01-18-2019 LETTING ITEM 118

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	1
	ILLINOIS	CONTRACT NO. 61F28		

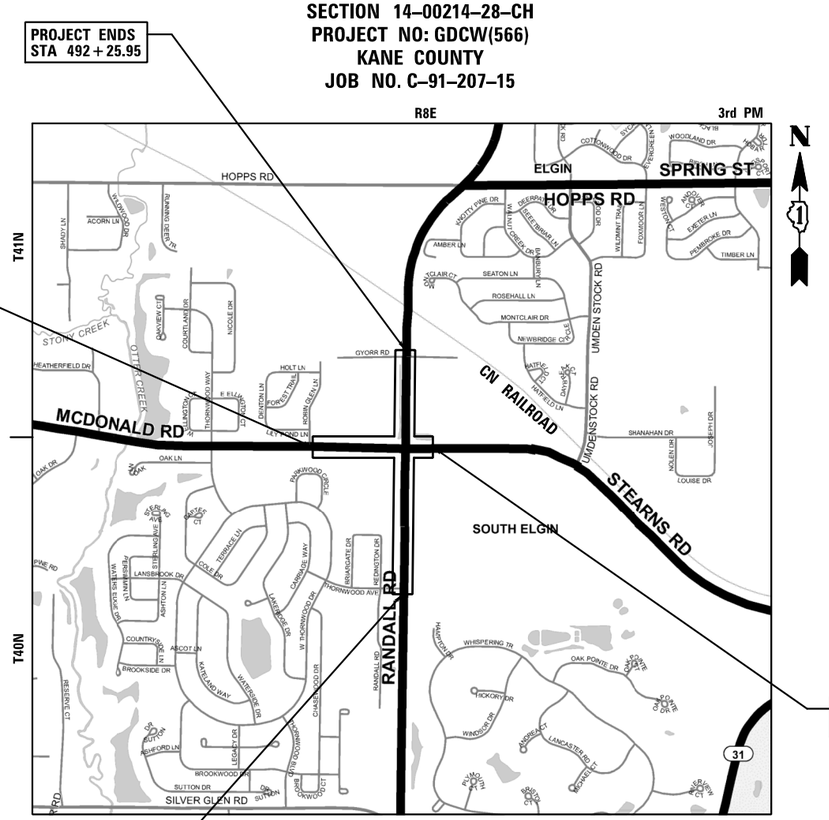
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF APPLICABLE HIGHWAY STANDARDS SEE SHEET 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.P. 336 (RANDALL ROAD) AT F.A.P. 537 (MCDONALD ROAD) / C.H. 37 (STEARNS ROAD)
INTERSECTION IMPROVEMENT PROJECT
SECTION 14-00214-28-CH
PROJECT NO: GDCW(566)
KANE COUNTY
JOB NO. C-91-207-15



LOCATION MAP
(NOT TO SCALE)

GROSS LENGTH = 4,780 FT. = 0.91 MILE
NET LENGTH = 4,780 FT. = 0.91 MILE

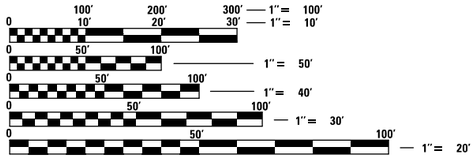
LOCATION OF SECTION INDICATED THUS:-

TRAFFIC DATA

RANDALL ROAD
ADT (YEAR) = 29,600 (2014)
ADT (YEAR) = 40,400 (2040)
SPEED LIMIT = 50 MPH NB, 45 MPH SB
DESIGN DESIGNATION: OTHER PRINCIPAL ARTERIAL

MCDONALD ROAD
ADT (YEAR) = 6,100 (2014)
ADT (YEAR) = 7,100 (2040)
SPEED LIMIT = 35 MPH
DESIGN DEESIGNATION: OTHER PRINCIPAL ARTERIAL

STEARNS ROAD
ADT (YEAR) = 12,100 (2014)
ADT (YEAR) = 15,950 (2040)
SPEED LIMIT = 45 MPH
FUNCTIONAL CLASSIFICATION = OTHER PRINCIPAL ARTERIAL



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

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

CONTRACT NO. 61F28

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED OCTOBER 9 2018
COUNTY ENGINEER, KANE COUNTY DIVISION OF TRANSPORTATION

PASSED 11/6 2018
DISTRICT ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW NOVEMBER 13 2018
REGIONAL ENGINEER

JASON G. SOUDEN
062-050850
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL ENGINEER 10-9-18 DATE

JASON SOUDEN
ILLINOIS REGISTRATION No. 062-050850
EXPIRATION DATE: 11/30/2019

CHRISTOPHER B. BURKE ENGINEERING, LTD.
9575 W. Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFESSIONAL DESIGN FIRM NO. 184-001175
EXPIRATION DATE: 04/30/19

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E. SCHAUMBURG, ILLINOIS

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016: THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY, 2018: THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (IMUTCD), THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS" (SSTCI), "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JULY 2009 SIXTH EDITION, THE "NRCS ILLINOIS URBAN MANUAL" DEC 2002 EDITION, THE "DETAILS" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO VERIFY EXISTING DIMENSIONS OR CONDITIONS.

3. THE CONTRACTOR SHALL LIMIT HIS/HER CONSTRUCTION ACTIVITIES TO THE WORK AREAS DESIGNATED ON THE PLANS. ANY DAMAGE TO AREAS OUTSIDE OF THESE LIMITS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE ENGINEER.

4. THE CONTRACTOR SHALL NOTIFY JENNIFER O'CONNELL AT THE KANE COUNTY DEPARTMENT OF TRANSPORTATION AT 630-406-7333 AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK AND COORDINATE ALL CONSTRUCTION OPERATIONS WITH THE ENGINEER.

5. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS, AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS. IF EXISTING SIGNS ARE DAMAGED DURING THE REMOVAL AND REPLACEMENT PROCESS, THE SIGN SHALL BE REPLACED.

6. THE CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES BEARING ON SAFETY OF PERSONS OR PROPERTY OR THEIR PROTECTION FROM DAMAGE, INJURY OR LOSS.

7. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ANY OTHER ROADWAY PROJECTS WITHIN THE AREA THAT ARE UNDER CONSTRUCTION AT THE SAME TIME:

   RANDALL ROAD TRAFFIC SIGNAL SAFETY / INTERCONNECT PROJECT (CONTRACT 61E99)

8. IF ANY EXISTING PAVEMENT MARKING AND/OR SIGNING OUTSIDE OF THE PROJECT LIMITS ARE/IS DISTURBED DUE TO THE CONSTRUCTION OF PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL REPLACE THE DISTURBED TRAFFIC CONTROL DEVICES PER IDOT AND IDOT DISTRICT 1 STANDARDS FOR PAVEMENT MARKING AND SIGNING.

9. **UTILITIES**
   (A) THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES, AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE COUNTY AND ENGINEER DO NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

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

   (C) BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION FACILITIES (48-HOUR NOTIFICATION IS REQUIRED). THE CONTRACTOR SHALL CONTACT IDOT'S BUREAU OF MATERIALS (AT 847-705-4337) AT LEAST 24 HOURS BEFORE PLACING HOT-MIX ASPHALT OR PORTLAND CEMENT CONCRETE.

10. **STAKING**
    (A) THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE ENGINEER, ITS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

11. **MISCELLANEOUS**
    (A) THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASIS ON WHICH THEY ARE TO BE PLACED. PLAN THICKNESSES SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.

    (B) ALL SAWCUTTING SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL.

    (C) LOCATIONS FOR PAVEMENT PATCHING WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

    (D) WHEN REMOVING PAVEMENT, CURB AND GUTTER, SHOULDER, AND/OR OTHER STRUCTURES, THE USE OF ANY TYPE OF CONCRETE BREAKERS, WHICH MIGHT DAMAGE UNDERGROUND PUBLIC OR PRIVATE UTILITIES, WILL NOT BE PERMITTED. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL BE PERMITTED. THE CONTRACTOR IS PROHIBITED FROM BREAKING UP CONCRETE BY DROPPING IT ON THE PAVEMENT OR IN ANY OTHER MANNER, WHICH IN THE OPINION OF THE ENGINEER MAY DAMAGE EXISTING OR PROPOSED PAVEMENTS OR OTHER ROADWAY APPURTENANCES.

    (E) NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.

    (F) 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. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR.

    (G) DURING THE CONSTRUCTION OPERATIONS WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION.

    (H) THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.

    (I) AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE STANDARD SPECIFICATIONS AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED.

    (J) ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.

    (K) TRENCH BACKFILL SHALL BE USED TO BACKFILL ALL TRENCHES WHERE THE EDGE OF THE TRENCH IS WITHIN 5 FEET OF THE PROPOSED EDGE OF PAVEMENT, CURB, CURB AND GUTTER OR SIDEWALK (BIKE PATH).

12. **STORM SEWER CONSTRUCTION**
    (A) FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES OF ALL NEW, ADJUSTED OR RECONSTRUCTED STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION OF THE AREA IN WHICH THEY ARE LOCATED.

    (B) ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR.

13. **SOIL EROSION AND SEDIMENT CONTROL**
    (A) SOIL EROSION AND SEDIMENT CONTROL (SESC) FEATURES MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE MUST BE PHASED OR ENACTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES MUST CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES.

    (B) UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED AT MINIMUM ACCORDING TO THE STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, REVISED TO LATEST VERSION AS AMENDED. A COPY OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL (SESC) PLAN AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST BE MAINTAINED ON THE SITE AT ALL TIMES.

    (C) THE EROSION AND SEDIMENT CONTROLS SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY THE COUNTY OR THEIR AUTHORIZED REPRESENTATIVE. ALL ADDITIONAL MEASURES MUST BE IN PLACE WITHIN 3 DAYS OF DISTURBANCE AND ANY EMERGENCY SESC MEASURES MUST BE INSTALLED IMMEDIATELY.

    (D) THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREAS AS THE PROJECT PROGRESSES, AND INSTALL TEMPORARY OR PERMANENT EROSION PROTECTION TO CONTROL SOIL EROSION, OR INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE TRACK-OUT MATERIAL.

    (E) DURING DE-WATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS). INLET HOSES SHOULD BE FLOATED AT THE SURFACE OF THE WATER IN ORDER TO LIMIT THE AMOUNT OF SEDIMENT INTAKE. PUMPING OPERATIONS MAY BE DISCHARGED TO A STABILIZED AREA THAT CONSISTS OF AN ENERGY DISSIPATING DEVICE (E.G., STONE), SEDIMENT FILTER BAG, OR BOTH. ADEQUATE EROSION AND SEDIMENT CONTROLS SHOULD BE USED DURING DE-WATERING OPERATIONS AS NECESSARY. DEWATERING SEDIMENT LADEN WATER DIRECTLY INTO FIELD TILES, STORM WATER STRUCTURES, OR "WATERS OF THE US" IS PROHIBITED.

    (F) CONSTRUCTION ACTIVITIES MUST BE SCHEDULED TO MINIMIZE THE TIME SOIL IS EXPOSED AND UNPROTECTED. IN NO CASE WILL THE EXISTING VEGETATION BE DESTROYED, REMOVED, OR DISTURBED MORE THAN FOURTEEN (14) DAYS PRIOR TO THE INITIATION OF IMPROVEMENTS.

    (G) ALL DISTURBED SOILS ARE TO BE STABILIZED, TEMPORARILY OR PERMANENTLY, WITHIN SEVEN (7) DAYS OF CONSTRUCTION ACTIVITY HAVING CEASED IF THE SOIL IS TO REMAIN UNDISTURBED FOR MORE THAN FOURTEEN (14) DAYS.

    (H) CONTRACTOR MUST INSTALL PERIMETER EROSION BARRIER AT ANY LOCATION IN WHICH SHEET FLOWS MAY RESULT IN SEDIMENT RUNOFF OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR MAY USE OTHER METHODS TO CONTROL RUNOFF, INCLUDING, BUT NOT LIMITED TO, TEMPORARY SEDIMENT TRAPS, SHAPED DITCHES TO CONVEY WATER, ETC.

    (I) KANE COUNTY, OR THEIR AUTHORIZED REPRESENTATIVE, MUST MAKE INSPECTIONS A MINIMUM OF ONCE EVERY SEVEN DAYS OF THE FOLLOWING: 1) DISTURBED AREAS OF THE PROJECT SITE THAT HAVE NOT BEEN FULLY STABILIZED, 2) STRUCTURAL CONTROL MEASURES (SILT FENCES, ETC), AND 3) LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE. AN ADDITIONAL INSPECTION OF THE ITEMS LISTED ABOVE MUST BE MADE WITHIN TWENTY-FOUR (24) HOURS OF A 0.5-INCH OR GREATER RAINFALL OR EQUIVALENT SNOWFALL.

HIGHWAY STANDARDS

000001-07 – STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS

001001-02 – AREAS OF REINFORCEMENT BARS

280001-07 – TEMPORARY EROSION CONTROL SYSTEMS

424001-11 – PERPENDICULAR CURB RAMPS FOR SIDEWALKS

424011-04 – CORNER PARALLEL CURB RAMPS FOR SIDEWALKS

424026-03 – ENTRANCE/ALLEY PEDESTRIAN CROSSINGS

442201-03 – CLASS C & D PATCHES

542301-03 – PRECAST REINFORCED CONCRETE FLARED END SECTION

601001-05 – PIPE UNDERDRAINS

602001-02 – CATCH BASIN TYPE A

602011-02 – CATCH BASIN TYPE C

602301-04 – INLET – TYPE A

602401-05 – PRECAST MANHOLE TYPE A 4' (1.22 m) DIAMETER

602402-01 – PRECAST MANHOLE TYPE A 5' (1.52 m) DIAMETER

602406-09 – PRECAST MANHOLE TYPE A 6' (1.83 m) DIAMETER

602411-07 – PRECAST MANHOLE TYPE A 7' (2.13 m) DIAMETER

602601-06 – PRECAST REINFORCED CONCRETE FLAT SLAB TOP

602701-02 – MANHOLE STEPS

604001-04 – FRAME AND LIDS, TYPE 1

604036-03 – GRATE, TYPE 8

604046-03 – FRAME AND GRATE, TYPE 10

604051-04 – FRAME AND GRATE, TYPE 11

604091-03 – FRAME AND GRATE, TYPE 24

606001-07 – CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

606006-04 – OUTLETS FOR CONCRETE CURB AND GUTTER, TYPE B-6.24 (B-15.60)

630001-12 – STEEL PLATE BEAM GUARDRAIL

631011-10 – TRAFFIC BARRIER TERMINAL, TYPE 2

701101-05 – OFF-RD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDGE

701106-02 – OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY

701421-08 – LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH

701426-09 – LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH

701427-05 – LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH

701701-10 – URBAN LAND CLOSURE, MULTILANE INTERSECTION

701801-06 – SIDEWALK, CORNER OR CROSSWALK CLOSURE

701901-08 – TRAFFIC CONTROL DEVICES

720001-01 – SIGN PANEL MOUNTING DETAILS

720016-04 – MAST ARM MOUNTED STREET NAME SIGNS

805001-01 – ELECTRICAL SERVICE INSTALLATION DETAILS

814001-03 – HANDHOLES

814006-02 – DOUBLE HANDHOLES

857001-01 – STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

862001-01 – UNINTERRUPTABLE POWER SUPPLY (UPS)

873001-02 – TRAFFIC SIGNAL GROUNDING & BONDING

877001-07 – STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'

877002-04 – STEEL MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'

877011-10 – STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'

878001-10 – CONCRETE FOUNDATION DETAILS

HIGHWAY STANDARDS (CONTINUED)

880001-01 – SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

880006-01 – TRAFFIC SIGNAL MOUNTING DETAILS

886001-01 – DETECTOR LOOP INSTALLATIONS

886006-01 – TYPICAL LAYOUTS FOR DETECTION LOOPS

INDEX OF SHEETS

COMMITMENTS

ADVANCED SIGNING IS TO BE INSTALLED TWO WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THIS PROJECT.

FILE NAME = N:\Kane County\170513\Civil\NOT_170513_01.dgn Default	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 2'	CHECKED -	REVISED -
	PLOT DATE = 11/12/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, LIST OF HIGHWAY STANDARDS, AND INDEX OF SHEETS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N/A | SHEET 1 OF 1 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	2
		CONTRACT NO. 61F28		
		ILLINOIS	FED. AID PROJECT	

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
Δ	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	50
	20101100	TREE TRUNK PROTECTION	EACH	39
Δ	20101200	TREE ROOT PRUNING	EACH	15
Δ	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	8
Δ	20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	7
	20101700	SUPPLEMENTAL WATERING	UNIT	125
	20200100	EARTH EXCAVATION	CU YD	2607
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	5887
	20400800	FURNISHED EXCAVATION	CU YD	3440
	20800150	TRENCH BACKFILL	CU YD	1454
	20900110	POROUS GRANULAR BACKFILL	CU YD	33
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	2350
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	15971
Δ	25000210	SEEDING, CLASS 2A	ACRE	2.0
Δ	25000310	SEEDING, CLASS 4	ACRE	1.5
Δ	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	210
Δ	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	210
Δ	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	210
Δ	25100630	EROSION CONTROL BLANKET	SQ YD	8931
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	300
	28000305	TEMPORARY DITCH CHECKS	FOOT	158
	28000400	PERIMETER EROSION BARRIER	FOOT	2407
	28000510	INLET FILTERS	EACH	80
	28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	7000
	28200200	FILTER FABRIC	SQ YD	5282
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	700
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	8457
	31101180	SUBBASE GRANULAR MATERIAL, TYPE B 2"	SQ YD	559
	31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	3548
	31101600	SUBBASE GRANULAR MATERIAL, TYPE B 8"	SQ YD	4700

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
	35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	34
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	29514
	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	443
	40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	1680
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	284
	40603090	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	3681
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1186
	42001300	PROTECTIVE COAT	SQ YD	21041
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5025
	42400800	DETECTABLE WARNINGS	SQ FT	284
	44000100	PAVEMENT REMOVAL	SQ YD	550
	44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	9844
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	36
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	688
	44000600	SIDEWALK REMOVAL	SQ FT	776
	44003100	MEDIAN REMOVAL	SQ FT	319
	44004250	PAVED SHOULDER REMOVAL	SQ YD	4860
	44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	84
	44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	126
	44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	126
	44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	203
	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	5697
Δ	50200100	STRUCTURE EXCAVATION	CU YD	27
Δ	50300225	CONCRETE STRUCTURES	CU YD	23.6
Δ	50500505	STUD SHEAR CONNECTORS	EACH	60
Δ	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2680
Δ	52200105	FURNISHING SOLDIER PILES (W SECTION)	FOOT	399
Δ	52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	1910
Δ	52200250	UNTREATED TIMBER LAGGING	SQ FT	475
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	2

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	326
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	1483
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	1093
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	624
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	783
550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	351
550A0470	STORM SEWERS, CLASS A, TYPE 2 42"	FOOT	551
55100500	STORM SEWER REMOVAL 12"	FOOT	48
55101200	STORM SEWER REMOVAL 24"	FOOT	909
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	55
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	7
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	5
60100945	PIPE DRAINS 12"	FOOT	88
60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	5042
60200205	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	7
60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	28
60205040	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2
60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	4
60207805	CATCH BASINS, TYPE C, TYPE 10 FRAME AND GRATE	EACH	1
60207905	CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE	EACH	1
60208240	CATCH BASINS, TYPE C, TYPE 24 FRAME AND GRATE	EACH	6
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1
60224039	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1
60224446	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1
60224449	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	5
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	10
60255500	MANHOLES TO BE ADJUSTED	EACH	1
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	8

Δ SPECIALTY ITEM

FILE NAME = N:\Kane County\178513\Civil\S00_178513_01.dgn	USER NAME = jsstrick	DESIGNED -	REVISED -
	PLOT SCALE = 2'	DRAWN -	REVISED -
Default	PLOT DATE = 11/12/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N/A | SHEET 1 OF 3 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	3
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
	60500040	REMOVING MANHOLES	EACH	4
	60500070	REMOVING MANHOLES TO MAINTAIN FLOW	EACH	1
	60600095	CLASS SI CONCRETE (OUTLET)	CU YD	1
	60602800	CONCRETE GUTTER, TYPE B	FOOT	100
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	278
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	6635
	60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	236
Δ	63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	1490
Δ	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1
Δ	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1
	67100100	MOBILIZATION	L SUM	1
	70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	22000
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	2500
Δ	72000100	SIGN PANEL - TYPE 1	SQ FT	368
Δ	72000200	SIGN PANEL - TYPE 2	SQ FT	72
Δ	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	27
Δ	72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	13
Δ	72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	302
Δ	72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	2
Δ	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	561
Δ	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1529
Δ	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	9301
Δ	78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	6929
Δ	78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	6937
Δ	78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	1015
Δ	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	2450

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
Δ	78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	572
Δ	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
Δ	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
Δ	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	515
Δ	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	491
Δ	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	415
Δ	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	455
Δ	81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	11715
Δ	81400100	HANDHOLE	EACH	9
Δ	81400200	HEAVY-DUTY HANDHOLE	EACH	5
Δ	81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	54445
Δ	81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	105
Δ	82500350	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	1
Δ	83050800	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 12 FT. MAST ARM	EACH	44
Δ	83050900	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 2-12 FT. MAST ARMS	EACH	4
Δ	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	488
Δ	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	48
Δ	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	1
Δ	84200804	REMOVAL OF POLE FOUNDATION	EACH	1
Δ	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
Δ	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1860
Δ	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3268
Δ	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	7958
Δ	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3037
Δ	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	7485
Δ	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1114
Δ	87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	6
Δ	87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
Δ	87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
Δ	87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
Δ	87700300	STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
Δ	87700430	STEEL MAST ARM ASSEMBLY AND POLE, 75 FT.	EACH	2
Δ	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24
Δ	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50
Δ	87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	100
Δ	87900200	DRILL EXISTING HANDHOLE	EACH	17
Δ	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	22
Δ	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	8
Δ	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	10
Δ	88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	30
Δ	88500100	INDUCTIVE LOOP DETECTOR	EACH	17
Δ	88600100	DETECTOR LOOP, TYPE I	FOOT	1712
Δ	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2
Δ	89502200	MODIFY EXISTING CONTROLLER	EACH	2
Δ	89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	2
Δ	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	14087
Δ	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2
Δ	89502380	REMOVE EXISTING HANDHOLE	EACH	1
Δ	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
Δ	A2001220	TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6
	X0322936	REMOVE EXISTING FLARED END SECTION	EACH	6
	X0323265	REMOVE EXISTING RIPRAP	SQ YD	15
Δ	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1338
Δ	X0324543	RELOCATE EXISTING CONFIRMATION BEACON	EACH	4
Δ	X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	505
	X0326806	WASHOUT BASIN	L SUM	1
	X0327036	BIKE PATH REMOVAL	SQ YD	14

Δ SPECIALTY ITEM

FILE NAME = N:\Kane County\170513\Civil\S00_170513_02.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 2'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N/A | SHEET 2 OF 3 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	4
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
Δ	X1400013	REMOVAL OF CABLE IN CONDUIT	FOOT	180
Δ	X1400095	LUMINAIRE, LED, HORIZONTAL MOUNT, HIGH WATTAGE	EACH	8
Δ	X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	357
Δ	X1400113	LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE	EACH	44
Δ	X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	7040
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1
	X4023000	TEMPORARY ACCESS (ROAD)	EACH	5
	X4060004	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80	TON	4479
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	31336
	X6020076	INLETS, SPECIAL, WITH SPECIAL FRAME AND GRATE	EACH	5
	X6020090	MANHOLES, WITH RESTRICTOR PLATE	EACH	2
	X6026050	SANITARY MANHOLES TO BE ADJUSTED	EACH	1
Δ	X8100105	CONDUIT SPLICE	EACH	3
Δ	X8730401	ELECTRIC CABLE IN CONDUIT, COMMUNICATION	FOOT	1634
Δ	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	10
Δ	X8950115	RELOCATE LIGHT DETECTOR	EACH	4
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52

	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
Δ	Z0033020	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	52
Δ	Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1
Δ	Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	4
Δ	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2
#	Z0076600	TRAINEES	HOUR	500
#	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500
Δ	XX003583	ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 16 3 C	FOOT	1634
Δ	XX006657	RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	1
Δ	XX006668	HANDHOLE TO BE ADJUSTED WITH NEW FRAME AND COVER	EACH	8
Δ	XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
	XX008195	EXPLORATION EXCAVATION (UTILITY)	FOOT	100
	XX009267	PERVIOUS HOT MIX ASPHALT	TON	1028
Δ	XX009268	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 78 FT.	EACH	1
Δ	XX009269	STEEL MAST ARM ASSEMBLY AND POLE, 80 FT.	EACH	1

#0042

Δ SPECIALTY ITEM

FILE NAME = N:\Kane County\170513\Civil\S00_170513.02	USER NAME = jstrick	DESIGNED -	REVISED -
	dgn	DRAWN -	REVISED -
	PLOT SCALE = 2'	CHECKED -	REVISED -
Default	PLOT DATE = 11/13/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N/A | SHEET 3 OF 3 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	5
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

	TOPSOIL STRIPPING (SQ FT)	CUT (EXCLUSIVE OF T/S STRIPPING, PAV'T REMOVAL, C&G REMOVAL, DRIVEWAY REMOVAL) (SQ FT)	FILL (SQ FT)	TOPSOIL STRIPPING (CU YD)	CUT VOLUME (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE (15% SHRINKAGE FACTOR) (CU YD)	FILL (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
SUBTOTALS				**2,574**	**1,252**	**1,064**	**2,445**	**-1,381**
RANDALL ROAD								
459+20.40	22.0	0.5	18.8	0.0	0.0	0.0	0.0	0.0
459+50	29.7	10.9	69.9	28.3	6.2	5.3	48.6	-43.3
460+00	37.4	20.9	24.6	62.1	29.5	25.1	87.4	-62.3
460+50	38.7	24.1	28.8	70.4	41.7	35.4	49.4	-13.9
461+00	38.8	13.2	25.2	71.7	34.5	29.3	49.9	-20.6
461+50	38.3	16.0	24.0	71.3	27.0	22.9	45.5	-22.6
462+00	61.4	26.6	48.4	92.3	39.4	33.5	67.0	-33.5
462+50	55.1	26.9	48.3	107.9	49.5	42.1	89.4	-47.4
463+00	57.1	37.1	51.5	103.9	59.3	50.4	92.3	-41.9
463+50	68.5	39.8	61.8	116.2	71.3	60.6	104.9	-44.3
464+00	68.7	38.4	61.6	127.0	72.5	61.6	114.2	-52.6
464+50	71.6	34.3	57.8	129.9	67.3	57.2	110.5	-53.3
465+00	56.1	33.1	43.8	118.2	62.3	53.0	94.1	-41.1
465+50	56.2	31.2	45.5	104.0	59.5	50.6	82.7	-32.1
466+00	59.5	28.8	45.9	107.1	55.5	47.2	84.5	-37.3
466+50	45.0	25.0	38.3	96.8	49.8	42.3	78.0	-35.6
467+00	64.8	49.1	47.5	101.7	68.6	58.3	79.5	-21.2
467+50	57.5	37.4	63.0	113.2	80.1	68.1	102.4	-34.3
468+00	58.3	42.7	57.5	107.2	74.2	63.1	111.6	-48.5
468+50	63.9	32.3	67.9	113.1	69.4	59.0	116.0	-57.0
469+00	38.5	9.1	40.8	94.8	38.3	32.6	100.6	-68.0
469+27	37.3	9.9	49.1	38.4	9.7	8.2	45.6	-37.4
469+50	36.4	10.1	60.3	30.9	8.4	7.1	45.8	-38.7
470+00	41.5	10.6	38.4	72.1	19.2	16.3	91.3	-75.0
470+50	36.3	9.1	46.4	72.0	18.3	15.5	78.5	-63.0
471+00	35.0	9.4	45.9	66.0	17.1	14.5	85.5	-70.9
471+50	33.8	8.0	52.2	63.7	16.1	13.7	90.8	-77.1
472+00	41.0	10.1	34.5	69.2	16.8	14.3	80.3	-66.1
472+23	23.8	9.4	19.3	27.9	8.4	7.1	23.1	-16.0
472+50	14.4	9.2	18.0	19.0	9.2	7.8	18.5	-10.7
472+74	18.0	10.7	14.6	14.6	8.9	7.6	14.6	-7.0
473+00	28.4	14.5	18.5	22.1	12.0	10.2	15.8	-5.6
473+50	39.9	10.3	56.3	63.3	22.9	19.5	69.3	-49.8
474+00	43.4	21.0	27.0	77.2	29.0	24.6	77.1	-52.5

	TOPSOIL STRIPPING (SQ FT)	CUT (EXCLUSIVE OF T/S STRIPPING, PAV'T REMOVAL, C&G REMOVAL, DRIVEWAY REMOVAL) (SQ FT)	FILL (SQ FT)	TOPSOIL STRIPPING (CU YD)	CUT VOLUME (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE (15% SHRINKAGE FACTOR) (CU YD)	FILL (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
SUBTOTALS				**2,557**	**1,303**	**1,108**	**2,524**	**-1,417**
RANDALL ROAD (CONTINUED)								
474+50	40.4	22.1	31.9	77.6	40.0	34.0	54.5	-20.5
475+00	41.4	22.7	34.1	75.7	41.5	35.2	61.1	-25.8
475+50	47.0	29.9	37.2	81.8	48.7	41.4	66.0	-24.6
476+00	40.5	26.1	33.9	81.0	51.9	44.1	65.8	-21.7
476+50	33.6	28.2	32.8	68.6	50.2	42.7	61.8	-19.1
477+00	31.1	27.2	46.6	59.9	51.3	43.6	73.5	-30.0
477+50	32.7	26.2	46.0	59.1	49.4	42.0	85.7	-43.7
478+00	37.8	33.1	34.7	65.3	54.9	46.6	74.7	-28.1
478+34	25.5	11.0	5.1	39.5	27.5	23.4	24.9	-1.5
479+00	0.0	0.0	0.0	31.3	13.5	11.5	6.3	5.2
480+50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
481+01	26.2	0.2	35.0	24.8	0.2	0.1	33.1	-33.0
481+50	50.2	20.3	62.6	69.2	18.5	15.7	88.4	-72.7
482+00	48.7	19.1	66.3	91.6	36.5	31.0	119.3	-88.4
482+50	48.1	20.6	62.5	89.6	36.8	31.3	119.2	-88.0
483+00	45.1	21.8	47.7	86.3	39.3	33.4	102.0	-68.6
483+50	47.0	21.7	58.4	85.3	40.3	34.2	98.2	-64.0
484+00	44.8	18.6	53.5	84.9	37.3	31.7	103.6	-71.9
484+50	45.1	18.1	58.4	83.3	34.1	29.0	103.6	-74.7
485+00	43.4	18.6	45.9	82.0	34.0	28.9	96.6	-67.7
485+50	40.0	21.1	47.7	77.3	36.7	31.2	86.6	-55.4
486+00	37.4	23.5	47.1	71.7	41.3	35.1	87.7	-52.7
486+50	35.2	24.5	35.7	67.2	44.4	37.8	76.6	-38.8
487+00	35.8	26.6	31.8	65.7	47.3	40.2	62.5	-22.2
487+50	43.8	24.1	42.4	73.7	46.9	39.9	68.7	-28.8
488+00	46.0	23.1	43.2	83.2	43.7	37.1	79.2	-42.1
488+50	46.0	25.1	49.2	85.2	44.6	37.9	85.6	-47.6
489+00	48.0	30.4	42.5	87.0	51.4	43.7	84.9	-41.2
489+50	49.7	29.5	42.5	90.4	55.5	47.2	78.6	-31.5
490+00	46.0	28.3	32.1	88.6	53.5	45.5	69.0	-23.5
490+50	60.2	21.1	46.6	98.4	45.8	38.9	72.9	-34.0
491+00	63.6	18.6	45.0	114.6	36.8	31.2	84.8	-53.6
491+50	62.8	6.6	48.1	117.0	23.3	19.8	86.2	-66.4
492+00	45.7	21.1	18.6	100.5	25.6	21.8	61.8	-40.0

FILE NAME = N:\Kane County\170513\Civil\SCH_170513_01.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 2'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EARTHWORK SCHEDULE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N/A | SHEET 1 OF 2 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	6
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		

	TOPSOIL STRIPPING (SQ FT)	CUT (EXCLUSIVE OF T/S STRIPPING, PAV'T REMOVAL, C&G REMOVAL, DRIVEWAY REMOVAL) (SQ FT)	FILL (SQ FT)	TOPSOIL STRIPPING (CU YD)	CUT VOLUME (CU YD)	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE (15% SHRINKAGE FACTOR) (CU YD)	FILL (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
SUBTOTALS				**606**	**52**	**44**	**686**	**-642**
McDONALD ROAD								
425+03.20	18.7	0.0	13.5	0.0	0.0	0.0	0.0	0.0
425+50	26.0	4.6	3.1	38.8	4.0	3.4	14.4	-10.9
426+00	24.9	7.2	1.6	47.1	11.0	9.3	4.4	5.0
426+50	24.8	4.9	3.3	46.0	11.2	9.5	4.5	5.0
426+92.37	24.2	3.7	8.0	38.5	6.7	5.7	8.9	-3.2
427+00	24.3	1.4	11.4	6.9	0.7	0.6	2.7	-2.1
427+25	24.1	0.8	16.7	22.4	1.0	0.9	13.0	-12.1
427+50	16.6	0.8	8.0	18.8	0.8	0.7	11.4	-10.8
427+80	0.0	0.0	0.0	9.2	0.5	0.4	4.5	-4.1
428+35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
428+50	18.0	0.0	29.2	5.0	0.0	0.0	8.1	-8.1
429+00	18.5	1.5	34.8	33.8	1.3	1.1	59.2	-58.1
429+50	20.0	1.4	36.8	35.6	2.6	2.2	66.3	-64.1
430+00	19.9	1.3	37.0	36.9	2.5	2.1	68.4	-66.3
430+50	19.5	1.4	31.7	36.5	2.5	2.1	63.6	-61.5
431+00	20.5	1.7	24.8	37.0	2.9	2.4	52.2	-49.8
432+00	16.0	0.0	24.6	67.6	3.2	2.7	91.3	-88.6
432+50	13.7	0.0	18.3	27.5	0.0	0.0	39.7	-39.7
433+00	13.6	0.0	25.0	25.3	0.0	0.0	40.2	-40.2
433+50	13.1	0.0	28.9	24.7	0.0	0.0	49.9	-49.9
434+00	12.6	0.0	25.6	23.8	0.0	0.0	50.4	-50.4
434+50	13.9	0.8	9.0	24.5	0.7	0.6	32.0	-31.4

EARTHWORK SUMMARY

	TOPSOIL STRIPPING (CU YD)	UNDERCUTS (CU YD)	CUT VOLUME (EARTH EXCAVATION) (CU YD)	EXCAVATION AVAILABLE FOR EMBANKMENTS ADJUSTED BY 15% SHRINKAGE FACTOR (CU YD)	EMBANKMENT (FILL) (CU YD)	EARTHWORK BALANCE ("+" = WASTE, "-" = SHORTAGE) (CU YD)
RANDALL ROAD	5,131	650	2,555	2,172	4,969	-2,798
MCDONALD ROAD	606	60	52	44	686	-642
PROJECT TOTALS	**5,737**	**710**	**2,607**	**2,216**	**5,655**	**-3,440**

UNDERCUTS ASSUMED TO BE 25% OF FULL DEPTH HMA WIDENING AREA (INCLUDING CURB & GUTTER) AND 12" DEEP

TOTAL REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL = 5737 CU YD FROM TOPSOIL STRIP + 150 CU YD FROM UNDERCUT = 5887 CU YD

EARTH EXCAVATION (20200100)	2,607 CU YD
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (20201200)	5,887 CU YD
FURNISHED EXCAVATION (20400800)	3,440 CU YD
TOPSOIL FURNISH AND PLACE 4" (21101615)	15,971 SQ YD
AGGREGATE SUBGRADE IMPROVEMENT (30300001)	700 CU YD

FILE NAME = N:\Kane County\170513\Civil\SCH_170513_02.sht
Default

USER NAME = jsitrick | PLOT SCALE = 2' | PLOT DATE = 11/12/2018

DESIGNED - | DRAWN - | CHECKED - | DATE -

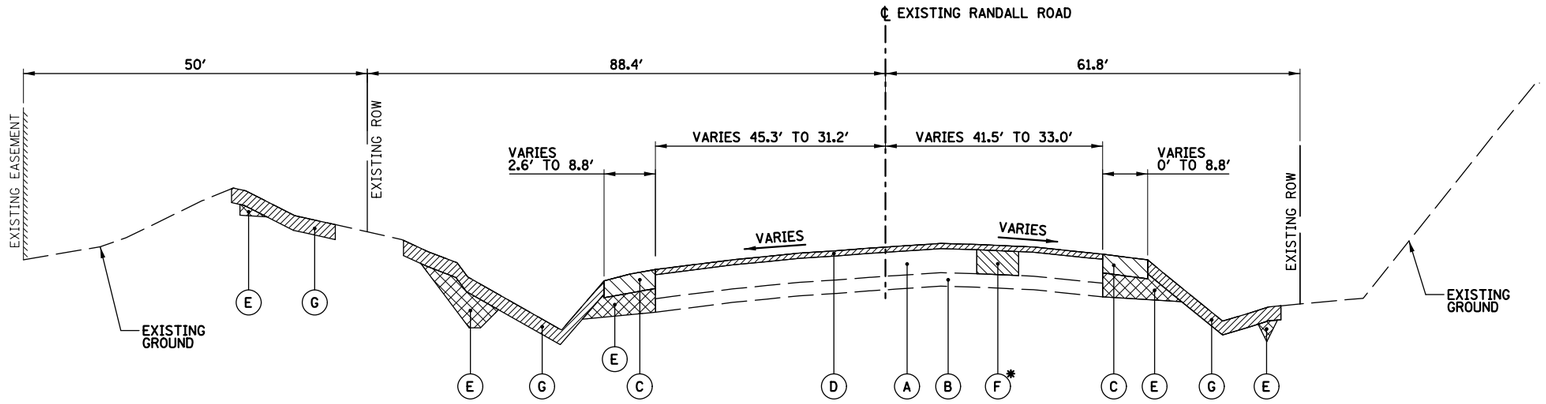
REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

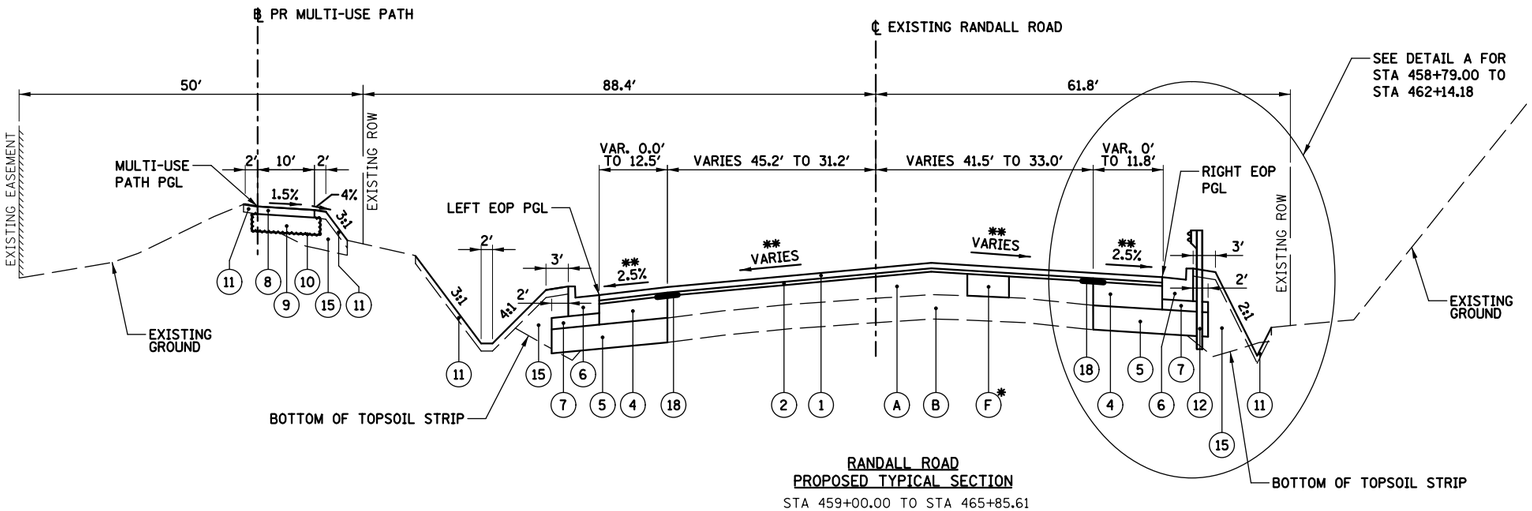
EARTHWORK SCHEDULE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N/A | SHEET 2 OF 2 SHEETS | STA. N/A | TO STA. N/A

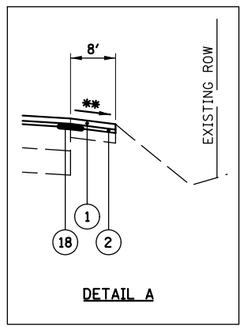
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	7
		CONTRACT NO. 61F28		
		ILLINOIS	FED. AID PROJECT	



RANDALL ROAD
EXISTING TYPICAL SECTION
STA 459+00.00 TO STA 465+85.61



RANDALL ROAD
PROPOSED TYPICAL SECTION
STA 459+00.00 TO STA 465+85.61



DETAIL A

* AS DIRECTED BY THE ENGINEER

** CROSS SLOPE VARIES: SEE CROSS SECTIONS AND ROADWAY PLAN AND PROFILE SHEETS

NOTE: TYPICAL UNDERCUT DETAIL ON SHEET 9

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ NDES
GRIND AND OVERLAY RESURFACING - RANDALL ROAD	
LEVELING BINDER (MACHINE METHOD), IL-9.5 mm, N70; 3/4″	4% @ 70 GYR.
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5 mm, N80; 2″	3.5% @ 80 GYR.
GRIND AND OVERLAY RESURFACING - MCDONALD ROAD	
LEVELING BINDER (MACHINE METHOD), IL-9.5 mm, N50; 3/4″	4% @ 50 GYR.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5 mm, N50; 2″	4% @ 50 GYR.
FULL DEPTH WIDENING	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90; 10 1/4″	4% @ 90 GYR.
LEVELING BINDER (MACHINE METHOD), IL-9.5 mm, N70; 3/4″	4% @ 70 GYR.
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5 mm, N80; 2″	3.5% @ 80 GYR.
PAVEMENT PATCHING	
CLASS D PATCHES, 10″ (HMA BINDER IL-19.0); 10″	4% @ 70 GYR.
DRIVEWAY (PRIVATE ENTRANCE)	
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0); 6″	4% @ 50 GYR.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5 mm, N50; 2″	4% @ 50 GYR.

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SY/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS

(A) EXISTING HOT-MIX ASPHALT PAVEMENT (SEE CORE INFORMATION)
(B) EXISTING GRANULAR SUBGRADE (SEE CORE INFORMATION)
(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED PAID FOR AS PAVED SHOULDER REMOVAL (44004250)
(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)
(E) EARTH EXCAVATION (20200100)
(F) CLASS D PATCHES, 10″ (44201761, 44201765, 44201769, 44201771)
(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR TOPSOIL STRIP - 10″ NOMINAL (20201200)
(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR UNDERCUT - 12″ NOMINAL (20201200)
(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4″ (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80; 2″ (X4060004)
(2) LEVELING BINDER (MACHINE METHOD), N70, 3/4″ (40600635)
(3) NOT USED
(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 1/4″ (40603090)
(5) AGGREGATE SUBGRADE IMPROVEMENT, 12″ (30300112)
(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)
(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4″ (31101200)
(8) PERVIOUS HOT MIX ASPHALT, 4″
(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8″ (31101600)
(10) FILTER FABRIC (28200200) (WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8″)
(11) TOPSOIL FURNISH AND PLACE, 4″ (21101615)
(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)
(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2″
(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); 3/4″
(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100 OR PAID FOR AS FURNISHED EXCAVATION - 20400800)
(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)
(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)
(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

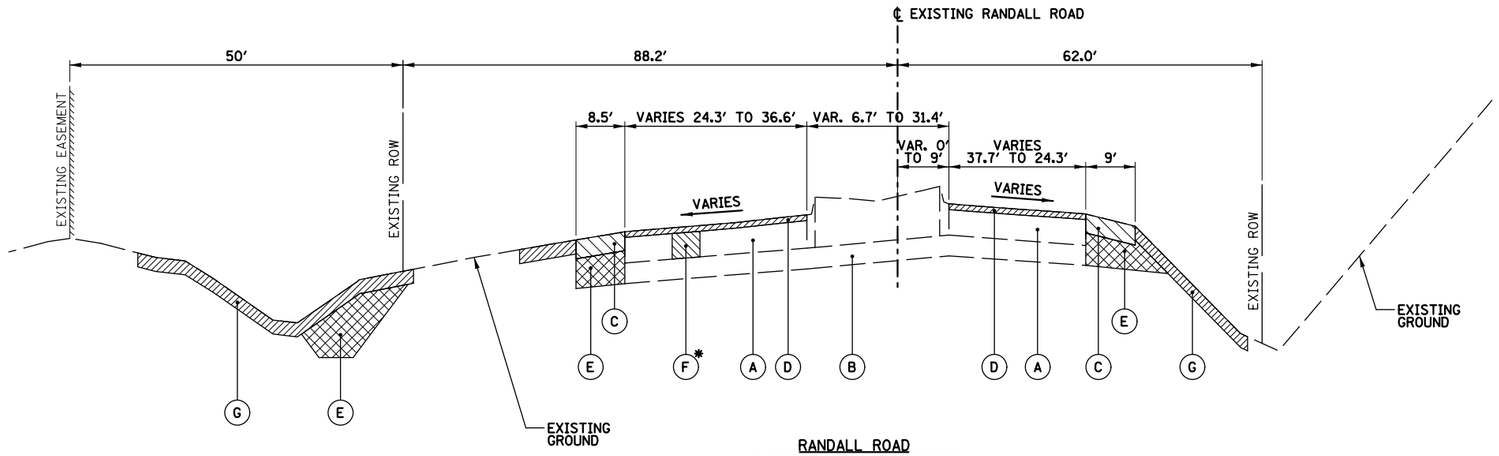
FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20′	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

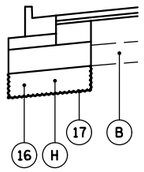
RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS
TYPICAL SECTIONS

SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. 459+00.00 TO STA. 465+85.61

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	8
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



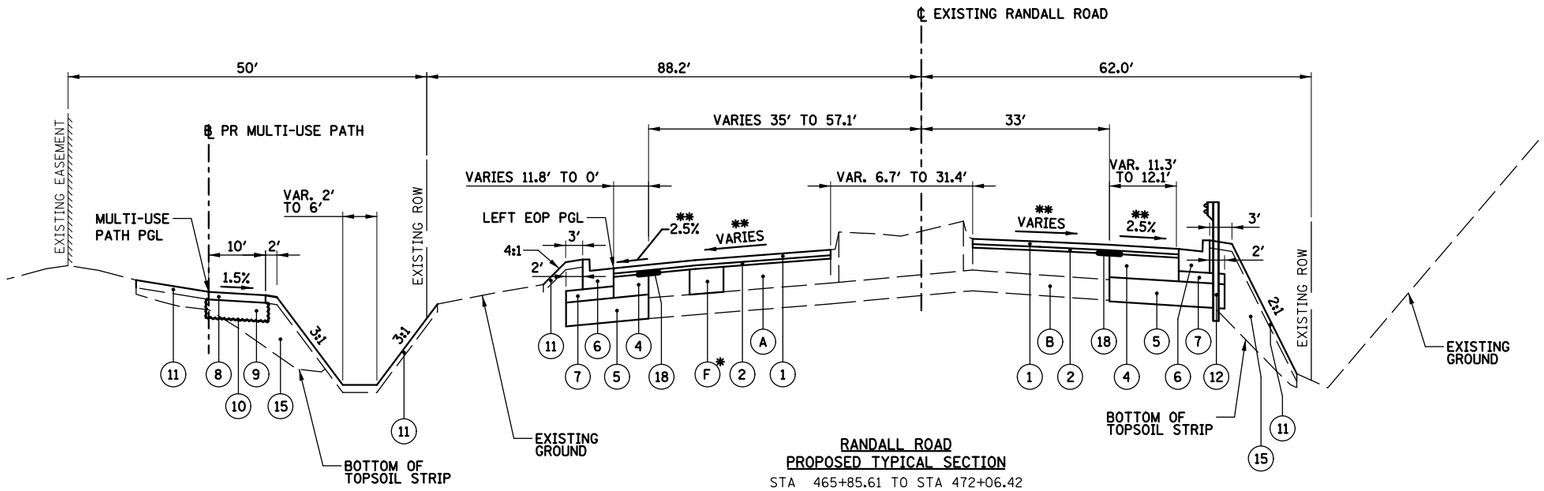
RANDALL ROAD
EXISTING TYPICAL SECTION
STA 465+85.61 TO STA 472+06.42



TYPICAL UNDERCUT DETAIL
(ACTUAL LOCATIONS AND DEPTHS DETERMINED IN THE FIELD AS DIRECTED BY THE ENGINEER)

* AS DIRECTED BY THE ENGINEER

** CROSS SLOPE VARIES: SEE CROSS SECTIONS AND ROADWAY PLAN AND PROFILE SHEETS



RANDALL ROAD
PROPOSED TYPICAL SECTION
STA 465+85.61 TO STA 472+06.42

(A) EXISTING HOT-MIX ASPHALT PAVEMENT (SEE CORE INFORMATION)

(B) EXISTING GRANULAR SUBGRADE (SEE CORE INFORMATION)

(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED PAID FOR AS PAVED SHOULDER REMOVAL (44004250)

(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)

(E) EARTH EXCAVATION (20200100)

(F) CLASS D PATCHES, 10" (44201761, 44201765, 44201769, 44201771)

(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR TOPSOIL STRIP - 10" NOMINAL (20201200)

(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR UNDERCUT - 12" NOMINAL (20201200)

(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80; 2" (X4060004)

(2) LEVELING BINDER (MACHINE METHOD), N70, ¾" (40600635)

(3) NOT USED

(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 ¼" (40603090)

(5) AGGREGATE SUBGRADE IMPROVEMENT, 12" (30300112)

(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)

(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4" (31101200)

(8) PERVIOUS HOT MIX ASPHALT, 4"

(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8" (31101600)

(10) FILTER FABRIC (28200200) (WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8")

(11) TOPSOIL FURNISH AND PLACE, 4" (21101615)

(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)

(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2"

(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); ¾"

(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100 OR PAID FOR AS FURNISHED EXCAVATION - 20400800)

(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)

(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

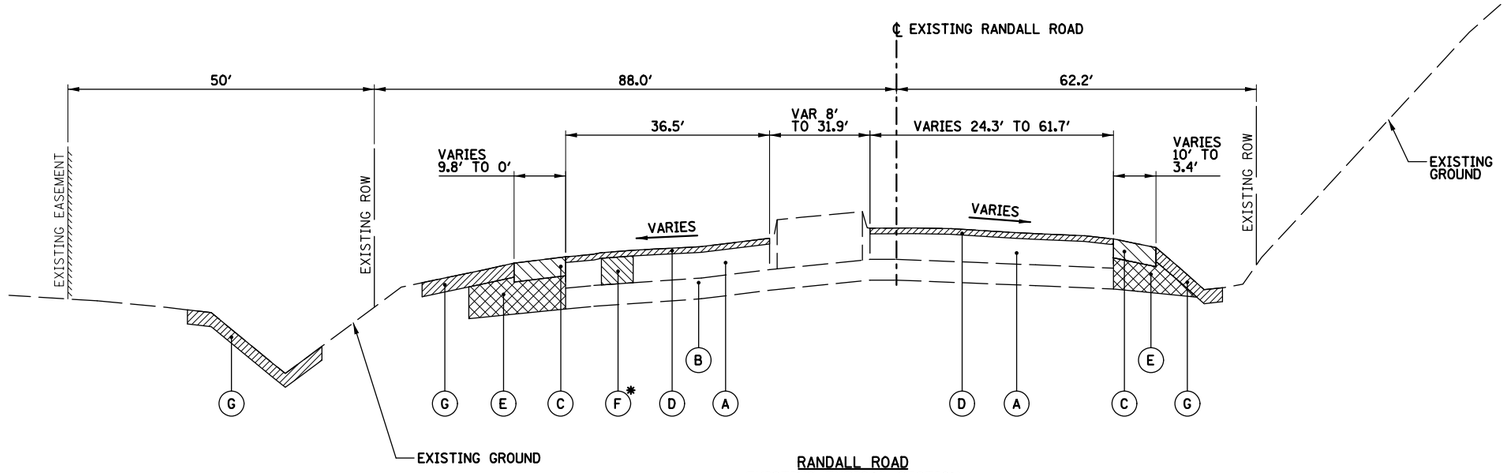
FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn Default	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

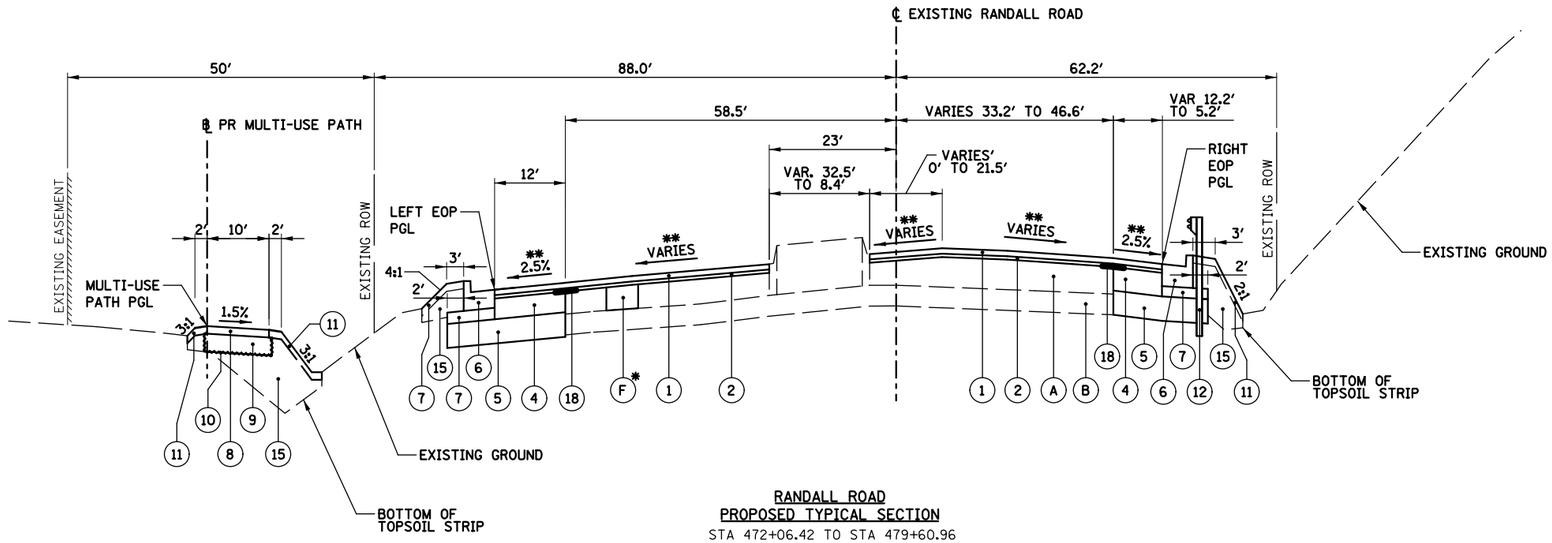
RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS
TYPICAL SECTIONS

SCALE: NONE | SHEET 2 OF 7 SHEETS | STA. 465+85.61 TO STA. 472+06.42

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	9
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



RANDALL ROAD
EXISTING TYPICAL SECTION
STA 472+06.42 TO STA 479+60.96



RANDALL ROAD
PROPOSED TYPICAL SECTION
STA 472+06.42 TO STA 479+60.96

* AS DIRECTED BY THE ENGINEER

** CROSS SLOPE VARIES: SEE CROSS SECTIONS AND ROADWAY PLAN AND PROFILE SHEETS

NOTE: TYPICAL UNDERCUT DETAIL ON SHEET 9

(A) EXISTING HOT-MIX ASPHALT PAVEMENT (SEE CORE INFORMATION)
(B) EXISTING GRANULAR SUBGRADE (SEE CORE INFORMATION)
(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED PAID FOR AS PAVED SHOULDER REMOVAL (44004250)
(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)
(E) EARTH EXCAVATION (20200100)
(F) CLASS D PATCHES, 10″ (44201761, 44201765, 44201769, 44201771)
(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR TOPSOIL STRIP - 10″ NOMINAL (20201200)
(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR UNDERCUT - 12″ NOMINAL (20201200)
(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4″ (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80; 2″ (X4060004)
(2) LEVELING BINDER (MACHINE METHOD), N70, ¾″ (40600635)
(3) NOT USED
(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 ¼″ (40603090)
(5) AGGREGATE SUBGRADE IMPROVEMENT, 12″ (30300112)
(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)
(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4″ (31101200)
(8) PERVIOUS HOT MIX ASPHALT, 4″
(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8″ (31101600)
(10) FILTER FABRIC (28200200) (WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8″)
(11) TOPSOIL FURNISH AND PLACE, 4″ (21101615)
(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)
(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2″
(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); ¾″
(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100 OR PAID FOR AS FURNISHED EXCAVATION - 20400800)
(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)
(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)
(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

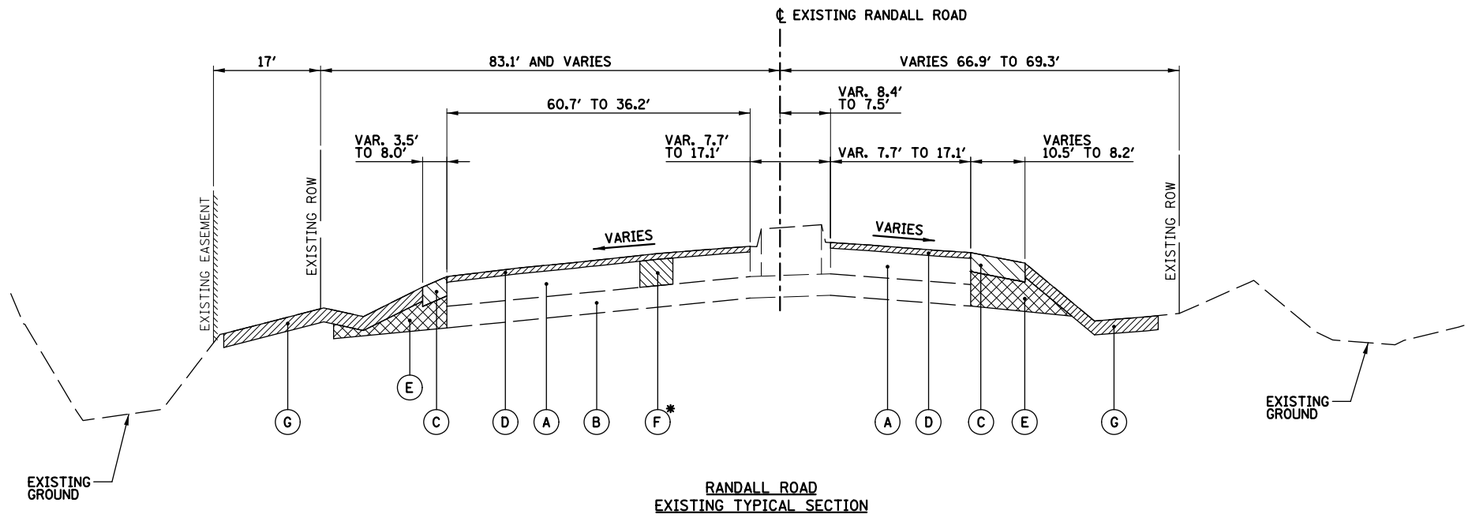
FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn Default	USER NAME = jsstrick	DESIGNED -	REVISED -
	PLOT SCALE = 20′	DRAWN -	REVISED -
	PLOT DATE = 11/9/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

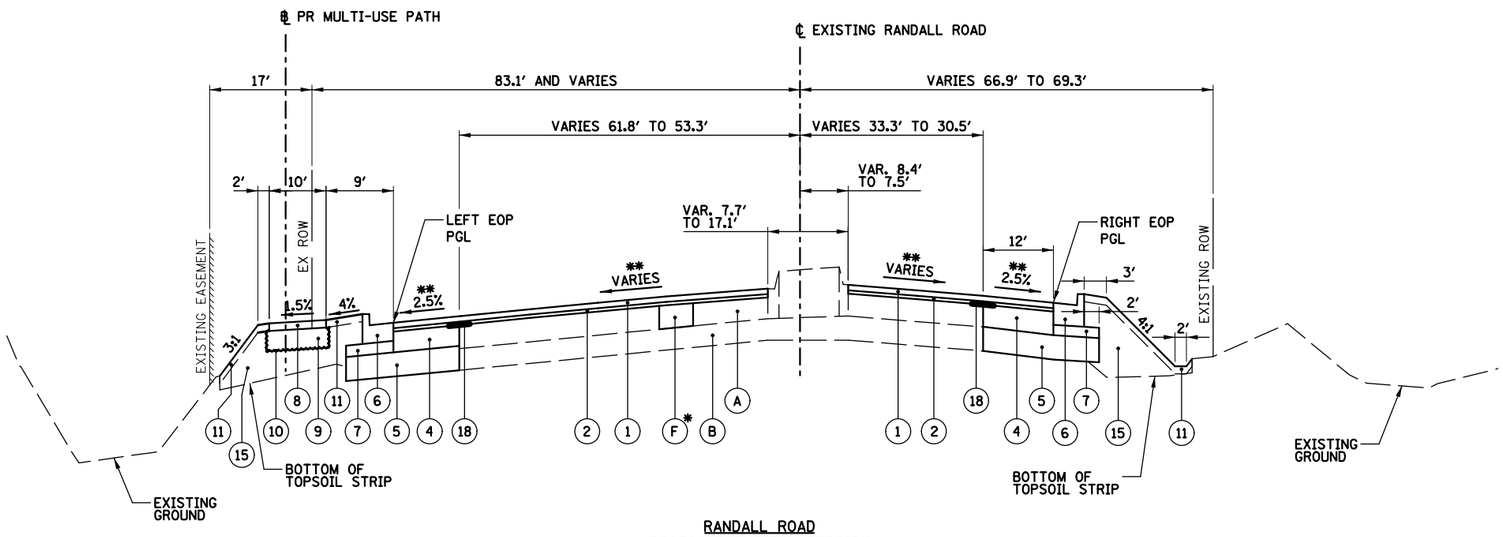
RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS
TYPICAL SECTIONS

SCALE: NONE | SHEET 3 OF 7 SHEETS | STA. 472+06.42 TO STA. 479+60.96

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	10
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		



RANDALL ROAD
EXISTING TYPICAL SECTION
STA 479+60.96 TO STA 486+38.46



RANDALL ROAD
PROPOSED TYPICAL SECTION
STA 479+60.96 TO STA 486+38.46

* AS DIRECTED BY THE ENGINEER

** CROSS SLOPE VARIES: SEE CROSS SECTIONS AND ROADWAY PLAN AND PROFILE SHEETS

NOTE: TYPICAL UNDERCUT DETAIL ON SHEET 9

(A) EXISTING HOT-MIX ASPHALT PAVEMENT (SEE CORE INFORMATION)

(B) EXISTING GRANULAR SUBGRADE (SEE CORE INFORMATION)

(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED PAID FOR AS PAVED SHOULDER REMOVAL (44004250)

(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)

(E) EARTH EXCAVATION (20200100)

(F) CLASS D PATCHES, 10″ (44201761, 44201765, 44201769, 44201771)

(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR TOPSOIL STRIP - 10″ NOMINAL (20201200)

(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR UNDERCUT - 12″ NOMINAL (20201200)

(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4″ (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80; 2″ (X4060004)

(2) LEVELING BINDER (MACHINE METHOD), N70, ¾″ (40600635)

(3) NOT USED

(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 ¼″ (40603090)

(5) AGGREGATE SUBGRADE IMPROVEMENT, 12″ (30300112)

(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)

(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4″ (31101200)

(8) PERVIOUS HOT MIX ASPHALT, 4″

(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8″ (31101600)

(10) FILTER FABRIC (28200200) (WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8″)

(11) TOPSOIL FURNISH AND PLACE, 4″ (21101615)

(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)

(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2″

(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); ¾″

(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100 OR PAID FOR AS FURNISHED EXCAVATION - 20400800)

(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)

(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

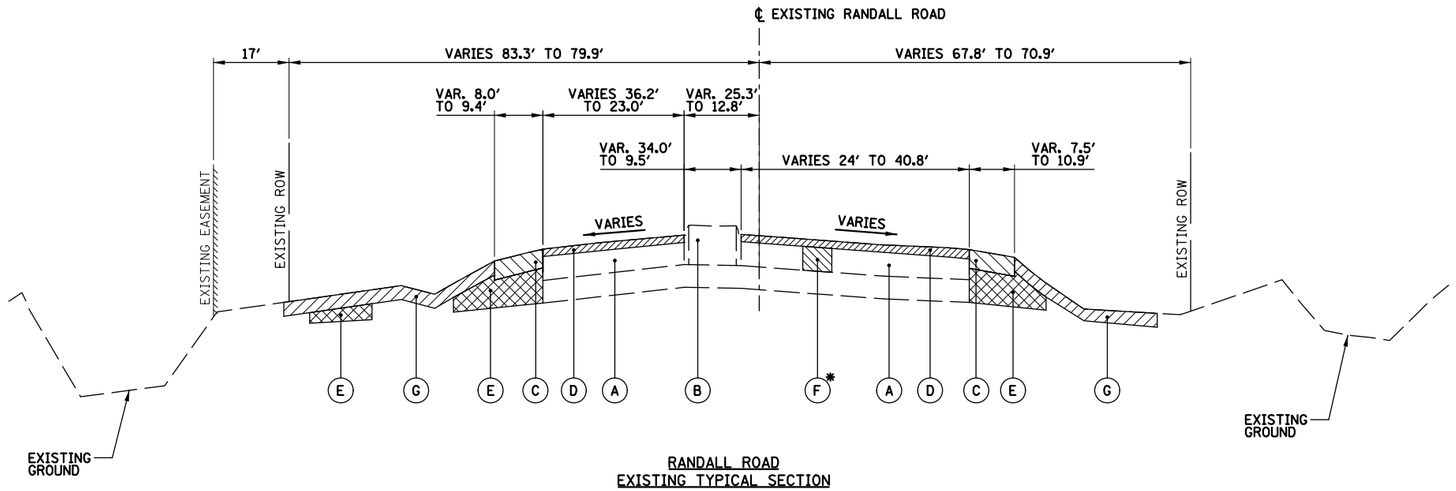
FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20′	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

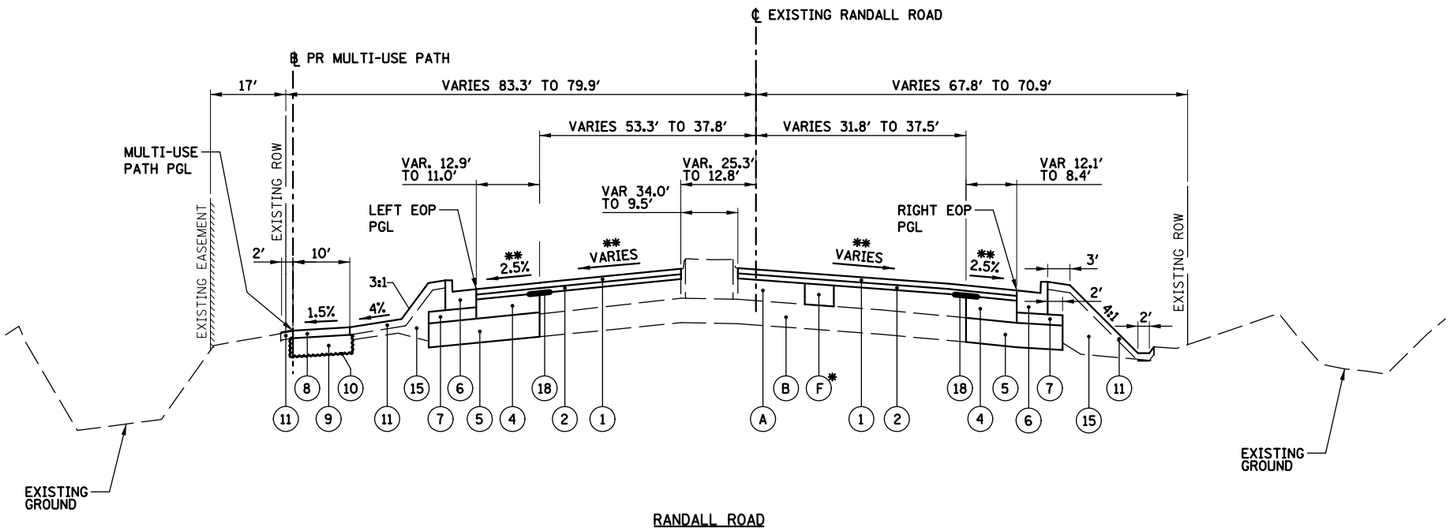
RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS
TYPICAL SECTIONS

SCALE: NONE | SHEET 4 OF 7 SHEETS | STA. 479+60.96 TO STA. 486+38.46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	11
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



RANDALL ROAD
EXISTING TYPICAL SECTION
STA 486+38.46 TO STA 490+07.23



RANDALL ROAD
PROPOSED TYPICAL SECTION
STA 486+38.46 TO STA 490+07.23

* AS DIRECTED BY THE ENGINEER

** CROSS SLOPE VARIES: SEE CROSS SECTIONS AND ROADWAY PLAN AND PROFILE SHEETS

NOTE: TYPICAL UNDERCUT DETAIL ON SHEET 9

(A) EXISTING HOT-MIX ASPHALT PAVEMENT (SEE CORE INFORMATION)

(B) EXISTING GRANULAR SUBGRADE (SEE CORE INFORMATION)

(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED PAID FOR AS PAVED SHOULDER REMOVAL (44004250)

(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)

(E) EARTH EXCAVATION (20200100)

(F) CLASS D PATCHES, 10" (44201761, 44201765, 44201769, 44201771)

(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR TOPSOIL STRIP - 10" NOMINAL (20201200)

(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR UNDERCUT - 12" NOMINAL (20201200)

(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80; 2" (X4060004)

(2) LEVELING BINDER (MACHINE METHOD), N70, 3/4" (40600635)

(3) NOT USED

(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 1/4" (40603090)

(5) AGGREGATE SUBGRADE IMPROVEMENT, 12" (30300112)

(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)

(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4" (31101200)

(8) PERVIOUS HOT MIX ASPHALT, 4"

(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8" (31101600)

(10) FILTER FABRIC (28200200) (WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8")

(11) TOPSOIL FURNISH AND PLACE, 4" (21101615)

(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)

(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2"

(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); 3/4"

(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100 OR PAID FOR AS FURNISHED EXCAVATION - 20400800)

(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)

(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

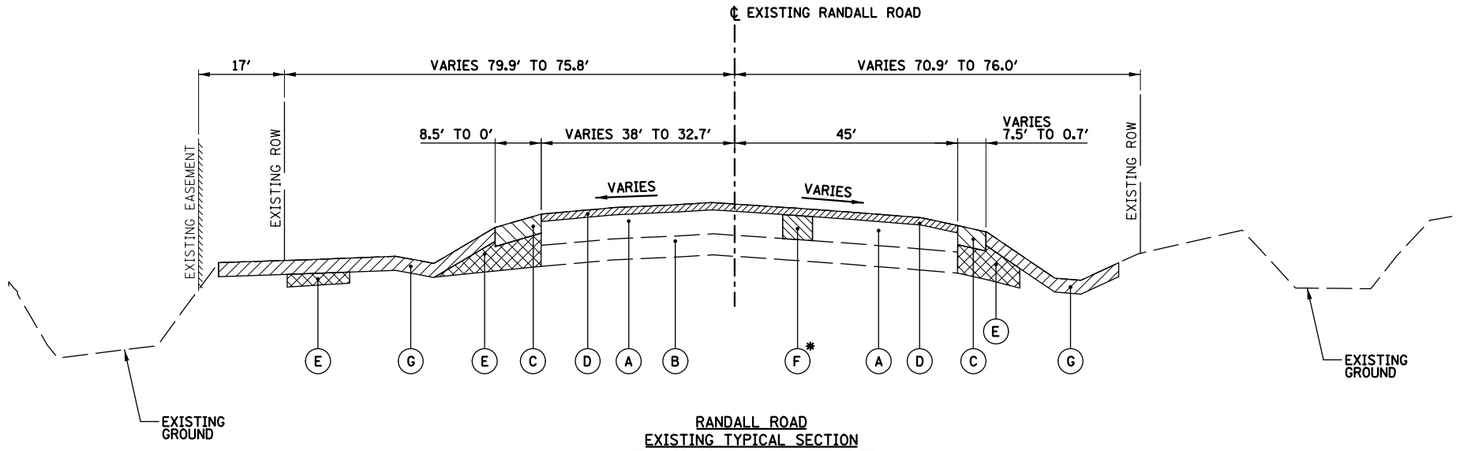
FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn Default	USER NAME = jsstrick	DESIGNED -	REVISED -
	DRAWN -	REVISED -	
	PLOT SCALE = 20'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

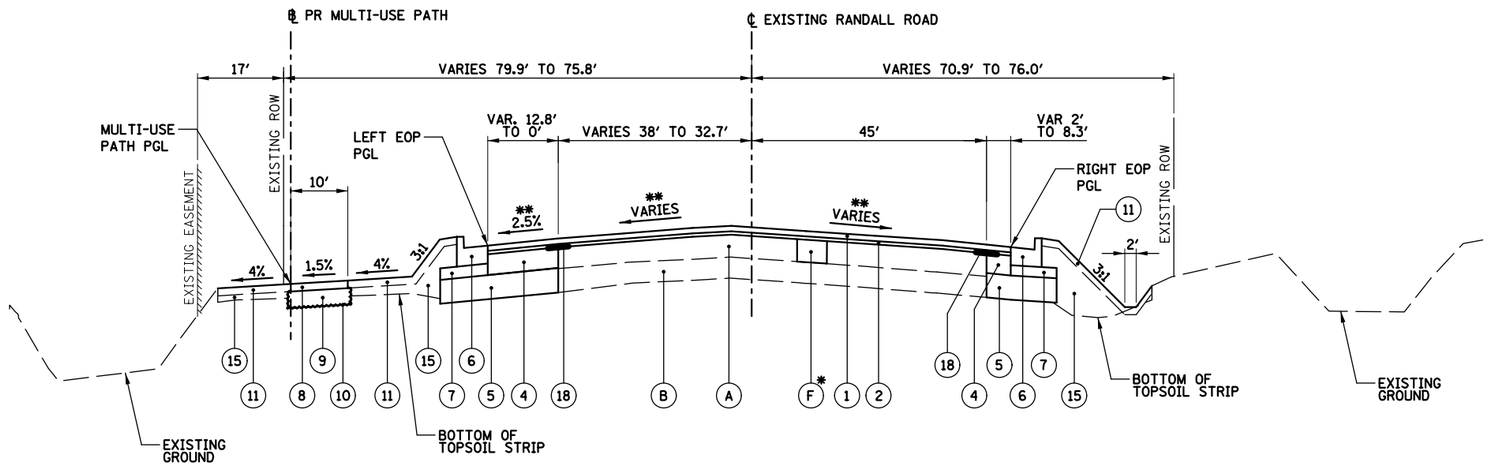
RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS
TYPICAL SECTIONS

SCALE: NONE | SHEET 5 OF 7 SHEETS | STA. 486+38.46 TO STA. 490+07.23

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	12
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		



RANDALL ROAD
EXISTING TYPICAL SECTION
STA 490+07.23 TO STA 492+25.95



RANDALL ROAD
PROPOSED TYPICAL SECTION
STA 490+07.23 TO STA 492+25.95

* AS DIRECTED BY THE ENGINEER

** CROSS SLOPE VARIES: SEE CROSS SECTIONS AND ROADWAY PLAN AND PROFILE SHEETS

NOTE: TYPICAL UNDERCUT DETAIL ON SHEET 9

(A) EXISTING HOT-MIX ASPHALT PAVEMENT (SEE CORE INFORMATION)
(B) EXISTING GRANULAR SUBGRADE (SEE CORE INFORMATION)
(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED PAID FOR AS PAVED SHOULDER REMOVAL (44004250)
(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)
(E) EARTH EXCAVATION (20200100)
(F) CLASS D PATCHES, 10″ (44201761, 44201765, 44201769, 44201771)
(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR TOPSOIL STRIP - 10″ NOMINAL (20201200)
(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR UNDERCUT - 12″ NOMINAL (20201200)
(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4″ (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80; 2″ (X4060004)
(2) LEVELING BINDER (MACHINE METHOD), N70, ¾″ (40600635)
(3) NOT USED
(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 ¼″ (40603090)
(5) AGGREGATE SUBGRADE IMPROVEMENT, 12″ (30300112)
(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)
(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4″ (31101200)
(8) PERVIOUS HOT MIX ASPHALT, 4″
(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8″ (31101600)
(10) FILTER FABRIC (28200200) (WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8″)
(11) TOPSOIL FURNISH AND PLACE, 4″ (21101615)
(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)
(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2″
(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); ¾″
(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100 OR PAID FOR AS FURNISHED EXCAVATION - 20400800)
(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)
(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)
(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn Default	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20′	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS
TYPICAL SECTIONS

SCALE: NONE | SHEET 6 OF 7 SHEETS | STA. 490+07.23 TO STA. 492+25.95

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	13
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

(A) EXISTING HOT-MIX ASPHALT PAVEMENT
(SEE CORE INFORMATION)

(B) EXISTING GRANULAR SUBGRADE
(SEE CORE INFORMATION)

(C) EXISTING HOT-MIX ASPHALT SHOULDER TO BE REMOVED
PAID FOR AS PAVED SHOULDER REMOVAL (44004250)

(D) HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH (X4401198)

(E) EARTH EXCAVATION (20200100)

(F) CLASS D PATCHES, 10" (44201761, 44201765, 44201769, 44201771)

(G) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
FOR TOPSOIL STRIP - 10" NOMINAL (20201200)

(H) REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
FOR UNDERCUT - 12" NOMINAL (20201200)

(I) HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)

REMOVAL ITEMS

(1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX
ASPHALT, 9.5, N80; 2" (X4060004)

(2) LEVELING BINDER (MACHINE METHOD), N70, 3/4" (40600635)

(3) NOT USED

(4) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 10 1/4" (40603090)

(5) AGGREGATE SUBGRADE IMPROVEMENT, 12" (30300112)

(6) PROPOSED COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24 (60605000)

(7) SUBBASE GRANULAR MATERIAL, TYPE B, 4" (31101200)

(8) PERVIOUS HOT MIX ASPHALT, 4"

(9) SUBBASE GRANULAR MATERIAL, TYPE B, 8" (31101600)

(10) FILTER FABRIC (28200200)
(WRAP BOTTOM AND SIDES OF AGGREGATE SUBGRADE IMPROVEMENT 8")

(11) TOPSOIL FURNISH AND PLACE, 4" (21101615)

(12) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS (63000003)

(13) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335); 2"

(14) LEVELING BINDER (MACHINE METHOD), N50 (40600625); 3/4"

(15) EMBANKMENT (INCLUDED IN COST OF EARTH EXCAVATION - 20200100
OR PAID FOR AS FURNISHED EXCAVATION - 20400800)

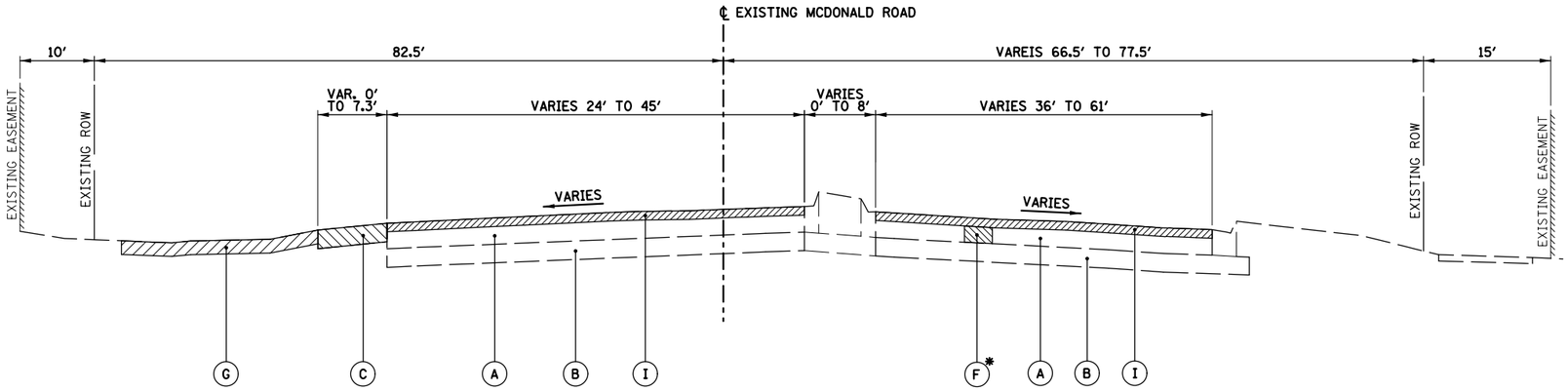
(16) AGGREGATE SUBGRADE IMPROVEMENT (30300001)

(17) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

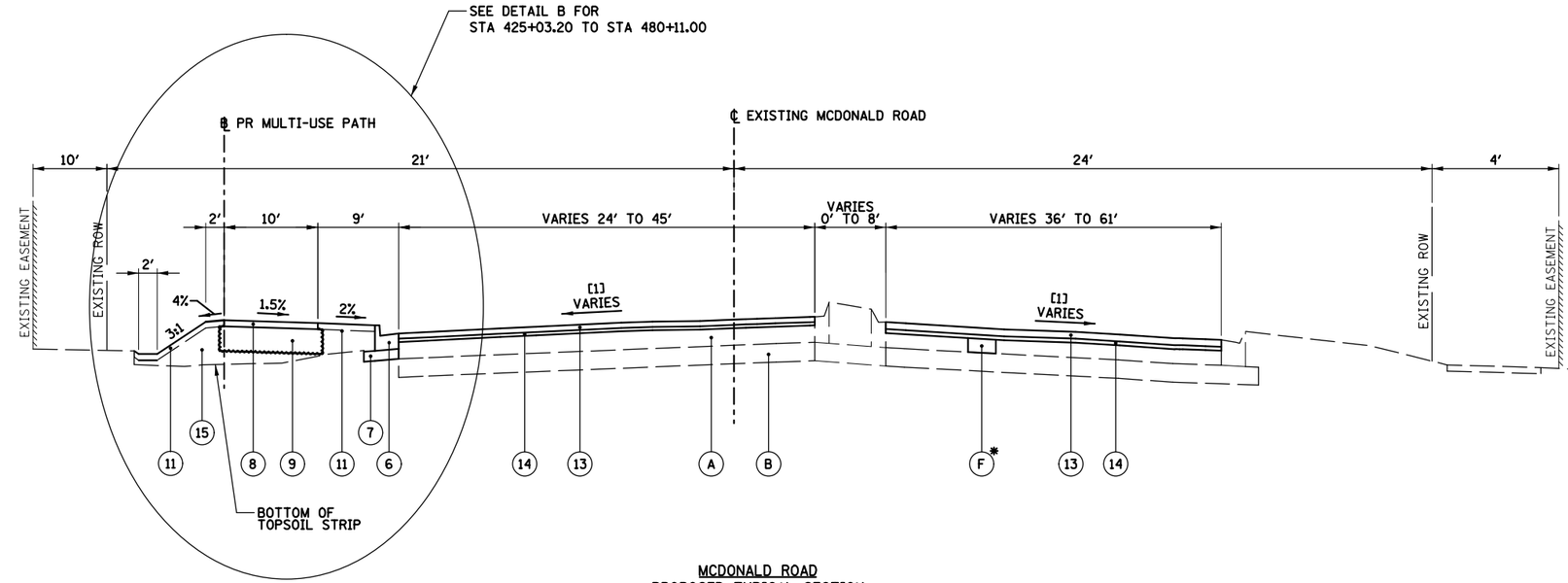
(18) STRIP REFLECTIVE CRACK CONTROL TREATMENT (44300200)

* AS DIRECTED BY THE ENGINEER

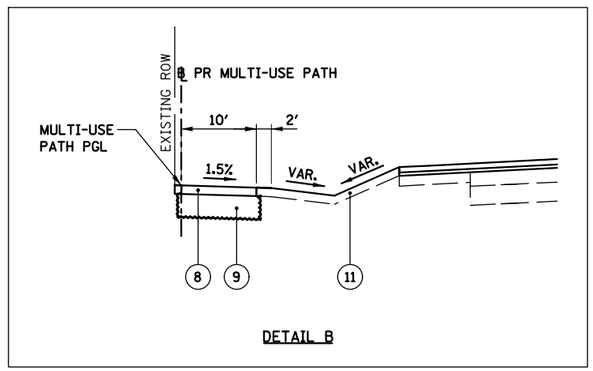
[1] MATCH EXISTING CROSS SLOPE



MCDONALD ROAD
EXISTING TYPICAL SECTION
STA 425+03.20 TO STA 479+60.96



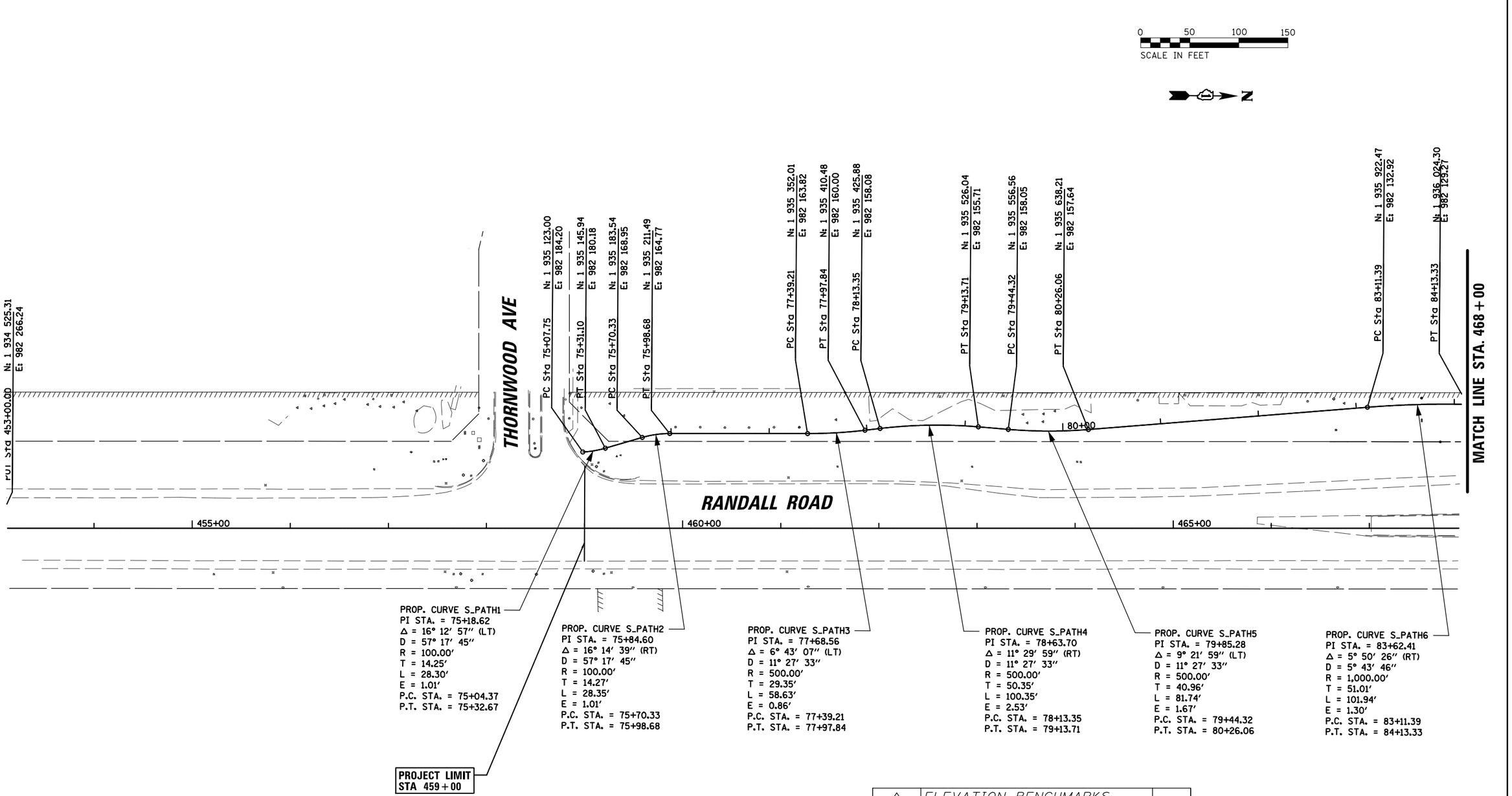
MCDONALD ROAD
PROPOSED TYPICAL SECTION
STA 425+03.20 TO STA 479+60.96



DETAIL B

FILE NAME = N:\Kane County\170513\Civil\TYP_170513_01.dgn	USER NAME = jstrick	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RANDALL ROAD AT MCDONALD ROAD/STEARNS ROAD IMPROVEMENTS TYPICAL SECTIONS
	PLOT SCALE = 20'	DRAWN -	REVISED -		
Default	PLOT DATE = 11/9/2018	CHECKED -	REVISED -		
		DATE -	REVISED -		SCALE: NONE SHEET 7 OF 7 SHEETS STA. 425+03.20 TO STA. 479+60.96

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-24-CH	KANE	129	14
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



ELEVATION BENCHMARKS DATUM: NAVD 1988 (GPS OBSERVED)		
NO.	DESCRIPTION	ELEV.
203	CUT "X" ON TOP OF W SIDE TRAFFIC LIGHT BASE. N.E. CORNER OF RANDALL RD. AND STEARNS RD.	806.57
204	FOUND RR SPIKE IN 2nd POWER POLE SOUTH OF GYORR AVE. ± 20′ EAST OF EAST EDGE OF PAVEMENT RANDALL RD.	805.02
206	CUT "X" ON TRAFFIC SIGNAL BASE, S.E. (SIGNAL WITH CAMERAS)	806.31

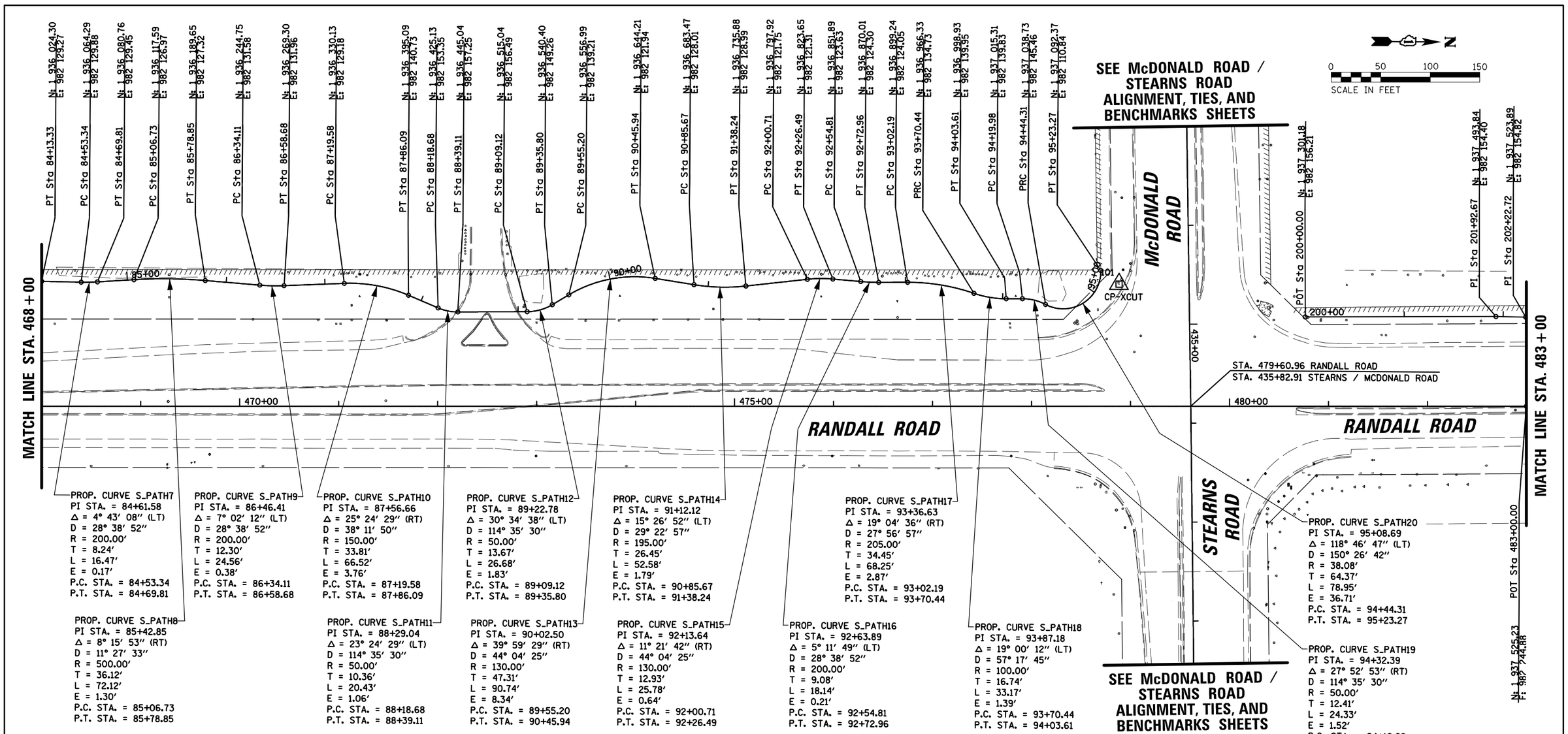
FILE NAME = N:\Kane County\170513\Civil\BNH_Randall_170513_01.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100′	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

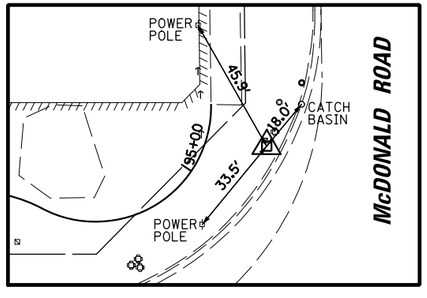
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENTS, TIES, AND BENCHMARKS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 1 OF 4 SHEETS | STA. 453+00.00 TO STA. 468+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	15
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			





CP 101 - XCUT
STA. 478+88.45, 123.40′ LT
N 1 937 112.81
E 982 124.41

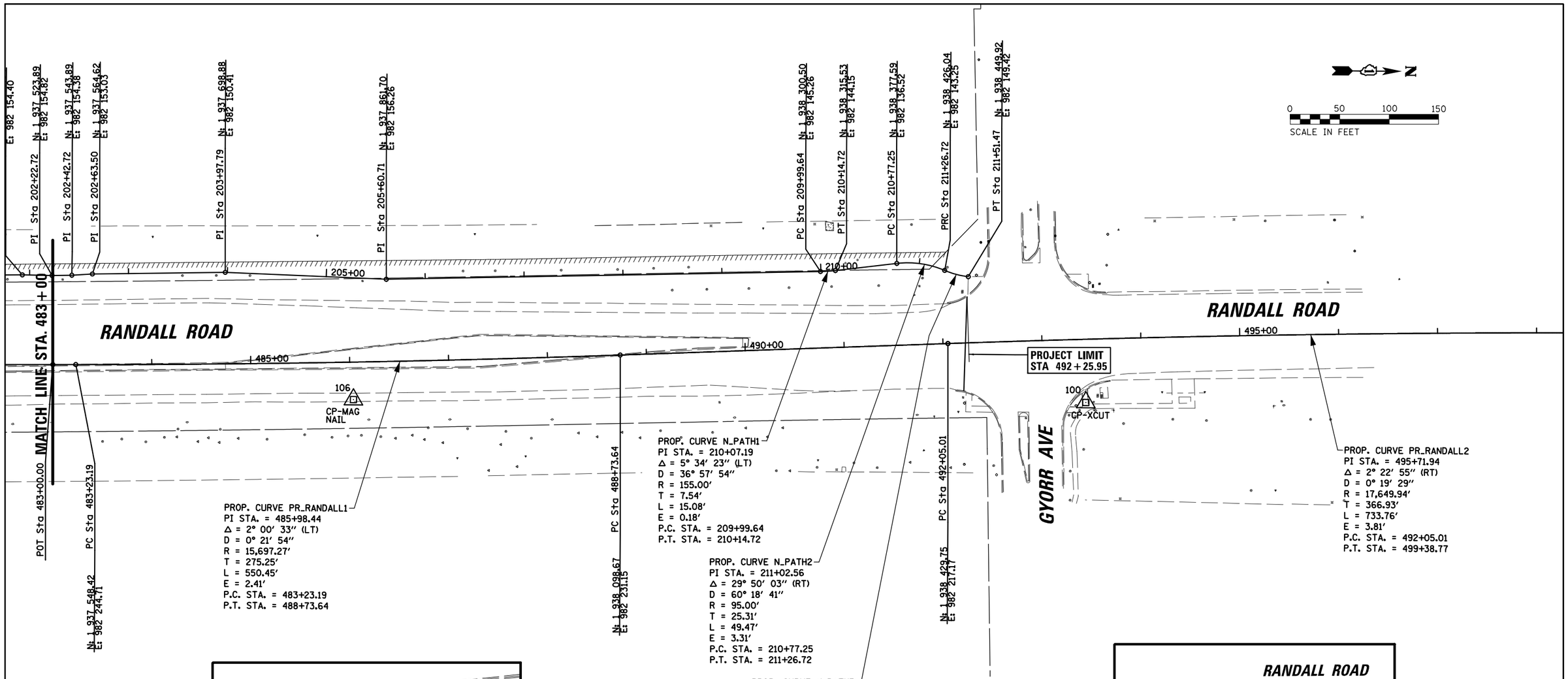
FILE NAME = N:\Kane County\170513\Civil\BNH_Randall_170513_02.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100′	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

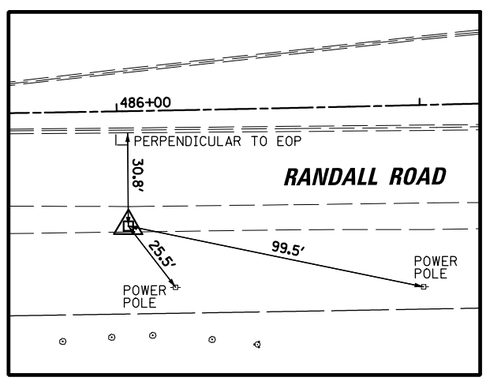
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENTS, TIES, AND BENCHMARKS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 2 OF 4 SHEETS | STA. 468+00.00 TO STA. 483+00.00

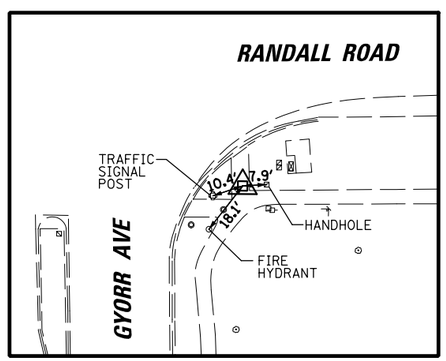
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	16
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		





CP 106 - MAG NAIL
STA. 486+03.26, 37.92′ RT

N 1 937 829.40
E 982 278.13



CP 100 - XCUT
STA. 493+42.79, 63.89′ RT

N 1 938 569.62
E 982 275.75

FILE NAME = N:\Kane County\170513\Civil\BNH_Randall_170513_03.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100′	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENTS, TIES, AND BENCHMARKS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 3 OF 4 SHEETS | STA. 483+00.00 TO STA. 497+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	17
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

SEE RANDALL ROAD ALIGNMENT, TIES, AND BENCHMARKS PLAN

N

SCALE IN FEET 0 50 100 150

POT Sta 150+00.00 N: 1 937 234.80 E: 981 166.61

PC Sta 151+97.21 N: 1 937 238.80 E: 981 363.78

PT Sta 152+20.99 N: 1 937 236.46 E: 981 387.39

PC Sta 152+38.40 N: 1 937 232.71 E: 981 404.39

PT Sta 152+62.26 N: 1 937 230.37 E: 981 428.07

BRIARGATE DRIVE

PC Sta 153+57.10 N: 1 937 232.37 E: 981 522.90

PRC Sta 153+83.89 N: 1 937 229.69 E: 981 549.49

PT Sta 154+09.44 N: 1 937 227.27 E: 981 574.85

PC Sta 155+77.23 N: 1 937 232.80 E: 981 742.55

PRC Sta 155+96.08 N: 1 937 235.19 E: 981 761.22

PT Sta 156+18.12 N: 1 937 237.85 E: 981 783.07

PC Sta 156+86.43 N: 1 937 239.29 E: 981 851.36

PRC Sta 157+04.78 N: 1 937 238.15 E: 981 869.65

PT Sta 157+21.70 N: 1 937 237.12 E: 981 886.52

PC Sta 158+52.30 N: 1 937 240.19 E: 982 017.08

PCC Sta 159+58.30 N: 1 937 257.30 E: 982 121.34

RANDALL ROAD

150+00 156+00 480+00

POT Sta 425+00.00 N: 1 937 162.91 E: 981 164.63

425+00 430+00 435+00

STA. 479+60.96 RANDALL ROAD
STA. 435+82.91 STEARNS / MCDONALD ROAD

POT Sta 440+00.00 N: 1 937 193.90 E: 982 664.31

110 CP-ROD W/ CAP

PROJECT LIMIT STA 425+03.20

109 CP-MAG NAIL

McDONALD ROAD

STEARNS ROAD

PROJECT LIMIT STA 439+55.81

RANDALL ROAD

PROP. CURVE MCDON_PATH1
PI STA. = 152+09.16
Δ = 13° 37′ 31″ (RT)
D = 57° 17′ 45″
R = 100.00′
T = 11.95′
L = 23.78′
E = 0.71′
P.C. STA. = 151+97.21
P.T. STA. = 152+20.99

PROP. CURVE MCDON_PATH2
PI STA. = 152+50.38
Δ = 13° 40′ 10″ (LT)
D = 57° 17′ 45″
R = 100.00′
T = 11.99′
L = 23.86′
E = 0.72′
P.C. STA. = 152+38.40
P.T. STA. = 152+62.26

PROP. CURVE MCDON_PATH3
PI STA. = 153+70.57
Δ = 13° 57′ 15″ (RT)
D = 52° 05′ 13″
R = 110.00′
T = 13.46′
L = 26.79′
E = 0.82′
P.C. STA. = 153+57.10
P.T. STA. = 153+83.89

PROP. CURVE MCDON_PATH4
PI STA. = 153+96.74
Δ = 14° 38′ 08″ (LT)
D = 57° 17′ 45″
R = 100.00′
T = 12.84′
L = 25.54′
E = 0.82′
P.C. STA. = 153+83.89
P.T. STA. = 154+09.44

PROP. CURVE MCDON_PATH5
PI STA. = 155+86.69
Δ = 10° 47′ 59″ (LT)
D = 57° 17′ 45″
R = 100.00′
T = 9.45′
L = 18.85′
E = 0.45′
P.C. STA. = 155+77.23
P.T. STA. = 155+96.08

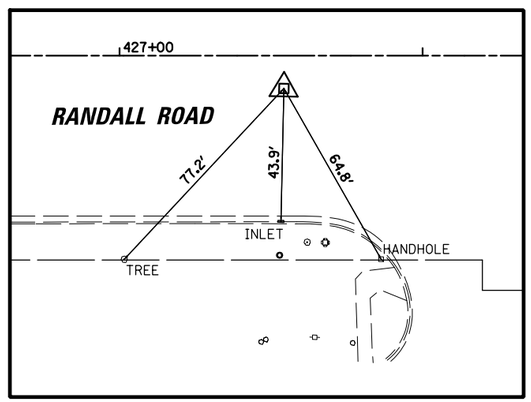
PROP. CURVE MCDON_PATH6
PI STA. = 156+07.14
Δ = 11° 28′ 51″ (RT)
D = 52° 05′ 13″
R = 110.00′
T = 11.06′
L = 22.04′
E = 0.55′
P.C. STA. = 155+96.08
P.T. STA. = 156+18.12

PROP. CURVE MCDON_PATH7
PI STA. = 156+95.63
Δ = 9° 33′ 20″ (RT)
D = 52° 05′ 13″
R = 110.00′
T = 9.19′
L = 18.35′
E = 0.38′
P.C. STA. = 156+86.43
P.T. STA. = 157+04.78

PROP. CURVE MCDON_PATH8
PI STA. = 157+13.26
Δ = 9° 41′ 47″ (LT)
D = 57° 17′ 45″
R = 100.00′
T = 8.48′
L = 16.92′
E = 0.36′
P.C. STA. = 157+04.78
P.T. STA. = 157+21.70

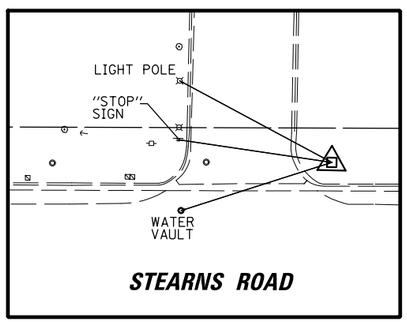
PROP. CURVE MCDON_PATH9
PI STA. = 159+05.64
Δ = 15° 56′ 24″ (LT)
D = 15° 02′ 18″
R = 381.00′
T = 53.34′
L = 106.00′
E = 3.72′
P.C. STA. = 158+52.30
P.T. STA. = 159+58.30

SEE RANDALL ROAD ALIGNMENT, TIES, AND BENCHMARKS PLAN



CP 109 - MAG NAIL
STA. 427+54.22, 10.82′ RT

N 1 938 569.62
E 982 275.75



CP 110 - ROD W/ CAP
STA. 440+03.26, 64.87′ LT

N 1 937 258.82
E 982 666.37

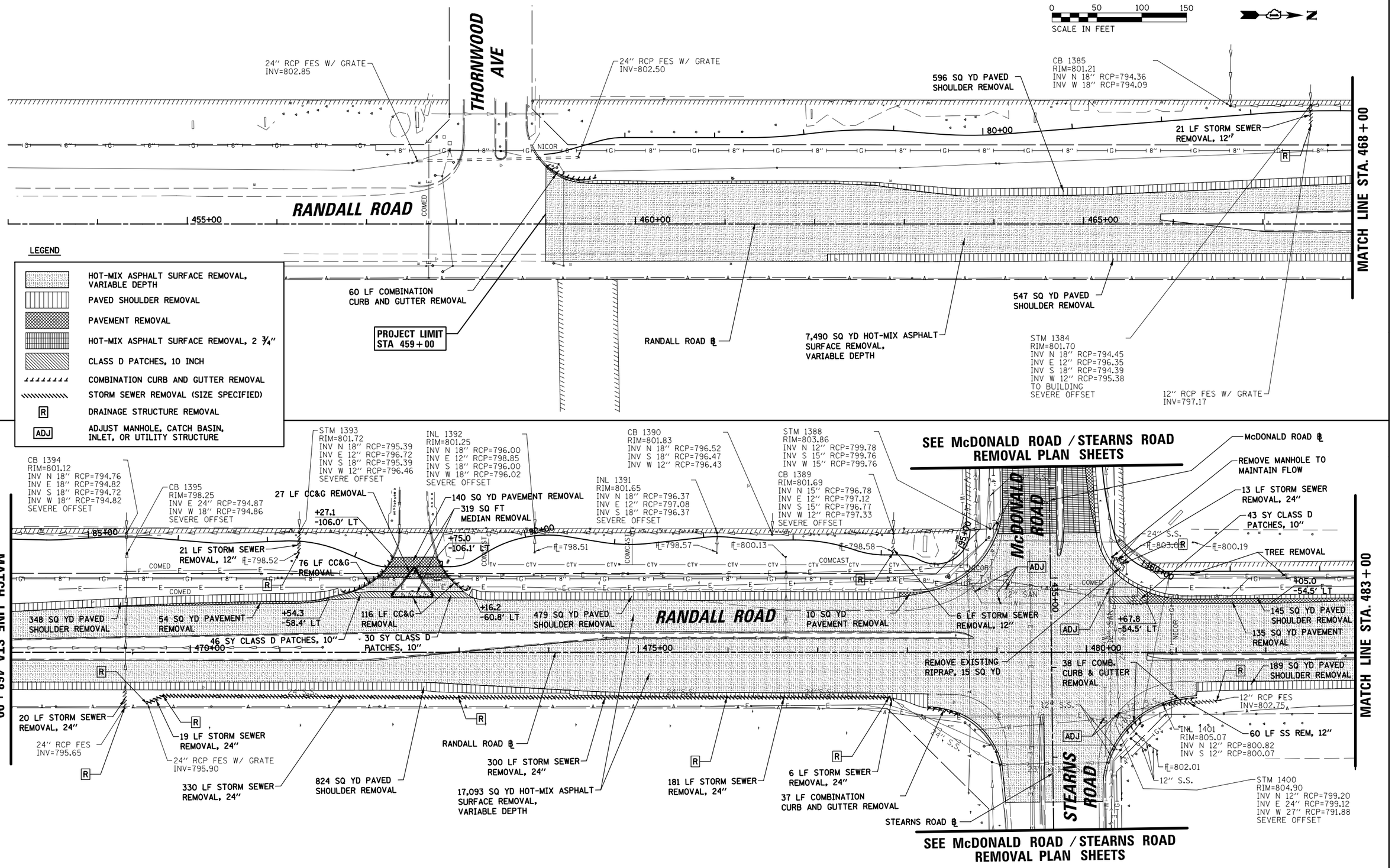
FILE NAME = N:\Kane County\170513\Civil\BNH_McDonald_170513_01.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100′	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENTS, TIES, AND BENCHMARKS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 4 OF 4 SHEETS | STA. 425+00.00 TO STA. 440+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	18
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



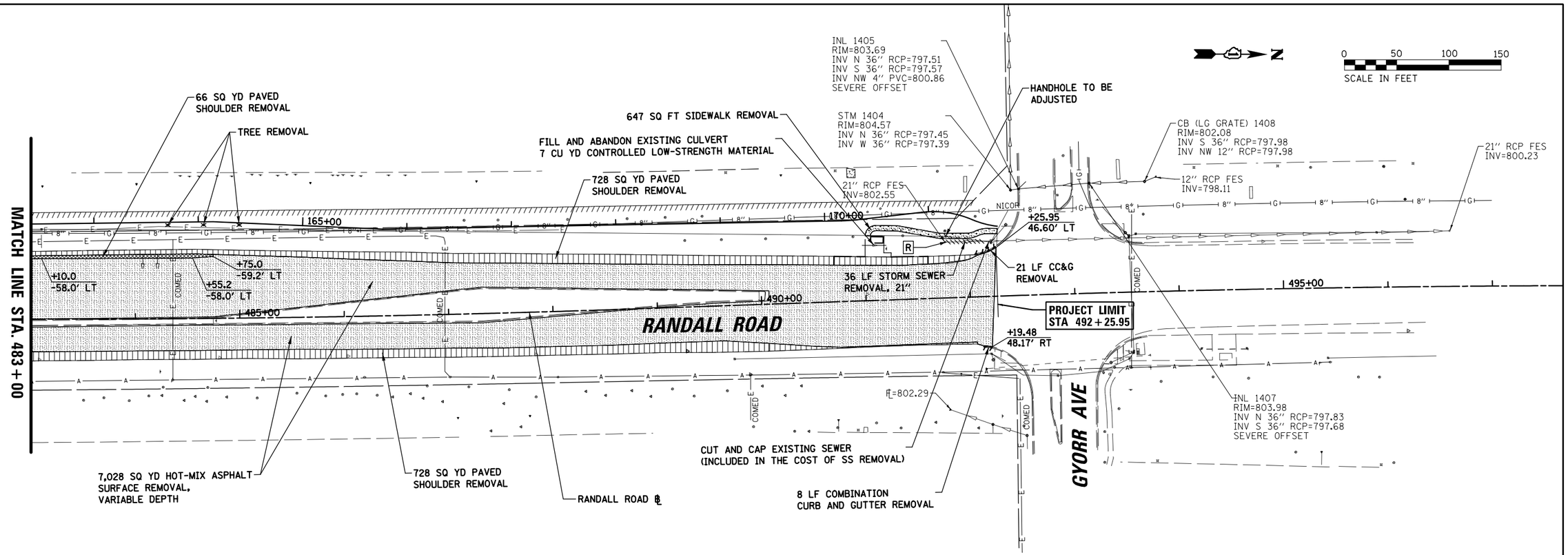
FILE NAME = N:\Kane County\170513\Civil\REM_Randall_170513_01.sht	USER NAME = jstrick	DESIGNED -	REVISED -
	DRAWN -	REVISED -	
Default	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/12/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS AND REMOVAL PLAN
RANDALL ROAD AT McDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 1 OF 3 SHEETS | STA. 458+79.00 TO STA. 483+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	19
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		



LEGEND

	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
	PAVED SHOULDER REMOVAL
	PAVEMENT REMOVAL
	HOT-MIX ASPHALT SURFACE REMOVAL, 2 ¾"
	CLASS D PATCHES, 10 INCH
	COMBINATION CURB AND GUTTER REMOVAL
	STORM SEWER REMOVAL (SIZE SPECIFIED)
R	DRAINAGE STRUCTURE REMOVAL
ADJ	ADJUST MANHOLE, CATCH BASIN, INLET, OR UTILITY STRUCTURE

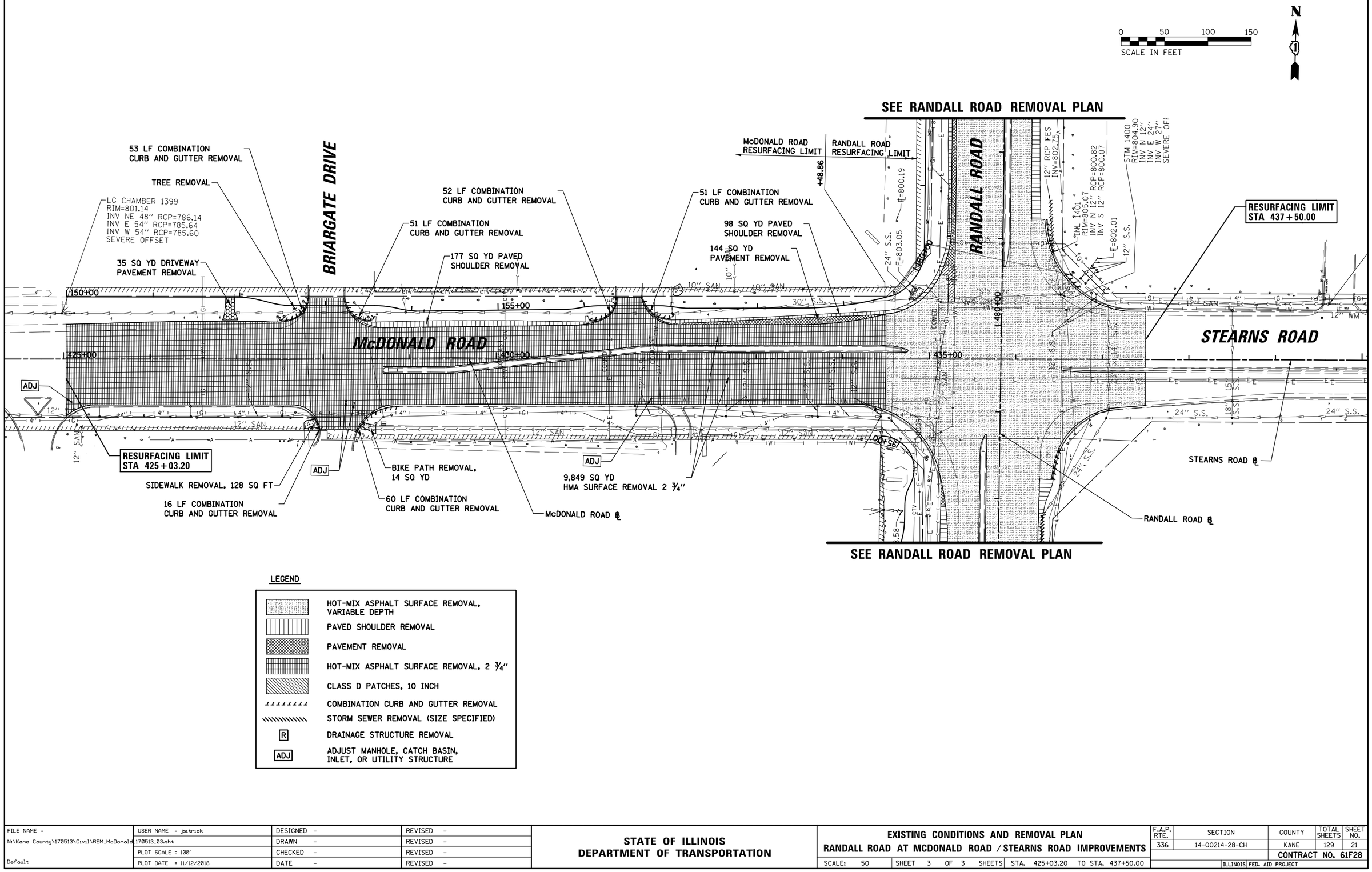
FILE NAME = N:\Kane County\170513\Civil\REM_Randall_170513_02.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/12/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS AND REMOVAL PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 2 OF 3 SHEETS | STA. 483+00.00 TO STA. 492+25.95

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	20
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



FILE NAME = N:\Kane County\170513\Civil\REM_McDonald_170513_03.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/12/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

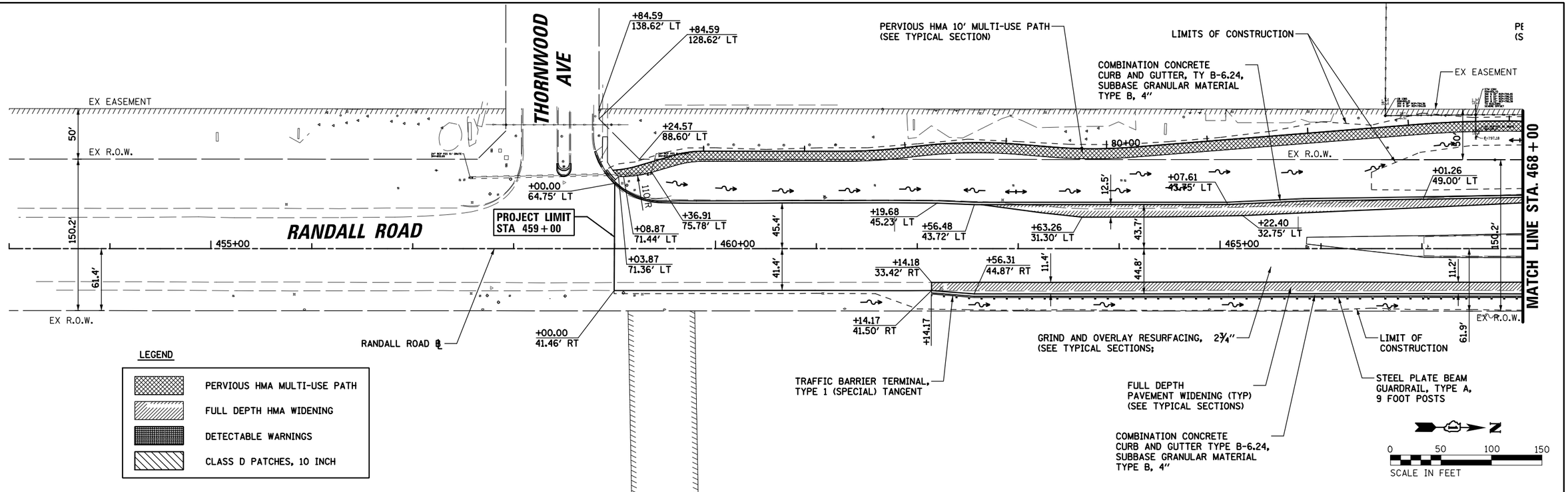
EXISTING CONDITIONS AND REMOVAL PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

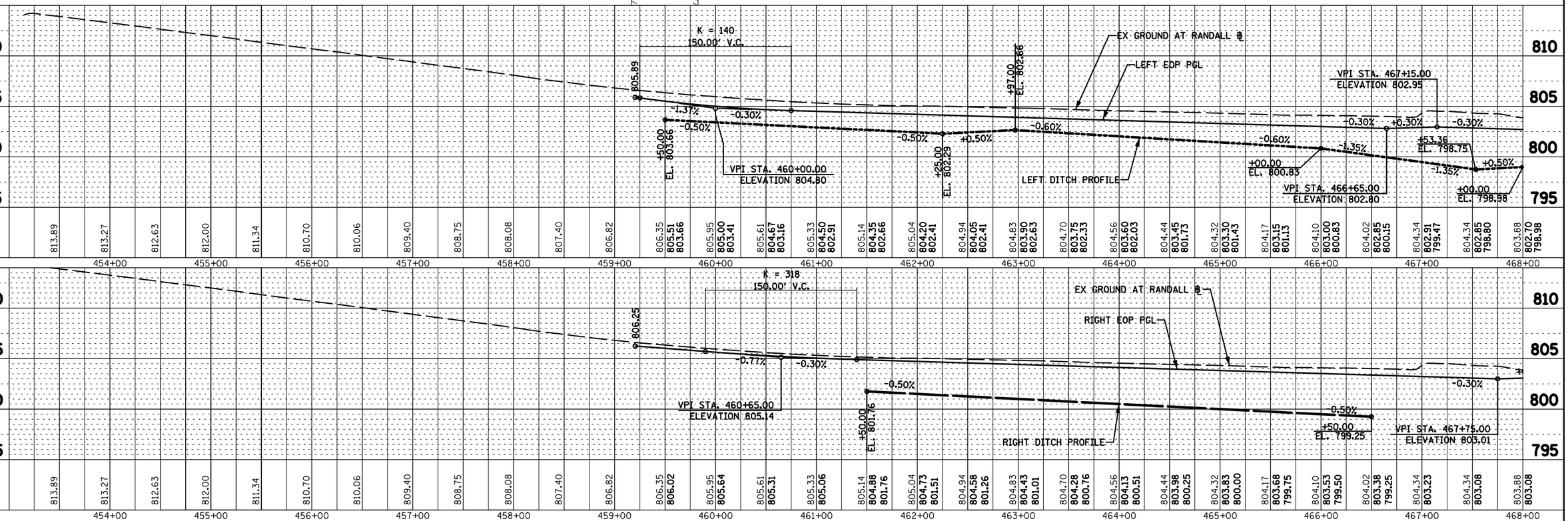
SCALE: 50 | SHEET 3 OF 3 SHEETS | STA. 425+03.20 TO STA. 437+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	21
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

PLAN
SURVEYED
PLOTTED
JOB NO. CHECKED
RT. OF WAY CHECKED
NOTE BOOK
CADD FILE NAME
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
JOB NO. CHECKED
BM. NOTED
STRUCTURE NO.
BY
DATE





FILE NAME = N:\Kane County\170513\Civil\RPP_Randall_170513_01.sht	USER NAME = jstrick	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50H 5V | SHEET 1 OF 4 SHEETS | STA. 458+79.00 TO STA. 468+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	22
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

ERVIOUS HMA 10' MULTI-USE PATH (TYP)
EE TYPICAL SECTION)

LIMITS OF CONSTRUCTION

CLASS D PATCHES, TYPE IV, 10 INCH

PCC SIDEWALK 5 INCH
SUBBASE GRANULAR MATERIAL, TYPE B 2"
DETECTABLE WARNINGS
COMB CONC. C&G TY B-6.12
(SEE ADA RAMP DETAILS)

COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24, SUBBASE GRANULAR MATERIAL, TYPE B 4"

PCC SIDEWALK 5 INCH
SUBBASE GRANULAR MATERIAL, TYPE B 2"
DETECTABLE WARNINGS
COMB CONC. C&G TY B-6.24
(SEE ADA RAMP DETAILS)

McDONALD ROAD

McDONALD ROAD ℄

CLASS D PATCHES, TYPE IV, 10 INCH

MATCH LINE STA. 468+00

MATCH LINE STA. 483+00

EX EASEMENT

EX R.O.W.

RANDALL ROAD ℄

RANDALL ROAD

COMB CONC. C&G TY B-6.12
SUBBASE GRANULAR MATERIAL TYPE B, 4"

SOLDIER PILE WALL
(SEE STRUCTURAL PLANS)

FULL DEPTH PAVEMENT WIDENING (TYP)
(SEE TYPICAL SECTION)

COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24, SUBBASE GRANULAR MATERIAL TYPE B, 4"

STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS

CLASS D PATCHES, TYPE IV, 10 INCH

FULL DEPTH PAVEMENT
(SEE TYPICAL SECTIONS AND MATCH PAVEMENT STRUCTURE OF FULL DEPTH HMA WIDENING)

CONCRETE MEDIAN SURFACE, 4"
SUBBASE GRANULAR MATERIAL TYPE B, 4"

LIMIT OF CONSTRUCTION

GRIND AND OVERLAY RESURFACING, 2¾"
(SEE TYPICAL SECTIONS)

TRAFFIC BARRIER TERMINAL, TYPE 2

STEARNS ROAD

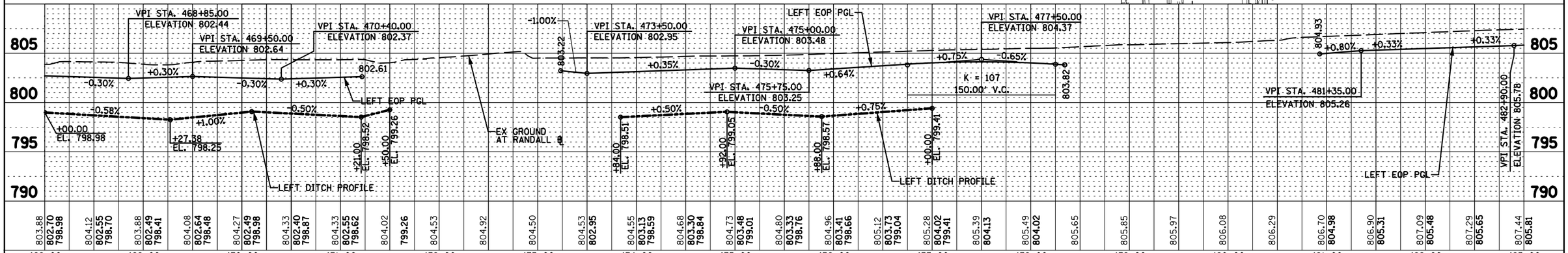
STEARNS ROAD ℄

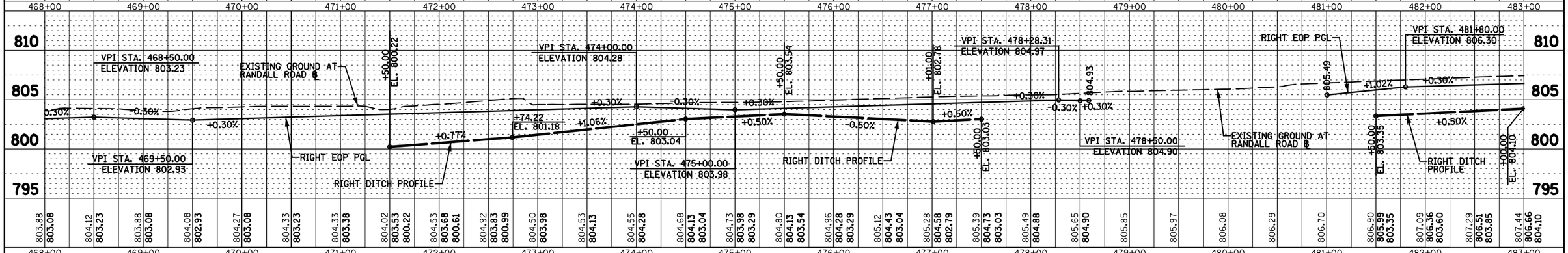
COMBINATION CONCRETE CURB AND GUTTER TY B-6.24 SUBBASE GRANULAR MATERIAL TYPE B, 4"

LEGEND

- PERVIOUS HMA MULTI-USE PATH
- FULL DEPTH HMA WIDENING
- DETECTABLE WARNINGS
- CLASS D PATCHES, 10 INCH

0 50 100 150
SCALE IN FEET





PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

FILE NAME = N:\Kane County\170513\Civil\RPP_Randall_170513_02.sht	USER NAME = jstrick	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: 50H 5V | SHEET 2 OF 4 SHEETS | STA. 468+00.00 TO STA. 483+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	23
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

MULTI-USE PATH PROFILE DEPENDENT ON EDGE OF PAVEMENT PROFILE (SEE TYPICAL SECTIONS)

MULTI-USE PATH PGL AT ℄ (SEE SHEET 26)

205+60.71 = 486+38.79

COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24
SUBBASE GRANULAR MATERIAL TYPE B, 4"

PERVIOUS HMA 10' MULTI-USE PATH (SEE TYPICAL SECTION)

LIMIT OF CONSTRUCTION

EX EASEMENT

EX R.O.W.

+06.21
92.40' LT

+88.94
75.80' LT

+25.95
46.60' LT

+13.31
43.51' LT

+74.74
73.50' LT

+75.73
61.66' LT

+32.78
61.24' LT

+74.71
43.68' RT

+05.32
43.29' RT

+19.48
48.17' RT

+41.89
76.03' RT

R 25'

165+00

170+00

485+00

490+00

495+00

MATCH LINE STA. 483+00

18.2'

151.7'

83.8'

11.5'

71.9'

9'

12.3'

36'

36'

36'

12.6'

2%

RANDALL ROAD

PROJECT LIMIT
STA 492+25.95

GYORR AVE

0 50 100 150
SCALE IN FEET

LEGEND

- PERVIOUS HMA MULTI-USE PATH
- FULL DEPTH HMA WIDENING
- DETECTABLE WARNINGS
- CLASS D PATCHES, 10 INCH

LIMIT OF CONSTRUCTION

FULL DEPTH PAVEMENT WIDENING (SEE TYPICAL SECTIONS)

GRIND AND OVERLAY RESURFACING, 2¾" (SEE TYPICAL SECTIONS)

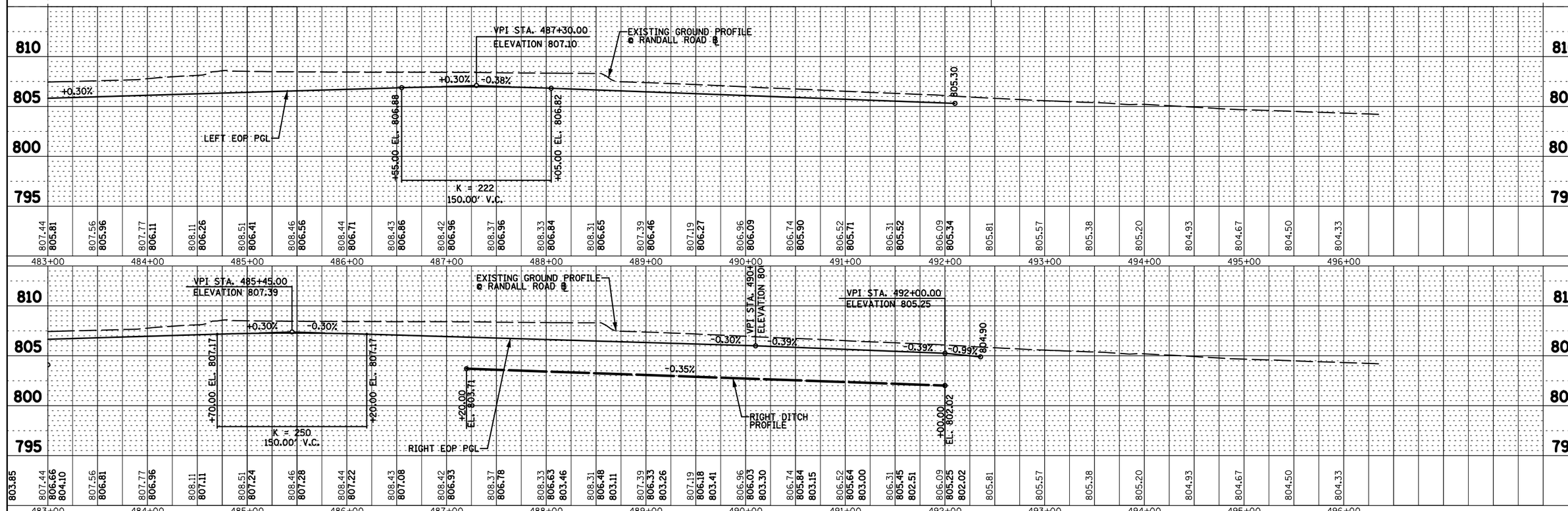
COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24, SUBBASE GRANULAR MATERIAL TYPE B, 4"

RANDALL ROAD ℄

PCC SIDEWALK 5 INCH
SUBBASE GRANULAR MATERIAL, TYPE B 2"
DETECTABLE WARNINGS
COMB CONC. C&G TY B-6.24
(SEE ADA RAMP DETAILS)

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE



FILE NAME = N:\Kane County\170513\Civil\RPP_Randall_170513_03.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50H 5V | SHEET 3 OF 4 SHEETS | STA. 483+00.00 TO STA. 492+25.95

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	24
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24, SUBBASE GRANULAR MATERIAL TYPE B, 4"

HMA SURFACE COURSE, MIX "D", N50; 2"
HMA BASE COURSE, 6"
SUBBASE GRANULAR MATERIAL, TYPE B 4"

PERVIOUS HMA 10' MULTI-USE PATH (TYP) (SEE TYPICAL SECTIONS)

BRIARGATE DRIVE

PCC SIDEWALK 5 INCH SUBBASE GRANULAR MATERIAL TYPE B, 2" DETECTABLE WARNINGS (SEE ADA RAMP DETAILS)

COMBINATION CONCRETE CURB AND GUTTER, TY B-6.24 SUBBASE GRANULAR MATERIAL TYPE B, 4"

McDONALD ROAD RESURFACING LIMIT | RANDALL ROAD RESURFACING LIMIT

COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24, SUBBASE GRANULAR MATERIAL TYPE B, 4"

LIMIT OF CONSTRUCTION

RANDALL ROAD

PCC SIDEWALK 5 INCH CONCRETE CURB TYPE B DETECTABLE WARNINGS COMB CONC. C&G TY B-6.24 (SEE ADA RAMP DETAILS)

PCC SIDEWALK, 5 INCH SUBBASE GRANULAR MATERIAL TYPE B, 2"

RESURFACING LIMIT STA 437+50.00

STEARNS ROAD

RESURFACING LIMIT STA 425+03.20

McDONALD ROAD

CLASS SI CONCRETE (OUTLET)

PCC SIDEWALK 5 INCH CONCRETE CURB TYPE B DETECTABLE WARNINGS COMB CONC. C&G TY B-6.24 (SEE ADA RAMP DETAILS)

HMA SURFACE COURSE, MIX "D", N50, 2" LEVELING BINDER (MACHINE METHOD), N50, ¾"

McDONALD ROAD ℄

RANDALL ROAD ℄

STEARNS ROAD ℄

SCALE IN FEET 0 50 100 150

MULTI-USE PATH PROFILE

MULTI-USE PATH PGL

MULTI-USE PATH PGL*

EX GROUND AT MULTI-USE PATH ℄

*PGL IS APPROXIMATED; PATH SHALL BE BUILT OFF THE BACK OF CURB AS SHOWN IN THE CROSS SECTIONS AND TYPICAL SECTION

LEGEND

- PERVIOUS HMA MULTI-USE PATH
- FULL DEPTH HMA WIDENING
- DETECTABLE WARNINGS
- CLASS D PATCHES, 10 INCH

LEFT EOP PROFILE

LEFT PROPOSED DITCH PROFILE

LEFT EDGE OF PAVED SHOULDER PGL

LEFT EDGE OF PAVEMENT PGL

EX GROUND AT McDONALD ROAD ℄

FILE NAME =	USER NAME = jstrick	DESIGNED -	REVISED -
N:\Kane County\170513\Civil\RPP_McDonald_170513_04.sht		DRAWN -	REVISED -
Default	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

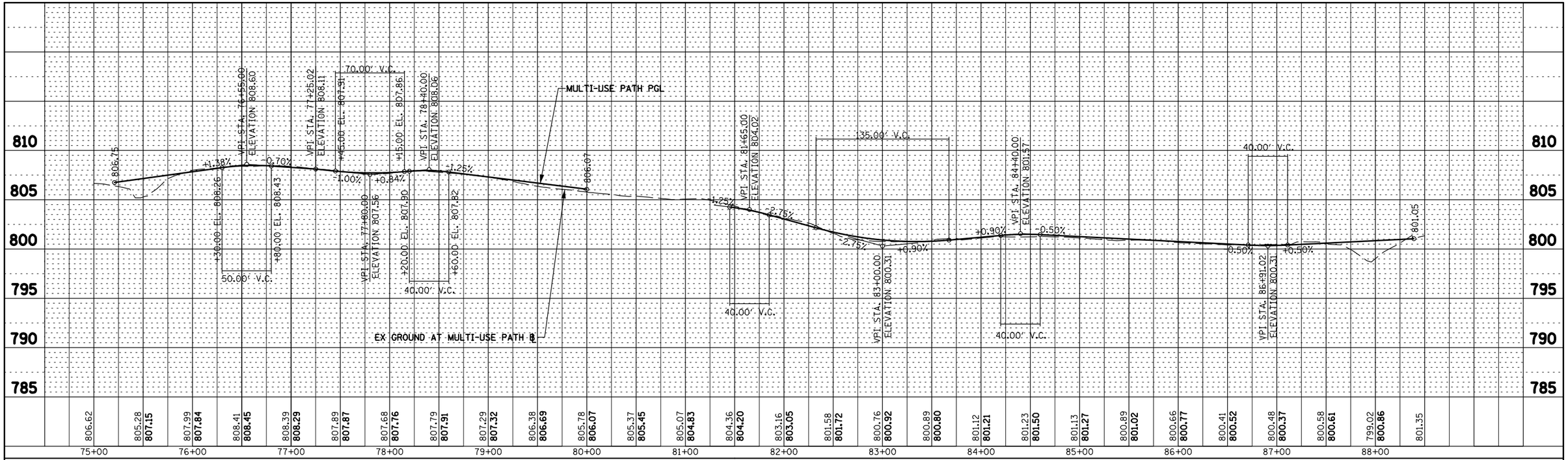
RANDALL ROAD ROADWAY PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50H 5V | SHEET 4 OF 4 SHEETS | STA. 425+03.20 TO STA. 437+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	25
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

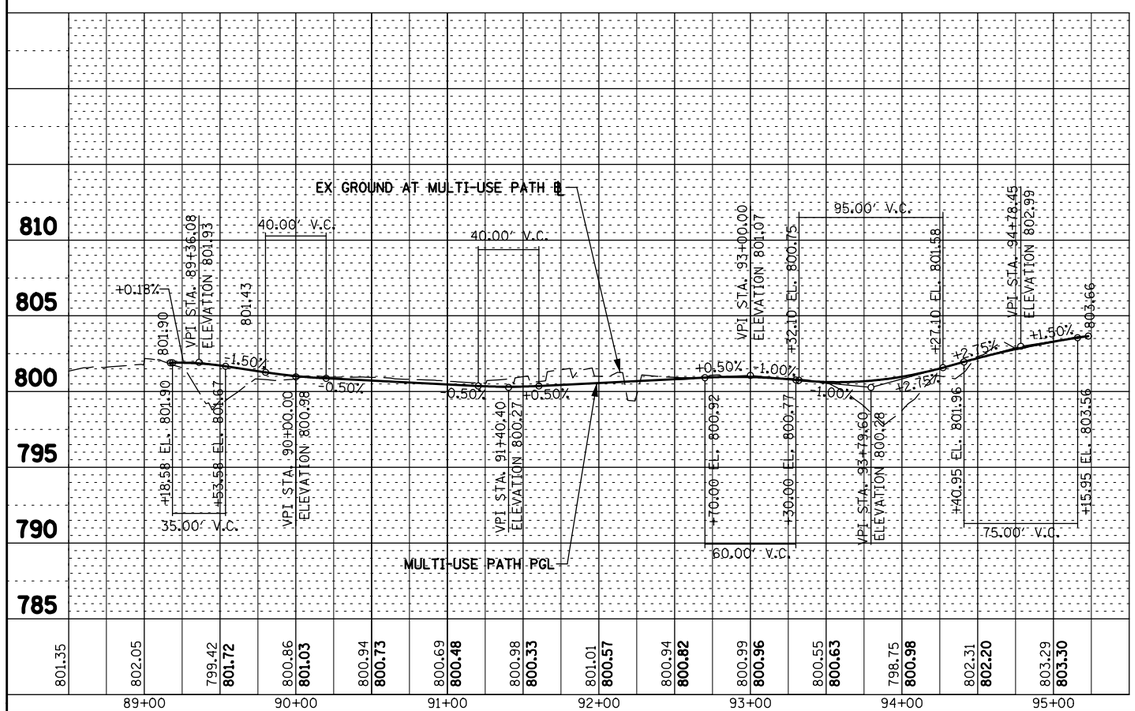
PLAN

BY	DATE
SURVEYED	
PLOTTED	
DESIGNED CHECKED	
QUANTITIES CHECKED	
RT. OF WAY CHECKED	
CADD FILE NAME	
NOTE BOOK	
NO.	



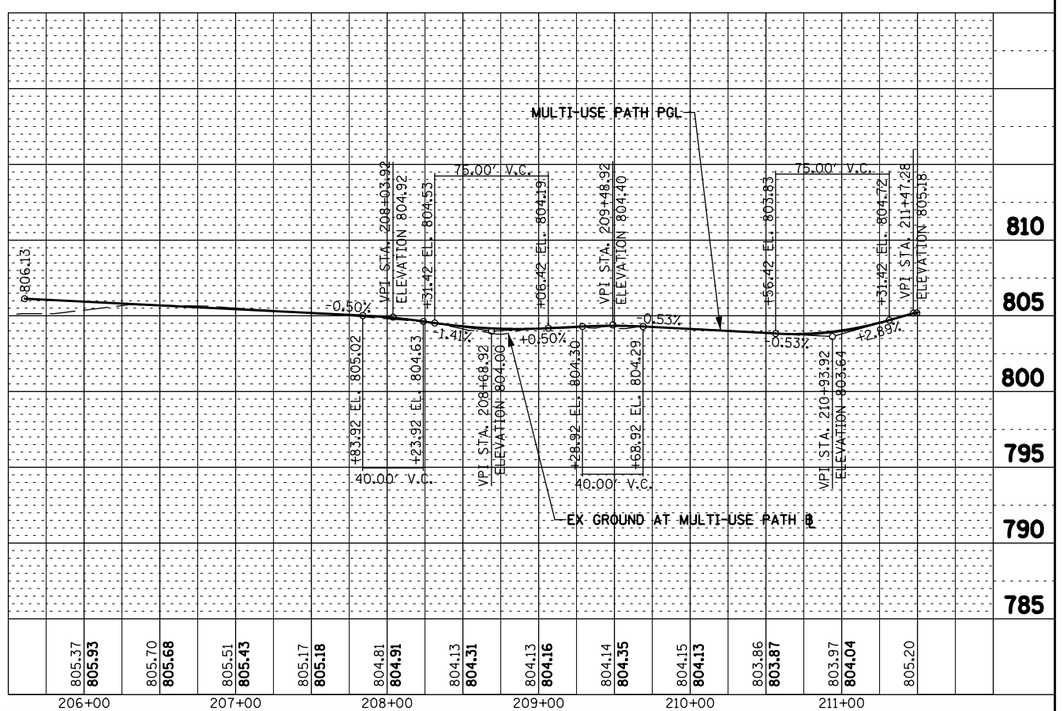
PROFILE

BY	DATE
SURVEYED	
PLOTTED	
DESIGNED CHECKED	
QUANTITIES CHECKED	
R.O.W. NOTED	
STRUCTURE NOTATNS CHKD	
NOTE BOOK	
NO.	



NOTE:
SEE SHEET 25 FOR PATH PROFILE INFORMATION FROM STA 150+00.00 TO STA 159+58.30

BUILD ADJACENT TO BACK OF CURB AS SHOWN IN TYPICAL SECTIONS AND CROSS SECTIONS FOR STA 200+00.00 TO STA 205+60.71



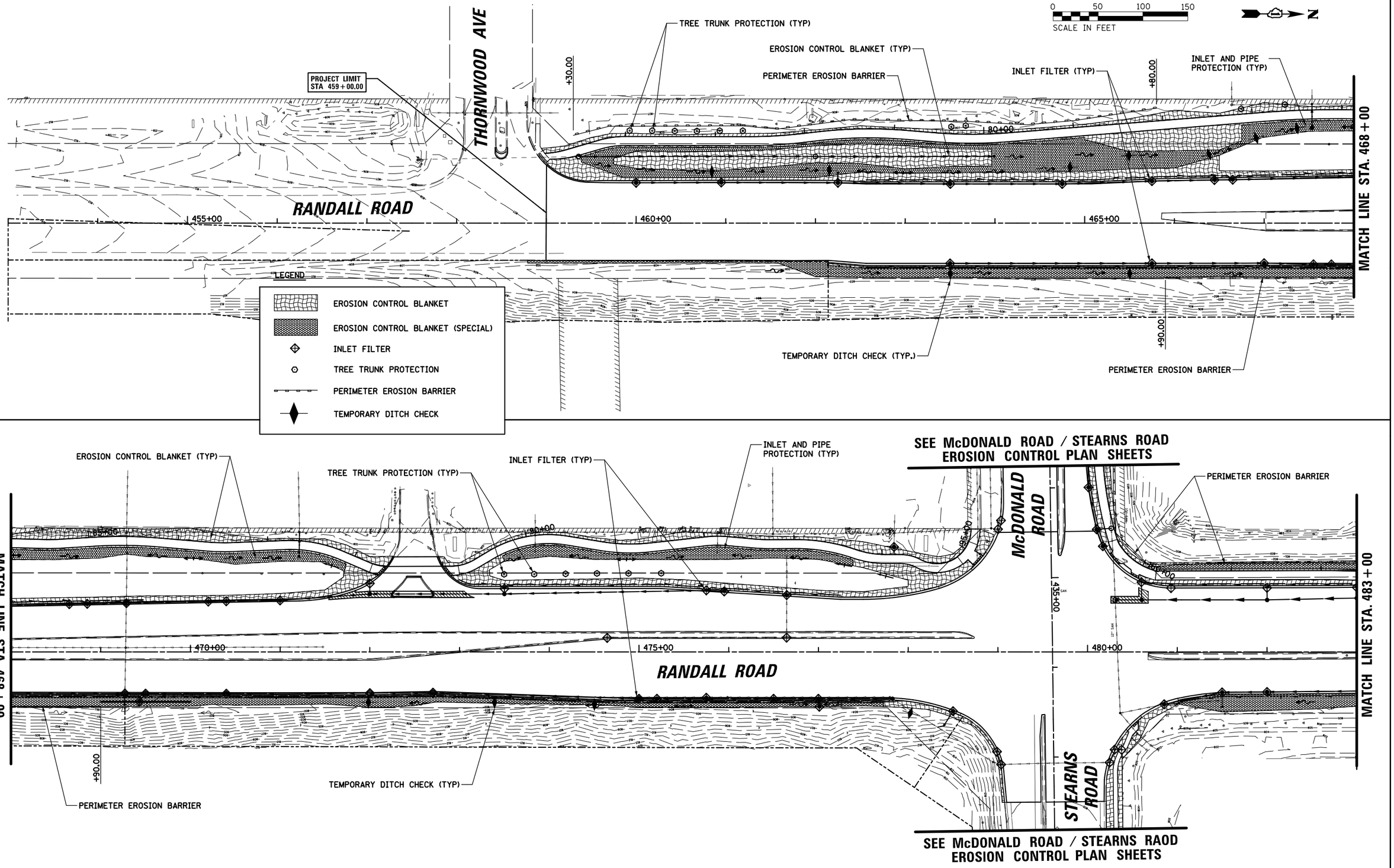
FILE NAME = N:\Kane County\170513\Civil\MUP_170513_01.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-USE PATH PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50H 5V | SHEET 1 OF 1 SHEETS | STA. 75+00.00 TO STA. 211+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	26
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



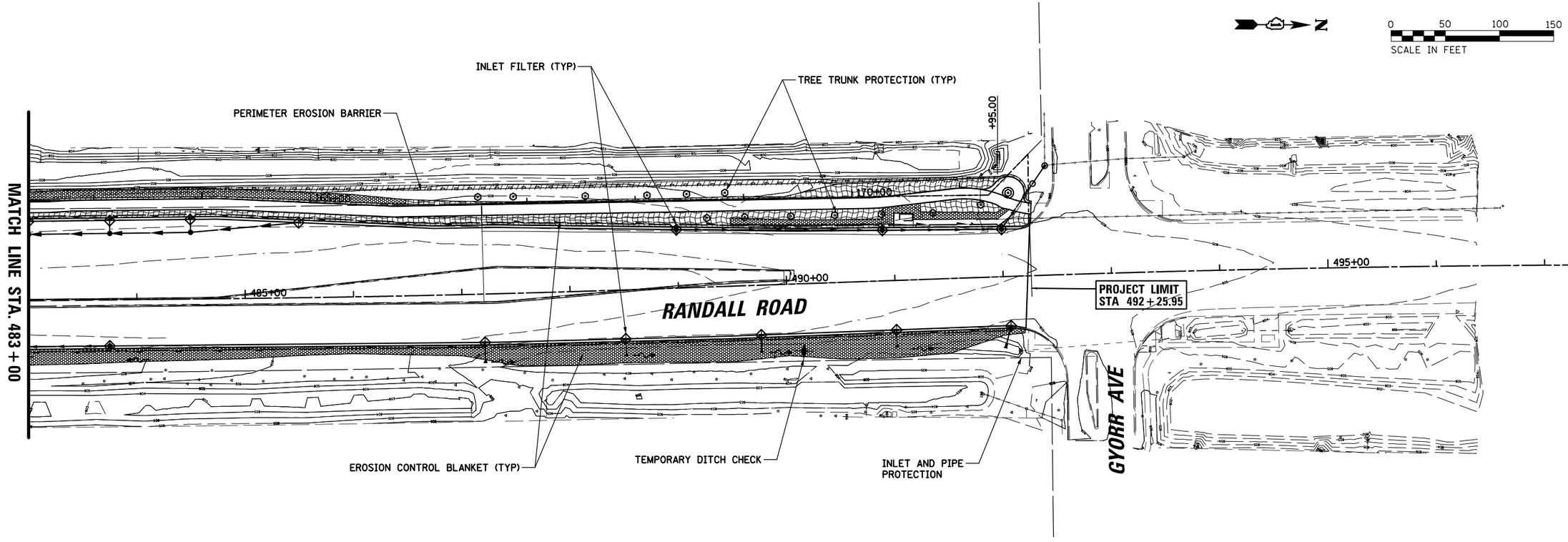
FILE NAME = N:\Kane County\170513\Civil\ERO_Randall_170513_01.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 1 OF 3 SHEETS | STA. 458+79.00 TO STA. 483+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	27
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- EROSION CONTROL BLANKET
- EROSION CONTROL BLANKET (SPECIAL)
- INLET FILTER
- TREE TRUNK PROTECTION
- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK

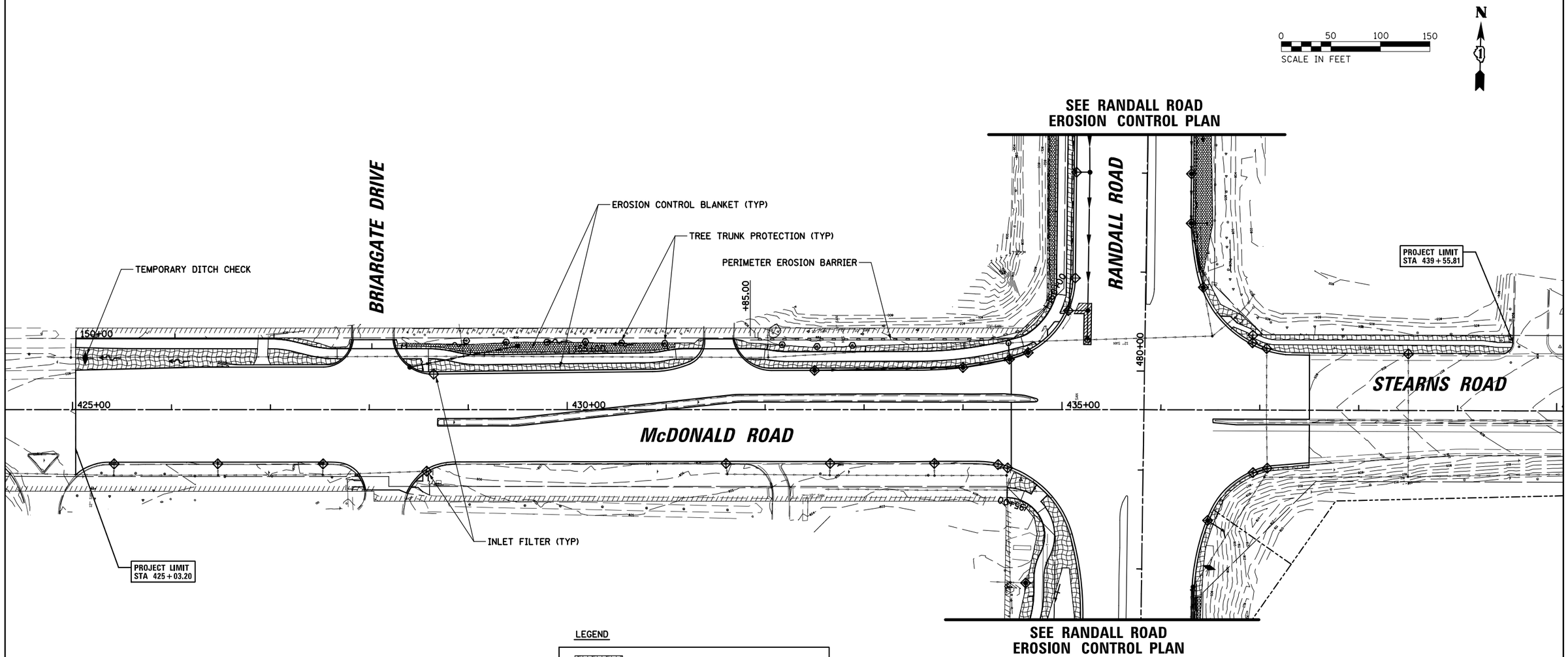
FILE NAME = N:\Kane County\170513\Civil\ERO_Randall_170513_02.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 2 OF 3 SHEETS | STA. 483+00.00 TO STA. 492+25.95

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	28
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



LEGEND

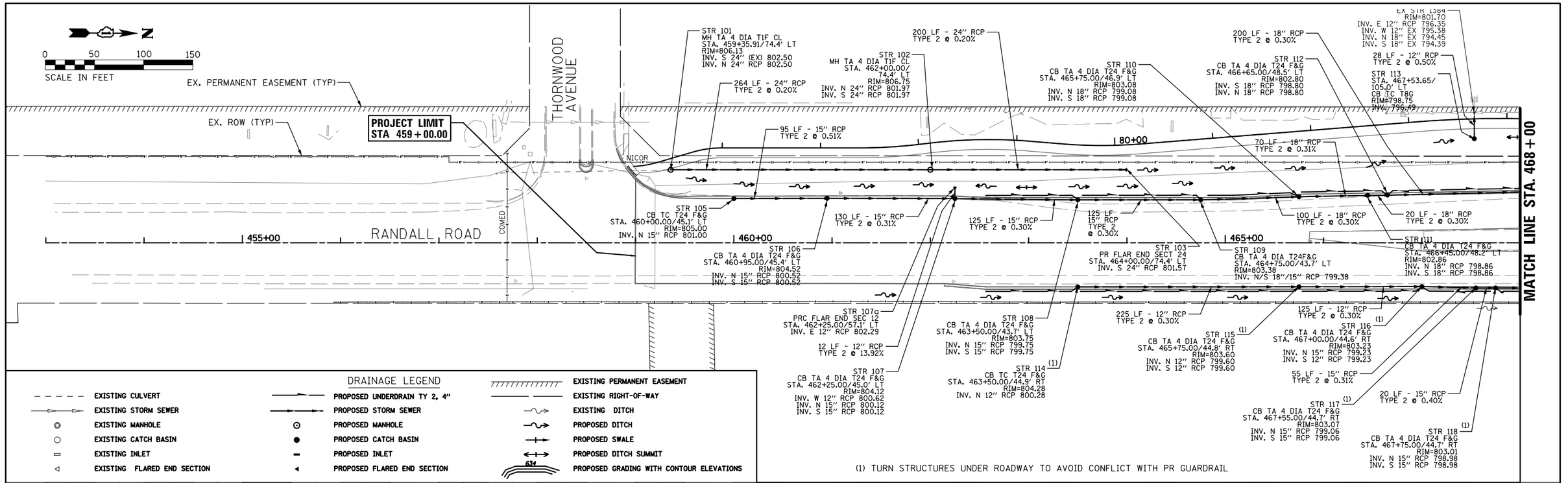
- EROSION CONTROL BLANKET
- EROSION CONTROL BLANKET (SPECIAL)
- INLET FILTER
- TREE TRUNK PROTECTION
- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK

FILE NAME = N:\Kane County\170513\Civil\ERO_McDonald70513_03.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: 50 | SHEET 3 OF 3 SHEETS | STA. 425+03.20 TO STA. 439+55.81

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	29
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



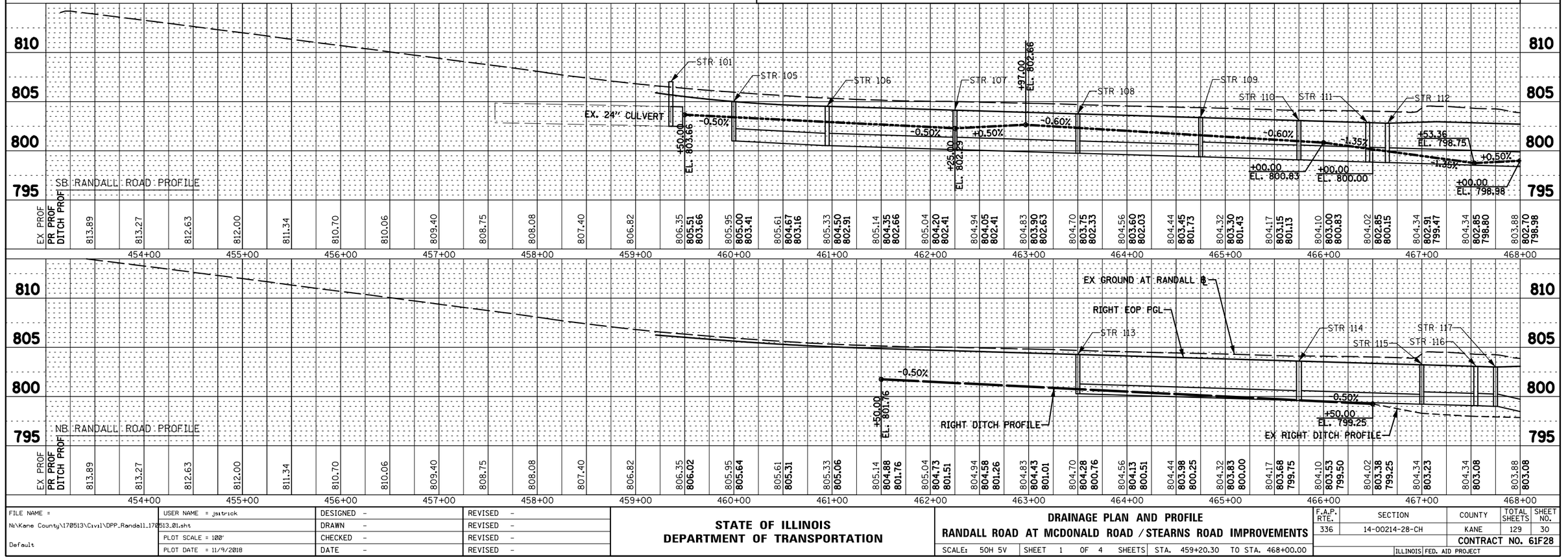
DRAINAGE LEGEND

- EXISTING CULVERT
- EXISTING STORM SEWER
- EXISTING MANHOLE
- EXISTING CATCH BASIN
- EXISTING INLET
- EXISTING FLARED END SECTION
- PROPOSED UNDERDRAIN TY 2, 4"
- PROPOSED STORM SEWER
- PROPOSED MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED INLET
- PROPOSED FLARED END SECTION
- EXISTING PERMANENT EASEMENT
- EXISTING RIGHT-OF-WAY
- EXISTING DITCH
- PROPOSED DITCH
- PROPOSED SWALE
- PROPOSED DITCH SUMMIT
- 634 PROPOSED GRADING WITH CONTOUR ELEVATIONS

(1) TURN STRUCTURES UNDER ROADWAY TO AVOID CONFLICT WITH PR GUARDRAIL

PLAN: SURVEYED; PLOTTED; DESIGN CHECKED; R.O.W. CHECKED; BAR. NOTED; STRUCTURE NO.; NOTE BOOK; NO.; CADD FILE NAME; BY; DATE

PROFILE: SURVEYED; PLOTTED; DESIGN CHECKED; R.O.W. CHECKED; BAR. NOTED; STRUCTURE NO.; NOTE BOOK; NO.; CADD FILE NAME; BY; DATE

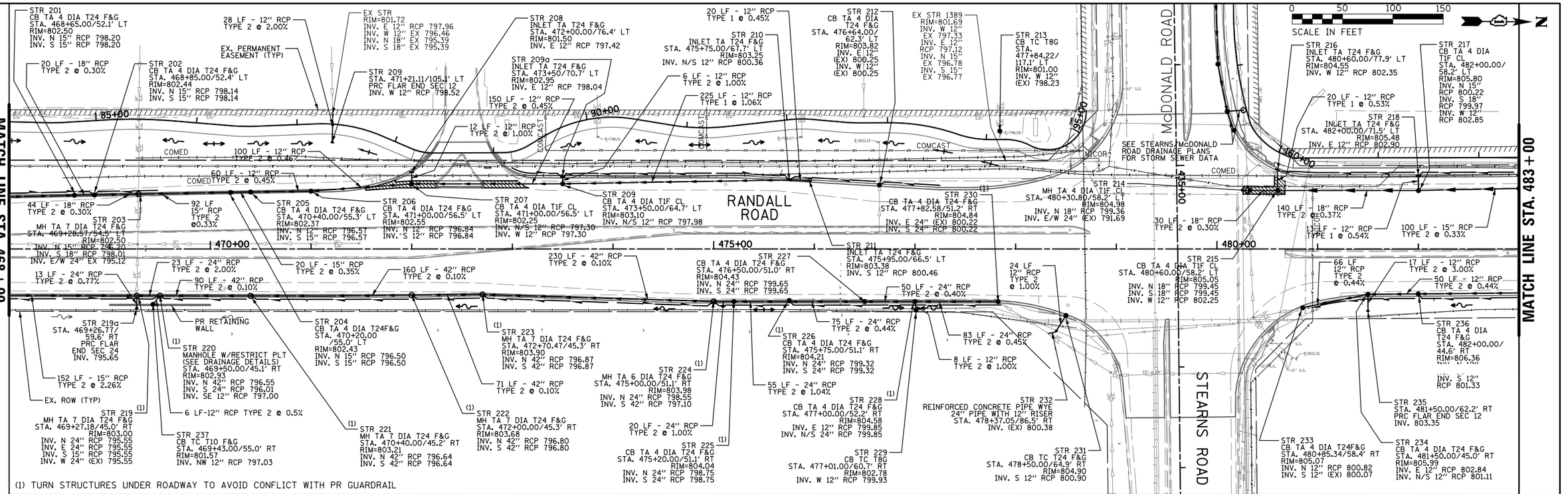


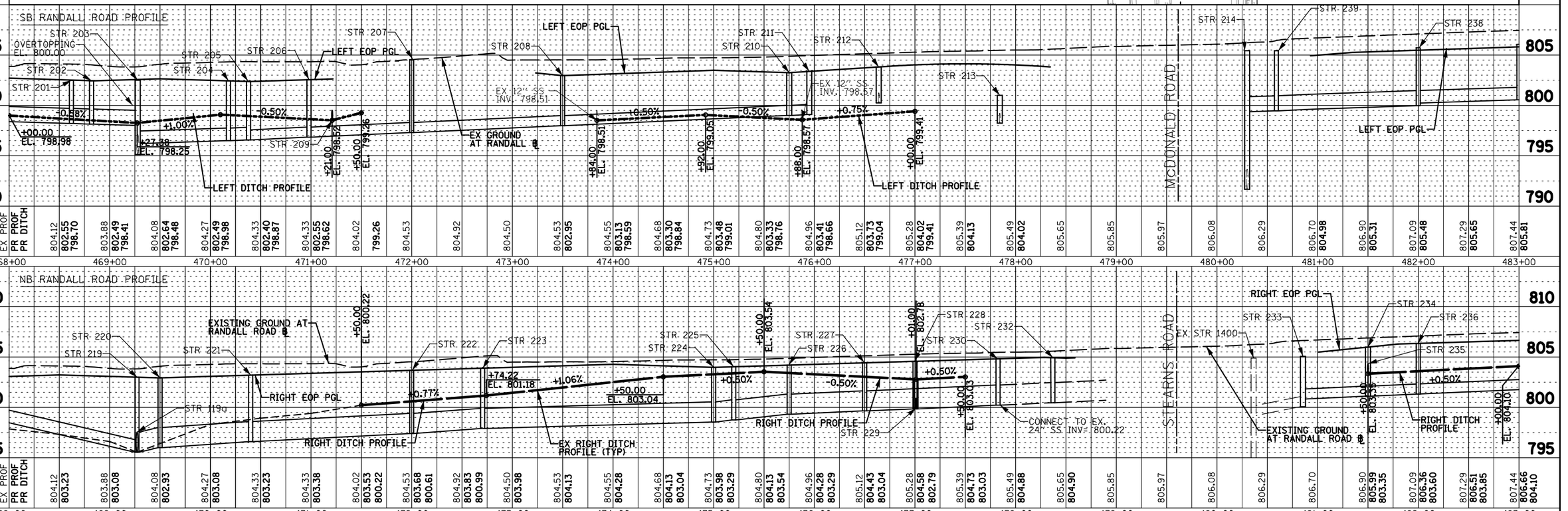
FILE NAME = N:\Kane County\170513\Civil\DPP_Randall_170513_01.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
Default	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: 50H 5V | SHEET 1 OF 4 SHEETS | STA. 459+20.30 TO STA. 468+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	30
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			





FILE NAME = N:\Kane County\170513\Civil\DPP_Randall_170513_02.sht	USER NAME = jstrick	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50H 5V | SHEET 2 OF 4 SHEETS | STA. 468+00.00 TO STA. 483+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	31
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

PLAN — SURVEYED | PLOTTED | DESIGNED | CHECKED | RT. OF WAY CHECKED | CADD FILE NAME | NOTE BOOK | NO. | BY | DATE

PROFILE — SURVEYED | PLOTTED | DESIGNED | CHECKED | BM. NOTED | STRUCTURE NO/TA'NS CHK'D | NOTE BOOK | NO. | BY | DATE

MATCH LINE STA. 483+00

STR 301a
INLET TA T24 F&G
STA. 483+00.00/72.1' LT
RIM=805.81
INV. E 12" RCP 803.26

10 LF - 12" RCP
TYPE 1 @ 0.50%

STR 302
CB TA 4 DIA TIF CL
STA. 483+75.00/60.1' LT
RIM=806.30
INV. N 15" RCP 801.05
INV. S 15" RCP 800.80
INV. W 12" RCP 803.45

STR 302a
INLET TA T24 F&G
STA. 483+75.00/72.9' LT
RIM=806.05
INV. E 12" RCP 803.51

12 LF
12" RCP
TYPE 1 @
0.50%

STR 303a
INLET TA T24 F&G
STA. 484+50.00/73.4' LT
RIM=806.26
INV. E 12" RCP 803.71

190 LF - 30" RCP
TYPE 2 @ 0.13%

STR 306
CB TA 5 DIA T24 F&G
STA. 492+00.00/43.9' LT
RIM=805.34
INV. S/W 30" RCP 799.07

STR 305
CB TA 5 DIA T24 F&G
STA. 490+90.00/46.7' LT
RIM=805.74
INV. N/S 30" RCP 799.22

STR 304
CB TA 4 DIA T24 F&G
STA. 489+00.00/54.0' LT
RIM=806.46
INV. N 30" 799.47

EX. PERMANENT
EASEMENT (TYP)

STR 307a
MH TA 7 DIA TIF CL
STA 492+42.44/101.7' LT
RIM=804.57
INV. E 15" RCP 798.80
INV N 36" (EX) 797.45
INV W 36" (EX) 797.39

20 LF - 15" RCP
TYPE 2 @ 1.00%

STR 307
MANHOLE W/RESTRICT PLT
(SEE DRAINAGE DETAILS)
STA. 492+30.08/84.9' LT
RIM=804.50
INV. E 30" RCP 799.00
INV W 15" RCP 799.00

165+00 | 170+00 | 495+00 | 490+00 | 485+00

75 LF - 15" RCP
TYPE 2 @ 0.33%

75 LF - 12" RCP
@ 0.44%

100 LF - 12" RCP
TYPE 2 @ 0.44%

12 LF - 12" RCP
TYPE 1 @ 0.50%

STR 303b
INLET TA T24 F&G
STA. 485+50.00/69.4' LT
RIM=806.56
INV. S 12" RCP 801.82

110 LF - 30" RCP
TYPE 2 @ 0.14%

51 LF - 30" RCP
TYPE 2 @ 0.14%

RANDALL ROAD

COMED

PROJECT LIMIT
STA 492+25.95

STR 317
INLETS SPL W/SPL F&G
STA. 492+05.72/45.6' RT
RIM=805.17
INV. E 12" ~~803.17~~

STR 308
CB TC T24 F&G
STA. 483+75.00/43.0' RT
RIM=806.89
INV. S 12" RCP 802.10

STR 303
CB TA 4 DIA TIF CL
STA. 484+50.00/61.4' LT
RIM=806.51
INV. N 12" RCP 801.38
INV. S 12" RCP 801.38
INV. W 12" RCP 803.65

16 LF. PIPE DRAINS
12" RCP @ 7.69%

16 LF. PIPE DRAINS
12" RCP @ 8.06%

STR 313
INLETS SPL
W/SPL F&G
STA. 489+75.00
/46.0' RT
RIM=806.10
INV. E 12" 804.10

21 LF. PIPE DRAINS 12"
RCP @ 5.48%

GYORR AVENUE

175 LF - 12" RCP
TYPE 2 @ 0.44%

STR 309
INLETS SPL W/SPL F&G
STA. 487+20.00/44.6' RT
RIM=806.86
INV. E 12" 804.86

STR 311
INLETS SPL W/SPL F&G
STA. 488+50.00/45.2' RT
RIM=806.48
INV. E 12" 804.48

STR 315
INLETS SPL
W/SPL F&G
STA. 491+00.00
/45.6' RT
RIM=805.64
INV. E 12" 803.64

STR 318
CONC HDWL
FOR P DRAIN
STA. 492+00.00
/66.1' RT
INV. W 12" 802.02

STR 301
CB TA 4 DIA TIF CL
STA. 483+00.00/60.1' LT
RIM=806.07
INV. N 15" RCP 800.55
INV. S 15" RCP 800.55
INV. W 12" RCP 803.20

19 LF. PIPE DRAINS
12" RCP @ 6.05%

STR 314
CONC HDWL FOR P DRAIN
STA. 489+75.00/62.2' RT
INV. W 12" 802.81

16 LF. PIPE DRAINS
12" RCP @ 7.94%

STR 310
CONC HDWL FOR P DRAIN
STA. 487+20.00/63.7' RT
INV. W 12" 803.71

STR 312
CONC HDWL FOR P DRAIN
STA. 488+50.00/61.3' RT
INV. W 12" 803.25

STR 316
CONC HDWL FOR P DRAIN
STA. 491+00.00/61.2' RT
INV. W 12" 802.37

EX. ROW (TYP)

0 50 100 150
SCALE IN FEET

PLAN
SURVEYED
PLOTTED
DRAWN
CHECKED
NOTE BOOK
NO.
BY
DATE
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME

PROFILE

EXISTING GROUND PROFILE
@ RANDALL ROAD ℄

STR 321 | STR 320 | STR 319 | STR 303 | STR 304 | STR 305 | STR 306 | STR 307 | STR 307a

LEFT EOP PGL

SB RANDALL ROAD PROFILE

GYORR AVENUE

	483+00	484+00	485+00	486+00	487+00	488+00	489+00	490+00	491+00	492+00	493+00	494+00	495+00	496+00
EX PROF	807.56	807.77	808.11	808.51	808.46	808.44	808.43	808.42	808.37	808.33	808.31	807.39	807.19	806.96	806.74	806.52	806.31	806.09	805.81	805.57	805.38	805.20	804.93	804.67	804.50	804.33
PR PROF	805.96	806.11	806.26	806.41	806.56	806.71	806.86	806.96	806.96	806.84	806.65	806.46	806.27	806.09	805.90	805.71	805.52	805.34								

EXISTING GROUND PROFILE
@ RANDALL ROAD ℄

RIGHT EOP PGL

STR 308

EX RIGHT DITCH PROFILE

STR 310 | STR 312 | STR 314 | STR 316 | STR 318

-0.35%

+20.00
EL. 803.71

+00.00
EL. 802.02

EX. 12" CULVERT ℄

RIGHT DITCH
PROFILE

EX. RIGHT
DITCH PROFILE

NB RANDALL ROAD PROFILE

GYORR AVENUE

	483+00	484+00	485+00	486+00	487+00	488+00	489+00	490+00	491+00	492+00	493+00	494+00	495+00	496+00
EX PROF	807.56	807.77	808.11	808.51	808.46	808.44	808.43	808.42	808.37	808.33	808.31	807.39	807.19	806.96	806.74	806.52	806.31	806.09	805.81	805.57	805.38	805.20	804.93	804.67	804.50	804.33
PR PROF	806.81	806.96	807.11	807.24	807.28	807.22	807.08	806.93	806.78	806.63	806.48	806.33	806.18	806.03	805.84	805.64	805.45	805.25	802.02							

PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
NOTE BOOK
NO.
BY
DATE
BM. NOTED
STRUCTURE NOTATNS CHKD

FILE NAME = N:\Kane County\170513\Civil\DPP_Randall_170513_03.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

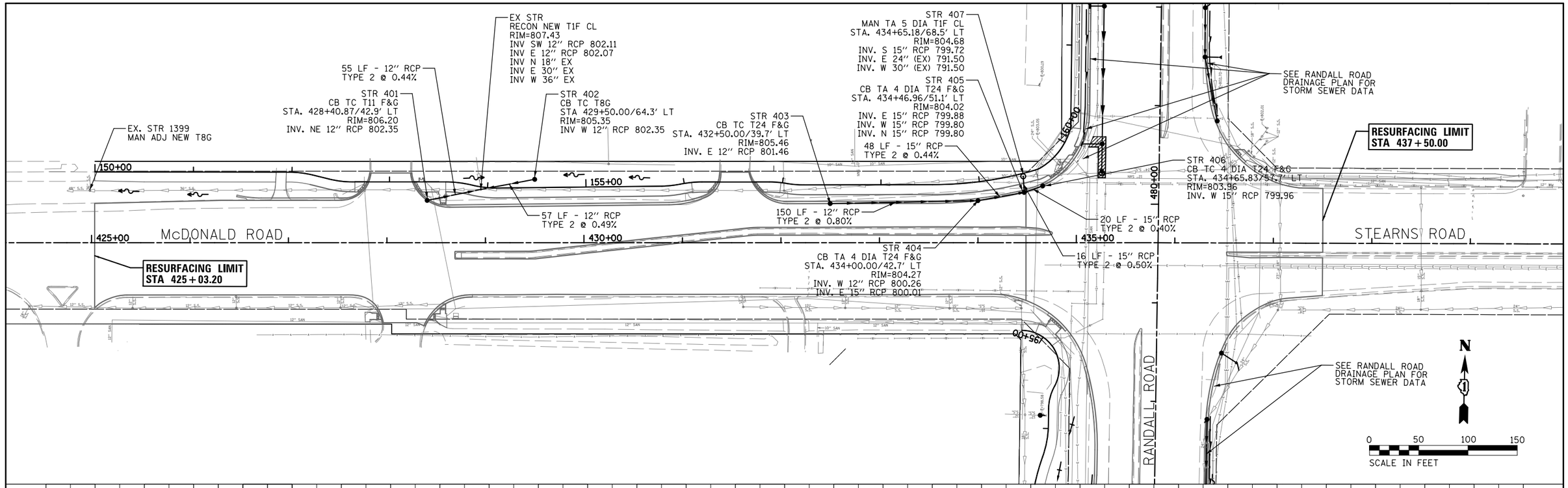
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

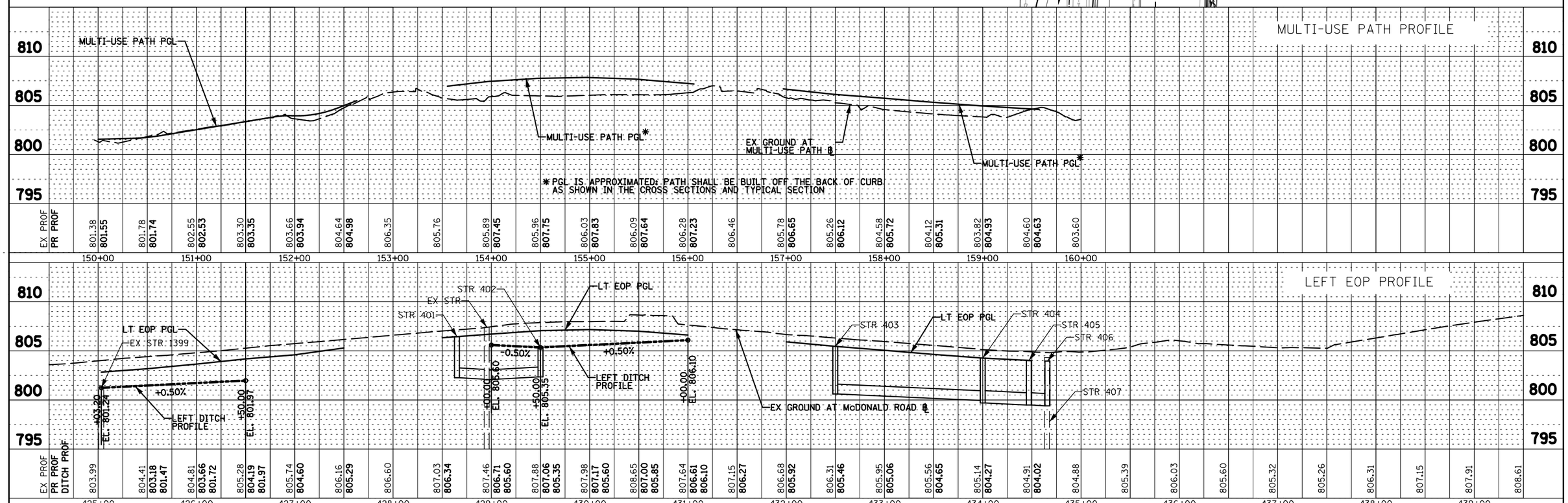
DRAINAGE PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: 50H 5V | SHEET 3 OF 4 SHEETS | STA. 483+00.00 TO STA. 492+25.95

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	32
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

PLAN
SURVEYED
PLOTTED
DRAWN
CHECKED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
CADD FILE NAME
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
DRAWN
CHECKED
ALIGNMENT
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE



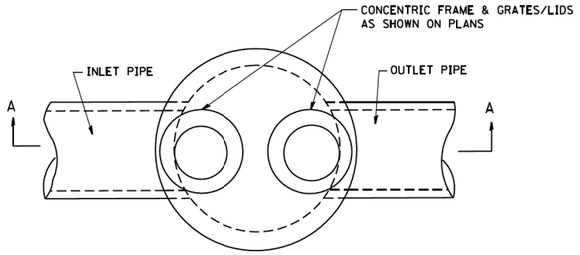


FILE NAME = N:\Kane County\170513\Civil\DPP_McDonald_170513_04.sht	USER NAME = jstrick	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

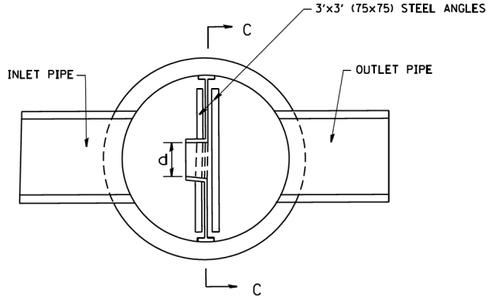
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN AND PROFILE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: 50H 5V | SHEET 4 OF 4 SHEETS | STA. 425+03.20 TO STA. 437+50.00

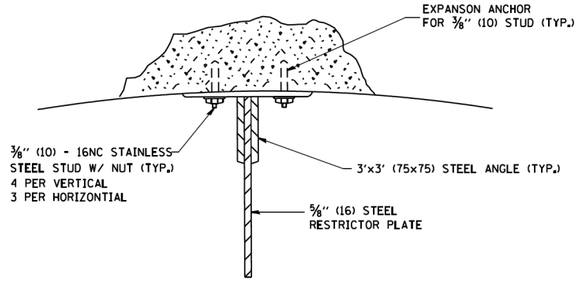
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	33
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



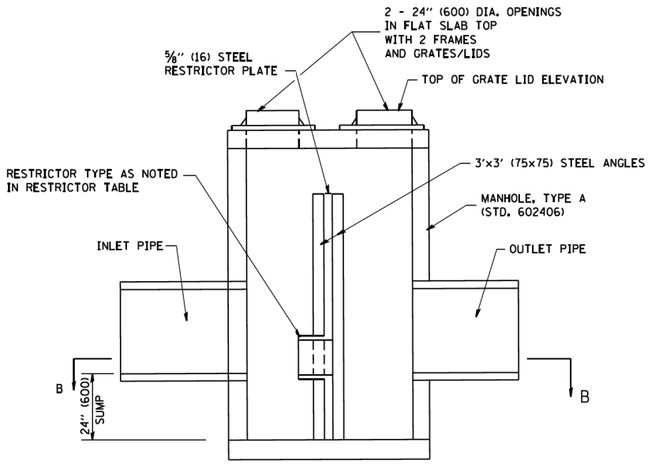
PLAN



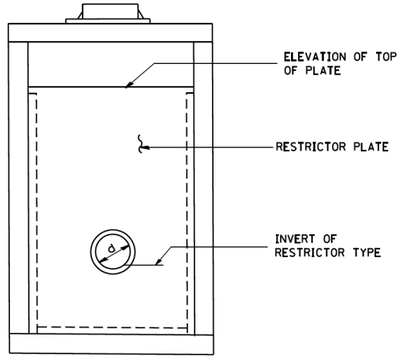
SECTION B-B



ANGLE FASTENER DETAIL



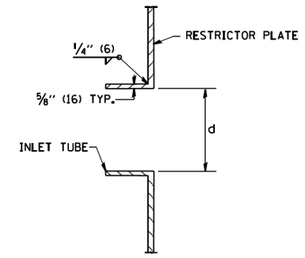
SECTION A-A



SECTION C-C

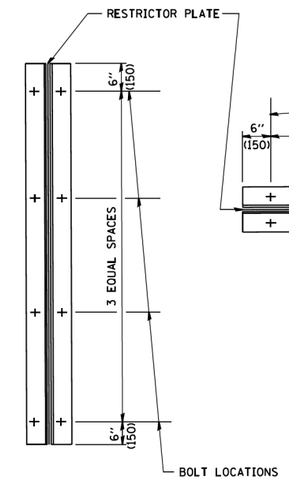
NOTES:

1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
3. BASIS OF PAYMENT: "MANHOLES, WITH RESTRICTOR PLATE" EACH

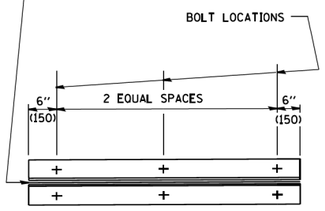


INLET TUBE DETAIL

STATION	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW
469+50.00	8'	T24 F&G	2	6"	796.55	800.53
492+30.08	6'	T1F CL	2	6"	799.00	802.00



TYPICAL VERTICAL ANGLES LOOKING TOWARD MANHOLE WALL



TYPICAL HORIZONTIAL ANGLES LOOKING TOWARD BOTTOM OF MANHOLE

TOTAL BOLTS REQUIRED: 22

NOTE:

1. ANGLES SHOULD BE 3x3x3/8 (75x75x75)
2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
3. HORIZONTIAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
LENGTH: 1/2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 DIA.	LENGTH: 2-1/2 DIA.	
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

STEEL ANGLE BOLTING DETAILS

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

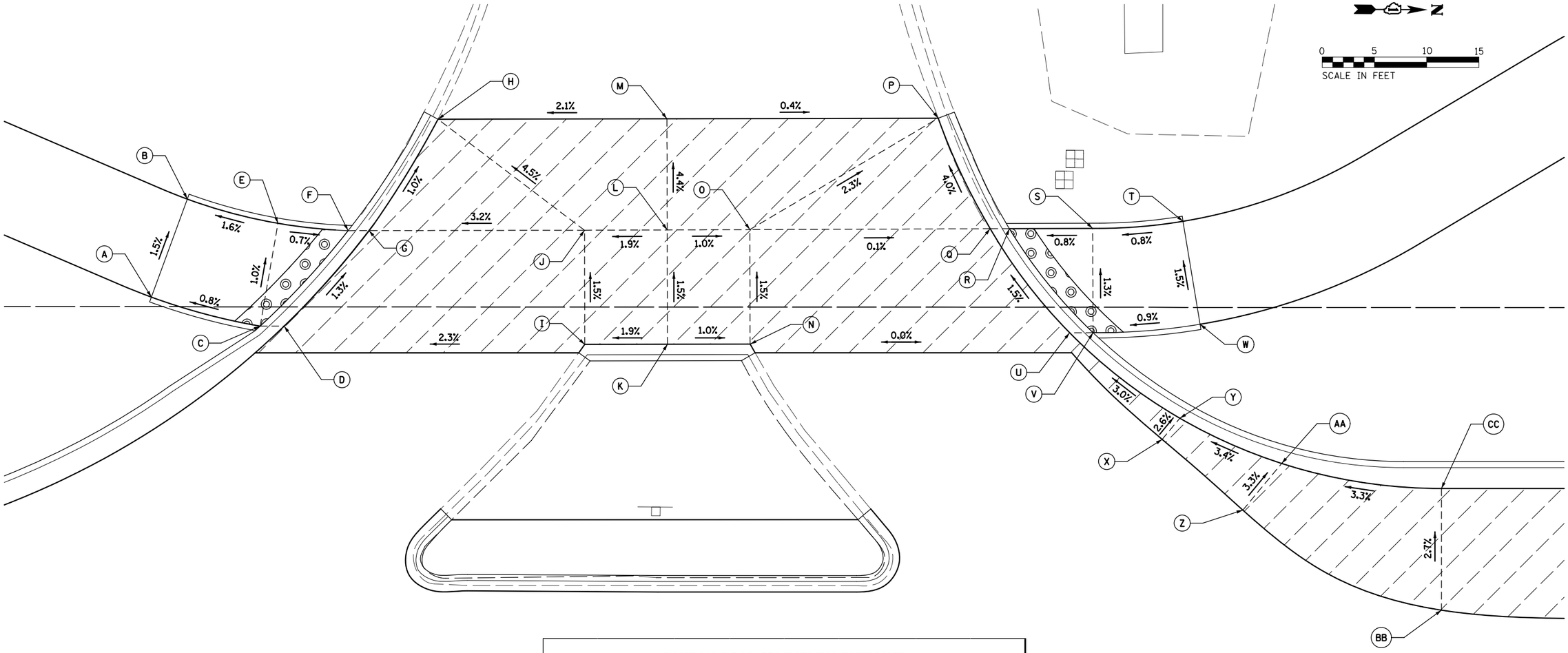
FILE NAME = N:\Kane County\170513\Civil\DPP_Restrictor Detail_170513_05.sht	USER NAME = jstrick	DESIGNED - JJW	REVISED -
		DRAWN - JJW	REVISED -
	PLOT SCALE = 2'	CHECKED - JOC	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 08/03/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE DETAIL – RESTRICTOR STRUCTURE
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	34
		CONTRACT NO. 61F28		
		ILLINOIS	FED. AID PROJECT	



RANDALL ROAD COMMERCIAL ENTRANCE							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
A	471+99.62	88.99' LT	801.11	P	472+75.00	106.13' LT	801.30
B	472+03.06	98.38' LT	800.96	Q	472+79.98	95.55' LT	801.76
C	472+10.04	86.20' LT	801.20	R	472+80.47	94.73' LT	801.76
D	472+12.34	86.21' LT	801.21	S	472+89.80	95.58' LT	801.83
E	472+11.75	96.05' LT	801.10	T	472+98.46	96.26' LT	801.90
F	472+18.47	95.35' LT	801.05	U	472+87.59	85.58' LT	801.95
G	472+20.47	95.36' LT	801.05	V	472+89.84	85.58' LT	801.96
H	472+27.08	106.03' LT	800.93	W	473+00.10	86.39' LT	802.05
I	472+41.14	84.46' LT	801.88	X	472+96.46	75.36' LT	802.42
J	472+41.12	95.40' LT	801.72	Y	472+98.16	77.40' LT	802.35
K	472+49.06	84.47' LT	802.03	Z	473+04.19	68.59' LT	802.90
L	472+49.04	95.43' LT	801.87	AA	473+07.91	73.06' LT	802.71
M	472+49.01	106.08' LT	801.40	BB	473+23.23	59.00' LT	803.53
N	472+56.98	84.49' LT	801.95	CC	473+23.23	70.66' LT	803.22
O	472+56.96	95.46' LT	801.79				

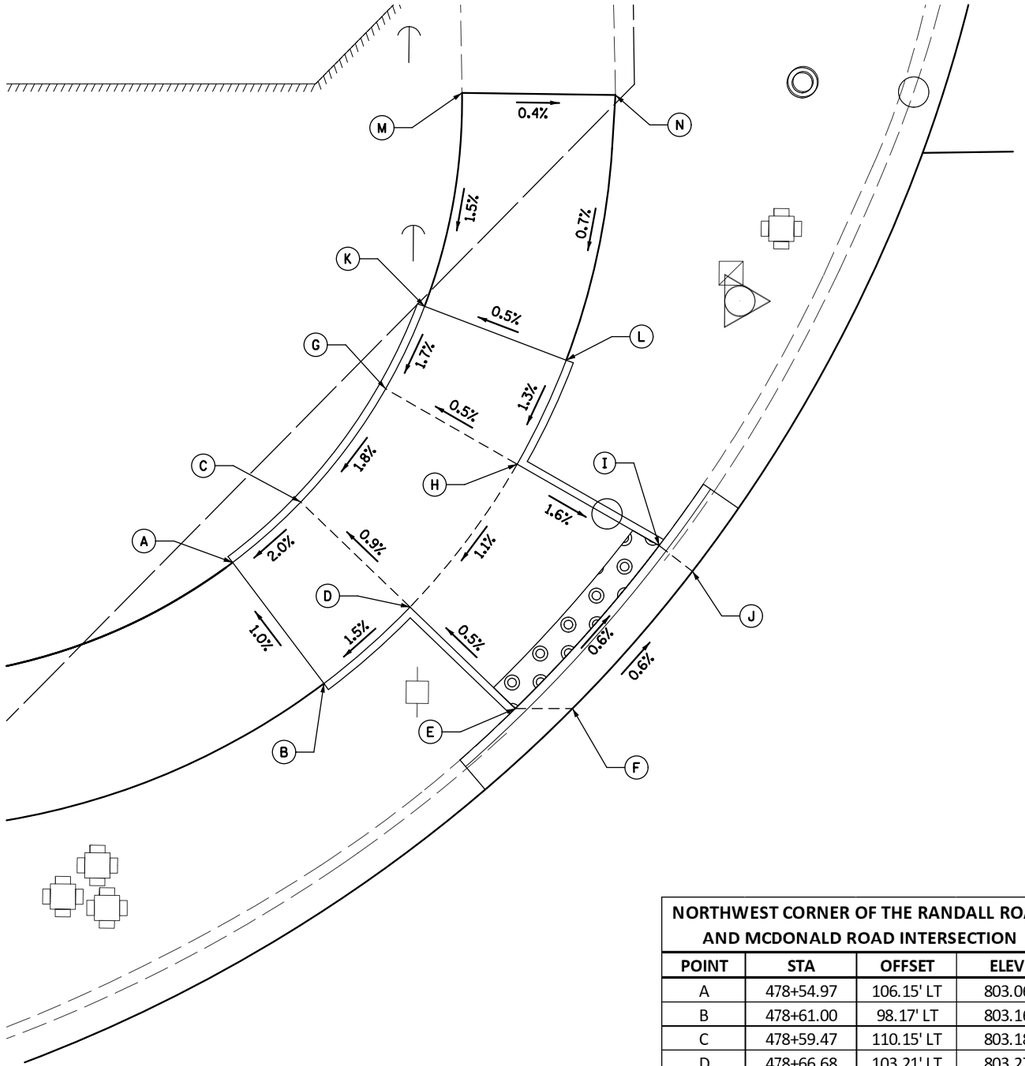
FILE NAME = N:\Kane County\170513\Civil\ADA_170513_01.sht	USER NAME = jsstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 11/12/2018	DATE -	REVISED -

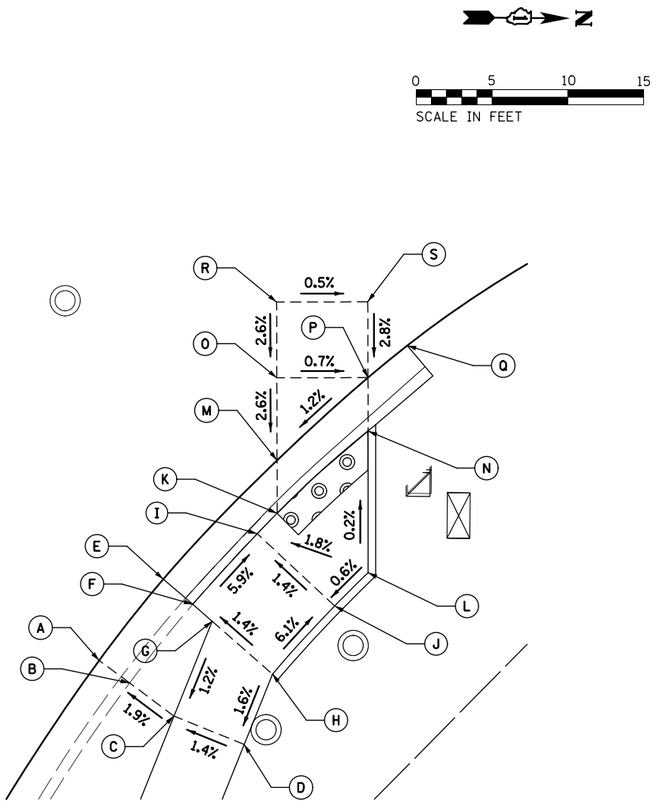
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 5 | SHEET 1 OF 7 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	35
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			





NORTHWEST CORNER OF THE RANDALL ROAD AND MCDONALD ROAD INTERSECTION			
POINT	STA	OFFSET	ELEV
A	478+54.97	106.15' LT	803.06
B	478+61.00	98.17' LT	803.16
C	478+59.47	110.15' LT	803.18
D	478+66.68	103.21' LT	803.27
E	478+73.64	96.52' LT	803.32
F	478+74.68	93.88' LT	803.38
G	478+65.07	117.61' LT	803.35
H	478+73.75	112.64' LT	803.40
I	478+83.12	107.27' LT	803.23
J	478+84.72	104.79' LT	803.29
K	478+67.64	123.06' LT	803.45
L	478+76.99	119.52' LT	803.50
M	478+70.11	137.15' LT	803.66
N	478+80.24	137.01' LT	803.62

NORTHEAST CORNER OF THE RANDALL ROAD AND MCDONALD ROAD INTERSECTION							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
A	480+38.61	91.74' RT	804.27	K	480+50.36	82.03' RT	804.37
B	480+40.62	93.22' RT	804.63	L	480+56.36	85.95' RT	804.50
C	480+43.55	95.41' RT	804.70	M	480+50.35	78.53' RT	804.46
D	480+48.18	97.28' RT	804.77	N	480+56.36	76.60' RT	804.48
E	480+42.85	86.37' RT	804.33	O	480+50.34	73.09' RT	804.60
F	480+44.80	88.04' RT	804.75	P	480+56.35	73.07' RT	804.56
G	480+46.07	89.15' RT	804.77	Q	480+58.94	70.96' RT	804.60
H	480+50.05	92.64' RT	804.85	R	480+50.32	68.09' RT	804.73
I	480+49.05	83.38' RT	804.38	S	480+56.34	68.07' RT	804.70
J	480+54.16	88.14' RT	804.48				

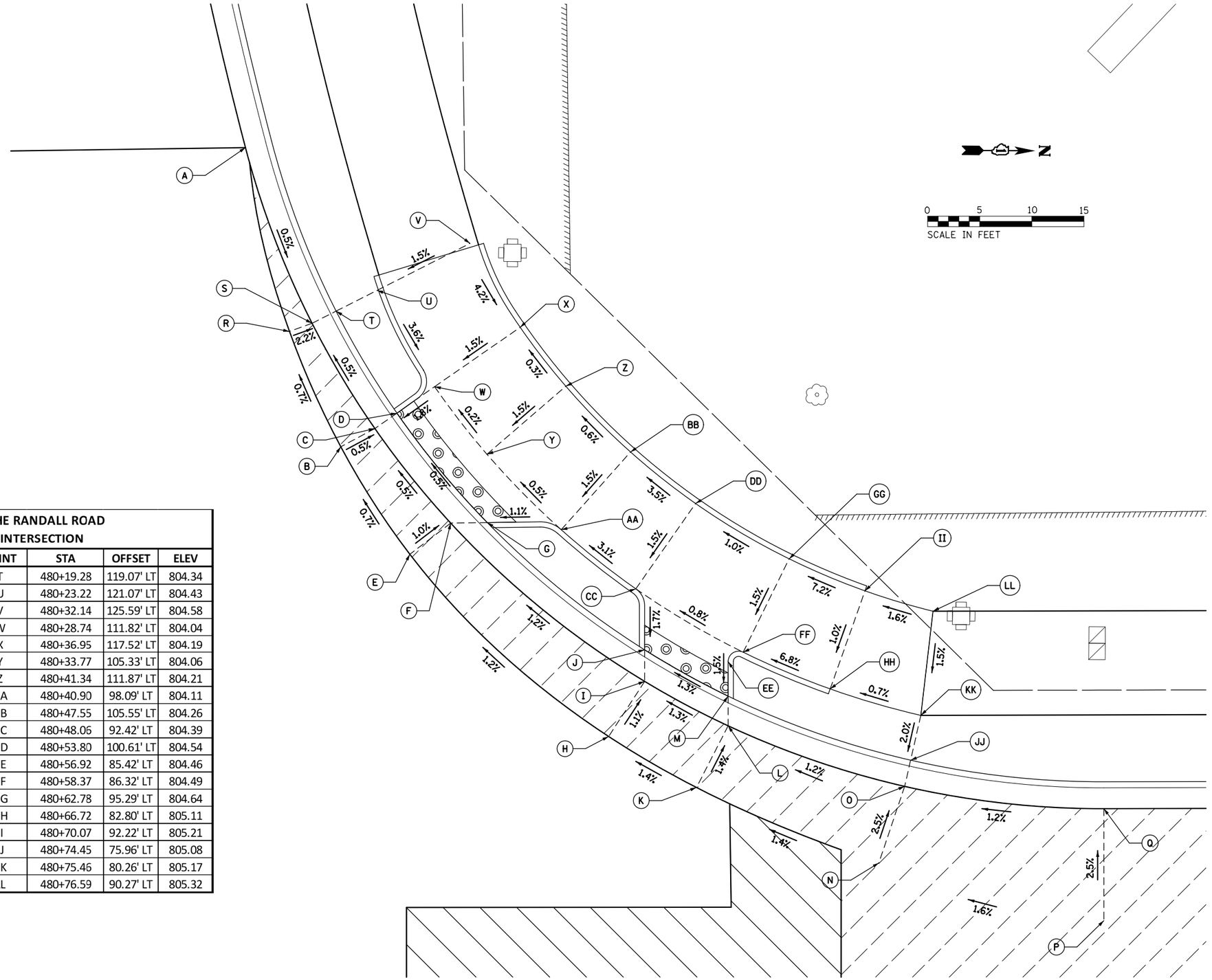
FILE NAME = N:\Kane County\170513\Civil\ADA_170513_02.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 5 | SHEET 2 OF 7 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	36
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



NORTHWEST CORNER OF THE RANDALL ROAD AND MCDONALD ROAD INTERSECTION							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
A	480+10.58	134.78' LT	804.05	T	480+19.28	119.07' LT	804.34
B	480+19.73	106.05' LT	804.04	U	480+23.22	121.07' LT	804.43
C	480+23.01	107.80' LT	804.02	V	480+32.14	125.59' LT	804.58
D	480+25.12	109.27' LT	803.96	W	480+28.74	111.82' LT	804.04
E	480+26.37	95.72' LT	804.13	X	480+36.95	117.52' LT	804.19
F	480+30.29	98.72' LT	804.08	Y	480+33.77	105.33' LT	804.06
G	480+33.79	98.77' LT	804.03	Z	480+41.34	111.87' LT	804.21
H	480+45.45	78.23' LT	804.44	AA	480+40.90	98.09' LT	804.11
I	480+48.92	83.51' LT	804.37	BB	480+47.55	105.55' LT	804.26
J	480+48.91	86.54' LT	804.29	CC	480+48.06	92.42' LT	804.39
K	480+53.89	73.33' LT	804.58	DD	480+53.80	100.61' LT	804.54
L	480+56.92	79.25' LT	804.49	EE	480+56.92	85.42' LT	804.46
M	480+56.92	82.11' LT	804.41	FF	480+58.37	86.32' LT	804.49
N	480+72.22	67.78' LT	804.85	GG	480+62.78	95.29' LT	804.64
O	480+73.87	73.44' LT	804.70	HH	480+66.72	82.80' LT	805.11
P	480+93.00	60.55' LT	805.21	II	480+70.07	92.22' LT	805.21
Q	480+93.00	71.30' LT	804.94	JJ	480+74.45	75.96' LT	805.08
R	480+14.81	117.12' LT	804.01	KK	480+75.46	80.26' LT	805.17
S	480+16.98	117.91' LT	803.96	LL	480+76.59	90.27' LT	805.32

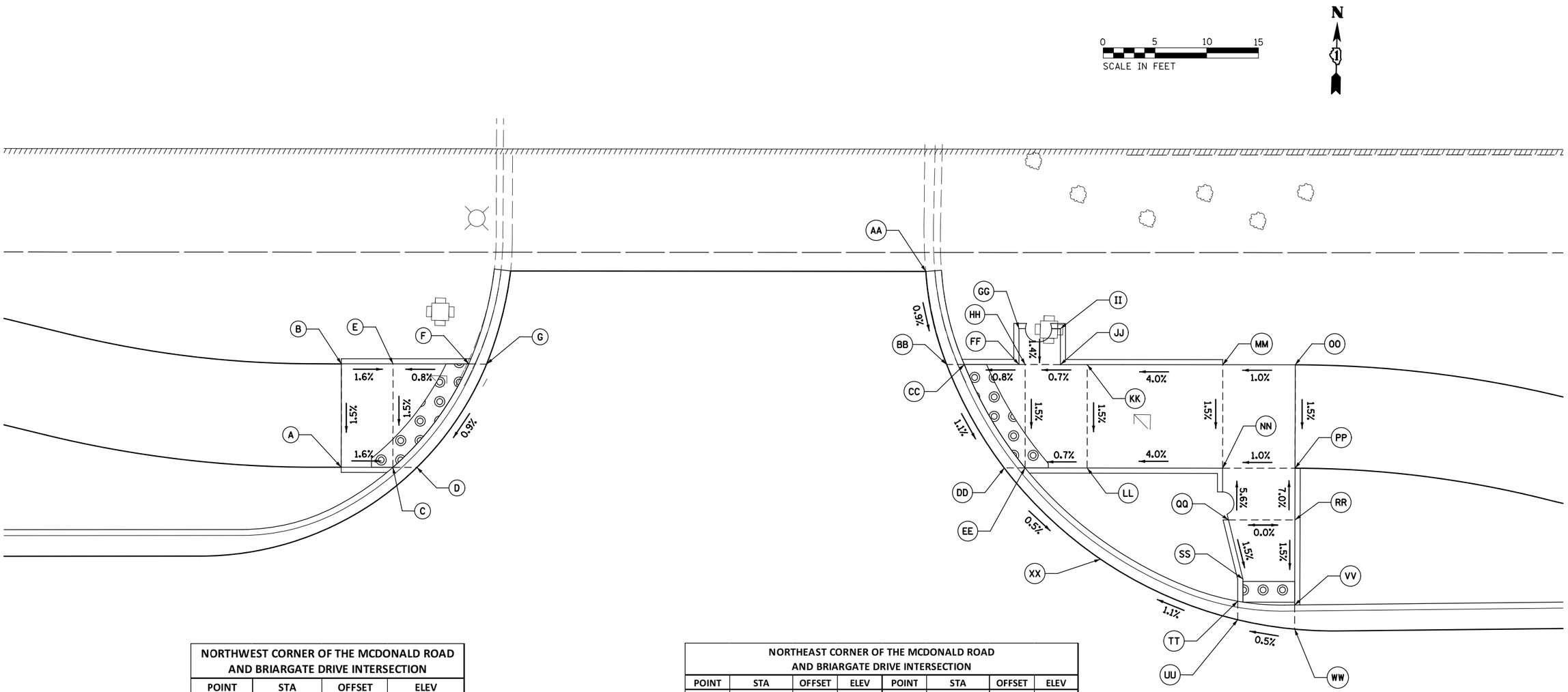
FILE NAME = N:\Kane County\170513\Civil\ADA_170513_03.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 5 | SHEET 3 OF 7 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	37
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



NORTHWEST CORNER OF THE MCDONALD ROAD AND BRIARGATE DRIVE INTERSECTION			
POINT	STA	OFFSET	ELEV
A	427+67.48	51.78' LT	805.33
B	427+67.48	61.78' LT	805.48
C	427+72.48	51.78' LT	805.41
D	427+74.80	51.77' LT	805.47
E	427+72.48	61.78' LT	805.56
F	427+79.81	61.77' LT	805.62
G	427+81.52	61.77' LT	805.64

NORTHEAST CORNER OF THE MCDONALD ROAD AND BRIARGATE DRIVE INTERSECTION							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
AA	428+23.98	70.75' LT	806.47	MM	428+52.68	61.74' LT	806.89
BB	428+26.00	61.75' LT	806.39	NN	428+52.68	51.74' LT	806.74
CC	428+27.70	61.75' LT	806.38	OO	428+59.68	61.74' LT	806.96
DD	428+31.57	51.75' LT	806.27	PP	428+59.68	51.74' LT	806.81
EE	428+33.58	51.75' LT	806.28	QQ	428+53.23	46.74' LT	806.46
FF	428+32.98	61.75' LT	806.42	RR	428+59.66	46.74' LT	806.46
GG	428+32.99	65.22' LT	806.47	SS	428+54.64	41.03' LT	806.37
HH	428+33.58	61.75' LT	806.43	TT	428+54.14	38.87' LT	806.34
II	428+36.99	65.22' LT	806.53	UU	428+54.14	37.08' LT	806.36
JJ	428+36.98	61.75' LT	806.47	VV	428+59.63	38.51' LT	806.34
KK	428+42.98	61.74' LT	806.50	WW	428+59.63	36.18' LT	806.39
LL	428+42.98	51.74' LT	806.35	XX	428+40.87	42.93' LT	806.20

FILE NAME = N:\Kane County\170513\Civil\ADA_170513_04.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
	PLOT SCALE = 10'	DRAWN -	REVISED -
Default	PLOT DATE = 11/9/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

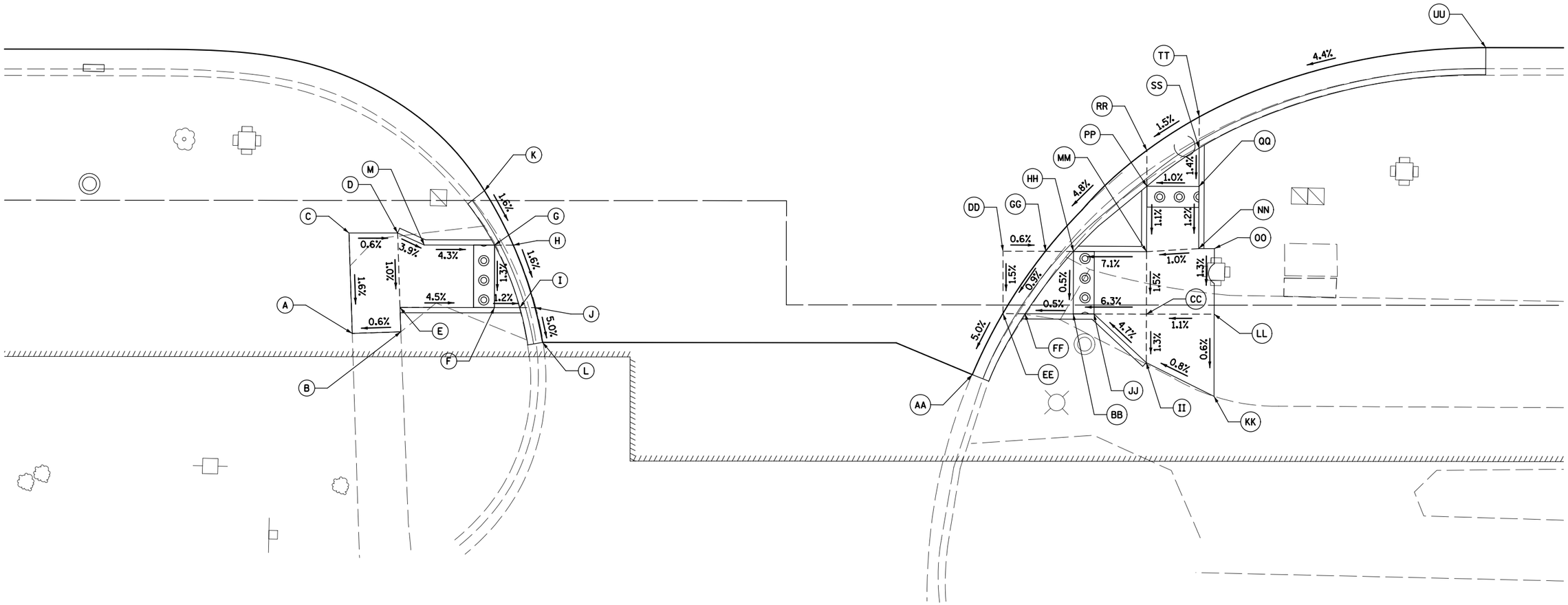
SIDEWALK RAMP DETAILS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 5 | SHEET 4 OF 7 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	38
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

SOUTHWEST CORNER OF THE MCDONALD ROAD AND BRIARGATE DRIVE INTERSECTION			
POINT	STA	OFFSET	ELEV
A	427+78.05	80.19' RT	804.43
B	427+82.71	80.04' RT	804.46
C	427+77.74	70.55' RT	804.58
D	427+82.40	70.55' RT	804.55
E	427+82.64	77.70' RT	804.48
F	427+91.70	77.71' RT	804.07
G	427+91.70	71.71' RT	804.15
H	427+93.50	71.71' RT	804.15
I	427+94.13	77.71' RT	804.04
J	427+95.60	77.71' RT	804.05
K	427+90.74	66.49' RT	804.37
L	427+96.32	81.05' RT	803.88
M	427+84.96	71.70' RT	804.44

SOUTHEAST CORNER OF THE MCDONALD ROAD AND BRIARGATE DRIVE INTERSECTION							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
AA	428+37.57	84.12' RT	803.78	LL	428+60.78	78.30' RT	804.66
BB	428+47.25	78.28' RT	804.15	MM	428+54.29	72.30' RT	804.68
CC	428+54.27	78.30' RT	804.59	NN	428+59.29	72.00' RT	804.73
DD	428+40.51	72.27' RT	804.20	OO	428+60.79	72.01' RT	804.74
EE	428+40.51	78.26' RT	804.11	PP	428+54.31	66.03' RT	804.75
FF	428+42.63	78.27' RT	804.11	QQ	428+59.31	66.04' RT	804.80
GG	428+44.60	72.27' RT	804.18	RR	428+54.31	62.59' RT	804.84
HH	428+47.27	72.28' RT	804.18	SS	428+59.32	62.37' RT	804.85
II	428+54.26	81.48' RT	804.55	TT	428+59.33	59.37' RT	804.93
JJ	428+49.23	78.29' RT	804.27	UU	428+86.83	52.70' RT	806.19
KK	428+60.78	85.19' RT	804.61				

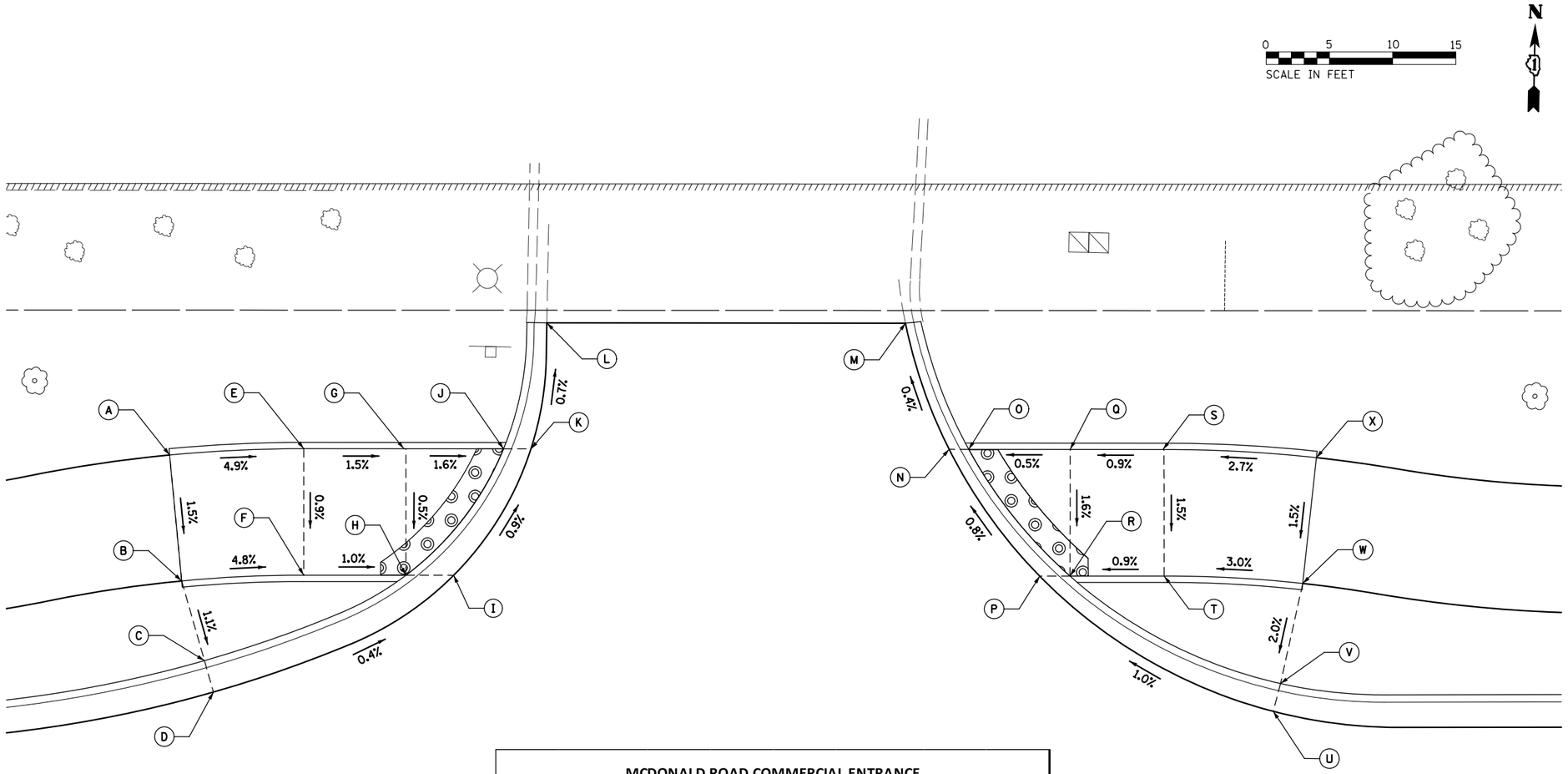


N

0 5 10 15

SCALE IN FEET

FILE NAME = N:\Kane County\170513\Civil\ADA_170513_05.sht	USER NAME = jpatrick	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIDEWALK RAMP DETAILS RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 10'	DRAWN -	REVISED -			336	14-00214-28-CH	KANE	129	39
Default	PLOT DATE = 11/9/2018	CHECKED -	REVISED -					CONTRACT NO. 61F28		
		DATE -	REVISED -		SCALE: 5 SHEET 5 OF 7 SHEETS STA. N/A TO STA. N/A			ILLINOIS FED. AID PROJECT		



MCDONALD ROAD COMMERCIAL ENTRANCE							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
A	431+09.29	61.12' LT	807.18	M	431+67.49	71.57' LT	806.29
B	431+10.25	51.16' LT	807.03	N	431+70.94	61.60' LT	806.25
C	431+12.05	44.86' LT	806.96	O	431+72.49	61.60' LT	806.24
D	431+12.76	42.38' LT	806.60	P	431+78.12	51.58' LT	806.15
E	431+19.90	61.62' LT	806.66	Q	431+80.52	61.60' LT	806.28
F	431+19.90	51.62' LT	806.57	R	431+80.51	51.58' LT	806.12
G	431+27.99	61.62' LT	806.54	S	431+87.94	61.60' LT	806.34
H	431+27.98	51.62' LT	806.49	T	431+87.96	51.60' LT	806.19
I	431+31.77	51.62' LT	806.51	U	431+96.60	40.90' LT	805.94
J	431+35.70	61.62' LT	806.42	V	431+97.17	43.10' LT	806.36
K	431+37.87	61.62' LT	806.41	W	431+98.92	51.01' LT	806.52
L	431+39.12	71.57' LT	806.34	X	432+00.00	60.96' LT	806.67

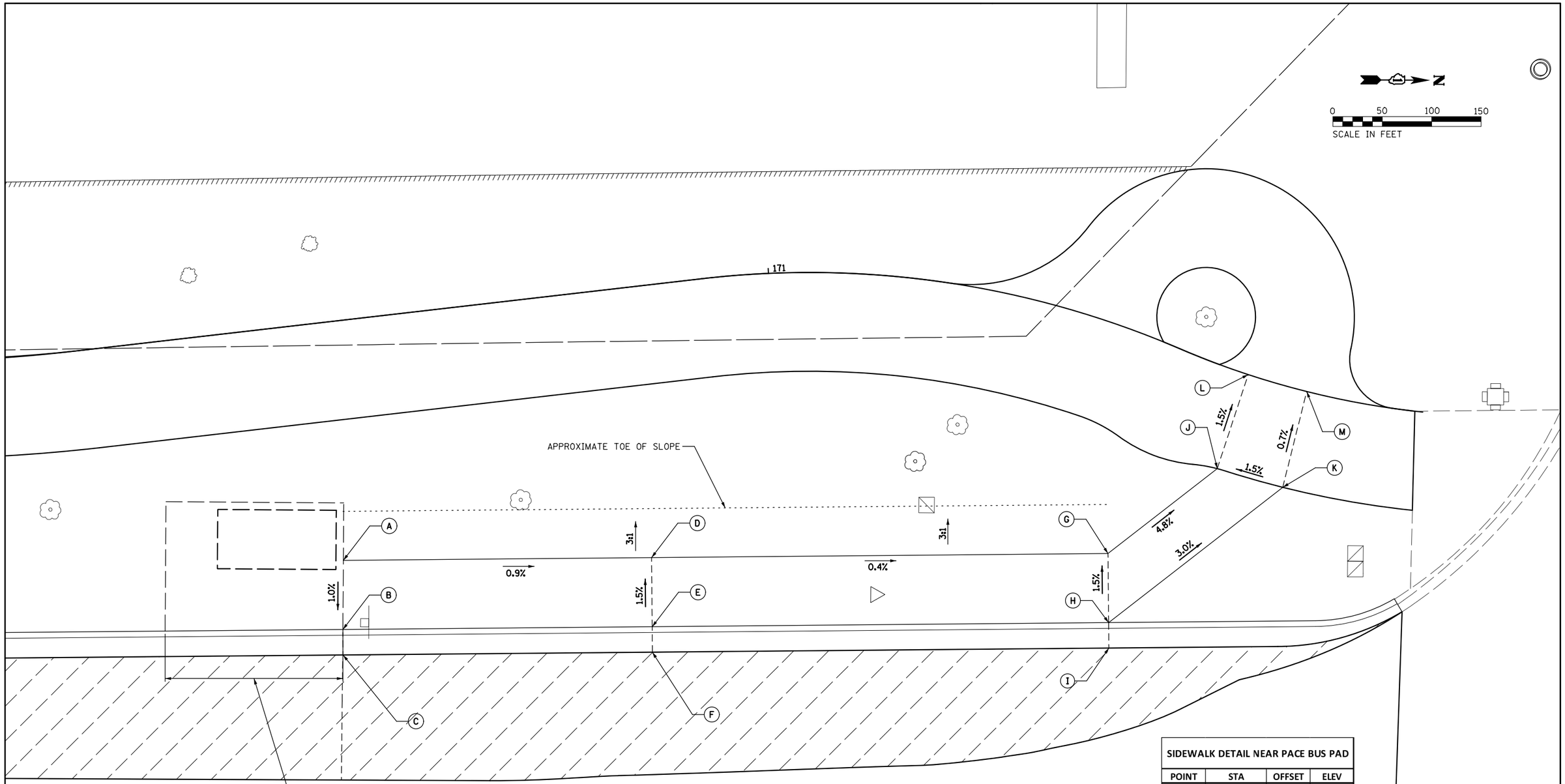
FILE NAME = N:\Kane County\170513\Civil\ADA_170513_06.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 5 | SHEET 6 OF 7 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	40
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



SIDEWALK DETAIL NEAR PACE BUS PAD

POINT	STA	OFFSET	ELEV
A	491+19.05	55.54' LT	806.08
B	491+18.75	48.54' LT	806.01
C	491+18.68	45.96' LT	805.64
D	491+50.25	54.73' LT	805.79
E	491+50.07	47.73' LT	805.90
F	491+50.00	45.15' LT	805.52
G	491+96.46	53.53' LT	805.62
H	491+96.27	46.53' LT	805.73
I	491+96.21	43.95' LT	805.35
J	492+07.80	61.73' LT	804.95
K	492+14.34	59.61' LT	805.05
L	492+11.25	71.14' LT	804.80
M	492+17.09	69.22' LT	804.98

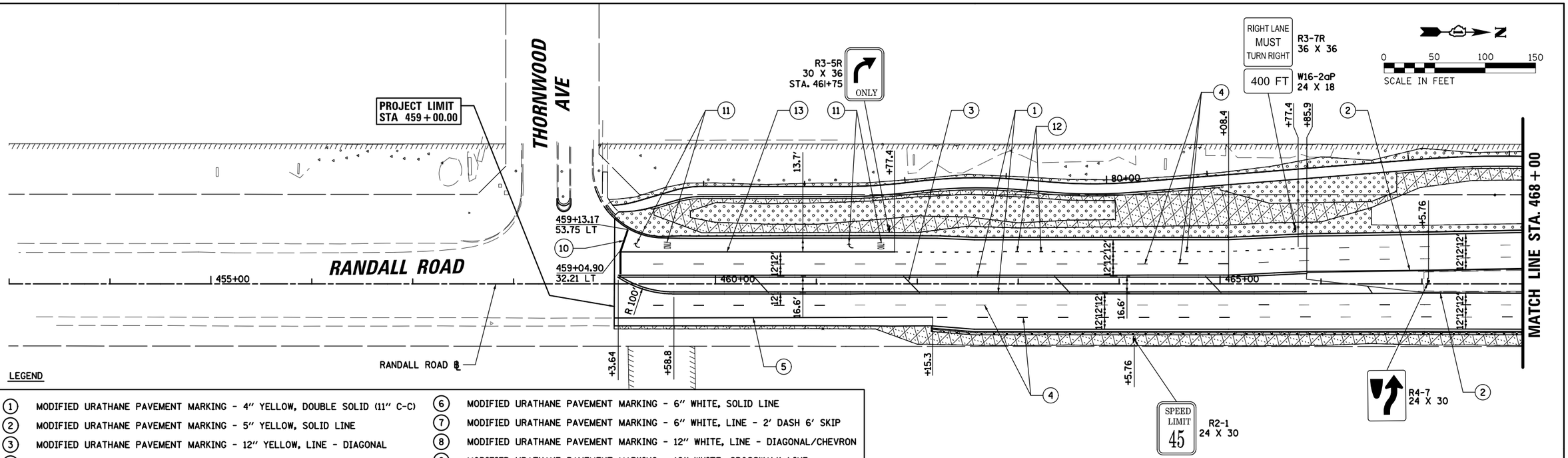
FILE NAME = N:\Kane County\170513\Civil\ADA_170513_07.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 10'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

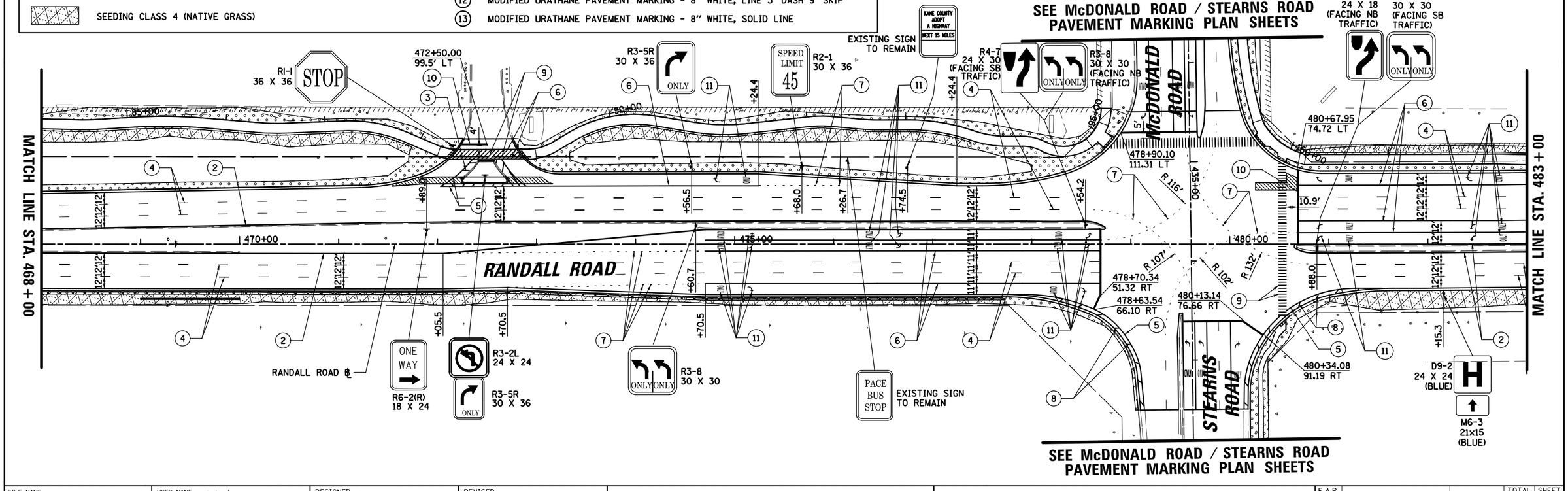
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK RAMP DETAILS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 5 | SHEET 7 OF 7 SHEETS | STA. N/A | TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	41
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			





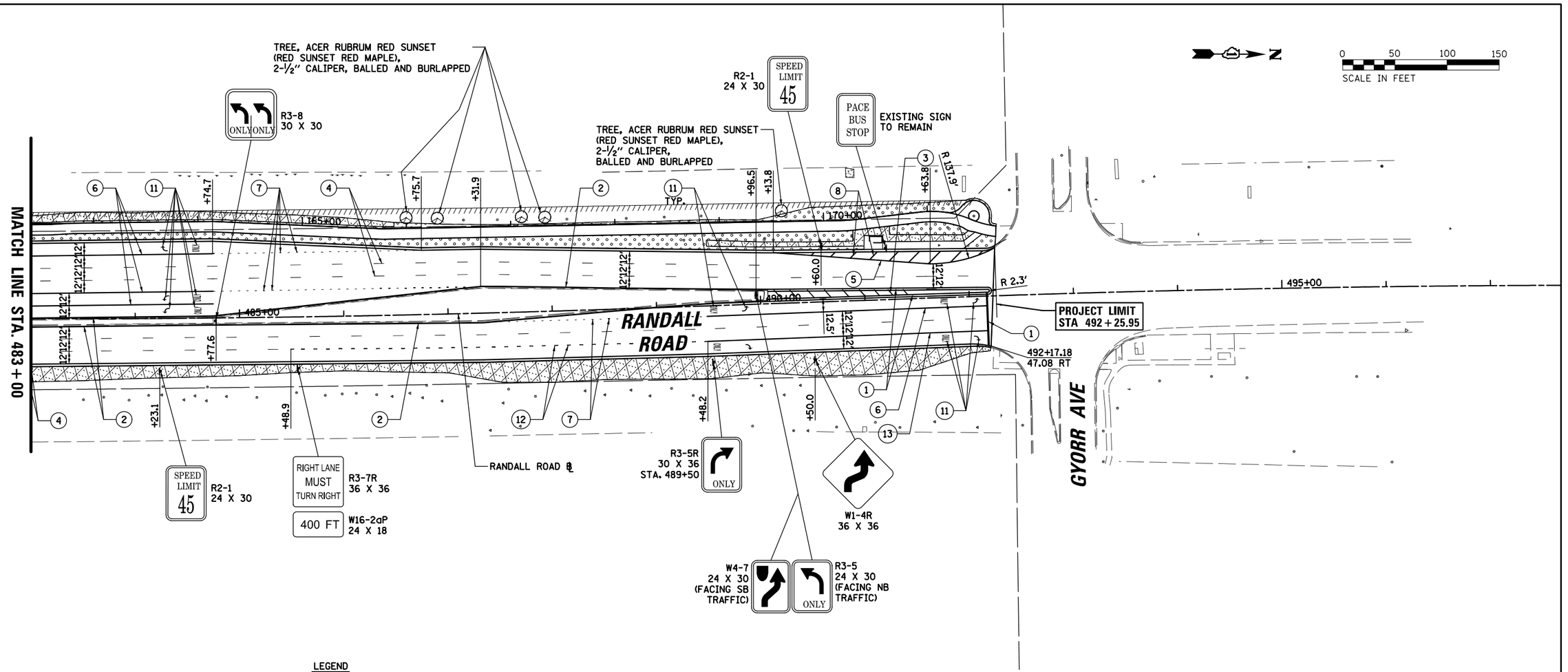
FILE NAME = N:\Kane County\170513\Civil\PMK_Randall_170513_01.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/13/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND LANDSCAPING PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 1 OF 3 SHEETS | STA. 459+20.30 TO STA. 483+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	42
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



LEGEND

(1)	MODIFIED URATHANE PAVEMENT MARKING - 4" YELLOW, DOUBLE SOLID (11" C-C)	(6)	MODIFIED URATHANE PAVEMENT MARKING - 6" WHITE, SOLID LINE
(2)	MODIFIED URATHANE PAVEMENT MARKING - 5" YELLOW, SOLID LINE	(7)	MODIFIED URATHANE PAVEMENT MARKING - 6" WHITE, LINE - 2' DASH 6' SKIP
(3)	MODIFIED URATHANE PAVEMENT MARKING - 12" YELLOW, LINE - DIAGONAL	(8)	MODIFIED URATHANE PAVEMENT MARKING - 12" WHITE, LINE - DIAGONAL/CHEVRON
(4)	MODIFIED URATHANE PAVEMENT MARKING - 4" WHITE, LINE - 10' DASH 30' SKIP	(9)	MODIFIED URATHANE PAVEMENT MARKING - 12" WHITE, CROSSWALK LINE
(5)	MODIFIED URATHANE PAVEMENT MARKING - 4" WHITE, SOLID LINE	(10)	MODIFIED URATHANE PAVEMENT MARKING - 24" WHITE, STOP BAR
	SEEDING CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)	(11)	MODIFIED URATHANE PAVEMENT MARKING - WHITE, LETTERS AND SYMBOLS
	SEEDING CLASS 4 (NATIVE GRASS)	(12)	MODIFIED URATHANE PAVEMENT MARKING - 8" WHITE, LINE 3' DASH 9' SKIP
		(13)	MODIFIED URATHANE PAVEMENT MARKING - 8" WHITE, SOLID LINE

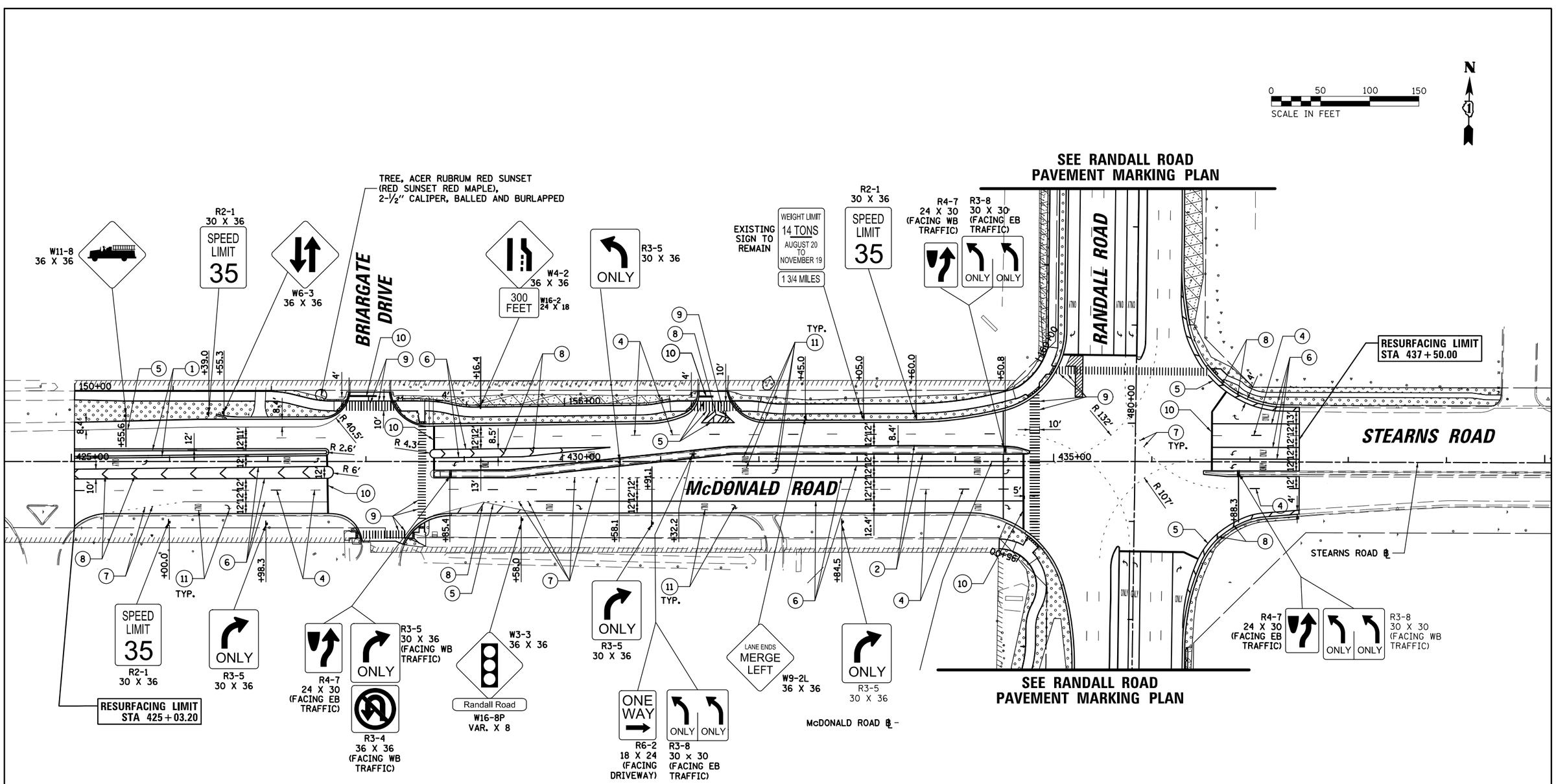
FILE NAME = N:\Kane County\170513\Civil\PMK_Randall_170513_02.sht	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND LANDSCAPING PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 2 OF 3 SHEETS | STA. 483+00.00 TO STA. 492+22.78

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	43
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



LEGEND

(1)	MODIFIED URATHANE PAVEMENT MARKING - 4" YELLOW, DOUBLE SOLID (11" C-C)
(2)	MODIFIED URATHANE PAVEMENT MARKING - 5" YELLOW, SOLID LINE
(3)	MODIFIED URATHANE PAVEMENT MARKING - 12" YELLOW, LINE - DIAGONAL
(4)	MODIFIED URATHANE PAVEMENT MARKING - 4" WHITE, LINE - 10' DASH 30' SKIP
(5)	MODIFIED URATHANE PAVEMENT MARKING - 4" WHITE, SOLID LINE
	SEEDING CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)
	SEEDING CLASS 4 (NATIVE GRASS)
(6)	MODIFIED URATHANE PAVEMENT MARKING - 6" WHITE, SOLID LINE
(7)	MODIFIED URATHANE PAVEMENT MARKING - 6" WHITE, LINE - 2' DASH 6' SKIP
(8)	MODIFIED URATHANE PAVEMENT MARKING - 12" WHITE, LINE - DIAGONAL/CHEVRON
(9)	MODIFIED URATHANE PAVEMENT MARKING - 12" WHITE, CROSSWALK LINE
(10)	MODIFIED URATHANE PAVEMENT MARKING - 24" WHITE, STOP BAR
(11)	MODIFIED URATHANE PAVEMENT MARKING - WHITE, LETTERS AND SYMBOLS
(12)	MODIFIED URATHANE PAVEMENT MARKING - 8" WHITE, LINE 3' DASH 9' SKIP
(13)	MODIFIED URATHANE PAVEMENT MARKING - 8" WHITE, SOLID LINE

FILE NAME = N:\Kane County\170513\Civil\PMK_McDonald_170513_03.sht	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND LANDSCAPING PLAN
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 50 | SHEET 3 OF 3 SHEETS | STA. 425+03.20 TO STA. 437+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	44
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED
CONTROLLER CABINET		
COMMUNICATION CABINET	CC	CC
MASTER CONTROLLER	MC	MC
MASTER MASTER CONTROLLER	MMC	MMC
UNINTERRUPTABLE POWER SUPPLY		
SERVICE INSTALLATION -(P) POLE MOUNTED	P	P
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	G GM	G GM
TELEPHONE CONNECTION	ET	T
STEEL MAST ARM ASSEMBLY AND POLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY		BM
WOOD POLE		
GUY WIRE		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD OPTICALLY PROGRAMMED	P P	P P
FLASHER INSTALLATION -(FS) SOLAR POWERED	F FS F FS	F FS F FS
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	APS	APS
RADAR DETECTION SENSOR	R	R
VIDEO DETECTION CAMERA	V	V
RADAR/VIDEO DETECTION ZONE		
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIMATION BEACON		
WIRELESS INTERCONNECT		
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR

ITEM	EXISTING	PROPOSED
HANDHOLE -SQUARE -ROUND		
HEAVY DUTY HANDHOLE -SQUARE -ROUND	H	H
DOUBLE HANDHOLE		
JUNCTION BOX		
RAILROAD CANTILEVER MAST ARM		
RAILROAD FLASHING SIGNAL		
RAILROAD CROSSING GATE		
RAILROAD CROSSBUCK		
RAILROAD CONTROLLER CABINET	RR	RR
UNDERGROUND CONDUIT (UC), GALVANIZED STEEL		
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		
SYSTEM ITEM	S	SP
INTERSECTION ITEM	I	IP
REMOVE ITEM		R
RELOCATE ITEM		RL
ABANDON ITEM		A
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF
MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF
SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF
DETECTOR LOOP, TYPE I		
PREFORMED DETECTOR LOOP	P P	P P
SAMPLING (SYSTEM) DETECTOR	S S	S S
INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS IS	IS IS
QUEUE AND SAMPLING (SYSTEM) DETECTOR	QS QS	QS QS
WIRELESS DETECTOR SENSOR	W	W
WIRELESS ACCESS POINT		

ITEM	EXISTING	PROPOSED
SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	P	P
SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	P RB	P RB
PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C D	C D
ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED	5	5
GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1*G	1*6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	1	1
COAXIAL CABLE	C	C
VENDOR CABLE	V	V
COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6*18	6*18
FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	12F 24F 36F	12F 24F 36F
GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	C M P S	C M P S

FILE NAME = ts05.dgn Default	USER NAME = leysa	DESIGNED - IP	REVISED -
		DRAWN - IP	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED - LP	REVISED -
	PLOT DATE = 9/29/2016	DATE - 9/29/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET 1 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	45
	TS-05	CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

LOOP DETECTOR NOTES

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

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

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

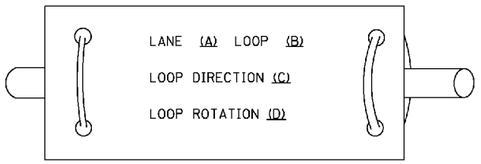
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

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

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

LOOP LEAD-IN CABLE TAG

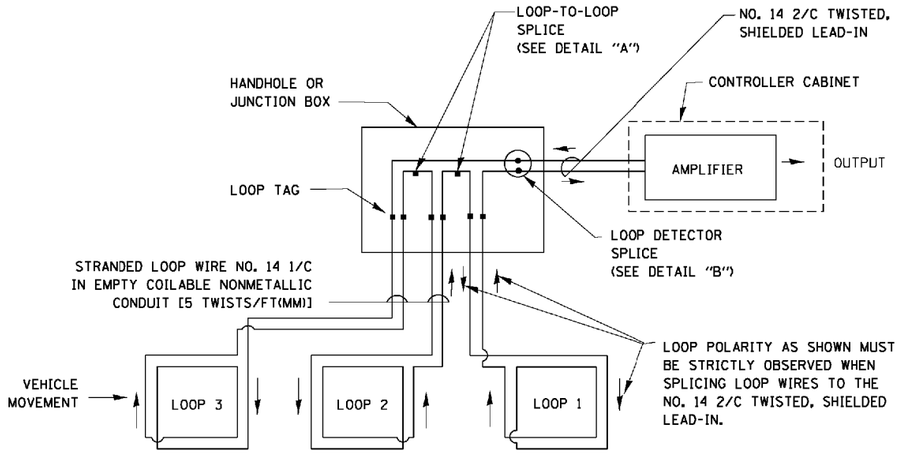


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

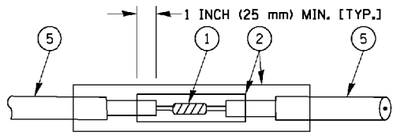
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

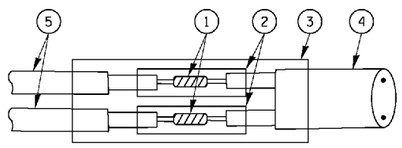


DETECTOR LOOP WIRING SCHEMATIC

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

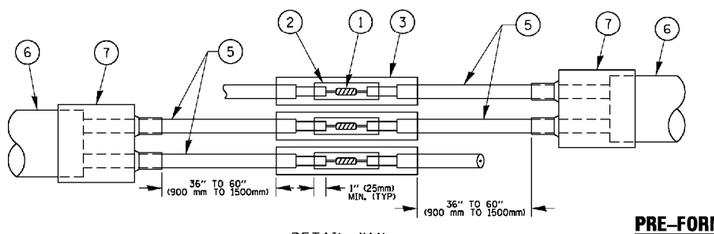


DETAIL "A"
LOOP-TO-LOOP SPLICE



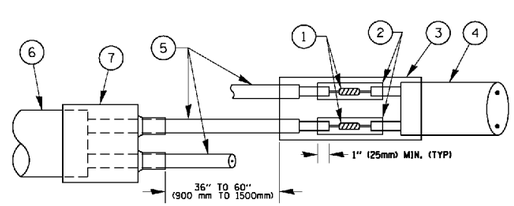
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



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. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

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

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

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

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

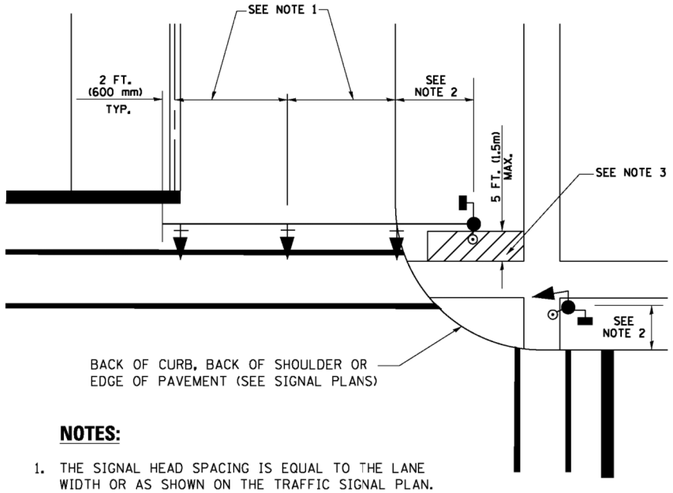
(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. ~~TYCO CBR-2 OR APPROVED EQUAL~~

FILE NAME = c:\pw_work\pwidot\footemj\d0128315\ts25.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - BCK	REVISED -					366	14-00214-28-CH	KANE	129	46
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -						TS-05	CONTRACT NO. 61F28		
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

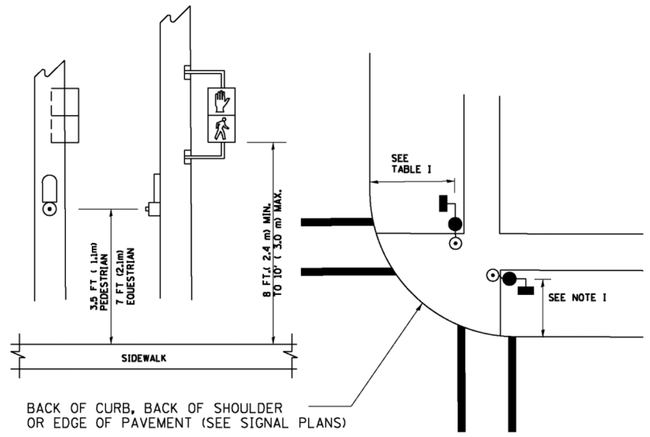
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

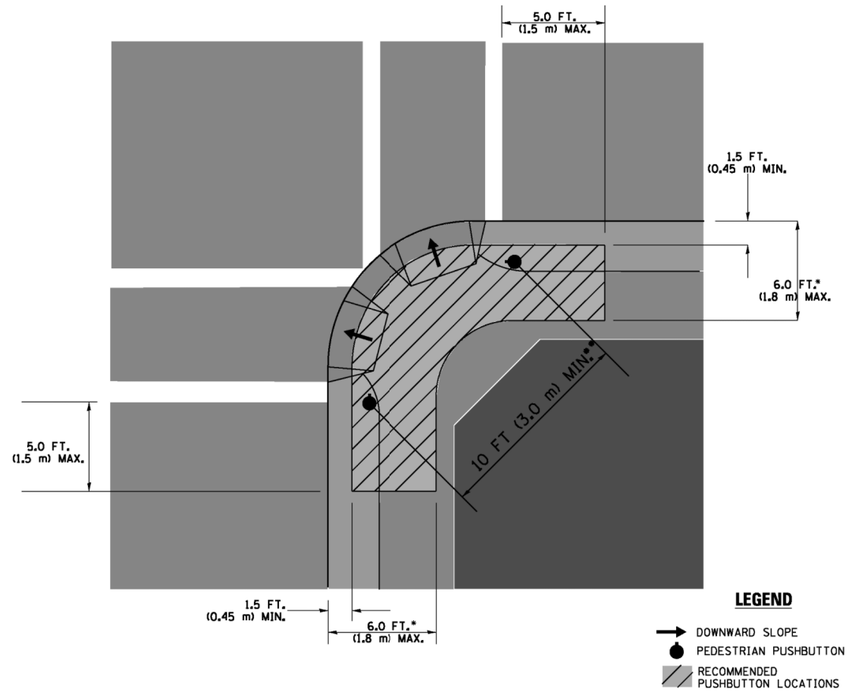
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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

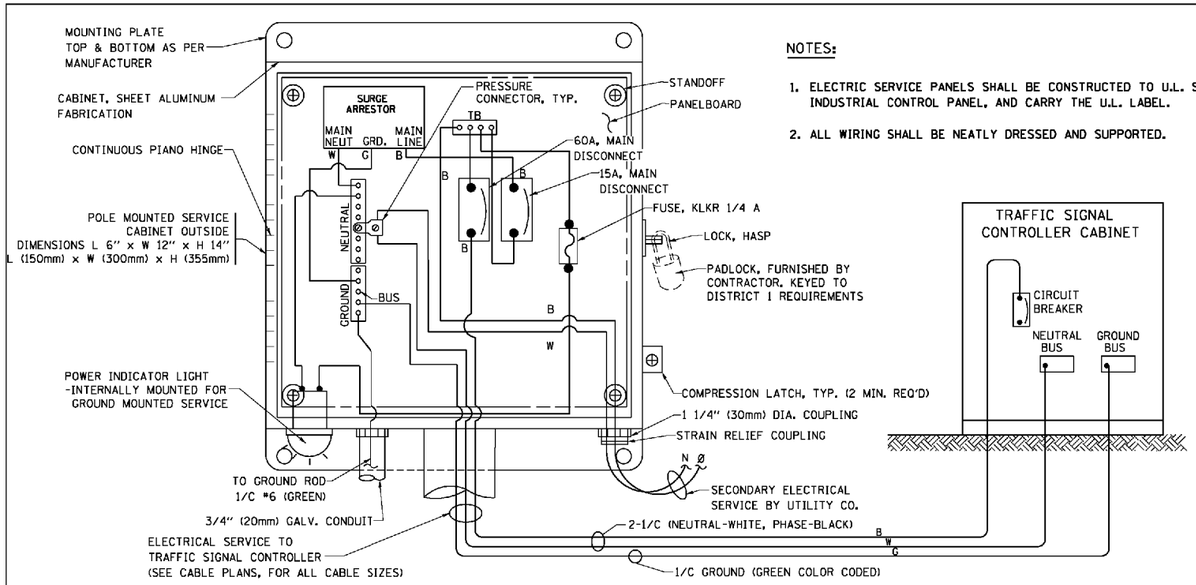
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	47
	TS-05	CONTRACT NO. 61F28		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

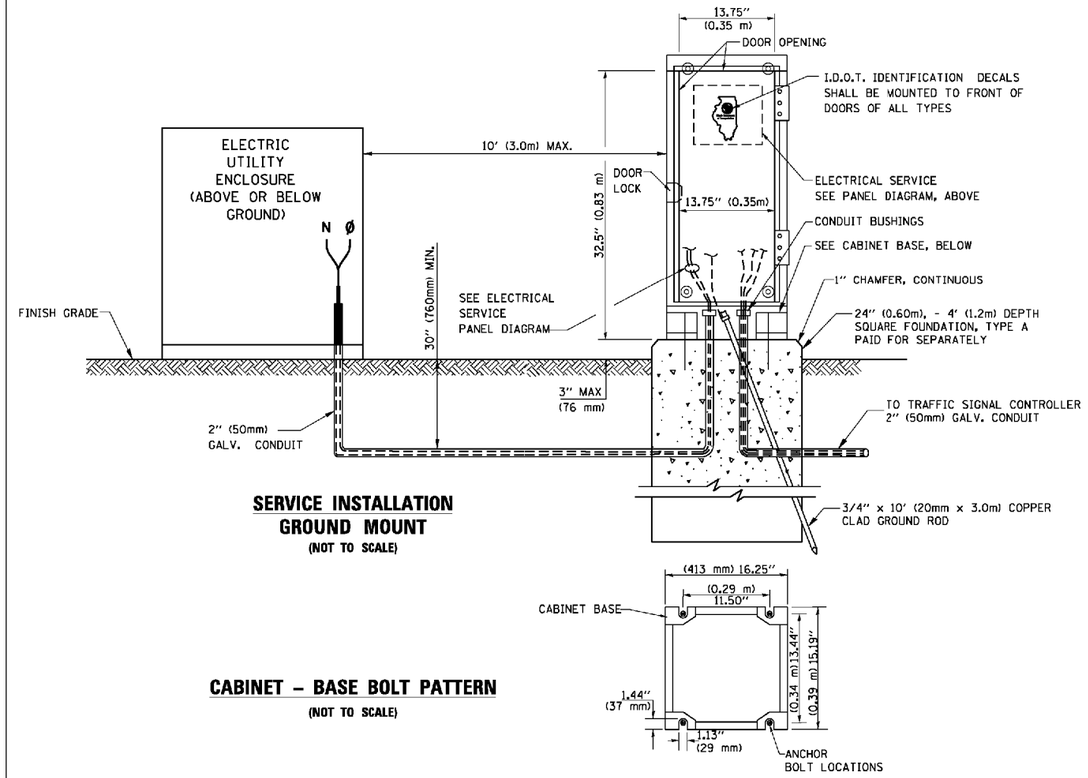
ts05.dgn 1/13/2014 1:16:29 PM User:footemj



NOTES:

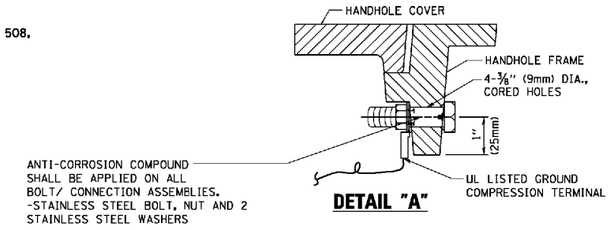
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

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

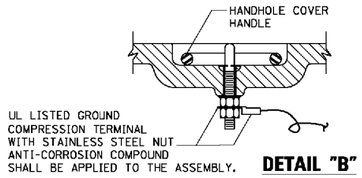


SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)

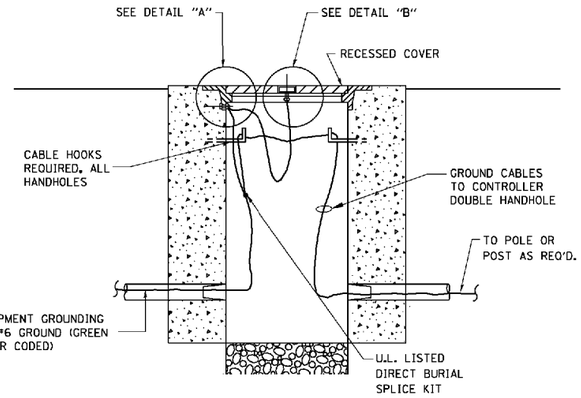
CABINET – BASE BOLT PATTERN
(NOT TO SCALE)



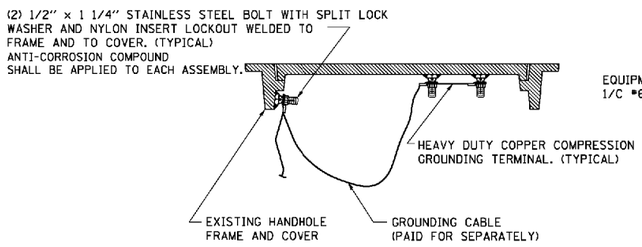
DETAIL "A"



DETAIL "B"



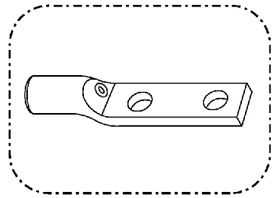
HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)



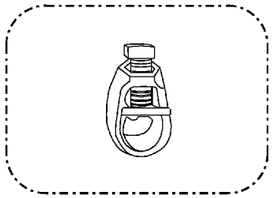
EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL
(NOT TO SCALE)

NOTES:
GROUNDING SYSTEM

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



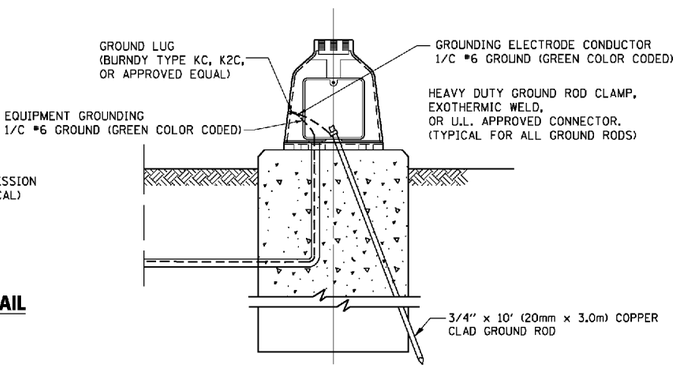
HEAVY-DUTY COMPRESSION TERMINAL
~~(BURNDY TYPE YGHA OR APPROVED EQUAL)~~



¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP
~~(BURNDY TYPE GRC OR APPROVED EQUAL)~~

NOTES:

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



MAST ARM POLE / POST-GROUNDING DETAIL
(NOT TO SCALE)

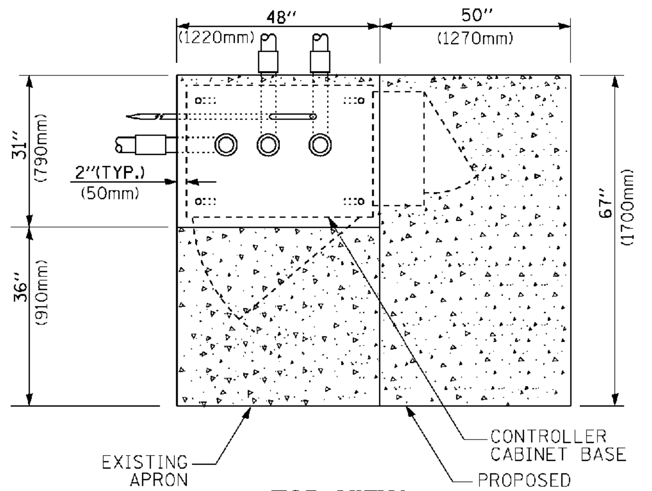
FILE NAME = c:\pw_work\pwidot\footemj\d0128315\ts25.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

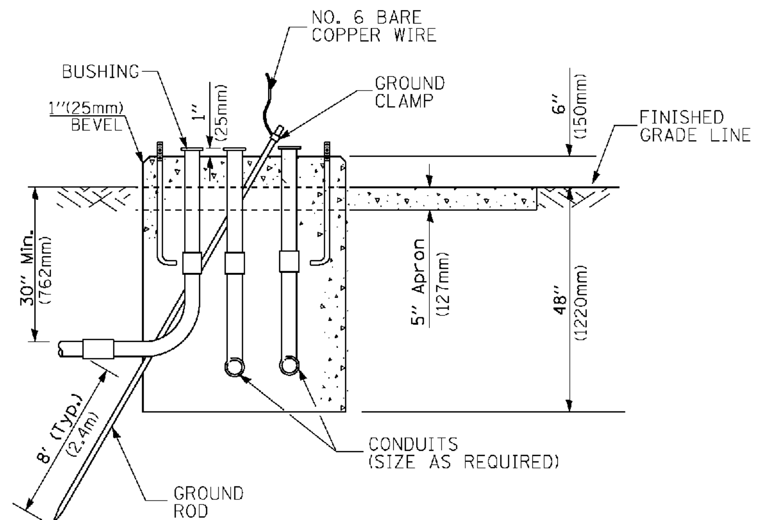
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

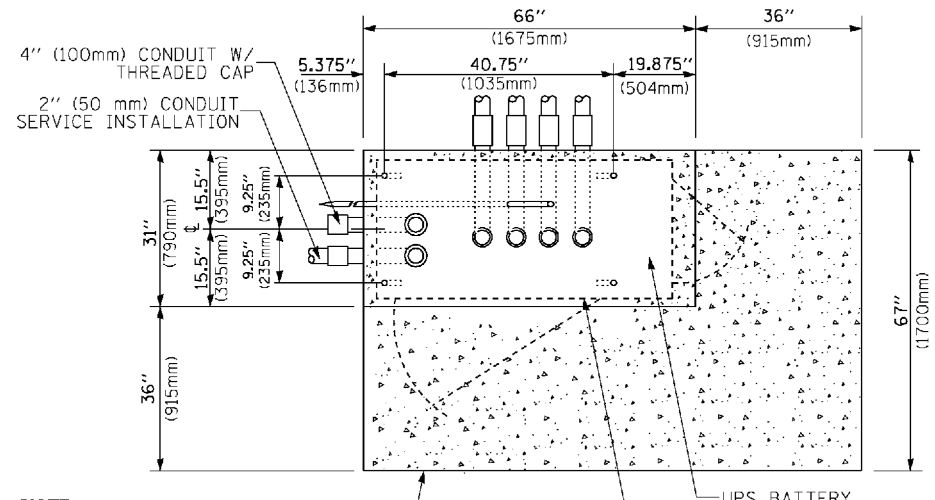
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	48
	TS-05	CONTRACT NO. 61F28		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TOP VIEW



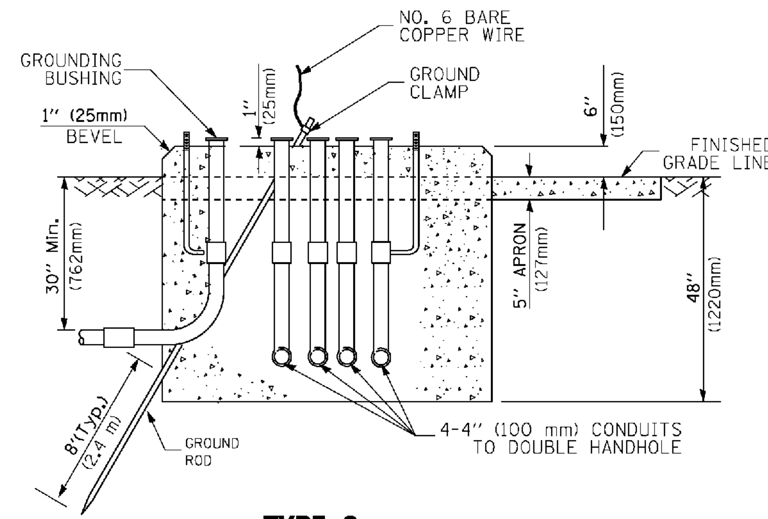
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



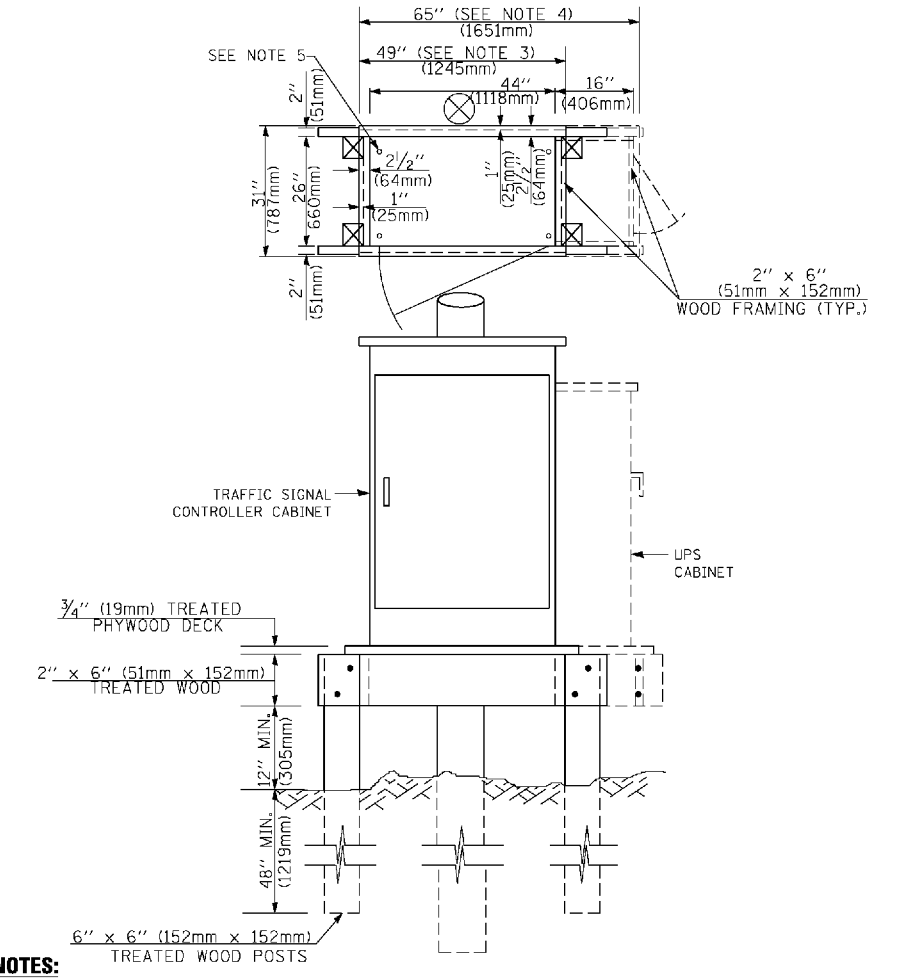
NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

TOP VIEW



TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS



NOTES:

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

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4′-0″ (1.2m)
TYPE C - CONTROLLER W/ UPS	4′-0″ (1.2m)
TYPE D - CONTROLLER	4′-0″ (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4′-0″ (1.2m)

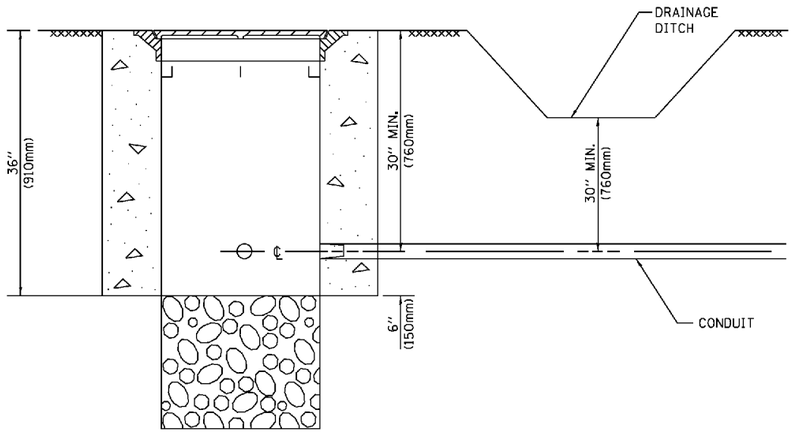
DEPTH OF FOUNDATION

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

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

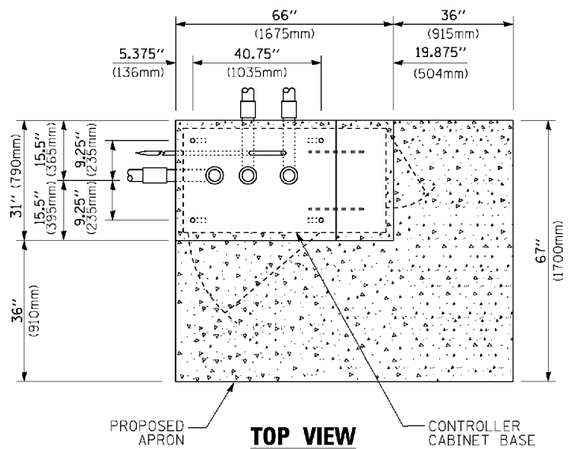


NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

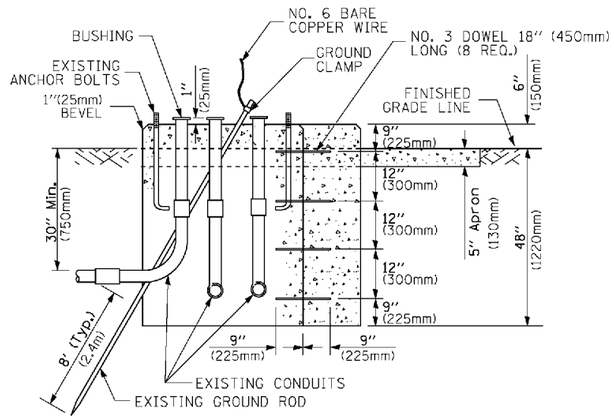
HANDHOLE WITH MINIMUM CONDUIT DEPTH

(NOT TO SCALE)



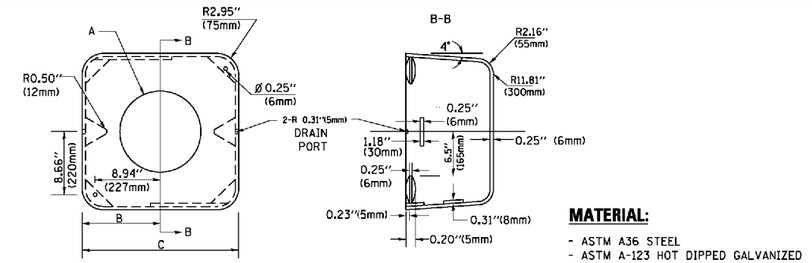
TOP VIEW

(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)



MATERIAL:

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

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

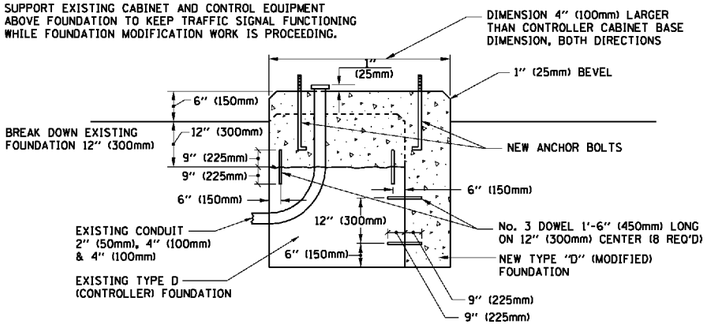
SHROUD

NOTES:

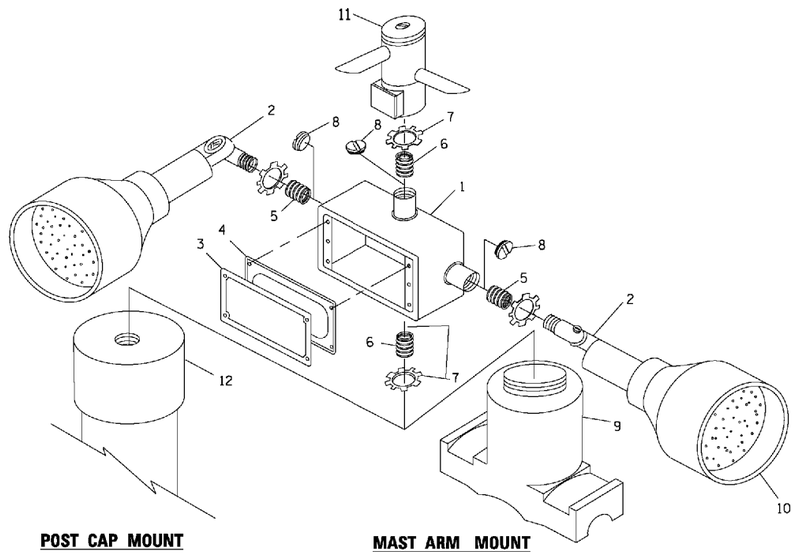
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE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

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



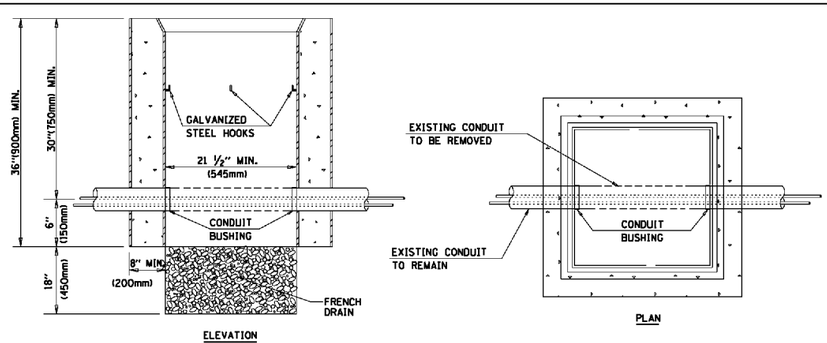
POST CAP MOUNT **MAST ARM MOUNT**

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

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



ELEVATION PLAN

NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

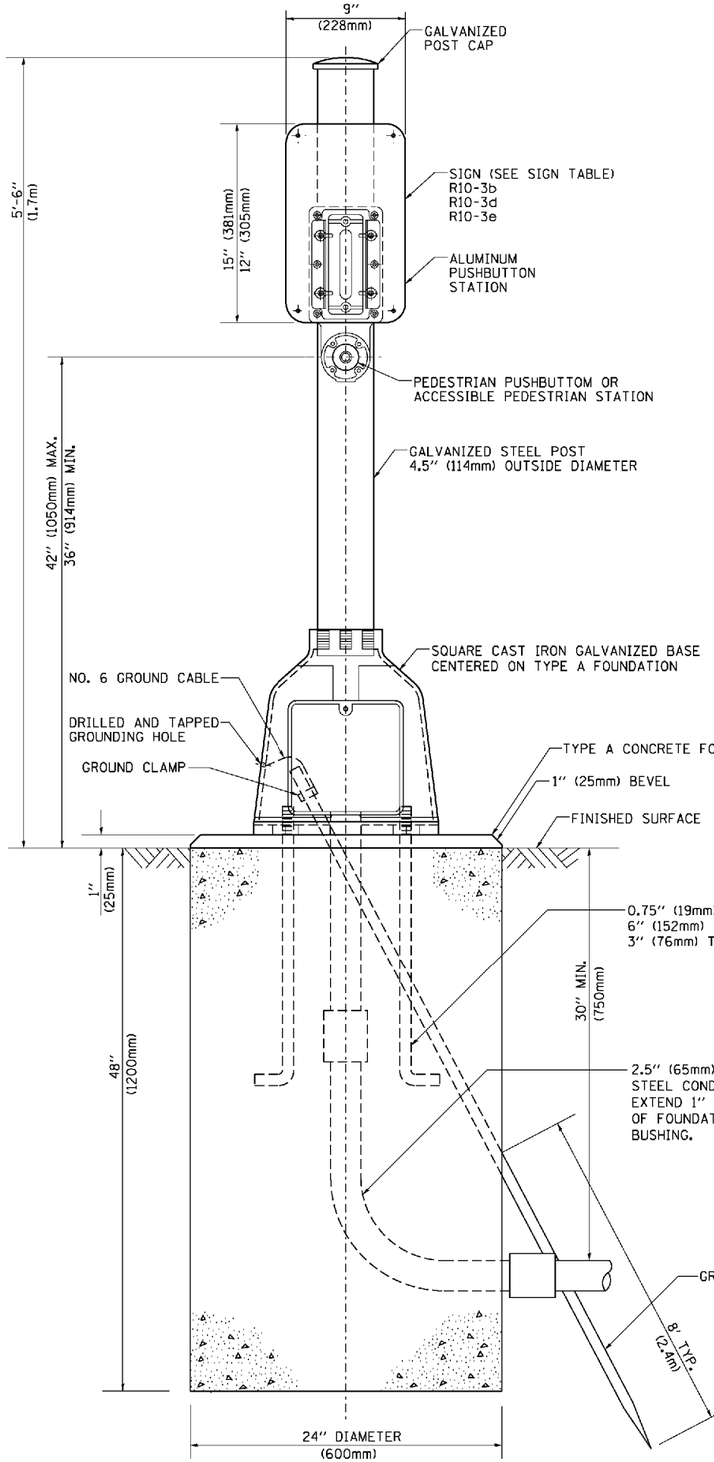
FILE NAME = c:\pw_work\pwidot\footemj\d0128315\ts25.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

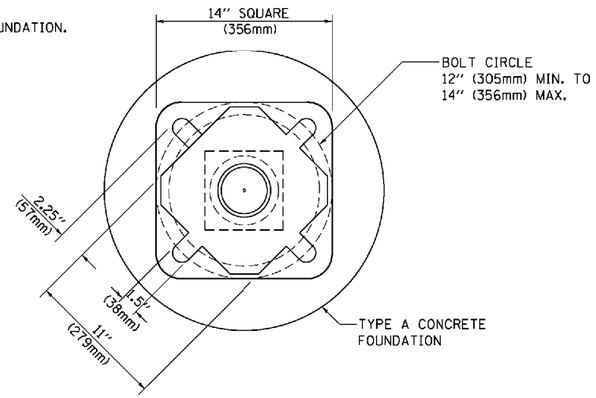
SCALE: NONE | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	50
	TS-05	CONTRACT NO. 61F28		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SIGN TABLE

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



BOLT PATTERN

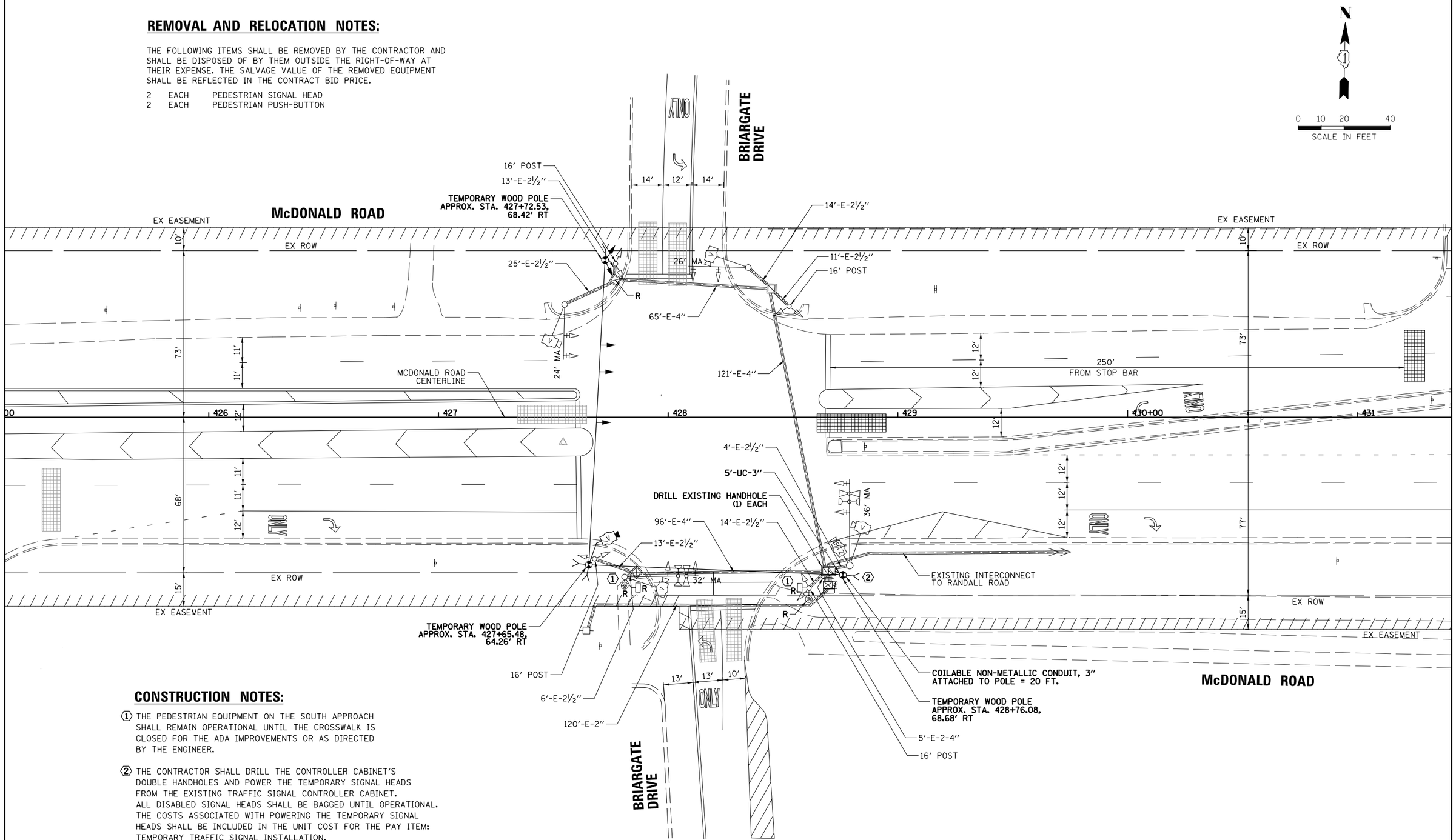
PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME = c:\pw_work\pwidot\footemj\d0128315\ts25.dgn	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GND	REVISED -					366	14-00214-28-CH	KANE	129	51
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -						TS-05	CONTRACT NO. 61F28		
	PLOT DATE = 1/13/2014	DATE - 10/1/2012	REVISED -		SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE 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.

2 EACH PEDESTRIAN SIGNAL HEAD
2 EACH PEDESTRIAN PUSH-BUTTON



CONSTRUCTION NOTES:

(1) THE PEDESTRIAN EQUIPMENT ON THE SOUTH APPROACH SHALL REMAIN OPERATIONAL UNTIL THE CROSSWALK IS CLOSED FOR THE ADA IMPROVEMENTS OR AS DIRECTED BY THE ENGINEER.

(2) THE CONTRACTOR SHALL DRILL THE CONTROLLER CABINET'S DOUBLE HANDHOLES AND POWER THE TEMPORARY SIGNAL HEADS FROM THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET. ALL DISABLED SIGNAL HEADS SHALL BE BAGGED UNTIL OPERATIONAL. THE COSTS ASSOCIATED WITH POWERING THE TEMPORARY SIGNAL HEADS SHALL BE INCLUDED IN THE UNIT COST FOR THE PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION.

FILE NAME = N:\Kane County\170513\Traffic\BRIARGATE_TS-sht-01_TMP.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

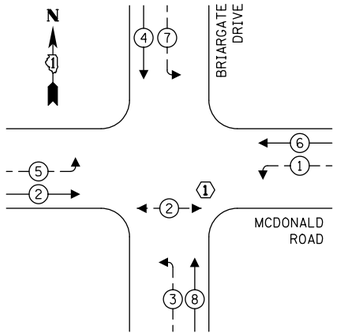
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
McDONALD ROAD AND BRIARGATE DRIVE

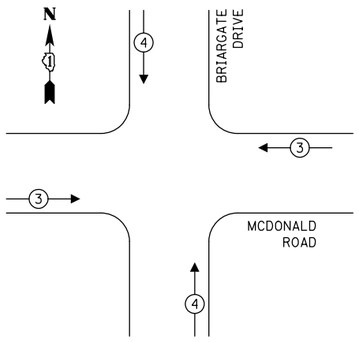
SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	52
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

TEMPORARY CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	17	11	50	93.5
(YELLOW)	17	20	5	17.0
(GREEN)	17	12	45	91.8
ARROW	18	10	10	18.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	535.3

ENERGY COSTS TO:

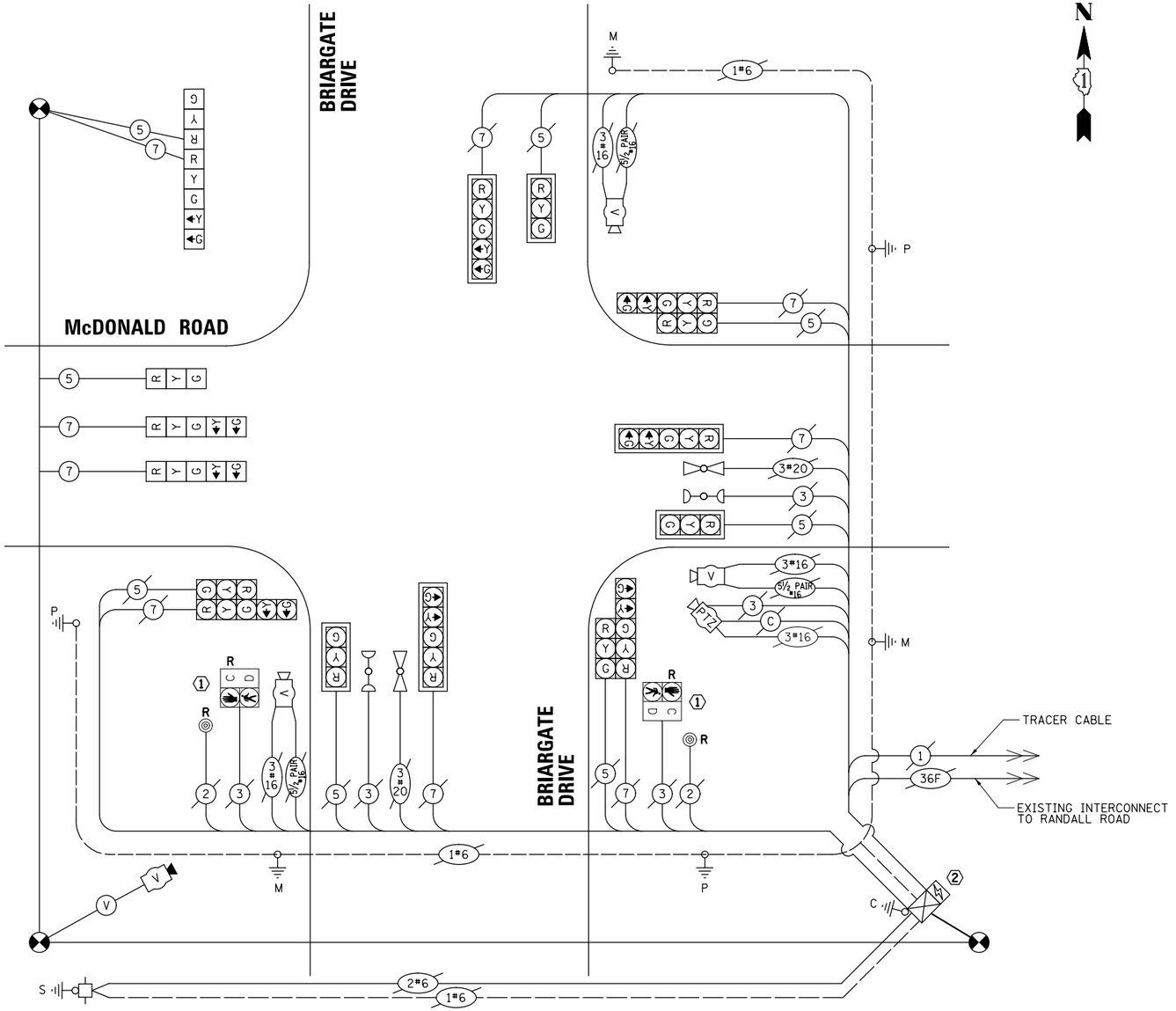
Kane County Division Of Transportation
41W011 Burlington Road
St. Charles, IL 60175

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: NEW PHONE
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

CONSTRUCTION NOTES:

(1) THE PEDESTRIAN EQUIPMENT ON THE SOUTH APPROACH SHALL REMAIN OPERATIONAL UNTIL THE CROSSWALK IS CLOSED FOR THE ADA IMPROVEMENTS OR AS DIRECTED BY THE ENGINEER.

(2) THE CONTRACTOR SHALL DRILL THE CONTROLLER CABINET'S DOUBLE HANDHOLES AND POWER THE TEMPORARY SIGNAL HEADS FROM THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET. ALL DISABLED SIGNAL HEADS SHALL BE BAGGED UNTIL OPERATIONAL. THE COSTS ASSOCIATED WITH POWERING THE TEMPORARY SIGNAL HEADS SHALL BE INCLUDED IN THE UNIT COST FOR THE PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION.



CABLE PLAN
(NOT TO SCALE)

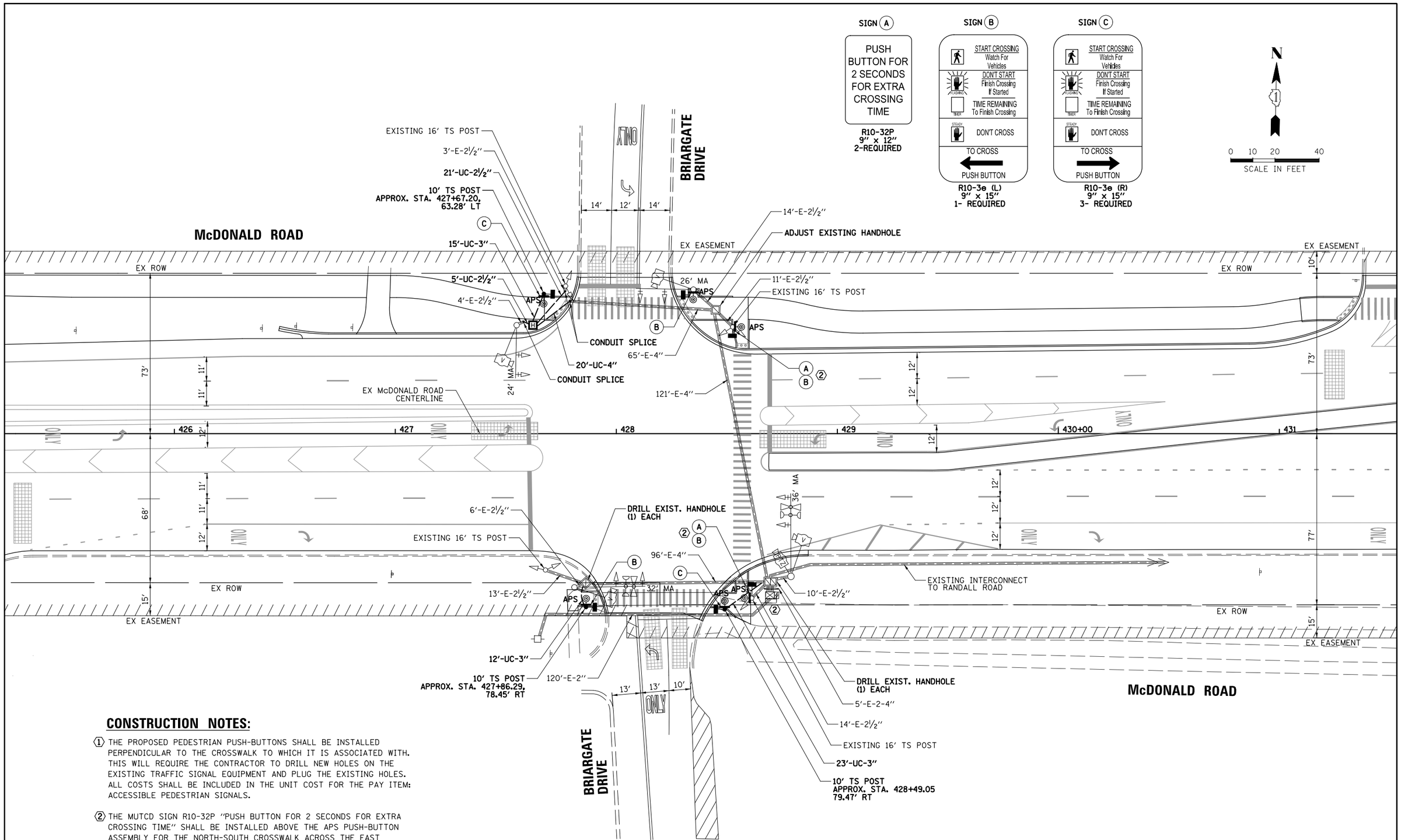
FILE NAME = N:\Kane County\170513\Traffic\BRIARGATE_TS-sht-02_TCD.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE MCDONALD ROAD AND BRIARGATE DRIVE

SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	53
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



CONSTRUCTION NOTES:

(1) THE PROPOSED PEDESTRIAN PUSH-BUTTONS SHALL BE INSTALLED PERPENDICULAR TO THE CROSSWALK TO WHICH IT IS ASSOCIATED WITH. THIS WILL REQUIRE THE CONTRACTOR TO DRILL NEW HOLES ON THE EXISTING TRAFFIC SIGNAL EQUIPMENT AND PLUG THE EXISTING HOLES. ALL COSTS SHALL BE INCLUDED IN THE UNIT COST FOR THE PAY ITEM: ACCESSIBLE PEDESTRIAN SIGNALS.

(2) THE MUTCD SIGN R10-32P "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" SHALL BE INSTALLED ABOVE THE APS PUSH-BUTTON ASSEMBLY FOR THE NORTH-SOUTH CROSSWALK ACROSS THE EAST APPROACH OF McDONALD ROAD. THE CONTROLLER SHALL BE PROGRAMMED TO ACTIVATE THE EXTENDED CROSSING FEATURE.

FILE NAME = N:\Kane County\170513\Traffic\BRIARGATE_TS-sht-03_MOD.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

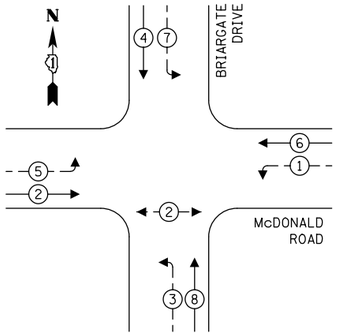
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN
MCDONALD ROAD AND BRIARGATE DRIVE

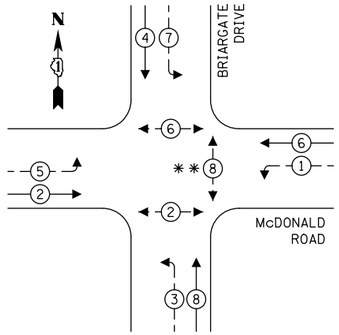
SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	54
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

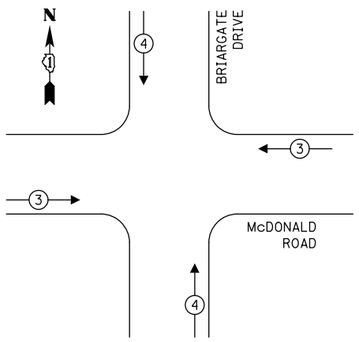
EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL — OVERLAP
- ** — EXTENDED PRESS FUNCTIONALITY

CONSTRUCTION NOTES:

(1) THE PROPOSED PEDESTRIAN PUSH-BUTTONS SHALL BE INSTALLED PERPENDICULAR TO THE CROSSWALK TO WHICH IT IS ASSOCIATED WITH. THIS WILL REQUIRE THE CONTRACTOR TO DRILL NEW HOLES ON THE EXISTING TRAFFIC SIGNAL EQUIPMENT AND PLUG THE EXISTING HOLES. ALL COSTS SHALL BE INCLUDED IN THE UNIT COST FOR THE PAY ITEM: ACCESSIBLE PEDESTRIAN SIGNAL.

(2) THE MUTCD SIGN R10-32P "PUSH-BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" SHALL BE INSTALLED ABOVE THE APS PUH-BUTTON ASSEMBLY FOR THE NORTH-SOUTH CROSSWALK ACROSS THE EAST APPROACH OF McDONALD ROAD. THE CONTROLLER SHALL BE PROGRAMMED TO ACTIVATE THE EXTENDED CROSSING FEATURE.

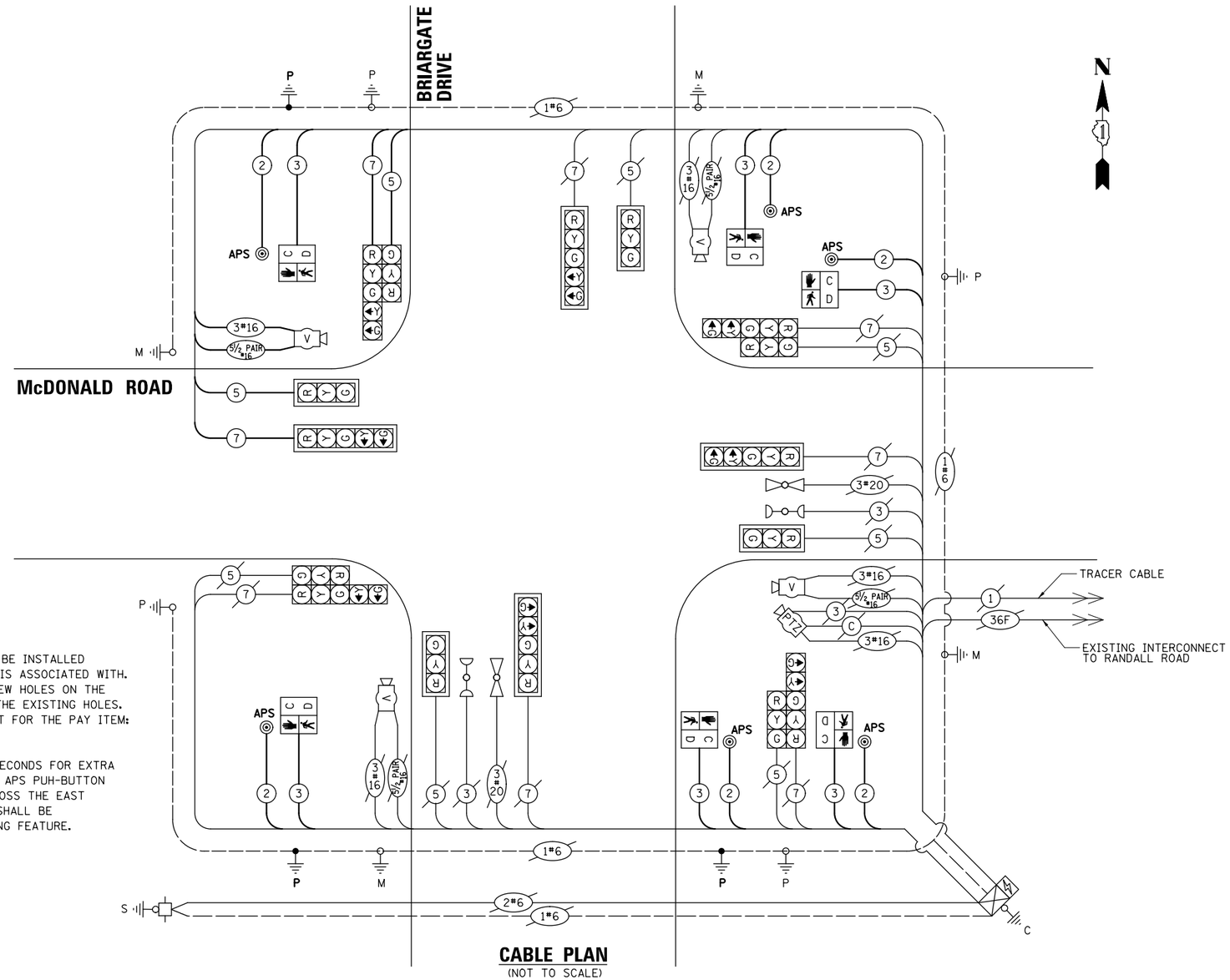
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88.0
(YELLOW)	16	20	5	16.0
(GREEN)	16	12	45	86.4
ARROW	16	10	10	16.0
PED. SIGNAL	6	20	100	120.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	601.4

ENERGY COSTS TO:

Kane County Division Of Transportation
41W011 Burlington Road
St. Charles, IL 60175

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: NEW PHONE
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	2
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	26
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	50
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	20
HEAVY-DUTY HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	864
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	906
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	572
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	581
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	268
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	3
CONCRETE FOUNDATION, TYPE A	FOOT	12
DRILL EXISTING HANDHOLE	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6

ITEM	UNIT	QUANTITY
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,395
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
ROD AND CLEAN EXISTING CONDUIT	FOOT	65
CONDUIT SPLICE	EACH	3
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 16 3 C	FOOT	316
HANDHOLE TO BE ADJUSTED WITH NEW FRAME AND COVER	EACH	1
ELECTRIC CABLE IN CONDUIT, COMMUNICATION	FOOT	316

FILE NAME = N:\Kane County\170513\Traffic\BRIARGATE_TS-sht-04_CAB.dgn	USER NAME = jmtrick	DESIGNED -	REVISED -
	PLOT SCALE = 40'	DRAWN -	REVISED -
default	PLOT DATE = 11/9/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
McDONALD ROAD AND BRIARGATE DRIVE

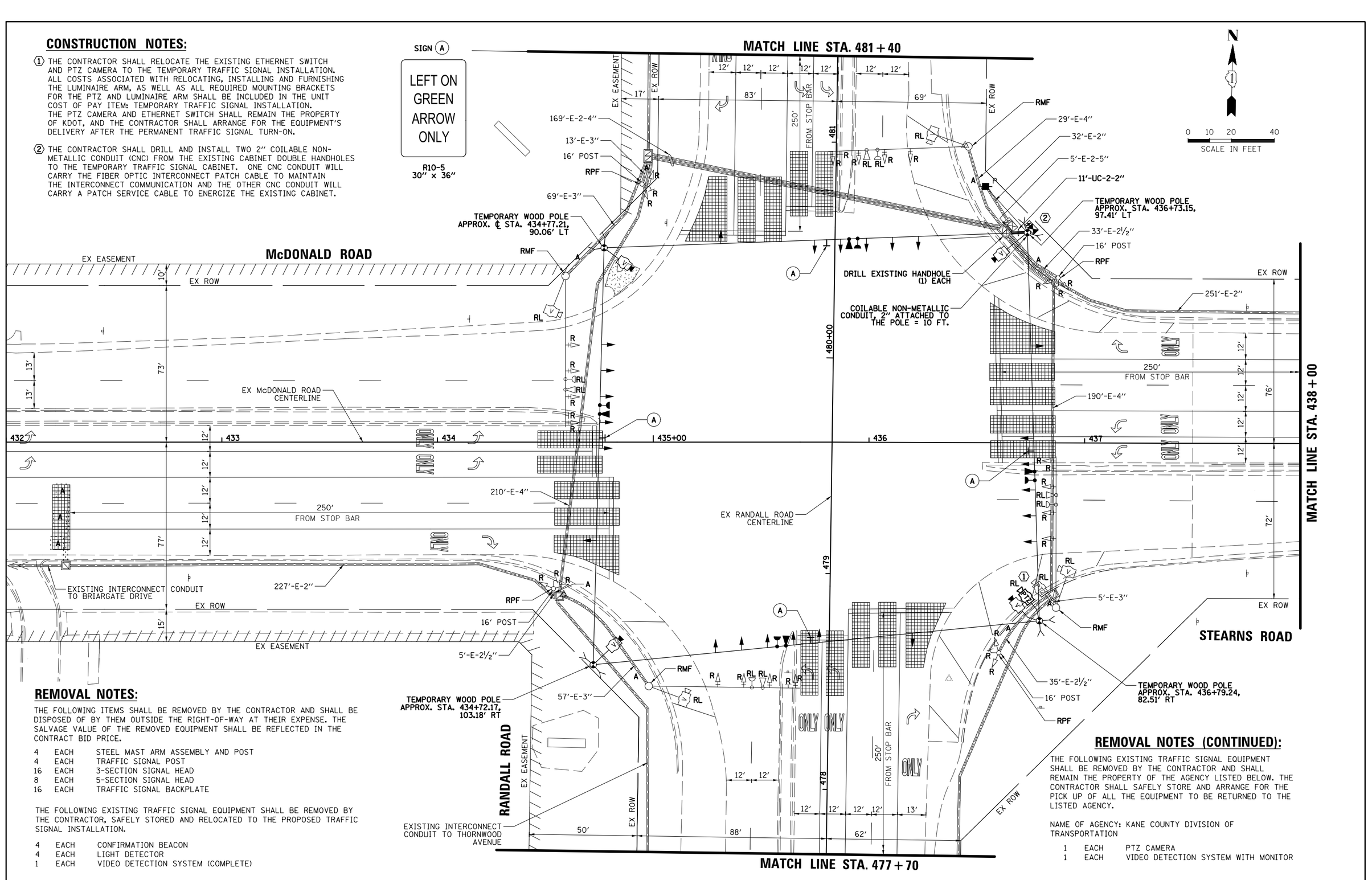
SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	55
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL RELOCATE THE EXISTING ETHERNET SWITCH AND PTZ CAMERA TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL COSTS ASSOCIATED WITH RELOCATING, INSTALLING AND FURNISHING THE LUMINAIRE ARM, AS WELL AS ALL REQUIRED MOUNTING BRACKETS FOR THE PTZ AND LUMINAIRE ARM SHALL BE INCLUDED IN THE UNIT COST OF PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE PTZ CAMERA AND ETHERNET SWITCH SHALL REMAIN THE PROPERTY OF KDOT, AND THE CONTRACTOR SHALL ARRANGE FOR THE EQUIPMENT'S DELIVERY AFTER THE PERMANENT TRAFFIC SIGNAL TURN-ON.

2. THE CONTRACTOR SHALL DRILL AND INSTALL TWO 2" COILABLE NON-METALLIC CONDUIT (CNC) FROM THE EXISTING CABINET DOUBLE HANDHOLES TO THE TEMPORARY TRAFFIC SIGNAL CABINET. ONE CNC CONDUIT WILL CARRY THE FIBER OPTIC INTERCONNECT PATCH CABLE TO MAINTAIN THE INTERCONNECT COMMUNICATION AND THE OTHER CNC CONDUIT WILL CARRY A PATCH SERVICE CABLE TO ENERGIZE THE EXISTING CABINET.



REMOVAL NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE 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	STEEL MAST ARM ASSEMBLY AND POST
4	EACH	TRAFFIC SIGNAL POST
16	EACH	3-SECTION SIGNAL HEAD
8	EACH	5-SECTION SIGNAL HEAD
16	EACH	TRAFFIC SIGNAL BACKPLATE

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

4	EACH	CONFIRMATION BEACON
4	EACH	LIGHT DETECTOR
1	EACH	VIDEO DETECTION SYSTEM (COMPLETE)

REMOVAL NOTES (CONTINUED):

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 THE PICK UP OF ALL THE EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY.

NAME OF AGENCY: KANE COUNTY DIVISION OF TRANSPORTATION

1	EACH	PTZ CAMERA
1	EACH	VIDEO DETECTION SYSTEM WITH MONITOR

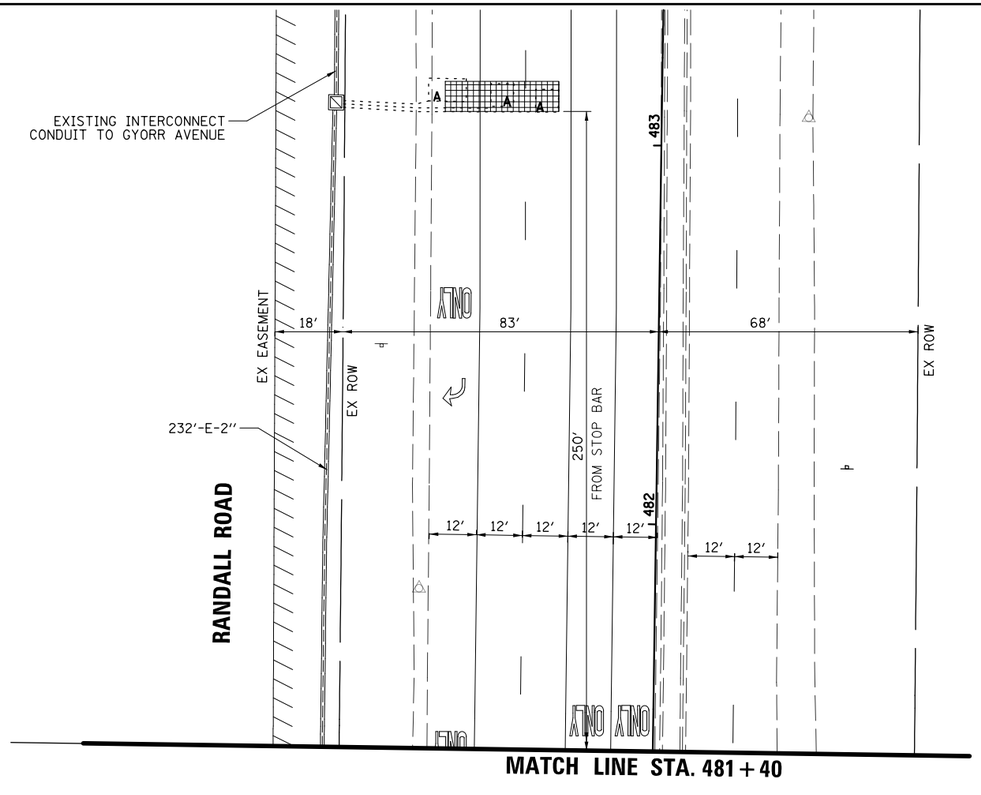
FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-01_TMP.dgn	USER NAME = jsstrick	DESIGNED -	REVISED -
	PLOT SCALE = 40'	DRAWN -	REVISED -
default	PLOT DATE = 11/9/2018	CHECKED -	REVISED -
		DATE -	REVISED -

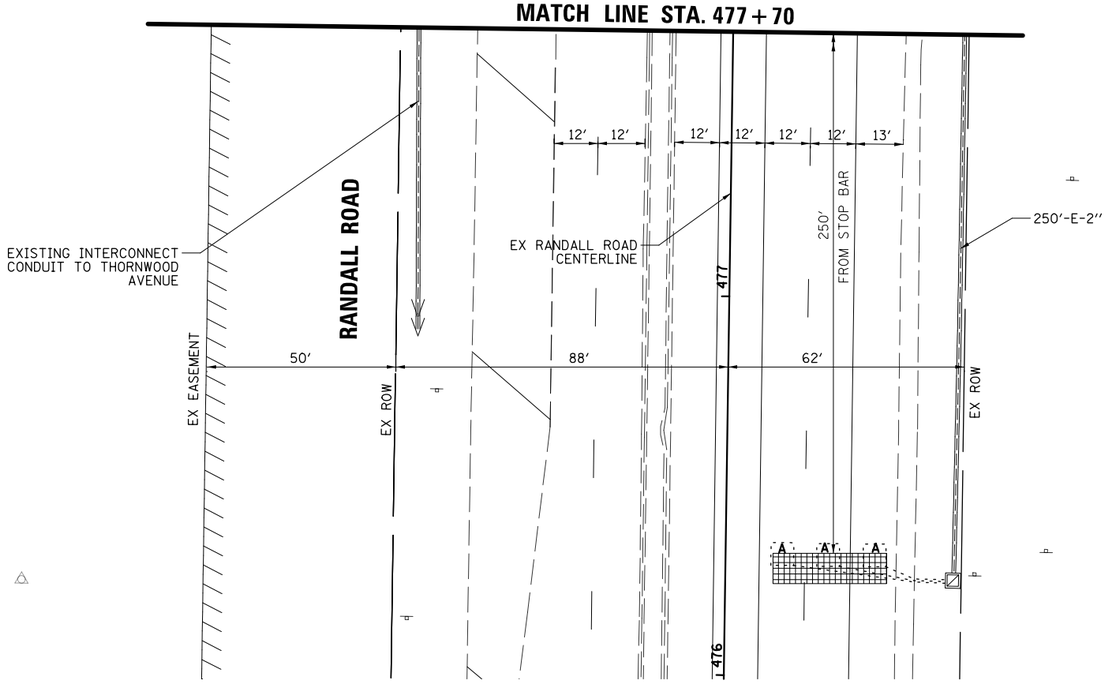
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

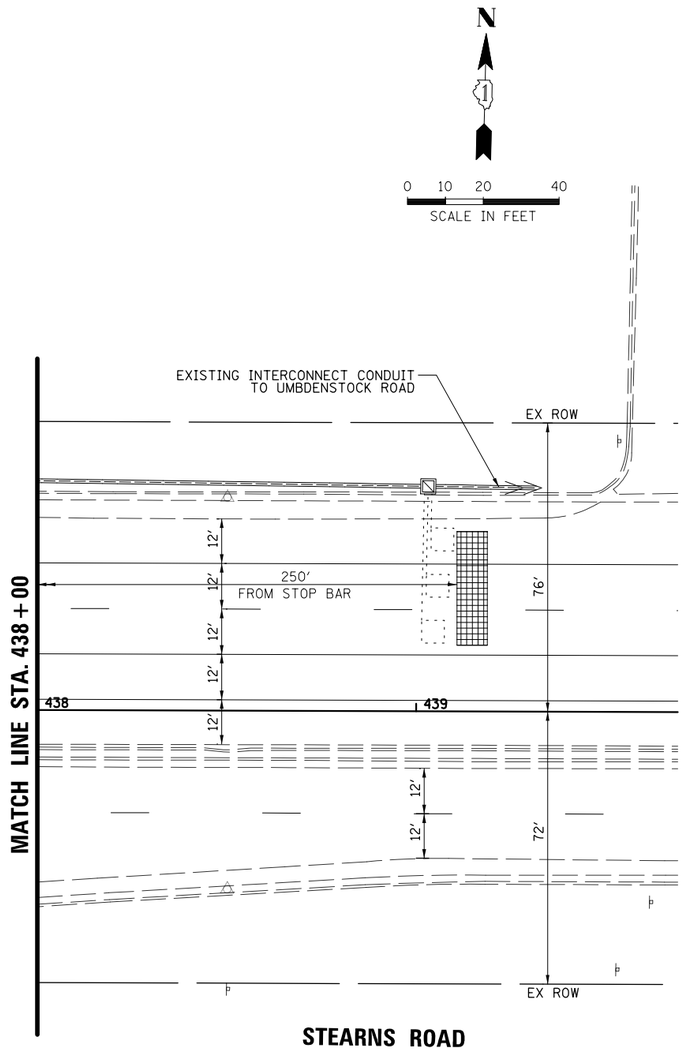
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	56
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		







FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-02_TMP.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40′	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

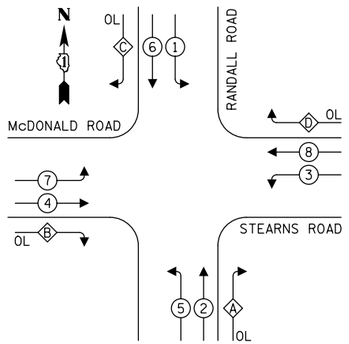
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVAL PLAN
McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD

SCALE: 1″ = 40′ | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	57
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

TEMPORARY CONTROLLER SEQUENCE



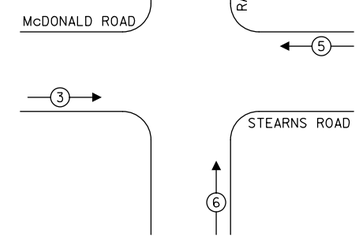
LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



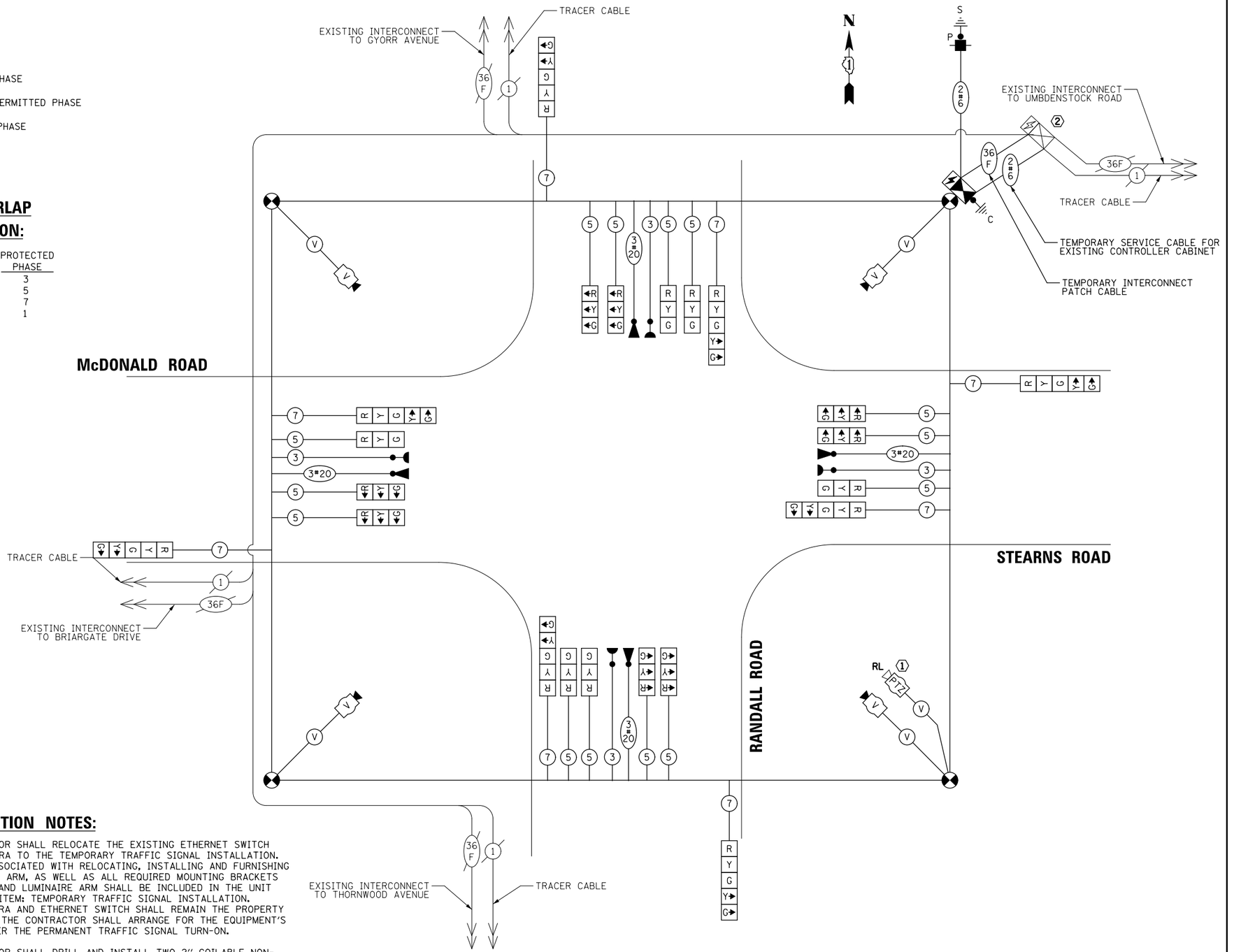
TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	22	11	50	121.0
(YELLOW)	22	20	5	22.0
(GREEN)	22	12	45	118.8
ARROW	16	10	10	16.0
PED. SIGNAL	-	20	100	-
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	536.8

ENERGY COSTS TO:

Kane County Division Of Transportation
41W011 Burlington Road
St. Charles, IL 60175

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: NEW PHONE
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---



TEMPORARY CABLE PLAN

(NOT TO SCALE)

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL RELOCATE THE EXISTING ETHERNET SWITCH AND PTZ CAMERA TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. ALL COSTS ASSOCIATED WITH RELOCATING, INSTALLING AND FURNISHING THE LUMINAIRE ARM, AS WELL AS ALL REQUIRED MOUNTING BRACKETS FOR THE PTZ AND LUMINAIRE ARM SHALL BE INCLUDED IN THE UNIT COST OF PAY ITEM: TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE PTZ CAMERA AND ETHERNET SWITCH SHALL REMAIN THE PROPERTY OF KDOT, AND THE CONTRACTOR SHALL ARRANGE FOR THE EQUIPMENT'S DELIVERY AFTER THE PERMANENT TRAFFIC SIGNAL TURN-ON.

2. THE CONTRACTOR SHALL DRILL AND INSTALL TWO 2" COILABLE NON-METALLIC CONDUIT (CNC) FROM THE EXISTING CABINET DOUBLE HANDHOLES TO THE TEMPORARY TRAFFIC SIGNAL CABINET. ONE CNC CONDUIT WILL CARRY THE FIBER OPTIC INTERCONNECT PATCH CABLE TO MAINTAIN THE INTERCONNECT COMMUNICATION AND THE OTHER CNC CONDUIT WILL CARRY A PATCH SERVICE CABLE TO ENERGIZE THE EXISTING CABINET.

FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-03_TCB.dgn	USER NAME = jstrick	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD
	PLOT SCALE = 40'	DRAWN -	REVISED -		SCALE: 1" = 40' SHEET OF SHEETS STA. TO STA.
default	PLOT DATE = 11/9/2018	CHECKED -	REVISED -		
		DATE -	REVISED -		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	58
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

CONSTRUCTION NOTES:

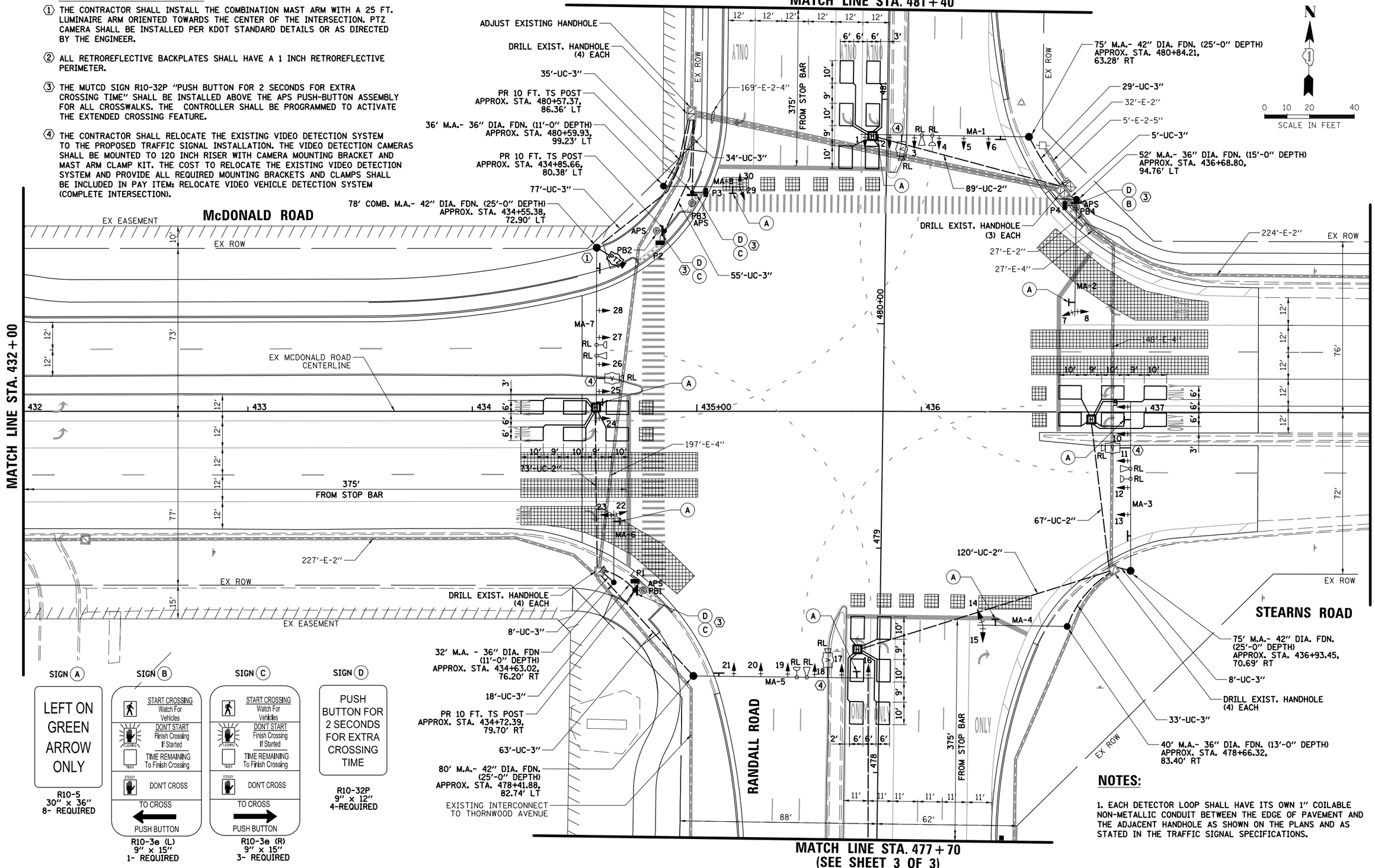
1. THE CONTRACTOR SHALL INSTALL THE COMBINATION MAST ARM WITH A 25 FT. LUMINAIRE ARM ORIENTED TOWARDS THE CENTER OF THE INTERSECTION. PTZ CAMERA SHALL BE INSTALLED PER KDOT STANDARD DETAILS OR AS DIRECTED BY THE ENGINEER.

2. ALL RETROREFLECTIVE BACKPLATES SHALL HAVE A 1 INCH RETROREFLECTIVE PERIMETER.

3. THE MUTCD SIGN R10-32P "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" SHALL BE INSTALLED ABOVE THE APS PUSH-BUTTON ASSEMBLY FOR ALL CROSSWALKS. THE CONTROLLER SHALL BE PROGRAMMED TO ACTIVATE THE EXTENDED CROSSING FEATURE.

4. THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION SYSTEM TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE VIDEO DETECTION CAMERAS SHALL BE MOUNTED TO 120 INCH RISER WITH CAMERA MOUNTING BRACKET AND MAST ARM CLAMP KIT. THE COST TO RELOCATE THE EXISTING VIDEO DETECTION SYSTEM AND PROVIDE ALL REQUIRED MOUNTING BRACKETS AND CLAMPS SHALL BE INCLUDED IN PAY ITEM: RELOCATE VIDEO VEHICLE DETECTION SYSTEM (COMPLETE INTERSECTION).

(SEE SHEET 3 OF 3)
MATCH LINE STA. 481+40



SIGN (A)

LEFT ON GREEN ARROW ONLY

R10-5
30" x 36"
8- REQUIRED

SIGN (B)

START CROSSING Watch For Vehicles
DON'T START Finish Crossing If Started
TIME REMAINING To Finish Crossing
DON'T CROSS
TO CROSS
PUSH BUTTON

R10-3e (L)
9" x 15"
1- REQUIRED

SIGN (C)

START CROSSING Watch For Vehicles
DON'T START Finish Crossing If Started
TIME REMAINING To Finish Crossing
DON'T CROSS
TO CROSS
PUSH BUTTON

R10-3e (R)
9" x 15"
3- REQUIRED

SIGN (D)

PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME

R10-32P
9" x 12"
4-REQUIRED

NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

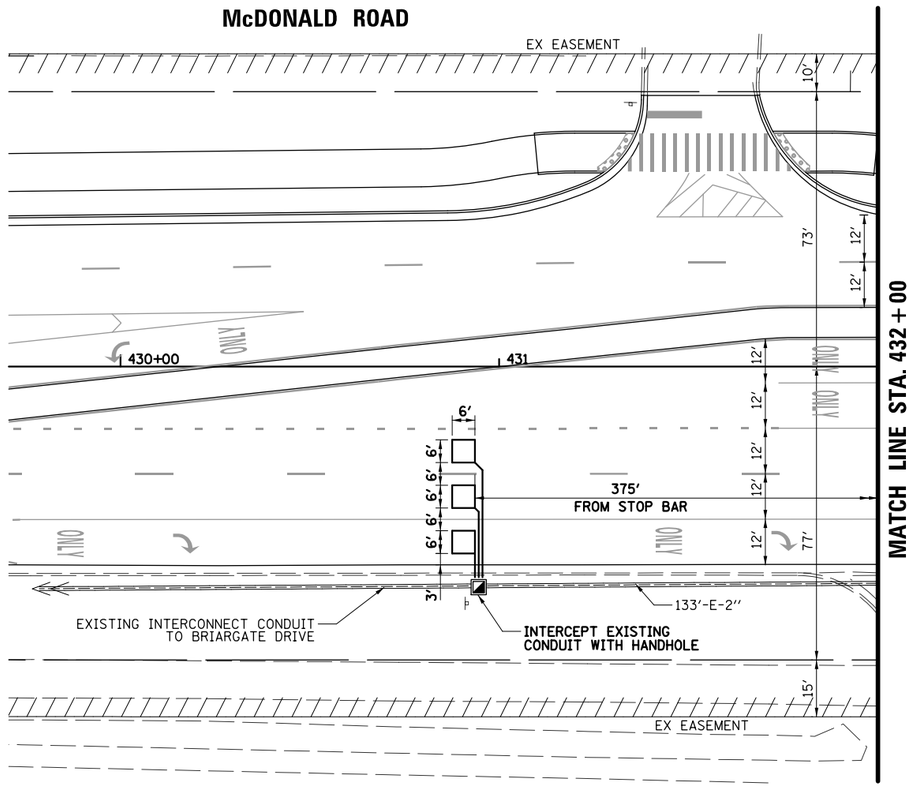
FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-04_MOD.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

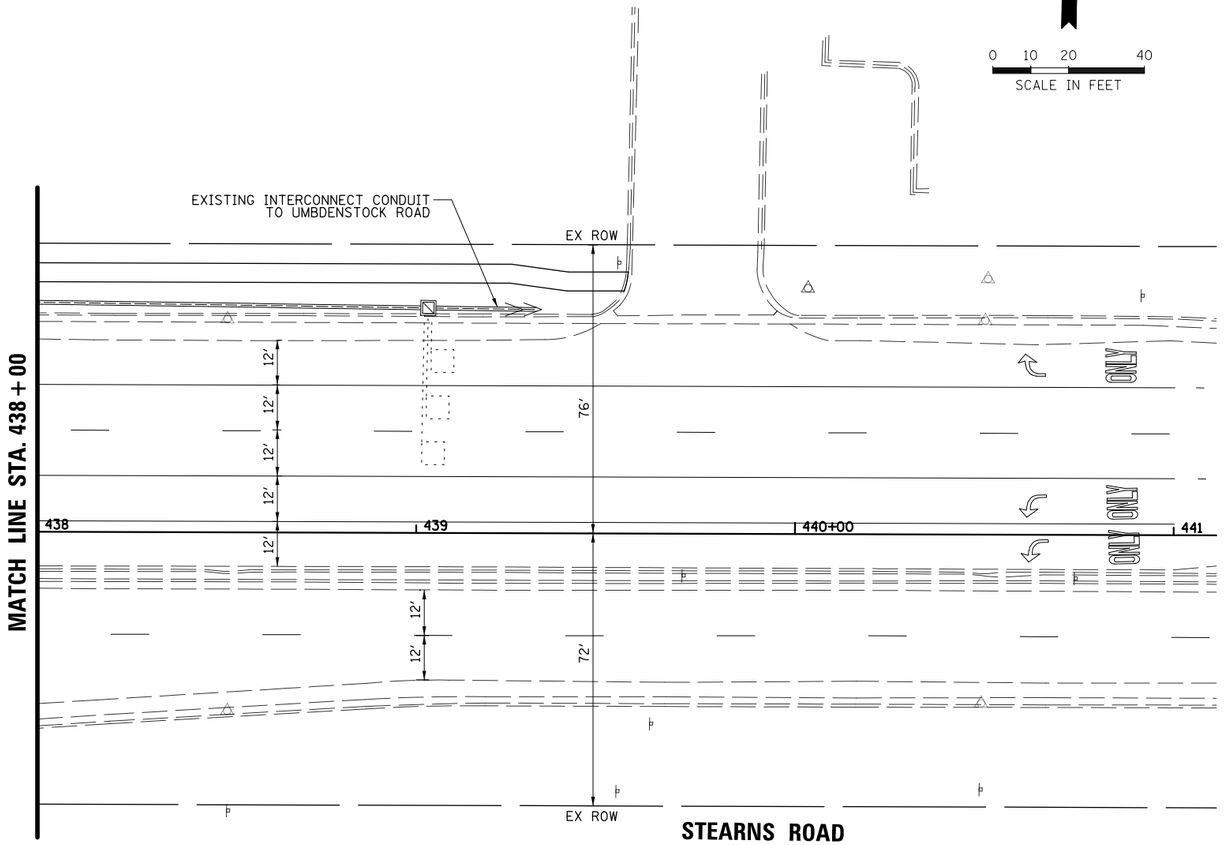
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
(SHEET 1 OF 3)
McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	59
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		





NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

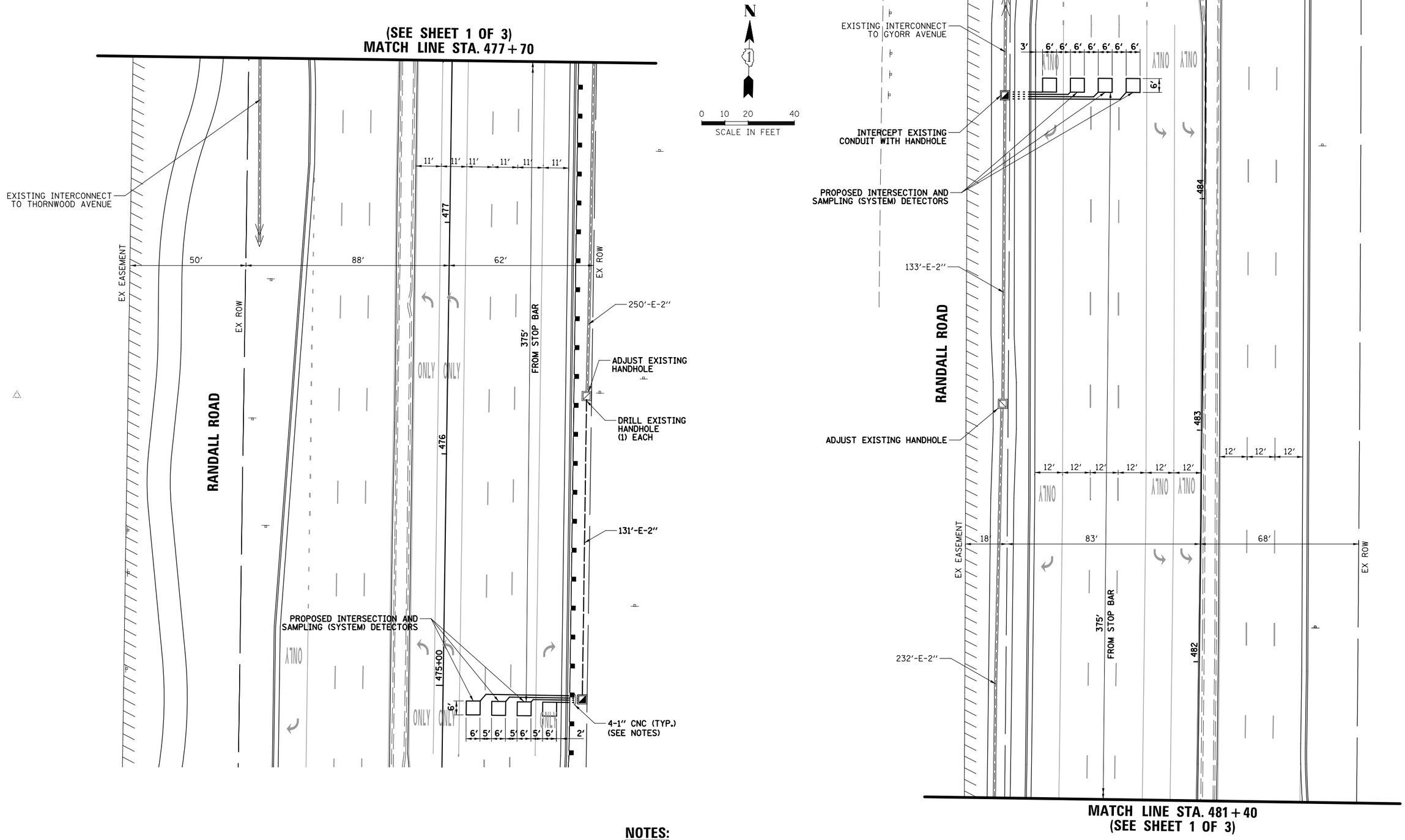
FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-05_MOD.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
(SHEET 2 OF 3)
McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	60
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1″ COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.

FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-06_MOD.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40′	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

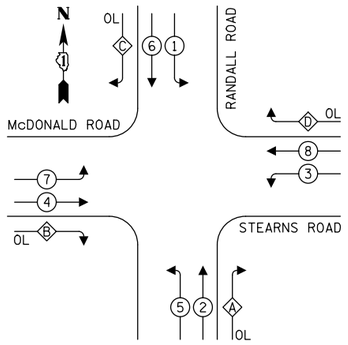
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
(SHEET 3 OF 3)
McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD

SCALE: 1″ = 40′ | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	61
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		

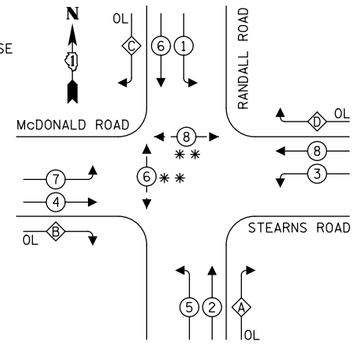
EXISTING CONTROLLER SEQUENCE



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP
- ** EXTENDED PRESS FUNCTIONALITY

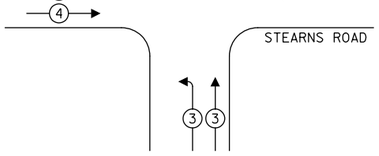
PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL INSTALL THE COMBINATION MAST ARM WITH A 25 FT. LUMINAIRE ARM ORIENTED TOWARDS THE CENTER OF THE INTERSECTION. PTZ CAMERA SHALL BE INSTALLED PER KDOT STANDARD DETAILS OR AS DIRECTED BY THE ENGINEER.
2. ALL RETROREFLECTIVE BACKPLATES SHALL HAVE A 1 INCH RETROREFLECTIVE PERIMETER.
3. THE MUTCD SIGN R10-32P "PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME" SHALL BE INSTALLED ABOVE THE APS PUSH-BUTTON ASSEMBLY FOR ALL CROSSWALKS. THE CONTROLLER SHALL BE PROGRAMMED TO ACTIVATE THE EXTENDED CROSSING FEATURE.
4. THE CONTRACTOR SHALL RELOCATE THE EXISTING VIDEO DETECTION SYSTEM TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION. THE VIDEO DETECTION CAMERAS SHALL BE MOUNTED TO 120 INCH RISER WITH CAMERA MOUNTING BRACKET AND MAST ARM CLAMP KIT. THE COST TO RELOCATE THE EXISTING VIDEO DETECTION SYSTEM AND PROVIDE ALL REQUIRED MOUNTING BRACKETS AND CLAMPS SHALL BE INCLUDED IN PAY ITEM: RELOCATE VIDEO VEHICLE DETECTION SYSTEM (COMPLETE INTERSECTION).

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	30	11	50	165.0
(YELLOW)	30	20	5	30.0
(GREEN)	30	12	45	162.0
ARROW	16	10	10	16.0
PED. SIGNAL	4	20	100	80.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
			TOTAL =	728.0

ENERGY COSTS TO:

Kane County Division Of Transportation
41W011 Burlington Road
St. Charles, IL 60175

ENERGY SUPPLY: CONTACT: NEW BUSINESS
PHONE: NEW PHONE
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

CABLE PLAN

(NOT TO SCALE)

FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-07_CAB.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

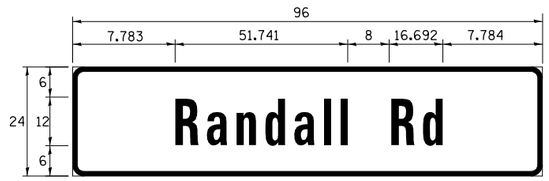
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
McDONALD ROAD / STEARNS ROAD AND RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

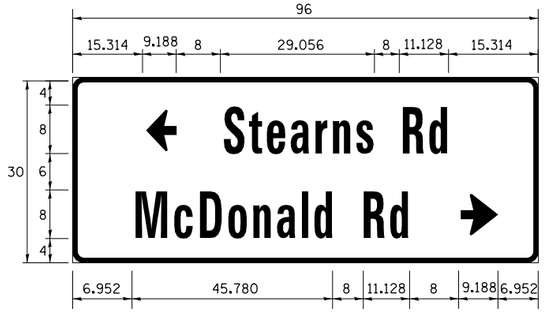
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	62
		CONTRACT NO. 61F28		
		ILLINOIS	FED. AID PROJECT	

SIGN PANEL – TYPE 1 OR TYPE 2

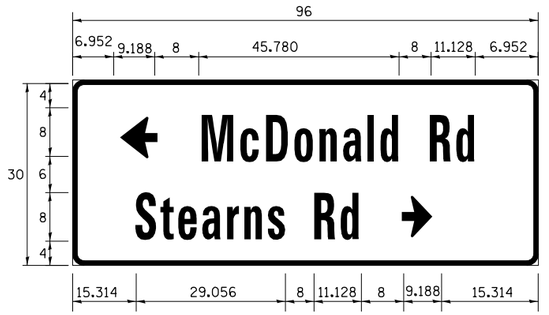
ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	16.0	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
C	20.0	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
C	20.0	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS DETAIL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	63
SIGN PANEL - TYPE 2	SQ FT	72
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	480
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	365
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	996
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,362
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	7,386
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,456
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	7,485
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	846
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 75 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	100
DRILL EXISTING HANDHOLE	EACH	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	22
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	30
INDUCTIVE LOOP DETECTOR	EACH	17
DETECTOR LOOP, TYPE I	FOOT	1,712
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	12,692
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,338
RELOCATE EXISTING CONFIRMATION BEACON	EACH	4
ROD AND CLEAN EXISTING CONDUIT	FOOT	440
OUTDOOR RATED NETWORK CABLE	FOOT	357
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
RELOCATE LIGHT DETECTOR	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 16 3 C	FOOT	1,318
RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	2
HANDHOLE TO BE ADJUSTED WITH NEW FRAME AND COVER	EACH	4
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 78 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 80 FT.	EACH	1
ELECTRIC CABLE IN CONDUIT, COMMUNICATION	FOOT	1,318

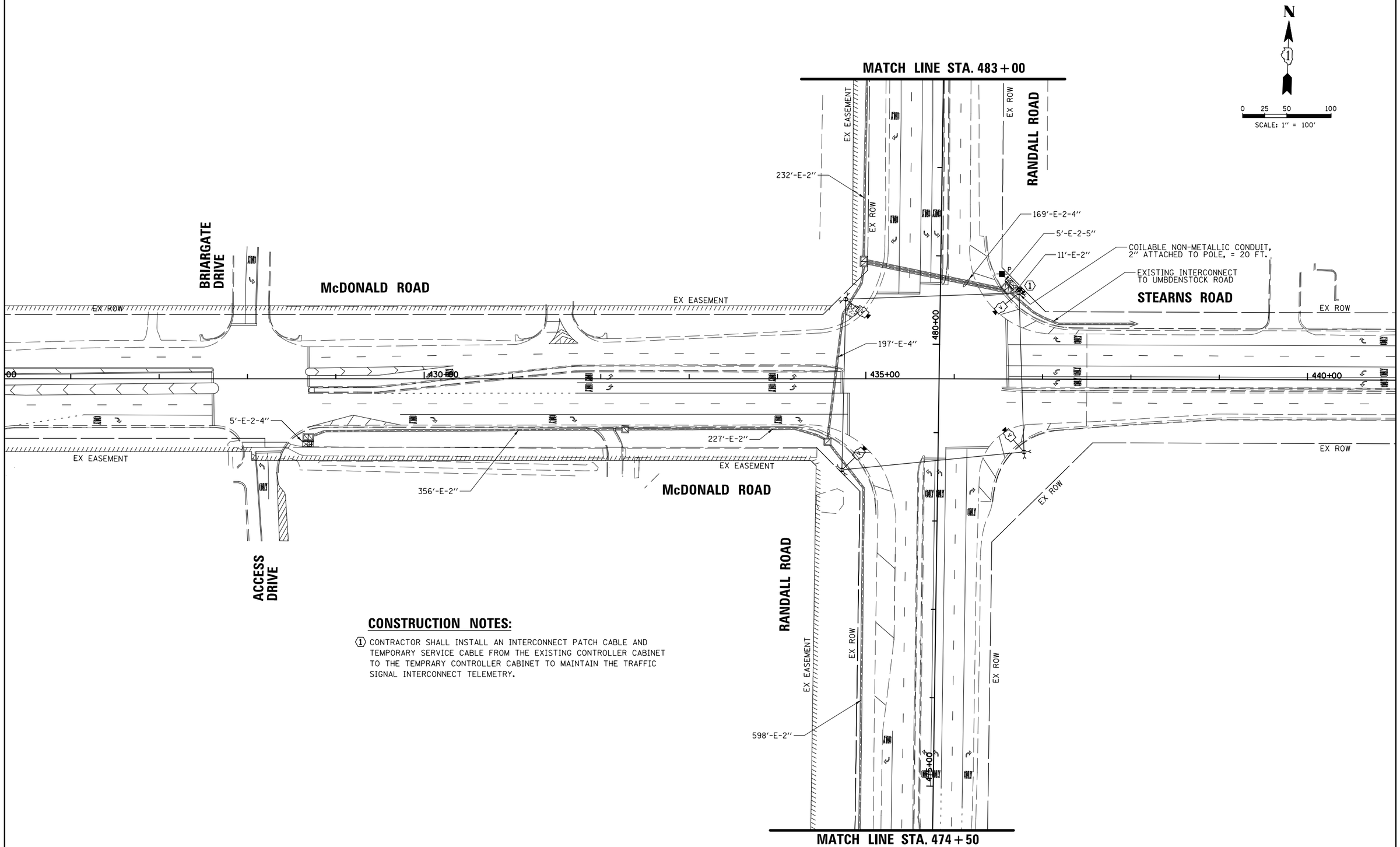
FILE NAME = N:\Kane County\170513\Traffic\RANDALL_TS-sht-08.STN.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
AND MAST ARM MOUNTED STREET NAME SIGN
McDONALD ROAD /STEARNS ROAD AND RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	63
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		



CONSTRUCTION NOTES:

(1) CONTRACTOR SHALL INSTALL AN INTERCONNECT PATCH CABLE AND TEMPORARY SERVICE CABLE FROM THE EXISTING CONTROLLER CABINET TO THE TEMPRARY CONTROLLER CABINET TO MAINTAIN THE TRAFFIC SIGNAL INTERCONNECT TELEMETRY.

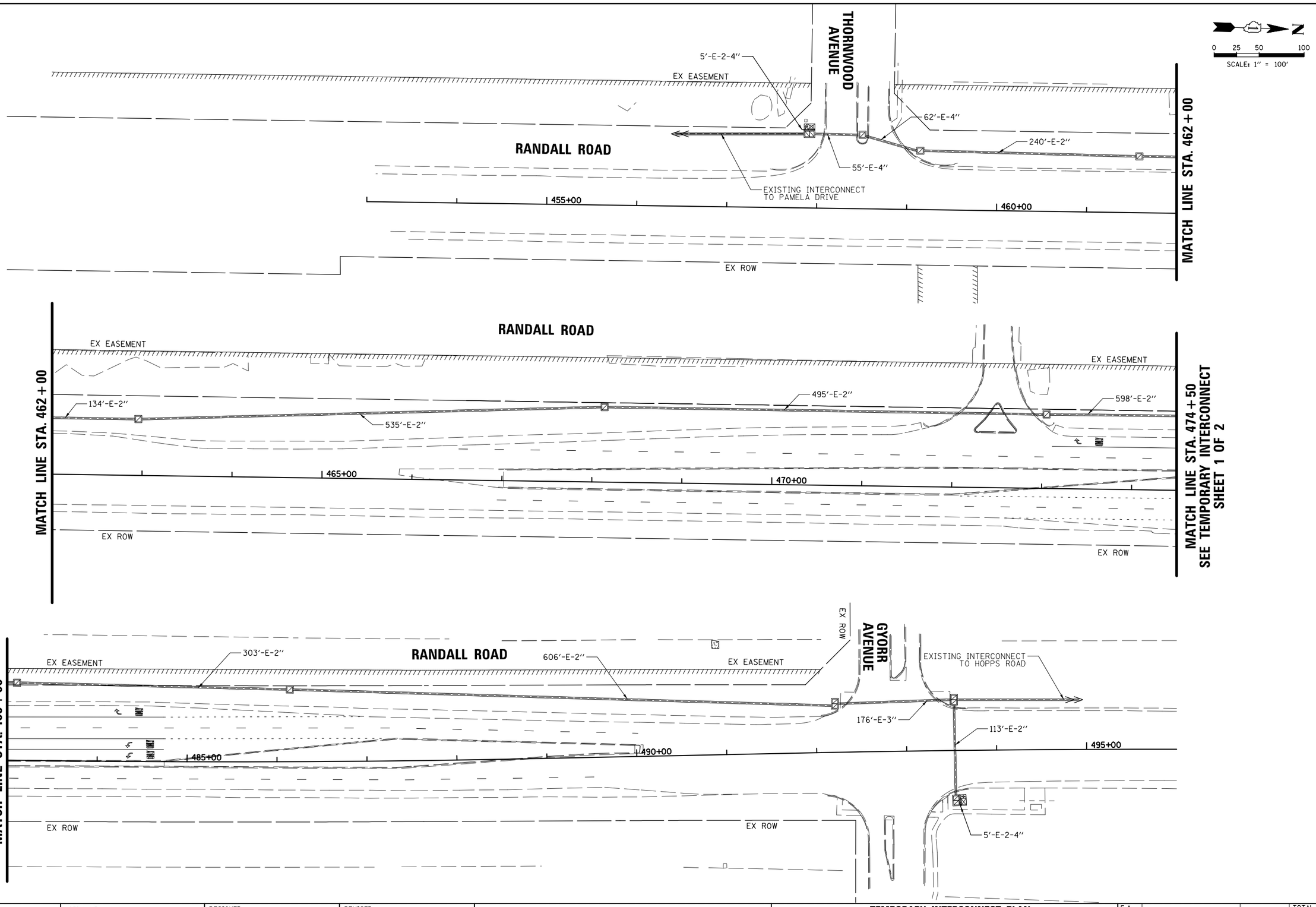
FILE NAME = N:\Kane County\170513\Traffic\TMP-INT-01_Randall.dgn	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
SHEET 1 OF 2
RANDALL ROAD AND McDONALD ROAD / STEARNS ROAD

SCALE: 1" = 100' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	64
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



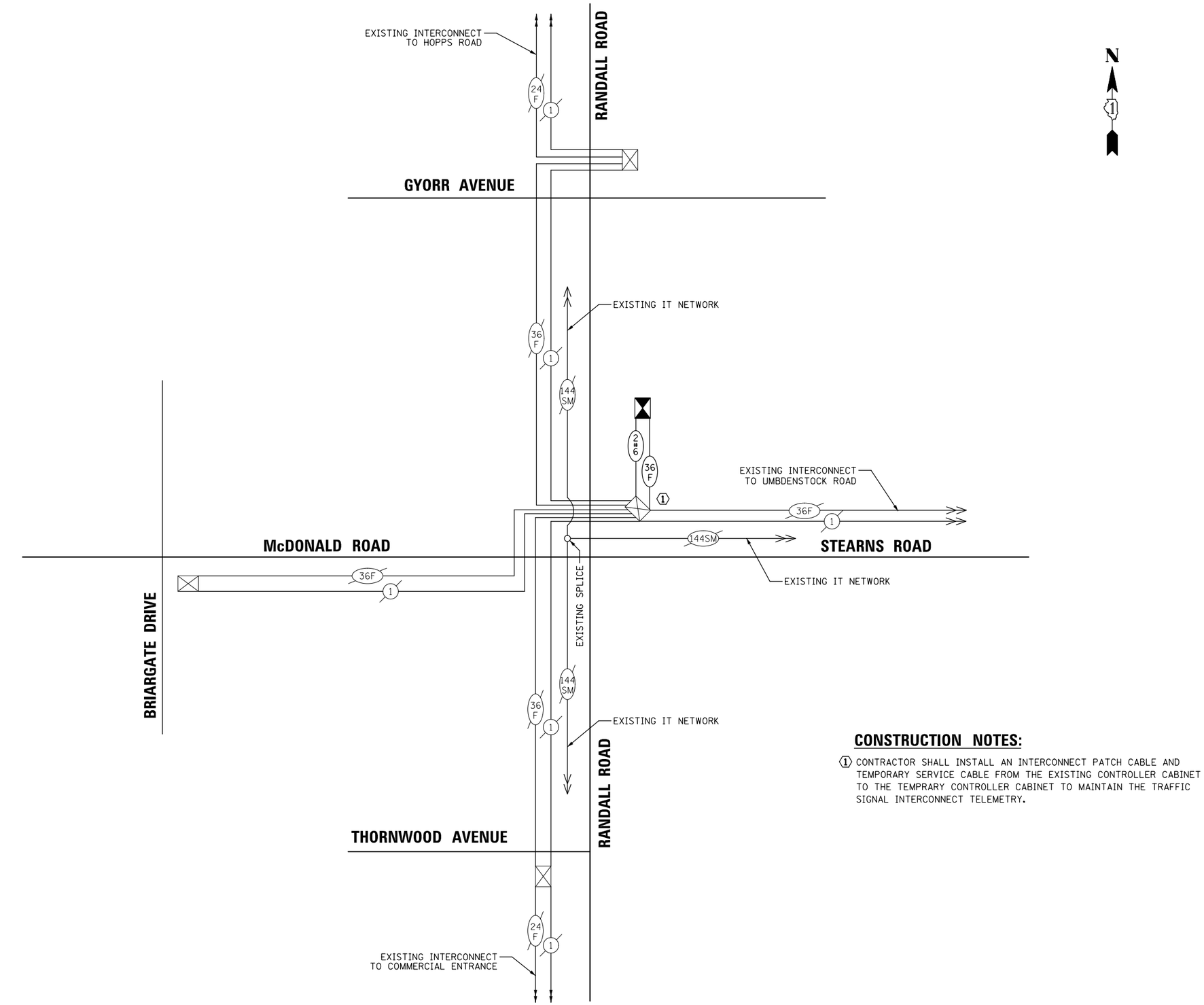
FILE NAME = N:\Kane County\170513\Traffic\TMP-INT-02_Randall.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT PLAN
SHEET 2 OF 2
RANDALL ROAD AND McDONALD ROAD / STEARNS ROAD

SCALE: 1" = 100' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	65
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION NOTES:

(1) CONTRACTOR SHALL INSTALL AN INTERCONNECT PATCH CABLE AND TEMPORARY SERVICE CABLE FROM THE EXISTING CONTROLLER CABINET TO THE TEMPRARY CONTROLLER CABINET TO MAINTAIN THE TRAFFIC SIGNAL INTERCONNECT TELEMETRY.

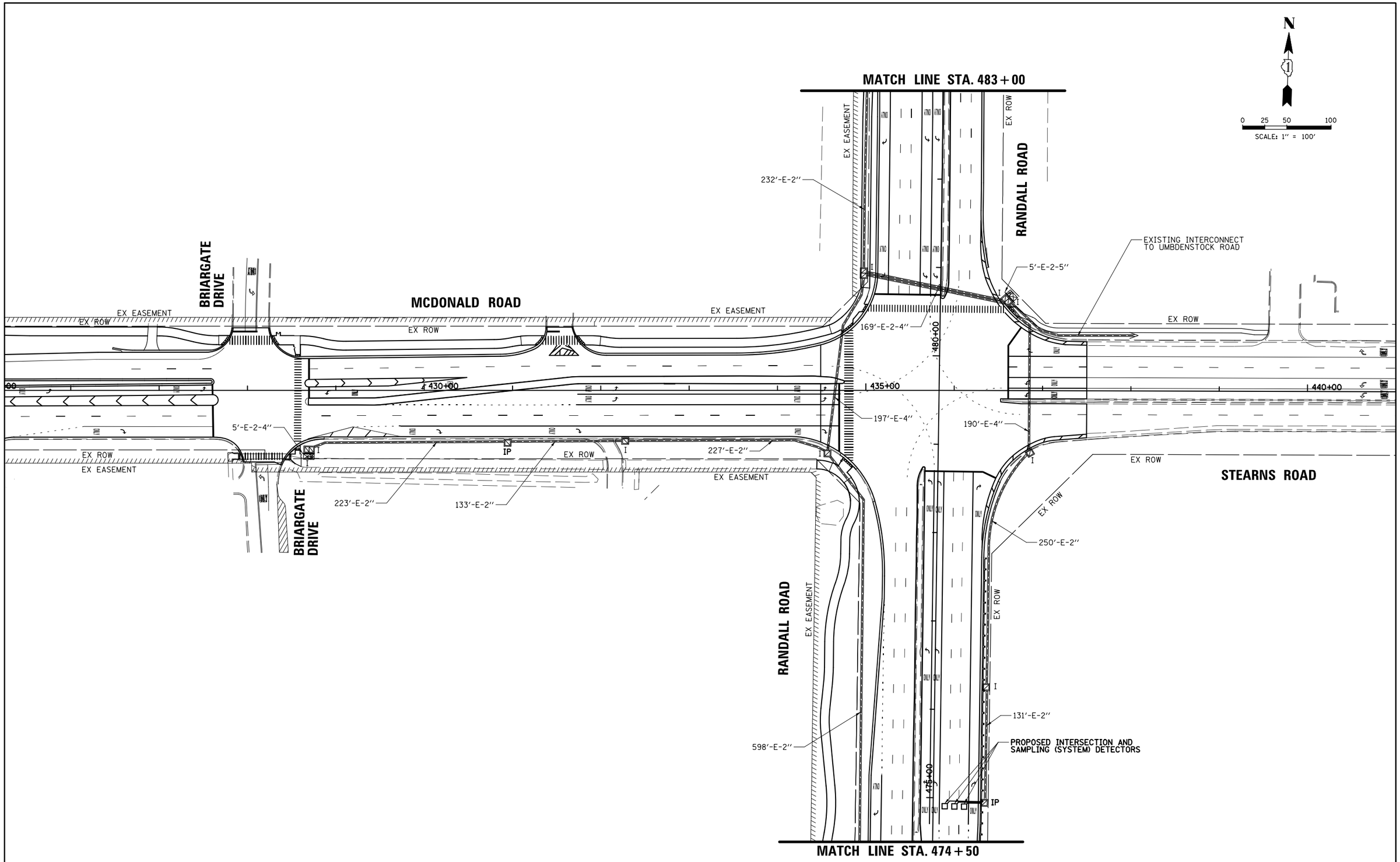
FILE NAME = N:\Kane County\170513\Traffic\TMP-SCH_Randall.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY INTERCONNECT SCHEMATIC
RANDALL ROAD AND McDONALD ROAD / STEARNS ROAD

SCALE: 1" = 100' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	66
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



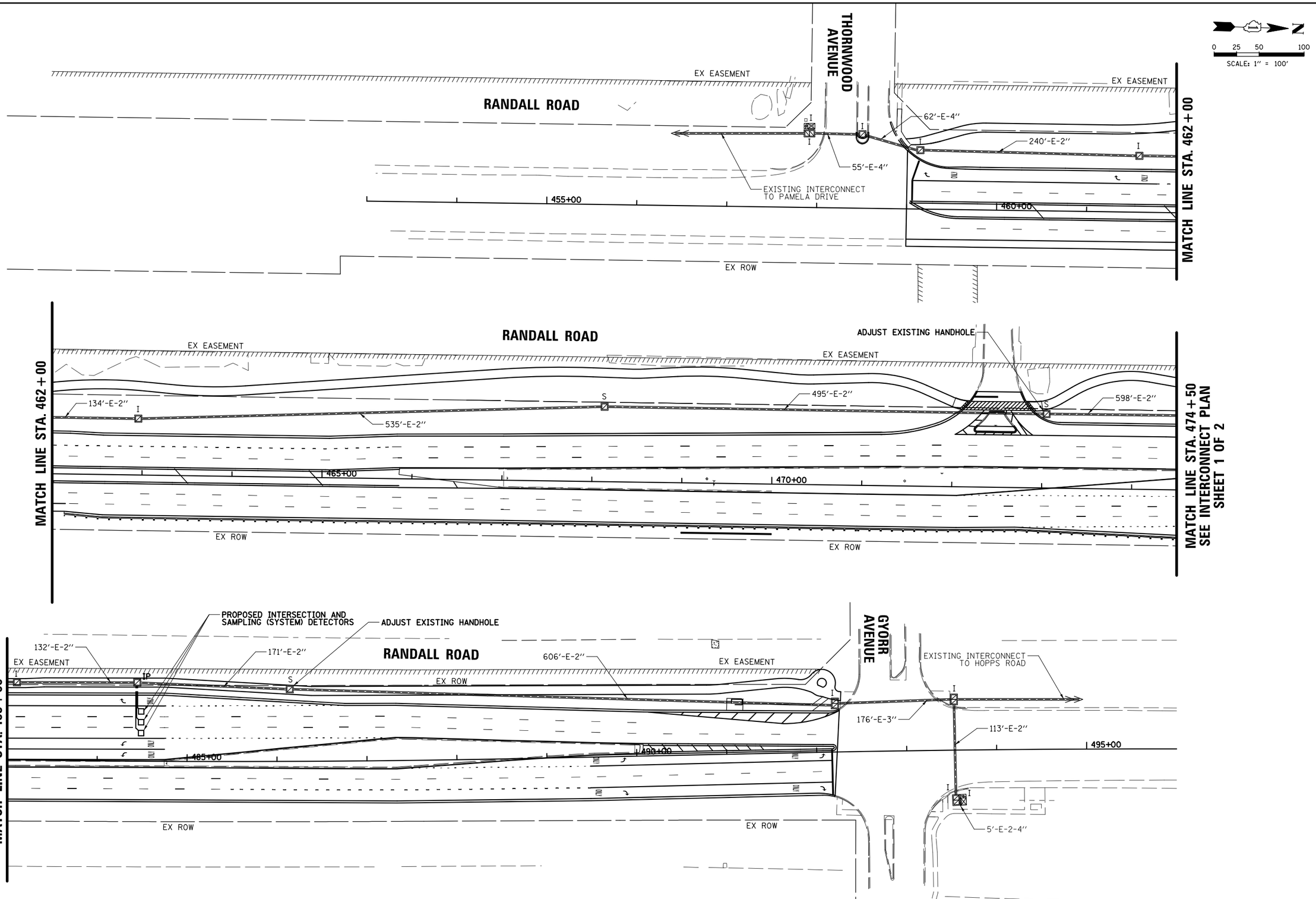
FILE NAME = N:\Kane County\170513\Traffic\INT-01_Randall.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
SHEET 1 OF 2
RANDALL ROAD AND MCDONALD ROAD / STEARNS ROAD

SCALE: 1" = 100' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	67
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



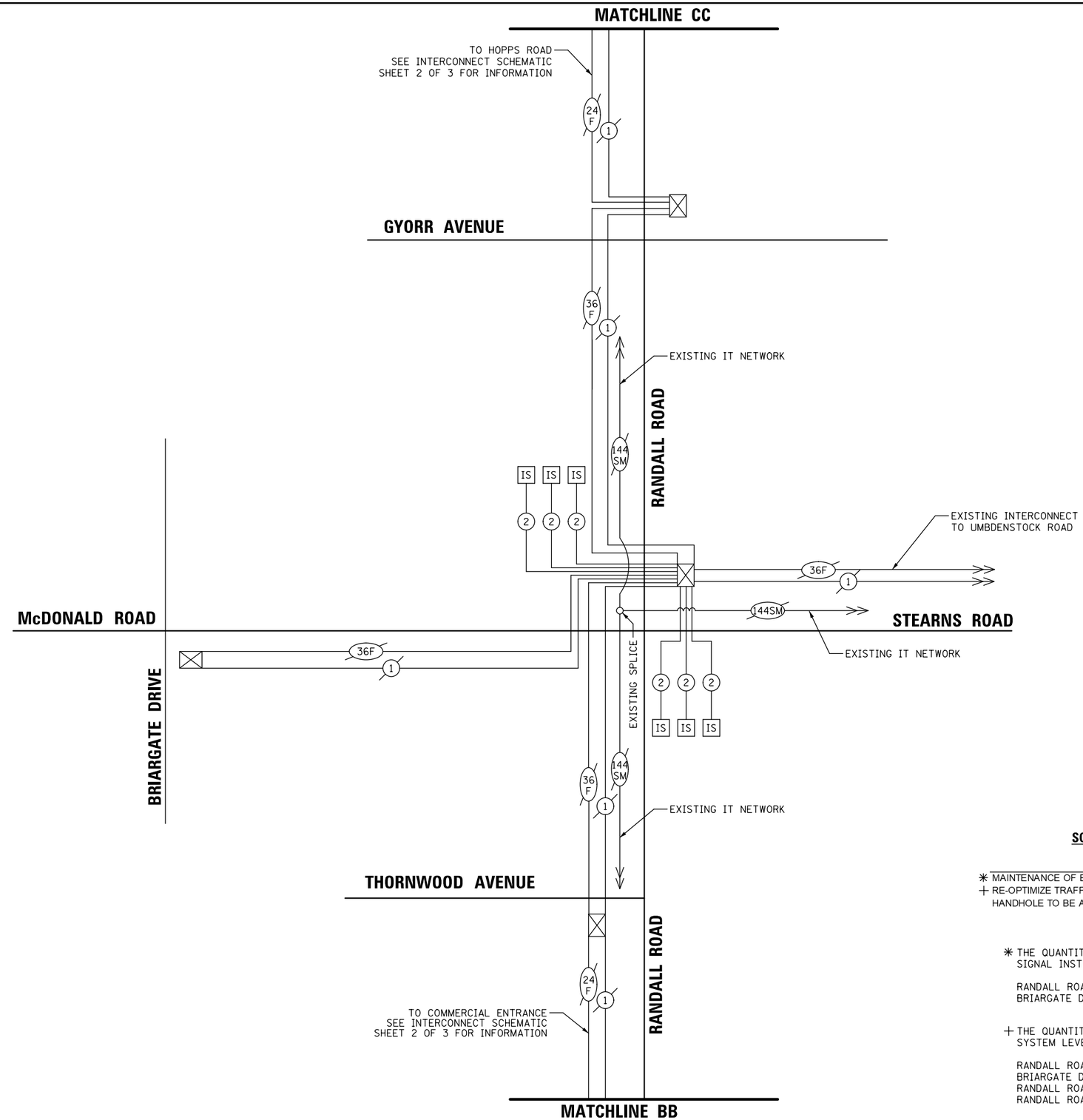
FILE NAME = N:\Kane County\170513\Traffic\INT-02_Randall.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
SHEET 2 OF 2
RANDALL ROAD AND MCDONALD ROAD / STEARNS ROAD

SCALE: 1" = 100' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	68
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



SCHEDULE OF QUANTITIES

	ITEM	UNIT	QUANTITY
✳	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
+	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	4
	HANDHOLE TO BE ADJUSTED WITH NEW FRAME AND COVER	EACH	2

✳ THE QUANTITY FOR THE PAY ITEM: MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION INCLUDES THE FOLLOWING INTERSECTIONS:

RANDALL ROAD AT STEARNS ROAD
BRIARGATE DRIVE AT MCDONALD ROAD

+ THE QUANTITY FOR THE PAY ITEM: RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2 INCLUDES THE FOLLOWING INTERSECTIONS:

RANDALL ROAD AT STEARNS ROAD
BRIARGATE DRIVE AT MCDONALD ROAD
RANDALL ROAD AT GYORR AVE
RANDALL ROAD AT THORNWOOD AVE

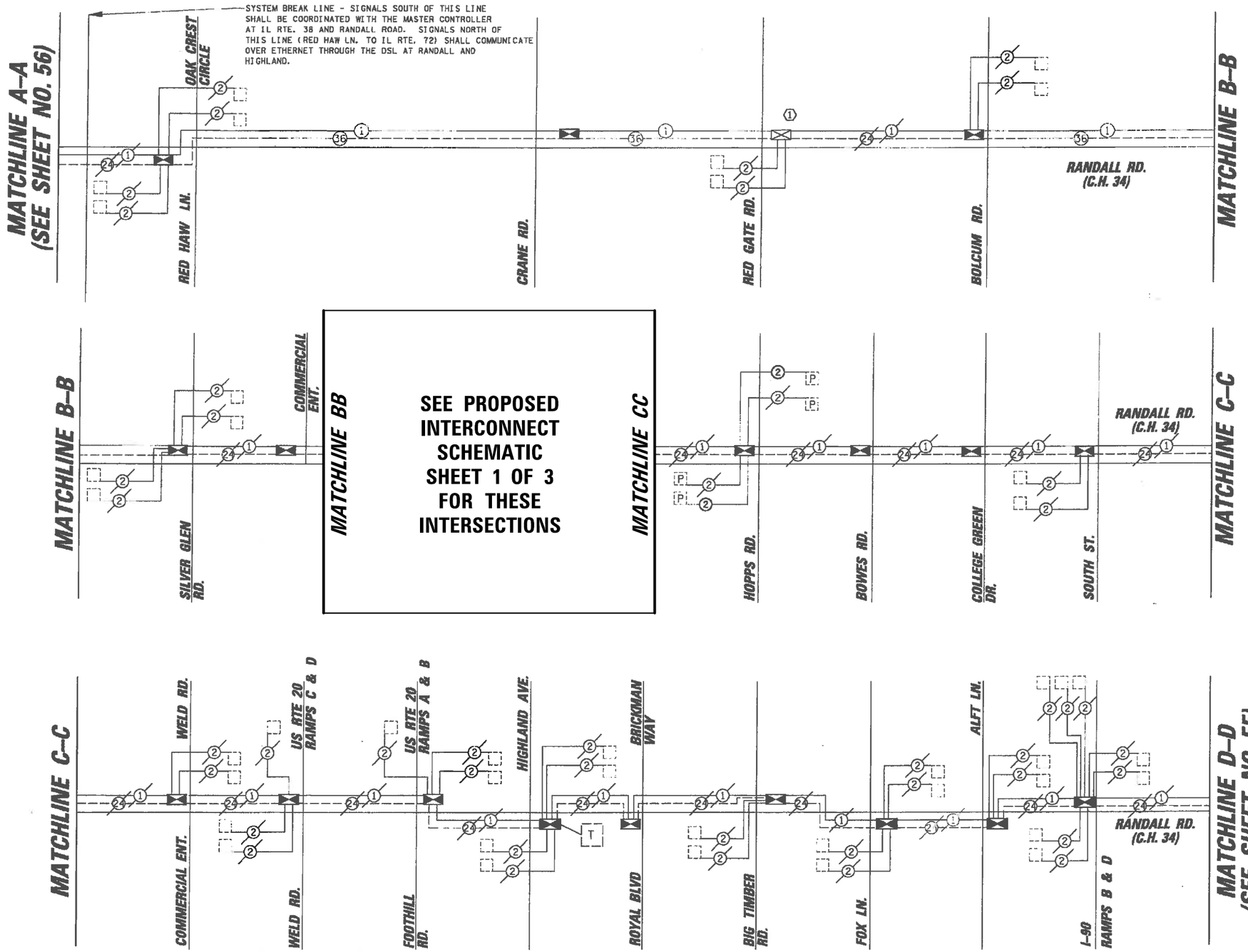
FILE NAME = N:\Kane County\170513\Traffic\INT-SCH-01.default	USER NAME = jstrick	DESIGNED -	REVISED -
	Randall.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100'	CHECKED -	REVISED -
	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
SHEET 1 OF 3
RANDALL ROAD

SCALE: 1" = 100' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	69
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER
- PROPOSED INTERSECTION CONTROLLER
- EXISTING MASTER CONTROLLER [EMC]
- PROPOSED MASTER CONTROLLER [MC]
- MASTER MASTER CONTROLLER [MMC]
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS
- EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS [P]
- EXISTING SAMPLING (SYSTEM) DETECTORS [ES]
- PROPOSED SAMPLING (SYSTEM) DETECTORS [PS]
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS. [ESP]
- EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS. [ESPS]
- EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [PD]
- PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS [PD]
- EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS [ESPD]
- PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS [PSPD]
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F (36)
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F (36)
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F (24)
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F (24)
- EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE (12)
- PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE (12)
- EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED (6)
- PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED (6)
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED (2)
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED (2)
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) (1)
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) (1)
- EXISTING TELEPHONE CONNECTION [T]
- PROPOSED TELEPHONE CONNECTION [T]

CONSTRUCTION NOTES:

(1) INTERCONNECTION AND INSTALLATION OF FIBER OPTIC CABLE TO RED GATE CABINET BY OTHERS.

FOR INFORMATION ONLY

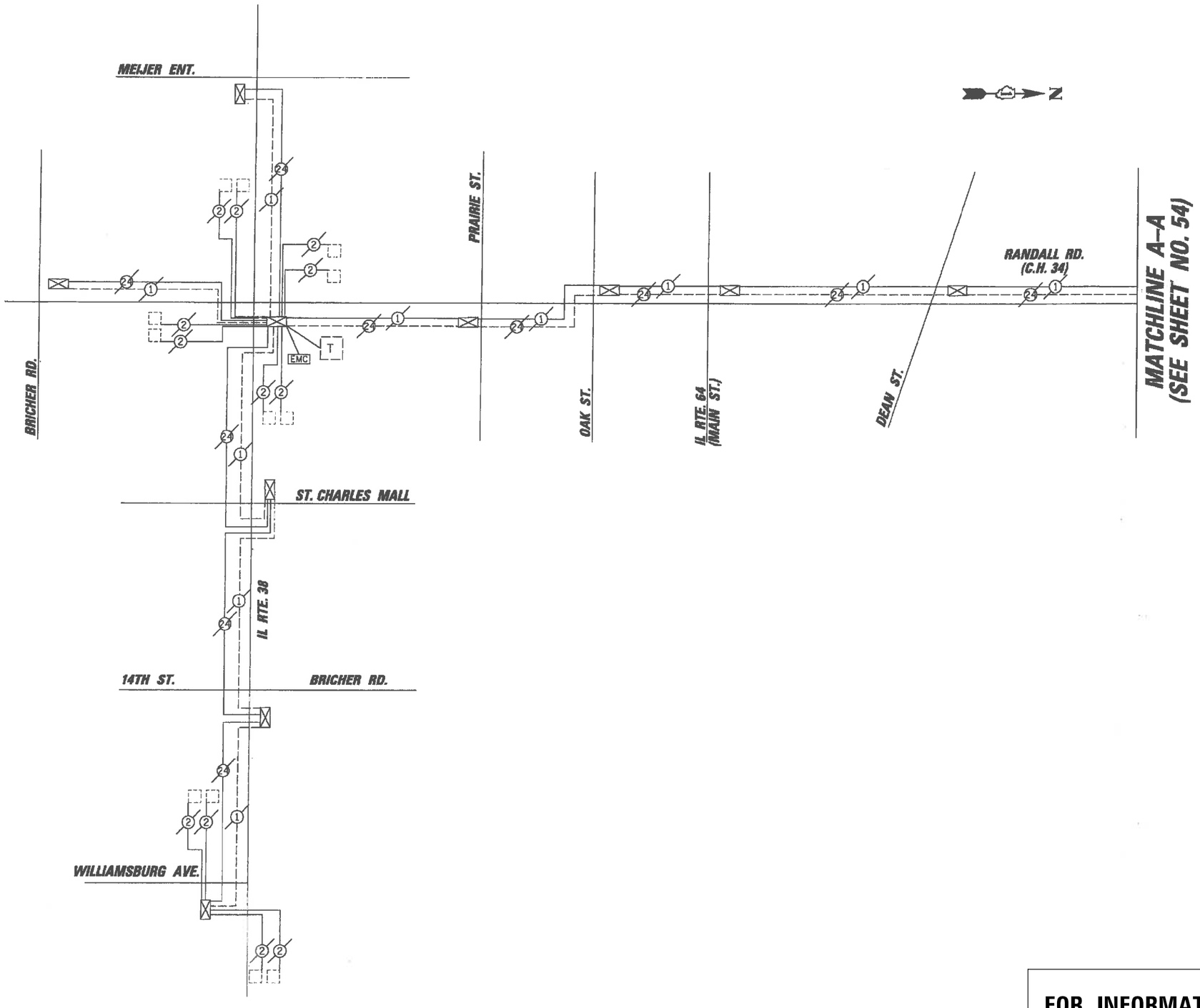
FILE NAME = N:\Kane County\170513\Traffic\INT-SCH-02_Randall.dgn	USER NAME = jpatrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
SHEET 2 OF 3
RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	70
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER	⊠
PROPOSED INTERSECTION CONTROLLER	⊠
EXISTING MASTER CONTROLLER	EMC
PROPOSED MASTER CONTROLLER	MC
MASTER MASTER CONTROLLER	MMC
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	⬚
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	□
EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS	P
EXISTING SAMPLING (SYSTEM) DETECTORS	ES
PROPOSED SAMPLING (SYSTEM) DETECTORS	PS
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.	ESP
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS.	ESPS
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS	ESPD
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	PSPD
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	36
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	36
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	24
EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	1
PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	1
EXISTING TELEPHONE CONNECTION	T
PROPOSED TELEPHONE CONNECTION	T

FOR INFORMATION ONLY

FILE NAME = N:\Kane County\170513\Traffic\INT-SCH-03_Randall.dgn	USER NAME = jstrick	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40'	CHECKED -	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC
SHEET 3 OF 3
RANDALL ROAD

SCALE: 1" = 40' | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
366	14-00214-28-CH	KANE	129	71
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES FOR ALL PTZ (PAN, TILT, ZOOM) CAMERA INSTALLATIONS

1. CABLE SLACK SHALL MEET IDOT REQUIREMENTS EXCEPT WHERE SLACK IS PROVIDED IN HANDHOLES AND DOUBLE HANDHOLES. SLACK SHALL BE 15' MIN. IN ALL HANDHOLES FOR PTZ RELATED CABLES.

2. PTZ CAMERAS SHALL BE IP (INTERNET PROTOCOL) ADDRESSABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH KDOT TRAFFIC IN REQUESTING AND PROGRAMMING THE IP ADDRESS DESIRED BY KDOT TRAFFIC INTO THE PTZ EQUIPMENT. ANY VIDEO SOFTWARE, ENCODING, OR DECODING HARDWARE/SOFTWARE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE COST OF THE PTZ CAMERA SYSTEM.

3. CAMERA SHALL HAVE A MINIMUM THIRTY (30x) MECHANICAL ZOOM AND MINIMUM TWELVE (12x) DIGITAL ZOOM. VIDEO QUALITY SHALL BE H.D. TV QUALITY

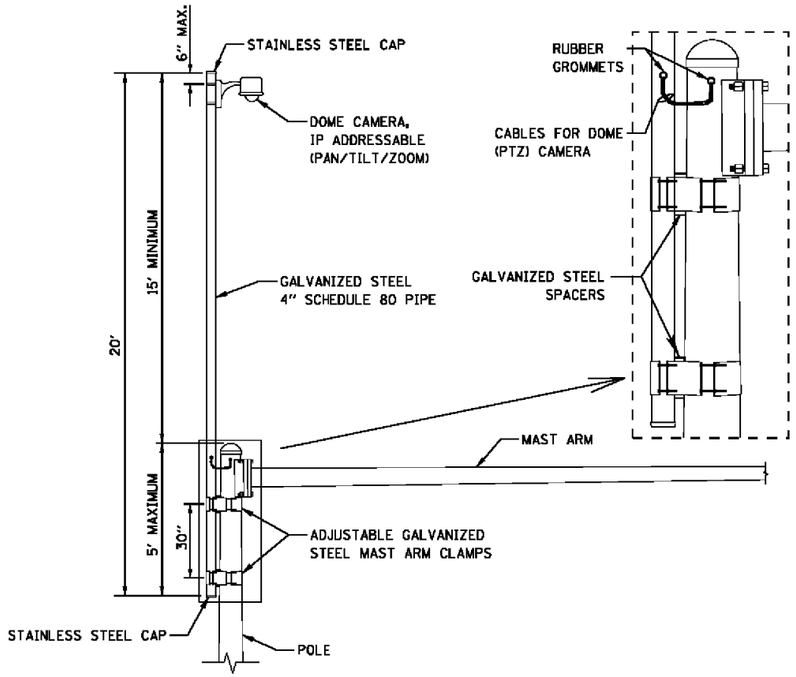
4. PTZ CAMERA SHALL BE HIGH POE (POWER OVER ETHERNET, 60W) UNLESS OTHERWISE STATED. A POE EXTENDER SHALL BE INSTALLED WITHIN AN APPROPRIATELY SPACED AUXILIARY CABINET (DT-ST SERIES) AS TO NOT EXCEED 300 FEET CONSECUTIVE CABLE LENGTH AS MEASURED ALONG THE CABLE (INCLUDING CABLE SLACK). COST OF AUXILIARY CABINET AND REQUISITE ADDITIONAL CABLES, FIBER OPTIC, JUMPERS, ETC. SHALL BE INCLUDED IN THE COST OF THE PTZ CAMERA BEING INSTALLED.

5. PTZ CABLES SHALL BE OUTDOOR RATED CAT6 UNLESS OTHERWISE RECOMMENDED BY EQUIPMENT MANUFACTURER AND APPROVED BY THE ENGINEER.

6. CONTRACTOR SHALL PROVIDE AN ITEMIZED INVENTORY OF THE PTZ CAMERA EQUIPMENT AND CABINET COMPONENTS CONTAINING MODEL, SERIAL, AND PART NUMBERS. THIS INVENTORY TO BE FURNISHED DURING SIGNAL OR MAINTENANCE TRANSFER.

7. RUBBER GROMITS SHALL BE INSTALLED IN ALL HOLES / OPENINGS USED TO RUN PTZ EQUIPMENT CABLE.

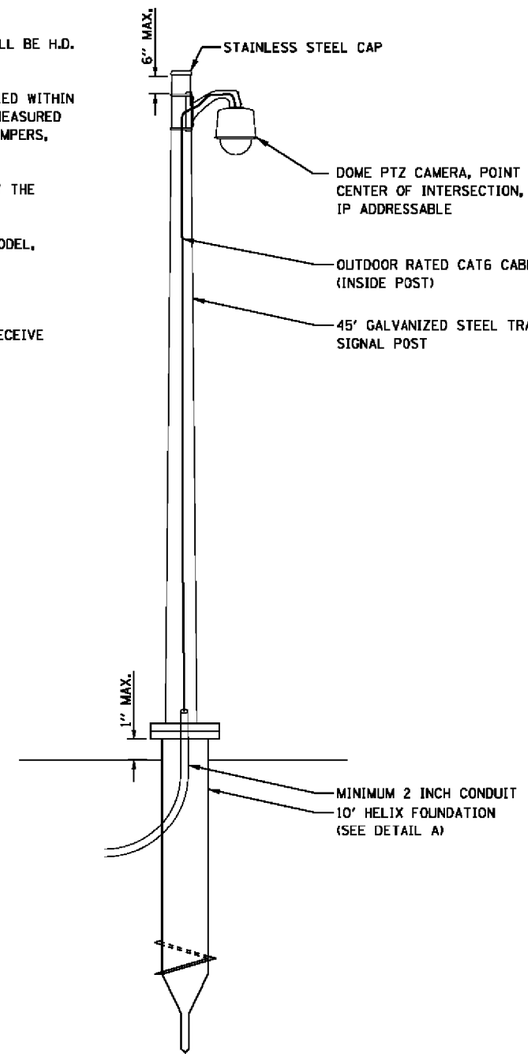
8. THE CONTRACTOR SHALL CONTACT KANE COUNTY TRAFFIC PRIOR TO INSTALLING THE PTZ CAMERA AND ASSOCIATED WIRING TO RECEIVE FINAL APPROVAL ON THE CAMERA LOCATION.



CAMERA MOUNTING ASSEMBLY DETAIL: PIPE /POLE EXTENSION

(NOT TO SCALE)

NOTES:
- THE MAST ARM IS TAPERED.
- INSTALL EXTENSION POLE VERTICAL AND PLUMB BY MODIFYING/INSTALLING BRACKETS AS NECESSARY. ADDITIONAL SPACERS REQUIRED ARE INCLUDED IN THE COST OF THE CAMERA MOUNTING ASSEMBLY OF THE TYPE SPECIFIED.
- SPACERS ARE TO BE INTEGRATED OR MANUFACTURED WITH THE MAST ARM BRACKETS.

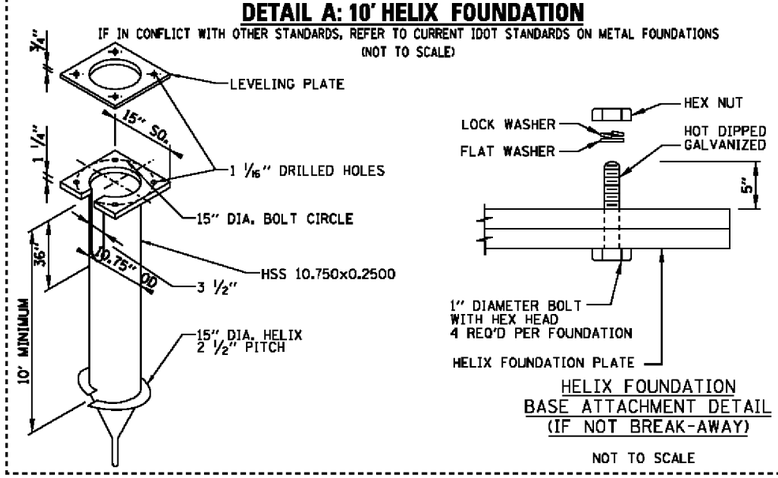


CAMERA MOUNTING ASSEMBLY DETAIL: STAND-ALONE 45' POST

(NOT TO SCALE)

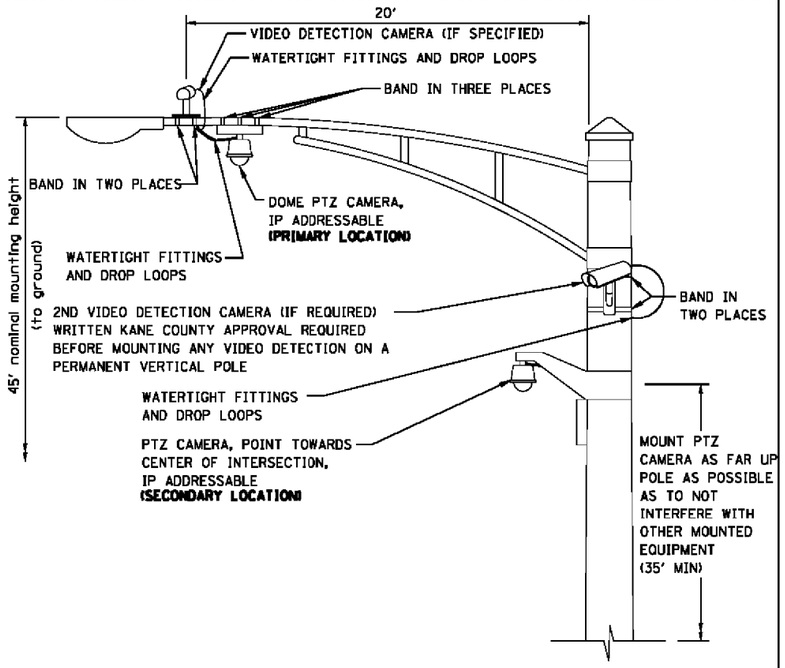
DETAIL A: 10' HELIX FOUNDATION

IF IN CONFLICT WITH OTHER STANDARDS, REFER TO CURRENT IDOT STANDARDS ON METAL FOUNDATIONS
(NOT TO SCALE)



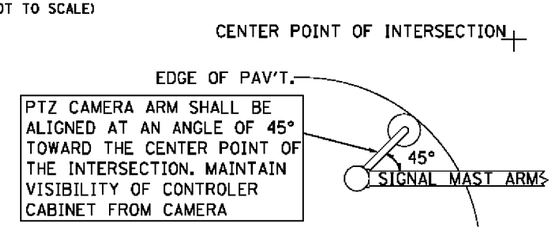
HELIX FOUNDATION BASE ATTACHMENT DETAIL (IF NOT BREAK-AWAY)

NOT TO SCALE



CAMERA MOUNTING ASSEMBLY DETAIL: COMBINATION MAST ARMS

(NOT TO SCALE)



PTZ CAMERA MOUNTING DETAILS

(SECONDARY LOCATION ONLY)
(NOT TO SCALE)

FILE NAME = U:\Microstation\CDOT Items\SDZ Details\PTZ Details.dgn

USER NAME = dotsdz	DESIGNED - SDZ 12/31/14	REVISED - SDZ 02/23/15	KANE COUNTY DIVISION OF TRANSPORTATION	CCTV / PTZ CAMERA INSTALLATION DETAILS	
	DRAWN - SDZ 12/31/14	REVISED - SDZ 08/22/16			
PLOT SCALE = 100.0000 ' / in.	CHECKED - DRAFT	REVISED -			
PLOT DATE = 8/22/2016	DATE - 01-16-2015	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	129	72
		CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

LIGHTING GENERAL NOTES

1. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY EQUIPMENT. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT (800) 892-0123.
2. BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES SHALL CALL COM ED FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/ DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
4. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
   - A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS PREPARED BY IDOT.
   - B. "THE NATIONAL ELECTRICAL CODE".
   - C. MUNICIPAL CODES & STANDARDS.
   - D. COMED STANDARDS
5. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN REVIEWED BY THE ENGINEER.
6. ALL UNDERGROUND WIRING SHALL BE XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, BURIED A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
7. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, (IF APPLICABLE) AND HAVE BEEN REVIEWED BY THE ENGINEER.
8. TO MAINTAIN THE STRUCTURAL INTEGRITY OF LIGHT POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES.
9. ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF THE TOP OF FOUNDATION ELEVATION WITH THE FINISHED GRADE.
11. THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO SETS OF FULL SIZE RECORD DRAWINGS TO THE ENGINEER UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATIONS OF ALL LIGHT POLES, UNDERGROUND CONDUITS/WIRING, HANDHOLES, JUNCTION BOXES & CONTROLLER CABINETS. THE DRAWINGS WILL BE REVIEWED BY THE ENGINEER.
12. UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY NOTIFICATION AND ALL COORDINATION WITH COM ED FOR NEW ELECTRIC SERVICE TO THE PROPOSED LIGHTING CONTROLLERS.
14. THE CONTRACTOR SHALL LABEL ALL WIRES WITH WIRE MARKERS INDICATING THE CIRCUIT ID IN EVERY CONTROLLER, POLE BASE, HAND HOLE AND SPLICE/CONNECTION POINT. WIRE MARKERS SHALL BE WHITE NYLON WITH INTEGRAL MECHANICAL FASTENER WITH MINIMUM 3/4" X 1" WRITEABLE AREA.
15. THERE ARE LOCATIONS THROUGHOUT THE PROJECT WHERE EXISTING UNDERGROUND UTILITIES ARE WITHIN CLOSE PROXIMITY TO THE PROPOSED LIGHT POLE FOUNDATIONS. CONTRACTOR SHALL LOCATE THE EDGE OF THE UTILITY IN THESE LOCATIONS AS DIRECTED BY THE ENGINEER USING THE HYDRO EXCAVATION METHOD (SEE SPECIAL PROVISION FOR "EXPLORATION EXCAVATION (UTILITY)").

BILL OF MATERIALS

	DESCRIPTION	UNIT	QUANTITY
	TRENCH BACKFILL	CU YD	11
•	ELECTRIC SERVICE INSTALLATION	EACH	1
•	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	35
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	465
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	435
	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	11715
	HANDHOLE	EACH	6
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	54445
	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	105
	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	1
	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 12 FT. MAST ARM	EACH	44
	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 2-12 FT. MAST ARMS	EACH	4
	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	488
	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	48
	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	1
	REMOVAL OF POLE FOUNDATION	EACH	1
•	REMOVAL OF CABLE IN CONDUIT	FOOT	180
•	LUMINAIRE, LED, HORIZONTAL MOUNT, HIGH WATTAGE	EACH	8
•	LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE	EACH	44
•	EXPLORATION EXCAVATION (UTILITY)	FOOT	100
•	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	52
•	MAINTAIN EXISTING LIGHTING SYSTEM	LSUM	1

• SEE SPECIAL PROVISION

ABBREVIATIONS

A	AMPS
BOC	BACK OF CURB
CKT	CIRCUIT
FT	FOOT
FOC	FACE OF CURB
GND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HPS	HIGH PRESSURE SODIUM
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
V	VOLTS
W	WATTS

CAUTION
NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND/OR ELEVATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ENGINEER OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS.

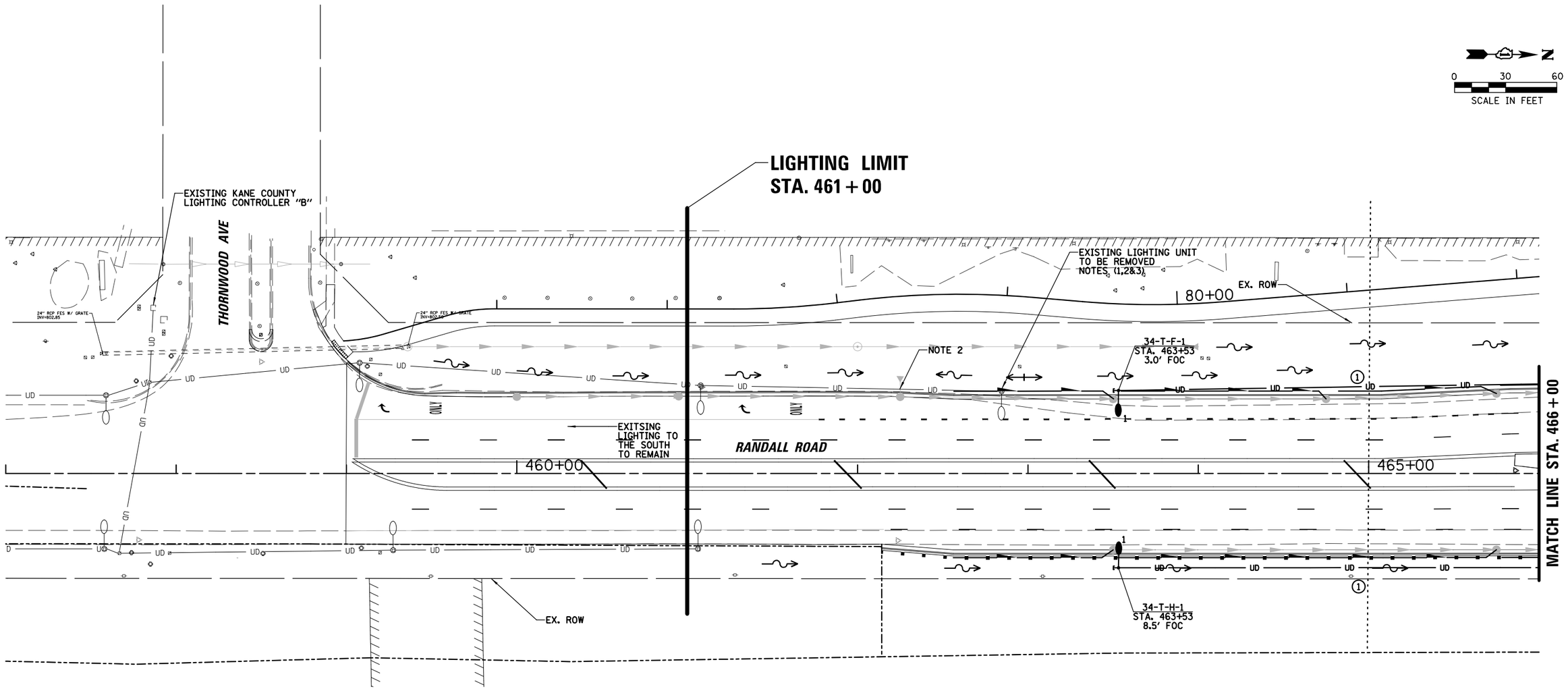
KANE COUNTY DIVISION OF TRANSPORTATION WILL OWN AND MAINTAIN THE PROPOSED LIGHTING SYSTEM.

FILE NAME = N:\Kane County\170513\Mech\GN_170513_01.dgn	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 100'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING GENERAL NOTES
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	73
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM
- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER
- PROPOSED CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- E — PROPOSED ELECTRIC SERVICE CONDUIT
- UD — PROPOSED 1¼" SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- 34-T-A-1 / STA. 10+00 / 4.0' FOC
  - COUNTY HWY
  - POWER CENTER
  - CIRCUIT
  - POLE NUMBER
  - STATION
  - SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

CONDUCTOR /CONDUIT SCHEDULE

(1) 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

(2) 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

NOTES:

1. AFTER PROPOSED LIGHTING IS INSTALLED AND OPERATIONAL, THE CONTRACTOR SHALL REMOVE EXISTING LIGHT POLE/ LUMINAIRE AND RETURN TO KANE COUNTY DOT. CONCRETE FOUNDATION SHALL BE REMOVED AND DISPOSED OF.
2. AFTER EXISTING LIGHT POLE HAS BEEN DISCONNECTED, CONTRACTOR SHALL REMOVE EXISTING WIRE FROM REMOVED POLE TO POLE TO REMAIN AND REMOVE CONDUIT TO 1 FOOT BELOW GRADE AND ABANDON. PAID FOR UNDER "REMOVAL OF CABLE IN CONDUIT" (SEE SPECIAL PROVISION).
3. CONTRACTOR SHALL TAKE FULL MAINTENANCE OF LIGHTING CONTROLLER "B" SYSTEM (SEE SPECIAL PREVISION).

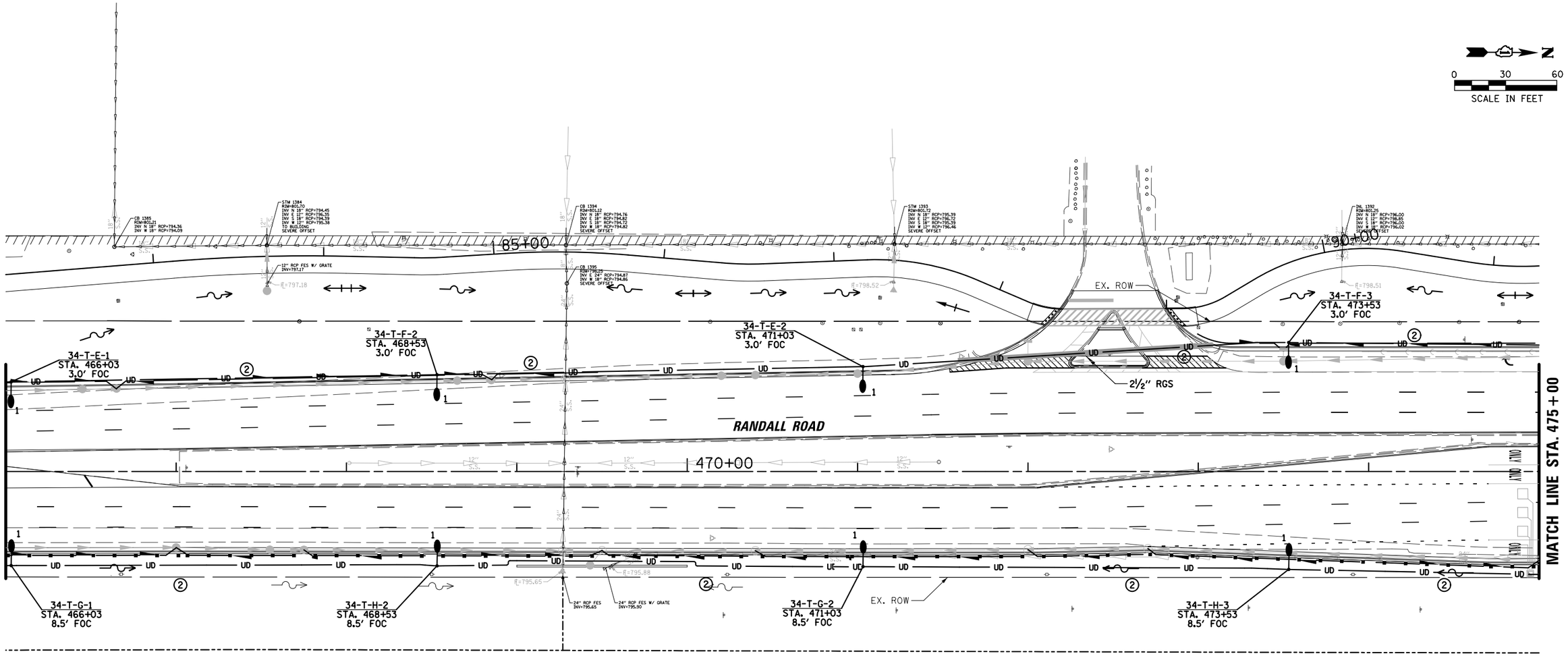
FILE NAME = N:\Kane County\170513\Mech\LGT01_Randall_170513.sht	USER NAME = jpatrick	DESIGNED AJD	REVISED -
		DRAWN RJJ	REVISED -
	PLOT SCALE = 60'	CHECKED AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (1 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 1 OF 7 SHEETS | STA. 461+00 | TO STA. 466+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	74
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM
- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER
- PROPOSED CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- PROPOSED ELECTRIC SERVICE CONDUIT
- PROPOSED 1¼" SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- 34-T-A-1 / STA. 10+00 / 4.0' FOC — COUNTY HWY, POWER CENTER, CIRCUIT, POLE NUMBER, STATION, SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

CONDUCTOR /CONDUIT SCHEDULE

(1) 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

(2) 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

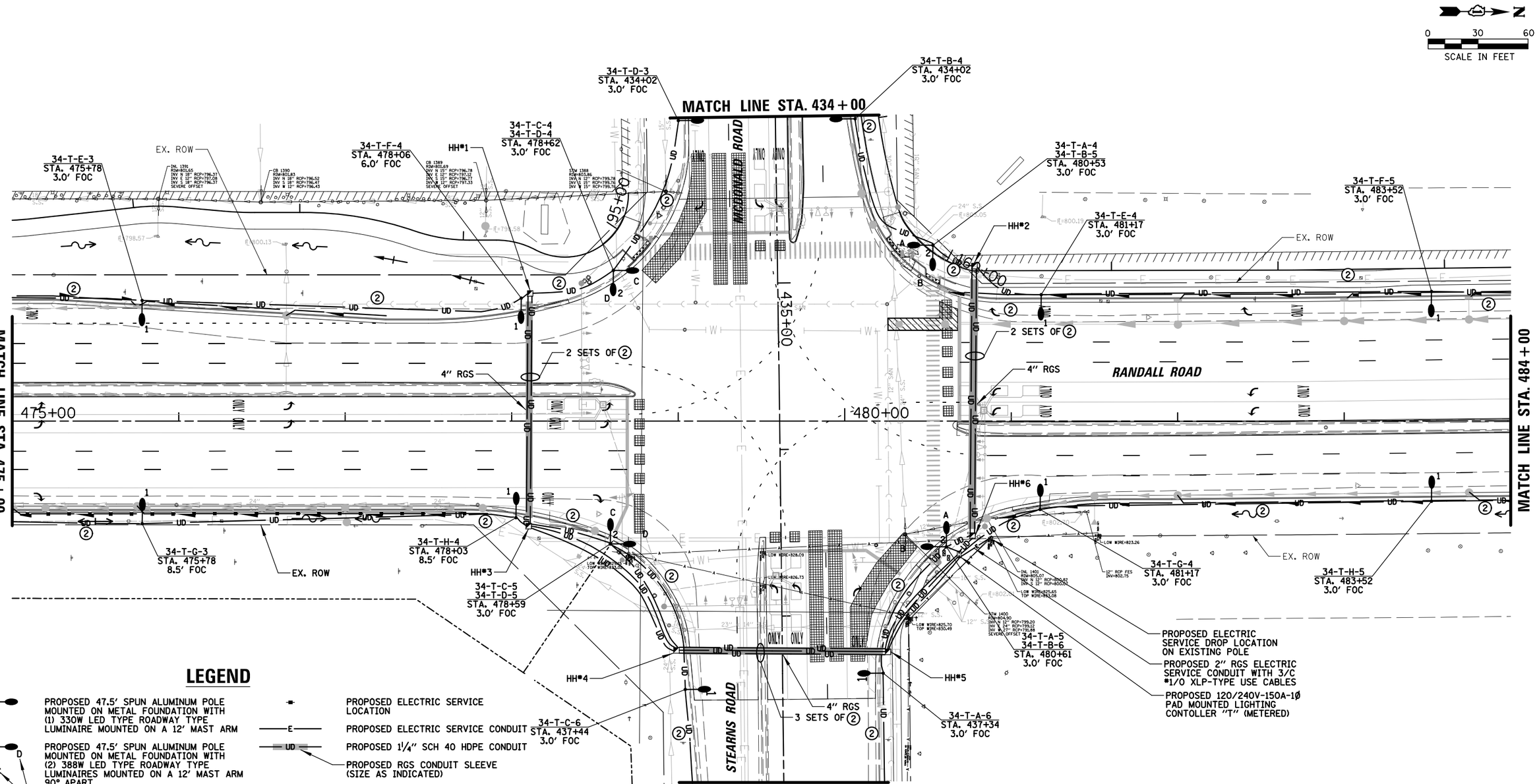
FILE NAME = N:\Kane County\170513\Mech\LGT02_Randall_170513.sht	USER NAME = jpatrick	DESIGNED AJD	REVISED -
		DRAWN RJJ	REVISED -
Default	PLOT SCALE = 60'	CHECKED AJD	REVISED -
	PLOT DATE = 11/9/2018	DATE 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (2 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 2 OF 7 SHEETS | STA. 466+00 TO STA. 475+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	75
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		



LEGEND

- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM
- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER
- PROPOSED CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- PROPOSED ELECTRIC SERVICE CONDUIT
- PROPOSED 1¼" SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- 34-T-A-1 STA. 10+00 4.0' FOC: COUNTY HWY, POWER CENTER, CIRCUIT, POLE NUMBER, STATION, SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

CONDUCTOR /CONDUIT SCHEDULE

(1) 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

(2) 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

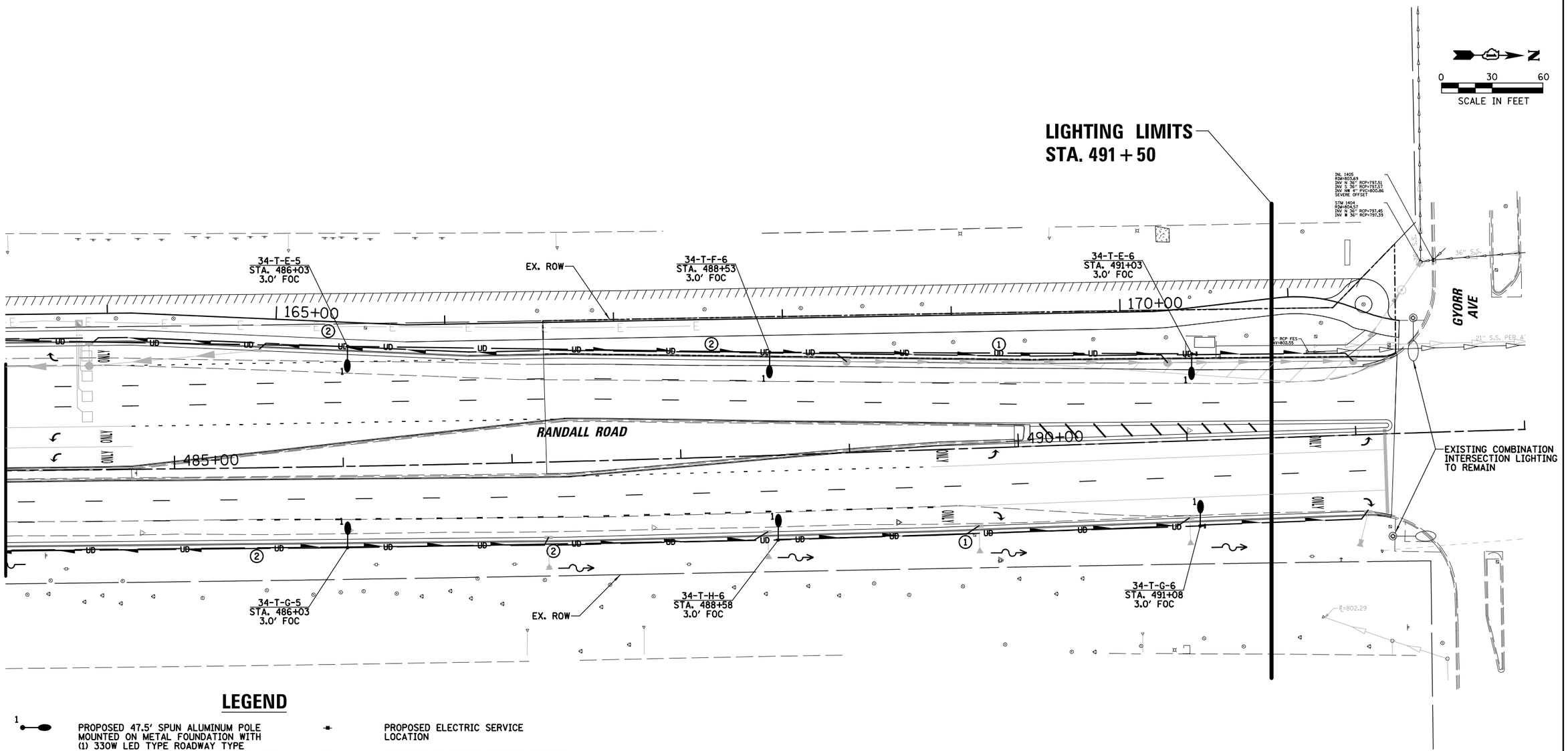
FILE NAME = N:\Kane County\170513\Mech\LGT03_Randal_170513.sht	USER NAME = jpatrick	DESIGNED AJD	REVISED -
		DRAWN RJJ	REVISED -
	PLOT SCALE = 60'	CHECKED AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (3 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 3 OF 7 SHEETS | STA. 475+00 | TO STA. 484+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	76
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		



LEGEND

- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM
- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER
- PROPOSED CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- PROPOSED ELECTRIC SERVICE CONDUIT
- PROPOSED 1¼" SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- COUNTY HWY
- POWER CENTER
- CIRCUIT
- POLE NUMBER
- STATION
- SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

34-T-A-1
STA. 10+00
4.0' FOC

CONDUCTOR /CONDUIT SCHEDULE

① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

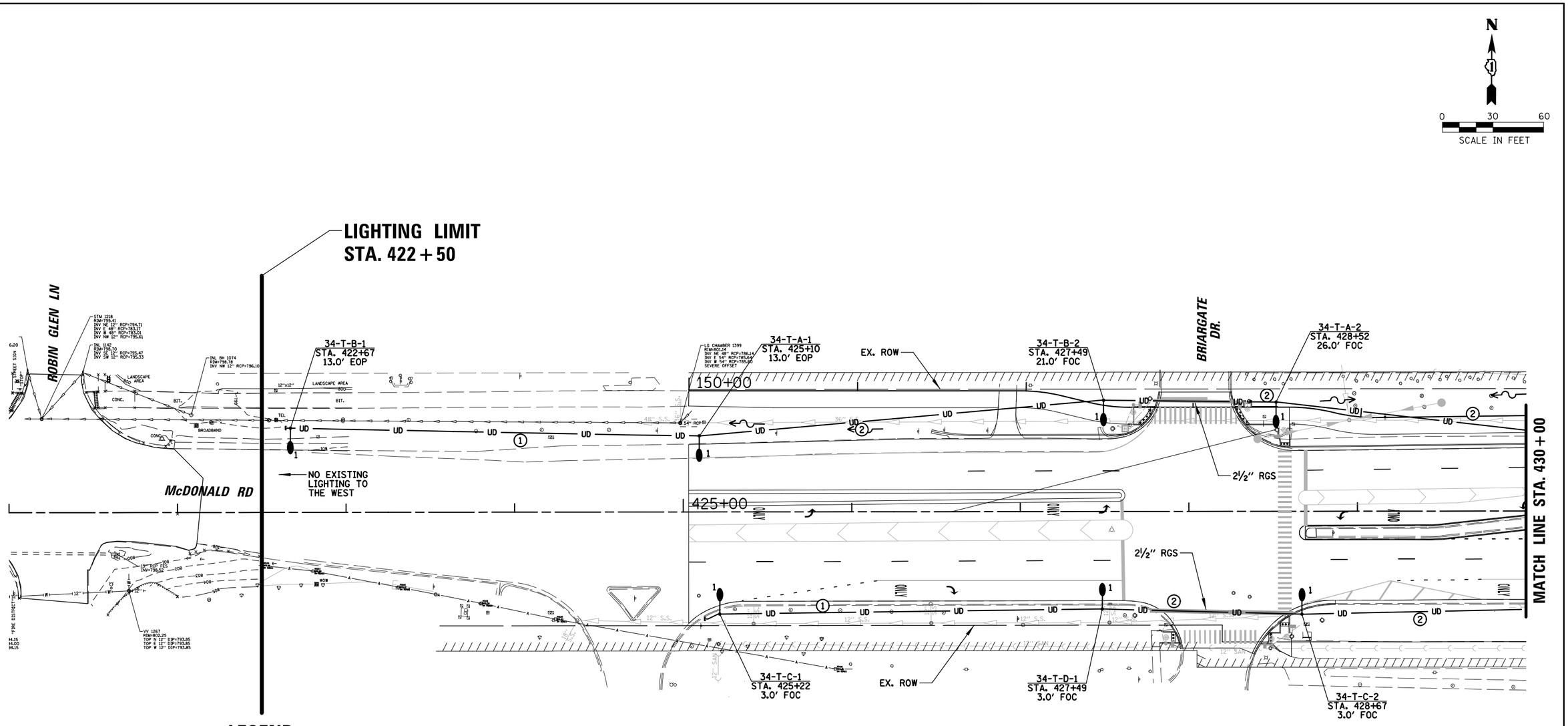
FILE NAME = N:\Kane County\170513\Mech\LGT04_Randal_170513.sht	USER NAME = jstrick	DESIGNED AJD	REVISED -
		DRAWN RJJ	REVISED -
	PLOT SCALE = 60'	CHECKED AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (4 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 4 OF 7 SHEETS | STA. 484+00 | TO STA. 491+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	77
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



LEGEND

1 — PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM

2 — PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART

C, D — LUMINAIRE CIRCUIT IDENTIFIER

EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM

PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER

PROPOSED CONCRETE HANDHOLE

PROPOSED ELECTRIC SERVICE LOCATION

E — PROPOSED ELECTRIC SERVICE CONDUIT

UD — PROPOSED 1¼" SCH 40 HDPE CONDUIT

PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)

34-T-A-1 / STA. 10+00 / 4.0' FOC

COUNTY HWY
POWER CENTER
CIRCUIT
POLE NUMBER
STATION
SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

CONDUCTOR /CONDUIT SCHEDULE

(1) 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

(2) 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

FILE NAME = N:\Kane County\170513\Mech\LGT05_McDonald_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 60'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (5 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 5 OF 7 SHEETS | STA. 422+50 | TO STA. 430+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	78
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

CONDUCTOR /CONDUIT SCHEDULE

① 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

② 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

N

0 30 60

SCALE IN FEET

34-T-B-3
STA. 430+44
3.0' FOC

EX. ROW

34-T-A-3
STA. 432+21
3.0' FOC

155+00

2½" RGS

430+00

McDONALD ROAD

MATCH LINE STA. 430+00

34-T-D-2
STA. 430+44
3.0' FOC

34-T-C-3
STA. 432+21
3.0' FOC

EX. ROW

MATCH LINE STA. 434+00

435+00

480+00

MATCH LINE STA. 438+00

STEARNS ROAD

EX. ROW

MATCH LINE STA. 439+00

RANDALL ROAD

LEGEND

1 — PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM

2 (C, D) — PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART

LUMINAIRE CIRCUIT IDENTIFIER

EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM

PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER

PROPOSED CONCRETE HANDHOLE

PROPOSED ELECTRIC SERVICE LOCATION

E — PROPOSED ELECTRIC SERVICE CONDUIT

UD — PROPOSED 1¼" SCH 40 HDPE CONDUIT

PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)

34-T-A-1
STA. 10+00
4.0' FOC

COUNTY HWY

POWER CENTER

CIRCUIT

POLE NUMBER

STATION

SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

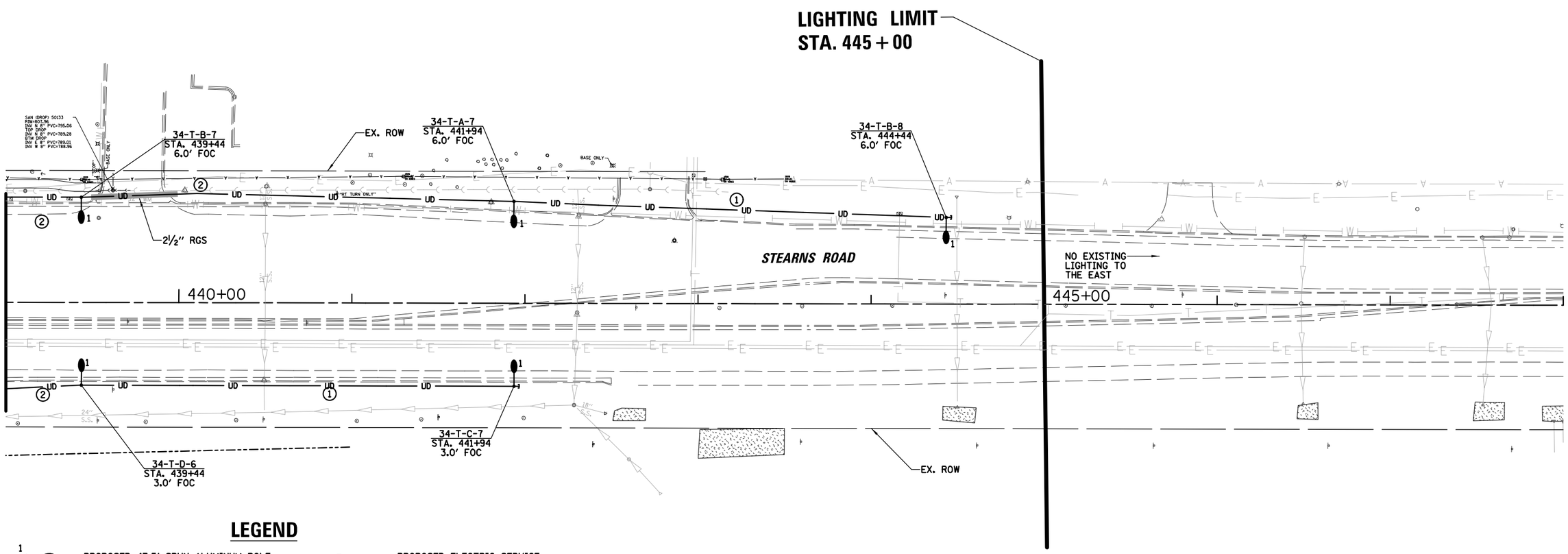
FILE NAME = N:\Kane County\170513\Mech\LGT06_McDonald_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 60'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (6 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 6 OF 7 SHEETS | STA. 430+00 TO STA. 439+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	79
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



LEGEND

- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (1) 330W LED TYPE ROADWAY TYPE LUMINAIRE MOUNTED ON A 12' MAST ARM
- PROPOSED 47.5' SPUN ALUMINUM POLE MOUNTED ON METAL FOUNDATION WITH (2) 388W LED TYPE ROADWAY TYPE LUMINAIRES MOUNTED ON A 12' MAST ARM 90° APART
- LUMINAIRE CIRCUIT IDENTIFIER
- EXISTING 310W HPS COMBINATION LIGHTING MOUNTED AT 40' ON A 12' ARM
- PROPOSED 120/240V-150A-1Ø LIGHTING CONTROLLER
- PROPOSED CONCRETE HANDHOLE
- PROPOSED ELECTRIC SERVICE LOCATION
- PROPOSED ELECTRIC SERVICE CONDUIT
- PROPOSED 1¼" SCH 40 HDPE CONDUIT
- PROPOSED RGS CONDUIT SLEEVE (SIZE AS INDICATED)
- COUNTY HWY
- POWER CENTER
- CIRCUIT
- POLE NUMBER
- STATION
- SET BACK FROM FACE OF CURB (FOC) TO CENTER OF POLE OR (E.O.P.) EDGE OF TRAVELED PAVEMENT

34-T-A-1
STA. 10+00
4.0' FOC

CONDUCTOR /CONDUIT SCHEDULE

(1) 2/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT
(2) 4/C #8 & 1/C #8 GND XLP-TYPE USE CABLES IN 1¼" SCH40 HDPE CONDUIT

FILE NAME = N:\Kane County\170513\Mech\LGT07_Stearns_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 60'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN (7 OF 7)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: 30 | SHEET 7 OF 7 SHEETS | STA. 439+00 TO STA. 445+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	80
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

ITEM	SPECIFICATION
(1) MAIN CIRCUIT BREAKER	150 AMPERE, 2P, 240V SERVICE RATING, 10KAIC
(2) LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 10KAIC
(3) PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC
(4) AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS
(5) CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER
(6) CABINET LIGHT	5 WATT LED STRIP LIGHT, 60K HOUR RATING, 65K COLOR TEMPERATURE, DOOR SWITCH CONTROLLED, FASTENED TO TOP OF CABINET
(7) CONTACTOR	100 AMPERE, 2P, 120V COIL, MECHANICALLY HELD
(8) BRANCH LINE CIRCUIT BREAKERS	(10) 20A, 2P, 240V RATING, 10KAIC
(9) POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQ'D, 10KAIC
(10) SERVICE CABLES	3-600V (XLP-TYPE USE) NO. #1/0
(11) LAMPHOLDER WIRE	2-600V XLP NO. 12
(12) CONTROL WIRE	2-600V XLP NO. 12
(13) SURGE ARRESTOR	10 K AMPERE RATING
(14) PHOTOELECTRIC CONTROL WIRE	3-600V XLP NO. 12
(15) DOOR SWITCH	20A/120V, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH
(16) HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN CAST ALUM. ENCLOSURE
(17) PHOTOCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC
(18) TERMINAL BLOCK	3 TERMINAL, SCREW TYPE, MAX. #10 WIRE SIZE
(19) CIRCUIT BREAKER DIST. BLOCKS	30A, 600V, 10 KAIC - WIRE RANGE: LINE SIDE LUG (1) #2/0-#14 AWG, LOAD SIDE LUGS (2) #4-#14 AWG

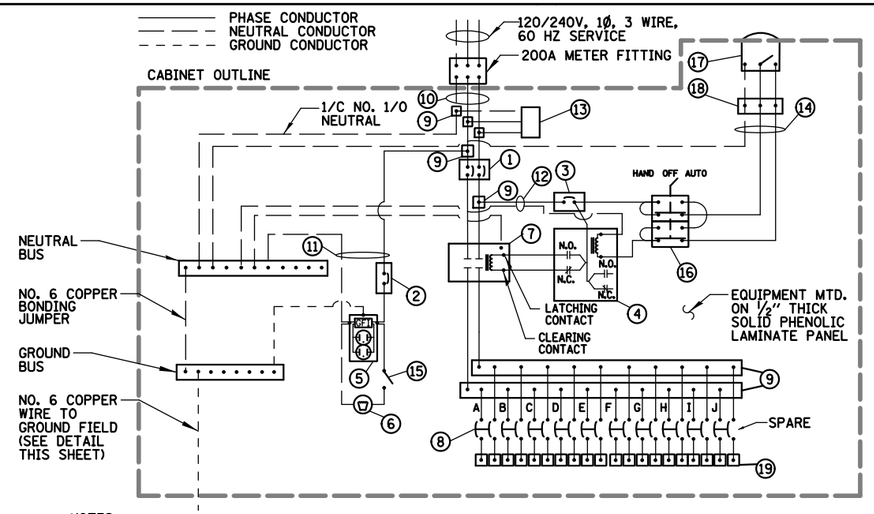
NOTES:

1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR "LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100 AMP" INCLUDING CABINET AND FOUNDATION.
2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
3. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."
4. THE MAIN CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT".
5. ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
6. THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.
7. ALL EXPOSED BUS BARS SHALL BE INSULATED.
8. ALL WIRING SHALL BE COPPER.

LIGHTING CONTROLLER "T" COMPONENT SCHEDULE

LIGHTING CONTROLLER "T"						
CIRCUIT ID	330W LED LUMINAIRE		388W LED LUMINAIRE		TOTAL CIRCUIT LOAD	
	QTY.	LOAD/FIXT. (WATTS)	QTY.	LOAD/FIXT. (WATTS)	(WATTS)	AMPS (VOLTS)
A	5	330 W	2	388 W	2426 W	10.1A (240V)
B	6	330 W	2	388 W	2756 W	11.5A (240V)
C	5	330 W	2	388 W	2426 W	10.1A (240V)
D	4	330 W	2	388 W	2096 W	8.7A (240V)
E	6	330 W	0	388 W	1980 W	8.3A (240V)
F	6	330 W	0	388 W	1980 W	8.3A (240V)
G	6	330 W	0	388 W	1980 W	8.3A (240V)
H	6	330 W	0	388 W	1980 W	8.3A (240V)
TOTAL	44	N/A	8	N/A	17,624 W	73.6A (240V)

PROPOSED LIGHTING/ELECTRICAL CIRCUIT LOADS

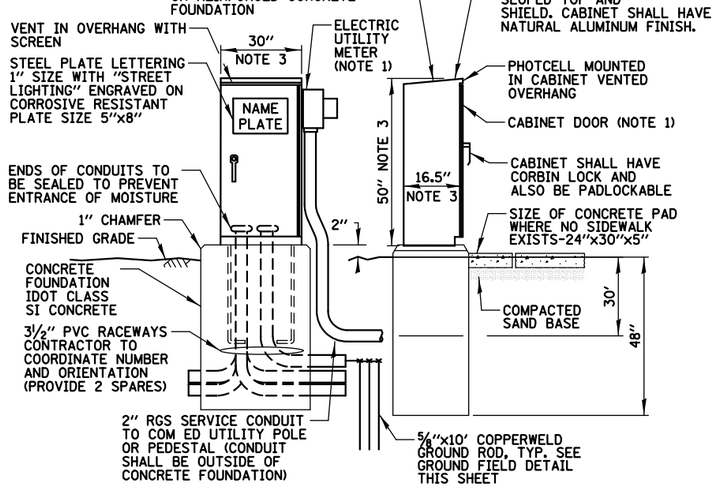


NOTES:

1. ALL GROUND CONDUCTORS SHALL BE GREEN AND NEUTRAL CONDUCTORS SHALL BE WHITE. PHASE CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH SECTION 1066.02 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL ONLY USE SOLID COLOR CODED INSULATIONS. COLOR STRIPPING OF PHASE CONDUCTORS SHALL NOT BE ALLOWED.
2. IN ADDITION TO THE TERMINATIONS SHOWN, THE NEUTRAL AND GROUND BUS BARS SHALL EACH ACCOMMODATE A MINIMUM OF 8 ADDITIONAL TERMINATIONS (#2-#14).

LIGHTING CONTROLLER "T" WIRING DETAIL

N.T.S.

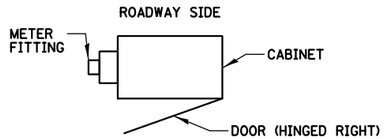


NOTES:

1. SEE DETAIL THIS SHEET FOR CABINET METER FITTING & DOOR ORIENTATION. METER AND DISCONNECT SHALL BE CECHA APPROVED.
2. ALL ITEMS SHOWN ABOVE (INCLUDING FOUNDATION, ELECTRIC METER & GROUND FIELD) SHALL BE INCLUDED IN THE PRICE BID FOR "LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100 AMP", EXCEPT FOR THE SERVICE CONDUIT/WIRE WHICH WILL BE PAID FOR SEPARATELY.
3. CABINET DIMENSIONS SHOWN ARE APPROXIMATE, CABINET SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE.

LIGHTING CONTROLLER "T" CABINET AND FOUNDATION

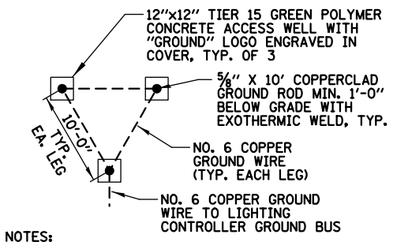
N.T.S.



LIGHTING CONTROLLER "T"

CABINET METER FITTING & DOOR ORIENTATION

N.T.S.

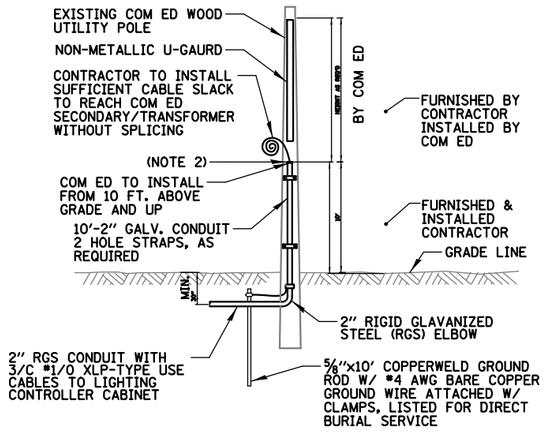


NOTES:

1. ACCESS WELLS SHALL BE INCLUDED IN THE LIGHTING CONTROLLER PAY ITEM.

GROUND FIELD DETAIL (TYP.)

N.T.S.



NOTES:

1. ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
2. CONTRACTOR SHALL PROVIDE CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.
3. ALL MATERIAL ABOVE (EXCEPT FOR POLE) SHALL BE INCLUDED IN THE PRICE BID FOR "ELECTRIC SERVICE INSTALLATION". THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM POLE TO CONTROLLER SHALL BE PAID FOR SEPERATELY.

COM ED OVERHEAD CONNECTION POLE

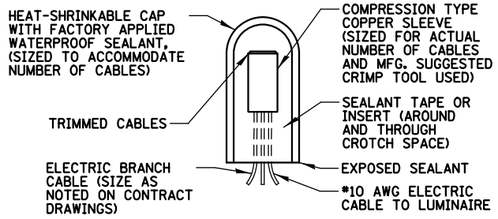
N.T.S.

FILE NAME = N:\Kane County\170513\Mech\LDT01_170513.dgn	USER NAME = jpatrick	DESIGNED - AJD	REVISED -
	PLOT SCALE = 100'	DRAWN - RJJ	REVISED -
Default	PLOT DATE = 11/9/2018	CHECKED - AJD	REVISED -
		DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

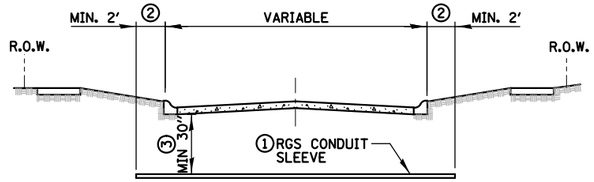
LIGHTING DETAILS (1 OF 6)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: N.T.S. | SHEET 1 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	81
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		

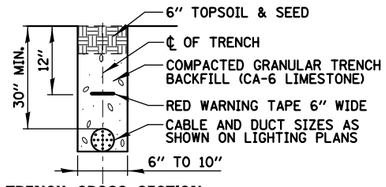


SPLICING ELECTRIC CABLE

N.T.S.



ROADWAY CROSSING



TRENCH CROSS SECTION

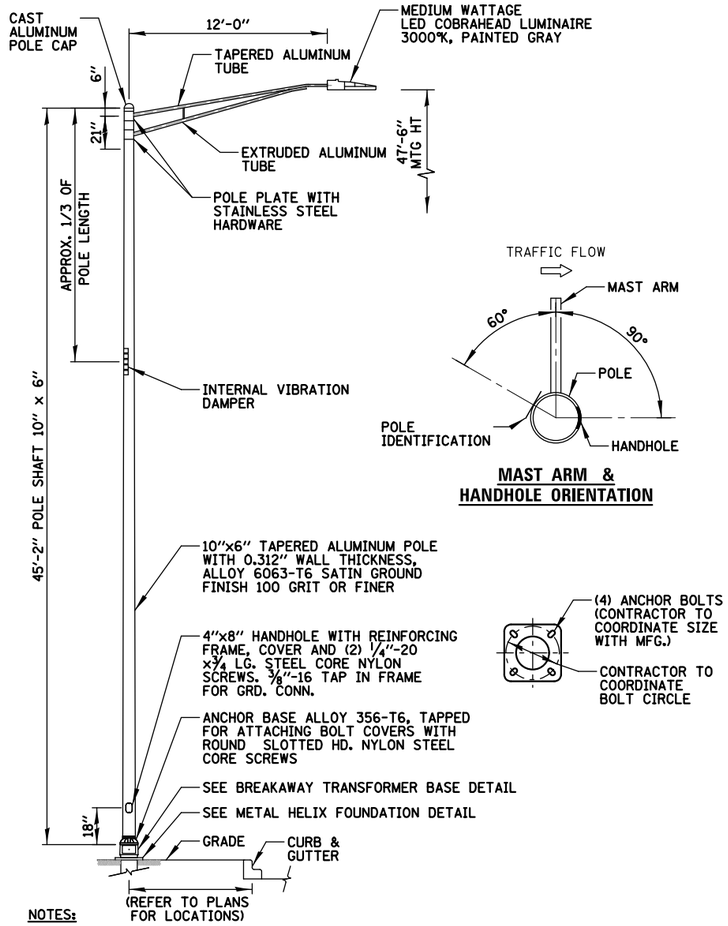
① SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.

② SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.

③ SLEEVE SHALL BE A MINIMUM OF 30" BELOW ROADWAY OR CURB BOTTOM.

ELECTRIC CONDUIT INSTALLATION

N.T.S.



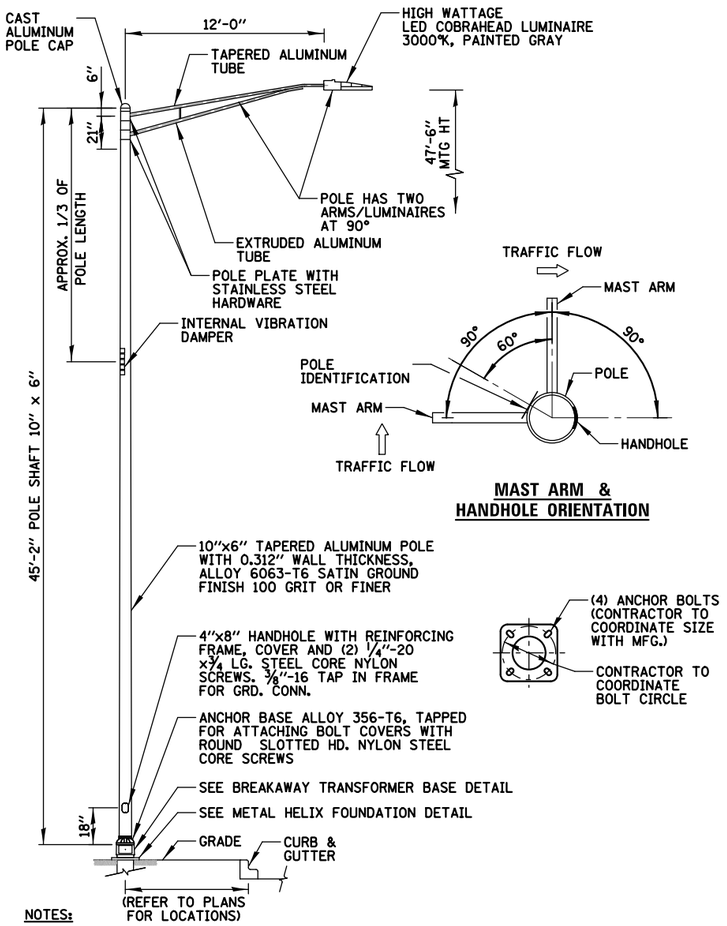
MAST ARM & HANDHOLE ORIENTATION

NOTES:

1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. POLE HANDHOLE SHALL FACE AWAY FROM TRAFFIC.
3. LED LUMINAIRE SHALL BE PAID FOR UNDER "LUMINAIRE, LED, HORIZONTAL MOUNT, MEDIUM WATTAGE"

LIGHT POLE TYPE 1 DETAIL

N.T.S.



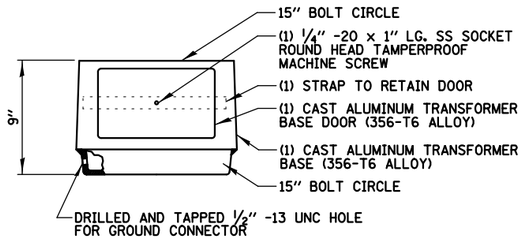
MAST ARM & HANDHOLE ORIENTATION

NOTES:

1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. POLE HANDHOLE SHALL FACE AWAY FROM TRAFFIC.
3. LED LUMINAIRE SHALL BE PAID FOR UNDER "LUMINAIRE, LED, HORIZONTAL MOUNT, HIGH WATTAGE"

LIGHT POLE TYPE 2 DETAIL

N.T.S.



NOTES:

1. BEFORE INSTALLATION OF BREAKAWAY BASE, USER SHOULD CONSULT WITH AUTHORIZED DISTRIBUTOR REGARDING USERS PROPOSED APPLICATION, LOAD REQUIREMENTS AND INSTALLATION METHODS. FAILURES CAN RESULT FROM USERS MISAPPLICATION OR IMPROPER INSTALLATION. TO APPROACH OPTIMUM STATIC LOADS, USE THE LARGEST POSSIBLE BOLT CIRCLES. SHIMS SHALL NOT BE ALLOWED.

BREAKAWAY TRANSFORMER BASE

N.T.S.

FILE NAME = N:\Kane County\170513\Mech\LDT02_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
Default	PLOT SCALE = 100'	CHECKED - AJD	REVISED -
	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS (2 OF 6)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N.T.S. | SHEET 2 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	82
		CONTRACT NO. 61F28		
		ILLINOIS	FED. AID PROJECT	

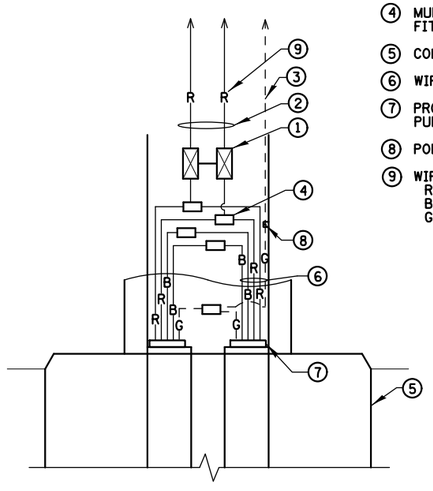
LUMINAIRE AND POLE SCHEDULE

LIGHT POLE IDENTIFIER	POLE TYPE	LUMINAIRE		LOCATION	
		WATTAGE	CKT ID	STATION	OFFSET
B1	1	330W	B	422+67L	13.0' E.O.P.
A1	1	330W	A	425+10L	13.0' E.O.P.
B2	1	330W	B	427+49L	21.0' F.O.C.
A2	1	330W	A	428+52L	26.0' F.O.C.
B3	1	330W	B	430+44L	3.0' F.O.C.
A3	1	330W	A	432+21L	3.0' F.O.C.
B4	1	330W	B	434+02R	3.0' F.O.C.
A4, B5	2	(2) 388W	B,A	480+53L	3.0' F.O.C.
A5, B6	2	(2) 388W	A,B	480+61R	3.0' F.O.C.
A6	1	330W	A	437+34R	3.0' F.O.C.
B7	1	330W	B	439+44L	6.0' F.O.C.
A7	1	330W	A	441+94L	6.0' F.O.C.
B8	1	330W	B	444+44L	6.0' F.O.C.
C1	1	330W	C	425+22R	3.0' F.O.C.
D1	1	330W	D	427+49R	3.0' F.O.C.
C2	1	330W	C	428+67R	3.0' F.O.C.
D2	1	330W	D	430+44R	3.0' F.O.C.
C3	1	330W	C	432+21R	3.0' F.O.C.
D3	1	330W	D	434+02L	3.0' F.O.C.
C4, D4	2	(2) 388W	C,D	478+62L	3.0' F.O.C.
C5, D5	2	(2) 388W	D,C	478+59R	3.0' F.O.C.
C6	1	330W	C	437+44L	3.0' F.O.C.
D6	1	330W	D	439+44R	3.0' F.O.C.
C7	1	330W	C	441+94R	3.0' F.O.C.
F1	1	330W	F	463+53L	3.0' F.O.C.
E1	1	330W	E	466+03L	3.0' F.O.C.
F2	1	330W	F	468+53L	3.0' F.O.C.
E2	1	330W	E	471+03L	3.0' F.O.C.
F3	1	330W	F	473+53L	3.0' F.O.C.
E3	1	330W	E	475+78L	3.0' F.O.C.
F4	1	330W	F	478+06L	6.0' F.O.C.
E4	1	330W	E	481+17L	3.0' F.O.C.
F5	1	330W	F	483+52L	3.0' F.O.C.
E5	1	330W	E	486+03L	3.0' F.O.C.
F6	1	330W	F	488+53L	3.0' F.O.C.
E6	1	330W	E	491+03L	3.0' F.O.C.
H1	1	330W	H	463+53R	8.5' F.O.C.
G1	1	330W	G	466+03R	8.5' F.O.C.
H2	1	330W	H	468+53R	8.5' F.O.C.
G2	1	330W	G	471+03R	8.5' F.O.C.
H3	1	330W	H	473+53R	8.5' F.O.C.
G3	1	330W	G	475+78R	8.5' F.O.C.
H4	1	330W	H	478+03R	8.5' F.O.C.
G4	1	330W	G	481+17R	3.0' F.O.C.
H5	1	330W	H	483+52R	3.0' F.O.C.
G5	1	330W	G	486+03R	3.0' F.O.C.
H6	1	330W	H	488+58R	3.0' F.O.C.
G6	1	330W	G	491+08R	3.0' F.O.C.

F.O.C. - FACE OF CURB
E.O.P. - EDGE OF TRAVELED PAVEMENT

PHASE CONDUCTOR
GROUND CONDUCTOR
NEUTRAL CONDUCTOR

TO 240V ROADWAY LUMINAIRE

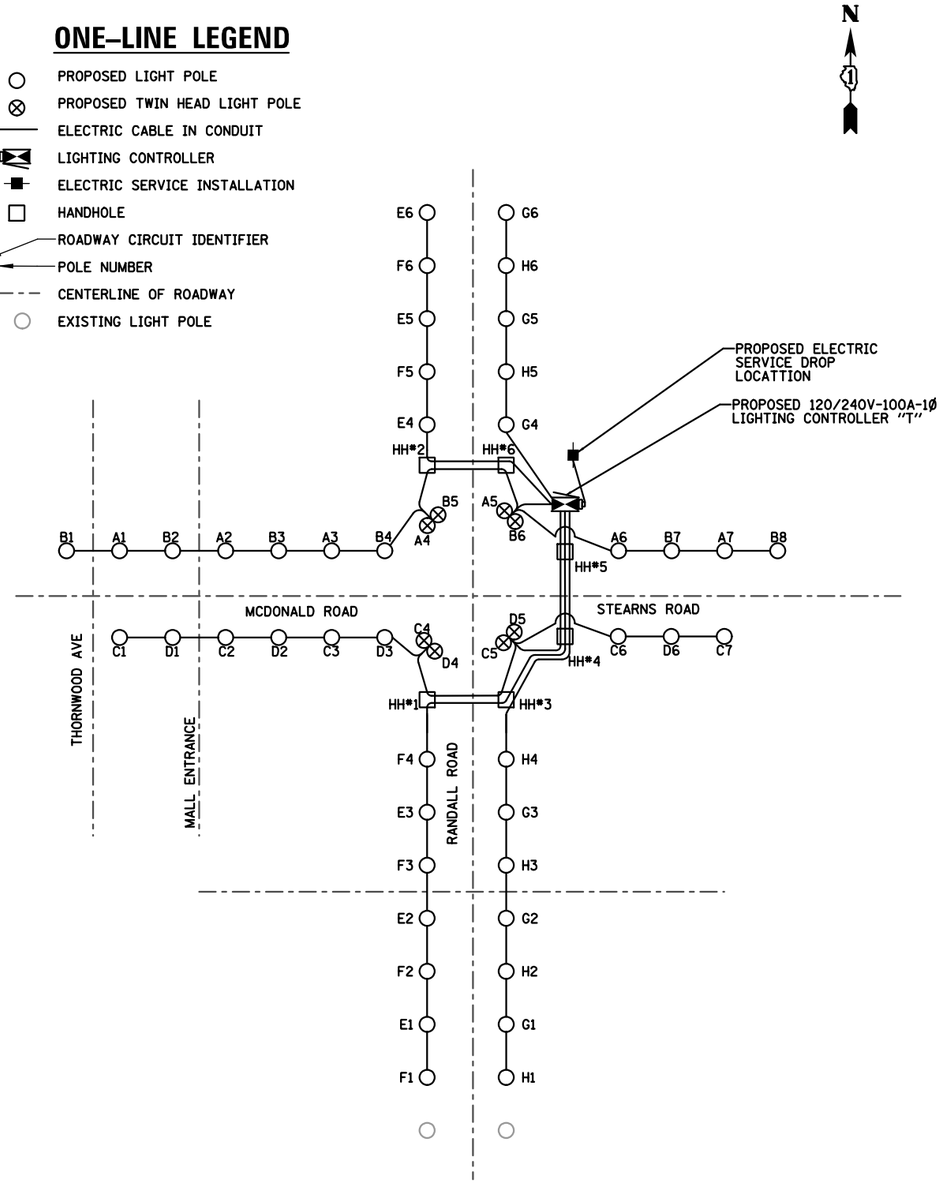


HANDHOLE WIRING DIAGRAM
N.T.S.

1. 5A TIME-DELAY TYPE FUSE INSIDE A 2-POLE BREAKAWAY WATERPROOF FUSE HOLDER & INSULATING BOOTS
2. NO. 10 POLE WIRES TO LUMINAIRE COLOR TO MATCH BRANCH WIRING
3. NO. 10 GROUND WIRE CONNECTED TO GROUND LUG IN LUMINAIRE
4. MULTIPLE COMPRESSION FITTINGS (SPLICE), TYP.
5. CONCRETE FOUNDATION
6. WIRES AS SHOWN ON PLANS
7. PROPOSED LIGHTING CONDUIT PULLED THROUGH PVC RACEWAY
8. POLE GROUND LUG
9. WIRE COLOR
   R=RED
   B=BLACK
   G=GREEN

ONE-LINE LEGEND

- PROPOSED LIGHT POLE
- PROPOSED TWIN HEAD LIGHT POLE
- ELECTRIC CABLE IN CONDUIT
- LIGHTING CONTROLLER
- ELECTRIC SERVICE INSTALLATION
- HANDHOLE
- A1 — ROADWAY CIRCUIT IDENTIFIER
- POLE NUMBER
- CENTERLINE OF ROADWAY
- EXISTING LIGHT POLE



CONTROLLER "T"
LIGHTING ONE-LINE DIAGRAM
N.T.S.

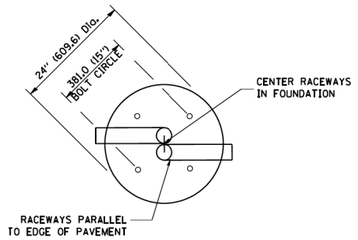
FILE NAME = N:\Kane County\170513\Mech\LDT03_170513.sht	USER NAME = jpatrick	DESIGNED - AJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - RJJ	REVISED -	
Default	PLOT SCALE = 100'	CHECKED - AJD	REVISED -	
	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -	

LIGHTING DETAILS (3 OF 6)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: N.T.S. | SHEET 3 OF 6 SHEETS | STA. | TO STA.

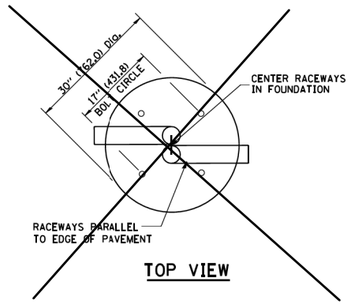
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	83
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

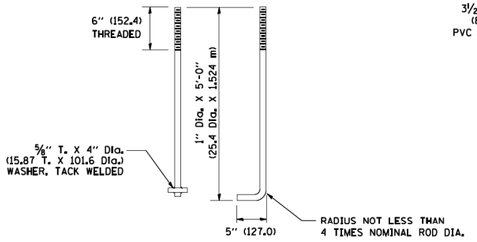
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Ou = 0.375 TON/SQ. FT.	13'-0" (3,96 m)	15'-0" (4,57 m)
MEDIUM CLAY Ou = 0.75 TON/SQ.FT	9'-6" (2.09 m)	10'-9" (3,23 m)
STIFF CLAY Ou = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND Ø = 34°	9'-0" (2.74 m)	10'-0" (3,05 m)
MEDIUM SAND Ø = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND Ø = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



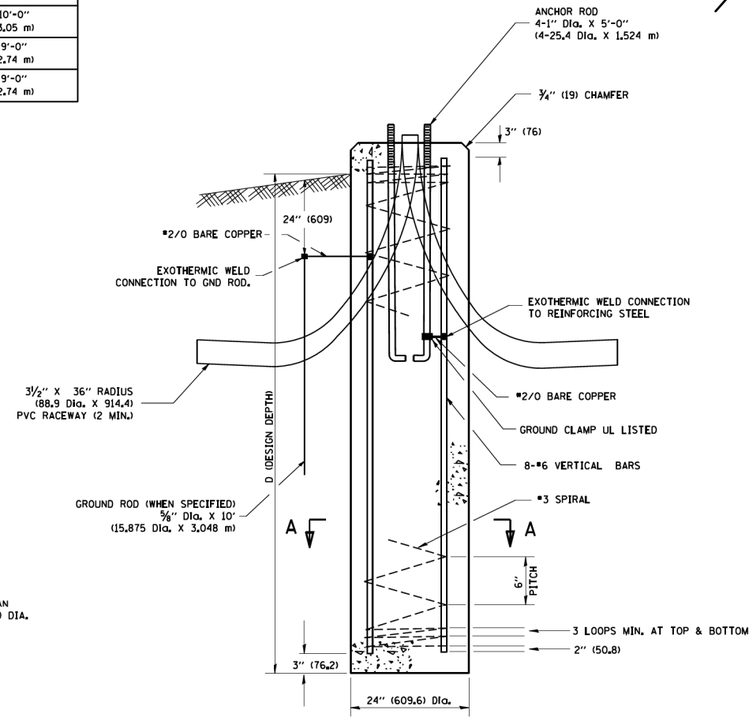
TOP VIEW



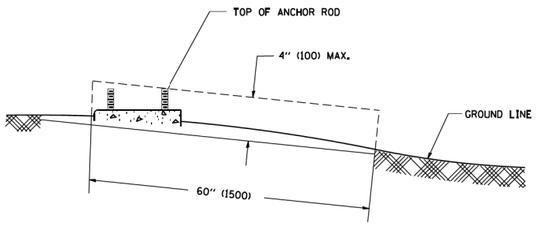
TOP VIEW



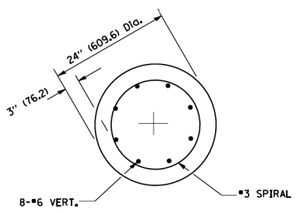
ANCHOR ROD DETAIL



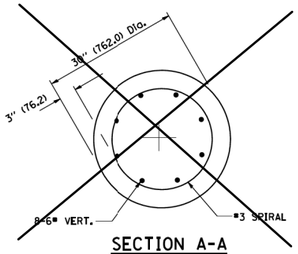
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

IDOT STANDARDS BE-301
REVISED 1-4-2008

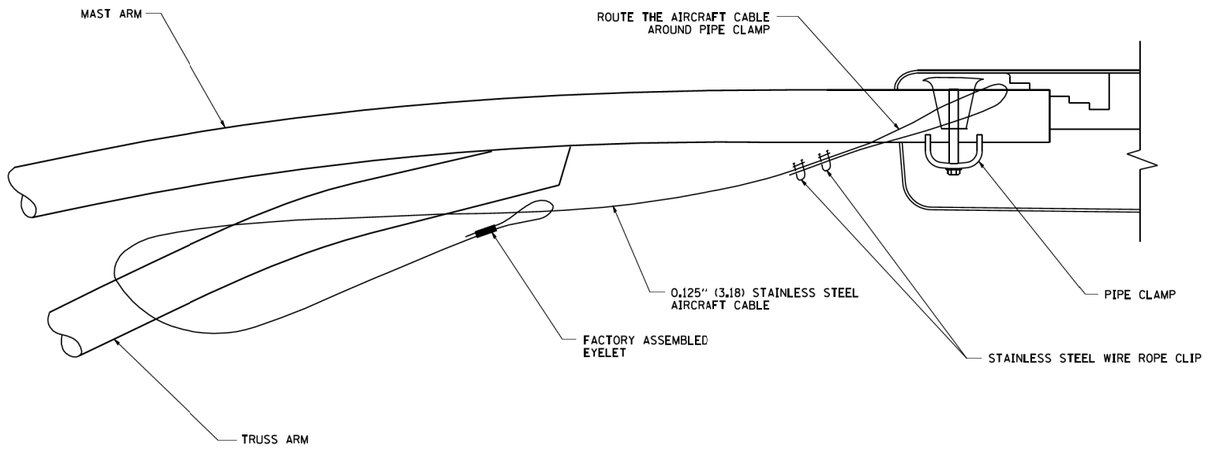
FILE NAME = N:\Kane County\170513\Mech\LDT04_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 100'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS (4 OF 6)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

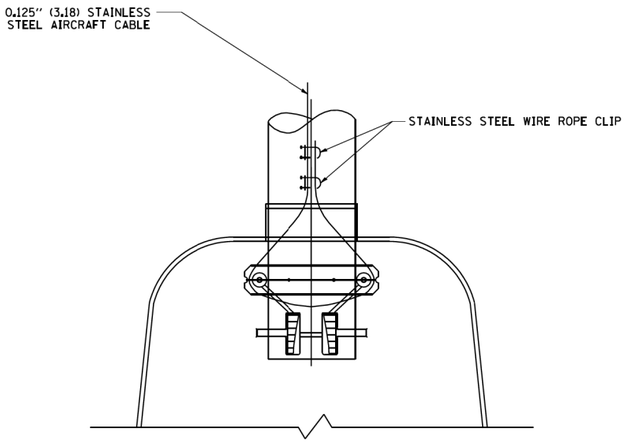
SCALE: NOT.S. | SHEET 4 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	84
		CONTRACT NO. 61F28		
	ILLINOIS FED. AID PROJECT			



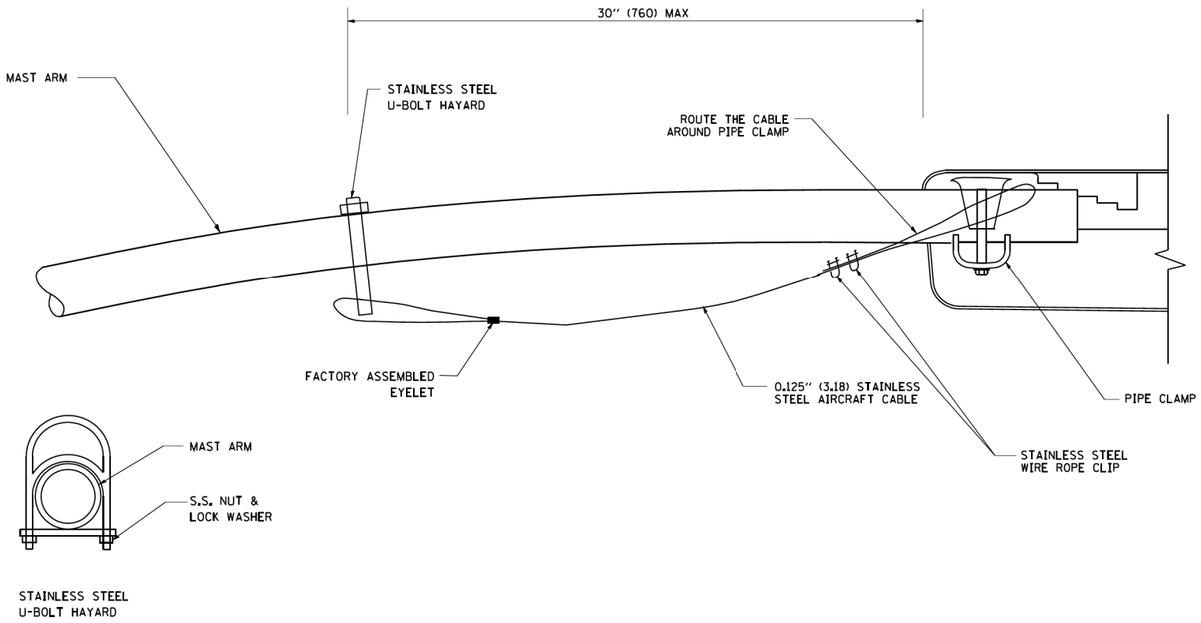
SIDE VIEW (TRUSS ARM)

N.T.S.



BOTTOM VIEW

N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

IDOT STANDARDS BE-701
REVISED 8-8-2003

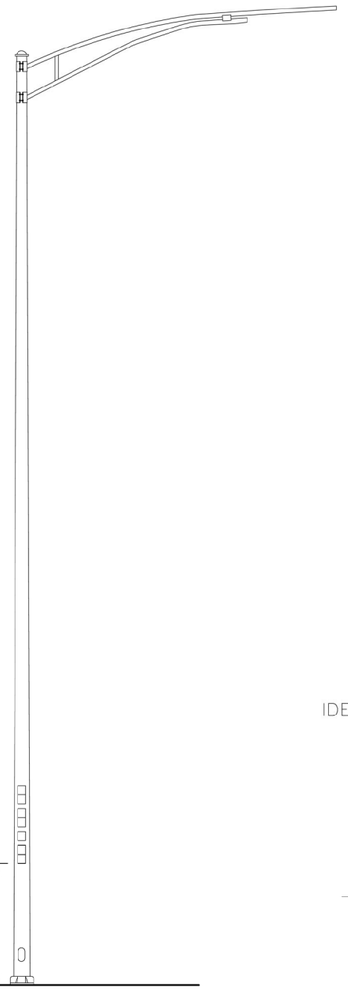
FILE NAME = N:\Kane County\170513\Mech\LDT05_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 100'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS (5 OF 6)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: N.T.S. | SHEET 5 OF 6 SHEETS | STA. | TO STA.

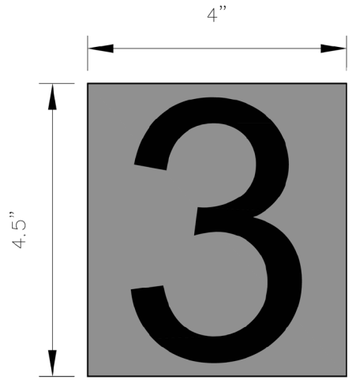
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	85
		CONTRACT NO. 61F28		
	ILLINOIS	FED. AID PROJECT		



5'

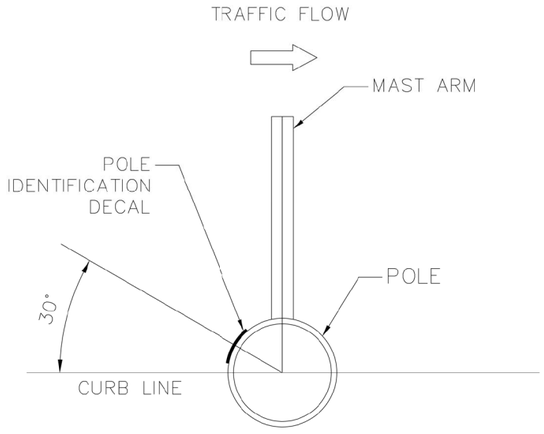
MOUNTING HEIGHT DETAIL

NOTE:
PLACE BOTTOM OF THE BOTTOM DECAL AT 5' ABOVE GROUND LEVEL. PLACE DECALS MOVING UP THE POLE FOLLOWING THE DECAL SPACING DETAIL TO THE RIGHT.

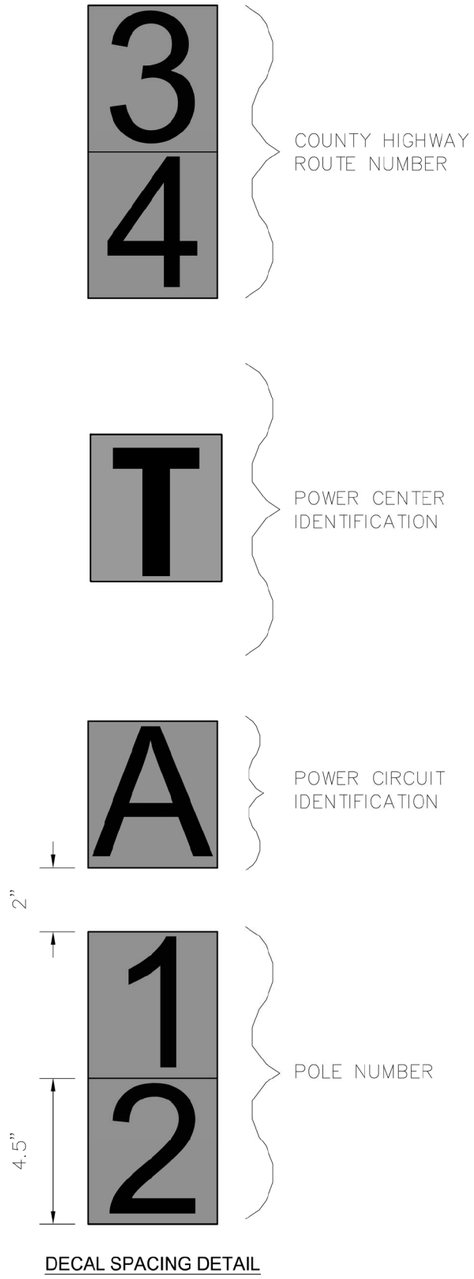


NOTE:
ALL DECALS SHALL BE BLACK LETTERS ON ORANGE BACKGROUND

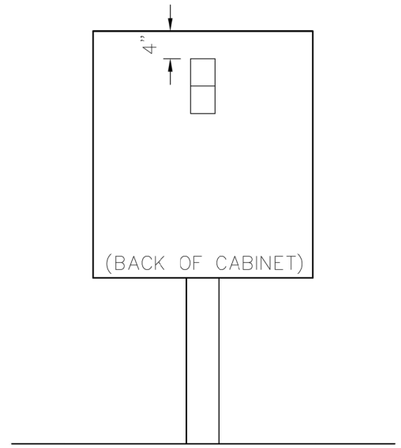
DECAL DETAIL



POLE IDENTIFICATION DECAL ORIENTATION DETAIL

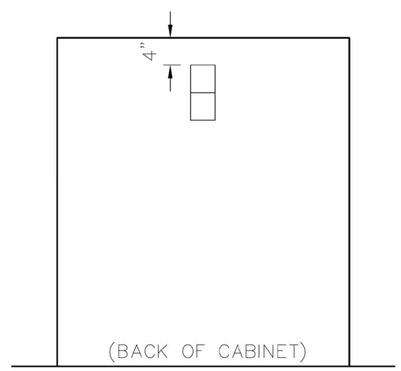


DECAL SPACING DETAIL



PEDESTAL MOUNTED CABINET DECAL LOCATION DETAIL

NOTE:
DECALS ON CABINET SHALL BE THE POWER CENTER IDENTIFICATION ONLY.



GROUND MOUNTED CABINET DECAL LOCATION DETAIL

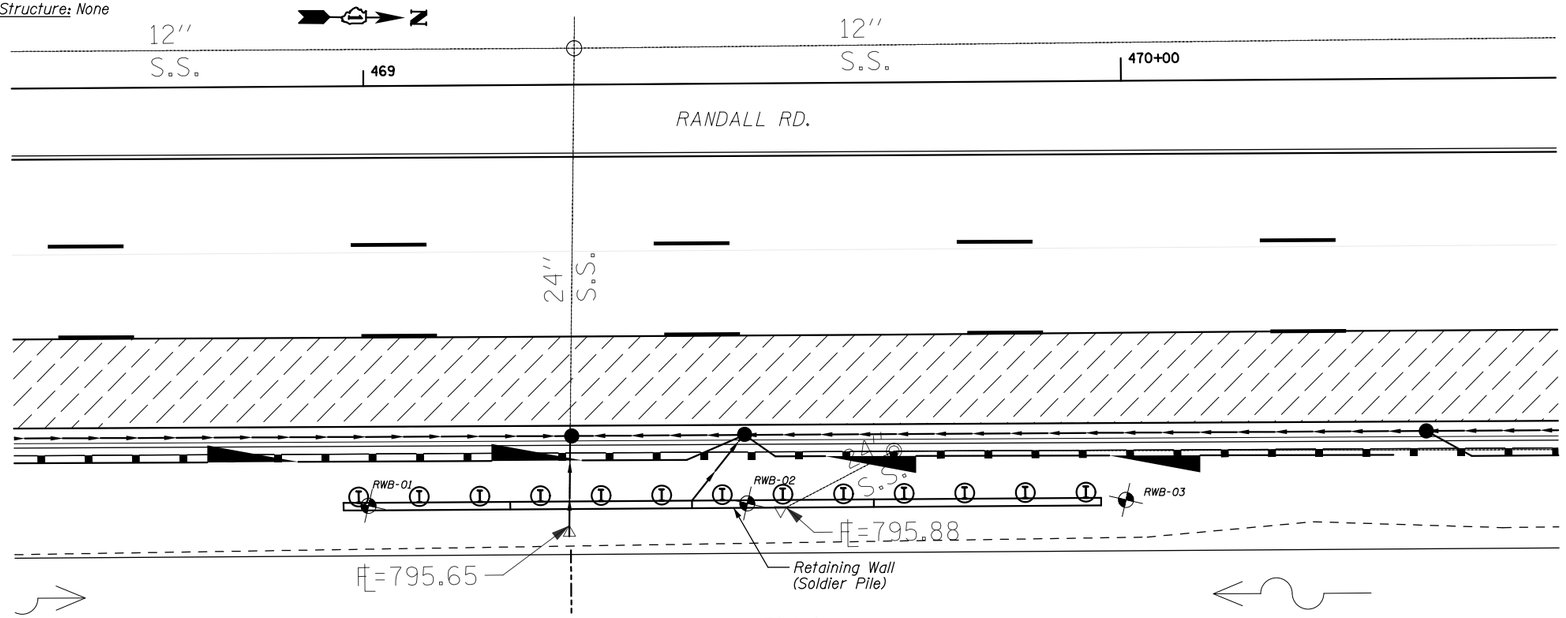
FILE NAME = N:\Kane County\170513\Mech\LDT06_170513.sht	USER NAME = jstrick	DESIGNED - AJD	REVISED -
		DRAWN - RJJ	REVISED -
	PLOT SCALE = 100'	CHECKED - AJD	REVISED -
Default	PLOT DATE = 11/9/2018	DATE - 07/23/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

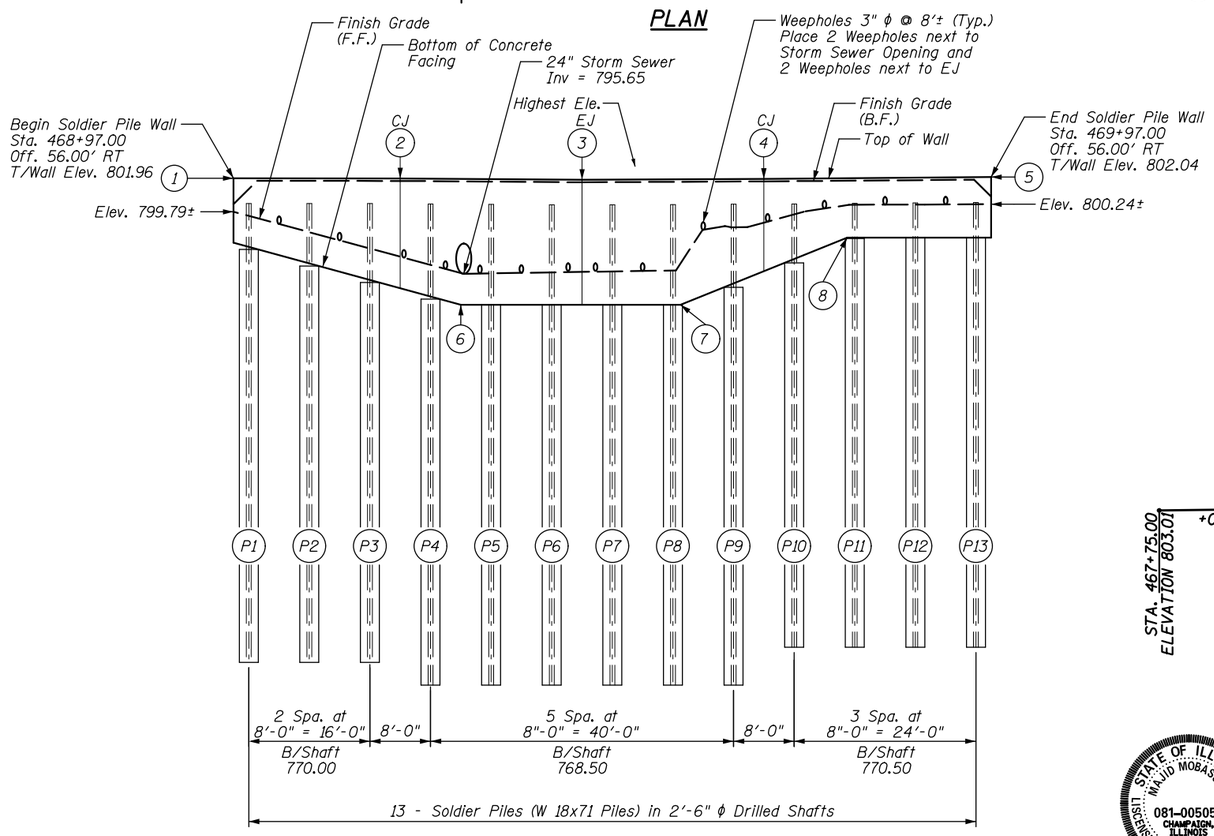
LIGHTING DETAILS (6 OF 6)
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: N.T.S. | SHEET 6 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	86
		CONTRACT NO. 61F28		
		ILLINOIS FED. AID PROJECT		

Existing Structure: None



PLAN



ELEVATION

DESIGN SPECIFICATIONS

2016 AASHTO LRFD Bridge Design Specifications, 7th Edition

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi (Wall Facing)
f'_c = 4,000 psi (Encasement)
f_y = 60,000 psi (Reinf.)
F_y = 50,000 psi (W Piles)

CONCRETE FACING LAYOUT

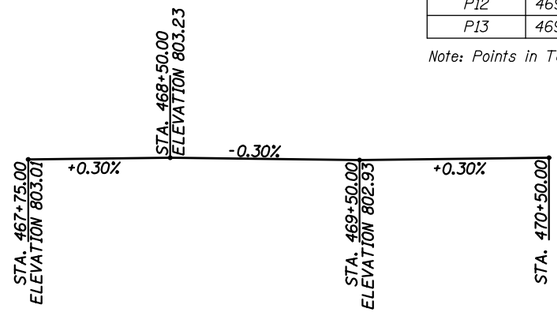
Mark	Station	Offset	T/Wall Elevation	B/Wall Elevation	Description
1	468+97.00	56.00' RT	801.96	797.71	Begin Wall
2	469+19.00	56.00' RT	801.95	794.71	CJ
3	469+43.00	56.00' RT	801.86	793.61	EJ
4	469+67.00	56.00' RT	801.92	795.83	CJ
5	469+97.00	56.00' RT	802.04	798.04	End Wall
6	469+27.00	56.00' RT	801.92	793.61	Bottom Bend
7	469+56.00	56.00' RT	801.89	793.61	Bottom Bend
8	469+78.00	56.00' RT	801.97	798.04	Bottom Bend

Notes: Points in Table are Front Face Of Wall
CJ = Construction Joint
EJ = Expansion Joint

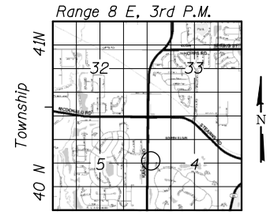
PILE/SHAFT LAYOUT

Mark	Station	Offset	T/Pile Elevation	T/Shaft Elevation	B/Shaft Elevation
P1	468+99.00	54.23' RT	800.29	797.27	770.00
P2	469+07.00	54.23' RT	800.29	796.17	770.00
P3	469+15.00	54.23' RT	800.29	795.08	770.00
P4	469+23.00	54.23' RT	800.27	793.99	768.50
P5	469+31.00	54.23' RT	800.24	793.61	768.50
P6	469+39.00	54.23' RT	800.21	793.61	768.50
P7	469+47.00	54.23' RT	800.21	793.61	768.50
P8	469+55.00	54.23' RT	800.23	793.61	768.50
P9	469+63.00	54.23' RT	800.25	794.77	768.50
P10	469+71.00	54.23' RT	800.27	796.38	771.00
P11	469+79.00	54.23' RT	800.30	797.99	771.00
P12	469+87.00	54.23' RT	800.34	798.04	771.00
P13	469+95.00	54.23' RT	800.37	798.04	771.00

Note: Points in Table are at the Center of the Piles/Shafts



PROFILE GRADE-N.B. RANDALL RD. RT EDGE OF PAVEMENT



LOCATION SKETCH

STATE OF ILLINOIS
MAJID MOBASSERI
081-005058
CHAMPAIGN, ILLINOIS
LICENSED STRUCTURAL ENGINEER

MAJID MOBASSERI
ILLINOIS REGISTRATION No. 081-005058 STRUCTURAL ENGINEER
EXPIRATION DATE: 11/30/18

0 10 20 30
SCALE IN FEET

FILE NAME = N:\Kane County\170513\Struct\GPE_170513.mt	USER NAME = jstrick	DESIGNED JMB	REVISED -
		DRAWN CMT	REVISED -
	PLOT SCALE = 20'	CHECKED MM	REVISED -
Default	PLOT DATE = 11/9/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL GENERAL PLANS AND ELEVATION
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS
SCALE: 10 | SHEET 1 OF 5 SHEETS | STA. 468+97.00 TO STA. 469+97.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00214-28-CH	KANE	129	87
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

I General Notes

1. All work shall be done in accordance to the Illinois Department of Transportation (IDOT) Standard Specification for Road and Bridge Construction. Adopted April 1, 2016, and latest Supplemental Specifications and recurring Special Provisions, unless noted otherwise. Construction Plans and Subsequent Details are all to be considered as part of the Contract. Incidental Items or Accessories necessary to complete this work may not be specifically noted but are considered a part of this Contract.

2. No Construction Plans shall be used for Construction unless specifically Marked for Construction. Prior to commencement of construction, the Contractor shall verify all dimensions and conditions affecting the work with the actual conditions, if there are discrepancies between the Job site and what Is shown on the construction plans, the contractor must Immediately report to Engineer before doing any work, otherwise the Contractor shall assume full responsibility. In the event of disagreement between the plans and existing conditions and or details, the Contractor shall secure written Instruction from the Engineer prior to proceeding with any part of the work affected by omissions or discrepancies. In failing to secure such instruction, the Contractor will be considered to have proceeded at his own risk and expense. In the event of any doubt or questions arising with respect to the true meaning of the Construction Plans or Specifications, the decision of the Engineer shall be final and conclusive.

3. Contractor shall verify all topographic Information and grade elevations adjacent to retaining wall prior to proceeding, Inform Engineer of any variation.

II CAST-IN-PLACE CONCRETE

1. All cast-In-place concrete work and reinforcing steel work shall be in accordance with Sections 503 and 508 respectively of the IDOT Standard Specifications for Road and Bridge Construction, adopted April 1, 2016, and Supplemental Specifications and Recurring Special Provisions and as noted below.

2. Reinforcement Bars designated (E) shall be Epoxy Coated.

3. Reinforcing bar bending dimensions are out to out.

4. All other C.I.P. concrete shall be class SI concrete for the concrete facing and DS concrete for the drilled shaft.

5. All exposed concrete edges shall be beveled ¾".

III CONSTRUCTION

1. Do not scale dimensions for construction. Scale, if shown, applies only to full size drawings.

2. No construction joints, except those shown on the plans, will be allowed unless directed by the Engineer.

3. Any information concerning type or location of underground and other utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of the utilities as may be necessary to avoid damage thereto. Contractor shall call J.U.L.I.E. and the Engineer prior to excavation.

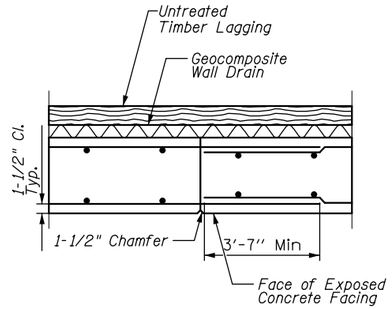
4. Shop working or layout drawings pertaining to the construction of the work, as may be required, shall be submitted to the Engineer for approval prior to the start of construction. Shop drawing shall be signed and sealed by a Structural Engineer licensed in State of Illinois.

5. Upon completion, the contractor shall collect and remove all construction debris and excess material from the site. Damaged trees, shrubs, and other landscape features resulting from construction activities shall be replaced or repaired.

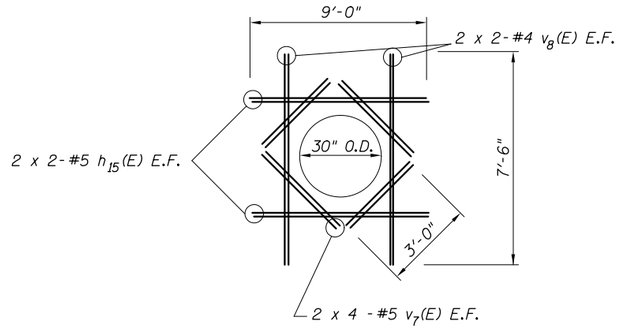
6. All bearing surfaces must be true and level.

BILL OF MATERIALS

SP	PAY ITEM NUMBER	PAY ITEM NAME	UNIT OF MEASURE	TOTAL QUANTITY
	20900110	POROUS GRANULAR BACKFILL	CU YD	33
	50200100	STRUCTURE EXCAVATION	CU YD	27
	50300225	CONCRETE STRUCTURES	CU YD	23.6
	50500505	STUD SHEAR CONNECTORS	EACH	60
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2680
	52200105	FURNISHING SOLDIER PILES (W SECTION)	FOOT	399
	52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	1910
	52200250	UNTREATED TIMBER LAGGING	SQ FT	475
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	55
	60602800	CONCRETE GUTTER, TYPE B	FOOT	100



CONSTRUCTION JOINT

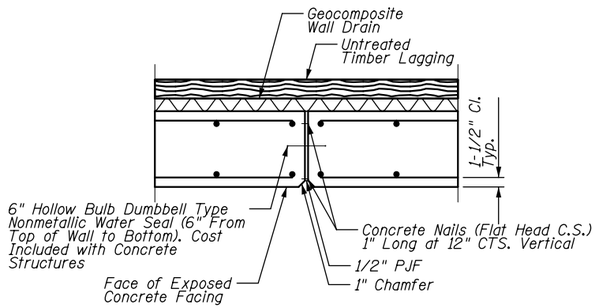


CIRCULAR OPENING

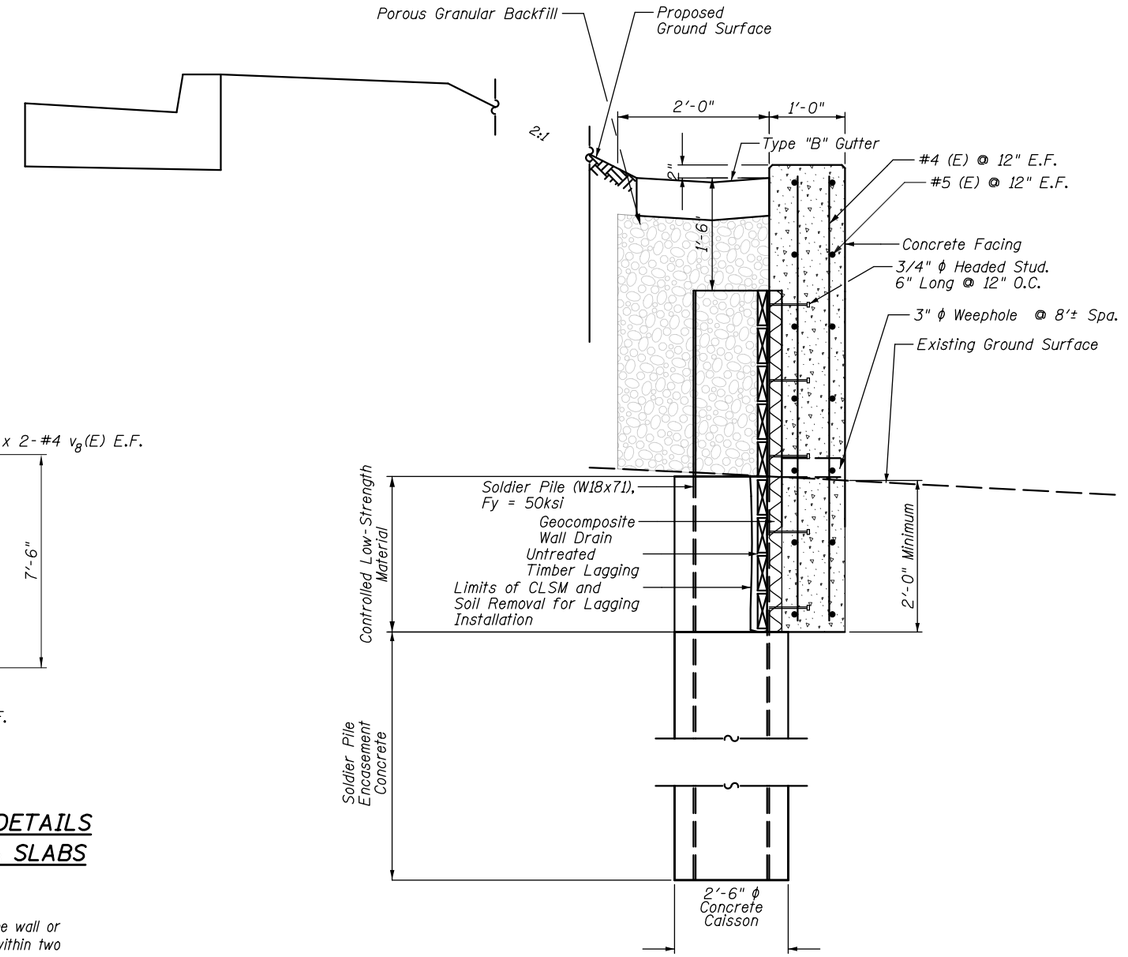
ADDITIONAL REINFORCEMENT DETAILS AROUND OPENINGS IN WALLS & SLABS

NOTES:

1. The added bars shall be placed in the same layers as the wall or slab reinforcing (i.e. all the bars in each face shall be within two layers except the diagonal bars.)



EXPANSION JOINT



TYPICAL SOLDIER PILE WALL SECTION

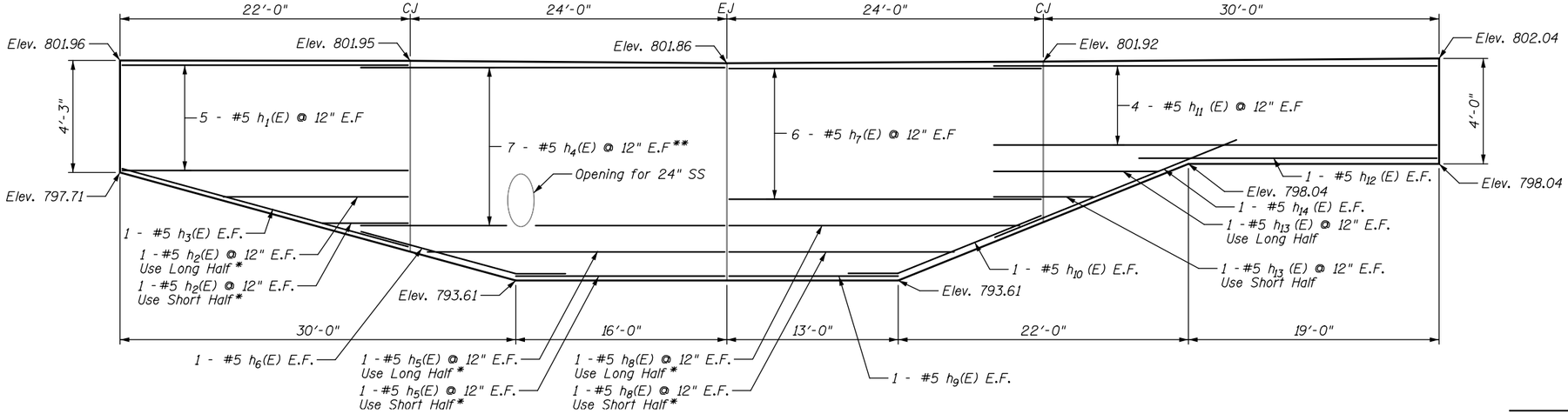
FILE NAME = N:\Kane County\170513\Struct\TYP&DET_170513.sht	USER NAME = jstrick	DESIGNED JMB	REVISED -
	PLOT SCALE = 2'	DRAWN CMT	REVISED -
Default	PLOT DATE = 11/9/2018	CHECKED MM	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAILS AND TYPICAL
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: NTS | SHEET 3 OF 5 SHEETS | STA. 468+97.00 TO STA. 469+97.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00214-28-CH	KANE	129	89
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			



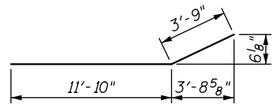
HORIZONTAL BAR LAYOUT

* See Cutting and Placement Diagrams

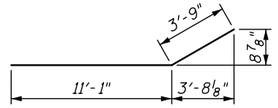
** Cut Bars Around Opening to Fit. See Details for Additional Reinforcement to be Placed Around Opening.

BILL OF MATERIAL

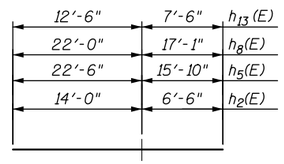
Bar	No.	Size	Length	Shape
h1(E)	10	#5	21'-8"	
h2(E)	2	#5	20'-6"	
h3(E)	2	#5	21'-10"	
h4(E)	14	#5	27'-7"	
h5(E)	2	#5	38'-4"	
h6(E)	2	#5	15'-7"	
h7(E)	12	#5	23'-8"	
h8(E)	2	#5	39'-1"	
h9(E)	2	#5	12'-10"	
h10(E)	2	#5	14'-10"	
h11(E)	8	#5	33'-7"	
h12(E)	2	#5	22'-7"	
h13(E)	2	#5	20'-0"	
h14(E)	2	#5	18'-8"	
h15(E)	8	#5	9'-0"	
v1(E)	22	#4	10'-10"	
v2(E)	8	#4	14'-9"	
v3(E)	60	#4	8'-0"	
v4(E)	12	#4	13'-10"	
v5(E)	12	#4	9'-4"	
v6(E)	38	#4	3'-8"	
v7(E)	16	#5	3'-0"	
v8(E)	8	#4	7'-6"	
Reinforcement Bars. Epoxy Coated		Pound	2,680	
Concrete Structures		Cu. Yd.	23.6	



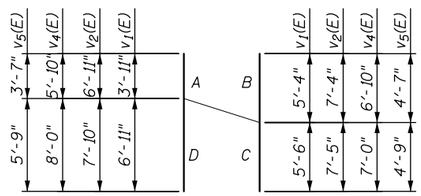
h6(E)



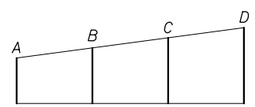
h10(E)



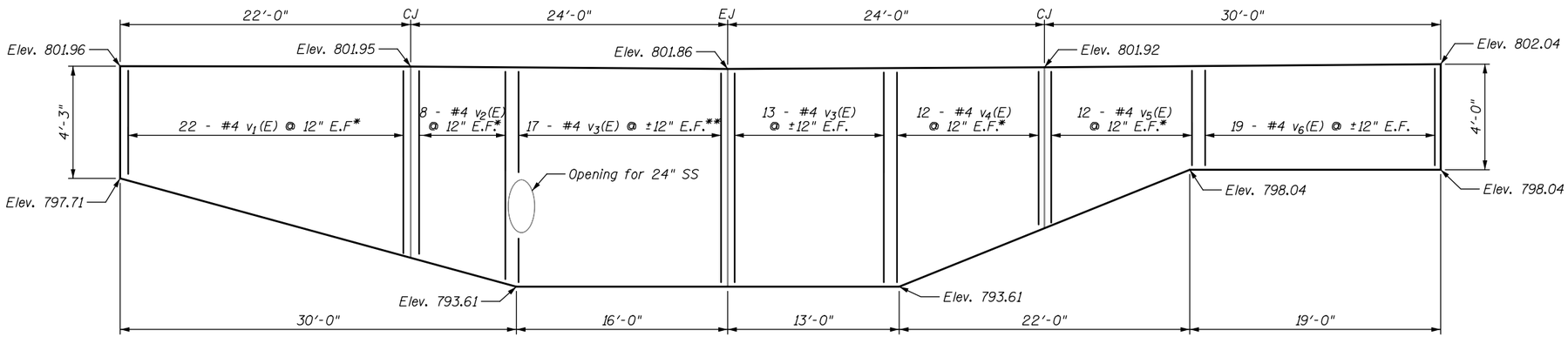
CUTTING DIAGRAM - HORIZONTAL BARS



CUTTING DIAGRAM - VERTICAL BARS



PLACEMENT DIAGRAM - VERTICAL BARS



* See Cutting and Placement Diagrams

** Cut Bars Around Opening to Fit. See Details for Additional Reinforcement to be Placed Around Opening.

VERTICAL BAR LAYOUT

FILE NAME = N:\Kane County\170513\Struct\REIN_PLN_170513.sht	USER NAME = jstrick	DESIGNED JMB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RETAINING WALL REINFORCEMENT ELEVATIONS RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS	F.A. RTE.	SECTION: 14-00214-28-CH; COUNTY: KANE; TOTAL SHEETS: 129; SHEET NO.: 90
	PLOT SCALE = 10'	DRAWN CMT	REVISED -				CONTRACT NO.
Default	PLOT DATE = 11/9/2018	CHECKED MM	REVISED -		SCALE: 50 SHEET 4 OF 5 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT
		DATE -	REVISED -				

GSG CONSULTANTS, INC.
855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

SOIL BORING LOG

Page 1 of 2
Date 2/2/18

ROUTE Randall Road DESCRIPTION Randall Road Phase 2 Engineering LOGGED BY MC
SECTION 14-00214-28-CH LOCATION Randall Road Northing 1936102.667 Easting 982317.326
COUNTY Kane DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. N/A
Station N/A
BORING NO. RWB-01
Station 469+02
Offset 55.48ft RT
Ground Surface Elev. 798.00 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 774.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	GRAPHIC LOG	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DRY DENSITY (pcf)	ORGANIC (%)	NOTES
4 inches of Topsoil 797.92							
Medium Stiff Brown and Gray, Very Moist SANDY CLAY, trace gravel (SC)		2					
794.50		2 3		56			
Very Stiff to Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		2					
		5 6	4.3 P	18			
		2					
		4 7	2.9 B	16			
789.00		3					
Loose Gray, Moist SILTY LOAM, trace gravel (ML)		4 6		13			
		2					
		4 6		12			
784.00		2					
Stiff to Very Stiff Gray, Moist CLAY, trace gravel (CL)		3 4	1.0 B	20			
		3					
		5 8	2.3 B	19			
779.00		2					
		3 5	2.3 P	13			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

GSG CONSULTANTS, INC.
855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

SOIL BORING LOG

Date 2/2/18

ROUTE Randall Road DESCRIPTION Randall Road Phase 2 Engineering LOGGED BY MC
SECTION 14-00214-28-CH LOCATION Randall Road Northing 1936102.667 Easting 982317.326
COUNTY Kane DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. N/A
Station N/A
BORING NO. RWB-01
Station 469+02
Offset 55.48ft RT
Ground Surface Elev. 798.00 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter 774.5 ft ▼
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	GRAPHIC LOG	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DRY DENSITY (pcf)	ORGANIC (%)	NOTES
Very Stiff Gray, Moist SILTY CLAY LOAM, trace gravel (ML/CL) *(continued)* 777.00		10					
Medium Dense Gray, Moist SAND, with gravel (SP)		13 11		7			
774.50 ▼							
Medium Dense Gray, Moist SAND and GRAVEL (SPG)		4 7 8		5			
772.00							
Dense Gray, Moist SAND, with gravel (SP)		10 20 18		10			
769.00		9					
Very Stiff Gray, Moist LOAM, trace gravel (ML/SP) 768.00		10 9	3.5 P	10			
End of Boring							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

GSG CONSULTANTS, INC.
855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

SOIL BORING LOG

Date 2/2/18

ROUTE Randall Road DESCRIPTION Randall Road Phase 2 Engineering LOGGED BY MC
SECTION 14-00214-28-CH LOCATION Randall Road Northing 1936152.266 Easting 982321.106
COUNTY Kane DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. N/A
Station N/A
BORING NO. RWB-02
Station 469+51
Offset 46.03ft RT
Ground Surface Elev. 797.00 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter None ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	GRAPHIC LOG	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DRY DENSITY (pcf)	ORGANIC (%)	NOTES
6 inches of Topsoil 796.50							
Brown and Gray, Moist FILL: SAND, trace gravel 795.50		2					
Very Stiff Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		6 4	2.5 P	11			
		2					
		4 7	2.9 B	18			
790.00		4					
		5 7	2.5 P	16			
Very Stiff Gray, Moist SILTY CLAY, trace gravel (CL/ML)		3					
		5 6	3.3 B	16			
786.00							
Stiff Gray, Moist CLAY, trace gravel (CL)		2					
		3 6	1.3 B	19	115.3		
		2					
		3 4	1.0 B	21			
780.00		2					
Medium Stiff to Stiff Gray, Moist SILTY CLAY LOAM, trace gravel (ML/CL)		3 7	1.0 P	14			
		2					
		4 6	0.8 B	13			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

GSG CONSULTANTS, INC.
855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

SOIL BORING LOG

Date 2/2/18

ROUTE Randall Road DESCRIPTION Randall Road Phase 2 Engineering LOGGED BY MC
SECTION 14-00214-28-CH LOCATION Randall Road Northing 1936152.266 Easting 982321.106
COUNTY Kane DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. N/A
Station N/A
BORING NO. RWB-02
Station 469+51
Offset 46.03ft RT
Ground Surface Elev. 797.00 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter None ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	GRAPHIC LOG	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DRY DENSITY (pcf)	ORGANIC (%)	NOTES
Medium Stiff to Stiff Gray, Moist SILTY CLAY LOAM, trace gravel (ML/CL) *(continued)*		2					
		3 5	1.0 P	12			
		1					
		2 2	0.5 P	12			
771.00		3					
Loose to Medium Dense Gray, Moist SAND, trace gravel (SP)		5 8		9			
		3					
767.00		4 5		9			
End of Boring							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

GSG CONSULTANTS, INC.
855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

SOIL BORING LOG

Page 1 of 2
Date 2/2/18

ROUTE Randall Road DESCRIPTION Randall Road Phase 2 Engineering LOGGED BY MC
SECTION 14-00214-28-CH LOCATION Randall Road Northing 1936200.854 Easting 982308.271
COUNTY Kane DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. N/A
Station N/A
BORING NO. RWB-03
Station 470+00
Offset 55.44ft RT
Ground Surface Elev. 798.00 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter None ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	GRAPHIC LOG	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DRY DENSITY (pcf)	ORGANIC (%)	NOTES
18 inches of Topsoil 796.50							
Brown and Gray, Very Moist FILL: SILTY CLAY, trace gravel 794.50		2 3 4	1.0 P	32			
Brown and Gray, Moist FILL: SAND, trace gravel 792.00		2 3 4		16			
Hard Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)		3 5 7	4.0 B	15			
789.00		3					
Very Stiff Gray, Moist SILTY CLAY, trace gravel (CL/ML)		5 7	3.3 B	14			
Pushed rock at 11 ft, no recovery		19					
784.50		10 9					
Stiff Gray, Moist CLAY, trace gravel (CL)		11 7 7	1.8 P	14			
782.00		2					
Loose Gray, Moist SILTY LOAM, trace gravel (ML)		4 6		12			
779.00		2					
		3 5	0.8 B	14			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

GSG CONSULTANTS, INC.
855 West Adams, Suite 200
Chicago, Illinois 60607
tel: 312.733.6262 • fax: 312.733.5612

SOIL BORING LOG

Date 2/2/18

ROUTE Randall Road DESCRIPTION Randall Road Phase 2 Engineering LOGGED BY MC
SECTION 14-00214-28-CH LOCATION Randall Road Northing 1936200.854 Easting 982308.271
COUNTY Kane DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. N/A
Station N/A
BORING NO. RWB-03
Station 470+00
Offset 55.44ft RT
Ground Surface Elev. 798.00 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft
Groundwater Elev.:
First Encounter None ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	GRAPHIC LOG	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DRY DENSITY (pcf)	ORGANIC (%)	NOTES
Medium Stiff Gray, Moist SANDY CLAY, trace gravel (SC) *(continued)* 2 inch gray sand lens at 21.5 feet		3					
		6 4	0.5 P	11			
774.50							
Medium Dense Gray, Moist SANDY LOAM (SM)		4 9 10		8			
772.00							
Medium Stiff Gray, Moist SANDY CLAY LOAM (SC/SM) 771.00		3 6 9	0.5 P	13			
Medium Dense Gray, Moist SANDY LOAM, with gravel (SM)		3					
768.00		7 10		6			
End of Boring							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

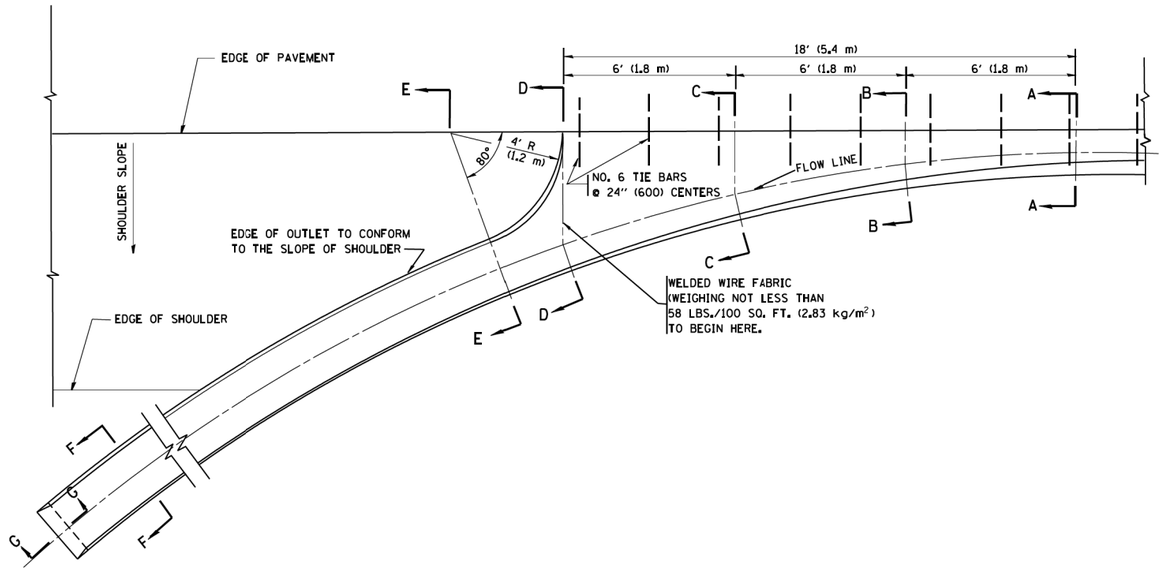
FILE NAME = N:\Kane County\170513\Struct\SOIL_170513.sht Default	USER NAME = jstrick PLOT SCALE = 20' PLOT DATE = 11/9/2018	DESIGNED JMB DRAWN CMT CHECKED MM DATE -	REVISED - REVISED - REVISED - REVISED -

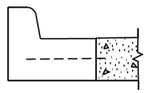
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL SOIL BORING LOGS
RANDALL ROAD AT MCDONALD ROAD / STEARNS ROAD IMPROVEMENTS

SCALE: NTS | SHEET 5 OF 5 SHEETS | STA. 468+97.00 TO STA. 469+97.00

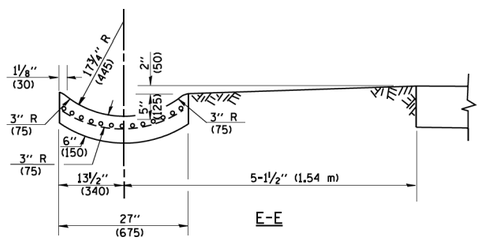
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14-00214-28-CH	KANE	129	91
		CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			



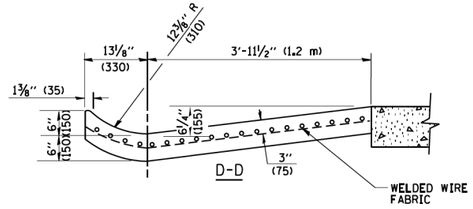


A-A *

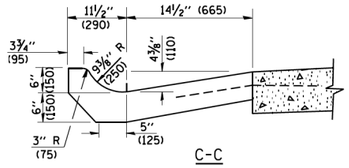
* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001.
FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



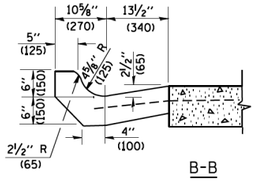
E-E



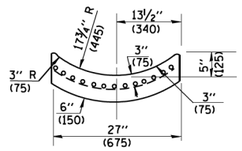
D-D



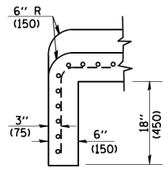
C-C



B-B



F-F



G-G

GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24" (600) CENTERS UNLESS OTHERWISE SHOWN.

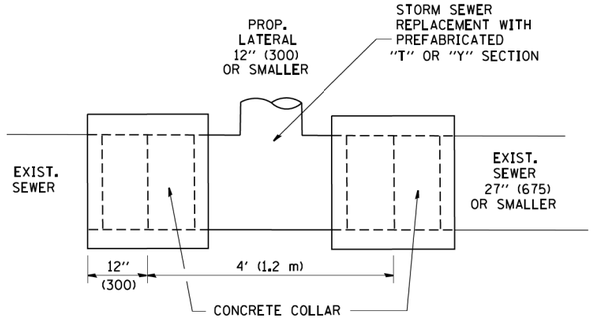
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL=
1.25 CU. YDS. (0.96 m^3) CLASS SI CONCRETE (OUTLET) FOR 9" (225) PAV'T.
1.27 CU. YDS. (0.96 m^3) CLASS SI CONCRETE (OUTLET) FOR 10" (250) PAV'T.
FOR SECTION F-F=
0.045 CU. YDS. (0.03 m^3) CLASS SI CONCRETE PER ft. (m).

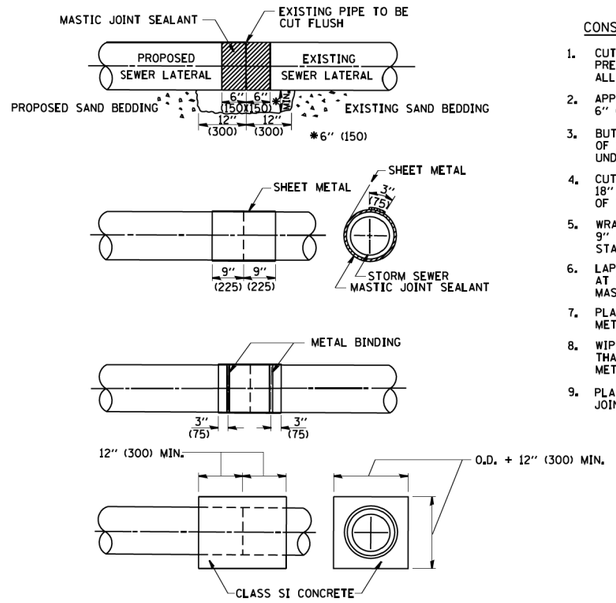
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd03.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OUTLET FOR CONCRETE CURB AND GUTER			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. SHAH 10-25-94					336	14-00214-28-CH	KANE	129	92
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - E. GOMEZ 12-21-00					BD600-01 (BD-03)		CONTRACT NO.		
	PLOT DATE = 1/4/2008	DATE - 08-04-86	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



DETAIL "A"

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

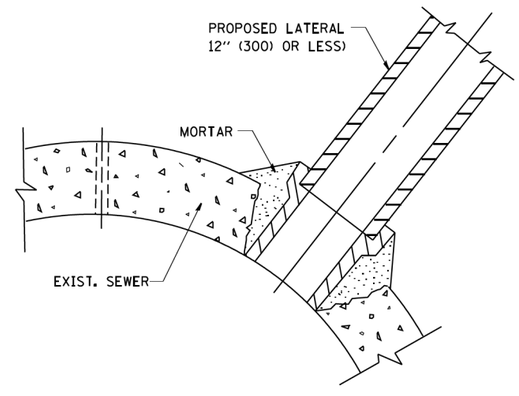


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

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



DETAIL "C"

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

NOTES

MATERIAL

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

CONSTRUCTION METHODS

I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".

B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

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

GENERAL

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

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

BASIS OF PAYMENT

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

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

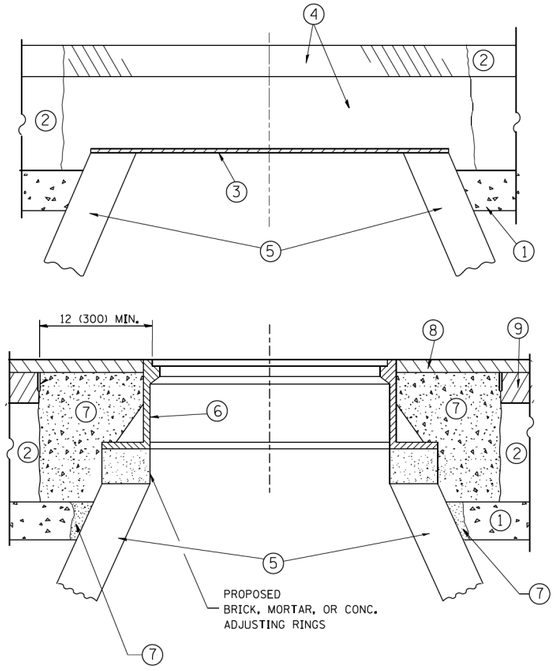
TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

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

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

FILE NAME = W:\diststd\22x34\bd07.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER**
		DRAWN -	REVISED - R. SHAH 09-09-94		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94		
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	93
	BD500-01 (BD-7)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

1. SUB-BASE GRANULAR MATERIAL
2. EXISTING PAVEMENT
3. 36 (900) DIAMETER METAL PLATE
4. PROPOSED CRUSHED STONE AND HMA SURFACE MIX
5. EXISTING STRUCTURE
6. FRAME AND LID (SEE NOTES)
7. CLASS PP-1* CONCRETE
8. PROPOSED HMA SURFACE COURSE
9. PROPOSED HMA BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMCVED AND COVERED BY THE METAL PLATE.

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

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

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

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT:

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = c:\pw_work\pwidot\bauerdl\d0108315\bd08.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1968.5000 ' / m	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

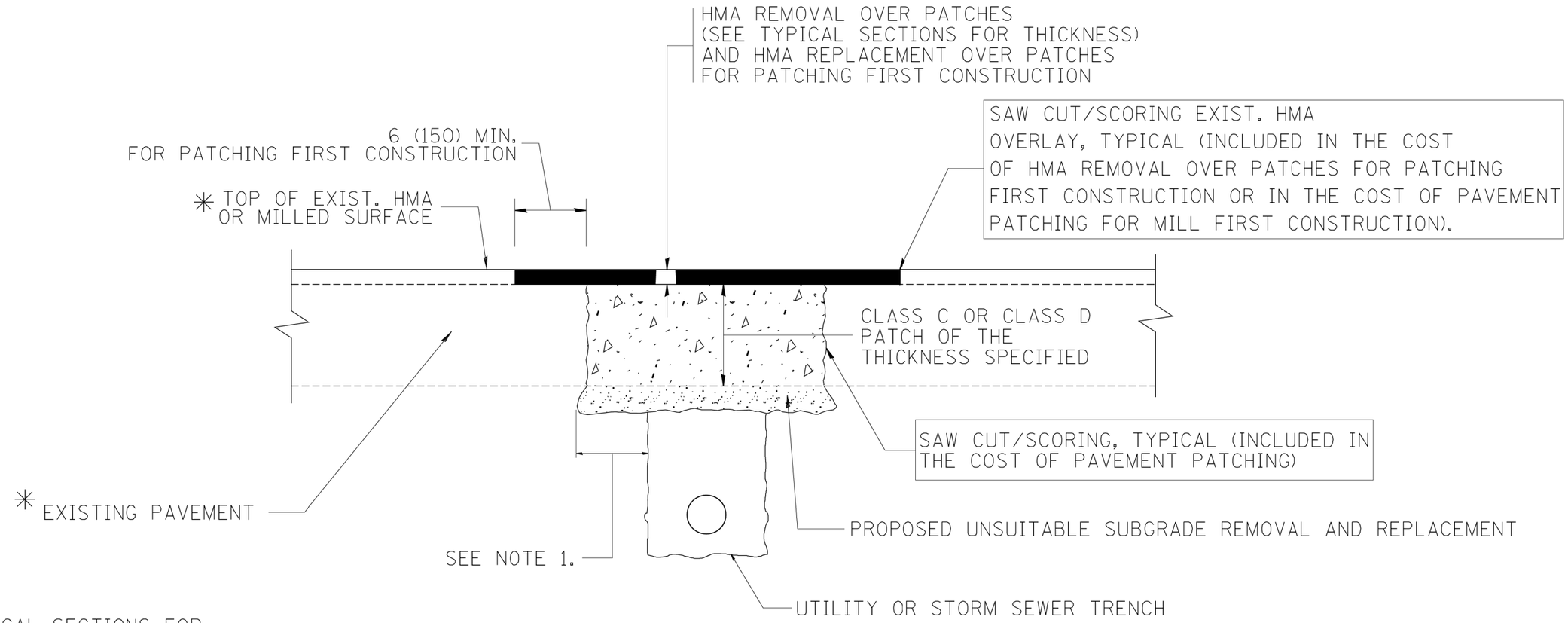
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	94
	BD600-03 (BD-8)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

bd08.dgn 12/6/2011 10:53:13 AM l:\ben\bauerdl



✳ SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST $4\frac{1}{2}$ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

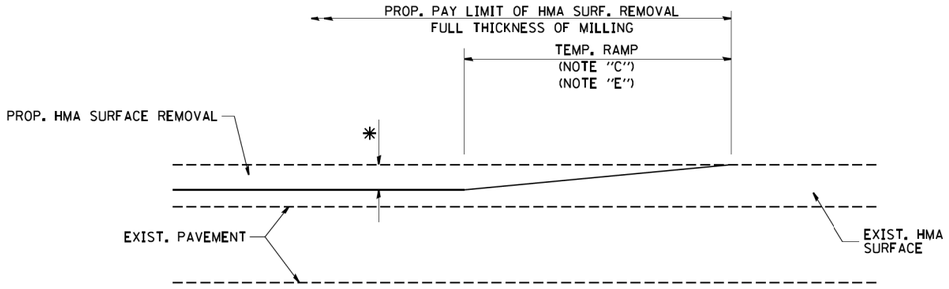
FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

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

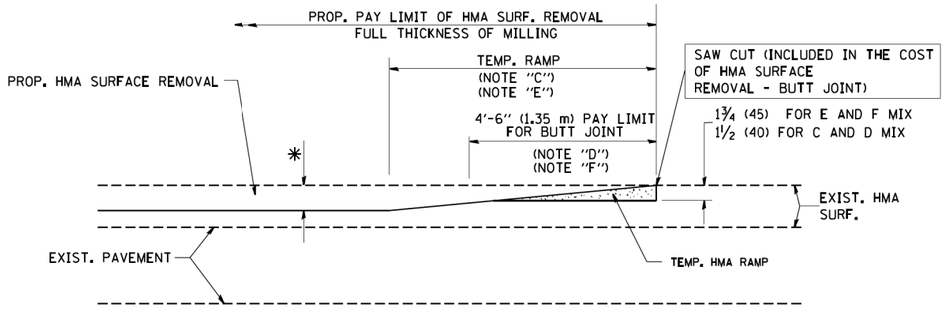
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	95
	BD400-04 (BD-22)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

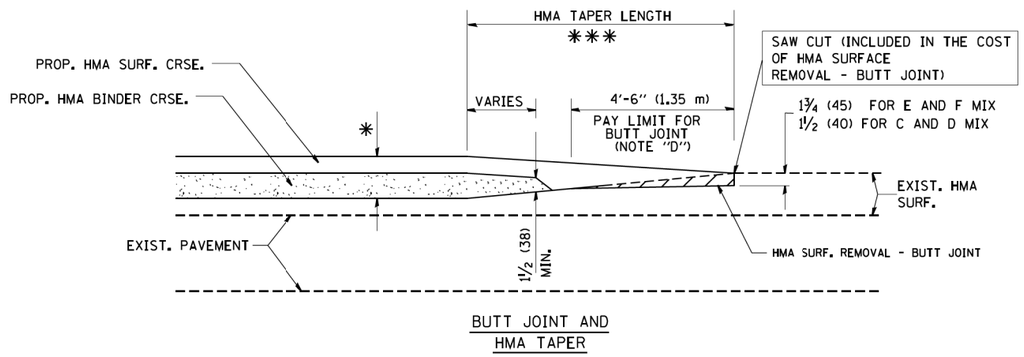


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

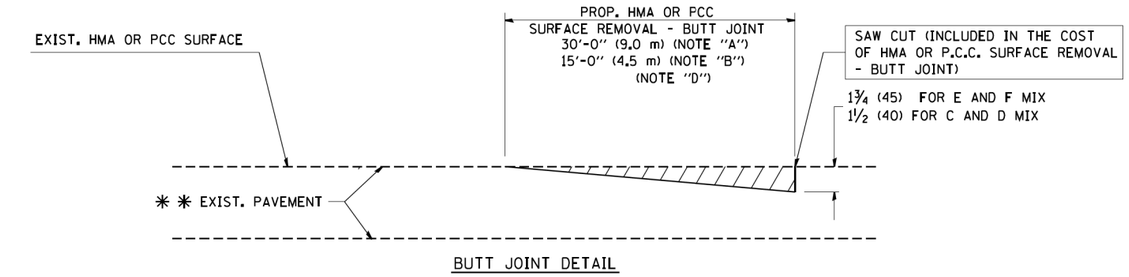
OPTION 2

TYPICAL TEMPORARY RAMP

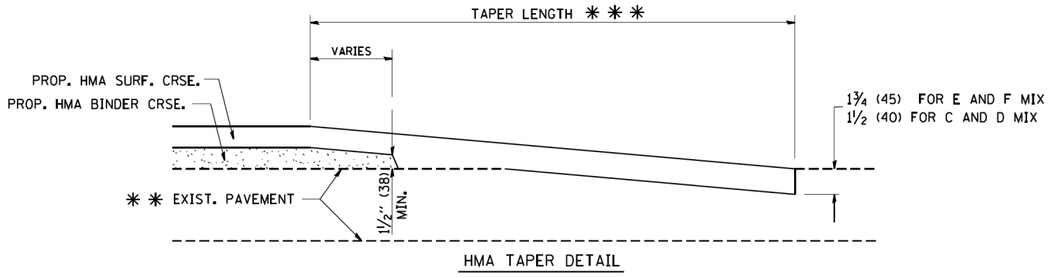


BUTT JOINT AND HMA TAPER

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")

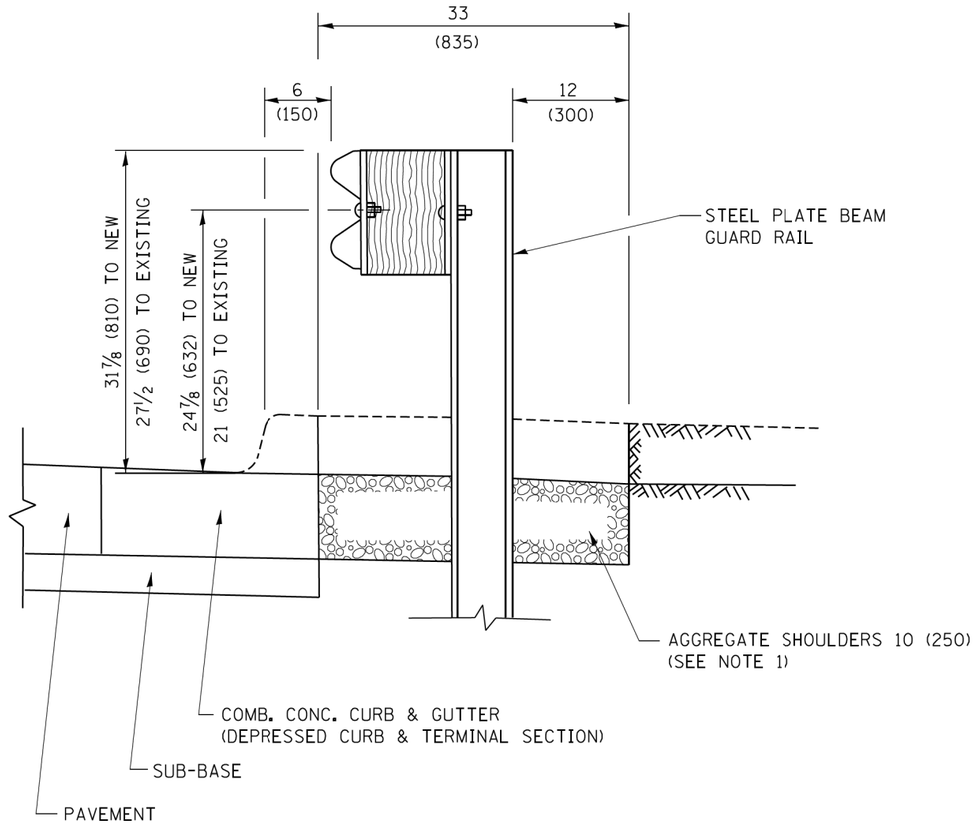
BASIS OF PAYMENT:

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

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

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS
		DRAWN -	REVISED - A. ABBAS 03-21-97		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01		
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	96
	BD400-05 BD32	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



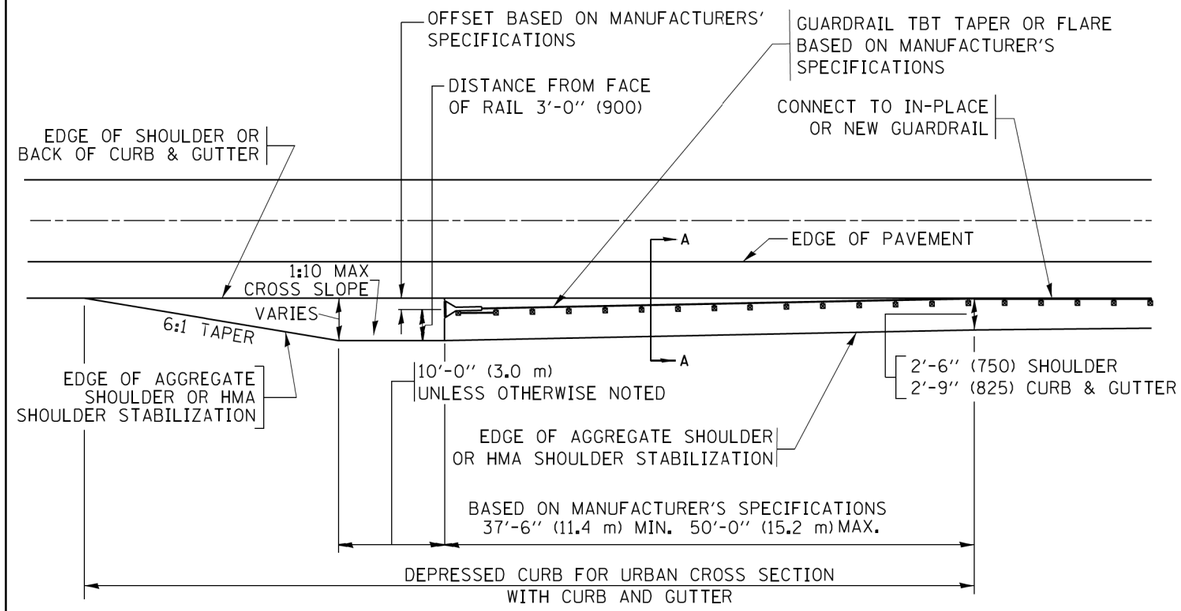
SECTION A-A

NOTES:

1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



DEPRESSED CURB AND GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\Standards\CADData\CADsheets\bd34.dgn	USER NAME = drivakosgn	DESIGNED - M. DE YONG	REVISED - R. BORO 12-08-2008
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 09-14-2009
Default	PLOT DATE = 12/21/2015	DRAWN -	REVISED - R. BORO 08-06-2012
		DATE - 09-22-90	REVISED - R. BORO 05-08-2015

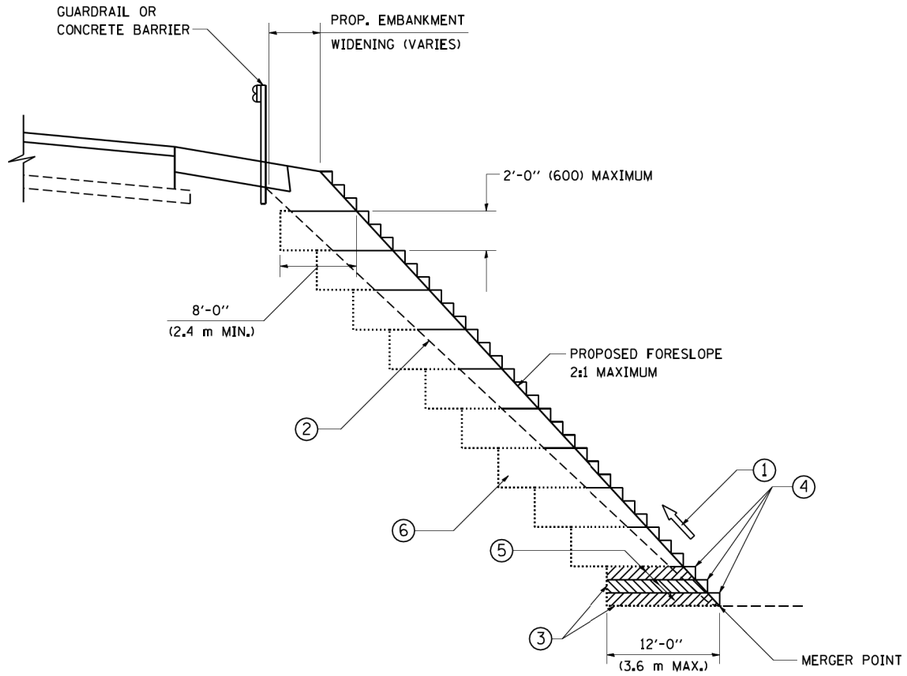
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	97
	BD600-10 (BD 34)	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

bd34.dgn 12/21/2015 1:59:48 PM User:drivakosgn



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

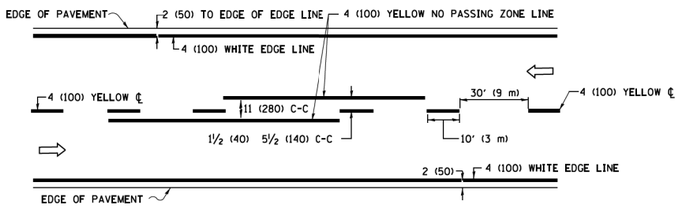
FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

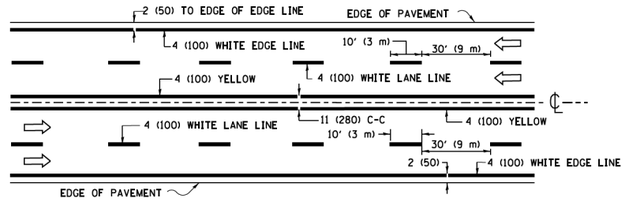
BENCHING DETAIL
FOR EMBANKMENT WIDENING

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

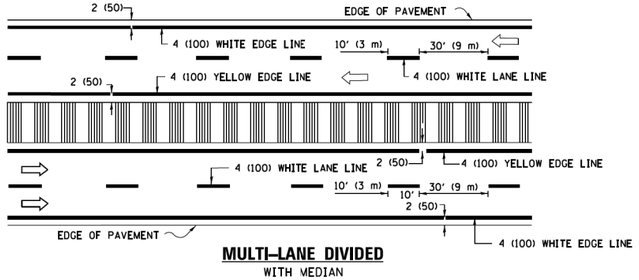
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	98
	BD-51	**CONTRACT NO.**		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2–LANE ROADWAY

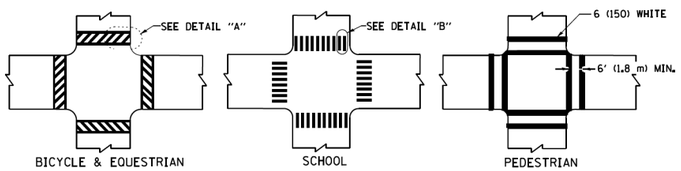


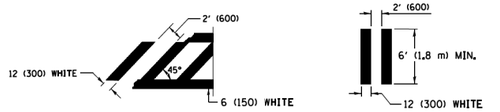
MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING



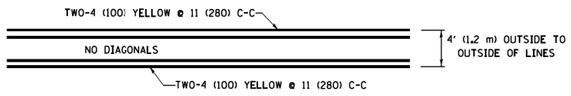


DETAIL "A"

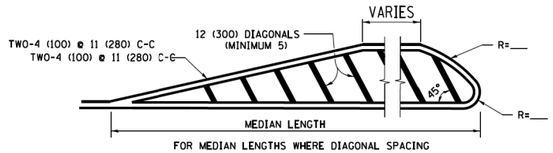
DETAIL "B"

TYPICAL CROSSWALK MARKING

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



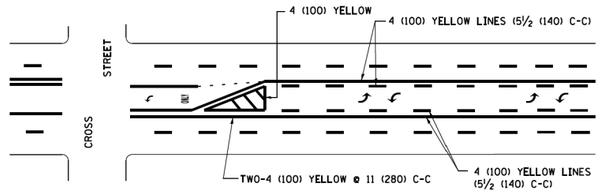
4' (1.2 m) WIDE MEDIANS ONLY



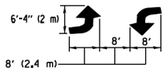
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

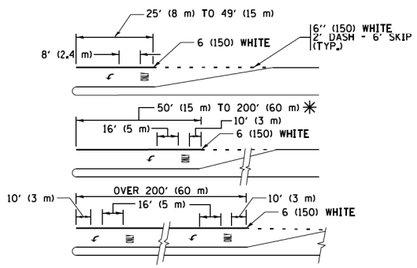


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

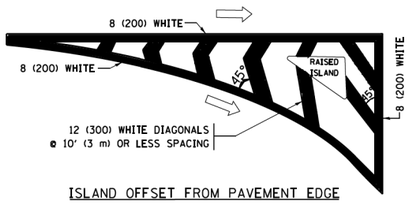


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1,5 m²) ONLY AREA = 20.8 SQ. FT. (1,9 m²)

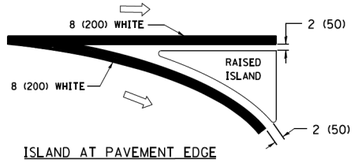
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

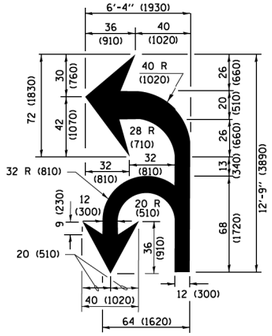


ISLAND OFFSET FROM PAVEMENT EDGE

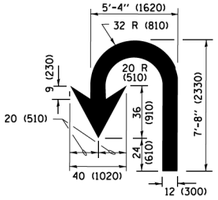


ISLAND AT PAVEMENT EDGE

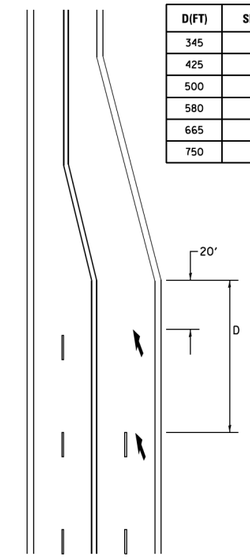
TYPICAL ISLAND MARKING



COMBINATION LEFT AND U–TURN



U–TURN



D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

LANE REDUCTION TRANSITION

✳ LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1,8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2,4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2,4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 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 (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16,3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30,4 SF

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

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

FILE NAME = W:\diststd\22x34\tc13.dgn	USER NAME = leysa	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
		DRAWN -	REVISED - C. JUCIUS 07-01-13
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
Default	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	14-00214-28-CH	KANE	129	99
	TC-13	CONTRACT NO.		
		ILLINOIS FED. AID PROJECT		

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

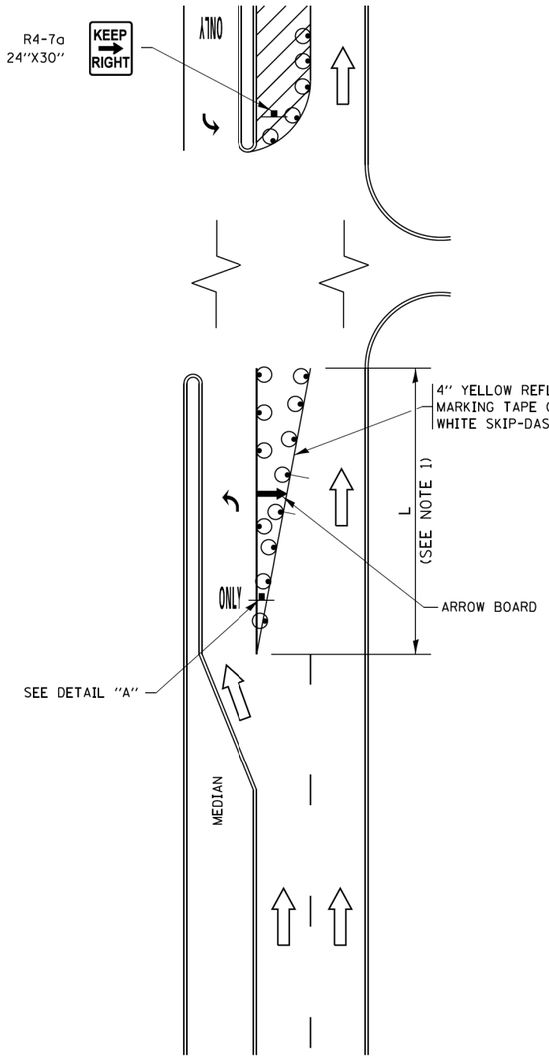


FIGURE 1

LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.

   B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.

2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.

3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.

4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.

5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I10OR 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.

6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.

7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.

8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

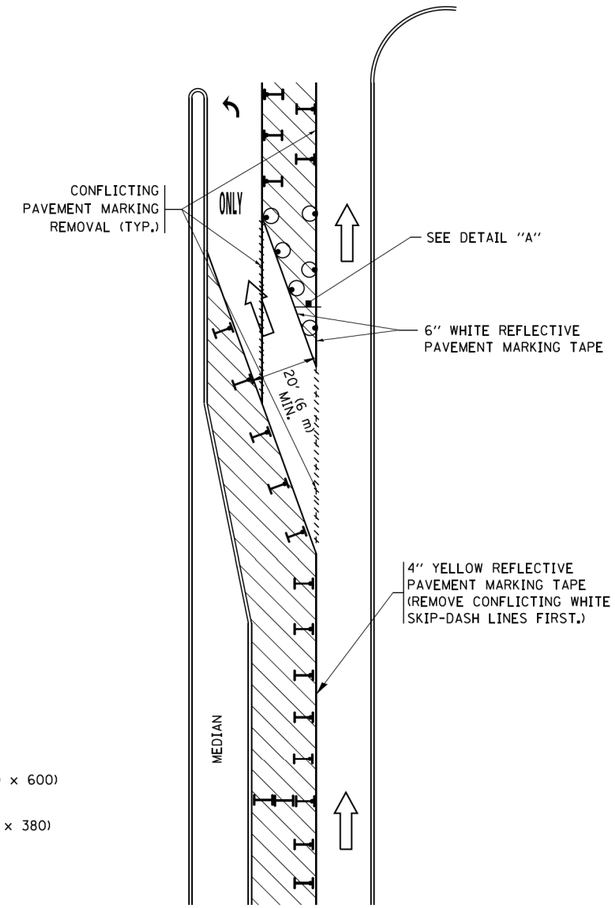
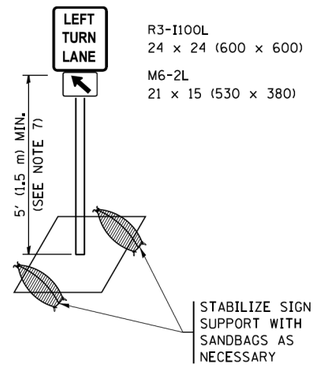


FIGURE 2



DETAIL A

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Distribution\ADData\CAD\HOUSEH\41507-95\Default	USER NAME = footemj	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000 ' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 07-01-13					336	14-00214-28-CH	KANE	129	100
	PLOT DATE = 9/15/2016	REVISED -T. RAMMACHER 01-06-00	REVISED - A. SCHUETZE 09-15-16		SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.		TC-14		CONTRACT NO.	
									ILLINOIS	FED. AID PROJECT		