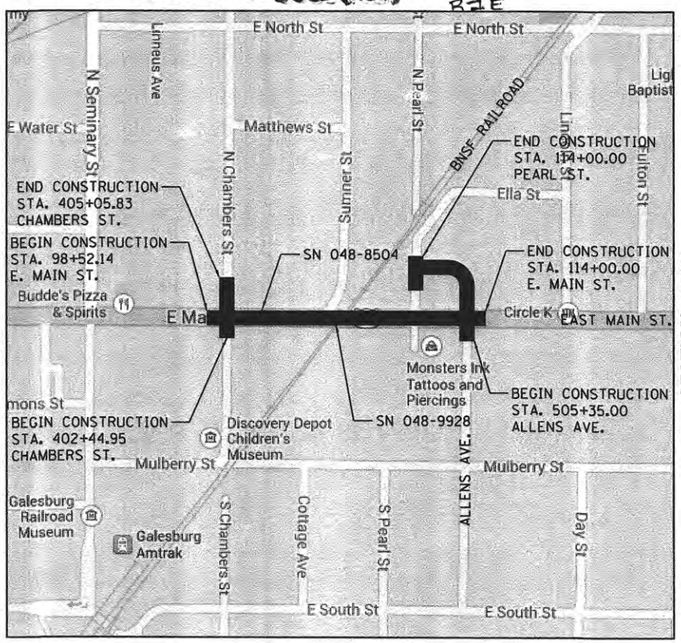
07-29-2016 LETTING ITEM 074

INDEX OF SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	1
	ILLINOIS	CONTRACT NO.		89417

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED ROADWAY PLANS
EAST MAIN STREET
ROUTE 6800 (U.S. 150)
SECTION 05-00500-19-GS
STATE SECTION 50VB
CITY OF GALESBURG
KNOX COUNTY
JOB C-94-116-06
ILLINOIS JOBS NOW

PROJECT BRP-5025(061)



GROSS LENGTH = 1547.86 FT. = 0.293 MILE

NET LENGTH = 1547.86 FT. = 0.293 MILE

DESIGN POLICY: BDE MANUAL

ROUTE	STREET	ADT (2036)	SU	MU	FUNCTIONAL CLASSIFICATION	DESIGN SPEED
FAU 6800	U.S. 150 EAST MAIN STREET	11,550	0	1.0%	MINOR ARTERIAL	35 MPH
FAU 6803	N. CHAMBERS STREET	3,000	0	1.0%	COLLECTOR (URBAN)	35 MPH
-	ALLENS AVENUE	1,520	0	1.0%	LOCAL	20 MPH

BRIDGE, AND RETAINING WALL STRUCTURAL SEALS ARE LOCATED ON SHEETS 80 AND 133

LICENSED PROFESSIONAL ENGINEER — MICHAEL P. BREITBACH 062-051371 — STATE OF ILLINOIS
DATE SIGNED : 11/16/15
LIC. EXP. DATE : 11/30/2017
HANSON : SHEETS 1-47, 71-80, 165-212

LICENSED PROFESSIONAL ENGINEER — KURT BIALOBRESKI 062-0586674 — STATE OF ILLINOIS
DATE SIGNED : 11/16/2015
LIC. EXP. DATE : 11/30/2017
HANSON : SHEETS 155-157

LICENSED PROFESSIONAL ENGINEER — LEE J. BLOOME 062057102 — STATE OF ILLINOIS
DATE SIGNED : 11/16/15
LIC. EXP. DATE : 11/30/2017
HANSON : SHEETS 48-54

LICENSED PROFESSIONAL ENGINEER — EHAB ELQAQ 062-058301 — STATE OF ILLINOIS
DATE SIGNED : 11/15/2015
LIC. EXP. DATE : 11/30/2017
TERRA ELECTRICAL : SHEETS 145-154

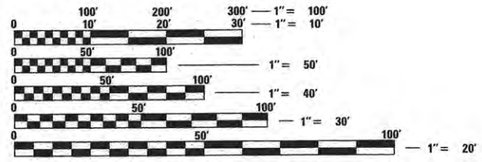
LOCATION OF SECTION INDICATED THUS: -

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

LICENSED PROFESSIONAL ENGINEER — KEVIN N. LIGHTFOOT 062-047643 — STATE OF ILLINOIS
DATE SIGNED : 11/11/2015
LIC. EXP. DATE : 11/30/2017
HANSON : SHEETS 55-70

LICENSED PROFESSIONAL ENGINEER — CURTIS LASTER 062-051787 — STATE OF ILLINOIS
DATE SIGNED : 11/15/2015
LIC. EXP. DATE : 11/30/2017
TERRA MOT : SHEETS 141-144

LICENSED PROFESSIONAL ENGINEER — RYAN D. NATION 062-055391 — STATE OF ILLINOIS
DATE SIGNED : 11/16/15
LIC. EXP. DATE : 11/30/2017
HANSON : SHEETS 158-164



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.

PROJECT ENGINEER: MICHAEL BREITBACH, P.E.
309.691.0902

CONTRACT #89417
CAT NO. 033266-01

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

APPROVED 11/13 2015
CITY ENGINEER

PASSED 11/18/ 2015
DISTRICT FOUR ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review 11/18 2015
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 11/13/2015

HANSON
Hanson Professional Services Inc.
7625 N. University St., Suite 200
Peoria, Illinois 61614
Offices Nationwide

GENERAL NOTES

1. THE CONSTRUCTION SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS" ADOPTED JANUARY 1, 2012, AND "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", 2015.
2. WHERE SECTION, SUB-SECTION, SUBDIVISION, OR PROPERTY MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PROPERTY MARKERS UNTIL AN OWNER OR AUTHORIZED SURVEYOR HAS WITNESSED OR REFERENCED THEIR LOCATION.
3. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY UTILITY LINES AND EXISTING IMPROVEMENTS TO REMAIN THAT ARE DAMAGED AS A RESULT OF THE WORK.
5. ALL SECTIONS, DETAILS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE SHOWN.
6. ADJUSTMENT OF PROPOSED GRADES TO MATCH EXISTING ENTRANCES OR OTHER FIELD CONDITIONS MAY BE REQUIRED. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF GRADE MODIFICATIONS.
7. ALL THE ELEVATIONS, STATIONS, AND OFFSETS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
8. ALL PAVEMENT, SIDEWALK, DRIVEWAY, AND CURB REMOVALS SHALL BE FULL DEPTH SAW CUT AT THE LIMITS TO BE REMOVED. SAW CUTTING TO BE INCLUDED IN COST OF EACH REMOVAL ITEM.
9. ACCESS SHALL BE MAINTAINED TO ALL PROPERTIES DURING ALL STAGES OF CONSTRUCTION, UNLESS SHOWN OTHERWISE ON PLANS.
10. THE WORK AREA SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
11. APPLICATION RATES:
    TEMPORARY EROSION CONTROL SEEDING: 100 LB/ACRE
    NUTRIENTS: 60 LB/ACRE FOR SODDING
12. THE CONTRACTOR SHALL USE ANY ON SITE MATERIAL DEEMED SUITABLE BY THE ENGINEER BEFORE ANY NEW FILL IS HAULED TO THE SITE.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
14. ALL TRENCH BACKFILL SHALL BE COMPACTED ACCORDING TO SECTION 542.04 AND 550.07 OF THE STANDARD SPECIFICATIONS.
15. ON-SITE BURNING OF TREES AND DEBRIS WILL NOT BE ALLOWED. ALL CONSTRUCTION DEBRIS, TREES AND LANDSCAPING WASTE SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH CITY ORDINANCE AND REGULATIONS.
16. TEMPORARY EASEMENTS FOR CONSTRUCTION ARE AVAILABLE AT LOCATIONS NOTED IN THE PLANS. THE EASEMENTS CAN BE USED FOR MOVEMENT OF CONSTRUCTION EQUIPMENT IF NECESSARY. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT DAMAGE TO PERMANENT FEATURES OF THE LAND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO PERMANENT FEATURES. AT THE COMPLETION OF THE CONSTRUCTION ACTIVITIES, THE LAND WITHIN THE TEMPORARY EASEMENT AREA SHALL BE RESTORED TO THE EXISTING CONDITION OF THE PROPERTY. NO CONSTRUCTION EQUIPMENT OR MATERIALS SHALL BE STORED IN TEMPORARY EASEMENT OR ON BNSF PERMANENT EASEMENT.
17. FOR STABILIZATION, ALL TYPE II BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
18. WATER MAIN QUALITY STORM SEWER IS TO BE USED AT ALL LOCATIONS WHERE LATERAL SEPARATION BETWEEN THE SEWER AND WATER MAIN IS LESS THAN 10 FEET AND THE WATER MAIN INVERT IS LESS THAN 1.5 FEET ABOVE THE STORM SEWER CROWN.
19. SEE SPECIAL PROVISIONS FOR LIST OF COMMITMENTS.

IDOT DISTRICT 4 GENERAL NOTES

107.00 COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

107.09 PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

201.04 TREE REMOVAL

THE DISTRICT FOUR TREE COMMITTEE SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

204.00 ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM - D4 PI0101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

205.01 SEEDING - SIDESLOPE RIPPING

ALL SLOPES STEEPER THAN 3 TO 1 AND OVER 15 FT. (4.5 M) IN HEIGHT SHALL BE RIPPED. THIS SHALL CONSIST OF RIPPING BETWEEN 18 INCHES TO 24 INCHES (450 MM TO 600 MM) DEEP NORMAL TO THE SLOPE. THE INTERVAL OF RIPPING ALONG THE SLOPE SHALL BE 12 FT. (3.6 M). THIS WORK SHALL BE DONE AFTER THE SEED BED HAS BEEN PREPARED BUT BEFORE ANY FERTILIZER OR SEED HAS BEEN APPLIED. THE FERTILIZER AND SEED SHALL BE APPLIED WITHIN A 24-HOUR PERIOD AFTER THE RIPPING HAS BEEN DONE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE VARIOUS ITEMS OF SEEDING INVOLVED.

406.03 PAVEMENT STATION NUMBERS & PLACEMENT

THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCH (20 MM) WIDE, 5 INCHES (125 MM) HIGH AND 5/8 INCH (15 MM) DEEP.

THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:
INTERVAL - 200 FEET (ENGLISH STATIONING) OR 100 METERS (METRIC STATIONING)
BOTTOM OF NUMBERS - 6 INCHES (150 MM) FROM THE INSIDE EDGE OF THE PAVEMENT MARKING
LOCATION:

- 2, 3, & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
- MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
- RAMPS - ALONG BASELINE EDGE OF PAVEMENT

POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER
FORMAT - ENGLISH (METRIC) PAVEMENT STATIONS SHALL USE THIS FORMAT 7/32 7/32 XXX (XX+XOO)9/32 9/32 ,
WHERE X REPRESENTS THE PAVEMENT STATION

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

406.19 PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

542.00 ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

602.00 EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES

IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS, THE CONNECTING OF EXISTING DRAIN TILES, PIPE CULVERTS, OR STORM SEWERS TO THE PROPOSED DRAINAGE SYSTEM STRUCTURES WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE PAY ITEMS PROVIDED.

670.00A ENGINEERS FIELD OFFICE

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (I) AND 670.04 (E):

ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

720.00 SIGNING

SIGN LOCATIONS MAY VARY FROM THE STATIONS SHOWN ON THE PLANS IN ACCORDANCE WITH DIRECTIONS FROM THE ENGINEER AT THE TIME OF CONSTRUCTION. SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID ANY FOUND UTILITIES.

ALL WOOD POST LOCATIONS SHALL BE VERIFIED WITH THE BUREAU OF OPERATIONS, TRAFFIC SECTION, BEFORE INSTALLATION.

IDOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-08	PAVEMENT JOINTS
420101-05	24' (7.2 m) JOINTED PCC PAVEMENT
420111-03	PCC PAVEMENT ROUNDOUTS
424001-08	CURB RAMPS FOR SIDEWALKS, PERPENDICULAR
424006-02	CURB RAMPS FOR SIDEWALKS, DIAGONAL
424011-02	CURB RAMPS FOR SIDEWALKS, CORNER PARALLEL
424021-03	DEPRESSED CORNER FOR SIDEWALK
424026-01	PEDESTRIAN CROSSINGS, ENTRANCE / ALLEY
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
601001-05	SUB-SURFACE DRAINS
602301-04	INLET - TYPE A
602306-03	INLET - TYPE B
602401-03	MANHOLE TYPE A
602601-04	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-04	FRAME AND LIDS TYPE 1
604006-05	FRAME AND GRATE TYPE 3
604036-03	FRAME AND GRATE TYPE 8
604051-04	FRAME AND GRATE TYPE 11V
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701001-02	OFF-ROAD OPERATIONS, 2L 2W, MORE THAN 15 FT. (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L 2W, 15 FT. (4.5 M) TO 24 IN (600 MM) FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600mm) FROM EDGE OF PAVEMENT
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5M) AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
701427-04	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS <= 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701602-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-05	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
821101-01	LUMINAIRE WIRING DIAGRAMS
830001-03	LIGHT POLE ALUMINUM MAST ARM
836001-02	LIGHT POLE FOUNDATION
857001-01	STANDARD PHASE DIAGRAMS
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
876001-04	PEDESTRIAN PUSH BUTTON POST
877011-06	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-10	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS
BLR22-7	TYPICAL APPLICATIONS OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

IDOT DISTRICT 4 HIGHWAY STANDARDS

424106-D4	COMBINATION CONCRETE CURB-SIDEWALK 4" (100 mm), (SPECIAL)
660101-D4	MODULAR RETAINING WALL SYSTEM DETAIL
780001-D4	TYPICAL PAVEMENT MARKINGS

UTILITIES

AMEREN ILLINOIS
1824 KNOX HIGHWAY 9
GALESBURG, IL 61401
JULIE CONE
(309) 345-5169

GALESBURG SANITARY DISTRICT
2700 W. MAIN STREET
GALESBURG, IL 61401
MARSHALL SCHRADER
(309) 342-0131

COMCAST COMMUNICATIONS
533 N. HENDERSON STREET
GALESBURG, IL 61401
(309) 342-2161

GALESBURG WATER DIVISION
920 W. MAIN STREET
GALESBURG, IL 61401
RICHARD NELSON
(309) 345-3649

CENTURY LINK
200 ENTERPRISE DRIVE
PEKIN, IL 61401
DARRELL SCHMIDT
(309) 477-0255

LEGEND

EXISTING MANHOLE	GAS
EXISTING INLET	TELEPHONE
CONTROL POINT	CABLE TELEVISION
EXISTING TELEPHONE PEDESTAL	FIBER OPTIC
EXISTING GUY	EXISTING WATER
EXISTING POWER POLE	PROPOSED WATER
EXISTING CULVERT	EXISTING ELECTRIC
EXISTING FIRE HYDRANT	PROPOSED ELECTRIC
EXISTING SIGN	PIPE CULVERT
EXISTING STUMP	PROPOSED STORM SEWER
EXISTING SANITARY SEWER CLEANOUT	PROPOSED PIPE UNDERDRAIN
PROPOSED INLET	EXISTING STORM SEWER
PROPOSED MANHOLE	EXISTING SANITARY SEWER
PROPOSED FIRE HYDRANT	PROPOSED SANITARY SEWER
PROPOSED TREE	OVERHEAD ELECTRIC
DITCH FLOW ARROW	FENCE
	PROPOSED R.O.W.
	EXISTING R.O.W.
	PERMANENT EASEMENT
	TEMPORARY EASEMENT

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED AMONG THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS, ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

	ITEM NUMBER	ITEM	UNIT	TOTAL QUANTITY
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	38
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	52
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1000
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	1000
	20800150	TRENCH BACKFILL	CU YD	1818
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	11291
*	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	26074
*	25000100	SEEDING, CLASS 1	ACRE	3.25
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	418
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	418
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	418
*	25100115	MULCH, METHOD 2	ACRE	3.25
*	25200100	SODDING	SQ YD	9102
*	25200110	SODDING, SALT TOLERANT	SQ YD	1637
*	25200200	SUPPLEMENTAL WATERING	UNIT	161
*	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	539
	28000305	TEMPORARY DITCH CHECKS	FOOT	90
	28000400	PERIMETER EROSION BARRIER	FOOT	1340
	28000510	INLET FILTERS	EACH	45
	30300011	AGGREGATE SUBGRADE IMPROVEMENT	TON	8822
	35300200	PORTLAND CEMENT CONCRETE BASE COURSE 7"	SQ YD	77
	40200500	AGGREGATE SURFACE COURSE, TYPE A 6"	SQ YD	392
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	500
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	4134
	40600285	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	POUND	7308
	40600837	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70	TON	606
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	491
	40603100	HOT-MIX ASPHALT BINDER COURSE, IL-19.0L, N30	TON	333
	40603305	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30	TON	246
	40603540	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	910
	42000201	PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	SQ YD	1303
	42000306	PORTLAND CEMENT CONCRETE PAVEMENT 8 1/4" (JOINTED)	SQ YD	8362
	42001300	PROTECTIVE COAT	SQ YD	6854
	42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	105
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	738
	42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	24653
	42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	380
	42400410	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH	SQ FT	5586
	42400800	DETECTABLE WARNINGS	SQ FT	191
	44000100	PAVEMENT REMOVAL	SQ YD	10398
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1989
	44000300	CURB REMOVAL	FOOT	402
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	3345
	44000600	SIDEWALK REMOVAL	SQ FT	13150
	44201329	CLASS C PATCHES, TYPE II, 8 INCH	SQ YD	49
	44201333	CLASS C PATCHES, TYPE III, 8 INCH	SQ YD	35
	44201335	CLASS C PATCHES, TYPE IV, 8 INCH	SQ YD	178
	44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	188
	50200100	STRUCTURE EXCAVATION	CU YD	5768
	50300225	CONCRETE STRUCTURES	CU YD	399
	50300285	FORM LINER TEXTURED SURFACE	SQ FT	3764
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	LSUM	1
	50500505	STUD SHEAR CONNECTORS	EACH	142
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	22550
	51100100	SLOPE WALL 4 INCH	SQ YD	580
	51202100	FURNISHING STEEL PILES HP14X117	FOOT	12543
	51202305	DRIVING PILES	FOOT	11322
	51204100	TEST PILE STEEL HP14X117	EACH	4

• SPECIALTY ITEM

	ITEM NUMBER	ITEM	UNIT	TOTAL QUANTITY
	51500100	NAME PLATES	EACH	2
	52100560	ANCHOR BOLTS, 2"	EACH	180
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	1319.5
	550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	233
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	163.5
	550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	77.5
	550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	61
	550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	16.5
*	56100600	WATER MAIN 6"	FOOT	300
*	56100900	WATER MAIN 12"	FOOT	1110
*	56103300	DUCTILE IRON WATER MAIN 12"	FOOT	565
*	56103520	DUCTILE IRON WATER MAIN 24"	FOOT	988
*	56104900	WATER VALVES 6"	EACH	6
*	56105200	WATER VALVES 12"	EACH	4
*	56108800	TAPPING VALVES AND SLEEVES 6"	EACH	2
*	56200500	WATER SERVICE LINE 1 1/2"	FOOT	200
*	56400600	FIRE HYDRANTS	EACH	5
	58000100	MEMBRANE WATERPROOFING	SQ FT	10480
	58700300	CONCRETE SEALER	SQ FT	14215
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	250
	59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	120
	60100915	PIPE DRAINS 6"	FOOT	4
	60107600	PIPE UNDERDRAINS 4"	FOOT	2700
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	6
	60218500	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	9
	60219300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	4
	60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2
	60221200	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	2
	60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	4
	60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	4
	60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	7
	60240210	INLETS, TYPE B, TYPE 1 FRAME, OPEN LID	EACH	1
	60240220	INLETS, TYPE B, TYPE 3 FRAME AND GRATE	EACH	12
	60240310	INLETS, TYPE B, TYPE 11 FRAME AND GRATE	EACH	2
	60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1
	60500040	REMOVING MANHOLES	EACH	11
	60500060	REMOVING INLETS	EACH	12
	60600605	CONCRETE CURB, TYPE B	FOOT	168
	60602800	CONCRETE GUTTER, TYPE B	FOOT	160
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1519
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	2526
	60611811	COMBINATION CONCRETE CURB AND GUTTER, TYPE M (MODIFIED)	FOOT	198
*	64100115	SIGHT SCREEN (WOODEN FENCE), TYPE P 6'	FOOT	132
	64300240	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2
*	66900105	UNDERGROUND STORAGE TANK REMOVAL	EACH	2
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	41600
*	66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	15
	67100100	MOBILIZATION	LSUM	1
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	100
	70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	62
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4208
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	60
	70300150	Short Term PAVEMENT MARKING REMOVAL	SQ FT	1571
	72000100	SIGN PANEL - TYPE 1	SQ FT	46.25
	72000200	SIGN PANEL - TYPE 2	SQ FT	80
	72900100	METAL POST - TYPE A	FOOT	50
	72900200	METAL POST - TYPE B	FOOT	126.5

• SPECIALTY ITEM

FILE NAME =	USER NAME = ander00846	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 5.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 11/17/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	05-00500-19-GS	KNOX	216	4
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	ITEM NUMBER	ITEM	UNIT	TOTAL QUANTITY
*	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	329
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	6226
*	78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	803
*	78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	1889
*	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	407
*	78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	191
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	2
*	81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	924
*	81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	7263
*	81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	79
*	81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	331
*	81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	319
*	81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	10
*	81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	2
*	81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	2
*	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	10
*	81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
*	81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	8358
*	81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	8717
*	82500390	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP (DUAL)	EACH	1
*	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	244
*	84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	6
*	84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	1
*	85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
*	86200200	UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1277.5
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2855.5
*	87301515	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	484
*	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	657.5
*	87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	6
*	87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
*	87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
*	87702950	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	2
*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	18
*	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	3
*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	50
*	88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
*	88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
*	88200510	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10
*	88500100	INDUCTIVE LOOP DETECTOR	EACH	2
*	88600100	DETECTOR LOOP, TYPE I	FOOT	596.5
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	8
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
*	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
*	B2001116	TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	21
*	B2004116	TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	20
	X0323389	STORM SEWER CONNECTION	EACH	2
*	X0323760	SANITARY SEWER SERVICE, 6" PVC, COMPLETE	EACH	1
*	X0323898	CLOSED CIRCUIT TELEVISION DOME CAMERA	EACH	2
	X0323923	SUPPORT EQUIPMENT AND MAINTENANCE	LSUM	1
	X0324455	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	3058
*	X0324878	ADJUSTING SANITARY SEWER SERVICE LINE	EACH	6
	X0325751	DRIVING SOLDIER PILES	FOOT	175
*	X0326654	ORNAMENTAL LIGHT UNIT, COMPLETE	EACH	23
	X0326671	CONCRETE SURFACE COLOR TREATMENT	SQ FT	60
*	X0326812	CAT 5 ETHERNET CABLE	FOOT	500
	X0326864	BRICK SIDEWALK REMOVAL	SQ FT	1457
	X0327131	DRAINAGE STRUCTURES, NO. 1	EACH	3

* SPECIALTY ITEM

	ITEM NUMBER	ITEM	UNIT	TOTAL QUANTITY
*	X0327241	STEEL CASING PIPE IN TRENCH, 24 INCH	FOOT	30
	X0327680	TRENCH DRAIN	FOOT	24
*	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1377
*	X0783300	PUMP STATION ELECTRICAL WORK	LSUM	1
*	X0783500	PUMP STATION MECHANICAL WORK	LSUM	1
	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	50
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	1942
	X5011100	FOUNDATION REMOVAL	EACH	1
	X5040050	PRECAST CONCRETE SUBSTRUCTURE	LSUM	1
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	370
	X6022810	MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	7
*	X6026054	SANITARY MANHOLES TO BE REMOVED	EACH	6
*	X6026056	SANITARY MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	11
	X6060505	CONCRETE CURB (SPECIAL)	FOOT	207
	X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	20
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1
*	X8110454	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., STAINLESS STEEL	FOOT	30
*	X8211000	UNDERPASS LUMINAIRE (SPECIAL)	EACH	6
*	X8211175	LUMINAIRE, LED, HORIZONTAL MOUNT, 175 WATT	EACH	4
*	X8250210	PHOTOCELL RELAY	EACH	1
*	X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	3500
*	X8710050	FIBER OPTIC ETHERNET DROP AND REPEAT SWITCH	EACH	2
*	X8710071	FIBER OPTIC FUSION SPLICE	EACH	18
	XX000300	CONCRETE STEPS	SQ FT	101
	XX001286	SPECIAL EXCAVATION	CU YD	29604
*	XX002090	STAIR SIDE RAILING	FOOT	30
*	XX004242	ORNAMENTAL HANDRAIL	FOOT	160
*	XX006653	FENCE (SPECIAL)	FOOT	446
	XX006898	STAMPED COLORED PORTLAND CEMENT CONCRETE	SQ FT	553
*	XX007531	RELOCATE EXISTING LIGHT POLE ONTO NEW FOUNDATION	EACH	2
*	XX007797	LUMINAIRE (SPECIAL)	EACH	38
	XX008257	STAMPED COLORED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	5067
*	XX008892	MANHOLE, ADDITIONAL DEPTH, 4' DIA.	FOOT	9.25
	XX008954	PRECAST PRESTRESSED CONCRETE FASCIA BEAM	FOOT	446
*	XX009058	TRACK MONITORING	LSUM	1
	Z0007118	UNTREATED TIMBER LAGGING	SQ FT	829
*	Z0007601	BUILDING REMOVAL NO. 1	LSUM	1
	Z0013302	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	4212
	Z0013798	CONSTRUCTION LAYOUT	LSUM	1
*	Z0015200	CURB STOPS 1 1/2"	EACH	2
	Z0018800	DRAINAGE SYSTEM	LSUM	1
*	Z0022800	FENCE REMOVAL	FOOT	99
	Z0026402	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	175
	Z0026404	FURNISHING SOLDIER PILES (W SECTION)	FOOT	505
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	1108
*	Z0047700	PUMPING STATION	LSUM	1
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	LSUM	1
	Z0048900	RAILROAD TRACK REMOVAL	FOOT	690
*	Z0049801	REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1	LSUM	1
*	Z0049901	REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1	LSUM	1
	Z0056648	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 12"	FOOT	127.5
	Z0056652	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 18"	FOOT	91.5
	Z0056668	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 12"	FOOT	60.5
	Z0056670	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 18"	FOOT	66
*	Z0056900	SANITARY SEWER 8"	FOOT	403
*	Z0057100	SANITARY SEWER 12"	FOOT	211
*	Z0067900	STEEL CASINGS 24"	FOOT	128
	Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	2170
Δ	Z0076600	TRAINEES	HOUR	1000
Δ	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1000

* SPECIALTY ITEM Δ 0042

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	11/6/15

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		DATE - 11/13/2015	REVISED -

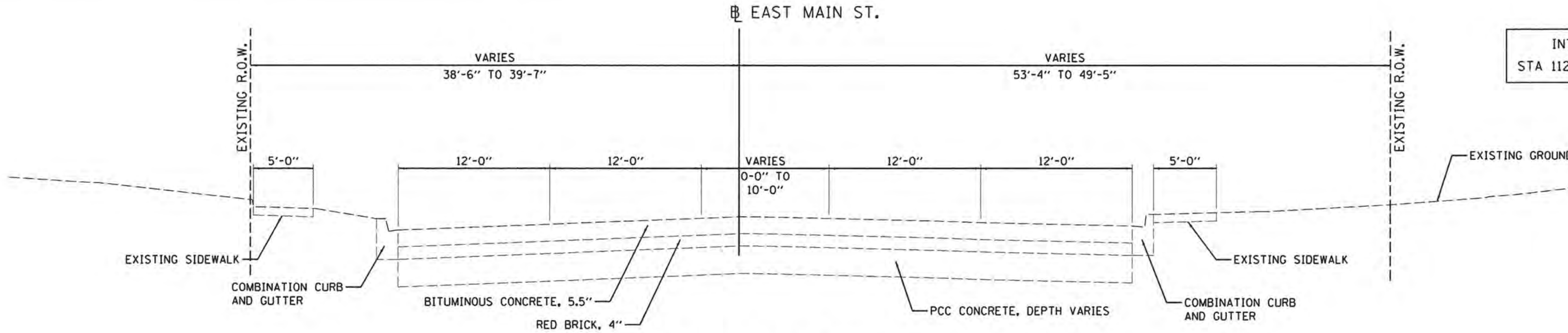
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

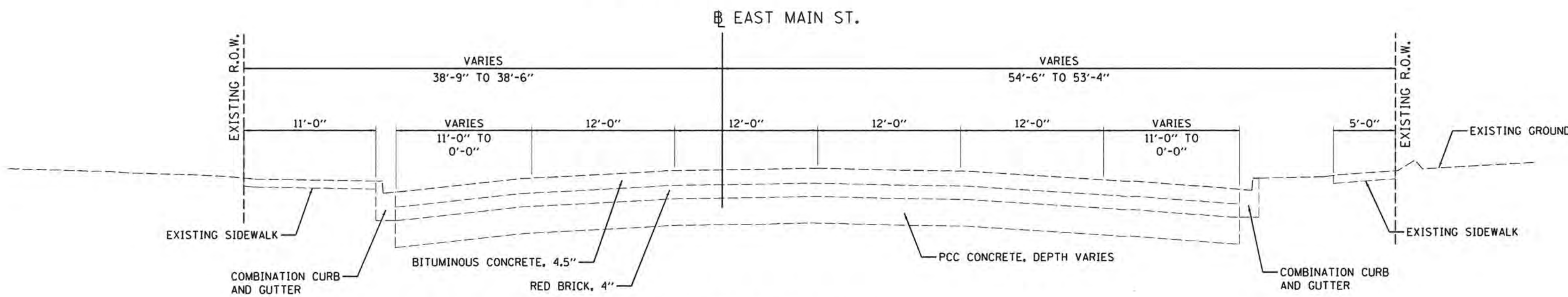
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	5
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INTERSECTION OMISSION
STA 112+88.39 TO STA 113+75.00



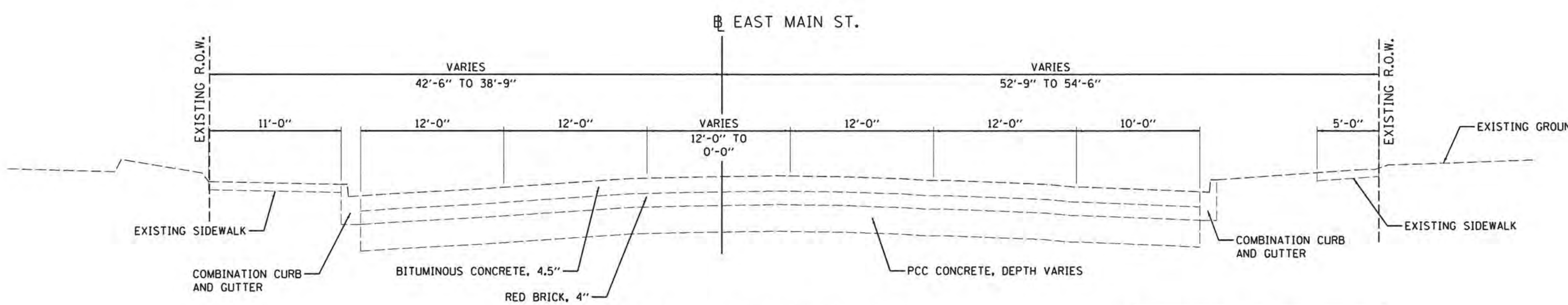
MAIN ST. EXISTING TYPICAL SECTION

STA. 107+50.00 TO STA. 118+20.49



MAIN ST. EXISTING TYPICAL SECTION

STA. 105+50.00 TO STA. 107+50.00



MAIN ST. EXISTING TYPICAL SECTION

STA. 102+98.49 TO STA. 105+50.00

INTERSECTION OMISSION
STA 101+90.00 TO STA 102+98.49

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DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

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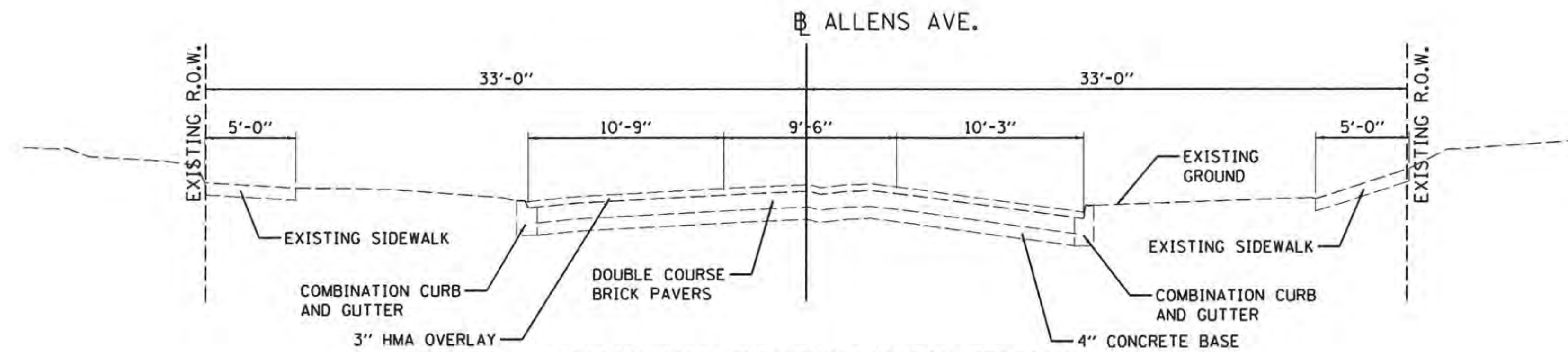
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

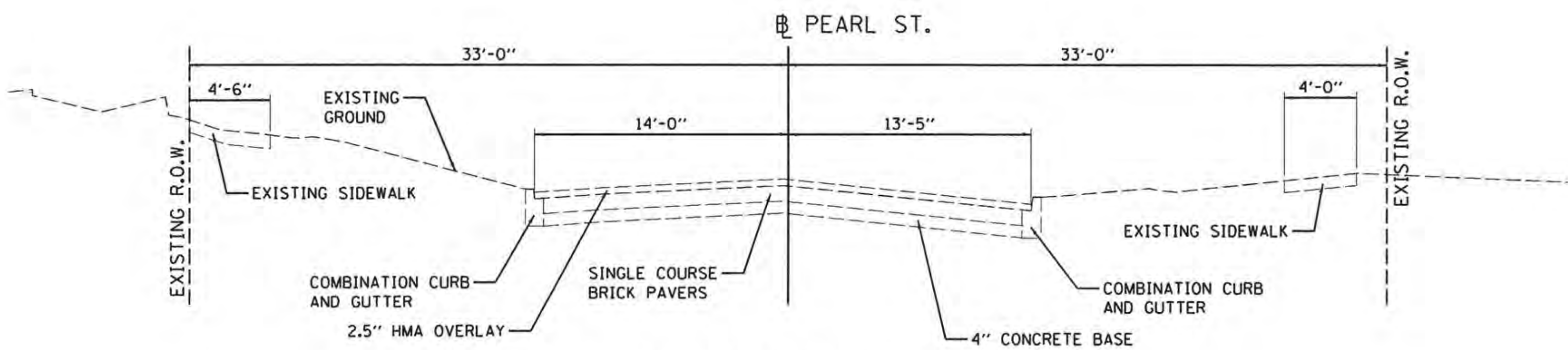
EAST MAIN STREET
EXISTING TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

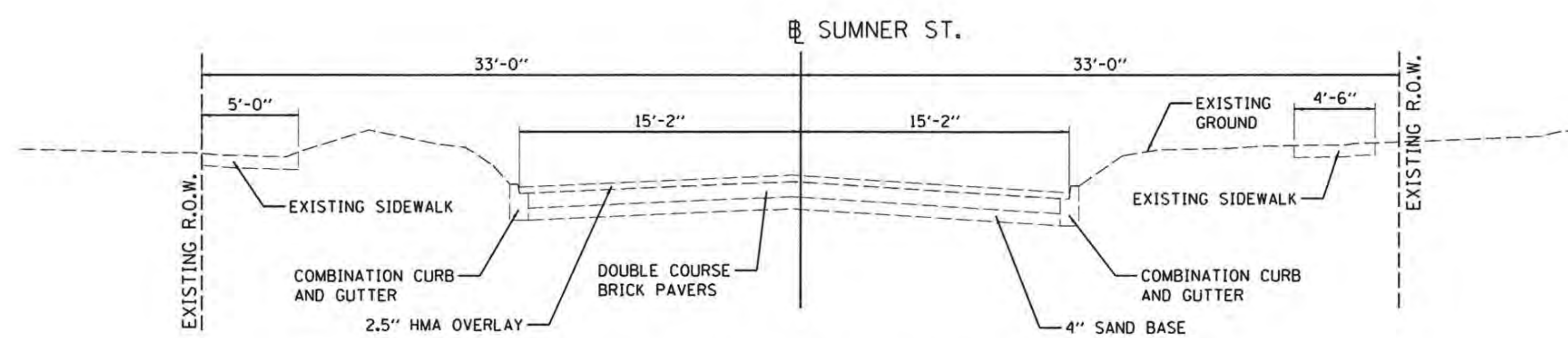
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-CS	KNOX	216	6
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



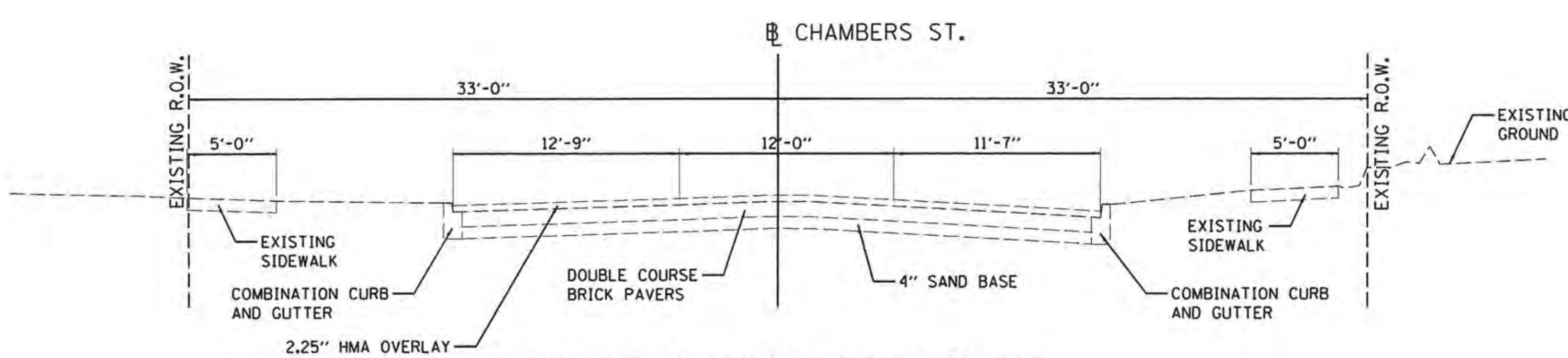
ALLENS AVE. EXISTING TYPICAL SECTION



PEARL ST. EXISTING TYPICAL SECTION



SUMNER ST. EXISTING TYPICAL SECTION



CHAMBERS ST. EXISTING TYPICAL SECTION

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DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

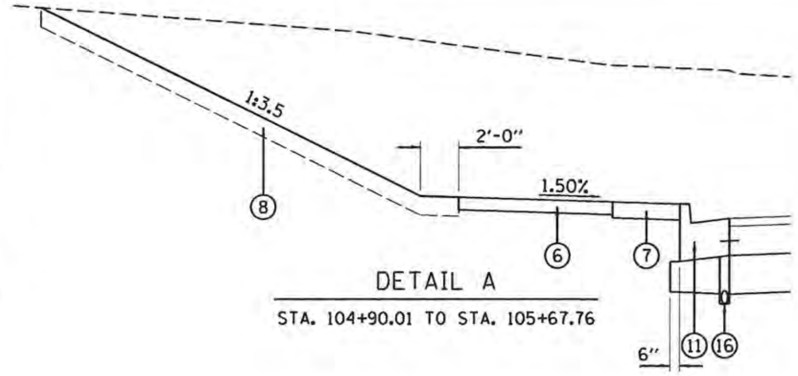
CHAMBERS STREET, ALLENS AVENUE AND PEARL STREET
EXISTING TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	7
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES:

1. SEE JOINTING PLAN SHEETS FOR LOCATIONS OF JOINTS AND TIE BARS.
2. SEE RIGHT OF WAY PLANS FOR EXACT LOCATIONS AND DIMENSIONS.
3. SEE INTERSECTION GRADING DETAIL.
4. SEE SITE LAYOUT AND GRADING DETAILS FOR SLOPES AND LIMITS OF PROPOSED PARKING LOT PAVEMENTS.



DETAIL A

STA. 104+90.01 TO STA. 105+67.76

STRUCTURAL DESIGN TRAFFIC: YEAR 2026 ADT 10,217
PV = 95.4% SU = 0% MU = 4.6%
ROAD/STREET CLASSIFICATION: CLASS I
P = 32% S = 45% M = 45%
TRAFFIC FACTOR: ACTUAL TF = 2.955 AC TYPE = N/A
MINIMUM TF = 5.024
AC GRADE: Binder= N/A Surface= N/A
SUBGRADE SUPPORT RATING:
SSR = POOR (STA. 101+45.79 TO 114+00.00)
SSR = POOR (STA. TO)

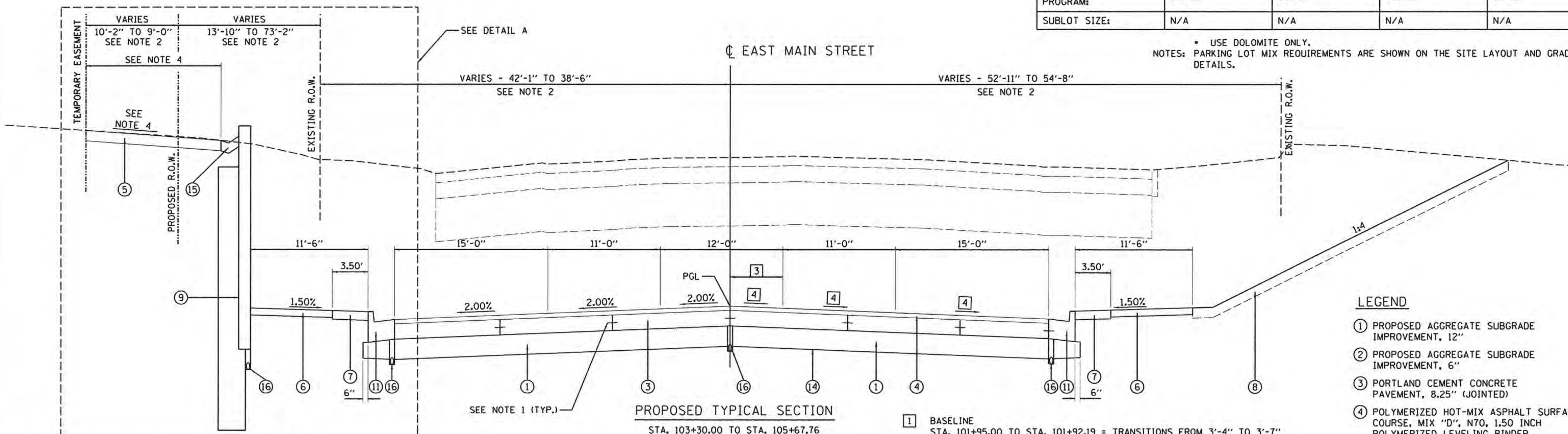
BITUMINOUS MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATIONS	EAST MAIN ST. & CHAMBERS ST.	EAST MAIN ST.	PEARL ST. & SUMNER ST.	SUMNER ST. BINDER COURSE
MIXTURE USE(S):	SURFACE COURSE	LEVELING BINDER	SURFACE COURSE	BINDER COURSE
PG:	SBS OR SBR 76-22	SBS OR SBR 76-22	PG 58-22	PG 58-22
DESIGN AIR VOIDS:	4.0% @ N-70	4.0% @ N-70	4.0% @ N-30	4.0% @ N-30
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5	IL 9.5	IL 9.5	IL 19.0L
FRICTION AGGREGATE:	MIXTURE D •	N/A	MIXTURE C	N/A
MIXTURE WEIGHT:	112 LB/SQ YD/IN	112 LB/SQ YD/IN	112 LB/SQ YD/IN	112 LB/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A	N/A	N/A

• USE DOLOMITE ONLY.

NOTES: PARKING LOT MIX REQUIREMENTS ARE SHOWN ON THE SITE LAYOUT AND GRADING DETAILS.



PROPOSED TYPICAL SECTION

STA. 103+30.00 TO STA. 105+67.76

INTERSECTION OMISSION
STA 101+92.19 TO STA 103+30.00

1 BASELINE
STA. 101+95.00 TO STA. 101+92.19 = TRANSITIONS FROM 3'-4" TO 3'-7"

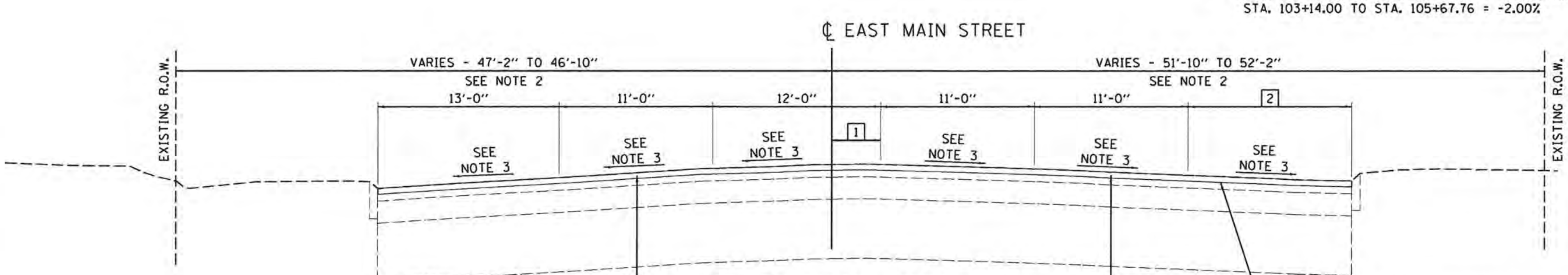
2 LANE WIDTH - RIGHT
STA. 101+95.00 TO STA. 101+92.19 = TRANSITIONS FROM 11'-7" TO 11'-9"

3 BASELINE
STA. 103+06.20 TO STA. 105+67.76 = TRANSITIONS FROM 4'-2" TO 6'-0"

4 ROADWAY CROSS SLOPE - RIGHT
STA. 103+06.20 TO STA. 103+14.00 = TRANSITIONS FROM -1.84% TO -2.00%
STA. 103+14.00 TO STA. 105+67.76 = -2.00%

LEGEND

1. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
2. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 6"
3. PORTLAND CEMENT CONCRETE PAVEMENT, 8.25" (JOINTED)
4. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.50 INCH POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70, 1.00 INCH
5. PARKING LOT PAVEMENT
6. PORTLAND CEMENT CONCRETE SIDEWALK, 4"
7. STAMPED COLORED PCC SIDEWALK, 5"
8. PROPOSED TOPSOIL FURNISH AND PLACE, 6"
9. SOLDIER PILE RETAINING WALL (SEE WALL PLANS)
10. SEGMENTAL CONCRETE BLOCK WALL (SEE WALL PLANS)
11. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
12. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
13. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE M (MODIFIED) (M-2.24)
14. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
15. CONCRETE GUTTER, TYPE B
16. PIPE UNDERDRAINS, 4"



PROPOSED TYPICAL SECTION

STA. 101+45.00 TO STA. 101+92.19

LAYOUT	RLA	2/11/14
DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

pw:\\spi-svr206.hanson.dom:Hanson Projects\Documents\09Jobs\09L0105\CAD-Phase I\Road\Sheet\D409L0105-sht-typical003

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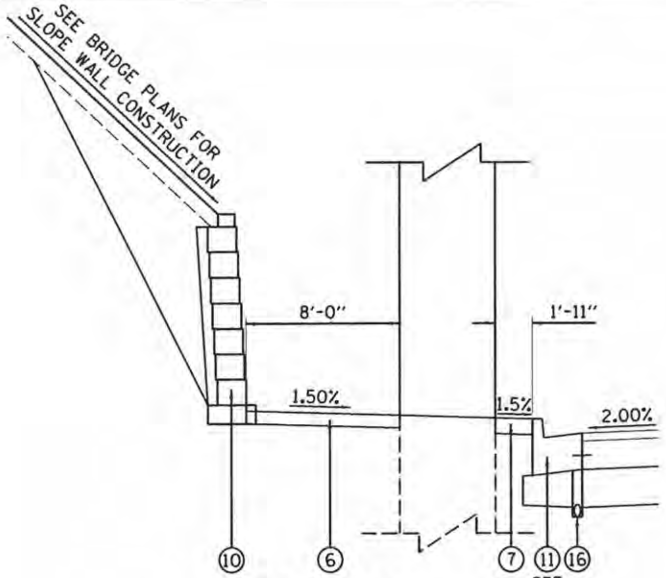
	PLOT SCALE = 5.0000 ' / in.	CHECKED - MPB	REVISED -
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PROPOSED TYPICAL SECTIONS

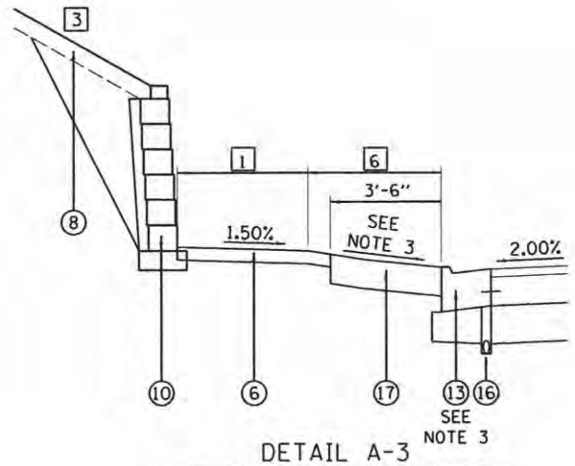
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	8
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



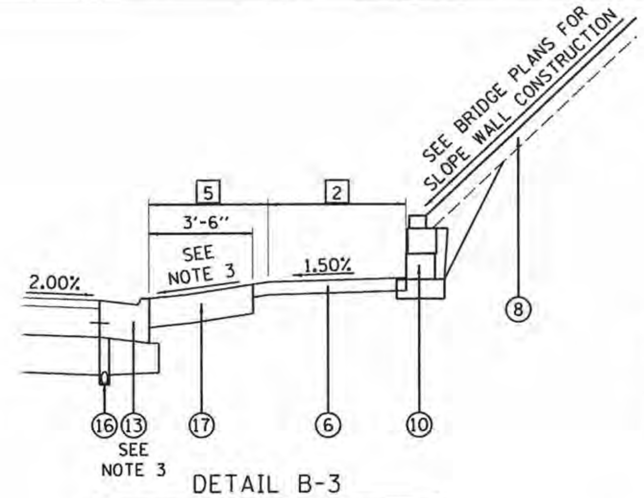
DETAIL A-2

STA. 107+79.00 TO STA. 108+55.87



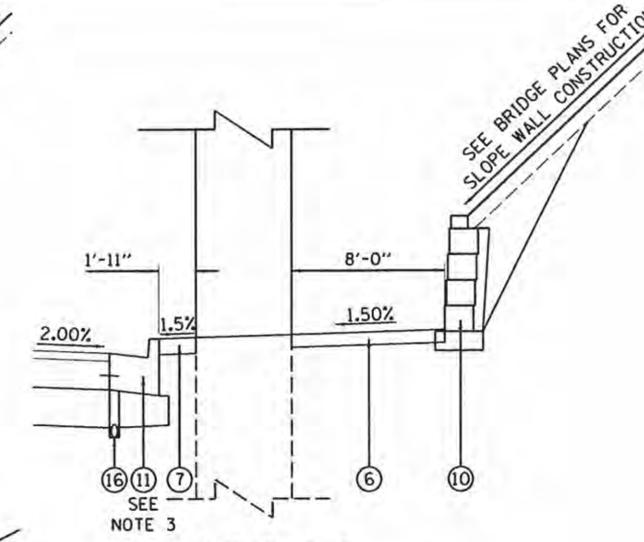
DETAIL A-3

STA. 108+55.87 TO STA. 109+34.87



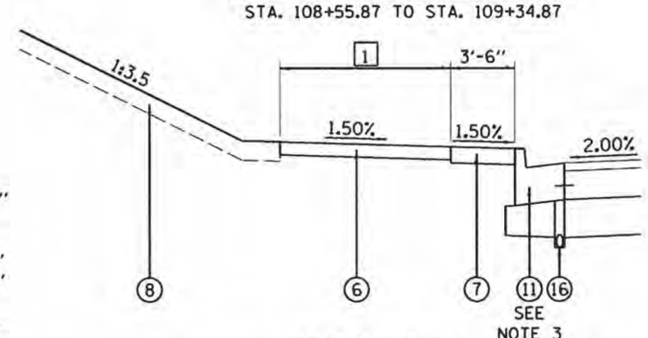
DETAIL B-3

STA. 106+85.00 TO STA. 107+10.51



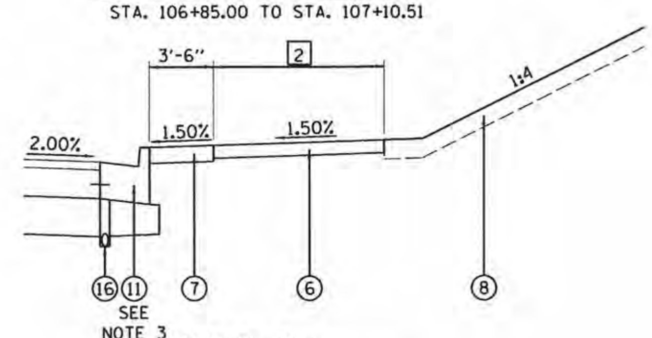
DETAIL B-4

STA. 107+10.54 TO STA. 107+87.43



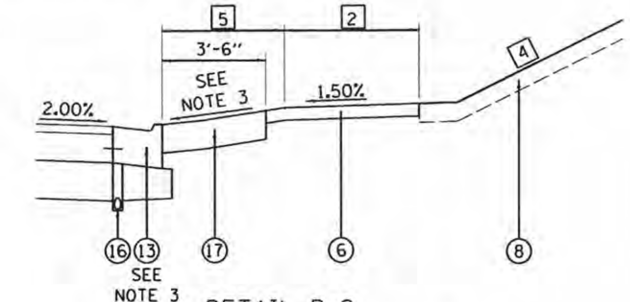
DETAIL A-1

STA. 105+67.76 TO STA. 106+70.00



DETAIL B-1

STA. 105+67.76 TO STA. 106+31.51
STA. 108+80.00 TO STA. 110+00.00



DETAIL B-2

STA. 106+31.51 TO STA. 106+85.00

1 SIDEWALK WIDTH - LEFT
STA. 105+67.76 TO STA. 107+15.00 = TRANSITIONS FROM 8'-0" TO 11'-5"
STA. 107+15.00 TO STA. 107+79.00 = 11'-5"
STA. 108+55.87 TO STA. 108+79.87 = 8'-0"
STA. 108+79.87 TO STA. 109+34.87 = TRANSITIONS FROM 8'-0" TO 9'-6"
STA. 109+34.87 TO STA. 110+00.00 = TRANSITIONS FROM 9'-6" TO 8'-0"

2 SIDEWALK WIDTH - RIGHT
STA. 105+67.28 TO STA. 106+31.51 = TRANSITIONS FROM 8'-0" TO 9'-6"
STA. 106+31.51 TO STA. 106+86.51 = TRANSITIONS FROM 9'-6" TO 8'-0"
STA. 106+86.51 TO STA. 107+10.54 = 8'-0"
STA. 107+87.43 TO STA. 108+80.00 = 11'-5"
STA. 108+80.00 TO STA. 110+00.00 = TRANSITIONS FROM 11'-5" TO 8'-0"

3 BACKSLOPE - LEFT
STA. 108+55.94 TO STA. 108+73.30 = 1:2.11 TO 1:2.55
STA. 108+73.30 TO STA. 108+80.00 = 1:2.55 TO 1:2.75
STA. 108+80.00 TO STA. 108+95.00 = 1:2.75 TO 1:3.25
STA. 108+95.00 TO STA. 109+00.00 = 1:3.25
STA. 109+00.00 TO STA. 109+05.00 = 1:3.25 TO 1:3.5
STA. 109+05.00 TO STA. 109+34.91 = 1:3.5

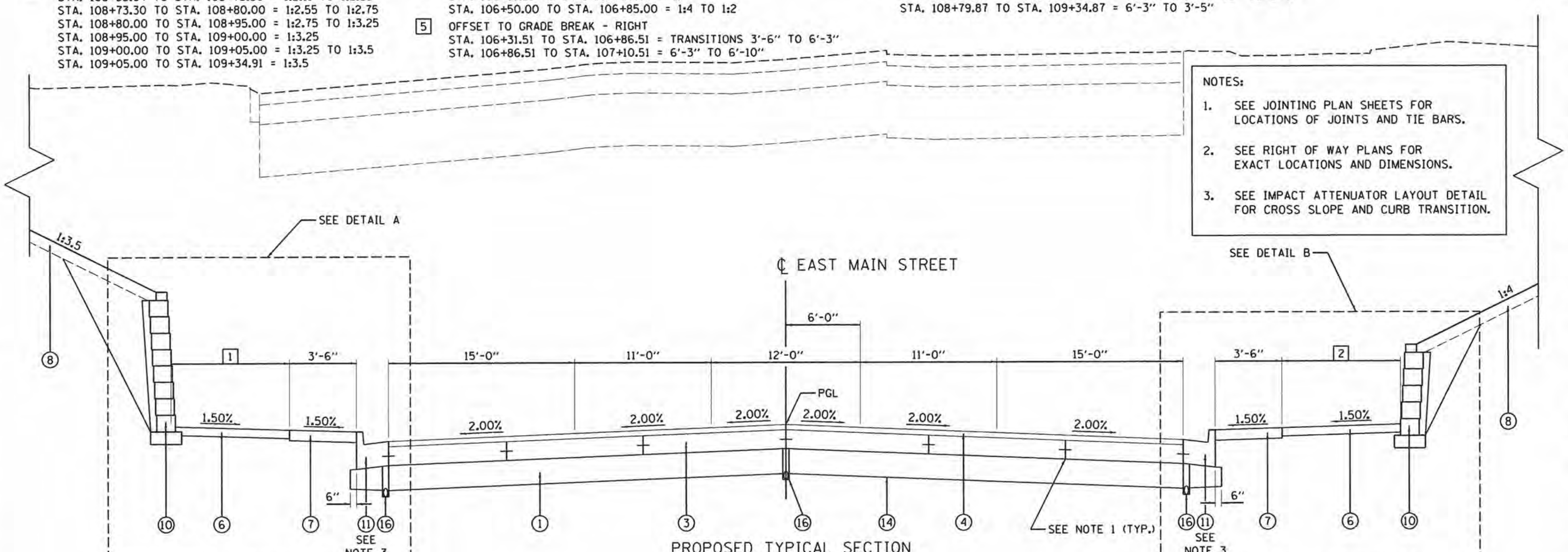
4 BACKSLOPE - RIGHT
STA. 106+31.51 TO STA. 106+50.00 = 1:4
STA. 106+50.00 TO STA. 106+85.00 = 1:4 TO 1:2

5 OFFSET TO GRADE BREAK - RIGHT
STA. 106+31.51 TO STA. 106+86.51 = TRANSITIONS 3'-6" TO 6'-3"
STA. 106+86.51 TO STA. 107+10.51 = 6'-3" TO 6'-10"

6 OFFSET TO GRADE BREAK - LEFT
STA. 108+55.87 TO STA. 108+79.87 = TRANSITIONS 6'-10" TO 6'-3"
STA. 108+79.87 TO STA. 109+34.87 = 6'-3" TO 3'-5"

NOTES:

1. SEE JOINTING PLAN SHEETS FOR LOCATIONS OF JOINTS AND TIE BARS.
2. SEE RIGHT OF WAY PLANS FOR EXACT LOCATIONS AND DIMENSIONS.
3. SEE IMPACT ATTENUATOR LAYOUT DETAIL FOR CROSS SLOPE AND CURB TRANSITION.



PROPOSED TYPICAL SECTION

STA. 105+67.76 TO STA. 110+00.00

LEGEND

1. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
2. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 6"
3. PORTLAND CEMENT CONCRETE PAVEMENT, 8.25" (JOINTED)
4. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.50 INCH POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70, 1.00 INCH
5. PARKING LOT PAVEMENT
6. PORTLAND CEMENT CONCRETE SIDEWALK, 4"
7. STAMPED COLORED PCC SIDEWALK, 5"
8. PROPOSED TOPSOIL FURNISH AND PLACE, 6"
9. SOLDIER PILE RETAINING WALL (SEE WALL PLANS)
10. SEGMENTAL CONCRETE BLOCK WALL (SEE WALL PLANS)
11. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
12. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
13. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE M (MODIFIED) (M-2.24)
14. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
15. CONCRETE GUTTER, TYPE B
16. PIPE UNDERDRAINS, 4"
17. STAMPED COLORED PORTLAND CEMENT CONCRETE, 9"

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LAYOUT	RLA	2/11/14
DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

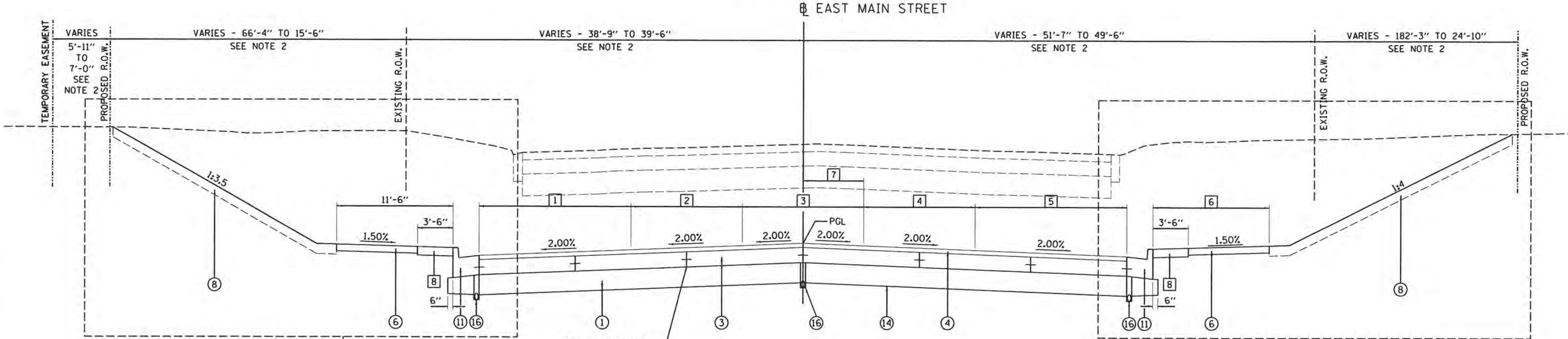
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PROPOSED TYPICAL SECTIONS

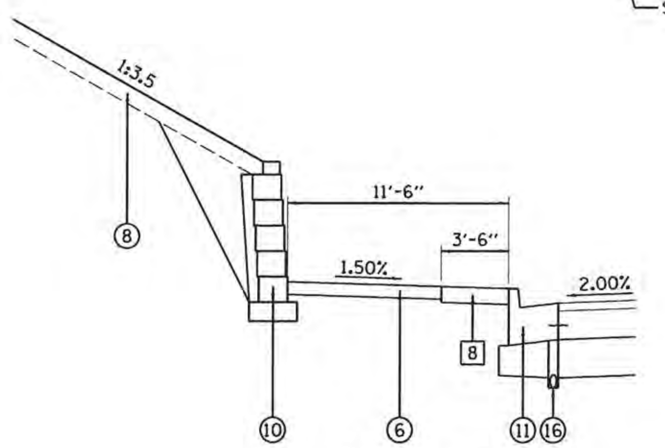
SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	9
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

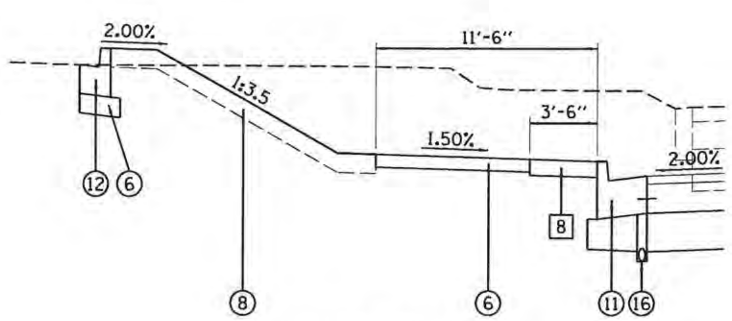
INTERSECTION OMISSION
STA 112+88.47 TO STA 114+00.00



PROPOSED TYPICAL SECTION
STA. 110+00.00 TO STA. 112+88.47



DETAIL A-1
STA. 110+00.00 TO STA. 110+25.00



DETAIL A-2
STA. 111+35.12 TO STA. 112+59.72

[1] LANE WIDTH - LEFT
STA. 110+00.00 TO STA. 112+00.00 = 15'-0"
STA. 112+00.00 TO STA. 112+88.47 = TRANSITIONS FROM 15'-0" TO 13'-6"

[2] LANE WIDTH - LEFT
STA. 110+00.00 TO STA. 112+00.00 = 11'-0"
STA. 112+00.00 TO STA. 112+88.47 = TRANSITIONS FROM 11'-0" TO 10'-11"

[3] DUAL LEFT TURN LANE
STA. 110+00.00 TO STA. 112+00.00 = 12'-0"
STA. 112+00.00 TO STA. 112+88.47 = TRANSITIONS FROM 12'-0" TO 11'-0"

[4] LANE WIDTH - RIGHT
STA. 110+00.00 TO STA. 112+00.00 = 11'-0"
STA. 112+00.00 TO STA. 112+88.47 = TRANSITIONS FROM 11'-0" TO 10'-8"

[5] LANE WIDTH - RIGHT
STA. 110+00.00 TO STA. 112+00.00 = 15'-0"
STA. 112+00.00 TO STA. 112+88.47 = TRANSITIONS FROM 15'-0" TO 13'-5"

[6] SIDEWALK - RIGHT
STA. 110+00.00 TO STA. 112+00.00 = 11'-6"
STA. 112+00.00 TO STA. 112+50.00 = TRANSITIONS FROM 11'-6" TO 7'-0"
STA. 112+50.00 TO STA. 112+88.47 = 7'-0"

[7] BASELINE
STA. 110+00.00 TO STA. 112+00.00 = 6'-0"
STA. 112+00.00 TO STA. 112+88.47 = TRANSITIONS FROM 6'-0" TO 5'-8"

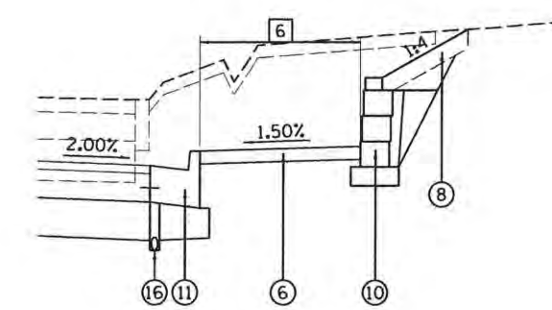
[8] SIDEWALK TYPE - LEFT/RIGHT
STA. 110+00.00 TO STA. 111+55.76 = (7)
STA. 111+55.76 TO STA. 112+88.47 = (6)

NOTES:

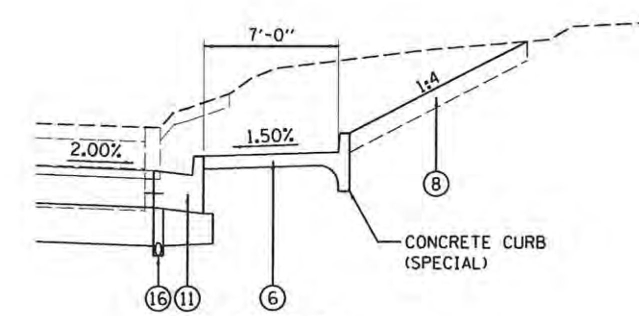
1. SEE JOINTING PLAN SHEETS FOR LOCATIONS OF JOINTS AND TIE BARS.
2. SEE RIGHT OF WAY PLANS FOR EXACT LOCATIONS AND DIMENSIONS.

LEGEND

(1) PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
(2) PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 6"
(3) PORTLAND CEMENT CONCRETE PAVEMENT, 8.25" (JOINTED)
(4) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.50 INCH POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70, 1.00 INCH
(5) PARKING LOT PAVEMENT
(6) PORTLAND CEMENT CONCRETE SIDEWALK, 4"
(7) STAMPED COLORED PCC SIDEWALK, 5"
(8) PROPOSED TOPSOIL FURNISH AND PLACE, 6"
(9) SOLDIER PILE RETAINING WALL (SEE WALL PLANS)
(10) SEGMENTAL CONCRETE BLOCK WALL (SEE WALL PLANS)
(11) PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
(12) PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(13) PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE M (MODIFIED) (M-2.24)
(14) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
(15) CONCRETE GUTTER, TYPE B
(16) PIPE UNDERDRAINS, 4"



DETAIL B-1
STA. 112+18.77 TO STA. 112+48.10



DETAIL B-2
STA. 112+48.10 TO STA. 112+88.47

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DRAWN	RLA	5/27/15	
REVIEWED	MPB	5/28/15	

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		DATE - 9/9/2015	REVISED -

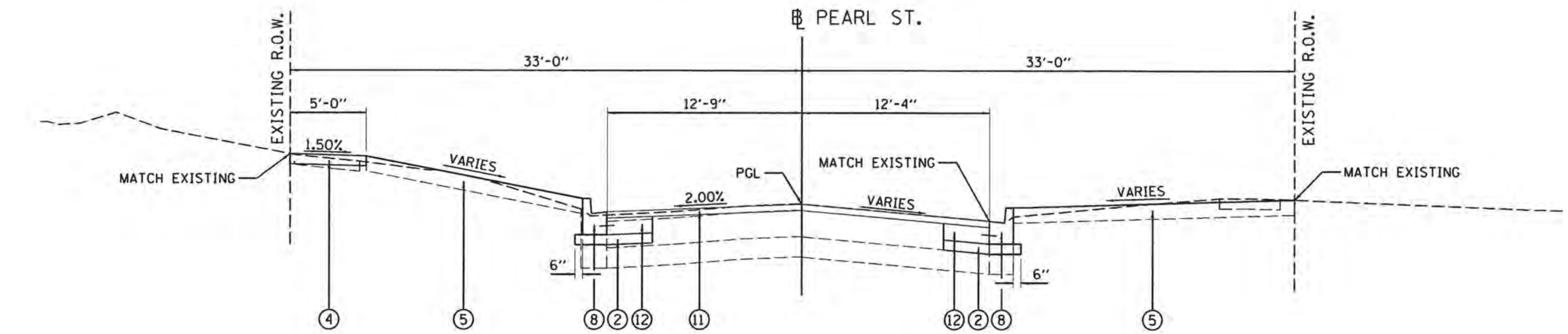
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PROPOSED TYPICAL SECTIONS

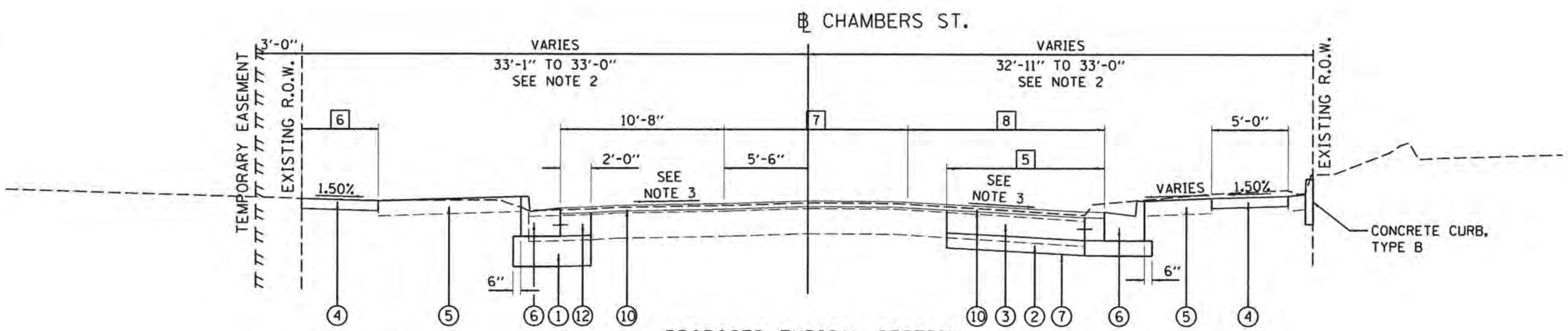
SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	10
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

INTERSECTION OMISSION
STA 201+80.39 TO STA 202+68.48

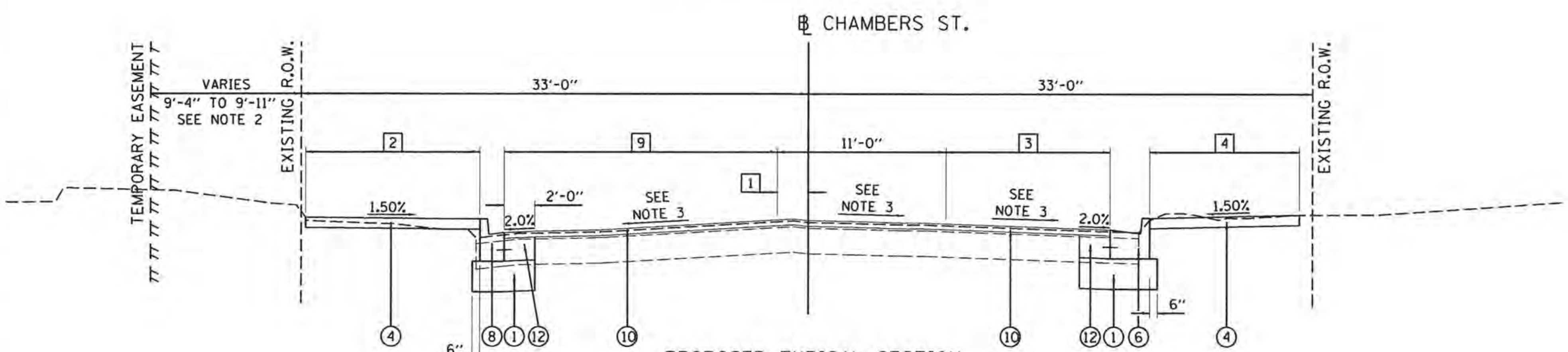


PROPOSED TYPICAL SECTION
STA. 200+95.30 TO STA. 201+80.39



PROPOSED TYPICAL SECTION
STA. 404+22.54 TO STA. 405+11.38

INTERSECTION OMISSION
STA 402+88.58 TO STA 404+22.54



PROPOSED TYPICAL SECTION
STA. 402+44.95 TO STA. 402+88.58

LEGEND

1. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
2. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 6"
3. PCC BASE COURSE, 7"
4. PORTLAND CEMENT CONCRETE SIDEWALK, 4"
5. PROPOSED TOPSOIL FURNISH AND PLACE, 6"
6. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
7. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
8. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
9. PORTLAND CEMENT CONCRETE PAVEMENT, 7" (JOINTED) HOT-MIX ASPHALT, 1 1/2"
10. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.25 INCH POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70, 1.00 INCH SURFACE COURSE REMOVAL, VARIABLE DEPTH
11. HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30, 2.25 INCH
12. PATCHING, CLASS C, 8"

[1] BASELINE
STA. 402+44.95 TO STA. 402+88.58 = TRANSITIONS FROM 1'-11" TO 2'-0"

[2] SIDEWALK - LEFT
STA. 402+44.95 TO STA. 402+73.03 = 5'-0"
STA. 402+73.03 TO STA. 402+83.03 = TRANSITION FROM 5'-0" TO 11'-4"
STA. 402+83.03 TO STA. 402+88.58 = 11'-4"

[3] LANE WIDTH - RIGHT
STA. 402+44.95 TO STA. 402+56.60 = 12'-0"
STA. 402+56.60 = TRANSITION FROM 12'-10" TO 10'-10"
STA. 402+56.60 TO STA. 402+88.58 = 10'-0"

[4] SIDEWALK - RIGHT
STA. 402+44.95 TO STA. 402+54.60 = 0'-0"
STA. 402+54.60 TO STA. 402+88.58 = TRANSITION FROM 9'-10" TO 9'-9"

[5] PAVEMENT WIDENEING - RIGHT
STA. 404+22.54 TO STA. 404+47.98 = TRANSITION FROM 10'-3" TO 4'-0"
STA. 404+47.98 TO STA. 404-50.37 = TRANSITION FROM 4'-0" TO 9'-2"
STA. 404-50.37 TO STA. 405+05.81 = TRANSITION FROM 9'-2" TO 4'-0"
STA. 405+05.81 TO STA. 405+11.39 = 4'-0"

[6] SIDEWALK WIDTH- LEFT - RIGHT
STA. 404+22.54 TO STA. 404+47.36 = TRANSITION FROM 5'-6" TO 5'-0"
STA. 404+47.36 TO STA. 405+11.39 = 5'-0"

[7] LANE WIDTH - CENTER
STA. 404+22.54 TO STA. 405+11.39 = TRANSITION FROM 11'-11" TO 12'-1"

[8] LANE WIDTH - RIGHT
STA. 404+22.54 TO STA. 405+05.81 = TRANSITION FROM 11'-1" TO 9'-2"
STA. 405+05.81 TO STA. 405+11.39 = 9'-2"

[9] CURBLINE OFFSET - LEFT
STA. 402+44.95 TO STA. 402+88.58 = TRANSITION FROM 19'-11" TO 17'-10"

NOTES:

1. SEE JOINTING PLAN SHEETS FOR LOCATIONS OF JOINTS AND TIE BARS.
2. SEE RIGHT OF WAY PLANS FOR EXACT LOCATIONS AND DIMENSIONS.
3. SEE INTERSECTION DETAIL SHEETS FOR CROSS SLOPES.

LAYOUT	RLA	2/11/14
DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

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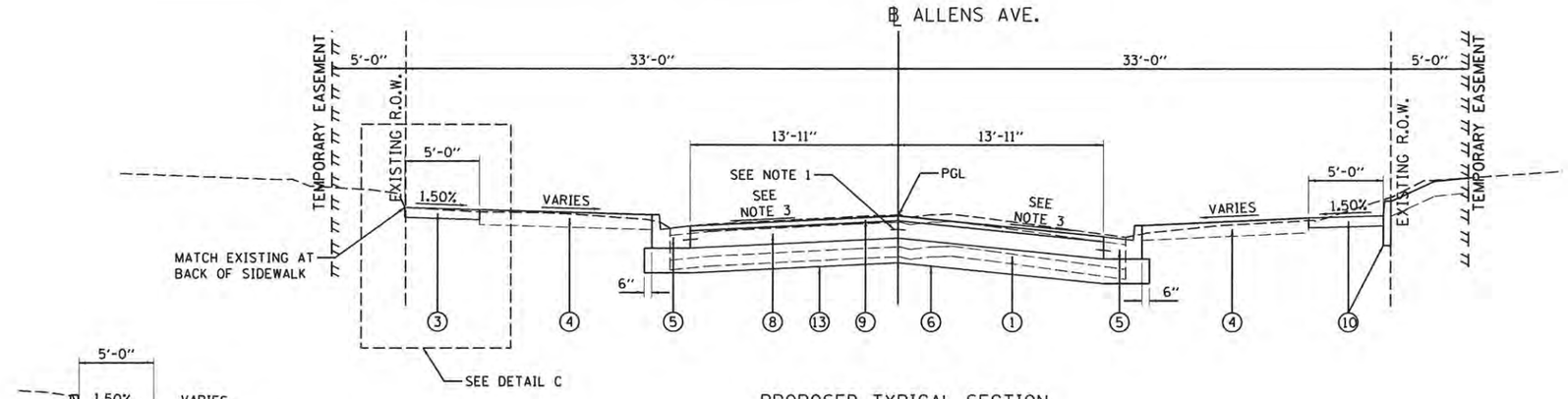
	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CHAMBERS STREET AND PEARL STREET
PROPOSED TYPICAL SECTIONS

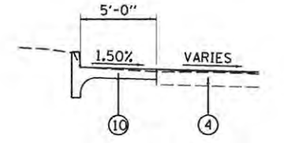
SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	11
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION

STA. 505+14.80 (RT) TO STA. 505+35.00
STA. 504+81.87 (LT) TO STA. 505+35.00



DETAIL C

STA. 504+81.87 TO STA. 505+25.00

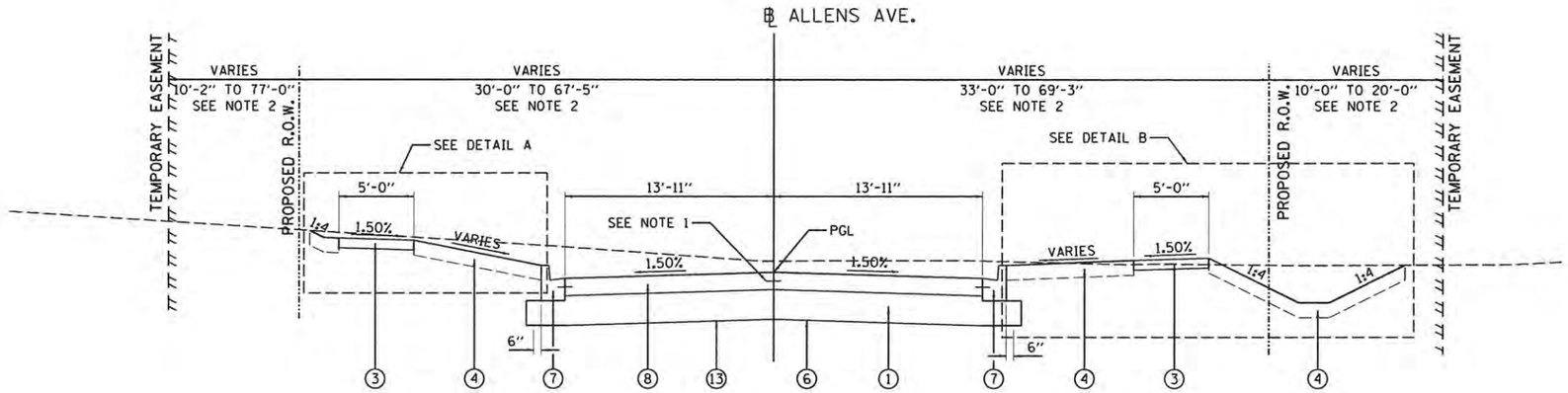
INTERSECTION OMISSION
STA 503+59.40 TO STA 504+81.87

LEGEND

1. PROPOSED AGGREGATE SUBGRADE IMPROVEMENT, 12"
2. PORTLAND CEMENT CONCRETE PAVEMENT, 9" (JOINTED)
3. PORTLAND CEMENT CONCRETE SIDEWALK, 4"
4. PROPOSED TOPSOIL FURNISH AND PLACE, 6"
5. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
6. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
7. PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
8. PORTLAND CEMENT CONCRETE PAVEMENT, 7" (JOINTED)
9. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1.50 INCH POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70, 1.00 INCH
10. COMBINATION CONCRETE CURB AND SIDEWALK, 4 INCH (SPECIAL)

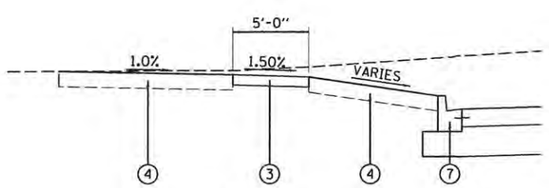
NOTES:

1. SEE JOINTING PLAN SHEETS FOR LOCATIONS OF JOINTS AND TIE BARS.
2. SEE RIGHT OF WAY PLANS FOR EXACT LOCATIONS AND DIMENSIONS.
3. SEE INTERSECTION DETAIL SHEETS FOR CROSS SLOPES ON ROADS AND SIDEWALKS.



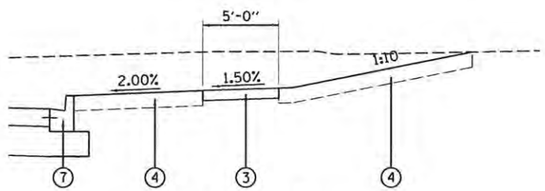
PROPOSED TYPICAL SECTION

STA. 500+42.57 TO STA. 503+59.40



DETAIL A

STA. 503+00.00 TO STA. 503+59.40



DETAIL B

STA. 502+34.34 TO STA. 503+59.40

LAYOUT	RLA	2/11/14
DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

p:\spi-svr-306\hanson.dom\hanson Projects\Documents\089\Jobs\089L0105\CAD-Phase1\Road\Sheets\D489L0105-sht-typical007

FILE NAME = c:\pwise.work\do_not_delete\d0273754\D489L0105-sht-typical007.dgn	USER NAME = ander00846	DESIGNED - RLA	REVISED -
		DRAWN - RLA	REVISED -
	PLOT SCALE = 5.0000 ' / in.	CHECKED - MPB	REVISED -
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALLENS AVENUE
PROPOSED TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	12
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

REMOVAL SCHEDULE

LOCATION		40600982 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	44000100 PAVEMENT REMOVAL	44000200 DRIVEWAY PAVEMENT REMOVAL	44000300 CURB REMOVAL	44000500 COMBINATON CURB AND GUTTER REMOVAL	44000600 SIDEWALK REMOVAL	X0327980 PAVEMENT MARKING REMOVAL - WATER BLASTING	X0326864 BRICK SIDEWALK REMOVAL	X4401198 HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	Z0022800 FENCE REMOVAL
BEGIN STATION	END STATION	SQ YD	SQ YD	SQ YD	FOOT	FOOT	SQ FT	SQ FT	SQ FT	SQ YD	FOOT
EAST MAIN STREET											
98+00.00	104+00.00	252	1,657	253	169	530	3,235	542		1,381	
104+00.00	110+00.00	0	4,989	1,009	74	1,315	5,576		461		99
110+00.00	114+20.00	159	3,678	677	131	1,377	3,926		996	395	
CHAMBERS STREET											
404+50.00	407+00.00	80	74	50	28	123	413	229		166	
TOTAL		491	10,398	1,989	402	3,345	13,150	771	1,457	1,942	99

TOPSOIL, SEEDING, SODDING & FERILIZER NUTRIENTS

LOCATION		21101625 TOPSOIL FURNISH AND PLACE, 6"	25000100 SEEDING, CLASS 1	25000400 NITROGEN FERTILIZER NUTRIENT	25000500 PHOSPHOROUS FERTILIZER NUTRIENT	25000600 POTASSIUM FERTILIZER NUTRIENT	25100115 MULCH, METHOD 2	25200100 SODDING	25200110 SODDING, SALT TOLERANT	25200200 SUPPLEMENTAL WATERING	28000250 TEMPORARY EROSION CONTROL SEEDING
BEGIN STATION	END STATION	SQ YD	ACRE	POUND	POUND	POUND	ACRE	SQ YD	SQ YD	UNIT	POUND
EAST MAIN STREET											
101+25.00	106+50.00	5,670	0.60	88	88	88	0.60	2,701	49	41.2	117
105+00.00	112+50.00	16,964	2.20	274	274	274	2.20	6,401	270	100.1	350
112+50.00	114+20.00	128		2	2	2			128	1.9	3
CHAMBERS STREET											
402+24.95	402+88.58	2							2		
404+22.54	405+31.38	64		1	1	1			64	1.0	1
PEARL STREET											
200+93.72	202+68.48	427		5	5	5			427	6.4	9
ALLENS AVENUE											
500+00.00	503+59.40	2,645	0.45	46	46	46	0.45		523	7.8	55
504+81.87	505+35.00	174		2	2	2			174	2.6	4
TOTAL		26,074	3.25	418	418	418	3.25	9,102	1,637	161	539

EARTHWORK SUMMARY

LOCATION		20200100 EARTH EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR 25% SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	20700220 POROUS GRANULAR EMBANKMENT	20201200 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
		CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
ALLEY TO MAIN							
102+00.00	102+64.00	45	34	136	-102	0	0
102+75.00	114+00.00	71321	53491	458	53033	0	0
CHAMBERS STREET							
402+44.95	403+00.00	22	17	6	11	0	0
404+22.54	405+11.39	118	89	0	89	0	0
ALLENS AVENUE							
500+42.57	503+59.40	1897	1423	10	1413	0	0
504+81.87	505+43.58	97	73	1	72	0	0
PEARL STREET							
201+00.00	202+68.48	192	144	48	96	0	0
OPEN LOT RESTORATION AREAS							
106+06.95 TO 108+05.16 LEFT (6" DEPTH)		229	172	0	172	0	0
104+05.53 TO 106+06.83 RIGHT (6" DEPTH)		429	322	0	322	0	0
107+24.43 TO 112+06.28 RIGHT (6" DEPTH)		1594	1196	0	1196	0	0
CONTINGENCY		**0**	**0**	**0**	**0**	**1000**	**1000**
TOTAL		**75944**	**56961**	**659**	**56302**	**1000**	**1000**

NOTE: STRUCTURAL EXCAVATION VOLUME HAS BEEN EXCLUDED FROM THE SPECIAL EXCAVATION QUANTITY. SEE BRIDGE PLANS FOR THIS QUANTITY.

PERIMETER EROSION BARRIER SCHEDULE

LOCATION			28000400 PERIMETER EROSION BARRIER
BEGIN STATION	END STATION	LT/RT	FOOT
EAST MAIN STREET			
103+85.81	106+50.00	RT	264
104+90.01	106+50.00	LT	162
106+50.00	107+65.46	LT	117
106+50.00	106+80.36	RT	37
107+98.25	111+60.75	RT	372
108+82.85	112+50.00	LT	369
112+50.00	112+69.40	LT	19
TOTAL			1,340

TREE REMOVAL SCHEDULE

LOCATION			20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)	20100210 TREE REMOVAL (OVER 15 UNITS DIAMETER)
STATION	OFFSET	LT/RT	UNITS	UNITS
EAST MAIN STREET				
105+93.44	57.19	LT		17
106+00.36	91.08	LT		17
106+00.65	76.96	LT		18
106+01.21	70.11	LT	6	
106+01.31	62.46	LT	6	
ALLENS AVENUE				
504+98.48	23.82	LT	14	
SUMNER CUL-DE-SAC			12	
TOTAL			38	52

LIGHTING AND FOUNDATION REMOVAL SCHEDULE

LOCATION			84200600 REMOVAL OF LIGHTING UNIT, NO SALVAGE	84400105 RELOCATE EXISTING LIGHTING UNIT	89502385 REMOVE EXISTING CONCRETE FOUNDATION	X5011100 FOUNDATION REMOVAL	XX007531 RELOCATE EXISTING LIGHT POLE ONTO NEW FOUNDATION
STATION	OFFSET	LT/RT	EACH	EACH	EACH	EACH	EACH
EAST MAIN STREET							
101+96.79	40.25	RT					1
101+98.01	35.00	LT					1
102+10.41	48.45	LT			1		
102+79.19	37.74	LT		1			
102+81.31	89.53	LT			1		
103+28.22	44.48	LT			1		
104+01.96	42.85	RT	1				
104+76.33	30.31	LT	1				
105+70.66	46.05	RT	1				
106+81.10	28.80	LT	1				
109+20.00	65.00	LT				1	
110+51.35	33.96	RT	1				
111+83.34	32.99	RT	1				
TOTAL			6	1	3	1	2

INLET AND MANHOLE REMOVAL AND ADJUSTMENT SCHEDULE

LOCATION			60255800 MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	60500040 REMOVING MANHOLES	60500060 REMOVING INLETS	X6026054 SANITARY MANHOLES TO BE REMOVED	X6026056 SANITARY MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID
STATION	OFFSET	LT/RT	EACH	EACH	EACH	EACH	EACH
EAST MAIN STREET							
102+84.28	40.48	RT			1		
105+26.78	18.08	LT		1			
106+53.06	33.41	RT				1	
107+34.06	25.28	LT		1			
107+53.64	113.33	LT			1		
107+65.44	115.72	LT		1			
107+71.35	180.05	LT					1
107+87.24	111.42	LT			1		
108+01.13	15.28	RT				1	
108+49.21	19.76	LT		1			
109+81.24	28.92	RT		1			
109+81.46	32.18	RT			1		
110+77.29	31.03	LT			1		
110+82.44	21.71	LT		1			
110+98.31	26.06	LT		1			
111+03.92	13.26	RT				1	
111+20.58	59.13	LT			1		
111+22.24	22.87	RT		1			
113+28.99	29.74	LT			1		
113+42.67	12.17	RT					1
113+56.42	21.66	RT		1			
113+86.81	12.20	RT					1
CHAMBERS STREET							
402+84.11	14.34	LT	1				
402+93.41	23.04	RT			1		
402+93.77	14.68	RT		1			
402+93.92	0.87	LT					1
402+99.40	25.45	LT			1		
403+22.60	38.42	RT					1
403+23.23	11.90	RT					1
403+65.78	7.58	RT					1
403+71.51	0.52	LT					1
403+79.28	39.27	RT					1
403+79.90	11.26	LT					1
403+87.49	34.60	RT			1		
403+88.37	11.02	LT		1			
ALLENS AVENUE							
501+38.70	20.40	RT				1	
502+19.29	33.39	LT					1
502+43.78	16.30	LT				1	
502+52.50	29.17	LT				1	
505+00.30	15.14	RT			1		
505+01.59	15.42	LT			1		
TOTAL			1	11	12	6	11

DRIVEWAY AND SIDEWALK SCHEDULE

LOCATION		30300011	40200500	42001300	42300200	42300400	42400100	42400300	42400410	42400800
		AGGREGATE SUBGRADE IMPROVEMENT	AGGREGATE SURFACE COURSE, TYPE A 6"	PROTECTIVE COAT	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	PORTLAND CEMENT CONCRETE SIDEWALK 8 INCH	DETECTABLE WARNINGS
BEGIN STATION	END STATION	TON	SQ YD	SQ YD	SQ YD	SQ YD	SQ FT	SQ FT	SQ FT	SQ FT
EAST MAIN STREET										
101+25.00	105+00.00	1		582		6	3,090		2,080	97
105+00.00	111+00.00			1,296			11,668			
111+00.00	114+20.00	59	392	827		257	3,422		1,659	70
CHAMBERS STREET										
402+24.95	402+88.58	4		85		18	334		262	
404+22.54	405+31.38	16		177		71	248		702	
PEARL STREET										
200+93.72	202+68.48	26		288	71	43	1,048	240	270	24
ALLENS AVENUE										
500+00.00	503+59.40	71		678		313	2,778		505	
504+81.87	505+35.00	7		77		30	564		108	
SUMNER CUL-DE-SAC		8		234	34		1,501	140		
TOTAL		192	392	4,244	105	738	24,653	380	5,586	191

SIGN SCHEDULE

LOCATION				72000100	72000200	72900100	72900200
				SIGN PANEL - TYPE 1	SIGN PANEL - TYPE 2	METAL POST - TYPE A	METAL POST - TYPE B
STATION	OFFSET	LT/RT	SIGN	SQ FT	SQ FT	FOOT	FOOT
EAST MAIN STREET							
107+65.59	115.75	LT	OM4-1	2.25		12.5	
107+72.83	115.69	LT	R11-2		10.0		27.0
107+79.97	115.69	LT	OM4-1	2.25		12.5	
PEARL STREET							
200+91.97	7.23	LT	OM4-1	2.25		12.5	
200+91.99	0.22	LT	R11-2		10.0		27.0
200+92.02	6.78	RT	OM4-1	2.25		12.5	
201+90.00	16.30	LT	W14-1	6.25			14.5
ALLENS AVENUE							
500+35.66	18.37	LT	R1-1	6.25			14.5
503+70.35	21.61	RT	R1-1	6.25			14.5
504+62.04	25.88	LT	R1-1	6.25			14.5
Int. of Sumner/Matthews			W14-1	6.25			14.5
TRAFFIC SIGNAL PLANS				6.00	60.0		
TOTAL				46.25	80.0	50.0	126.5

PAVEMENT AND CURB & GUTTER SCHEDULE

LOCATION		21001000	30300011	35300200	40600275	40600285	40600837	40603100	40603305	40603540
		GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	AGGREGATE SUBGRADE IMPROVEMENT	PORTLAND CEMENT CONCRETE BASE COURSE 7"	BITUMINOUS MATERIALS (PRIME COAT)	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N70	HOT-MIX ASPHALT BINDER COURSE, IL-19.0L, N30	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
BEGIN STATION	END STATION	SQ YD	TON	SQ YD	POUND	POUND	TON	TON	TON	TON
EAST MAIN STREET										
101+25.00	105+00.00	1,912	1,967	18	2,049	2,133	177	185	93	265
105+00.00	111+00.00	4,678	3,196			2,880	239			358
111+00.00	114+20.00	2,550	1,742			1,668	138			208
CHAMBERS STREET										
402+24.95	402+88.58		24			199	17			25
404+22.54	405+31.38		150	59	197	294	24	18	9	37
PEARL STREET										
200+93.72	202+68.48		42		209				58	
ALLENS AVENUE										
500+00.00	503+59.40	1,303	891							
504+81.87	505+35.00	204	140			134	11			17
SUMNER CUL-DE-SAC		644	440		1,441			130	73	
FROM DRWY AND SW SCHEDULE			192							
PUMP STATION GENERATOR			38		238				13	
TOTAL		11,291	8,822	77	4,134	7,308	606	333	246	910

LOCATION		42000201	42000306	42001300	60107600	60600605	60602800	60603800	60605000	60611811	X6060505
		PORTLAND CEMENT CONCRETE PAVEMENT 7" (JOINTED)	PORTLAND CEMENT CONCRETE PAVEMENT 8 1/4" (JOINTED)	PROTECTIVE COAT	PIPE UNDERDRAINS 4"	CONCRETE CURB, TYPE B	CONCRETE GUTTER, TYPE B	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	COMBINATION CONCRETE CURB AND GUTTER, TYPE M (MODIFIED)	CONCRETE CURB (SPECIAL)
BEGIN STATION	END STATION	SQ YD	SQ YD	SQ YD	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	
EAST MAIN STREET											
101+25.00	105+00.00		1,751	241	450	83	160	45	554		51
105+00.00	111+00.00		4,267	389	1,800				1,002	198	
111+00.00	114+20.00		2,344	224	450				621		156
CHAMBERS STREET											
402+24.95	402+88.58			20				44	32		
404+22.54	405+31.38			66		58			179		
PEARL STREET											
200+93.72	202+68.48			79				355			
ALLENS AVENUE											
500+00.00	503+59.40	1,135		1,312				795			
504+81.87	505+35.00	168		217		27			138		
SUMNER CUL-DE-SAC				62				280			
FROM DRWY AND SW SCHEDULE				4,244							
PUMP STATION GENERATOR											
TOTAL		1,303	8,362	6,854	2,700	168	160	1,519	2,526	198	207

PAVEMENT MARKING SCHEDULE

LOCATION		78009000	78009004	78009006	78009008	78009012	78009024
		MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"
BEGIN STATION	END STATION	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT
EAST MAIN STREET							
98+00.00	104+00.00	172	1,357	221	1,412	45	135
104+00.00	110+00.00	16	2,247	300	102	332	
110+00.00	114+20.00	94	1,891	282	265		56
CHAMBERS STREET							
404+50.00	407+00.00	47	731		110	30	
TOTAL		329	6,226	803	1,889	407	191

PAVEMENT PATCHING SCHEDULE

LOCATION		44201329	44201333	44201335	44201747
		CLASS C PATCHES, TYPE II, 8 INCH	CLASS C PATCHES, TYPE III, 8 INCH	CLASS C PATCHES, TYPE IV, 8 INCH	CLASS D PATCHES, TYPE IV, 8 INCH
BEGIN STATION	END STATION	SQ YD	SQ YD	SQ YD	SQ YD
EAST MAIN STREET					
101+25.00	105+00.00	14	16	139.5	
105+00.00	111+00.00				
111+00.00	114+20.00				
114+20.00	119+00.00				188
CHAMBERS STREET					
402+24.95	402+88.58				
404+22.54	405+31.38	12			
PEARL STREET					
200+93.72	202+68.48	23	19	38.5	
ALLENS AVENUE					
500+00.00	503+59.40				
504+81.87	505+35.00				
SUMNER CUL-DE-SAC					
TOTAL		49	35	178	188

SANITARY SEWER SCHEDULE

LOCATION			X6022810	XX008892
			MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	MANHOLE, ADDITIONAL DEPTH, 4' DIA.
STATION	OFFSET	LT/RT	EACH	FOOT
EAST MAIN STREET				
112+00.00	12.74	RT	1	
PEARL STREET				
201+58.00	25.91	LT	1	
202+00.00	25.91	LT	1	1.35
ALLENS AVENUE				
502+20.00	21.00	LT	1	
502+52.50	29.17	LT	1	3.10
504+30.84	26.54	LT	1	2.40
504+31.00	4.13	LT	1	2.40
SUMNER STREET				
TOTAL			7	9.25

SANITARY SEWER SERVICE SCHEDULE

ADDRESS	X0323760	X0324878
	SANITARY SEWER SERVICE, 6" PVC, COMPLETE	ADJUSTING SANITARY SEWER SERVICE LINE
	EACH	EACH
571 E. MAIN ST.	1	
723 E. MAIN ST.		1
759 E. MAIN ST.		1
34 N. PEARL ST.		1
46 N. PEARL ST.		1
58 N. PEARL ST.		1
91 N. PEARL ST.		1
TOTAL	1	6

INLET FILTER SCHEDULE

LOCATION			28000510
			INLET FILTERS
STATION	OFFSET	LT/RT	EACH
EAST MAIN STREET			
103+27.50	49.76	LT	1
103+84.23	50.81	RT	1
104+99.93	48.56	LT	1
104+99.93	34.06	LT	1
105+00.00	33.11	RT	1
106+24.96	33.58	LT	1
106+25.00	34.58	RT	1
107+00.00	33.58	LT	1
107+00.00	34.58	RT	1
107+50.00	34.58	LT	1
107+50.00	34.58	RT	1
107+65.30	129.22	LT	1
108+00.00	34.58	LT	1
108+00.00	34.58	RT	1
108+50.00	34.58	LT	1
108+50.00	34.58	RT	1
109+00.00	33.58	LT	1
109+00.00	34.58	RT	1
109+74.96	33.58	LT	1
109+75.00	34.58	RT	1
110+99.96	33.58	LT	1
111+00.00	34.58	RT	1
111+61.76	50.00	RT	1
112+58.72	59.80	LT	1
PEARL STREET			
200+97.68	12.89	RT	1
200+97.71	13.44	LT	1
CHAMBERS STREET			
402+91.50	21.39	RT	1
403+11.73	34.47	LT	1
404+48.22	23.55	RT	1
404+58.37	17.73	LT	1
404+58.37	23.39	LT	1
ALLENS AVENUE			
500+50.00	14.50	RT	1
500+88.00	14.50	LT	1
500+88.00	15.50	RT	1
501+70.00	14.50	LT	1
501+85.00	15.50	RT	1
502+00.00	35.00	RT	1
502+60.00	14.50	LT	1
502+60.00	15.50	RT	1
503+12.50	14.50	LT	1
503+12.50	15.50	RT	1
503+65.84	16.96	RT	1
503+70.18	18.13	LT	1
504+81.77	16.50	LT	1
504+95.18	16.65	RT	1
TOTAL			45

WATER MAIN STRUCTURE SCHEDULE

LOCATION			56104900	56105200	56108800	Z0015200	56400600
			WATER VALVES 6"	WATER VALVES 12"	TAPPING VALVES AND SLEEVES 6"	CURB STOP 1 1/2"	FIRE HYDRANTS
STATION	OFFSET	LT/RT	EACH	EACH	EACH	EACH	EACH
EAST MAIN STREET							
107+75.58	129.54	LT	1				1
111+36.95	52.82	RT	1				1
113+51.15	41.83	RT			1		
PEARL STREET							
200+99.07	15.26	LT	1				1
CHAMBERS STREET							
404+68.93	12.75	RT			1		
404+69.03	24.18	RT					1
ALLENS AVENUE							
503+55.05	32.68	RT	1				1
499+78.00	33.80	LT				1	
501+66.00	38.60	LT				1	
WATER MAIN ALIGNMENT							
0+15.82				1			
5+69.89				1			
5+69.89			1				
8+67.90				1			
8+67.90			1				
11+10.59				1			
TOTAL			6	4	2	2	5

MISCELLANEOUS CONCRETE SCHEDULE

LOCATION		XX000300	XX002090	XX006898	XX008257
		CONCRETE STEPS	STAIR SIDE RAILING	STAMPED COLORED PORTLAND CEMENT CONCRETE	STAMPED COLORED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
BEGIN STATION	END STATION	SQ FT	FOOT	SQ FT	SQ FT
EAST MAIN STREET					
101+25.00	105+00.00	9			1,256
105+00.00	111+00.00			553	3,421
111+00.00	114+20.00	92	30		390
TOTAL		101	30	553	5,067

IMPACT ATTENUATOR SCHEDULE

LOCATION			64300240
			IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2
STATION	OFFSET	LT/RT	EACH
EAST MAIN STREET			
107+00.00	38.00	RT	1
108+65.00	38.00	LT	1
TOTAL			2

TEMPORARY DITCH CHECKS

LOCATION			28000305
			TEMPORARY DITCH CHECKS
STATION	OFFSET	LT/RT	FOOT
EAST MAIN STREET			
111+21.41	142.01	RT	10
111+34.16	129.31	RT	10
111+46.92	116.61	RT	10
111+57.75	102.39	RT	10
111+61.68	84.97	RT	10
111+61.71	72.47	RT	10
111+61.73	59.97	RT	10
ALLENS AVENUE			
501+19.73	34.31	RT	10
501+76.89	32.41	RT	10
TOTAL			90

WATER MAIN AND SANITARY SEWER SCHEDULE

LOCATION			56100600	56100900	56200500	Z0056900	Z0057100	Z0067900	X0327241
			WATER MAIN 6"	WATER MAIN 12"	WATER SERVICE LINE 1 1/2"	SANITARY SEWER 8"	SANITARY SEWER 12"	STEEL CASINGS 24"	STEEL CASING PIPE IN TRENCH, 24 IN.
BEGIN STATION	END STATION	LT/RT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT
EAST MAIN STREET									
0+00.00	6+00.00	LT	24	602				21	30
6+00.00	12+00.00	LT	276	508				107	
111+60.00	112+00.00	RT				67			
PEARL STREET									
201+58.00	202+00.00	LT				42			
202+00.00	502+20.00	LT				252.5			
ALLENS AVENUE									
502+20.00	502+52.50	LT				41.5			
504+30.84	502+52.50	LT					22.5		
504+31.00	504+30.84	LT					188.5		
499+78.00	501+66.00	LT			200				
TOTAL			300	1,110	200	403	211	128	30

HANSON
Hanson Professional Services Inc.

	RLA	MGD	MPB
LAYOUT	2/11/14		
DRAWN	5/27/15		
REVIEWED	11/6/15		

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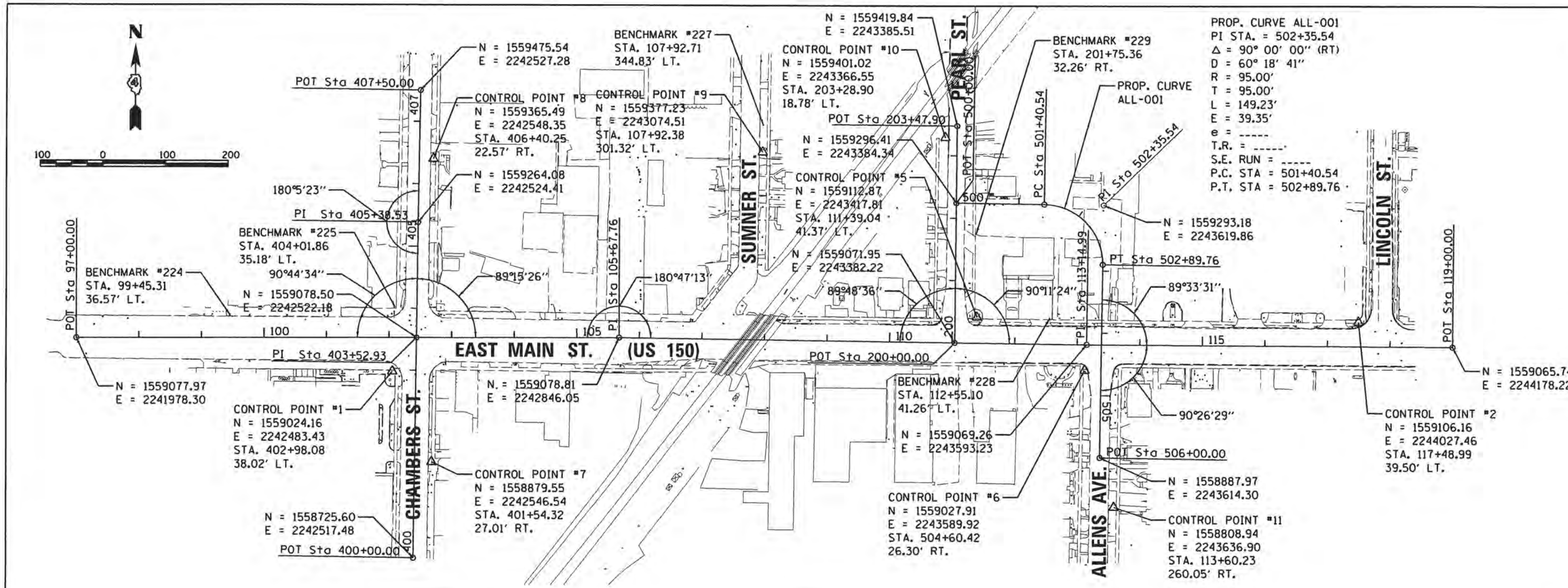
		DRAWN - MGD	REVISED -
	PLOT SCALE = 10.0000 ' / in.	CHECKED - MPB	REVISED -
	PLOT DATE = 5/9/2016	DATE - 11/13/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
SCHEDULE OF QUANTITIES

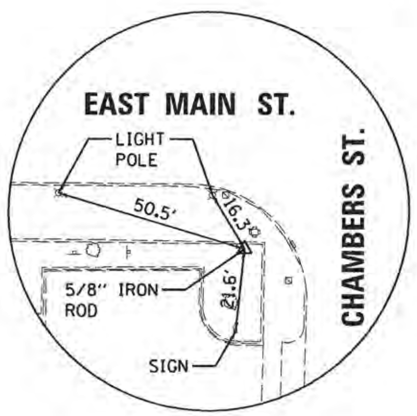
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	15
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

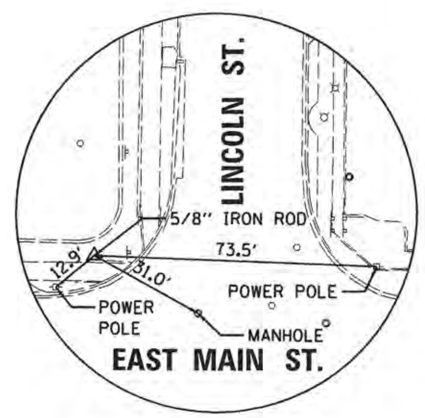


BENCHMARKS

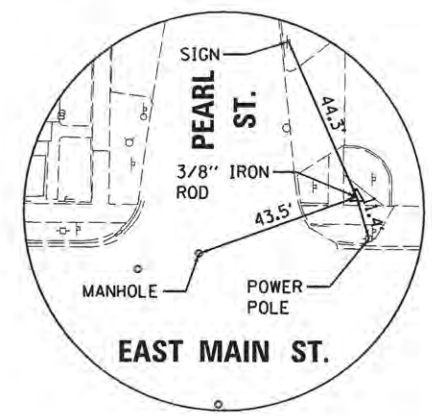
- #224 CHISLLED "+" ON N. CAP BOLT OF FIRE HYDRANT AT THE E. SIDE OF ENTRANCE N. SIDE OF MAIN ST. ELEV. = 776.69
- #225 CHISLLED "□" ON N.E. CORNER OF ABANDONED CONC. SIGN FOUNDATION AT N.E. CORNER OF MAIN ST. AND CHAMBERS ST. ELEV. = 776.22
- #227 CHISLLED "+" ON N. CAP BOLT OF FIRE HYDRANT AT THE E. SIDE OF SUMNER ST. ELEV. = 782.52
- #228 CHISLLED "□" ON N.E. CORNER OF ABANDONED CONC. SIGN FOUNDATION AT N. OF MAIN ST. ELEV. = 775.93
- #229 CHISLLED "□" ON N.E. CORNER OF CONC. BASE OF LIGHT POLE E. SIDE OF PEARL ST. ELEV. = 779.04



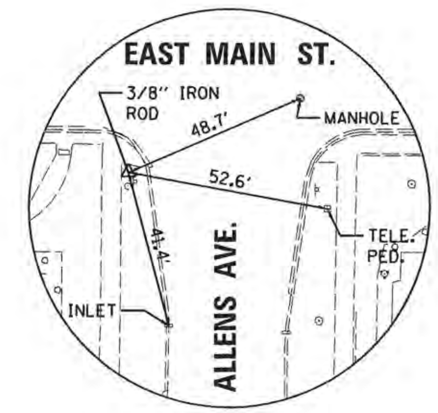
CONTROL POINT #1
STA. 402+98.08, 38.02' LT.
5/8" IRON ROD



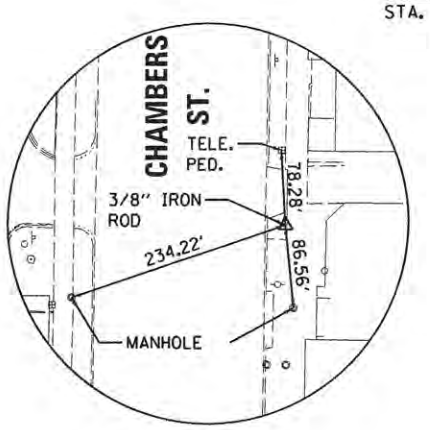
CONTROL POINT #2
STA. 117+48.99, 39.50' LT.
5/8" IRON ROD



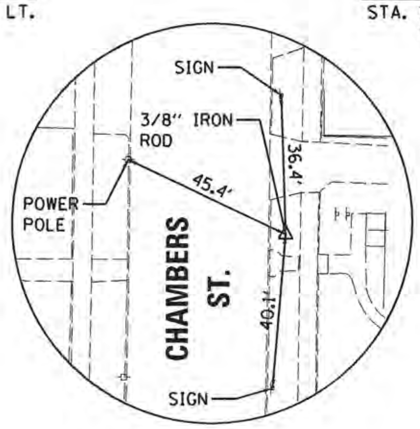
CONTROL POINT #5
STA. 111+39.04, 41.37' LT.
3/8" IRON ROD



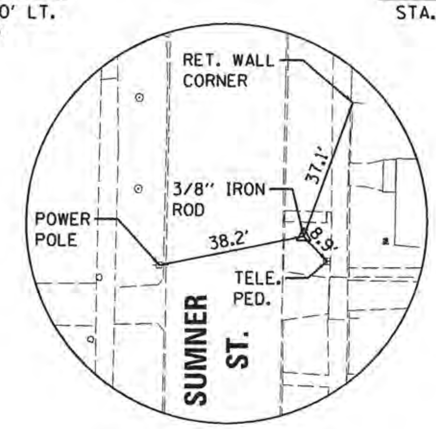
CONTROL POINT #6
STA. 504+60.42, 26.30' RT.
3/8" IRON ROD



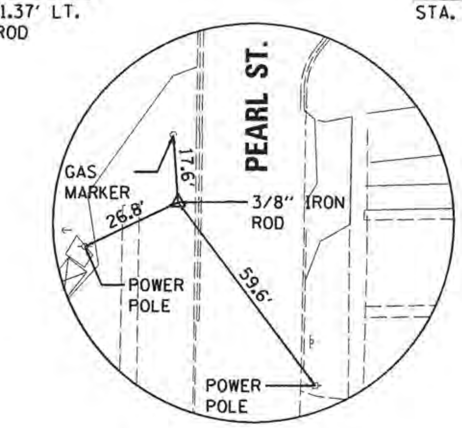
CONTROL POINT #7
STA. 401+54.32, 27.01' RT.
3/8" IRON ROD



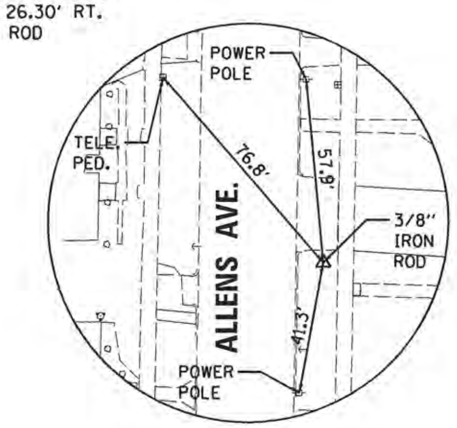
CONTROL POINT #8
STA. 406+40.25, 22.57' RT.
3/8" IRON ROD



CONTROL POINT #9
STA. 107+92.38, 301.32' LT.
3/8" IRON ROD



CONTROL POINT #10
STA. 203+28.90, 18.78' LT.
3/8" IRON ROD



CONTROL POINT #11
STA. 113+60.23, 260.05' RT.
3/8" IRON ROD

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LAYOUT	RLA	2/11/14
DRAWN	RLA	5/27/15
REVIEWED	MPB	5/28/15

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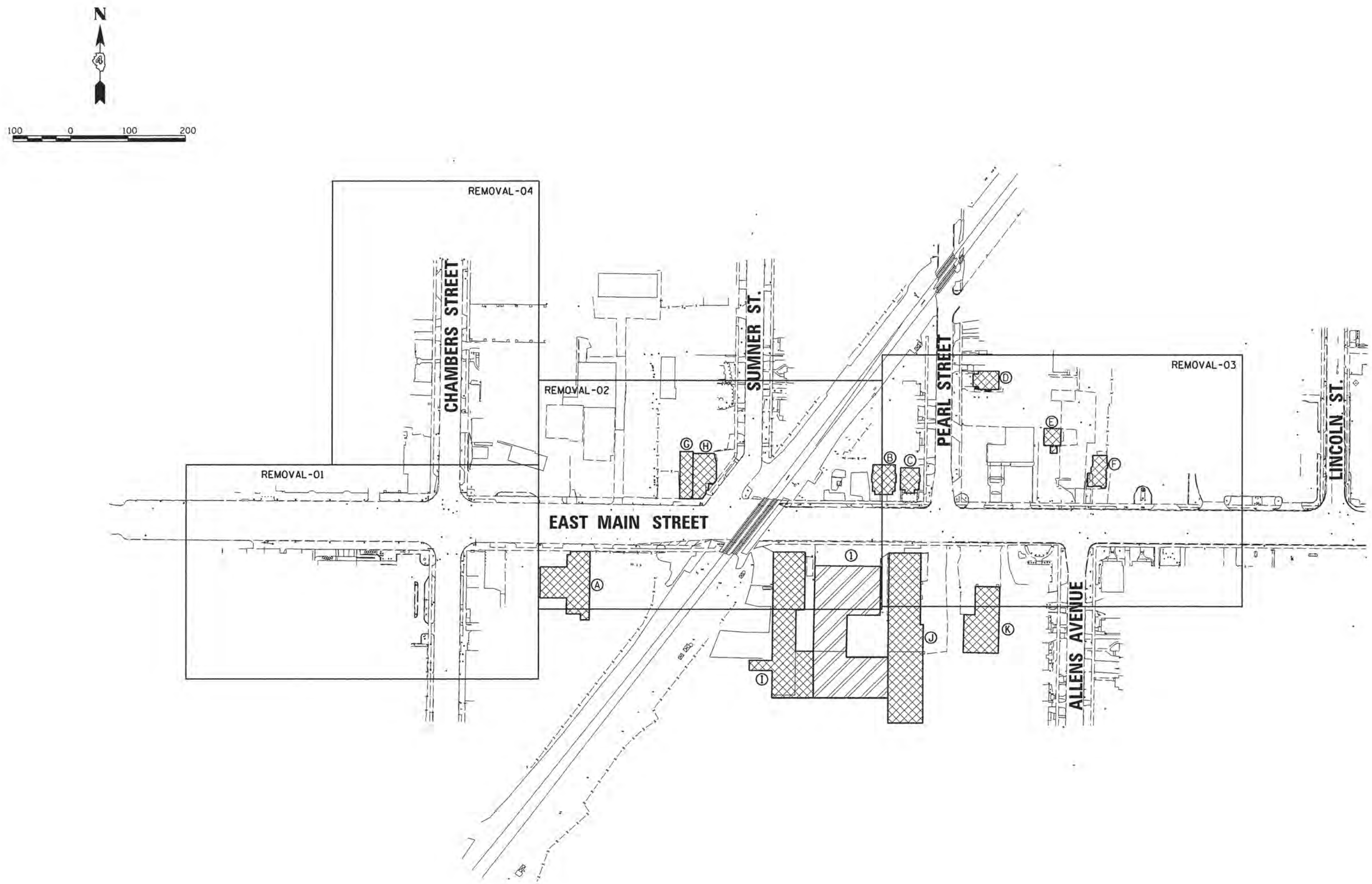
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ALIGNMENT, BENCHMARKS, AND TIES

SCALE: 1"=100' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	16
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

BUILDINGS PREVIOUSLY REMOVED BY OTHERS

Ⓐ 536 E. MAIN STREET
Ⓑ 663 E. MAIN STREET
Ⓒ 675 E. MAIN STREET
Ⓓ 61 N. PEARL STREET
Ⓔ 759 E. MAIN STREET
Ⓕ 789 E. MAIN STREET
Ⓖ 583 E. MAIN STREET
Ⓗ 587 E. MAIN STREET
Ⓘ 600 E. MAIN STREET
Ⓙ 674 E. MAIN STREET
Ⓚ 712 E. MAIN STREET

BUILDINGS TO BE REMOVED WITH THIS CONTRACT		
PARCEL#	ADDRESS	PAY ITEM
1	642 E. MAIN ST.	BUILDING REMOVAL #1 •

• PAY ITEMS ASSOCIATED WITH THE BUILDING REMOVAL INCLUDE "BUILDING REMOVAL NO. 1", "REMOVAL AND DISPOSAL FRIABLE ASBESTOS, BUILDING NO. 1" AND "REMOVAL AND DISPOSAL NON-FRIABLE ASBESTOS, BUILDING NO. 1". SEE SPECIAL PROVISIONS.

NOTES:
1. ALL RAILROAD EQUIPMENT REMOVAL WILL BE BY OTHERS

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

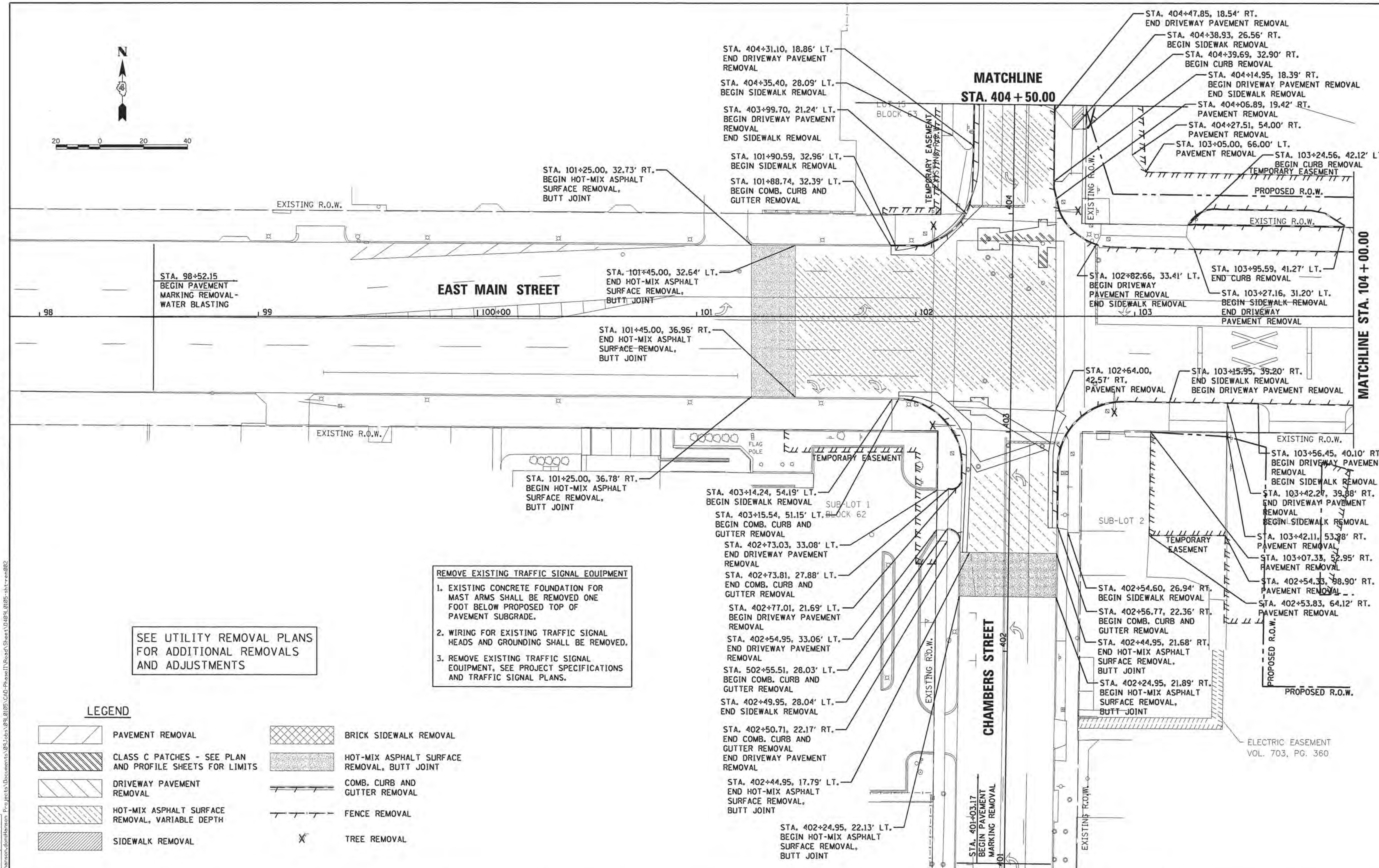
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
REMOVAL PLAN OVERVIEW

SCALE: 1"=100' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	17
50VB		CONTRACT NO.89417		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT


N
20 0 20 40
MATCHLINE
STA. 404 + 50.00
MATCHLINE STA. 104 + 00.00
EAST MAIN STREET
CHAMBERS STREET
EXISTING R.O.W.
PROPOSED R.O.W.
TEMPORARY EASEMENT
LOT 15
BLOCK 63
SUB-LOT 1
BLOCK 62
SUB-LOT 2
FLAG POLE
ELECTRIC EASEMENT
VOL. 703, PG. 360
STA. 98+52.15
BEGIN PAVEMENT
MARKING REMOVAL-
WATER BLASTING
STA. 101+25.00, 32.73' RT.
BEGIN HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 101+45.00, 32.64' LT.
END HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 101+45.00, 36.96' RT.
END HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 101+25.00, 36.78' RT.
BEGIN HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 404+31.10, 18.86' LT.
END DRIVEWAY PAVEMENT
REMOVAL
STA. 404+35.40, 28.09' LT.
BEGIN SIDEWALK REMOVAL
STA. 403+99.70, 21.24' LT.
BEGIN DRIVEWAY PAVEMENT
REMOVAL
END SIDEWALK REMOVAL
STA. 101+90.59, 32.96' LT.
BEGIN SIDEWALK REMOVAL
STA. 101+88.74, 32.39' LT.
BEGIN COMB. CURB AND
GUTTER REMOVAL
STA. 404+47.85, 18.54' RT.
END DRIVEWAY PAVEMENT REMOVAL
STA. 404+38.93, 26.56' RT.
BEGIN SIDEWAK REMOVAL
STA. 404+39.69, 32.90' RT.
BEGIN CURB REMOVAL
STA. 404+14.95, 18.39' RT.
BEGIN DRIVEWAY PAVEMENT REMOVAL
END SIDEWALK REMOVAL
STA. 404+06.89, 19.42' RT.
PAVEMENT REMOVAL
STA. 404+27.51, 54.00' RT.
PAVEMENT REMOVAL
STA. 103+05.00, 66.00' LT.
PAVEMENT REMOVAL
STA. 103+24.56, 42.12' LT.
BEGIN CURB REMOVAL
STA. 102+82.66, 33.41' LT.
BEGIN DRIVEWAY
PAVEMENT REMOVAL
END SIDEWALK REMOVAL
STA. 103+95.59, 41.27' LT.
END CURB REMOVAL
STA. 103+27.16, 31.20' LT.
BEGIN SIDEWALK REMOVAL
END DRIVEWAY
PAVEMENT REMOVAL
STA. 102+64.00,
42.57' RT.
PAVEMENT REMOVAL
STA. 103+15.95, 39.20' RT.
END SIDEWALK REMOVAL
BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 103+56.45, 40.10' RT.
BEGIN DRIVEWAY PAVEMENT
REMOVAL
BEGIN SIDEWALK REMOVAL
STA. 103+42.27, 39.88' RT.
END DRIVEWAY PAVEMENT
REMOVAL
BEGIN SIDEWALK REMOVAL
STA. 103+42.11, 53.38' RT.
PAVEMENT REMOVAL
STA. 103+07.33, 52.95' RT.
PAVEMENT REMOVAL
STA. 402+54.33, 98.90' RT.
PAVEMENT REMOVAL
STA. 402+53.83, 64.12' RT.
PAVEMENT REMOVAL
STA. 402+54.60, 26.94' RT.
BEGIN SIDEWALK REMOVAL
STA. 402+56.77, 22.36' RT.
BEGIN COMB. CURB AND
GUTTER REMOVAL
STA. 402+44.95, 21.68' RT.
END HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 402+24.95, 21.89' RT.
BEGIN HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 403+14.24, 54.19' LT.
BEGIN SIDEWALK REMOVAL
STA. 403+15.54, 51.15' LT.
BEGIN COMB. CURB AND
GUTTER REMOVAL
STA. 402+73.03, 33.08' LT.
END DRIVEWAY PAVEMENT
REMOVAL
STA. 402+73.81, 27.88' LT.
END COMB. CURB AND
GUTTER REMOVAL
STA. 402+77.01, 21.69' LT.
BEGIN DRIVEWAY PAVEMENT
REMOVAL
STA. 402+54.95, 33.06' LT.
END DRIVEWAY PAVEMENT
REMOVAL
STA. 502+55.51, 28.03' LT.
BEGIN COMB. CURB AND
GUTTER REMOVAL
STA. 402+49.95, 28.04' LT.
END SIDEWALK REMOVAL
STA. 402+50.71, 22.17' RT.
END COMB. CURB AND
GUTTER REMOVAL
END DRIVEWAY PAVEMENT
REMOVAL
STA. 402+44.95, 17.79' LT.
END HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 402+24.95, 22.13' LT.
BEGIN HOT-MIX ASPHALT
SURFACE REMOVAL,
BUTT JOINT
STA. 401+03.17
BEGIN PAVEMENT
MARKING REMOVAL
SEE UTILITY REMOVAL PLANS
FOR ADDITIONAL REMOVALS
AND ADJUSTMENTS
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1. EXISTING CONCRETE FOUNDATION FOR MAST ARMS SHALL BE REMOVED ONE FOOT BELOW PROPOSED TOP OF PAVEMENT SUBGRADE.
2. WIRING FOR EXISTING TRAFFIC SIGNAL HEADS AND GROUNDING SHALL BE REMOVED.
3. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, SEE PROJECT SPECIFICATIONS AND TRAFFIC SIGNAL PLANS.
LEGEND
PAVEMENT REMOVAL
CLASS C PATCHES - SEE PLAN AND PROFILE SHEETS FOR LIMITS
DRIVEWAY PAVEMENT REMOVAL
HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
SIDEWALK REMOVAL
BRICK SIDEWALK REMOVAL
HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
COMB. CURB AND GUTTER REMOVAL
FENCE REMOVAL
TREE REMOVAL

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	11/6/15

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	PLOT DATE = 5/9/2016	DATE - 11/13/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ROADWAY REMOVAL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 98+52.15 TO STA. 104+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	18
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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LEGEND

- PAVEMENT REMOVAL
- CLASS C PATCHES - SEE PLAN AND PROFILE SHEETS FOR LIMITS
- DRIVEWAY PAVEMENT REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
- SIDEWALK REMOVAL
- BRICK SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
- COMB. CURB AND GUTTER REMOVAL
- FENCE REMOVAL
- TREE REMOVAL

N

20 0 20 40

MATCHLINE STA. 104 + 00.00

MATCHLINE STA. 110 + 00.00

STA. 104+00.95, 29.52' LT.
END SIDEWALK REMOVAL
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 104+51.59, 54.00' LT.
END PAVEMENT REMOVAL

STA. 104+02.04, 40.94' RT.
BEGIN DRIVEWAY PAVEMENT REMOVAL
END SIDEWALK REMOVAL

STA. 104+01.71, 40.93' RT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 104+47.36, 41.76' RT.
END DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 104+92.13, 42.56' RT.
BEGIN DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 104+44.29, 28.92' LT.
END DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 104+64.54, 48.29' LT.
BEGIN CURB REMOVAL

STA. 104+66.45, 28.41' LT.
END DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 104+74.92, 40.25' LT.
END CURB REMOVAL

STA. 104+49.11, 28.80' LT.
END SIDEWALK REMOVAL
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 105+48.23, 105.03' LT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 105+32.60, 102.58' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 106+05.80, 114.80' LT.
END FENCE REMOVAL

STA. 105+26.84, 28.26' LT.
END SIDEWALK REMOVAL
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 105+82.65, 39.39' LT.
BEGIN FENCE REMOVAL

STA. 106+46.99, 27.22' LT.
END DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 105+32.31, 43.30' RT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 105+46.09, 27.66' LT.
END DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 105+28.99, 49.67' RT.
BEGIN SIDEWALK REMOVAL

STA. 105+73.58, 43.91' RT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 105+76.98, 49.88' RT.
END SIDEWALK REMOVAL

STA. 105+29.04, 54.67' RT.
BEGIN CURB REMOVAL

STA. 105+76.90, 54.67' RT.
END CURB REMOVAL

STA. 106+06.70, 49.60' RT.
BEGIN SIDEWALK REMOVAL

STA. 106+09.62, 43.91' RT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 106+33.10, 27.28' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL
END SIDEWALK REMOVAL

STA. 106+82.48, 43.76' RT.
END COMB. CURB AND GUTTER REMOVAL

STA. 106+66.55, 47.60' RT.
BEGIN SIDEWALK REMOVAL

STA. 106+69.68, 43.38' RT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 106+18.13, 43.15' RT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 106+21.37, 49.30' RT.
END SIDEWALK REMOVAL

STA. 106+21.38, 54.38' RT.
END CURB REMOVAL

STA. 106+11.39, 56.38' RT.
BEGIN CURB REMOVAL

STA. 107+57.06, 230.64' LT.
END PAVEMENT REMOVAL
END COMB. CURB AND GUTTER REMOVAL

STA. 107+43.43, 230.60' LT.
END BRICK SIDEWALK REMOVAL

STA. 107+56.60, 172.29' LT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 107+56.58, 149.63' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 107+56.52, 136.34' LT.
END SIDEWALK REMOVAL

STA. 107+56.54, 131.94' LT.
BEGIN SIDEWALK REMOVAL

CONCRETE BLOCK REMOVAL
(SEE SPECIAL EXCAVATION SPECIAL PROVISIONS)

STA. 107+47.30, 105.55' LT.
END SIDEWALK REMOVAL

STA. 107+44.40, 101.83' LT.
END DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 107+26.72, 77.91' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 107+35.57, 32.53' RT.
END PAVEMENT REMOVAL

STA. 107+21.75, 44.08' RT.
END SIDEWALK REMOVAL

STA. 107+99.37, 244.09' LT.
END SIDEWALK REMOVAL

STA. 107+87.21, 240.17' LT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 107+87.13, 232.38' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 107+87.12, 230.72' LT.
END PAVEMENT REMOVAL
END COMB. CURB AND GUTTER REMOVAL
END DRIVEWAY PAVEMENT REMOVAL

STA. 107+87.22, 219.82' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 107+55.61, 206.57' LT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 107+56.76, 197.26' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 107+87.95, 136.97' LT.
END SIDEWALK REMOVAL

TEMPORARY EASEMENT

STA. 107+87.96, 131.39' LT.
BEGIN SIDEWALK REMOVAL

STA. 107+99.59, 112.30' LT.
BEGIN SIDEWALK REMOVAL

PERMANENT EASEMENT

STA. 107+89.05, 105.75' LT.
BEGIN COMB. CURB AND GUTTER REMOVAL

STA. 107+85.08, 33.49' LT.
BEGIN PAVEMENT REMOVAL
BEGIN COMB. CURB AND GUTTER REMOVAL
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 108+32.22, 34.51' LT.
BEGIN SIDEWALK REMOVAL

STA. 107+88.60, 37.93' LT.
END PAVEMENT REMOVAL

STA. 108+29.41, 26.36' LT.
BEGIN PAVEMENT REMOVAL
BEGIN COMB. CURB AND GUTTER REMOVAL

RAILROAD CROSSING SIGNAL EQUIPMENT REMOVED BY OTHERS

STA. 108+96.53, 56.74' LT.
DRIVEWAY PAVEMENT REMOVAL

STA. 108+96.55, 38.80' LT.
DRIVEWAY PAVEMENT REMOVAL

STA. 108+80.11, 38.46' LT.
DRIVEWAY PAVEMENT REMOVAL

STA. 108+80.17, 27.89' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 109+05.60, 52.06' LT.
DRIVEWAY PAVEMENT REMOVAL

STA. 109+05.51, 57.10' LT.
DRIVEWAY PAVEMENT REMOVAL

STA. 109+63.95, 28.49' LT.
BEGIN DRIVEWAY PAVEMENT REMOVAL

STA. 109+78.83, 33.67' LT.
BEGIN SIDEWALK REMOVAL

STA. 109+82.31, 28.70' LT.
END DRIVEWAY PAVEMENT REMOVAL

FOUNDATION REMOVAL
(SEE SPECIAL PROVISIONS)

STA. 109+32.33, 52.29' LT.
DRIVEWAY PAVEMENT REMOVAL

STA. 109+34.05, 33.50' LT.
DRIVEWAY PAVEMENT REMOVAL
BEGIN SIDEWALK REMOVAL

STA. 109+38.76, 28.20' LT.
END DRIVEWAY PAVEMENT REMOVAL

STA. 109+66.74, 33.61' LT.
END SIDEWALK REMOVAL

PROPOSED R.O.W.
EXISTING R.O.W.
TEMPORARY EASEMENT
PERMANENT EASEMENT
ELECTRIC EASEMENT VOL. 597, PG. 62
SUMNER ST.
EAST MAIN STREET
BLOCK 1
SUB-LOT 18
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 20
LOT 26

SEE UTILITY REMOVAL PLANS FOR ADDITIONAL REMOVALS AND ADJUSTMENTS

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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PLOT DATE = 11/13/2015

DESIGNED - RLA
DRAWN - MGD
CHECKED - MPB
DATE - 9/9/2015

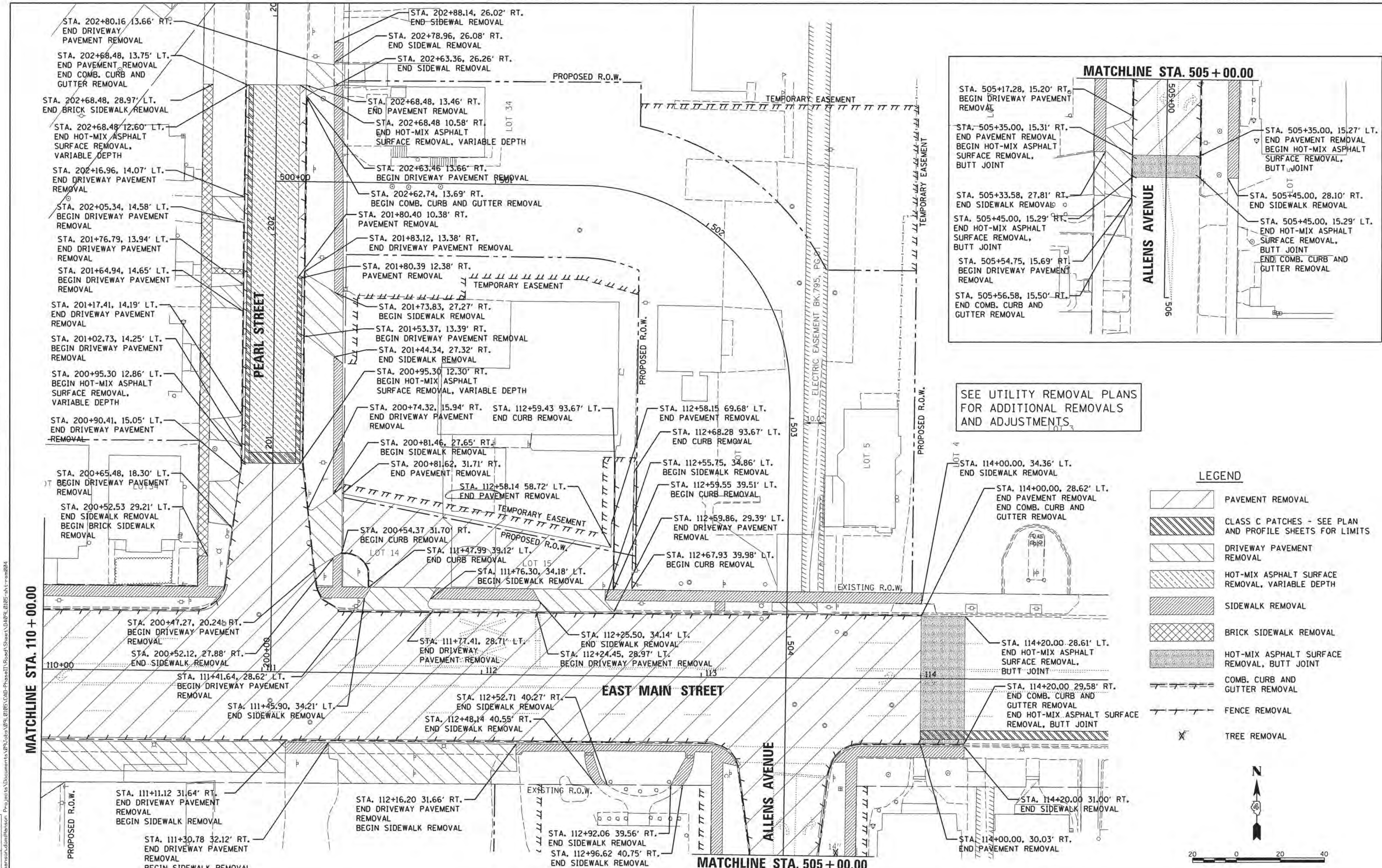
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ROADWAY REMOVAL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 104+00.00 TO STA. 110+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	19
	50V8	CONTRACT NO. 89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		


STA. 202+80.16 13.66' RT. END DRIVEWAY PAVEMENT REMOVAL
STA. 202+68.48, 13.75' LT. END PAVEMENT REMOVAL END COMB. CURB AND GUTTER REMOVAL
STA. 202+68.48, 28.97' LT. END BRICK SIDEWALK REMOVAL
STA. 202+68.48 12.60' LT. END HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
STA. 202+16.96, 14.07' LT. END DRIVEWAY PAVEMENT REMOVAL
STA. 202+05.34, 14.58' LT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 201+76.79, 13.94' LT. END DRIVEWAY PAVEMENT REMOVAL
STA. 201+64.94, 14.65' LT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 201+17.41, 14.19' LT. END DRIVEWAY PAVEMENT REMOVAL
STA. 201+02.73, 14.25' LT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 200+95.30 12.86' LT. BEGIN HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
STA. 200+90.41, 15.05' LT. END DRIVEWAY PAVEMENT REMOVAL
STA. 200+65.48, 18.30' LT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 200+52.53 29.21' LT. END SIDEWALK REMOVAL BEGIN BRICK SIDEWALK REMOVAL
STA. 202+88.14, 26.02' RT. END SIDEWAL REMOVAL
STA. 202+78.96, 26.08' RT. END SIDEWAL REMOVAL
STA. 202+63.36, 26.26' RT. END SIDEWAL REMOVAL
STA. 202+68.48, 13.46' RT. END PAVEMENT REMOVAL
STA. 202+68.48 10.58' RT. END HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
STA. 202+63.46 13.66' RT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 202+62.74, 13.69' RT. BEGIN COMB. CURB AND GUTTER REMOVAL
STA. 201+80.40 10.38' RT. PAVEMENT REMOVAL
STA. 201+83.12, 13.38' RT. END DRIVEWAY PAVEMENT REMOVAL
STA. 201+80.39 12.38' RT. PAVEMENT REMOVAL
STA. 201+73.83, 27.27' RT. BEGIN SIDEWALK REMOVAL
STA. 201+53.37, 13.39' RT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 201+44.34, 27.32' RT. END SIDEWALK REMOVAL
STA. 200+95.30 12.30' RT. BEGIN HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
STA. 200+74.32, 15.94' RT. END DRIVEWAY PAVEMENT REMOVAL
STA. 200+81.46, 27.65' RT. BEGIN SIDEWALK REMOVAL
STA. 200+81.62, 31.71' RT. END PAVEMENT REMOVAL
STA. 200+54.37 31.70' RT. BEGIN CURB REMOVAL
STA. 112+59.43 93.67' LT. END CURB REMOVAL
STA. 112+58.14 58.72' LT. END PAVEMENT REMOVAL
STA. 111+47.99 39.12' LT. END CURB REMOVAL
STA. 111+76.30, 34.18' LT. BEGIN SIDEWALK REMOVAL
STA. 112+58.15 69.68' LT. END PAVEMENT REMOVAL
STA. 112+68.28 93.67' LT. END CURB REMOVAL
STA. 112+55.75, 34.86' LT. BEGIN SIDEWALK REMOVAL
STA. 112+59.55 39.51' LT. BEGIN CURB REMOVAL
STA. 112+59.86, 29.39' LT. END DRIVEWAY PAVEMENT REMOVAL
STA. 112+67.93 39.98' LT. BEGIN CURB REMOVAL
STA. 200+47.27, 20.24' RT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 200+52.12, 27.88' RT. END SIDEWALK REMOVAL
STA. 111+77.41, 28.71' LT. END DRIVEWAY PAVEMENT REMOVAL
STA. 112+25.50, 34.14' LT. END SIDEWALK REMOVAL
STA. 112+24.45, 28.97' LT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 111+41.64, 28.62' LT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 111+45.90, 34.21' LT. END SIDEWALK REMOVAL
STA. 112+52.71 40.27' RT. END SIDEWALK REMOVAL
STA. 112+48.14 40.55' RT. END SIDEWALK REMOVAL
STA. 111+11.12 31.64' RT. END DRIVEWAY PAVEMENT REMOVAL BEGIN SIDEWALK REMOVAL
STA. 111+30.78 32.12' RT. END DRIVEWAY PAVEMENT REMOVAL BEGIN SIDEWALK REMOVAL
STA. 112+16.20 31.66' RT. END DRIVEWAY PAVEMENT REMOVAL BEGIN SIDEWALK REMOVAL
STA. 112+92.06 39.56' RT. END SIDEWALK REMOVAL
STA. 112+96.62 40.75' RT. END SIDEWALK REMOVAL
STA. 114+00.00, 34.36' LT. END SIDEWALK REMOVAL
STA. 114+00.00, 28.62' LT. END PAVEMENT REMOVAL END COMB. CURB AND GUTTER REMOVAL
STA. 114+20.00 28.61' LT. END HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
STA. 114+20.00 29.58' RT. END COMB. CURB AND GUTTER REMOVAL END HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
STA. 114+20.00 31.00' RT. END SIDEWALK REMOVAL
STA. 114+00.00, 30.03' RT. END PAVEMENT REMOVAL
PEARL STREET
EAST MAIN STREET
ALLENS AVENUE
PROPOSED R.O.W.
TEMPORARY EASEMENT
EXISTING R.O.W.
ELECTRIC EASEMENT BK.795, PG.
LOT 34
LOT 14
LOT 15
LOT 5
LOT 4
MATCHLINE STA. 110+00.00
MATCHLINE STA. 505+00.00
MATCHLINE STA. 505+00.00
STA. 505+17.28, 15.20' RT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 505+35.00, 15.31' RT. END PAVEMENT REMOVAL BEGIN HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
STA. 505+33.58, 27.81' RT. END SIDEWALK REMOVAL
STA. 505+45.00, 15.29' RT. END HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
STA. 505+54.75, 15.69' RT. BEGIN DRIVEWAY PAVEMENT REMOVAL
STA. 505+56.58, 15.50' RT. END COMB. CURB AND GUTTER REMOVAL
STA. 505+35.00, 15.27' LT. END PAVEMENT REMOVAL BEGIN HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
STA. 505+45.00, 28.10' RT. END SIDEWALK REMOVAL
STA. 505+45.00, 15.29' LT. END HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT END COMB. CURB AND GUTTER REMOVAL
SEE UTILITY REMOVAL PLANS FOR ADDITIONAL REMOVALS AND ADJUSTMENTS
LEGEND
PAVEMENT REMOVAL
CLASS C PATCHES - SEE PLAN AND PROFILE SHEETS FOR LIMITS
DRIVEWAY PAVEMENT REMOVAL
HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
SIDEWALK REMOVAL
BRICK SIDEWALK REMOVAL
HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
COMB. CURB AND GUTTER REMOVAL
FENCE REMOVAL
TREE REMOVAL
N
20 0 20 40

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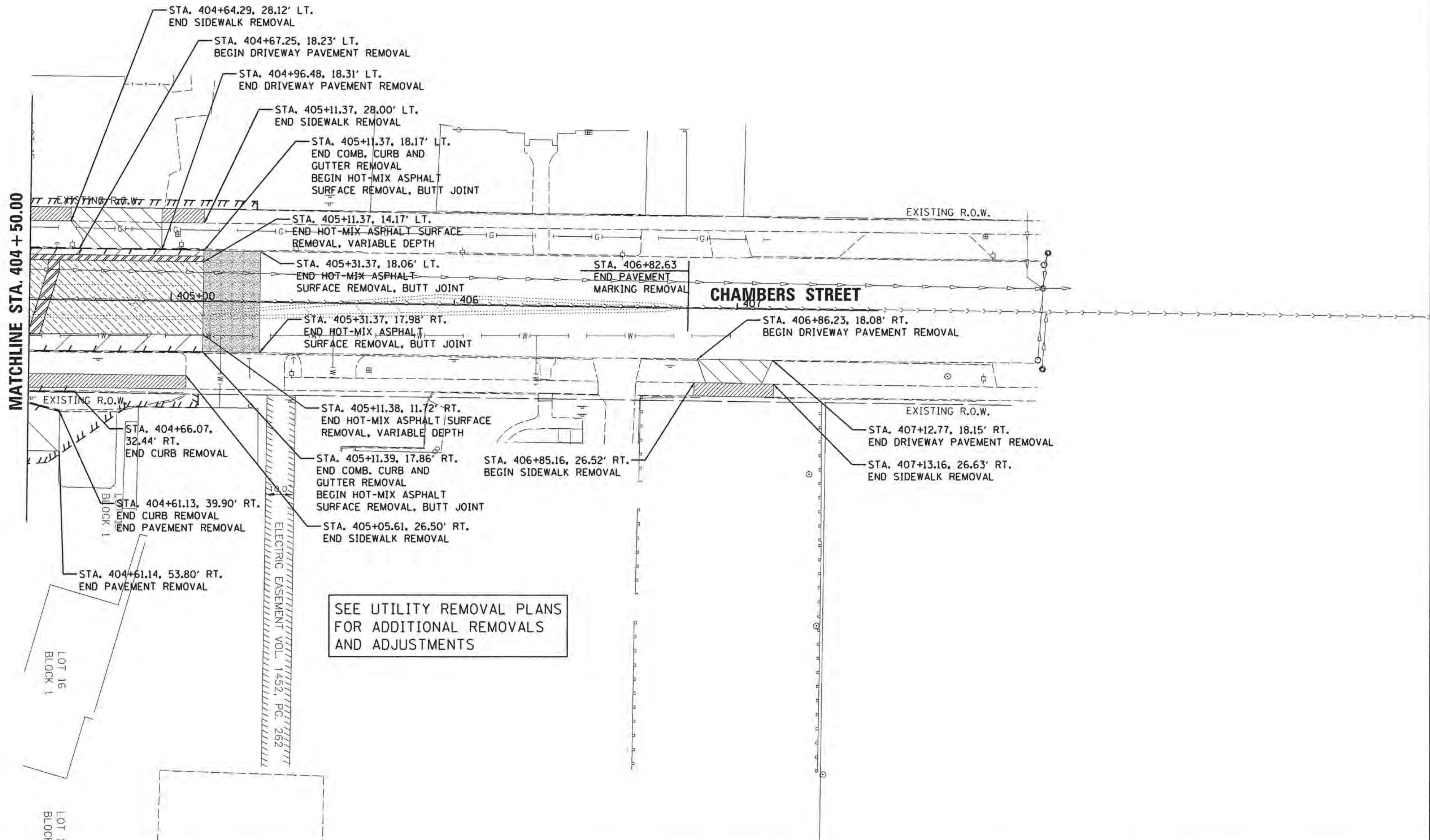
DRAWN MGD 5/27/15		PLOT SCALE = 20.0000 ' / in.	DRAWN - MGD	REVISED -		SCALE: 1"=20'	50VB; CONTRACT NO.89417
REVIEWED MPB 5/28/15		PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -		SHEET NO. OF SHEETS	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
			DATE - 9/9/2015	REVISED -		STA. 110+00.00 TO STA. 114+00.00	

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

LEGEND

PAVEMENT REMOVAL	BRICK SIDEWALK REMOVAL
CLASS C PATCHES - SEE PLAN AND PROFILE SHEETS FOR LIMITS	HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT
DRIVEWAY PAVEMENT REMOVAL	COMB. CURB AND GUTTER REMOVAL
HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	FENCE REMOVAL
SIDEWALK REMOVAL	TREE REMOVAL



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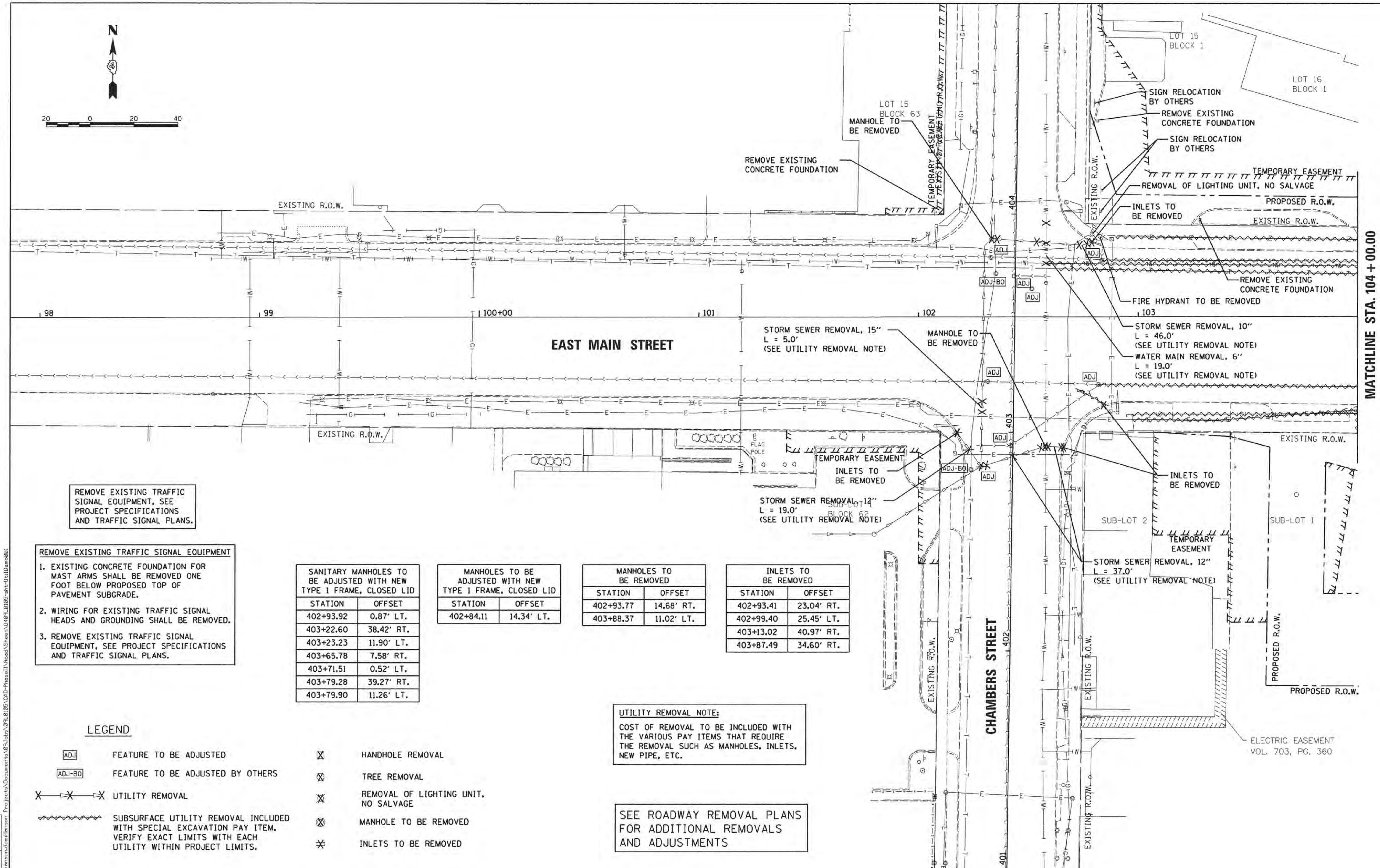
	PLOT SCALE = 20.0000 ' / in.	DRAWN - MGD	REVISED -			50VB / CONTRACT NO.89417
	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -		SCALE: 1"=20' / SHEET NO. OF SHEETS / STA. 404+50.00 TO STA. 406+82.63	FED. ROAD DIST. NO. / ILLINOIS / FED. AID PROJECT
		DATE - 9/9/2015	REVISED -			



REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, SEE PROJECT SPECIFICATIONS AND TRAFFIC SIGNAL PLANS.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

1. EXISTING CONCRETE FOUNDATION FOR MAST ARMS SHALL BE REMOVED ONE FOOT BELOW PROPOSED TOP OF PAVEMENT SUBGRADE.
2. WIRING FOR EXISTING TRAFFIC SIGNAL HEADS AND GROUNDING SHALL BE REMOVED.
3. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT, SEE PROJECT SPECIFICATIONS AND TRAFFIC SIGNAL PLANS.

SANITARY MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	
STATION	OFFSET
402+93.92	0.87' LT.
403+22.60	38.42' RT.
403+23.23	11.90' LT.
403+65.78	7.58' RT.
403+71.51	0.52' LT.
403+79.28	39.27' RT.
403+79.90	11.26' LT.

MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	
STATION	OFFSET
402+84.11	14.34' LT.

MANHOLES TO BE REMOVED	
STATION	OFFSET
402+93.77	14.68' RT.
403+88.37	11.02' LT.

INLETS TO BE REMOVED	
STATION	OFFSET
402+93.41	23.04' RT.
402+99.40	25.45' LT.
403+13.02	40.97' RT.
403+87.49	34.60' RT.

UTILITY REMOVAL NOTE:

COST OF REMOVAL TO BE INCLUDED WITH THE VARIOUS PAY ITEMS THAT REQUIRE THE REMOVAL SUCH AS MANHOLES, INLETS, NEW PIPE, ETC.

LEGEND

ADJ	FEATURE TO BE ADJUSTED
ADJ-BO	FEATURE TO BE ADJUSTED BY OTHERS
X—X—X	UTILITY REMOVAL
~~	SUBSURFACE UTILITY REMOVAL INCLUDED WITH SPECIAL EXCAVATION PAY ITEM. VERIFY EXACT LIMITS WITH EACH UTILITY WITHIN PROJECT LIMITS.
⊠	HANDHOLE REMOVAL
⊗	TREE REMOVAL
⊠	REMOVAL OF LIGHTING UNIT, NO SALVAGE
⊗	MANHOLE TO BE REMOVED
✳	INLETS TO BE REMOVED

SEE ROADWAY REMOVAL PLANS FOR ADDITIONAL REMOVALS AND ADJUSTMENTS

pw:\\spi-svr305.hanson.domHanson Projects\Documents\09Jobs\09L0105\CAD-PhaseII\Road\Sheets\0409L0105-sht-UtilDemo001

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DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
UTILITY REMOVAL PLANS

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

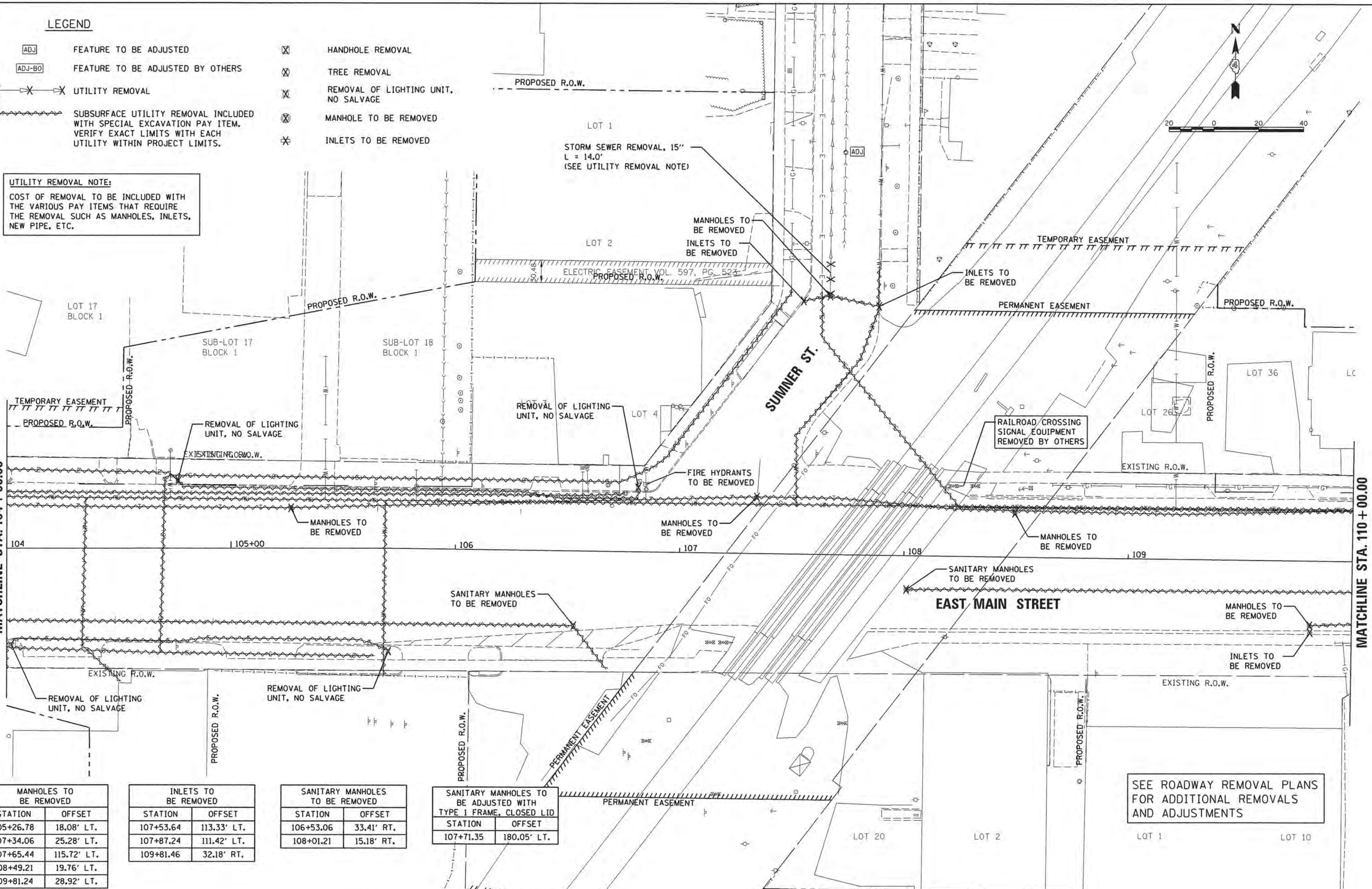
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	22
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

ADJ	FEATURE TO BE ADJUSTED
ADJ-BO	FEATURE TO BE ADJUSTED BY OTHERS
X—X—X	UTILITY REMOVAL
(wavy line)	SUBSURFACE UTILITY REMOVAL INCLUDED WITH SPECIAL EXCAVATION PAY ITEM. VERIFY EXACT LIMITS WITH EACH UTILITY WITHIN PROJECT LIMITS.
	HANDHOLE REMOVAL
	TREE REMOVAL
	REMOVAL OF LIGHTING UNIT, NO SALVAGE
	MANHOLE TO BE REMOVED
	INLETS TO BE REMOVED

UTILITY REMOVAL NOTE:

COST OF REMOVAL TO BE INCLUDED WITH THE VARIOUS PAY ITEMS THAT REQUIRE THE REMOVAL SUCH AS MANHOLES, INLETS, NEW PIPE, ETC.



SEE ROADWAY REMOVAL PLANS FOR ADDITIONAL REMOVALS AND ADJUSTMENTS

MANHOLES TO BE REMOVED

STATION	OFFSET
105+26.78	18.08' LT.
107+34.06	25.28' LT.
107+65.44	115.72' LT.
108+49.21	19.76' LT.
109+81.24	28.92' LT.

INLETS TO BE REMOVED

STATION	OFFSET
107+53.64	113.33' LT.
107+87.24	111.42' LT.
109+81.46	32.18' RT.

SANITARY MANHOLES TO BE REMOVED

STATION	OFFSET
106+53.06	33.41' RT.
108+01.21	15.18' RT.

SANITARY MANHOLES TO BE ADJUSTED WITH TYPE 1 FRAME, CLOSED LID

STATION	OFFSET
107+71.35	180.05' LT.

LAYOUT	RLA	2/11/14	
DRAWN	MGD	5/27/15	
REVIEWED	MPB	5/28/15	

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		DATE - 9/9/2015	REVISED -

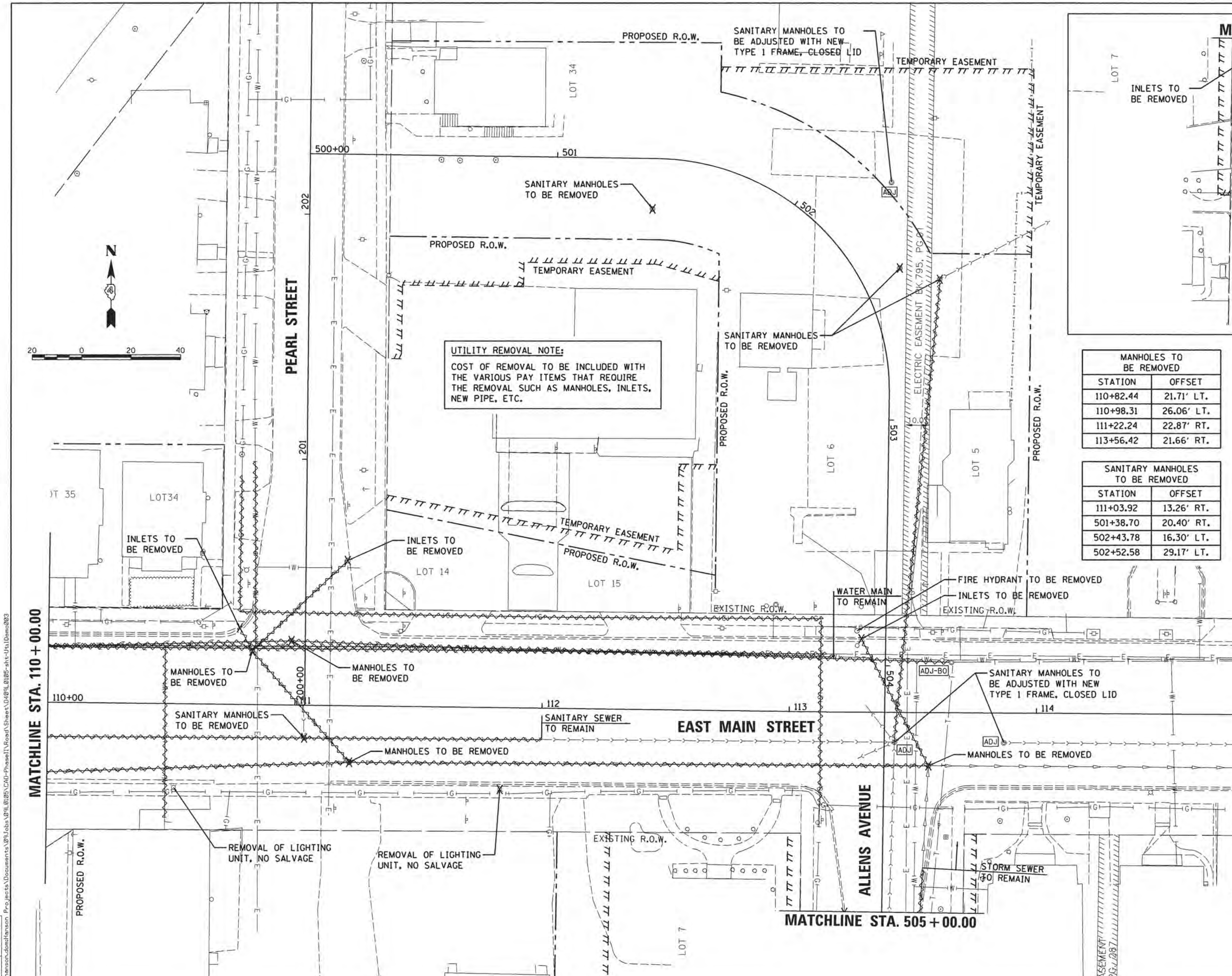
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

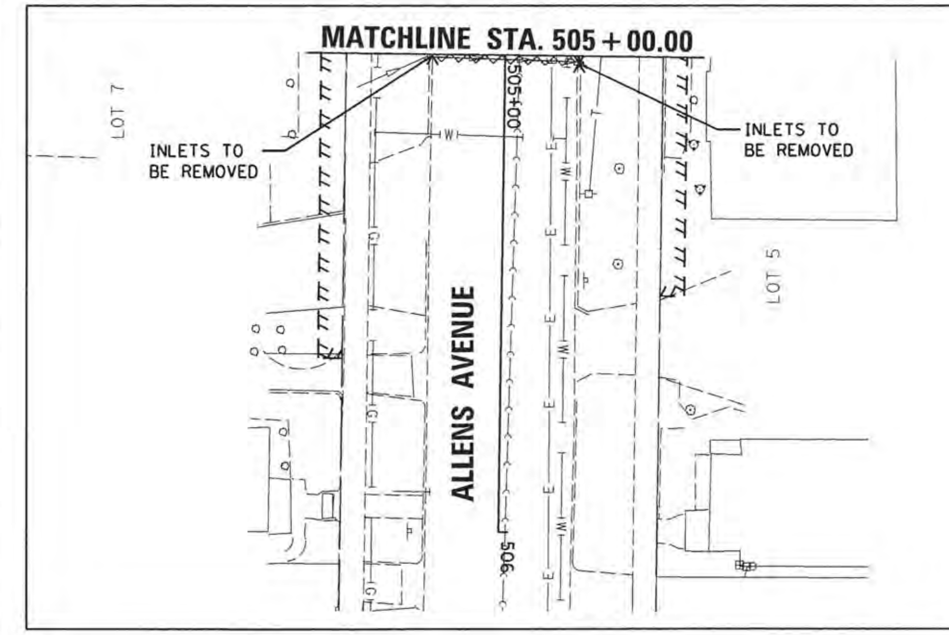
EAST MAIN STREET
UTILITY REMOVAL PLANS

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	23
	50VB	CONTRACT NO.89417		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT





MANHOLES TO BE REMOVED	
STATION	OFFSET
110+82.44	21.71' LT.
110+98.31	26.06' LT.
111+22.24	22.87' RT.
113+56.42	21.66' RT.

SANITARY MANHOLES TO BE REMOVED	
STATION	OFFSET
111+03.92	13.26' RT.
501+38.70	20.40' RT.
502+43.78	16.30' LT.
502+52.58	29.17' LT.

LEGEND

- ADJ — FEATURE TO BE ADJUSTED
- ADJ-BO — FEATURE TO BE ADJUSTED BY OTHERS
- X—X—X — UTILITY REMOVAL
- SUBSURFACE UTILITY REMOVAL INCLUDED WITH SPECIAL EXCAVATION PAY ITEM. VERIFY EXACT LIMITS WITH EACH UTILITY WITHIN PROJECT LIMITS.
- HANDHOLE REMOVAL
- TREE REMOVAL
- REMOVAL OF LIGHTING UNIT, NO SALVAGE
- MANHOLE TO BE REMOVED
- INLETS TO BE REMOVED

SANITARY MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	
STATION	OFFSET
113+42.67	12.17' RT.
113+86.81	12.20' RT.
502+19.29	33.39' LT.

INLETS TO BE REMOVED	
STATION	OFFSET
110+77.29	31.03' LT.
111+20.58	59.13' LT.
505+00.30	15.14' RT.
505+01.59	15.42' LT.
503+89.18	9.79' RT.

SEE ROADWAY REMOVAL PLANS FOR ADDITIONAL REMOVALS AND ADJUSTMENTS

pw:\\spi-svr306.hanson.dom:Hanson Projects\Documents\05Jobs\09L0105\CAD-PhaseII\Road\Sheet\D49L0105-sht-UtilDemo003

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REVIEWED	MPB	5/28/15

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
UTILITY REMOVAL PLANS

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	24
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND - DRIVEWAYS

- PCC DRIVEWAY PAVEMENT, 8"
- PCC DRIVEWAY PAVEMENT, 6"
- PCC SIDEWALK, 8"
- STAMPED COLORED PCC SIDEWALK, 5 INCH
- PCC SIDEWALK, 6"
- PORTLAND CEMENT CONCRETE BASE COURSE, 7" AGGREGATE SUBGRADE IMPROVEMENT, 12"
- CLASS C PATCHES
- STAMPED COLORED PORTLAND CEMENT CONCRETE, 9"

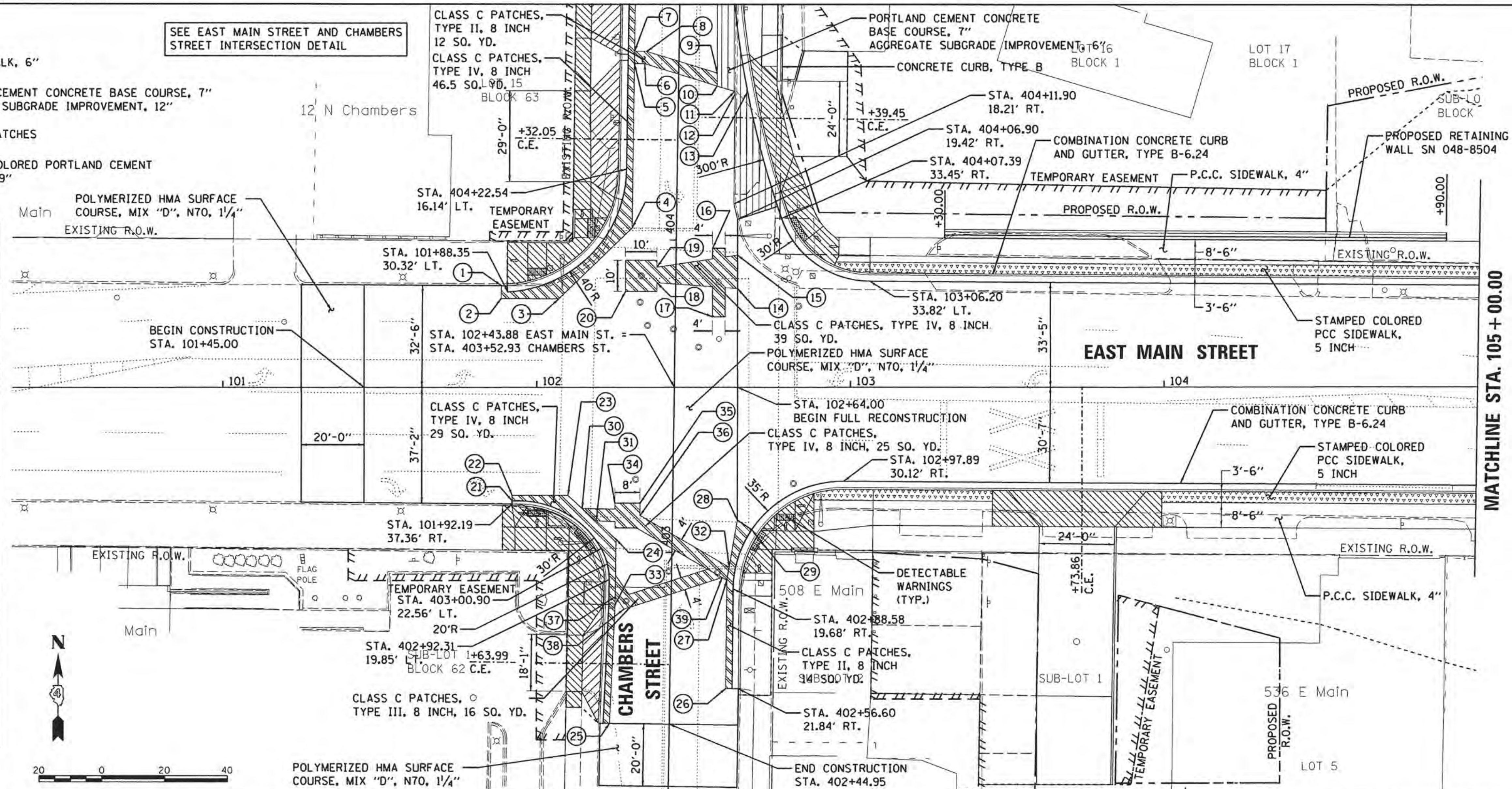
SEE EAST MAIN STREET AND CHAMBERS STREET INTERSECTION DETAIL

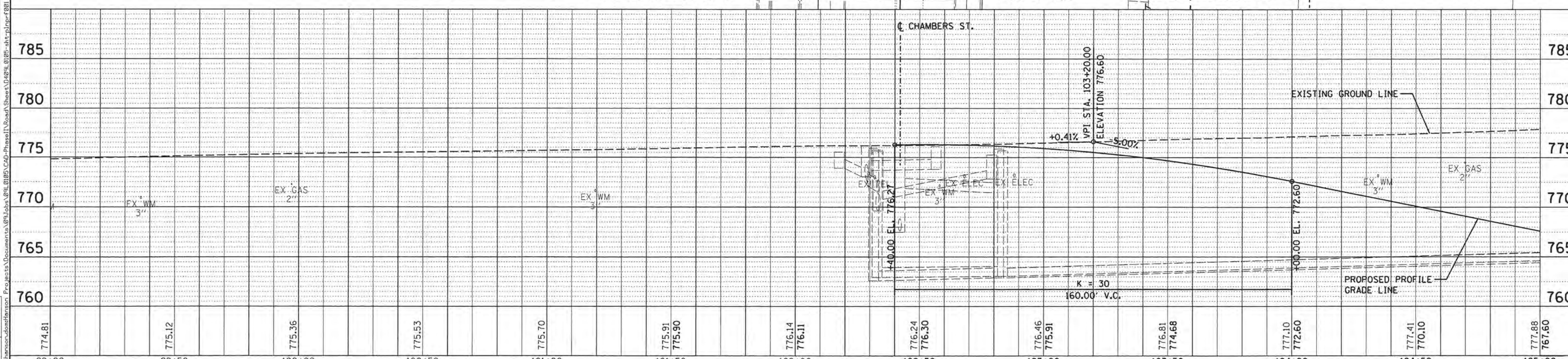
CLASS C PATCHES

NO.	STATION	OFFSET
1	101+88.74	32.38' LT.
2	101+88.71	28.32' LT.
3	102+07.02	28.18' LT.
4	404+03.73	14.13' LT.
5	404+56.37	14.15' LT.
6	404+56.37	10.88' LT.
7	404+60.37	14.15' LT.
8	404+60.37	10.30' LT.
9	404+53.66	12.28' RT.
10	404+49.47	12.33' RT.
11	404+47.81	17.93' RT.
12	404+47.01	18.06' RT.
13	404+47.83	22.02' RT.
14	403+84.67	19.71' RT.
15	403+95.41	19.57' RT.
16	403+97.56	11.61' RT.
17	403+75.56	11.87' RT.
18	403+86.20	5.99' LT.
19	403+91.21	6.06' LT.
20	403+83.30	15.96' LT.

CLASS C PATCHES

NO.	STATION	OFFSET
21	101+92.20	36.36' RT.
22	101+92.21	34.56' RT.
23	102+09.98	34.65' RT.
24	403+04.02	17.86' LT.
25	402+44.95	19.07' LT.
26	402+56.59	17.84' RT.
27	402+91.31	17.67' RT.
28	403+10.65	20.72' RT.
29	403+07.65	25.33' RT.
30	403+13.71	28.79' LT.
31	403+09.68	24.26' LT.
32	402+95.53	18.32' RT.
33	402+82.95	17.84' LT.
34	403+15.58	18.36' LT.
35	403+15.69	10.36' LT.
36	403+11.68	10.30' LT.
37	402+85.53	17.84' LT.
38	402+81.58	14.98' LT.
39	402+92.15	16.18' RT.





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Default	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -		STA. 101+45.00 TO STA.105+00.00	COUNTY KNOX
		DATE - 9/9/2015	REVISED -			TOTAL SHEETS 216, SHEET NO. 25

CONTRACT NO.89417

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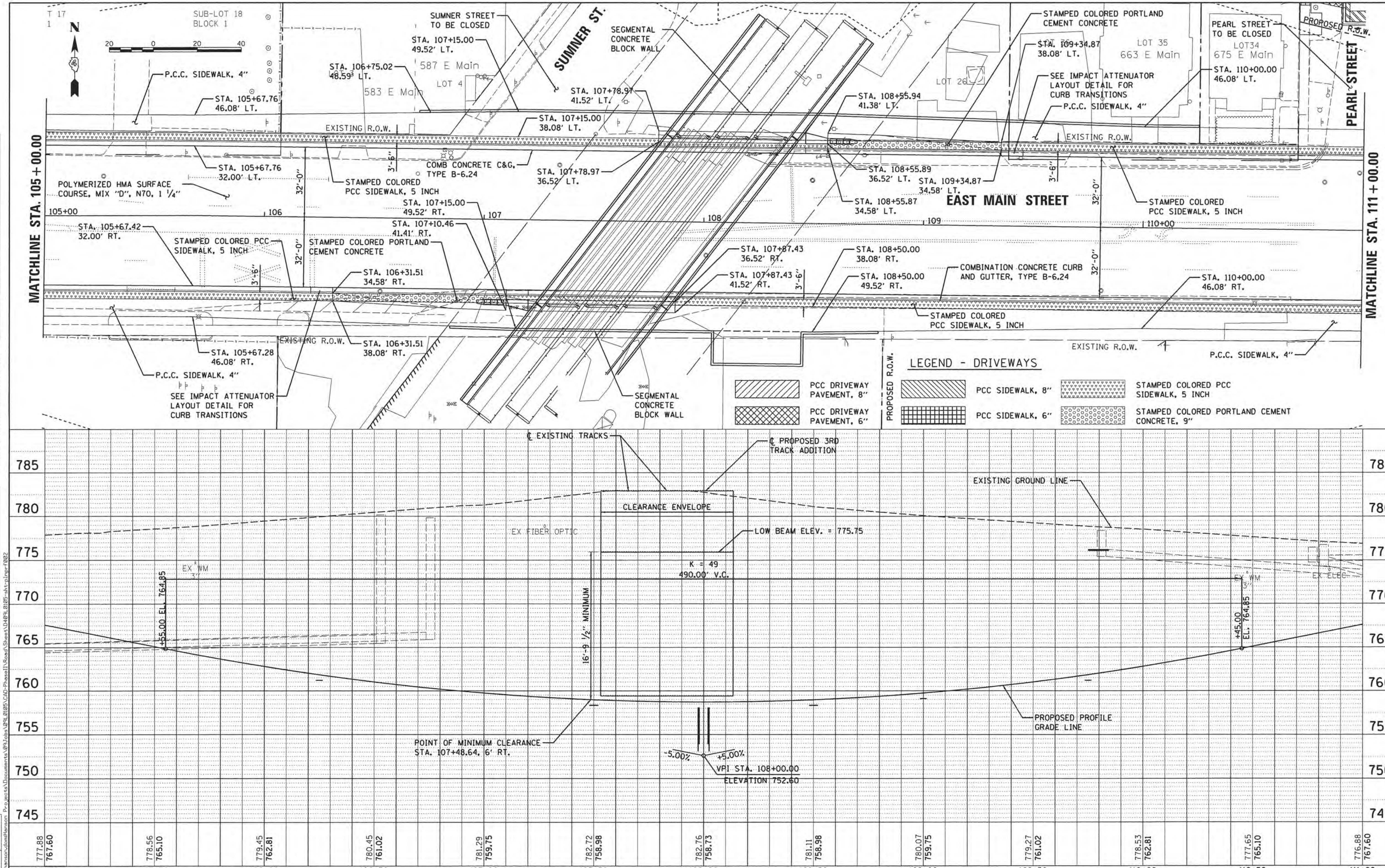

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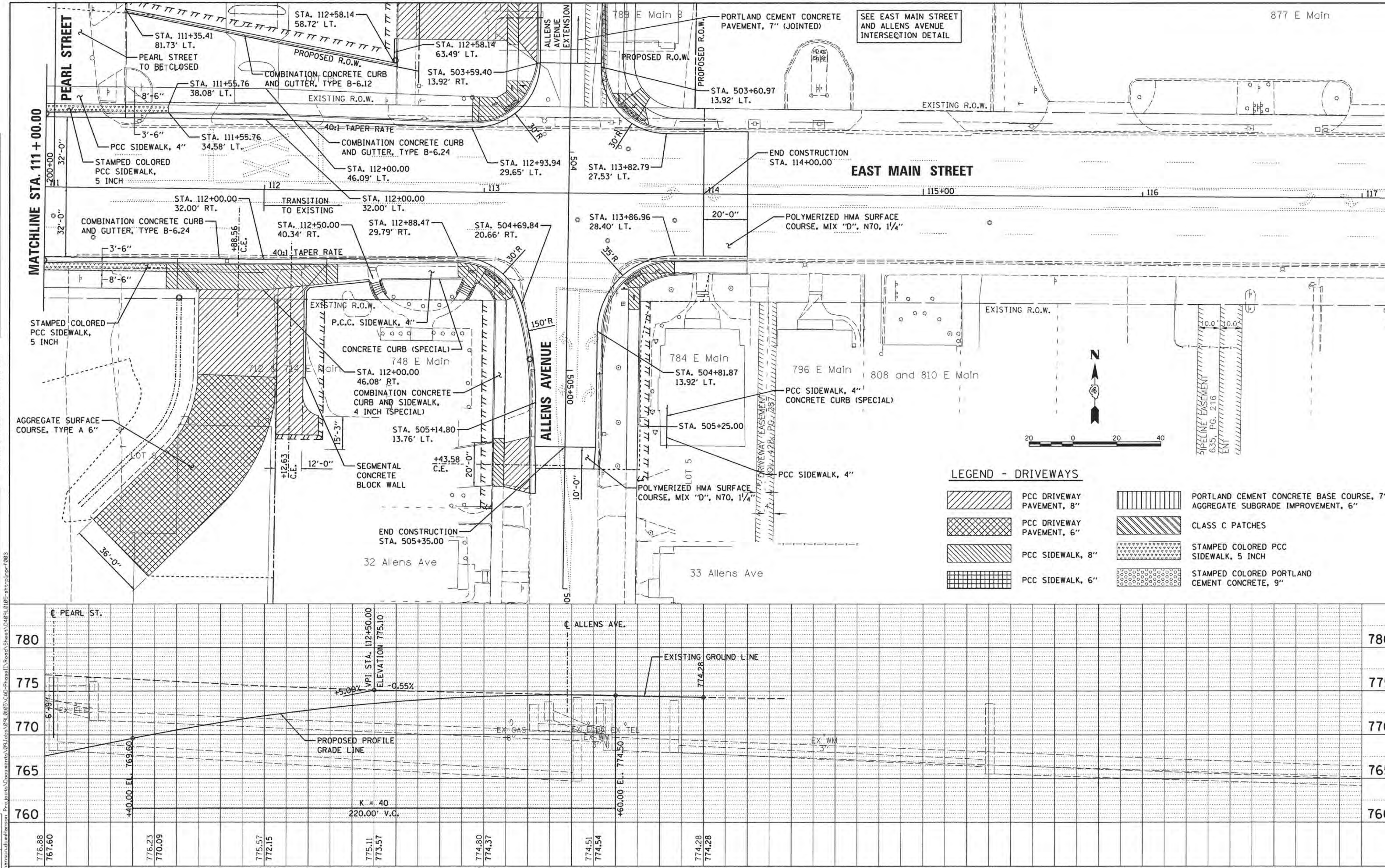
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 105+00.00 TO STA. 111+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	26
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		



PLAN	NOTE BOOK NO.
SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. NOTED / RT. OF WAY CHECKED / CADD FILE NAME	BY / DATE
PROFILE	NOTE BOOK NO.
SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHKD	BY / DATE

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HANSON

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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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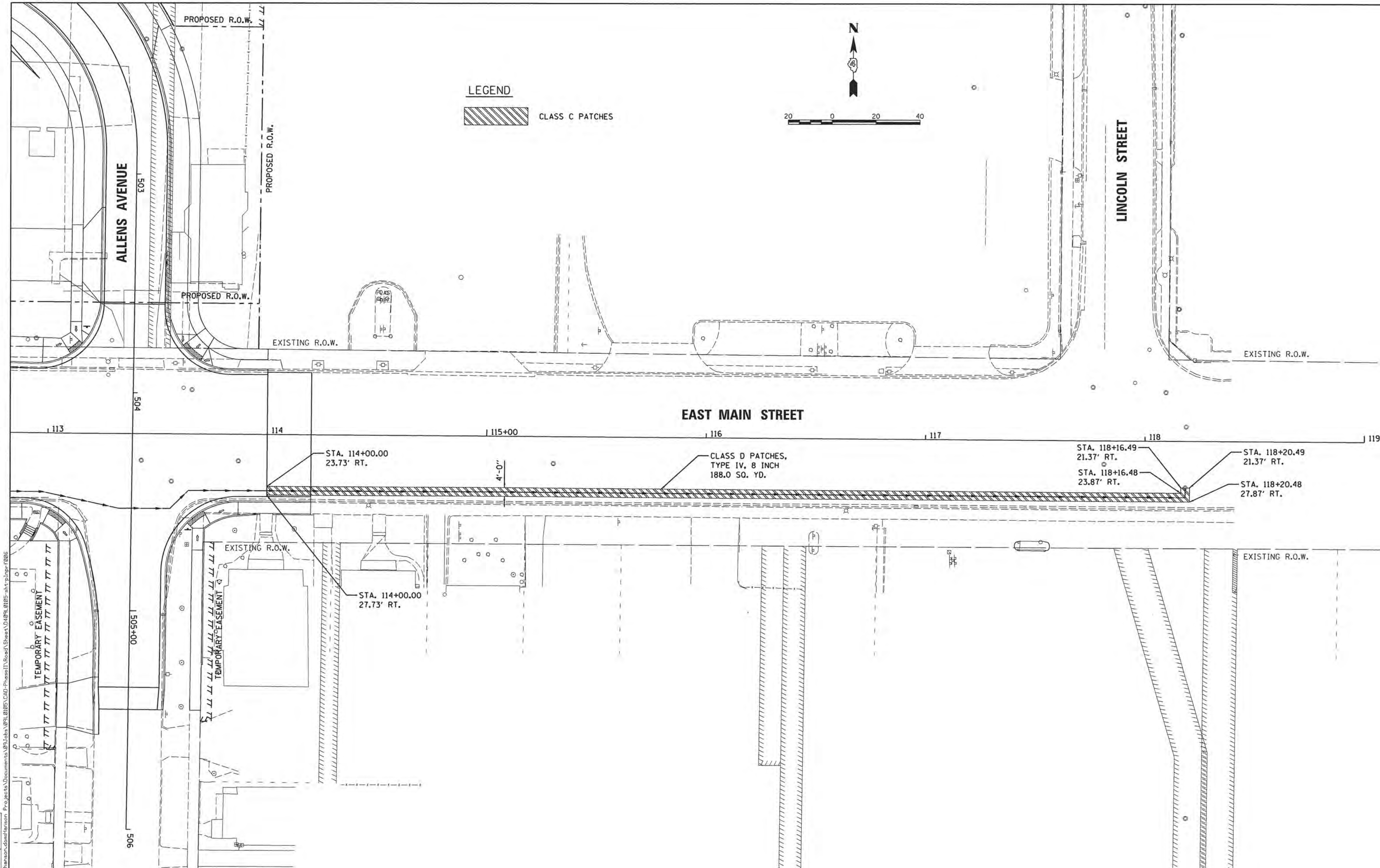
		CHECKED - MPB	REVISED -
Default	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PLAN AND PROFILE

SCALE: 1"=20' | SHEET OF SHEETS | STA. 111+00.00 TO STA. 114+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	27
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		



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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

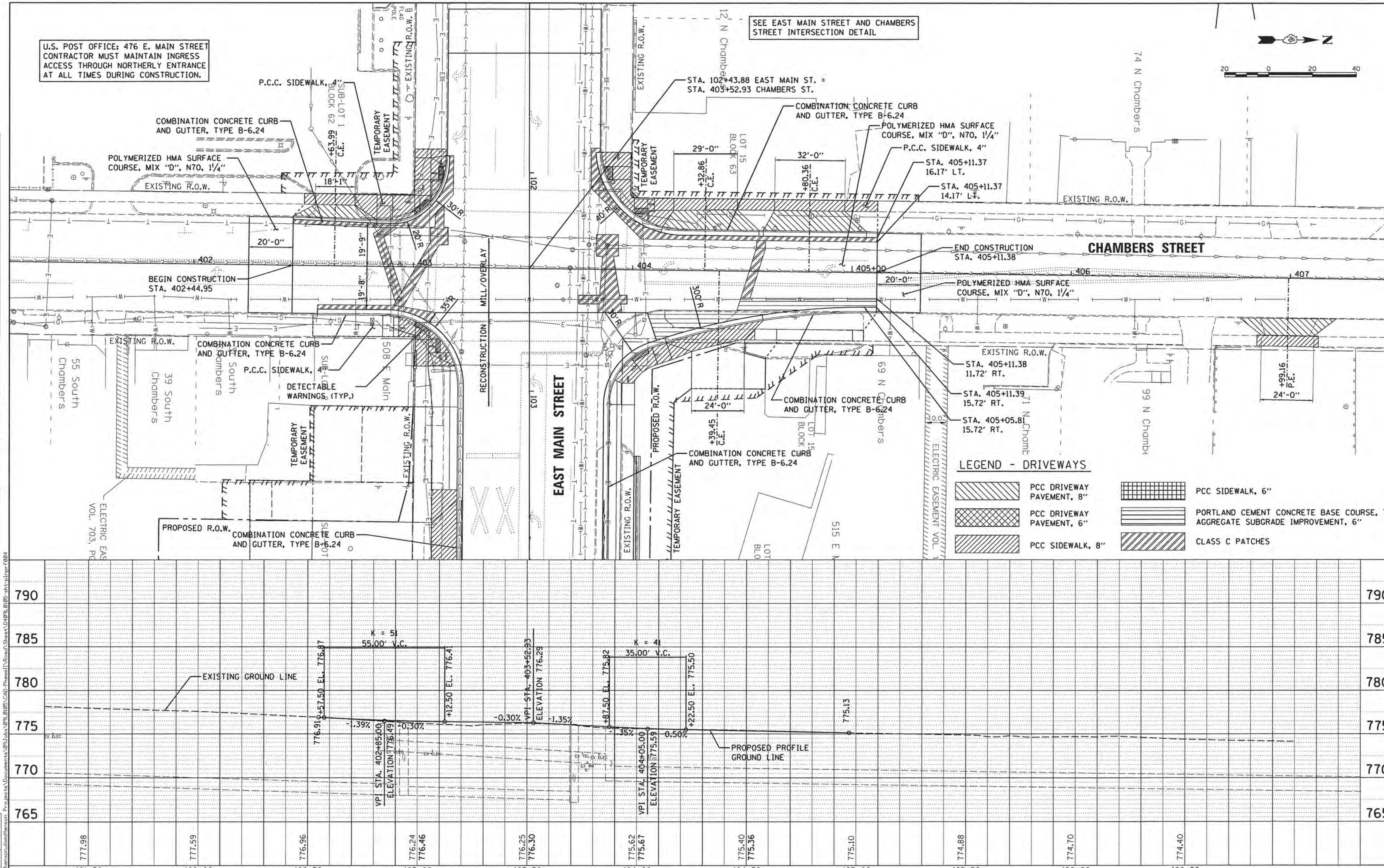
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ROADWAY PLAN (FORCE MAIN)

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	28
	50VB	CONTRACT NO.89417		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT


U.S. POST OFFICE: 476 E. MAIN STREET CONTRACTOR MUST MAINTAIN INGRESS ACCESS THROUGH NORTHERLY ENTRANCE AT ALL TIMES DURING CONSTRUCTION.
SEE EAST MAIN STREET AND CHAMBERS STREET INTERSECTION DETAIL
P.C.C. SIDEWALK, 4"
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
POLYMERIZED HMA SURFACE COURSE, MIX "D", N70, 1¼"
EXISTING R.O.W.
STA. 102+43.88 EAST MAIN ST. = STA. 403+52.93 CHAMBERS ST.
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
POLYMERIZED HMA SURFACE COURSE, MIX "D", N70, 1¼"
P.C.C. SIDEWALK, 4"
STA. 405+11.37 16.17' LT.
STA. 405+11.37 14.17' LT.
TEMPORARY EASEMENT
BEGIN CONSTRUCTION STA. 402+44.95
END CONSTRUCTION STA. 405+11.38
CHAMBERS STREET
POLYMERIZED HMA SURFACE COURSE, MIX "D", N70, 1¼"
MILL/OVERLAY
RECONSTRUCTION
EAST MAIN STREET
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
P.C.C. SIDEWALK, 4"
DETECTABLE WARNINGS (TYP.)
STA. 405+11.38 11.72' RT.
STA. 405+11.39 15.72' RT.
STA. 405+05.81 15.72' RT.
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
PROPOSED R.O.W.
ELECTRIC EASEMENT VOL. 703, PG
LEGEND - DRIVEWAYS
PCC DRIVEWAY PAVEMENT, 8"
PCC DRIVEWAY PAVEMENT, 6"
PCC SIDEWALK, 8"
PCC SIDEWALK, 6"
PORTLAND CEMENT CONCRETE BASE COURSE, 7" AGGREGATE SUBGRADE IMPROVEMENT, 6"
CLASS C PATCHES
K = 51 55.00' V.C.
K = 41 35.00' V.C.
EXISTING GROUND LINE
PROPOSED PROFILE GROUND LINE
VPI STA. 402+85.00 ELEVATION 776.49
VPI STA. 403+52.93 ELEVATION 776.29
VPI STA. 404+05.00 ELEVATION 775.59
401+50
402+00
402+50
403+00
403+50
404+00
404+50
405+00
405+50
406+00
406+50

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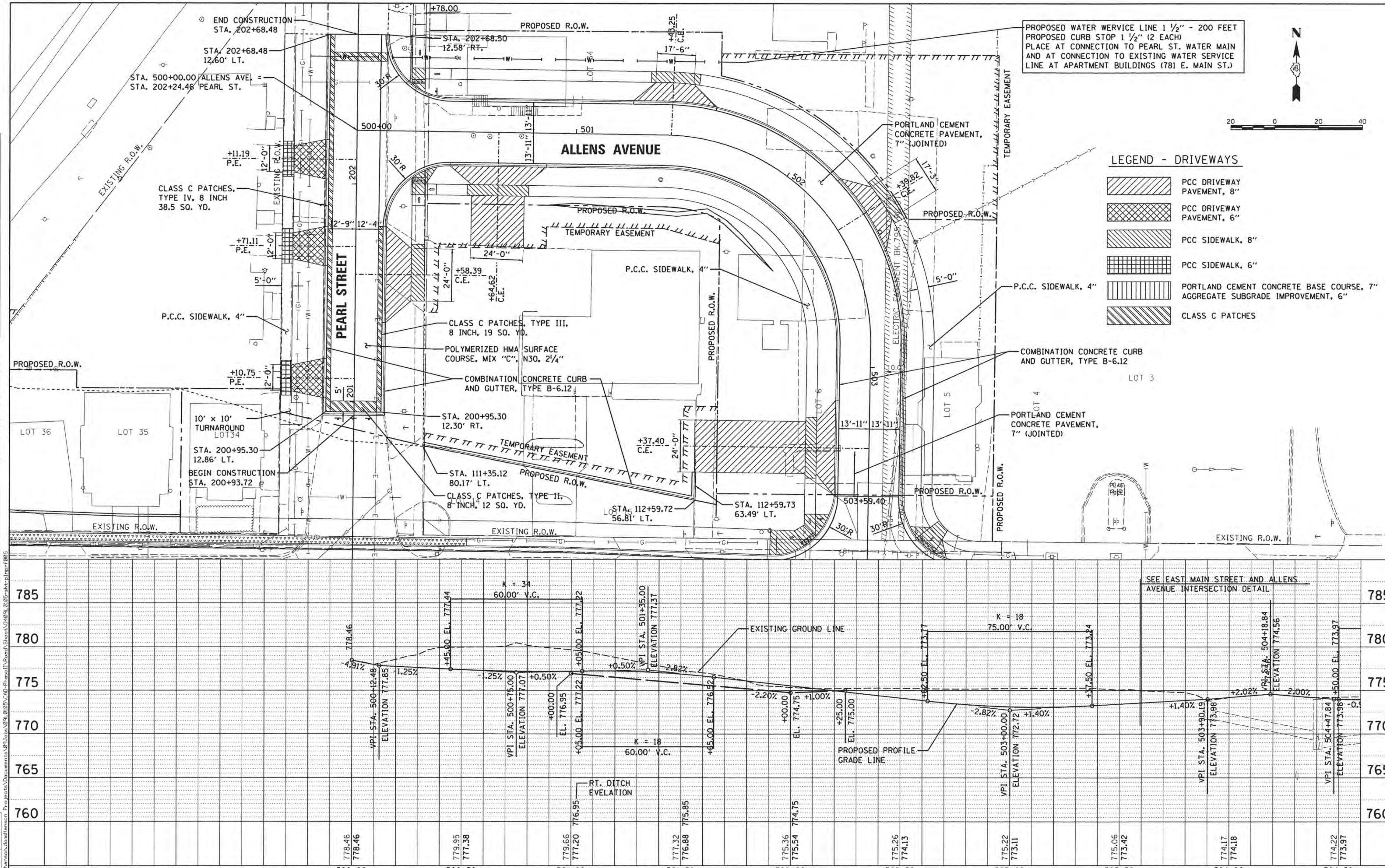
Default	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -		SCALE: 1"=20' SHEET OF SHEETS STA. 402+70.00 TO STA. 405+05.83
		DATE - 9/9/2015	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	29
	50VB	CONTRACT NO. 89417		
		ILLINOIS FED. AID PROJECT		



END CONSTRUCTION
STA. 202+68.48
STA. 202+68.48
12.60' LT.
STA. 202+68.50
12.58' RT.
STA. 500+00.00 ALLENS AVE. =
STA. 202+24.46 PEARL ST.
PROPOSED R.O.W.
+78.00
+43.25
C.E.
17'-6"
PROPOSED WATER WERVICE LINE 1 1/2" - 200 FEET
PROPOSED CURB STOP 1 1/2" (2 EACH)
PLACE AT CONNECTION TO PEARL ST. WATER MAIN
AND AT CONNECTION TO EXISTING WATER SERVICE
LINE AT APARTMENT BUILDINGS (781 E. MAIN ST.)
N
20 0 20 40
ALLENS AVENUE
500+00
501
502
503
PEARL STREET
202
201
EXISTING R.O.W.
TEMPORARY EASEMENT
PORTLAND CEMENT CONCRETE PAVEMENT, 7" (JOINTED)
LEGEND - DRIVEWAYS
PCC DRIVEWAY PAVEMENT, 8"
PCC DRIVEWAY PAVEMENT, 6"
PCC SIDEWALK, 8"
PCC SIDEWALK, 6"
PORTLAND CEMENT CONCRETE BASE COURSE, 7" AGGREGATE SUBGRADE IMPROVEMENT, 6"
CLASS C PATCHES
+11.19
P.E.
CLASS C PATCHES, TYPE IV, 8 INCH 38.5 SQ. YD.
+71.11
P.E.
5'-0"
P.C.C. SIDEWALK, 4"
PROPOSED R.O.W.
+10.75
P.E.
10' x 10' TURNAROUND
STA. 200+95.30
12.86' LT.
BEGIN CONSTRUCTION
STA. 200+93.72
LOT 36
LOT 35
LOT 34
12'-9" 12'-4"
24'-0"
+58.39
C.E.
+64.62
C.E.
13'-11" 13'-11"
30'R
+39.82
C.E.
17'-3"
CLASS C PATCHES, TYPE III, 8 INCH, 19 SQ. YD.
POLYMERIZED HMA SURFACE COURSE, MIX "C", N30, 2 1/4"
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
STA. 200+95.30
12.30' RT.
STA. 111+35.12
80.17' LT.
CLASS C PATCHES, TYPE II, 8 INCH, 12 SQ. YD.
STA. 112+59.72
56.81' LT.
STA. 112+59.73
63.49' LT.
+37.40
C.E.
P.C.C. SIDEWALK, 4"
PROPOSED R.O.W.
ELECTRIC EASEMENT BK.796
LOT 6
LOT 5
LOT 4
LOT 3
503+59.40
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
PORTLAND CEMENT CONCRETE PAVEMENT, 7" (JOINTED)
785
780
775
770
765
760
K = 34
60.00' V.C.
K = 18
60.00' V.C.
K = 18
75.00' V.C.
-4.91%
-1.25%
+0.50%
-2.82%
-2.20%
+1.00%
+1.40%
+2.02%
2.00%
VPI STA. 500+12.48
ELEVATION 777.85
VPI STA. 500+75.00
ELEVATION 777.07
VPI STA. 501+35.00
ELEVATION 777.37
VPI STA. 503+00.00
ELEVATION 772.72
VPI STA. 503+90.19
ELEVATION 773.98
VPI STA. 504+18.84
ELEVATION 774.56
VPI STA. 504+47.84
ELEVATION 773.98
EXISTING GROUND LINE
PROPOSED PROFILE GRADE LINE
RT. DITCH EVELATION
SEE EAST MAIN STREET AND ALLENS AVENUE INTERSECTION DETAIL
778.46 778.46
779.95 777.38
779.66 777.20
777.32 776.88
775.36 775.54
775.26 774.13
775.22 773.11
775.06 773.42
774.17 774.18
774.22 773.97
500+00
500+50
501+00
501+50
502+00
502+50
503+00
503+50
504+00
504+50

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	PLOT DATE = 11/17/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALLENS AVENUE
PLAN AND PROFILE

SCALE: 1"=20' SHEET OF SHEETS STA. 500+00.00 TO STA. 503+59.40

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	30
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		

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N

20 0 20 40

CHAMBERS STREET

405+00

404

403

402

99 100+00 101 102 103 104

EAST MAIN STREET

MATCHLINE STA. 105+00.00

EXISTING R.O.W.

TEMPORARY EASEMENT

PROPOSED R.O.W.

LOT 15
BLOCK 63

LOT 15
BLOCK 1

LOT 16
BLOCK 1

LOT 17
BLOCK 1

SUB-LO
BLOCK

ELECTRIC EASEMENT VOL. 1452, PG. 262

11' 11.5' 11.5' 11'

15' (TYP.)

FLAG POLE

SUB-LOT 1
BLOCK 62

SUB-LOT 2

SUB-LOT 1

LOT 5

ELECTRIC EASEMENT
VOL. 703, PG. 360

LEGEND

LONGITUDINAL PAVEMENT JOINT

TRANSVERSE PAVEMENT JOINT

EXPANSION JOINT

NOTES:

1. EPOXY COATED BARS SHALL BE USED FOR ALL PAVEMENT REINFORCEMENT BARS ON THE PROJECT.
2. BOX OUT AROUND MANHOLES IN ACCORDANCE WITH IDOT STANDARD 420101.

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
JOINTING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 101+45.00 TO STA. 105+00.00

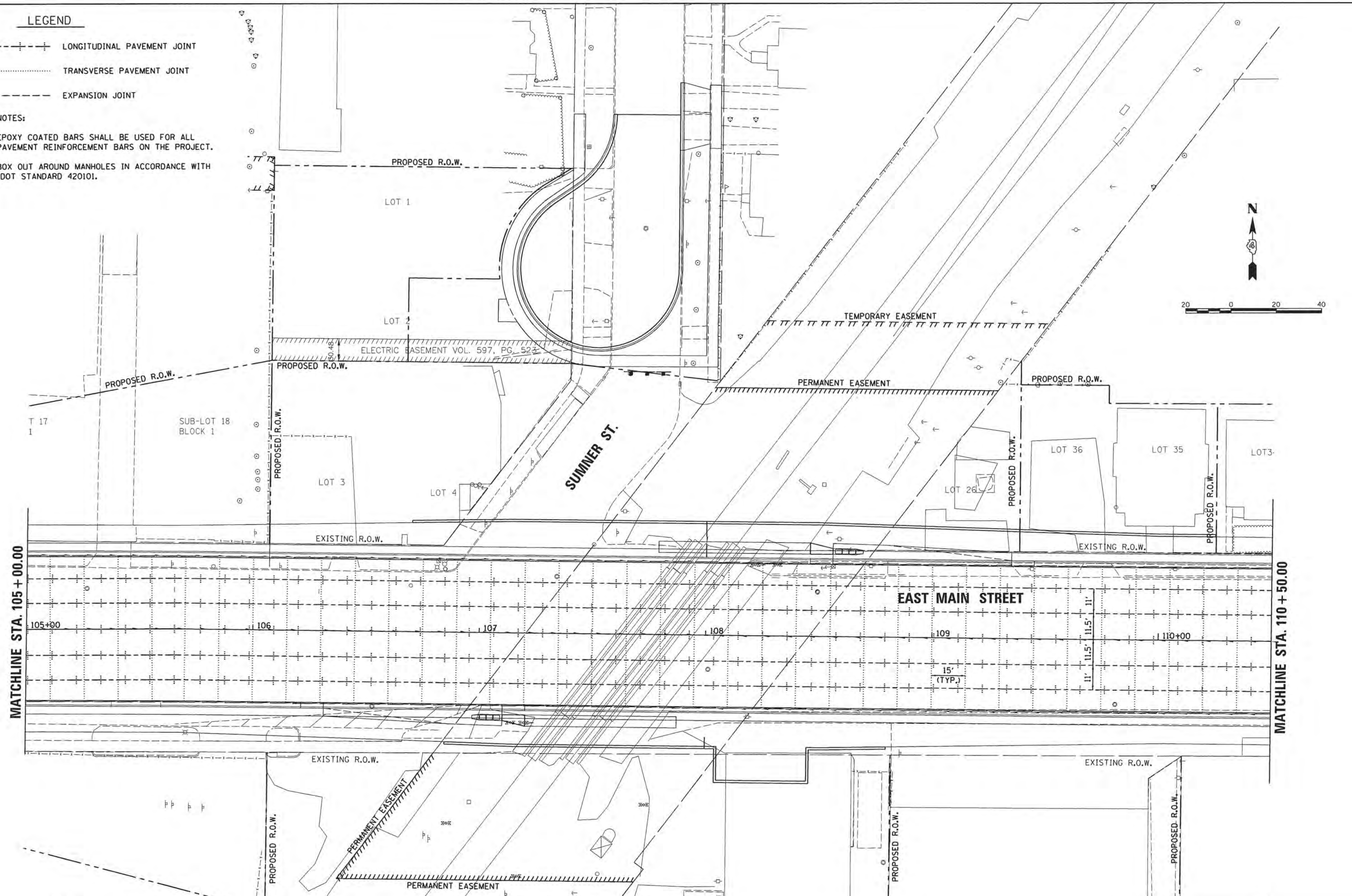
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	31
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

- LONGITUDINAL PAVEMENT JOINT
- TRANSVERSE PAVEMENT JOINT
- EXPANSION JOINT

NOTES:

1. EPOXY COATED BARS SHALL BE USED FOR ALL PAVEMENT REINFORCEMENT BARS ON THE PROJECT.
2. BOX OUT AROUND MANHOLES IN ACCORDANCE WITH IDOT STANDARD 420101.



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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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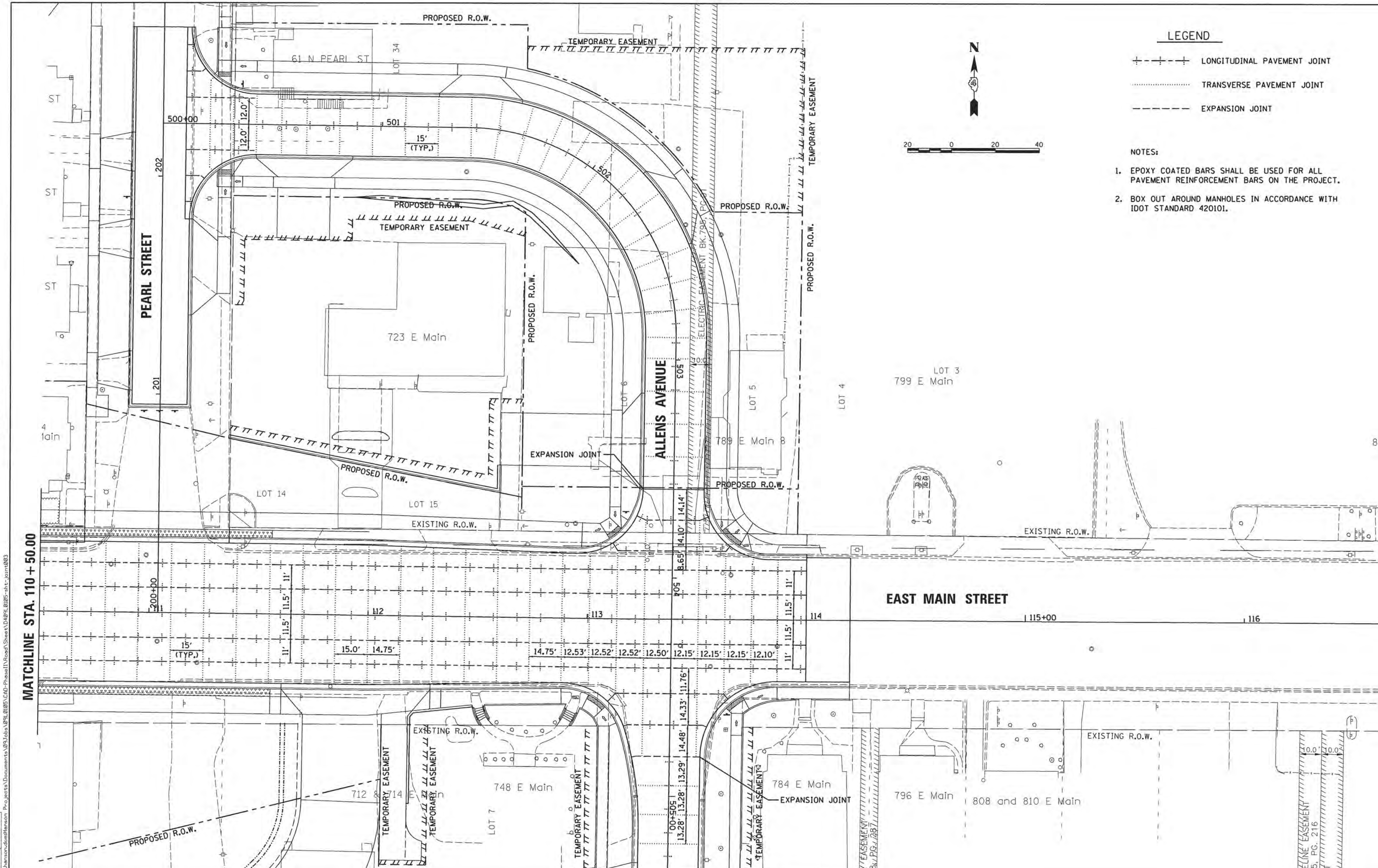
		CHECKED - MPB	REVISED -
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
JOINTING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 105+00.00 TO STA. 110+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	32
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

- LONGITUDINAL PAVEMENT JOINT
- TRANSVERSE PAVEMENT JOINT
- EXPANSION JOINT

NOTES:

1. EPOXY COATED BARS SHALL BE USED FOR ALL PAVEMENT REINFORCEMENT BARS ON THE PROJECT.
2. BOX OUT AROUND MANHOLES IN ACCORDANCE WITH IDOT STANDARD 420101.

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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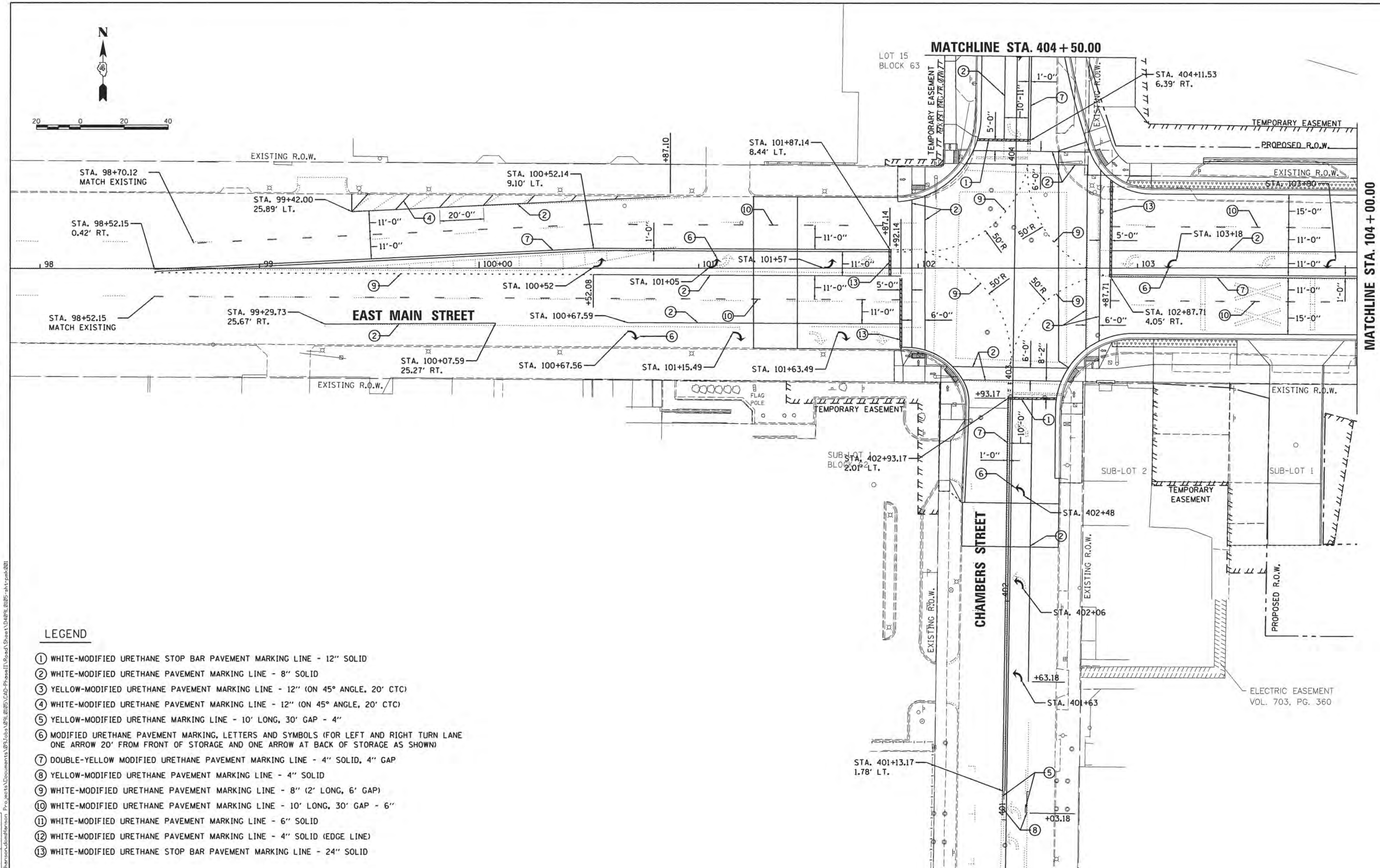
PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
JOINTING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 110+00.00 TO STA. 114+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	33
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND

1. WHITE-MODIFIED URETHANE STOP BAR PAVEMENT MARKING LINE - 12" SOLID
2. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 8" SOLID
3. YELLOW-MODIFIED URETHANE PAVEMENT MARKING LINE - 12" (ON 45° ANGLE, 20' CTC)
4. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 12" (ON 45° ANGLE, 20' CTC)
5. YELLOW-MODIFIED URETHANE MARKING LINE - 10' LONG, 30' GAP - 4"
6. MODIFIED URETHANE PAVEMENT MARKING, LETTERS AND SYMBOLS (FOR LEFT AND RIGHT TURN LANE ONE ARROW 20' FROM FRONT OF STORAGE AND ONE ARROW AT BACK OF STORAGE AS SHOWN)
7. DOUBLE-YELLOW MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID, 4" GAP
8. YELLOW-MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID
9. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 8" (2' LONG, 6' GAP)
10. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 10' LONG, 30' GAP - 6"
11. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 6" SOLID
12. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID (EDGE LINE)
13. WHITE-MODIFIED URETHANE STOP BAR PAVEMENT MARKING LINE - 24" SOLID

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PAVEMENT MARKING AND SIGNING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 98+52.15 TO STA. 104+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-CS	KNOX	216	34
	50VB	CONTRACT NO.89417		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

LEGEND

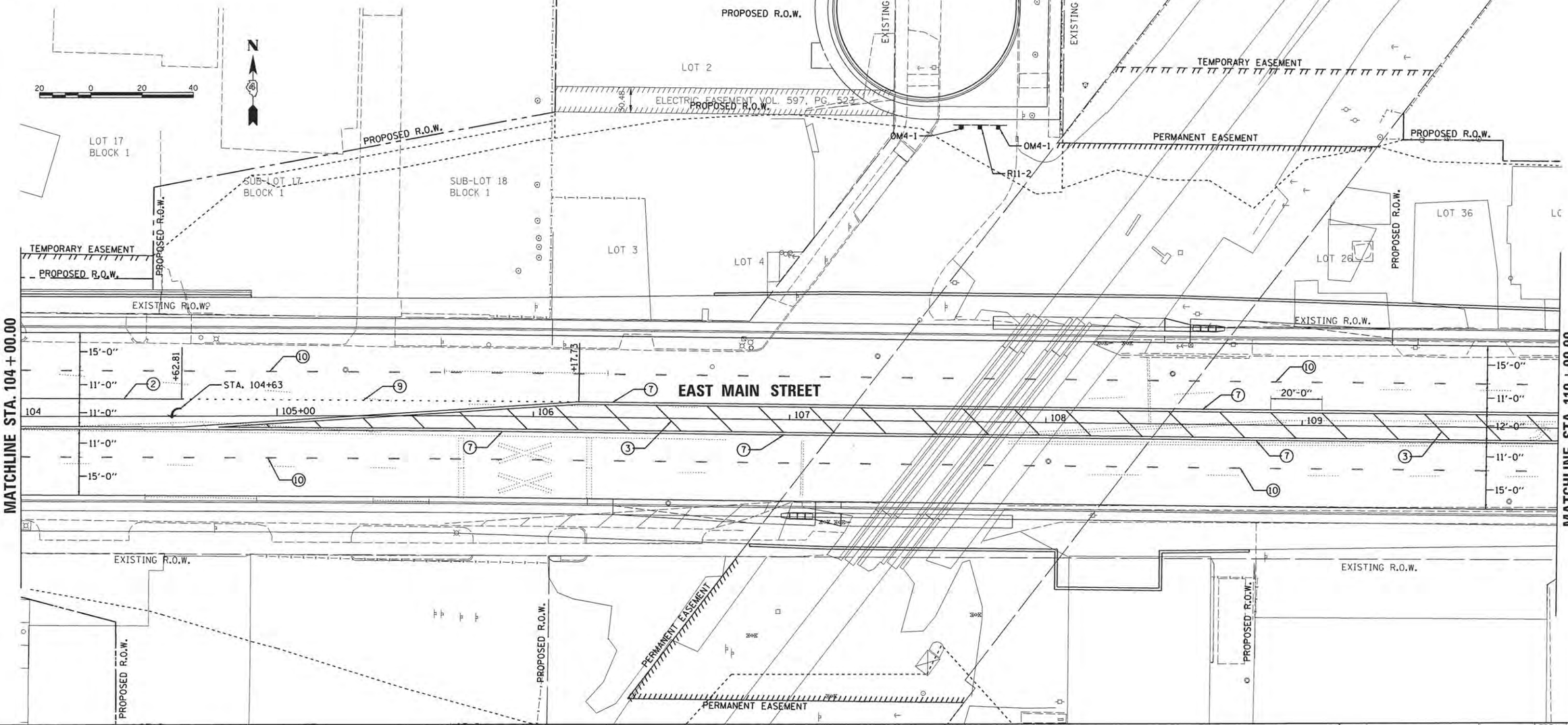
1. WHITE-MODIFIED URETHANE STOP BAR PAVEMENT MARKING LINE - 12" SOLID
2. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 8" SOLID
3. YELLOW-MODIFIED URETHANE PAVEMENT MARKING LINE - 12" (ON 45° ANGLE, 20' CTC)
4. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 12" (ON 45° ANGLE, 20' CTC)
5. YELLOW-MODIFIED URETHANE MARKING LINE - 10' LONG, 30' GAP - 4"
6. MODIFIED URETHANE PAVEMENT MARKING, LETTERS AND SYMBOLS (FOR LEFT AND RIGHT TURN LANE ONE ARROW 20' FROM FRONT OF STORAGE AND ONE ARROW AT BACK OF STORAGE AS SHOWN)
7. DOUBLE-YELLOW MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID, 4" GAP
8. YELLOW-MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID
9. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 8" (2' LONG, 6' GAP)
10. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 10' LONG, 30' GAP - 6"
11. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 6" SOLID
12. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID (EDGE LINE)
13. WHITE-MODIFIED URETHANE STOP BAR PAVEMENT MARKING LINE - 24" SOLID

NOTE:
PLACE W14-1 SIGN IN SOUTHWEST CORNER OF SUMNER/MATTHEWS STREET INTERSECTION.

W14-1
30"x30"

R11-2
48"x30"


OM4-1
18"x18"



LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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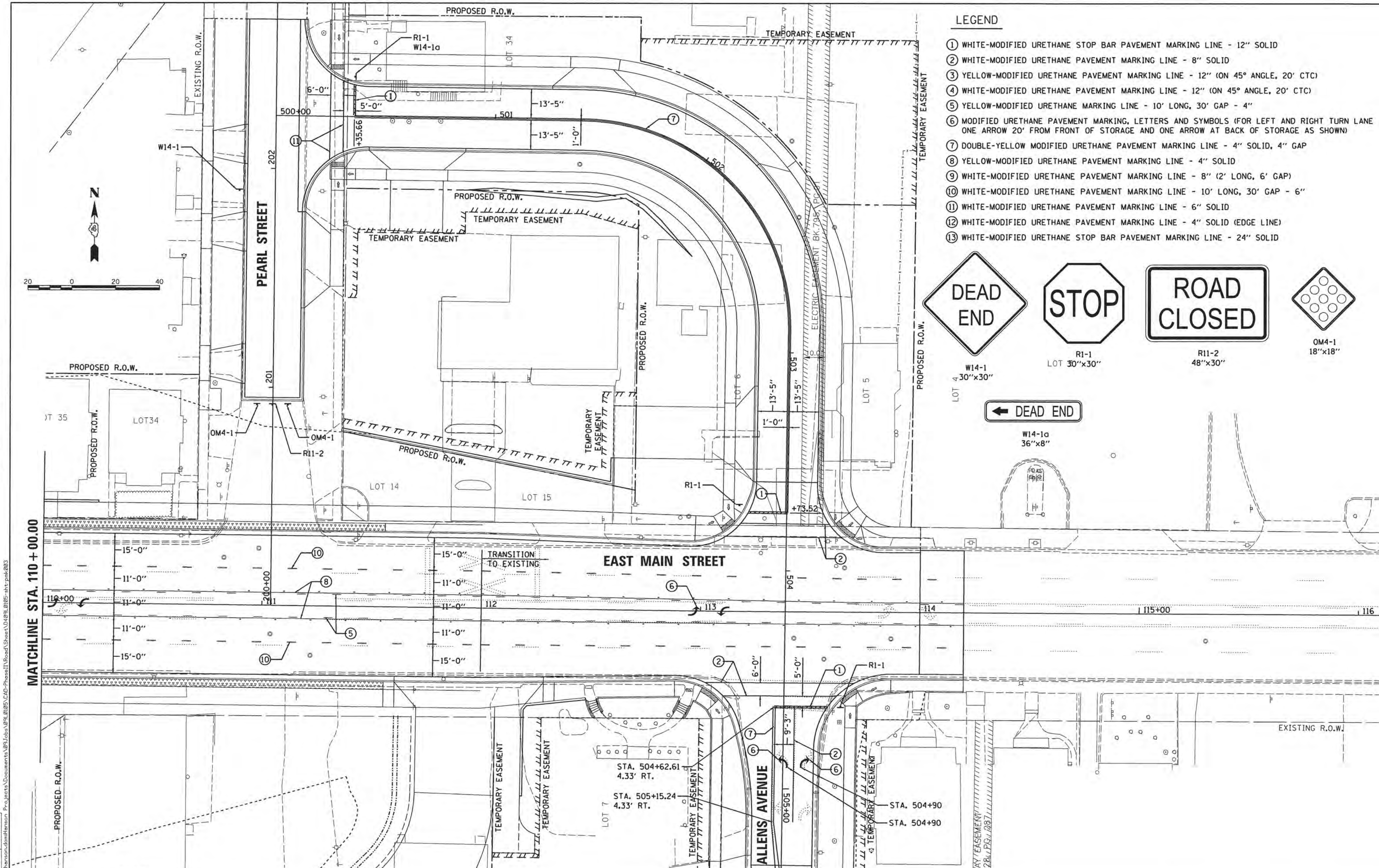
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PAVEMENT MARKING AND SIGNING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 104+00.00 TO STA. 110+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	35
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LAYOUT	RLA	2/11/14	
DRAWN	MGD	5/27/15	
REVIEWED	MPB	5/28/15	

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

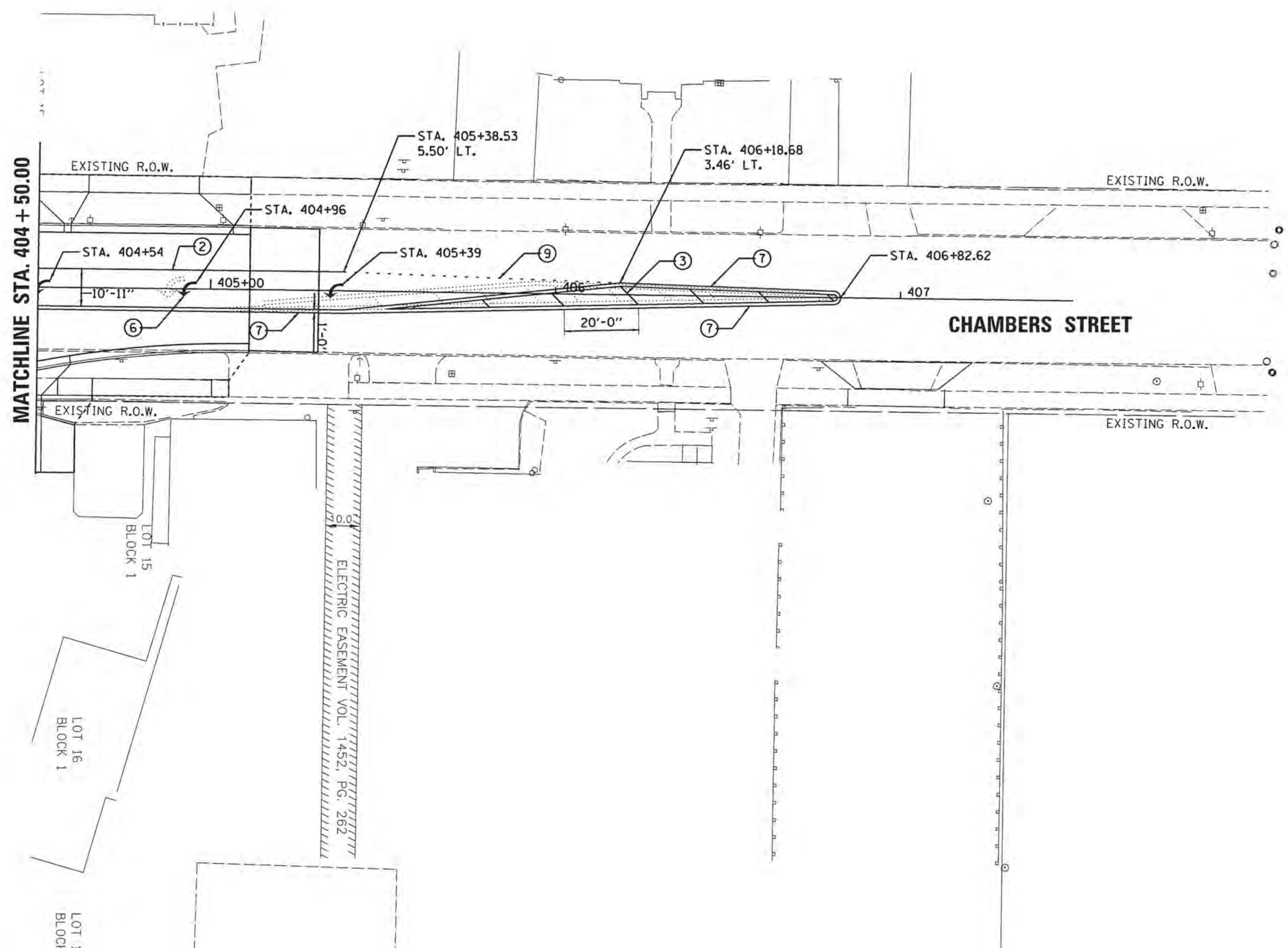
EAST MAIN STREET
PAVEMENT MARKING AND SIGNING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 110+00.00 TO STA. 114+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	36
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

1. WHITE-MODIFIED URETHANE STOP BAR PAVEMENT MARKING LINE - 12" SOLID
2. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 8" SOLID
3. YELLOW-MODIFIED URETHANE PAVEMENT MARKING LINE - 12" (ON 45° ANGLE, 20' CTC)
4. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 12" (ON 45° ANGLE, 20' CTC)
5. YELLOW-MODIFIED URETHANE MARKING LINE - 10' LONG, 30' GAP - 4"
6. MODIFIED URETHANE PAVEMENT MARKING, LETTERS AND SYMBOLS (FOR LEFT AND RIGHT TURN LANE ONE ARROW 20' FROM FRONT OF STORAGE AND ONE ARROW AT BACK OF STORAGE AS SHOWN)
7. DOUBLE-YELLOW MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID, 4" GAP
8. YELLOW-MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID
9. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 8" (2' LONG, 6' GAP)
10. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 10' LONG, 30' GAP - 6"
11. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 6" SOLID
12. WHITE-MODIFIED URETHANE PAVEMENT MARKING LINE - 4" SOLID (EDGE LINE)
13. WHITE-MODIFIED URETHANE STOP BAR PAVEMENT MARKING LINE - 24" SOLID



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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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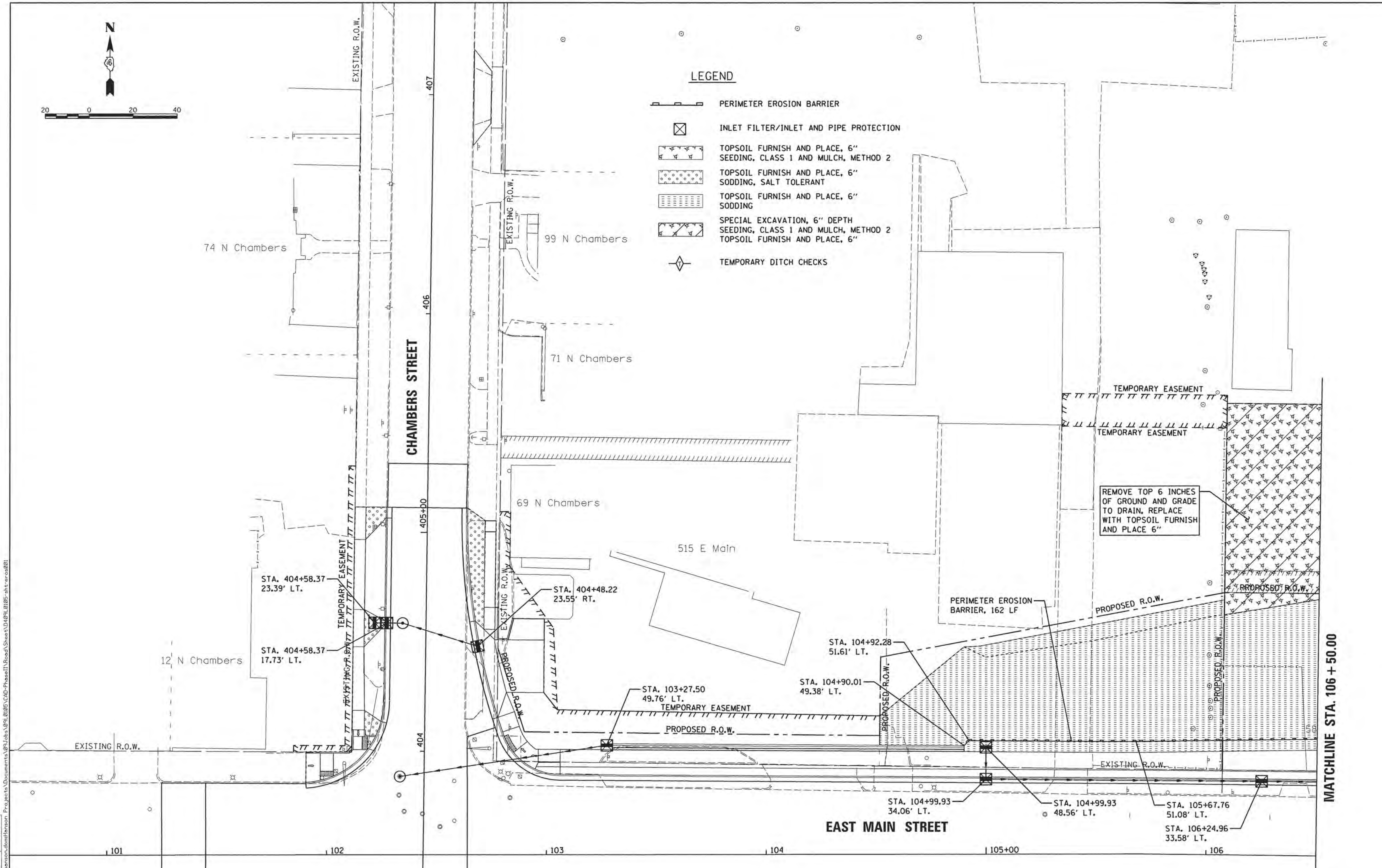
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CHAMBERS STREET
PAVEMENT MARKING AND SIGNING PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 110+00.00 TO STA. 114+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	37
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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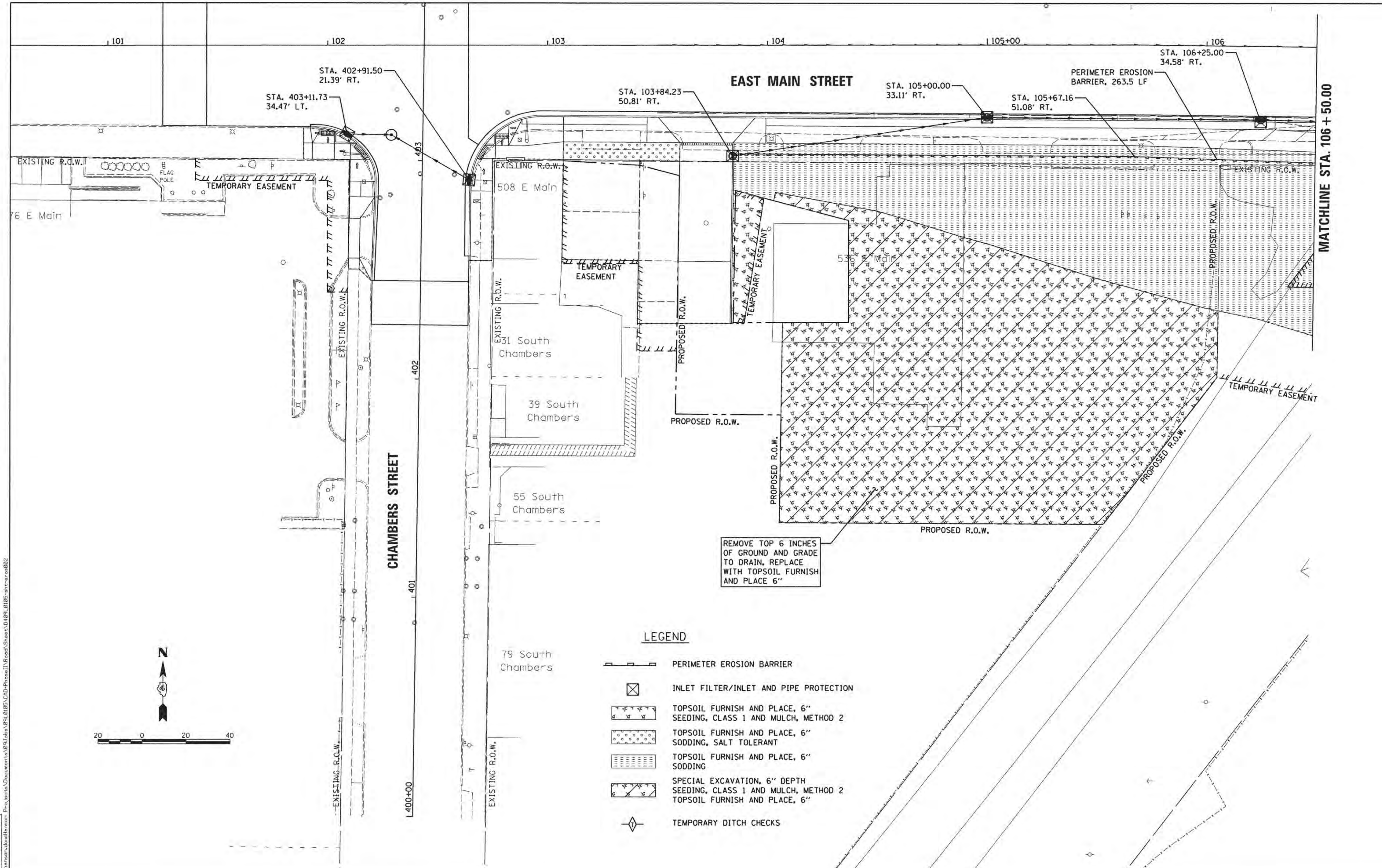
	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 101+45.00 TO STA. 106+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	38
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		


EAST MAIN STREET
CHAMBERS STREET
STA. 402+91.50 21.39' RT.
STA. 403+11.73 34.47' LT.
STA. 103+84.23 50.81' RT.
STA. 105+00.00 33.11' RT.
STA. 105+67.16 51.08' RT.
PERIMETER EROSION BARRIER, 263.5 LF
STA. 106+25.00 34.58' RT.
MATCHLINE STA. 106 + 50.00
EXISTING R.O.W.
PROPOSED R.O.W.
TEMPORARY EASEMENT
FLAG POLE
76 E Main
508 E Main
31 South Chambers
39 South Chambers
55 South Chambers
79 South Chambers
REMOVE TOP 6 INCHES OF GROUND AND GRADE TO DRAIN, REPLACE WITH TOPSOIL FURNISH AND PLACE 6"
LEGEND
PERIMETER EROSION BARRIER
INLET FILTER/INLET AND PIPE PROTECTION
TOPSOIL FURNISH AND PLACE, 6" SEEDING, CLASS 1 AND MULCH, METHOD 2
TOPSOIL FURNISH AND PLACE, 6" SODDING, SALT TOLERANT
TOPSOIL FURNISH AND PLACE, 6" SODDING
SPECIAL EXCAVATION, 6" DEPTH SEEDING, CLASS 1 AND MULCH, METHOD 2 TOPSOIL FURNISH AND PLACE, 6"
TEMPORARY DITCH CHECKS
N
20 0 20 40
HANSON
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LAYOUT RLA 2/11/14	FILE NAME = c:\pwise_work\do_not_delete\d0273754\D409L0105-sht-eros002.dgn	USER NAME = ander00846	DESIGNED - RLA
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REVIEWED MPB 5/28/15		PLOT DATE = 11/13/2015	CHECKED - MPB
			DATE - 9/9/2015

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 101+45.00 TO STA. 106+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	39
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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LEGEND

- PERIMETER EROSION BARRIER
- INLET FILTER/INLET AND PIPE PROTECTION
- TOPSOIL FURNISH AND PLACE, 6"
  SEEDING, CLASS 1 AND MULCH, METHOD 2
- TOPSOIL FURNISH AND PLACE, 6"
  SODDING, SALT TOLERANT
- TOPSOIL FURNISH AND PLACE, 6"
  SODDING
- SPECIAL EXCAVATION, 6" DEPTH
  SEEDING, CLASS 1 AND MULCH, METHOD 2
  TOPSOIL FURNISH AND PLACE, 6"
- TEMPORARY DITCH CHECKS

N

20 0 20 40

SUMNER STREET

EXISTING R.O.W.

77 SUMNER ST

63 SUMNER ST

47 SUMNER ST

62 SUMNER ST

REMOVE TOP 6 INCHES OF GROUND AND GRADE TO DRAIN, REPLACE WITH TOPSOIL FURNISH AND PLACE 6"

PROPOSED R.O.W.

STA. 107+65.30
129.22' LT.

TEMPORARY EASEMENT

PERMANENT EASEMENT

MATCHLINE STA. 106 + 50.00

MATCHLINE STA. 201 + 25.00

MATCHLINE STA. 112 + 50.00

EAST MAIN STREET

PEARL STREET

STA. 107+00.00
33.58' LT.

STA. 107+14.94
54.52' LT.

PERIMETER EROSION BARRIER, 117 LF

STA. 107+61.46
54.52' LT.

STA. 107+50.00
34.58' LT.

STA. 107+65.46
50.52' LT.

STA. 108+50.00
34.58' LT.

STA. 108+00.00
34.58' LT.

STA. 109+00.00
33.58' LT.

STA. 108+85.80
53.70' LT.

STA. 108+82.85
49.77' LT.

STA. 109+74.96
33.58' LT.

STA. 110+00.06
51.08' LT.

STA. 110+99.96
33.58' LT.

STA. 200+97.71
13.44' LT.

STA. 200+97.68
12.89' RT.

PERIMETER EROSION BARRIER, 369 LF

STA. 112+00.21
51.08' LT.

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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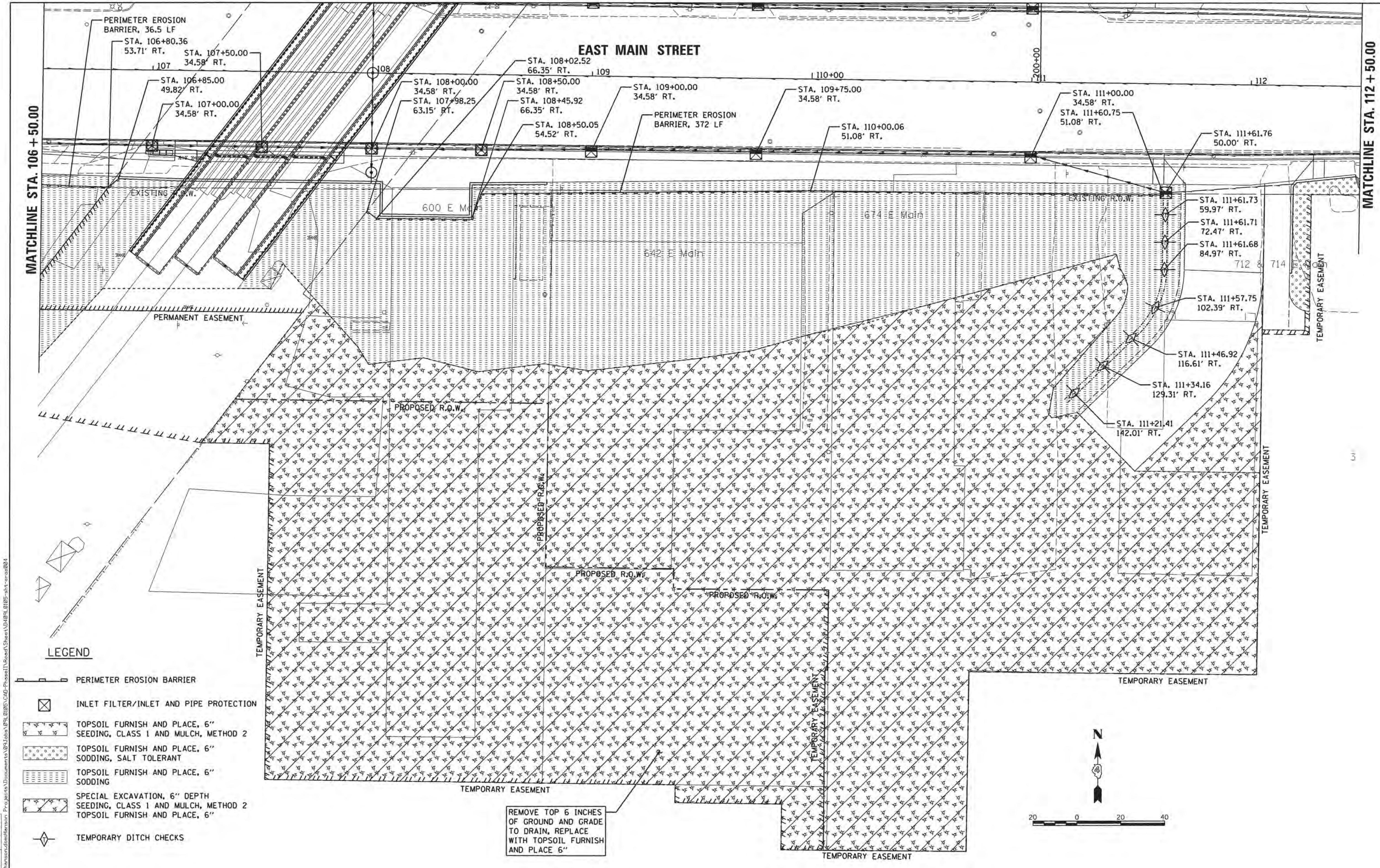
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 106+50.00 TO STA. 112+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	40
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		


EAST MAIN STREET
MATCHLINE STA. 106+50.00
MATCHLINE STA. 112+50.00
PERIMETER EROSION BARRIER, 36.5 LF
STA. 106+80.36 53.71' RT.
STA. 107+50.00 34.58' RT.
STA. 106+85.00 49.82' RT.
STA. 107+00.00 34.58' RT.
STA. 108+02.52 66.35' RT.
STA. 108+00.00 34.58' RT.
STA. 107+98.25 63.15' RT.
STA. 108+50.00 34.58' RT.
STA. 108+45.92 66.35' RT.
STA. 108+50.05 54.52' RT.
STA. 109+00.00 34.58' RT.
PERIMETER EROSION BARRIER, 372 LF
STA. 109+75.00 34.58' RT.
STA. 110+00.06 51.08' RT.
STA. 111+00.00 34.58' RT.
STA. 111+60.75 51.08' RT.
STA. 111+61.76 50.00' RT.
STA. 111+61.73 59.97' RT.
STA. 111+61.71 72.47' RT.
STA. 111+61.68 84.97' RT.
STA. 111+57.75 102.39' RT.
STA. 111+46.92 116.61' RT.
STA. 111+34.16 129.31' RT.
STA. 111+21.41 142.01' RT.
EXISTING R.O.W.
600 E Main
642 E Main
674 E Main
712 & 714 E Main
PERMANENT EASEMENT
PROPOSED R.O.W.
TEMPORARY EASEMENT
REMOVE TOP 6 INCHES OF GROUND AND GRADE TO DRAIN. REPLACE WITH TOPSOIL FURNISH AND PLACE 6"
LEGEND
PERIMETER EROSION BARRIER
INLET FILTER/INLET AND PIPE PROTECTION
TOPSOIL FURNISH AND PLACE, 6" SEEDING, CLASS 1 AND MULCH, METHOD 2
TOPSOIL FURNISH AND PLACE, 6" SODDING, SALT TOLERANT
TOPSOIL FURNISH AND PLACE, 6" SODDING
SPECIAL EXCAVATION, 6" DEPTH SEEDING, CLASS 1 AND MULCH, METHOD 2 TOPSOIL FURNISH AND PLACE, 6"
TEMPORARY DITCH CHECKS
N
20 0 20 40

LAYOUT	RLA	2/11/14	
DRAWN	MGD	5/27/15	
REVIEWED	MPB	5/28/15	

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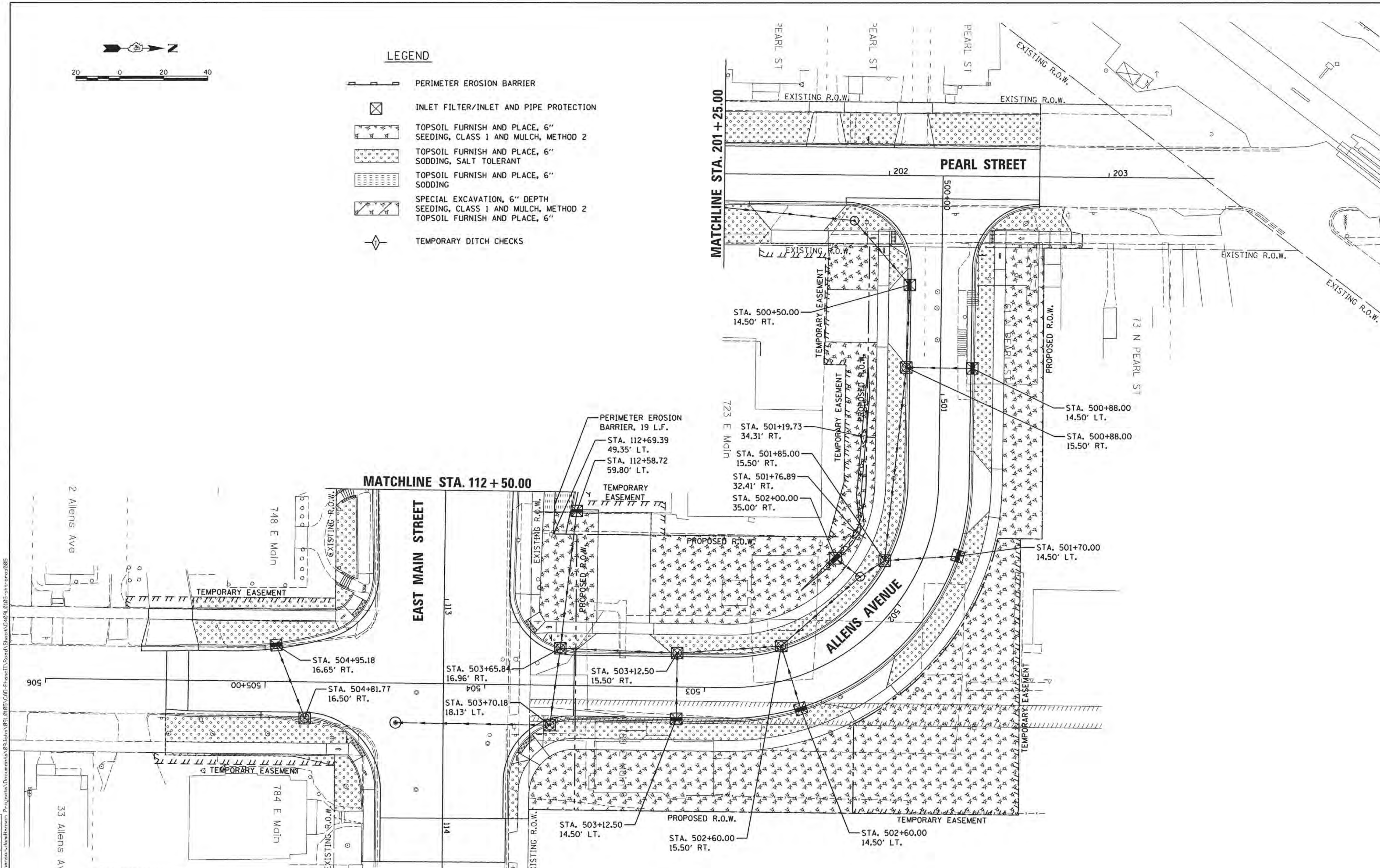
	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 106+50.00 TO STA. 112+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	41
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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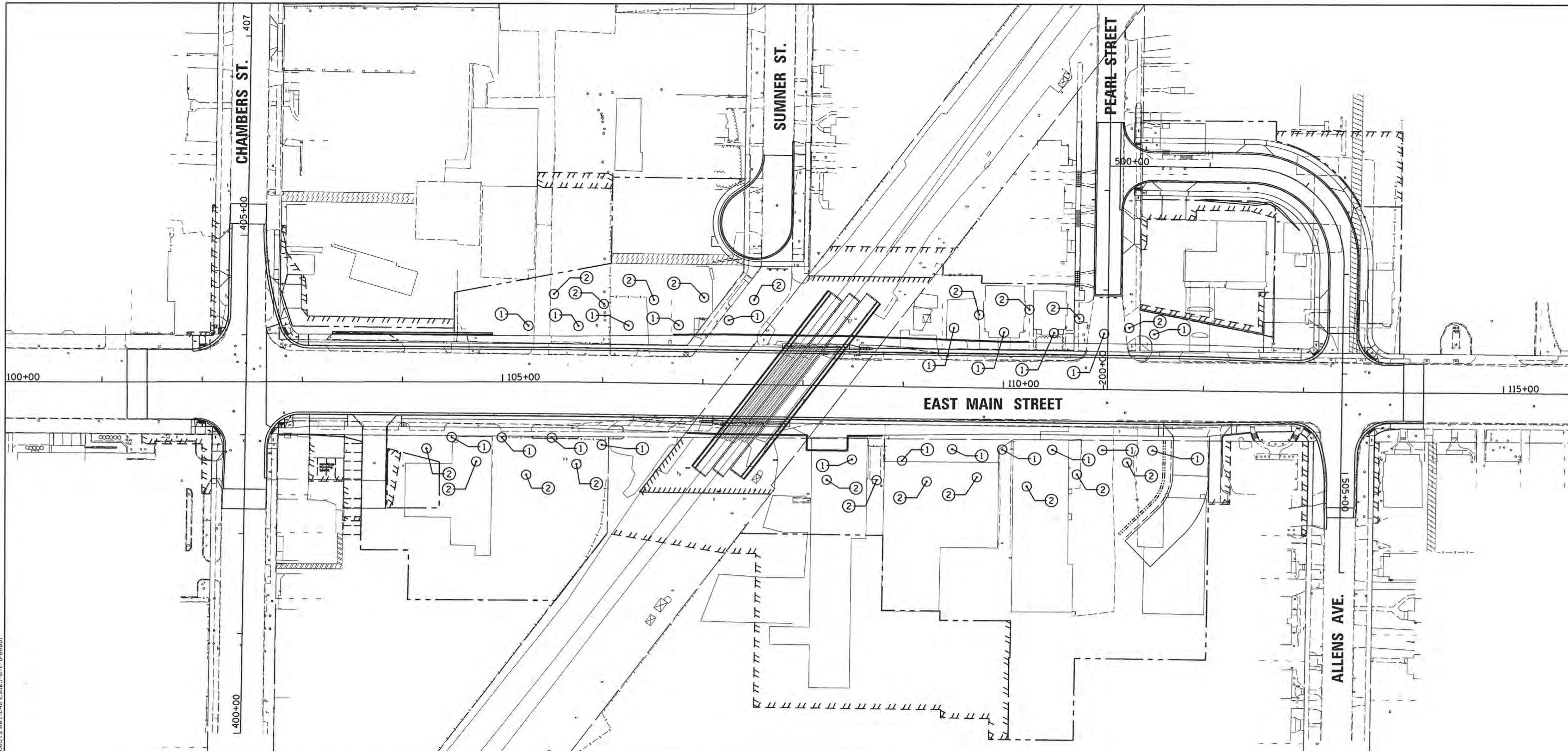
REVIEWED MPB 5/28/15		PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -	
			DATE - 9/9/2015	REVISED -	

EAST MAIN STREET EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 112+50.00 TO STA. 201+25.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	42
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED (B2001116)		
NO.	STATION	OFFSET
1	104+49.23	55.26' RT.
1	104+99.23	55.61' RT.
1	105+25.77	56.38' LT.
1	105+49.23	55.96' RT.
1	105+75.00	56.26' LT.
1	106+00.00	62.50' RT.
1	106+25.00	57.42' LT.
1	106+75.00	58.59' LT.
1	107+25.00	64.21' LT.
1	108+50.00	73.85' RT.
1	109+00.00	74.36' RT.

TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED (B2001116)		
NO.	STATION	OFFSET
1	109+50.00	61.95' RT.
1	109+50.00	59.66' LT.
1	110+00.00	61.59' RT.
1	110+00.00	56.08' LT.
1	110+50.00	61.23' RT.
1	110+50.00	56.08' LT.
1	111+00.00	60.88' RT.
1	111+00.00	56.08' LT.
1	111+50.00	60.52' RT.
1	111+50.00	56.08' LT.

TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED (B2004116)		
NO.	STATION	OFFSET
2	104+24.07	66.63' RT.
2	104+73.89	79.99' RT.
2	105+23.71	93.35' RT
2	105+51.21	88.16' LT.
2	105+75.00	82.48' RT.
2	106+00.00	78.75' LT.
2	106+50.00	83.53' LT.
2	107+00.00	86.68' LT.
2	107+50.00	84.94' LT.
2	108+25.00	94.77' RT.

TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED (B2004116)		
NO.	STATION	OFFSET
2	108+75.00	94.46' RT.
2	109+25.00	95.16' RT.
2	109+75.00	90.09' RT.
2	109+75.00	73.29' LT.
2	110+25.00	98.69' RT.
2	110+25.10	79.10' LT.
2	110+75.00	85.92' RT.
2	110+75.00	70.64' LT.
2	111+25.00	73.15' RT.
2	111+25.00	62.18' LT.

LEGEND

(1) TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED

(2) TREE, MALUS PRAIRIFIRE (PRAIRIFIRE CRABAPPLE), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED

N

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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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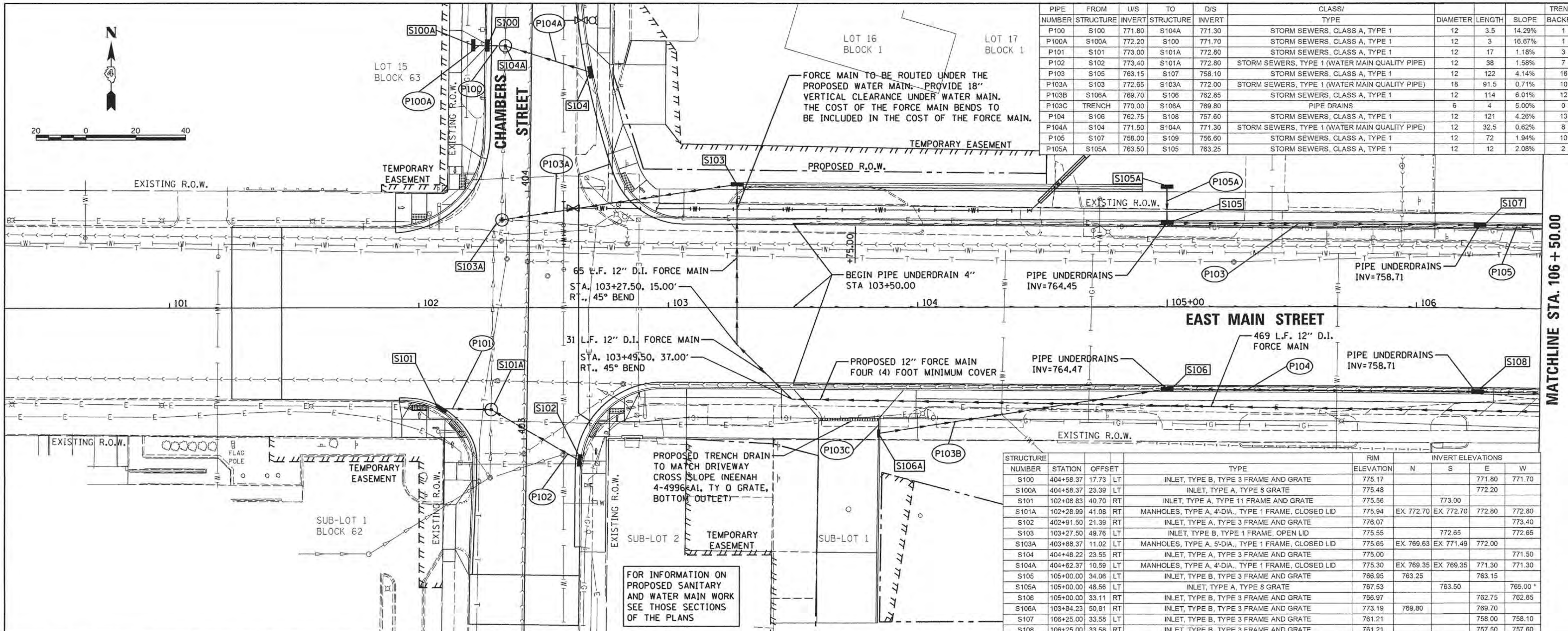
	PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
TREE REPLACEMENT PLAN

SCALE: 1"=50' | SHEET NO. | OF | SHEETS | STA. | TO STA.

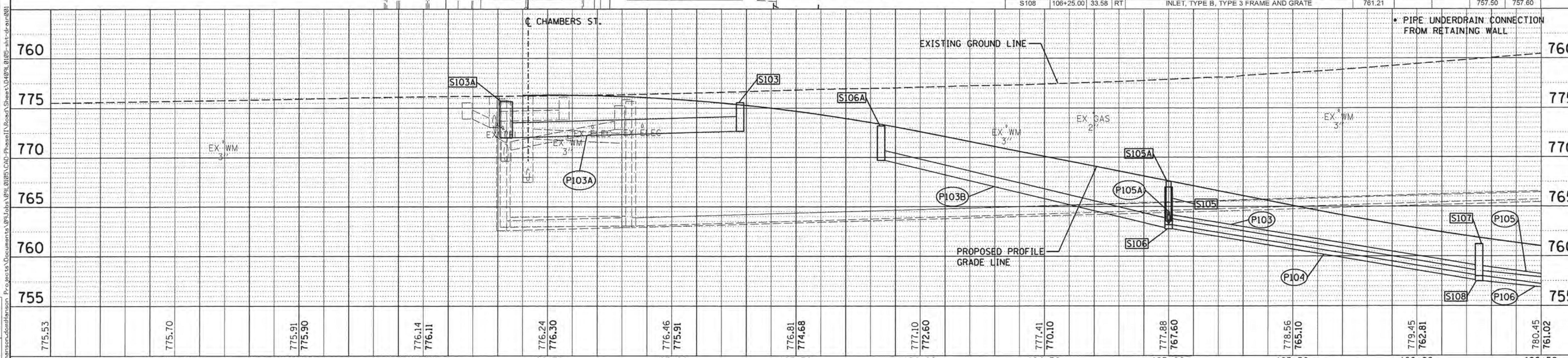
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	43
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PIPE NUMBER	FROM STRUCTURE	U/S INVERT	TO STRUCTURE	D/S INVERT	CLASS/ TYPE	DIAMETER	LENGTH	SLOPE	TRENCH BACKFILL
P100	S100	771.80	S104A	771.30	STORM SEWERS, CLASS A, TYPE 1	12	3.5	14.29%	1
P100A	S100A	772.20	S100	771.70	STORM SEWERS, CLASS A, TYPE 1	12	3	16.67%	1
P101	S101	773.00	S101A	772.80	STORM SEWERS, CLASS A, TYPE 1	12	17	1.18%	3
P102	S102	773.40	S101A	772.80	STORM SEWERS, TYPE 1 (WATER MAIN QUALITY PIPE)	12	38	1.58%	7
P103	S105	763.15	S107	758.10	STORM SEWERS, CLASS A, TYPE 1	12	122	4.14%	16
P103A	S103	772.65	S103A	772.00	STORM SEWERS, TYPE 1 (WATER MAIN QUALITY PIPE)	18	91.5	0.71%	10
P103B	S106A	769.70	S106	762.85	STORM SEWERS, CLASS A, TYPE 1	12	114	6.01%	12
P103C	TRENCH	770.00	S106A	769.80	PIPE DRAINS	6	4	5.00%	0
P104	S106	762.75	S108	757.60	STORM SEWERS, CLASS A, TYPE 1	12	121	4.26%	13
P104A	S104	771.50	S104A	771.30	STORM SEWERS, TYPE 1 (WATER MAIN QUALITY PIPE)	12	32.5	0.62%	8
P105	S107	758.00	S109	756.60	STORM SEWERS, CLASS A, TYPE 1	12	72	1.94%	10
P105A	S105A	763.50	S105	763.25	STORM SEWERS, CLASS A, TYPE 1	12	12	2.08%	2

STRUCTURE NUMBER	STATION	OFFSET		TYPE	RIM ELEVATION	INVERT ELEVATIONS N	S	E	W
S100	404+58.37	17.73	LT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	775.17			771.80	771.70
S100A	404+58.37	23.39	LT	INLET, TYPE A, TYPE 8 GRATE	775.48			772.20	
S101	102+08.83	40.70	RT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	775.56		773.00		
S101A	102+28.99	41.08	RT	MANHOLES, TYPE A, 4'-DIA., TYPE 1 FRAME, CLOSED LID	775.94	EX. 772.70	EX. 772.70	772.80	772.80
S102	402+91.50	21.39	RT	INLET, TYPE A, TYPE 3 FRAME AND GRATE	776.07				773.40
S103	103+27.50	49.76	LT	INLET, TYPE B, TYPE 1 FRAME, OPEN LID	775.55		772.65		772.65
S103A	403+88.37	11.02	LT	MANHOLES, TYPE A, 5'-DIA., TYPE 1 FRAME, CLOSED LID	775.65	EX. 769.63	EX. 771.49	772.00	
S104	404+48.22	23.55	RT	INLET, TYPE A, TYPE 3 FRAME AND GRATE	775.00				771.50
S104A	404+62.37	10.59	LT	MANHOLES, TYPE A, 4'-DIA., TYPE 1 FRAME, CLOSED LID	775.30	EX. 769.35	EX. 769.35	771.30	771.30
S105	105+00.00	34.06	LT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	766.95	763.25		763.15	
S105A	105+00.00	48.56	LT	INLET, TYPE A, TYPE 8 GRATE	767.53		763.50		765.00 *
S106	105+00.00	33.11	RT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	766.97			762.75	762.85
S106A	103+84.23	50.81	RT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	773.19	769.80		769.70	
S107	106+25.00	33.58	LT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	761.21			758.00	758.10
S108	106+25.00	33.58	RT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	761.21			757.50	757.60

* PIPE UNDERDRAIN CONNECTION FROM RETAINING WALL



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
DRAINAGE PLAN AND PROFILE

SCALE: 1"=20' | SHEET OF SHEETS | STA. 101+45.00 TO STA.105+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	44
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		

LAYOUT RLA 2/11/14 · DRAWN MPB 5/27/15 · REVIEWED MPB 5/28/15

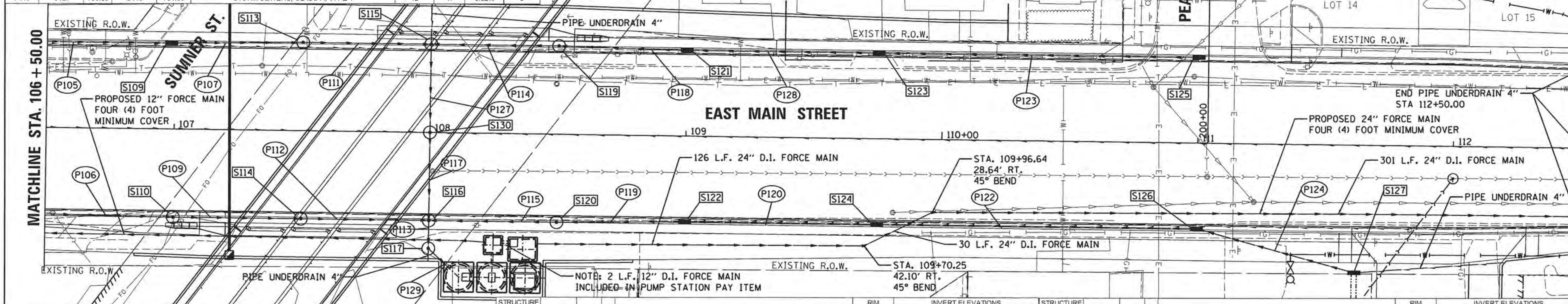
HANSON Hanson Professional Services Inc.

PLAN: NOTE BOOK NO. — SURVEYED, PLOTTED, ALIGNMENT CHECKED, R/W OF WAY CHECKED, CADD FILE NAME — BY — DATE

PROFILE: NOTE BOOK NO. — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTAT'NS CHK'D — BY — DATE

PIPE NUMBER	FROM STRUCTURE	U/S INVERT	TO STRUCTURE	D/S INVERT	CLASS/ TYPE	DIAMETER	LENGTH	SLOPE	TRENCH BACKFILL
P106	S108	757.50	S110	755.60	STORM SEWERS, CLASS A, TYPE 1	12	71	2.68%	9
P107	S109	756.50	S113	755.10	STORM SEWERS, CLASS A, TYPE 1	12	48.5	2.89%	6
P109	S110	755.50	S114	754.80	STORM SEWERS, CLASS A, TYPE 1	15	46	1.52%	6
P111	S113	755.00	S115	754.60	STORM SEWERS, CLASS A, TYPE 1	15	46	0.87%	6
P112	S114	754.70	S116	753.20	STORM SEWERS, CLASS A, TYPE 1	15	46	3.26%	8
P113	S116	753.10	S117	752.90	STORM SEWERS, CLASS A, TYPE 2	24	7	2.86%	2
P114	S119	754.20	S115	754.00	STORM SEWERS, CLASS A, TYPE 1	15	46	0.43%	7
P115	S120	753.70	S116	753.20	STORM SEWERS, CLASS A, TYPE 2	15	46	1.09%	10
P117	S130	753.50	S116	753.20	STORM SEWERS, CLASS A, TYPE 2	18	30.5	0.98%	8
P118	S121	756.00	S119	754.30	STORM SEWERS, CLASS A, TYPE 1	12	47	3.62%	6

PIPE NUMBER	FROM STRUCTURE	U/S INVERT	TO STRUCTURE	D/S INVERT	CLASS/ TYPE	DIAMETER	LENGTH	SLOPE	TRENCH BACKFILL
P119	S122	755.50	S120	753.80	STORM SEWERS, CLASS A, TYPE 1	12	46	3.70%	7
P120	S124	757.50	S122	755.60	STORM SEWERS, CLASS A, TYPE 1	12	71	2.68%	9
P122	S126	763.50	S124	757.60	STORM SEWERS, CLASS A, TYPE 1	12	121	4.88%	16
P123	S125	764.00	S123	758.10	STORM SEWERS, CLASS A, TYPE 1	12	65	9.08%	9
P124	S127	766.90	S126	763.60	STORM SEWERS, TYPE 2 (WATER MAIN QUALITY PIPE)	12	60.5	5.45%	8
P127	S115	753.90	S130	753.60	STORM SEWERS, CLASS A, TYPE 2	18	30.5	0.98%	4
P128	S123	758.00	S121	756.10	STORM SEWERS, CLASS A, TYPE 1	12	30.5	6.23%	4
P129	S117	752.80	Pump Sta	752.60	STORM SEWERS, CLASS A, TYPE 2	24	9.5	2.11%	1

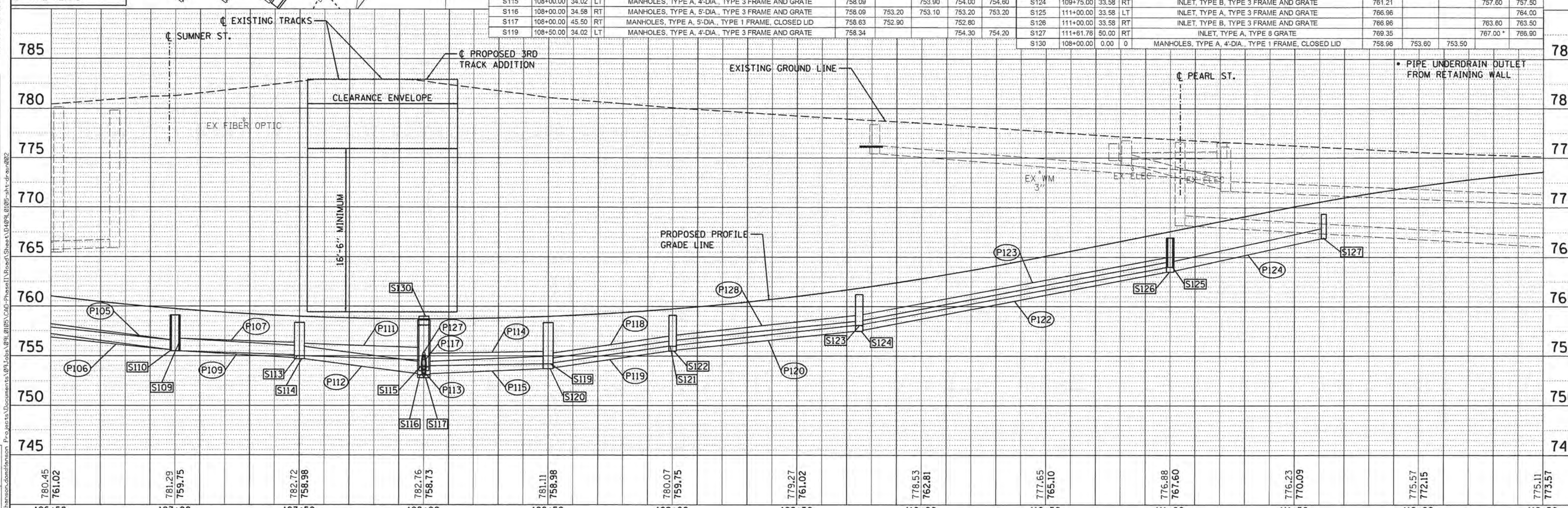


FOR INFORMATION ON PROPOSED SANITARY AND WATER MAIN WORK SEE THOSE SECTIONS OF THE PLANS

STRUCTURE NUMBER	STATION	OFFSET		TYPE	RIM ELEVATION	INVERT ELEVATIONS N	S	E	W
S109	107+00.00	33.58	LT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	759.11			756.50	756.60
S110	107+00.00	34.58	RT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	759.11			755.50	755.60
S113	107+50.00	34.58	LT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	758.34			755.00	755.10
S114	107+50.00	34.02	RT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	758.34			754.70	754.80
S115	108+00.00	34.02	LT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	758.09		753.90	754.00	754.60
S116	108+00.00	34.58	RT	MANHOLES, TYPE A, 5'-DIA., TYPE 3 FRAME AND GRATE	758.09	753.20	753.10	753.20	753.20
S117	108+00.00	45.50	RT	MANHOLES, TYPE A, 5'-DIA., TYPE 1 FRAME, CLOSED LID	758.63	752.90		752.80	
S119	108+50.00	34.02	LT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	758.34			754.30	754.20

STRUCTURE NUMBER	STATION	OFFSET		TYPE	RIM ELEVATION	INVERT ELEVATIONS N	S	E	W
S120	108+50.00	34.58	RT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	758.34			753.80	753.70
S121	109+00.00	33.58	LT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	759.11			756.10	756.00
S122	109+00.00	33.58	RT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	759.11			755.60	755.50
S123	109+75.00	33.58	LT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	761.21			758.10	758.00
S124	109+75.00	33.58	RT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	761.21			757.60	757.50
S125	111+00.00	33.58	LT	INLET, TYPE A, TYPE 3 FRAME AND GRATE	766.96				764.00
S126	111+00.00	33.58	RT	INLET, TYPE B, TYPE 3 FRAME AND GRATE	766.96			763.60	763.50
S127	111+61.76	50.00	RT	INLET, TYPE A, TYPE 8 GRATE	769.35			767.00 *	766.90
S130	108+00.00	0.00	0	MANHOLES, TYPE A, 4'-DIA., TYPE 1 FRAME, CLOSED LID	758.98	753.60	753.50		

* PIPE UNDERDRAIN OUTLET FROM RETAINING WALL



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

PROFILE | NOTE BOOK NO. | SURVEYED | PLOTTED | GRADES CHECKED | B.M. NOTED | STRUCTURE NOTATIONS CHKD | BY | DATE

HANSON
Hanson Professional Services Inc.

LAYOUT	RLA	2/11/14
DRAWN	MPB	5/27/15
REVIEWED	MPB	5/28/15

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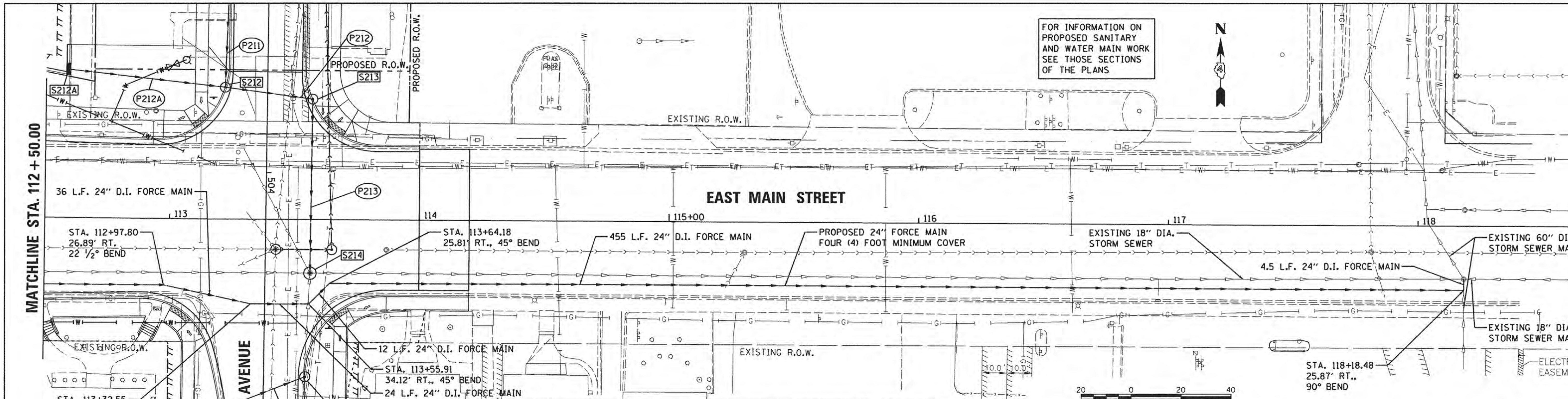
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
DRAINAGE PLAN AND PROFILE

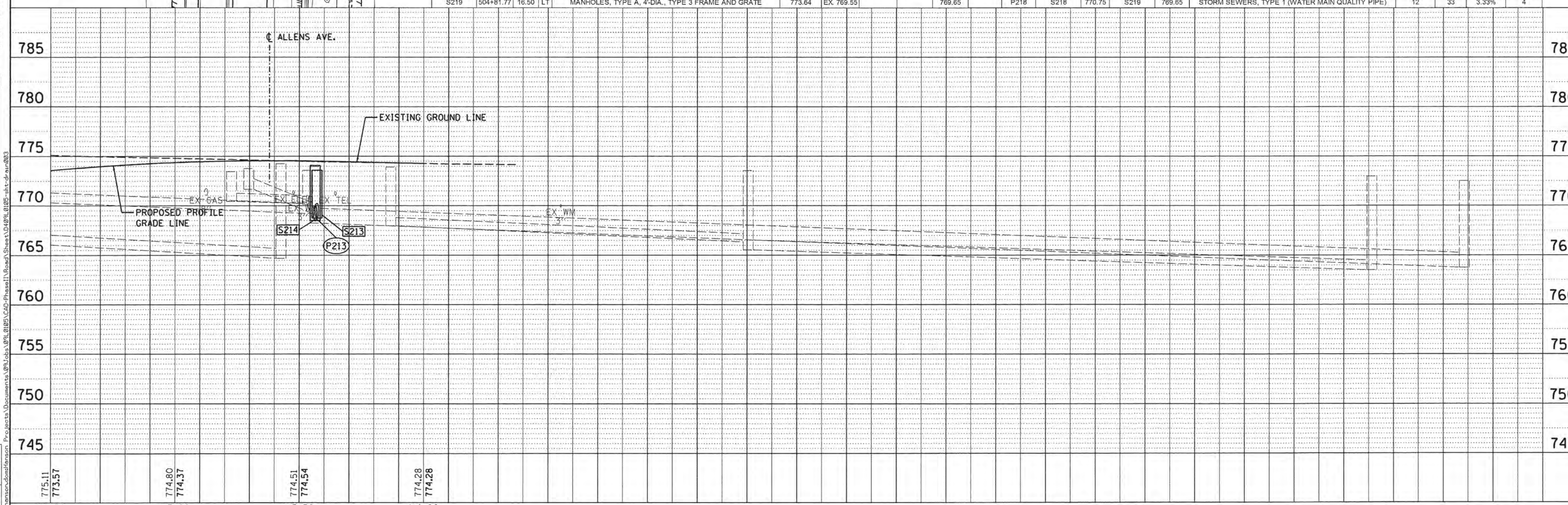
SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 105+00.00 TO STA. 111+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	45
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		



STRUCTURE NUMBER	STATION	OFFSET		TYPE	RIM ELEVATION	INVERT ELEVATIONS N	S	E	W
S212	503+65.84	16.96	RT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	773.50	769.10		769.00	770.40
S212A	112+58.72	59.80	LT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	775.75			772.25	
S213	503+70.18	18.13	LT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	773.60		768.75		768.85
S214	113+56.35	21.72	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 1 FRAME, CLOSED LID	774.08	768.50	EX. 768.23	EX. 768.42	EX. 769.20
S218	504+95.18	16.65	RT	INLET, TYPE A, TYPE 3 FRAME AND GRATE	773.57			770.75	
S219	504+81.77	16.50	LT	MANHOLES, TYPE A, 4'-DIA., TYPE 3 FRAME AND GRATE	773.64	EX. 769.55			769.65

PIPE NUMBER	FROM STRUCTURE	U/S INVERT	TO STRUCTURE	D/S INVERT	CLASS/ TYPE	DIAMETER	LENGTH	SLOPE	TRENCH BACKFILL
P211	S210	769.30	S212	769.10	STORM SEWERS, CLASS A, TYPE 1	15	49	0.41%	8
P212	S212	769.00	S213	768.85	STORM SEWERS, CLASS A, TYPE 2	15	31.5	0.48%	7
P212A	S212A	772.25	S212	770.40	STORM SEWERS, CLASS A, TYPE 1	12	60.5	3.06%	8
P213	S213	768.75	S214	768.50	STORM SEWERS, TYPE 2 (WATER MAIN QUALITY PIPE)	18	66	0.38%	19
P218	S218	770.75	S219	769.65	STORM SEWERS, TYPE 1 (WATER MAIN QUALITY PIPE)	12	33	3.33%	4



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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
DRAINAGE PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 111+00.00 TO STA. 114+00.00

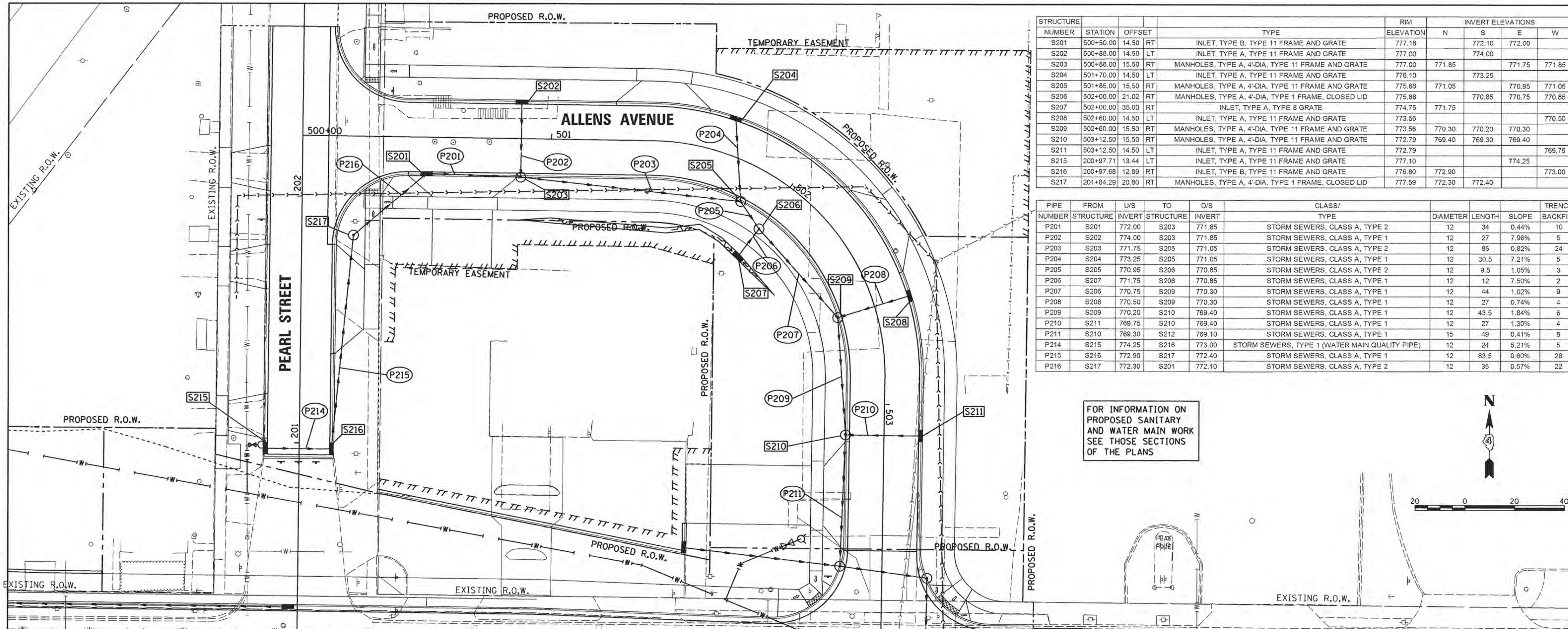
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	46
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

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

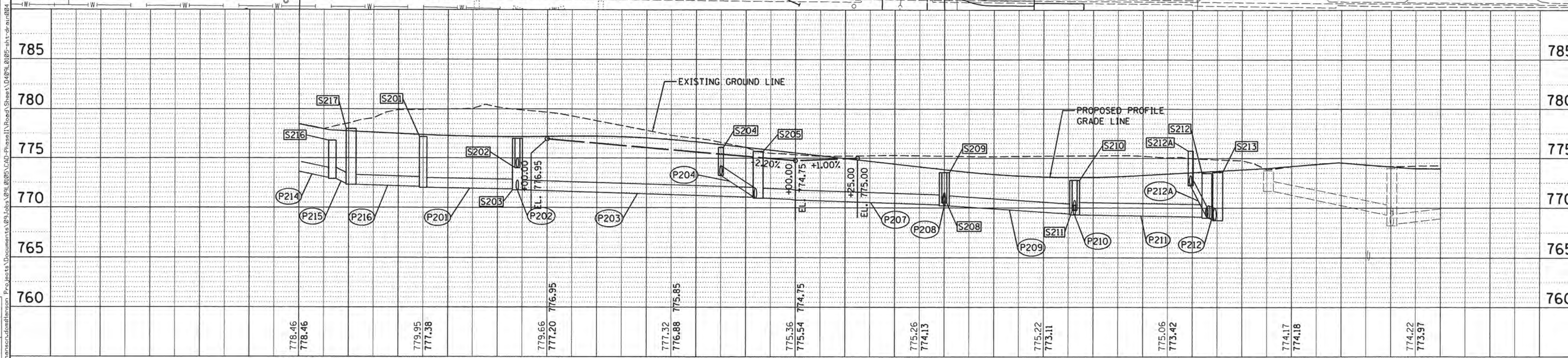
PROFILE | NOTE BOOK NO. | SURVEYED | PLOTTED | GRADES CHECKED | BM. NOTED | STRUCTURE NOTAT'NS CHK'D | BY | DATE

LAYOUT RLA 2/11/14
DRAWN MPB 5/27/15
REVIEWED MPB 5/28/15



STRUCTURE NUMBER	STATION	OFFSET		TYPE	RIM ELEVATION	INVERT ELEVATIONS N	S	E	W
S201	500+50.00	14.50	RT	INLET, TYPE B, TYPE 11 FRAME AND GRATE	777.18		772.10	772.00	
S202	500+88.00	14.50	LT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	777.00		774.00		
S203	500+88.00	15.50	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 11 FRAME AND GRATE	777.00	771.85		771.75	771.85
S204	501+70.00	14.50	LT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	776.10		773.25		
S205	501+85.00	15.50	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 11 FRAME AND GRATE	775.68	771.05		770.95	771.05
S206	502+00.00	21.02	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 1 FRAME, CLOSED LID	775.88		770.85	770.75	770.85
S207	502+00.00	35.00	RT	INLET, TYPE A, TYPE 8 GRATE	774.75	771.75			
S208	502+60.00	14.50	LT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	773.56				770.50
S209	502+60.00	15.50	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 11 FRAME AND GRATE	773.56	770.30	770.20	770.30	
S210	503+12.50	15.50	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 11 FRAME AND GRATE	772.79	769.40	769.30	769.40	
S211	503+12.50	14.50	LT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	772.79				769.75
S215	200+97.71	13.44	LT	INLET, TYPE A, TYPE 11 FRAME AND GRATE	777.10			774.25	
S216	200+97.68	12.89	RT	INLET, TYPE B, TYPE 11 FRAME AND GRATE	776.80	772.90			773.00
S217	201+84.29	20.80	RT	MANHOLES, TYPE A, 4'-DIA, TYPE 1 FRAME, CLOSED LID	777.59	772.30	772.40		

PIPE NUMBER	FROM STRUCTURE	U/S INVERT	TO STRUCTURE	D/S INVERT	CLASS/ TYPE	DIAMETER	LENGTH	SLOPE	TRENCH BACKFILL
P201	S201	772.00	S203	771.85	STORM SEWERS, CLASS A, TYPE 2	12	34	0.44%	10
P202	S202	774.00	S203	771.85	STORM SEWERS, CLASS A, TYPE 1	12	27	7.96%	5
P203	S203	771.75	S205	771.05	STORM SEWERS, CLASS A, TYPE 2	12	85	0.82%	24
P204	S204	773.25	S205	771.05	STORM SEWERS, CLASS A, TYPE 1	12	30.5	7.21%	5
P205	S205	770.95	S206	770.85	STORM SEWERS, CLASS A, TYPE 2	12	9.5	1.05%	3
P206	S207	771.75	S206	770.85	STORM SEWERS, CLASS A, TYPE 1	12	12	7.50%	2
P207	S206	770.75	S209	770.30	STORM SEWERS, CLASS A, TYPE 1	12	44	1.02%	9
P208	S208	770.50	S209	770.30	STORM SEWERS, CLASS A, TYPE 1	12	27	0.74%	4
P209	S209	770.20	S210	769.40	STORM SEWERS, CLASS A, TYPE 1	12	43.5	1.84%	6
P210	S211	769.75	S210	769.40	STORM SEWERS, CLASS A, TYPE 1	12	27	1.30%	4
P211	S210	769.30	S212	769.10	STORM SEWERS, CLASS A, TYPE 1	15	49	0.41%	8
P214	S215	774.25	S216	773.00	STORM SEWERS, TYPE 1 (WATER MAIN QUALITY PIPE)	12	24	5.21%	5
P215	S216	772.90	S217	772.40	STORM SEWERS, CLASS A, TYPE 1	12	83.5	0.60%	28
P216	S217	772.30	S201	772.10	STORM SEWERS, CLASS A, TYPE 2	12	35	0.57%	22



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALLENS AVENUE
DRAINAGE PLAN AND PROFILE

SCALE: 1"=20' | SHEET OF SHEETS | STA. 402+70.00 TO STA. 405+05.83

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	47
	50VB	CONTRACT NO. 89417		
		ILLINOIS FED. AID PROJECT		

LAYOUT	RLA	2/11/14
DRAWN	MPB	5/27/15
REVIEWED	MPB	5/28/15

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK NO.

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK NO.

GENERAL NOTES:

1. FINAL SITE GRADING SHALL OCCUR ONLY AFTER ALL IMPROVEMENTS HAVE BEEN COMPLETED.
2. THERE ARE THREE (3) DRAINAGE STRUCTURES, NO. 1. EACH IS IDENTICAL WITH EXCEPTION OF THE INVERTS, HATCHES, AND THE PIPES ENTERING AND EXITING THEM. THEY WILL BE BID PER EACH.

EXCAVATION AND BACKFILL NOTES:

1. THE CONTRACTOR SHALL SUBMIT AN EXCAVATION PLAN SEALED BY A PROFESSIONAL ENGINEER PRIOR TO COMMENCING WORK.
2. ALL EXCAVATION, SHORING, AGGREGATE OR CONCRETE BASE, CONCRETE PRECAST MANHOLE SECTIONS, FLAT SLAB TOP, ACCESS HATCHES, LOCKING MECHANISM, MASTIC, SEALANT, WATERPROOFING GROUT, AND BACKFILL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DRAINAGE STRUCTURES, NO. 1.
3. THE DRAINAGE STRUCTURE SHALL BE CHECKED AFTER THE INSTALLATION OF EACH SECTION TO ENSURE A TRUE VERTICAL INSTALLATION. IF THE ALIGNMENT IS OFF, THE CONTRACTOR SHALL TAKE CORRECTIVE ACTION TO SHIM THE STRUCTURE BACK INTO LEVEL.

DRAINAGE STRUCTURE PIPE CONNECTION NOTES:

1. THE THREE DRAINAGE STRUCTURES, NO. 1 SHALL BE CONNECTED BY 36" DIAMETER CLASS 52 DUCTILE IRON PIPE.
2. ALL MATERIAL AND LABOR ASSOCIATED WITH EXCAVATING FOR AND INSTALLING THE 36" DIAMETER PIPE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR STORM SEWER CONNECTION.

PUMPING STATION NOTES:

1. THE VALVE VAULT, PUMPS, PUMP BASES, RAILS AND LIFTING CHAINS SHALL ALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PUMPING STATION.
2. ALL PIPING, FITTINGS, VALVES AND PIPE SUPPORT BRACKETS FROM THE PUMP BASE, THROUGH THE VALVE VAULT TO TWO FEET OUTSIDE THE VALVE VAULT SHALL BE PAID FOR UNDER PUMP STATION MECHANICAL WORK.
3. ALL VALVES AND FITTINGS IN THE VALVE VAULT SHALL BE SUPPORTED ON STEEL PIPE SUPPORTS.
4. THE 2" SCHEDULE 40 DRAIN AND CHECK VALVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PUMP STATION MECHANICAL WORK.

FORCEMAIN NOTES:

1. THE FORCEMAIN SHALL BE DUCTILE IRON CLASS 52 PIPE CONFORMING TO AWWA C-150 WITH PUSH ON JOINTS.
2. FITTINGS SHALL BE DUCTILE IRON COMPACT MECHANICAL JOINT CONFORMING TO AWWA C-153. ALL FITTING SHALL USE LOCKING GLANDS IN LIEU OF STANDARD GLANDS.
3. THE FORCEMAIN SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH SECTION 41 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.
4. THE FORCEMAIN SHALL UTILIZE A GRANULAR BEDDING, HAUNCHING AND INITIAL BACKFILL WHICH WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE FORCEMAIN.
5. FORCEMAIN SHALL INCLUDE ALL EFFORTS OF INSTALLATION INCLUDING EXCAVATION, INSTALLATION, INITIAL BEDDING, HAUNCHING AND INITIAL BACKFILL, FITTINGS, CONNECTIONS, AND TESTING. WHERE INDICATED, FINAL GRANULAR BACKFILL WILL BE PAID FOR SEPARATELY.
5. THE FORCEMAIN SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR DUCTILE IRON WATER MAIN OF THE SIZE INDICATED ON THE PLANS.

DRAINAGE STRUCTURES AND VALVE VAULT NOTES:

1. THE ACCESS HATCHES CAST INTO THE LIDS OF DRAINAGE STRUCTURES, NO. 1 SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DRAINAGE STRUCTURES, NO. 1.
2. THE VALVE VAULTS AND ASSOCIATED EXCAVATION AND BACKFILL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PUMPING STATION.
3. THE VALVE VAULTS SHALL CONFORM TO ASTM C-913. THE STRUCTURE SHALL BE DESIGNED FOR EARTH LOADS AND HS-20 LIVE LOAD FOR VEHICULAR TRAFFIC.
4. THE PRECAST LID FOR DRAINAGE STRUCTURES, NO. 1 SHALL BE SEALED TO THE TOP RING SECTION WITH A DOUBLE ROW OF BUTYL MASTIC. THE LID SHALL HAVE A CAST IN PLACE ALUMINUM ACCESS FRAME AND HATCH. THE HATCH SHALL BE HINGED WITH A FLUSH LOCKING MECHANISM 36" X 36" MINIMUM CLEAR OPENING. THE TOP OF THE HATCH SHALL BE A MINIMUM 1/4" ALUMINUM DIAMOND TREAD PLATE.
5. THE PRECAST CONCRETE LID FOR DRAINAGE STRUCTURES, NO. 1 SHALL BE SEALED TO THE TOP BARREL SECTION WITH TWO ROWS OF BUTYL MASTIC. THE LID SHALL HAVE A FABRICATED GALVANIZED STEEL FRAME AND HATCH SYSTEM PER THE PLANS. ORIENTATION OF THE HATCH SYSTEM SHALL BE COORDINATED WITH THE PUMP MANUFACTURER.
6. AFTER INSTALLATION IS COMPLETE, IF THERE ARE WATER LEAKS AT JOINTS, THE CONTRACTOR SHALL WATERPROOF THE LEAKS USING DRILLED PORTS AROUND THE LEAK AND A HYDROPHILIC GROUT. IF REQUIRED, IT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DRAINAGE STRUCTURES, NO. 1.
7. ALL PENETRATIONS THROUGH THE WALLS OF THE DRAINAGE STRUCTURES SHALL BE RUBBER GASKETED CONNECTIONS CAST INTO THE CONCRETE STRUCTURE SUCH AS A-LOK, PRESS SEAL OR APPROVED EQUAL. CONTRACTOR SHALL ENSURE PENETRATIONS ARE LARGE ENOUGH TO ACCOMODATE BOTH THE PIPE AND THE GASKET.
8. CONTRACTOR SHALL CONFIRM THE SIZE OF ALL PENETRATIONS INTO THE DRAINAGE STRUCTURES AND VAULT STRUCTURES BEFORE CONSTRUCTING THEM.
9. DRAINAGE STRUCTURES SHALL BE CHECKED DURING INSTALLATION AND GROUTING TO ENSURE A TRUE VERTICAL INSTALLATION. IF THE ALIGNMENT IS OFF, THE CONTRACTOR SHALL TAKE CORRECTIVE MEASURES TO SHIM THE STRUCTURE BACK TO LEVEL.
10. THE ELEVATIONS OF THE VALVE VAULT LIDS ARE POSITIONED BELOW THE FINISHED SIDEWALK ELEVATION WITH ROUGH OPENINGS CAST FOR HATCHES. THE CONTRACTOR SHALL INSTALL THE ALUMINUM HATCHES FLUSH WITH THE PROPOSED SIDEWALK GRADE AND GROUT AS NECESSARY AROUND THE ROUGH OPENING TO PROVIDE A WATERPROOF SEAL.

DRAINAGE STRUCTURES PRECAST CONCRETE MANHOLE:

1. DRAINAGE STRUCTURES SHALL BE PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO SECTION 1042 OF THE STANDARD SPECIFICATIONS. STRUCTURES SHALL BE WATER TIGHT.
2. THE EXTERIOR AND BOTTOM OF THE BASE OF THE STRUCTURES SHALL RECEIVE TWO COATS OF ASPHALT EMULSION WATERPROOFING IN ACCORDANCE WITH SECTION 503.18 OF THE STANDARD SPECIFICATIONS.
3. THE DRAINAGE STRUCTURE SECTIONS SHALL BE A MINIMUM OF 4-FT TALL WITH THE EXCEPTION OF THE FINAL SECTION. EACH SECTION SHALL BE SEALED WITH TWO (2) STRIPS OF BUTYL RUBBER SEALANT. JOINTS IN THE BUTYL RUBBER SEALANT SHALL BE OVERLAPPED TO PREVENT GAPS.

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LJB	EJM	LJB

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	PLOT SCALE = 5.0000 '/ in.	DRAWN - EJM	REVISED -		
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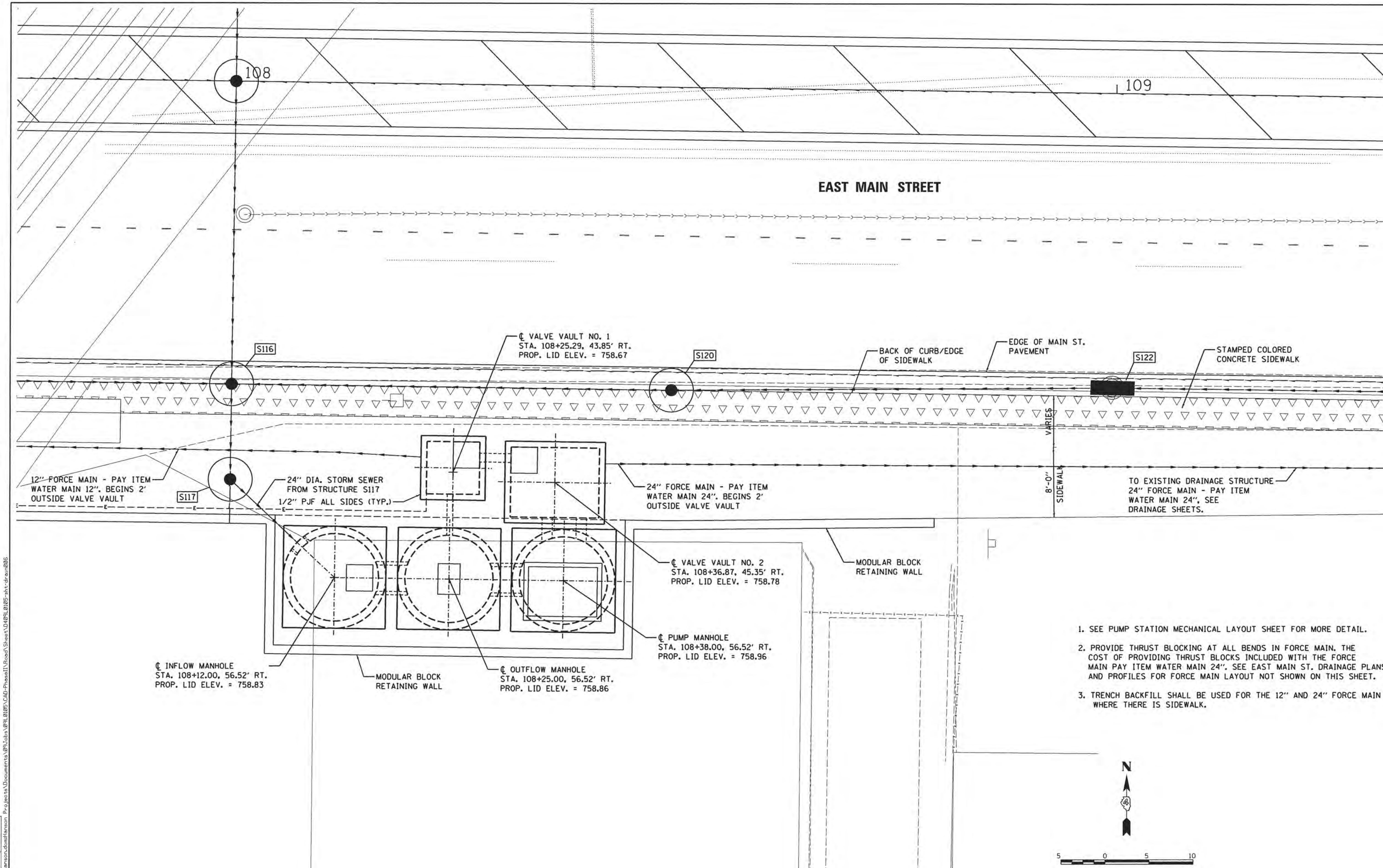
		DATE - 9/9/2015	REVISED -		SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	48
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1. SEE PUMP STATION MECHANICAL LAYOUT SHEET FOR MORE DETAIL.
2. PROVIDE THRUST BLOCKING AT ALL BENDS IN FORCE MAIN. THE COST OF PROVIDING THRUST BLOCKS INCLUDED WITH THE FORCE MAIN PAY ITEM WATER MAIN 24". SEE EAST MAIN ST. DRAINAGE PLANS AND PROFILES FOR FORCE MAIN LAYOUT NOT SHOWN ON THIS SHEET.
3. TRENCH BACKFILL SHALL BE USED FOR THE 12" AND 24" FORCE MAIN WHERE THERE IS SIDEWALK.

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		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PUMP STATION - PLAN

SCALE: 1"=5'	SHEET NO. OF SHEETS	STA. 500+00.00 TO STA. 503+59.40

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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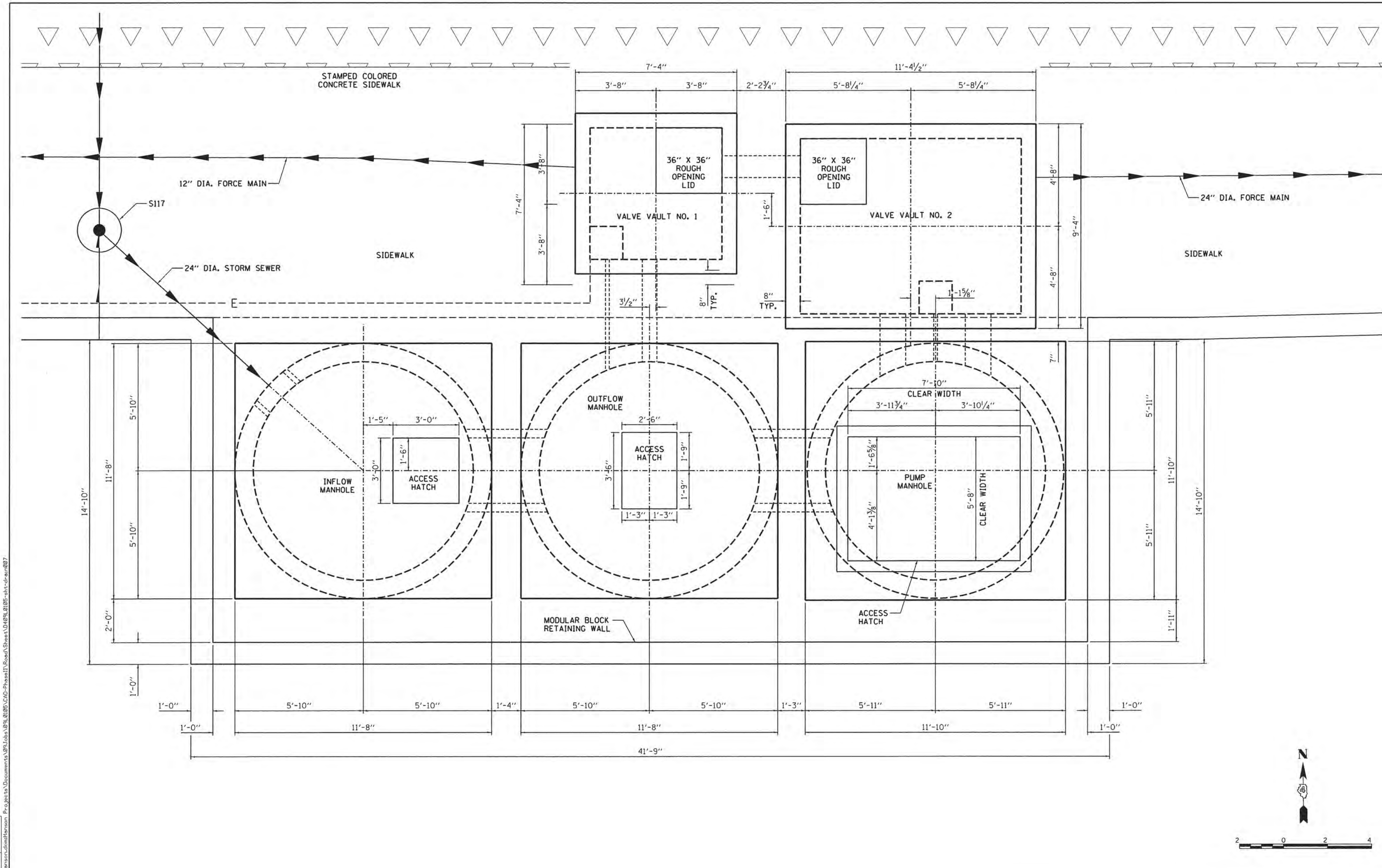
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



Hanson Professional Services Inc.

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		PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PUMP STATION – PARTIAL PLAN

SCALE: 1"=2" | SHEET NO. OF SHEETS | STA. TO STA.

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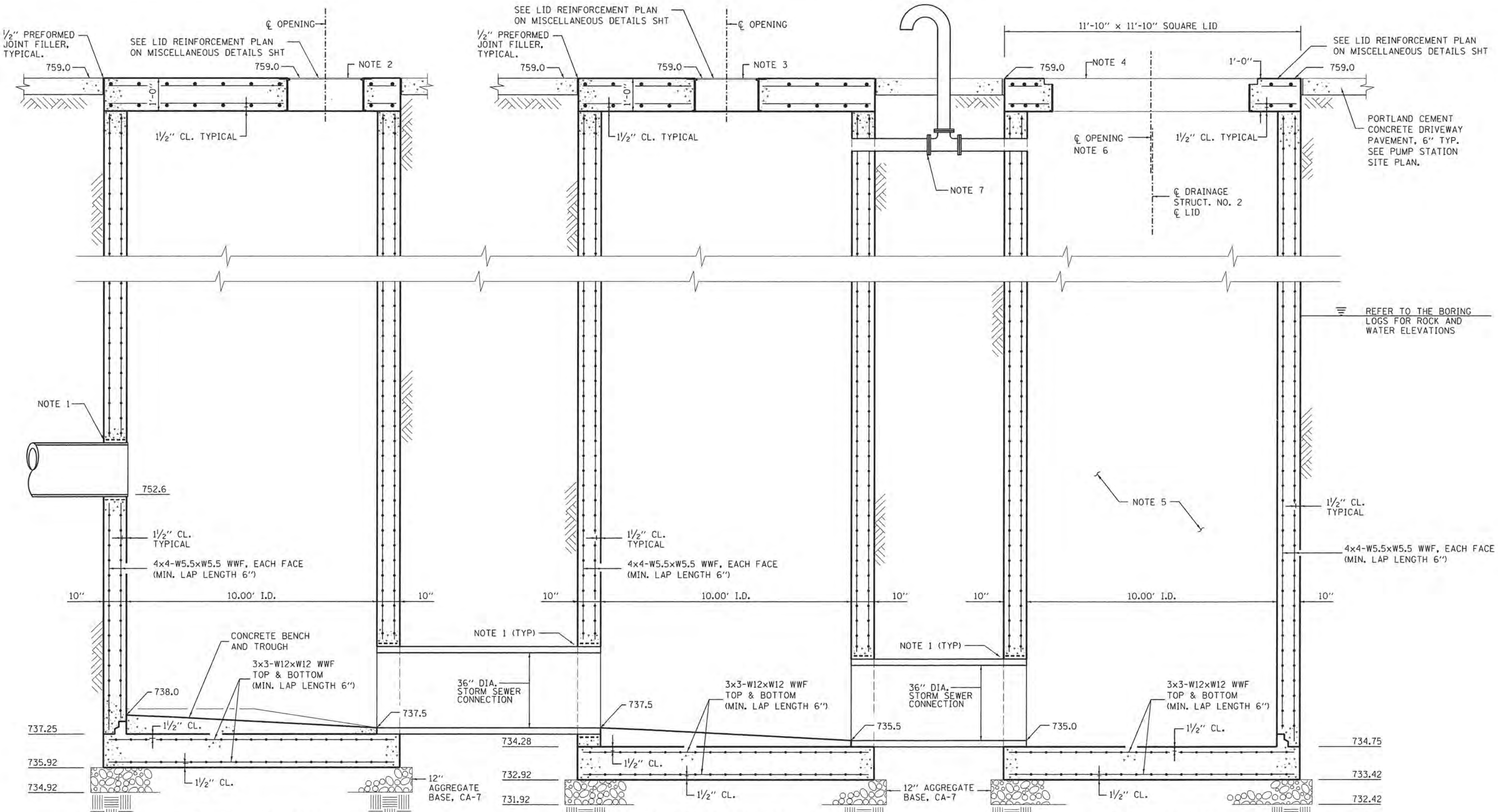
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



INFLOW MANHOLE

DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

SEE MISCELLANEOUS DETAILS SHEET-1 FOR PLAN VIEW OF INFLOW MANHOLE.

OUTFLOW MANHOLE

DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

SECTION A–A

NOT TO SCALE

PUMP MANHOLE

DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

NOTES:

1. RUBBER GASKET STYLE WATERPROOF PIPE CONNECTION.
2. 36" X 36" ALUMINUM ACCESS FRAME AND HATCH.
3. 42" X 30" ALUMINUM ACCESS FRAME AND HATCH.
4. CUSTOM HATCH SYSTEM. SEE MISCELLANEOUS PUMP STATION DETAILS-2 SHEET.
5. PUMPS AND PIPING REMOVED FOR CLARITY.
6. LOCATION OF THE HATCH & HINGED SIDE OF THE HATCH TO BE COORDINATED WITH THE PUMP MANUFACTURER.
7. 6" D.I. CLASS 52 PIPE BETWEEN THE WET WELLS, 6"X6" TEE, M.J. 6" SCHEDULE 40 STAINLESS STEEL VENT PIPE WITH 180 DEGREE RADIUS.

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REVIEWED LJB		PLOT DATE = 11/13/2015	CHECKED - LJB	REVISED -
			DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PUMP STATION – ELEVATION

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

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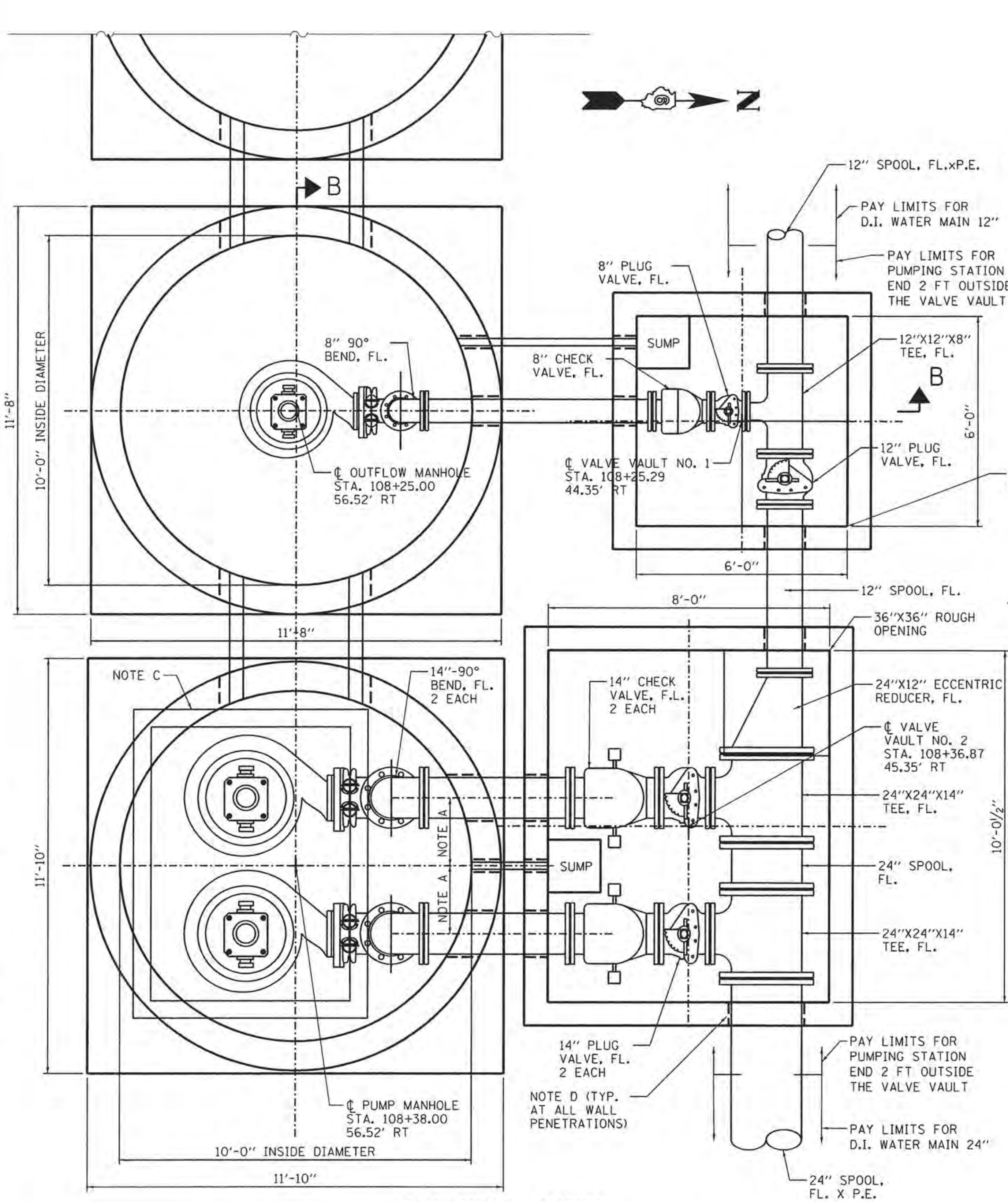
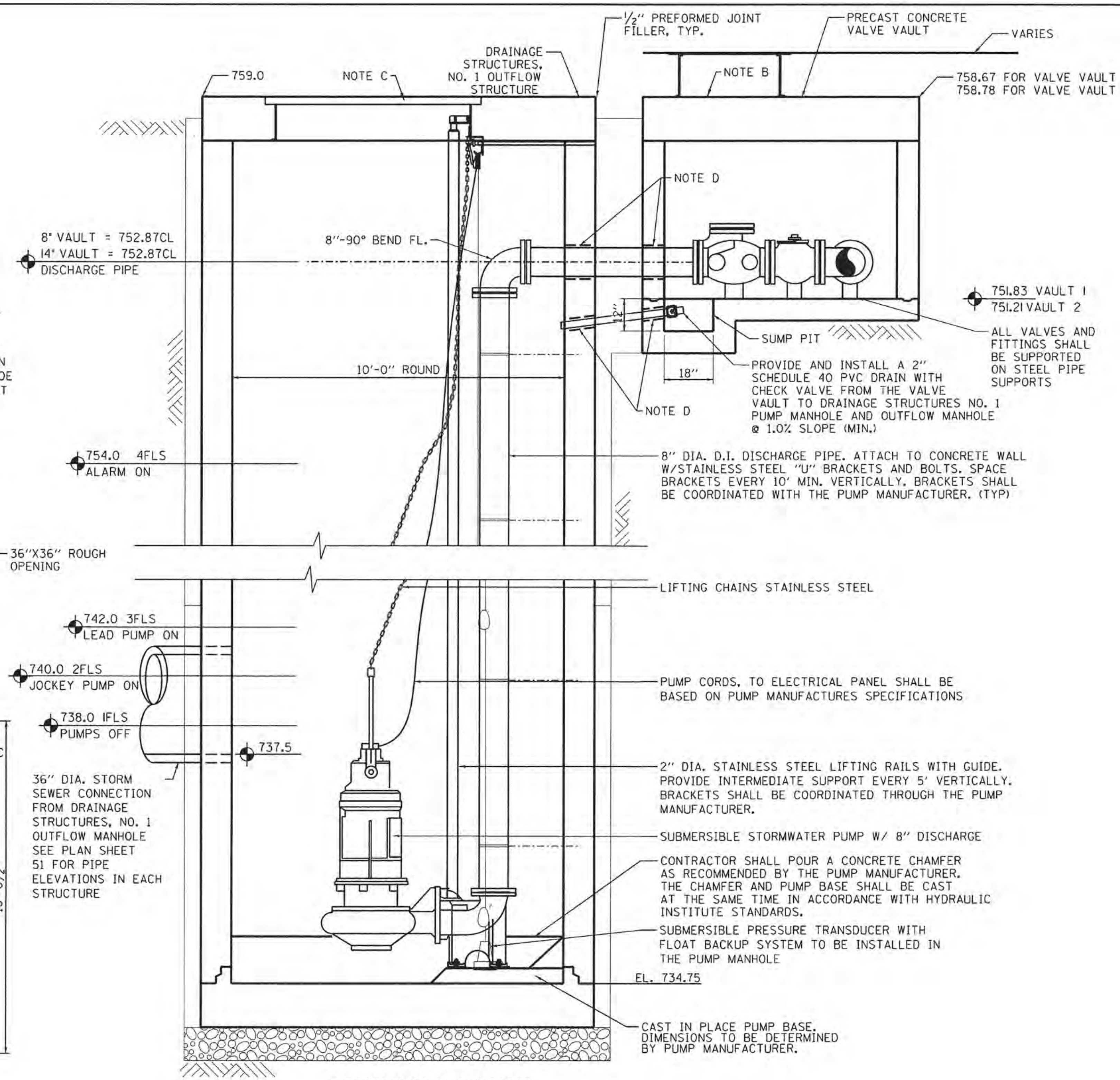


MECHANICAL LAYOUT
DRAINAGE STRUCTURES, NO. 1 AND VALVE VAULTS PLAN

NOT TO SCALE AND SHOWN WITH THE PRC LAYOUT



MECHANICAL LAYOUT
SECTION B–B

NOT TO SCALE AND SHOWN WITH THE PRC LAYOUT

NOTES

A. 1.933' - CONTRACTOR TO VERIFY DIMENSION WITH PUMP MANUFACTURER FOR MINIMUM PUMP SPACING

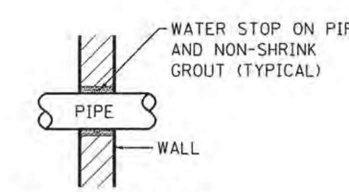
B. 36" X 36" OPENING IN THE CONCRETE LID.

C. CUSTOM HATCH SYSTEM. SEE PUMP STATION LID DETAILS SHEET.

D. CAST IN PLACE RUBBER GASKET SYSTEM.

E. MINIMUM DISTANCE FROM FLANGE TO WALL SHALL BE 4".

F. UTILIZE A FLANGE ADAPTER FOR THIS JOINT.



GROUT DETAIL

NOT TO SCALE

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EAST MAIN STREET
PUMP STATION – MECHANICAL LAYOUT

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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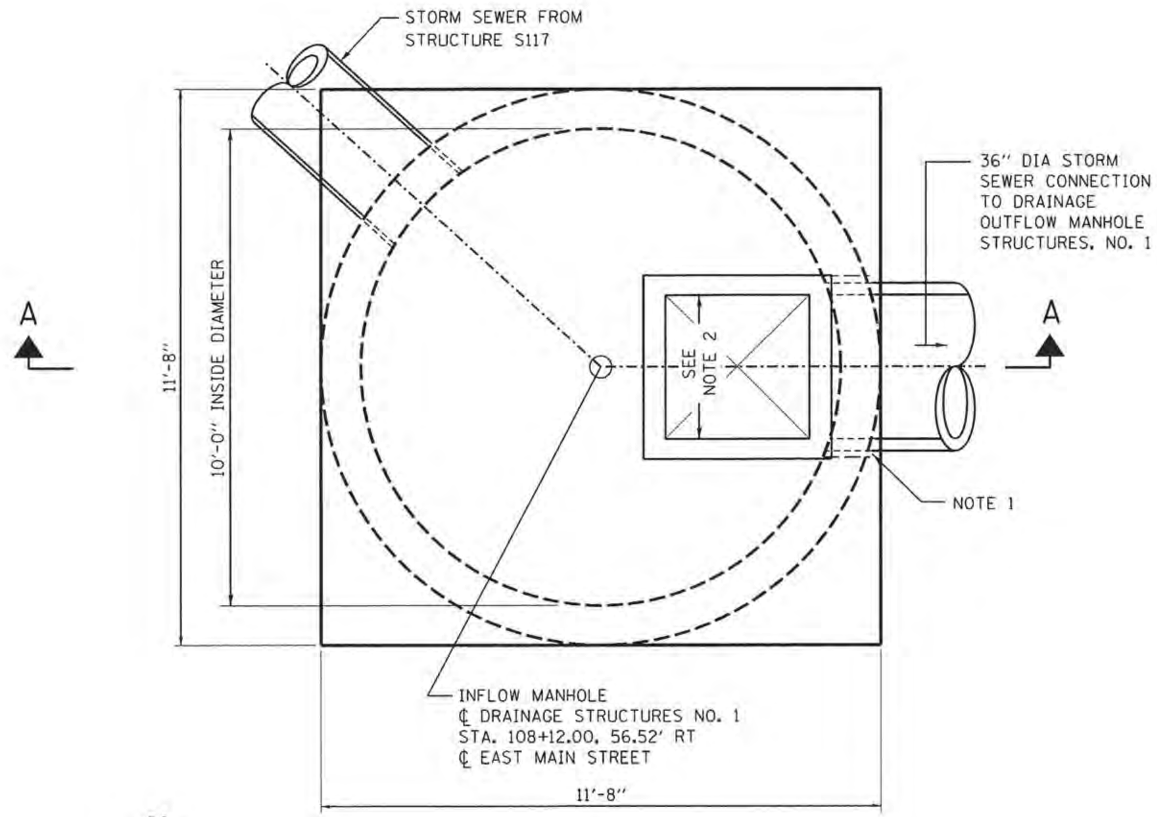
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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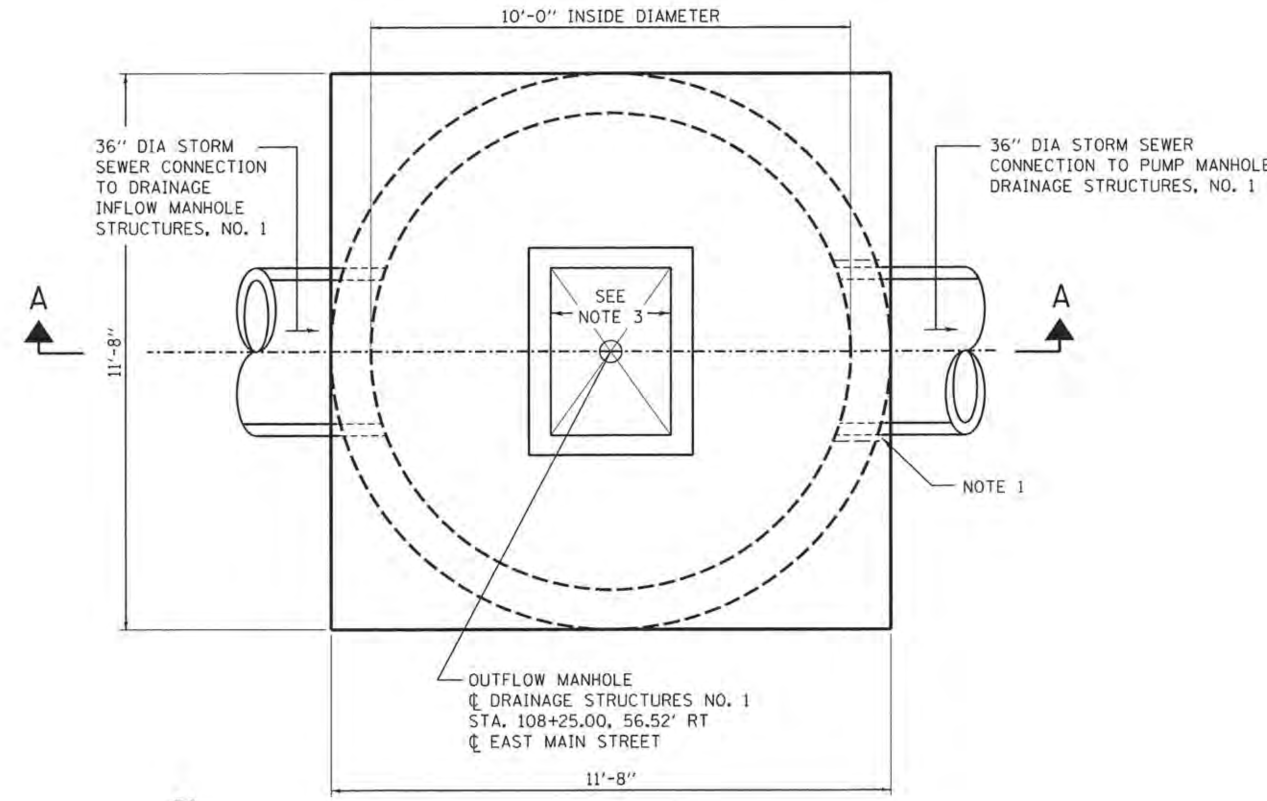
INFLOW MANHOLE
DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
NOT TO SCALE
SEE PRC PUMP STATION DETAILS SHEET FOR SECTION A-A



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OUTFLOW MANHOLE
DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
NOT TO SCALE
SEE PRC PUMP STATION DETAILS SHEET FOR SECTION A-A

NOTES:

1. GROUT TYPICAL, SEE DETAIL ON PUMP STATION MECHANICAL LAYOUT SHEET.
2. 36" X 36" ALUMINUM ACCESS FRAME AND HATCH.
3. 42" X 30" ALUMINUM ACCESS FRAME AND HATCH.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PUMP STATION – LID DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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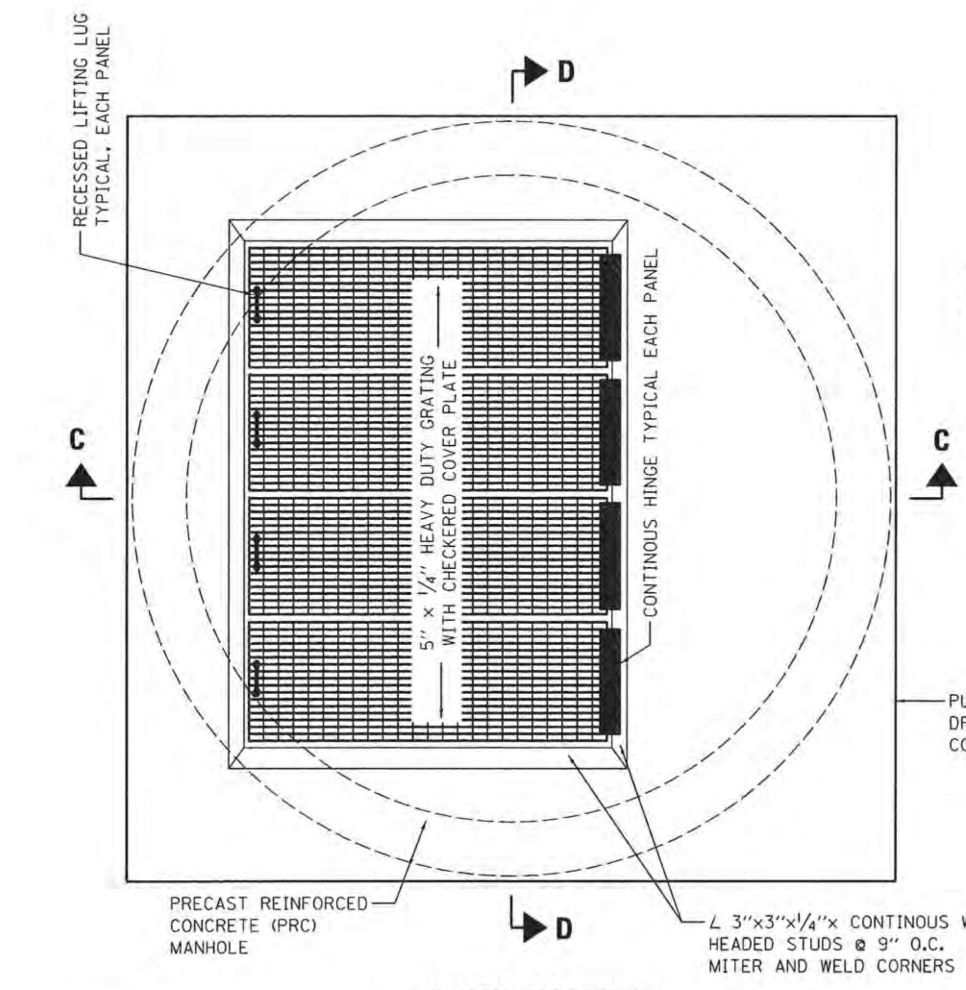
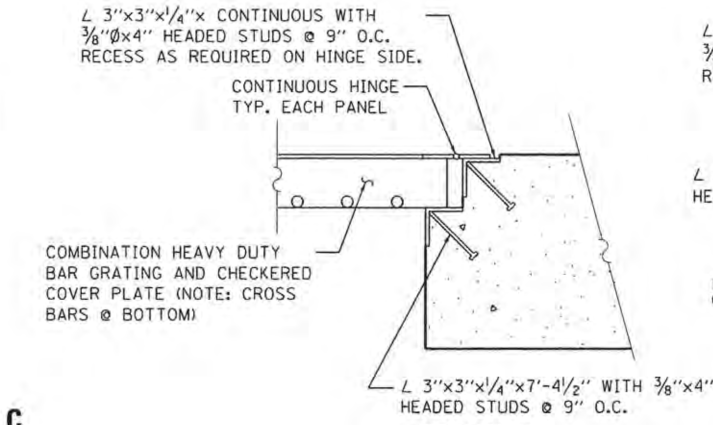
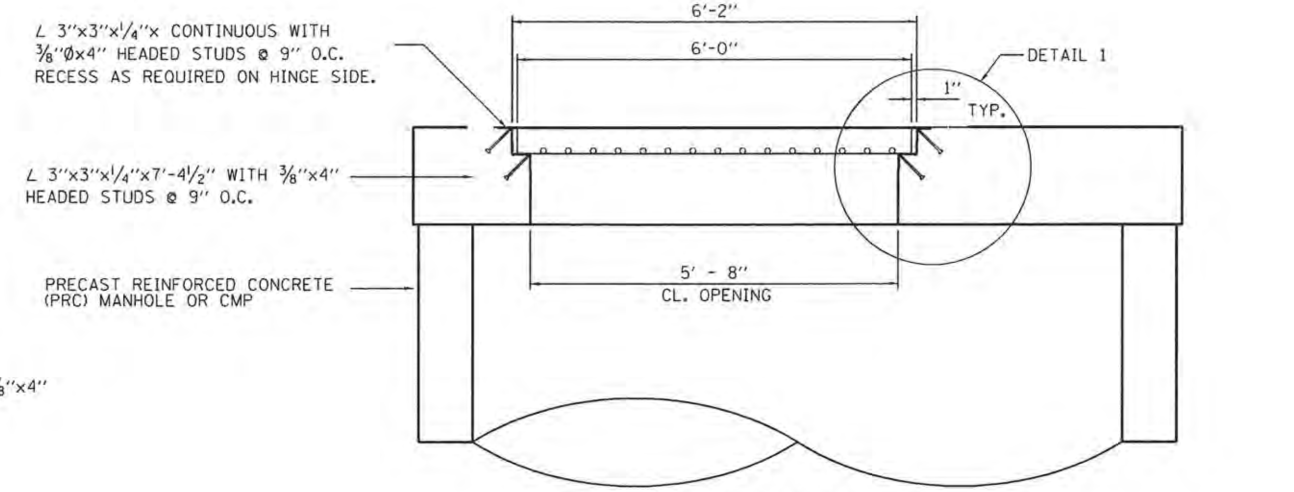
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



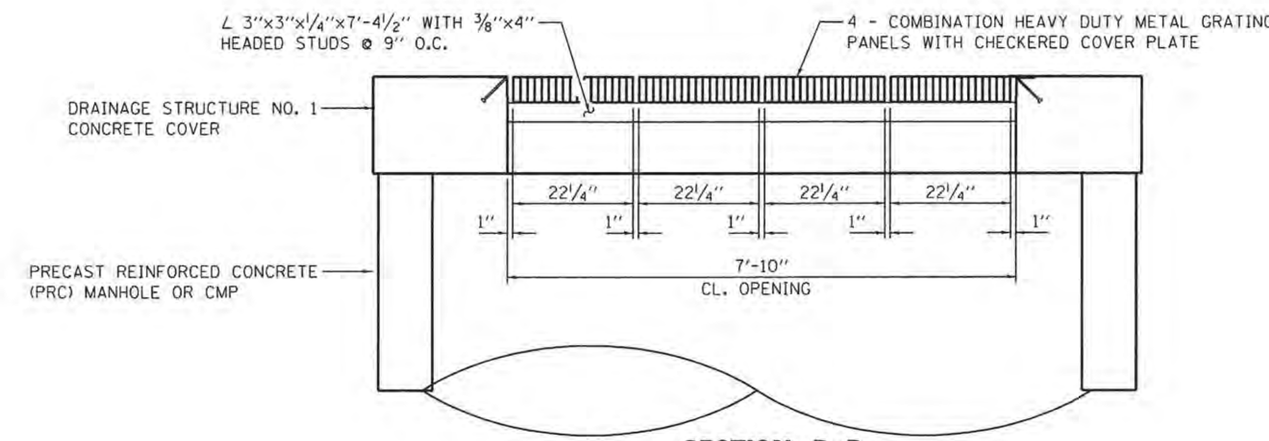
PUMP MANHOLE
DRAINAGE STRUCTURES, NO. 1
PLAN
NOT TO SCALE



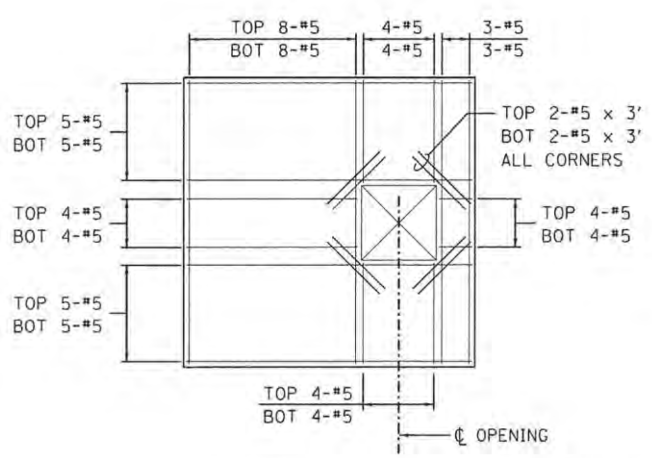
DETAIL 1



SECTION C–C
NOT TO SCALE

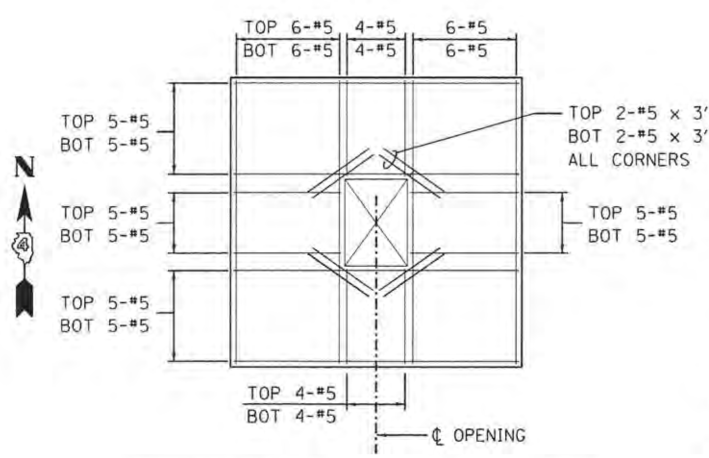


SECTION D–D
NOT TO SCALE



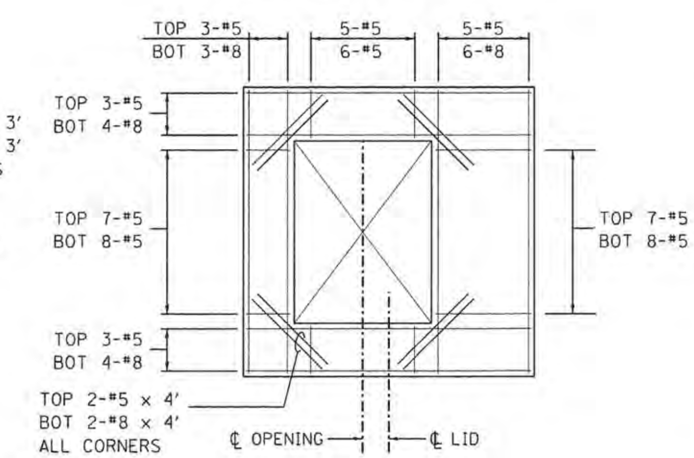
NOTE: 1 1/2" CLEAR COVER ON ALL REINFORCEMENT

DRAINAGE STRUCTURES, NO. 1
INFLOW MANHOLE
LID REINFORCING PLAN
NOT TO SCALE



NOTE: 1 1/2" CLEAR COVER ON ALL REINFORCEMENT

DRAINAGE STRUCTURES, NO. 1
OUTFLOW MANHOLE
LID REINFORCING PLAN
NOT TO SCALE



NOTE: 1 1/2" CLEAR COVER ON ALL REINFORCEMENT

DRAINAGE STRUCTURES, NO. 1
PUMP MANHOLE LID REINFORCING PLAN
NOT TO SCALE

DRAINAGE STRUCTURES, NO. 1 GRATING COVER NOTES:

1. LOADING: LIVE LOAD= AASHTO HL-93 TRUCK LOAD AND ALTERNATE TANDEM LOAD.
2. COMBINATION HEAVY DUTY WELDED STEEL W-SERIES GRATING AND WELDED 1/4" CHECKERED COVERED PLATE.
3. 22-W-4 GRATING: 5" X 1/4" PLAIN BEARING BARS @ 1 3/8" O.C. AND CROSS BARS @ 4" O.C.
4. GALVANIZED FINISH FOR GRATING, PLATE AND ACCESSORIES.
5. STEEL PLATE, BAR, AND ANGLES: AASHTO M270/ASTM A709, GRADE 36.
6. HEADED STUDS: AASHTO M169/ASTM A108, GRADE 1015, 1018, OR 1020 AUTOMATIC END WELDED TO BASE METAL.
7. WELD METAL: AWS D1.5
8. PROVIDE LIFTING LUG AND HINGE CONNECTION AT OPPOSITE ENDS OF EACH PANEL PER GRATING MANUFACTURERS STANDARD DETAILS CAPABLE OF SUPPORTING THE WEIGHT OF THE COMBINATION GRATING AND COVER PLATE, AND CAPABLE OF OPENING 180°.
9. LOCATION AND ARRANGEMENT OF THE HATCH TO BE COORDINATED WITH THE PUMP MANUFACTURER

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		DATE - 9/9/2015	REVISED -	

EAST MAIN STREET
PUMP STATION – LID DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	54
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL LEGEND

PLAN

- $ SINGLE POLE SWITCH
- $2 TWO POLE SWITCH
- $3 THREE WAY SWITCH
- $4 FOUR WAY SWITCH
- FRACTIONAL H.P. MANUAL STARTER
- $WP WEATHERPROOF SWITCH
- $MC MOMENTARY CONTACT SINGLE POLE DOUBLE THROW SWITCH
- SIMPLEX RECEPTACLE
- EP EXPLOSION PROOF SIMPLEX RECEPTACLE
- DUPLEX RECEPTACLE
- WP WEATHERPROOF DUPLEX RECEPTACLE
- GFCI DUPLEX RECEPTACLE W/GROUND FAULT INTERRUPTOR
- QUADRUPLEX RECEPTACLE
- SPECIAL PURPOSE OUTLET (IDENTIFIED ON PLANS)
- PLUG
- J JUNCTION BOX (LINE GOES TO BOX)
- J EP EXPLOSION PROOF JUNCTION BOX (LINE GOES TO BOX)
- GROUND ROD
- DISCONNECT SWITCH. • = AMPERAGE RATING.
- POWER POLE OR RISER POLE
- F* LIGHT FIXTURE. * = TYPE
- F* EP EXPLOSION PROOF LIGHT FIXTURE * = TYPE
- CONDUIT (EXPOSED)
- CONDUIT (CONCEALED OR BURIED)
- — OHE — OVERHEAD ELECTRIC
- NEUTRAL / G / HOT: * 12 THWN UNLESS OTHERWISE SPECIFIED. LONG AND SHORT HASH LINES DENOTE NUMBER OF CURRENT CARRYING WIRES. G = SEPARATE GROUND WIRE.
- LIGHTING PANEL
- POWER PANEL
- PANEL OR ENCLOSURE

ONE-LINE

- SURGE PROTECTOR/TVSS DEVICE
- ELECTRIC UTILITY SERVICE METER AND BASE
- CAPACITOR
- TRANSFORMER
- CABLE TERMINAL OR LUGS
- G GENERATOR
- SIZE * COMBINATION CIRCUIT BREAKER/STARTER WITH OVERLOAD PROTECTION. * = NEMA SIZE NO.
- GROUND - GROUND ROD, CHASSIS, BUS, OR AT EARTH POTENTIAL
- M MOTOR
- M EP EXPLOSION PROOF MOTOR
- * MOTOR, * = HORSEPOWER
- CIRCUIT BREAKER
- MCP ADJUSTABLE MOTOR CIRCUIT PROTECTOR TYPE BREAKER
- THERMAL-MAGNETIC CIRCUIT BREAKER
- FUSE
- DISCONNECT SWITCH
- FUSIBLE DISCONNECT SWITCH
- THERMAL OVERLOAD PROTECTION
- EXPLOSION PROOF CONDUIT SEAL-OFF FITTING
- N L E TRANSFER SWITCH
- O OR J JUNCTION BOX WITH SPLICE
- GND GROUND BUS OR LUG
- S/N NEUTRAL BUS
- GND S/N PANELBOARD WITH MAIN BREAKER
- GND S/N PANELBOARD WITH MAIN MAIN LUGS

ELECTRICAL ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A, AMP	AMPERES
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CR	CONTROL RELAY
CU	COPPER
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EP	EXPLOSION PROOF
ES	EMERGENCY STOP
ETL	INTERTEK - ELECTRICAL TESTING LABS
ETM	ELAPSE TIME METER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
GRSC	GALVANIZED RIGID STEEL CONDUIT
HID	HIGH INTENSITY DISCHARGE
HOA	HAND OFF AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
J	JUNCTION BOX
KVA	KILOVOLT AMPERE(S)
KW	KILOWATTS
LC	LIGHTING CONTACTOR
LTFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT (UL LISTED)
LTG	LIGHTING
LP	LIGHTING PANEL
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MIL
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRIC
OL	OVERLOAD

ELECTRICAL ABBREVIATIONS (CONTINUED)

PB	PULL BOX
PC	PHOTO CELL
PDB	POWER DISTRIBUTION BLOCK
PNL	PANEL
RCPT	RECEPTACLE
R	RELAY
S	STARTER
SPD	SURGE PROTECTION DEVICE
SPST	SINGLE POLE SINGLE THROW
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UL	UNDERWRITER'S LABORATORIES
V	VOLTS
W/	WITH
W/O	WITHOUT
WP	WEATHER PROOF
XFER	TRANSFER
XFMR	TRANSFORMER

NOTES:

1. CONTRACTOR SHALL EXAMINE THE SITE TO DETERMINE EXISTING SITE CONDITIONS.
2. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, INTERTEK TESTING SERVICES VERIFICATION/ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
3. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
4. COLOR CODE PHASE AND NEUTRAL CONDUCTOR INSULATION FOR NO. 6 AWG OR SMALLER. PROVIDE COLORED INSULATION OR COLORED MARKING TAPE FOR PHASE AND NEUTRAL CONDUCTORS FOR NO. 4 AWG AND LARGER. INSULATED GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTOR AWG AND/OR KCMIL TO COMPLY WITH NEC 250.119. NEUTRAL CONDUCTORS SHALL HAVE GRAY OR WHITE COLORED INSULATION (AS APPLICABLE) FOR NO. 6 AWG AND SMALLER TO MEET THE REQUIREMENTS OF NEC 200.6. STANDARD COLORS FOR POWER WIRING AND BRANCH CIRCUITS SHALL BE AS FOLLOWS:

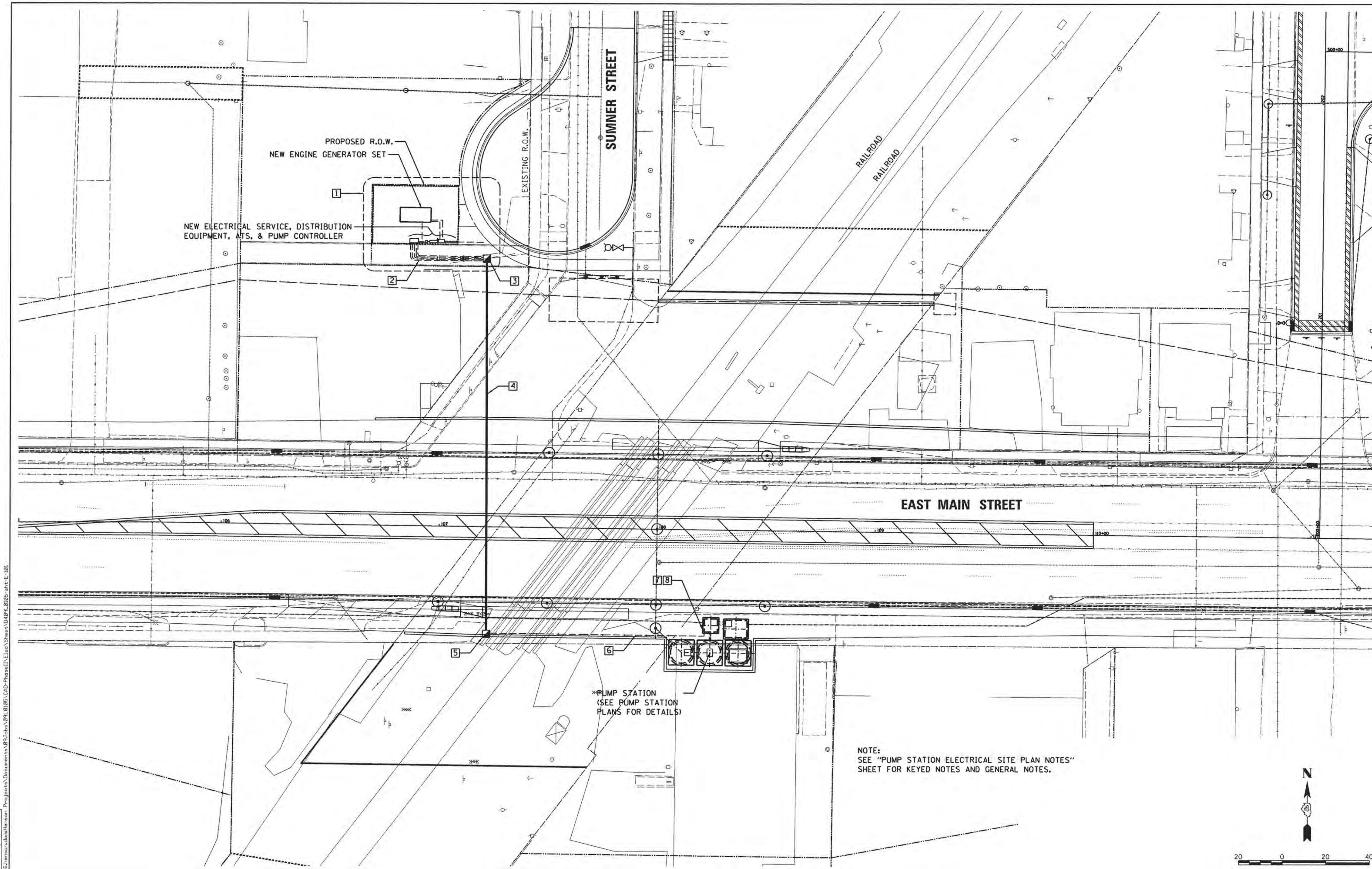
   480Y/277 VAC, 3 PHASE, 4 WIRE

PHASE A	BROWN
PHASE B	ORANGE
PHASE C	YELLOW
NEUTRAL	GRAY
GROUND	GREEN

   120/240 VAC, 1 PHASE, 3 WIRE

PHASE A	BLACK
PHASE B	RED
NEUTRAL	WHITE
GROUND	GREEN

5. LTFMC DENOTES LIQUID TIGHT FLEXIBLE METAL CONDUIT UL LISTED, SUNLIGHT RESISTANT, & SUITABLE FOR GROUNDING. LIQUID TIGHT FLEXIBLE METAL CONDUIT AND ASSOCIATED FITTINGS SHALL BE U.L. LISTED TO MEET THE REQUIREMENTS OF NEC 350.6. LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS USED FOR FLEXIBILITY (INCLUDING CONNECTIONS TO ENGINE GENERATOR SET & TRANSFORMERS) SHALL REQUIRE AN EXTERNAL BONDING JUMPER OR INTERNAL EQUIPMENT GROUNDING CONDUCTOR PER NEC 350.60. DO NOT INSTALL LTFMC THAT IS NOT UL LISTED. CONFIRM LTFMC BEARS THE UL LABEL PRIOR TO INSTALLATION.
6. ALL ENCLOSURES RATED NEMA 4, 4X SHALL HAVE WATERTIGHT HUBS AT CONDUIT ENTRANCES U.L. LISTED NEMA 4, 4X FOR THE RESPECTIVE ENCLOSURE, TO MAINTAIN THE NEMA 4, 4X RATING.
7. INTRINSICALLY SAFE CONDUCTORS SHALL MAINTAIN SEPARATION FROM POWER WIRING AND NON-INTRINSICALLY SAFE CONDUCTORS IN ACCORDANCE WITH NEC 504.30 "SEPARATION OF INTRINSICALLY SAFE CONDUCTORS."



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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PUMP STATION ELECTRICAL SITE PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	56
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LAYOUT	KNL
DRAWN	EJM
REVIEWED	RDN/KNL

HANSON Hanson Professional Services Inc.

KEYED NOTES:

1. SEE ELECTRIC SERVICE AND GENERATOR SITE PLAN FOR EQUIPMENT LAYOUT. COORDINATE ELECTRIC SERVICE WITH THE SERVING ELECTRIC UTILITY COMPANY. VERIFY ELECTRIC SERVICE UTILITY TRANSFORMER LOCATIONS WITH THE SERVING ELECTRIC UTILITY COMPANY; AMEREN, PHONE: 1-888-659-4540, AND THE AMEREN CUSTOMER SERVICE REP; MS. JULIE CONE, PHONE: 309-345-5169, CELL PHONE: 309-368-6248.

2. 3-3 INCH SCHEDULE 40 PVC CONDUITS WITH PUMP MOTOR CONDUCTORS, 1-2 INCH GRSC WITH PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLES, 1-2 INCH SCHEDULE 40 PVC CONDUITS WITH FLOAT SWITCH INTRINSICALLY SAFE WIRING FROM PUMP CONTROL PANEL TO ELECTRICAL MANHOLE #1. TRANSITION TO PVC COATED GRSC WHERE EMERGING FROM GRADE. INCLUDE EQUIPMENT GROUND WIRE(S) WITH EACH CIRCUIT. EXTEND CABLES, WIRING AND CONDUCTORS TO THE PUMP STATION WET WELL.

3. ELECTRICAL MANHOLE NO. 1. SEE DETAILS.

4. 6-WAY CONCRETE ENCASED DUCT BANK FROM ELECTRICAL MANHOLE NO. 1 TO ELECTRICAL MANHOLE NO. 2. 6-WAY DUCT BANK SHALL INCLUDE 4 -4 INCH SCHEDULE 40 PVC DUCTS, 1-2 INCH SCHEDULE 40 PVC DUCT, AND 1-2 INCH GALVANIZED RIGID STEEL DUCT. SEE DETAILS FOR DUCT BANK.

5. ELECTRICAL MANHOLE NO. 2. SEE DETAILS.

6. 3-3 INCH SCHEDULE 40 PVC CONDUITS WITH PUMP MOTOR CONDUCTORS, 1-2 INCH GRSC WITH PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLES, 1-2 INCH SCHEDULE 40 PVC CONDUITS WITH FLOAT SWITCH INTRINSICALLY SAFE WIRING FROM ELECTRICAL MANHOLE #2 TO RESPECTIVE JUNCTION BOXES AT PUMP STATION WET WELL. TRANSITION TO PVC COATED GRSC WHERE EMERGING FROM GRADE AT THE PUMP STATION.

7. PROVIDE NEMA 4X STAINLESS STEEL JUNCTION BOX FOR EACH SET OF SUBMERSIBLE PUMP MOTOR CABLES. SPLICE PUMP MOTOR CABLES TO PUMP MOTOR CONDUCTORS IN EACH RESPECTIVE JUNCTION BOX. INCLUDE STAINLESS STEEL STRUT SUPPORT AND MOUNTING HARDWARE. SEE DETAILS.

8. PROVIDE NEMA 4X STAINLESS STEEL JUNCTION BOX FOR FLOAT SWITCH CABLES AND PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLE. INTRINSICALLY SAFE CONDUCTORS SHALL MAINTAIN SEPARATION FROM POWER AND NON-INTRINSICALLY SAFE CONDUCTORS IN ACCORDANCE WITH NEC 504.30 "SEPARATION OF INTRINSICALLY SAFE CONDUCTORS". INTRINSICALLY SAFE CONDUCTORS FOR FLOAT SWITCH WIRING SHALL HAVE LIGHT BLUE COLORED INSULATION IN ACCORDANCE WITH NEC 504.80 (C). SEE DETAILS.

GENERAL NOTES:

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 70 - NATIONAL ELECTRICAL CODE (NEC), MOST CURRENT ISSUE IN FORCE, AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS FOR THE RESPECTIVE APPLICATION. ANY INSTALLATIONS WHICH VOID THE UL LISTING, ETL LISTING, FM APPROVAL, OR OTHER THIRD PARTY LISTING, AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.

2. CONTRACTOR SHALL EXAMINE THE SITE TO DETERMINE THE EXTENT OF THE WORK. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS.

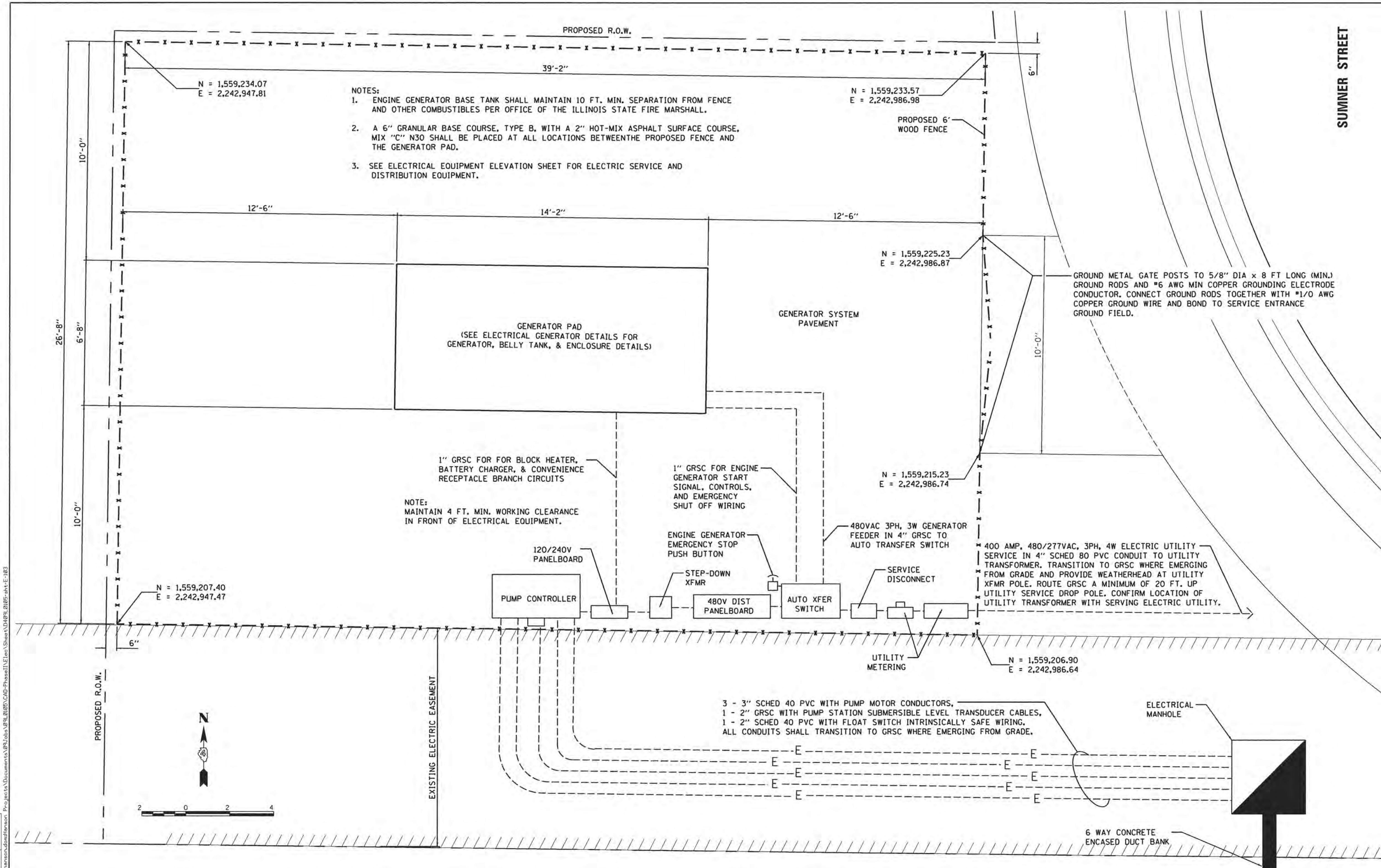
3. CONTRACTOR SHALL COORDINATE WORK AND ANY POWER OUTAGES WITH THE OWNER'S REPRESENTATIVE. ANY SHUTDOWN OF EXISTING SYSTEMS SHALL BE SCHEDULED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE, PRIOR TO SHUTDOWN. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).

4. CONTRACTOR SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE.

5. THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT, OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS, AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT, WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT JULIE (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS) FOR UTILITY INFORMATION, PHONE: 1-800-892-0123.

6. CONTRACTOR SHALL COORDINATE INSTALLATION OF ELECTRICAL WORK WITH THE ROADWAY WORK.

7. THE SERVING ELECTRIC UTILITY; AMEREN WILL NEED TO DETERMINE THE RESPECTIVE LOCATION OF THEIR UTILITY TRANSFORMER THAT WILL SERVE THE PUMP STATION. CONTRACTOR SHALL COORDINATE ELECTRIC SERVICE WITH THE SERVING ELECTRIC UTILITY. FOR BIDDING PURPOSES, FIGURE THE UTILITY TRANSFORMER WILL BE LOCATED WITHIN 100 FT FROM THE SERVICE DISCONNECT.



PROPOSED R.O.W.
SUMNER STREET
39'-2"
6"
N = 1,559,234.07
E = 2,242,947.81
N = 1,559,233.57
E = 2,242,986.98
NOTES:
1. ENGINE GENERATOR BASE TANK SHALL MAINTAIN 10 FT. MIN. SEPARATION FROM FENCE AND OTHER COMBUSTIBLES PER OFFICE OF THE ILLINOIS STATE FIRE MARSHALL.
2. A 6" GRANULAR BASE COURSE, TYPE B, WITH A 2" HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N30 SHALL BE PLACED AT ALL LOCATIONS BETWEENTHE PROPOSED FENCE AND THE GENERATOR PAD.
3. SEE ELECTRICAL EQUIPMENT ELEVATION SHEET FOR ELECTRIC SERVICE AND DISTRIBUTION EQUIPMENT.
PROPOSED 6' WOOD FENCE
10'-0"
12'-6"
14'-2"
12'-6"
N = 1,559,225.23
E = 2,242,986.87
GROUND METAL GATE POSTS TO 5/8" DIA x 8 FT LONG (MIN.) GROUND RODS AND #6 AWG MIN COPPER GROUNDING ELECTRODE CONDUCTOR. CONNECT GROUND RODS TOGETHER WITH #1/0 AWG COPPER GROUND WIRE AND BOND TO SERVICE ENTRANCE GROUND FIELD.
26'-8"
6'-8"
GENERATOR PAD
(SEE ELECTRICAL GENERATOR DETAILS FOR GENERATOR, BELLY TANK, & ENCLOSURE DETAILS)
GENERATOR SYSTEM PAVEMENT
10'-0"
1" GRSC FOR FOR BLOCK HEATER, BATTERY CHARGER, & CONVENIENCE RECEPTACLE BRANCH CIRCUITS
1" GRSC FOR ENGINE GENERATOR START SIGNAL, CONTROLS, AND EMERGENCY SHUT OFF WIRING
N = 1,559,215.23
E = 2,242,986.74
10'-0"
NOTE:
MAINTAIN 4 FT. MIN. WORKING CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT.
ENGINE GENERATOR EMERGENCY STOP PUSH BUTTON
480VAC 3PH, 3W GENERATOR FEEDER IN 4" GRSC TO AUTO TRANSFER SWITCH
400 AMP, 480/277VAC, 3PH, 4W ELECTRIC UTILITY SERVICE IN 4" SCHED 80 PVC CONDUIT TO UTILITY TRANSFORMER. TRANSITION TO GRSC WHERE EMERGING FROM GRADE AND PROVIDE WEATHERHEAD AT UTILITY XFMR POLE. ROUTE GRSC A MINIMUM OF 20 FT. UP UTILITY SERVICE DROP POLE. CONFIRM LOCATION OF UTILITY TRANSFORMER WITH SERVING ELECTRIC UTILITY.
120/240V PANELBOARD
STEP-DOWN XFMR
SERVICE DISCONNECT
N = 1,559,207.40
E = 2,242,947.47
PUMP CONTROLLER
480V DIST PANELBOARD
AUTO XFER SWITCH
6"
UTILITY METERING
N = 1,559,206.90
E = 2,242,986.64
PROPOSED R.O.W.
EXISTING ELECTRIC EASEMENT
N
3 - 3" SCHED 40 PVC WITH PUMP MOTOR CONDUCTORS.
1 - 2" GRSC WITH PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLES.
1 - 2" SCHED 40 PVC WITH FLOAT SWITCH INTRINSICALLY SAFE WIRING.
ALL CONDUITS SHALL TRANSITION TO GRSC WHERE EMERGING FROM GRADE.
ELECTRICAL MANHOLE
E
2 0 2 4
6 WAY CONCRETE ENCASED DUCT BANK

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ELECTRICAL SERVICE AND GENERATOR SITE PLAN

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	58
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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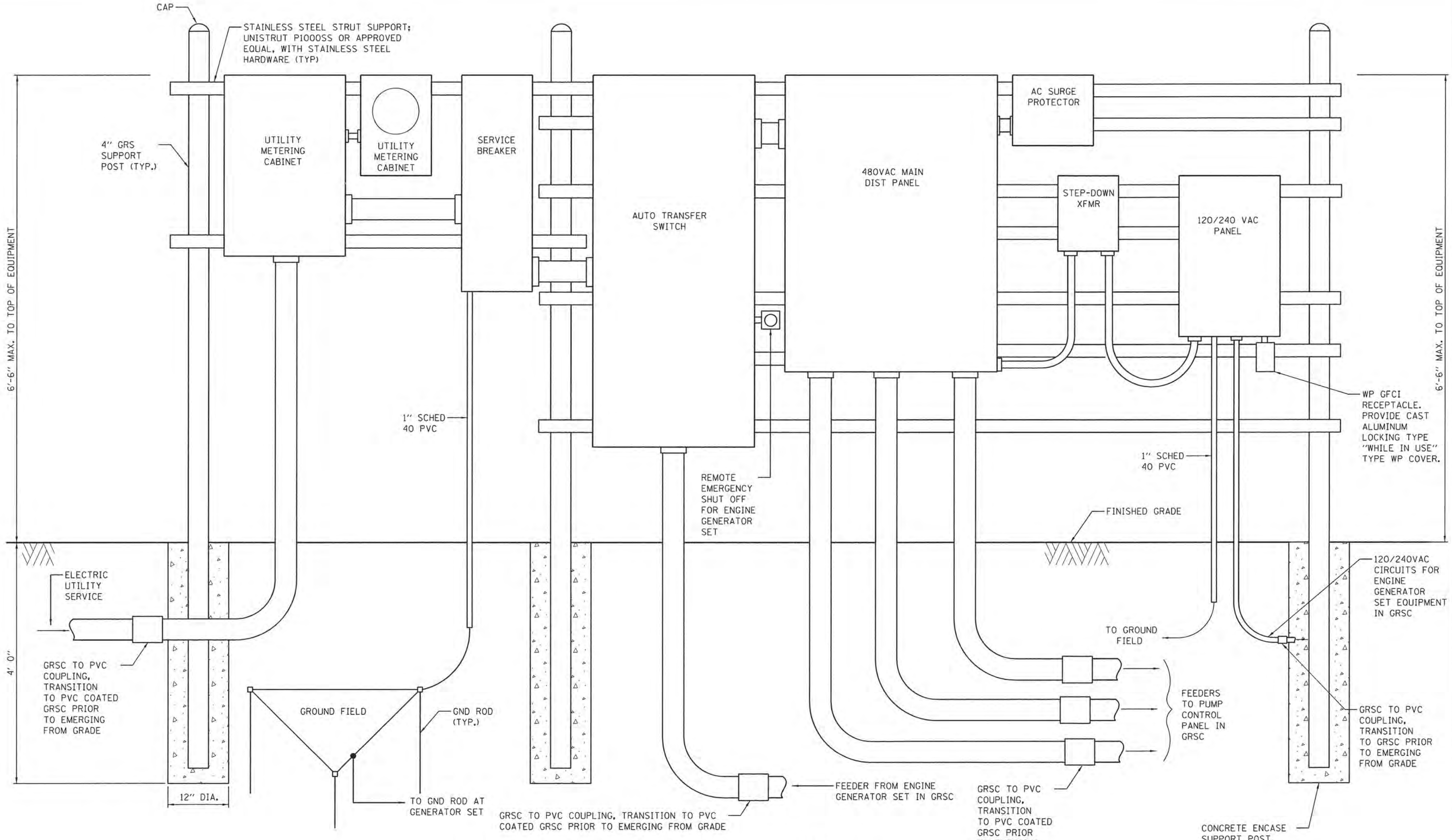
REVIEWED RDN/KNL



ELECTRIC SERVICE & DISTRIBUTION EQUIPMENT ELEVATION

NOT TO SCALE

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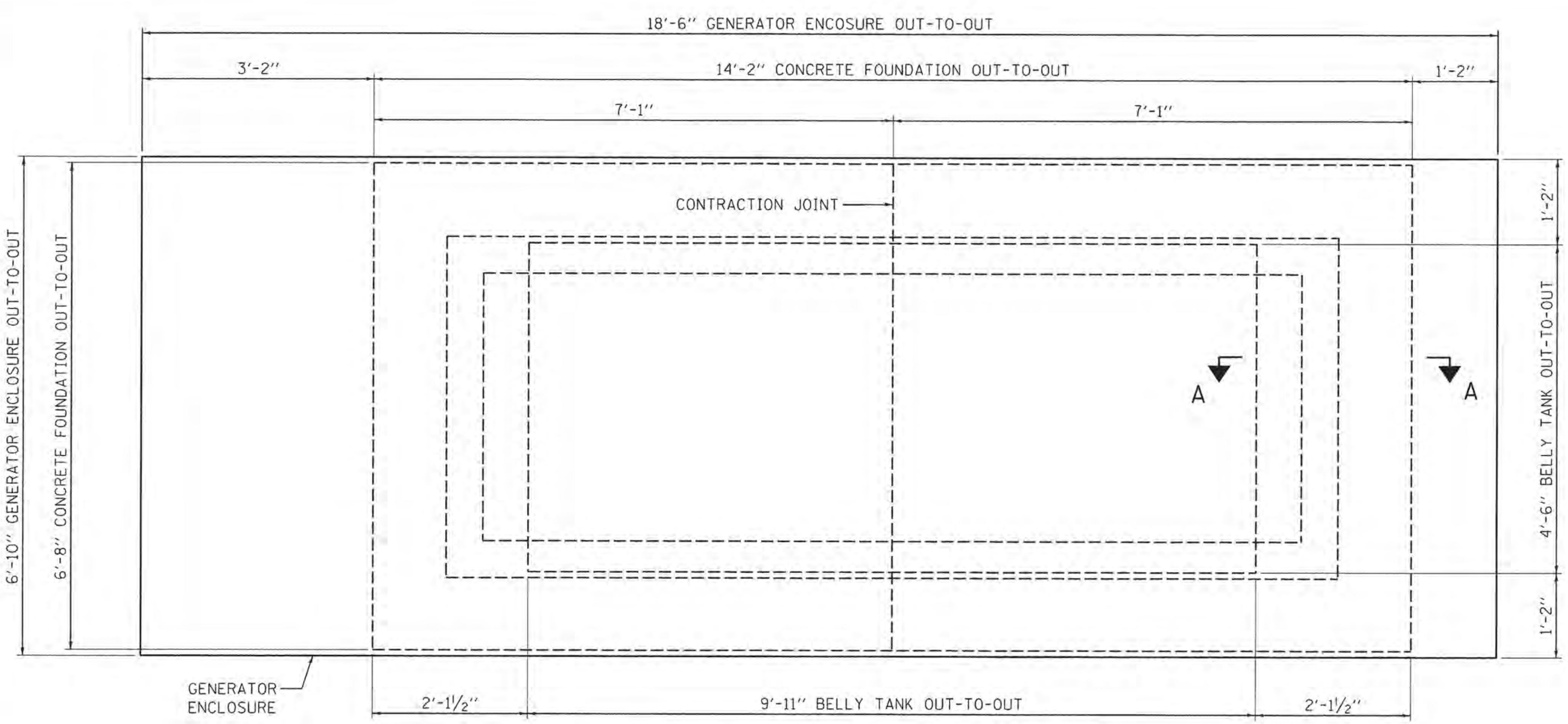
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ELECTRICAL EQUIPMENT ELEVATION

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	59
	50VB	CONTRACT NO.89417		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

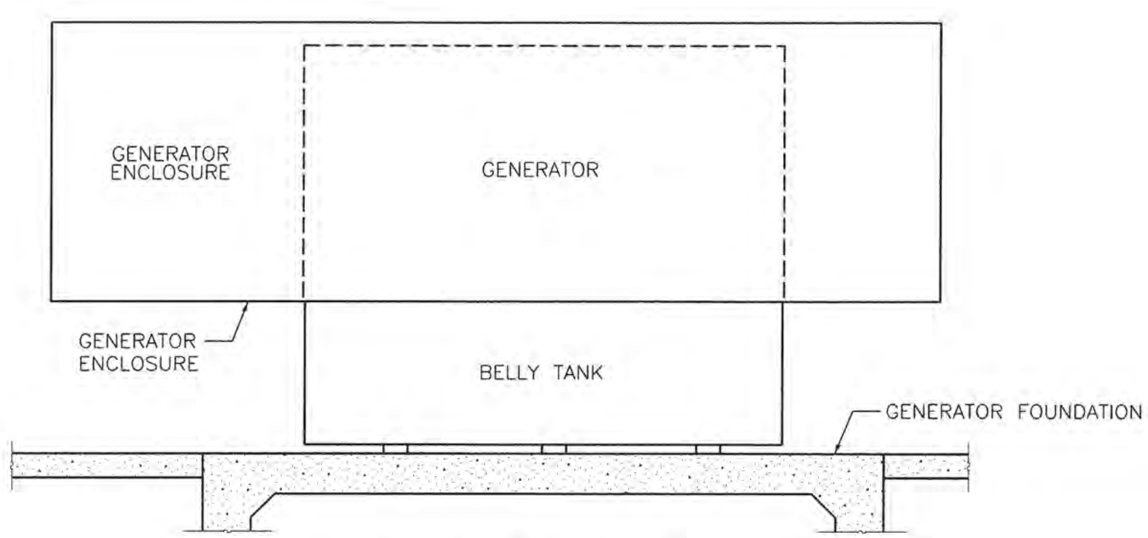


GENERATOR FOUNDATION & ENCLOSURE PLAN

SCALE: 1"=1'-0"

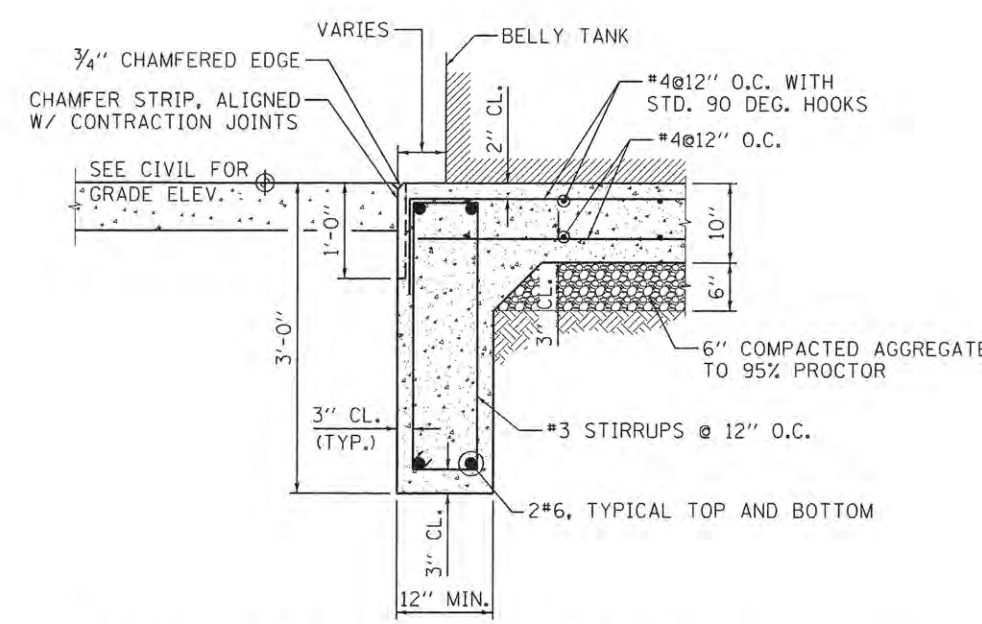
NOTES:

1. PAD MOUNTING BOLTS BY CONTRACTOR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS FOR ITS ENCLOSURE, HOUSING, AND/OR BASE MOUNTED FUEL TANK.
2. MINIMUM CONCRETE COVERAGE OVER REBAR TO BE 3" UNLESS OTHERWISE NOTED.
3. PAD DIMENSIONS ARE BASED ON ENGINE GENERATOR SET AND FUEL TANK FROM ONE OF THE RESPECTIVE ENGINE GENERATOR MFRS.; CUMMINS POWER GENERATION. ENGINE GENERATOR SETS MANUFACTURED BY CATERPILLAR, CUMMINS POWER GENERATION OR APPROVED EQUAL, MAY HAVE DIMENSIONS THAT VARY BETWEEN MFRS. AND/OR BETWEEN MODELS BY THE SAME MFR. ADJUST AND/OR INCREASE PAD TO ACCOMMODATE THE RESPECTIVE ENGINE GENERATOR SET FURNISHED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND INSTALLING ALL NECESSARY ELECTRICAL PENETRATIONS AND SLEEVES FOR CONDUITS THROUGH THE GENERATOR FOUNDATION.
5. FINAL CONDUIT CONNECTIONS TO THE ENGINE GENERATOR SET SHALL BE WITH U.S. LISTED LIQUID-TIGHT FLEXIBLE METAL CONDUIT.



GENERATOR ELEVATION

SCALE: ½"=1'-0"



SECTION A–A – TYPICAL GENERATOR FOUNDATION SECTION

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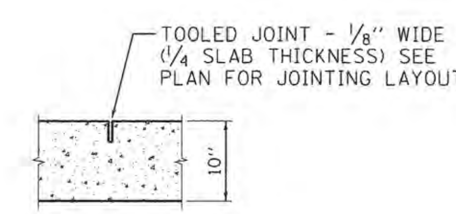

CONTRACTION JOINT

SCALE: 1"=1'-0"

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			DATE - 9/9/2015	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	60
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

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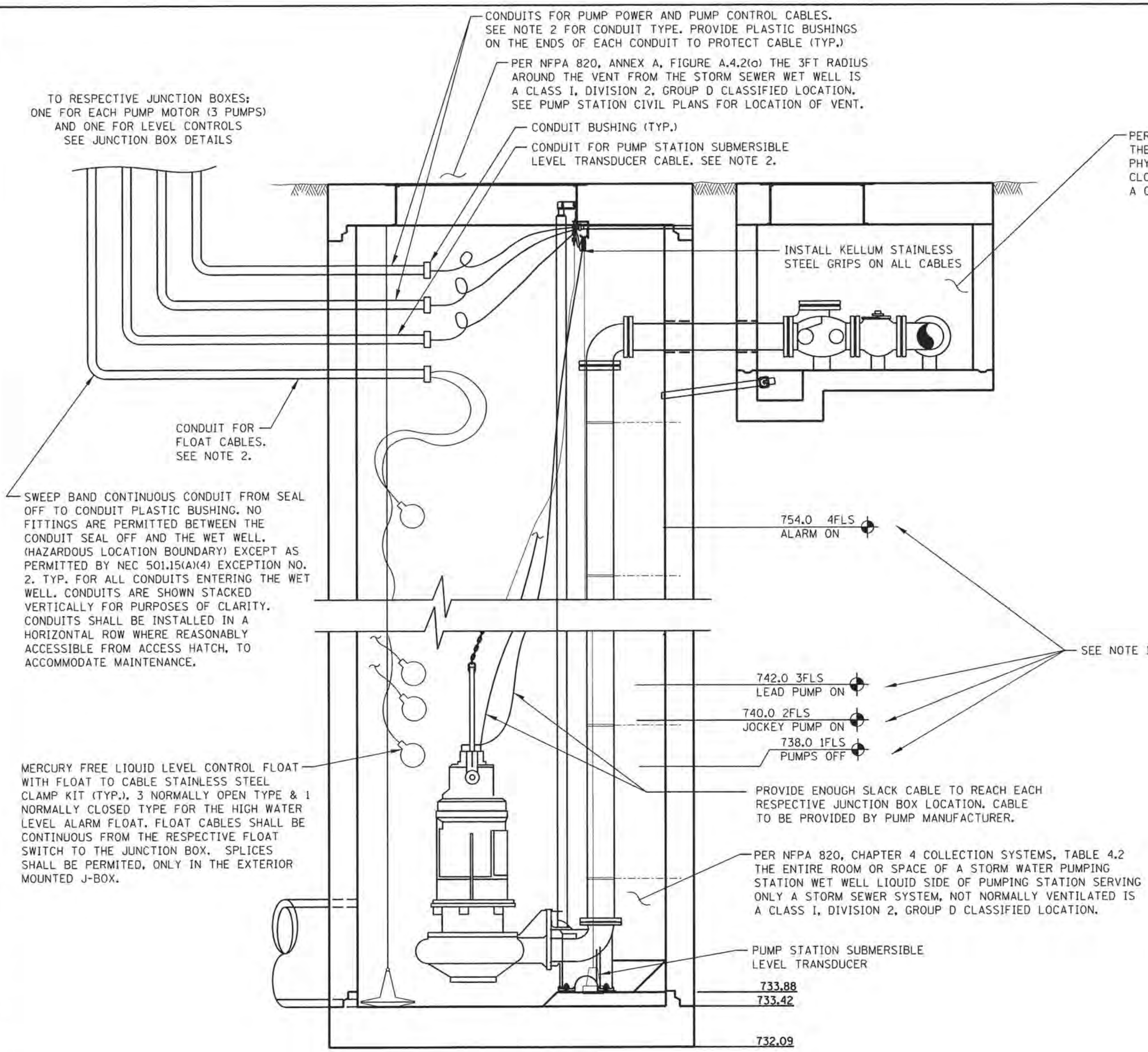

ELECTRICAL ELEVATION

NOT TO SCALE

GENERAL NOTES:

1. ALL ELECTRICAL EQUIPMENT INSTALLED IN THE WET WELL SHALL BE SUITABLE FOR USE IN CLASS I, DIV. 1, GROUP D HAZARDOUS LOCATION AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEC ARTICLES 500, 501, & 504 AS WELL AS ALL LOCAL CODES, ORDINANCES AND REQUIREMENTS.
2. CONDUITS FROM JUNCTION BOXES (AT EXTERIOR) TO WET WELL SHALL BE PVC COATED RIGID STEEL.
3. CONTRACTOR SHALL COORDINATE INSTALLATION OF ELECTRICAL EQUIPMENT, AND WORK WITH RESPECT TO PLUMBING, MECHANICAL, CONCRETE, EXCAVATION AND ALL OTHER WORK. COORDINATE THE INSTALLATION OF CONDUITS INTO THE WET WELL. USE NON-SHRINK GROUT AS REQUIRED TO SEAL CONDUIT PENETRATIONS.
4. ALL CONDUIT TERMINATIONS & OPENINGS IN ENCLOSURES SHALL BE SEALED WITH DUCT SEAL OR EQUAL.
5. LEVEL SENSING PRESSURE TRANSDUCER & BACK-UP FLOATS SHALL HAVE AN FM LISTED OR UL LISTED INTRINSICALLY SAFE BARRIER (SWITCHING AMPLIFIER) SUPPLIED FOR UNIT. INTRINSICALLY SAFE WIRING SHALL HAVE LIGHT BLUE COLORED INSULATION AND KEPT PHYSICALLY ISOLATED FROM OTHER CONDUCTORS. INTRINSICALLY SAFE WIRING AND EQUIPMENT SHALL BE INSTALLED PER ANSI/ISA RP12.6, UL 698A, AND NEC 504. CONDUITS WITH INTRINSICALLY SAFE WIRING SHALL TERMINATE IN THE CONTROL PANEL AT THE INTRINSICALLY SAFE WIRING SECTION.
6. METAL CONDUIT IN DIRECT CONTACT WITH EARTH OR CONCRETE SHALL BE PVC COATED FOR CORROSION PROTECTION.
7. ALL CONDUIT ENTRANCES INTO NEMA 4 ENCLOSURES SHALL HAVE WATER TIGHT THREADED HUBS, UL LISTED NEMA 4, 4X FOR RESPECTIVE ENCLOSURE.
8. ALL BUSHINGS, HUBS, & FITTINGS BETWEEN CONDUITS OF DISSIMILAR METALS AND/OR BETWEEN CONDUITS AND ENCLOSURES OF A DISSIMILAR METAL SHALL BE SUITABLE FOR SUCH APPLICATIONS TO ELIMINATE THE POSSIBILITY OF GALVANIC ACTION.
9. CONDUIT SHALL BE SIZED FOR 25% MAXIMUM FILL TO CONFORM TO EXPLOSION PROOF CONDUIT SEAL REQUIREMENTS. ADJUST (ENLARGE) AS REQUIRED.
10. EXPLOSION PROOF CONDUIT SEAL SHALL BE SUITABLE FOR CLASS I, DIVISION 1, GROUP D HAZARDOUS LOCATION, CROUSE HINDS EYS, APPLETON EYS, ESU, EY, KILLARK ENY, EY EYS OR O-Z GEDNEY EYA, EY, OR EZS SERIES, REQUIRED FOR ALL CONDUITS ENTERING OR LEAVING THE WET WELL OR VALVE VAULT INSTALLED IN CONFORMANCE WITH NEC 501 & MANUFACTURER'S DIRECTIONS. NOTE CONDUIT SEALS SHALL BE SIZED AS REQUIRED FOR THE RESPECTIVE CABLE FILL. CABLE FILL SHALL NOT EXCEED 25% FOR CONDUIT SEAL APPLICATION. CONDUIT SEALS SHALL BE THE FIRST FITTING AFTER THE CONDUIT LEAVES THE WET WELL AND EMERGES FROM GRADE & THE FIRST FITTING AFTER CONDUIT ENTERS THE VALVE VAULT.
11. PROVIDE HEAVY DUTY STAINLESS STEEL CABLE RACK ADEQUATELY SIZED FOR THE RESPECTIVE PUMP & LEVEL CABLES OR HEAVY DUTY NYLON SADDLE RACKS (CABLE HANGAR WITH 3" THROAT OPENING), UNDERGROUND DEVICES CAT. NO. 3SR1. MOUNT AT IMMEDIATELY INSIDE ACCESS HATCH WITH STAINLESS STEEL STRUT SUPPORT & STAINLESS STEEL HARDWARE. PROVIDE SUFFICIENT RACKS FOR EACH PUMP CABLE & LEVEL CABLES. EACH PUMP MOTOR SHALL HAVE 10' MINIMUM SLACK CABLE TO ALLOW FOR FUTURE REMOVAL AND REINSTALLATION. LOOP SLACK CABLES AROUND SADDLE RACK AND SECURE WITH CABLE TIES.
12. SUBMERSIBLE PUMP CABLE SHALL BE SUPPLIED BY PUMP MANUFACTURER. VERIFY EACH PUMP MOTOR HAS A MINIMUM OF 10 FEET OF SLACK CABLE.
13. CONDUIT HOLES SHALL BE CORED THROUGH THE STRUCTURE WALLS OR PREFORMED DURING CASTING.

NOTES:

1. VERIFY LEVEL SWITCH ELEVATIONS AND CABLE HANGER LOCATIONS WITH ENGINEER AND PUMP MANUFACTURER REPRESENTATIVE. FLOAT SWITCHES AND LEVEL CONTROL TRANSDUCER TO BE LOCATED IN THE WET WELL FOR THE JOCKEY PUMP.

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		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

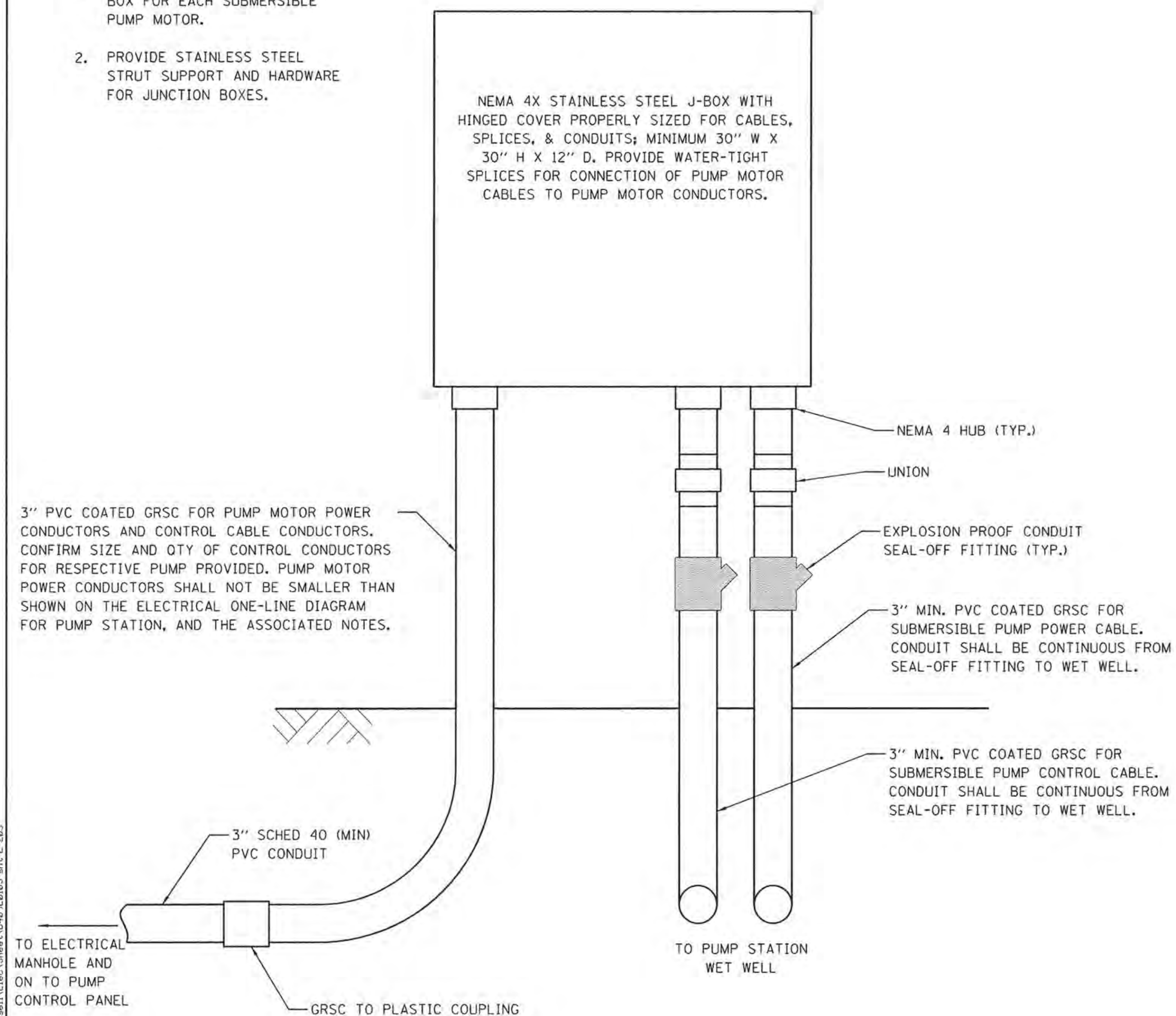
EAST MAIN STREET
PUMP STATION ELEVATION

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-CS	KNOX	216	61
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES:

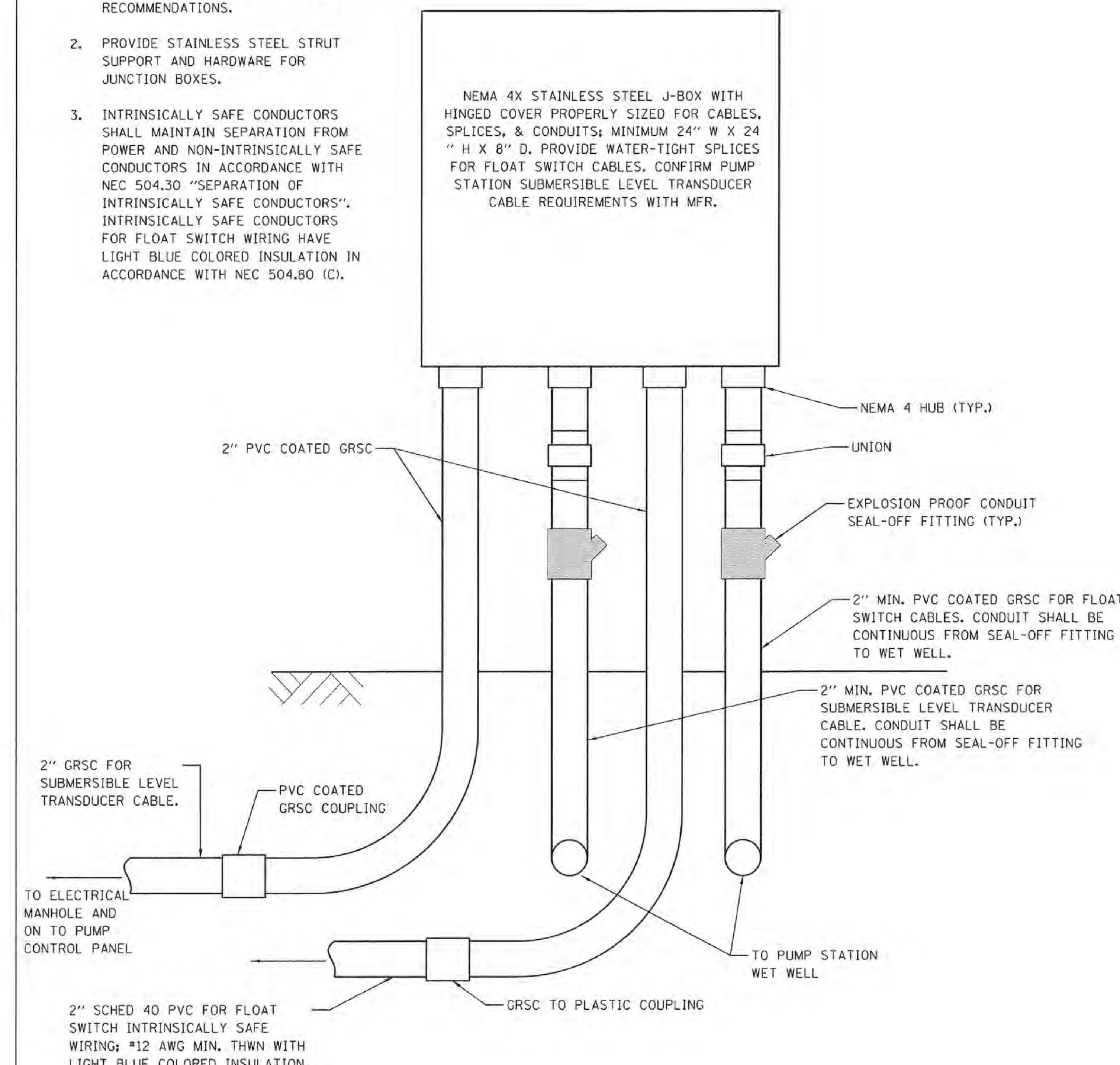
1. PROVIDE A SEPARATE SPLICE BOX FOR EACH SUBMERSIBLE PUMP MOTOR.
2. PROVIDE STAINLESS STEEL STRUT SUPPORT AND HARDWARE FOR JUNCTION BOXES.



SUBMERSIBLE PUMP MOTOR CABLE SPLICE BOX

NOTES:

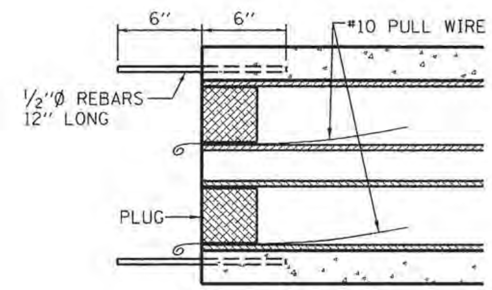
1. SUBMERSIBLE LEVEL TRANSDUCER CABLE TO BE INSTALLED IN GRSC FOR SHIELDING PROTECTION PER MFR RECOMMENDATIONS.
2. PROVIDE STAINLESS STEEL STRUT SUPPORT AND HARDWARE FOR JUNCTION BOXES.
3. INTRINSICALLY SAFE CONDUCTORS SHALL MAINTAIN SEPARATION FROM POWER AND NON-INTRINSICALLY SAFE CONDUCTORS IN ACCORDANCE WITH NEC 504.30 "SEPARATION OF INTRINSICALLY SAFE CONDUCTORS". INTRINSICALLY SAFE CONDUCTORS FOR FLOAT SWITCH WIRING HAVE LIGHT BLUE COLORED INSULATION IN ACCORDANCE WITH NEC 504.80 (C).



FLOAT SWITCH & LEVEL CONTROLLER CABLE SPLICE BOX

LAYOUT KNL	FILE NAME =	USER NAME = ander00846	DESIGNED - KNL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST MAIN STREET JUNCTION BOX DETAILS FOR PUMP STATION
DRAWN SIP	c:\pwise_work\do_not_delete\d0273649\D409L0105-sht-E-203.dgn	PLOT SCALE = 1.0000 ' / in.	DRAWN - SIP	REVISED -		
REVIEWED RDN/KNL		PLOT DATE = 11/13/2015	CHECKED - RDN/KNL	REVISED -		SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.
			DATE - 9/9/2015	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	62
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION
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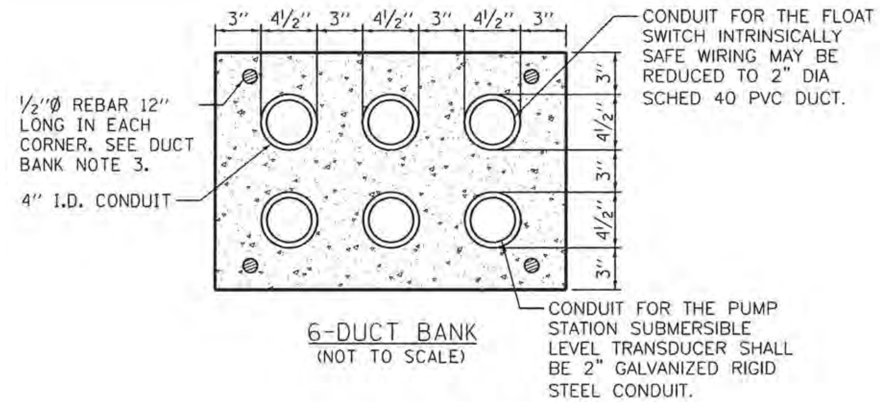
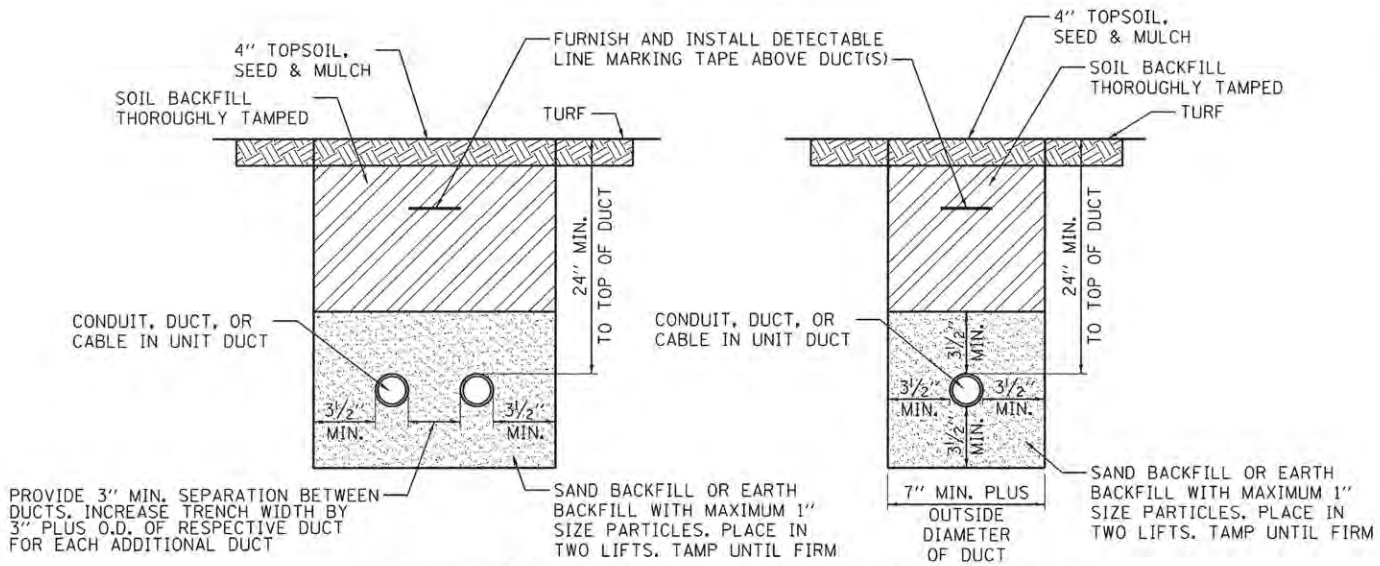


DUCT BANK DETAIL



CONDUIT IN TRENCH – NON-PAVEMENT AREAS
(NOT TO SCALE)

NOTES:

1. DIMENSIONS FOR COVERAGE AND SEPARATION BETWEEN DUCTS ARE MINIMUM.
2. TRENCHES WITH MORE THAN TWO DUCTS OR CABLE IN UNIT DUCTS SHALL BE INCREASED 3" IN WIDTH PLUS DIAMETER OF RESPECTIVE DUCT FOR EACH ADDITIONAL CONDUIT, DUCT, OR CABLE IN UNIT DUCT; IF SPECIFIED ON PLANS TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
3. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS. MINIMUM COVER REQUIREMENTS FOR CABLES AND DUCTS SHALL BE 24 INCHES. COVER IS DEFINED AS THE SHORTEST DISTANCE IN INCHES MEASURED BETWEEN A POINT ON THE TOP SURFACE OF ANY DIRECT-BURIED CONDUCTOR, CABLE, CONDUIT, OR OTHER RACEWAY AND THE TOP SURFACE OF FINISHED GRADE, CONCRETE OR SIMILAR COVER.
4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH.

DUCT BANK NOTES:

1. ALL DIMENSIONS ARE MINIMUM.
2. INCLUDE DUCT SPACERS AS MANUFACTURED BY UNDERGROUND DEVICES INC., TO MAINTAIN PROPER SEPARATION OF CONDUITS.
3. PROVIDE REBAR WHERE APPLICABLE TO ACCOMMODATE INTERFACE TO HANDHOLES AND MANHOLES AT DUCT BANK TERMINATIONS. COORDINATE WITH MANHOLE INSTALLATIONS. REBAR SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GRADE 60 OR ASTM A615 GRADE 60.
4. CONDUITS FOR CONCRETE ENCASEMENT SHALL BE SCHEDULE 40 (MINIMUM) PVC, UL-LISTED, RATED FOR 90°C CABLE, CONFORMING TO NEMA STANDARD TC-2 AND UL 651, LISTED SUITABLE FOR CONCRETE ENCASEMENT. SEE NOTE 5 FOR CONDUIT REQUIREMENTS FOR PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLES.
5. CONDUITS AND DUCTS FOR THE PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLES SHALL BE GALVANIZED RIGID STEEL CONDUIT. RIGID STEEL CONDUIT AND FITTINGS SHALL BE HOT-DIPPED, GALVANIZED, UL-LISTED, AND PRODUCED IN ACCORDANCE WITH UL STANDARD 6; RIGID METAL CONDUIT AND ANSI C80.1; RIGID STEEL CONDUIT, ZINC COATED. COUPLINGS, CONNECTORS, AND FITTINGS FOR RIGID STEEL CONDUIT SHALL BE THREADED, GALVANIZED STEEL OR GALVANIZED, MALLEABLE IRON, SPECIFICALLY DESIGNED AND MANUFACTURED FOR THE PURPOSE. FITTINGS SHALL CONFORM TO ANSI C80.4; FITTINGS RIGID METAL CONDUIT AND EMT AND UL 514B; CONDUIT, TUBING, AND CABLE FITTINGS. SET SCREW TYPE FITTINGS ARE NOT ACCEPTABLE. STEEL USED TO MANUFACTURE CONDUITS SHALL BE 100 PERCENT DOMESTIC STEEL. CONTRACTOR SHALL PROVIDE CERTIFICATION THAT THE RESPECTIVE STEEL CONDUITS USED ON THIS PROJECT ARE MANUFACTURED FROM 100 PERCENT DOMESTIC STEEL.
6. MINIMUM DEPTH OF TOP OF DUCT ENCASEMENT SHALL BE 24" BELOW FINISHED GRADE. DEPTH OF TOP OF DUCT ENCASEMENT SHALL BE 42" MINIMUM TO FINISHED GRADE IN AREAS UNDER ROADWAYS. ADJUST DEPTHS TO ACCOMMODATE SITE CONDITIONS AND/OR TO AVOID INTERFERENCES WITH OTHER UTILITIES AND LINES.
7. BELOW GRADE PVC CONDUITS SHALL TRANSITION TO PVC COATED GALVANIZED RIGID STEEL CONDUIT WHERE EMERGING FROM GRADE TO COMPLY WITH CITY OF GALESBURG, IL ELECTRICAL CODE AND ORDINANCES AND IDOT RECOMMENDATIONS. ABOVE GRADE EXPOSED CONDUIT SHALL BE PVC COATED GALVANIZED RIGID STEEL UNLESS DETAILED OTHERWISE HEREIN.
8. THE WIRING ASSOCIATED WITH EACH SUBMERSIBLE PUMP MOTOR SHALL BE RUN IN A DEDICATED DUCT.
9. THE WIRING ASSOCIATED WITH THE PUMP STATION SUBMERSIBLE LEVEL TRANSDUCER CABLES SHALL BE RUN IN A DEDICATED GALVANIZED RIGID STEEL DUCT.
10. THE INTRINSICALLY SAFE WIRING ASSOCIATED WITH THE PUMP STATION FLOAT SWITCHES SHALL BE RUN IN A SEPARATE DEDICATED DUCT. INTRINSICALLY SAFE CONDUCTORS SHALL MAINTAIN SEPARATION FROM POWER AND NON-INTRI9NSICALLY SAFE CONDUCTORS IN ACCORDANCE WITH NEC 504.30 "SEPARATION OF INTRINSICALLY SAFE CONDUCTORS". COORDINATE DUCT INTERFACE TO MANHOLES AND SECURING CABLES FOR PROPER SEPARATION.
11. WHERE CONCRETE ENCASED DUCT INTERFACES TO AN ELECTRICAL HANDHOLE OR MANHOLE, THE CONCRETE ENCASEMENT SHALL BE INSTALLED UP TO THE RESPECTIVE HANDHOLE OR MANHOLE. PROVIDE BUSHINGS OR BELLS AT CONDUIT TERMINATIONS IN ELECTRICAL HANDHOLES AND MANHOLES.
12. A PULL WIRE SHALL BE INSTALLED IN EACH CONDUIT OR DUCT TO BE LEFT VACANT.
13. COORDINATE CONDUIT AND DUCT INTERFACE WITH THE HANDHOLE AND/OR MANHOLE INSTALLATION. FIELD CUT OPENINGS FOR CONDUITS AND DUCTS ACCORDING TO THE RESPECTIVE HANDHOLE AND/OR MANHOLE MANUFACTURER'S RECOMMENDATIONS. CORE DRILL AND/OR CUT WALL OF HANDHOLE AND/OR MANHOLE WITH A TOOL DESIGNED FOR THE MATERIAL TO BE CUT AND SUITABLE FOR THE RESPECTIVE APPLICATION. SIZE HOLES FOR TERMINATION FITTINGS TO BE USED AND SEAL AROUND PENETRATIONS AFTER FITTINGS ARE INSTALLED.
14. INSTALL DUCT BANKS WITH SLOPE TO DRAIN WHERE TERMINATION IN MANHOLES OR HANDHOLES.
15. THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT, OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS, AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT, WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER/RESIDENT PROJECT REPRESENTATIVE SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. CONTACT JULIE (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS) FOR UTILITY INFORMATION, PHONE: 1-800-892-0123.
16. FURNISH AND INSTALL DETECTABLE LINE MARKING TAPE ABOVE DUCTS; (CONCRETE ENCASED AND DIRECT BURY DUCTS).

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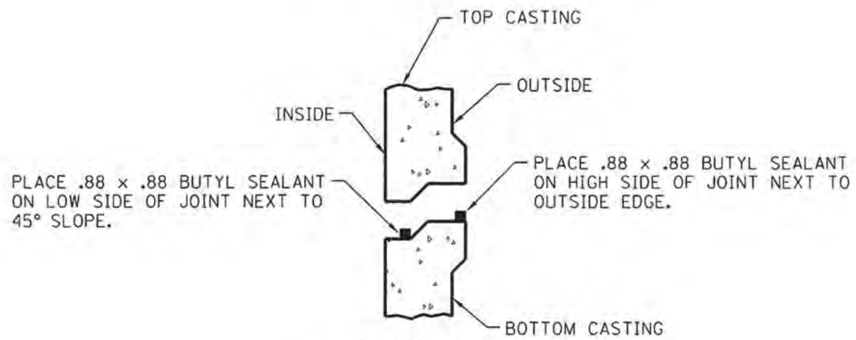
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ELECTRICAL DUCT DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	63
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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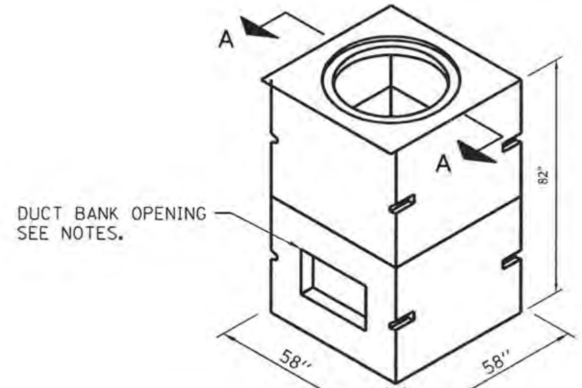
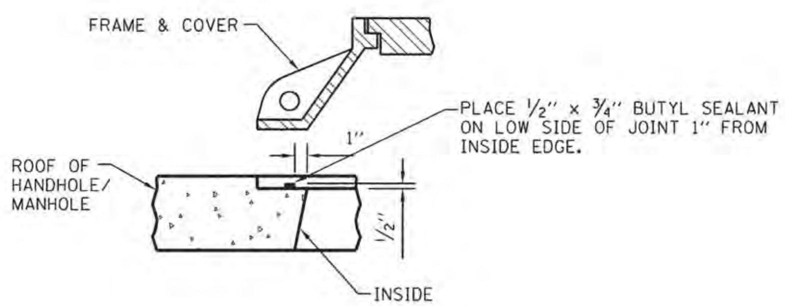


PRECAST 4'x4'x6' MANHOLE
(NOT TO SCALE)



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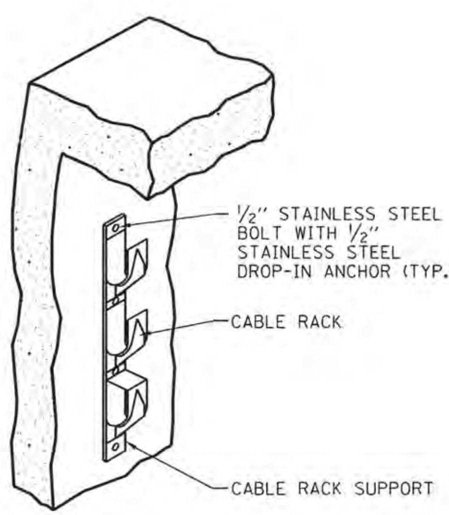

CABLE RACK
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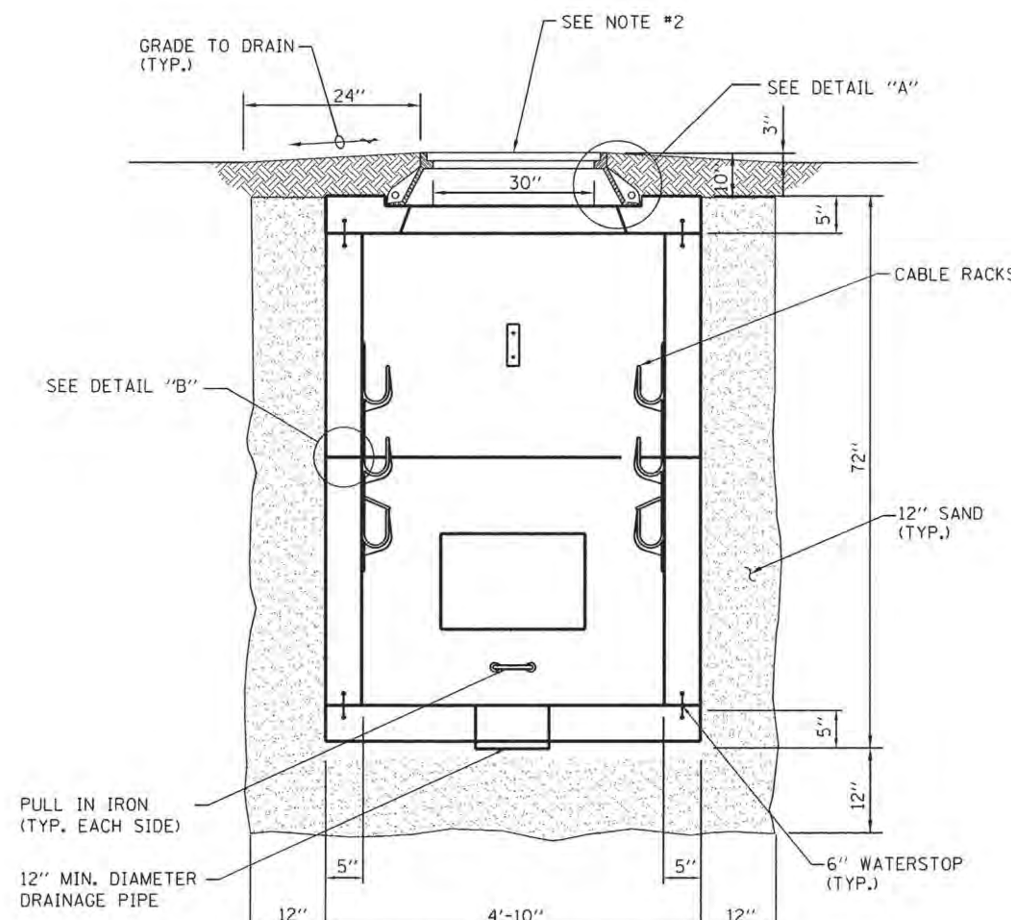

SECTION A

PRECAST 4'x4'x6' ELECTRICAL MANHOLE NOTES

1. 4'x4'x6' ELECTRICAL MANHOLE SHALL BE CONSTRUCTED TO MEET THE FOLLOWING:

   DESIGN CRITERIA:
   1) DESIGN SPECIFICATION: ACI 318, AASHTO LOAD FACTOR DESIGN METHOD, AND ASTM C858
   2) DESIGN LOADING: AASHTO HS20 (32,000 LB/AXLE)
   3) LIVE LOAD SURCHARGE: .5% OF THE WHEEL LOADING APPLIED TO 8'-0" OF DEPTH.
   4) CONCRETE COMPRESSIVE STRENGTH: F'c = 4500 PSI
   5) REINFORCING STEEL: ASTM A706, Fy = 60000 PSI

   DESIGN ASSUMPTIONS:
   1) GROUND WATER LEVEL: 3'-6" BELOW GRADE.
   2) EARTH COVER: 2'-0" MINIMUM TO 5'-0" MAXIMUM
   3) LIVE LOAD IMPACT: 2'-0" 1 = 20%
      2'-1" TO 2'-11" 1 = 10%
      3'-0" TO 5'-0" 1 = 0%
   4) COEFFICIENT OF ACTIVE EARTH PRESSURE: Ka - 0.3
   5) SPECIFIC WEIGHT OF STD. AGGREGATE CONCRETE" 150 PCF
   6) SPECIFIC WEIGHT OF DRY EARTH: 100 PCF
   7) SPECIFIC WEIGHT OF SATURATED EARTH: 120 PCF
   8) EQUIVALENT FLUID PRESSURE OF DRY EARTH: 30 PSF
   9) EQUIVALENT FLUID PRESSURE OF SATURATED EARTH: 80 PSF

   THE SUPPLIER SHALL PROVIDE CERTIFICATION THAT THE PRECAST MANHOLES MEET OR EXCEED THESE REQUIREMENTS PRIOR TO INSTALLATION.

2. MANHOLE FRAME & LID SHALL BE CAPABLE OF WITHSTANDING MINIMUM 50,000 POUND LOADS. MANHOLE FRAME & LID SHALL BE NEENAH CATALOG NO. R-1640-C OR APPROVED EQUAL. LID FOR MANHOLE CONTAINING LOW VOLTAGE CIRCUITS (600 VOLTS AND BELOW) SHALL BE LABELED "ELECTRIC".

3. COORDINATE DUCT BANK INTERFACE & OPENINGS WITH THE MANHOLE MFR. CONTRACTOR SHALL SLOPE DUCT BANK TO PRECAST MANHOLE OPENINGS. ALL OPENINGS SHALL BE SEALED WATERTIGHT AFTER DUCT BANK INSTALLATION.

4. 4'x4'x6' MANHOLE SHALL BE MANUFACTURED BY A CONCRETE ELECTRICAL MANHOLE PRODUCER ON THE ILLINOIS DEPARTMENT OF TRANSPORTATION APPROVED LIST OF CERTIFIED PRECAST CONCRETE PRODUCERS.

5. INTRINSICALLY SAFE CONDUCTORS SHALL MAINTAIN SEPARATION FROM POWER WIRING AND NON-INTRINSICALLY SAFE CONDUCTORS IN ACCORDANCE WITH NEC 504.30 "SEPARATION OF INRINSICALLY SAFE CONDUCTORS". COORDINATE DUCT INTERFACE TO MANHOLES AND SECURING CABLES FOR PROPOER SEPARATION.

6. CABLE RACKS SHALL BE HEAVY DUTY CORROSION RESISTANT NYLON MATERIAL WITH CORROSION RESISTANT STAINLESS STEEL MOUNTING HARDWARE; UNDERGROUND DEVICES, INC. CAT. NO. 3SR1N, 3SR2N OR 3SR3N OR EQUAL. PROVIDE AT LEAST TWO TRIPLE HOOK CABLE RACKS ON EACH MANHOLE WALL, SPACED TO SUPPORT RESPECTIVE CABLES.

7. COORDINATE INSTALLATION OF MANHOLES WITH RESPECTIVE FINISHED GRADE ELEVATIONS.

8. INCLUDE FLOOR SUMP OR DRAINAGE PIPE, ADEQUATELY SIZED TO ACCOMMODATE A PORTABLE SUMP PUMP.

9. ALL CORING, INTERFACE AND LABOR ASSOCIATED WITH DUCT, CONDUIT, AND/OR CABLE ENTRIES WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE MANHOLE AND OTHER ASSOCIATED WORK AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

PRECAST 4' x 4' x 6' MANHOLE DETAILS
(NOT TO SCALE)

LAYOUT	DRAWN	REVIEWED
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	PLOT SCALE = 1.0000 ' / in.	DRAWN - SIP	REVISED -		
	PLOT DATE = 11/13/2015	CHECKED - RDN/KNL	REVISED -		
		DATE - 9/9/2015	REVISED -		SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

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6800	05-00500-19-GS	KNOX	216	64
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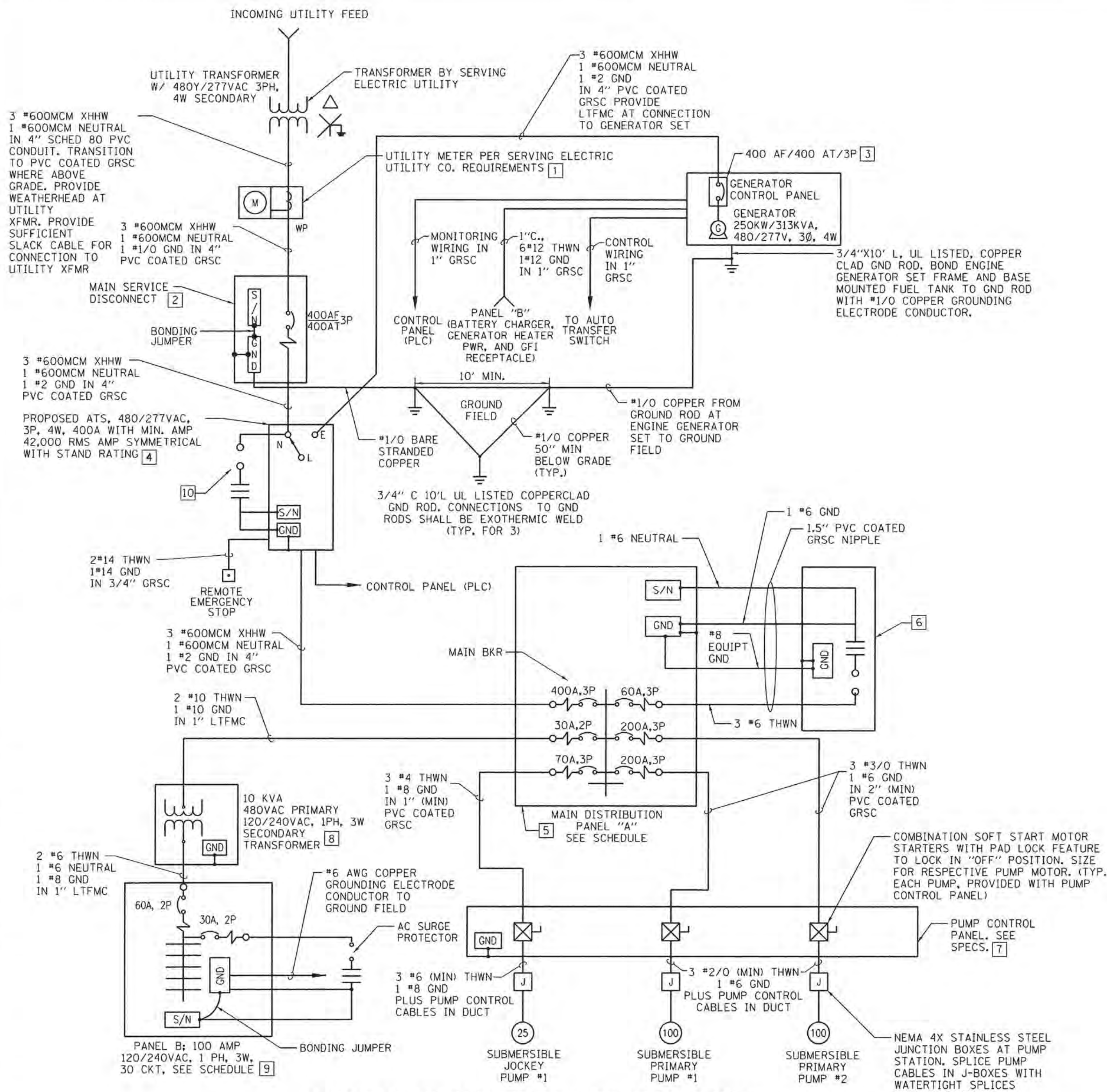

ELECTRICAL ONE-LINE DIAGRAM FOR PUMP STATION

ELECTRICAL KEYED NOTES:

[1] CONFIRM UTILITY METERING REQUIREMENTS WITH THE SERVING ELECTRIC UTILITY COMPANY. FURNISH AND INSTALL UTILITY METER BASE PER THE SERVING ELECTRIC UTILITY COMPANY REQUIREMENTS.

[2] 600 VAC, 400 AMP, 3-POLE CIRCUIT BREAKER WITH 42,000 AIC (MIN.) AT 480 VAC IN A NEMA 4X STAINLESS STEEL ENCLOSURE UL LISTED SUITABLE FOR SERVICE ENTRANCE. CIRCUIT BREAKER SHALL BE SELECTED TO MAINTAIN THE WITHSTAND AND CLOSING RATINGS OF THE TRANSFER SWITCH OF 42,000 AMPS (MIN). INCLUDE SOLID NEUTRAL AND EQUIPMENT GROUND BAR KIT. CIRCUIT BREAKER ENCLOSURE SHALL BE PAD LOCKABLE IN THE "OFF" POSITION. COORDINATE SELECTION OF LUGS TO ACCOMMODATE 600MCM CONDUCTORS.

[3] COORDINATE GENERATOR CIRCUIT BREAKER SELECTION TO MAINTAIN THE WITHSTAND AND CLOSING RATINGS OF THE TRANSFER SWITCH OF 42,000 AMPS (MIN). CIRCUIT BREAKER ENCLOSURE SHALL BE PAD LOCKABLE IN THE "OFF" POSITION. COORDINATE SELECTION OF LUGS TO ACCOMMODATE 600MCM CONDUCTORS.

[4] 400 AMP, 3-POLE 480/277 VAC, 3 PHASE, 4-WIRE, AUTO TRANSFER SWITCH IN A NEMA 4X STAINLESS STEEL ENCLOSURE WITH HINGED COVER. SEE SPECS. COORDINATE SELECTION OF LUGS TO ACCOMMODATE 600MCM CONDUCTORS.

[5] 400 AMP, 480/277 VAC, 3 PHASE, 4-WIRE, MAIN DISTRIBUTION PANELBOARD "A" IN A NEMA 3R, 5, AND 12 ENCLOSURE WITH HINGED COVER. SEE PANELBOARD "A" SCHEDULE FOR REQUIREMENTS. COORDINATE SELECTION OF LUGS TO ACCOMMODATE 600MCM CONDUCTORS.

[6] AC SURGE PROTECTOR SUITABLE FOR 480/277 VAC, 3 PHASE, 4-WIRE PLUS GROUND SYSTEM WITH A SURGE CURRENT RATING OF 240 KA, 8 X 20 MICROSECOND WAVE PER MODE AND STATUS INDICATION LIGHTS IN A NEMA 4X STAINLESS STEEL ENCLOSURE ; LIGHTNING PROTECTION CORPORATION MODEL 2070-8U-G WITH NEMA 4X STAINLESS STEEL ENCLOSURE OR APPROVED EQUAL. AC SURGE PROTECTOR SHALL BE INSTALLED ON THE SAME SIDE OF THE PANELBOARD AS THE RESPECTIVE BREAKER CONNECTING TO THE SURGE PROTECTOR. MAINTAIN LEADS AS SHORT AND AS STRAIGHT AS POSSIBLE FROM THE PANELBOARD TO THE AC SURGE PROTECTOR DEVICE. PROVIDE DUCT SEAL AT CONDUIT TERMINATIONS.

[7] PUMP CONTROL PANEL IN A NEMA 4X STAINLESS STEEL ENCLOSURE. EACH MOTOR STARTER SHALL BE A COMBINATION SOFT START TYPE PROPERLY SIZED FOR THE RESPECTIVE PUMP MOTOR AND SHALL HAVE PROVISIONS TO PAD LOCK THE STARTER IN THE "OFF" POSITION. SEE SPECS.

[8] 10 KVA, 480 VAC SINGLE PHASE PRIMARY, 120/240 VAC, SINGLE PHASE, 3-WIRE SECONDARY STEP-DOWN TRANSFORMER IN A NEMA 3R WEATHERPROOF ENCLOSURE. SEE SPECS.

[9] 100 AMP, 120/240 VAC, 1 PHASE, 3-WIRE, PANELBOARD "B" WITH 60 AMP, 2-POLE MAIN BREAKER IN A NEMA 3R, 5, AND 12 ENCLOSURE WITH HINGED COVER. SEE PANELBOARD "B" SCHEDULE FOR REQUIREMENTS.

[10] AC SURGE PROTECTOR WITH PEAK SURGE CURRENT RATING 80KA, SUITABLE FOR 480Y/277VAC 3PH, 4 WIRE PLUS GROUND, SQUARE D CLASS 6671 CAT. NO. TVS4HWA80X OR APPROVED EQUAL. COORDINATE LUGS AND CONNECTION TO LINE SIDE OF TRANSFER SWITCH WITH TRANSFER SWITCH MFR.

ELECTRICAL GENERAL NOTES:

1. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS, AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL/INTERTEK TESTING SERVICES VERIFICATION LISTING, FM APPROVAL, (OR OTHER THIRD PARTY LISTING) AND/OR THE EQUIPMENT MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
2. COORDINATE ELECTRIC SERVICE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY:
   AMEREN ILLINOIS
   ATTN MS. JULIE CONE
   1824 KNOX HIGHWAY 9
   GALESBURG, IL. 61401
   PHONE: 309-345-5169
   CELL PHONE: 309-368-6248
3. PUMP MOTOR SIZES MAY VARY DEPENDING UPON MANUFACTURER. CIRCUIT BREAKERS, MOTOR STARTERS, CONDUITS AND WIRING SHALL BE SIZED FOR THE RESPECTIVE PUMP MOTORS FURNISHED. VERIFY REQUIREMENTS WITH THE RESPECTIVE PUMP MOTOR MANUFACTURER.
4. BATTERY, BATTERY CHARGER, AND ALL GEN. SET CONTROL AND INDICATOR PANELS SHALL BE INSTALLED INSIDE THE ENGINE GENERATOR SET HOUSING. INCLUDE 120 VAC, 20 AMP, GFCI CONVENIENCE RECEPTACLE WITH FS BOX TO BE INSTALLED IN THE GEN SET HOUSING.
5. ALL METAL CONDUITS ENTERING SERVICE ENTRANCE EQUIPMENT AND/OR THE TRANSFER SWITCH SHALL BE GROUNDED USING GROUNDING BUSHING/GROUNDING HUBS WITH GROUND CONDUCTOR FROM BUSHING TO RESPECTIVE ENCLOSURE GROUND BUS.
6. METAL CONDUIT IN DIRECT CONTACT WITH EARTH OR CONCRETE SHALL BE PVC COATED GRSC. METAL CONDUIT ENTERING THE SEWAGE PUMP STATION WET WELL SHALL BE PVC COATED GRSC OR PVC COATED RIGID ALUMINUM.
7. PROVIDE NEMA 4 HUBS FOR ALL CONDUIT ENTERING EXTERIOR ENCLOSURES THAT ARE RATED NEMA 4 OR NEMA 4X TO MAINTAIN THE NEMA 4, 4X RATING OF THE ENCLOSURE. PROVIDE NEMA 4 HUBS FOR ALL CONDUITS ENTERING THE PANELBOARD ENCLOSURE.
8. ALL CONDUCTORS/WIRING SHALL BE COPPER.
9. THE SERVING ELECTRIC UTILITY; AMEREN, HAS NOTED SOFT START MOTOR STARTERS ARE REQUIRED FOR THIS PUMP STATION.

MAIN DISTRIBUTION PANEL "A" SCHEDULE

CKT #	DUTY	SIZE	SIZE	DUTY	CKT #
1	MAIN	400A, 3P	60A, 3P	AC SURGE PROTECTOR	2
	DISCONNECT	---	---		
		---	---		
	SPACE FOR MAIN SERVICE BKR		200A, 3P	PRIMARY PUMP #1	4
3	TRANSFORMER PRIMARY DISCONNECT	30A, 2P	---		
		---	---		
5	JOCKEY PUMP	70A, 3P	200A, 3P	PRIMARY PUMP #2	6

	1.5" SPACE	---		1.5" SPACE	---
	1.5" SPACE	---		1.5" SPACE	---
	1.5" SPACE	---		1.5" SPACE	---

GND

400AMP, 480/277 VAC, 3 PHASE, 4 WIRE PANELBOARD WITH 400AMP, 3 POLE MAIN BREAKER (REVERSE FEED AMIN BREAKER IS ACCEPTABLE) IN A NEMA 3R & 12 ENCLOSURE UL LISTED SUITABLE FOR SERVICE ENTRANCE. ENCLOSURE SHALL HAVE A HINGED COVER. PANEL SHALL HAVE 36" MINIMUM OF CIRCUIT BREAKER MOUNTING SPACE FOR BREAKERS. PANELBOARD SHALL ACCOMMODATE BRANCH/FEEDER BREAKERS UP TO 400 AMP FRAME SIZE. PANELBOARD SHALL BE SQUARE D I-LINE HCP SERIES WITH NEMA 3R & 12 ENCLOSURE, OR APPROVED EQUAL.

NOTES:

1. PANELBOARD SHALL BE BRACED FOR 35,000 AMPS SYMMETRICAL MINIMUM AT 480VAC.
2. PANEL SHALL HAVE COPPER BUS, COPPER NEUTRAL & COPPER EQUIPMENT GROUND BAR.
3. ALL FEEDER & BRANCH BREAKERS SHALL HAVE AN INTERRUPTING RATING OF 35,000 AIC MINIMUM AT 480VAC.
4. INCLUDE PHENOLIC ENGRAVED LEGEND PLATE LABELED "MAIN DISTRIBUTION PANEL "A" 480/277 VAC, 3 PHASE, 4-WIRE.
5. INCLUDE PHENOLIC ENGRAVED LEGEND PLATES TO IDENTIFY EACH BREAKER.
6. CIRCUIT BREAKERS AND WIRING SHALL BE SIZED FOR THE ACTUAL EQUIPMENT FURNISHED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S RECOMMENDATION AND N.E.C. CONTRACTOR SHALL ADJUST CIRCUIT BREAKER SIZES & WIRING WHERE APPLICABLE TO CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS AND N.E.C.
7. COORDINATE SELECTION OF 400AMP MAIN BREAKER TO ACCOMMODATE 600MCM CONDUCTORS.

120/240V PANELBOARD "B" SCHEDULE

CKT #	DUTY	SIZE	SIZE	DUTY	CKT #
1	MAIN BREAKER	60A, 2P	30A, 2P	AC SURGE PROTECTOR	2
3		---			4
5	BATTERY CHARGER	20A, 1P	20A, 1P	CONVENIENCE RECEPT	6
7	CONV. RECEPT FOR GENERATOR	20A, 1P	15A, 1P	CONTROL POWER FOR PUMPS	8
9	BLOCK HEATER	15A, 2P	15A, 1P	SPARE	10
11	---	---	20A, 1P	SPARE	12
13	SPARE	20A, 2P	25A, 1P	SPARE	14
15	---		30A, 1P	SPARE	16
17	BLANK			BLANK	18
19	BLANK			BLANK	20
21	BLANK			BLANK	22
23	BLANK			BLANK	24
25	BLANK			BLANK	26
27	BLANK			BLANK	28
29	BLANK			BLANK	30

S/N GND

100AMP, 120/240VAC, 1 PHASE, 3 WIRE 30 CIRCUIT PANELBOARD WITH 60AMP, 2 POLE MAIN BREAKER RATED 10,000 AIC AT 240VAC IN A NEMA 3R, 5 & 12 ENCLOSURE WITH HINGED COVER. PANELBOARD SHALL ACCOMMODATE FEEDER AND BRACH BREAKER UP TO 100AMP, 2 POLE FRAME & TRIP RATING. PANELBOARD SHALL BE SQUARE D CAT. NO. NQ30L1C WITH COPPER NEUTRAL & COPPER GROUND BAR KIT, AND CAT NO. MH32WP ENCLOSURES OR APPROVED EQUAL.

NOTES:

1. PANELBOARD BUSSES SHALL BE COPPER. NEUTRAL SHALL BE COPPER. EQUIPMENT GROUND BAR SHALL BE COPPER.
2. ALL BRANCH CIRCUIT & FEEDER BREAKERS SHALL BE BOLT-ON TYPE WITH 10,000 AIC AT 120/240 VAC.
3. INCLUDE ENGRAVED, PHENOLIC OR PLASTIC LEGEND PLATE LABELED "PANEL B, 120/240 VAC, 1PH, 3W".
4. CIRCUIT BREAKERS AND WIRING SHALL BE SIZED FOR THE ACTUAL EQUIPMENT FURNISHED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S RECOMMENDATION AND N.E.C. CONTRACTOR SHALL ADJUST CIRCUIT BREAKER SIZES & WIRING WHERE APPLICABLE TO CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS AND N.E.C.
5. FURNISH AND INSTALL A 20 AMP, 125VAC, GFCI SPEC GRADE RECEPTACLE WITH CAST WEATHERPROOF OUTLET BOX AND WEATHERPROOF COVER. FURNISH AND CAST ALUMINUM LOCKING TYPE "WHILE IN USE" AND INSTALL 1 #12 THWN, 1 #12 NEUTRAL, 1 #12 GND IN 3/4 INCH GRSC NIPPLE FROM 20 AMP, 1P BRANCH BREAKER TO RECEPTACLE.
6. FURNISH AND INSTALL AN AC SURGE PROTECTOR SUITABLE FOR 120/240VAC, 1 PHASE, 3-WIRE PLUS GROUND SYSTEM WITH SURGE CURRENT RATING NOT LESS THAN 40KA, 8x20 MICROSECOND WAVE, PER MODE, SQUARE D CAT. NO. TVS12OXR50S, JOSLYN MODEL 1265-21, OR APPROVED EQUAL.

LEGEND PLATE SCHEDULE	
DEVICE	**LABEL**
SERVICE DISCONNECT FOR PUMP STATION	SERVICE DISCONNECT 480/277 VAC, 3 PH, 4-W
SERVICE DISCONNECT FOR PUMP STATION	NOTE ELECTRIC SERVICE IS BACKED UP BY AN ENGINE GENERATOR SET LOCATED ON SITE
SERVICE DISCONNECT FOR PUMP STATION	WARNING SHOCK HAZARD EXISTS IF GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS EQUIPMENT IS REMOVED WHILE ALTERNATIVE SOURCE IS ENERGIZED
SERVICE DISCONNECT FOR PUMP STATION Note: The fault current will need to be calculated and/or provided by the serving electric utility and the date of the calculation recorded for the nameplate to comply with NEC 110.24(A) "Field Marking".	MAX AVAILABLE FAULT CURRENT CALCULATED TO BE ___ AMPS LINE TO LINE AND ___ AMPS LINE TO NEUTRAL ON _____
MAIN BREAKER FOR ENGINE GENERATOR SET	GENERATOR DISCONNECT 480/277 VAC, 3 PH, 4-W
AUTO TRANSFER SWITCH	AUTO TRANSFER SWITCH 480/277 VAC, 3 PH, 4-W
MAIN DISTRIBUTION PANELBOARD "A"	MAIN DISTRIBUTION PANEL A 480/277 VAC, 3 PH, 4-W
MAIN DISTRIBUTION PANELBOARD "A"	THIS PANELBOARD IS POWERED BY THE SERVICE DISCONNECT AND THE ENGINE GENERATOR SET THROUGH THE TRANSFER SWITCH
MAIN BREAKER IN MAIN DISTRIBUTION PANEL "A"	MAIN DISCONNECT
CIRCUIT BREAKER FOR AC SURGE PROTECTOR IN MAIN DISTRIBUTION PANEL "A"	SURGE PROTECTOR
CIRCUIT BREAKER FOR STEP DOWN TRANSFORMER IN MAIN DISTRIBUTION PANEL "A"	STEP-DOWN TRANSFORMER
CIRCUIT BREAKER FOR JOCKEY PUMP IN MAIN DISTRIBUTION PANEL "A"	JOCKEY PUMP
CIRCUIT BREAKER FOR PRIMARY PUMP NUMBER 1 IN MAIN DISTRIBUTION PANEL "A"	PRIMARY PUMP #1
CIRCUIT BREAKER FOR PRIMARY PUMP NUMBER 2 IN MAIN DISTRIBUTION PANEL "A"	PRIMARY PUMP #2
JUNCTION BOX FOR JOCKEY PUMP WIRING	JOCKEY PUMP
JUNCTION BOX FOR PRIMARY PUMP #1	PRIMARY PUMP #1
JUNCTION BOX FOR PRIMARY PUMP #2	PRIMARY PUMP #2
JUNCTION BOX FOR LEVEL TRANSDUCER & FLOAT SWITCH WIRING	LEVEL CONTROL WIRING INTRISICALLY SAFE
PUMP CONTROL PANEL	NOTE PUMP CONTROL PANEL HAS MULTIPLE FEEDER AND BRANCH CIRCUITS, DISCONNECT POWER BEFORE SERVICING

CABLE TAG SCHEDULE	
DEVICE	**LABEL**
JOCKEY PUMP CIRCUIT CABLES	JOCKEY PUMP
PRIMARY PUMP NUMBER 1 CIRCUIT CONDUCTORS	PRIMARY PUMP #1
PRIMARY PUMP NUMBER 2 CIRCUIT CONDUCTORS	PRIMARY PUMP #2
PUMP CONTROL SUBMERSIBLE LEVEL TRANSDUCER CABLE	TRANSDUCER
FLOAT SWITCH PUMP CONTROL CONDUCTORS	FLOAT SWITCHES

GENERAL NOTES:

1. LEGEND PLATES SHALL BE WEATHERPROOF ENGRAVED PLASTIC OR PHENOLIC MATERIAL, 1/4" HIGH WHITE LETTERS ON A RED BACKGROUND UNLESS NOTED OTHERWISE. SECURE WITH WEATHERPROOF ADHESIVE AND MACHINE SCREWS. FURNISH ADDITIONAL LEGEND PLATES WHERE REQUIRED BY CODE, FOR ADDITIONAL EQUIPMENT AS DETAILED HEREIN ON THE PLANS, AND AS NOTED IN THE SPECIAL PROVISION SPECIFICATIONS.
2. LEGEND PLATES FOR EQUIPMENT THAT IS NOT BACKED UP BY THE ENGINE GENERATOR SET SHALL HAVE 1/4" HIGH BLACK LETTERS ON A WHITE BACKGROUND. (FOR EXAMPLE THE SERVICE DISCONNECT)
3. FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH SAFETY SWITCH, PANELBOARD, LOAD CENTER, CUTOUT, & CONTROL PANEL TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS, PER THE REQUIREMENTS OF NEC 110.16 "ARC-FLASH HAZARD WARNING". LABELS SHALL BE HAZARD COMMUNICATION SYSTEMS, LLC (190 OLD MILFORD RD., BOX 1174, MILFORD, PA 18337, PHONE: 1-877-748-0244) PART NO. H6010-9VWHBJ OR APPROVED EQUAL.
4. ALL POWER AND CONTROL CABLES IN HANDHOLES, MANHOLES, AND JUNCTION BOXES SHALL BE TAGGED TO IDENTIFY THE RESPECTIVE CABLE. A MINIMUM OF TWO TAGS SHALL BE PROVIDED ON EACH CABLE IN A MANHOLE; ONE AT THE CABLE ENTRANCE AND ONE AT THE CABLE EXIT. CABLE TAGS SHALL BE STAMPED BRASS TAGS OR OTHER WEATHERPROOF/WATERPROOF CORROSION RESISTANT MATERIAL.
5. FAULT CURRENT INFORMATION TO BE PROVIDED BY SERVING ELECTRIC UTILITY COMPANY. CONTACT PROJECT ENGINEER TO CONFIRM FAULT CURRENT CALCULATIONS.

WARNING

Arc-Flash and Shock Hazard
Appropriate PPE Required

Equipment Name	Main Service Disconnect	
Voltage	480V	
Fed From	Utility Xfmr	
Arc-Flash Protection		
Hazard/Risk Category	2	
Working Distance	1'-6"	(45.7 cm)
Incident Energy	7.96 cal/cm²	(33.28 J/cm²)
Arc-Flash Protection Boundary		
Distance	4'-9"	(1.45 m)
Energy	1.2 cal/cm²	(5.02 J/cm²)
Shock Protection		
Limited Approach Boundary	3'-6"	(1 m)
Restricted Approach Boundary	1'	(0.3 m)
Prohibited Approach Boundary	1"	(25 mm)

MAIN SERVICE DISCONNECT LABEL

WARNING

Arc-Flash and Shock Hazard
Appropriate PPE Required

Equipment Name	Emergency Generator	
Voltage	480V	
Fed From	UTILITY	
Arc-Flash Protection		
Hazard/Risk Category	1	
Working Distance	1'-6"	(45.7 cm)
Incident Energy	2.79 cal/cm²	(11.67 J/cm²)
Arc-Flash Protection Boundary		
Distance	2'-6"	(76.4 cm)
Energy	1.2 cal/cm²	(5.02 J/cm²)
Shock Protection		
Limited Approach Boundary	3'-6"	(1 m)
Restricted Approach Boundary	1'	(0.3 m)
Prohibited Approach Boundary	1"	(25 mm)

ENGINE GENERATOR LABEL

WARNING

Arc-Flash and Shock Hazard
Appropriate PPE Required

Equipment Name	ATS-1	
Voltage	480V	
Fed From	Main Service Disconnect / Emergency Generator	
Arc-Flash Protection		
Hazard/Risk Category	2	
Working Distance	1'-6"	(45.7 cm)
Incident Energy	7.85 cal/cm²	(32.83 J/cm²)
Arc-Flash Protection Boundary		
Distance	4'-9"	(1.44 m)
Energy	1.2 cal/cm²	(5.02 J/cm²)
Shock Protection		
Limited Approach Boundary	3'-6"	(1 m)
Restricted Approach Boundary	1'	(0.3 m)
Prohibited Approach Boundary	1"	(25 mm)

TRANSFER SWITCH LABEL

WARNING

Arc-Flash and Shock Hazard
Appropriate PPE Required

Equipment Name	MDP-A	
Voltage	480V	
Fed From	ATS-1	
Arc-Flash Protection		
Hazard/Risk Category	2	
Working Distance	1'-6"	(45.7 cm)
Incident Energy	7.76 cal/cm²	(32.46 J/cm²)
Arc-Flash Protection Boundary		
Distance	4'-8"	(1.43 m)
Energy	1.2 cal/cm²	(5.02 J/cm²)
Shock Protection		
Limited Approach Boundary	3'-6"	(1 m)
Restricted Approach Boundary	1'	(0.3 m)
Prohibited Approach Boundary	1"	(25 mm)

480V MAIN DIST. PANEL LABEL

WARNING

Arc-Flash and Shock Hazard
Appropriate PPE Required

Equipment Name	XFMR B	
Voltage	240V	
Fed From	MDP-A	
Arc-Flash Protection		
Hazard/Risk Category	1	
Working Distance	1'-6"	(45.7 cm)
Incident Energy	1.21 cal/cm²	(5.07 J/cm²)
Arc-Flash Protection Boundary		
Distance	1'-6"	(46 cm)
Energy	1.2 cal/cm²	(5.02 J/cm²)
Shock Protection		
Limited Approach Boundary	3'-6"	(1 m)
Restricted Approach Boundary	Avoid contact	
Prohibited Approach Boundary	Avoid contact	

480V TO 120/240V STEP-DOWN XFMR LABEL

WARNING

Arc-Flash and Shock Hazard
Appropriate PPE Required

Equipment Name	Panel B	
Voltage	240V	
Fed From	XFMR B	
Arc-Flash Protection		
Hazard/Risk Category	0	
Working Distance	1'-6"	(45.7 cm)
Incident Energy	1.18 cal/cm²	(4.95 J/cm²)
Arc-Flash Protection Boundary		
Distance	1'-6"	(45.3 cm)
Energy	1.2 cal/cm²	(5.02 J/cm²)
Shock Protection		
Limited Approach Boundary	3'-6"	(1 m)
Restricted Approach Boundary	Avoid contact	
Prohibited Approach Boundary	Avoid contact	

120/240V PANEL B LABEL

NOTES:

1. PROVIDE ARC-FLASH AND SHOCK HAZARD WARNING LABELS FOR EQUIPMENT AS DETAILED ON THIS SHEET AND IN ACCORDANCE WITH NEC 110.16 ARC-FLASH HAZARD WARNING, AND NEC 110.21 MARKING.

2. ARC-FLASH CALCULATIONS TO BE PERFORMED ONCE THE EQUIPMENT IS SELECTED DURING CONSTRUCTION. INFO ON LABELS TO BE REVISED FOR RESPECTIVE SITE CONDITIONS. COORDINATE WITH EQUIPMENT MFR AND ENGINEER.

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LAYOUT	KNL
DRAWN	SIP
REVIEWED	RDN/KNL

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	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -

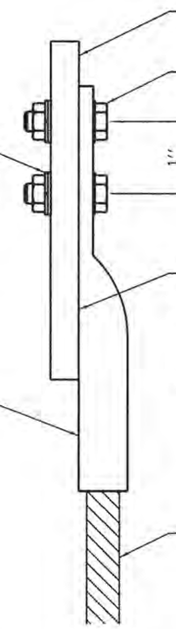
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
ARC-FLASH WARNING LABELS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	68
	50VB	CONTRACT NO.89417		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

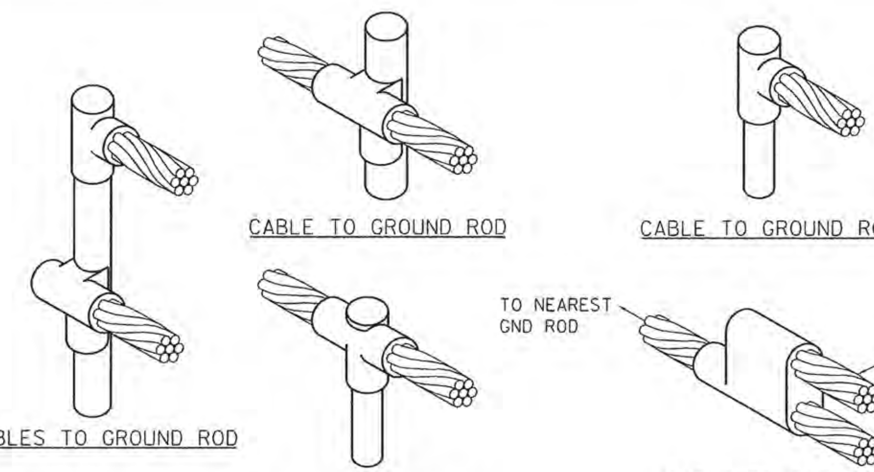


2 HOLE LONG BARREL COMPRESSION LUG TABLE			
WIRE SIZE	BURNDY CAT. NO.	THOMAS & BETTS CAT. NO.	PENN-UNION CAT. NO.
#8 AWG STRANDED	YA8C-2TC38	256-30695-1157	BBLU-8D-2TC38
#6 AWG SOLID	YA8C-2TC38 OR YGA6C-2TC38E2G1		
#6 AWG STRANDED	YA6C-2TC38	256-30695-1158	BBLU-6D-2TC38
#4 AWG STRANDED	YA4C-2TC38	256-30695-1159	BBLU-4D-2TC38
#2 AWG STRANDED	YA2C-2TC38	256-30695-1160	BBLU-2D-2TC38
#2 AWG SOLID	YA3C-2TC38	256-30695-1160	BBLU-3D-2TC38
#1/0 AWG STRANDED	YA25-2TC38	256-30695-1162	BBLU-1/0D-2TC38
#2/0 AWG STRANDED	YA26-2TC38	256-30695-1116	BBLU-2/0D-2TC38
#3/0 AWG STRANDED	YA27-2TC38	54816BE	BBLU-3/0D-2TC38
#4/0 AWG STRANDED	YA28-2TC38	256-30695-1117	BBLU-4/0D-2TC38

NOTES

1. ALL CONNECTIONS TO GROUND BUS BAR SHALL BE WITH 2 HOLE TONGUE LONG BARREL COMPRESSION LUGS BOLTED TO THE BUS BAR.
2. GROUND WIRE CONNECTIONS TO EQUIPMENT SHALL BE WITH 2 HOLE TONGUE LONG BARREL COMPRESSION LUGS BOLTED TO THE DEVICE OR WITH THE RESPECTIVE EQUIPT MANUFACTURER'S LUG OR TERMINAL WHERE APPLICABLE.
3. GROUNDING ELECTRODE CONDUCTORS, BONDING JUMPERS, & INDIVIDUAL GROUND WIRES SHALL NOT BE INSTALLED IN METAL CONDUIT. WHERE PLASTIC CONDUIT IS USED FOR INDIVIDUAL GROUND WIRES, DO NOT COMPLETELY ENCIRCLE THE CONDUIT WITH FERROUS AND/OR MAGNETIC MATERIALS. WHERE METAL CLAMPS ARE INSTALLED USE NYLON BOLTS, NUTS, WASHERS, & SPACERS TO INTERRUPT A COMPLETE METALLIC PATH FROM ENCIRCLING THE CONDUIT.
4. ALL CONNECTIONS SHALL BE COATED WITH A CORROSION PREVENTATIVE COMPOUND (SANCHEM INC. NO-OX-ID "A-SPECIAL", BURNDY PENETROX E, OR EQUAL) BEFORE JOINING. ALL COPPER BUS BARS SHALL BE CLEANED PRIOR TO MAKING CONNECTIONS TO REMOVE SURFACE OXIDATION. CLEAN SURFACES, OF RESPECTIVE DEVICES TO BE BONDED, TO BARE METAL, PER NEC 250-12.

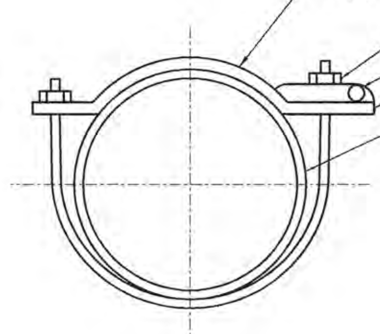
GROUNDING LUG CONNECTION DETAIL



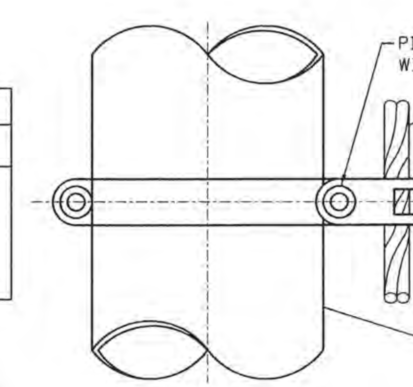
DETAIL NOTES

1. ALL BELOW GRADE CONNECTIONS TO GROUND RODS & GROUND RING CONDUCTORS SHALL BE EXOTHERMIC WELD TYPE CONNECTIONS. EXOTHERMIC WELDS SHALL BE CADWELD AS MANUFACTURED BY ERICO PRODUCTS, SOLON, OHIO, ULTRAWELD AS MANUFACTURED BY HARGER LIGHTNING PROTECTION & GROUNDING EQUIPMENT, GRAYSLAKE, IL, THERMOWELD AS MANUFACTURED BY CONTINENTAL INDUSTRIES, TULSA, OKLAHOMA, OR APPROVED EQUAL. VERIFY PROPER SIZES, MOLDS, TYPES, AND REQUIREMENTS FOR THE RESPECTIVE APPLICATION WITH THE MANUFACTURER, AND INSTALL PER THEIR DIRECTIONS.
2. FOR APPLICATIONS TO GALVANIZED STEEL OR PAINTED STEEL, REMOVE GALVANIZING AND/OR PAINT & CLEAN THE SURFACE TO EXPOSE BARE STEEL BEFORE MAKING EXOTHERMIC WELD CONNECTION.
3. INDIVIDUAL GROUNDING ELECTRODE CONDUCTORS SHALL NOT BE INSTALLED IN METAL CONDUIT. INSTALL GROUNDING ELECTRODE CONDUCTORS IN SCHED 40 PVC CONDUIT AS REQUIRED IN FOUNDATIONS, FOR PROTECTION, WHERE ENTERING ENCLOSURES, ETC. WHERE PLASTIC CONDUIT IS USED FOR INDIVIDUAL GROUND WIRES, DO NOT COMPLETELY ENCIRCLE THE CONDUIT WITH FERROUS AND/OR MAGNETIC MATERIALS. WHERE METAL CLAMPS ARE INSTALLED USE NYLON BOLTS, NUTS, WASHERS, & SPACERS TO INTERRUPT A COMPLETE METALLIC PATH FROM ENCIRCLING THE CONDUIT.

EXOTHERMIC WELD DETAILS



PIPE GROUNDING CLAMP TABLE	
BURNDY CAT. NO.	PIPE SIZE
GAR3902-BU	1/2" - 1"
GAR3903-BU	1 1/4" - 2"
GAR3904-BU	2 1/2" - 3 1/2"
GAR3905-BU	4" - 5"
GAR3906-BU	6"



NOTES

1. PIPE GROUNDING CLAMPS SHALL HAVE BRONZE HARDWARE, FOR CORROSION RESISTANT, SUITABLE FOR DIRECT BURIAL IN EARTH OR CONCRETE, & UL467 LISTED.

PIPE/CONDUIT GROUNDING CLAMP DETAIL

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EAST MAIN STREET GROUNDING DETAILS				
SCALE: N/A	SHEET NO.	OF	SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	69
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

GROUNDING NOTES

1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL GROUNDING AS MAY BE NECESSARY OR REQUIRED TO MAKE A COMPLETE GROUNDING SYSTEM AS REQUIRED BY THE LATEST NATIONAL ELECTRICAL CODE (NFPA 70) IN FORCE. THE RELIABILITY OF THE GROUNDING SYSTEM IS DEPENDENT ON CAREFUL, PROPER INSTALLATION AND CHOICE OF MATERIALS. IMPROPER PREPARATION OF SURFACES TO BE JOINED TO MAKE AN ELECTRICAL PATH, LOOSE JOINTS OR CORROSION CAN INTRODUCE IMPEDANCE THAT WILL SERIOUSLY IMPAIR THE ABILITY OF THE GROUND PATH TO PROTECT PERSONNEL AND EQUIPMENT AND TO ABSORB TRANSIENTS THAT CAN CAUSE NOISE IN COMMUNICATIONS CIRCUITS. THE FOLLOWING FUNCTIONS ARE PARTICULARLY IMPORTANT TO ENSURE A RELIABLE GROUND SYSTEM:

2. FURNISH AND INSTALL GROUND RODS AS DETAILED HEREIN. GROUND RODS SHALL BE MINIMUM 3/4-IN. DIAMETER BY 10-FT LONG, UL-LISTED, COPPER CLAD STEEL WITH 10-MIL MINIMUM COPPER COATING. GROUND RODS SHALL BE SPACED OR AS DETAILED ON THE RESPECTIVE PLANS, AND IN NO CASE SPACED LESS THAN ONE ROD LENGTH APART. ALL CONNECTIONS TO GROUND RODS AND THE GROUND RING/GROUND FIELD SHALL BE MADE WITH EXOTHERMIC WELD TYPE CONNECTORS, CADWELD BY ERICO PRODUCTS, INC., SOLON, OHIO, (PHONE 1-800-248-9353), THERMOWELD BY CONTINENTAL INDUSTRIES, INC., TULSA, OKLAHOMA (PHONE 918-663-1440) OR ULTRAWELD BY HARGER, GRAYSLAKE, ILLINOIS (PHONE 1-800-842-7437) OR APPROVED EQUAL. EXOTHERMIC WELD CONNECTIONS SHALL BE INSTALLED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S DIRECTIONS USING MOLDS AS REQUIRED FOR EACH RESPECTIVE APPLICATION. BOLTED CONNECTIONS WILL NOT BE PERMITTED AT GROUND RODS OR AT BURIED GROUNDING ELECTRODE CONDUCTORS.

3. CONTRACTOR SHALL TEST EACH MADE ELECTRODE GROUND ROD/GROUND FIELD/GROUND RING WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND FIELD SYSTEMS. IF GROUND RESISTANCE EXCEEDS 25 OHMS, CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTION. COPIES OF GROUND ROD TEST RESULTS SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE.

4. ALL PRODUCTS ASSOCIATED WITH THE GROUNDING SYSTEM SHALL BE UL-LISTED AND LABELED.

5. ALL BOLTED OR MECHANICAL CONNECTIONS SHALL BE COATED WITH A CORROSION PREVENTATIVE COMPOUND BEFORE JOINING, SANCHEM INC. "NO-OX-ID "A-SPECIAL" COMPOUND, BURNDY PENETROX E, OR EQUAL.

6. METALLIC SURFACES TO BE JOINED SHALL BE PREPARED BY THE REMOVAL OF ALL NON-CONDUCTIVE MATERIAL, PER 2014 NATIONAL ELECTRICAL CODE ARTICLE 250-12. ALL COPPER BUS BARS MUST BE CLEANED PRIOR TO MAKING CONNECTIONS TO REMOVE SURFACE OXIDATION.

7. METALLIC RACEWAY FITTINGS SHALL BE MADE UP TIGHT TO PROVIDE A PERMANENT LOW IMPEDANCE PATH FOR ALL CIRCUITS. METAL CONDUIT TERMINATIONS IN ENCLOSURES SHALL BE BONDED TO THE ENCLOSURE WITH UL-LISTED FITTINGS SUITABLE FOR GROUNDING. PROVIDE GROUNDING BUSHINGS WITH BONDING JUMPERS FOR ALL METAL CONDUITS ENTERING SERVICE EQUIPMENT (METER BASE, CT CABINET, MAIN SERVICE BREAKER ENCLOSURE, ETC.). PROVIDE GROUNDING BUSHINGS WITH BONDING JUMPERS FOR ALL METAL CONDUITS ENTERING AN ENCLOSURE THROUGH CONCENTRIC OR ECCENTRIC KNOCKOUTS THAT ARE PUNCHED OR OTHERWISE FORMED SO AS TO IMPAIR THE ELECTRICAL CONNECTION TO GROUND. STANDARD LOCKNUTS OR BUSHINGS SHALL NOT BE THE SOLE MEANS FOR BONDING WHERE A CONDUIT ENTERS AN ENCLOSURE THROUGH A CONCENTRIC OR ECCENTRIC KNOCKOUT

8. ALL CONNECTIONS, LOCATED ABOVE GRADE, BETWEEN THE DIFFERENT TYPES OF GROUNDING CONDUCTORS SHALL BE MADE USING UL-LISTED DOUBLE COMPRESSION CRIMP TYPE CONNECTORS OR UL-LISTED BOLTED GROUND CONNECTORS. FOR GROUND CONNECTIONS TO ENCLOSURES, CASES AND FRAMES OF ELECTRICAL EQUIPMENT NOT SUPPLIED WITH GROUND LUGS THE CONTRACTOR SHALL DRILL REQUIRED HOLES FOR MOUNTING A BOLTED GROUND CONNECTOR. ALL BOLTED GROUND CONNECTORS SHALL BE BURNDY, THOMAS AND BETTS, OR EQUAL. TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUES IN UL STANDARD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.

9. ALL METAL EQUIPMENT ENCLOSURES, CONDUITS, CABINETS, BOXES, RECEPTACLES, MOTORS, ETC. SHALL BE BONDED TO THE RESPECTIVE GROUNDING SYSTEM.

10. PROVIDE ALL BOXES FOR PROPOSED OUTLETS, SWITCHES, CIRCUIT BREAKERS, ETC. WITH GROUNDING SCREWS. PROVIDE ALL PANELBOARD, SWITCHGEAR, ETC., ENCLOSURES WITH GROUNDING BARS WITH INDIVIDUAL SCREWS, LUGS, CLAMPS, ETC., FOR EACH OF THE GROUNDING CONDUCTORS THAT ENTER THEIR RESPECTIVE ENCLOSURES.

11. EACH NEW FEEDER CIRCUIT AND/OR BRANCH CIRCUIT SHALL INCLUDE AN EQUIPMENT GROUND WIRE. METAL RACEWAY OR CONDUIT SHALL NOT MEET THIS REQUIREMENT. THE EQUIPMENT GROUND WIRE FROM EQUIPMENT SHALL NOT BE SMALLER THAN ALLOWED BY 2014 NEC TABLE 250-122 "MINIMUM SIZE CONDUCTORS OR GROUNDING RACEWAY AND EQUIPMENT." WHEN CONDUCTORS ARE ADJUSTED IN SIZE TO COMPENSATE FOR VOLTAGE DROP, EQUIPMENT-GROUNDING CONDUCTORS SHALL BE ADJUSTED PROPORTIONATELY ACCORDING TO CIRCULAR MIL AREA. ALL EQUIPMENT GROUND WIRES SHALL BE COPPER, EITHER BARE OR INSULATED GREEN IN COLOR. WHERE THE EQUIPMENT GROUNDING CONDUCTORS ARE INSULATED, THEY SHALL BE IDENTIFIED BY THE COLOR GREEN, AND SHALL BE THE SAME INSULATION TYPE AS THE PHASE CONDUCTORS.

12. ALL EXTERIOR METAL CONDUIT, WHERE NOT ELECTRICALLY CONTINUOUS BECAUSE OF MANHOLES, HANDHOLES, NON-METALLIC JUNCTION BOXES, ETC., SHALL BE BONDED TO ALL OTHER METAL CONDUIT IN THE RESPECTIVE DUCT RUN, AND AT EACH END, WITH A COPPER-BONDING JUMPER SIZED IN CONFORMANCE WITH 2014 NEC 250-102. WHERE METAL CONDUITS TERMINATE IN AN ENCLOSURE (SUCH AS A MOTOR CONTROL CENTER, SWITCHBOARD, ETC) WHERE THERE IS NOT ELECTRICAL CONTINUITY WITH THE CONDUIT AND THE RESPECTIVE ENCLOSURE, PROVIDE A BONDING JUMPER FROM THE RESPECTIVE ENCLOSURE GROUND BUS TO THE CONDUIT SIZED PER 2014 NEC 250-102.

13. IT IS THE INTENT OF THIS SPECIFICATION THAT ALL MOTOR FRAMES, PUMP BASES ELECTRICAL EQUIPMENT ENCLOSURES, PANEL HOUSINGS, CONDUITS, BOXES, ETC. HAVE A CONTINUOUS COPPER WIRE GROUND CONNECTION AND SHALL BE POSITIVELY BONDED TO THE RESPECTIVE GROUNDING SYSTEM. CONDUIT CONNECTORS WILL NOT BE CONSIDERED AS ADEQUATE GROUNDING.

14. PROVIDE A POSITIVE GROUND BOND FOR ALL OUTLET BOXES, ELECTRICAL EQUIPMENT ENCLOSURES, GROUNDING RECEPTACLES, TOGGLE SWITCHES, ETC. INSTALL A GROUNDING CONDUCTOR IN ALL WIRE AND CABLE RACEWAYS. GROUND CONDUCTOR TO HAVE 600-VOLT INSULATION AND BE IDENTIFIED BY A CONTINUOUS GREEN COLOR COATING. THEY SHALL BE USED SOLELY FOR GROUNDING PURPOSES AND BE ENTIRELY SEPARATE FROM WHITE GROUNDED NEUTRAL CONDUCTOR, EXCEPT AT SUPPLY SIDE OF SERVICE DISCONNECTING MEANS, WHERE GROUNDING AND NEUTRAL SYSTEMS ARE TO BE CONNECTED TO SERVICE GROUND.

15. EACH AND ALL GROUNDED CASED AND METAL PARTS ASSOCIATED WITH ELECTRICAL EQUIPMENT SHALL BE TESTED FOR CONTINUITY OF CONNECTION WITH GROUND BUS SYSTEM BY CONTRACTOR IN PRESENCE OF OWNER'S REPRESENTATIVE.

16. ALL CONNECTIONS BETWEEN THE DIFFERENT TYPES OF GROUNDING CONDUCTORS ABOVE GRADE SHALL BE MADE USING BOLTED GROUND CONNECTORS. GROUND LUGS SHALL BE PROVIDED IN ALL ENCLOSURES AND WIRING TERMINATION JUNCTION BOXES. EQUIPMENT GROUNDS AND GROUNDING CONDUCTOR SHALL BE CONNECTED TO THESE GROUND LUGS. FOR GROUND CONNECTIONS TO ENCLOSURES, CASES AND FRAMES OF ELECTRICAL EQUIPMENT NOT SUPPLIED WITH GROUND LUGS THE CONTRACTOR SHALL DRILL REQUIRED HOLES FOR MOUNTING A BOLTED GROUND CONNECTOR. ALL BOLTED GROUND CONNECTORS SHALL BE BURNDY, OR APPROVED EQUAL.

17. BOND ALL NONCURRENT-CARRYING PARTS OF METAL EQUIPMENT TO GROUND SYSTEM.

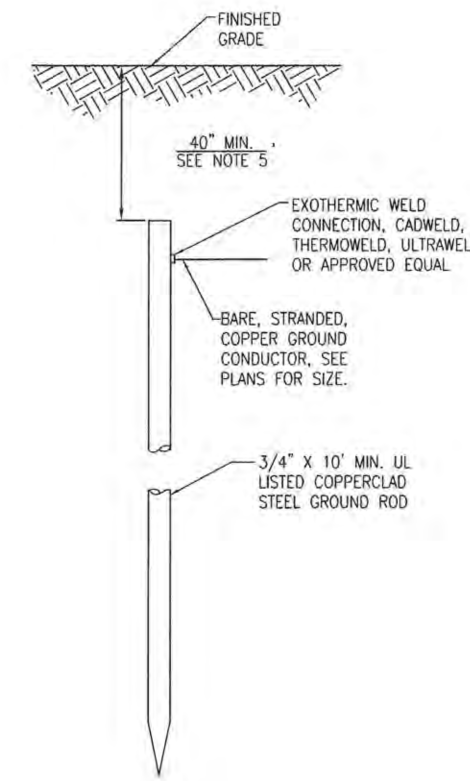
18. BUILDING STRUCTURAL STEEL SYSTEM SHALL BE BONDED TO ELECTRICAL GROUND SYSTEM.

19. INSTALL GROUNDING ELECTRODE CONDUCTORS, LIGHTNING PROTECTION DOWN CONDUCTORS AND SEPARATE GROUND CONDUCTORS IN SCHEDULE 40 OR SCHEDULE 80 PVC CONDUIT OR EXPOSED WHERE ACCEPTABLE TO LOCAL CODES. WHERE GROUNDING ELECTRODE CONDUCTORS, LIGHTNING PROTECTION DOWN CONDUCTORS OR INDIVIDUAL GROUND CONDUCTORS ARE RUN IN PVC CONDUIT, DO NOT COMPLETELY ENCIRCLE CONDUIT WITH FERROUS AND/OR MAGNETIC MATERIALS. USE NON-METALLIC REINFORCED FIBERGLASS STRUT SUPPORT. WHERE METAL CONDUIT CLAMPS ARE INSTALLED, USE NYLON BOLTS, NUTS, WASHERS AND SPACERS TO INTERRUPT A COMPLETE METALLIC PATH FROM ENCIRCLING THE CONDUIT. THIS IS REQUIRED TO AVOID GIRDLING OF GROUND CONDUCTORS. GIRDLING OF A GROUND CONDUCTOR IS THE RESULT OF PLACING THE CONDUCTOR IN A RING OF MAGNETIC MATERIAL. THIS RING COULD BE A METALLIC CONDUIT, U-BOLT OR STRUT SUPPORT PIPE CLAMP, OR OTHER SUPPORT HARDWARE. THE RESULT OF GIRDLING GROUND CONDUCTORS SIGNIFICANTLY INCREASES THE INDUCTIVE IMPEDANCE OF THE GROUND CONDUCTOR. INDUCTIVE AND CAPACITIVE IMPEDANCE IS A TYPE OF RESISTANCE THAT OPPOSES THE FLOW OF ALTERNATING CURRENT. ANY INCREASE IN THE IMPEDANCE OF A GROUND CONDUCTOR REDUCES ITS ABILITY TO EFFECTIVELY MITIGATE RADIO FREQUENCY NOISE IN THE GROUND SYSTEM. THE CONDITION WHERE A GROUND CONDUCTOR IS GIRDLED DURING A LIGHTNING STRIKE RESULTS IN PHENOMENA KNOWN AS SURGE IMPEDANCE LOADING. SURGE IMPEDANCE LOADING IS A RESULT OF VOLTAGE AND CURRENT REACHING 500,000 VOLTS AND 10,000 AMPS FOR A SHORT DURATION. GIRDLING FURTHER INCREASES THE IMPEDANCE AT LIGHTNING FREQUENCIES OF 100 KILOHERTZ TO 100 MEGAHERTZ. AT THESE POWER AND FREQUENCY LEVELS ANY INCREASE IN THE IMPEDANCE OF THE GROUND CONDUCTOR MUST BE CONTROLLED. DURING LIGHTNING DISCHARGE CONDITIONS A LOW INDUCTIVE IMPEDANCE PATH IS MORE IMPORTANT THAN A LOW DC RESISTANCE PATH.

20. IF LOCAL CODES DICTATE THAT INDIVIDUAL GROUNDING CONDUCTORS MUST BE RUN IN METAL CONDUIT OR RACEWAY, THEN THE CONDUIT OR RACEWAY MUST BE BONDED AT EACH END OF THE RUN WITH A BONDING JUMPER SIZED EQUAL TO THE INDIVIDUAL GROUNDING CONDUCTOR OR AS REQUIRED BY 2014 NEC 250-102. NOTE THIS DOES NOT APPLY TO AC EQUIPMENT GROUNDING CONDUCTORS RUN WITH AC CIRCUITS.

21. WHERE A CONFLICT IS DETERMINED WITH RESPECT TO GROUNDING REQUIREMENTS PER MANUFACTURER INSTALLATION INSTRUCTIONS, NEC, AND/OR THE CONTRACT DOCUMENTS, CONTACT THE RESIDENT ENGINEER OR PROJECT ENGINEER FOR FURTHER DIRECTIONS.

22. GROUND RODS SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA FROM DOMESTIC STEEL TO COMPLY WITH APPLICABLE BUY AMERICAN REQUIREMENTS AND STATE REQUIREMENTS.

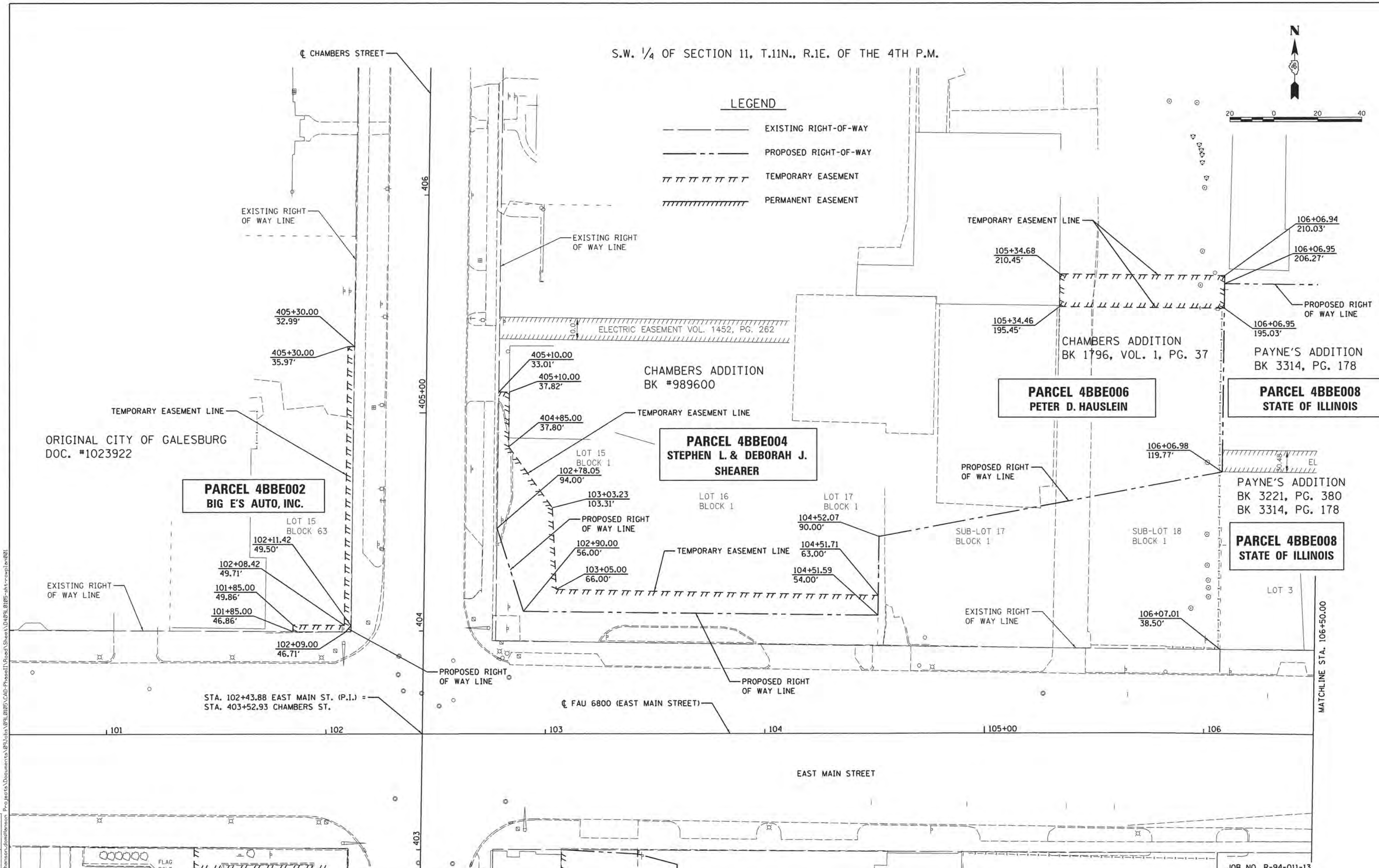


10 FT. GROUND ROD

NOTES

1. TYPE AND MINIMUM NUMBER OF GROUND RODS SHALL BE AS SPECIFIED ON THE PLAN.
2. THE RESISTANCE TO GROUND OF THE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS.
3. COST OF GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.
4. GROUND RODS SHALL BE SPACED AS DETAILED ON THE PLANS AND SHALL NOT BE SPACED LESS THAN ONE ROD LENGTH APART.
5. TOP OF GROUND RODS SHALL BE 40" MINIMUM BELOW GRADE UNLESS DETAILED OTHERWISE HEREIN. GROUND RING AND/OR GROUND FIELD CONDUCTORS SHALL BE 50" MINIMUM BELOW GRADE TO BE BELOW FROST LINE (FOR KNOX COUNTY, ILLINOIS).

GROUND RODS
(NOT TO SCALE)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N
20 0 20 40
LEGEND
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY
TEMPORARY EASEMENT
PERMANENT EASEMENT
℄ CHAMBERS STREET
EXISTING RIGHT OF WAY LINE
ELECTRIC EASEMENT VOL. 1452, PG. 262
405+30.00 32.99'
405+30.00 35.97'
405+10.00 33.01'
405+10.00 37.82'
404+85.00 37.80'
TEMPORARY EASEMENT LINE
CHAMBERS ADDITION BK #989600
PARCEL 4BBE004 STEPHEN L. & DEBORAH J. SHEARER
LOT 15 BLOCK 1
LOT 16 BLOCK 1
LOT 17 BLOCK 1
102+78.05 94.00'
103+03.23 103.31'
PROPOSED RIGHT OF WAY LINE
102+90.00 56.00'
103+05.00 66.00'
104+52.07 90.00'
104+51.71 63.00'
104+51.59 54.00'
ORIGINAL CITY OF GALESBURG DOC. #1023922
PARCEL 4BBE002 BIG E'S AUTO, INC.
LOT 15 BLOCK 63
102+11.42 49.50'
102+08.42 49.71'
101+85.00 49.86'
101+85.00 46.86'
102+09.00 46.71'
STA. 102+43.88 EAST MAIN ST. (P.I.) = STA. 403+52.93 CHAMBERS ST.
℄ FAU 6800 (EAST MAIN STREET)
101 102 103 104 105+00 106
406 405+00 404 403
EAST MAIN STREET
FLAG POLE
105+34.68 210.45'
105+34.46 195.45'
106+06.94 210.03'
106+06.95 206.27'
106+06.95 195.03'
106+06.98 119.77'
106+07.01 38.50'
CHAMBERS ADDITION BK 1796, VOL. 1, PG. 37
PAYNE'S ADDITION BK 3314, PG. 178
PARCEL 4BBE006 PETER D. HAUSLEIN
PARCEL 4BBE008 STATE OF ILLINOIS
PAYNE'S ADDITION BK 3221, PG. 380 BK 3314, PG. 178
SUB-LOT 17 BLOCK 1
SUB-LOT 18 BLOCK 1
LOT 3
EL
MATCHLINE STA. 106+50.00
HANSON Hanson Professional Services Inc.
JOB NO. R-94-011-13

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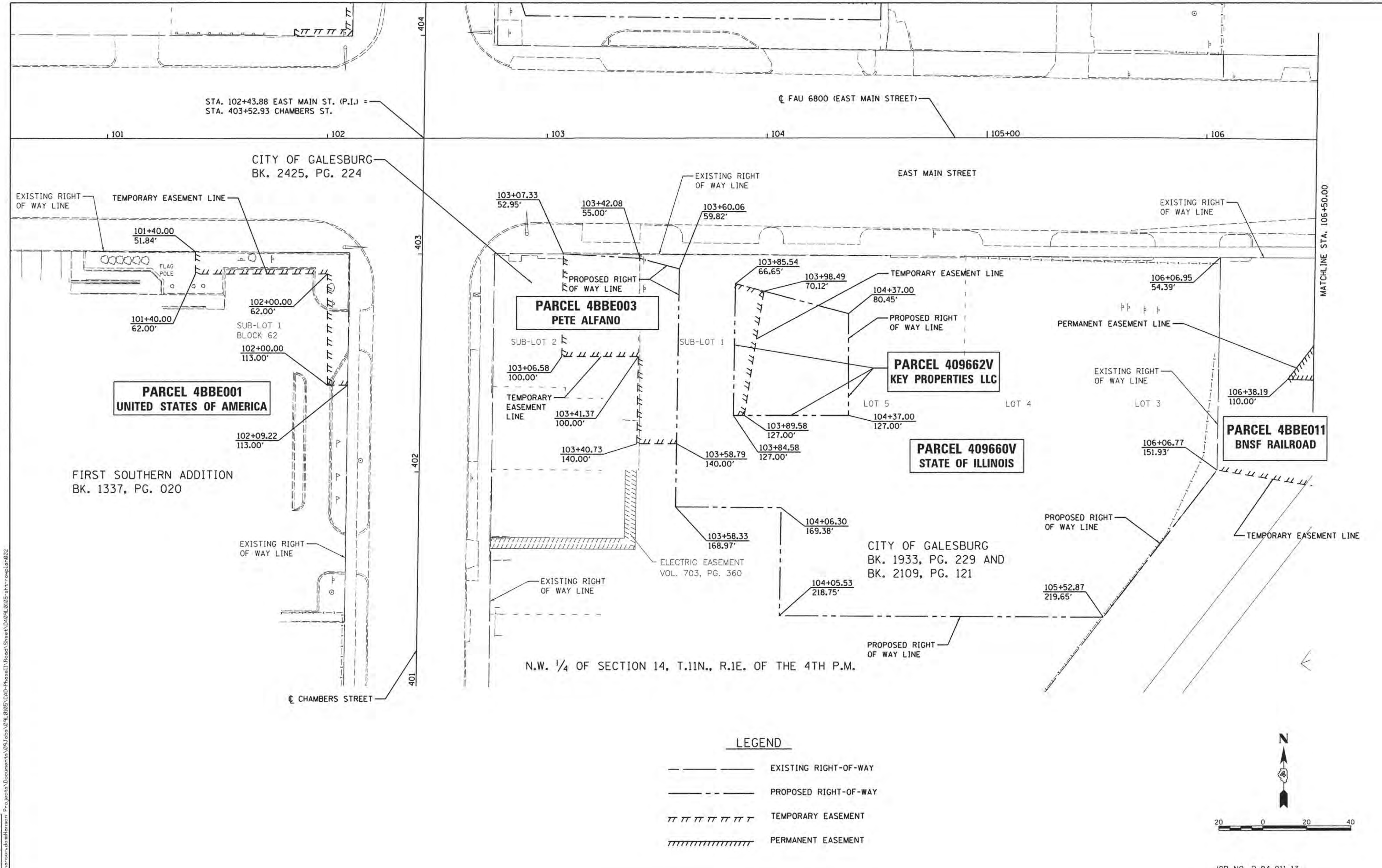
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -	

EAST MAIN STREET AND CHAMBERS STREET
R.O.W. PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 101+45.00 TO STA. 106+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	71
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LAYOUT RLA 2/11/14 · DRAWN MGD 5/27/15 · REVIEWED MPB 5/28/15



HANSON Hanson Professional Services Inc.

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JOB NO. R-94-011-13

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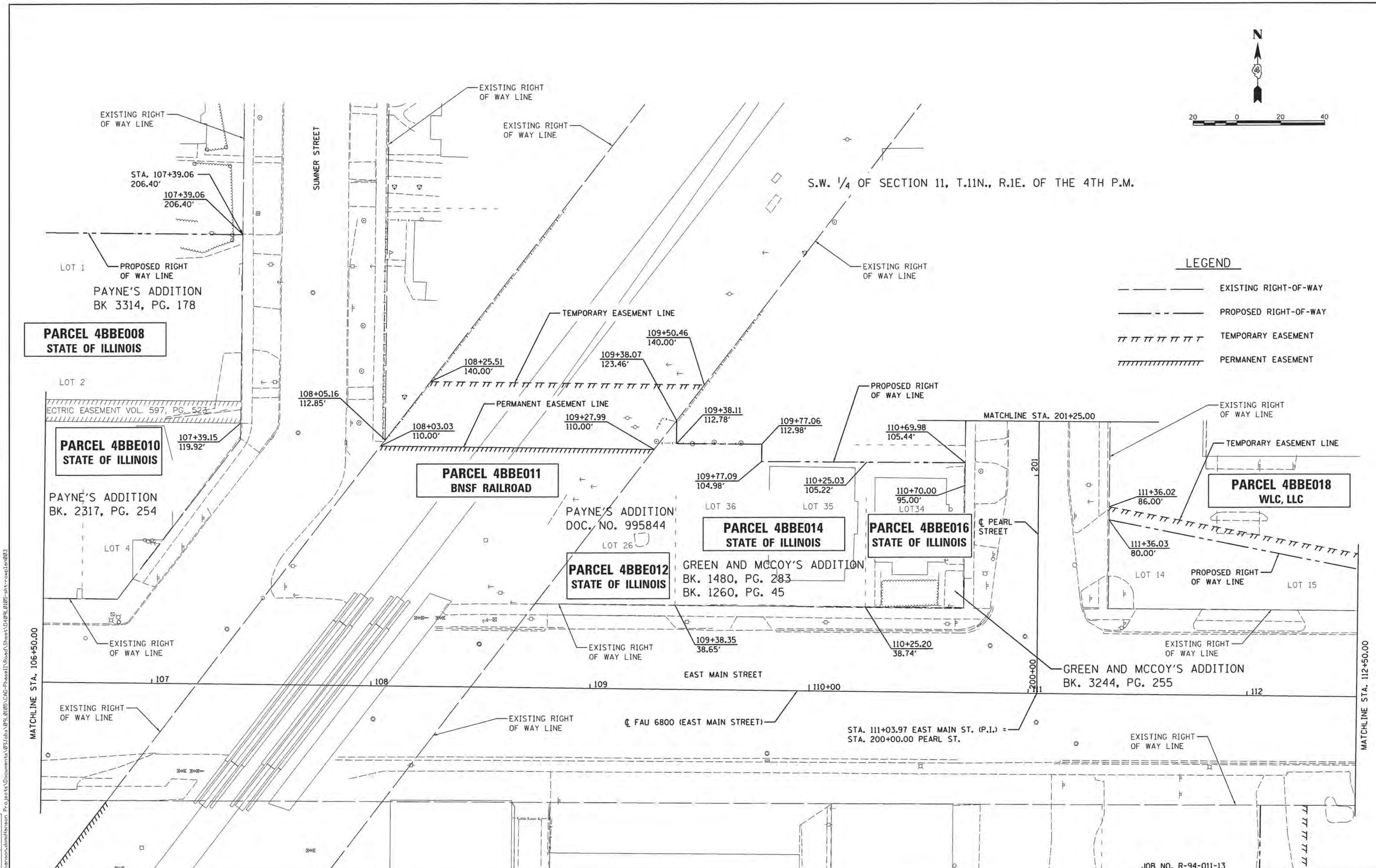
REVIEWED MPB 5/28/15		PLOT DATE = 11/13/2015	CHECKED - MPB	REVISED -
			DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
R.O.W. PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 101+45.00 TO STA. 106+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	72
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		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20 0 20 40
S.W. 1/4 OF SECTION 11, T.11N., R.1E. OF THE 4TH P.M.
LEGEND
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY
TEMPORARY EASEMENT
PERMANENT EASEMENT
EXISTING RIGHT OF WAY LINE
SUMNER STREET
STA. 107+39.06 206.40'
107+39.06 206.40'
LOT 1
PROPOSED RIGHT OF WAY LINE
PAYNE'S ADDITION BK 3314, PG. 178
PARCEL 4BBE008 STATE OF ILLINOIS
LOT 2
ECTRIC EASEMENT VOL. 597, PG. 528
PARCEL 4BBE010 STATE OF ILLINOIS
107+39.15 119.92'
PAYNE'S ADDITION BK. 2317, PG. 254
LOT 4
TEMPORARY EASEMENT LINE
109+50.46 140.00'
109+38.07 123.46'
108+25.51 140.00'
108+05.16 112.85'
PERMANENT EASEMENT LINE
108+03.03 110.00'
109+27.99 110.00'
109+38.11 112.78'
109+77.06 112.98'
PROPOSED RIGHT OF WAY LINE
110+69.98 105.44'
MATCHLINE STA. 201+25.00
PARCEL 4BBE011 BNSF RAILROAD
109+77.09 104.98'
110+25.03 105.22'
110+70.00 95.00'
PAYNE'S ADDITION DOC. NO. 995844
LOT 36
LOT 35
LOT34
PARCEL 4BBE014 STATE OF ILLINOIS
PARCEL 4BBE016 STATE OF ILLINOIS
℄ PEARL STREET
201
PARCEL 4BBE018 WLC, LLC
TEMPORARY EASEMENT LINE
111+36.02 86.00'
111+36.03 80.00'
LOT 26
PARCEL 4BBE012 STATE OF ILLINOIS
GREEN AND MCCOY'S ADDITION BK. 1480, PG. 283 BK. 1260, PG. 45
LOT 14
PROPOSED RIGHT OF WAY LINE
LOT 15
109+38.35 38.65'
110+25.20 38.74'
GREEN AND MCCOY'S ADDITION BK. 3244, PG. 255
EAST MAIN STREET
107
108
109
110+00
200+00
111
112
MATCHLINE STA. 106+50.00
MATCHLINE STA. 112+50.00
℄ FAU 6800 (EAST MAIN STREET)
STA. 111+03.97 EAST MAIN ST. (P.I.) = STA. 200+00.00 PEARL ST.
JOB NO. R-94-011-13

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REVIEWED	MPB	5/28/15

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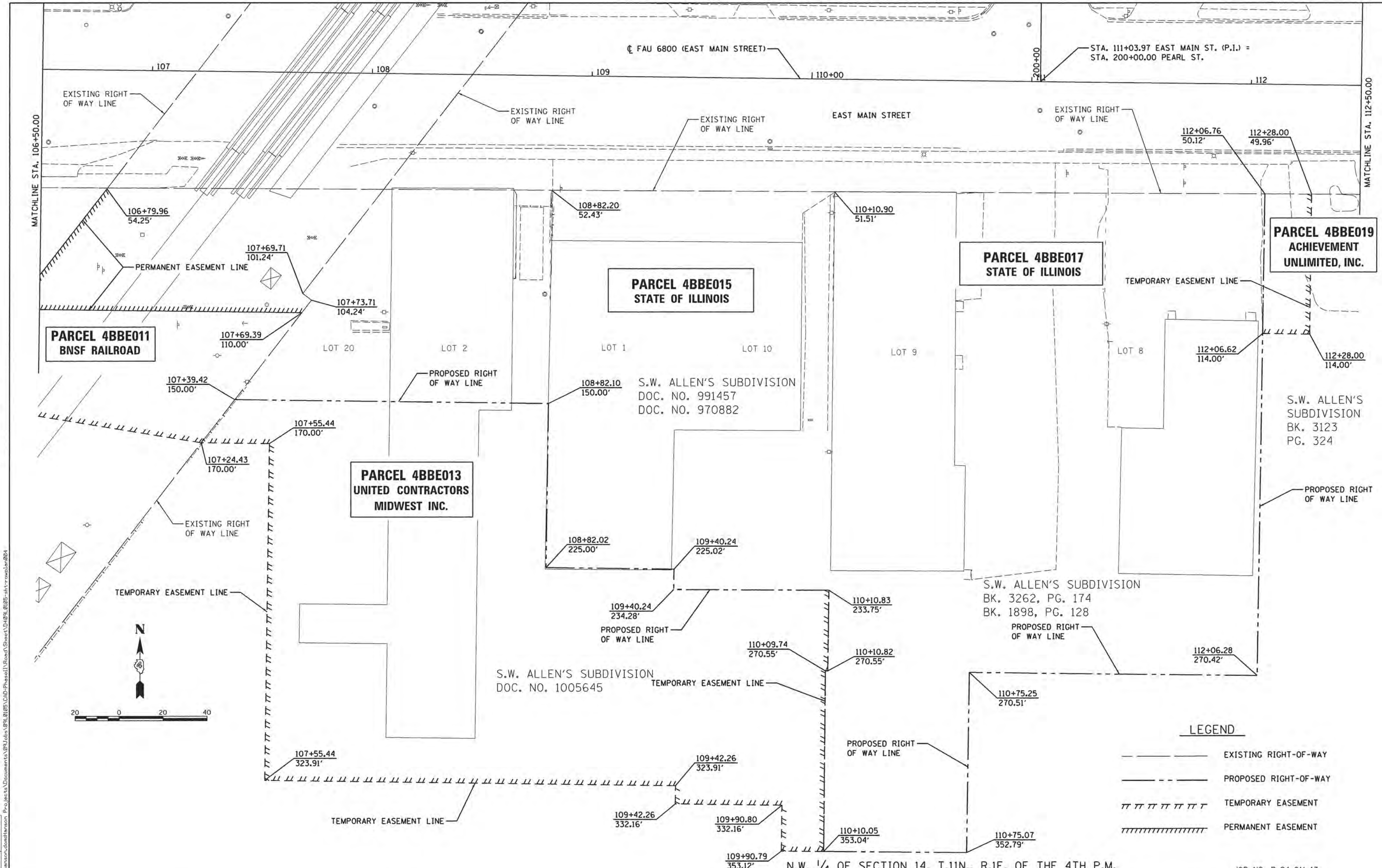
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
R.O.W. PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 106+50.00 TO STA. 112+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	73
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MATCHLINE STA. 106+50.00
MATCHLINE STA. 112+50.00
℄ FAU 6800 (EAST MAIN STREET)
STA. 111+03.97 EAST MAIN ST. (P.I.) =
STA. 200+00.00 PEARL ST.
107
108
109
110+00
112
200+00
EAST MAIN STREET
EXISTING RIGHT OF WAY LINE
EXISTING RIGHT OF WAY LINE
EXISTING RIGHT OF WAY LINE
EXISTING RIGHT OF WAY LINE
EXISTING RIGHT OF WAY LINE
106+79.96
54.25'
PERMANENT EASEMENT LINE
107+69.71
101.24'
107+73.71
104.24'
107+69.39
110.00'
107+39.42
150.00'
107+55.44
170.00'
107+24.43
170.00'
108+82.20
52.43'
108+82.10
150.00'
108+82.02
225.00'
109+40.24
225.02'
109+40.24
234.28'
110+10.90
51.51'
110+10.83
233.75'
110+09.74
270.55'
110+10.82
270.55'
110+75.25
270.51'
107+55.44
323.91'
109+42.26
323.91'
109+42.26
332.16'
109+90.80
332.16'
109+90.79
353.12'
110+10.05
353.04'
110+75.07
352.79'
112+06.76
50.12'
112+28.00
49.96'
112+06.62
114.00'
112+28.00
114.00'
112+06.28
270.42'
PARCEL 4BBE011
BNSF RAILROAD
PARCEL 4BBE013
UNITED CONTRACTORS
MIDWEST INC.
PARCEL 4BBE015
STATE OF ILLINOIS
PARCEL 4BBE017
STATE OF ILLINOIS
PARCEL 4BBE019
ACHIEVEMENT
UNLIMITED, INC.
LOT 20
LOT 2
LOT 1
LOT 10
LOT 9
LOT 8
PROPOSED RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
TEMPORARY EASEMENT LINE
TEMPORARY EASEMENT LINE
TEMPORARY EASEMENT LINE
TEMPORARY EASEMENT LINE
S.W. ALLEN'S SUBDIVISION
DOC. NO. 991457
DOC. NO. 970882
S.W. ALLEN'S SUBDIVISION
BK. 3123
PG. 324
S.W. ALLEN'S SUBDIVISION
BK. 3262, PG. 174
BK. 1898, PG. 128
S.W. ALLEN'S SUBDIVISION
DOC. NO. 1005645
N
20 0 20 40
LEGEND
EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY
TEMPORARY EASEMENT
PERMANENT EASEMENT
N.W. 1/4 OF SECTION 14, T.11N., R.1E. OF THE 4TH P.M.
JOB NO. R-94-011-13

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DRAWN	MGD	5/27/15	
REVIEWED	MPB	5/28/15	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
R.O.W. PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 106+50.00 TO STA. 112+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	74
	50VB	CONTRACT NO. 89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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N

20 0 20 40

LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- PERMANENT EASEMENT

N.W. 1/4 OF SECTION 14, T.11N., R.1E. OF THE 4TH P.M.

S.W. 1/4 OF SECTION 11, T.11N., R.1E. OF THE 4TH P.M.

EXISTING RIGHT OF WAY LINE

STA. 500+00.00 ALLENS AVE. = STA. 202+24.46 PEARL ST.

MATCHLINE STA. 201+25.00

PEARL STREET

202

203

500+00

EXISTING RIGHT OF WAY LINE

500+32.75
83.00'

500+32.59
33.00'

500+38.00
83.00'

500+38.00
53.00'

500+32.33
46.38'

EXISTING RIGHT OF WAY LINE

TEMPORARY EASEMENT LINE

PARCEL 4BBE021
STATE OF ILLINOIS

GREEN AND MCCOY'S ADDITION
BK. 3584, PG. 359

500+87.00
53.00'

500+87.00
43.00'

PARCEL 4BBE018
WLC, LLC

LOT 34

501

PROPOSED RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

TEMPORARY EASEMENT LINE

501+40.54
43.00'

501+40.54
33.00'

112+54.00
65.00'

112+54.00
100.00'

S.W. ALLEN'S SUBDIVISION
BK. 3123
PG. 324

EXISTING RIGHT OF WAY LINE

STA. 113+38.55 EAST MAIN ST. = STA. 504+18.84 ALLENS AVE. (P.I.)

MATCHLINE STA. 112+50.00

GREEN AND MCCOY'S ADDITION DOC. NO. 977035

LOT 7

PARCEL 4BBE019
ACHIEVEMENT UNLIMITED, INC.

112+69.42
39.49'

112+69.38
55.00'

112+69.28
100.00'

501+80.56
33.00'

501+89.00
43.00'

501+59.78
30.00'

501+57.09
49.70'

501+58.31
40.00'

505+63.86
38.00'

113+00.00
49.45'

EAST MAIN STREET

113

EXISTING RIGHT OF WAY LINE

PROPOSED RIGHT OF WAY LINE

ALLENS AVENUE

502

LOT 6

B.F. ARNOLD'S SUBDIVISION
BK. 1127, PG. 190

TEMPORARY EASEMENT LINE

505+63.86
33.00'

EXISTING RIGHT OF WAY LINE

TEMPORARY EASEMENT LINE

CURVE ALL-001

506

505+00

504

503

PARCEL 4BBE020
TERRY L. JOHNSON

505+50.00
32.99'

ELECTRIC EASEMENT BK.795, PG.01

502+44.00
30.00'

PROPOSED RIGHT OF WAY LINE

113+76.00
49.32'

LOT 5

505+50.00
38.00'

LOT 5

EXISTING RIGHT OF WAY LINE

ALLEN'S SUBDIVISION OF 1903, DOC. NO. 967946

PARCEL 4BBE009
DANNIE B., TY AND TOD BARNES

114

113+95.85
60.00'

113+95.72
39.19'

LOT 4

PROPOSED RIGHT OF WAY LINE

502+55.00
67.40'

502+21.13
107.00'

TEMPORARY EASEMENT LINE

PROP. CURVE ALL-001
PI STA. = 502+35.54
Δ = 90° 00' 00" (RT)
D = 60° 18' 41"
R = 95.00'
T = 95.00'
L = 149.23'
E = 39.35'
P.C. STA = 501+40.54
P.T. STA = 502+89.76

JOB NO. R-94-011-13

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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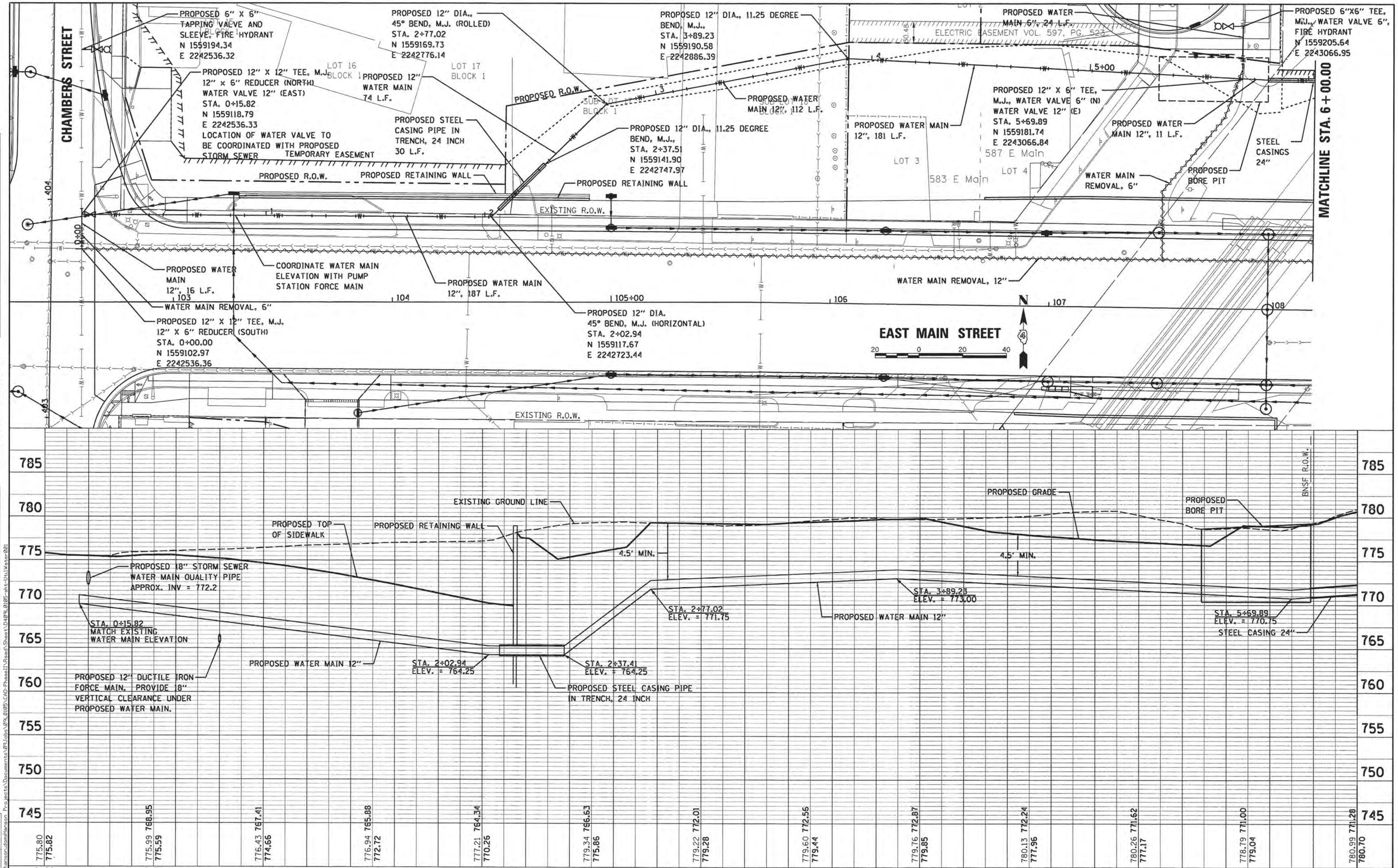
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALLENS AVENUE
R.O.W. PLAN

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 500+00.00 TO STA. 503+59.40

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	75
	50VB	CONTRACT NO.89417		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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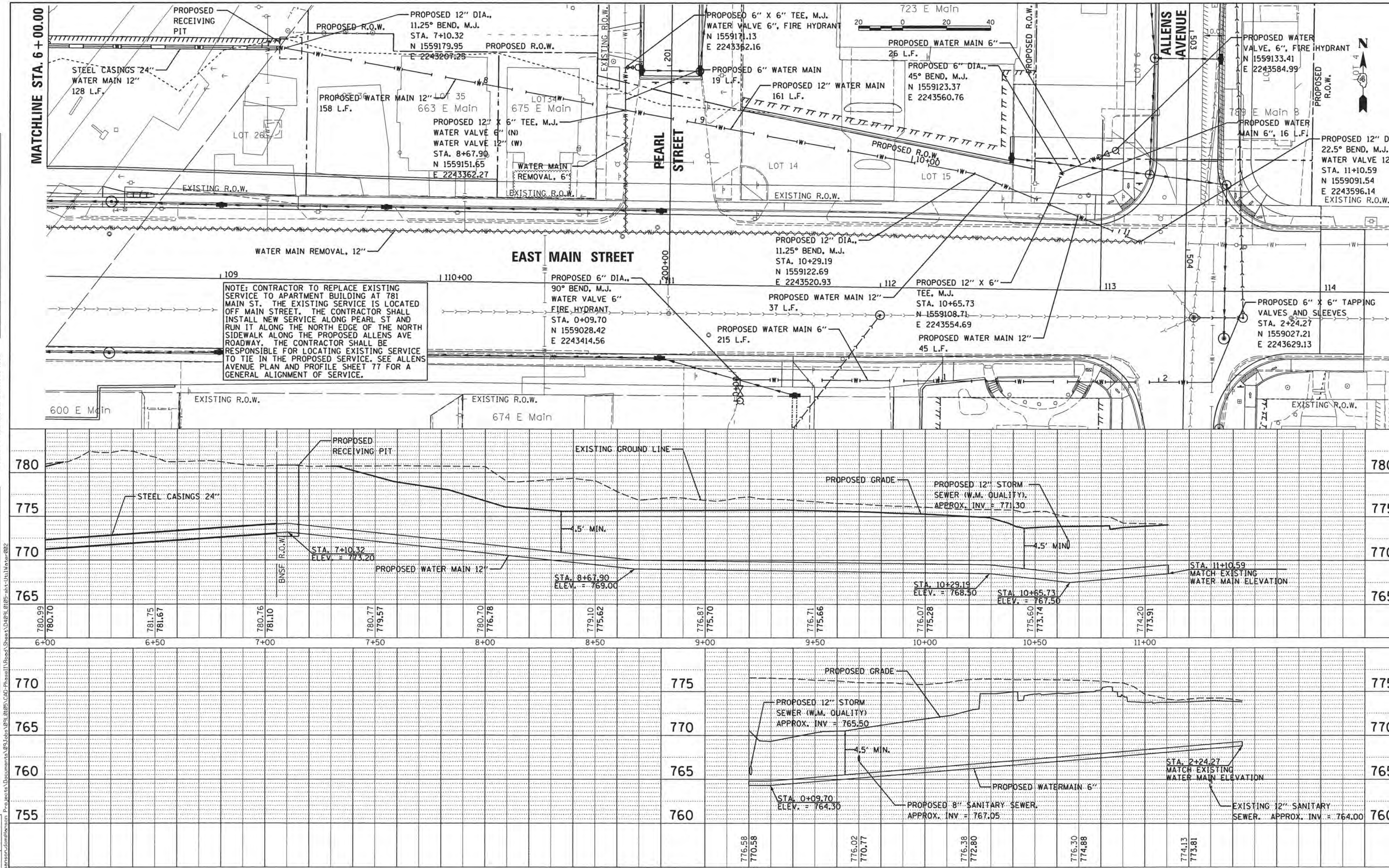
	PLOT DATE = 5/9/2016	CHECKED - MPB	REVISED -	
		DATE - 11/13/2015	REVISED -	

EAST MAIN STREET PROPOSED WATERMAIN PLANS

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	76
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		

LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	11/6/15



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PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTAT'NS CH'KD — NOTE BOOK NO. — BY — DATE

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LAYOUT	RLA	2/11/14
DRAWN	MGD	5/27/15
REVIEWED	MPB	5/28/15

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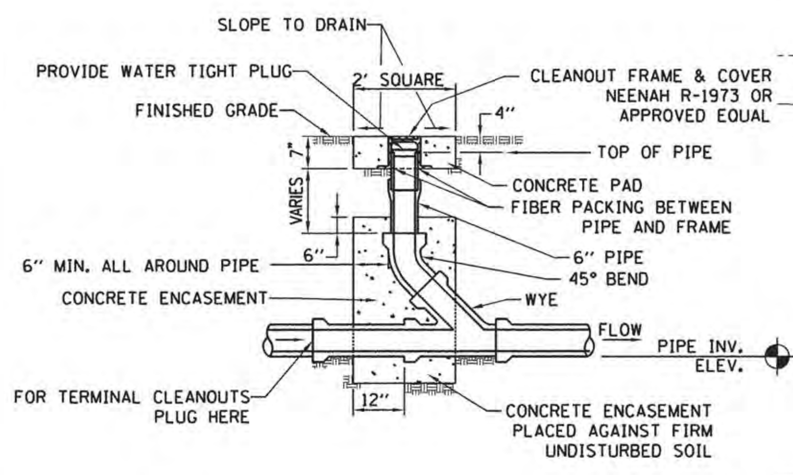
PLOT DATE = 11/17/2015	DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PROPOSED WATERMAIN PLANS

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	77
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		

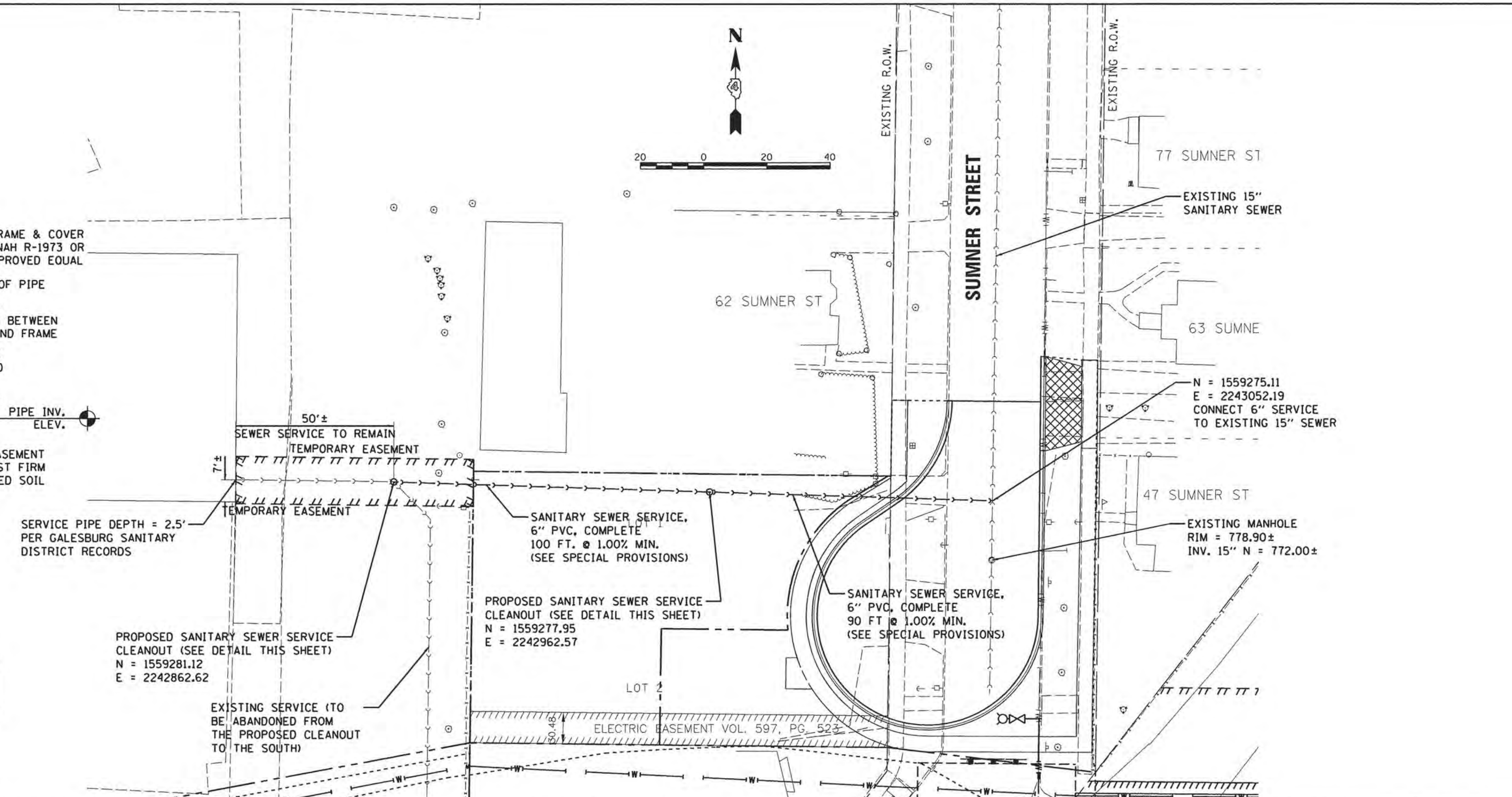


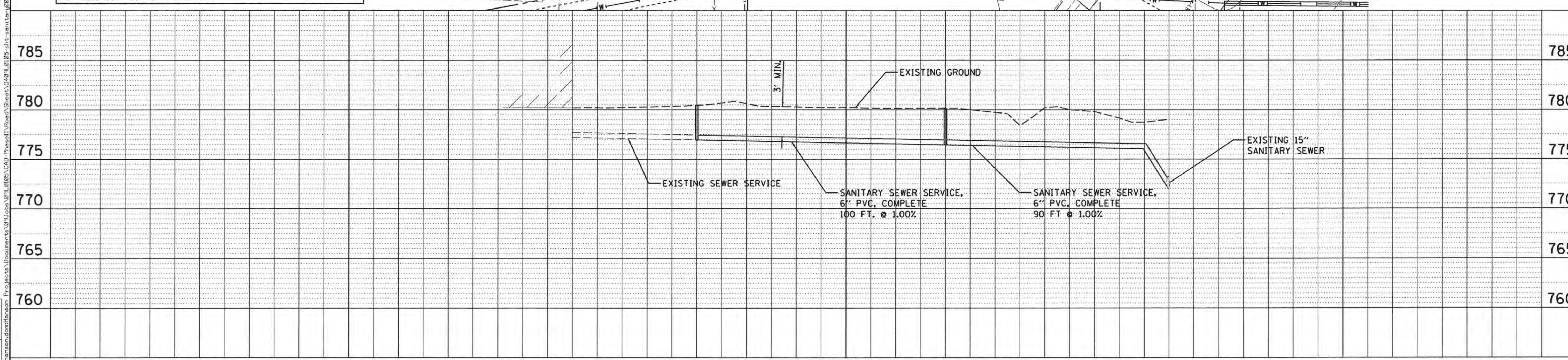
SANITARY SEWER SERVICE CLEANOUT

SCALE: NONE

NOTE: THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (CURRENT EDITION) SHALL GOVERN THE SANITARY SEWER CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL PROVIDE THE REQUIRED SEPARATION BETWEEN WATER MAINS AND SEWERS IN ACCORANCE WITH SECTION 41-2.01A OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (CURRENT EDITION).





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	PLOT SCALE = 20.0000 ' / in.	CHECKED - MPB	REVISED -	
	PLOT DATE = 11/13/2015	DATE - 9/9/2015	REVISED -	

EAST MAIN STREET
SEWER SERVICE DETAIL – 571 EAST MAIN STREET

SCALE: 1"=20' | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	78
	50VB	CONTRACT NO.89417		

ILLINOIS FED. AID PROJECT

LAYOUT RLA 2/11/14
DRAWN MGD 5/27/15
REVIEWED MPB 5/28/15

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PROFILE — NOTE BOOK NO. — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTAT'NS CHK'D — BY — DATE

EXISTING R.O.W.

EXISTING R.O.W.

PEARL STREET

LOT 14

EXISTING R.O.W.

LOT 15

PROPOSED R.O.W.

EAST MAIN STREET

108

109

110+00

200+00

111

STA 112+00.00, 12.74' RT.
PROP. MANHOLES, SANITARY,
4'-DIA, TYPE 1 FRAME,
CLOSED LID
RIM = 771.89
INV 8" S = 766.90
INV 12" W = 766.80 (EX.)
INV 12" E = 766.80 (EX.)

EXISTING SANITARY
SEWER TO REMAIN

112

113

504

EXISTING SANITARY SEWER
TO BE REMOVED

600 E Main

EXISTING R.O.W.

EXISTING R.O.W.

674 E Main

SANITARY SEWER 8"
67.0 L.F.

642 E Main

712 & 714 E Main

748 E Main

N

LOT 7

ALLENS AVENUE

505+00

784 E

NOTE: THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (CURRENT EDITION) SHALL GOVERN THE SANITARY SEWER CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL PROVIDE THE REQUIRED SEPARATION BETWEEN WATER MAINS AND SEWERS IN ACCORANCE WITH SECTION 41-2.01A OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (CURRENT EDITION).

STA 111+60, 67.00' RT.
PROP. FL= 767.20
PLUG SANITARY SEWER
FOR FUTURE CONNECTION

LOT 20

LOT 2

LOT 10

LOT 9

LOT 8

20 0 20 40

EXISTING R.O.W.

LOT 5

EXISTING GRADE ABOVE SEWER LINE

EXISTING ROADWAY GROUND LINE

PROPOSED GRADE ABOVE SEWER LINE

EX WM 3"

EX ELEC

EX ELEC

EX GAS 8"

EX TEL

EX WM 3"

SANITARY SEWER 8"
67.0 L.F.

PROPOSED 6" WATER MAIN.
APPROX. INV = 765.00

785 780 775 770 765 760 755 750 745

782.76 781.11 780.07 779.27 778.53 777.65 776.88 776.23 775.57 775.11 774.80 774.51

108+00 108+50 109+00 109+50 110+00 110+50 111+00 111+50 112+00 112+50 113+00 113+50

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

PROFILE
SURVEYED
DRAWN
GRADES CHECKED
R.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

LAYOUT RLA 2/11/14
DRAWN MGD 5/27/15
REVIEWED MPB 5/28/15

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DESIGNED - RLA
DRAWN - MGD
CHECKED - MPB
DATE - 9/9/2015

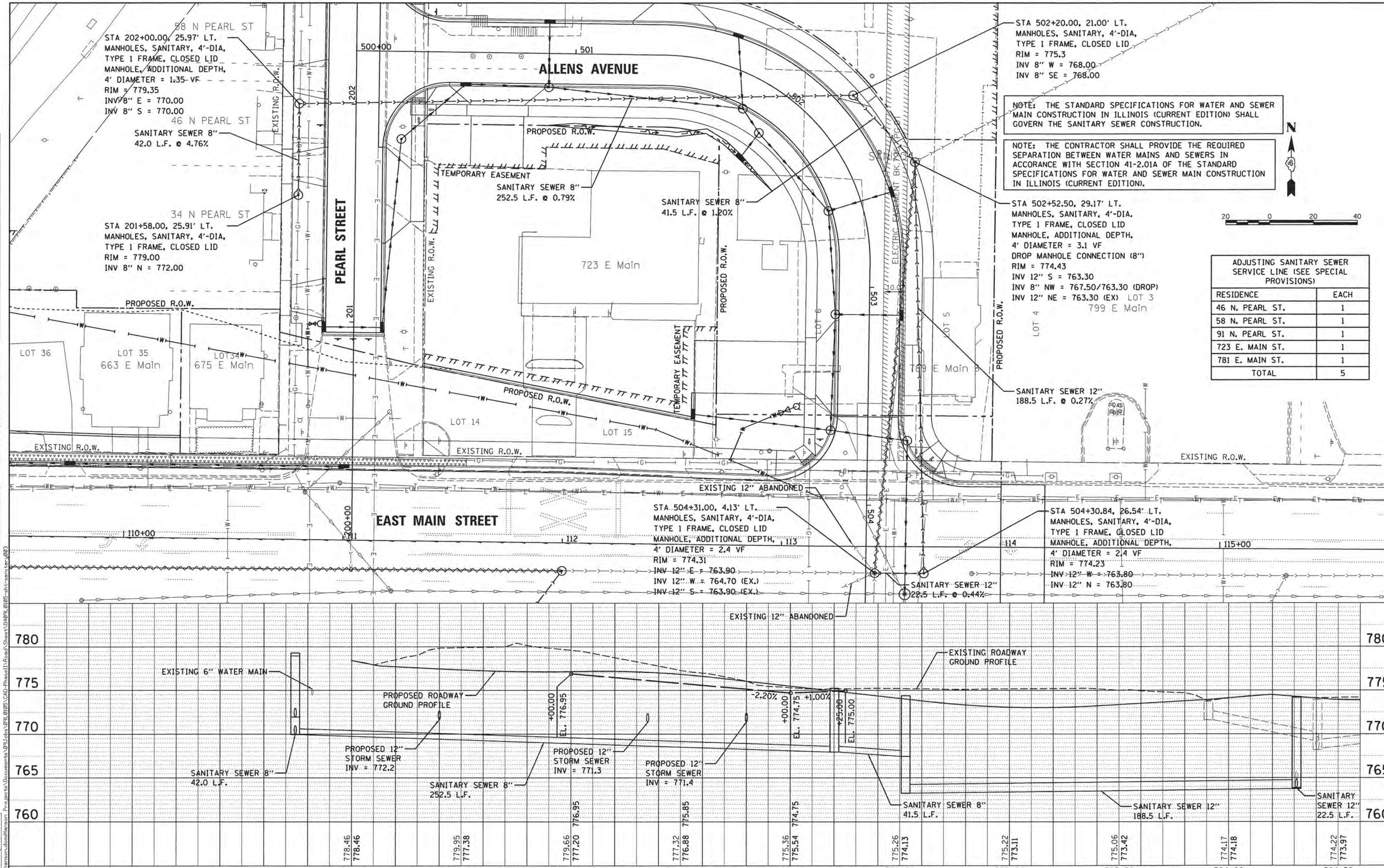
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST MAIN STREET
PROPOSED SANITARY SEWER PLANS

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	79
	50VB	CONTRACT NO.89417		
	ILLINOIS FED. AID PROJECT			



58 N PEARL ST
STA 202+00.00, 25.97' LT.
MANHOLES, SANITARY, 4'-DIA,
TYPE 1 FRAME, CLOSED LID
MANHOLE, ADDITIONAL DEPTH,
4' DIAMETER = 1.35 VF
RIM = 779.35
INV 8" E = 770.00
INV 8" S = 770.00
46 N PEARL ST
SANITARY SEWER 8"
42.0 L.F. @ 4.76%
34 N PEARL ST
STA 201+58.00, 25.91' LT.
MANHOLES, SANITARY, 4'-DIA,
TYPE 1 FRAME, CLOSED LID
RIM = 779.00
INV 8" N = 772.00
ALLENS AVENUE
PEARL STREET
EXISTING R.O.W.
PROPOSED R.O.W.
TEMPORARY EASEMENT
SANITARY SEWER 8"
252.5 L.F. @ 0.79%
SANITARY SEWER 8"
41.5 L.F. @ 1.20%
723 E Main
LOT 36
LOT 35
663 E Main
LOT 34
675 E Main
LOT 14
LOT 15
LOT 6
LOT 5
LOT 4
LOT 3
799 E Main
789 E Main
EAST MAIN STREET
STA 502+20.00, 21.00' LT.
MANHOLES, SANITARY, 4'-DIA,
TYPE 1 FRAME, CLOSED LID
RIM = 775.3
INV 8" W = 768.00
INV 8" SE = 768.00
NOTE: THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (CURRENT EDITION) SHALL GOVERN THE SANITARY SEWER CONSTRUCTION.
NOTE: THE CONTRACTOR SHALL PROVIDE THE REQUIRED SEPARATION BETWEEN WATER MAINS AND SEWERS IN ACCORANCE WITH SECTION 41-2.01A OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (CURRENT EDITION).
N
20 0 20 40
STA 502+52.50, 29.17' LT.
MANHOLES, SANITARY, 4'-DIA,
TYPE 1 FRAME, CLOSED LID
MANHOLE, ADDITIONAL DEPTH,
4' DIAMETER = 3.1 VF
DROP MANHOLE CONNECTION (8")
RIM = 774.43
INV 12" S = 763.30
INV 8" NW = 767.50/763.30 (DROP)
INV 12" NE = 763.30 (EX)
SANITARY SEWER 12"
188.5 L.F. @ 0.27%
EXISTING 12" ABANDONED
STA 504+31.00, 4.13' LT.
MANHOLES, SANITARY, 4'-DIA,
TYPE 1 FRAME, CLOSED LID
MANHOLE, ADDITIONAL DEPTH,
4' DIAMETER = 2.4 VF
RIM = 774.31
INV 12" E = 763.90
INV 12" W = 764.70 (EX.)
INV 12" S = 763.90 (EX.)
STA 504+30.84, 26.54' LT.
MANHOLES, SANITARY, 4'-DIA,
TYPE 1 FRAME, CLOSED LID
MANHOLE, ADDITIONAL DEPTH,
4' DIAMETER = 2.4 VF
RIM = 774.23
INV 12" W = 763.80
INV 12" N = 763.80
SANITARY SEWER 12"
22.5 L.F. @ 0.44%
EXISTING 12" ABANDONED
EXISTING 6" WATER MAIN
PROPOSED ROADWAY GROUND PROFILE
EXISTING ROADWAY GROUND PROFILE
-2.20%
+1.00%
EL. 776.95
EL. 774.75
EL. 775.00
PROPOSED 12" STORM SEWER INV = 772.2
PROPOSED 12" STORM SEWER INV = 771.3
PROPOSED 12" STORM SEWER INV = 771.4
SANITARY SEWER 8" 42.0 L.F.
SANITARY SEWER 8" 252.5 L.F.
SANITARY SEWER 8" 41.5 L.F.
SANITARY SEWER 12" 188.5 L.F.
SANITARY SEWER 12" 22.5 L.F.
780
775
770
765
760
500+00
500+50
501+00
501+50
502+00
502+50
503+00
503+50
504+00
504+50

ADJUSTING SANITARY SEWER SERVICE LINE (SEE SPECIAL PROVISIONS)	
RESIDENCE	EACH
46 N. PEARL ST.	1
58 N. PEARL ST.	1
91 N. PEARL ST.	1
723 E. MAIN ST.	1
781 E. MAIN ST.	1
TOTAL	5

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Default	PLOT DATE = 11/17/2015	CHECKED - MPB	REVISED -
		DATE - 9/9/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALLENS AVENUE
PROPOSED SANITARY SEWER PLANS

SCALE: 1"=20' | SHEET OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	80
	50VB	CONTRACT NO.89417		
		ILLINOIS FED. AID PROJECT		

Benchmark:
BM#225 - Chiseled square in Northeast corner of abandoned concrete sign foundation at the Northwest corner of E. Main St. and N. Chambers St.
Elevation = 776.22

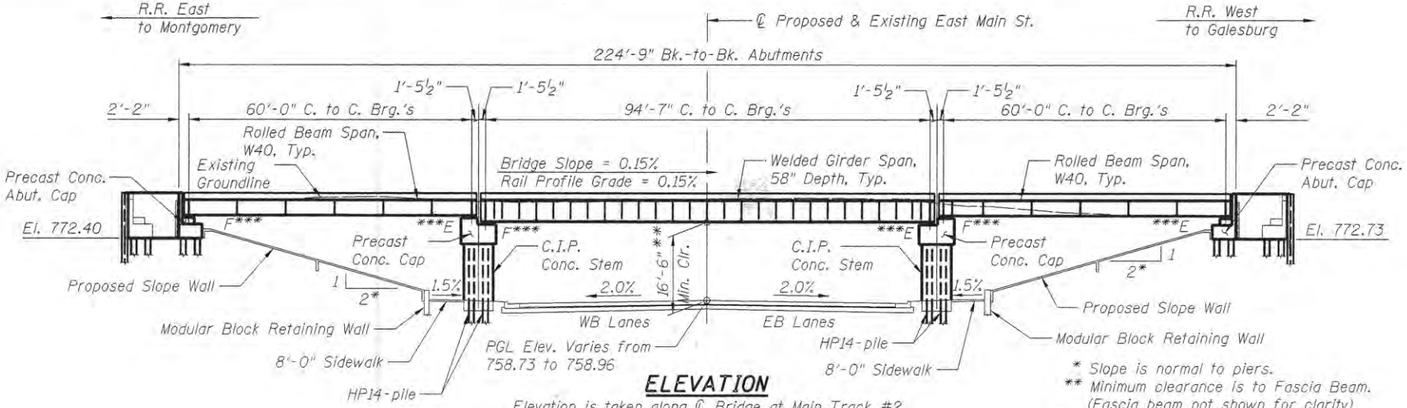
Existing Structure: None

Traffic Control:
Minimum one lane of traffic in each direction on U.S. 150 during pile driving operations. Complete Road Closure during superstructure and roadway construction. Traffic is to be maintained by detouring onto an alternate route. Rail traffic to be maintained at all times on all three tracks except for closure windows coordinated with BNSF.

Salvage: None

Railroad utilities may exist within BNSF right-of-way. Prior to the start of any construction or excavation, utility relocations will have to be coordinated with the BNSF.

BNSF Call Before You Dig Phone Numbers
Fiber Optics: 800-533-2891
Communications & Signals: 800-832-5452



ELEVATION

Elevation is taken along ℄ Bridge at Main Track #2

* Slope is normal to piers.
** Minimum clearance is to Fascia Beam. (Fascia beam not shown for clarity)
*** Fixity of all beam ends is reversed for East Fascia Beam only.

LOADING COOPER E-80

Impact: Diesel Impact
300 psf of Ballast Dead Load

DESIGN SPECIFICATIONS

2014 AREMA Manual for Railway Engineering
Live Load + Impact Deflection: L/640
Composite Design for Deflection Requirements
Design speed: 79 m.p.h.

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi (Pier Stems and Retaining Wall)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (ASTM A709 Grade 50)

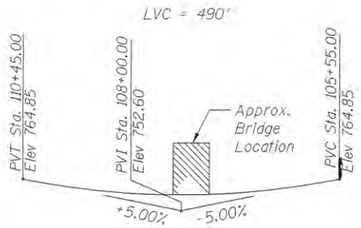
PRECAST UNITS

f'c = 4,000 psi (Pier and Abutment Caps)
f'c = 6,500 psi (Fascia Beam)
f'ci = 5,000 psi (Fascia Beam)
fpu = 270,000 psi (½" Dia. low lax strands)
fpbt = 202,500 psi (½" Dia. low lax strands)

SEISMIC DATA

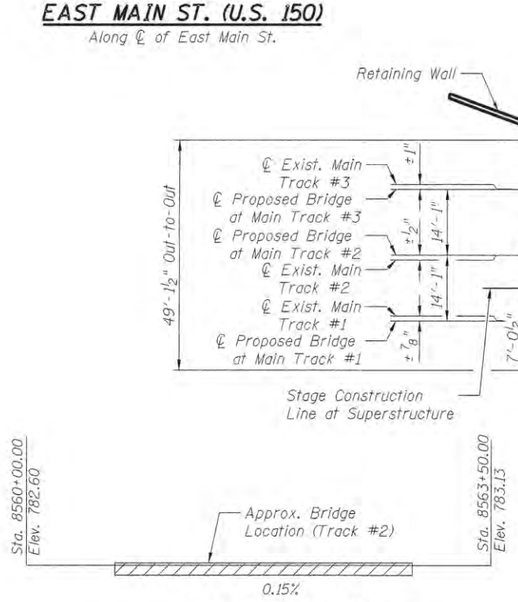
AREMA

Coefficient of Horiz. Acceleration, 100 Year (A_{100}) = < 0.04
Coefficient of Horiz. Acceleration, 475 Year (A_{475}) = < 0.04
Coefficient of Horiz. Acceleration, 2400 Year (A_{2400}) = 0.08
Soil Site Coefficient (S) = 1.0

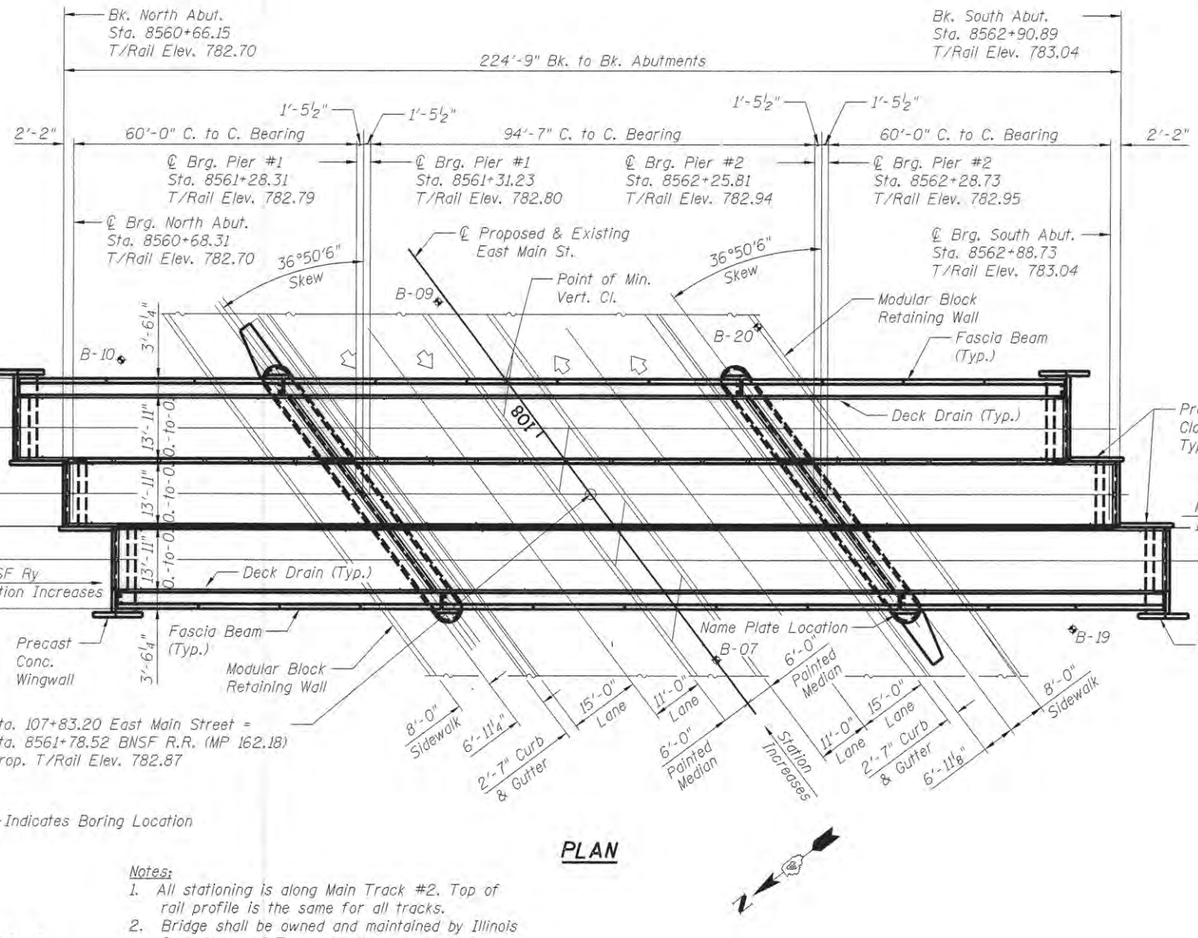


PROFILE GRADE
EAST MAIN ST. (U.S. 150)

Along ℄ of East Main St.



PROFILE GRADE
TOP OF RAIL PROFILE
PROPOSED BNSF MAINLINE TRACKS
MENDOTA SUBDIVISION, LINE SEGMENT 1, MILEPOST 162.15



Indicates Boring Location

PLAN

Notes:
1. All stationing is along Main Track #2. Top of rail profile is the same for all tracks.
2. Bridge shall be owned and maintained by Illinois Department of Transportation.

LOCATION SKETCH

ILLINOIS STRUCTURAL NO. 081-005990
EXPIRES 11/30/16
DATE: 11/16/2015

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridges and Structures

GENERAL PLAN & ELEVATION
BNSF OVER EAST MAIN ST. (U.S. 150)
F.A.U. 6800-SECTION 05-00500-19-GS
KNOX COUNTY
STATION 107+83.20
STRUCTURE NO. 048-9928
BNSF BR. 0001-0162.150

	JEC	5-22-15
DESIGNED	GTJ	5-22-15
DRAWN	MAF	5-29-15
REVIEWED		

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HANSON

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	CHECKED - MAF	REVISED -	
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PLOT DATE = 5/9/2016	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE 048-9928
SHEET NO. 1 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	81
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $^{7}/_{8}$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel, ASTM A709, Gr. 50 = 2,209,800 lbs.
ASTM A36, Gr. 36 = 8,300 lbs.

All Structural Steel shall be ASTM A709, Grade 50 unless otherwise noted on the plans.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{1}/_{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the following surfaces:
- Abutments - inside face of backwall, inside face of wingwall, inside face of closure wall, top of cap, top of step and faces of step in cap.
- Pier - entire exposed pier cap surface, including steps, and cast-in-place concrete stem walls.
- Superstructure - entire exposed surface of precast prestressed fascia beam & curb (except surfaces coated with surface color treatment).

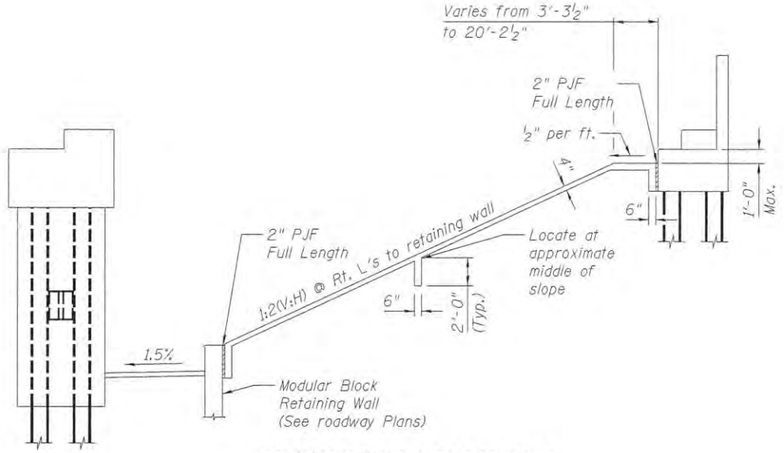
The organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied. Masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior and exterior steel surfaces shall be gray, Munsell No. 5B 7/1.

Bridge shall be owned and maintained by Illinois Department of Transportation.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.	-	5,620	5,620
Concrete Structures	Cu. Yd.	-	350.7	350.7
Form Liner Textured Surface	Sq. Ft.	-	2,650	2,650
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	-	48	48
Reinforcement Bars, Epoxy Coated	Pound	-	16,290	16,290
Slope Wall 4 Inch	Sq. Yd.	-	580	580
Furnishing Steel Piles HP14x117	Foot	-	12,543	12,543
Driving Piles	Foot	-	11,322	11,322
Test Pile Steel HP14x117	Each	-	4	4
Name Plates	Each	-	1	1
Anchor Bolts, 2"	Each	180	-	180
Membrane Waterproofing	Sq. Ft.	10,480	-	10,480
Concrete Sealer	Sq. Ft.	7,230	6,190	13,420
Geocomposite Wall Drain	Sq. Yd.	-	180	180
Controlled Low-Strength Material	Cu. Yd.	-	120	120
Driving Soldier Piles	Foot	-	175	175
Concrete Surface Color Treatment	Sq. Ft.	60	-	60
Drainage System	L. Sum	1	-	1
Precast Concrete Substructure	L. Sum	-	1	1
Granular Backfill for Structures	Cu. Yd.	-	370	370
Untreated Timber Lagging	Sq. Ft.	-	80	80
Furnishing Soldier Piles (HP Section)	Foot	-	175	175
Pipe Underdrains for Structures, 4"	Foot	-	241	241
Temporary Soil Retention System	Sq. Ft.	-	2,170	2,170
Fence (Special)	Foot	446	-	446
Precast Prestressed Concrete Fascia Beam	Foot	446	-	446
Track Monitoring	L. Sum	1	-	1



SECTION THRU SLOPEWALL

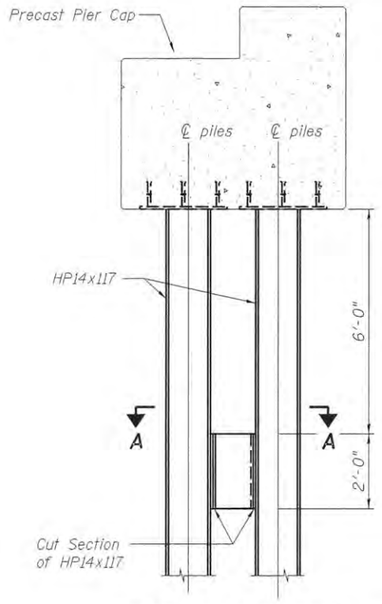
(Dimensions shown @ Rt. L's)

Notes:
1. Slope wall shall be reinforced with galvanized welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
2. Slope wall shall extend 2 ft. beyond the extended vertical face of the Fascia Beams.
3. Cost of furnishing and placing of any additional subgrade material necessary for grading beneath slope wall and pre-molded joint filler is included in the unit price of "Slope Wall 4 Inch".
4. Seal top of 2" PJF with polyurethane exterior caulking compound.

BNSF RAILWAY
BUILT 20__ BY
CITY OF GALESBURG
F.A.U. RT. 6800 SEC. 05-00500-19-GS
STATION 107+83.20
LOADING COOPER E-80
STR. NO. 048-9928

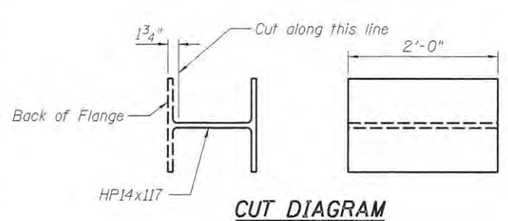
NAME PLATE

See Std. 515001

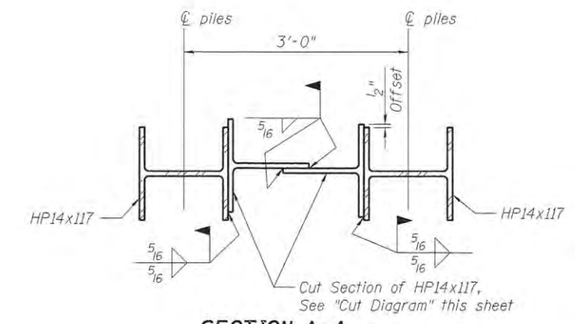


PIER #2 ELEVATION

(Pier #1 similar)
(Looking East)



CUT DIAGRAM



SECTION A-A

PIER PILE BRACING

Notes:
1. Bracing should be installed between each pier pile pair at a distance of 6'-0" below the precast pier cap.
2. Bracing shall be installed within 24 hours of excavation to bottom of brace.
3. Cost to furnish and install bracing shall be included in the cost of "Driving Piles".
4. Welding should be performed by a certified welder.
5. Cut Sections of HP14x117 shall be AASHTO M270, Gr. 50.

	JEC	5-22-15
	GTJ	5-22-15
	MAF	5-29-15
DESIGNED		
DRAWN		
REVIEWED		

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HANSON

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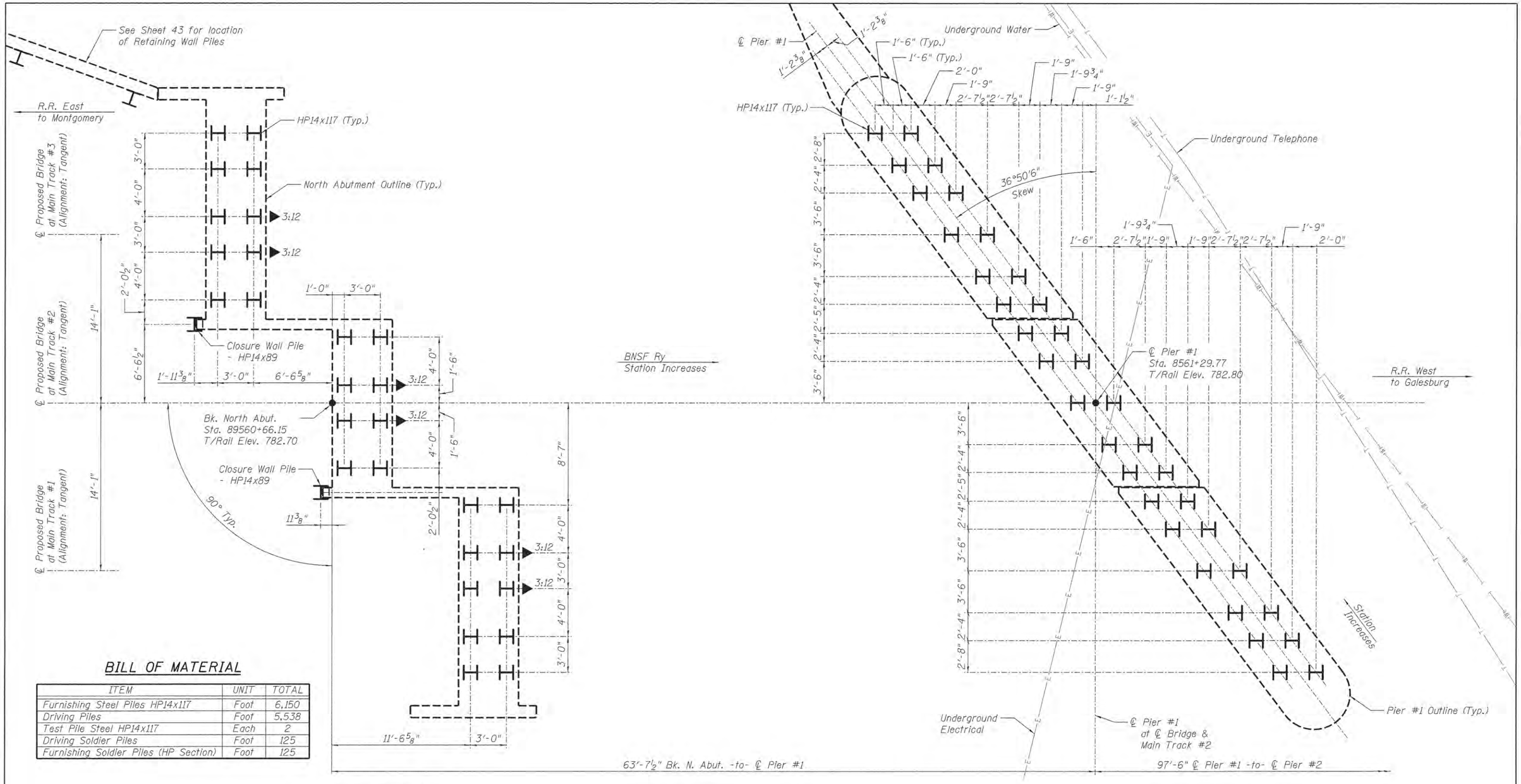
	CHECKED - MAF	REVISED -
PLOT SCALE = 0.2000 '' / in.	DRAWN - GTJ	REVISED -
PLOT DATE = 5/9/2016	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE 048-9928
SHEET NO. 2 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	82
		CONTRACT NO. 89417		
		ILLINOIS FED. AID PROJECT		



BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing Steel Piles HP14x117	Foot	6,150
Driving Piles	Foot	5,538
Test Pile Steel HP14x117	Each	2
Driving Soldier Piles	Foot	125
Furnishing Soldier Piles (HP Section)	Foot	125

PILE DATA TABLE

Structure		Type	Nominal Required Bearing (Kips)	Allowable Resistance Available (Kips)	Est. Length (Ft.)	No. Production Piles	No. Test Piles	Est. Tip Elevation	Cutoff Elevation
North Abutment	Closure Wall	HP14x89	-	-	25	2	-	757.0	782.07
	Retaining Wall	HP14x89	-	-	25	3	-	754.8	779.80
	Cap	HP14x117	929	249	97	27	1	685.0	772.40
Pier #1		HP14x117	929	268	107	33	1	675.1	771.49

FOUNDATION LAYOUT PLAN - NORTH

Notes:
1. Existing utilities shown are for information from records available. Pile driving operations shall be coordinated with utility relocation.
2. Railroad utilities may exist within BNSF right-of-way. Prior to the start of any construction or excavation, utility relocations will have to be coordinated with BNSF.
3. During excavation for roadway, contractor shall install bracing between piles as shown on sheet 2.
4. ▼ - Indicates direction of batter.
5. X:12 - indicates amount of batter.
6. All dimensions are given at bottom of precast cap.

DESIGNED	JEC	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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HANSON

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	CHECKED - MAF	REVISED -
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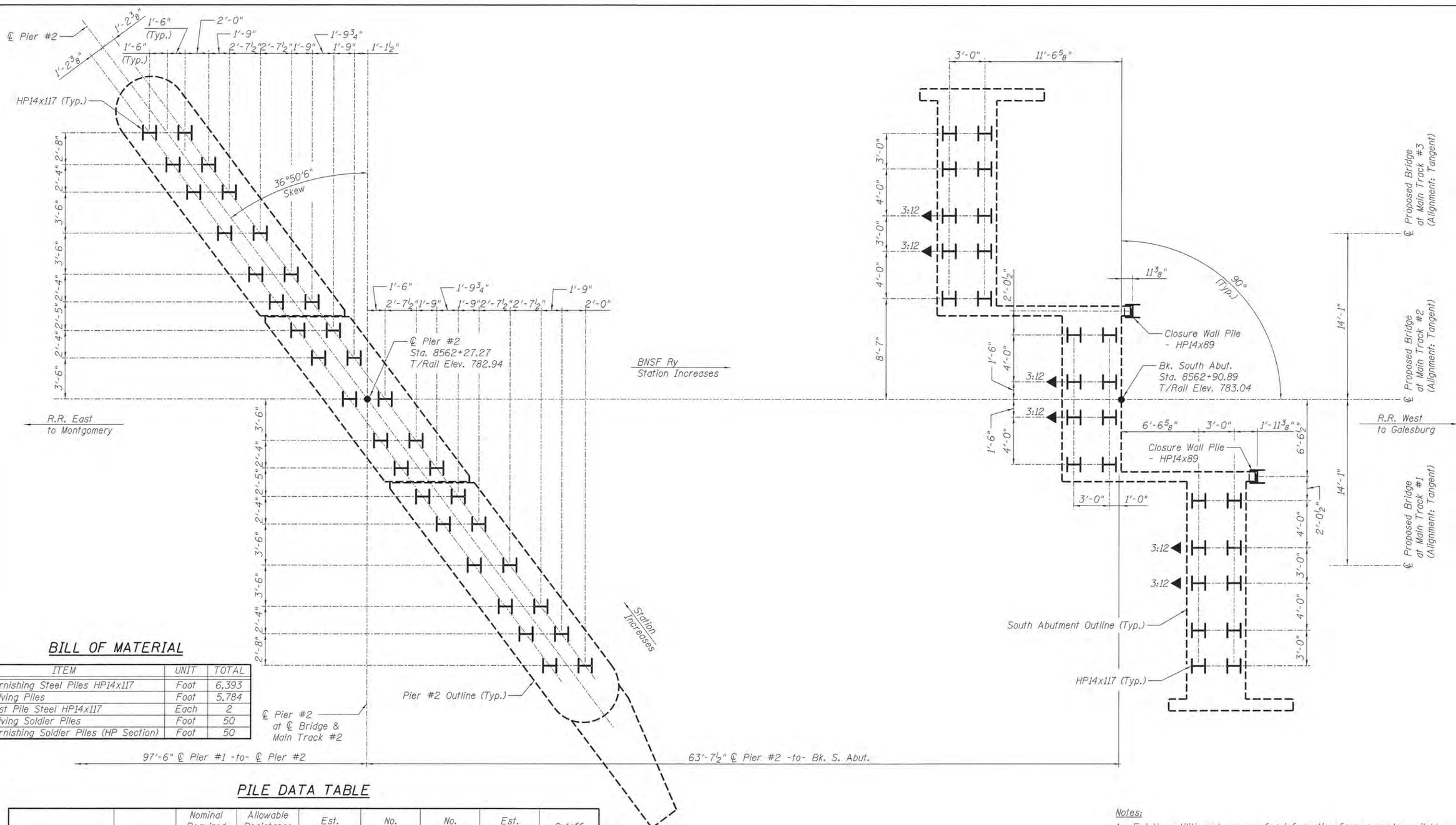
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT PLAN – NORTH SIDE
STRUCTURE 048-9928
SHEET NO. 3 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	83
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing Steel Piles HP14x117	Foot	6,393
Driving Piles	Foot	5,784
Test Pile Steel HP14x117	Each	2
Driving Soldier Piles	Foot	50
Furnishing Soldier Piles (HP Section)	Foot	50

PILE DATA TABLE

Structures		Type	Nominal Required Bearing (Kips)	Allowable Resistance Available (Kips)	Est. Length (Ft.)	No. Production Piles	No. Test Piles	Est. Tip Elevation	Cutoff Elevation
Pier #2		HP14x117	929	268	107	33	1	675.2	771.63
South Abutment	Closure Wall	HP14x89	-	-	25	2	-	757.3	782.43
	Cap	HP14x117	929	240	106	27	1	676.3	772.73

FOUNDATION LAYOUT PLAN - SOUTH

Notes:

1. Existing utilities shown are for information from records available. Pile driving operations shall be coordinated with utility relocation.
2. Railroad utilities may exist within BNSF right-of-way. Prior to the start of any construction or excavation, utility relocations will have to be coordinated with BNSF.
3. During excavation for roadway, contractor shall install bracing between piles as shown on sheet 2.
4. ▼ - Indicates direction of batter.
5. X:12 - indicates amount of batter.
6. All dimensions are given at bottom of precast cap.

DESIGNED	JEC	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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HANSON

USER NAME = ander00846	DESIGNED - JEC	REVISED -
	CHECKED - MAF	REVISED -
PLOT SCALE = 40.0000 ' / in.	DRAWN - GTJ	REVISED -
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT PLAN – SOUTH SIDE
STRUCTURE 048-9928
SHEET NO. 4 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	84
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			

CONSTRUCTION SEQUENCE

Stage I
- Maintain vehicular traffic on U.S. 150 with minimum one way traffic in each direction.
- Maintain rail traffic with track closures and closure windows on adjacent tracks to allow for construction (ex. - Close Main Track #1 and maintain rail traffic on Main Track #2 & #3).

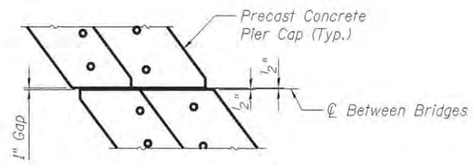
1. Drive H-pile at all locations to grade. BNSF to adjust track ties where needed. (See Foundation Layout Plan)

Stage II
- Close U.S. 150 & detour vehicular traffic. U.S. 150 to remain closed through the duration of the remaining stages.
- Utilize closure windows on Main Track #1 for construction and maintain rail traffic on Main Track #2 & #3. Closure windows to be six (6) hours.

1. Provide Temporary Soil Retention System between Main Track #1 and Main Track #2. (See this sheet)

Stage III
- Maintain closure of U.S. 150 & detour vehicular traffic.
- Utilize closure window on Main Track #1 and maintain rail traffic on Main Track #2 & #3. Closure window to be 48 hour for Main Track #1.

1. Excavate and cut H-pile to correct elevation at abutments and piers.
2. Place and weld precast abutment & pier caps.
3. Place Controlled Low-Strength Material at Abutments.
4. Excavate between foundation elements as required to install superstructure.
5. Install abutment closure wall & backfill abutment caps.
6. Set bearings and install superstructure.
7. BNSF to install tracks on Main #1 and open to rail traffic.



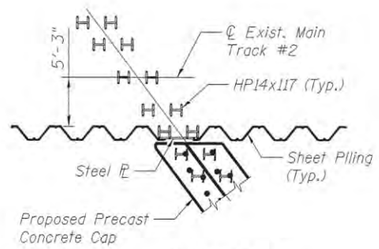
PLAN - PIER CAPS

Construction Sequence (cont.)

Stage IV
- Same as III with closure window on Main Track #2 & #3.
- Closure window to be 48 hour for Main Track #2 and an additional 18 hours (66 total) for Main Track #3.
- Temporary Soil Retention System shall be removed (locations of interference with structure installation) at any time after excavation for the superstructure during closure window and coordinated with the BNSF Representative (See Note 3 below).

Stage V
- Maintain closure of U.S. 150 & detour vehicular traffic.
- Rail traffic open on all three Main Tracks.

1. Excavate to required elevations for roadway construction, installing Pier Pile Bracing as shown on sheet 2 of 52.
2. Construct cast-in-place concrete stem on piers and concrete slope paving.
3. Construct new roadway of U.S. 150 (East Main St.).
4. Install Precast Fascia Beams. Contractor shall coordinate with BNSF Representative to minimize the impact on train operations. Fascia Beams may be installed at any point after adjacent steel superstructure has been placed in Stages III and IV.



VIEW A-A

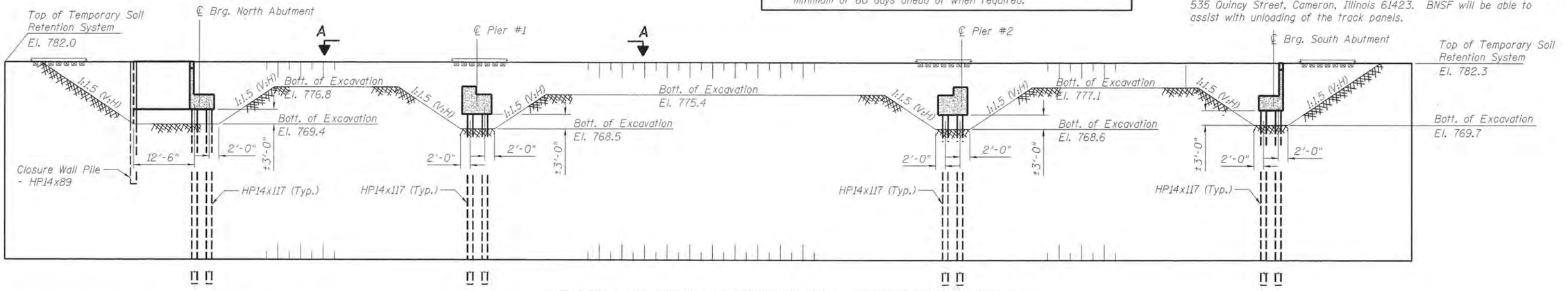
Typical at Abutments & Piers

BNSF REQUIREMENTS

Notes
1. Contractor shall note dates for BNSF to move ties in 3 week planning schedules to coordinate work with BNSF forces
2. During closure window, the movement and location of personal and equipment shall be restricted during passage of trains on adjacent tracks. The contractor shall coordinate with BNSF Representative.
3. Six (6) hour closure window includes time for BNSF forces to modify ties and/or rail as needed.
4. BNSF has noted closure windows to be scheduled for three days a week, with the use of two cranes to install piles and shoring.
5. Installation of sheet piling with vibratory hammer shall not be permitted.
6. Closure window on Main Track #2 will require closure on Main Track #3.
7. Stage III closure window for Main Track #1 shall be for a maximum of 48 hours.
8. Stage IV closure window for Main Track #2 shall be for the maximum of 48 hours with Main Track #3 closed an additional maximum of 18 hours (66 total).
9. Stage III and IV closure windows shall be coordinated a minimum of 60 days ahead of when required.

NOTES

1. The Contractor must coordinate with the BNSF Representative to work around the train schedule to minimize the impact on train operations.
2. The Contractor shall install the steel H-Piles and Temporary Soil Retention System in six (6) hour closure windows. Contractor shall coordinate with BNSF on moving ties to install piles and shoring. The six (6) hour closure window shall included time for BNSF forces to make modifications to ties and/or rail as needed to complete work and prior to restoring train operations. BNSF has noted these windows to be scheduled for three days a week, with the requirement to use two cranes to install piles and shoring.
3. During Stage I, a closure window on Main Track #2 will require the closure of Main Track #1 or #3. The Contractor must coordinate with the BNSF Representative on which additional track to close to minimize the impact on train operations.
4. The Contractor will be given one window per stage for the interruption of train operations in Stages III and IV of bridge construction for the removal of tracks, installing substructure caps, setting superstructure and restoring train operations. The Contractor shall preassemble the superstructure near the bridge site to install in final position to expedite construction.
5. Only Conceptual Layout and Details are shown for the Temporary Soil Retention System. The final design and details are the responsibility of the Contractor. Final design and details signed and sealed by a registered Structural Engineer in the State of Illinois shall be submitted to the Engineer for review and approval.
6. Final Construction Sequence, Design and Details shall be submitted to BNSF for approval and coordination prior to installation of the Temporary Soil Retention System.
7. For additional Suggested Construction Sequence and Details, see sheets 6 to 8.
8. Mats or other means of protection must be provided to protect rails and ballast from damage due to equipment or construction operations. Cost included in Track Monitoring. Details shall be submitted to BNSF for review and approval.
9. Design of Temporary Soil Retention System should be per the BNSF Guidelines for Temporary Shoring.
10. Railroad utilities may exist within BNSF right-of-way. Prior to the start of any construction or excavation, utility relocations will have to be coordinated with BNSF.
11. During excavation for roadway, contractor shall install bracing between piles as shown on sheet 2.
12. All welding of caps to piles and of connection angles to closure walls and caps shall be performed by a certified welder.
13. BNSF will cut existing track panels to be removed (into 40 foot lengths) and the contractor will be responsible for removal of the track from the ballast. The track panels for Track #1 and #2 will become the property of the contractor and shall be removed from BNSF R.O.W. The contractor shall remove and deliver the track panels for Track #3 to 535 Quincy Street, Cameron, Illinois 61423. BNSF will be able to assist with unloading of the track panels.



TYPICAL SECTION - TEMPORAY SOIL RETENTION SYSTEM

Notes:
1. The Temporary Soil Retention System includes two different excavation requirements: (1) Depth to allow for setting of superstructure. (2) Depth to allow for setting and attaching precast caps and associated safe working slopes.

2. At Abutments & Piers, a cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The contractor shall submit a Temporary Soil Retention System design including plan details and calculations signed and sealed by a registered Structural Engineer in the State of Illinois to the Engineer for review and approval prior to commencing construction.

3. If the contractor elects to cut and remove portions of the Temporary Soil Retention Wall instead of removing the entire wall, the wall shall be removed to an elevation of 750.00 between the proposed bridge piers and to an elevation of 5' below finished grade at locations outside of the piers. All wall above elevation 765.00 shall be removed.

DESIGNED	JEC	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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HANSON

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	CHECKED - MAF	REVISED -	
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PLOT DATE = 5/9/2016	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION SEQUENCE NOTES AND DETAILS
STRUCTURE 048-9928
SHEET NO. 5 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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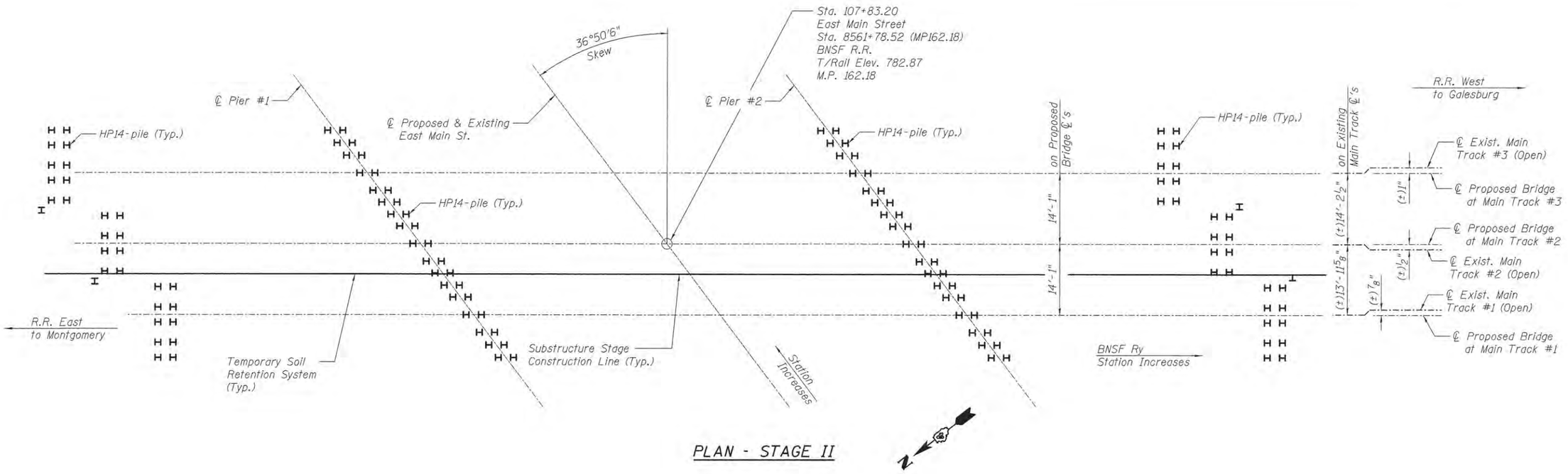
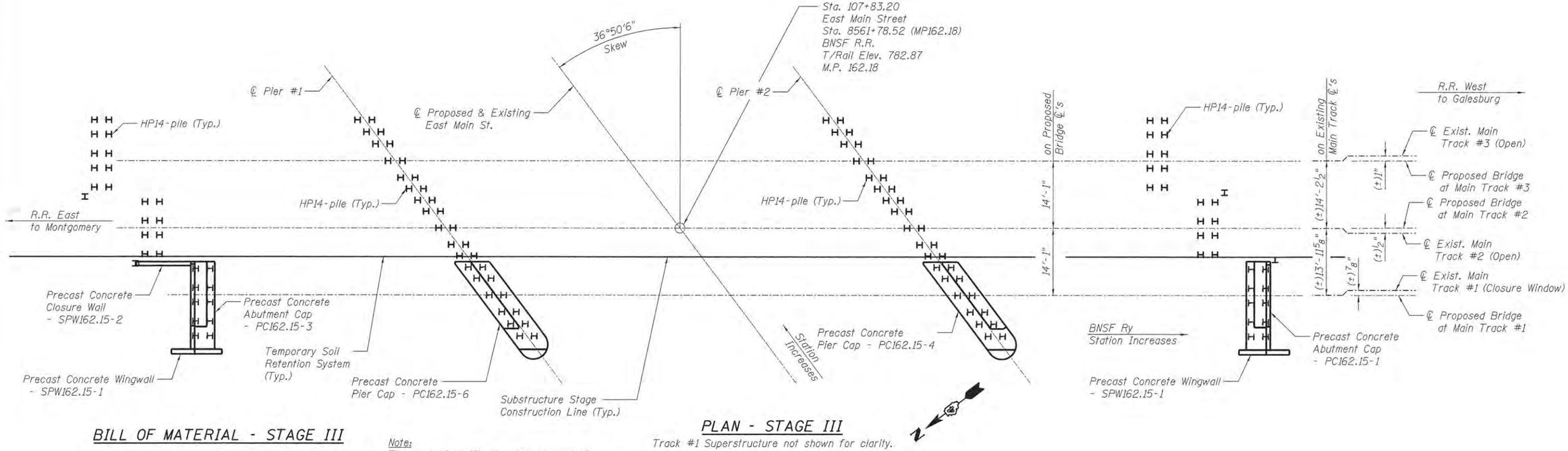
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



PLAN - STAGE II



PLAN - STAGE III

Track #1 Superstructure not shown for clarity.

BILL OF MATERIAL - STAGE III

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	2,100

Note:
The cost of verification and removal of abandoned utilities shall be included in the unit price of "Structure Excavation".

DESIGNED	JEC	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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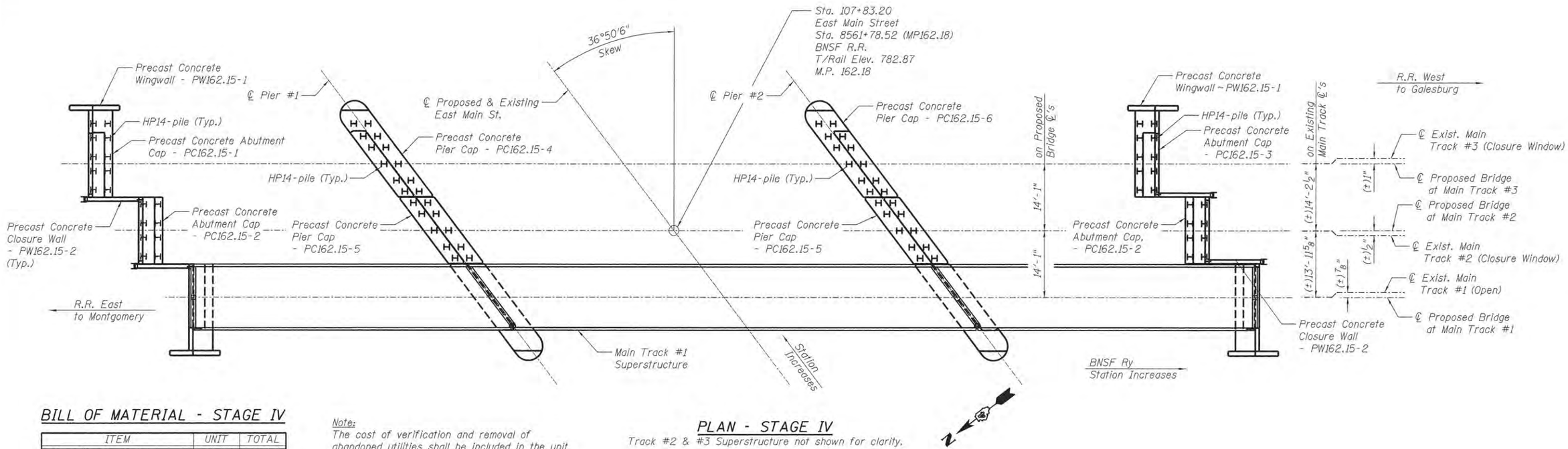
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION SEQUENCE PLAN – STAGE II AND III
STRUCTURE 048-9928
SHEET NO. 6 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	86
		CONTRACT NO. 89417		
		ILLINOIS FED. AID PROJECT		



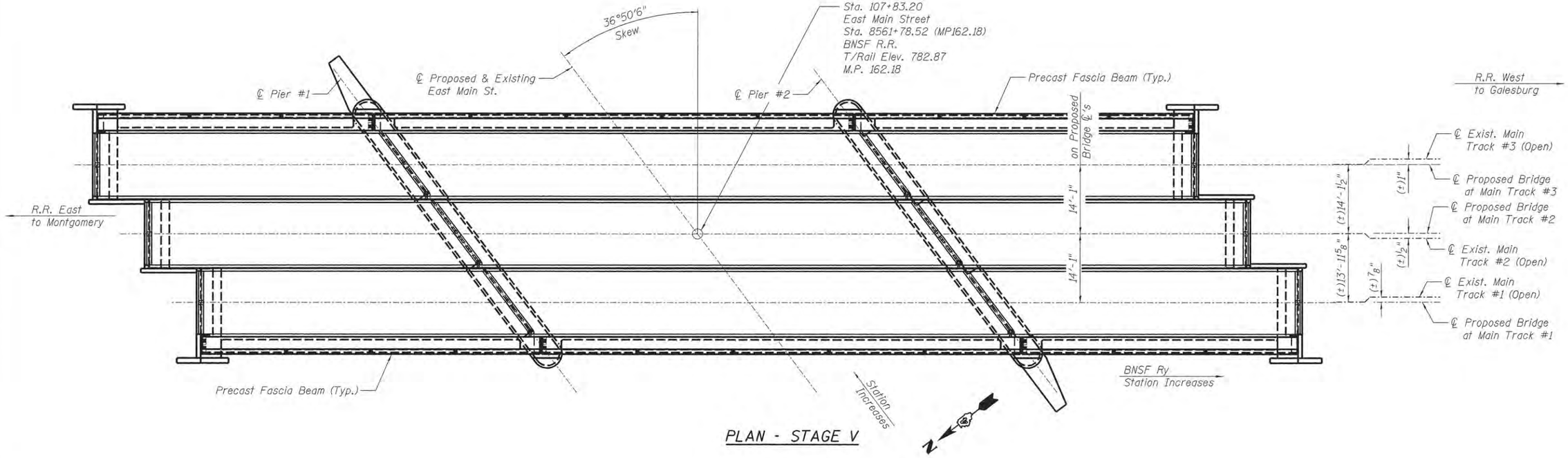
BILL OF MATERIAL - STAGE IV

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	3,500

Note:
The cost of verification and removal of abandoned utilities shall be included in the unit price of "Structure Excavation".

PLAN - STAGE IV

Track #2 & #3 Superstructure not shown for clarity.



PLAN - STAGE V

DESIGNED	JEC	5-22-15	
DRAWN	GTJ	5-22-15	
REVIEWED	MAF	5-29-15	

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PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION SEQUENCE PLAN – STAGE IV AND V
STRUCTURE 048-9928
SHEET NO. 7 OF 48 SHEETS

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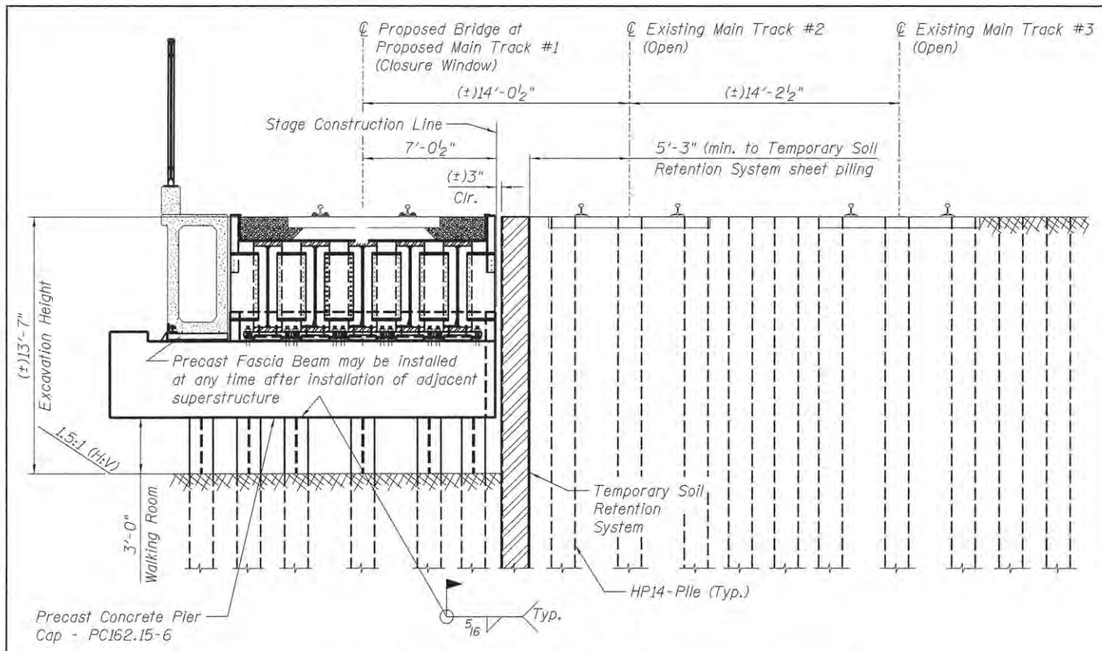
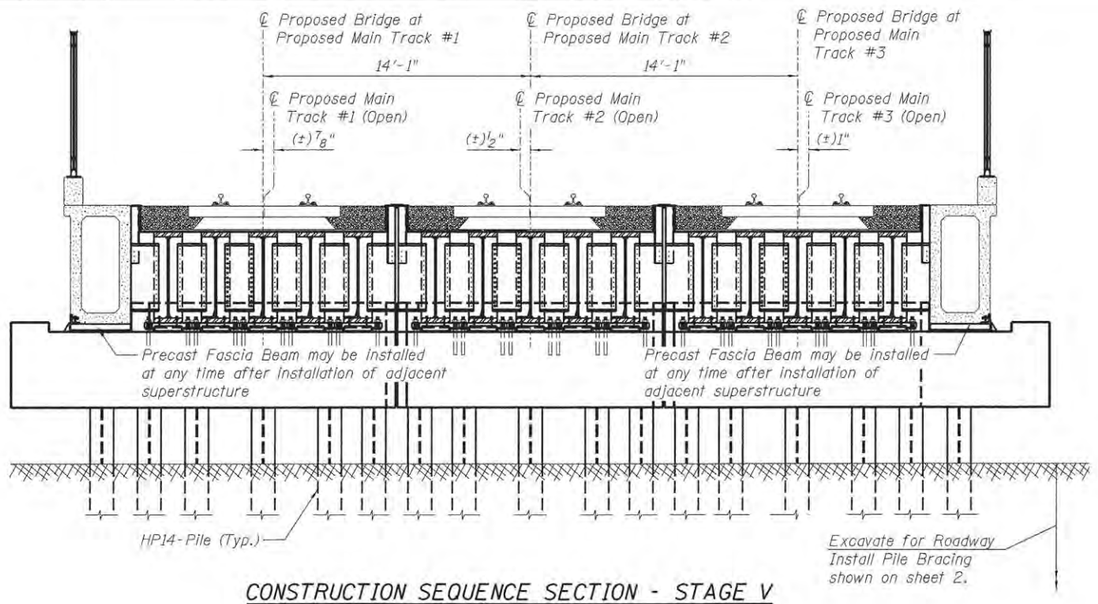
		ILLINOIS FED. AID PROJECT		



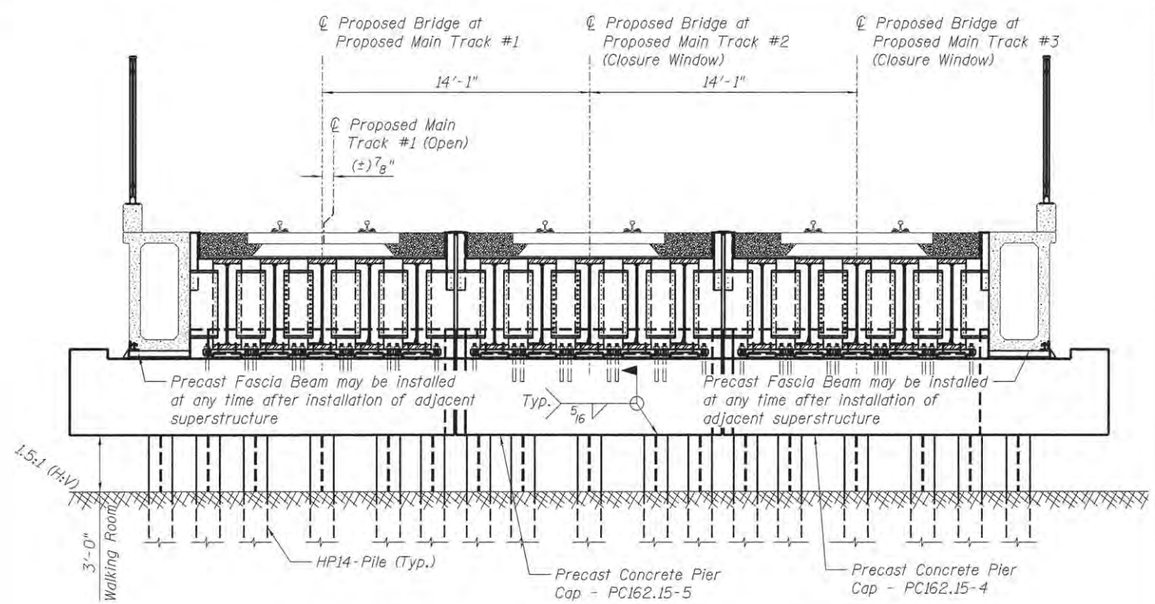
CONSTRUCTION SEQUENCE SECTION - STAGE III

(Looking North at Pier #1)



CONSTRUCTION SEQUENCE SECTION - STAGE V

(Looking North at Pier #1)



CONSTRUCTION SEQUENCE SECTION - STAGE IV

(Looking North at Pier #1)

DESIGNED	JEC 5-22-15
DRAWN	GTJ 5-22-15
REVIEWED	MAF 5-29-15

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PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION SEQUENCE STAGING SECTIONS
STRUCTURE 048-9928
SHEET NO. 8 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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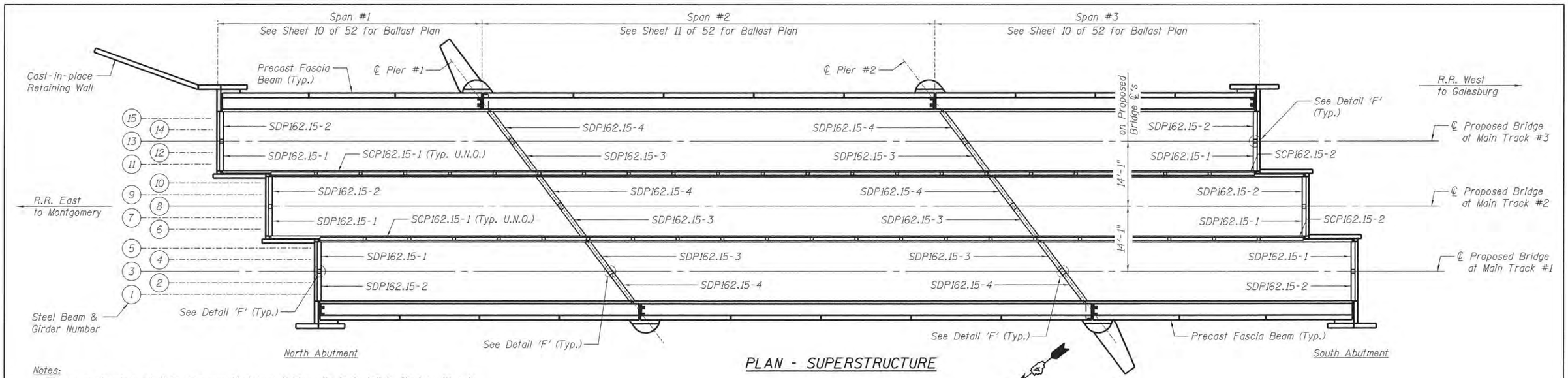
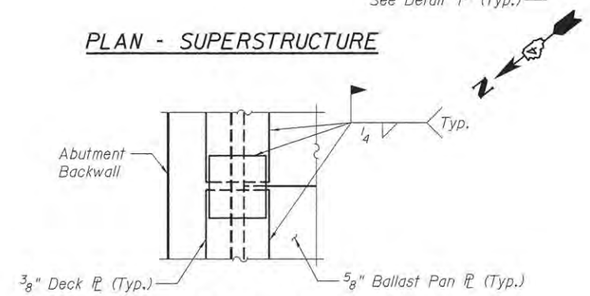
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



PLAN - SUPERSTRUCTURE

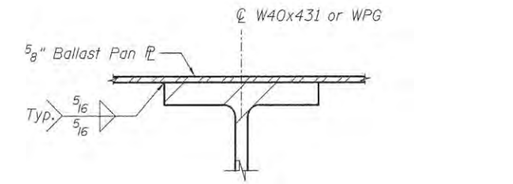
Notes:

1. The superstructure shall be preassembled near bridge site to install in final position to expedite installation at time of change out. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
2. See sheets 10 and 11 for location of section views.
3. See sheet 42 for deck and curb plate details.
4. After assembled span is in final position, all lifting devices shall be removed and the Waterproofing System shall be repaired or finished as needed.

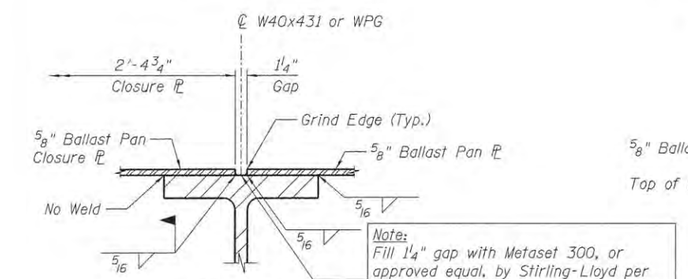


DETAIL 'F'

(Abutment shown, Pier similar)

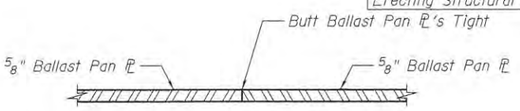


SECTION A-A

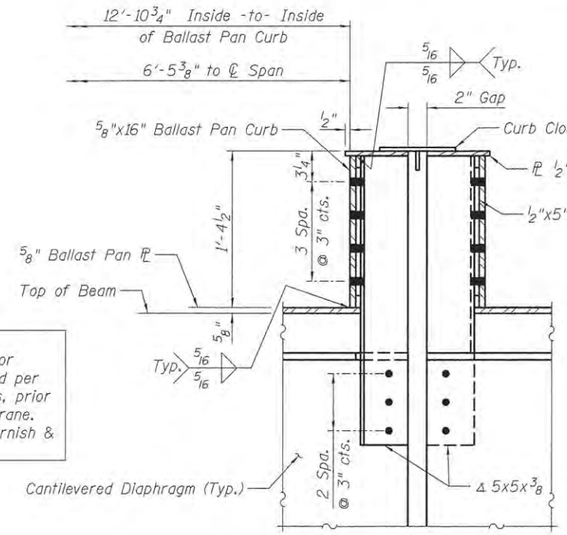


SECTION B-B

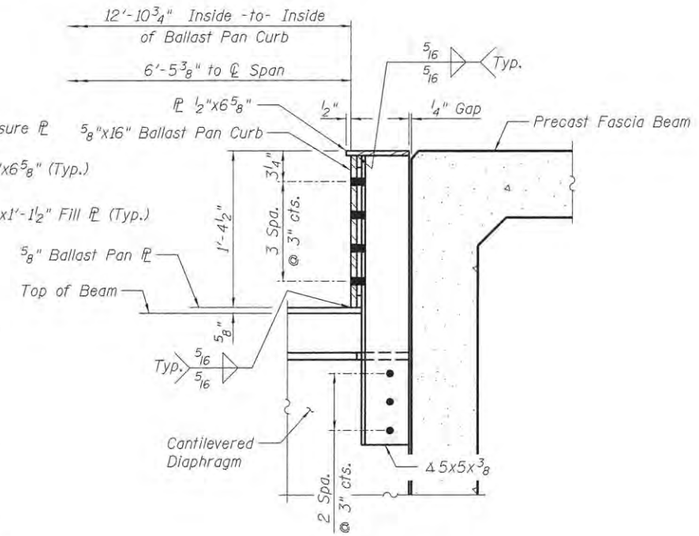
Note:
Fill 1 1/4" gap with Metaset 300, or approved equal, by Stirling-Lloyd per manufacturer's recommendations, prior to applying waterproofing membrane. Cost included in the cost of Furnish & Erecting Structural Steel.



SECTION C-C



SECTION E-E



SECTION D-D

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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HANSON

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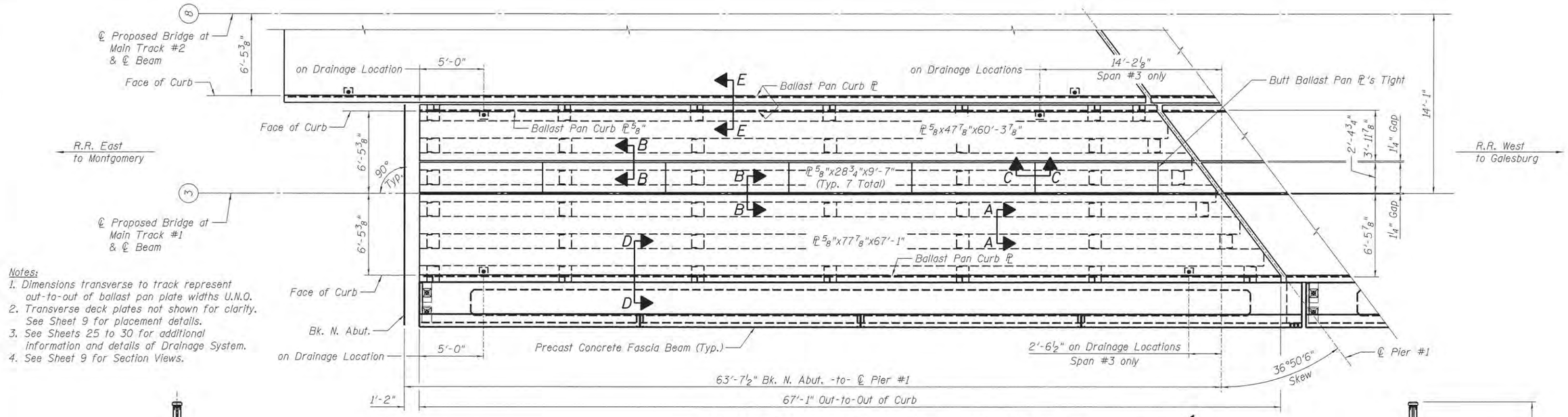
	CHECKED - MAF	REVISED -	
PLOT SCALE = 01.0000 '' / in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE AND DETAILS
STRUCTURE 048-9928
SHEET NO. 9 OF 48 SHEETS

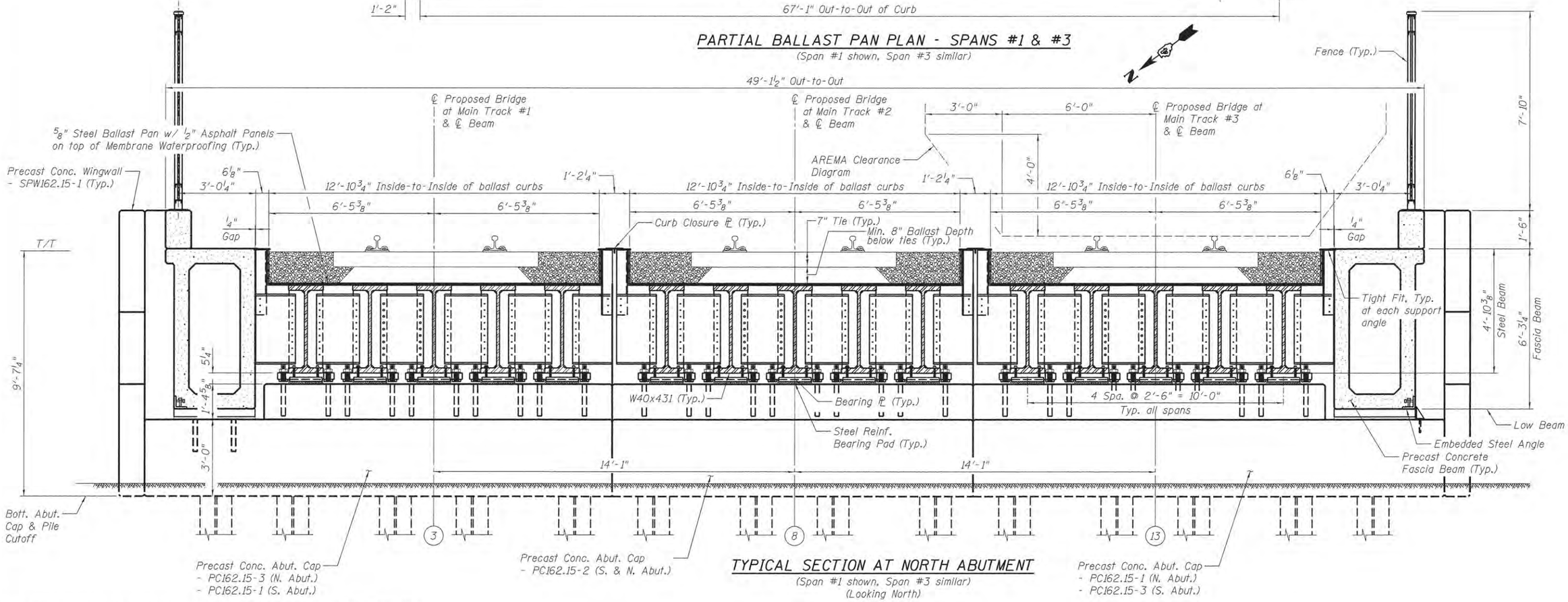
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	89
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



Notes:
1. Dimensions transverse to track represent out-to-out of ballast pan plate widths U.N.O.
2. Transverse deck plates not shown for clarity. See Sheet 9 for placement details.
3. See Sheets 25 to 30 for additional information and details of Drainage System.
4. See Sheet 9 for Section Views.

PARTIAL BALLAST PAN PLAN - SPANS #1 & #3

(Span #1 shown, Span #3 similar)



TYPICAL SECTION AT NORTH ABUTMENT

(Span #1 shown, Span #3 similar)
(Looking North)

DESIGNED	TDP 5-22-15
DRAWN	GTJ 5-22-15
REVIEWED	MAF 5-29-15

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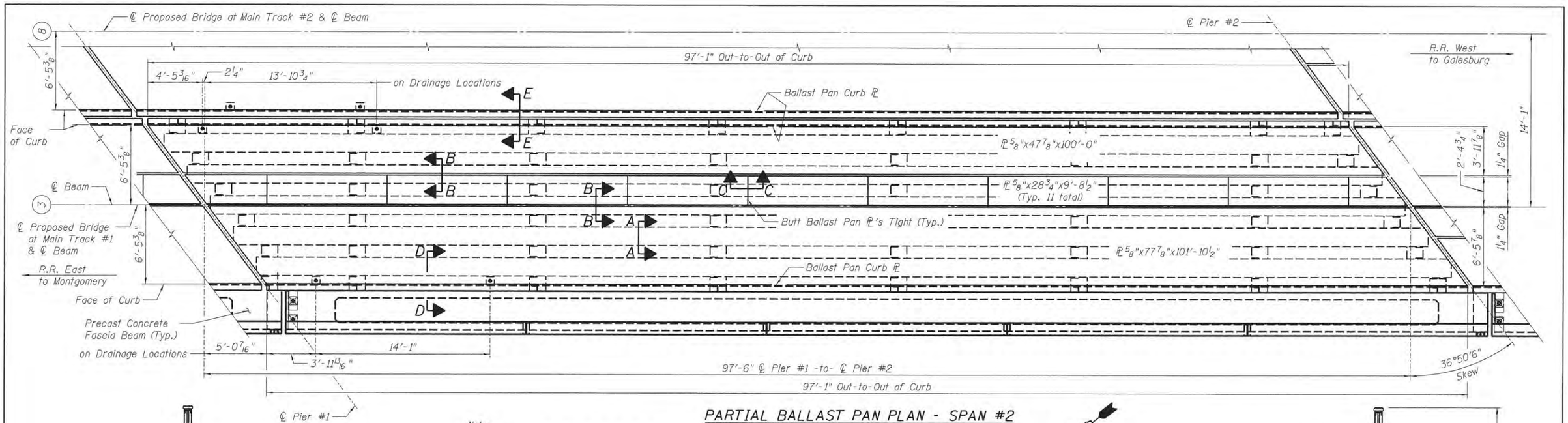
HANSON

USER NAME = ender00846	DESIGNED - TDP	REVISED -
	CHECKED - MAF	REVISED -
PLOT SCALE = 40.0000 '' / in.	DRAWN - GTJ	REVISED -
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

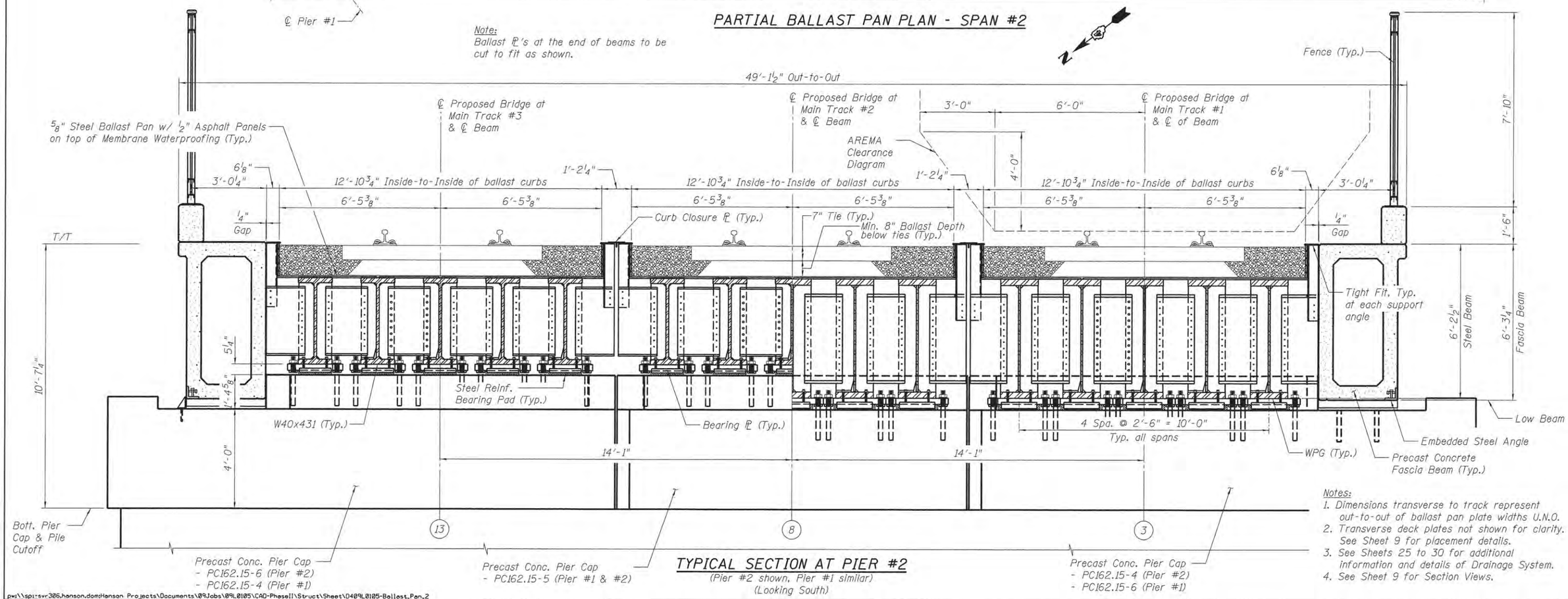
BALLAST PAN PLAN – SPAN #1 AND #3
STRUCTURE 048-9928
SHEET NO. 10 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	90
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



PARTIAL BALLAST PAN PLAN - SPAN #2

Note:
Ballast ℄'s at the end of beams to be cut to fit as shown.



TYPICAL SECTION AT PIER #2

(Pier #2 shown, Pier #1 similar)
(Looking South)

Notes:
1. Dimensions transverse to track represent out-to-out of ballast pan plate widths U.N.O.
2. Transverse deck plates not shown for clarity. See Sheet 9 for placement details.
3. See Sheets 25 to 30 for additional information and details of Drainage System.
4. See Sheet 9 for Section Views.

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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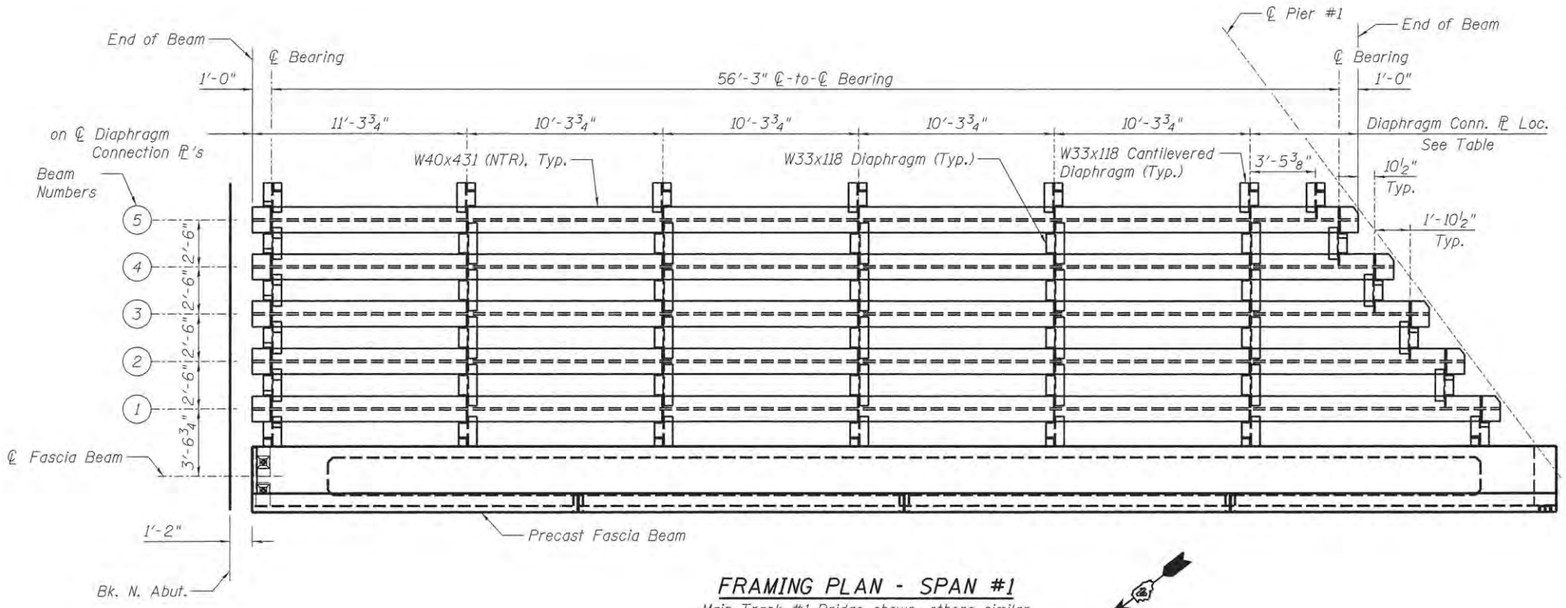
HANSON

USER NAME = ander00846	DESIGNED - TDP	REVISED -
	CHECKED - MAF	REVISED -
PLOT SCALE = 4.0.0000 ' = ' in.	DRAWN - GTJ	REVISED -
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

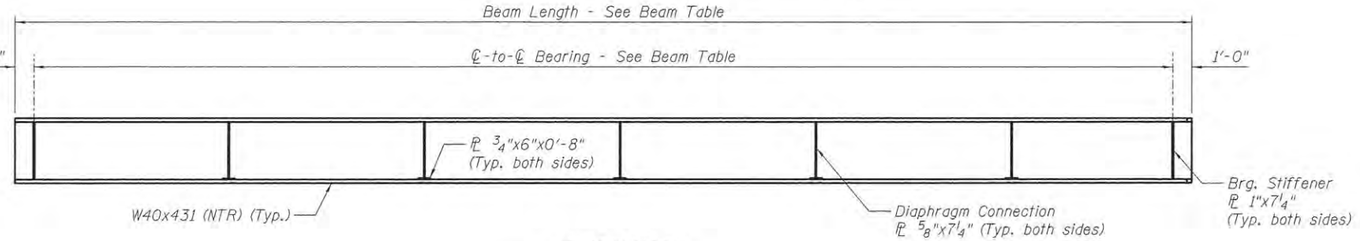
BALLAST PAN PLAN – SPAN #2
STRUCTURE 048-9928
SHEET NO. 11 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	91
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



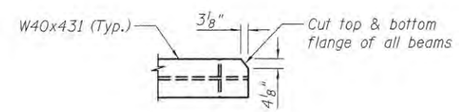
FRAMING PLAN - SPAN #1

Main Track #1 Bridge shown, others similar

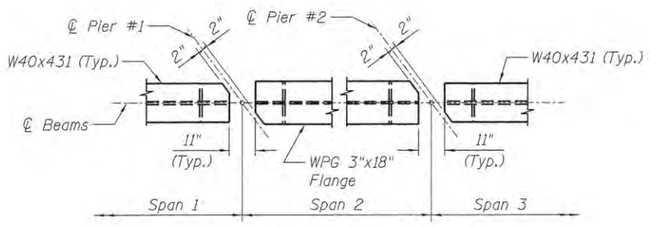


ELEVATION

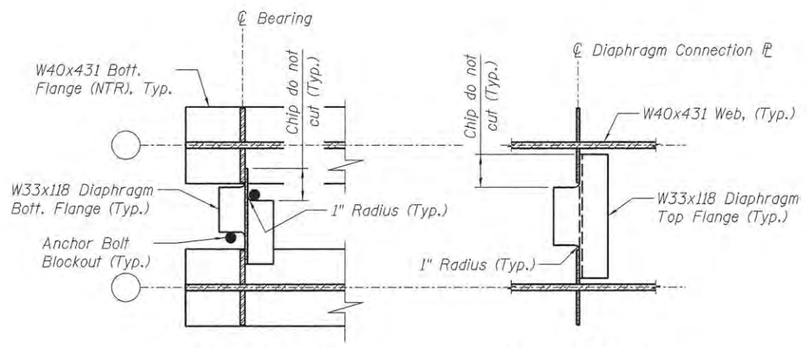
(Beam Line 3 shown, others similar)



COPING DETAIL



TYPICAL JOINT DETAILS



BOTTOM FLANGE TOP FLANGE

TYPICAL DIAPHRAGM COPE DETAILS

(Skewed end of deck similar)

BEAM TABLE

Beam	Beam Length	℄ Brg.-to-Brg.	Diaphragm Connection ℄ Location
1, 6, 11	65'-9"	63'-9"	13'-2¼"
2, 7, 12	63'-10½"	61'-10½"	11'-3¾"
3, 8, 13	62'-0"	60'-0"	9'-5¼"
4, 9, 14	60'-1½"	58'-1½"	7'-6¾"
5, 10, 15	58'-3"	56'-3"	5'-8¼"

MOMENT & SHEAR TABLE - BEAM 1

DESCRIPTION	MOMENT	SHEAR
Dead Load	707 k-ft.	44 k
Live Load	1162 k-ft.	82 k
Impact	447 k-ft.	32 k
Total	2315 k-ft.	158 k
Section	W40x431	
Steel	A.S.T.M. A709 GR. 50 NTR Zone 2	
Net I	32,698 in.⁴	
Net S (Bott.)	1,527 in.³	
FST (Bott.)	16.9 ksi	
Gross I	34,487 in.⁴	
Gross S (Top)	1,670 in.³	
FSC (Top)	16.6 ksi	
(LL+I) Deflection	1.0 in	
Allowable (LL+I) Deflection	1.2 in	

I - Non-Composite moment of inertia of the steel section.

S - Non-Composite section modulus of the steel section.

FST - Max unfactored tension stress in steel section due to DL+LL+Impact.

FSC - Max unfactored compression stress in steel section due to DL+LL+Impact.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

STEEL NOTES:

DEAD LOAD: (ASSUMED)

Rail	200
Ballast (8" plus ties)	1,950
Steel Deck & Curb	436
Waterproofing	50
Girders (incl. misc.)	2,371
Future Ballast, 15"	1,950
Total	6,957 Lbs. per Lin. Ft. of Track

PROPERTIES: (W40x431)

d = 41.3"
bf = 16.2"
tf = 2.36"
tw = 1.34"

LIFTING WEIGHTS:

Single Beam = 30,000 lbs.
2-Beam Set = 69,800 lbs.
3-Beam Set = 111,900 lbs.
5-Beam Set = 187,500 lbs.

Notes:

1. Any beam camber shall be upward.
2. See Sheet 2 for Steel Notes.
3. See Sheet 25 to 30 for information on details of Drainage System and holes in cantilevered diaphragms.

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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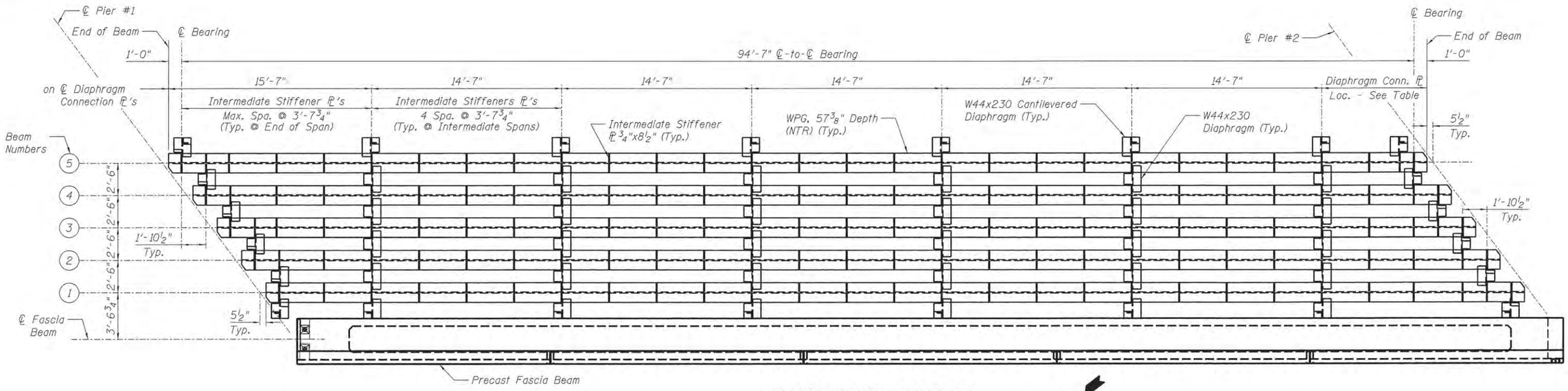
HANSON

USER NAME = ander-00846	DESIGNED - TDP	REVISED -
	CHECKED - MAF	REVISED -
PLOT SCALE = 40.0000 '' / in.	DRAWN - GTJ	REVISED -
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

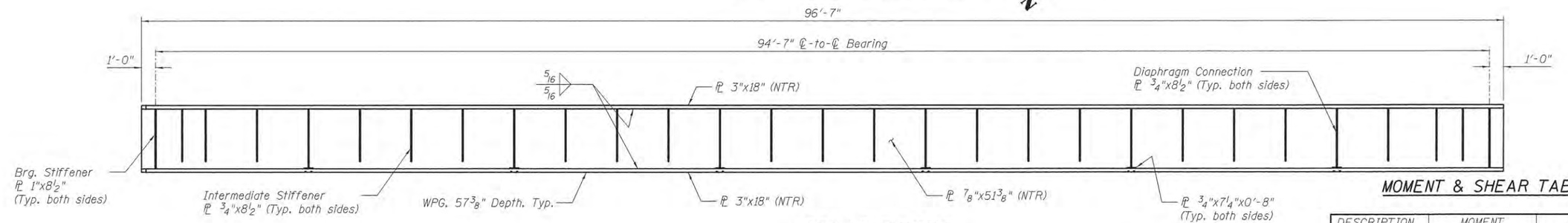
FRAMING PLAN – SPAN #1
STRUCTURE 048-9928
SHEET NO. 12 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	92
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



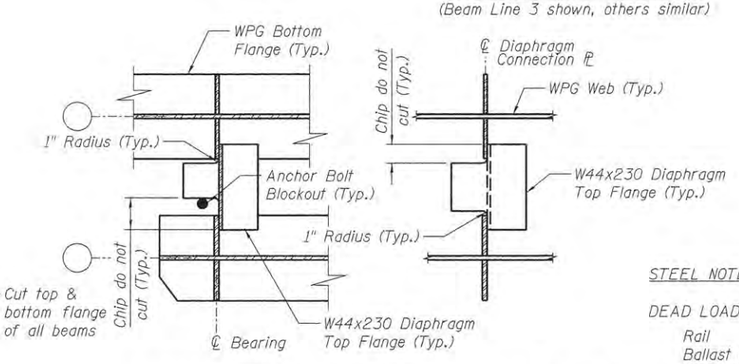
FRAMING PLAN - SPAN #2

Main Track #1 Bridge shown, others similar



BEAM ELEVATION

(Beam Line 3 shown, others similar)



BEAM TABLE

Beam	Diaphragm Conn. ℙ Loc.
1, 6, 11	15'-7"
2, 7, 12	13'-8 1/2"
3, 8, 13	11'-10"
4, 9, 14	9'-11 1/2"
5, 10, 15	8'-1"

WEIGHTS:
Single Beam = 56,100 lbs.
2-Beam Set = 141,800 lbs.
3-Beam Set = 210,800 lbs.
5-Beam Set = 361,600 lbs.

MOMENT & SHEAR TABLE

DESCRIPTION	MOMENT	SHEAR
Dead Load	1,665 k-ft.	70 k
Live Load	2,339 k-ft.	115 k
Impact	801 k-ft.	39 k
Total	4,804 k-ft.	224 k
Steel	A.S.T.M. A709 GR. 50 NTR Zone 2	
Net I	85,362 in.^{4}	
Net S (Bott.)	2,865 in.^{3}	
FST (Bott.)	20.1 ksi	
Gross I	89,798 in.^{4}	
Gross S (Top)	3,130 in.^{3}	
FSC (Top)	18.4 ksi	
(LL+I) Deflection	1.7 in.	
Allowable (LL+I) Deflection	1.8 in.	

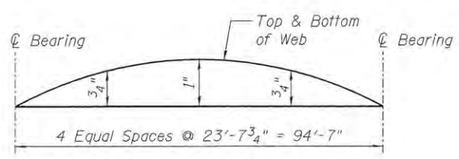
I - Non-Composite moment of inertia of the steel section.

S - Non-Composite section modulus of the steel section.

FST - Max unfactored tension stress in steel section due to DL+LL+Impact.

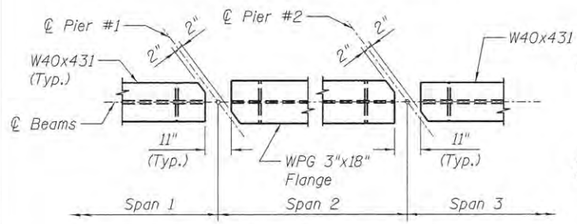
FSC - Max unfactored compression stress in steel section due to DL+LL+Impact.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

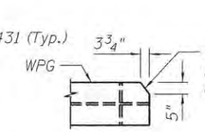


CAMBER DIAGRAM

Camber calculated for Dead Load



TYPICAL JOINT DETAILS



COPING DETAIL

BOTTOM FLANGE

TOP FLANGE

TYPICAL DIAPHRAGM COPE DETAILS

STEEL NOTES:

DEAD LOAD: (ASSUMED)

Rail	200
Ballast (8" plus ties)	1,950
Steel Deck & Curb	431
Waterproofing	50
Girders (incl. misc.)	2,863
Future Ballast, 15"	1,950
Total	7,444 Lbs. per Lin. Ft. of Track

Notes:
1. See Sheet 2 for Steel Notes.
2. See Sheet 25 to 30 for information on details of Drainage System and holes in cantilevered diaphragms.

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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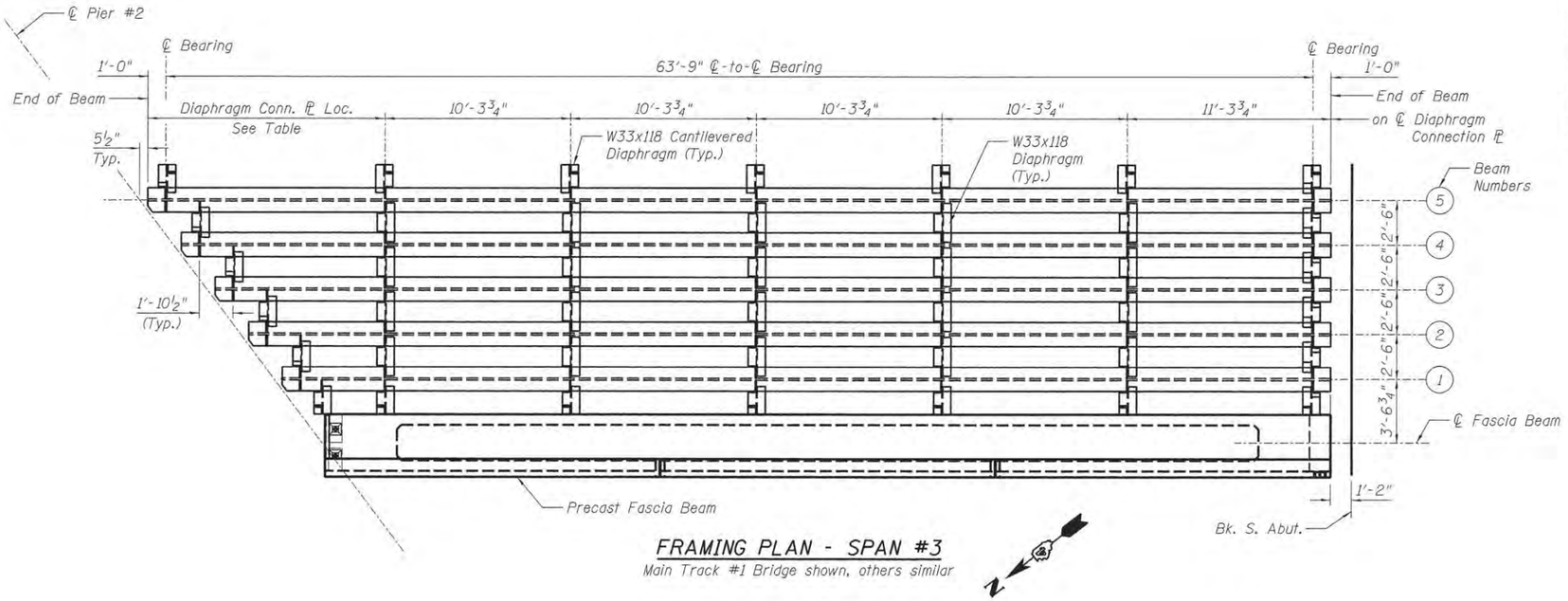
HANSON

USER NAME = ander00846	DESIGNED - TDP	REVISED -	
	CHECKED - MAF	REVISED -	
PLOT SCALE = 40.0000 '' / in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

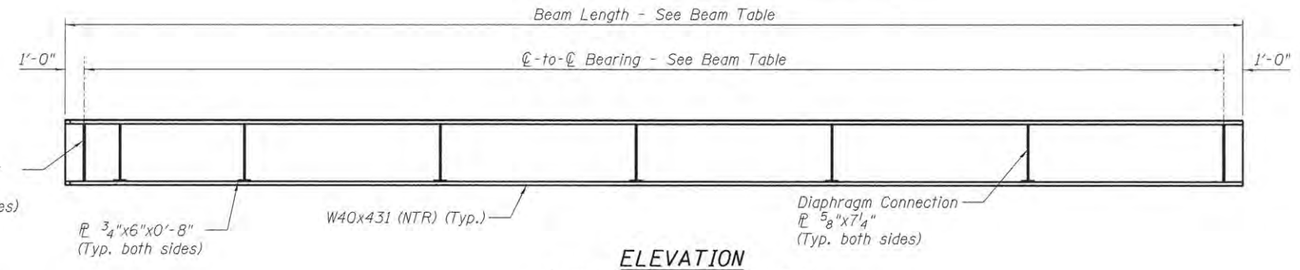
FRAMING PLAN – SPAN #2
STRUCTURE 048–9928
SHEET NO. 13 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	93
		CONTRACT NO. 89417		
		ILLINOIS FED. AID PROJECT		



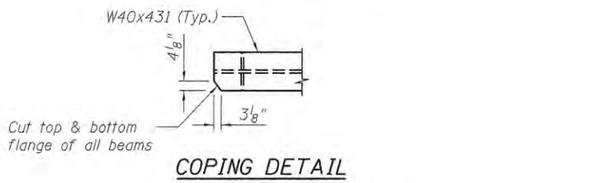
FRAMING PLAN - SPAN #3

Main Track #1 Bridge shown, others similar



ELEVATION

(Beam Line 3 shown, others similar)



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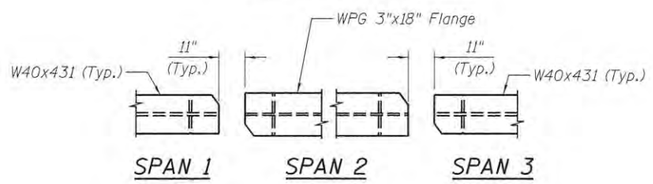
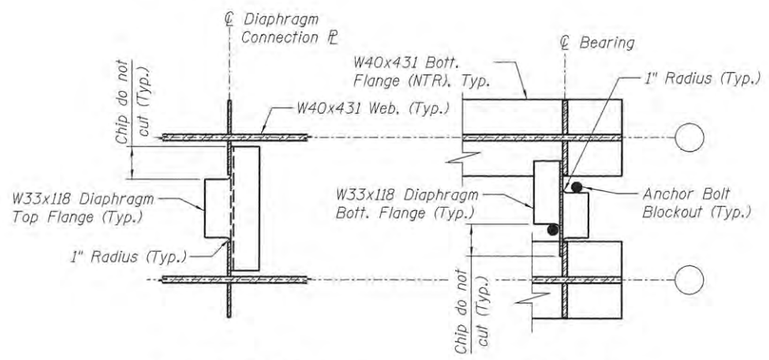


TYPICAL JOINT DETAILS



BOTTOM FLANGE

TOP FLANGE

TYPICAL DIAPHRAGM COPE DETAILS

(Skewed end of deck similar)

BEAM TABLE

Beam	Beam Length	℄ Brg.-to-Brg.	Diaphragm Connection ℙ Location
1, 6, 11	58'-3"	56'-3"	5'-8 1/4"
2, 7, 12	60'-1 1/2"	58'-1 1/2"	7'-6 3/4"
3, 8, 13	62'-0"	60'-0"	9'-5 1/4"
4, 9, 14	63'-10 1/2"	61'-10 1/2"	11'-3 3/4"
5, 10, 15	65'-9"	63'-9"	13'-2 1/4"

MOMENT & SHEAR TABLE - BEAM 5

DESCRIPTION	MOMENT	SHEAR
Dead Load	707 k-ft.	44 k
Live Load	1162 k-ft.	82 k
Impact	447 k-ft.	32 k
Total	2315 k-ft.	158 k
Section	W40x431	
Steel	A.S.T.M. A709 GR. 50 NTR Zone 2	
Net I	32,698 in.4	
Net S (Bott.)	1,527 in.3	
FST (Bott.)	16.9 ksi	
Gross I	34,487 in.4	
Gross S (Top)	1,670 in.3	
FSC (Top)	16.6 ksi	
(LL+I) Deflection	1.0 in	
Allowable (LL+I) Deflection	1.2 in	

I - Non-Composite moment of inertia of the steel section.

S - Non-Composite section modulus of the steel section.

FST - Max unfactored tension stress in steel section due to DL+LL+Impact.

FSC - Max unfactored compression stress in steel section due to DL+LL+Impact.

Load carrying components designated "NTR" shall conform to Impact Testing Requirements, Zone 2.

STEEL NOTES:

DEAD LOAD: (ASSUMED)

Rail	200
Ballast (8" plus ties)	1,950
Steel Deck & Curb	436
Waterproofing	50
Girders (incl. misc.)	2,371
Future Ballast, 15"	1,950
Total	6,957 Lbs. per Lin. Ft. of Track

PROPERTIES: (W40x431)

d = 41.3"
bf = 16.2"
tf = 2.36"
tw = 1.34"

WEIGHTS:

Single Beam = 30,000 lbs.
2-Beam Set = 69,800 lbs.
3-Beam Set = 111,900 lbs.
5-Beam Set = 187,500 lbs.

Notes:

1. Any beam camber shall be upward.
2. See Sheet 2 for Steel Notes.
3. See Sheet 25 to 30 for information on details of Drainage System and holes in cantilevered diaphragms.

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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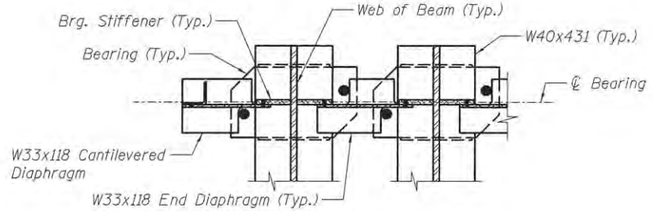
HANSON

USER NAME = ander-00846	DESIGNED - TDP	REVISED -	
	CHECKED - MAF	REVISED -	
PLOT SCALE = 40.0000 '' / in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

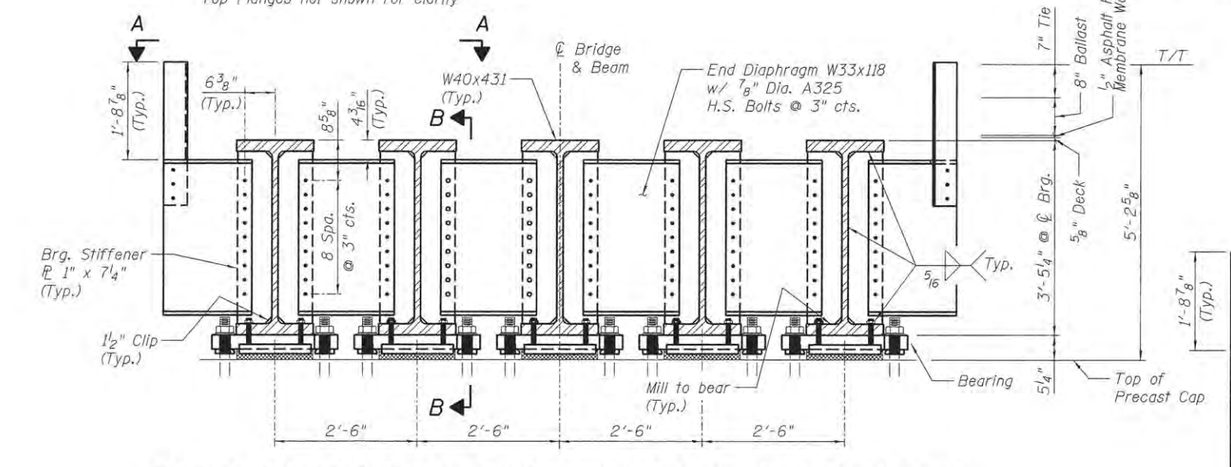
FRAMING PLAN – SPAN #3
STRUCTURE 048-9928
SHEET NO. 14 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	94
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



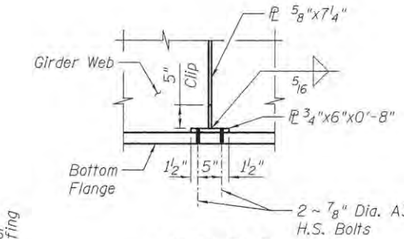
VIEW A-A

Top Flanges not shown for clarity



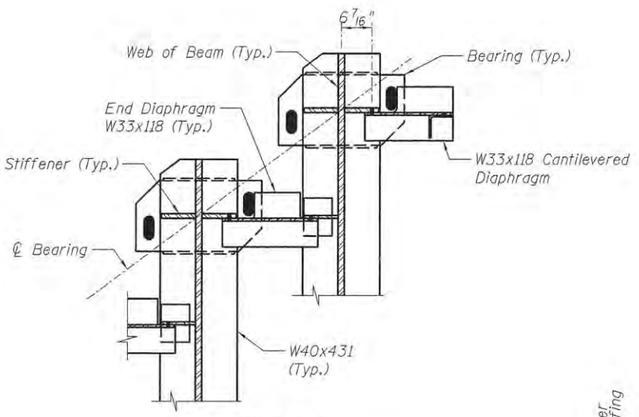
TYPICAL END DIAPHRAGMS AND BEARINGS FOR SQUARED END SPAN #1

- H.S. Shop Bolt
- H.S. Field Bolt



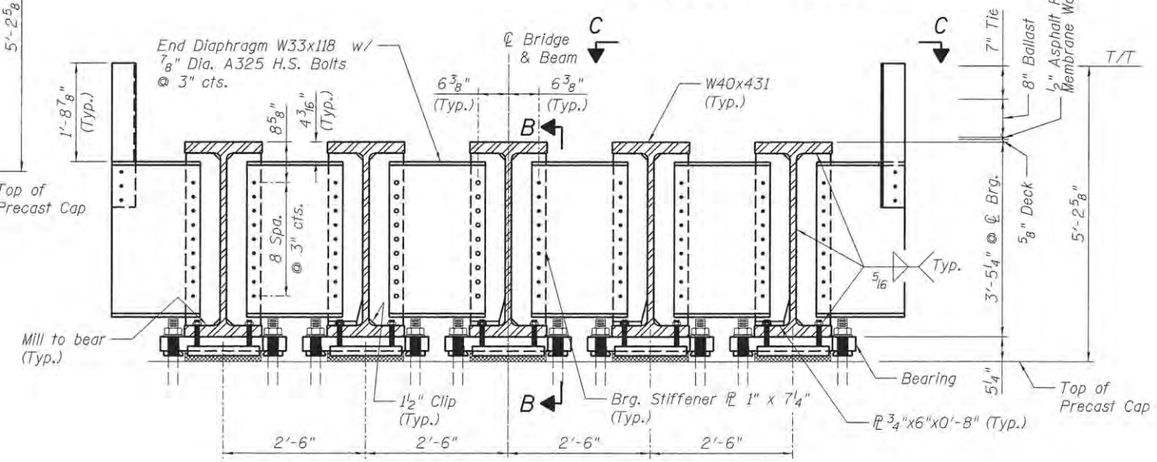
VIEW E-E

Diaphragm not shown for clarity



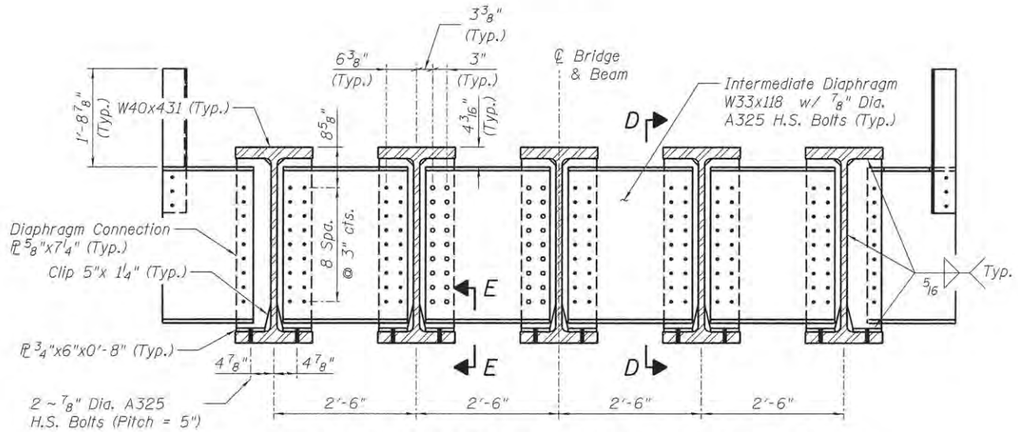
VIEW C-C

Top Flanges not shown for clarity.



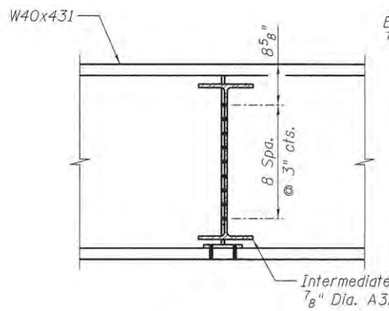
TYPICAL END DIAPHRAGMS AND BEARINGS FOR SKEWED END SPAN #1

- H.S. Shop Bolt
- H.S. Field Bolt

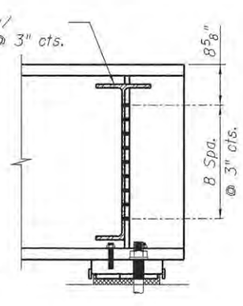


TYPICAL INTERMEDIATE DIAPHRAGMS FOR SPAN #1

- H.S. Shop Bolt
- H.S. Field Bolt



SECTION D-D



SECTION B-B

Note:
See Sheets 25 to 30 for information on details of Drainage System and holes in cantilevered diaphragms.

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

pw:\\spi-svr306.hanson.dom:Hanson Projects\Documents\09Jobs\09L0105\CAD-Phase II\Struct\Sheet\D409L0105-Framing_Details.dgn

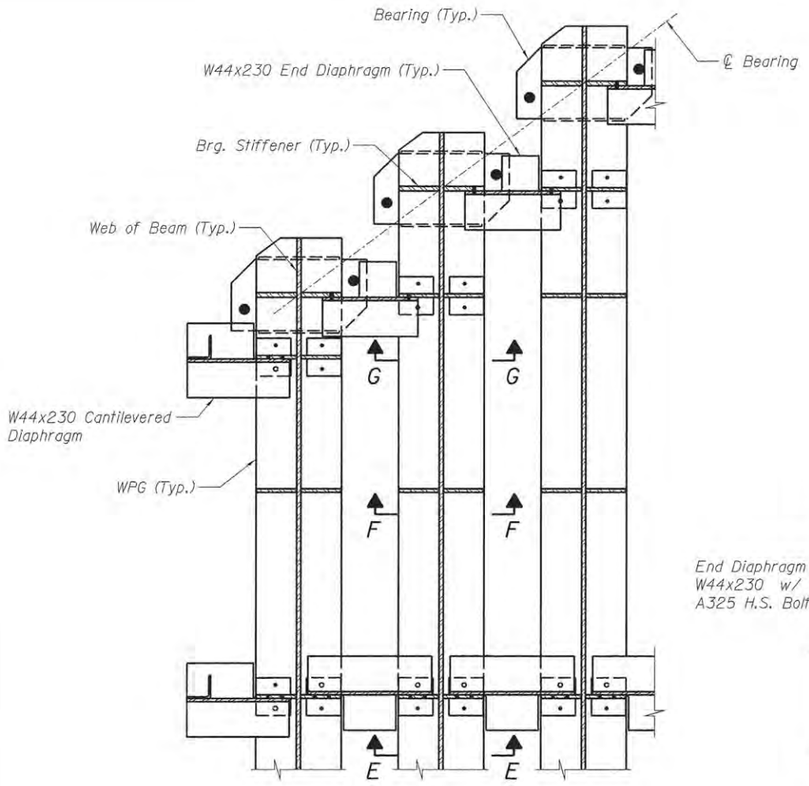
HANSON

USER NAME = ander00846	DESIGNED - TDP	REVISED -	
	CHECKED - MAF	REVISED -	
PLOT SCALE = 14.0000 '/ in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

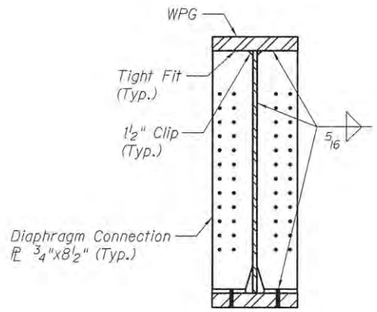
FRAMING DETAILS – SPAN #1 AND #3
STRUCTURE 048-9928
SHEET NO. 15 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	95
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			

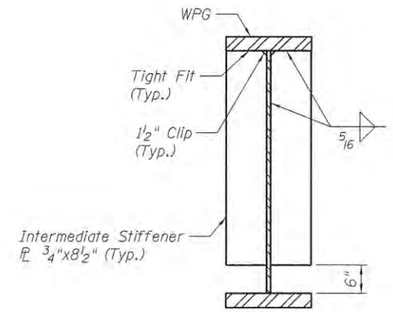


VIEW A-A

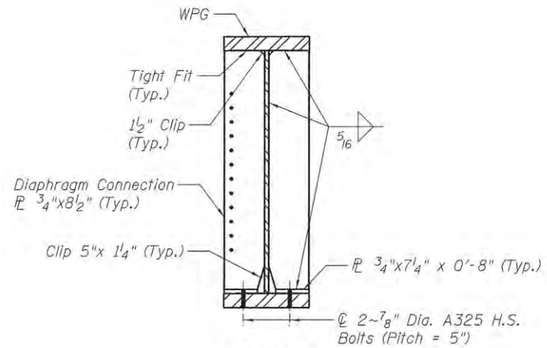
Top Flanges not shown for clarity.



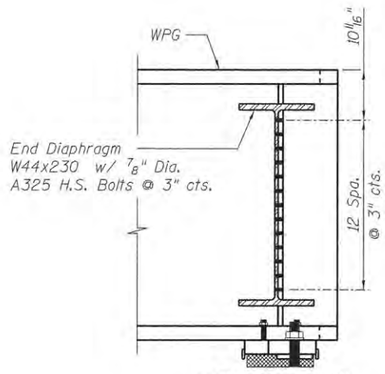
SECTION E-E



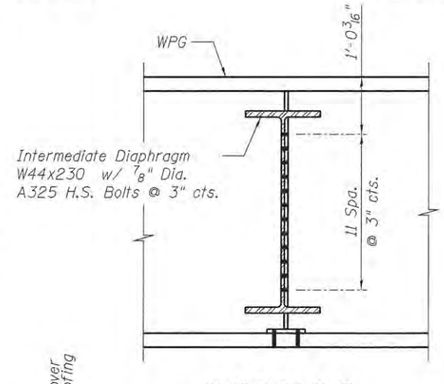
SECTION F-F



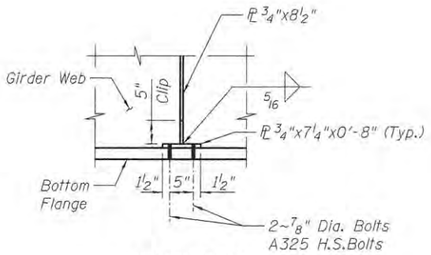
SECTION G-G



SECTION B-B

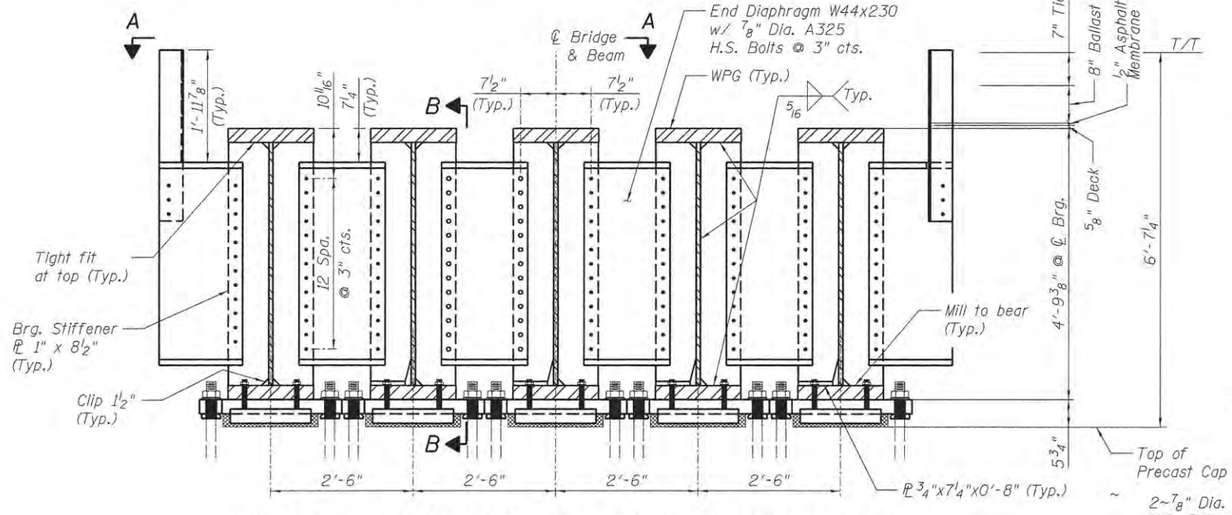


SECTION C-C



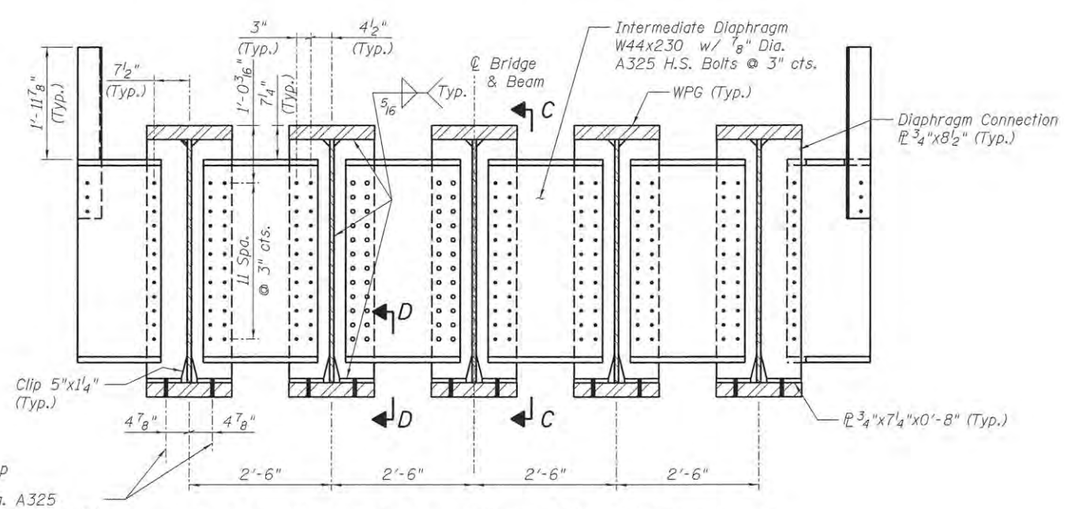
VIEW D-D

Diaphragm not shown for clarity



TYPICAL END DIAPHRAGMS AND BEARINGS FOR SPAN #2

- H.S. Shop Bolt
- o H.S. Field Bolt



TYPICAL INTERMEDIATE DIAPHRAGMS FOR SPAN #2

- H.S. Shop Bolt
- o H.S. Field Bolt

Note:
See Sheets 25 to 30 for information on details of Drainage System and holes in cantilevered diaphragms.

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

pw:\\spi-svr306.hanson.dom:Hanson Projects\Documents\09Jobs\09L0105\CAD-Phase II\Struct\Sheet\D48L0105-Framing_Details_2

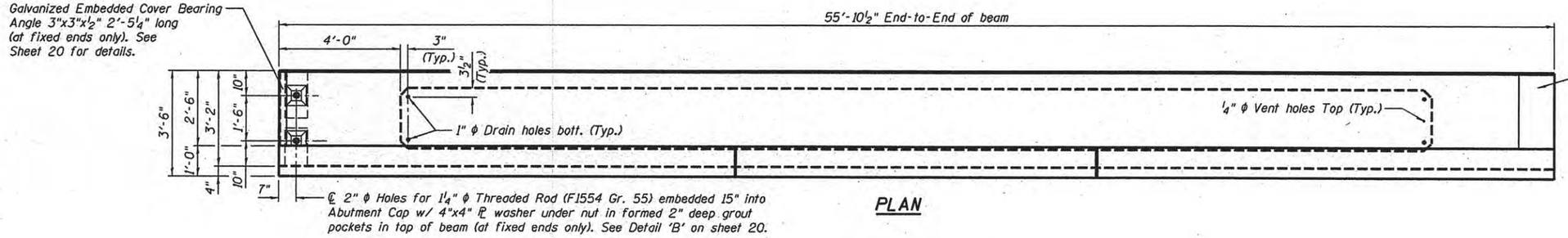
HANSON

USER NAME = ander00846	DESIGNED - TDP	REVISED -	
	CHECKED - MAF	REVISED -	
PLOT SCALE = 1:4.0000 '' / in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 11/13/2015	CHECKED - MAF	REVISED -	

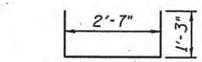
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS – SPAN #2
STRUCTURE 048-9928
SHEET NO. 16 OF 48 SHEETS

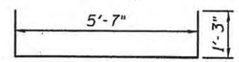
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	96
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



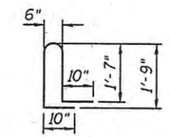
PLAN



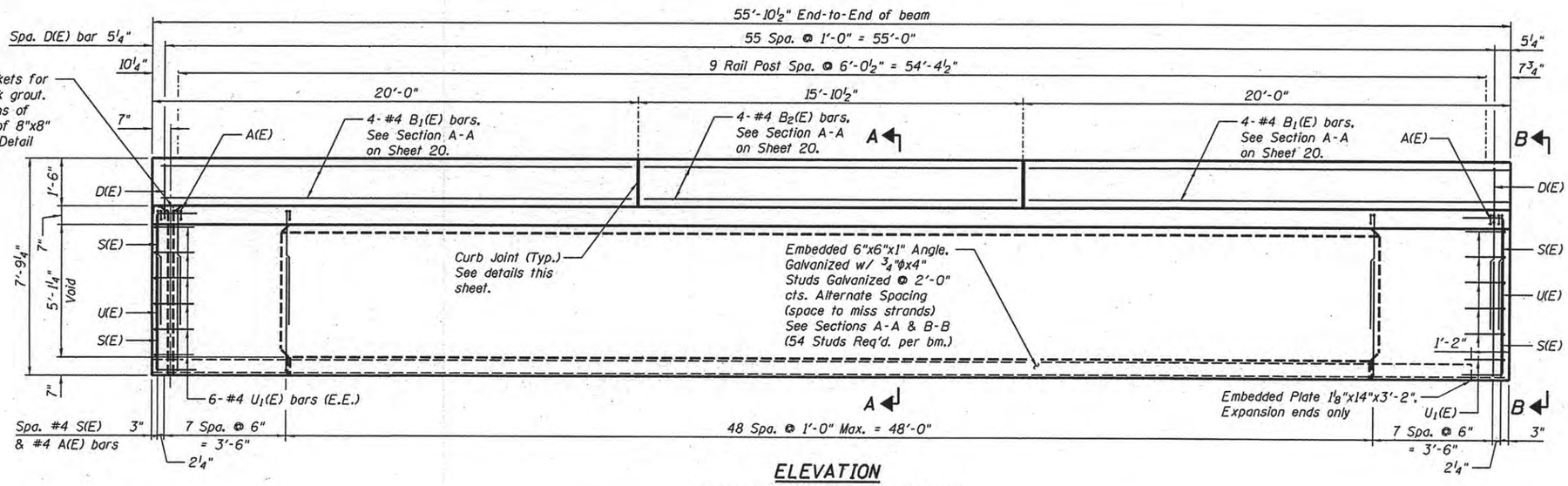
BAR $U_1(E)$



BAR U(E)

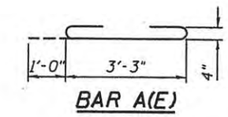


BAR D(E)

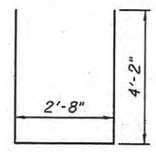


ELEVATION

(2 Req'd.. Approx. Weight = 96,200 lbs.)



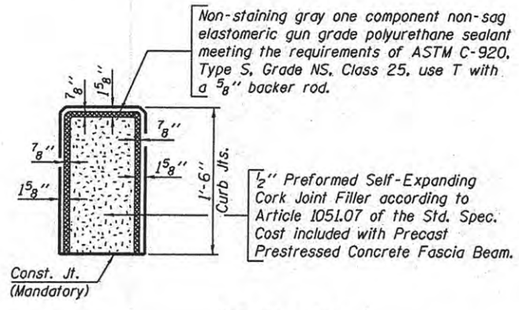
BAR A(E)



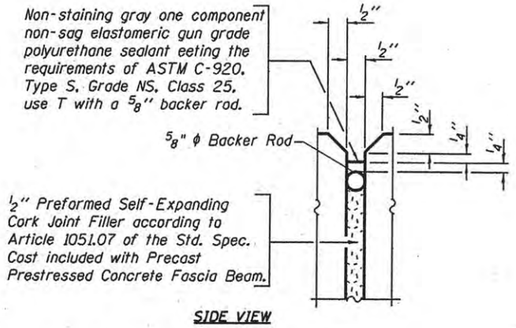
BAR S(E)

MINIMUM BAR LAP

#4 bar = 2'-0"
#6 bar = 3'-0"



ELEVATION VIEW



SIDE VIEW

CURB JOINT DETAILS

Notes:

1. See Sheet 20 for Section Views, Notes and Details.
2. See Sheet 31 for Rail Post Details.

BAR LIST ONE BEAM ONLY

(For Fabrication Only)

Bar	No.	Size	Length	Shape
A(E)	65	#4	5'-3"	
B(E)	20	#6	55'-6"	
$B_1(E)$	8	#4	19'-8"	
$B_2(E)$	4	#4	15'-6"	
D(E)	56	#4	5'-6"	
S(E)	130	#4	11'-0"	
U(E)	8	#4	8'-1"	
$U_1(E)$	12	#4	5'-1"	

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

pw:\\spi-svr-386.hanson.dom:Hanson Projects\Documents\09Jobs\09L0185\CAD-Phase1\Struct\Sheet\048L0185-Precast_Fascia_Beam1

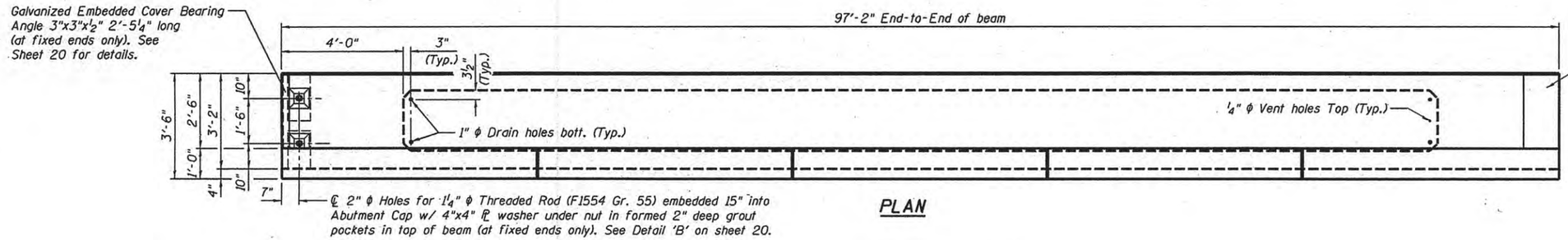
HANSON

USER NAME = Jenni08313	DESIGNED - TDP	REVISED -
	CHECKED - MAF	REVISED -
PLOT SCALE = 3:11.9999 '/ in.	DRAWN - GTJ	REVISED -
PLOT DATE = 1/15/2016	CHECKED - MAF	REVISED -

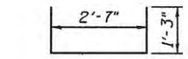
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST FASCIA BEAM (SHEET 1 OF 3)
STRUCTURE 048-9928
SHEET NO. 17 OF 48 SHEETS

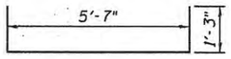
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	97
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			



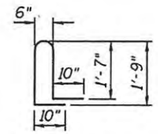
PLAN



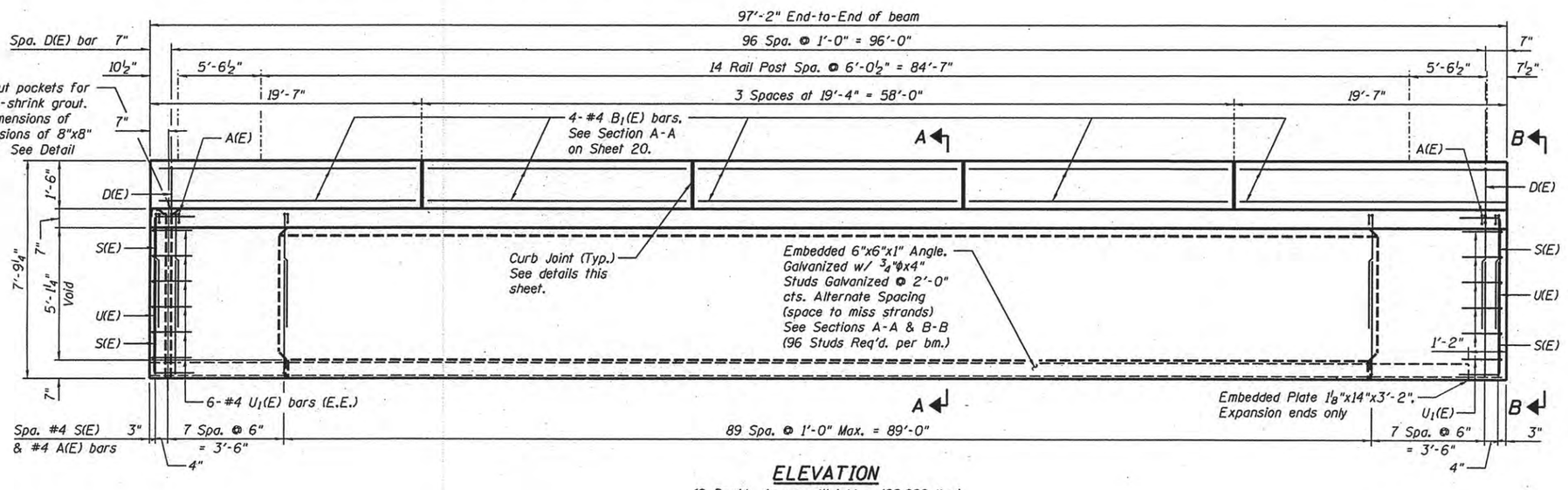
BAR U1(E)



BAR U(E)

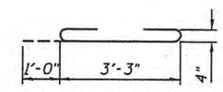


BAR D(E)

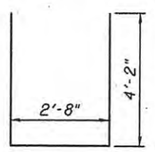


ELEVATION

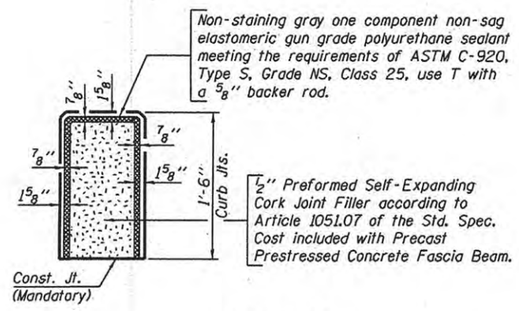
(2 Req'd., Approx. Weight = 168,000 lbs.)



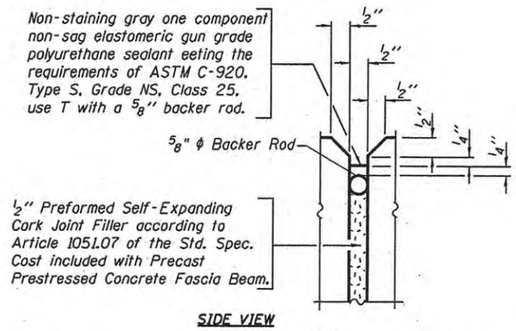
BAR A(E)



BAR S(E)



ELEVATION VIEW



SIDE VIEW

CURB JOINT DETAILS

Notes:
1. See Sheet 20 for Section Views, Notes and Details.
2. See Sheet 31 for Rail Post Details.
3. See Sheet 46 for Fascia Beam Aesthetic Details.

MINIMUM BAR LAP

#4 bar = 2'-0"
#6 bar = 3'-0"

BAR LIST ONE BEAM ONLY

(For Fabrication Only)

Bar	No.	Size	Length	Shape
A(E)	106	#4	5'-3"	
B(E)	20	#6	97'-0"	
B1(E)	20	#4	19'-3"	
D(E)	97	#4	5'-6"	
S(E)	212	#4	11'-0"	
U(E)	8	#4	8'-1"	
U1(E)	12	#4	5'-1"	

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

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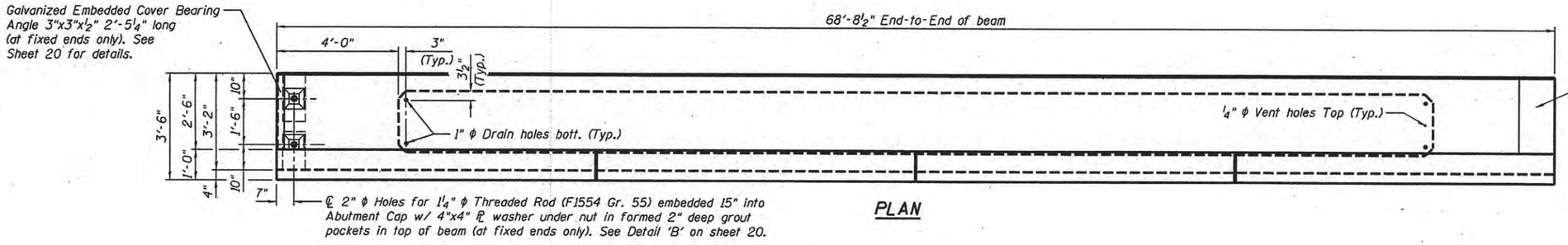
HANSON

USER NAME = Jenni00313	DESIGNED - TDP	REVISED -
	CHECKED - MAF	REVISED -
PLOT SCALE = 3ll.9999 '1' / in.	DRAWN - GTJ	REVISED -
PLOT DATE = 1/15/2016	CHECKED - MAF	REVISED -

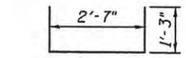
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST FASCIA BEAM (SHEET 2 OF 3)
STRUCTURE 048-9928
SHEET NO. 18 OF 48 SHEETS

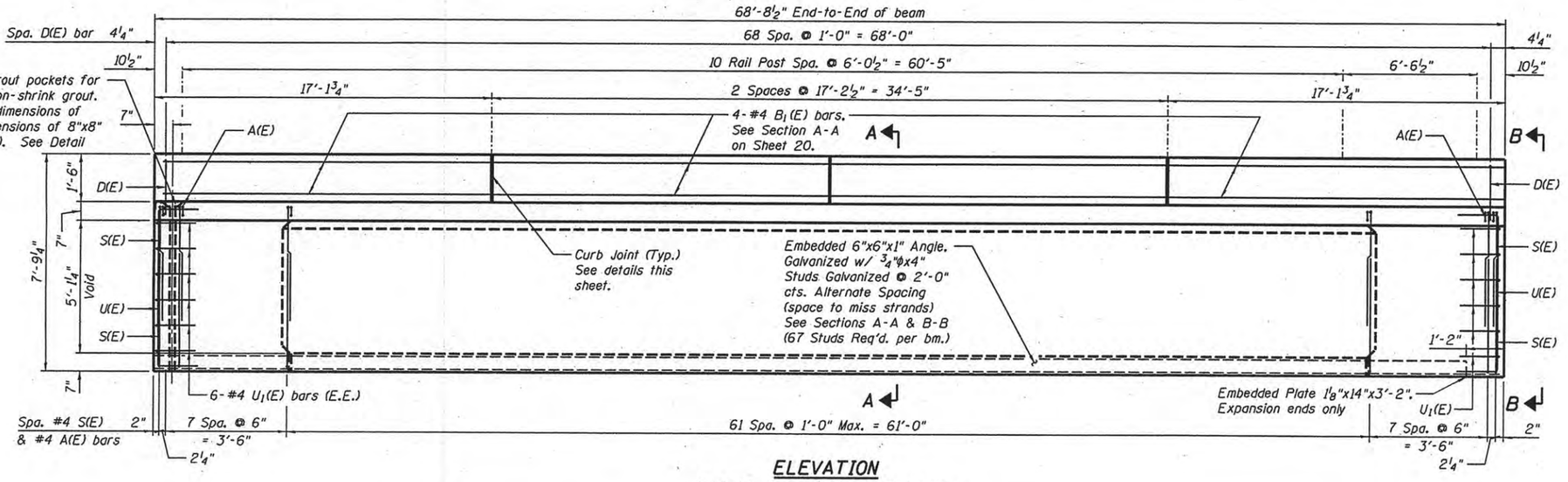
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	98
		CONTRACT NO. 89417		
		ILLINOIS FED. AID PROJECT		



PLAN

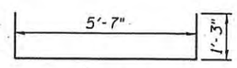


BAR $U_1(E)$

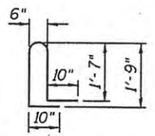


ELEVATION

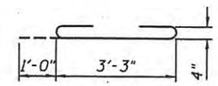
(2 Req'd., Approx. Weight = 118.700 lbs.)



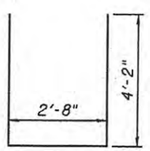
BAR U(E)



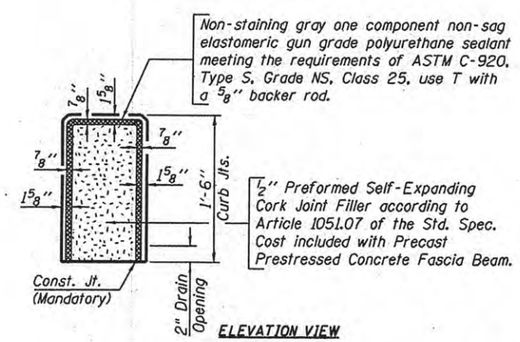
BAR D(E)



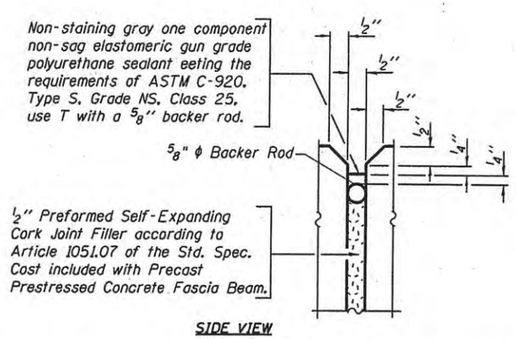
BAR A(E)



BAR S(E)



ELEVATION VIEW



SIDE VIEW

CURB JOINT DETAILS

Notes:
1. See Sheet 20 for Section Views, Notes and Details.
2. See Sheet 31 for Rail Post Details.

MINIMUM BAR LAP

#4 bar = 2'-0"
#6 bar = 3'-0"

BAR LIST ONE BEAM ONLY

(For Fabrication Only)

Bar	No.	Size	Length	Shape
A(E)	78	#4	5'-3"	
B(E)	20	#6	68'-7"	
$B_1(E)$	16	#4	16'-10"	
D(E)	69	#4	5'-6"	
S(E)	156	#4	11'-0"	
U(E)	8	#4	8'-1"	
$U_1(E)$	12	#4	5'-1"	

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

pw:\\ipi-svr386.hanson.dom:Hanson Projects\Documents\89Jobs\89L8185\CAD-PhaseII\Struct\Sheet\048L8185-Precast_Fascia_Beam3

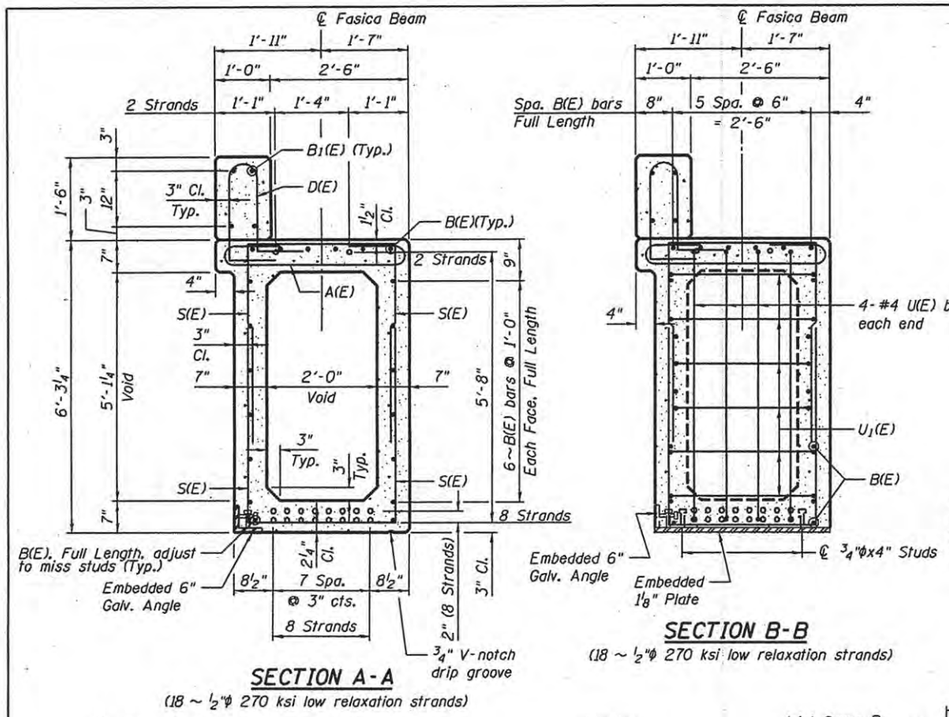
HANSON

USER NAME = Jenni00313	DESIGNED - TDP	REVISED -	
	CHECKED - MAF	REVISED -	
PLOT SCALE = 3.11.9999 '/ in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 1/15/2016	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST FASCIA BEAM (SHEET 3 OF 3)
STRUCTURE 048-9928
SHEET NO. 19 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	99
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			

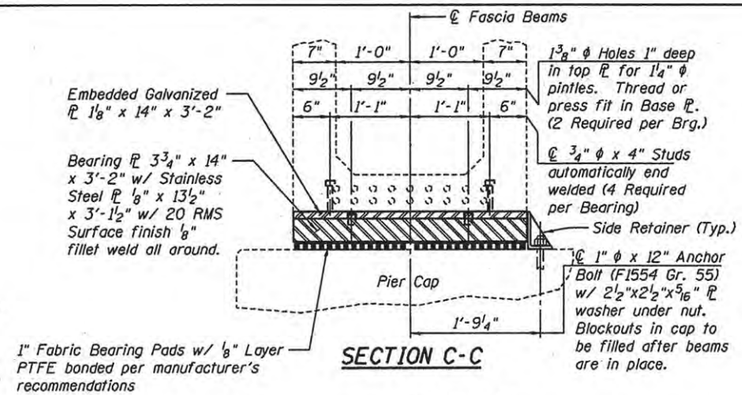


SECTION A-A

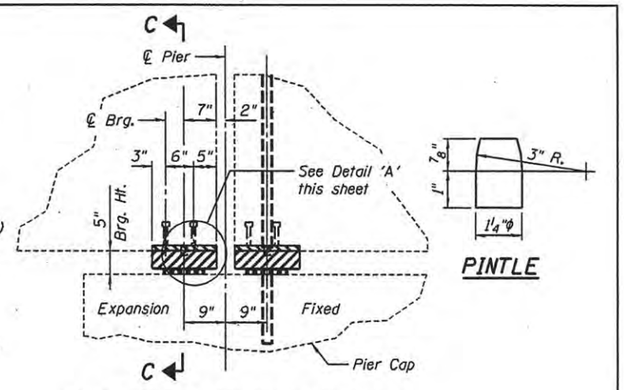
(18 ~ ½"℄ 270 ksi low relaxation strands)

SECTION B-B

(18 ~ ½"℄ 270 ksi low relaxation strands)

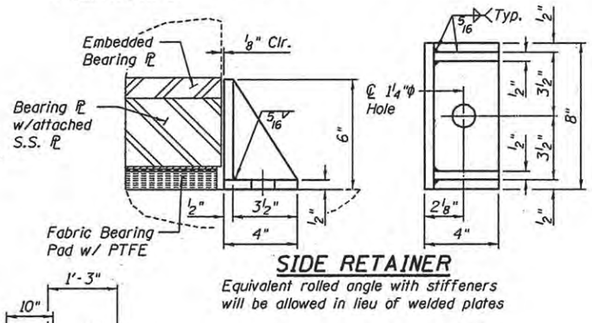


SECTION C-C



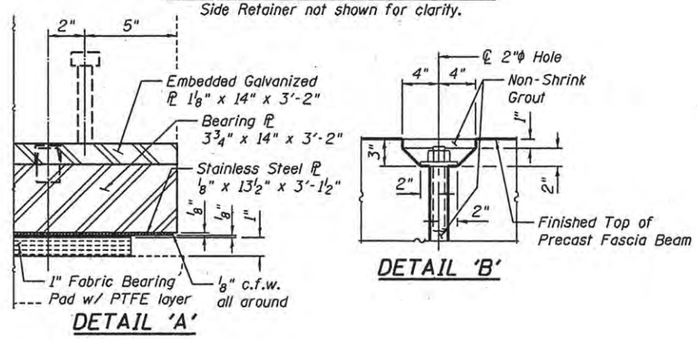
BEARING ELEVATION AT PIER

Side Retainer not shown for clarity.



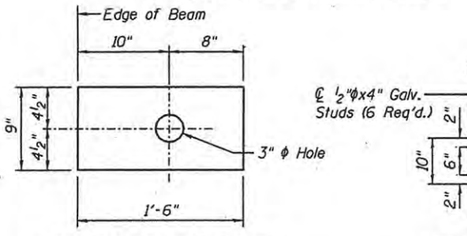
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates



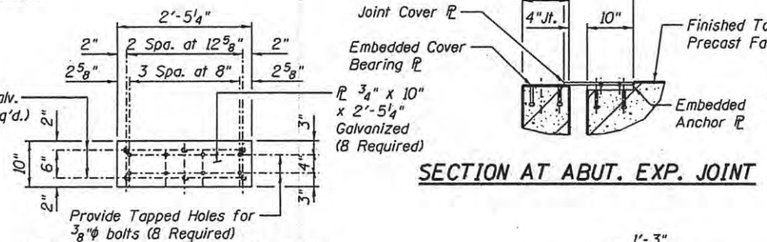
DETAIL 'A'

DETAIL 'B'



FABRIC BEARING PAD

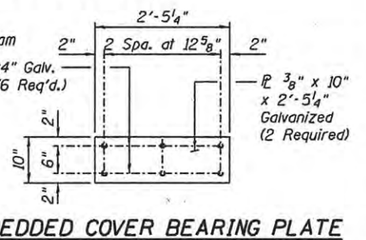
(2 per each end of beam)



EMBEDDED ANCHOR PLATE

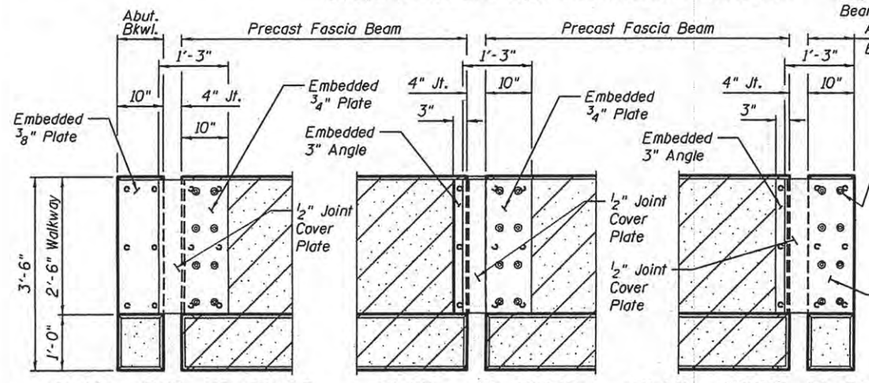
(1 Req'd. at Exp. End of each Fascia Beam)
(1 Req'd. at Abut. Bkwl. adjacent to Fixed End of Fascia Beam)

SECTION AT ABUT. EXP. JOINT



EMBEDDED COVER BEARING PLATE

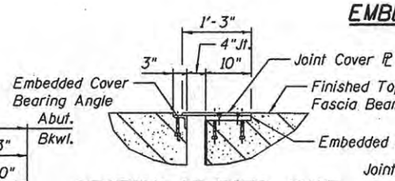
(1 Req'd. at Abut. Bkwl. adjacent to Exp. End of Fascia Beam)



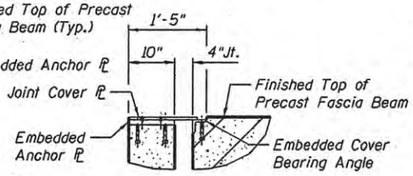
PLAN - EXP. JT. COVER AT ABUTMENT

PLAN - JT. COVER AT PIER

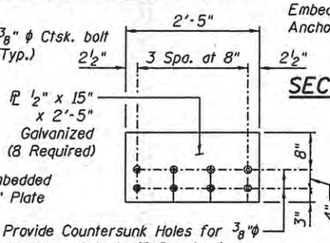
PLAN - FIXED JT. COVER AT ABUTMENT



SECTION AT PIER JOINT

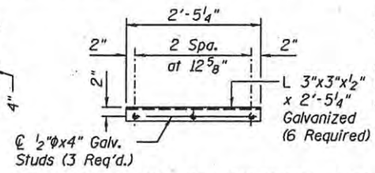


SECTION AT ABUT. FIXED JOINT



JOINT COVER PLATE

(1 Req'd. at each Fascia Beam Joint)



EMBEDDED COVER BEARING ANGLE

(1 Req'd. at each Fixed End of Fascia Beams)

Notes:

Fabricator to provide lifting devices.

For Fence Details See Sheet 31.

All angle and plates shall meet requirements of the current A.S.T.M. designation: A36.

All (embedded and separate) hardware, angles, bearing plates, side retainers, anchor bolts, threaded rods, nuts, washers and pintles shall be galvanized according to AASHTO M111 and ASTM 385 or M232 as applicable.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Reinforcement bars shall conform to ASTM A 706, Grade 60.

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

All bearing pads shall be 1" thick. Omit holes when using expansion bearings. Expansion bearing pad shall be bonded to the substructure.

Expansion bearing pad shall have PTFE bonded to top surface. PTFE surface shall be bonded according to manufacturers recommendations.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete fascia beams. Compressive strength of prestressed concrete, f'c, shall be 6500 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi. Embedded angles, Side Retainers, Anchor Bolts, plates, studs, bearing pads, Threaded Rods, Non-Shrink Grout and accessories shall be included in the cost of Precast Prestressed Concrete Fascia Beam.

Concrete curb shall be cast with the precast fascia beam after release of P/S force and included in the cost of Precast Prestressed Concrete Fascia Beam.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts and Threaded Rods shall be installed in blockouts with Non-Shrink Grout meeting the material requirements of Article 1024.02 of the Standard Specifications. Blockouts shall be clean prior to grouting and grout installed according to manufacturer's recommendations.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Precast Prestressed Concrete Fascia Beams	Foot	446

DESIGNED	TDP	5-22-15
DRAWN	GTJ	5-22-15
REVIEWED	MAF	5-29-15

p:\\spi-svr386.hanson.dom\Hanson Projects\Documents\0%Jobs\0%_0185\CAD-Phase II\Struct\Sheet\D48%_0185-Precast_Fascia_Beam4

HANSON

USER NAME = Jenni80313	DESIGNED - TDP	REVISED -	
	CHECKED - MAF	REVISED -	
PLOT SCALE = 54.0000 '/ in.	DRAWN - GTJ	REVISED -	
PLOT DATE = 1/15/2016	CHECKED - MAF	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST FASCIA BEAM DETAILS
STRUCTURE 048-9928
SHEET NO. 20 OF 48 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6800	05-00500-19-GS	KNOX	216	100
		CONTRACT NO. 89417		
	ILLINOIS FED. AID PROJECT			