

PROGRAM AND OFFICE ENGINEER CHARLES F. RIDDLE, P.E. 847-705-4406 SCHLAUMBURG, IL
CONSULTING ENGINEER: ENGINEERING ENTERPRISES, INC. CONTACT: JAMES R. LENZINI 630-466-6700

04-26-13 LETTING ITEM 042

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	1
ILLINOIS CONTRACT NO. 63733				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

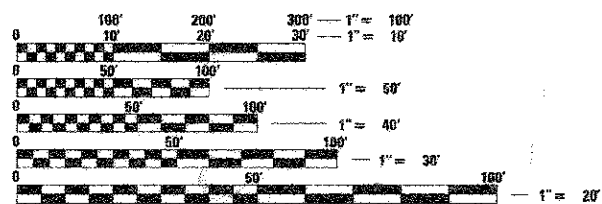
PLANS FOR PROPOSED FEDERAL-AID HIGHWAY VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE PARKING LOT CONSTRUCTION

SECTION 09-00370-00-PK
PROJECT NUMBER: CMM-9003(484)
MCHENRY COUNTY
C-91-072-10

INDEX OF SHEETS


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3. SUMMARY OF QUANTITIES
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5. TYPICAL SECTIONS
6. SITE LAYOUT PLAN
7. SITE GRADING AND UTILITY PLAN
8. ACCESS ROADS PROFILES
9. EROSION CONTROL AND LANDSCAPING PLAN
- 10.-14. LIGHTING PLAN AND DETAILS
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SEE SHEET NO. 2 FOR
HIGHWAY STANDARDS



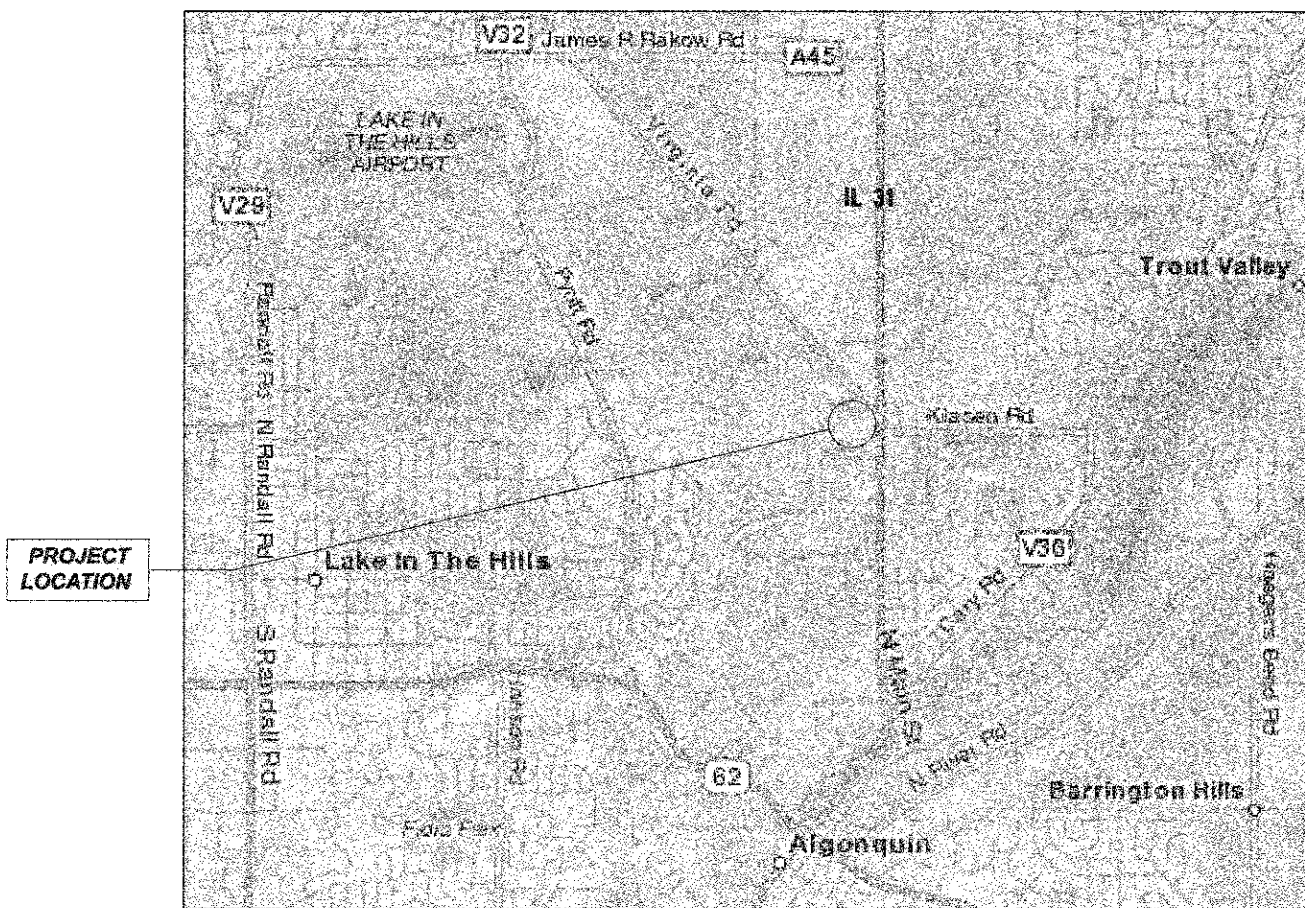
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT
UTILITY
LOCATION
INFORMATION FOR
EXCAVATION
CALL 811

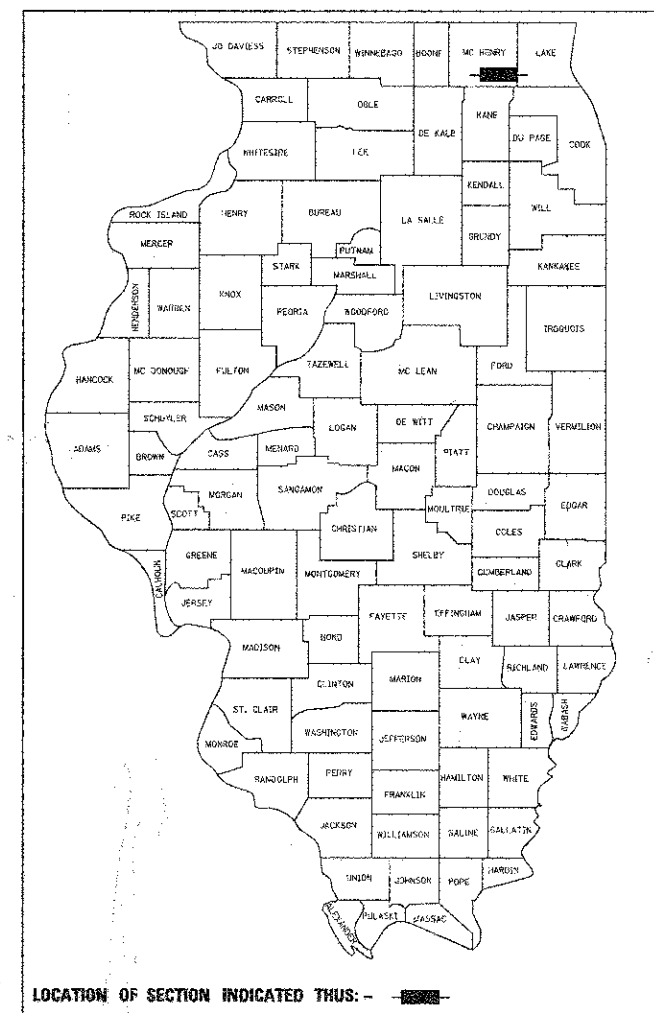


Know what's below.
Call before you dig.

CONTRACT NO. 63733



PROJECT LOCATED
IN THE VILLAGE OF
LAKE IN THE HILLS



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED June 26, 2012
Joseph P. Kopylaski Jr.
MCHENRY COUNTY, DIRECTOR OF TRANSPORTATION/COUNTY ENGINEER


PASSED July 20, 2012
C. H. H. C. H. H.
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW July 23, 2012
John B. ...
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

DATE: 6/25/12

BY: *James R. Lenzini*
JAMES R. LENZINI

LICENSE
EXPIRES: NOVEMBER 30, 2013



SEAL

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

SCALE: 1" = 2000'
TOTAL LENGTH OF PROJECT = NA
NW & NE 1/4 SEC. 22, T 43N, R 8E, 3RD P.M.
ALGONQUIN TOWNSHIP



Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Wheeler Road
Sugar Grove, Illinois 60554
Phone: (630) 466-6700

Printed: 6/25/2012 9:49:33 AM By: jpling

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GENERAL NOTES

SPECIFICATIONS, STANDARDS, AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," ADOPTED JANUARY 1, 2012 (HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS," ADOPTED JANUARY 1, 2013, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS", SIXTH EDITION, THE DETAILS IN THE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

NO SUBSTITUTIONS OR VARIANCES WILL BE PERMITTED TO ANY STANDARD NOTES OR ORDINANCES UNLESS APPROVED OTHERWISE IN WRITING PRIOR TO COMMENCING CONSTRUCTION ACTIVITY.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.14 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION FOR TRAFFIC AS CALLED FOR IN THE APPLICATION OF TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS AND THE PLANS

UTILITIES

THE CONTRACTOR SHALL COOPERATE WITH THE VILLAGE OF LAKE IN THE HILLS, MCHENRY COUNTY AND STATE IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE VILLAGE, COUNTY OR STATE WITHIN THE DURATION OF THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL EXISTING AND PROPOSED UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.

THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, FIELD TILES AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND NOT NECESSARILY COMPLETE; THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE OCCURRED. THIS WORK SHALL BE ARRANGED BY THE UTILITY COMPANY AND SHALL BE AT THE CONTRACTOR'S EXPENSE.

IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR OPERATE ANY VALVES OR HYDRANTS.

STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, THE OWNER'S AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED. CURB AND GUTTER ELEVATIONS SHOWN AT POINTS OF CURVE, ETC., ARE BACK OF CURB, UNLESS OTHERWISE NOTED.

STRUCTURE OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS ARE TO THE FOLLOWING POINTS:

- A) STRUCTURES FALLING IN THE CURB LINE ARE MEASURED TO THE BACK OF CURB
B) ALL OTHER STRUCTURES ARE MEASURED TO THE CENTER OF THE STRUCTURE

ALL ELEVATIONS ARE ON U.S.G.S. DATUM, NAVD 88.

ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC., ARE FROM THE CENTERLINES AS SHOWN ON THE PLANS.

SEWERS AND WATER MAINS

ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY. IT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN IN AN OPERATING CONDITION TEMPORARY OUTLETS AND CONNECTIONS FOR ALL DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES WHICH HAVE THE CAPACITY TO RECEIVE AND DISCHARGE THE STORM WATER FLOW RATES NORMALLY ACCEPTED AND RELEASED BY EXISTING DRAINAGE FACILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

THE COST OF INTERCONNECTIONS BETWEEN THE PROPOSED AND EXISTING SEWER SYSTEMS AND PROPOSED AND EXISTING WATER MAIN SYSTEMS SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES ON THE ITEMS BEING CONNECTED.

ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT FOR ANY MANHOLE, CATCH BASIN OR INLET SHALL HAVE CAST INTO THE LID: "STORM". ANY ADDITIONAL COST FOR THIS REQUIREMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE FRAME AND CLOSED LID PROVIDED.

FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION AND CROSS SLOPE OF THE AREA IN WHICH THEY ARE LOCATED. ALL FINAL ADJUSTMENTS OF FRAMES WILL BE ACCOMPLISHED BY THE USE OF CONCRETE ADJUSTING RINGS SET IN BUTYL ROPE JOINT SEALANT; MORTAR JOINTS WILL NOT BE ALLOWED. HEIGHT OF ADJUSTING RINGS SHALL NOT EXCEED EIGHT INCHES (8"). THE COST OF THE ADJUSTMENT TO FINAL ELEVATION IS INCLUDED IN THE COST OF THE ITEM CONSTRUCTED.

ALL STORM SEWERS SHALL BE RCCP CLASS IV, UNLESS NOTED OTHERWISE ON THE PLAN.

BACKFILL

ALL TRENCH BACKFILL QUANTITIES FOR STORM SEWER HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE.

STORM SEWER, WATER MAIN AND SANITARY SEWER SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07, METHOD 1 ONLY, OR AS DIRECTED BY THE ENGINEER, WITH THE FOLLOWING MODIFICATIONS.

TRENCH BACKFILL SHALL BE GRADATION CA-6. THE FINAL TRENCH BACKFILL SHALL BE PLACED IN 6" LIFTS AND SHALL BE COMPACTED IN PLACE TO NINETY FIVE PERCENT (95%) OF MAXIMUM DENSITY AT OPTIMUM MOISTURE AS DETERMINED BY THE MODIFIED PROCTOR TEST.

SIGNS

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR AND ENGINEER SHALL INVENTORY THE LOCATION, SIZE, TYPE, AND CONDITION OF ALL EXISTING SIGNS. ANY SIGN DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ALL SIGNS SHALL BE ERECTED IN STRICT CONFORMANCE WITH SECTION 720 OF THE STANDARD SPECIFICATIONS AND BY STATE PREQUALIFIED CONTRACTOR PERSONNEL SUCH AS A SUBCONTRACTOR THAT SPECIALIZES IN TRAFFIC CONTROL AND SIGN PLACEMENT. TO ENSURE THIS OPERATION IS PERFORMED CORRECTLY THERE WILL BE A WALKTHROUGH ON THE JOB WITH THE ENGINEER AND MCHENRY COUNTY DOT MAINTENANCE PERSONNEL AS PART OF THE OVERALL PUNCH LIST.

ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:

- 1. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT
2. THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SIGNS THAT INTERFERE WITH THEIR WORK DURING CONSTRUCTION OPERATIONS. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING. THE SIGNS MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS INTENDED. THIS WORK WILL BE INCLUDED IN THE COST OF THE CONTRACT.

3. ALL SIGNS SHALL BE INSTALLED OR RELOCATED IN PERMANENT LOCATIONS AS SHOWN ON THE PLANS ONCE THE ROADWAY IS COMPLETED. THIS WORK SHALL BE PAID FOR USING THE APPROPRIATE PAY ITEM.

4. ALL REMOVED SIGNS WILL BE RETURNED TO THE VILLAGE (600 HARVEST GATE, LAKE IN THE HILLS), COUNTY (16111 NELSON ROAD, WOODSTOCK) OR STATE, AS APPLICABLE.

5. LONGER POSTS MAY BE REQUIRED AT TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN HEIGHT.

MISCELLANEOUS

SAWING OF REMOVAL ITEMS AS NOTED ON THE PLANS, SPECIFIED IN THE STANDARD SPECIFICATIONS, OR AS REQUIRED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

THE THICKNESS OF ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE ASPHALT MIXTURES ARE TO BE PLACED.

PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB, TOP OF BICYCLE RACK CONCRETE PAD, AND AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL BE REQUIRED TO MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS, STRUCTURES, POLES, CABLES AND PIPE LINES, BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER AND COUNTY AT THEIR OWN EXPENSE. ANY SHEETING AND/OR SHORING USED FOR THIS IMPROVEMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

THE CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES (E.G. CURB, PAVEMENT) THAT ARE NOT INDICATED TO BE REMOVED ON THE PLANS. ANY FACILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE OCCURRED.

EXISTING PAVEMENT THICKNESSES SHOWN ON THE PLANS ARE APPROXIMATE. BASED ON AVAILABLE INFORMATION AT THE TIME OF DESIGN. ANY ADDITIONAL COSTS REQUIRED BY THE CONTRACTOR DUE TO THICKNESSES OTHER THAN THOSE SHOWN ON THE PLANS WILL BE INCLUDED IN THE COST OF THE CONTRACT.

WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION. IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.

THE CONTRACTOR SHALL PREPARE THE SUBGRADE IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS PRIOR TO THE REMOVAL OF ANY UNSTABLE MATERIALS.

ALL DISTURBED AREAS WITHIN THE PROJECT THAT ARE NOT OTHERWISE SURFACED SHALL BE CLEANED, LAYERED WITH TOPSOIL, AND SEEDED AS SHOWN IN THE PLANS. LIMITS SHOWN ON THE PLANS ARE THE MAXIMUM PAY WIDTHS FOR PAYMENT PURPOSES. ADDITIONAL AREAS DAMAGED BY MACHINERY, CONSTRUCTION EQUIPMENT, CONTRACTOR NEGLIGENCE OR OVER-EXCAVATION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE OCCURRED AT THE COST OF THE CONTRACTOR.

THE CONTRACTOR SHALL DISPOSE OF AND REMOVE FROM THE SITE EACH DAY ALL CURB AND GUTTER, PAVEMENT AND ALL OTHER EXCAVATED MATERIAL NOT FOR SALVAGE. THE COST FOR HAULING AND TRUCKING TO DISPOSAL LOCATIONS WILL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

THE ACTUAL NEED FOR REMOVAL OF UNSTABLE SOILS AND REPLACEMENT WITH AGGREGATE SUBGRADE IMPROVEMENT WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER (BY USE OF CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL). IF UNSTABLE SOILS ARE ENCOUNTERED, THE SOILS SHALL BE REMOVED AND REPLACED WITH AGGREGATE SUBGRADE IMPROVEMENT. IF UNSTABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY WILL BE DEDUCTED FROM THE CONTRACT WITH NO ADDITIONAL COMPENSATION PAID TO THE CONTRACTOR. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION SHALL BE PLACED AT ALL LOCATIONS REQUIRING REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT AS APPROVED BY THE ENGINEER.

BITUMINOUS MATERIALS (PRIME COAT) SHALL BE APPLIED AT A RATE OF 0.1 GALLONS PER SQUARE YARD ON ASPHALT AND 0.5 GALLONS PER SQUARE YARD ON AGGREGATE. BITUMINOUS MATERIALS SHALL BE SS-1 ON ASPHALT AND MC-30 ON AGGREGATE.

AT LOCATIONS WHERE THE PROPOSED CURB AND GUTTER IS TO BE CONSTRUCTED ACROSS TRENCHES OR WITHIN THREE FEET OF THE CLOSE EDGE OF ANY TRENCH, TWO (2) NO. 4 REINFORCEMENT BARS SHALL BE PLACED IN THE PROPOSED GUTTER. THESE REINFORCEMENT BARS SHALL NOT BE CONTINUOUS THROUGH TRANSVERSE EXPANSION JOINTS, BUT SHALL BE STOPPED 3" SHORT OF THE EXPANSION JOINT. COST OF THESE REINFORCEMENT BARS, COMPLETE IN PLACE, SHALL BE INCLUDED IN THE COST FOR THE CURB AND GUTTER.

THE ENGINEER AND COUNTY ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THEIR WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WORK PERFORMED UNDER SEPARATE CONTRACT FOR IL 31 AND VIRGINIA ROAD IMPROVEMENTS CONTRACT NO. 63553.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS CONTRACT. CONTRACT PLANS INDICATE EXISTING CONDITIONS ANTICIPATED UPON COMPLETION OF THE IL 31 AND VIRGINIA ROAD IMPROVEMENTS, AS SHOWN ON THE CONTRACT NO. 63553 PLANS.

SEWER STRUCTURE AND PIPE NOTATION

Table defining notation for Structure No., Structure Type, Frame & Grate/Lid Type, Station and Offset, Top of Curb (T/C) or Rim Elevation, Pipe Diameter, Sewer Type, Length, and Trench Backfill Quantity.

SUPPLEMENTAL LEGEND

Legend table showing symbols for Existing Curb or Curb & Gutter, Proposed Reverse Pitch Gutter, Proposed Curb or Curb & Gutter, Proposed Index Contour (705), and Proposed Intermediate Contour (704).

HIGHWAY STANDARDS

Table listing Highway Standards including Standard Symbols, Abbreviations and Patterns, Temporary Erosion Control Systems, Precast Reinforced Concrete Flared End Section, Catch Basin Type A, Catch Basin Type C, Inlet - Type A, Manhole Type A, Manhole Type A 8' Diameter, Precast Reinforced Concrete Flat Slab Top, Manhole Steps, Frame and Lids Type I, Grate Type B, Frame and Grate Type II, Concrete Curb Type B and Combination Curb and Gutter, Off-Road Operations, Multilane, 15' (45 M) to 24' (600 MM) from Pavement Edge, Off-Road Operations, Multilane, More than 15' (45 M) away, Lane Closure, Multilane, Day Operations Only, for Speeds > 45 MPH to 55 MPH, Urban Lane Closure, Multilane, 1W or 2W with Nontraversable Median, Traffic Control Devices, Sign Panel Mounting Details, Sign Panel Erection Details, Telescoping Steel Sign Support, Base for Telescoping Steel Sign Support, and Typical Pavement Markings.

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Project information block including Engineering Enterprises, Inc., MCHENRY COUNTY DIVISION OF TRANSPORTATION, 16111 NELSON ROAD WOODSTOCK, IL 60098, STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION, VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE GENERAL NOTES, HIGHWAY STANDARDS, LEGEND, SCALE: N/A, SHEET NO. 1 OF 1 SHEETS, STA. N/A TO STA. N/A, ILLINOIS FED. AID PROJECT, CONTRACT NO. 63553, TOTAL SHEETS: 17, SHEET NO.: 2.

SUMMARY OF QUANTITIES

SPECIAL PROVISION SPECIALTY ITEM	CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	FEDERAL = 80%	
					COUNTY = 20%	
					TRAINEES	OTHER
					0042	0044
Δ	20200100	EARTH EXCAVATION	CU YD	6412		6412
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	650		650
	20400800	FURNISHED EXCAVATION	CU YD	795		795
	20800150	TRENCH BACKFILL	CU YD	64		64
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1950		1950
	21101815	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	12695		12695
	21301072	EXPLORATION TRENCH 72" DEPTH	FOOT	100		100
	25000210	SEEDING, CLASS 2A	ACRE	1.8		1.8
	25000310	SEEDING, CLASS 4	ACRE	0.7		0.7
	25000314	SEEDING, CLASS 4B	ACRE	0.25		0.25
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	162		162
	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	162		162
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	162		162
	25100115	MULCH, METHOD 2	ACRE	1.8		1.8
	25100630	EROSION CONTROL BLANKET	SQ YD	4050		4050
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	520		520
	28000305	TEMPORARY DITCH CHECKS	FOOT	30		30
	28000400	PERIMETER EROSION BARRIER	FOOT	545		545
	28000500	INLET AND PIPE PROTECTION	EACH	6		6
	28000510	INLET FILTERS	EACH	6		6
	28100105	STONE RIPRAP, CLASS A3	SQ YD	390		390
	28200200	FILTER FABRIC	SQ YD	390		390
Δ	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	650		650
	35101400	AGGREGATE BASE COURSE, TYPE B	TON	5256		5256
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4771		4771
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	945		945
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	760		760
	42001300	PROTECTIVE COAT	SQ YD	450		450
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	90		90
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	5		5
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	3		3
	54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1		1
	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1		1
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	206		206

SPECIAL PROVISION SPECIALTY ITEM	CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	FEDERAL = 80%	
					COUNTY = 20%	
					TRAINEES	OTHER
					0042	0044
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	183		183
	550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	92		92
	550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	80		80
	60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1		1
	60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	5		5
	60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	2		2
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		1
	60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	1		1
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	2485		2485
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	90		90
	67100100	MOBILIZATION	L SUM	1		1
Δ	70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1		1
Δ	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1		1
	72000100	SIGN PANEL - TYPE 1	SQ FT	45		45
	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	119		119
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	60		60
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3100		3100
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	26		26
Δ *	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1		1
Δ *	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1
*	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	60		60
*	81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	2		2
*	81603047	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1934		1934
*	81702400	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 2	FOOT	62		62
*	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	176		176
Δ *	X8250500	LIGHTING UNIT COMPLETE, SPECIAL	EACH	20		20
Δ *	X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1		1
Δ	X0005472	DRAINAGE STRUCTURE SPECIAL	EACH	1		1
Δ	Z0003855	BICYCLE RACKS	EACH	1		1
Δ	Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	240		240
Δ	Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1
Δ	Z0076600	TRAINEES	HOOR	500	500	
Δ	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOOR	500	500	

Δ SEE SPECIAL PROVISIONS
* SPECIALTY ITEMS

Printed: 2/26/13 9:02:06 AM By: twd/ahr

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89 Wheeler Road
Bloomington, Illinois 61854
618-699-8700 / www.eeinc.com

**MCHENRY COUNTY DIVISION
OF TRANSPORTATION**
16111 NELSON ROAD
WOODSTOCK, IL 60098

DESIGNED - TVW	REVISED - TVW 1/21/13
DRAWN - KKP	REVISED -
CHECKED - JRL	REVISED -
DATE - 6/1/12	REVISED -

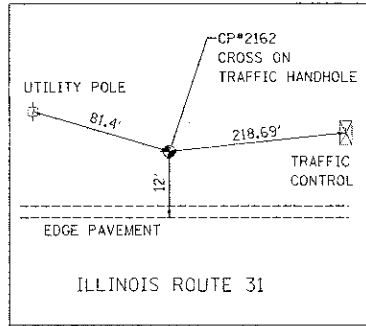
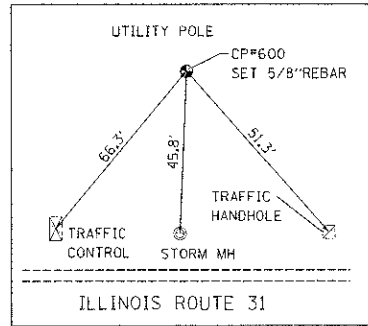
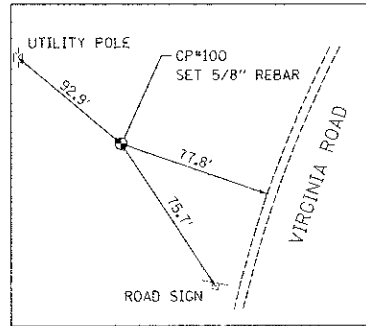
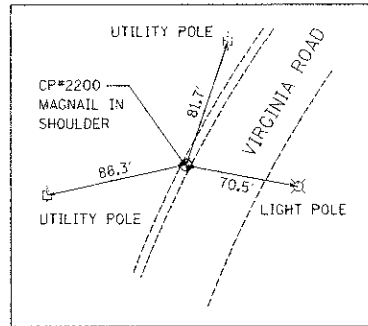
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**VIRGINIA ROAD AT ILLINOIS 31-PARK AND RIDE
SUMMARY OF QUANTITIES**

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	3
C-91-072-10		CONTRACT NO.	63733	
ILLINOIS FED. AID PROJECT CUM-90034840				

TIE DETAILS N.T.S.

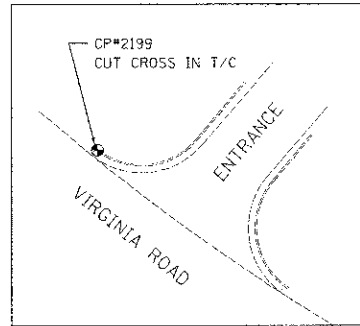
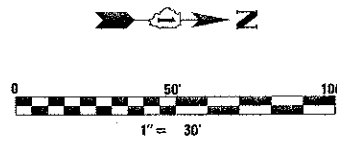


CURVE 1
 PI STA. = 11+08.68
 $\Delta = 58^\circ 44' 46''$ (LT)
 $D = 88^\circ 08' 50''$
 $R = 65.00'$
 $T = 36.59'$
 $L = 66.65'$
 $E = 9.59'$
 P.C. STA = 10+72.10
 P.T. STA = 11+38.74

CURVE 2
 PI STA. = 12+19.22
 $\Delta = 94^\circ 37' 41''$ (LT)
 $D = 88^\circ 08' 50''$
 $R = 65.00'$
 $T = 30.80'$
 $L = 107.35'$
 $E = 30.87'$
 P.R.C. STA = 11+48.74
 P.T. STA = 12+56.09

CURVE 3
 PI STA. = 12+86.90
 $\Delta = 50^\circ 42' 40''$ (RT)
 $D = 88^\circ 08' 50''$
 $R = 65.00'$
 $T = 30.80'$
 $L = 57.53'$
 $E = 6.33'$
 P.R.C. STA = 12+56.09
 P.T. STA = 13+13.62

CURVE 4
 PI STA. = 13+53.33
 $\Delta = 5^\circ 42' 26''$ (LT)
 $D = 7^\circ 17' 36''$
 $R = 796.50'$
 $T = 39.70'$
 $L = 79.34'$
 $E = 0.99'$
 P.R.C. STA = 13+13.62
 P.T. STA = 13+92.96



BENCHMARKS

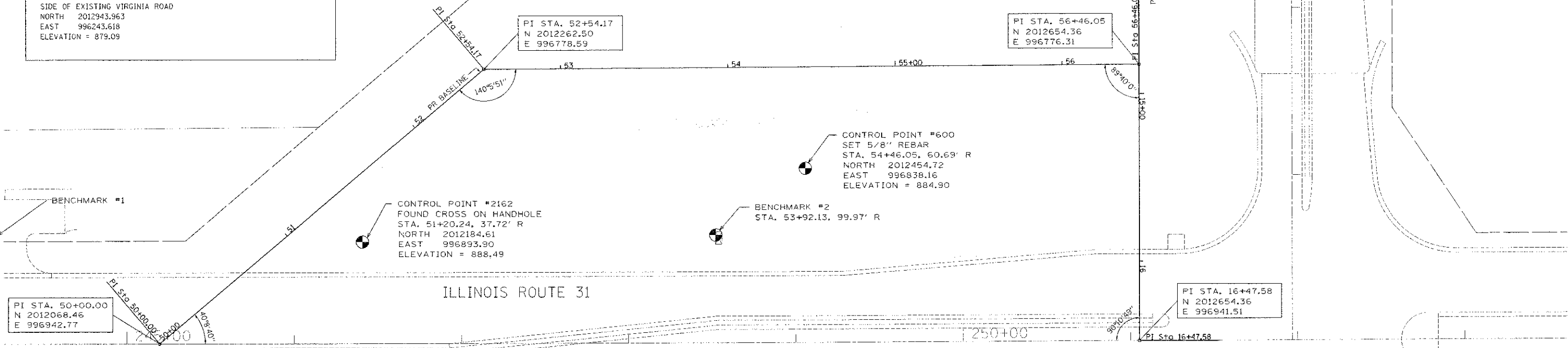
BM#1
 NGS MONUMENT AT THE SOUTHEAST CORNER OF IL ROUTE 31 & KLASSEN ROAD.
 NORTH 2011824.001
 EAST 997031.854
 ELEVATION = 894.66

BM#2
 CUT SQUARE ON WESTERLY CORNER OF TRAFFIC SIGNAL CONTROL BOX FOUNDATION AT THE SOUTHWEST CORNER OF IL ROUTE 31 & VIRGINIA ROAD.
 NORTH 2012401.028
 EAST 996877.752
 ELEVATION = 886.54

CONTROL POINT #2199
 CUT CROSS IN WEST END OF THE CURB RETURN ON THE WEST SIDE OF THE FIRST ENTRANCE WEST OF IL ROUTE 31 ON THE NORTH SIDE OF EXISTING VIRGINIA ROAD
 NORTH 2012943.963
 EAST 996243.618
 ELEVATION = 879.09

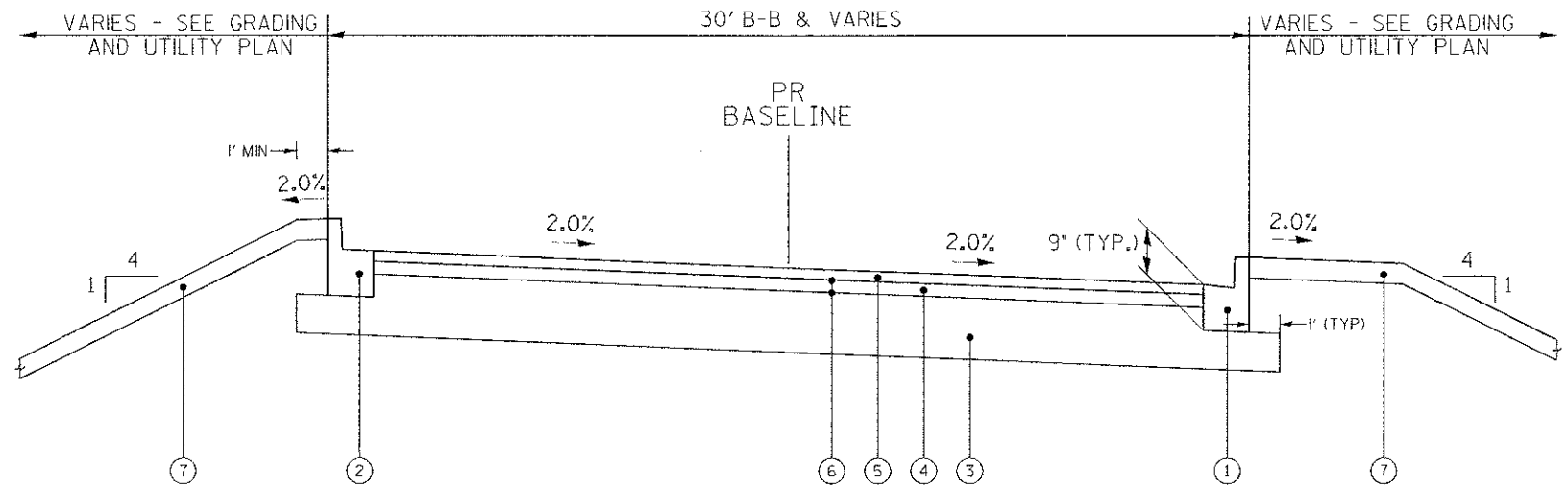
BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83. COORDINATES ARE ON THE GROUND. HORIZONTAL CONTROL BASED ON HOLDING PUBLISHED VALUES FOR NGS CONTROL MONUMENT WITH P.I.D. AJ2855 AT THE SOUTHEAST CORNER OF IL ROUTE 31 AND KLASSEN ROAD. BENCHMARKS FROM PROPOSED HIGHWAY PLANS PREPARED BY CIVILTECH WITH CONTRACT NO. 63553.

CONTROL POINT AND BENCHMARK DATA AS OF OCTOBER 2011 PRIOR TO THE CONSTRUCTION OF CONTRACT NO. 63553.

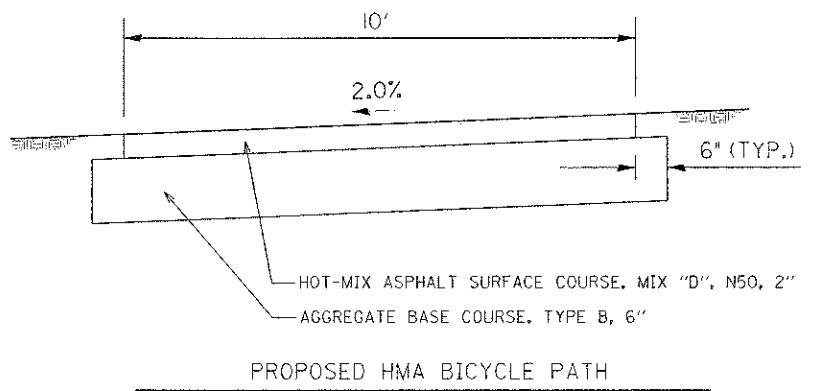


BY: [Signature] DATE: 5/23/2012 2:24:25 PM
 kgung

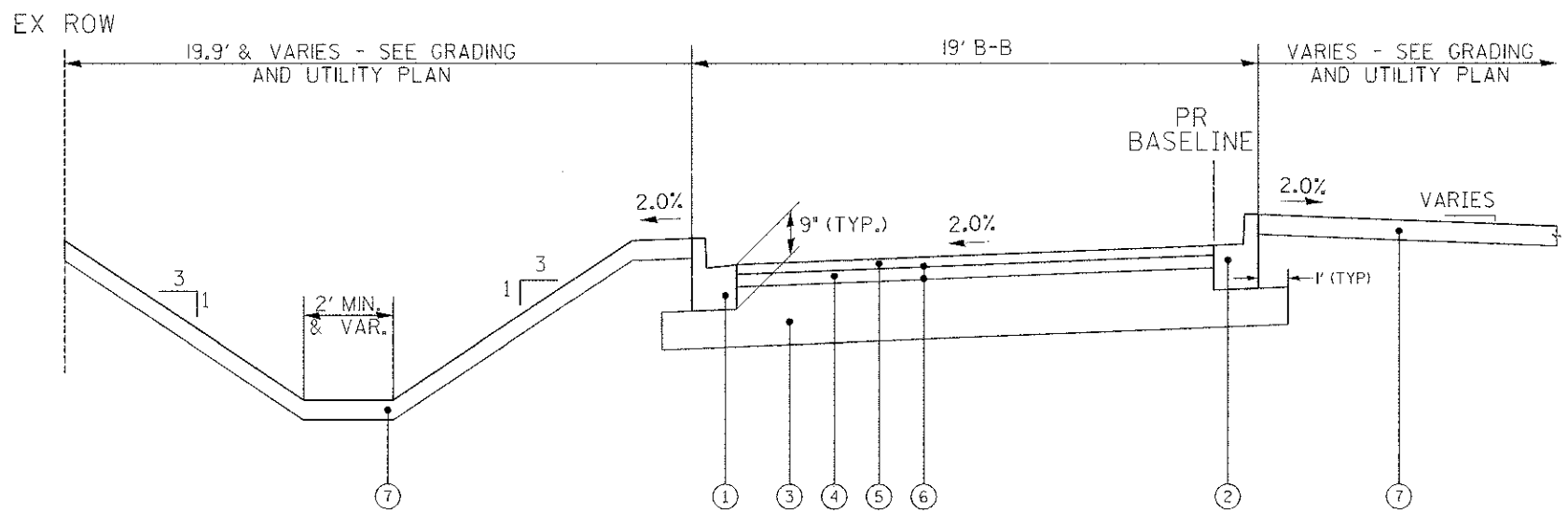
Engineering Enterprises, Inc. CONSULTING ENGINEERS 52 Wheeler Road Sugar Grove, Illinois 60554 630.466.6700 / www.eeiweb.com	MCHENRY COUNTY DIVISION OF TRANSPORTATION 16111 NELSON ROAD WOODSTOCK, IL 60098	DESIGNED - TVW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE ALIGNMENT, TIES AND BENCHMARKS	F.A. RTE. N/A	SECTION 09-00370-00-PK	COUNTY MCHENRY	TOTAL SHEETS 17	SHEET NO. 4
		DRAWN - KKP	REVISED -			SCALE: 1" = 30'	SHEET NO. 1 OF 1 SHEETS	STA. N/A TO STA. N/A	C-91-072-10	CONTRACT NO. 63733
		CHECKED - JRL	REVISED -							
		DATE - 6/1/12	REVISED -							



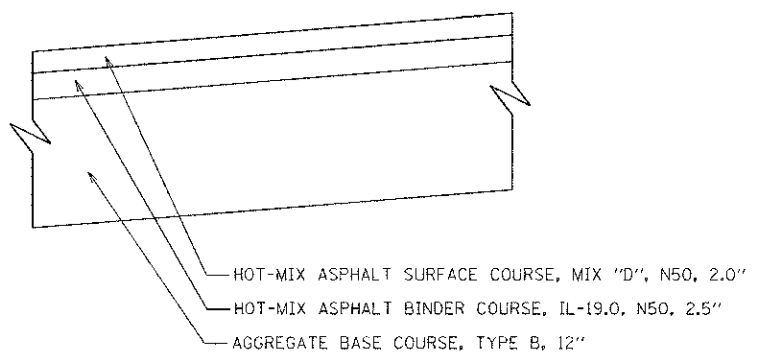
PROPOSED TYPICAL SECTION
VIRGINIA ROAD ACCESS ROAD
STATION 10+22 TO 13+89.38



PROPOSED HMA BICYCLE PATH



PROPOSED TYPICAL SECTION
ILLINOIS 31 ACCESS ROAD
STATION 50+66.04 TO 52+27.04



PROPOSED PARKING LOT PAVEMENT SECTION

PROPOSED LEGEND

- ① COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ② COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (REVERSE PITCH GUTTER 2%)
- ③ AGGREGATE BASE COURSE, TYPE B, 12"
- ④ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 2.5"
- ⑤ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2.0"
- ⑥ BITUMINOUS MATERIALS (PRIME COAT)
- ⑦ TOPSOIL 4", SEEDING, FERTILIZER AND MULCH

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR Voids @ NDES
ACCESS ROADS AND PARKING LOT	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 2.5"	4% @ 50 Gyr.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 mm), 2.0"	4% @ 50 Gyr.
BICYCLE PATH	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 mm), 2.0"	4% @ 50 Gyr.

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

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE SPECIAL PROVISIONS.

P:\01\1212013 444210 EX By: twelizer
 6/1/13

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 Sugar Grove, Illinois 60054
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**MCHENRY COUNTY DIVISION
 OF TRANSPORTATION**
 16111 NELSON ROAD
 WOODSTOCK, IL 60098

DESIGNED - TVW	REVISED - TVW 1/21/13
DRAWN - KKP	REVISED -
CHECKED - JRL	REVISED -
DATE - 6/1/12	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
 TYPICAL SECTIONS**

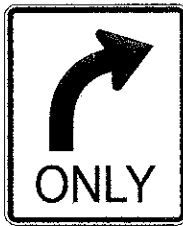
SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	5
C-91-072-10		CONTRACT NO.	63733	
ILLINOIS FED. AID PROJECT			CMM-90034841	

Sign Code	Sign Name	Width (in)	Height (in)	STA	Offset
R1-1	STOP	36	36	50+56.37	23.92' LT
R3-5R	RIGHT TURN ONLY	30	36		
R3-1	RIGHT TURN PROHIBITION	36	36	50+86.12	15.35' RT
R7-8	RESERVED PARKING	12	18	15+77.89	30.01' RT
R7-1101	\$250 FINE PLAQUE	12	6		
R7-8	RESERVED PARKING	12	18	15+59.89	0.60' LT
R7-1101	\$250 FINE PLAQUE	12	6		
R7-8	RESERVED PARKING	12	18	15+46.58	9.48' LT
R7-1101	\$250 FINE PLAQUE	12	6		
R7-8	RESERVED PARKING	12	18	15+33.28	18.37' LT
R7-1101	\$250 FINE PLAQUE	12	6		
R7-8	RESERVED PARKING	12	18	15+19.97	27.25' LT
R7-1101	\$250 FINE PLAQUE	12	6		
R1-1	STOP	36	36	10+37.00	32.04' LT



R1-1



R3-5R



R3-1



R7-8



R7-1101

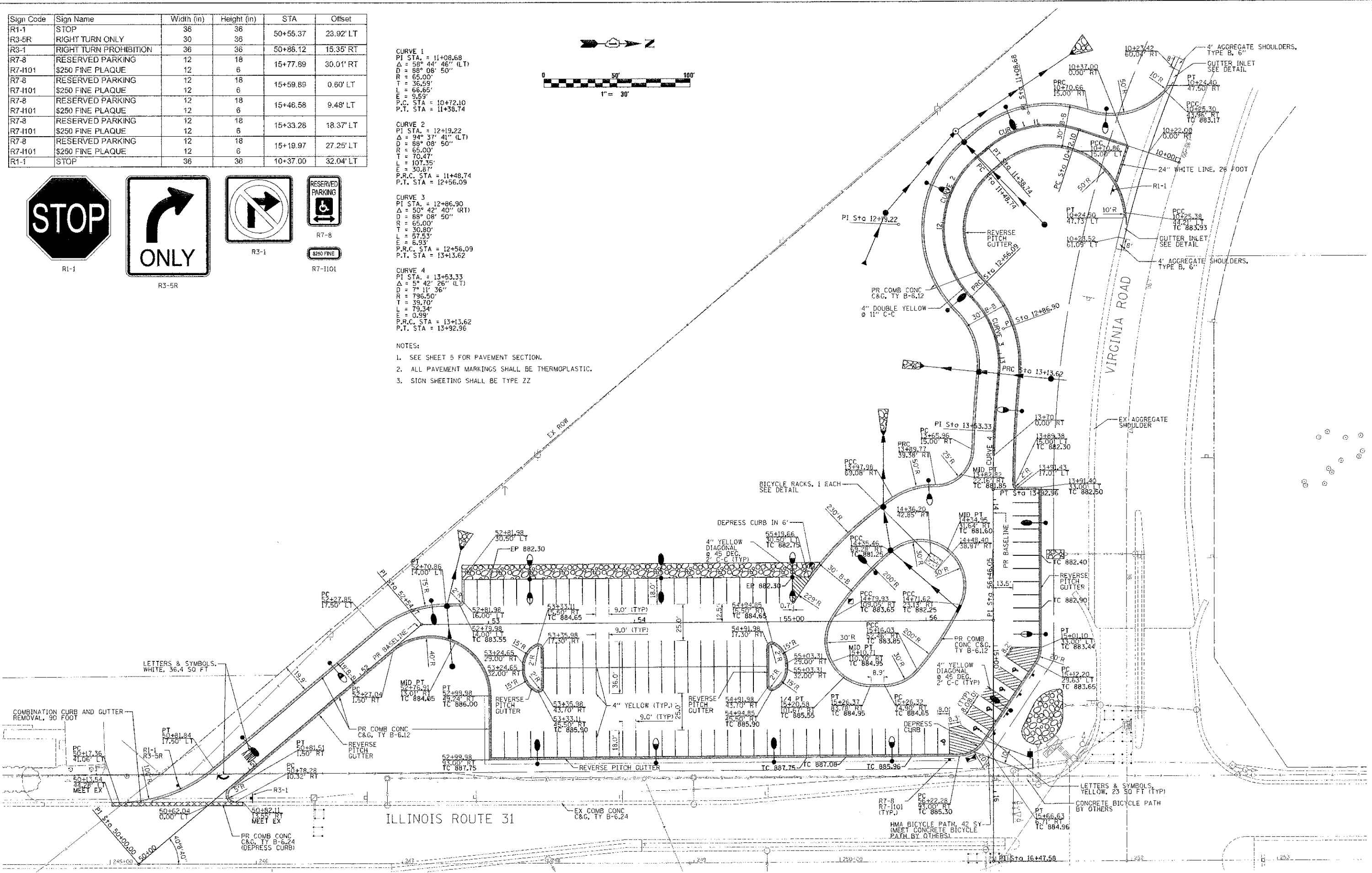
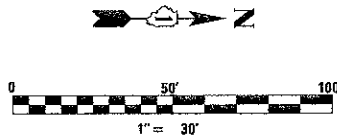
CURVE 1
 PI STA. = 11+08.68
 $\Delta = 58^\circ 44' 46''$ (LT)
 $D = 88^\circ 08' 50''$
 $R = 65.00'$
 $T = 36.69'$
 $L = 66.65'$
 $E = 9.99'$
 P.C. STA. = 10+72.10
 P.T. STA. = 11+38.74

CURVE 2
 PI STA. = 12+19.22
 $\Delta = 94^\circ 31' 41''$ (LT)
 $D = 88^\circ 08' 50''$
 $R = 65.00'$
 $T = 70.47'$
 $L = 107.35'$
 $E = 30.87'$
 P.R.C. STA. = 11+48.74
 P.T. STA. = 12+56.09

CURVE 3
 PI STA. = 12+86.90
 $\Delta = 50^\circ 42' 40''$ (RT)
 $D = 88^\circ 08' 50''$
 $R = 65.00'$
 $T = 30.80'$
 $L = 57.53'$
 $E = 6.93'$
 P.R.C. STA. = 12+56.09
 P.T. STA. = 13+13.62

CURVE 4
 PI STA. = 13+53.33
 $\Delta = 5^\circ 42' 26''$ (LT)
 $D = 7^\circ 11' 36''$
 $R = 796.50'$
 $T = 39.70'$
 $L = 79.34'$
 $E = 0.99'$
 P.R.C. STA. = 13+13.62
 P.T. STA. = 13+92.96

- NOTES:
- SEE SHEET 5 FOR PAVEMENT SECTION.
 - ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
 - SIGN SHEETING SHALL BE TYPE ZZ



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Engineering Enterprises, Inc.
 CONSULTING ENGINEERS
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 Sugar Grove, Illinois 60554
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**MCHENRY COUNTY DIVISION
 OF TRANSPORTATION**
 16111 NELSON ROAD
 WOODSTOCK, IL 60098

DESIGNED - TVW
 DRAWN - KKP
 CHECKED - JRL
 DATE - 6/1/12

REVISED -
 REVISED -
 REVISED -
 REVISED -

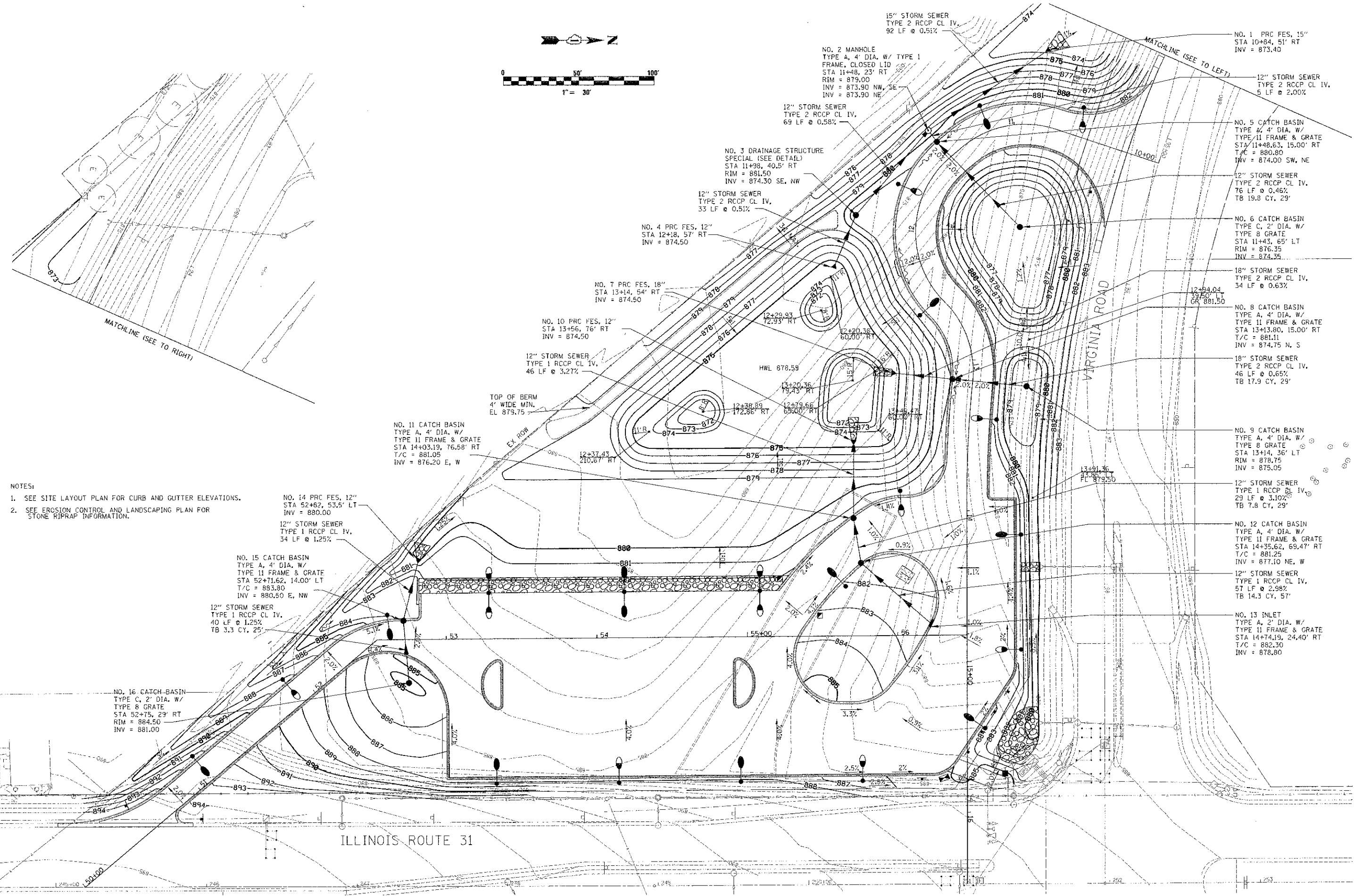
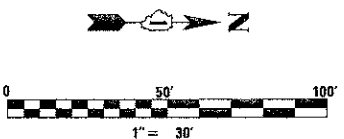
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
 SITE LAYOUT PLAN**

SCALE: 1" = 30' SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	6
C-91-072-10		CONTRACT NO.	63733	
ILLINOIS FED. AID PROJECT CMM-9903(484)				

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 5/23/2012 16:07 PM



- NOTES:
- SEE SITE LAYOUT PLAN FOR CURB AND GUTTER ELEVATIONS.
 - SEE EROSION CONTROL AND LANDSCAPING PLAN FOR STONE RIPRAP INFORMATION.

NO. 14 PRC FES, 12"
STA 52+62, 53.5' LT
INV = 880.00

12" STORM SEWER
TYPE 1 RCCP CL IV,
34 LF @ 1.25%

NO. 15 CATCH BASIN
TYPE A, 4' DIA. W/
TYPE II FRAME & GRATE
STA 52+71.62, 14.00' LT
T/C = 893.80
INV = 880.50 E, NW

12" STORM SEWER
TYPE 1 RCCP CL IV,
40 LF @ 1.25%
TB 3.3 CY, 25'

NO. 16 CATCH-BASIN
TYPE C, 2' DIA. W/
TYPE 8 GRATE
STA 52+75, 23' RT
RIM = 884.50
INV = 881.00

NO. 10 PRC FES, 12"
STA 13+56, 76' RT
INV = 874.50

12" STORM SEWER
TYPE 1 RCCP CL IV,
46 LF @ 3.27%

TOP OF BERM
4' WIDE MIN.
EL 879.75

NO. 11 CATCH BASIN
TYPE A, 4' DIA. W/
TYPE II FRAME & GRATE
STA 14+03.19, 76.58' RT
T/C = 881.05
INV = 876.20 E, W

NO. 7 PRC FES, 18"
STA 13+14, 54' RT
INV = 874.50

NO. 4 PRC FES, 12"
STA 12+18, 57' RT
INV = 874.50

12" STORM SEWER
TYPE 2 RCCP CL IV,
33 LF @ 0.51%

NO. 3 DRAINAGE STRUCTURE
SPECIAL (SEE DETAIL)
STA 11+98, 40.5' RT
RIM = 881.50
INV = 874.30 SE, NW

12" STORM SEWER
TYPE 2 RCCP CL IV,
69 LF @ 0.58%

15" STORM SEWER
TYPE 2 RCCP CL IV,
92 LF @ 0.51%

NO. 1 PRC FES, 15"
STA 10+84, 51' RT
INV = 873.40

12" STORM SEWER
TYPE 2 RCCP CL IV,
5 LF @ 2.00%

NO. 5 CATCH BASIN
TYPE A, 4' DIA. W/
TYPE II FRAME & GRATE
STA 11+48.63, 15.00' RT
T/C = 880.80
INV = 874.00 SW, NE

12" STORM SEWER
TYPE 2 RCCP CL IV,
76 LF @ 0.46%

NO. 6 CATCH BASIN
TYPE C, 2' DIA. W/
TYPE 8 GRATE
STA 11+43, 65' LT
RIM = 876.35
INV = 874.35

18" STORM SEWER
TYPE 2 RCCP CL IV,
34 LF @ 0.63%

NO. 8 CATCH BASIN
TYPE A, 4' DIA. W/
TYPE II FRAME & GRATE
STA 13+13.80, 15.00' RT
T/C = 881.11
INV = 874.75 N, S

18" STORM SEWER
TYPE 2 RCCP CL IV,
46 LF @ 0.65%

NO. 9 CATCH BASIN
TYPE A, 4' DIA. W/
TYPE II FRAME & GRATE
STA 13+14, 36' LT
RIM = 878.75
INV = 875.05

12" STORM SEWER
TYPE 1 RCCP CL IV,
29 LF @ 3.10%

NO. 12 CATCH BASIN
TYPE A, 4' DIA. W/
TYPE II FRAME & GRATE
STA 14+35.62, 69.47' RT
T/C = 881.25
INV = 877.10 NE, W

12" STORM SEWER
TYPE 1 RCCP CL IV,
57 LF @ 2.98%

NO. 13 INLET
TYPE A, 2' DIA. W/
TYPE II FRAME & GRATE
STA 14+74.19, 24.40' RT
T/C = 882.30
INV = 878.80

By: Date: 5/23/2012 2:25:34 PM

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**MCHENRY COUNTY DIVISION
OF TRANSPORTATION**
16111 NELSON ROAD
WOODSTOCK, IL 60098

DESIGNED - TVW	REVISED -
DRAWN - KKP	REVISED -
CHECKED - JRL	REVISED -
DATE - 6/1/12	REVISED -

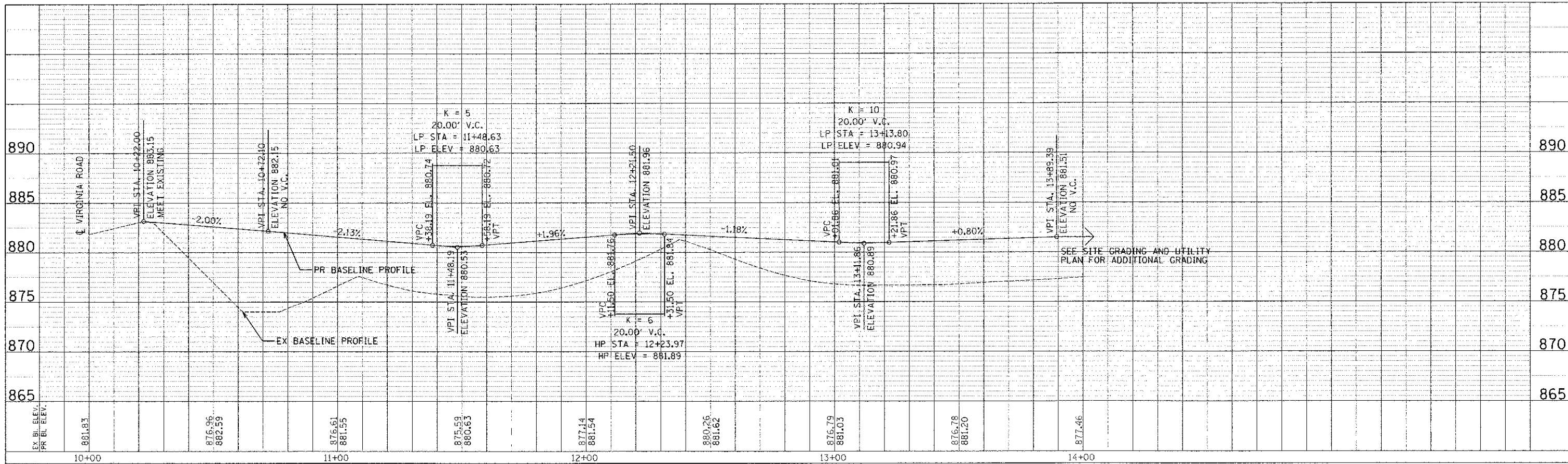
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
SITE GRADING AND UTILITY PLAN

SCALE: 1" = 30'
SHEET NO. 1 OF 1 SHEETS
STA. N/A TO STA. N/A

F.A. RTE. N/A	SECTION 09-00370-00-PK	COUNTY MCHENRY	TOTAL SHEETS 17	SHEET NO. 7
C-91-072-10		CONTRACT NO. 63733		ILLINOIS FED. AID PROJECT CMW-90054941

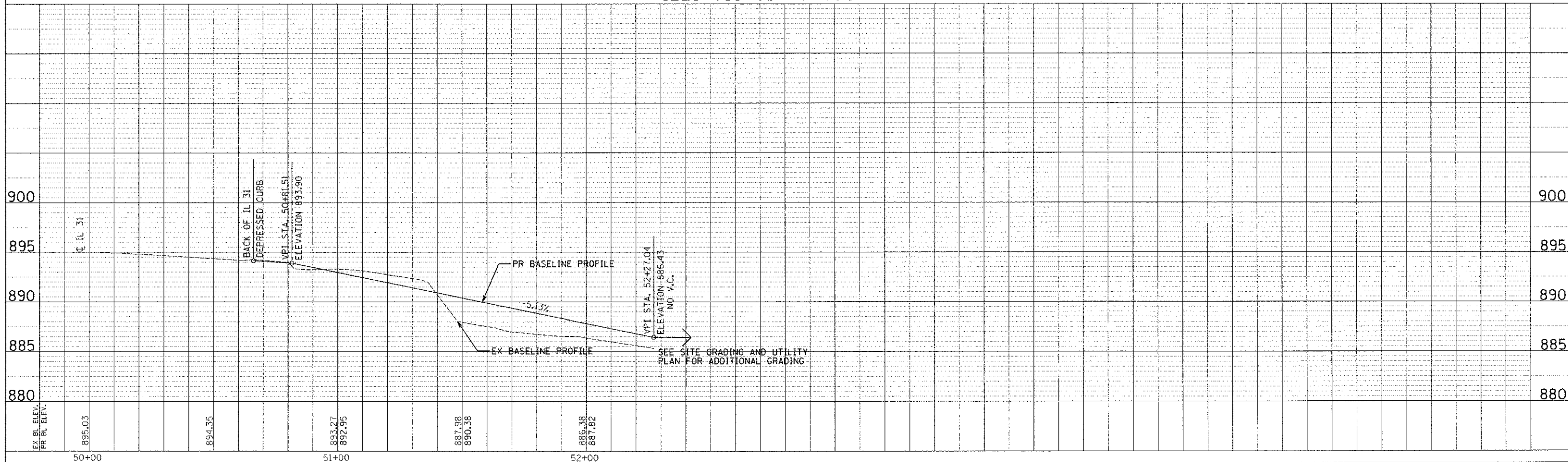
DATE: 6/1/12
 SURVEYED BY: J. K. MCGEE
 PLAN NO.: 09-00370-00-PK
 NOTE BOOK NO.: 117
 DATE OF SURVEY: 5/11/12
 BY: J. K. MCGEE



VIRGINIA ROAD ACCESS ROAD

ILLINOIS 31 ACCESS ROAD

DATE: 6/1/12
 SURVEYED BY: J. K. MCGEE
 PROFILE NO.: 09-00370-00-PK
 NOTE BOOK NO.: 117
 DATE OF SURVEY: 5/11/12
 BY: J. K. MCGEE



Plotted: 5/23/2012 2:28:30 PM
 By: kgung

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**MCHENRY COUNTY DIVISION
 OF TRANSPORTATION**
 16111 NELSON ROAD
 WOODSTOCK, IL 60098

DESIGNED: TVW
 DRAWN: KKP
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 DATE: 6/1/12

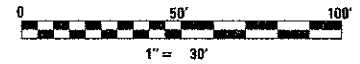
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
 ACCESS ROADS PROFILES**

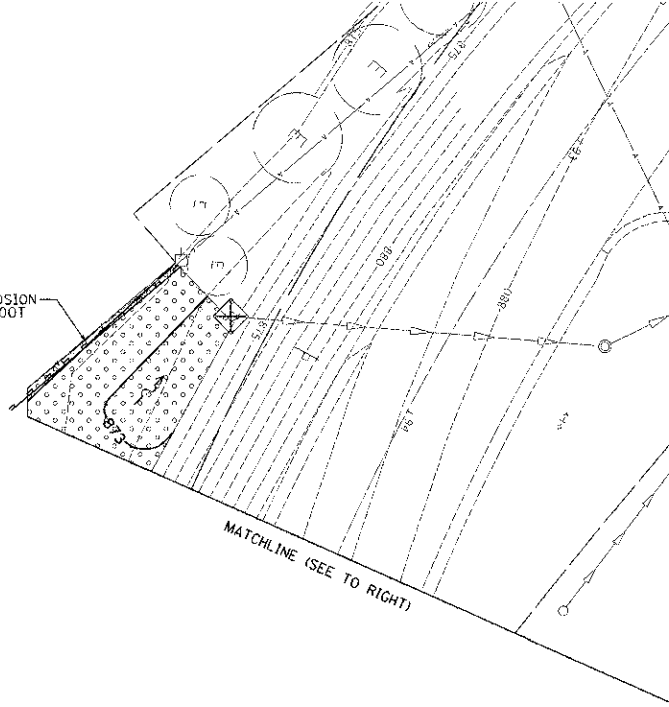
SCALE: 1"=20'H/5'V SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A. RTE. N/A	SECTION 09-00370-00-PK	COUNTY MCHENRY	TOTAL SHEETS: 17	SHEET NO.: 8
C-91-072-10			CONTRACT NO. 63733	
ILLINOIS FED. AID PROJECT			CMM-90034841	



LEGEND	
	DITCH CHECK
	INLET AND PIPE PROTECTION
	PERIMETER EROSION BARRIER
	SEEDING - CLASS 2A & MULCH METHOD 2 (UNLESS NOTED OTHERWISE)
	SEEDING - CLASS 4 & EROSION CONTROL BLANKET
	SEEDING - CLASS 4B & EROSION CONTROL BLANKET

PERIMETER EROSION BARRIER, 70 FOOT



MATCHLINE (SEE TO RIGHT)

PERIMETER EROSION BARRIER, 475 FOOT

STONE RIPRAP
CL 3
8 SQ YD

STONE RIPRAP
CL 3
269 SQ YD

STONE RIPRAP
CL 3
8 SQ YD

STONE RIPRAP
CL 3
79 SQ YD

STONE RIPRAP
CL 3
11 SQ YD

STONE RIPRAP
CL 3
7 SQ YD

STONE RIPRAP
CL 3
8 SQ YD

- NOTES:
1. TEMPORARY DITCH CHECKS SHALL BE ROLLED EXCELSIOR.
 2. INLET FILTERS SHALL BE USED AT CURB STRUCTURES FOR INLET AND PIPE PROTECTION.
 3. INLET AND PIPE PROTECTION SHALL BE SILT FILTER FABRIC TYPE.
 4. FILTER FABRIC SHALL BE USED AT ALL RIP RAP AREAS.
 5. MULCH, METHOD 2 - PROCEDURES 1 AND 2 WILL NOT BE ALLOWED FOR THIS CONTRACT.

ILLINOIS ROUTE 31

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
EROSION CONTROL AND LANDSCAPING PLAN

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	9
C-91-072-10		CONTRACT NO.		63733
ILLINOIS FED. AID PROJECT CMM-90034661				

SCALE: 1" = 30' SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

9:03:08 AM By: bvsdazr

Engineering Enterprises, Inc.
CONSULTING ENGINEERS
85 Windsor Road
Sugar Grove, Illinois 61054
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**MCHENRY COUNTY DIVISION
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16111 NELSON ROAD
WOODSTOCK, IL 60098

DESIGNED - TVW
DRAWN - KKP
CHECKED - JRL
DATE - 6/1/12

REVISED - TVW 1/21/13
REVISED -
REVISED -
REVISED -

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VERTICAL CURVE DATA: SEE PLAN SHEET 17-8 FOR VERTICAL CURVE DATA

EXTERIOR LUMINAIRES

SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, PRODUCTS BY MANUFACTURERS SPECIFIED BELOW. THE USE OF A SPECIFIC MANUFACTURER'S PRODUCT FOR DESIGN STANDARD DOES NOT PRECLUDE THE CONTRACTOR FROM SEEKING EQUAL PRODUCTS FROM COMPETITIVE SOURCES. ALL PRODUCTS ARE SUBJECT TO FINAL APPROVAL BY THE ENGINEER.

MARK	NO.	LAMPS		MOUNTING		MANUFACTURER				LOAD		REMARKS
		TYPE	TYPE	HEIGHT	BASIS OF DESIGN	CATALOG NO.	SHIELDING	TRIM FINISH	#WATTS	VOLTS		
F1	1	250W PSMH	ARM	25'-0"	LITHONIA	HEAD: KAD-250M-R3-TB-SCWA-SPD09-GALV-LPI POLE: SSS-25-46-DM19-GALV-SERIES	FLAT GLASS	GALVANIZED	275	240	COMPETING MFR'S MUST PROVIDE A PHOTOMETRIC PLAN DEMONSTRATING EQUIVALENCE	
F2	1	250W PSMH	ARM	25'-0"	LITHONIA	HEAD: KAD-250M-SR4SC-TB-SCWA-SPD09-GALV-LPI POLE: SSS-25-46-DM19-GALV-SERIES	FLAT GLASS	GALVANIZED	298	240	COMPETING MFR'S MUST PROVIDE A PHOTOMETRIC PLAN DEMONSTRATING EQUIVALENCE	
F3	1	250W PSMH	ARM	25'-0"	LITHONIA	HEAD: KAD-250M-SR4SC-TB-SCWA-SPD09-GALV-LPI POLE: SSS-25-46-DM20-GALV-SERIES	FLAT GLASS	GALVANIZED	576	240	AS ABOVE WITH POLE DRILLED AND PLUGGED FOR FUTURE SECOND HEAD	

LUMINAIRE LOGS SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	F1	1	KAD 250M R3 (PULSE START)	Area Luminaire, 250W MH, 83 Reflector, Full Cutoff MEETS THE NIGHTTIME FRIENDLY CRITERIA	ONE (1) 250 WATT CLEAR B729 PULSE START METAL HALIDE LAMP IN HORIZONTAL POSITION	KAD_250M_R3 (PULSE_START).log	22500	0.75	298
	F2	16	KAD 250M SR4SC (PULSE START)	Area Luminaire, 250W MH, High Performance 8740C Sharp Cutoff Reflector, Full Cutoff MEETS THE NIGHTTIME FRIENDLY CRITERIA	ONE (1) 250 WATT CLEAR B729 PULSE START METAL HALIDE LAMP IN HORIZONTAL POSITION	KAD_250M_SR4SC (PULSE_START).log	22500	0.75	298
	F3	3							

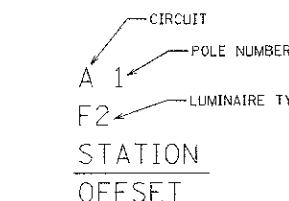
STATISTICS

Description	Avg	Max	Min	Max/Min	Avg/Min
NON-PAVED AREAS	0.8 fc	3.9 fc	0.3 fc	N/A	N/A
PAVED AREAS	1.4 fc	3.9 fc	0.3 fc	13.0:1	4.7:1

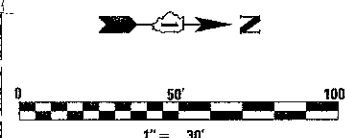
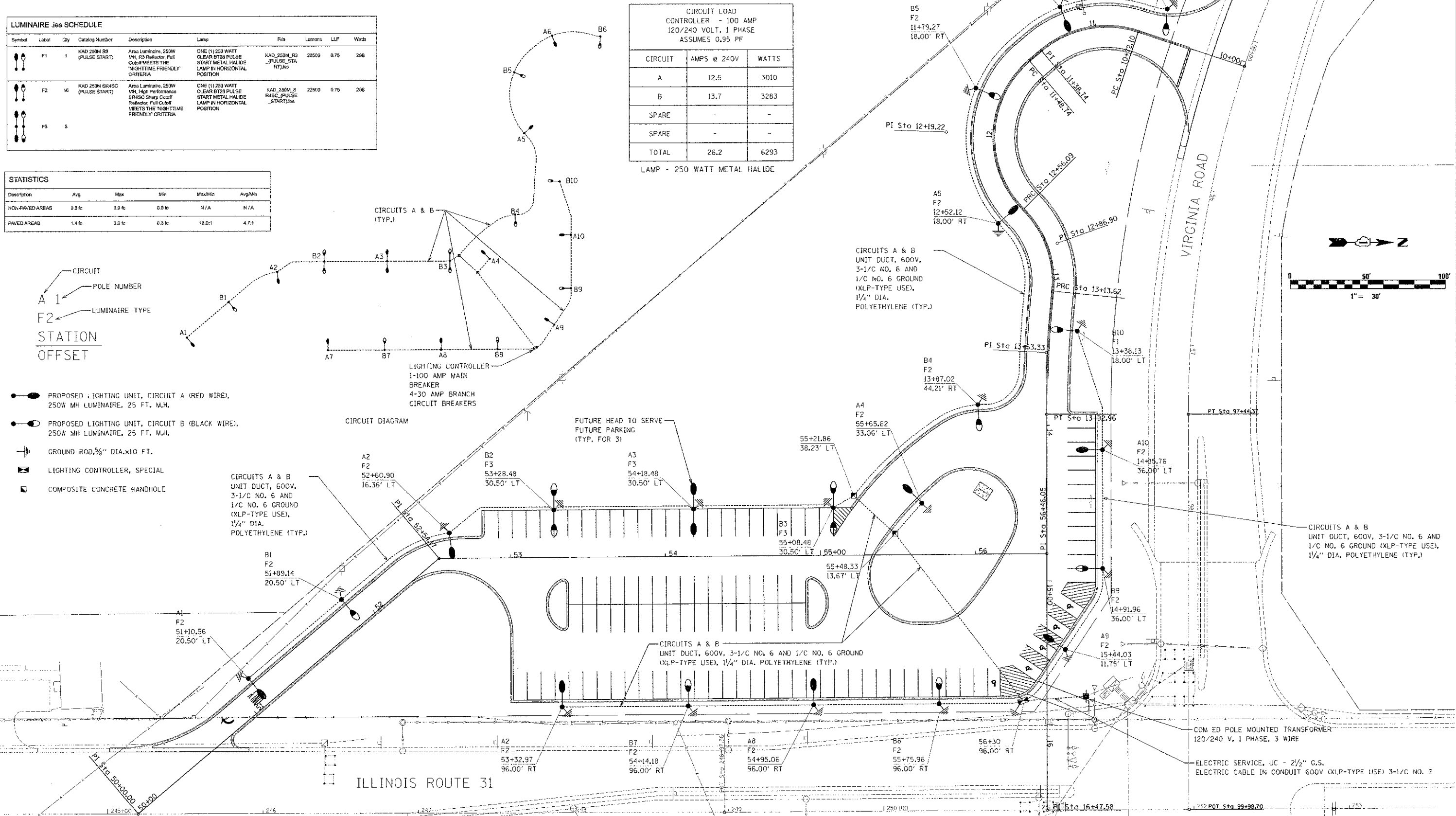
CIRCUIT LOAD CONTROLLER - 100 AMP 120/240 VOLT, 1 PHASE ASSUMES 0.95 PF

CIRCUIT	AMPS @ 240V	WATTS
A	12.5	3010
B	13.7	3283
SPARE	-	-
SPARE	-	-
TOTAL	26.2	6293

LAMP - 250 WATT METAL HALIDE



- PROPOSED LIGHTING UNIT, CIRCUIT A (RED WIRE), 250W MH LUMINAIRE, 25 FT. M.H.
- PROPOSED LIGHTING UNIT, CIRCUIT B (BLACK WIRE), 250W MH LUMINAIRE, 25 FT. M.H.
- GROUND ROD, 3/8" DIA. x 10 FT.
- LIGHTING CONTROLLER, SPECIAL
- COMPOSITE CONCRETE HANDHOLE



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 Appr: [Signature]

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MCHENRY COUNTY DIVISION OF TRANSPORTATION
 1611 NELSON ROAD
 WOODSTOCK, IL 60098

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DATE - 6/1/12	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE LIGHTING PLAN

SCALE: 1" = 30' SHEET NO. 1 OF 5 SHEETS STA. N/A TO STA. N/A

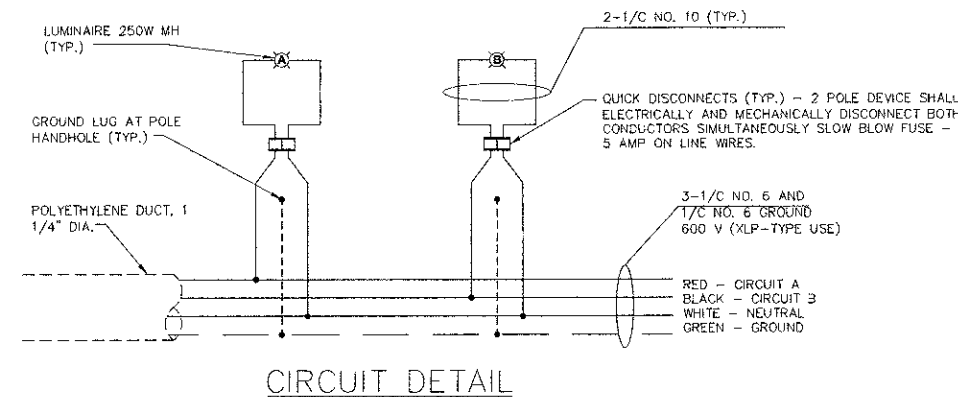
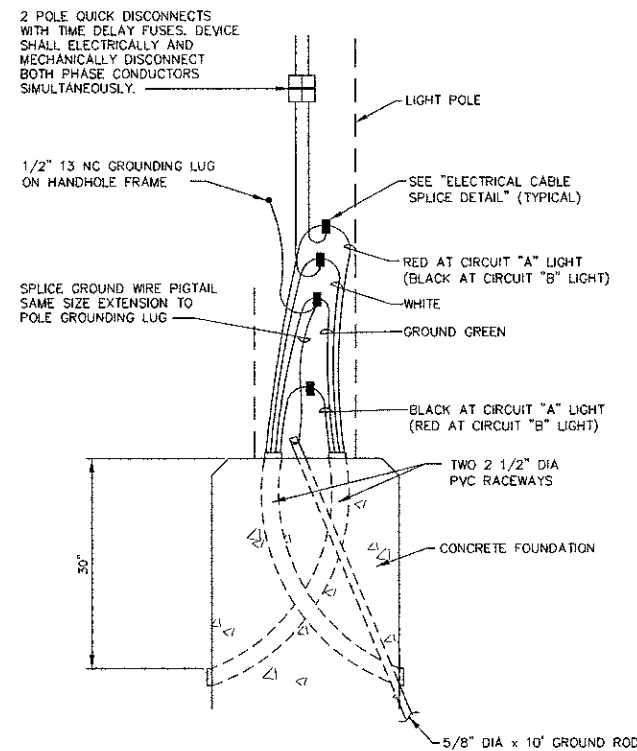
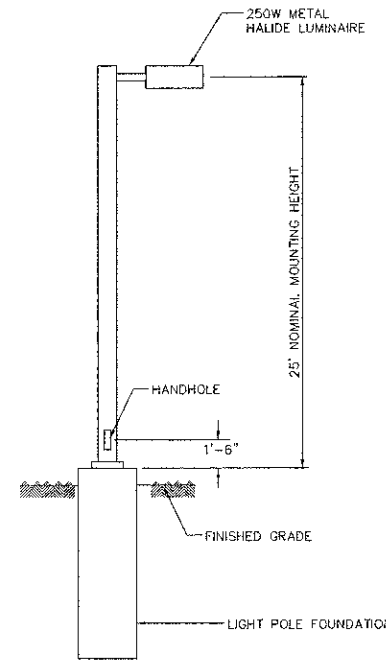
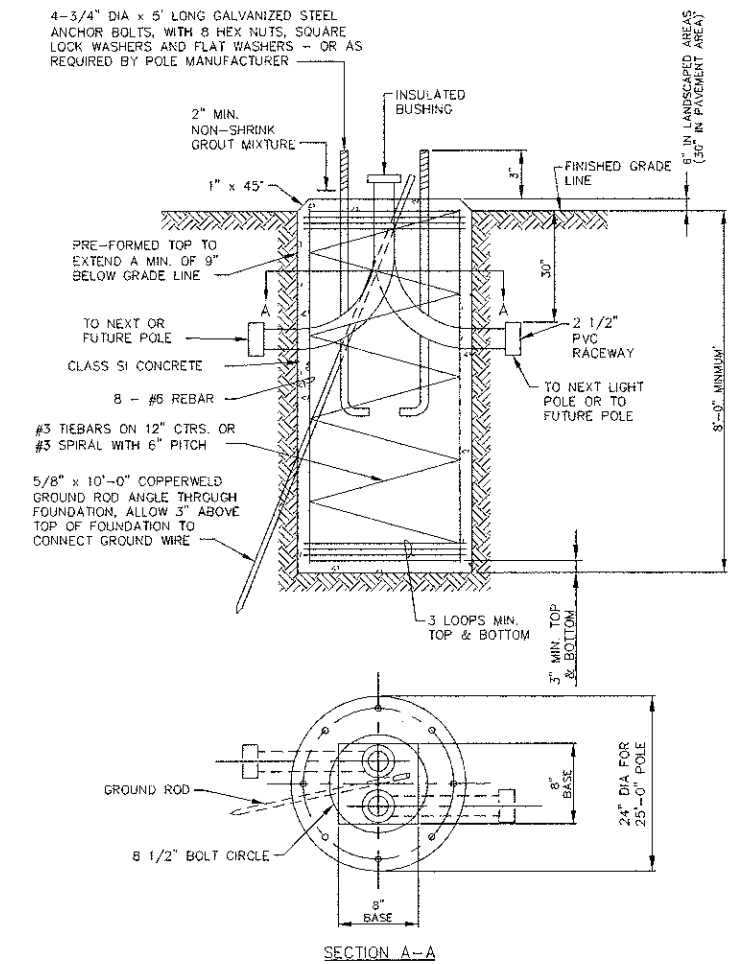
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	10
C-91-072-10		CONTRACT NO. 63733		
[ILLINOIS] FED. AID PROJECT CMM-9003484				

LIGHTING SCHEDULE OF QUANTITIES

GENERAL NOTES

1. 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, ILLINOIS DEPARTMENT OF TRANSPORTATION.
 - B. THE NATIONAL ELECTRICAL CODE.
 - C. LOCAL CODES AND ORDINANCES.
2. THE CONTRACTOR SHALL SUBMIT SPECIFICATIONS, SHOP DRAWINGS, AND CATALOG CUTS FOR ALL LIGHTING ITEMS TO THE ENGINEER FOR REVIEW BEFORE ORDERING ANY MATERIALS.
3. ONLY SUBMERSIBLE WATERPROOF TYPE SPLICES OF THE UNIT DUCT AND CIRCUIT CABLES WILL BE ALLOWED IN BELOW GROUND HANDHOLES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TOP OF CONCRETE FOUNDATION HEIGHTS WITH FINISHED GRADE ELEVATIONS.
5. ALL ELECTRIC CABLE SHALL BE FULLY PIGMENTED COLOR CODED AND TAGGED AS SHOWN ON THE DRAWINGS.
6. ALL ELECTRICAL EQUIPMENT AND MATERIAL SHALL BE UL LISTED AND LABELED.
7. POLE FUSES AND ASSOCIATED HARDWARE/MATERIAL AND INSTALLATION SHALL BE INCLUDED IN THE LIGHTING UNIT COMPLETE, SPECIAL PAY ITEM.
8. THE INSTALLATION OF WARNING TAPE SHALL BE REVIEWED BY THE ENGINEER PRIOR TO BACKFILLING, AS APPLICABLE.
9. THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING IN THE PRESENCE OF THE ENGINEER. THE ELECTRICAL TESTING SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHTING POLES AND CONTROLLER. THE EXACT LOCATION OF ALL SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO START OF WORK.
11. GROUND RODS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE ITEM IT IS GROUNDING.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	60
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	2
81603047	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1934
81702400	ELECTRIC CABLE IN CONDUIT, 600 V (XLP-TYPE USE) 3-1/C NO. 2	FOOT	62
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	176
X8250500	LIGHTING UNIT COMPLETE, SPECIAL	EACH	20
X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1



NOTES:

- VERIFY ALL POLE RELATED DIMENSIONS AND INFORMATION WITH POLE MANUFACTURER PRIOR TO FABRICATION OF FOUNDATION.
- MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 3500 PSI AT THE END OF 28 DAYS.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER 24" IN DIAMETER.
- THE ANCHOR BOLTS SHALL BE A TACK WELDED TYPE BOLT OR HOOK TYPE BOLT. COIL BENDING OF THE HOOK BOLT WILL NOT BE ALLOWED.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- THE ENTIRE LENGTH OF THE ANCHOR BOLTS AS WELL AS THE NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM DESIGNATION A153.
- RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
- CONCRETE SHALL BE CLASS "B". THE CONCRETE FOUNDATION MUST BE CURED FOR 10 DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED 36" DEEP. THE LIGHT IS ERECTED.
- UNIT DUCT SHALL EXTEND 12" ABOVE CONCRETE FOUNDATION.

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DATE - 6/1/12	REVISED -

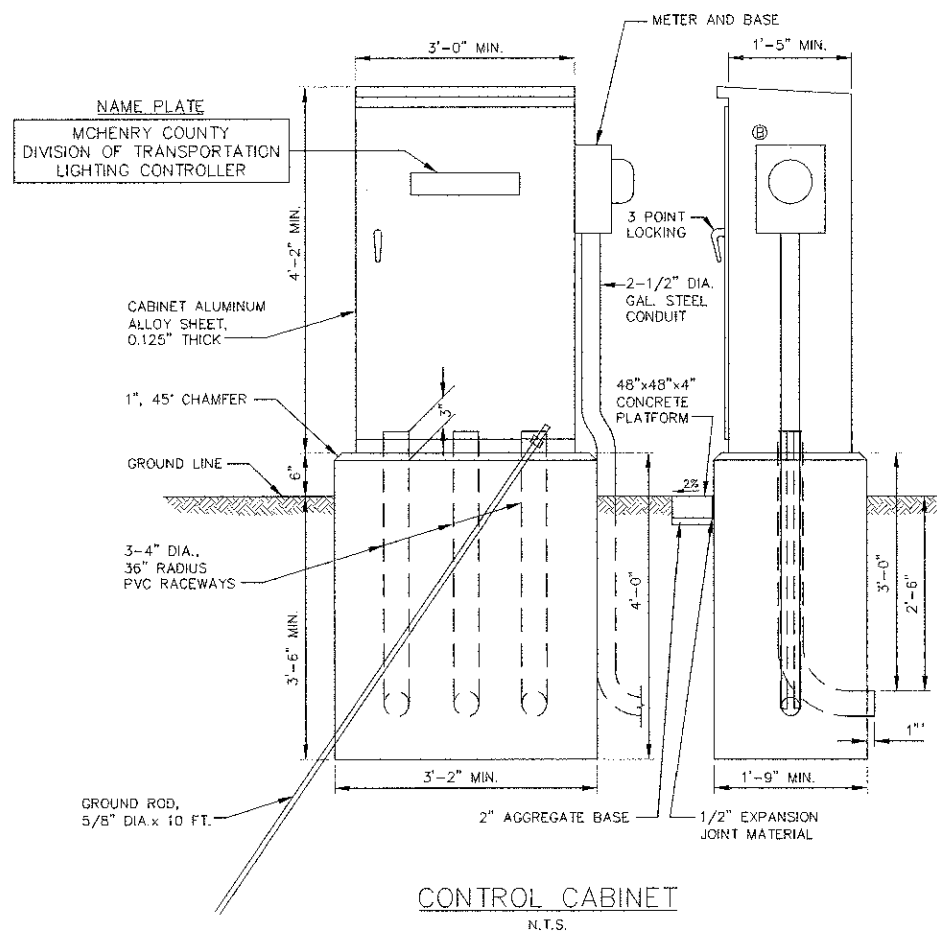
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DEPARTMENT OF TRANSPORTATION

VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
LIGHTING GENERAL NOTES, QUANTITIES AND DETAILS

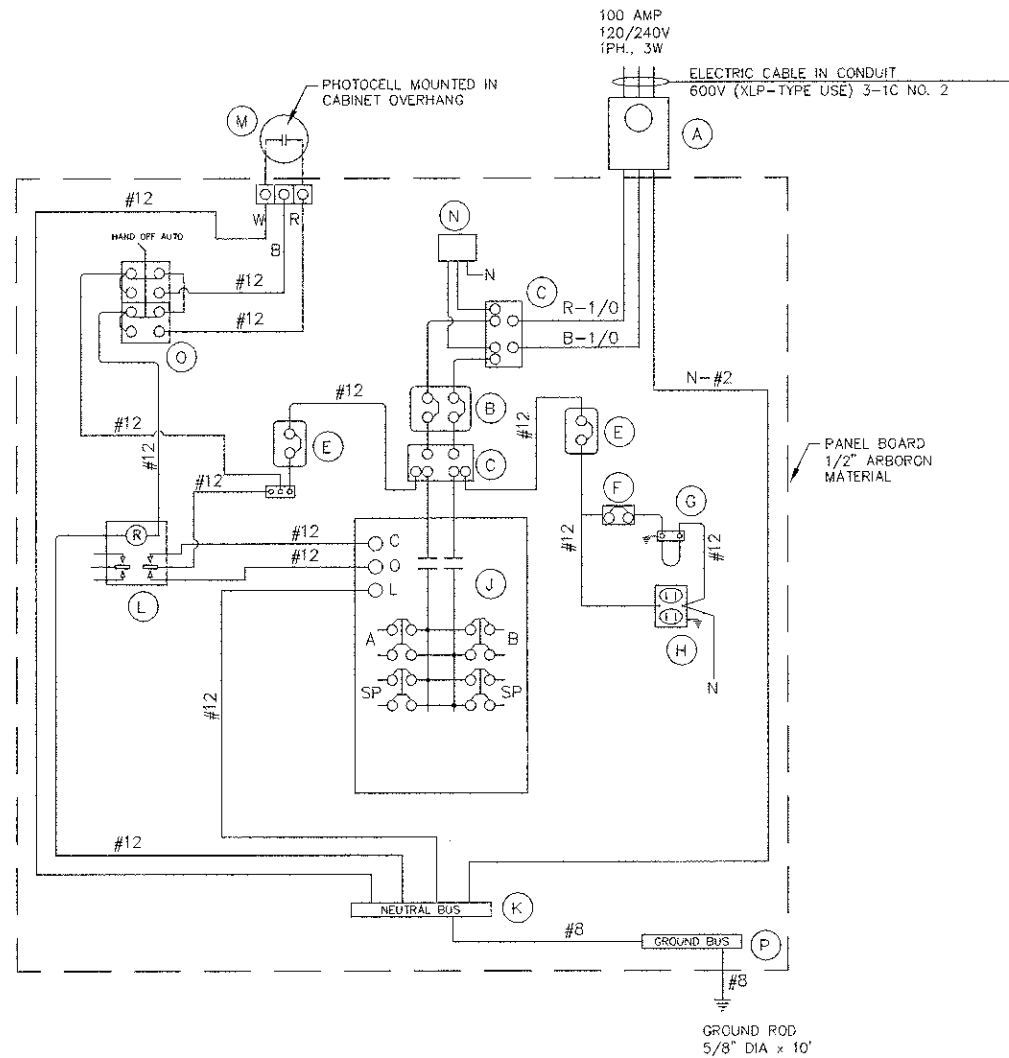
SCALE: N/A SHEET NO. 2 OF 5 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	11
C-91-072-10			CONTRACT NO. 63733	
ILLINOIS FED. AID PROJECT CMM-900314841				

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CONTROL CABINET
N.T.S.



100 AMPERE - 120/240 VOLT WIRING DIAGRAM

DEVICE SCHEDULE		
ITEM	QUANT.	DESCRIPTION
(A)	1	METER FITTING
(B)	1	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC BOLT-ON TYPE, 2- POLE- 100 AMPERE, 225 A. FRAME, 240 V _{ac} , NON INTERCHANGEABLE TRIP, INTERRUPTING CAPACITY OF NOT LESS THAN 25,000 RMS SYMMETRICAL AMPERES AT 480 VOLT
(C)	2	SPLICE BLOCK
(D)		RESERVED
(E)	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1- POLE- 240 V., BOLT-ON TYPE, 15 A. WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277 V.
(F)	1	20 A. SPST MICRO SWITCH MOUNTED ON A DOOR.
(G)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX
(H)	1	GFI RECEPTACLE, 120V, 20A, PREMIUM SPEC. GRADE, NEMA REFERENCE 5-20R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER
(I)		RESERVED
(J)	1	100 A. CONTACTOR PANEL BOARD INTERIOR, 16 CKT., 1 PH, 3 WIRE, 4-2P/30 AMP BOLT-ON BRANCH CIRCUIT BREAKERS, EACH RATED 480 VOLT WITH INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 480 VOLT
(K)	1	NEUTRAL, COPPER BUSS BAR, PAINTED IN WHITE
(L)	1	POWER RELAY, 120 VOLT COIL
(M)	1	PHOTO ELECTRIC CELL, MOUNTED IN CABINET OVERHANG
(N)	1	SURGE ARRESTOR
(O)	1	SELECTOR SWITCH, 3 POSITION, ON-OFF-AUTO
(P)	1	GROUND COPPER BUSS BAR, PAINTED IN GREEN

NOTES:

THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3 CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

THE CABINET ENCLOSURE SHALL HAVE A #3 POLISH FINISH.

THE CONTRACTOR SHALL REMOVE VEGETATION AND TOPSOIL, LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTH WISE, PARALLEL TO CONTROL CABINET, A CONCRETE PAD, 48"x48"x4" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCLUDED IN THE COST OF LIGHTING CONTROLLER SPECIAL.

CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "SIS" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.

ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.

ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.

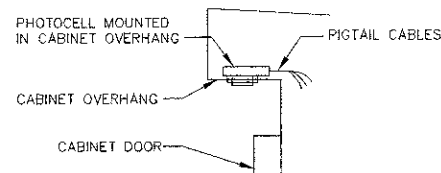
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.

PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES WITHIN THE CONTROL CABINET. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAIN WATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN. FURNISH THE APPROVED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".

ANCHOR BOLTS AS SPECIFIED BY THE MANUFACTURER.



PHOTOCELL IN CABINET OVERHANG DETAIL
N.T.S.

By

Revised

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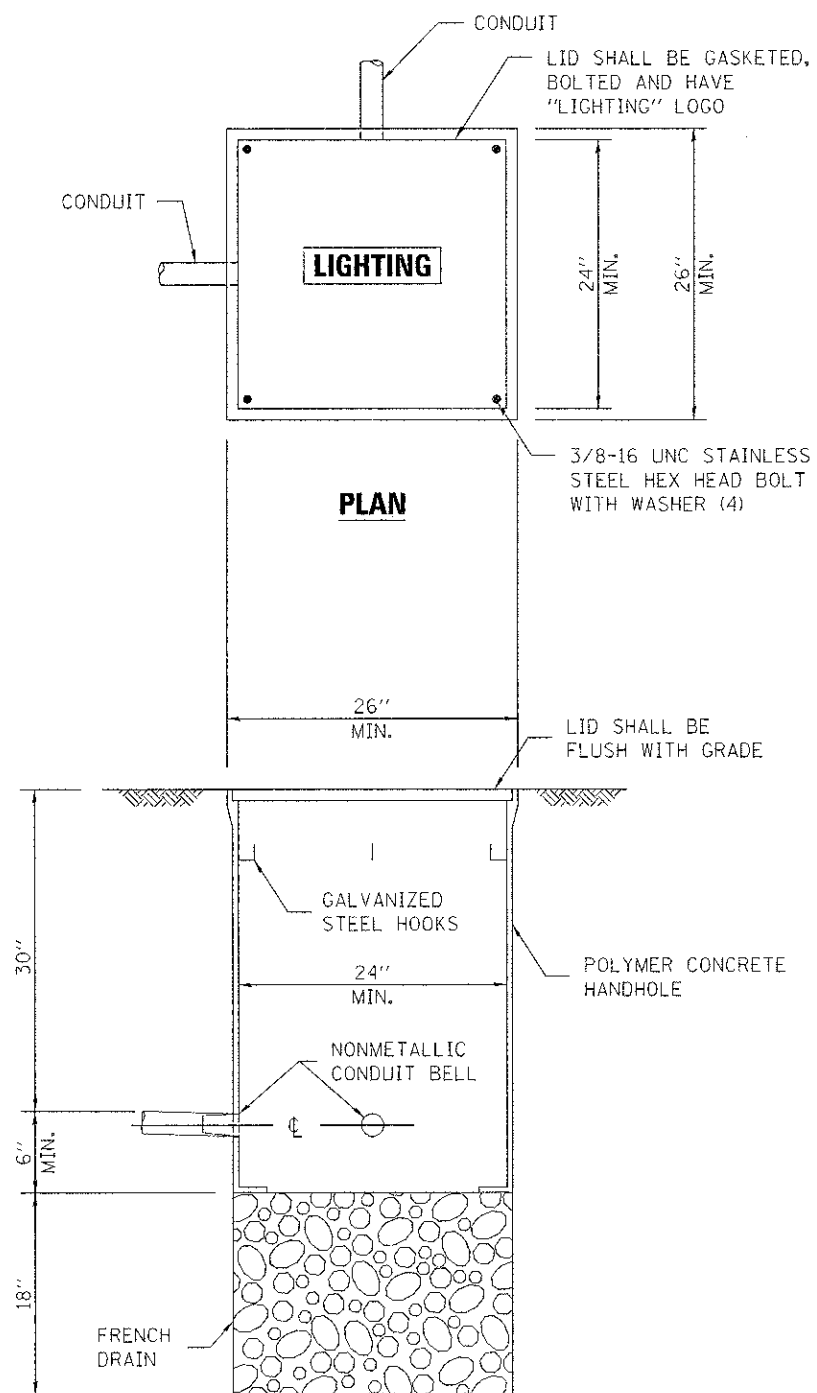
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
LIGHTING CONTROLLER, SPECIAL

SCALE: N/A SHEET NO. 3 OF 5 SHEETS STA. N/A TO STA. N/A

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N/A	09-00370-00-PK	MCHENRY	17	12
C-91-072-10		CONTRACT NO. 63733		
[ILLINOIS] FED. AID PROJECT CMM-9003(464)				

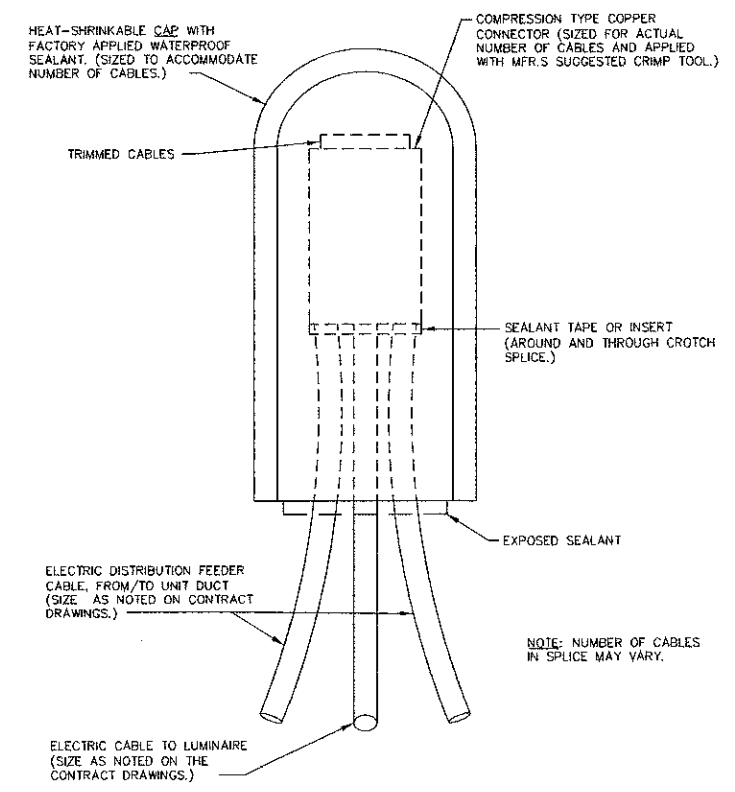
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ELEVATION

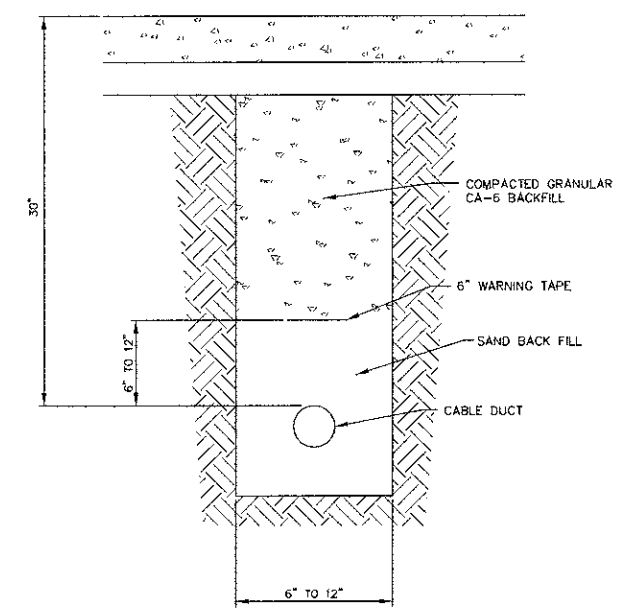
- NOTES:
1. ONLY SUBMERSIBLE WATERPROOF TYPE SPLICES ALLOWED IN HANDHOLES.
 2. THE COLOR OF THE TOP FRAME AND COVER SHALL BE GREEN.
 3. HANDHOLE SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS AND BE UL LISTED.

COMPOSITE CONCRETE HANDHOLE



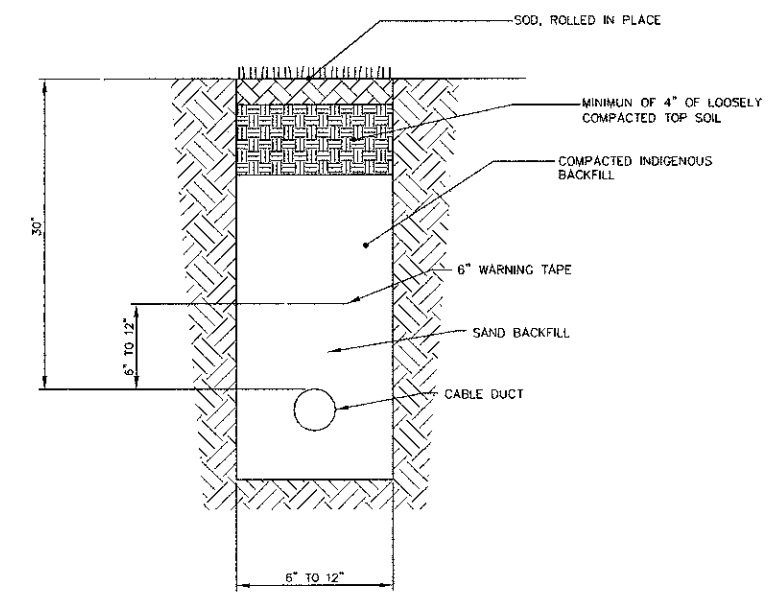
ELECTRICAL CABLE SPLICE DETAIL

N.T.S.



TRENCH & BACKFILL - CONCRETE AND ASPHALT AREA IF TRENCH IS USED

N.T.S.



TRENCH & BACKFILL - SOIL AREA IF TRENCH IS USED

N.T.S.

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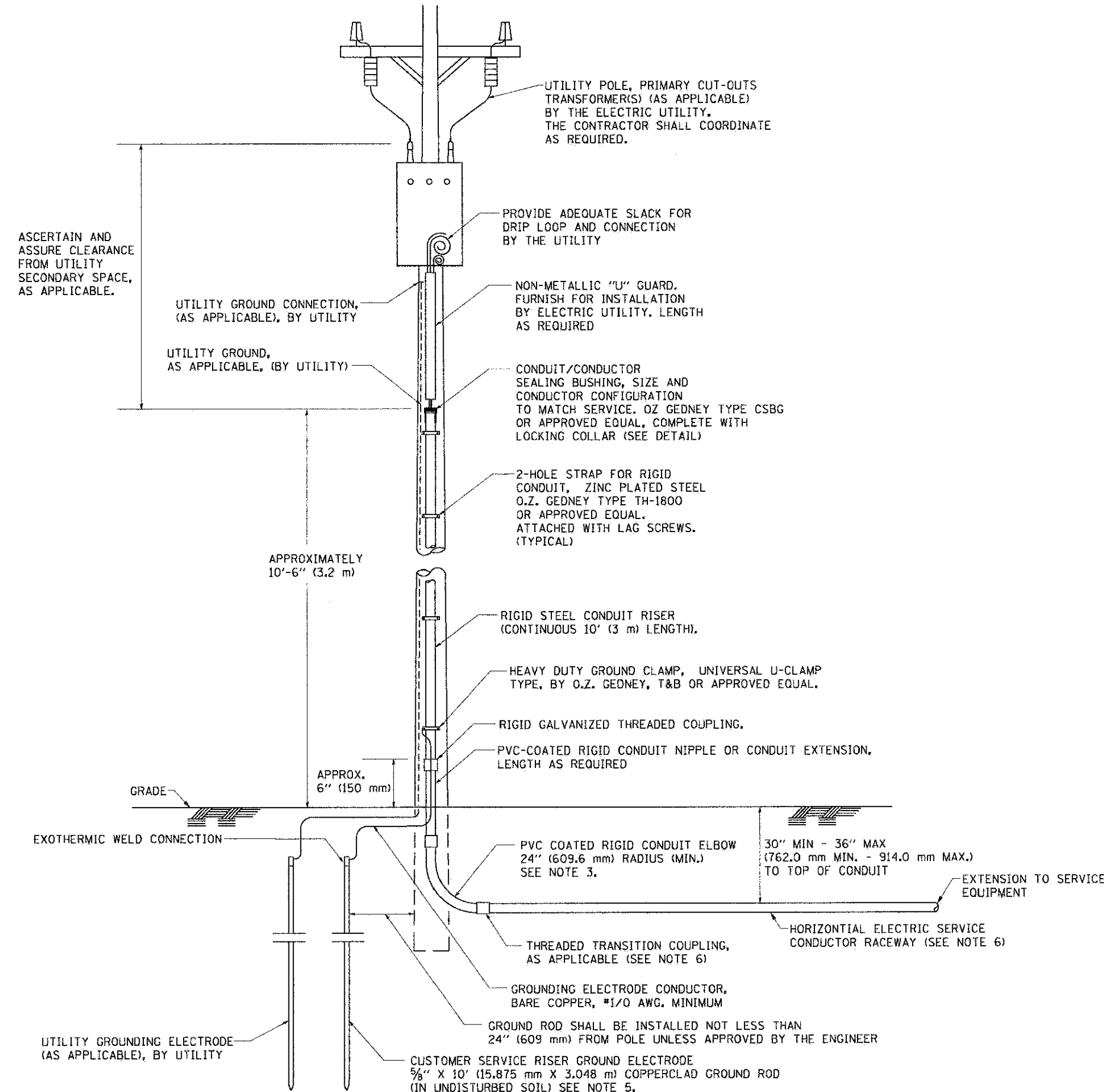
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE: N/A	SHEET NO. 4 OF 8 SHEETS	STA. N/A TO STA. N/A
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F.A. RTE. N/A	SECTION 09-00370-00-PK	COUNTY MCHENRY	TOTAL SHEETS 17	SHEET NO. 13
C-91-072-10			CONTRACT NO. 63733	
ILLINOIS FED. AID PROJECT CMM-9003(484)				

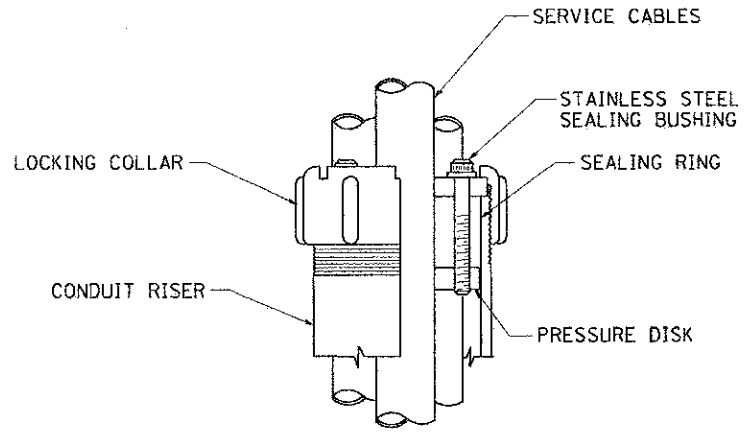


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER, WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

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 Date: 5/23/2012 3:15 PM
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

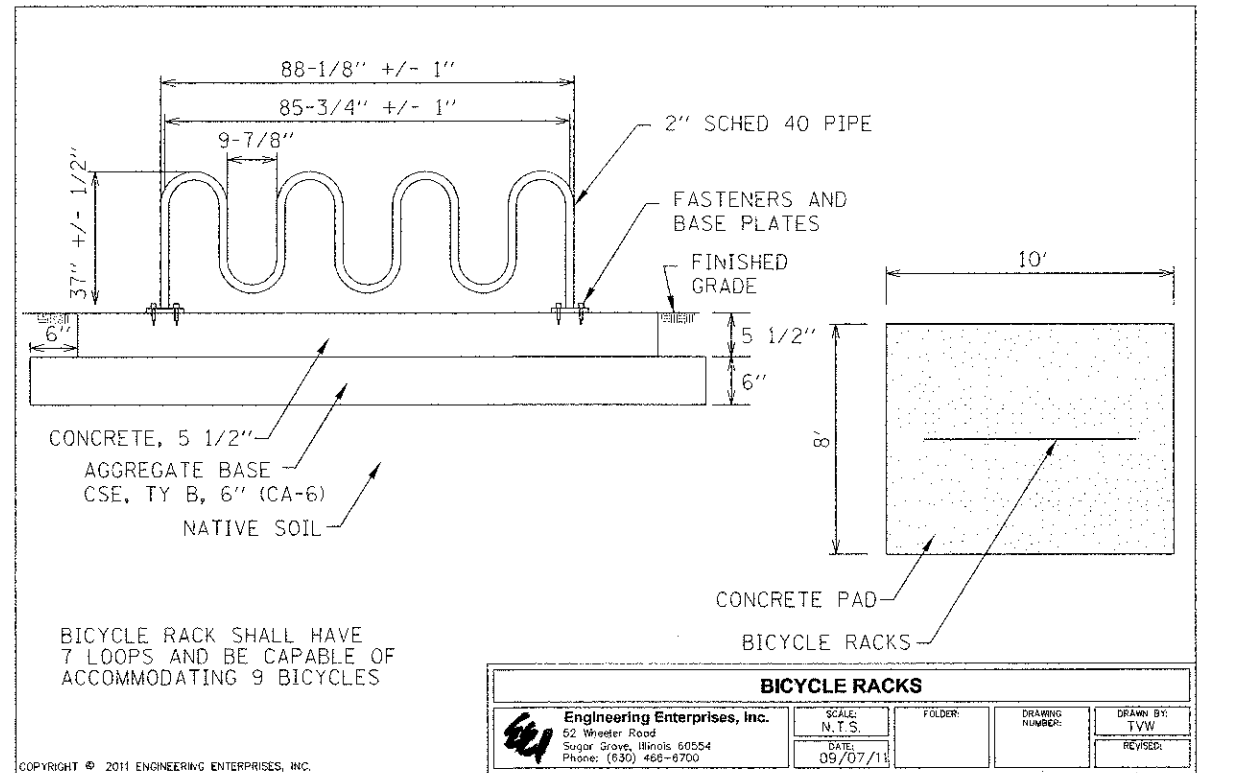
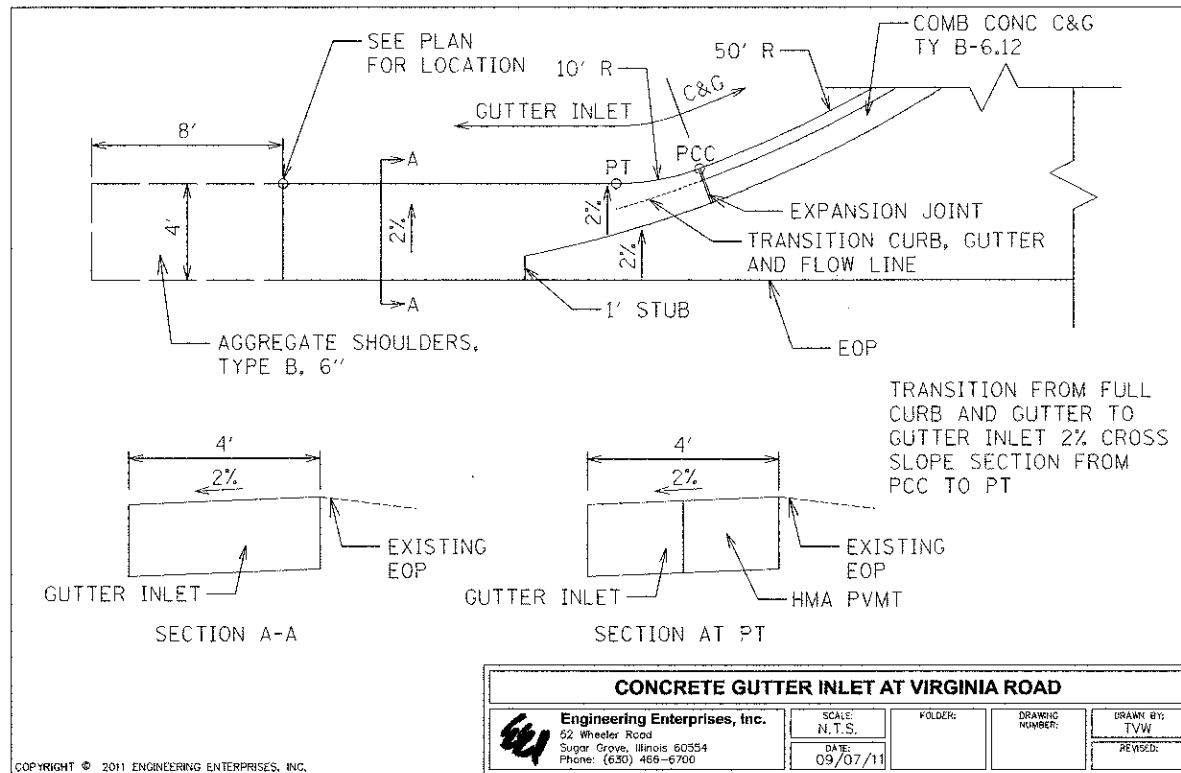
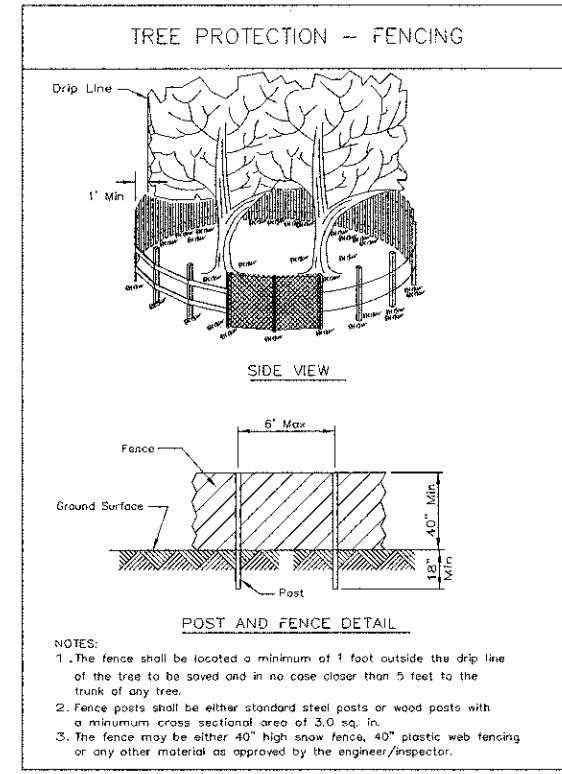
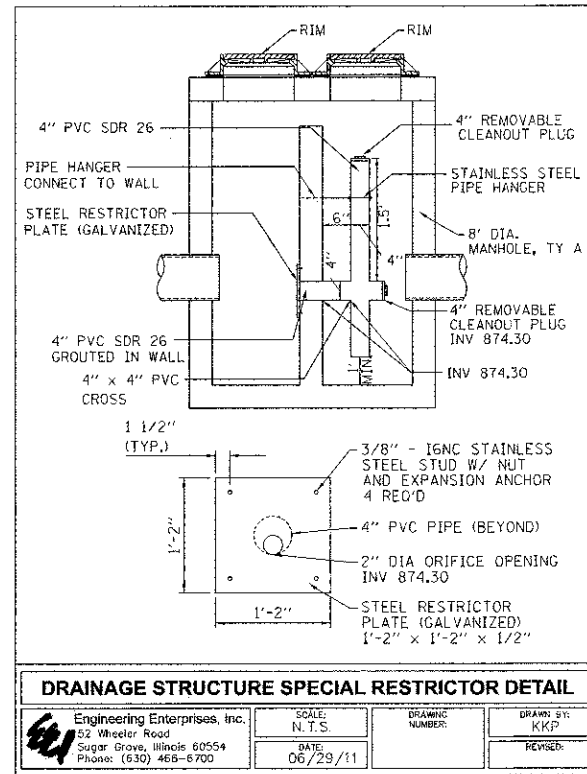
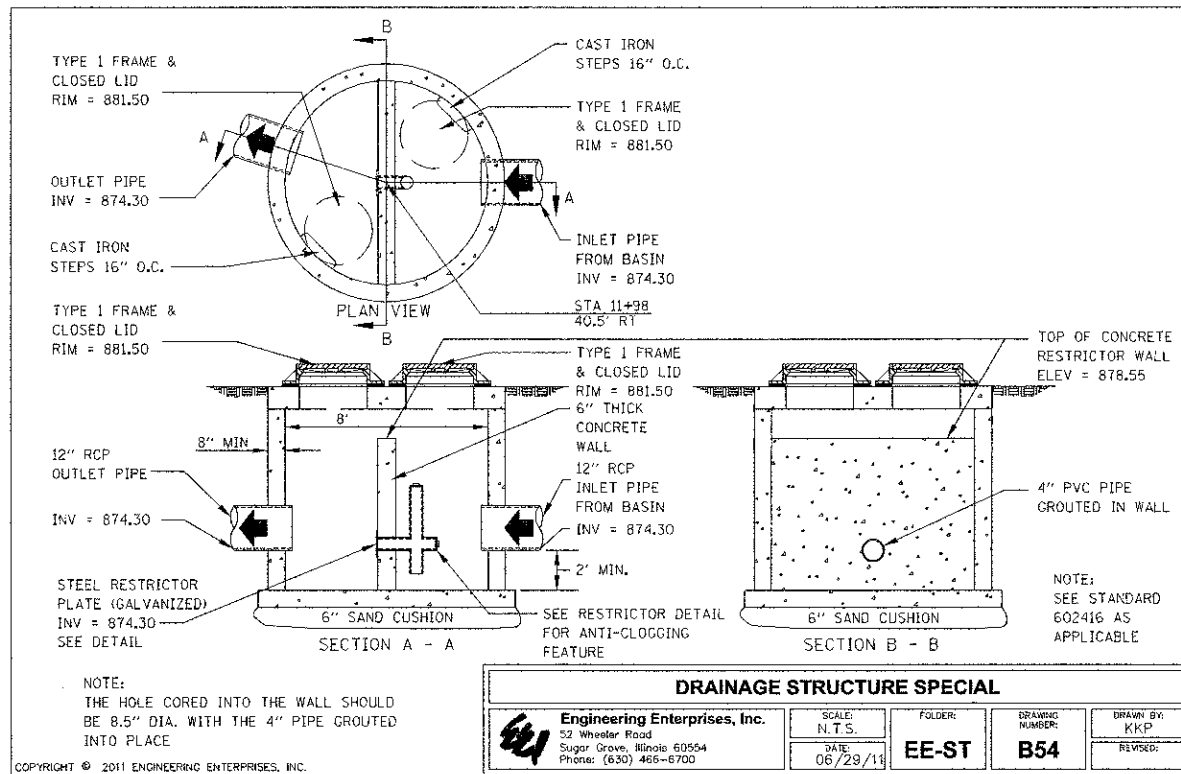
**VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE
 ELECTRIC SERVICE INSTALLATION**

SCALE: N/A SHEET NO. 5 OF 5 SHEETS STA. N/A TO STA. N/A

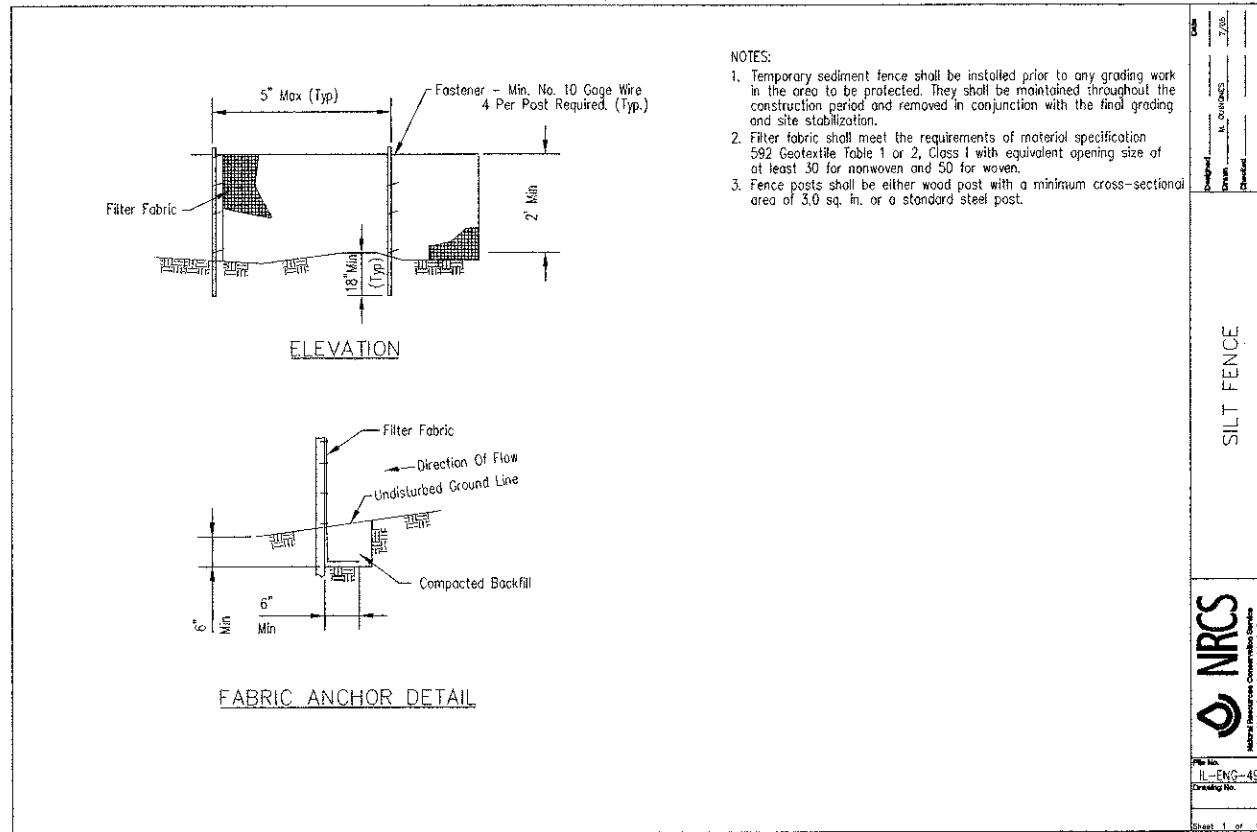
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ILLINOIS FED. AID PROJECT		CMM-90031484		

BE-220

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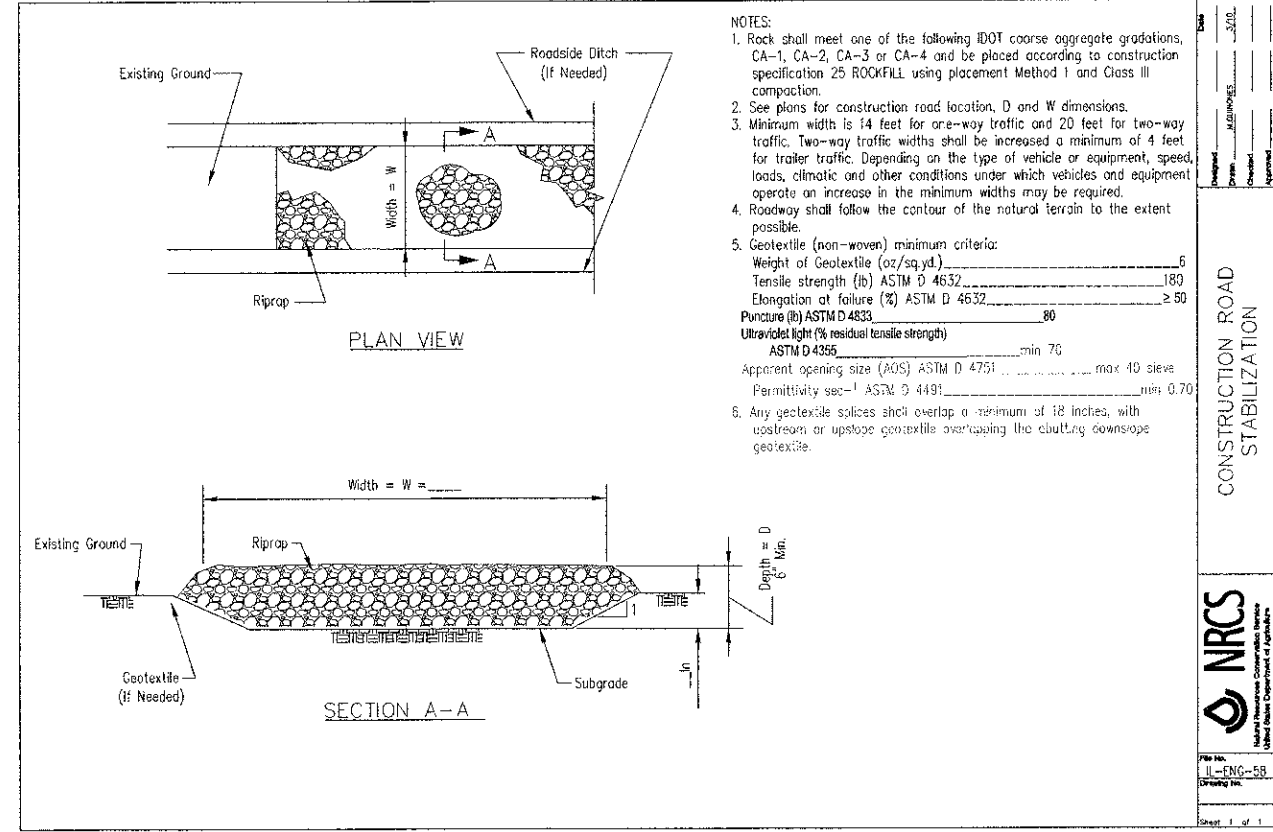
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SILT FENCE

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

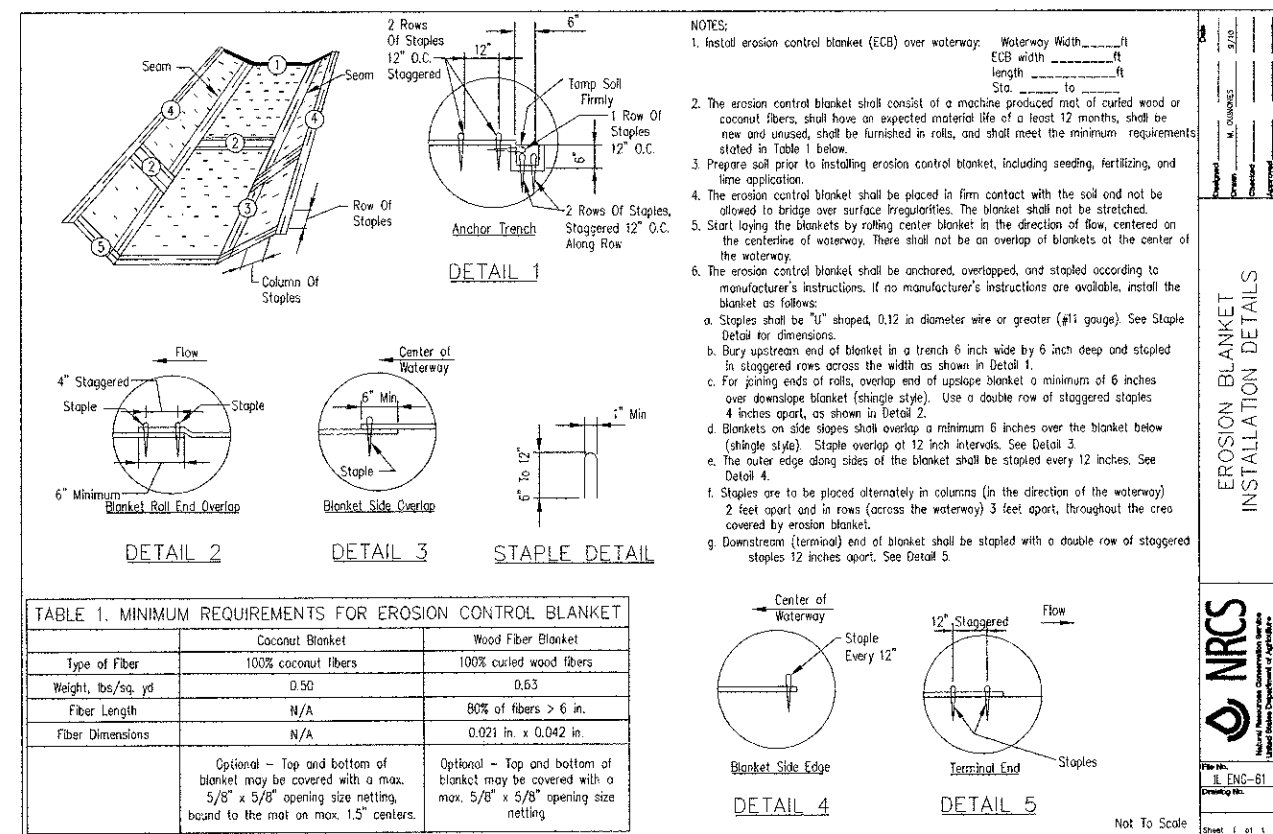
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Drawing No.



CONSTRUCTION ROAD STABILIZATION

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

Project No. IL-ENG-58
Drawing No.



EROSION BLANKET INSTALLATION DETAILS

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

Project No. IL-ENG-61
Drawing No.

By:
 Date: 5/23/2012 09:25 PM
 kpaung

Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Wheeler Road
Sauger Grove, Illinois 60554
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MCHENRY COUNTY DIVISION OF TRANSPORTATION
16111 NELSON ROAD
WOODSTOCK, IL 60098

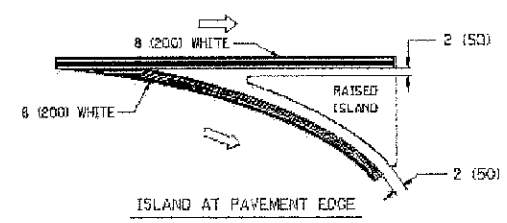
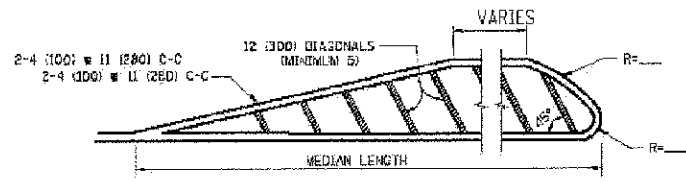
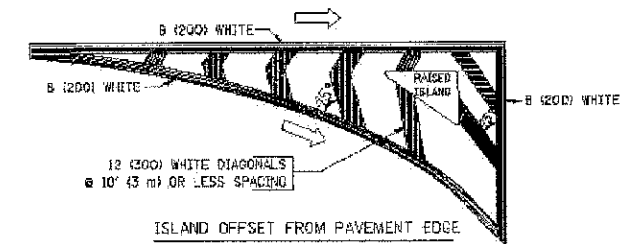
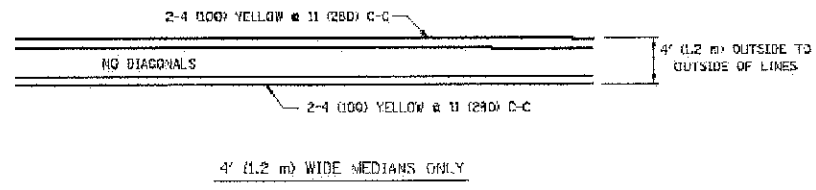
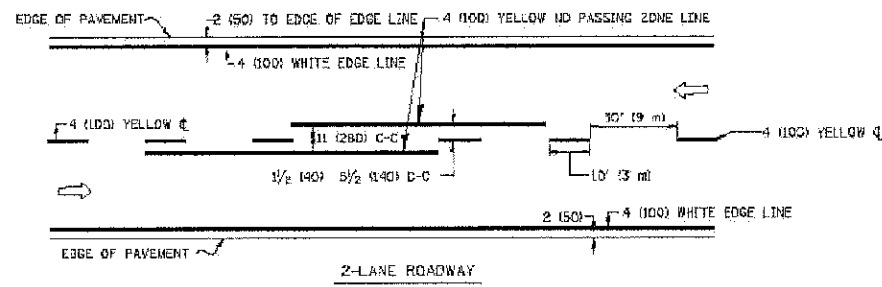
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DRAWN - KKP	REVISED -
CHECKED - JRL	REVISED -
DATE - 6/1/12	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

VIRGINIA ROAD AT ILLINOIS 31 PARK AND RIDE SPECIAL DETAILS

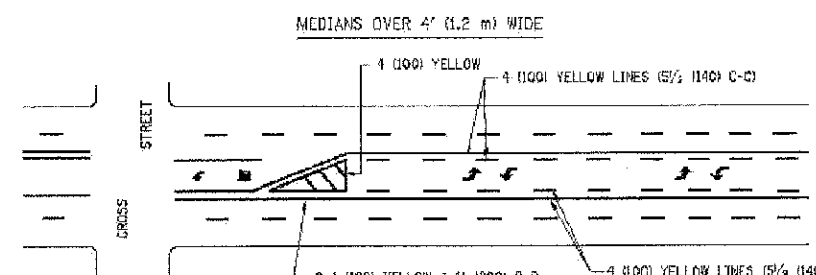
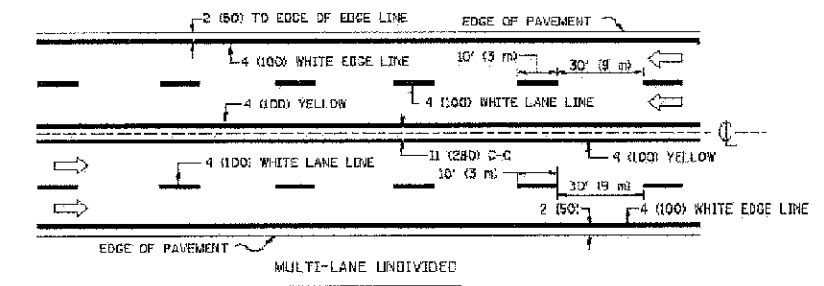
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT			CAM-90034841	

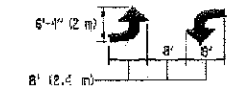


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FT) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (23 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

TYPICAL ISLAND MARKING

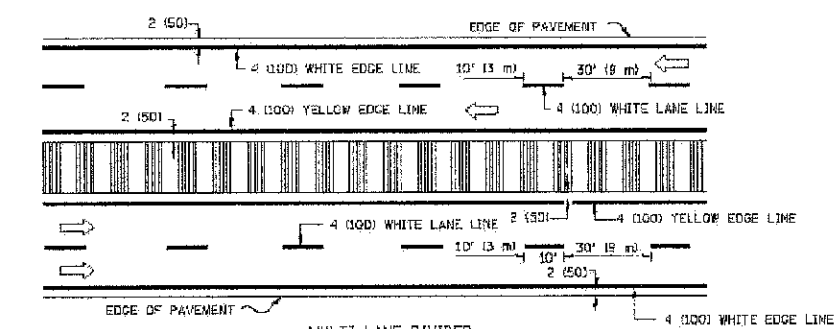


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



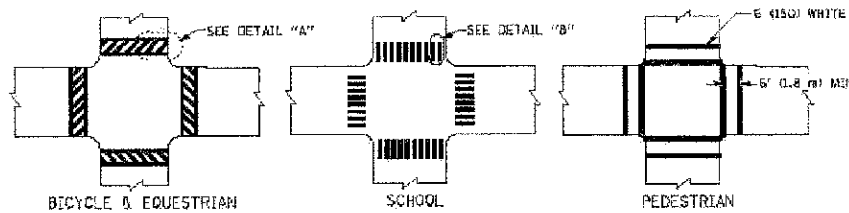
MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

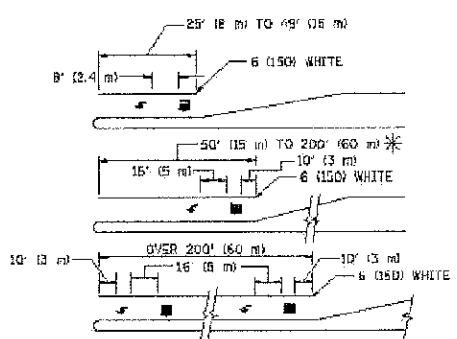


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING



FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED.
 * AREA = 15.6 SQ. FT. (1.5 m²) * 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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2-LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	30' (9 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	5/2 (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	30' (9 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW. EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE, FULL SIZE LETTERS 8" (2.4 m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (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) 2 (600) @ 45° 12 (300) @ 30°	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 WHITE WHITE ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
DORE 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 8" (2.4 m) LETTERS, 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA 9' x 3.8 SQ. FT. (0.33 m ²) EACH "X" - 54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (23 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

By: Young