

# CAROLINA CROSSROADS, PHASE 1

## CONFLICT 1052/1055

### SALUDA 30" FORCE MAIN (PARALLEL TO I-126)

## FACILITY #22

## SECTION 1



The utilities are shown for the contractor's convenience only. There may be other utilities not shown on these Plans. The Engineer assumes no responsibility to verify the locations shown and it shall be the contractor's responsibility to verify the locations of all utilities within the limits of the work. All damage made to existing utilities by the contractor shall be the sole responsibility of the contractor.



This 100% submittal has been reviewed by the City of Columbia and is approved to be issued for construction.

John B. Hilbert, Utility Relocation Coordinator Date

Dana R. Higgins, Director of Engineering Date

MAYOR

DANIEL J. RICKENMANN

CITY COUNCIL

HOWARD E. DUVALL, JR.  
EDWARD H. MCDOWELL, JR.  
WILL BRENNAN  
JOE E. TAYLOR, JR.  
TINA N. HERBERT  
ADITI BUSSELLS

CITY MANAGER

TERESA B. WILSON

ASSISTANT CITY MANAGER OF COLUMBIA WATER

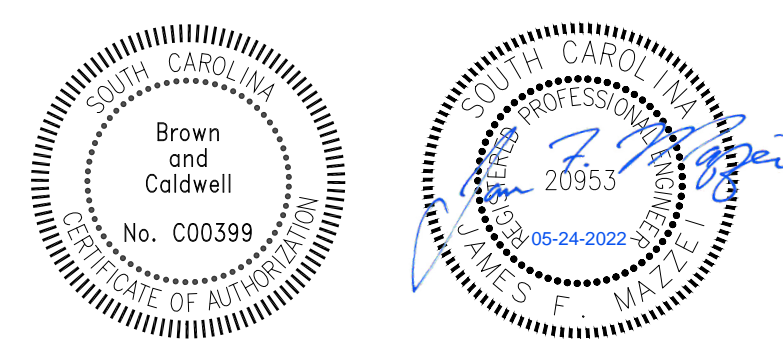
CLINT SHEALY, P.E.

DIRECTOR OF UTILITY OPERATIONS

WILLIAM FRANK ESKRIDGE, P.E.

DIRECTOR OF ENGINEERING

DANA R. HIGGINS, P.E.



## 100% DESIGN DOCUMENTS

## MAY 2022

PREPARED BY:

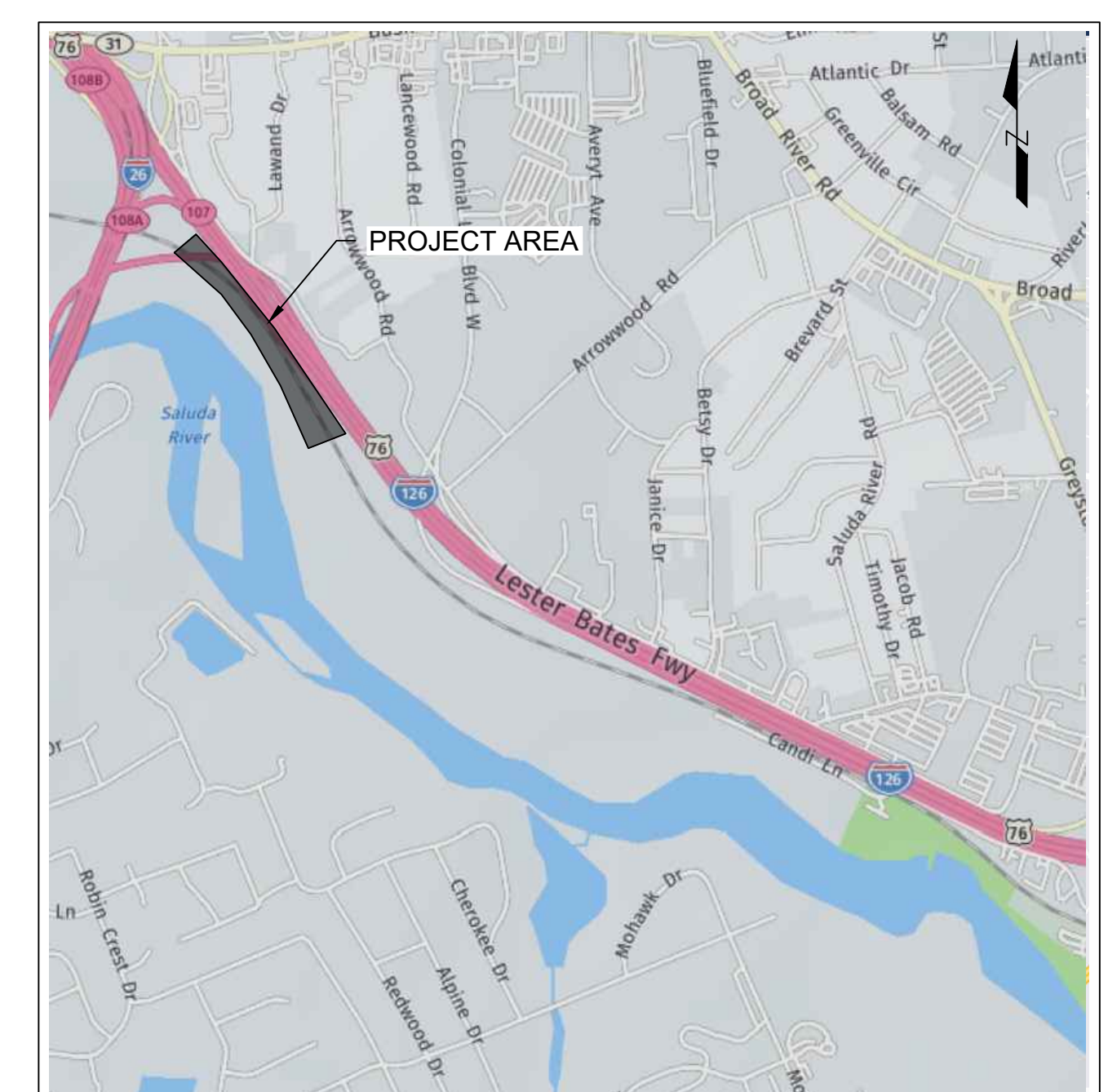
**Brown AND Caldwell**

Environmental Engineering and Consulting  
250 Berryhill Road, Suite 104, Columbia, SC 29210 803-873-9701



Chao & Associates, Inc.

Civil - Structural - Survey  
7 Clusters Court  
Columbia, SC 29210  
Voice: (803) 772-8420  
Fax: (803) 772-9120  
Email: consult@chaoinc.com



LOCATION MAP  
NTS

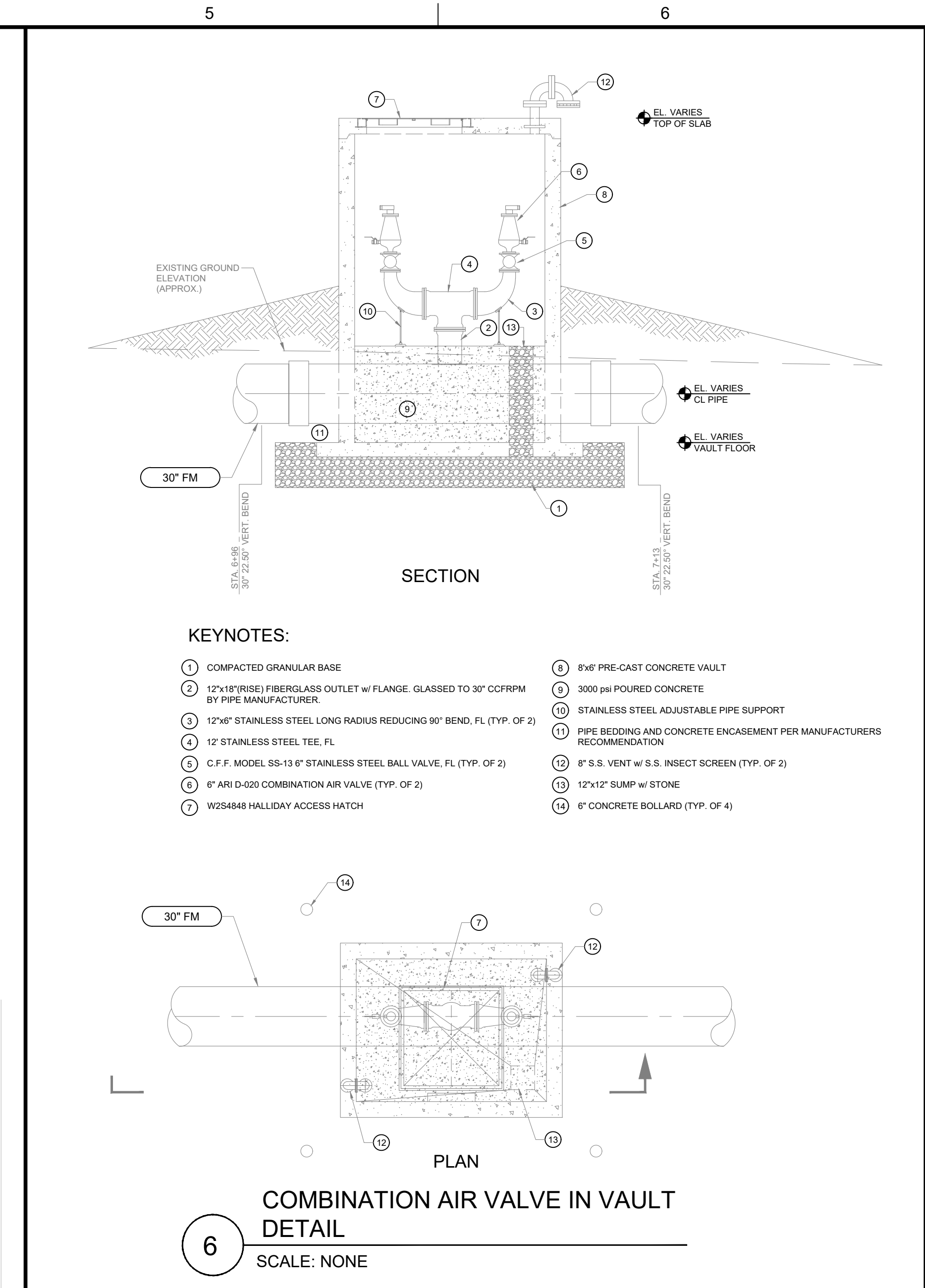
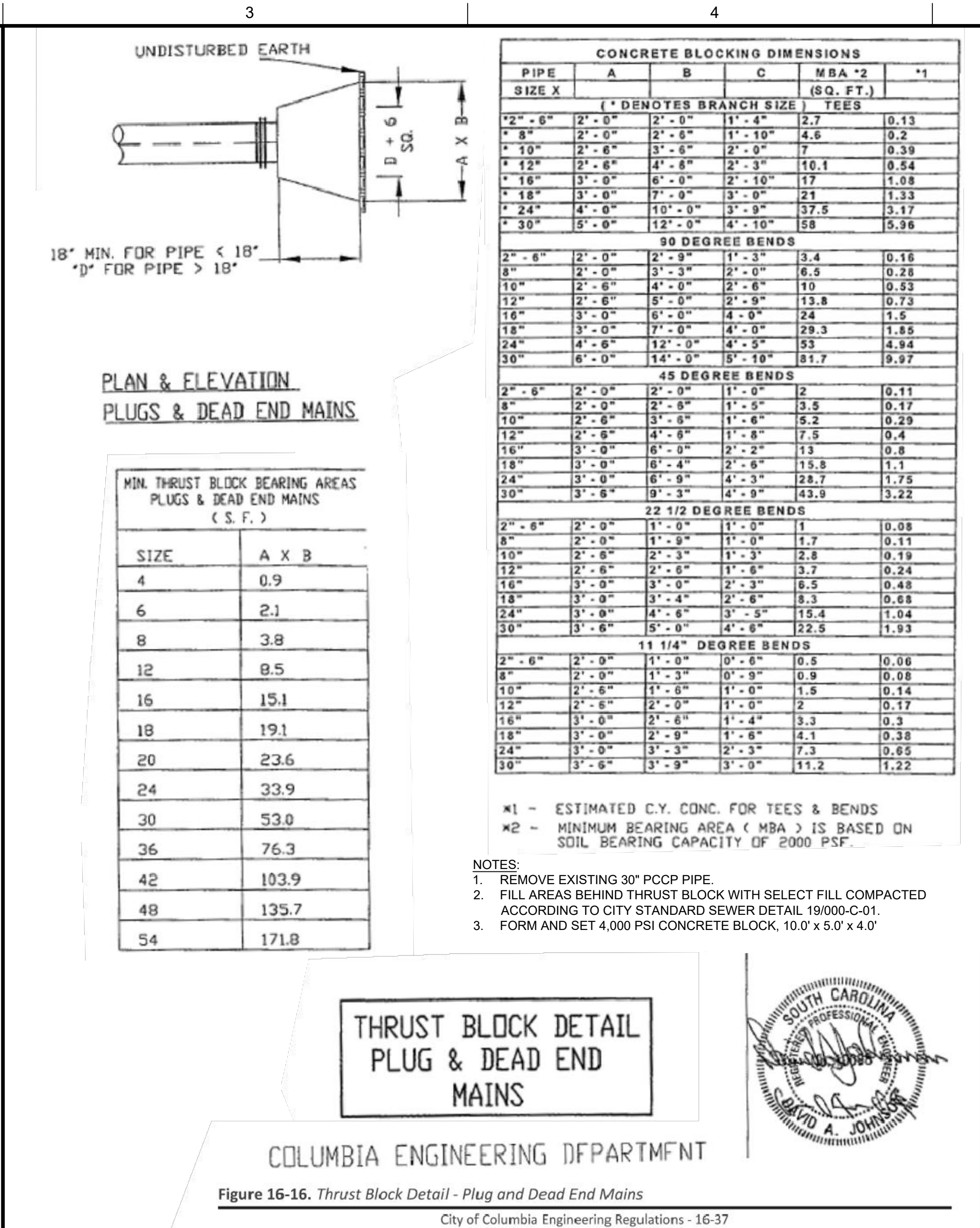
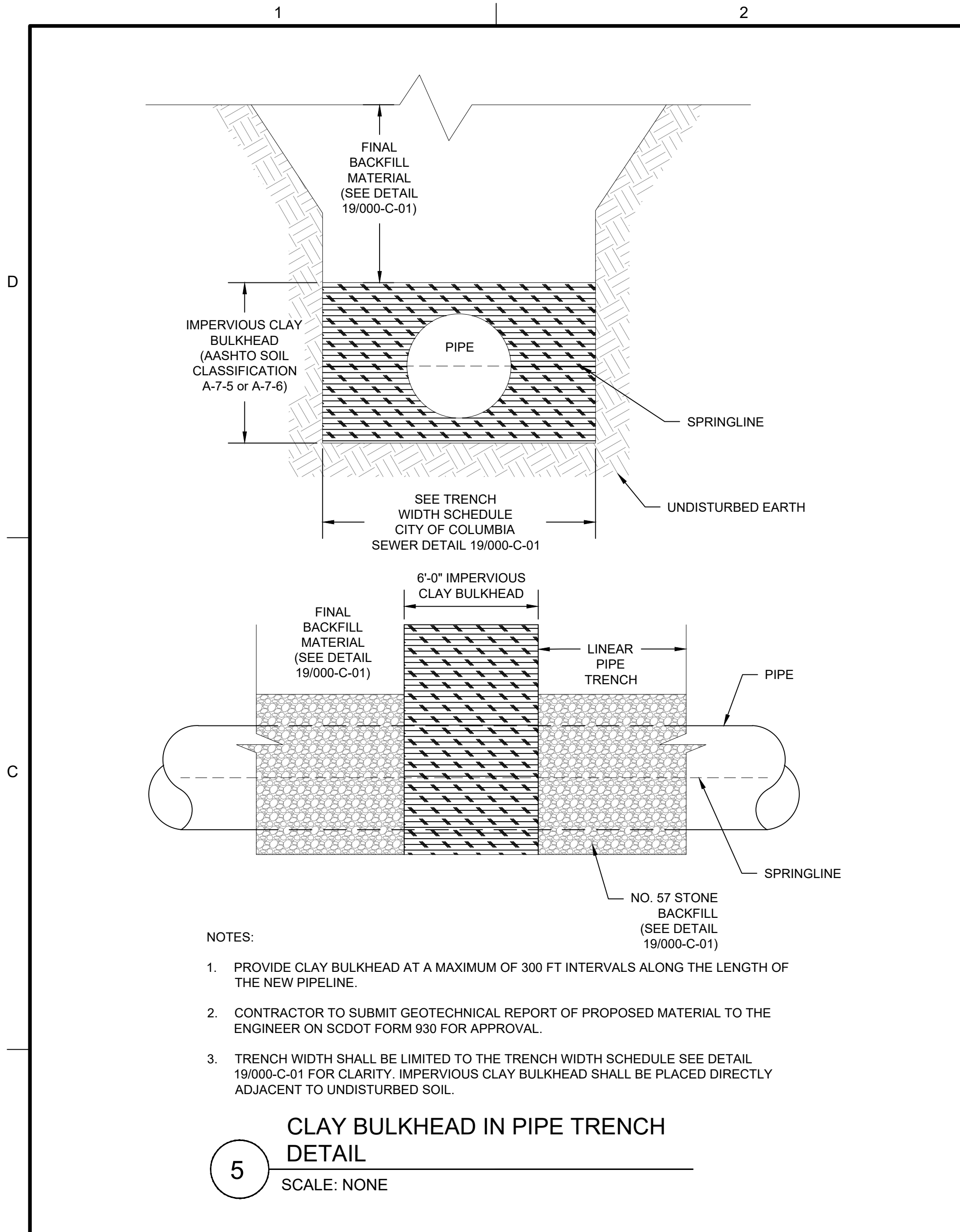












COLUMBIA, SOUTH CAROLINA

100% DESIGN SUBMITTAL

**CAROLINA CROSSROADS  
PHASE 1**

**CONFLICT 1052/1055  
30" FORCE MAIN  
(PARALLEL TO I-26  
FACILITY #22)  
SECTION 1**

REVISIONS		
REV	DATE	DESCRIPTION

LINE IS 2 INCHES  
AT FULL SIZE

DESIGNED:  
DRAWN:  
CHECKED:  
CHECKED:  
APPROVED:

FILENAME	000-C-01_02_03.DWG
BC PROJECT NUMBER	156904
CLIENT PROJECT NUMBER	SCDOT PROJECT ID P027662

**CIVIL**

**CIVIL DETAILS 2**

DRAWING NUMBER  
**000-C-02**

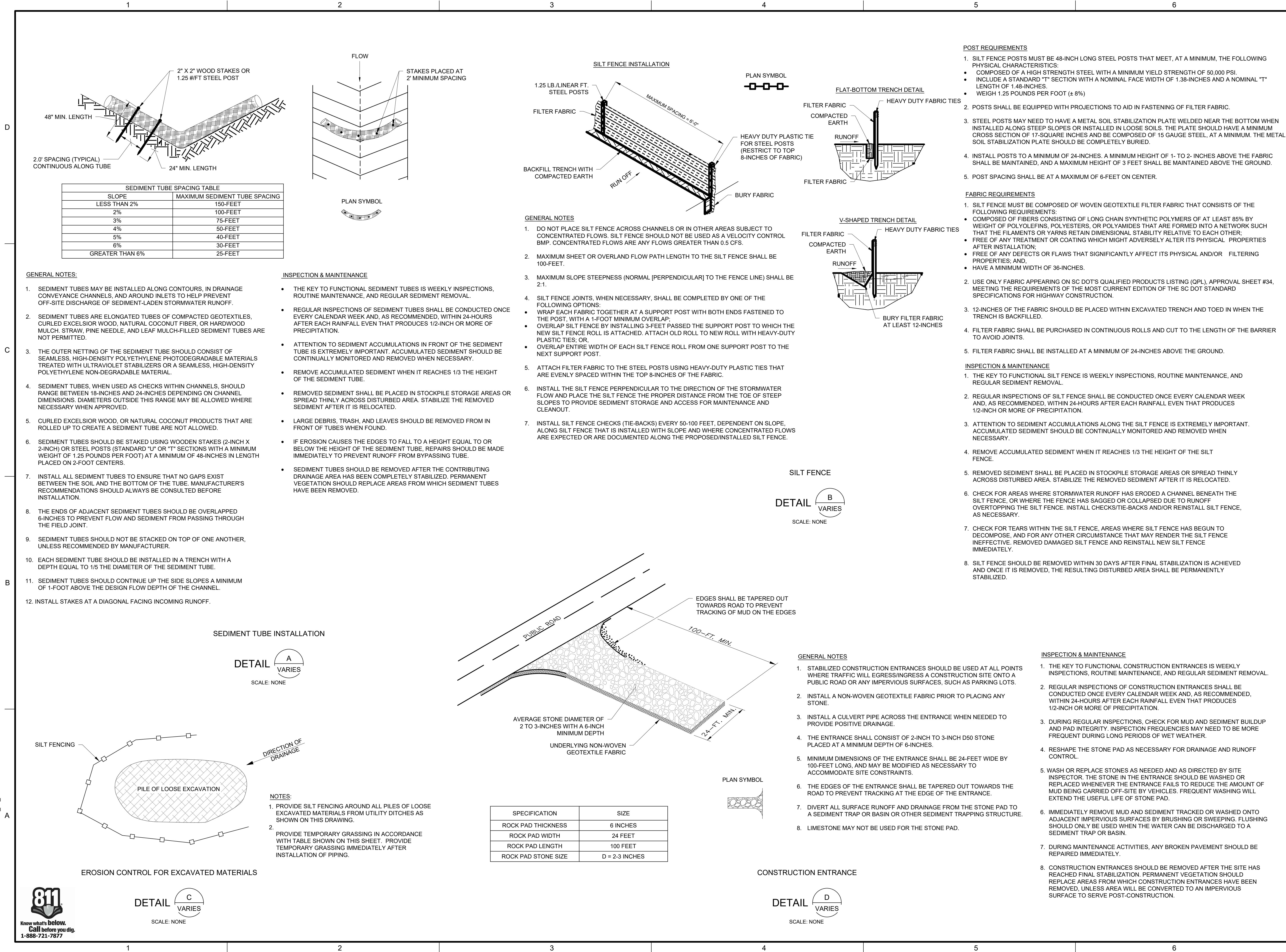
SHEET NUMBER  
4 OF 9



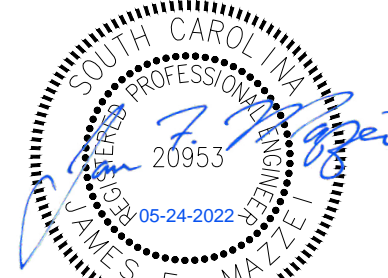
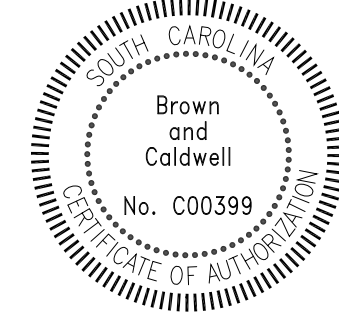




Path: C:\BCPWD\1874287 FILENAME: 000-C-01\_02\_03.DWG PLOT DATE: 4/25/2022 7:06 PM CAD USER: ANDY JUMPER



COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA CROSSROADS  
PHASE 1

CONFLICT 1052/1055  
30" FORCE MAIN  
(PARALLEL TO I-26  
FACILITY #22)  
SECTION 1

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES  
AT FULL SIZE

DESIGNED:

DRAWN:

CHECKED:

CHECKED:

APPROVED:

FILENAME	000-C-01_02_03.DWG
BC PROJECT NUMBER	156904
CLIENT PROJECT NUMBER	SCDOT PROJECT ID P027662

CIVIL

EROSION &  
SEDIMENTATION  
CONTROL DETAILS

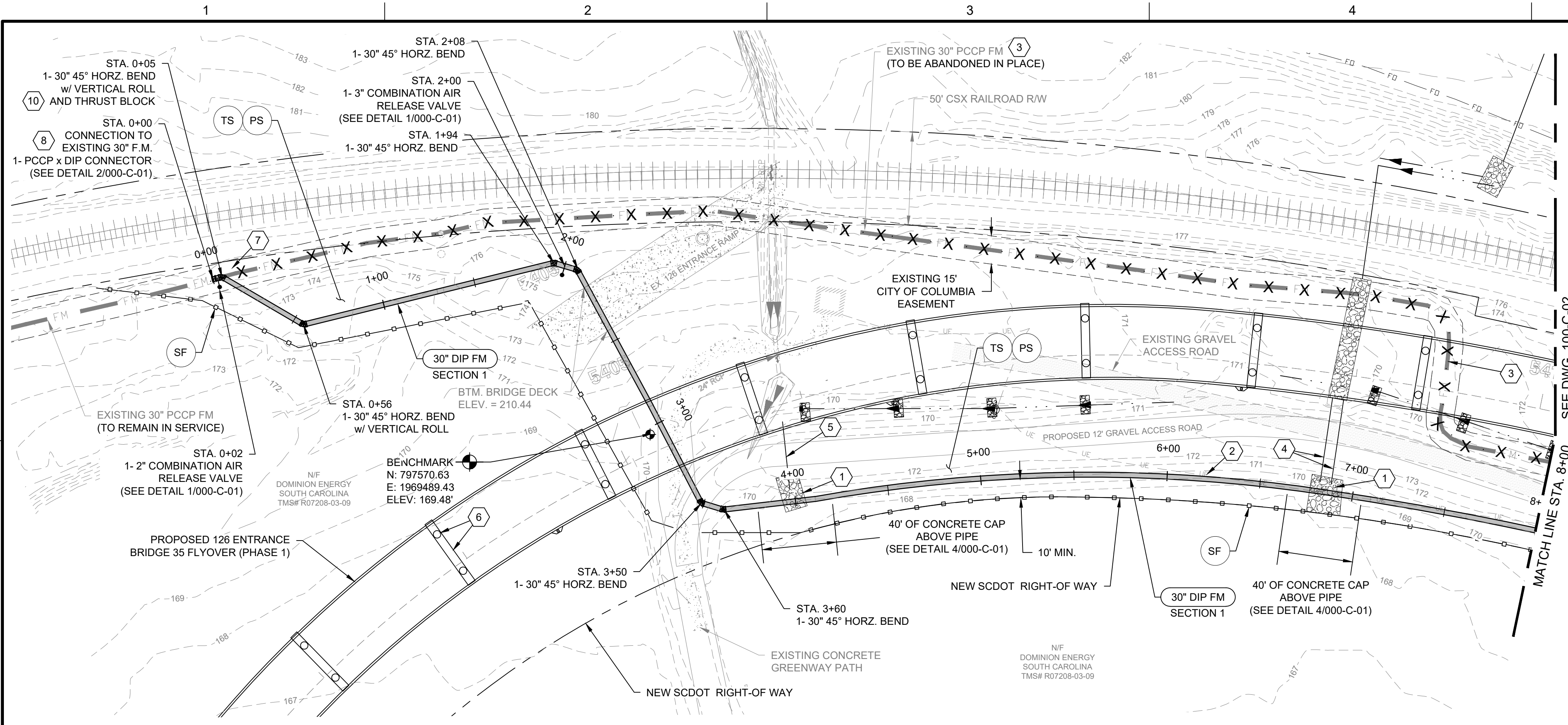
DRAWING NUMBER

000-C-04

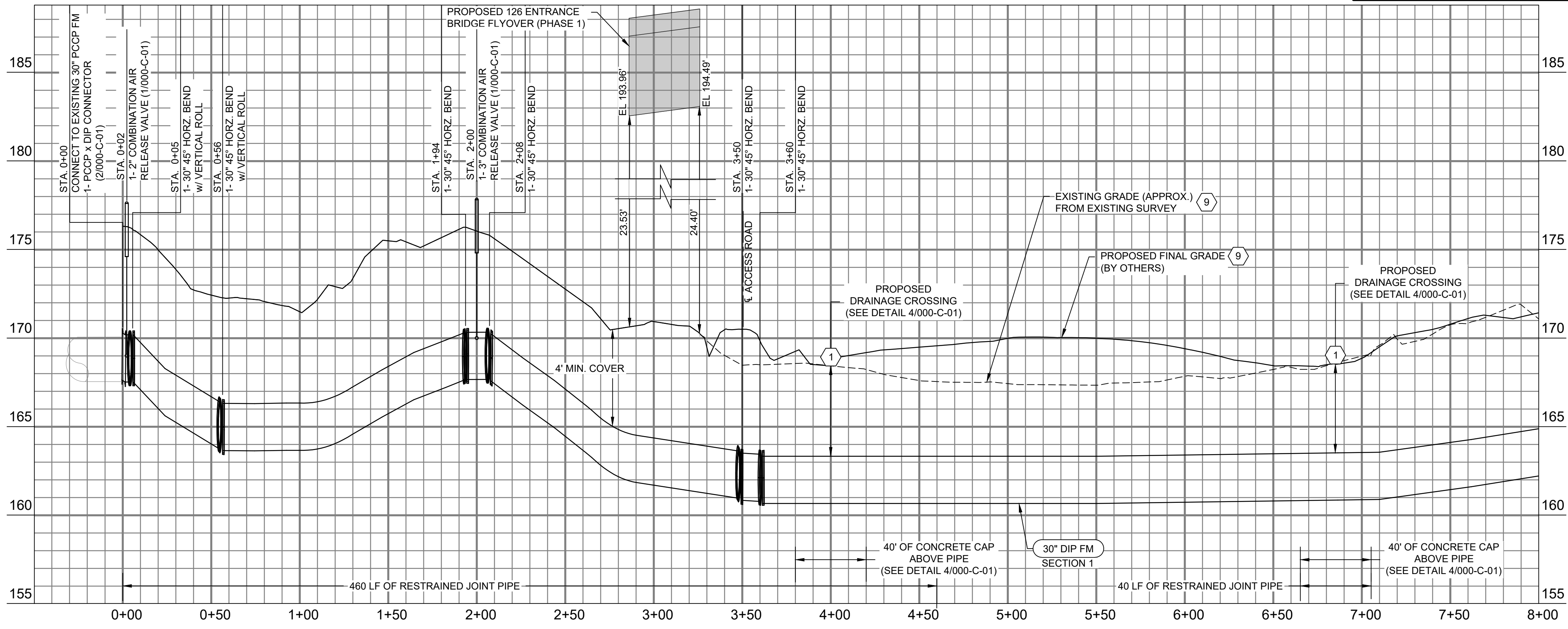
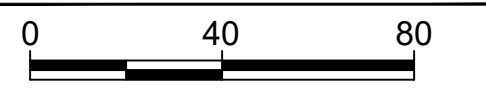
SHEET NUMBER

6 OF 9

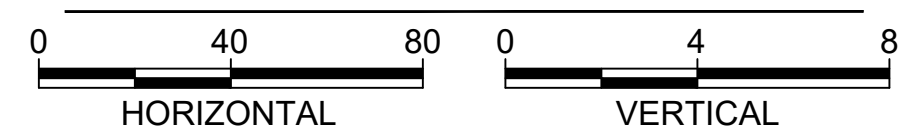




PLAN  
STA 0+00 TO 8+00



PROFILE  
STA 0+00 TO 8+00



KEY NOTES:

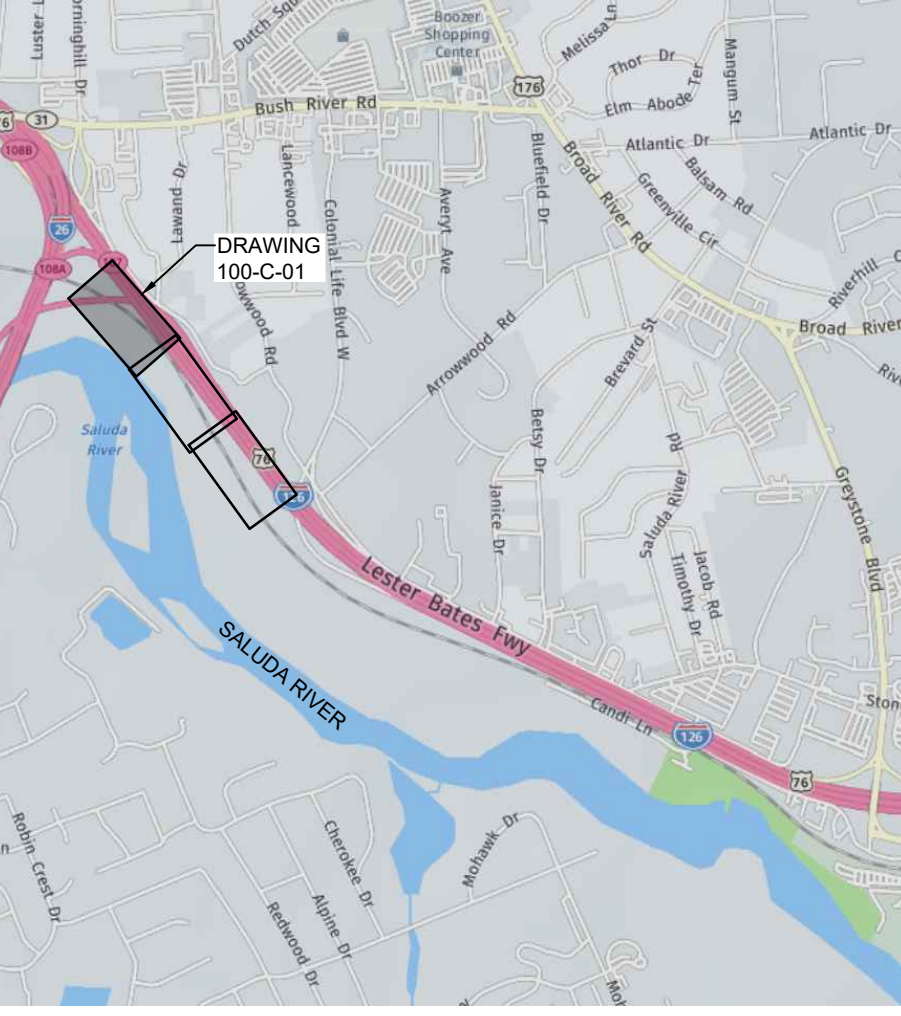
- 1 RIP-RAP (SEE DETAIL 4/000-C-01)
- 2 EXISTING UNDERGROUND ELECTRICAL (TO BE RELOCATED BY OTHERS)
- 3 ABANDONED UPON COMMISSIONING OF NEW 30-INCH FORCE MAIN. CONTRACTOR WILL REMOVE THE EXISTING PIPING WHEREVER IT IS WITHIN 10-FEET OF THE PROPOSED ROADWAY. IN OTHER LOCATIONS, THE ABANDONED FORCE MAIN WILL BE FILLED WITH EXCAVATABLE FLOWABLE FILL CONCRETE. CONTRACTOR TO SUBMIT A PLAN FOR ABANDONMENT TO THE CITY FOR APPROVAL PRIOR TO BEGINNING FLOW-FILLING.
- 4 PROPOSED TWIN 30" STORM PIPES AND RIP-RAP (TO BE INSTALLED BY OTHERS)
- 5 PROPOSED 24" STORM PIPES (TO BE INSTALLED BY OTHERS)
- 6 PROPOSED BRIDGE BENT AND SUPPORTS
- 7 SEE THRUST BLOCK DETAIL - PLUG AND DEAD END MAINS, FIGURE 16-16/000-C-02.
- 8 CONTRACTOR MUST EXERCISE CARE TO EXPOSE AND PROTECT EXISTING PCPP JOINTS. IF A JOINT IS DAMAGED AND CANNOT BE USED TO CONNECT TO, CONTRACTOR SHALL REMOVE ADDITIONAL PCPP PIPE TO REACH A VIABLE JOINT.
- 9 EXISTING GRADE AND PROPOSED GRADE IN PROFILE WERE BOTH ESTABLISH ALONG THE CENTERLINE OF THE NEW 30" FM.
- 10 CONTRACTOR TO PROVIDE TEMPORARY BLOCKING AND BRACING AROUND PIPE UNTIL CONCRETE SETS.

GENERAL NOTES:

1. EXISTING FORCE MAIN TO BE CAPPED AND FILLED WITH FLOWABLE FILL FOR ABANDONMENT EXCEPT AS NOTED IN KEYNOTES. ALL EXISTING MANHOLE STRUCTURES SHALL BE REMOVED TO A MINIMUM DEPTH OF 3' BELOW FINISHED GRADE AND FILLED WITH FLOWABLE FILL.

GENERAL NOTES CON'D:

2. NEW 30" DIP FORCE MAIN SHALL BE INSTALLED AND PRESSURE TESTED PRIOR TO MAKING CONNECTION AT STA. 0+00.
3. AT ANY LOCATION WHERE THE FORCE MAIN IS MORE THAN 10' AWAY FROM THE PROPOSED ACCESS ROAD, CONTRACTOR TO PROVIDE DRIVABLE FINISH GRADE ABOVE PROPOSED FORCE MAIN TO ALLOW FUTURE ACCESS WITH A STANDARD 4-WHEEL DRIVE TRUCK.
4. CONTRACTOR TO ENSURE ALL PERMITS AND PERMISSIONS FOR WORK WITHIN 50' OF THE CSX RIGHT-OF-WAY HAVE BEEN OBTAINED. IF NOT, CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS/PERMISSIONS AND FULFILLING ANY REQUIREMENTS AS DICTATED BY CSX
5. THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE 30 DAYS ADVANCE WRITTEN NOTIFICATION TO JOHN HILBERT OF THE CITY OF COLUMBIA (WITH THE REQUEST TO UTILIZE STORAGE AT THE SALUDA RIVER PUMP STATION) OF THE DATE THE CONNECTION IS PLANNED TO BE MADE. THIS DATE WILL BE CONFIRMED AT 15 DAYS, 10 DAYS, AND 5 DAYS TO ALLOW CITY TO PLAN AND PREPARE THE STORAGE SYSTEM AT THE SALUDA RIVER PUMP STATION, IF AVAILABLE, FOR USE DURING THE CONNECTION OF THE RELOCATED FORCE MAIN TO THE EXISTING SYSTEM. CONTRACTOR WILL COORDINATE FINAL APPROVAL FOR USE OF THE PUMP STATION STORAGE WITH THE CITY AS THE DATE APPROACHES. USING THIS STORAGE SYSTEM TO DIVERT WASTEWATER FLOW OFF OF THE EXISTING FORCE MAIN IS LIMITED TO 24-HOURS. A COMPREHENSIVE TIMELINE SHALL BE SUBMITTED TO THE ENGINEER AND CITY FOR APPROVAL. IN THE EVENT THAT THE STORAGE SYSTEM IS UNAVAILABLE, THE CONTRACTOR SHALL SUBMIT A DETAILED 'PLAN B' TO THE CITY OF COLUMBIA FOR APPROVAL THROUGH THE SCDOT SUBMITTAL PROCESS. THIS SHALL INCLUDE HYDRAULIC CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN SOUTH CAROLINA, THAT SHOW THE PUMPS CAN OPERATE AT THE SAME CAPACITY WITH THE HEAD LOSSES IN THE FITTINGS, VALVES, AND PIPING IN THE BYPASS SYSTEM, DURATION OF THE TIMELINE FOR WHICH THE SYSTEM WILL BE ON BYPASS, DEWATERING TIMELINE, PCPP CONNECTION AND THRUST RESTRAINT CONSIDERATIONS, AND OVERALL SCHEDULE FOR CONSIDERATION. THE CONTRACTOR SHALL ALLOW FOR A 45-DAY REVIEW PERIOD IF THE 'PLAN B' CONNECTION IS DEEMED NECESSARY.
6. CONTRACTOR TO CONSTRUCT CLAY BULKHEADS IN THE PIPE TRENCH EVERY 300-FEET. SEE DETAIL 5/000-C-02.
7. ANY SLOPED GRADING OVER THE 30" FORCE MAIN WILL BE AT A MAXIMUM OF 4:1 OR FLATTER. A MINIMUM OF 4 FEET OF BACKFILL WILL BE PROVIDED OVER THE NEW FORCE MAIN AT ALL TIMES AFTER INSTALLATION.

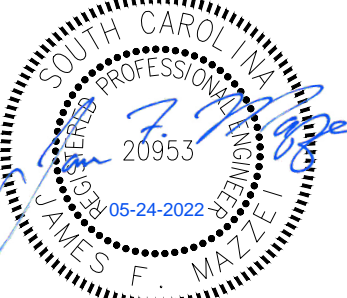
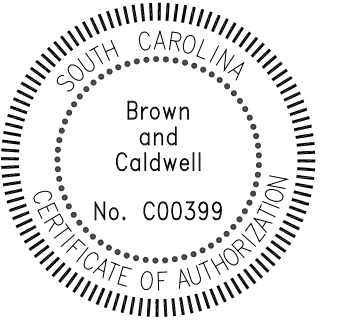


KEY PLAN

SCALE: NONE



COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

CAROLINA  
CROSSROADS  
PHASE 1

CONFLICT 1052/1055  
30" FORCE MAIN  
(PARALLEL TO I-26  
FACILITY #22)  
SECTION 1

REVISIONS		
REV	DATE	DESCRIPTION

DESIGNED:  
DRAWN:  
CHECKED:  
CHECKED:  
APPROVED:

FILENAME  
100-C-01.DWG  
BC PROJECT NUMBER  
156904  
CLIENT PROJECT NUMBER  
SCEC00111PFCOLLECT101P02210022

CIVIL

PLAN AND PROFILE  
STA. 0+00  
TO  
STA. 8+00

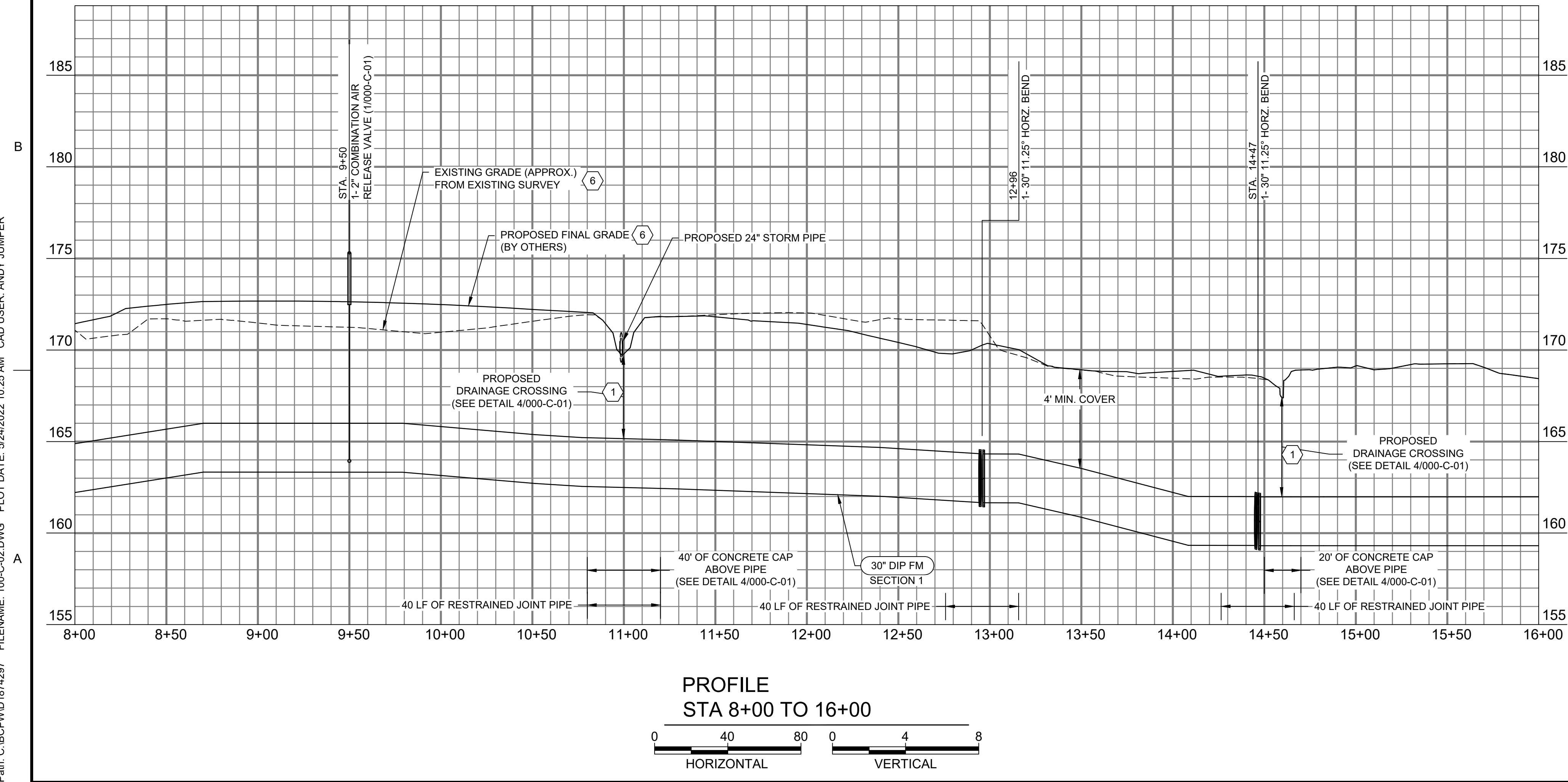
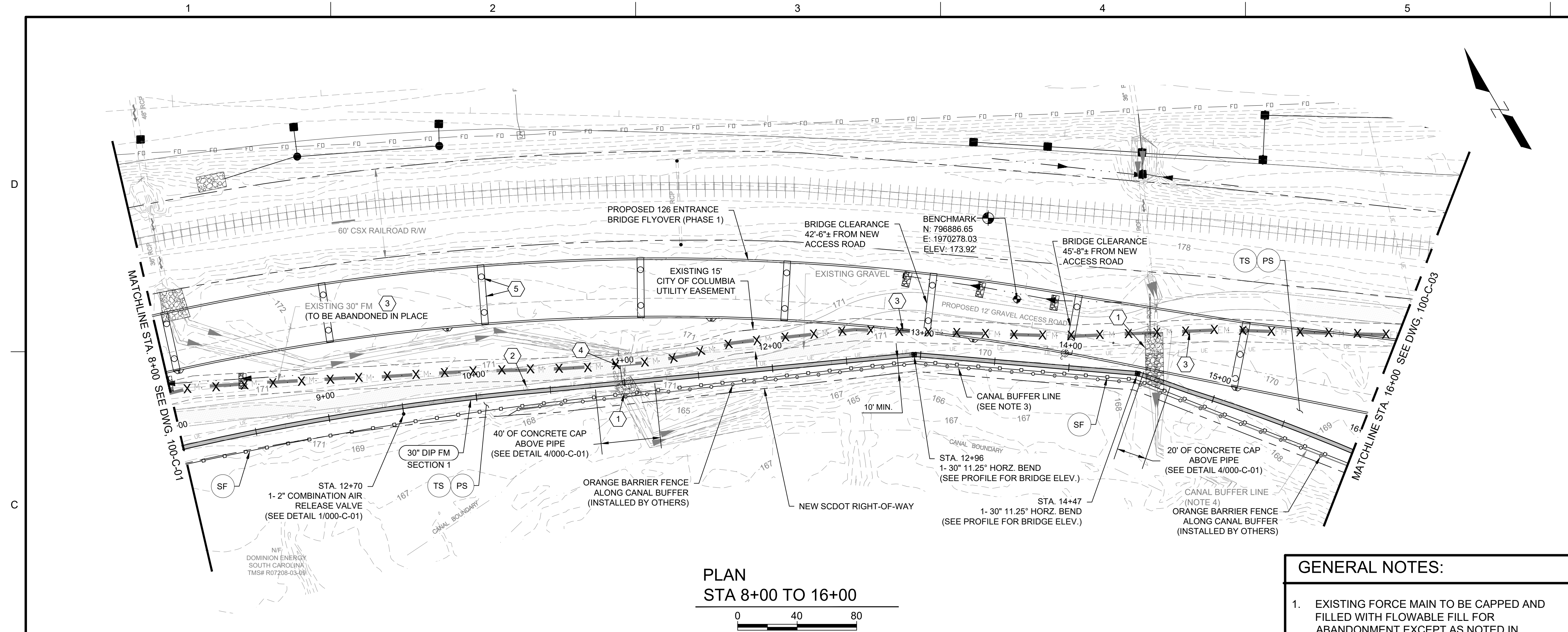
DRAWING NUMBER

100-C-01

SHEET NUMBER  
7 OF 9



Path: C:\BCP\DWG\1874287 FILENAME: 100-C-02.DWG PLOT DATE: 5/24/2022 10:25 AM CAD USER: ANDY JUMPER



#### GENERAL NOTES:

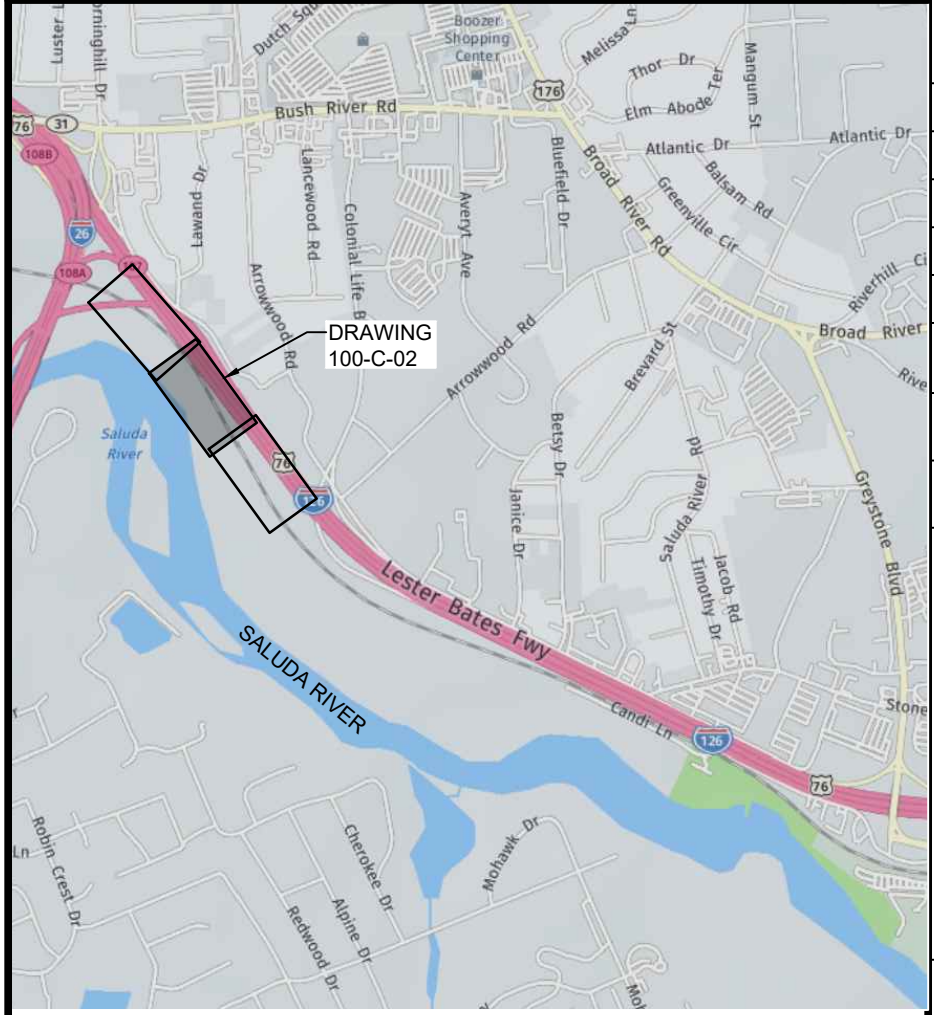
- EXISTING FORCE MAIN TO BE CAPPED AND FILLED WITH FLOWABLE FILL FOR ABANDONMENT EXCEPT AS NOTED IN KEYNOTES. ALL EXISTING MANHOLE STRUCTURES SHALL BE REMOVED TO A MINIMUM DEPTH OF 3' BELOW FINISHED GRADE AND FILLED WITH FLOWABLE FILL.
- NEW 30" DIP FORCE MAIN SHALL BE INSTALLED AND PRESSURE TESTED PRIOR TO MAKING CONNECTION AT STA. 0+00.

#### KEY NOTES:

- RIP-RAP (SEE DETAIL 4/000-C-01)
- EXISTING UNDERGROUND ELECTRICAL (TO BE RELOCATED BY OTHERS)
- EXISTING 30" FORCE MAIN WILL BE ABANDONED UPON COMMISSIONING OF NEW 30-INCH FORCE MAIN. CONTRACTOR WILL REMOVE THE EXISTING PIPING WHEREVER IT IS WITHIN 10-FEET OF THE PROPOSED ROADWAY. IN OTHER LOCATIONS, THE ABANDONED FORCE MAIN WILL BE FILLED WITH EXCAVATABLE FLOWABLE FILL CONCRETE. CONTRACTOR TO SUBMIT A PLAN FOR ABANDONMENT TO THE CITY FOR APPROVAL PRIOR TO BEGINNING FLOW-FILLING.
- PROPOSED 24" STORM PIPE (TO BE INSTALLED BY OTHERS)
- PROPOSED BRIDGE BENT AND SUPPORTS (TO BE DRILLED IN PLACE BY OTHERS)
- EXISTING GRADE AND PROPOSED GRADE IN PROFILE WERE BOTH ESTABLISH ALONG THE CENTERLINE OF THE NEW 30" FM.

#### GENERAL NOTES CON'D:

- THE CONTRACTOR SHALL COMPLY WITH ALL ENVIRONMENTAL COMMITMENTS SET FORTH IN THE COMBINED FINAL ENVIRONMENTAL IMPACT STATEMENT / RECORD OF DECISION (FEIS/ROD) DATED MAY 2, 2019 AND REVALUATION DATED AUGUST 3, 2020.
- AT ANY LOCATION WHERE THE FORCE MAIN IS MORE THAN 10' AWAY FROM THE PROPOSED ACCESS ROAD, CONTRACTOR TO PROVIDE DRIVABLE FINISH GRADE ABOVE PROPOSED FORCE MAIN TO ALLOW FUTURE ACCESS WITH A STANDARD 4-WHEEL DRIVE TRUCK.
- CONTRACTOR TO ENSURE ALL PERMITS AND PERMISSIONS FOR WORK WITHIN 50' OF THE CSX RIGHT-OF-WAY HAVE BEEN OBTAINED. IF NOT, CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS/PERMISSIONS AND FULFILLING ANY REQUIREMENTS AS DICTATED BY CSX.
- THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE 30 DAYS ADVANCE WRITTEN NOTIFICATION TO JOHN HILBERT OF THE CITY OF COLUMBIA (WITH THE REQUEST TO UTILIZE STORAGE AT THE SALUDA RIVER PUMP STATION) OF THE DATE THE CONNECTION IS PLANNED TO BE MADE. THIS DATE WILL BE CONFIRMED AT 15 DAYS, 10 DAYS, AND 5 DAYS TO ALLOW CITY TO PLAN AND PREPARE THE STORAGE SYSTEM AT THE SALUDA RIVER PUMP STATION, IF AVAILABLE, FOR USE DURING THE CONNECTION OF THE RELOCATED FORCE MAIN TO THE EXISTING SYSTEM. CONTRACTOR WILL COORDINATE FINAL APPROVAL FOR USE OF THE PUMP STATION STORAGE WITH THE CITY AS THE DATE APPROACHES. USING THIS STORAGE SYSTEM TO DIVERT WASTEWATER FLOW OFF OF THE EXISTING FORCE MAIN IS LIMITED TO 24-HOURS. A COMPREHENSIVE TIMELINE SHALL BE SUBMITTED TO THE ENGINEER AND CITY FOR APPROVAL. IN THE EVENT THAT THE STORAGE SYSTEM IS UNAVAILABLE, THE CONTRACTOR SHALL SUBMIT A DETAILED 'PLAN B' TO THE CITY OF COLUMBIA FOR APPROVAL THROUGH THE SCDOT SUBMITTAL PROCESS. THIS SHALL INCLUDE HYDRAULIC CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN SOUTH CAROLINA, THAT SHOW THE PUMPS CAN OPERATE AT THE SAME CAPACITY WITH THE HEAD LOSSES IN THE FITTINGS, VALVES, AND PIPING IN THE BYPASS SYSTEM, DURATION OF THE TIMELINE FOR WHICH THE SYSTEM WILL BE ON BYPASS, DEWATERING TIMELINE, PCCP CONNECTION AND THRUST RESTRAINT CONSIDERATIONS, AND OVERALL SCHEDULE FOR CONSIDERATION. THE CONTRACTOR SHALL ALLOW FOR A 45-DAY REVIEW PERIOD IF THE 'PLAN B' CONNECTION IS DEEMED NECESSARY.
- CONTRACTOR TO CONSTRUCT CLAY BULKHEADS IN THE PIPE TRENCH EVERY 300-FEET. SEE DETAIL 5/000-C-02.
- ANY SLOPED GRADING OVER THE 30" FORCE MAIN WILL BE AT A MAXIMUM OF 4:1 OR FLATTER. A MINIMUM OF 4 FEET OF BACKFILL WILL BE PROVIDED OVER THE NEW FORCE MAIN AT ALL TIMES AFTER INSTALLATION.

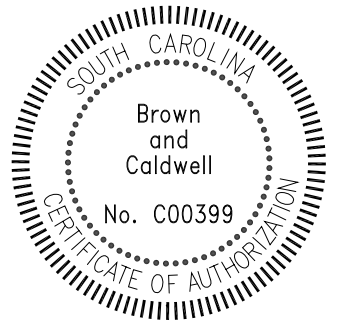


#### KEY PLAN

SCALE: NONE

**Brown and Caldwell**

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

**CAROLINA CROSSROADS  
PHASE 1**

**CONFLICT 1052/1055  
30" FORCE MAIN  
(PARALLEL TO I-26  
FACILITY #22)**

#### REVISIONS

REV	DATE	DESCRIPTION

DESIGNED:

DRAWN:

CHECKED:

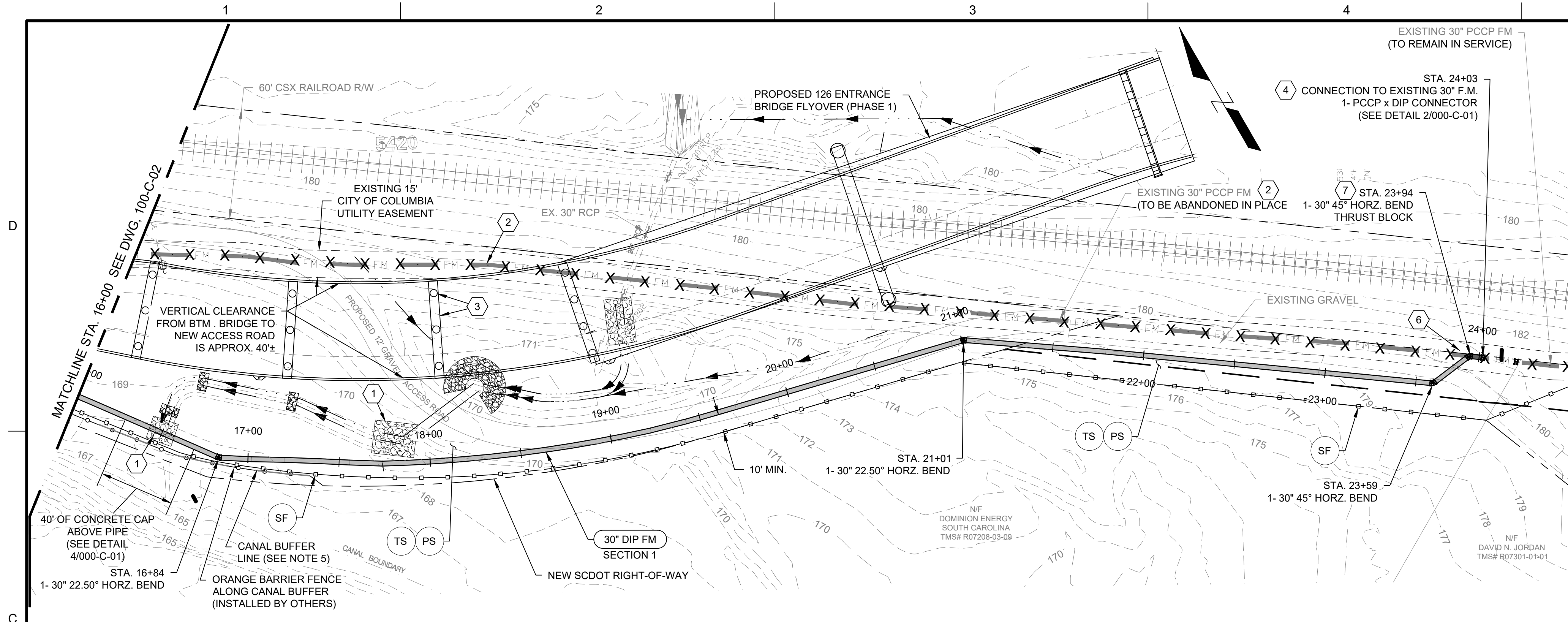
CHECKED:

APPROVED:

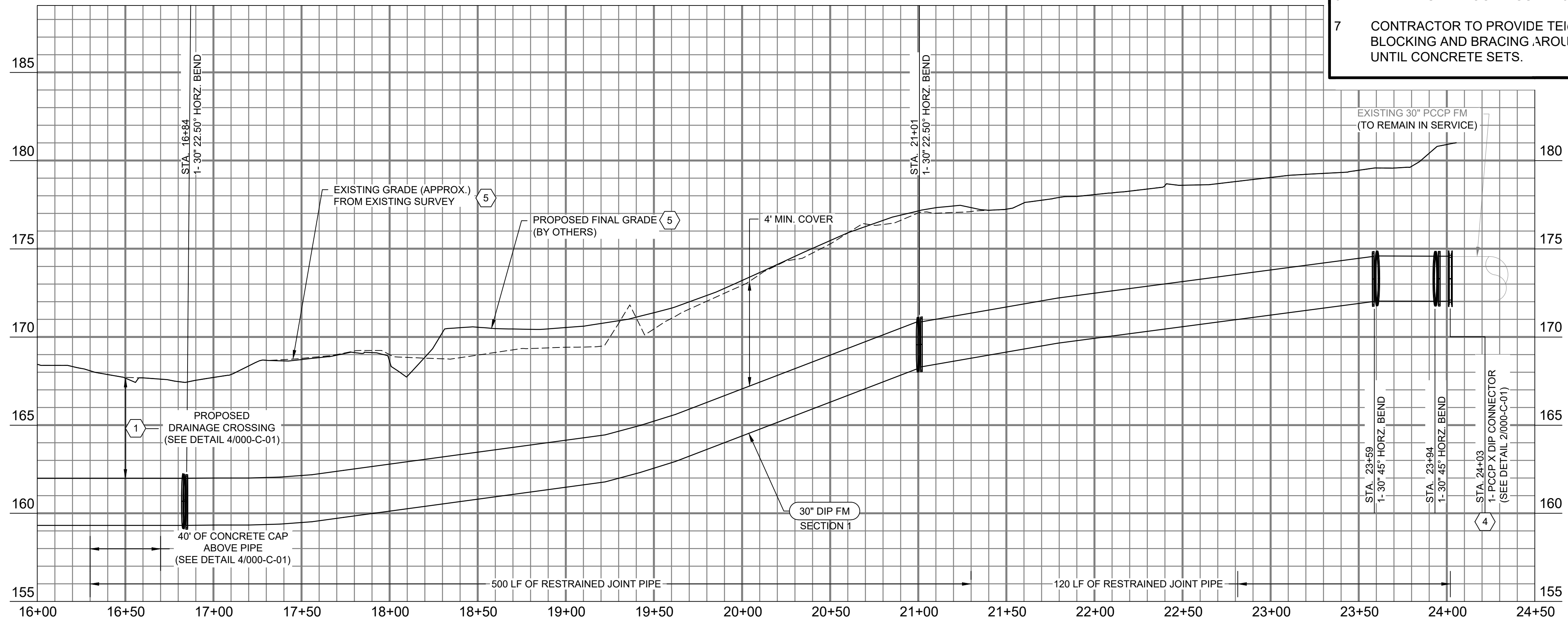
CIVIL

**PLAN AND PROFILE  
STA. 8+00  
TO  
STA. 16+00**  
DRAWING NUMBER  
**100-C-02**  
SHEET NUMBER  
8 OF 9

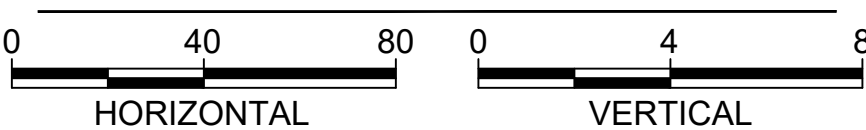




PLAN  
STA 16+00 TO 24+03



PROFILE  
STA 16+00 TO 24+03



#### GENERAL NOTES:

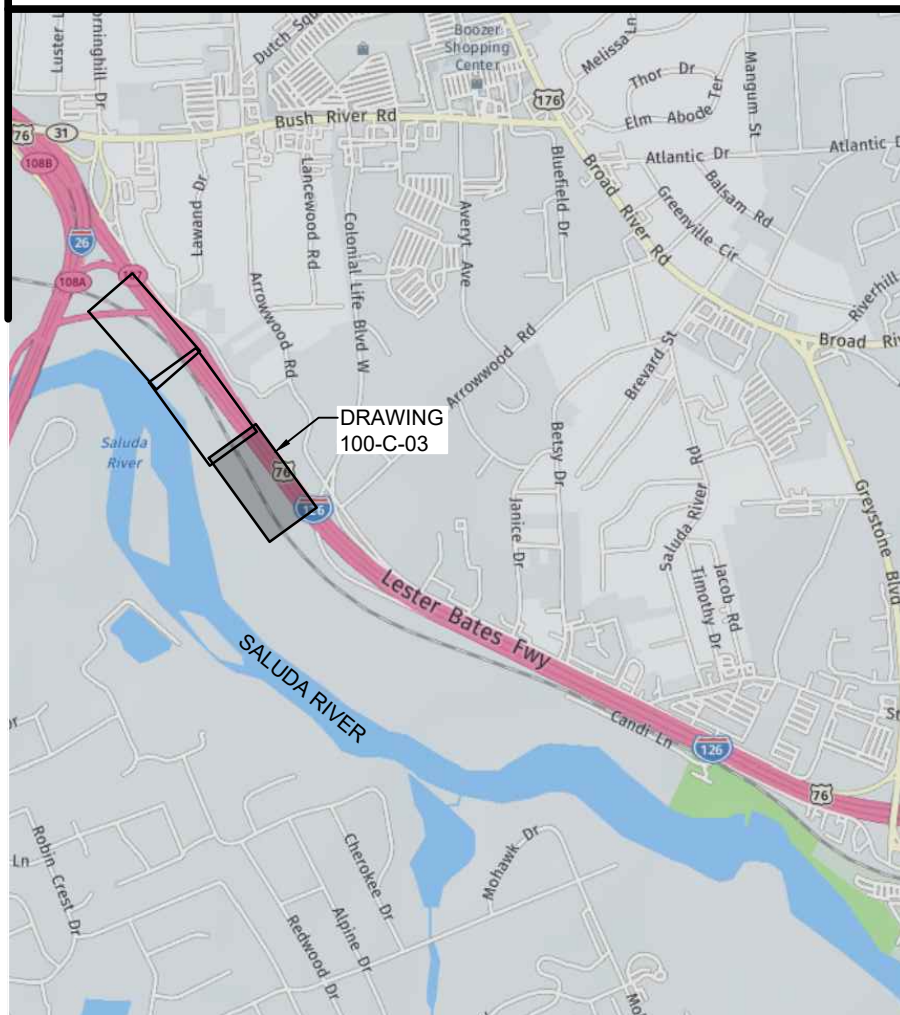
- EXISTING FORCE MAIN TO BE CAPPED AND FILLED WITH FLOWABLE FILL FOR ABANDONMENT EXCEPT AS NOTED IN KEYNOTES. ALL EXISTING MANHOLE STRUCTURES SHALL BE REMOVED TO A MINIMUM DEPTH OF 3' BELOW FINISHED GRADE AND FILLED WITH FLOWABLE FILL.
- NEW 30" DIP FORCE MAIN SHALL BE INSTALLED AND PRESSURE TESTED PRIOR TO MAKING CONNECTION AT STA. 0+00.
- AT ANY LOCATION WHERE THE FORCE MAIN IS MORE THAN 10' AWAY FROM THE PROPOSED ACCESS ROAD, CONTRACTOR TO PROVIDE DRIVABLE FINISH GRADE ABOVE PROPOSED FORCE MAIN TO ALLOW FUTURE ACCESS WITH A STANDARD 4-WHEEL DRIVE TRUCK.

#### KEY NOTES:

- RIP-RAP (SEE DETAIL 4/000-C-01)
- EXISTING 30" FORCE MAIN WILL BE ABANDONED UPON COMMISSIONING OF NEW 30-INCH FORCE MAIN. CONTRACTOR WILL REMOVE THE EXISTING PIPING WHEREVER IT IS WITHIN 10-FEET OF THE PROPOSED ROADWAY. IN OTHER LOCATIONS, THE ABANDONED FORCE MAIN WILL BE FILLED WITH EXCAVATABLE FLOWABLE FILL CONCRETE. CONTRACTOR TO SUBMIT A PLAN FOR ABANDONMENT TO THE CITY FOR APPROVAL PRIOR TO BEGINNING FLOW-FILLING.
- PROPOSED BRIDGE BENT AND SUPPORTS
- CONTRACTOR MUST EXERCISE CARE TO EXPOSE AND PROTECT EXISTING PCCP JOINTS. IF A JOINT IS DAMAGED AND CANNOT BE USED TO CONNECT TO, CONTRACTOR SHALL REMOVE ADDITIONAL PCCP PIPE TO REACH A VIABLE JOINT.
- EXISTING GRADE AND PROPOSED GRADE IN PROFILE WERE BOTH ESTABLISH ALONG THE CENTERLINE OF THE NEW 30" FM.
- SEE THRUST BLOCK FIGURE 16-16/000-C-02.
- CONTRACTOR TO PROVIDE TEMPORARY BLOCKING AND BRACING AROUND PIPE UNTIL CONCRETE SETS.

#### GENERAL NOTES CON'D:

- CONTRACTOR TO ENSURE ALL PERMITS AND PERMISSIONS FOR WORK WITHIN 50' OF THE CSX RIGHT-OF-WAY HAVE BEEN OBTAINED. IF NOT, CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS/PERMISSIONS AND FULFILLING ANY REQUIREMENTS AS DICTATED BY CSX.
- THE CONTRACTOR SHALL COMPLY WITH ALL ENVIRONMENTAL COMMITMENTS SET FORTH IN THE COMBINED FINAL ENVIRONMENTAL IMPACT STATEMENT / RECORD OF DECISION (FEIS/ROD) DATED MAY 2, 2019 AND REVALUATION DATED AUGUST 3, 2020.
- THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE 30 DAYS ADVANCE WRITTEN NOTIFICATION TO JOHN HILBERT OF THE CITY OF COLUMBIA (WITH THE REQUEST TO UTILIZE STORAGE AT THE SALUDA RIVER PUMP STATION) OF THE DATE THE CONNECTION IS PLANNED TO BE MADE. THIS DATE WILL BE CONFIRMED AT 15 DAYS, 10 DAYS, AND 5 DAYS TO ALLOW CITY TO PLAN AND PREPARE THE STORAGE SYSTEM AT THE SALUDA RIVER PUMP STATION, IF AVAILABLE, FOR USE DURING THE CONNECTION OF THE RELOCATED FORCE MAIN TO THE EXISTING SYSTEM. CONTRACTOR WILL COORDINATE FINAL APPROVAL FOR USE OF THE PUMP STATION STORAGE WITH THE CITY AS THE DATE APPROACHES. USING THIS STORAGE SYSTEM TO DIVERT WASTEWATER FLOW OFF OF THE EXISTING FORCE MAIN IS LIMITED TO 24-HOURS. A COMPREHENSIVE TIMELINE SHALL BE SUBMITTED TO THE ENGINEER AND CITY FOR APPROVAL. IN THE EVENT THAT THE STORAGE SYSTEM IS UNAVAILABLE, THE CONTRACTOR SHALL SUBMIT A DETAILED 'PLAN B' TO THE CITY OF COLUMBIA FOR APPROVAL THROUGH THE SCDOT SUBMITTAL PROCESS. THIS SHALL INCLUDE HYDRAULIC CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN SOUTH CAROLINA, THAT SHOW THE PUMPS CAN OPERATE AT THE SAME CAPACITY WITH THE HEAD LOSSES IN THE FITTINGS, VALVES, AND PIPING IN THE BYPASS SYSTEM, DURATION OF THE TIMELINE FOR WHICH THE SYSTEM WILL BE ON BYPASS, DEWATERING TIMELINE, PCCP CONNECTION AND THRUST RESTRAINT CONSIDERATIONS, AND OVERALL SCHEDULE FOR CONSIDERATION. THE CONTRACTOR SHALL ALLOW FOR A 45-DAY REVIEW PERIOD IF THE 'PLAN B' CONNECTION IS DEEMED NECESSARY.
- CONTRACTOR TO CONSTRUCT CLAY BULKHEADS IN THE PIPE TRENCH EVERY 300-FEET. SEE DETAIL 5/000-C-02.
- ANY SLOPED GRADING OVER THE 30" FORCE MAIN WILL BE AT A MAXIMUM OF 4:1 OR FLATTER. A MINIMUM OF 4 FEET OF BACKFILL WILL BE PROVIDED OVER THE NEW FORCE MAIN AT ALL TIMES AFTER INSTALLATION.

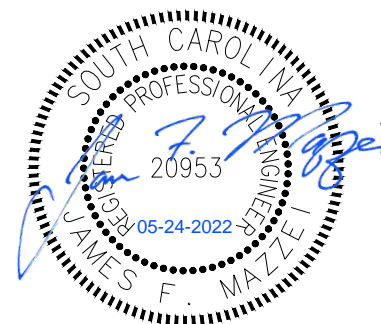
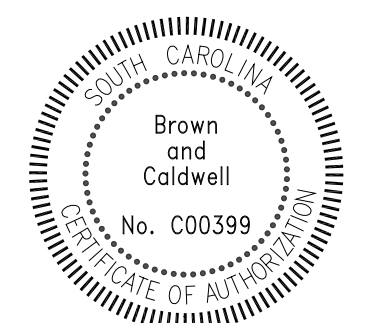


KEY PLAN

SCALE: NONE

**Brown and Caldwell**

COLUMBIA, SOUTH CAROLINA



100% DESIGN SUBMITTAL

#### CAROLINA CROSSROADS PHASE 1

#### CONFLICT 1052/1055 30" FORCE MAIN (PARALLEL TO I-26 FACILITY #22) SECTION 1

REVISIONS		
REV	DATE	DESCRIPTION

DESIGNED:	J. MAZZEI
DRAWN:	A. JUMPER
CHECKED:	C. LUCIE
CHECKED:	J. MAZZEI
APPROVED:	J. MAZZEI
FILENAME:	100-C-03.DWG
BC PROJECT NUMBER:	156904
CLIENT PROJECT NUMBER:	SCDOT PROJECT ID P027662

CIVIL

PLAN AND PROFILE  
STA. 16+00  
TO  
STA. 24+03  
DRAWING NUMBER  
**100-C-03**  
SHEET NUMBER  
9 OF 9