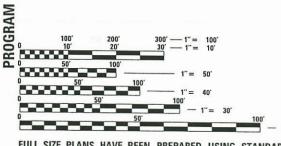
# 04-27-2018 LETTING ITEM 163

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA EXISTING ADT = 8,000 (2014)

**SPEED LIMIT:** 25 MPH (POSTED)

**DESIGN DESIGNATION MAJOR COLLECTOR** 



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.

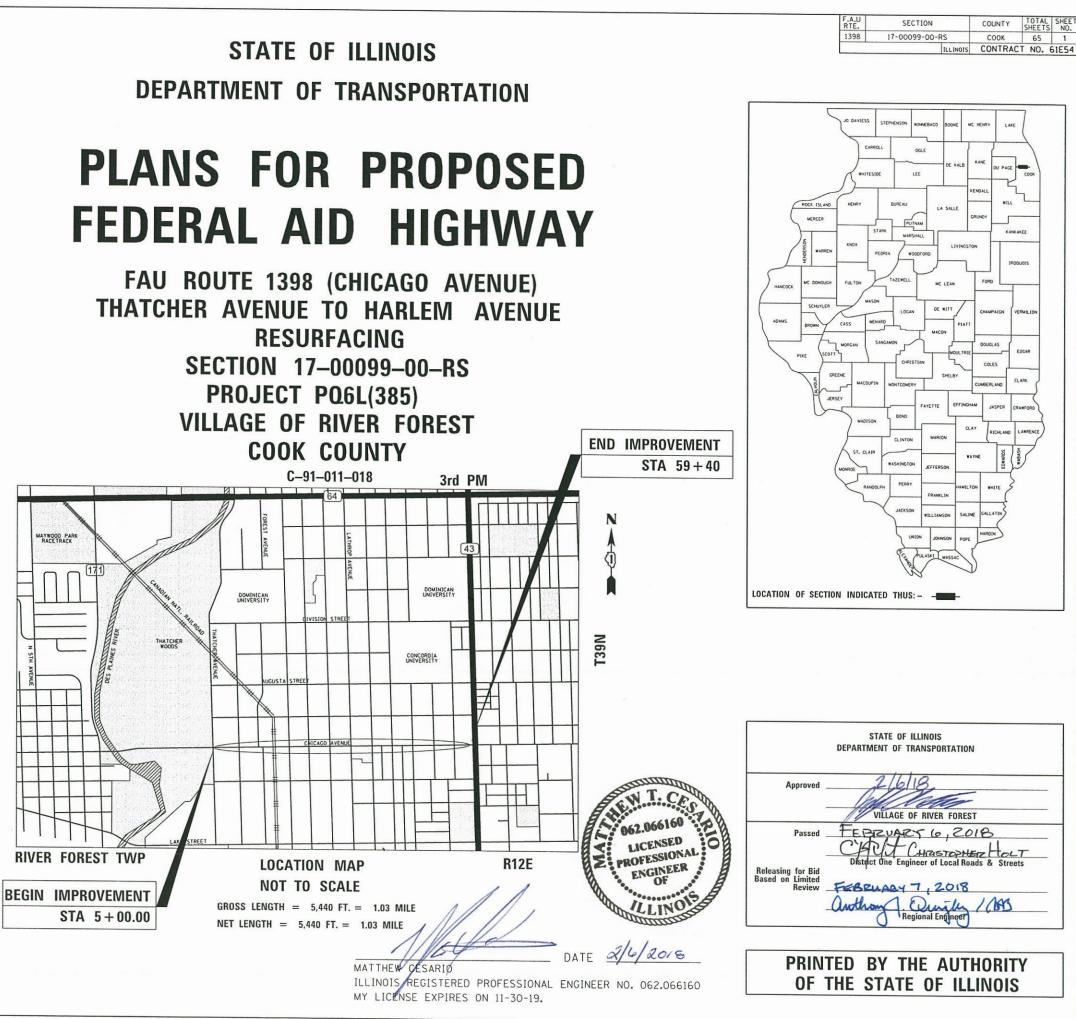
J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811



**CONTRACT NO. 61E54** 

# **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

# **PLANS FOR PROPOSED**



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SCHAUMBURG, IL

(847) 705-4406

Р.Е.

RIDDLE,

ENGINEER: CHARLES

OFFICE

AND

# **INDEX OF SHEETS**

COVER SHEET

1

- 2 INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS
- 3-8 SUMMARY OF QUANTITIES
- 9-11 TYPICAL SECTIONS
- 12-17 SCHEDULE OF QUANTITIES
- 18 ALIGNMENT, TIES, AND BENCHMARKS
- 19-23 PROPOSED ROADWAY AND PAVEMENT MARKING PLAN
- ADA RAMP / GEOMETRIC PLAN 24-34
- 35-42 DRAINAGE AND LANDSCAPING PLAN
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- 47-49 EXISTING LOOP DETECTOR PLANS (INFORMATION ONLY)
- 50-65 DISTRICT DETAILS

# DISTRICT DETAILS

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- BD-8 DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
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- TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
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# **HIGHWAY STANDARDS**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001006 DECIMAL EQUIVALENTS OF AN INCH-FOOT
- TEMPORARY EROSION CONTROL SYSTEMS 280001-07
- 424001-10 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424016-04 MID-BLOCK CURB RAMPS FOR SIDEWALKS
- 442201-03 CLASS C AND D PATCHES
- 606001-07 CONCRETE CURB TYPE B COMBINATION CURB AND GUTTER
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24' FROM EDGE OF PVMT
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311-03 LANE CLOSURE 2L, 2W MOVING OPERATIONS - DAY ONLY
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- SIDEWALK, CORNER, OR CROSSWALK CLOSURE 701801-06
- TRAFFIC CONTROL DEVICES 701901-07
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 886001-01 DETECTOR LOOP INSTALLATION
- 886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED APRIL 1, 2016 (HEREIN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED APRIL 1, 2016; THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS; THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS IN THE ONLINE DEVILOPED AND THE SECOND ADDITIONS FOR WATER & SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- 2. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOURS NOTIFICATION IS REQUIRED.
- 4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH LOCAL EMERGENCY SERVICES AND THE VILLAGE OF RIVER FOREST USING THE FOLLOWING TELEPHONE NUMBERS:

POLICE DEPARTMENT: (708) 366-7125

FIRE DEPARTMENT: (708) 366-7629

- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL EXISTING AND PROPOSED UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS, IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
- THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS AND REFERENCE MARKERS UNTIL THE OWNER, OWNER'S REPRESENTATIVE, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- 8. ALL LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES THAT OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF IMPROVEMENT. ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS.
- 9. THE CONTRACTOR SHALL NOT SET UP A YARD OR FIELD OFFICE ON STATE OR VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT OR THE VILLAGE.
- 10. THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS AND PEDESTRIAN ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT UNLESS OTHERWISE NOTED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 11. NITROGEN FERTILIZER AND POTASSIUM FERTILIZER NUTRIENTS SHALL BE PLACED OVER SODDING AT HE RATE OF 60 POUNDS EACH PER ACRE.
- 12. SAW CUTTING OF CURB AND GUTTER SHALL BE FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING.
- 13. THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS IS NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE HOT-MIX ASPHALT MIXTURES ARE TO BE PLACED.
- 14. PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB, SIDEWALKS, AND AS DIRECTED BY THE ENGINEER.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED.
- 16. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MATCHING SHALL NOT EXCEED 1-1/2" WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1" WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH, WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 17. BUTT JOINT WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE DISTRICT DETAIL "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 18. FOR CLASS D PATCHING, CONTRACTOR SHALL MILL BEFORE PATCHING AS DIRECTED BY THE ENGINEER.
- 19. ALL ELEVATIONS ARE ON THE U.S.G.S. DATUM NAVD 88.
- 20. ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR ADA RAMPS, PAVEMENT MARKINGS, ETC. ARE FROM THE CENTERLINE AS SHOWN ON THE PLANS.
- 21. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 22. THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR. WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.
- 23. SUPPLEMENTAL WATERING SHALL BE PERFORMED WHEN DIRECTED BU THE ENGINEER AT A RATE OF 10 GAL PER SQ YD FOR SODDED AREAS.
- 24. TEMPORARY INFORMATION SIGNING AND CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT PROJECT LIMITS EAST AND WEST PROJECT LIMITS. ADDITIONAL TEMPORARY INFORMATION SIGNING SHALL BE PLACED ON ALL SIDE ROADS (NORTH AND SOUTH OF CHICAGO AVENUE) OR AS DIRECTED BY THE ENGINEER, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 25. ACTUAL LOCATION AND SIZE OF BASE PATCHES WILL BE DETERMINED IN THE FIELD. NO COMPENSATION WILL BE ALLOWED FOR UNUSED PATCHING QUANTITIES.
- 26. TREE ROOT PRUNING SHALL BE USED WHERE NECESSARY IN AREAS OF PROPOSED SIDEWALK AND BIO-RETENTION LOCATIONS AS DIRECTED BY THE ENGINEER.

Pollinger Lach	USER NAME = cesorio	DESIGNED - WT	REVISED -		1	CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY TOTAL SHEETS	SHEET NO.
Bollinger, Lach & Associates, Inc.		DRAWN - WT	REVISED -	STATE OF ILLINOIS	INDEX OF SH	HEETS, HIGHWAY STANDARDS, GEN. NOTES & COMMITMENTS	1398	17-00099-00-RS	COOK 65	2
TASCA, ILLINOIS	PLOT SCALE = 100.0000 '/ 10.	CHECKED - MC	REVISED -	DEPARTMENT OF TRANSPORTATION						61E54
	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: N/A	SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. AI	ID PROJECT	

NONE

REPLACED

**GENERAL NOTES** 

b. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS NEEDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.

c. ALL

d. ALL UNUSED SIGNS WILL BE RETURNED TO THE: THE VILLAGE OF RIVER FOREST

e. LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS.

THE ENGINEER. ALL SIDE ROADS AND DRIVEWAY ENTRANCES SHALL BE MAINTAINED AT ALL TIMES. NO CLOSURES TO SIDE ROADS OR DRIVEWAYS SHALL OCCUR.

36. ALL OF THE TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE CONSTRUCTION IS STARTED. BOTH DIRECTIONS OF TRAVEL (1 LANE IN EACH DIRECTION) SHALL BE MAINTAINED AT ALL TIMES AS DIRECTED BY THE ENGINEER. ANY LANE CLOSURES OR PARKING RESTRICTIONS MUST BE APPROVED BY

37. PROPOSED IMPROVEMENTS SHALL BE COMPLETED UTILIZING IDOT HIGHWAY STANDARDS 701006, 701301, 701311, 701501, 701701, AND 701801, 701901.

38. PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE USED PRIOR TO THE EAST AND WEST LIMITS. ITS EXACT PLACEMENT SHALL BE DIRECTED BY THE ENGINEER.

27. CONTRACTOR SHALL USE CAUTION WHEN WORKING NEAR AND UNDER OVERHEAD UTILITY FACILITIES.

28. THE CONTRACTOR SHALL MAINTAIN THE EXISTING CLEARANCE UNDER THE RAILROAD DURING AND AFTER THE PROPOSED IMPROVEMENTS

29. WHEN CONSTRUCTING SIDEWALK RAMPS FOR THE HANDICAPPED. STATE STANDARDS LISTED IN THE HIGHWAY STANDARD INDEX SHALL APPLY. THE PROPOSED ELEVATIONS SHALL ME UTILIZED UNLESS FIELD CONDITIONS NECESSITATE DEVIATING FROM THE ELEVATIONS IN ORDER TO MEET ALL SLOPE REQUIREMENTS

30. THE CONTRACTOR SHALL TAKE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR

31. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.

32. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.

33. PIPE UNDERDRAINS TYPE 2 SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED 6" BELOW THE PROPOSED SUBGRADE OR AS DEEP AS POSSIBLE STILL MAINTAINING POSITIVE DRAINAGE.

34. EXISTING STORM SEWERS AND STORM STRUCTURES TO REMAIN WITHIN THE PROJECT LIMITS SHALL BE CLEANED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

35. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS AND IN ACCORDANCE WITH IDOT SIGNING STANDARDS:

a. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.

ALL SIGNS SHALL BE RE-ERECTED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED. HORIZONTAL LOCATION FROM THE EDGE OF PAVEMENT SHALL BE AS DIRECTED BY THE ENGINEER.

39. STOP SIGNS AND STOP BARS ARE TO BE MAINTAINED ON ALL ROADS THROUGH THE DURATION OF CONSTRUCTION.

40. POSITIVE DRAINAGE WITHIN THE WORK ZONE MUST BE MAINTAINED AT ALL TIMES. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, INCLUDING THE FLOW LINE OF DITCHES, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY INLETS, OUTLETS, AND CONNECTIONS FOR ALL EXISTING AND PROPOSED FACILITIES INCLUDING TEMPORARY PUMPING IF NECESSARY. TEMPORARY ACCOMMODATIONS SHALL BE MAINTAINED UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE AND THE FINAL SHAPING AND GRADING OF DITCHES IS PERFORMED.

# COMMITMENTS

					ROADWAY
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0005 S. N.
_	20101000	TEMPORARY FENCE	FOOT	350	350
	20101200	TREE ROOT PRUNING	EACH	15	15
	20200100	EARTH EXCAVATION	CU YD	608	608
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	152	152
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	1416	1416
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	18	18
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	18	18
	25100630	EROSION CONTROL BLANKET	Sũ YD	1416	1416
	25100900	TURF REINFORCEMENT MAT	SQ YD	42	42
	25200110	SODDING, SALT TOLERANT	SQ YD	1416	1416
	25200200	SUPPLEMENTAL WATERING	UNIT	14	14
	28000400	PERIMETER EROSION BARRIER	FOOT	700	700
	28000510	INLET FILTERS	EACH	83	83
	35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	1478	1478

CONSTR. CODE

¥ SPECIALTY ITEM △ 100% COST TO VILLAGE (0043)

Bollinger, Lach & Associates, Inc.	USER NAME = cesario PLOT SCALE = 40.0000 1/ in.	DESIGNED - DRAWN - CHECKED -	WT WT MC	REVISED – REVISED – REVISED –	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		C	HICAGO AN				E OF F
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F.A.U. RTE. 1398	SECTION 17-00099-0	 COUNTY COOK	TOTAL SHEE SHEETS NO. 65 3
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CODE NO.	ITEM	UNIT	TOTAL OUANTITY	ROADWAY 0005 S. N.
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	23270	23270
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	7	7
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1009	1009
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	328	328
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1985	1985
42001300	PROTECTIVE COAT	SQ YD	1975	1975
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	13307	1 3 3 0 7
42400800	DETECTABLE WARNINGS	SQ FT.	836	836
44000100	PAVEMENT REMOVAL	SO YD	427	427
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	24051	24051
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2107	2107
44000600	SIDEWALK REMOVAL	SO FT	11775	11775
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	481	481
44201741	CLASS D PATCHES, TYPE II, 8 INCH	50 YD	722	722

✤ SPECIALTY ITEM

 $\triangle$  100% COST TO VILLAGE (0043)

	Bollinger, Lach	USER NAME = ceserio	DESIGNED - DRAWN -	WT WT	REVISED - REVISED -	STATE OF ILLINOIS		C		ENUE			E OF F
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CODE			TOTAL	ROADWAY 0005
NO.	ITEM	UNIT	QUANTITY	S. N.
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	722	722
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	481	481
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	16320	16320
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	15	15
55100300	STORM SEWER REMOVAL 8"	FOOT	40	40
60108206	PIPE UNDERDRAINS, TYPE 2, 6"	FOOT	140	140
60108300	PIPE UNDERDRAINS 8" (SPECIAL)	FOOT	371	371
60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	13	13
60218300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	4	4
60251200	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 8 GRATE	EACH	1	1
60500050	REMOVING CATCH BASINS	EACH	5	5
60600605	CONCRETE CURB, TYPE B	FOOT	1491	1491
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	2236	2236
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	760	760

✤ SPECIALTY ITEM

 $\triangle$  100% cost to village (0043)

Bollinger, Lach & Associates, Inc.	USER NAME = cesorio PLOT SCALE = 40.0000 '/ in.	DESIGNED - DRAWN - CHECKED -	WT WT MC	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CI					OF RI
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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 S. N.
NO.			- COARTIN	
66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1
66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3
67100100	MOBILIZATION	L SUM	1	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	5602	5602
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	1867	1867
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	1227	1227
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	19248	19248
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	4706	4706
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1096	1096
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1688	1688

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✤ SPECIALTY ITEM

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	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.

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-	CODE NO.	ІТЕМ	UNIT	TOTAL QUANTITY	ROADWAY 0005 S. N.
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	613	613
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	9624	9624
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2353	2353
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	548	548
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	844	844
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	120	120
*	K0013080	PERENNIAL PLANTS, SEDGE MEADOW TYPE, GALLON POT	UNIT	30	30
-	K0026830	SHRUB REMOVAL	EACH	1	1
*	K0029634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	19	19
*	K1001970	CA-7 WASHED GRAVEL FOR RAIN GARDEN	CU YD	294	294
*	X0323444	DECORATIVE STEEL RAILING	FOOT	1491	1491
*	X0327808	PLANTING SOIL MIX FURNISH AND PLACE, 18"	SO YD	883	883
	X5537600	STORM SEWERS TO BE CLEANED 8"	FOOT	50	50
	X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	50	50
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					CONSTR. CODE			
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 S. N.			
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	613	613			
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FDOT	9624	9624			
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2353	2353			
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	548	548			
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	844	844			
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	120	120			
*	K0013080	PERENNIAL PLANTS, SEDGE MEADOW TYPE, GALLON POT	UNIT	30	30			
	K0026830	SHRUB REMOVAL	EACH	1	1			
*	K0029634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	19	19			
*	K1001970	CA-7 WASHED GRAVEL FOR RAIN GARDEN	CU YD	294	294			
*	X0323444	DECORATIVE STEEL RAILING	FOOT	1491	1491			
*	X0327808	PLANTING SOIL MIX FURNISH AND PLACE, 18"	SQ YD	883	883			
Δ	X5537600	STORM SEWERS TO BE CLEANED 8"	FOOT	50	50			
	X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	50	50			
	* SPECIALTY	ITEM						
		TO VILLAGE (0043)						
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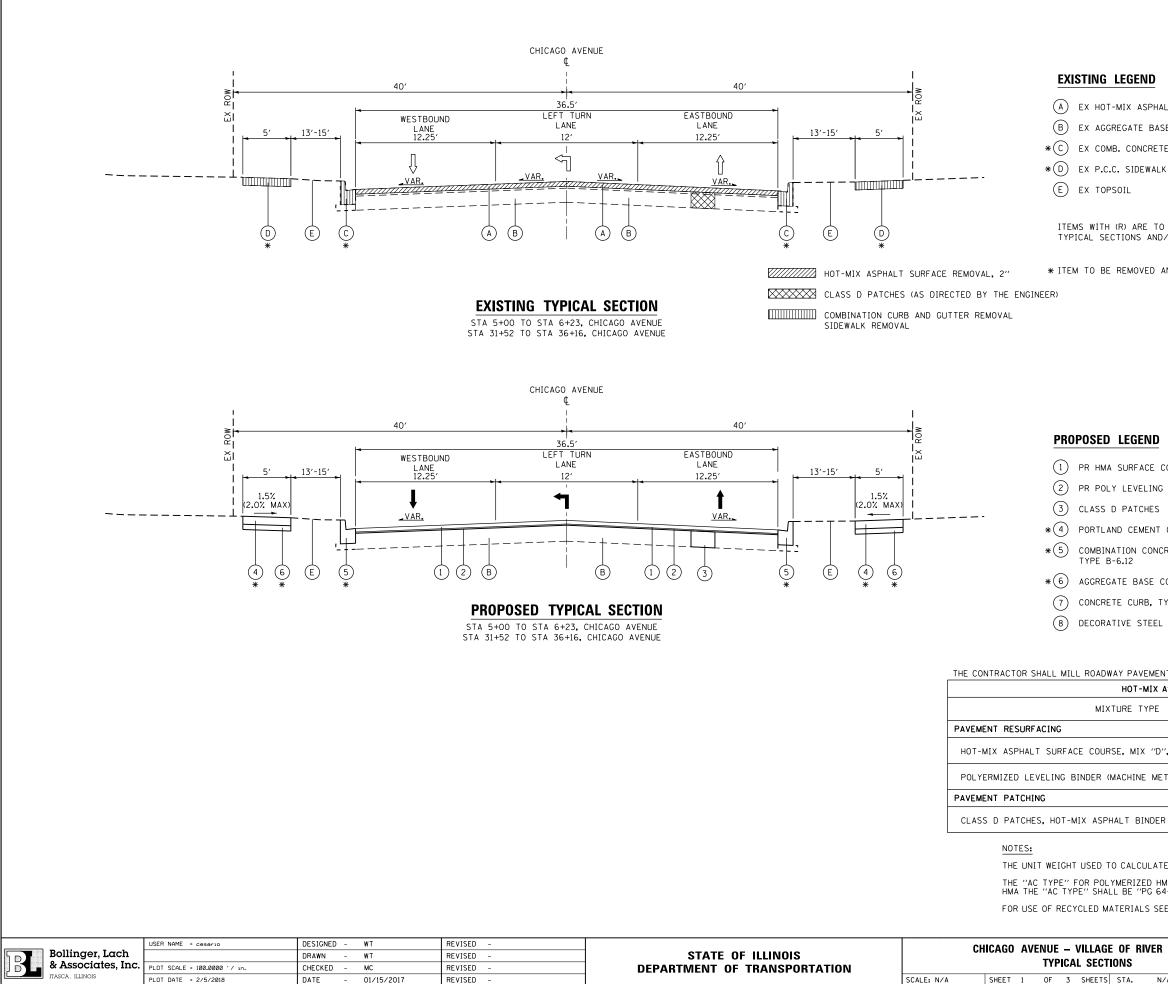
					CONSTR. CODE
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0005 S. N.
	X5537900	STORM SEWERS TO BE CLEANED 15"	FOOT	50	50
	X5538000	STORM SEWERS TO BE CLEANED 18"	FOOT	50	50
F	X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	98	98
-	X7015005	CHANGEABLE MESSAGE SIGN	CAL DAY	120	120
*	XX002185	RELOCATE EXISTING LIGHT POLE	EACH	1	1
,	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	83	83
*	Z0027800	GEOTECHNICAL FABRIC	SQ YD	883	883
_	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	720	720

✤ SPECIALTY ITEM

 $\triangle$  100% COST TO VILLAGE (0043)

		USER NAME = cesario	DESIGNED -	WT	REVISED -			C	HICAGO A	VENUE	_ VII	LAGE OF
11月1日月月月1日日	llinger, Lach		DRAWN -	WT	REVISED -	STATE OF ILLINOIS			INOAGO A	LIVOL	- •	LAGE OF
	Associates, Inc. 🛾	PLOT SCALE = 40.0000 1/ 10.	CHECKED -	мс	REVISED -	DEPARTMENT OF TRANSPORTATION						
ITASC	CA, ILLINOIS	PLOT DATE = 2/5/2018	DATE -	01/15/2017	REVISED -		SCALE:	N/A	SHEET 6	OF	6 SI	IEETS STA.

N/A	TO STA.	N/A			FED. AID	CONTRAC		
IVER FOI	REST		F.A.U. RTE. 1398	SECTION	s	COUNTY COOK	TOTAL SHEETS 65	SHEET NO. 8



PLOT DATE = 2/5/2018

DATE

-

01/15/2017

REVISED

(A) EX HOT-MIX ASPHALT SURFACE COURSE, 4" (R-2") (B) EX AGGREGATE BASE COURSE, 6" \*(C) EX COMB. CONCRETE CURB & GUTTER, TY B-6.12

ITEMS WITH (R) ARE TO BE REMOVED AS SHOWN ON THE TYPICAL SECTIONS AND/OR ON THE PLAN SHEETS.

 $\boldsymbol{\ast}$  ITEM TO BE REMOVED AND REPLACED AT LOCATIONS INDICATED IN THE PLANS

(1) PR HMA SURFACE COURSE, MIX "D", N50, 1 1/2" (2) PR POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4" \* (4) PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 \*(6) AGGREGATE BASE COURSE, TY B 4"

(7) CONCRETE CURB, TYPE B

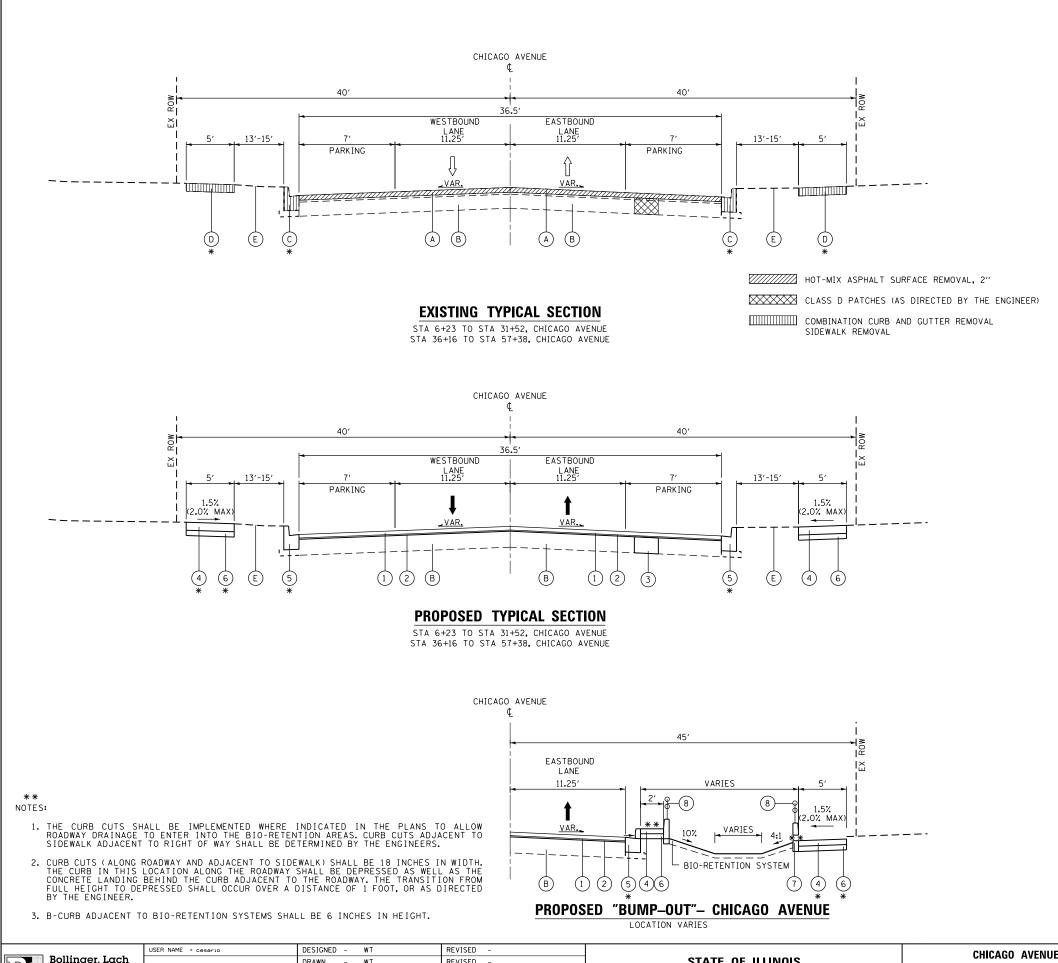
(8) DECORATIVE STEEL RAILING

and that emerit in the three ment in a remained.	
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
IXTURE TYPE	AIR VOIDS © Ndes
JRSE, MIX "D", N50 (IL 9.5 mm); 1 1/2"	4% @ 50 GYR
(MACHINE METHOD), IL-4.75, N50 (IL 9.5 mm), 3/4"	3.5% @ 50 GYR
PHALT BINDER (IL 19 mm), N70; 8"	4% @ 70 GYR

THE CONTRACTOR SHALL MILL ROADWAY PAVEMENT PRIOR TO PAVEMENT PATCHING.

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SO 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 DISTRICT ONE SPECIAL PROVISIONS.

GE						SECTION	TOTAL SHEETS	SHEET NO.	
CTIONS					1398	17-00099-00-RS	СООК	65	9
	TIONS						CONTRAC	T NO. 6	51E54
`S	STA.	N/A	TO STA.	N/A		ILLINOIS FED. A	ID PROJECT		



Bollinger, Lac & Associates, 1		DESIGNED - WT DRAWN - WT CHECKED - MC	REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	СН	IICAGO AVENI T	UE – VILLAG Ypical sect
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: N/A	SHEET 2 0	F 3 SHEETS

# **EXISTING LEGEND**

- (A) EX HOT-MIX ASPHALT SURFACE COURSE, 4" (R-2")
- (B) EX AGGREGATE BASE COURSE, 6"
- \*(C) EX COMB. CONCRETE CURB & GUTTER, TY B-6.12
- \*(D) EX P.C.C. SIDEWALK
- E EX TOPSOIL

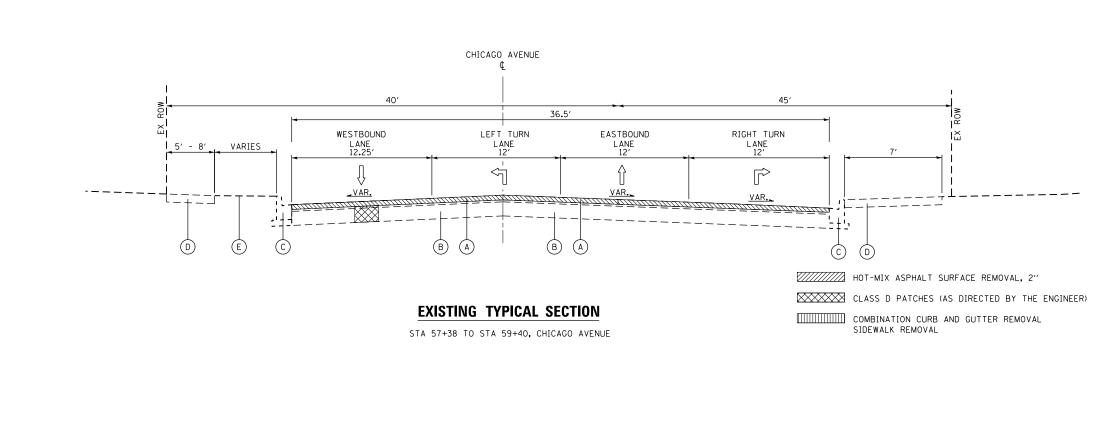
ITEMS WITH (R) ARE TO BE REMOVED AS SHOWN ON THE TYPICAL SECTIONS AND/OR ON THE PLAN SHEETS.

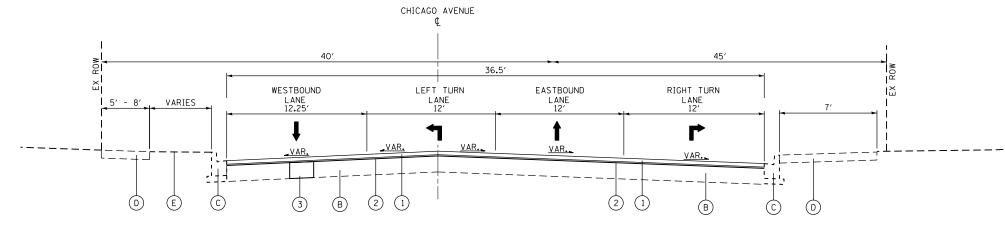
 $\ast$  ITEM TO BE REMOVED AND REPLACED AT LOCATIONS INDICATED IN THE PLANS

# **PROPOSED LEGEND**

- 1) PR HMA SURFACE COURSE, MIX "D", N50, 1 1/2"
- 2 PR POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 3 CLASS D PATCHES
- \* (4) PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
- \*(5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- \*(6) AGGREGATE BASE COURSE, TY B 4"
- (7) CONCRETE CURB, TYPE B
- (8) DECORATIVE STEEL RAILING
- \* ITEM TO BE REMOVED AND REPLACED AT LOCATIONS INDICATED IN THE PLANS

GE O	RIVER FO	REST		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
CTIONS				1398	17-00099-00-RS	СООК	65	10		
	<b>.</b>			CONTRACT NO. 61E54						
'S ST	4. N/A	TO STA.	NZA		ILLINOIS FED. AI	D PROJECT				





**PROPOSED TYPICAL SECTION** 

STA 57+38 TO STA 59+40, CHICAGO AVENUE

L L	Bollinger, Lach & Associates, Inc.	USER NAME = cesario	DESIGNED -	WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U.	SECTION	COUNTY	TOTAL SHEET
Boiniger, Laci			DRAWN -	WT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE: N/A	TYPICAL SECTIONS			17-00099-00-RS	СООК	65 11
	Bollinger, Lach & Associates, Inc.	PLOT SCALE = 100.0000 ' / in.	CHECKED -	мс	REVISED -						CONTRAC	T NO. 61E54
Ľ		PLOT DATE = 2/5/2018	DATE -	01/15/2017	REVISED -		SCALE: N/A	SHEET 2 OF 3 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	D PROJECT	

# EXISTING LEGEND

- (A) EX HOT-MIX ASPHALT SURFACE COURSE, 4" (R-2")
- (B) EX AGGREGATE BASE COURSE, 6"
- \* C EX COMB. CONCRETE CURB & GUTTER, TY B-6.12
- \*(D) EX P.C.C. SIDEWALK
- E EX TOPSOIL

ITEMS WITH (R) ARE TO BE REMOVED AS SHOWN ON THE TYPICAL SECTIONS AND/OR ON THE PLAN SHEETS.

\* ITEM TO BE REMOVED AND REPLACED AT LOCATIONS INDICATED IN THE PLANS

# **PROPOSED LEGEND**

- (1) PR HMA SURFACE COURSE, MIX "D", N50, 1 1/2"
- (2) PR POLY LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 3 CLASS D PATCHES
- \*(4) PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
- \*5 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- \*(6) AGGREGATE BASE COURSE, TY B 4"
- (7) CONCRETE CURB, TYPE B
- (8) DECORATIVE STEEL RAILING

Sta	tion	Offset	Area	Quantity
From	То	(LT / RT)	(Sq Yd)	(Ton)
CHICAGO AVENUE				
5+00	10+50	LT / RT	2,274	191
10+50	16+00	LT / RT	2,262	190
16+00	21+50	LT / RT	2,393	201
21+50	27+00	LT / RT	2,393	201
27+00	32+50	LT / RT	2,393	201
32+50	38+00	LT / RT	2,405	202
38+00	43+50	LT / RT	2,476	208
43+50	49+00	LT / RT	2,393	201
49+00	54+50	LT / RT	2,393	201
54+50	59+40	LT / RT	2,250	189
PA	Y ITEM: 40603	335	TOTAL	1.985

	THERMOPLASTIC PAVEMENT MARKING											
Sta	ition	Offset	Offset 4 Inch		12 Inch	24 Inch	Letters & Symbols					
From	То	(LT / RT)	(F†)	(F†)	(F†)	(F†)	(Sq Ft)					
CHICAGO AVENUE												
5+00	10+50	LT / RT	988	291	80	53	39					
10+50	16+00	LT / RT	820	178		24						
16+00	21+50	LT / RT	928	112	42	207	53					
21+50	27+00	LT / RT	788	188	42	26	53					
27+00	32+50	LT / RT	924	211	107	26	53					
32+50	38+00	LT / RT	1,256	203	65	144	182					
38+00	43+50	LT / RT	736	258	42	256	53					
43+50	49+00	LT / RT	927	214	42	60	53					
49+00	54+50	LT / RT	1,048	268	42	24	53					
54+50	59+40	LT / RT	1,209	430	86	24	77					
PAY ITEM: 78000400 / 78000650	78000200 / 78000600 / / 78000100	TOTAL	9,624	2,353	548	844	613					

Sto	ation	Offset	Area	Quantity
From	То	(LT / RT)	(Sq Yd)	(Ton)
ICAGO AVENUE				
5+00	10+50	LT / RT	2,333	98
10+50	16+00	LT / RT	1,143	96
16+00	21+50	LT / RT	1,214	102
21+50	27+00	LT / RT	1,214	102
27+00	32+50	LT / RT	1,214	102
32+50	38+00	LT / RT	1,214	102
38+00	43+50	LT / RT	1,262	106
43+50	49+00	LT / RT	1,214	102
49+00	54+50	LT / RT	1,214	102
54+50	59+40	LT / RT	1,155	97
PA	Y ITEM: 40600	827	TOTAL	1.009

н	HMA SURFACE REMOVAL, 2 INCH										
Sta	tion	Offset	Area								
From	То	(LT / RT)	(Sq Yd)								
CHICAGO AVENUE											
5+00	10+50	LT / RT	2,395								
10+50	16+00	LT / RT	2,399								
16+00	21+50	LT / RT	2,392								
21+50	27+00	LT / RT	2,397								
27+00	32+50	LT / RT	2,396								
32+50	38+00	LT / RT	2,439								
38+00	43+50	LT / RT	2,534								
43+50	49+00	LT / RT	2,393								
49+00	54+50	LT / RT	2,392								
54+50	59+40	LT / RT	2,314								
PAY ITEM:	44000157	TOTAL	24,051								

REMOVING CATCH BASINS											
Chatian	Distance	Quantity									
Station	Intersection	(LT / RT)	(F†)	(Each)							
ICAGO AVENUE											
14+78.52	Forest	RT	31	1							
15+28.96	Forest	RT	19	1							
55+77.54	Bonnie Brae	RT	27	1							
56+11.70	Bonnie Brae	RT	27	1							
56+31.57	Bonnie Brae	RT	19	1							
PA	Y ITEM: 60500	050	TOTAL	5							

HMA SURFACE REMO	VAL - BUTT J	IOINT			
Internetice	Offset	Area			
Intersection	(LT / RT)	(Sq Yd)			
PROJECT BEGIN	LT / RT	18			
KEYSTONE	LT	14			
RETSTONE	RT	14			
FOREST	LT	12			
TOREST	RT	12			
PARK	LT	12			
	RT	15			
FRANKLIN	LT	14			
T NAME IN	RT	13			
ASHLAND	LT	13			
	RT	14			
LATHROP	LT	15			
	RT	16			
JACKSON	LT	12			
	RT	12			
MONROE	LT	12			
	RT	13			
WILLIAMS	LT	12			
	RT	12			
CLINTON	LT	12			
	RT	12			
BONNIE BRAE	LT	12			
	RT	13			
PROJECT END	LT / RT	24			
PAY ITEM: 40600	982	328			

	USER NAME = cesario	DESIGNED - WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTF.	SECTION	COUNTY TOTAL SHEET SHEETS NO.
Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS	1	SCHEDULE OF QUANTITIES	1398	17-00099-00-RS	СООК 65 12
& Associates, Inc.	PLOT SCALE = 100.0000 ' / in.	CHECKED - MC	REVISED -	DEPARTMENT OF TRANSPORTATION	L	SCHEDULE OF QUANTITIES			CONTRACT NO. 61E54
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: NTS	SHEET 1 OF 6 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	ID PROJECT

Intersection	Offset	Quadrant	Area
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Ft)
	LT	NW	320
-	RT	SW	339
KEYSTONE	LT	NE	397
-	RT	SE	334
1			
	LT	NW	219
FOREST	RT	SW	236
	LT	NE	285
	RT	SE	175
	LT	NW	282
	RT	SW	277
PARK	LT	NE	273
	RT	SE	275
	n I	JL	210
	LT	NW	205
	RT	SW	301
FRANKLIN	LT	NE	259
	RT	SE	227
	LT	NW	207
ASHLAND	RT	SW	254
	LT	NE	273
	RT	SE	182
	LT	NW	258
-	RT	SW	250
LATHROP	LT	NE	267
	RT	SE	266
	LT	NW	265
JACKSON	RT	SW	361
	LT	NE	258
	RT	SE	285
	LT	NW	261
	RT	SW	290
MONROE	LT	NE	290
-	RT	SE	280
I			
	LT	NW	257
WILLIAMS	RT	SW	299
	LT	NE	256
	RT	SE	297
	LT	NW	252
	RT	SW	252
CLINTON			
		NE	254 257
	RT	SE	251
	LT	NW	254
	RT	SW	243
BONNIE BRAE	LT	NE	254
-	RT	SE	258
PAY ITEM: 4400060		TOTAL	11,775

	Offset	Quadrant	Area	
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Yd)	Int
		NIW	40	
	LT RT	NW SW	48 49	
KEYSTONE	LT	NE	57	H
	RT	SE	49	
	Т			
	LT	NW	40	
FOREST	RT	SW	40	
	LT RT	NE SE	<u>    44                               </u>	
		52		
	LT	NW	31	
PARK	RT	SW	31	
PARK	LT	NE	30	
	RT	SE	31	
	. I.Т.	NIW	23	
	LT RT	NW SW	33	
FRANKLIN	LT	NE	29	1
	RT	SE	25	
	LT	NW	23	
ASHLAND	RT	SW	28	
ASHLAND	LT	NE	30	
	RT	SE	20	
	LT	NW	29	
	RT	SW	25	
LATHROP	LT	NE	30	
	RT	SE	30	
	LT	NW	41	
JACKSON	RT LT	SW NE	48 40	
	RT	SE	40	
	LT	NW	29	
MONROE	RT	SW	32	
	LT	NE SE	29 33	
	RT	JSE	<u> </u>	
	LT	NW	29	
WILLIAMS	RT	SW	33	
WILLIAMS	LT	NE	28	
	RT	SE	33	
	LT	NW	28	
	RT	SW	28	
CLINTON	LT	NE	28	
	RT	SE	29	
	LT	NW	28	
BONNIE BRAE	RT	SW	42	вс
	LT	NE	28 42	
	RT	SE	42	

	Offset	Quadrant	Area
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Ft
	LT	NW	435
	RT	SW	447
KEYSTONE	LT	NE	512
	RT	SE	446
	LT	NW	364
FOREST	RT	SW	354
FUREST	LT	NE	393
	RT	SE	310
	LT	NW	282
PARK	RT	SW	277
	LT	NE	273
	RT	SE	276
	LT	NW	205
	RT	SW	301
FRANKLIN	LT	NE	259
	RT	SE	239
		52	221
	LT	NW	207
	RT	SW	254
ASHLAND	LT	NE	273
	RT	SE	182
		1	
	LT	NW	258
LATHROP	RT	SW	229
	LT	NE	267
	RT	SE	266
	LT	NW	372
	RT	SW	435
JACKSON	LT	NE	359
	RT	SE	359
	LT	NW	261
MONROE	RT	SW	290
	LT	NE	260
	RT	SE	298
	LT	NW	257
	RT	SW	299
WILLIAMS	LT	NE	255
	RT	SE	297
			201
	LT	NW	252
	RT	SW	254
CLINTON	LT	NE	254
	RT	SE	257
		NW	254
BONNIE BRAE	RT	SW	369
	LT RT	NE SE	254 373
		J JE	212

Dellin and	USER NAME = cesario	DESIGNED -	WT	REVISED -		C	CHICAGO	AVENUE	– VILLAG	E OF RIVER F	OREST	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
Bollinger, Lach		DRAWN -	WT	REVISED -	STATE OF ILLINOIS							1398	17-00099-00-RS	СООК	65 13
& Associates, Inc.	PLOT SCALE = 100.0000 ' / in.	CHECKED -	MC	REVISED -	DEPARTMENT OF TRANSPORTATION			<b>Ο Ο ΠΕ</b> ΡΟ	DLE OF UU	ANTITIES				CONTRAC	CT NO. 61E54
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE -	01/15/2017	REVISED -		SCALE: NTS	SHEET	2 OF	6 SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	

	Offset	Quadrant	Length
tersection	(LT / RT)	(NW, SW, NE, SE)	(F†)
	1		
	LT	NW	81
VENCTONE	RT	SW	84
KEYSTONE	LT	NE	74
	RT	SE	75
	1		
	LT	NW	74
FORFET	RT	SW	79
FOREST	LT	NE	74
	RT	SE	68
	LT	NW	43
DADY	RT	SW	43
PARK	LT	NE	41
	RT	SE	42
		· ·	
	LT	NW	12
	RT	SW	46
FRANKLIN	LT	NE	37
	RT	SE	12
	· · · · · · · · · · · · · · · · · · ·		
	LT	NW	11
	RT	SW	38
ASHLAND	LT	NE	40
	RT	SE	11
	LT	NW	37
LATHROP	RT	SW	33
	LT	NE	38
	RT	SE	38
		· · ·	
	LT	NW	71
JACKSON	RT	SW	70
JACKSON	LT	NE	71
	RT	SE	68
	LT	NW	40
MONROE	RT	SW	44
WONNUE	LT	NE	38
	RT	SE	46
	LT	NW	38
WILLIAMS	RT	SW	45
TILLIAMS	LT	NE	37
	RT	SE	44
	LT	NW	36
CLINTON	RT	SW	37
CLINTON	LT	NE	37
	RT	SE	37
	LT	NW	37
	RT	SW	74
ONNIE BRAE	LT	NE	37
	RT	SE	69

Internetice	Offset	Quadrant	Lengt
Intersection	(LT / RT)	(NW, SW, NE, SE)	(F†)
	LT	NW	83
	RT	SW	93
KEYSTONE	LT	NE	83
	RT	SE	85
	LT	NW	83
FOREST	RT	SW	88
TUNEST	LT	NE	84
	RT	SE	79
	LT	NW	43
PARK	RT	SW	43
	LT	NE	41
	RT	SE	42
	LT	NW	12
	RT	SW	46
FRANKLIN	LT	NE	37
	RT	SE	12
	LT	NW	11
	RT	SW	38
ASHLAND	LT	NE	40
	RT	SE	11
	LT	NW	37
LATHROP	RT	SW	33
	LT RT	NE SE	38 38
		32	50
	LT	NW	80
	RT	SW	81
JACKSON	LT	NE	80
	RT	SE	78
	LT	NW	40
MONROE	RT	SW	44
<b>-</b>	LT	NE	38
	RT	SE	46
	LT	NW	38
	RT	SW	45
WILLIAMS	LT	NE	37
	RT	SE	44
	LT	NW	36
CLINTON	RT	SW	37
	LT	NE	37
	RT	SE	37
		NIW	77
	LT	NW	37
BONNIE BRAE	RT	SW	85
	LT RT	NE SE	37 79
		JL	C I

	Offset	Quadrant	Area
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Yd
			134 10
	LT	NW	38
	RT	SW	38
KEYSTONE	LT	NE	31
	RT	SE	32
	I	1 1	
	LT	NW	28
FOREST	RT	SW	32
FOREST	LT	NE	31
	RT	SE	27
	LT	NW	
DADK	RT	SW	
PARK	LT	NE	
	RT	SE	
	LT	NW	
	RT	SW	
FRANKLIN	LT	NE	
	RT	SE	
	·	· ·	
	LT	NW	
ASHLAND	RT	SW	
ASHLAND	LT	NE	
	RT	SE	
	LT	NW	
LATHROP	RT	SW	
LATING	LT	NE	
	RT	SE	
	1		
	LT	NW	26
JACKSON	RT	SW	30
0.000000	LT	NE	25
	RT	SE	26
	LT	NW	
MONROE	RT	SW	
	LT	NE	
	RT	SE	
		NIN I	
	LT	NW	
WILLIAMS	RT	SW	
		NE	
	RT	SE	
	. T	NIW	
		NW	
CLINTON	RT	SW	
		NE	
	RT	SE	
		NW	
BONNIE BRAE	RT	SW	33
	LT	NE	
	RT	SE	30
PAY ITEM: 440	00100	TOTAL	427

	USER NAME = ceserio	DESIGNED - WT		REVISED -		C	HICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Bollinger, Lach & Associates, Inc.			SCHEDULE OF QUANTITIES			17-00099-00-RS	СООК	65	14			
	FEOT SCHEE - 100.0000 / 10.	CHECKED - MC		REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRAC	T NO. 6	51E54
TAJCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/	/15/2017	REVISED -		SCALE: NTS	SHEET 3 OF 6 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT		

	DETECTABLE WA		
Intersection	Offset	Quadrant	Area
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Ft)
		<b>NUR</b>	20
		NW	20
KEYSTONE	RT	SW	20
	LT	NE	20
	RT	SE	20
	LT	NW	10
	RT	SW	26
FOREST	LT	NE	26
	RT	SE	10
	LT	NW	20
DADY	RT	SW	20
PARK	LT	NE	20
	RT	SE	20
	1		
	LT	NW	10
	RT	SW	20
FRANKLIN	LT	NE	20
	RT	SE	10
	LT	NW	10
ASHLAND	RT	SW	20
ASILEAD	LT	NE	20
	RT	SE	10
			20
	LT	NW	20
LATHROP	RT	SW	20
	LT	NE	20
	RT	SE	20
	LT	NW	20
	RT	SW	24
JACKSON	LT	NE	20
	RT	SE	20
	LT	NW	20
MONROE	RT	SW	20
MONITOL	LT	NE	20
	RT	SE	20
	LT	NW	20
WILLIAMS	RT	SW	20
	LT	NE	20
	RT	SE	20
	LT	NW	20
	RT	SW	20
CLINTON	LT	NE	20
		SE	
	RT	SE	20
	LT	NW	20
	RT	SW	20
BONNIE BRAE	LT	NE	20
	RT	SE	20
	00800	TOTAL	836

			LAND	SCAPING SCHEDU	LE					EROSIO	N CONTROL SCHED	ULE	
	LOCATION		TOPSOIL FURNISH & PLACE, 4 INCH	SODDING SALT TOLERANT	CA-7 WASHED GRAVEL FOR RAIN GARDENS	* * SHREDDED BARK MULCH 2 INCH	PLANTING SOIL MIX FURN. & PLACE 18 INCH	GEOTECHNICAL FABRIC	L	OCATION		EROSION CONTROL BLANKET	- PERIMETE EROSION BAR
					GARDEINS		FLACE TO INCH		Intersection	Offset	Quadrant	Area	Length
Intersection	Offset	Quadrant	Area	Area	Volume	Area	Area	Area		(LT / RT)	(NW, SW, NE, SE)	(Sq Yd)	(F†)
	(LT / RT)	(NW, SW, NE, SE)	(Sq Yd)	(Sq Yd)	(Cu Yd)	(Sq Yd)	(Sq Yd)	(Sq Yd)			1	1	1
		1								LT	NW	66	50
	LT	NW	66	66	18	53	53	53	KEYSTONE	RT	SW	71	50
KEYSTONE	RT	SW	71	71	19	57	57	57		LT	NE	34	50
NET STONE	LT	NE	34	34	17	52	52	52		RT	SE	51	50
	RT	SE	51	51	19	57	57	57				1	
	1		1							LT	NW	11	50
	LT	NW	11	11	29	88	88	88	FOREST	RT	SW	16	50
FOREST	RT	SW	16	16	27	82	82	82		LT	NE	22	50
	LT	NE	22	22	22	67	67	67		RT	SE	6	50
	RT	SE	6	6	29	86	86	86				1	
		-								LT	NW	41	
	LT	NW	41	41					PARK	RT	SW	37	
PARK	RT	SW	37	37						LT	NE	38	
	LT	NE	38	38						RT	SE	37	
	RT	SE	37	37									
										LT	NW	22	
	LT	NW	22	22					FRANKLIN	RT	SW	43	
FRANKLIN	RT	SW	43	43					FRANKLIN	LT	NE	29	
FRANKLIN	LT	NE	29	29						RT	SE	25	
	RT	SE	25	25									
										LT	NW	23	
	LT	NW	23	23						RT	SW	27	
	RT	SW	27	27					ASHLAND	LT	NE	34	
ASHLAND	LT	NE	34	34						RT	SE	15	
	RT	SE	15	15									1
			I							LT	NW	28	
	LT	NW	28	28					1.17/1000	RT	SW	16	
	RT	SW	16	16					LATHROP	LT	NE	29	
LATHROP	LT	NE	29	29						RT	SE	29	
	RT	SE	29	29									
					L.					LT	NW	34	50
	LT	NW	34	34	19	57	57	57	IACKEON	RT	SW	28	50
	RT	SW	28	28	19	57	57	57	JACKSON	LT	NE	32	50
JACKSON	LT	NE	32	32	19	57	57	57		RT	SE	30	50
	RT	SE	30	30	19	56	56	56					
			· · · · · ·							LT	NW	32	
	LT	NW	32	32					WANDAE	RT	SW	39	
	RT	SW	39	39					MONROE	LT	NE	28	
MONROE	LT	NE	28	28						RT	SE	44	
	RT	SE	44	44							1	1	1
	1	1	ı		1	1		<u> </u>		LT	NW	38	
	LT	NW	38	38						RT	SW	50	
	RT	SW	50	50					WILLIAMS	LT	NE	36	
WILLIAMS	LT	NE	36	36						RT	SE	49	
	RT	SE	49	49						1		1	1
			-			I	l			LT	NW	27	
	LT	NW	27	27						RT	SW	28	
	RT	SW	28	28					CLINTON	LT	NE	27	
CLINTON	LT	NE	27	27						RT	SE	27	
	RT	SE	27	27									1
		JL JL	21	21						LT	NW	28	
	LT	NW	28	28						RT	SW	30	50
	RT	SW	30	30	19	57	57	57	BONNIE BRAE	LT	NE	27	
BONNIE BRAE	LT	NE SW	27	27			57			RT	SE	32	50
	RT	SE	32	32	19	57	57	57	PAY ITEM: 25100630		TOTAL	1,416	700
		JE JE	52	32	13	ן נ <u>י</u>	51		TAT TEM: 20100600	20000400	TUTAL	1,410	100
ITEM: 21101615 /		TOTAL	1		1		883						

\*\* NOTE: SHREDDED BARK MULCH 2 INCH IS INCIDENTAL TO PERENNIALS PER IDOT STANDARD SPEC

		USER NAME = cesario	DESIGNED - WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U.	SECTION	COUNTY TOTA	AL SHEET
	Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS		SCHEDULE OF QUANTITIES	1398	17-00099-00-RS	COOK 65	15
	& Associates, Inc.	PLOT SCALE = 100.0000 ' / in.	CHECKED – MC	REVISED -	DEPARTMENT OF TRANSPORTATION		SCHEDULE OF QUANTITIES			CONTRACT NO.	0. 61E54
B	ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: NTS	SHEET 4 OF 6 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT	

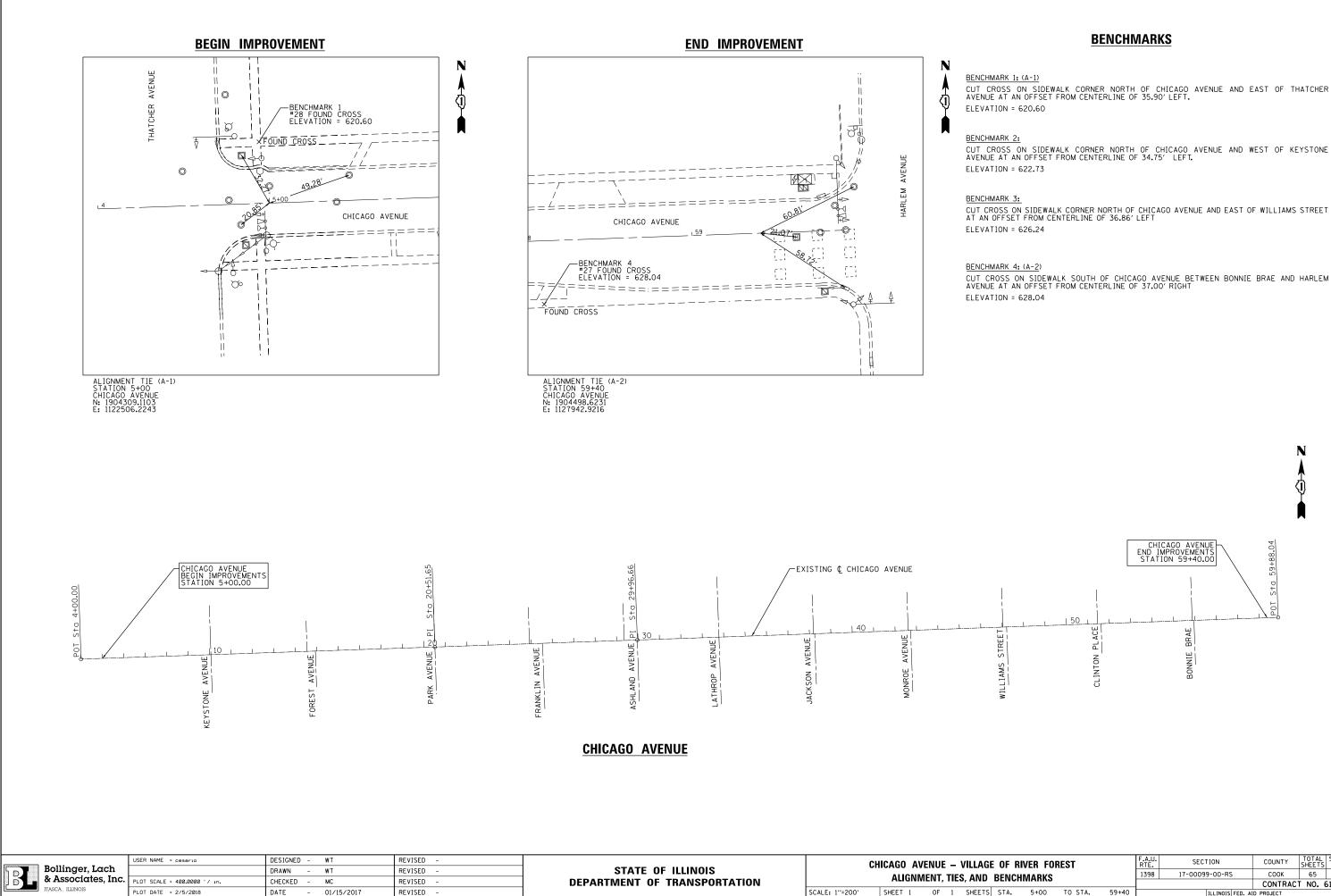
•	Offset	Quadrant	Area	Depth	Volum
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Ft)	(Feet)	(Cu Yo
					1
	LT	NW	477	2	35.33
KEYSTONE	RT	SW	513	2	38.00
REFORE	LT	NE	468	2	34.67
	RT	SE	513	2	38.00
			700	2	50.67
	LT	NW	792	2	58.67
FOREST	RT	SW	855	2	63.33
	LT	NE	747	2	55.33
	RT	SE	774	2	57.33
	LT	NW			
	RT	SW			
PARK	LT	NE			
	RT	SE			
	LT	NW			
FRANKLIN	RT	SW			
FRANKLIN	LT	NE			
	RT	SE			
	LT	NW			
ASHLAND	RT	SW			
	LT	NE			
	RT	SE			
	LT	NW			
	RT	SW			
LATHROP	LT	NE			
	RT	SE			
	LT	NW	513	2	38.00
IN CK CON	RT	SW	513	2	38.00
JACKSON	LT	NE	513	2	38.00
	RT	SE	504	2	37.33
		1 1			
	LT	NW			
MONROE	RT	SW			
		NE			
	RT	SE			
	LT	NW			
	RT	SW			
WILLIAMS	LT	NE			
	RT	SE			
		· · · · · · · · · · · · · · · · · · ·			
	LT	NW			
	RT	SW			
CLINTON	LT	NE			
	RT	SE			
	. –				
	LT	NW			
BONNIE BRAE	RT	SW	513	2	38.00
	LT	NE			
	RT	SE	513	2	38.00

	Offset	Quadrant	Area	Depth	Volume
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Ft)	(Feet)	(Cu Yo
	LT	NW	477	0.5	8.83
	RT	SW	513	0.5	9.50
KEYSTONE	LT	NE	468	0.5	8.67
	RT	SE	513	0.5	9.50
	LT	NW	792	0.5	14.67
	RT	SW	855	0.5	15.83
FOREST	LT	NE	747	0.5	13.83
	RT	SE	774	0.5	14.33
	· · -	<u></u>			1
	LT	NW			
PARK	RT	SW			
	LT	NE			
	RT	SE			
	LT	NW			
FRANKLIN	RT	SW			
I DOUNE IN	LT	NE			
	RT	SE			
	LT	NW			
	RT	SW			
ASHLAND	LT	NE			
	RT	SE			
	LT	NW			
	RT	SW			
LATHROP	LT	NE			
	RT	SE			
	L T	NUL NUL	F17	0.5	0.50
		NW	513	0.5	9.50
JACKSON	RT LT	SW	513 513	0.5	9.50 9.50
	RT	SE	504	0.5	9.30
	LT	NW			
MONROE	RT	SW			
	LT RT	NE SE			
		35			
	LT	NW			
WILLIAMS	RT	SW			
WILLIAMS	LT	NE			
	RT	SE			
	LT	NW			
	RT	SW			
CLINTON	LT	NE			
	RT	SE			
	LT	NW			
	RT	SW	513	0.5	9.50
BONNIE BRAE	LT	NE			
	RT	SE	513	0.5	9.50
	PAY ITEM: 20	201200		TOTAL	152

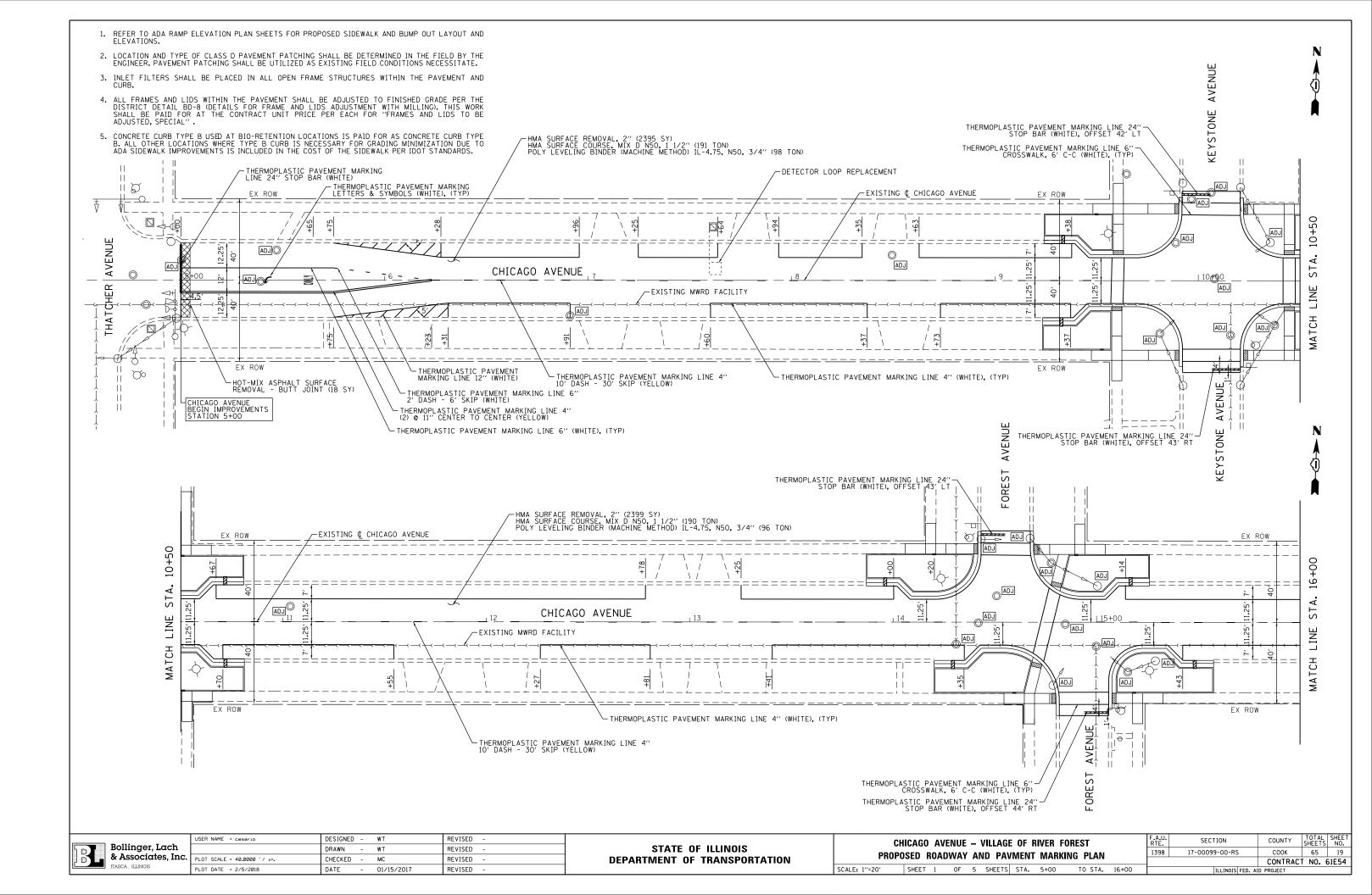
	USER NAME = cesario	DESIGNED - WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTF.	SECTION		OTAL SHEET
Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS		SCHEDULE OF QUANTITIES	1398	17-00099-00-RS		65 16
	PLOT SCALE = 100.0000 '/ in.	CHECKED - MC	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT I	NO. 61E54
Interview and a second second	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: NTS	SHEET 5 OF 6 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT	

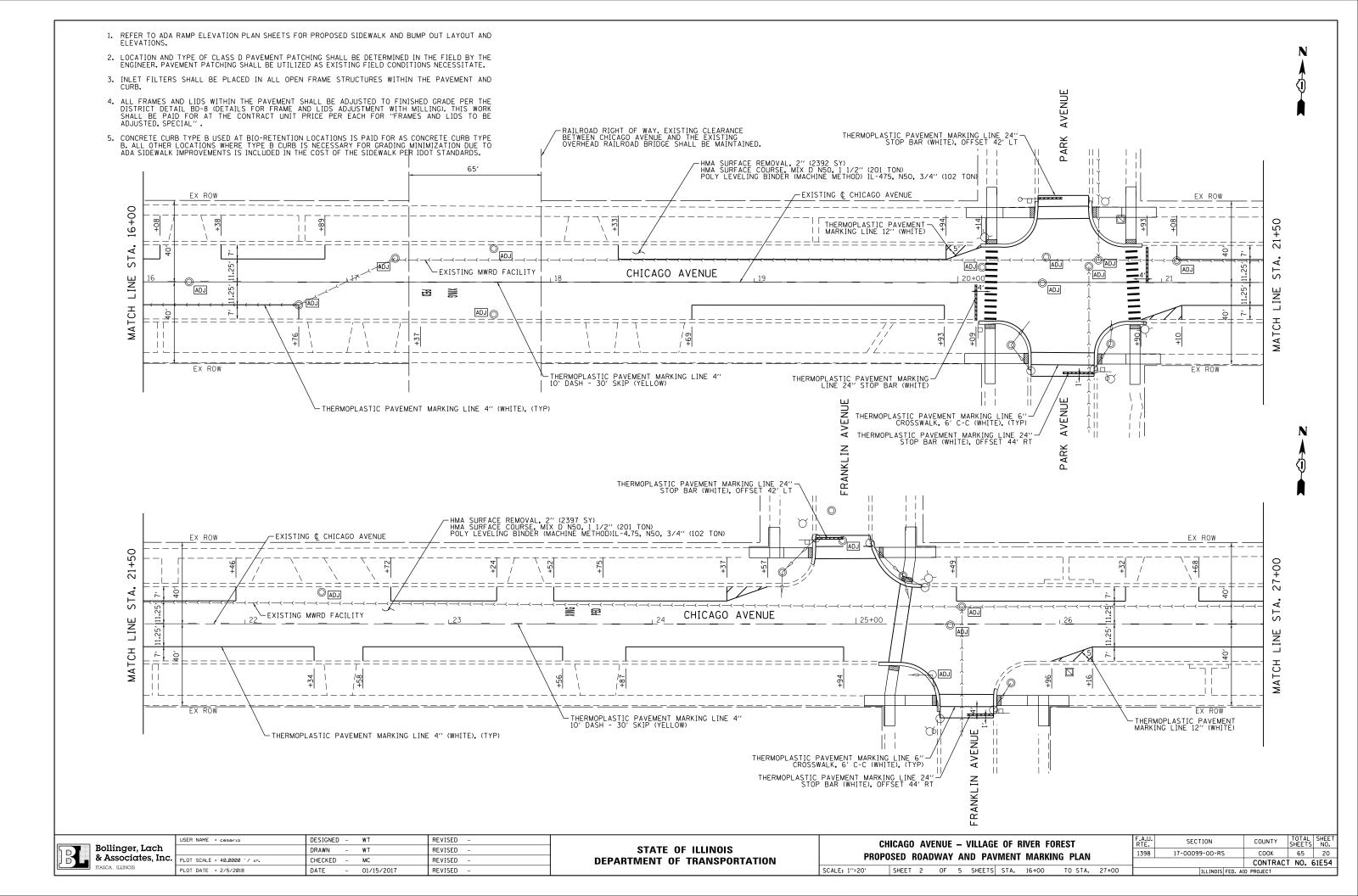
	Offset	Quadrant	Area	Volume	Quanti
Intersection	(LT / RT)	(NW, SW, NE, SE)	(Sq Yd)	(Gallons)	(Unit)
				1	
	LT	NW	66	660	0.66
KEYSTONE	RT	SW	71	710	0.71
		NE	34	340	0.34
	RT	SE	51	510	0.51
	LT	NW	11	110	0.11
	RT	SW	16	160	0.16
FOREST	LT	NE	22	220	0.22
	RT	SE	6	60	0.06
					1
	LT	NW	41	410	0.41
PARK	RT	SW	37	370	0.37
	LT	NE	38	380	0.38
	RT	SE	37	370	0.37
	LT	NW	22	220	0.22
	RT	SW	43	430	0.43
FRANKLIN	LT	NE	29	290	0.29
	RT	SE	25	250	0.25
	LT	NW	23	230	0.23
ASHLAND	RT	SW	27	270	0.27
	LT	NE	34	340	0.34
	RT	SE	15	150	0.15
	LT	NW	28	280	0.28
	RT	SW	16	160	0.16
LATHROP	LT	NE	29	290	0.29
	RT	SE	29	290	0.29
		1			1
	LT	NW	34	340	0.34
JACKSON	RT	SW	28	280	0.28
		NE	32	320	0.32
	RT	SE	30	300	0.30
	LT	NW	32	320	0.32
	RT	SW	39	390	0.39
MONROE	LT	NE	28	280	0.28
	RT	SE	44	440	0.44
	LT	NW	38	380	0.38
WILLIAMS	RT	SW	50	500	0.50
		NE	36	360	0.36
	RT	SE	49	490	0.49
	LT	NW	27	270	0.27
	RT	SW	28	280	0.28
CLINTON	LT	NE	27	270	0.27
	RT	SE	27	270	0.27
	LT	NW	28	280	0.28
BONNIE BRAE	RT	SW	30	300	0.30
· ·· •	LT	NE	27	270	0.27
	RT	SE	32	320	0.32

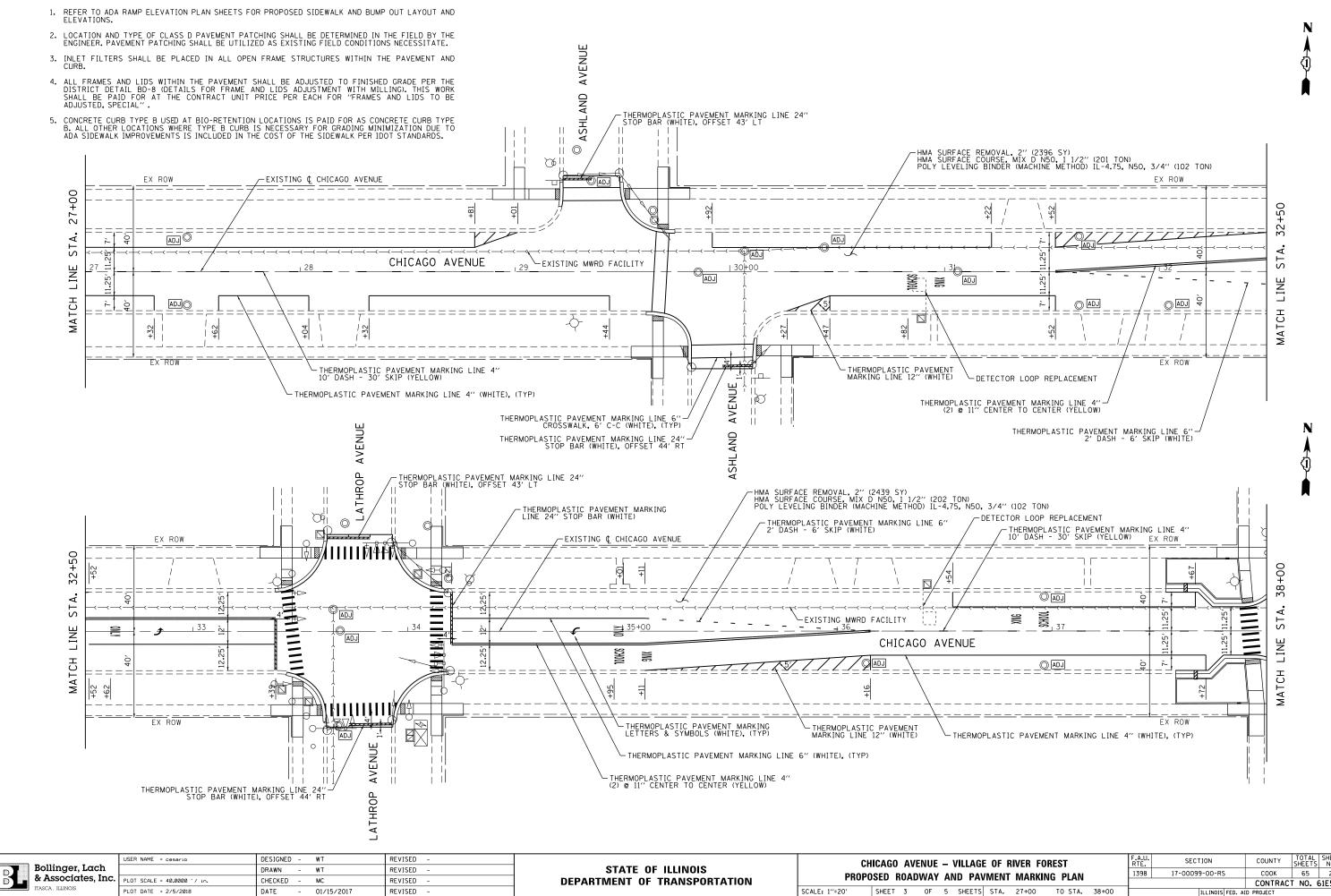
	USER NAME = cesario	DESIGNED - WT	REVISED -		CHICAGO AVENUE – VILLAGE OF RIVER FOREST SCHEDULE OF QUANTITIES			SECTION	COUNTY	TOTAL SHEET SHEETS NO.
Bollinger, Lach & Associates, Inc.		DRAWN - WT	REVISED -	STATE OF ILLINOIS				17-00099-00-RS	СООК	65 17
	PLOT SCALE = 100.0000 ' / in.	CHECKED – MC	REVISED -	DEPARTMENT OF TRANSPORTATION			_		CONTRAC	T NO. 61E54
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: NTS	SHEET 6 OF 6 SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT	



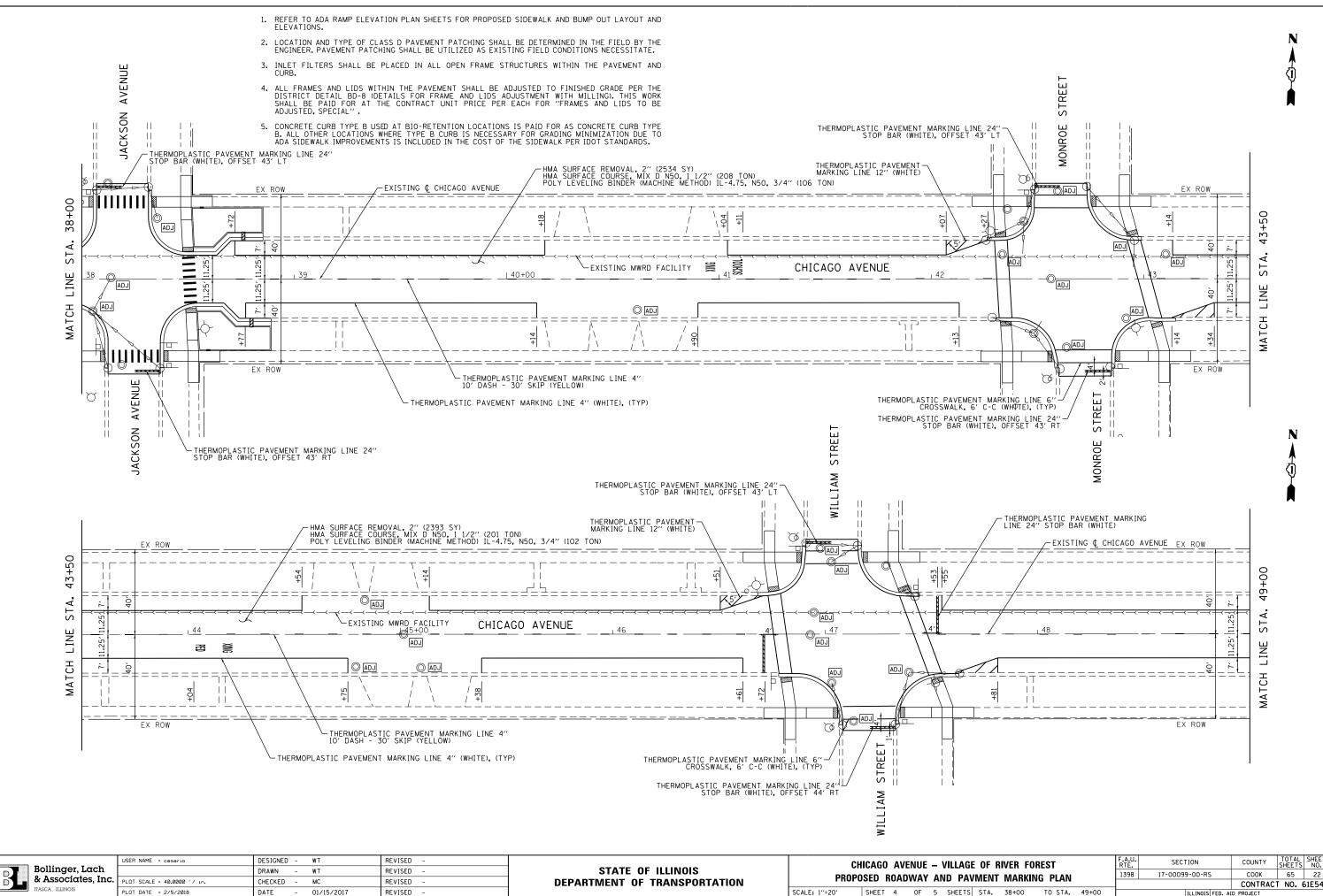
GF	OF B	VFR FO	REST		F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
	D BENCHMARKS					17-00099-00-R	S	СООК	65	18
U								CONTRACT	NO. 6	51E54
٢S	S STA. 5+00 TO STA. 59+40					ILLINOIS	S FED. AI	D PROJECT		



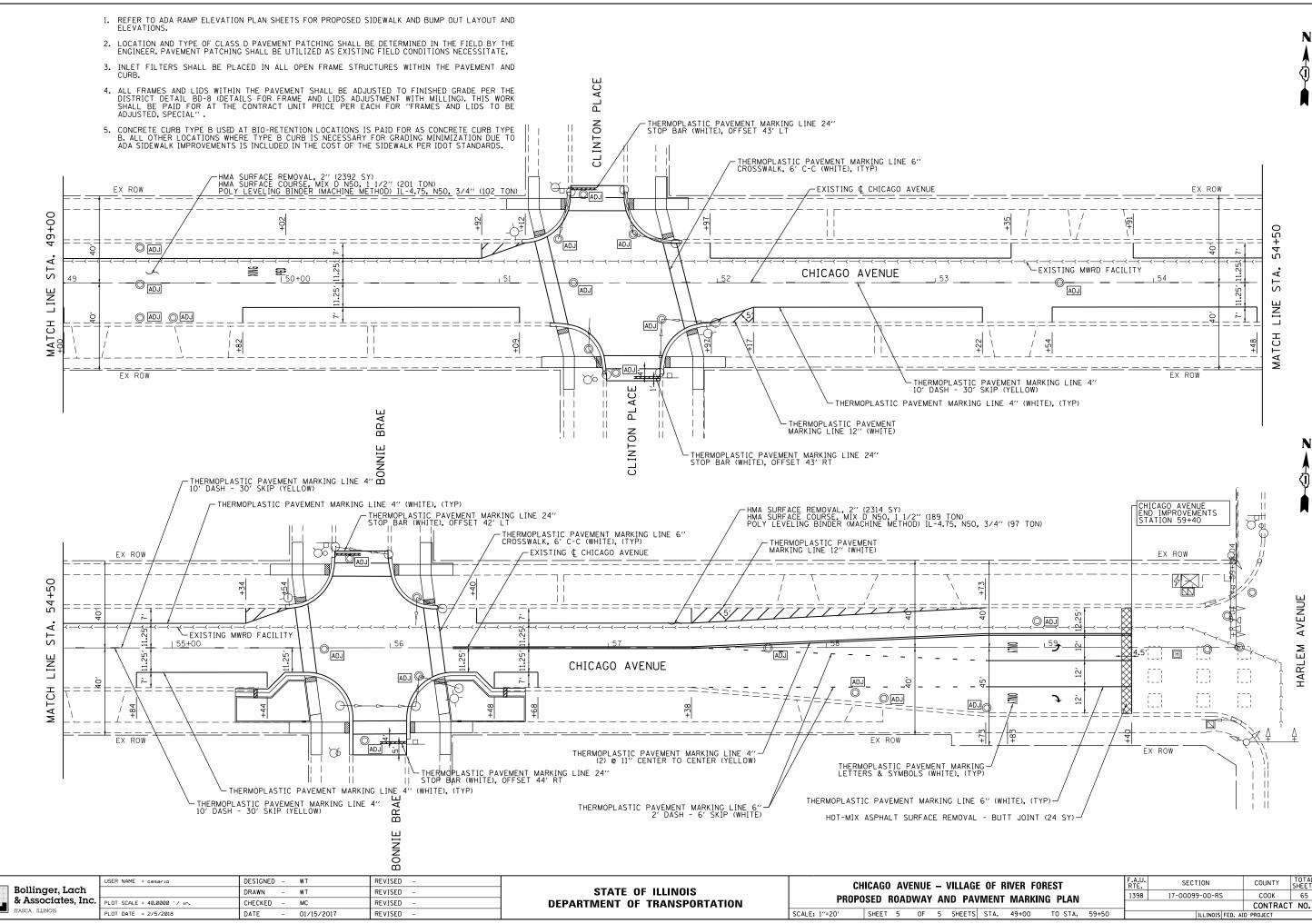




GE	OF R	IVER FO	REST		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ΔV	MENT	MARKI	NG PLAN		1398	17-00099-00-RS	СООК	65	21
CONTRACT NO. 6						51E54			
TS	STA.	27+00	TO STA.	38+00		ILLINOIS FED. AI	ID PROJECT		



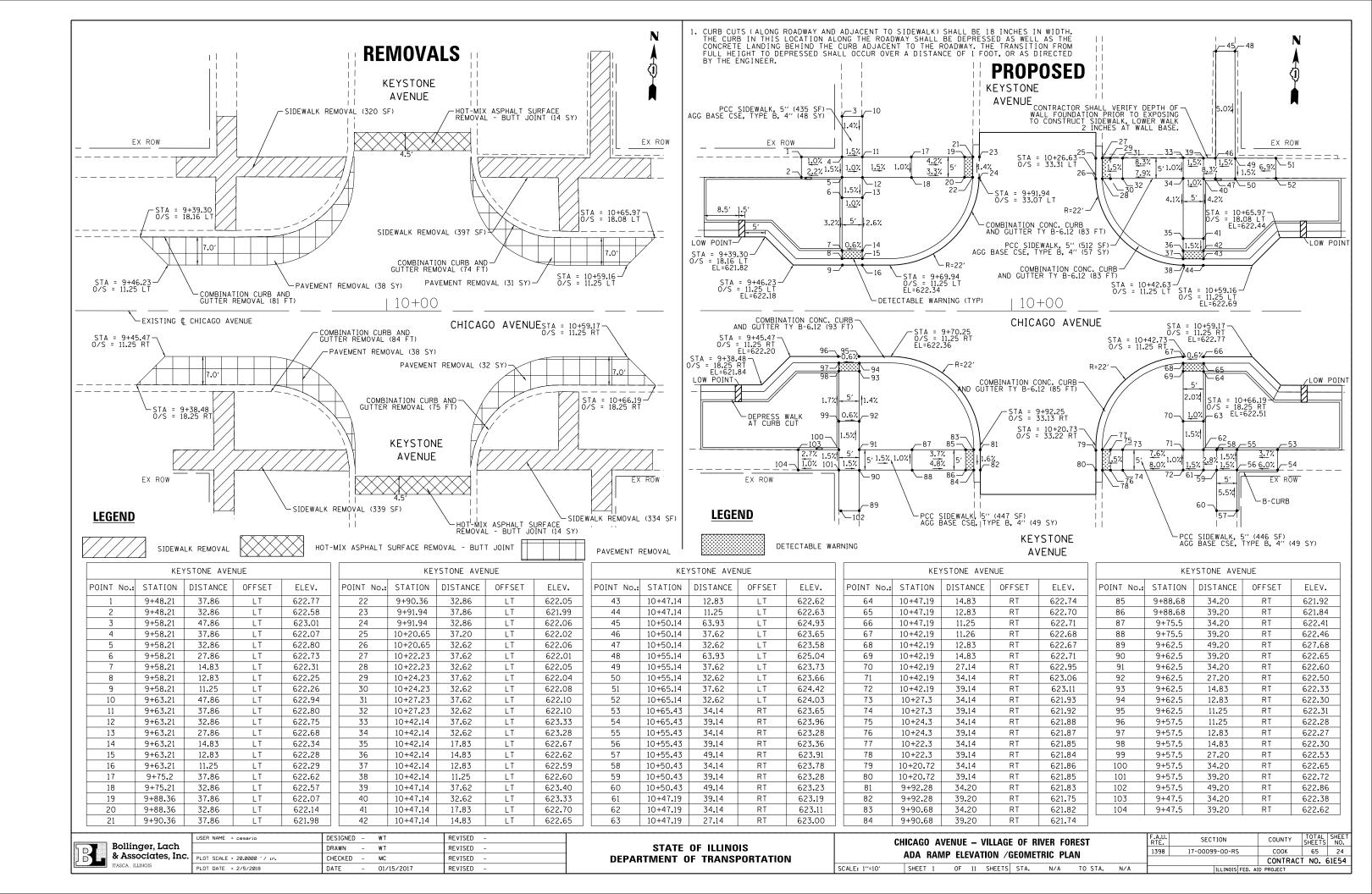
GE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AVMENT MARKING PLAN	1398	17-00099-00-RS	COOK	65	22
			CONTRAC	T NO. 6	61E54
TS STA. 38+00 TO STA. 49+00	)	ILLINOIS FED.	ID PROJECT		

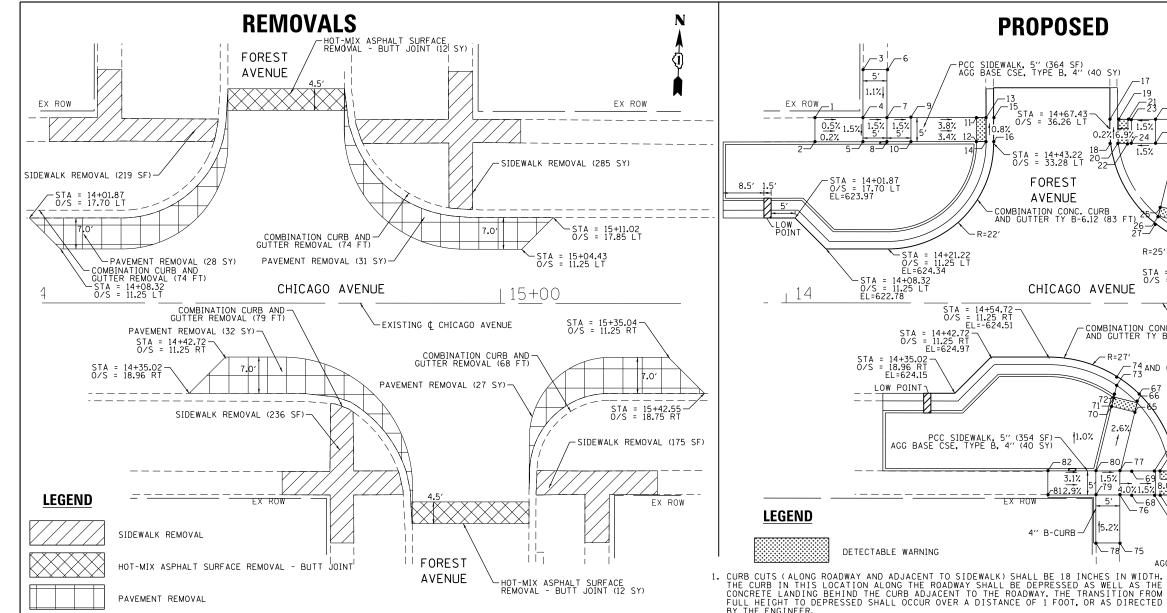


B



GE OF RIVER FOREST					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
AVMENT MARKING PLAN					1398	17-00099-00-RS	СООК	65	23
							CONTRAC	T NO. 6	51E54
TS STA. 49+00 TO STA. 59+50				59+50		ILLINOIS FED. A	ID PROJECT		





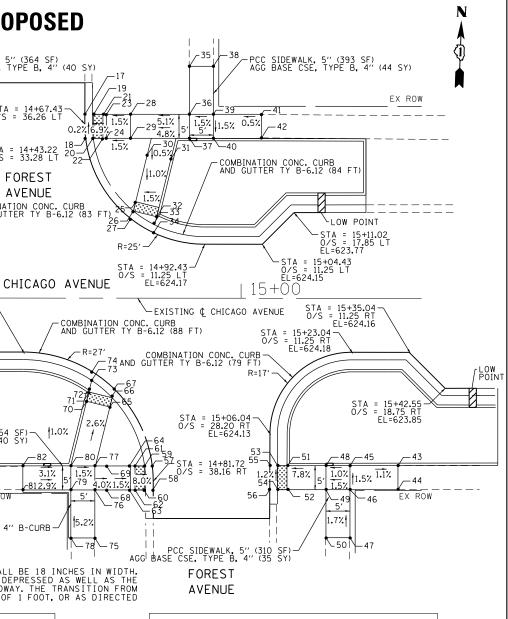
FOREST AVENUE										
POINT No .:	STATION	DISTANCE	OFFSET	ELEV.						
1	14+06.	38.62	LT	624.49						
2	14+06.	33.62	LT	624.39						
3	14+16.	48.62	LT	624.55						
4	14+16.	38.62	LT	624.44						
5	14+16.	33.62	LT	624.37						
6	14+21.	48.62	LT	624.47						
7	14+21.	38.62	LT	624.37						
8	14+21.	33.62	LT	624.32						
9	14+26.	38.62	LT	624.30						
10	14+26.	33.62	LT	624.27						
11	14+39.63	38.62	LT	623.77						
12	14+39.63	33.62	LT	623.81						
13	14+41.63	38.62	LT	623.69						
14	14+41.63	33.62	LT	623.73						
15	14+43.21	38.62	LT	623.68						
16	14+43.21	33.63	LT	623.74						
17	14+67.43	38.33	LT	623.71						
18	14+67.6	33.33	LT	623.72						
19	14+69.19	38.33	LT	623.70						
20	14+69.19	33.33	LT	623.71						
21	14+71.19	38.33	LT	623.84						

	FC	DREST AVENI	JE	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.
22	14+71.19	33.33	LT	623.85
23	14+71.95	38.33	LT	623.90
24	14+71.95	33.33	LT	623.90
25	14+71.95	28.06	LT	623.87
26	14+71.95	24.87	LT	623.85
27	14+71.95	21.89	LT	623.86
28	14+76.95	38.33	LT	623.98
29	14+76.95	33.33	LT	623.98
30	14+76.95	28.06	LT	623.95
31	14+76.95	24.87	LT	623.93
32	14+76.95	21.85	LT	624.00
33	14+76.95	18.66	LT	624.05
34	14+76.95	16.61	LT	624.06
35	14+89.23	48.33	LT	624.59
36	14+89.23	38.33	LT	624.64
37	14+89.23	33.33	LT	624.57
38	14+94.23	48.36	LT	624.64
39	14+94.23	38.33	LT	624.68
40	14+94.23	33.33	LT	624.61
41	15+04.23	38.33	LT	624.73
42	15+04.23	33.33	LT	624.73

THE CURB IN CONCRETE LAI	THIS LOCAT	ION ALONG	THE ROADWA 3 ADJACENT	Y SHALL BE TO THE ROA	DEPRESSED DWAY. THE 1	AS WEL FRANSIT
FULL HEIGHT BY THE ENGIN		SED SHALL C	ICCUR OVER	A DISTANCE	0F I FOOT,	UR AS L
		FC	DREST AVENI	JE		
	POINT No.:	STATION	DISTANCE	OFFSET	ELEV.	

FUREST AVENUE							
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.			
43	15+32.71	34.89	RT	624.88			
44	15+32.71	39.89	RT	625.08			
45	15+22.71	34.89	RT	624.99			
46	15+22.71	39.89	RT	625.07			
47	15+22.71	49.89	RT	625.24			
48	15+17.72	34.89	RT	624.94			
49	15+17.72	39.89	RT	624.99			
50	15+17.72	49.89	RT	625.08			
51	15+09.6	34.89	RT	624.32			
52	15+09.6	39.89	RT	624.38			
53	15+07.6	34.89	RT	624.16			
54	15+07.6	39.89	RT	624.22			
55	15+06.02	34.89	RT	624.17			
56	15+06.01	39.89	RT	624.23			
57	14+81.52	34.97	RT	624.07			
58	14+81.73	39.97	RT	624.14			
59	14+79.93	34.97	RT	624.06			
60	14+79.93	39.97	RT	624.13			
61	14+77.93	34.97	RT	624.22			
62	14+77.93	39.97	RT	624.29			
63	14+77.	39.97	RT	624.37			

	USER NAME = cesario	DESIGNED -	WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U.	SECTION	COUNTY	TOTAL SHEET
Bollinger, Lach		DRAWN -	WT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				17-00099-00-RS	СООК	65 25
& Associates, Inc.	PLOT SCALE = 20.0000 ' / 10.	CHECKED -	мс	REVISED -		ADA RAMP ELEVATION /GEOMETRIC PLAN				CONTRAC	CT NO. 61E54
I TASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE –	01/15/2017	REVISED -		SCALE: 1"=10"	SHEET 2 OF 11 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	ID PROJECT	



0.27

1.0%

1.5%

5.2%

<u>}</u>78

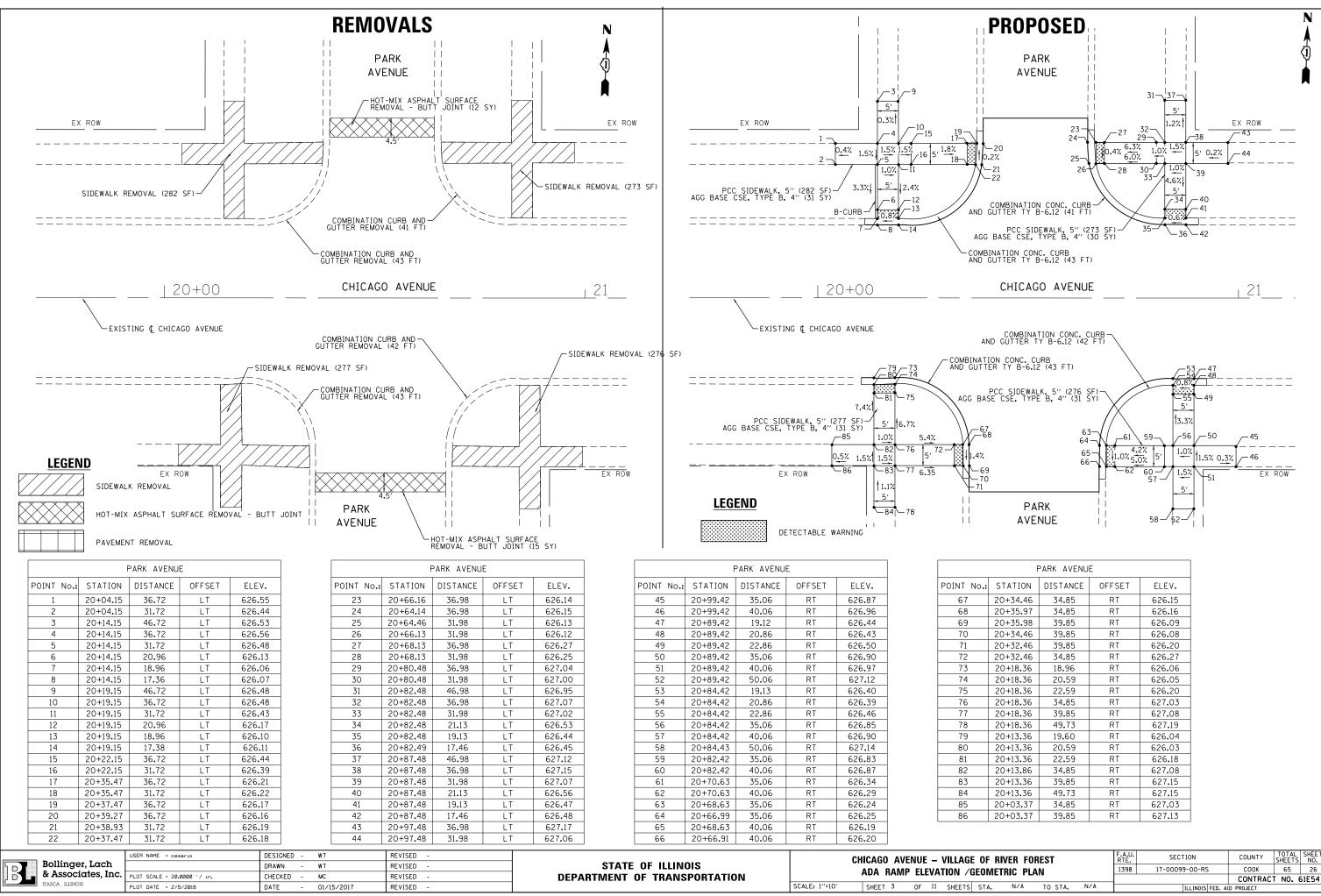
3.1% -812.9%

4" B-CURB -/

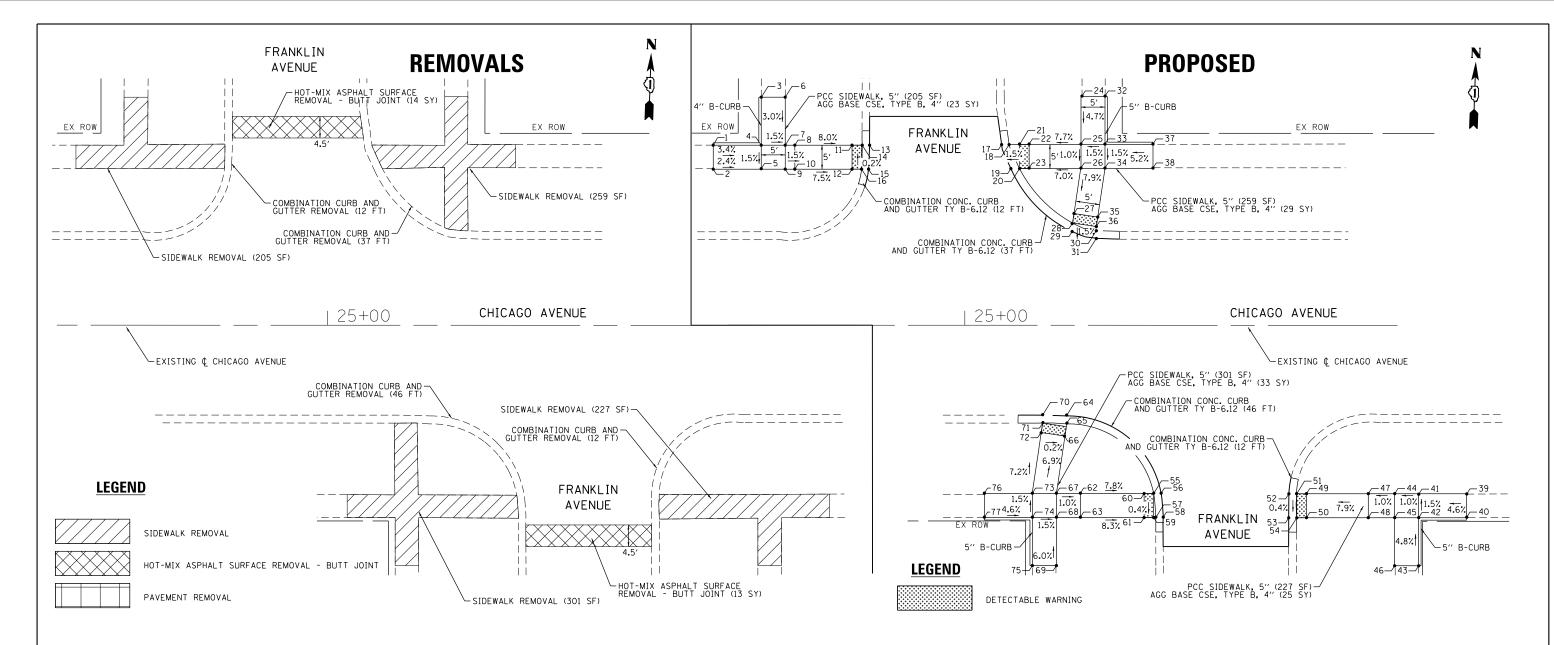
FOREST

AVENUE

	FC	DREST AVENI	JE	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.
64	14+77.	34.97	RT	624.30
65	14+77.	29.25	RT	624.11
66	14+77.	26.00	RT	624.06
67	14+77.	22.98	RT	624.07
68	14+72.	39.97	RT	624.45
69	14+72.	34.97	RT	624.38
70	14+72.	29.25	RT	624.32
71	14+72.	26.00	RT	624.30
72	14+72.	22.84	RT	624.30
73	14+72.	19.59	RT	624.25
74	14+72.	17.49	RT	624.26
75	14+69.56	49.97	RT	625.07
76	14+69.56	39.97	RT	624.55
77	14+69.56	34.97	RT	624.48
78	14+64.56	49.97	RT	625.15
79	14+64.56	39.97	RT	624.63
80	14+64.56	34.97	RT	624.56
81	14+54.56	39.97	RT	624.92
82	14+54.56	34.97	RT	624.87



GE OF RIVER FOREST /GEOMETRIC PLAN					RTE.	520110	•	0001111	SHEETS	NO.
					1398	17-00099-0	0-RS	COOK	65	26
							CONTRAC	T NO. (	51E54	
S	STA.	N/A	TO STA.	N/A		ILL	INOIS FED. A	ID PROJECT		



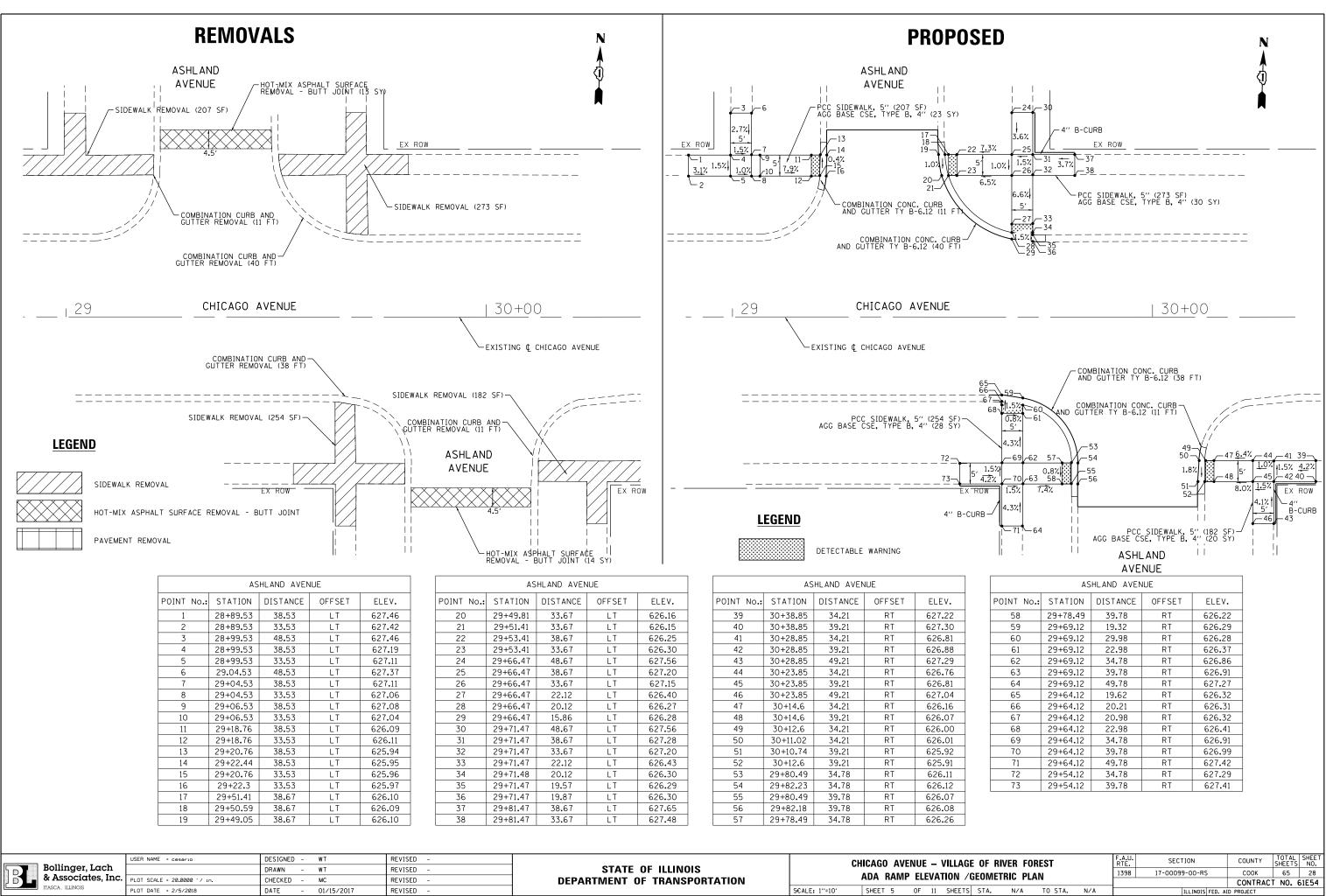
	FR	ANKLIN AVEN	IUE	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.
1	24+47.57	37.50	LT	627.08
2	24+47.57	32.50	LT	626.90
3	24+57.57	47.50	LT	627.04
4	24+57.57	37.50	LT	626.74
5	24+57.57	32.50	LT	626.66
6	24+62.57	47.50	LT	626.95
7	24+62.57	37.50	LT	626.66
8	24+64.57	37.50	LT	626.63
9	24+62.57	32.50	LT	626.61
10	24+64.57	32.50	LT	626.58
11	24+76.5	37.50	LT	625.69
12	27+76.5	32.50	LT	625.70
13	24+80.15	37.50	LT	625.54
14	24+78.5	37.50	LT	625.53
15	24+79.93	32.50	LT	625.55
16	24+78.5	32.50	LT	625.54
17	25+07.66	37.64	LT	625.51
18	25+09.22	37.64	LT	625.50
19	25+09.59	32.64	LT	625.57
20	25+11.39	32.64	LT	625.56

	FR.	ANKLIN AVEN	IUE		
OINT No.:	STATION	DISTANCE	OFFSET	ELEV.	
21	25+11.39	37.64	LT	625.53	
22	25+13.39	37.64	LT	625.68	
23	25+13.39	32.64	LT	625.71	
24	25+24.19	47.64	LT	626.89	
25	25+24.19	37.64	LT	626.52	
26	25+24.19	32.64	LT	626.47	
27	25+24.19	22.42	LT	625.70	
28	25+24.19	20.42	LT	625.54	
29	25+24.19	18.74	LT	625.55	
30	25+29.19	19.66	LT	625.54	
31	25+29.19	18.04	LT	625.55	
32	25+29.19	47.64	LT	627.06	
33	25+29.19	37.64	LT	626.59	
34	25+29.19	32.64	LT	626.52	
35	25+29.19	22.42	LT	625.71	
36	25+29.19	20.42	LT	625.55	
37	25+39.19	37.64	LT	627.11	
38	25+39.19	32.64	LT	626.95	
39	26+04.57	35.10	RT	627.17	
40	26+04.57	40.10	RT	627.27	

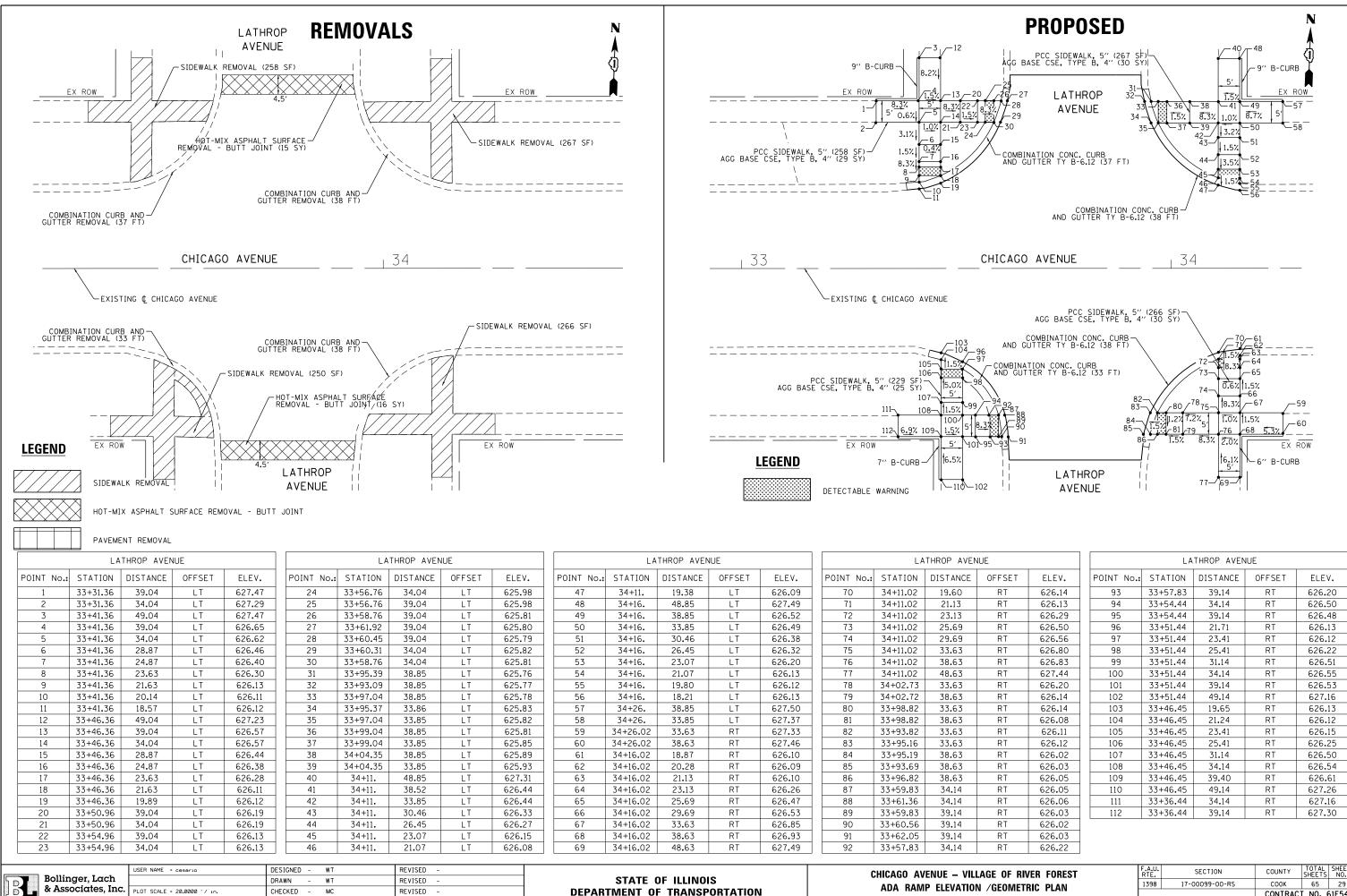
	FRANKLIN AVENUE											
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.								
41	25+94.57	35.10	RT	626.71								
42	25+94.57	40.10	RT	626.78								
43	25+94.57	50.10	RT	627.26								
44	25+89.57	35.10	RT	626.66								
45	25+89.57	40.10	RT	626.71								
46	25+89.57	50.10	RT	627.15								
47	25+84.07	35.10	RT	626.61								
48	25+84.07	40.10	RT	626.63								
49	25+71.18	35.10	RT	625.62								
50	25+71.18	40.10	RT	625.60								
51	25+69.18	35.10	RT	625.46								
52	25+67.54	35.10	RT	625.47								
53	25+67.5	40.10	RT	625.45								
54	25+69.18	40.10	RT	625.44								
55	25+39.36	35.08	RT	625.49								
56	25+40.92	35.08	RT	625.50								
57	25+39.81	40.08	RT	625.46								
58	25+41.34	40.08	RT	625.47								
59	25+39.36	40.08	RT	625.47								
60	25+37.36	35.08	RT	625.66								

Pollingor I gab	USER NAME = cesario	DESIGNED - WT	REVISED -		CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY TO	OTAL SHEET HEETS NO.
		DRAWN - WT	REVISED -	STATE OF ILLINOIS	ADA RAMP ELEVATION /GEOMETRIC PLAN	1398	17-00099-00-RS	соок е	65 27
	PLOT SCALE = 20.0000 ' / in.	CHECKED - MC	REVISED - DEPARTMENT OF TRANSPORTATION				CONTRACT N	NO. 61E54	
I HAJCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: 1''=10' SHEET 4 OF 11 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	AID PROJECT	

	FR	ANKLIN AVEN	IUE	
POINT No .:	STATION	DISTANCE	OFFSET	ELEV.
61	25+37.36	40.08	RT	625.64
62	25+24.09	35.08	RT	626.68
63	25+24.09	40.08	RT	626.72
64	25+22.08	18.91	RT	627.70
65	25+21.64	21.33	RT	625.69
66	25+21.28	23.30	RT	625.83
67	25+19.09	35.08	RT	626.73
68	25+19.09	40.08	RT	626.78
69	25+19.09	50.08	RT	627.38
70	25+17.01	18.77	RT	625.73
71	25+16.74	20.38	RT	625.72
72	25+16.36	22.39	RT	625.87
73	25+14.09	35.08	RT	626.78
74	25+14.09	40.08	RT	626.86
75	25+14.09	50.08	RT	627.30
76	25+04.09	35.08	RT	627.09
77	25+04.09	40.08	RT	627.32



Bellin ver Luch	USER NAME = cesario	DESIGNED -	WT	REVISED -		СН	ICAGO AVEI	NUE – VILLAG
Bollinger, Lach		DRAWN -	WT	REVISED -	STATE OF ILLINOIS			
& Associates, Inc.	PLOT SCALE = 20.0000 ' / in.	CHECKED -	MC	REVISED -	DEPARTMENT OF TRANSPORTATION		ADA RAMP	ELEVATION /
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE -	01/15/2017	REVISED -		SCALE: 1"=10'	SHEET 5	OF 11 SHEETS



**DEPARTMENT OF TRANSPORTATION** SCALE: 1"=10'

ITASCA . ILLINOIS

PLOT DATE = 2/5/2018

DATE

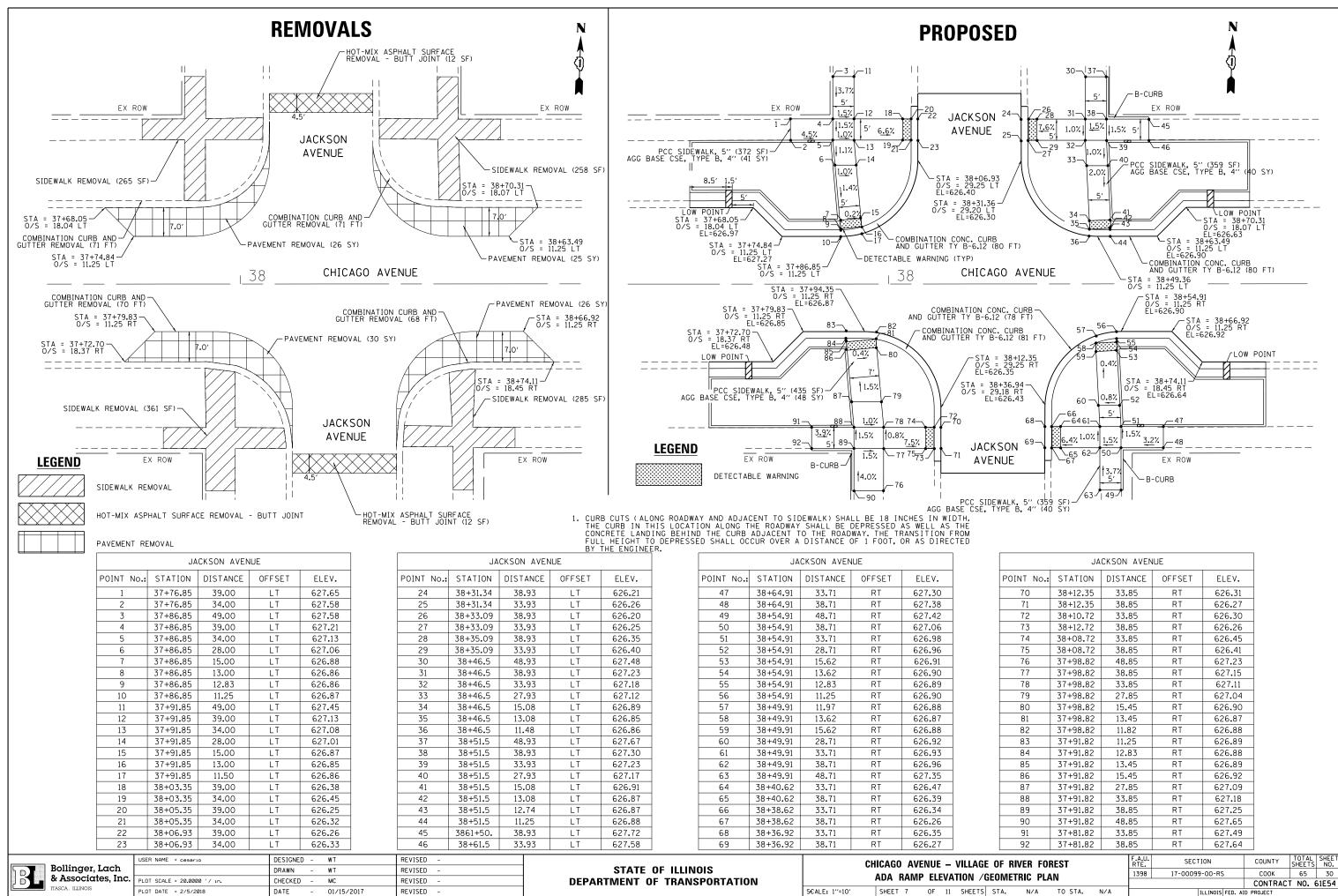
- 01/15/2017

REVISED

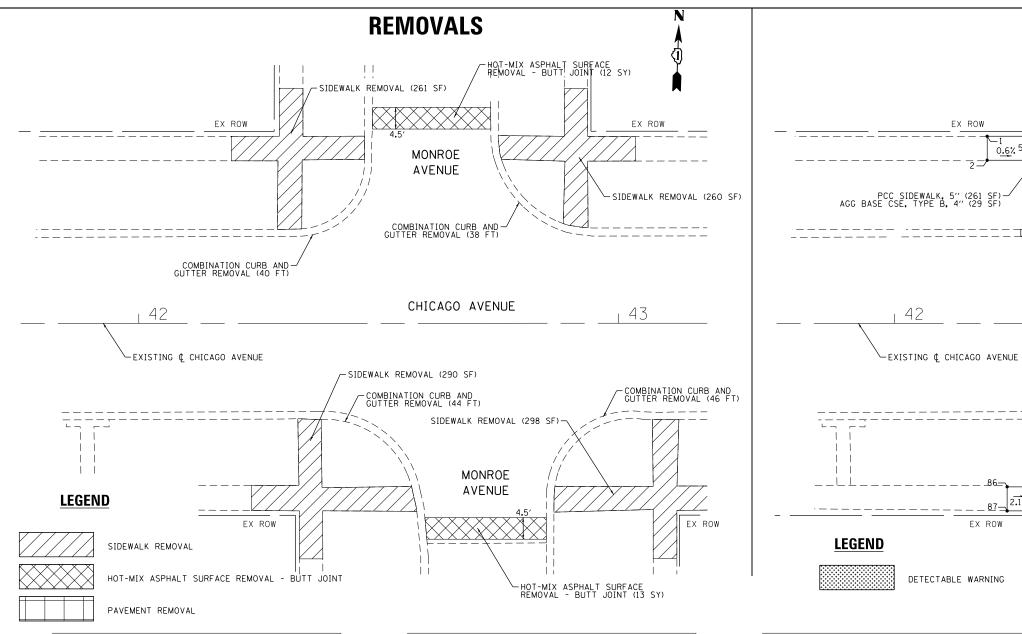
SHEET 6 OF 11 SHEET

						LA	THROP AVEN	NUE			
OFFSET	ELEV.		POINT	No.:	ST.	ATION	DISTANCE	0	FFSET	ELEV	v.
RT	626.14		93		33-	-57.83	39.14		RT	626.2	20
RT	626.13		94		33-	-54.44	34.14		RT	626.5	50
RT	626.29		95		33+	-54.44	39.14		RT	626.	48
RT	626.50		96		33-	+51.44	21.71		RT	626.	13
RT	626.56		97		33-	+51.44	23.41		RT	626.	12
RT	626.80		98		33-	+51.44	25.41		RT	626.2	22
RT	626.83		99		33-	+51.44	31.14		RT	626.	51
RT	627.44		100	)	33-	+51.44	34.14		RT	626.	55
RT	626.20		101	l	33-	+51.44	39.14		RT	626.	53
RT	626.14		102	2	33-	+51.44	49.14		RT	627.	16
RT	626.14		103	3	33+	-46.45	19.65		RT	626.	13
RT	626.08		104	4	33+	-46.45	21.24		RT	626.	12
RT	626.11		105	5	33+	-46.45	23.41		RT	626.	15
RT	626.12		106	5	33+	-46.45	25.41		RT	626.2	25
RT	626.02		10	7	33+	-46.45	31.14		RT	626.5	50
RT	626.03		108	3	33+	-46.45	34.14		RT	626.	54
RT	626.05		109	Э	33+	-46.45	39.40		RT	626.	61
RT	626.05		110	)	33+	-46.45	49.14		RT	627.2	26
RT	626.06		111		33+	-36.44	34.14		RT	627.	16
RT	626.03		112	2	33+	-36.44	39.14		RT	627.	30
RT	626.02										
RT	626.03										
RT	626.22										
										1	
GE OF RI\	/ER FOREST				F.A.U. RTE.		SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
/GEOMFTI	GEOMETRIC PLAN				1398	17-0	00099-00-RS		СООК	65	29
							CONTRAC	T NO. 6	61E54		

GE	GE OF RIVER FOREST		RTE.	SECT	ION	COUNTY	SHEETS	NO.		
/(	GEOMETRIC PLAN				1398	1398 17-00099-00-RS			65	29
<u></u>						CONTRACT NO. 61E				51E54
ΤS	S STA. N/A TO STA. N/A		N/A			ILLINOIS FED. AI	D PROJECT			



		JA	CKSON	AVEN	IUE				
Ī	POINT No .:	STATION	DIST	ANCE	OFFSET	ELEV.			
ľ	70	38+12.35	33.	85	RT	626.31			
ľ	71	38+12.35	38.	85	RT	626.27			
ľ	72	38+10.72	33.	85	RT	626.30			
Ī	73	38+12.72	38.	85	RT	626.26			
ľ	74	38+08.72	33.	85	RT	626.45			
Ì	75	38+08.72	38.	85	RT	626.41			
ſ	76	37+98.82	48.	85	RT	627.23			
	77	37+98.82	38.	85	RT	627.15			
	78	37+98.82	33.	85	RT	627.11			
ľ	79	37+98.82	27.	85	RT	627.04			
	80	37+98.82	15.	45	RT	626.90			
	81	37+98.82	13.	45	RT	626.87			
ſ	82	37+98.82	11.8	32	RT	626.88			
	83	37+91.82	11.3	25	RT	626.89			
	84	37+91.82	12.	83	RT	626.88			
ſ	85	37+91.82	13.	45	RT	626.89			
ſ	86	37+91.82	15.	45	RT	626.92			
ſ	87	37+91.82	27.	85	RT	627.09			
ĺ	88	37+91.82	33.	85	RT	627.18			
ſ	89	37+91.82	38.	85	RT	627.25			
	90	37+91.82	48.	85	RT	627.65			
	91	37+81.82	33.	85	RT	627.49			
	92	37+81.82	38.	85	RT	627.64			
ונ	F RIVER FOR	REST		F.A.U. RTE.	SECTI	ION	COUNTY	TOTAL	SHE
	METRIC PLA			1398	17-00099	-00-RS	СООК	65	3
_							CONTRAC	T NO.	61E
SΤ	A. N/A	TO STA. I	N/A		I	LLINOIS FED. AI	D PROJECT		



	M	ONROE AVENI	JE	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.
1	42+19.29	38.99	LT	626.47
2	42+19.29	33.99	LT	626.33
3	42+29.29	48.99	LT	626.40
4	42+29.29	38.99	LT	626.41
5	42+29.29	33.99	LT	626.33
6	42+29.29	21.71	LT	625.56
7	42+29.29	19.71	LT	625.44
8	42+29.29	18.05	LT	625.45
9	42+34.29	48.99	LT	626.24
10	42+34.29	38.99	LT	626.33
11	42+34.29	33.99	LT	626.28
12	42+34.29	21.71	LT	625.60
13	42+34.29	19.71	LT	625.48
14	42+34.29	18.19	LT	625.49
15	42+45.06	38.99	LT	625.58
16	42+47.06	38.99	LT	625.44
17	42+48.6	38.98	LT	625.45
18	42+48.54	33.98	LT	625.47
19	42+47.06	33.99	LT	625.46
20	42+45.06	33.99	LT	625.60
21	42+75.67	38.91	LT	625.45
22	42+74.92	38.91	LT	625.44

	M	ONROE AVENI	JE	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.
23	42+73.4	38.93	LT	625.45
24	42+74.17	33.93	LT	625.49
25	42+75.67	33.91	LT	625.48
26	42+77.67	38.91	LT	625.55
27	42+77.67	33.91	LT	625.58
28	42+88.54	48.91	LT	626.04
29	42+88.54	38.91	LT	626.08
30	42+88.54	33.91	LT	626.03
31	42+88.54	22.74	LT	625.56
32	42+88.54	20.74	LT	625.46
33	42+88.54	19.14	LT	625.47
34	42+93.54	48.91	LT	626.12
35	42+93.54	38.91	LT	626.15
36	42+93.54	33.91	LT	626.08
37	42+93.54	22.74	LT	625.54
38	42+93.54	20.74	LT	625.44
39	42+93.54	19.89	LT	625.43
40	42+93.54	18.25	LT	625.44
41	43+03.54	38.91	LT	626.11
42	43+03.54	33.91	LT	625.93
43	43+22.11	34.00	RT	626.48
44	43+22.11	39.00	RT	626.48

	М	ONROE AVENI	JE	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.
45	43+07.46	18.55	RT	625.85
46	43+07.66	20.06	RT	625.84
47	43+08.3	21.95	RT	625.89
48	43+12.11	34.00	RT	626.42
49	43+12.11	39.00	RT	626.49
50	43+12.11	49.00	RT	626.54
51	43+02.31	19.87	RT	625.81
52	43+02.92	21.66	RT	625.84
53	43+03.56	23.56	RT	625.93
54	43+07.11	34.00	RT	626.37
55	43+07.11	39.00	RT	626.42
56	43+07.11	49.00	RT	626.42
57	43+02.11	34.00	RT	626.30
58	43+02.11	39.00	RT	626.35
59	42+88.69	34.00	RT	625.69
60	42+88.69	39.00	RT	625.68
61	42+85.06	34.00	RT	625.62
62	42+86.69	34.00	RT	625.61
63	42+84.9	39.00	RT	625.59
64	42+86.69	39.00	RT	625.58
65	42+56.84	34.08	RT	625.48
66	42+58.46	34.08	RT	625.49

5′

1.5%

1.5%

80 74

2.1% 5' 84

87-1-

EX ROW

DETECTABLE WARNING

- 82

7.8%

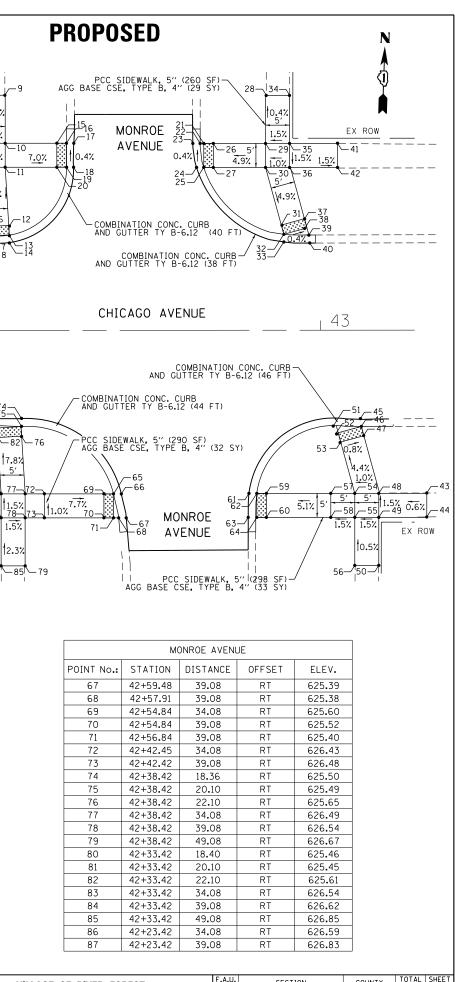
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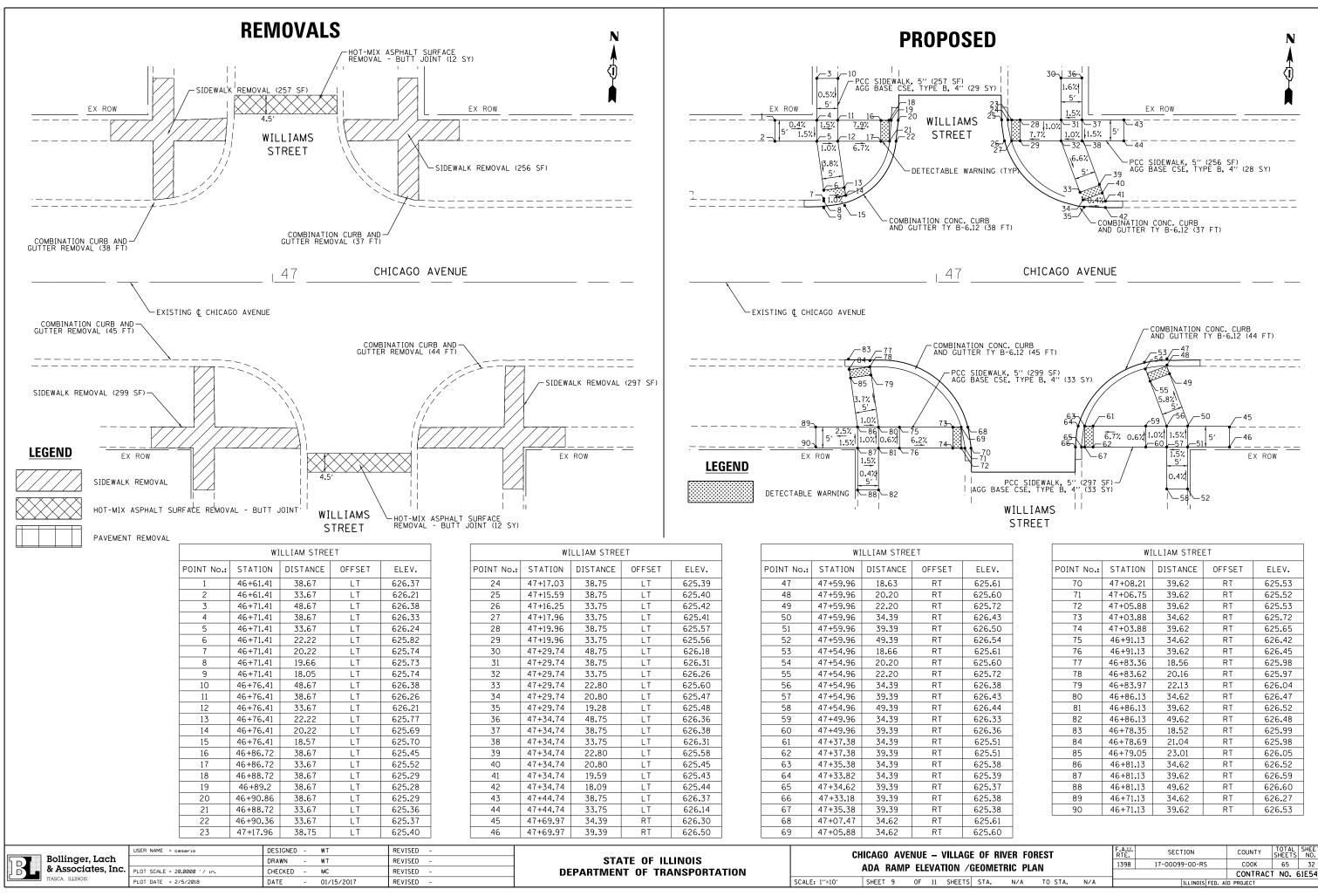
2.3%

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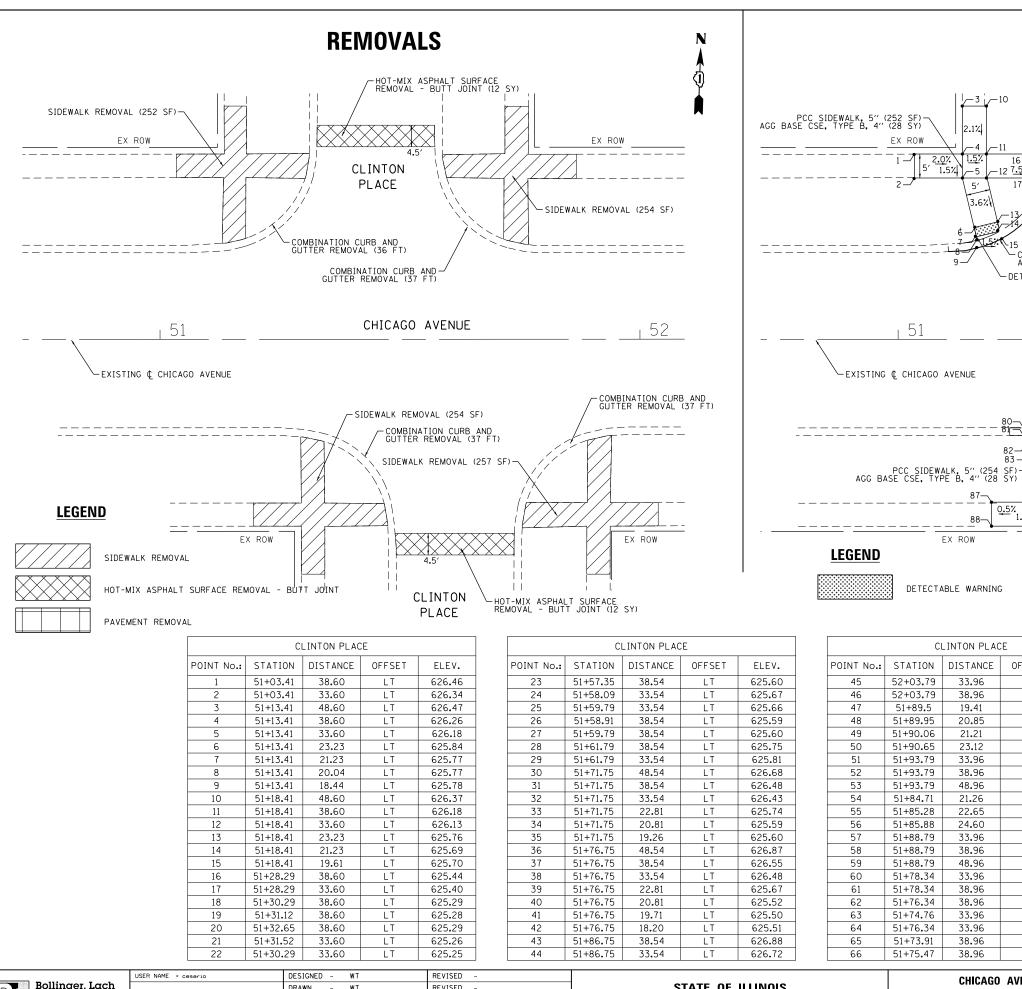
EX ROW

	USER NAME = cesario	DESIGNED -	WΤ	REVISED -		C	CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY TOTAL SHEET SHEETS NO.
Bollinger, Lach		DRAWN -	WT	REVISED -	STATE OF ILLINOIS	-	ADA RAMP ELEVATION /GEOMETRIC PLAN	1398	17-00099-00-RS	СООК 65 31
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	MC	REVISED -	DEPARTMENT OF TRANSPORTATION			_		CONTRACT NO. 61E54
TASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE –	01/15/2017	REVISED -		SCALE: 1"=10'	SHEET 8 OF 11 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED.	AID PROJECT





/GEOMETRIC PLAN			1398	17-00099-00-	RS	COOK	65	32		
/ <b>c</b>								CONTRACT	NO.	61E54
٢S	STA.	N/A	TO STA.	N/A		ILLINO	S FED. A	ID PROJECT		



	С	LINTON PLAC	E			С	LINTON PLAC	E	
POINT No.:	STATION	DISTANCE	OFFSET	ELEV.	POINT No.:	STATION	DISTANCE	OFFSET	ELEV
45	52+03.79	33.96	RT	626.33	67	51+46.62	33.93	RT	625.4
46	52+03.79	38.96	RT	626.41	68	51+48.09	33.93	RT	625.4
47	51+89.5	19.41	RT	625.55	69	51+48.83	38.93	RT	625.4
48	51+89.95	20.85	RT	625.54	70	51+47.47	38.93	RT	625.4
49	51+90.06	21.21	RT	625.55	71	51+46.62	38.93	RT	625.4
50	51+90.65	23.12	RT	625.67	72	51+44.62	33.93	RT	625.63
51	51+93.79	33.96	RT	626.28	73	51+44.62	38.93	RT	625.56
52	51+93.79	38.96	RT	626.35	74	51+30.48	18.87	RT	625.7
53	51+93.79	48.96	RT	626.39	75	51+30.67	20.53	RT	625.70
54	51+84.71	21.26	RT	625.57	76	51+31.24	22.45	RT	625.79
55	51+85.28	22.65	RT	625.56	77	51+34.44	33.93	RT	626.2
56	51+85.88	24.60	RT	625.67	78	51+34.44	38.93	RT	626.30
57	51+88.79	33.96	RT	626.23	79	51+34.44	48.93	RT	626.2
58	51+88.79	38.96	RT	626.28	80	51+25.18	18.47	RT	625.7
59	51+88.79	48.96	RT	626.30	81	51+25.31	20.04	RT	625.78
60	51+78.34	33.96	RT	625.68	82	51+25.88	21.95	RT	625.79
61	51+78.34	38.96	RT	625.63	83	51+86.45	23.07	RT	625.88
62	51+76.34	38.96	RT	625.51	84	51+29.44	33.93	RT	626.30
63	51+74.76	33.96	RT	625.57	85	51+29.44	38.93	RT	626.3
64	51+76.34	33.96	RT	625.56	86	51+29.44	48.93	RT	626.39
65	51+73.91	38.96	RT	625.51	87	51+19.44	33.93	RT	626.25
66	51+75.47	38.96	RT	625.50	88	51+19.44	38.93	RT	626.35
		CHICAGO	AVENUE -	VILLAGE OF	RIVER FOREST		F.A.U. RTE.	SECTION	COUN
								0000-00-05	

Bollinger, Lach	USER NAME = cesario	DESIGNED - WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY TOTAL SHEET SHEETS NO.
& Associates. Inc.		DRAWN - WT	REVISED -	STATE OF ILLINOIS		ADA RAMP ELEVATION /GEOMETRIC PLAN	1398	17-00099-00-RS	COOK 65 33
itasca, illinois	PLOT SCALE = 20.0000 '/ in.	CHECKED - MC	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE: 1//-10/	SHEET 10 OF 11 SHEETS STA N/A TO STA N/A			CONTRACT NO. 61E54
	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: 1 =10	SHEET TO OF TI SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	NID PROJECT

# **PROPOSED**

16

17

82-/ 83-

88—

EX ROW

DETECTABLE WARNING

4 6%

-12 7<u>.5</u>%

1.57

-5

5′

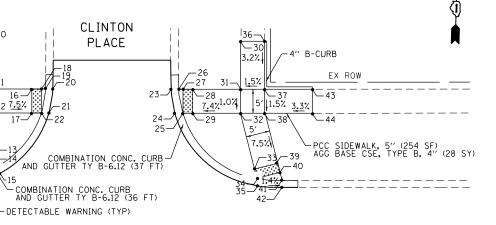
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EX ROW

51

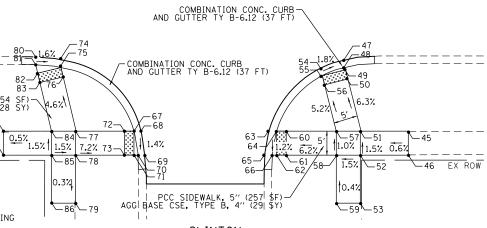
,2<u>.0</u>% 1.5%

5'

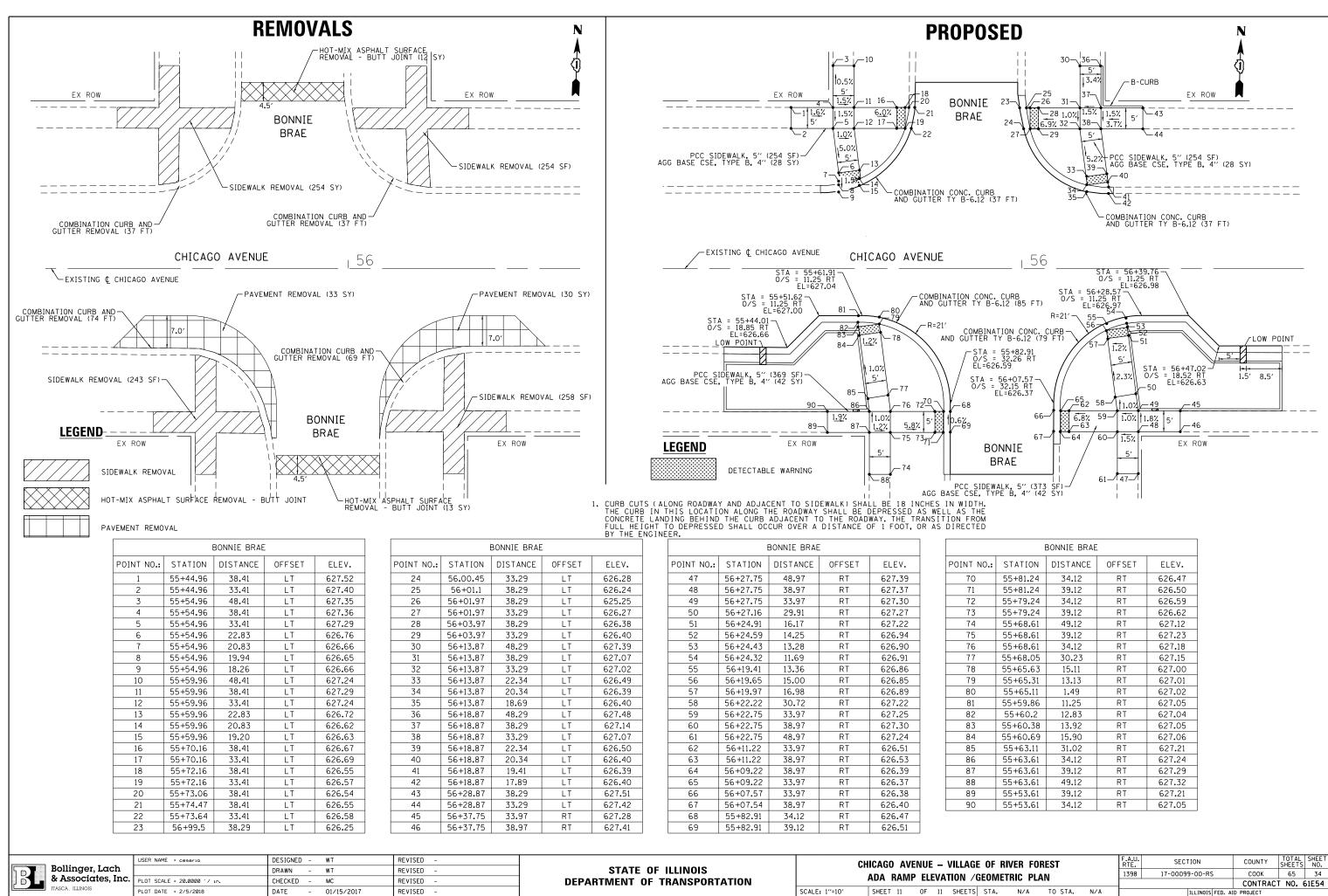


CHICAGO AVENUE

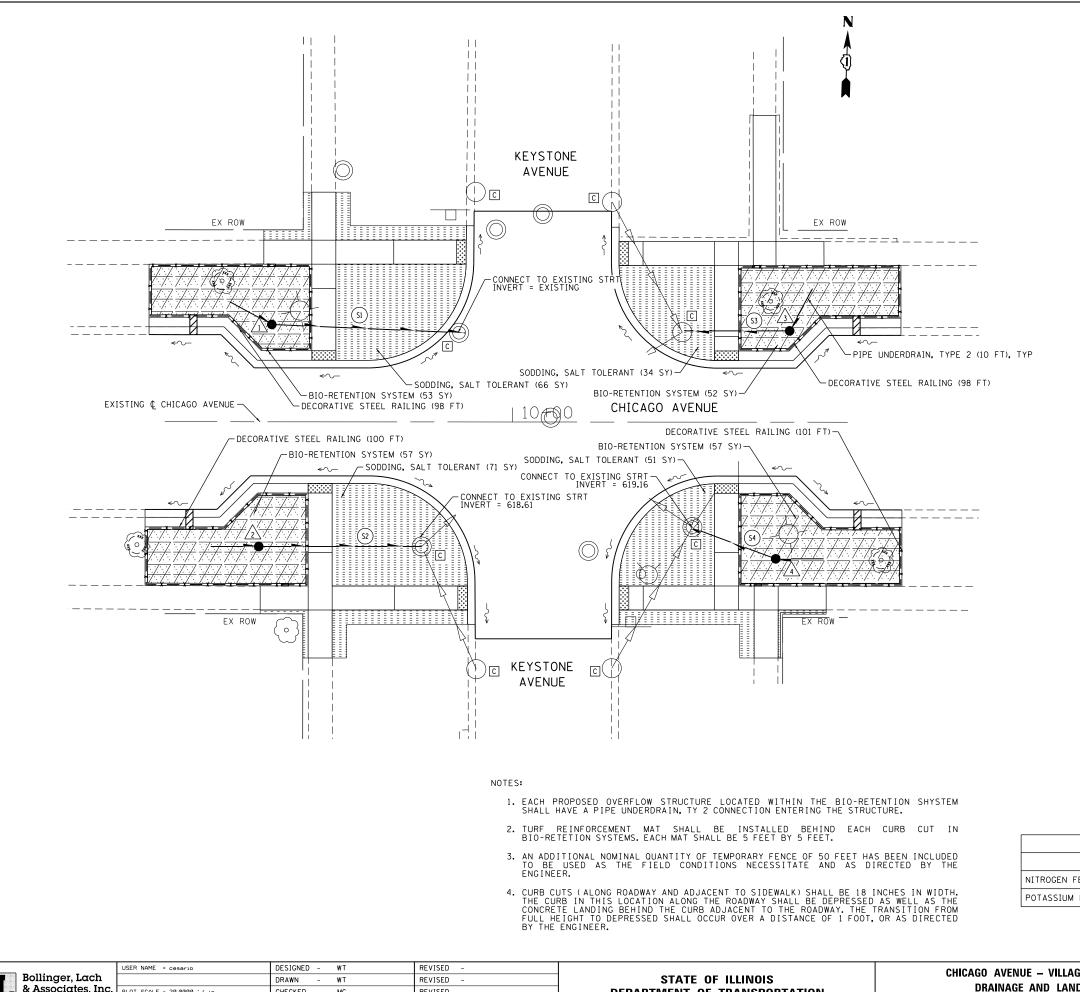
52



# CLINTON PLACE



GE OF RIVER FOREST					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
/GEOMETRIC PLAN			1398	17-00099-00-RS	СООК	65	34		
/ (							CONTRAC	T NO. 6	51E54
TS	STA.	N/A	TO STA.	N/A	ILLINOIS FED. AID PROJECT				



Bollinger, Lach	USER NAME = cesario	DESIGNED -	WT	REVISED -		CHICAGO AVENUE – VILLAGE OF RIVER FOREST		F.A.U. RTE.	SECTION	COUNTY TOTAL SHEETS	SHEET NO.
		DRAWN -	WT	REVISED -	STATE OF ILLINOIS		DRAINAGE AND LANDSCAPING PLAN	1398	17-00099-00-RS	СООК 65	35
	PLOT SCALE = 20.0000 '/ in.	CHECKED -	мс	REVISED -	DEPARTMENT OF TRANSPORTATION			_		CONTRACT NO.	61E54
TAJCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE –	01/15/2017	REVISED -		SCALE: 1"=10"	SHEET 1 OF 7 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	ID PROJECT	

# **LEGEND**



PERENNIAL PLANTS, SEDGE MEADOW TYPE

SODDING, SALT TOLERANT



SUDDING, SALT TULERANT

CURB CUT (18" WIDTH / 1' TRANS)

TREE PROTECTION (TEMPORARY FENCE) = 25 FEET EACH

- x - x - DECORATIVE STEEL RAILING

XX PROPOSED STORM STRUCTURE

(SXX) PROPOSED STORM SEWER

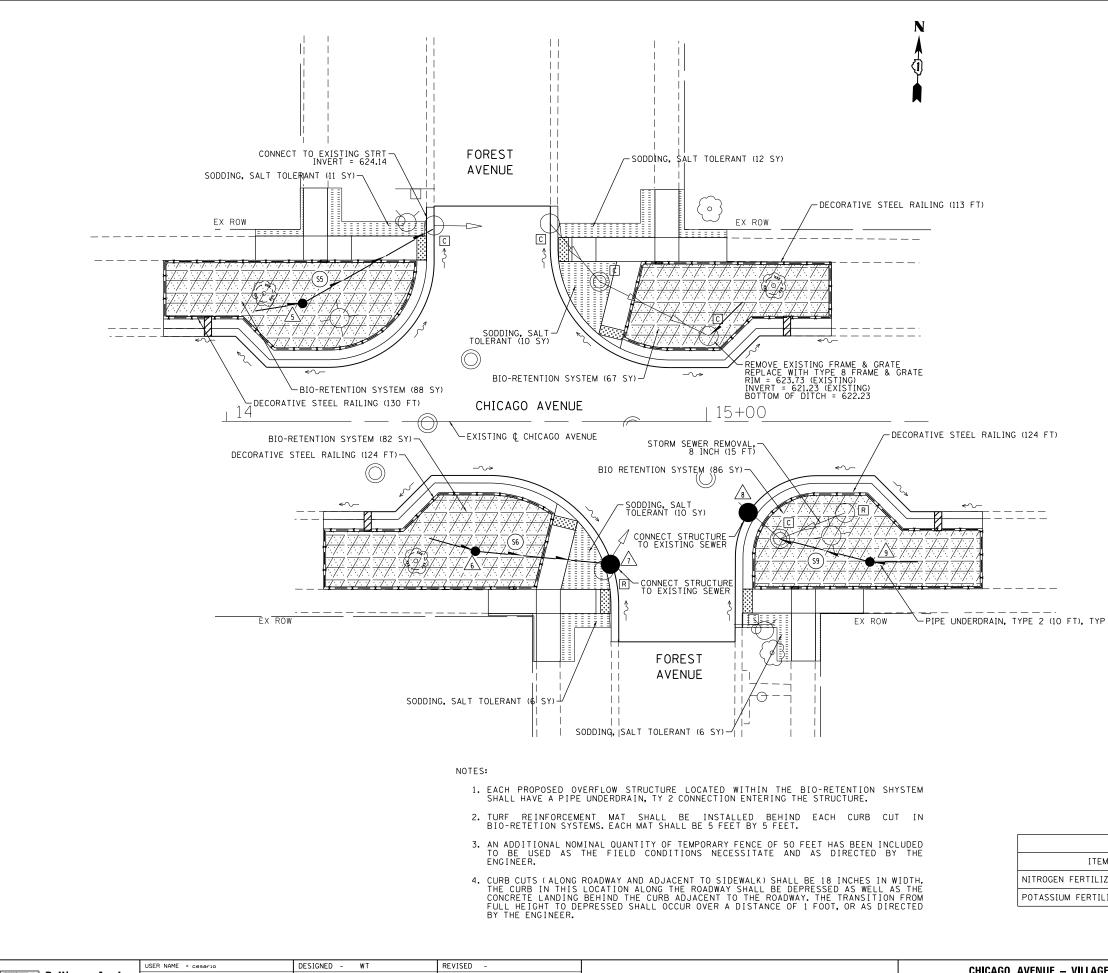
R EXISTING STRUCTURE TO BE REMOVED

C EXISTING STRUCTURE/SEWER TO BE CLEANED

AB EXISTING STORM SEWER TO BE ABANDONED

ADJ EXISTING STRUCTURE TO BE ADJUSTED

FERTILIZER NUTRIENT SCHEDULE							
ITEM	SODDING	QUANTITY					
FERTILIZER NUTRIENT	60 LBS/AC X 0.045 AC = 2.75 LBS	2.75 LBS					
FERTILIZER NUTRIENT	60 LBS/AC X 0.045 AC = 2.75 LBS	2.75 LBS					



	USER NAME = cesario	DESIGNED - WT	REVISED -		CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U.	SECTION	COUNTY TOTAL SHEET
Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS	DRAINAGE AND LANDSCAPING PLAN	1398	17-00099-00-RS	СООК 65 36
& Associates, Inc.	PLOT SCALE = 20.0000 ' / in.	CHECKED – MC	REVISED -	DEPARTMENT OF TRANSPORTATION	DRAINAGE AND LANDSCAFING FLAN			CONTRACT NO. 61E54
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: 1''=10' SHEET 1 OF 7 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED.	AID PROJECT

# LEGEND



PERENNIAL PLANTS, SEDGE MEADOW TYPE

SODDING, SALT TOLERANT

 $\square$ CURB CUT (18" WIDTH / 1' TRANS) \*\*\*

TREE PROTECTION (TEMPORARY FENCE) = 25 FEET EACH

- x - x - DECORATIVE STEEL RAILING

XX PROPOSED STORM STRUCTURE

(SXX) PROPOSED STORM SEWER

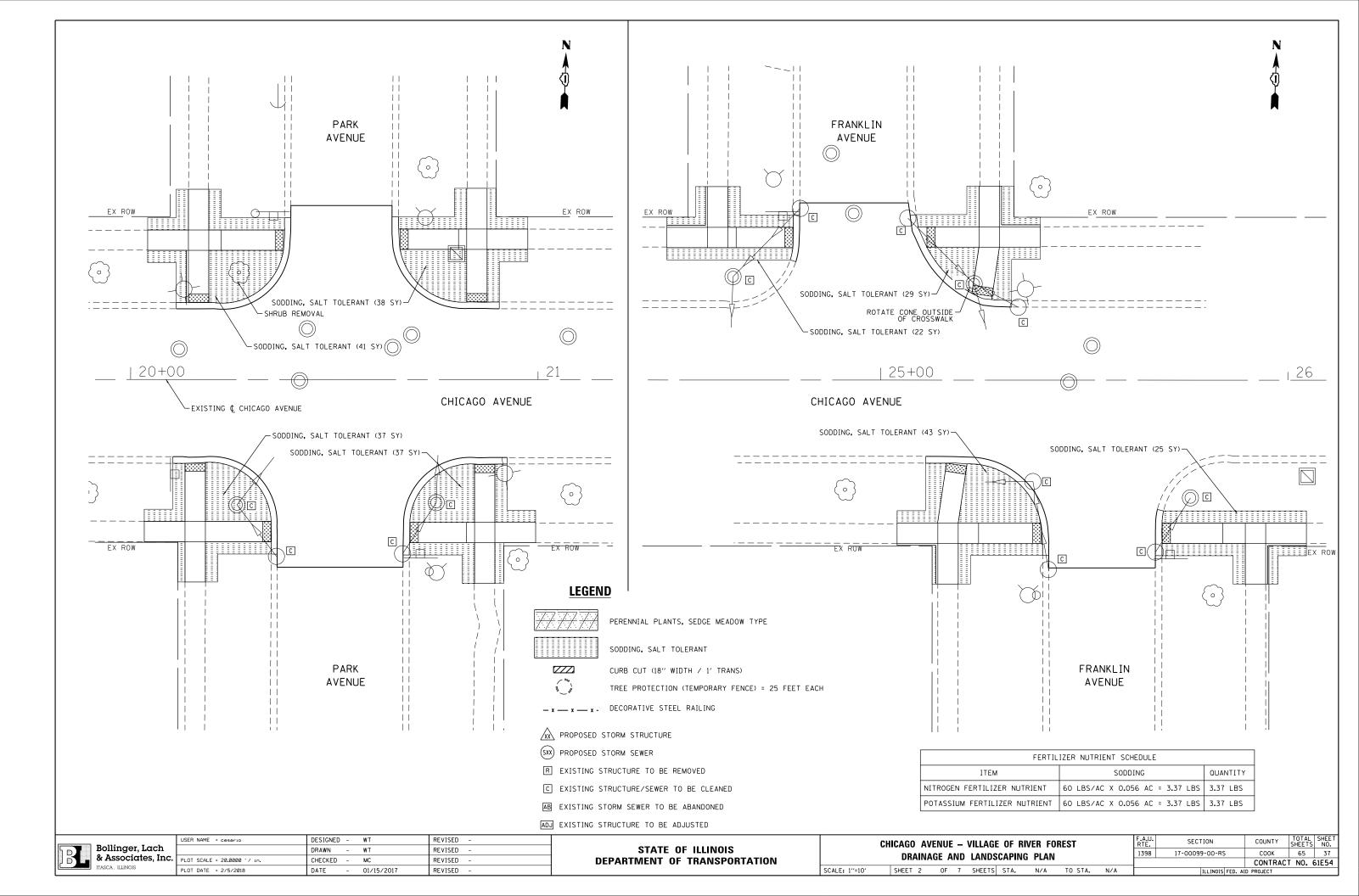
R EXISTING STRUCTURE TO BE REMOVED

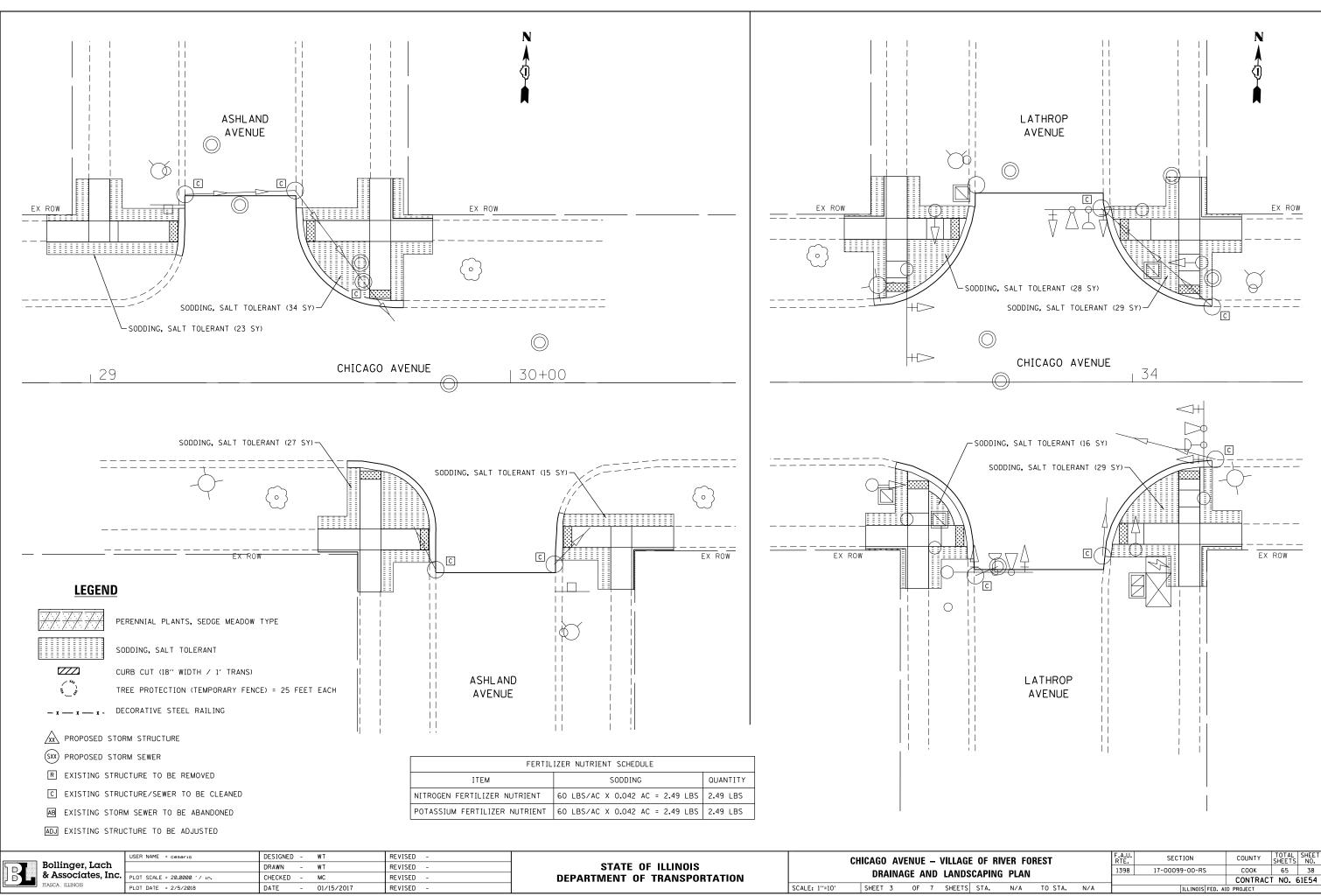
C EXISTING STRUCTURE/SEWER TO BE CLEANED

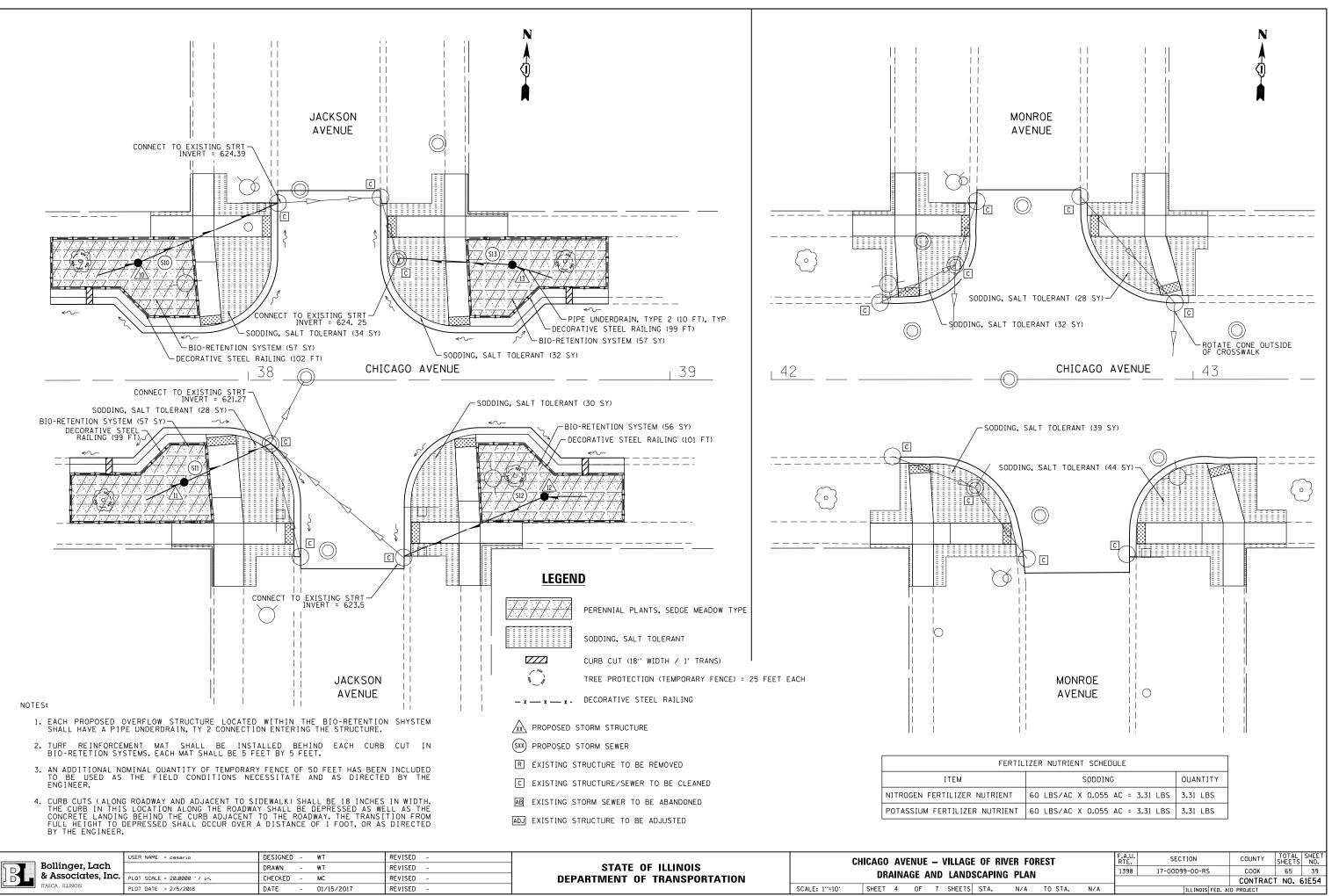
AB EXISTING STORM SEWER TO BE ABANDONED

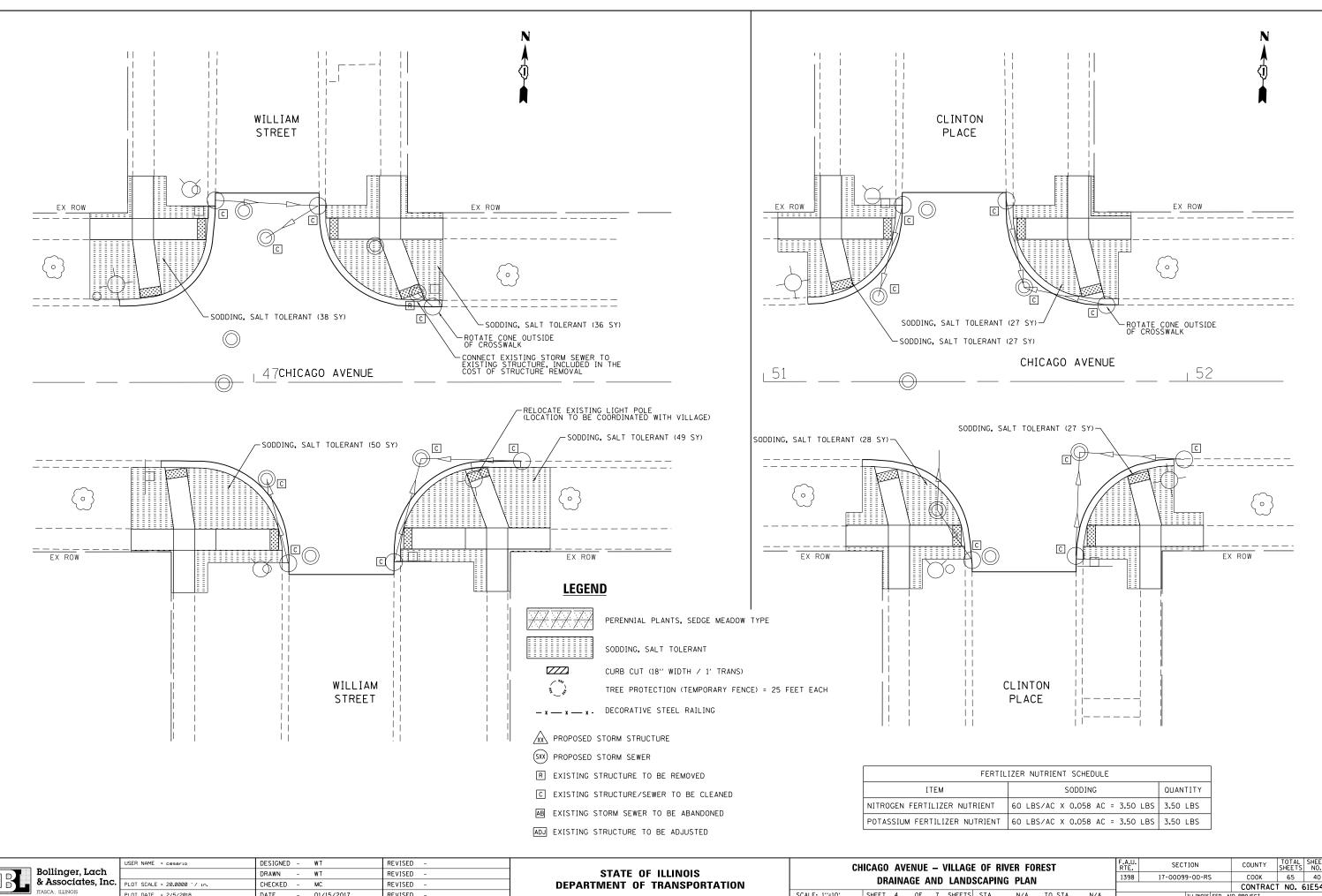
ADJ EXISTING STRUCTURE TO BE ADJUSTED

FERTILIZER NUTRIENT SCHEDULE								
EM	SODDING	QUANTITY						
IZER NUTRIENT	60 LBS/AC X 0.011 AC = 0.68 LBS	0.68 LBS						
ILIZER NUTRIENT	60 LBS/AC X 0.011 AC = 0.68 LBS	0.68 LBS						









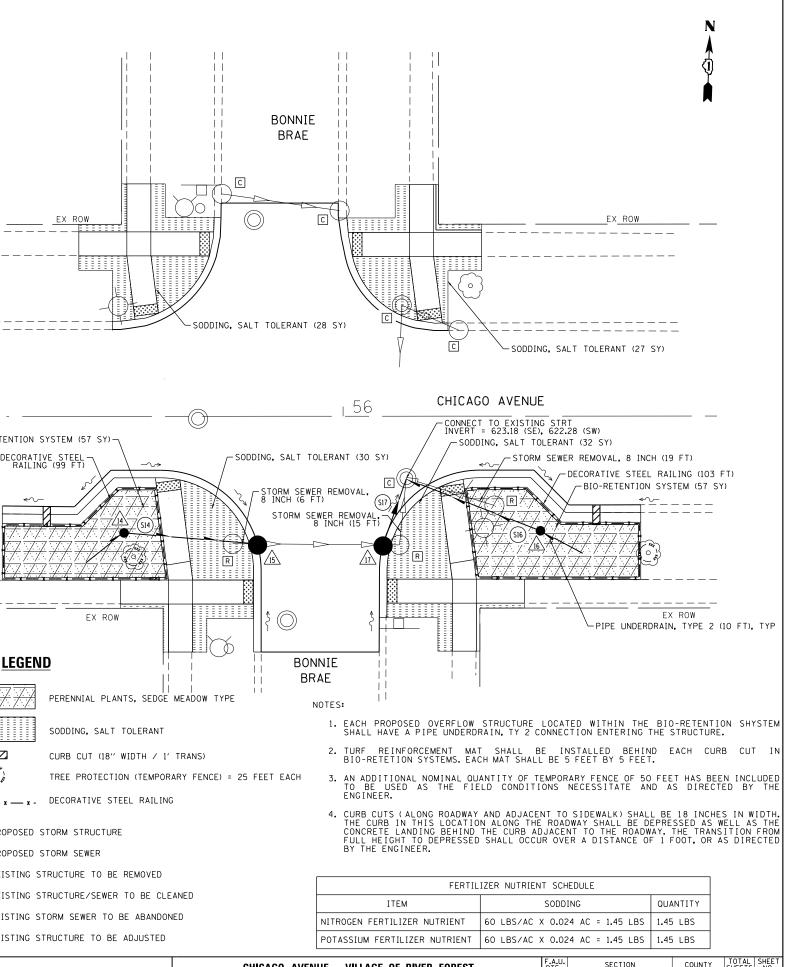
REVISED

DATE - 01/15/2017

PLOT DATE = 2/5/2018

**DEPARTMENT OF TRANSPORTATION** SCALE: 1"=10' SHEET 4 OF 7 SHEET

GE OF RIVER FOREST					F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
DSCAPING PLAN					1398	17-00099-00-RS	COOK	65	40		
		I LAN					CONTRAC	T NO. 6	51E54		
٢S	STA.	N/A	TO STA.	D STA. N/A ILLINOIS FED. AID PROJECT							



		[	56
BIO-RETENTION SYSTEM (57 SY)			
DECORATIVE STEEL RAILING (99 FT)	DING, SALT	TOLERANT	30 S
		SEWER REMOVA FT) SEWER REMO 8 INCH (19	( ( )
EX ROW	$\uparrow \bigcirc$		\$
	L B	ONNIE	
		BRAE	
PERENNIAL PLANTS, SEDGE MEADOW TYPE	11	NOTES:	
SODDING, SALT TOLERANT		1. EAC SHA	CH P All F
CURB CUT (18" WIDTH / 1' TRANS)		2. TUF BIC	RF I D-RE
TREE PROTECTION (TEMPORARY FENCE) = 25	FEET EACH		ADD I BE GINER
_ x x DECORATIVE STEEL RAILING		4. CUF	
XX PROPOSED STORM STRUCTURE		THE COM	E CUR NCRE
(SXX) PROPOSED STORM SEWER		BY	THE
R EXISTING STRUCTURE TO BE REMOVED		[	
C EXISTING STRUCTURE/SEWER TO BE CLEANED			
AB EXISTING STORM SEWER TO BE ABANDONED		NITROGE	N FEI
ADJ EXISTING STRUCTURE TO BE ADJUSTED		POTASSI	
l			

STR	STA	0/S				STRUCTURE TYPE	F&G	INVERT ELEV	RIM	DITCH
NO	314	0/3	MH	CB	IN		1 00		ELEV	BOTTOM
1	9+49.8	20.29 LT		С			8	619.65 (E)	622.15	621.5
2	9+47.19	25.98 RT		С			8	618.75 (E)	621.75	620.8
3	10+57.78	19.03 LT		С			8	619.30 (SW)	622.30	621.3
4	10+55.15	28.57 RT		С			8	620.75 (SW)	622.25	621.3
5	14+15.83	24.57 LT		С			8	620.50 (NE)	623.50	622.5
6	14+51.87	27.04 RT		С			8	621.00 (E)	624.00	623.0
7	14+80.33	29.69 RT	A (4')			ON EXISTING SEWER	1 OL	620.85 (W, NE)	624.02	
8	15+08.92	18.79 RT	A (4')			ON EXISTING SEWER	1 OL	620.67 (NW, SE)	624.10	
9	15+34.07	29.20 RT		С			8	620.80 (NW)	624.00	623.0
10	37+73.95	27.93 LT		С			8	624.57 (NE)	626.45	625.5
11	37+84.75	24.17 RT		С			8	623.25 (NE)	626.25	625.3
12	38+69.98	27.68 RT		С			8	623.75 (SW)	626.50	625.5
13	38+62.64	27.36 LT		С			8	624.50 (W)	626.50	625.5
14	55+54.48	24.31 RT		С			8	624.14 (E)	626.50	625.5
15	55+82.14	26.60 RT	A (4')			ON EXISTING SEWER	1 OL	624.00 (E, W)	626.80	
16	56+40.86	23.29 RT		С			8	623.50 (NW)	626.50	625.5
17	56+08.29	26.80 RT	A (4')			REINSTALL EX RESTRICTOR (622.65 N)	1 OL	622.95 (W), 622.65 (N)	626.35	

PIPE	FROM	ТО		DIA	LENGTH	SLOPE
NO	STR	STR	DESCRIPTION		(f+)	(%)
S1	1	EXISTING	PIPE UNDERDRAIN SPECIAL	8	40	0.50%
S2	2	EXISTING	PIPE UNDERDRAIN SPECIAL	8	34	0.40%
S3	3	EXISTING	PIPE UNDERDRAIN SPECIAL	8	22	0.50%
S4	4	EXISTING	PIPE UNDERDRAIN SPECIAL	8	18	0.50%
S5	5	EXISTING	PIPE UNDERDRAIN SPECIAL	8	31	1.10%
S6	6	10	PIPE UNDERDRAIN SPECIAL	8	28	0.50%
S9	9	EXISTING	PIPE UNDERDRAIN SPECIAL	8	19	0.50%
S10	10	EXISTING	PIPE UNDERDRAIN SPECIAL	8	36	0.50%
S11	11	EXISTING	PIPE UNDERDRAIN SPECIAL	8	22	0.50%
S12	12	EXISTING	PIPE UNDERDRAIN SPECIAL	8	36	0.60%
S13	13	EXISTING	PIPE UNDERDRAIN SPECIAL	8	27	0.70%
S14	14	15	PIPE UNDERDRAIN SPECIAL	8	28	0.50%
S16	16	EXISTING	PIPE UNDERDRAIN SPECIAL	8	30	1.10%
S17	17	EXISTING	STORM SEWER CLASS A TYPE 1	12	15	2.50%

Rollingor Lagh	USER NAME = cesario	DESIGNED - WT	REVISED -			CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U.	SECTION	COUNTY TOTAL SHEET
Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS			1398	17-00099-00-RS	СООК 65 41
& Associates, Inc.	PLOT SCALE = 20.0000 ' / in.	CHECKED – MC	REVISED -	DEPARTMENT OF TRANSPORTATION		DRAINAGE AND LANDSCAPING PLAN			CONTRACT NO. 61E54
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: 1"=10"	SHEET 6 OF 7 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. AI	D PROJECT

SYSTEM.

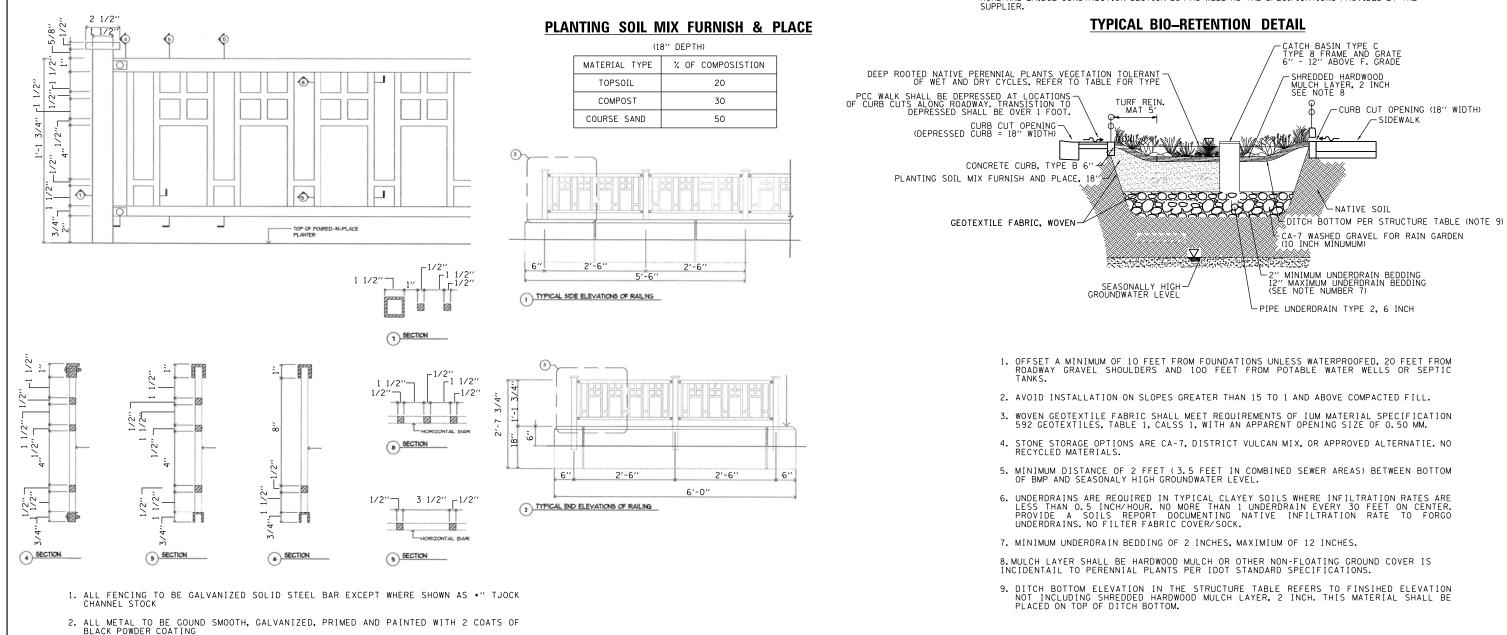
ELEVATION.

# **BIO-RETENTION PLANTING SCHEDULE**

LOCATIONS OF PLANTINGS SHALL BE DETERMINED IN THE FIELD BY THE VILLAGE AND THE ENGINEER TO ENSURE A VISUALLY PLEASING ARRANGEMENT AND ENSURING DEEP ROOTED PLANTS ARE NEAR THE DEPRESSED CURB OPENING ADJACENT TO THE ROADWAY FOR GROUND STABILITY. QUANTITIES OF PLANTINGS SHALL BE VERIFIED BY THE VILLAGE AND THE ENGINEER PRIOR TO ORDERING

		PERENI	NIAL PLANT	S, SE	EDGE	MEA	DOW	TYPE	, GAI	LLON	POT	S								
								Q	UANT	ΙTΥ	(PLAN	ITS -	EAC	CH)						
BOTANIC NAME	COMMON NAME	COLOR	SIZE	SIZE KEYS		KEYSTONE			FOREST			JACKSON			BONNIE BRAE		SPACING	INUNDATION TOLERANCE	HEIGHT (FT)	
				NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	SW	SE			
ASCLEPIAS INCRNATA	SWAMP MILKWEED	PINK	1 GAL	12	10	13	13	22	17	21	21	13	13	13	13	13	13	24 " O.C.	> 24 HRS	3 TO 4
CHELONE GLABRA	TURTLEHEAD	WHITE	1 GAL	20	16	22	22	37	29	35	35	22	22	22	23	22	22	18" O.C.	2-24 HRS	2 TO 3
COREOPSIS PALMATA	PRAIRIE COREOPSIS	YELLOW	1 GAL	20	16	22	22	37	29	35	35	22	22	22	23	22	22	18" O.C.	2-24 HRS	2 TO 3
IRIS VIRFINICA VAR SHREVEI	BLUE FLAG IRIS	BLUE	1 GAL	30	25	34	34	55	43	53	53	34	34	34	35	34	34	12" O.C.	> 24 HRS	1 TO 2
LIATRIS SPICATA	MARSH BLAZING STAR	PURPLE	1 GAL	30	25	34	34	55	43	53	53	34	34	34	35	34	34	12" O.C.	2-24 HRS	2 TO 3
LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	BLUE	1 GAL	15	12	17	17	28	22	26	27	17	17	17	17	17	17	12" O.C.	2-24 HRS	2 TO 3
CAREX MOLESTA	FIELD OVAL SEDGE	GREEN	1 GAL	12	10	13	13	22	17	21	21	13	13	13	13	13	13	18" O.C.	> 24 HRS	1 TO 2
SPORPBOLUS HETEROLEPIS	PRAIRIE DROPSEED	GREEN	1 GAL	13	11	15	15	25	19	23	24	15	15	15	15	15	15	24" O.C.	2-24 HRS	1 TO 2
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	BROWN	1 GAL	14	12	17	17	28	22	26	27	17	17	17	17	17	17	24" O.C.	2-24 HRS	2 TO 3
			TOTAL	100	177	107	107	700	241	207	200	107	107	107	101	107	107			

TOTAL <u>166 137 187 187 309 241 293 296 187 187 187 191 187 187</u>



3. ALL BAR TO BE 100% WELDED IN COMFOMANCE WITH SPECIFICATIONS AND GROUND SMOOTH AT ALL JOINT.

Bollinger, Lach	USER NAME = cesario	DESIGNED - WT	REVISED -		С	CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
& Associates Inc		DRAWN - WT	REVISED -	STATE OF ILLINOIS		DRAINAGE AND LANDSCAPING PLAN	1398	17-00099-00-RS	СООК	65 42
	PLOT SCALE = 20.0000 '/ in.	CHECKED – MC	REVISED -	DEPARTMENT OF TRANSPORTATION			_		CONTRACT	T NO. 61E54
ITASCA, IELINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SCALE: 1"=10'	SHEET 7 OF 7 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. A	ID PROJECT	

# **BIO**-RETENTION NOTES

1. ALL PLANT MATERIAL SHALL BE NORTHERN ILLINOIS NURSERY GROWN TO ASSURE CLIMATIC AND SOIL SIMILARITY. ALL PERENNIAL MATERIAL SHALL BE CONTAINER GROWN.

2. QUANTITIES AND PLANTING TYPES SHALL BE COORDINATED AND VERIFIED BY THE VILLAGE OF RIVER FOREST AND THE RESIDENT ENGINEER PRIOR TO ORDERING PLANTS AND INSTALLATION. VARIATIONS IS PLANT TYPES AND QUANTITIES WHICH OCCUR SHALL HAPPEN AND NO ADDITIONAL COST TO THE CONTRACT. CONTRACTOR SHALL VERIFY ALL PLANTING TYPES AND QUANTITIES PRIOR TO ORDERING.

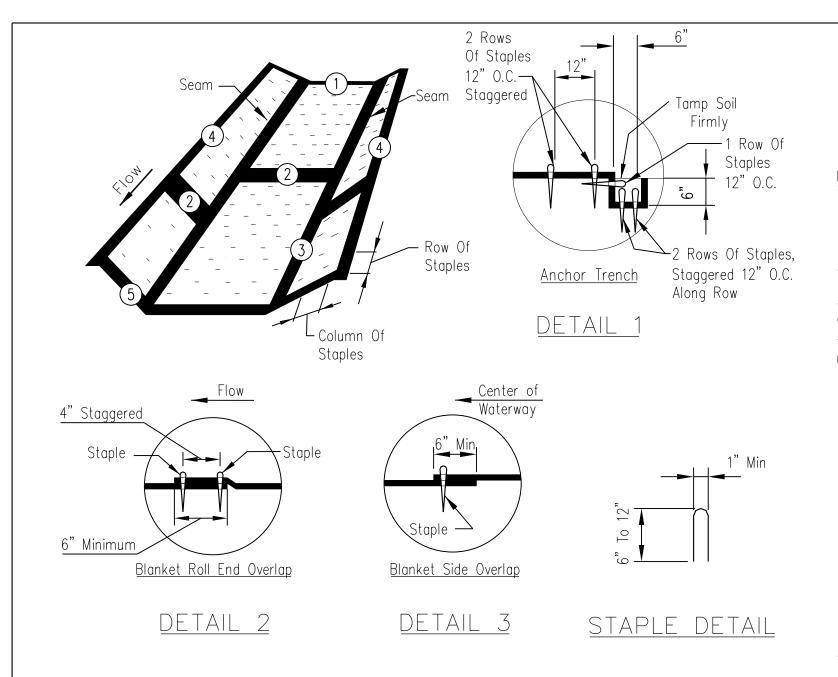
3. WHERE EXISTING TREES AND LIGHT POSTS ARE LOCATED WITHIN THE BIO-RETENTION AREAS, GRADING OF THE BIO-RETENTION AREA SHALL NOT EXPOSE THE BASE OF THE POST OR THE ROOTS OF THE TREES. THE EXISTING GRADE SHALL REMAIN AROUND THE OBJECTS FOR A MINIMUM OF 2 FOOT HORIZONTAL DISTANCE PRIOR TO GRADING TO BIO-RETENTION SYSTEM. ALL EXCAVATION WITHIN THE DRIP LINE OF THE TREES SHALL BE PERFORMED BY HAND TO ENSURE MINIMAL DAMAGE TO THE ROOT

4. LOCATIONS OF PLANTS WITHIN THE BIO-RETENTION SYSTEM SHALL BE COORDINATED WITH THE VILLAGE OF RIVER FOREST AND THE RESIDENT ENGINEER.

5. THE BIO-RETENTION SYSTEM GRADING: THE SLOPE FROM THE CURB CUT SHALL NOT EXCEED 10% GRADE TO THE DITCH BOTTOM ELEVATION. THIS DISTANCE OF THE 10% SLOPE SHALL VARY DEPENDING ON THE DEPTH OF THE SPECIFIC BIO-RETENTION SYSTEM. THE SLOPES FROM THE BACK THE CONCRETE CURB TYPE B SHALL BE AT A 4:1 SLOPE TO THE BOTTOM OF THE BIO-RETENTION

6. THE GRADING OF THE BIO-RETENTION SYSTEM IN LOCATIONS OF CURB CUTS SHALL EXTEND TO THE TOP OF THE DEPRESSED CURB TO ALLOW FOR A SMOOTH TRANSISTION FROM THE OPENING TO THE BIO-RETENTION SYSTEM.

7. PLANTING PLUGS SHALL MEET THE SPECIFICATIONS OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 254 AS WELL AS THE SPECIFICATIONS PROVIDED BY THE



PLOT DATE = 2/5/2018

DATE

01/15/2017

REVISED

Waterway #			
Waterway Width (ft)			
ECB Width (ft)			
Length (ft)			
Stations	to	to	to

# NOTES:

- materials may be used upon approval by the designer.
- 2. Prepare soil prior to installing erosion control blanket, including seeding, fertilizing, and lime application.

3. The erosion control blanket is to be placed in firm contact with the soil and not be allowed to bridge over surface irregularities. The blanket can not be stretched. 4. Install the erosion control blanket according to manufacturer's instructions. If no manufacturer's instructions are available, install the blanket as follows:

- Detail for dimensions.
- in staggered rows across the width as shown in Detail 1.
- c. For joining ends of rolls, overlap end of upslope blanket a minimum of 6 inches 4 inches apart, as shown in Detail 2.
- d. Overlap blankets on side slopes a minimum 6 inches over the blanket below (shingle style). Staple overlap at 12 inch intervals. See Detail 3.
- e. Staple the outer edge along sides of the blanket every 12 inches. See Detail 4.
- covered by erosion blanket.
- staggered staples 12 inches apart. See Detail 5.
- 5. Start laying the blankets by rolling center blanket in the direction of flow, centered on

SSCALE:NTS

1 ? max. 5/8" x	d bottom of blanket wit 5/8" opening size netti mat on max. 1.5" cento 	ng,   with a max. 5/8'	etting	TE OF ILLINOIS	DETAIL 4 CHICAGO AVENUE - VILLAGE
l ?   max. 5/8" x !	5/8" opening size netti	ng,   with a max. 5/8'	' x 5/8" opening		
Cover Top and					Blanket Side Edge
5	N/A	0.021 in. x	0.042 in.		
	N/A	80% of fibe	ers > 6 in.		
yd.	0.50	0.6	33		
100%	% coconut fibers	100% curled	wood fibers		$\Box$ / $\lambda$
Co	oconut Blanket	Wood Fibe	r Blanket		
TABLE 1. MINI	MUM REQUIREM	ENTS FOR ERO	SION CONTRO	L BLANKET	Center of Waterway
	Co 1009	Coconut Blanket 100% coconut fibers rd. 0.50	Coconut Blanket     Wood Fibe       100% coconut fibers     100% curled       rd.     0.50     0.6	Coconut Blanket     Wood Fiber Blanket       100% coconut fibers     100% curled wood fibers       rd.     0.50     0.63	100% coconut fibers     100% curled wood fibers       rd.     0.50     0.63

1. The erosion control blanket consists of a machine produced mat of specified material. The product must meet the minimum requirements specified in Table 1, below. Ensure that the product is new and unused, and is furnished in rolls. Alternative

a. Use "U" shaped staples, 0.12 in diameter wire or greater (#11 gauge). See Staple

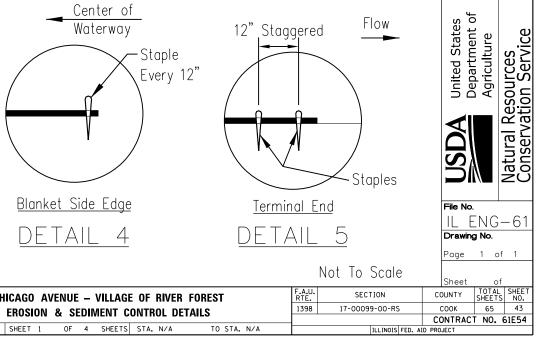
b. Bury upstream end of blanket in a trench 6 inch wide by 6 inch deep and stapled

over downslope blanket (shingle style). Use a double row of staggered staples

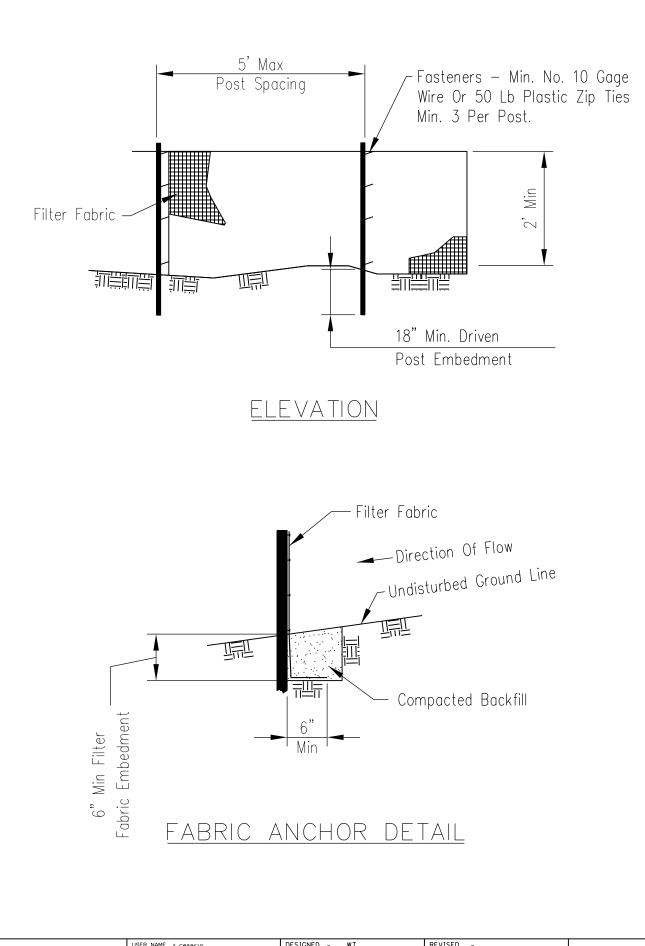
f. Staples are to be placed alternately in columns (in the direction of the waterway) 2 feet apart and in rows (across the waterway) 3 feet apart, throughout the area

q. Downstream (terminal) end of blanket are to be stapled with a double row of

the centerline of waterway. No overlap of blankets at the center of the waterway.



Date	7/1/15	
-	Designed	Checked
	⊢	S
	OSION CONTROL BLANKE	NSTALLATION DETAILS
	L CONTR	alla TION
	EROSION	INST /
tes	nt of e	e
United Sta	Departmer Agriculture	kesources tion Servic
		Natural R Conserva
	No. EN( wing No. e 1	
She	et	of AL SHEET TS NO.

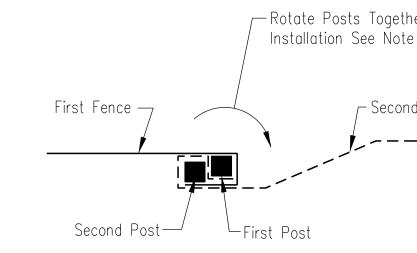


# NOTES:

- 1. Temporary silt fence shall be insta area to be protected. Fence shal construction period and removed and site stabilization.
- Filter fabric shall meet the require Geotextile Table 1 or 2, Class I w 30 for nonwoven and 50 for wove
- 3. Fence posts shall be either wood area of 1.5" X 1.5" or a standar
- 4. When splices are necessary make detail. Place the end post of the the first fence. Rotate both post create a tight seal with the fabr bottom of the posts to accommon posts and bury the flap. Compact

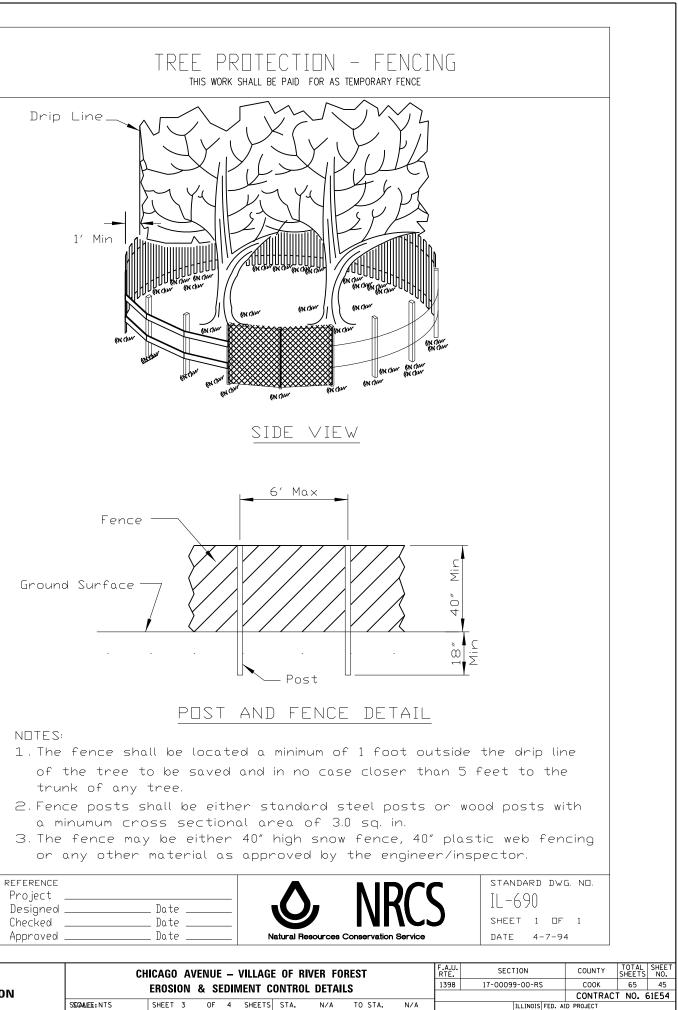
# NOTES:

1. THIS WORK SHALL BE PAID FOR AS



# <u>SPLICE DETAIL-PLAN VIEW</u>

	USER NAME = cesario	DESIGNED -	WT	REVISED -		CI CI	HICAGO AV	ENILE	– VILI	
Bollinger, Lach		DRAWN -	WT	REVISED -	STATE OF ILLINOIS					
& Associates, Inc.	PLOT SCALE = 100.0000 ' / in.	CHECKED -	мс	REVISED -	DEPARTMENT OF TRANSPORTATION		EROSION	& SE	DIMEN	
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE -	01/15/2017	REVISED -		SSCALEE:NTS	SHEET 2	OF	4 SHI	IEETS



	USER NAME = cesario	DESIGNED - WT	REVISED -		CL	HICAGO AVE	NILE	- VILLAG
Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS	-			
& Associates, Inc.	PLOT SCALE = 100.0000 ' / 10.	CHECKED - MC	REVISED -	DEPARTMENT OF TRANSPORTATION		EROSION 8	k SEDI	IMENT C
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SSOMALEE: NTS	SHEET 3	0F 4	1 SHEETS

# **TURF REINFORCEMENT MAT**

0.35 lb/sq yd

(0.19 kg/sm) 0.15 lbs/sq yd (0.08 kg/sm)

5 lb/1000 sq ft

(2.44 kg/100 sm)

24 lb/1000 sf

8 ft (2.44m)

90 ft (27.4 m)

70 lbs (31.8 kg)

80 sq. yd. (66.8 sm)

(11.7 kg/100 sm)

Index Property	Test Method	Typical
Thickness	ASTM D6525	0.62 in. (15.75 mm)
Resiliency	ASTM 6524	95.2%
Density	ASTM D792	0.891 g/cm <sup>3</sup>
Mass/Unit Area	ASTM 6566	16.13 oz/sy (548 g/sm)
UV Stability	ASTM D4355/ 1000 HR	100%
Porosity	ECTC Guidelines	99%
Stiffness	ASTM D1388	222.65 oz-in.
Light Penetration	ASTM D6567	4.1%
Tensile Strength – MD	ASTM D6818	709 lbs/ft (10.51 kN/m)
Elongation – MD	ASTM D6818	23.9%
Tensile Strength – TD	ASTM D6818	712 lbs/ft (10.56 kN/m)
Elongation - TD	ASTM D6818	36.9%
Biomass Improvement	ASTM D7322	441%

Design Permissible Shear Stress								
The Real Property is	Short Duration	Long Duration						
Phase 1: Unvegetated	3.0 psf (144 Pa)	2.5 psf (120 Pa)						
Phase 2: Partially Veg.	8.0 psf (383 Pa)	8.0 psf (383 Pa)						
Phase 3: Fully Veg.	10.0 psf (480 Pa)	8.0 psf (383 Pa)						
Unvegetated Velocity	9.5 fr	os (2.9 m/s)						
Vegetated Velocity	15 fp	s (4.6 m/s)						

Slo	pe Design Da	ta: C Factors	
	1	Slope Gradient	ts (5)
Slope Length (L)	≤ 3:1	3:1 - 2.1	≥ 2:1
≤ 20 ft (6 m)	0.0010	0.0209	0.0507
20-50 ft	0.0081	0.0266	0.0574
≥ 50 ft (15.2 m)	0.0455	0.0555	0.081

Roughness (	oefficients - Unveg
Flow Depth	Manning's n
≤ 0.50 ft (0.15 m)	0.040
0.50 - 2.0 ft	0.040-0.012
≥ 2.0 ft (0.60 m)	D.011

Material Content

70% Straw Fiber

30% Coconut Fiber

Polypropylene

Polypropylene

Top and Bottom, UV-Stabilized

Middle, Corrugated UV-Stabilized

**Standard Roll Sizes** 

6.5 ft (2.0 m)

55.5 ft (16.9 m)

34 lbs (15.42 kg)

40 sq yd (33.4 sm)

Polypropylene, UV Stable

Matrix

Netting

Thread

Width

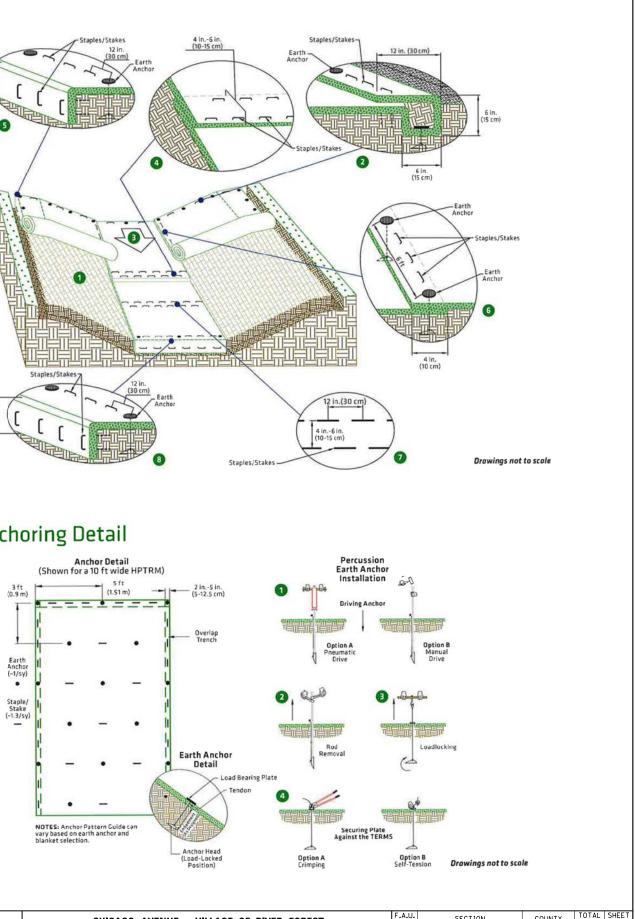
Length

Area

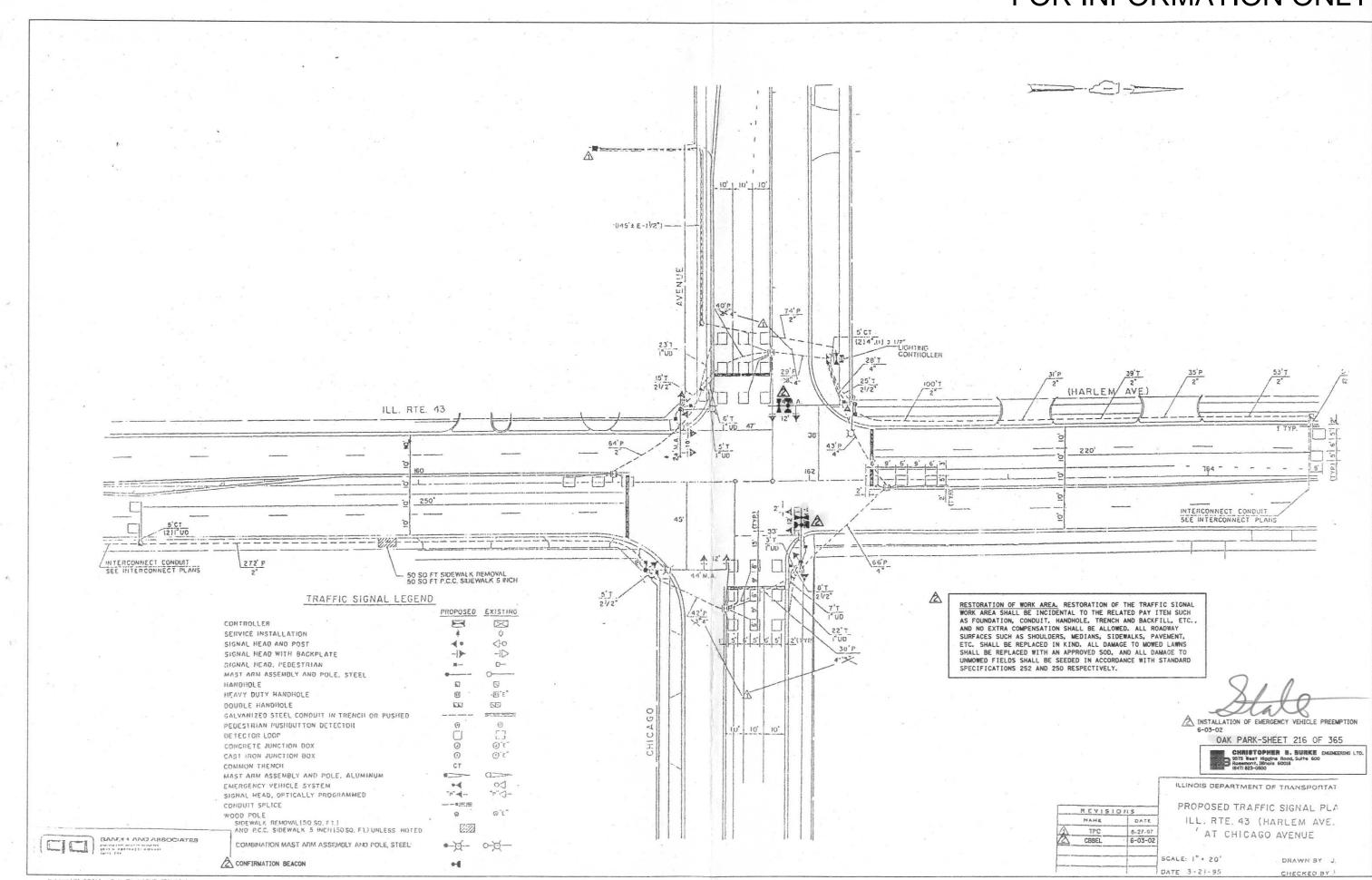
Weight ± 10%

12 In. (30 cm) Earth Anchor	(10-15 cm)
(is cm)	-
Staples/Stakes	
6 in. (15 cm)	
8	

# Anchoring Detail



	USER NAME = cesario	DESIGNED - WT	REVISED -		C C	CHICAGO AVENUE – VILLAGE OF RIVER FOREST	F.A.U.	SECTION	COUNTY	TOTAL SHEET
Bollinger, Lach		DRAWN - WT	REVISED -	STATE OF ILLINOIS			1398	17-00099-00-RS	СООК	65 46
& Associates, Ind	PLOT SCALE = 100.0000 ' / in.	CHECKED – MC	REVISED -	DEPARTMENT OF TRANSPORTATION		EROSION & SEDIMENT CONTROL DETAILS				T NO. 61E54
ITASCA, ILLINOIS	PLOT DATE = 2/5/2018	DATE - 01/15/2017	REVISED -		SSCALE:NTS	SHEET 4 OF 4 SHEETS STA. N/A TO STA. N/A		ILLINOIS FED. AI	D PROJECT	



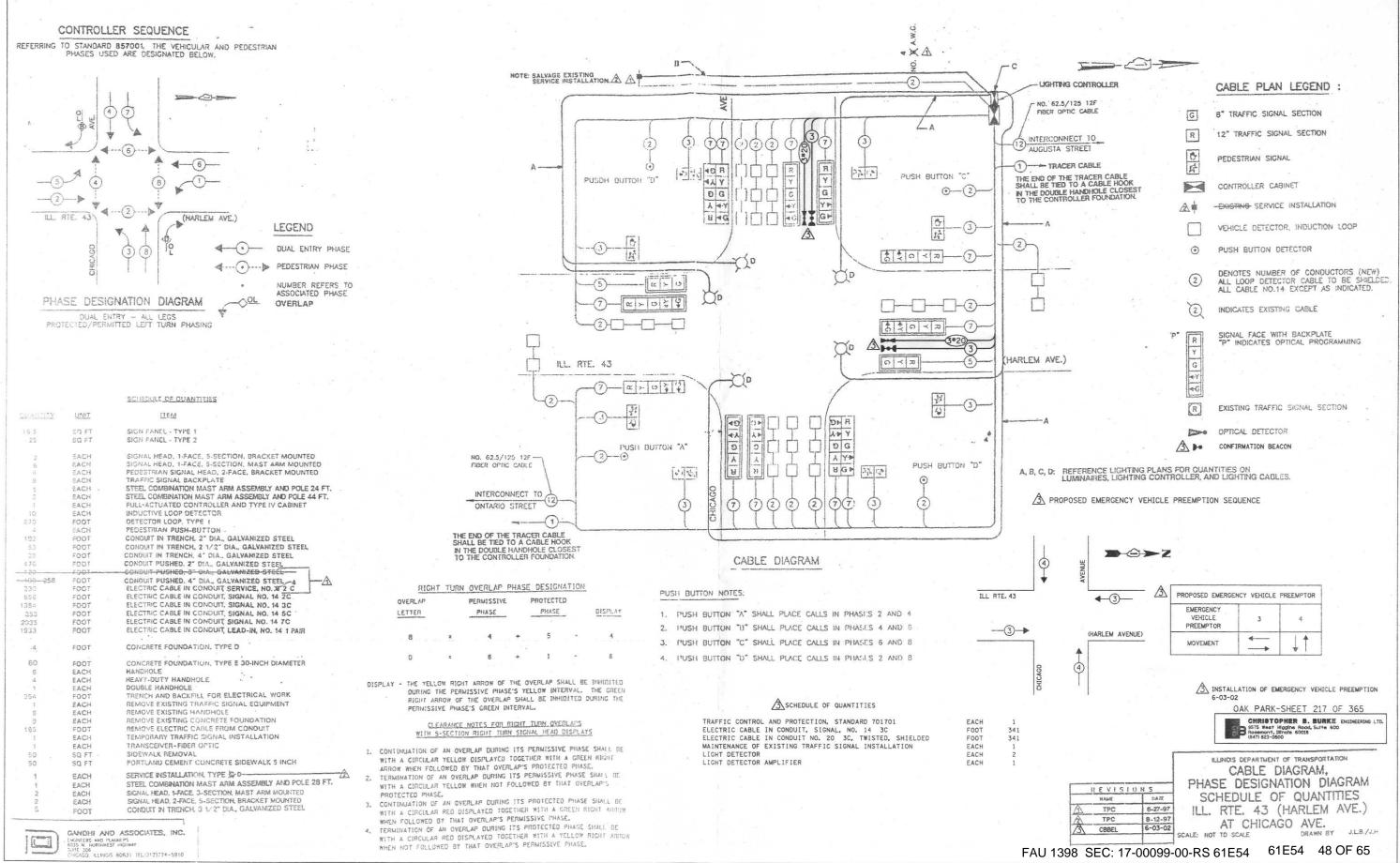
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# FOR INFORMATION ONLY

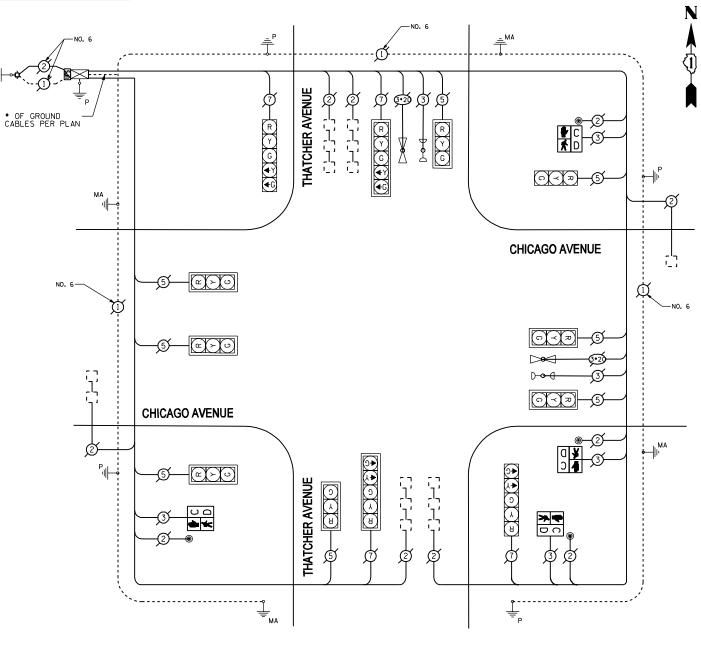
FAU 1398 SEC: 17-00099-00-RS 61E54 61E54 47 OF 65

# FOR INFORMATION ONLY



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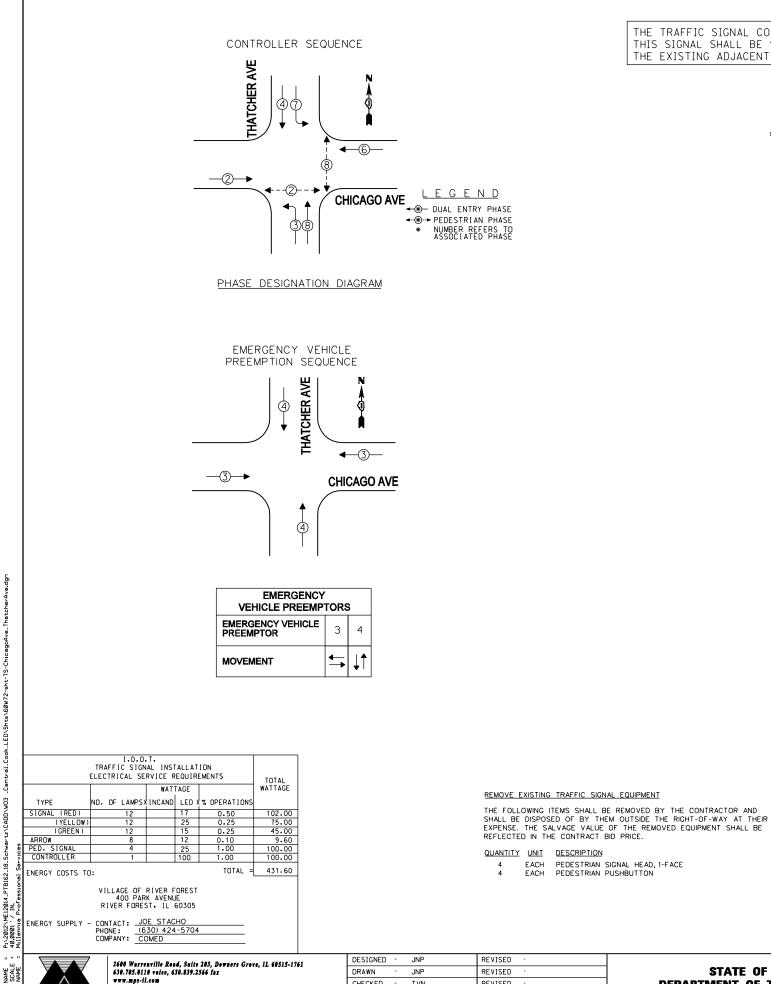
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C	OMPANY: COMED							I	AU 1330 BEC. 17	-00033	9-00-110 01204	1234 -	30103
	2600 Warrenville Road. Suite 203, Downers Grove, IL 60515-1761	DESIGNED -	JNP	REVISED -		SCHEDULE C	OF QUANTITIES, CABLE	E PLAN, PHASE DES	GNATION DIAGRAM,	F.A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	630.785.0110 voice, 638.839.2566 faz	DRAWN -	JNP	REVISED -	STATE OF ILLINOIS	A	AND EMERGENCY VEHI			VAR	2013-035-TS	соок	87 84
		CHECKED -	TVN	REVISED -	DEPARTMENT OF TRANSPORTATION		CHICAGO AVENUE	AT THATCHER AV				CONTRAC	NO. 60W72
	MILLENNIA PROFESSIONAL SERVICES	DATE -	8/2/2013	REVISED -		SCALE: N/A	SHEET NO. OF	SHEETS STA. •	TO STA.	FED. ROAL	D DIST. NO. 1 ILLINOIS FED.	AID PROJECT	
								P:\2012	ME12014_PTB162_18_Schwartz\CA	DD\WO3_Ce	ntral_Cook_LED\Shts\60W72	sht-TS-ChicagoA	e_ThatcherAve.dgn

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR

THIS SIGNAL SHALL BE "ECONOLITE" TO MATCH

THE EXISTING ADJACENT SYSTEM.



FILE

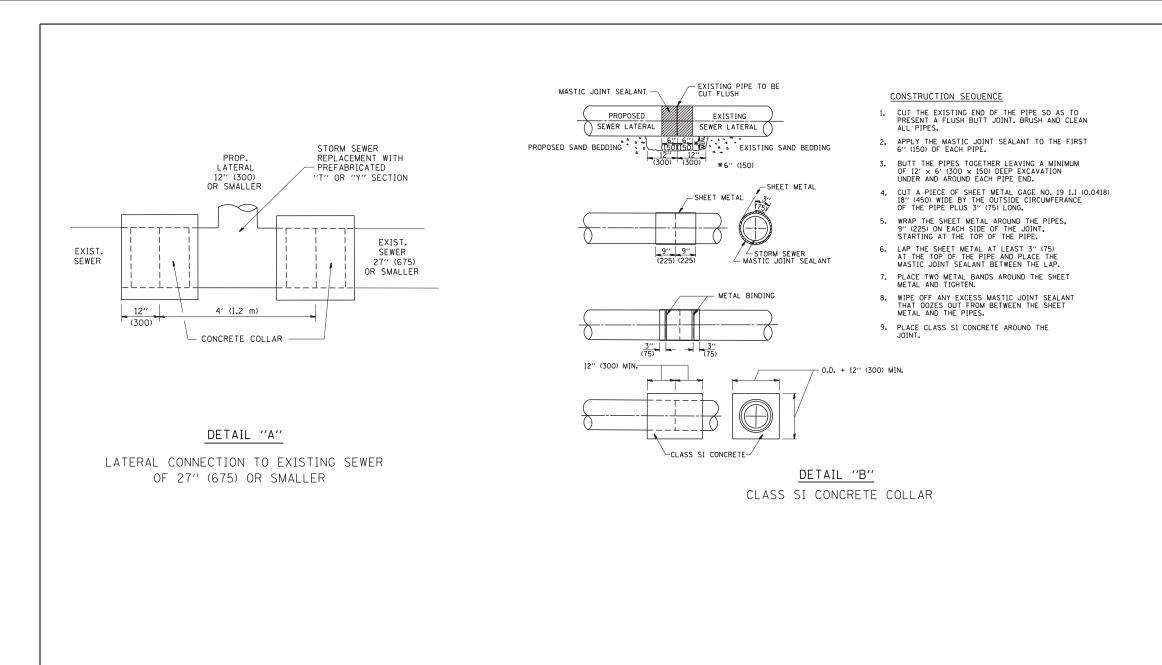
FOR INFORMATION ONLY TS-22325

# CABLE PLAN

# OF QUANTITIES

ANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION IAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER RIAN PUSH-BUTTON EXISTING CONTROLLER CABINET EXISTING TRAFFIC SIGNAL EQUIPMENT RUPTIBLE POWER SUPPLY, SPECIAL

# FAU 1398 SEC: 17-00099-00-RS 61E5461E54 49 OE 65



### 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.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS: A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
  - DETAIL "A" AND "B". 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

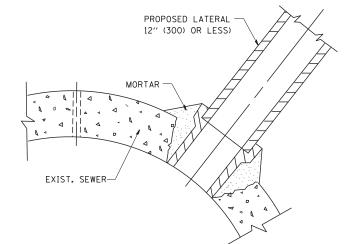
TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING 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.

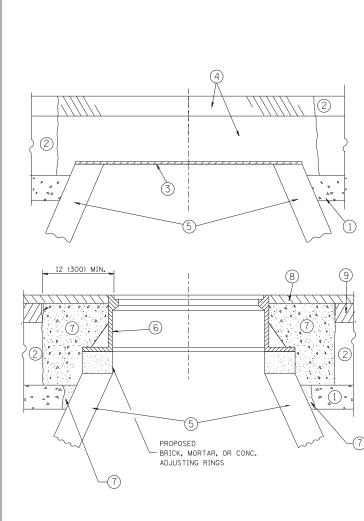
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92			DETAIL OF STORM SEWER	F.A.U. RTE.	SECTION	COUNTY TOTAL SHEET SHEETS NO.
W:\diststd\22x34\bd07.dgn		DRAWN -	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS		CONNECTION TO EXISTING SEWER	1398	17-00099-00-RS	COOK 65 50
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94	DEPARTMENT OF TRANSPORTATION				BD500-01 (BD-7)	CONTRACT NO. 61E54
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT



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

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



### 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.

# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04			DETAILS FOR	F.A.U. RTF.	SECTION	COUNTY	SHEFTS NO.
c:\pw_work\pwidot\bauerdl\d0108315\bd08.d	lgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS			1398	17-00099-00-RS	СООК	65 51
	PLOT SCALE = 1968.5000 '/ m	CHECKED -	REVISED - R. BORO 03-09-11	DEPARTMENT OF TRANSPORTATION		FRAMES AND LIDS ADJUSTMENT WITH MILLING	В	D600-03 (BD-8)	CONTRACT	NO 61E54
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FE	D. AID PROJECT	

### 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  $1^{\prime}\!\!/_{2}$  (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	6 FRAME AND LID (SEE NOTES)
2	EXISTING PAVEMENT	CLASS PP-1* CONCRETE
3	36 (900) DIAMETER METAL PLATE	(8) PROPOSED HMA SURFACE COURSE
4	PROPOSED CRUSHED STONE AND HMA SURFACE MIX	C THUI OLD THINK SUM ALL COUNCE
(5)	EXISTING STRUCTURE	9 proposed HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

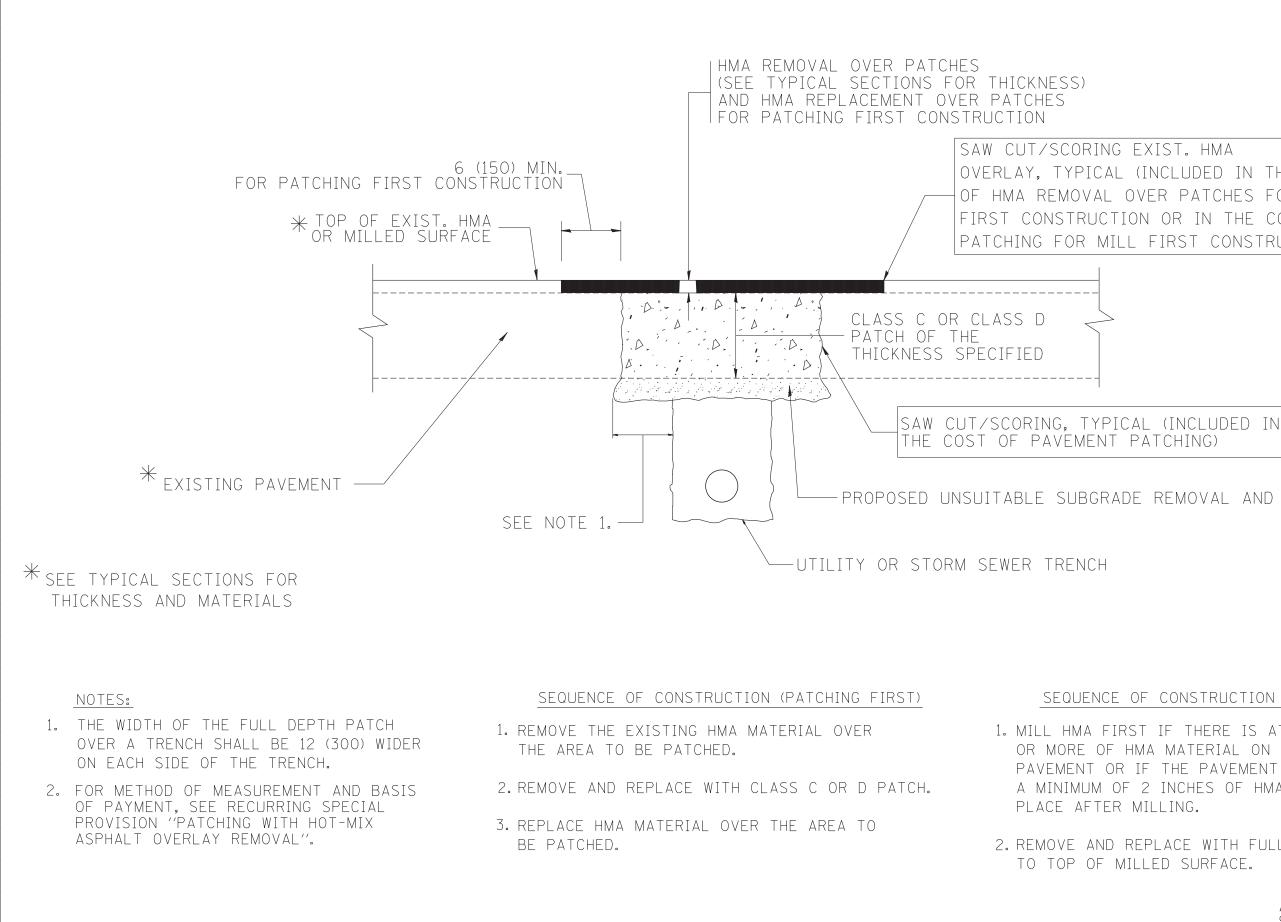
### BASIS OF PAYMENT:

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

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

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

	ALL	DIMENSIONS	ARE	IN	INCHES	(MILLIMETERS)	UNLESS	OTHERWISE	SHOWN	
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FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			PAVEMENT PATCHI		F.A.U.	SECTION	COUNTY TOTAL SHEET
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				1398 1	7-00099-00-RS	COOK 65 52
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD400-	-04 (BD-22)	CONTRACT NO. 61E54	
	PLOT DATE = 10/27/2008	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

OVERLAY, TYPICAL (INCLUDED IN THE COST OF HMA REMOVAL OVER PATCHES FOR PATCHING FIRST CONSTRUCTION OR IN THE COST OF PAVEMENT PATCHING FOR MILL FIRST CONSTRUCTION).

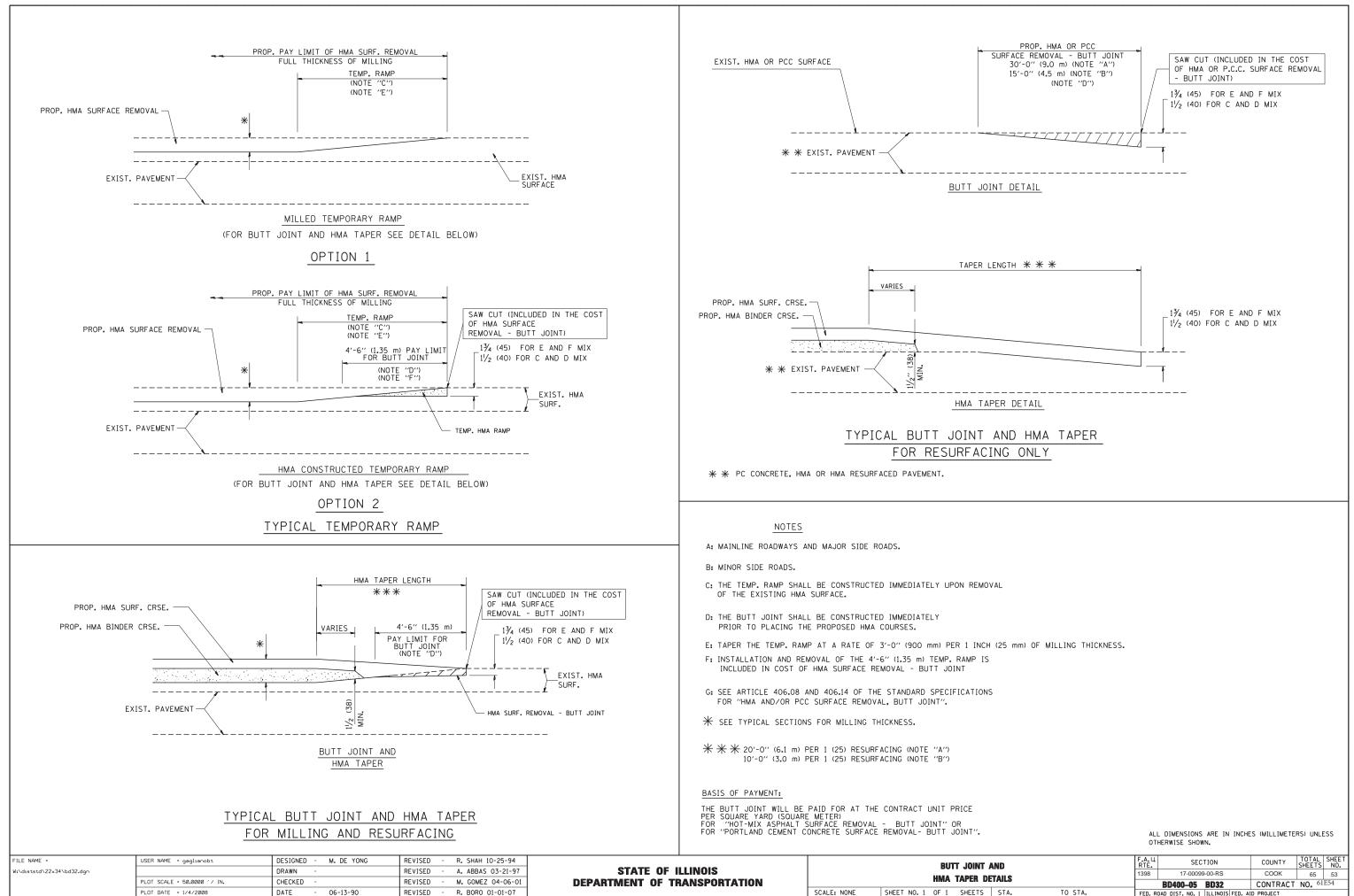
PROPOSED UNSUITABLE SUBGRADE REMOVAL AND REPLACEMENT

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  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

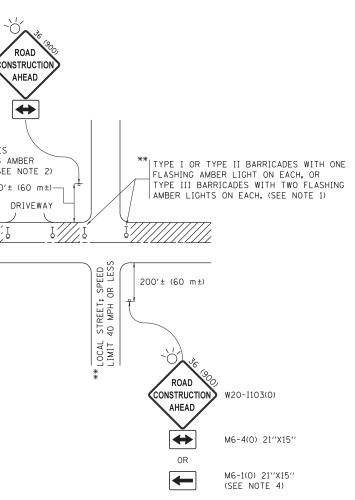
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

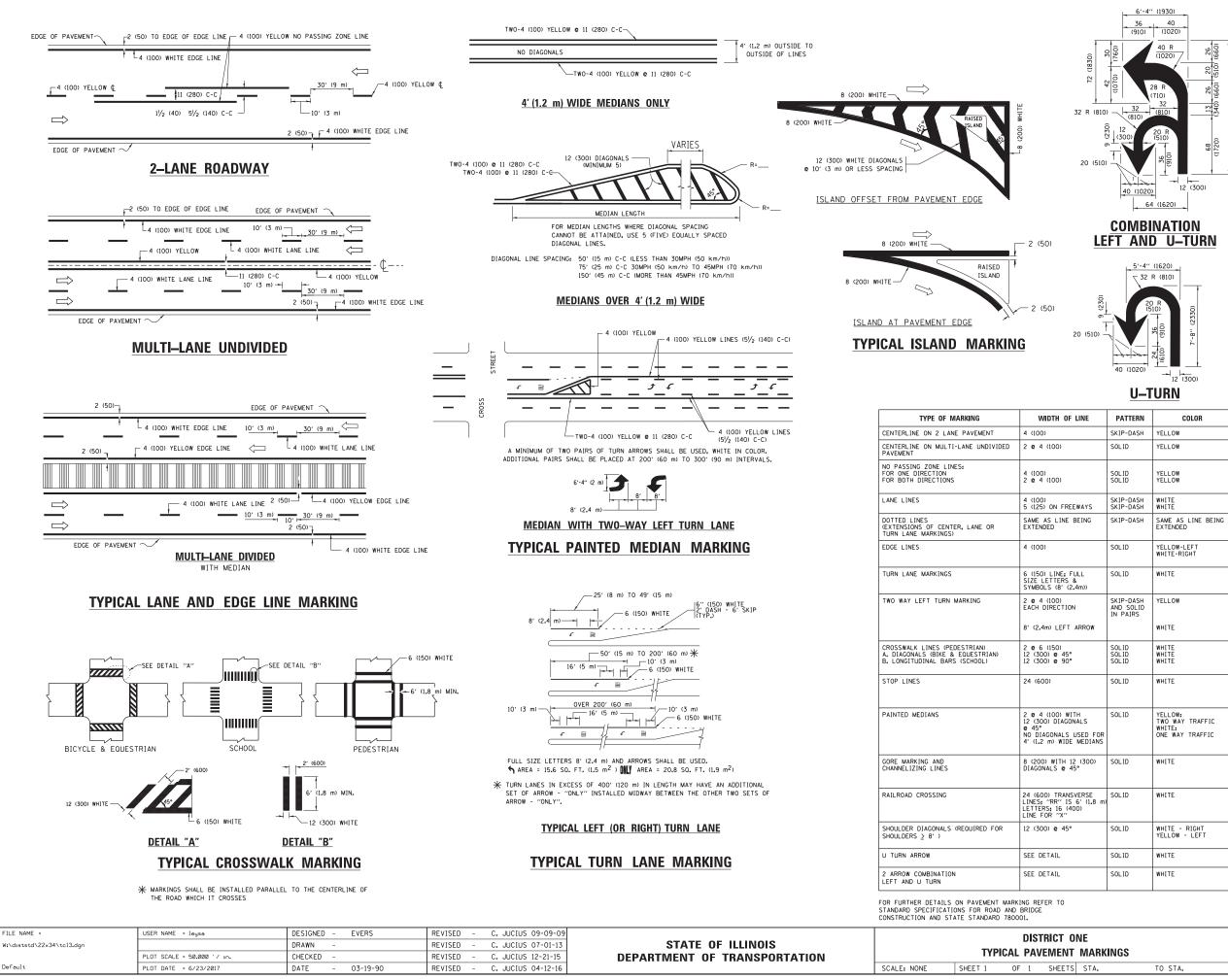
> ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

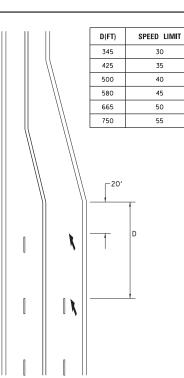


ND	F.A.U RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
DETAILS		17-00099	9-00-RS		COOK	65	53
		BD400-05	BD32		CONTRACT	NO. 61	E54
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				SHOWN ON a) ONE MOUN b) THE BLOC THE 2. SIDE ROAD AS SHOWN a) ONE FLAS OF T b) THE BLOC OF T 3. CONES MAY	WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS THE DRAWING AND AS DIRECTED BY THE ENGINEER: "ROAD CONSTRUCTION AHEAD" SIGN 36 × 36 (900×900) WITH A FLASHEF TED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROU" CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY KING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF CROSS SECTION OF THE CLOSED PORTION. WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) ON THE DRAWING AND AS DIRECTED BY THE ENGINEER: "ROAD CONSTRUCTION AHEAD" SIGN 48 × 48 (1.2 m × 1.2 m) WITH A 4ER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE HE MAIN ROUTE. CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY KING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION HE CLOSED PORTION. BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE JRING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)	
FILE NAME = pw:\\ILØ84EBIDINTEG.illinois.gov;PWIDOT\D Default	USER NAME = footemj cuments\IDOT Offices\District [\Projects\Dis PLOT SCALE = 50.000 // in. PLOT DATE = 9/15/2016	DESIGNED - L.H.A. <b>DEXIGNUC</b> ADDeta\CADSheets\tc10.dgn CHECKED - DATE - 06-89	REVISED         -         A. HOUSEH         10-15-96           REVISED         -T. RAMMACHER         01-06-00           REVISED         -         A. SCHUETZE         07-01-13           REVISED         -         A. SCHUETZE         09-15-16	IN HEIGHT. 4. WHEN THE SIGNING AN	SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE ID THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL ILIEU OF THE DOUBLE HEADED ARROW (M6-4).	1398 17-00099-00-PS COOK







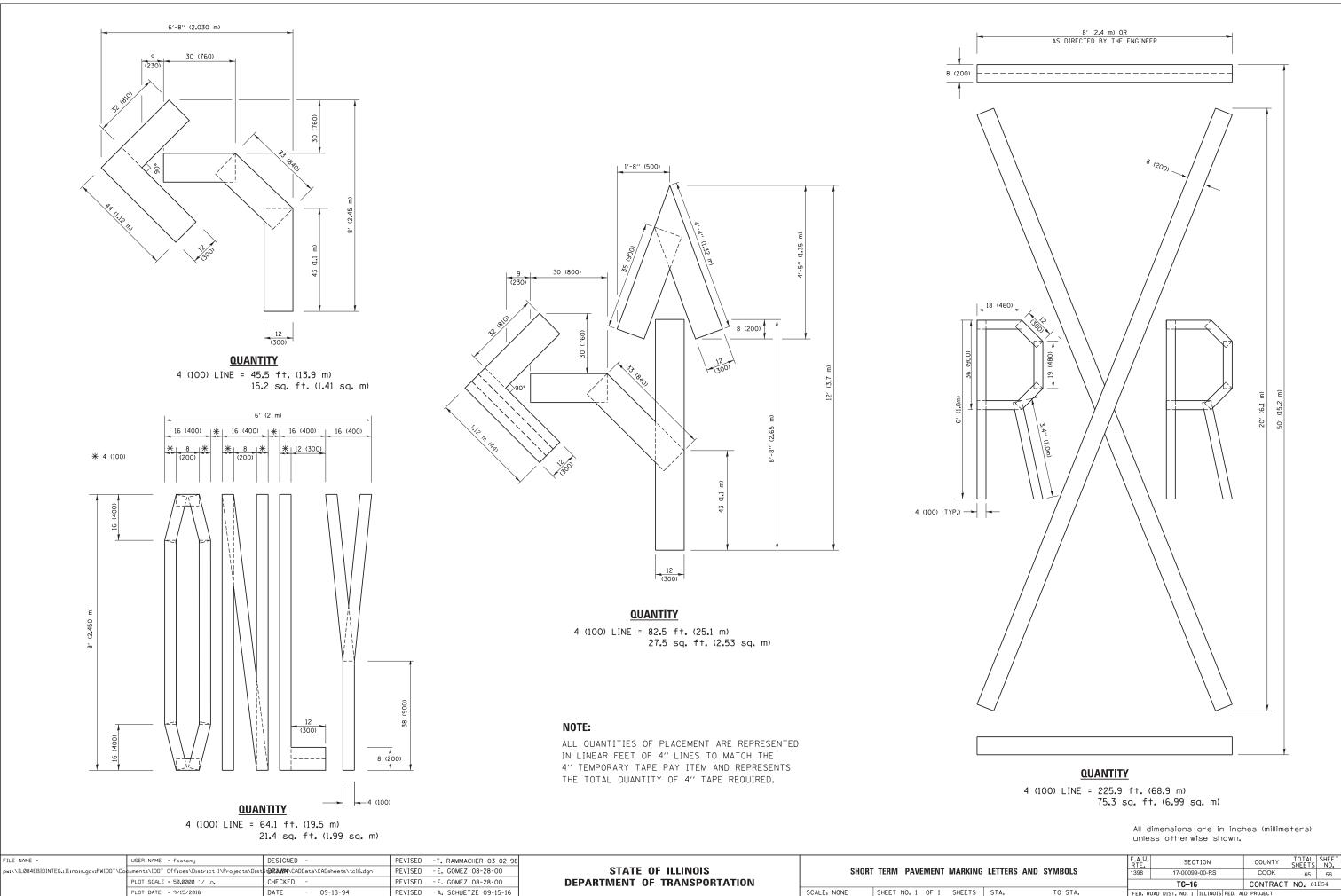
# LANE REDUCTION TRANSITION

# lane reduction arrows required at speeds of 45 MPH or greater or when specified in plans.

LINE	PATTERN	COLOR	SPACING /REMARKS
	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
	SOLID	YELLOW	11 (280) C-C
	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
EEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
BEING	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
FULL & 2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
DN ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
0	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
	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
ITH DNALS USED FOR E MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
12 (300) 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 (0VER 45MPH (70 km/h))
SVERSE 5 6' (1.8 m) 400)	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SO. FT. (5.0 m <sup>2</sup> )
0	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 (0VER 45MPH (70 km/h))
	SOLID	WHITE	16.3 SF
	SOLID	WHITE	30.4 SF

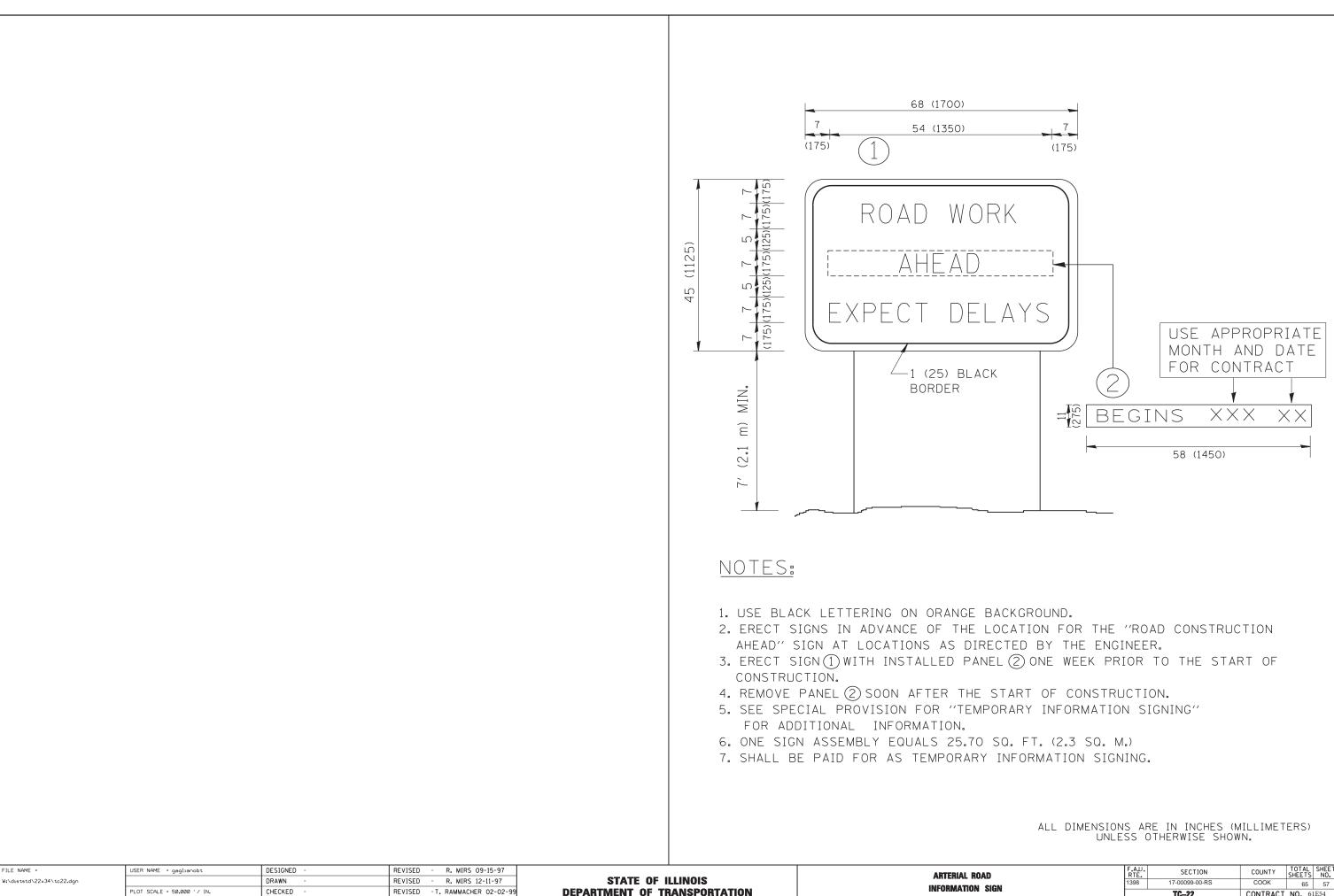
All dimensions are in inches (millimeters) unless otherwise shown.

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T MARKINGS			1398	17-00099-00-RS		COOK	65	55
				TC-13	CONTRACT NO. 61E54			
٢S	STA.	TO STA.		ILLINOIS FED. AID PROJECT				



REVISED - A. SCHUETZE 09-15-16 SCALE: NONE SHEET NO. 1 OF 1 SHEETS

IG	G LETTERS AND SYMBOLS		F.A.U. RTE. 1398	SECTION 17-00099-00-RS	COUNTY COOK	TOTAL SHEETS 65	SHEET NO. 56
				TC-16	CONTRACT NO. 61E54		
	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



REVISED - C. JUCIUS 01-31-07

PLOT DATE = 1/4/2008

DATE

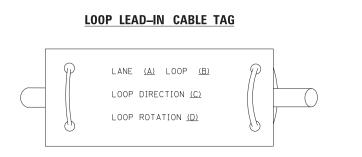
RO,	AD		F.A.U. RTE. 1398	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
M	N SIGN			17-00099-00-RS	COOK	65	57
				TC-22	CONTRACT NO. 61E54		
	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		

# TRAFFIC SIGNAL LEGEND

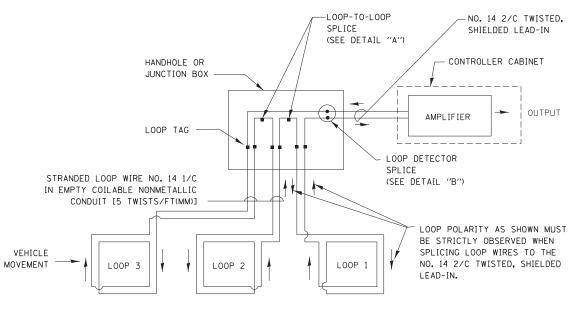
CONTROLLER CABINET       Image: Construction cabinet cabin	ROPOSED CC MC MMC P P C C MMC MMC MMC	LITEMHANDHOLE -SOUARE -ROUNDHEAVY DUTY HANDHOLE -SOUARE -ROUNDDOUBLE HANDHOLEJUNCTION BOXRAILROAD CANTILEVER MAST ARMRAILROAD CANTILEVER MAST ARMRAILROAD CONSSING GATERAILROAD CROSSING GATERAILROAD CONTROLLER CABINETUNDERGROUND CONDUIT (UC), GALVANIZED STEELTEMPORARY SPAN WIRE, TETHER WIRE, AND CABLESYSTEM ITEMINTERSECTION ITEMREMOVE ITEM	EXISTING	PROPOSED	ITEM SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN ''NO LEFT TURN''/''NO RIGHT TURN''	EXISTING R C C C C C C C C C C C C C	$\begin{array}{c c} PROPOSED \\ \hline R \\ \hline V \\ \hline G \\ \hline Q \hline \hline Q \\ \hline Q \hline \hline Q \\ \hline Q \hline \hline Q \\ \hline Q \hline \hline \hline Q \hline \hline Q \hline \hline Q \hline \hline Q \hline \hline $
COMMUNICATION CABINET       ECC       [         MASTER CONTROLLER       EMC       [         MASTER MASTER CONTROLLER       EMC       [         UNINTERRUPTABLE POWER SUPPLY       ∅       [         SERVICE INSTALLATION -(P) POLE MOUNTED       -□,P       [         SERVICE INSTALLATION -(G) GROUND MOUNTED       □       [         SERVICE INSTALLATION -(G) GROUND MOUNTED       □       [         SERVICE INSTALLATION -(G) GROUND MOUNTED       [       [         SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY       [       [         SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY       [       [         WOOD POLE       [       [       [         SIGNAL HEAD       ->       [       [         SIGNAL HEAD OPTICALLY PROGRAMMED       ->       [       [         FLASHER INSTALLATION -(FS) SOLAR POWERED       [       ->       [	СС МС ММС Р 	-SQUARE -ROUND HEAVY DUTY HANDHOLE -SQUARE -ROUND DOUBLE HANDHOLE JUNCTION BOX RAILROAD CANTILEVER MAST ARM RAILROAD CANTILEVER MAST ARM RAILROAD CANTILEVER MAST ARM RAILROAD CONTILEVER MAST ARM RAILROAD CONSSING GATE RAILROAD CROSSING GATE RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM	E B IN IN IN IN IN IN IN IN IN IN	<ul> <li>3</li> <li>3</li> <li>3</li> <li>3</li> <li>3</li> <li>4</li> <li>5</li> <li>5&lt;</li></ul>	-(P) PROGRAMMABLE SIGNAL HEAD SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN		$\begin{array}{c} Y \\ G \\ H \\ H$
MASTER CONTROLLER EMC [ MASTER MASTER CONTROLLER EMC [ MASTER MASTER CONTROLLER EMC [ UNINTERRUPTABLE POWER SUPPLY SERVICE INSTALLATION	MC MMC ₽ ■ P MC T P MC P MC MC MC MC MC MC MC MC MC MC	HEAVY DUTY HANDHOLE -SOUARE -ROUND DOUBLE HANDHOLE JUNCTION BOX RAILROAD CANTILEVER MAST ARM RAILROAD CANTILEVER MAST ARM RAILROAD CANTILEVER MAST ARM RAILROAD CONSSING GATE RAILROAD CROSSING GATE RAILROAD CROSSBUCK RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM	I I I I I I I I I I I I I I I I I I I		-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN		P R Y G Y C N D N N N N N N N N N N N N N
MASTER MASTER CONTROLLER       Imic       [         ININTERRUPTABLE POWER SUPPLY       Imic       Imic       [         SERVICE INSTALLATION       Imic       Imic       Imic       Imic         SERVICE INSTALLATION       Imic       Imic       Imic       Imic         SERVICE INSTALLATION       Imic       Imic       Imic       Imic       Imic         SERVICE INSTALLATION       Imic       <	MMC	-SQUARE -ROUND DOUBLE HANDHOLE JUNCTION BOX RAILROAD CANTILEVER MAST ARM RAILROAD FLASHING SIGNAL RAILROAD CROSSING GATE RAILROAD CROSSBUCK RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM	I I I I I I I I I I I I I I I I I I I		-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN		P R Y G Y C N D N N N N N N N N N N N N N
ININTERRUPTABLE POWER SUPPLY  ININTERRUPTABLE POWER SUPPLY  ERVICE INSTALLATION (P) POLE MOUNTED (G) GROUND MOUNTED (G) GROUND MOUNTED METERED (GM) GROUND MOUNTED METERED (GM) GROUND MOUNTED METERED (ELEPHONE CONNECTION  ET  ELEPHONE CONNECTION  ET  ELEPHONE CONNECTION  ET  ELEPHONE CONNECTION  ET  ELIPHONE CONNECTION  ELIPHONE	<ul> <li>₽</li> <li>P</li> <li>G GM</li> <li>T</li> <li>→</li> <li>→</li> <li>→</li> <li>→</li> </ul>	JUNCTION BOX RAILROAD CANTILEVER MAST ARM RAILROAD FLASHING SIGNAL RAILROAD CROSSING GATE RAILROAD CROSSBUCK RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM			-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN		Y   G     Y
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SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED TELEPHONE CONNECTION STEEL MAST ARM ASSEMBLY AND POLE ALUMINUM MAST ARM ASSEMBLY AND POLE STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY WOOD POLE GUY WIRE SIGNAL HEAD SIGNAL HEAD SIGNAL HEAD WITH BACKPLATE +D FLASHER INSTALLATION -(FS) SOLAR POWERED -(FS) SOLAR POWERED -(GR) GROUND MOUNTED -(GR) GROUND (GROUNTED -(GR) GROUND (GROUNTED -(GROUND (GROUNTED -(GROUND (GROUNTED -(GROUND (GROUNTED -(GROUND (GROUNTED -(GROUND (GROUNTED -(GROUNTED -(GROUND (GROUNTED -(GROUNTE	■ GM T ■ BM ● BM ● C	RAILROAD FLASHING SIGNAL RAILROAD CROSSING GATE RAILROAD CROSSBUCK RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM	xox xox ~ ~	¥•¥ ⊁•₽ ★	PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN		P RB
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-(G) GROUND MOUNTED       □C □ CM       □	<ul> <li>▼</li> <li>● BM</li> <li>●</li> <li>● →</li> <li>→</li> </ul>	RAILROAD CROSSBUCK RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM	ъ M		AT RAILROAD INTERSECTIONS PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN	C C D	
STEEL MAST ARM ASSEMBLY AND POLE ALUMINUM MAST ARM ASSEMBLY AND POLE STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE SIGNAL POST	• BM • BM • -	RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER ILLUMINATED SIGN	C C D	C X
ALUMINUM MAST ARM ASSEMBLY AND POLE	• BM • D	UNDERGROUND CONDUIT (UC), GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM			WITH COUNTDOWN TIMER ILLUMINATED SIGN		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE SIGNAL POST (BM) BARREL MOUNTED - TEMPORARY NOOD POLE SUY WIRE SIGNAL HEAD SIGNAL HEAD SIGNAL HEAD SIGNAL HEAD OPTICALLY PROGRAMMED CLASHER INSTALLATION C(FS) SOLAR POWERED CFS SOLAR POWE	• BM • D	GALVANIZED STEEL TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE SYSTEM ITEM INTERSECTION ITEM	S		ILLUMINATED SIGN		
ASSEMBLY AND POLE WITH LUMINAIRE	• BM • D	TETHER WIRE, AND CABLE System Item Intersection Item	S I	SP			
(BM) BARREL MOUNTED - TEMPORARY     O       VOOD POLE     ⊗       GUY WIRE     >-       SIGNAL HEAD    >       GIGNAL HEAD WITH BACKPLATE     +->       SIGNAL HEAD OPTICALLY PROGRAMMED    >       GIGNAL HEAD OPTICALLY PROGRAMMED    >       FLASHER INSTALLATION     O+>       (FS) SOLAR POWERED     O+>	€ ≻ ►	INTERSECTION ITEM	S I	SP			
WOOD POLE     ⊗       GUY WIRE     >-       SIGNAL HEAD     -D>       SIGNAL HEAD WITH BACKPLATE     +D>       SIGNAL HEAD OPTICALLY PROGRAMMED     -D <sup>P</sup> FLASHER INSTALLATION     OD <sup>F</sup> OD <sup>F</sup> D <sup>F</sup> OD <sup>F</sup> D <sup>F</sup> D <sup>F</sup> D <sup>F</sup>	≻ ►		Ι		NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.	5	(5)
GUY WIRE     >-     SIGNAL HEAD       SIGNAL HEAD    >    >       SIGNAL HEAD WITH BACKPLATE     +->    >       SIGNAL HEAD OPTICALLY PROGRAMMED    >     P       FLASHER INSTALLATION     o->     F       -(FS) SOLAR POWERED    >     FS	≻ ►	REMOVE ITEM		IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED	,	$\bigcirc$
SIGNAL HEAD>>>>>>>>>	-			R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		(1*6)
SIGNAL HEAD WITH BACKPLATE +→ ···································		RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
ILASHER INSTALLATION     O→F     O→FS     FF       (FS) SOLAR POWERED     D→F     D→F     FS	+►	ABANDON ITEM Controller cabinet and		А	COAXIAL CABLE	—	
TLASHER INSTALLATION OF OF OF FS FS FS FF FS FF FS FF FS FF FF FS FF FF		FOUNDATION TO BE REMOVED		RCF	COAXIAL CADLE		
	F FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE	—	
PEDESTRIAN SIGNAL HEAD -	F FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	
	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	12F
PEDESTRIAN PUSH BUTTON © @ APS ©	@ APS	PREFORMED DETECTOR LOOP		P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	24F	24F
	R	SAMPLING (SYSTEM) DETECTOR		s s			36F
VIDEO DETECTION CAMERA	V	INTERSECTION AND SAMPLING		IS (IS		$\sim$	
RADAR/VIDEO DETECTION ZONE		(SYSTEM) DETECTOR QUEUE AND SAMPLING			GROUND ROD -(C) CONTROLLER	<u>≟C</u> ≟M ≟P ≟S T T T T	<u>,</u> c ,M ,P ,S Ť Ť Ť Ť
	PTZ	(SYSTEM) DETECTOR		05 (S)	-(M) MAST ARM -(P) POST	0 0 0 0	••••
Ŭ		WIRELESS DETECTOR SENSOR	®		-(S) SERVICE		
		WIRELESS ACCESS POINT					
	••• <del>•</del> •• <del>•</del> •••						
	RR						

### 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.

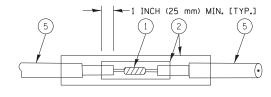


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

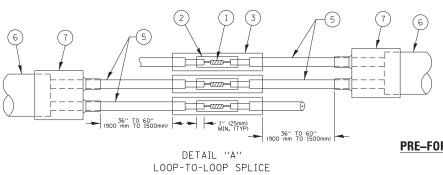


### DETECTOR LOOP WIRING SCHEMATIC

- 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.



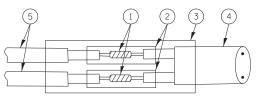
DETAIL "A" LOOP-TO-LOOP SPLICE



## LOOP DETECTOR SPLICE

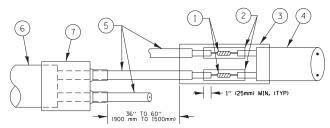
- $\overbrace{1}$  western union splice soldered with rosin core flux. All exposed suf-OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE S
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14			DISTRICT ONE	F.A.U. RTE	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\footemj\d0108315\ts05	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS		STANDARD TRAFFIC SIGNAL DESIGN DETAILS	1398	17-00099-00-RS	COOK 65 59
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05	CONTRACT NO. 61E54
	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



### DETAIL "B" LOOP-TO-CONTROLLER SPLICE

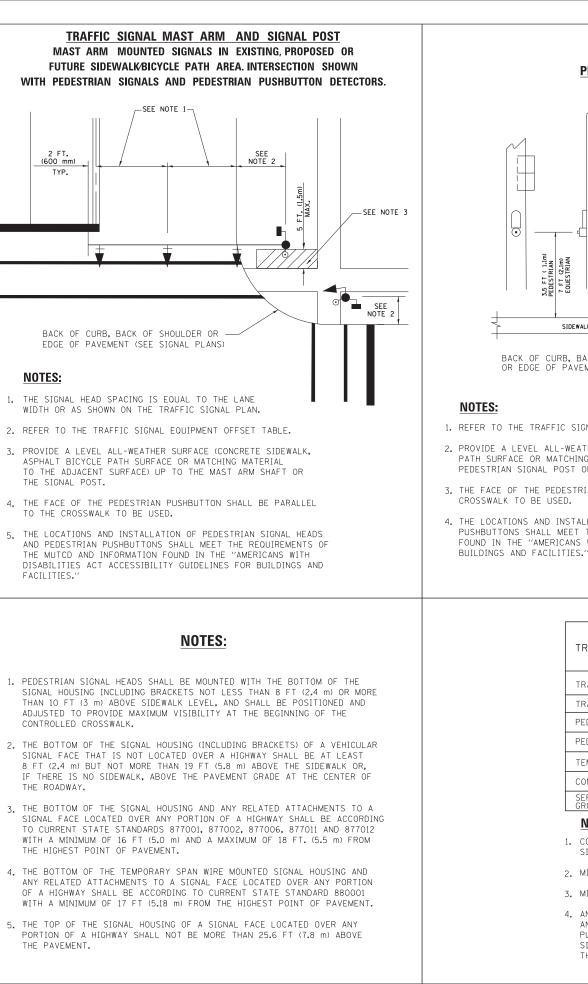
## TYPE | LOOP

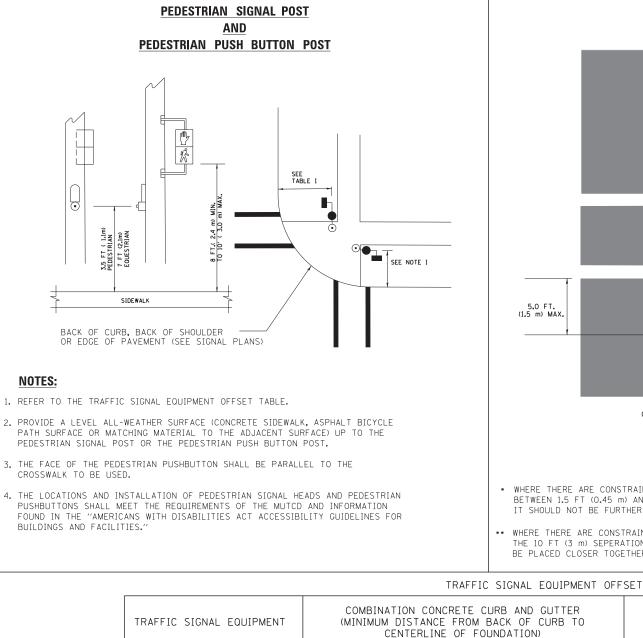


# **PRE-FORMED LOOP**

DETAIL "B" LOOP-TO-CONTROLLER SPLICE

	5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
STAGGERED.	6 PRE-FORMED LOOP
R GRADE.	<u> </u>
	TL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL
R GRADE.	U BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL



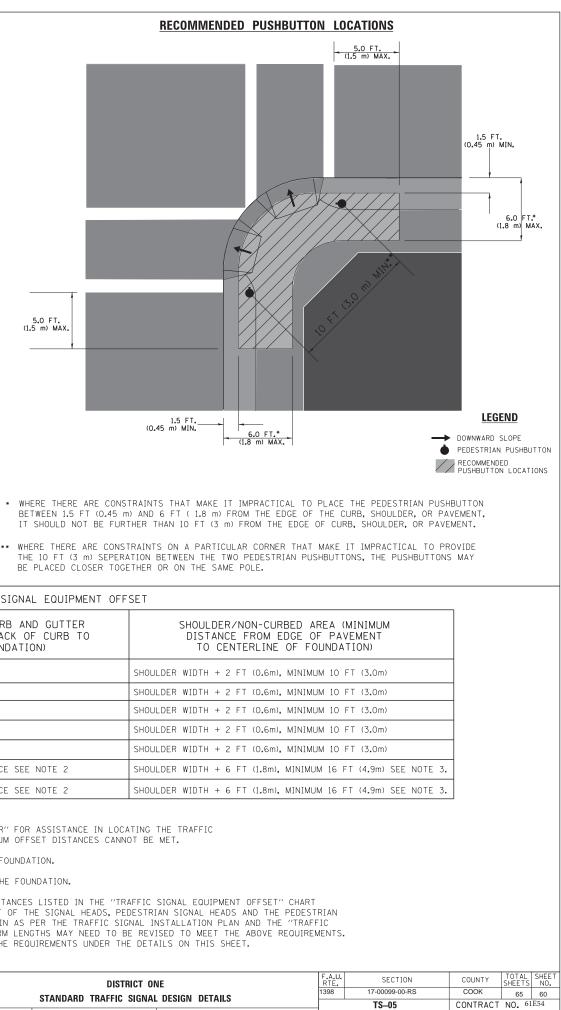


TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOUL
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOUL
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOUL
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOUL
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOUL
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOUL
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOUL

# 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 =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14			DISTRICT ONE		
c:\pw_work\pwidot\footemj\d0108315\ts05.	lgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS				
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC	SIGNAL	I
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 3 OF 7 S	SHEETS	

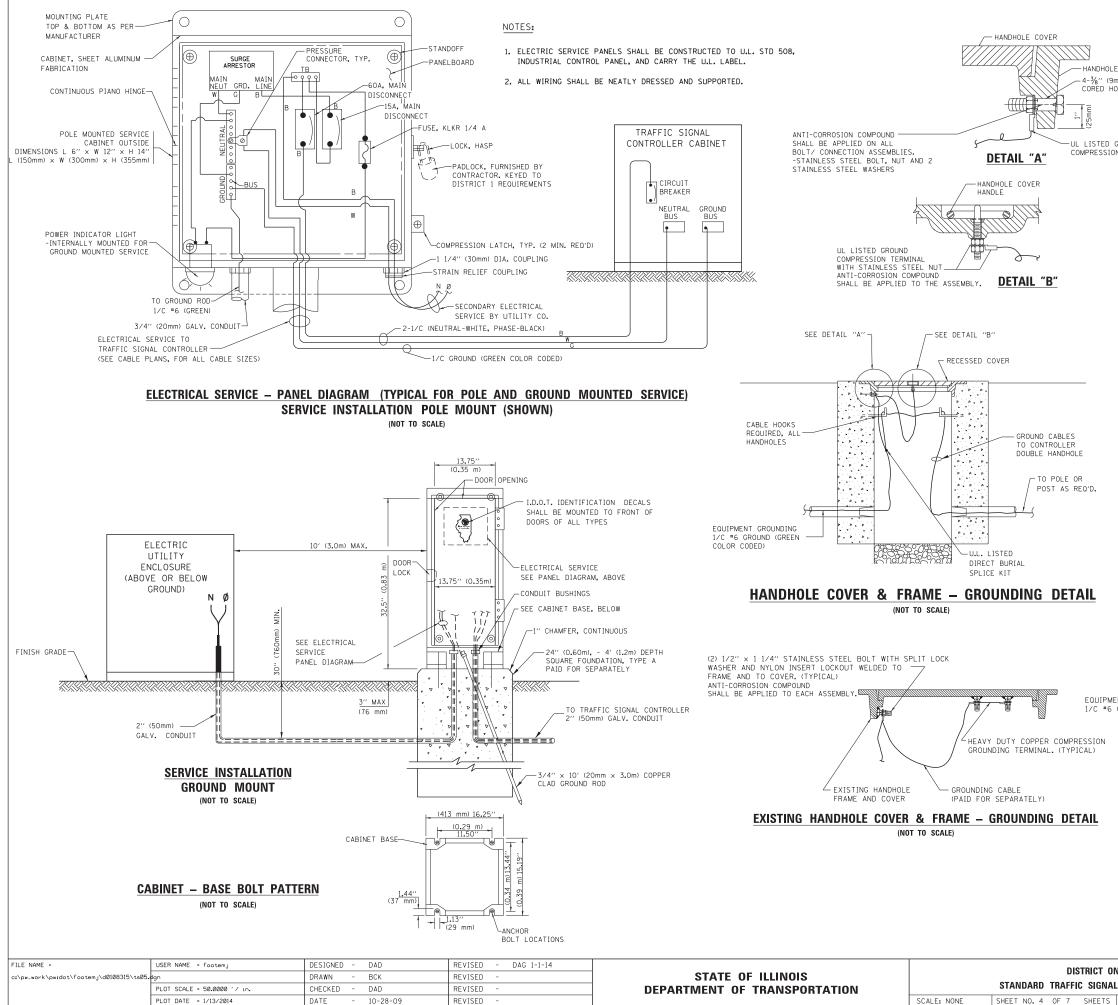


FED. ROAD DIST. NO. 1 II

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STA.

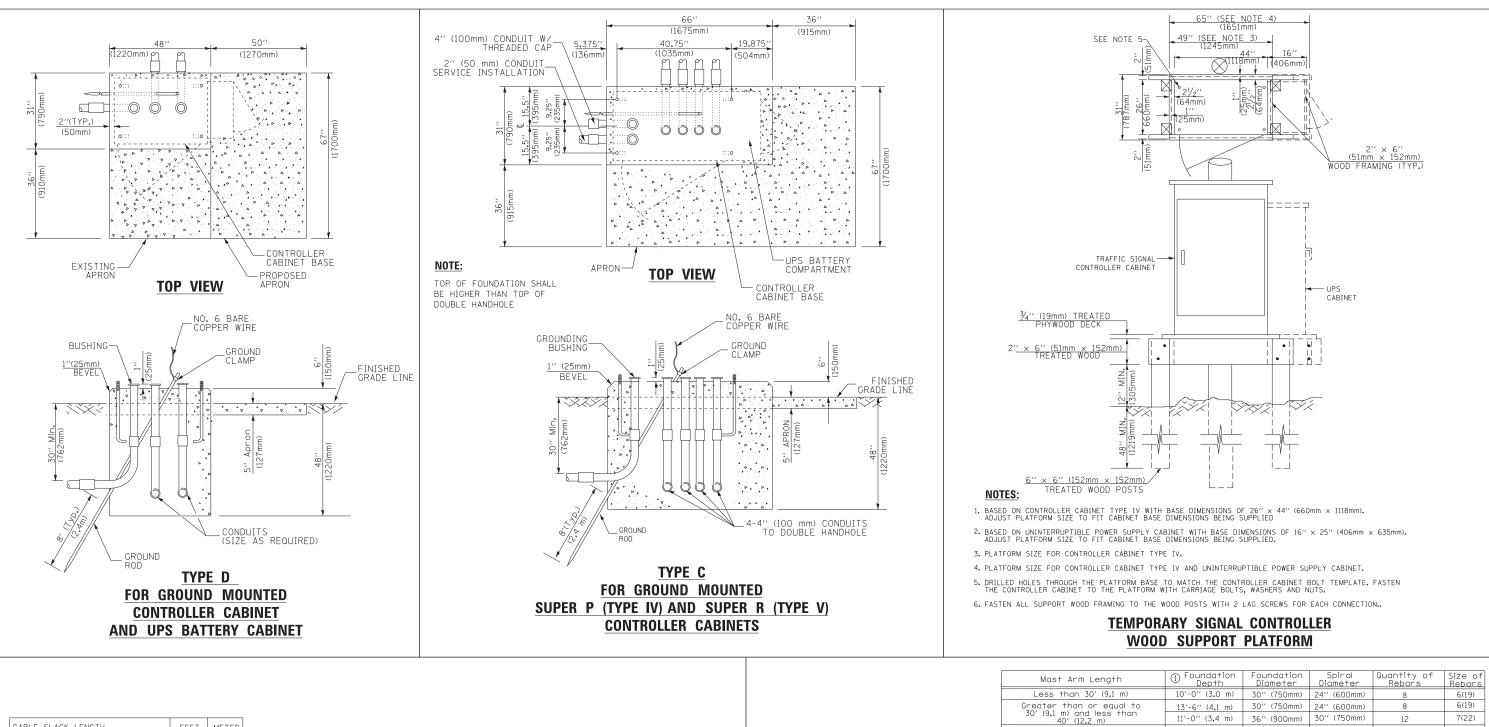
TO STA.



# NOTES: GROUNDING SYSTEM

LE FRAME 9mm) DIA., HOLES GROUND ION TERMINAL	<ol> <li>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. × 10'-0" (20mm × 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.</li> </ol>
	<ol> <li>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.</li> </ol>
	<ol> <li>ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.</li> </ol>
	4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.
	DUTY COMPRESSION TERMINAL TYPE YGHA OR APPROVED EQUAL)       ¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)         MOTES:         • ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.         • ALL CLAMPS SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES (5.5' (2.0m) SLACK SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES (5.5' (1.4m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.
OR AP	IT TYPE KC. K2C. PROVED EQUAL) I/C *6 GROUND (GREEN COLOR CODED) HEAVY DUTY GROUND ROD CLAMP. EXOTHERMIC WELD

ONE AL DESIGN DETAILS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		1398	17-00099-00-RS	COOK	65	61	
AL	AL DESIGN DETAILS			TS-05	CONTRACT	NO. 61	1E54
S	STA.	TO STA.	FED. R	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



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

**CABLE SLACK** 

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+1	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

## **VERTICAL CABLE LENGTH**

	DEPTH	
inal Post	4'-0'' (1.2m)	-
NTROLLER W/ UPS	4'-0'' (1.2m)	
NTROLLER	4'-0'' (1.2m)	
ALLATION, T, UARE	4'-0'' (1.2m)	

## **DEPTH OF FOUNDATION**

NOTES:

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14		DISTRICT ONE		F.A.U.	SECTION	COUNTY	TOTAL SHEET
c:\pw_work\pwidot\footemj\d0108315\ts05.	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS				17-00099-00-RS	СООК	65 62
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD         TRAFFIC         SIGNAL         DESIGN         DETAILS           SCALE:         NONE         SHEET NO. 5         OF 7         SHEETS         STA.         TO STA.			TS-05	CONTRACT	NO. 61E54
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -				FED. ROAD	DIST. NO. 1 ILLINOIS FED.	AID PROJECT	

FOUNDATION TYPE A - Siç

TYPE C - CO TYPE D - CO

SERVICE INST

GROUND MOUN TYPE A - SQL

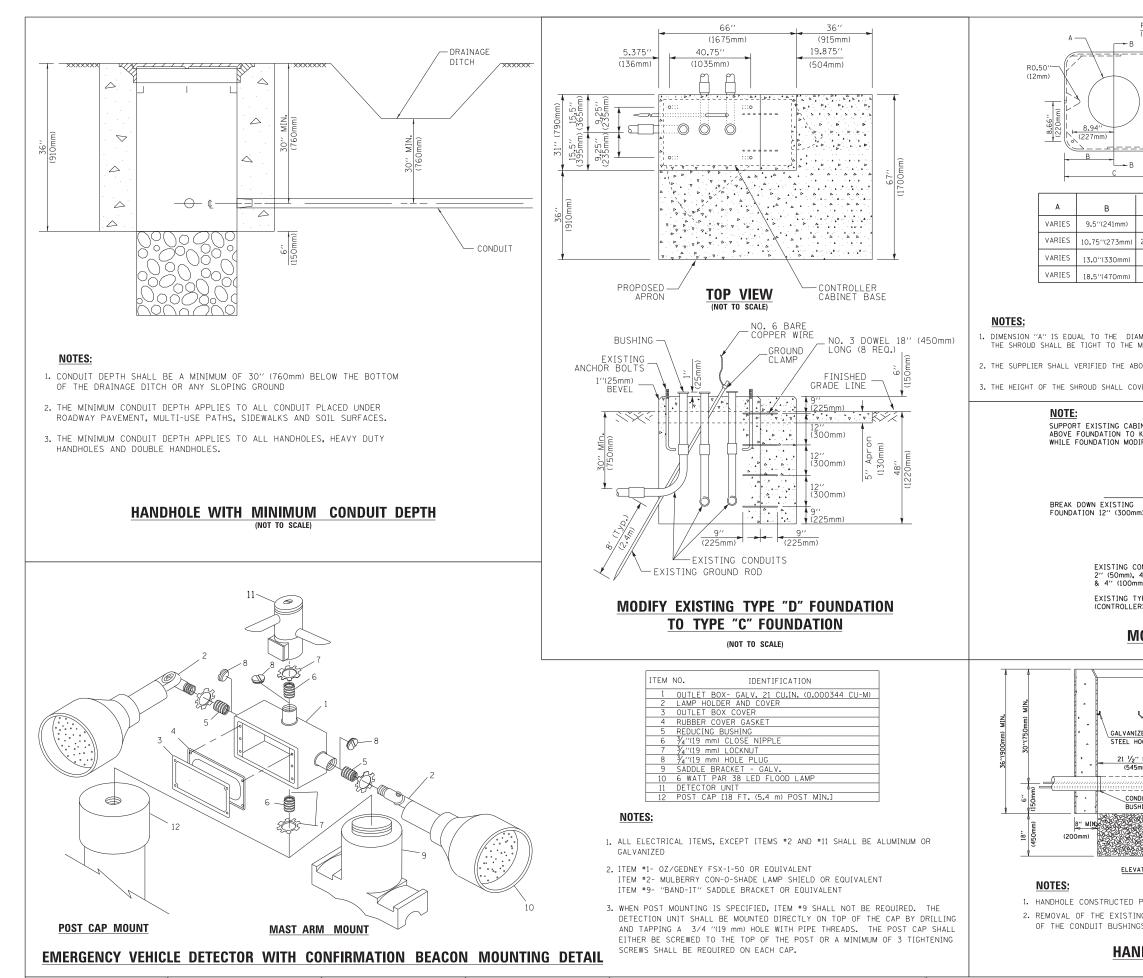
① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
10'-0'' (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
13'-6'' (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
13'-0'' (4.0 m)	36'' (900mm)	30'' (750mm)	12	7(22)
15'-0'' (4.6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
	Depth           10'-0'' (3.0 m)           13'-6'' (4.1 m)           11'-0'' (3.4 m)           13'-0'' (4.0 m)           15'-0'' (4.6 m)           21'-0'' (6.4 m)	Depth         Diameter           10'-0'' (3.0 m)         30'' (750mm)           13'-6'' (4.1 m)         30'' (750mm)           11'-0'' (3.4 m)         36'' (900mm)           13'-0'' (4.0 m)         36'' (900mm)           15'-0'' (4.6 m)         36'' (900mm)           21'-0'' (6.4 m)         42'' (1060mm)	Diameter         Diameter         Diameter           10'-0'' (3.0 m)         30'' (750mm)         24'' (600mm)           13'-6'' (4.1 m)         30'' (750mm)         24'' (600mm)           11'-0'' (3.4 m)         36'' (900mm)         30'' (750mm)           13'-0'' (4.0 m)         36'' (900mm)         30'' (750mm)           15'-0'' (4.6 m)         36'' (900mm)         30'' (750mm)           21'-0'' (6.4 m)         42'' (1060mm)         36'' (900mm)	Diameter         Diameter         Diameter         Rebars           10'-0'' (3.0 m)         30'' (750mm)         24'' (600mm)         8           13'-6'' (4.1 m)         30'' (750mm)         24'' (600mm)         8           11'-0'' (3.4 m)         36'' (900mm)         30'' (750mm)         12           13'-0'' (4.0 m)         36'' (900mm)         30'' (750mm)         12           15'-0'' (4.6 m)         36'' (900mm)         30'' (750mm)         12           21'-0'' (6.4 m)         42'' (1060mm)         36'' (900mm)         16

Interest 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 (0u) > 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.

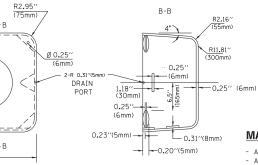
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations

4. For mast arm assemblies with dual arms refer to state standard 878001..



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FILE NAME =	USER NAME = footemj	DESIGNED -	DAD	REVISED - DAG 1-1-14	
c:\pw_work\pwidot\footemj\d0108315\ts05.	lgn	DRAWN -	BCK	REVISED -	
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	DAD	REVISED -	ĺ
	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -	ĺ





MATERIAL:

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

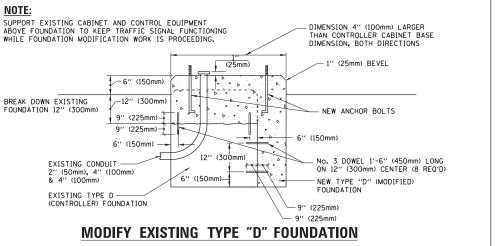
	С	HEIGHT	WEIGHT
1)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
m)	21.5''(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
n)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
n)	37''(940mm)	7'' (178mm) - 12'' (300mm)	126 lbs (57 kg)

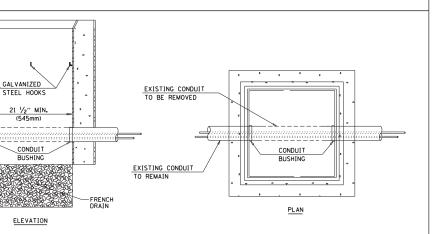
# **SHROUD**

1. 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.

2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.

3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

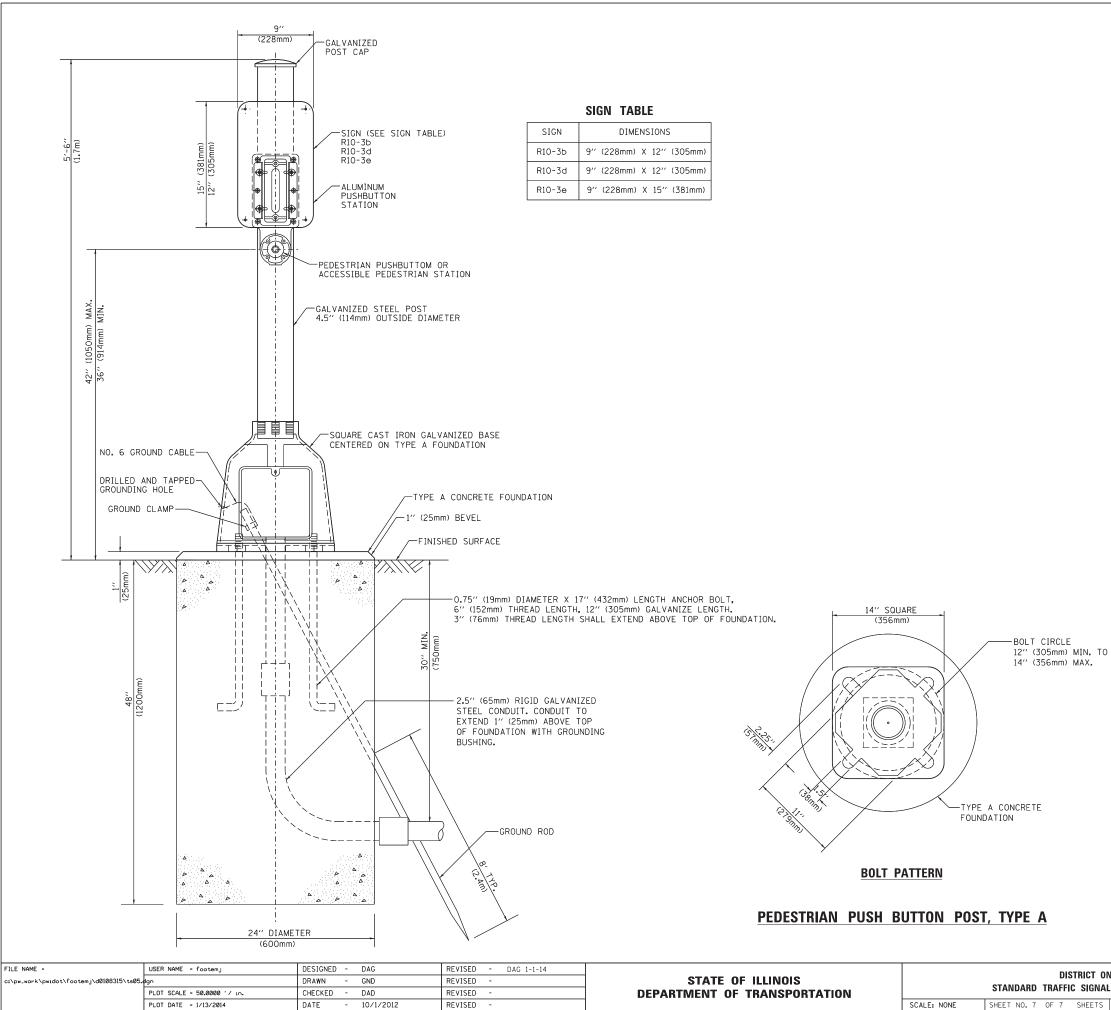




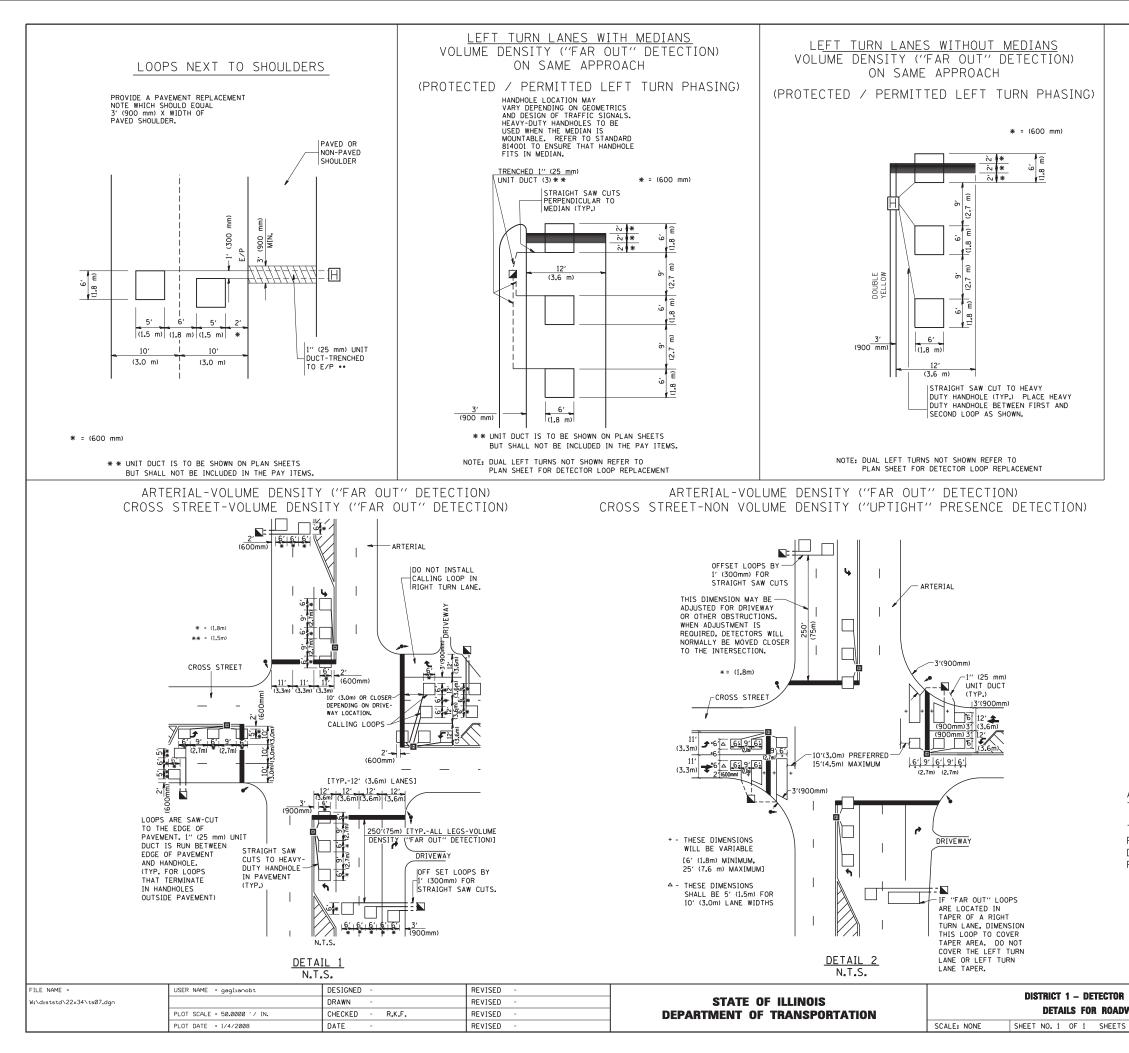
 HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

# HANDHOLE TO INTERCEPT EXISTING CONDUIT

DNE			F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
AL DESIGN DETAILS		1398	17-00099-00-RS	COOK	65	63		
~	AL DESIGN DETAILS			TS05	CONTRACT	NO. 61	E54	
;	STA.	TO STA.	FED. R	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



ONE AL DESIGN DETAILS				SECTION 17-00099-00-RS	COUNTY COOK	TOTAL SHEETS 65	SHEET NO. 64
AL DESIGN DETAILS				TS-05	CONTRACT	NO. 61	E54
5	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



### 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 <u>ALL</u> 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, <u>MORE</u> 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. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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  $\underline{ALL}$  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.

LOOP INSTALLATION WAY RESURFACING			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			1398	17-00099-00-RS	COOK	65	65
				TS07	CONTRACT NO. 61E54		
	STA.	TO STA.	FED. RO	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			