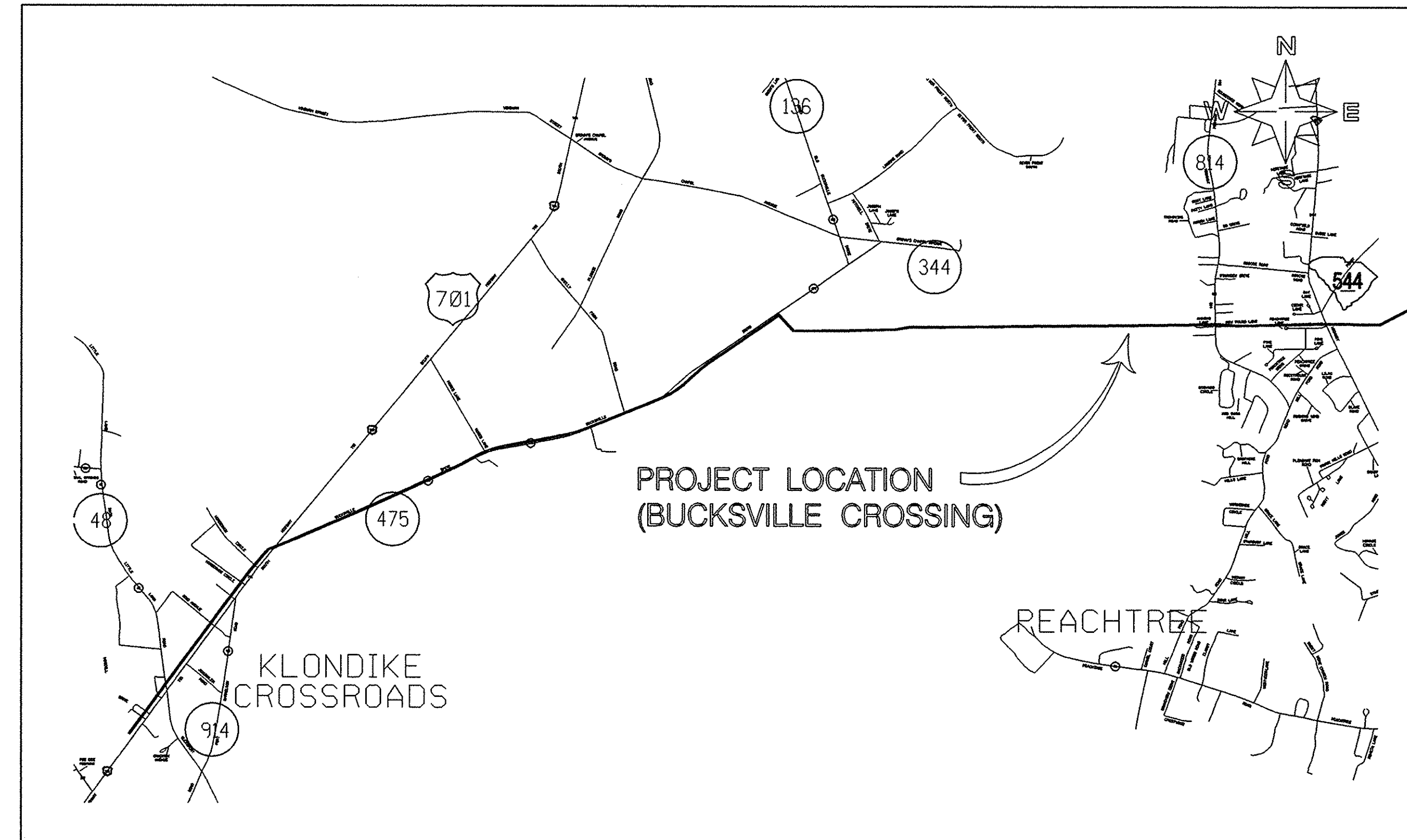


GRAND STRAND WATER AND SEWER AUTHORITY

"BUCKSVILLE WATER TRANSMISSION LINE"



LOCATION MAP
NOT TO SCALE

CONTRACT I PROJ. # 442-04 PGS. 3-10
CONTRACT II PROJ. # 442-05 PGS. 10-13
CONTRACT III PROJ. # 442-06 PGS. 13-14

THESE DRAWINGS REFLECT	
AS-BUILT	
CONDITIONS	
REVIEWED BY: <i>[Signature]</i>	DATE: 9-28-00
INSPECTIONS	
REVIEWED BY: <i>[Signature]</i>	DATE: 9-28-00
ENGINEERING	
GRAND STRAND WATER AND SEWER AUTHORITY	

1. WORK WITHIN PUBLIC RIGHT-OF-WAYS OR PRIVATE EASEMENTS SHALL BE ACCOMPLISHED BY THE CONTRACTOR ACCORDING TO THE REQUIREMENTS OR CONDITIONS OF THE ENCROACHMENT PERMIT OR OTHER LEGAL DOCUMENTS AS THOUGH DOCUMENTS WERE ISSUED IN THE CONTRACTORS NAME. THE CONTRACTOR SHALL MAINTAIN COPIES OF THESE DOCUMENTS ON THE SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF PUBLIC RIGHT-OF-WAYS DURING CONSTRUCTION OF THE PROJECT AND UNTIL THE CONTRACTOR OBTAINS AND DELIVERS TO THE OWNER A WRITTEN SIGN-OFF FROM HORRY COUNTY AND/OR THE S.C.D.O.T. THAT THE PUBLIC AGENCY HAS ACCEPTED THE RIGHT-OF-WAY BACK FOR MAINTENANCE. FINAL PAYMENT AND RELEASE OF RETAINAGE WILL NOT BE MADE TO THE CONTRACTOR UNTIL WRITTEN SIGN-OFF HAS BEEN OBTAINED FROM THE APPROPRIATE PUBLIC AGENCY AND PROVIDED TO THE OWNER.
2. PROVISIONS SHALL BE MADE TO PREVENT EROSION AND SILTRATION CAUSED BY CONSTRUCTION. TEMPORARY GRASSING, HAY BALES, SILT FENCES OR OTHER METHODS, AS CALLED FOR ON THE PLAN OR THAT MAY BE REQUIRED, SHALL BE USED.
3. DISTANCES SHOWN ON THE PLAN FOR THE DESIGNATED LOCATION OF THE PROPOSED LINE WHICH MAY BE FROM THE EDGE OF PAVEMENT OR OTHERWISE SHOWN IS INTENDED ONLY AS A DESIRED LOCATION FOR THIS INSTALLATION. HOWEVER, SHOULD A CONFLICT OCCUR AND/OR DUE TO UNFORESEEN OR OTHER UTILITIES DISCOVERED THAT ARE IN CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR ANY AND ALL INSTALLATIONS AND DEVIATIONS OF ALIGNMENT NECESSARY TO ACHIEVE A CHANGED AND SATISFACTORY LOCATION FOR THIS INSTALLATION. THE INSTALLATION COSTS THAT MAY OCCUR DUE TO ALIGNMENT CHANGES ARE CONSIDERED TO BE A PART OF THE PRICE SUBMITTED FOR PIPE INSTALLATION AND NO ADDITIONAL COMPENSATION IS ALLOWED. THE FINAL LOCATION SELECTED FOR INSTALLATION BY THE CONTRACTOR OTHER THAN WHAT IS SHOWN ON THE PLANS SHALL BE FIRST APPROVED BY THE AUTHORITY PRIOR TO PROCEEDING WITH THE WORK AND ACTUAL INSTALLATION.

- THE CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND EXISTENCE OF ALL UNDERGROUND UTILITIES BOTH PRIOR TO THE BID SUBMITTAL AND DURING CONSTRUCTION. LOCATION OF UTILITIES AS TENTATIVELY SHOWN ON THE PLANS, WHETHER FULLY AND CORRECTLY LOCATED OR PARTIALLY AND/OR INCORRECTLY LOCATED OR OMITTED WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OR LIABILITY FOR PROVIDING FOR ANY DEVIATION FROM THE PLANNED LOCATION AND FOR THE COMPLETE INSTALLATION AND/OR DAMAGE TO OTHER UTILITIES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING LOCAL UTILITIES FOR ASSISTANCE IN LOCATING UTILITIES BOTH PRIOR TO BID PROPOSALS AND DURING INSTALLATIONS. THE CONTRACTOR MUST FULLY COMPLY WITH THE SOUTH CAROLINA UNDERGROUND UTILITIES DAMAGE PREVENTION ACT, GENERAL STATUTES 58-35, SECTIONS 20 THROUGH 120 AND ALL APPLICABLE STATUTES AND STATE APPROVED REQUIREMENTS.
4. WHEN THE CONTRACTOR IS UNABLE TO COMPLETE HIS WORK AS SHOWN ON THE PLANS BECAUSE OF AN EXISTING UTILITY, CONTRACTOR SHALL STAKE THE LOCATION OF THE UTILITY PRIOR TO PROCEEDING AND CONTACT THE ENGINEER.
 5. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AGENCIES, THE OWNER, THE ENGINEER AND ALL OTHER CONCERNED PARTIES WHEN CONSTRUCTION IS TO COMMENCE SO THAT INSPECTIONS AND OTHER SITE VISITS MAY BE SCHEDULED.
 6. DATA REQUIRED FOR PREPARATION OF AS-BUILT DRAWINGS SHALL BE OBTAINED BY THE CONTRACTOR AT THE TIME OF INSTALLATION. THIS DATA SHALL BE ACCUMULATED BY THE CONTRACTOR AND COORDINATED WITH THE PROJECT INSPECTOR ON A DAILY BASIS DURING THE CONSTRUCTION PERIOD AND BE SUBMITTED TO THE PROJECT INSPECTOR IN A NEAT AND LEGIBLE MANNER AFTER COMPLETION OF THE PROJECT.
 7. ALL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE FEDERAL, SOUTH CAROLINA AND LOCAL ORDINANCES, REGULATIONS, SPECIFICATIONS AND PERMITS.

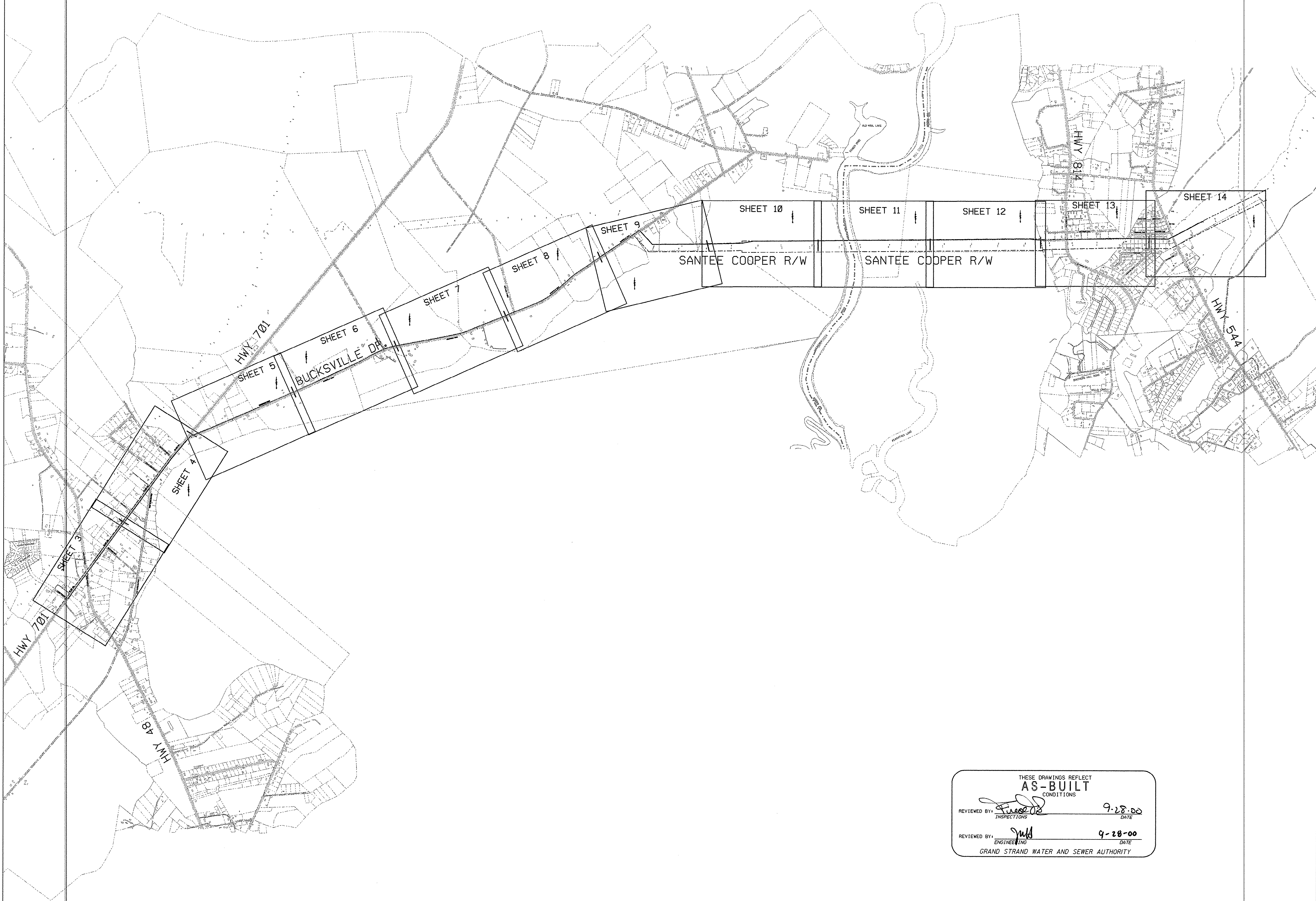
8. SPECIAL NOTE: PRIOR TO ANY EXCAVATION THE CONTRACTOR IS REQUIRED TO CONTACT HORRY TELEPHONE COOPERATIVE FOR CABLE LOCATIONS AT 365-2151. THIS PROJECT HAS SEVERAL CABLES OFF EDGE OF PAVEMENT THAT THE CONTRACTOR WILL BE REQUIRED TO LOCATE AND EXPOSE PRIOR TO THE INSTALLATION OF ANY MATERIALS.
9. REPLACE IN KIND ALL AREAS PROPERTY OWNER HAS DEVELOPED SPECIAL GRASS, TURF, OR LANDSCAPING. ALL DISTURBED AREAS ARE TO BE RAKED AND SEEDDED.

PREPARED BY:
GRAND STRAND WATER & SEWER AUTHORITY
PO BOX 1337 CONWAY, SC 29526

APPROVED BY:

FRED E. AKEL P.E. #12859
"BUCKSVILLE CROSSING"
"APRIL 1999"





THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *Fred E. Akel* DATE: *9-28-00*
INSPECTIONS

REVIEWED BY: *JMB* DATE: *9-28-00*
ENGINEERING

GRAND STRAND WATER AND SEWER AUTHORITY

REVISION		BY	DATE

BUCKSVILLE CROSSING LINE
36" WATER TRANSMISSION LINE
GRAND STRAND WATER & SEWER AUTHORITY
P.O. BOX 1837 CONWAY, SC 29536
TELEPHONE (803) 347-4641 OR 448-1686

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: NTS

FILENAME: BUCKSVILLE.DGN

DRAWN BY: *Carolyn Wright*
CAROLYN WRIGHT

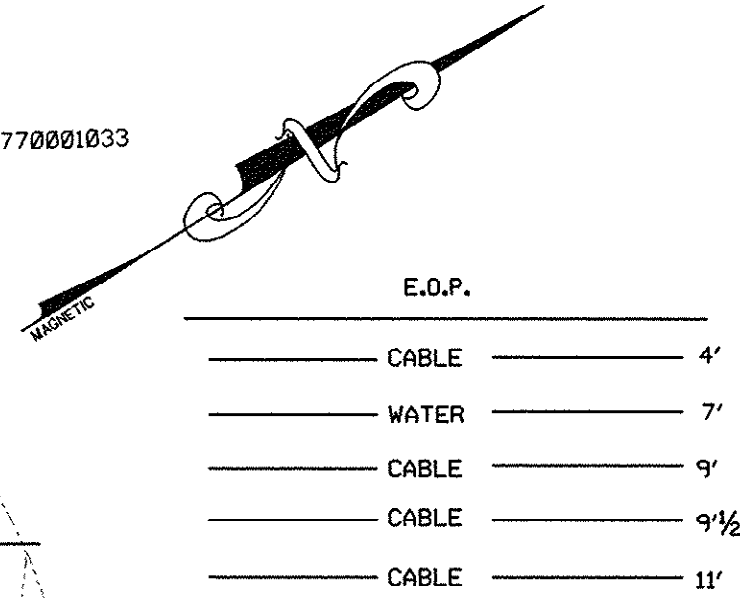
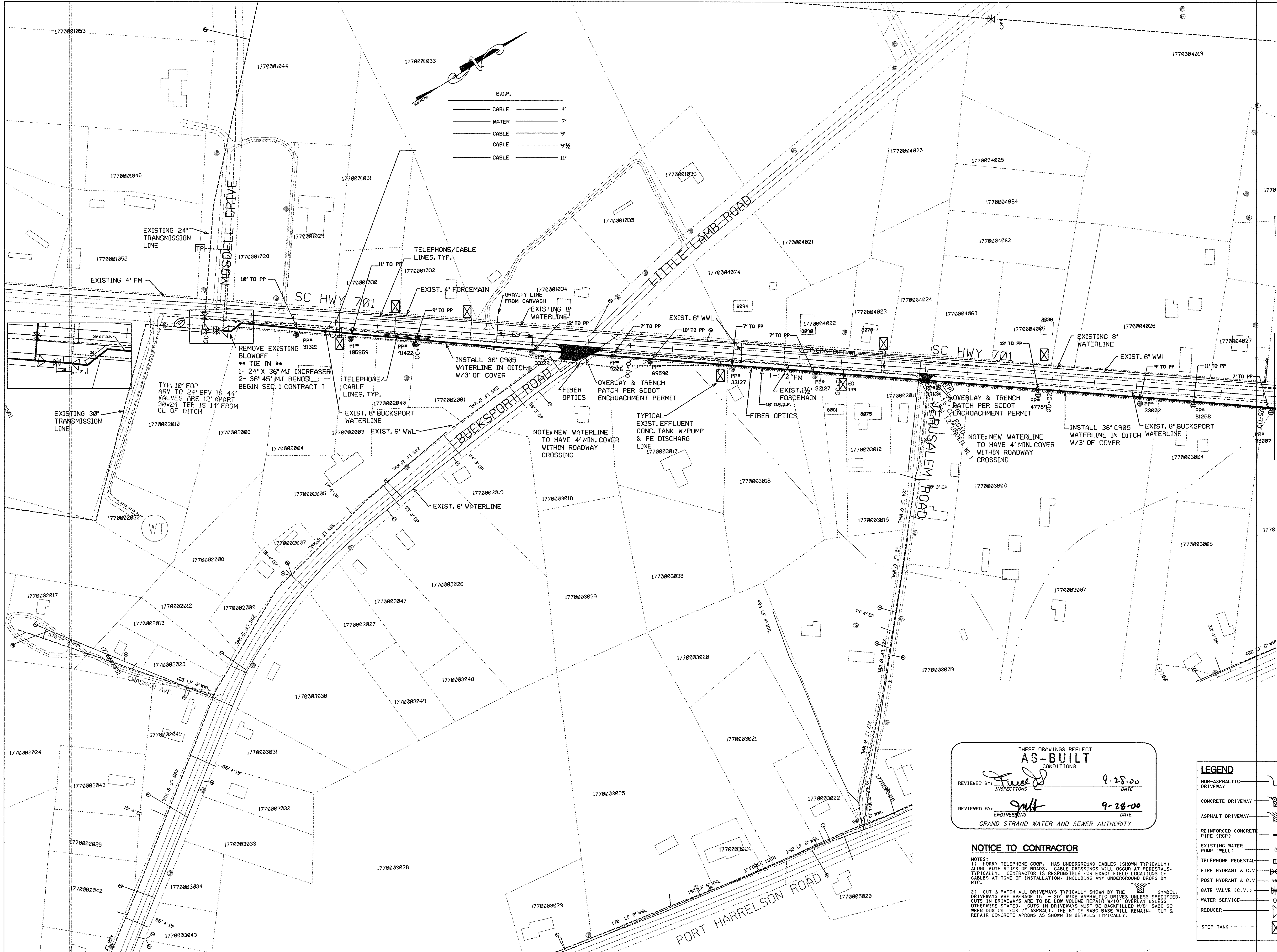
CHECKED BY: JIM HEMBREE

APPROVED BY: *Fred E. Akel*

FRED E. AKEL P.E. #12859

SHEET 2 OF 18

DRAWING NO. 28-026-002-W



THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *[Signature]* DATE: 9-28-00
INSPECTIONS

REVIEWED BY: *[Signature]* DATE: 9-28-00
ENGINEERING

GRAND STRAND WATER AND SEWER AUTHORITY

NOTICE TO CONTRACTOR

NOTES:
1) HARRY TELEPHONE COOP. HAS UNDERGROUND CABLES (SHOWN TYPICALLY) ALONG BOTH SIDES OF ROADS. CABLE CROSSINGS WILL OCCUR AT PEDESTALS. TYPICALLY, CONTRACTOR IS RESPONSIBLE FOR EXACT FIELD LOCATIONS OF CABLES AT TIME OF INSTALLATION, INCLUDING ANY UNDERGROUND DROPS BY HTC.

2) CUT & PATCH ALL DRIVEWAYS TYPICALLY SHOWN BY THE SYMBOL. DRIVEWAYS ARE AVERAGE 15' - 20' WIDE ASPHALTIC DRIVES UNLESS SPECIFIED. CUTS IN DRIVEWAYS ARE TO BE LOW VOLUME REPAIR W/10' OVERLAY UNLESS OTHERWISE STATED. CUTS IN DRIVEWAYS MUST BE BACKFILLED W/8" SABC SO WHEN DUG OUT FOR 2" ASPHALT, THE 6" OF SABC BASE WILL REMAIN. CUT & REPAIR CONCRETE APRONS AS SHOWN IN DETAILS TYPICALLY.

LEGEND	
NON-ASPHALTIC DRIVEWAY	
CONCRETE DRIVEWAY	
ASPHALT DRIVEWAY	
REINFORCED CONCRETE PIPE (RCP)	
EXISTING WATER PUMP (WELL)	
TELEPHONE PEDESTAL	
FIRE HYDRANT & G.V.	
POST HYDRANT & G.V.	
GATE VALVE (G.V.)	
WATER SERVICE	
REDUCER	
STEP TANK	

BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
CONTRACT I SECTION I
GRAND STRAND WATER & SEWER AUTHORITY

CONTRACT I PROJ. # 442-04
CONTRACT III PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY: *[Signature]*
CAROLYN WRIGHT

CHECKED BY: JIM HEMBREE

APPROVED BY: FRED E. AKEL P.E. #12859

SHEET 3 OF 17

DRAWING NO. 28-026-003-W

TELEPHONE 800 347-4641 OR 448-1686

P.O. BOX 1537, CONWAY, SC 29536

MATCHLINE STA 25+26
SEE SHEET 3

MATCHLINE STA 54+70
SEE SHEET 5

BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
CONTRACT I SECT. 1
GRAND STRAND WATER & SEWER AUTHORITY
P.O. BOX 1537 CONWAY, SC 29526
TELEPHONE 803 247-4641 OR 448-1686

CONTRACT I	PROJ. # 442-04
CONTRACT II	PROJ. # 442-05
CONTRACT III	PROJ. # 442-06
DATE:	MARCH 1999
SCALE:	1" = 100'
FILENAME:	BUCKSVILLE.DGN
DRAWN BY:	Carolyn Wright CAROLYN WRIGHT
CHECKED BY:	JIM HEMBREE
APPROVED BY:	
FRED E. AKEL	P.E. #12859
SHEET	4 OF 17
DRAWING NO.	25-026-004-U

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *Fred Akel* DATE: 9-28-00
INSPECTIONS

REVIEWED BY: *JWH* DATE: 9-28-00
ENGINEERING

GRAND STRAND WATER AND SEWER AUTHORITY

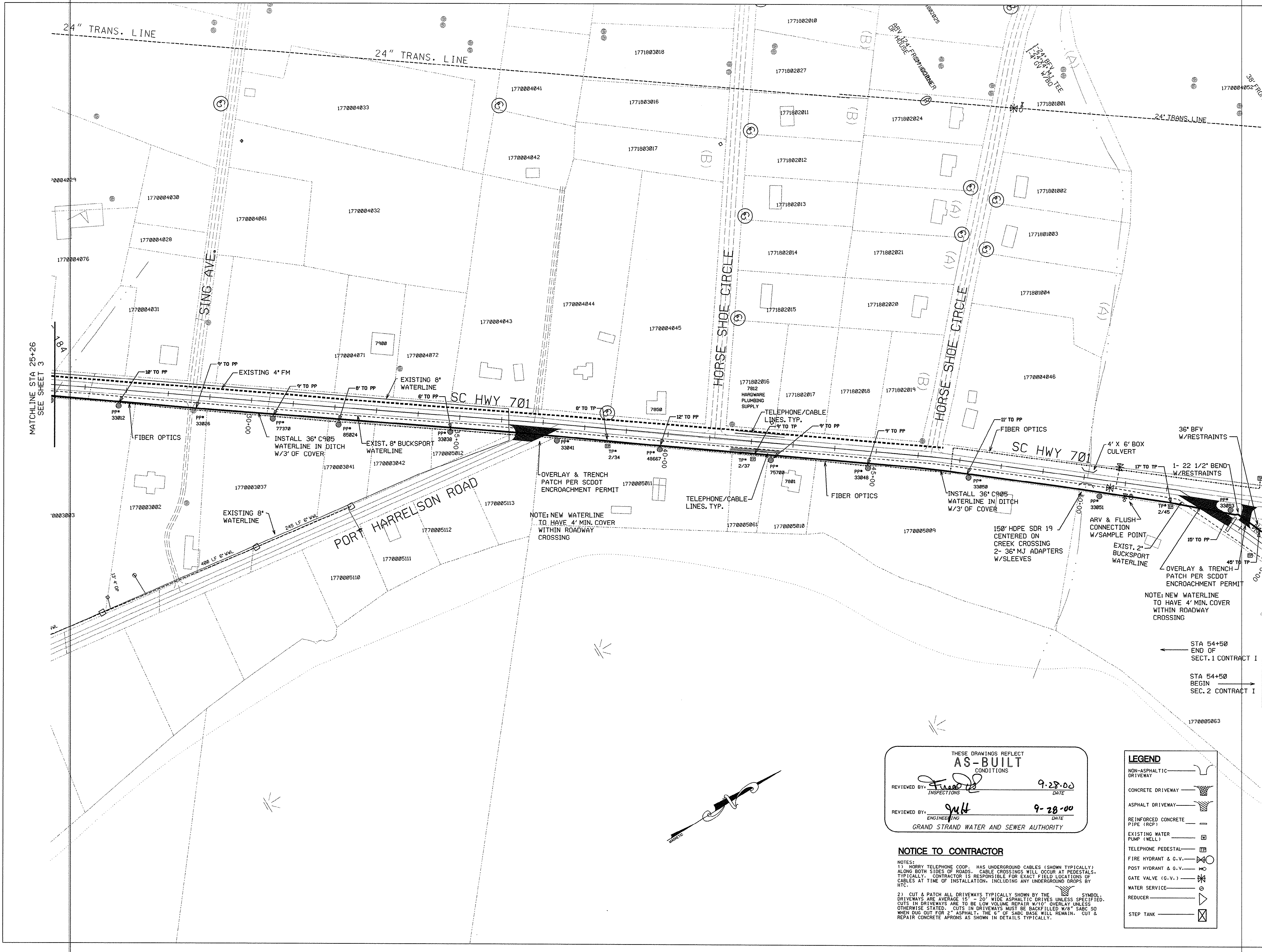
NOTICE TO CONTRACTOR

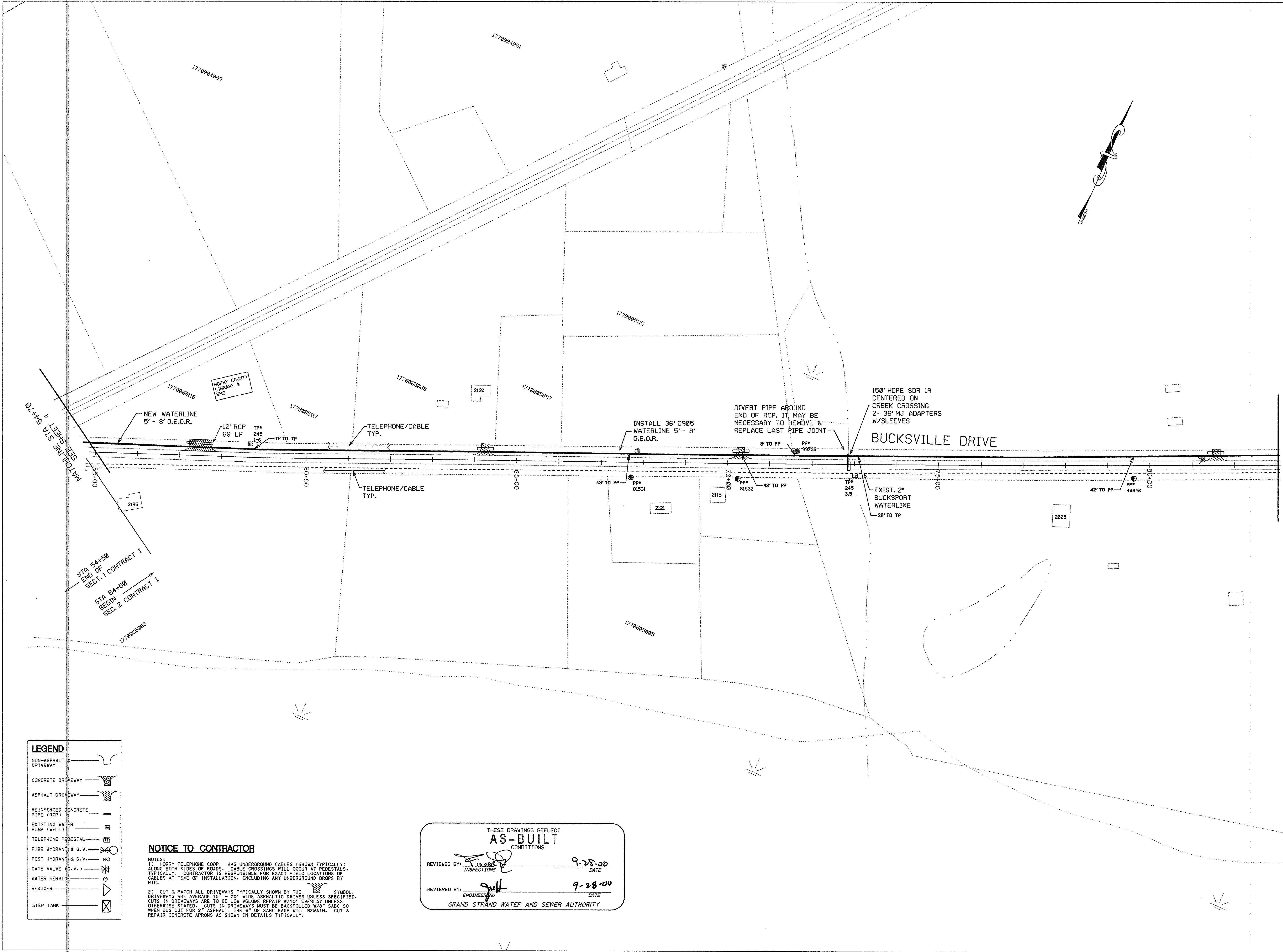
NOTES:
1) Horry Telephone Coop. HAS UNDERGROUND CABLES (SHOWN TYPICALLY) ALONG BOTH SIDES OF ROADS. CABLE CROSSINGS WILL OCCUR AT PEDESTALS, TYPICALLY. CONTRACTOR IS RESPONSIBLE FOR EXACT FIELD LOCATIONS OF CABLES AT TIME OF INSTALLATION, INCLUDING ANY UNDERGROUND DROPS BY ETC.

2) CUT & PATCH ALL DRIVEWAYS TYPICALLY SHOWN BY THE SYMBOL. DRIVEWAYS ARE AVERAGE 15" - 20" WIDE ASPHALTIC DRIVES UNLESS SPECIFIED. CUTS IN DRIVEWAYS ARE TO BE LOW VOLUME REPAIR W/10' OVERLAY UNLESS OTHERWISE STATED. CUTS IN DRIVEWAYS MUST BE BACKFILLED W/8" SABC SO WHEN DUG OUT FOR 2" ASPHALT, THE 6" OF SABC BASE WILL REMAIN. CUT & REPAIR CONCRETE APRONS AS SHOWN IN DETAILS TYPICALLY.

LEGEND

NON-ASPHALTIC DRIVEWAY	
CONCRETE DRIVEWAY	
ASPHALT DRIVEWAY	
REINFORCED CONCRETE PIPE (RCP)	
EXISTING WATER PUMP (WELL)	
TELEPHONE PEDESTAL	
FIRE HYDRANT & G.V.	
POST HYDRANT & G.V.	
GATE VALVE (G.V.)	
WATER SERVICE REDUCER	
STEP TANK	





BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
CONTRACT I SECTION 2
GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE 680.547-4641 OR 448-1686

P.O. BOX 1857, CONWAY, SC 29526

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY: Carolyn Wright
CAROLYN WRIGHT

CHECKED BY: JIM HEMBREE

APPROVED BY:

FRED E. AKEL P.E. #12859

SHEET 5 OF 17

DRAWING NO. 28-026-005-W

REVISION	BY	DATE
ASBUILT	CAW	9/28/00

MATCHLINE STA 83+04
SEE SHEET 5

LEGEND	
NON-ASPHALTIC DRIVEWAY	
CONCRETE DRIVEWAY	
ASPHALT DRIVEWAY	
REINFORCED CONCRETE PIPE (RCP)	
EXISTING WATER PUMP (WELL)	
TELEPHONE PEDESTAL	
FIRE HYDRANT & G.V.	
GATE VALVE (G.V.)	
WATER SERVICE	
REDUCER	
STEP TANK	

NOTICE TO CONTRACTOR

NOTES:
1) Horry Telephone Coop. has underground cables (shown typically) along both sides of roads. Cable crossings will occur at pedestals. Typically, contractor is responsible for exact field locations of cables at time of installation, including any underground drops by HTC.
2) CUT & PATCH ALL DRIVEWAYS TYPICALLY SHOWN BY THE SYMBOL. DRIVEWAYS ARE AVERAGE 15' - 20' WIDE ASPHALTIC DRIVES UNLESS SPECIFIED. CUTS IN DRIVEWAYS ARE TO BE LOW VOLUME REPAIR W/10" OVERLAY UNLESS OTHERWISE STATED. CUTS IN DRIVEWAYS MUST BE BACKFILLED W/8" SABC SO WHEN DUG OUT FOR 2" ASPHALT, THE 6" OF SABC BASE WILL REMAIN. CUT & REPAIR CONCRETE APRONS AS SHOWN IN DETAILS TYPICALLY.

REMOVE & REPLACE LAST
PIPE JOINT AS NECESSARY

100' HDPE SDR 19
CENTERED ON
CREEK CROSSING
2- 36" MJ ADAPTERS
W/SLEEVES

FLUSH
CONNECTION
36" MJ BFV
W/ADAPTERS
-ARV

12" TO PP

36" RCP

12" RCP

PP# 32177

2" AIR RELEASE POINT

330' TO PP# 32610

12" RCP

INSTALL 36" C905
WATERLINE 5' - 8'
O.E.O.R.

TELEPHONE/CABLE
TYP.

12" RCP

1948

BUCKSVILLE DRIVE

TELEPHONE/CABLE
TYP.

EXIST. 2"
BUCKSPORT
WATERLINE

MATCHLINE STA 112+54
SEE SHEET 7

BUCKSVILLE CROSSING 36" WATER TRANSMISSION LINE CONTRACT I SECTION 2 GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE (803) 547-4641 OR 448-1686

P.O. BOX 1557, CONWAY, SC 29526

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY
CARYN WRIGHT

CHECKED BY
JIM HEMBREE

APPROVED BY

FRED E. AKEL P.E. #12859

SHEET 6 OF 17

DRAWING NO. 28-026-006-W

THESE DRAWINGS REFLECT AS-BUILT CONDITIONS	
REVIEWED BY:	DATE: 9-28-00
INSPECTIONS	
REVIEWED BY:	DATE: 9-28-00
ENGINEERING	
GRAND STRAND WATER AND SEWER AUTHORITY	

MATCHLINE STA 112+54
SEE SHEET 6

MATCHLINE STA 142+43
SEE SHEET 8

BUCKSVILLE CROSSING LINE
36" WATER TRANSMISSION LINE
CONTRACT I SECTION 2
GRAND STRAND WATER & SEWER AUTHORITY
TELEPHONE (800) 347-4641 OR 448-1686

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY
CAROLYN WRIGHT

CHECKED BY
JIM HEMBREE

APPROVED BY

FRED E. AKEL P.E. #12859

SHEET 7 OF 17

DRAWING NO. 28-026-007-W

REVISION	BY	DATE
ASBUILT	CAM	9/28/00

LEGEND	
NON-ASPHALTIC DRIVEWAY	
CONCRETE DRIVEWAY	
ASPHALT DRIVEWAY	
REINFORCED CONCRETE PIPE (RCP)	
EXISTING WATER PUMP (WELL)	
TELEPHONE PEDESTAL	
FIRE HYDRANT & G.V.	
POST HYDRANT & G.V.	
GATE VALVE (G.V.)	
WATER SERVICE	
REDUCER	
STEP TANK	

NOTICE TO CONTRACTOR

NOTES:
1) HURRY TELEPHONE COOP. HAS UNDERGROUND CABLES (SHOWN TYPICALLY) ALONG BOTH SIDES OF ROADS. CABLE CROSSINGS WILL OCCUR AT PEDESTALS. TYPICALLY, CONTRACTOR IS RESPONSIBLE FOR EXACT FIELD LOCATIONS OF CABLES AT TIME OF INSTALLATION, INCLUDING ANY UNDERGROUND DROPS BY HTC.
2) CUT & PATCH ALL DRIVEWAYS TYPICALLY SHOWN BY THE DRIVEWAYS ARE AVERAGE 15' - 20' WIDE ASPHALTIC DRIVES UNLESS SPECIFIED. CUTS IN DRIVEWAYS ARE TO BE LOW VOLUME REPAIR W/10' OVERLAY UNLESS OTHERWISE STATED. CUTS IN DRIVEWAYS MUST BE BACKFILLED W/8" SABC SO WHEN DUG OUT FOR 2" ASPHALT, THE 6" OF SABC BASE WILL REMAIN. CUT & REPAIR CONCRETE APRONS AS SHOWN IN DETAILS TYPICALLY.

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: DATE: 9-28-00
INSPECTIONS

REVIEWED BY: DATE: 9-28-00
ENGINEERING

GRAND STRAND WATER AND SEWER AUTHORITY

MATCHLINE STA 142+43
SEE SHEET 7

DIVERT PIPE AROUND
END OF RCP. IT MAY BE
NECESSARY TO REMOVE &
REPLACE LAST PIPE JOINT

SHELLY FARM ROAD

TELEPHONE/CABLE
TYP.
2" AIR RELEASE POINT
150' FROM PP# 85020 PP# 32639

INSTALL 36" C905
WATERLINE 5' - 8'
O.E.O.R.

DIVERT PIPE AROUND
END OF RCP. IT MAY BE
NECESSARY TO REMOVE &
REPLACE LAST PIPE JOINT

BUCKSVILLE DRIVE

EXIST. 2"
BUCKSPORT
WATERLINE

150' HDPE SDR 19
CENTERED ON
CREEK CROSSING
2- 36" MJ ADAPTERS
W/SLEEVES

DIVERT PIPE AROUND
END OF RCP. IT MAY BE
NECESSARY TO REMOVE &
REPLACE LAST PIPE JOINT

DIVERT PIPE AROUND
END OF RCP. IT MAY BE
NECESSARY TO REMOVE &
REPLACE LAST PIPE JOINT

MATCHLINE STA 171+72
SEE SHEET 9

LEGEND

- NON-ASPHALTIC DRIVEWAY
- CONCRETE DRIVEWAY
- ASPHALT DRIVEWAY
- REINFORCED CONCRETE PIPE (RCP)
- EXISTING WATER PUMP (WELL)
- TELEPHONE PEDESTAL
- FIRE HYDRANT & G.V.
- POST HYDRANT & G.V.
- GATE VALVE (G.V.)
- WATER SERVICE
- REDUCER
- STEP TANK

NOTICE TO CONTRACTOR

NOTES:
1) HOBBS TELEPHONE COOP. HAS UNDERGROUND CABLES (SHOWN TYPICALLY) ALONG BOTH SIDES OF ROADS. CABLE CROSSINGS WILL OCCUR AT PEDESTALS. TYPICALLY, CONTRACTOR IS RESPONSIBLE FOR EXACT FIELD LOCATIONS OF CABLES AT TIME OF INSTALLATION, INCLUDING ANY UNDERGROUND DROPS BY HTC.

2) CUT & PATCH ALL DRIVEWAYS TYPICALLY SHOWN BY THE SYMBOL. DRIVEWAYS ARE AVERAGE 15' - 20' WIDE ASPHALTIC DRIVES UNLESS SPECIFIED. CUTS IN DRIVEWAYS ARE TO BE LOW VOLUME REPAIR W/10" OVERLAY UNLESS OTHERWISE STATED. CUTS IN DRIVEWAYS MUST BE BACKFILLED W/8" SABC SO WHEN DUG OUT FOR 2" ASPHALT, THE 6" OF SABC BASE WILL REMAIN. CUT & REPAIR CONCRETE APRONS AS SHOWN IN DETAILS TYPICALLY.

SYMBOL

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *[Signature]* 9-28-00
INSPECTIONS DATE

REVIEWED BY: *[Signature]* 9-28-00
ENGINEERING DATE

GRAND STRAND WATER AND SEWER AUTHORITY

BUCKSVILLE CROSSING 36" WATER TRANSMISSION LINE CONTRACT I SECTION 2 GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE 680 547-4641 OR 448-1686

P.O. BOX 1857 CONWAY, SC 29526

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY: *[Signature]*
CAROLYN WRIGHT

CHECKED BY: JIM HEMBREE

APPROVED BY

FRED E. AKEL P.E. #12859

SHEET 8 OF 17

DRAWING NO. 28-026-008-U

REVISION
BY: CAV
DATE: 9/28/00
ASBUILT

MATCHLINE STA 232+37
SEE SHEET 10

1700004009
ELIZABETH S. HUCKS & MARY FOXWORTH
5815 LONG LEAF DR.
MYRTLE BEACH, SC 29577

MACCAMAM RIVER

1700005024
WILLARD D. HANNA JR.
P.O. BOX 14610
MYRTLE BEACH, SC 29587

1700005023
INTERNATIONAL PAPER CO.
VINYAH LAND & TIMBER
P.O. BOX 518
GEORGETOWN, SC 29442

Santee Cooper
300' R/W
EASEMENT

CONC. COLLARS FOR
RIVER CROSSING
SEE RIVER CROSSING
DETAIL AND CONTRACT II
REQUIREMENTS

MAINTAIN A MINIMUM
20' SEPARATION FROM
GUY LINES

SEE RIVER CROSSING
DETAIL FOR SPECIAL
CONCRETE PIPE TIE
DOWNS AND CONTRACT II
REQUIREMENTS

NOMINAL 40" HDPE
39.37' O.D. / 35.23' I.D.
SDR 19 WATERLINE
WITHIN 20' EASEMENT
OF POWERLINE

Santee Cooper
300' R/W
EASEMENT

NOMINAL 40" HDPE
39.37' O.D. / 35.23' I.D.
SDR 19 WATERLINE
WITHIN 20' EASEMENT
OF POWERLINE

SWAMP
LINE

END OF
SEC. 1
CONTRACT II

INV. -4.5'

ARV
98' TO PP

OLD PP# 38
NEW PP# 121568

OLD PP# 294

NEW PP# 121477

BEGIN
SEC. 2
CONTRACT II
(APPROX. 500'
RIVER CROSSING)

END OF
SEC. 2
CONTRACT II

98' TO PP

OLD PP# 37
NEW PP# 121567

OLD PP# 295

NEW PP# 121478

BEGIN
SEC. 3
CONTRACT II

INV. 3.9

ARV

92' TO PP

OLD PP# 36
NEW PP# 121566

OLD PP# 296

NEW PP# 121479

96' TO PP

OLD PP# 35
NEW PP# 121565

OLD PP# 297

NEW PP# 121488

1700004009
ELIZABETH S. HUCKS & MARY FOXWORTH
5815 LONG LEAF DR.
MYRTLE BEACH, SC 29577

MLW
MHW

1700005024
WILLARD D. HANNA JR.
P.O. BOX 14610
MYRTLE BEACH, SC 29587

1700005023
INTERNATIONAL PAPER CO.
VINYAH LAND & TIMBER
P.O. BOX 518
GEORGETOWN, SC 29442

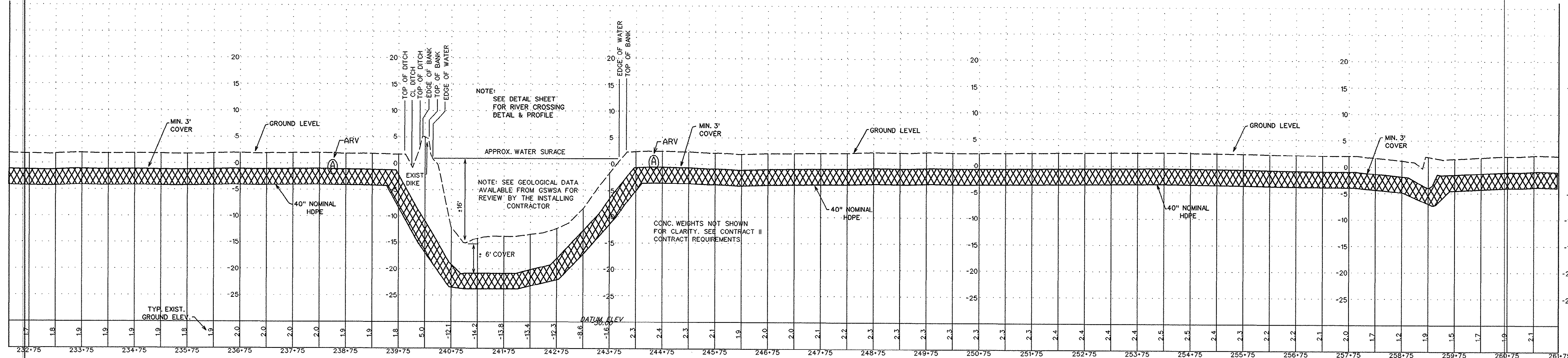
THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *[Signature]* **9-29-00** DATE
INSPECTIONS

REVIEWED BY: *[Signature]* **9-29-00** DATE
ENGINEERING

GRAND STRAND WATER AND SEWER AUTHORITY

MATCHLINE STA 261+72
SEE SHEET 12



BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
CONTRACT II SECTION 1, 2 & 3
GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE (803) 547-4641 OR 448-1686

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY *[Signature]*
CAROLYN WRIGHT

CHECKED BY

APPROVED BY

FRED E. AKEL P.E. #12859

SHEET 11 OF 17

DRAWING NO. 28-026-011-W

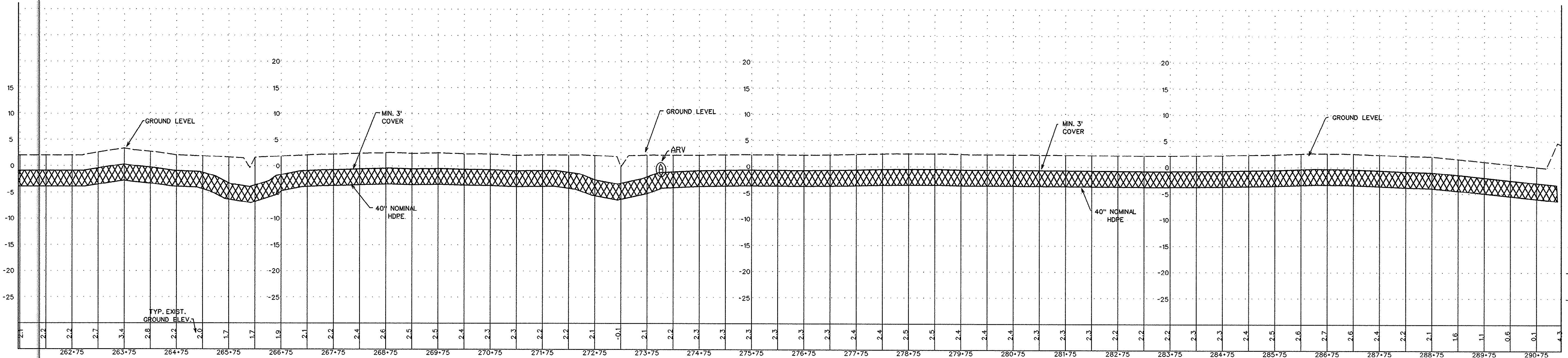
MATCHLINE STA 261+72
SEE SHEET 11

MATCHLINE STA 289+50
SEE SHEET 13

1700005023
INTERNATIONAL PAPER CO.
WYNAH LAND & TIMBER
P.O. BOX 518
GEORGETOWN, SC 29442

1700005023
INTERNATIONAL PAPER CO.
WYNAH LAND & TIMBER
P.O. BOX 518
GEORGETOWN, SC 29442

THESE DRAWINGS REFLECT	
AS-BUILT	
CONDITIONS	
REVIEWED BY: <i>[Signature]</i>	DATE: 9-28-00
INSPECTIONS	
REVIEWED BY: <i>[Signature]</i>	DATE: 9-28-00
ENGINEERING	
GRAND STRAND WATER AND SEWER AUTHORITY	



HORZ. SCALE 1"=100'
VERT. SCALE 1"=10'

BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
CONTRACT II SECTION 3
GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE (803) 47-4641 OR 448-1686

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: 1" = 100'

FILENAME: BUCKSVILLE.DGN

DRAWN BY: *[Signature]*
CAROLYN WRIGHT

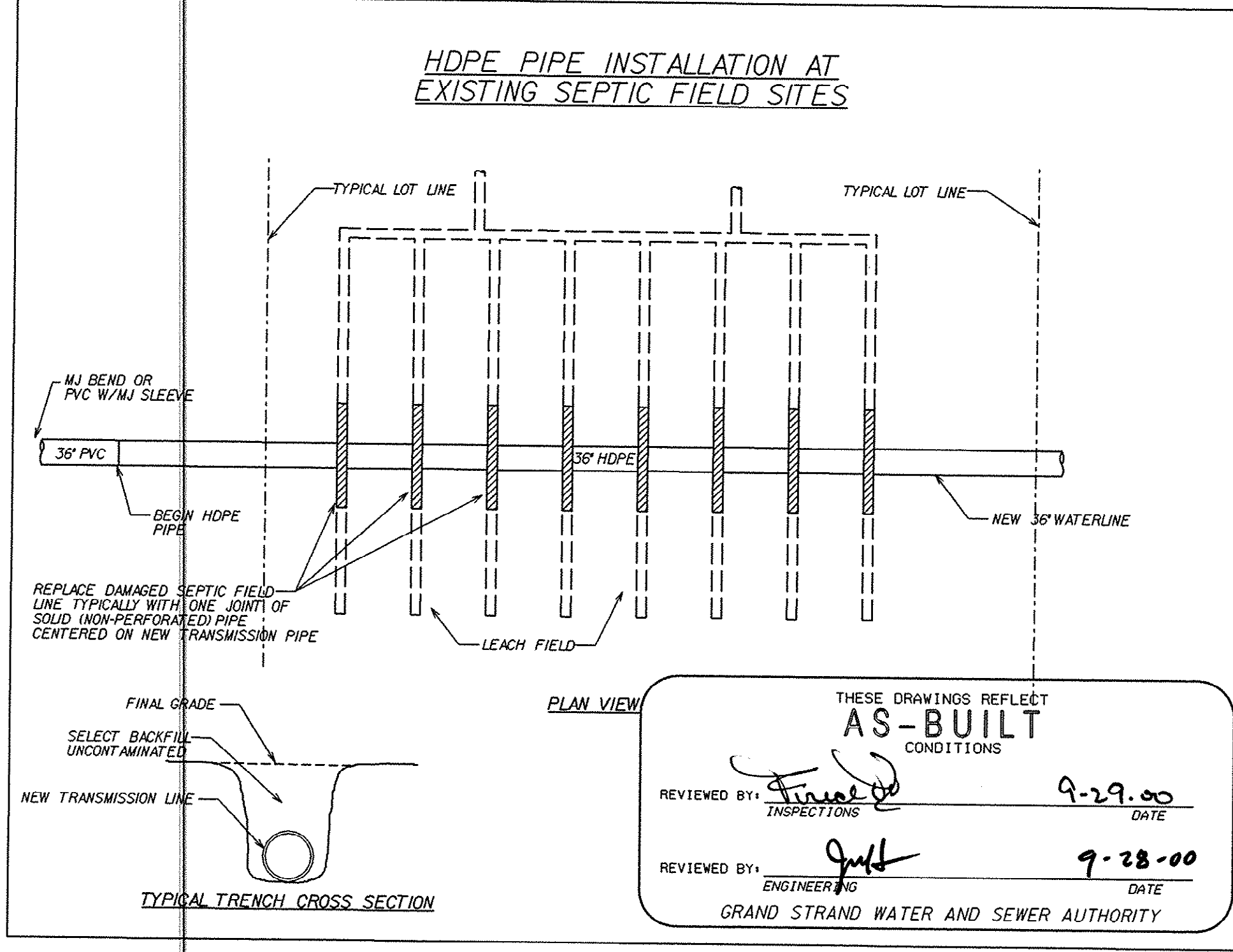
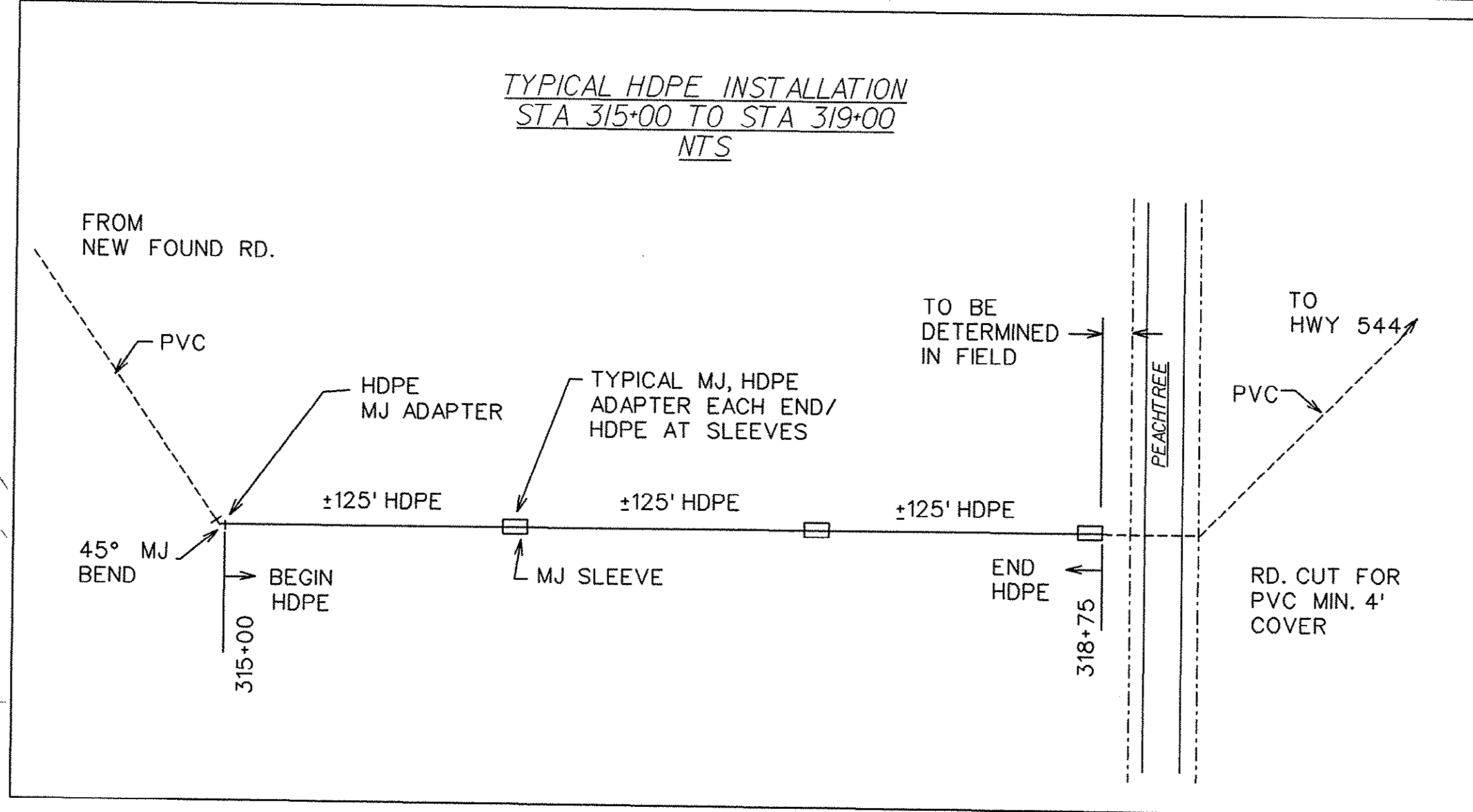
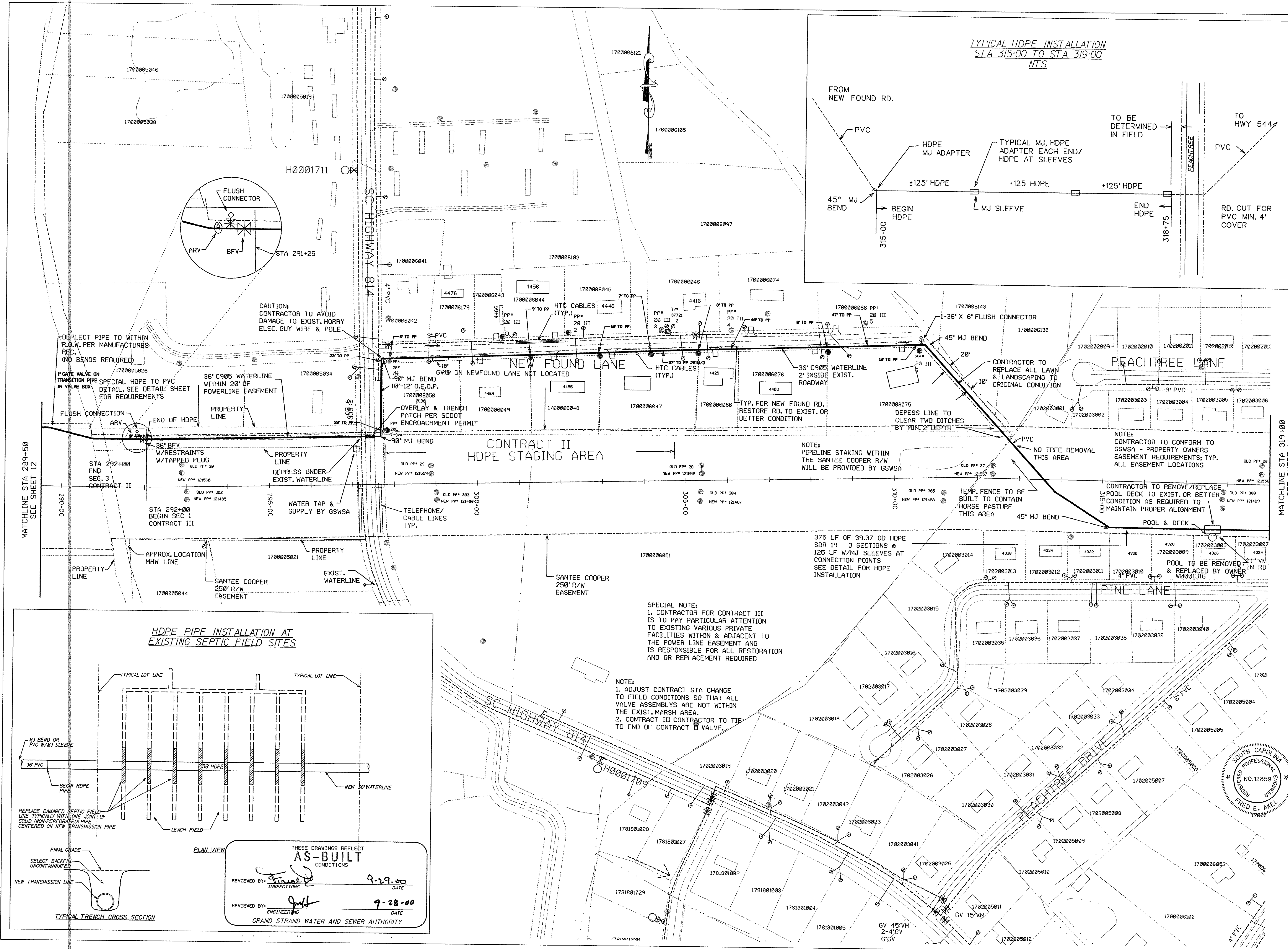
CHECKED BY: JIM HEMBREE

APPROVED BY:

FRED E. AKEL P.E. #12859

SHEET 12 OF 17

DRAWING NO. 28-026-012-W



THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *[Signature]* DATE: 9-29-00
INSPECTIONS

REVIEWED BY: *[Signature]* DATE: 9-28-00
ENGINEERING

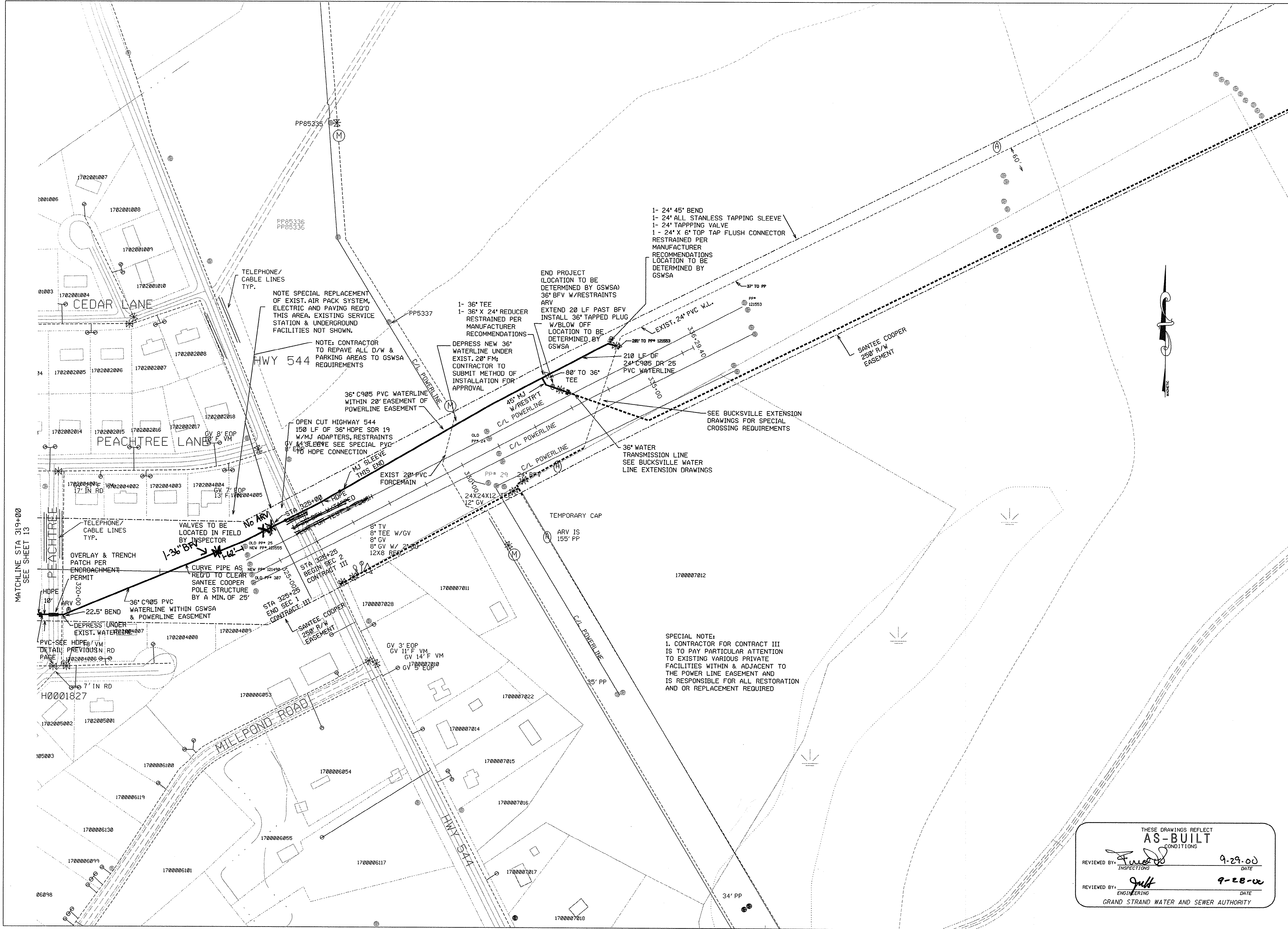
GRAND STRAND WATER AND SEWER AUTHORITY

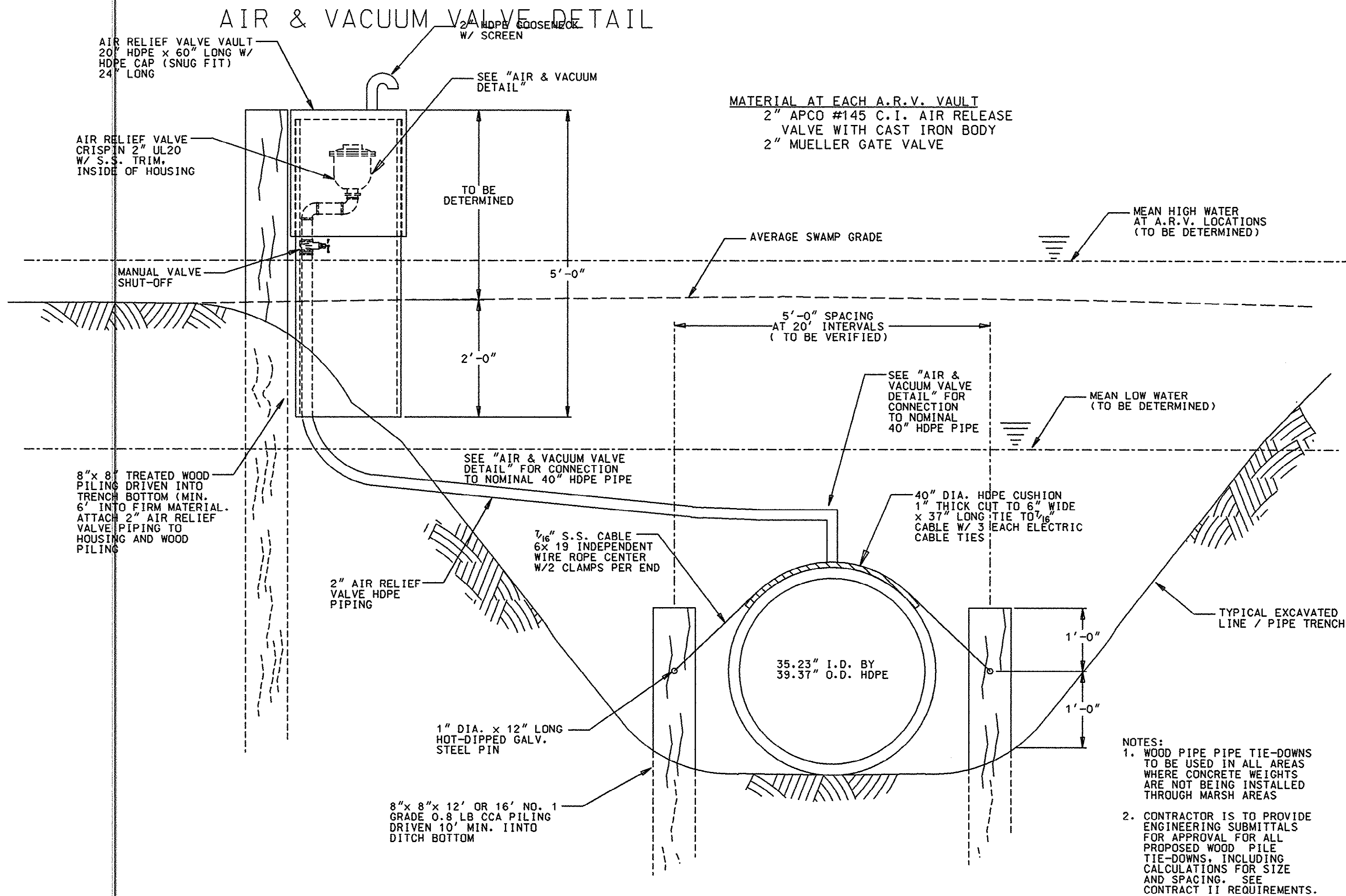
BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
CONTRACT II SECT.3 - CONTRACT III SECT.1
GRAND STRAND WATER & SEWER AUTHORITY

P.O. BOX 1587, CONWAY, SC 29386
TELEPHONE (803) 547-4441 OR 448-1686

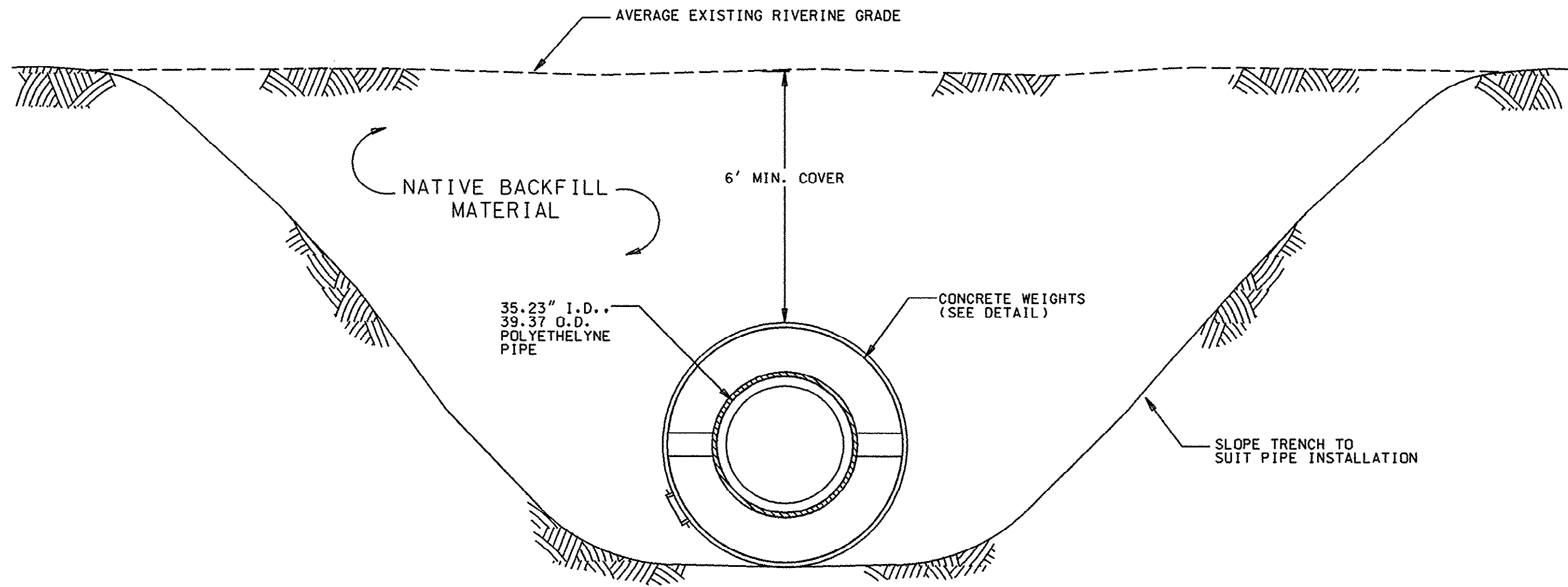
CONTRACT I	PROJ. # 442-04
CONTRACT II	PROJ. # 442-05
CONTRACT III	PROJ. # 442-06
DATE:	MARCH 1999
SCALE:	1" = 100'
FILENAME:	BUCKSVILLE.DGN
DRAWN BY:	<i>[Signature]</i> CAROLYN WRIGHT
CHECKED BY:	JIM HEMBREE
APPROVED BY:	
FRED E. AKEL	P.E. #12859
SHEET	13 OF 17
DRAWING NO.	21-026-013-W

DATE	7/23/99
BY	CAW
REVISION	
REVISED	SEE ADDITIONAL NOTES IN POWER LINE CROSSING - SPECIAL NOTES FOR DITCH CROSSING AND FENCING FOR HORSES
ASBUILT	9/28/00
CAW	

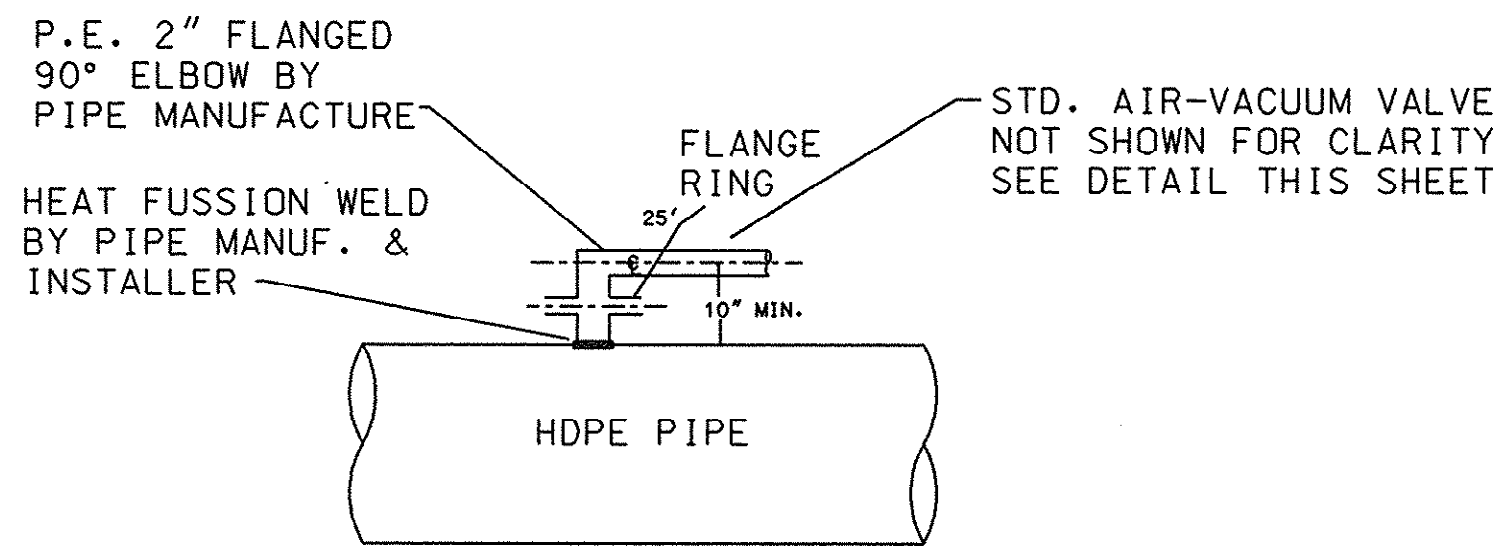
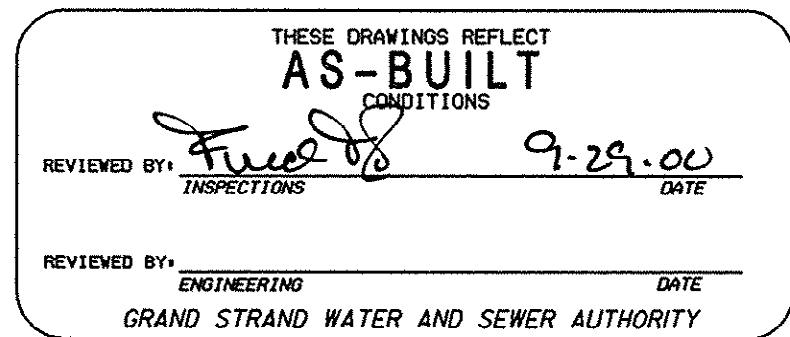




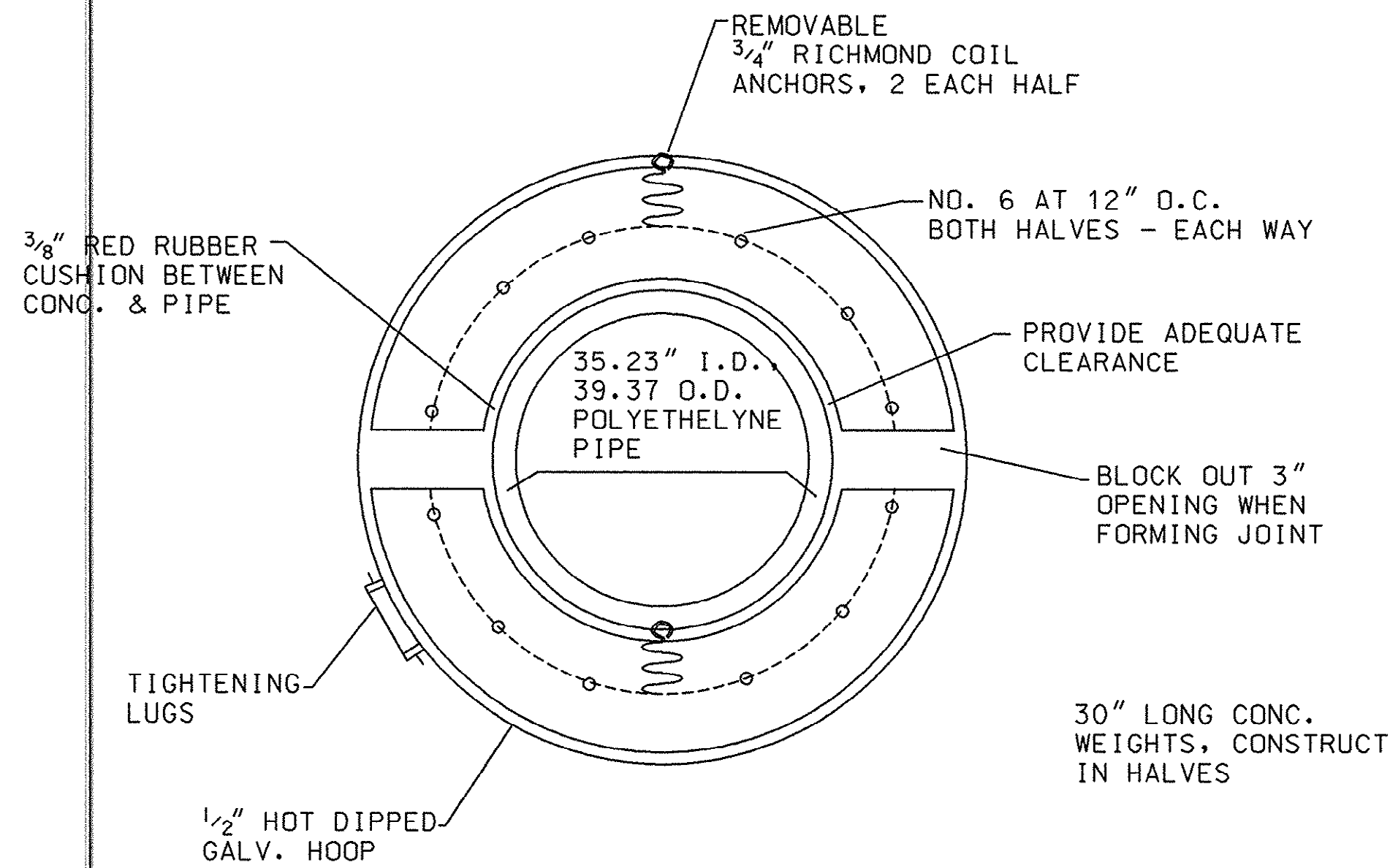
TIE-DOWN & AIR VACUUM RELEASE VAULT DETAIL
SCALE: 3/4" = 1'-0"



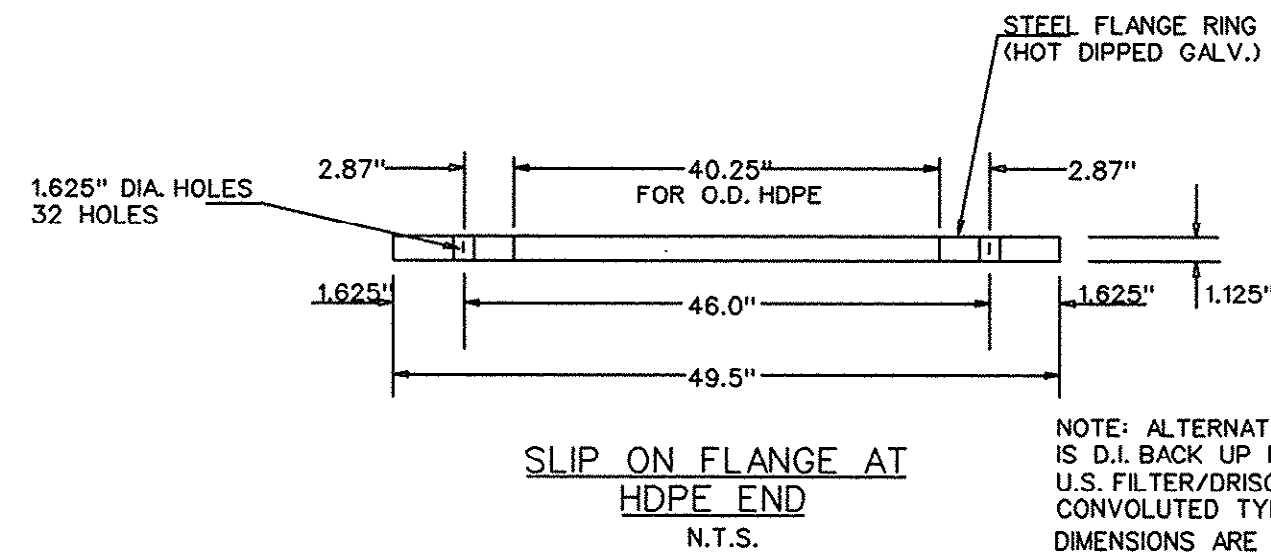
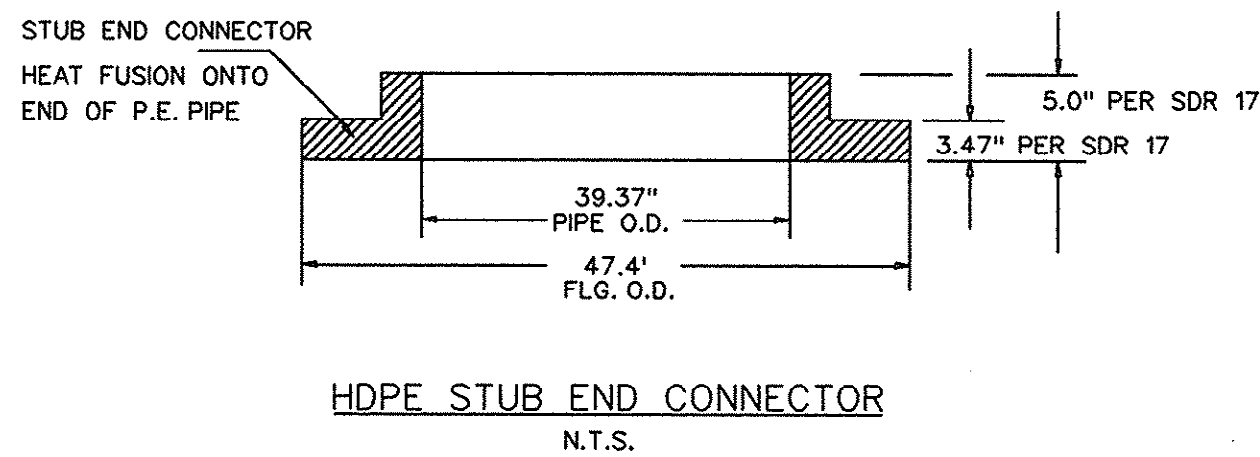
TYPICAL RIVER CROSSING SECTION
(WHERE CONCRETE WEIGHTS WILL BE USED)
SCALE: 3/8" = 1'-0"



AIR & VACUUM VALVE DETAIL

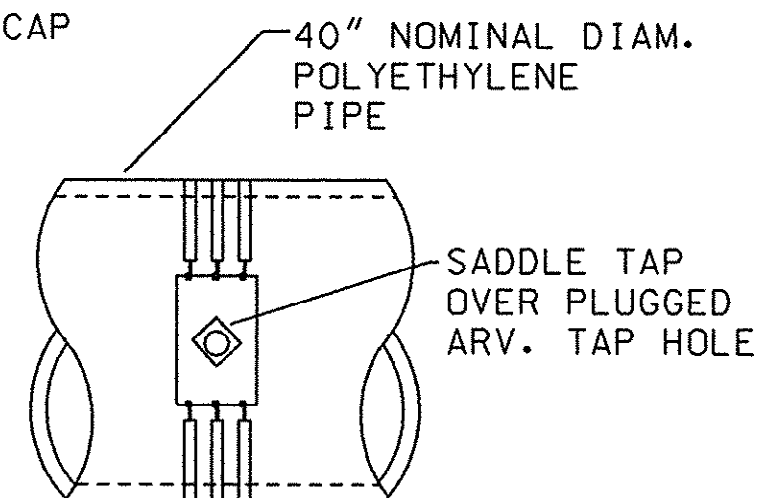
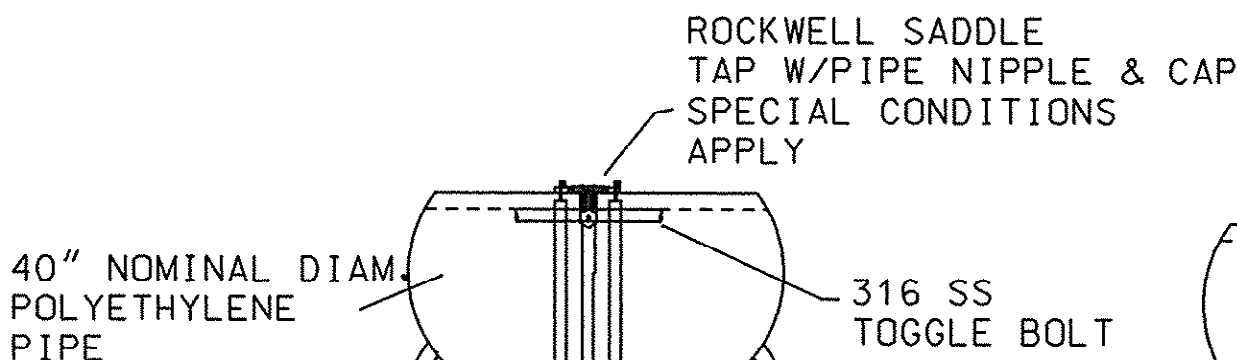


CONCRETE PIPE WEIGHTS
CROSS SECTION
SCALE 1"=1'



NOTE: ALTERNATE TO G.I. FLANGE
IS D.I. BACK UP RING PER
U.S. FILTER/DRISCO PIPE
CONVULGATED TYPE.
DIMENSIONS ARE APPROX. ONLY
AND SHALL BE VERIFIED THRU
SUBMITTAL APPROVALS

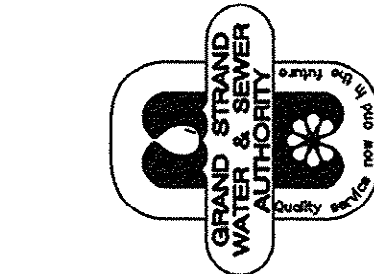
- NOTE:
1. APPROXIMATE LENGTH OF PIPE
REQUIRING CONCRETE WEIGHTS
IS 500 FEET. WEIGHTS FOR
RIVER AND SOME CREEK AREAS
TO BE USED.
 2. CONTRACTOR IS TO PROVIDE
ENGINEERING SUBMITTALS FOR
APPROVAL ALL PROPOSED CONC.
ANCHOR MANUFACTURING DETAILS
INCLUDING CALCULATIONS
DETERMINING SIZE & SPACING FOR
CONCRETE ANCHORS. SEE CONTRACT
II REQUIREMENTS.



NOTE: CONTRACTOR TO
OBTAIN APPROVAL OF
SERVICE SADDLE USE
PRIOR TO ORDERING
MATERIALS

BUCKSVILLE WATER
TRANSMISSION LINE
DETAILS FOR CONTRACT II
GRAND STRAND WATER & SEWER AUTHORITY

P.O. BOX 1527, CONWAY, SC 29526
TELEPHONE 803 347-4641 OR 448-1586



CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: AS SHOWN

FILENAME: BUCKSVILLE.DGN

DRAWN BY: *Carolyn Wright*
CAROLYN WRIGHT

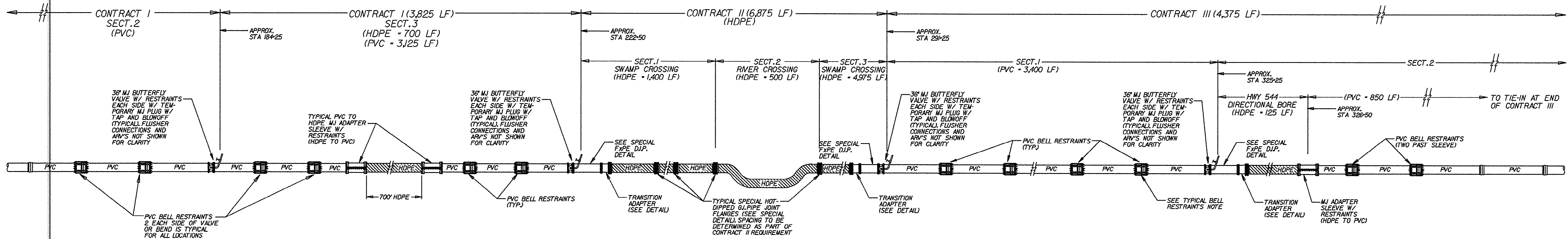
CHECKED BY: *J.M. Hembree*
J.M. HEMBREE

APPROVED BY

FRED E. AKEL P.E. #12859

SHEET 15 OF 17

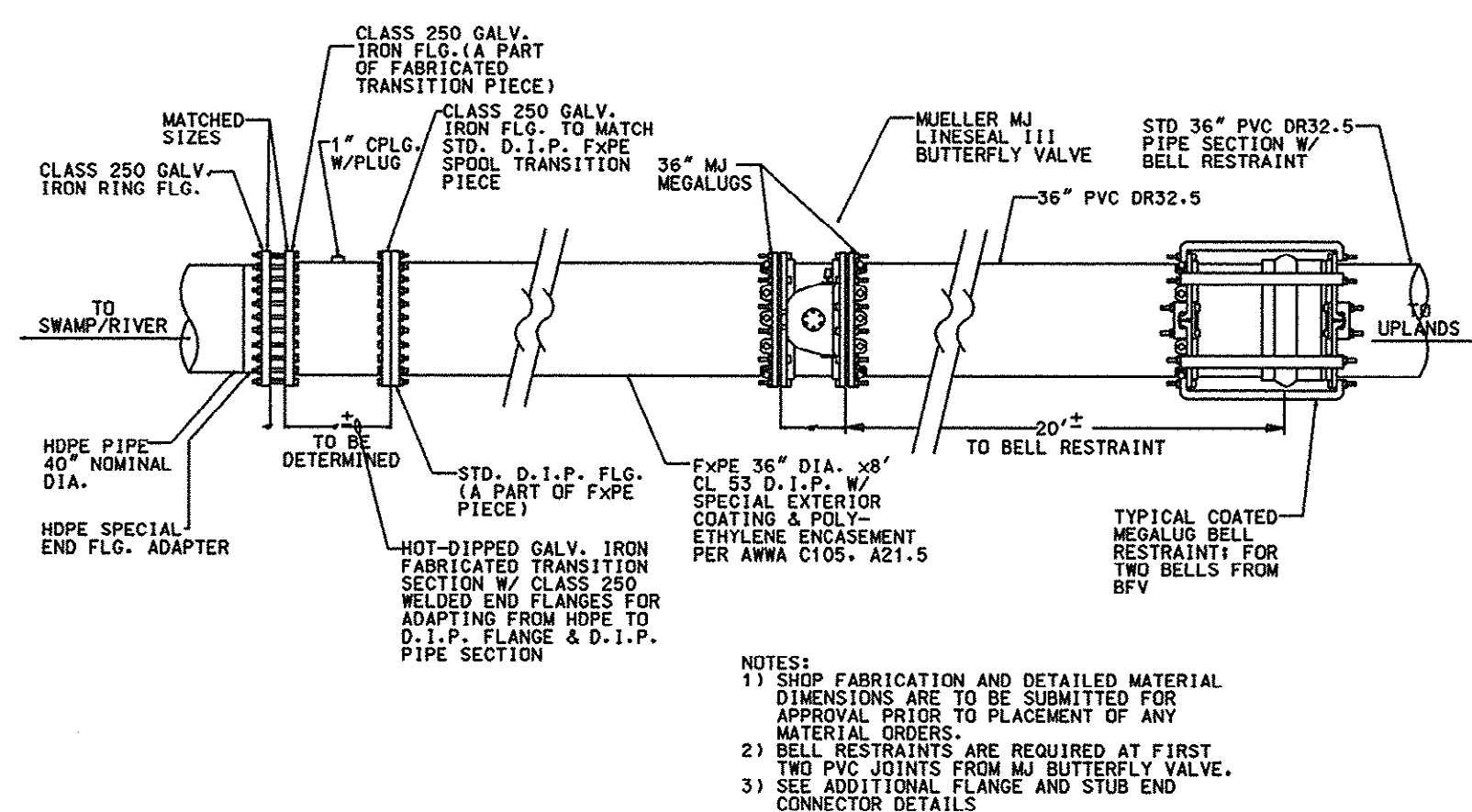
DRAWING NO. 28-026-015-W



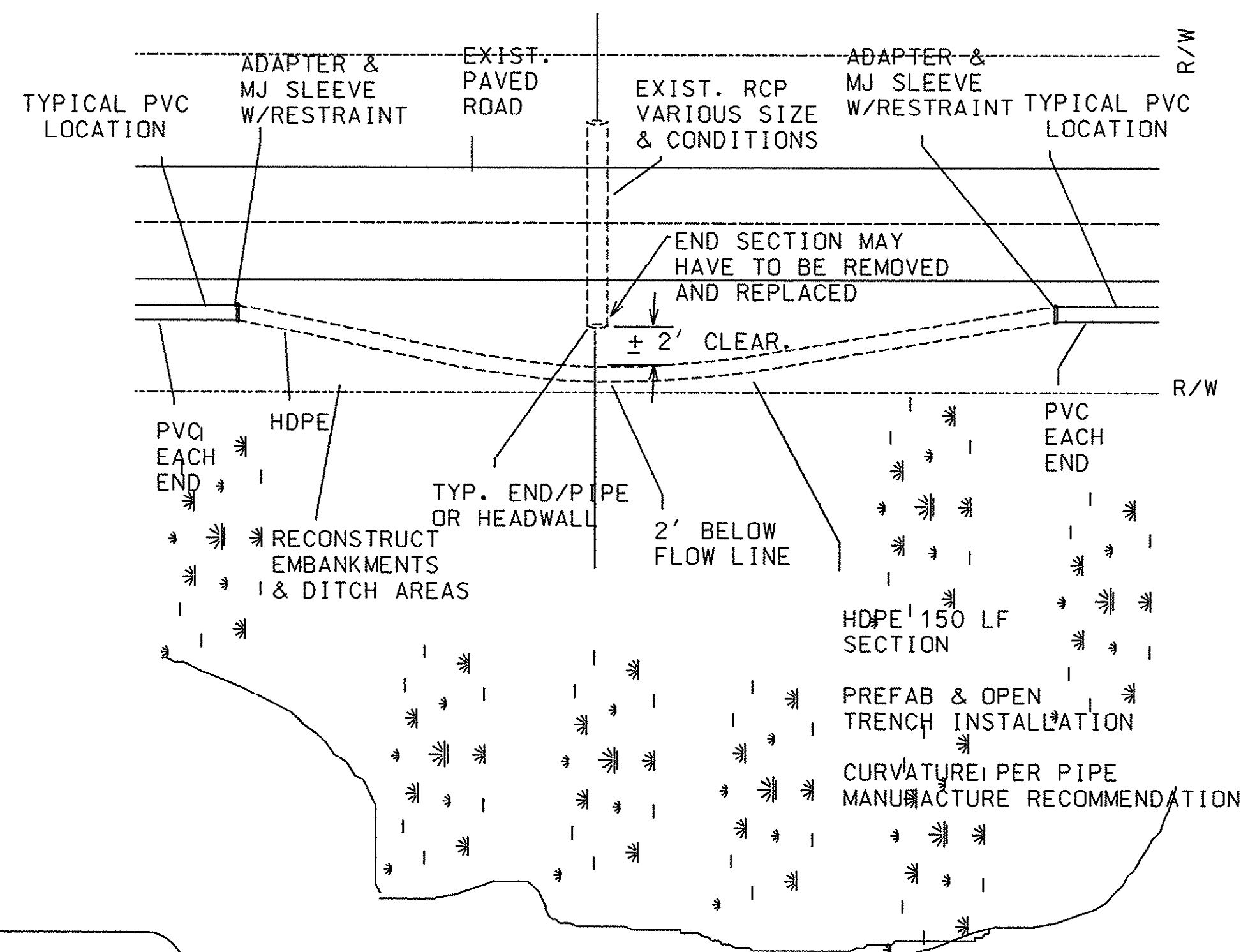
- NOTES:
1. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION FOR PVC AND HDPE CONNECTION DETAILS.
 2. HDPE SPECIAL FLANGES NOT SHOWN FOR CLARITY.
 3. ARV'S NOT SHOWN FOR CLARITY.

DIAGRAM FOR PIPE AND VALVE CONNECTIONS AT END OF CONTRACTS

(NOT TO SCALE)



**TRANSMISSION LINE CONNECTION DETAIL
HDPE TO PVC AT VALVE LOCATIONS**
(NOT TO SCALE)



HWY 701 & BUCKSVILLE ROAD
TYPICAL LARGE CREEK -
DRAINAGE WAY CROSSINGS
HDPE INSTALLATION

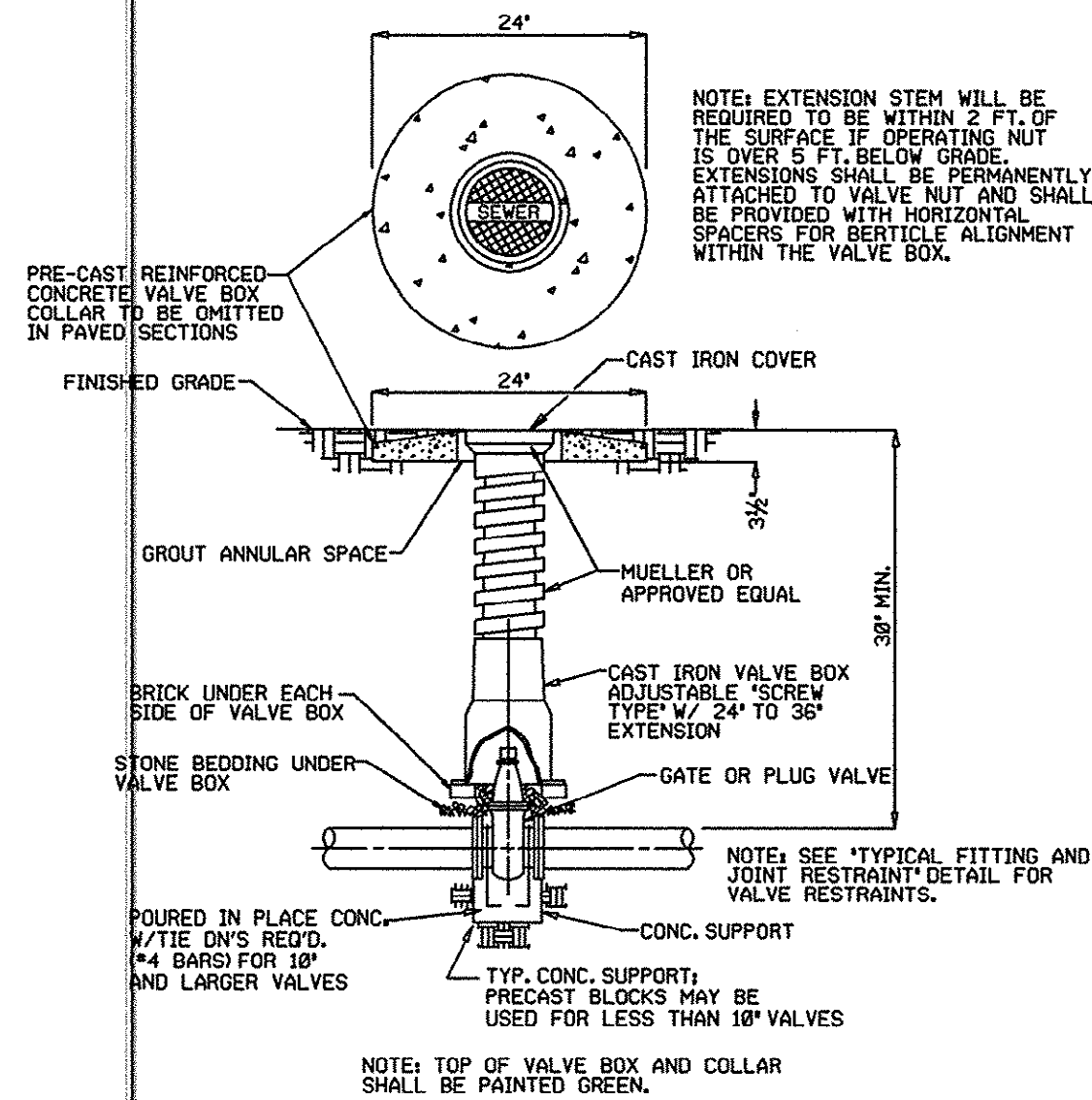
THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *Fred E. Akel* DATE: *4-29-00*

REVIEWED BY: _____ DATE: _____

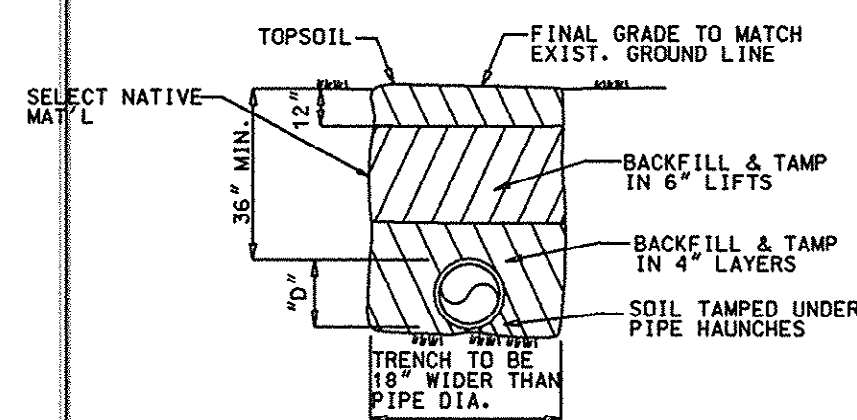
ENGINEERING
GRAND STRAND WATER AND SEWER AUTHORITY

DATE	9/28/00
BY	CAN
REVISION	
ASBUILT	
BUCKSVILLE CROSSING 36" WATER TRANSMISSION LINE PIPE INSTALLATION DETAIL GRAND STRAND WATER & SEWER AUTHORITY TELEPHONE (803) 347-4641 OR 449-1686	
CONTRACT I	PROJ. # 442-04
CONTRACT II	PROJ. # 442-05
CONTRACT III	PROJ. # 442-06
DATE:	APRIL 1999
SCALE:	NTS
FILENAME:	
DRAWN BY:	<i>Carolyn Wright</i> CAROLYN WRIGHT
CHECKED BY:	<i>JIM HEMBREE</i> JIM HEMBREE
APPROVED BY:	
FRED E. AKEL	P.E. #12859
SHEET	16 OF 17
DRAWING NO.	28-026-016-W



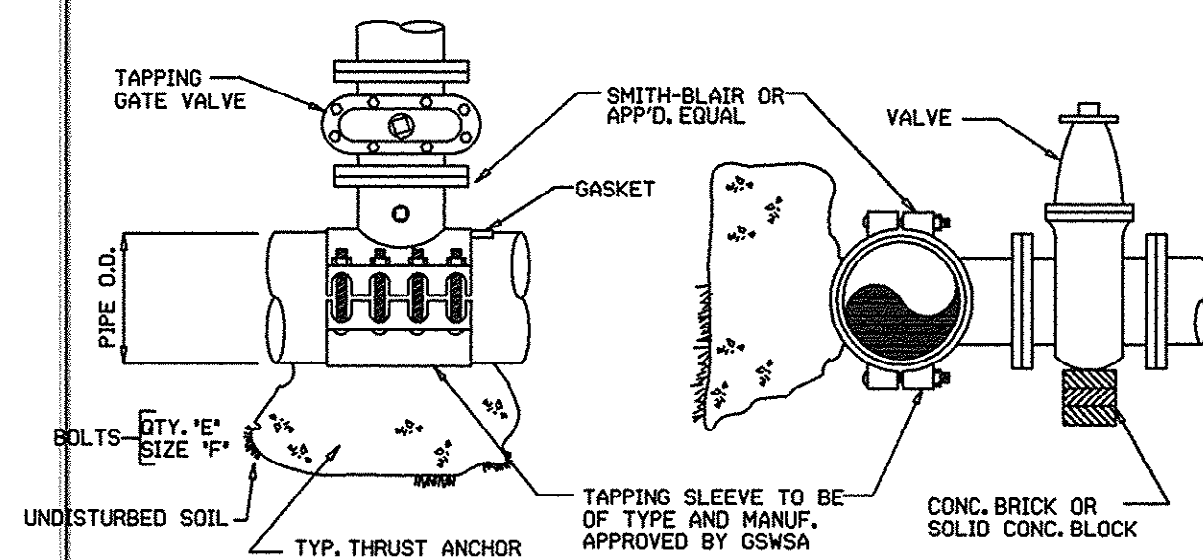
TYPICAL VALVE AND VALVE BOX

WS1



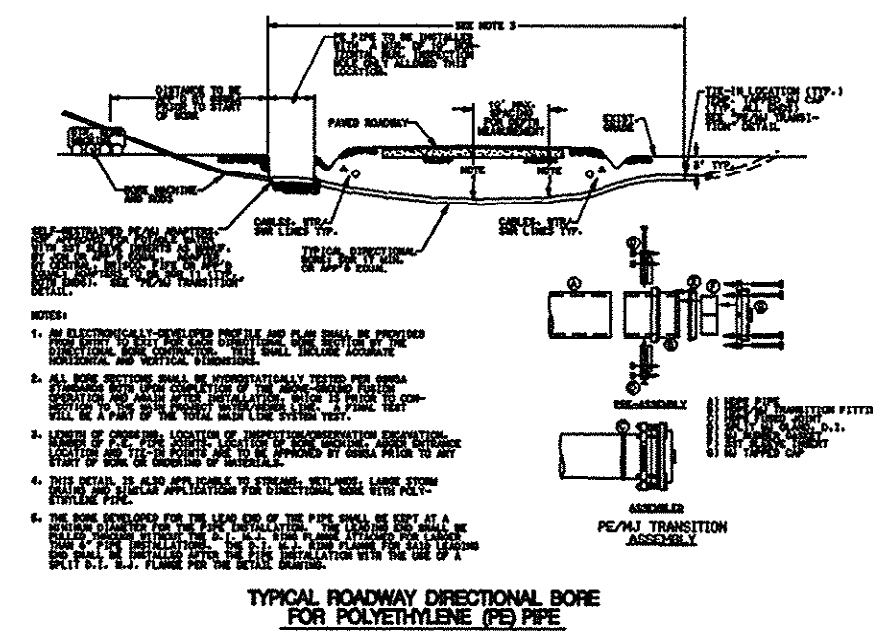
TYPICAL PIPE BEDDING DETAIL

WS11

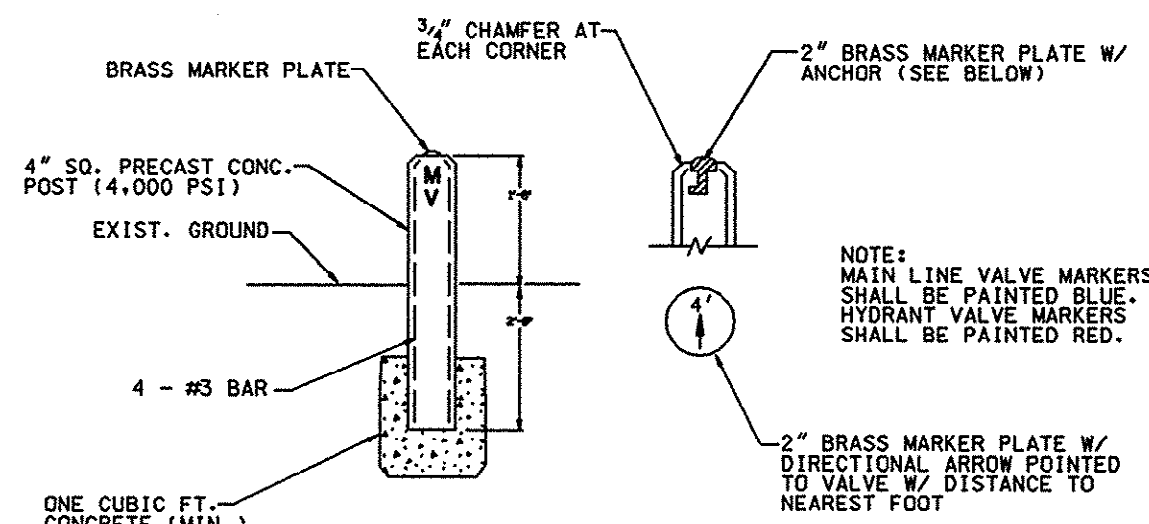


TYPICAL TAPPING SLEEVE
(FOR WATERLINE OR SEWER FORCEMAIN)

WS2

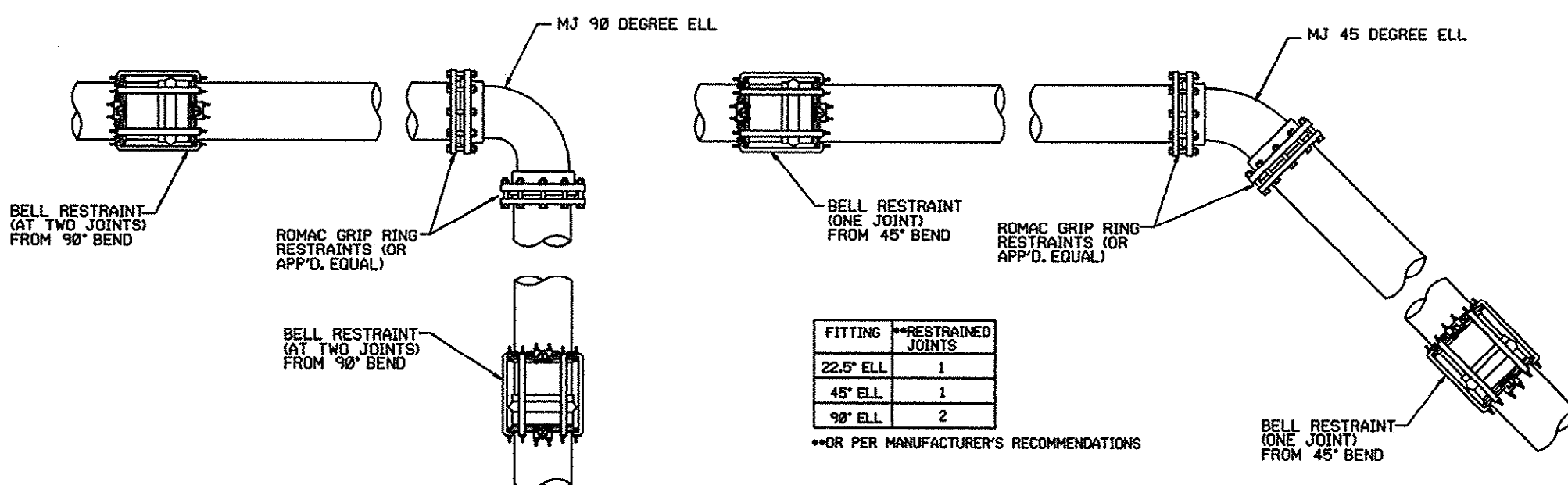


TYPICAL RANDOM DIRECTIONAL BORE
FOR POLYETHYLENE (PE) PIPE



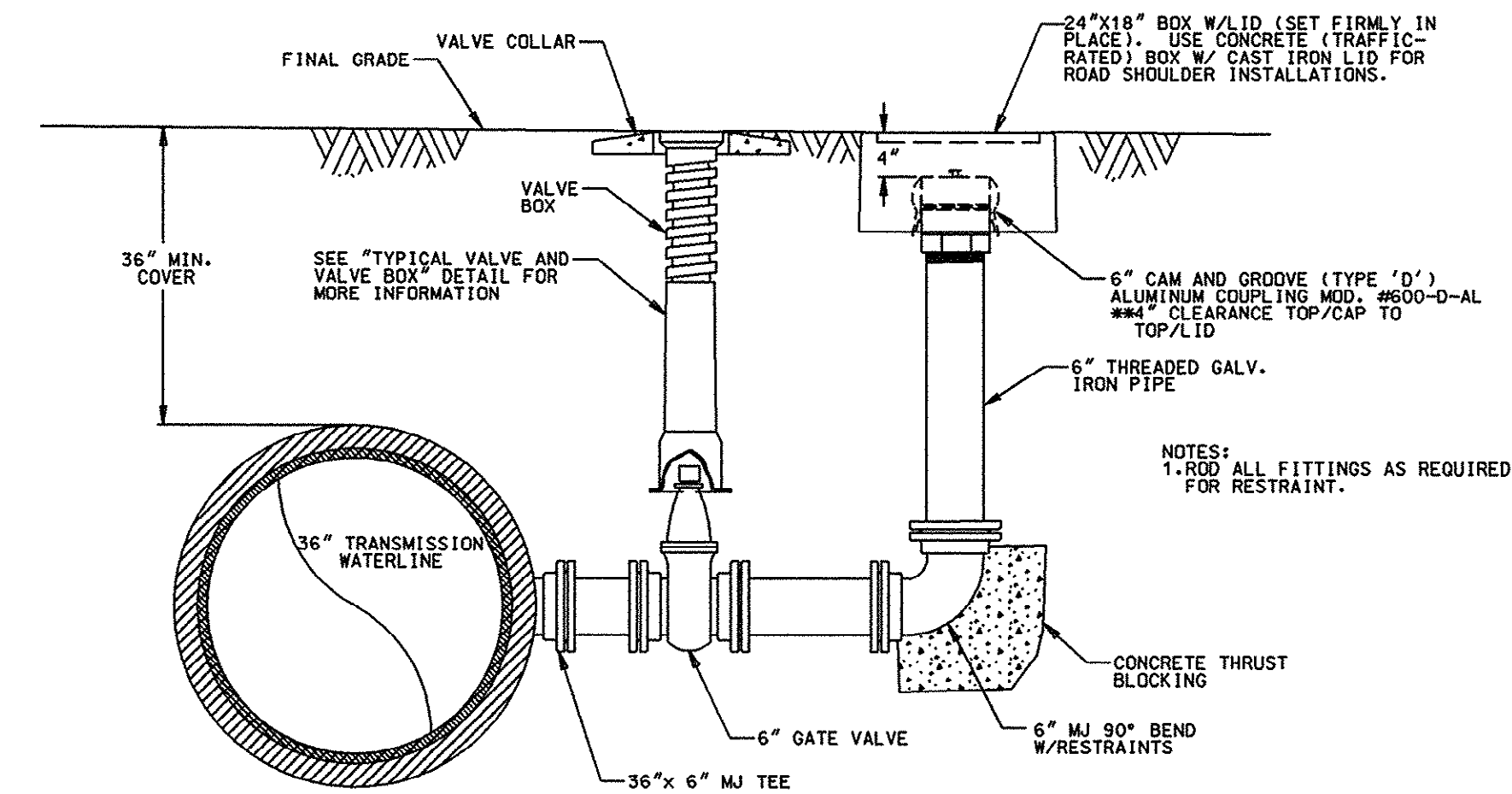
TYPICAL CONCRETE VALVE MARKER

W17



TYPICAL FITTING AND JOINT RESTRAINT
(INCLUDES VALVES)

WS3

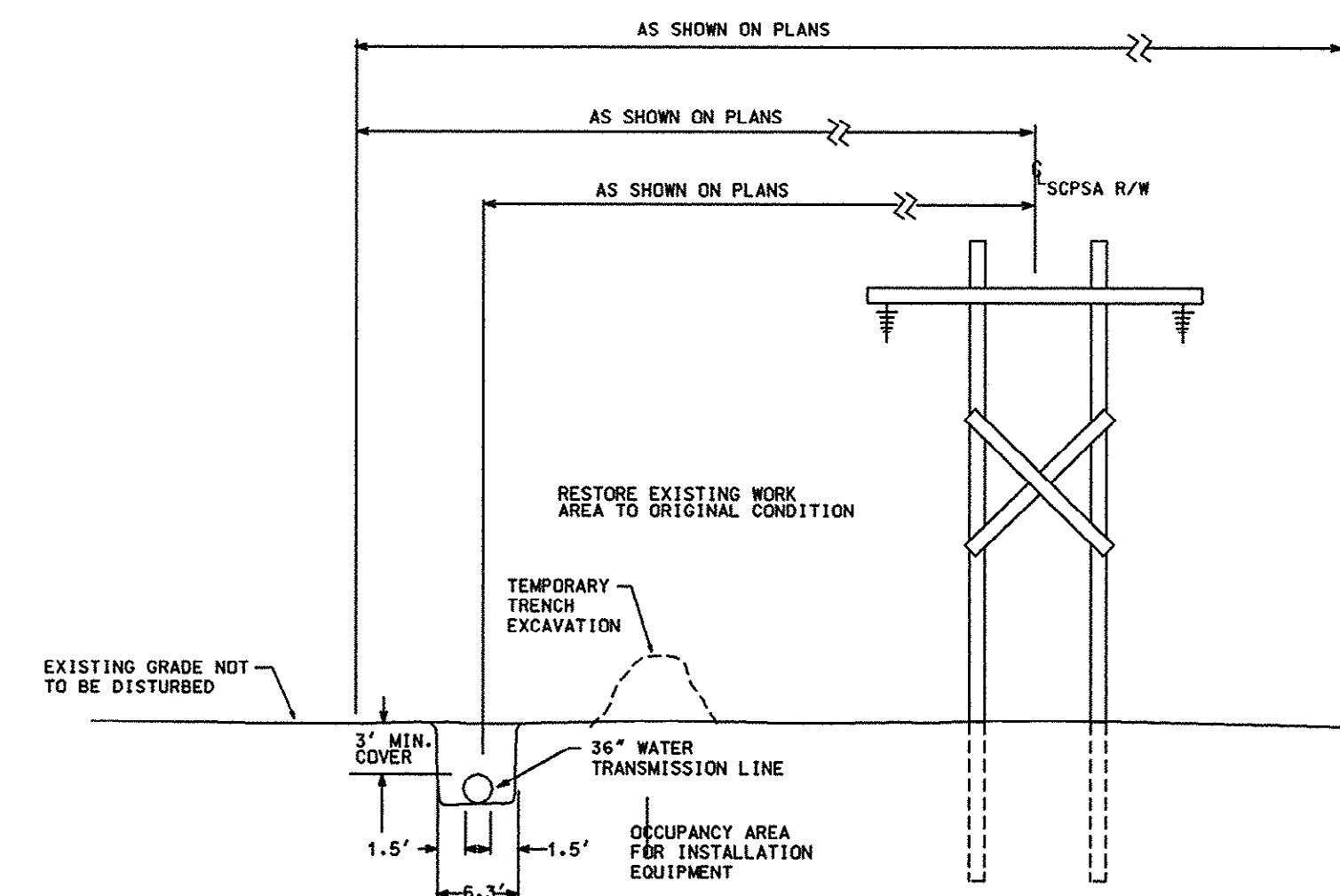


TRANSMISSION QUALITY-CONTROL
BLOW-OFF CONNECTION

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: *Timothy J. Wright* 9.29.00 DATE
INSPECTIONS

REVIEWED BY: _____ DATE
ENGINEERING
GRAND STRAND WATER AND SEWER AUTHORITY



TYPICAL TRENCH DETAIL

BUCKSVILLE CROSSING
36" WATER TRANSMISSION LINE
STANDARD DETAIL SHEET
GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE 683 347-4641 OR 418-1686

CONTRACT I PROJ. # 442-04
CONTRACT II PROJ. # 442-05
CONTRACT III PROJ. # 442-06

DATE: MARCH 1999

SCALE: NTS

FILENAME: BUCKSVILLE.DGN

DRAWN BY: *Carolyn Wright*
CAROLYN WRIGHT

CHECKED BY: JIM HEMBREE

APPROVED BY: _____

FRED E. AKEL P.E. #12859

SHEET 17 OF 17

DRAWING NO. 28-026-017-W

DATE: 9/28/00
BY: CAW
REVISION: ASBUILT