-WAY MARKERS.

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

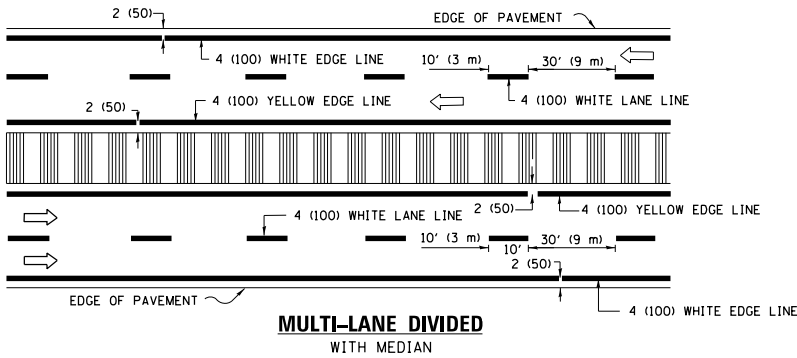
FILE NAME = p:\11\084EBID\INTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\DI299\BID\BID Data\Design\DistStd.dgn	USER NAME = paraynoi	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 03-12-99					1362	3200RS&DR-5	COOK	85	78
	PLOT DATE = 1/30/2019	DATE -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.			TC-11 CONTRACT NO. 62G42				
			REVISED - C. JUCIUS 09-09-09					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

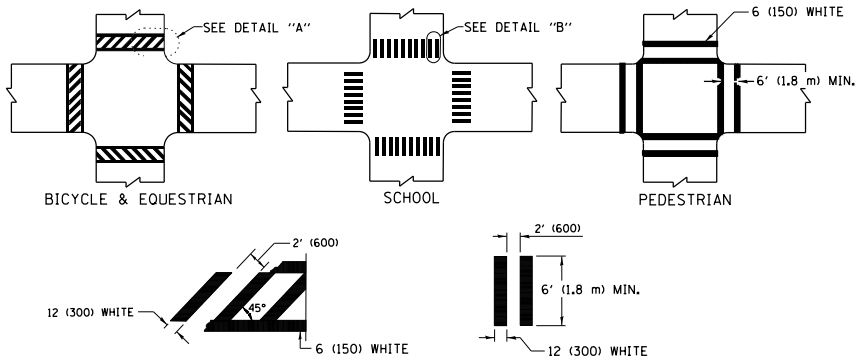


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

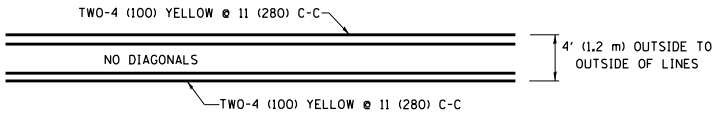


DETAIL "A"

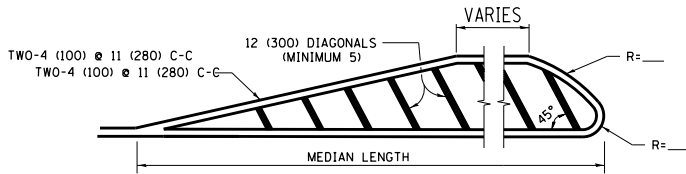
DETAIL "B"

TYPICAL CROSSWALK MARKING

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

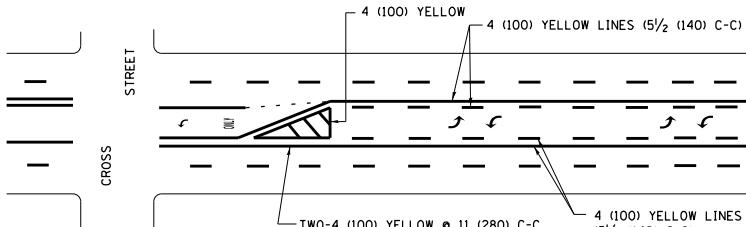


4' (1.2 m) WIDE MEDIANS ONLY

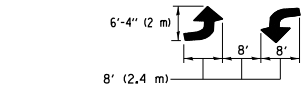


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

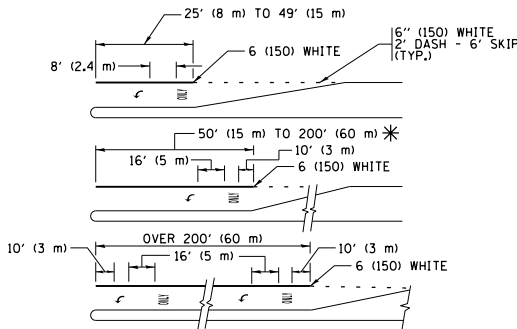


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

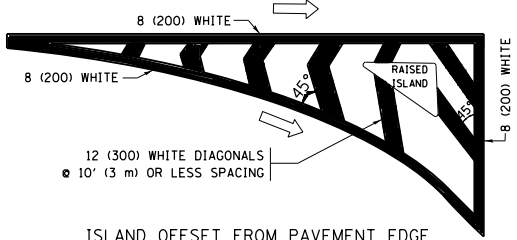


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

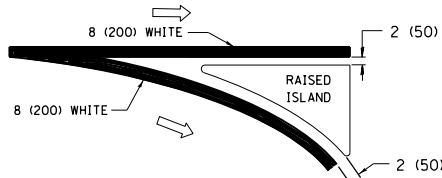
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

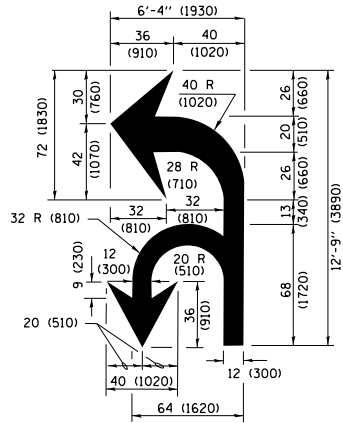


ISLAND OFFSET FROM PAVEMENT EDGE

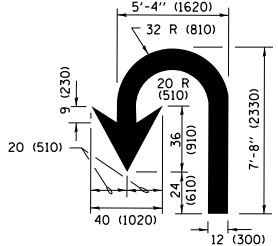


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



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 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 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 <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
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 = paraynoal	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
p:\1\1084EBID\TEG\Illinois.gov\PI\DOT\Documents\100T Offices\District 1\Projects\DI29\BROWN\Design\DistStd.dgn			REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 1/30/2019	DATE - 03-19-90	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.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	79
TC-13		CONTRACT NO. 62G42		
ILLINOIS		FED. AID PROJECT		

TURN BAY ENTRANCE AT START  
OF LANE CLOSURE TAPER

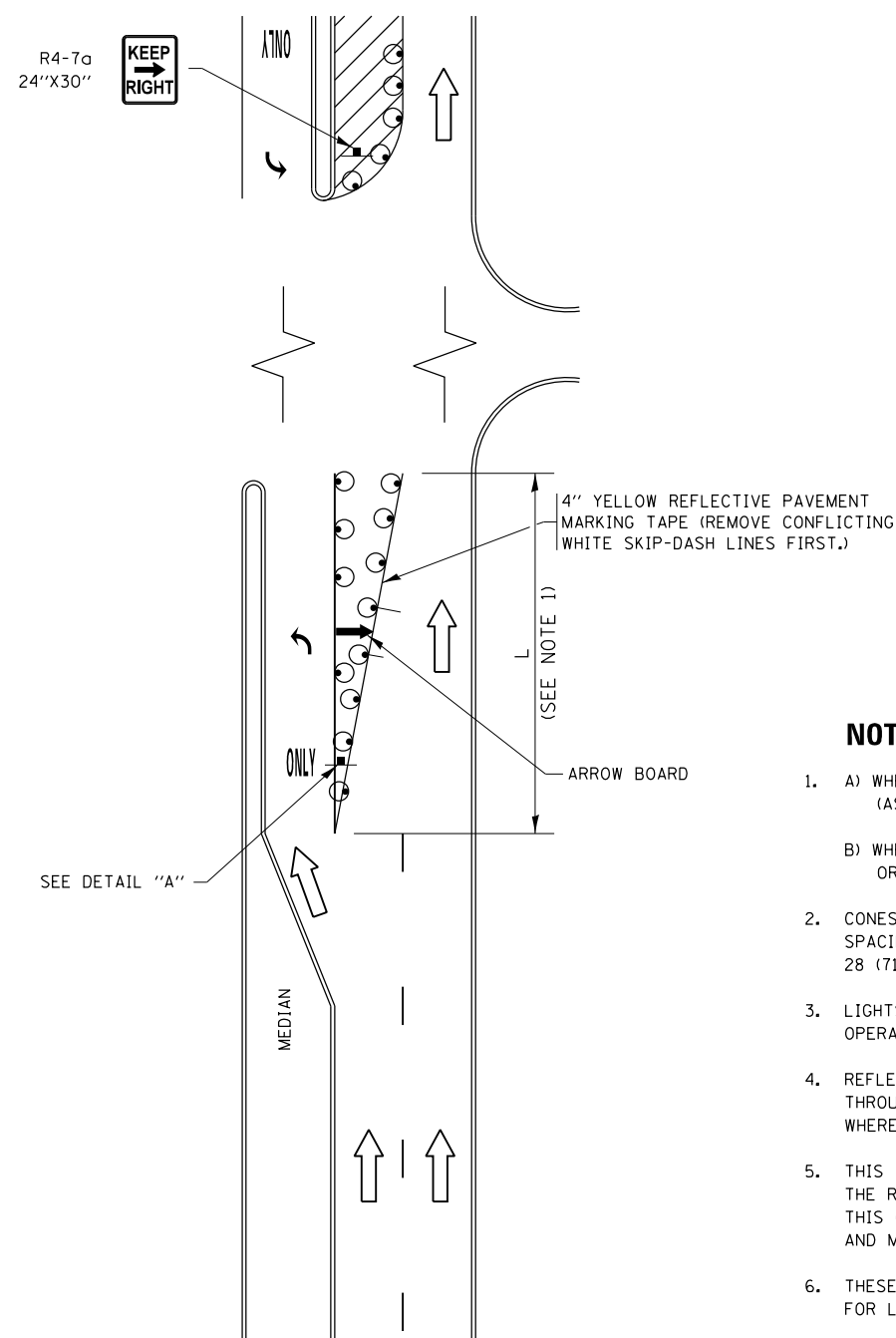
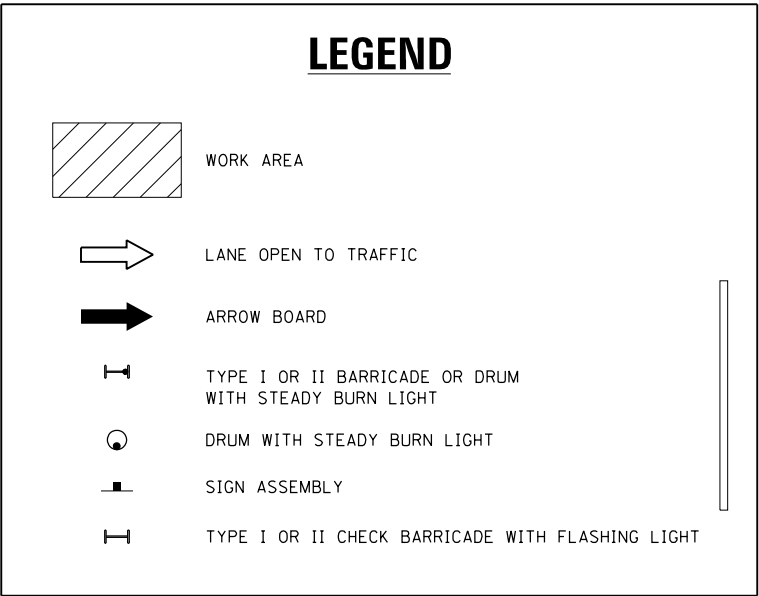


FIGURE 1

LEGEND



NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. 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.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE  
WITHIN A LANE CLOSURE

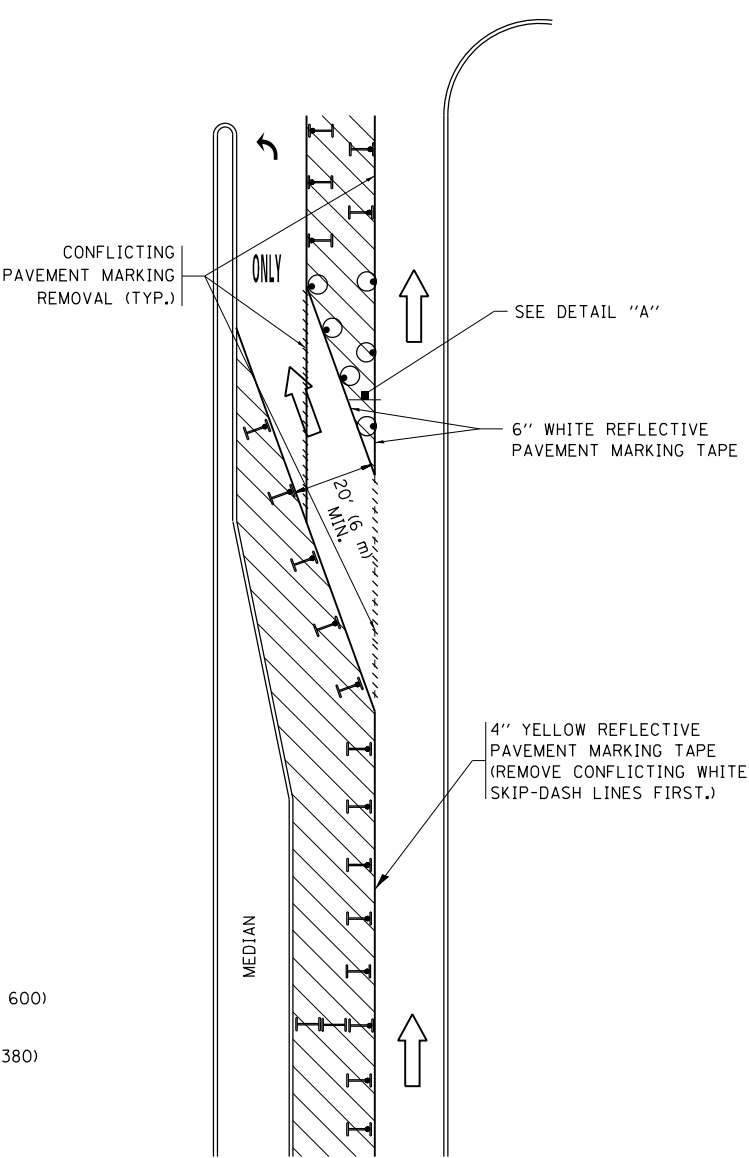
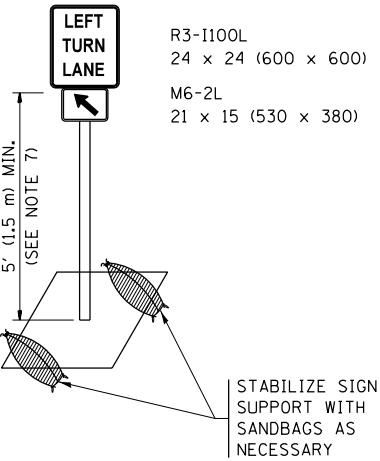


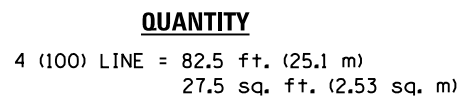
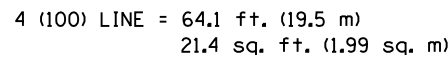
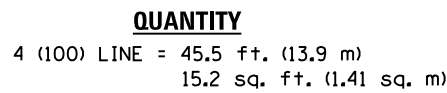
FIGURE 2



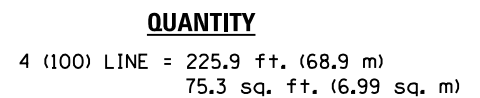
DETAIL A

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

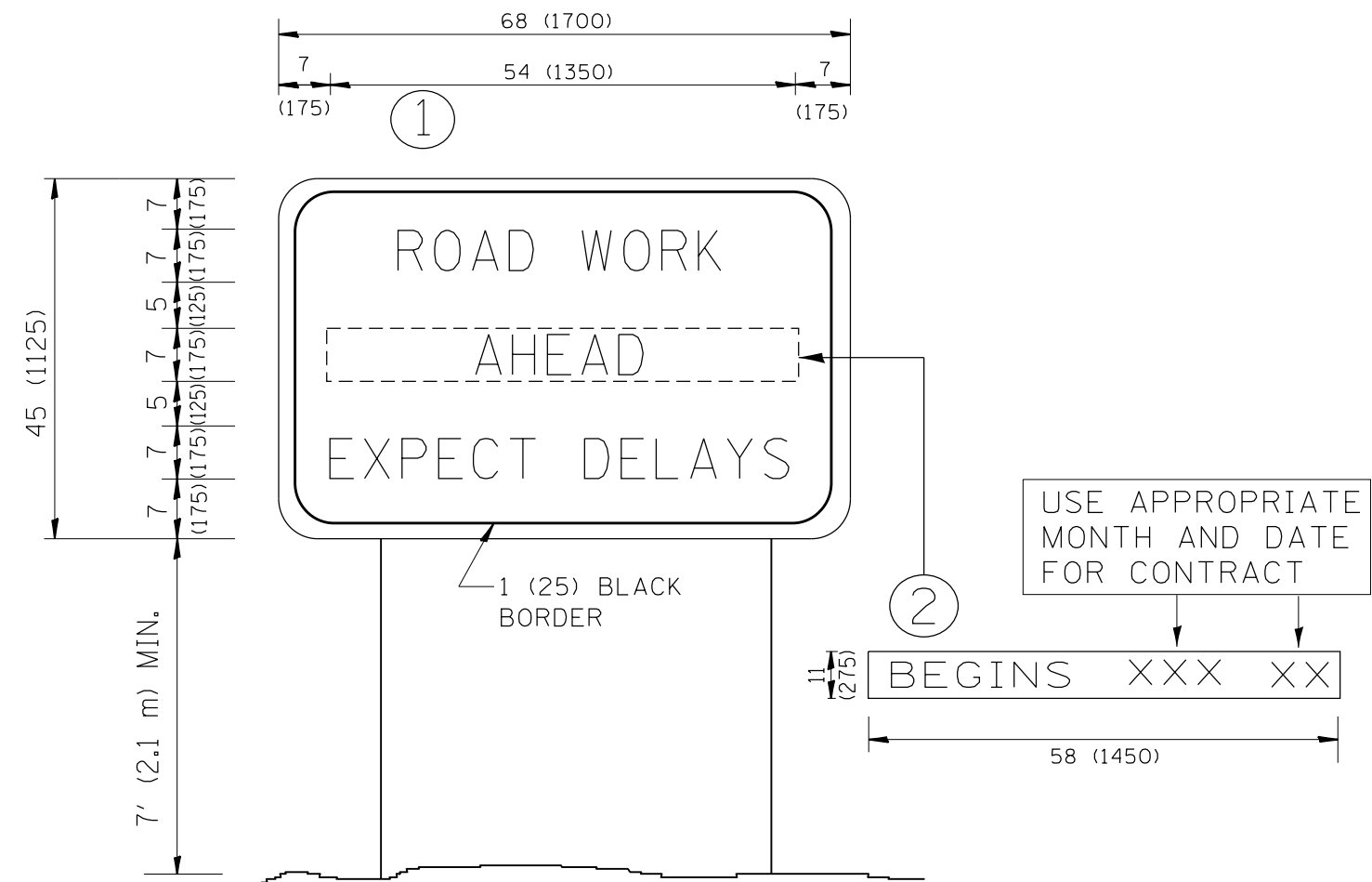
FILE NAME =	USER NAME = pargnoal	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBIDINTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\DI299\REVISED\Design\HOUSEH 11-07-95		REVISED - A. SCHUETZE 07-01-13	REVISED - A. SCHUETZE 07-01-13			1362	3200RS&DR-5	COOK	85	80
PLOT SCALE = 100.0000' / in.		REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16			TC-14		CONTRACT NO. 62G42		
Default	PLOT DATE = 2/1/2019	REVISED - T. RAMMACHER 01-06-00	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE: NONE		SHEET 1	OF 1	SHEETS	STA.	TO STA.



ALL QUANTITIES OF PLACEMENT ARE REPRESENTED  
IN LINEAR FEET OF 4" LINES TO MATCH THE  
4" TEMPORARY TAPE PAY ITEM AND REPRESENTS  
THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED - T. RAMMACHER 03-02-98	<div style="text-align: center;"> <b>STATE OF ILLINOIS</b>  <b>DEPARTMENT OF TRANSPORTATION</b> </div>	<div style="text-align: center;"> <b>SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS</b> </div>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pwt:\IL084EBIDINTEGallinois.gov\PIDOT\Documents\DOT Offices\District 1\Projects\DI29\BROWData\Design\DistStd.dgn		REVISD - E. GOMEZ 08-28-00				1362	3200R5&DR-5	COOK	85	81
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00				TC-16		CONTRACT NO. 62G42		
PLOT DATE = 1/30/2019	DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	
				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						

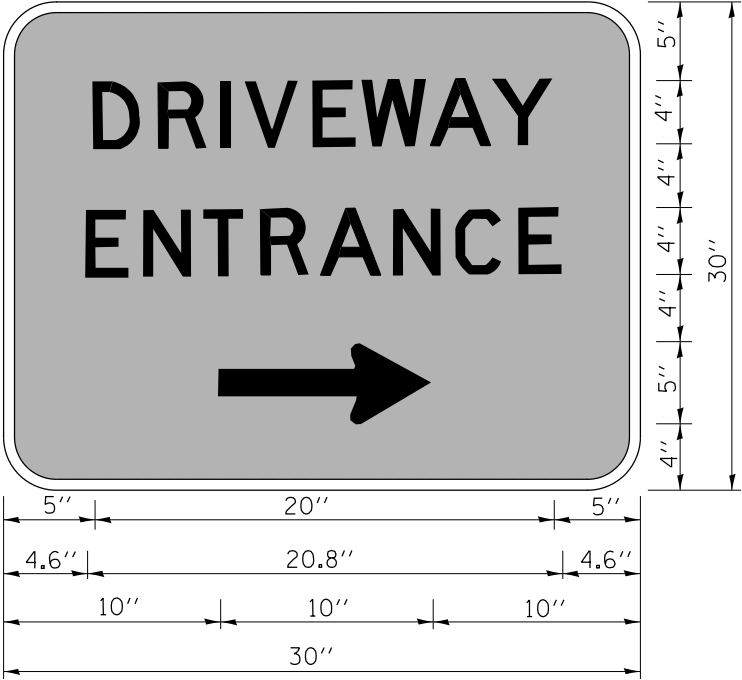


NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME = p:\11\084EBID\INTEG\Illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI299\Drawings\Design\DistStd.dgn	USER NAME = paraynoal	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			REVISED - R. MIRS 12-11-97						1362	3200RS&DR-5	COOK	85	82
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99		SCALE: NONE			SHEET NO. 1 OF 1 SHEETS			TO STA.		
	PLOT DATE = 1/30/2019	DATE -	REVISED - C. JUCIUS 01-31-07										
					TC-22 CONTRACT NO. 62G42								
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT													



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED  
"DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

**NOTES:**

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE  
PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)  
SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY  
AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE  
FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = paraynoal	DESIGNED -	REVISED - C. JUCIUS 02-15-07
p:\1\11084EBID\INTEG\illinois.gov\PWIDOT\Documents\IDOT Offices\District 1\Projects\DI299\Drawings\Design\DistStd.dgn		CHECKED -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/30/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

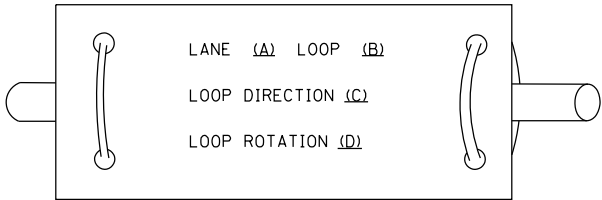
SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1362	3200RS&DR-5	COOK	85	83
TC-26		CONTRACT NO. 62G42		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

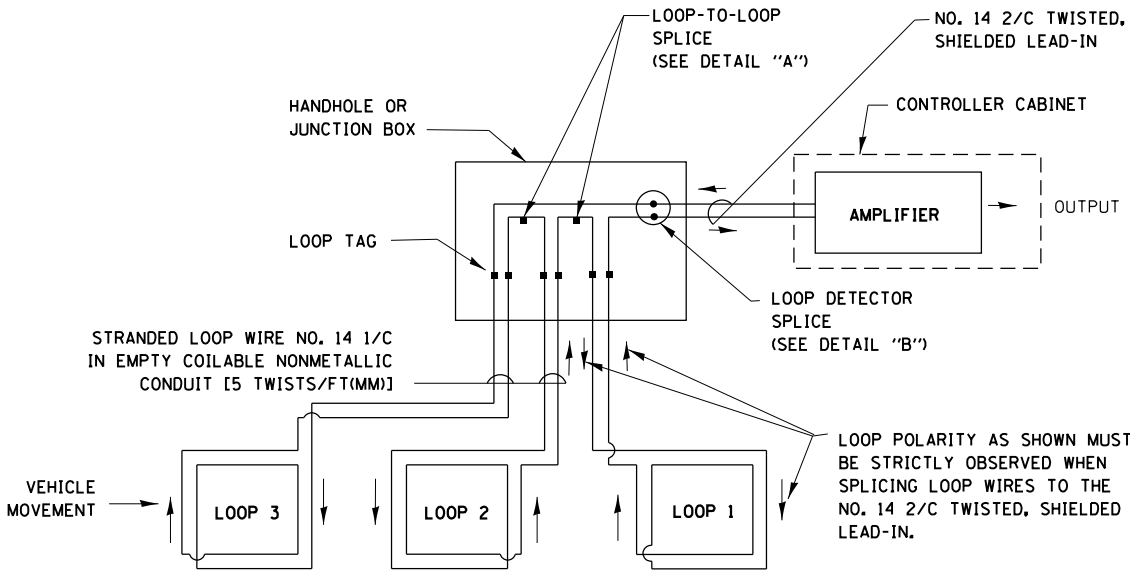
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

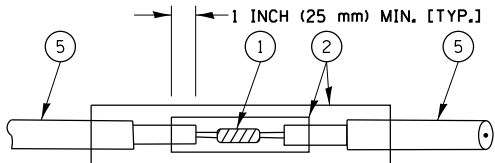


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

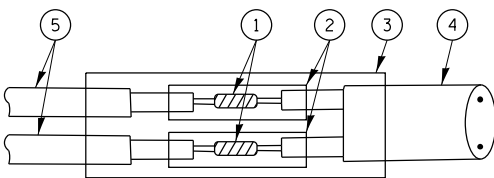


DETECTOR LOOP WIRING SCHEMATIC

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

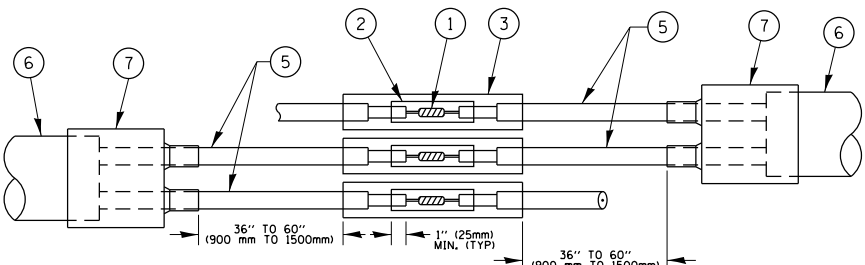


DETAIL "A"  
LOOP-TO-LOOP SPLICE

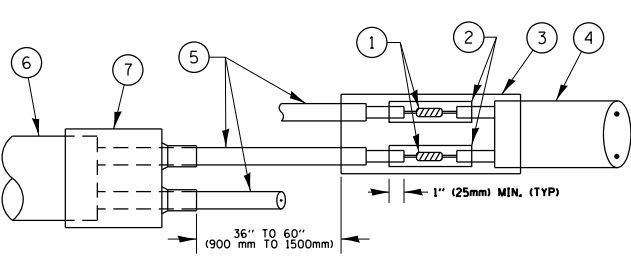


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

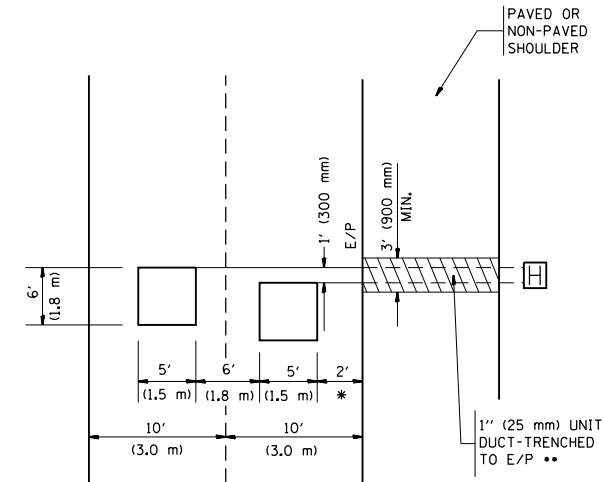
PRE-FORMED LOOP

LOOP DETECTOR SPLICE

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

LOOPS NEXT TO SHOULDERS

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



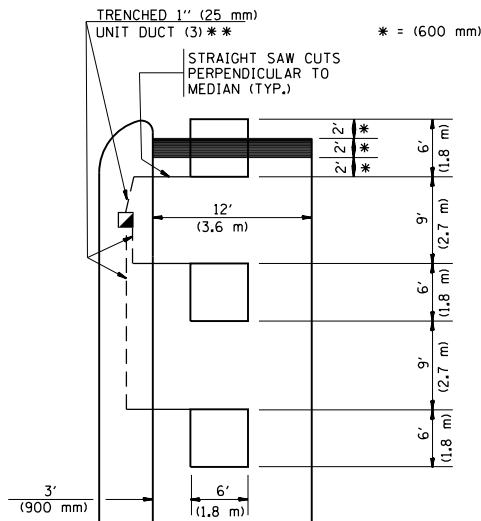
\* = (600 mm)

\*\* 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.

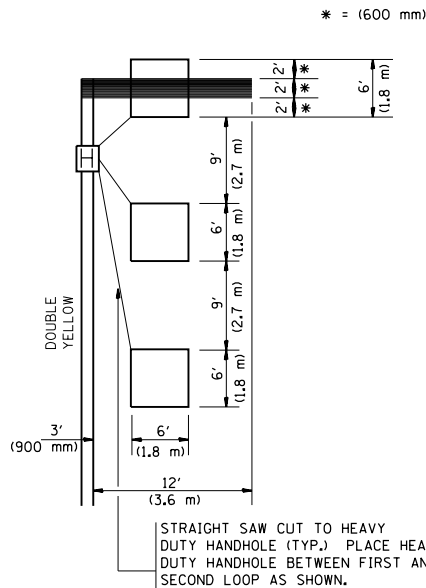


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS  
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

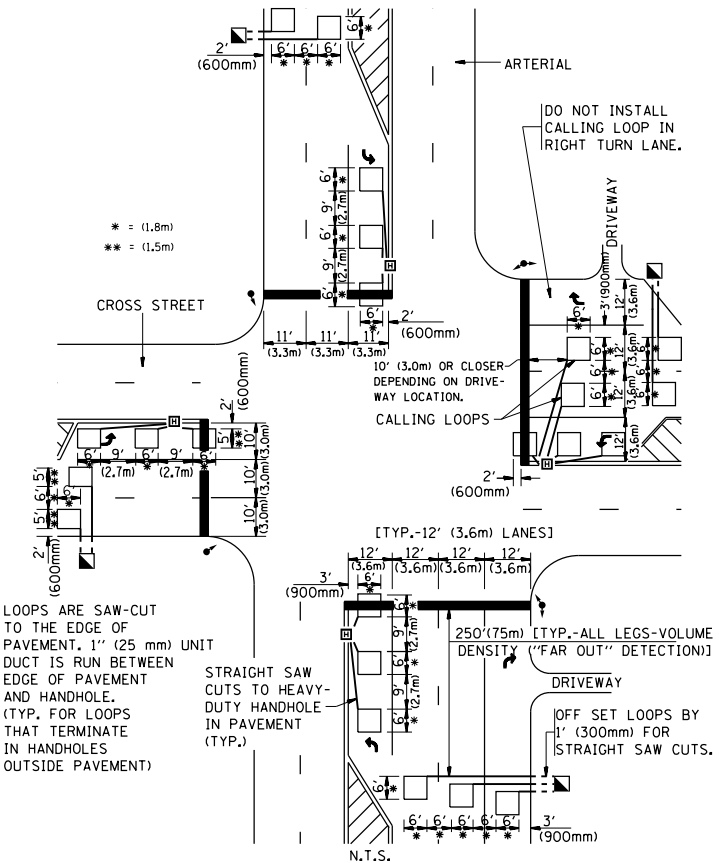
LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



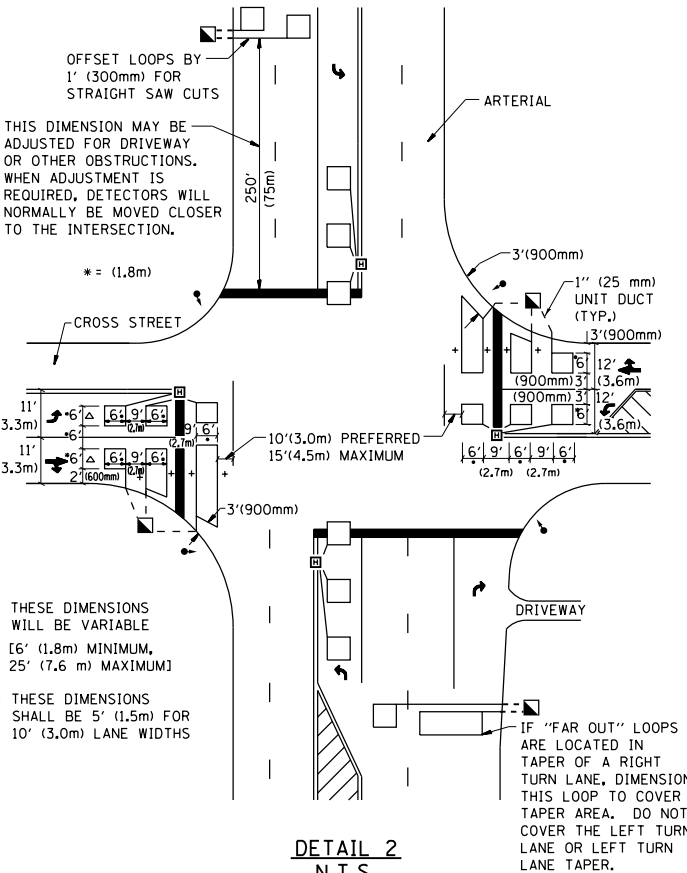
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 SEPARATLY. 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 =	USER NAME = peraynoal	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\w\11084EBID\INTEG\illinois.gov\PI\DOT\Documents\IDOT Offices\District 1\Projects\DI299\Drawings\Design\DistStd.dgn		CHECKED - R.K.F.	REVISED -					1362	3200RS&DR-5	COOK	85	85
PLOT SCALE = 100.0000' / in.		DATE -	REVISED -					TS-07		CONTRACT NO. 62G42		
PLOT DATE = 1/30/2019								FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				
SCALE: NONE					SHEET NO. 1 OF 1 SHEETS		STA. TO STA.					