

GENERAL NOTES:

- THIS PROJECT INCLUDES THE REMOVAL OF EXISTING SURVEILLANCE EQUIPMENT IN THE PAVEMENT AS A RESULT OF ROADWAY WORK AND REPLACING THE EQUIPMENT WITH NEW SENSORS. AT SOME LOCATIONS ADDITIONAL EQUIPMENT IS ALSO REQUIRED AS INDICATED ON THE PLANS TO INTEGRATE WITH THE EXISTING SYSTEM.
- THE EXISTING SURVEILLANCE SYSTEM IS OWNED AND MAINTAINED BY THE STATE OF ILLINOIS. PARTIAL MAINTENANCE OF THE SYSTEM SHALL BE TRANSFERRED TO THE CONTRACTOR PRIOR TO THE START OF ANY WORK.
- 3. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF THE EXISTING AND PROPOSED SURVEILLANCE EQUIPMENT IMPACTED BY THE WORK. COST IS INCLUDED IN MAINTAINING ITS DURING CONSTRUCTION PAY ITEM.
- 4. THE QUANTITIES OF RACEWAY WHEREVER INDICATED ON THESE PLANS ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE COMPLIANCE WITH THE SPECIFIED REQUIREMENTS.
- 5. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL ALSO CONTACT MEADE ELECTRIC DISTRICT 1 ELECTRICAL MAINTENANCE CONTRACTOR TO LOCATE IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES BY CALLING (773)-287-7672.
- 6. THE CONTRACTOR SHALL MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER. LOCATIONS FOR PROPOSED ITS INFRASTRUCTURE ARE DIAGRAMMATICALLY SHOWN AND FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
- 7. THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND/OVERHEAD UTILITIES PRIOR TO INSTALLATION OF LIGHT POLES AND CONDUITS. IF THERE IS A CONFLICT WITH THE LIGHT POLES/CONDUITS AS SHOWN ON PLANS, THE CONTRACTOR SHALL SUGGEST ALTERNATIVE LOCATIONS AND COORDINATE WITH THE ENGINEER PRIOR TO PERFORMING DIGGING WORK. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION ACTIVITIES.
- 3. THE CONTRACTOR SHALL TAKE CARE TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, PAVEMENT AND TREES INCLUDING THEIR ROOTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AT NO ADDITIONAL COST AND THE REPAIRS SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- 9. TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
- 10. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE ALL ELECTRICAL WORK.
- 11. ALL ELECTRICAL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), LIFE SAFETY CODE (NFPA) 101, OSHA AND ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATION REQUIREMENTS.
- 12. THE CONTRACTOR SHALL COORDINATE WITH SENSYS NETWORKS FOR TECHNICAL SUPPORT TO ENSURE THAT THE PROPOSED SYSTEM IS INTEGRATED WITH THE EXISTING SENSYS SERVERS IN OAK PARK.
- 13. THE WIRELESS VEHICLE DETECTION SENSOR PAY ITEM: WIRELESS IN PAVEMENT DETECTOR (X1400337) SHALL INCLUDE SENSYS PRODUCTS VSN240-F-2 AND VSN240-EPX-SOT-01.
- IMPLEMENTATION OF ITS WORK AS SHOWN IN THESE PLANS SHALL BE PERFORMED IN COORDINATION WITH THE CONCURRENT CONTRACT NO. 62K51.

BILL OF MATERIALS

PAY ITEM	DESCRIPTION	UNIT	QUANTITY
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	761
83600352	LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE, 8 5/8" X 6'	EACH	5
X0326812	CAT 5 ETHERNET CABLE	FOOT	761
X0327117	ATMS SYSTEM INTEGRATION	L SUM	1
X0327616	MAINTAINING ITS DURING CONSTRUCTION	CAL MO	6
X1400106	WIRELESS VEHICLE DETECTION SYSTEM	EACH	11
X1400211	LIGHT POLE, SPECIAL, 30'	EACH	5
X1400337	WIRELESS IN PAVEMENT DETECTOR	EACH	86
X1400438	WIRELESS VEHICLE DETECTION SOLAR REPEATER	EACH	4

LEGEND

WIRELESS	VEHICLE	DETECTION	SENSOR

O PROPOSED LIGHT POLE, SPECIAL, 30 FT. WITH RADIO OR REPEATER INSTALLED PER PLAN

O—EXISTING LIGHTING UNIT WITH RADIO OR REPEATER INSTALLED PER PLAN

EXISTING SURVEILLANCE CABINET

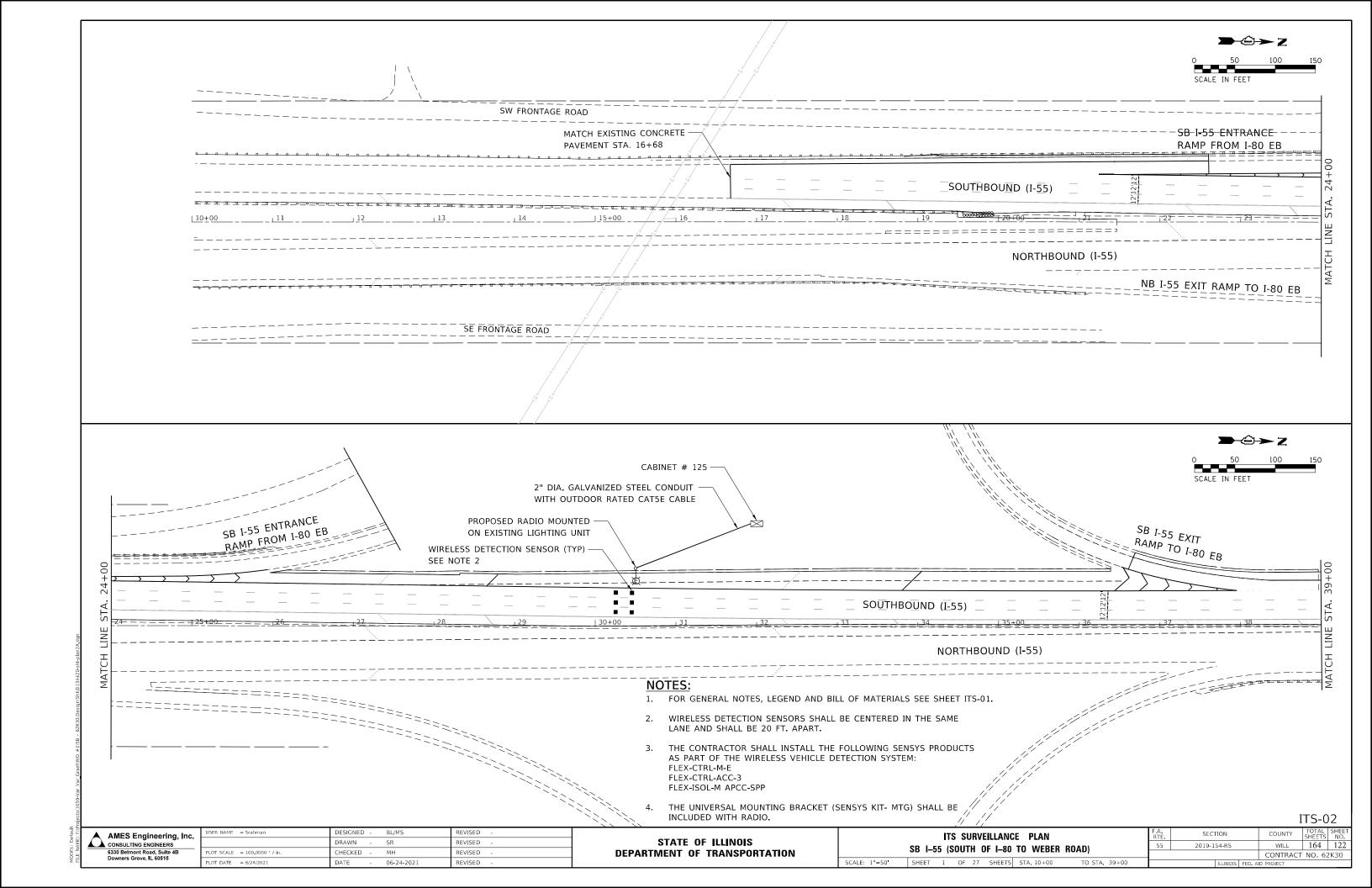
2" DIA. GALVANIZED STEEL CONDUIT WITH OUTDOOR RATED CATSE CABLE

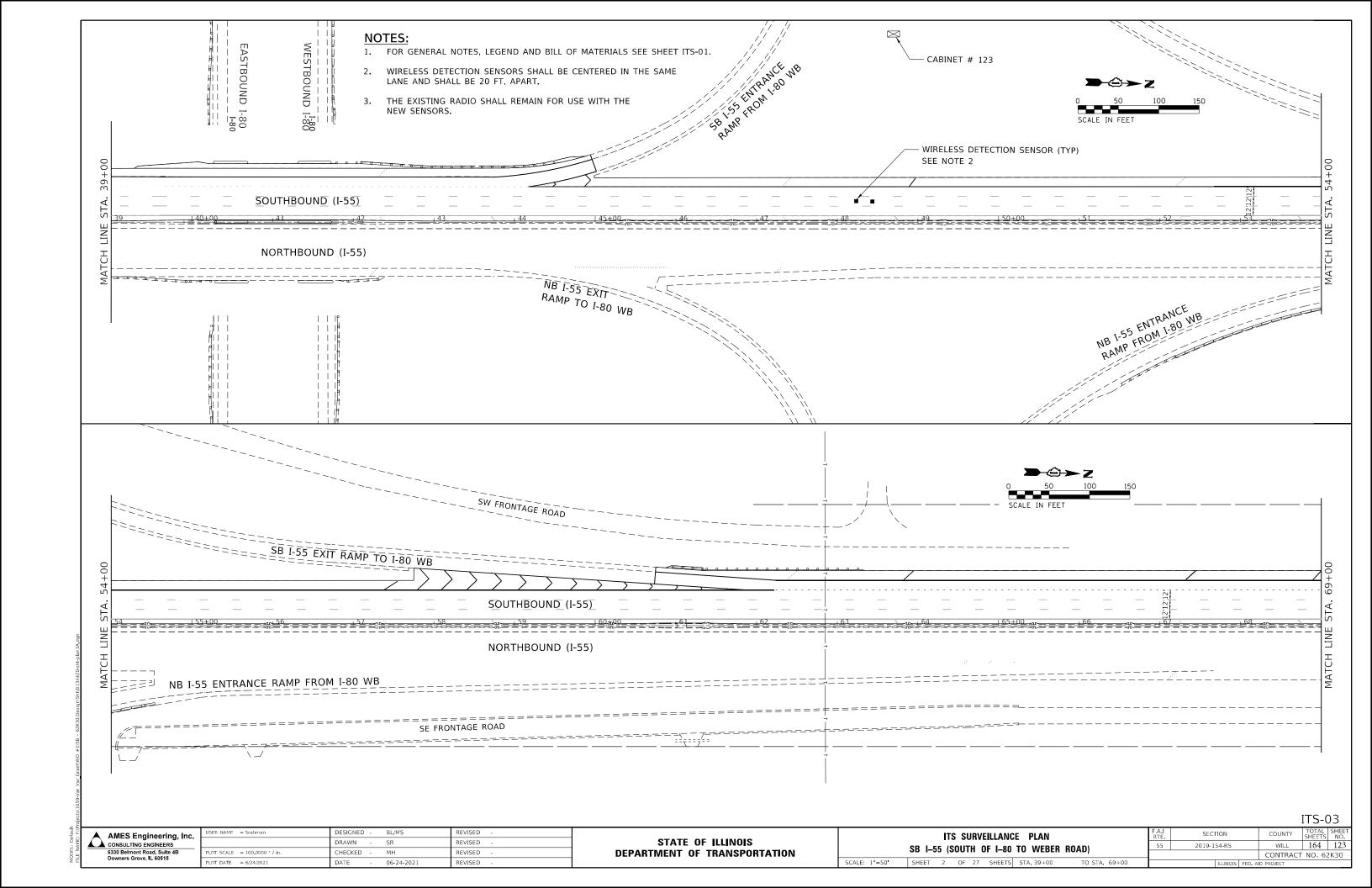
EXISTING POLE WITH EXISTING CABINET AND SOLAR PANEL

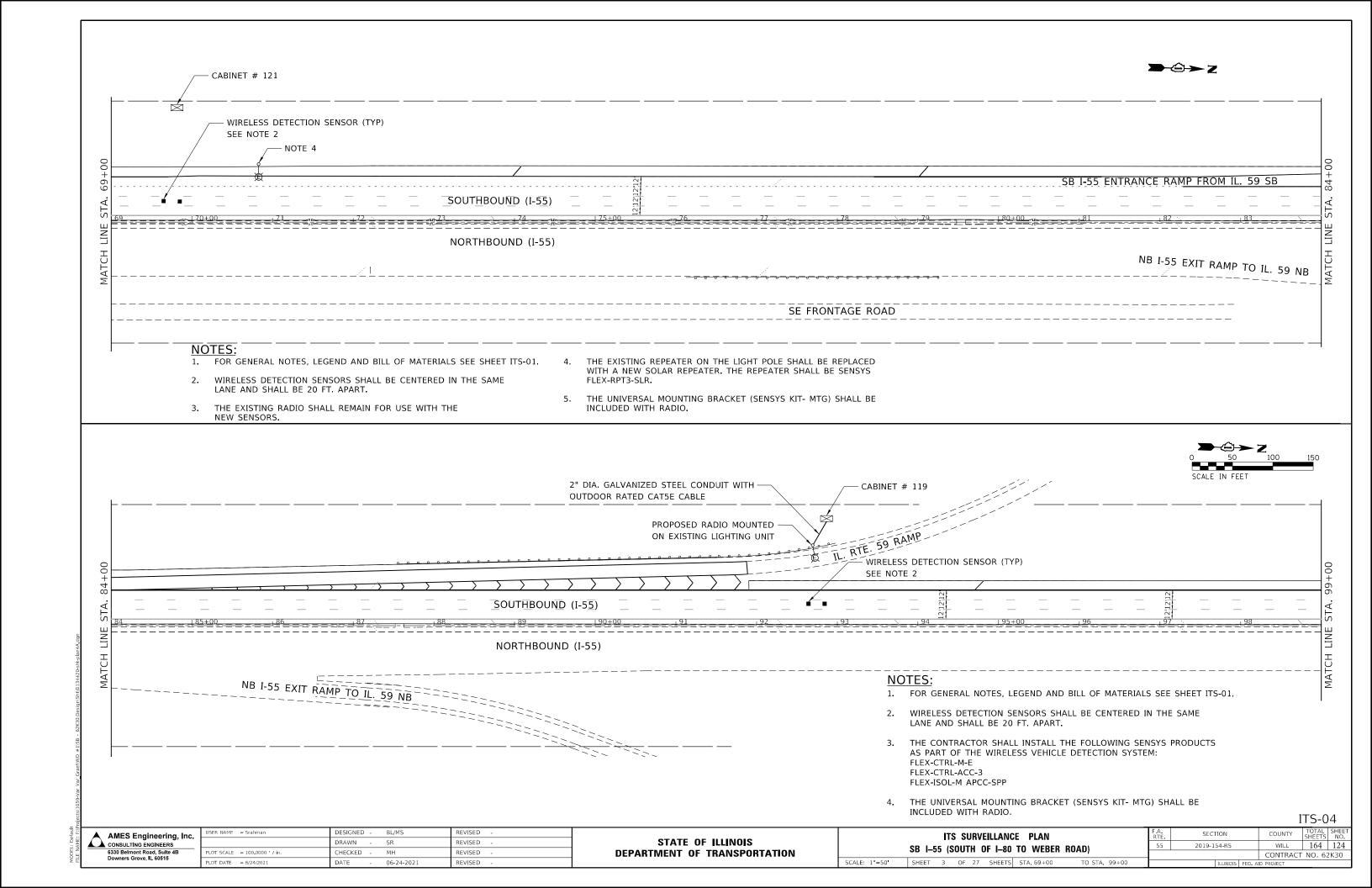
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	DRAWN	-	SR	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	МН	REVISED -
PLOT DATE = 6/24/2021	DATE	-	06-24-2021	REVISED -

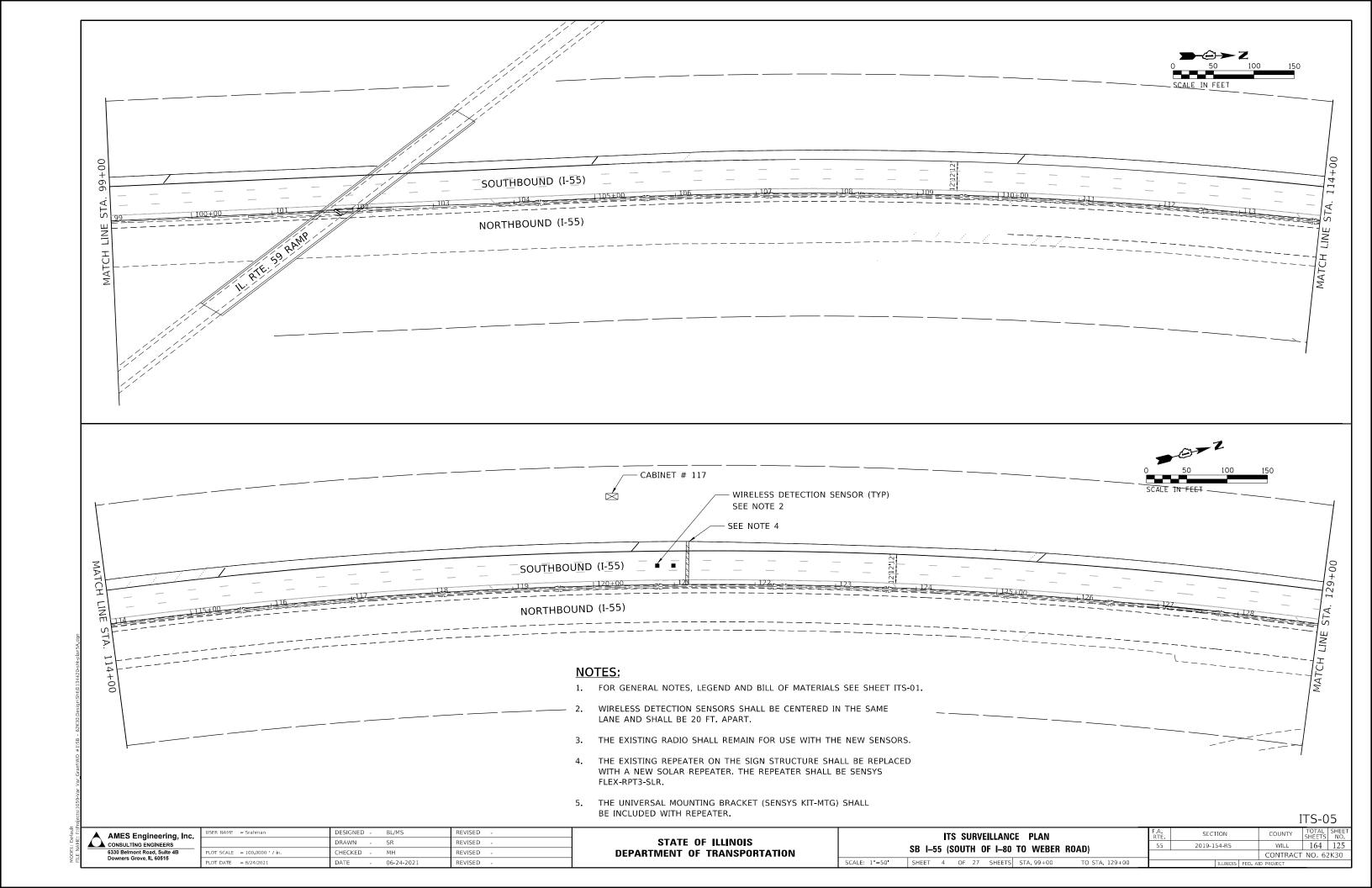
GENERAL NOTES, BILL OF MATERIALS AND LEGEND								
SB I-55 (SOUTH OF I-80 TO WEBER ROAD)								
3D 1-33 (300111 01 1-00 10 WEDEN HOAD)								
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA. N/A	TO STA. N/A			

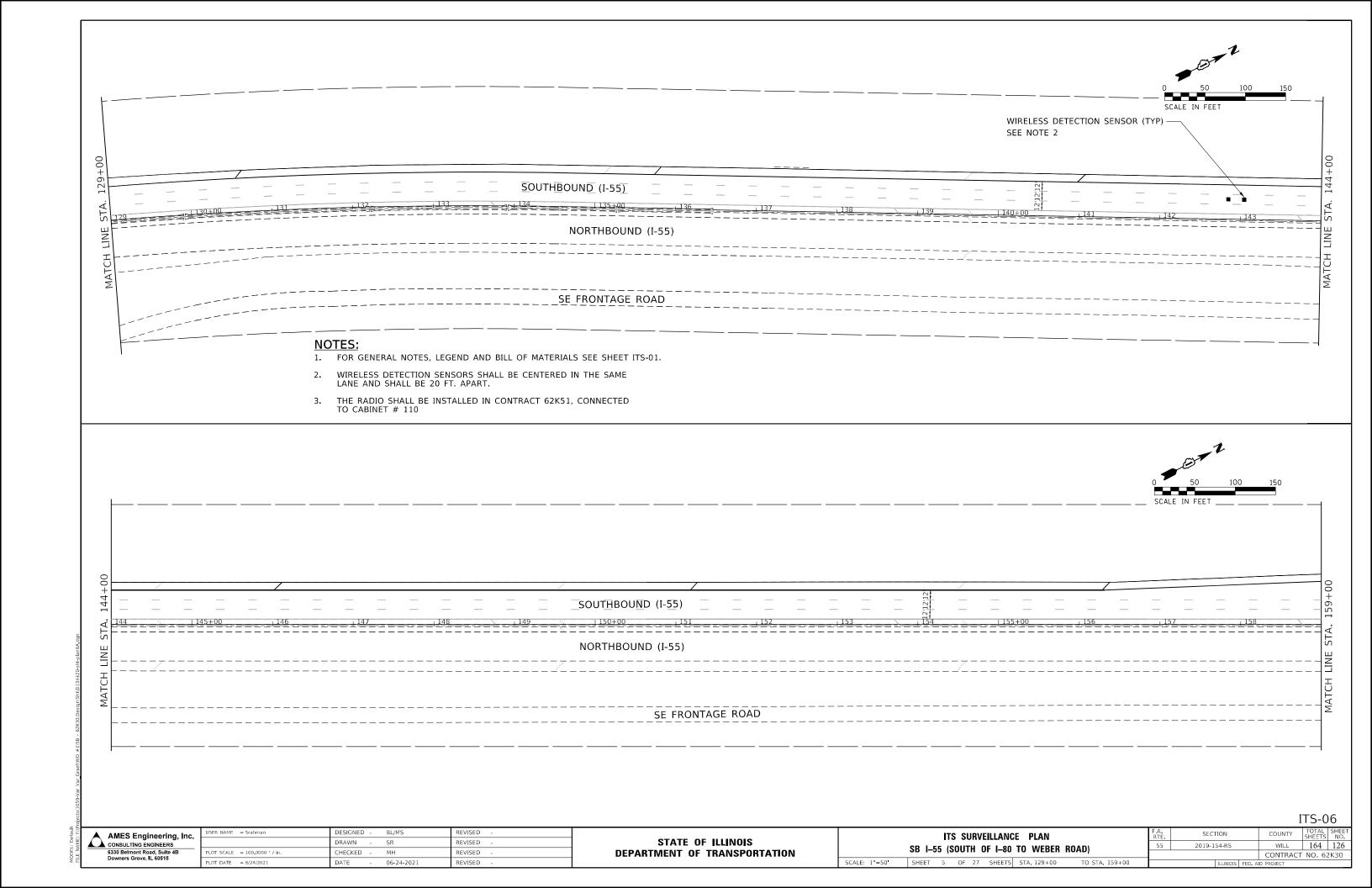
.1059-Var Var_Graef\WO #1\SB - 62K30\Design\Sht\D1344?

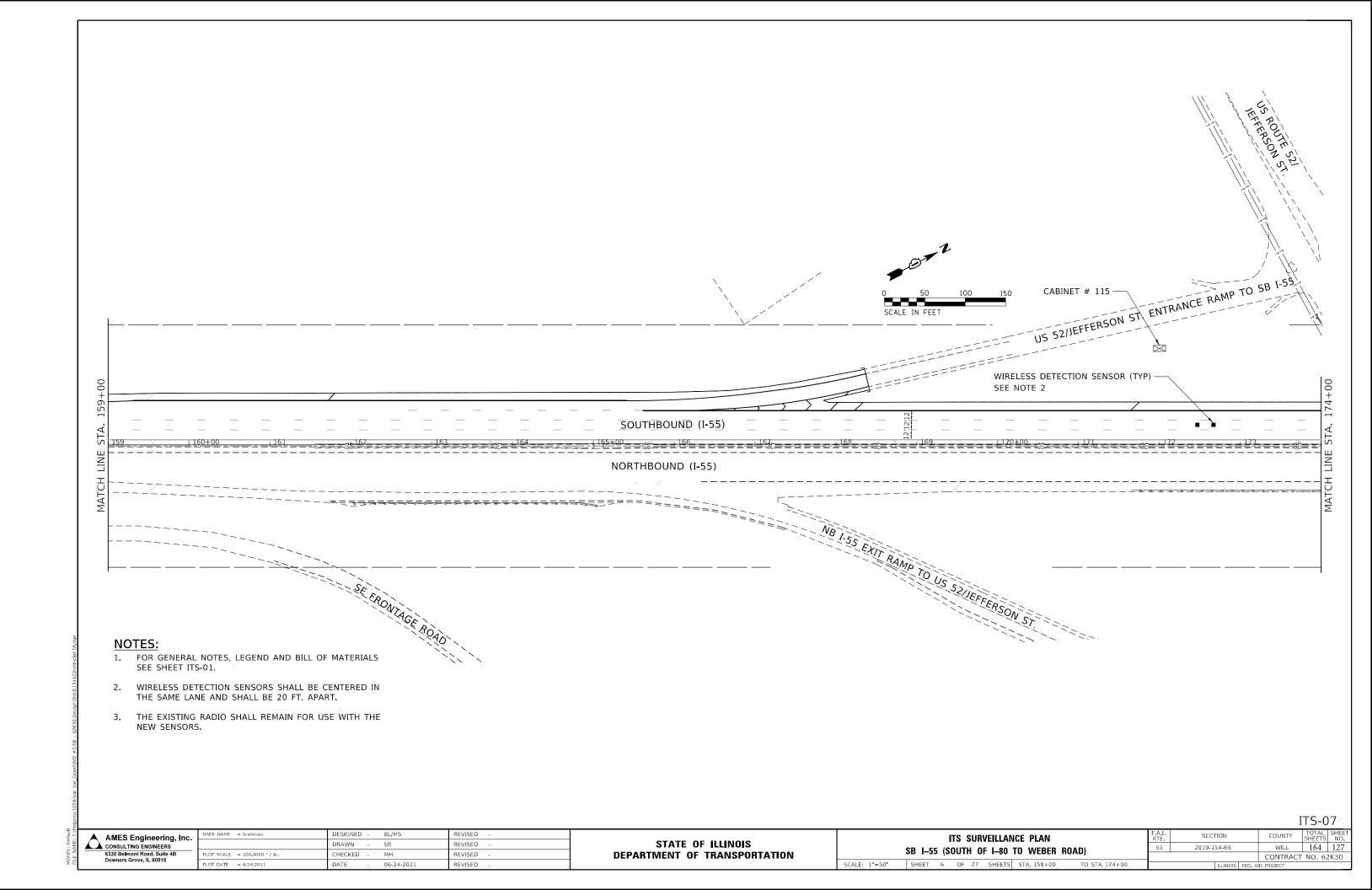


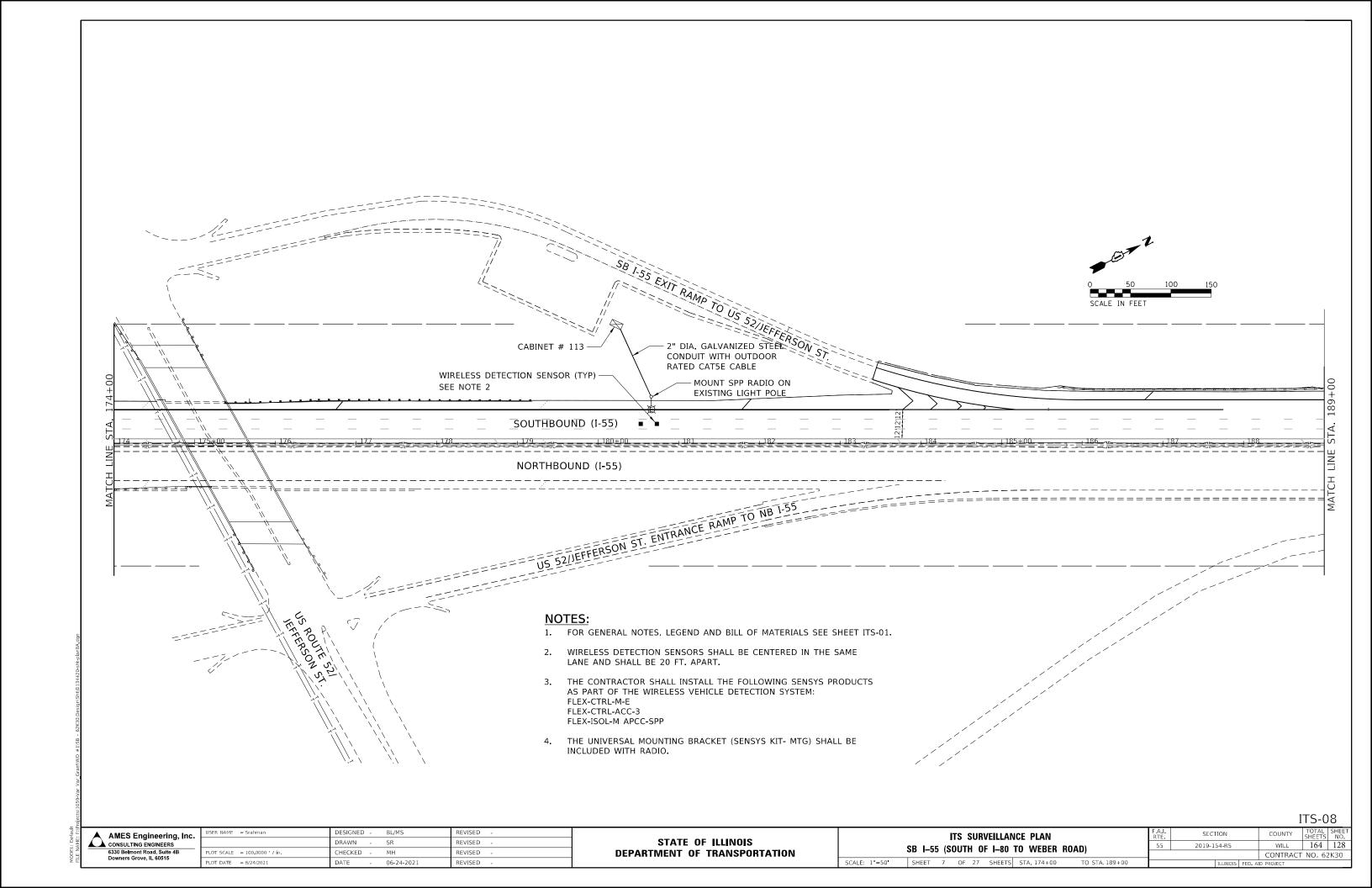


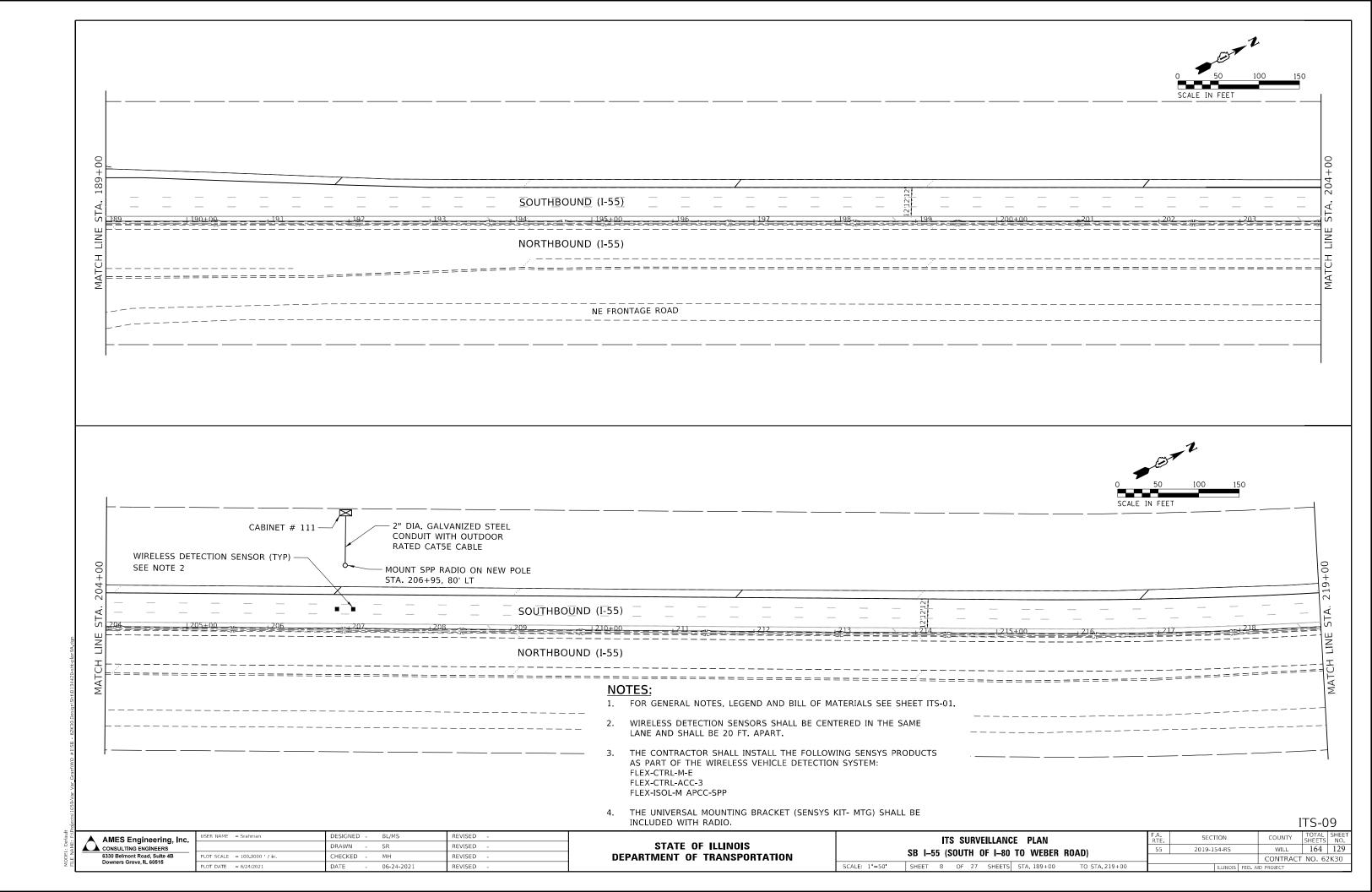


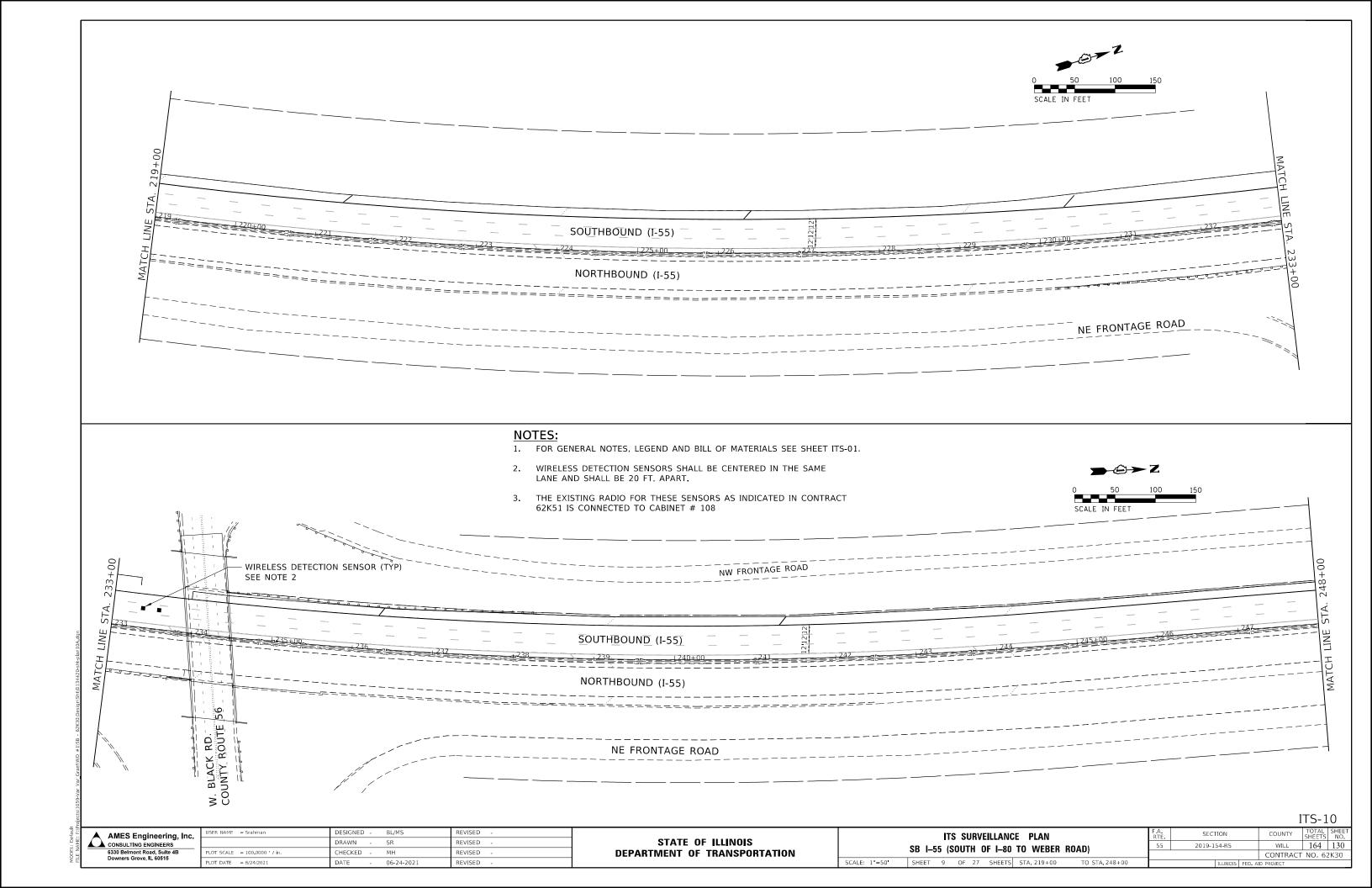


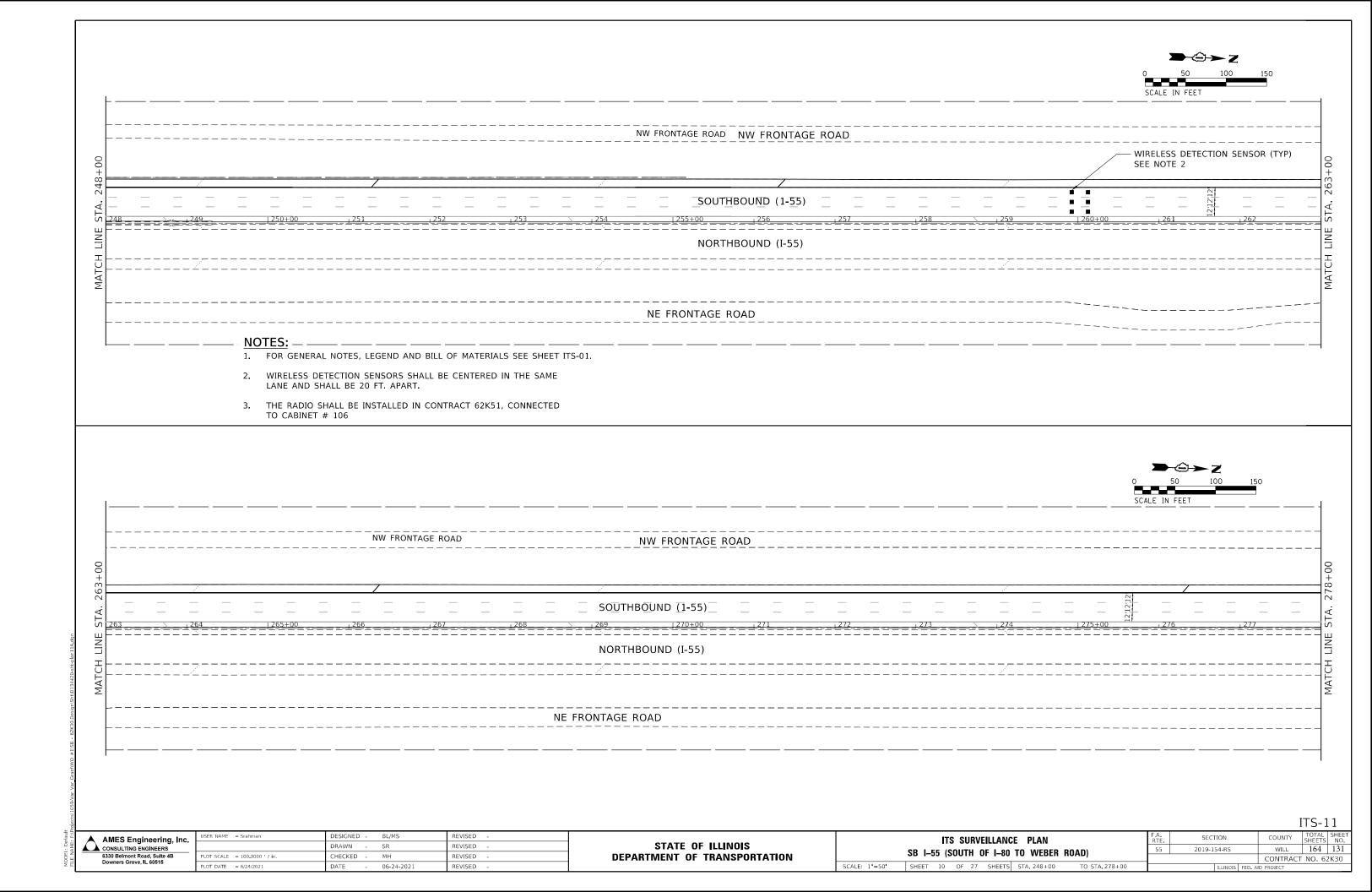


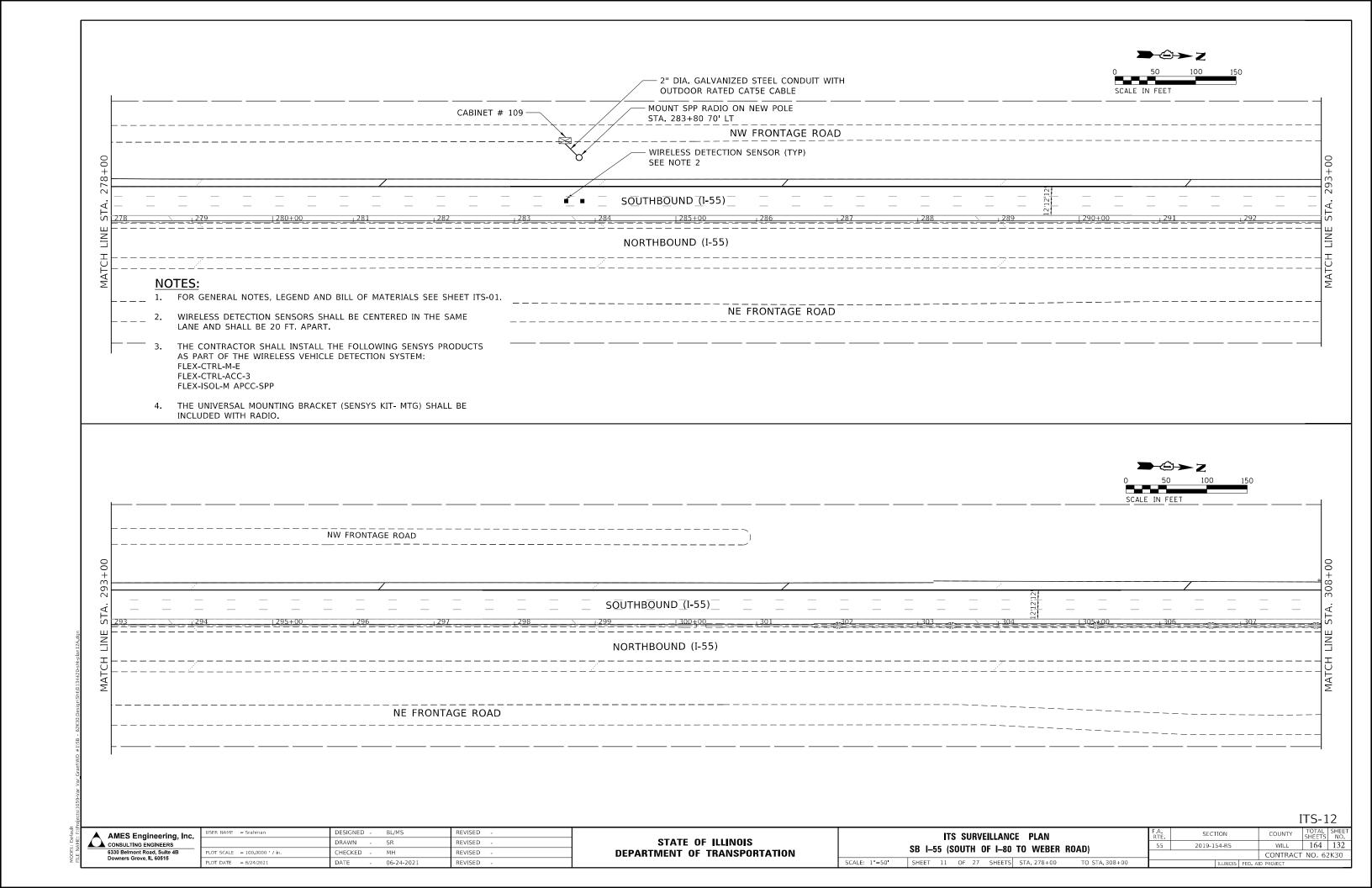


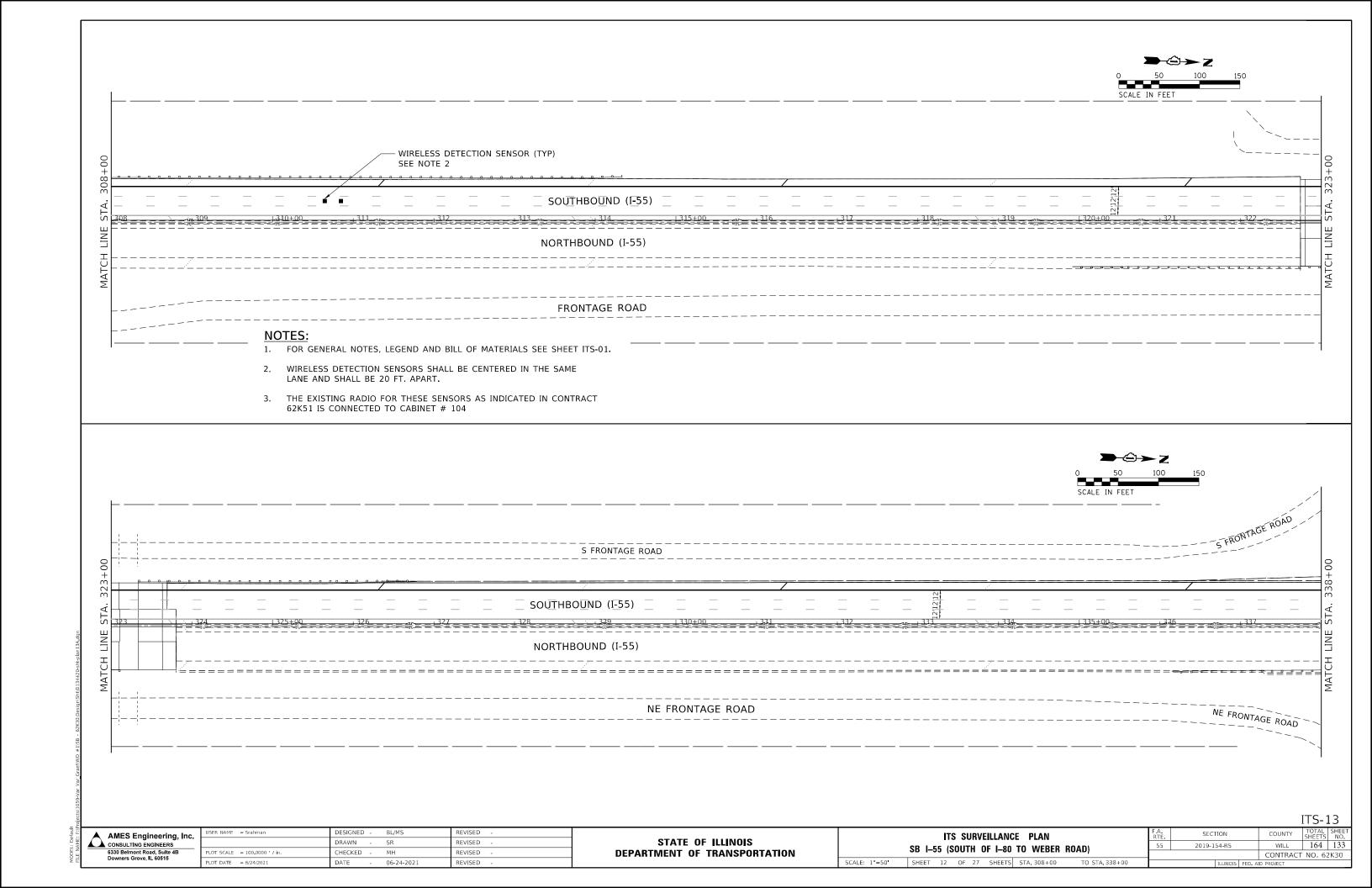


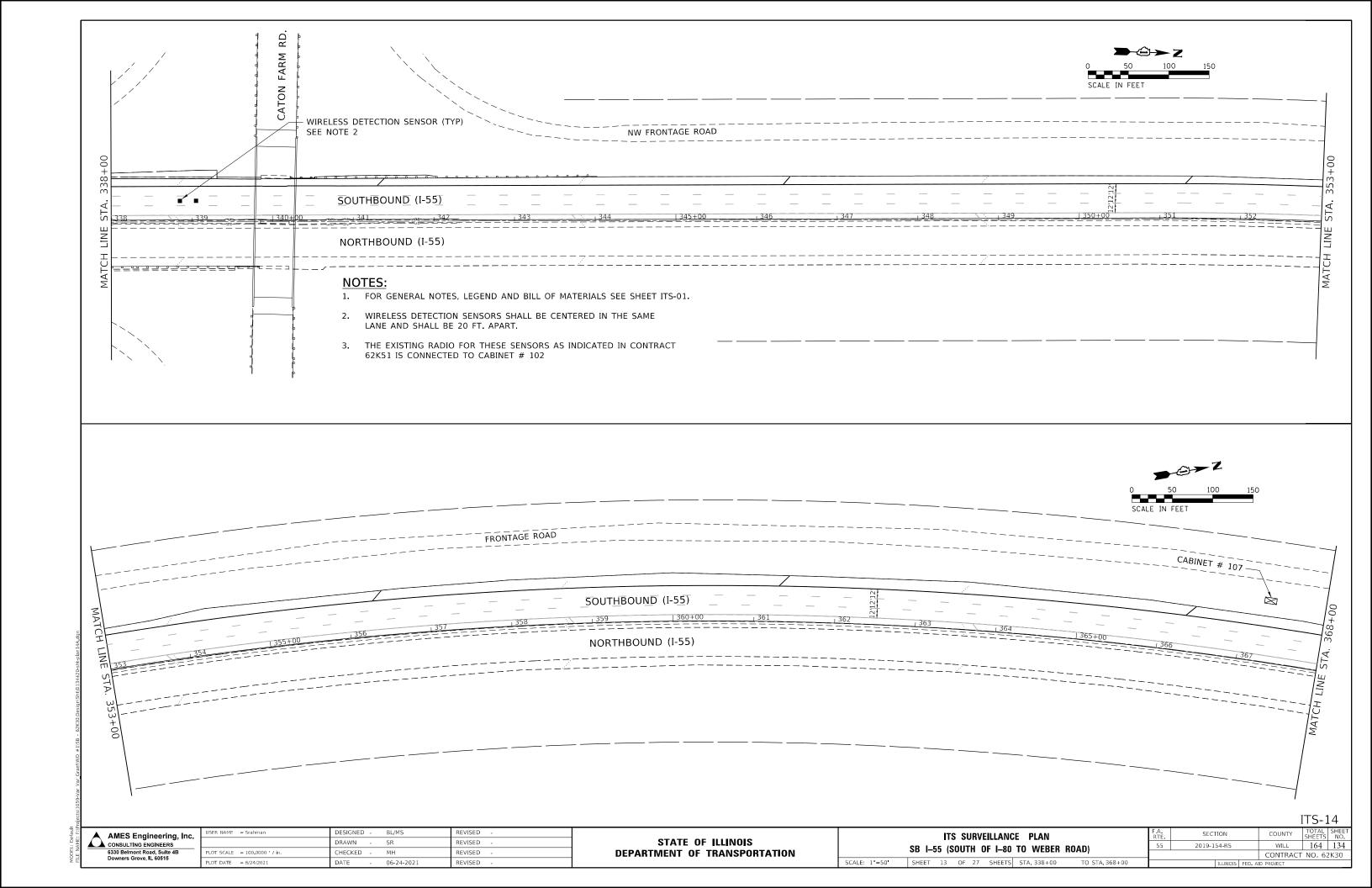


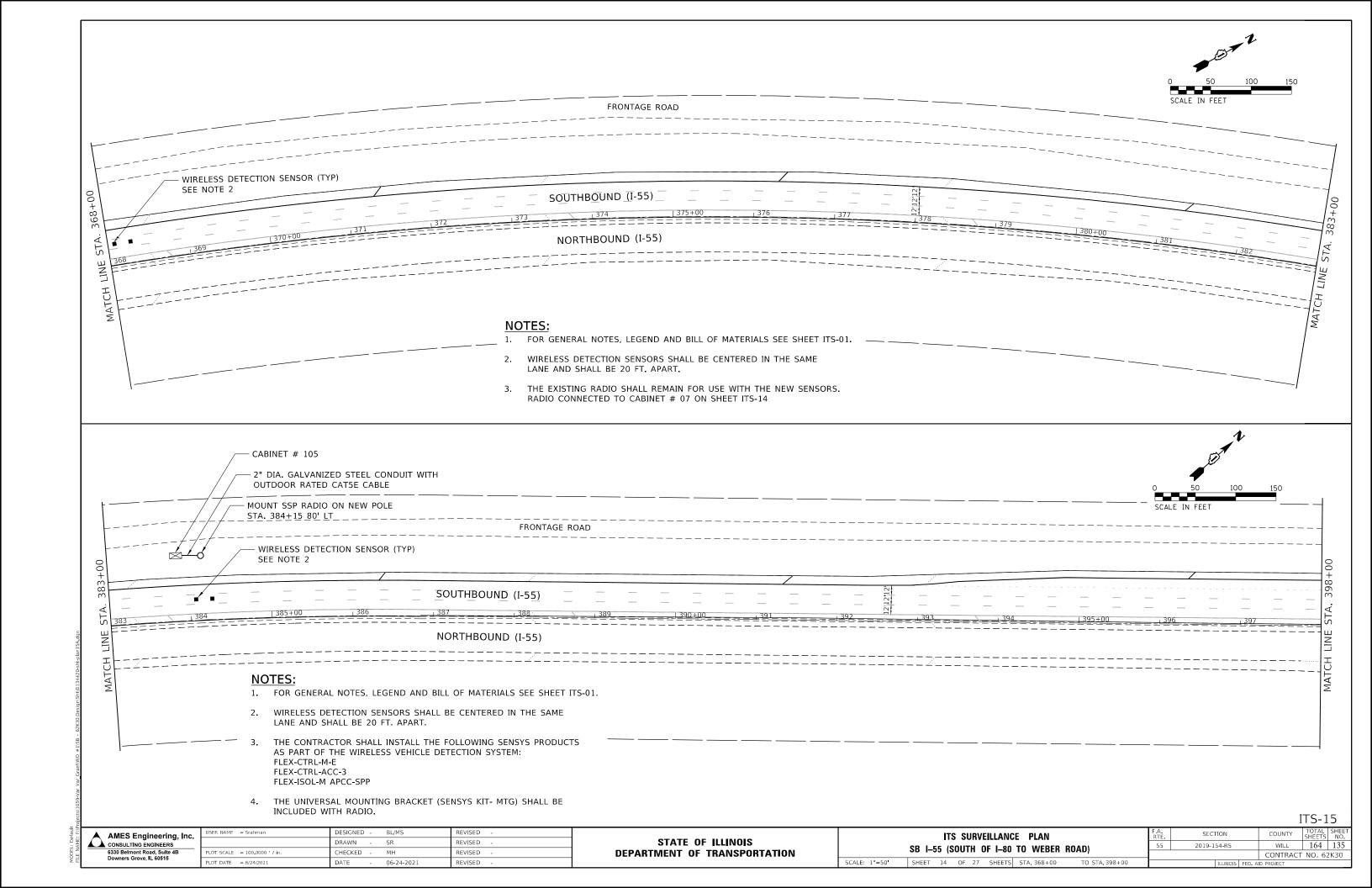


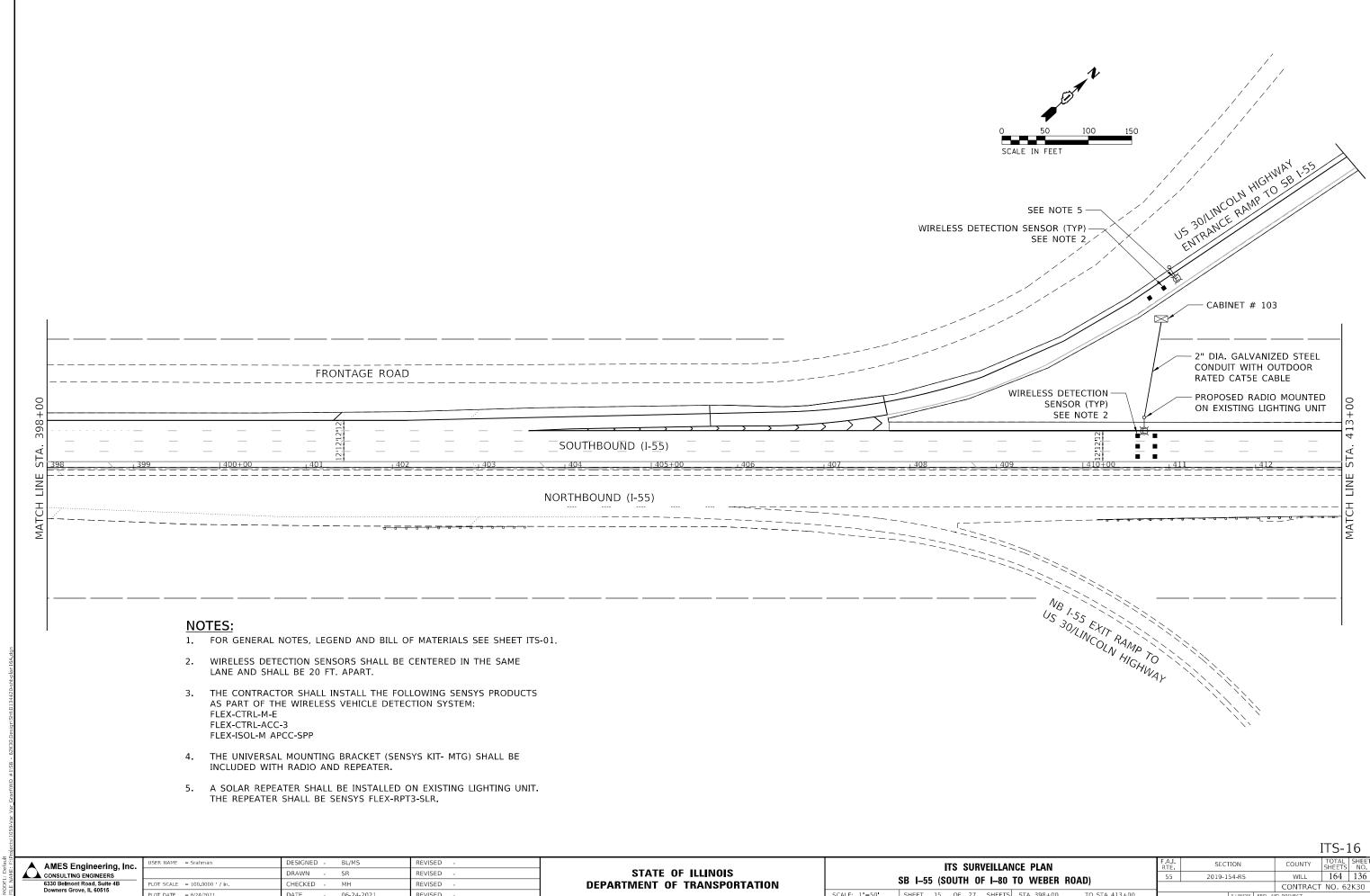






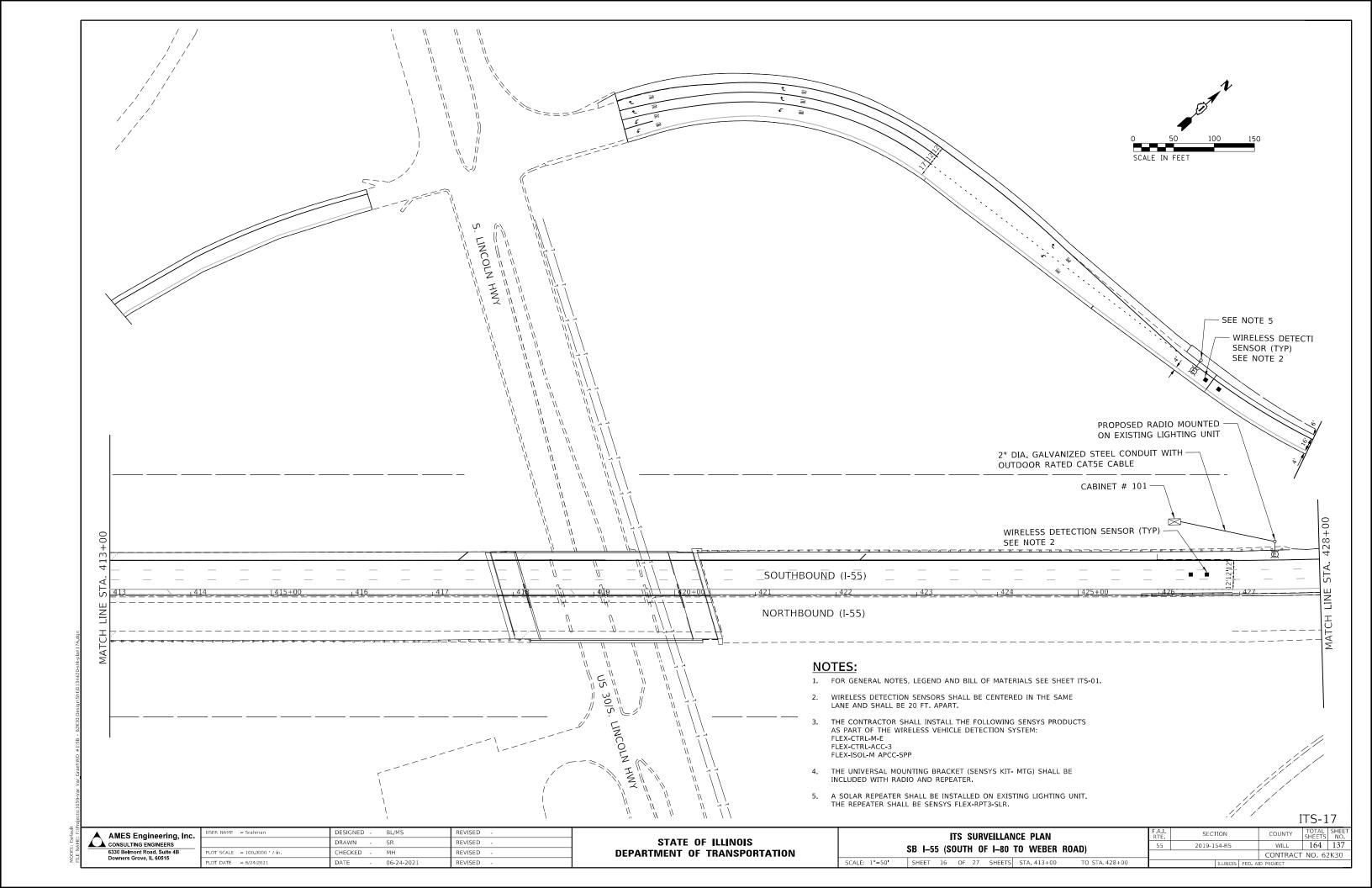


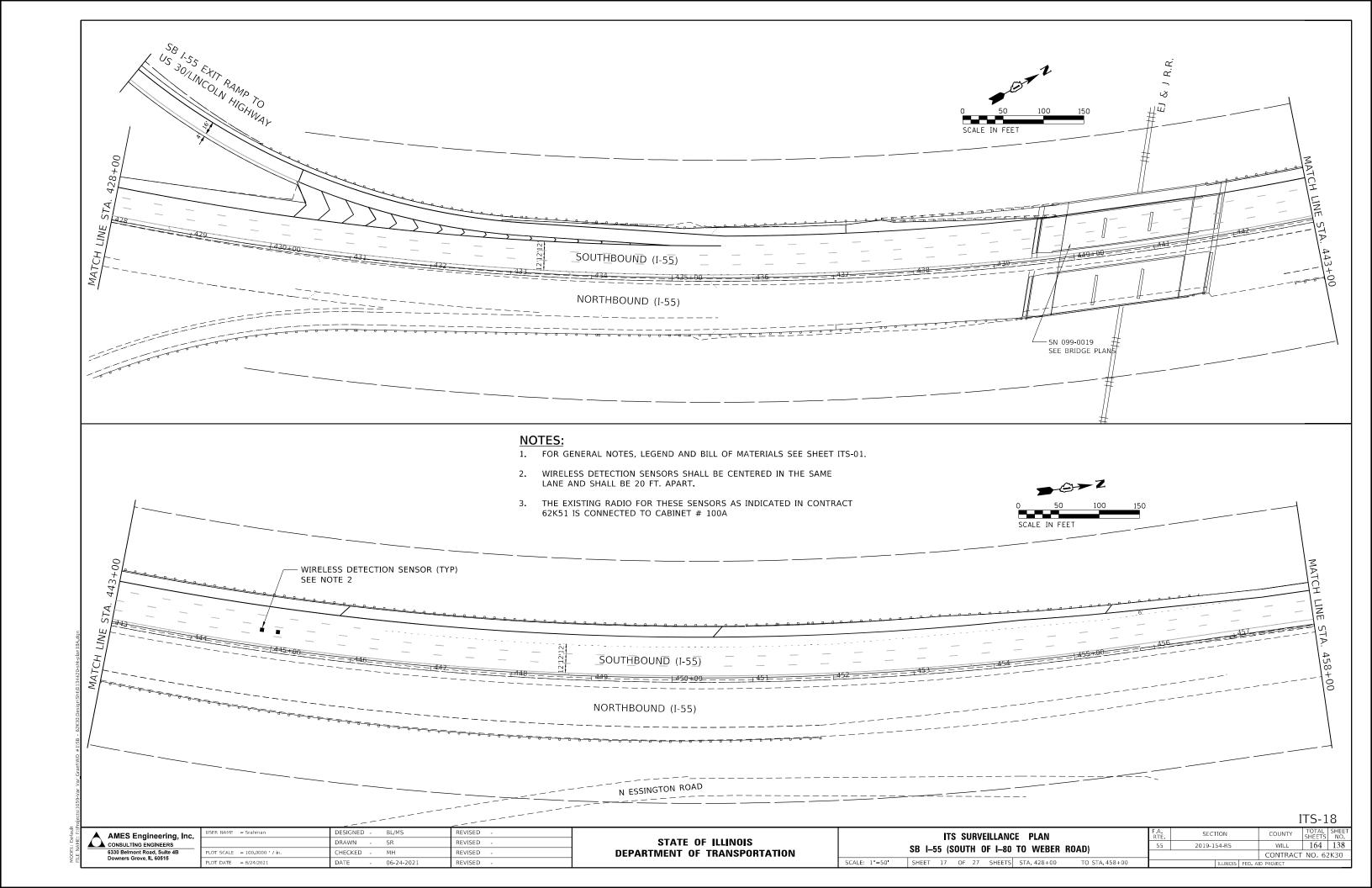


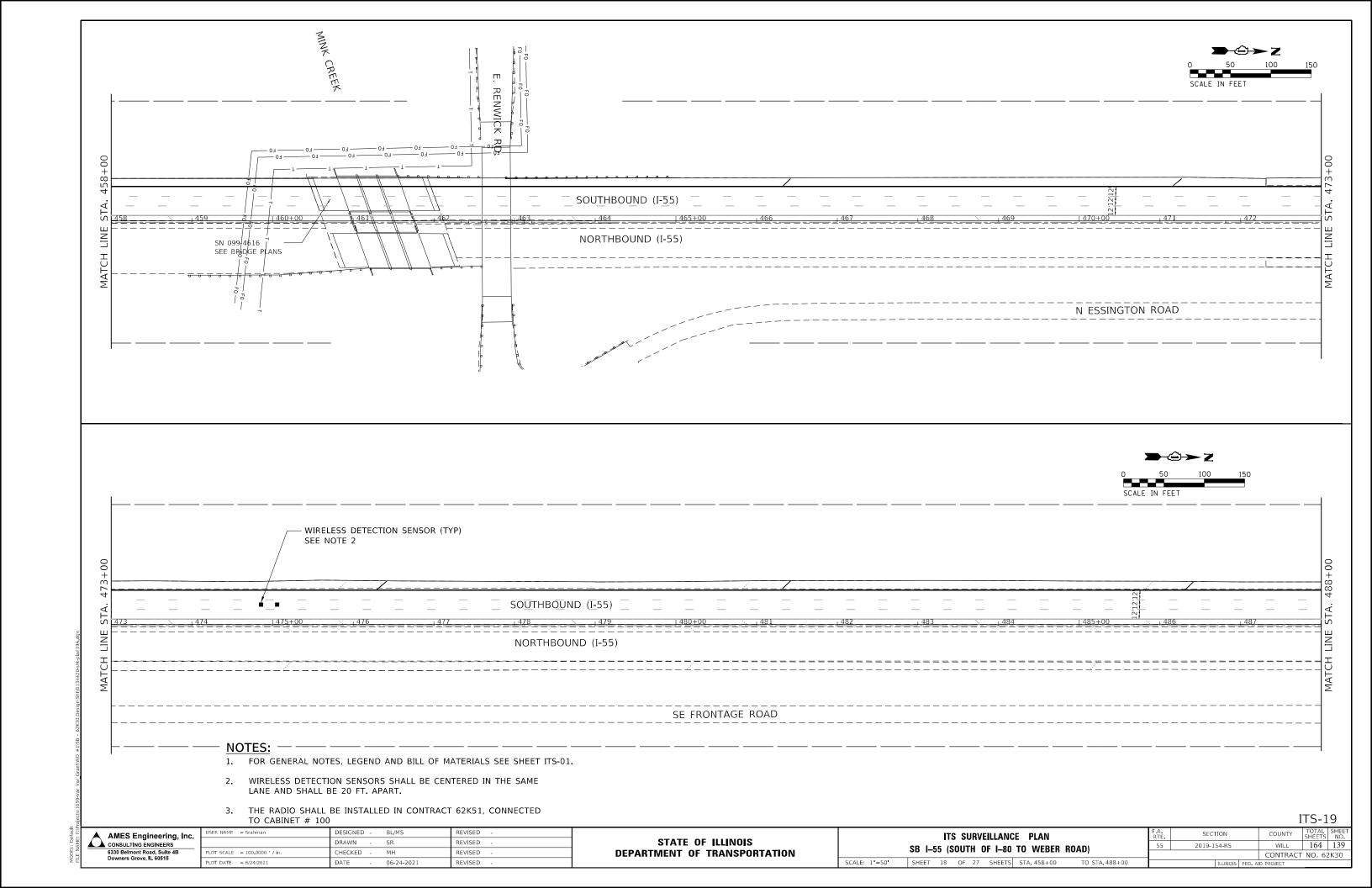


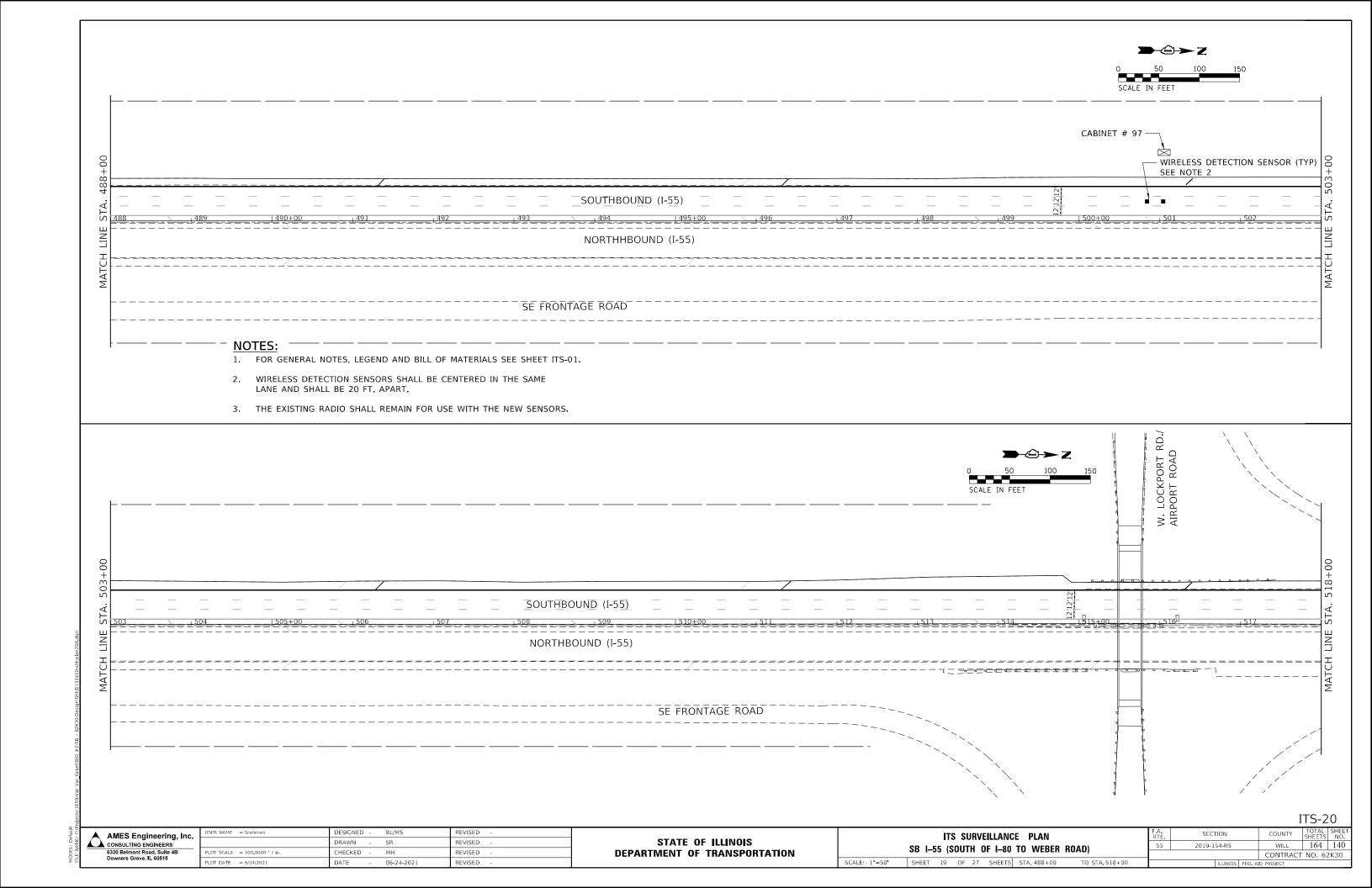
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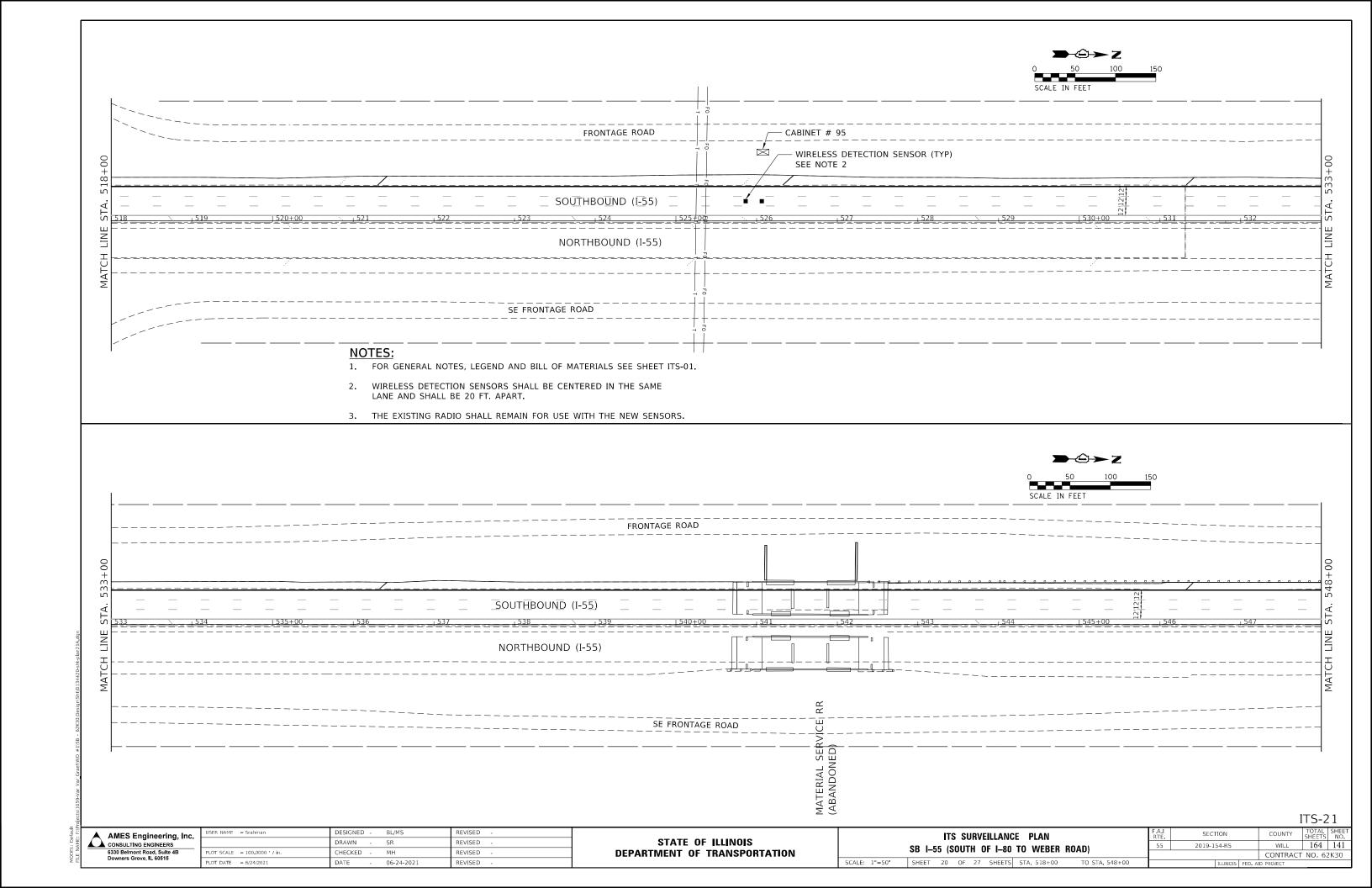
CONTRACT NO. 62K30

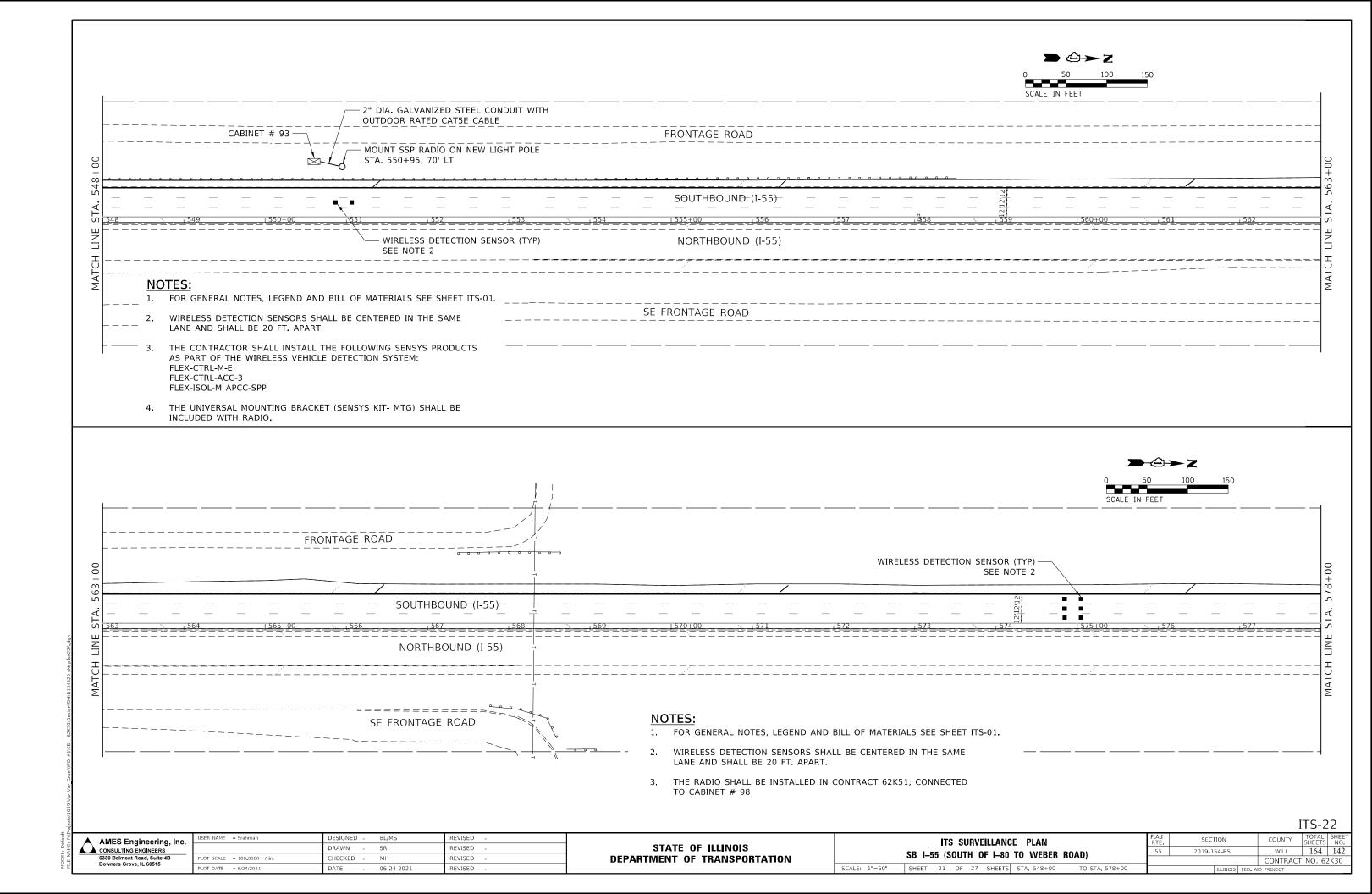


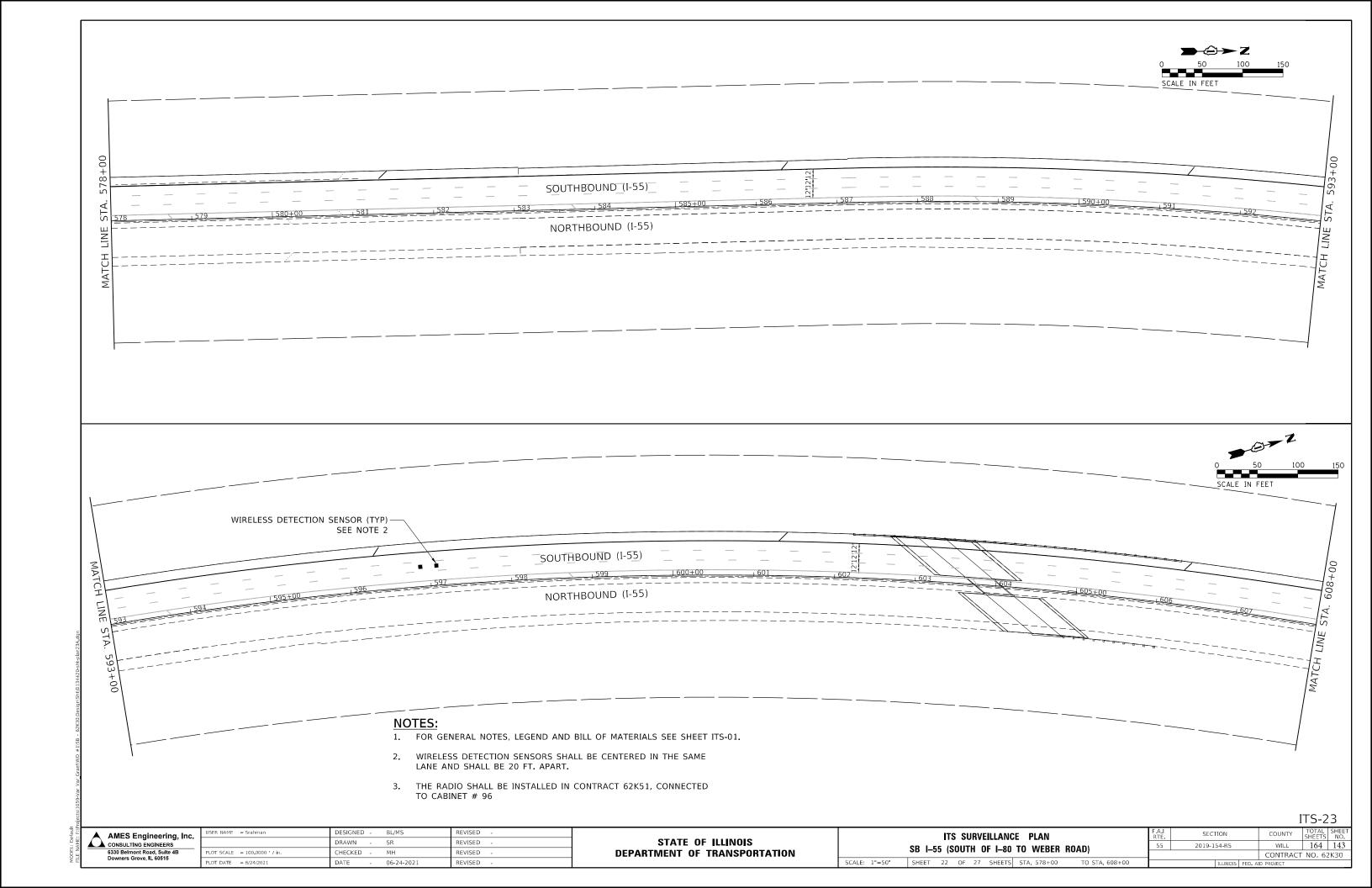


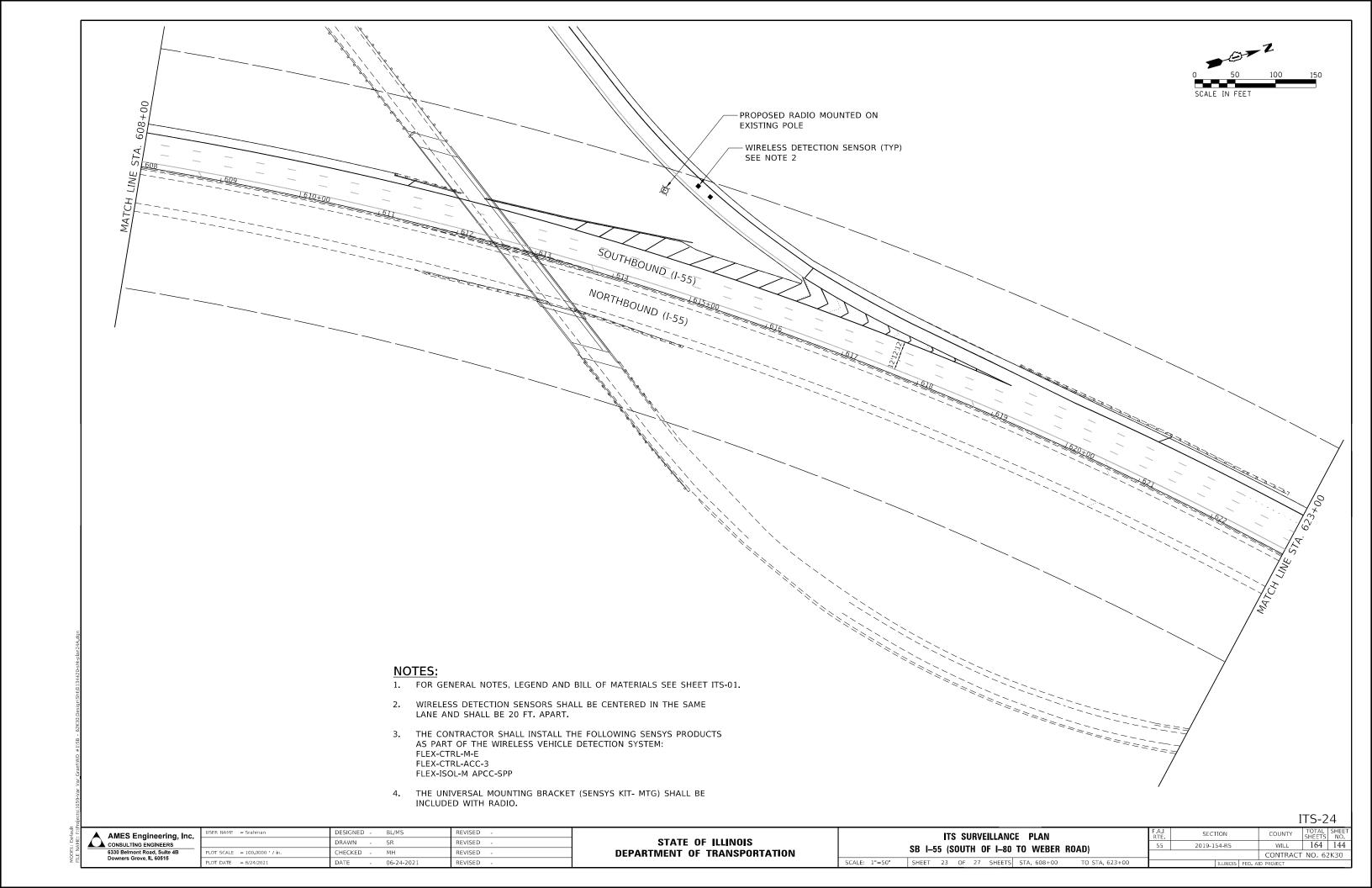


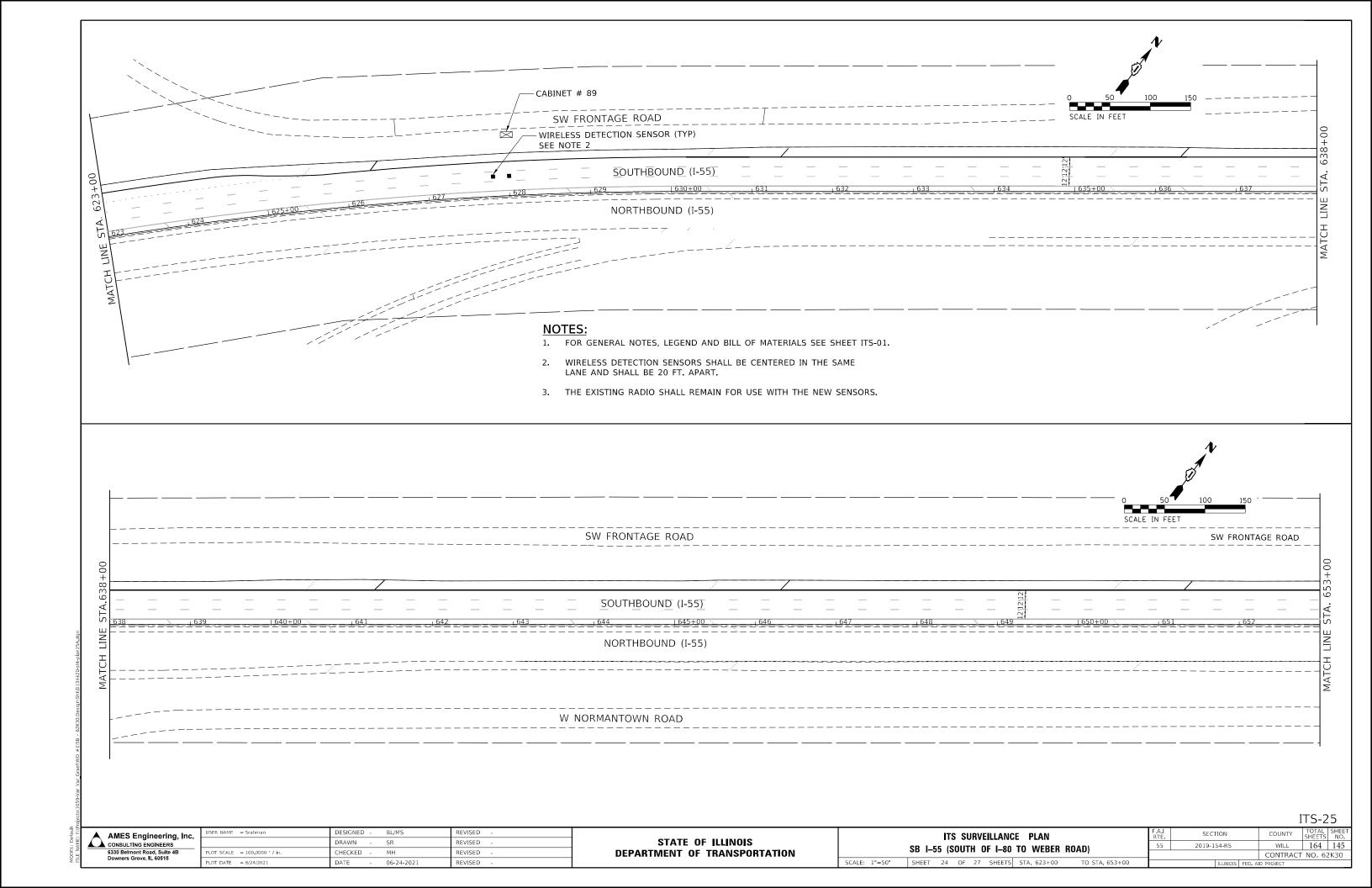


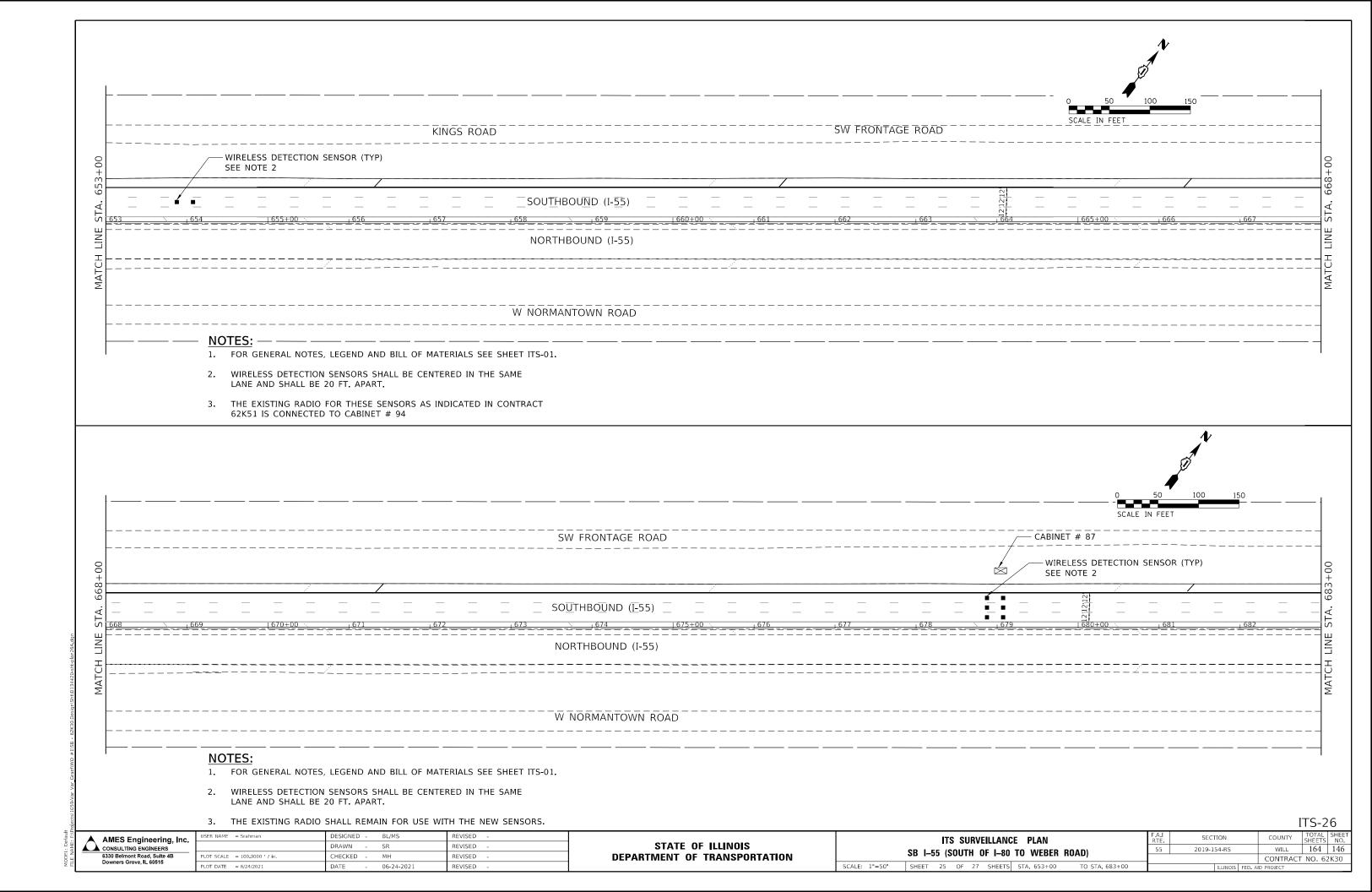


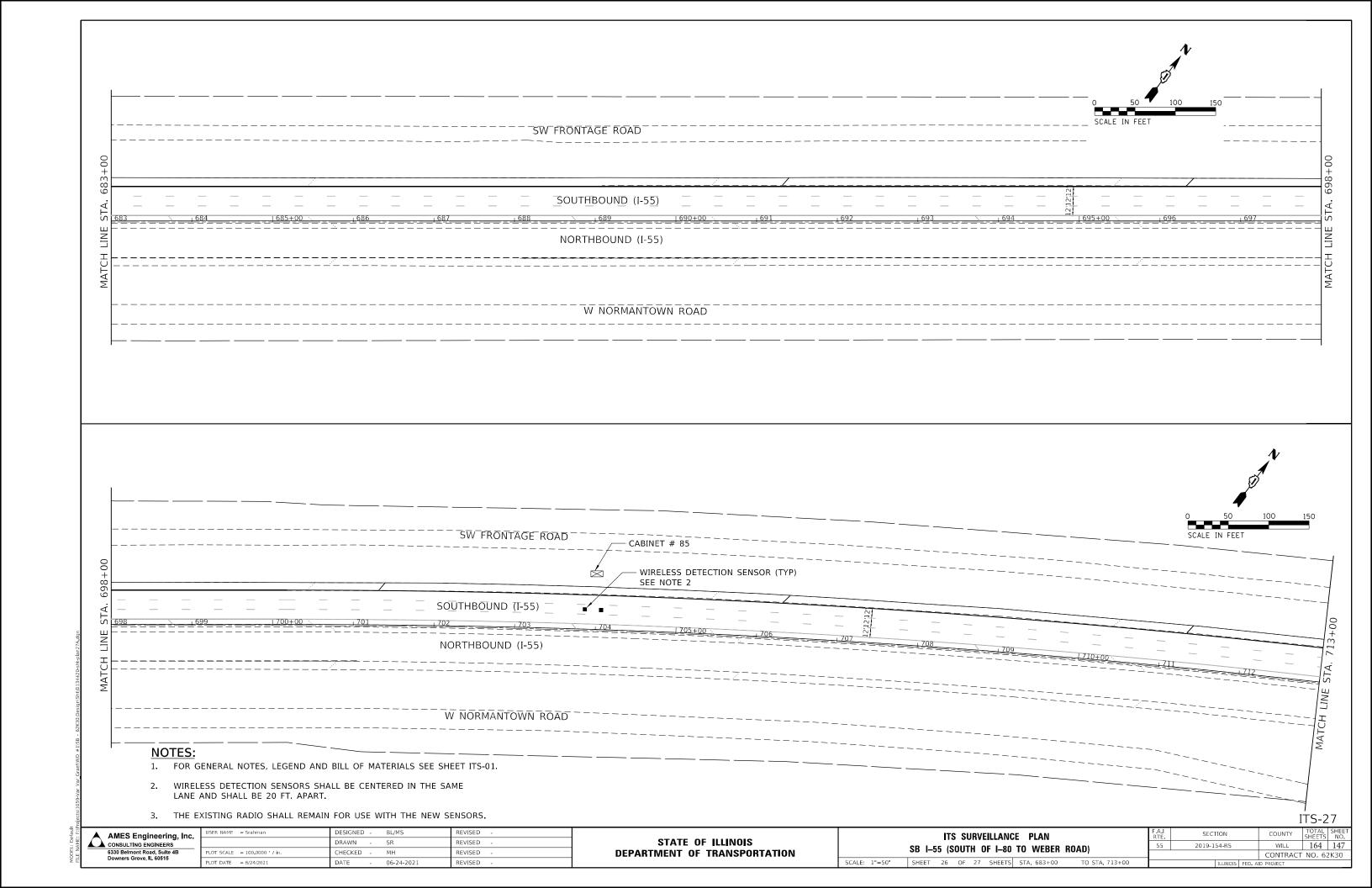


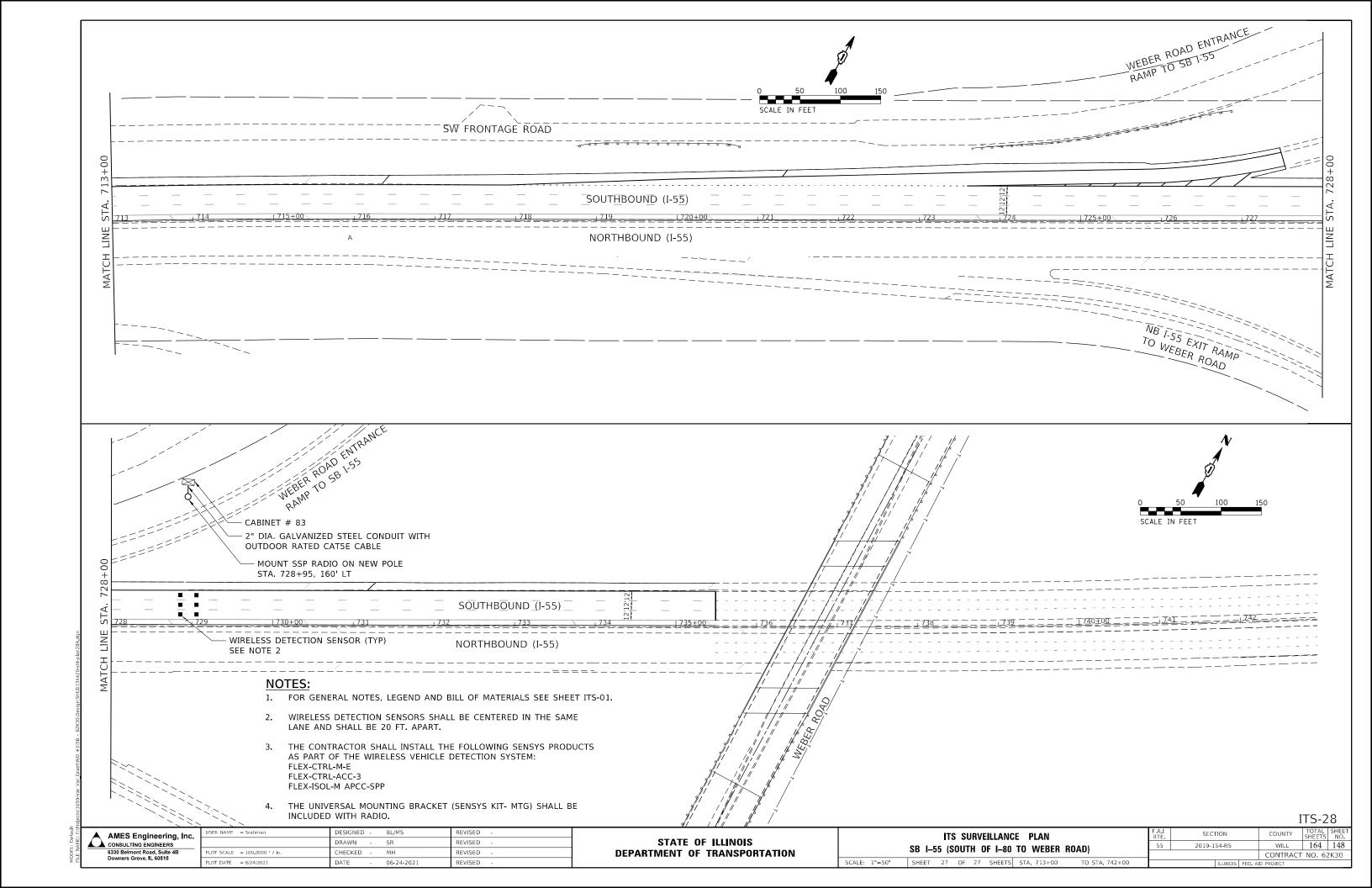


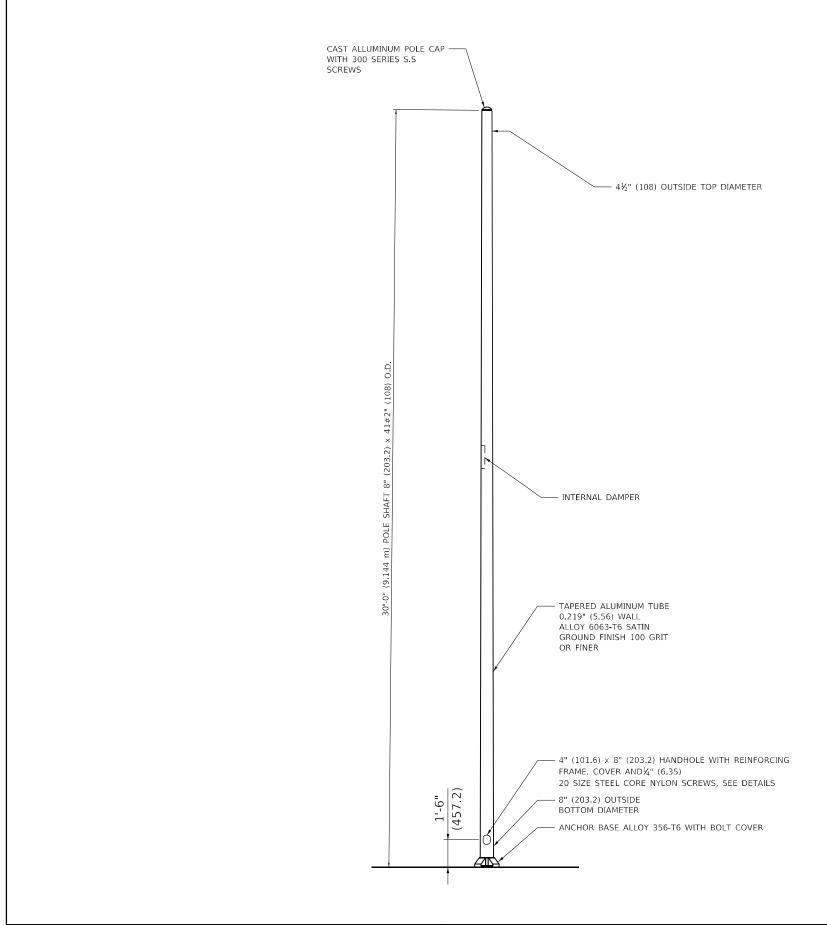






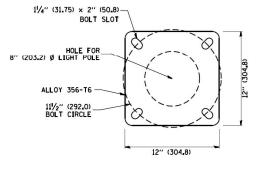






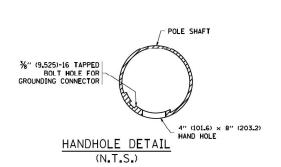
NOTES:

- 1. ALL DIMENSION ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
- 3. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
- LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.



LIGHT POLE BASE PLATE DETAIL

111/2" (292.0) BOLT CIRCLE



SCALE: NONE

ITS-29

AMES Engineering, Inc.
CONSULTING ENGINEERS
6330 Belmont Road, Suite 4B
Downers Grove, IL 60515

USER NAME = gaglianobt	DESIGNED - BL	REVISED - R. TOMSONS 09-02-03
	DRAWN - SR	REVISED -
PLOT SCALE = 50.000 '/ IN.	CHECKED - MB	REVISED -
PLOT DATE = 1/4/2008	DATE - 06-24-2021	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

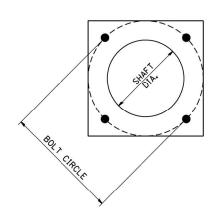
WIRELESS VEHICLE DETECTOR POLE DETAILS					OR				
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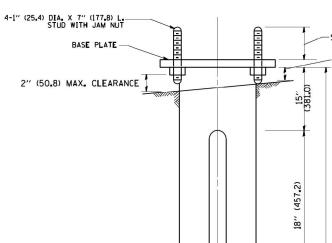
 F.A. ref. (RTE.)
 SECTION
 COUNTY (SHEETS NO.)
 STATE (NO.)

 55
 2019-154-RS
 WILL
 164
 149

 CONTRACT NO.
 62 x30

 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID | PROJECT



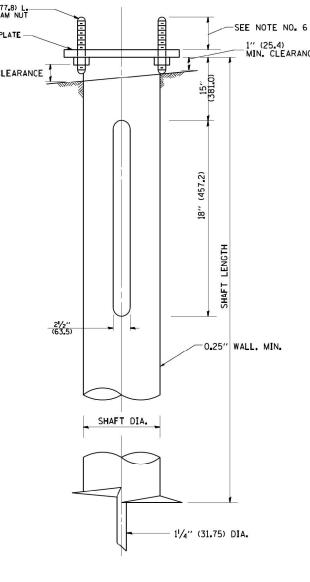


HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	111/2"	85%"	6 FT.	12"×12"×1"
31 FT35 FT.	11 ½ ′′	85/3′′	6 FT.	12"×12"×1"
36 FT40FT.	15"	85%′′	6 FT.	15"×15"×1 ¹ / ₄ "
41 FT45 FT.	15"	85/3′′	6 FT.	15"×15"×1¼"
46 FT50 FT.	15"	10"	8 FT.	15"×15"×1¼"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)



NOTES:

- 1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- 3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- 4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE
- 5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- 6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- 7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- 8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FCUNDTION IS NOT ALLOWED.
- 9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- 10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
- 11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
- 12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

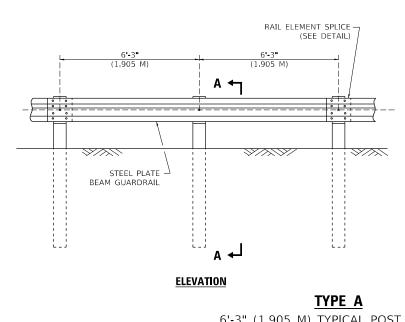
ITS-30

•	AMES Engineering, Inc.	US
Δ	CONSULTING ENGINEERS	
	6330 Belmont Road, Suite 4B	PL
	Downers Grove, IL 60515	ΡL

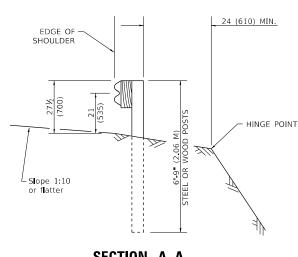
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PLOT SCALE = 50.000 ' / IN.	CHECKED	-	MB	REVISED	=:
PLOT DATE = 1/4/2008	DATE	-	06-24-2021	REVISED	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

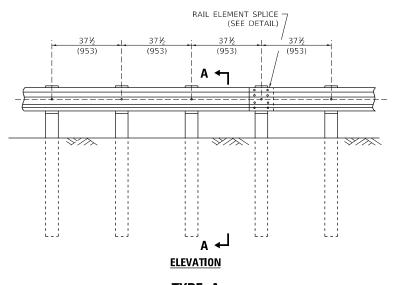
LIGHT POLE FOUNDATION, METAL			F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
				55	2019-154-RS	WILL	164	150
					BE-305	CONTRACT	NO. 6	2K30
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAL	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			-



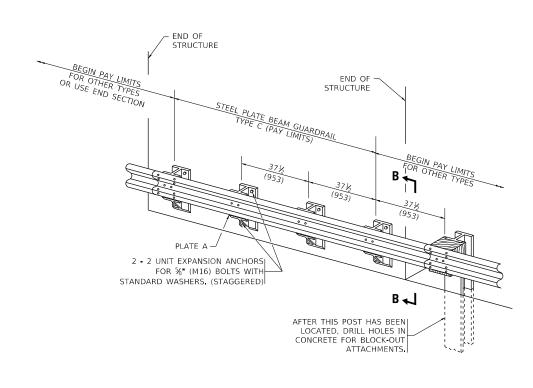
6'-3" (1.905 M) TYPICAL POST SPACING



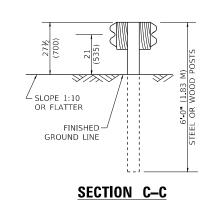
SECTION A-A



TYPE A 37½ (953) CLOSED POST SPACING



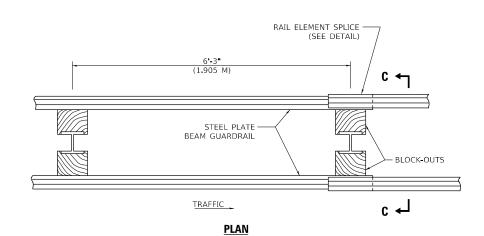
TYPE C 37½ (953) BLOCK-OUT SPACING



CONCRETE STRUCTURE (232) STEEL BLOCK OUTS ONLY - SLOPE 1:10 OR FLATTER FINISHED GROUND LINE

SECTION B-B

SCALE: NONE



TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL 6'-3" (1.905 M) TYPICAL POST SPACING

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

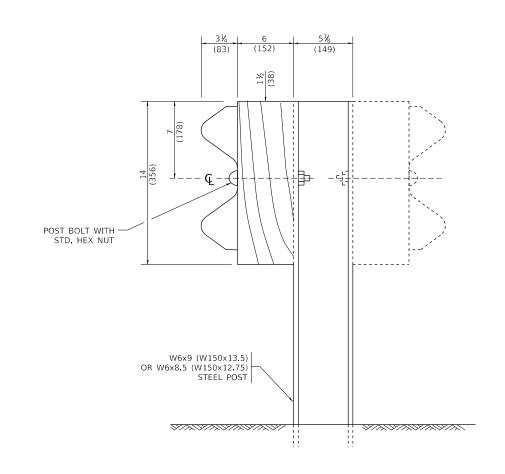
THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

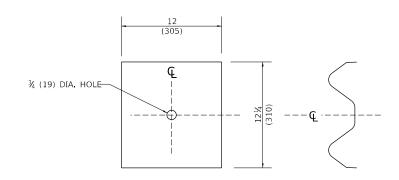
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	DRAWN -	REVISED -
PLOT SCALE = 50,0000 / in	CHECKED -	REVISED -
PLOT DATE ■ 3/11/2019	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL		F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
		55	2019-154-RS	WILL	164	151			
			BM-21	CONTRACT NO. 62K30		2K30			
SHEET 1	OF 4	SHEETS	STA.	TO STA.		ILLINOIS FED, A	JD PROJECT		



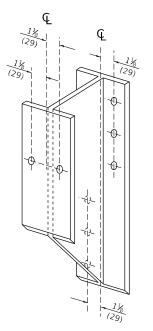
STEEL POST CONSTRUCTION



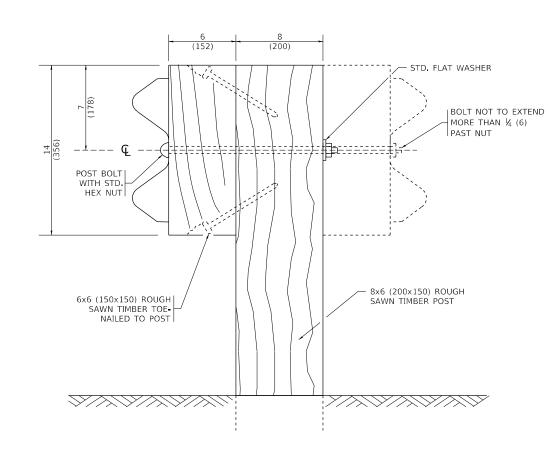
NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

PLATE A



STEEL BLOCK-OUT DETAIL



WOOD POST CONSTRUCTION

TOTAL SHEET NO.

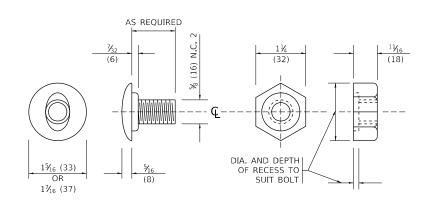
CONTRACT NO. 62K30

COUNTY

WILL

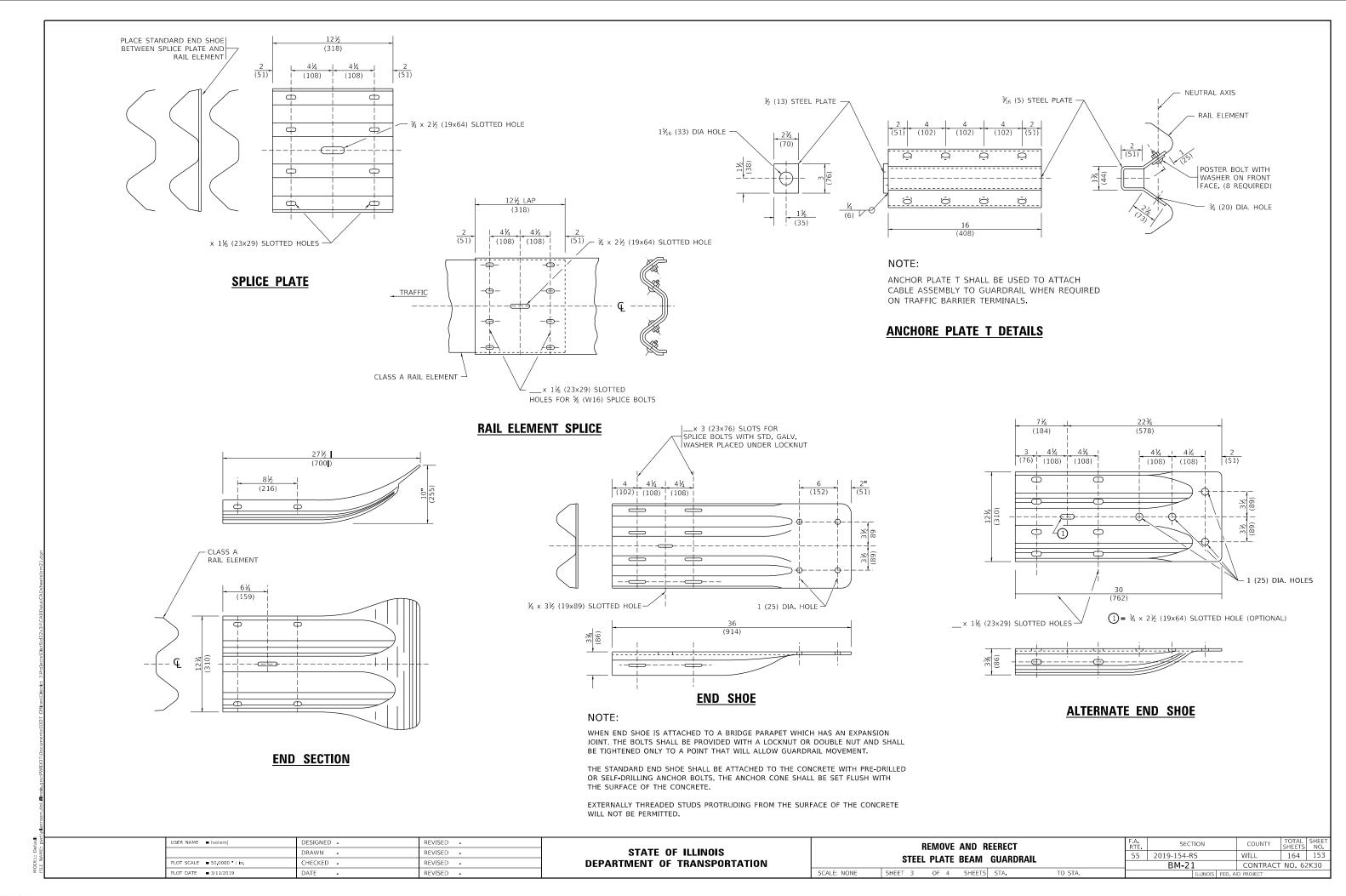
55 2019-154-RS

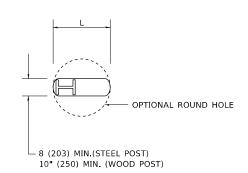
BM-21



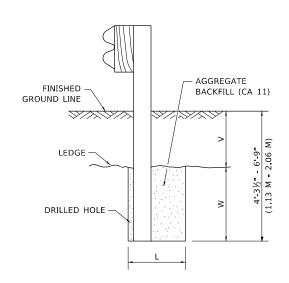
POST OR SPLICE BOLT & NUT

USER NAME = footemj	DESIGNED -	REVISED -				REMOVE	AND B	REERECT	
	DRAWN -	REVISED -	STATE OF ILLINOIS		-				
PLOT SCALE = 50,0000 */ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		STEEL	PLATE	BEAM	GUARDRAIL	
PLOT DATE 3 /11/2019	DATE -	REVISED -		SCALE: NONE	SHEET 2	OF 4	SHEETS	STA.	TO STA.





<u>PLAN</u>

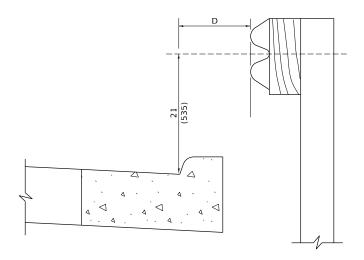


NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



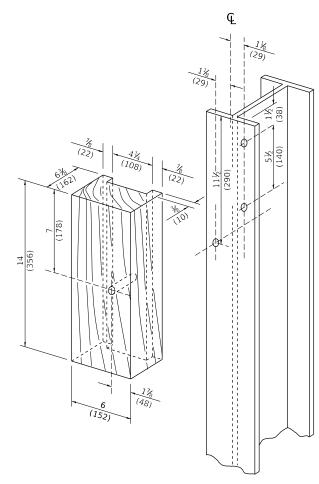
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

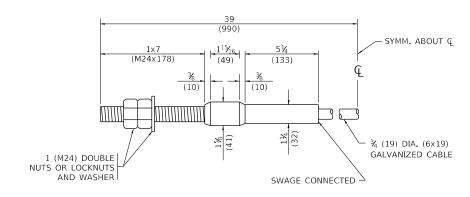
GUARDRAIL PLACED BEHIND CURB

(D = O DESIRABLE TO 12 (300) MAXIMUM)

V	w	L			
V	VV	STEEL POST	WOOD POST		
0 - 18	24	21	23		
(0 - 460)	(610)	(530)	(580)		
>18 - 41.5	12	8	10		
(> 460 - 825)	(305)	(203)	(250)		
>41.5 - 53.5	12 - 0	8	10		
(> 825 - 1.13 M)	(350 - 0)	(203)	(250)		



WOOD BLOCK – OUT AND STEEL POST DETAILS



CABLE ASSEMBLY

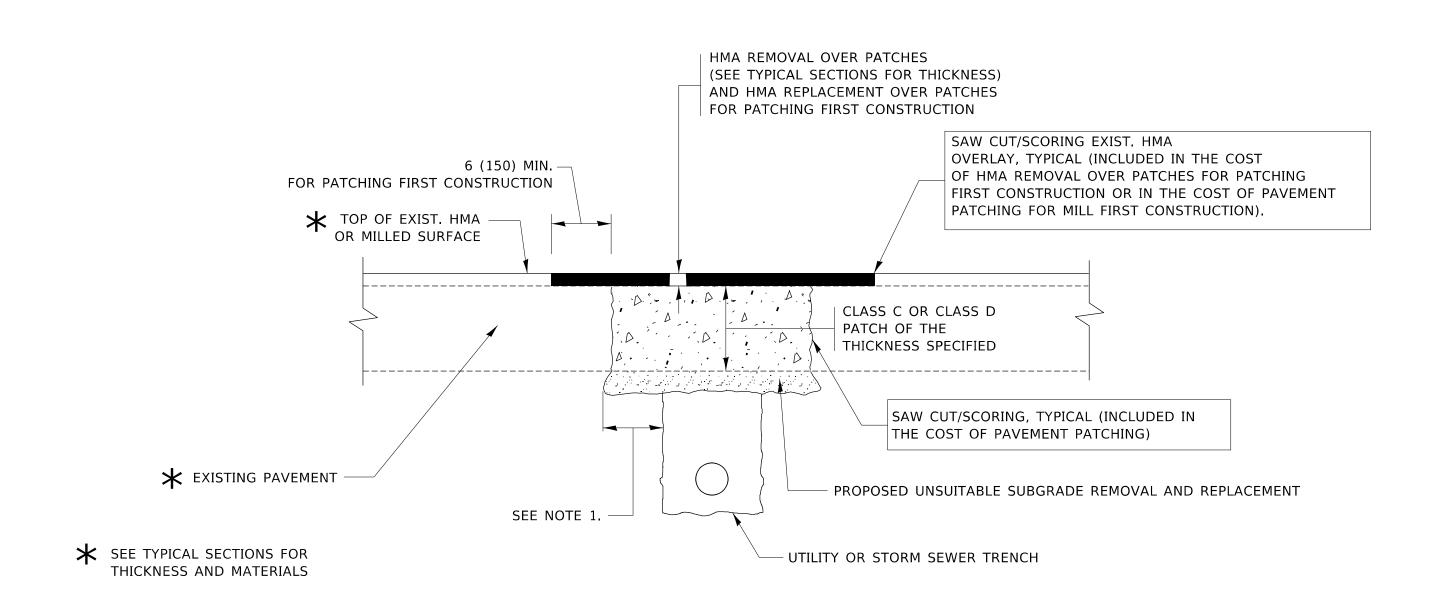
(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

USER NAME ■ footemj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 50,0000 / in	CHECKED .	REVISED -
PLOT DATE 3 /11/2019	DATE -	REVISED -
		,

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

REMOVE AND REERECT							F.A. RTE	SECTION	COUNTY	TOTAL SHEET SHEETS NO.		
STEEL PLATE BEAM GUARDRAIL						CHARDRAII		55	2019-154-RS	WILL	164	154
SILL FLATE BLAW GUANDRAIL							BM-21 CONTRACT NO. 62					
	SHEET	4	OF 4 SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT									



NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

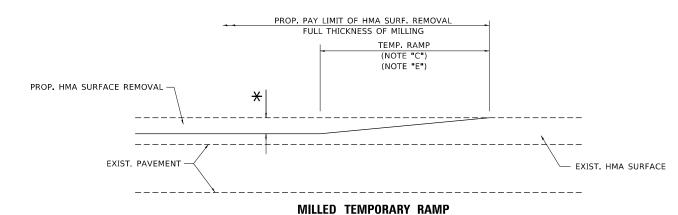
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST $4\frac{1}{2}$ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

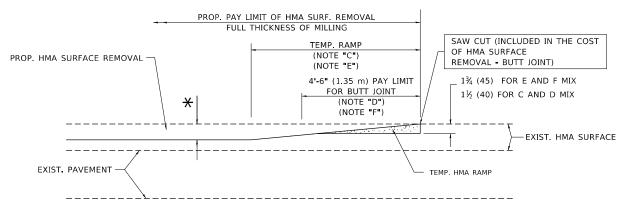
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

USER NAME = footemj	DESIGNED - R. SHAH	REVISED - A ABBAS 04-27-98			PAVEMENT PATCHING FOR		RTF SECT	TION	COUNTY	SHEETS NO.
	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				55 2019-154-R	lS.	WILL	164 155
PLOT SCALE = 50,0000 */ in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT		BD400-04 (B		CONTRACT	T NO. 62K30
PLOT DATE ■ 3/27/2019	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

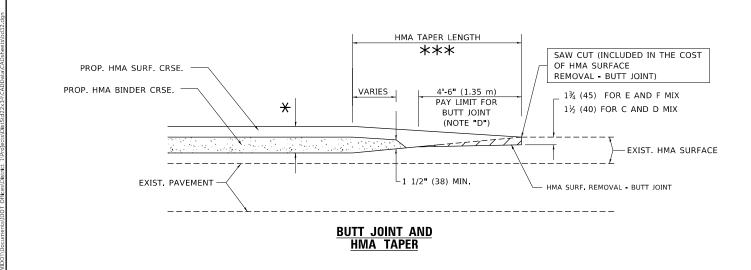


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



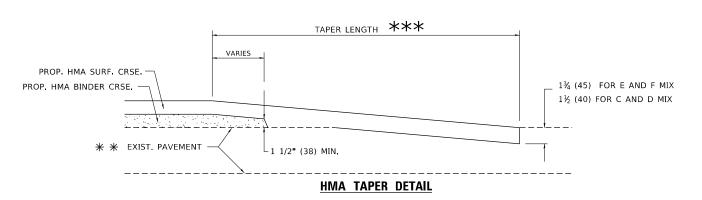
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

USER NAME ■ footemj DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 DRAWN . REVISED - A. ABBAS 03-21-97 CHECKED -REVISED - M. GOMEZ 04-06-01 LOT DATE = 3/27/2019 REVISED - R.BORO 01-01-07 DATE - 06-13-90

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

COUNTY **BUTT JOINT AND** 55 | 2019-154-RS **HMA TAPER DETAILS** BD400-05 BD32 CONTRACT NO. 62K30 SHEET 1 OF 1 SHEETS STA. TO STA

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT SAW CUT (INCLUDED IN THE COST 30'-0" (9.0 m) (NOTE "A") EXIST, HMA OR PCC SURFACE -OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 1¾ (45) FOR E AND F MIX 1½ (40) FOR C AND D MIX * * EXIST. PAVEMENT **BUTT JOINT DETAIL**



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A. MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE,
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP, RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F. INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT. * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

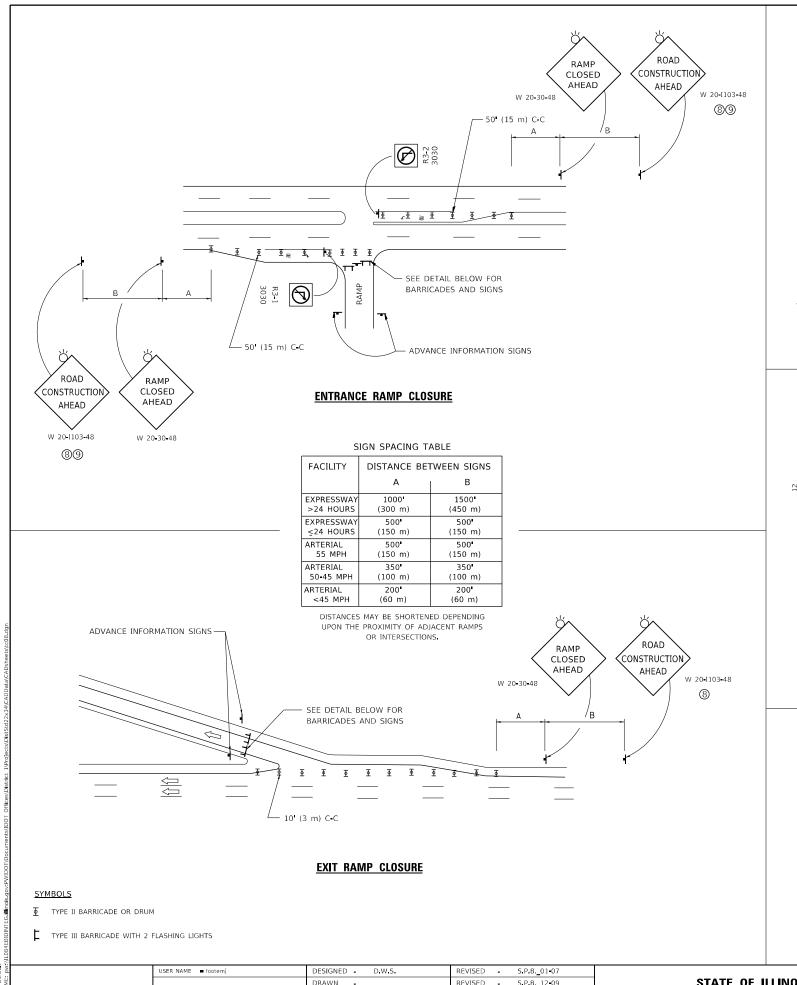
BASIS OF PAYMENT

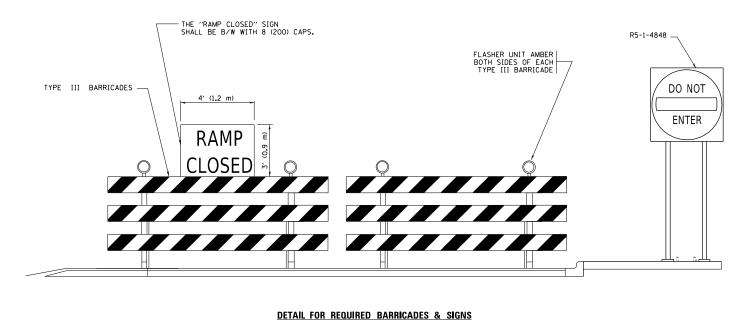
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

SCALE: NONE

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

164 | 156





RAMP CLOSURE ADVANCE INFORMATION SIGN

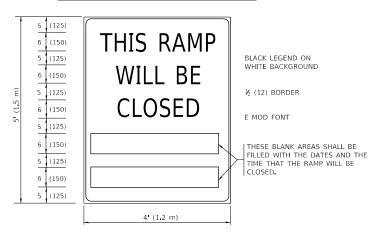
RAMP CLOSURE ADVANCE WARNING SIGN

RAMP CLOSED 10' (3 m)

BLACK LEGEND ON ORANGE

BACKGROUND MOUNTED DIAGONALLY E MOD FONT 1 (25) BORDER THESE SIGNS ARE REQUIRED ON ALL THE EXIT

GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- (2) VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- 3 A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

SCALE: NONE

- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES,
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS, ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN,
- ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

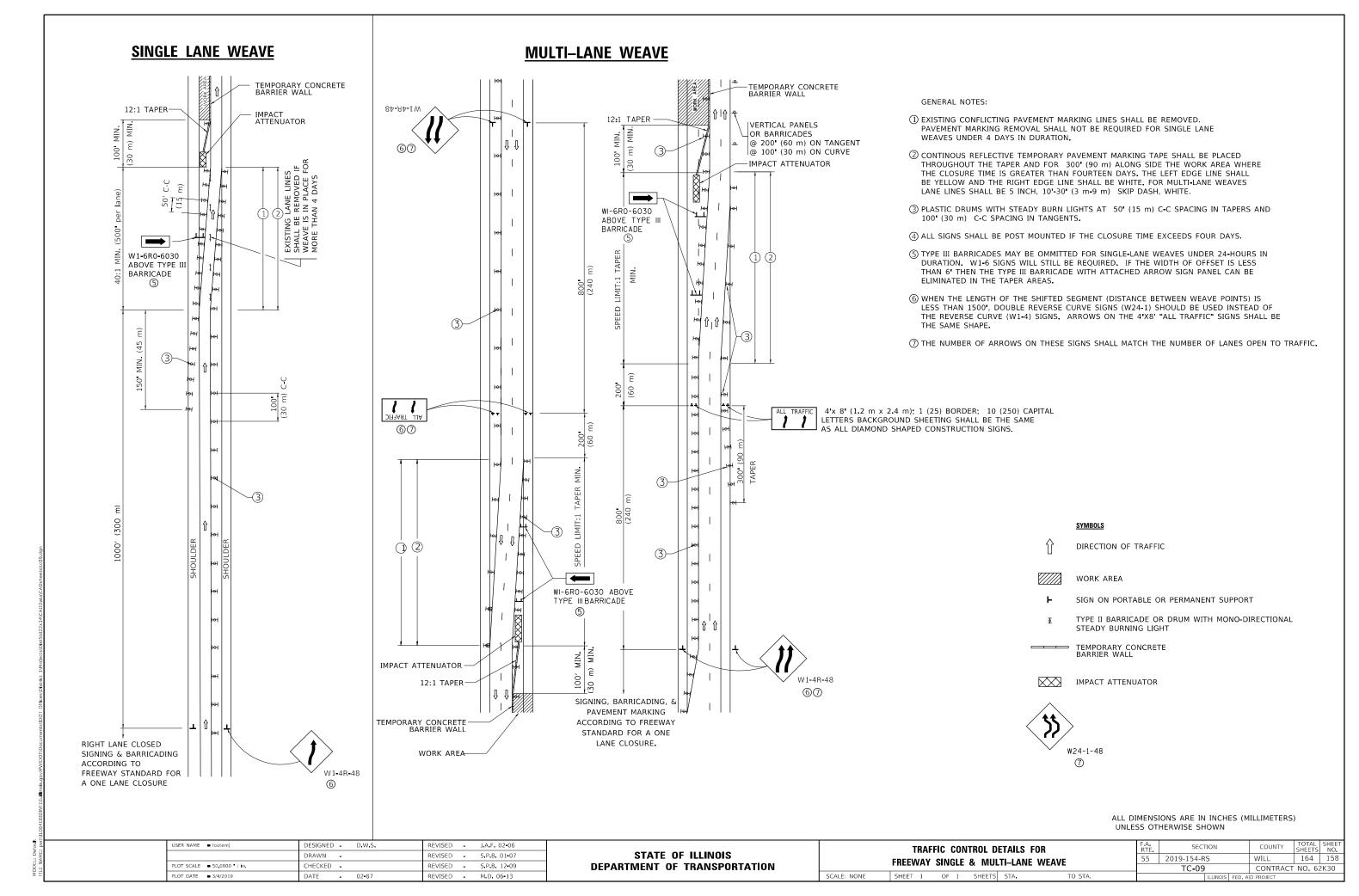
REVISED - S.P.B._12-09 CHECKED -REVISED - M.D._06-13 LOT DATE = 3/4/2019 DATE REVISED - M.D. 01-18

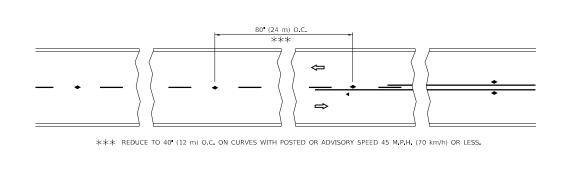
STATE OF ILLINOIS

ENTRANCE_AND_EXIT_RAMP **CLOSURE DETAILS** OF 1 SHEETS STA SHEET 1 TO STA

SECTION COUNTY 55 2019-154-RS WILL 164 | 157 CONTRACT NO. 62K30

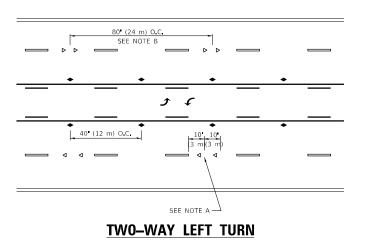
DEPARTMENT OF TRANSPORTATION



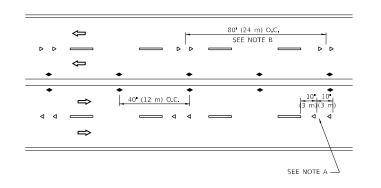


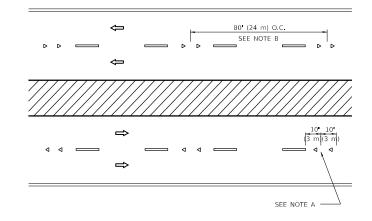
3 @ 40 (12 m) O.C. \Rightarrow LANE REDUCTION TRANSITION

SEE FIGURE 3B-14 MUTCD



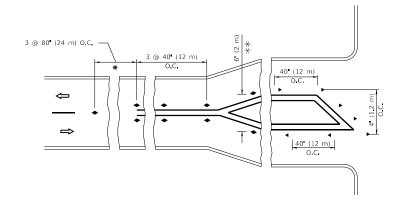
TW0-LANE/TW0-WAY

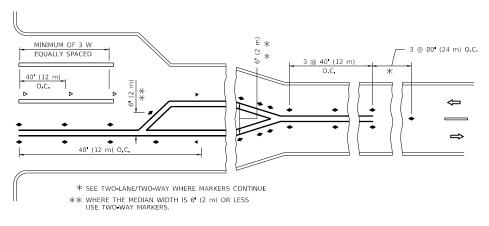




MULTI-LANE/UNDIVIDED







TURN LANES

GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2, MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500 (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
- 4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40 (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

USER NAME ■ footemj REVISED - T. RAMMACHER 03-12-99 DESIGNED . DRAWN -REVISED -T. RAMMACHER 01-06-00 CHECKED . REVISED - C. JUCIUS 09-09-09 LOT DATE = 3/4/2019 DATE REVISED - C. JUCIUS 07-01-13

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET 1 OF 1 SHEETS STA.

SECTION 55 2019-154-RS 164 159 WILL CONTRACT NO. 62K30 TC-11

SYMBOLS

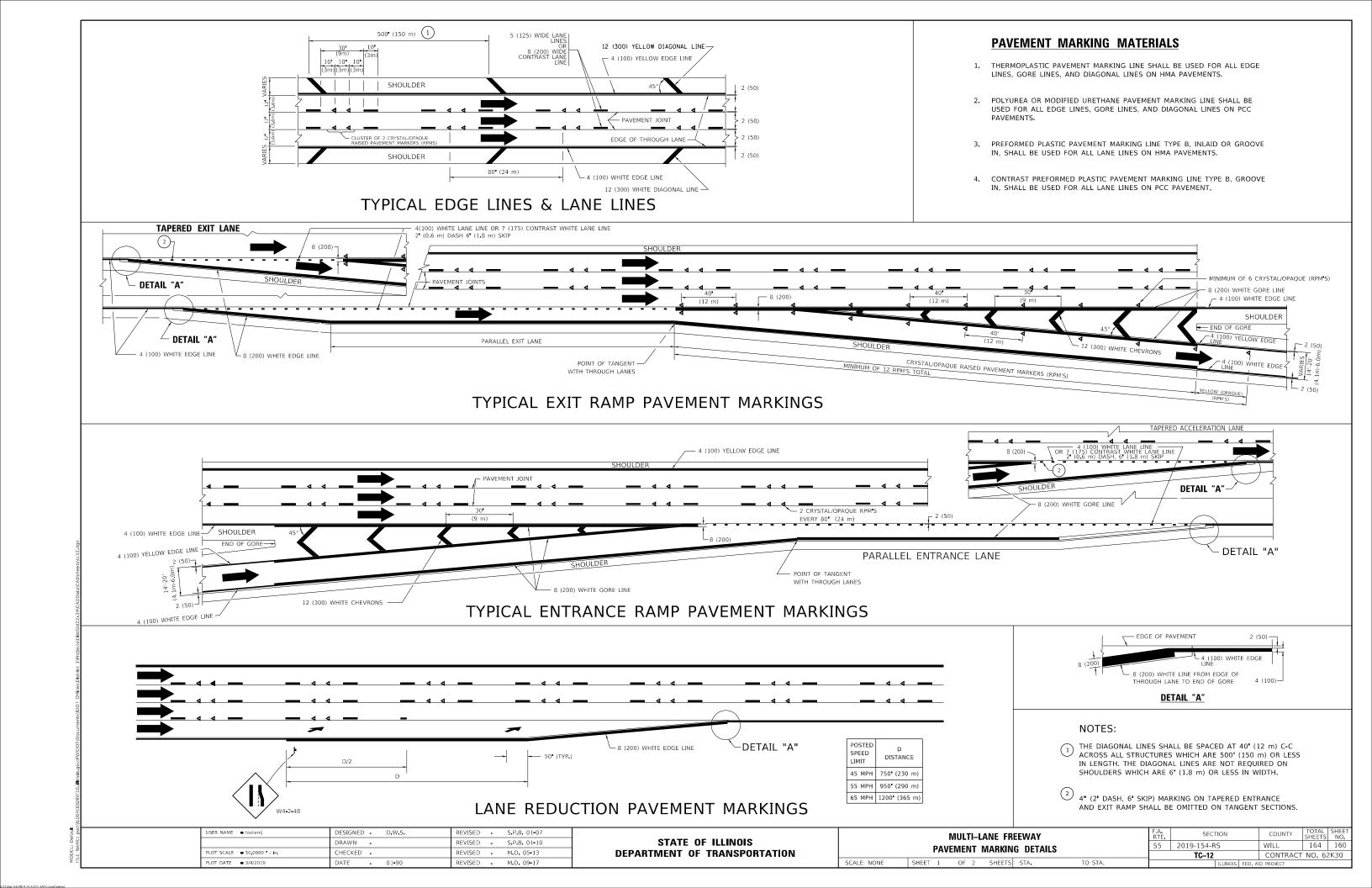
ONE-WAY AMBER MARKER

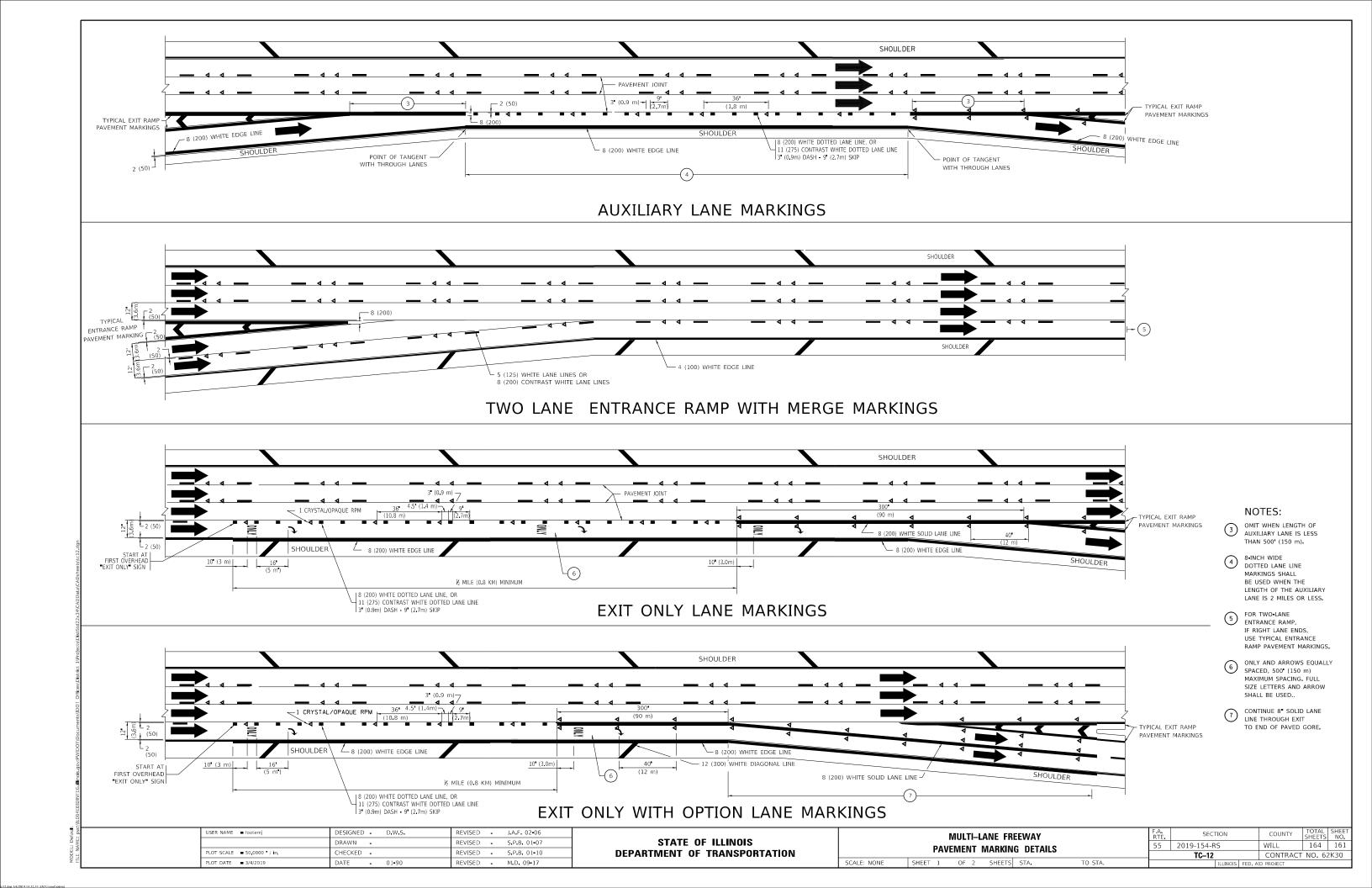
TWO-WAY AMBER MARKER

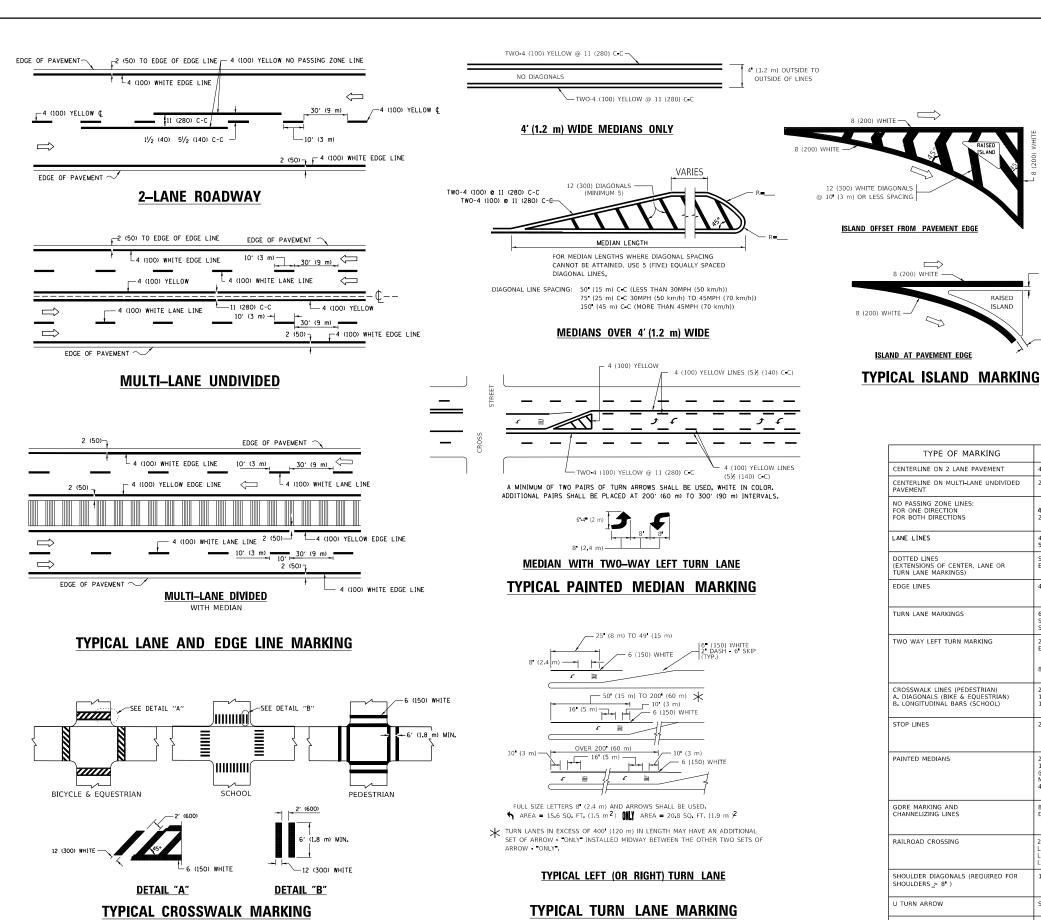
ONE-WAY CRYSTAL MARKER (W/O)

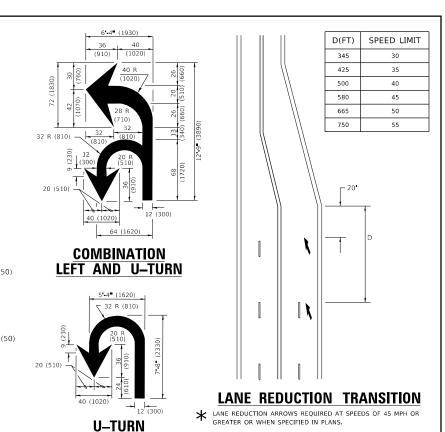
YELLOW STRIPE

WHITE STRIPE









TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10" (3 m) LINE WITH 30" (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10° (3 m) LINE WITH 30° (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2* (600) LINE WITH 6* (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8 (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8* (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C. C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (500) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4 (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4" (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6 (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m PEACH "X"=54.0 SQ. FT. (5.0 m P
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8°)	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16,3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

8 (200) WHITE -

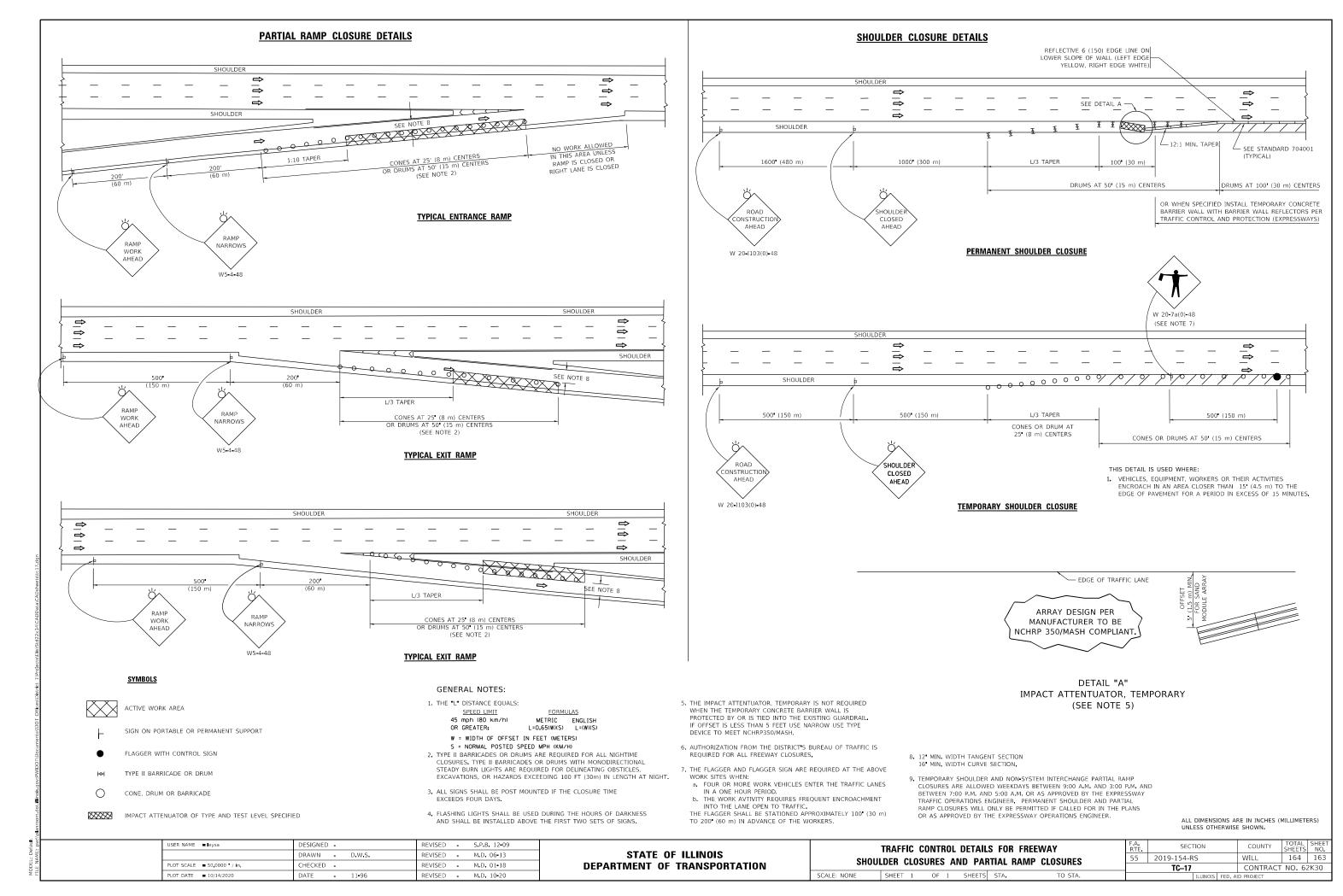
RAISED

USER NAME ■ footemj DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 DRAWN . REVISED - C. JUCIUS 07-01-13 CHECKED . REVISED - C. JUCIUS 12-21-15 LOT DATE = 3/4/2019 DATE

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

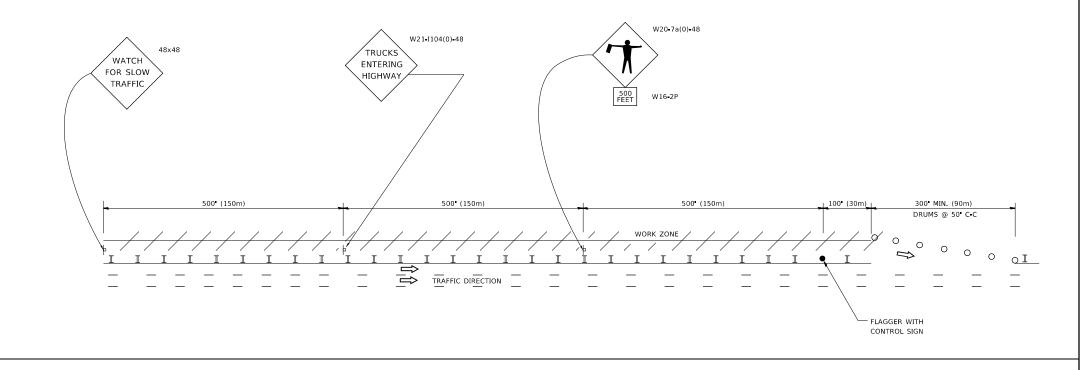
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE 164 162 55 2019-154-RS TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62K30 OF 2 SHEETS STA.

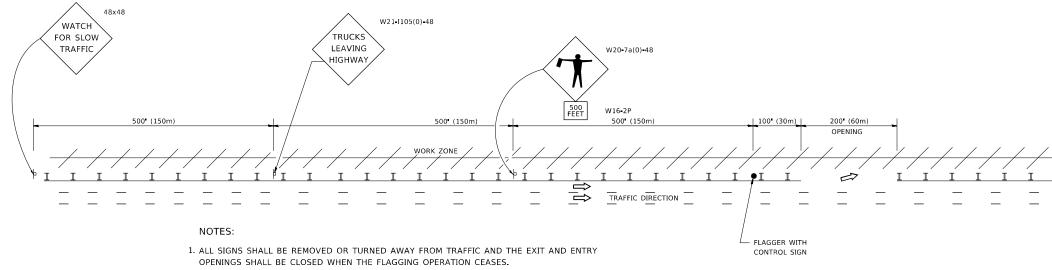


SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



- NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
- 2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
- 3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
- 4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
- 5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

USER NAME ■ footemj	DESIGNED -	REVISED	-	J.A.F. 02-06
	DRAWN -	REVISED	-	S.P.B. 01-07
PLOT SCALE = 50,0000 / in	CHECKED -	REVISED	-	S.P.B. 12-09
PLOT DATE ■ 3/4/2019	DATE •	REVISED	-	M.D.06-13

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** FREEWAY /EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS /EXPRESSWAYS SHEET 1 OF 1 SHEETS STA.

55 2019-154-RS 164 164 WILL TC-18 CONTRACT NO. 62K30