FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS** 

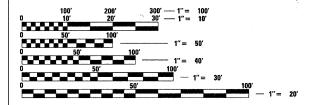
PROJECT LOCATED IN THE VILLAGE OF CARY

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY F.A.U. 4051 THREE OAKS ROAD AND F.A.U. 4052 SILVER LAKE ROAD

### TRAFFIC DATA

THREE OAKS ROAD POSTED & DESIGN SPEED = 30 MPH 2009 ADT = 9.500**URBAN COLLECTOR** 

SILVER LAKE ROAD POSTED & DESIGN SPEED = 30-35 MPH 2009 ADT = 12.500**URBAN COLLECTOR** 



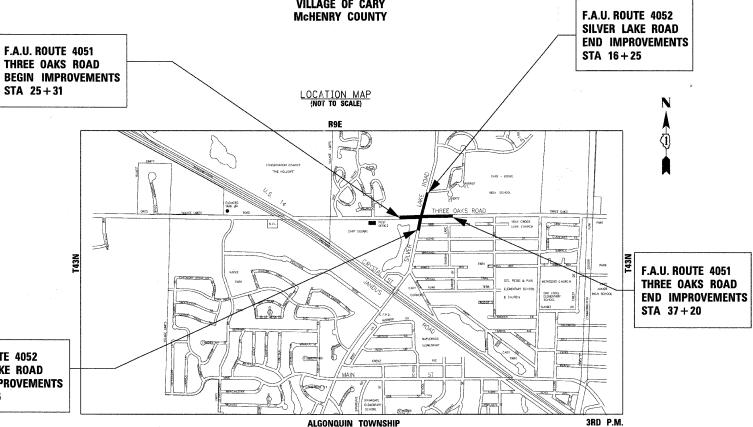
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

BAXTER & WOODMAN. INC STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM LICENSE NO. - 184-001121 - EXPIRES 4/30/2011

> F.A.U. ROUTE 4052 SILVER LAKE ROAD **BEGIN IMPROVEMENTS** STA 6+56

# INTERSECTION IMPROVEMENTS

SECTION NO.: 09-00058-00-CH PROJECT NO.: ARA-9003(635) JOB NO.: C-91-511-10 VILLAGE OF CARY



J.U.L.I.E. DESIGN STAGE REQUEST DIG. No. A2592319



CONTACT JULIE AT 811 OR 800-892-0123 WITH THE FOLLOWING:

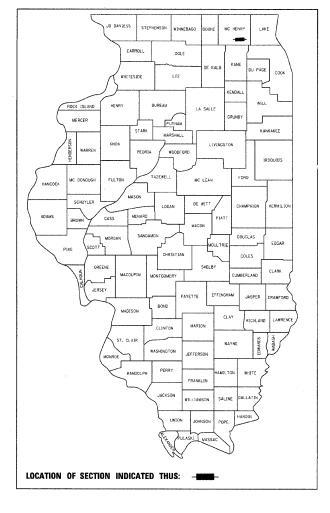
COUNTY = MCHENRY CITY-TWNSHP. = CARY-ALGONOUIN SEC. & 1/4 SEC. NO. = SEC 18 NW & NE 1/4, T43N, R9E 48 HOURS (2 working days) BEFORE YOU DIG

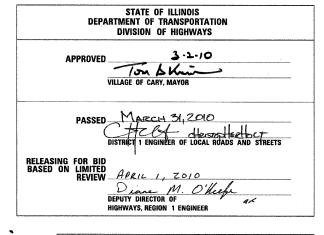


GROSS LENGTH OF IMPROVEMENT = 2,158 LF OR 0.409 MILES NET LENGTH OF IMPROVEMENT = 2,158 LF OR 0.409 MILES



09-00058-00-CH MCHENRY FED AID PROJECT \* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD CONTRACT NO. 63381





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 63381

262.763.7834

312.578.0050

815.459.1260 (OFFICE WHICH PREPARED PLANS)

815,787.3111 847.223.5088 630.773.1870

608.347.1542

Burlington, Wisconsin Chicago, Illinois Crystal Lake, Illinois DeKalb, Illinois Grayslake, Illinois Itasca, Illinois Madison, Wisconsin Mokena, Illinois Plainfield, Illinois 708.478.2090 815.609.7425

62-041763

LICENSED

B&W PROJECT NO.: 060197.41

DATE: 03/01/10

### **HIGHWAY STANDARDS**

000001-05 STANDARD SYMBOLS ABBREVIATIONS AND SYMBOLS

280001-05 TEMPORARY EROSION CONTROL SYSTEMS

424001-05 CURB RAMPS FOR SIDEWALKS

442201-03 CLASS C AND D PATCHES

602011-01 CATCH BASIN, TYPE C

602301-02 INLET, TYPE A

602401-02 MANHOLE, TYPE A

602601-02 PRECAST REINFORCED CONCRETE FLAT SLAB TOP

602701-02 MANHOLE STEPS

604001-03 FRAME AND GRATE, TYPE 1

604056-03 FRAME AND GRATE, TYPE 11V

606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

701301-03 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

701501-05 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

701502-03 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE

701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701801-04 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE

701901-01 TRAFFIC CONTROL DEVICES

780001-02 TYPICAL PAVEMENT MARKINGS

814001-02 HANDHOLES

857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

873001-02 TRAFFIC SIGNAL GROUTING & BONDING

877001-04 STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'

878001-08 CONCRETE FOUNDATION DETAILS

880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

880006-01 TRAFFIC SIGNAL MOUNTING DETAILS

886001-01 DETECTOR LOOP INSTALLATIONS

886006-01 TYPICAL LAYOUTS FOR DETECTOR LOOPS

### SUGGESTED SEQUENCE OF CONSTRUCTION

STAGE I: 1. BEGIN CONSTRUCTION ON OR BEFORE SEPTEMBER 7, 2010.

2. INSTALL EROSION CONTROL ON THE ENTIRE PROJECT AND ESTABLISH TRAFFIC CONTROL.

3. INSTALL AND TEST TEMPORARY TRAFFIC SIGNAL.

STAGE II: 1. SWITCH SIGNAL OPERATION FROM SIGNAL FOULPMENT TO BE REMOVED TO THE TEMPORARY TRAFFIC SIGNAL.

2. REMOVE EXISTING TRAFFIC SIGNAL FOULPMENT AND MAINTAIN SIGNAL FOLLPMENT TO REMAIN.

3. CONSTRUCT STORM SEWER, MOVE/INSTALL FIRE HYDRANTS, BEGIN REMOVING CURB AND GUTTER AND SIDEWALK.

STAGE III: 1. CONSTRUCT CURB AND GUTTER AND RIGHT TURN LANE PAVEMENT (THRU HMA BASE COURSE). 2. CONSTRUCT PROPOSED TRAFFIC SIGNAL FOUIPMENT AVAILABLE.

3. COMPLETE HMA SURFACE REMOVAL AND INSTALL LEVELING BINDER.

4. INSTALL PROPOSED DETECTOR LOOPS IN THE LEVELING BINDER.

5. CONSTRUCT PROPOSED SIDEWALK

STAGE IV: 1. INSTALL SURFACE COURSE

INSTALL PERMANENT PAVEMENT MARKINGS.

3. COMPLETE TOPSOIL AND SOD RESTORATION (THE VILLAGE OF CARY RESERVES THE RIGHT TO DELAY INSTALLING SOD. TEMPOARAY EROSION CONTROL MEASURES SHALL STABILIZE PARKWAYS. THESE SHALL BE MAINTAINED BY THE CONTRACTOR AND REMOVED PRIOR TO INSTALLING SOD. THE VILLAGE SHALL DETERMINE WHEN SOD RESTORATION CAN BE COMPLETED. THE COST TO MAINTAIN AND REMOVE TEMPORARY EROSION CONTROL

MEASURES SHALL BE INCLUDED IN THAT PAY ITEM).

4. COMPLETION DATE NOVEMBER 3, 2010 (58 CALENDAR DAYS). WORK SHALL BE SUSPENDED UNTIL REMAINING SIGNAL EQUIPMENT IS RECEIVED BY THE CONTRACTOR, AS DETERMINED BY THE ENGINEER.

STAGE V: 1. NOTIFICATION SHALL BE GIVEN TO THE ENGINEER WHEN REMAINING SIGNAL EQUIPMENT IS RECEIVED.

THE WORK SUSPENSION SHALL BE LIFTED ON A DATE AGREED TO BY THE ENGINEER, CONTRACTOR, AND VILLAGE,

2. REMAINING SIGNAL EQUIPMENT SHALL BE INSTALLED.

TEST NEW SIGNAL EQUIPMENT.

4. SWITCH SIGNAL OPERATION FROM THE TEMPORARY SIGNAL TO THE NEW SIGNAL EQUIPMENT.

5. REMOVE TEMPORARY TRAFFIC SIGNAL FOLIPMENT.

6. COMPLETE PUNCH LIST ITEMS, REMOVE EROSION CONTROL (ONCE SOD ESTABLISHES) AND REMOVE TRAFFIC CONTROL.

7. FINAL COMPLETION 6 WORKING DAYS AFTER WORK SUSPENSION IS LIFTED.

REVISED - 01-04-10 PER IDOT DESIGNED - MWP/DSH DRAWN MAC REVISED - 03-01-10 PER IDOT CHECKED RWI REVISED FILE -060197-P2-gen-notes.sht 03-01-1

**VILLAGE OF CARY, ILLINOIS** THREE OAKS ROAD AND SILVER LAKE ROAD ARRA INTERSECTION IMPROVEMENTS

### **INDEX OF SHEETS**

TITLE	SHEET NO.
COVER SHEET	1
INDEX OF SHEETS, HIGHWAY STANDARDS, COMMITTMENTS, LEGEND, BENCHMARKS AND	
CONSTRUCTION STAGING	22
GENERAL NOTES	3
SUMMARY OF QUANTITIES	4 - 7
TYPICAL SECTIONS, STRUCTURAL DESIGN DATA & HOT-MIX ASPHALT MIXTURE REQUIREMENTS	8
SCHEDULE OF QUANTITIES	9
OVERALL LAYOUT	10
PLAN AND PROFILE: THREE OAKS ROAD	11 - 13
PLAN AND PROFILE: SILVER LAKE ROAD	14 - 16
EROSION AND SEDIMENT CONTROL NOTES	17
EROSION CONTROL PLAN: THREE OAKS ROAD & SILVER LAKE ROAD	18
DRAINAGE AND UTILITES: THREE OAKS ROAD	19 - 21
DRAINAGE AND UTILITIES: SILVER LAKE ROAD	22 - 24
PAVEMENT MARKING AND SIGNING PLAN	25
DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS	26 - 31
REMOVAL OF EXISTING SIGNAL AND TEMPORARY TRAFFIC SIGNAL PLAN:	
THREE OAKS ROAD & SILVER LAKE ROAD	32
TEMPORARY TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION DIAGRAM:	
THREE OAKS ROAD & SILVER LAKE ROAD	33
TRAFFIC SIGNAL INSTALLATION PLAN: THREE OAKS ROAD & SILVER LAKE ROAD	34
TRAFFIC SIGNAL CABLE PLAN, PHASE DESIGNATION DIAGRAM:	
THREE OAKS ROAD & SILVER LAKE ROAD	35
MISCELLANEOUS DETAILS	36
DISTRICT 1 DETAIL - BD-08 DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING	37
DISTRICT 1 DETAIL - BD-22 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	38
DISTRICT 1 DETAIL - BD-32 BUTT JOINTS AND HMA TAPER DETAILS	39
DISTRICT 1 DETAIL - TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,	
INTERSECTIONS, AND DRIVEWAYS	40
DISTRICT 1 DETAIL - TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS	41
DISTRICT 1 DETAIL - TC-16 DISTRICT ONE PAVEMENT MARKING LETTERS AND SYMBOLS	
FOR TRAFFIC STAGING	42
DISTRICT 1 DETAIL - TC-18 SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS	43
DISTRICT 1 DETAIL - TC-22 ARTERIAL ROAD INFORMATION SIGN	44
DISTRICT 1 DETAIL - TS-07 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	45
CROSS-SECTIONS - THREE OAKS ROAD	46 - 49
CROSS-SECTIONS - SILVER LAKE ROAD	50 - 53
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### **BENCHMARKS (NAVD 88)**

CHISELED "X" AT NW CORNER OF TRAFFIC SIGNAL DOUBLE HANDHOLE BM#1 AT SOUTHWEST CORNER OF THREE OAKS ROAD AND SILVER LAKE ROAD ELEV. = 824.18

SOUTHWEST UPPER FLANGE BOLT ON FIRE HYDRANT ON WEST SIDE OF SILVER LAKE ROAD ACROSS FROM \*1091 (BARN) & STA. 14+02 FIFV. = 833.80

RAILROAD SPIKE IN SW SIDE OF POWER POLE WITH LIGHT AND UNDERGROUND AT NW CORNER OF THREE OAKS AND SILVER LAKE ROAD (TO BE RELOCATED BY UTILITY) ELEV. = 825.99

## VILLAGE OF CARY **PHONE NUMBERS**

BENCHMARKS AND CONSTRUCTION STAGING

PUBLIC WORKS POLICE DEPT. FIRE DEPT.

847-639-2341

847-639-2121

\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD

COUNTY TOTAL SHEE SECTION INDEX OF SHEETS, HIGHWAY STANDARDS, COMMITTMENTS, LEGEND, 09-00058-00-CH MCHENRY CONTRACT NO. 63381 C-91-511-10

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS.

THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST

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

COORDINATION OF ALL UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT A PRECONSTRUCTION CONFERENCE. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ANY UTILITY RELOCATIONS REQUIRED.

5. THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF CARY PUBLIC WORKS AT (847) 639-0003 AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK AND TO OBTAIN VILLAGE UTILITY LOCATIONS AND SHALL COORDINATE ALL CONSTRUCTION OPERATION WITH THE ENGINEER. SPECIAL ATTENTION IS CALLED TO SECTION 107 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION. THE STORAGE OF EQUIPMENT AND/OR MATERIALS WITHIN THE PARKWAYS SHALL REQUIRE PRIOR APPROVAL OF THE ENGINEER.

6. DURING CONSTRUCTION STAGING OPERATIONS, THE CARY POLICE AND FIRE DEPARTMENTS SHALL BE NOTIFIED IN WRITING 48 HOURS PRIOR TO MAJOR LANE CLOSURES. EMERGENCY ACCESS SHALL BE ALLOWED AT ALL TIMES. NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED.

7. MATERIALS RESULTING FROM THE REMOVAL OF PAVEMENT, CURB AND GUTTER, HOT-MIX ASPHALT SURFACES, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGMENT OF THE VILLAGE, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE VILLAGE WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR WILL BE BILLED (CHARGED) ACCORDINGLY.

8. THE CONTRACTOR MAY OBTAIN MUNICIPAL WATER IN BULK, AT NO CHARGE, AS LONG AS THERE IS NOT A "WATERING BAN" IN EFFECT. THE INDISCRIMINATE USE OF FIRE HYDRANTS IS STRICTLY PROHIBITED. WATER FOR CONSTRUCTION SHALL BE METERED AND A DAILY LOG MAINTAINED. A METER MUST BE OBTAINED FROM THE VILLAGE WATER DEPARTMENT AND A DEPOSIT MUST BE MADE TO THE WATER DEPARTMENT FOR ITS USE. THE CONTRACTOR SHALL PROVIDE THE WATER TRUCK AND DRIVER REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE VILLAGE RESERVES THE RIGHT TO RESTRICT OR REFUSE THE USE OF VILLAGE WATER IF DEEMED NECESSARY.

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNERS, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS. BENCHMARKS ARE PROVIDED AT THE LOCATIONS INDICATED AND ARE REQUIRED TO BE TRANSFERRED AS IS NECESSARY.

10. ACCESS TO PRIVATE DRIVEWAYS SHALL BE PROVIDED AT ALL TIMES EXCEPT DURING ACTUAL CONSTRUCTION ADJACENT THERE TO.

11. ANY SIGNS OR MAILBOXES THAT ARE IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH VILLAGE STANDARDS AND INCLUDED IN EARTH EXCAVATION. MAIL SERVICE SHALL BE MAINTAINED AT ALL TIMES. ALL SIGNS SHALL BE REINSTALLED TO THE PROPER HEIGHT ACCORDING TO CURRENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).

EXISTING PAVEMENT, CURB AND GUTTER AND SIDEWALK TO REMAIN IN PLACE SHALL BE SAW CUT FULL DEPTH TO PROVIDE A NEAT VERTICAL FACE BETWEEN THE PROPOSED AND EXISTING AND SHALL BE INCLUDED IN THE PRICE OF THE APPROPRIATE REMOVAL PAY ITEM.

13. IN AREAS WHERE THE EXISTING SIDEWALK IS TO BE REMOVED AND REPLACED IN-KIND, THE REMOVAL AND DISPOSAL OF ANY ADDITIONAL MATERIAL REQUIRED TO ESTABLISH THE PROPOSED SIDEWALK SUBGRADE ELEVATION SHALL BE INCLUDED IN THE SIDEWALK REMOVAL

**GENERAL NOTES** 

14. THE PRIME COAT APPLICATION RATE SHALL BE 0.1 GAL/SY.

15. ALL AGGREGATE USED ON THE PROJECT SHALL BE CRUSHED MATERIAL, EXCEPT AS REQUIRED BY HMA SPECIFICATIONS.

16. CURB AND GUTTER SHALL BE DEPRESSED AT DRIVEWAYS AND SIDEWALK RAMPS IN ACCORDANCE WITH THE IDOT HIGHWAY STANDARDS. SIDEWALK RAMPS FOR ACCESS FOR THE DISABLED SHALL BE PROVIDED AT THE PROPOSED CROSSWALKS IN ACCORDANCE WITH THE IDOT HIGHWAY STANDARDS OR AS DETERMINED BY THE ENGINEER.

17. THE FINISHED HOT-MIX ASPHALT SURFACE COURSE SHALL BE CONSTRUCTED 0.25 INCH ABOVE THE GUTTER FLAG.

18. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED. ONE (1) WEIGHTED SANDBAG SHALL BE PLACED ACROSS EACH BOTTOM RAIL. ALL FLASHERS SHALL BE IN WORKING ORDER.

19. | THE CONTRACTOR SHALL UTILIZE A MECHANICAL SWEEPER TO CLEAN STREETS AFFECTED BY CONTRACTORS OPERATIONS, INCLUDING HAUL ROUTES, AT LEAST TWICE PER WEEK AND ADDITIONALLY AS DETERMINED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE EARTH EXCAVATION PAY ITEM.

THE DAYS PAVING OPERATION SHOULD RESULT IN A SINGLE TRANSVERSE JOINT. ANY COLD LONGITUDINAL JOINTS WILL NOT BE ACCEPTED. PROVIDING A SINGLE TRANSVERSE JOINT SHALL BE ACCOMPLISHED BY PAVING ONE LANE OF SUFFICIENT LENGTH THAT WILL ALLOW FOR THE PAVING OF THE ADJACENT LANE IN THE SAME DAY.

21. ALL POSTS, RAILROAD TIES, DECORATIVE TIMBER, OR ANY OTHER LANDSCAPE ITEM IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RELOCATED AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION AND SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR WHEN REMOVING THESE ITEMS TO PRESERVE THEM FROM HARM. ITEMS SHALL BE CAREFULLY PLACED AT THE EDGE OF ADJACENT PROPERTY AND THE PROPERTY OWNER WILL BE GIVEN 24 HOURS TO REMOVE THEM. IF ITEMS ARE NOT MOVED, THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE ITEMS.

22. PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES, THE CONTRACTOR SHALL EXCAVATE AND LOCATE THE EXISTING UTILITIES TO VERIFY THEIR LOCATION, SIZE, AND DEPTH TO INSURE THAT GRADE CONFLICTS WILL NOT OCCUR. THE COST OF THIS EXPLORATION SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY CONSTRUCTION.

23. ANY DAMAGE DONE TO THE WATER MAIN, WATER SERVICES, SANITARY SEWER, OR SANITARY SEWER SERVICES NOT CONSIDERED IN CONFLICT WITH THE PROPOSED STORM SEWER SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE.

24. CONNECTION OF PROPOSED STORM SEWER INTO EXISTING STORM SEWER OR EXISTING STORM SEWER STRUCTURES SHALL BE INCLUDED IN THE COST OF STORM SEWERS.

25. IF ANY STORM SEWER LATERALS ARE FOUND DURING CONSTRUCTION AND ARE NOT IDENTIFIED ON THE PLANS, THEY SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM AND INCLUDED IN THE COST OF THE STORM SEWER CONSTRUCTION.

26. STORM STRUCTURE OFFSET LOCATIONS ARE TO THE EDGE OF PAVEMENT IF THE STRUCTURE IS IN THE CURB LINE OR TO THE CENTER OF STRUCTURE IF THE STRUCTURE IS NOT IN THE CURBLINE.

27. IN ALL TRENCHES CROSSING DRIVEWAYS, SIDEWALKS, AND ALL PROPOSED AND EXISTING ROADWAYS. THE MATERIAL FOR THE TOP 12 INCHES SHALL BE CA-6 CRUSHED GRAVEL OR CRUSHED STONE AND BE INCLUDED IN THE PAY ITEM FOR TRENCH BACKFILL. THE BACKFILL SHALL EXTEND TO AND BE MEASURED FOR PAYMENT TO THE EXISTING GROUND OR SURFACE ELEVATION.

28. FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL NEW STRUCTURES SHALL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED AS PART OF COST OF THE STRUCTURE.

29. ALL CRACKS AND JOINTS SHALL BE CLEANED PRIOR TO FILLING THEM. THIS WORK SHALL BE INCLUDED IN THE ITEM "MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS."

30. ON STREETS TO BE FULL WIDTH MILLED (2" OR MORE). THE STRUCTURES IN THE PAVEMENT SHALL BE ADJUSTED IN ACCORDANCE WITH THE IDOT DETAIL "DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING". THIS WORK SHALL BE PAID FOR AS FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) AND SHALL INCLUDE THE ADJUSTMENT OF FRAMES AND LIDS FOR STORM MANHOLES, SANITARY MANHOLES, VALVE VAULTS, AND ANY OTHER UTILITY MANHOLE LOCATED IN THE EXISTING PAVEMENT TO REMAIN.

31. ALL OPEN TRENCHES SHALL BE FILLED AT THE END OF EACH DAY.

32. FOR STEEL BARS CERTIFICATION, PLEASE CONTACT IDOT BUREAU OF OF MATERIALS AT

33. SUPPLEMENTAL WATERINGS MAY BE REQUIRED BEYOND THE FINAL COMPLETION DATE TO ENSURE SURVIVAL OF THE PROPOSED SODDING RESTORATION. SAID WATERINGS SHALL BE COMPLETED IN THE MORNING OR EVENING HOURS AND SHALL BE COMPLETED AS DETERMINED BY THE VILLAGE OR ENGINEER.

34. UNLESS OTHERWISE INDICATED ON THE PLANS OR DETERMINED BY THE VILLAGE OR ENGINEER, EXISTING ITEMS SUCH AS SIDEWALKS, ARE INTENDED TO REMAIN, A PRECONSTRUCTION VIDEO WILL BE RECORDED BY THE VILLAGE WITHIN THE PROJECT LIMITS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO DETERMINE THE CONDITION OF SAID ITEMS. ANY DAMAGE OCCURRING TO ITEMS INTENDED TO REMAIN SHALL BE ADDRESSED TO THE SATISFACTION OF THE VILLAGE. WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OR REQUIREMENTS OF THE SPECIAL PROVISIONS FOR THE APPLICABLE ITEM OF WORK AND SHALL BE COMPLETED AT THE CONTRACTORS EXPENSE.

35. AT THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL FURNISH TWO (2) 24-HOUR CONTACT NAMES AND TELEPHONE NUMBERS. ONE PRIMARY AND ONE SECONDARY.

36. SAW CUTS MADE IN THE EXISTING PAVEMENT TO REMAIN FOR CONSTRUCTING UTILITIES SHALL BE INCLUDED IN CLASS D PATCHES.

37. SAW CUTS SHALL BE MADE ALONG THE EXISTING EDGE OF PAVEMENT WHERE CURB AND GUTTER IS TO BE REMOVED TO ENSURE A NEAT VERTICAL FACE BETWEEN EXISTING AND PROPOSED PAVEMENT AND SHALL BE INCLUDED IN THE COST OF COMBINATION CURB AND GUTTER REMOVAL.

38. FERTILIZER NUTRIENTS APPLIED IN ACCORDANCE WITH ARTICLE 253.03 OF THE STANDARD SPECIFICATIONS SHALL BE INCLUDED IN SODDING, SALT TOLERANT.

39. EXISTING MAST-ARM MOUNTED STREET NAME SIGNS SHALL BE SALVAGED AND REINSTALLED ON THE PROPOSED MAST-ARM POLES, WITH NEW MOUNTING HARDWARE, WHICH SHALL BE INCLUDED IN THE COST OF EACH STEEL MAST-ARM ASSEMBLY AND POLE.

40. THE DETECTABLE WARNING AREA AS SHOWN ON THE PLANS SHALL BE CONSTRUCTED WITH THE INSTALLATION OF A "METAPANEL" 24" x 48" NOMINAL PANEL WIDTH AS MANUFACTURED BY "METADOME LLC" (608) 249-8644 OF MADISON, WISCONSIN OR AN APPROVED EQUAL. THE PANEL SHALL BE STAINLESS STEEL IN COMPOSITION AND COMPLY WITH ADA REQUIREMENTS. THE DOMES LOCATED ON THE PANEL SHALL PARALLEL THE PAVEMENT CROSS WALK WITH THE CLOSEST EDGE LOCATED AT THE BACK OF CURB. THE PANEL COLOR SHALL BE SELECTED BY THE VILLAGE. INSTALLATION SHALL OCCUR IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS."

41. ALL TYPE 1 FRAMES, CLOSED LIDS SHALL BE STAMPED WITH THE WORD "STORM", STAMPING SHALL BE INCLUDED IN THE COST OF APPROPRIATE PAY ITEM WHICH INCLUDES A TYPE 1 FRAME, CLOSED LID.

42. TRANSVERSE EXPANSION JOINTS 3/4" SHALL BE PLACED EVERY 50 FEET IN PORTLAND CEMENT CONCRETE SIDEWALK OR AS DETERMINED BY THE ENGINEER AND INCLUDED IN THE COST OF THE PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH PAY ITEM.

43. STORM SEWER REMOVAL IN THE SAME TRENCH AS PROPOSED STORM SEWER SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER PAY ITEM.

44. TRENCH BACKFILL IS REQUIRED ON ALL WATER MAIN ITEMS WITHIN 2 FEET OF ANY PAVED SURFACE AND SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE WATER MAIN ITEMS.

> . F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD

> > SECTION



DESIGNED MWP/DSH REVISED - 01-04-10 PER IDOT DRAWN MAC REVISED - 03-01-10 PER IDOT CHECKED RWL REVISED 03-01-10 FILE -060197-P2-gen-notes.sht DATE

VILLAGE OF CARY, ILLINOIS THREE OAKS ROAD AND SILVER LAKE ROAD ARRA INTERSECTION IMPROVEMENTS

**GENERAL NOTES** STA. TO STA.

TOTAL SHEE 09-00058-00-CH MCHENRY 53 C-91-511-10 CONTRACT NO. 63381

COUNTY

SCALE:

Γ					CONSTRUC	TION TYPE CODE
			Mar 1971 1971	7 t tr - 1 t t t	ROADWAY	TRAFFIC SIGNALS
	CODE NUMBER	PAYITEM	UNIT	TOTAL QUANTITY	000-1A  QUANTITY	Y031-1F  QUANTITY
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	99	99	
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	188	188	
	20200100	EARTH EXCAVATION	CUYD	895	895	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CUYD	545	545	
	20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CUYD	266	266	
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,502	1,502	
	20800150	TRENCH BACKFILL	CUYD	54	54	
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1,696	1,696	
	25100105	MULCH, METHOD 1	ACRE	1		
L	25200110	SODDING, SALT TOLERANT	SQ YD	1,696	1,696	
	25200200	SUPPLEMENTAL WATERING	UNIT	36	36	
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	71	71	
	28000400	PERIMETER EROSION BARRIER	FOOT	1,248	1,248	
	28000510	INLET FILTERS	EACH	17	17	
	35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	434	434	
	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	1,210	1,210	
	40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	2,034	2,034	
	40600300	AGGREGATE (PRIME COAT)	TON	21	21	
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5	. 5	
	40600826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	586	586	
	40600895	CONSTRUCTING TEST STRIP	EACH	1	1	
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	81	81	
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	878	878	
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQFT	4,625	4,625	
	42400800	DETECTABLE WARNINGS	SQFT	72	72	
	44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	8,960	8,960	
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,400	1,400	
	44000600	SIDEWALK REMOVAL	SQFT	4,055	4,055	
	44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	31	31	
L	44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	42	42	

<sup>\*</sup> INDICATES SPECIALTY ITEMS

• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD

TO STA.



VILLAGE OF CARY, ILLINOIS
THREE OAKS ROAD AND SILVER LAKE ROAD
ARRA INTERSECTION IMPROVEMENTS

SUMMARY OF QUANTITIES

SCALE: STA.

LINGIS - PROFESSIONAL DESIGN FIRM ...\DIOCACHUNGT\P - 184-001121 - EXPIRES 4/30/2011 ...\PIO+EXPHASE. 3/3/2010 I48837 PM INCRYSFOLLOKE\

					CONSTRUC	TION TYPE CODE
					ROADWAY	TRAFFIC SIGNALS
	CODE			TOTAL	I000-1A	Y031-1F
	NUMBER	PAYITEM	UNIT	QUANTITY	QUANTITY	QUANTITY
	44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	64	64	
	44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	72	72	
	48301000	PROTECTIVE COAT	SQ YD	740	740	
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	78	78	
	56400100	FIRE HYDRANTS TO BE MOVED	EACH	2	2	
	56400820	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	1		
	60107600	PIPE UNDERDRAINS 4"	FOOT	100	100	
	60207005	CATCH BASINS, TYPE C, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
	60207915	CATCH BASINS, TYPE C, TYPE 11V FRAME AND GRATE	EACH	4	4	
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
	60236825	INLETS, TYPE A, TYPE 11V FRAME AND GRATE	EACH	5	5	
	60250500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	4	4	
	60255500	MANHOLES TO BE ADJUSTED	EACH	1	1	
	60260400	INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1	
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	4	4	
	60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	20	20	
	60500050	REMOVING CATCH BASINS	EACH	1	1	
	60500060	REMOVING INLETS	EACH	2	2	
	60604200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	1,257	1,257	-
	67100100	MOBILIZATION	L SUM	1	1	
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM		1	
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM		1	,
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4,600	4,600	
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	344	344	
*	78000100	THERMOPLASTIC PAVEMENT MARKINGS - LETTERS AND SYMBOLS	SQ FT	573	573	
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5,190	5,190	
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,028	2,028	
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	777	777	

<sup>\*</sup> INDICATES SPECIALTY ITEMS

• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD



VILLAGE OF CARY, ILLINOIS
THREE OAKS ROAD AND SILVER LAKE ROAD
ARRA INTERSECTION IMPROVEMENTS

SUMMARY OF QUANTITIES

TO STA.

SCALE:

## SUMMARY OF QUANTITIES

	wished weed his control states that the second states are the		tracking was a reserver to contract the	B	CONSTRUC	TION TYPE CODE TRAFFIC SIGNALS
	Communication of the Communica				1000-1A	Y031-1F
	CODE NUMBER	PAYITEM	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY
		THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	156		
	no commo manorem e reservado remada en alteré a a el	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	477	AND AND RECORDING AND RESIDENCE OF THE PARTY OF THE PROPERTY OF THE PARTY OF THE PA	47
	an angula page an unit an ann a the ann a	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	5	innegging og preggi	nou in consideration in Laboration and the manager speciment of the Colorest Colores
	Production Color Programme	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	18	TO A SERVICE STATE AND A STATE OF THE STATE	1
		CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	48	Anni primetali primeta in fundi servicio delle in con con con con con con con con con co	4
		CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	132		13
	***************************************	HANDHOLE	EACH	5		
		TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	500		50
	Transference consequences and the property of the contract of	PAINT EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	00-180900000 - 100-1 - 100-1 - 100-1 100-1 100-1 100-1 100-1 100-1 100-1 100-1 100-1 100-1 100-1 100-1 100-1 1	To proceedings as a chair shall had been shall be SWEET TO STONESS AND A STONESS AS
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	865		86
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,077		1,07
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	523	er gagen reggggger om geg is a gegan singkannin gelekki sinkin k kinkin kal	52
-	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,043		1,04
	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,225	endourilia (i majesta) jastinu reksper i reksper til och som en som e	1,22
	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1		
•	87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1	aasaanaan aan oo	a independents, the one weeks at the cults a feature of the other wife.
r	87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1	the state of the s	and the second s
	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	4	ader sambe e mor monthmer summered etter 1 kg te 1811	Source - C. Constitution will be able to the constitution bet
k	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28	egga an ann ann headan sear responserer	The second secon
ŧ	87900200	DRILL EXISTING HANDHOLE	EACH	5		
٠	88000170	SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2	essenti sensina singan sentan kenil selat senti sebas se	The state of the s
*	88000280	SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2	energy system in the companies of the Section 188	
k	88000290	SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2	Applicated Mills about 1800 CHEST CONTRACT IN TO 18 CO.	
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2		Managements of the contract of
٠	88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2		
	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	. 4	and a company of the second section of the second s	The second secon
k	88600100	DETECTOR LOOP, TYPE I	FOOT	719	Processors and Committee and Committee Committ	7
k	88700200	LIGHT DETECTOR	EACH		na yan aranganan na masa anasa ana ha 4 5 da	TO SEE ON THE WARF TO SET THEFT WELL TO THE THE
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	6	and the second s	John Charles and Charles and Charles and Charles
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		

SCALE:

\* INDICATES SPECIALTY ITEMS

• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD



ESIGNED	-	MWP/DSH	REVISED - 01-04-10 PER IDOT
RAWN	-	MAC	REVISED - 03-01-10 PER IDOT
HECKED	-	RWL .	REVISED - 03-17-10 PER IDOT
DATE	-	03-01-10	FILE -060197-P2-soq1.sht

F.A.U. 4052 SILVER LAKE ROAD

F.A.U. SECTION COUNTY SHEETS NO.

• 09-00058-00-CH MCHENRY 53 6

C-91-511-10 CONTRACT NO. 63381

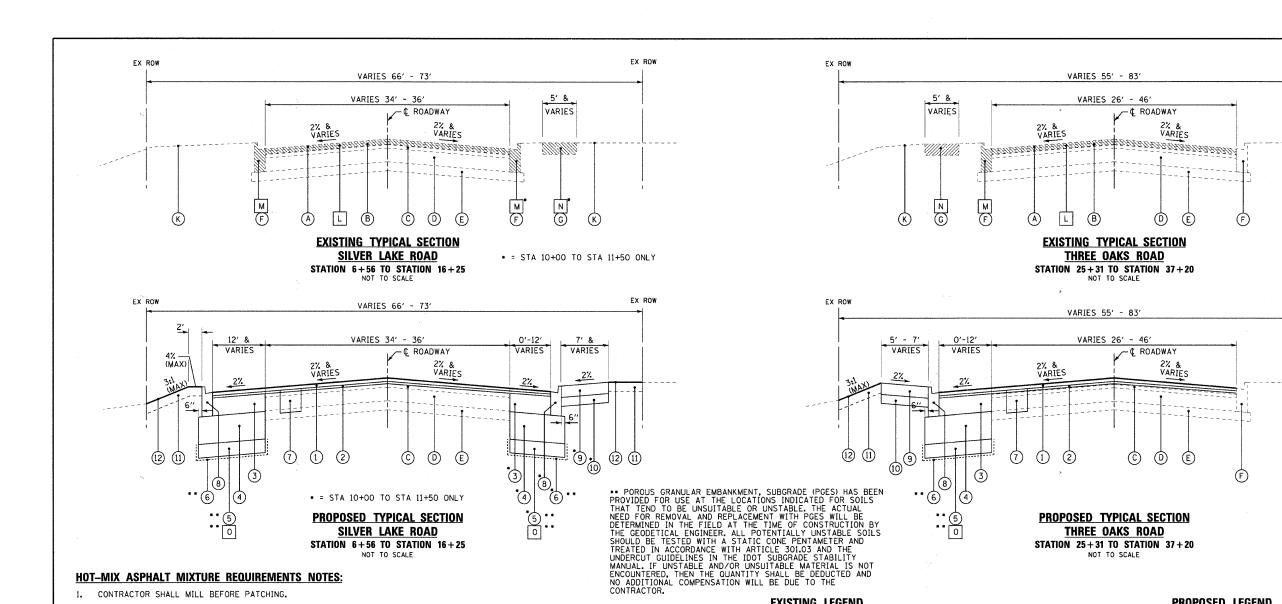
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID | PROJECT: ARA-9003(635)

ICHT @ 2010, BY BA

					CONSTRUC	TION TYPE CODE
l kana a				City shelles and conditional blocks (Code and alcendate)	ROADWAY	TRAFFIC SIGNALS
	- swippe and their carries from the city		e annen mooralane oo oo oo oo oo oo oo	and the second of the second s	1000-1A	Y031-1F
	CODE		3 IN IEEE	TOTAL	OLIA MITTEE	OLIANITITY
-	NUMBER	PAYTIEM	UNIT	QUANTITY	QUANTITY	QUANTITY
*	89502200	MODIFY EXISTING CONTROLLER	EACH	* 1	Control of the second discussion of the second of the seco	
*	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4,539		4,539
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1
*	89502380	REMOVE EXISTING HANDHOLE	EACH	5	der trade ( ) statemented Security model (46 ) ( ) of ( ) ( ) (	5
*	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	3		3
	Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	1,502	1,502	n na vina ana ana ana ana ana ana ana ana ana
	Z0019600	DUST CONTROL WATERING	UNIT	20	20	
	Z0064560	SEGMENTAL BLOCK RETAINING WALL	SQFT	340	340	
*	XX003536	CONNECTION TO EXISTING WATER MAINS (NON PRESSURE)	EACH	1		and the state of t
*	XX003539	DUCTILE IRON WATER MAIN FITTINGS 8" X 6" TEE	EACH	1	1	
*	XX005478	DUCTILE IRON WATER MAIN 6" RESTRAINED JOINT TYPE	FOOT	40	. 40	
*	XX006242	WATER SERVICE REMOVAL	EACH	1	.,	
	X0322033	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	17	. 17	
	X0322256	TEMPORARY INFORMATION SIGNING	SQFT	104	104	
*	X0323797	PAINT NEW TRAFFIC SIGNAL POST	EACH	1		1
*	X0325141	PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	2		2
*	X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	na naka munannuas i zaseminos musel nu zo i ma s	
*	X8140074	GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	10		10
*	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1,800	er hadestinden fallt sellfet engel et til det e skille falle fil	1,800
*		ELECTRIC CABLE IN CONDUIT NO. 20 3/C,TWISTED, SHIELDED	FOOT	184		184
*	INDICATES	SPECIALTYITEMS				

• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD





### **HOT-MIX ASPHALT MIXTURE REQUIREMENTS NOTES:**

1. CONTRACTOR SHALL MILL BEFORE PATCHING.

### **HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

PROPOSED TYPICAL SECTION

SILVER LAKE ROAD STATION 6+56 TO STATION 16+25

NOT TO SCALE

MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT WIDENING AND RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm); - 1 1/2"	4% @ 70 GYR
HOT-MIX ASPHALT BASE COURSE, 8" (HMA BINDER IL-19 mm) (TWO LIFTS)	4% @ 70 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 1"	4% @ 50 GYR
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm); TYPE I - IV - 10-INCH	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ. YD./IN

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

### **EXISTING LEGEND**

- A HOT-MIX ASPHALT SURFACE COURSE, 1"± B HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"
- (C) HOT-MIX ASPHALT BINDER COURSE, 1 1/2"
- (D) HOT-MIX ASPHALT BASE COURSE, 7"
- E) SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- (F) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- G EXISTING SIDEWALK

5

- (H) AGGREGATE BASE COURSE
- J EXISTING SUB-GRADE

- (K) GROUND SURFACE
- HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- M COMBINATION CURB AND GUTTER REMOVAL
- N SIDEWALK REMOVAL

SCALE:

- O REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL ...
- ITEM TO BE REMOVED

### PROPOSED LEGEND

- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 1 1/2"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 1"

EX ROW

EX ROW

- HOT-MIX ASPHALT BASE COURSE, 8"
- (4) AGGREGATE SUBGRADE 12"
  - POROUS GRANULAR EMBANKMENT, SUBGRADE •• (AS DETERMINED BY THE ENGINEER)
- (5)
- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- 7 CLASS D PATCHES, TYPE I - IV, 10 INCH
- 8 COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12 (SPECIAL) (10 1/4" MIN FLAG DEPTH)
- 9 PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- (10) AGGREGATE BASE COURSE, TYPE B 4"
- (11) TOPSOIL FURNISH AND PLACE, 4"
- SODDING, SALT TOLERANT

TO STA.

### STRUCTURAL DESIGN DATA

STREET	STRL DE TR	ICTUR SIGN AFFIC	AL	STREET	TRAFFIC FACTOR	SSR	TEMP	STRAIN	AC	E AC	REO'D HMA THICKNESS	MECHANISTIC PAVEMENT DESIGN
	PV	SU	MU									·
SILVER LAKE ROAD	13,524	207	69	II	0.52	POOR	76 <b>°</b> F	128	PG64-22	650	8.5 IN	1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 1" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 8" HOT-MIX ASPHALT BASE COURSE 12" AGGREGATE SUBGRADE
THREE OAKS ROAD	9,310	143	47	II	0.50	POOR	76 <b>°</b> F	130	PG64-22	650	8.0 IN	1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 1" POLYMETIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 8" HOT-MIX ASPHALT BASE COURSE 12" AGGREGATE SUBGRADE

F.A.U. 4051 THREE OAKS ROAD . F.A.U. 4052 SILVER LAKE ROAD



DESIGNED	-	MWP/DSH	REVISED - 01-04-10 PER IDOT
DRAWN	-	MAC	REVISED - 03-01-10 PER IDOT
CHECKED		RWL	REVISED -
DATE	-	03-01-10	FILE -060197-P2-typsec.sht

**VILLAGE OF CARY, ILLINOIS** THREE OAKS ROAD AND SILVER LAKE ROAD ARRA INTERSECTION IMPROVEMENTS

TYPICAL	SECT	IONS,	STR	UCTURAL	DESIGN	DATA	AND
нот-	-MIX	ASPH	ALT	MIXTURE	REQUIR	EMENT	S

STA.

PROPOSED TYPICAL SECTION

THREE OAKS ROAD

**STATION 25+31 TO STATION 37+20** 

NOT TO SCALE

09-00058-00-CH MCHENRY 53 C-91-511-10 CONTRACT NO. 63381 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT: ARA-9003(635)

# **EARTH EXCAVATION TABLE**

STATION BEGIN	STATION END	UNDERCUT AND PGES REPLACEMENT	TOPSOIL EXCAVATION	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	EARTH EXCAVATION	STORM SEWER & WATER MAIN EXCAVATION	TOTAL SUITABLE EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT (ADJUST FOR 15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
		(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD) *	(CU YD)	(CU YD)
SILVER LA										
10+00	10+50	14.7	6.9	21.6	46.3	0.0	46.3	39.4	1.3	38.1
10+50	11+00	25.1	15.5	40.5	80.8	0.0	80.8	68.7	4.2	64.5
11+00	11+50	17.6	16.6	34.2	53.1	0.0	53.1	45.2	8.0	37.2
11+50	12+00	13.8	14.3	28.1	30.1	0.0	30.1	25.7	11.4	14.3
12+00	12+50	13.1	12.7	25.7	26.4	0.0	26.4	22.5	12.6	9.9
12+50	13+00	12.2	12.8	25.0	30.6	7.1	37.7	32.1	11.9	20.2
13+00	13+50	9.5	12.7	22.2	27.1	0.0	27.1	23.1	13.1	10.0
13+50	14+00	5.6	11.9	17.5	16.1	0.0	16.1	13.8	12.8	1.0
14+00	14+25	0.9	2.7	3.7	2.4	0.0	2.4	2.1	2.7	-0.6
			X/////////////////////////////////////			X/////////////////////////////////////				
SUBTOTALS	· · · · · · · · · · · · · · · · · · ·	113	107	219	313	8.0	321	273	79	195
			XX		X/////////////////////////////////////	X				
THREE OAK										
25+70	26+00	1.2	0.9	2.1	3.9	0	3.9	3.3	0.0	3.3
26+00	26+50	4.3	3.3	7.6	13.9	1	14.9	12.7	0.0	12.7
26+50	27+00	3.5	2.5	6.0	10.7	0	10.7	9.2	0.0	9.2
27+00	27+07	0.2	0.1	0.3	0.5	0	0.5	0.4	0.0	0.4
28+50	29+00	2.4	2.1	4.6	7.9	0	7.9	6.8	0.5	6.3
29+00	29+50	9.4	9.1	18.5	31.1	0	31.1	26.5	2.2	24.3
29+50	30+00	7.0	6.9	13.9	23.2	6	29.2	24.9	1.7	23.2
30+00	30+50	7.0	0.0	7.0	22.0	2.9	24.9	21.2	0.0	21.2
30+50	31+00	13.5	7.6	21.1	50.4	0	50.4	42.9	0.8	42.1
31+00	31+50	13.0	13.6	26.6	58.1	1.7	59.8	50.8	0.8	50.0
31+50	32+00	13.1	11.9	25.0	57.9	0	57.9	49.3	0.0	49.3
32+00	32+50	13.1	12.0	25.0	44.1	0	44.1	37.5	6.9	30.6
32+50	33+00	13.2	14.5	27.7	22.8	2	24.8	21.1	29.4	-8.3
33+00	33+50	12.2	18.2	30.4	20.0	0	20.0	17.1	60.3	-43.2
33+50	34+00	9.0	16.4	25.4	23.1	0	23.1	19.7	53.8	-34.1
34+00	34+50	6.7	15.2	21.9	20.6	0.8	21.4	18.3	20.3	-2.0
34+50	35+00	6.7	14.1	20.8	35.6	0	35.6	30.3	4.3	26.0
35+00	35+50	6.5	8.3	14.8	48.2	0	48.2	41.1	0.0	41.1
35+50	36+00	5.3	5.1	10.4	44.6	0.8	45.4	38.6	0.0	38.6
36+00	36+50	3.7	4.6	8.4	28.7	0.0	28.7	24.5	0.1	24.4
36+50	37+00	1.5	5.4	6.8	11.9	0	11.9	10.2	1.7	8.5
37+00	37+21	0.0	1.6	1.6	1.9	0 	1.9	1.7 *	0.8	0 <b>.</b> 9
SUBTOTALS		153	174	326	582	16	597	509	184	325
TOTALS		266	281	545	895	24	918	782	263	520

EARTH EXCAVATION
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
POROUS GRANULAR EMBANKMENT, SUBGRADE
EXCESS EARTH EXCAVATION 895 545 266

EARTHWORK NOTES:

FILE -060197-P2-schedule.sht

1. ASSUME 4 INCH DEPTH OF TOPSOIL EXCAVATION

2. ASSUME 15% SHRINKAGE OF EARTH EXCAVATION TO BE REUSED AS EMBANKMENT

REVISED - 01-04-10 PER IDOT VILLAGE OF CARY, ILLINOIS
THREE OAKS ROAD AND SILVER LAKE ROAD SCHEDULE OF MATERIALS REVISED -REVISED -ARRA INTERSECTION IMPROVEMENTS

SCALE: NONE

• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD

C-91-511-10

TO STA.

SECTION

09-00058-00-CH

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT: ARA-9003(635)

COUNTY TOTAL SHEET NO.
MCHENRY 53 9
CONTRACT NO. 63381

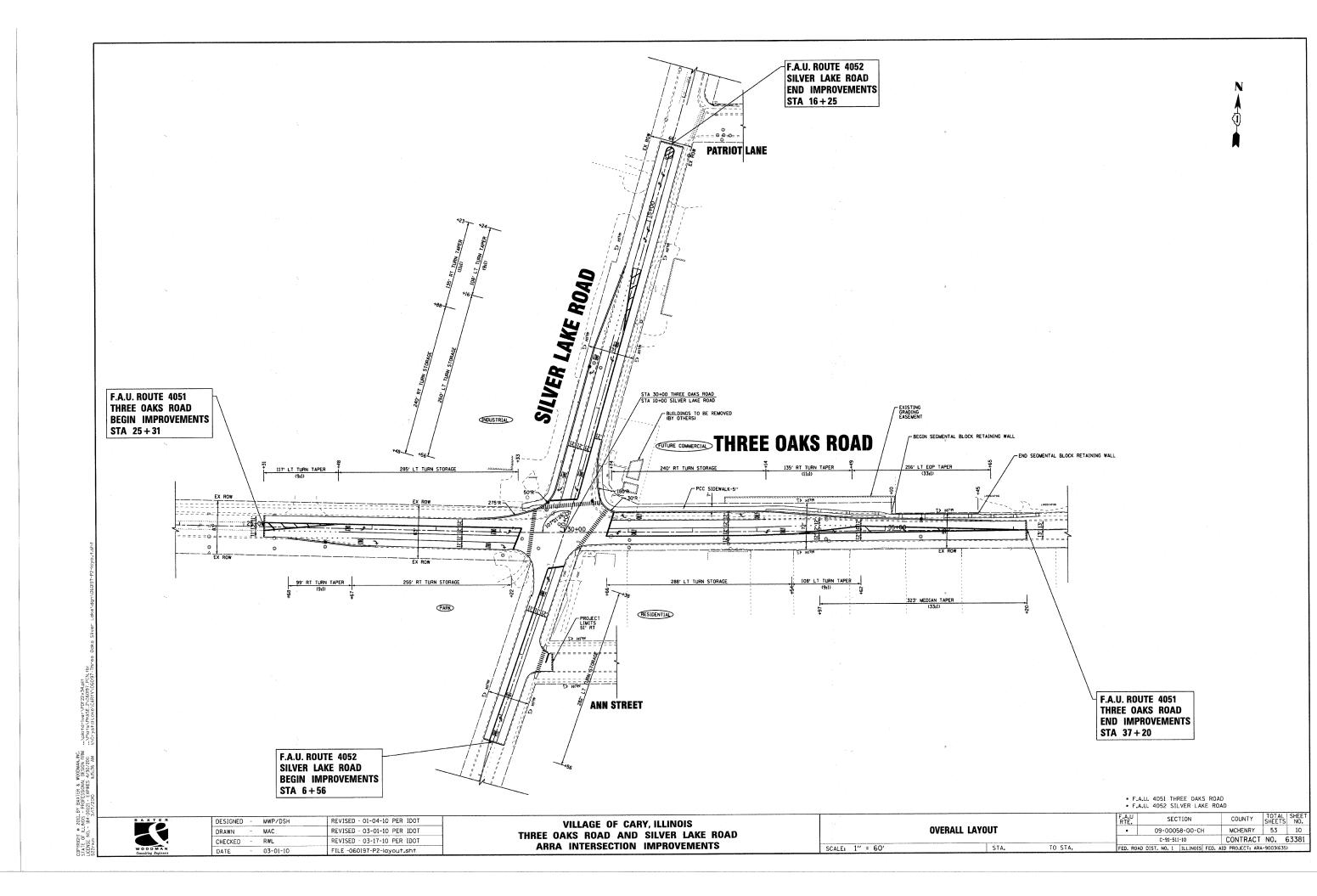


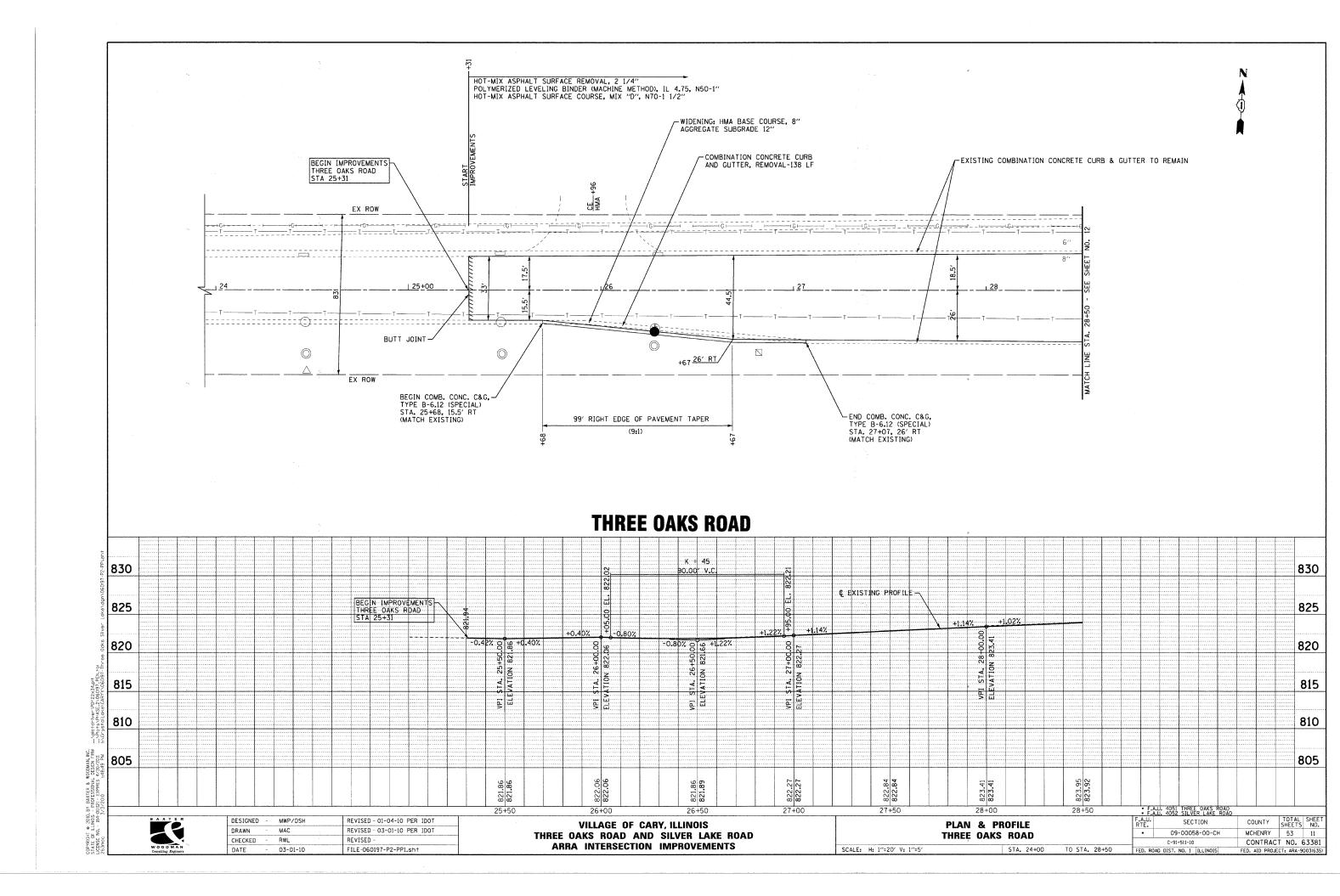
DESIGNED - MWP/DSH

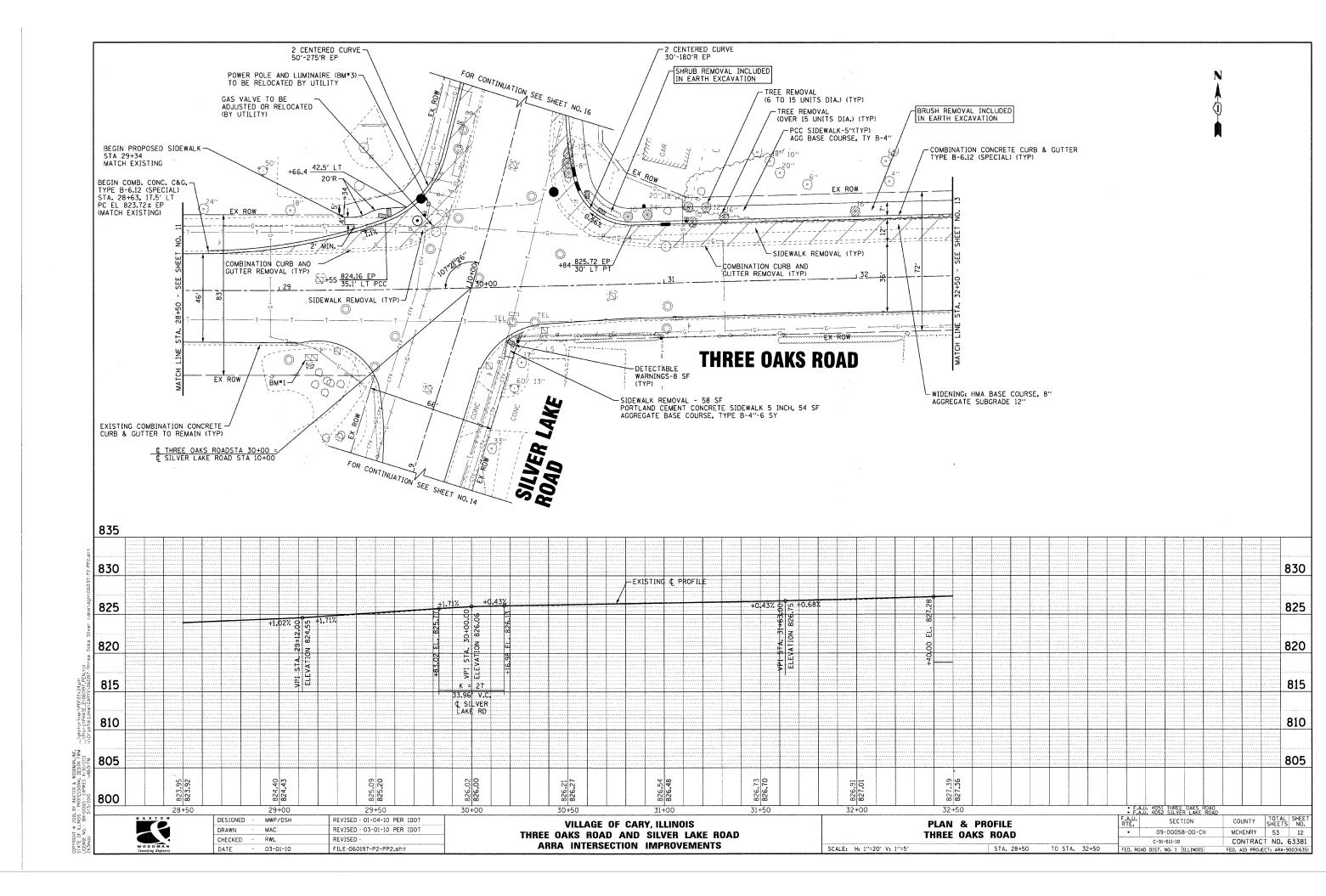
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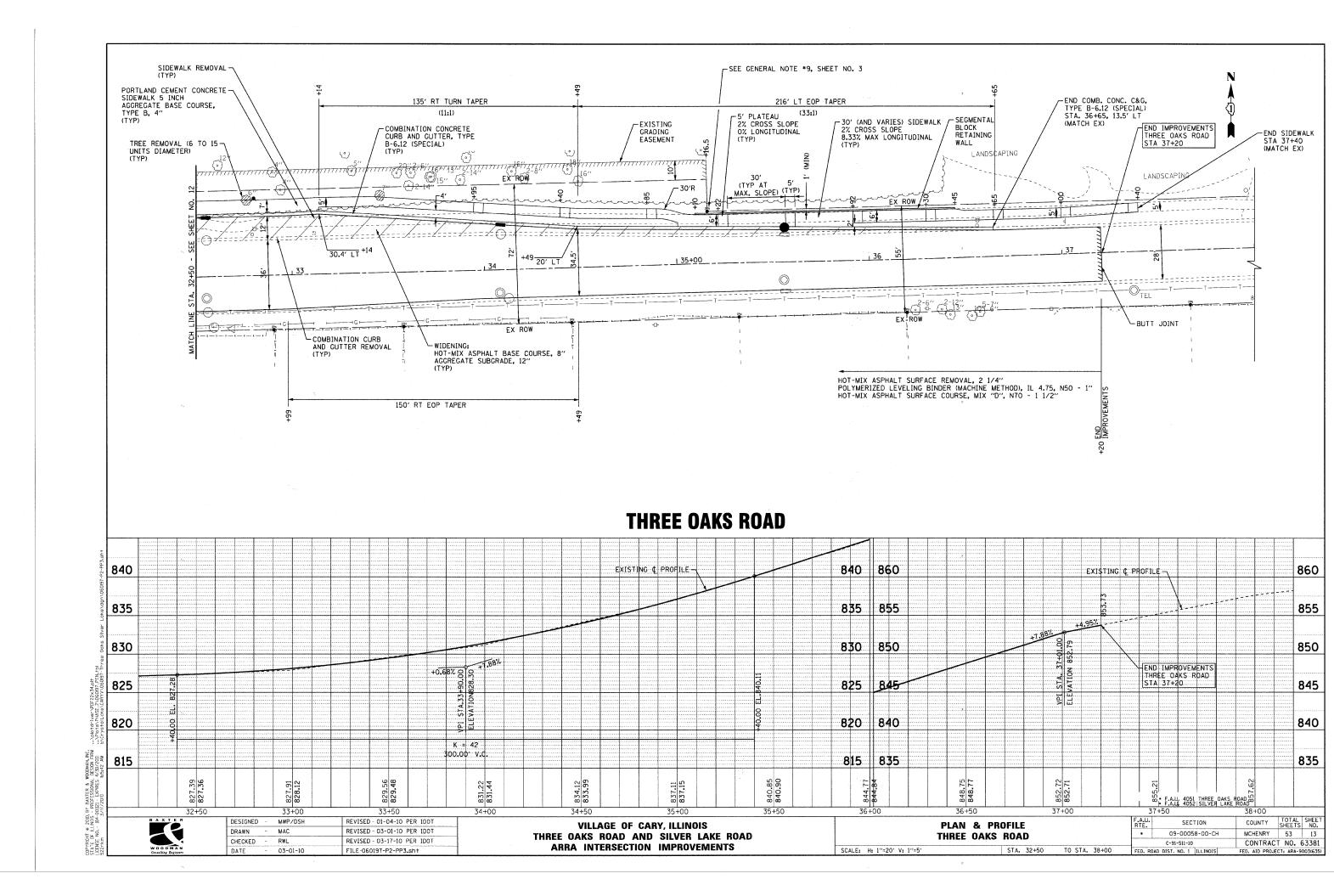
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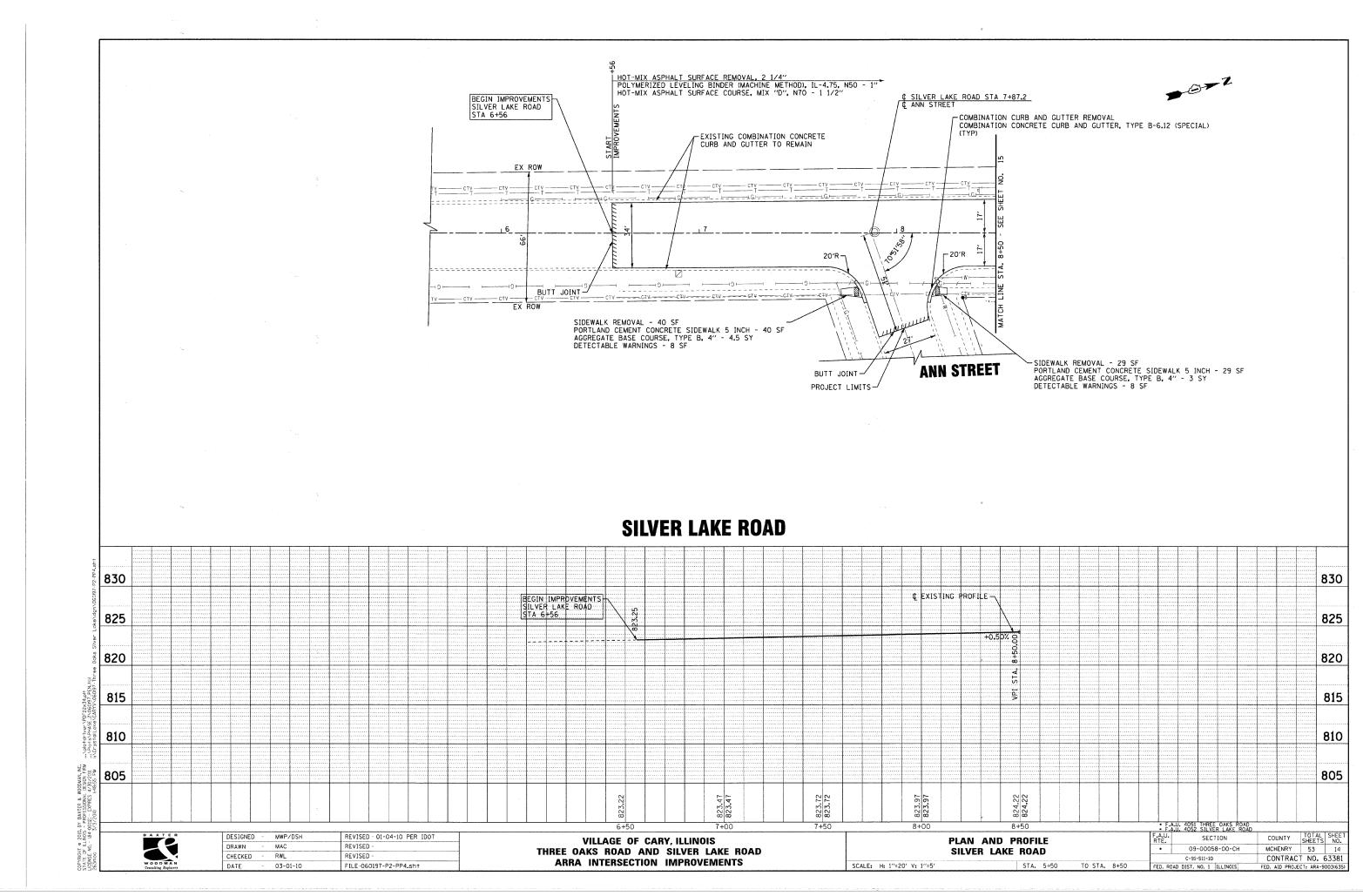
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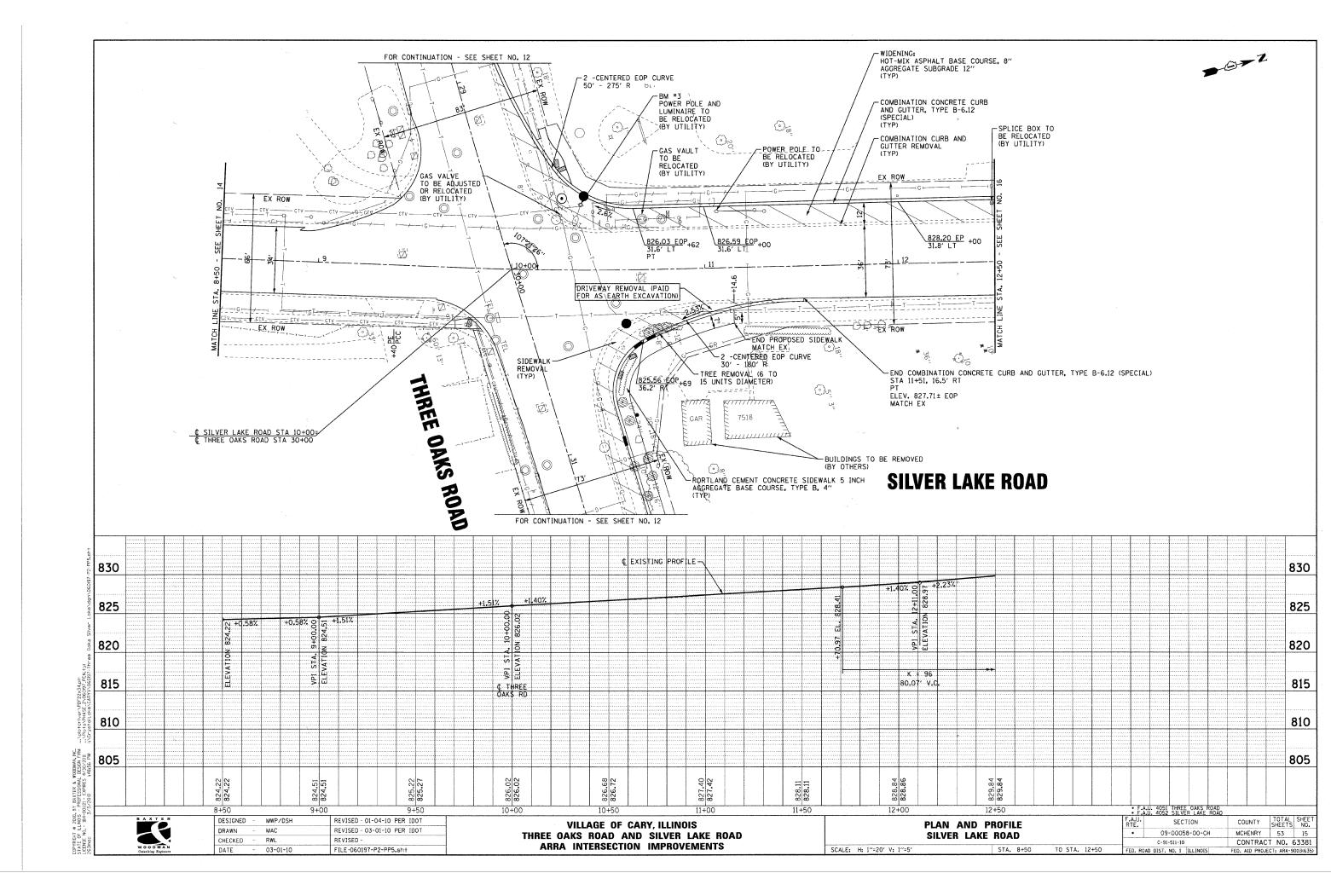


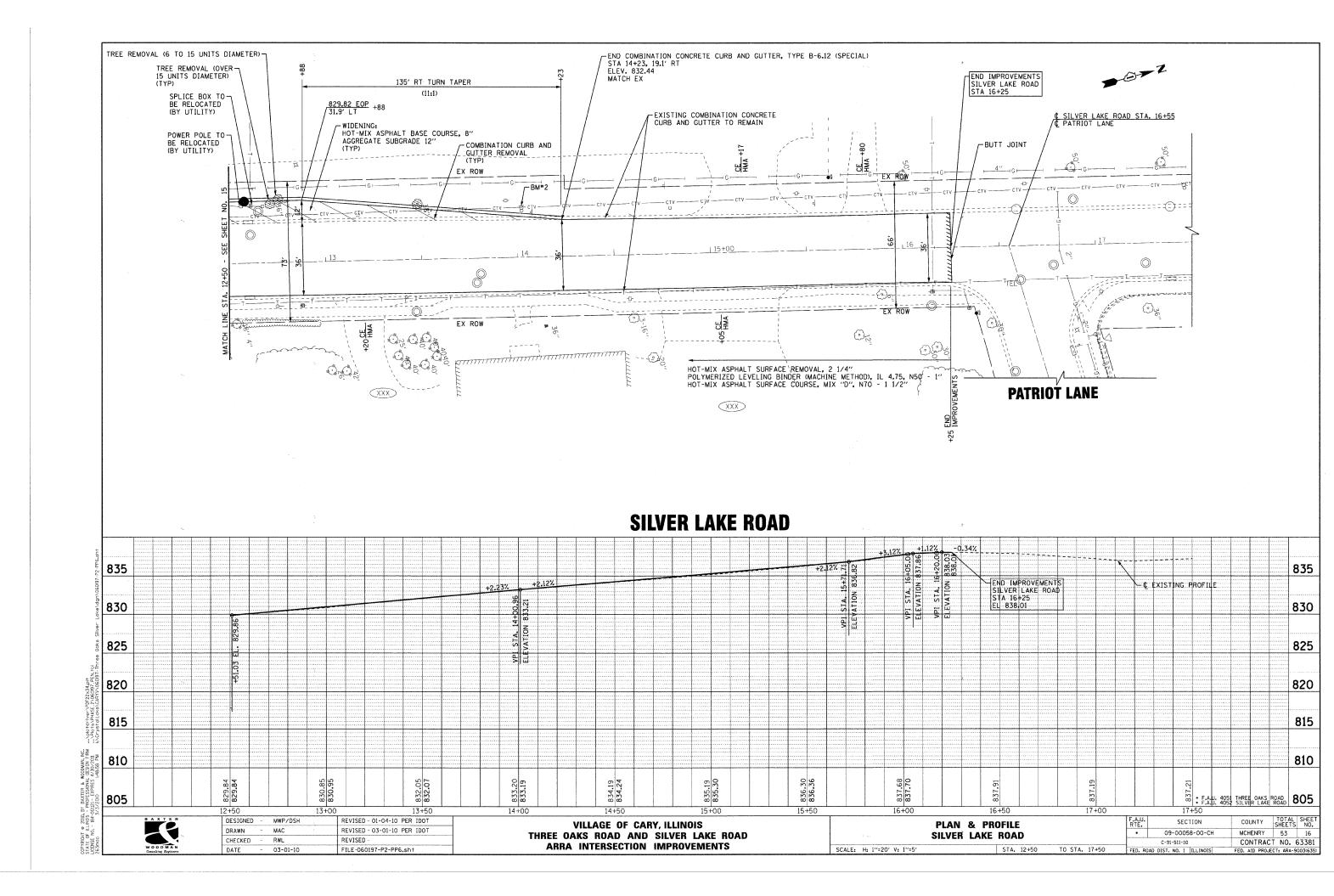












### 1. SEDIMENTATION AND EROSION CONTROL STANDARDS

THE FOLLOWING STANDARDS MUST BE SATISFIED:

- A. ALL AREAS LOCATED DOWNSTREAM FROM DISTURBED AREAS OF A DEVELOPMENT SITE SHALL BE PROTECTED FROM POTENTIAL INCREASE OF EROSION AND SEDIMENTATION RESULTING FROM UPSTREAM ACTIVITIES.
- B. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED AND FUNCTIONAL PRIOR TO OR CONCURRENTLY WITH THE START OF DISTURBANCE.
- C. PERMANENT STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED; BUT IN NO CASE SHALL THESE MEASURES BE INSTALLED MORE THAN 14 DAYS AFTER THE CONSTRUCTION IN THE AREA TEMPORARILY OR PERMANENTLY CEASES.

### sedimentation and erosion control methods

THE FOLLOWING SEDIMENTATION AND EROSION CONTROL METHODS MUST BE INSTALLED AND MAINTAINED:

- A. ALL STORM SEWER STRUCTURES THAT RECEIVE RUNOFF DURING CONSTRUCTION SHALL INCLUDE INLET PROTECTION TO PREVENT DEBRIS AND EXCESSIVE SEDIMENT FROM ENTERING THE STORM SEWER PIPING SYSTEM. THESE PROTECTIVE MEASURES SHALL BE PROPERLY INSTALLED, MAINTAINED, AND REMOVED IN THEIR ENTIRETY AFTER THE AREA TRIBUTARY TO THE STORM STRUCTURE IS STABILIZED.
- B. DISCHARGES FROM DEWATERING OPERATIONS SHALL ENTER OR BE ROUTED TO A SEDIMENT AND EROSION CONTROL SYSTEM OR DEVICE.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PROPERLY STABILIZED OR DISPOSED.
- D. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE CONSTRUCTION SITE. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PERIODICALLY MAINTAINED TO REMOVE MUD AND DEBRIS. THE STABILIZED CONSTRUCTION ENTRANCE SHALL CONSIST OF AN APPROPRIATE GEOTEXTILE FABRIC COVERED WITH AT LEAST SIX INCHES OF CLEAN STONE THAT IS AT LEAST TWO (2) INCHES IN DIAMETER.
- E. TEMPORARY EARTHEN EMBANKMENTS, GRADE TRANSITIONS AND BERMS SHALL BE CONSTRUCTED WITH SIDE SLOPES NO STEEPER THAN 3H:1V. SIDE SLOPES BELOW NORMAL WATER LEVEL SHALL BE NO STEEPER THAN 2H:1V. MORE GRADUAL SLOPES MAY BE REQUIRED FOR SOILS THAT EASILY ERODE.

### 3. MAINTENANCE

ALL TEMPORARY MEASURES AND PERMANENT EROSION AND SEDIMENT CONTROL MUST BE MAINTAINED IN AN EFFECTIVE WORKING CONDITION AS IDENTIFIED BY REQUIRED INSPECTIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- A. REPAIR, REPLACE OR MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES AFTER A SINGULAR OR CUMULATIVE RAINFALL EVENT(S) OF 0.5 INCH OR MORE OVER A TWENTY-FOUR-HOUR PERIOD.
- B. MAKE ADJUSTMENTS TO THE SEDIMENTATION AND EROSION CONTROL PLAN AND METHODS, AS NEEDED, TO ACCOMPLISH THE INTENDED PURPOSE.
- C. ALL ADJACENT ROADWAYS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY, AND CLEANED WHEN NECESSARY OR AS DETERMINED BY THE VILLAGE OF CARY OR THE ENGINEER.

### 4. INSPECTIONS

- A. THESE PLANS FOR UPGRADING, STRIPPING, EXCAVATING, AND FILLING WORK, BEAR THE STAMP OF APPROVAL OF THE ENFORCEMENT OFFICER. THESE PLANS SHALL BE MAINTAINED AT THE SITE DURING THE PROGRESS OF THE WORK. THE DISTRICT AND/OR ENGINEER SHALL MAKE INSPECTIONS AND MAINTAIN ON -SITE RECORDS OF SUCH INSPECTIONS AT THE INTERVALS SPECIFIED BELOW:
  - I. UPON COMPLETION OF INSTALLATION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING;
  - . AFTER ROUGH GRADING;
  - III. AFTER FINAL GRADING: AND
  - IV. WEEKLY AND AFTER EACH RAINFALL EVENT OF 0.5 INCH OR MORE OVER A TWENTY-FOUR-HOUR PERIOD.
- B. ANY NECESSARY REPAIRS TO SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MADE AND REPORTED IN THE ON-SITE INSPECTION RECORDS. COPIES OF THE INSPECTION RECORDS SHALL BE SUBMITTED TO THE ENFORCEMENT OFFICER IN A MONTHLY INSPECTION REPORT.

### NOTIFICATIONS

TO FACILITATE ENFORCEMENT OFFICER COMPLIANCE INSPECTIONS THE DISTRICT AND/OR ENGINEER SHALL NOTIFY THE ENFORCEMENT OFFICER WITHIN TWO (2) WORKING DAYS OF THE COMPLETION OF THE CONSTRUCTION STAGES SPECIFIED BELOW:

- A. UPON COMPLETION OF INSTALLATION OF SEDIMENT AND RUNOFF CONTROL (CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING:

  B. AFTER ROUGH GRADING:
- C. AFTER FINAL STABILIZATION AND LANDSCAPING, PRIOR TO REMOVAL OF SEDIMENT CONTROLS.

IF STRIPPING, CLEARING, GRADING AND/OR LANDSCAPING ARE TO BE DONE IN PHASES OR AREAS, THE DISTRICT AND/OR ENGINEER SHALL GIVE NOTICE AT THE COMPLETION OF EACH OF THE ABOVE WORK STAGES IN EACH PHASE OR AREA.

### 5. SPECIAL PRECAUTIONS

- A. IF AT ANY STAGE OF THE GRADING ON THE SITE, THE ENFORCEMENT OFFICER DETERMINES BY INSPECTION THAT THE NATURE OF THE SITE IS SUCH THAT FURTHER WORK AUTHORIZED BY AN EXISTING PERMIT IS LIKELY TO IMPERIL ANY PROPERTY, PUBLIC WAY, STREAM, LAKE, WETLAND, OR DRAINAGE STRUCTURE, THE ENFORCEMENT OFFICER MAY REQUIRE, AS A CONDITION OF ALLOWING THE WORK TO BE DONE, THAT SUCH REASONABLE SPECIAL PRECAUTIONS BE TAKEN AS ARE CONSIDERED ADVISABLE TO AVOID THE LIKELIHOOD OF SUCH PERIL. "SPECIAL PRECAUTIONS" MAY INCLUDE, BUT SHALL NOT BE LIMITED TO, A MORE LEVEL EXPOSED SLOPE, CONSTRUCTION OF ADDITIONAL DRAINAGE FACILITIES, BERMS, TERRACING, COMPACTION, OR CRIBBING, INSTALLATION OF PLANT MATERIALS FOR EROSION CONTROL. AND RECOMMENDATIONS OF A REGISTERED SOILS ENGINEER AND/OR ENGINEERING GEOLOGIST WHICH MAY OUTLINE REQUIREMENTS FOR FURTHER WORK.
- B. WHERE IT APPEARS THAT STORM DAMAGE MAY OCCUR DUE TO INCOMPLETE GRADING AT SITE, WORK MAY BE STOPPED AND THE CONTRACTOR REQUIRED TO INSTALL TEMPORARY STRUCTURES OR TAKE SUCH OTHER MEASURES AS MAY BE REQUIRED TO PROTECT ADJOINING PROPERTY OR THE PUBLIC SAFETY. WHERE UNUSUAL SITE CONDITIONS PREVAIL, THE ENFORCEMENT OFFICER MAY SPECIFY THE START AND END DATES FOR GRADING OPERATIONS OR MAY REQUIRE THAT THE OPERATIONS BE CONDUCTED IN SPECIFIC STAGES SO AS TO ENSURE COMPLETION OF PROTECTIVE MEASURES OR DEVICES PRIOR TO THE ADVENT OF SEASONAL RAINS.

### 7. McHENRY COUNTY SOIL EROSION AND SEDIMENT CONTROL

- A. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION.

  AREAS OF THE DEVELOPMENT SITE THAT ARE NOT TO BE GRADED SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC OR OTHER DISTURBANCE UNTIL FINAL SEEDING IS PERFORMED.
- B. SOIL AND MATERIAL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD-PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES OR ISOLATED WATERS OF MCHENRY COUNTY.
- C. THE CONTRACTOR SHALL PROVIDE ADEQUATE RECEPTACLES FOR THE DISPOSITION OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, EATERS OF THE U.S. OR ISOLATED WATERS OF MCHENRY COUNTY. THE CONTRACTOR SHALL MAINTAIN THE DEVELOPMENT SITE FREE OF CONSTRUCTION MATERIAL DEBRIS.

• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD



VILLAGE OF CARY, ILLINOIS
THREE OAKS ROAD AND SILVER LAKE ROAD
ARRA INTERSECTION IMPROVEMENTS

EROSION AND SEDIMENT CONTROL NOTES

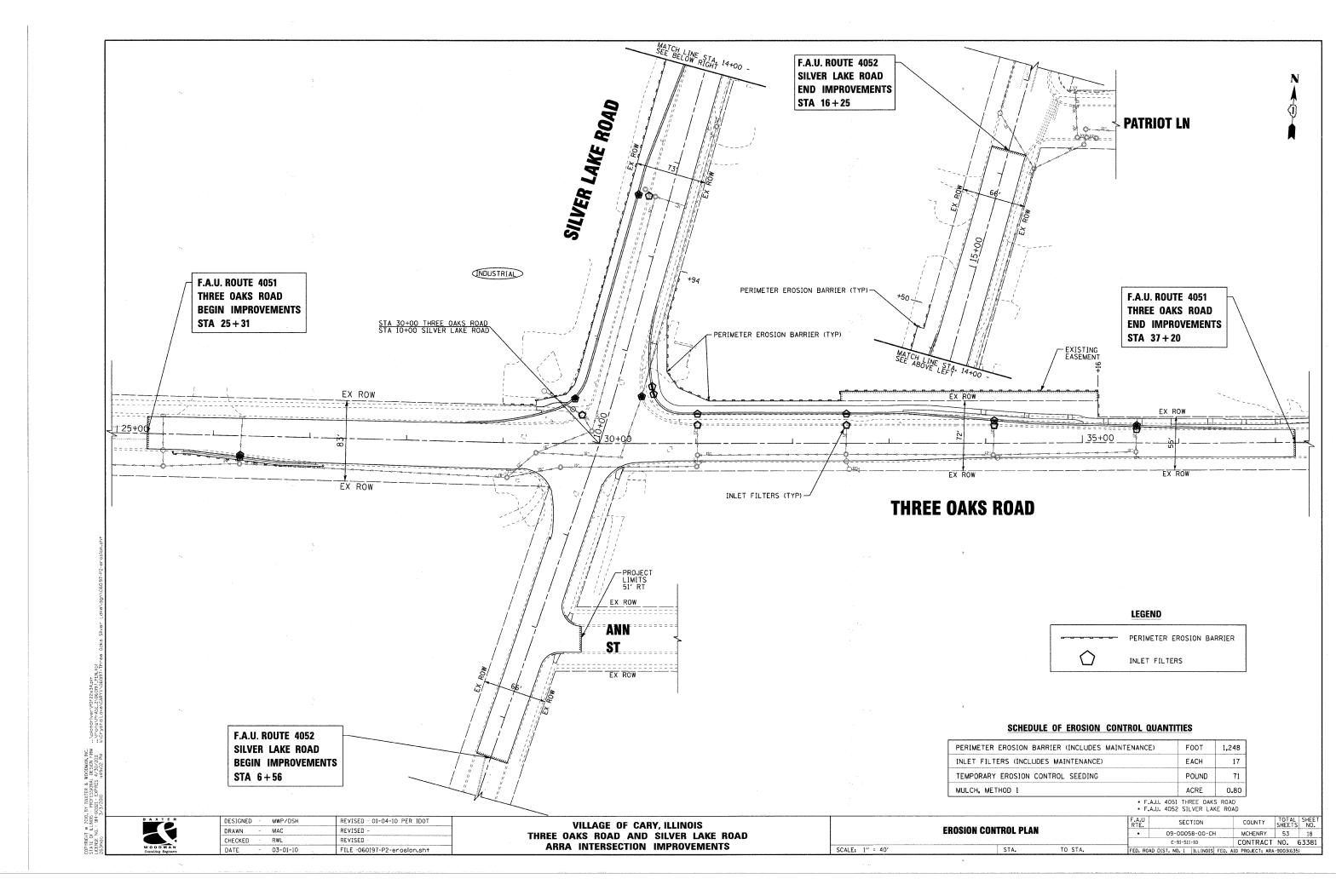
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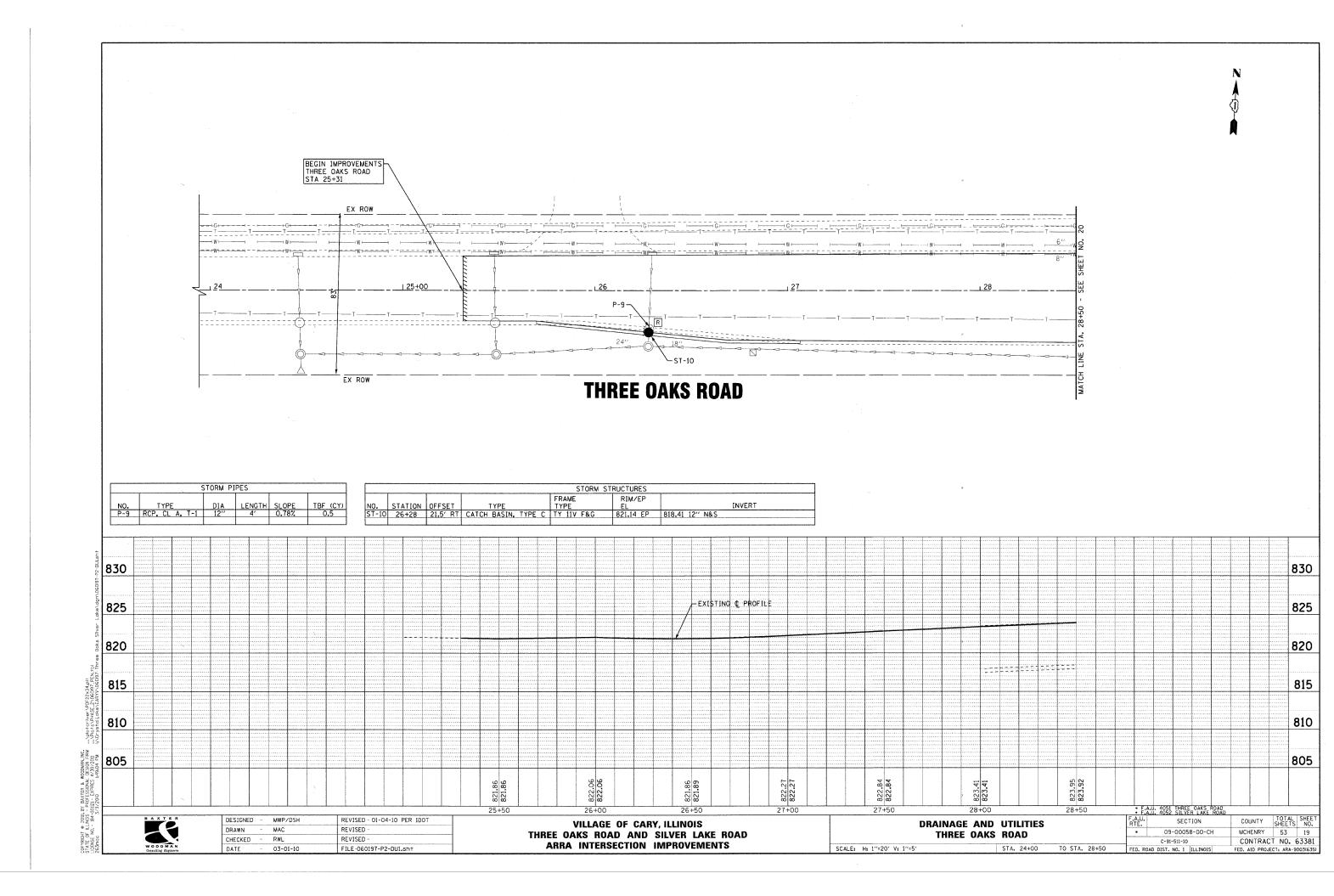
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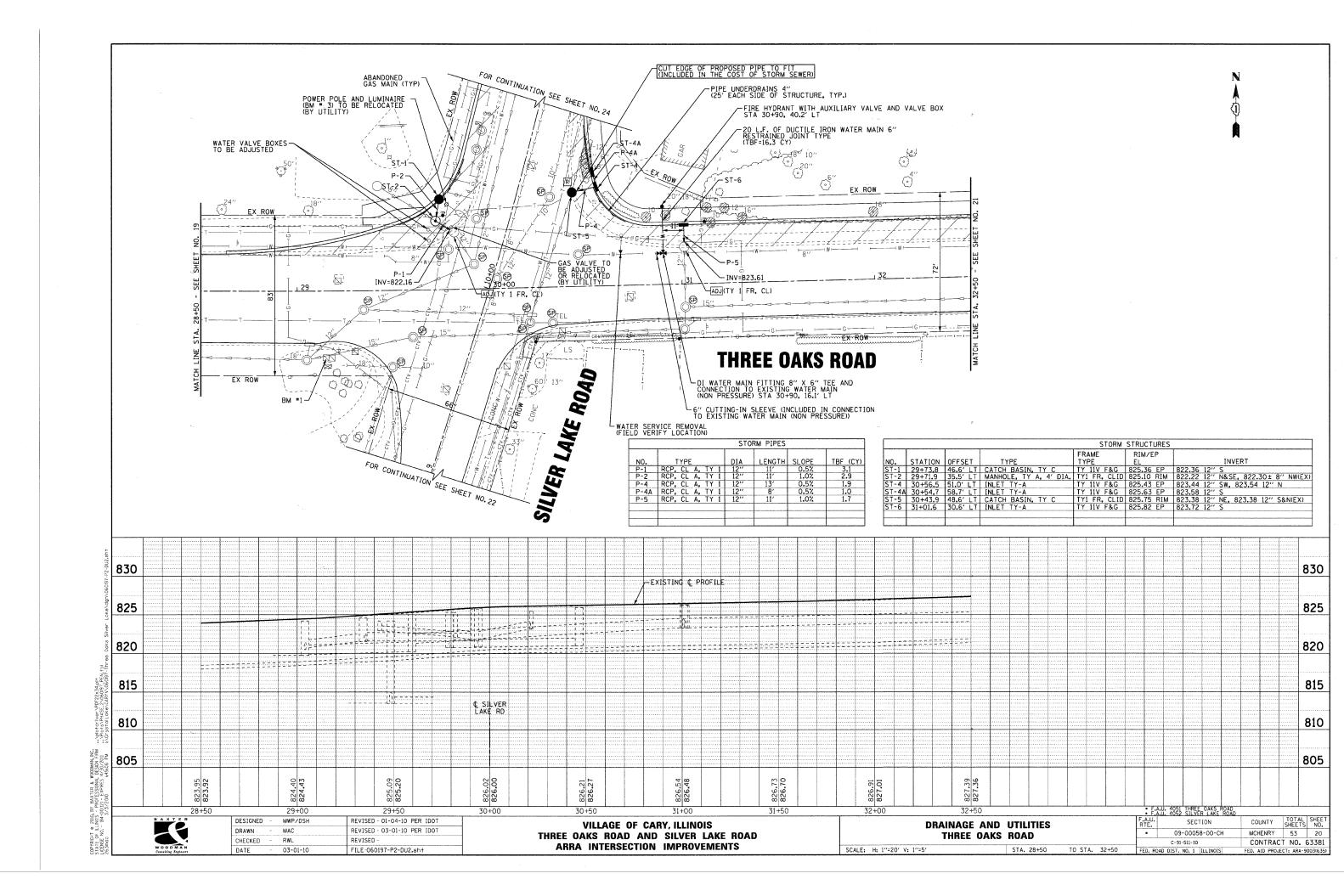
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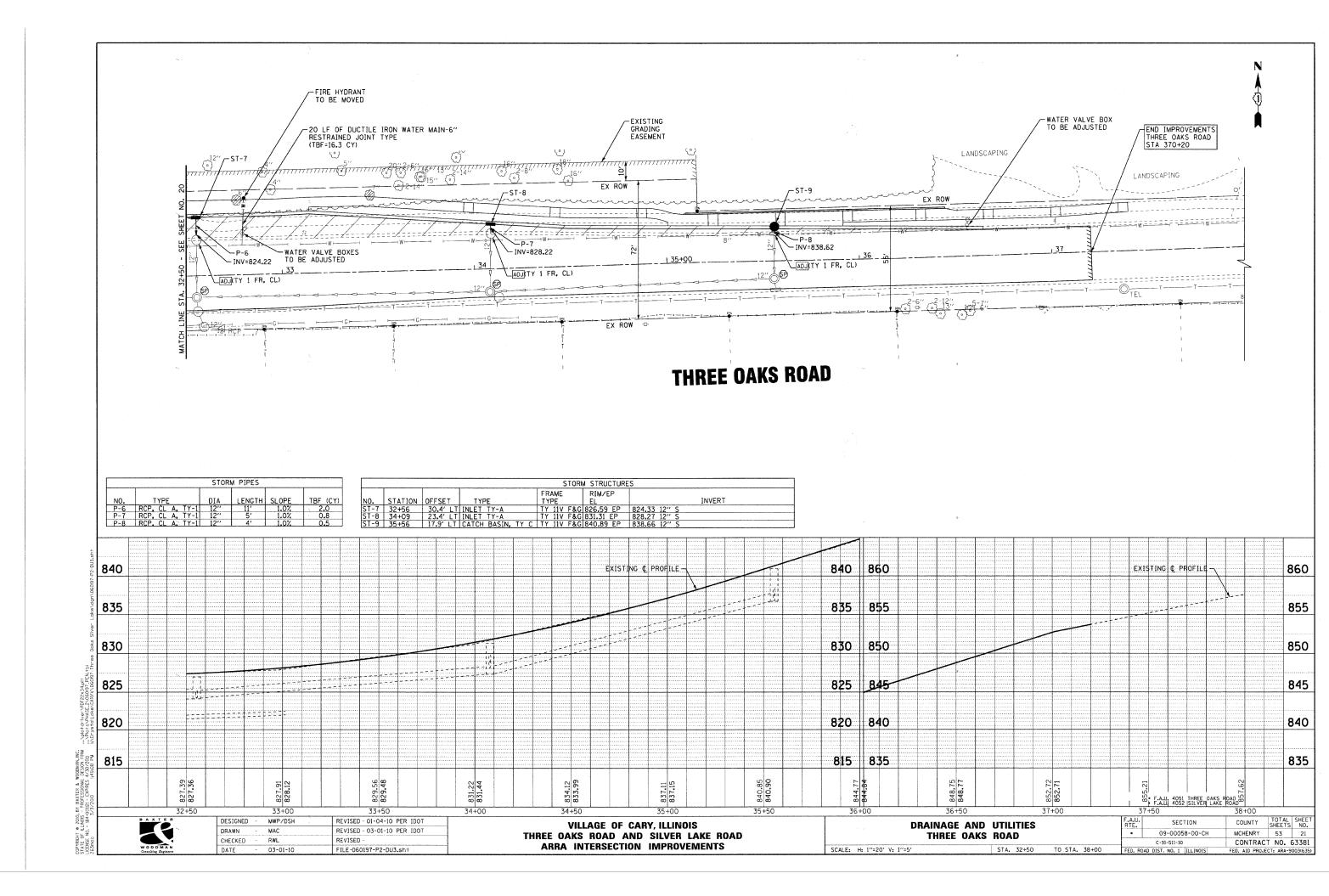
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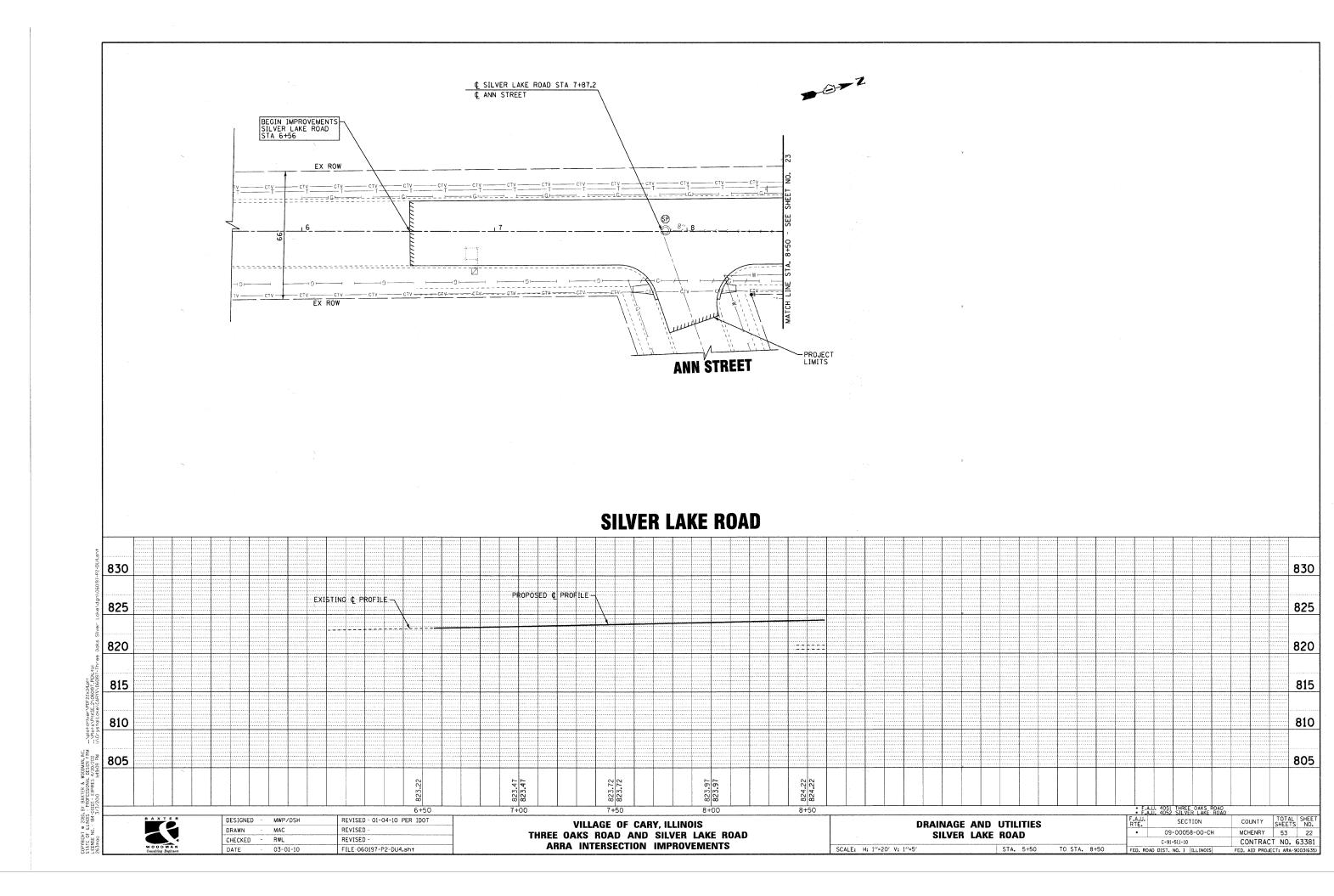
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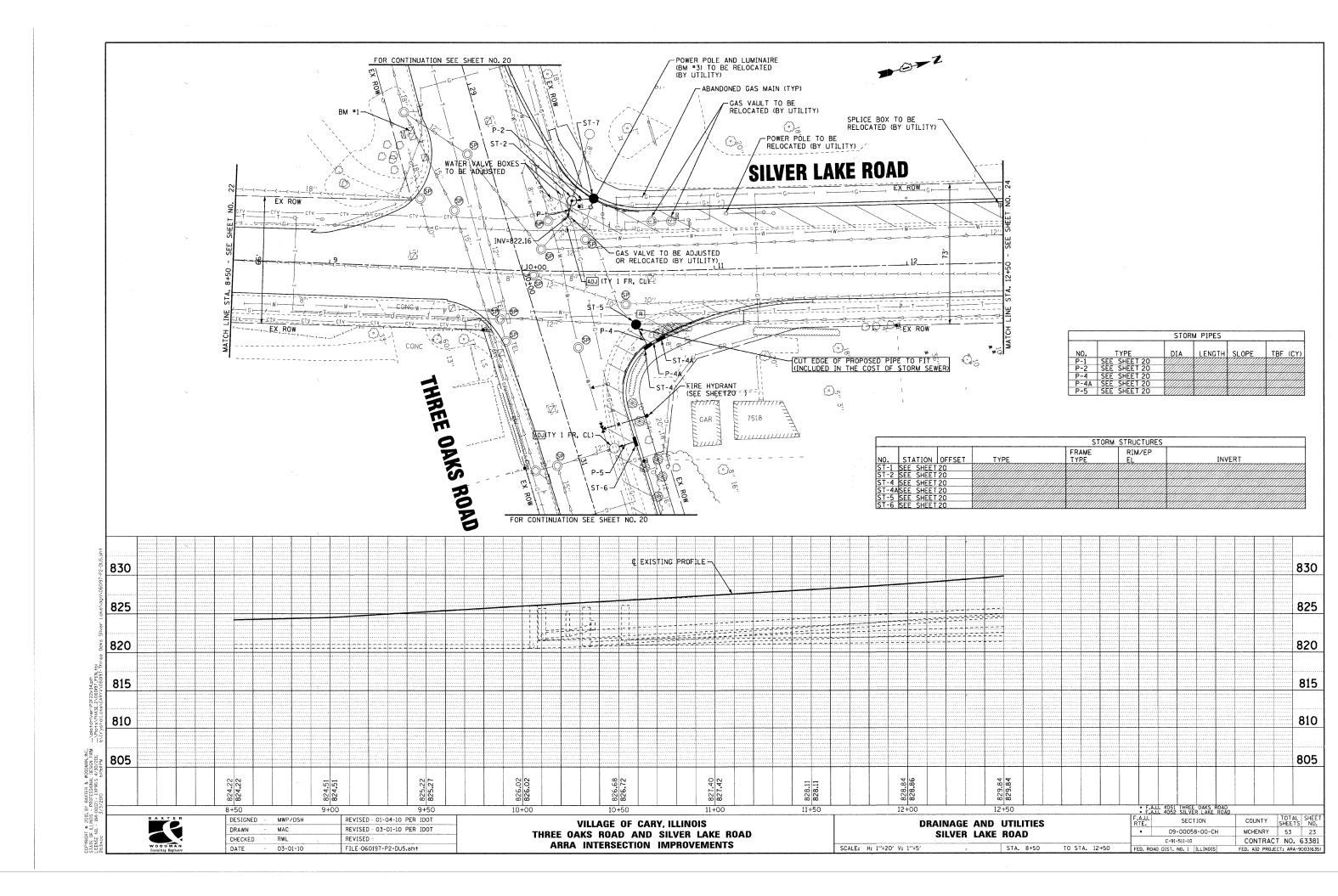


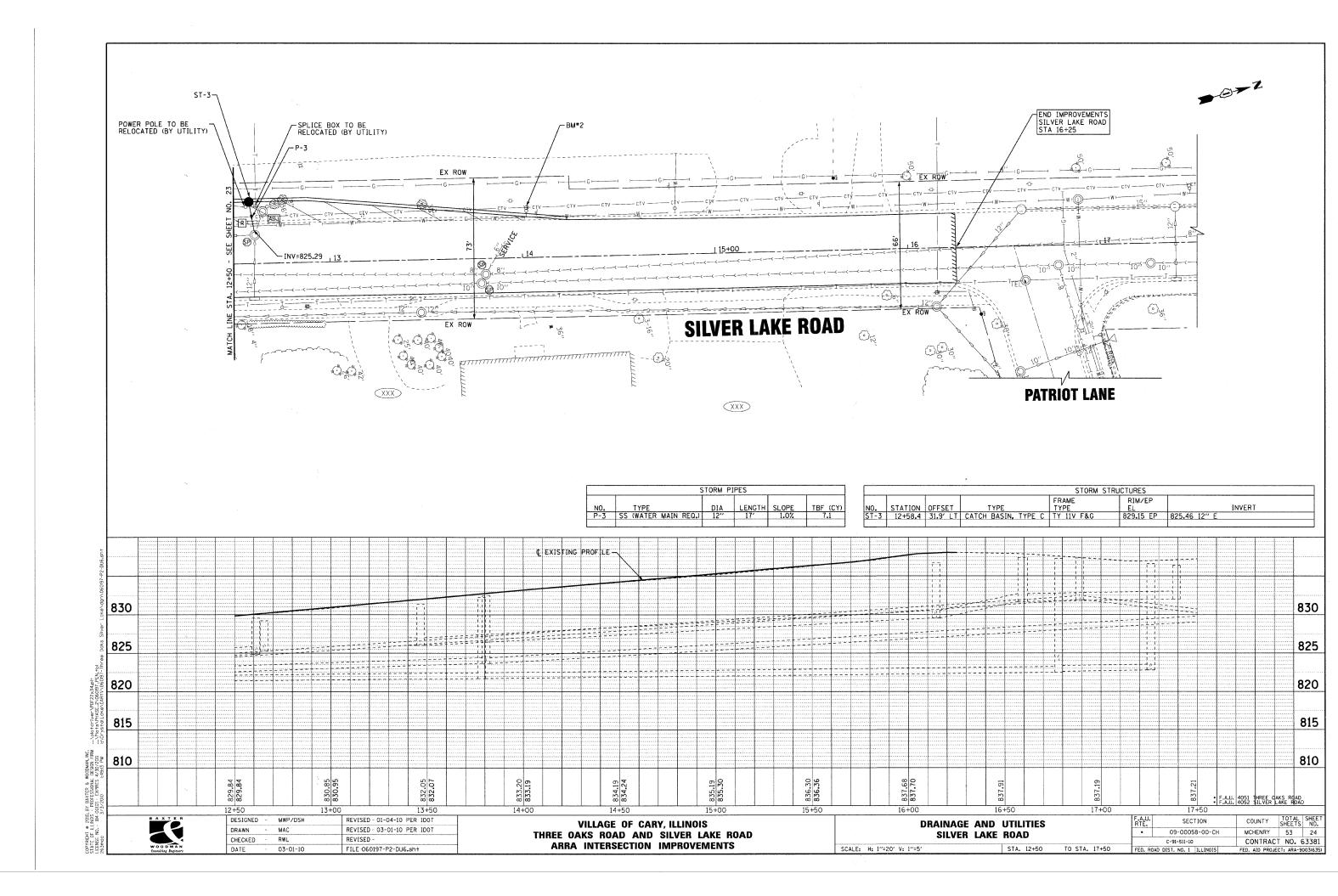


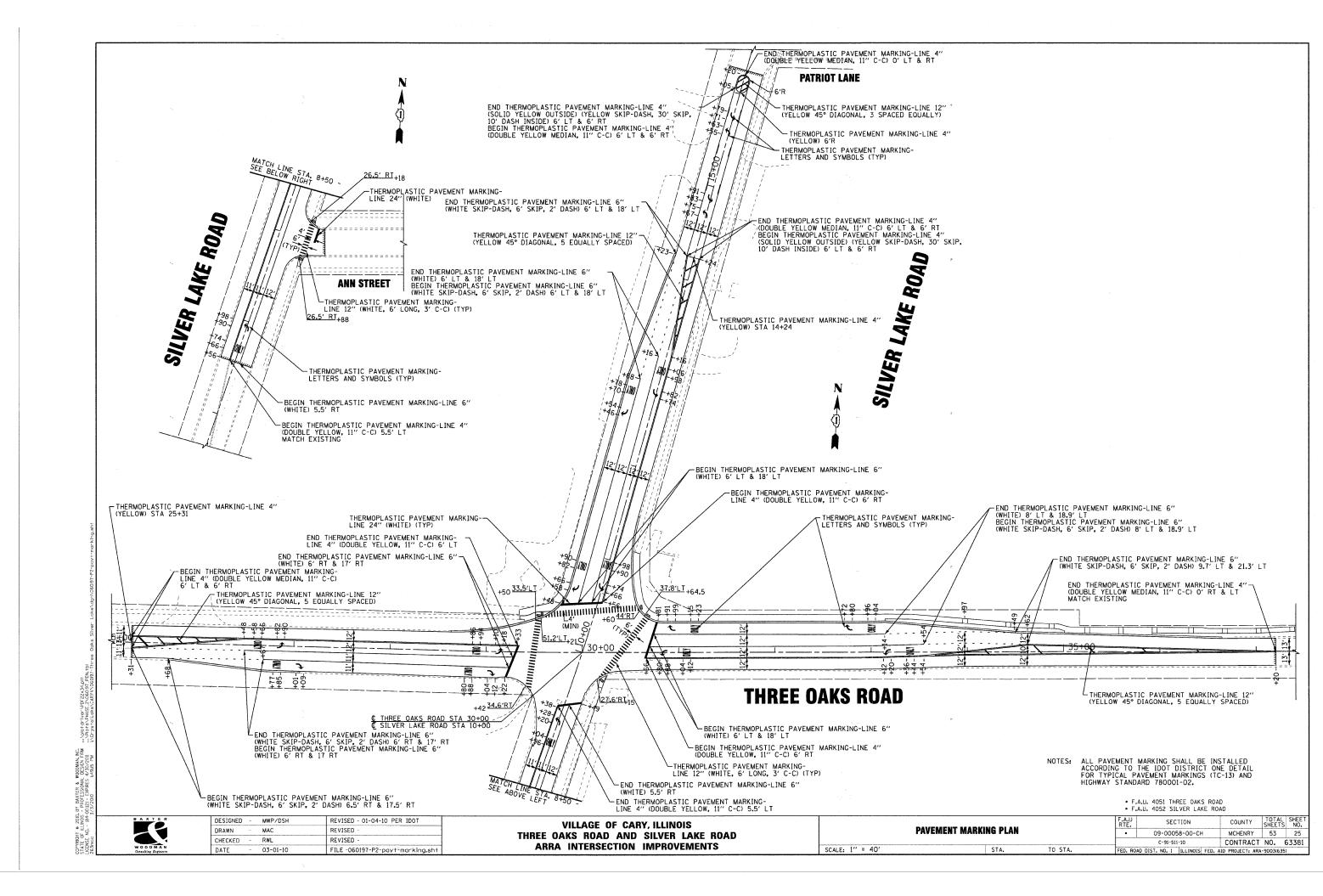








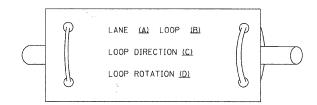




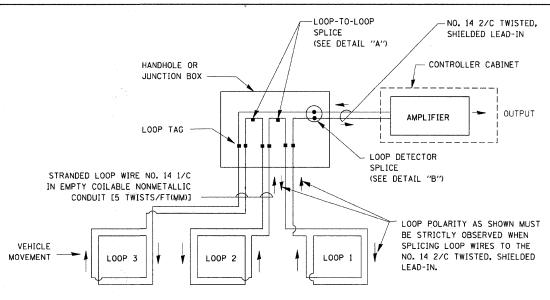
### LOOP DETECTOR NOTES

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

### LOOP LEAD-IN CABLE TAG

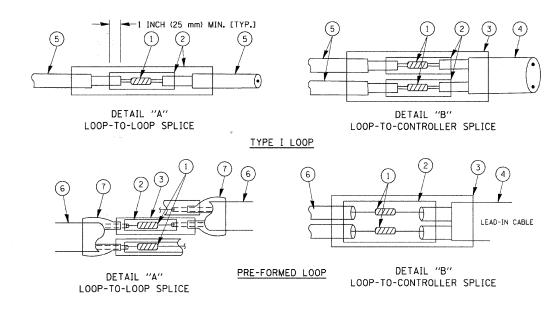


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



### DETECTOR LOOP WIRING SCHEMATIC

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



### LOOP DETECTOR SPLICE

- $\ensuremath{\bigcirc}$  Western union splice soldered with rosin core flux. All exposed surfaces of the solder shall be smooth.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

\*F.A.U. ROUTE 4051 THREE OAKS ROAD F.A.U. ROUTE 4052 SILVER LAKE ROAD PROJECT NO.: ARA-9003(635) JOB NO.: C-91-511-09

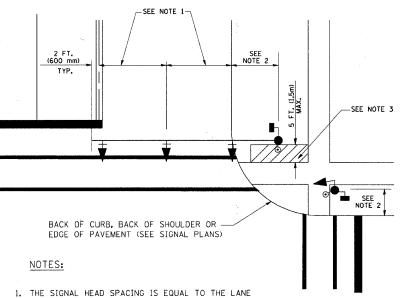
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



 THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.

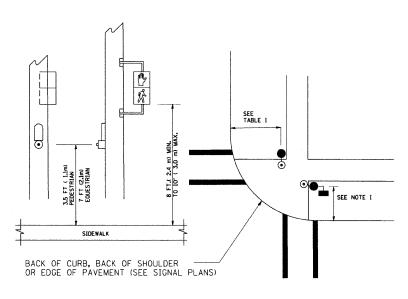
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.

3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT

SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.

- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK JO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

# PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



### NOTES:

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

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

### NOTES:

- L PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5,0 m) AND A MAXIMUM OF 18 FT. (5,5 m) FROM THE HIGHEST POINT OF PAVEMENT
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION
  OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

### TRAFFIC SIGNAL EQUIPMENT OFFSET

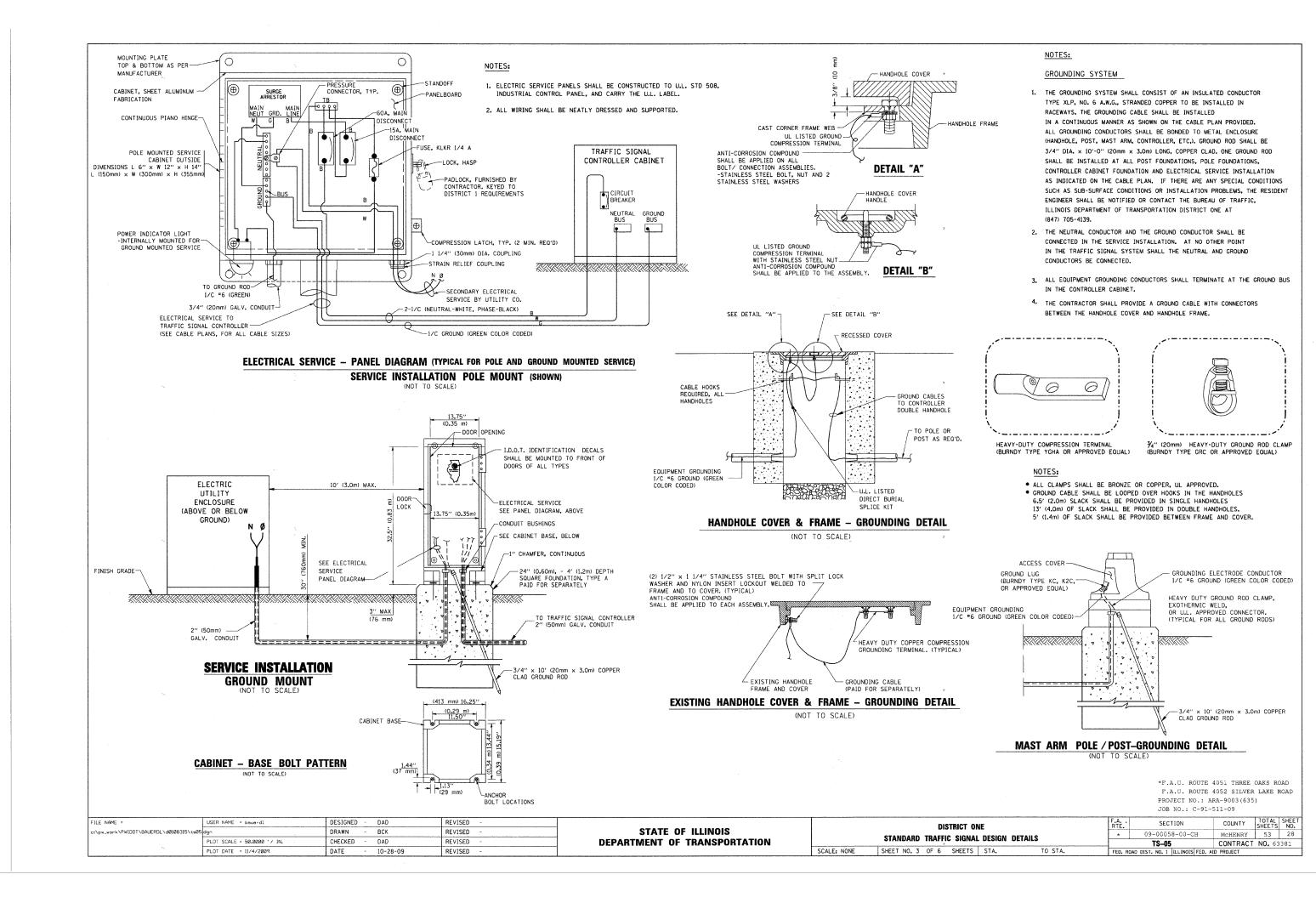
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

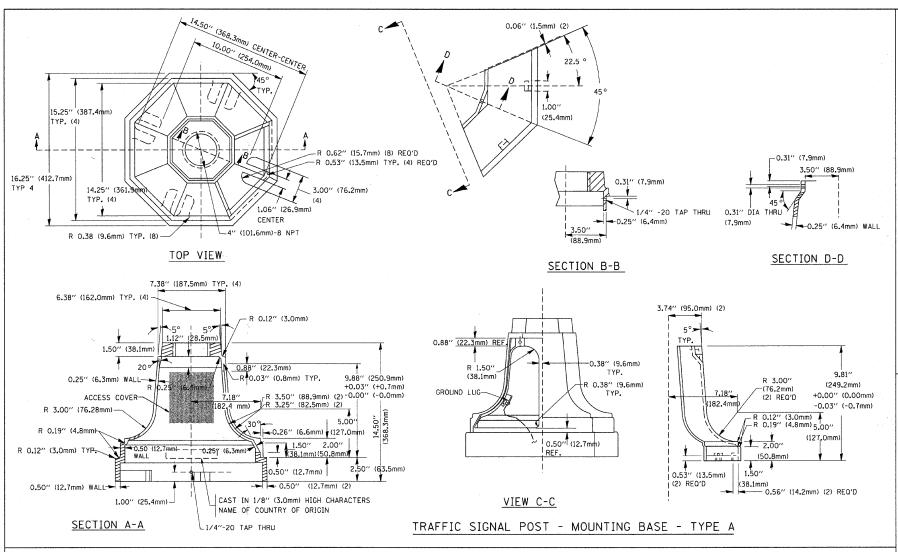
### NOTES:

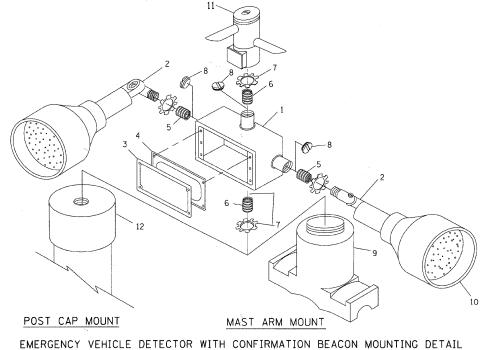
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS ARMS 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.

\*F.A.U. ROUTE 4051 THREE OAKS ROAD F.A.U. ROUTE 4052 SILVER LAKE ROAD PROJECT NO.: ARA-9003(635) JOB NO.: C-91-511-09

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	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 6 SHEETS STA. TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED.	. AID PROJECT	







PLOT SCALE = 50.0000 '/ IN.

PLOT DATE = 11/4/2009

FILE NAME =

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

### NOTES:

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

**DEPARTMENT OF TRANSPORTATION** 

### REVISED USER NAME = bauerd) DESIGNED ~ DAD \pw\_work\PWIDOT\BAUERDL\dØ1Ø8315\t=05 STATE OF ILLINOIS DRAWN BCK REVISED

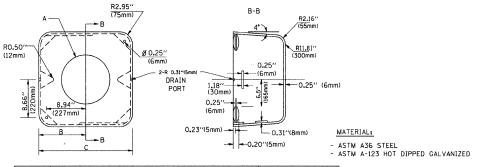
REVISED

REVISED

CHECKED - DAD

10-28-09

DATE

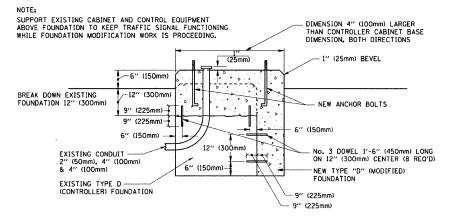


А	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) ~ 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

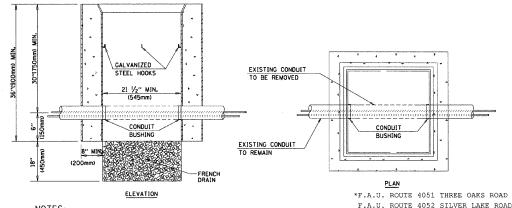
### SHROUD

### NOTES:

- 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.







### NOTES:

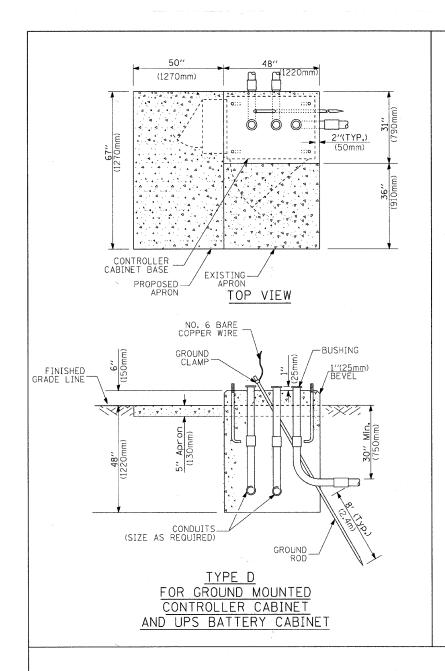
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

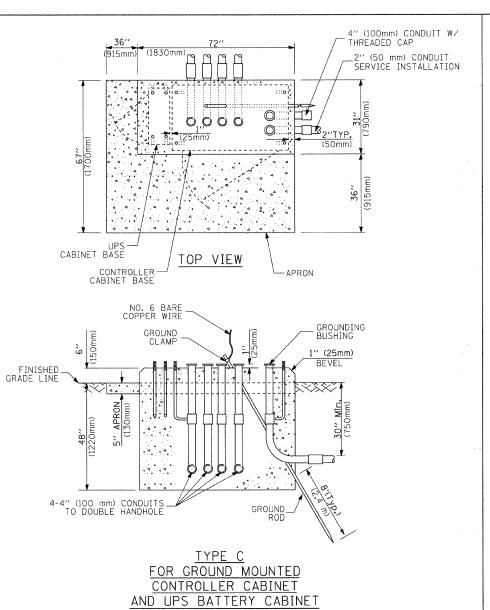
### HANDHOLE TO INTERCEPT EXISTING CONDUIT

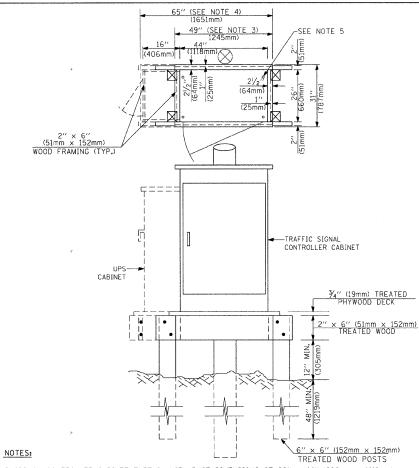
PROJECT NO.: ARA-9003(635)

JOB NO.: C-91-511-09

		DIS	TRICT ON	IE		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	STANDARD	TDACEI	CIGNAL	DECIGN	DETAILS	*	09-00058-00-CH	McHENRY	53	29
	SIANDAND	INAIRE	, SIGINAL	DESIGN	DETAILS		TS-05	CONTRACT	NO. 63	3381
SCALE: NONE	SHEET NO. 4	0F 6	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		







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

# TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

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

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

### VERTICAL CABLE LENGTH

CABLE SLACK

# LER CABINET, SERVICE-GROUND MOUNT) 3.0 1.0 DEPTH OF FOUNDATION

*F.A.	J. ROUTE	4051	THREE	OAKS	ROAD

F.A.U. ROUTE 4052 SILVER LAKE ROAD PROJECT NO.: ARA-9003(635) JOB NO.: C-91-511-09

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

### NOTES:

DEPTH

4'-0" (1.2m)

4'-0" (1.2m)

4'-0'' (1,2m)

4'-0" (1.2m)

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

## DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = bauerdl	DESIGNED - DAG	REVISED -		DISTRICT ONE	F.A. S	ECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\PWIDOT\BAUERDL\d0108315\ts05	dgn	DRAWN - BCK	REVISED ~	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	* 09-00	0058-00-CH	McHENRY	53 30
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		TS-	-05	CONTRACT	NO. 63381
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 5 OF 6 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	. 1 ILLINOIS FED.	AID PROJECT	

FOUNDATION

TYPE A - Signal Post

TYPE D - CONTROLLER

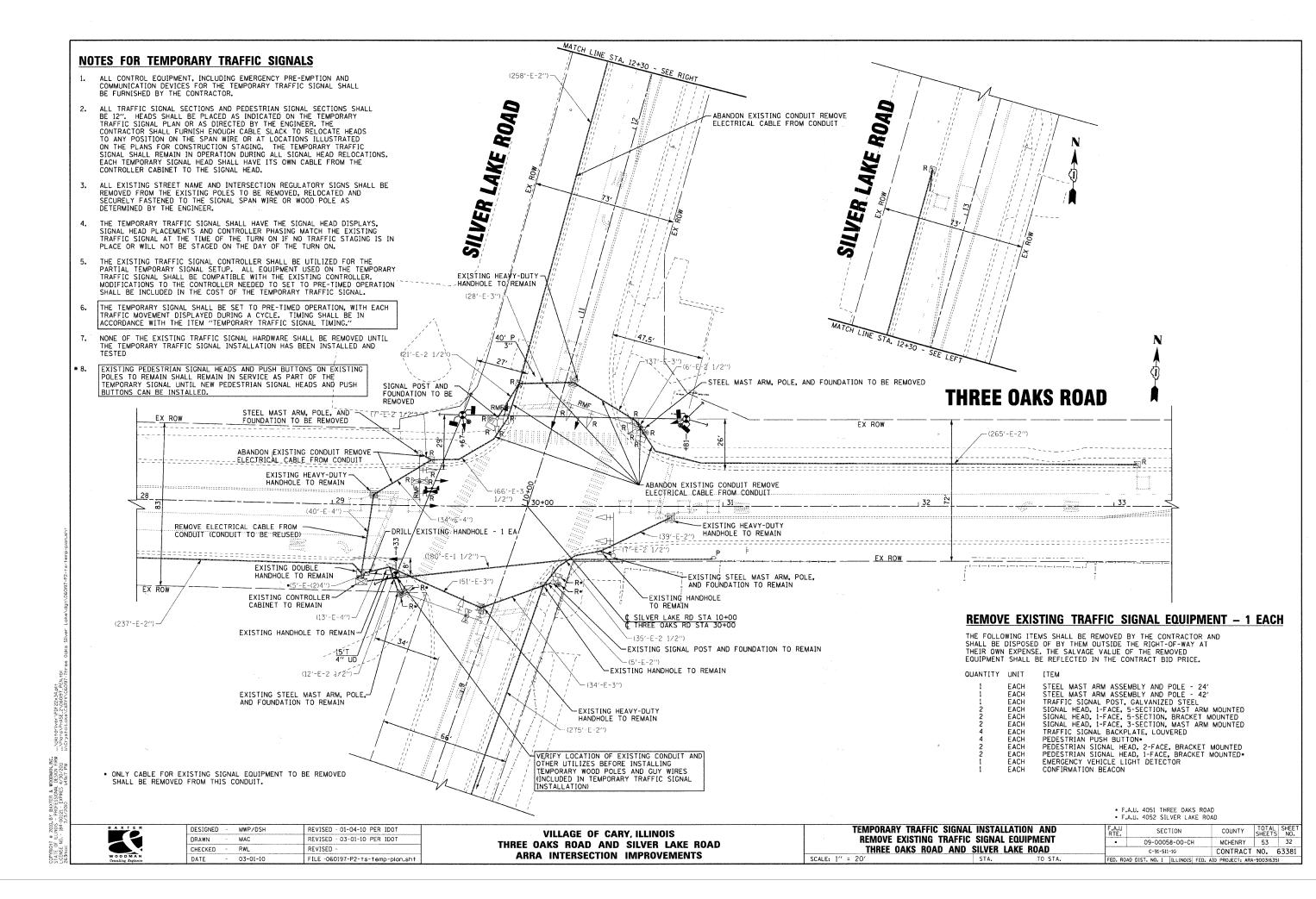
SERVICE INSTALLATION,

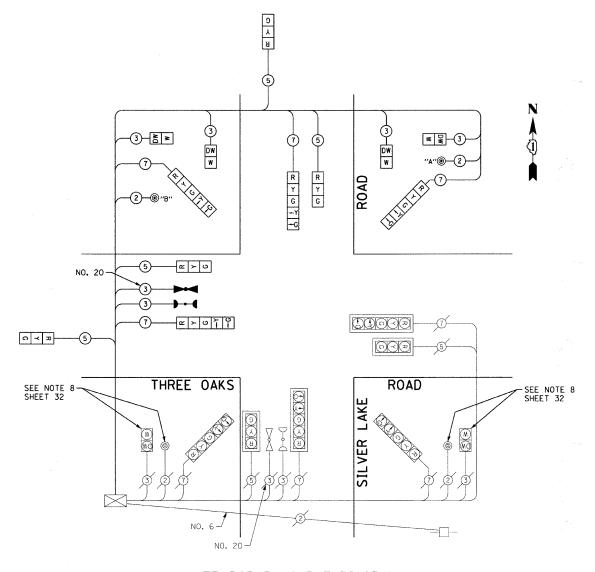
GROUND MOUNT, TYPE A - SQUARE

TYPE C - CONTROLLER W/ UPS

# TRAFFIC SIGNAL LEGEND

										• •		
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM		REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R R	$\bowtie$	$\blacksquare$	EMERGENCY VEHI	CLE LIGHT DETECTOR	R≪	$\bowtie$	◄ ′	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BE	EACON	R <sub>O-()</sub>	<b>○</b> —()	₩,			$\prec$	
COMMUNICATIONS CABINET	C C R	ECC	CC	HANDHOLE		R □			COAXIAL CABLE		<del>_</del> ©	<u> </u>
MASTER CONTROLLER		EMC	MC	·		_		P779	VENDOR CABLE FOR CAMERA		V	
MASTER MASTER CONTROLLER	, R	ЕММС	MMC	HEAVY DUTY HAN	DHOLE	R H	H	<b>(i)</b>	2			—(V)—
UNINTERRUPTIBLE POWER SUPPLY	UPS	EUPS	UPS	DOUBLE HANDHOL	E	^⊠ R @		<b>5</b>	COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	-□ <sup>R</sup>	-D-P	<del>-■</del> P	JUNCTION BOX  GALVANIZED STEE	EL CONDUIT		9		FIBER OPTIC CABLE NO. 62.5/125, MM12F		—(12F)—	
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R	P	P T	IN TRENCH (T) O			There were reported to the second		FIBER OPTIC CABLE		,	645
STEEL MAST ARM ASSEMBLY AND POLE	R.	_		TEMPORARY SPAN	WIRE, TETHER WIRE,			***************************************	NO. 62.5/125, MM12F SM12F		<del></del> (24F)	24F
ALUMINUM MAST ARM ASSEMBLY AND POLE	R.	0		COMMON TRÊNCH				СТ	FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE		<del>-</del>	
STEEL COMBINATION MAST ARM	R	0-10	•	COILABLE NONME	TALLIC CONDUIT (EMPTY)			CNC	NOTED ON PLANS)		)	
ASSEMBLY AND POLE WITH LUMINAIRE	"O-≭	0-0	<del></del>	SYSTEM ITEM			S	S	GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM,		C <sub>II</sub>	c'll—•
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	`Q [FTZ]]	PIZN	PIZ	INTERSECTION IT	ЕМ		I	ΙP	OR (S) SERVICE		"	,
SIGNAL POST	RO	0	•	REMOVE ITEM		R			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
TEMPORARY WOOD POLE (CLASS 5 OR	R⊗	⊗ ,,,	•	RELOCATE ITEM		RL				RMF		
BETTER) 45 FOOT (13.7m) MINIMUM	>R			ABANDON ITEM	EETO GIOLIA GEOTION	А			STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	O		
GUY WIRE	R	>	>_	12" (300mm) TRA	FFIC SIGNAL SECTION		R	R	ALUMINUM MAST ARM POLE AND	RMF		
SIGNAL HEAD			>		WITH 8" (200mm)		R	*** ****	FOUNDATION TO BE REMOVED			
SIGNAL HEAD CONSTRUCTION STAGES NUMBERS INDICATE THE CONSTRUCTION STAGE)				YELLOW AND GRE	EN TRAFFIC SIGNAL FACE		Ö	;	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND	RMF O→¤———		
SIGNAL HEAD WITH BACKPLATE	+CR	+	+-				R	R	FOUNDATION TO BE REMOVED			
SIGNAL HEAD OPTICALLY PROGRAMMED	-R -▷′′₽′′	—D''p''	- <b>▶</b> "P"	SIGNAL FACE			G	G ◆Y	SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	- R O	O√>″F″	<b>⊕→</b> "F"				••	<b>4</b> G	INTERSECTION & SAMPLING (SYSTEM) DETECTOR		[IS]	IS
PEDESTRIAN SIGNAL HEAD	R -□	-0	-1				R	R	SAMPLING (SYSTEM) DETECTOR		S	S
PEDESTRIAN PUSHBUTTON DETECTOR	R ((i)	<b>©</b>	<b>©</b>	SIGNAL FACE WIT	TH BACKPLATE. ROGRAMMED HEAD		(Y)	G T	EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETEC	TOR	[P]	
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	@ APS	⊚APS	APS					₫G	EXISTING PREFORMED INTERSECTION LOOP DETECTOR		1=1	
ILLUMINATED SIGN "NO LEFT TURN"	R S		•	12" (300mm) PED	ESTRIAN SIGNAL HEAD			"P"	PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETEC	TOR	PP	
ILLUMINATED SIGN	R_			WALK/DON'T WAL			(W)		PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
"NO RIGHT TURN"			<b>®</b>	ł .	ESTRIAN SIGNAL HEAD SYMBOL, OUTLINED				PREFORMED SAMPLING (SYSTEM) DETECTOR		[PS]	PS
DETECTOR LOOP, TYPE I	5							(Tain)	y	And Manufactures (AMA) And And And Commence of Commence		
PREFORMED DETECTOR LOOP		P	Р	12" (300mm) PED INTERNATIONAL S	ESTRIAN SIGNAL HEAD SYMBOL, SOLID			*	RAILROAD	SYMB	OLS	
MICROWAVE VEHICLE SENSOR	R M	M	M	PEDESTRIAN SIGN SYMBOL, WITH CO	NAL HEAD, INTERNATIONAL DUNTDOWN TIMER		C C D	<b>₽</b> C			EXISTING	PROPOSED
VIDEO DETECTION CAMERA	R V∑	$[\widehat{\mathbb{V}}]$	$\bigcirc$	RADIO INTERCONI	NECT	-   R	###	<del>   </del>	RAILROAD CONTROL CABINET		₽ P	
VIDEO DETECTION ZONE				DADIO MESS. ***				<u> </u>	RAILROAD CANTILEVER MAST ARM		XOX X	XeX X X
DAN TILT TOOM CANEDA	R			RADIO REPEATER		R ERR	ERR	RR	FLASHING SIGNAL		<del>XoX</del>	<b>X</b> ⊙ <b>X</b>
PAN, TILT, ZOOM CAMERA		PIZI	PZIII	CABLE NO. 14, U	OF CONDUCTORS, ELECTRIC NLESS NOTED OTHERWISE,		-5-		CROSSING GATE		<del>\</del>	<del>X0</del> <b>X</b> -
WIRELESS DETECTOR SENSOR	RW R		W	GROUND CABLE I	OOP CABLE TO BE SHIELDED  N CONDUIT		$\prec$		*F.A.U. ROUTE 4051 THREE CROSSBUCK F.A.U. ROUTE 4052 SILVE	R LAKE ROAD	<u> </u>	*
WIRELESS ACCESS POINT				NO. 6 SOLID COF			0	(1)	PROJECT NO.: ARA-9003(63 JOB NO.: C-91-511-09			
USER NAME		DESIGNED - DAG/BCK DRAWN - BCK	REVISED -	-	STATE	OF ILLINOIS	S		DISTRICT ONE	F.A. RTE.	SECTION 09-00058-00-CH	COUNTY TOTAL SHEETS IN MICHENRY 53
PLOT SCALE = 50.0000 '/	IN.	CHECKED - DAD	REVISED -	-	DEPARTMENT				STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT NO. 6338
PLOT DATE = 11/4/2009		DATE - 10-28-09	REVISED -	-				SCALE: NO	NE SHEET NO. 6 OF 6 SHEETS STA. TO STA.	FED.	ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT

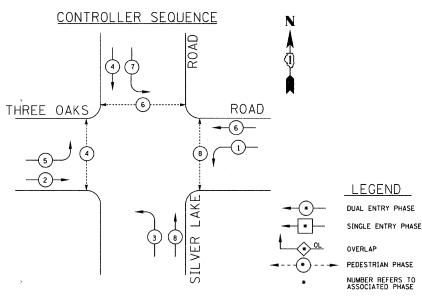






### PEDESTRIAN PUSH BUTTON NOTES:

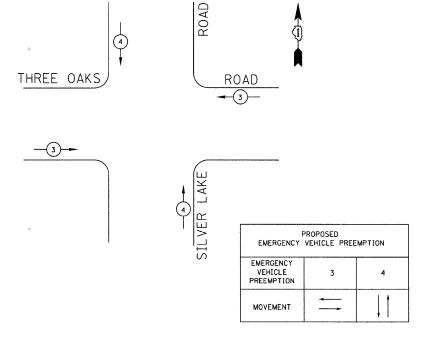
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 6 AND 8. PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.



## TEMPORARY PHASE DESIGNATION DIAGRAM

NOTE: SIGNAL SHALL BE SET TO PRE-TIMED OPERATION.

# TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD



I.D.O.T TRAFFIC SIGNAL INSTALLATION

ELECTRICAL SERVICE REQUIREMENTS

WATTAGE INCAND. LED

MWP/DSH REVISED - 01-04-10 PER IDOT DESIGNED DRAWN MAC REVISED - 03-01-10 PER IDOT RWL REVISED CHECKED DATE 03-01-10 FILE -060197-P2-ts-temp-cable.sh

WATTAGE

2746

TOTAL =

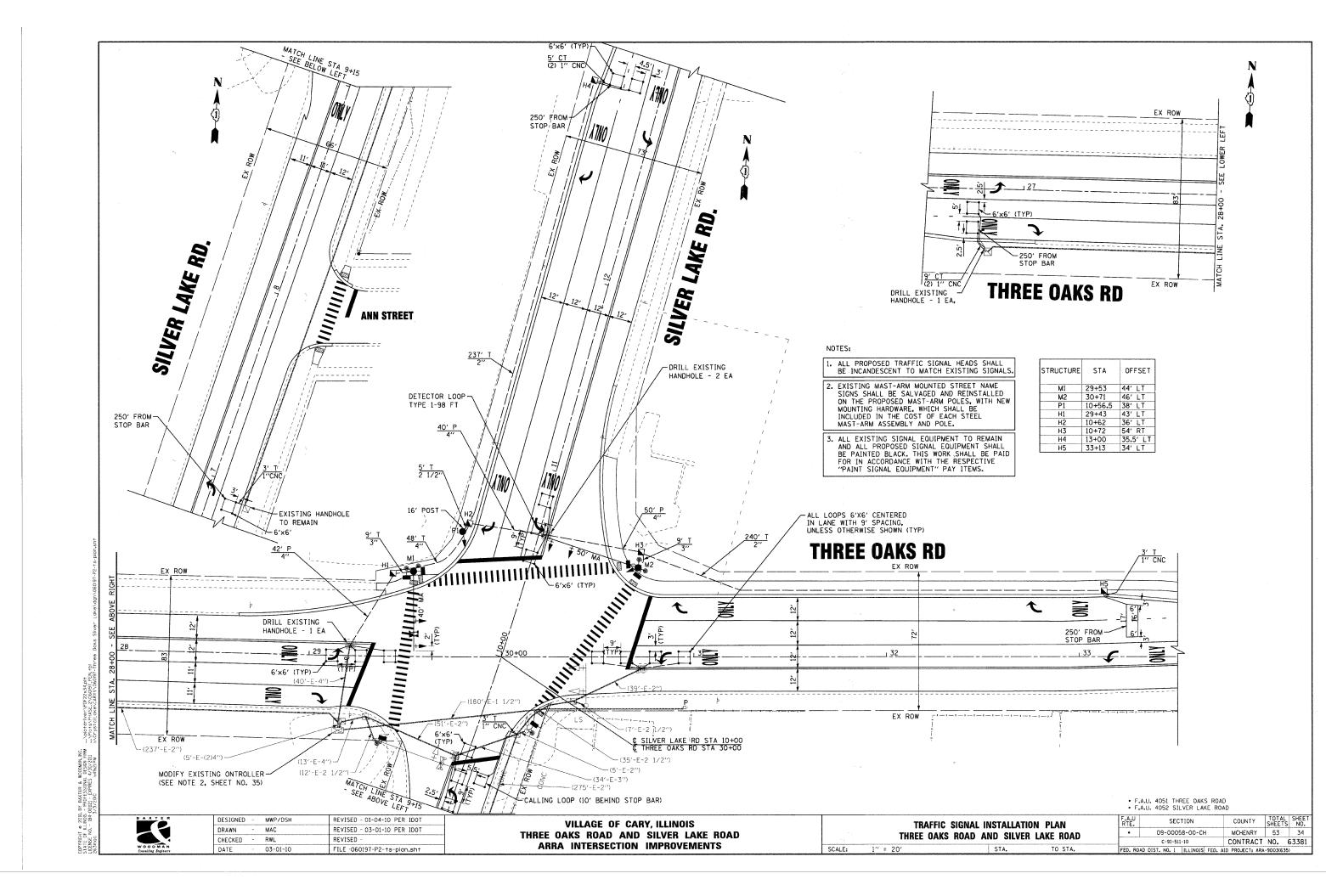
VILLAGE OF CARY, ILLINOIS THREE OAKS ROAD AND SILVER LAKE ROAD ARRA INTERSECTION IMPROVEMENTS

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM THREE OAKS ROAD AND SILVER LAKE ROAD

COUNTY TOTAL SHEETS NO.
MCHENRY 53 33 SECTION 09-00058-00-CH C-91-511-10 CONTRACT NO. 63381

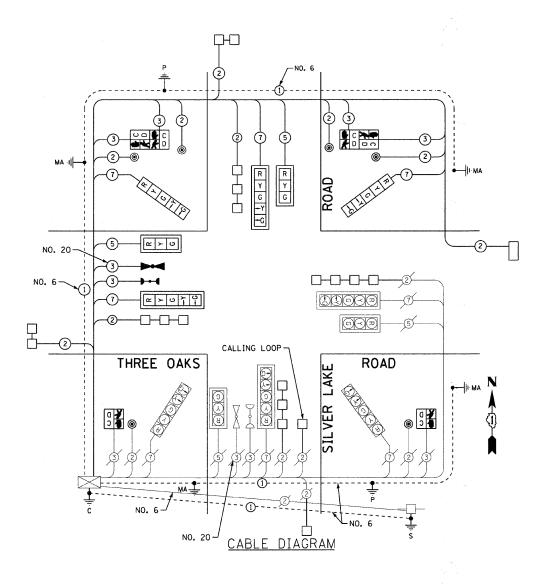
ENERGY COSTS TO:

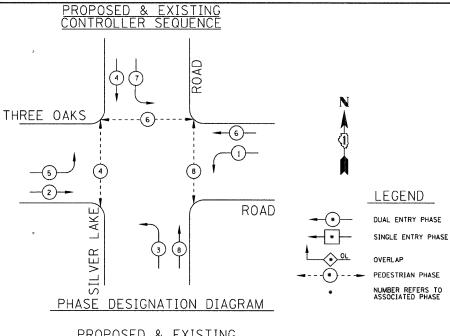
VILLAGE OF CARY
655 VILLAGE HALL DRIVE
CARY, ILLINOIS 60013-2599 ENERGY SUPPLY CONTACT: MIKE LENOX
PHONE: (815) 490-2869



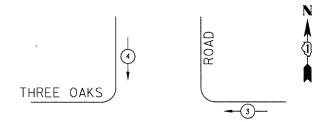
### SCHEDULE OF QUANTITIES

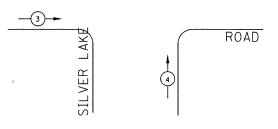
PAY JIEM  CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL HANDHOLE TRENCH AND BACKFILL FOR ELECTRICAL WORK PAINT EXISTING TRAFFIC SIGNAL EQUIPMENT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 15 PAIR ELECTRIC PAIR ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 15 PAIR ELECTRIC	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	477
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	5
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	18
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	48
CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL	FOOT	132
HANDHOLE	EACH	5
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	500
PAINT EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	865
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,077
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	523
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,043
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,225
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	. 1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 36" DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED. 2-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
WITH COUNTDOWN TIMER TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM DETECTOR LOOP, TYPE 1 LIGHT DETECTOR PEDESTRIAN PUSH-BUTTON TEMPORARY TRAFFIC SIGNAL INSTALLATION MODIFY EXISTING CONTROLLER REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVE EXISTING CONRETE FOUNDATION PAINT NEW TRAFFIC SIGNAL POST PAINT NEW MAST ARM POLE, 40 FEET AND OVER TEMPORARY TRAFFIC SIGNAL TIMING GROUNDING EXISTING HANDHOLE FRAME AND COVER ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 10	FOOT	719
LIGHT DETECTOR	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	6
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER	EACH	Ĩ
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4.539
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONRETE FOUNDATION	EACH	3
PAINT NEW TRAFFIC SIGNAL POST	EACH	1
PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	2
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	10
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1,800
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED SHIELDED	FOOT	184





PROPOSED & EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE





- THE PRIORITY CONTROL SYSTEM EQUIPMENT SHALL MATCH THE EXISTING EQUIPMENT TYPE.
- 2. THE EXISTING CONTROLLER WILL NEED TO BE MODIFIED TO ACCOMMODATE TWO ADDITIONAL PROPOSED PEDESTRIAN PUSH BUTTONS AND SHALL BE PAID FOR AS MODIFY EXISTING CONTROLLER.
- 3. EXISTING MAST ARM MOUNTED STREET NAME SIGNS SHALL BE SALVAGED AND REINSTALLED WITH NEW MOUNTING HARDWARE ON THE PROPOSED MAST ARMS, INCLUDED IN EACH STEEL MAST ARM ASSEMBLY AND POLE.

PROPOSED EMERGENCY VEHICLE PREEMPTION			
EMERGENCY VEHICLE PREEMPTION	3	4	
MOVEMENT		ļ †	

\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD



MWP/DSH REVISED - 01-04-10 PER IDOT DRAWN MAC REVISED - 03-01-10 PER IDOT CHECKED RWL REVISED DATE 03-01-10 FILE -060197-P2-ts-cable.sht

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM THREE OAKS ROAD AND SILVER LAKE ROAD SCALE: NONE

COUNTY TOTAL SHEET NO. MCHENRY 53 35 SECTION 09-00058-00-CH CONTRACT NO. 63381 C-91-511-10

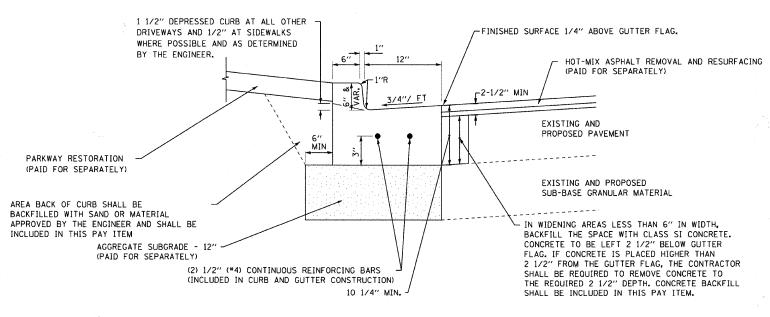
TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS TOTAL WATTAGE WATTAGE LASHER ENERGY COSTS TO:
VILLAGE OF CARY
655 VILLAGE HALL DRIVE
CARY, ILLINOIS 60013-2599 2086 TOTAL =

ENERGY SUPPLY CONTACT: MIKE LENOX
PHONE: (815) 490-2869
COMPANY: COM. ED.

**VILLAGE OF CARY, ILLINOIS** THREE OAKS ROAD AND SILVER LAKE ROAD ARRA INTERSECTION IMPROVEMENTS

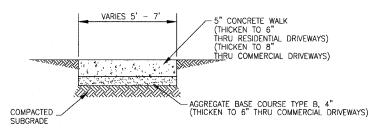
### **SEGMENTAL BLOCK RETAINING WALL DETAIL**

STA 35+10 TO STA 36+45 LT NO SCALE



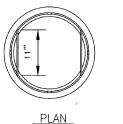
### **COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)**

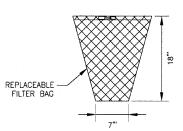
NO SCALE



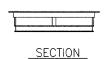
PROVIDE FIBER 3/4" EXPANSION JOINTS WHERE WHERE NEW SIDEWALK MEETS EXISTING AND @ 50' O.C. MAX. AND PROVIDE CONTROL JOINTS @ 5' O.C.

### PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH





GENERAL NOTES:



SCALE: NONE

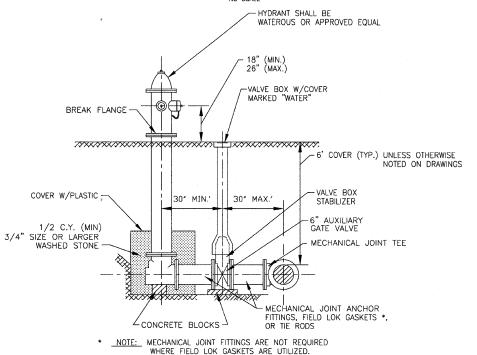
FRAME: TOP RING CONSTRUCTED FROM 1 1/4" x 1 1/4" x 1/8" ANGLE.

BASE RING CONSTRUCTED OF 1 1/2" x 1/2" x 1/8" CHANNEL. HANDLES
& SUSPENSION BRACKETS CONSTRUCTED FROM 1/4" x 1 1/4" FLAT.

ALL STEEL CONFORMING TO ASTM-A36.

REPLACEABLE BAG: CONSTRUCTED FROM 4 OZ./SQ. YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. CONNECTED TO BASE RING WITH STAINLESS STEEL STRAP & LOCK.

### **INLET FILTER**



### FIRE HYDRANT INSTALLATION

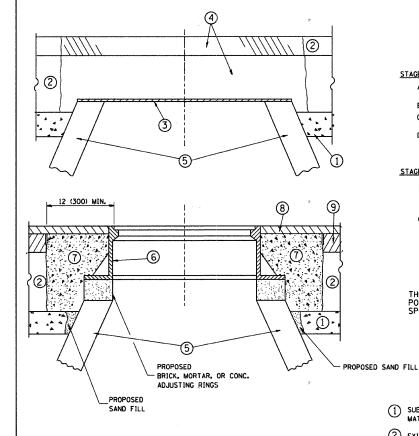
• F.A.U. 4051 THREE OAKS ROAD • F.A.U. 4052 SILVER LAKE ROAD

TOTAL SHEE NO.

MWP/DSH REVISED - 01-04-10 PER IDOT DESIGNED REVISED - 03-17-10 PER IDOT DRAWN MAC CHECKED RWL REVISED 03-01-10 FILE -060197-P2-MIS-DETAILS.sht

VILLAGE OF CARY, ILLINOIS THREE OAKS ROAD AND SILVER LAKE ROAD ARRA INTERSECTION IMPROVEMENTS

SECTION COUNTY **MISCELLANEOUS DETAILS** MCHENRY 53 36 09-00058-00-CH CONTRACT NO. 63381 C-91-511-10 STA. TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT: ARA-9003(635)



- SUB-BASE GRANULAR
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- 5 EXISTING STRUCTURE
- 9 PROPOSED HIMA 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.

CONSTRUCTION PROCEDURES

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 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE. B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.

C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HWA SURFACE COURSE OR HWA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

LEGEND

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

STAGE 1 (BEFORE PAVEMENT MILLING)

STAGE 2 (AFTER PAVEMENT MILLING)

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

\* F.A.U. 4051 THREE OAKS ROAD

\* F.A.U. 4052 SILVER LAKE ROAD

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = USER NAME = gaglianobt DESIGNED - R. SHAH REVISED - R. SHAH 03-10-95 \diststd\22x34\bdØ8.dgn DRAWN REVISED - A. ABBAS 03-21-97 PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED - R. WIEDEMAN 05-14-04 PLOT DATE = 1/4/2008 DATE - 10-25-94 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

FRAMES AND LIDS ADJUSTMENT WITH MILLING SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

TOTAL SHEET NO. 53 37 DETAILS FOR 09-00058-00-CH MCHENRY BD600-03 (BD-8) CONTRACT NO. 63381

C-91-511-09

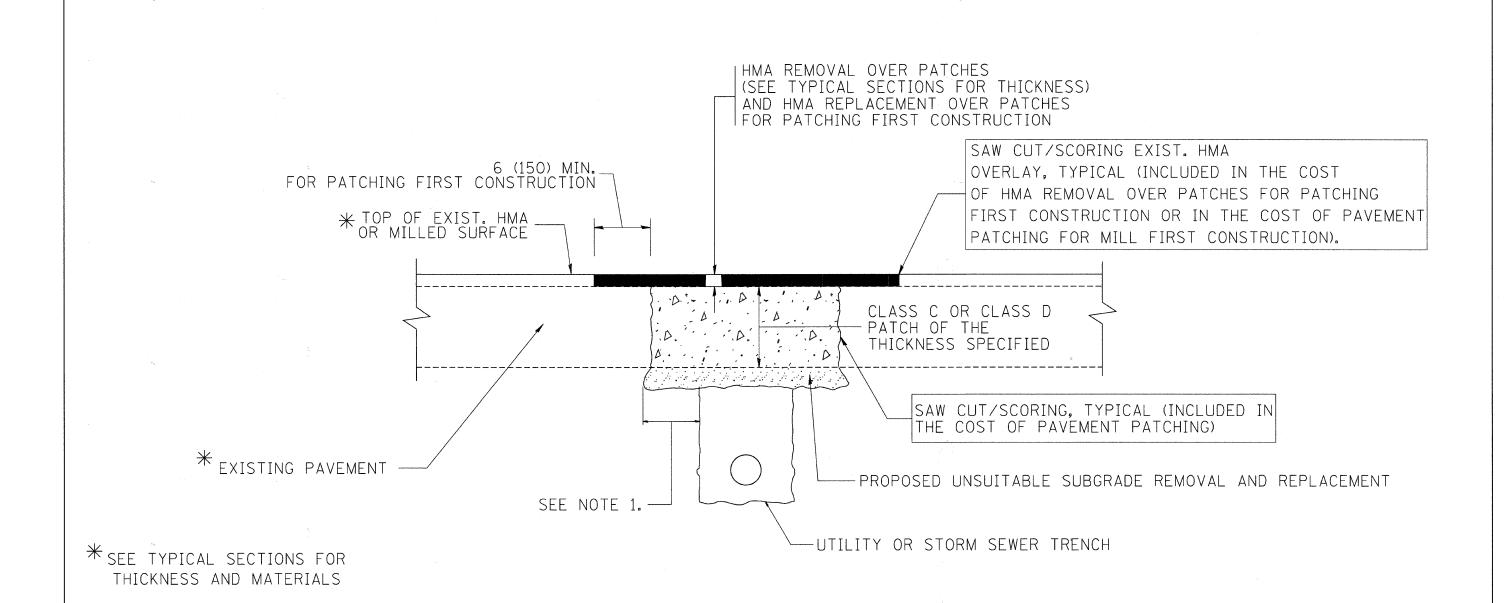
EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE REGINEER, REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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.



# NOTES:

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

# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

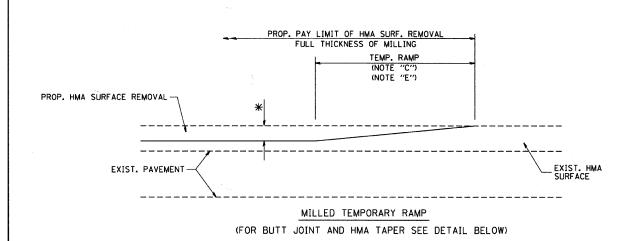
# SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

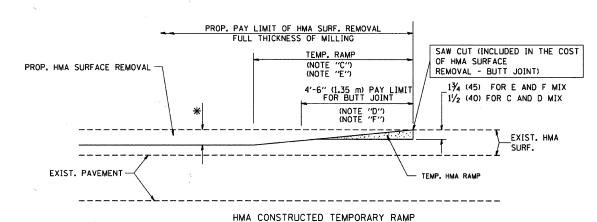
\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD

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

CT   Projects   DRAWN -   REVISED - R. BORO 01-01-07   STATE OF ILLINUIS	FILE NAME =	USER NAME = bauerdl	DESIGNED ~ R. SHAH	REVISED - A. ABBAS 04-27-98		5 60	PAVEMENT PATCHING FOR	F.A. SECTION	COUNTY TOTAL SHE
PLOT SCHEET OF THE CHECKED - R. BORO 09-04-07 DEPARTMENT OF TRANSPORTATION	c:\projects\diststd22x34\bd22.dgn	PLOT SCALE = 50.000 '/ IN. PLOT DATE = 10/27/2008	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS			* 09-00058-00-CF	MCHENRY 53 38
				REVISED - R. BORO 09-04-07 DEPARTI	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 63381
3CALES NONE SHEET NO. 1 OF 1 SHEET STA. 10 STA. FED. NO. 1   ILLINOIS   FED. NO. 1   ILLINOIS   FED. NO. 1   ILLINOIS   FED. NO. 1   ILLINOIS   FED. NO. 2   FED. NO. 3   FED.				REVISED - K. ENG 10-27-08	EVISED - K. ENG 10-27-08	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.		FED. AID PROJECT ARA-9003 (635)



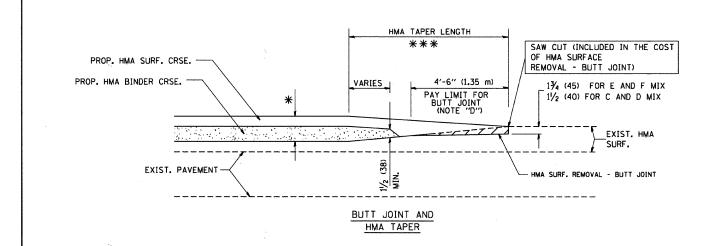
# OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

## OPTION 2

# TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

TAPER LENGTH \* \* \* VARIES PROP. HMA SURF. CRSE. -13/4 (45) FOR E AND F MIX PROP. HMA BINDER CRSE. 11/2 (40) FOR C AND D MIX \* \* EXIST. PAVEMENT HMA TAPER DETAIL

BUTT JOINT DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

PROP. HMA OR PCC

SURFACE REMOVAL - BUTT JOINT

30'-0" (9.0 m) (NOTE "A")

(NOTE "D")

15'-0" (4.5 m) (NOTE "B")

# NOTES

EXIST. HMA OR PCC SURFACE

\* \* EXIST. PAVEMENT

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

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

- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\* \* \* \* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

### BASIS OF PAYMENT:

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

\* F.A.U. 4052 SILVER LAKE ROAD ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

\* F.A.U. 4051 THREE OAKS ROAD

SAW CUT (INCLUDED IN THE COST

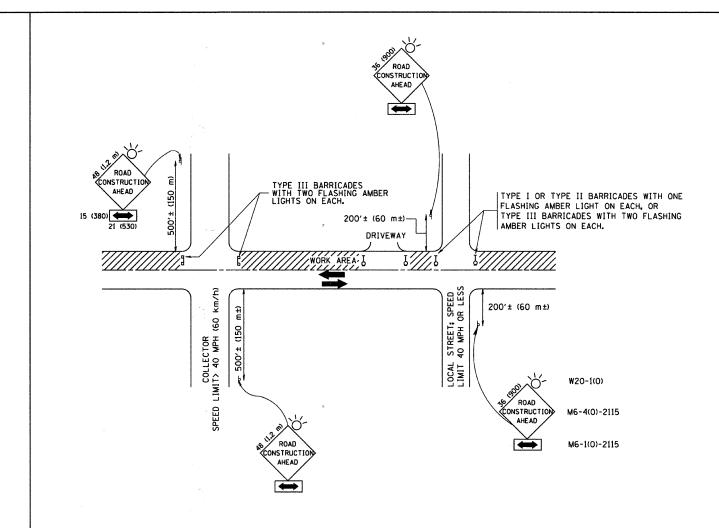
BUTT JOINT)

13/4 (45) FOR E AND F MIX 11/2 (40) FOR C AND D MIX

OF HMA OR P.C.C. SURFACE REMOVAL

COUNTY TOTAL SHEET NO. FILE NAME = USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 **BUTT JOINT AND** :\diststd\22x34\bd32.dgn DRAWN REVISED - A. ABBAS 03-21-97 STATE OF ILLINOIS 09-00058-00-CH MCHENRY 53 39 HMA TAPER DETAILS PLOT SCALE = 50.0000 '/ IN. CHECKED -REVISED - M. GOMEZ 04-06-01 **DEPARTMENT OF TRANSPORTATION** BD400-05 BD32 CONTRACT NO. 63381 - 06-13-90 SHEET NO. 1 OF 1 SHEETS STA. TO STA. PLOT DATE = 1/4/2008 DATE REVISED - R. BORO 01-01-07 SCALE: NONE

C-91-511-09



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

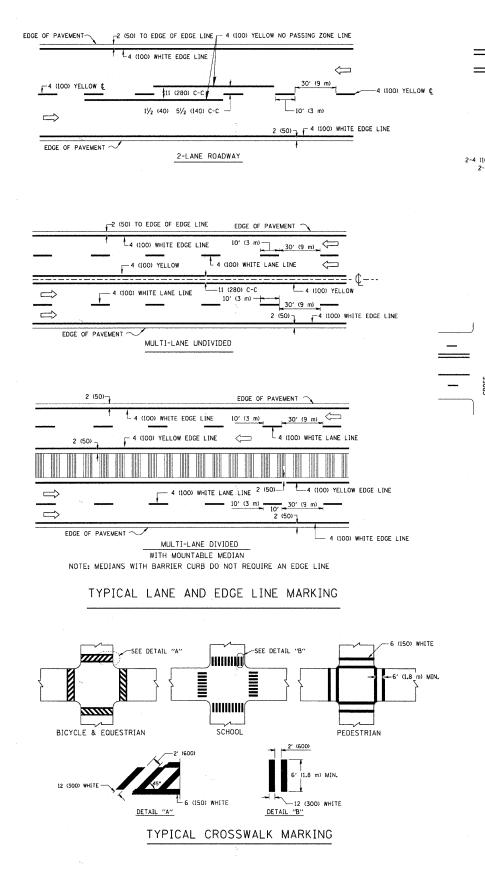
#### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

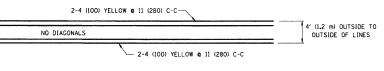
USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.
  - \* F.A.U. 4051 THREE OAKS ROAD
  - \* F.A.U. 4052 SILVER LAKE ROAD

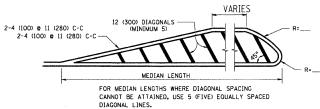
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95		TRAFFIC CONTROL AND PROTECTION FOR	F.A SECTION	COUNTY TOTAL SHEET NO.
W:\diststd\22x34\tc10.dgn	:	DRAWN -	REVISED - A. HOUSEH 03-06-96	STATE OF ILLINOIS		* 09-00058-00-CH	MCHENRY 53 40
14	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96	DEPARTMENT OF TRANSPORTATION	SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	TC-10	CONTRACT NO. 63381
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00	SC	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED.	AID PROJECT ARA-9003 (635)





#### 4' (1.2 m) WIDE MEDIANS ONLY

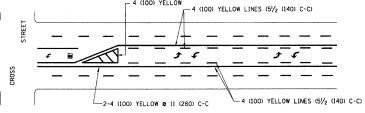


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

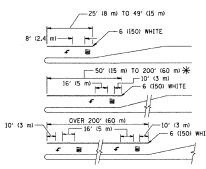


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

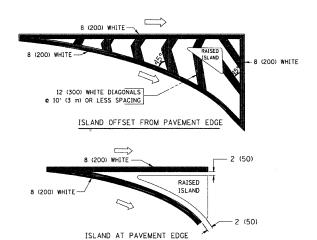


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup> )  $\P$  AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING



### TYPICAL ISLAND MARKING

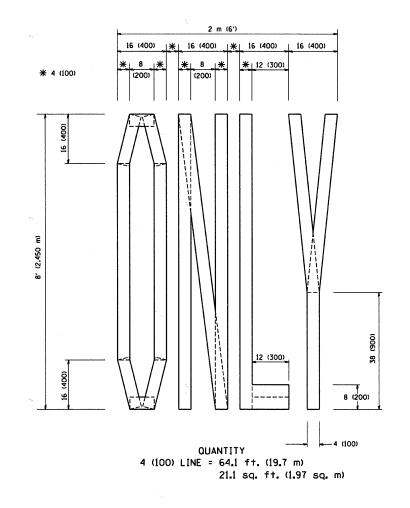
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 & 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 & 6 (150) 12 (300) & 45° 12 (300) & 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART 5' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS & 45°	SOLID	WHITE	DIACONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SO. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) & 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

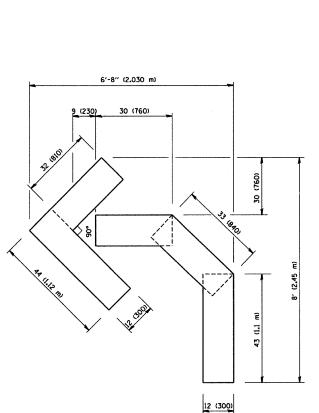
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

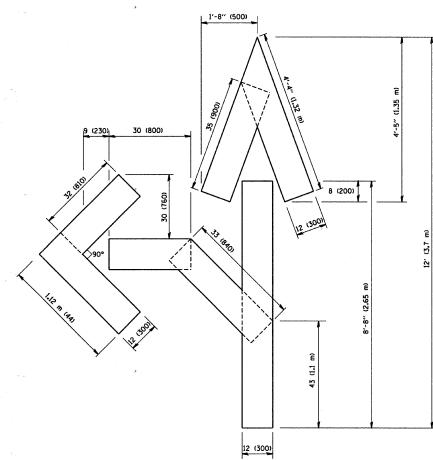
\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD

FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	F.A. SECTION	COUNTY TOTAL SHEET NO.
c:\pw_work\pwidot\drivakosgn\d0108315\to	3.dgn	DRAWN ~	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS	TYPICAL PAVEMENT MARKINGS	* 09-00058-00-CF	MCHENRY 53 41
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		TC-13	CONTRACT NO. 63381
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS	FED. AID PROJECT ARA-9003 (635)





OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD

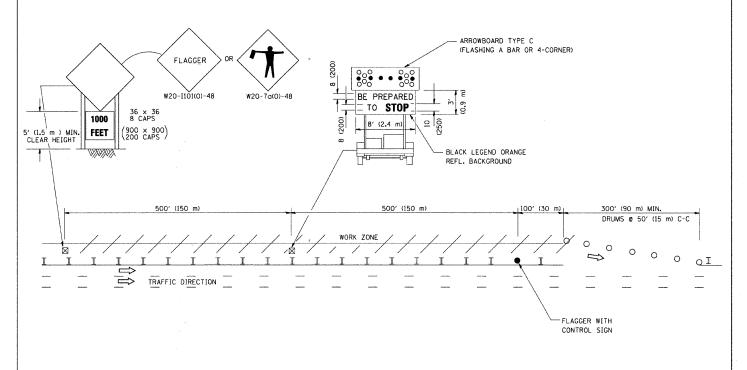
All dimensions are in inches (millimeters) unless otherwise shown.

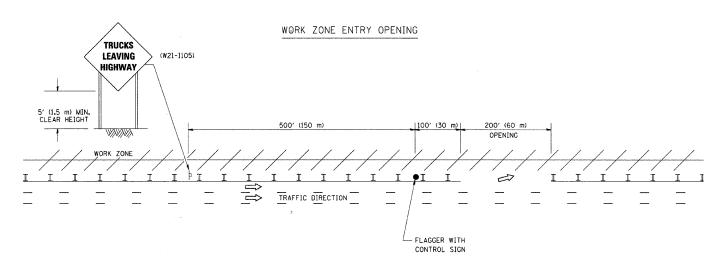
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96			PAVEMENT MARKING LETTERS AND SYMBOLS	F.A. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\tc16.dgn		DRAWN ~	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS		FOR TRAFFIC STAGING	* 09-00058-00-CH	MCHENRY 53 42
1	PLOT SCALE = 50.0000 '/ IN.	CHECKED ~	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION			TC-16	CONTRACT NO. 63381
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED	. AID PROJECT ARA-9003 (635)

C-91-511-09

## SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

#### WORK ZONE EXIT OPENING





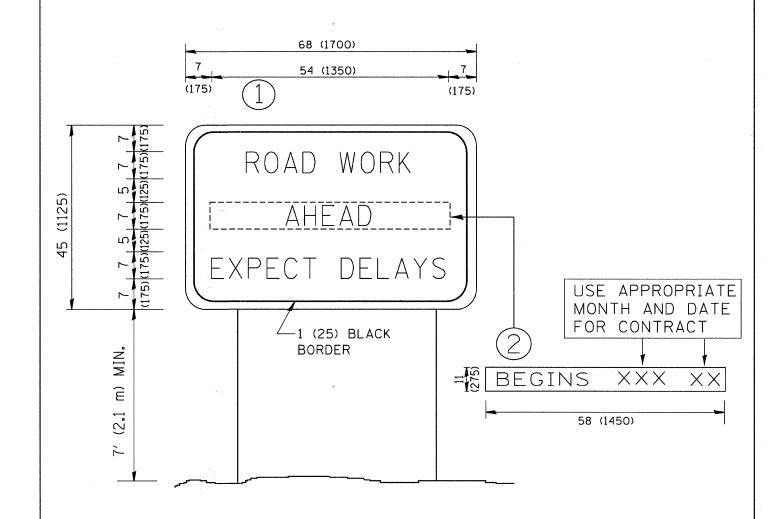
#### NOTES

- 1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
- 2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
- 3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
- 4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

\* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 SILVER LAKE ROAD

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = DESIGNED REVISED - J.A.F. 04-03 DRAWN REVISED -J.A.F. 02-06 STATE OF ILLINOIS PLOT SCALE = 50.000 ' / IN. CHECKED S.P.B. 01-07 **DEPARTMENT OF TRANSPORTATION** REVISED -SCALE: NONE PLOT DATE = 1/26/2010 DATE REVISED - S.P.B. 12-09



# NOTES:

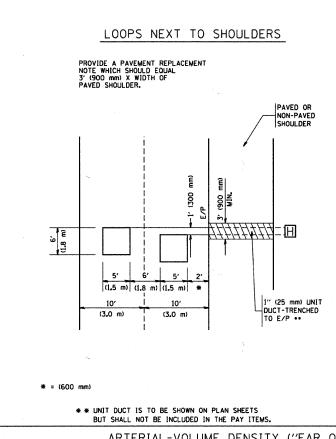
- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START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

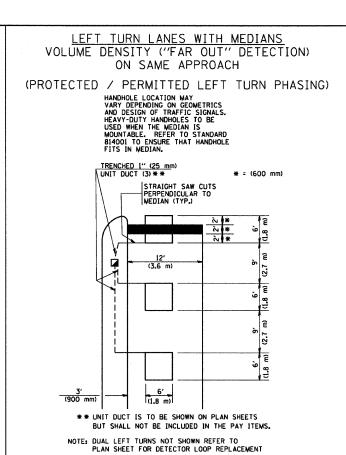
# ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

\* F.A.U. 4051 THREE OAKS ROAD

\* F.A.U. 4052 SILVER LAKE ROAD

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD INFORMATION SIGN			F.A	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS				*	09-00058-00-CH	MCHENRY	Ý 53 44
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99						TC-22	CONTRAC	CT NO. 63381
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. RO	AD DIST. NO. 1   ILLINOIS FED.	AID PROJECT A	RA-9003 (635)



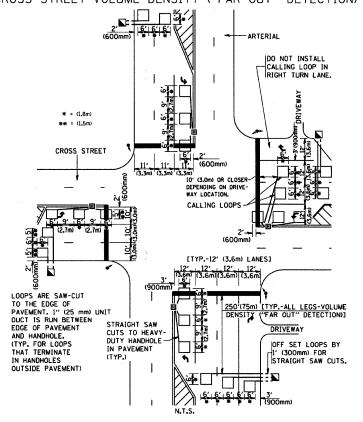


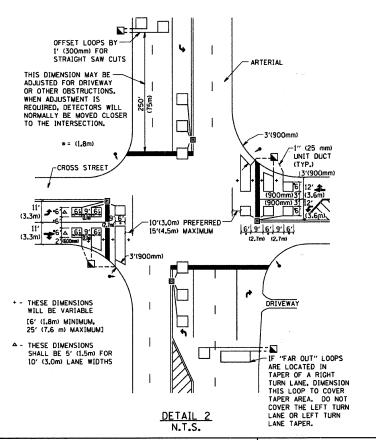
LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) \* = (600 mm) (900 mn ISTRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

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

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

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





NOTES:

VEHICLES LOOP DETECTORS

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

#### PLACEMENT OF DETECTORS

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

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

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

# NOTE:

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

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

> \* F.A.U. 4051 THREE OAKS ROAD \* F.A.U. 4052 STLVER LAKE ROAD

N.T.S. FILE NAME : USER NAME = gaglianobt DESIGNED REVISED diststd\22x34\ts07.dor DRAWN REVISED PLOT SCALE = 50.0000 '/ IN. CHECKED - R.K.F. REVISED DATE REVISED

DETAIL 1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT 1 - DETECTOR LOOP INSTALLATION **DETAILS FOR ROADWAY RESURFACING** SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.

COUNTY SECTION 09-00058-00-CH MCHENRY 53 45 CONTRACT NO. 63381 TS-07 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ARA-9003 (635)

