70' - ABANDON 8" UTILITY PIPE

LOWER EXISTING 8" WATER MAIN WITH NEW
TO GO UNDER FUTURE DRAIN PIPE.
SEE PROFILE SHEET FOR REQUIRED
PIPE ELEVATIONS.

EXISTING 8" WATER MAIN
(FIELD LOCATE AND VERIFY
SIZE AND MATERIAL)
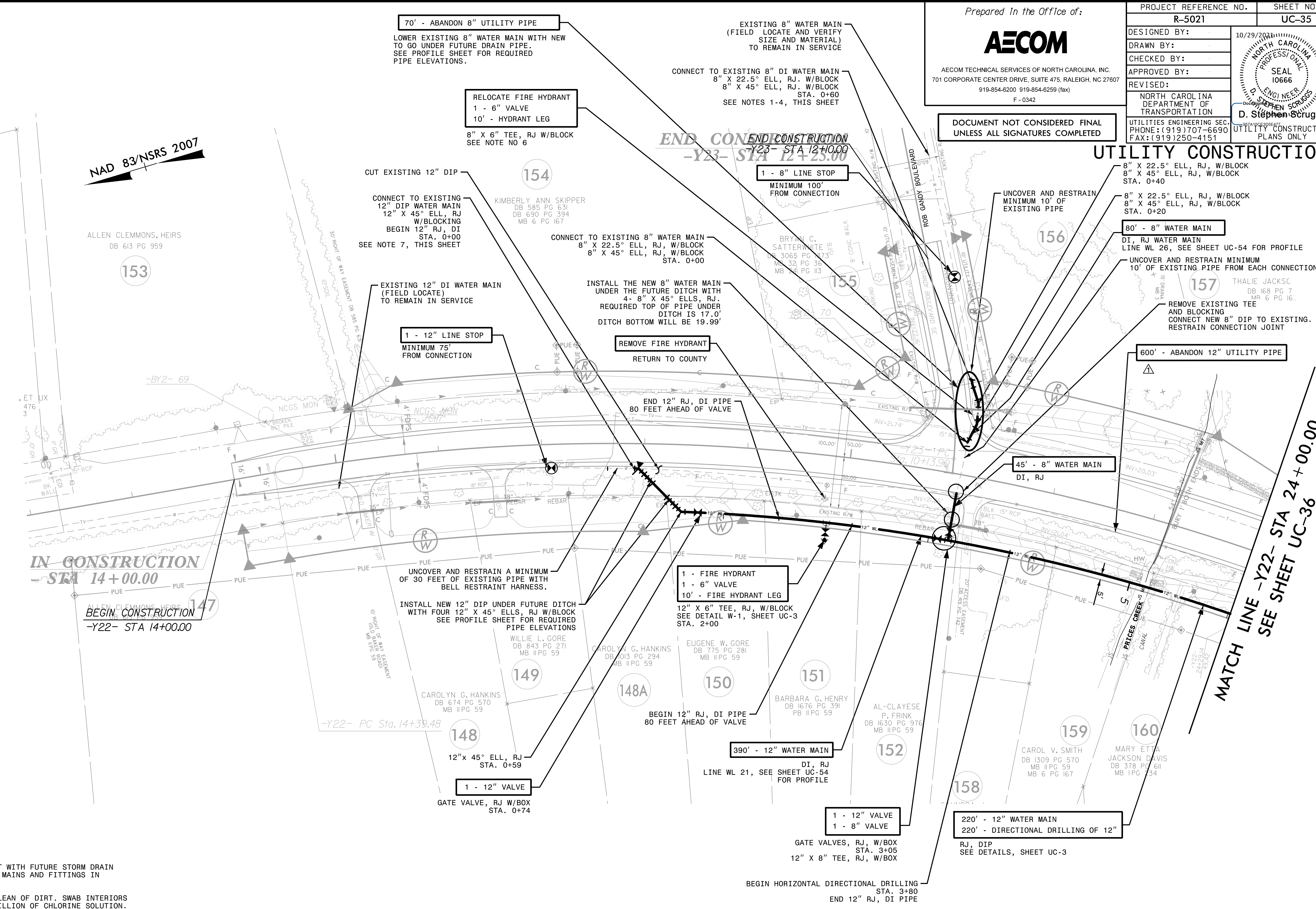TO REMAIN IN SERVICE

PROJECT REFERENCE NO. R-5021
SHEET NO. UC-35

Prepared In the Office of:

AECOM

AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC.
701 CORPORATE CENTER DRIVE, SUITE 475, RALEIGH, NC 27607
919-854-6200 919-854-6259 (fax)
F - 0342

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:
REVISED:

10/29/2021

NORTH CAROLINA
PROFESSIONAL
SEAL
10666
D. ENGINEER
D. STEPHEN SCRUGGS

D. Stephen Scruggs

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

UTILITIES ENGINEERING SEC.
PHONE:(919)707-6690
FAX:(919)250-4151

UTILITY CONSTRUCTION
PLANS ONLY

CONNECT TO EXISTING 8" DI WATER MAIN
8" X 22.5° ELL, RJ. W/BLOCK
8" X 45° ELL, RJ. W/BLOCK
STA. 0+60
SEE NOTES 1-4, THIS SHEET

UTILITY CONSTRUCTION

8" X 22.5° ELL, RJ, W/BLOCK
8" X 45° ELL, RJ, W/BLOCK
STA. 0+40

RELOCATE FIRE HYDRANT
1 - 6" VALVE
10' - HYDRANT LEG

8" X 6" TEE, RJ W/BLOCK
SEE NOTE NO 6

END CONSTRUCTION
-Y23- STA 12+25.00

END CONSTRUCTION
-Y23- STA 12+00.00

CUT EXISTING 12" DIP

1 - 8" LINE STOP
MINIMUM 100'
FROM CONNECTION

UNCOVER AND RESTRAIN
MINIMUM 10' OF
EXISTING PIPE

8" X 22.5° ELL, RJ, W/BLOCK
8" X 45° ELL, RJ, W/BLOCK
STA. 0+20

80' - 8" WATER MAIN
DI, RJ WATER MAIN
LINE WL 26, SEE SHEET UC-54 FOR PROFILE

CONNECT TO EXISTING
12" DIP WATER MAIN
12" X 45° ELL, RJ
W/BLOCKING
BEGIN 12" RJ, DI
STA. 0+00
SEE NOTE 7, THIS SHEET

CONNECT TO EXISTING 8" WATER MAIN
8" X 22.5° ELL, RJ, W/BLOCK
8" X 45° ELL, RJ, W/BLOCK
STA. 0+00

UNCOVER AND RESTRAIN MINIMUM
10' OF EXISTING PIPE FROM EACH CONNECTION

EXISTING 12" DI WATER MAIN
(FIELD LOCATE)
TO REMAIN IN SERVICE

INSTALL THE NEW 8" WATER MAIN
UNDER THE FUTURE DITCH WITH
4- 8" X 45° ELLS, RJ.
REQUIRED TOP OF PIPE UNDER
DITCH IS 17.0'
DITCH BOTTOM WILL BE 19.99'

REMOVE EXISTING TEE
AND BLOCKING
CONNECT NEW 8" DIP TO EXISTING.
RESTRAIN CONNECTION JOINT

1 - 12" LINE STOP
MINIMUM 75'
FROM CONNECTION

REMOVE FIRE HYDRANT
RETURN TO COUNTY

600' - ABANDON 12" UTILITY PIPE

END 12" RJ, DI PIPE
80 FEET AHEAD OF VALVE

45' - 8" WATER MAIN
DI, RJ

UNCOVER AND RESTRAIN A MINIMUM
OF 30 FEET OF EXISTING PIPE WITH
BELL RESTRAINT HARNESS.

INSTALL NEW 12" DIP UNDER FUTURE DITCH
WITH FOUR 12" X 45° ELLS, RJ W/BLOCK
SEE PROFILE SHEET FOR REQUIRED
PIPE ELEVATIONS.

1 - FIRE HYDRANT
1 - 6" VALVE
10' - FIRE HYDRANT LEG

12" X 6" TEE, RJ, W/BLOCK
SEE DETAIL W-1, SHEET UC-3
STA. 2+00

BEGIN CONSTRUCTION
-Y22- STA 14+00.00

BEGIN 12" RJ, DI PIPE
80 FEET AHEAD OF VALVE

390' - 12" WATER MAIN
DI, RJ
LINE WL 21, SEE SHEET UC-54
FOR PROFILE

12"X 45° ELL, RJ
STA. 0+59

1 - 12" VALVE
GATE VALVE, RJ W/BOX
STA. 0+74

1 - 12" VALVE
1 - 8" VALVE

GATE VALVES, RJ, W/BOX
STA. 3+05
12" X 8" TEE, RJ, W/BLOCK

220' - 12" WATER MAIN
220' - DIRECTIONAL DRILLING OF 12"

RJ, DIP
SEE DETAILS, SHEET UC-3

BEGIN HORIZONTAL DIRECTIONAL DRILLING
STA. 3+80
END 12" RJ, DI PIPE

NAD 83/NSRS 2007

NOTES

1. LOWER EXISTING WATER MAIN TO AVOID CONFLICT WITH FUTURE STORM DRAIN
PIPING. INSTALL NEW RESTRAINED JOINT WATER MAINS AND FITTINGS IN
ORDER TO LOWER EXISTING PIPE.

2. KEEP INTERIORS OF NEW PIPES AND FITTINGS CLEAN OF DIRT. SWAB INTERIORS
OF PIPES AND FITTINGS WITH 200 PARTS PER MILLION OF CHLORINE SOLUTION.

3. FIELD LOCATE EXISTING CUT -OFF VALVES AND SHUT OFF WATER. FIELD LOCATE
EXISTING PIPE AND VERIFY SIZE AND MATERIAL. SAW CUT EXISTING PIPE AND INSTALL
RESTRAINED PIPE AND FITTINGS, AND CONCRETE BLOCKING. CONNECTIONS TO
EXISTING PIPE SHALL BE MADE WITH RESTRAINT COUPLING AND 20 FEET OF RESTRAINED
JOINT PIPE. RESTORE WATER SERVICE AND SOON AS POSSIBLE.

4. RESTORE DISTURBED AREAS.

5. SEE SHEET UC-54 FOR PROFILE OF NEW WATER MAIN.

6. INSTALL NEW 6" VALVE AND FIRE HYDRANT TO ACCOMMODATE FOR NEW DEPTH OF BURY.

7. CONTRACTOR SHALL INSTALL NEW PIPE FROM CONNECTION POINT TO CONNECTION POINT.
PRIOR TO MAKING THE FINAL CONNECTIONS, THE CONTRACTOR SHALL INSTALL TEMPORARY
PLUGS AT EACH POINT AND THEN PRESSURE TEST, FLUSH AND DISINFECT THE NEW MAIN.
THE FINAL CONNECTIONS AND TRANSFERRING SERVICE CONNECTION SHALL BE DONE WITHIN
AN 8- HOUR PERIOD.

⚠ REMOVED NOTE BELOW PAY ITEM FOR ABANDON UTILITY PIPE PER ADDENDUM NO. 1

The estimated quantity of Ductile Iron Water
Pipe Fittings on this plan sheet is 3,275 pounds.
The actual quantity and type of fittings will
vary based on field conditions.

MATCH LINE -Y22- STA 24+00.00
SEE SHEET UC-36