

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM  
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2022  
 morning 10/13/2021 7:52:31 AM  
 FILE NAME: R:\CADD\Projects\181171\North Main St PH ILLCAD\Sheets\181171\_ss2-sht-S00.dgn



USER NAME = morning	DESIGNED - DJ5	REVISED  ADDENDUM A 10/13/2021
PLOT SCALE = 80.0000' / in.	DRAWN - KAR	REVISED -
PLOT DATE = 10/13/2021	CHECKED - AKS	REVISED -
	DATE - 10-12-2021	FILE - 181171_ss2-sht-S00.dgn

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: NONE SHEET 6 OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	15-00124-00-PV	MCHENRY	121	9
			CONTRACT NO. 61H27	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROUTE 176	MAIN STREET	ROUTE 176	MAIN STREET	ROUTE 176	
				80% FED	80% FED	100% CITY	100% CITY	100% CITY	
				10% STATE	10% STATE	WATER MAIN	WATER MAIN	LIGHTING/SIGNALS	
				10% CITY	10% CITY	0004	0004	0021	
				URBAN	URBAN	URBAN	URBAN	URBAN	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	1,091	1,091					
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	1,153	1,153					
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,230	2,230					
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	91	91					
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,086	1,086					
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3	3					
* 87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1	1					
* 87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1	1					
* 87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1	1					
* 87702400	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 28 FT. AND 32 FT.	EACH	1	1					
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16	16					
* 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4					
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27	27					
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28	28					
* 87900200	DRILL EXISTING HANDHOLE	EACH	1	1					

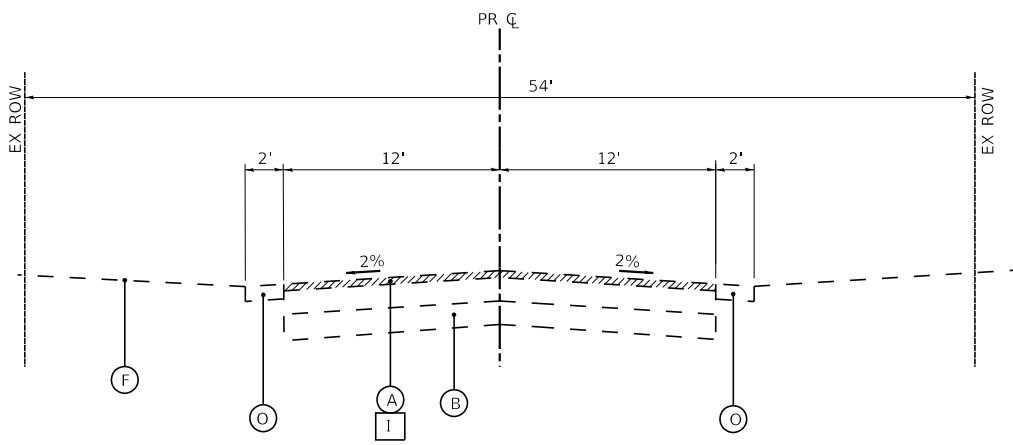
\* INDICATES SPECIALTY ITEM  
 \$ INDICATES CONSTRUCTION CODE 0042 TRAINEES

CONSTRUCTION CODE

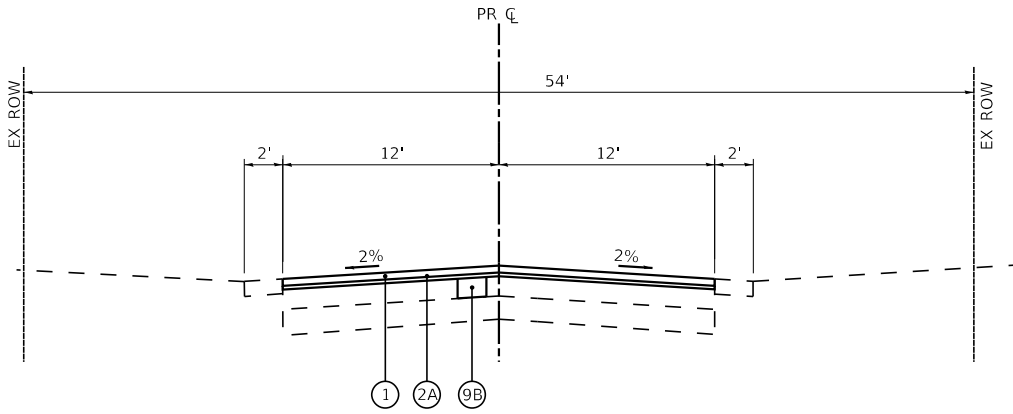
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROUTE 176	MAIN STREET	ROUTE 176	MAIN STREET	ROUTE 176
				80% FED	80% FED	100% CITY	100% CITY	100% CITY
				10% STATE	10% STATE	WATER MAIN	WATER MAIN	LIGHTING/SIGNALS
				10% CITY	10% CITY	0004	0004	0021
				URBAN	URBAN	URBAN	URBAN	URBAN
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4	4				
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4	4				
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2	2				
* 88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6	6				
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	4				
* 88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10	10				
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	7	7				
* 88600100	DETECTOR LOOP, TYPE I	FOOT	305	305				
* 88700200	LIGHT DETECTOR	EACH	2					2
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1					1
* 88800100	PEDESTRIAN PUSH BUTTON	EACH	4	4				
* 89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	538	538				
A2012001	TREE, AESCULUS X CARNE BRIOTTI (BRIOTTI HORSECHESTNUT), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2				
B2000121	TREE, ACER TATARICUM (TATARIAN MAPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	4	4				
B2006216	TREE, SYRINGA RETICULATA (JAPANESE TREE LILAC), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	2	2				
K0036120	MULCH PLACEMENT 4"	SQ YD	37	11			26	

\* INDICATES SPECIALTY ITEM  
 \$ INDICATES CONSTRUCTION CODE 0042 TRAINEES

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM  
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**EXISTING TYPICAL SECTION**  
 MAIN STREET  
 IL 176 TO PROJECT LIMITS  
 STA 30+55 TO STA 31+20



**PROPOSED TYPICAL SECTION**  
 MAIN STREET  
 IL 176 TO PROJECT LIMITS  
 STA 30+55 TO STA 31+20

**EXISTING LEGEND**

- (A) EXISTING PAVEMENT (9" HMA)
- (AA) EXISTING PAVEMENT (5" TO 6" HMA OVER 5" TO 9" CONCRETE)
- (B) EXISTING AGGREGATE BASE
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (D) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (E) CONCRETE SIDEWALK
- (F) EXISTING GROUND
- (G) DEPRESSED CURB AND GUTTER
- (H) BRICK PAVERS

- (I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- (J) SIDEWALK REMOVAL
- (K) NOT USED
- (L) PAVEMENT REMOVAL
- (M) COMBINATION CURB AND GUTTER REMOVAL
- (N) REMOVE BRICK PAVER
- (O) AGGREGATE WEDGE SHOULDERS
- (Hatched Box) ITEM TO BE REMOVED

**PROPOSED LEGEND**

- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N70 - 1 1/2"
- (2A) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50 - 3/4"
- (2B) HOT MIX ASPHALT BINDER COURSE, IL-9.5, N70 - VARIABLE DEPTH (1 1/2" - 2 1/4")
- (3A) HOT-MIX ASPHALT BASE COURSE - 10 1/4" (FOR WIDENING >6')
- (3B) HOT-MIX ASPHALT BASE COURSE WIDENING - 10 1/4" (FOR WIDENING ≤6')
- (3C) HOT-MIX ASPHALT BASE COURSE - 8 1/2" (FOR WIDENING >6')
- (3D) HOT-MIX ASPHALT BASE COURSE WIDENING - 8 1/2" (FOR WIDENING ≤6')
- (3E) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 - VARIABLE DEPTH (2 1/4" MIN)
- (4) AGGREGATE SUBGRADE IMPROVEMENT - 12"
- (5A) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (5B) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24

- (6) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (AS DETERMINED BY THE ENGINEER)
- (7) TOPSOIL EXCAVATION AND PLACEMENT (6" DEPTH) SODDING, SALT TOLERANT
- (8) PORTLAND CEMENT CONCRETE SIDEWALK 5" (8" AT DRIVEWAYS)
- (9A) CLASS D PATCHES 12" (AS DETERMINED BY THE ENGINEER)
- (9B) CLASS D PATCHES 10" (AS DETERMINED BY THE ENGINEER)
- (10) DEPRESSED CURB AND GUTTER
- (11) AGGREGATE SUBGRADE IMPROVEMENT \*\*
- (12) REINSTALL BRICK PAVER
- (13) AGGREGATE BASE COURSE, TYPE B 4"
- (14) PIPE UNDER DRAIN, TYPE 2 - 4"

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

CONTRACTOR SHALL MILL BEFORE PATCHING

MIXTURE TYPE	AIR VOIDS @ Ndes
<b>PAVEMENT RESURFACING - IL ROUTE 176 (TERRA COTTA AVENUE)</b>	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, MIX "F", N80: 1-3/4"	3.5% @80 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50: 3/4"	3.5% @50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70: VARIABLE DEPTH (2 1/4" MIN.)	4% @70 GYR.
<b>PAVEMENT RESURFACING - MAIN STREET</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70: 1-1/2"	4% @70 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50: 3/4"	3.5% @50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL 9.5, N70: VARIABLE DEPTH (1 1/2" TO 2 1/4")	4% @70 GYR.
<b>PAVEMENT WIDENING - IL ROUTE 176 (TERRA COTTA AVENUE)</b>	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, SMA, 9.5, MIX "F", N80: 1-3/4"	3.5% @80 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50: 3/4"	3.5% @50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0), 10 1/4" (FOR WIDENING >6')	4% @70 GYR.
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER IL-19.0), 10 1/4" (FOR WIDENING ≤6')	4% @70 GYR.
<b>PAVEMENT WIDENING- MAIN STREET</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70: 1-1/2"	4% @70 GYR.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50: 3/4"	3.5% @50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0), 8 1/2" (FOR WIDENING >6')	4% @70 GYR.
HOT-MIX ASPHALT BASE COURSE WIDENING (HMA BINDER IL-19.0), 8 1/2" (FOR WIDENING <6')	4% @70 GYR.
<b>HMA DRIVEWAY PAVEMENT 8" PE (10" CE)</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm): 1-1/2"	4% @ 50 Gyr.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm)	4% @ 50 Gyr.
<b>PATCHING- IL ROUTE 176 (TERRA COTTA AVENUE)</b>	
CLASS D PATCHES (HMA BINDER IL-19 mm) - 12"	4% @ 70 Gyr.
<b>PATCHING- MAIN STREET</b>	
CLASS D PATCHES (HMA BINDER IL-19 mm) - 10"	4% @ 70 Gyr.
<b>TEMPORARY PAVEMENT</b>	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70: 4"	4% @ 70 Gyr.

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

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

THE "AC TYPE" FOR NON-POLYMERIZED HMA SHALL BE "PG 64-22" ON US ROUTE 14 AND "PG 58-20" ON MAIN STREET UNLESS MODIFIED BY SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

\* AGGREGATE SUBGRADE IMPROVEMENT (ASI) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND REPLACED WITH ASI OR EMBANKMENT AS DETERMINED BY THE ENGINEER. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR. A QUANTITY OF REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL SHALL ALSO BE DEDUCTED WITH NO ADDITIONAL COMPENSATION DUE TO THE CONTRACTOR.



USER NAME = morning	DESIGNED - DJS	REVISED $\Delta$ ADDENDUM A 10/13/2021
DRAWN - KAR	CHECKED - AKS	REVISIED -
PLOT SCALE = 40,0000' / in.	DATE - 10-12-2021	FILE - 181171_ss2-sht-TypSec.dgn
PLOT DATE = 10/13/2021		

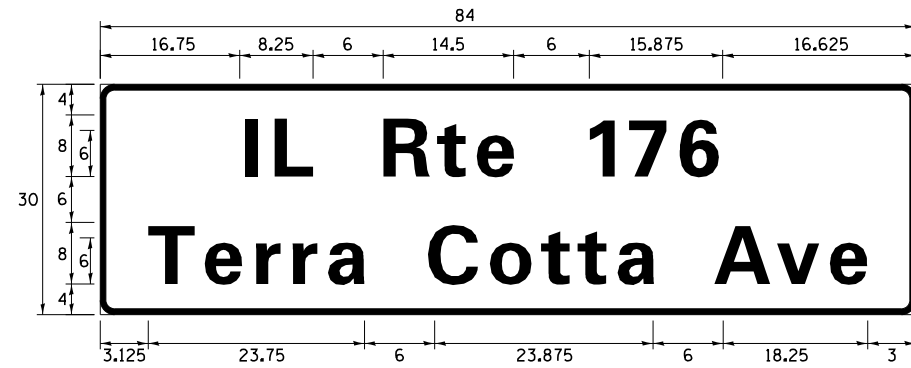
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

<b>TYPICAL SECTIONS</b>	
SCALE: NONE	SHEET 5 OF 5 SHEETS STA. TO STA.

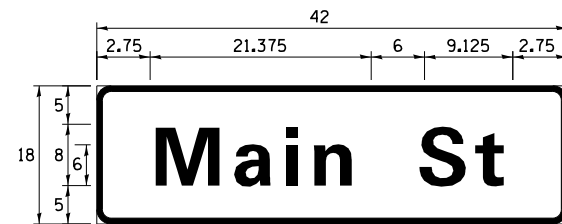
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	15-00124-00-PV	MCHENRY	121	18
CONTRACT NO. 61H27				
ILLINOIS FED. AID PROJECT				

**SIGN PANEL – FOR LED INTERNALLY ILLUMINATED STREET NAME SIGNS**

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



DESIGN SERIES	AREA (SQ FT)
D	17.50



DESIGN SERIES	AREA (SQ FT)
D	5.25

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MASTARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES		
ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	793
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	70
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	271
HANDHOLE	EACH	4
HEAVY DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
PAINT NEW TRAFFIC SIGNAL POST	EACH	3
PAINT NEW MAST ARM AND POLE, UNDER 40 FOOT	EACH	3
TRANSCIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	207
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	856
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	1,091
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	1,153
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,347
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 8 2C	FOOT	91
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,096
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 28 FT. AND 32 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	18
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	305
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	222
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE SUPER R CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	2
MASTER CONTROLLER (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
PAINT NEW MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, UNDER 40 FEET	EACH	1
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	548
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10

STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM  
 LICENSE NO. - 184-001121 - EXPIRES 4/30/2022  
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 FILE NAME: R:\Cyril\LakeCreek\181171\North Main St PH I\CAD\Drawings\181171\_ss2-sht-TS-Cable.dgn



USER NAME = mornij	DESIGNED - SARAH MAGNUSON	REVISED - ADDENDUM A 10/13/2021
	DRAWN - KATHLEEN ROBERSON	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - BOB LENZINI	REVISED -
PLOT DATE = 10/13/2021	DATE - 10-12-2021	FILE - 181171_ss2-sht-TS-Cable.dgn

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**MAST ARM MOUNTED STREET NAME SIGNS  
 AND SCHEDULE OF QUANTITIES**  
**IL RTE 176 (TERRA COTTA AVE) AND MAIN ST**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	15-00124-00-PV	MCHENRY	121	80
CONTRACT NO. 61H27				
ILLINOIS FED. AID PROJECT				

**TS XXXX  
 ECON XX**