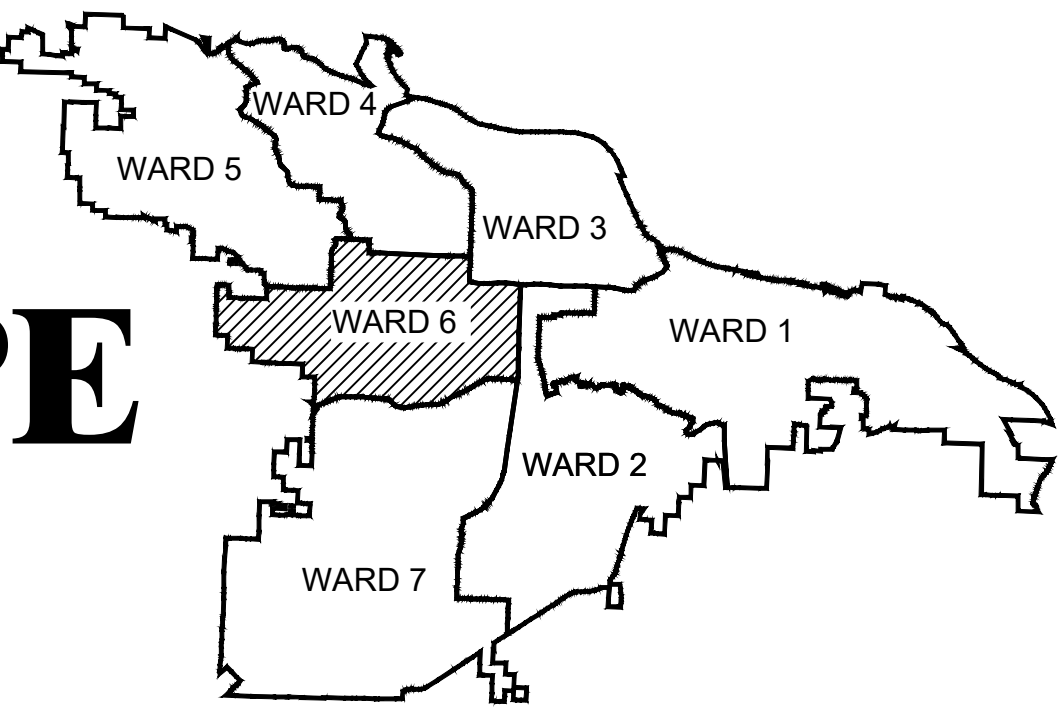


06-17-ST-267

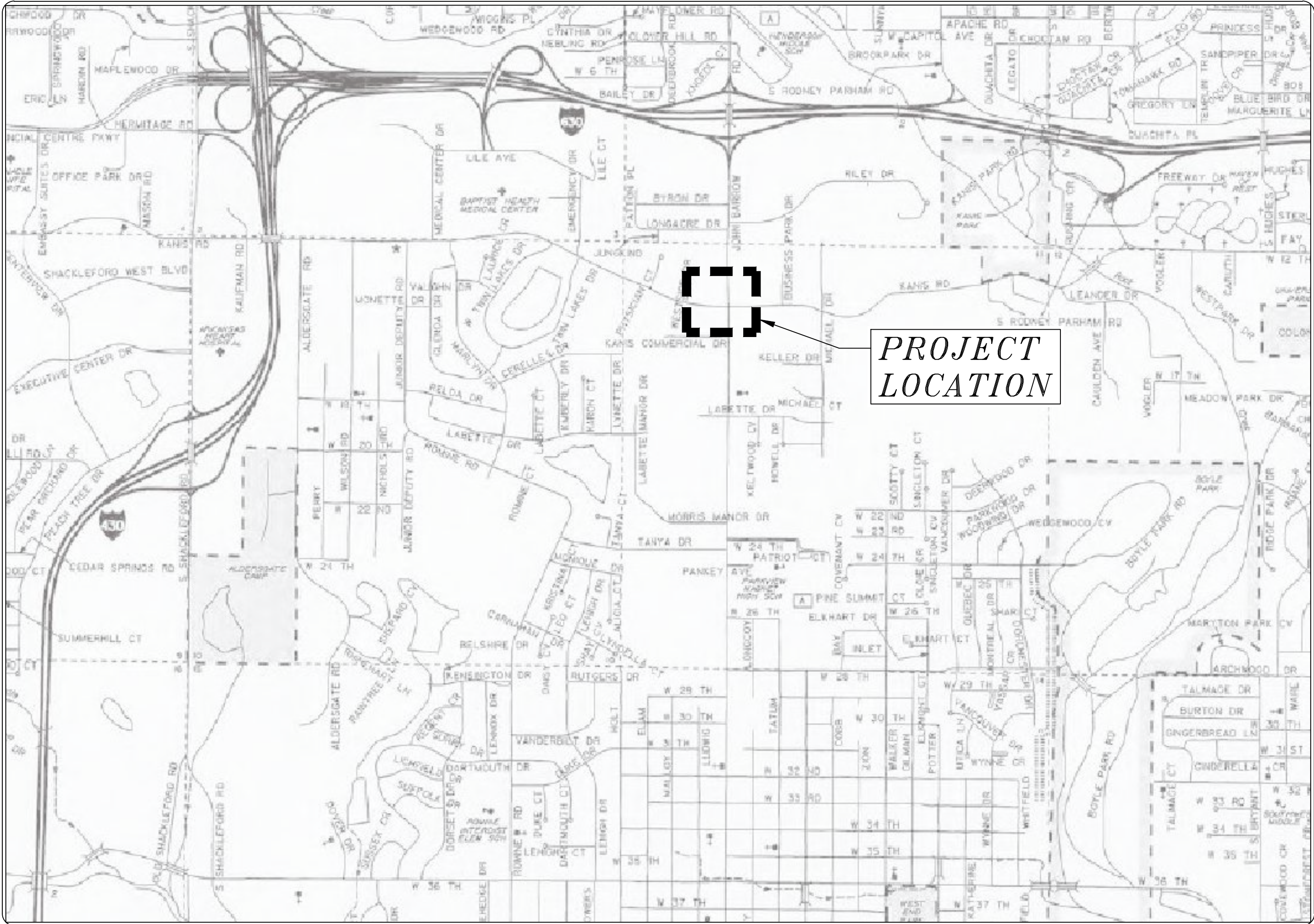
JOHN BARROW RD STREETSCAPE

(JOHN BARROW RD/KANIS RD INTERSECTION)

100% SUBMITTAL



PROJECT LOCATION - WARD 6



PROJECT
LOCATION

JOHN BARROW RD AND KANIS RD INTERSECTION	
Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.1	GN LEGEND AND QUANTITIES SHEET
C2.1	DEMO AND EROSION PLAN
C3.1	SITE PLAN
C4.1	SIGNAL PLAN
C5.1	DETAIL SHEET
C5.2	DETAIL SHEET
C5.3	DETAIL SHEET
C5.4	DETAIL SHEET
SD-11	STEEL POLE WITH MAST ARM

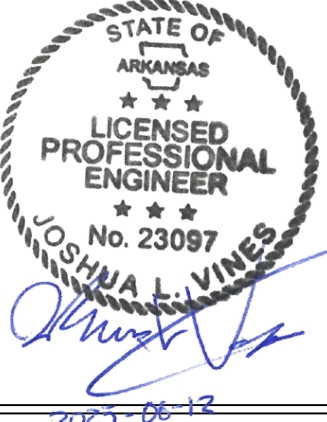


2019-2021
BOND PROGRAM

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 WEST MARKHAM STREET
LITTLE ROCK, ARKANSAS 72201



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CITY OF LITTLE ROCK, ARKANSAS
JOHN BARROW RD STREETSCAPE
COVER SHEET
JOHN BARROW RD & KANIS RD INTERSECTION

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

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DRAWN BY LCJ
DESIGNED SBH
CHECKED SBH
DATE 06-13-25
SCALE NO SCALE
PROJECT NO. 06-17-ST-267
SHEET NO. C0.0

06-17-ST-267			
JOHN BARROW RD AND KANIS RD INTERSECTION - MATERIAL QUANTITIES			
ITEM #	DESCRIPTION	UNIT	QTY
2.01	SITE PREPARATION	LS	1
3.40	TOPSOIL (4" depth)	CY	2
6.01	ACHM OVERLAY 2"	TON	90
8.03	CONCRETE CURB (TYPE A)	LF	30
14.01	SOLID SODDING- BERMUDA	SF	185
18.01	MAINTENANCE OF TRAFFIC	LS	1
18.50	ACCESS RAMP W/ TRUNCATED DOMES	SF	605
604.01	HYDROBLASTING FOR PAVEMENT MARKING REMOVAL	SF	34
707.00	COUNTDOWN PED SIG HEAD, LED	EA	8
708.00	ELECTRICAL CONDUCTORS-IN-CONDUIT (10/8 A.W.G., E.G.C.)	LF	270
708.00	TRAFFIC SIGNAL CABLE (5C / 14A.W.G.)	LF	1100
708.00	TRAFFIC SIGNAL CABLE (10C / 14A.W.G.)	LF	350
710.00	NON-METALLIC CONDUIT (2")	LF	130
710.00	NON-METALLIC CONDUIT (3")	LF	20
715.00	TRAFFIC SIGNAL PED. POLE W/ FND	EA	2
715.01	TRAFFIC SIGNAL PED. PUSH BUTTON PEDESTAL W/ FND	EA	4
719.24W	THERMOPLASTIC PAVEMENT MARKING WHITE (12")	LF	157
SP	STAMPED AND INTEGRAL COLORED CONCRETE	SF	2056
SP	CONCRETE BAND- CROSSWALKS	SF	845
SP	NEIGHBORHOOD SIGN	LS	1
SP	ELECTRICAL	LS	1
19.01	FINAL CLEANUP (AS DIRECTED BY ENGINEER)	LS	1
	EASEMENTS	LS	2
	UTILITY RELOCATION	BY OTHERS	

EXISTING

IRON ROD	○ IR
PK NAIL	○ PK
R.R. SPIKE	○ RR(Sp)
CONC. MONUMENT	□ CM
WATER VALVE	⊗ WV
WATER METER	□ WM
FIRE HYDRANT	⊕ FH
GAS METER	⊞ GM
GAS VALVE	⊗ GV
CLEAN-OUT	○ CO
GUARD POST (BOLLARD)	● GP
SIGN POST	⊕
BENCHMARK	⊕
STORM SEWER MANHOLE	⊙
SANITARY SEWER MANHOLE	⊙
TELEPHONE MANHOLE	⊙
ELECTRIC MANHOLE	⊙
TELEPHONE BOX	⊞
ELECTRIC BOX	⊞
CABLE BOX	⊞
UTILITY POLE	⊕
GUY WIRE	⊕
LIGHT POLE	⊕
POST OR POLE (TYPE AS NOTED)	⊕
MAILBOX	⊕
DECIDUOUS TREE	⊕
EVERGREEN/CONIFEROUS TREE	⊕
BUSH	⊕
PROPERTY LINE	—
SETBACK LINE	—
EASEMENT LINE	—
CURB	—
FENCE	— X — X — X —
OVERHEAD ELECTRIC	— OE — OE —
OVERHEAD TELEPHONE	— OT — OT —
OVERHEAD CABLE	— OC — OC —
UNDERGROUND TELEPHONE	— UGT —
UNDERGROUND ELECTRIC	— UGE —
UNDERGROUND CABLE	— UGC —
WATER LINE	— 8"W —
SEWER LINE	— 8"SS —
GAS LINE	— 4"G —
STORM SEWER/CULVERT	— 24" CMP/RCP/DIP —
EDGE OF WOODS	— 650 —
CONTOUR LINE	— 650 —

PROPOSED

PROPOSED CONTOUR	⊕
PROPOSED SPOT ELEVATION	⊕
PROPOSED SPOT CURB ELEVATION	⊕
STORM SEWER – PIPE	⊕
STORM SEWER – MITERED END SECTION	⊕
STORM SEWER – GRATE INLET	⊕
STORM SEWER – JUNCTION BOX	⊕
STORM SEWER – FLARED END SECTION	⊕
STORM SEWER – HEADWALL	⊕
STORM SEWER – SINGLE WING	⊕
STORM SEWER – DOUBLE WING	⊕
STORM SEWER – AREA INLET	⊕
GRADE BREAK LINE	⊕
HIGH POINT	⊕
LOW POINT	⊕
CUT LINE	⊕
FILL LINE	⊕
SANITARY SEWER PIPE	⊕
SANITARY SEWER MANHOLE	⊕
PROPOSED CURB	⊕
PROPOSED CONCRETE	⊕
CONSTRUCTION – ENTRANCE/EXIT	⊕
CHECK DAM	⊕
DIVERSION BERM	⊕
DOWNDRAIN STRUCTURE – TEMPORARY	⊕
ROCK DAM	⊕
SEDIMENT BARRIER – SILT FENCE	⊕
SEDIMENT BARRIER – GRAVEL RING	⊕
SEDIMENT BARRIER – BLOCK & GRAVEL	⊕
SEDIMENT BARRIER – BLOCK	⊕
TEMPORARY SEDIMENT BASIN	⊕
SILT FENCE – TYPE A	⊕
SILT FENCE – TYPE B	⊕
SILT FENCE – TYPE C	⊕
STORM DRAIN OUTLET PROTECTION	⊕
SURFACE ROUGHENING	⊕
DISTURBED AREA STABILIZATION –TEMPORARY STABILIZATION	⊕
DISTURBED AREA STABILIZATION –TEMPORARY GRASSING	⊕
DISTURBED AREA STABILIZATION –PERMANENT GRASSING	⊕
MATTING/BLANKETS	⊕
CONSTRUCTION LIMITS	⊕



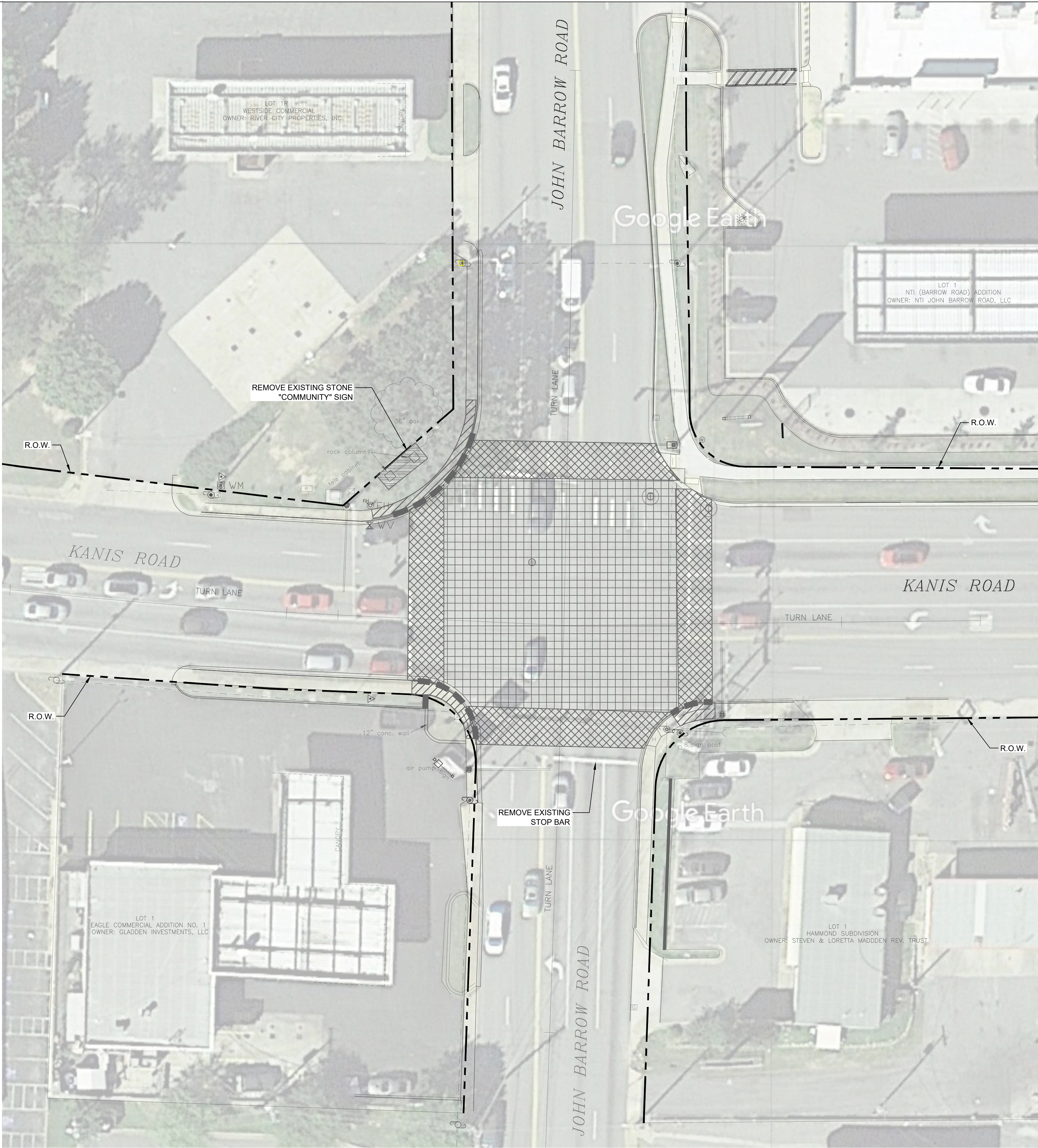
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS	JOHN BARROW RD STREETSCAPE
GN LEGEND AND QUANTITIES SHEET	
JOHN BARROW RD & KANIS RD INTERSECTION	

DEPARTMENT OF PUBLIC WORKS	CIVIL ENGINEERING	701 W. MARKHAM	LITTLE ROCK, ARKANSAS 72201

100% SUBMITTAL

DRAWN BY	LCJ
DESIGNED	SBH
CHECKED	SBH
DATE	06-13-25
SCALE	NO SCALE
PROJECT NO.	06-17-ST-267
SHEET NO.	C1.1



DEMOLITION GENERAL NOTES

- ALL WORK SHALL BE CONFINED TO LIMITS OF CONSTRUCTION SHOWN ON PLANS.
- CONTRACTOR SHALL COORDINATE AND BE IN COMPLIANCE WITH ALL STATE AND LOCAL MUNICIPALITIES AS WARRANTED. CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT PRIOR TO START OF PROJECT.
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND EXISTING SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE OWNER AND LANDSCAPE ARCHITECT, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
- DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER, HIS/ HER REPRESENTATIVE, OR THE LANDSCAPE ARCHITECT MAY BE CAUSE FOR THE WORK TO BE DESIGNATED UNACCEPTABLE.
- THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER AND LANDSCAPE ARCHITECT ANY UNFORESEEN OR ADVERSE CONDITIONS DISCOVERED DURING DEMOLITION OPERATIONS.
- ALL TRENCHES AND/OR VOIDS CREATED BY THE REMOVAL OF EXISTING STRUCTURES & SITE ELEMENTS SHALL BE BACKFILLED PER LOCAL AND STATE REGULATIONS.
- THE LOCATION AND SIZE OF KNOWN EXISTING ABOVE GROUND UTILITIES ARE NOT SHOWN ON THE SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC AND PRIVATE UTILITIES WHICH LIE IN OR ARE ADJACENT TO THE CONSTRUCTION SITE. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY CALL ARKANSAS 811 AND COORDINATE UTILITY WORK WITH PULASKI COUNTY FOR COMPLIANCE WITH LOCAL CODES AND ORDINANCES.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING POWER POLES, MANHOLES, TELEPHONE RISERS, WATER VALVES, POND WALL, ETC., DURING ALL CONSTRUCTION PHASES, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND/OR OBTAINING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING ANY PROJECT WORK.
- ALL DEMOLITION DEBRIS AND OTHER EXCESS MATERIAL SHALL BE HAULED OFF-SITE AS DIRECTED BY THE OWNER AND PROPERLY DISPOSED OF IN A LEGAL MATTER, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL COORDINATE AND BE RESPONSIBLE FOR THE STAGING AND REMOVAL OF ALL DEMOLITION ITEMS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITY TO EXISTING ELEMENTS THAT ARE TO REMAIN.

NOTES

- REFER TO SITE PLAN SHEETS C3.1 FOR ADDITIONAL INFORMATION.
- ALL BUSINESSES AND RESIDENCES TO REMAIN OPEN, OPERABLE AND ACCESSIBLE THROUGHOUT CONSTRUCTION. TEMPORARY WALKS, BARRIERS AND DIRECTIONAL SIGNAGE TO BE INSTALLED AS NEEDED TO ASSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS.
- CONTRACTOR TO COMPLETE ONE BLOCK AT A TIME FROM DEMOLITION THROUGH INSTALLATION OF CURB AND SIDEWALKS. TOPSOIL AND LANDSCAPE MAY BE INSTALLED AT ONCE THROUGHOUT PROJECT.
- ALL UNDERGROUND UTILITIES TO REMAIN UNLESS NOTED OTHERWISE ON THESE PLANS.
- ALL UTILITIES, VALVES, METERS, FIRE HYDRANTS, THAT FALL INSIDE THE PROPOSED STREETSCAPE PROJECT ARE TO BE FLUSH WITH THE PROPOSED FINISHED GRADE.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING MARKING OF THE UTILITIES WITH 'ONE-CALL' AND THE CITY OF LITTLE ROCK.
- PROVIDE 36" ACCESSIBLE ROUTE AROUND SIGNAL POLES. CONTACT CITY FOR REVIEW PRIOR TO INSTALLATION OF SIDEWALKS / RAMPS.
- REMOVE EXISTING CROSSWALK BARS AND STOP BARS

LEGEND

- REMOVE STREET (ASPHALT)
- REMOVE SIDEWALK AND DRIVEWAY (CONCRETE)
- MILL INTERIOR 2" DEPTH (ASPHALT)
- REMOVE EXISTING NEIGHBORHOOD SIGN
- REMOVE CONCRETE CURB & GUTTER



SCALE: 1" = 40'-0"
GRAPHIC SCALE
0 10 20 40



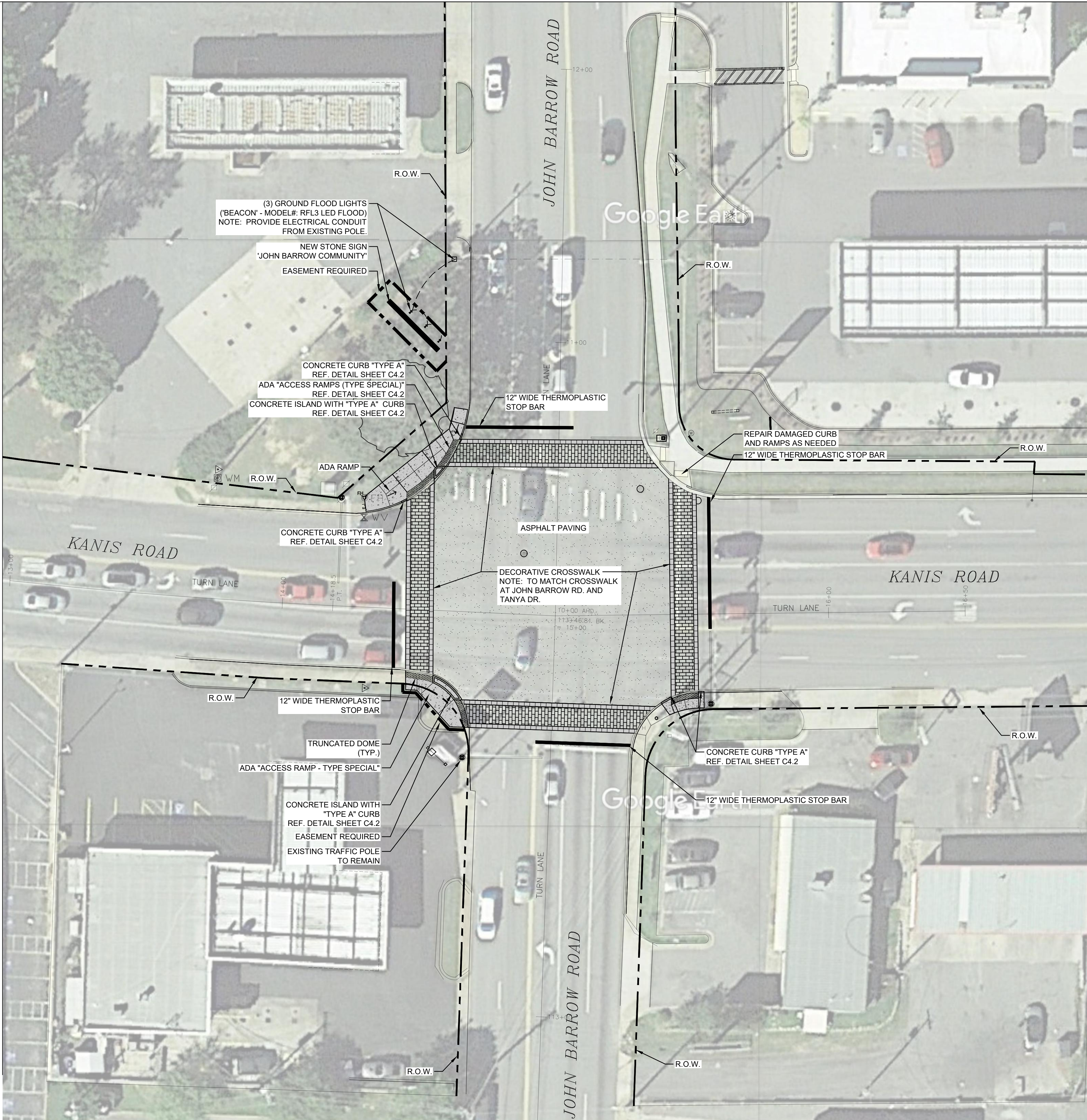
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
JOHN BARROW RD STREETSCAPE
DEMOLITION AND EROSION PLAN
JOHN BARROW RD & KANIS RD INTERSECTION

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

100% SUBMITTAL

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1" = 20'-0"
PROJECT NO.
06-17-ST-267
SHEET NO.
C2.1



LEGEND

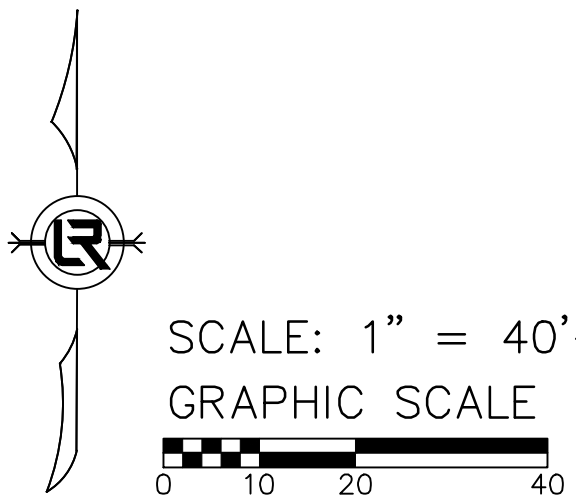
- 4" THICK CONCRETE WALK
- 2" DEPTH ASPHALT PAVING
- COLORLED AND PATTERNED CONCRETE CROSSWALK (TYP.)
- CONCRETE CROSSWALK BANDS (BOTH SIDES OF CROSSWALK) (TYP.)

NOTES

- REFER TO SHEET C1.1 FOR ADDITIONAL INFORMATION.
- ALL BUSINESSES AND RESIDENCES TO REMAIN OPEN, OPERABLE AND ACCESSIBLE THROUGHOUT CONSTRUCTION. TEMPORARY WALKS, BARRIERS AND DIRECTIONAL SIGNAGE TO BE INSTALLED AS NEEDED TO ASSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS.
- CONTRACTOR TO COMPLETE ONE CORNER SECTION AT A TIME FROM DEMOLITION THROUGH INSTALLATION OF CURB AND SIDEWALKS. TOPSOIL AND LANDSCAPE MAY BE INSTALLED AT ONCE THROUGHOUT PROJECT.
- ALL UNDERGROUND UTILITIES TO REMAIN UNLESS NOTED OTHERWISE ON THESE PLANS.
- ALL UTILITIES, VALVES, METERS, FIRE HYDRANTS, THAT FALL INSIDE THE PROPOSED STREETSCAPE PROJECT ARE TO BE FLUSH WITH THE PROPOSED FINISHED GRADE.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING MARKING OF THE UTILITIES WITH 'ONE-CALL' AND THE CITY OF LITTLE ROCK.
- PROVIDE 36" ACCESSIBLE ROUTE AROUND SIGNAL POLES. CONTACT CITY FOR REVIEW PRIOR TO INSTALLATION OF SIDEWALKS / RAMPS.
- PCE WILL BE REQUIRED FOR ANY WORK INCLUDING WALKS, LIGHT POLES, ETC. WITHIN R.O.W.

SIDEWALK NOTES

- SIDEWALK TO BE NO MORE THAN 5% LONGITUDINAL SLOPE ACROSS SLOPE 2% MAX.
- CONTRACTOR TO PROVIDE STAKEOUT OF SIDEWALK / BOARDWALK DESIGN FOR APPROVAL PRIOR TO CONSTRUCTION.



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
JOHN BARROW RD STREETSCAPE
SITE PLAN
JOHN BARROW RD & KANIS RD INTERSECTION

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

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06-17-ST-267
SHEET NO.
C3.1



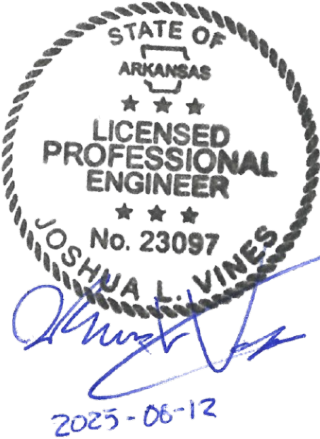
KANIS ROAD AND JOHN BARROW ROAD						
POLE DIMENSIONS						
POLE	MAST ARM	* MAST ARM ANGLE	** HAND HOLE	VERT. SHAFT	LUM. ARM	* LUM. ANGLE
A	EXISTING					
B	EXISTING					
C	EXISTING					
D	EXISTING					
E	N/A	N/A	N/A	4'	N/A	N/A
F	N/A	N/A	N/A	12'	N/A	N/A
G	N/A	N/A	N/A	4'	N/A	N/A
H	N/A	N/A	N/A	4'	N/A	N/A
I	N/A	N/A	N/A	12'	N/A	N/A
J	N/A	N/A	N/A	4'	N/A	N/A
POLES E, G, H, & J (SEE PEDESTRIAN PUSH BUTTON PEDESTAL DETAIL). POLES E, G, I, AND J FOUNDATIONS SHALL BE INSTALLED FLUSH WITH THE SIDEWALK. TOP OF POLES F & H FOUNDATION ELEVATIONS SHALL BE THREE (3) INCHES ABOVE THE FINISHED SURFACE ELEVATION.						

NOTES

- REFER TO SHEET C1.1 FOR ADDITIONAL INFORMATION.
- ALL BUSINESSES AND RESIDENCES TO REMAIN OPEN, OPERABLE AND ACCESSIBLE THROUGHOUT CONSTRUCTION. TEMPORARY WALKS, BARRIERS AND DIRECTIONAL SIGNAGE TO BE INSTALLED AS NEEDED TO ASSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS.
- CONTRACTOR TO COMPLETE ONE CORNER SECTION AT A TIME FROM DEMOLITION THROUGH INSTALLATION OF CURB AND SIDEWALKS. TOPSOIL AND LANDSCAPE MAY BE INSTALLED AT ONCE THROUGHOUT PROJECT.
- ALL UNDERGROUND UTILITIES TO REMAIN UNLESS NOTED OTHERWISE ON THESE PLANS.
- ALL UTILITIES, VALVES, METERS, FIRE HYDRANTS, THAT FALL INSIDE THE PROPOSED STREETScape PROJECT ARE TO BE FLUSH WITH THE PROPOSED FINISHED GRADE.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING MARKING OF THE UTILITIES WITH 'ONE-CALL' AND THE CITY OF LITTLE ROCK.
- PROVIDE 36" ACCESSIBLE ROUTE AROUND SIGNAL POLES. CONTACT CITY FOR REVIEW PRIOR TO INSTALLATION OF SIDEWALKS / RAMPS.
- PCE WILL BE REQUIRED FOR ANY WORK INCLUDING WALKS, LIGHT POLES, ETC. WITHIN R.O.W.
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDUIT.
- FOR PED HEAD P2 AND ASSOCIATED BUTTON, REUSE CABLE FOR EXISTING PED HEAD AND BUTTON ON POLE B.
- FOR PED HEAD P7 AND ASSOCIATED BUTTON, REUSE CABLE FOR EXISTING PED HEAD AND BUTTON ON POLE D.
- ALL NON-PEDESTRIAN SIGNALS TO REMAIN IN OPERATION THROUGHOUT THE PROJECT.
- ALL NEW CONDUIT INSTALLED TO CONTAIN 2-1c / #8 E.G.C. CABLE.
- ALL SIGNAL CABLES TO BE 14 A.W.G. UNLESS OTHERWISE NOTED.



SCALE: 1" = 20'-0"
GRAPHIC SCALE
0 5 10 20



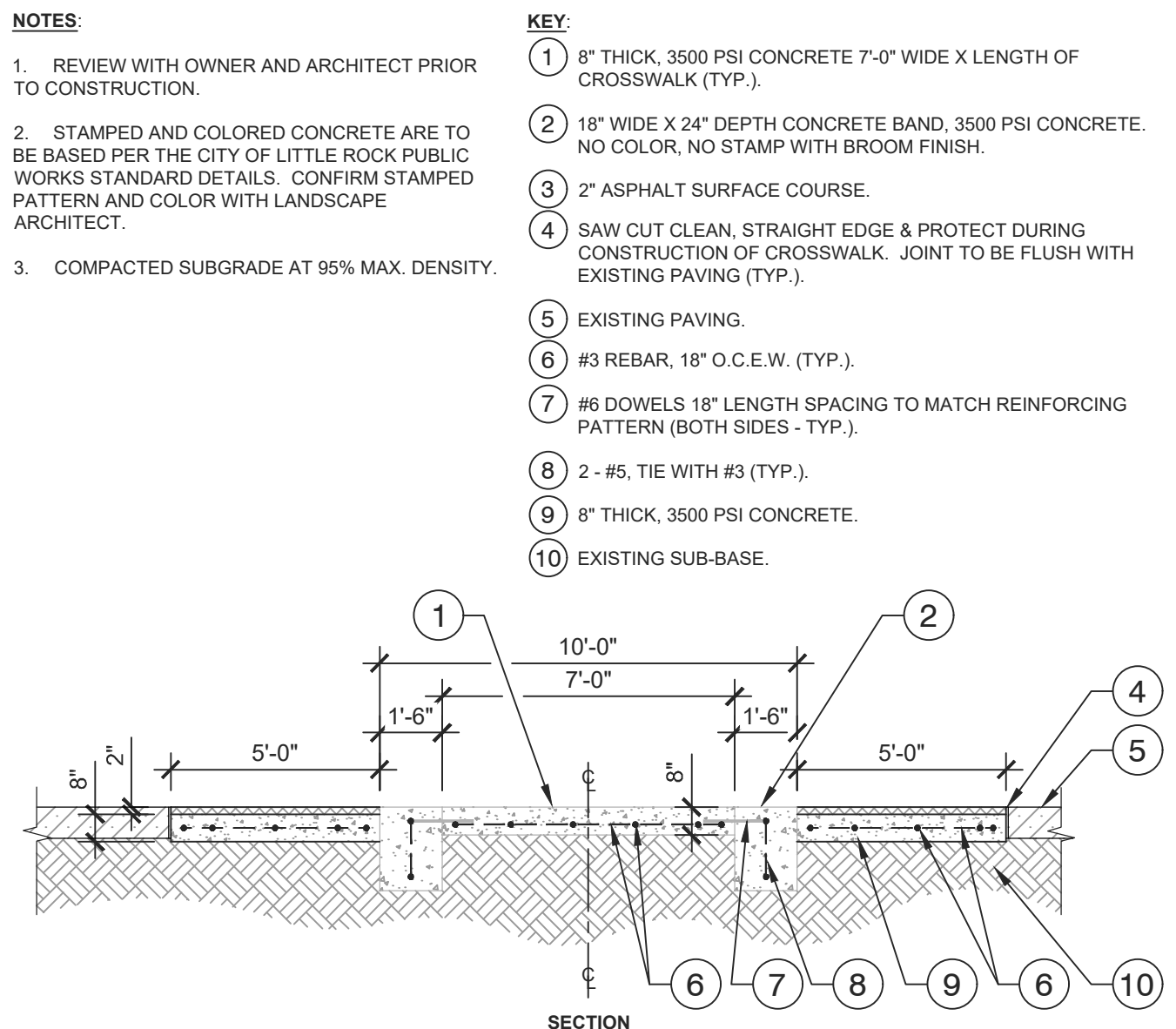
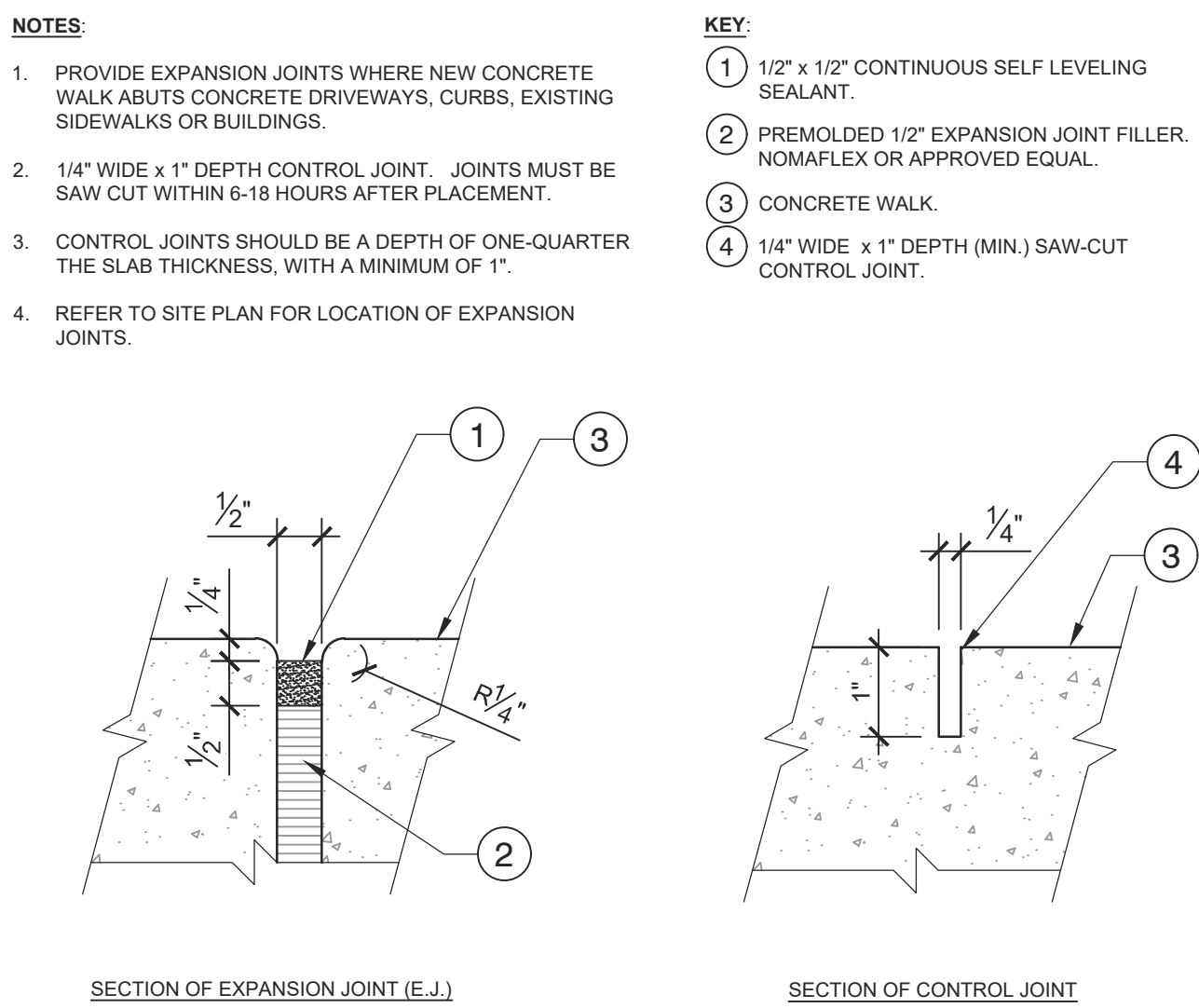
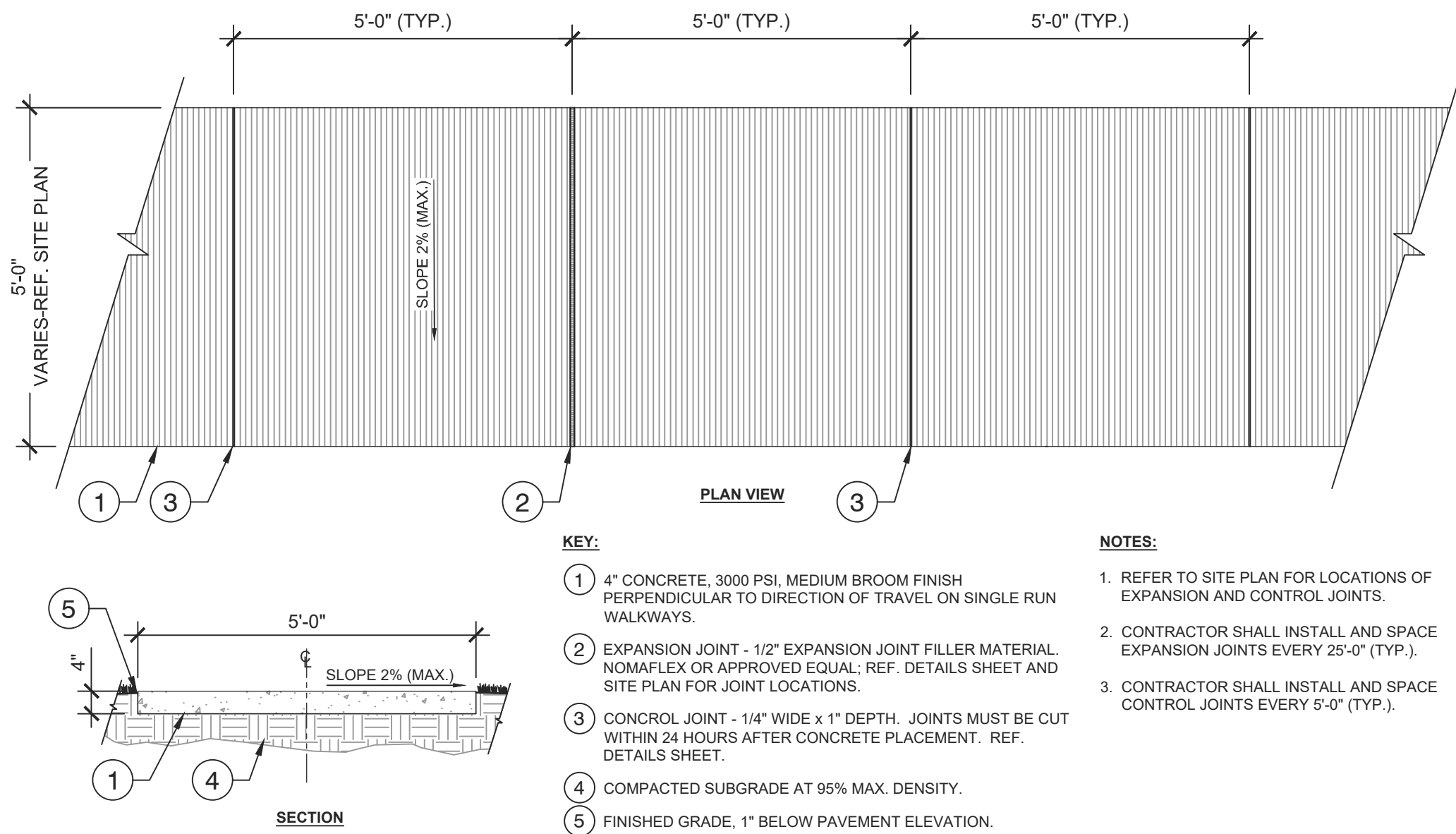
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
JOHN BARROW RD STREETSCAPE
JOHN BARROW RD & KANIS RD INTERSECTION
SIGNAL PLAN

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

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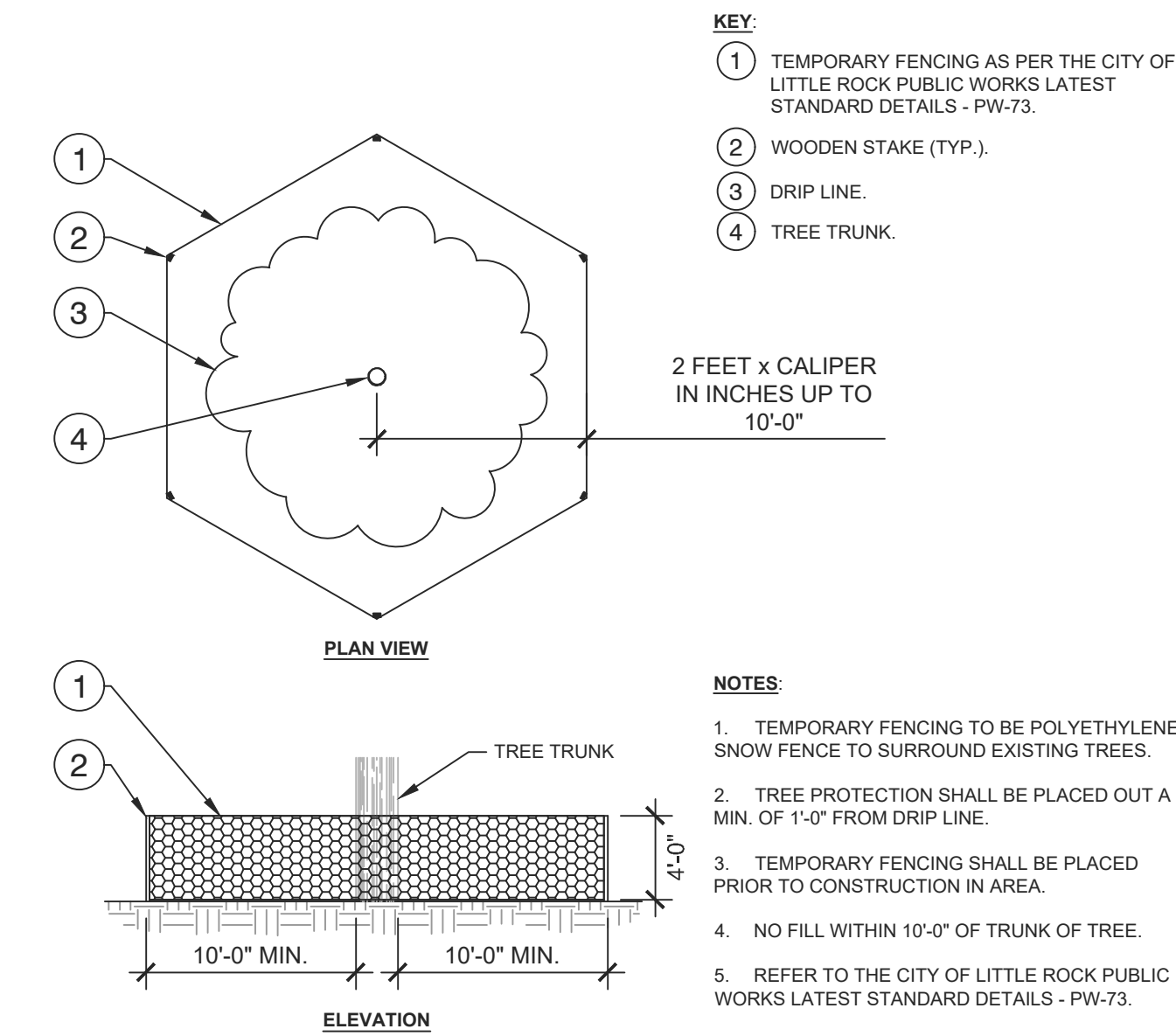
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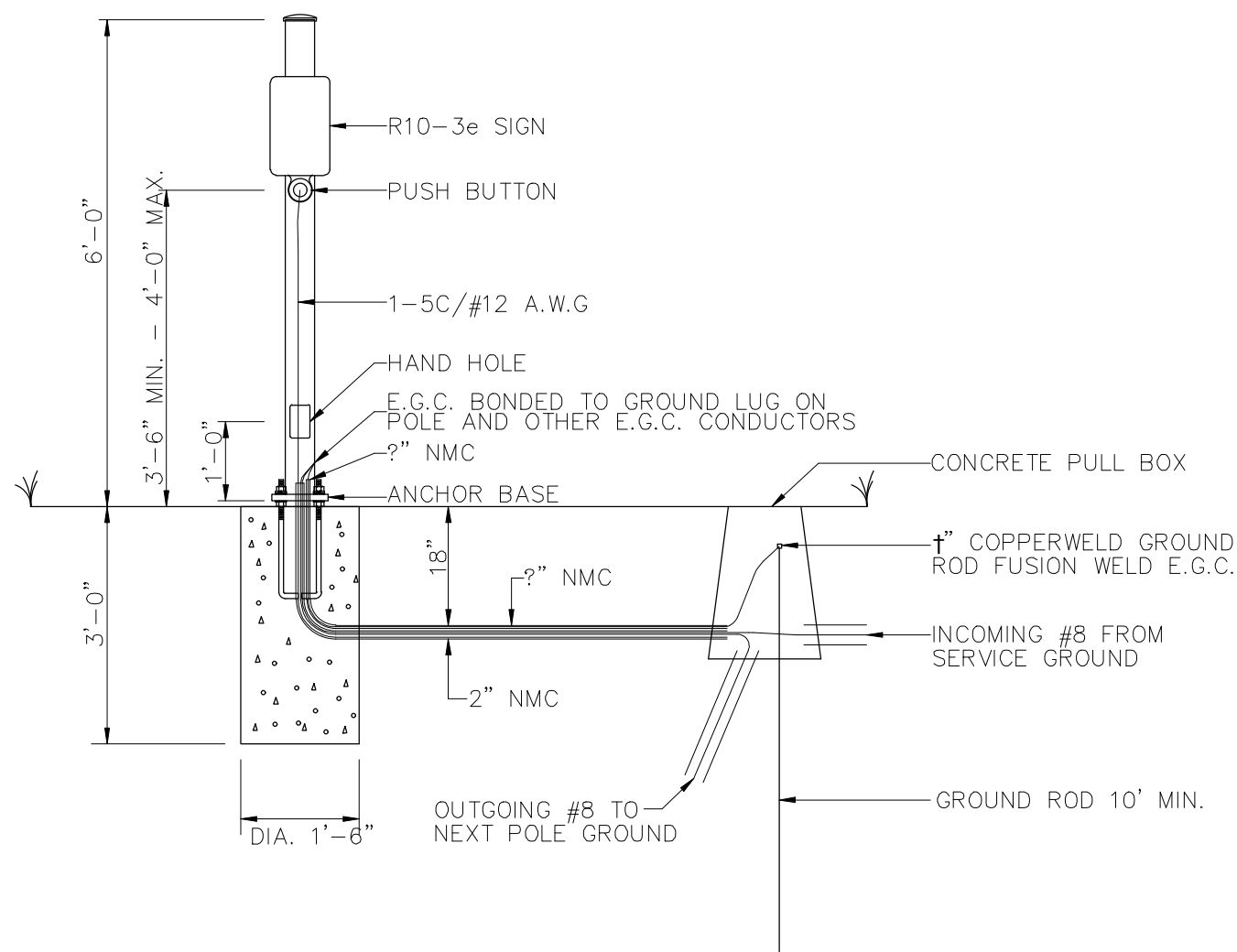
1 TYPICAL 5'-0" WIDE CONCRETE WALK
1/2" = 1'-0"

2 TYPICAL CONSTRUCTION JOINTS DETAIL
6" = 1'-0"

3 TYPICAL CROSSWALK SECTION DETAIL
1/4" = 1'-0"
P-ST-JOH1-07



4 TYPICAL TREE PROTECTION FENCING DETAIL
1/8" = 1'-0"



NOTES:

EACH PEDESTRIAN PUSH BUTTON SHALL HAVE ONE R10-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209. ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

MINIMUM STRUCTURAL REQUIREMENTS:
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

CONSTRUCTION SPECIFICATIONS:
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

POLE CAP - POLE CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

HAND HOLE - HAND HOLES SHALL BE 3 IN. X 5 IN. FOR PED POLES. MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACUUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL.

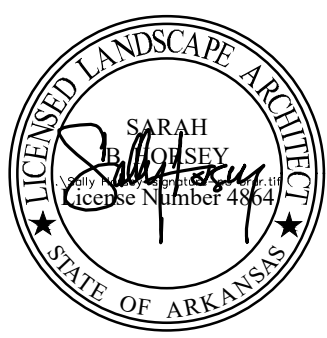
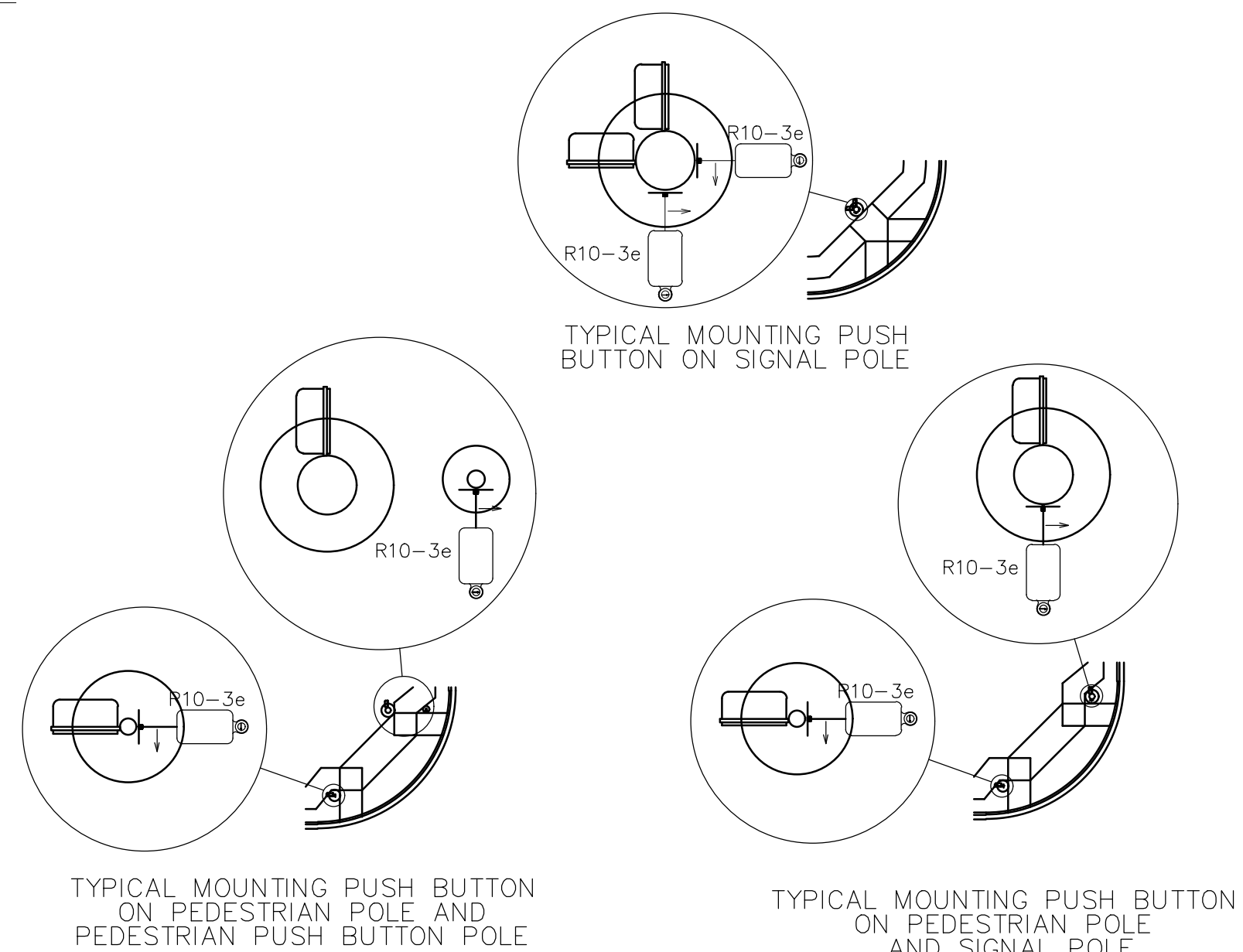
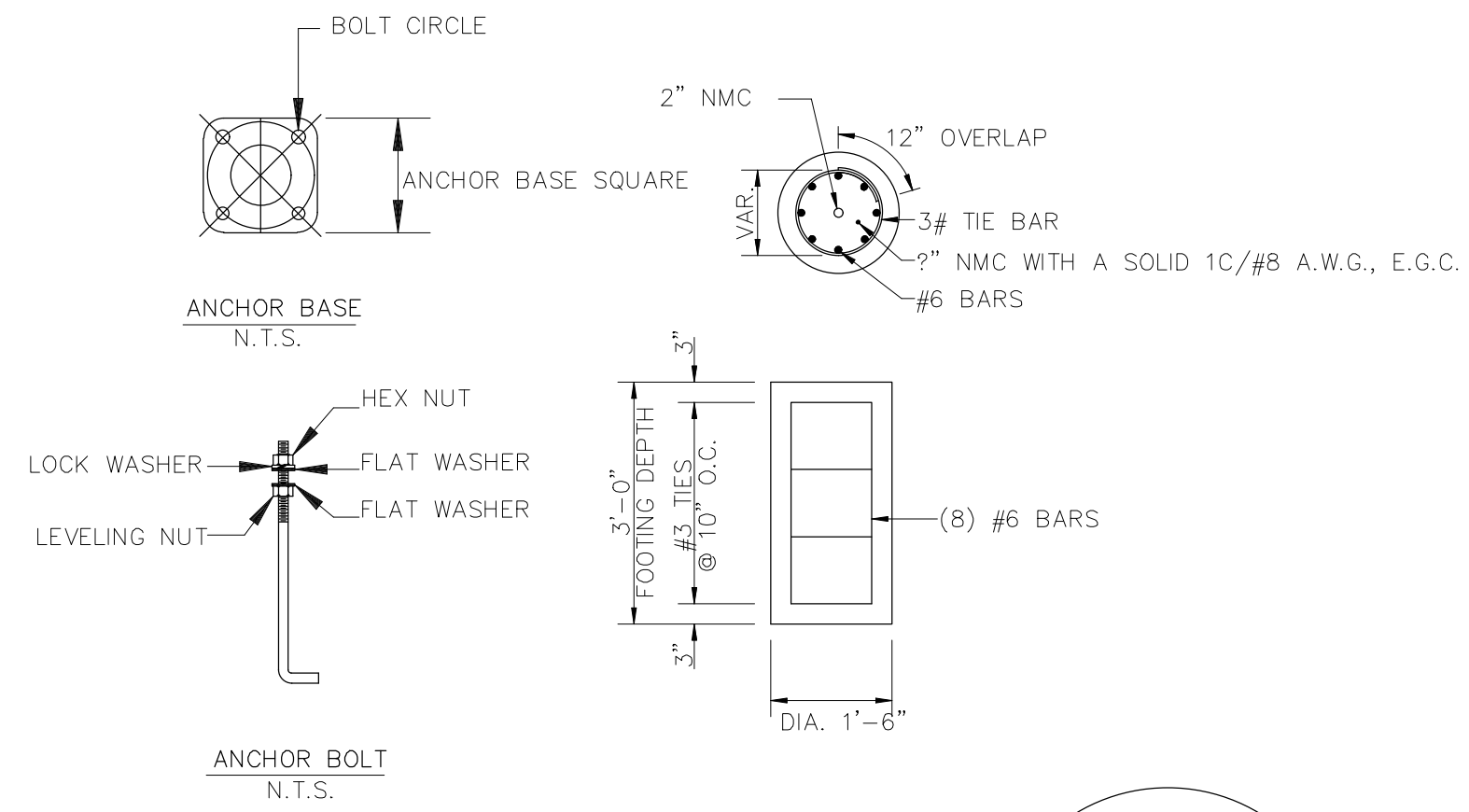
NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.

GROUND ROD - A 10' X 1" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND " NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID SEPARATELY.

POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A " WEEP HOLE. ALL CONCRETE SHALL BE CLASS "S" OR GREATER.

CONCRETE - ALL CONCRETE POLE FOUNDATION SHALL BE CLASS "S" OR GREATER.

5 PEDESTRIAN PUSH BUTTON PEDESTAL DETAIL
N.T.S.



REVISIONS	DATE

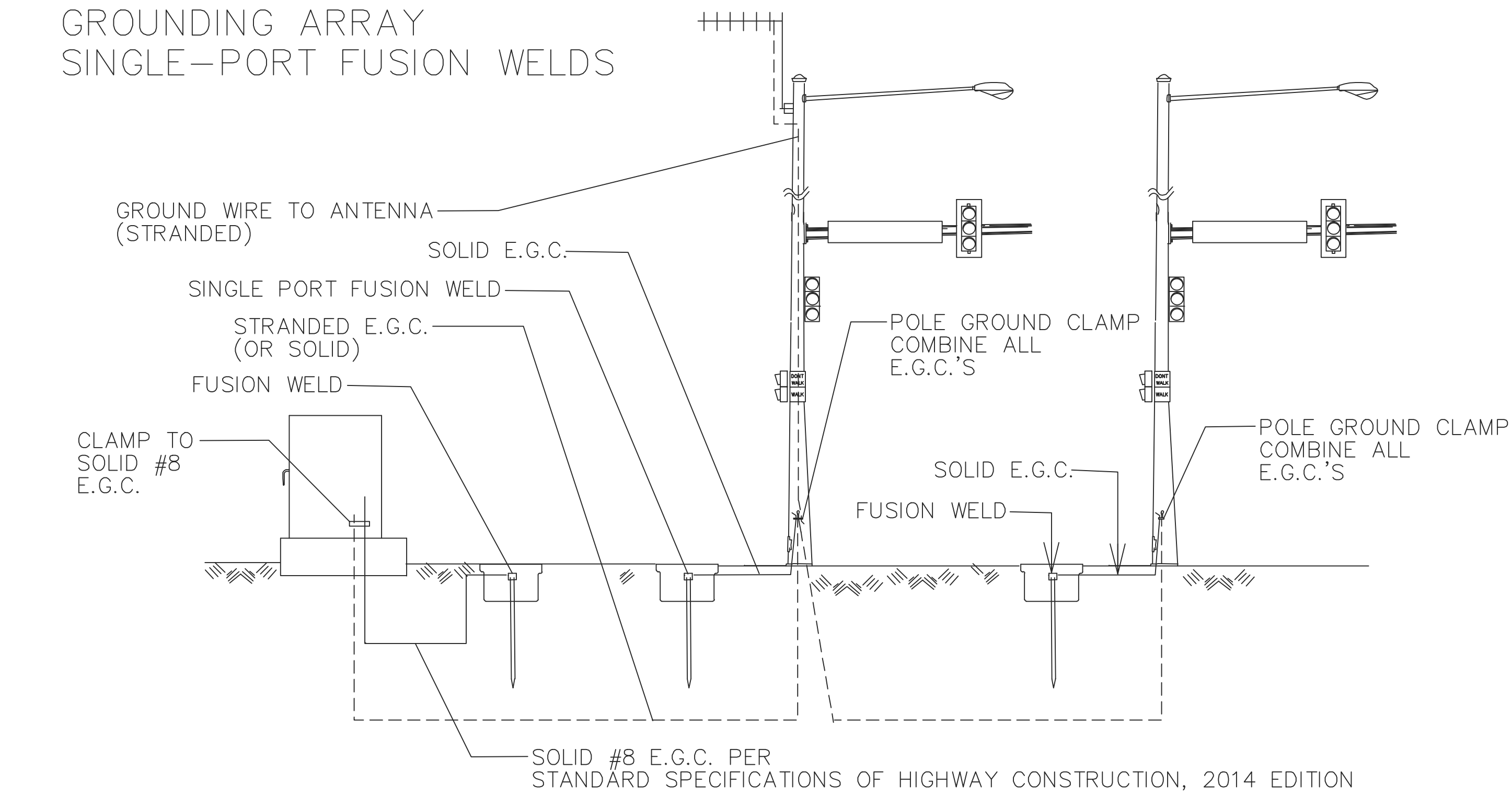
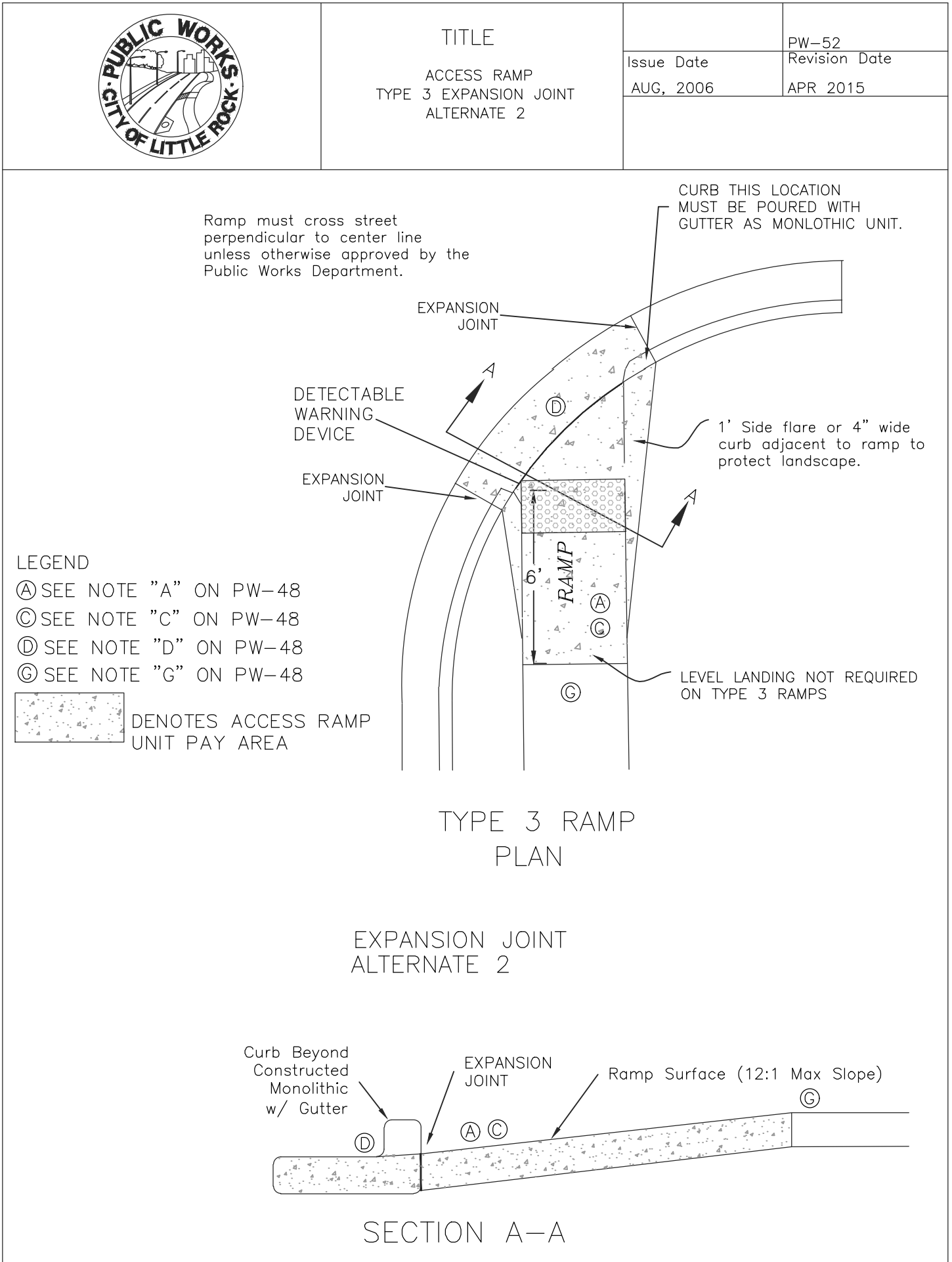
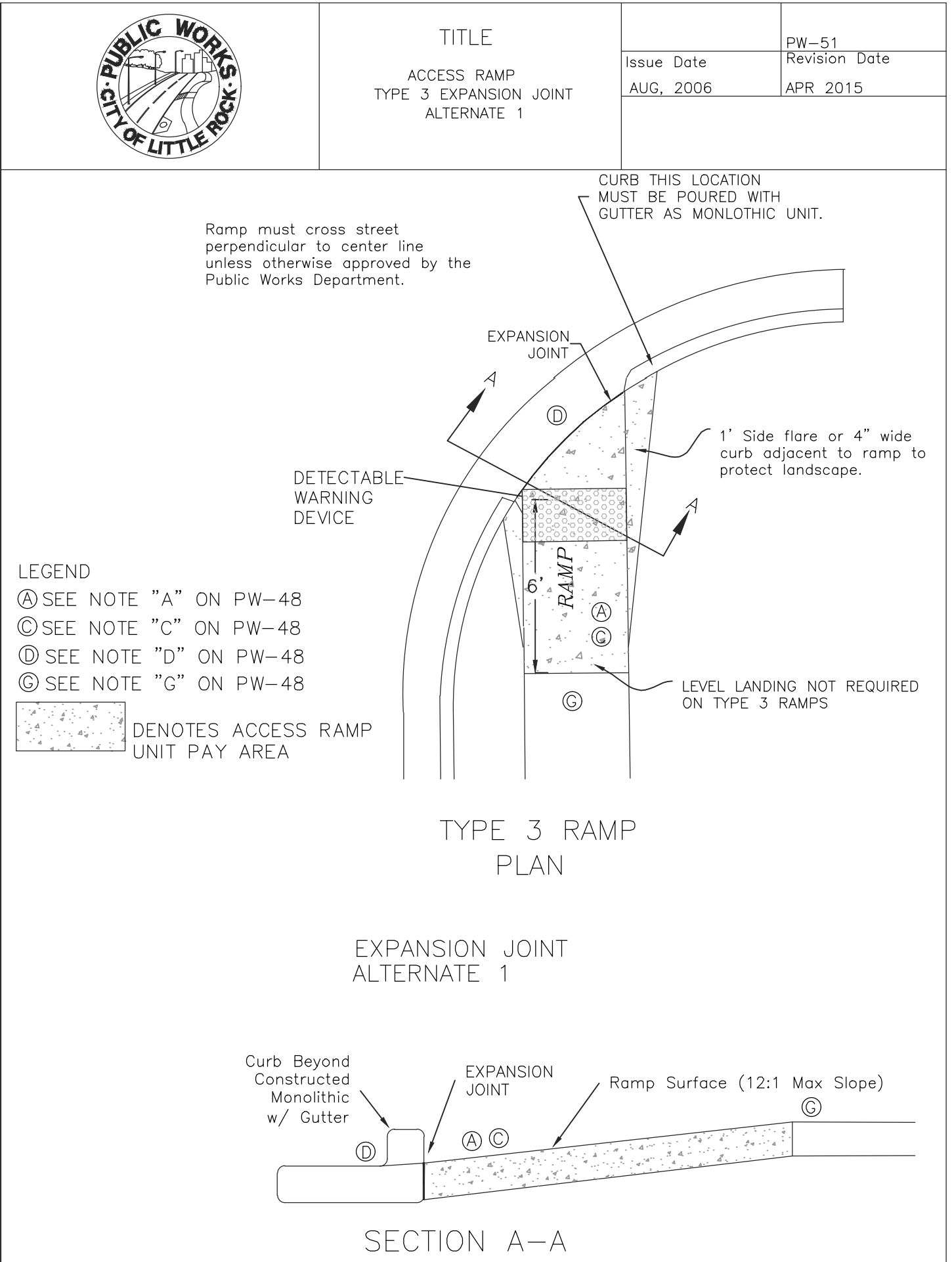
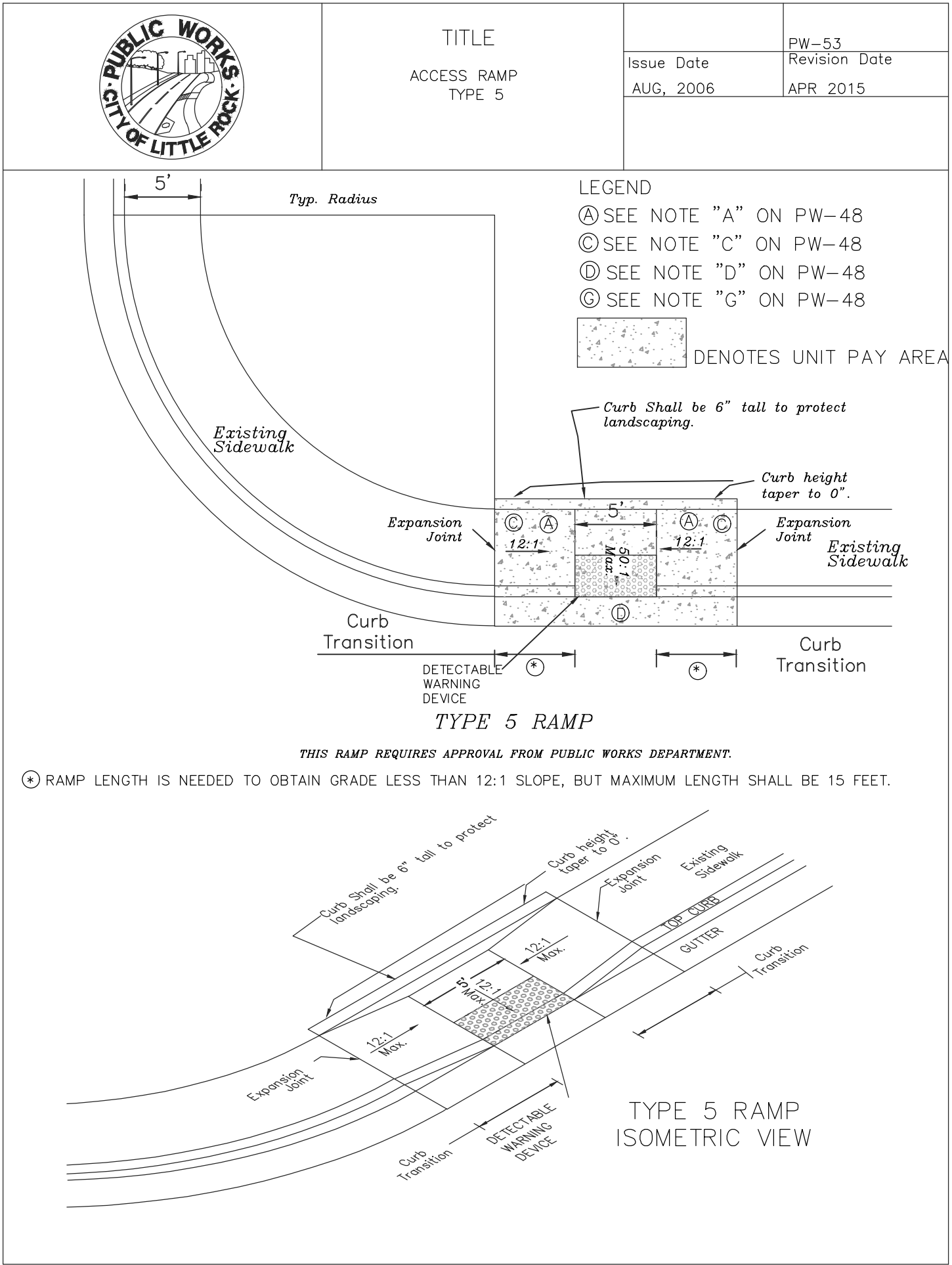
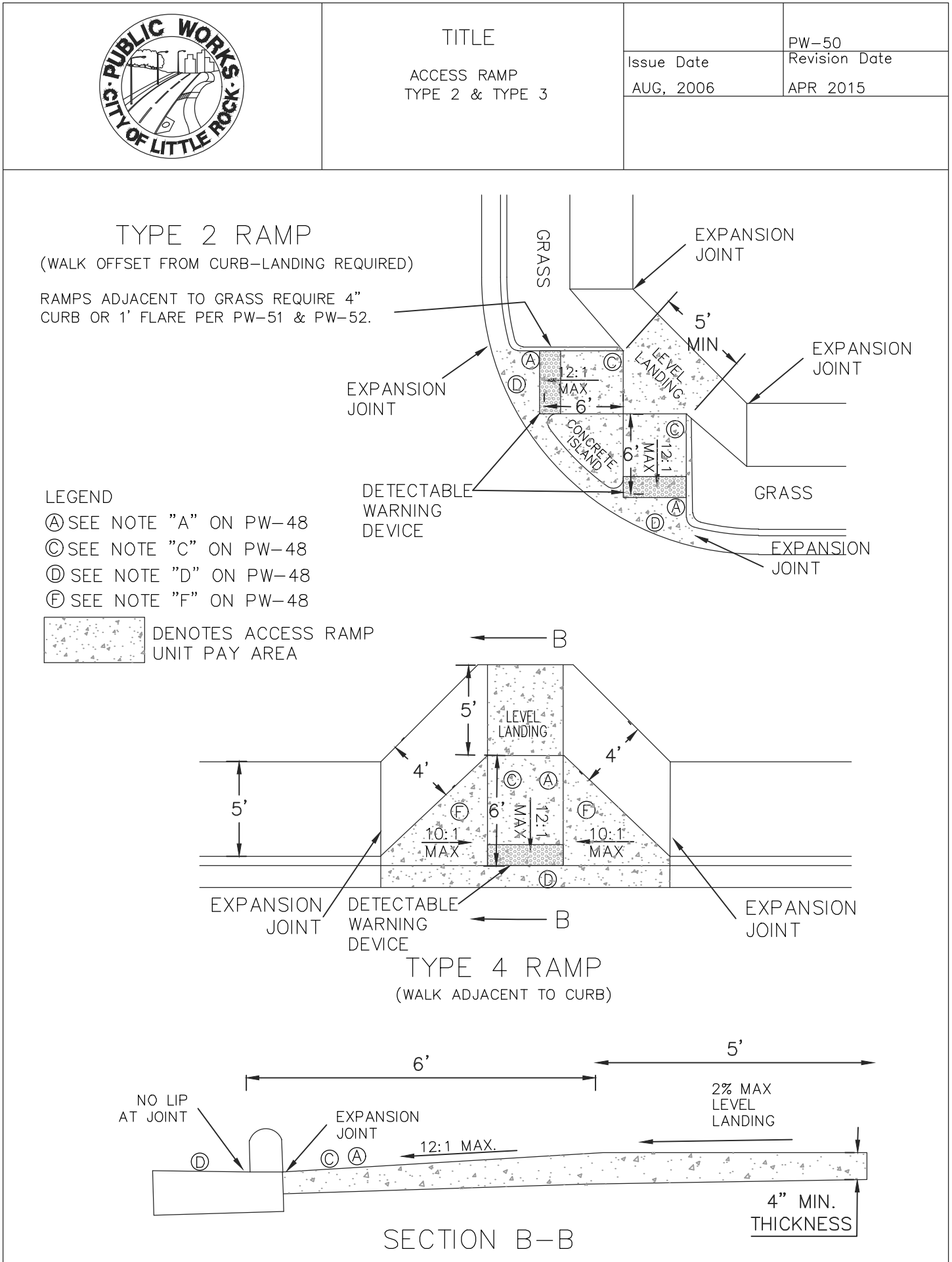
CITY OF LITTLE ROCK, ARKANSAS
JOHN BARROW RD STREETSCAPE
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CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

100% SUBMITTAL

DRAWN BY
LCJ
DESIGNED
SBH
CHECKED
SBH
DATE
06-13-25
SCALE

PROJECT NO.
06-17-ST-267
SHEET NO.
C5.1



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
JOHN BARROW RD STREETSCAPE
DETAIL SHEET
JOHN BARROW RD & KANIS RD INTERSECTION

DEPARTMENT OF PUBLIC WORKS
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NOTES:
PEDESTRIAN AND TRAFFIC SIGNAL HEAD SIGNS:
EACH ITEM "TRAFFIC SIGNAL HEAD (4 SEC., I-WAY)" SHALL INCLUDE A SIGN (RIO-12a) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD UNLESS REMOVED WITHIN THE SIGNAL PLAN NOTES.

EACH ITEM "TRAFFIC SIGNAL HEAD (3 SEC., I-WAY)" TO BE USED AS A LEFT TURN INDICATION ONLY SHALL INCLUDE A SIGN (RIO-10) AS SHOWN, ATTACHED TO THE MAST ARM OR SPAN ASSEMBLY 12" TO THE RIGHT OF THE SIGNAL HEAD.

EACH PEDESTRIAN PUSHBUTTON SHALL HAVE ONE RIO-3E SIGN ATTACHED TO THE POLE ABOVE THE BUTTON. ALL SIGNS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 723 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL SIGN BLANKS SHALL BE CONSTRUCTED OF ALUMINUM ALLOY (ASTM DESIGNATION B-209, ALLOY 5052-H38) WITH THICKNESS OF 0.100 INCH.

GENERAL NOTES:
1. MAST ARM POLES SHALL BE MOUNTED A MINIMUM OF FOUR (4') FEET BEHIND CURB OR SHOULDER.

2. OCTAGONAL POLES AND ARMS MEETING THE REQUIREMENTS OF THE PLANS SPECIFICATIONS CAN BE INSTALLED IN LIEU OF ROUND. ALL POLES AND ARMS IN A JOB MUST BE THE SAME SHAPE.

3. MINIMUM STRUCTURAL REQUIREMENTS:
DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION (2001) WITH 2003 AND 2006 INTERIMS.

USE FATIGUE CATEGORY I FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS 65 MPH AND GREATER AT THE STRUCTURE LOCATION AND ON ROUTES WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY II FOR ALL STRUCTURES ON ROUTES WHERE THE SPEED LIMIT IS LESS THAN 65 MPH AND GREATER THAN 45 MPH WITH MAST ARMS LESS THAN 60' AND ON ROUTES WHERE THE SPEED LIMITS OF 45 MPH AND LESS WITH AN MAST ARM OF 60' OR LONGER.

USE FATIGUE CATEGORY III FOR ALL STRUCTURES WHERE THE SPEED LIMIT IS 45 MPH AND LESS AND MAST ARMS LESS THAN 60'.

CONSTRUCTION SPECIFICATIONS:
STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION) WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

BASE WIND SPEED: 90 MPH.

STEEL MEMBERS CONSIDERED MAIN LOAD CARRYING MEMBERS WITH A THICKNESS GREATER THAN 1/2" SHALL MEET THE LONGITUDINAL CHARPY V-NOTCH TEST SPECIFIED IN SUBSECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DEAD LOAD: AS A MINIMUM, DESIGN SHALL BE BASED ON THE FIXED ATTACHMENTS SHOWN BELOW OR AS MODIFIED IN THE PLANS.

ALL SIGNAL HEADS TO BE ONE WAY, TWELVE (12") INCH AND HAVE FIVE (5") INCH BACK PLATES:

SIGNAL HEADS AT THE END OF MAST ARM - ONE 4 SEC., 85 LB., 14.5 SQ. FT., ONE SIGN MOUNTED 3 FEET FROM SIGNAL HEAD (2'-0" X 2'-6"; 20 LB.) REMAINING SIGNAL HEADS SPACED AT 8 FT. (3 SEC., 56 LB., 8.3 SQ. FT.); DESIGN TO ACCOMMODATE:
2 SIGNAL HEADS FOR MAST ARMS 10 FT. TO 16 FT.
3 SIGNAL HEADS FOR MAST ARMS 18 FT. TO 24 FT.
4 SIGNAL HEADS FOR MAST ARMS OVER 26 FT.

STREET NAME SIGN - 72" X 18", 36 LB., MOUNTED SUCH THAT OUTSIDE EDGE IS NOT GREATER THAN 12 FT. FROM POLE, DEPENDING UPON POSITION OF SIGNAL HEAD ADJACENT TO POLE, SIGN MAY OVERLAP POLE SHAFT.
ROADWAY LUMINAIRES (WHERE REQUIRED ON PLAN SHEET) - VARIABLE ARM LENGTH (MAX. WT. 75 LB., 3.3 SQ. FT.)
PEDESTRIAN SIGNALS - TWO 1 SEC., 12 INCH MOUNTED 8 FT. FROM BASE OF POLE, POST MOUNTED 3 SEC. SIGNAL HEAD AT 10 FT. ON SIDE OF POLE.

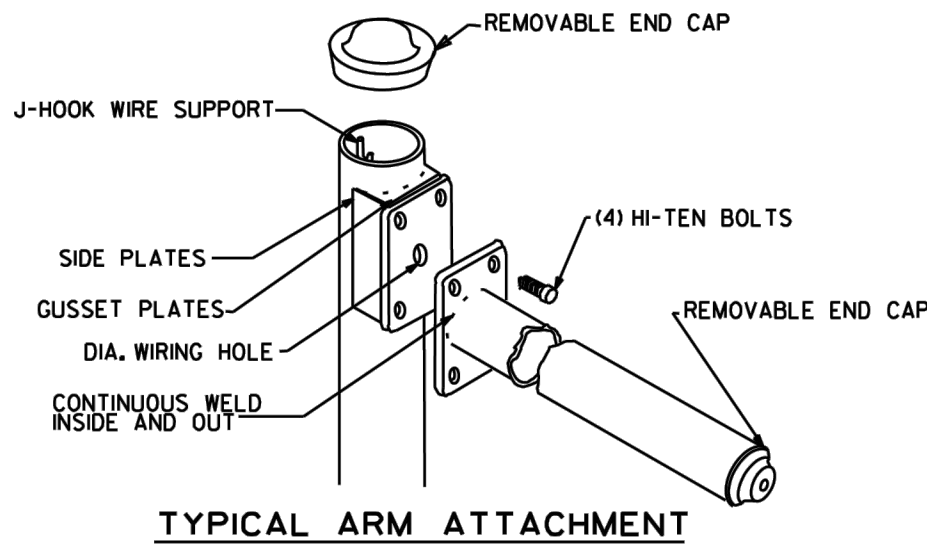
4. POLE/MAST ARM CAP - POLE AND MAST ARM CAPS SHALL BE PROVIDED, FABRICATED OF EITHER STEEL OR CAST ALUMINUM.

5. HAND HOLE - HAND HOLES SHALL BE 4 IN. X 6 IN. FOR STANDARD, AND 3 IN. X 5 IN. FOR PED. POLES. MINIMUM PLACED APPROXIMATELY 12 INCHES FROM BASE, AND SHALL BE FIXED WITH A BOLT DOWN COVER. A VACUUM FORMED ABS COVER IS AN ACCEPTABLE ALTERNATE TO STEEL. POLES GREATER THAN 21 FT. IN HEIGHT (FOR ROADWAY LUMINAIRE ATTACHMENT) SHALL INCLUDE A HAND HOLE WITHIN 12 INCHES OF MAST ARMS ATTACHMENT(S).

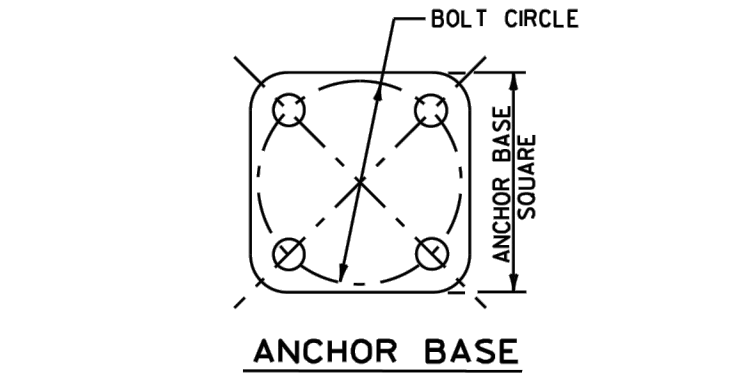
6. POLE/MAST ARM TAPER SLOPE - AVERAGE TAPER OF SIGNAL MAST ARMS AND POLE SHAFT SHALL BE 0.125 TO 0.15 INCHES PER FOOT.

MAST ARM CENTERLINE ANGLE AT ATTACHMENT POINT WITH POLE SHAFT MAINTAIN NOT LESS THAN 0.5 DEGREES OR MORE THAN 4 DEGREES POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE. THE MAST ARM SHALL MAINTAIN A POSITIVE SLOPE AFTER IT IS PLACED UNDER LOAD.

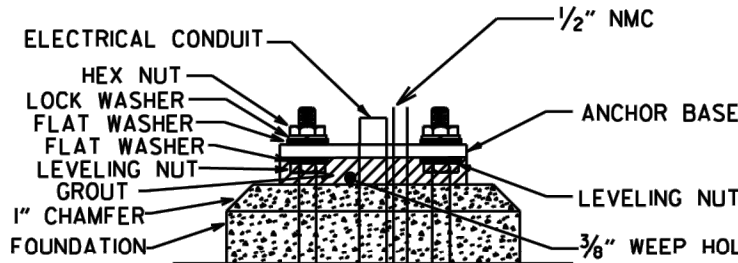
7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN NUT COVER FOR EACH ANCHOR BOLT.



TYPICAL ARM ATTACHMENT



ANCHOR BASE



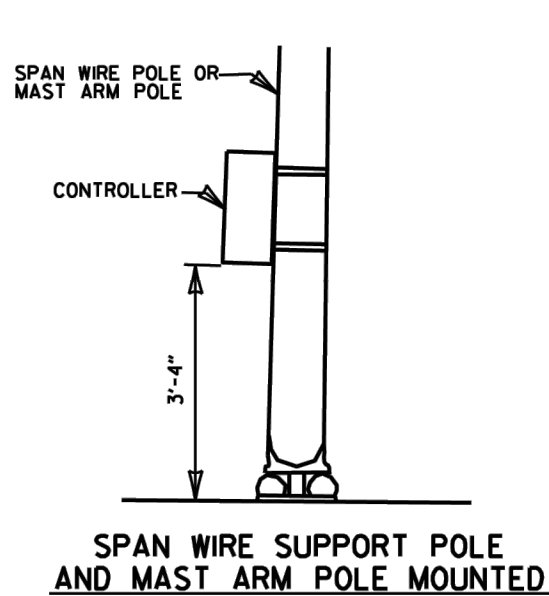
THE SWEEPING "L" IN THE FOUNDATION SHALL BE THE SAME SIZE AS THE CONDUIT FROM THE FOUNDATION TO THE PULL BOX AS SHOWN ON THE PLANS.

THE GROUND ROD SHALL BE FUSION WELDED TO A 1/2" X 8 A.W.G. SOLID COPPER GROUND WIRE. ATTACHMENT TO THE PRIMARY GROUND MAY BE BY AN APPROVED CLAMP. THE GROUND ROD IS TO BE LOCATED IN THE CONCRETE PULL BOX.

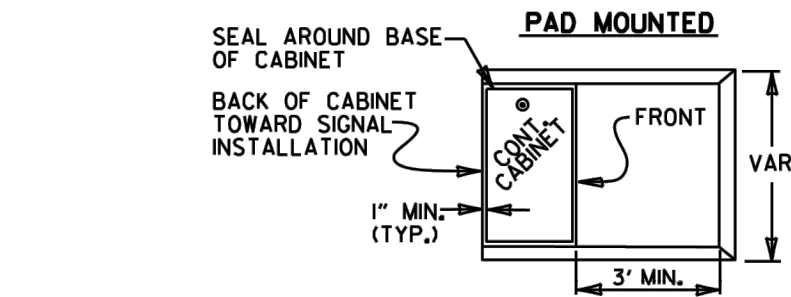
TYPICAL FOUNDATION DETAILS

POLE FOUNDATION MINIMUM DIMENSIONS AND STEEL REINFORCING. ALL REINFORCING STEEL SHALL BE GRADE 40 MIN.

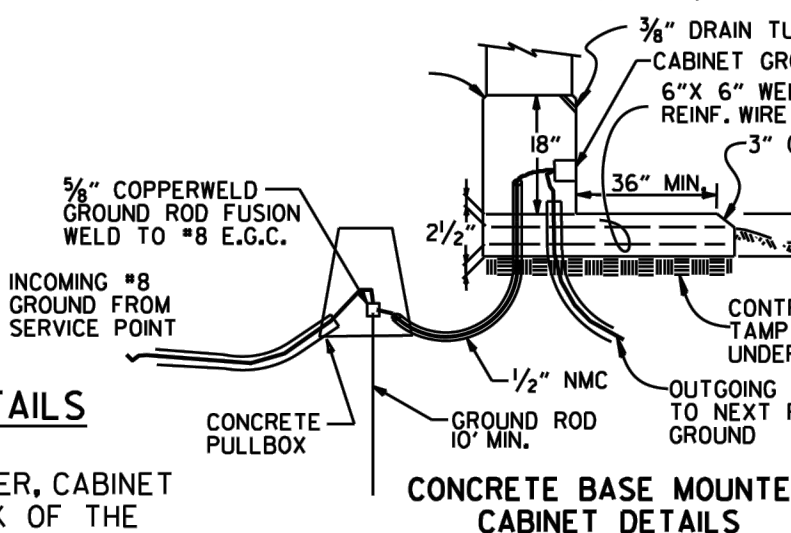
ARM LENGTH	FOUNDATION DIAMETER	DEPTH "L"*	STEEL		
			VERTICAL	HORIZONTAL	O.C.
PED	30"	7'-0"	12-#7 (6'-6")	10-#4	8.44"
2' TO 12'	30"	10'-6"	12-#7 (10'-0")	15-#4	8.42"
OVER 12' TO 20'	30"	11'-6"	12-#7 (11'-0")	16-#4	8.66"
OVER 20' TO 35'	36"	12'-6"	13-#8 (12'-0")	17-#4	8.88"
OVER 35' TO 50'	36"	13'-6"	13-#8 (13'-0")	19-#4	8.56"
OVER 50' TO 72'	42"	14'-6"	18-#8 (14'-0")	20-#4	8.74"
TWINS TO 20'	30"	16'-0"	12-#6 (15'-6")	22-#4	8.76"
TWINS OVER 20' TO 44'	36"	16'-0"	13-#8 (15'-6")	22-#4	8.76"
TWINS OVER 44' TO 50'	42"	16'-0"	18-#8 (15'-6")	22-#4	8.76"
TWINS OVER 50' TO 72'	42"	16'-6"	18-#8 (16'-0")	23-#4	8.64"



SPAN WIRE SUPPORT POLE AND MAST ARM POLE MOUNTED



PAD MOUNTED



CONCRETE BASE MOUNTED CABINET DETAILS

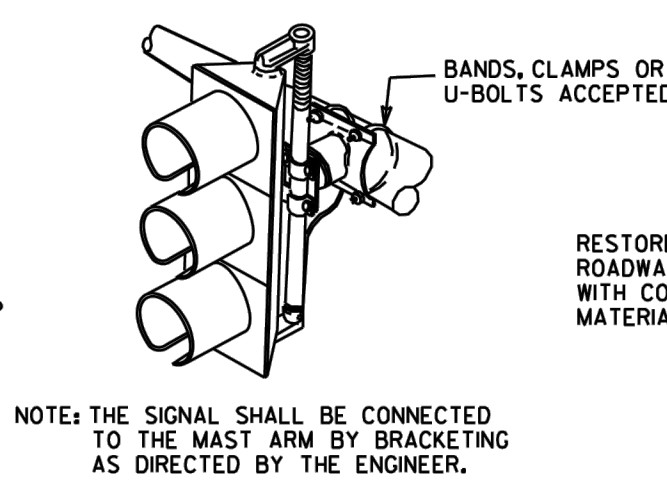
CONTROLLER CABINET MOUNTING DETAILS

NOTE:
UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CABINET ORIENTATION SHALL BE SUCH THAT THE BACK OF THE CABINET IS PARALLEL TO THE STREET AND POSITIONED TO ALLOW VISIBILITY OF THE SIGNAL DISPLAY WHILE OBSERVING THE CONTROLLER FRONT PANEL.

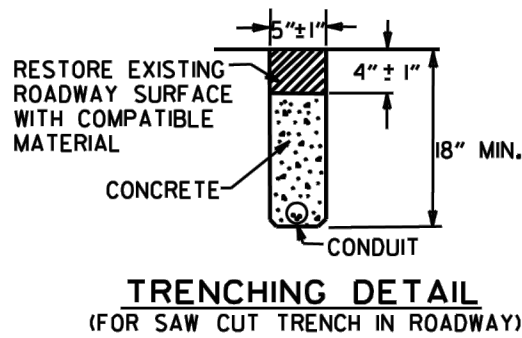
8. GROUND ROD - A 10' X 5/8" GROUND ROD SHALL BE INSTALLED IN THE CONCRETE PULL BOX FOR EACH POLE AND THE CONTROLLER. PAYMENT FOR THE GROUND ROD AND 1/2" NMC SHALL BE INCLUDED IN ITEM 714 FOR SIGNAL POLES AND ITEM 701 FOR THE CONTROLLER. THE CONCRETE PULL BOX AND CONDUCTOR BOX SHALL BE PAID SEPARATELY.

9. POLE BASE/FOUNDATION - ANCHOR BOLTS SHALL INCLUDE AS A MINIMUM, ONE LEVELING NUT, TWO FLAT WASHERS, ONE LOCK WASHER, AND ONE HEX NUT. PERIMETER OF ANCHOR BASE SHALL BE GROUTED WITH A 1/4" WEEP HOLE. ALL CONCRETE SHALL BE CLASS "S" OR GREATER.

10. CONCRETE - ALL CONCRETE FOR CONTROLLER CABINET AND POLE FOUNDATIONS SHALL BE CLASS "S" OR GREATER.



NOTE: THE SIGNAL SHALL BE CONNECTED TO THE MAST ARM BY BRACKETING AS DIRECTED BY THE ENGINEER.

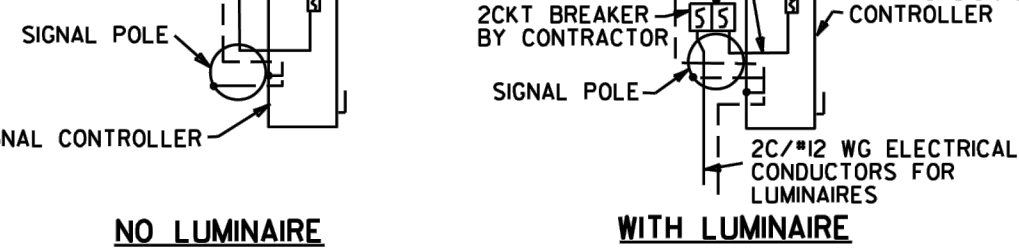
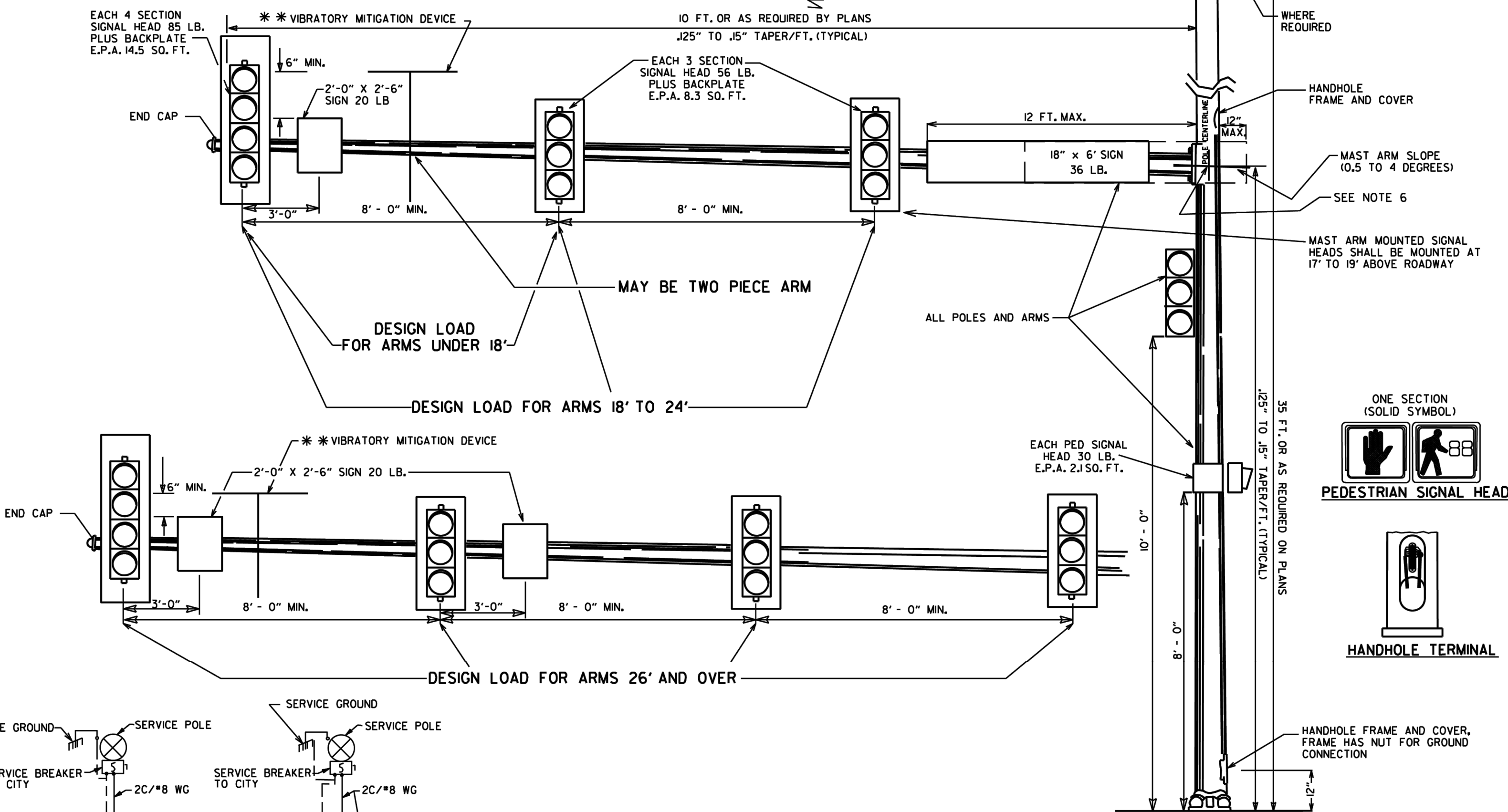


TRENCHING DETAIL (FOR SAW CUT TRENCH IN ROADWAY)

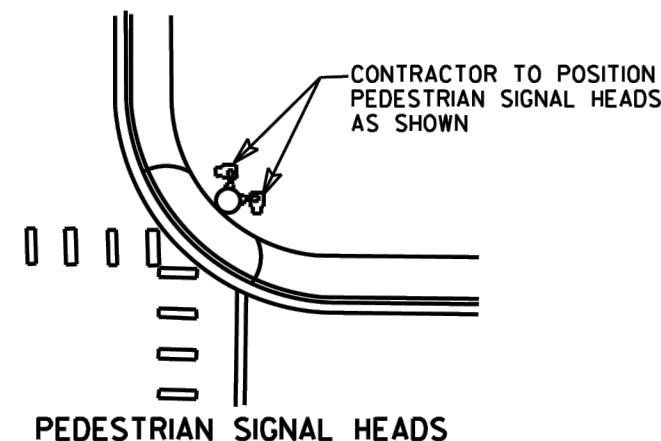
* WHEN THE GROUND ELEVATION AT THE POLE IS LOWER THAN THE ROADWAY ELEVATION, THE LENGTH OF FOUNDATION ABOVE THE GROUND MAY BE INCREASED TO PROVIDE THE REQUIRED SIGNAL HEAD CLEARANCE ABOVE THE ROADWAY. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 18" OR LESS, NO INCREASE IN DEPTH "L" WILL BE REQUIRED. WHEN THE REQUIRED LENGTH OF FOUNDATION ABOVE THE GROUND IS 5'-6" OR LESS, INCREASE DEPTH "L" BY 1'-0". FOR LENGTHS GREATER THAN 5'-6", DEPTH "L" SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. LONGITUDINAL REINFORCING, AS SHOWN IN THE TABLE, SHALL BE PROVIDED FOR THE LENGTH OF THE EXTENDED SHAFT AND #4 TIES SHALL BE PROVIDED AT A SPACING NOT TO EXCEED 9" ON CENTERS. PAYMENT WILL BE IN ACCORDANCE WITH SECTION 714 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE STANDARD SPECIFICATIONS.

* * IN LIEU OF DESIGNING THE STRUCTURE TO RESIST PERIODIC GALLOPING, A VIBRATORY MITIGATION DEVICE MAY BE PROVIDED BY THE POLE MANUFACTURER. THE VIBRATORY MITIGATION DEVICE SHALL BE AN ANTI-GALLOPING PANEL CONSISTING OF A 60" X 16" X 0.125" SIGN BLANK MOUNTED NEAR THE END OF THE MAST ARM NOT TO EXCEED ONE QUARTER OF THE LENGTH OF THE MAST ARM FROM THE END OF THE MAST ARM WITH THE LONG AXIS OF THE PANEL COLLINEAR WITH THE LONG AXIS OF THE MAST ARM. THE PANEL SHOULD BE MOUNTED AT SUCH THE HEIGHT AS TO PROVIDE AT LEAST 6" CLEAR FROM THE TOP OF ANY SIGNAL ASSEMBLY OF SIGN PANEL LOCATED ON THE MAST ARM WITHIN THE LENGTH OF THE ANTI-GALLOPING PANEL.

TRUCK-INDUCED GUST LOADS SHALL BE EXCLUDED FOR FATIGUE DESIGN FOR ALL STRUCTURES EXCEPT MAST ARMS MOUNTED OVER FACILITIES WITH POSTED SPEEDS OF 65 MPH OR GREATER AT THE LOCATION OF THE STRUCTURE.



NOTE: ELECTRICAL GROUND CONDUCTOR IS BONDED TO ALL METAL ENCLOSURES



PEDESTRIAN SIGNAL HEADS

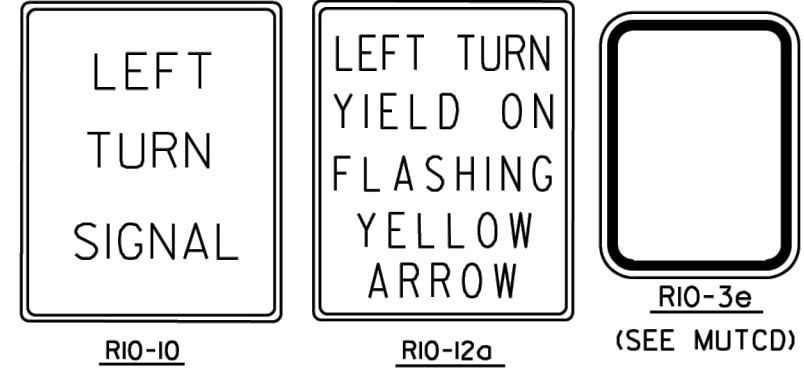
11. PEDESTRIAN PHASES - PEDESTRIAN MOVEMENTS SHALL BE PUSH BUTTON ACTUATED AND CONCURRENTLY TIMED, UNLESS OTHERWISE INDICATED ON THE PLAN SHEET(S). FURNISHING AND INSTALLING PEDESTRIAN PUSH SWITCH SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM 707 PEDESTRIAN SIGNAL HEAD.

SIGNAL OPERATION NOTES:

FLASHING OPERATION - PRIOR TO NORMAL OPERATION, SIGNAL SHALL BE FLASHED FOR A PERIOD OF 3 TO 5 WORK DAYS OR AS DIRECTED BY THE ENGINEER. SIGNAL SHALL BE PLACED IN OPERATION ONLY ON A REGULAR WORK DAY, EXCEPT FRIDAY.

THE CONTRACTOR MAY BE REQUIRED TO ALTER THE FLASHING DISPLAY DURING THE TEMPORARY FLASH PERIOD, AT THE TIME THE INTERSECTION IS PLACED IN PERMANENT OPERATION, THE FLASH SEQUENCE SHALL THEN BE RETURNED TO THAT INDICATED ON THE PLAN SHEETS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THESE ALTERATIONS IN FLASH SEQUENCE.

SPECIAL NOTE: 90 MPH WIND ZONE DESIGN, SEE NOTE 3. MINIMUM STRUCTURAL REQUIREMENTS.



ARKANSAS STATE HIGHWAY COMMISSION

STEEL POLE WITH MAST ARM

STANDARD DRAWING SD-II

02-13-24	REVISED SPECIAL SIGN TO RIO-12a SIGN	
11-16-17	REVISED NOTES, ADDED PEDESTRIAN SIGNAL HEAD DETAIL, ADDED HANDHOLE TERMINAL DETAIL, ADDED TRENCHING DETAIL	
02-27-14	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
12-08-16	REVISED NOTES	
02-27-14	REVISED NOTES	
09-12-13	ISSUED AS STANDARD DRAWING	
07-21-11	REVISED YMD, SIGNAL HEADS	
05-21-09	REVISED GROUNDING	
07-31-08	REVISED GROUNDING	
04-25-08	ADDED VIBRATORY MITIGATION DEVICE & NOTES	
04-18-08	REVISED AASHTO NOTES	
04-17-08	REVISED TO 2001 AASHTO STANDARDS	
10-12-04	REVISED CABINET ORIENTATION	
06-23-04	REVISED	
05-11-04	REV. NOTE 3/AASHTO REQUIREMENTS	
06-11-01	REV. NOTES & POLE MAST ARM SLOPE	
04-11-01	REVISED POLE TAPERS	
04-25-00	REV. NOTES & SIGNAL HEAD PLACEMENT	
11-22-99	REVISED FOUNDATION DETAILS	
11-17-98	REVISED DETAILS AND NOTES	
11-21-95	ISSUED	
DATE	REVISION	FILMED