

COMPONENTS OF CONTRACT PLANS SET

ROADWAY PLANS
SIGNALIZATION PLANS

A DETAILED INDEX APPEARS ON THE
KEY SHEET OF EACH COMPONENT

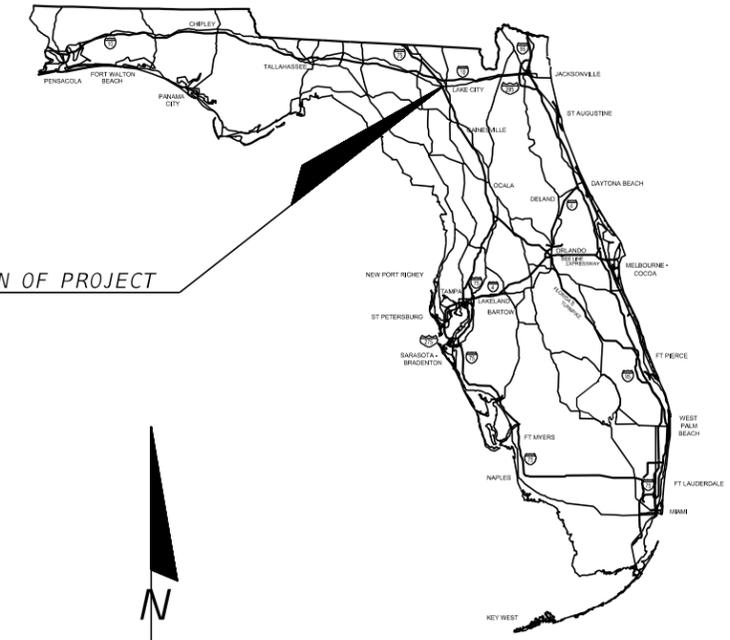
INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2-4	TYPICAL SECTIONS
5	GENERAL NOTES
6-9	ROADWAY PLAN
10-19	CROSS SECTIONS
20-22	SIGNING AND MARKING PLAN
23-32	TRAFFIC CONTROL PLAN

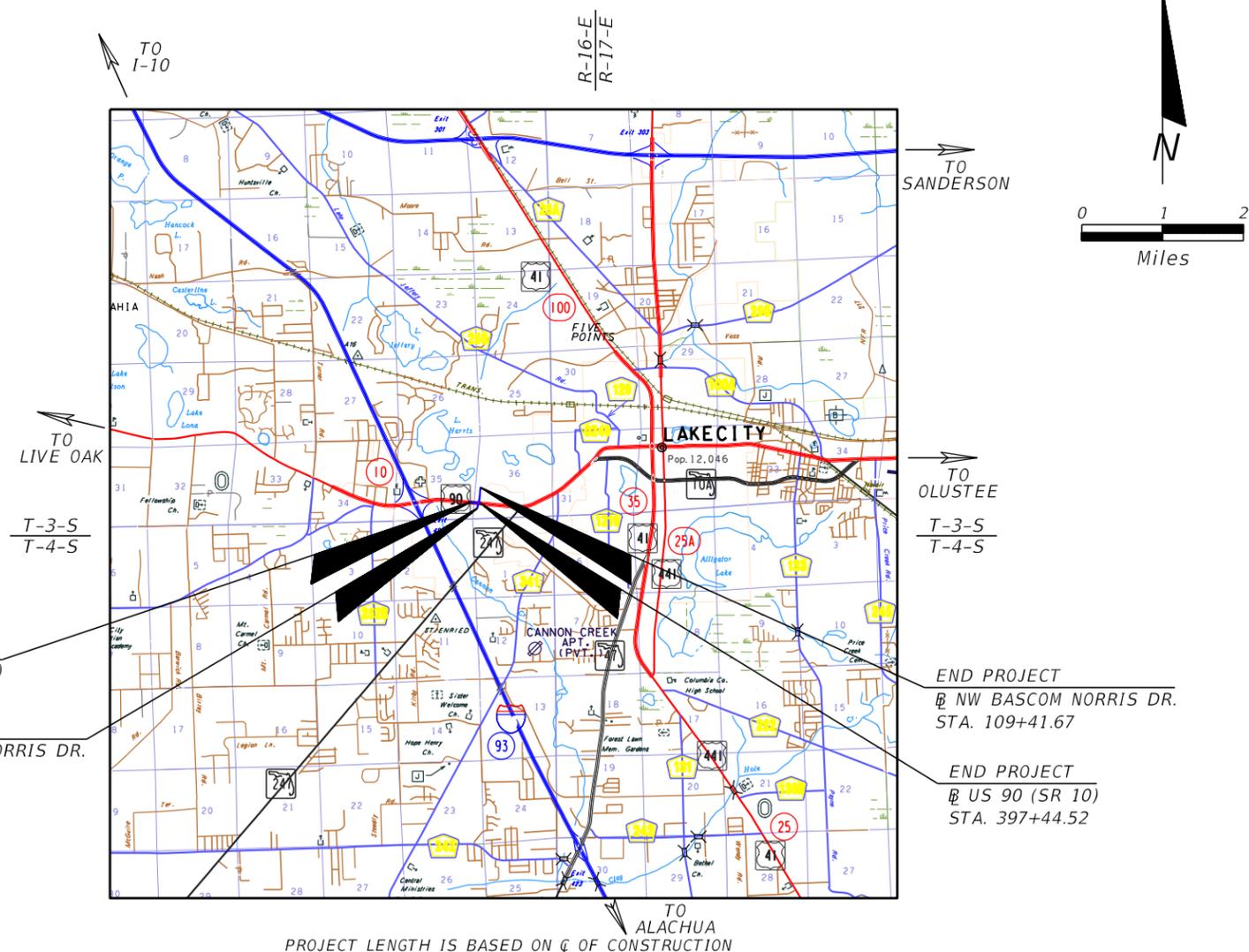
BASCOM NORRIS DRIVE AND US 90 INTERSECTION IMPROVEMENTS

CONTRACT PLANS

FINANCIAL PROJECT ID 434625-1-58-01
COLUMBIA COUNTY



LOCATION OF PROJECT



**BID SET
DATED: 10/7/2014**

BEGIN PROJECT
@ US 90 (SR 10)
STA. 390+71.15

BEGIN PROJECT
@ SW BASCOM NORRIS DR.
STA. 53+04.31

END PROJECT
@ NW BASCOM NORRIS DR.
STA. 109+41.67

END PROJECT
@ US 90 (SR 10)
STA. 397+44.52

GOVERNING STANDARDS AND SPECIFICATIONS:
Florida Department of Transportation, 2014 Design Standards and revised Index Drawings as appended herein, and 2014 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents.

For Design Standards click on the "Design Standards" link at the following website:
<http://www.dot.state.fl.us/rddesign/>

For the Standard Specifications for Road and Bridge Construction click on the "specifications" link at the following website:
<http://www.dot.state.fl.us/specificationsoffice/>

ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

WALTER J. NEMECEK III, P.E.
ARCADIS
1650 PRUDENTIAL DRIVE
JACKSONVILLE, FLORIDA 32207

PLANS PREPARED BY:

WALTER J. NEMECEK III, P.E.
ARCADIS
1650 PRUDENTIAL DRIVE
JACKSONVILLE, FLORIDA 32207

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

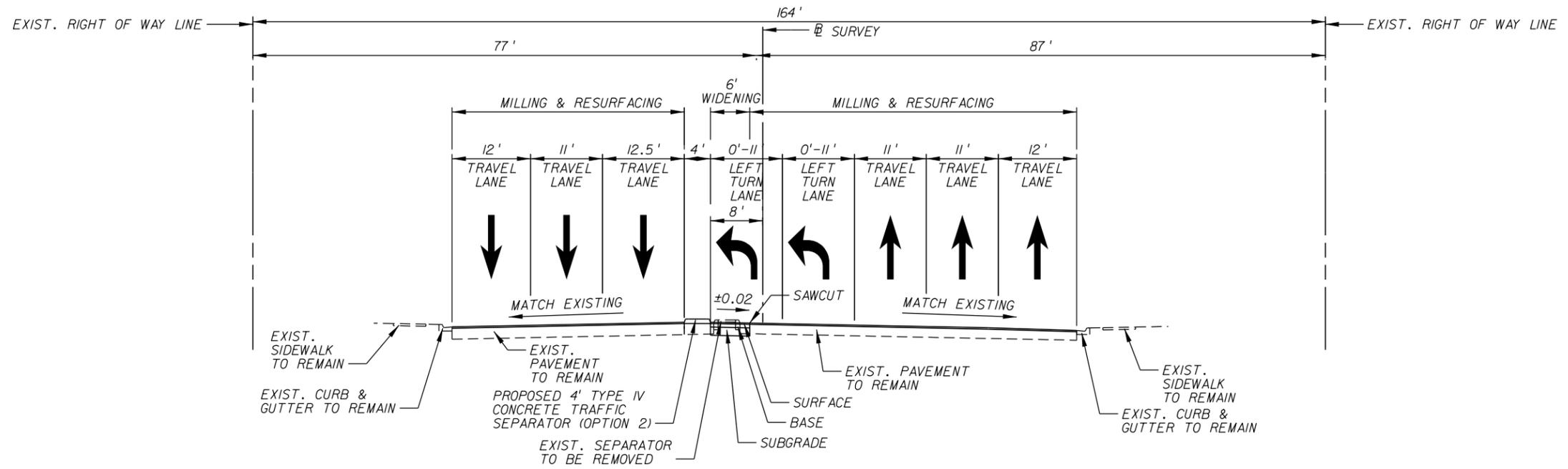
LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	1,382.80	0.262
BRIDGES	0.00	0.000
NET LENGTH OF PROJECT	1,382.80	0.262
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	1,382.80	0.262

PROJECT MANAGER: CHAD WILLIAMS, P.E.

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ROADWAY PLANS
ENGINEER OF RECORD: WALTER J. NEMECEK III, P.E.
P.E. NO.: 58122

FISCAL YEAR	SHEET NO.
14	1



**TYPICAL SECTION
US 90 (SR 10)
STA. 391+67 TO STA. 395+40**

WIDENING	
SURFACE:	1.5" ASPHALT CONCRETE FRICTION COURSE, TYPE FC-12.5 (PG 76-22) (PMA) 1.5" ASPHALT CONCRETE, TYPE SP (TRAFFIC C)
BASE:	LIMEROCK, 10" THICK (LBR 100)
SUBGRADE:	12" STABILIZED SUBGRADE (LBR 40)

MILLING & RESURFACING	
MILLING:	1.5" DEPTH
SURFACE:	1.5" ASPHALT CONCRETE FRICTION COURSE, TYPE FC-12.5 (PG 76-22) (PMA)

**DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH**

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

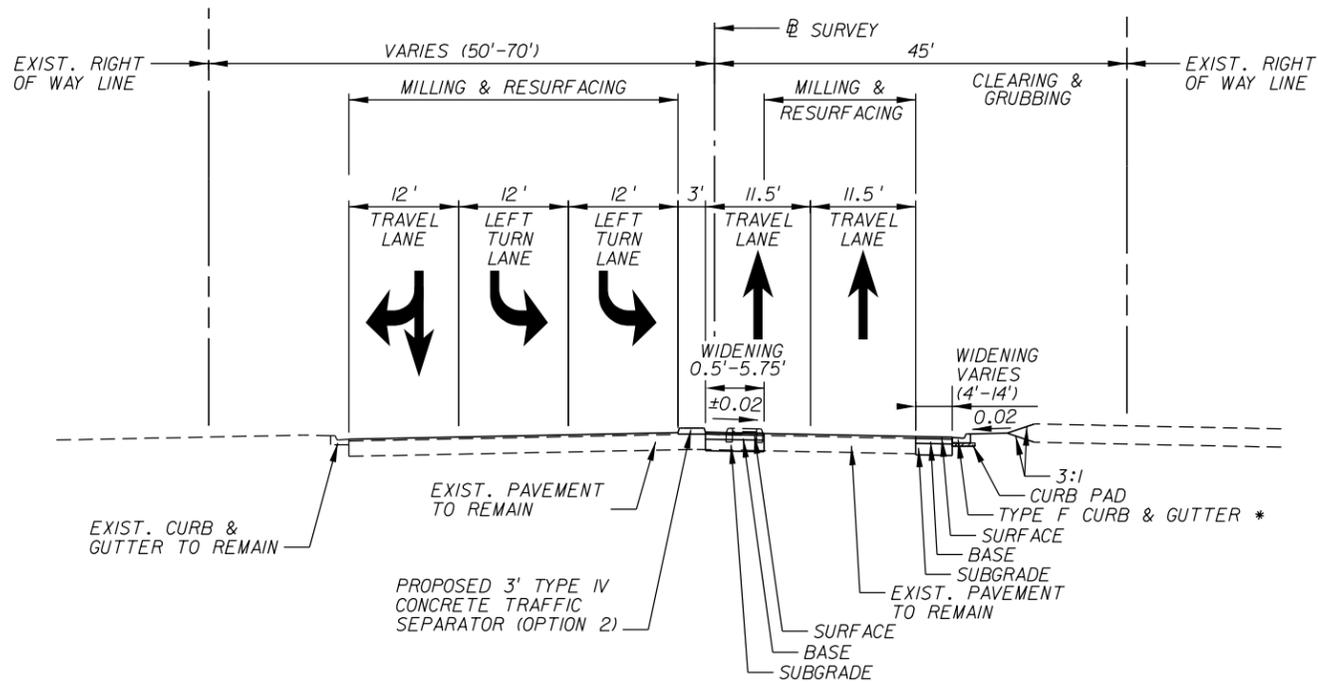
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

**US 90 (SR 10)
TYPICAL SECTIONS**

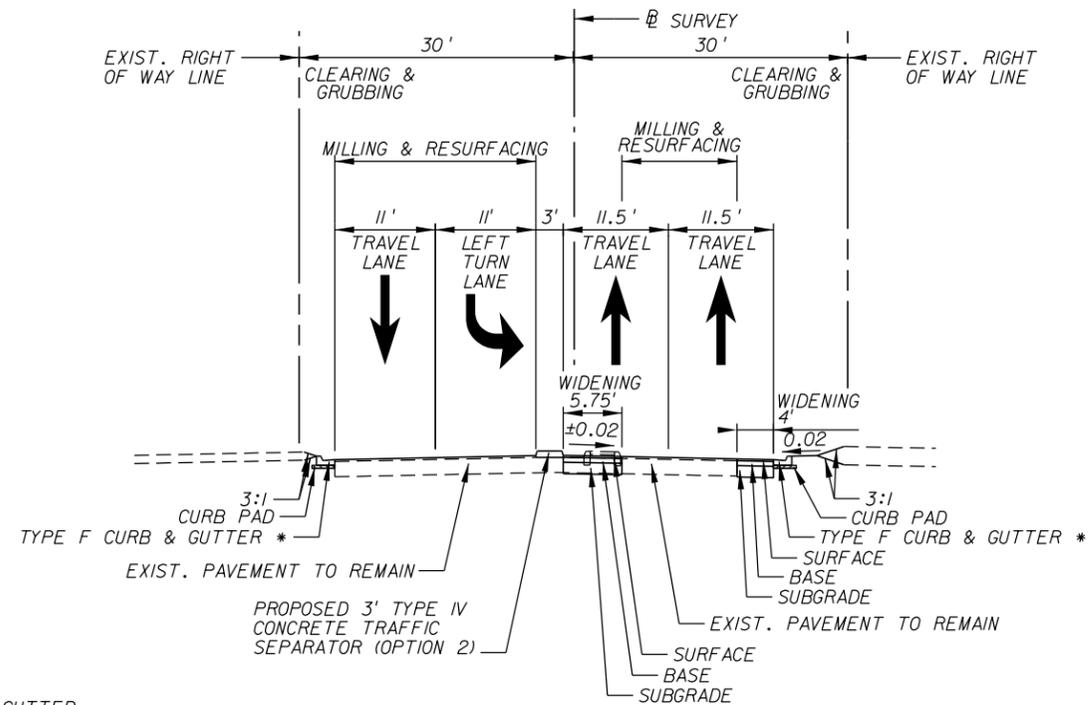
SHEET
NO.
2



TYPICAL SECTION

NW BASCOM NORRIS DRIVE

STA. 100+00 TO STA. 101+15



TYPICAL SECTION

NW BASCOM NORRIS DRIVE

STA. 101+15 TO STA. 103+75

* SEE PLANS FOR LIMITS OF TYPE F CURB & GUTTER

WIDENING	
SURFACE:	1.5" ASPHALT CONCRETE FRICTION COURSE, TYPE FC-12.5 (PG 76-22) (PMA) 1.5" ASPHALT CONCRETE, TYPE SP (TRAFFIC C)
BASE:	LIMEROCK, 10" THICK (LBR 100)
SUBGRADE:	12" STABILIZED SUBGRADE (LBR 40)

MILLING & RESURFACING	
MILLING:	1.5" DEPTH
SURFACE:	1.5" ASPHALT CONCRETE FRICTION COURSE, TYPE FC-12.5 (PG 76-22) (PMA)

DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

REVISIONS		
DATE	BY	DESCRIPTION

US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS

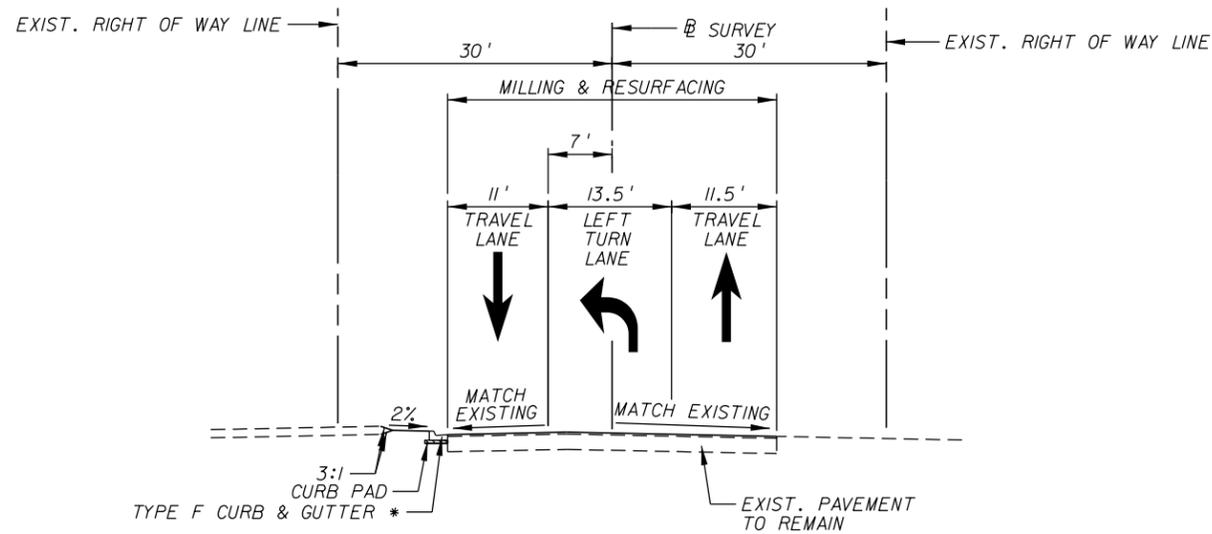
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

BASCOM NORRIS DR.
TYPICAL SECTIONS

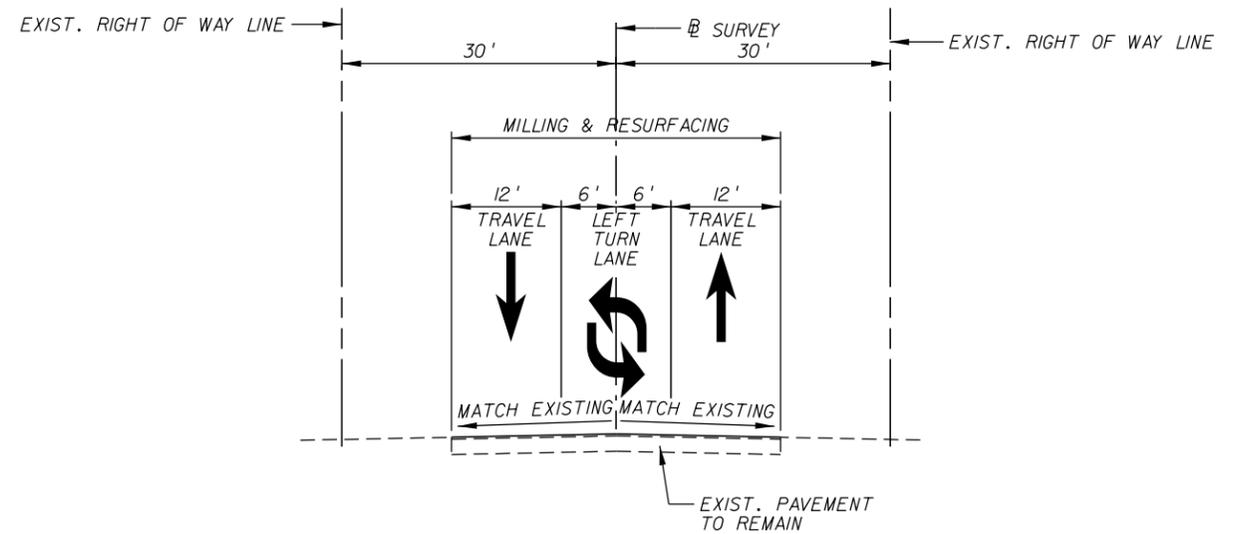
SHEET NO.
3



TYPICAL SECTION

NW BASCOM NORRIS DRIVE

STA. 104+18 TO STA. 105+12



TYPICAL SECTION

NW BASCOM NORRIS DRIVE

STA. 105+12 TO STA. 109+41.67

WIDENING

SURFACE: 1.5" ASPHALT CONCRETE FRICTION COURSE, TYPE FC-12.5 (PG 76-22) (PMA)
 1.5" ASPHALT CONCRETE, TYPE SP (TRAFFIC C)
 BASE: LIMEROCK, 10" THICK (LBR 100)
 SUBGRADE: 12" STABILIZED SUBGRADE (LBR 40)

MILLING & RESURFACING

MILLING: 1.5" DEPTH
 SURFACE: 1.5" ASPHALT CONCRETE FRICTION COURSE, TYPE FC-12.5 (PG 76-22) (PMA)

DESIGN SPEED = 30 MPH
 POSTED SPEED = 30 MPH

REVISIONS		
DATE	BY	DESCRIPTION

US 90 AND BASCOM NORRIS DR.
 INTERSECTION IMPROVEMENTS

ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
 Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

BASCOM NORRIS DR.
 TYPICAL SECTIONS

SHEET NO.
 4

GENERAL NOTES

1. THE SITE IS LOCATED IN SECTIONS 17, 18, 19, TOWNSHIP 6 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA.
2. THE CONTRACT TIME SHALL BE 180 CALENDAR DAYS FROM THE DATE OF CONTRACT EXECUTION. LIQUIDATED DAMAGES SHALL BE \$300 PER CALENDAR DAY. NO WORK SHALL BE ALLOWED ON SATURDAYS, SUNDAYS, OR DESIGNATED COUNTY HOLIDAYS.
3. BOUNDARY AND TOPOGRAPHICAL INFORMATION SHOWN WAS OBTAINED FROM A SURVEY PERFORMED BY DONALD F. LEE & ASSOCIATES, INC. # LB 7042.
4. FOR ABBREVIATIONS USED IN PLANS, SEE FDOT INDEX NO. 001.
5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH COLUMBIA COUNTY AND FDOT SPECIFICATIONS.
6. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE TO ENSURE THAT ALL NEW WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, NOTIFY THE ENGINEER OF SUCH DIFFERENCES IMMEDIATELY, PRIOR TO PROCEEDING WITH THE WORK.
7. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR/UTILITY COMPANY DURING CONSTRUCTION.
8. UTILITIES ARE TO BE ADJUSTED BY THE UTILITY OWNER AS NECESSARY.
9. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, NOTIFY THE ENGINEER.
10. COORDINATE ALL WORK WITH OTHER CONTRACTORS WITHIN PROJECT LIMITS.
11. MAINTAIN THE CONSTRUCTION SITE AT ALL TIMES IN A SECURE MANNER. ALL OPEN TRENCHES AND EXCAVATED AREAS SHALL BE PROTECTED FROM ACCESS BY THE GENERAL PUBLIC.
12. UNLESS OTHERWISE NOTED, ALL EXISTING STORMWATER STRUCTURES AND PIPES ARE TO REMAIN.
13. ALL STORMWATER PIPES SHALL HAVE A MINIMUM COVER OF 6". USE LIMEROCK BACKFILL IF PIPE UNDER PAVEMENT HAS LESS THAN 12" COVER.
14. ANY PORTION OF EXISTING R/W DISTURBED SHALL BE REDRESSED AND SODDED TO MATCH EXISTING. IF GRASS IS NOT CURRENTLY ESTABLISHED, INSTALL BERMUDA SOD.
15. TREE REMOVAL IS TO BE INCLUDED IN THE COST FOR CLEARING AND GRUBBING. REMOVE TREES ONLY AS NOTED IN PLANS.
16. ALL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AS SHOWN IN PLANS PRIOR TO CONSTRUCTION AND SHALL BE CONTINUED UNTIL CONSTRUCTION IS COMPLETE. TAKE NECESSARY MEASURES TO MINIMIZE EROSION, TURBIDITY, NUTRIENT LOADING, AND SEDIMENTATION TO ADJACENT LANDS AND LOW AREAS. THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED AS DESIGNED AND UPGRADED AS NEEDED AS DIRECTED BY ENGINEER OR SRWMD PERSONNEL. CONSTRUCTION DESIGNS AND SPECIFICATIONS AS OUTLINED BY THE "FLORIDA EROSION AND SEDIMENT CONTROL INSPECTORS MANUAL" SHALL BE ADHERED TO.
17. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE FDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. CERTIFICATION BY AN APPROVED TESTING LABORATORY IS REQUIRED AND IS THE RESPONSIBILITY OF THE CONTRACTOR. PAYMENT SHALL BE AS SPECIFIED IN THE BID PROPOSAL.
18. DENSITY TESTING WILL BE REQUIRED ACCORDING TO COLUMBIA COUNTY STANDARDS.
19. EMPLOY A QUALIFIED GEOTECHNICAL TESTING FIRM FOR MATERIAL TESTING INCLUDING CONCRETE, ASPHALT, EMBANKMENTS, ETC.
20. ALL CONSTRUCTION SIGNING NECESSARY FOR THE PROTECTION OF WORKERS AND MOTORISTS SHALL BE PROVIDED BY THE CONTRACTOR. STRIPING (TEMPORARY ON PAVEMENT) WILL BE REQUIRED FOLLOWING EACH DAY OF ASPHALTIC CONCRETE APPLICATION.
21. ALL DISTURBED FENCING MUST BE REPLACED IN KIND TO THE ORIGINAL CONDITION.
22. GIVE PROPERTY OWNERS WRITTEN NOTIFICATION OF ANY RELOCATION OR REPLACEMENT OF ANY FENCES, SHRUBS, OR OTHER PERSONAL ITEMS OUT OF THE CONSTRUCTION LIMITS ONE MONTH PRIOR TO CONSTRUCTION ACTIVITIES BEGINNING. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE COMPENSATED BY REPLACEMENT OF THE FEATURE(S).
23. THE CONSTRUCTION AND PLACEMENT OF ANY CURB CUT RAMPS OR LANDING PADS WITHIN COLUMBIA COUNTY RIGHT OF WAYS SHALL AT A MINIMUM ADHERE TO THE STANDARDS AS SET FORTH BY THE FDOT STANDARD INDEX 304, SHEETS 1 THROUGH 7, AND 28 CODE OF FEDERAL REGULATIONS (CFR) PART 36, APPENDIX A LATEST REVISION, FLORIDA ACCESSIBILITY CODE, AS WELL AS APPLICABLE COUNTY REQUIREMENTS; LDC SECTION 6.04.02.C. DETECTABLE WARNING SURFACES SHALL MEET COLUMBIA COUNTY'S STANDARDS. CONTACT THE ENGINEERING DIVISION FOR FURTHER INFORMATION AT (386) 758-1019.

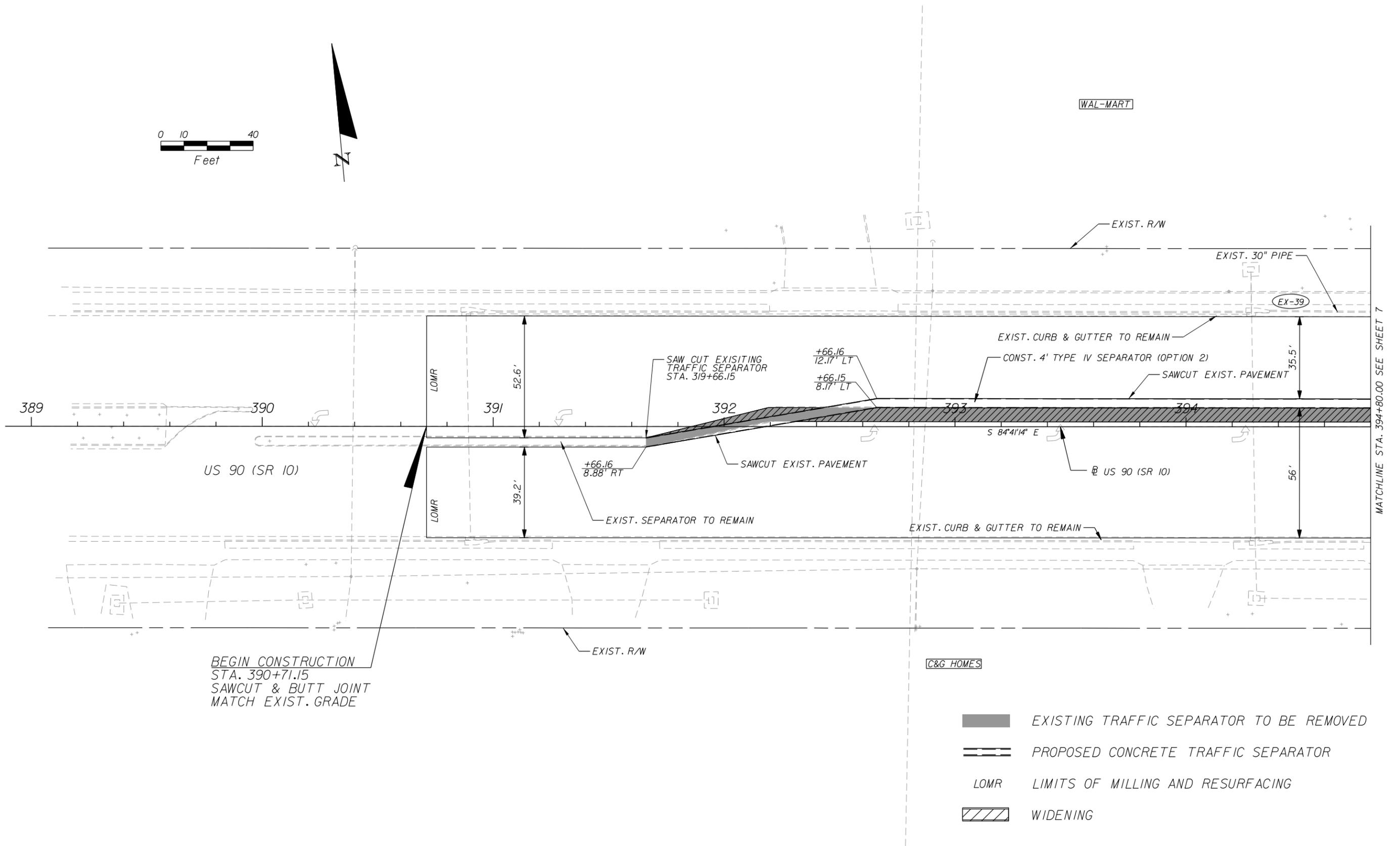
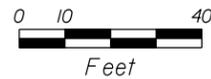
24. ACCESS TO EXISTING DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
25. REPORT ANY UNFORESEEN CONDITIONS TO THE ENGINEER.
26. NPDES PERMIT TO BE FILED TO FDEP 48 HOURS PRIOR TO CONSTRUCTION.
27. PERMITS MUST BE CLOSED OUT BY THE ENGINEER AFTER FINAL INSPECTION.
28. PROVIDE A VIDEO OF PROPOSED STORM SYSTEM UPON COMPLETION.
29. PROVIDE A PRE-CONSTRUCTION VIDEO FOR PROJECT LIMITS AND ADJACENT PROPERTIES.
30. CONCRETE DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 515.
31. SIDEWALKS TO BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 310.
32. ALL COMPACTION FOR ANY MATERIAL SHALL BE LIMITED TO STATIC MODE ONLY, UNLESS APPROVED BY THE ENGINEER.

SIGNING AND PAVEMENT MARKING NOTES

1. PAY ITEM NUMBERS ARE PROVIDED ONLY FOR THE PURPOSE OF DESCRIBING THE WORK TO BE PERFORMED. PAY ITEM DESCRIPTIONS ARE FOUND IN THE FDOT BASIS OF ESTIMATES HANDBOOK AND THE PROJECT SPECIFICATIONS PACKAGE.
2. ALIGNMENT OF PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS AT PAVEMENT MARKING LIMITS OF CONSTRUCTION.
3. ALL DIRECTIONAL ARROWS SHALL BE PLACED AS ONE SEGMENT.
4. ALL EXISTING SIGNS SHALL REMAIN UNLESS OTHERWISE NOTED. SIGNS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO COLUMBIA COUNTY TRAFFIC OPERATIONS. ANY SIGN OR SIGN POST DAMAGED DURING CONSTRUCTION SHALL BE REPLACED.
5. ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC AND RPMS TO BE INSTALLED AS REQUIRED.
6. REGULATORY SIGNAGE SHALL BE PERFORMED BY COLUMBIA COUNTY FORCES AFTER PROJECT COMPLETION.
7. REGULATORY SIGNAGE TO BE MAINTAINED PER MUTCD.

REVISIONS			US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS	ARCADIS 1650 Prudential Drive, Suite 400 Jacksonville, Florida 32207 T: 904 721 2991 | F: 904 861 2450 Certificate of Authorization No. 7917 Walter J. Nemecek, III, PE | No. 58122	COUNTY		GENERAL NOTES	SHEET NO.
DATE	BY	DESCRIPTION			COLUMBIA	FPID		5





BEGIN CONSTRUCTION
 STA. 390+71.15
 SAWCUT & BUTT JOINT
 MATCH EXIST. GRADE

- EXISTING TRAFFIC SEPARATOR TO BE REMOVED
- PROPOSED CONCRETE TRAFFIC SEPARATOR
- LOMR LIMITS OF MILLING AND RESURFACING
- WIDENING

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
 INTERSECTION IMPROVEMENTS**

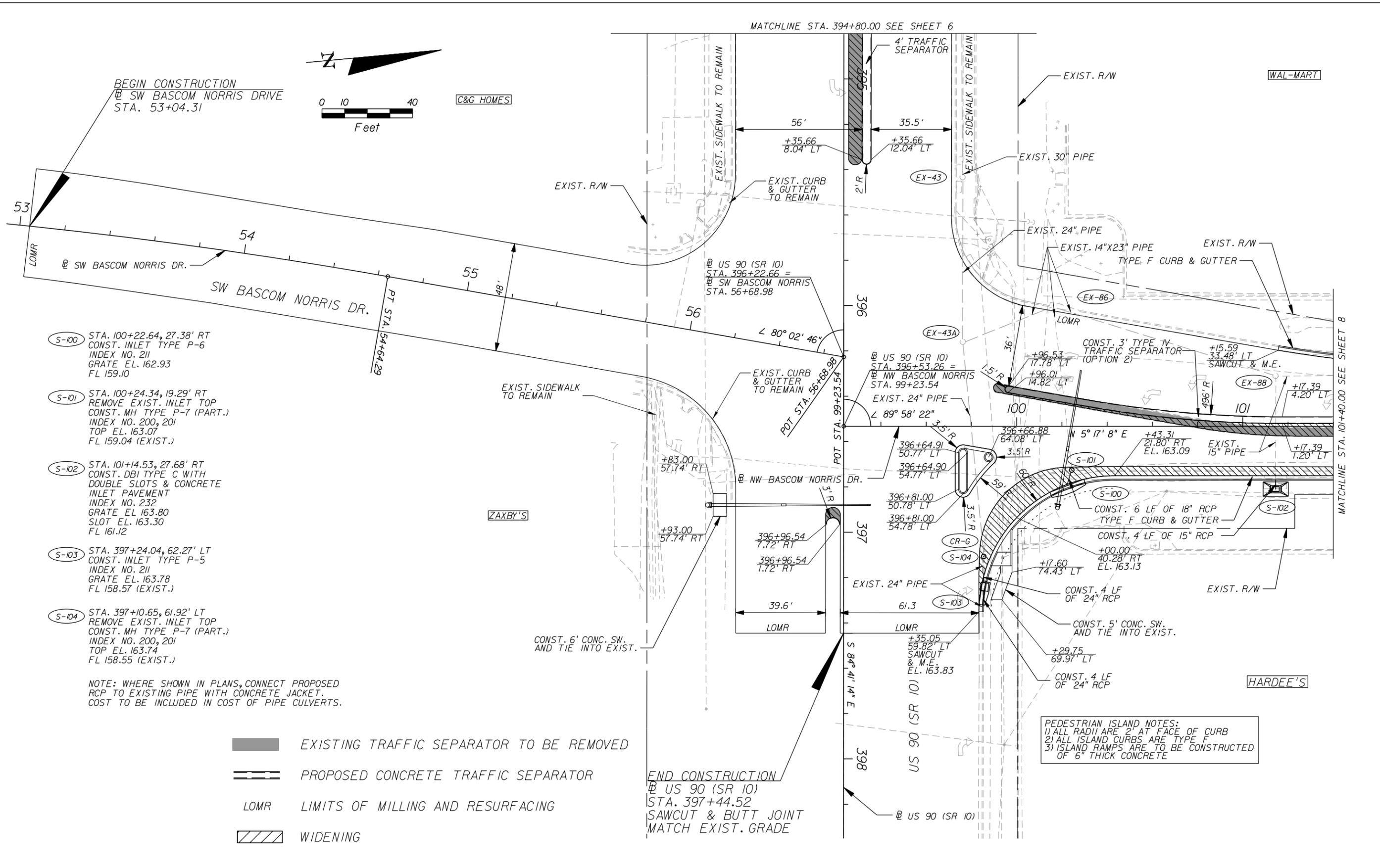
ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
 Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

US 90 (SR 10) PLAN

SHEET NO.
 6



- (S-100) STA. 100+22.64, 27.38' RT
CONST. INLET TYPE P-6
INDEX NO. 211
GRATE EL. 162.93
FL 159.10
- (S-101) STA. 100+24.34, 19.29' RT
REMOVE EXIST. INLET TOP
CONST. MH TYPE P-7 (PART.)
INDEX NO. 200, 201
TOP EL. 163.07
FL 159.04 (EXIST.)
- (S-102) STA. 101+14.53, 27.68' RT
CONST. DBI TYPE C WITH
DOUBLE SLOTS & CONCRETE
INLET PAVEMENT
INDEX NO. 232
GRATE EL. 163.80
SLOT EL. 163.30
FL 161.12
- (S-103) STA. 397+24.04, 62.27' LT
CONST. INLET TYPE P-5
INDEX NO. 211
GRATE EL. 163.78
FL 158.57 (EXIST.)
- (S-104) STA. 397+10.65, 61.92' LT
REMOVE EXIST. INLET TOP
CONST. MH TYPE P-7 (PART.)
INDEX NO. 200, 201
TOP EL. 163.74
FL 158.55 (EXIST.)

NOTE: WHERE SHOWN IN PLANS, CONNECT PROPOSED RCP TO EXISTING PIPE WITH CONCRETE JACKET. COST TO BE INCLUDED IN COST OF PIPE CULVERTS.

- EXISTING TRAFFIC SEPARATOR TO BE REMOVED
- PROPOSED CONCRETE TRAFFIC SEPARATOR
- LOMR LIMITS OF MILLING AND RESURFACING
- WIDENING

PEDESTRIAN ISLAND NOTES:
1) ALL RADII ARE 2' AT FACE OF CURB
2) ALL ISLAND CURBS ARE TYPE F
3) ISLAND RAMPS ARE TO BE CONSTRUCTED OF 6" THICK CONCRETE

REVISIONS		
DATE	BY	DESCRIPTION

US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS

ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



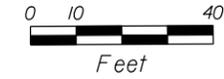
COUNTY	COLUMBIA
FPID	434625-1-58-01

BASCOM NORRIS DR. PLAN

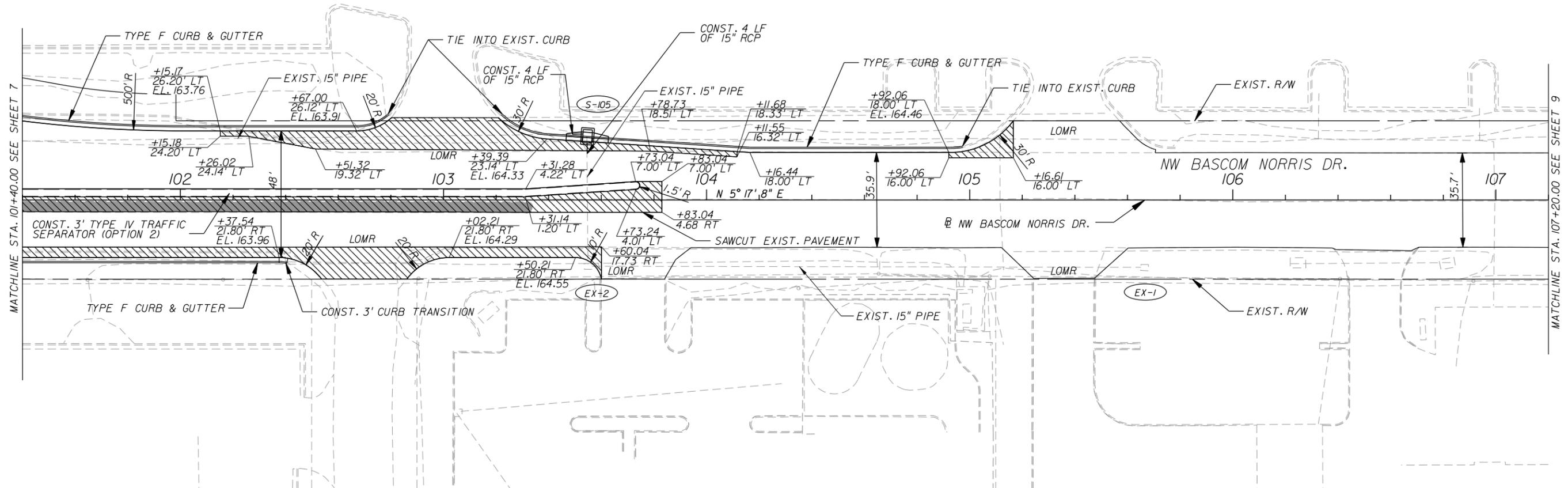
SHEET
NO.

7

S-105 STA. 103+54.68, 23.37' RT
 REMOVE EXIST. INLET
 CONST. INLET TYPE J-6 (3.5'x5')
 INDEX NO. 211
 GRATE EL. 164.25
 FL 161.11



WAL-MART



MATCHLINE STA. 101+40.00 SEE SHEET 7

MATCHLINE STA. 107+20.00 SEE SHEET 9

- EXISTING TRAFFIC SEPARATOR TO BE REMOVED
- PROPOSED CONCRETE TRAFFIC SEPARATOR
- LOMR LIMITS OF MILLING AND RESURFACING
- WIDENING

T MOBILE

STAR TECH

PHOENIX PLAZA
CAR WASH

PHOENIX
PLAZA

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
 INTERSECTION IMPROVEMENTS**

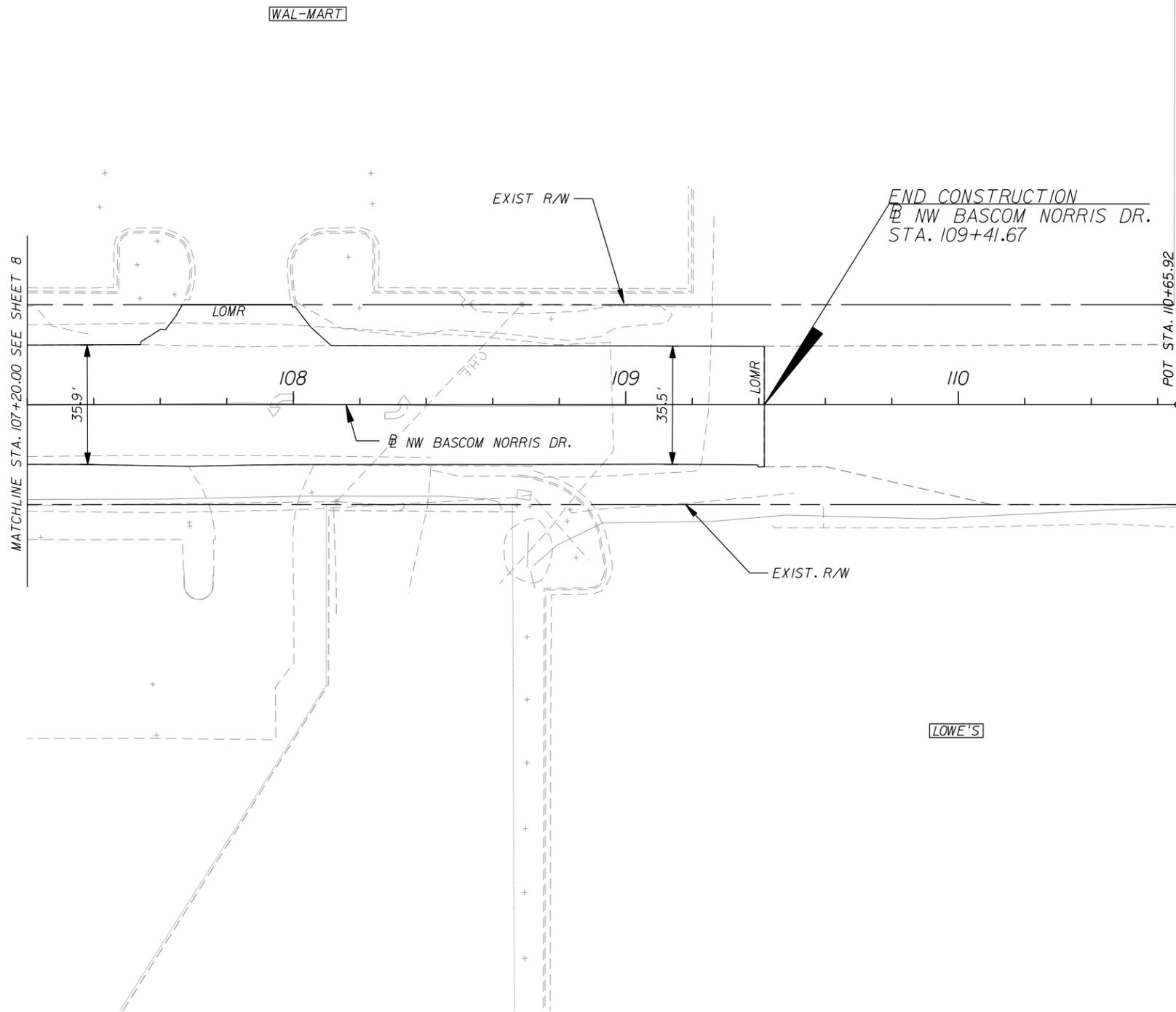
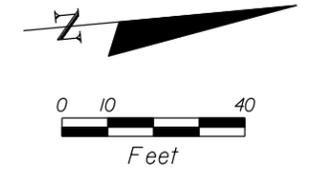
ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
 Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

BASCOM NORRIS DR. PLAN

SHEET NO.
8



- EXISTING TRAFFIC SEPARATOR TO BE REMOVED
- PROPOSED CONCRETE TRAFFIC SEPARATOR
- LOMR LIMITS OF MILLING AND RESURFACING
- WIDENING

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

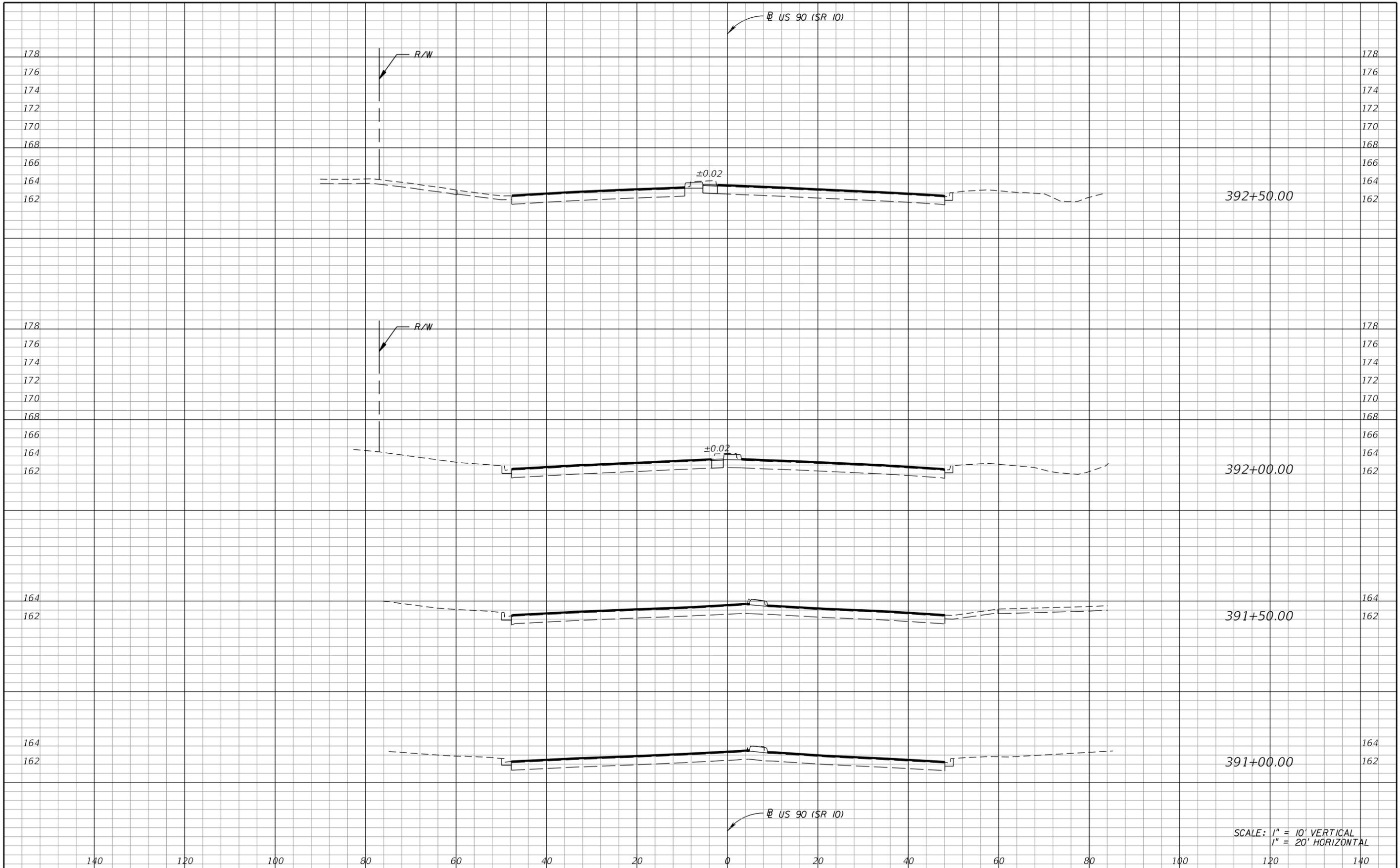
ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
 Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

BASCOM NORRIS DR. PLAN

SHEET NO.
9



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

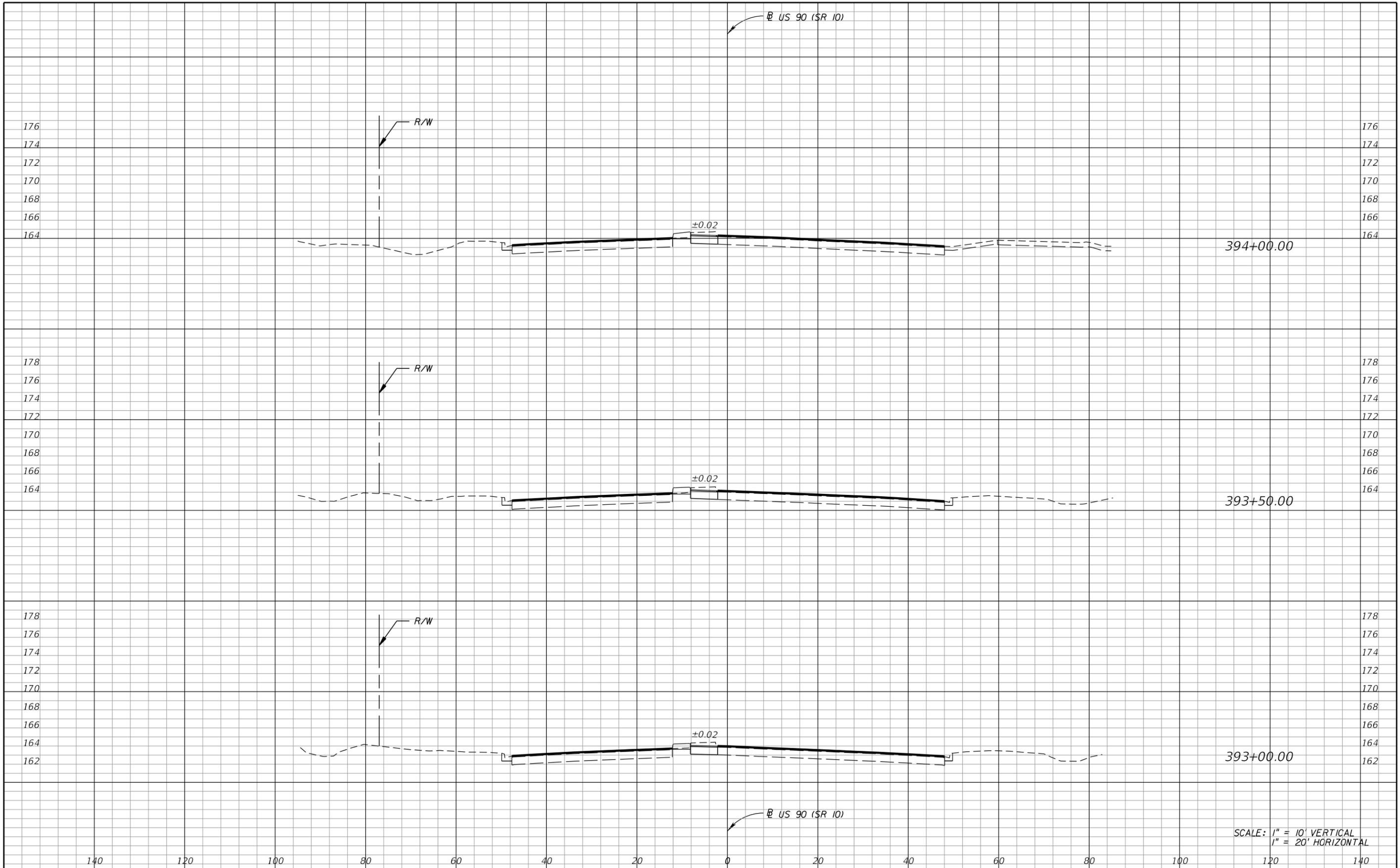
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
10



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

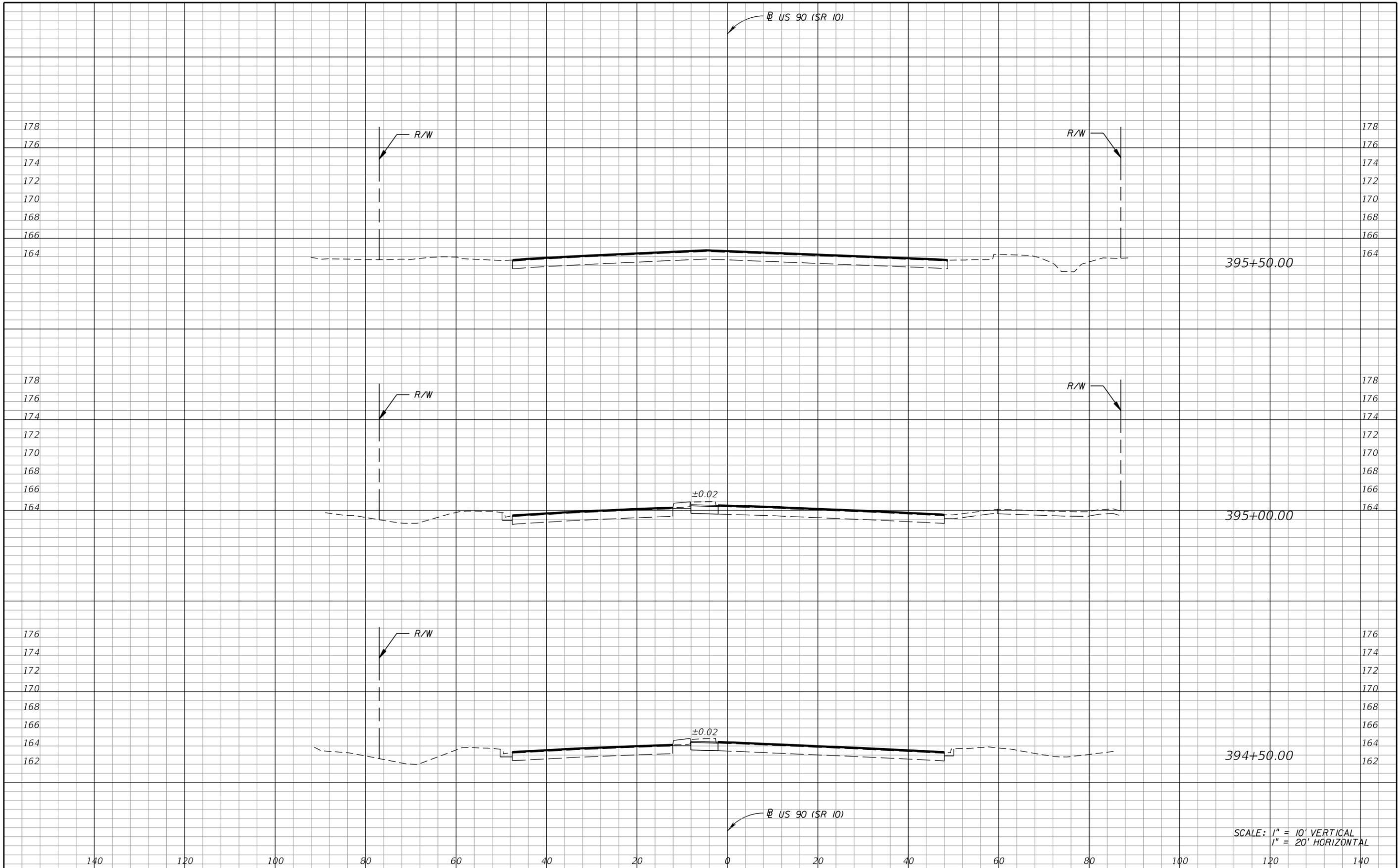
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

CROSS SECTIONS

SHEET NO.
11



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

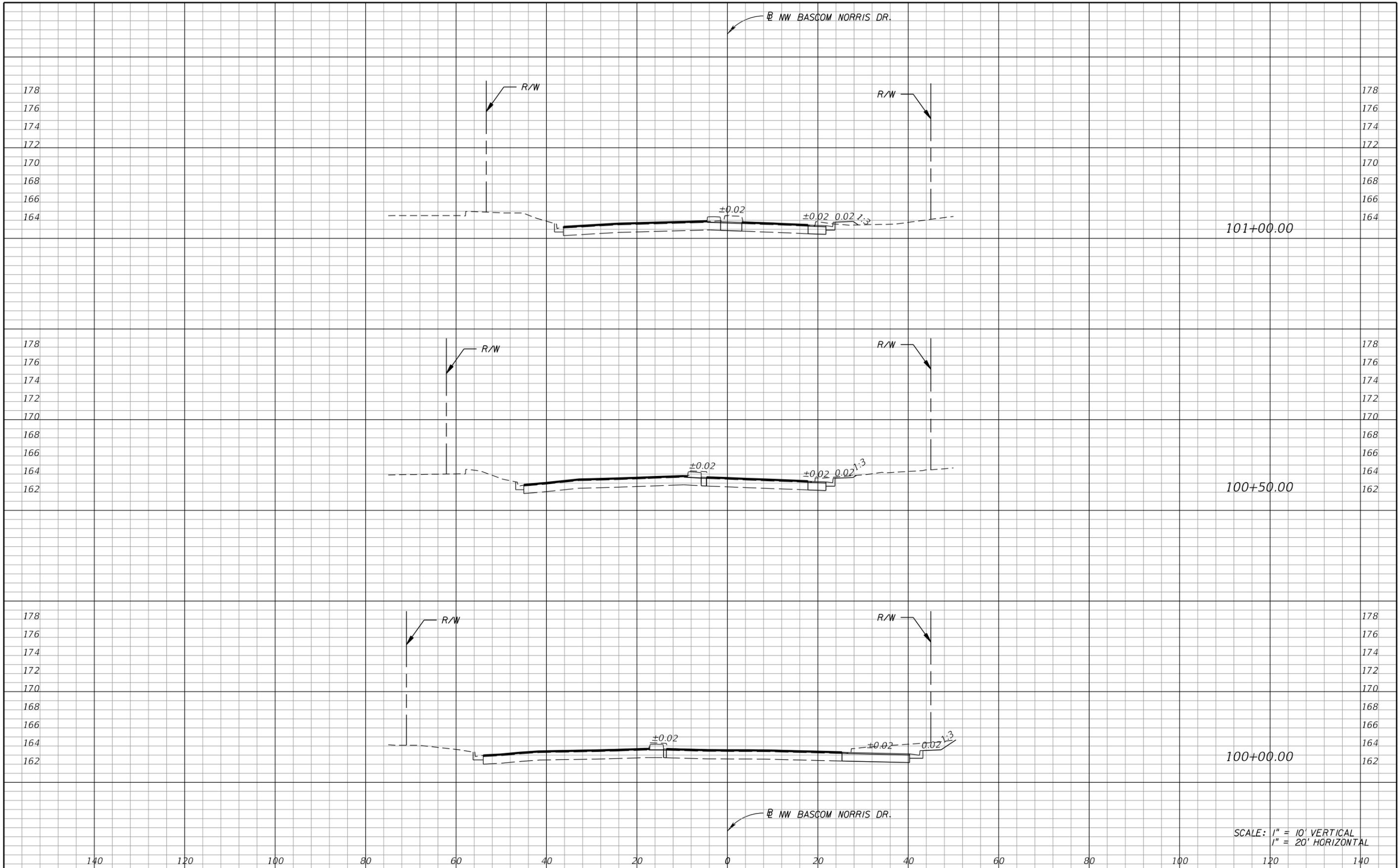
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
12



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

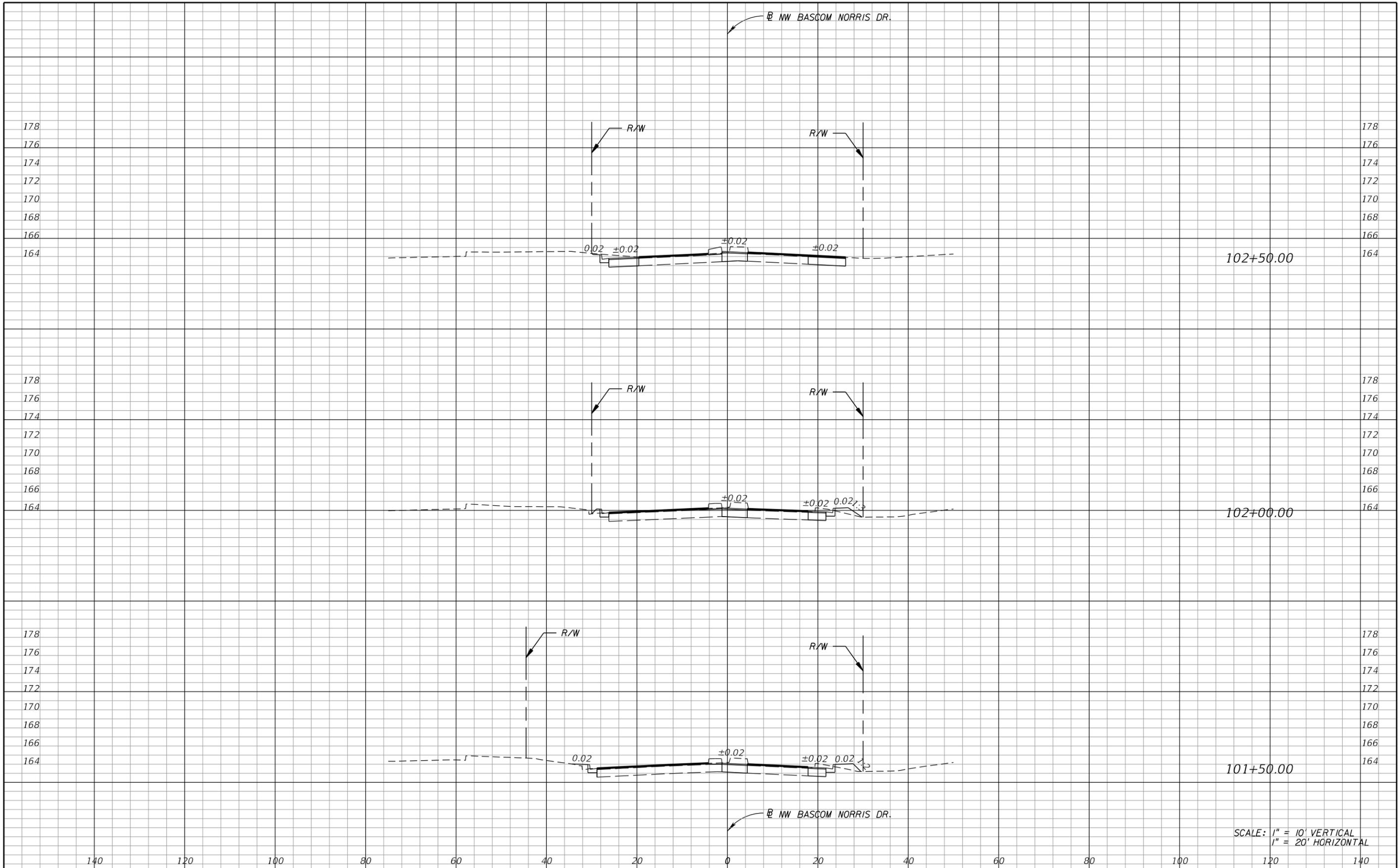
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
13



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

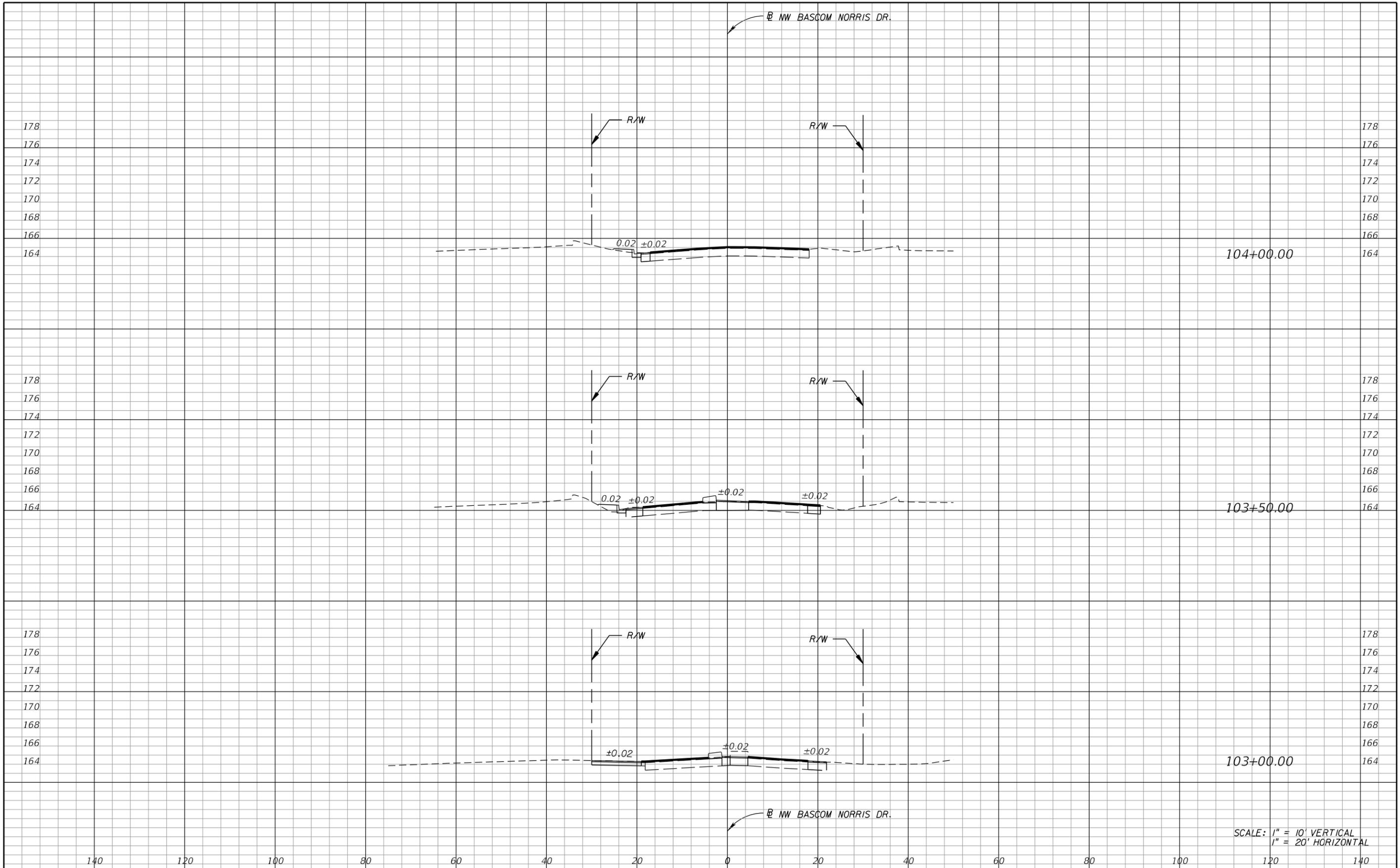
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
14



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

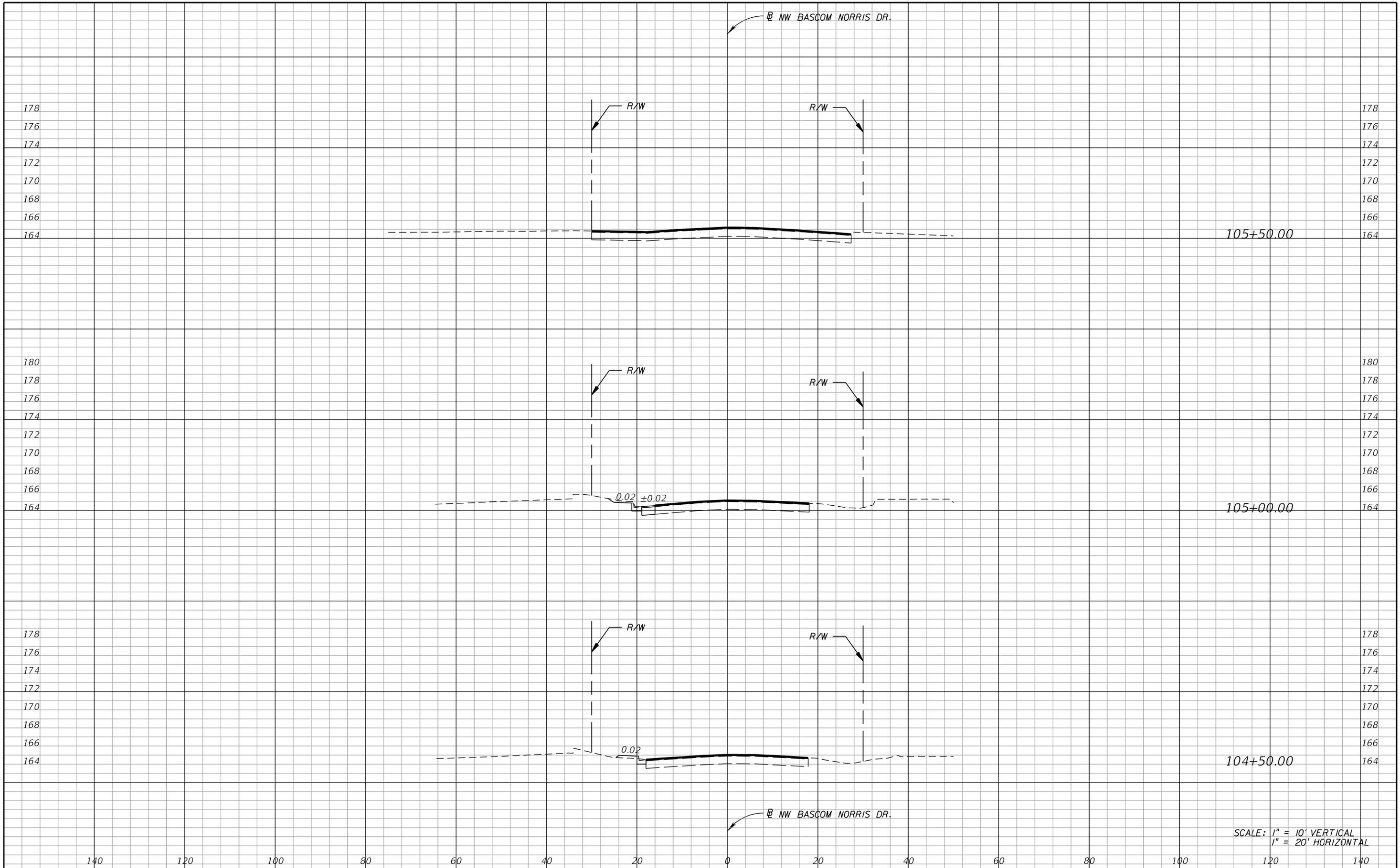
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
15



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

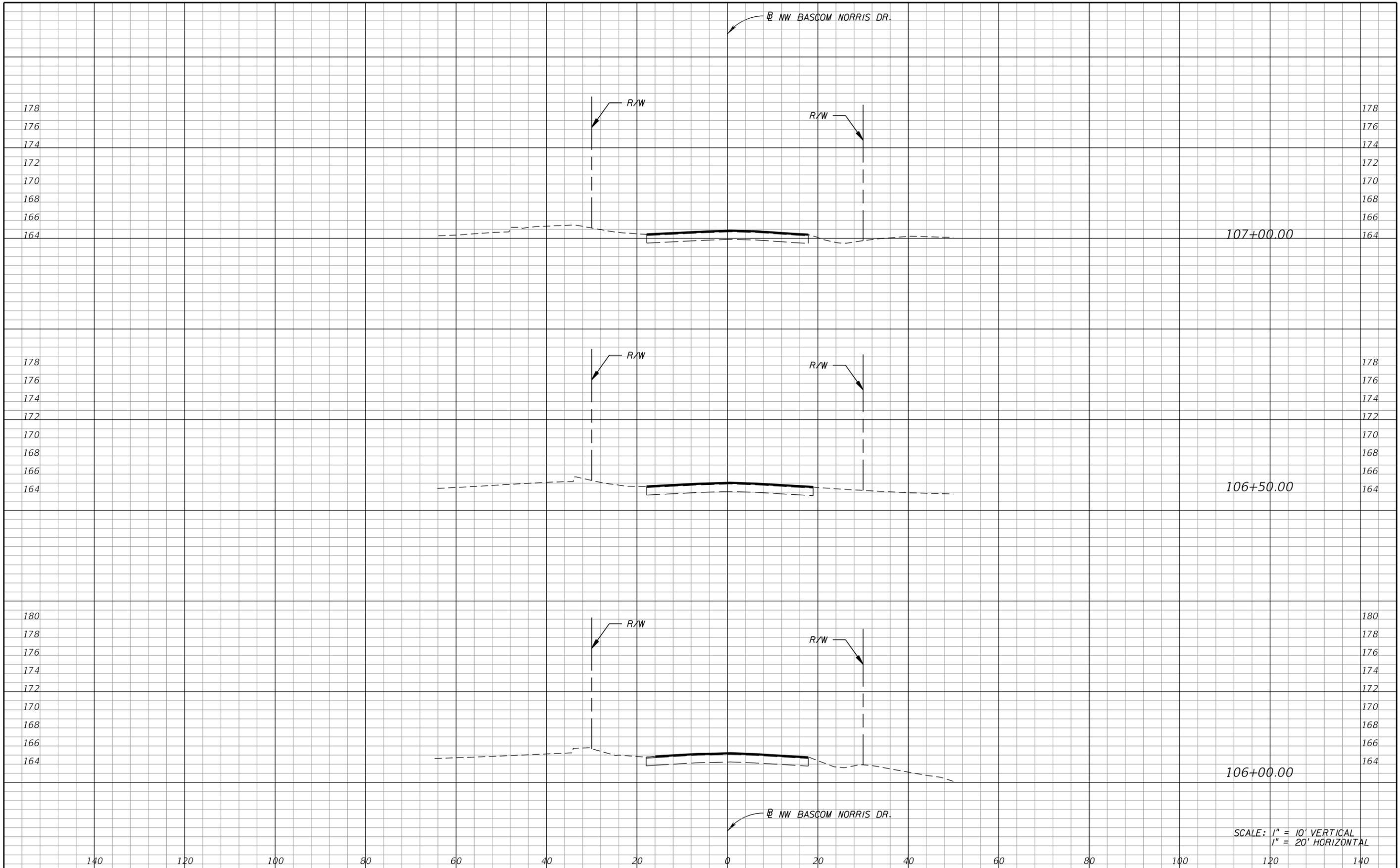
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
16



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

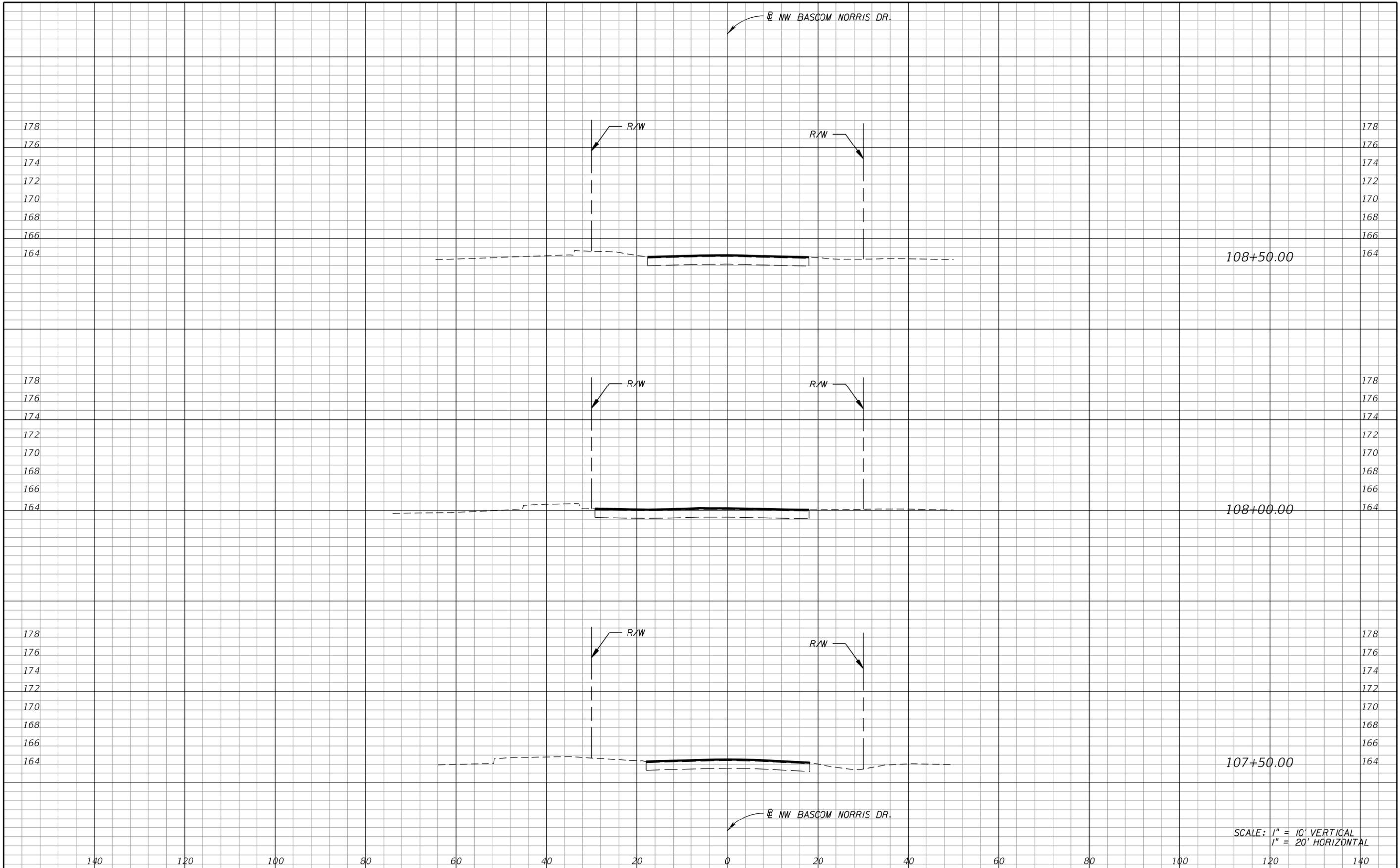
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
17



SCALE: 1" = 10' VERTICAL
1" = 20' HORIZONTAL

REVISIONS	
DATE	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

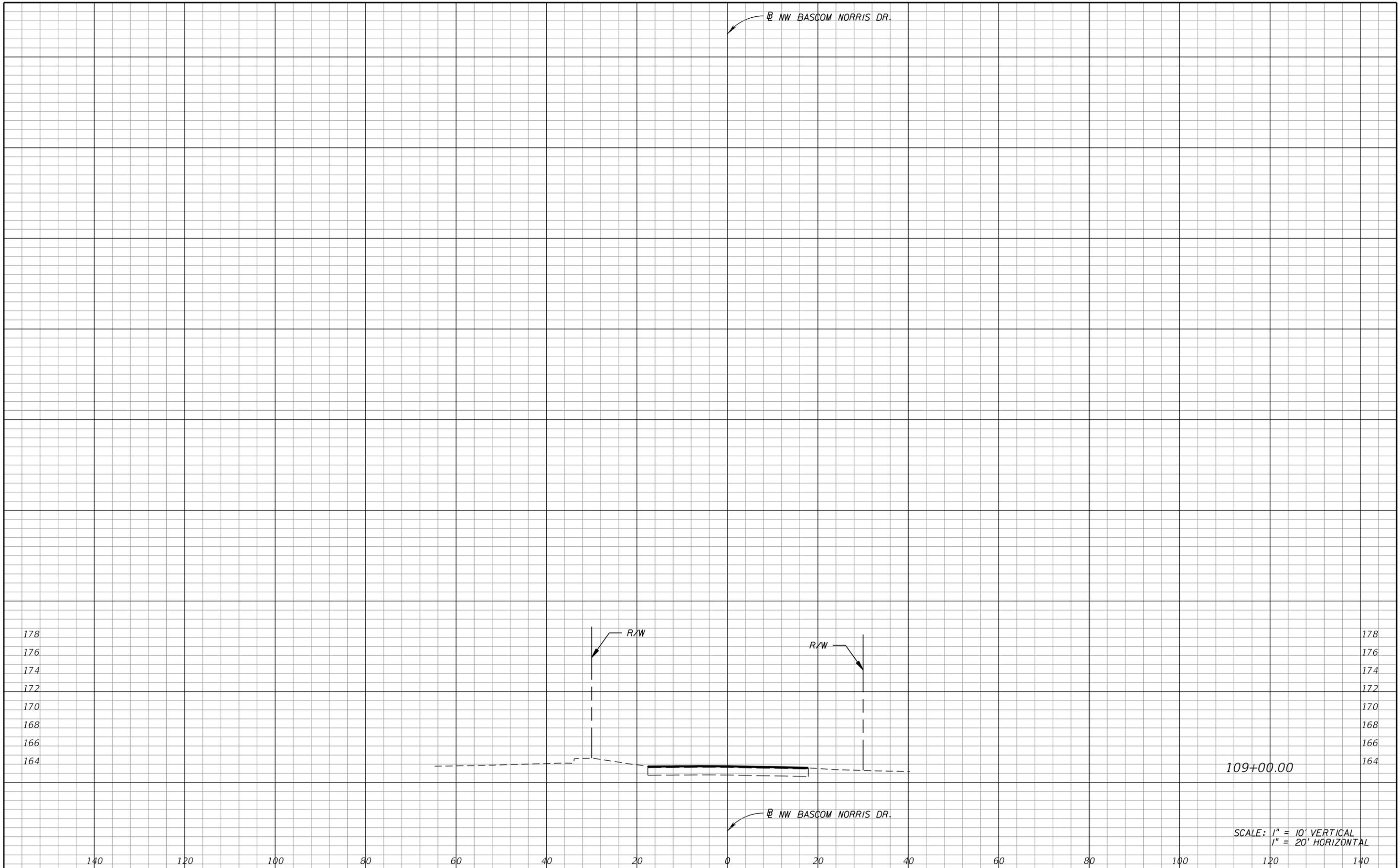
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
COLUMBIA
FPID
434625-1-58-01

CROSS SECTIONS

SHEET NO.
18



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

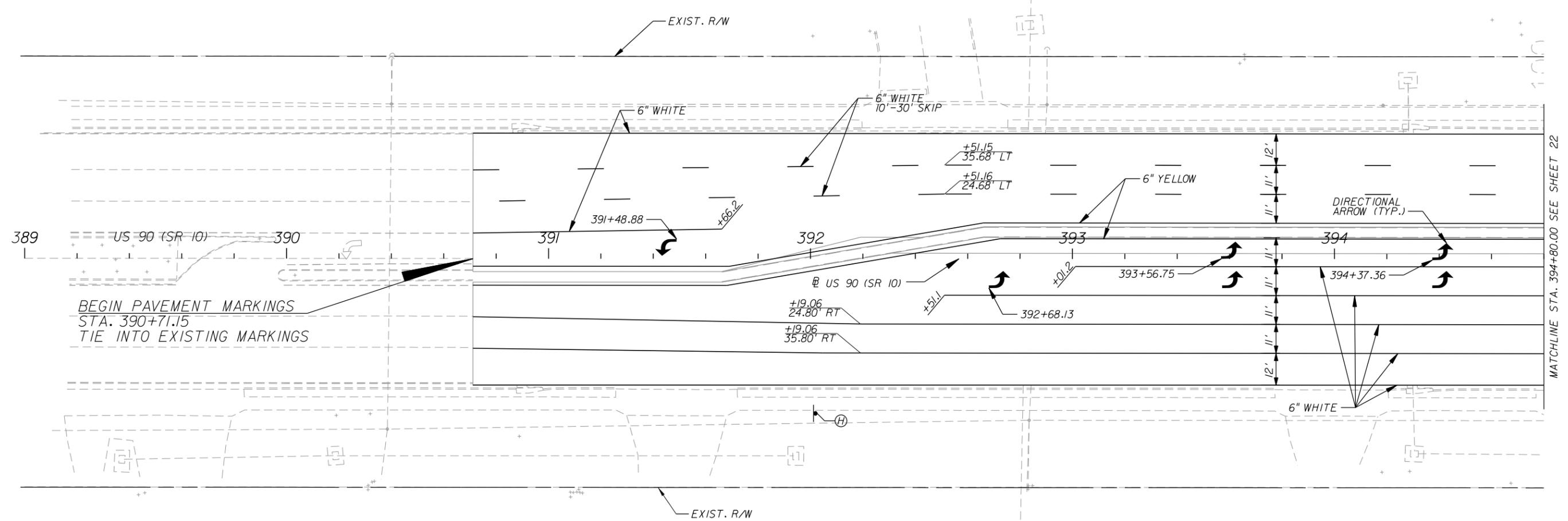
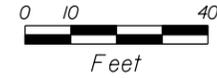
ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY
 COLUMBIA
 FPID
 434625-1-58-01

CROSS SECTIONS

SHEET NO.
 19



MATCHLINE STA. 394+80.00 SEE SHEET 22

BEGIN PAVEMENT MARKINGS
STA. 390+71.15
TIE INTO EXISTING MARKINGS

700-20-11
R4-11
30"x30"
1 EA.

MAY USE
FULL LANE

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

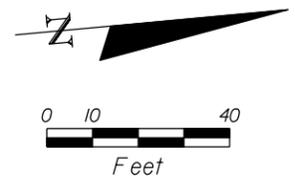
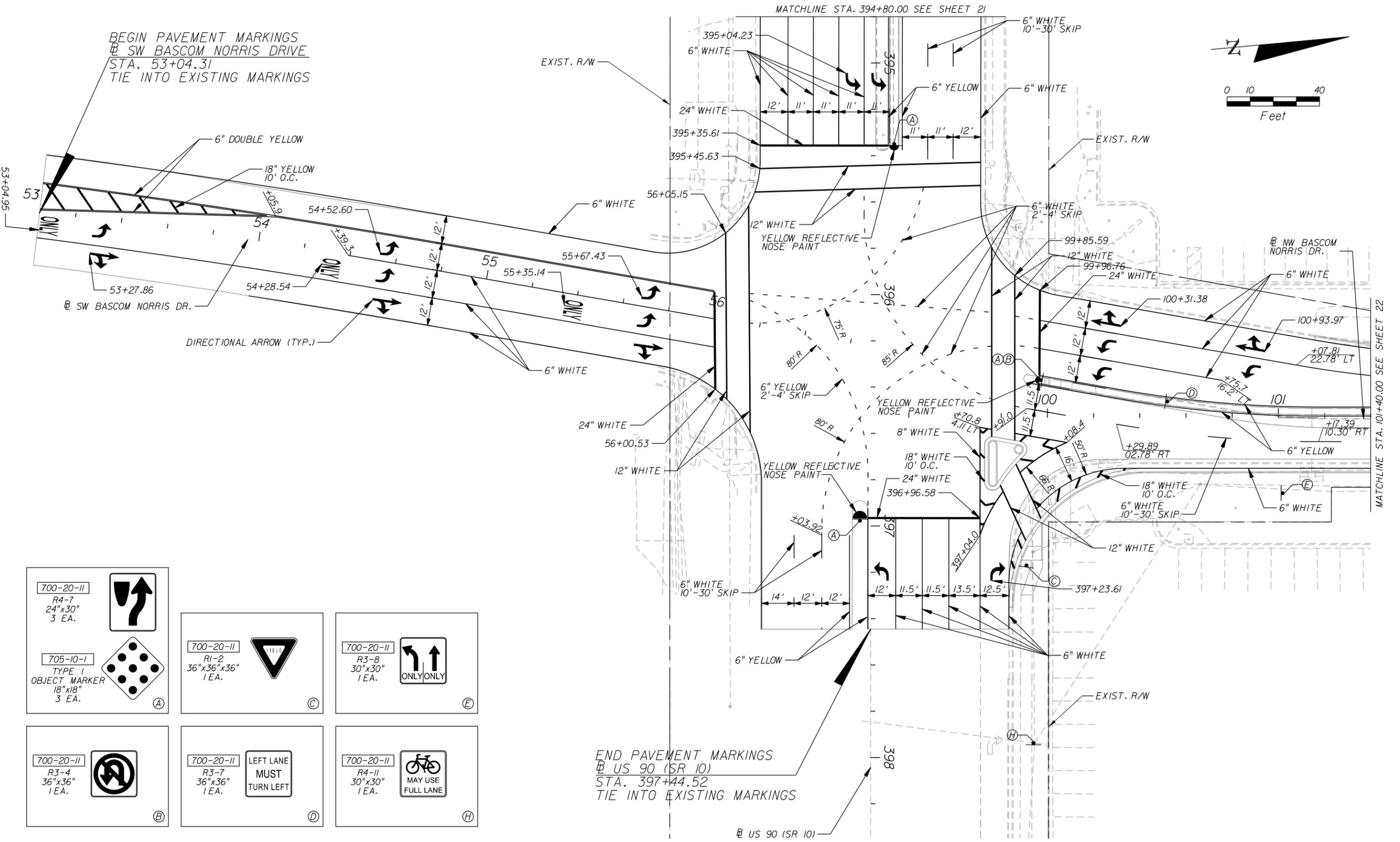
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

SIGNING & MARKING PLAN

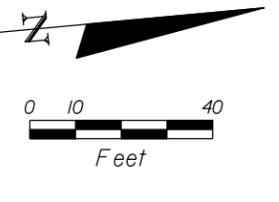
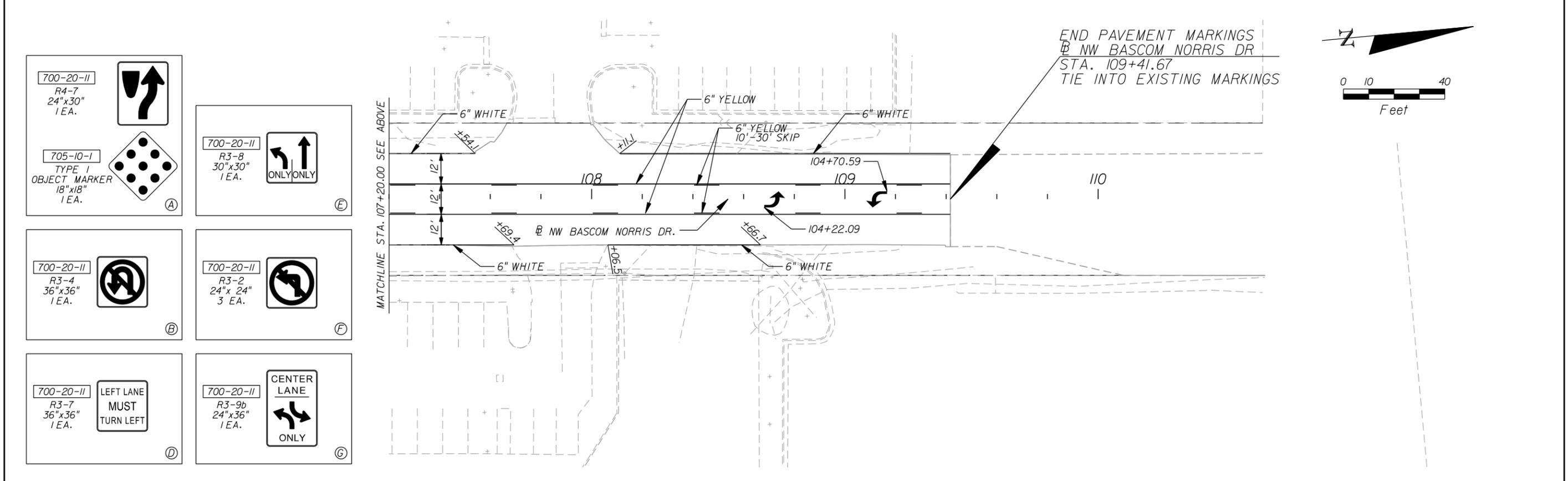
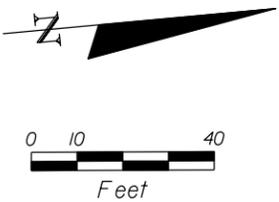
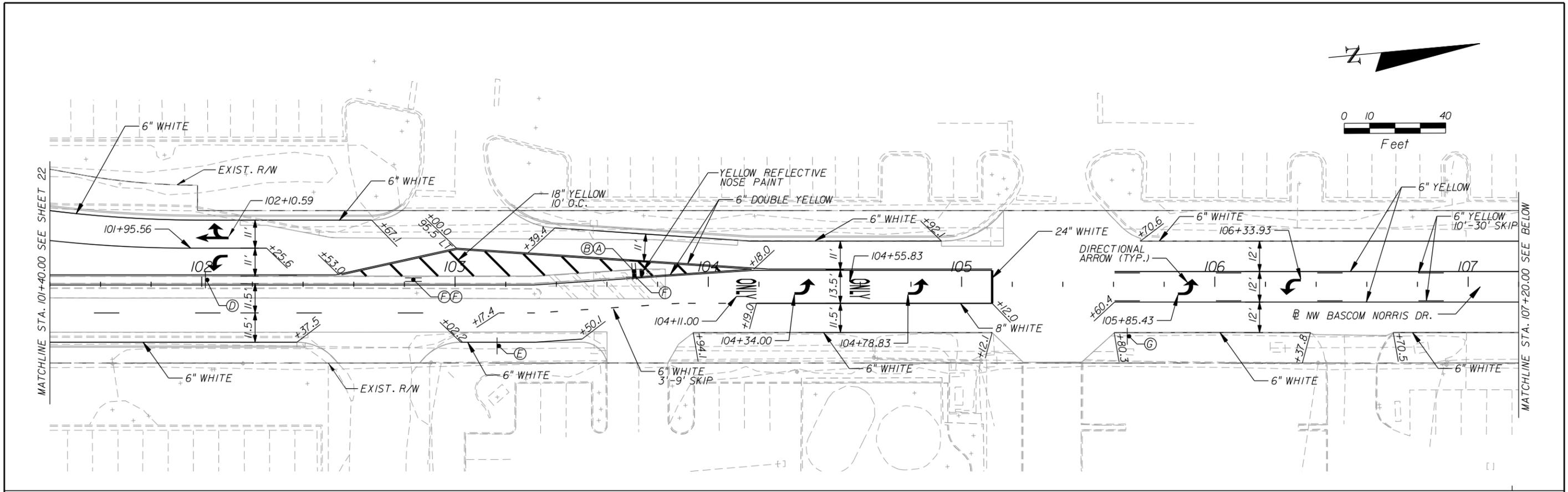
SHEET NO.
20



<p>700-20-11 R4-7 24"x30" 3 EA.</p>	<p>705-10-1 TYPE 1 OBJECT MARKER 18"x18" 3 EA.</p>	<p>700-20-11 R1-2 36"x36"x36" 1 EA.</p>	<p>700-20-11 R3-8 30"x30" 1 EA.</p>
<p>700-20-11 R3-4 36"x36" 1 EA.</p>	<p>700-20-11 R3-7 36"x36" 1 EA.</p> <p>LEFT LANE MUST TURN LEFT</p>	<p>700-20-11 R4-11 30"x30" 1 EA.</p> <p>MAY USE FULL LANE</p>	

END PAVEMENT MARKINGS
 @ US 90 (SR 10)
 STA. 397+44.52
 TIE INTO EXISTING MARKINGS

REVISIONS			US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS	ARCADIS 1650 Prudential Drive, Suite 400 Jacksonville, Florida 32207 T: 904 721 2991 | F: 904 861 2450 Certificate of Authorization No. 7917 Walter J. Nemecek, III, PE | No. 58122		COUNTY		SHEET NO.
DATE	BY	DESCRIPTION				COLUMBIA	FPID	
						COLUMBIA	434625-1-58-01	21



<p>700-20-II R4-7 24"x30" 1 EA.</p>	<p>700-20-II R3-8 30"x30" 1 EA.</p>
<p>705-10-I TYPE I OBJECT MARKER 18"x18" 1 EA.</p>	<p>700-20-II R3-2 24"x24" 3 EA.</p>
<p>700-20-II R3-4 36"x36" 1 EA.</p>	<p>700-20-II R3-9b 24"x36" 1 EA.</p>
<p>700-20-II R3-7 36"x36" 1 EA.</p> <p>LEFT LANE MUST TURN LEFT</p>	<p>700-20-II R3-9b 24"x36" 1 EA.</p> <p>CENTER LANE ONLY</p>

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

SIGNING & MARKING PLAN

SHEET NO.
22

GENERAL NOTES

1. ALL TRAFFIC CONTROL PLANS (TCP) SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS, DATED 2010, 600 SERIES, AS AMENDED AND SUPPLEMENTED.
2. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE ACCOMPANIED BY APPROPRIATE REFLECTIVE PAVEMENT MARKERS (RPM'S). REFER TO FDOT STANDARD INDEX NO. 600, SHEET 12 OF 12.
3. LANE CLOSURES ARE ONLY PERMITTED BETWEEN THE HOURS OF 8:00 PM AND 6:00 AM ON WEEKDAYS. A LANE MAY BE CLOSED ONLY DURING ACTIVE WORK.
4. THESE PLANS PRESCRIBE A SEQUENCE OF CONSTRUCTION THAT DEFINES ACTIVITIES WITHIN EACH PHASE. PROPOSED WORK IN ANY PHASE MAY BE CONSTRUCTED CONCURRENTLY.
5. SHADED ARROWS SHOWN IN THESE PLANS DENOTE DIRECTION AND NUMBER OF LANES ONLY AND DO NOT INDICATE PAVEMENT MARKINGS.
6. POSTED SPEED LIMIT FOR US 90 SHALL REMAIN AS EXISTING 45 MPH AND SPEED LIMIT FOR BASCOM NORRIS DRIVE SHALL BE 30 MPH.
7. ALL ROAD NAME SIGNS SHALL BE CLEARLY VISIBLE TO TRAFFIC DURING THE CONSTRUCTION PERIOD AND ALL SIDE STREET ACCESS SHALL BE MAINTAINED AT ALL TIMES.
8. MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AT ALL TIMES USING EXISTING DRAINAGE STRUCTURES AND DITCHES, PROPOSED, AND TEMPORARY DRAINAGE SYSTEMS.
9. PROVIDE SIGNALIZATION DURING ALL CONSTRUCTION PHASES AT THE EXISTING SIGNALIZED INTERSECTIONS. THIS INCLUDES ALL EQUIPMENT AND LABOR AS NEEDED TO PROVIDE THE CORRECT NUMBER OF TRAFFIC SIGNAL HEADS IN THE PROPER ALIGNMENT WITH THE TRAFFIC LANES DURING EACH PARTICULAR CONSTRUCTION STAGE. COORDINATE WITH GARY PINKMAN AT THE CITY OF LAKE CITY TRAFFIC OPERATIONS AT (386) 867-3207 TO DETERMINE SIGNAL TIMING FOR EACH PHASE OF CONSTRUCTION.
10. IF A MAST ARM CONFLICTS WITH OR OBSCURES EXISTING SIGNALS, THE CONTRACTOR SHALL ERECT THE MAST ARM AND HAVE IT FULLY FUNCTIONING IN ONE NIGHT'S WORK SO THE INTERSECTION WILL OPERATE AT FULL CAPACITY THE NEXT DAY.
11. TEMPORARY TRAFFIC DETECTION SHALL BE INSTALLED AT ALL INTERSECTIONS DURING CONSTRUCTION, AS NECESSARY.
12. TRAFFIC CONTROL OFFICERS SHALL BE UTILIZED AT INTERSECTIONS WHEN AND WHERE SIGNAL CHANGE-OVERS TAKE PLACE.
13. BUSINESS ENTRANCES AND DRIVEWAYS SHALL BE ACCOMMODATED AS DETAILED IN FDOT STANDARD INDEX NO. 600, SHEET 10 OF 12.
14. EXISTING PAVEMENT MARKINGS AND SIGNING THAT CONFLICT WITH THE TRAFFIC CONTROL PHASING SHALL BE REMOVED OR COVERED AS NOT TO CONFLICT WITH TRAFFIC FLOW THROUGH CONSTRUCTION.
15. ANY REQUIRED TEMPORARY MARKINGS MUST BE IN PLACE BEFORE OPENING LANES TO TRAFFIC.
16. MAINTAIN EXISTING PEDESTRIAN TRAFFIC ACCESS BY TEMPORARY PEDESTRIAN SIGNALS OR PROPOSED FINAL PEDESTRIAN SIGNALS WHEN POSSIBLE.
17. ENSURE ALL CONSTRUCTION OPERATIONS ARE HALTED AND CLEAR ROADWAY ACCESS IS AVAILABLE TO ALLOW TWO-WAY TRAFFIC DURING CATASTROPHIC EVENTS. THE ROADWAY SHALL REMAIN OPEN FOR THE DURATION OF THE EVENT AS DIRECTED BY COLUMBIA COUNTY EMERGENCY SERVICES OR THEIR AUTHORIZED REPRESENTATIVE.

TRAFFIC CONTROL AND CONSTRUCTION SEQUENCE, PHASE 1:

THIS CONSTRUCTION PHASE CONSISTS OF ROADWAY WIDENING ALONG BASCOM NORRIS DRIVE. THE MAIN CONSTRUCTION STEPS ARE AS FOLLOWS:

1. MAINTAIN ALL EXISTING TRAFFIC LANES WHERE NIGHTLY CONSTRUCTION IS NOT PRESENT EXCEPT WHERE APPROACHING LANES OF TRAFFIC MUST BE CLOSED TO DIVERT TRAFFIC AROUND THE WORK ZONE. SEE FDOT INDEXES 616 AND 618.
2. INSTALL ADVANCE WARNING SIGNS AND BARRICADES.
3. INSTALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 1 AS SHOWN IN THE TRAFFIC CONTROL PLANS AND FDOT INDEX 613.
4. CONSTRUCT PROPOSED SIGNALIZATION FOR BASCOM NORRIS DRIVE ACCORDING TO THE SIGNALIZATION PLANS. ALIGN SIGNAL HEADS TO THE DAYTIME TRAFFIC PATTERN AND COVER ADDITIONAL LEFT TURN SIGNAL UNTIL LANE IS RESTRIPEDED IN PHASE 3.
4. CONSTRUCT PROPOSED SIGNALIZATION FOR US 90 ACCORDING TO THE SIGNALIZATION PLANS. COVER SIGNAL HEADS UNTIL ACTIVATION FOLLOWING PHASE 2 CONSTRUCTION.
5. CONSTRUCT THE PROPOSED DRAINAGE AND WIDENING ALONG BASCOM NORRIS DRIVE.
6. PROVIDE TEMPORARY MARKINGS, SIGNING, AND OTHER TRAFFIC CONTROL DEVICES FOR PHASE 2 CONSTRUCTION.

TRAFFIC CONTROL AND CONSTRUCTION SEQUENCE, PHASE 2:

THIS CONSTRUCTION PHASE CONSISTS OF TRAFFIC SEPARATOR REMOVAL AND CONSTRUCTION, ROADWAY WIDENING IN THE MEDIAN OF US 90 AND BASCOM NORRIS DRIVE, AND THE CONSTRUCTION OF THE PEDESTRIAN ISLAND. THE MAIN CONSTRUCTION STEPS ARE AS FOLLOWS:

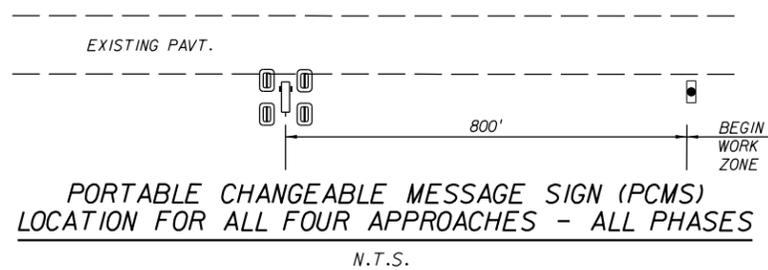
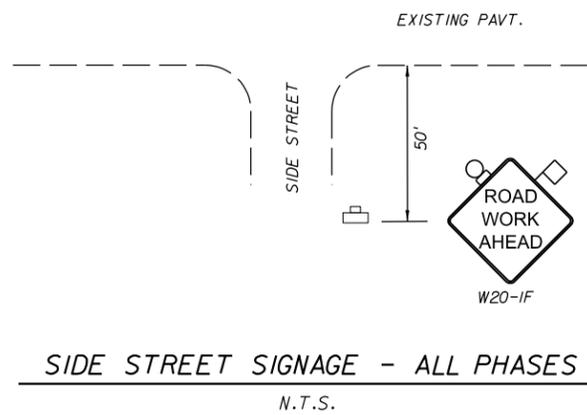
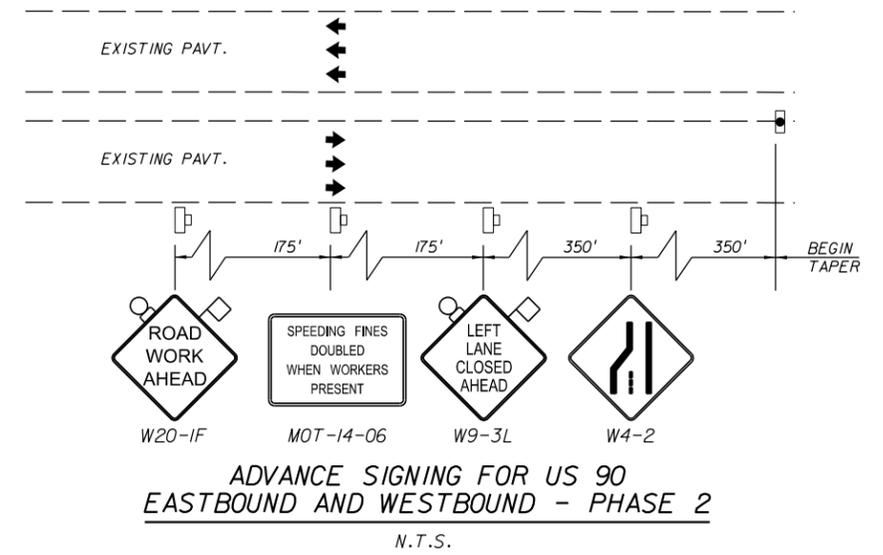
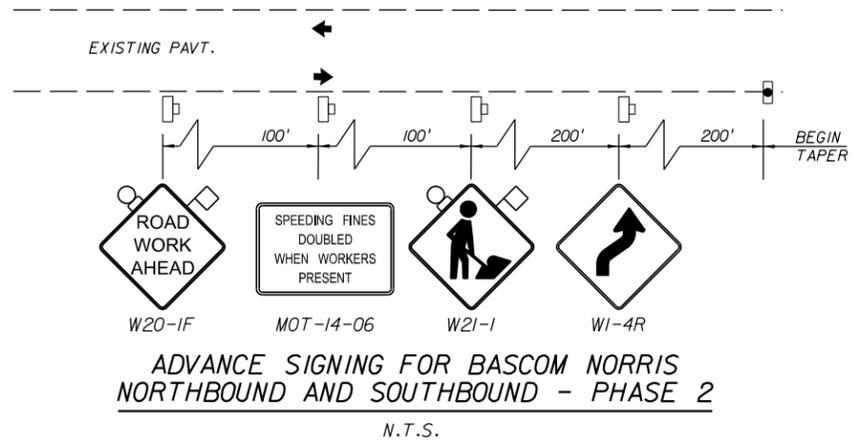
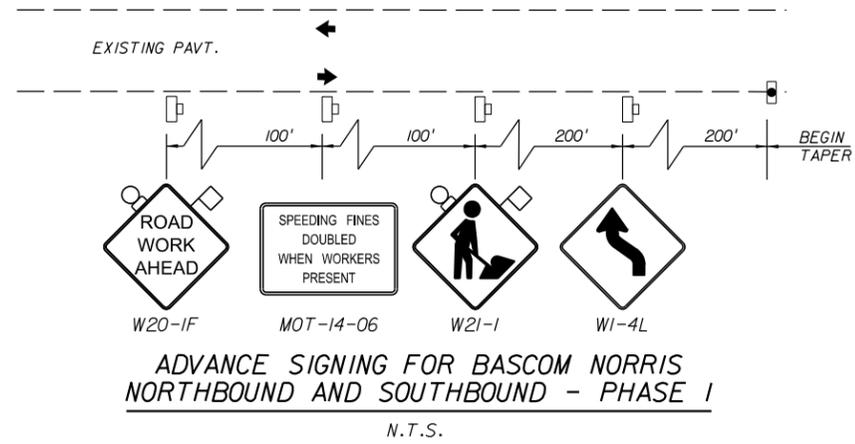
1. MAINTAIN ALL EXISTING TRAFFIC LANES WHERE NIGHTLY CONSTRUCTION IS NOT PRESENT EXCEPT WHERE APPROACHING LANES OF TRAFFIC MUST BE CLOSED TO DIVERT TRAFFIC AROUND THE WORK ZONE. SEE FDOT INDEXES 616 AND 618.
2. INSTALL ADDITIONAL, AND/OR REVISE PLACEMENT OF, EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY FOR PHASE 2 CONSTRUCTION.
3. CONSTRUCT TRAFFIC SEPARATOR AND TURN LANE FOR US 90 EASTBOUND.
4. CONSTRUCT TRAFFIC SEPARATOR AND TURN LANE FOR BASCOM NORRIS DRIVE NORTHBOUND.
5. RECONSTRUCT TRAFFIC SEPARATOR NOSE FOR US 90 WESTBOUND TURNLANE.
6. CONSTRUCT PEDESTRIAN ISLAND IN THE NORTHEAST QUADRANT OF THE INTERSECTION.
7. REMOVE EXISTING MAST ARM AND ACTIVATE PROPOSED SIGNAL FOR US 90.
8. PROVIDE TEMPORARY MARKINGS, SIGNING, AND OTHER TRAFFIC CONTROL DEVICES FOR PHASE 3 CONSTRUCTION.

TRAFFIC CONTROL AND CONSTRUCTION SEQUENCE, PHASE 3 (NO PLANS):

THIS CONSTRUCTION PHASE CONSISTS OF MINOR CONSTRUCTION ITEMS TO NEEDED COMPLETE THE PROPOSED DESIGN INCLUDING MILLING AND RESURFACING ALONG US 90, BASCOM NORRIS DRIVE, AND INTERSECTING DRIVEWAYS. THE MAIN CONSTRUCTION STEPS ARE AS FOLLOWS:

1. MAINTAIN ALL EXISTING TRAFFIC LANES WHERE NIGHTLY CONSTRUCTION IS NOT PRESENT EXCEPT WHERE APPROACHING LANES OF TRAFFIC MUST BE CLOSED TO DIVERT TRAFFIC AROUND THE WORK ZONE. SEE FDOT INDEXES 616 AND 618.
2. MILL AND RESURFACE EXISTING PAVEMENT TO THE LIMITS SHOWN IN THE ROADWAY PLANS.
3. CONFIGURE SIGNAL HEADS TO FINAL LAYOUT AS INDICATED IN THE SIGNALIZATION PLANS.
4. PLACE FINAL ROADWAY SIGNS AND PAVEMENT MARKINGS, THEN REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE REMOVAL OF ALL TEMPORARY CONSTRUCTION SIGNS.
5. DIVERT TRAFFIC TO FINAL LANE CONFIGURATION AND OPEN ALL LANES TO TRAFFIC.

REVISIONS			US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS	ARCADIS 1650 Prudential Drive, Suite 400 Jacksonville, Florida 32207 T: 904 721 2991 | F: 904 861 2450 Certificate of Authorization No. 7917 Walter J. Nemecek, III, PE | No. 58122		COUNTY	TRAFFIC CONTROL PLAN	SHEET NO.
DATE	BY	DESCRIPTION				COLUMBIA		434625-1-58-01	23



PCMS MESSAGE TABLE 1	
DISPLAY 1	DISPLAY 2
NIGHTLY LANE CLOSURES	STARTING ON XX-XX-XX
DISPLAYED 2 WEEKS PRIOR TO CONSTRUCTION. CONTRACTOR MAY ALTER DISPLAYS WITH THE APPROVAL OF THE ENGINEER.	

PCMS MESSAGE TABLE 2	
DISPLAY 1	DISPLAY 2
CAUTION LANE CLOSURES	ROAD WORK AHEAD
DISPLAYED DURING CONSTRUCTION. CONTRACTOR MAY ALTER DISPLAYS WITH THE APPROVAL OF THE ENGINEER.	

XX-XX-XX REPRESENTS A DATE SUCH AS 06-20-14 (JUNE 20, 2014)

LEGEND

- WORK ZONE
- SILT FENCE
- FLOATING TURBIDITY BARRIER
- ROCK BAGS
- STAKED TURBIDITY BARRIER
- LANE IDENTIFICATION AND DIRECTION OF TRAFFIC
- DRUM
- TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (WITH STEADY BURNING LIGHT AT NIGHT ONLY)
- WORK ZONE SIGN
- CRASH CUSHION
- STOP BAR
- TYPE III BARRICADE (WITH FLASHING LIGHT)
- TYPE III BARRICADE
- ADVANCE WARNING ARROW PANEL
- PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

REVISIONS		
DATE	BY	DESCRIPTION

US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS

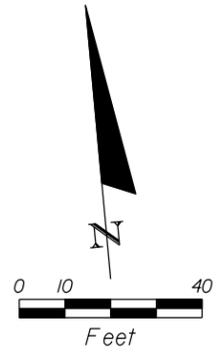
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

TRAFFIC CONTROL PLAN

SHEET NO.
24



WAL-MART

EXIST. R/W

BEGIN CONSTRUCTION
STA. 390+71.15

89

390

391

392

393

394

MATCHLINE STA. 394+80.00 SEE SHEET 26

EXIST. R/W

C&G HOMES

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122

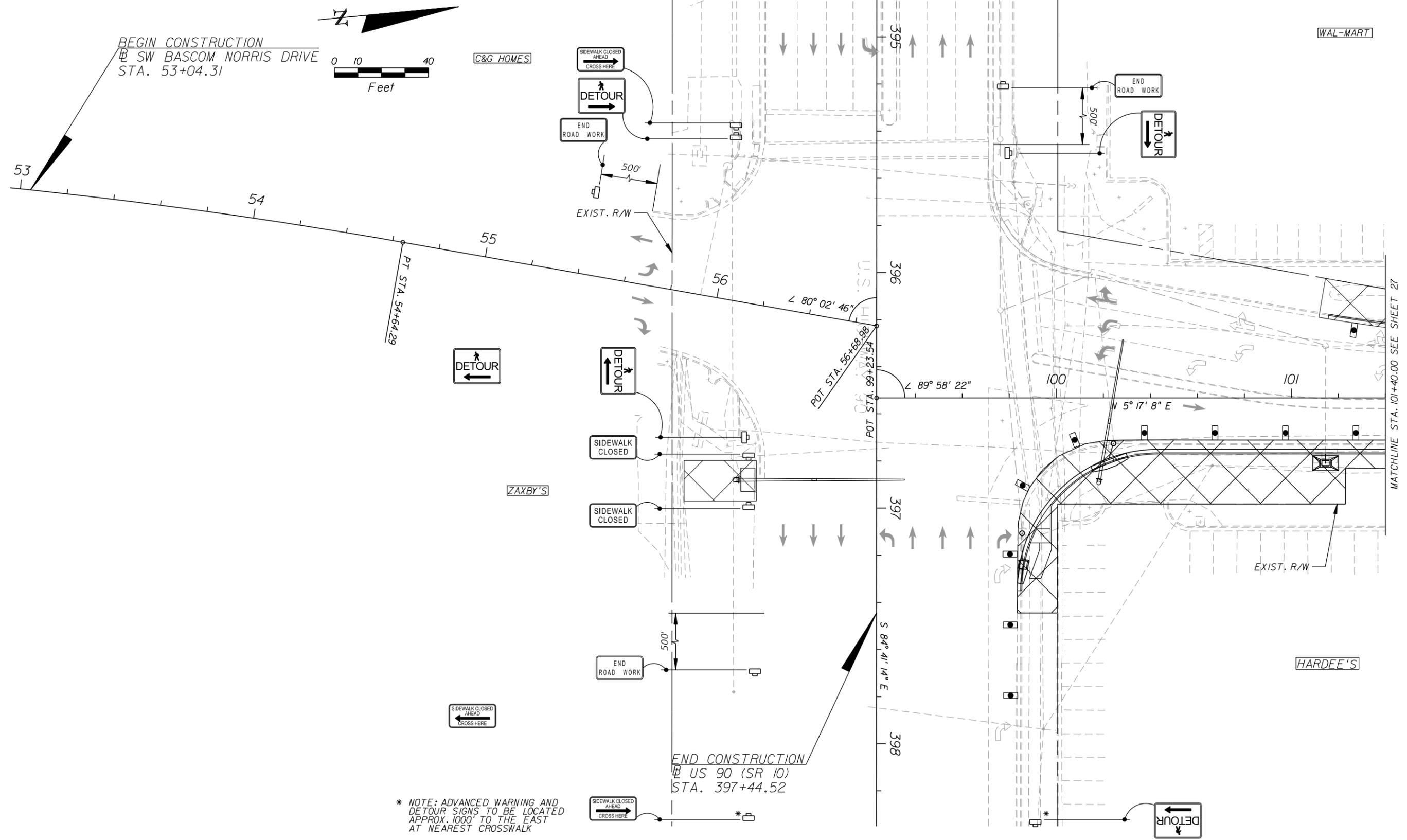


COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 1**

SHEET NO.
25

MATCHLINE STA. 394+80.00 SEE SHEET 25



* NOTE: ADVANCED WARNING AND DETOUR SIGNS TO BE LOCATED APPROX. 1000' TO THE EAST AT NEAREST CROSSWALK

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

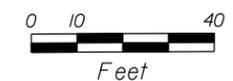
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



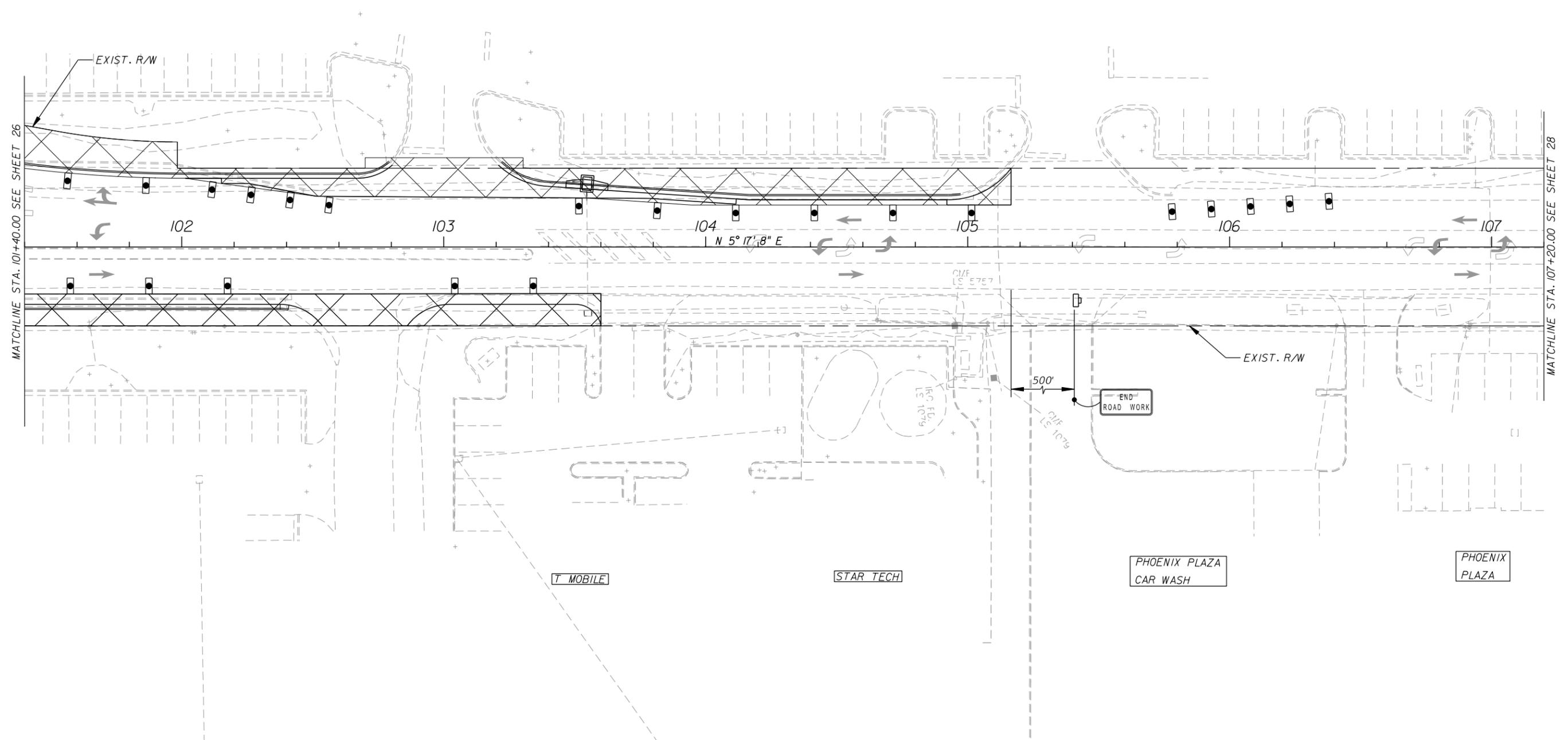
COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 1**

SHEET NO.
26



WAL-MART



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

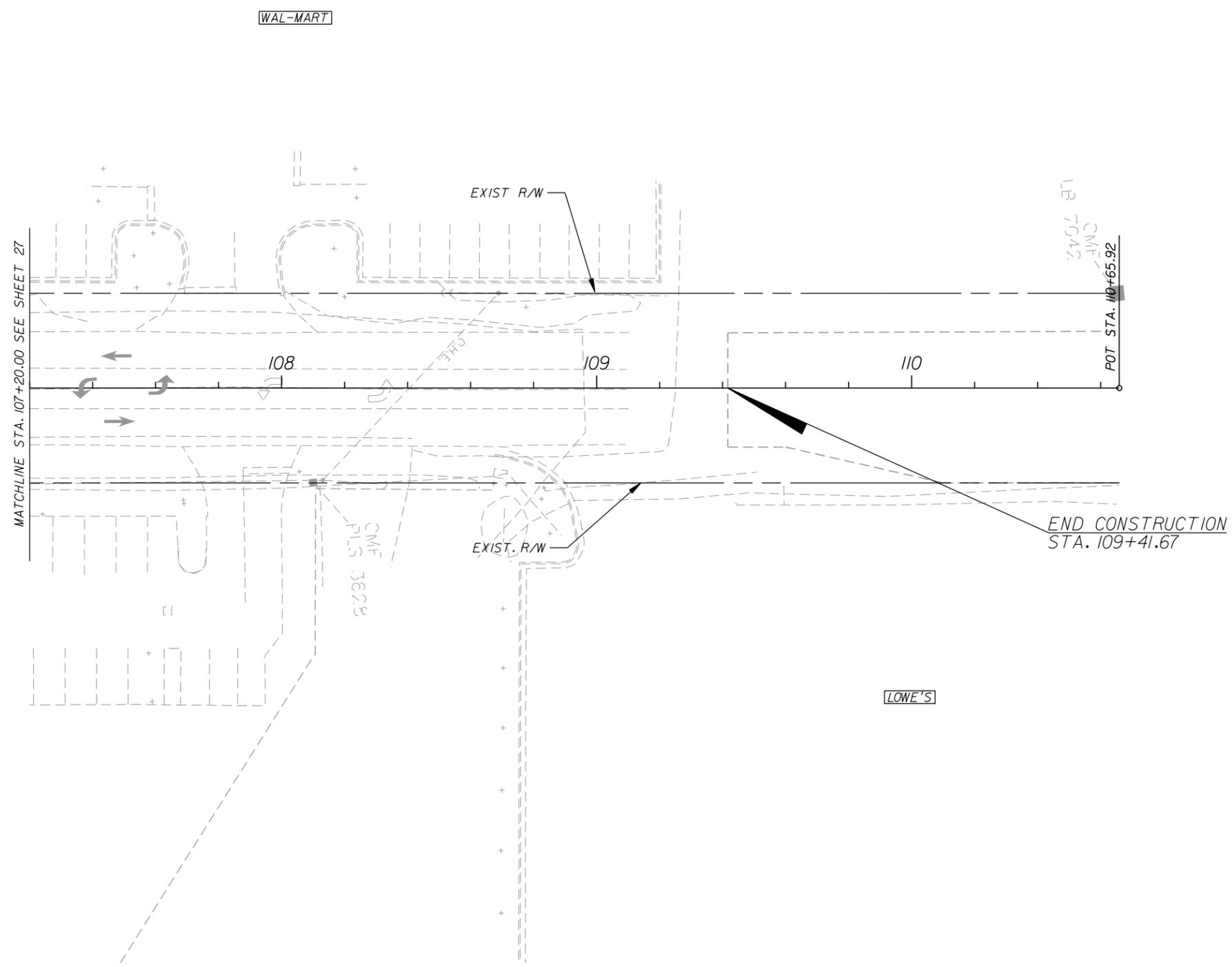
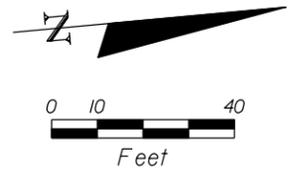
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 1**

SHEET NO.
27



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

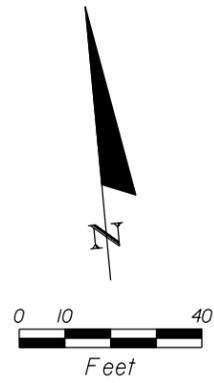
ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
 Walter J. Nemecek, III, PE | No. 58122



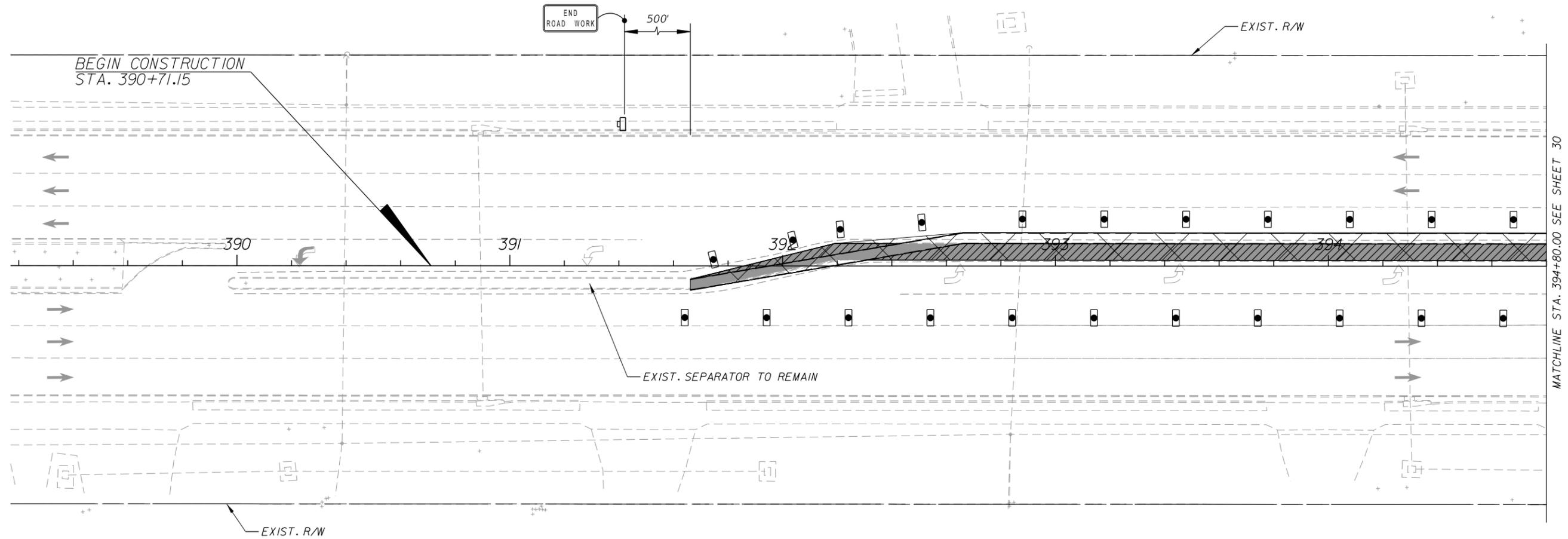
COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 1**

SHEET NO.
28



WAL-MART



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

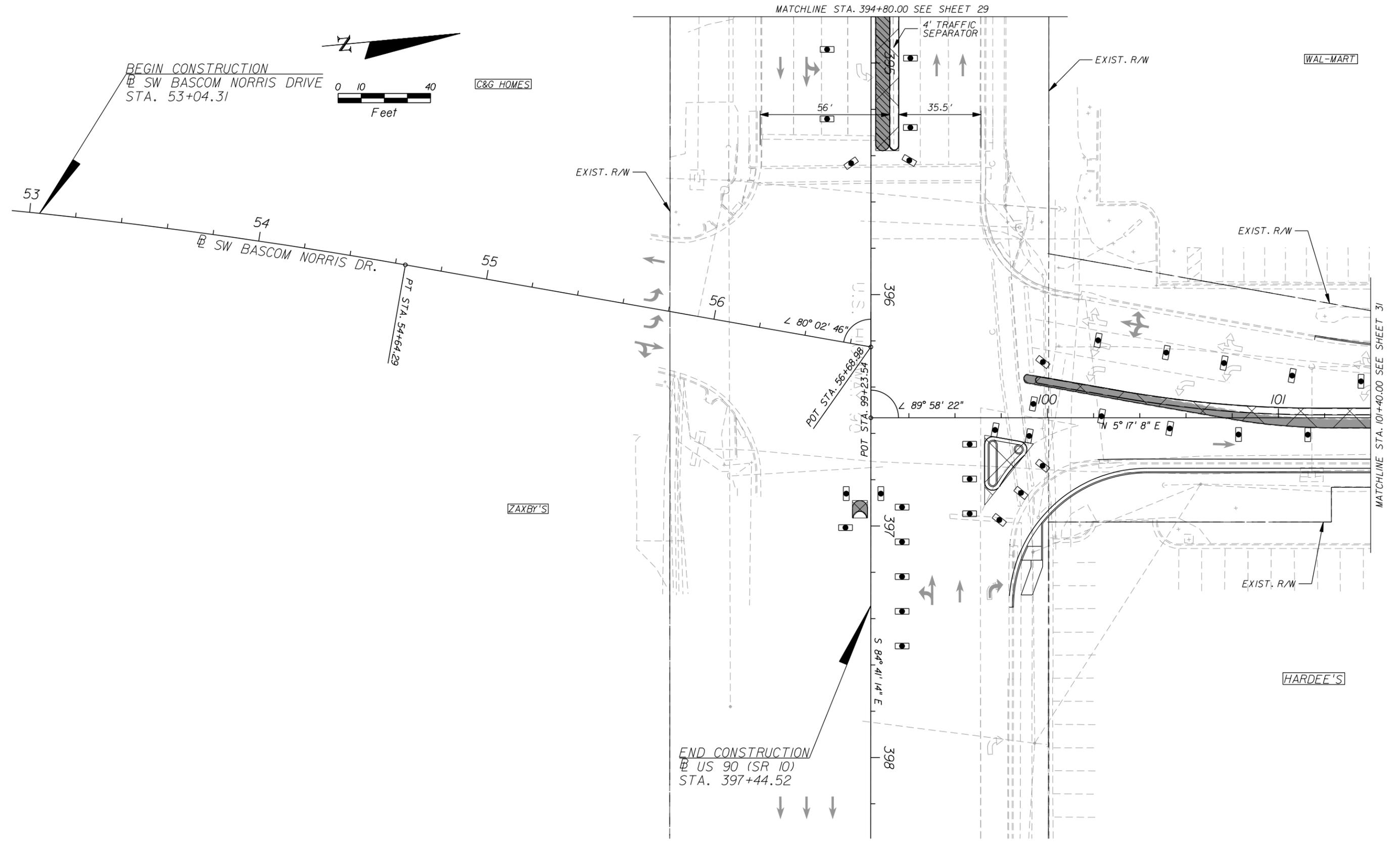
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 2**

SHEET NO.
29



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

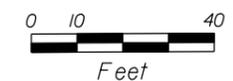
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



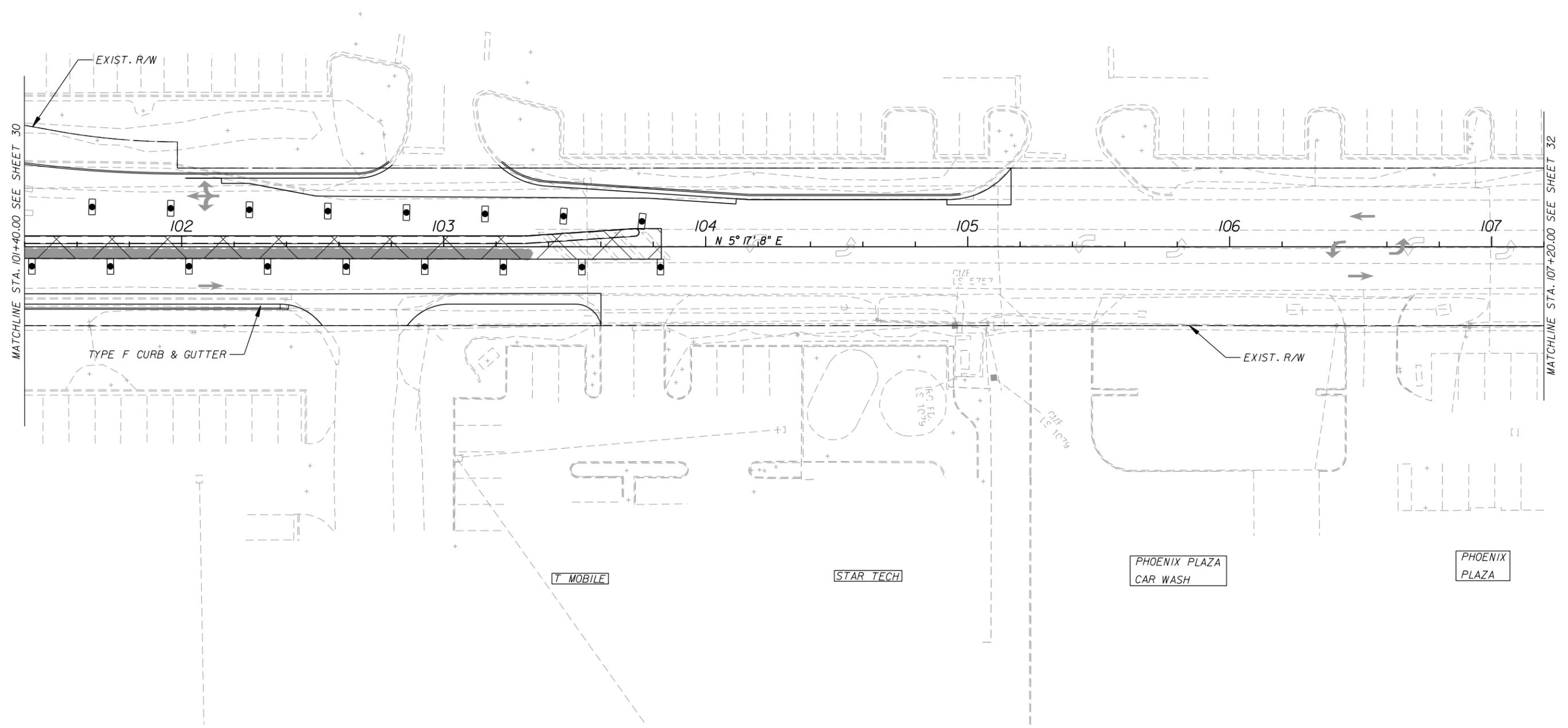
COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 2**

SHEET NO.
30



WAL-MART



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

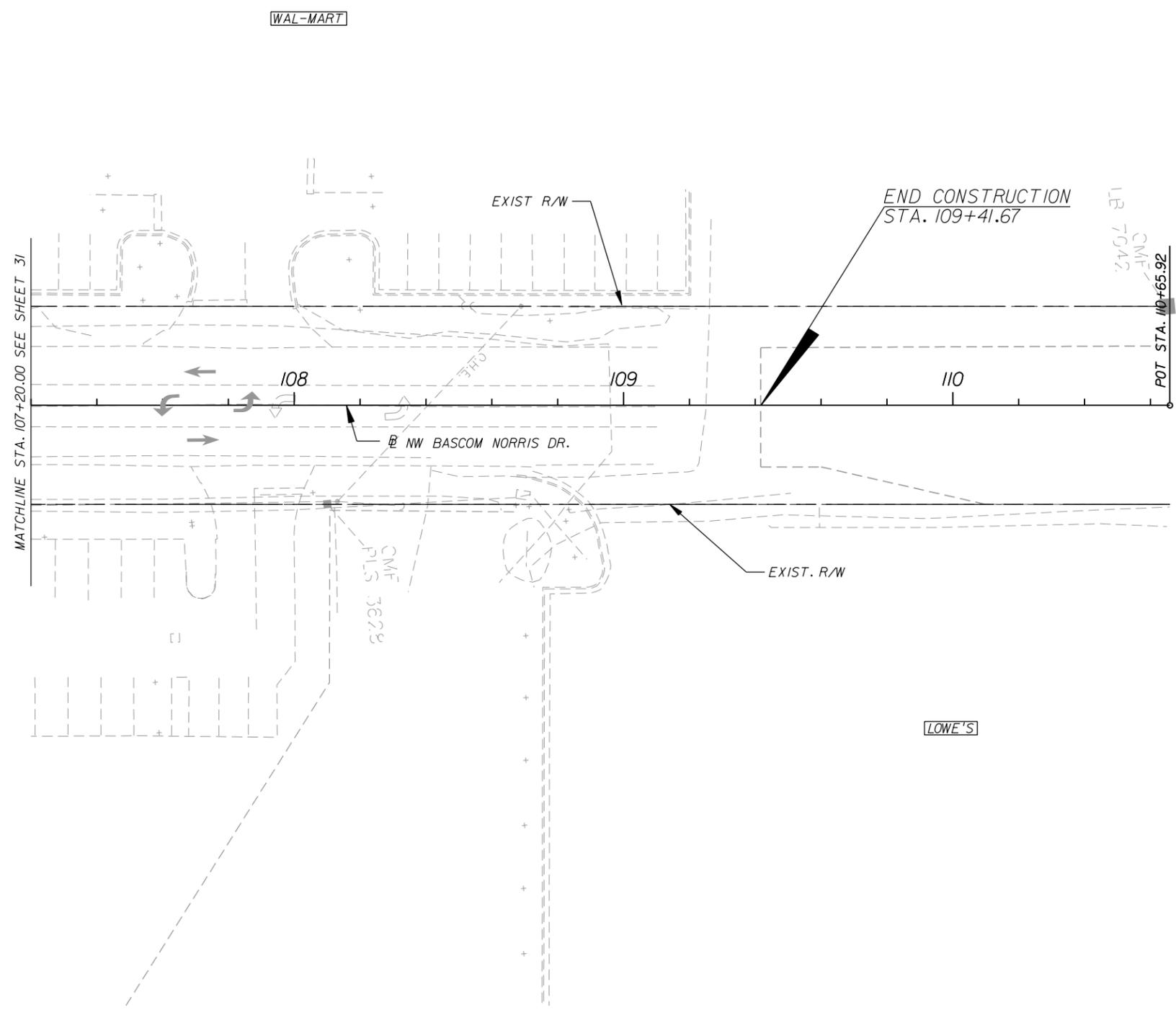
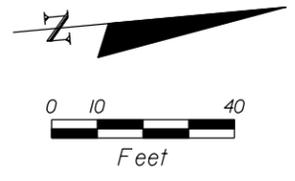
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 2**

SHEET NO.	31
-----------	----



REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

ARCADIS
 1650 Prudential Drive, Suite 400
 Jacksonville, Florida 32207
 T: 904 721 2991 | F: 904 861 2450
 Certificate of Authorization No. 7917
 Walter J. Nemecek, III, PE | No. 58122



COUNTY	COLUMBIA
FPID	434625-1-58-01

**TRAFFIC CONTROL PLAN
PHASE 2**

SHEET NO.
32

BASCOM NORRIS DRIVE AND US 90 INTERSECTION IMPROVEMENTS

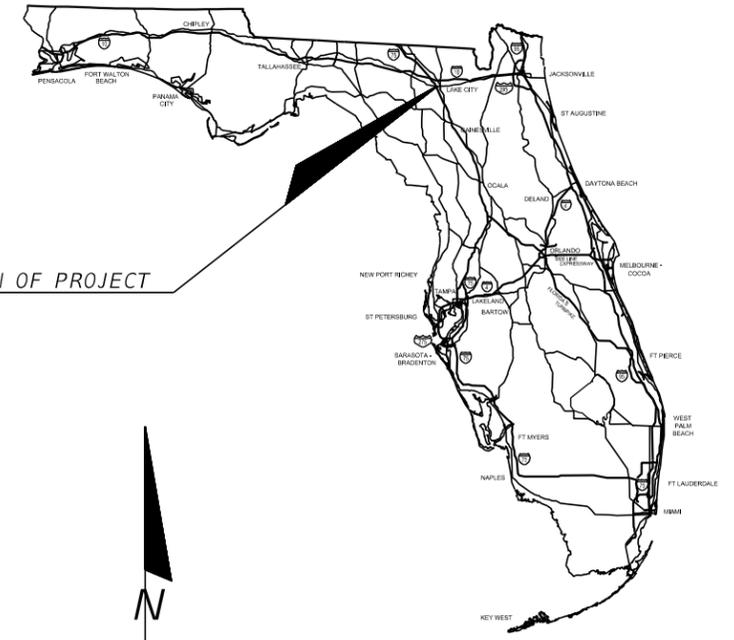
CONTRACT PLANS

FINANCIAL PROJECT ID 434625-1-58-01
COLUMBIA COUNTY
STATE ROAD NO. 10

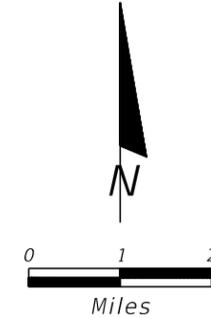
SIGNALIZATION PLANS

INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	GENERAL NOTES
3	TABULATION OF QUANTITIES
4	SIGNALIZATION PLAN
5	MAST ARM TABULATION
6	MAST ARM ASSEMBLIES DATA
7	STREET SIGN WORKSHEET
8	MISCELLANEOUS DETAILS



LOCATION OF PROJECT



ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

CHRISTIAN J. GYLE P.E.
ARCADIS
1650 PRUDENTIAL DRIVE
JACKSONVILLE, FLORIDA 32207

PLANS PREPARED BY:

CHRISTIAN J. GYLE, P.E.
ARCADIS
1650 PRUDENTIAL DRIVE
JACKSONVILLE, FLORIDA 32207

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO REPRODUCTION.

**BID SET
DATED: 10/7/2014**

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

SIGNALIZATION PLANS
ENGINEER OF RECORD: CHRISTIAN J. GYLE, P.E.
P.E. NO.: 69159

FISCAL YEAR	SHEET NO.
14	1

PROJECT MANAGER: CHAD WILLIAMS, P.E.

SIGNALIZATION NOTES

1. THERE SHALL BE NO LOOP LEAD-INS AND SIGNAL CABLE IN THE SAME CONDUIT OR PULL BOX.
2. WHEN JACKING CONDUIT UNDER PAVEMENT, AN FDOT APPROVED GUIDANCE BORING SYSTEM MAY BE USED IN ACCORDANCE WITH SECTION 555 OF THE FDOT SPECIFICATIONS AS AN ALTERNATE METHOD OF CONSTRUCTION.
3. UTILIZE EXISTING SPARE CONDUIT RUNS WHEN POSSIBLE. IF ADDITIONAL CONDUIT RUNS ARE REQUIRED FOR NEW RUNS OF SIGNAL CABLE, LOOP LEAD-INS, OR INTERCONNECT CABLE TO ENTER EXISTING CONTROLLER CABINET, USE A PROPERLY SEALED PULLING ELL, LOCATED AS NOT TO INTERFERE WITH THE INTERNAL COMPONENTS OR WIRING. COST TO BE INCLUDED UNDER PAY ITEM SERIES 630.
4. NOTIFY GARY PINKMAN AT THE CITY OF LAKE CITY TRAFFIC OPERATIONS AT (386) 867-3207, 48 HOURS IN ADVANCE OF BEGINNING SIGNAL WORK TO OBSERVE INSTALLATION IF DESIRED.
5. ALL TYPE F LOOPS SHALL BE MODIFIED TO 30 FEET IN LENGTH AND SHALL EXTEND 4 FEET IN FRONT OF STOP BAR.
6. UNLESS SPECIFIED OTHERWISE IN THE PLANS, ALL PULL BOX COVERS TO BE FURNISHED AND INSTALLED SHALL BE NON-METALLIC.
7. THE COST OF REMOVING EXISTING PULL BOXES TO BE INCLUDED UNDER PAY ITEM SERIES 635.
8. THE CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA, INC. AS REQUIRED BY CHAPTER 556 OF THE FLORIDA STATUTES.
9. VERIFY VERTICALLY AND HORIZONTALLY (VVH) EXISTING UTILITIES PRIOR TO ANY DIRECTIONAL OR JACK AND BORES. COST SHALL BE INCLUDED IN THE COST OF THE BORE.
10. TREE TRIMMING SHALL BE PERFORMED AS NECESSARY FOR THE INSTALLATION OF MAST ARMS AND TO REMOVE VISIBLE OBSTRUCTION OF THE PROPOSED SIGNALS TO A MINIMUM HEIGHT OF 23 FEET ABOVE FINISHED GRADE.
11. UTILITY CONTACT INFORMATION:

WATER/SEWER/GAS:	LAKE CITY PUBLIC WORKS	KEITH HAMPTON	386-758-5492
	LAKE CITY PUBLIC WORKS	RICHARD MOODY	386-758-5492
	LAKE CITY PUBLIC WORKS	JOE SHELDON	386-758-5405
TELEPHONE:	AT&T	DINO FARRUGGIO	954-249-0558
CABLE:	COMCAST	LARRY WINBURN	904-380-7574
ELECTRIC:	FPL	TRACY STERN	800-868-9554

CALL BEFORE YOU DIG
 SUNSHINE STATE ONE CALL
1-800-432-4770
 48 HOURS, MIN. PRIOR TO CONSTRUCTION

REVISIONS			US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS	ARCADIS 1650 Prudential Drive, Suite 400 Jacksonville, Florida 32207 T: 904 721 2991 | F: 904 861 2450 Certificate of Authorization No. 7917 Christian J. Gyle, PE | No. 69159		COUNTY	GENERAL NOTES	SHEET NO.
DATE	BY	DESCRIPTION				COLUMBIA		FPID	2
						434625-1-58-01		

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			4																								
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL					
110-15-1	Arborist Work, Tree Trimming - Limbs/Roots	EA	1																				1		1		
630-2-11	Signals-Conduit (F&I)(Underground)	LF	110																					110		110	
630-2-12	Signals-Conduit (F&I)(Directional Bore)	LF	886																					886		886	
635-2-11	Pull & Splice Box, F&I, 13"X24" Cover Size	EA	7																					7		7	
646-1-11	Aluminum Signals Pole (Pedestal Detector Post)	EA	2																					2		2	
649-31-304	M/ARM(F&I)(Wind Speed 110) (70.5)	EA	1																					1		1	
649-31-303	M/ARM(F&I)(Wind Speed 110) (60)	EA	1																					1		1	
650-1-311	Traffic Signal (F&I)(3-sec)(1 way)(Aluminum)	AS	9																					9		9	
653-191	Pedestrian Signal (F&I) (LED) (1-way)	AS	2																					2		2	
660-2-106	Loop Assembly (F&I) (Type F)	EA	15																					15		15	
660-3-42	Vehical Detection System - Microwave, Relocate	EA	2																					2		2	
665-1-12	Pedestrian Detector (F&I) (Accessible)	EA	2																					2		2	
690-10	Traffic Signal Head Assmely, Removal	EA	6																					6		6	
690-20	Pedestrial Signal Assembly, Removal	EA	2																					2		2	
690-32-2	Pole Removal, Shallow	PI	2																					2		2	
690-90	Remove Conduit and Cabling	PI	1																					1		1	
690-100	Signal Equipment, Miscellaneous Removal	PI	1																					1		1	
700-3-21	Sign Panel (F&I) Overhead Mount (Up to 12 S.F.)	EA	1																					1		1	
700-3-22	Sign Panel (F&I) Overhead Mount (12-20 S.F.)	EA	1																					1		1	

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

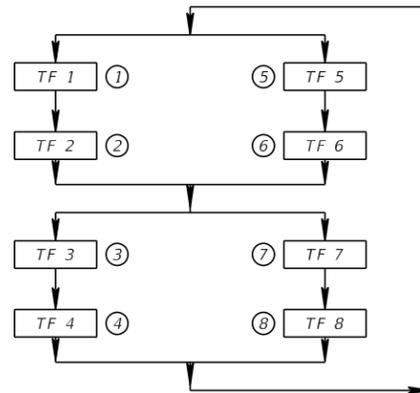
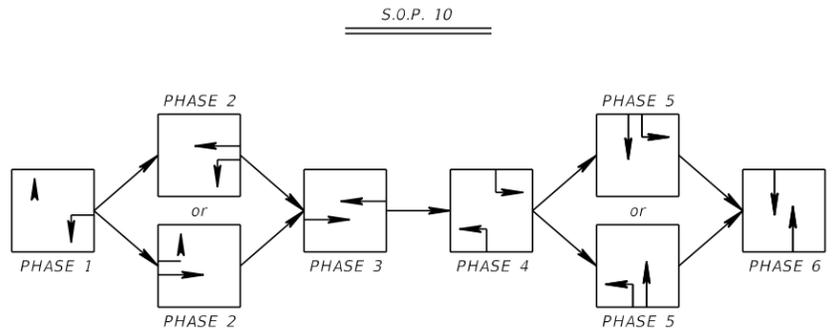
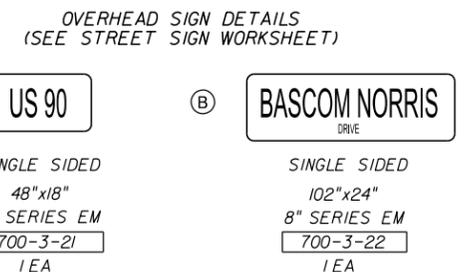
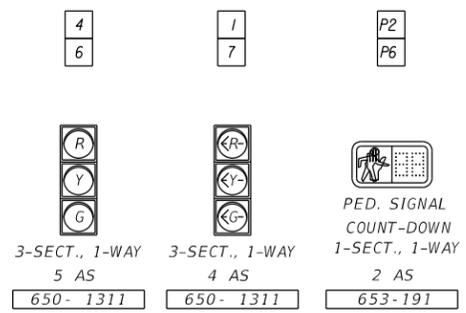
ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Christian J. Gyle, PE | No. 69159



COUNTY	COLUMBIA
FPID	434625-1-58-01

TABULATION OF QUANTITIES

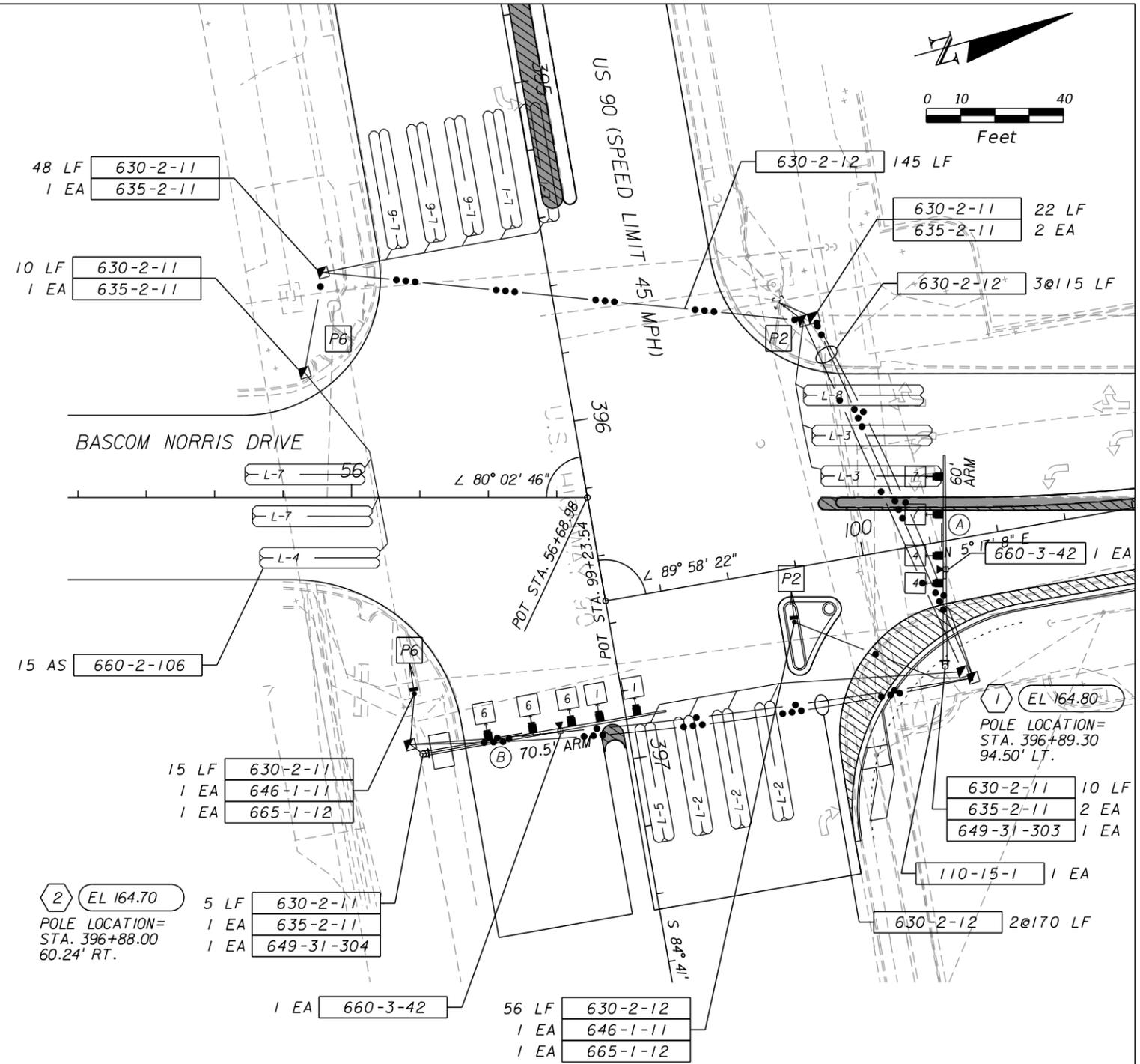
SHEET NO.
3



LOOP	NO. OF LOOPS	NO. OF NEW DETS.	NO. OF EXIST. DETS.	DELAY TIME (SEC)
L-1	1			
L-2	3			
L-3	2			
L-4	1			5
L-5	1			5
L-6	3			
L-7	2			
L-8	1			5
L-				
L-				

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

TIMING FUNCTION	MOVEMENT NUMBER	1	2	3	4	5	6	7	8
MINIMUM GREEN		4	15	5	7	5	15	7	7
EXTENSION		5	5	5	5	5	5	5	5
MAXIMUM GREEN 1		25	50	25	25	15	50	20	25
MAXIMUM GREEN 2		29	80	19	18	12	80	16	27
YELLOW CLEARANCE		4.8	4.8	3.4	4.8	4.8	4.8	3.4	3.4
ALL RED		2.0	2.0	2.5	2.9	2.0	2.0	2.0	2.9
PEDESTRIAN WALK			7				7		7
PED. CLEARANCE			30				26		29
RECALL			Min				Min		



2 EL 164.70
POLE LOCATION = STA. 396+88.00
60.24' RT.

690-10	6 EA
690-20	2 EA
690-32-2	2 EA
690-90	1 PI
690-100	1 PI

- NOTES:
- INTERSECTION NO.: 29M013
 - THE MAJOR STREET IS US 90 (POSTED 45 MPH). NEMA PHASES 1,2,5 & 6. THE MINOR STREET IS BASCOM NORRIS DRIVE (POSTED 30 MPH). NEMA PHASES 3,4,7 & 8
 - USE EXISTING CONTROLLER CABINET AND CABINET HARDWARE.
 - THE CONTRACTOR SHALL MAINTAIN FIBER COMMUNICATIONS AND DETECTION DURING CONSTRUCTION.
 - INSTALL (1) WHITE ENFORCEMENT LIGHT ATOP THE MIDDLE SIGNAL FOR MOVEMENT 6 (EB US 90).
 - RELOCATE (2) EXISTING PREEMPTION DEVICES TO THE PROPOSED MAST ARMS.

DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Christian J. Gyle, PE | No. 69159



COUNTY	COLUMBIA
FPID	434625-1-58-01

**SIGNALIZATION
PLAN 1**

SHEET NO.
4

STANDARD MAST ARM ASSEMBLIES DATA TABLE																		
STRUCTURE ID NUMBERS	ASSEMBLY NUMBERS ⁽¹⁾	FIRST ARM			SECOND ARM			UF (deg)	LL (deg)	POLE			SPECIAL DRILLED SHAFT ^(4 & 5)					
		ARM TYPE	FAA ⁽²⁾ (ft.)	FBA ⁽²⁾ (in.)	ARM TYPE	FAA ⁽²⁾ (ft.)	FBA ⁽²⁾ (in.)			POLE TYPE	UAA ⁽³⁾ (ft.)	UB (ft.)	UCA ⁽³⁾ (in.)	DA (ft.)	DB (ft.)	RA	RB	RC	RD
1	E5-T3	E5	.	.	.	.	.	.	.	T3	22	19	15.95	.	.	.	.	.
2	E6-T4	E6	.	.	.	.	.	.	.	T4	23	20	18.81	.	.	.	.	.
	
	
	
	
	
	

TABLE NOTES:

1. Assembly Number Legend

Single Arm:

Arm Type - Pole Type = D# - S#
 = E# - T#
 = F# - W#

Double Arm:

First Arm Type - Second Arm Type - Pole Type = D# - D# - S#
 = E# - E# - T#
 = F# - F# - W#

- If an entry appears in columns "FAA" and "FBA", a shorter arm is required. This is obtained by removing length from the arm tip. For these cases the mast arm length shall be shortened from "FA" to "FAA" and the tip diameter shall be increased from "FB" to "FBA".
- If an entry appears in columns "UAA" and "UCA", a shorter pole is required. This is obtained by removing length from the pole tip. For these cases the pole height shall be shortened from "UA" to "UAA" and the pole tip diameter shall be increased from "UC" to "UCA".
- The foundations for Standard Mast Arm Assemblies are pre-designed and are based upon the following conservative soil criteria which covers the great majority of soil types found in Florida. Only complete the "Special Drilled Shaft" data information if site conditions dictate drilled shafts with additional foundation capacity.

Classification = Cohesionless (Fine Sand)
 Friction Angle = 30 Degrees (30°)
 Unit Weight = 50 lbs. / cu. ft. (assumed saturated)

- Values have been provided for the Special Drilled Shaft to increase the foundation capacity.

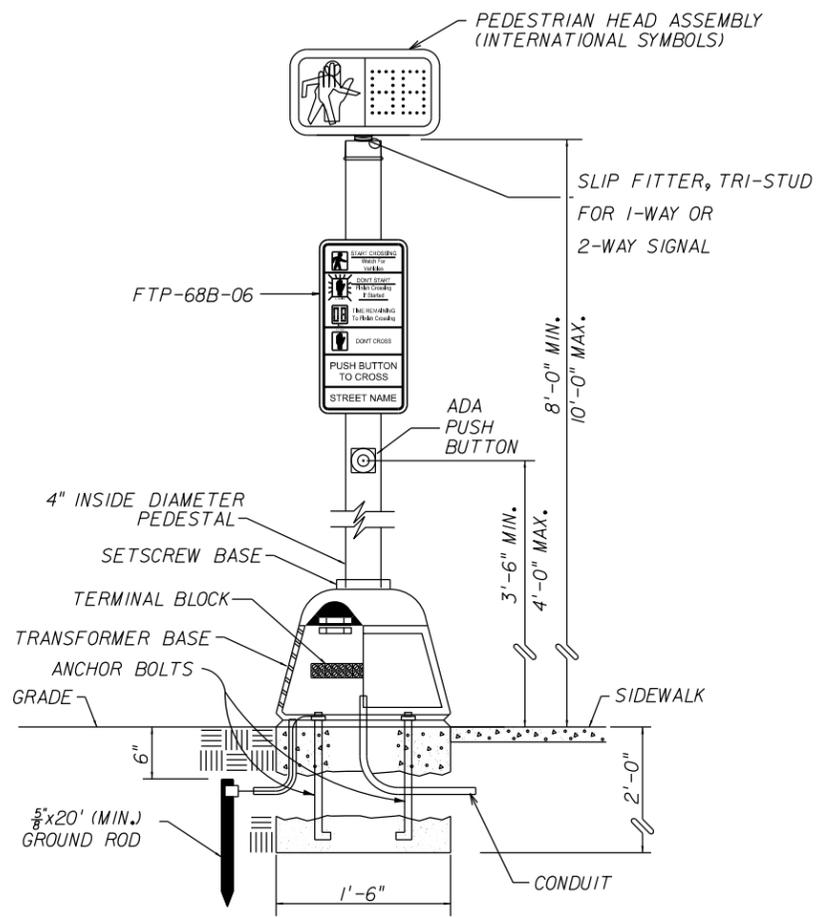
GENERAL NOTES:

- Work this sheet with the Signal Designer's "Mast Arm Tabulation". See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.
- Work with Index Nos. 17743 and 17745.

DRILLED SHAFT NOTES:

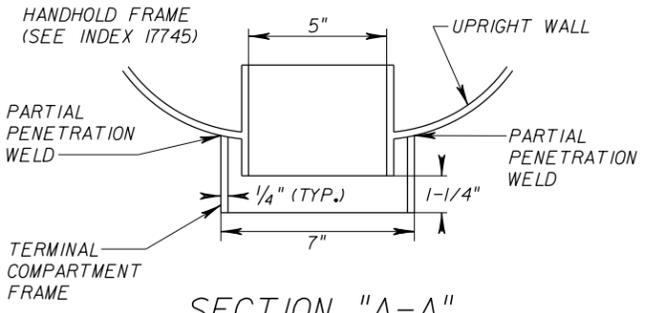
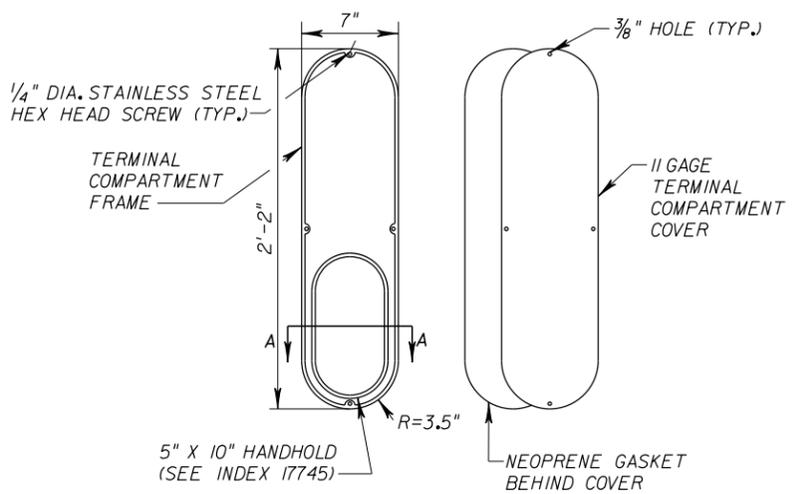
- CSL Tubes shall be schedule 80 PVC above the top of the reinforcing cage.

REVISIONS			US 90 AND BASCOM NORRIS DR. INTERSECTION IMPROVEMENTS	ARCADIS 1650 Prudential Drive, Suite 400 Jacksonville, Florida 32207 T: 904 721 2991 | F: 904 861 2450 Certificate of Authorization No. 7917 Christian J. Gyle, PE | No. 69159		COUNTY COLUMBIA FPID 434625-1-58-01	STANDARD MAST ARM ASSEMBLIES DATA TABLE	SHEET NO.
DATE	BY	DESCRIPTION						6

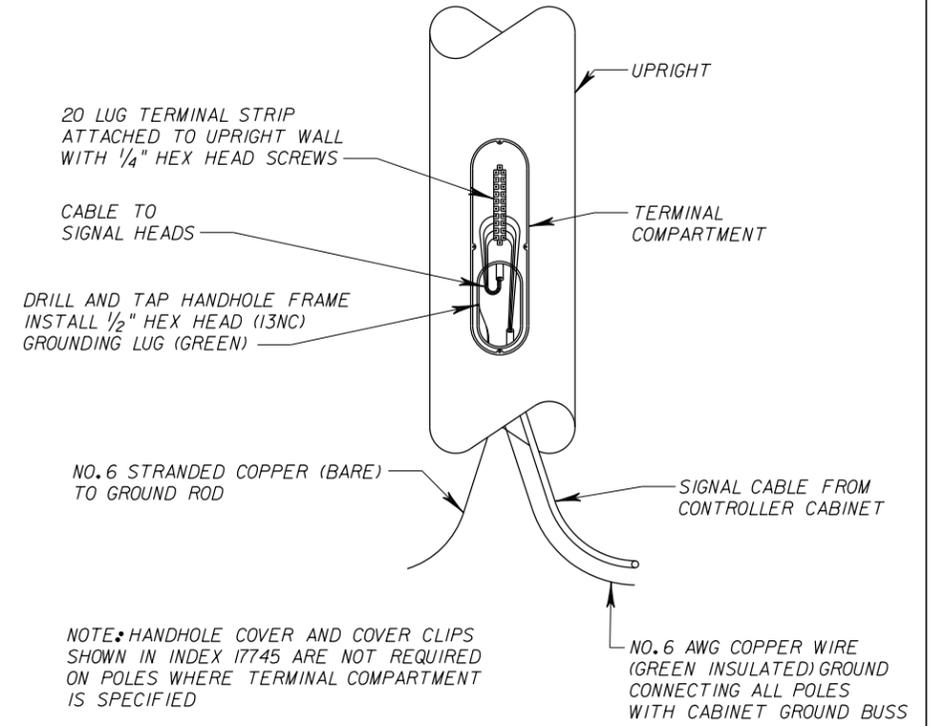


PEDESTRIAN SIGNAL PEDESTAL DETAIL
N.T.S.

- Notes:**
1. Ped detector, Ped sign and Ped signal shall be oriented facing the crosswalk they service.
 2. When 2 Ped signals are mounted on the same pedestal the Ped signs shall be cantilevered as needed to mount at the same height.
 3. Use Class I concrete for foundation.



SECTION "A-A"
N.T.S.
TERMINAL COMPARTMENT FRAME AND COVER DETAIL
N.T.S.



WIRING DETAILS
N.T.S.

REVISIONS		
DATE	BY	DESCRIPTION

**US 90 AND BASCOM NORRIS DR.
INTERSECTION IMPROVEMENTS**

ARCADIS
1650 Prudential Drive, Suite 400
Jacksonville, Florida 32207
T: 904 721 2991 | F: 904 861 2450
Certificate of Authorization No. 7917
Christian J. Gyle, PE | No. 69159



COUNTY	COLUMBIA
FPID	434625-1-58-01

MISCELLANEOUS DETAILS

SHEET NO.
8