F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	1
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.U. ROUTE 2593 (WOODWARD AVEVUE)
63rd STREET (FAU 1518) TO SOUTH VILLAGE LIMITS
ROADWAY WIDENING AND RESURFACING
SECTION: 02-00092-00-WR
PROJECT: M-8003(814)
JOB: C-91-288-07
VILLAGE OF DOWNERS GROVE
DU PAGE COUNTY

INDEX OF SHEETS

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2–3	SUMMARY OF QUANTITIES
4	GENERAL NOTES & IDOT STANDARDS
5	TYPICAL SECTIONS
6	WOODWARD AVE. EXISTING & PROPOSED (STA. 1+00 TO STA. 5+00)
7	WOODWARD AVE. EXISTING & PROPOSED (STA. 5+00 TO STA. 10+00)
8	WOODWARD AVE. EXISTING & PROPOSED (STA. 10+00 TO STA. 15+50)
9	WOODWARD AVE. EXISTING & PROPOSED (STA. 15+50 TO STA. 20+50)
10	WOODWARD AVE. EXISTING & PROPOSED (STA. 20+50 TO STA. 25+57)
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12	WOODWARD AVENUE PROFILES (STA.10+50 TO STA. 20+30)
13	WOODWARD AVENUE PROFILES (STA. 20+30 TO STA. 25+57)
14	WOODWARD AVE. STRIPING (STA. 1+00 TO STA. 5+00)
15	WOODWARD AVE. STRIPING (STA. 5+00 TO STA. 10+00)
16	WOODWARD AVE. STRIPING (STA. 10+00 TO STA. 15+50)
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20	PROPOSED TRAFFIC SIGNAL PLAN
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J. U. L. I. E.
JOINT UTILITY INFORMATION FOR EXCAVATION

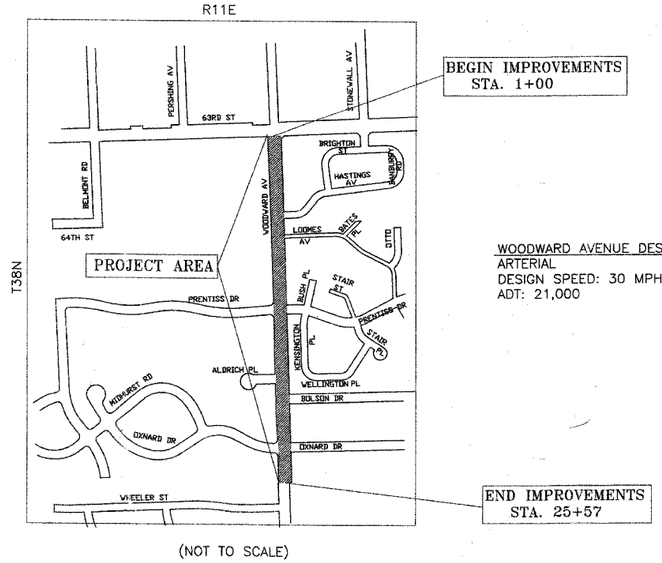
1-800-892-0123

0 100' 200' 300' – 1"=100'
0 10' 20' 30' – 1"=10'
0 50' 100' – 1"=50'
0 50' 100' – 1"=40'
0 50' 100' – 1"=30'
0 50' 100' – 1"=20'
SCALE IN FEET

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

Contract No. 83936

VILLAGE OF DOWNERS GROVE

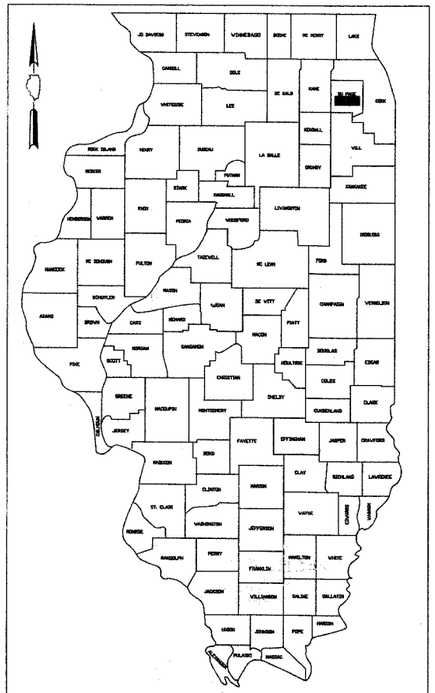


(NOT TO SCALE)

LOCATION MAP

LENGTH OF PROJECT=2,457 FT. (0.467 MILE)

WOODWARD AVENUE DESIGN DESIGNATION
ARTERIAL
DESIGN SPEED: 30 MPH
ADT: 21,000



LOCATION OF SECTION INDICATED THUS: –■–

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED November 2 2007
Asst. DIRECTOR OF PUBLIC WORKS, VILLAGE OF DOWNERS GROVE

PASSED NOVEMBER 6 2007
DIVISION 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW Nov. 6 2007
DEPUTY DIRECTOR OF HIGHWAYS
REGION ONE ENGINEER

MICHAEL D. MILLETTE 062-047313 LICENSED PROFESSIONAL ENGINEER ILLINOIS

Michael D. Millette, P.E.
#062-047313
My License Expires 11/30/07

As an official act as Assistant Director of Public Works, I hereby seal these plans.

ASSOCIATE FIELD ENGINEER: KEVIN STALLWORTH (847) 705-4169

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	2
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO.83936

SUMMARY OF QUANTITIES

	CODE NUMBER	PAY ITEM	TOTAL BID QNTY	UNIT	CONSTRUCTION TYPE CODE		
					1000-2A	Y030-1E	Y031-1F
	20101000	TEMPORARY FENCE	450	FOOT	450		
	20101200	TREE ROOT PRUNING	15	EACH	15		
	20200100	EARTH EXCAVATION	340	CU YD	340		
	20800150	TRENCH BACKFILL	10	TON	10		
	21101615	TOPSOIL FURNISH AND PLACE, 4"	1035	SQ YD	1035		
	25000400	NITROGEN FERTILIZER NUTRIENT	13	POUND	13		
	25000500	PHOSPHOROUS FERTILIZER NUTRIENT	13	POUND	13		
	25000600	POTASSSIUM FERTILIZER NUTRIENT	13	POUND	13		
	25200110	SODDING, SALT TOLERANT	1035	SQ YD	1035		
	25200200	SUPPLEMENTAL WATERING	5	UNIT	5		
	40600100	BITUMIINOUS MATERIALS (PRIME COAT)	1526	GAL	1526		
	40600300	AGGREGATE (PRIME COAT)	31	TON	31		
	40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N70	424	TON	424		
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	560	SQ YD	560		
	40600825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	831	TON	831		
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	1831	TON	1831		
	42001300	PROTECTIVE COAT	800	SQ YD			
	42400200	PORTLAND CONCRETE CEMENT SIDEWALK, 5"	2505	SQ FT	2505		
	44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	14440	SQ YD	14440		
	44000500	COMBINATION CURB & GUTTER REMOVAL	3406	FOOT	3406		
	44000600	SIDEWALK REMOVAL	2685	SQ FT	2685		
	44201737	CLASS D PATCHES, TYPE I, 8 INCH	500	SQ YD	500		
	44201741	CLASS D PATCHES, TYPE II, 8 INCH	500	SQ YD	500		
	44201745	CLASS D PATCHES, TYPE III, 8 INCH	500	SQ YD	500		
	44201747	CLASS D PATCHES, TYPE IV, 8 INCH	500	SQ YD	500		
	44300100	AREA REFLECTIVE CRACK CONTROL TREATMENT	14440	SQ YD	14440		
	551A0700	STORM SEWER INSTALLATION, CLASS A, 15"	12	FOOT	12		
	55100700	STORM SEWER REMOVAL 15"	6	FOOT	6		
	60260300	INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND OPEN LID	15	EACH	15		
	60500060	REMOVING INLETS	2	EACH	2		
	60603800	COMBINATION CONCRETE CURB & GUTTER B6.12	3106	FOOT	3106		
^	67100100	MOBILIZATION	1	L SUM	1		
	70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	1	L SUM	1		
	70300100	SHORT - TERM PAVEMENT MARKING	6000	FOOT	6000		
*	78000100	THERMOPLASTIC PAVEMENT MARKINGS - LETTERS & SYMBOLS	218.4	SQ FT	218.4		
*	78000200	THERMOPLASTIC PAVEMENT MARKINGS - LINE 4"	5700	FOOT	5700		
*	78000400	THERMOPLASTIC PAVEMENT MARKINGS - LINE 6"	1157	FOOT	1157		
*	78000600	THERMOPLASTIC PAVEMENT MARKINGS - LINE 12"	67	FOOT	67		
*	78000650	THERMOPLASTIC PAVEMENT MARKINGS - LINE 24"	120	FOOT	120		
*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	1	L SUM		1	
*	81000600	CONDUIT TRENCH, 2" DIA GALVANIZED STEEL	100	FOOT		100	
*	81000700	CONDUIT TRENCH, 2 1/2" DIA. GALVANIZED STEEL	1478	FOOT		488	990
*	81001000	CONDUIT TRENCH, 4" DIA. GALVANIZED STEEL	275	FOOT			275
*	81001100	CONDUIT TRENCH, 5" DIA. GALVANIZED STEEL	10	FOOT			10
*	81018600	CONDUIT PUSH, 2 1/2" DIA. GALVANIZED STEEL	572	FOOT		572	
*	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	6	EACH			6
*	81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	1	EACH			1
*	81700335	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 3-1/C NO. 6	200	FOOT		200	
*	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	5029	FOOT		4498	531
*	82102250	LUMINARE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	36	EACH		36	
*	82500530	LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240VOLT	1	EACH		1	

* DENOTES SPECIALTY ITEM

^ DENOTES SPECIAL PROVISION

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

REVISIONS	
NAME	DATE

WOODWARD AVENUE IMPROVEMENTS
SUMMARY OF QUANTITIES

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\SUMOFQUANT	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	3
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.83936

SUMMARY OF QUANTITIES

	CODE NUMBER	PAY ITEM	TOTAL BID QNTY	UNIT	CONSTRUCTION TYPE CODE		
					1000-2A	Y030-1E	Y031-1F
*	83006200	LIGHT POLE, ALUMINUM, 30FT MH, 6 FT MAST ARM	28	EACH		28	
*	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	400	FOOT		400	
*	83800505	BREAKAWAY DEVICE, COUPLING, WITH ALUMINUM SKIRT	112	EACH		112	
*	85700200	FULL ACTUATED CONTROLLER AND TYPE IV CABINET	1	EACH			1
*	87100160	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 24F	1600	FOOT			1600
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	2834	FOOT			2834
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	1392	FOOT			1392
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	1392	FOOT			1392
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	1392	FOOT			1392
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	4	EACH			4
*	87600200	PEDESTRIAN PUSH BUTTON, TYPE II	8	EACH			8
*	87702860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 26 FT.	2	EACH			2
*	87702890	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT.	2	EACH			2
*	87800100	CONCRETE FOUNDATION, TYPE A	16	FOOT			16
*	87800200	CONCRETE FOUNDATION, TYPE D	4	FOOT			4
*	87800415	CONCRETE FOUNDATION, TYPE E, 36 INCH DIAMETER	60	FOOT			60
*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	4	EACH			4
*	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	4	EACH			4
*	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	4	EACH			4
*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	4	EACH			4
*	88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE BRACKET MOUNTED	8	EACH			8
*	88200100	TRAFFIC SIGNAL BACKPLATE	8	EACH			8
*	88700200	LIGHT DETECTOR	2	EACH			2
*	88700300	LIGHT DETECTOR AMPLIFIER	2	EACH			2
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	1	EACH			1
*	89100300	ILLUMINATED SIGN	4	EACH			4
* ^	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1	EACH			1
* ^	89502380	REMOVE EXISTING HANDHOLE	5	EACH			5
* ^	89502385	REMOVE EXISTING CONCRETE FOUNDATION	17	EACH		2	15
* ^	X0323481	VIDEO VEHICLE DETECTION, 4 CAMERAS	1	EACH			1
* ^	X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C	1600	FOOT			1600
* ^	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	1392	FOOT			1392
* ^	X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELED	540	FOOT			540
* ^	X8160112	UNIT DUCT, WITH 2-1/C NO. 6 AND 1-1/C NO. 8 GROUND, 600 V(EPR-TYPE RHW) 1 1/4" DIA. POLYETHYLENE	5521	FOOT		5521	
^	XX003435	PORTLAND CONCRETE CEMENT DRIVEWAY REMOVAL AND REPLACEMENT	17	SQ YD	17		
* ^	XX003954	REMOVE EXISTING LIGHT POLE AND FOUNDATION	9	EACH		9	
* ^	XX003552	Video Detection System	1	EACH			1
Δ	Z0076600	TRAINEES	500	HOUR	500		
* ^	XX007160	ELECTRIC CABLE IN CONDUIT, NO. 20 6C, TWISTED, SHIELED, 3 PAIR	751	FOOT			751
* ^	X0321760	DOUBLE HANDHOLE REMOVAL	1	EACH			1
^	XX006806	HOT-MIX ASPHALT DRIVEWAY REMOVAL & REPLACEMENT	39	SQ YD	39		
^	XX007161	MANHOLE TO BE RECONSTRUCTED W/TYPE 1 FRAME AND LID	8	EACH	8		
^	XX007162	AGGREGATE SUB-BASE, 4"	818	SQ YD	818		
* ^	XX006937	GROUND ROD, 5/8" DIA. X 10 FT.	29	EACH		29	

* DENOTES SPECIALTY ITEM

^ DENOTES SPECIAL PROVISION

Δ Y080

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

REVISIONS	
NAME	DATE

WOODWARD AVENUE
IMPROVEMENTS
SUMMARY OF QUANTITIES

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\SUMOFQUANT	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	4
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936

GENERAL NOTES

1. ALL REFERENCES TO THE "VILLAGE" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE VILLAGE OF DOWNERS GROVE.

2. ALL REFERENCES TO THE "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION ON JANUARY 1, 2007.

3. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE VILLAGE AND THE ENGINEERS DO NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION OF SUCH UTILITIES AND EXERCISE CARE DURING THE CONSTRUCTION OPERATION SO AS NOT TO DAMAGE THEM IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICILE 107.20 OF THE "STANDARD SPECIFICATIONS." THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF THE CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE "STANDARD SPECIFICATIONS."

4. THOSE EXISTING TRAFFIC SIGNS WHICH ARE SO DESIGNATED BY THE ENGINEER TO BE REMOVED, SHALL BE STORED AND SUBSEQUENTLY RELOCATED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE VILLAGE. IN ADDITION, ANY SIGNS WHICH ARE DAMAGED BEYOND REPAIR BY THE CONCRACTOR AS DETERMINED BY THE ENGINEER SHALL BE REPLACED IN KIND BY THE CONTRACTOR AND TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE VILLAGE.

5. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND THE IDOT STANDARDS FOR TRAFFIC CONTROL AND PROTECTION.

6. WHERE THE PROPOSED PAVEMENT ABUTS EXISTING PAVEMENT TO REMAIN IN PLACE (BEGIN, END, AND LIMITS OF CONSTRUCTION), THE EXISTING PAVEMENT SHALL BE SAW CUT TO PROVIDE A NEAT VERTICAL FACE BETWEEN THE PROPOSED AND EXISTING SURFACES. THIS SAW CUT WILL BE INCIDENTAL TO THE COST OF THE PAY ITEM HOT-MIX ASPHALT SURFACE REMOVAL 3".

7. WHEN REQUESTED BY THE ENGINEER, PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF THE CURBS AND P.C. CONCRETE SIDEWALK AND DRIVEWAYS.

8. DEBRIS REMOVAL- MATERIALS RESULTING FROM THE VARIOUS CONSTRUCTION OPERATIONS SHALL BE REMOVED AT THE END OF EACH WORK DAY TO AN APPROVED SITE. IN THE JUDGEMENT OF THE VILLAGE, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE VILLAGE WILL REMOVE SAME AND THE CONTRACTOR SHALL BE BILLED ACCORDINGLY.

9. THE CONTRACTOR SHALL BE RESPOSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR THE VILLAGE. THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE.
BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE ,GAS AND CABLE TELEVISION FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.).

10. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO THE CONTRACT.

11. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYRDANTS WITHOUT PRIOR AUTHORIZATION FROM THE VILLAGE WATER DEPARTMENT. UNAUTHORIZED USE SHALL SUBJECT THE OFFENDER TO ARREST AND PROSECUTION.

12. CLASS D PATCHES WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

14. MAILBOXES WHICH ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED, TEMPORARILY RELOCATED, AND REPLACED UPON COMPLETION OF THE PROPOSED IMPROVEMENTS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION".

15. PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEERS OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

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

17. TESTING: THE CONTRACTOR SHALL TEST AND ADJUST ALL EMERGENCY VEHICLE PREEMPTION EQUIPMENT WITH THE LOCAL FIRE DEPARTMENT PRIOR TO THE DATE OF THE MAINTENANCE TRANSFER. THE CONTRACTOR SHALL COORDINATE THIS TESTING WITH THE ENGINEER.

18. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" BRAND TO MATCH THE EXISTING SYSTEM.

19. AT LEAST 72 HOURS PRIOR TO SCHEDULING A SIGNAL INSPECTION.

20. THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. HAND EXCAVATION SHALL BE PERFORMED IF MAJOR ROOTS ARE PRESENT. MAJOR ROOTS OF A TREE THAT ARE TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREAS AT AN ELEVATION THAT WOULD INTERFERE WITH ANY PORTION OF THE PLANNED CONSTRUCTION SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA IN A MANNER THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEMIC TO THE REMAINING TREE STRUCTURE. THE EXPENSE OF THE REQUIRED HAND EXCAVATION AND/OR THE CUTTING OF MAJOR TREE ROOTS, AS DESCRIBED ABOVE, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT LINE ITEM BEING REMOVED OR INSTALLED AT THAT LOCATION.

21. TREE ROOT PRUNING IS TO BE USED ON EXISTING TREES TO PREVENT THE RIPPING UP OF ROOTS WHEN TRENCHING OR EXCAVATION IS WITHIN THE ROOT ZONE OF ADJACENT TREES TO REMAIN. SUPPLEMENTAL WATERING OF TREES SHOULD BEGIN IMMEDIATELY AFTER TREE ROOT PRUNING OF THE TREES HAS OCCURRED.

22. THE PRIMARY CONCERN OF THE VILLAGE IS TO MAINTAIN A SAFE TRAVEL WAY FOR THE PUBLIC AND A SAFE ENVIRONMENT FOR THE WORK IN THE CONSTRUCTION ZONE. THE CONTRACTOR IS EXPECTED TO COMPLY WITH THE STANDARD SPECIFICATIONS, CONTRACT PLANS, THE SPECIAL PROVSIONS AND DIRECTIONS FROM THE ENGINEER CONCERNING TRAFFIC CONTROL AND PROTECTION. tHE CONTRACTOR SHALL PROVIDE A TELEPHONE NUMBER WHERE A RESPONSIBLE INDIVIDUAL CAN BE CONTACTED ON A 24-HOUR-A-DAY BASIS TO RECIEVE NOTIFICATION OF ANY DEFICIENCES REGARDING TRAFFIC CONTROL AND PROTECTION. THE CONTRACTOR SHALL IMMEDIATELY RESPOND CORRECTING TRAFFIC CONTROL DEFIENCIES BY DISPATCHING WORKERS, MATERIALS AND EQUIPMENT TO CORRECT SUCH DEFIENCES.
FAILURE TO COMPLY WITH DIRECTIONS FROM THE ENGINEER FOR CORRECTIONS OR MODIFICATIONS TO THE TRAFFIC CONTROL AND PROTECTION WILL RESULT IN A DEDUCTION OF EITHER $1,000 OR 0.05 PERCENT OF THE AWARDED SPECIFICATIONS. THIS CHARGE IS SEPERATE FROM THE COST OF ANY CORRECTIVE WORK ORDERED. THE CONTRACT VALUE, WHICHEVER IS GREATER, IN ACCORDANCE WITH ARTICLE 105.03 OF THE STANDARD CONTRACTOR SHALL NOT BE RELIVED OF ANY CONTRACTURAL RESPONSIBILITIES BY HTE VILLAGE'S ACTIONS.

23. MATERIAL INSPECTION
ALL HOT-MIX ASPHALT AND P.C. CONCRETE MATERIALS USED ON THIS PROJECT SHALL BE TESTED AND INSPECTED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S QC/QA REQUIREMENTS.
THE CONTRACTOR SHALL PROVIDE A REQUEST FOR MATERIAL TESTING TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION BUREAU OF MATERIALS ORDER BOARD (PHONE 847 705-4337 OR FAX 847-705-4529) BY 4 PM, 24-HOURS IN ADVANCE OF CONSTRUCTION FOR INSPECTION OF ALL HOT-MIX ASPHALT AND CONCRETE MATERIALS USED ON THIS PROJECT.
THE CONTRACTOR IS TO SUBMIT A QC PLAN FOR HMA AND CONCRETE MATERIALS TO THE QA MANAGER FOR APPROVAL PRIOR TO CONSTRUCTION OPERATIONS COMMENCING. THE QA MANAGER WILL APPROVE THIS PLAN AND COPY THE DISTRICT OF LOCAL ROADS OFFICE ON THE APPROVAL LETTER.
QC AND QA REPORTS FOR CONCRETE WILL BE SENT TO THE DISTRICT OF LOCAL ROADS OFFICE AFTER REVIEW AND APPROVAL BY THE QA MANAGER.
QC REPORTS FOR BITUMINOUS MIXTURES WILL BE TRANSMITTED DIRECTLY BY THE CONTRACTOR DAILY DURING PRODUCTION. THE DISTRICT WILL PREPARE AND RETAIN THE QA PLANT REPORTS. THE QA FIELD REPORTS WILL BE SUBMITTED BY THE QA MANAGER TO THE DISTRICT VIA THE DISTRICT OF LOCAL ROADS OFFICE.

24. TEMPORARY FENCE SHOULD BE ERECTED ALONG THE DRIPLINE OF EXISTING TREES TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION. AFTER TREES ARE SAFELY FENCED NOTHING IS TO BE STORED, DRIVEN, OR DISTURBED INSIDE THE FENCE. REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED. ALL TEMPORARY FENCING AROUND TREES IS TO BE 4' HIGH SECURED TO METAL SPACED NO FURTHER THAN 10' APART & MAINTAINED DAILY IN GOOD CONDITION.

25. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.

26. THERE SHOULD BE A MINIMUM OF 3 PASSES AT 3 INCHES PER PASS PASS FOR HOT-MIX ASPHALT BINDER TO ALLOW FOR PROPER DENSITY.

IDOT STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEM
424001-05	CURB RAMPS FOR SIDEWALK
442201-03	CLASS C & D PATCHES
602301-01	INLET, TYPE A
604001-02	FRAME AND LIDS TYPE 1
606001-03	CONCRETE CURB TYPE B & COMBINATION CONCRETE CURB & GUTTER
664001-01	CHAIN LINK FENCE
701301-02	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701311-02	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701601-05	URBAN LANE CLOSURE MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-05	URBAN LANE CLOSURE MULTI-LANE INTERSECTION
701801-03	LANE CLOSURE MULTILANE 1W AND 2W CROSSWALK OR SIDEWALK CLOSURE
701901	TRAFFIC CONTROL DEVICES
720016-01	MAST ARM MOUNTED STREET NAME SIGNS
780001-01	TYPICAL PAVEMENT MARKINGS
805001	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-01	CONCRETE HANDHOLES
814006-01	DOUBLE HANDHOLES
857001	STANDARD PHASE DESINGNATION DIAGRAMS AND PHASE SEQUENCES
877001-03	STEEL MAST ARM ASSEMBLY AND POLE
877011-03	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-06	CONCRETE FOUNDATION DETAILS
880006	TRAFFIC SIGNAL MOUNTING DETAILS

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

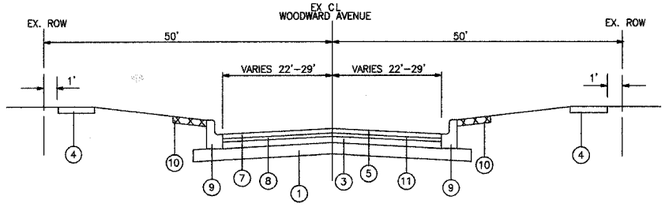
NAME	REVISIONS	DATE

WOODWARD AVENUE IMPROVEMENTS
GENERAL NOTES

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\GEN-NOTES REVISED	

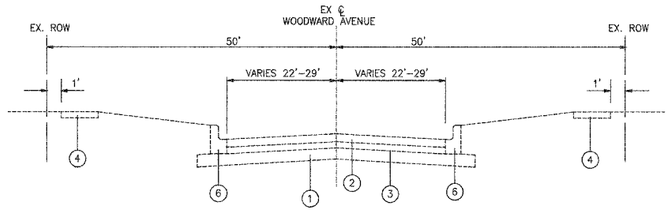
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	5
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



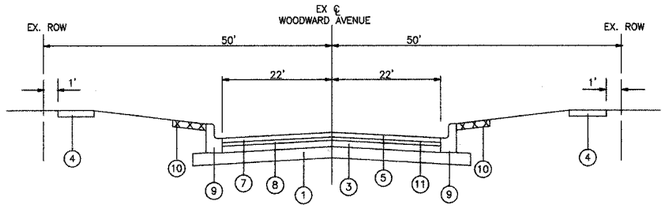
PROPOSED TYPICAL SECTION

STA. 1+00 TO STA. 4+50



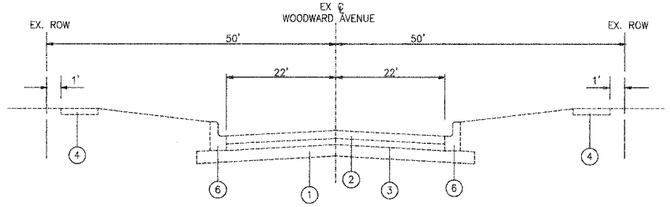
EXISTING TYPICAL SECTION

STA. 1+00 TO STA. 4+50



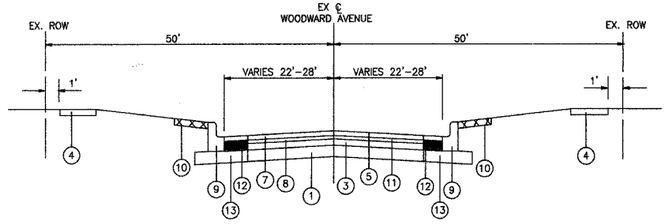
PROPOSED TYPICAL SECTION

STA. 4+50 TO STA. 10+25
STA. 16+78 TO STA. 25+57



EXISTING TYPICAL SECTION

STA. 4+50 TO STA. 25+57



PROPOSED TYPICAL SECTION

STA. 10+25 TO STA. 16+78

LEGEND

1. EXISTING SUB-BASE
2. EXISTING BITUMINOUS PAVEMENT, 3.5" AND VARIES
3. EXISTING AGGREGATE BASE, 8" AND VARIES
4. EXISTING PORTLAND CEMENT CONCRETE SIDEWALK
5. PROPOSED HMA SURFACE REMOVAL, 3."
6. EXISTING COMBINATION CURB & GUTTER, TYPE B6.12
7. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2."
8. PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50, 1"
9. PROPOSED COMBINATION CURB & GUTTER, TYPE B6.12
   REMOVAL AND REPLACEMENT WHERE SHOWN ON PLANS
10. PROPOSED SODDING, SALT TOLERANT & TOP SOIL FURNISH AND PLACE, 4"
11. PROPOSED AREA REFLECTIVE CRACK CONTROL TREATMENT
12. PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 9" (3 LIFTS)
13. PROPOSED AGGREGATE SUB-BASE, 4"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AC TYPE	AIR VOIDS
HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5 mm)	PG 64-22	4% @ 70 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 1"	SBS/SBR PG 76-28/-22	4% @ 70 GYR
HMA DRIVEWAY REMOVAL AND REPLACEMENT		
HOT MIX ASPHALT SURFACE COURSE, MIX C, N50 (IL 9.5 MM), 2"	PG 64-22	4% @ 70 GYR
HOT MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), PE-6", CE-8"	*PG 64-22	4% @ 70 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0 N70	PG 64-22/58-22	4% @ 70 GYR
CLASS D PATCHES, 8" (BINDER IL-19mm)	PG 64-22	4% @ 70 GYR

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

*-WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

REVISIONS	
NAME	DATE

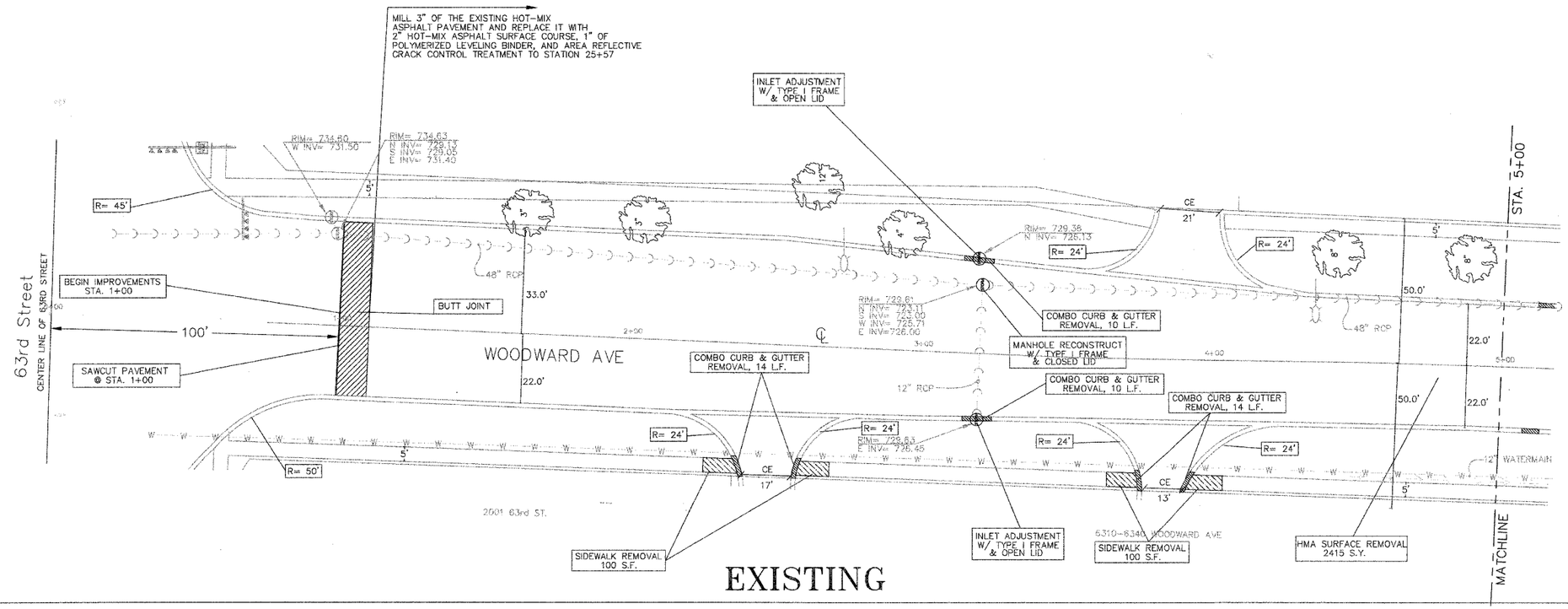
WOODWARD AVE IMPRIOVEMENTS
TYPICAL SECTIONS

DATE: 2/09/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\WOODWARD- TYP SEC	

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

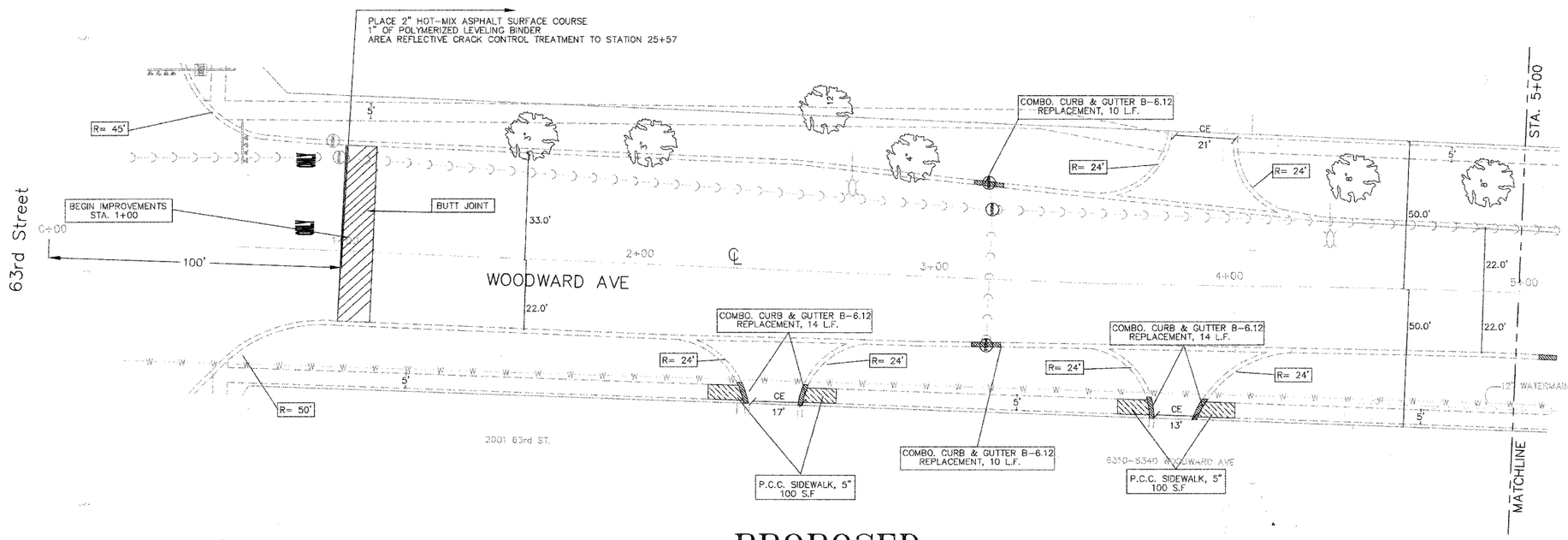
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	6
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936



EXISTING

PLAN
SCALE: 1"=20'



PROPOSED

FOR WOODWARD AVE. PROFILE STA. 1+00 TO STA. 5+00 SEE SHEET 11

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. EXISTING & PROPOSED STA. 1+00 TO STA. 5+00	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-1A	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	7
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936

MILL 3" OF THE EXISTING HOT-MIX ASPHALT PAVEMENT AND REPLACE IT WITH 2" HOT-MIX ASPHALT SURFACE COURSE, 1" OF POLYMERIZED LEVELING BINDER, AND AREA REFLECTIVE CRACK CONTROL TREATMENT TO STATION 25+57

STA. 5+00 · HASTINGS AVENUE · BUTT JOINT · SAWCUT PAVEMENT @ 60' LT. · COMBO CURB & GUTTER REMOVAL 5 L.F. · INLET ADJUSTMENT W/ TYPE I FRAME & OPEN LID · RIM= 720.51 NE INV= 716.87 SW INV= 718.51 · SIDEWALK REMOVAL 50 S.F. · COMBO CURB & GUTTER REMOVAL 65 L.F. · 12" RCP · COMBO CURB & GUTTER REMOVAL 5 L.F. · COMBO CURB & GUTTER REMOVAL 5 L.F. · 28' · R= 34' · 1998 LOOMES AVE · R= 25' · LOOMES AVENUE · SAWCUT PAVEMENT @ 50' LT. · SIDEWALK REMOVAL 50 S.F. · INLET ADJUSTMENT W/ TYPE I FRAME & OPEN LID · 22' · 5' · 48" RCP · OUTFALL = 719.00 · PRENTISS CREEK · STA. 10+00 · SIDEWALK REMOVAL 100 S.F. · 6" PVC · 12" RCP · STRUCTURES DUMP INTO CREEK · COMBO CURB & GUTTER REMOVAL 23 L.F. · RIM= 726.77 N INV= 720.10 S INV= 719.00 W INV= 722.90 · 48" RCP · COMBO CURB & GUTTER REMOVAL 250 L.F. · PAVEMENT REMOVAL 20 S.Y. · RIM= 724.44 N INV= 718.11 S INV= 718.00 E INV= 718.25 · RIM= 722.93 E INV= 720.28 · RIM= 727.79 E INV= 720.03 · 50.0' · 5+00 · 6+00 · 7+00 · 8+00 · 9+00 · 10+00 · 22.0' · COMBO CURB & GUTTER REMOVAL 7 L.F. · INLET ADJUSTMENT W/ TYPE I FRAME & OPEN LID · MH RECONSTRUCTION W/ TYPE I FRAME & OPEN LID · COMBO CURB & GUTTER REMOVAL 24 L.F. · COMBO CURB & GUTTER REMOVAL 23 L.F. · 12" RCP · COMBO CURB & GUTTER REMOVAL 85 L.F. · WOODWARD AVE · COMBO CURB & GUTTER REMOVAL 200 L.F. · RIM= 722.79 S INV= 720.48 · RIM= 723.02 NW INV= 719.44 · COMBO CURB & GUTTER REMOVAL 5 L.F. · RIM= 725.61 E INV= 720.61 · R= 18' · 12" WATERMAIN · 21' CE · 23' CE · OUTFALL = 719.30 · MATCHLINE · 6310-6340 WOODWARD AVE · 6400 WOODWARD AVE · HMA SURFACE REMOVAL, 3" 2663 S.Y. · RIM= 723.80 E INV= 720.90 · SIDEWALK REMOVAL 50 S.F. · SIDEWALK REMOVAL 50 S.F. · INLET ADJUSTMENT W/ TYPE I FRAME & OPEN LID · COMBO CURB & GUTTER REMOVAL 80 L.F. · COMBO CURB & GUTTER REMOVAL 14 L.F. · PRENTISS CREEK · INLET ADJUSTMENT W/ TYPE I FRAME & OPEN LID · RIM= 723.32 N INV= 715.57 S INV= 716.35 NE INV= 720.00 · MATCHLINE

EXISTING

PLAN
SCALE: 1"=20'

PLACE 2" HOT-MIX ASPHALT SURFACE COURSE 1" OF POLYMERIZED LEVELING BINDER AREA REFLECTIVE CRACK CONTROL TREATMENT TO STATION 25+57

STA. 5+00 · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 35 L.F. · HASTINGS AVENUE · END RESURFACING @ 60' LT · P.C.C. SIDEWALK, 5" 50 S.F. · P.C.C. SIDEWALK, 5" 50 S.F. · P.C.C. SIDEWALK, 5" 50 S.F. · END RESURFACING @ 50' LT · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 50 L.F. · P.C.C. SIDEWALK, 5" 50 S.F. · BUTT JOINT · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 23 L.F. · 28' · R= 34' · 1998 LOOMES AVE · R= 25' · LOOMES AVENUE · 22' · INLET EMPTY TO CREEK · PRENTISS CREEK · STA. 10+00 · BUTT JOINT · R= 25' · 5' · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 430 L.F. · 50.0' · 5+00 · 6+00 · 7+00 · 8+00 · 9+00 · 10+00 · 22.0' · PAVEMENT REPLACEMENT 20 S.Y. · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 250 L.F. · 12" RCP · WOODWARD AVE · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 12 L.F. · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 10 L.F. · R= 18' · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 85 L.F. · 12" WATERMAIN · 12" · 21' CE · 23' CE · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 10 L.F. · MATCHLINE · 6310-6340 WOODWARD AVE · 6400 WOODWARD AVE · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 80 L.F. · P.C.C. SIDEWALK, 5" 50 S.F. · P.C.C. SIDEWALK, 5" 50 S.F. · COMBO CURB & GUTTER REPLACEMENT, B-6.12, 14 L.F. · PRENTISS CREEK · MATCHLINE · HOT-MIX ASPHALT SURFACE COURSE, LEVELING BINDER (MACHINE METHOD), AREA REFLECTIVE CRACK CONTROL TREATMENT. · INLET TO STORM SEWER

PROPOSED

FOR WOODWARD AVE. PROFILE STA. 5+00 TO STA. 10+00 SEE SHEET 11

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

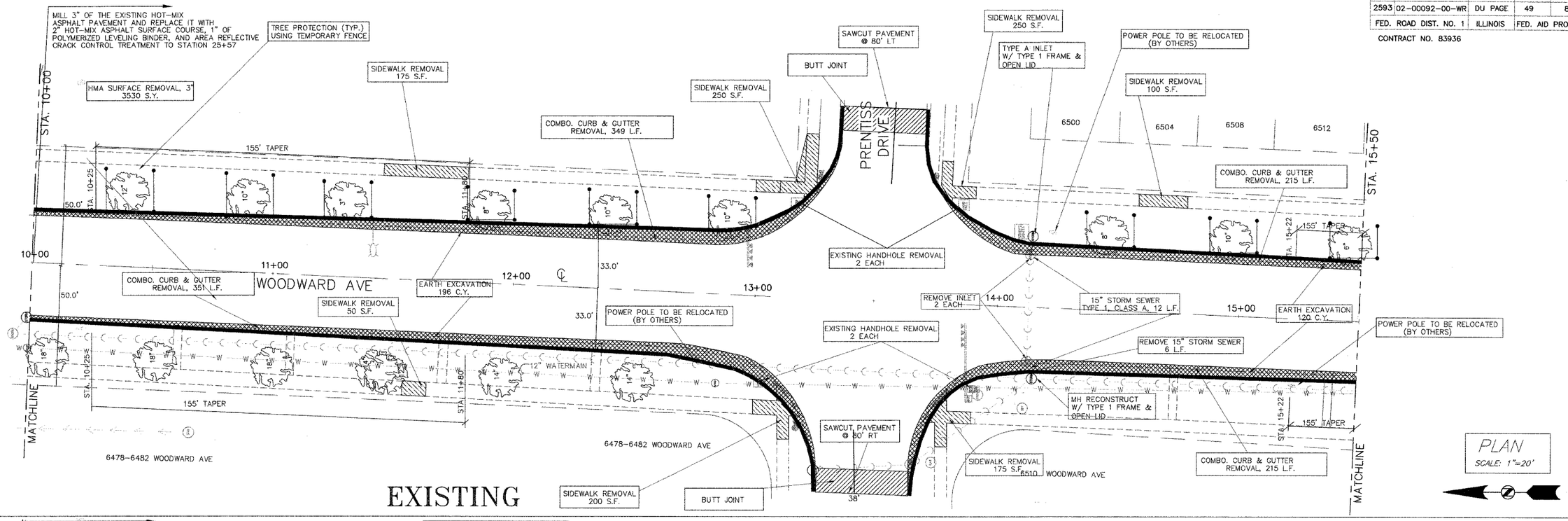
WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. EXISTING & PROPOSED STA. 5+00 TO STA. 10+00	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-2A	

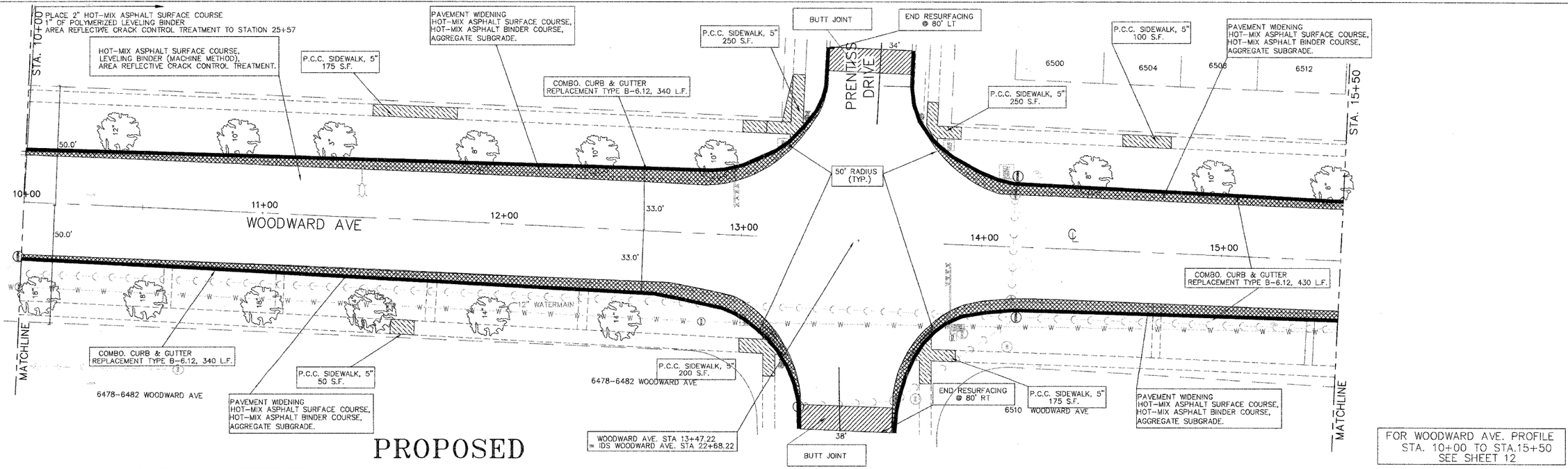
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	8
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936



EXISTING

PLAN
SCALE: 1"=20'



PROPOSED

FOR WOODWARD AVE. PROFILE STA. 10+00 TO STA.15+50 SEE SHEET 12

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. EXISTING & PROPOSED STA. 10+00 TO STA. 15+50	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-3A	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	9
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936

EXISTING

MILL 3" OF THE EXISTING HOT-MIX ASPHALT PAVEMENT AND REPLACE IT WITH 2" HOT-MIX ASPHALT SURFACE COURSE, 1" OF POLYMERIZED LEVELING BINDER, AND AREA REFLECTIVE CRACK CONTROL TREATMENT TO STATION 25+57

TREE PROTECTION (TYP.) USING TEMPORARY FENCE

COMBO. CURB & GUTTER REMOVAL, 450 L.F.

EXISTING HANDHOLE REMOVAL 1 EACH

155' TAPER

STA. 15+50

STA. 16+78

INLET ADJUSTMENT W/ TYPE 1 FRAME & OPEN LID

RIM= 741.40
S INV= 736.40
W INV= 736.23
SE INV= 736.15

RIM= 744.11
N INV= 738.21
S INV= 738.78
W INV= 739.53

6516 6520 6524 6528 6532 6536 6540 6544 6548 6552

50.0'

5'

12" RCP

8" 6" 8"

16+00 17+00 18+00 19+00 20+00

RIM= 740.67
NE INV= 736.75

EARTH EXCAVATION 24 C.Y.

22.0'

MH RECONSTRUCT W/ TYPE 1 FRAME & CLOSED LID

RIM= 745.58
NW INV= 740.65
SW INV= 740.91
NE INV= 740.80

WOODWARD AVE

15" RCP

12" WATERMAIN

INLET ADJUSTMENT W/ TYPE 1 FRAME & CLOSED LID

RIM= 743.81
E INV= 740.89
SW INV= 741.14

COMBO CURB & GUTTER REMOVAL, 5 L.F.

CONC. DRIVEWAY REMOVAL & REPLACEMENT 8 S.Y.

MH RECONSTRUCT W/ TYPE 1 FRAME & CLOSED LID

COMBO CURB & GUTTER REMOVAL, 38 L.F.

COMBO CURB & GUTTER REMOVAL, 16 L.F.

COMBO CURB & GUTTER REMOVAL, 10 L.F.

10" 12"

CONC. BIT.

155' TAPER

STA. 16+78

5'

RIM= 741.15
N INV= 735.99
E INV= 736.07

6510 WOODWARD AVE

POWER POLE TO BE RELOCATED (BY OTHERS)

COMBO. CURB & GUTTER REMOVAL, 300 L.F.

HMA SURFACE REMOVAL, 3" 2948 S.Y.

2000 ALDRICH

SIDEWALK REMOVAL 50 S.F.

COMBO CURB & GUTTER REMOVAL, 12 L.F.

SAWCUT PAVEMENT @ 54' LT.

ALDRICH PLACE

28'

RIM= 745.70
NE INV= 741.40

RIM= 744.70
W INV= 739.15
S INV= 739.00

SIDEWALK REMOVAL 125 S.F.

SIDEWALK REMOVAL 50 S.F.

COMBO CURB & GUTTER REMOVAL, 32 L.F.

2001 ALDRICH

END RESURFACING @ 84' LT

6510

SIDEWALK REMOVAL 50 S.F.

RIM= 746.22
N INV= 738.30
S INV= 738.30
E INV= 738.23

SIDEWALK REMOVAL 100 S.F.

MATCHLINE

SAWCUT PAVEMENT @ 84' LT.

INLET ADJUSTMENT W/ TYPE 1 FRAME & OPEN LID

BOLSON DRIVE

28'

RIM= 744.77
S INV= 742.02

COMBO CURB & GUTTER REMOVAL, 23 L.F.

SIDEWALK REMOVAL 50 S.F.

CB RECONSTRUCT W/ TYPE 1 FRAME & OPEN LID

RIM= 744.99
N INV= 741.87
W INV= 741.74

STA. 20+50

SIDEWALK REMOVAL 50 S.F.

COMBO CURB & GUTTER REMOVAL, 30 L.F.

HMA DRIVEWAY REMOVAL & REPLACEMENT 9 S.Y.

MATCHLINE

PLAN
SCALE: 1"=20'

PROPOSED

PLACE 2" HOT-MIX ASPHALT SURFACE COURSE 1" OF POLYMERIZED LEVELING BINDER AREA REFLECTIVE CRACK CONTROL TREATMENT TO STATION 25+57

STA. 15+50

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 450 L.F.

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 10 L.F.

6528 6532 6536 6540 6544 6548 6552

50.0'

5'

8" 6" 8"

16+00 17+00 18+00 19+00 20+00

PAVEMENT WIDENING HOT-MIX ASPHALTB SURFACE COURSE, HOT-MIX ASPHALTT BINDER COURSE, AGGREGATE SUBGRADE.

WOODWARD AVE

22.0'

12" WATERMAIN

MATCHLINE

R= 26'

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 300 L.F.

6510 WOODWARD AVE

2000 ALDRICH

P.C.C. SIDEWALK, 5" 50 S.F

COMBO. CURB & GUTTER REPLACEMENTTYPE B-6.12 12 L.F.

HOT-MIX ASPHALTT SURFACE COURSE, LEVELING BINDER (MACHINE METHOD), AREA REFLECTIVE CRACK CONTROL TREATMENT.

END RESURFACING @ 54 RT

ALDRICH PLACE

28'

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 38 L.F.

P.C.C. SIDEWALK, 5" 125 S.F

2001 ALDRICH

P.C.C. SIDEWALK, 5" 50 S.F

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 32 L.F.

P.C.C. SIDEWALK, 5" 50 S.F

6510

P.C.C. SIDEWALK, 5" 100 S.F

MATCHLINE

BOLSON DRIVE

28'

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 23 L.F.

P.C.C. SIDEWALK, 5" 50 S.F

STA. 20+50

P.C.C. SIDEWALK, 5" 50 S.F

R= 53'

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 30 L.F.

COMBO. CURB & GUTTER REPLACEMENT TYPE B-6.12 16 L.F.

CONC. BIT.

PAVEMENT WIDENING HOT-MIX ASPHALTB SURFACE COURSE, HOT-MIX ASPHALTT BINDER COURSE, AGGREGATE SUBGRADE.

FOR WOODWARD AVE. PROFILE STA. 15+50 TO STA.20+50 SEE SHEET 12

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE

WOODWARD AVE. EXISTING & PROPOSED
STA. 15+50 TO STA. 20+50

DATE: 2/02/07	CHECKED BY: S.A.V.
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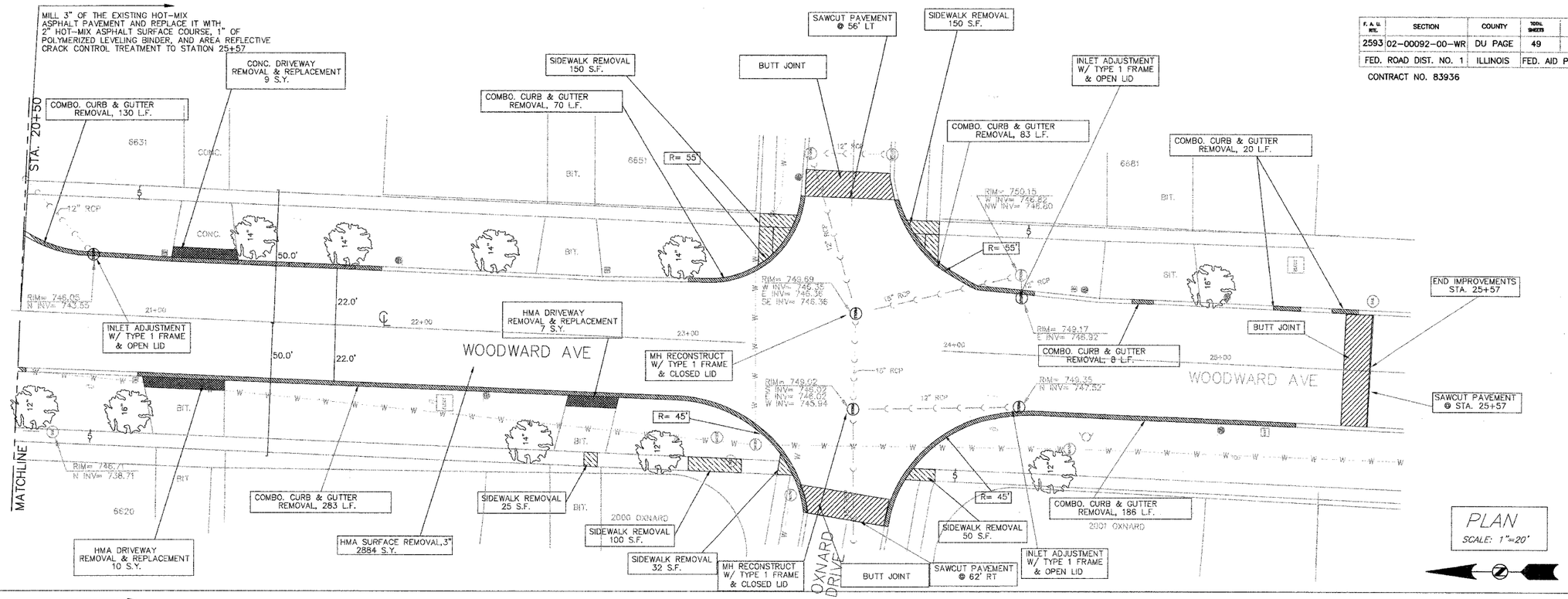
FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-4A	

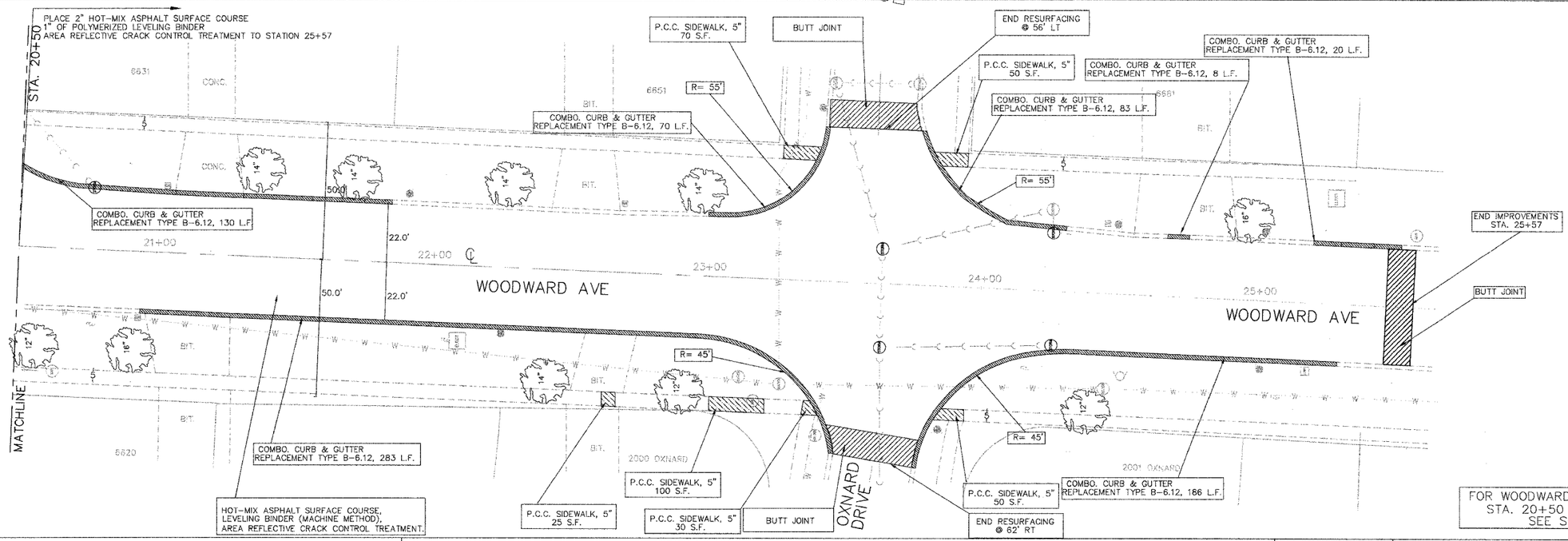
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	10
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936

EXISTING



PROPOSED



FOR WOODWARD AVE. PROFILE STA. 20+50 TO STA. 25+57 SEE SHEET 13

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

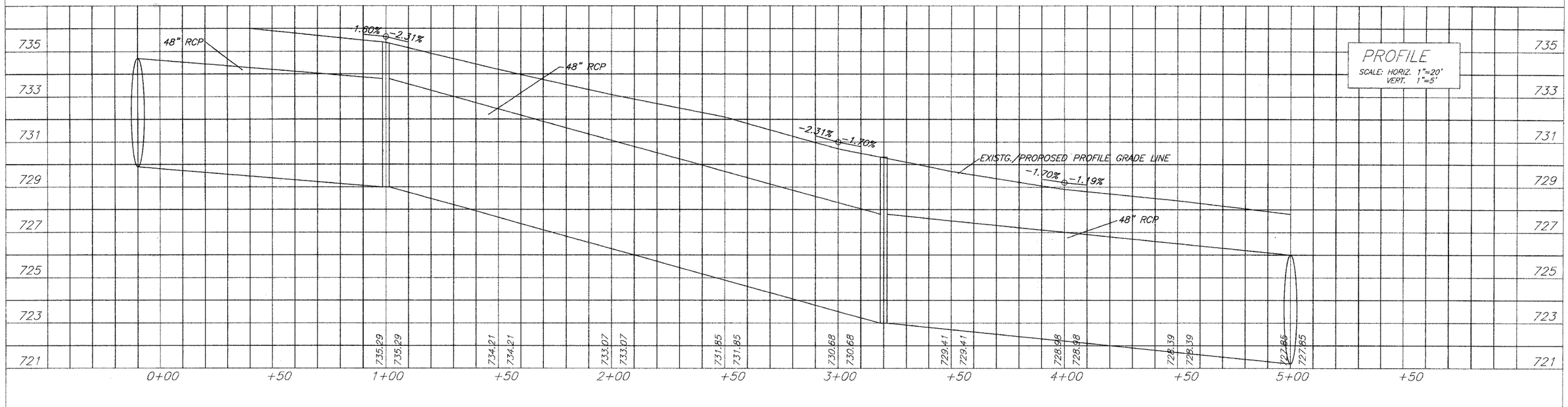
WOODWARD AVE. IMPROVEMENTS

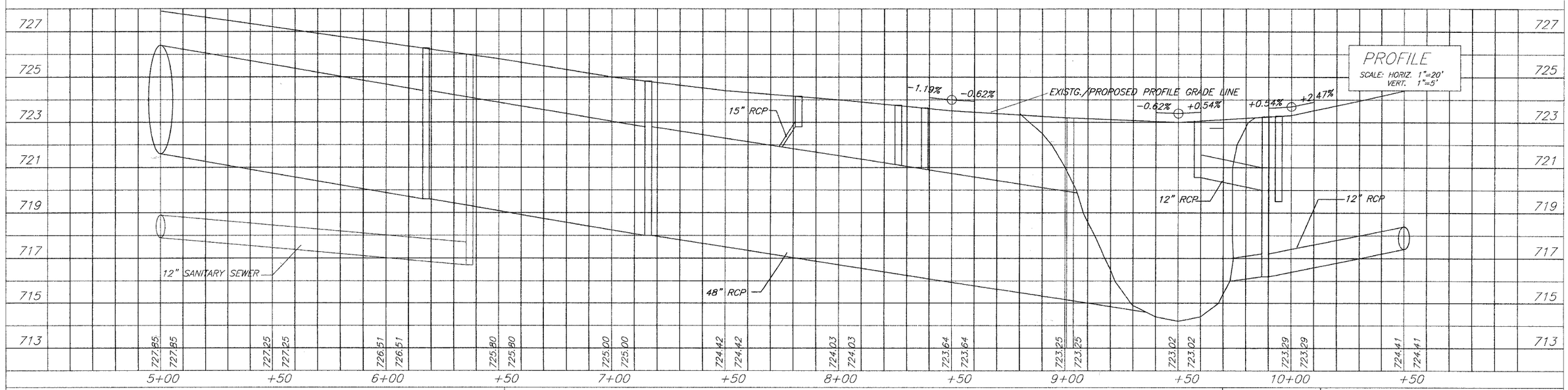
DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. EXISTING & PROPOSED STA. 20+50 TO STA. 25+57	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-5A	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	11
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936





VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. PROFILE STA. 1+00 TO STA. 10+50	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-6	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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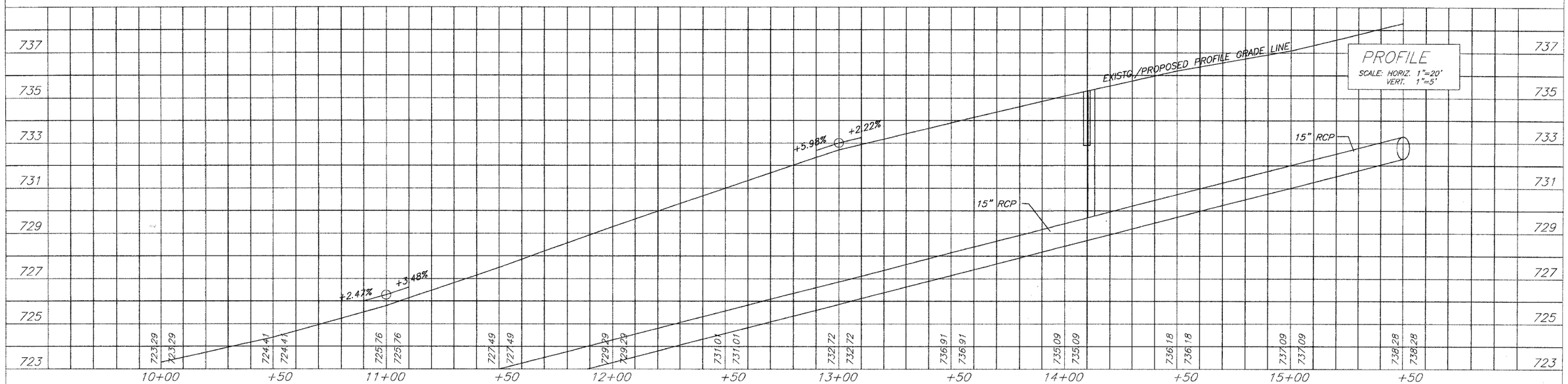
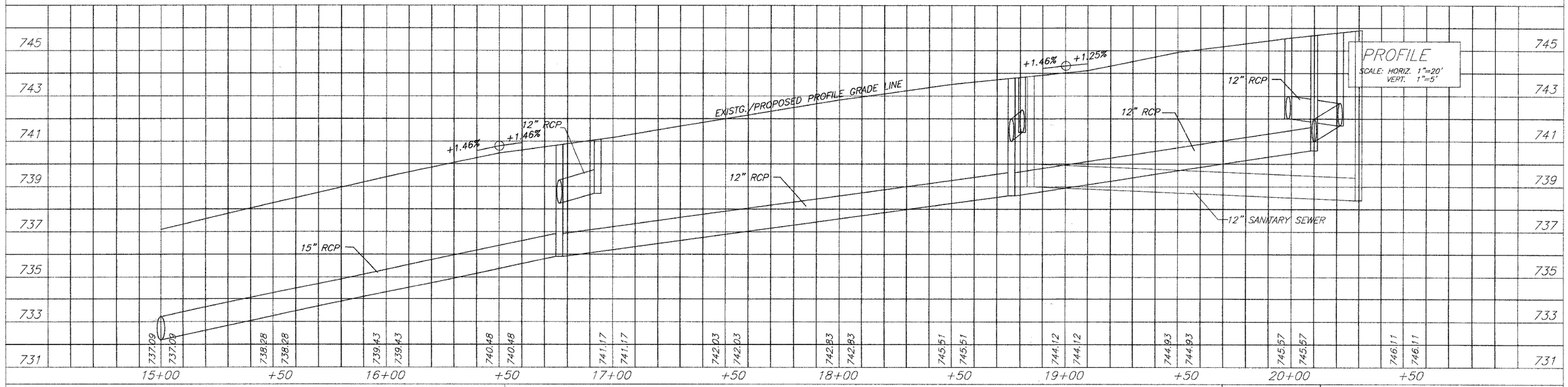
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936





VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

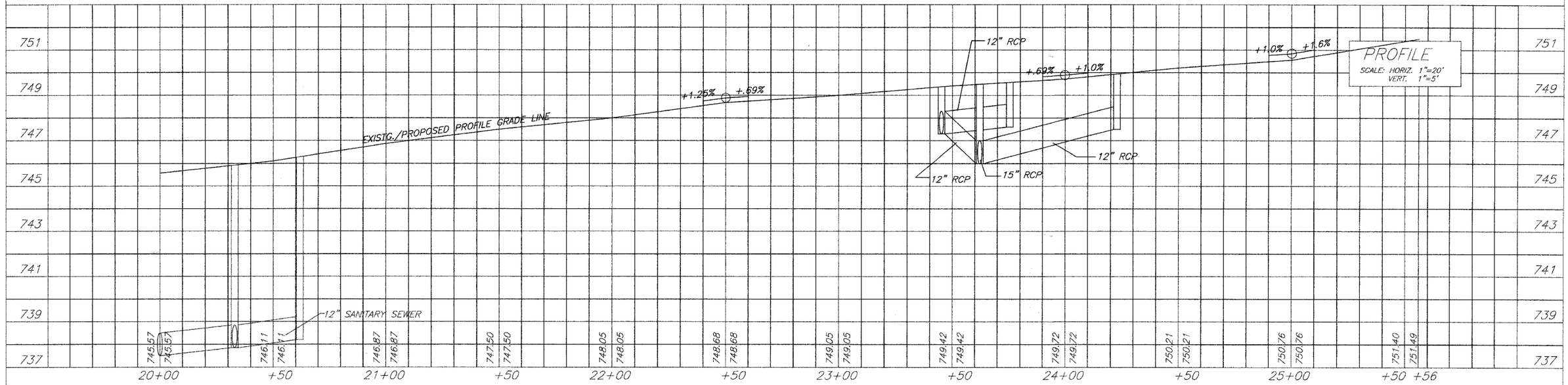
REVISIONS NAME	DATE

WOODWARD AVE. PROFILE
STA. 10+50 TO STA. 20+30

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-8	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	13
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936



PROFILE

SCALE: HORIZ. 1"=20'
VERT. 1"=5'

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

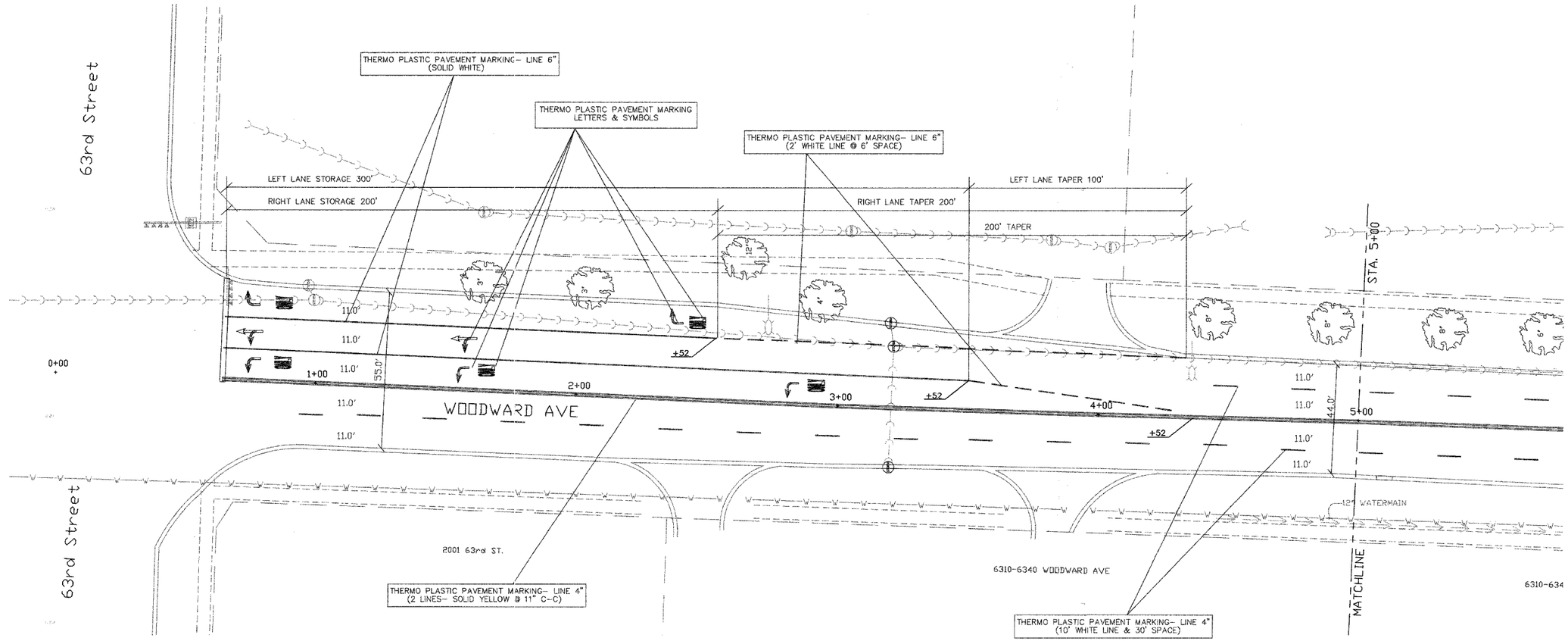
REVISIONS NAME	DATE

WOODWARD AVE. PROFILE
STA. 20+30 TO STA. 25+57

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-10	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	14
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



PLAN
SCALE: 1"=20'

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

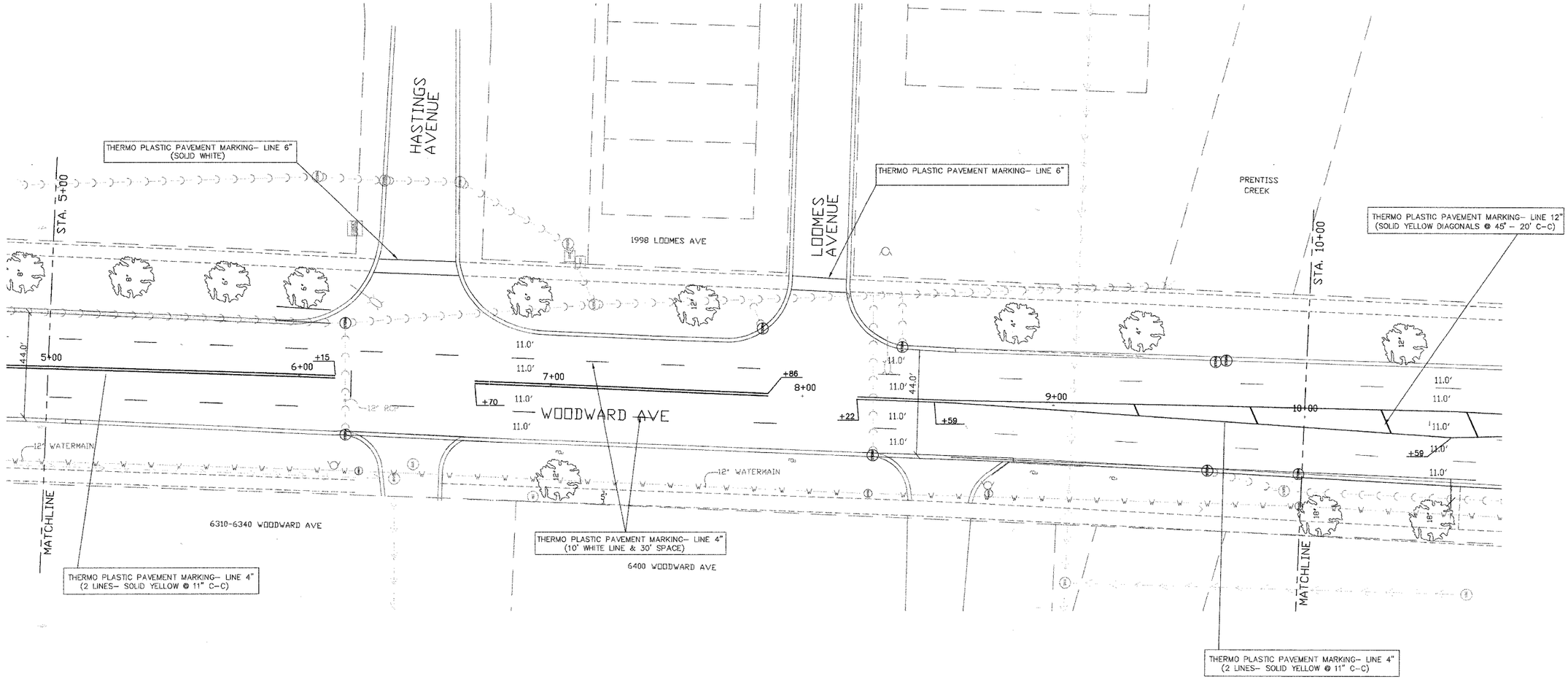
REVISIONS NAME	DATE

WOODWARD AVE. STRIPING PLAN
STA. 1+00 TO STA. 5+00

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-6	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	15
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO.83936



PLAN
SCALE: 1"=20'

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

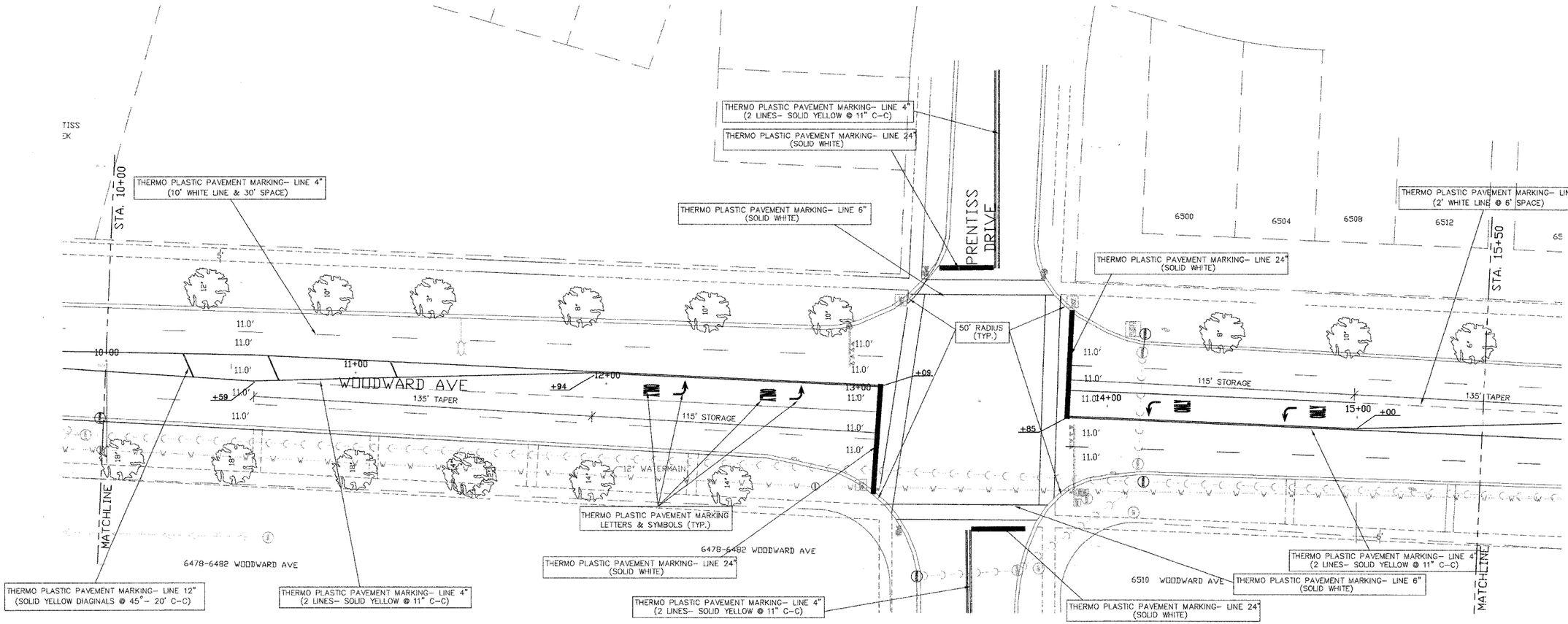
WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. STRIPING PLAN STA. 5+00 TO STA. 10+00	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-7	

F. A. Rte.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	16
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



PLAN
SCALE: 1"=20'

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

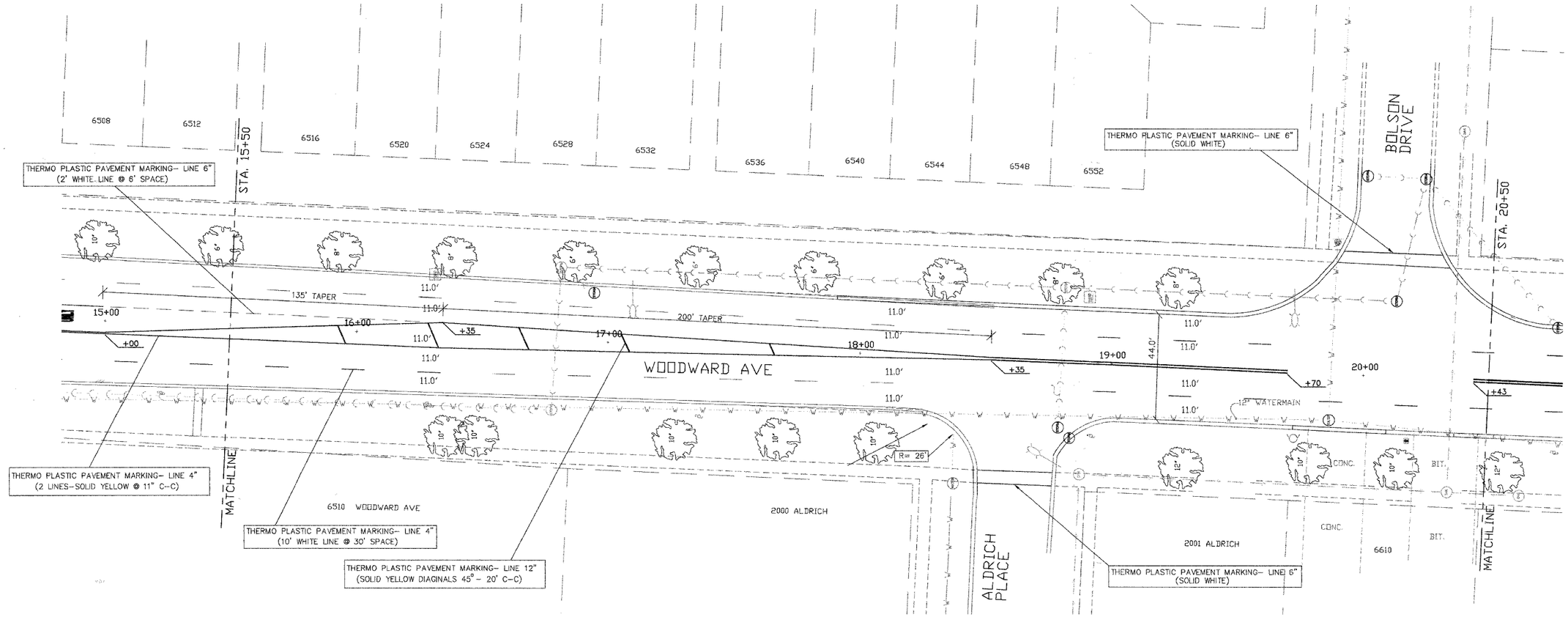
WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

REVISIONS NAME	DATE	WOODWARD AVE. STRIPING PLAN STA. 10+00 TO STA. 15+50	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-8	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	17
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



PLAN
SCALE: 1"=20'

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

WOODWARD AVE. IMPROVEMENTS

DOWNERS GROVE, ILLINOIS

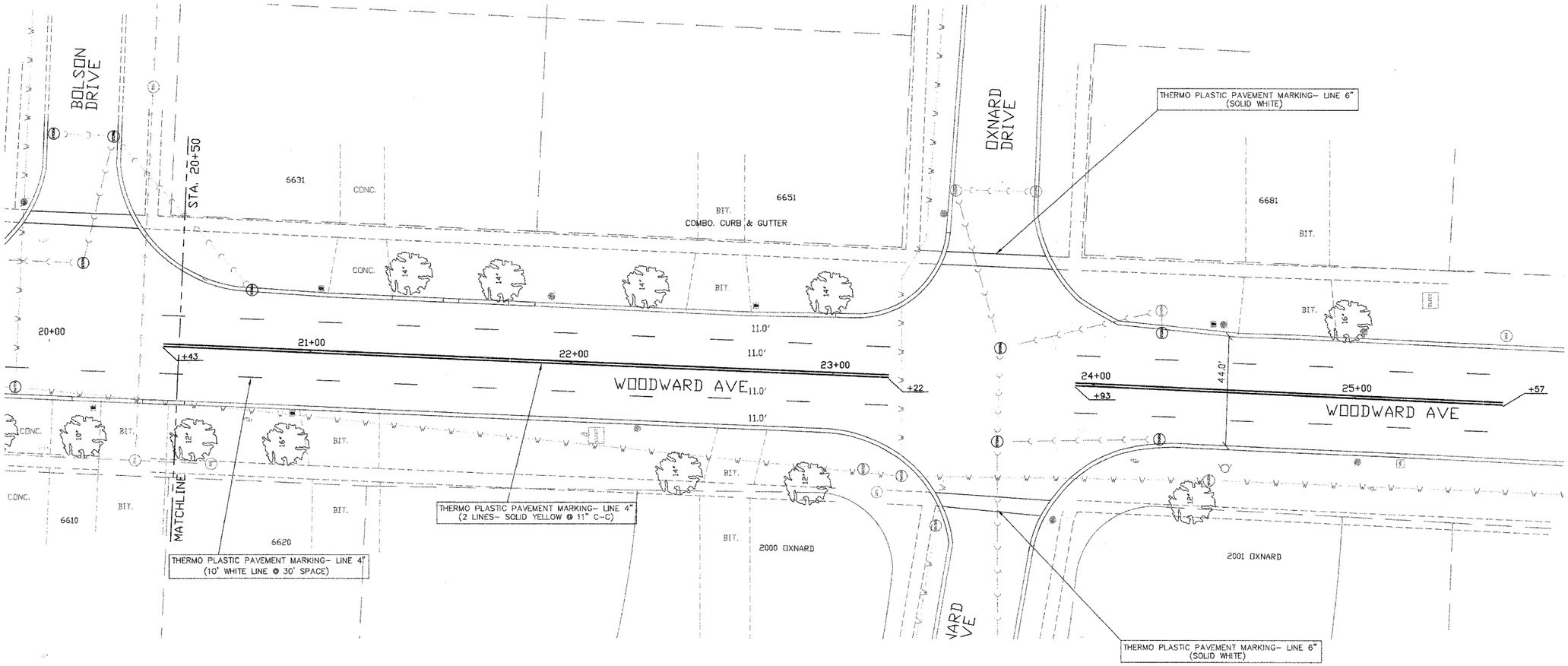
REVISIONS NAME	DATE

WOODWARD AVE. STRIPING PLAN
STA. 15+50 TO STA. 20+50

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-9	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2593	02-00092-00-WR	DU PAGE	49	18
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



PLAN
SCALE: 1"=20'

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434–5460

WOODWARD AVE. IMPROVEMENTS

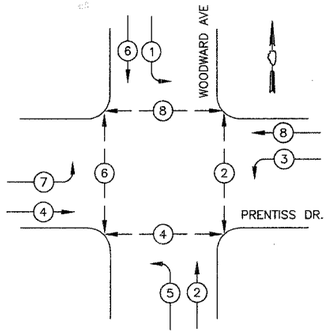
DOWNERS GROVE, ILLINOIS

REVISIONS NAME	REVISIONS DATE	WOODWARD AVE. STRIPING PLAN STA. 20+50 TO STA. 25+57	
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\WOODWARD-10	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	19
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936

TEMPORARY CONTROLLER SEQUENCE

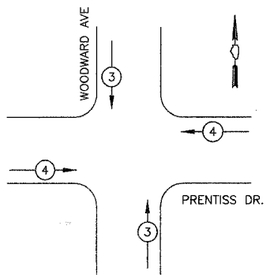


LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- PEDESTRIAN MOVEMENT
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



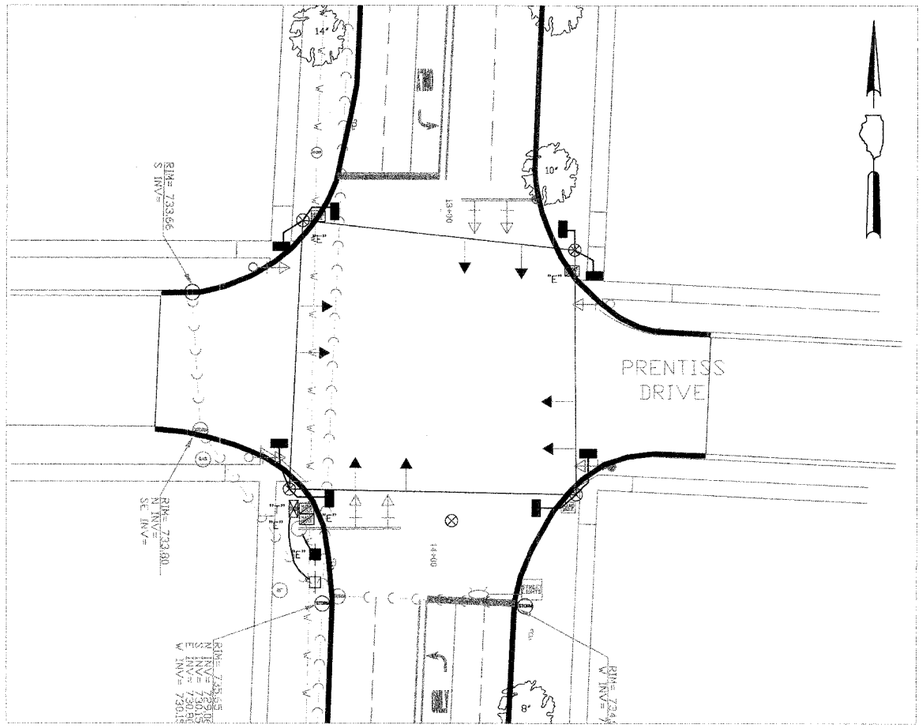
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↓ ↑	← →

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- "E" EXISTING SERVICE INSTALLATION
- EXISTING SIGNAL POST TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" EXISTING CONTROLLER TO BE REMOVED
- "E" EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- EMERGENCY VEHICLE SYSTEM DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- "E" EXISTING HEAVY DUTY HANDHOLE TO REMAIN
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE TO BE REMOVED
- "R" RELOCATE

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT MIN.
- "T" TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- VEHICLE DETECTOR, INDUCTION LOOP
- CT COMMON TRENCH
- UD UNIT DUCT
- G.S. CONDUIT IN TRENCH OR PUSHED
- HANDHOLE
- H HEAVY DUTY HANDHOLE
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- E.V.S. DETECTOR
- CONFIRMATION BEACON



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

2 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1 EACH EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT

AGENCY: VILLAGE OF DOWNERS GROVE

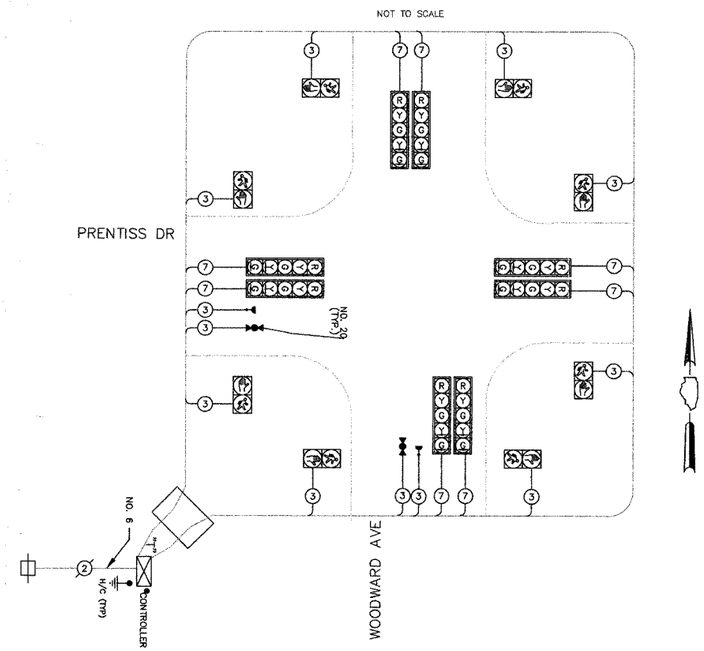
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH TRAFFIC SIGNAL POST
8 EACH 3-FACE SIGNAL HEAD
8 EACH PEDESTRIAN SIGNAL HEAD
2 EACH STEEL MAST ARM ASSEMBLY AND POLE

TEMPORARY TRAFFIC SIGNAL NOTES

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER.
3. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
4. ALL STATION AND OFFSETS ARE FROM CENTERLINE OF WOODWARD AVENUE.
5. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
6. THE EXISTING CONTROLLER AND CABINET COMPLETE IS TO BE REMOVED BY THE CONTRACTOR. AFTER USING EXISTING CONTROLLER FOR TEMPORARY SIGNALS & PROPOSED CONTROLLER IS INSTALLED, THE EXISTING FOUNDATION SHALL BE REMOVED & REPLACED
7. THE EXISTING PHONE SERVICE WILL BE REUSED IN THE PERMANENT SIGNAL INSTALLATION.
8. DURING CONSTRUCTION ALL LEFT TURN ARROWS NEED TO BE BAGGED. ONCE CONSTRUCTION OF THE NEW LEFT TURN LANES IS COMPLETED, BAGS FROM LEFT TURN ARROWS CAN BE REMOVED.

NOT TO SCALE



REVISIONS	
NAME	DATE

WOODWARD AVENUE IMPROVEMENTS

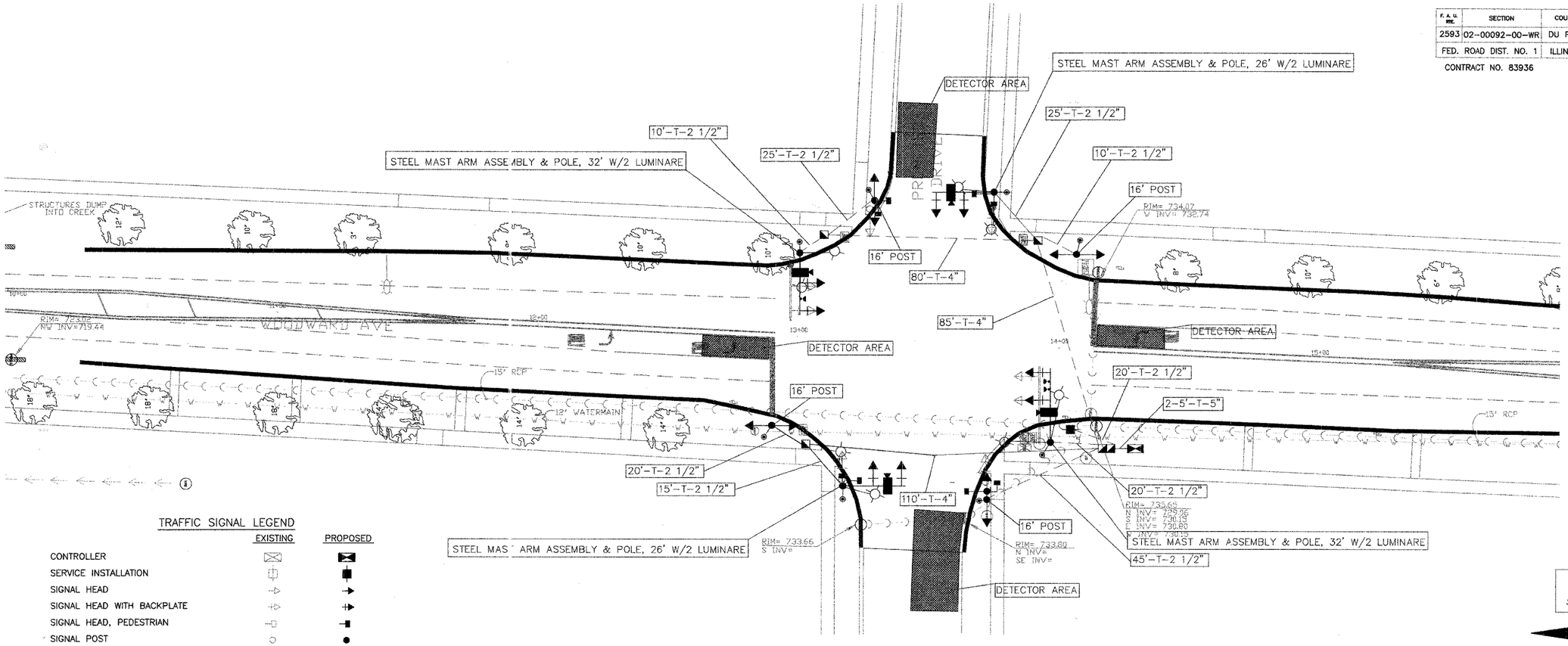
TEMPORARY TRAFFIC SIGNAL PLAN

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\TEMP-CABLE	

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	20
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



PLAN
SCALE: 1"=20'

TRAFFIC SIGNAL LEGEND

	EXISTING	PROPOSED
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
COMMON TRENCH		CT
UNIT DUCT		UD
HANDHOLE	"E"	
HEAVY DUTY HANDHOLE	"E"	H
DOUBLE HANDHOLE	"E"	
G.S. CONDUIT IN TRENCH OR PUSHED		
PEDESTRIAN PUSHBUTTON DETECTOR		
CAST IRON JUNCTION BOX	"E"	
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD PROGRAMMED	"P"	"P"
CONDUIT SPLICE		
WOOD POLE	"E"	
LUMINAIRE, 250W HPS	"E"	
MICROWAVE DETECTOR		

TRAFFIC SIGNAL GENERAL NOTES

THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONETS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATIN OF UTILITIES CALL J.U.L.I.E. AT 800-892-0123

ALL SIGNAL POSTS SHALL BE LOCATED WITH THE CENTERLINES A MINIMUM OF FOUR (4) FEET FROM THE BACK OF CURB UNLESS NOTED OR DIMENSIONED OTHERWISE ON THE DRAWINGS.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA UNLESS OTHERWISE SPECIFIED IN THE PLANS.

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY

CONSTRUCTION STAGING NOTES

THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS FOR OPERATION OF THE EXISTING TRAFFIC SIGNALS AS SPECIFIED IN THE TRAFFIC SIGNAL SPECIAL PROVISIONS WHEN PERFORMING THE WORK DESCRIBED HEREIN

ASSUME MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

CONSTRUCT NEW FOUNDATIONS AND INSTALL GALVANIZED STEEL CONDUIT

INSTALL PROPOSED ELECTRIC CABLE FOR CONDUIT, COIL AT HANDHOLES UNTIL READY FOR CONNECTION TO TRAFFIC SIGNAL EQUIPMENT.

INSTALL NEW TRAFFIC SIGNAL POST & MAST ARM COMPLETE WITH PROPOSED EQUIPMENT & SIGNAGE AS SHOWN ON PLAN. (IE SIGNAL HEADS,PED SIGNAL HEADS, PED PUSHBUTTON, E.V.S. DETECTORS,CONFIRMATION BEACONS,LUMINARES, VIDEO DETECTION CAMERAS, ETC.)

CONNECT NEW SIGNALS TO NEW CONTROLLER. CONNECTION OF NEW TRAFFIC AND PEDESTRIAN SIGNALS TO NEW CONTROLLER SHALL BE ACCOMPLISHED IN ONE DAY. SIGNALS AND EMERGENCY VEHICLE DETECTOR EQUIPMENT SHALL BE OPERATIONAL BY THE END OF EACH DAY.

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

REVISIONS		WOODWARD AVENUE IMPROVEMENTS PROPOSED TRAFFIC SIGNAL PLAN WOODWARD & PRESNTISS	
NAME	DATE		
		DATE: 2/09/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\PROP. SIGNAL	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	21
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936

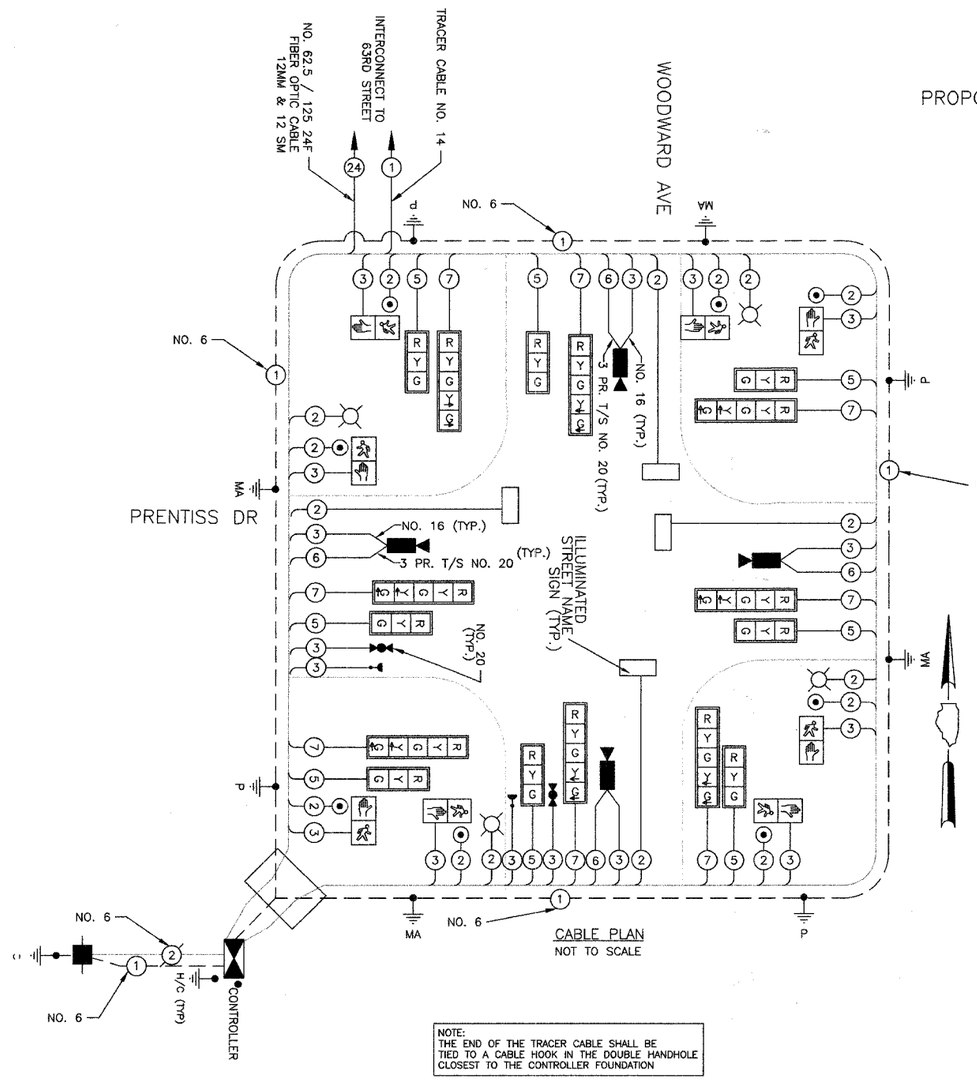
CABLE PLAN LEGEND

	EXISTING	PROPOSED
12" TRAFFIC SIGNAL SECTION	R	R
12" PEDESTRIAN SIGNAL SECTION		
CONTROLLER CABINET		
SERVICE INSTALLATION		
TELEPHONE CONNECTION		T
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
PUSHBUTTON DETECTOR		
DENOTES NUMBER OF CONDUCTORS ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.	2	2
SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.	R	R
GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER	H/C	H/C
GROUND ROD AT POST OR MAST ARM POLE	P	P
GROUND ROD AT ELECTRICAL SERVICE INSTALLATION	S	S
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1	1
FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 12MM & 12SM	24	24
LUMINAIRE, 250 W HPS	"E"	
VIDEO DETECTION CAMERA		

SUMMARY OF QUANTITIES

81000700	CONDUIT TRENCH, 2 1/2" DIA. GALVANIZED STEEL	990	FOOT
81001000	CONDUIT TRENCH, 4" DIA. GALVANIZED STEEL	275	FOOT
81001100	CONDUIT TRENCH, 5" DIA. GALVANIZED STEEL	10	FOOT
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	6	EACH
81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	1	EACH
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	531	FOOT
85700200	FULL ACTUATED CONTROLLER AND TYPE IV CABINET	1	EACH
87100160	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 24F	1600	FOOT
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	2834	FOOT
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	1392	FOOT
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	1392	FOOT
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	1392	FOOT
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	4	EACH
87600200	PEDESTRIAN PUSH BUTTON, TYPE II	8	EACH
87702860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 26 FT.	2	EACH
87702890	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT.	2	EACH
87800100	CONCRETE FOUNDATION, TYPE A	16	FOOT
87800200	CONCRETE FOUNDATION, TYPE D	4	FOOT
87800415	CONCRETE FOUNDATION, TYPE E, 36 INCH DIAMETER	60	FOOT
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	4	EACH
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	4	EACH
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	4	EACH
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	4	EACH
88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE BRACKET MOUNTED	8	EACH
88200100	TRAFFIC SIGNAL BACKPLATE	8	EACH
88700200	LIGHT DETECTOR	2	EACH
88700300	LIGHT DETECTOR AMPLIFIER	2	EACH
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	1	EACH
89100300	ILLUMINATED SIGN	4	EACH
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1	EACH
89502380	REMOVE EXISTING HANDHOLE	5	EACH
89502385	REMOVE EXISTING CONCRETE FOUNDATION	15	EACH
X0323481	VIDEO VEHICLE DETECTION, 4 CAMERAS	1	EACH
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C	1600	FOOT
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	1392	FOOT
X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, OVERALL SHIELED	540	FOOT
XX0035 52	VIDEO DETECTION SYSTEM	1	EACH
XX0071 60	ELECTRIC CABLE IN CONDUIT, NO. 20 6C, TWISTED, SHIELED, 3 PAIR	751	FOOT
X0321760	DOUBLE HANDHOLE REMOVAL	1	EACH

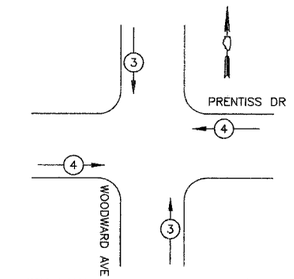
VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460



CABLE PLAN
NOT TO SCALE

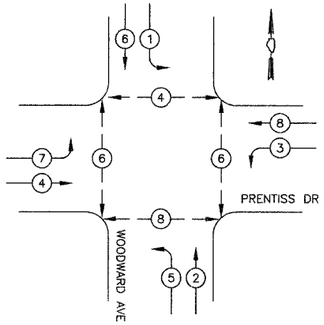
NOTE:
THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOK IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

LEGEND
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL OVERLAP
- PEDESTRIAN MOVEMENT
- NUMBER REFERS TO ASSOCIATED PHASE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	16		17	50	1080
(YELLOW)	16		25	25	439
(GREEN)	16		15	25	439
ARROW	16		12	10	216
PED. SIGNAL	8		25	100	720
CONTROLLER	1		100	100	100
				TOTAL =	2994

ENERGY COSTS TO: VILLAGE OF DOWNERS GROVE
5101 WALNUT AVENUE
DOWNERS GROVE, IL 60515
ENERGY SUPPLY: CONTACT: BOB TAYLOR
PHONE: 630-985-4055
COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20+L-2
E - M. ARM POLE		SIGNAL POST	2	BRACKET MOUNTED	13
24"	10	CONTROLLER CAB.	1	PED. PUSHBUTTON	4
30"	15	FIBER OPTIC	13	ELECTRICAL SERVICE	13.5
		ELECTRICAL SERVICE	1	SERVICE TO GROUND	13.5
		GROUND CABLE	1	POST MOUNTED	6

REVISIONS	
NAME	DATE

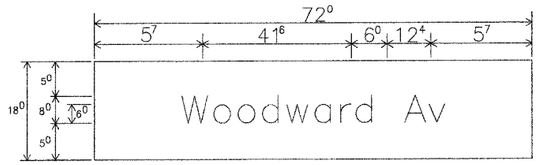
WOODWARD AVENUE IMPROVEMENTS

PROPOSED CABLE PLAN, SERVICES & SCHEDULE OF QUANTITIES

DATE: 2/09/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\CABLE-PLAN-PROP	

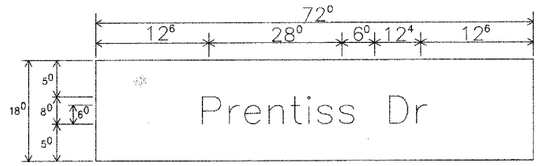
NOTE: ILLUMINATED STREET NAME SIGNS AVAILABLE ONLY IN 4 FT OR 6 FT LENGTHS.

PANEL SIGN DESIGN TYPE 1



____ Sq. M Each
9.00 Sq. Ft. Each
2 Required
Design Series D

INTERNALLY ILLUMINATED SIGN PANEL DESIGN

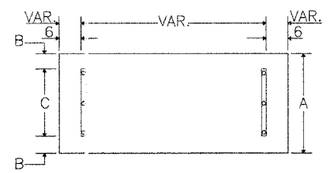


____ Sq. M Each
9.00 Sq. Ft. Each
2 Required
Design Series D

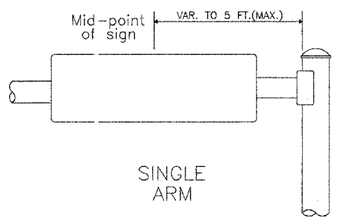
INTERNALLY ILLUMINATED SIGN PANEL DESIGN

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS.

SUPPORTING CHANNELS



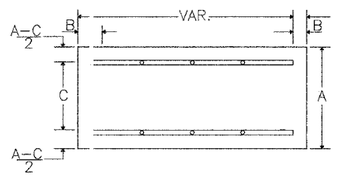
A	B	C
18"	2"	14"



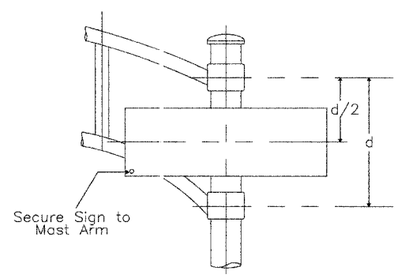
SINGLE ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



DUAL ARM

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" X 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
4. ALL BORDERS SHALL BE 3/4 " WIDE AND CORNER RADIUS SHALL BE 2-1/4".
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

A.K.T. CORPORATION
SCHAUMBURG, IL

TUCKER COMPANY, INC.
WAUWATOSA, WI

AMERICAN FABRICATION CO.
CHICAGO HEIGHTS, IL

WESTERN TRAFFIC CONTROL, INC.
CICERO, IL

PARTS LISTING:

SIGN CHANNEL — PART #HPN053 (MED. CHANNEL)
SIGN SCREWS — 1/4 " x 14 x 1" H.W.H #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS — PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

UPPER TO LOWER CASE

SPACING CHART 8-6 INCH SERIES "C & D"

EXAMPLE, 2^{3} — DENOTES 3/8"

	SECOND LETTER															
	a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{2}	1^{4}
B	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{6}	1^{7}
C E G	1^{4}	1^{5}	2^{0}	2^{1}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
D O Q R	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
F	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}
H I M N	2^{0}	2^{1}	2^{2}	2^{4}	2^{0}	2^{1}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}	2^{0}	2^{1}
J U	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}
K L	1^{1}	1^{2}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
P	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
S	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
T	1^{1}	1^{2}	1^{6}	1^{7}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
V	0^{6}	1^{0}	1^{4}	1^{5}	1^{1}	1^{2}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
Y	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{5}	0^{7}	0^{5}	0^{6}	0^{6}	1^{0}	1^{1}	1^{2}
Z	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}

LOWER CASE TO LOWER CASE

SPACING CHART 6 INCH SERIES "C" & "D"

FIRST LETTER	SECOND LETTER															
	a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d g h i j l m n q u	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}
b f k o p s	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
c e	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
r	0^{6}	1^{0}	1^{2}	1^{4}	0^{6}	1^{0}	0^{3}	0^{3}	0^{5}	0^{6}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}
t z	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
v y	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}
w	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
x	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}

NUMBER TO NUMBER

SPACING CHART 8 INCH SERIES "C" & "D"

FIRST NUMBER	SECOND NUMBER															
	0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}
1	2^{0}	2^{1}	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}
2 3 4	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{6}	1^{7}	1^{4}	1^{5}
5	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
6	1^{6}	1^{7}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
7	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{5}	0^{5}	0^{6}	1^{2}	1^{4}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}
8	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{4}	1^{5}

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	22
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83936

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	6 INCH UPPER CASE LETTERS SERIES D	8 INCH UPPER CASE LETTERS SERIES C	8 INCH UPPER CASE LETTERS SERIES D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	6 INCH LOWER CASE LETTERS SERIES D
A	3^{6}	5^{0}	5^{0}	6^{5}	a	3^{5}	4^{2}
B	3^{2}	4^{0}	4^{3}	5^{3}	b	3^{5}	4^{2}
C	3^{2}	4^{0}	4^{3}	5^{3}	c	3^{5}	4^{1}
D	3^{2}	4^{0}	4^{3}	5^{3}	d	3^{5}	4^{2}
E	3^{0}	3^{5}	4^{0}	4^{7}	e	3^{5}	4^{2}
F	3^{0}	3^{5}	4^{0}	4^{7}	f	2^{3}	2^{6}
G	3^{2}	4^{0}	4^{3}	5^{3}	g	3^{5}	4^{2}
H	3^{2}	4^{0}	4^{3}	5^{3}	h	3^{5}	4^{2}
I	0^{7}	0^{7}	1^{1}	1^{2}	i	1^{1}	1^{1}
J	3^{0}	3^{6}	4^{0}	5^{0}	j	2^{0}	2^{2}
K	3^{2}	4^{1}	4^{3}	5^{4}	k	3^{5}	4^{2}
L	3^{0}	3^{5}	4^{0}	4^{7}	l	1^{1}	1^{1}
M	3^{7}	4^{5}	5^{1}	6^{1}	m	6^{0}	7^{0}
N	3^{2}	4^{0}	4^{3}	5^{3}	n	3^{5}	4^{2}
O	3^{4}	4^{2}	4^{5}	5^{5}	o	3^{6}	4^{3}
P	3^{2}	4^{0}	4^{3}	5^{3}	p	3^{5}	4^{2}
Q	3^{4}	4^{2}	4^{5}	5^{5}	q	3^{5}	4^{2}
R	3^{2}	4^{0}	4^{3}	5^{3}	r	2^{6}	3^{2}
S	3^{2}	4^{0}	4^{3}	5^{3}	s	3^{6}	4^{2}
T	3^{0}	3^{5}	4^{0}	4^{7}	t	2^{7}	3^{2}
U	3^{2}	4^{0}	4^{3}	5^{3}	u	3^{5}	4^{2}
V	3^{5}	4^{4}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{4}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{4}	5^{1}
Y	3^{6}	5^{0}	5^{0}	6^{6}	y	4^{6}	5^{3}
Z	3^{2}	4^{0}	4^{3}	5^{3}	z	3^{6}	4^{3}

NUMBER	6 INCH SERIES C	6 INCH SERIES D	8 INCH SERIES C	8 INCH SERIES D
1	2^{2}	1^{4}	1^{5}	2^{0}
2	3^{2}	4^{0}	4^{3}	5^{3}
3	3^{2}	4^{0}	4^{3}	5^{3}
4	3^{5}	4^{0}	4^{7}	5^{7}
5	3^{2}	4^{0}	4^{3}	5^{3}
6	3^{2}	4^{0}	4^{3}	5^{3}
7	3^{2}	4^{0}	4^{3}	5^{3}
8	3^{2}	4^{0}	4^{3}	5^{3}
9	3^{2}	4^{0}	4^{3}	5^{3}
0	3^{4}	4^{2}	4^{5}	5^{5}

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

REVISIONS	
NAME	DATE

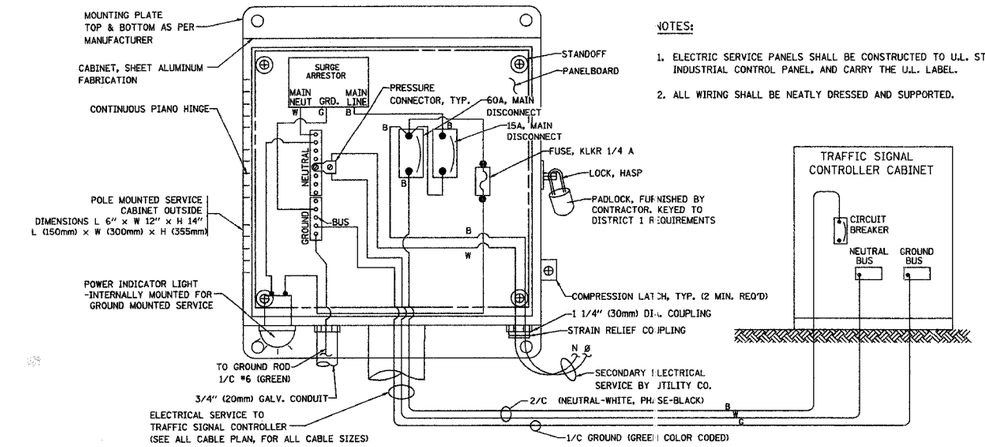
WOODWARD AVENUE IMPROVEMENTS

MAST ARM MOUNTED STREET SIGNS

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\MAST-ARM-SIGNS	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	23
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



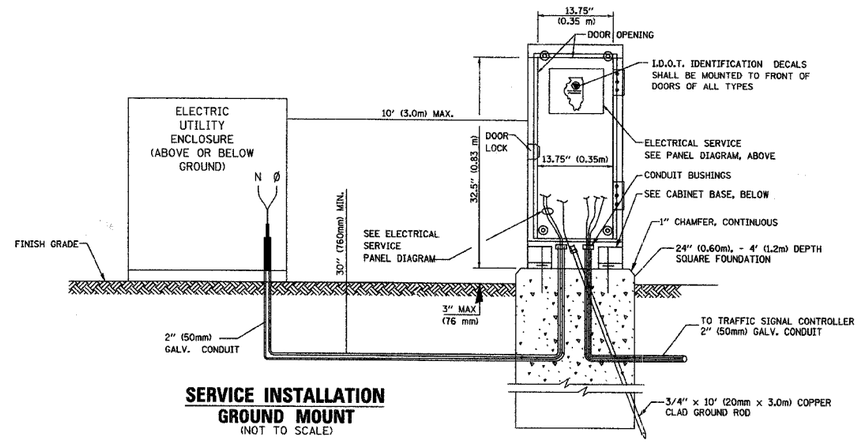
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)

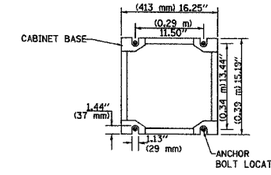
NOTES:

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



SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)



CABINET – BASE BOLT PATTERN

(NOT TO SCALE)

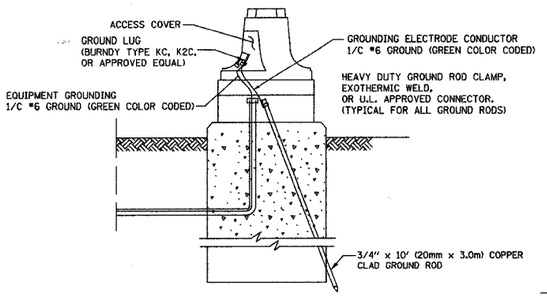
NOTES:

GROUNDING SYSTEM

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

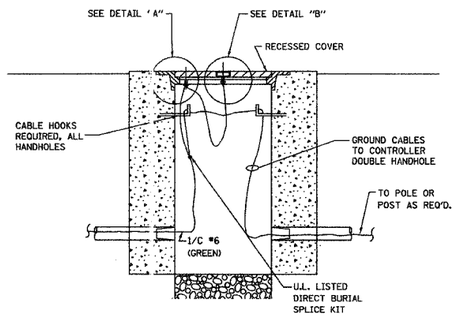
NOTES:

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



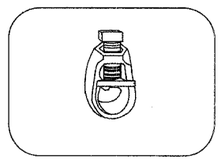
MASTER ARM POLE / POST-GROUNDING DETAIL

(NOT TO SCALE)

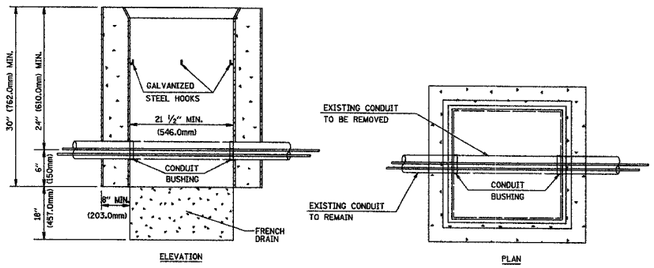


HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



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



DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT
N.T.S.

REVISIONS		WOODWARD AVENUE IMPROVEMENTS STANDARD TRAFFIC SIGNAL DETAILS	
NAME	DATE		
		DATE: 2/02/07	CHECKED BY: S.A.V.
		SCALE: N.T.S.	DRAWN BY: R.W.B.
		FILE NAME: C:\CADFILES\WOODWARD\SIGNAL-DESIGN-DETAILS	

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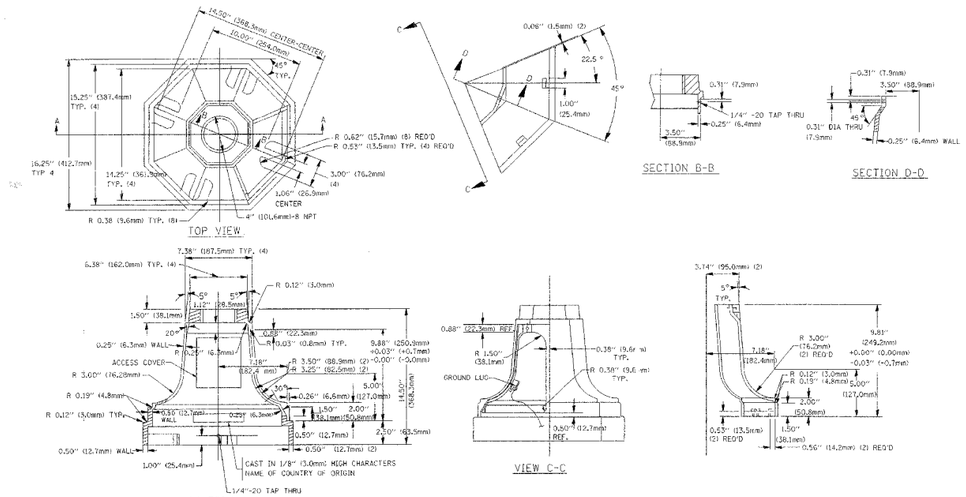
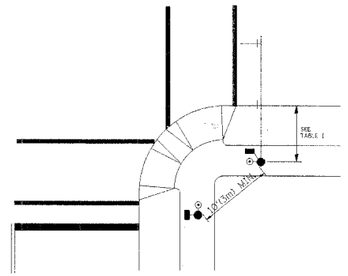
CONTRACT NO. 83936



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

1. AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

   AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

   PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

   A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.

   B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.

   C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

   D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).

   E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK.

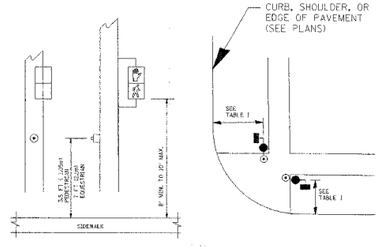
2. PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.

3. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.

4. THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION



TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA, INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR

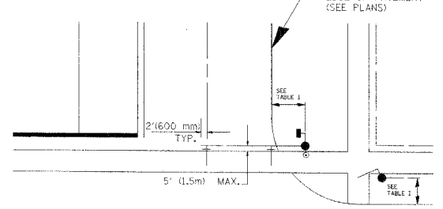
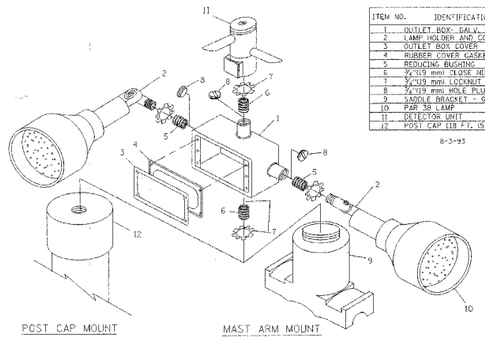


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1



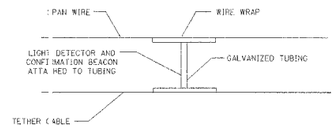
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX: GALV. 22 CU.IN. (0.000344 CU.M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP (10 FT. (3.4 m) POST MIN.)

8-3-93

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-SO 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 ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCRIBED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

VILLAGE OF DOWNERS GROVE
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LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

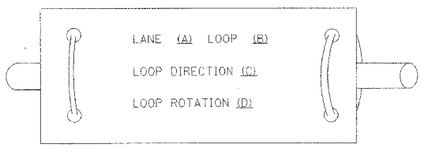
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

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

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

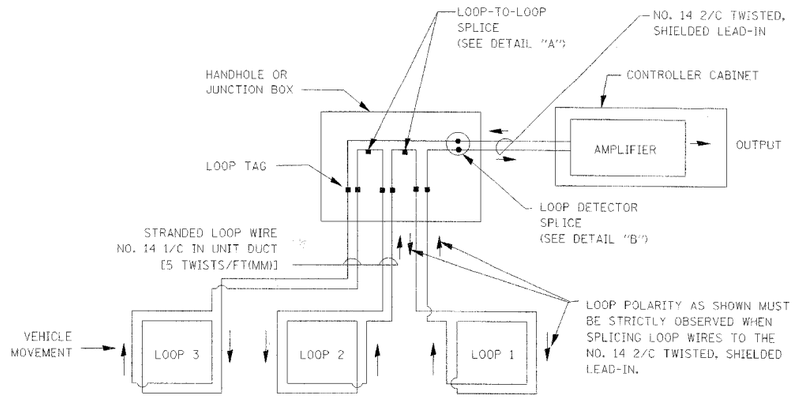


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

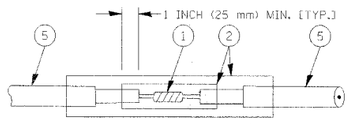
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

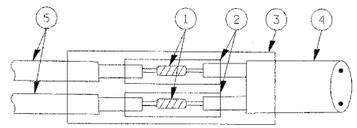


DETECTOR LOOP WIRING SCHEMATIC

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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

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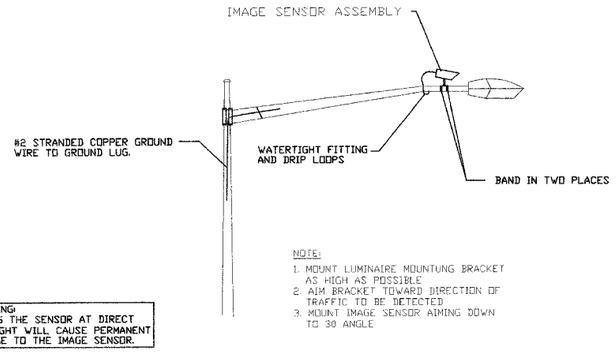
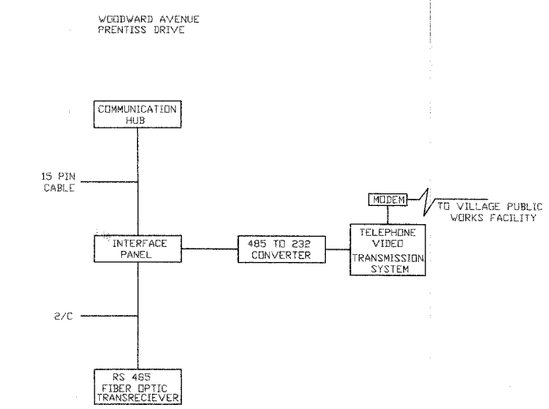
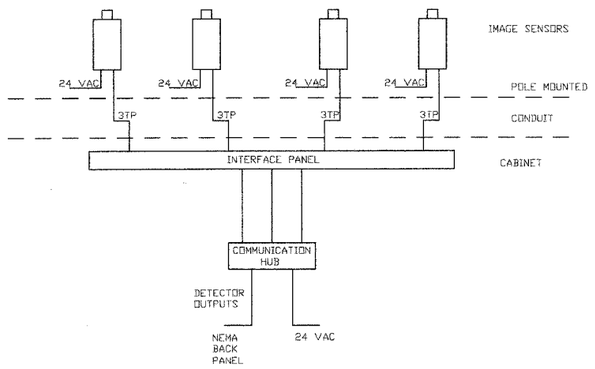


IMAGE SENSOR MOUNTING DETAIL

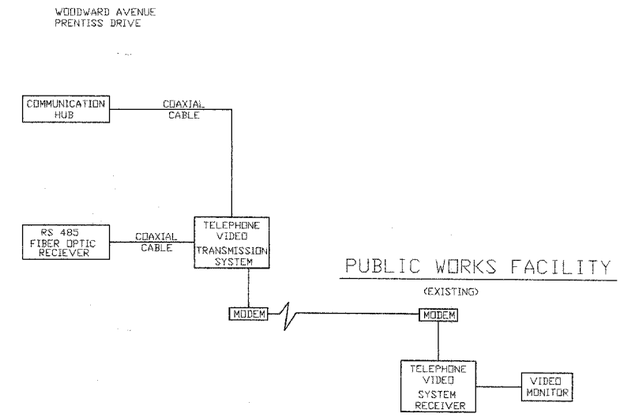
N.T.S.



DATA TRANSMISSION SCHEMATIC



VIDEO VEHICLE DETECTION SYSTEM COMPONENT LAYOUT



VIDEO TRANSMISSION SCHEMATIC

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2593	02-00092-00-WR	DU PAGE	49	27
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
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GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLE FOUNDATIONS, CENTER LINE OF TRENCH AND CONDUIT PUSHES FOR EXAMINATION AND CONFIRMATION WITH THE VILLAGE AND ENGINEER. THE EXACT LOCATIONS OF ALL ITEMS SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR GROUNDING. GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING.
3. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE SPECIFIED REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ROADWAY LIGHTING". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED BY THE ENGINEER PRIOR TO COMPLETING BACKFILLING OPERATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIKE SHALL REMAIN WITH THE CONTRACTOR.
5. NO LIGHT POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, A MINIMUM OF SEVEN DAYS OR AS APPROVED BY THE ENGINEER.
6. TO MAINTAIN STRUCTURAL INTEGRITY OF THE LIGHT POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT POLES SHALL NOT BE PAID UNTIL THE LUMINAIRES ARE INSTALLED.
7. NO EQUIPMENT OR MATERIAL SHALL BE DELIVERED TO THE JOB SITE PRIOR TO THE APPROVAL AND INSPECTION BY THE ENGINEER. ANY EQUIPMENT OR MATERIAL DELIVERED TO THE JOB SITE PRIOR TO APPROVAL AND INSPECTION SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
8. CONDUIT PUSHED AND IN TRENCH SHALL EXTEND FIVE (5) FEET BEYOND THE SHOULDER, CURB OR DRIVEWAY, AS APPLICABLE.
9. THE CONTRACTOR SHALL PROVIDE A 5/8 " X 10' COPPER CLAD GROUND ROD AT EACH LIGHT POLE (REFER TO THE FOUNDATION DETAIL). THE GROUND ROD SHALL NOT BE EMBEDED IN THE FOUNDATION.
10. ALL CONDUIT SHALL BE INSTALLED MIN. 30 INCHES BELOW FINISHED GRADE (UNLESS DIRECTED OTHERWISE) COMPLETE WITH WARNING TAPE. CONTRACTOR SHALL HAND DIG TEST HOLES FOR EVERY 1000 FT. OF TRENCHING FOR ENGINEER'S APPROVAL OF THE INSTALLATION.
11. MATERIALS AND INSTALLATION METHODS SHALL COMPLY WITH CODES AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION. NATIONAL ELECTRICAL CODE (LATEST REVISION) SHALL BE CONSIDERED AS A MINIMUM REQUIREMENT.
12. IT IS CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTACT J.U.L.I.E. PRIOR TO THE START OF ANY EXCAVATION WORK.
13. BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL UTILITY COMPANY FOR APPROVAL OF LOCATION.
14. FOR LOCATION OF EXISTING UNDERGROUND MUNICIPAL UTILITIES CALL THE VILLAGE OF DOWNERS GROVE.
15. MATERIAL QUANTITIES ARE APPROXIMATIONS ONLY. IT IS CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL QUANTITIES PRIOR TO ORDERING MATERIAL.
16. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION AND STAGING WITH OTHER WORK BEING DONE IN THE SAME GENERAL AREA BY UTILITY COMPANY. CONTRACTOR SHALL SET UP COORDINATION MEETINGS IF REQUIRED.
17. A STAGING SCHEDULE FOR MATERIAL INSTALLATION, REMOVAL AND APPROXIMATE DATE OF PROPOSED ENERGIZING OF PERMANENT LIGHTING SHALL BE SUBMITTED PRIOR TO THE COMMENCEMENT OF WORK TO ASSURE COORDINATION WITH CONTRACT WORK SCHEDULE.
18. POWER UTILITY COMPANY SHALL BE CONTACTED AS SOON AS POSSIBLE AND NOTIFIED OF PENDING SERVICE CONNECTIONS AND INSTALLATIONS TO ENSURE CONTINUITY OF NIGHT TIME HOURS OF LIGHTING OPERATION.
19. EXISTING LIGHTING CONTROL CABINETS SHALL BE REMOVED AND PROVIDE NEW LIGHTING CONTROL CABINET PER VILLAGE OF DOWNERS GROVE STANDARDS.
20. PROPOSED NEW CONDUITS SHALL BE HDPE SCHEDULE 40, UNLESS NOTED OTHERWISE.
21. EACH WIRE SHALL BE IDENTIFIED AT EACH POLE BY APPROPRIATE CONTROLLER AND CIRCUIT NUMBER.
22. CONTRACTOR SHALL SUBMIT "RECORD DRAWINGS" A MINIMUM OF 7 DAYS PRIOR TO THE FINAL INSPECTION. "RECORD DRAWINGS" SHALL BE UPDATED REGULARLY DURING CONSTRUCTION AND INDICATE ALL LIGHTING MATERIAL INSTALLATION WITH ANY CHANGES IN RED.
23. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE VILLAGE AND ENGINEER.
24. CONTRACTOR SHALL NOT PROCEED WITH CUTTING OF TREES OR CLEARING OF RIGHT- OF-WAY WITHOUT WRITTEN NOTIFICATION AND APPROVED BY ENGINEER.
25. CONTRACTOR TO VERIFY FOUNDATION BOLT PATTERN PRIOR TO CONSTRUCTING FOUNDATIONS.
26. CONDUCTORS IN LIGHT POLES AND COMBINATION MAST ARMS AND POLES SHALL BE PROPERLY SUPPORTED INDEPENDENT OF THE LUMINAIRE TERMINALS.
27. QUANTITY OF PUSHED CONDUIT AND CONDUIT IN TRENCH ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY THE QUANTITIES PRIOR TO ORDERING THE MATERIAL AND INSTALL CONDUITS IN FULL COMPLIANCE WITH THE DETAILS AND SPECIFICATIONS SET REQUIREMENTS.
28. THE CONTRACTOR SHALL PROVIDE NEW PHOTOCELL FOR NEW LIGHTING CONTROL. A PHOTOCELL SHALL BE MOUNTED ON THE CLOSEST POLE TO THE EXISTING LIGHTING CONTROLLER. FURNISH WEATHER TIGHT ADAPTER FOR MOUNTING PHOTOCELL. PHOTOCELL CONTROL CABLES SHALL RUN INSIDE THE SAME RACEWAY AS THE LIGHTING CIRCUIT. THE PHOTOCELL AND PHOTOCELL WIRING SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
29. THE CONTROLLER AND CIRCUIT DESIGNATIONS AS SHOWN ON THE DRAWINGS ARE FOR REFERENCE ONLY. EXACT DESIGNATIONS FOR DECALS SHALL BE AS DIRECTED BY THE OWNER.
30. THE POLE DESIGNATION AS SHOWN ON THE DRAWINGS ARE FOR REFERENCE ONLY. EXACT DESIGNATION OF ALL NEW POLES AND RELOCATED POLES SHALL BE AS DIRECTED BY THE OWNER.
31. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, FLAG AND PROTECT ALL EXISTING UNDERGROUND UTILITIES PRIOR TO AND DURING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT NO EXTRA COST TO THE VILLAGE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED CONDUIT.
32. COMBINATION MAST ARMS AND POLES ARE INSTALLED AND PAID FOR UNDER TRAFFIC SIGNAL WORK. COORDINATE LUMINAIRE INSTALLATION AND CONDUITS IN FOUNDATIONS WITH TARFFIC SIGNAL WORK.
33. ANY REMOVED LIGHT POLES/FIXTURES/PHOTOCELLS AND CONTROLLERS SHALL BE TURNED OVER TO THE VILLAGE. COORDINATE LOCATION AND DELIVERY TIMES WITH OWNER/ENGINEER. CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING SYSTEM IN OPERATION DURING INSTALLATION OF PROPOSED LIGHTING SYSTEM.
34. UNLESS OTHERWISE INDICATED, ALL ITEMS AND WORK SHOWN ON THESE PLANS ARE PROPOSED NEW ITEMS OF WORK.
35. CONTRACTOR'S STAGING AREA SHALL BE AS DIRECTED BY THE OWNER IN THE PRE-CONSTRUCTION MEETING.
36. EXISTING POLES AND FIXTURES NOT MARKED FOR REMOVAL SHALL REMAIN. REROUTE AND EXTEND CONDUIT AND WIRING AS REQUIRED FOR EXISTING REMAINING LIGHT POLES.
37. CONTRACTOR SHALL OBTAIN EXISTING LIGHTING PLANS FROM THE VILLAGE OF DOWNERS GROVE PRIOR TO STARTING CONSTRUCTION.
38. CONTRACTOR SHALL PROVIDE NEW COMPLETE FIXTURES IN PROJECT LIMITS. PROPOSED FIXTURES SHALL BE MANUFACTURED BY AMERICAN ELECTRIC, TYPE 325-25-S-R3-FG-HP, 250W HPS, 28,000 LIGHT LUMENS OR ENGINEER APPROVED EQUAL.
39. CONTRACTOR SHALL PROVIDE NEW ALUMINUM LIGHT POLES IN PROJECT LIMITS. LIGH POLES SHALL BE 30 FEET MOUNTING HEIGHT AND 6 FEET MAST ARM.
40. CONDUCTORS SHALL BE SPLICED IN LIGHTING CONTROLLERS AND LIGHT POLE BASES ONLY. NO SPLICES SHALL BE LOCATED BELOW GRADE.
41. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE INDICATED BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE CONTRACTOR SHALL CONFIRM UNDERGROUND UTILITY AND DRAINAGE LOCATIONS IN THE FIELD PRIOR TO EXCAVATING. THE CONTRACTOR SHALL RELOCATE UNDERGROUND CABLES AS REQUIRED TO AVOID UNDERGROUND UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL ADJUST THE POSITION OF TEMPORARY LIGHT POLES AND CONSTRUCT OFFSET LIGHT POLE FOUNDATIONS AS REQUIRED TO AVOID UNDERGROUND UTILITIES AND STRUCTURES. DEVIATIONS FROM THE CONTRACT PLANS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION AND ACCURATELY REPORTED ON THE RECORD DRAWINGS.
42. ELECTRICAL WORK SHALL BE COORDINATED WITH ALL OF THE WORK REQUIRED IN THIS CONTRACT. LACK OF COORDINATION WITH OTHER WORK INCLUDED IN THIS CONTRACT, WHETHER OR NOT SHOWN ON THE ELECTRICAL PLANS, SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION.

LEGEND

- EXISTING LIGHTING CONTROL CABINET TO REMOVE.
- NEW LIGHTING CONTROL CABINET.
- VILLAGE OF DOWNERS GROVE EXISTING LIGHT FIXTURE, POLE AND FOUNDATION, TO BE REMOVED
- PROPOSED VILLAGE OF DOWNERS GROVE COMBINATION MAST ARM AND POLE WITH TWO 250W HPS LUMINAIRES, 45 FEET MOUNTING HEIGHT, (2) 6 FEET MAST ARMS AND FOUNDATION.
- PROPOSED VILLAGE OF DOWNERS GROVE ALUMINUM LIGHT POLE AND 250W HPS LUMINAIRE, 30 FEET MOUNTING HEIGHT, 6 FEET MAST ARM AND FOUNDATION.

1A3
- POLE NUMBER
- CIRCUIT IDENTIFICATION (LIGHTING FIXTURES)
- LIGHTING CONTROL CABINET DESIGNATION
- GROUNDING

- PROPOSED LIGHTING CABLE IN 1 1/4" SCHEDULE 40 HDPE UNIT DUCT CONDUIT (CABLE SIZE AS NOTED)
- P — PROPOSED RGS CONDUIT, PUSHED

ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CCT	CIRCUIT
DIA	DIAMETER
E	ELECTRICAL
EX	EXISTING
GND	GROUND
RGS	RIGID GALVANIZED STEEL
P	PROPOSED
PVC	POLY VINYL CHLORIDE (SCHEDULE 80 CONDUIT)
STA	STATION
T	TRENCH
UD	UNIT DUCT

PAY ITEM	UNIT	TOTAL BID QTY
ELECTRICAL UTILITY SERVICE CONNECTION	EACH	1
GROUND ROD, 5/8" DIA. X 10FT	EACH	29
CONDUIT TRENCH, 2' DIA GALAVIZED STEEL	FOOT	100
CONDUIT TRENCH, 2 1/2" DIA GALAVIZED STEEL	FOOT	488
CONDUIT PUSH, 2 1/2" DIA GALAVIZED STEEL	FOOT	572
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	4,488
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 3-1/C NO. 6	FOOT	200
LUMINARE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	36
LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240 VOLT	EACH	1
LIGHT POLE, ALUMINUM, 30FT MH, 6FT MAST ARM	EACH	28
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	400
BREAKAWAY DEVICE, COUPLING, WITH ALUMINUM SKIRT	EACH	112
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
REMOVE EXISTING LIGHT POLE AND FOUNDATION	EACH	9
UNIT DUCT WITH 2-1/C NO. 8 & 1/C NO. 8 GROUND, 600V(EPR-TYPE RHW) 1 1/4" DIA POLYETHYLENE	FOOT	5,521

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

SIGNED 10 APR 2007
LICENSE EXPIRES 30 NOV 2007

Burns & McDonnell

date	detailed
04/10/2007	BMH
designed	checked
FO	DEM

Village of DOWNERS GROVE

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
GEN. NOTES, LEGEND AND ABBREVIATIONS

project	contract
45190	
drawing	rev.
E01	0
sheet	of sheets
file I:\DOWNERS...\45190\CAD\E01	

Scale For Microfilming: Millimetres / Inches

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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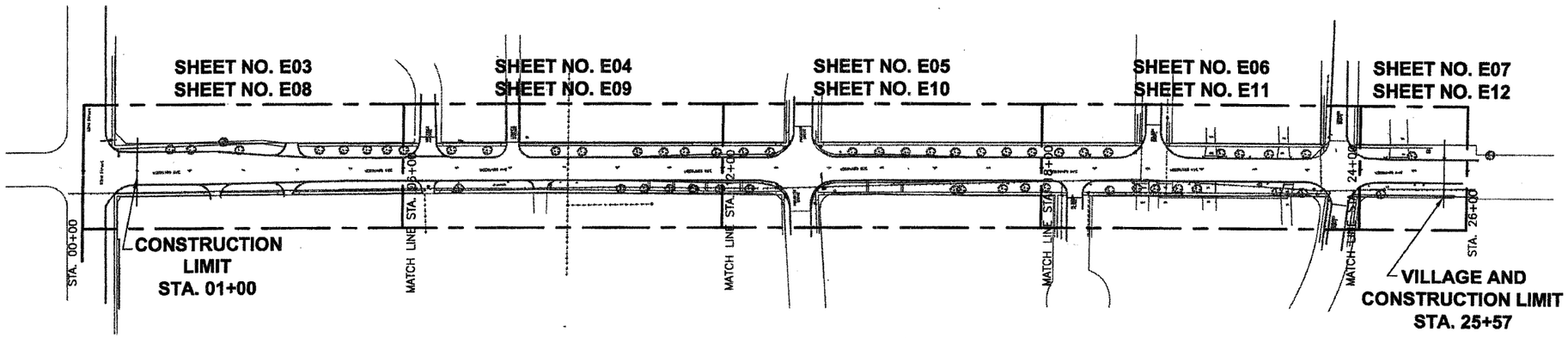
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 83936				



PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - KEY PLAN

SCALE AS NOTED

NORTH

0 100' 200'
SCALE IN FEET

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 00+00 TO STATION 26+00

project	contract
45190	

drawing E02 — rev. 0

sheet of sheets

file I:\DOWNERS...\45190\CAD\ E02

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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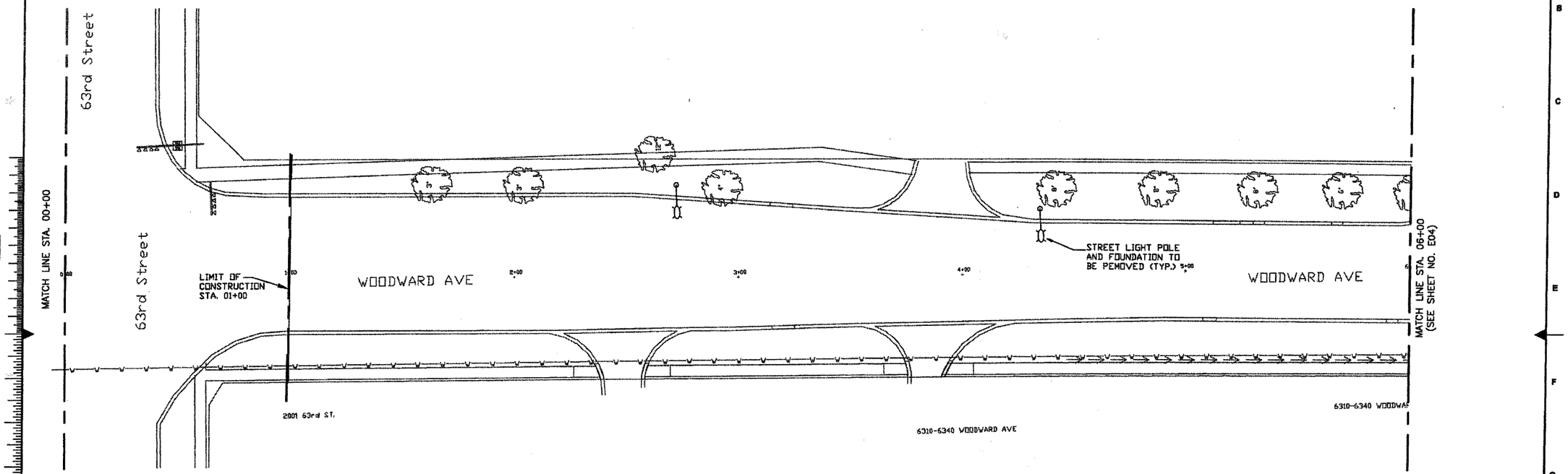
CONTRACT 83936				



PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - EXISTING

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

Village of DOWNERS GROVE

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 00+00 TO STATION 06+00

project	contract
45190	
drawing	rev.
E03	– 0
sheet	of sheets
file I:\DOWNERS...\45190\CAD\ E03	

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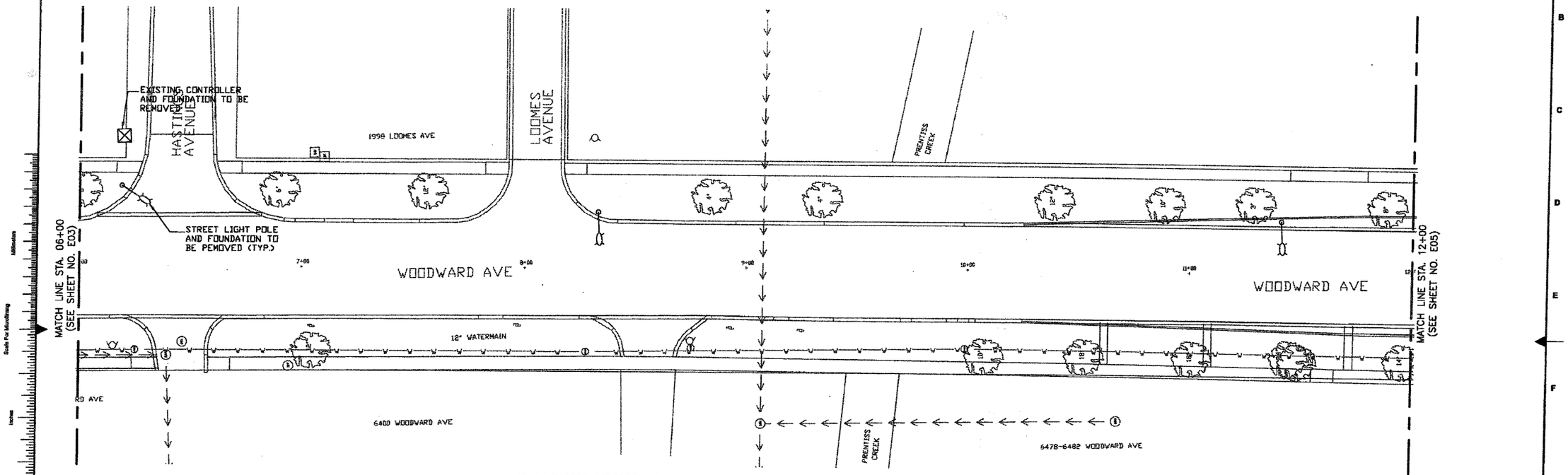

PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - EXISTING

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

Village of DOWNERS GROVE

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 06+00 TO STATION 12+00

project	contract
45190	

drawing E04 — rev. 0

sheet of sheets

file I:\DOWNERS...\45190\CAD\ E04

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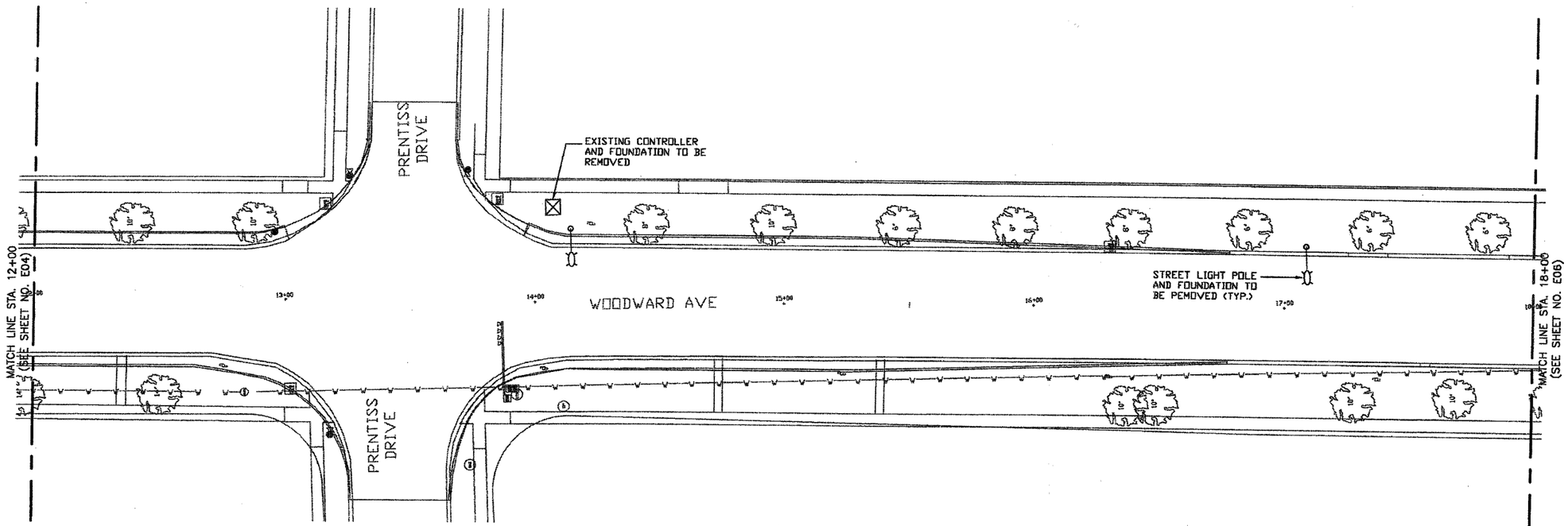

PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - EXISTING

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 12+00 TO STATION 18+00

project	contract
45190	

drawing E05 — rev. 0

sheet of sheets

file: I:\DOWNERS...\45190\CAD\ E05

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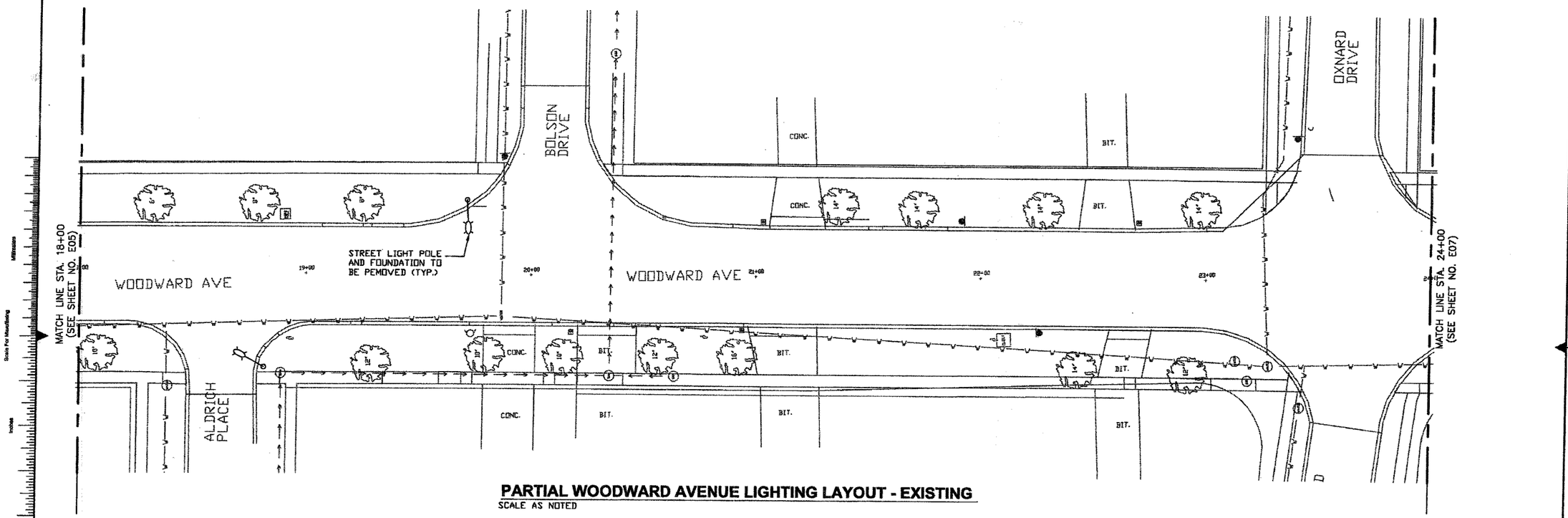

NORTH

0 10' 20' 40'
SCALE IN FEET

PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - EXISTING

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 18+00 TO STATION 24+00

project	contract
45190	

drawing E06 — rev. 0

sheet of sheets

file I:\DOWNERS...\45190\CAD\ E06

Scale For Microfilming
Inches
Millimeters

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2593	02-00092-00-WR	DU PAGE	49	33
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 83936				

NORTH

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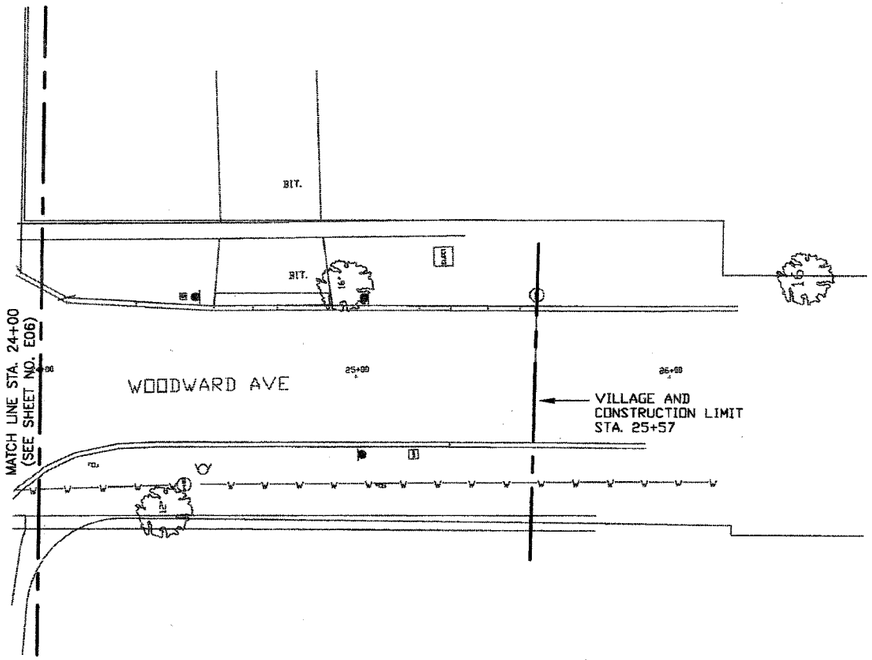
SCALE IN FEET



PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - EXISTING

SCALE AS NOTED

Scale For Millimetres

Inches

DAVID E. MERTZ
062-052068
REGISTERED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS

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date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 24+00 TO STATION 26+00

project	contract
45190	
drawing	rev.
E07	0
sheet	of sheets
file I:\DOWNERS...\45190\CAD\ E07	

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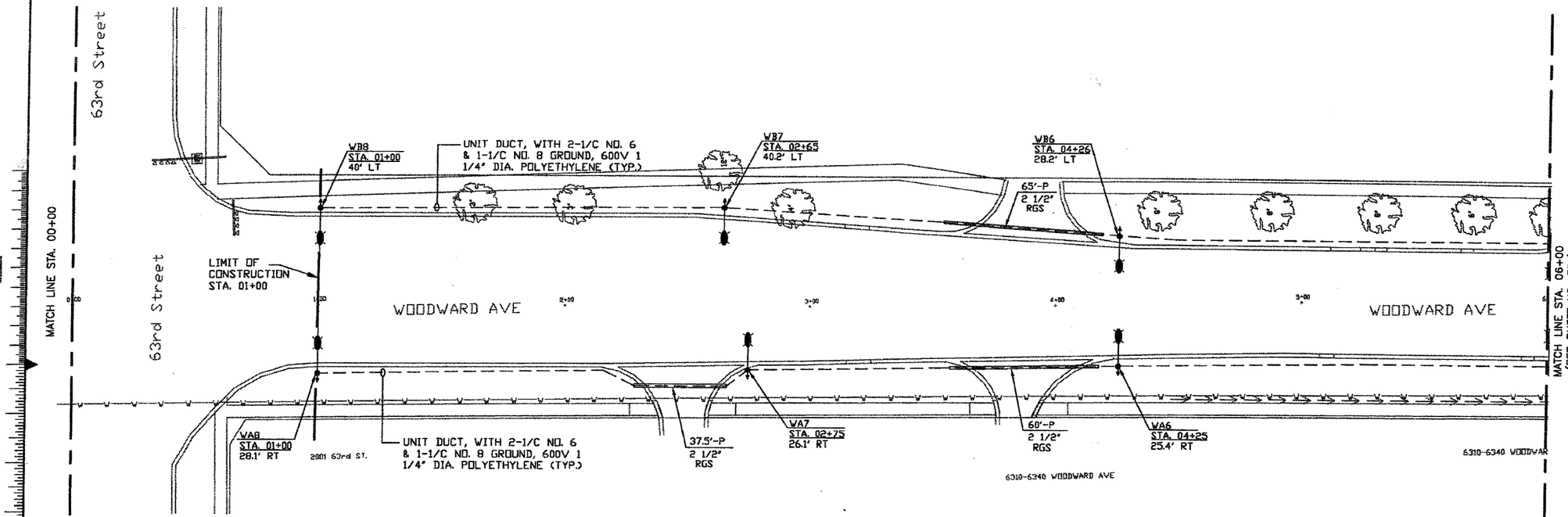

PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - PROPOSED PLAN

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 00+00 TO STATION 06+00

project	contract
45190	

drawing E08 — rev. 0

sheet of sheets

file I:\DOWNERS...\45190\CAD\ E08

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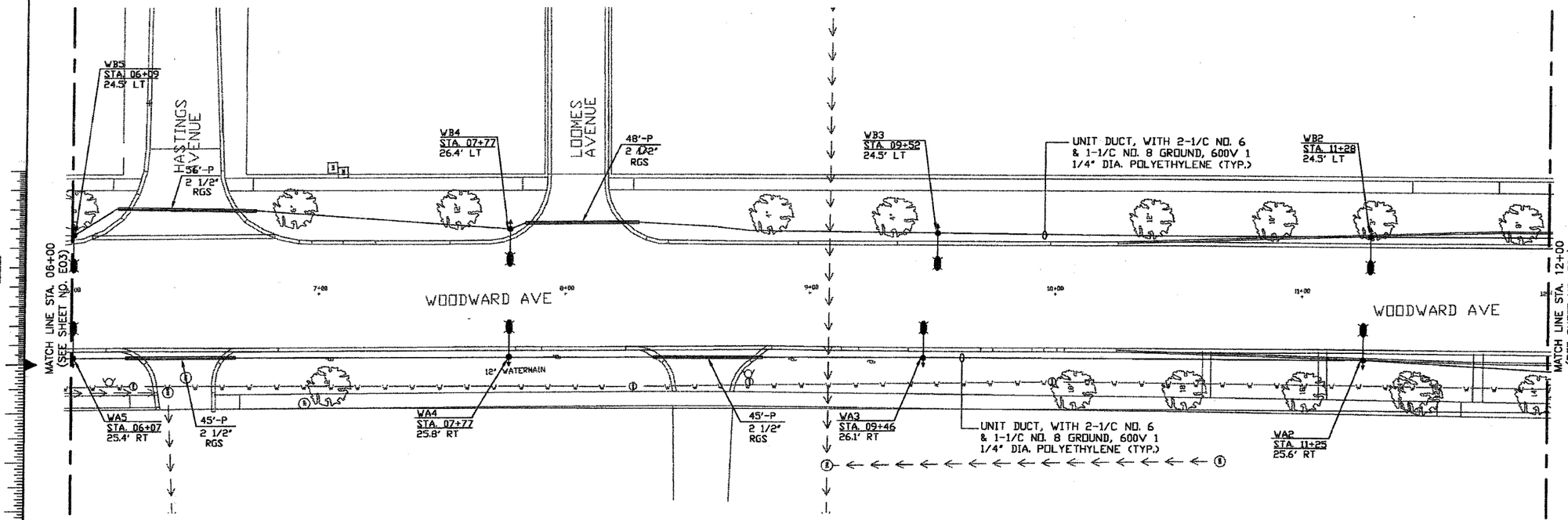

PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - PROPOSED PLAN

SCALE AS NOTED

NORTH

0 10' 20' 40'
SCALE IN FEET

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

Village of DOWNERS GROVE

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 06+00 TO STATION 12+00

project	contract
45190	

drawing E09 — rev. 0

sheet of sheets

file I:\DOWNERS...\45190\CAD\ E09

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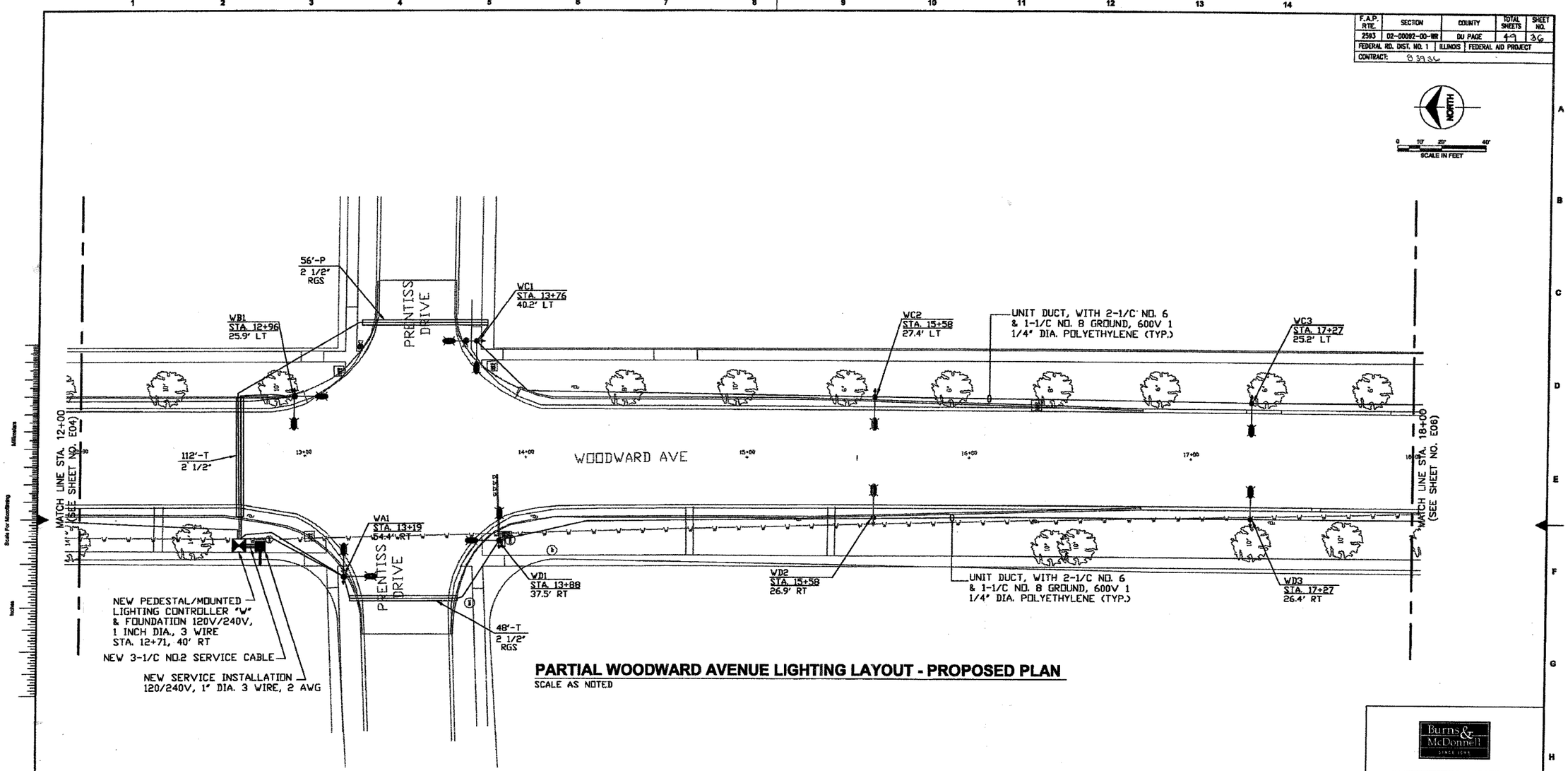


PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - PROPOSED PLAN

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

Village of DOWNERS GROVE

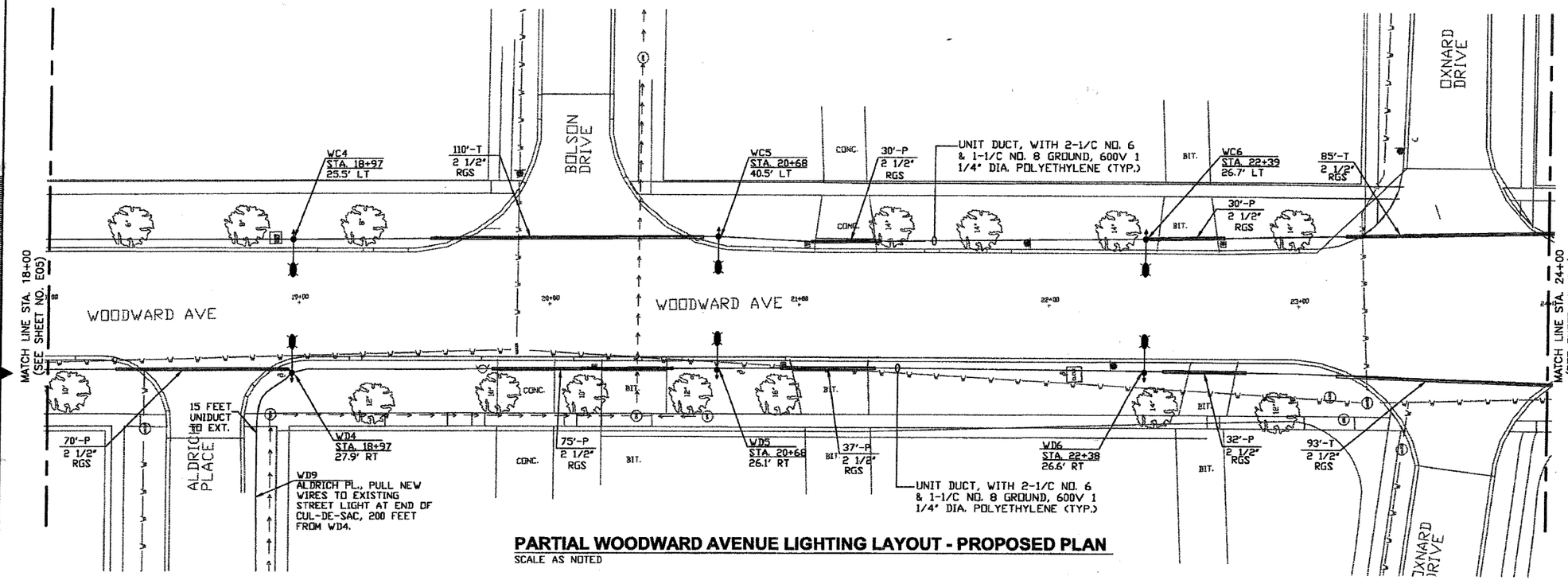
VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 12+00 TO STATION 18+00

project	contract
45190	
drawing	rev.
E10	0
sheet	of sheets
file I:\DOWNERS...\45190\CAD\ E10	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2593	02-00092-00-WR	DU PAGE	49	37
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 85936				

NORTH

0 10' 20' 40'
SCALE IN FEET



PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - PROPOSED PLAN

SCALE AS NOTED

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 18+00 TO STATION 24+00

project	contract
45190	

drawing E11 — rev. 0

sheet of sheets

file I:\DOWNERS...\45190\CAD\ E11

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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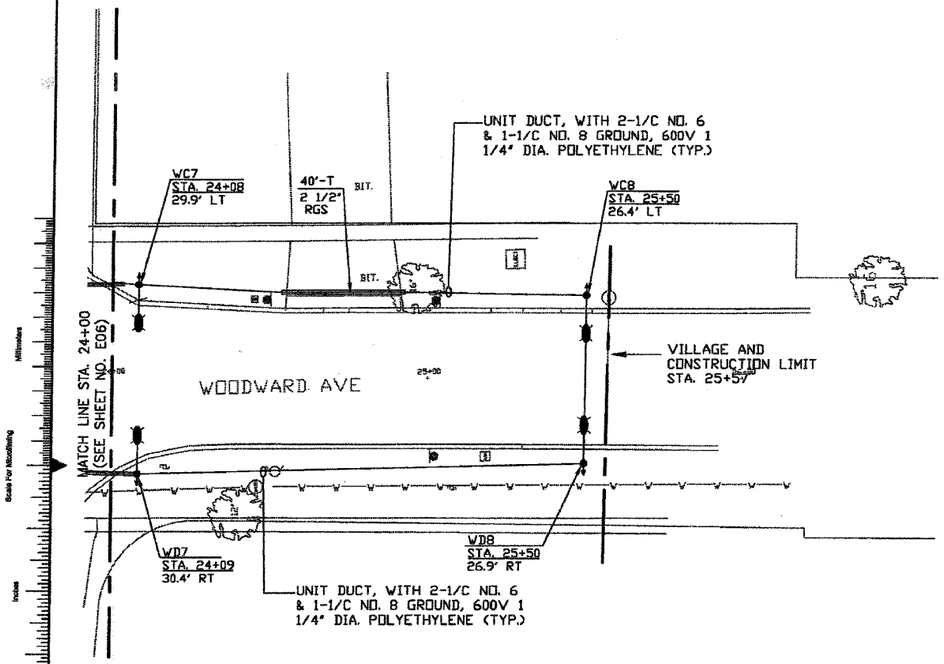
CONTRACT: 83936				



PARTIAL WOODWARD AVENUE LIGHTING LAYOUT - PROPOSED PLAN

SCALE AS NOTED

NORTH

0 10' 20' 40'
SCALE IN FEET

DAVID E. MERTZ
062-052068
REGISTERED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	BMH
designed	checked
FO	DEM

Village of DOWNERS GROVE

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE LIGHTING LAYOUT
STATION 24+00 TO STATION 26+00

project	contract
45190	

drawing E12 — rev. 0

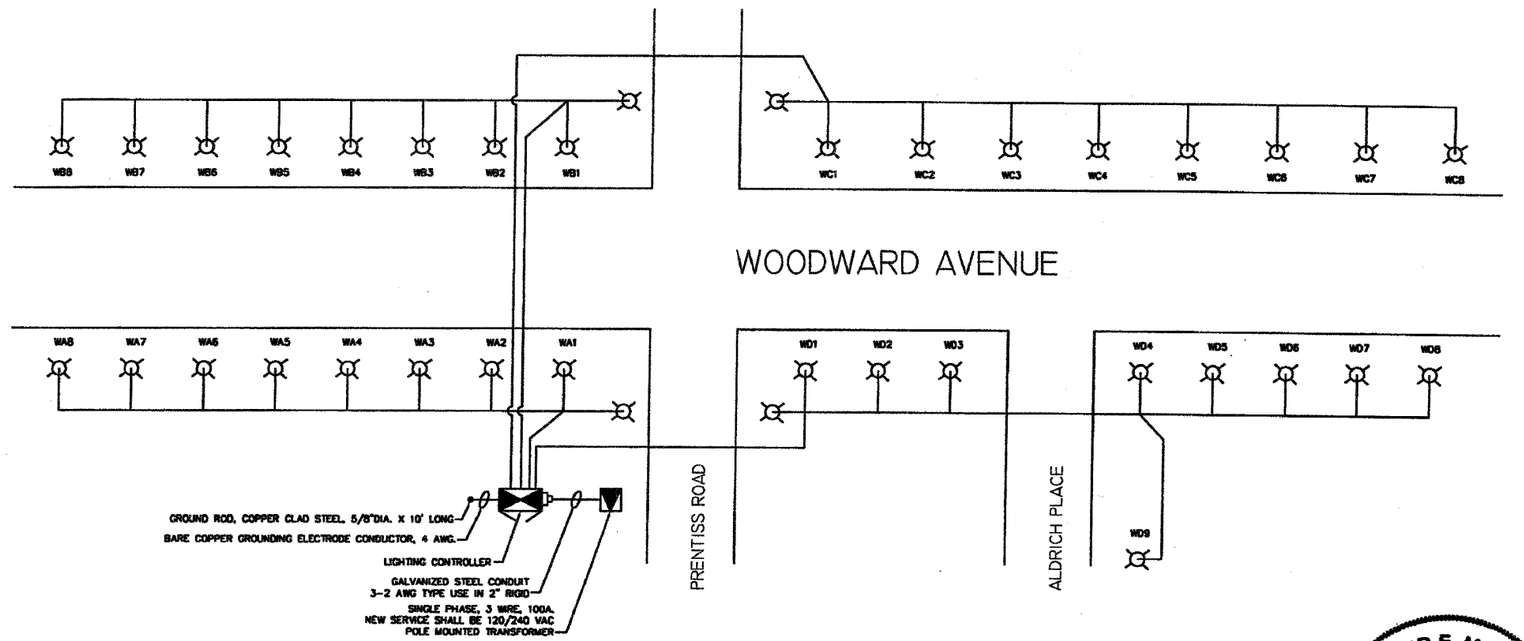
sheet of sheets

file I:\DOWNERS...\45190\CAD\ E12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2593	02-00092-00-WR	DU PAGE	49	39
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 83936				

NORTH

LOAD TABULATION FOR LIGHTING CONTROLLER "W"					
CIRCUIT	POLE NUMBER	PHASE 1 (BLACK) AMP	PHASE 2 (RED) AMP	BREAKER SIZE	REMARKS
A	3	11.1	11.1	20	
B	2, 4	11.1	11.1	30	
C	5, 7	11.1	11.1	20	
D	6	11.9	11.9	30	
E	9, 11	0	0	20	SPARE
F	12	0	0	30	SPARE
	TOTAL	45.2	45.2		



ONE LINE DIAGRAM (N.T.S.)

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

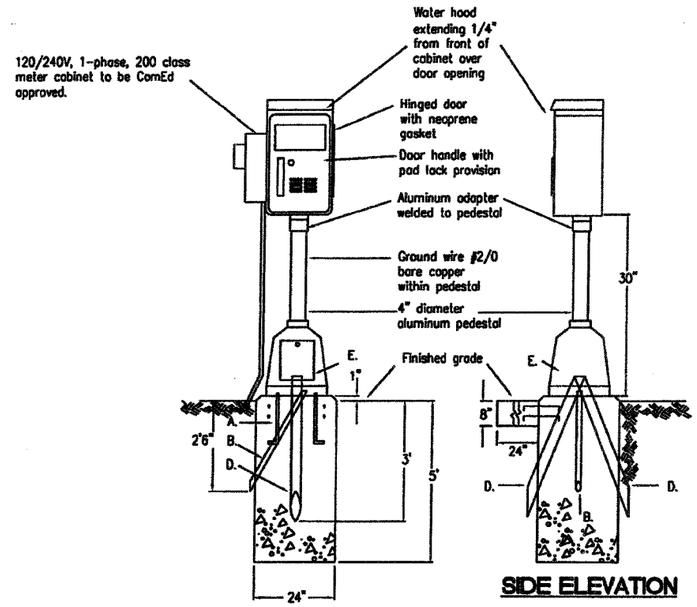
date	detailed
04 / 10 / 2007	B.HAAS
designed	checked
D.MERTZ	A.RAHMAN

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE PHOTOMETRICS
ONE LINE DIAGRAM

project	contract
45190	
drawing	rev.
E13	–

sheet 13 of 16 sheets
file I:\DOWNERS...\45190\CAD\ E13

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2593	02-00092-00-WR	DU PAGE	49	40
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 83936				

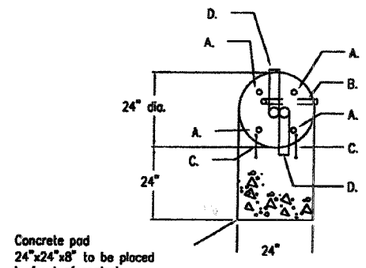


FRONT ELEVATION

SIDE ELEVATION

NOTES:

1. The control cabinet shall be 30"H X 20"W X 16"D, nema 3R aluminum with mounting panel size of (28"HX17"W) min. Control cabinet shall be as manufactured by Hennessy Products Inc. or approved equal
2. The control center foundation shall be Class SI concrete. Reinforcing steel will not be required except to tie in the service pad.
3. Control cabinet and pedestal shall have a factory applied paint finish consisting of a baked primer, followed by two coats of Rustoleum Industrial Enamel, High Gloss, Hunter Green No. 7738.
4. All cable openings in the pedestal base shall be sealed with duct seal.
5. Provide a 12"X6" stainless steel name plate. Rivet to door with aluminum rivets. Name plate shall read "Village of Downers Grove, lighting control cabinet" engraved with 0.75 inch high letters filled in black ink.



Concrete pad 24"x24"x8" to be placed in front of control cabinet

FOUNDATION PLAN

A. Anchor bolts 3/4" x 12" galvanized or stainless steel, threaded 8NC for top 6", furnished with 2 galvanized flat washers and 2 galvanized hex nuts

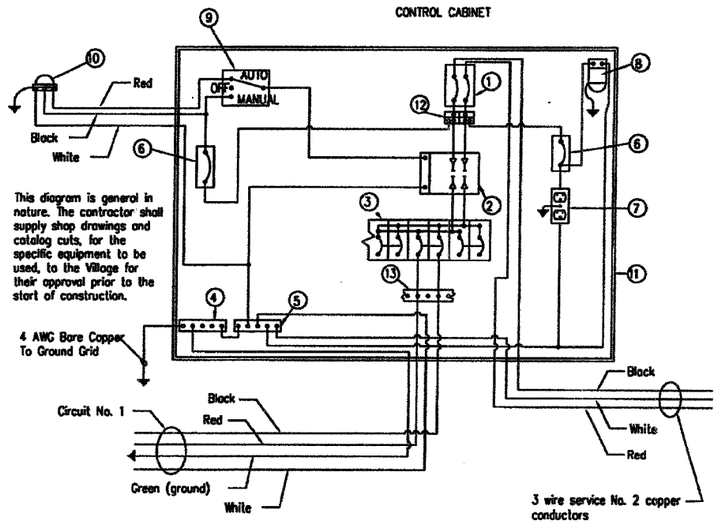
B. Ground wire raceway 2" dia. min. extended to the ground field.

C. Deformed tie bars

D. Lighting circuit raceway 3" dia. min. extended to the handhole

E. Ornamental pedestal base with handhole door held in place with stainless steel screws, base to be welded to pedestal column

CABINET AND FOUNDATION DETAIL (N.T.S.)



CONTROL CABINET SCHEMATIC (N.T.S.)

LEGEND		QUANTITY
(1)	100A, 2POLE MAIN CIRCUIT BREAKER, 250V, SQUARE D TYPE QO OR ENGINEER-APPROVED EQUIVALENT.	1
(2)	100A, 2 POLE, SINGLE THROW ELECTRICALLY OPERATED AND HELD CONTACTOR, 240V, SQUARE D 8903 TYPE SQ01 OR ENGINEER-APPROVED EQUIVALENT.	1
(3)	20A, 2 POLE CIRCUIT BREAKER, 250V, SQUARE D TYPE QO OR ENGINEER-APPROVED EQUIVALENT.	6
(4)	1"X12"X.25" GROUND BUS LABELED "GROUND" AND PAINTED GREEN.	1
(5)	1"X12"X.25" NEUTRAL BUS LABELED "NEUTRAL" AND JOINED TO THE GROUND STRIP WITH A BONDING JUMPER.	1
(6)	15A, 1 POLE CIRCUIT BREAKER, 120V, SQUARE D TYPE QO OR ENGINEER-APPROVED EQUIVALENT.	2
(7)	15A, 120V GFCI DUPLEX OUTLET IN GALVANIZED STEEL BOX AND COVER	1
(8)	INCANDESCENT LIGHTING FIXTURE WITH 120V, 60 WATT BULB AND A PULL CHAIN SWITCH.	1
(9)	20A, SPDT HOA SWITCH, 120V, MOUNTED IN A 4"X4" BOX.	1
(10)	PHOTO-CELL WITH 2 MINUTE TIME DELAY, 120V MOUNTED ON LUMINAIRE NEAREST CONTROLLER.	1
(11)	BENELEX 1/2" THICK PANEL BOARD.	1
(12)	POWER TERMINAL BLOCK, 2 POLE.	1
(13)	POWER TERMINAL BLOCK, 12 POLE.	1

DAVID E. MERTZ
062-052068
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

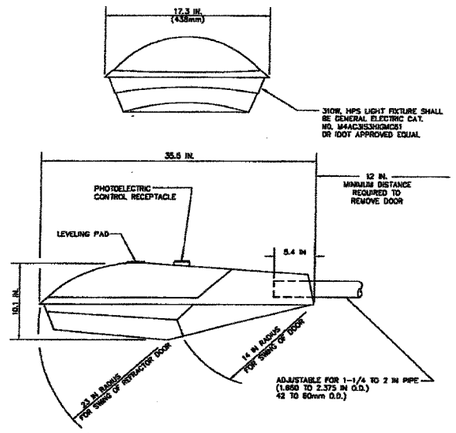
date	detailed
04 / 10 / 2007	B.HAAS
designed	checked
D.MERTZ	F.ONOL

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE PHOTOMETRICS
DETAILS SHEET 1 OF 2

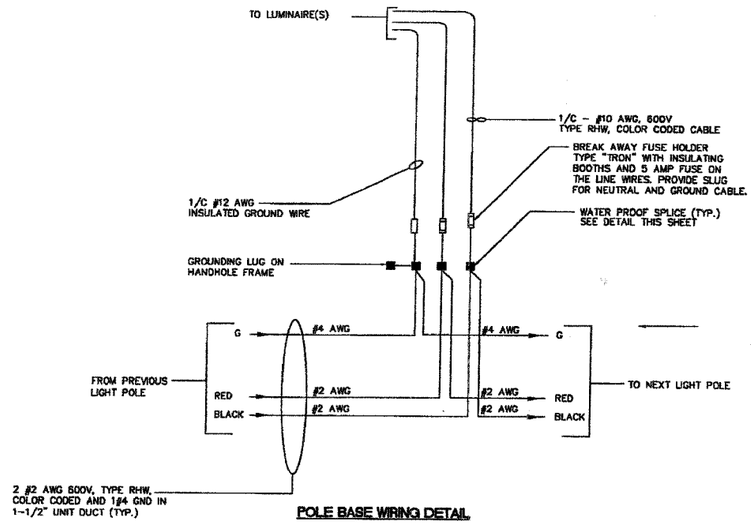
project	contract
45190	
drawing	rev.
E14	–

sheet 14 of 16 sheets
file I:\DOWNERS...\45190\CAD\E14

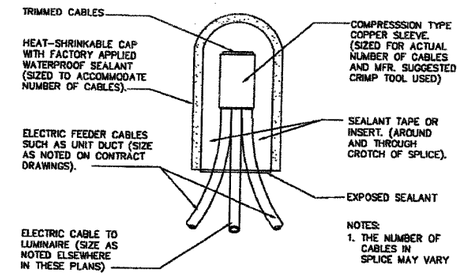
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2593	02-00092-00-WR	DU PAGE	43	41
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 83936				



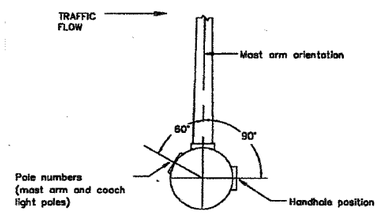
LIGHT FIXTURE DETAIL



POLE BASE WIRING DETAIL



SPLICING ELECTRIC CABLES
BASIC MATERIALS AND METHODS



Notes:
1. Light pole numbers shall be 4" tall, black on white, and installed 5' above the finished grade.
2. Hand hole and pole number locations shall be similar for mast arm and coach light poles.
3. Exact control cabinet and pole designations shall be as directed by the owner.

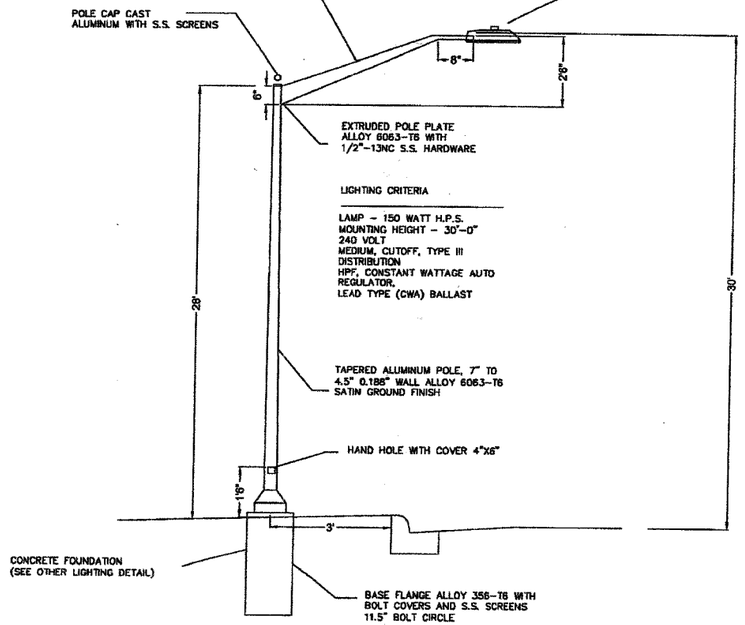
XX	Control cabinet number
X	Pole number

POSITION OF HANDHOLE AND POLE NUMBERS

MAJOR STREETS WITH MAST ARMS						
	DESIGN DEPTH		REINFORCEMENT IN FOUNDATION			
TYPE OF SOIL	SINGLE ARM D	TWIN ARM D	SINGLE ARM VERT. BARS	SPIRAL	TWIN ARM VERT. BARS	SPIRAL
SOFT CLAY	13'-0"	15'-0"	4-#6X12'-6"	#3X122'	4-#6X14'-6"	#3X141'
MEDIUM CLAY	9'-6"	10'-9"	4-#6X9'-0"	#3X90'	4-#6X10'-3"	#3X100'
STIFF CLAY	8'-0"	8'-0"	4-#6X7'-6"	#3X75'	4-#6X7'-6"	#3X76'
LOOSE SAND	9'-0"	10'-0"	4-#6X8'-6"	#3X85'	4-#6X9'-6"	#3X94'
MEDIUM SAND	8'-3"	9'-0"	4-#6X7'-9"	#3X78'	4-#6X8'-6"	#3X85'
DENSE SAND	8'-0"	9'-0"	4-#6X7'-6"	#3X76'	4-#6X8'-6"	#3X85'

NOTE: 1. Contractor at his option may substitute No.3 hoops at 12" on centers for spiral cage
2. Contractor shall use the values for twin arm installation for this project.

LIGHT POLE FOUNDATION DESIGN TABLE



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REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
04 / 10 / 2007	B.HAAS
designed	checked
D.MERTZ	F.ONOL

Village of DOWNERS GROVE

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE PHOTOMETRICS
DETAIL SHEET 2 OF 2

project	contract
45190	
drawing	rev.
E15	0

sheet 15 of 16 sheets
file I:\DOWNERS...\45190\CAD\ E15

Scale For Modifying: Millimeters / Inches

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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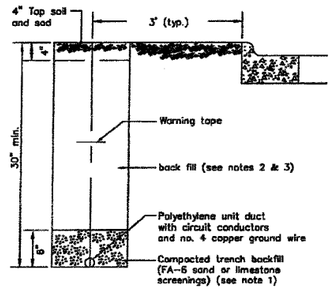
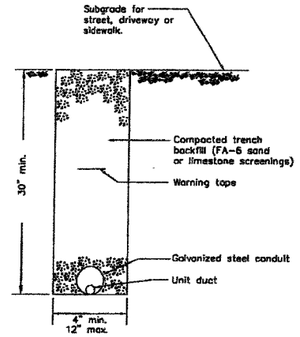
FEDERAL RD. DIST. NO. 1	ILLINOIS	FEDERAL AID PROJECT		
CONTRACT: 85936				



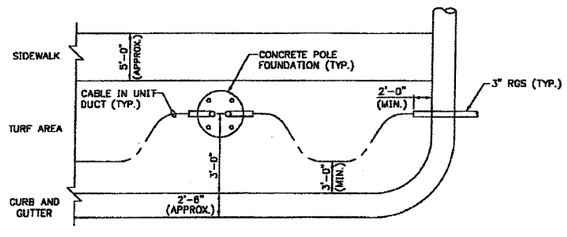
Notes:
1. Unit duct installed in trenches shall be covered with a minimum of 6" of compacted FA-6, or limestone screenings.
2. In grassy areas, the backfill may be compacted earth.
3. Trenches within 2' of proposed or existing streets, driveways, or sidewalks shall be backfilled with compacted FA-6 sand or limestone screenings.
4. Where more than (1) unit duct runs adjacent to each other, they shall be placed in a common trench so as not to cross each other.
5. 6" wide reinforced metallic warning tape, red with black lettering to read "Caution-Electrical line buried below". Warning tape to be placed 1" minimum to 2' maximum below finished grade.
6. All grassy areas disturbed during construction shall be restored with 4" of top soil and sod.

UNITDUCT TRENCH

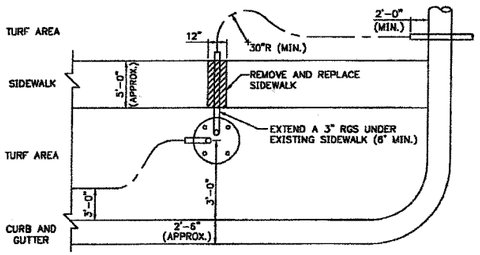


Notes:
1. Conduit shall be hot dip galvanized steel, a minimum of 2 1/2" in diameter.
2. Conduit shall extend a minimum of 1' beyond the street, driveway, or sidewalk.
3. Conduit shall have both ends capped until used.
4. When placed into service, conduit shall be provided with an insulated fiber bushing, and sealed with a workable soft plastic sealing compound at each end.
5. 6" wide reinforced metallic warning tape, red with black lettering to read "Caution – Electrical line buried below". Warning tape to be placed 1' minimum to 2' maximum below finished grade.
6. All grassy areas disturbed during construction shall be restored with 4" of topsoil and sod.

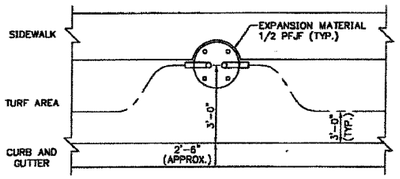
CONDUIT TRENCH



'A'



'B'



'C'

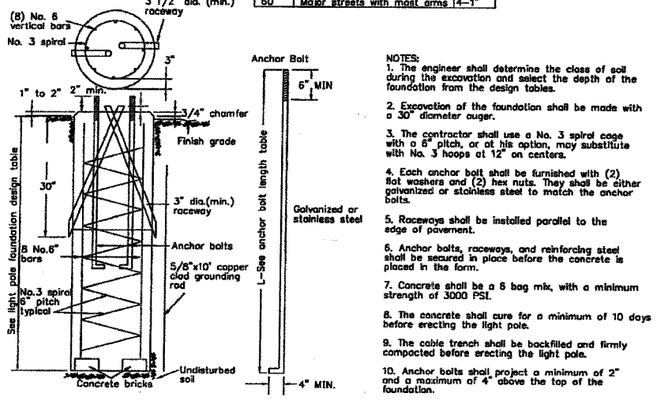
NOTES:
1. UNIT DUCT SHALL BE INSTALLED MIN. 3'-0" FROM B.O.C.
2. CONTRACTOR SHALL MAKE AN EFFORT TO INSTALL RGS CONDUITS (UNDER DRIVEWAYS OR ROADWAY) AT THE SAME SIDE OF THE SIDEWALK AS THE POLE FOUNDATION (DETAIL "A").
3. WHEN ITS NECESSARY TO CROSS THE EXISTING SIDEWALK, CONTRACTOR SHALL INSTALL A 3" RGS CONDUIT PERPENDICULAR TO THE SIDEWALK (DETAIL "B")
4. WHEN LOCATION OF A POLE FOUNDATION FALLS COMPLETELY WITHIN THE EXISTING SIDEWALK, CONTRACTOR SHALL CONSTRUCT THE FOUNDATION AT THE SIDE OF SIDEWALK AWAY FROM THE ROAD. WHEN PARTIAL OVERLAP OCCURS, CONTRACTOR SHALL CONSTRUCT THE POLE FOUNDATION AS SHOWN ON DETAIL "D".

TYPICAL UNIT DUCT AND CONDUIT INSTALLATION DETAILS
N.T.S.

The anchor bolt pattern shall match the pattern on the light pole base.

ANCHOR BOLT LENGTHS AND SIZES

LENGTH	LOCATION	SIZE
60"	Major streets with mast arms	4-1"



NOTES:
1. The engineer shall determine the class of soil during the excavation and select the depth of the foundation from the design tables.
2. Excavation of the foundation shall be made with a 30" diameter auger.
3. The contractor shall use a No. 3 spiral cage with a 6" pitch, or at his option, may substitute with No. 3 hoops at 12" on centers.
4. Each anchor bolt shall be furnished with (2) flat washers and (2) hex nuts. They shall be either galvanized or stainless steel to match the anchor bolts.
5. Raceways shall be installed parallel to the edge of pavement.
6. Anchor bolts, raceways, and reinforcing steel shall be secured in place before the concrete is placed in the form.
7. Concrete shall be a 6 bag mix, with a minimum strength of 3000 PSI.
8. The concrete shall cure for a minimum of 10 days before erecting the light pole.
9. The cable trench shall be backfilled and firmly compacted before erecting the light pole.
10. Anchor bolts shall project a minimum of 2" and a maximum of 4" above the top of the foundation.
11. Raceways shall project 1" above the top of the foundation.
12. All ground rod connections shall be made above grade, inside the pole base, with exothermic of inert gas welds.

TYPICAL FOUNDATION DETAIL
N.T.S.

Scale For Modifying: Millimeters / Inches

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REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

Burns & McDonnell

date	detailed
4/10/07	B.HAAS
designed	checked
D.MERTZ	F.ONOL

Village of DOWNERS GROVE FOUNDED IN 1832

VILLAGE OF DOWNERS GROVE
WOODWARD AVENUE PHOTOMETRICS
UNIT DUCT AND FOUNDATION DETAILS

project	contract
45190	

drawing E16 – rev. 0

sheet 16 of 16 sheets

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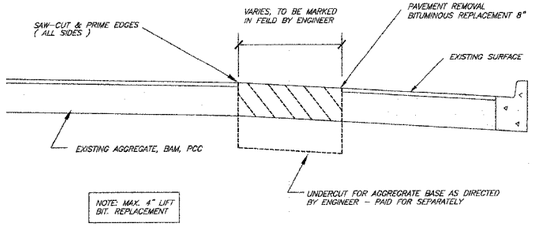
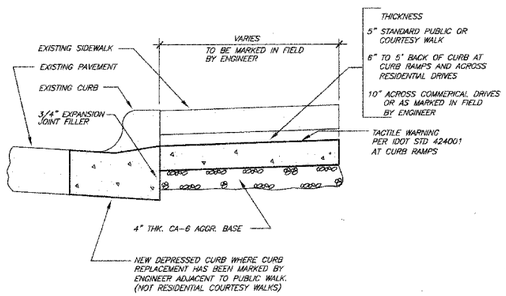
F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	43
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO.83936



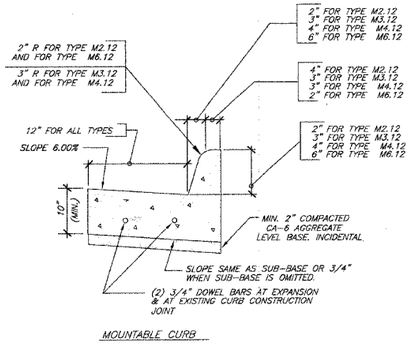
CLASS D PATCHES, 8"

N.T.S.



SIDEWALK REMOVAL & REPLACEMENT

N.T.S.

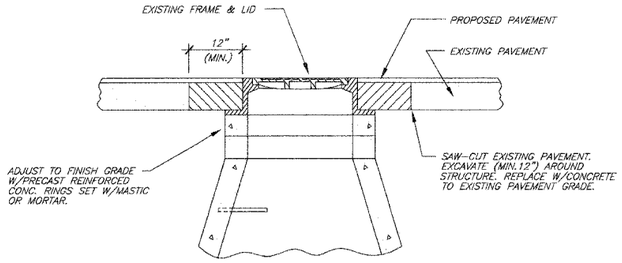


MOUNTABLE CURB

JOINT SPACING ON CENTERS:
15' FOR CONTRACTIONS
90' FOR EXPANSION

COMBINATION CONCRETE CURB & GUTTER-MOUNTABLE

N.T.S. STANDARD DESIGN

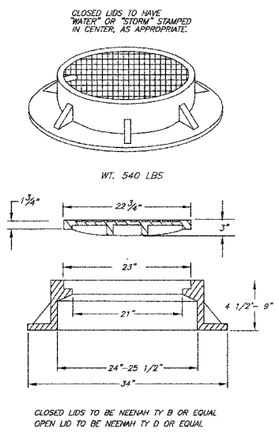


NOTES:

1. AFTER MANHOLE HAS BEEN ADJUSTED AND IF STREET IS OPEN TO TRAFFIC, A TYPE 1 BARRICADE W/FLASHER 2 SANDBAGS SHALL BE PLACED AT EACH MANHOLE.
2. SANITARY MANHOLE TO BE SET W/MASTIC

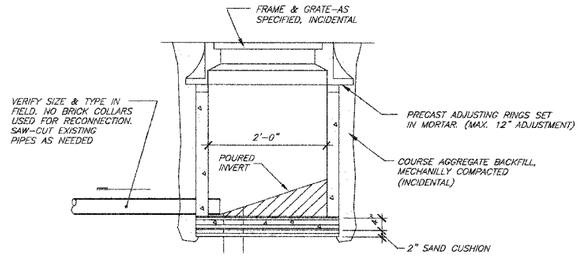
UTILITY ADJUSTMENT DETAIL

N.T.S.



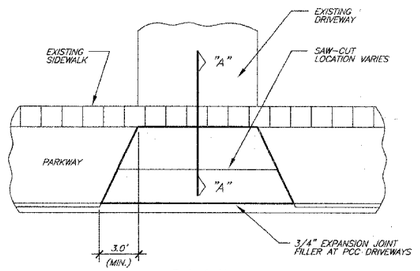
TYPE 1 HEAVY DUTY FRAMES & LIDS

N.T.S.

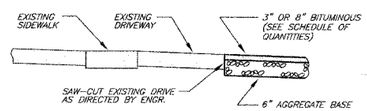


TYPE "A" INLET NEW/REPLACEMENT

N.T.S.

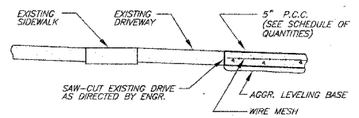


PLAN



SECTION "A - A"

ASPHALT DRIVE

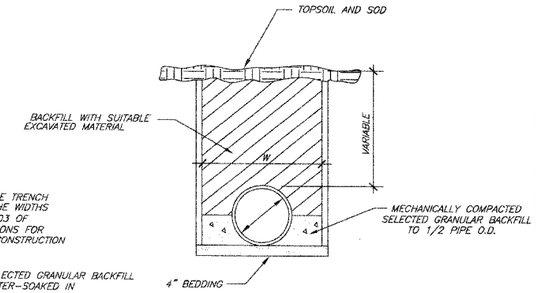


SECTION "A - A"

CONCRETE DRIVE

DRIVEWAY REMOVAL & REPLACEMENT

N.T.S.

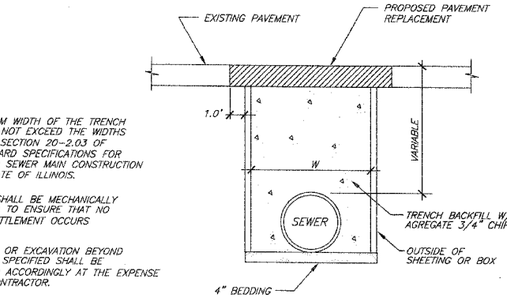


NOTES:

1. THE BOTTOM WIDTH OF THE TRENCH (W) SHALL NOT EXCEED THE WIDTHS STATED IN SECTION 20-2.03 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN THE STATE OF ILLINOIS.
2. BACKFILL OTHER THAN SELECTED GRANULAR BACKFILL SHALL BE JETTED AND WATER-SOAKED IN ACCORDANCE WITH SECTION 20-2.21 OF THE STANDARD SPECIFICATION FOR WATER & SEWER MAIN CONSTRUCTION
3. ANY FLARE OR EXCAVATION BEYOND THE LIMITS SPECIFIED SHALL BE BACKFILLED ACCORDINGLY AT THE EXPENSE OF THE CONTRACTOR.

TYPICAL TRENCH DETAIL

N.T.S. (UNPAVED AREA)



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1. THE BOTTOM WIDTH OF THE TRENCH (W) SHALL NOT EXCEED THE WIDTHS STATED IN SECTION 20-2.03 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN THE STATE OF ILLINOIS.
2. BACKFILL SHALL BE MECHANICALLY COMPACTED TO ENSURE THAT NO FUTURE SETTLEMENT OCCURS
3. ANY FLARE OR EXCAVATION BEYOND THE LIMITS SPECIFIED SHALL BE BACKFILLED ACCORDINGLY AT THE EXPENSE OF THE CONTRACTOR.

TYPICAL TRENCH DETAIL

N.T.S. PAVED AREA

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

REVISIONS	
NAME	DATE

WOODWARD AVE. IMPROVEMENTS CONSTRUCTION DETAILS

DATE: 2/09/07	CHECKED BY: S.A.V.
SCALE: N.T.S.	DRAWN BY: R.W.B.
FILE NAME: C:\CADFILES\WOODWARD\CONST-DET	

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
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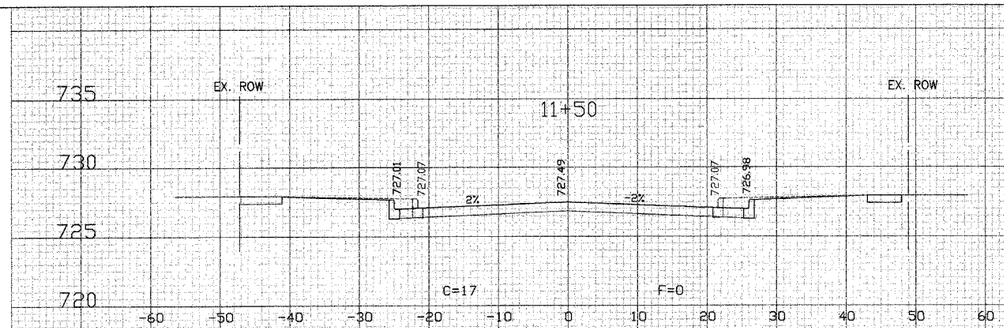
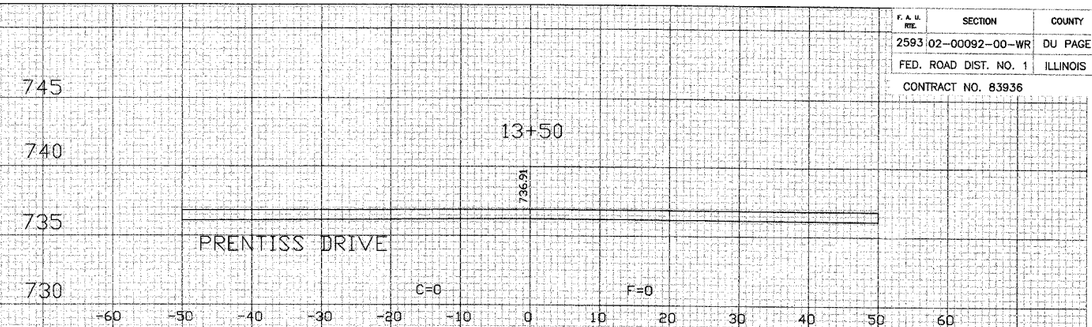
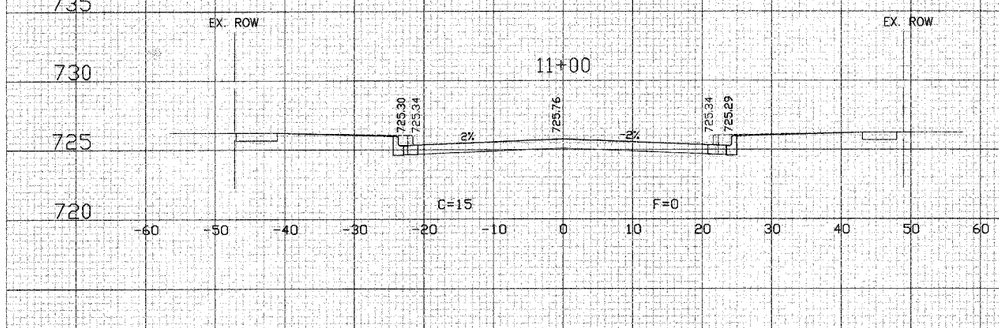
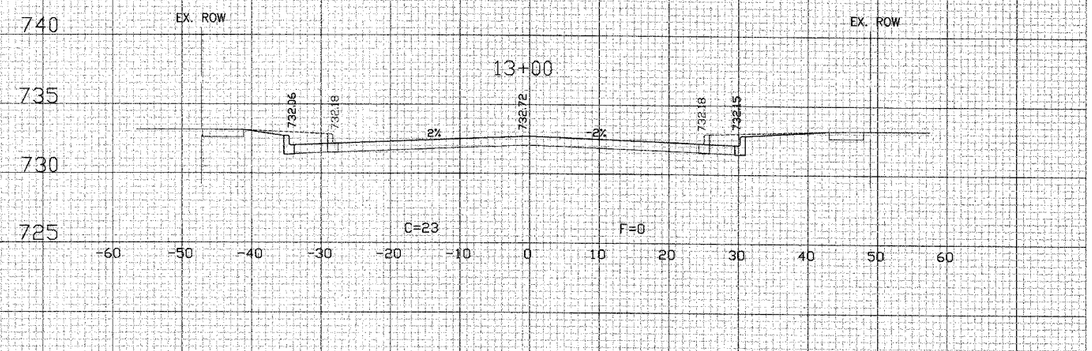
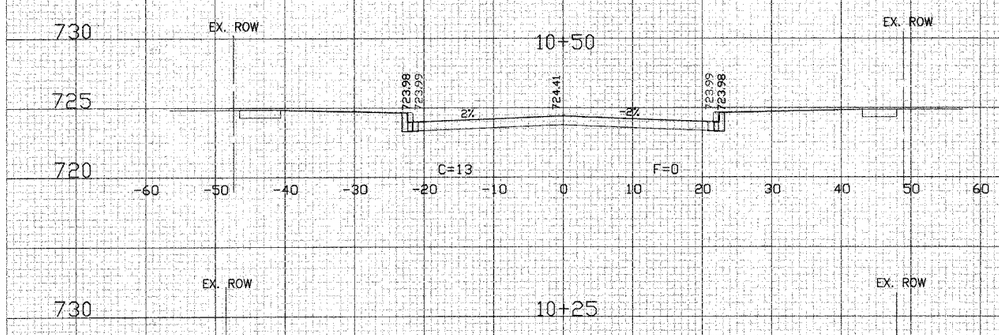
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	
	CONTRACT NO. 83936			

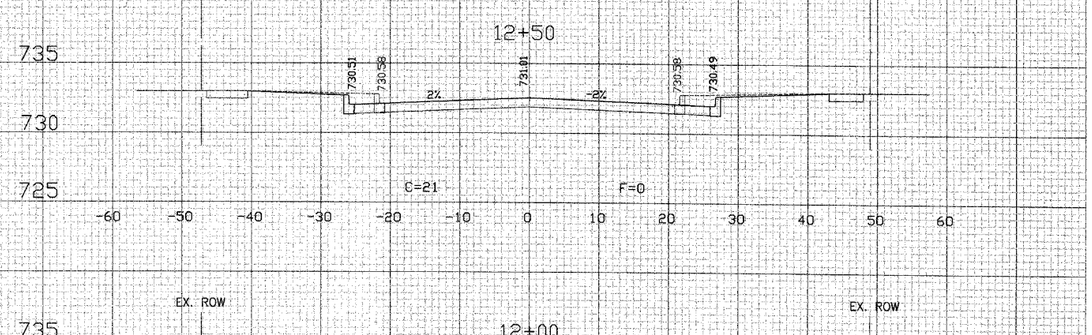


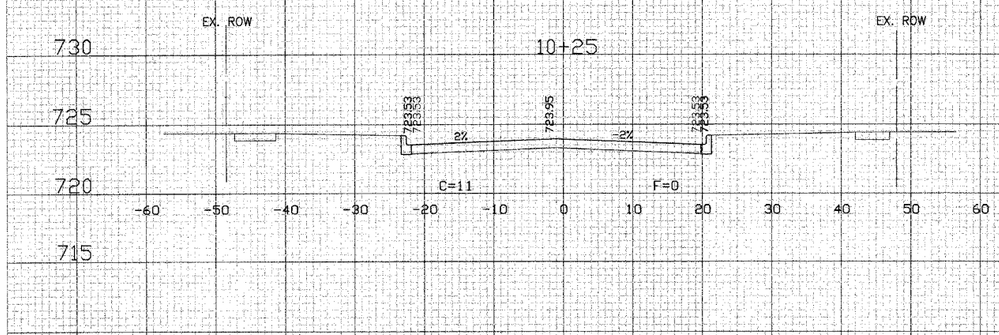


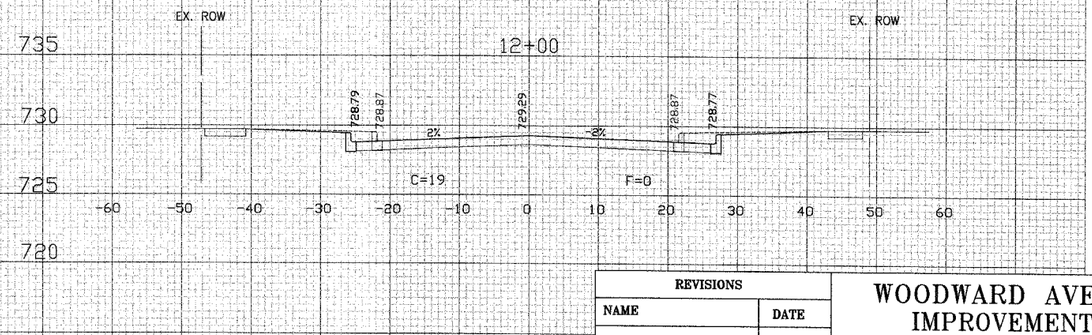












REVISIONS	
NAME	DATE

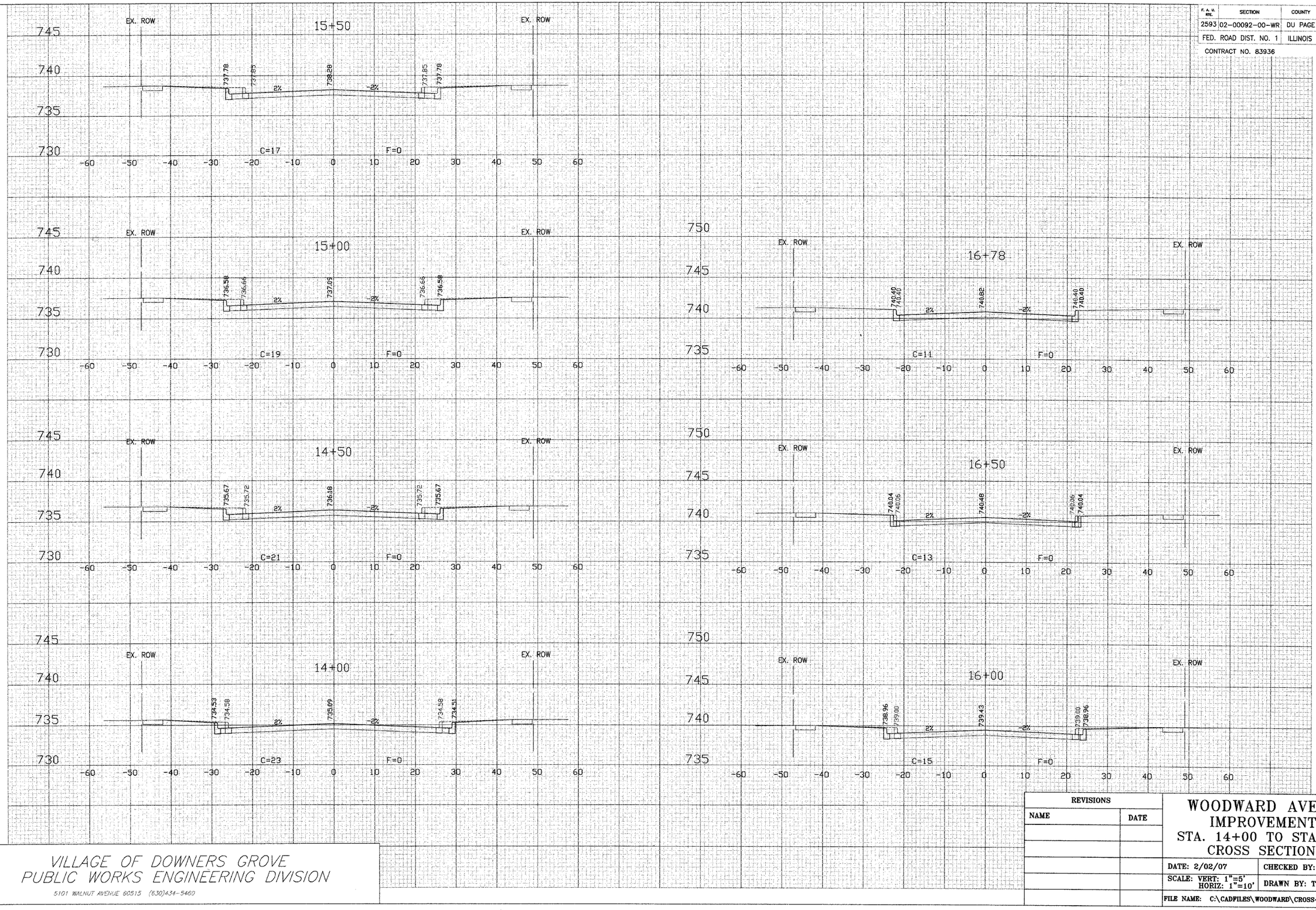
WOODWARD AVENUE IMPROVEMENTS
STA. 10+25 TO STA. 13+50
CROSS SECTIONS

DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: VERT: 1"=5' HORIZ: 1"=10'	DRAWN BY: T.J.T
FILE NAME: C:\CADFILES\WOODWARD\CROSS-SECTIONS	

VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
2593	02-00092-00-WR	DU PAGE	49	45
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 83936



VILLAGE OF DOWNERS GROVE
PUBLIC WORKS ENGINEERING DIVISION
5101 WALNUT AVENUE 60515 (630)434-5460

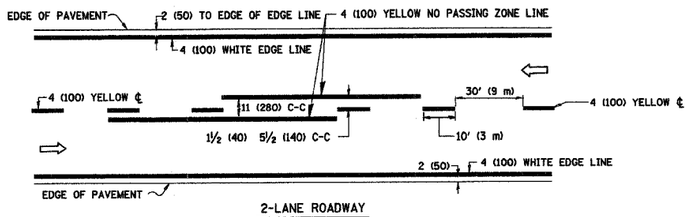
REVISIONS	
NAME	DATE

WOODWARD AVENUE IMPROVEMENTS
STA. 14+00 TO STA.16+78
CROSS SECTIONS

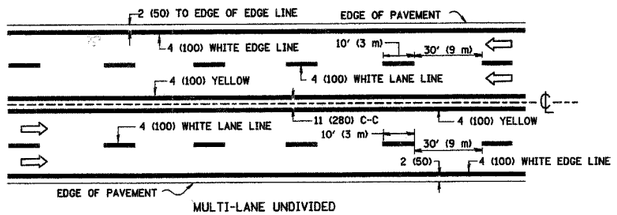
DATE: 2/02/07	CHECKED BY: S.A.V.
SCALE: VERT: 1"=5' HORIZ: 1"=10'	DRAWN BY: T.J.T
FILE NAME: C:\CADFILES\WOODWARD\CROSS-SECTIONS	

CONTRACT NO. 83936

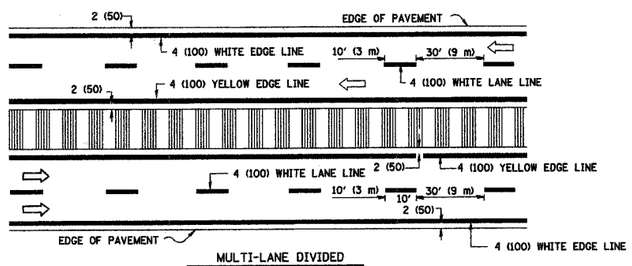
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2595	02-00092-00-GM	DUPAGE	49	46
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



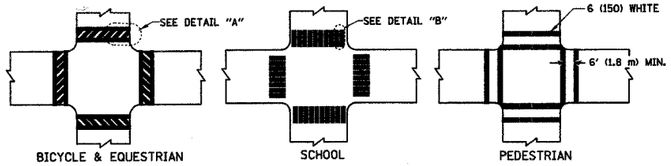
MULTI-LANE UNDIVIDED

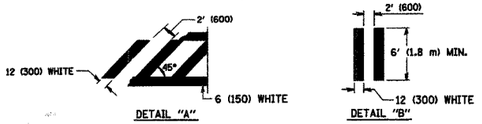


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

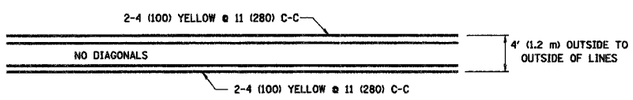
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

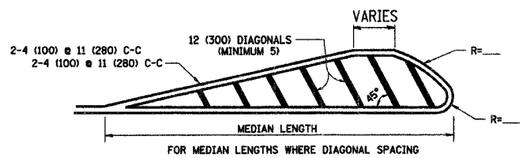




TYPICAL CROSSWALK MARKING



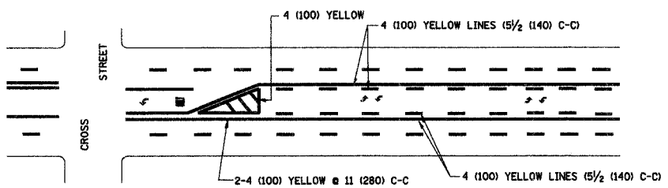
4' (1.2 m) WIDE MEDIANS ONLY



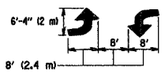
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

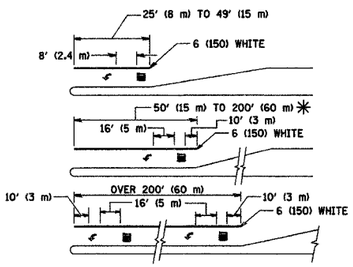


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

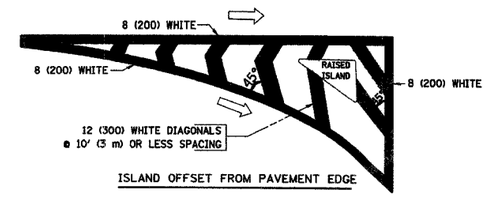


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

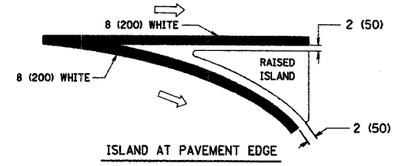
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED 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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⊕ 6 (150) 12 (300) ⊕ 45° 12 (300) ⊕ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⊕ 4 (100) WITH 12 (300) DIAGONALS ⊕ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⊕ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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.

REVISIONS NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE

DRAWN BY CADD

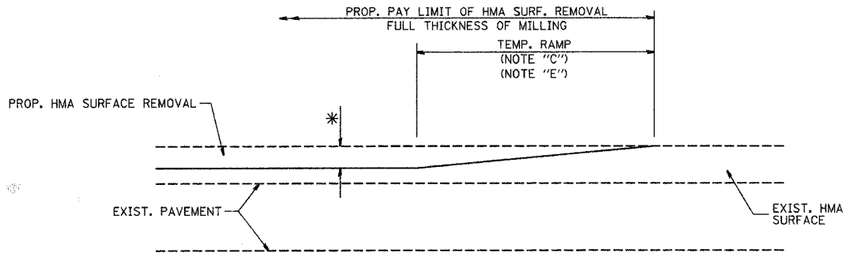
CHECKED BY

TC-13

PLOT DATE = 3/6/2007
FILE NAME = K:\district\tc13.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerdl

CONTRACT NO. 83936

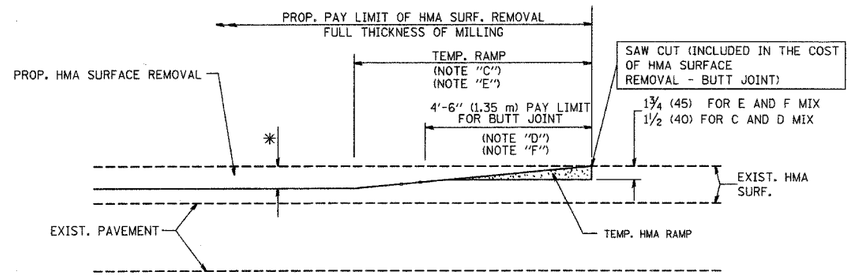
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2553	02-00096-00-GM	DUPAGE	49	47
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

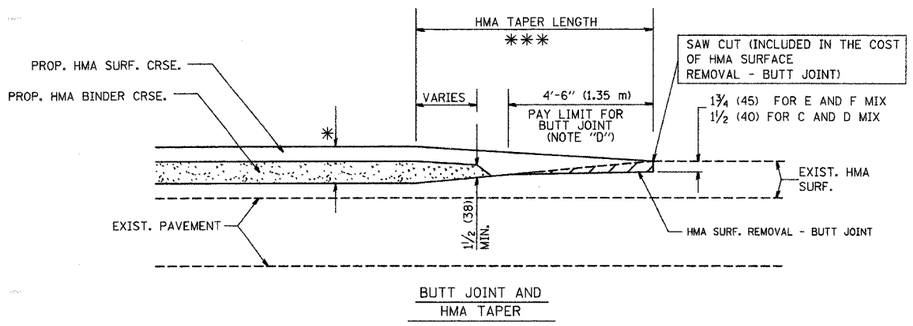


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

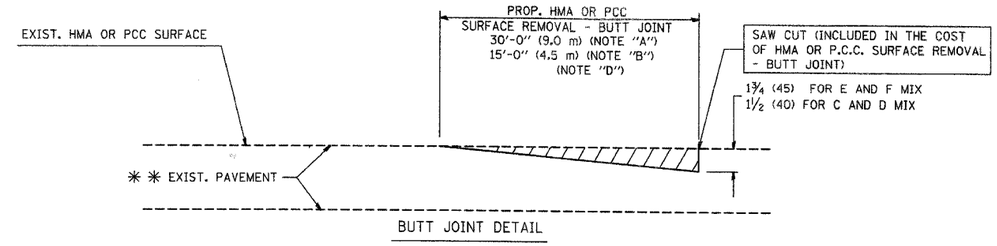
OPTION 2

TYPICAL TEMPORARY RAMP

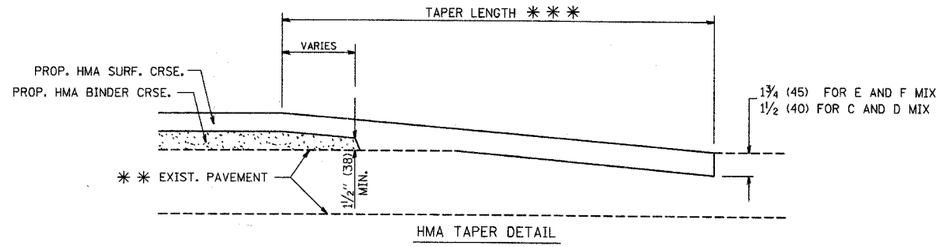


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

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

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

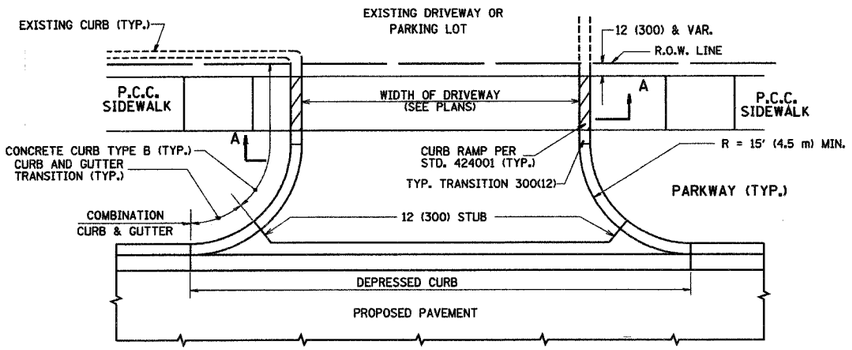
SCALE: VERT. NONE HORIZ. NONE
PLOT DATE: 10/31/2006
DRAWN BY
CHECKED BY

BD400-05 (VI=BD32)
REVISION DATE: 01/01/07

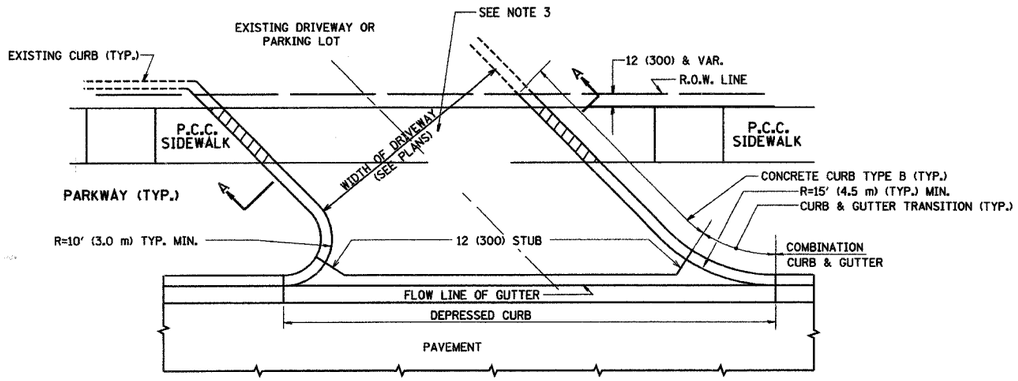
PLOT DATE = 10/31/2006
FILE NAME = N:\district1\bd32.dgn
PLOT SCALE = 1.0000 '/ IN.
USER NAME = bagas

CONTRACT NO. 83936

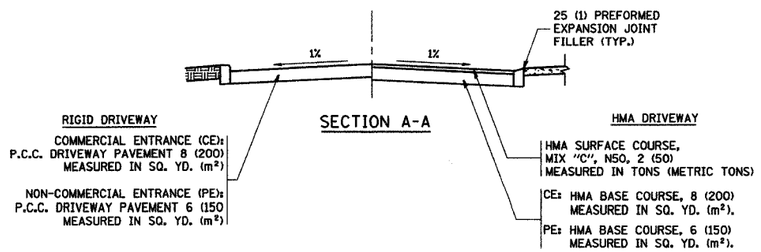
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2593	01-00096-00-CH	DUPAGE	49	48
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

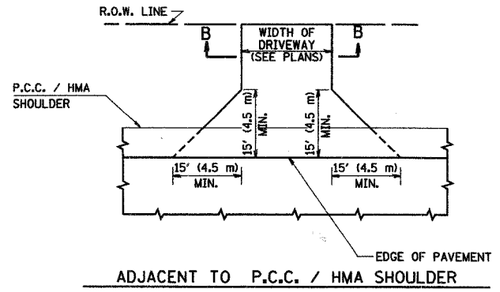


WITH CONCRETE CURB, TYPE B

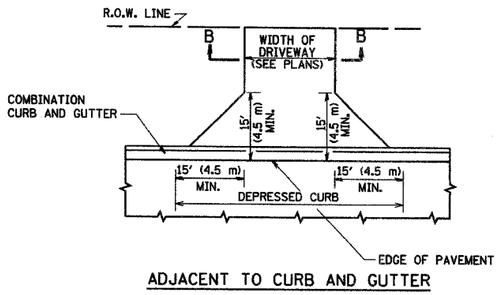


WITH CONCRETE CURB, TYPE B

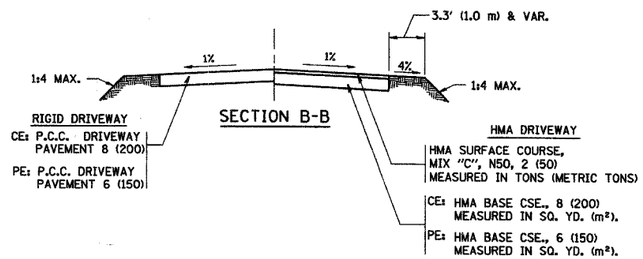




ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE,
MIX "C", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE A 8 (200)
MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LaFLEUR	04-15-03
R. BORO	01-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE HORIZ.

DRAWN BY

CHECKED BY

BD0156-07 (BD-01)

PLOT DATE = 4/11/2007
FILE NAME = n:\projects\distarea\bd81.dgn
PLOT SCALE = 49.9999 ' / IN.
USER NAME = drivelocsgn

CONTRACT NO. 83536

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7513	02-00093-00-RS	DUPAGE	49	49
STA.	TO STA.			
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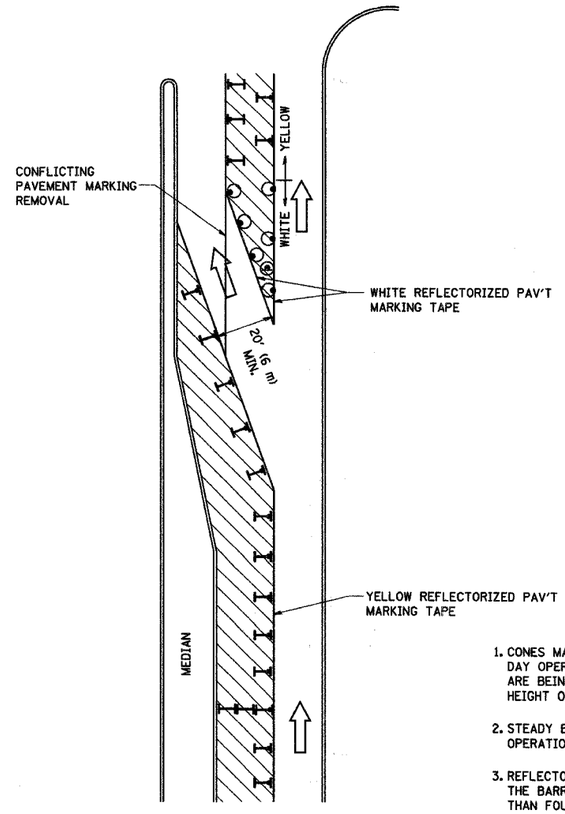

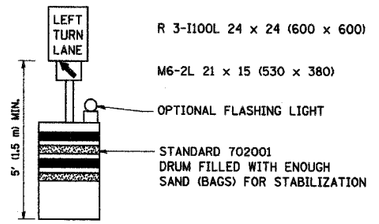

GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/06/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)

SCALE: NONE

DRAWN BY

CHECKED BY LHA

TC-14

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