F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149 ☆	1
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519		☆ 149+1=150		

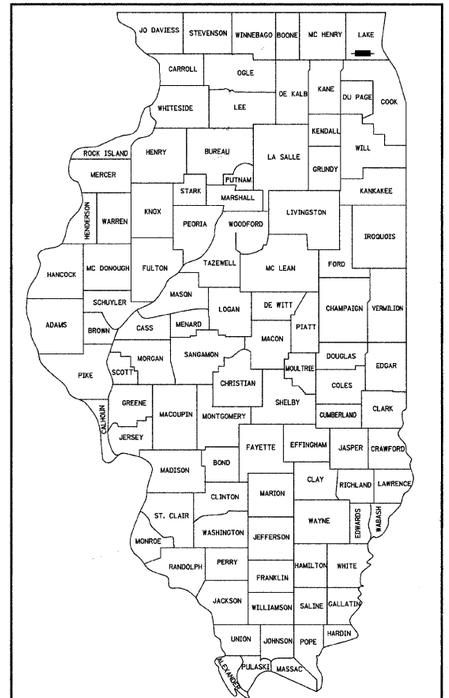
FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 337 (ILLINOIS ROUTE 22)
AT U.S. ROUTE 45 / ILLINOIS ROUTE 21 (MILWAUKEE AVE.)
INTERSECTION RECONSTRUCTION, CULVERT REPLACEMENT
AND TRAFFIC SIGNAL MODERNIZATION
SECTION 20R-6
LAKE COUNTY
C-91-271-02

D-91-530-99



LOCATION OF SECTION INDICATED THUS: –■–

PROJECT LOCATED IN VILLAGE OF LINCOLNSHIRE

INDIAN CREEK TRIBUTARY DOUBLE BOX CULVERT REPLACEMENT SN 049-0233, STA. 104+950

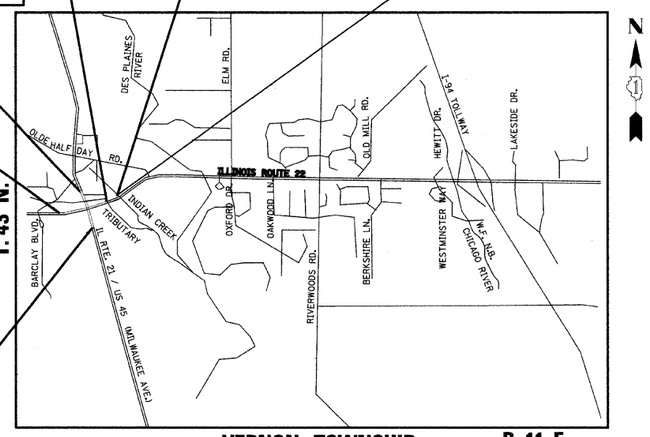
IL RTE 22 END PROJECT STA. 105+132.181

STATION EQUATION
STA. 105+132.181 BK = STA. 105+131.926 AH
W.B.L. & E.B.L.

US RTE 45 /IL RTE 21 END IMPROVEMENT STA. 10+180.459

IL RTE 22 BEGIN PROJECT STA. 104+517.919

US RTE 45 /IL RTE 21 BEGIN IMPROVEMENT STA. 9+845.844



LOCATION MAP
SCALE 1:15,000

METRIC RATIOS

1 m 0 2 m
1 : 50

0 5 m 10 m
1 : 100

10 m 0 20 m
1 : 250

5 m 0 20 m
1 : 500

0 50 m 100 m
1 : 1000

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. 62519

GROSS LENGTH ILLINOIS RTE. 22 = 614 m = 0.614 Km
NET LENGTH ILLINOIS RTE. 22 = 614 m = 0.614 Km

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED February 5, 20 09

Denis M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 20 09
Charles J. Fragerowski
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PATRICK ENGINEERING, INC.
DENIS T. HOGAN, P.E.
062-050059
Denis T. Hogan
DATE: 1/28/09
SIGNATURE AND SEAL APPLY TO DRWG. NOS.
DENIS T. HOGAN 062-050059 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
EXP 11/30/09

PATRICK ENGINEERING, INC.
PAUL M. LOPEZ, S.E.
081-005231
Paul M Lopez
DATE: 1/28/09
SIGNATURE AND SEAL APPLY TO DRWG. NOS. Shts S1 thru S6
STATE OF ILLINOIS PAUL M. LOPEZ 081-005231 CHICAGO, IL LICENSED STRUCTURAL ENGINEER
EXP 11/30/10

PATRICK ENGINEERING, INC.
MIR S. ALIKHAN, P.E.
062-054268
DATE: 1/28/09
SIGNATURE AND SEAL APPLY TO DRWG. NOS. Shts TS1thruTS18
MIR S. ALIKHAN 062-054268 LICENSED PROFESSIONAL ENGINEER ILLINOIS
EXP 11/30/09

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PATRICK ENGINEERING INC. LISLE, ILLINOIS
DISTRICT 1-DESIGN /CONSULTANT UNIT /ISSAM RAYYAN (847) 705-4556

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

INDEX OF SHEETS

STATE STANDARDS

STANDARD NO.	TITLE
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420106-04	10.8 M (36') JOINTED PCC PAVEMENT
420111-02	PCC PAVEMENT ROUNDOUTS
424001-05	CURB RAMPS FOR SIDEWALKS
515001-03	NAME PLATES FOR BRIDGES
542101-02	REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERTS, 375 MM (15") THRU 900 MM (36") DIAMETER AT RIGHT ANGLE WITH ROADWAY
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311-01	GRATING FOR CONCRETE FLARED END SECTION (FOR 600 MM (24") THRU 1350 MM (54") PIPE
602001-01	CATCH BASIN, TYPE A
602011-01	CATCH BASIN, TYPE C
602301-02	INLET, TYPE A
602401-02	MANHOLE, TYPE A
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS, TYPE 1
604036-02	GRATE, TYPE 8
604086-02	FRAME AND GRATE, TYPE 23
604091-02	FRAME AND GRATE, TYPE 24
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-08	STEEL PLATE BEAM GUARDRAIL
631011-05	TRAFFIC BARRIER TERMINAL TYPE 2
631026-05	TRAFFIC BARRIER TERMINAL TYPE 5 & 5A
631031-07	TRAFFIC BARRIER TERMINAL TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L 2W, MOVING DAY ONLY OPERATIONS
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >= 45 MPH
701406-05	LANE CLOSURE, FREEWAY / EXPRESSWAY, DAY OPERATIONS ONLY
701601-06	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATION OF TYPE A AND B METAL POSTS (FOR SIGNS & MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
877001-04	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-07	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

P:\Lisle\IDOT\9171.A01\Drawings\ROWY\MII\Shts\Rdy's_IndxofShts.dgn
tkoeppen(Rdwy_Lisle) 2/5/2009 5:05:08 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9171.A01\Drawings\ROWY\MII\Shts\Rdy's_IndxofShts.dgn

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

INDEX OF SHEETS &
STATE STANDARDS

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

GENERAL NOTES

1. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION STAGING AND MAINTENANCE OF TRAFFIC ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

2. THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.

3. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E." AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE,CABLE AND GAS FACILITIES AND THE VILLAGE OF LINCOLNSHIRE (48-HOUR ADVANCE NOTIFICATION IS REQUIRED).

4. 3 METER(10 FOOT) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTERS AND MEDIAN ITEMS IN THE FIELD. UNLESS OTHERWISE SHOWN, THE TRANSITIONS SHALL BE PAID FOR AS "COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.60"

5. THE CONTRACTOR SHALL NOT BE ALLOWED TO SET A YARD OR FIELD OFFICE ON STATE RIGHT-OF-WAY OR PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE DEPARTMENT.

6. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED (ONE WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL). ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

7. NIGHT OPERATIONS: WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTION IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS THE ADJOINING RESIDENTIAL AREAS.

8. ALL STORM SEWER CONNECTIONS WITH PIPES 27 INCHES IN DIAMETER AND SMALLER SHALL BE MADE WITH PRECAST "TEE" OR "WYE" PIPES. FOR PROPOSED STORM SEWER PIPES LARGER THAN 27 INCHES IN DIAMETER, OPENINGS OF THE SPECIFIED DIAMETER SHALL BE MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED. PRECAST "TEE" AND "WYE" PIPE CONNECTIONS FOR PROPOSED STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE STORM SEWERS, OF THE TYPE AND SIZE SPECIFIED.

9. USE NO. 8 EPOXY-COATED TIE BARS CONFORMING TO ARTICLE 1006.10(a)(2) OF THE STANDARD SPECIFICATION FOR LONGITUDINAL CONSTRUCTION JOINT, GROUTED-IN-PLACE TIE BARS. AS SHOWN ON STATE STANDARDS 420001. THE COST OF THIS ITEM SHALL BE INCLUDED IN THE COST OF THE PAVEMENT ITEM BEING CONSTRUCTED.

10. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE CURING TIME FOR VARIOUS HOT-MIX ASPHALT LIFTS.

11. STORM SEWER, WATER MAIN GRADE, IS TO BE USED AT LOCATIONS WHERE LATERAL SEPARATION BETWEEN THE SEWER AND WATER MAIN IS LESS THAN 3 METER (10 FEET) AND THE WATER MAIN INVERT IS LESS THAN 450 mm (18 INCHES) ABOVE THE STORM SEWER CROWN.

12. STORM SEWER, RUBBER GASKET IS TO BE USED AT LOCATIONS WHERE THE WATER MAIN CROSSES BELOW THE SEWER, REGARDLESS OF VERTICAL SEPARATION OR WHERE THE BOTTOM OF THE WATER MAIN IS LESS THAN 450 mm (18 INCHES) ABOVE THE TOP OF THE SEWER.

13. A 'BOXED' NOTE INDICATES AN ITEM OF WORK THAT IS NOT PAID FOR SEPARATELY, BUT IS PAID FOR AS PART OF ANOTHER ITEM LISTED IN THE SUMMARY OF QUANTITIES.

14. THE QUANTITIES FOR HOT-MIX ASPHALT ITEMS WERE DETERMINED USING THE FOLLOWING RATES: 2.4 Kg/m2/mm (112 LB/SQ YD/IN).

15. THE QUANTITY FOR BITUMINOUS MATERIALS (PRIME COAT) WAS DETERMINED USING THE FOLLOWING RATE: 0.5L/m2 (0.1 GAL/SQ YD).

16. THE QUANTITY FOR AGGREGATE (PRIME COAT) WAS DETERMINED USING THE FOLLOWING RATE: 2Kg/m2 (4.0 LBS/SQ YD).

17. TWO WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS. THE ENGINEER SHALL CONTACT MS. DEBBIE HANLON, THE AREA TRAFFIC FIELD ENGINEER, AT 847-438-2300.

18. THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

19. ROADWAY WIDTHS AND RADIUS ARE GIVEN TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE INDICATED.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF TREES AND SHRUBS IN ACCORDANCE WITH ARTICLE 201.05 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

21. DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

22. IN LOCATIONS WHERE EXISTING DRAINAGE STRUCTURES, EXISTING STORM SEWERS AND EXISTING FLARED END SECTIONS ARE IN CONFLICT WITH THE INSTALLATION OF THE PROPOSED DRAINAGE STRUCTURES AND STORM SEWERS, REMOVAL OF THE EXISTING ITEMS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF DRAINAGE STRUCTURES OR STORM SEWERS, OF THE TYPE AND SIZE SPECIFIED.

23. THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND IDOT DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. PRIOR TO CONSTRUCTION AND COORDINATE ACTIVITIES WITH THE ENGINEER.

24. 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. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

25. ANY EXISTING OR PROPOSED STORM SEWER DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

26. FOR WATERMAIN SHUT OFFS, THE CONTRACTOR SHALL GIVE THE VILLAGE OF LINCOLNSHIRE A MINIMUM OF ONE WEEK NOTICE. THE VILLAGE OF LINCOLNSHIRE SHALL PROVIDE NOTIFICATION FORMS AND DETERMINE THE LIMIT OF THE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION AFFECTED OF THE NOTIFICATION FORMS TO ALL AFFECTED RESIDENTS.

27. THE CONTRACTOR SHALL NOT OPEN OR SHUT ANY WATER VALVES OR FIRE HYDRANTS WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE VILLAGE OF LINCOLNSHIRE PUBLIC WORKS. UNAUTHORIZED USE IS SUBJECT TO ARREST AND PROSECUTION.

28. ANY ABANDONED UTILITY OR SEWER ENCOUNTERED DURING CONSTRUCTION OR ANY EXISTING UTILITY OR SEWER ABANDONED AS PART OF THE CONSTRUCTION THAT IS NOT BEING FILLED WITH C.I.S.M. AS PER PLAN, SHALL BE PLUGGED AS DIRECTED BY THE ENGINEER AND ABANDONED IN PLACE. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

29. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE VILLAGE OF LINCOLNSHIRE, THEIR AGENTS OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

30. ALL HYDRANTS SHALL BE INSTALLED WITH A BURY MARK AT GRADE LEVEL AND NO LOWER THAN 450mm (1.5') FROM THE CENTER OF STEAMER PORT TO FINAL GRADE. HYDRANTS SHALL BE INSTALLED PLUMB AND LEVEL. WHEN EXTENDING A HYDRANT THE BREAK FLANGE SHALL BE RELOCATED TO GRADE LEVEL.

31. ALL VALVE VAULT OPENINGS SHALL BE SEALED WITH FLEXIBLE RUBBER GASKETS (NOT CONCRETE). TAR MASTIC SHALL BE USED BETWEEN ALL VALVE VAULT SECTIONS INCLUDING FRAME TO TOP SECTION. VALVES SHALL BE ALIGNED TO THE CENTER OF THE VAULT FRAME SECTION. LIDS ON VALVE VAULT FRAME SHALL BE MARKED "WATER"

32. DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

33. THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, AND CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. HE SHALL PROVIDE AND MAINTAIN A PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

34. ALL HYDRANTS AND AUXILIARY VALVES, FRAMES, GRATES. LIDS AND BOXES REMOVED FROM EXISTING WATER SERVICE OR SEWER STRUCTURES WHICH ARE TO BE ABANDONED OR ADJUSTED WITH A NEW OR DIFFERENT FRAME AND LID SHALL BE RETURNED TO THE APPLICABLE AGENCY. ALL HYDRANTS TO BE REMOVED SHALL BE REMOVED TO A MINIMUM DEPTH OF 900mm (3') FEET BELOW GRADE AND PLUGGED.

35. 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 AS PART OF THE STRUCTURE ADJUSTMENT OR RECONSTRUCTION COST.

36. STORM SEWER SHALL BE BACKFILLED IN ACCORDANCE WITH ARTICLE 550.07 (METHOD 1) OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". 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, WHICH IS BASED ON INVERT DEPTH FROM EXISTING PAVEMENT. ANY TRENCH BACKFILL REQUIRED IN EXCESS OF THE COMPUTED QUANTITY, INCLUDING BEDDING MATERIAL, SHALL BE INCLUDED IN THE COST OF TRENCH BACKFILL.

37. THE ENGINEER SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

38. STORM SEWERS TO BE REMOVED SHALL NOT BE SALVAGED FOR RE-USE ON THIS PROJECT.

39. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S OWN EXPENSE.

40. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION SHALL NOT CROSS OR COVER THE PIPE UNDERDRAIN TRENCHES.

41. THE CONTRACTOR SHALL BE PROHIBITED TO EXCAVATE OR DISTURB THE EXISTING PAVEMENT WITHIN 1.5 M (5 FEET) OF THE EXISTING CONCRETE PAD LOCATED AT THE BP STATION.

42. DEWATERING FOR THE CONSTRUCTION OF THE INDIAN CREEK TRIBUTARY BOX CULVERT SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF "CONCRETE BOX CULVERTS".

COMMITMENTS

1. ALL WETLANDS IDENTIFIED BY THE ILLINOIS NATURAL HISTORY SURVEY (INHS) ADJACENT TO THE EXISTING AND PROPOSED RIGHT-OF-WAY ARE TO BE PROTECTED FROM INTRUSION AND SEDIMENTATION. PROTECTIVE FENCING AND SILT FENCING WILL BE INSTALLED TO RESTRICT ENTRY BY PERSONNEL, EQUIPMENT, AND SUPPLIES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

GENERAL NOTES, AND COMMITMENTS

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\Mis\Shts\Rdy\S_Notes.dgn PDF(Grey_Larger).plt 5:05:14 PM 2/5/2009 tKoeppen(Rdwy_Lisle)

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	URBAN TOTAL QUANTITY (100% STATE)	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
	28000300	TEMPORARY DITCH CHECKS	EACH	4	4							
	28000510	INLET FILTERS	EACH	62	62							
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1								1
	51500100	NAME PLATES	EACH	1								1
	56400100	FIRE HYDRANTS TO BE MOVED	EACH	2		2						
	60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	2	2							
	60208240	CATCH BASINS, TYPE C, TYPE 24 FRAME AND GRATE	EACH	3	3							
	60237460	INLETS, TYPE A, TYPE 23 FRAME AND GRATE	EACH	2	2							
	60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	10	10							
	60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2							
	60265700	VALVE VAULTS TO BE ADJUSTED	EACH	1		1						
	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	3	3							
	60500040	REMOVING MANHOLES	EACH	9	9							
	60500050	REMOVING CATCH BASINS	EACH	6	6							
	60500060	REMOVING INLETS	EACH	22	22							
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	6	6							
*	63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2							
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1							
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	5							
*	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1							
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1							
	67100100	MOBILIZATION	L SUM	1	1							
	70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1							
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	280	280							
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	24	24							
	73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	13	13							
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	411	411							
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	13	13							
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	31	31							
*	78201000	TERMINAL MARKER-DIRECT APPLIED	EACH	5	5							
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	564	564							
*	81400100	HANDHOLE	EACH	9			9					
*	81400200	HEAVY-DUTY HANDHOLE	EACH	2			2					
*	81400300	DOUBLE HANDHOLE	EACH	2			2					

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE — DRAWN BY: TCK
DATE: 1/28/2009 — CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\Mill Shts\Rdwy_SOFQ.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy_Lisle)
11:41:41 AM
2/6/2009

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	100% STATE URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
*	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3						3		
*	85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1			1					
*	86400100	TRANSCEIVER - FIBER OPTIC	EACH	1			1					
*	87900200	DRILL EXISTING HANDHOLE	EACH	3						3		
*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4			4					
*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	6			6					
*	88030220	SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2			2					
*	88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2			2					
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2				2				
*	88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1				1				
*	88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10			10					
*	88500100	INDUCTIVE LOOP DETECTOR	EACH	16			16					
*	88700200	LIGHT DETECTOR	EACH	4					4			
*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1					1			
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	3			3					
*	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1			1					
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1			1					
*	89502380	REMOVE EXISTING HANDHOLE	EACH	12			12					
*	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9			9					
	M2010110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	165	165							
	M2010210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	36	36							
	M2020010	EARTH EXCAVATION	CU M	6,705	6,705							
	M2021200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU M	4,795	4,795							
	M2040800	FURNISHED EXCAVATION	CU M	715	715							
	M2070420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU M	170	170							
	M2080150	TRENCH BACKFILL	CU M	1,052	1,052							
	M2101000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ M	1,016	1,016							
	M2113100	TOPSOIL FURNISH AND PLACE, 100MM	SQ M	9,676	9,676							
	M2113600	TOPSOIL FURNISH AND PLACE, 600MM	SQ M	1,019	959	60						
	M2114100	COMPOST FURNISH AND PLACE, 100MM	SQ M	491	491							
	M2500210	SEEDING, CLASS 2A	HA	0.78	0.77	0.01						
	M2500312	SEEDING, CLASS 4A	HA	0.19	0.19							
	M2500400	NITROGEN FERTILIZER NUTRIENT	KG	106	105	1						
	M2500500	PHOSPHOROUS FERTILIZER NUTRIENT	KG	106	105	1						

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\DOT\917.AO\Drawings\RDWY\MI\Shts\Rdy\S_SOF0.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy-Lisle) 2/6/2009 11:41:46 AM

SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	URBAN TOTAL QUANTITY (100% STATE)	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
M2500600	POTASSIUM FERTILIZER NUTRIENT	KG	106	105	1						
M2510630	EROSION CONTROL BLANKET	SQ M	9,481	9,481							
M2520110	SODDING, SALT TOLERANT	SQ M	1,490	1,490							
M2520200	SUPPLEMENTAL WATERING	UNIT	194	193	1						
M2800250	TEMPORARY EROSION CONTROL SEEDING	KG	108	108							
M2810107	STONE RIPRAP, CLASS A4	SQ M	48								48
M2810109	STONE RIPRAP, CLASS A5	SQ M	330	330							
M2820200	FILTER FABRIC	SQ M	378	330							48
M3550500	HOT-MIX ASPHALT BASE COURSE, 200MM	SQ M	291	291							
M4060100	BITUMINOUS MATERIALS (PRIME COAT)	LITER	2,025	2,025							
M4060300	AGGREGATE (PRIME COAT)	M TON	5	5							
M4060895	CONSTRUCTING TEST STRIP	EACH	1	1							
M4063080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	M TON	415							415	
M4063310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	M TON	243	35						208	
M4202255	PORTLAND CEMENT CONCRETE PAVEMENT 250MM (JOINTED)	SQ M	10,689	10,379	310						
M4205200	PROTECTIVE COAT	SQ M	22,733	22,405	328						
M4230200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 200MM	SQ M	458	458							
M4240125	PORTLAND CEMENT CONCRETE SIDEWALK 125MM	SQ M	69	69							
M4402000	PAVEMENT REMOVAL	SQ M	15,881	15,881							
M4402010	DRIVEWAY PAVEMENT REMOVAL	SQ M	882	882							
M4402040	COMBINATION CURB AND GUTTER REMOVAL	METER	2,184	2,184							
M4402420	MEDIAN REMOVAL	SQ M	1,454	1,454							
M4402530	PAVED SHOULDER REMOVAL	SQ M	172	172							
M4405000	PAVED DITCH REMOVAL	METER	167	167							
M5080105	REINFORCEMENT BARS	KG	16,190								16,190
M5090500	BICYCLE RAILING	METER	198		198						
M5120900	TEMPORARY SHEET PILING	SQ M	73.9								73.9
M5403000	CONCRETE BOX CULVERTS	CU M	137.7								137.7
M542H060	PIPE CULVERTS, CLASS A, TYPE 1 1050MM	METER	3	3							
M5429900	CONCRETE HEADWALLS	CU M	6.7	6.7							
M5500030	STORM SEWERS, CLASS A, TYPE 1 300MM	METER	219	219							
M5500040	STORM SEWERS, CLASS A, TYPE 1 375MM	METER	37	37							
M5500050	STORM SEWERS, CLASS A, TYPE 1 450MM	METER	75	75							
M5500430	STORM SEWERS, CLASS A, TYPE 2 300MM	METER	466	466							

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\MiscSht\RdwS_SOFQ.dgn PDF(Grey_Large).plt 11:41:50 AM 2/6/2009 +Koeppen(Rdwy_Lisle)

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	URBAN TOTAL QUANTITY (100% STATE)	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
	M5500440	STORM SEWERS, CLASS A, TYPE 2 375MM	METER	47	47							
	M5500450	STORM SEWERS, CLASS A, TYPE 2 450MM	METER	41	41							
	M5500465	STORM SEWERS, CLASS A, TYPE 2 600MM	METER	146	146							
	M5500475	STORM SEWERS, CLASS A, TYPE 2 750MM	METER	29	29							
	M5510020	STORM SEWER REMOVAL 250MM	METER	10	10							
	M5510025	STORM SEWER REMOVAL 300MM	METER	299	299							
	M5510035	STORM SEWER REMOVAL 375MM	METER	129	129							
	M5510045	STORM SEWER REMOVAL 450MM	METER	103	103							
	M5510060	STORM SEWER REMOVAL 600MM	METER	40	40							
	M6010605	PIPE UNDERDRAINS 100MM	METER	202	202							
	M6020140	CATCH BASINS, TYPE A, 1.2M DIAMETER, TYPE 8 GRATE	EACH	2	2							
	M6020180	CATCH BASINS, TYPE A, 1.2M DIAMETER, TYPE 23 FRAME AND GRATE	EACH	12	12							
	M6020185	CATCH BASINS, TYPE A, 1.2M DIAMETER, TYPE 24 FRAME AND GRATE	EACH	16	16							
	M6020485	CATCH BASINS, TYPE A, 1.5M DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1							
	M6021135	RESTRICTED DEPTH CATCH BASINS, 1.2M DIAMETER, TYPE 8 GRATE	EACH	1	1							
	M6021155	RESTRICTED DEPTH CATCH BASINS, 1.2M DIAMETER, TYPE 24 FRAME AND GRATE	EACH	11	11							
	M6021255	RESTRICTED DEPTH CATCH BASINS, 1.5M DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1							
	M6021410	MANHOLES, TYPE A, 1.2M DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	5	5							
	M6021610	MANHOLES, TYPE A, 1.5M DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	5	5							
	M6021880	MANHOLES, TYPE A, 1.8M DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1							
	M6022110	RESTRICTED DEPTH MANHOLES, 1.2M DIAMETER TYPE 1 FRAME, CLOSED LID	EACH	3	3							
	M6060070	CONCRETE CURB, TYPE B	METER	157	157							
	M6060500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.30	METER	446	416	30						
	M6060700	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-15.60	METER	2,073	2,073							
	M6063600	CONCRETE MEDIAN SURFACE, 100MM	SQ M	11	11							
	M6064100	CONCRETE MEDIAN, TYPE SB-15.30	SQ M	316	316							
	M6065830	CONCRETE MEDIAN (SPECIAL)	SQ M	57	57							
	M6066000	CORRUGATED MEDIAN	SQ M	101	101							
	M6080200	FLAP GATE 750 MM	EACH	1	1							
*	M6300100	STEEL PLATE BEAM GUARDRAIL, TYPE A	METER	243.84	243.84							
*	M6300300	STEEL PLATE BEAM GUARDRAIL, TYPE A (SPECIAL)	METER	156.21		156.21						
	M6320030	GUARDRAIL REMOVAL	METER	377	377							
*	M6690100	BACKFILL PLUGS	CU M	40	40							
*	M6690200	NON-SPECIAL WASTE DISPOSAL	CU M	180	180							

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mill\Shts\RGYS_SOFQ.dgn
PDF(Grey_Large).plt
1:28:24 PM
2/6/2009
tkoeppen(Rdwy_Lisle)

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	100% STATE URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
	M7030210	TEMPORARY PAVEMENT MARKING-LETTERS AND SYMBOLS	SQ M	21	21							
	M7030220	TEMPORARY PAVEMENT MARKING-LINE 100MM	METER	1,439	1,439							
	M7030240	TEMPORARY PAVEMENT MARKING-LINE 150MM	METER	117	117							
	M7030280	TEMPORARY PAVEMENT MARKING-LINE 600MM	METER	24	24							
	M7030510	PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS	SQ M	153	153							
	M7030520	PAVEMENT MARKING TAPE, TYPE III 100MM	METER	10,579	10,579							
	M7030540	PAVEMENT MARKING TAPE, TYPE III 150MM	METER	1,863	1,863							
	M7030560	PAVEMENT MARKING TAPE, TYPE III 300MM	METER	160	160							
	M7030580	PAVEMENT MARKING TAPE, TYPE III 600MM	METER	115	115							
	M7031000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ M	1,639	1,639							
	M7040100	TEMPORARY CONCRETE BARRIER	METER	68	68							
	M7040200	RELOCATE TEMPORARY CONCRETE BARRIER	METER	61	61							
*	M7200100	SIGN PANEL - TYPE 1	SQ M	38.1	33.2		4.9					
*	M7240310	REMOVE SIGN PANEL - TYPE 1	SQ M	12	12							
*	M7280100	TELESCOPING STEEL SIGN SUPPORT	METER	50	50							
*	M7290100	METAL POST - TYPE A	METER	71	71							
*	M7290200	METAL POST - TYPE B	METER	39	39							
*	M7800100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ M	28	28							
*	M7800105	THERMOPLASTIC PAVEMENT MARKING - LINE 100MM	METER	3,649	3,649							
*	M7800115	THERMOPLASTIC PAVEMENT MARKING - LINE 150MM	METER	271	271							
*	M7800125	THERMOPLASTIC PAVEMENT MARKING - LINE 300MM	METER	55	55							
*	M7800140	THERMOPLASTIC PAVEMENT MARKING - LINE 600MM	METER	28	28							
*	M7802000	POLYUREA PAVEMENT MARKING-TYPE I LETTERS AND SYMBOLS	SQ M	105	105							
*	M7802010	POLYUREA PAVEMENT MARKING-TYPE I LINE 100MM	METER	1,752	1,752							
*	M7802015	POLYUREA PAVEMENT MARKING-TYPE I LINE 150MM	METER	1,704	1,704							
*	M7802030	POLYUREA PAVEMENT MARKING-TYPE I LINE 300MM	METER	225	225							
*	M7802060	POLYUREA PAVEMENT MARKING-TYPE I LINE 600MM	METER	112	112							
	M7830100	PAVEMENT MARKING REMOVAL	SQ M	138	138							
*	M8100060	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	680			320			360		
*	M8100070	CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	38			38					
*	M8100080	CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	6			6					
*	M8100100	CONDUIT IN TRENCH, 100MM DIA.,GALVANIZED STEEL	METER	34			34					
*	M8101050	CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	108			41			67		
*	M8101090	CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	131			131					

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\ROWY\MiscShts\RdwS_SOFQ.dgn PDF(Grey_Large).plt 11:41:59 AM 2/6/2009 tkoeppen(Rdwy_Lisle)

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	100% State URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
*	M8190200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	681			423			258		
*	M8731210	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	METER	96			96					
*	M8731220	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	METER	482			482					
*	M8731240	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	525			525					
*	M8731250	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	1,017			1,017					
*	M8731300	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	1,740			1,740					
*	M8731800	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	EACH	28			28					
*	M8780100	CONCRETE FOUNDATION, TYPE A	METER	4.8			4.8					
*	M8780200	CONCRETE FOUNDATION, TYPE D	METER	2.4			2.4					
*	M8780400	CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	19.6			19.6					
	MX030063	STORM SEWER (WATER MAIN REQUIREMENTS) 300MM	METER	107	107							
	MX030104	STORM SEWER (WATER MAIN REQUIREMENTS) 600MM	METER	31	31							
	MX030199	TEMPORARY PAVEMENT	SQ M	1,347	1,347							
	MX032178	TEMPORARY INFORMATION SIGNING	SQ M	9.2	9.2							
*	MX032200	ENGINEERED BARRIER	SQ M	366	366							
	MX032639	WEED CONTROL, TEASEL	LITER	1.4	1.4							
*	MX032723	PREFORMED DETECTOR LOOP	METER	249			249					
*	MX032819	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1 C	METER	2,217						2,217		
*	MX033162	ELECTRIC CABLE IN CONDUIT, COAXIAL	METER	60						60		
	MX033290	SEDIMENT CONTROL, SILT FENCE	METER	1,640	1,640							
	MX420240	PORTLAND CEMENT CONCRETE PAVEMENT 265MM (JOINTED)	SQ M	8,705	8,705							
*	MX871055	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	METER	2,217						2,217		
*	MX873027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	283			283					
*	MX873030	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	METER	332					332			
	MZ001050	AGGREGATE SUBGRADE 300MM	SQ M	22,253	21,929	324						
	X0321556	SANITARY MANHOLES TO BE ADJUSTED	EACH	8		8						
	X0323426	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH	186	186							
	X0323782	VORTEX MANHOLE, LOCATION 1	EACH	1	1							
*	X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1			1					
	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	9	9							
	X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	18	18							
*	X8050015	SERVICE INSTALLATION-POLE MOUNTED	EACH	1			1					
*	XX002856	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1			1					
*	X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	1			1					

* SPECIALTY ITEM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\Mi\Shts\Rdys_SOFQ.dgn PDF(Grey_Large).plt tkoeppen(Rdwy-Lisle) 2/6/2009 11:42:04 AM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

SUMMARY OF QUANTITIES

	CODE NO.	PAY ITEM	UNIT	100% State URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE: ROADWAY J000-2A	ROADWAY J000-2A	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL IL RTE 21 Y031-3D	TRAFFIC SIGNAL EVP Y031-3D	TRAFFIC SIGNAL INTERCONNECT Y031-1F	NEW SIDEPATH SFTY-1B	INDIAN CREEK TRIBUTARY X028-2A
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1							
	50800515	BAR SPLICERS	EACH	55								55
	Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2							
	Z0030320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2	2							
*	MX033769	TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER (SPECIAL)	EACH	4			4					
*	M8770270	STEEL MAST ARM ASSEMBLY AND POLE, 12.19 METER (SPECIAL)	EACH	1			1					
*	M8770290	STEEL MAST ARM ASSEMBLY AND POLE, 14.63 METER (SPECIAL)	EACH	1			1					
*	M8770880	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 14.63 METER (SPECIAL)	EACH	1			1					
*	MX033768	STEEL MAST ARM ASSEMBLY AND POLE, 15.85 METER (SPECIAL)	EACH	1			1					
*	X0326332	RELOCATE EXISTING SURVEILLANCE CAMERA AND CABINET	EACH	2			2					
	MX033770	COBBLESTONE PAVERS	SQ M	781		781						

* Specialty Items

tkoeppen(Rdwy_Lisle) 2/6/2009 11:42:08 AM PDF(Grey_Large).plt P:\Lisle\IDOT\917.A0\Drawings\RDWY\MI\Shts\Rd\S_SOFQ.dgn

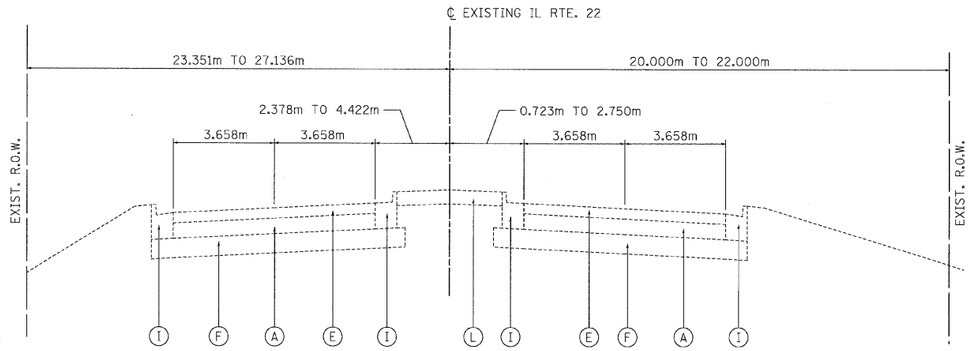
PATRICK ENGINEERING INC. LISLE, ILLINOIS

REVISIONS	
NAME	DATE

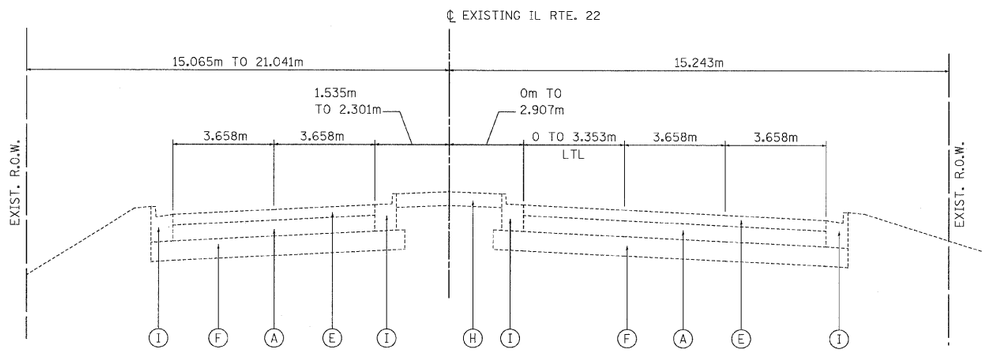
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUMMARY OF QUANTITIES

SCALE: NONE
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

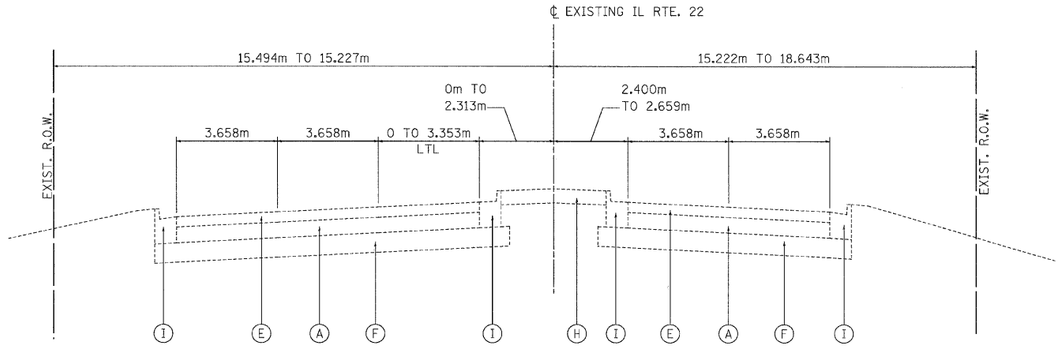
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



E-0 ILLINOIS ROUTE 22
STA. 104+517.919 TO STA. 104+600.000



E-1 ILLINOIS ROUTE 22
STA. 104+600.000 TO STA. 104+818.038

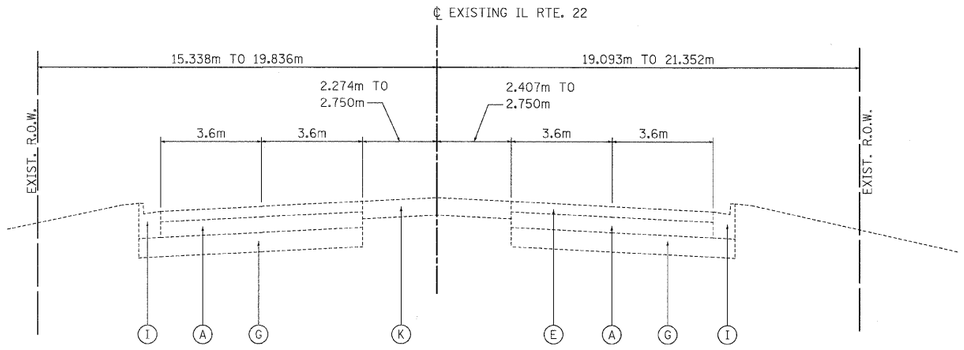


E-2 ILLINOIS ROUTE 22
STA. 104+818.038 TO STA. 104+902.347

LEGEND:

EXISTING

- (A) - P.C.C. PAVEMENT, 225mm
- (B) - HMA SURFACE CSE., 50mm
- (C) - HMA BINDER CSE., 50mm
- (D) - HMA BASE CSE., 150mm
- (E) - HMA OVERLAY, 150mm
- (F) - SUBBASE
- (G) - AGGREGATE SUBGRADE
- (H) - CONCRETE MEDIAN
- (I) - CONCRETE CURB & GUTTER
- (J) - HMA SHOULDER
- (K) - TEMPORARY PAVEMENT, 250mm
- (L) - LANDSCAPED MEDIAN



E-3 ILLINOIS ROUTE 22
STA. 104+902.347 TO STA. 104+995.000

NOTE:

1. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR BECAUSE OF VARIATION FROM THE ASSUMED THICKNESS OR FROM THE THICKNESS SHOWN ON THE PLANS EVEN IF THAT THICKNESS MEASURES MORE THAN 4 INCHES AND EVEN IF MULTIPLE PASSES OF THE REMOVAL EQUIPMENT ARE REQUIRED. THIS REQUIREMENT SHALL NOT BE A CASE FOR CLAIMING DELAY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

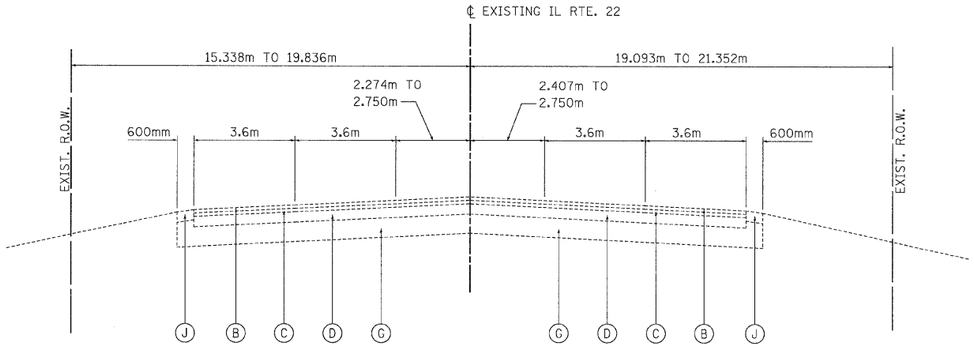
EXISTING TYPICAL SECTIONS

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

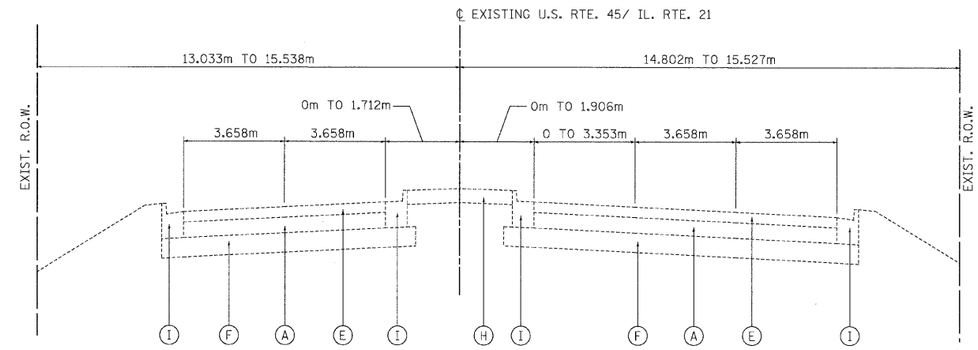
PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\917LAO\Drawings\RDWY\MIN\Shts\Typ\S_XTyp_01.dgn PDF(Grey_Large).plt 5:06:01 PM 2/5/2009 tKoeppen(Rdwy_Lisle)

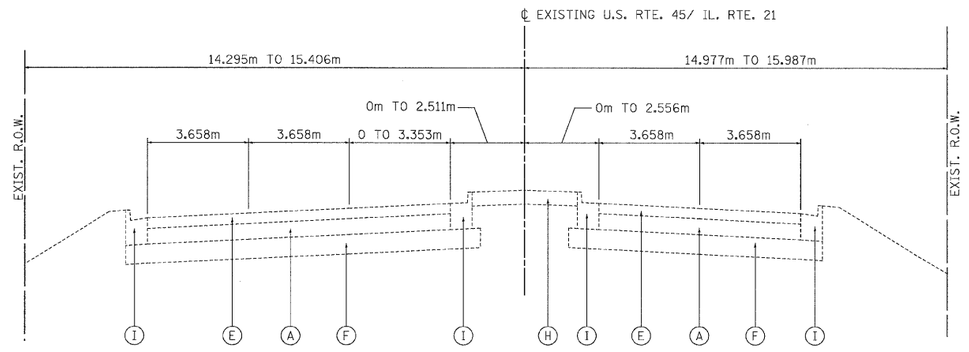
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



E-4 ILLINOIS ROUTE 22
STA. 104+995.000 TO STA. 105+132.181



E-5 U.S. RTE. 45/ ILLINOIS ROUTE 21
STA. 9+845.844 TO STA. 9+987.310



E-6 U.S. RTE. 45/ ILLINOIS ROUTE 21
STA. 10+016.682 TO STA. 10+180.459

LEGEND:

EXISTING

- (A) - P.C.C. PAVEMENT, 225mm
- (B) - HMA SURFACE CSE., 50mm
- (C) - HMA BINDER CSE., 50mm
- (D) - HMA BASE CSE., 150mm
- (E) - HMA OVERLAY, 150mm
- (F) - SUBBASE
- (G) - AGGREGATE SUBGRADE
- (H) - CONCRETE MEDIAN
- (I) - CONCRETE CURB & GUTTER
- (J) - HMA SHOULDER
- (K) - TEMPORARY PAVEMENT, 250mm
- (L) - LANDSCAPED MEDIAN

NOTE:

1. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR BECAUSE OF VARIATION FROM THE ASSUMED THICKNESS OR FROM THE THICKNESS SHOWN ON THE PLANS EVEN IF THAT THICKNESS MEASURES MORE THAN 4 INCHES AND EVEN IF MULTIPLE PASSES OF THE REMOVAL EQUIPMENT ARE REQUIRED. THIS REQUIREMENT SHALL NOT BE A CAUSE FOR CLAIMING DELAY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

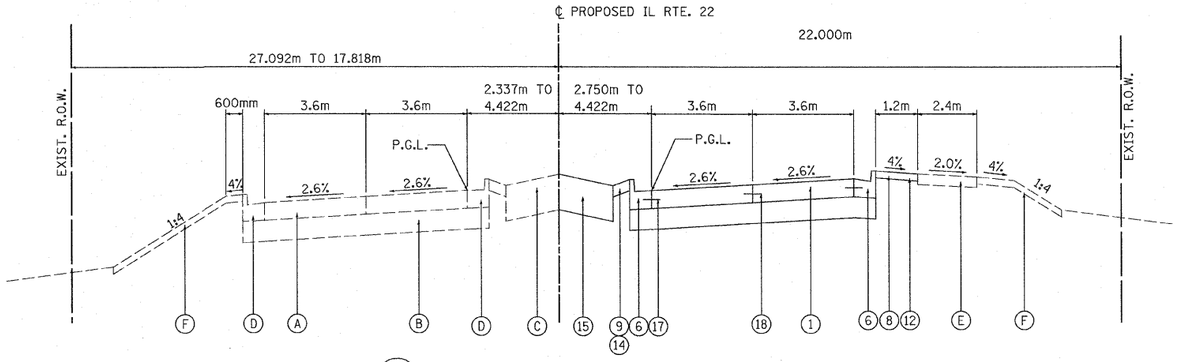
EXISTING TYPICAL SECTIONS

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

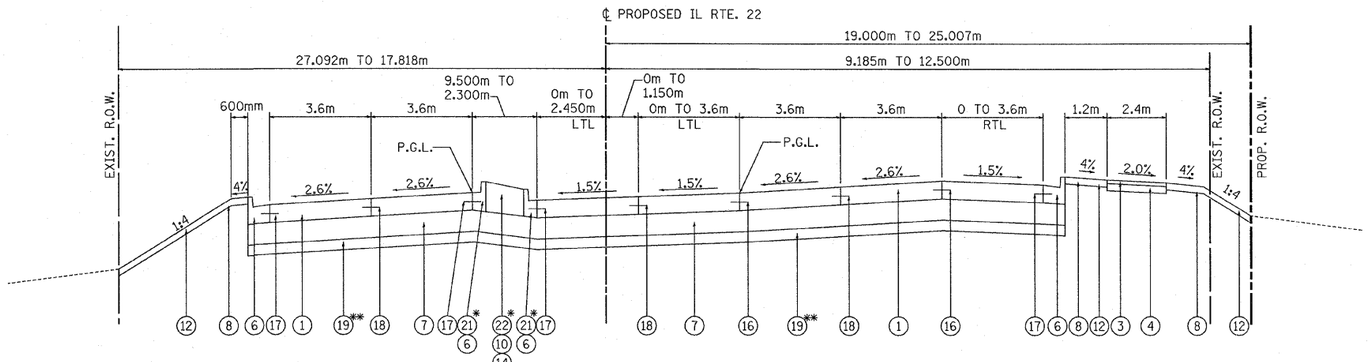
PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/5/2009 5:06:04 PM PDF(Grey_Large).plt P:\Lisle\IDOT\917.A0\Drawings\RDWY\MI\Shts\Typ\S_XTyp_01.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	13
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



P-0 ILLINOIS ROUTE 22
STA. 104+517.919 TO STA. 104+600.000

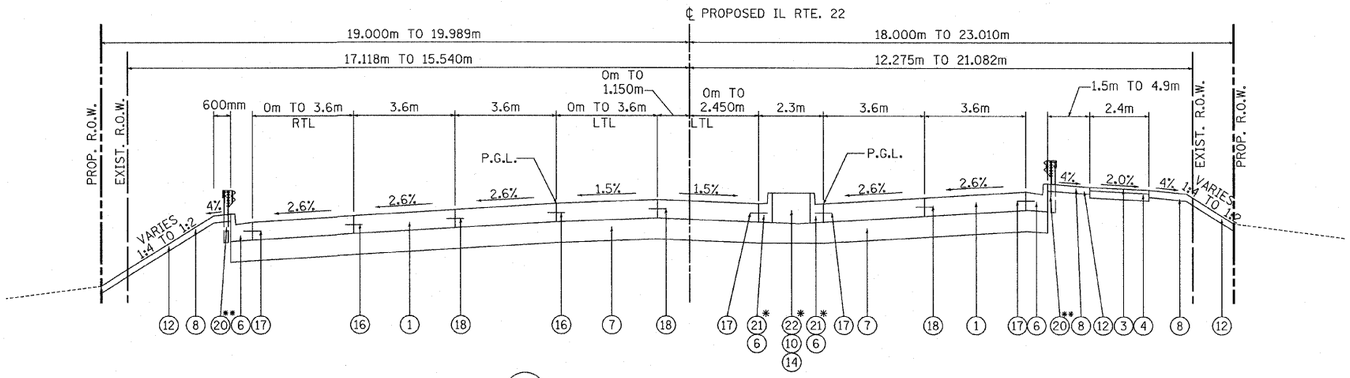


P-1 ILLINOIS ROUTE 22
STA. 104+600.000 TO STA. 104+782.605

*COMB. CONC. C&G B-15.60 & FURNISH & PLACE TOPSOIL, 600mm, & SEEDING, CLASS 2A FROM STA. 104+600.000 TO STA. 104+678.514

*COMB. CONC. C&G B-15.30 & COBBLESTONE PAVERS FROM STA. 104+678.514 TO STA. 104+782.605

**POROUS GRANULAR EMBANKMENT, SUBGRADE, 150mm FROM STA. 104+635.000 TO STA. 104+675.000



P-2 ILLINOIS ROUTE 22
STA. 104+846.079 TO STA. 105+028.132

*COMB. CONC. C&G B-15.60 & FURNISH & PLACE TOPSOIL, 600mm, & SEEDING, CLASS 2A FROM STA. 104+968.890 TO STA. 105+028.132

*COMB. CONC. C&G B-15.30 & COBBLESTONE PAVERS FROM STA. 104+846.079 TO STA. 104+968.890

**STA. 104+881.383 TO STA. 104+972.583 RT.
STA. 104+924.904 TO STA. 105+019.914 LT.

LEGEND:

EXISTING

- (A) - P.C.C. PAVEMENT
- (B) - AGGREGATE SUBGRADE
- (C) - LANDSCAPED MEDIAN
- (D) - CONCRETE CURB & GUTTER
- (E) - HMA SIDEPATH
- (F) - TOPSOIL AND SODDING

PROPOSED

- (1) - P.C.C. PAVEMENT 250mm (JOINTED)
- (2) - P.C.C. PAVEMENT 265mm (JOINTED)
- (3) - HMA SURFACE CSE., MIX "C", N 50, 50mm
- (4) - HMA BINDER CSE., IL-19.0, N 50, 100mm
- (5) - CONCRETE MEDIAN, TYPE SB15.30
- (6) - COMBINATION CONCRETE CURB & GUTTER, TYPE B15.60
- (7) - AGGREGATE SUBGRADE, 300mm
- (8) - FURNISH & PLACE TOPSOIL, 100mm
- (9) - STEEL PLATE BEAM GUARDRAIL, TYPE A, (SPECIAL)
- (10) - FURNISH & PLACE TOPSOIL, 600mm
- (11) - COMPOST FURNISH & PLACE, 100mm
- (12) - SODDING, SALT TOLERANT
- (13) - EROSION CONTROL BLANKET
- (14) - SEEDING, CLASS 2A
- (15) - SEEDING, CLASS 4A
- (16) - LONGITUDINAL CONSTRUCTION JOINT, NO. 25 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS
- (17) - LONGITUDINAL CONSTRUCTION JOINT, NO. 20 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS
- (18) - SAWED LONGITUDINAL JOINT WITH NO. 20 x 750mm EPOXY COATED DEFORMED TIE BARS AT 750mm CENTERS
- (19) - POROUS GRANULAR EMBANKMENT, SUBGRADE, 150mm
- (20) - STEEL PLATE BEAM GUARDRAIL OR TRAFFIC BARRIER TERMINAL, TYPE VARIES
- (21) - COMBINATION CONCRETE CURB & GUTTER, TYPE B15.30
- (22) - COBBLESTONE PAVERS
  - (22A) - LIMESTONE SCREENING
  - (22B) - SUBBASE GRANULAR MATERIAL TYPE B, 256mm
- (23) - BICYCLE RAILING

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

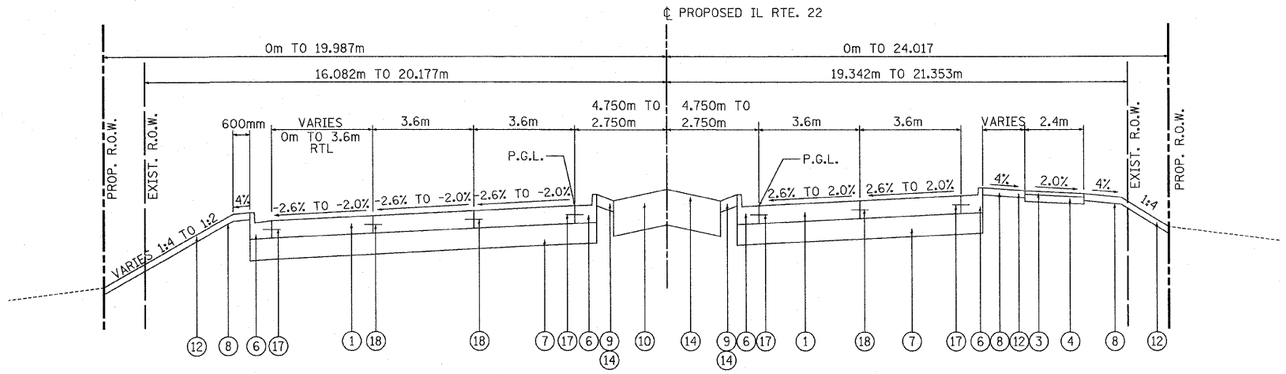
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PROPOSED TYPICAL SECTIONS

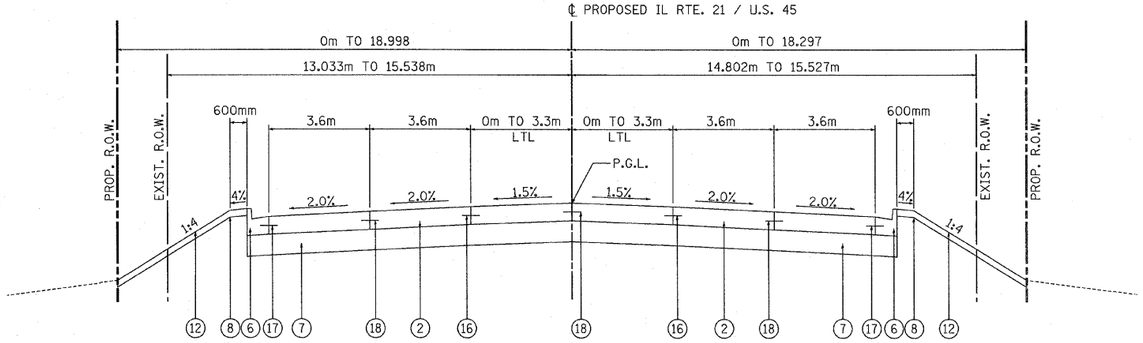
SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

P:\Lisle\IDOT\917LAO\Drawings\RDWY\Mill\Shts\Typ\S_PTyp_01.dgn
tkoeppen(Rdwy_Lisle) 2/6/2009 1:25:42 PM PDF(Grey_Large).plt

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



P-3 ILLINOIS ROUTE 22
STA. 105+028.132 TO STA. 105+132.181



P-4 U.S. RTE. 45/ ILLINOIS ROUTE 21
STA. 9+845.844 TO STA. 9+879.482
STA. 10+116.267 TO STA. 10+180.459

LEGEND:

PROPOSED

1. P.C.C. PAVEMENT 250mm (JOINTED)
2. P.C.C. PAVEMENT 265mm (JOINTED)
3. HMA SURFACE CSE., MIX C, N 50, 50mm
4. HMA BINDER CSE., IL-19.0, N 50, 100mm
5. CONCRETE MEDIAN, TYPE SB15.30
6. COMBINATION CONCRETE CURB & GUTTER, TYPE B15.60
7. AGGREGATE SUBGRADE, 300mm
8. FURNISH & PLACE TOPSOIL, 100mm
9. STEEL PLATE BEAM GUARDRAIL, TYPE A, (SPECIAL)
10. FURNISH & PLACE TOPSOIL, 600mm
11. COMPOST FURNISH & PLACE, 100mm
12. SODDING, SALT TOLERANT
13. EROSION CONTROL BLANKET
14. SEEDING, CLASS 2A
15. SEEDING, CLASS 4A
16. LONGITUDINAL CONSTRUCTION JOINT, NO. 25 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS
17. LONGITUDINAL CONSTRUCTION JOINT, NO. 20 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS
18. SAWED LONGITUDINAL JOINT WITH NO. 20 x 750mm EPOXY COATED DEFORMED TIE BARS AT 750mm CENTERS
19. POROUS GRANULAR EMBANKMENT, SUBGRADE, 150mm
20. STEEL PLATE BEAM GUARDRAIL OR TRAFFIC BARRIER TERMINAL, TYPE VARIES
21. COMBINATION CONCRETE CURB & GUTTER, TYPE B15.30
22. COBBLESTONE PAVERS
    - 22A - LIMESTONE SCREENING
    - 22B - SUBBASE GRANULAR MATERIAL TYPE B, 256mm
23. BICYCLE RAILING

P:\Lisle\IDOT\9171A0\Drawings\RDWY\MII\Shts\Typ\S_PTyp_01.dgn
tkoeppen(Rdwy-Lisle) 2/6/2009 1:26:09 PM PDF(Grey_Large).plt

PATRICK ENGINEERING INC. LISLE, ILLINOIS

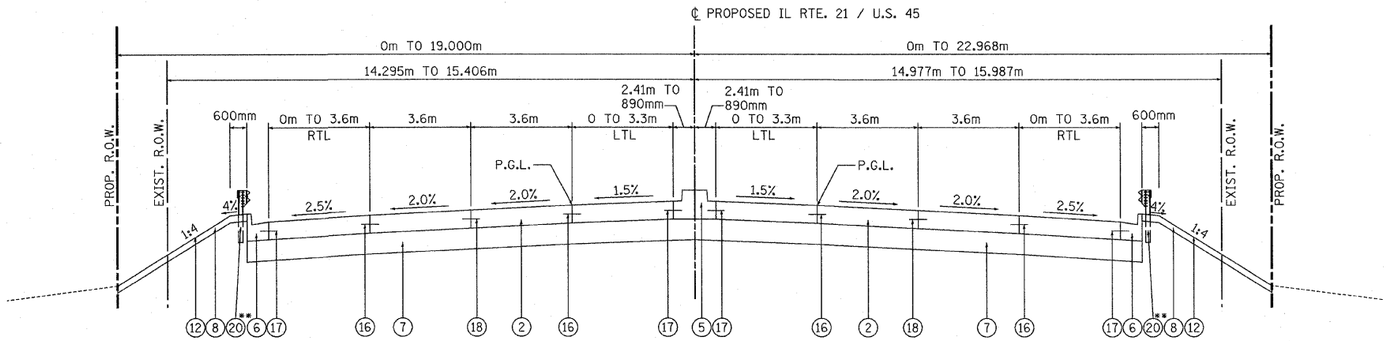
REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PROPOSED TYPICAL SECTIONS

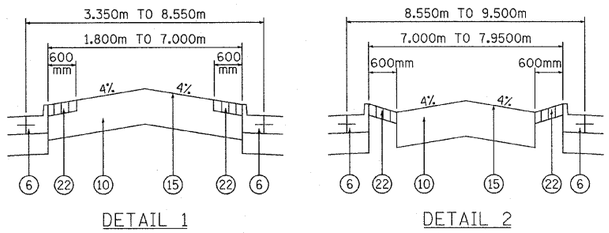
SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



P-5 U.S. RTE. 45/ ILLINOIS ROUTE 21
STA. 9+879.482 TO STA. 10+116.267

**STA. 10+043.000 TO STA. 10+069.430 RT.
STA. 10+056.000 TO STA. 10+093.860 LT.

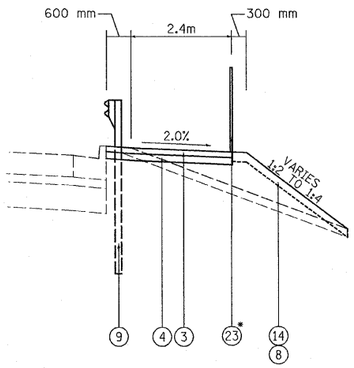


DETAIL 1

DETAIL 2

LANDSCAPE MEDIAN

1. USE DETAIL 1 WHEN MEDIAN WIDTH IS BETWEEN 1.8m AND 7.0m
2. USE DETAIL 2 WHEN MEDIAN WIDTH IS 7.0m OR GREATER
3. PC CONCRETE MEDIAN WHEN THE MEDIAN WIDTH IS LESS THAN 1.8m



TYPICAL SIDEPATH DETAIL

STA. 105+203.559 TO STA. 105+429.394 RT.
*STA. 105+203.559 TO STA. 105+340.000 RT.

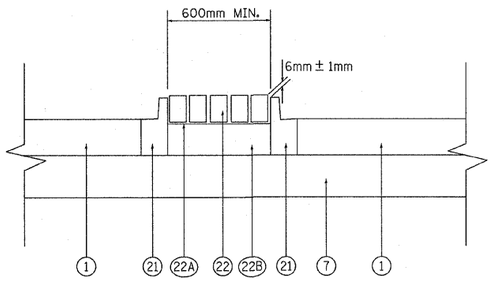
LEGEND:

PROPOSED

1. P.C.C. PAVEMENT 250mm (JOINTED)
2. P.C.C. PAVEMENT 265mm (JOINTED)
3. HMA SURFACE CSE., MIX C, N 50, 50mm
4. HMA BINDER CSE., IL-19.0, N 50, 100mm
5. CONCRETE MEDIAN, TYPE SB15.30
6. COMBINATION CONCRETE CURB & GUTTER, TYPE B15.60
7. AGGREGATE SUBGRADE, 300mm
8. FURNISH & PLACE TOPSOIL, 100mm
9. STEEL PLATE BEAM GUARDRAIL, TYPE A, (SPECIAL)
10. FURNISH & PLACE TOPSOIL, 600mm
11. COMPOST FURNISH & PLACE, 100mm
12. SODDING, SALT TOLERANT
13. EROSION CONTROL BLANKET
14. SEEDING, CLASS 2A
15. SEEDING, CLASS 4A
16. LONGITUDINAL CONSTRUCTION JOINT, NO. 25 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS
17. LONGITUDINAL CONSTRUCTION JOINT, NO. 20 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS
18. SAWED LONGITUDINAL JOINT WITH NO. 20 x 750mm EPOXY COATED DEFORMED TIE BARS AT 750mm CENTERS
19. POROUS GRANULAR EMBANKMENT, SUBGRADE, 150mm
20. STEEL PLATE BEAM GUARDRAIL OR TRAFFIC BARRIER TERMINAL, TYPE VARIES
21. COMBINATION CONCRETE CURB & GUTTER, TYPE B15.30
22. COBBLESTONE PAVERS
    - 22A - LIMESTONE SCREENING
    - 22B - SUBBASE GRANULAR MATERIAL TYPE B, 256mm
23. BICYCLE RAILING

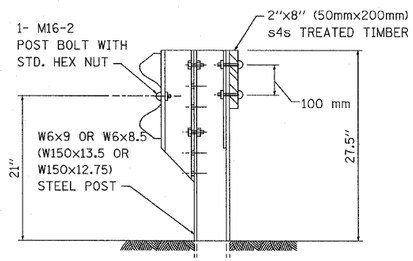
HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC/PG TYPE	AIR VOIDS
SIDEPATH		
HOT-MIX ASPHALT SURFACE COURSE, MIX 'C', N50 (IL 9.5mm); 50mm	PG 64-22	4% @ 50 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 100mm	PG 64-22*	4% @ 50 GYR
DRIVEWAYS		
HOT-MIX ASPHALT SURFACE COURSE, MIX 'C', N50 (IL 9.5mm); 50mm	PG 64-22	4% @ 50 GYR
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0); 200mm (CE)	PG 64-22*	4% @ 50 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL SURFACE MIXTURE QUANTITIES IS 2.4 KG/SQ M/MM.
*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

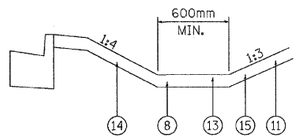


COBBLESTONE PAVER DETAIL

NOTE: 22A AND 22B ARE ALL INCLUDED IN THE COST FOR COBBLESTONE PAVERS



STEEL PLATE BEAM GUARDRAIL, TYPE A (SPECIAL)



TYPICAL DITCH

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PROPOSED TYPICAL SECTIONS

SCALE: NONE — DRAWN BY: TCK
DATE: 1/28/2009 — CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/6/2009 1:26:18 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MII\Shts\Typ\S_PTyp_01.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	16
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				

TREE REMOVAL (6 TO 15 UNITS DIAMETER)

STATION	OFFSET		UNITS
104+613.088	24.955	LT	8
104+613.088	24.955	LT	8
104+613.088	24.955	LT	8
104+613.088	24.955	LT	8
104+641.940	24.653	LT	8
104+641.940	24.653	LT	8
104+644.011	24.472	LT	10
104+772.348	17.741	LT	10
104+787.470	19.101	LT	12
104+790.888	21.671	LT	8
104+794.567	24.699	LT	12
104+799.673	29.206	LT	10
104+798.603	41.307	LT	8
104+942.413	16.025	LT	15
104+944.366	16.421	LT	12
104+964.227	19.665	LT	8
105+046.162	19.318	RT	6
10+151.957	12.325	LT	6
		TOTAL	165

TREE REMOVAL (OVER 15 UNITS DIAMETER)

STATION	OFFSET		UNIT
104+621.593	26.273	LT	18
104+621.593	26.273	LT	18
		TOTAL	36

DRIVEWAY PAVEMENT REMOVAL

STATION	OFFSET	SQ M
IL RTE. 22		
104+678.191	LT	104.3
104+781.546	LT	305.1
IL RTE. 21/U.S. 45		
10+108.892	RT	118.2
10+128.438	RT	44.2
10+155.535	RT	40.3
10+172.901	RT	33.5
10+112.089	LT	99.0
10+134.407	LT	87.9
10+167.740	LT	48.9
	TOTAL	882

COMBINATION CURB AND GUTTER REMOVAL

STATION	TO	STATION	OFFSET	METER
104+600.000	TO	104+791.000	LT	191.0
DRIVEWAY	TO	104+678.000	LT	21.9
DRIVEWAY	TO	104+770.000	LT	54.0
104+517.919	TO	104+550.000	RT	32.1
104+550.000	TO	104+795.000	RT	245.0
NW CORNER	TO	NW CORNER	LT	24.3
NW CORNER	TO	LOT	LT	22.4
NE CORNER	TO	NE CORNER	LT	21.4
SW CORNER	TO	SW CORNER	RT	23.6
SE CORNER	TO	SE CORNER	RT	23.4
104+841.000	TO	104+900.000	LT	59.0
104+843.000	TO	104+900.000	RT	57.0
104+900.000	TO	104+995.000	LT	95.0
104+900.000	TO	104+995.000	RT	95.0
9+845.844	TO	9+977.000	LT	131.2
9+845.844	TO	9+977.000	RT	131.2
10+028.000	TO	10+158.234	LT	130.2
DRIVEWAY	TO	10+039.000	LT	47.0
DRIVEWAY	TO	10+110.000	LT	41.9
DRIVEWAY	TO	10+130.000	LT	21.2
10+026.000	TO	10+158.234	RT	132.2
DRIVEWAY	TO	10+109.000	RT	18.5
DRIVEWAY	TO	10+128.000	RT	13.1
DRIVEWAY	TO	10+155.000	RT	12.3
104+517.919	TO	104+600.000	MEDIAN	82.1
104+600.000	TO	104+736.000	MEDIAN	136.0
104+600.000	TO	104+736.000	MEDIAN	136.0
9+866.000	TO	9+927.000	MEDIAN	61.0
9+866.000	TO	9+927.000	MEDIAN	61.0
10+125.000	TO	10+152.000	MEDIAN	31.8
10+125.000	TO	10+152.000	MEDIAN	31.8
			TOTAL	2,184

STEEL PLATE BEAM GUARDRAIL, TYPE A

STATION	TO	STATION	OFFSET	METER
104+896.383	TO	104+968.773	RT	72.39
104+928.714	TO	104+985.864	LT	57.15
105+112.476	TO	105+123.906	RT	11.43
105+045.303	TO	105+121.503	LT	76.2
10+058.000	TO	10+065.620	RT	7.62
10+059.810	TO	10+078.860	LT	19.05
			TOTAL	243.84

STEEL PLATE BEAM GUARDRAIL, TYPE A (SPECIAL)

STATION	TO	STATION	OFFSET	METER
105+207.816	TO	105+364.026	RT	156.21
			TOTAL	156.21

POLYUREA PAVEMENT MARKINGS

LOCATION	MARKING LINE				LETTERS & SYMBOLS (SQ M)	RAISED PAVEMENT MARKERS		
	100mm (M)	150mm (M)	300mm (M)	600mm (M)		1-WAY CRYSTAL	2-WAY AMBER	1-WAY AMBER
IL. RTE. 22	451	1295	142	64	65	224	0	0
U.S. RTE. 45/IL. RTE. 21	1301	409	83	48	40	130	18	39
TOTAL	1752	1704	225	112	105	354	18	39

MEDIAN REMOVAL

STATION	TO	STATION	SQ M
IL RTE 22			
104+517.920	TO	104+550.000	85.3
104+550.000	TO	104+600.000	125.0
104+600.000	TO	104+655.033	216.0
104+655.033	TO	104+657.318	8.4
104+657.318	TO	104+698.939	144.4
104+698.939	TO	104+744.163	133.6
104+744.163	TO	104+803.530	104.5
104+832.542	TO	104+900.000	104.2
104+900.000	TO	104+902.354	3.7
U.S. ROUTE 45			
9+845.844	TO	9+887.068	116.7
9+887.068	TO	9+926.783	98.9
9+926.783	TO	9+951.836	49.9
9+951.836	TO	9+987.316	54.5
10+016.680	TO	10+097.001	120.5
10+124.917	TO	10+150.784	88.1
		TOTAL	1,454

TRAFFIC BARRIER TERMINAL TYPE 1, (SPECIAL) TANGENT

STATION	OFFSET	EACH
IL RTE 22		
104+881.383	RT	1
104+985.864	LT	1
105+097.236	RT	1
IL RTE 21/U.S. 45		
10+093.860	LT	1
10+043.000	RT	1
	TOTAL	5

TRAFFIC BARRIER TERMINAL, TYPE 2

STATION	OFFSET	EACH
IL RTE 22		
104+928.714	LT	1
104+972.583	RT	1
105+045.303	LT	1
105+367.836	RT	1
IL RTE 21/U.S. 45		
10+059.810	LT	1
10+069.430	RT	1
	TOTAL	6

TRAFFIC BARRIER TERMINAL, TYPE 5

STATION	OFFSET	EACH
105+125.974	LT	1
105+203.345	RT	1
	TOTAL	2

TRAFFIC BARRIER TERMINAL, TYPE 6

STATION	OFFSET	EACH
105+138.008	RT	1
	TOTAL	1

COMBINATION CONCRETE CURB & GUTTER

LOCATION STA. – STA.	TYPE	
	B-15.30 METER	B-15.60 METER
IL. RTE. 22		
104+517.919 - 104+900	310	746
104+950 - 105+132.181	136	782
U.S. RTE. 45 /IL. RTE. 21		
9+845.844 - 10+158.234		545
TOTAL	446	2073

PROPOSED ROADWAY PAVEMENT

LOCATION STA. – STA.	AGGREGATE SUBGRADE 300mm (SQ M)	PCC PVT. JOINTED 250mm (SQ M)	PCC PVT. JOINTED 265mm (SQ M)
IL. RTE. 22			
104+517.919 - 105+132.181	12,465	10,689	
U.S. RTE. 45 /IL. RTE. 21			
9+845.844 - 10+158.234	9,788		8,705
TOTAL	22,253	10,689	8,705

PAVED SHOULDER REMOVAL

STATION	TO	STATION	LT/RT	SQ M
104+995.000	TO	105+137.731	LT	85.6
104+995.000	TO	105+137.731	RT	85.6
			TOTAL	172

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SCHEDULE OF QUANTITIES

SCALE: NONE DRAWN BY: TCK

DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MISheets\Rd\S_Sched_01.dgn
PDF(Grey_Large).pit 5:06:24 PM 2/5/2009 tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	17
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

LOCATION STA. TO STA.			UNDERCUT AND PGE REPLACEMENT (CU M)		UNSUITABLE REMOVAL (TOPSOIL STRIPPING) (CU M)		EARTH EXCAVATION (CU M)		TOTAL SUITABLE EXCAVATION (CU M)		EXCAVATION TO BE USED IN EMBANKMENT (ADJ. FOR SHRINKAGE) 15% (CU M)		EMBANKMENT (CU M)		EARTHWORK BALANCE WASTE (+) OR SHORTAGE (–) (CU M)	
			STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II
IL RTE. 22																
104+518	TO	104+525	0	0	4	0	8	0	8	0	7	0	0	0	7	0
104+525	TO	104+550	0	0	33	0	81	0	81	0	69	0	4	0	65	0
104+550	TO	104+575	0	0	41	0	94	0	94	0	80	0	8	0	72	0
104+575	TO	104+600	0	0	74	0	59	0	59	0	50	0	88	0	-38	0
104+600	TO	104+625	0	0	104	36	80	66	80	66	68	56	108	24	-40	33
104+625	TO	104+650	23	16	101	75	155	145	155	145	132	123	50	44	82	80
104+650	TO	104+675	46	36	98	79	180	165	180	165	153	140	44	24	109	117
104+675	TO	104+700	24	20	105	63	129	100	129	100	109	85	46	35	63	50
104+700	TO	104+725	0	0	114	41	76	19	76	19	65	16	49	59	16	-43
104+725	TO	104+750	0	0	123	36	129	19	129	19	109	16	25	51	84	-35
104+750	TO	104+775	0	0	131	18	238	49	238	49	202	41	5	24	197	18
104+775	TO	104+800	0	0	135	43	176	49	176	49	150	41	43	31	107	10
104+800	TO	104+825	0	0	70	43	201	183	201	183	171	155	41	31	130	124
104+825	TO	104+850	0	0	35	0	220	233	220	233	187	198	11	0	176	198
104+850	TO	104+875	0	0	69	38	104	111	104	111	88	95	25	23	63	72
104+875	TO	104+900	0	0	66	76	103	99	103	99	87	84	40	44	47	40
104+900	TO	104+925	0	0	65	68	100	98	100	98	85	83	53	45	33	38
104+925	TO	104+950	0	0	83	61	91	71	91	71	78	61	95	90	-17	-29
104+950	TO	104+975	0	0	99	66	93	44	93	44	79	37	219	118	-140	-80
104+975	TO	105+000	0	0	98	69	95	30	95	30	81	26	328	113	-247	-87
105+000	TO	105+025	0	0	99	73	80	20	80	20	68	17	329	171	-261	-154
105+025	TO	105+050	0	0	98	68	86	14	86	14	73	12	299	165	-225	-153
105+050	TO	105+075	0	0	99	66	81	5	81	5	69	4	369	95	-300	-91
105+075	TO	105+100	0	0	101	74	60	28	60	28	51	23	481	201	-430	-178
105+100	TO	105+132	0	0	116	98	71	72	71	72	60	61	585	487	-524	-425
105+197	TO	105+225	0	0	0	43	29	32	29	32	25	27	74	0	-49	27
105+225	TO	105+250	0	0	0	0	0	0	0	0	0	0	51	0	-51	0
105+250	TO	105+275	0	0	0	0	0	0	0	0	0	0	43	0	-43	0
105+275	TO	105+300	0	0	0	0	0	0	0	0	0	0	40	0	-40	0
105+300	TO	105+325	0	0	1	0	0	0	0	0	0	0	29	0	-29	0
105+325	TO	105+350	0	0	3	0	0	0	0	0	0	0	16	0	-16	0
105+350	TO	105+375	0	0	5	0	1	0	1	0	1	0	6	0	-5	0
105+375	TO	105+400	0	0	8	0	11	0	11	0	10	0	1	0	8	0
105+400	TO	105+425	0	0	11	0	16	0	16	0	14	0	1	0	13	0
105+425	TO	105+430	0	0	2	0	1	0	1	0	1	0	0	0	1	0
IL RTE. 22 SUBTOTALS			93	73	2,186	1,231	2,848	1,649	2,848	1,649	2,421	1,402	3,603	1,873	-1,182	-471
US RTE. 45/IL RTE. 21																
9+846	TO	9+875	0	0	55	26	98	82	98	82	83	69	34	16	49	53
9+875	TO	9+900	0	0	59	25	73	58	73	58	62	49	29	9	33	40
9+900	TO	9+925	0	0	58	30	50	39	50	39	43	33	34	15	9	18
9+925	TO	9+950	0	0	46	34	43	38	43	38	36	32	46	16	-10	16
9+950	TO	9+975	0	0	65	61	46	74	46	74	39	63	59	14	-19	49
9+975	TO	10+025	0	0	52	71	53	111	53	111	45	95	15	7	30	87
10+015	TO	10+025	0	0	1	3	109	48	109	48	92	41	1	2	91	38
10+025	TO	10+050	0	0	20	10	183	135	183	135	155	115	14	1	141	114
10+060	TO	10+075	0	0	21	13	48	79	48	79	41	67	18	20	23	47
10+075	TO	10+105	0	0	21	62	74	114	74	114	62	97	24	45	38	52
10+100	TO	10+109	0	0	0	12	24	45	24	45	20	38	6	2	14	36
10+109	TO	10+125	0	0	22	41	50	78	50	78	42	67	26	9	16	58
10+125	TO	10+128	0	0	10	18	13	15	13	15	11	12	8	6	3	6
10+128	TO	10+134	0	0	16	27	21	22	21	22	18	19	13	15	4	4
10+134	TO	10+150	0	0	47	82	60	62	60	62	51	52	39	57	12	-4
10+150	TO	10+156	0	0	18	30	19	18	19	18	16	16	17	27	-2	-11
10+156	TO	10+168	0	0	35	47	49	49	49	49	42	41	32	40	9	2
10+168	TO	10+180	0	0	37	36	65	65	65	65	55	55	28	23	27	32
US RTE. 45/IL RTE. 21 SUBTOTALS			0	0	583	626	1075	1130	1075	1130	914	961	443	325	471	636
TOTALS			93	73	2,769	1,858	3,923	2,780	3,923	2,780	3,335	2,363	4,046	2,197	-711	165

	STAGE I	STAGE II	TOTAL
EARTH EXCAVATION	3,923	2,780	6,703
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	2,862	1,931	4,793
POROUS GRANULAR EMBANKMENT, SUBGRADE	93	73	166
FURNISHED EXCAVATION	711	0	711

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SCHEDULE OF QUANTITIES

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

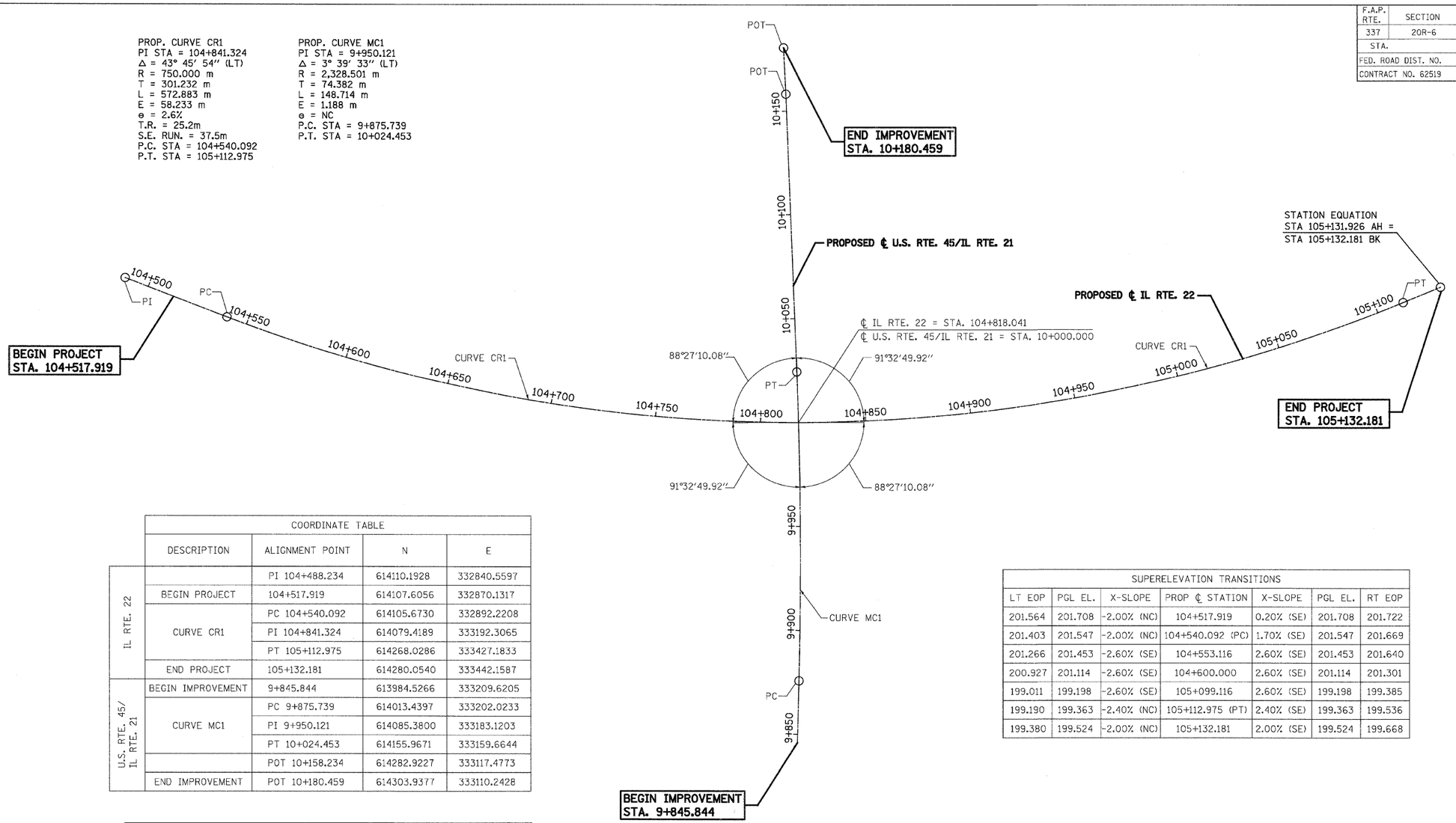
PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mill\Shts\Rdwy_Sched_02.dgn PDF(Grey_Large).pltt 11:17:11 AM 2/6/2009 tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

PROP. CURVE CR1
PI STA = 104+841.324
Δ = 43° 45′ 54″ (LT)
R = 750.000 m
T = 301.232 m
L = 572.883 m
E = 58.233 m
e = 2.6%
T.R. = 25.2m
S.E. RUN. = 37.5m
P.C. STA = 104+540.092
P.T. STA = 105+112.975

PROP. CURVE MC1
PI STA = 9+950.121
Δ = 3° 39′ 33″ (LT)
R = 2,328.501 m
T = 74.382 m
L = 148.714 m
E = 1.188 m
e = NC
P.C. STA = 9+875.739
P.T. STA = 10+024.453



COORDINATE TABLE				
	DESCRIPTION	ALIGNMENT POINT	N	E
IL RTE. 22		PI 104+488.234	614110.1928	332840.5597
	BEGIN PROJECT	104+517.919	614107.6056	332870.1317
	CURVE CR1	PC 104+540.092	614105.6730	332892.2208
		PI 104+841.324	614079.4189	333192.3065
		PT 105+112.975	614268.0286	333427.1833
	END PROJECT	105+132.181	614280.0540	333442.1587
U.S. RTE. 45/ IL RTE. 21	BEGIN IMPROVEMENT	9+845.844	613984.5266	333209.6205
	CURVE MC1	PC 9+875.739	614013.4397	333202.0233
		PI 9+950.121	614085.3800	333183.1203
		PT 10+024.453	614155.9671	333159.6644
		POT 10+158.234	614282.9227	333117.4773
	END IMPROVEMENT	POT 10+180.459	614303.9377	333110.2428

SIDE ROAD COORDINATE TABLE		
STATION EQUATION	N	E
℄ IL RTE. 22 = STA. 104+818.041 ℄ U.S. RTE. 45/IL RTE. 21 = STA. 10+000.000	614132.7227	333167.2545

SUPERELEVATION TRANSITIONS						
LT EOP	PGL EL.	X-SLOPE	PROP ℄ STATION	X-SLOPE	PGL EL.	RT EOP
201.564	201.708	-2.00% (NC)	104+517.919	0.20% (SE)	201.708	201.722
201.403	201.547	-2.00% (NC)	104+540.092 (PC)	1.70% (SE)	201.547	201.669
201.266	201.453	-2.60% (SE)	104+553.116	2.60% (SE)	201.453	201.640
200.927	201.114	-2.60% (SE)	104+600.000	2.60% (SE)	201.114	201.301
199.011	199.198	-2.60% (SE)	105+099.116	2.60% (SE)	199.198	199.385
199.190	199.363	-2.40% (NC)	105+112.975 (PT)	2.40% (SE)	199.363	199.536
199.380	199.524	-2.00% (NC)	105+132.181	2.00% (SE)	199.524	199.668

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

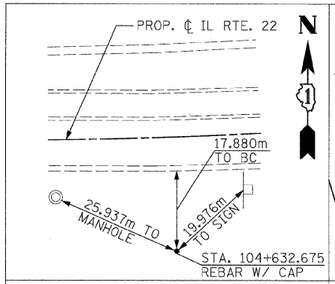
ALIGNMENT, TIES, & BENCHMARKS

SCALE: 1:1000 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

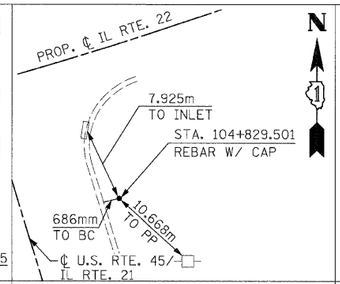
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoepper(Rdwy_Lisle)
2/5/2009 5:06:45 PM PDF(Grey_Large).plt P:\Lisle\IDOT\917.AO\Drawings\RDWY\MIN\Shts\ALIN_ALL01.dgn

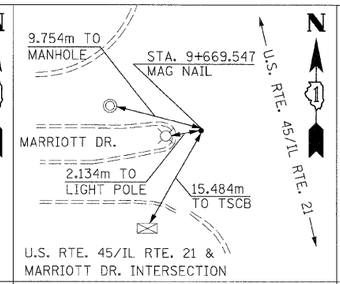
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	19
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



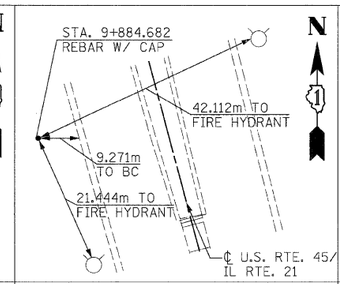
STA. 104+632.675 EL. 200.890 m
N: 614079.9954
E: 332985.5584



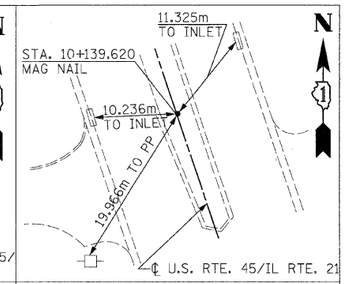
STA. 104+829.501 EL. 200.697 m
N: 614106.0220
E: 333187.4638



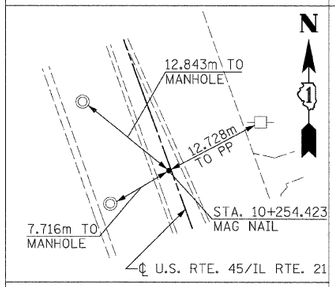
STA. 9+669.547 EL. 198.673 m
N: 613810.3973
E: 333241.8234



STA. 9+884.682 EL. 201.040 m
N: 614017.0988
E: 333181.0506



STA. 10+139.620 EL. 199.560 m
N: 614265.2988
E: 333123.4685



STA. 10+254.423 EL. 199.790 m
N: 614373.4801
E: 333085.0516

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

ALIGNMENT, TIES, & BENCHMARKS

SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Rdwy_Isle)
2/5/2009 5:06:51 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MISh+s\All\S_Ties_01.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE STAGING PLANS, OR ANY CHANGE IN STAGE.
3. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION THROUGHOUT THE PROJECT AREA AT ALL TIMES.
4. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL ENTRANCES, APROACHES, AND TEMPORARY ROADS WITHIN THE PROJECT LIMITS. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "TEMPORARY ACCESS (PRIVATE OR COMMERCIAL ENTRANCE)".
5. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)".
7. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT THE NORTH, SOUTH AND EAST ENDS OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACE TWO WEEKS BEFORE THE START OF CONSTRUCTION ACTIVITIES. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH FOR "CHANGEABLE MESSAGE SIGNS".
8. THE CONTRACTOR SHALL PLACE "CAUTION NEW LANES OPEN" SIGNS AT EVERY ENTRANCE AND SIDE ROAD PRIOR TO THE OPENING OF NEW LANES TO TRAFFIC AND/OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)".
9. THE CONTRACTOR SHALL PLACE "DRIVEWAY ENTRANCE" SIGNS AT EVERY COMMERCIAL ENTRANCE WITHIN THE PROJECT LIMITS WHERE ENTRANCE IS OBSTRUCTED DUE TO CONSTRUCTION ACTIVITIES AND/OR AT THE DIRECTION OF THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)".
10. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE (1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
11. ANY SAW CUTTING OF THE EXISTING PAVEMENT FOR STAGE CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE METER FOR "PAVEMENT REMOVAL".
12. THE CONTRACTOR SHALL USE LEG EXTENSIONS FOR TYPE II BARRICADES AND PROVIDE A 600MM WIDE EARTH FILL PAD FOR DRUMS TO MEET MINIMUM HEIGHT REQUIREMENTS WHERE NECESSARY. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION, SPECIAL".

SEQUENCE OF CONSTRUCTION

PRESTAGE

1. REMOVE THE CENTER MEDIAN FROM STATION 104+600 TO STATION 104+804, STATION 104+832 TO STATION 104+902.347, ON MILWAUKEE AVENUE FROM STATION 9+845 TO STATION 9+988. STATION 10+016 TO STATION 10+097 AND STATION 10+124 TO STATION 10+152. REPLACE WITH TEMPORARY PAVEMENT.

   TRAFFIC WILL BE MAINTAINED ON THE OUTSIDE LANES. THE INSIDE LANES (ADJACENT TO THE EXISTING CENTER MEDIAN) WILL BE CLOSED. LANE CLOSURES SHALL BE IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARD 701701.

   THE CONTRACTOR SHALL REPLACE THE CENTER MEDIAN WITH TEMPORARY PAVEMENT AS SOON AS POSSIBLE TO PREVENT WATER FROM ACCUMULATING IN THE MEDIAN. THE CONTRACTOR SHALL PUMP ANY WATER THAT ACCUMULATES IN THE MEDIAN BEFORE THE TEMPORARY PAVEMENT IS CONSTRUCTED. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE METER FOR "TEMPORARY PAVEMENT".
2. INSTALL AND ACTIVATE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21.
3. CONSTRUCT ALL TEMPORARY PAVEMENT. TWO WAY TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701326, 701601 AND 701701.

STAGE 1

1. PLACE TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN AND RESET TRAFFIC SIGNAL HEADS FOR THE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701301 AND 701701.
2. SHIFT EASTBOUND IL RTE 22 TRAFFIC TO THE NORTH SIDE OF IL RTE 22 FROM STATION 104+517 TO STATION 105+100, SHIFT NORTHBOUND US RTE 45/IL RTE 21 TRAFFIC TO THE WEST SIDE OF US RTE 45/IL RTE 21 FROM STATION 9+660 TO STATION 10+200 AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH APPLICABLE PORTIONS OF IDOT TRAFFIC CONTROL STANDARDS 701301, 701601, 701701 AND 702001.
3. REMOVE THE EXISTING EASTBOUND IL RTE 22 AND THE EXISTING NORTHBOUND US RTE 45/IL RTE 21 PAVEMENT AND CONSTRUCT THE EASTBOUND IL RTE 22 AND THE NORTHBOUND US RTE 45/IL RTE 21 THROUGH LANES AND RIGHT TURN LANES, STORM SEWER MAINLINE AND LATERALS, DRAINAGE STRUCTURES, UTILITY RELOCATIONS, OUTSIDE CURB & GUTTER, MEDIAN CURB & GUTTER AND PARKWAYS TO THE LIMITS AS SHOWN ON THE PLANS.

STAGE 1A

1. PLACE TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN AND RESET TRAFFIC SIGNAL HEADS FOR THE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701301 AND 701701.
2. SHIFT NORTH AND SOUTHBOUND US RTE 45/IL RTE 21 TRAFFIC TO THE EAST SIDE OF US RTE 45/IL RTE 21 ON THE NEWLY CONSTRUCTED PAVEMENTS FROM STATION 9+660 TO STATION 10+200 AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF IDOT TRAFFIC CONTROL STANDARDS 701301, 701601, 701701 AND 702001.
3. REMOVE THE EXISTING PAVEMENT AT THE SOUTHWEST CORNER OF THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21 AND CONSTRUCT THE SOUTHWEST CORNER PAVEMENT, STORM SEWER MAINLINE AND LATERALS, DRAINAGE STRUCTURES, UTILITY RELOCATIONS AND CURB & GUTTER TO THE LIMITS AS SHOWN ON THE PLANS.

STAGE 2

1. PLACE TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN AND RESET TRAFFIC SIGNAL HEADS FOR THE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701301 AND 701701.
2. SHIFT WEST AND EASTBOUND IL RTE 22 TRAFFIC TO THE SOUTH SIDE OF IL RTE 22 FROM STATION 104+517 TO STATION 105+100 AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH APPLICABLE PORTIONS OF IDOT TRAFFIC CONTROL STANDARDS 701301, 701601, 701701 AND 702001.
3. REMOVE THE EXISTING WESTBOUND IL RTE 22 AND THE EXISTING SOUTHBOUND US RTE 45/IL RTE 21 PAVEMENT AND CONSTRUCT THE WESTBOUND IL RTE 22 AND THE SOUTHBOUND US RTE 45/IL RTE 21 THROUGHT LANES AND RIGHT TURN LANES, STORM SEWER LATERALS, DRAINAGE STRUCTURES, UTILITY RELOCATIONS, OUTSIDE CURB & GUTTER, MEDIAN CURB & GUTTER AND PARKWAYS TO THE LIMITS AS SHOWN ON THE PLANS.

STAGE 2A

1. PLACE TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN AND RESET TRAFFIC SIGNAL HEADS FOR THE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701301 AND 701701.
2. SHIFT NORTH AND SOUTHBOUND US RTE 45/IL RTE 21 TRAFFIC TO THE WEST SIDE OF US RTE 45/IL RTE 21 ON THE NEWLY CONSTRUCTED PAVEMENTS FROM STATION 9+660 TO STATION 10+200 AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF IDOT TRAFFIC CONTROL STANDARDS 701301, 701601, 701701 AND 702001.
3. REMOVE THE EXISTING PAVEMENT AT THE NORTHEAST CORNER OF THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21 AND CONSTRUCT THE NORTHEAST CORNER PAVEMENT, STORM SEWER MAINLINE AND LATERALS, DRAINAGE STRUCTURES, UTILITY RELOCATIONS AND CURB & GUTTER TO THE LIMITS AS SHOWN ON THE PLANS.

STAGE 3

1. PLACE TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS PER PLAN AND RESET TRAFFIC SIGNAL HEADS FOR THE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701301 AND 701701.
2. SHIFT EAST AND WESTBOUND IL RTE 22 TRAFFIC TO THEIR RESPECTIVE NEWLY CONSTRUCTED OUTSIDE LANES AND SHIFT NORTH AND SOUTHBOUND US RTE 45/ IL RTE 21 TRAFFIC TO THEIR RESPECTIVE NEWLY CONSTRUCTED OUTSIDE LANES AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF IDOT TRAFFIC CONTROL STANDARDS 701301, 701601, 701701 AND 702001.
3. REMOVE EXISTING CENTER PAVEMENT AND CONSTRUCT THE PROPOSED LEFT TURN LANES AND MEDIANS, STORM SEWER LATERALS AND DRAINAGE STRUCTURES.
4. THE CENTER OF THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21 SHALL BE CONSTRUCTED IN STAGE 3 AFTER THE LEFT TURN LANES AND MEDIANS ARE CONSTRUCTED. THIS CONSTRUCTION SHALL TAKE PLACE AT NIGHT USING HIGH EARLY STRENGTH CONCRETE PAVEMENT AND TEMPORAY LANE CLOSURES. THIS CONSTRUCTION SHALL BEGIN NO EARLIER THAN 6:00PM AND THE TEMPORARY LANE CLOSURES SHALL BE OPEN THE FOLLOWING DAY NO LATER THAN 6:00AM.
5. COMPLETE THE INSTALLATION OF THE PROPOSED TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND US RTE 45/IL RTE 21.
6. REMOVE TEMPORARY TRAFFIC SIGNALS.
7. INSTALL PERMANENT PAVEMENT MARKINGS, RAISED PAVEMENT REFLECTORS AND LANDSCAPING IN ACCORDANCE WITH IDOT TRAFFIC CONTROL STANDARDS 701311 AND 701701.

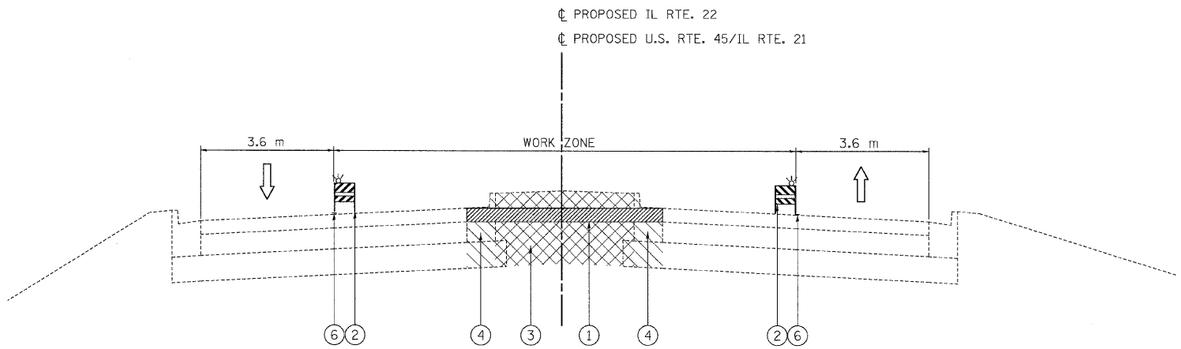
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
NOTES

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS
tkoepper(Rdwy-Lisle) 2/5/2009 5:06:57 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9I7.AO\Drawings\RDWY\MI\Shts\MOT_MOT_NOTES.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	21
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

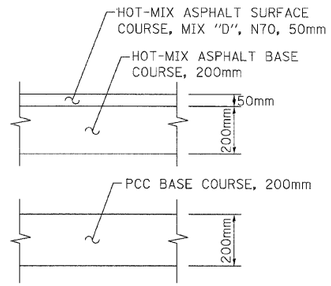


PRESTAGE

STATION 104+517.919 TO STATION 104+700 - IL RTE. 22
STATION 9+845 TO STATION 9+890 - U.S. RTE. 45/IL RTE. 21
STATION 10+124 TO STATION 10+152 - U.S. RTE. 45/IL RTE. 21

TEMPORARY PAVEMENT DETAILS

(CONTRACTOR HAS THE OPTION OF USING HMA OR PCC SECTION FOR TEMPORARY PAVEMENT)

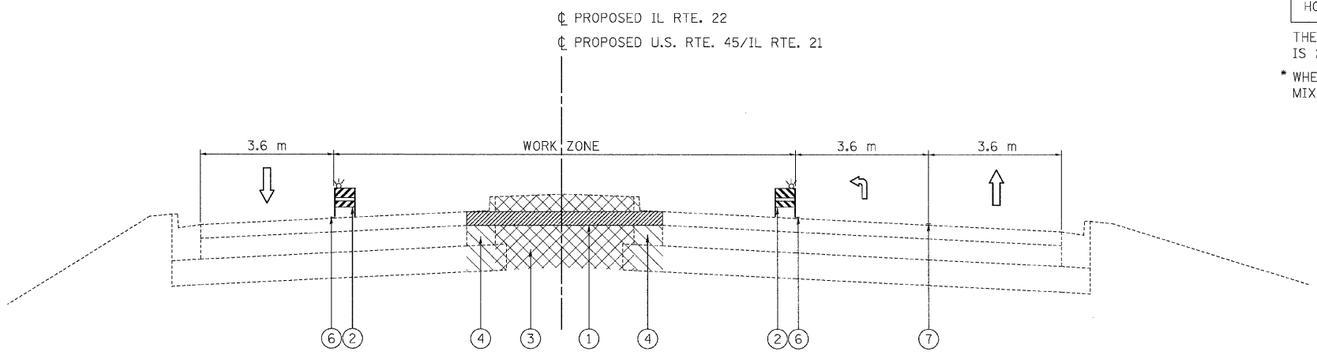


HOT-MIX ASPHALT MIXTURE REQUIREMENTS

TEMPORARY PAVEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	PG 64-22	4% @ 70 GYR.
HOT-MIX ASPHALT BASE COURSE	PG 64-22*	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 2.39 KG/SQ M/MM.

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



PRESTAGE

STATION 104+700 TO STATION 104+804 - IL RTE. 22
STATION 104+832 TO STATION 104+902 - IL RTE. 22 (MIRROR IMAGE)
STATION 9+890 TO STATION 9+988 - U.S. RTE. 45/IL RTE. 21
STATION 10+016 TO STATION 10+097 - U.S. RTE. 45/IL RTE. 21 (MIRROR IMAGE)

LEGEND

1. TEMPORARY PAVEMENT
2. TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS (15m C-C, 7.5m @ TAPERS & 3.5m ALONG RADII)
3. MEDIAN REMOVAL
4. CONCRETE CURB & GUTTER REMOVAL
5. THERMOPLASTIC PVMT MKG, 100mm (DOUBLE YELLOW)
6. THERMOPLASTIC PVMT MKG, 100mm (YELLOW EDGE LINE)
7. THERMOPLASTIC PVMT MKG, 150mm (WHITE LANE LINE)
8. PVMT MKG TAPE, TYPE III, 100mm (DOUBLE YELLOW)
9. PVMT MKG TAPE, TYPE III, 100mm (EDGE LINE)
10. PVMT MKG TAPE, TYPE III, 150mm (WHITE LANE LINE)

REVISIONS	
NAME	DATE

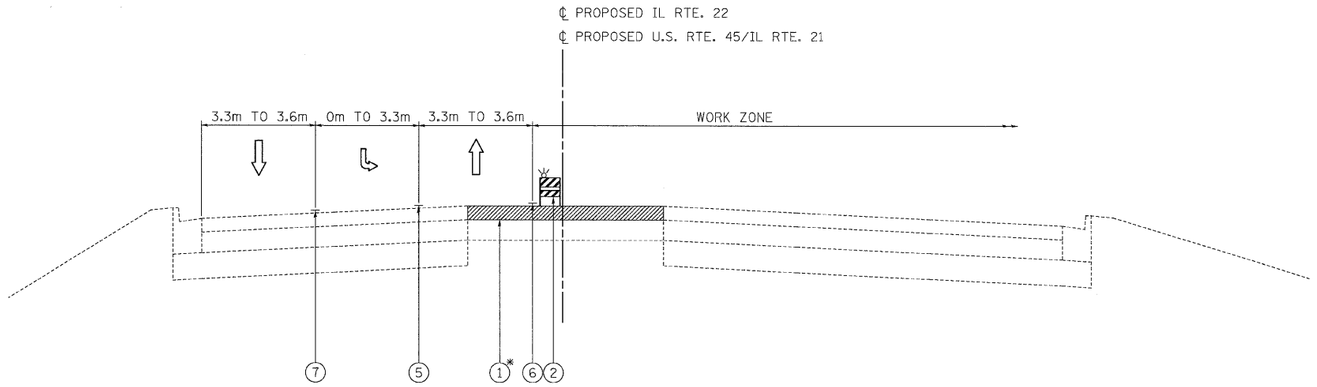
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION AND TRAFFIC CONTROL
TYPCIAL SECTIONS - PRESTAGE

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

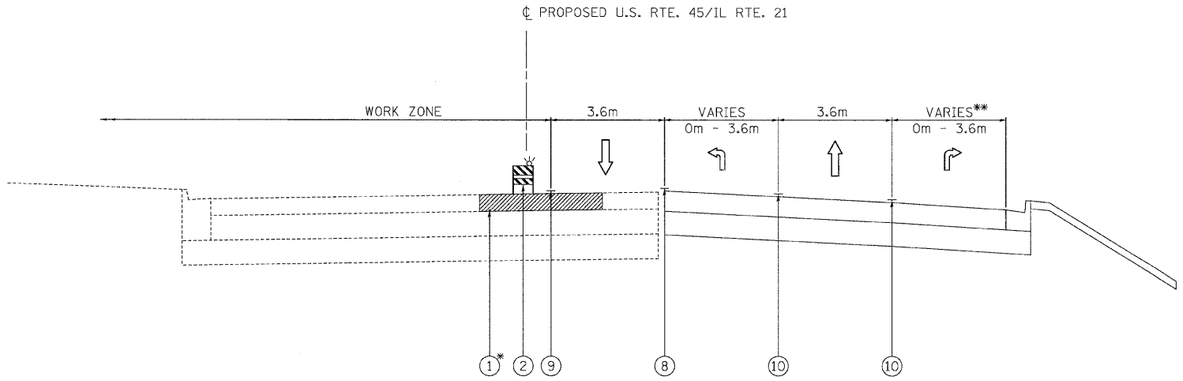
P:\Lisle\IDOT\9171.AO\Drawings\RDWY\Mi\Shts\MOT\MOT_TYP_A_L.dgn
tkoepper(Rdwy-Lisle) 2/5/2009 5:07:07 PM PDF(Grey_Large).plt

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	22
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



STAGE 1

STATION 104+517.919 TO STATION 105+132 - IL RTE. 22
STATION 9+845 TO STATION 10+158 - U.S. RTE. 45/IL RTE. 21
*ACTUAL LIMITS ARE SHOWN ON PLAN VIEW



STAGE 1A & 2

STATION 9+845.844 TO STATION 10+158.234 - U.S. RTE. 45/IL RTE. 21
*ACTUAL LIMITS ARE SHOWN ON PLAN VIEW
**RIGHT TURN LANE CREATED BETWEEN STA. 9+845.844 AND STA. 9+970.000

LEGEND

1. TEMPORARY PAVEMENT
2. TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS (15m C-C, 7.5m @ TAPERS & 3.5m ALONG RADII)
3. MEDIAN REMOVAL
4. CONCRETE CURB & GUTTER REMOVAL
5. THERMOPLASTIC PVMT MKG, 100mm (DOUBLE YELLOW)
6. THERMOPLASTIC PVMT MKG, 100mm (YELLOW EDGE LINE)
7. THERMOPLASTIC PVMT MKG, 150mm (WHITE LANE LINE)
8. PVMT MKG TAPE, TYPE III, 100mm (DOUBLE YELLOW)
9. PVMT MKG TAPE, TYPE III, 100mm (EDGE LINE)
10. PVMT MKG TAPE, TYPE III, 150mm (WHITE LANE LINE)

REVISIONS	
NAME	DATE

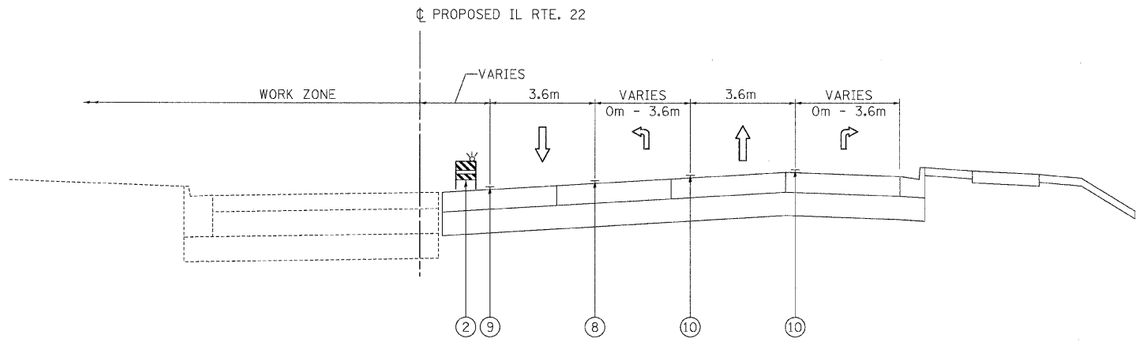
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION AND TRAFFIC CONTROL
TYPICAL SECTIONS - STAGE 1, 1A, & 2

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

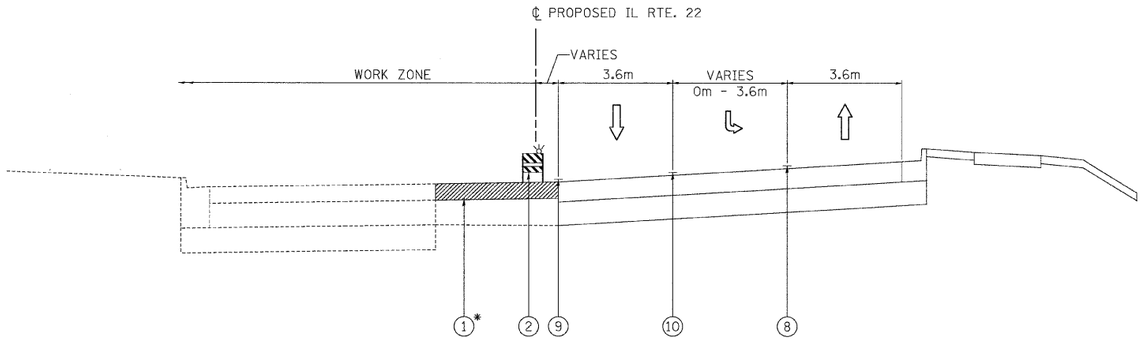
P:\Lisle\IDOT\917.AC\Drawings\RDWY\MINSht+s\MOT\MOT_TYP_ALL.dgn
PDF(Grey_Large).plt
5:07:09 PM
2/5/2009
+koeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	23
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



STAGE 2

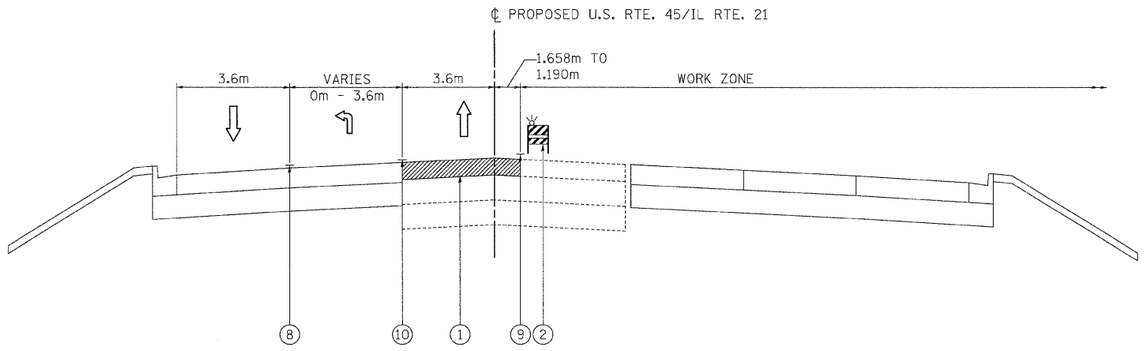
STATION 104+517.919 TO STATION 104+800 - IL RTE. 22



STAGE 2

STATION 104+840 TO STATION 105+132.181 - IL RTE. 22

*ACTUAL LIMITS ARE SHOWN ON PLAN VIEW



STAGE 2A

STATION 9+845.844 TO STATION 10+000.000 - U.S. RTE. 45/IL RTE. 21

LEGEND

1. TEMPORARY PAVEMENT
2. TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS (15m C-C, 7.5m @ TAPERS & 3.5m ALONG RADII)
3. MEDIAN REMOVAL
4. CONCRETE CURB & GUTTER REMOVAL
5. THERMOPLASTIC PVMT MKG, 100mm (DOUBLE YELLOW)
6. THERMOPLASTIC PVMT MKG, 100mm (YELLOW EDGE LINE)
7. THERMOPLASTIC PVMT MKG, 150mm (WHITE LANE LINE)
8. PVMT MKG TAPE, TYPE III, 100mm (DOUBLE YELLOW)
9. PVMT MKG TAPE, TYPE III, 100mm (EDGE LINE)
10. PVMT MKG TAPE, TYPE III, 150mm (WHITE LANE LINE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 337 (IL ROUTE 22)

SUGGESTED STAGING OF CONSTRUCTION AND TRAFFIC CONTROL

TYPICAL SECTIONS - 2 & 2A

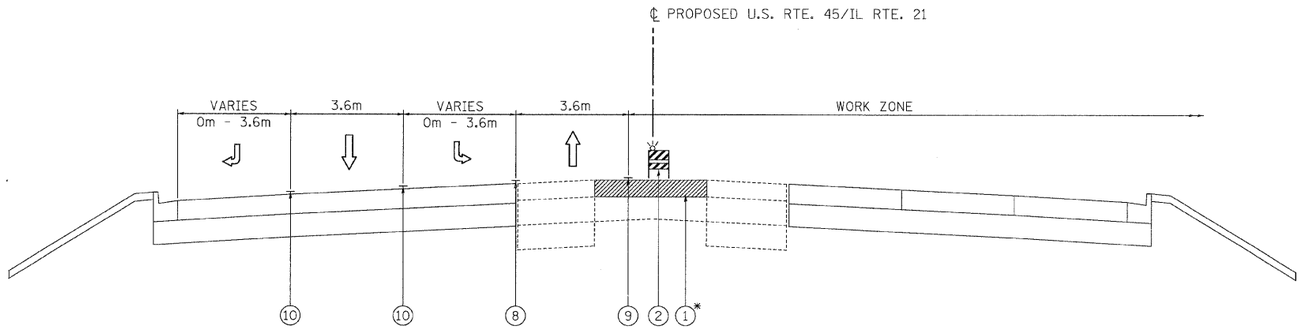
SCALE: 1:500 DRAWN BY: KEF

DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MIN Shts\MOT\MOT_TYP_ALL.dgn tkoeppen(Rdwy-Lisle) 2/5/2009 5:07:10 PM PDF(Grey_Large).pit P:\Lisle\IDOT\917.A0\Drawings\RDWY\MIN Shts\MOT\MOT_TYP_ALL.dgn

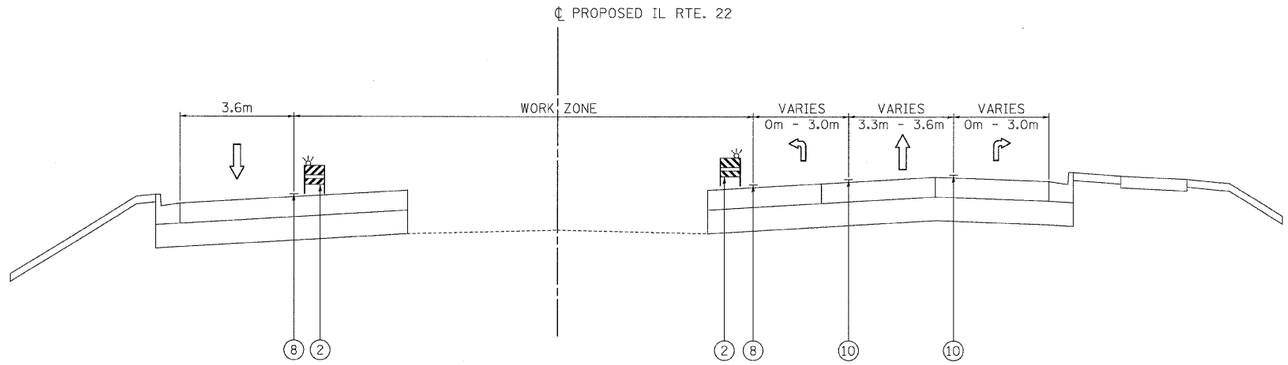
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	24
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



STAGE 2A

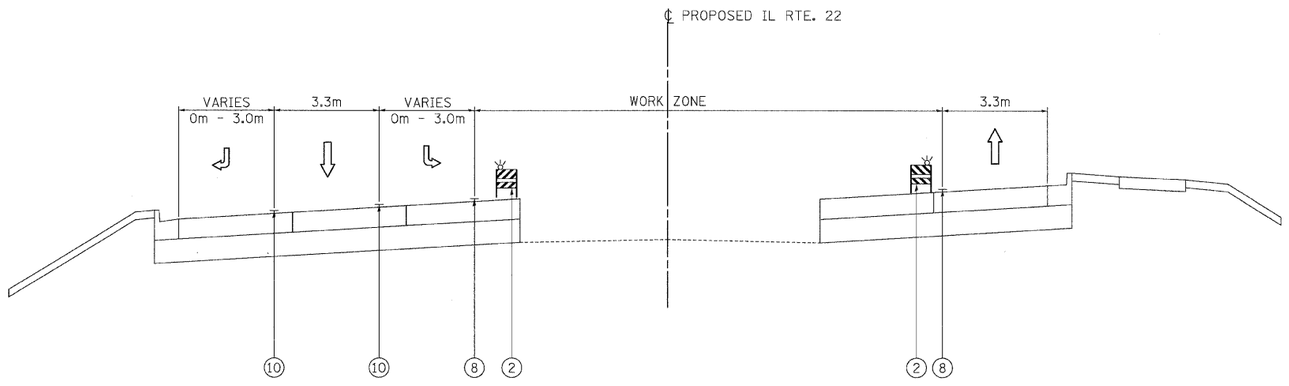
STATION 10+000 TO STATION 10+158.234 - U.S. RTE. 45/IL RTE. 21

*ACTUAL LIMITS ARE SHOWN ON PLAN VIEW



STAGE 3

STATION 104+517.919 TO STATION 104+805 - IL RTE. 22



STAGE 3

STATION 104+830 TO STATION 105+132.181 - IL RTE. 22

LEGEND

1. TEMPORARY PAVEMENT
2. TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS (15m C-C, 7.5m @ TAPERS & 3.5m ALONG RADII)
3. MEDIAN REMOVAL
4. CONCRETE CURB & GUTTER REMOVAL
5. THERMOPLASTIC PVMT MKG, 100mm (DOUBLE YELLOW)
6. THERMOPLASTIC PVMT MKG, 100mm (YELLOW EDGE LINE)
7. THERMOPLASTIC PVMT MKG, 150mm (WHITE LANE LINE)
8. PVMT MKG TAPE, TYPE III, 100mm (DOUBLE YELLOW)
9. PVMT MKG TAPE, TYPE III, 100mm (EDGE LINE)
10. PVMT MKG TAPE, TYPE III, 150mm (WHITE LANE LINE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 337 (IL ROUTE 22)

SUGGESTED STAGING OF CONSTRUCTION AND TRAFFIC CONTROL

TYPICAL SECTIONS - STAGE 2A & 3

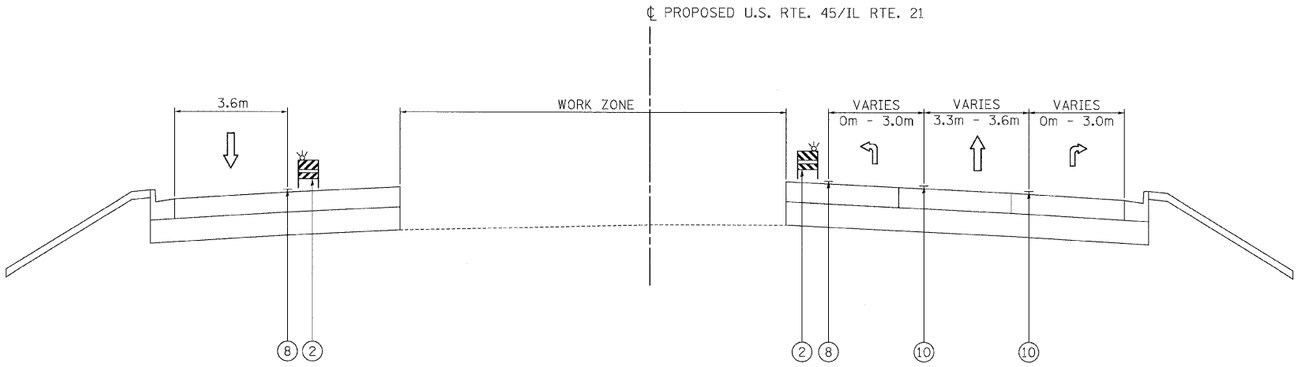
SCALE: 1:500 DRAWN BY: KEF

DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

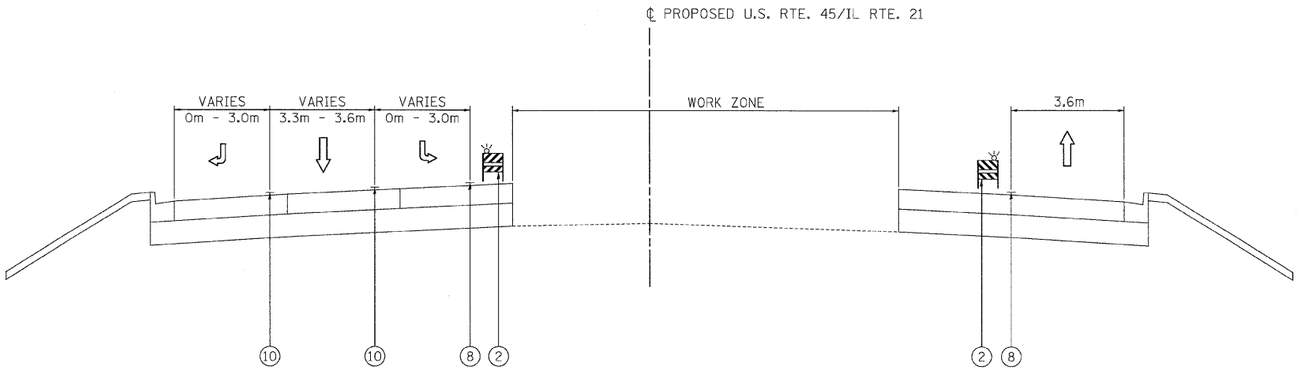
tkoeppen(Rdwy_Lisle) 2/5/2009 5:07:12 PM PDF(Grey_Large).plt P:\Lisle\IDOT\917.AO\Drawings\RDWY\Mill\Shts\MOT\MOT_TYP_ALL.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	25
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



STAGE 3

STATION 9+845 TO STATION 9+980 - U.S. RTE. 45/IL RTE. 21



STAGE 3

STATION 10+025 TO STATION 10+158 - U.S. RTE. 45/IL RTE. 21

LEGEND

1. TEMPORARY PAVEMENT
2. TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS (15m C-C, 7.5m @ TAPERS & 3.5m ALONG RADII)
3. MEDIAN REMOVAL
4. CONCRETE CURB & GUTTER REMOVAL
5. THERMOPLASTIC PVMT MKG, 100mm (DOUBLE YELLOW)
6. THERMOPLASTIC PVMT MKG, 100mm (YELLOW EDGE LINE)
7. THERMOPLASTIC PVMT MKG, 150mm (WHITE LANE LINE)
8. PVMT MKG TAPE, TYPE III, 100mm (DOUBLE YELLOW)
9. PVMT MKG TAPE, TYPE III, 100mm (EDGE LINE)
10. PVMT MKG TAPE, TYPE III, 150mm (WHITE LANE LINE)

REVISIONS NAME	DATE

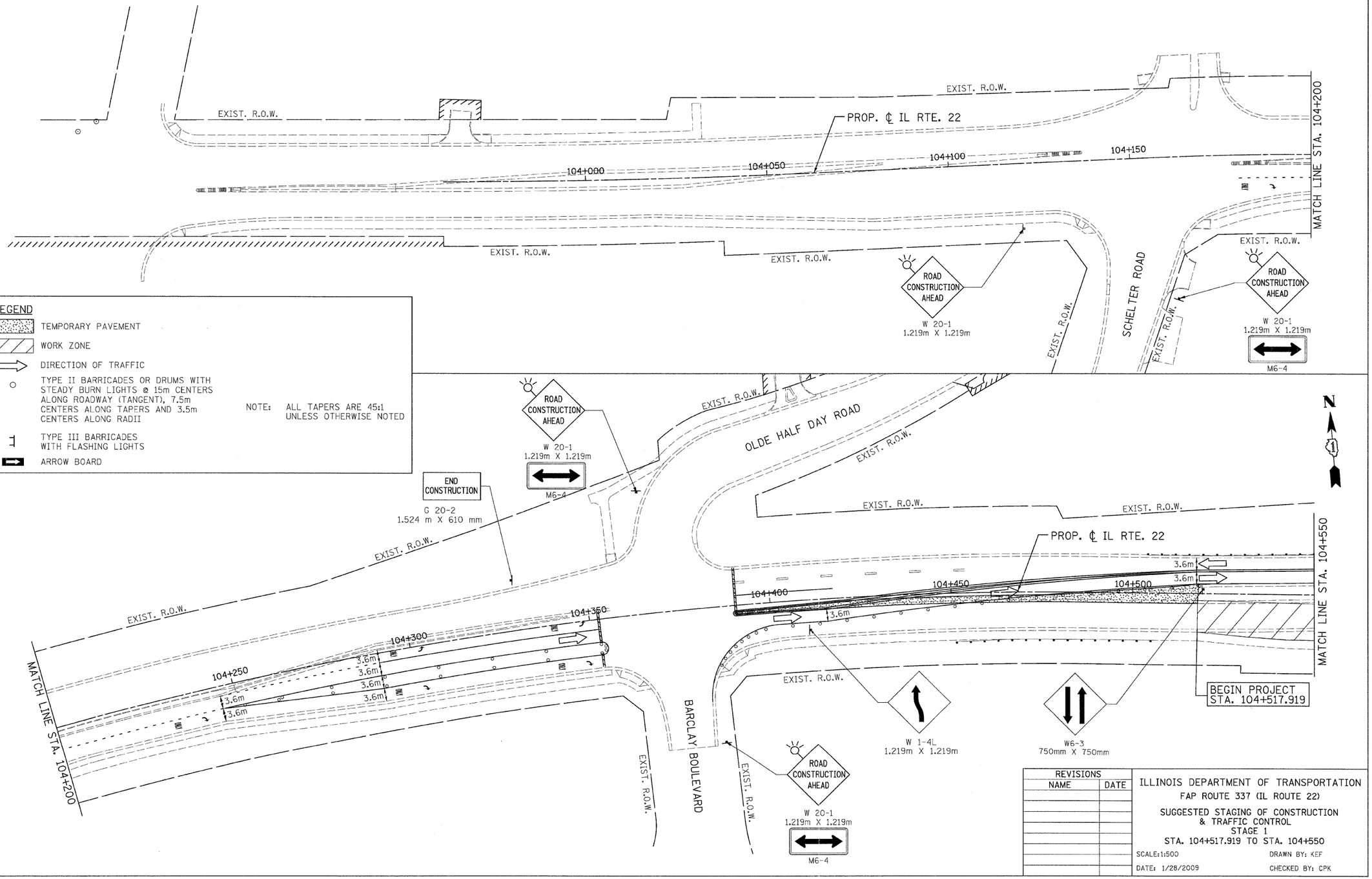
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION AND TRAFFIC CONTROL
TYPICAL SECTIONS - STAGE 3

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/5/2009 5:07:14 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9171.A0\Drawings\RDWY\MI\Shts\MOT\MOT_TYP_ALL.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	26
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

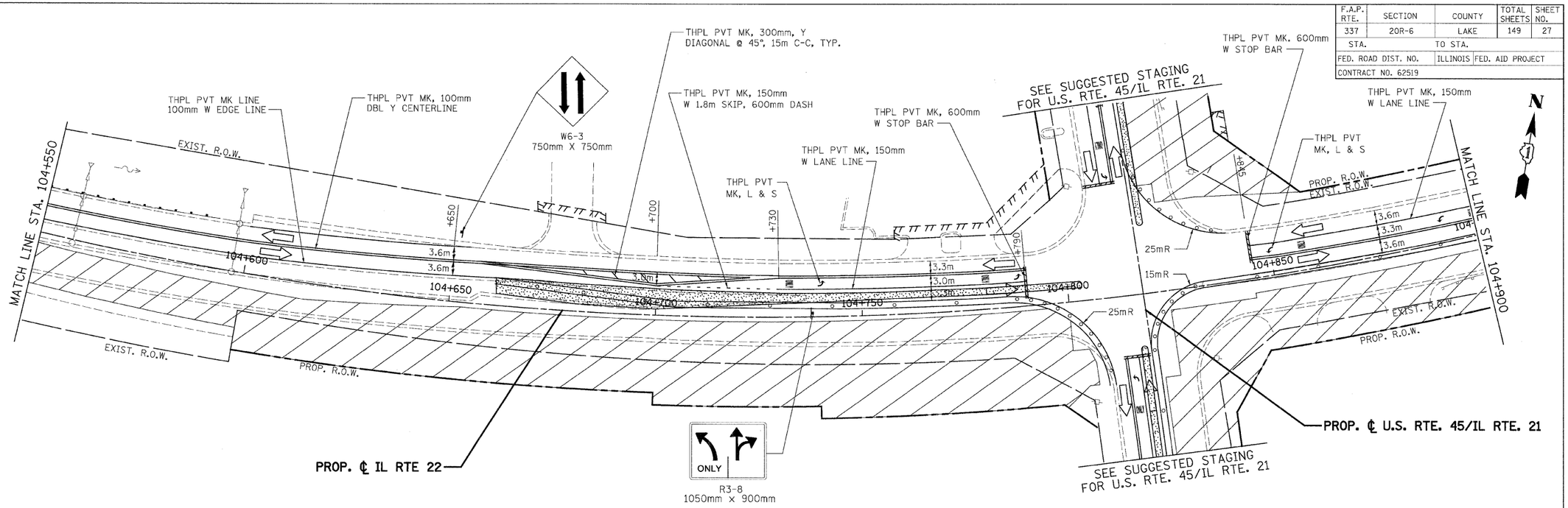
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 1
STA. 104+517.919 TO STA. 104+550

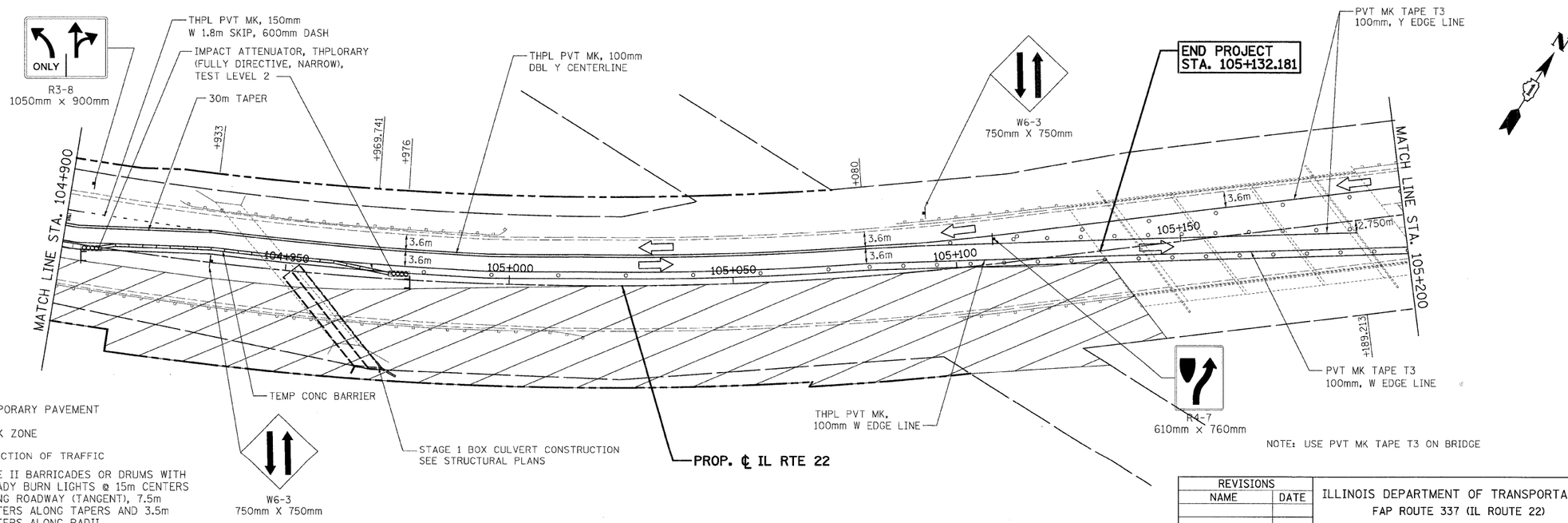
SCALE:1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MiscSht\MOT_S_MOT_01.00.dgn PDF(Grey_Large).plt 5:07:20 PM 2/5/2009 tkoepcen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				





LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

REVISIONS	
NAME	DATE

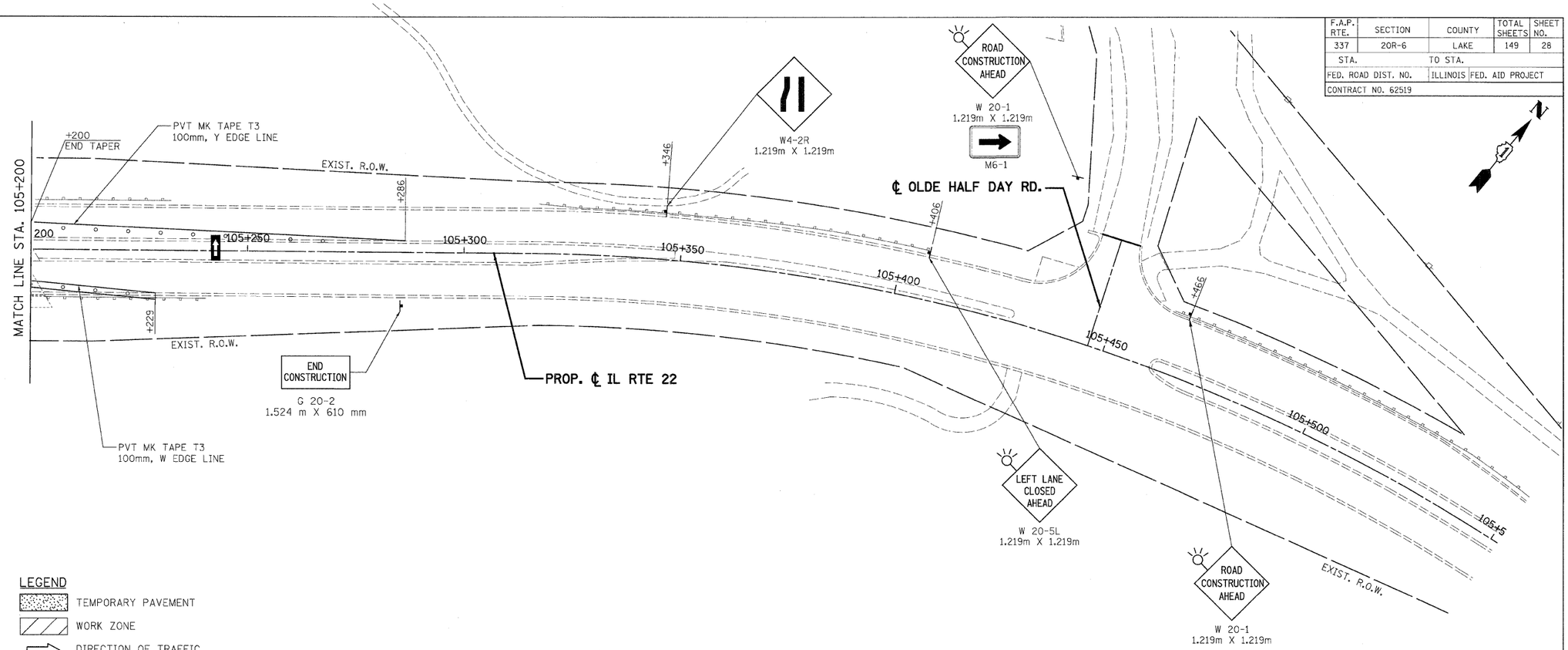
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 1
STA. 104+550 TO STA. 105+200

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MINShts\MOTS_MOT_01.dgn
PDF(Grey_Large).plt
5:07:30 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	28
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SUGGESTED STAGING OF CONSTRUCTION
& TRAFFIC CONTROL
STAGE 1
STA. 105+200 TO STA. 105+466

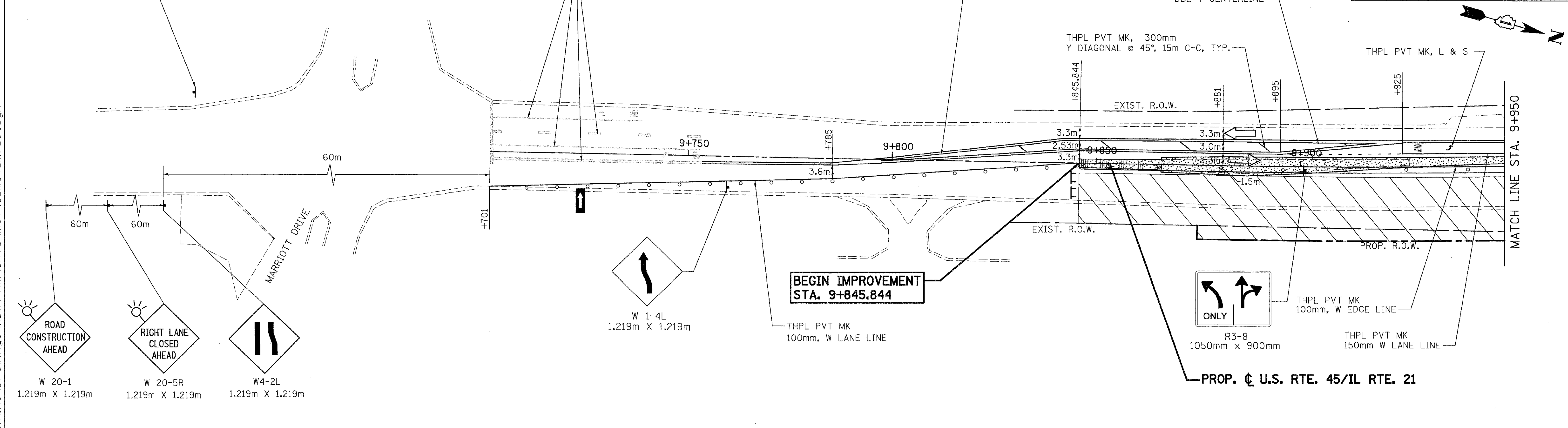
SCALE:1:500 DRAWN BY: KEF

DATE: 1/28/2009 CHECKED BY: CPK

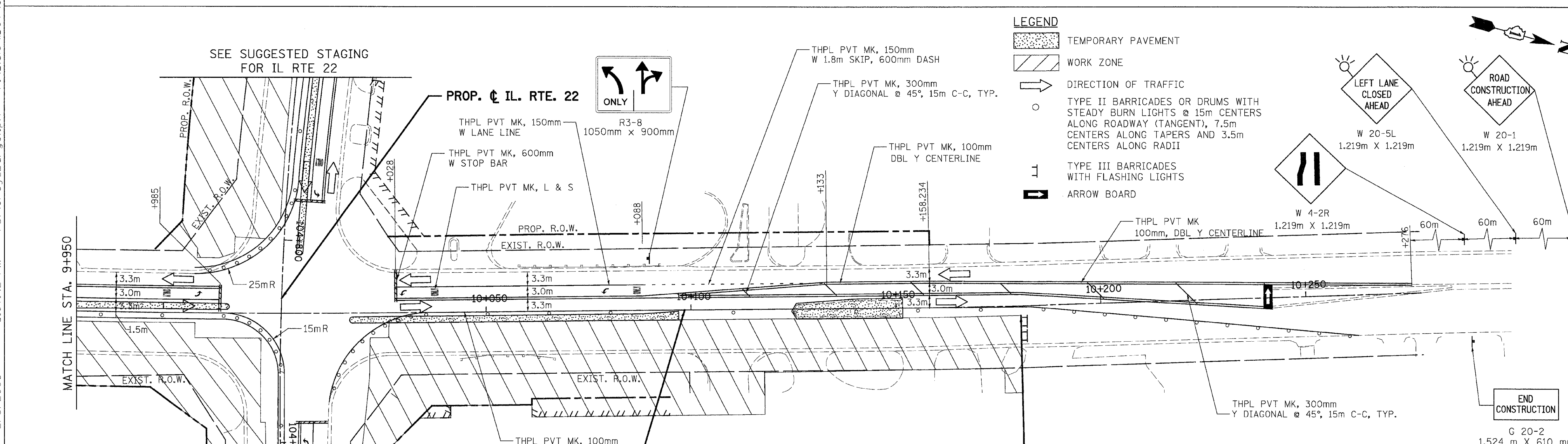
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MIShts\MOTS_MOT_01_02.dgn PDF(Grey_Large).plt 5:07:38 PM 2/5/2009 tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	29
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



END CONSTRUCTION
G 20-2
1.524 m X 610 mm
EXISTING PVT MK
THPL PVT MK
100mm, DBL Y CENTERLINE
THPL PVT MK, 100mm
DBL Y CENTERLINE
THPL PVT MK, 300mm
Y DIAGONAL @ 45°, 15m C-C, TYP.
THPL PVT MK, L & S
EXIST. R.O.W.
PROP. R.O.W.
MATCH LINE STA. 9+950
MARRIOTT DRIVE
60m
BEGIN IMPROVEMENT
STA. 9+845.844
ROAD CONSTRUCTION AHEAD
W 20-1
1.219m X 1.219m
RIGHT LANE CLOSED AHEAD
W 20-5R
1.219m X 1.219m
W4-2L
1.219m X 1.219m
W 1-4L
1.219m X 1.219m
THPL PVT MK
100mm, W LANE LINE
ONLY
R3-8
1050mm x 900mm
THPL PVT MK
100mm, W EDGE LINE
THPL PVT MK
150mm W LANE LINE
PROP. ℄ U.S. RTE. 45/IL RTE. 21



SEE SUGGESTED STAGING
FOR IL RTE 22
PROP. ℄ IL. RTE. 22
ONLY
R3-8
1050mm x 900mm
THPL PVT MK, 150mm
W LANE LINE
THPL PVT MK, 600mm
W STOP BAR
THPL PVT MK, L & S
THPL PVT MK, 150mm
W 1.8m SKIP, 600mm DASH
THPL PVT MK, 300mm
Y DIAGONAL @ 45°, 15m C-C, TYP.
THPL PVT MK, 100mm
DBL Y CENTERLINE
THPL PVT MK
100mm, DBL Y CENTERLINE
THPL PVT MK, 100mm
W EDGE LINE
MATCH LINE STA. 9+950
EXIST. R.O.W.
PROP. R.O.W.
25mR
15mR
END IMPROVEMENT
STA. 10+180.459
PROP. ℄ U.S. RTE. 45/IL RTE. 21
SEE SUGGESTED STAGING
FOR IL RTE 22
LEFT LANE CLOSED AHEAD
W 20-5L
1.219m X 1.219m
ROAD CONSTRUCTION AHEAD
W 20-1
1.219m X 1.219m
W 4-2R
1.219m X 1.219m
END CONSTRUCTION
G 20-2
1.524 m X 610 mm

LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 1
U.S. RTE. 45 / IL RTE 21 - STAGE 1

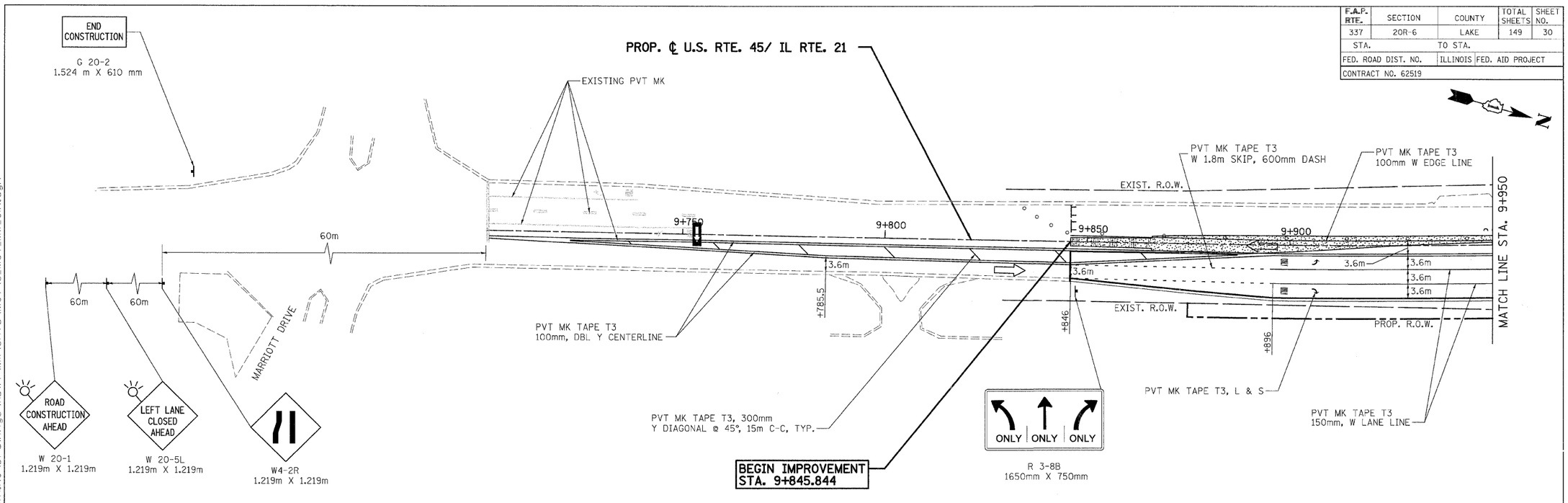
SCALE:1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

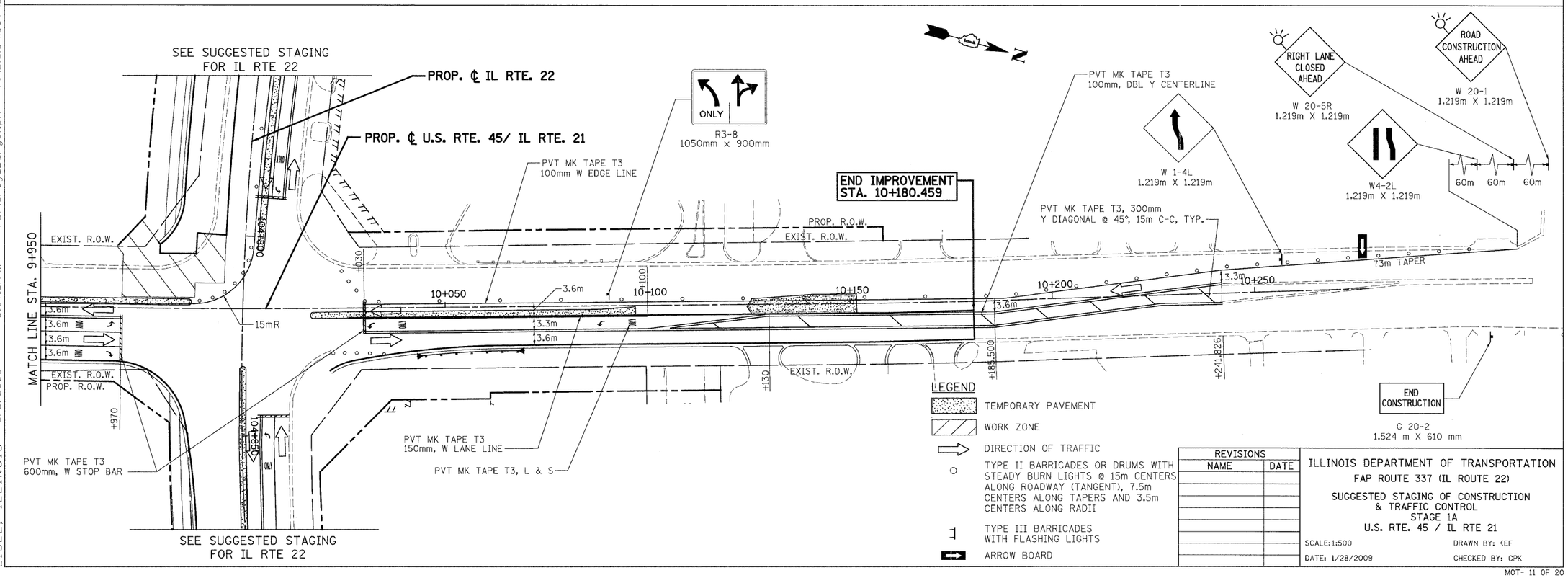
MOT- 10 OF 20

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/5/2009 5:07:42 PM PDF(Grey_Large).plt P:\Lisle\IDOT\97I.A0\Drawings\RDWY\MI\Shts\MOT\S_MOT_MW_01.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	30
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				





REVISIONS	
NAME	DATE

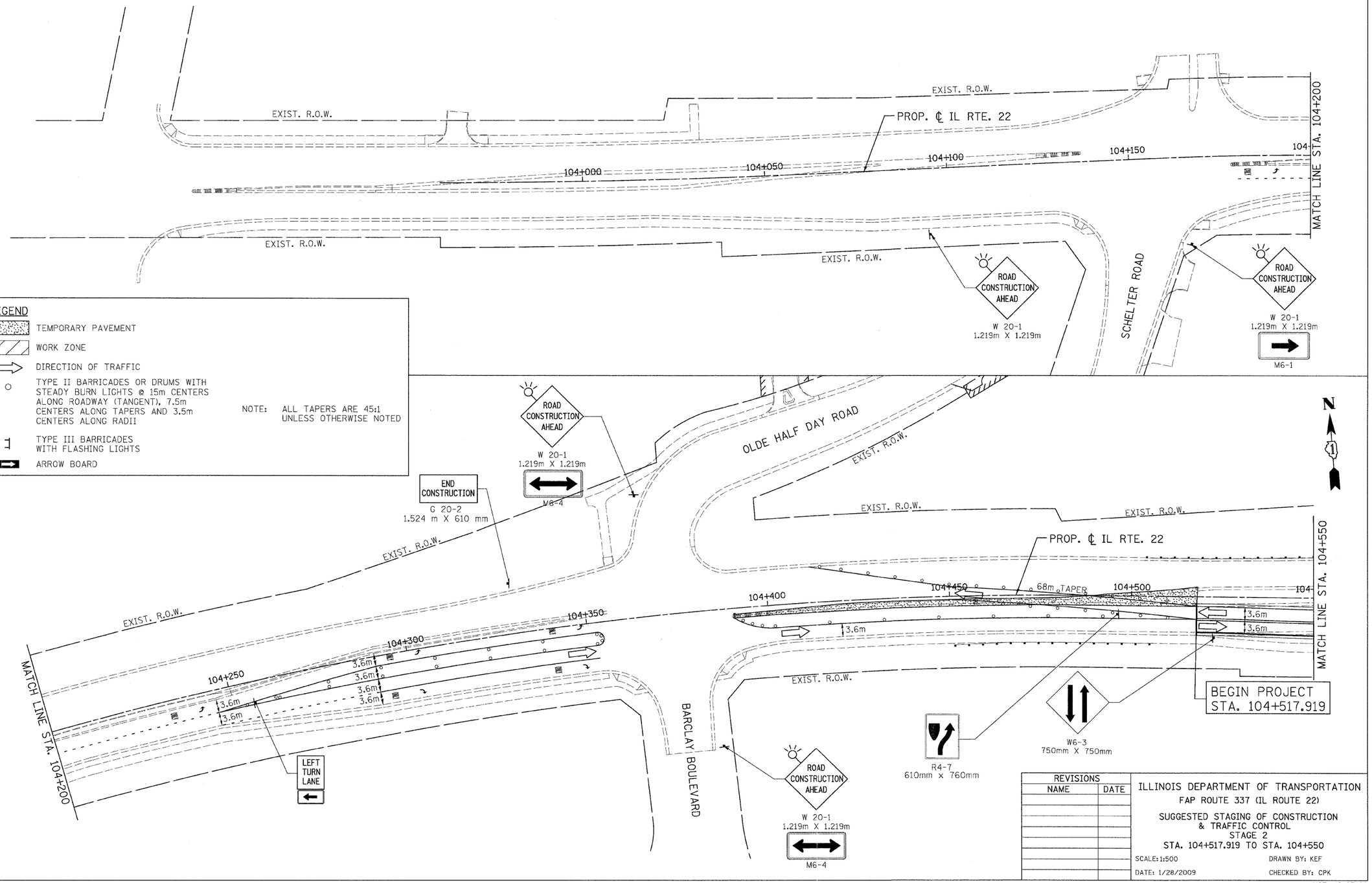
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION
& TRAFFIC CONTROL
STAGE 1A
U.S. RTE. 45 / IL RTE 21

SCALE:1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen\Rdwy-Lisle) 5:07:51 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MI\Shts\MOT\S_MOT_MW_01A.dgn
2/5/2009

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	31
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 2
STA. 104+517.919 TO STA. 104+550

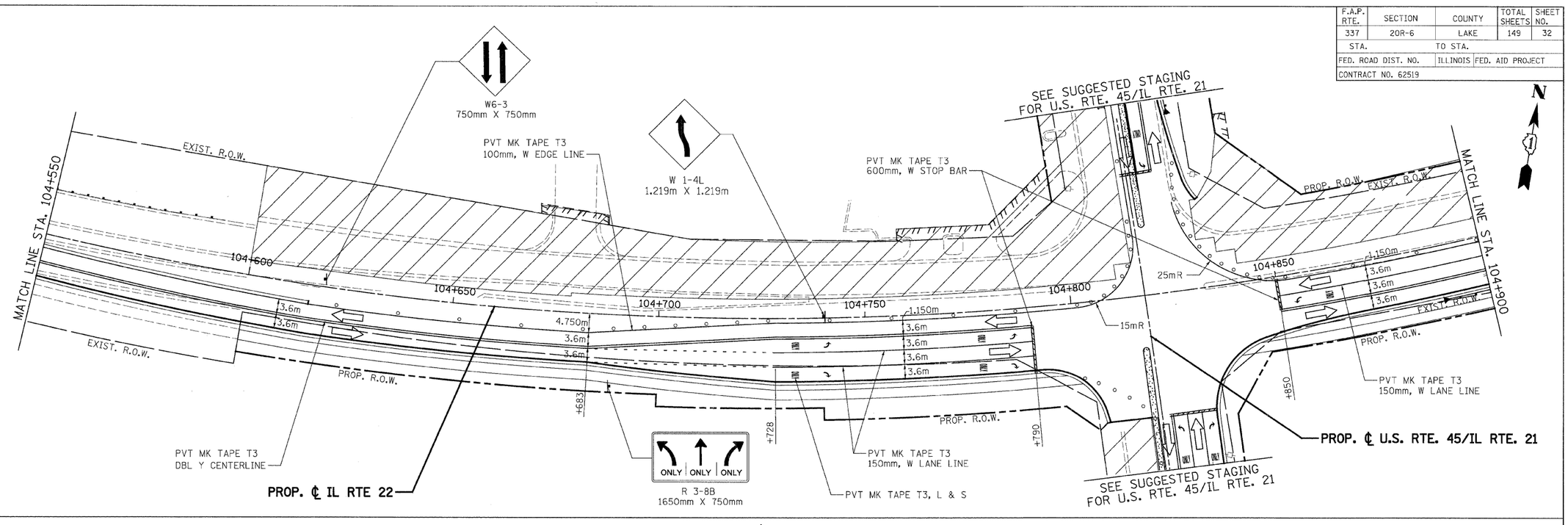
SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

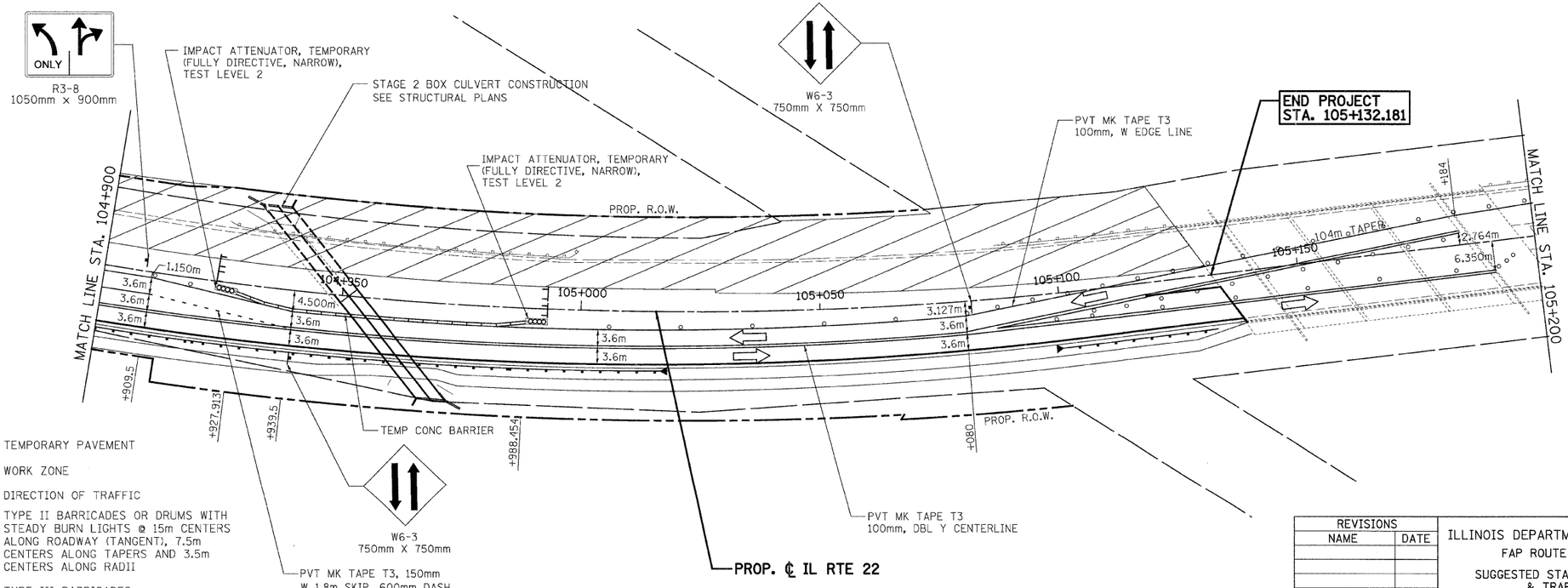
MOT- 12 OF 20

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MiscShts\MOTS_MOT_02_00.cgn
PDF(Grey_Large).pltkoeppen(Rdwy_Lisle) 2/5/2009 5:07:59 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	32
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				





LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

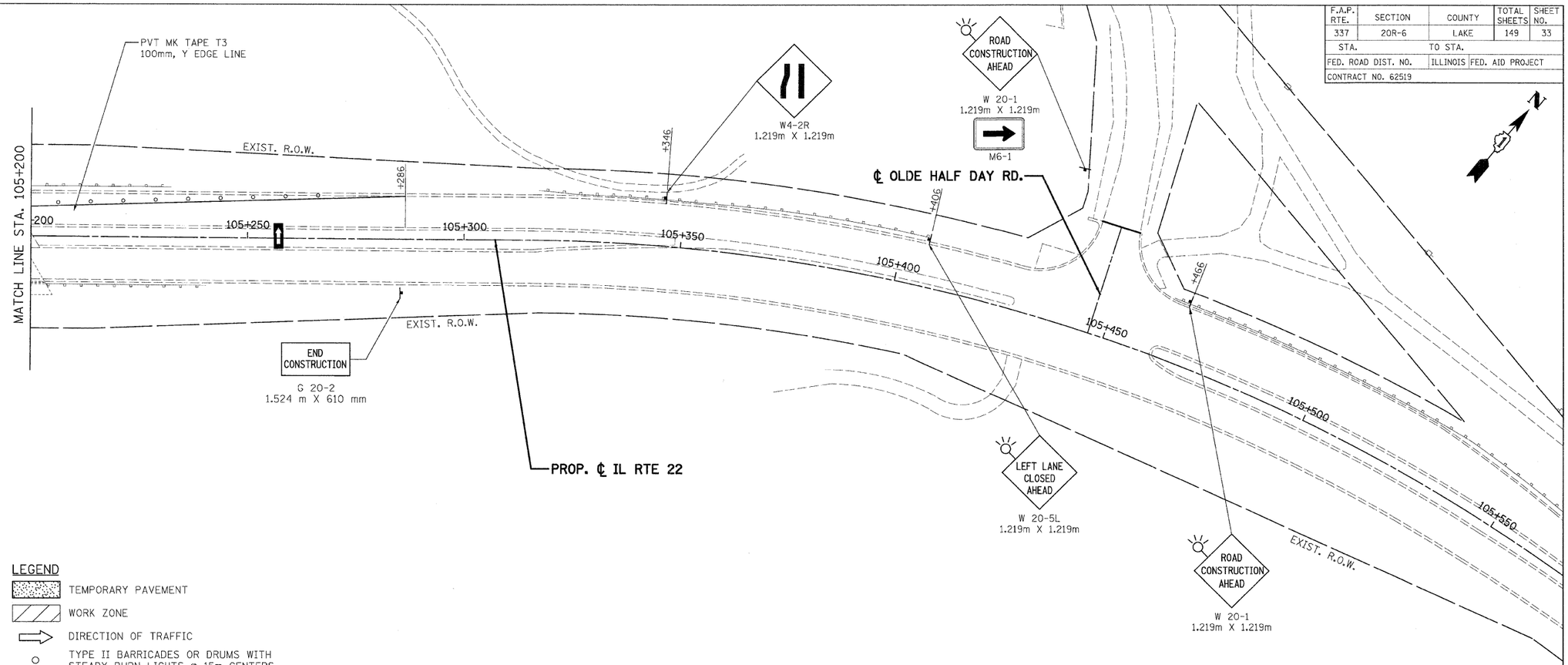
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 2
STA. 104+550 TO STA. 105+200

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MIShts\MOTS_MOT_02_01.dgn
tkoeppen(Rdwy_Lisle) 2/5/2009 5:08:09 PM PDF(Grey_Large).plt

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SUGGESTED STAGING OF CONSTRUCTION
& TRAFFIC CONTROL
STAGE 2
STA. 105+200 TO STA. 105+466

SCALE: 1:500 DRAWN BY: KEF

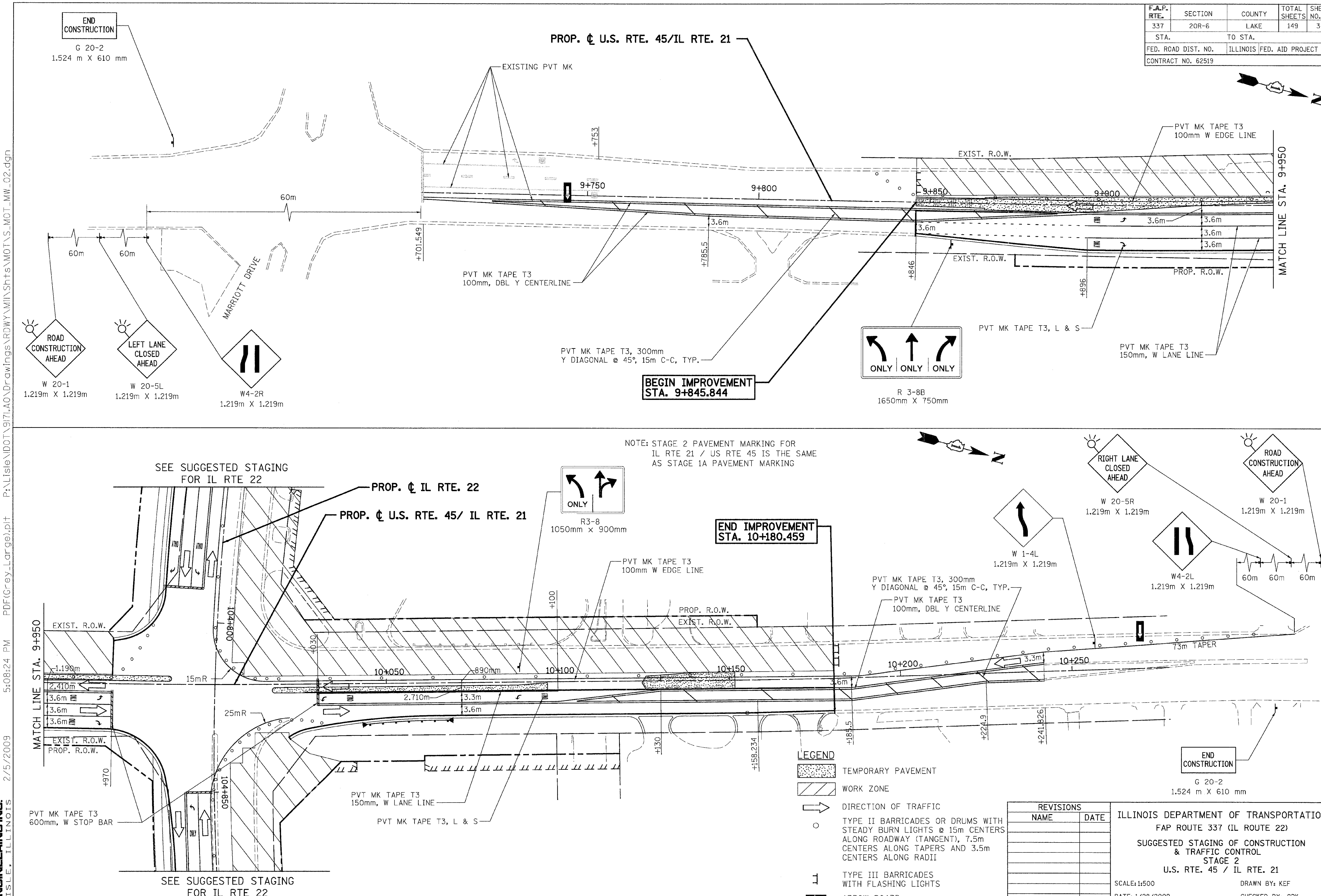
DATE: 1/28/2009 CHECKED BY: CPK

MOT- 14 OF 20

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\917A.00\Drawings\RDWY\MIN\Shts\MOT\S_MOT_02_02.dgn
PDF(Grey_Large).plt
5:08:19 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	34
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



END CONSTRUCTION
G 20-2
1.524 m X 610 mm
PROP. ℄ U.S. RTE. 45/IL RTE. 21
EXISTING PVT MK
PVT MK TAPE T3
100mm W EDGE LINE
EXIST. R.O.W.
MATCH LINE STA. 9+950
9+750
9+800
9+850
9+900
60m
+753
+701.549
+785.5
+846
+896
3.6m
PROP. R.O.W.
MARRIOTT DRIVE
PVT MK TAPE T3
100mm, DBL Y CENTERLINE
PVT MK TAPE T3, 300mm
Y DIAGONAL @ 45°, 15m C-C, TYP.
BEGIN IMPROVEMENT
STA. 9+845.844
ONLY ONLY ONLY
R 3-8B
1650mm X 750mm
PVT MK TAPE T3, L & S
PVT MK TAPE T3
150mm, W LANE LINE
ROAD CONSTRUCTION AHEAD
W 20-1
1.219m X 1.219m
LEFT LANE CLOSED AHEAD
W 20-5L
1.219m X 1.219m
W4-2R
1.219m X 1.219m
NOTE: STAGE 2 PAVEMENT MARKING FOR IL RTE 21 / US RTE 45 IS THE SAME AS STAGE 1A PAVEMENT MARKING
SEE SUGGESTED STAGING FOR IL RTE 22
PROP. ℄ IL RTE. 22
PROP. ℄ U.S. RTE. 45/ IL RTE. 21
ONLY
R3-8
1050mm x 900mm
END IMPROVEMENT
STA. 10+180.459
PVT MK TAPE T3
100mm W EDGE LINE
PVT MK TAPE T3, 300mm
Y DIAGONAL @ 45°, 15m C-C, TYP.
PVT MK TAPE T3
100mm, DBL Y CENTERLINE
W 1-4L
1.219m X 1.219m
RIGHT LANE CLOSED AHEAD
W 20-5R
1.219m X 1.219m
ROAD CONSTRUCTION AHEAD
W 20-1
1.219m X 1.219m
W4-2L
1.219m X 1.219m
60m 60m 60m
73m TAPER
10+050
10+100
10+150
10+200
10+250
104+800
104+850
1.190m
2.410m
2.710m
890mm
3.3m
3.6m
15mR
25mR
+030
+100
+970
+130
+158.234
+185.5
+224.9
+241.826
MATCH LINE STA. 9+950
EXIST. R.O.W.
PROP. R.O.W.
PVT MK TAPE T3
600mm, W STOP BAR
PVT MK TAPE T3
150mm, W LANE LINE
PVT MK TAPE T3, L & S
SEE SUGGESTED STAGING FOR IL RTE 22
END CONSTRUCTION
G 20-2
1.524 m X 610 mm

LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

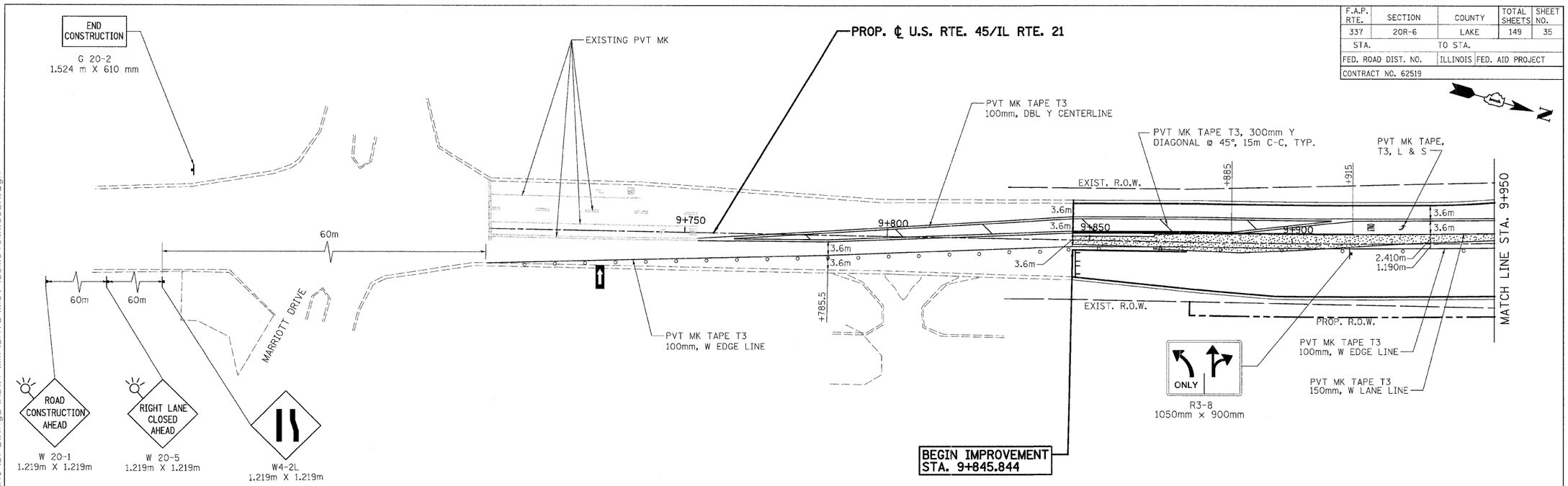
REVISIONS	
NAME	DATE

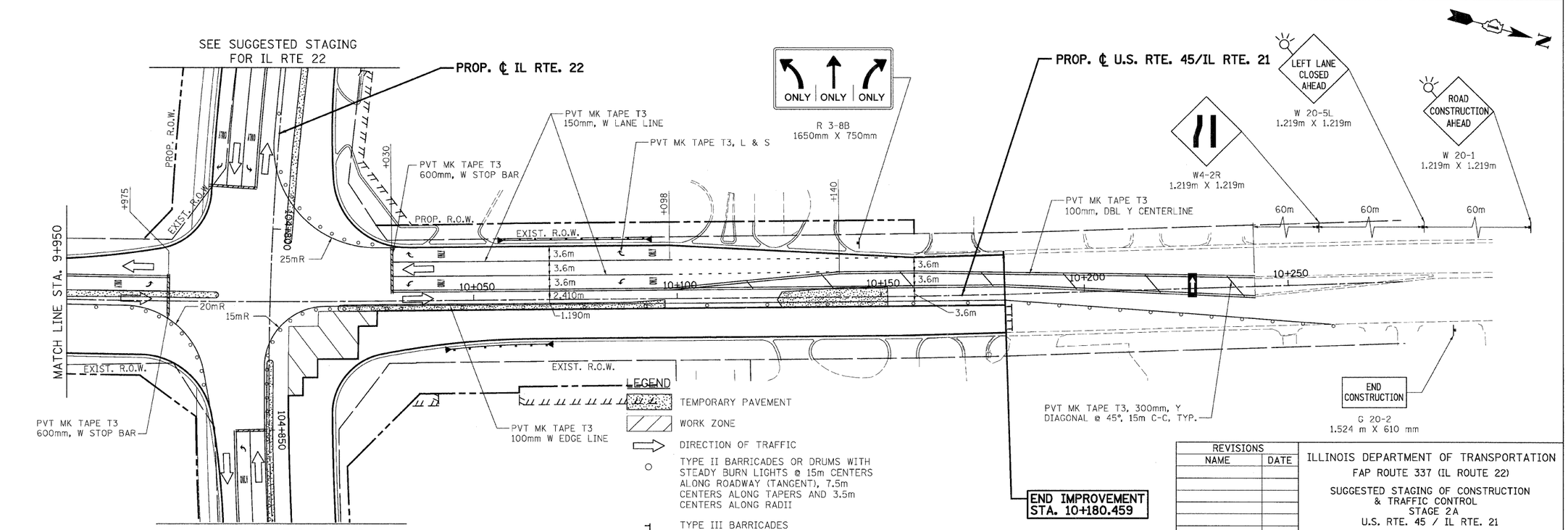
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 2
U.S. RTE. 45 / IL RTE. 21

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS
tkoeppen(Rdwy_Lisle) 2/5/2009 5:08:24 PM PDF(Grey_Large).plt P:\Lisle\IDOT\917LA0\Drawings\RDWY\MIN\Shts\MOT\S_MOT_MW_02.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	35
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				





REVISIONS	
NAME	DATE

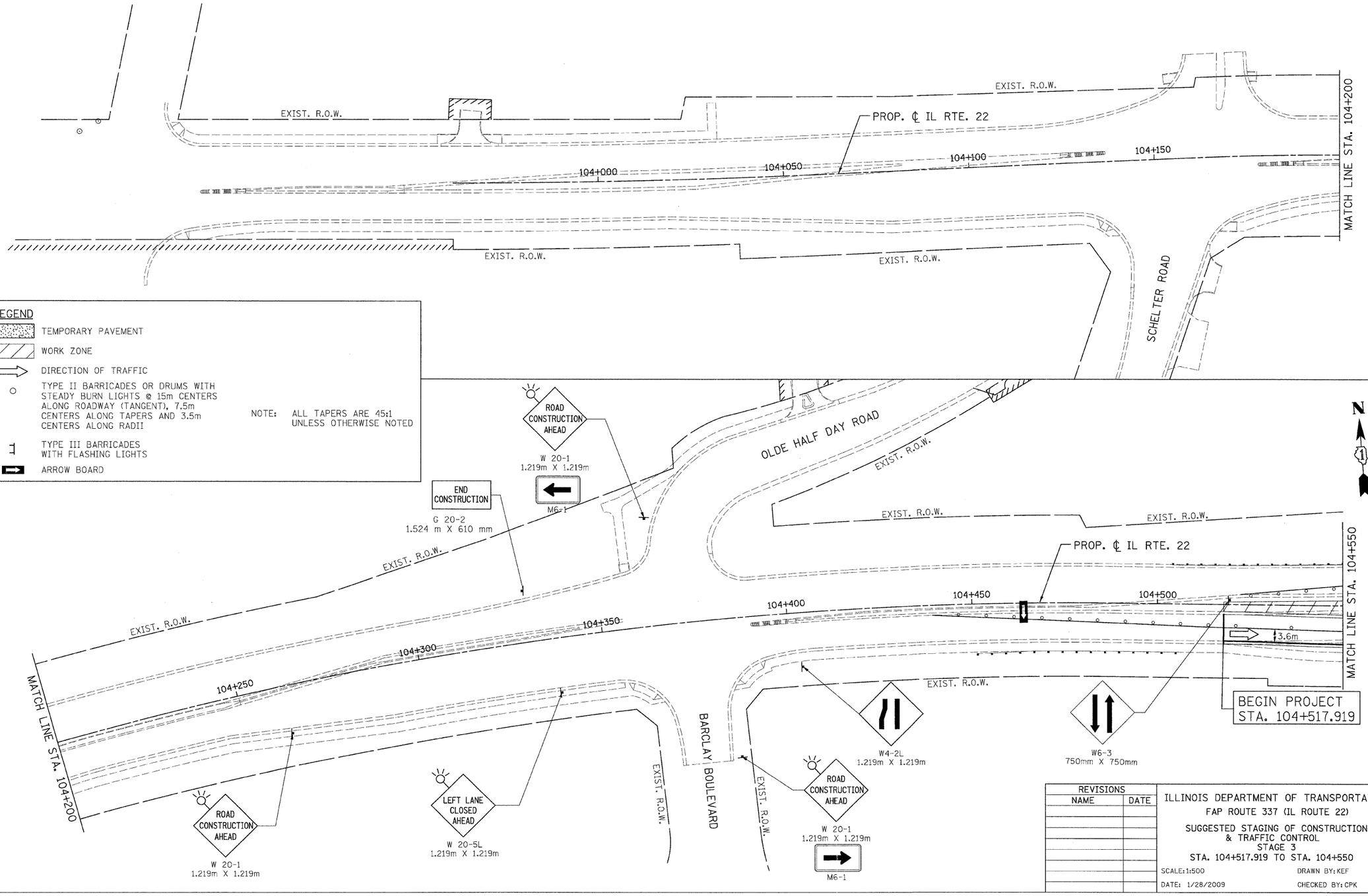
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 2A
U.S. RTE. 45 / IL RTE. 21

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MISht s\MOT\S_MOT_MW_02A.dgn tkoeppen(Rdwy_Lisle) 2/5/2009 5:08:33 PM PDF(Grey_Large).plt

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	36
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

REVISIONS	
NAME	DATE

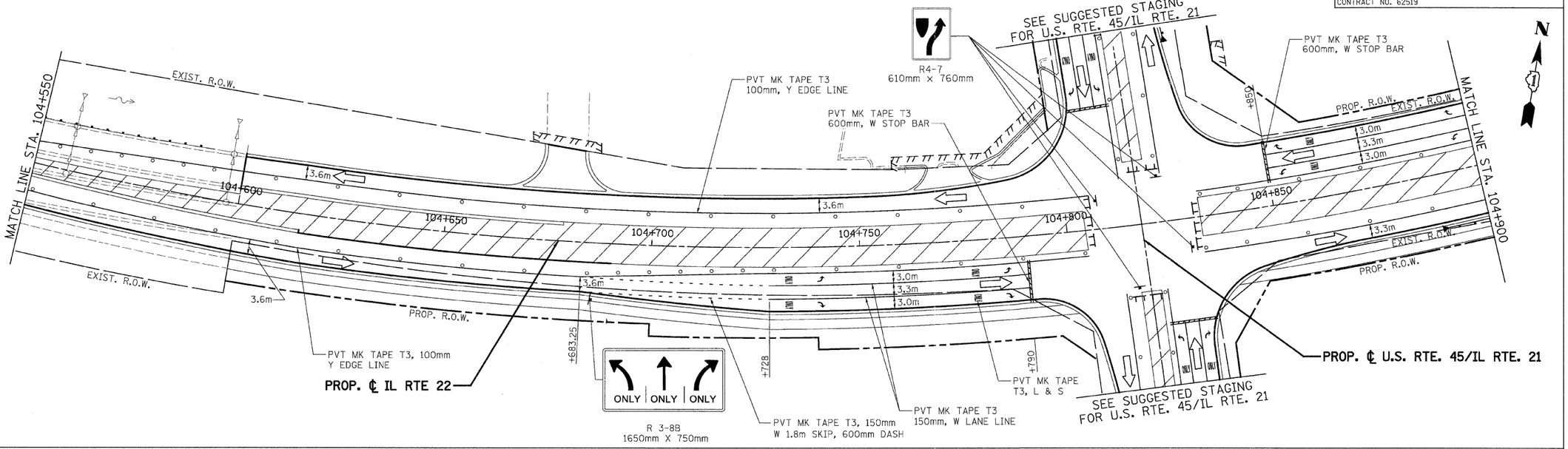
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 3
STA. 104+517.919 TO STA. 104+550

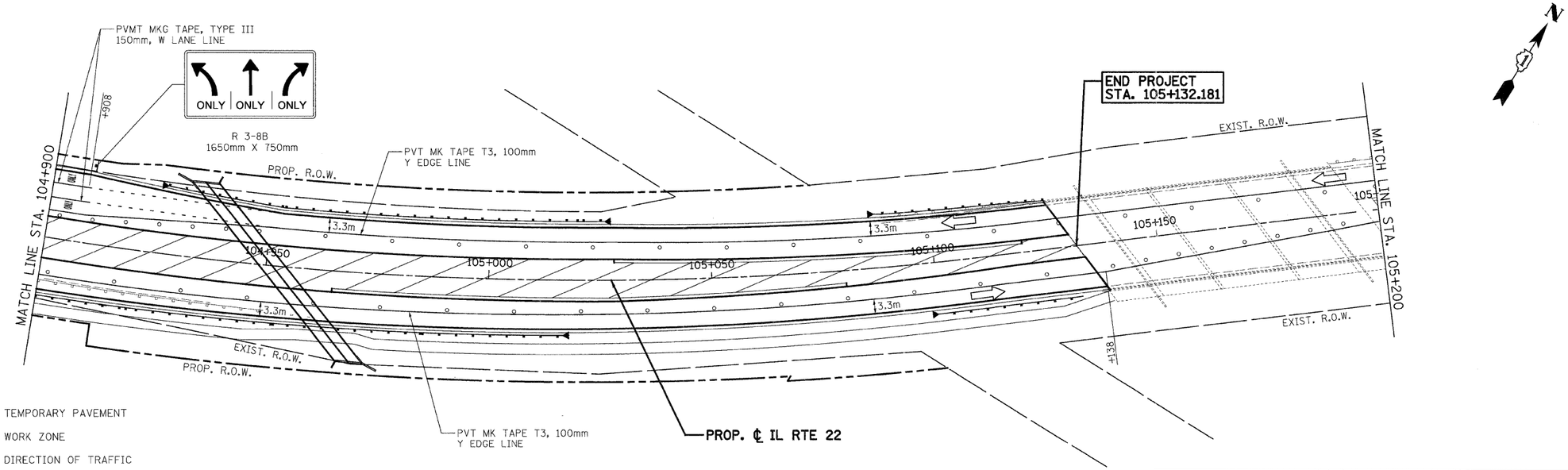
SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MIShts\MOTS_MOT_03_00.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy-Lisle)
2/5/2009 5:08:41PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	37
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				





LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

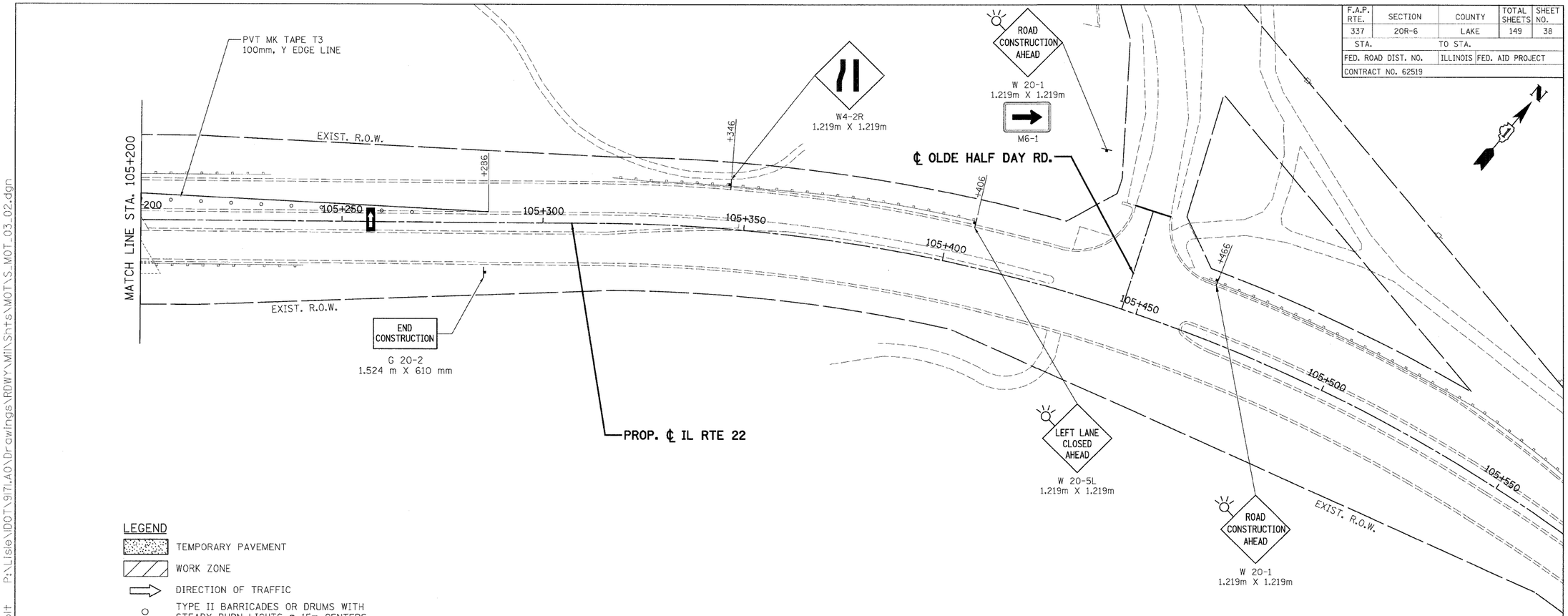
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 3
STA. 104+550 TO STA. 105+200

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mi\Shts\MOTS_MOT_03_01.dgn
PDF(Grey_Large).plt
5:08:50 PM
2/5/2009
tkoeppen(Rdwy-Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	38
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

NOTE: ALL TAPERS ARE 45:1 UNLESS OTHERWISE NOTED

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MISnts\MOT\S_MOT_03_02.dgn
PDF(Grey_Large).plt
5:08:59 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION & TRAFFIC CONTROL
STAGE 3
STA. 105+200 TO STA. 105+466

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	39
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

END CONSTRUCTION
G 20-2
1.524 m X 610 mm

EXISTING PVT MK

PVT MK TAPE T3, 100mm
Y EDGE LINE

EXIST. R.O.W.

9+750 9+800 9+850 9+900

3.6m 5.542m 3.6m 5.574m 3.6m 3.910m 3.0m 3.3m 3.0m

MATCH LINE STA. 9+950

60m 60m 60m

+753

MARRIOTT DRIVE

EXIST. R.O.W.

PROP. R.O.W.

+896

ROAD CONSTRUCTION AHEAD
W 20-1
1.219m X 1.219m

LEFT LANE CLOSED AHEAD
W 20-5L
1.219m X 1.219m

W4-2R
1.219m X 1.219m

PROP. ℄ U.S. RTE. 45/IL RTE 21

BEGIN IMPROVEMENT
STA. 9+845.844

ONLY ONLY ONLY
R 3-8B
1650mm X 750mm

PVT MK TAPE T3
150mm, W LANE LINE

PVT MK TAPE T3, L & S

SEE SUGGESTED STAGING
FOR IL RTE 22

PVT MK TAPE T3, L & S

PVT MK TAPE T3
150mm, W LANE LINE

PVT MK TAPE T3, 100mm
Y EDGE LINE

R4-7
610mm X 760mm

+030

10+800

PROP. R.O.W. +098

EXIST. R.O.W.

+040

3.0m 3.3m 3.0m 10+050 10+100 10+150 10+200 10+250

3.910m 6.010m 6.010m

3.6m 3.6m 3.6m

MATCH LINE STA. 9+950

+975

10+850

+241.826

PVT MK TAPE,
T3, 600mm
W STOP BAR

PROP. ℄ IL. RTE. 22

EXIST. R.O.W.

PROP. R.O.W.

SEE SUGGESTED STAGING
FOR IL RTE 22

PROP. ℄ U.S. RTE. 45/IL RTE. 21

END IMPROVEMENT
STA. 10+180.459

LEGEND

- TEMPORARY PAVEMENT
- WORK ZONE
- DIRECTION OF TRAFFIC
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN LIGHTS @ 15m CENTERS ALONG ROADWAY (TANGENT), 7.5m CENTERS ALONG TAPERS AND 3.5m CENTERS ALONG RADII
- TYPE III BARRICADES WITH FLASHING LIGHTS
- ARROW BOARD

END CONSTRUCTION
G 20-2
1.524 m X 610 mm

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
SUGGESTED STAGING OF CONSTRUCTION
& TRAFFIC CONTROL
STAGE 3
U.S. RTE. 45/IL RTE. 21

SCALE: 1:500 DRAWN BY: KEF
DATE: 1/28/2009 CHECKED BY: CPK

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MINShts\MOT\S_MOT_MW_03.dgn
PDF(Grey_Large).plt
5:09:03 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	40
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

MEDIAN REMOVAL
PAVEMENT REMOVAL
DRIVEWAY PAVEMENT REMOVAL
TREE REMOVAL

OLDE HALF DAY ROAD
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
BARCLAY BOULEVARD
PROP. ℄ IL RTE. 22
104+250
104+300
104+350
104+400
104+450
104+500
3.45
7.2
COMB CURB & GUTTER REMOVAL (TYP.)
MATCH LINE STA. 104+550
BEGIN PROJECT STA. 104+517.919
N
1

EXISTING
PROPOSED

OLDE HALF DAY ROAD
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
EXIST. R.O.W.
BARCLAY BOULEVARD
PROP. ℄ IL RTE. 22
104+250
104+300
104+350
104+400
104+450
104+500
2.750
50:1 TAPER
7.2
MATCH LINE STA. 104+550
BEGIN PROJECT STA. 104+517.919
N
1

202.5
200.0
197.5
PROP. PGL
BEGIN PROJECT STA. 104+517.919 ELEVATION 201.708
202.371
202.201
202.019
201.657
201.476
201.294
104+425
104+450
104+475
104+525
104+550
104+575

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

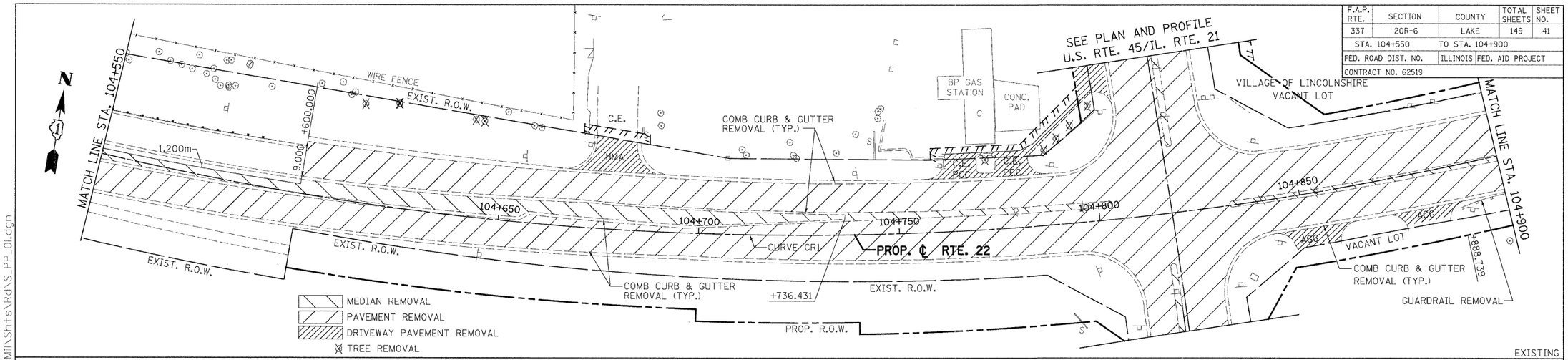
PLAN & PROFILE
STA. 107+517.919 TO STA. 104+550

SCALE: VERT. 1:50 HORIZ. 1:500
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

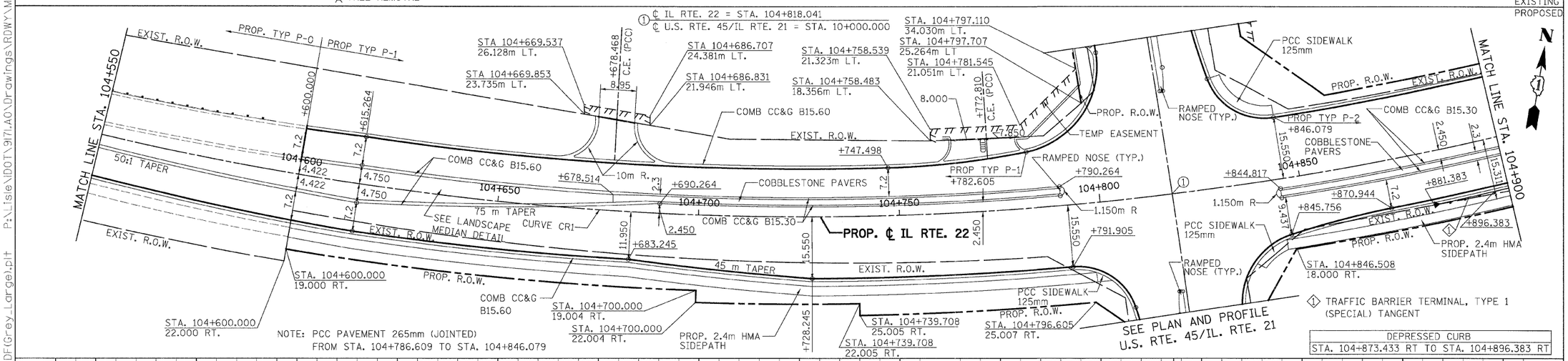
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MISht\RdwS_PP_00.dgn
PDF(Grey_Large).plt
5:09:13 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

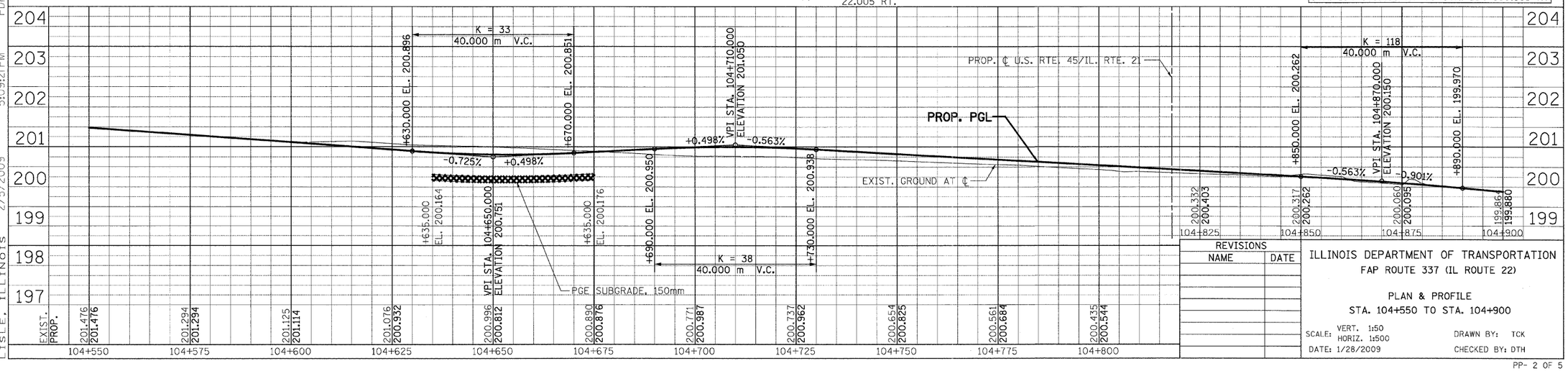
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	41
STA. 104+550	TO STA. 104+900			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



EXISTING
PROPOSED



DEPRESSED CURB
STA. 104+873.433 RT TO STA. 104+896.383 RT



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

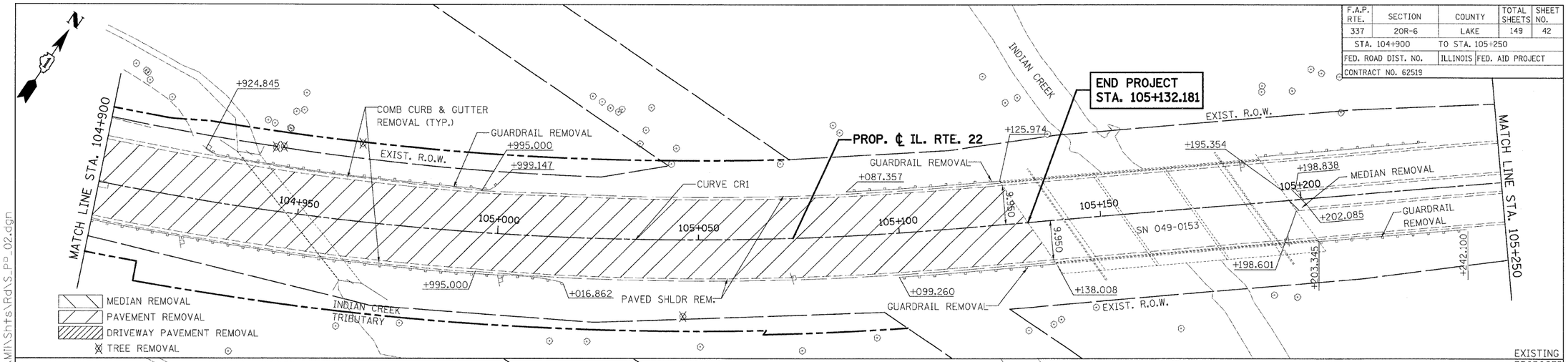
PLAN & PROFILE
STA. 104+550 TO STA. 104+900

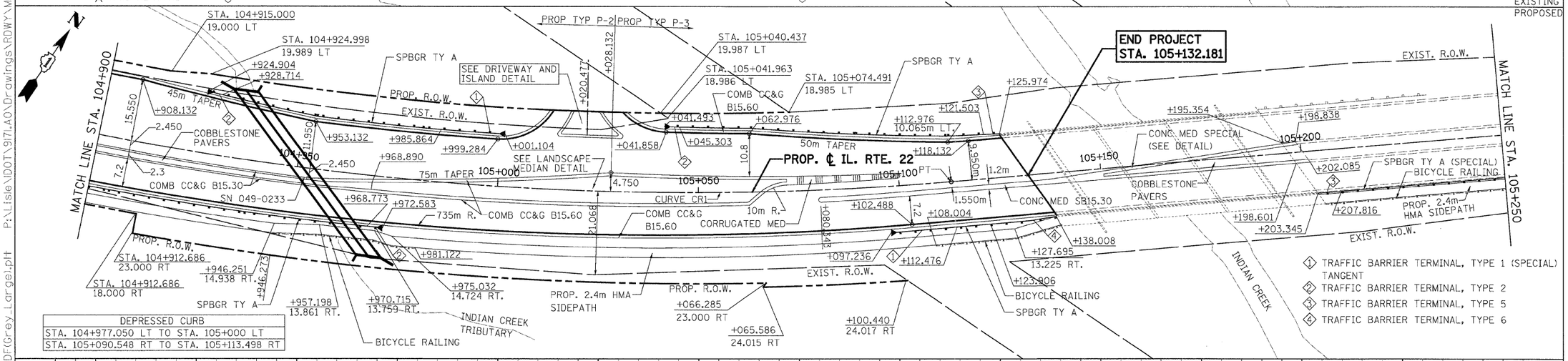
SCALE: VERT. 1:50
HORIZ. 1:500
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

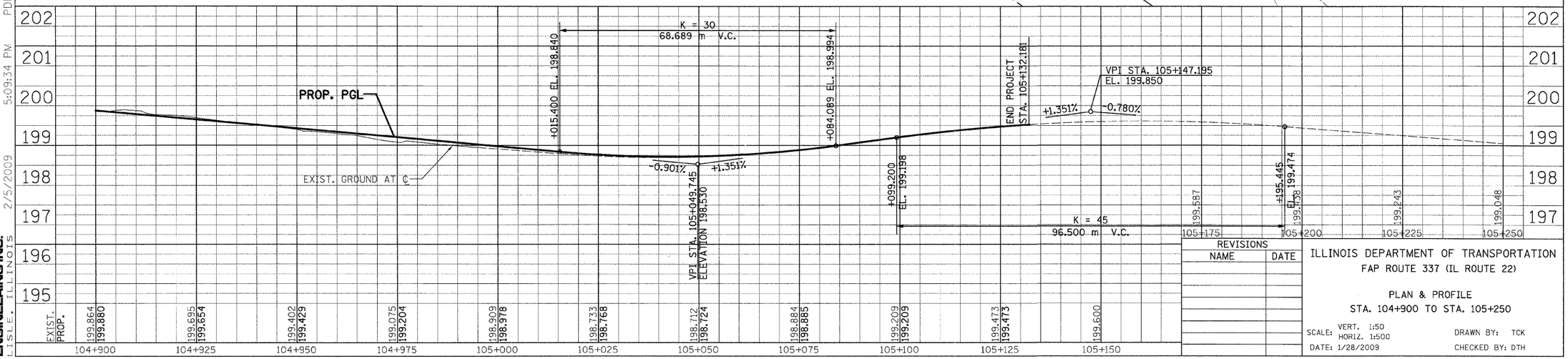
P:\Lisle\DOT\9171.A0\Drawings\RDWY\Mill\Shts\Rdy\S_PP_01.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy_Lisle)
2/5/2009 5:09:21 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	42
STA. 104+900	TO STA. 105+250			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				





DEPRESSED CURB
STA. 104+977.050 LT TO STA. 105+000 LT
STA. 105+090.548 RT TO STA. 105+113.498 RT



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

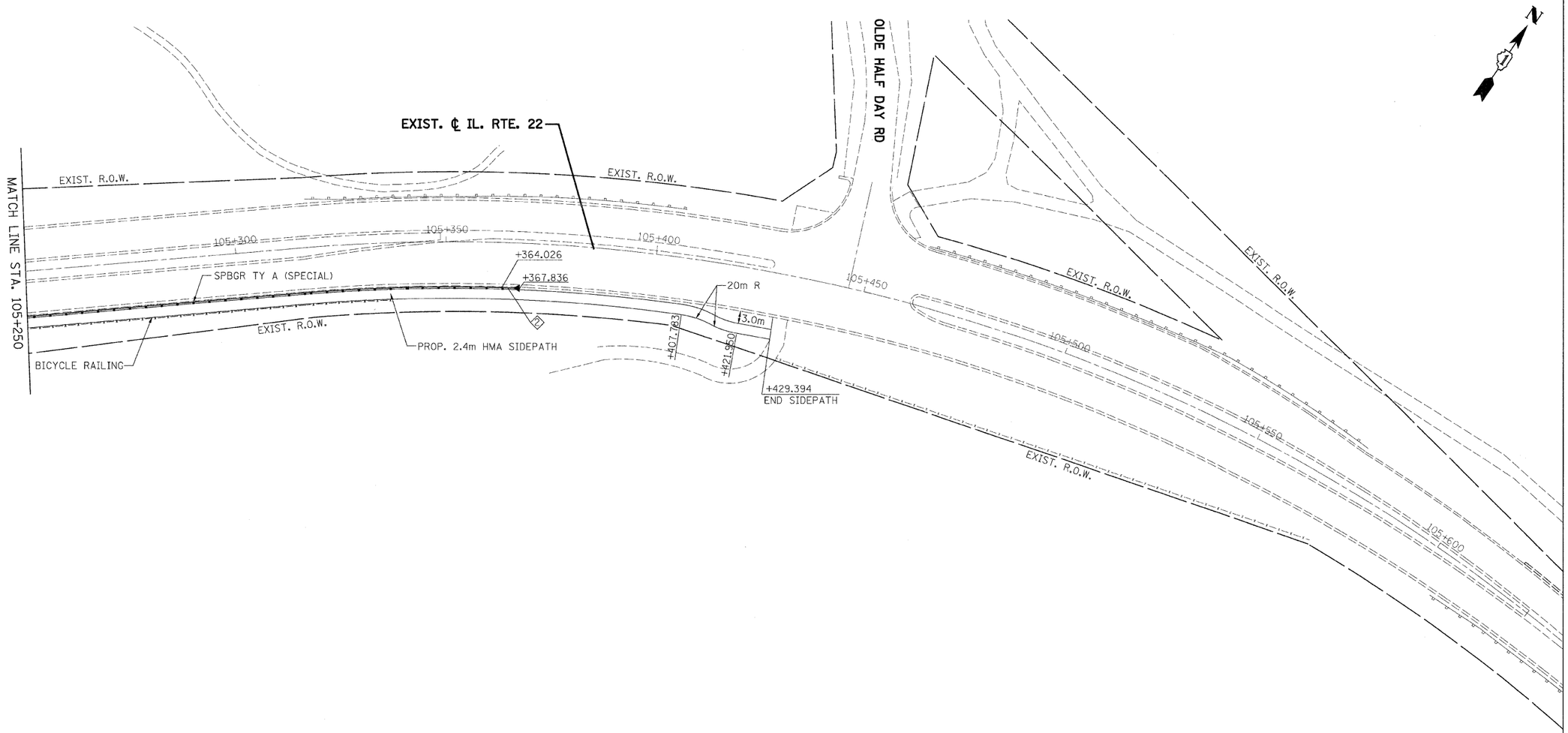
PLAN & PROFILE
STA. 104+900 TO STA. 105+250

SCALE: VERT. 1:50 HORIZ. 1:500
DATE: 1/28/2009
DRAWN BY: TCK
CHECKED BY: DTH

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MII\Shts\RdS_PP_02.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy_Lisle)
2/5/2009 5:09:34 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	43
STA. 104+900		TO STA. 105+250		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



① TRAFFIC BARRIER TERMINAL,TYPE 1 (SPECIAL) TANGENT
② TRAFFIC BARRIER TERMINAL,TYPE 2
③ TRAFFIC BARRIER TERMINAL,TYPE 5
④ TRAFFIC BARRIER TERMINAL,TYPE 6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PLAN & PROFILE
STA. 105+250 TO STA. 105+450

SCALE: VERT. 1:50 HORIZ. 1:500
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/5/2009 5:09:44 PM PDF(Grey_Large).plt P:\Lisle\IDOT\917.A0\Drawings\RDWY\MINShts\Rd\S_PP_02a.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	44
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

DEPRESSED CURB
STA. 10+035.050 RT TO STA. 10+058.000 RT
STA. 10+078.860 LT TO STA. 10+098.230 LT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PLAN & PROFILE
U.S. RTE. 45 / IL ROUTE 21

SCALE: VERT. 1:50 HORIZ. 1:500
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

PP- 5 OF 5

P:\Lisle\IDOT\917\A0\Drawings\RDWY\Mil\Shts\Rd\S_PP_03.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy_Lisle) 5:09:53 PM 2/5/2009

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

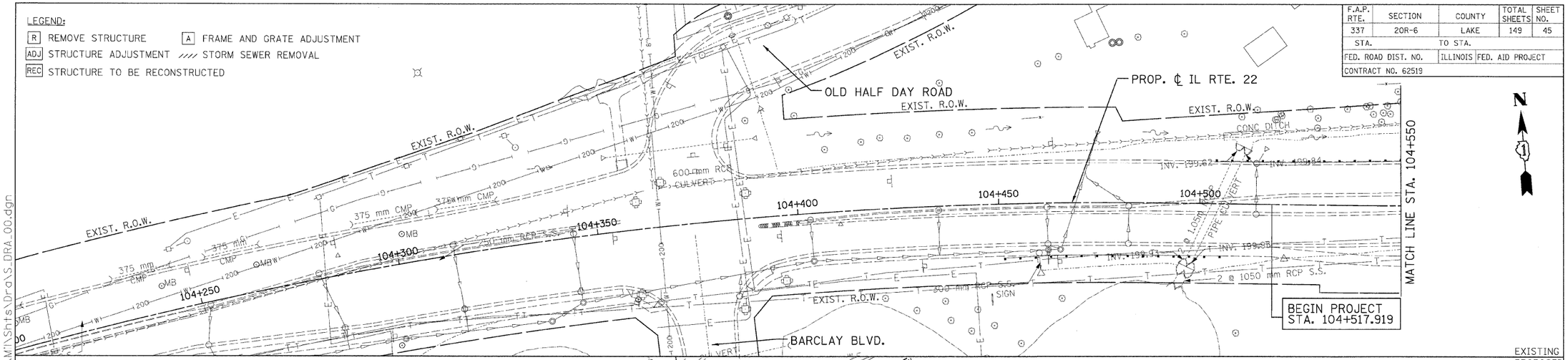
LEGEND:

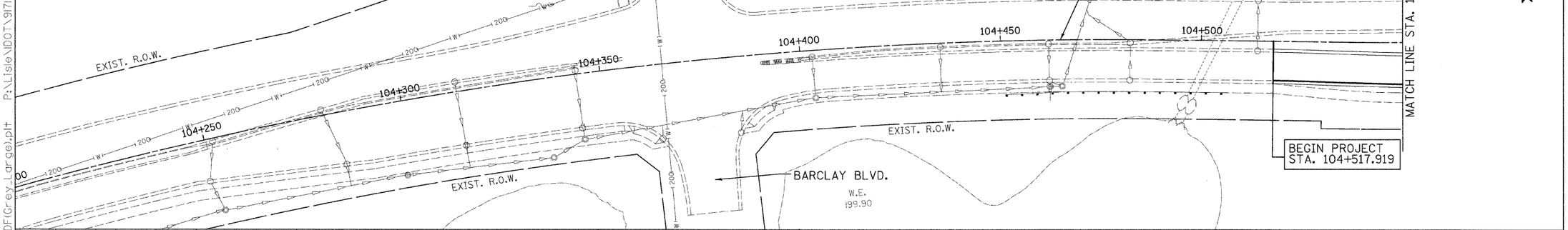
R REMOVE STRUCTURE A FRAME AND GRATE ADJUSTMENT

ADJ STRUCTURE ADJUSTMENT //// STORM SEWER REMOVAL

REC STRUCTURE TO BE RECONSTRUCTED

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	45
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				





REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 337 (IL ROUTE 22)

DRAINAGE & UTILITIES

STA. 104+517.919 TO STA. 104+550

SCALE: VERT. 1:50, HORIZ. 1:500 DRAWN BY: TCK

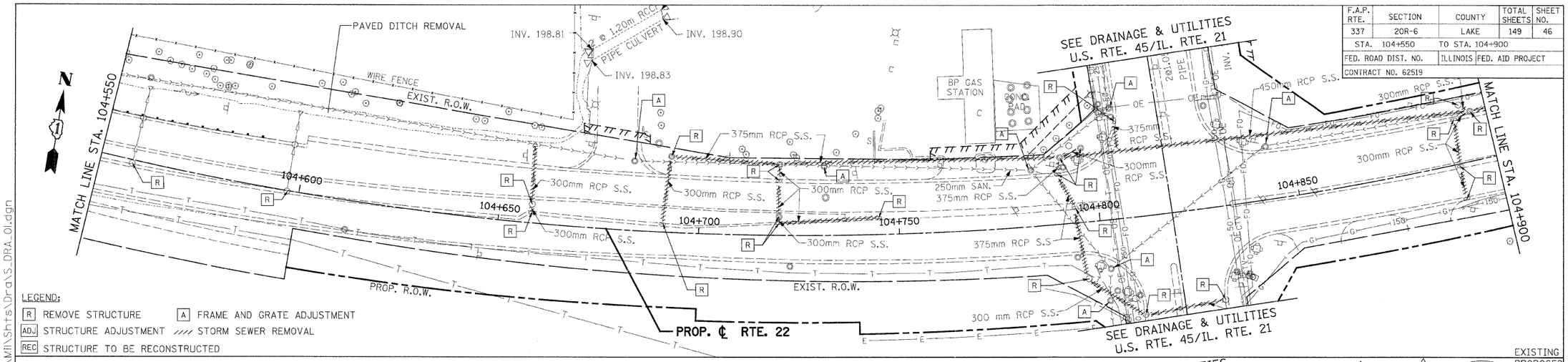
DATE: 1/28/2009 CHECKED BY: DTH

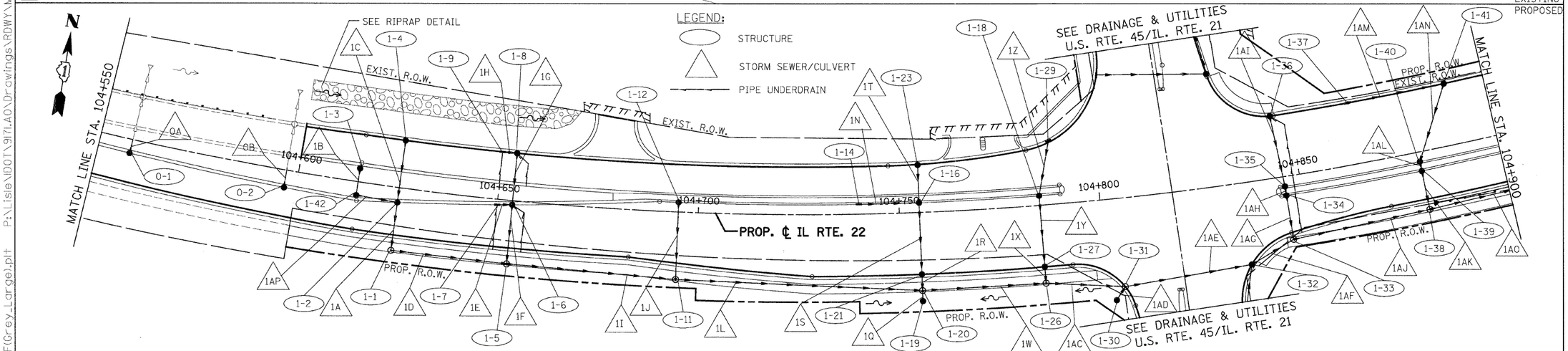
PATRICK ENGINEERING INC. LISLE, ILLINOIS

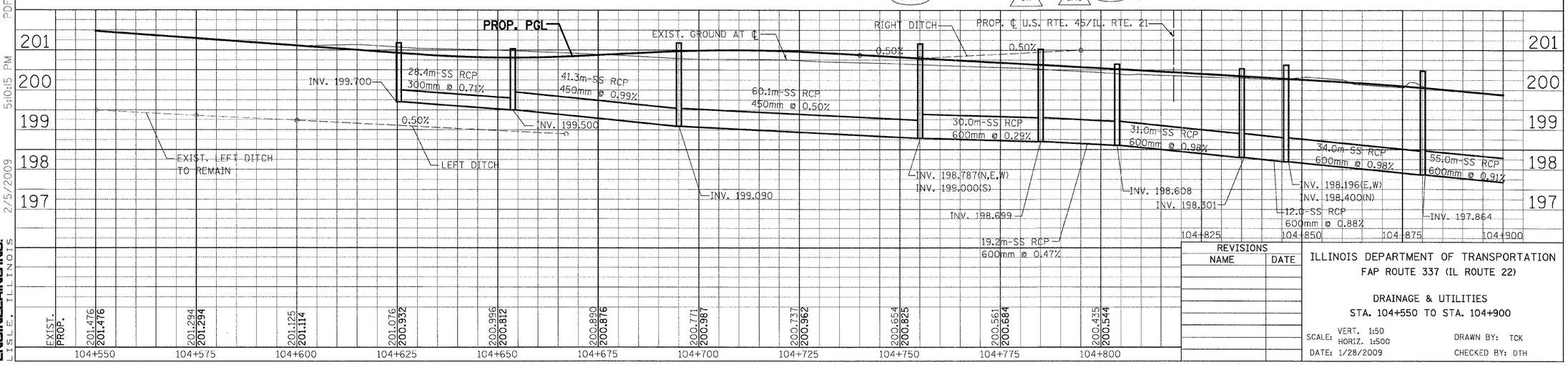
DU- 1 OF 10

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\M1\Shts\DrgS_DRA_00.dgn
PDF(Grey_Large).plt
5:10:03 PM 2/5/2009
+koeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	46
STA. 104+550	TO STA. 104+900			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				







REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

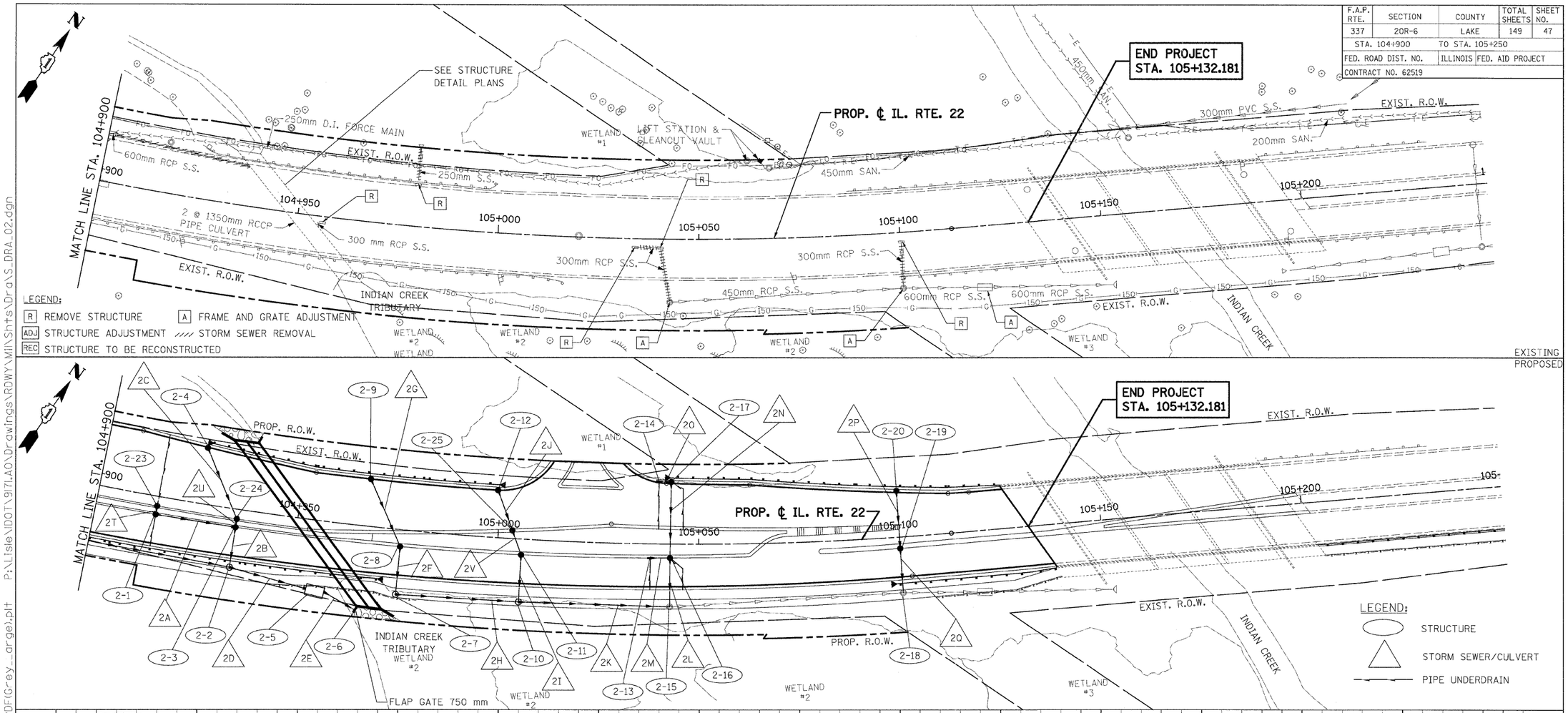
DRAINAGE & UTILITIES
STA. 104+550 TO STA. 104+900

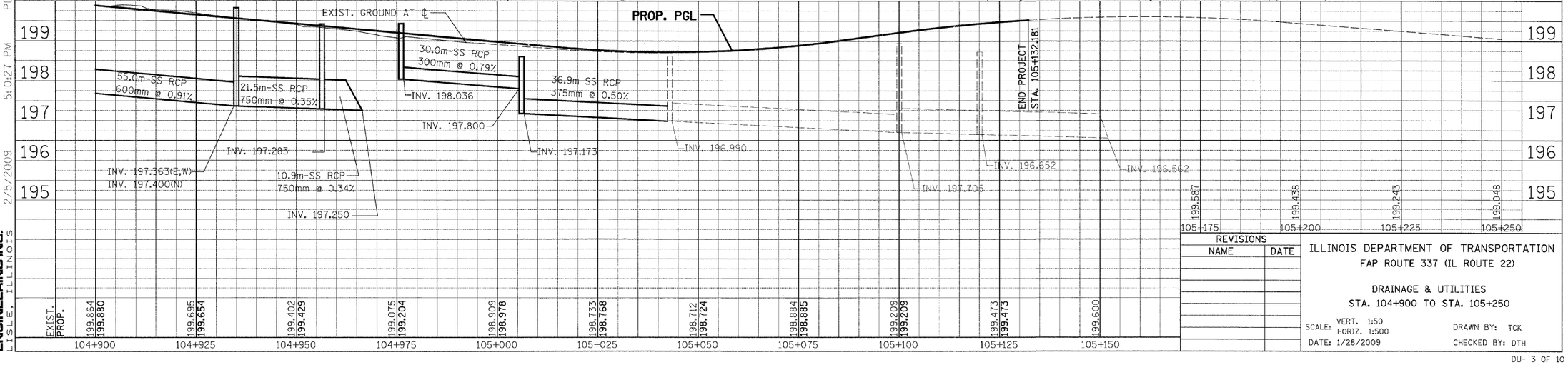
SCALE: VERT. 1:50, HORIZ. 1:500 — DRAWN BY: TCK
DATE: 1/28/2009 — CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\MIShts\DrayS_DRA_01.dgn PDF(Grey_Large).plt tkoeppen(Rdwy_Lisle) 2/5/2009 5:01:15 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	47
STA. 104+900		TO STA. 105+250		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				





REVISIONS	
NAME	DATE

PATRICK ENGINEERING INC. LISLE, ILLINOIS

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

DRAINAGE & UTILITIES
STA. 104+900 TO STA. 105+250

SCALE: VERT. 1:50 HORIZ. 1:500
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

DU- 3 OF 10

P:\Lisle\IDOT\917LAO\Drawings\ROWY\MII\Shts\DrgS_DRA_02.dgn
PDF(Grey_orgel).plt
5:10:27 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	48
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

BEGIN IMPROVEMENT
STA. 9+845.844

PROP. ℄ U.S. RTE. 45/IL. RTE. 21

PROP. ℄ IL RTE. 22

SEE DRAINAGE & UTILITIES
IL. RTE. 22

FIRE HYDRANT TO BE MOVED

VALVE VAULT TO BE ADJUSTED

FIRE HYDRANT TO BE MOVED

200mm SAN.

250mm SAN.

300mm RCP S.S.

375mm RCP S.S.

EXIST. R.O.W.

PROP. R.O.W.

INV. 197.86

INV. 197.77

INV. 197.823(W)

2@1.05M RCCP PIPE CULVERT

PLUG STORM SEWER

McDONALD

GAS STATION

END IMPROVEMENT
STA. 10+180.459

LEGEND:

R REMOVE STRUCTURE

A FRAME AND GRATE ADJUSTMENT

ADJ STRUCTURE ADJUSTMENT

//// STORM SEWER REMOVAL

REC STRUCTURE TO BE RECONSTRUCTED

EXISTING
PROPOSED

LEGEND:

STRUCTURE

STORM SEWER/CULVERT

PIPE UNDERDRAIN

SEE PIPE CULVERT EXTENSION CONNECTION DETAIL

3-1 3A 3-2 3B 3-3 3C 3-4 3D 3-5 3E 3-6 3-7 1-32 3F 3-8 3G 3H 3-9 3I 3-10 3J 3-11 3K 3-12 3L 3-13 3M 3-14 3N 3-14A 3P 3-15 3Q 3-16 3R 3-17 3S 3-18 30 3-19 3-20 3-21 3-22

NOTE: PIPE CONNECTIONS TO THE EXISTING HEADWALLS SHALL BE INCLUDED IN THE COST OF THE STORM SEWERS.

EXIST. GROUND AT ℄

RIGHT DITCH

LEFT DITCH

PROP. PGL

℄ PROP. IL RTE. 22

1.00%(RIGHT)
1.28%(LEFT)
0.70%
1.30%
1.27%
1.93%
1.40%

21.4m-SS RCP
300mm @ 1.35%

25.0m-SS RCP
300mm @ 0.96%

26.9m-SS RCP
300mm @ 0.64%

14.7m-SS RCP
300mm @ 2.73%

27.4-SS RCP
300mm @ 4.57%

39.1-SS RCP
375mm @ 0.47%

4.0m-SS RCP
300mm @ 0.80%

23.0m-SS RCP
300mm @ 0.73%

26.0m-SS RCP
300mm @ 0.53%

INV. 198.892
INV. 199.181
INV. 199.421
INV. 198.720
INV. 198.703
INV. 198.301
INV. 198.110(N)
INV. 198.340(W)
INV. 197.855(N.E.S)
INV. 198.271(W)
INV. 197.823
INV. 198.007
INV. 198.175
INV. 198.313

	9+850	9+875	9+900	9+925	9+950	9+975	10+000	10+025	10+050	10+075	10+100	10+125	10+150	10+175
EXIST.	200.424	200.664	200.828	200.959	200.985	200.767	200.358	200.026	199.811	199.720	199.658	199.573	199.512	199.514
PROP.	200.418	200.661	200.905	201.126	201.131	200.895	200.413	199.907	199.728	199.760	199.810	199.740	199.640	199.540

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

DRAINAGE & UTILITIES
U.S. RTE. 45/IL ROUTE 21

SCALE: VERT. 1:50
HORIZ. 1:500

DATE: 1/28/2009

DRAWN BY: TCK

CHECKED BY: DTH

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\971.A0\Drawings\RDWY\MINShts\DraS_DRA_03.dgn
PDF(Grey-Large).plt
5:10:38 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	49
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				

DRAINAGE STRUCTURE TO BE REMOVED

STRUCTURE TYPE	STATION	OFFSET	NO.
MANHOLE	104+692.501	19.053 LT	1
	104+719.972	4.658 LT	1
	104+720.088	17.777 LT	1
	104+791.347	16.758 LT	1
	104+796.905	18.684 LT	1
	104+893.472	14.548 LT	1
	104+896.019	12.400 LT	1
	10+091.192	11.515 LT	1
TOTAL			8
CATCH BASIN	104+658.159	4.660 LT	1
	104+795.932	14.229 RT	1
	9+831.745	16.861 RT	1
	9+976.502	10.037 RT	1
	9+975.558	10.128 LT	1
	10+094.508	12.664 RT	1
TOTAL			6
INLET	104.658.257	2.585 LT	1
	104+690.885	1.998 LT	1
	104+720.030	3.005 LT	1
	104+719.913	13.679 LT	1
	104+744.774	4.238 LT	1
	104+794.085	3.831 LT	1
	104+790.483	12.553 LT	1
	104+890.459	8.882 RT	1
	104+890.669	0.574 RT	1
	104+891.600	11.278 LT	1
	104+979.124	10.579 LT	1
	105+034.215	2.182 RT	1
	105+040.404	2.219 RT	1
	105+100.249	2.425 RT	1
	9+858.586	9.733 LT	1
	10+025.232	10.610 LT	1
	10+053.004	10.142 LT	1
	10+094.557	10.324 RT	1
	10+103.979	10.194 LT	1
	10+119.984	10.305 RT	1
	10+142.591	10.199 LT	1
	10+081.834	10.236 LT	1
		TOTAL	22

EXISTING STORM SEWER /PIPE CULVERT REMOVAL

FROM	TO	LENGTH (M)	DIA. (MM)
104+979.124 LT	104+978.985 LT	9.70	250
TOTAL		9.7	
104+658.257 LT	104+658.159 LT	2.08	300
104+658.159 LT	104+657.526 LT	15.02	300
104+690.885 LT	104+692.501 LT	17.13	300
104+720.030 LT	104+719.972 LT	1.65	300
104+719.972 LT	104+719.913 LT	9.02	300
104+719.913 LT	104+720.089 LT	4.10	300
104+720.030 LT	104+744.774 LT	24.65	300
104+791.347 LT	104+796.905 LT	5.76	300
104+890.459 RT	104+890.669 RT	8.31	300
104+890.669 RT	104+891.600 LT	11.89	300
104+893.472 LT	104+896.019 LT	3.30	300
105+042.887 RT	105+040.404 RT	13.92	300
105+040.404 RT	105+034.215 RT	6.21	300
105+100.249 RT	105+100.000 RT	11.65	300
10+053.004 LT	10+081.834 LT	28.83	300
10+081.834 LT	10+103.979 LT	22.14	300
10+060.239 RT	10+094.508 RT	34.28	300
10+119.984 RT	10+145.990 RT	26.01	300
10+145.990 RT	10+180.460 RT	34.87	300
10+142.591 LT	10+179.184 LT	36.60	300
9+975.558 LT	9+976.502 RT	20.19	300
9+975.558 LT	104+795.932 RT	16.79	300
TOTAL		354.4	
104+692.501 LT	104+720.089 LT	26.94	375
104+720.089 LT	104+791.347 LT	69.60	375
104+795.932 RT	104+794.085 LT	18.16	375
104+794.085 LT	104+790.483 LT	9.42	375
104+790.483 LT	104+791.347 LT	4.29	375
TOTAL		128.5	
104+791.347 LT	104+896.019 LT	102.70	450
TOTAL		102.7	
104+896.019 LT	104+936.453 LT	39.90	600
TOTAL		39.9	

FRAMES AND LIDS TO BE ADJUSTED

STRUCTURE TYPE	STATION	OFFSET	RIM ELEV	EACH
VORTEX MANHOLE	105+120.000	15.500 RT	199.575	1
CATCH BASIN	10+177.380	10.253 LT	199.340	1
MANHOLE	10+179.184	9.472 LT	199.345	1
			TOTAL	3

MANHOLES TO BE RECONSTRUCTED

STRUCTURE TYPE	STATION	OFFSET	EACH
MANHOLE	105+042.887	15.911 RT	1
MANHOLE	105+100.000	14.069 RT	1
		TOTAL	2

PIPE UNDERDRAIN 100MM

FROM	STATION	OFFSET	TO STRUCT	STATION	OFFSET	METER
BACK OF CURB	104+650.000	12.72 RT	1-7	104+650.000	1.407 RT	11.3
EDGE OF PVMT	104+653.712	12.72 RT	1-9	104+653.712	1.050 RT	12.7
BACK OF CURB	104+650.000	4.75 LT	1-6	104+650.000	11.950 LT	7.2
EDGE OF PVMT	104+653.712	4.75 LT	1-8	104+653.712	11.950 LT	8.2
BACK OF CURB	104+846.000	14.93 RT	1-36	104+845.000	15.580 LT	32.2
BACK OF CURB	104+915.000	12.62 RT	2-1	104+915.000	4.650 RT	8.0
BACK OF CURB	104+915.000	15.79 LT	2-23	104+915.000	2.450 RT	18.5
BACK OF CURB	105+038.000	11.61 RT	2-13	105+038.000	3.641 RT	8.0
EDGE OF PVMT	105+038.000	4.531 LT	2-14	105+038.000	11.730 LT	7.3
BACK OF CURB	105+042.887	11.56 RT	2-16	105+042.887	3.586 RT	9.0
EDGE OF PVMT	105+046.110	4.351 LT	2-17	105+042.887	11.623 LT	8.2
BACK OF CURB	9+850.000	9.981 LT	3-2	9+850.000	9.533 RT	19.6
BACK OF CURB	10+055.235	13.98 LT	3-9	10+055.255	9.814 RT	24.8
BACK OF CURB	10+146.000	11.12 RT	3-21	10+146.000	9.610 RT	22.0
					TOTAL	197

SANITARY MANHOLES TO BE ADJUSTED

STRUCTURE TYPE	STATION	OFFSET	RIM ELEV	EACH
MANHOLE	104+683.143	17.416 LT	200.847	1
MANHOLE	104+730.656	17.318 LT	200.380	1
MANHOLE	104+783.807	14.230 LT	200.387	1
MANHOLE	104+800.656	20.277 RT	200.808	1
MANHOLE	104+801.555	12.272 RT	200.747	1
MANHOLE	104+805.125	28.047 LT	199.835	1
MANHOLE	104+843.533	13.348 LT	200.090	1
MANHOLE	10+124.925	10.908 LT	199.397	1
			TOTAL	8

FIRE HYDRANTS TO BE MOVED

STRUCTURE TYPE	STATION	OFFSET	EACH
FIRE HYDRANT	9+979.915	12.120 RT	1
FIRE HYDRANT	10+054.781	12.083 RT	1
		TOTAL	2

P:\Lisle\IDOT\9171.A01\Drawings\RDWY\MiscShts\Drn\S_Drainsched_01.dgn
PDF(Grey_Large).plt
5:10:48 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SCHEDULE OF QUANTITIES

SCALE: NONE DRAWN BY: TCK

DATE: 1/28/2009 CHECKED BY: DTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	50
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

DRAINAGE STRUCTURE					
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	RIM ELEV	INVERT
0-1	RD CB 1.2 M D T24F&G	104+557.971	3.516 RT	201.400	
0-2	RD CB 1.2 M D T24F&G	104+597.032	4.357 RT	201.132	
1-1	MAN A 1.2D T1F CL	104+625.350	15.91 RT	201.195	199.700(N,E)
1-2	RD CB 1.2 M D T24F&G	104+625.350	3.778 RT	200.921	199.763(N,S,W)
1-3	CB C T8G	104+615.000	3.369 LT	201.173	199.841(S)
1-4	RD CB 1.2 M D T24F&G	104+625.350	11.95 LT	200.744	199.855(S)
1-5	RD MAN A 1.2D T1F CL	104+653.712	16.02 RT	200.785	199.500(N,E,W)
1-6	RD CB 1.5 M D T24F&G	104+653.712	1.050 RT	200.785	199.541(N,S,W)
1-7	INLETS TA T24F&G	104+650.000	1.407 RT	200.779	199.558(E)
1-8	RD CB 1.2 M D T24F&G	104+653.712	11.95 LT	200.638	199.611(S,W)
1-9	INLETS TA T24F&G	104+650.000	11.95 LT	200.625	199.628(E)
1-11	MAN A 1.2D T1F CL	104+695.000	16.96 RT	201.203	199.090(N,E,W)
1-12	CB A 1.2 M D T23F&G	104+695.000	2.450 LT	200.896	199.273(S)
1-14	INLETS TA T23F&G	104+740.000	2.450 LT	200.770	199.121(E,W)
1-16	CB A 1.2 M D T23F&G	104+755.000	2.450 LT	200.686	198.983(N,S,W)
1-18	CB A 1.2 M D T23F&G	104+785.000	2.450 LT	200.554	198.921(N,S,W)
1-19	CB A 1.2 M D T8G	104+755.000	22.29 RT	201.012	199.056(N)
1-20	MAN A 1.5D T1F CL	104+755.000	19.62 RT	201.152	.787(N,E,W) 199.00
1-21	CB A 1.2 M D T24F&G	104+755.000	15.55 RT	200.913	198.815(N,S)
1-23	CB A 1.2 M D T24F&G	104+755.000	12.04 LT	200.619	199.066(S)
1-26	MAN A 1.5D T1F CL	104+785.000	19.62 RT	201.041	198.699(N,E,W)
1-27	CB A 1.2 M D T24F&G	104+785.000	15.55 RT	200.747	198.753(N,S)
1-29	INLETS TA T23F&G	104+788.328	15.59 LT	200.155	198.995(S)
1-30	CB C T8G	104+801.637	25.46 RT	200.776	198.780(N)
1-31	MAN A 1.8D T24F&G OL	104+804.000	22.29 RT	200.647	198.608(E,S,W)
1-32	CB A 1.5 M D T24F&G	104+835.000	20.72 RT	200.537	198.303(E,W)
1-33	MAN A 1.5D T1F CL	104+846.000	15.96 RT	200.626	8.196(E,W) 198.400
1-34	CB A 1.2 M D T23F&G	104+846.000	4.754 RT	200.282	198.509(N,S)
1-35	CB A 1.2 M D T23F&G	104+846.000	2.450 RT	200.282	198.520(N,S)
1-36	CB A 1.2 M D T24F&G	104+845.000	15.58 LT	199.988	198.621(S)
1-37	INLETS TA T24F&G	104+865.000	15.55 LT	199.909	198.474(E)
1-38	MAN A 1.5D T1F CL	104+880.000	14.71 RT	200.328	197.864(N,E,W)
1-39	CB A 1.2 M D T23F&G	104+880.000	4.800 RT	200.055	198.036(N,S)
1-40	CB A 1.2 M D T23F&G	104+880.000	2.450 RT	200.055	198.047(N,S)
1-41	CB A 1.2 M D T24F&G	104+890.000	15.55 LT	199.705	198.241(S,W)
1-42	RD CB 1.2 M D T8G	104+615.000	3.369 RT	200.951	199.786(E)
2-1	CB A 1.2 M D T23F&G	104+915.000	4.649 RT	199.744	198.122(N,E)
2-2	MAN A 1.5D T1F CL	104+935.000	14.71 RT	199.829	7.363(E,W) 197.400
2-3	CB A 1.2 M D T23F&G	104+935.000	4.535 RT	199.564	197.744(N,S,W)
2-4	CB A 1.2 M D T24F&G	104+925.000	14.10 LT	199.411	197.936(S)
2-5	VORTEX MANHOLE	104+956.316	17.74 RT	199.532	197.283(E,W)
2-6	FLAP GATE 750MM	104+966.630	21.34 RT	198.089	197.250(W)
2-7	MAN A 1.2D T1F CL	104+976.000	16.31 RT	199.398	198.036(N,E)
2-8	RD CB 1.2 M D T24F&G	104+976.000	4.241 RT	199.195	198.101(S)
2-9	RD CB 1.2 M D T24F&G	104+967.000	11.95 LT	199.134	198.204(S)
2-10	RD MAN A 1.2D T1F CL	105+006.000	15.87 RT	199.135	7.173(N,E) 197.800
2-11	CB A 1.2 M D T24F&G	105+006.000	3.974 RT	198.928	197.280(N,S,W)
2-12	CB A 1.2 M D T24F&G	105+999.282	11.95 LT	198.741	197.427(S,W)
2-13	INLETS TA T24F&G	105+038.000	3.641 RT	198.745	197.137(E)
2-14	INLETS TA T24F&G	105+039.989	15.39 LT	198.558	197.166(E)

DRAINAGE STRUCTURE					
STRUCTURE NO.	STRUCTURE TYPE	STATION	OFFSET	RIM ELEV	INVERT
2-15	EX. RD MAN A 1.5D T1F CL	105+042.887	15.91 RT	198.935	196.990 ±(N,E,W)
2-16	CB A 1.2 M D T24F&G	105+042.887	3.586 RT	198.737	197.057(N,S)
2-17	CB A 1.2 M D T24F&G	105+043.067	15.22 LT	198.549	197.143(S,W)
2-18	EX. RD MAN A 1.5D T1F CL	105+100.000	14.06 RT	199.429	705 ±(E,W) 197.00
2-19	CB A 1.2 M D T24F&G	105+100.000	2.858 RT	199.209	197.396(N,S)
2-20	CB C T24F&G	105+100.000	11.29 LT	199.022	197.636(S)
2-23	CB A 1.2 M D T23F&G	104+915.000	2.450 RT	199.744	198.133(S)
2-24	CB A 1.2 M D T23F&G	104+935.000	2.450 RT	199.564	197.755(N,S)
2-25	CB A 1.2 M D T24F&G	105+003.496	2.047 LT	199.093	197.592(E)
3-1	RD CB A 1.2 M D T8G	9+831.745	11.86 RT	199.980	198.720(S,W,N)
3-2	RD CB 1.2 M D T24F&G	9+858.637	10.27 RT	200.227	198.892(N,S)
3-3	RD CB 1.2 M D T24F&G	9+880.000	12.06 RT	200.470	199.181(N,S)
3-4	CB C T24F&G	9+905.000	13.21 RT	200.718	199.421(S)
3-5	RD CB 1.2 M D T24F&G	9+858.586	9.733 LT	200.314	199.669(N,W)
3-6	RD CB 1.2 M D T24F&G	9+895.000	9.610 LT	200.698	199.880(S)
3-7	CB A 1.2 M D T24F&G	9+965.000	13.21 RT	200.784	198.705(N)
3-8	CB A 1.2 M D T24F&G	10+028.000	12.92 RT	199.791	98.111(N) 198.340(
3-9	CB A 1.2 M D T24F&G	10+055.255	9.814 RT	199.595	7.855(E,S) 198.271
3-10	EX. CONCRETE HEADWALLS	10+057.900	12.80 RT	198.174	197.823 ±(W)
3-11	INLETS TA T24F&G	10+032.118	14.07 LT	199.684	198.604(E)
3-12	INLETS TA T24F&G	10+056.637	13.21 LT	199.461	198.489(E)
3-13	CONCRETE HEADWALLS	10+060.157	15.89 LT	199.011	197.847(W)
3-14A	EX. DOUBLE PIPE CULVERT 1050	10+059.948	13.22 LT	199.008	197.844 ±(W)
3-14	MAN A 1.2D T1F CL	10+097.000	12.11 RT	199.550	198.007(N,S,W)
3-15	CB A 1.2 M D T24F&G	10+052.557	9.953 RT	199.556	98.020(E) 198.250(
3-16	INLETS TA T24F&G	10+054.381	13.21 LT	199.478	198.467(E)
3-17	MAN A 1.2D T1F CL	10+120.000	12.11 RT	199.540	198.181(N,S,W)
3-18	RD CB 1.2 M D T24F&G	10+120.000	9.610 RT	199.444	198.189(E,W)
3-19	INLETS TA T24F&G	10+123.000	11.72 LT	199.378	198.392(E)
3-20	RD MAN A 1.2D T1F CL	10+146.000	12.11 RT	199.535	198.330(S,W)
3-21	RD CB 1.2 M D T24F&G	10+146.000	9.610 RT	199.351	198.338(E,W)
3-22	INLETS TA T24F&G	10+146.000	10.34 LT	199.333	198.451(E)

P:\Lisle\IDOT_917.A0\Drawings\RDWY\MiscShts\DraS_Drainsched_02.dgn
PDF(Grey_Large).plt
5:10:58 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
DRAINAGE STRUCTURE SCHEDULE

SCALE: NONE
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	51
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

STORM SEWER							
PIPE NO.	FRO	TO	ENGT (M)	DIA. (MM)	TYPE FF	SLOPE (%)	TRENCH CKFILL (CU
0A	0-1	xist	2.6	300	SS CL A 1 300	1.64	0.3
0B	0-2	xist	4.2	300	SS CL A 1 300	1.72	0.3
1A	1-2	1-1	12.1	300	SS CL A 1 300	0.52	5.7
1B	1-3	1-42	6.7	300	SS CL A 1 300	0.82	2.3
1C	1-4	1-2	15.7	300	SS CL A 1 300	0.46	3.5
1D	1-1	1-5	28.4	300	SS CL A 2 300	0.71	14.9
1E	1-7	1-6	3.7	300	SS CL A 1 300	0.46	1.5
1F	1-6	1-5	15.0	450	SS CL A 1 450	0.27	5.6
1G	1-8	1-6	13.0	300	SS CL A 1 300	0.54	4.0
1H	1-9	1-8	3.7	300	SS CL A 1 300	0.46	0.8
1I	1-5	1-11	41.3	450	SS CL A 2 450	0.99	33.8
1J	1-12	1-11	19.4	300	SS CL A 2 300	0.94	18.1
1L	1-11	1-20	60.1	450	SS CL A 1 450	0.50	130.8
1M	1-13	1-14	#N/A	300	SS CL A 2 300	#N/A	#N/A
1N	1-14	1-16	15.0	300	SS CL A 2 300	0.92	11.5
1O	1-17	1-18	#N/A	300	SS CL A 2 300	#N/A	#N/A
1Q	1-19	1-20	2.7	300	SS CL A 2 300	2.10	1.8
1R	1-21	1-20	4.1	300	SS CL A 2 300	0.69	8.5
1S	1-16	1-21	18.0	300	SS CL A 2 300	0.93	17.3
1T	1-23	1-16	9.6	300	SS CL A 2 300	0.86	7.0
1W	1-20	1-26	30.0	600	SS CL A 2 600	0.29	72.4
1X	1-27	1-26	4.1	300	SS CL A 2 300	1.33	8.1
1Y	1-18	1-27	18.0	300	SS CL A 2 300	0.93	15.9
1Z	1-29	1-18	13.6	300	SS CL A 2 300	0.55	7.2
1AC	1-26	1-31	19.2	600	SS CL A 2 600	0.47	21.5
1AD	1-30	1-31	4.0	300	SS CL A 1 300	4.35	1.6
1AE	1-31	1-32	31.0	600	STORM SEW WM REQ 60	0.99	63.1
1AF	1-32	1-33	12.0	600	SS CL A 2 600	0.88	20.7
1AG	1-34	1-33	11.2	300	SS CL A 2 300	0.97	11.7
1AH	1-35	1-34	2.3	300	SS CL A 2 300	0.48	1.9
1AI	1-36	1-35	18.1	300	SS CL A 2 300	0.56	12.1
1AJ	1-33	1-38	34.0	600	SS CL A 2 600	0.98	87.7
1AK	1-39	1-38	9.9	300	SS CL A 2 300	1.74	20.7
1AL	1-40	1-39	2.4	300	SS CL A 2 300	0.47	2.5
1AM	1-37	1-41	25.0	300	SS CL A 2 300	0.93	14.4
1AN	1-41	1-40	20.6	300	SS CL A 2 300	0.94	16.9
1AO	1-38	2-2	55.0	600	SS CL A 2 600	0.91	23.7
1AP	1-42	1-2	10.4	300	SS CL A 1 300	0.89	3.1
2A	2-1	2-3	20.0	300	SS CL A 2 300	1.89	16.1
2B	2-3	2-2	10.2	300	SS CL A 2 300	3.38	20.9
2C	2-4	2-24	19.3	300	SS CL A 2 300	0.94	14.3
2D	2-2	2-5	21.5	750	SS CL A 2 750	0.35	49.2
2E	2-5	2-6	10.9	750	SS CL A 2 750	0.34	0.0
2F	2-8	2-7	12.1	300	SS CL A 2 300	0.54	5.4
2G	2-9	2-8	18.5	300	SS CL A 2 300	0.56	3.7
2H	2-7	2-10	30.0	300	SS CL A 2 300	0.79	14.7
2I	2-11	2-10	11.9	300	SS CL A 2 300	0.90	10.7
2J	2-12	2-11	993.4	300	SS CL A 1 300	0.01	597.8
2K	2-10	2-15	36.9	375	SS CL A 1 375	0.50	38.6
2L	2-16	2-15	12.3	375	SS CL A 2 375	0.54	11.5
2M	2-13	2-16	4.9	300	SS CL A 2 300	1.64	3.6
2N	2-17	2-16	18.8	300	SS CL A 2 300	0.46	12.3
2O	2-14	2-17	3.1	300	SS CL A 2 300	0.75	1.6
2P	2-20	2-19	14.1	300	SS CL A 1 300	1.70	9.9
2Q	2-19	2-18	11.2	300	SS CL A 2 300	3.53	23.4
2T	2-23	2-1	2.2	300	SS CL A 2 300	0.50	1.6
2U	2-24	2-3	2.1	300	SS CL A 2 300	0.53	1.8
2V	2-25	2-11	6.5	300	SS CL A 2 300	4.78	4.4
3A	3-2	3-1	26.9	300	SS CL A 1 300	0.64	3.2
3B	3-3	3-2	21.4	300	SS CL A 1 300	1.35	9.8
3C	3-4	3-3	25.0	300	SS CL A 1 300	0.96	11.1
3D	3-6	3-5	36.4	300	STORM SEW WM REQ 30	1.05	4.4
3E	3-7	1-32	14.7	300	SS CL A 2 300	2.73	29.2
3F	3-8	3-9	27.4	300	SS CL A 2 300	4.57	10.2
3G	3-9	3-10	4.0	300	SS CL A 2 300	0.80	1.2
3H	3-11	3-8	27.3	300	STORM SEW WM REQ 30	0.97	11.4
3I	3-12	3-9	23.1	300	STORM SEW WM REQ 30	0.95	7.3
3J	3-13	3-14	2.7	1050	2 P CUL CL A 1 105	0.11	0.0
3K	3-14	3-10	39.1	375	SS CL A 2 375	0.47	0.0
3L	3-15	3-14	44.5	300	SS CL A 2 300	0.03	0.9
3M	3-16	3-15	23.2	300	STORM SEW WM REQ 30	0.93	7.6
3N	3-17	3-14	23.0	300	SS CL A 2 300	0.73	11.3
3O	3-18	3-17	2.5	300	SS CL A 1 300	0.56	0.7
3P	3-19	3-18	21.5	300	SS CL A 1 300	0.94	6.3
3Q	3-20	3-17	26.0	300	SS CL A 1 300	0.53	5.5
3R	3-21	3-20	2.5	300	SS CL A 1 300	0.48	0.5
3S	3-22	3-21	20.0	300	SS CL A 1 300	0.46	3.3

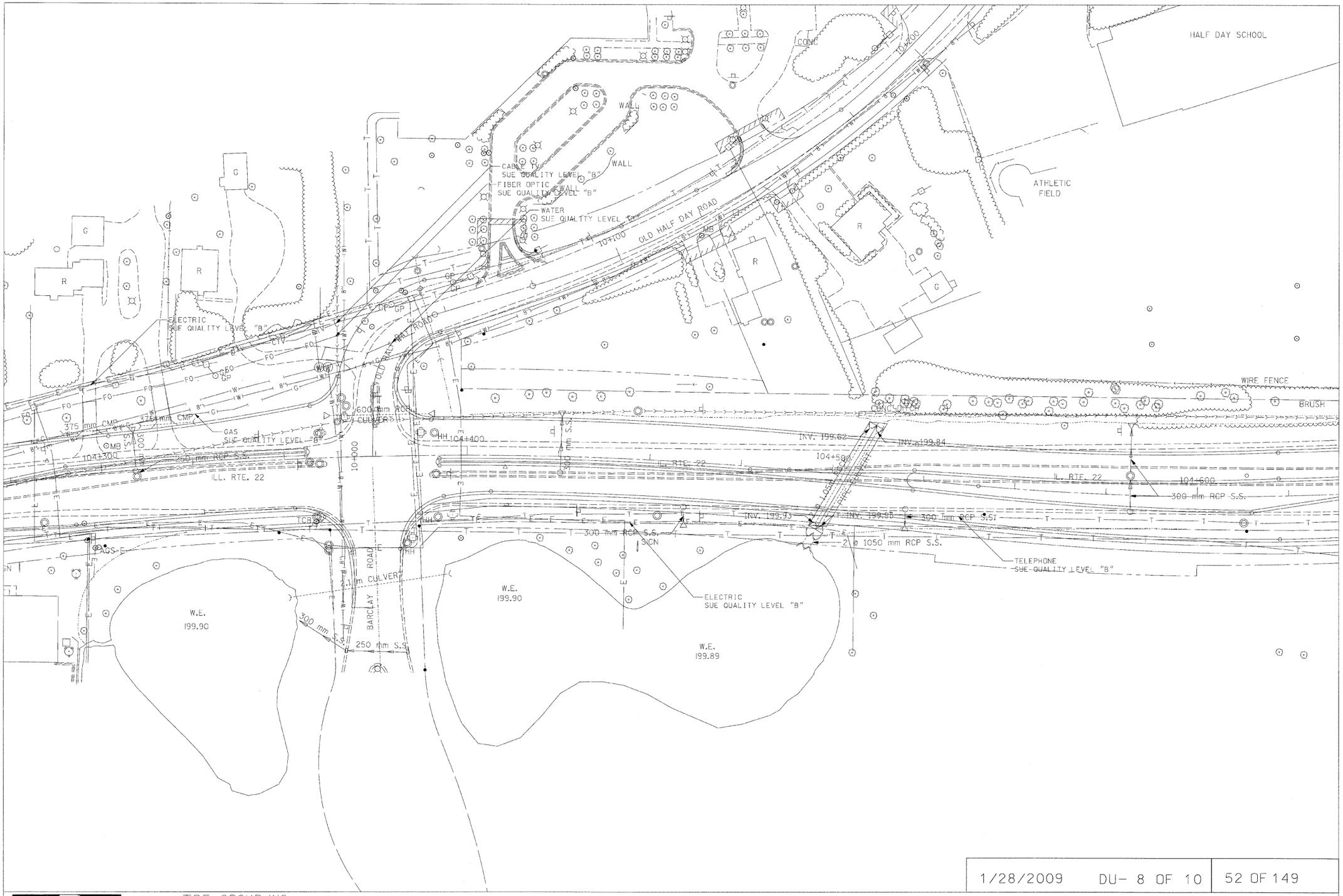
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
STORM SEWER SCHEDULE

SCALE: NONE
DRAWN BY: TCK
DATE: 1/28/2009
CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/5/2009 5:11:06 PM PDF(Grey_Large).plt P:\Lisle\IDOT\97LAO\Drawings\RDWY\MI\Shts\Dra\S_Drainsched_02.dgn



1/28/2009	DU- 8 OF 10	52 OF 149

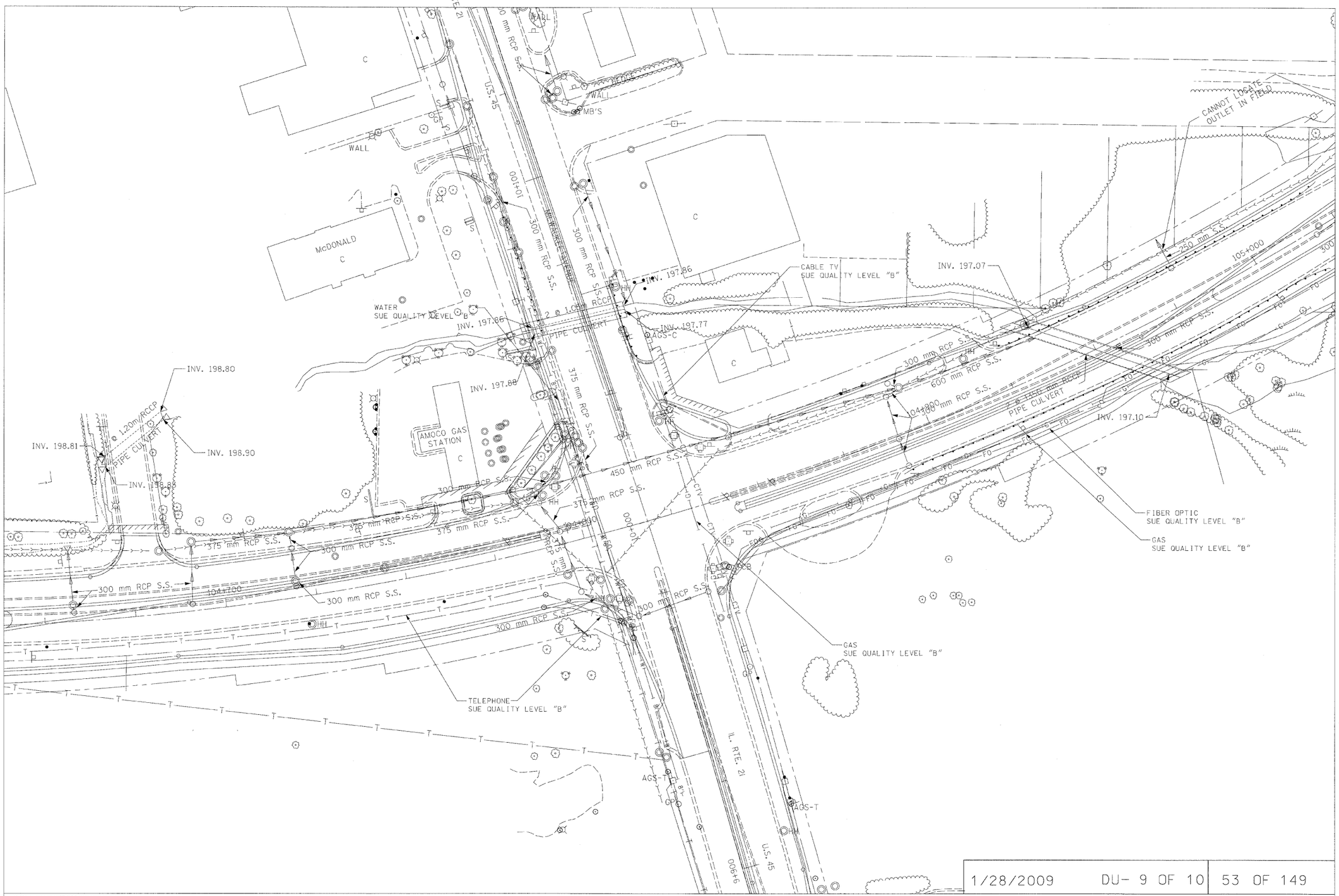
TBE GROUP, INC.
CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL
• PLANNING • UTILITY ENGINEERING/LOCATING
SOUTHEAST REGION: FL,GA,
NORTHEAST REGION: MD,NJ,NY,PA,VA
CENTRAL REGION: IL,IN,MI,OH
WESTERN REGION: AZ,NV,NM,TX CARIBBEAN: PR

SUE QUALITY LEVEL "B" PERFORMED BY 8/8/01

QA/QC By: _____

PLAN PAGE #2

DYNASTY GROUP, INC.
ENGINEERS AND SURVEYORS
205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970



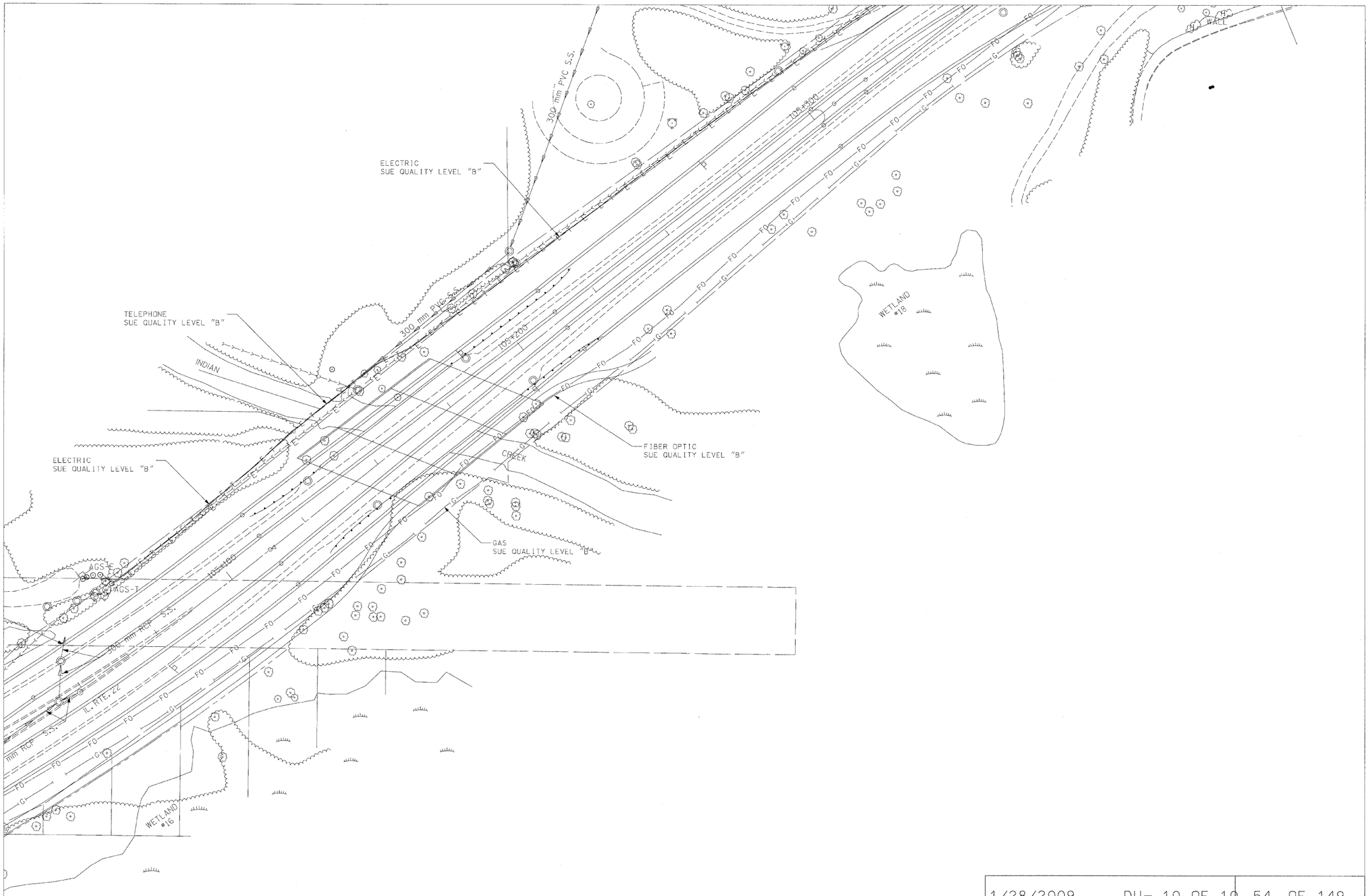
1/28/2009 | DU- 9 OF 10 | 53 OF 149

TBE GROUP, INC.
CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL • PLANNING • UTILITY ENGINEERING/LOCATING
SOUTHEAST REGION: FL,GA,
NORTHEAST REGION: MD,NJ,NY,PA,VA
CENTRAL REGION: IL,IN,MI,OH
WESTERN REGION: AZ,NV,NM,TX CARIBBEAN: PR

SUE QUALITY LEVEL "B" PERFORMED BY 8/8/01
QA/QC By: _____

PLAN PAGE #3

DYNASTY GROUP INC. ENGINEERS AND SURVEYORS
205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970



1/28/2009 DU- 10 OF 10 54 OF 149

TBE GROUP, INC.
CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL
• PLANNING • UTILITY ENGINEERING/LOCATING
SOUTHEAST REGION: FL,GA,
NORTHEAST REGION: MD,NJ,NY,PA,VA
CENTRAL REGION: IL,IN,MI,OH
WESTERN REGION: AZ,NV,NM,TX CARIBBEAN: PR

SUE QUALITY LEVEL "B" PERFORMED BY 8/8/01
QA/QC By: _____

PLAN PAGE #4

DYNASTY GROUP, INC.
ENGINEERS AND SURVEYORS
205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	55
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				

JOINT LEGEND

(A) LONGITUDINAL CONSTRUCTION JOINT, NO. 25 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS

(B) LONGITUDINAL CONSTRUCTION JOINT, NO. 20 EPOXY COATED TIE BARS 600mm LONG AT 600mm CENTERS

*(C) SAWED LONGITUDINAL JOINT WITH NO. 20 x 750mm EPOXY COATED DEFORMED TIE BARS AT 750mm CENTERS

*LONGITUDINAL CONSTRUCTION JOINT, (A), MAY BE USED AT NO ADDITIONAL COMPENSATION TO THE CONTRACTOR

N

EXIST. R.O.W.

PROP. R.O.W.

PROP. ℄ IL RTE. 22

10+050

104+750

104+850

104+900

PROP. ℄ U.S. RTE. 45/IL. RTE. 21

NOTE: ALL ELEVATIONS = 190 + LISTED ELEVATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PAVEMENT JOINT AND ELEVATION PLAN
IL ROUTE 22

SCALE: 1:250 DRAWN BY: TCK

DATE: 1/28/2009 CHECKED BY: JAH

JNT- 1 OF 1

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\DOT\917LA01\Drawings\RDWY\Mill Shts\Intrx\S_Int_01_070908.dgn
PDF(Grey_Large).plt P:\Lisle
tkoeppen(Rdwy_Lisle)
2/5/2009 5:11:58 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	56
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

PRESTAGE

CONSTRUCTION ACTIVITY:

(1) REMOVE THE CENTER MEDIAN FROM 104+600.000 TO 104+803.504, 105+080.619 TO 105+132.898 ON IL RTE 22 AND FROM 9+845.844 TO 10+151.670 ON IL RTE 21(U.S. 45), AND REPLACE WITH TEMPORARY PAVEMENT. TRAFFIC WILL BE MAINTAINED ON OUTSIDE WESTBOUND AND EASTBOUND LANES OF IL 22, AND SOUTHBOUND AND NORTHBOUND OF U.S. RTE. 45/IL RTE. 21. THE WESTBOUND AND EASTBOUND INSIDE LANES OF IL RTE 22 AND THE SOUTHBOUND AND NORTHBOUND INSIDE LANES OF IL RTE 21 (ADJACENT TO THE EXISTING CENTER MEDIAN) WILL BE CLOSED.

(2) INSTALL AND ACTIVATE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND U.S. RTE. 45/IL RTE. 21.

EROSION CONTROL:

(1) THE CONTRACTOR SHALL REPLACE THE MEDIAN WITH TEMPORARY PAVEMENT AS SOON POSSIBLE TO PREVENT WATER FROM ACCUMULATING IN THE MEDIAN. THE CONTRACTOR SHALL PUMP ANY WATER THAT ACCUMULATES IN THE MEDIAN BEFORE THE TEMPORARY PAVEMENT IS CONSTRUCTED. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE METER FOR "TEMPORARY PAVEMENT".

(2) PLACE EROSION CONTROL MEASURES SOUTH OF THE PROPOSED CENTERLINE OF IL RTE 22 AND EAST OF THE PROPOSED CENTERLINE OF IL RTE 21 AS SHOWN ON THE PLANS INCLUDING SEDIMENT CONTROL SILT FENCE, INLET AND OUTLET PROTECTION, TEMPORARY DITCH CHECKS, AND TEMPORARY EROSION CONTROL SEEDING ON ANY DISTURBED AREAS.

STAGE 1

CONSTRUCTION ACTIVITY:

(1) REMOVE THE EXISTING EASTBOUND PAVEMENT OF IL RTE 22 AND EXISTING NORTHBOUND PAVEMENT OF U.S. RTE. 45/IL RTE 21. CONSTRUCT THE TWO EASTBOUND AND THE NORTHBOUND THROUGH LANE PAVEMENT, STORM SEWER MAINLINE AND LATERALS, DRAINAGE STRUCTURES, RETAINING WALLS, UTILITY RELOCATIONS, OUTSIDE CURB AND GUTTER, AND PARKWAYS FROM STA. 104+517.919 TO STA.105+132.118 OF IL RTE 22 AND STA. 9+845.844 TO STA. 10+158.234 OF U.S. RTE. 45/IL RTE 21.

(2) CONSTRUCT THE SOUTH HALF OF THE PROPOSED DOUBLE BOX CULVERTS AT INDIAN CREEK TRIBUTARY. (SEE STRUCTURAL PLANS FOR STAGING INFORMATION).

EROSION CONTROL:

PLACE EROSION CONTROL MEASURES SOUTH OF THE PROPOSED CENTERLINE OF IL RTE 22 AND EAST OF THE PROPOSED CENTERLINE OF U.S. RTE 45/IL RTE. 21 AS SHOWN ON THE PLANS FROM STATION 104+517.919 TO STA. 105+132.118 AND FROM STA. 9+845.844 TO STA. 10+158.234 INCLUDING SEDIMENT CONTROL SILT FENCE, INLET AND OUTLET PROTECTION, TEMPORARY DITCH CHECKS, RIPRAP AT THE NOTED LOCATIONS AND TEMPORARY EROSION CONTROL SEEDING ON ANY DISTURBED AREAS.

STAGE 2

CONSTRUCTION ACTIVITY:

(1) REMOVE THE EXISTING WESTBOUND PAVEMENT OF IL RTE 22 AND EXISTING SOUTHBOUND OF U.S. RTE. 45/IL RTE 21. CONSTRUCT THE TWO WESTBOUND AND THE SOUTHBOUND THROUGH LANE PAVEMENT, STORM SEWER MAINLINE AND LATERALS, DRAINAGE STRUCTURES, OUTSIDE CURB AND GUTTER, AND PARKWAYS FROM STA. 104+517.919 TO STA.105+132.118 OF IL RTE 22 AND FROM STA. 9+845.844 TO STA. 10+158.234 OF U.S. RTE. 45/IL RTE 21.

(3) CONSTRUCT THE NORTH HALF OF THE PROPOSED DOUBLE BOX CULVERT AT INDIAN CREEK TRIBUTARY. (SEE STRUCTURAL PLANS FOR STAGING INFORMATION). CONSTRUCT THE WEST EXTENTION OF THE PROPOSED DOUBLE PIPE CULVERT AT INDIAN CREEK TRIBUTARY. (SEE STRUCTURAL PLANS FOR STAGING INFORMATION).

EROSION CONTROL:

PLACE EROSION CONTROL MEASURES NORTH OF THE PROPOSED CENTERLINE OF IL RTE 22 AND WEST OF THE PROPOSED CENTERLINE OF U.S. RTE. 45/IL RTE 21 (U.S. 45) AS SHOWN ON THE PLANS FROM STATION 104+517.919 TO STA. 105+132.118 AND FROM STA. 9+845.844 TO STA. 10+158.234 INCLUDING SEDIMENT CONTROL SILT FENCE, INLET AND OUTLET PROTECTION, TEMPORARY DITCH CHECKS, RIPRAP AT THE NOTED LOCATIONS AND TEMPORARY EROSION CONTROL SEEDING ON ANY DISTURBED AREAS.

STAGE 3

CONSTRUCTION ACTIVITY:

(1) REMOVE REMAINING EXISTING CENTER PAVEMENT AND CONSTRUCT THE PROPOSED MEDIAN AND LEFT TURN LANE PAVEMENT, STORM SEWER MAINLINE, LATERALS AND DRAINAGE STRUCTURES FROM STA. 104+517.919 TO STA.105+132.118 OF IL RTE 22 AND STA. 9+845.844 TO STA. 10+158.234 OF U.S. RTE. 45/IL RTE 21.

(2) COMPLETE INSTALLATION OF PROPOSED TRAFFIC SIGNALS AT THE INTERSECTION OF IL RTE 22 AND U.S. RTE. 45/IL RTE 21

(3) REMOVE TEMPORARY TRAFFIC SIGNALS

EROSION CONTROL:

NONE

NOTES

(1) TEMPORARY EROSION SEEDING AND EROSION CONTROL BLANKET SHALL BE PROVIDED IN THE PROPOSED PAVEMENT AREA UNLESS THE CONTRACTOR PLACES THE NEW PAVEMENT WITHIN 14 DAYS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
EROSION & SEDIMENT CONTROL NOTES

SCALE: NONE — DRAWN BY: CLW
DATE: 1/28/2009 — CHECKED BY: AAC

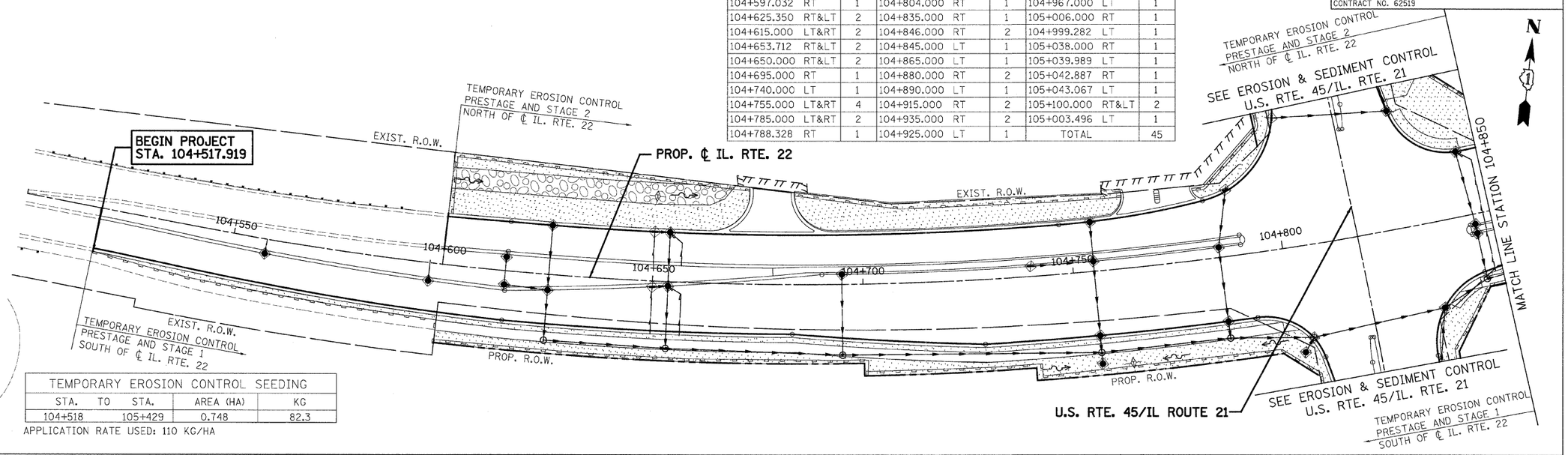
EC- 1 OF 3

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MiscShts\Dra\S_Eros_Notes.dgn PDF(Grey_Large).plt 5:12:12 PM 2/5/2009 tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	57
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

INLET FILTERS					
STATION	EACH	STATION	EACH	STATION	EACH
104+557.971 RT	1	104+801.637 RT	1	104+976.000 RT	1
104+597.032 RT	1	104+804.000 RT	1	104+967.000 LT	1
104+625.350 RT&LT	2	104+835.000 RT	1	105+006.000 RT	1
104+615.000 LT&RT	2	104+846.000 RT	2	104+999.282 LT	1
104+653.712 RT&LT	2	104+845.000 LT	1	105+038.000 RT	1
104+650.000 RT&LT	2	104+865.000 LT	1	105+039.989 LT	1
104+695.000 RT	1	104+880.000 RT	2	105+042.887 RT	1
104+740.000 LT	1	104+890.000 LT	1	105+043.067 LT	1
104+755.000 LT&RT	4	104+915.000 RT	2	105+100.000 RT&LT	2
104+785.000 LT&RT	2	104+935.000 RT	2	105+003.496 LT	1
104+788.328 RT	1	104+925.000 LT	1	TOTAL	45



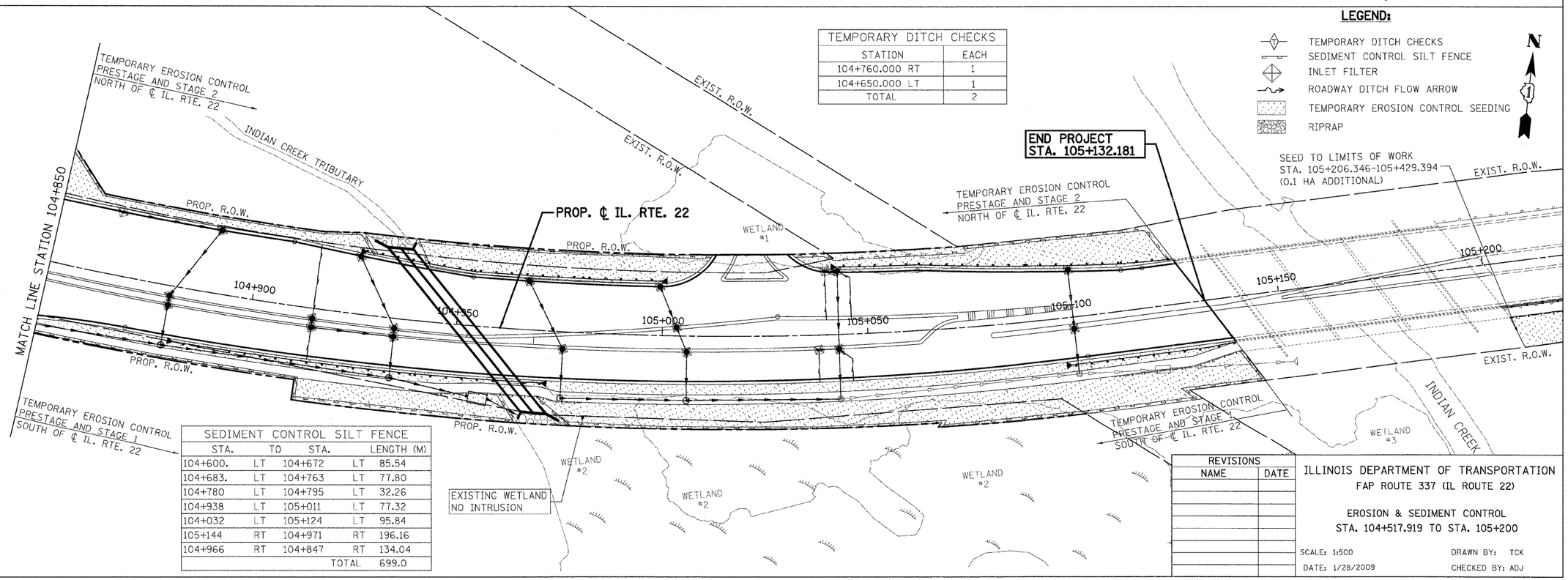
TEMPORARY EROSION CONTROL SEEDING			
STA.	TO STA.	AREA (HA)	KG
104+518	105+429	0.748	82.3

APPLICATION RATE USED: 110 KG/HA

TEMPORARY DITCH CHECKS	
STATION	EACH
104+760.000 RT	1
104+650.000 LT	1
TOTAL	2

LEGEND:

- TEMPORARY DITCH CHECKS
- SEDIMENT CONTROL SILT FENCE
- INLET FILTER
- ROADWAY DITCH FLOW ARROW
- TEMPORARY EROSION CONTROL SEEDING
- RIPRAP



SEDIMENT CONTROL SILT FENCE				
STA.	TO	STA.		LENGTH (M)
104+600.	LT	104+672	LT	85.54
104+683.	LT	104+763	LT	77.80
104+780	LT	104+795	LT	32.26
104+938	LT	105+011	LT	77.32
104+032	LT	105+124	LT	95.84
105+144	RT	104+971	RT	196.16
104+966	RT	104+847	RT	134.04
		TOTAL		699.0

REVISIONS	
NAME	DATE

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

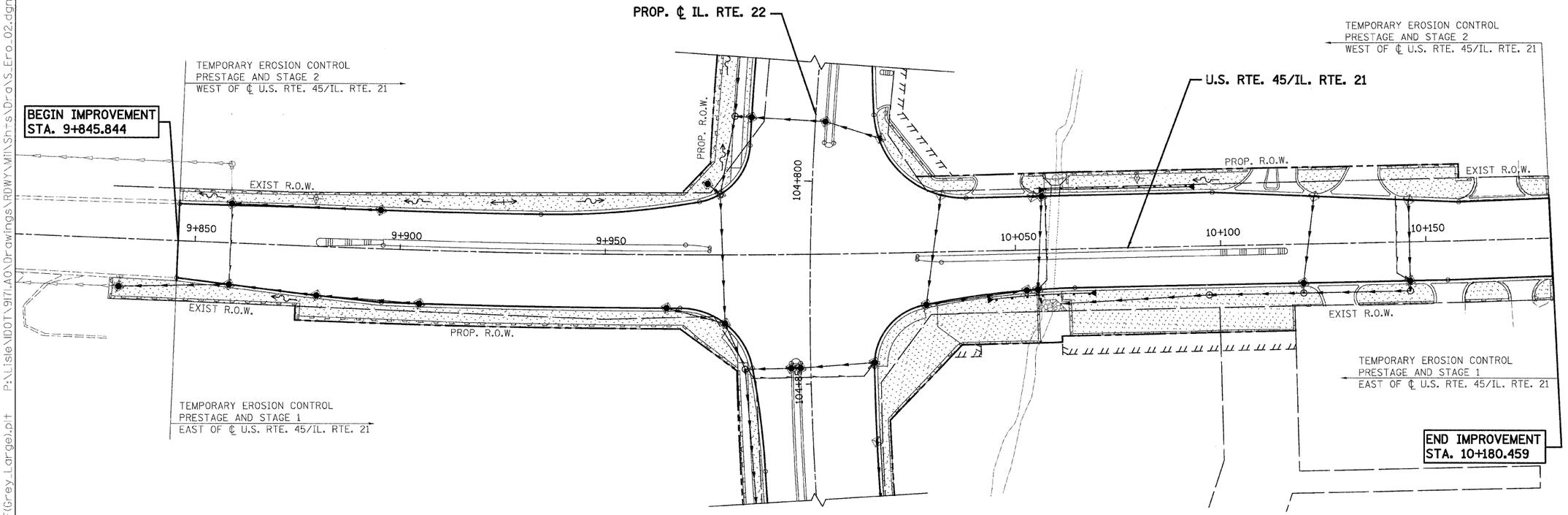
EROSION & SEDIMENT CONTROL
STA. 104+517.919 TO STA. 105+200

SCALE: 1:500 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: ADJ

EC- 2 OF 3

P:\Lisle\IDOT\9171.AO\Drawings\RDWY\MiscSht\Dra\S_Ero_01.dgn
PDF(Grey_Large).plt
tkoeppen(Rdwy_Lisle)
2/5/2009 5:12:21 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	58
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				



INLET FILTERS					
STATION		EACH	STATION		EACH
9+831.745	RT	1	10+032.118	LT	1
9+858.637	RT	1	10+056.637	LT	1
9+880.000	RT	1	10+052.557	RT	1
9+905.000	RT	1	10+054.381	LT	1
9+858.586	LT	1	10+120.000	RT	1
9+895.000	LT	1	10+123.000	LT	1
9+965.000	RT	1	10+146.000	RT&LT	2
10+028.000	RT	1	TOTAL		17
10+055.255	RT	1			

TEMPORARY EROSION CONTROL SEEDING			
STA. TO STA.		AREA (HA)	KG
9+830	10+180	0.187	20.5

APPLICATION RATE USED: 110 KG/HA

SEDIMENT CONTROL SILT FENCE				
STA.		TO STA.		LENGTH (M)
10+053	LT	10+057	LT	8.38
10+063	LT	10+107	LT	47.85
10+119	LT	10+131	LT	11.83
10+139	LT	10+161	LT	25.70
10+173	LT	10+180	LT	10.19
10+180	RT	10+176	RT	8.18
10+170	RT	10+159	RT	10.35
10+151	RT	10+133	RT	18.01
10+125	RT	10+014	RT	12.44
10+104	RT	10+061	RT	52.30
10+055	RT	104+928	LT	125.80
9+982	RT	9+830	RT	163.90
9+847	LT	104+518	LT	430.93
			TOTAL	925.9

TEMPORARY DITCH CHECKS	
STATION	EACH
9+875.000 LT	1
10+080.000 LT	1
TOTAL	2

LEGEND:

- TEMPORARY DITCH CHECKS
- SEDIMENT CONTROL SILT FENCE
- INLET FILTER
- ROADWAY DITCH FLOW ARROW
- TEMPORARY EROSION CONTROL SEEDING
- RIPRAP

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

EROSION & SEDIMENT CONTROL

SCALE: 1:500 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: ADJ

EC- 3 OF 3

P:\Lisle\IDOT\9171A01\Drawings\RDWY\MI\Shts\Drg\S_Ero_02.dgn PDF(Grey_Large).plt 5:12:37 PM 2/5/2009 tkoeppen(Rdwy-Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	59
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

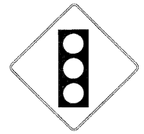
(1)
R6-2
450mm X 600mm

(2)
R3-2
750mm X 750mm

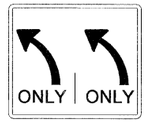
(3)
R3-5R
600mm X 750mm

(3a)
R3-5L
600mm X 750mm

(4)
R4-7
600mm X 750mm



(5)
W3-3
900mm X 900mm



(6)
CUSTOM
750mm X 750mm

(7)
M3-1
600mm X 300mm

(8)
M3-2
600mm X 300mm

(9)
M3-3
600mm X 300mm

(10)
M3-4
600mm X 300mm

(11)
M2-1
525mm X 375mm

(12)
450mm X 600mm

(13)
450mm X 600mm

(14)
R3-2
600mm X 600mm

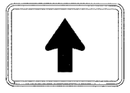
(15)
R3-2
600mm X 600mm

(15a)
R3-2
900mm X 900mm

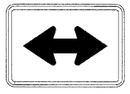
(16)
R3-2
600mm X 600mm

(16a)
R3-2
900mm X 900mm

(17)
R2-1
750mm X 900mm



(18)
M6-3
533mm X 381mm



(19)
M6-4
533mm X 381mm

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle)
2/5/2009 5:12:45 PM
P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mill Shts\Strp\S_Strp_Legend.dgn
PDF(Grey_Large).plt

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

SIGNING LEGEND

SCALE: 1:500 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	60
STA. 104+517.919	TO STA. 104+600.000			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				

N

EXIST. R.O.W.

PROP. ℄ IL RTE. 22

104+000 104+050 104+100 104+150 104+200

EXIST. R.O.W.

EXIST. R.O.W.

MATCH LINE STA. 104+250

SCHELTER ROAD

±179.620

EXIST. R.O.W.

NOTES:

1. ALL PAVEMENT SHALL BE PROVIDED WITH POLYUREA PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL CONTACT DEBBIE HANLON AT 847-438-2300 TWO WEEKS PRIOR TO INSTALLING FINAL PAVEMENT MARKINGS.

SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET

SEEDING, CLASS 4A WITH EROSION CONTROL BLANKET

SODDING, SALT TOLERANT

OLDE HALF DAY ROAD

EXIST. R.O.W.

EXIST. R.O.W.

RAISED REF PVT MKR (CRYSTAL, 1 WAY) (24m CENTERS) (TYP.)

MATCH LINE STA. 104+250

150 mm W LANE LINE

104+300 104+350

3.6m 3.6m 3.6m 3.6m

EXIST. R.O.W.

LTR-SYM W (TYP)

600 mm W STOP BAR (TYP.)

100 mm W SKIP DASH (3 m DASH - 9 m SKIP) (TYP.)

BARCLAY BOULEVARD

EXIST. R.O.W.

EXIST. R.O.W.

150 mm W LANE LINE

PROP. ℄ IL RTE. 22

104+400 104+450 104+500 104+550

3.6m 3.6m 3.6m 3.6m 3.6m 3.6m

1.2m

EXIST. R.O.W.

RAISED REF PVT MKR (CRYSTAL, 1 WAY) (24m CENTERS) (TYP.)

MATCH LINE STA. 104+600

BEGIN PROJECT STA. 104+517.919

100 mm W SKIP DASH (3 m DASH - 9 m SKIP) (TYP.)

N

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PAVEMENT MARKING, SIGNING, & LANDSCAPING PLAN
STA. 104+517.919 TO STA. 104+600

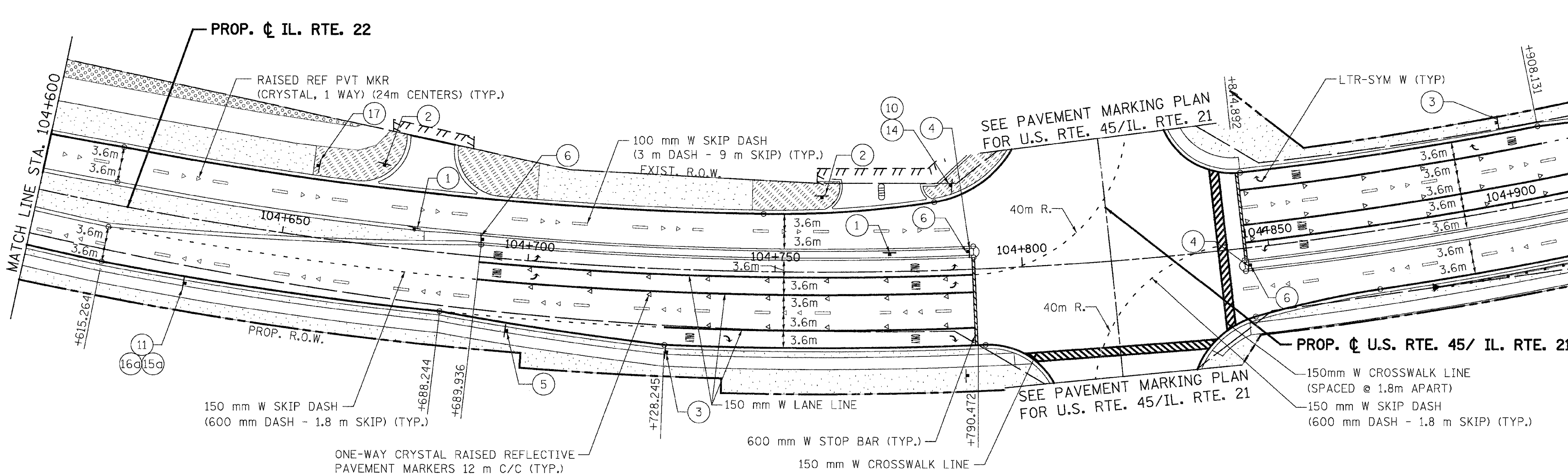
SCALE: 1:500 DRAWN BY: TCK

DATE: 1/28/2009 CHECKED BY: DTH

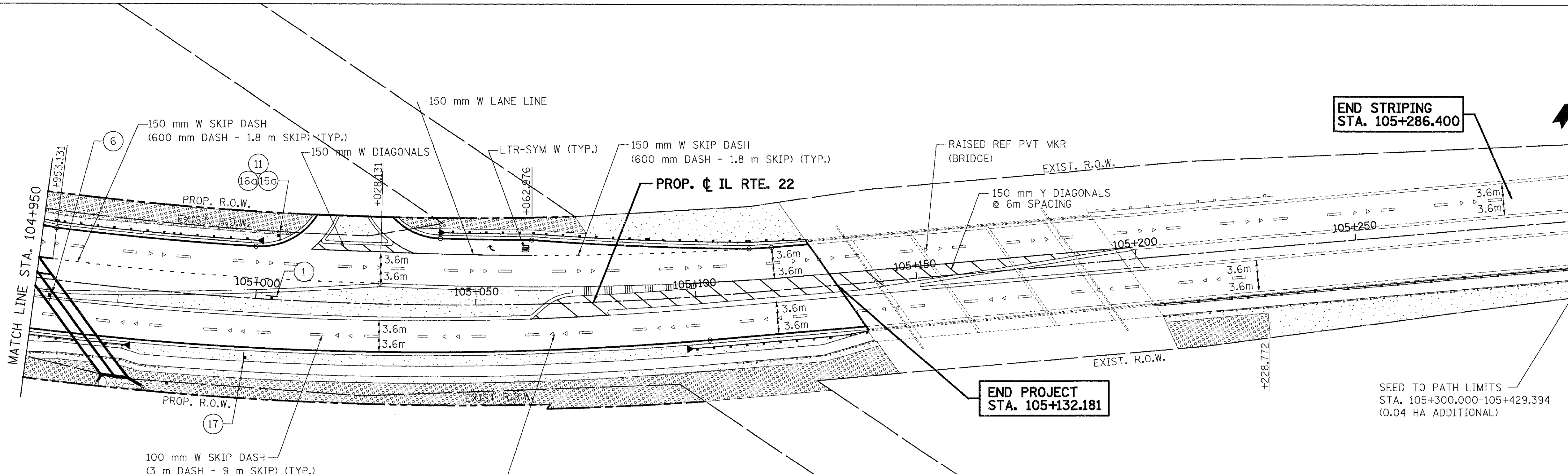
PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A01\Drawings\RDWY\MI\Shts\Strp\S_Strp_00.dgn
tkoeppen(Rdwy-Lisle) 2/5/2009 5:12:52 PM PDF(Grey_Large).plt

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	61
STA. 104+600	TO STA. 105+286.400			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



	SEEDING, CLASS 2A WITH EROSION CONTROL BLANKET
	SEEDING, CLASS 4A WITH EROSION CONTROL BLANKET
	SODDING, SALT TOLERANT



NOTES:

1. ALL PAVEMENT SHALL BE PROVIDED WITH POLYUREA PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL CONTACT DEBBIE HANLON AT 847-438-2300 TWO WEEKS PRIOR TO INSTALLING FINAL PAVEMENT MARKINGS.

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 2/5/2009 5:13:00 PM PDF(Grey_Large).plt P:\Lisle\IDOT\97LA0\Drawings\RDWY\MI\Shts\Strp\S_Strp_01.dgn

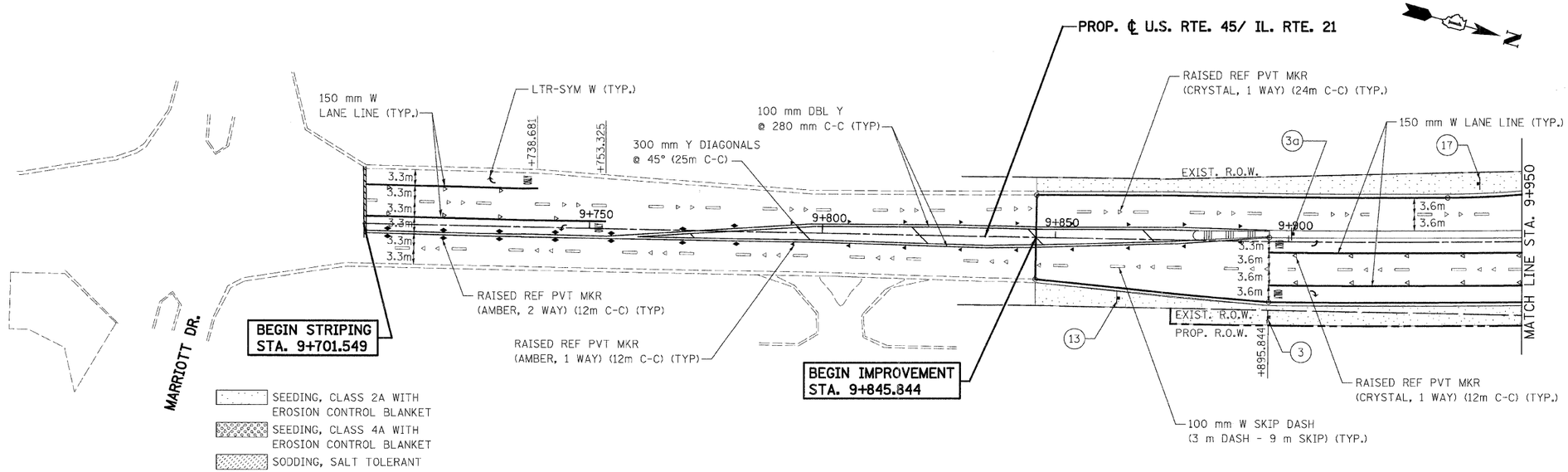
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PAVEMENT MARKING, SIGNING, & LANDSCAPING PLAN
STA. 104+600 TO STA. 105+300

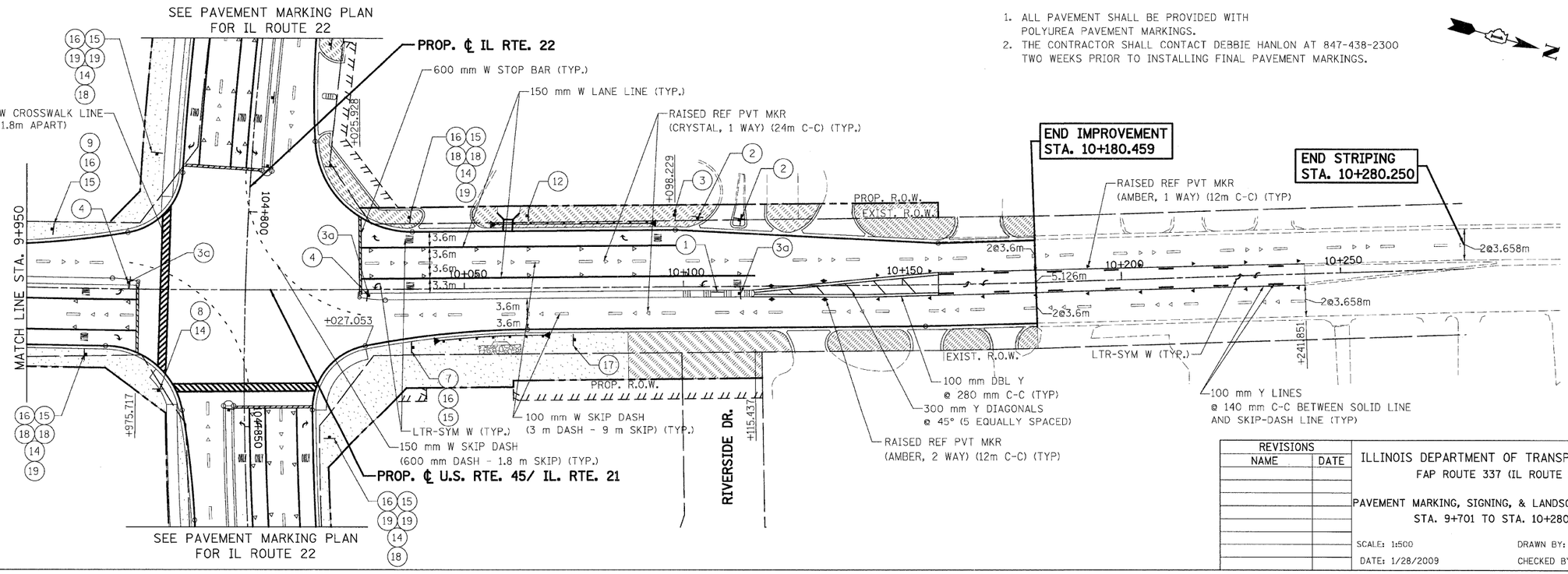
SCALE: 1:500 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	62
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



NOTES:

1. ALL PAVEMENT SHALL BE PROVIDED WITH POLYUREA PAVEMENT MARKINGS.
2. THE CONTRACTOR SHALL CONTACT DEBBIE HANLON AT 847-438-2300 TWO WEEKS PRIOR TO INSTALLING FINAL PAVEMENT MARKINGS.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

PAVEMENT MARKING, SIGNING, & LANDSCAPING PLAN
STA. 9+701 TO STA. 10+280

SCALE: 1:500 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\917LAO\Drawings\RDWY\MiNSht\Strp\S_Strp_MW.dgn
PDF(Grey_Large).plt
5:13:17 PM
2/5/2009
tkoeppen(Rdwy_Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	63
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

LOOP DETECTOR NOTES

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

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

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

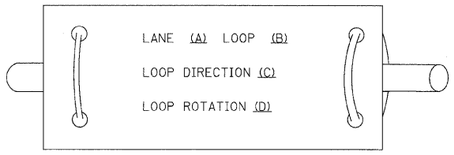
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

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

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

LOOP LEAD-IN CABLE TAG

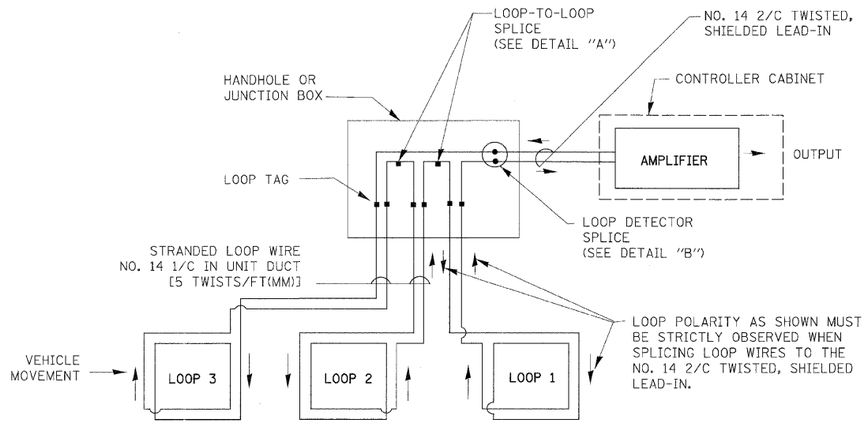


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

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

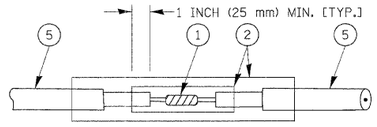
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

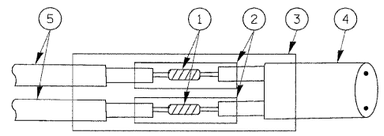


DETECTOR LOOP WIRING SCHEMATIC

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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

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

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

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

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

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.

DATE 1/28/2009

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

TS- 1 OF 18

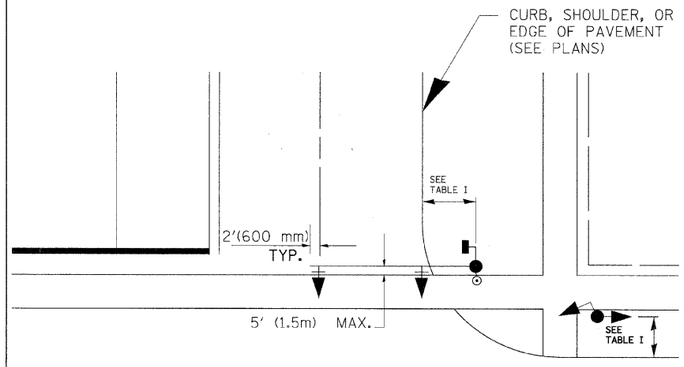
PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\ROWY\M11\Shts\Traf\DET-1.DGN
2/5/2009 5:13:26 PM

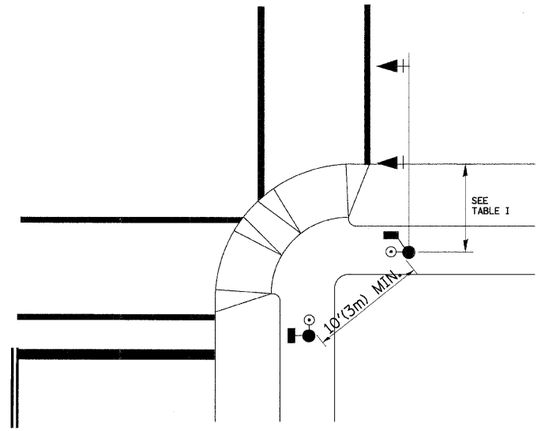
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	64
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

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

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

   PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:

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

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

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

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

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

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

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

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

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

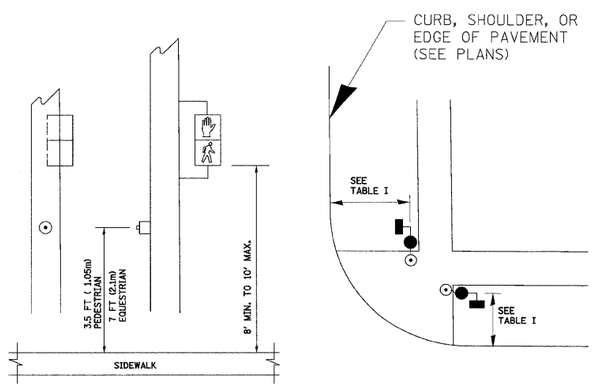


TABLE I

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

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mi\Shts\Traf\DET-2.DGN
2/5/2009 5:13:30 PM

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

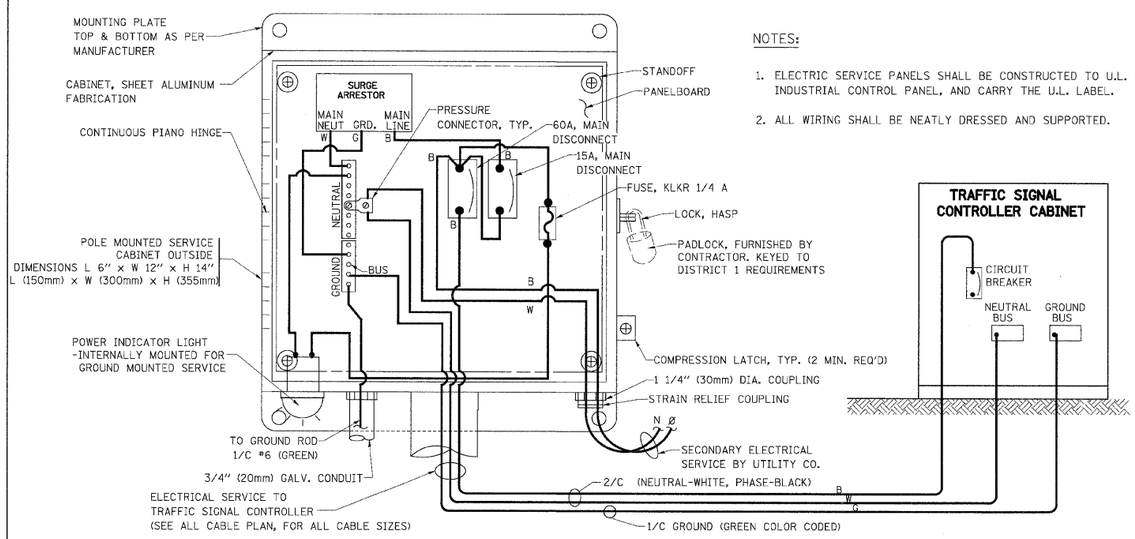
DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1/28/2009

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	65
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



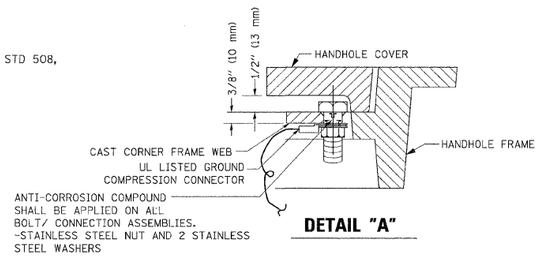
NOTES:

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.

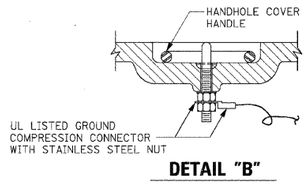
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



DETAIL "A"

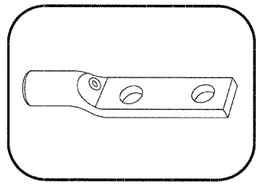


DETAIL "B"

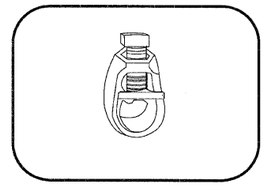
NOTES:

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.



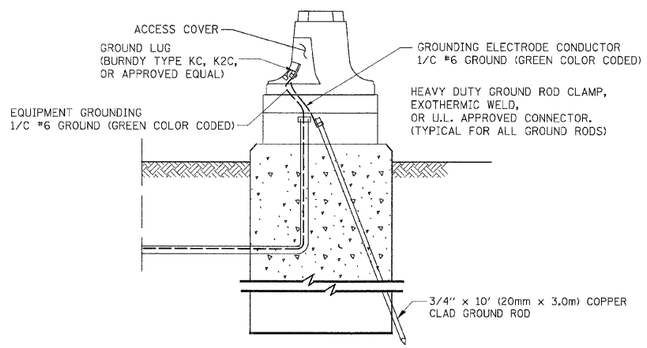
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

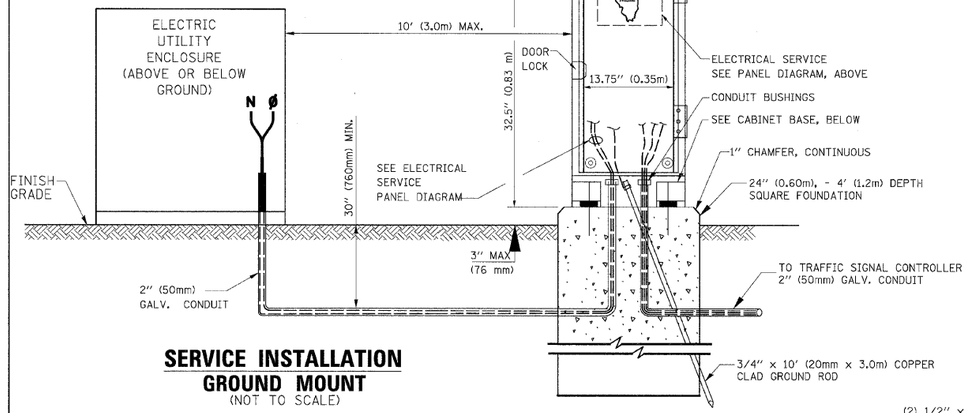
NOTES:

- 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.



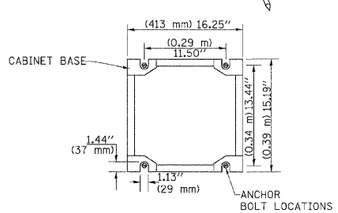
MAST ARM POLE / POST-GROUNDING DETAIL

(NOT TO SCALE)



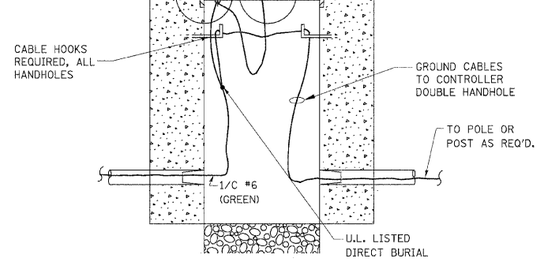
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)



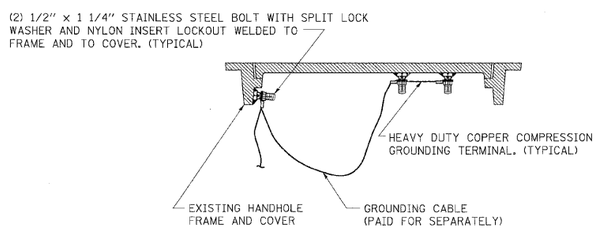
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE HORIZ.

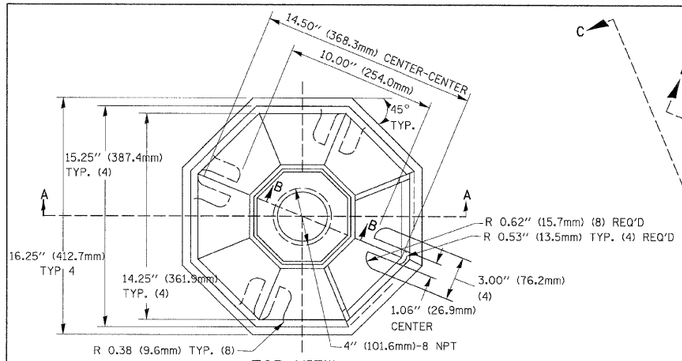
DATE 1/28/2009

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 3 OF 4

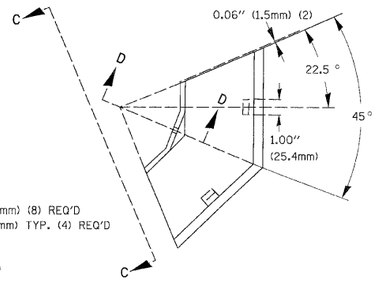
PATRICK ENGINEERING INC. LISLE, ILLINOIS

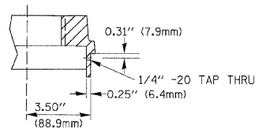
P:\Lisle\IDOT\9171.A0\Drawings\ROWY\M11\Shts\TrsfDET-3.DGN 2/5/2009 5:13:35 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	66
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

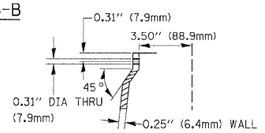


TOP VIEW

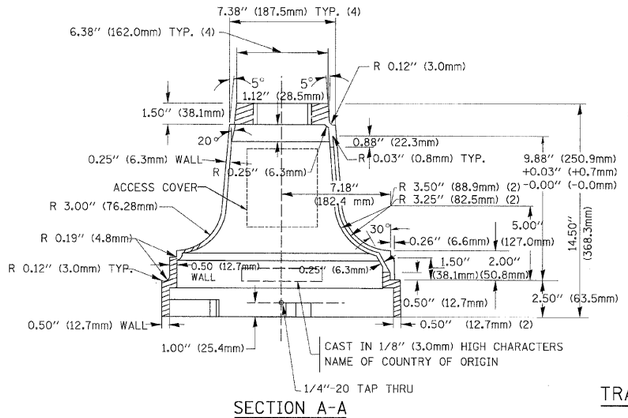




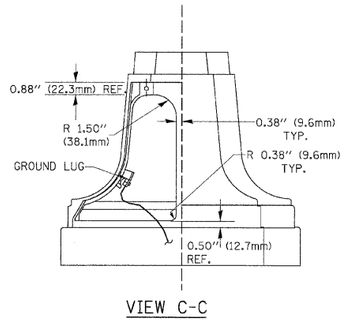
SECTION B-B



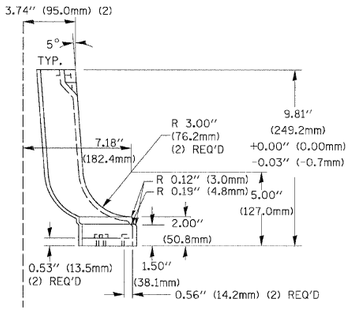
SECTION D-D



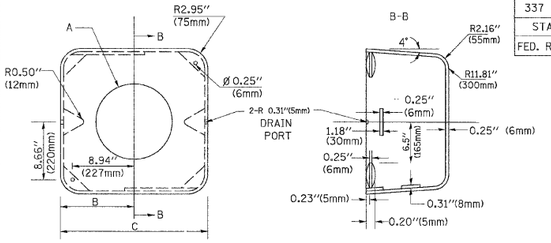
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

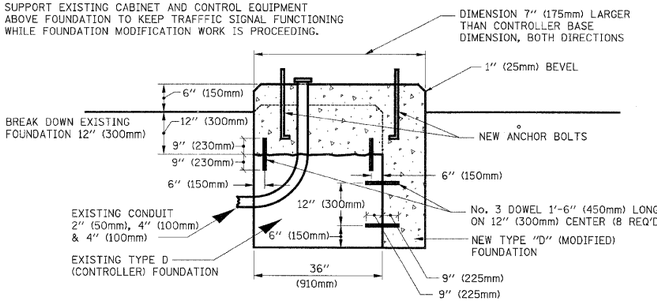


MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED

TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125"(257mm)	9.5"(241mm)	19"(483mm)	12" (300mm)	24kg
II	Ø 11.125"(283mm)	10.75"(273mm)	21.5"(546mm)	12" (300mm)	26kg

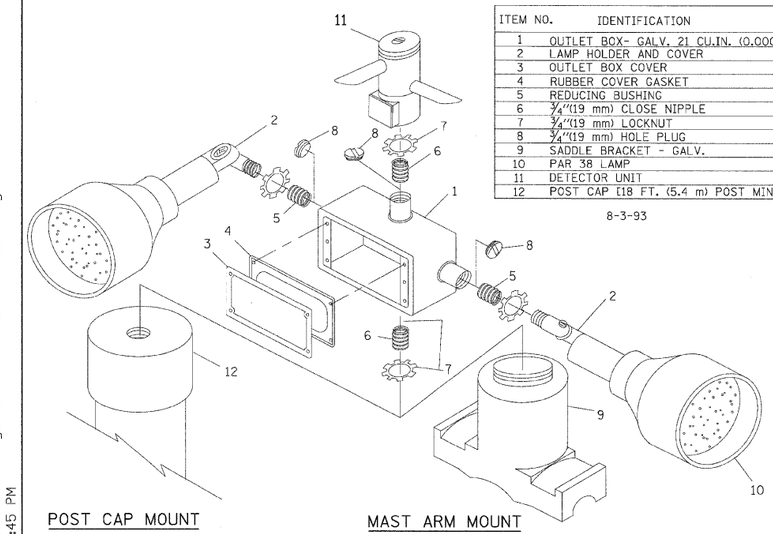
SHROUD DETAIL

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

(NOT TO SCALE)



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	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

8-3-93

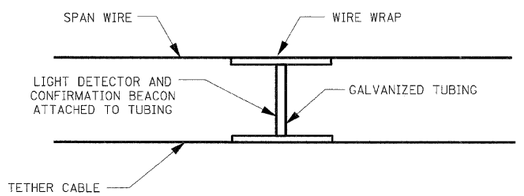
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

NOTES:

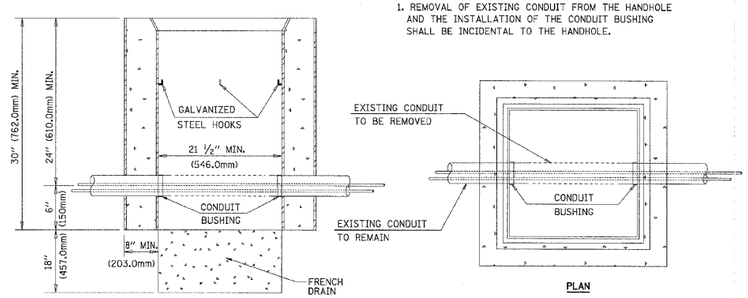
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(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.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)

NOTES
1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



ELEVATION

PLAN

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE
HORIZ.
DATE 1/28/2009

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 4 OF 4

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171A00\Drawings\ROWY\Mil Shts\Traf\DET-4.dgn
2/5/2009 5:13:45 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	67
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SCHEDULE OF TRAFFIC SIGNAL QUANTITIES

CODE	PAY ITEM	UNIT	TOTAL QUANTITY	ILL 22 & ILL 21	TEMPORARY INTERCONNECT	INTERCONNECT
81400100	HANDHOLE	EACH	9	9	-	-
81400200	HEAVY-DUTY HANDHOLE	EACH	2	2	-	-
81400300	DOUBLE HANDHOLE	EACH	2	2	-	-
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3	-	3	-
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	1	-	-
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1	1	-	-
87900200	DRILL EXISTING HANDHOLE	EACH	3	-	-	3
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4	4	-	-
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	6	6	-	-
88030210	SIGNAL HEAD, LED, 2-FACE, 3 SECTION BRACKET MOUNTED	EACH	2	2	-	-
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2	2	-	-
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	2	-	-
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1	1	-	-
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10	10	-	-
88500100	INDUCTIVE LOOP DETECTOR	EACH	16	16	-	-
88700200	LIGHT DETECTOR	EACH	4	4	-	-
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1	1	-	-
88800100	PEDESTRIAN PUSH-BUTTON	EACH	3	3	-	-
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1	-	-
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1	-	-
89502380	REMOVE EXISTING HANDHOLE	EACH	12	12	-	-
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9	9	-	-
M7200100	SIGN PANEL- TYPE 1	SQ M	5	4.9	-	-
M8100060	CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	680	320	-	360
M8100070	CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	38	38	-	-
M8100080	CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	6	6	-	-
M8100100	CONDUIT IN TRENCH, 100MM DIA., GALVANIZED STEEL	METER	34	34	-	-
M8780200	CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	108	41	-	67
M8101090	CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	131	131	-	-
M8190200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	681	423	-	258
M8731210	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	METER	96	96	-	-
M8731220	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	METER	482	482	-	-
M8731240	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	525	525	-	-
M8731250	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	1,017	1,017	-	-
M8731300	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	1,740	1,740	-	-
M8731800	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	METER	28	28	-	-
M8780100	CONCRETE FOUNDATION, TYPE A	METER	4.8	4.8	-	-
M8780200	CONCRETE FOUNDATION, TYPE D	METER	2.4	2.4	-	-
M8780415	CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	19.6	19.6	-	-
MX032723	PREFORMED DETECTOR LOOP	METER	249	249	-	-
MX032819	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14C	METER	2,217	-	-	2,217
MX871055	ELECTRIC CABLE IN CONDUIT, NO. 62.5/125 MM12F & SM12F	METER	2,217	-	-	2,217
MX873027	ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	METER	283	283	-	-
MX873030	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	METER	332	332	-	-
X0325737	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1	-	-
X8050015	SERVICE INSTALLATION, POLE MOUNTED	EACH	1	1	-	-
XX002856	RE-OPTIMIZE TRAFFIC SIGNAL SYS - LEVEL 1	L SUM	1	1	-	-
XX006661	UN-INTERRUPTABLE POWER SUPPLY	EACH	1	1	-	-
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER (SPECIAL)	EACH	4	4	-	-
	STEEL MAST ARM ASSEMBLY AND POLE, 12.19 METER (SPECIAL)	EACH	1	1	-	-
	STEEL MAST ARM ASSEMBLY AND POLE, 14.63 METER (SPECIAL)	EACH	1	1	-	-
	STEEL MAST ARM ASSEMBLY AND POLE, 15.85 METER (SPECIAL)	EACH	1	1	-	-
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 14.63 METER (SPECIAL)	EACH	1	1	-	-
	RELOCATE EXISTING SURVEILLANCE CAMERA AND CABINET	EACH	2	2	-	-
MX033162	ELECTRIC CABLE IN CONDUIT, COAXIAL	METER	60	-	-	60

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.00\Drawings\RDWY\M1\Shts\Traf\sumqnt.dgn
2/6/2009 10:38:07 AM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 22
SCHEDULE OF TRAFFIC SIGNAL QUANTITIES

SCALE: NONE
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

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

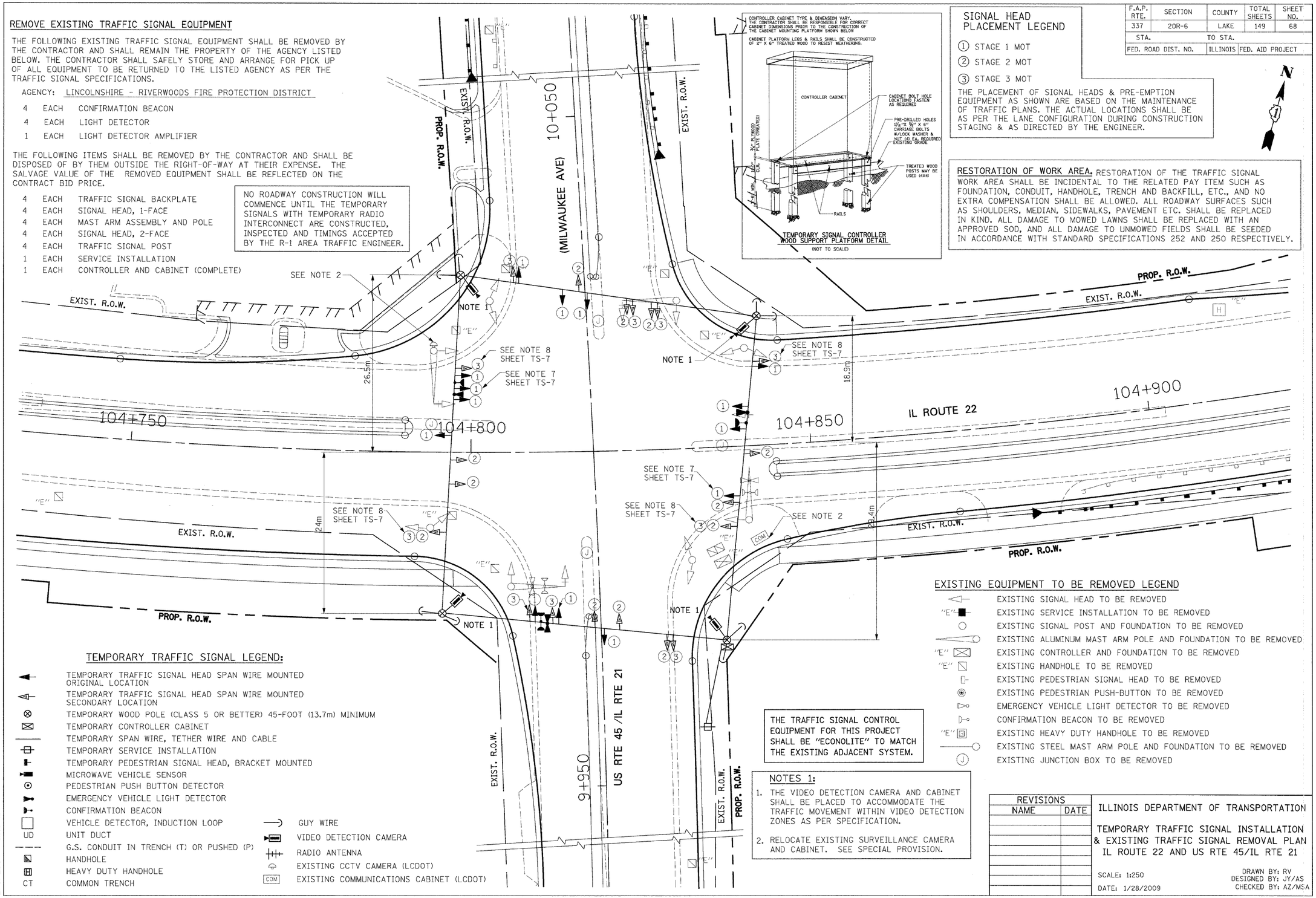
AGENCY: LINCOLNSHIRE - RIVERWOODS FIRE PROTECTION DISTRICT

4	EACH	CONFIRMATION BEACON
4	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER

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 ON THE CONTRACT BID PRICE.

4	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	SIGNAL HEAD, 1-FACE
4	EACH	MAST ARM ASSEMBLY AND POLE
4	EACH	SIGNAL HEAD, 2-FACE
4	EACH	TRAFFIC SIGNAL POST
1	EACH	SERVICE INSTALLATION
1	EACH	CONTROLLER AND CABINET (COMPLETE)

NO ROADWAY CONSTRUCTION WILL COMMENCE UNTIL THE TEMPORARY SIGNALS WITH TEMPORARY RADIO INTERCONNECT ARE CONSTRUCTED, INSPECTED AND TIMINGS ACCEPTED BY THE R-1 AREA TRAFFIC ENGINEER.



CONTROLLER CABINET TYPE & DIMENSION VARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF THE CABINET MOUNTING PLATFORM SHOWN BELOW

CABINET PLATFORM LEGS & RAILS SHALL BE CONSTRUCTED OF 2" X 6" TREATED WOOD TO RESIST WEATHERING.

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM DETAIL
(NOT TO SCALE)

SIGNAL HEAD PLACEMENT LEGEND

1. STAGE 1 MOT
2. STAGE 2 MOT
3. STAGE 3 MOT

THE PLACEMENT OF SIGNAL HEADS & PRE-EMPTION EQUIPMENT AS SHOWN ARE BASED ON THE MAINTENANCE OF TRAFFIC PLANS. THE ACTUAL LOCATIONS SHALL BE AS PER THE LANE CONFIGURATION DURING CONSTRUCTION STAGING & AS DIRECTED BY THE ENGINEER.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	68
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

TEMPORARY TRAFFIC SIGNAL LEGEND:

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45-FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- MICROWAVE VEHICLE SENSOR
- PEDESTRIAN PUSH BUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD — UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- CT — COMMON TRENCH
- GUY WIRE
- VIDEO DETECTION CAMERA
- RADIO ANTENNA
- EXISTING CCTV CAMERA (LCDOT)
- COM — EXISTING COMMUNICATIONS CABINET (LCDOT)

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- "E" — EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" — EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" — EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- EXISTING CONFIRMATION BEACON TO BE REMOVED
- "E" — EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- J — EXISTING JUNCTION BOX TO BE REMOVED

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

NOTES 1:

1. THE VIDEO DETECTION CAMERA AND CABINET SHALL BE PLACED TO ACCOMMODATE THE TRAFFIC MOVEMENT WITHIN VIDEO DETECTION ZONES AS PER SPECIFICATION.
2. RELOCATE EXISTING SURVEILLANCE CAMERA AND CABINET. SEE SPECIAL PROVISION.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

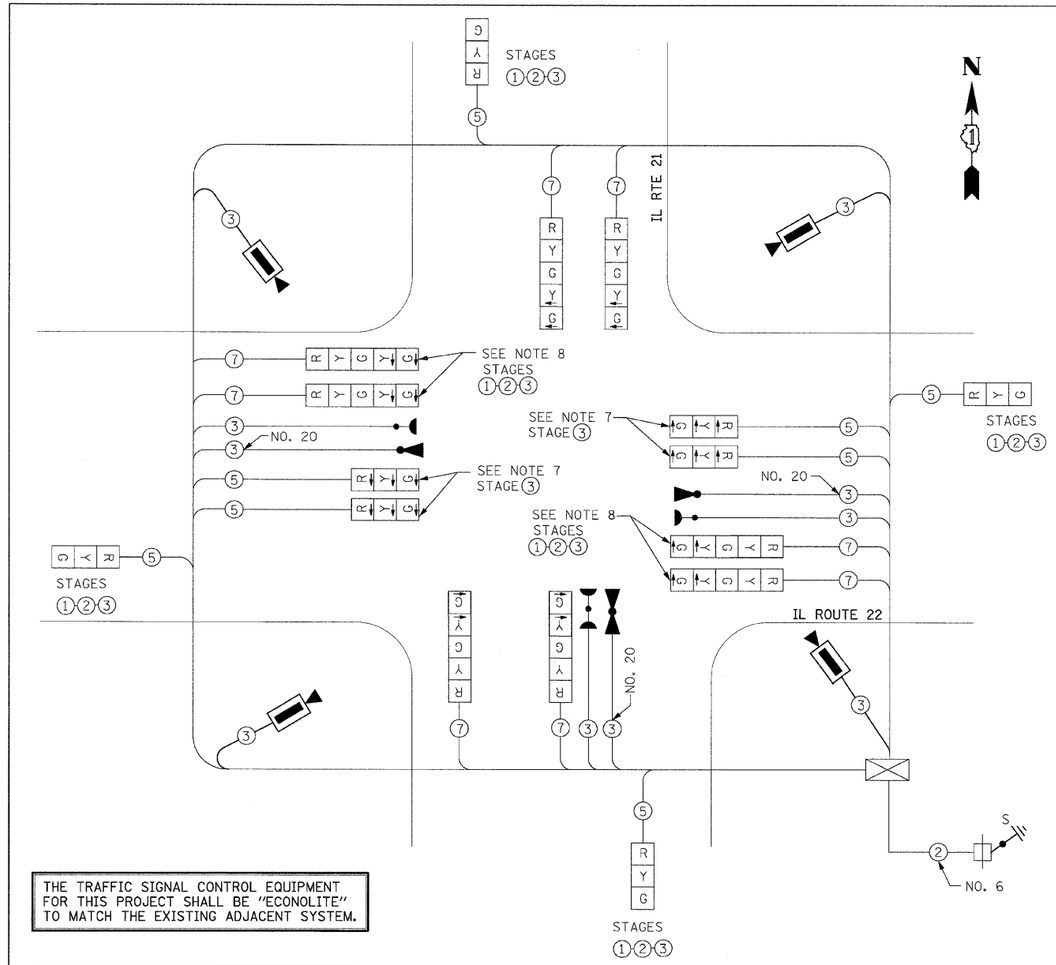
TEMPORARY TRAFFIC SIGNAL INSTALLATION & EXISTING TRAFFIC SIGNAL REMOVAL PLAN IL ROUTE 22 AND US RTE 45/IL RTE 21

SCALE: 1:250
DATE: 1/28/2009
DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\M11Shts\Traf\mlwtpln.dgn
2/6/2009 10:39:14 AM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	69
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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

NO ROADWAY CONSTRUCTION WILL COMMENCE UNTIL THE TEMPORARY SIGNALS WITH TEMPORARY INTERCONNECT ARE CONSTRUCTED, INSPECTED AND TIMINGS ACCEPTED BY THE R-1 AREA TRAFFIC ENGINEER.

I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	X WATTAGE INCAND	X WATTAGE LED	X % OPERATION	TOTAL VOLTAGE
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	-	84		0.05	-
FLASHER	-			0.50	-
				TOTAL =	415.2

ENERGY COST TO: Illinois Department of Transportation
Division of Highways / District 1
201 West Center Court Schaumburg, Illinois 60196-1096
ENERGY SUPPLY: CONTACT: Mr. Varughese Samuel
PHONE: 847-816-5291
COMPANY: ComEd

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\ROWY\M11Shts\Traf\m11wtpcbl.dgn
2/6/2009 10:43:01 AM

TEMPORARY CABLE DIAGRAM LEGEND

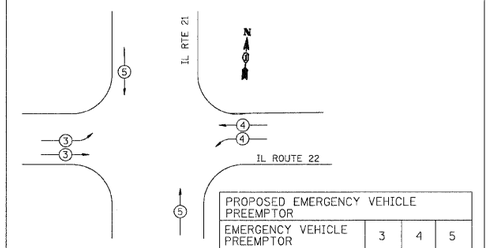
- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) — INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PEDESTRIAN PUSHBUTTON DETECTOR
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- MICROWAVE VEHICLE SENSOR
- S — GROUND ROD AT ELECTRIC SERVICE INSTALLATION
- VIDEO DETECTION CAMERA
- RADIO ANTENA

SIGNAL HEAD PLACEMENT LEGEND

(1) STAGE 1 MOT
(2) STAGE 2 MOT
(3) STAGE 3 MOT

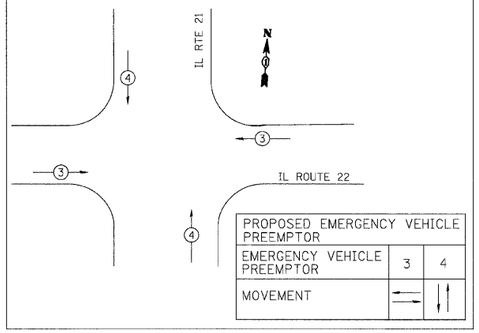
THE PLACEMENT OF SIGNAL HEADS & PRE-EMPTION EQUIPMENT AS SHOWN ARE BASED ON THE MAINTENANCE OF TRAFFIC PLANS. THE ACTUAL LOCATIONS SHALL BE AS PER THE LANE CONFIGURATION DURING CONSTRUCTION STAGING & AS DIRECTED BY THE ENGINEER.

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE: STAGE 3



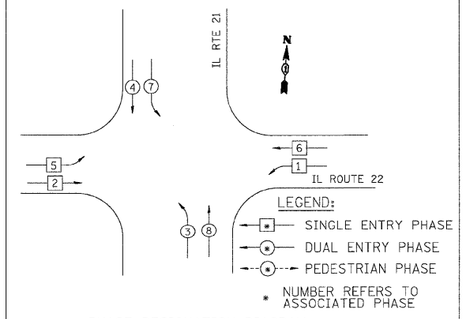
PROPOSED EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE: STAGES 1 & 2



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

TEMPORARY CONTROLLER SEQUENCE: STAGE 3

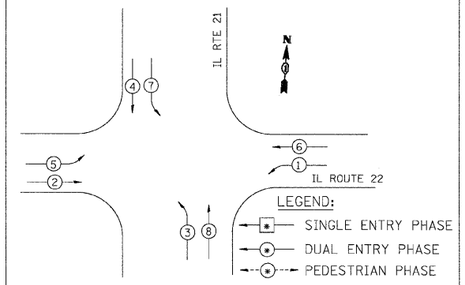


PHASE DESIGNATION DIAGRAM

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OF TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. THESE SIGNALS HEADS SHALL BE BAGGED AND DISCONNECTED DURING STAGES 1 & 2. AT THE BEGINNING OF STAGE 3, THESE SIGNAL HEADS SHALL BE UNBAGGED AND ACTIVATED FOR USE UNTIL THE THE PERMANENT SIGNALS ARE INSTALLED.
8. AT THE BEGINNING OF STAGE 3, THE BOTTOM TWO SECTIONS OF THESE SIGNAL HEADS SHALL BE BAGGED AND DISCONNECTED.

TEMPORARY CONTROLLER SEQUENCE: STAGES 1 & 2



PHASE DESIGNATION DIAGRAM

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL ROUTE 22 AND US RTE 45/IL RTE 21

SCALE: NONE
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	70
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE ASC/3" TO MATCH THE EXISTING ADJACENT SYSTEM.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACK PLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT	UD	
COMMON TRENCH	CT	
CCTV CAMERA (LCDOT)		

TRAFFIC SIGNAL LEGEND (CONTD.)

	PROPOSED	EXISTING
HANDHOLE		
HEAVY-DUTY HANDHOLE	H	H
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		"E"
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED	"P"	"P"
CONDUIT SPLICE		
WOOD POLE		"E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		"E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		"E"
TELEPHONE CONNECTION	T	T
ILLUMINATED SIGN "NO LEFT TURN"		"E"
ILLUMINATED SIGN "NO RIGHT TURN"		"E"
PREFORMED LOOP DETECTORS	P	P
UNINTRUPABLE POWER SUPPLY	B	B
EXISTING COMMUNICATIONS CABINET (LCDOT)		COM

MATCH LINE STA. 10+050 (SEE SHEET TS-9)

LEFT ON GREEN ARROW ONLY

R10-5
4 REQUIRED
600mmX750mm
SIGN PANEL TYPE 1

(MILWAUKEE AVE)

EXIST. R.O.W.

PROP. R.O.W.

IL ROUTE 22

104+250

104+800

104+850

MATCH LINE STA. 104+730 (SEE SHEET TS-9)

MATCH LINE STA. 104+900 (SEE SHEET TS-9)

US RTE 45 /IL RTE 21

9+950

MATCH LINE STA. 9+930 (SEE SHEET TS-9)

PREFORMED DETECTOR LOOPS (TYP)

NO ROADWAY CONSTRUCTION WILL COMMENCE UNTIL THE TEMPORARY SIGNALS WITH TEMPORARY INTERCONNECT ARE CONSTRUCTED, INSPECTED AND TIMINGS ACCEPTED BY THE R-1 AREA TRAFFIC ENGINEER.

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

NOTES

1. INSTALL "L" SHAPE CONCRETE MAINTENANCE PADS FOR EACH OF THE CONTROLLER / UPS CABINET AS PER STANDARD 878001-06.
2. ALL TRAFFIC SIGNAL POLES, AT THIS INTERSECTION SHALL BE CONSTRUCTED BY UPGRADED MATERIAL AND SPECIFICATION PRODUCED BY STERNBERG LIGHTING.

   THE SPECIFICATION FOR THE UPGRADED MATERIAL ARE AS FOLLOWS:

   MANUFACTURER: STERNBERG LIGHTING
   COLOR: BLACK
   BASE PLATE: BIRMINGHAM
   POLES: 16-POINT FLAT FLUTE
   POST CENTER CAP: RBCC3
   ROADWAY ARM: CCA
   STRAPS: BLACK TO MATCH POLES
3. RELOCATE CCTV CAMERA AND CAMERA MOUNTING ASSEMBLY FROM TEMPORARY SIGNAL POLE TO THE PROPOSED COMBINATION MAST ARM AT THE SOUTHEAST CORNER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION
IL. ROUTE 22 AND US RTE 45/IL RTE 21

SCALE: 1:250
DATE: 1-15-2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

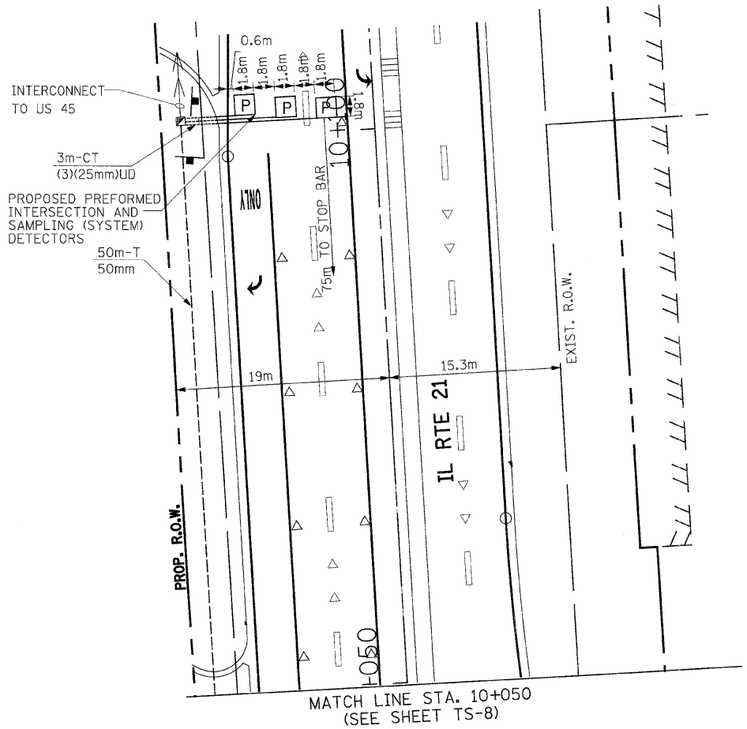
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

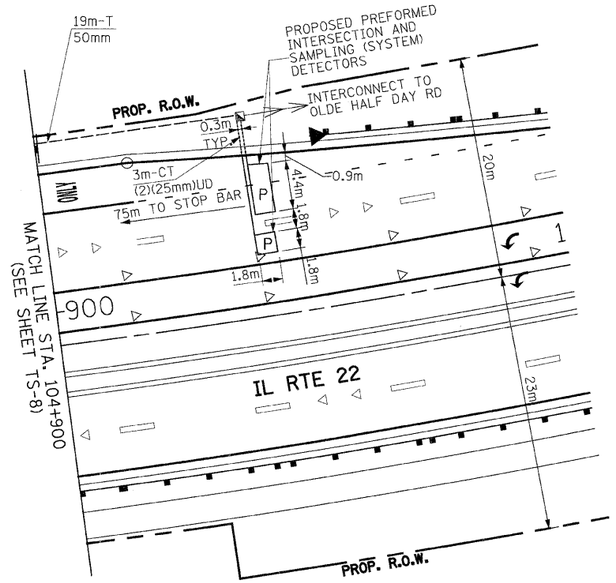
P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mi\Shts\Traf\milwpln.dgn
2/5/2009 5:14:20 PM

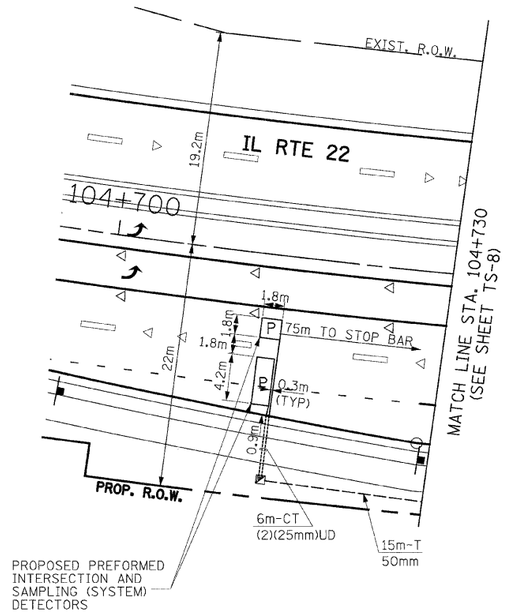
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	71
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

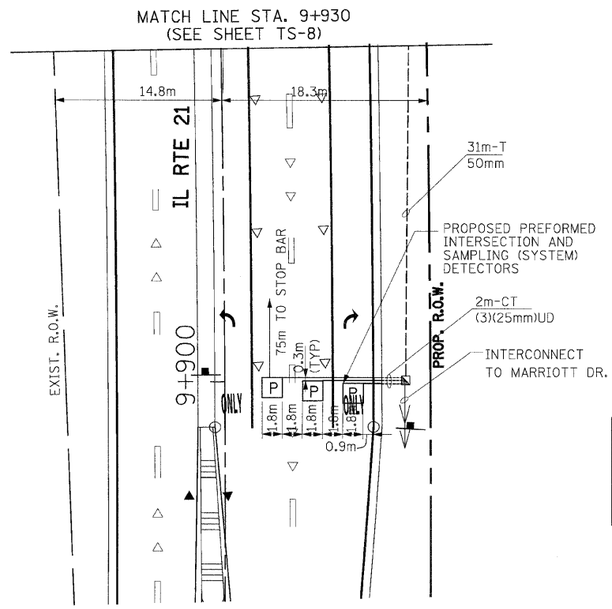
TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	▣	▣
SERVICE INSTALLATION	■	□
SIGNAL HEAD	→	⇨
SIGNAL HEAD WITH BACK PLATE	+→	+⇨
SIGNAL HEAD, PEDESTRIAN	▪	▫
SIGNAL POST	●	○
MAST ARM ASSEMBLY AND POLE, STEEL	●———	○———
MAST ARM ASSEMBLY AND POLE, ALUMINUM	●———	○———
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	●—✳—	○—✳—
UNIT DUCT	UD	
COMMON TRENCH	CT	
HANDHOLE	◪	◪
HEAVY-DUTY HANDHOLE	H	H
DOUBLE HANDHOLE	◪◪	◪◪
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	———	———
PEDESTRIAN PUSHBUTTON DETECTOR	⊙	⊙
DETECTOR LOOP	□	⬚
CAST IRON JUNCTION BOX	Ⓘ	Ⓘ "E"
EMERGENCY VEHICLE LIGHT DETECTOR	◢	◿
CONFIRMATION BEACON	✦	✧
SIGNAL HEAD OPTICALLY PROGRAMMED	→ "P"	⇨ "P"
CONDUIT SPLICE	——⊗——	
WOOD POLE	⊗	⊗ "E"
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	———	——— "E"
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	■——	□——
RAILROAD CONTROL CABINET	R	R "E"
TELEPHONE CONNECTION	T	T "E"
ILLUMINATED SIGN "NO LEFT TURN"	⛔	⛔ "E"
ILLUMINATED SIGN "NO RIGHT TURN"	⛔	⛔ "E"
PREFORMED LOOP DETECTORS	P	P
UNINTRUPABLE POWER SUPPLY	B	B









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

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

NOTE 1. INSTALL "L" SHAPE CONCRETE MAINTENANCE PADS FOR EACH OF THE CONTROLLER / UPS CABINET AS PER STANDARD 878001-06.

NO ROADWAY CONSTRUCTION WILL COMMENCE UNTIL THE TEMPORARY SIGNALS WITH TEMPORARY RADIO INTERCONNECT ARE CONSTRUCTED, INSPECTED AND TIMINGS ACCEPTED BY THE R-1 AREA TRAFFIC ENGINEER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

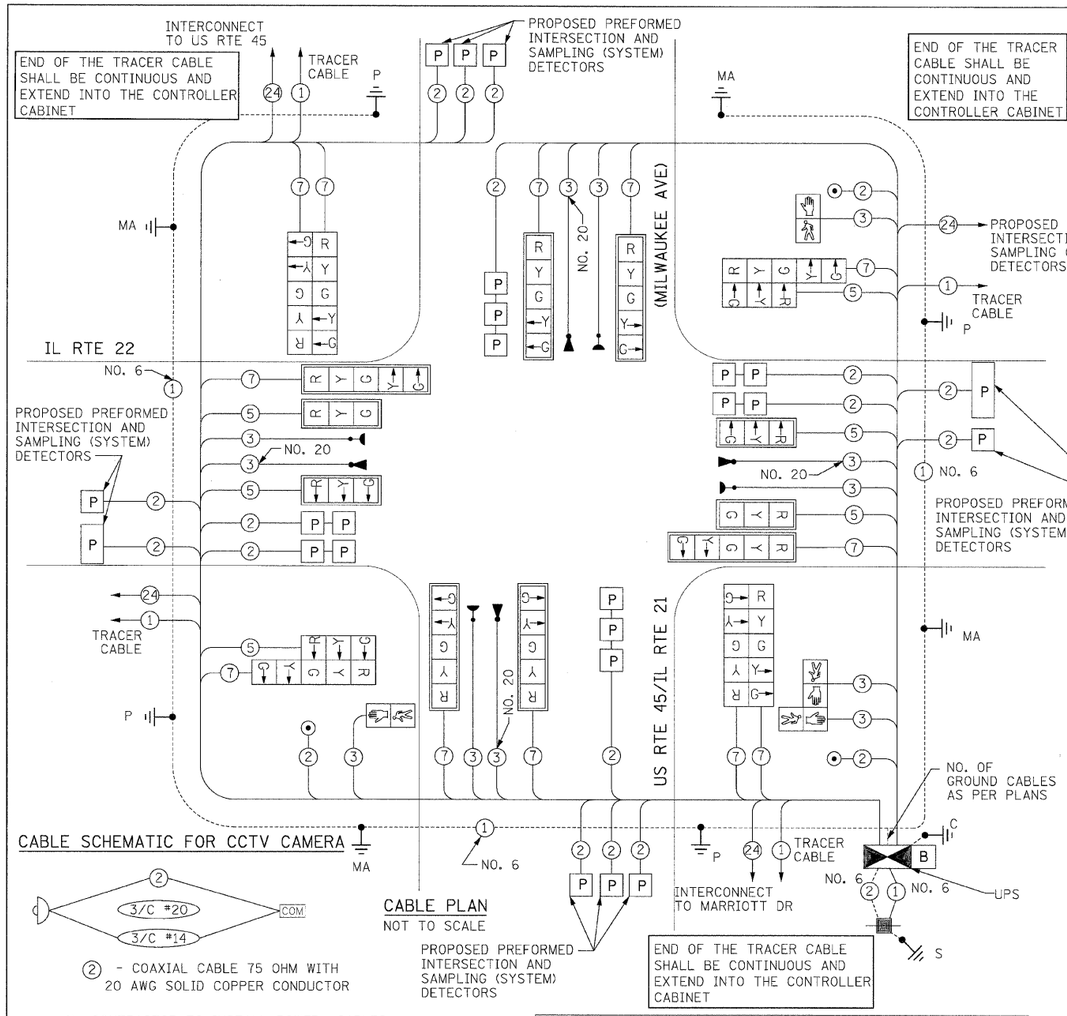
TRAFFIC SIGNAL INSTALLATION PLAN
IL ROUTE 22 AND US 45/IL RTE 21

SCALE: 1:250
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\M11\Shts\Traf\mlwpln2.dgn
2/5/2009 5:14:31 PM



1) CONTRACTOR TO INSTALL POWER CABLES AND SIGNAL CABLES IN SEPARATE CONDUITS WHERE POSSIBLE.

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
T	T	TELEPHONE INSTALLATION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
(2)	(2)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(1)	(1)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(24)	(24)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G	R Y G	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
"P"	"P"	
"E"	"E"	RAILROAD CONTROL CABINET
"E"	"E"	ILLUMINATED SIGN "NO LEFT TURN"
"E"	"E"	ILLUMINATED SIGN "NO RIGHT TURN"
H/C C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
B	B	UN-INTERRUPTIBLE POWER SUPPLY (UPS)
P	P	PREFORMED LOOP DETECTIORS
		EXISTING CCTV CAMERA (LCDOT)
COM		EXISTING COMMUNICATIONS CABINET (LCDOT)

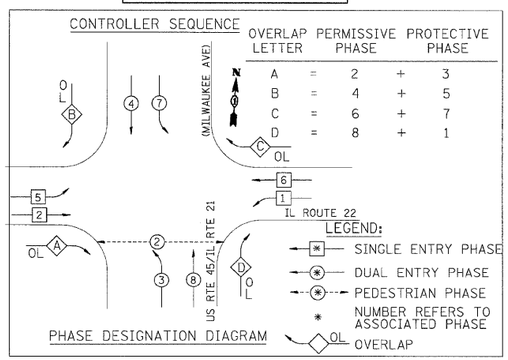
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL VOLTAGE
TYPE	NO. LAMPS	WATTAGE INCAND	WATTAGE LED	% OPERATION	
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	8	135	12	0.10	28.8
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	-	84		0.05	-
FLASHER	-			0.50	-
				TOTAL =	561.8

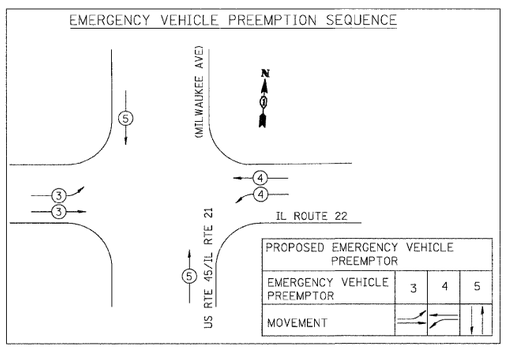
ENERGY COST TO: Illinois Department of Transportation
Division of Highways / District 1
201 West Center Ct., Schaumburg, Illinois 60196-1096
ENERGY SUPPLY: CONTACT: Mr. Varughese Samuel
PHONE: 847-816-5291
COMPANY: ComEd

FOUNDATION (DEPTH)	(FT.)	(m)
TYPE A - POST	4	(1.2)
D - CONTROLLER	4	(1.2)
E - M. ARM POLE		
24" (600mm)	10	(3.0)
30" (750mm)	15	(4.6)

CABLE SLACK	(FT.)	(m)
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	2	(1.0)
CONTROLLER CAB.	1	(0.5)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

CABLE SLACK	(FT.)	(m)
ALL FOUNDATIONS	3.5	(1.0)
MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)=	
BRACKET MOUNTED	13	(4.0)
PED. PUSHBUTTON	4	(1.2)
ELECTRIC SERVICE	13.5	(4.1)
SERVICE TO GROUND POST MOUNTED	13.5	(4.1)
	6	(1.8)





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	72
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SCHEDULE OF QUANTITIES

ITEM	UNIT	QNTY.
HANDHOLE	EACH	9
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	16
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
SIGN PANEL- TYPE 1	SQ M	4.92
CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	320
CONDUIT IN TRENCH, 65MM DIA., GALVANIZED STEEL	METER	38
CONDUIT IN TRENCH, 75MM DIA., GALVANIZED STEEL	METER	6
CONDUIT IN TRENCH, 100MM DIA., GALVANIZED STEEL	METER	34
CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	41
CONDUIT PUSHED, 100MM DIA., GALVANIZED STEEL	METER	131
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	423
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	METER	96
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	METER	482
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	525
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	1017
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	METER	1740
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	METER	28
CONCRETE FOUNDATION, TYPE A	METER	4.8
CONCRETE FOUNDATION, TYPE D	METER	2.4
CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	19.6
PREFORMED DETECTOR LOOP	METER	249
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	METER	283
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	METER	332
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYS - LEVEL 1	L SUM	1
UN-INTERRUPTABLE POWER SUPPLY	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 4.85 METER (SPECIAL)	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 12.19 METER (SPECIAL)	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 14.63 METER (SPECIAL)	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 15.85 METER (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM AND POLE, 14.63 METER (SPECIAL)	EACH	1
RELOCATE EXISTING SURVEILLANCE CAMERA AND CABINET	EACH	2

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

NO ROADWAY CONSTRUCTION WILL COMMENCE UNTIL THE TEMPORARY SIGNALS WITH TEMPORARY RADIO INTERCONNECT ARE CONSTRUCTED, INSPECTED AND TIMINGS ACCEPTED BY THE R-1 AREA TRAFFIC ENGINEER.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL ROUTE 22 AND US RTE 45/IL RTE 21

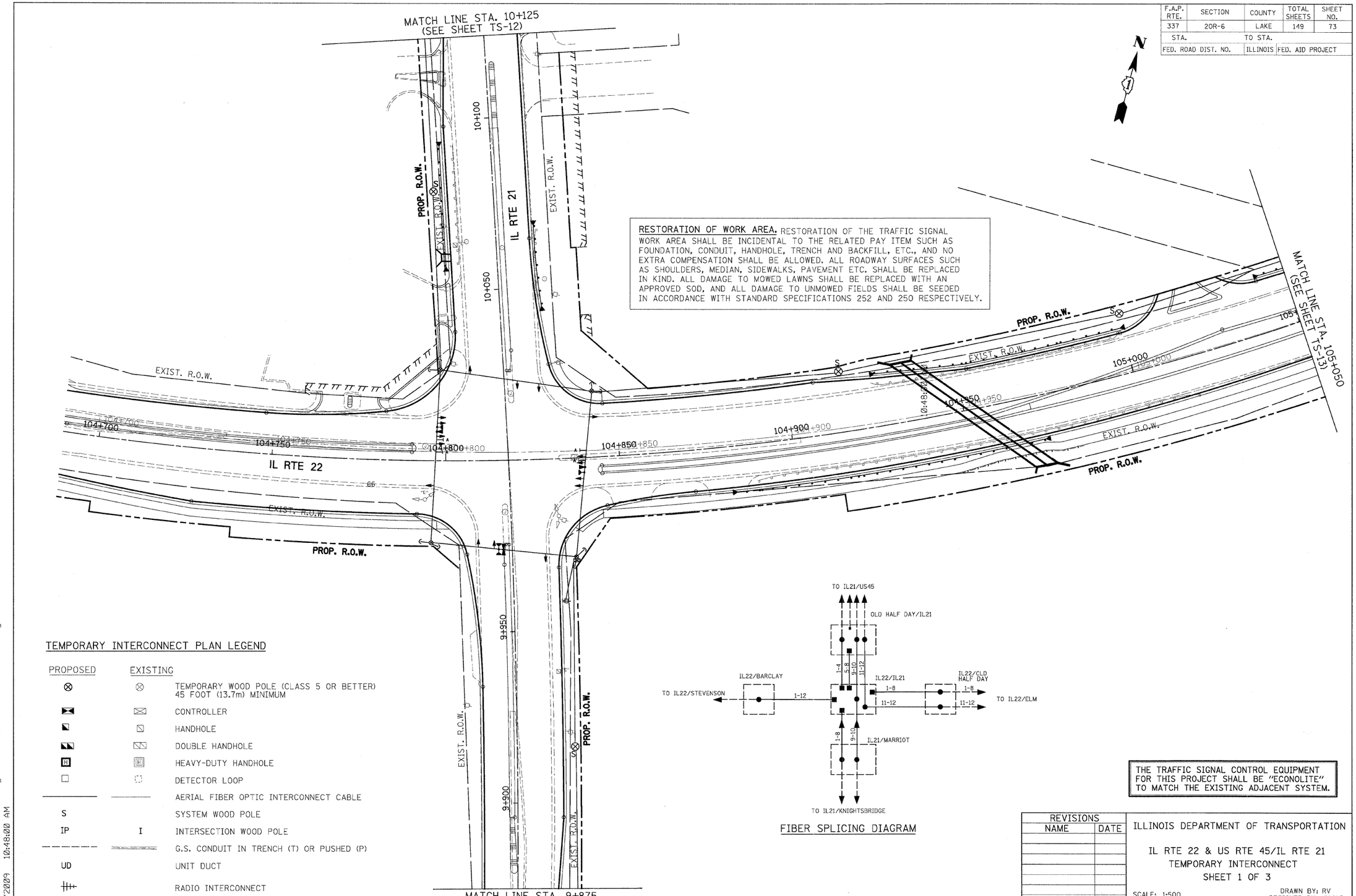
SCALE: NONE
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mi\Shts\Traf\milwcbl.dgn
2/6/2009 10:44:47 AM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	73
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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

TEMPORARY INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
⊗	⊗	TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
▣	▣	CONTROLLER
◪	◪	HANDHOLE
◪◪	◪◪	DOUBLE HANDHOLE
H	H	HEAVY-DUTY HANDHOLE
□	□	DETECTOR LOOP
———	———	AERIAL FIBER OPTIC INTERCONNECT CABLE
S		SYSTEM WOOD POLE
IP	I	INTERSECTION WOOD POLE
– – – – – –	═══	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
UD		UNIT DUCT
⊢⊢⊣		RADIO INTERCONNECT

FIBER SPLICING DIAGRAM

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 22 & US RTE 45/IL RTE 21
TEMPORARY INTERCONNECT
SHEET 1 OF 3

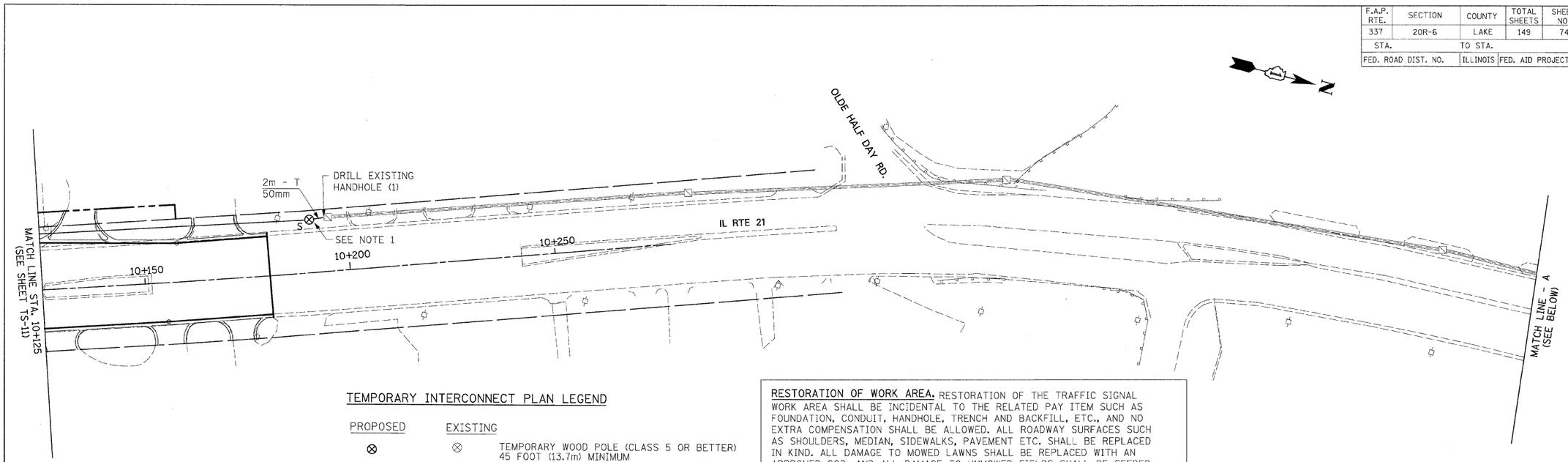
SCALE: 1:500
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\RDWY\M11\Shts\Traf\TMPintl.dgn
2/6/2009 10:48:00 AM

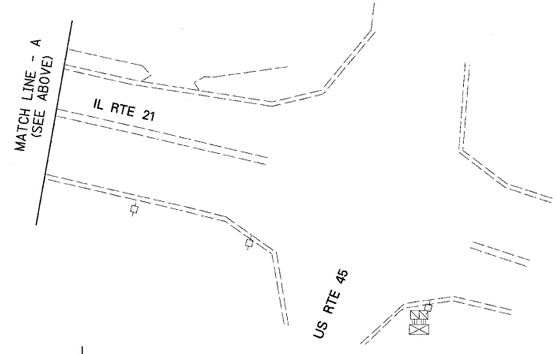
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	74
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

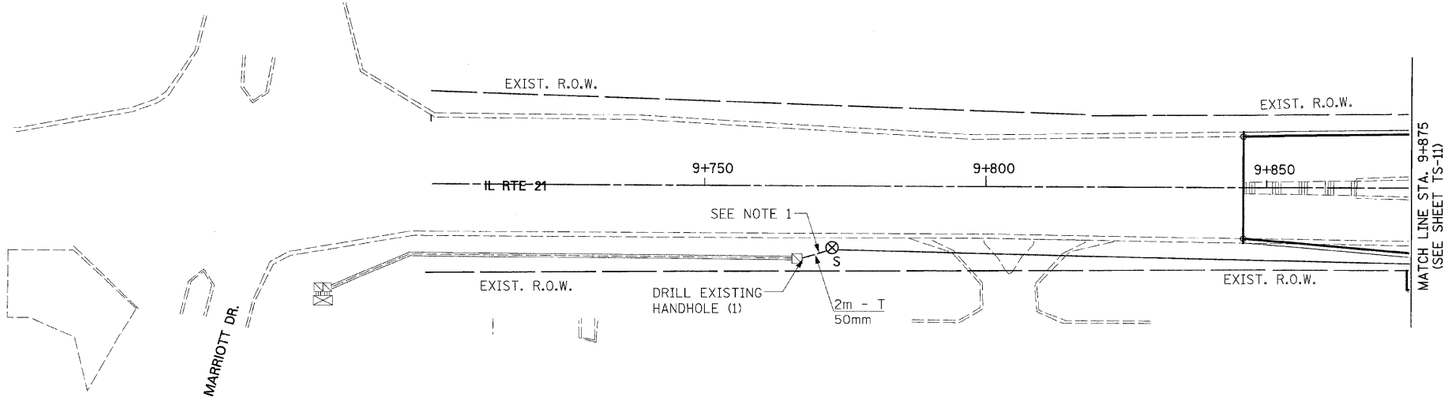


TEMPORARY INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
⊗	⊗	TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
▬	▨	CONTROLLER
◪	◪	HANDHOLE
◪◪	◪◪	DOUBLE HANDHOLE
H	H	HEAVY-DUTY HANDHOLE
□	□	DETECTOR LOOP
———	———	AERIAL FIBER OPTIC INTERCONNECT CABLE
S		SYSTEM WOOD POLE
IP	I	INTERSECTION WOOD POLE
- - - - -	═══	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
UD		UNIT DUCT
⫼		RADIO INTERCONNECT

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





NOTE:

1. THE CONTRACTOR SHALL INSTALL THE WOOD POLE AS SHOWN IN THE PLAN AND CONNECT THE AERIAL CABLE TO THE EXISTING HANDHOLE USING 50mm CONDUIT. THIS WORK IS INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 21 & IL RTE 22
TEMPORARY INTERCONNECT
SHEET 2 OF 3

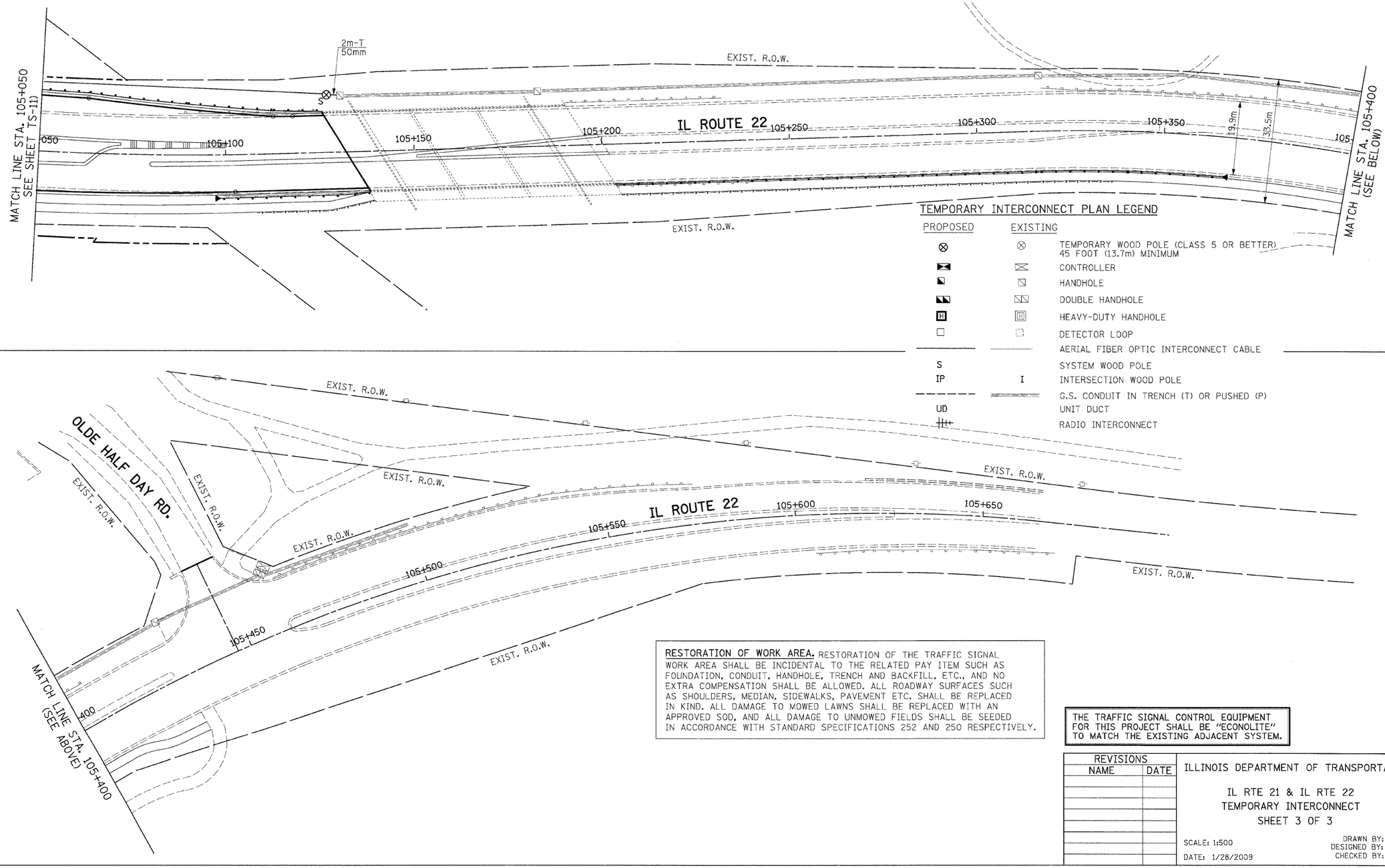
SCALE: 1:500
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.40\Drawings\ROW\Mil\Shts\Traf\tmpnt2.dgn
2/5/2009 10:28:38 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	75
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



TEMPORARY INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
⊗	⊗	TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
⋈	⋈	CONTROLLER
◥	◥	HANDHOLE
◥◥	◥◥	DOUBLE HANDHOLE
H	H	HEAVY-DUTY HANDHOLE
□	□	DETECTOR LOOP
		AERIAL FIBER OPTIC INTERCONNECT CABLE
S		SYSTEM WOOD POLE
IP	I	INTERSECTION WOOD POLE
		G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
UD		UNIT DUCT
		RADIO INTERCONNECT

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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 21 & IL RTE 22
TEMPORARY INTERCONNECT
SHEET 3 OF 3

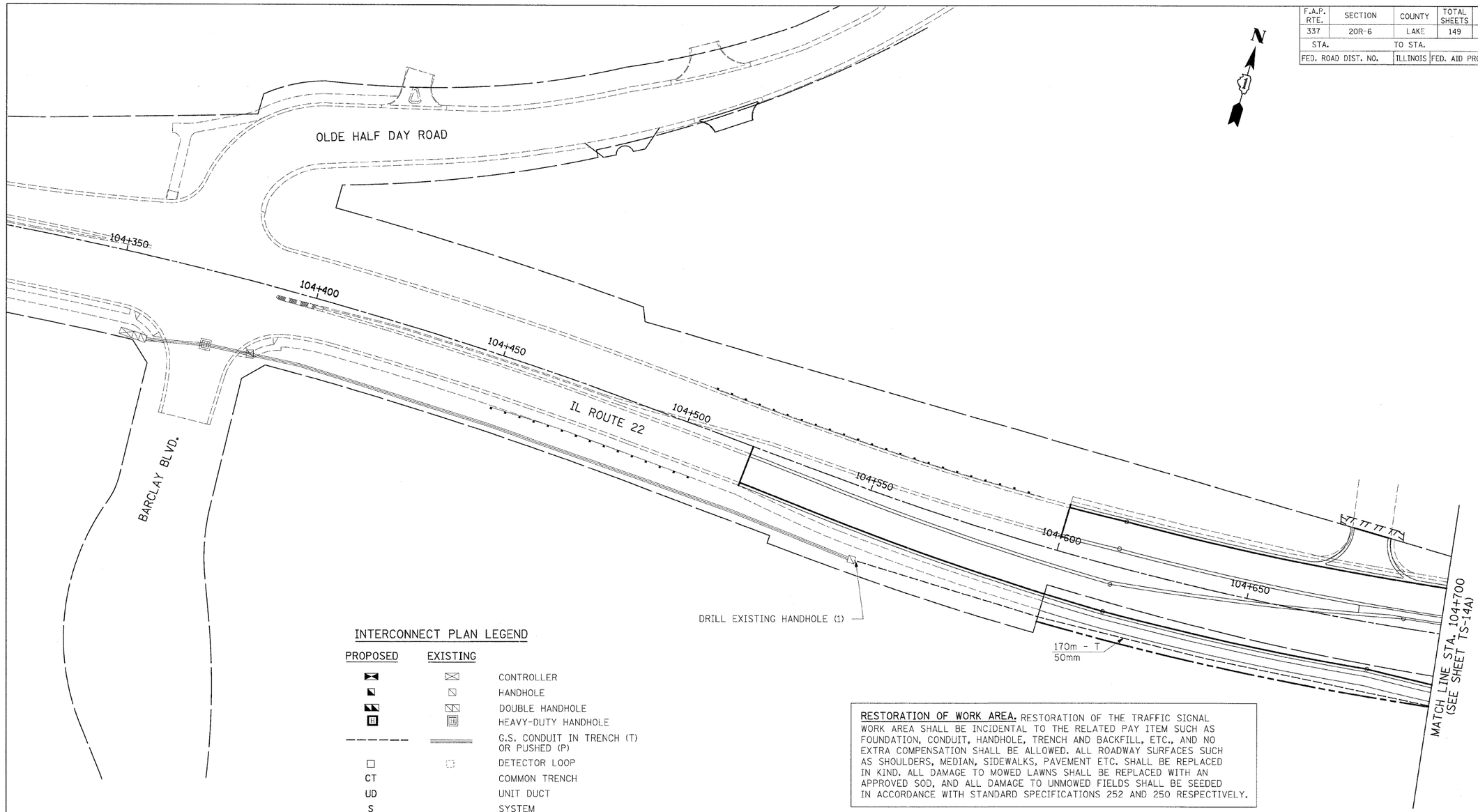
SCALE: 1:500
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.40\Drawings\RDWY\Mi\Shts\Traf\TMPint3.dgn
2/5/2009 10:29:39 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	76
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
⊠	⊠	CONTROLLER
◪	◪	HANDHOLE
◪◪	◪◪	DOUBLE HANDHOLE
H	H	HEAVY-DUTY HANDHOLE
———	═══	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
□	⬚	DETECTOR LOOP
CT		COMMON TRENCH
UD		UNIT DUCT
S		SYSTEM
IP	I	INTERSECTION

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

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\ROWY\M11\Shts\Traf\int1.DGN
2/6/2009 10:49:13 AM

REVISIONS NAME	DATE

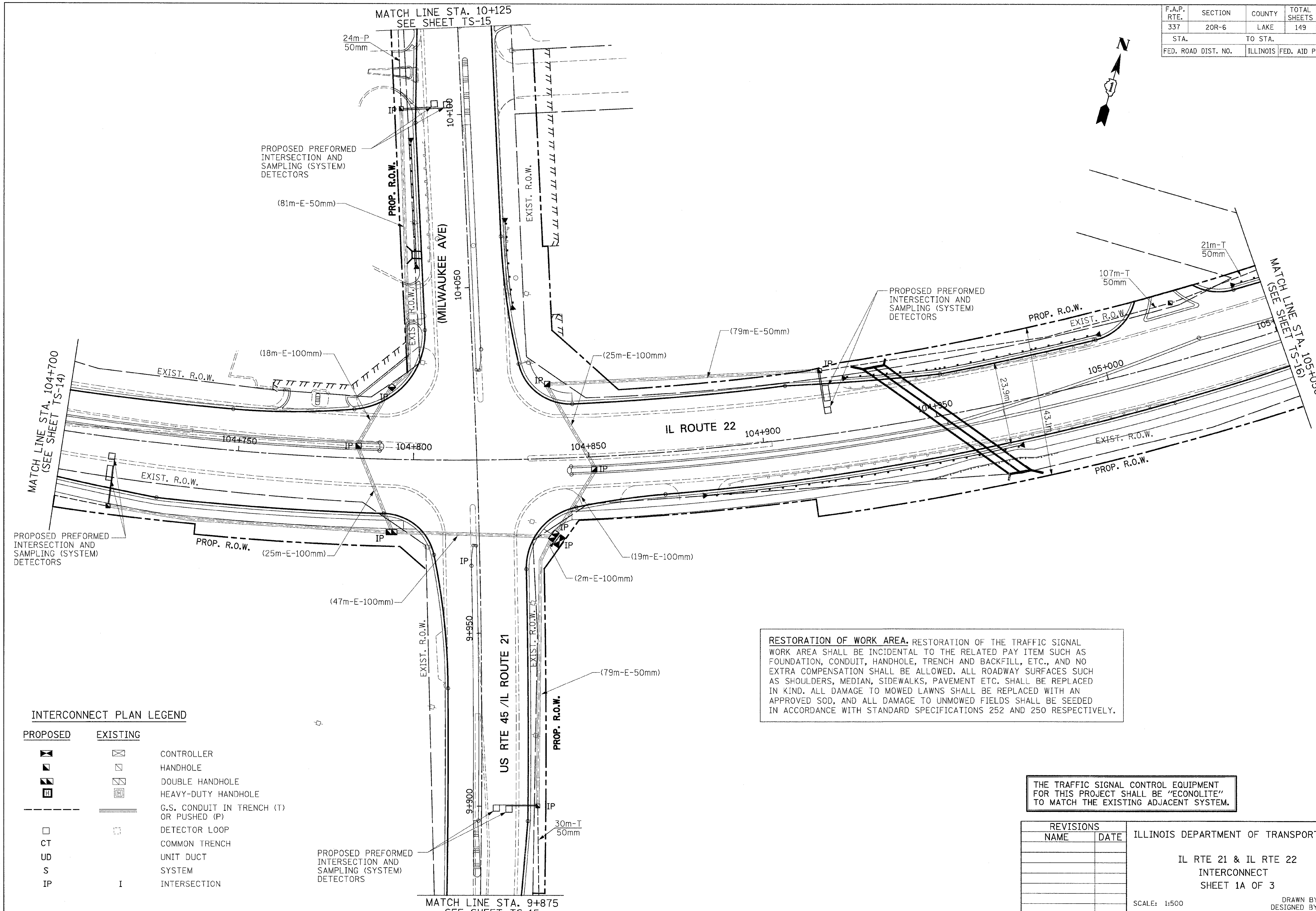
ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 21 & IL RTE 22
INTERCONNECT
SHEET 1 OF 3

SCALE: 1:500
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	76A
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
◼	⊠	CONTROLLER
◼	◻	HANDHOLE
◼◼	◻◻	DOUBLE HANDHOLE
◼	◻	HEAVY-DUTY HANDHOLE
------	═══	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
□	⬚	DETECTOR LOOP
CT		COMMON TRENCH
UD		UNIT DUCT
S		SYSTEM
IP	I	INTERSECTION

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

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

PATRICK ENGINEERING INC.
LISLE, ILLINOIS
P:\Lisle\IDOT\9171.A0\Drawings\RDWY\M1\Shts\Traf\int1A.dgn
2/6/2009 10:17:18 AM

REVISIONS	
NAME	DATE

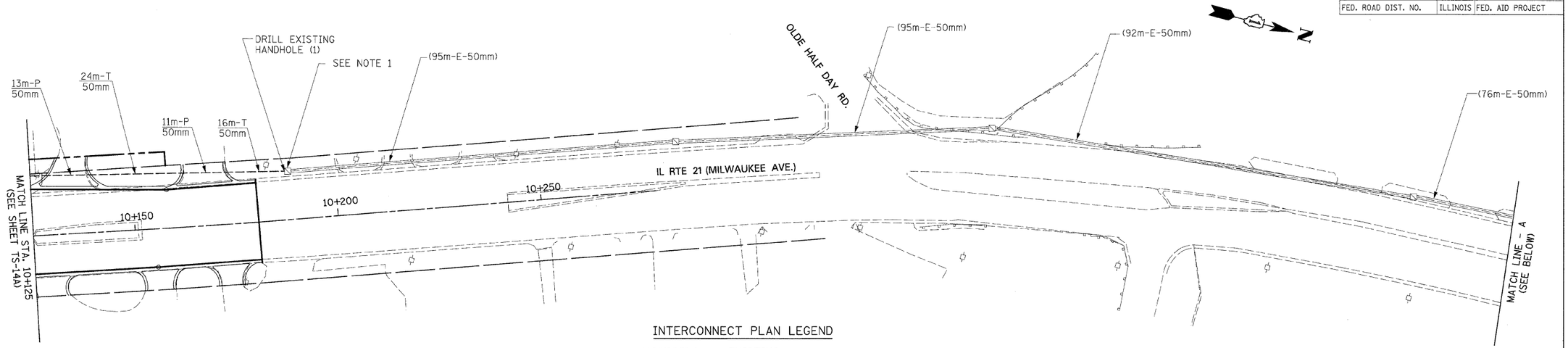
ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 21 & IL RTE 22
INTERCONNECT
SHEET 1A OF 3

SCALE: 1:500
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

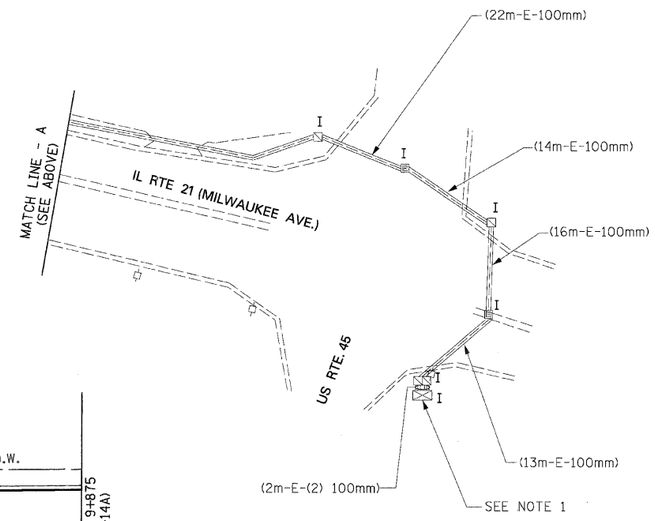
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	77
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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

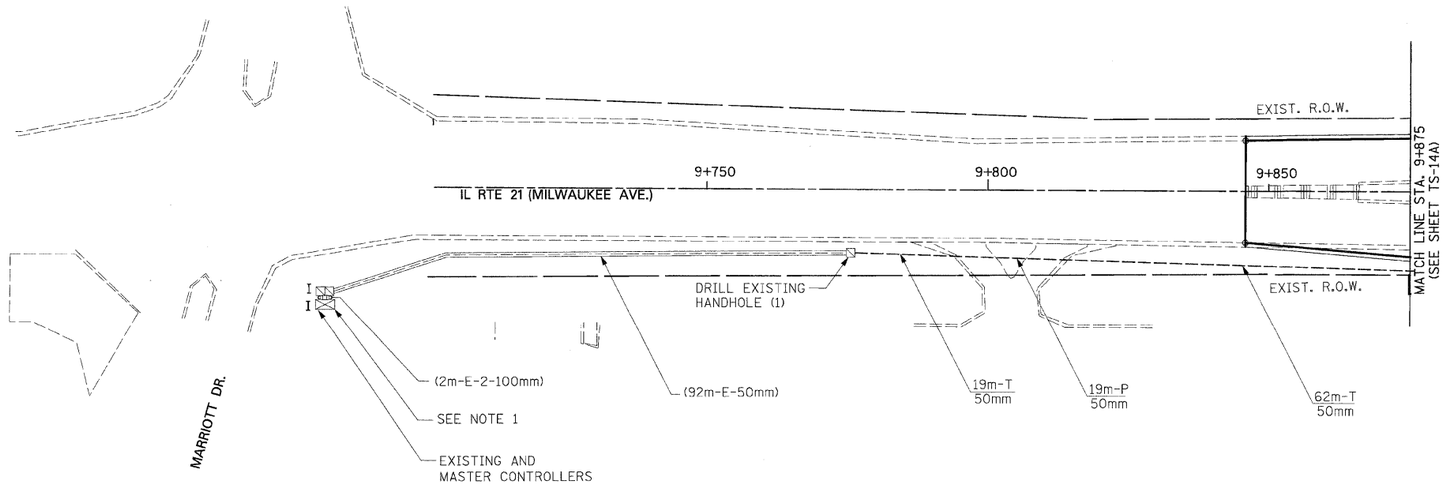
INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
⧓	⊠	CONTROLLER
◪	▨	HANDHOLE
◪◪	▨▨	DOUBLE HANDHOLE
H	H	HEAVY-DUTY HANDHOLE
-------	═══	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
□	⬚	DETECTOR LOOP
CT		COMMON TRENCH
UD		UNIT DUCT
S		SYSTEM
IP	I	INTERSECTION



NOTES:

1. THE CONDUIT SHALL BE INSTALLED INTO THE HANDHOLE AT THE CONDUIT STUB FROM THE TEMPORARY INTERCONNECT.



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

TS-15

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 21 & IL RTE 22
INTERCONNECT
SHEET 2 OF 3

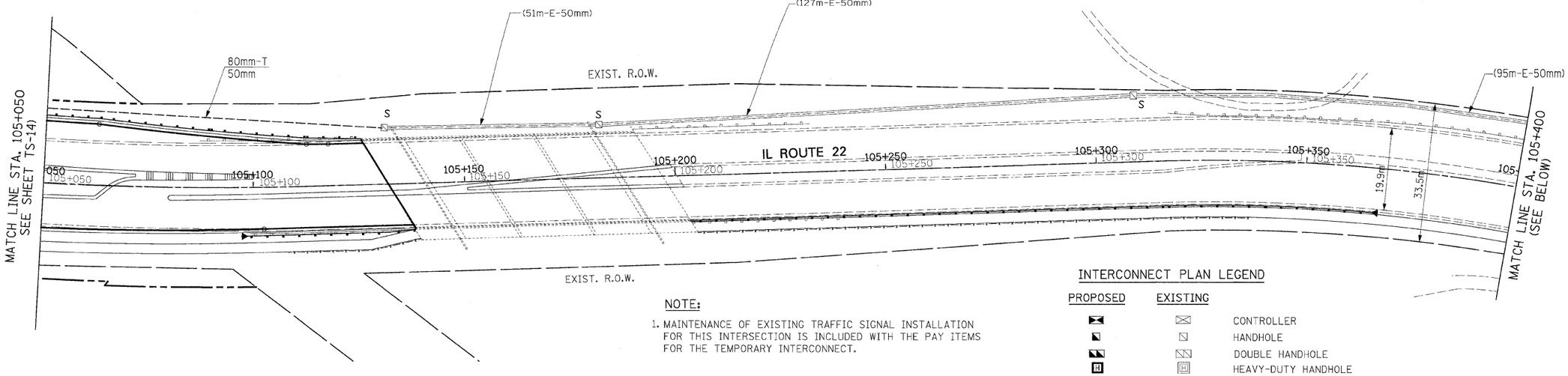
SCALE: 1:500
DATE: 1/28/2009

DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171A0\Drawings\RDWY\Mil\Shts\Traf\int2.dgn
2/6/2009 10:51:00 AM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	78
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

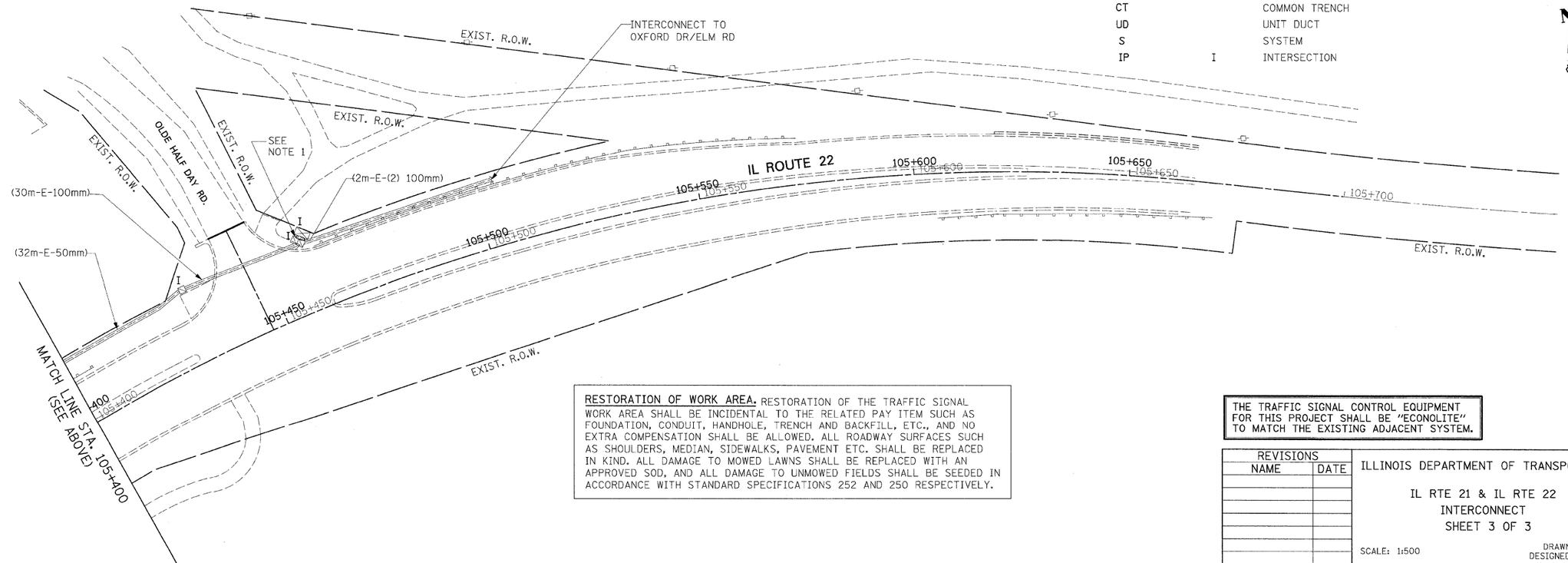


NOTE:

1. MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION FOR THIS INTERSECTION IS INCLUDED WITH THE PAY ITEMS FOR THE TEMPORARY INTERCONNECT.

INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
⋈	⋈	CONTROLLER
◪	◪	HANDHOLE
◪◪	◪◪	DOUBLE HANDHOLE
H	H	HEAVY-DUTY HANDHOLE
———	———	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
□	□	DETECTOR LOOP
CT		COMMON TRENCH
UD		UNIT DUCT
S		SYSTEM
IP	I	INTERSECTION



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

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL RTE 21 & IL RTE 22
INTERCONNECT
SHEET 3 OF 3

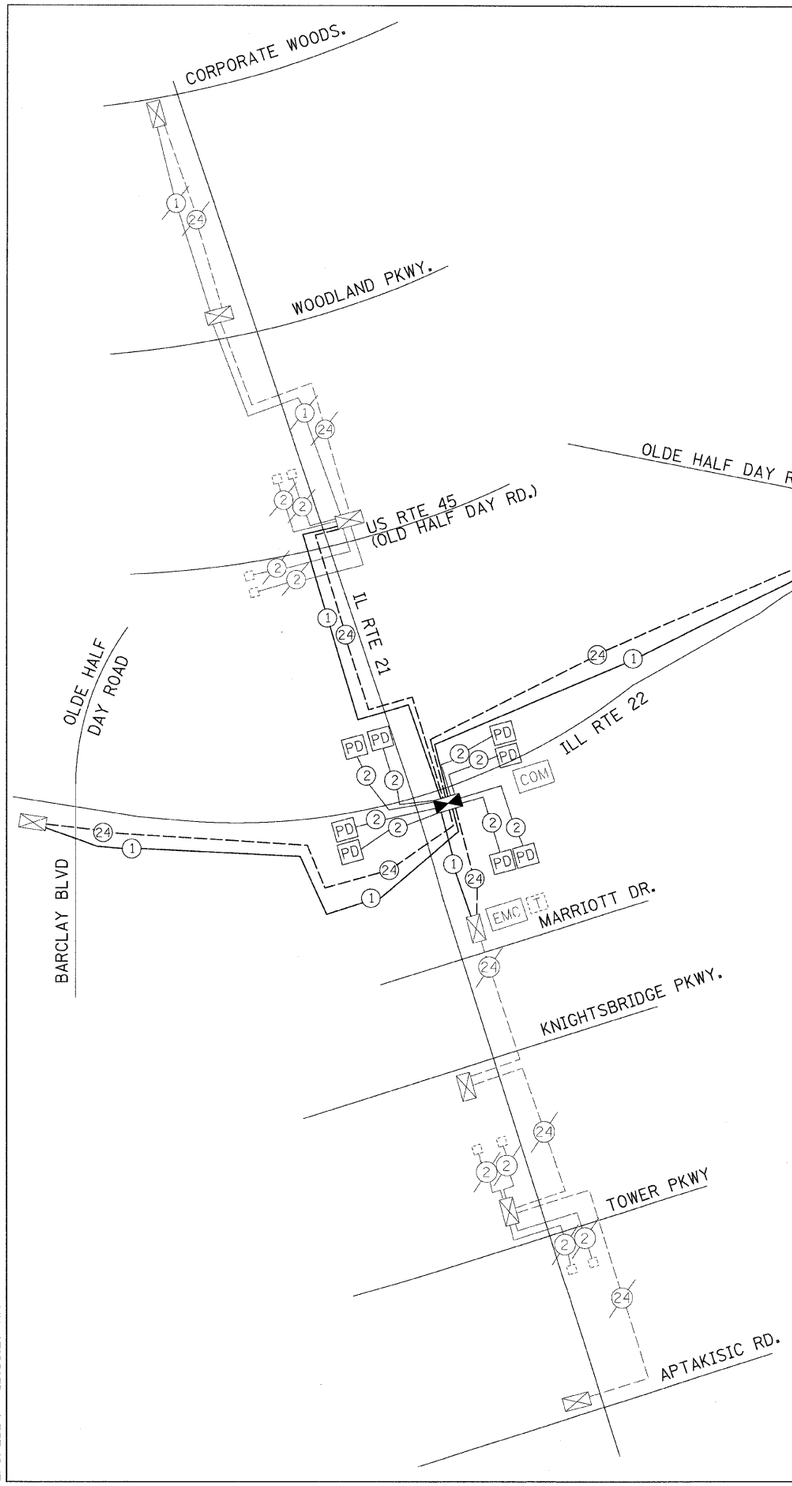
SCALE: 1:500
DATE: 1/28/2009

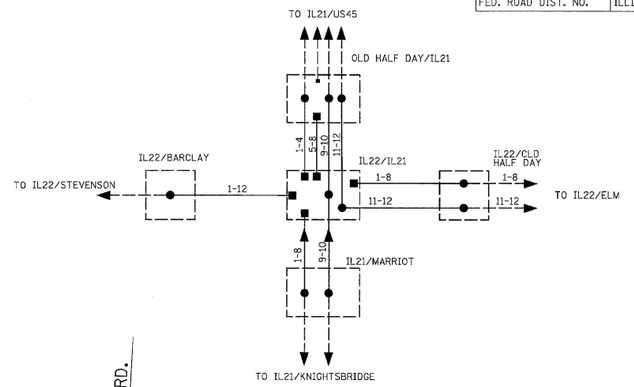
DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171A00\Drawings\ROWY\Mil\Shts\Traf\int3.DGN
2/5/2009 10:32:55 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	79
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	





FIBER SPLICING DIAGRAM.

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QTY
DRILL EXISTING HANDHOLE	EACH	3
CONDUIT IN TRENCH, 50MM DIA., GALVANIZED STEEL	METER	360
CONDUIT PUSHED, 50MM DIA., GALVANIZED STEEL	METER	67
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	258
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14C	METER	2,217
ELECTRIC CABLE IN CONDUIT, NO. 62.5/125 MM12F & SM12F	METER	2,217
ELECTRIC CABLE IN CONDUIT, COAXIAL	METER	60

INTERCONNECT SCHEMATIC LEGEND

INTERSECTION CONTROLLER	
EXISTING INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	EMC
MASTER CONTROLLER	MC
MASTER MASTER CONTROLLER	MMC
EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION AND 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
EXISTING COMMUNICATION CABINET	COM
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	PSPD
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 TRACER CABLE 1/C (AS SPECIFIED)	(1)
PROPOSED TRACER CABLE NO. 14 1/C	(1)
EXISTING TELEPHONE CONNECTION	T
PROPOSED TELEPHONE CONNECTION	T

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

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT
SCHEMATIC PLAN - IL ROUTE 22

SCALE: NONE
DATE: 1/28/2009

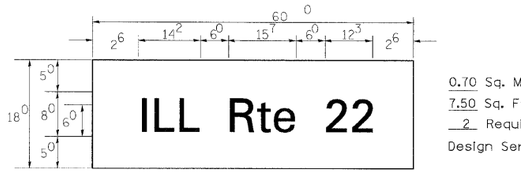
DRAWN BY: RV
DESIGNED BY: JY/AS
CHECKED BY: AZ/MSA

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

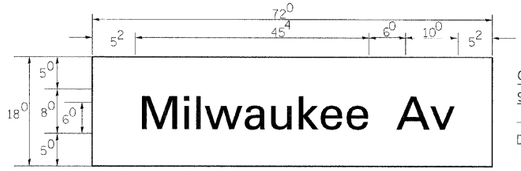
P:\Lisle\IDOT\9171.A0\Drawings\RDWY\Mi\Shts\Traf\SCHEM-1.dgn
2/6/2009 10:53:27 AM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	80
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1

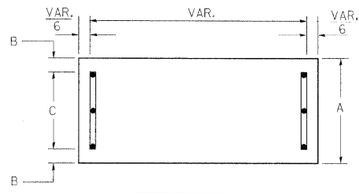


0.70 Sq. M. each
7.50 Sq. Ft. each
2 Required
Design Series D

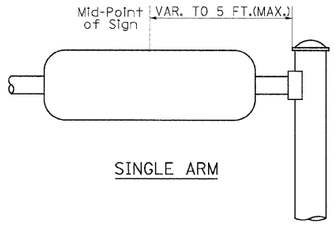


0.84 Sq. M. each
9.0 Sq. Ft. each
2 Required
Design Series C

SUPPORTING CHANNELS

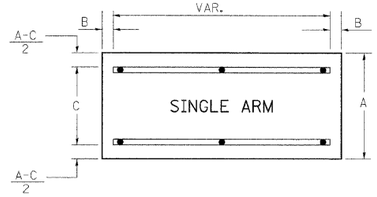


A	B	C
18"	2"	14"



SINGLE ARM

SUPPORTING CHANNELS



SINGLE ARM

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

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

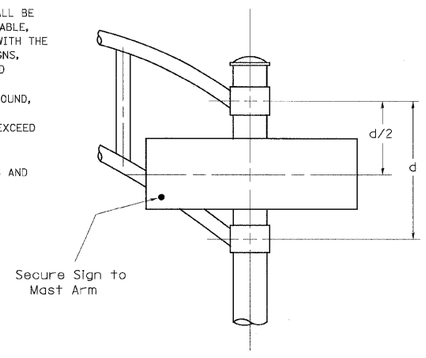
GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
   - * A.K.T. CORPORATION, SCHAUMBURG, IL
   - * AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL
   - * TUCKER COMPANY, INC., WAUWATOSA, WI
   - * WESTERN TRAFFIC CONTROL INC., CICERO, IL

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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



DUAL ARM

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

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2 (3) DENOTES 3/8"

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

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

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

Number To Number
Spacing Chart 8 Inch Series "C & D"

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

UPPER AND LOWER CASE LETTER WIDTHS

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

NUMBER	6 INCH SERIES, C	6 INCH SERIES, D	8 INCH SERIES, C	8 INCH SERIES, D
1	1 2	1 4	1 5	2 0
2	3 2	4 0	4 3	5 3
3	3 2	4 0	4 3	5 3
4	3 5	4 3	4 7	5 7
5	3 2	4 0	4 3	5 3
6	3 2	4 0	4 3	5 3
7	3 2	4 0	4 3	5 3
8	3 2	4 0	4 3	5 3
9	3 2	4 0	4 3	5 3
0	3 4	4 2	4 5	5 5

TS-18

REVISIONS NAME	DATE
D.A.Z./D.A.G.	4/90
	6/98
CADD	10/00

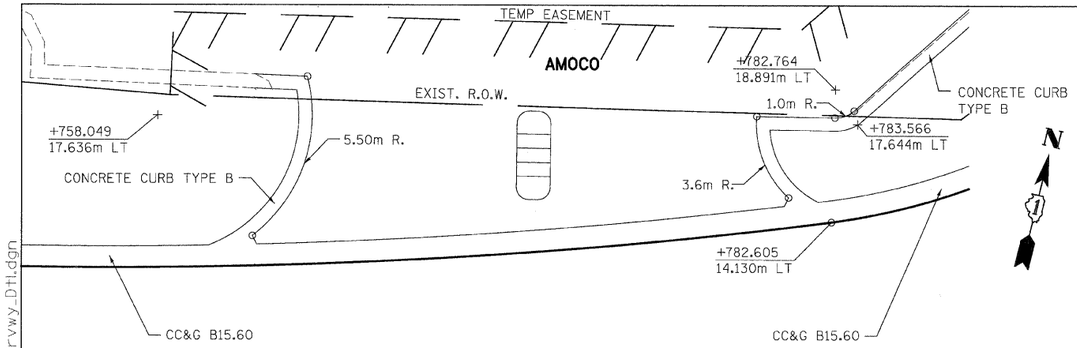
ILLINOIS DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS

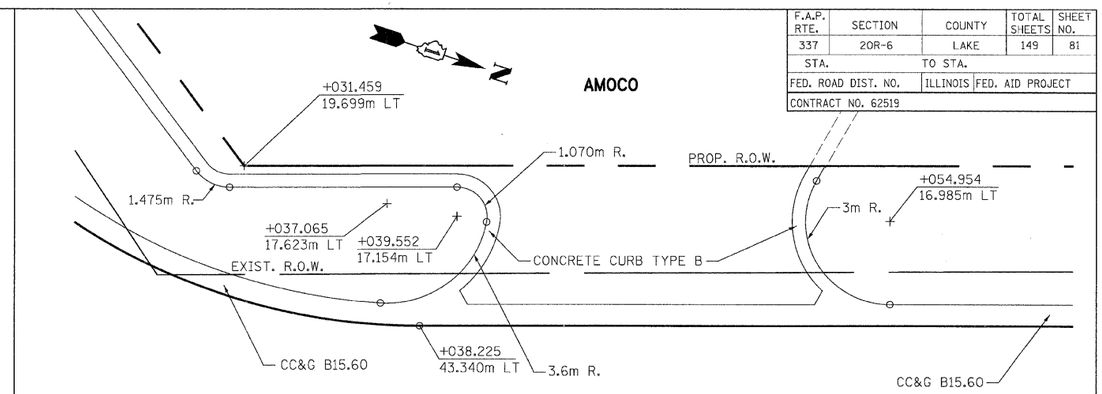
SCALE: HOR: NONE VER:
DATE: 1/28/2009
DRAWN BY: TJR
CHECKED BY: RKF A

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\ROW\Mill Shts\Traf\signgn-1.dgn
2/5/2009 5:15:34 PM

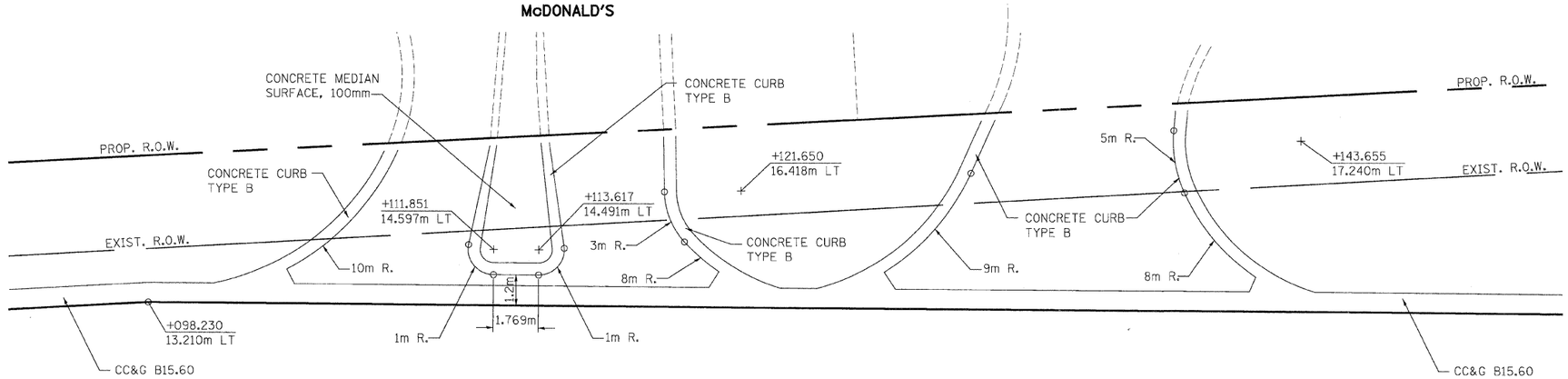


IL RTE. 22
STA. 104+772.810 LT



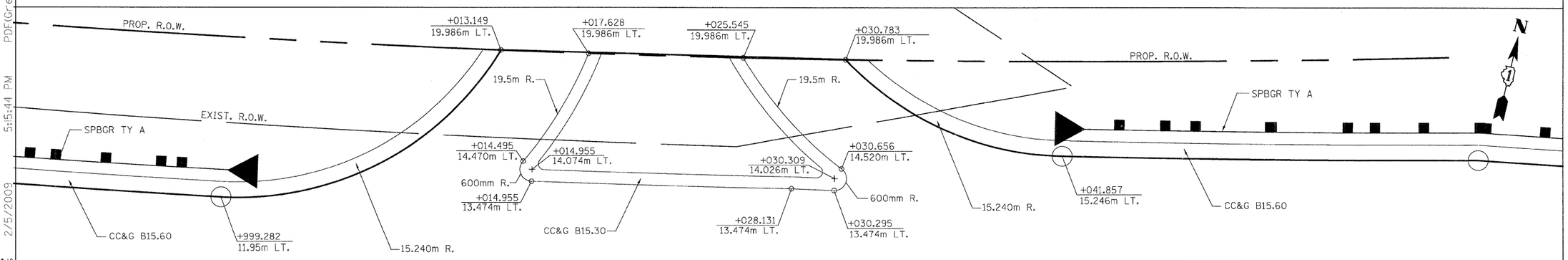
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	81
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

U.S. RTE. 45/IL RTE. 21
STA. 10+046.524 LT



U.S. RTE. 45/IL RTE. 21
STA. 10+113.520 LT

U.S. RTE. 45/IL RTE. 21
STA. 10+135.267 LT



IL RTE. 22
STA. 105+020.477 LT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

DRIVEWAY & ISLAND DETAILS

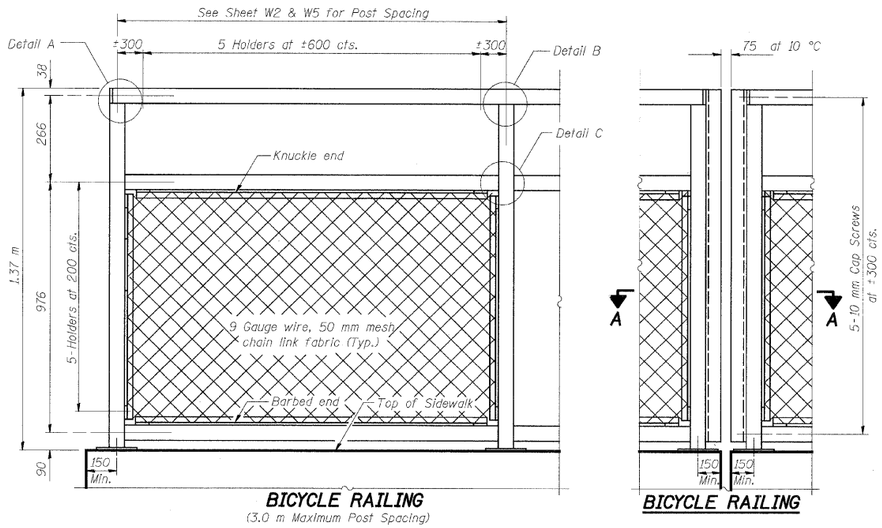
SCALE: 1:100 DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: JAH

DTL-1 OF 5

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

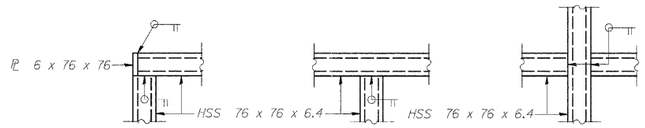
P:\Lisle\IDOT\917A0\Drawings\RDWY\MiscSht s\IntrxS_Drvwy_Dtl.dgn
PDF(Grey_Large).plt
5:15:44 PM
koeppen(Rdwy_Lisle)
2/5/2009

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	82
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62519				

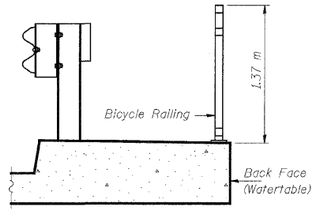


BICYCLE RAILING
(3.0 m Maximum Post Spacing)

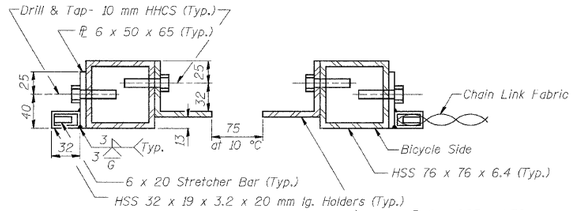
BICYCLE RAILING



DETAIL A **DETAIL B** **DETAIL C**



SECTION THRU SIDEWALK



SECTION A-A

NOTES

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing.

The 9 gauge fabric ties shall be according to Article 1006.27 (d) of the Standard Specifications.

Installation of the chain link fabric shall be according to Section 664 of the Standard Specifications.

Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270M Grade 250.

The Parapet Railing, furnished and installed shall not be paid for separately, but shall be included in the unit bid price for Bicycle Railing.

The chain link fabric shall be placed along Bicycle Side as shown on Section A-A.

Stretcher bars shall be used at all four sides of each panel.

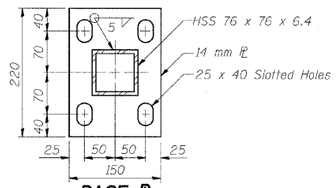
If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with premeasured amounts of the adhesive chemical.

Space reinforcement to miss anchor rods.

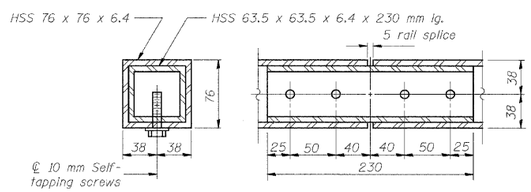
All dimensions are in millimeters (mm) except as noted.

All posts, railing, splices, anchor devices shall be painted black using the appropriate paint system for structural steel.

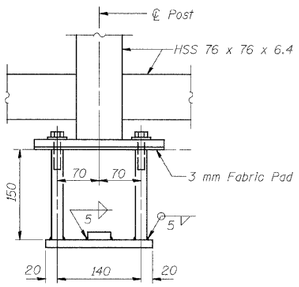
The chain link fabric shall conform to the requirements of article 1006.27(a)(1)d of the standard specs.

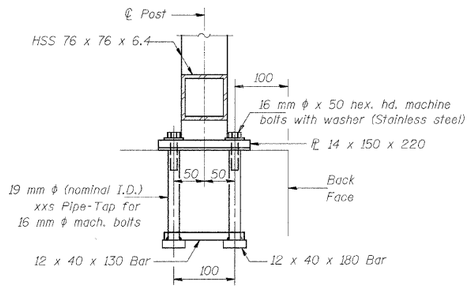


BASE PL



RAIL SPLICE





ANCHOR BOLT DETAILS

(In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting M16 anchor rods for the connections on top of the parapets. Embedment shall be according to the manufacturer's specifications.)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)
BICYCLE RAILING DETAILS

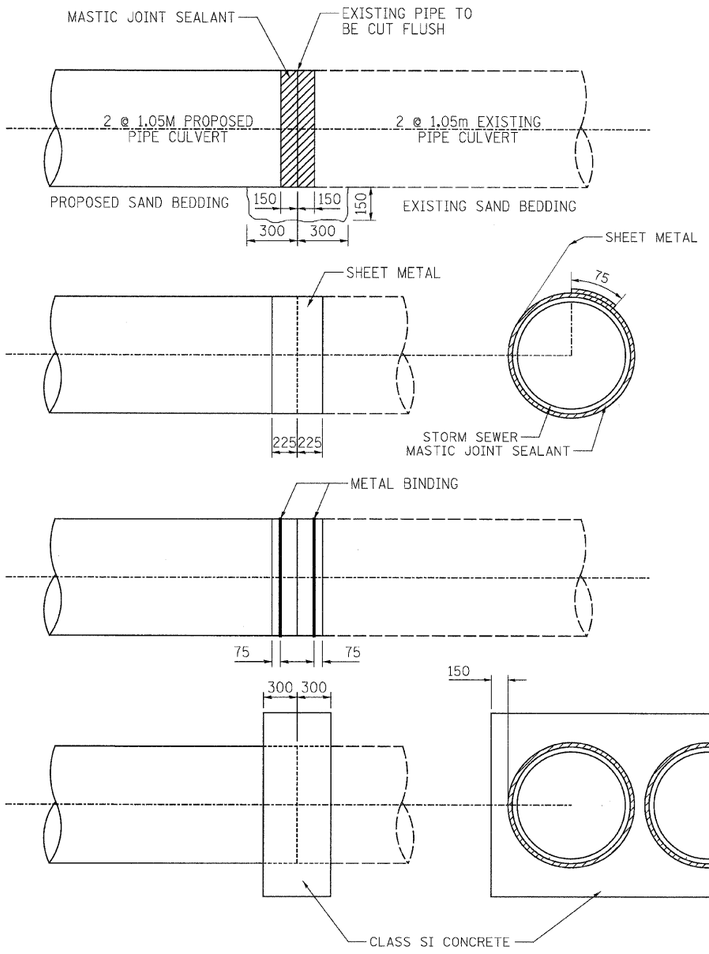
SCALE: NONE DRAWN BY: TCK
DATE: 1/28/2009 CHECKED BY: DTH

DTL-2 OF 5

PATRICK ENGINEERING INC. LISLE, ILLINOIS

tkoeppen(Rdwy_Lisle) 5:15:50 PM 2/5/2009 P:\Lisle\IDOT\917.A0\Drawings\RDWY\MiscShts\Std\bicycle_railing.dgn PDF(Grey_Large).plt

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	83
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



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 150 mm OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 300 mm X 150 mm DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE 19 1.1 450 mm WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 75 mm LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 225 mm ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 75 mm 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.

GENERAL NOTES:

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE PIPE CULVERT. ALL DEBRIS WHICH ENTERS THE PIPE CULVERT MUST BE REMOVED. THE PIPE CULVERT MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETEION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING PIPE CULVERT.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIPE CULVERT EXTENSION
CONNECTION TO EXISTING PIPE CULVERT DETAIL
STA. 10+059.000

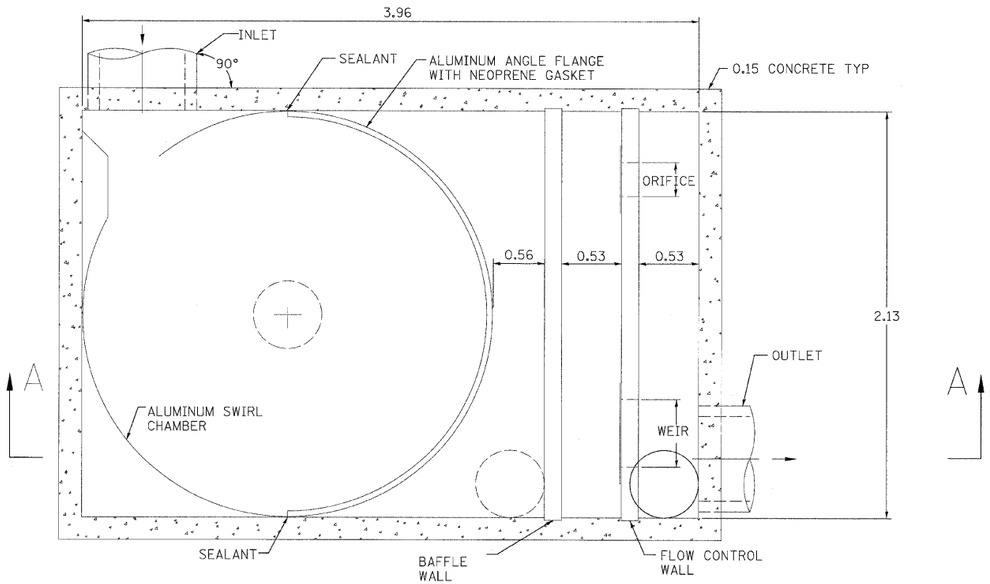
SCALE: NOT TO SCALE
DRAWN BY: B. SAUTER
DATE: 1/28/2009
CHECKED BY:G. HATLESTAD

DTL-3 OF 5

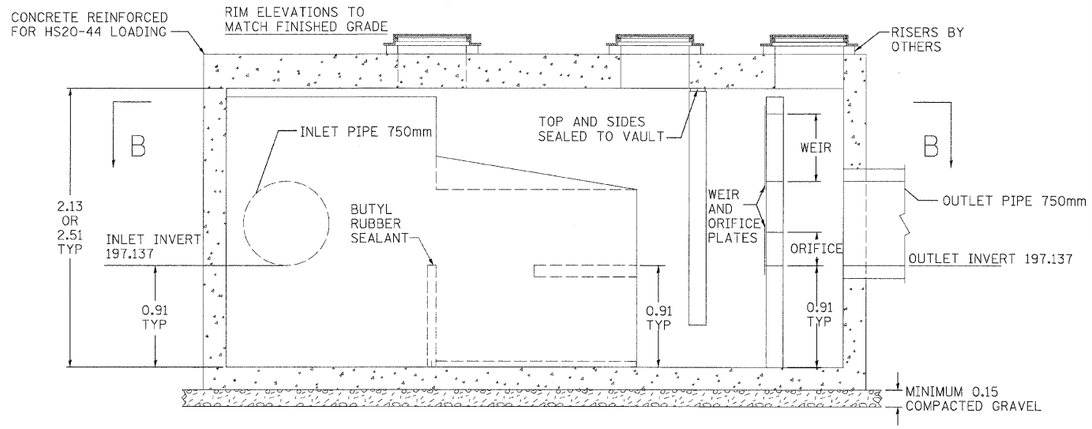
PATRICK ENGINEERING INC. LISLE, ILLINOIS

+koeppen(Rdwy_Lisle) 2/5/2009 5:15:59 PM PDF(Grey_Large).plt P:\Lisle\IDOT\9171.AO\Drawings\RDWY\Mill Shts\Dra\pipeculvertext.dgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	84
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



PLAN VIEW B - B



SECTION A - A

NOTES:

1. SWTS INVERTS IN AND OUT SHALL BE AT THE SAME ELEVATION
2. INLET PIPE MUST BE PERPENDICULAR TO THE STRUCTURE
3. PIPE ORIENTATION MAY VARY; SEE SITE PLAN FOR SIZE AND LOCATION
4. DIMENSIONS ARE IN METERS

P:\Lisle\IDOT\917.A0\Drawings\RDWY\MiNShts\Dra\S_Vortex5K.dgn
PDF(Grey_Large).plt
2/5/2009 5:16:25 PM
tkoeppen(Rdwy-Lisle)

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

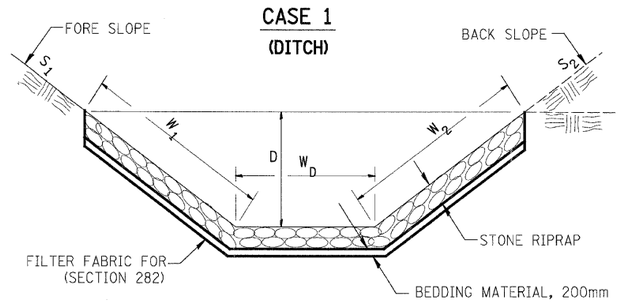
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

VORTEX MANHOLE DETAIL
STATION 104+956.316

SCALE: NOT TO SCALE
DRAWN BY: YM
DATE: 1/28/2009
CHECKED BY: DTH/AAC

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	85
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



STONE RIPRAP, CLASS A5					
LOCATION	WIDTH (1)	LENGTH	DEPTH (D)	RIPRAP	FABRIC
STATION	M	M	M	SQ M	SQ M
104+600 LT TO 104+666 LT	5	66.0	0.6	330.0	330.0
TOTAL				330.0	330.0

(1) WIDTH = $W_1 + W_2 + W_D$

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

RIPRAP DITCH DETAIL

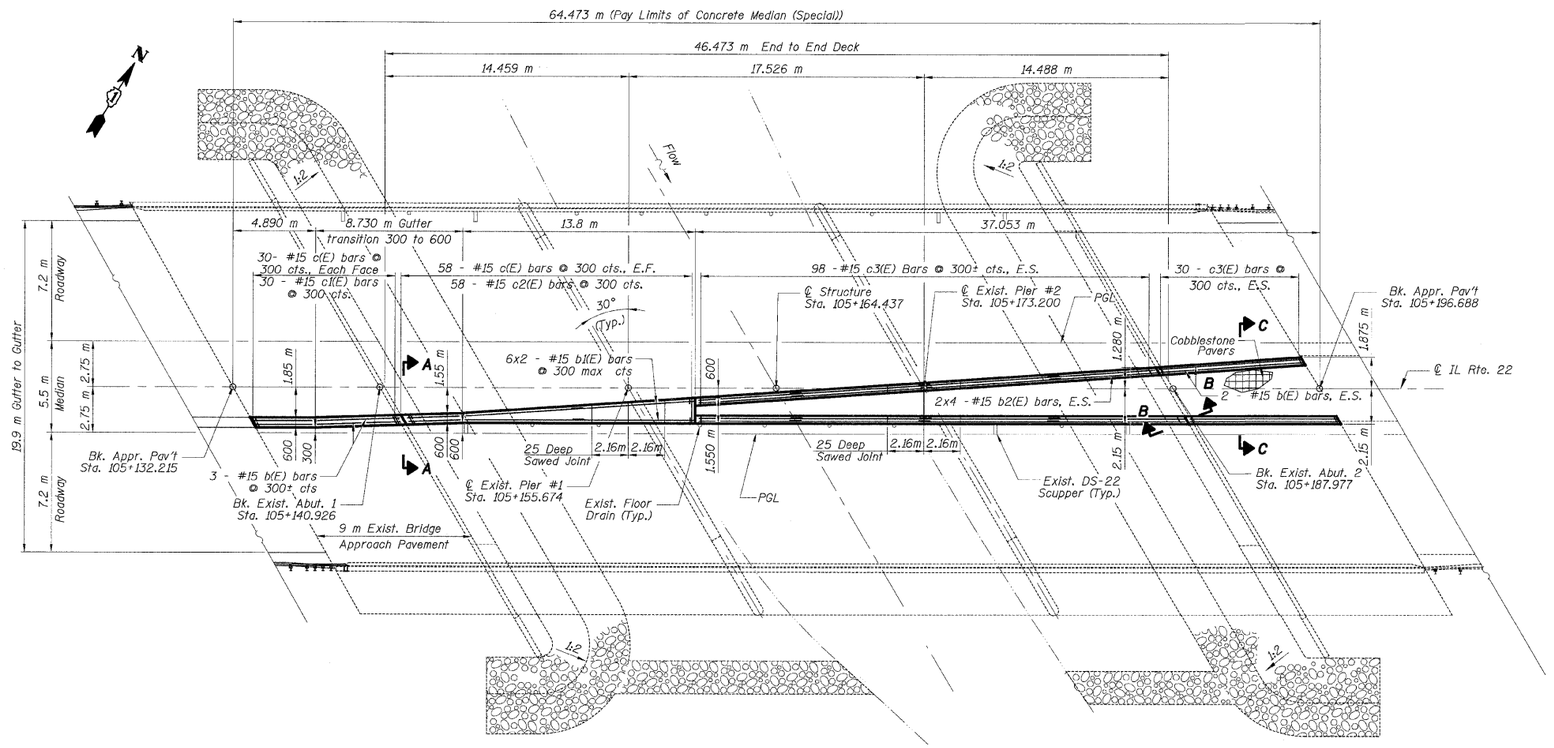
SCALE: NOT TO SCALE
DRAWN BY: YLM
DATE: 1/28/2009
CHECKED BY: DTH/AAC

DTL-5 OF 5

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

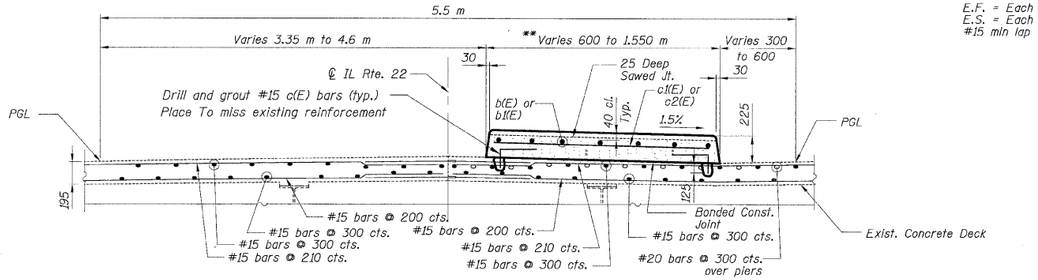
tkoeppen(Rdwy_Lisle)
2/5/2009 5:16:29 PM
PDF(Grey_Large).plt
P:\Lisle\IDOT\9171.A0\Drawings\RDWY\MIL\Shts\Dra\S_Rip_dtl_01.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	86
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62519				



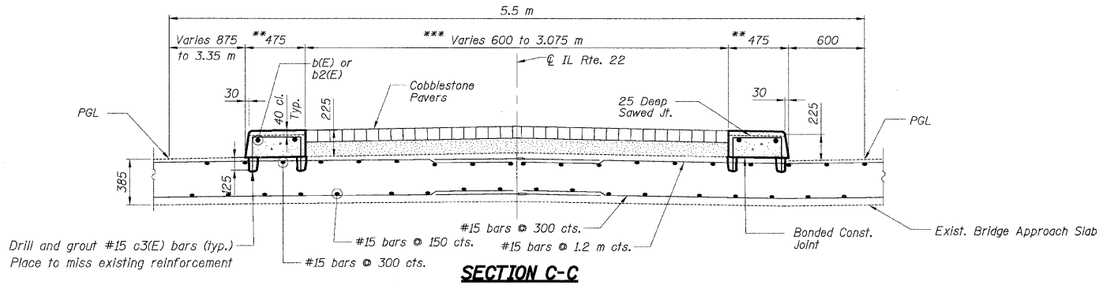
PLAN

E.F. = Each Face
E.S. = Each Side
#15 min lap = 660

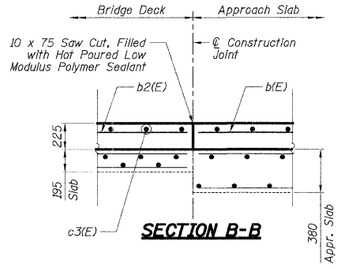


SECTION A-A

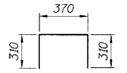
** - Pay Limits of Concrete Median (Special)
*** - Pay Limits of Cobblestone Pavers



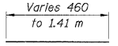
SECTION C-C



SECTION B-B



BAR c3(E)



BAR c2(E)

BAR c(E)

REINFORCEMENT BAR SCHEDULE

For Concrete Median (Special)

Bar	No.	Size	Length (m)	Shape
b(E)	7	#15	8.92	
b1(E)	12	#15	9.02	
b2(E)	16	#15	7.80	
c(E)	176	#15	0.54	
c1(E)	30	#15	0.52	
c2(E)	88	#15	Varies	
c3(E)	256	#15	0.99	

BILL OF MATERIAL

Item	Unit	Quantity
* Concrete Median (Special)	m^2	57
* Cobblestone Pavers	m^2	70

* - See Special Provisions

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 337 (IL ROUTE 22)

CONCRETE MEDIAN (SPECIAL) AT INDIAN CREEK BRIDGE

SCALE: NONE
DRAWN BY: BWS/APD
DATE: 1/28/2009
CHECKED BY: GJH/AY

PATRICK ENGINEERING INC. LISLE, ILLINOIS

P:\Lisle\IDOT\917A0\Drawings\STRUCT\conc med (spl)\IndianCrk_median_rl.dgn
tkoeppen(Rdwy_Lisle) 2/5/2009 5:16:33 PM PDF(Grey_Large).plt

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	87
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

Bench Mark:
Square cut in median in IL Route 22, 250 m east of Milwaukee Avenue.
Elevation 198.647

Existing Structure:
Two 1.35 m concrete pipe culverts 40.84 m long with reinforced concrete headwalls.
Structure is to be removed and replaced with a double cell 2.1 m by 1.2 m reinforced concrete box culvert.
Horizontal cantilever wingwalls shall be provided.
Traffic to be maintained utilizing stage construction.

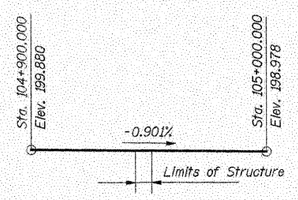
No salvage

Notes:
All dimensions are in millimeters (mm) except as noted.

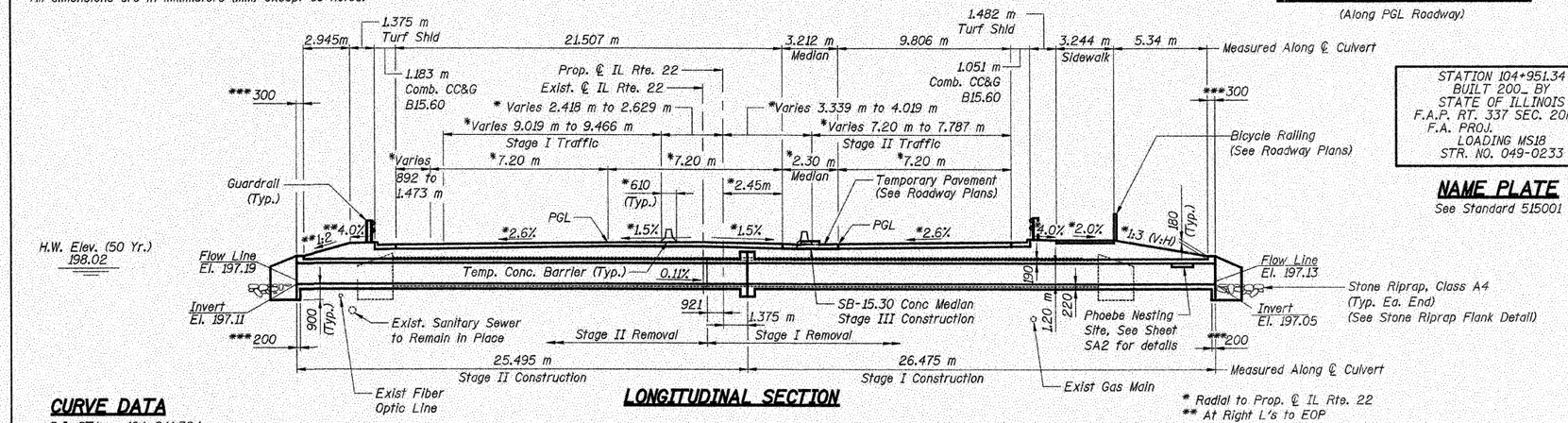
WATERWAY INFORMATION

Drainage Area = 2.1 km² @ Sta. 104+950

Flood	Freq. Yr.	Q m³/s	Opening m² Exist.	Opening m² Prop.	Nat. H.W.E. m	Head - m Exist.	Head - m Prop.	Headwater Elev. Exist.	Headwater Elev. Prop.
	10	2.5	1.8	3.5	197.92	0.08	0.00	198.00	197.68
Design	50	5.1	2.1	3.9	198.02	0.45	0.00	198.47	198.02
Base	100	7.0	2.2	4.0	198.05	0.75	0.17	198.80	198.22
Overtopping									
Max. Calc.	500	10.3	2.3	4.3	198.10	1.34	0.46	199.44	198.56



PROPOSED PROFILE GRADE
(Along PGL Roadway)



* Radial to Prop. ℄ IL Rte. 22
** At Right L's to EOP
*** At Right L's to Local Tangent

LONGITUDINAL SECTION

STATION 104+951.34
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RT. 337 SEC. 20R-6
F.A. PROJ.
LOADING MS18
STR. NO. 049-0233

NAME PLATE
See Standard 515001

TOTAL BILL OF MATERIAL

	ITEM	UNIT	TOTAL
	Stone Riprap, Class A4	m²	48
	Filter Fabric	m²	48
	Removal of Existing Structures	Each	1
*	Concrete Box Culverts	m³	137.7
	Reinforcement Bars	kg	15,890
**	Temporary Sheet Piling	m²	73.9
	Name Plates	Each	1
	Bar Splicers	Each	55

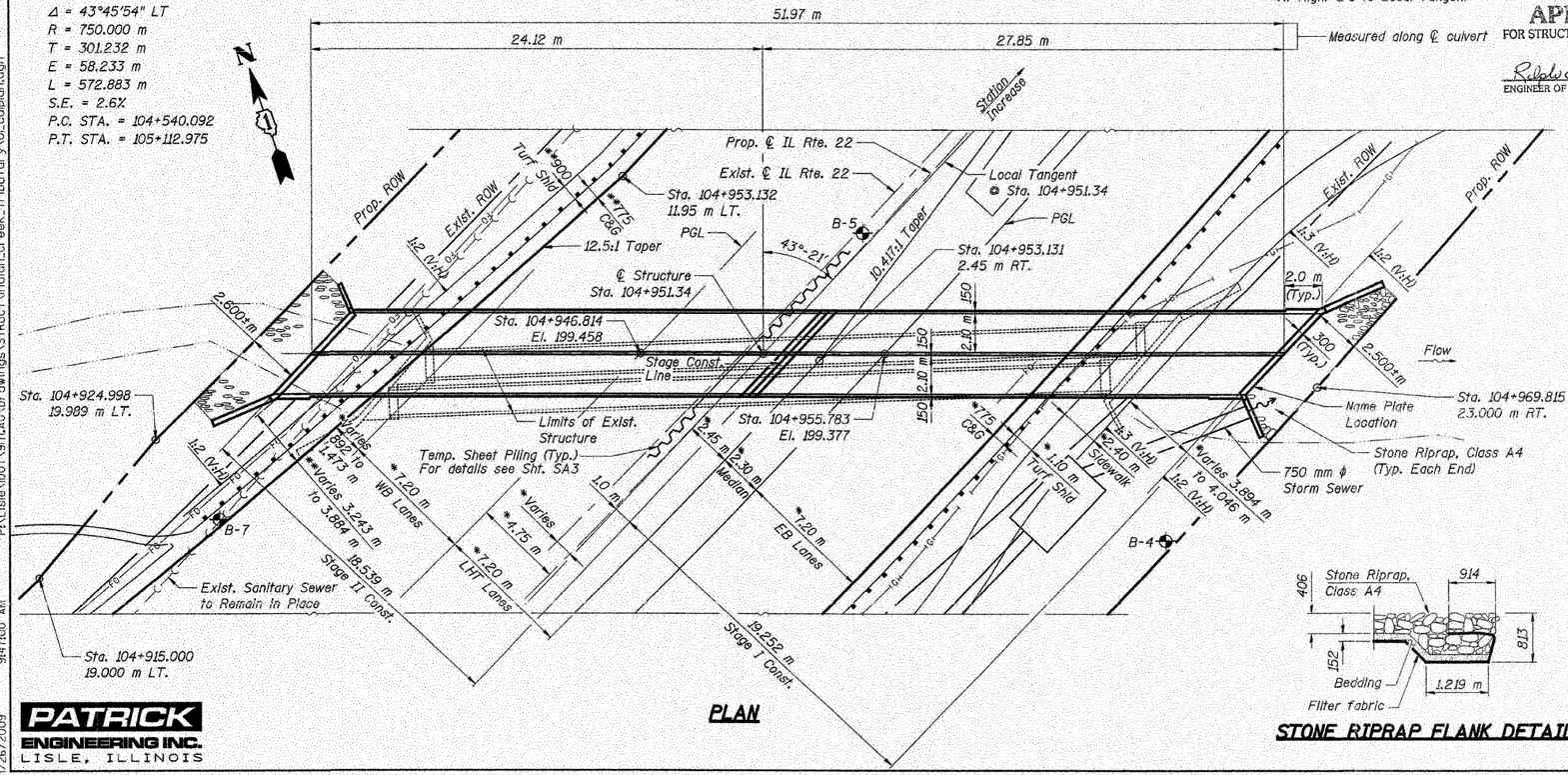
*See Notes 6 and 7.
**See Special Provisions.

GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. No less than 2.0 m of Barrel shall be poured monolithically with the wingwalls.
3. All dimensions are in millimeters (mm) except as noted.
4. Precast alternative is not allowed.
5. All exposed concrete edges shall be chamfered 20 mm unless otherwise noted.
6. Dewatering for the construction of the Indian Creek Tributary shall be included in the cost of "Concrete Box Culverts".
7. Structural excavation required for the construction of the structure shall not be paid for separately but shall be included in the cost of "Concrete Box Culverts ".

CURVE DATA

P.I. STA. = 104+841.324
Δ = 43°45'54" LT
R = 750.000 m
T = 301.232 m
E = 58.233 m
L = 572.883 m
S.E. = 2.6%
P.C. STA. = 104+540.092
P.T. STA. = 105+112.975



PLAN

STONE RIPRAP FLANK DETAIL

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TDD)
ENGINEER OF BRIDGES AND STRUCTURES

DESIGN SPECIFICATIONS
1996 AASHTO Standard Specifications for Highway Bridges and 1997-2000 Interims

LOADING MS18
Allowance for Future Wearing Surface = 2.4 kN/m²

DESIGN STRESSES
Reinforced Concrete - f'c = 24 MPa
Reinforcement - fy = 420 MPa

PATRICK ENGINEERING, INC.
PAUL M. LOPEZ, S.E.

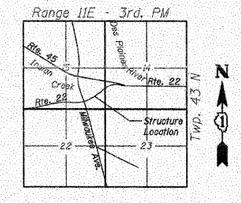
STATE OF ILLINOIS
PAUL M. LOPEZ
081-005231
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

PAUL M. LOPEZ, S.E.
081-005231

EXP 11-30-10

DATE 1-28-09

Range 11E - 3rd. PM



LOCATION SKETCH

INDEX OF SHEETS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

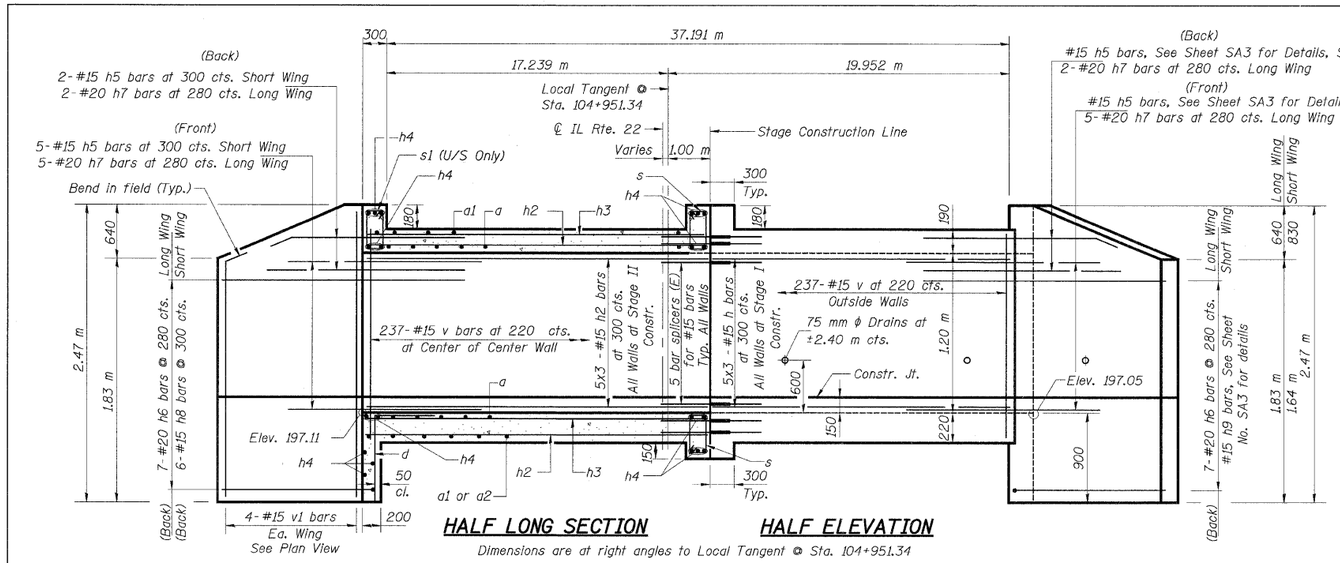
GENERAL PLAN
ILLINOIS ROUTE 22 OVER
INDIAN CREEK TRIBUTARY
FAP 337 SECTION 20R-6
STRUCTURE NUMBER 049-0233
LAKE COUNTY STATION 104+951.34

SCALE: NONE DRAWN BY: E. MROCZEK
DATE: 1/28/2009 CHECKED BY: G. HATLESTAD

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\91LAO\Drawings\STRUCT\Indian_Creek_Tributary\01_culplan.dgn
tkoeppen(Rdwy_Lisle)
1/26/2009 9:47:00 AM

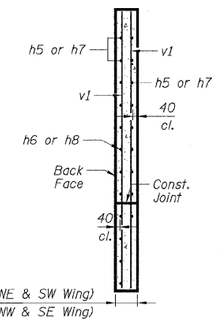
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	88
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



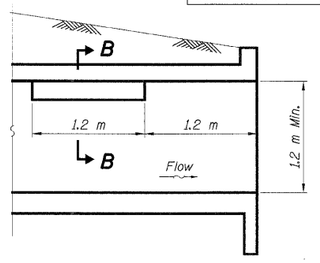
HALF LONG SECTION

HALF ELEVATION

Dimensions are at right angles to Local Tangent ℄ Sta. 104+951.34



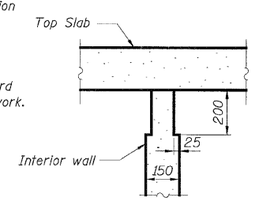
SECTION A-A



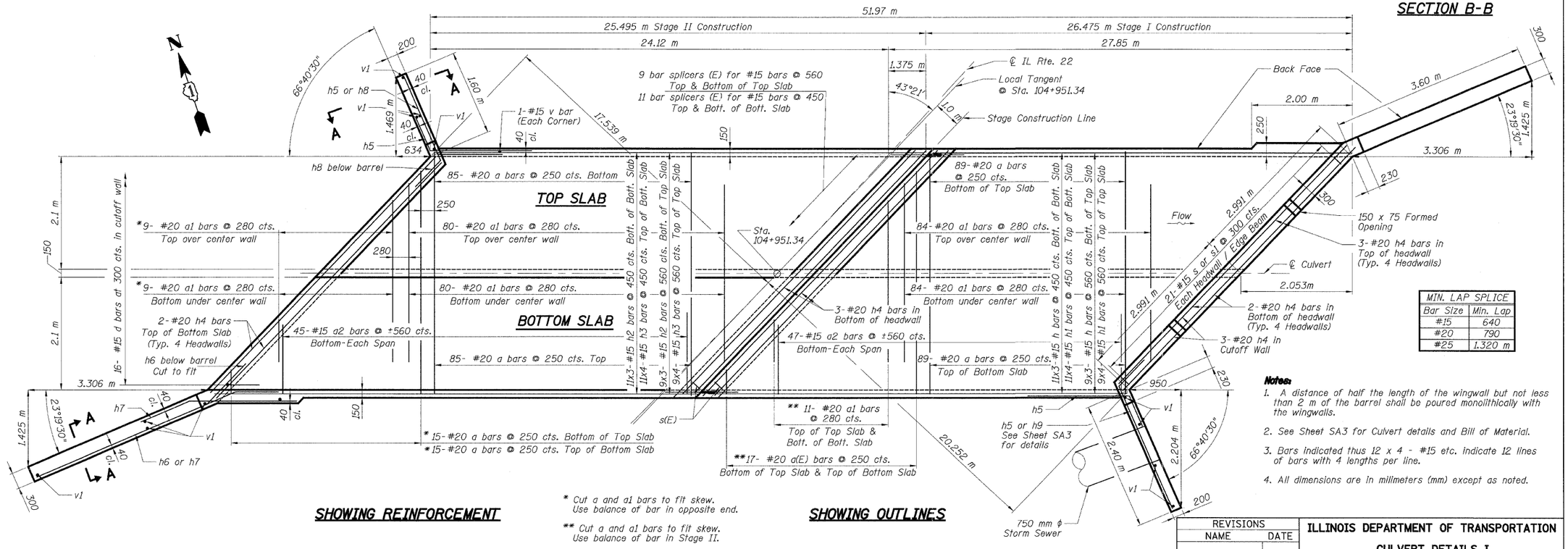
PHOEBE NESTING SITE

Longitudinal Section

Note:
Notch formed by rough-finished board attached to and removed with formwork.



SECTION B-B



MIN. LAP SPLICE	
Bar Size	Min. Lap
#15	640
#20	790
#25	1.320 m

Notes:

1. A distance of half the length of the wingwall but not less than 2 m of the barrel shall be poured monolithically with the wingwalls.
2. See Sheet SA3 for Culvert details and Bill of Material.
3. Bars indicated thus 12 x 4 - #15 etc. indicate 12 lines of bars with 4 lengths per line.
4. All dimensions are in millimeters (mm) except as noted.

* Cut a and a1 bars to fit skew. Use balance of bar in opposite end.

** Cut a and a1 bars to fit skew. Use balance of bar in Stage II.

SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS I
ILLINOIS ROUTE 22 OVER INDIAN CREEK TRIBUTARY

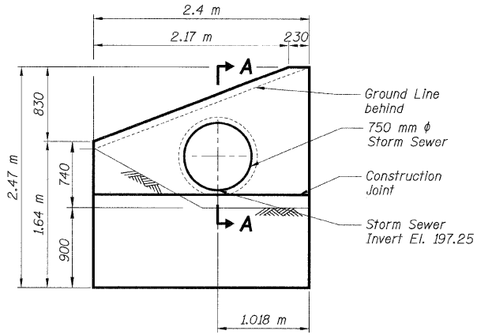
FAP 337 **SECTION 20R-6**
STRUCTURE NUMBER 049-0233
LAKE COUNTY **STATION 104+951.34**

SCALE: **NONE** DRAWN BY: **E. MROCZEK**
DATE: **1/28/2009** CHECKED BY: **G. HATLESTAD**

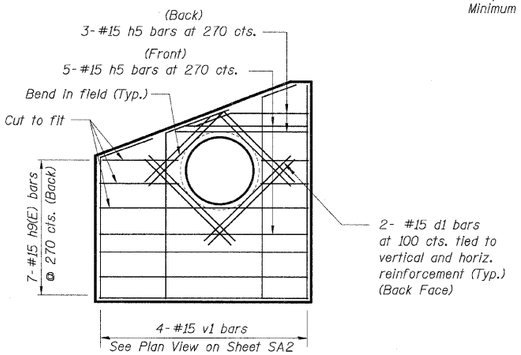
PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171A0\Drawings\STRUCT\Indian_Creek_Tributary\02_culdet1.dgn
tKoeppen(Rdwy_Lisle)
2/5/2009 5:16:58 PM

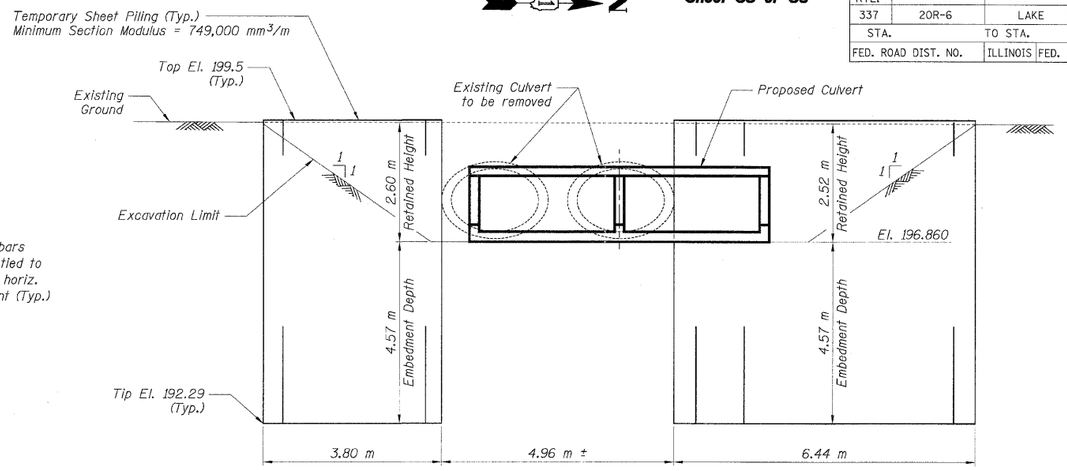
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	89
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



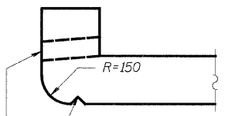
S-E WINGWALL ELEVATION

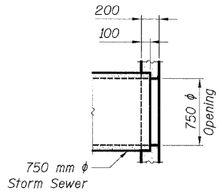


S-E WINGWALL REINFORCEMENT

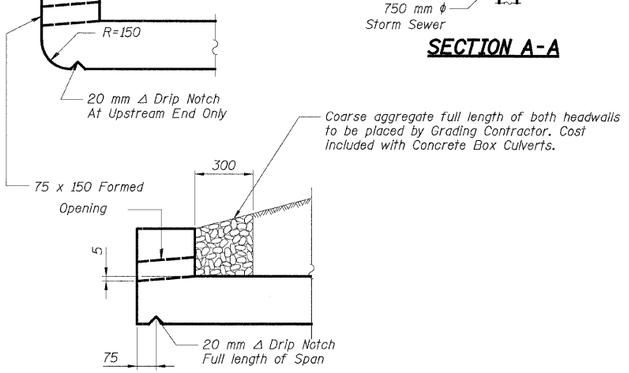


TEMPORARY SHEET PILING ELEVATION

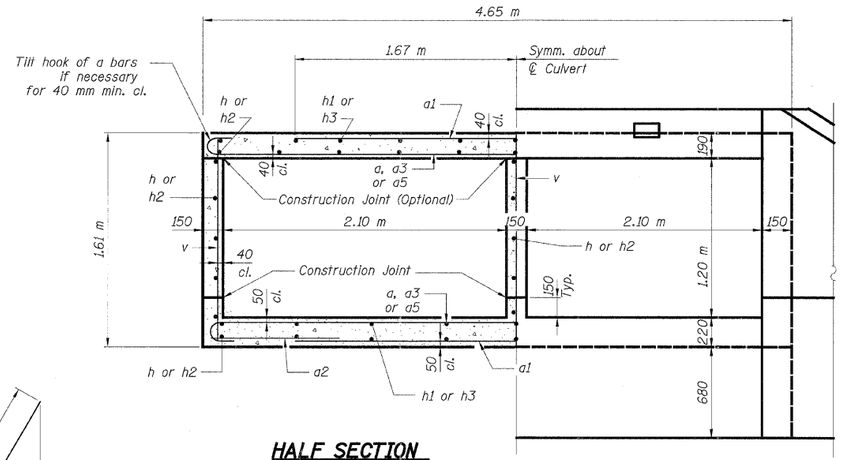




SECTION A-A



DRAIN DETAIL

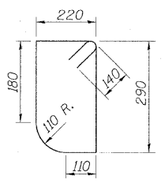


HALF SECTION THRU BARREL

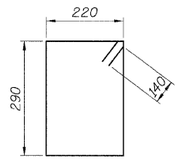
HALF END ELEVATION

BILL OF MATERIAL

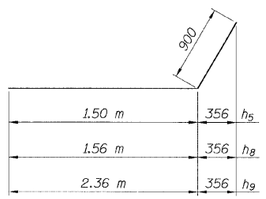
Bar	No.	Size	Length (m)	Shape
a	412	#20	4.99	
a1	368	#20	3.34	
a2	184	#15	1.25	
d	32	#15	1.36	
d1	8	#15	1.35	
h	105	#15	9.22	
h1	80	#15	7.08	
h2	105	#15	8.90	
h3	80	#15	6.83	
h4	40	#20	6.25	
h5	15	#15	2.40	
h6	14	#20	4.90	
h7	14	#20	2.40	
h8	6	#15	2.46	
h9	7	#15	3.26	
s	105	#15	1.30	
s1	21	#15	1.25	
v	715	#15	1.52	
v1	16	#15	2.38	
Concrete Box Culverts		m^3	137.7	
Reinforcement Bars		kg	15,890	
Bar Splicers		Each	55	



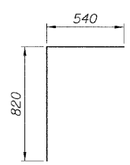
BAR s1



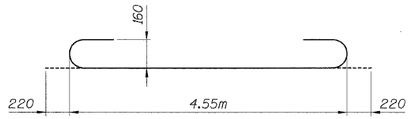
BAR s



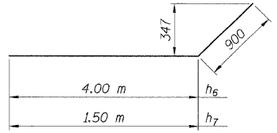
BARS h5, h8 & h9



BAR d



BAR a



BARS h6 & h7

MIN. LAP SPLICE	
Bar Size	Min. Lap
#15	640
#20	790
#25	1.320 m

Notes:

1. Bars indicated thus 12 x 4-#15 etc. indicates 12 lines of bars with 4 lengths per line.
2. All dimensions are in millimeters (mm) except as noted.
3. Information for the Temporary Sheet Piling shown on this drawing is estimated. If Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans for lesser design requirements, then full design submittals with the required seals will be expected by the Department, for review and approval.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS II
ILLINOIS ROUTE 22 OVER INDIAN CREEK TRIBUTARY

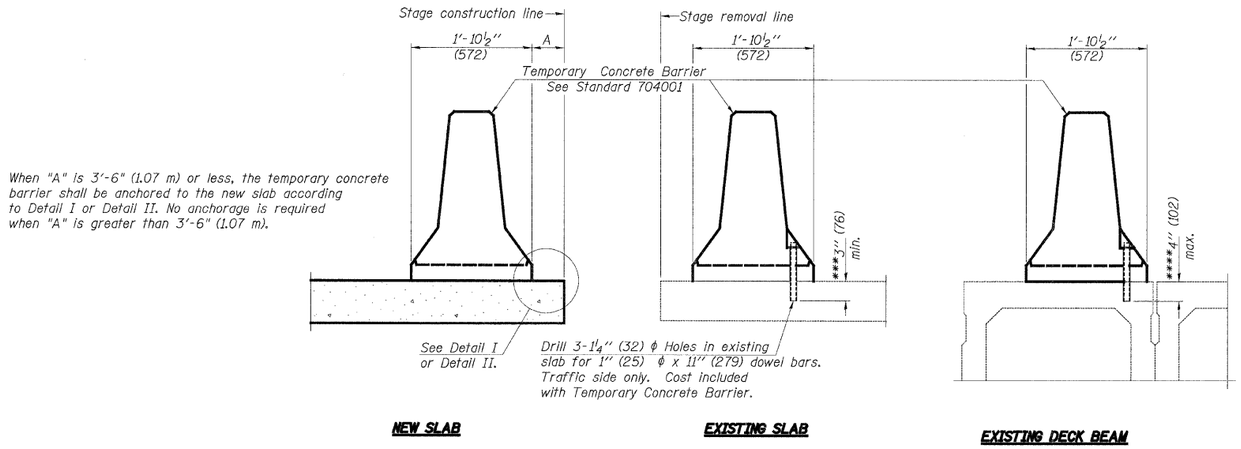
FAP 337 SECTION 20R-6
STRUCTURE NUMBER 049-0233
LAKE COUNTY STATION 104+951.34

SCALE: NONE DRAWN BY: E. MROCZEK
DATE: 1/28/2009 CHECKED BY: G. HATLESTAD

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

P:\Lisle\IDOT\9171.A0\Drawings\STRUCT\Indian_Creek_Tributary\03_culde42.dgn
tkoeppen(Rdwy_Lisle)
2/5/2009 5:17:14 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	90
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" (25 x 178 x 254) steel ℙ to the top layer of couplers with 2-⅝" (16) ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x 10" (25 x 178 x 254) steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" (16) ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

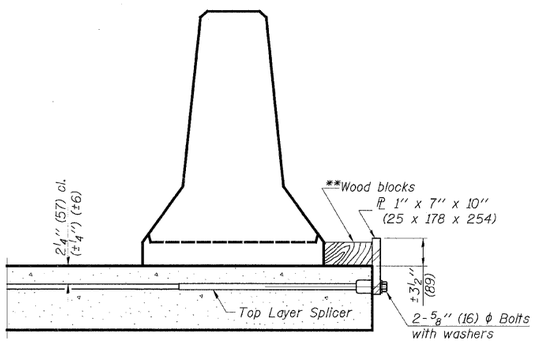
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x 10" (25 x 178 x 254) plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

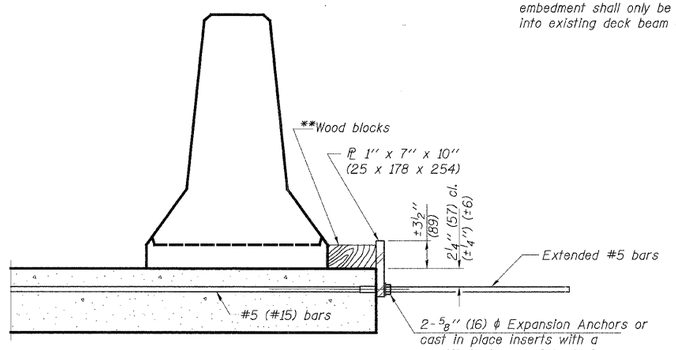
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

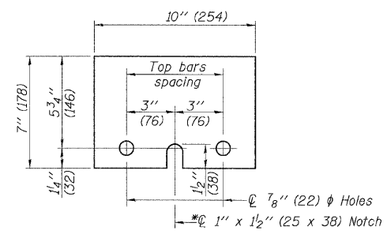


DETAIL I



DETAIL II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER ℙ 1" x 7" x 10" (25 x 178 x 254)

* Required only with Detail II

All dimensions shown in parathesis () are in mm, except as noted.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER
ILLINOIS ROUTE 22 OVER
INDIAN CREEK TRIBUTARY

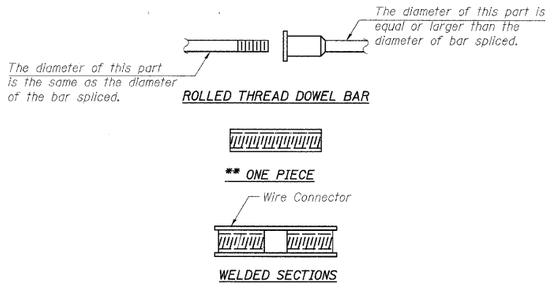
FAP 337 SECTION 20R-6
STRUCTURE NUMBER 049-0233
LAKE COUNTY STATION 104+951.34

SCALE: NONE DRAWN BY: E. MROCZEK
DATE: 1/28/2009 CHECKED BY: G. HATLESTAD

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

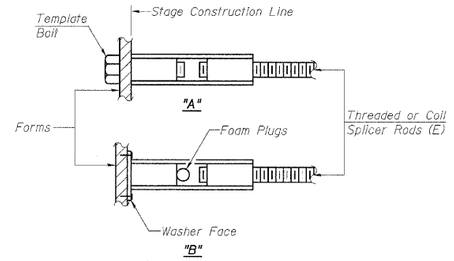
P:\Lisle\IDOT\9171.A0\Drawings\STRUCT\Indian_Creek_Tributary\04_tempconc.dgn
tkoppen(Rdwy_Lisle)
2/5/2009 5:17:22 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	91
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi (413.7 MPa) yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

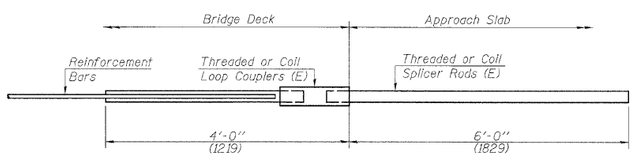
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity = 1.25 x fy x A_t (Tension in kips (kN))

② Minimum *Pull-out Strength (Tension in kips (kN)) = 0.66 x fy x A_t

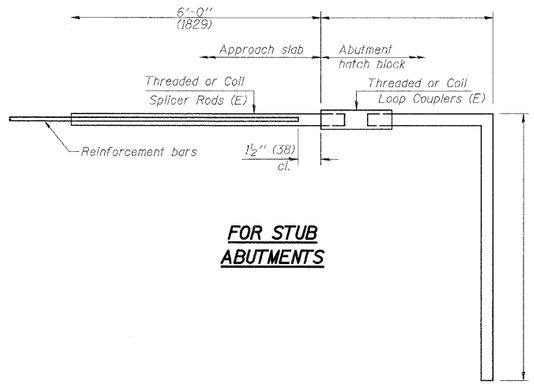
Where fy = Yield strength of lapped reinforcement bars in ksi (MPa).
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5 (#15)	2'-2" (660)	23.0 (102.3KN)	12.3 (54.7KN)



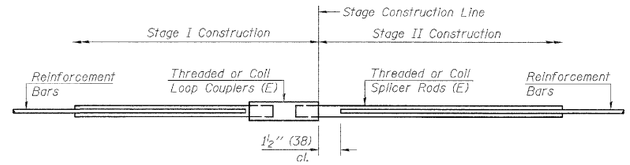
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 (#15) bar
Min. Capacity = 23.0 kips (102.3 kN) - tension
Min. Pull-out Strength = 12.3 kips (54.7 kN) - tension
No. Required =



FOR STUB ABUTMENTS

Bar Splicer for #5 (#15) bar
Min. Capacity = 23.0 (102.3 kN) kips - tension
Min. Pull-out Strength = 12.3 kips (54.7 kN) - tension
No. Required =



STANDARD

Bar Size	No. Assemblies Required	Location
#5 (#15)	18	Top Slab
#5 (#15)	22	Bottom Slab
#5 (#15)	15	Walls

All dimensions shown in Parathesis () are in mm, except as noted.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
IL ROUTE 22 OVER INDIAN CREEK TRIBUTARY

FAP 337 **SECTION 20R-6**
STRUCTURE NUMBER 049-0233
LAKE COUNTY **STATION 104+951.34**

SCALE: **NONE** DRAWN BY: **E. MROCZEK**
DATE: **1/28/2009** CHECKED BY: **G. HATLESTAD**

Sheet S5 of S6

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

BSD-1 10-1-08

P:\Lisle\IDOT\97I,A01\Drawings\STRUCT\Indian_Creek_Tributary\05_barsplicers.dgn
2/5/2009 5:17:28 PM
tkoeppen(Rdwy-Lisle)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	92
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 1
Date 4/30/01

ROUTE FAP 337 DESCRIPTION Rte. 22 Box Culvert at Indian Creek Tributary
SECT. 20R-3 STRUCT. NO. DRILLED BY PDI-PJC 9171 A0-17
COUNTY Lake LOCATION Lincolnshire, IL S. 15 , TWP. 43N , RNG. 11E

Boring No. B-4-01
Station 104 + 959.93
Offset 23.34m Rt
Surface Elev. 199.66 m

Surface Water Elev.
Groundwater Elev.: when drilling 194.2
at Completion 194.5
after NA Hrs.

DEPTH	BLOWS	Qu kPa	W %
199.66 Black and dark brown, silty clay fill, trace organics, moist	A	--	22
Brown silty clay fill, stiff to very stiff, moist	3 4 5	--	13
	2 5 5	192 P	18
-1.5			
196.86 Gray silty clay fill, soft, moist	3 3 3	--	14
	WOH WOH WOH	--	15
196.66 -3.0 Brown coarse to fine sand, loose, moist			
	WOH 1 4	NP	18
196.27 Gray clayey silt, medium dense, moist			
	5 7 11	NP	16
-4.5			
193.92 Gray fine sand, medium dense to dense, saturated	8 18 12	NP	13 19
	9 10 10	NP	23
-6.0			
	11 20 26	NP	23
	6 8 5	NP	1
-7.5			

DEPTH	BLOWS	Qu kPa	W %
181.31 Gray clayey silt, loose, saturated			
180.83 -18.8 Gray silty clay, medium stiff to stiff, moist	3 4 4	NP	17 0.5 21
	2 3 4	92 B	22
-9.8			
	3 4 5		15
	1 2 3	61 B	25
-12.0 Grades to hard			
	3 4 5	101 B	12
-13.5			
	11 14 17	623 B	15
186.95 -17.2 End of Boring at 12.2m.			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Meters

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 1
Date 4/30/01

ROUTE FAP 337 DESCRIPTION Rte. 22 Box Culvert at Indian Creek Tributary
SECT. 20R-3 STRUCT. NO. DRILLED BY PDI-PJC 9171 A0-17
COUNTY Lake LOCATION Lincolnshire, IL S. 15 , TWP. 43N , RNG. 11E

Boring No. B-5-01
Station 104 + 959.50
Offset 0.54m Lt
Surface Elev. 199.27 m

Surface Water Elev.
Groundwater Elev.: when drilling 194.5
at Completion 196.0
after NA Hrs.

DEPTH	BLOWS	Qu kPa	W %
0.3m Bituminous concrete			
196.97 Gray and brown silty clay fill, moist	B U S H	NP	15
196.46 Brown coarse to fine sand, fill, dense, moist	11 25 21	NP	4
-1.5			
	9 8 1	NP	
196.90 No recovery			
Gray clayey silt, medium dense to dense, moist to saturated No recovery	8 4 5	NP	
-3.0			
	5 5 3	NP	14
	7 16 13	NP	12
-4.5			
	10 17 23	NP	13
	14 19 19	NP	15
193.27 -6.0 Gray fine sand, medium dense, saturated			
	4 9 16	NP	21
	3 7 10	NP	19
-7.6			

DEPTH	BLOWS	Qu kPa	W %
	2 4 5	NP	15
	1 2 3	61 B	25
-9.0			
191.17 Gray silty clay, medium stiff, moist			
	1 5 7	61 B	15
-10.5			
188.77 Gray silty clay, very stiff to hard, moist			
	5 13 33	358 B	16
-12.0			
	21 24 39	1285 B	11
185.77 -13.5 End of Boring at 13.7m.			
-15.0			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Meters

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 1 of 2
Date 5/1/01

ROUTE FAP 337 DESCRIPTION Rte. 22 Box Culvert at Indian Creek Tributary
SECT. 20R-3 STRUCT. NO. 049-0153 DRILLED BY PDI-PJC 9171 A0-17
COUNTY Lake LOCATION Lincolnshire, IL S. 15 , TWP. 43N , RNG. 11E

Boring No. B-7-01
Station 104 + 923.52
Offset 15.17m Lt
Surface Elev. 199.45 m

Surface Water Elev.
Groundwater Elev.: when drilling
at Completion
after Hrs.

DEPTH	BLOWS	Qu kPa	W %
12" Black, organic silty clay	A	--	24
199.15 Brown and gray silty clay, soft, moist	1 1 3		20
198.55 Gray fine sand, loose, moist	3 4 4	NP	16
-1.5			
	3 2 2	NP	18
197.05 Brown and black coarse to fine sand, loose, saturated			
	5 2 3	NP	11
-3.0			
	2 3 3	NP	9
	WOH WOH 1	NP	18
-4.6			
194.80 Gray, clayey silt, medium dense, moist	4 7 7	NP	15
194.05 Gray medium to fine sand, medium dense, saturated			
	7 5 10	NP	20
-6.0			
	7 9 10	NP	19
	3 3 3	NP	19
-7.5			

DEPTH	BLOWS	Qu kPa	W %
181.80 Gray clayey silt with interbedded layers of silty clay, loose, saturated			
	3 4 3	NP	18
	1 1 1	NP	20
-9.0			
189.97 -9.5 Gray silty clay, stiff to very stiff, moist to wet			
	2 3 5	81 B	28
-10.5			
	6 10 10	265 B	1
187.45 -12.0 Gray silty clay, hard, moist			
	13 15 20	750 B	12
-13.5			
184.63 -14.8 Gray fine sand, very	5 36 50	364 B	12.2
-16.0			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Meters

Patrick Engineering, Inc.
STRUCTURE BORING LOG

Page 2 of 2
Date 5/1/01

STRUCTURE NO. 049-0153
ROUTE FAP 337
SECTION 20R-3
COUNTY Lake

STRUCTURE NO. 049-0153
ROUTE FAP 337
SECTION 20R-3
COUNTY Lake

Boring No. B-7-01
Station 104 + 923.52
Offset 15.17m Lt
Elevation 184.45 m

Elevation 175.95 m

DEPTH	BLOWS	Qu kPa	W %
dense End of Boring at 15.2m.			13.4
-16.0			
-18.0			
-19.5			
-21.0			
-22.5			

DEPTH	BLOWS	Qu kPa	W %
-24.0			
-25.5			
-27.0			
-28.5			
-30.0			

SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test
Stations, Depths, Offset, and Elevations are in Meters

PATRICK ENGINEERING INC.
LISLE, ILLINOIS

REVISIONS	
NAME	DATE

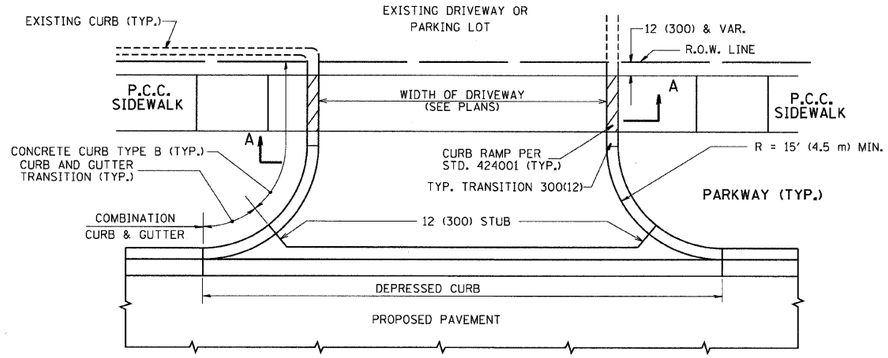
ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
ILLINOIS ROUTE 22 OVER INDIAN CREEK TRIBUTARY

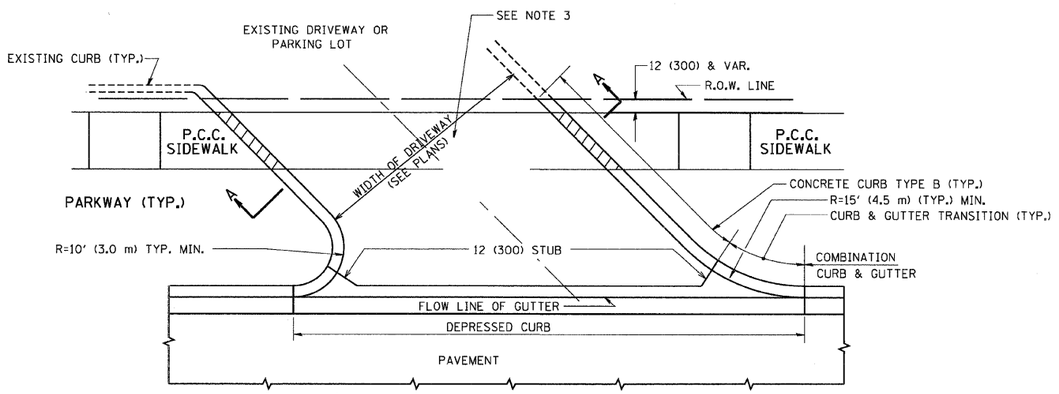
FAP 337 SECTION 20R-6
STRUCTURE NUMBER 049-0233
LAKE COUNTY STATION 104+951.34

SCALE: NONE DRAWN BY: M. BELTON
DATE: 1/28/2009 CHECKED BY: G. HATLESTAD

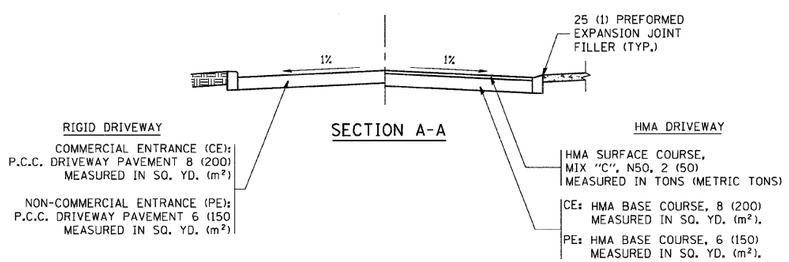
tkoeppen(Rdwy-Lisle)
2/5/2009 5:18:0 PM
P:\Lisle\D01\9171A0\Drawings\STRUCT\Indian_Creek_Tributary\06_soilborings.dgn

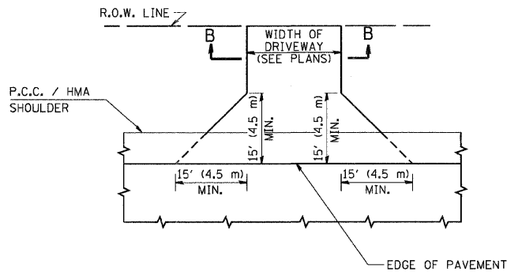


WITH CONCRETE CURB, TYPE B

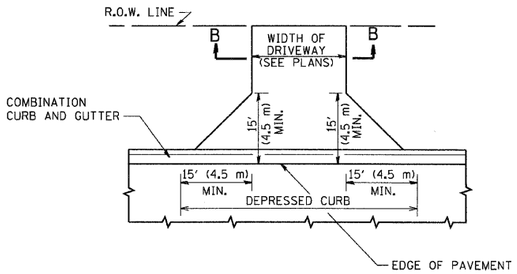


WITH CONCRETE CURB, TYPE B

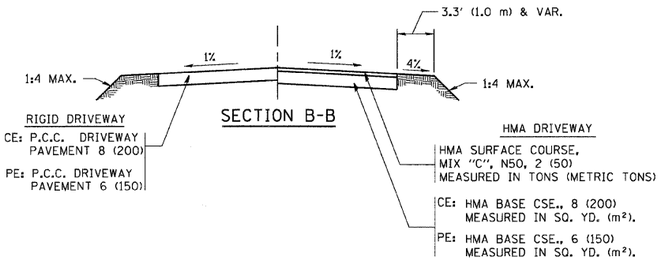




ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)

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

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

GENERAL NOTES:

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

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

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

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

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

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

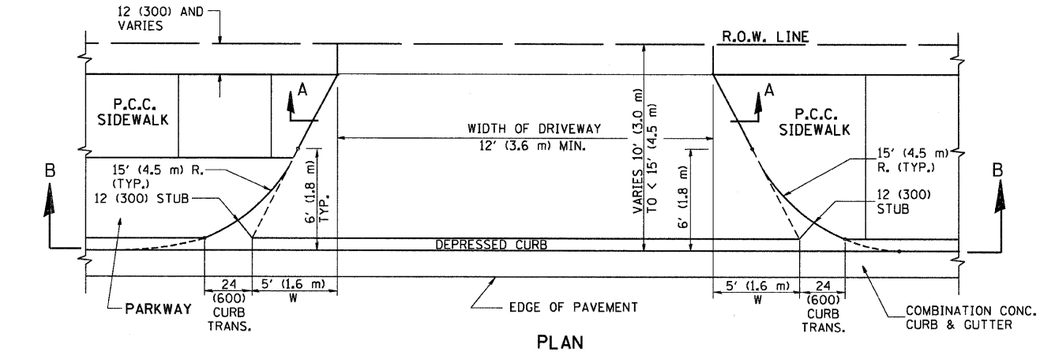
FILE NAME = c:\projects\diststd22x34\bd01.dgn	USER NAME = baumrdl	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
		DRAWN -	REVISED - P. LaFLUER 04-15-03
	PLOT SCALE = 49.9999 ' / IN.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 6/12/2008	DATE - 11-04-95	REVISED - R. BORO 06-11-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

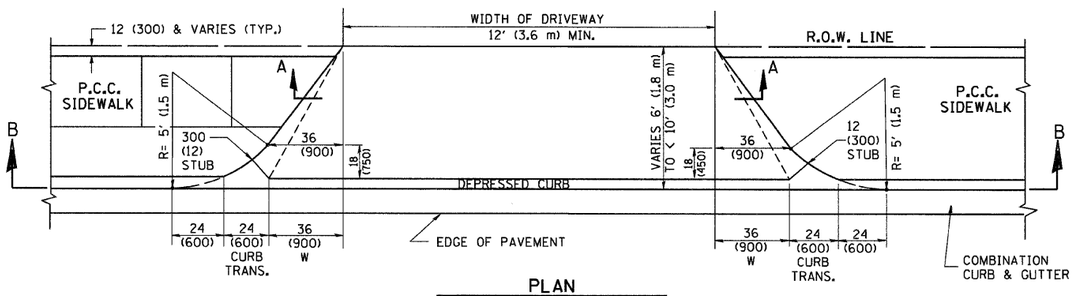
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	93
	BD0156-07 (BD-01)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



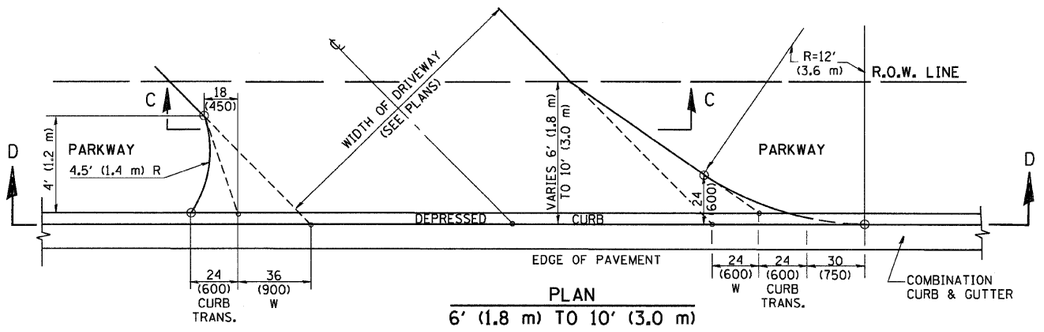
PLAN

10' (3.0 m) TO < 15' (4.5 m)



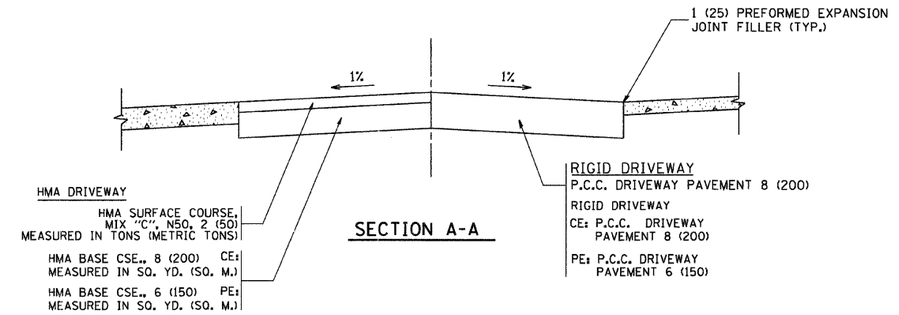
PLAN

6' (1.8 m) TO < 10' (3.0 m)

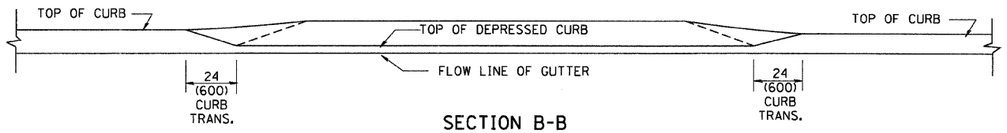


PLAN

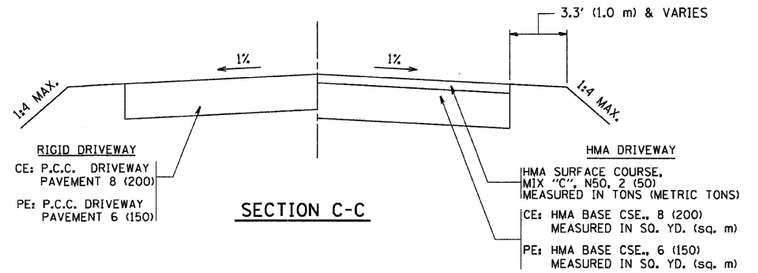
6' (1.8 m) TO 10' (3.0 m)



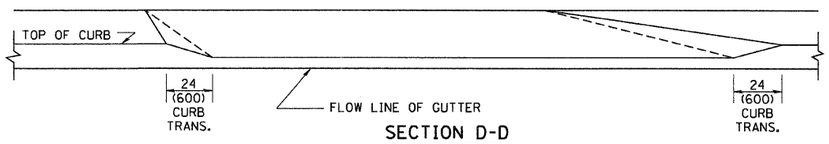
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

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

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

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

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

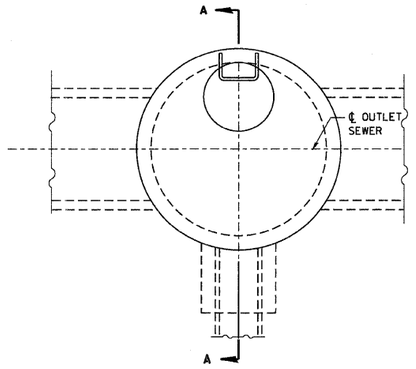
FILE NAME = W:\diststd\22x34\bd02.dgn	USER NAME = gaglionobt	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97
		DRAWN -	REVISED - M. GOMEZ 04-06-01
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - P. LaFLEUR 04-15-03
	PLOT DATE = 1/4/2008	DATE - 11-06-95	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

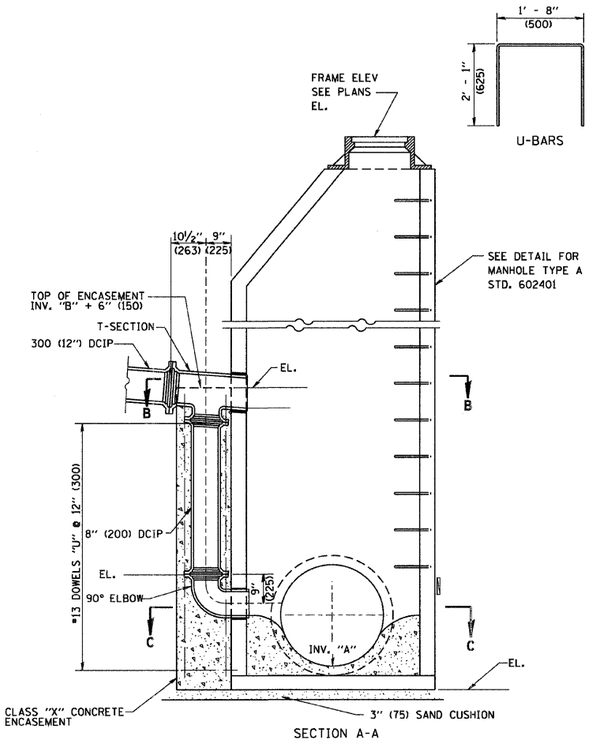
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	94
	BD400-02 (BD-02)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



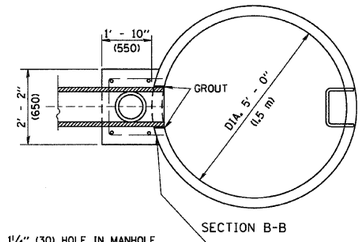
PLAN
FOR LOCATION SEE DRAINAGE PLANS

ENCASEMENT DETAILS				
DROP M.H. LOCATION STA., OFFSET				
INV. "A"				
INLET PIPE				
INV. "B"				
INV. "C"				
A				
B				
"V" BAR LENGTH				
NO. OF "U" BARS				
REINF. BARS				
CLASS "SI" CONC. CUBIC METER (CU. YD.)				



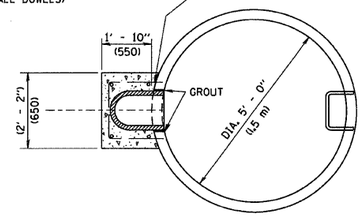
SECTION A-A

U-BARS



SECTION B-B

DRILL 1¼" (30) HOLE IN MANHOLE RISER WALLS, FILL WITH MORTAR AND INSERT DOWELS. (TYPICAL FOR ALL DOWELS)



SECTION C-C

TYPE A1-1 MANHOLE WITH 1 DROP AND DEPTH UP TO 10' (3 m)
TYPE A1-2 " " 1 " " " FROM 10' TO 15' (3 m TO 1.5 m)
TYPE A1-3 " " 1 " " " FROM 15' TO 20' (1.5 m TO 6 m)
TYPE A1-4 " " 1 " " " OVER 20' (6 m)

TYPE A2-1 MANHOLE WITH 2 DROPS AND DEPTH UP TO 10' (3 m)
TYPE A2-2 " " 2 " " " FROM 10' TO 15' (3 m TO 1.5 m)
TYPE A2-3 " " 2 " " " FROM 15' TO 20' (1.5 m to 6 m)
TYPE A2-4 " " 2 " " " OVER 20' (6 m)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

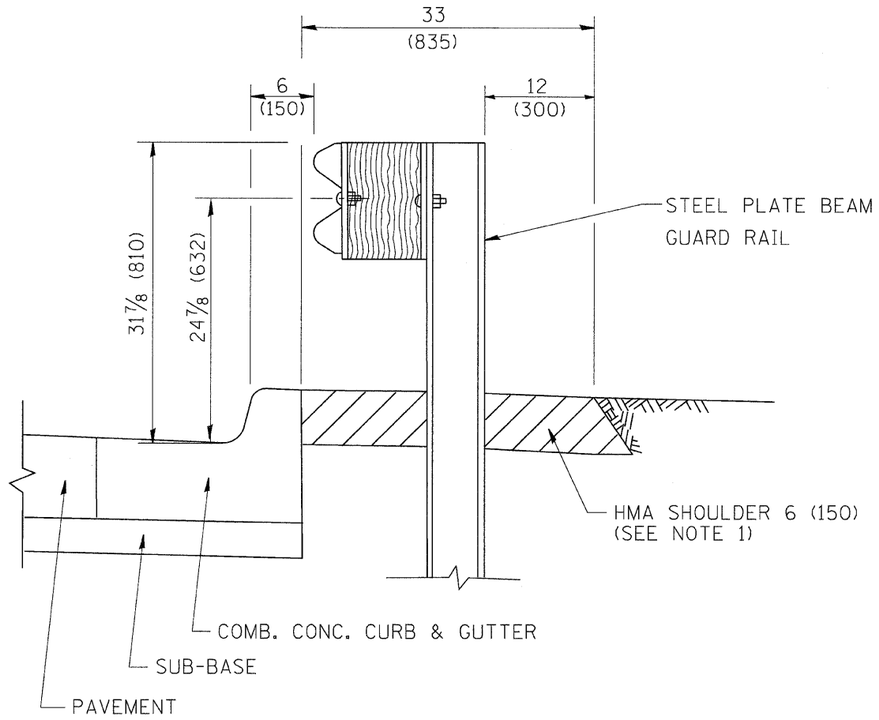
FILE NAME = W:\diststd\22x34\bd16.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE - 10-18-02	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DROP MANHOLE DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	95
	BD600-05 (BD-16)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL

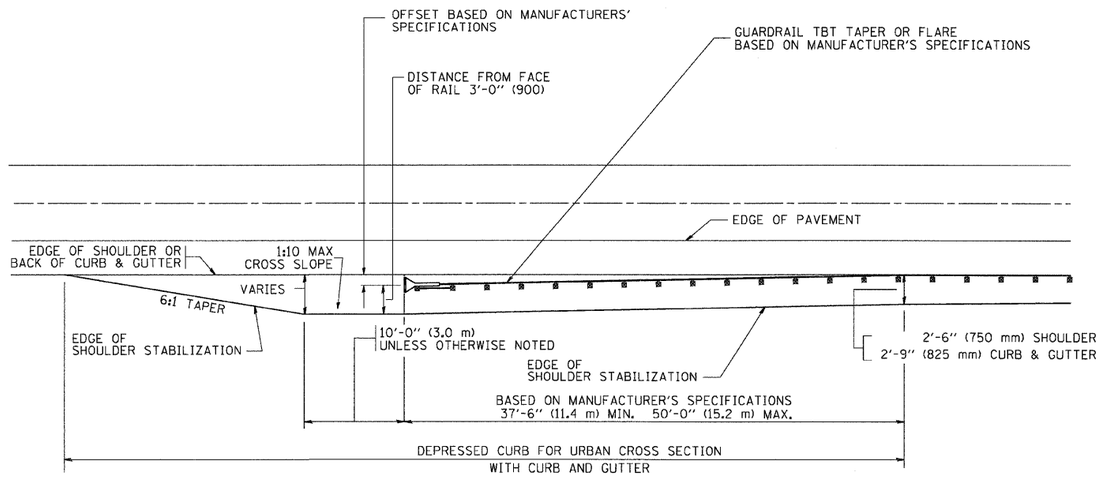
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]

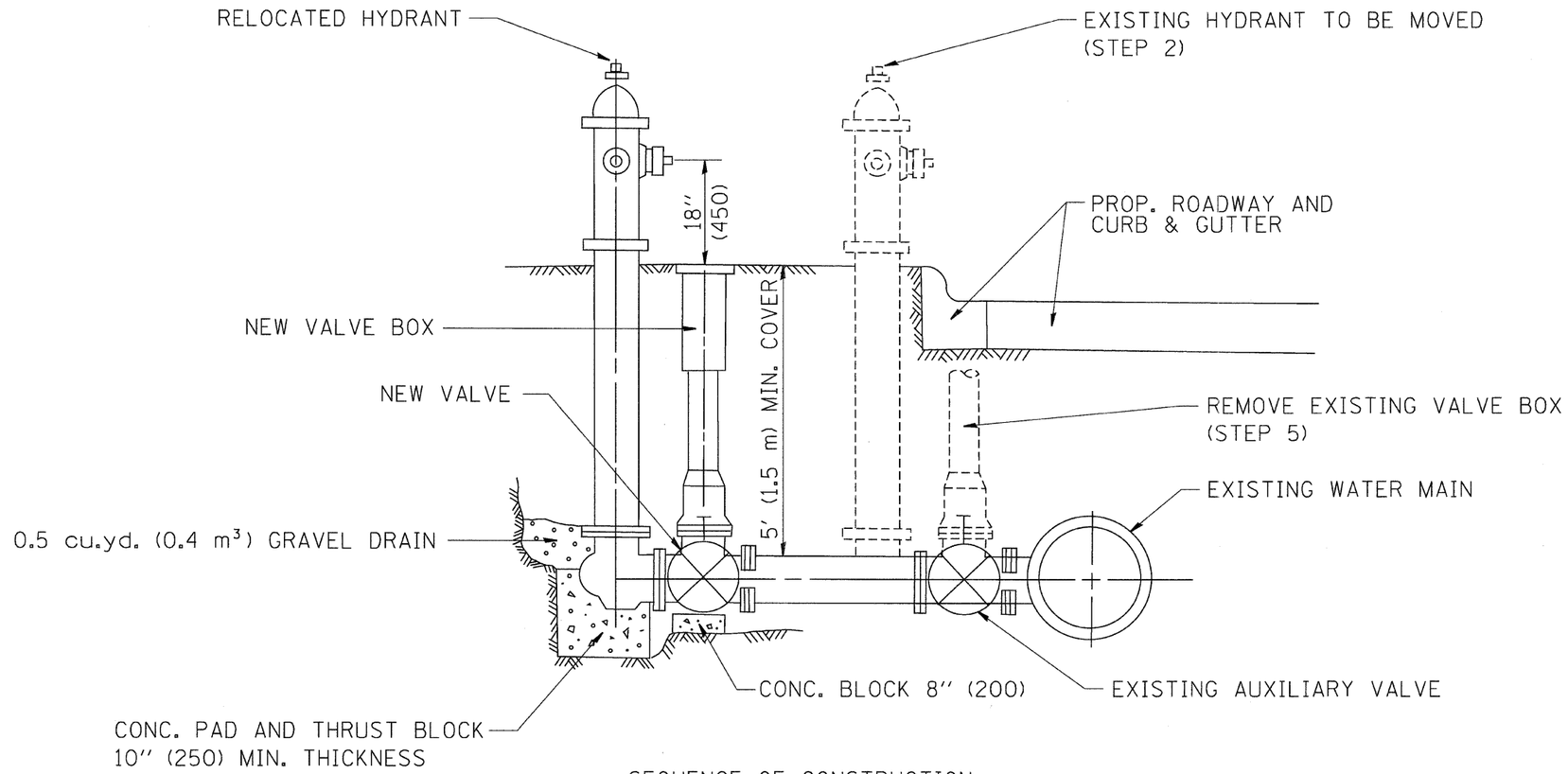


STABILIZATION AT TBT TY. 1 SPL.

TBT = TRAFFIC BARRIER TERMINAL

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

FILE NAME = C:\Projects\22x34\bd34.dgn	USER NAME = geglenobt	DESIGNED - M. DE YONG	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - E. GOMEZ 08-28-00			337	20R-6	LAKE	149	96
	PLOT SCALE = 49.9999 '/ IN.	CHECKED -	REVISED - R. BORO 01-01-07				BD600-10 (BD 34)	CONTRACT NO.		
	PLOT DATE = 12/11/2008	DATE - 09-22-90	REVISED - R. BORO 12-08-2008		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

FILE NAME = W:\diststd\22x34\bd36.dgn	USER NAME = gaglionbt	DESIGNED -	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIRE HYDRANT TO BE MOVED
		DRAWN -	REVISED - R. SHAH 10-25-94		
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.
	PLOT DATE = 1/4/2008	DATE -	REVISED -		

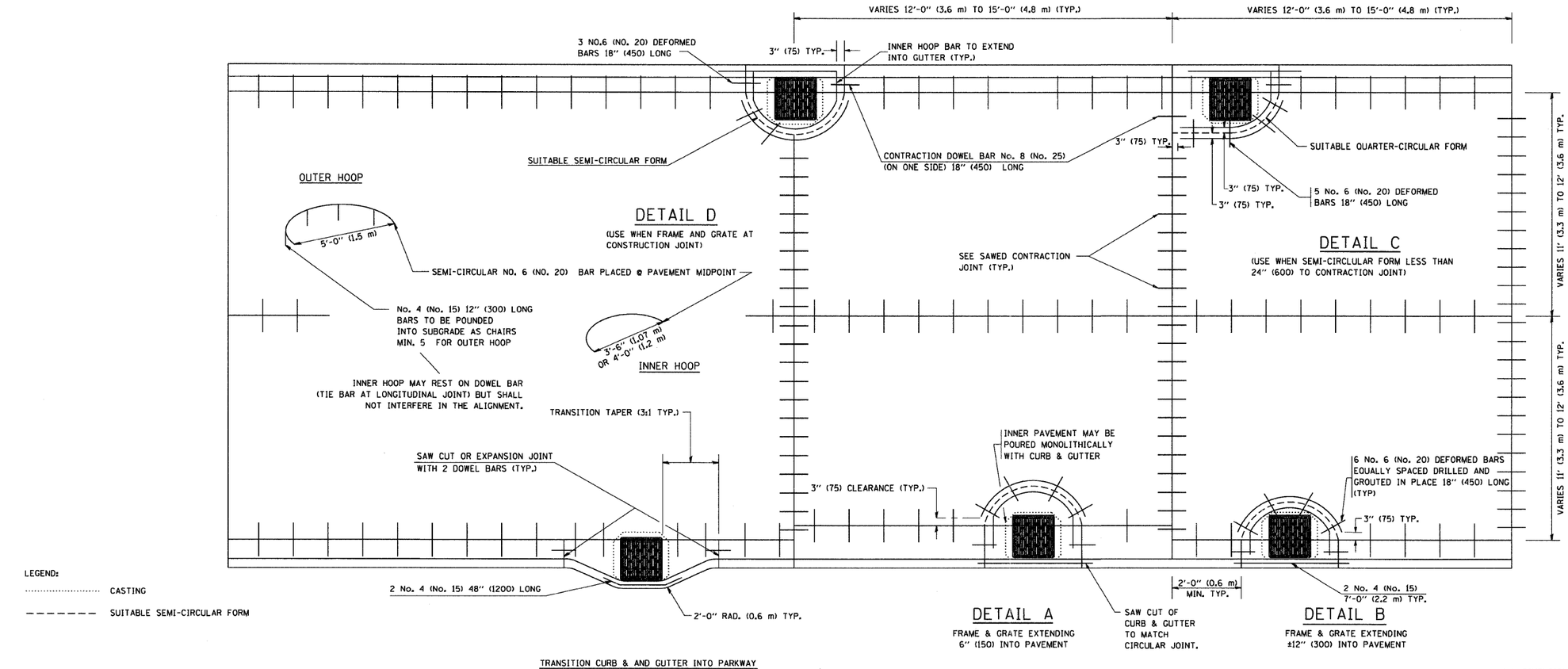
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	97
	BD-36	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3'-6" (1.1 m)	4'-0" (1.2 m)	5'-0" (1.5 m)
> 8" (200) TO 14" (360)	4'-0" (1.2 m)	4'-6" (1.4 m)	5'-0" (1.5 m)

DESIGNER NOTE:
THIS DETAIL IS TO BE USED WHEN THE GUTTER FLAG IS LESS THAN 24"

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT, EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.



TRANSITION CURB & AND GUTTER INTO PARKWAY
(PREFERRED BECAUSE PAVING OF MAINLINE NOT AFFECTED.)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

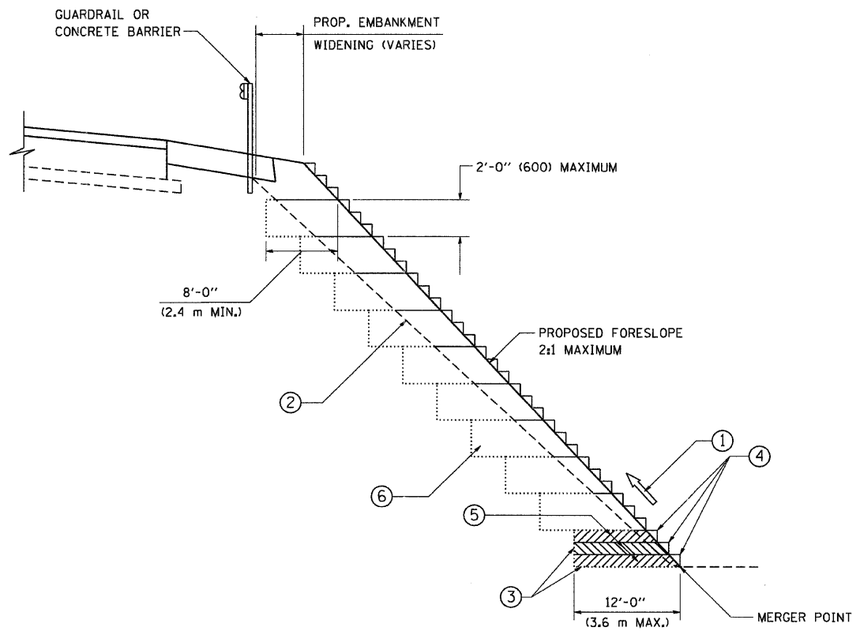
FILE NAME = W:\diststd\22x34\bd48.dgn	USER NAME = gaglianobt	DESIGNED - A. ABBAS	REVISED - T. MATOUSEK 08-28-00
		DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 10-02-00
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - A. ABBAS	REVISED - T. MATOUSEK 04-25-02
	PLOT DATE = 1/4/2008	DATE - 01-04-99	REVISED - P. LAFLEUR 08-27-02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	98
	BD-48	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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.

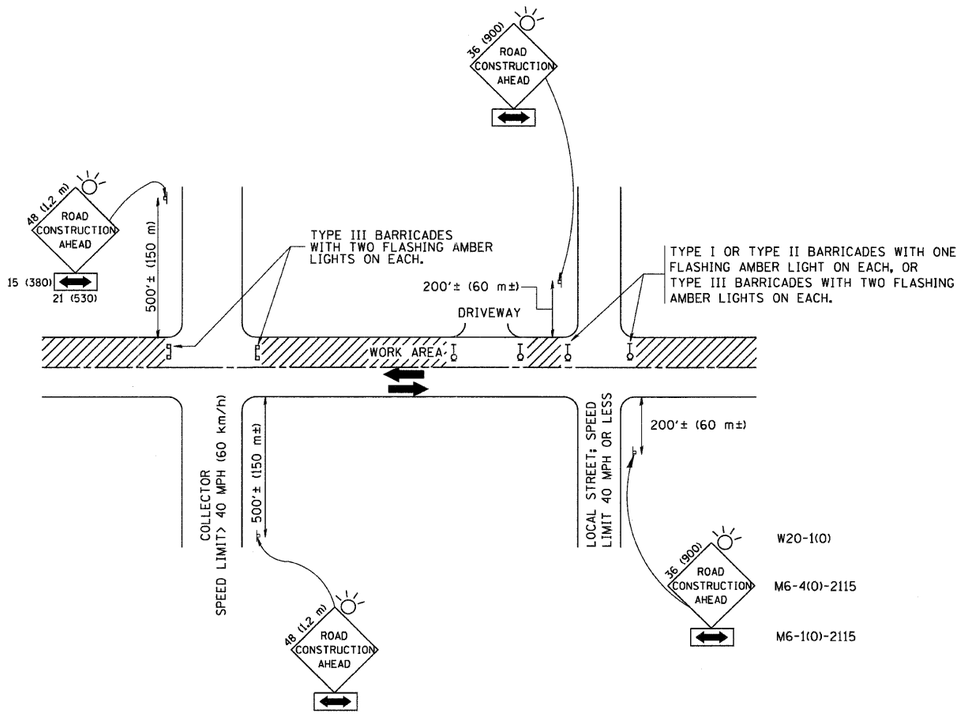
FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL FOR EMBANKMENT WIDENING

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	99
	BD-51	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

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

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = geglienobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
337	20R-6	LAKE	149	100
	TC-10	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		