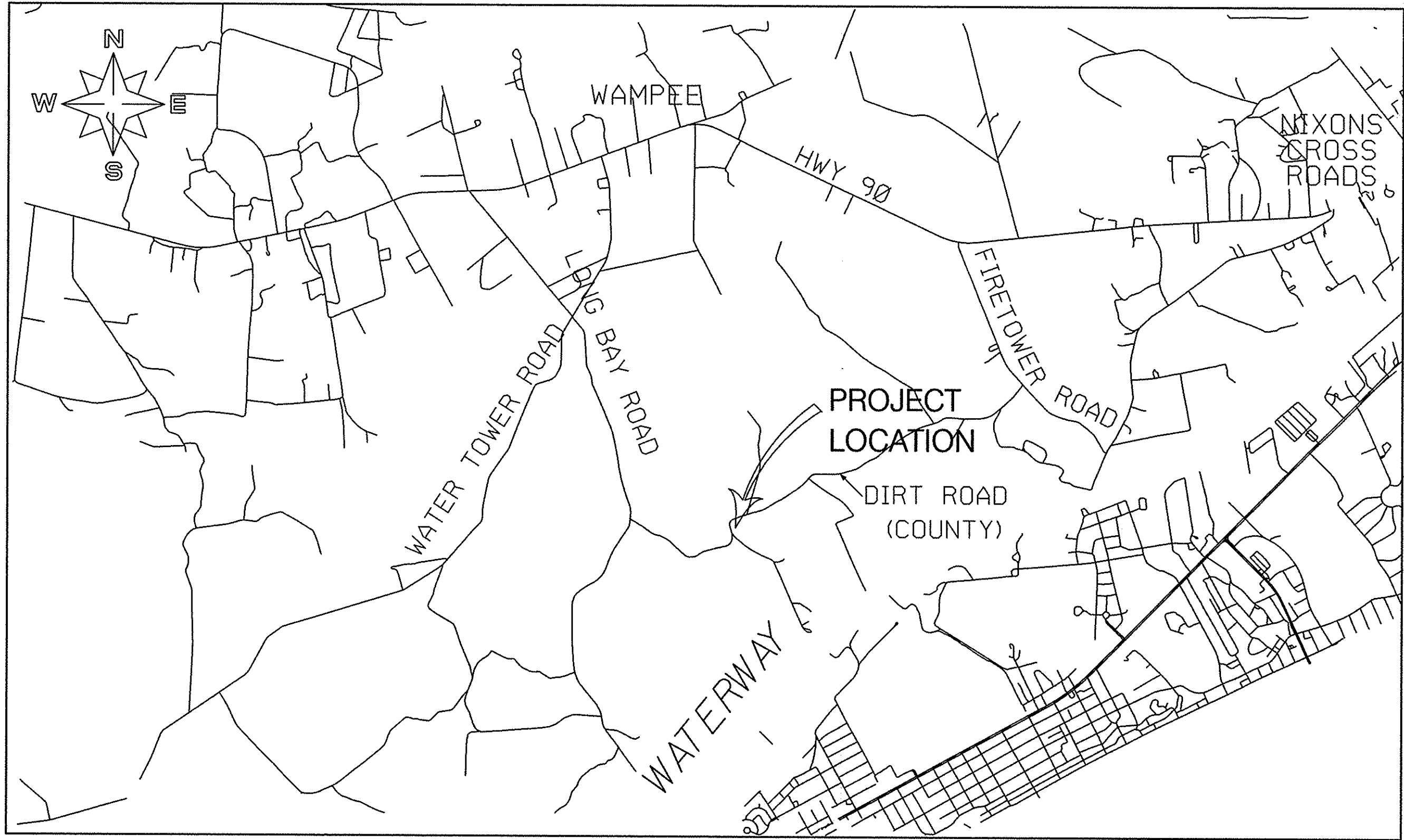


GRAND STRAND WATER AND SEWER AUTHORITY

NORTH TRANSMISSION BOOSTER PUMP STATION PROJ. #07-442-09



LOCATION MAP
NOT TO SCALE

THESE DRAWINGS REFLECT	
AS-BUILT	
CONDITIONS	
REVIEWED BY: <i>David Greenland</i>	DATE: <i>8/14/00</i>
INSPECTIONS	DATE
REVIEWED BY: _____	DATE: _____
ENGINEERING	DATE
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 SEEDED.

PREPARED BY:

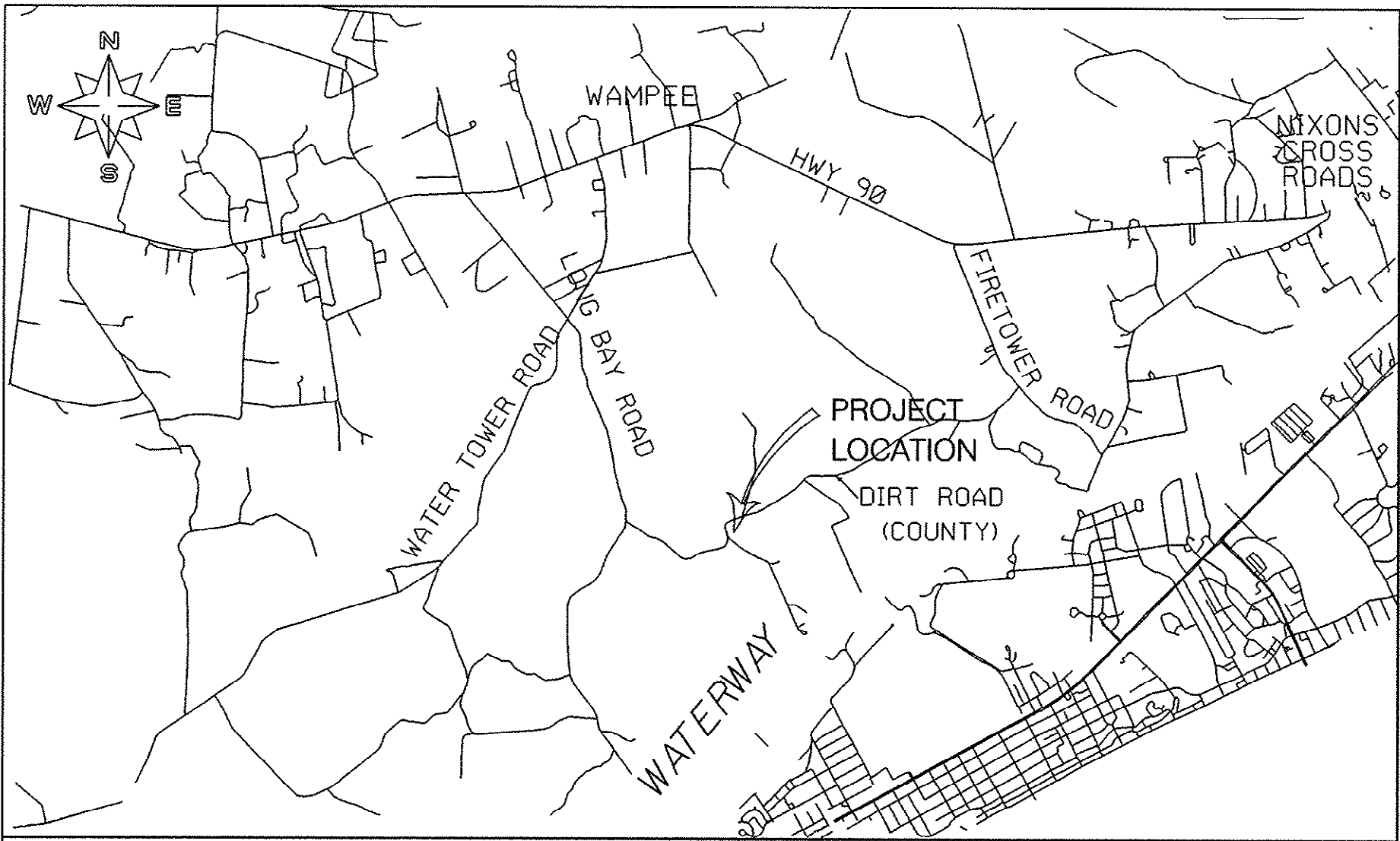
GRAND STRAND WATER & SEWER AUTHORITY
PO BOX 1537 CONWAY, SC 29526

APPROVED BY:

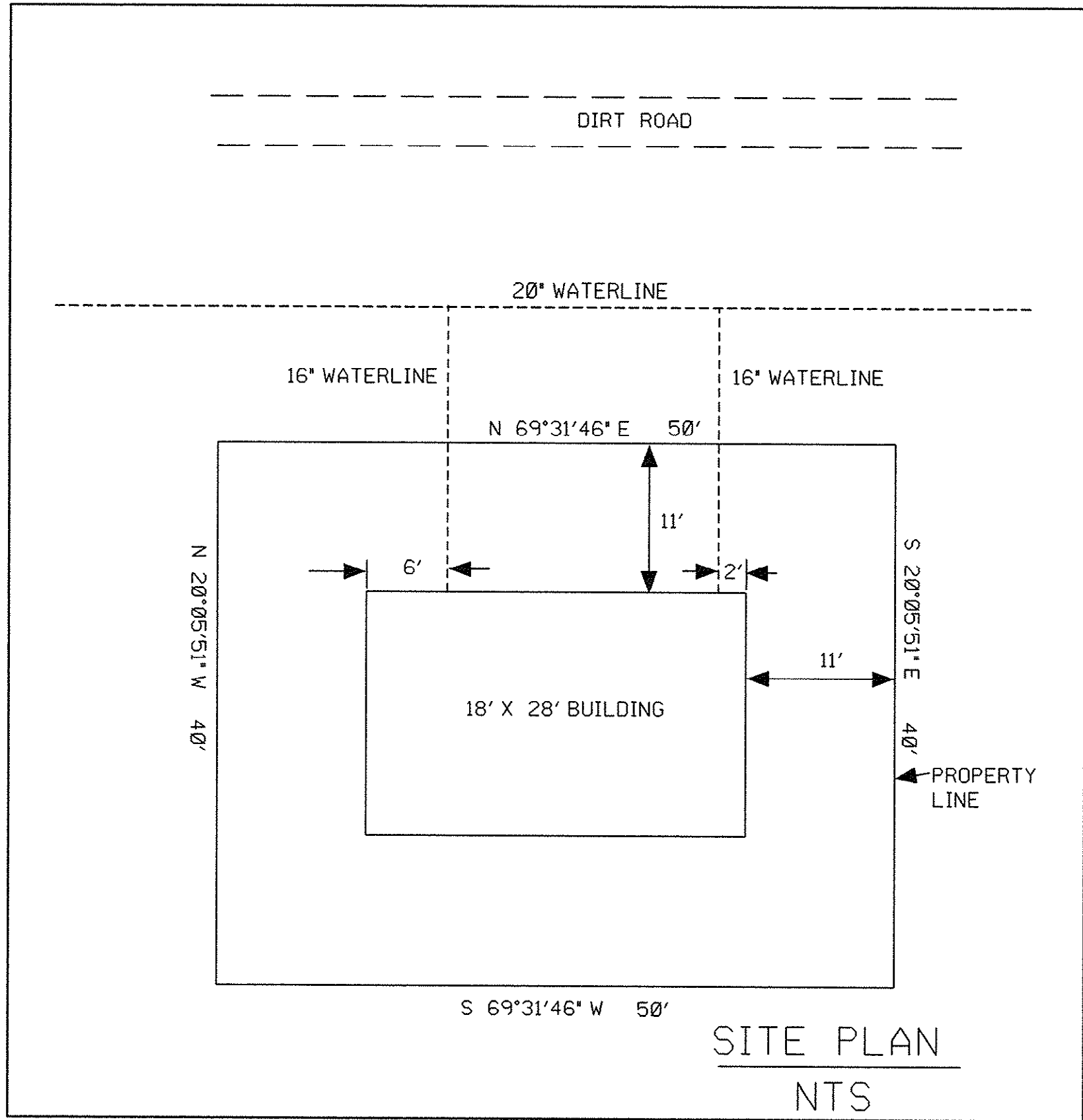
FRED E. AKEL P.E. #12859
"NORTH TRANSMISSION BOOSTER
PUMP STATION"
PROJ. # 07-442-09
"OCTOBER 1999"

21-142-004-W





LOCATION MAP
NOT TO SCALE



SITE PLAN
NTS

DOUBLE
STRUCTURE

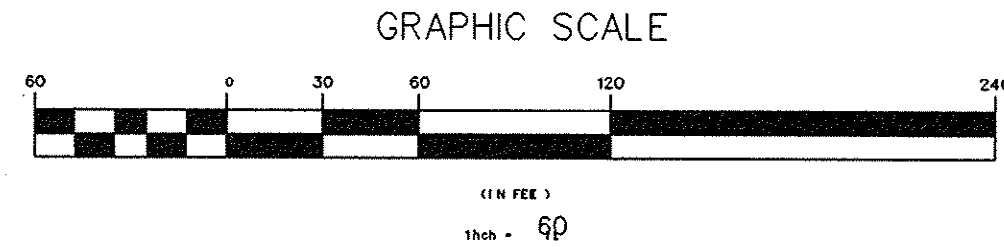
TMS 143-00-01-001
N/F LONG BAY ASSOCIATES

DOUBLE
STRUCTURE
(EXISTING INGRESS/EGRESS EASEMENT)
APPROX. LOCATION UNDERGROUND PIPELINE
N 734114.75
E 2680300.35
RAD 83
2,000 sq ft
0.05 acres
PROPOSED
G.S.W.S.A.
PUMP STATION SITE

TMS 143-00-01-001
N/F LONG BAY ASSOCIATES

TMS 143-00-01-001
N/F LONG BAY ASSOCIATES

R=299.76
L=136.66
Tan=69.54
Delta=28°07'16"
Chord= 503°13'35"W
135.48



THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS
REVIEWED BY: David Strickland 8/16/00 DATE
INSPECTIONS
REVIEWED BY: _____ DATE
ENGINEERING
GRAND STRAND WATER AND SEWER AUTHORITY

TMS 143-00-01-041
GRAND STRAND WATER & SEWER AUTHORITY

66' EASEMENT AND RIGHT-OF-WAY
DEED BOOK 1163, PG. 405

TMS 143-00-01-001
N/F LONG BAY ASSOCIATES

- NOTES**
- PARENT TMS 143-00-01-001
 - THIS PROPERTY SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.
 - REFERENCE "ACCESS ROAD EASEMENT SURVEY OF GEORGE R. VERGEN NORTH STRAND REGIONAL WASTEWATER TREATMENT PLANT" DATED JULY 20, 1987, PREPARED BY SUR-TECH, INCORPORATED FOR GRAND STRAND WATER & SEWER AUTHORITY, AND RECORDED IN PLAT BOOK _____ AT PAGE _____
 - THIS PROPERTY IS LOCATED IN FLOOD ZONE X" (NOT A SPECIAL FLOOD HAZARD ZONE) ACCORDING TO F.I.R.M. No. 4505100578 H DATED AUGUST 23, 1999.
 - SURVEY IS VALID ONLY IF PRINT HAS ORIGINAL SEAL AND SIGNATURE OF SURVEYOR.
 - NO ATTEMPT HAS BEEN MADE AS A PART OF THIS BOUNDARY SURVEY TO OBTAIN OR SHOW DATA CONCERNING EXISTENCE, SIZE, DEPTH, CONDITION, CAPACITY, OR LOCATION OF ANY UTILITY OR MUNICIPAL/PUBLIC SERVICE FACILITY. FOR INFORMATION REGARDING THESE UTILITIES PLEASE CONTACT THE APPROPRIATE AGENCIES.
 - THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVEGROUND STRUCTURES AND RECORD DRAWINGS PROVIDED THE SURVEYOR. LOCATIONS OF UNDERGROUND UTILITIES/ STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THE SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.
 - ALL BUILDINGS, AND SURFACE AND SUBSURFACE IMPROVEMENTS ON AND ADJACENT TO THE SITE ARE NOT NECESSARILY SHOWN HEREON.
 - ALL DISTANCES SHOWN ARE HORIZONTAL DISTANCES, NOT GRID.
 - SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.

REVISION		BY	DATE
PROJECT # 07-442-09			
DATE: OCTOBER 1999			
SCALE: AS SHOWN			
FILENAME: NTRANBPS			
DRAWN BY	<i>Carolyn Wright</i>		
	CAROLYN WRIGHT		
CHECKED BY			
	JIM HEMBREE		
APPROVED BY			
FRED E. AKEL P.E. #12859			
SHEET 1 OF 4			
DRAWING NO. 21-142-001/4-W			

NORTH TRANSMISSION BOOSTER

PUMP STATION

GRAND STRAND WATER & SEWER AUTHORITY

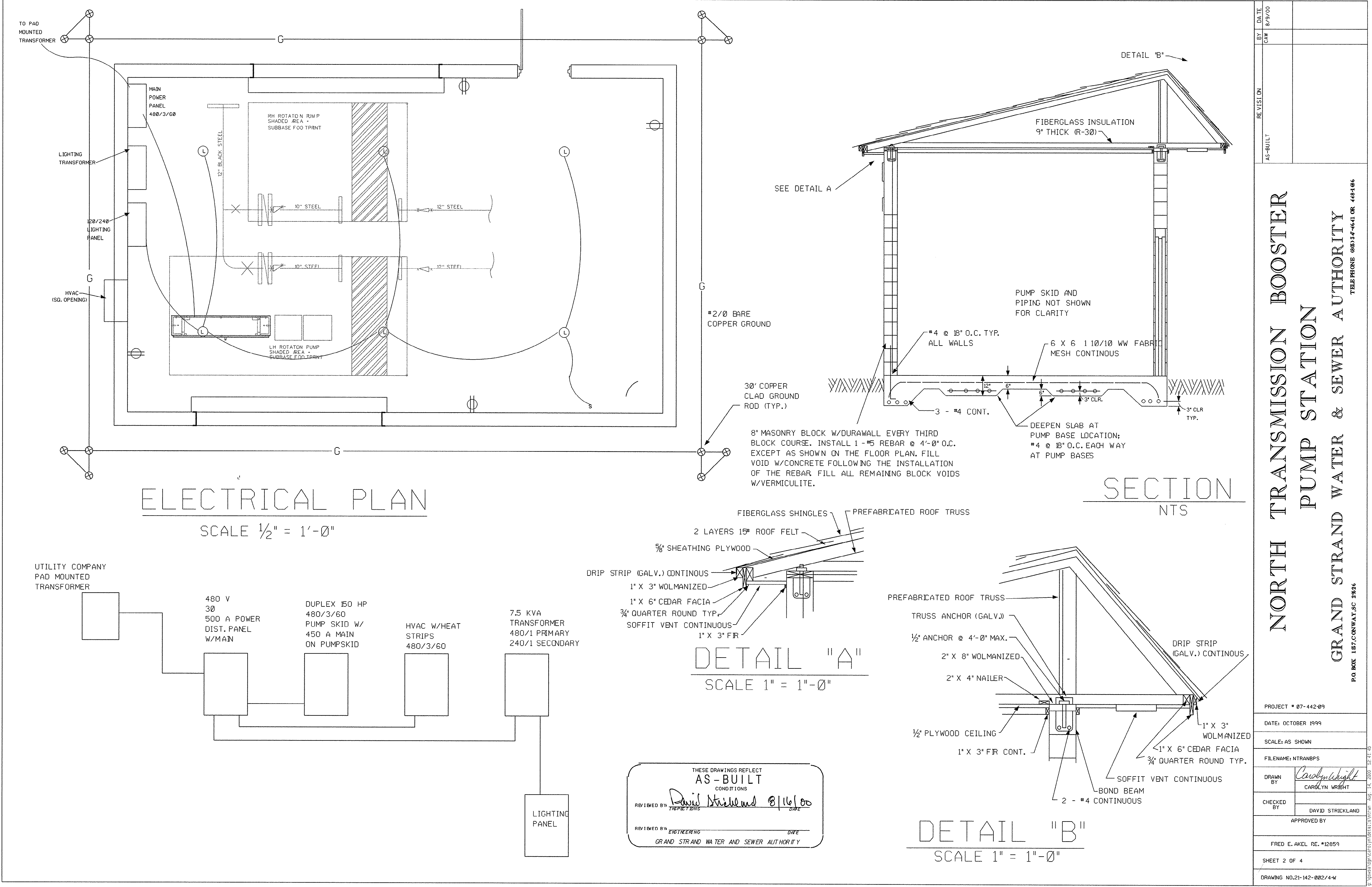
P.O. BOX 1537 CONWAY, SC 29526

TELEPHONE (803) 447-6441 OR 448-1686

**NORTH TRANSMISSION BOOSTER
PUMP STATION**
GRAND STRAND WATER & SEWER AUTHORITY

P.O. BOX 1537, CONWAY, SC 29526

TELEPHONE (803) 47-4641 OR 48-1686



ELECTRICAL PLAN

SCALE 1/2" = 1'-0"

SECTION
NTS

DETAIL "A"

SCALE 1" = 1'-0"

DETAIL "B"

SCALE 1" = 1'-0"

NORTH TRANSMISSION BOOSTER
PUMP STATION
GRAND STRAND WATER & SEWER AUTHORITY

TELEPHONE (803) 461-4641 OR 446-186

P.O. BOX 157, CONWAY, SC 2936

PROJECT # 07-442-09

DATE: OCTOBER 1999

SCALE: AS SHOWN

FILENAME: NTRANBPS

DRAWN BY
CAROLYN WRIGHT

CHECKED BY
DAVID STRICKLAND

APPROVED BY

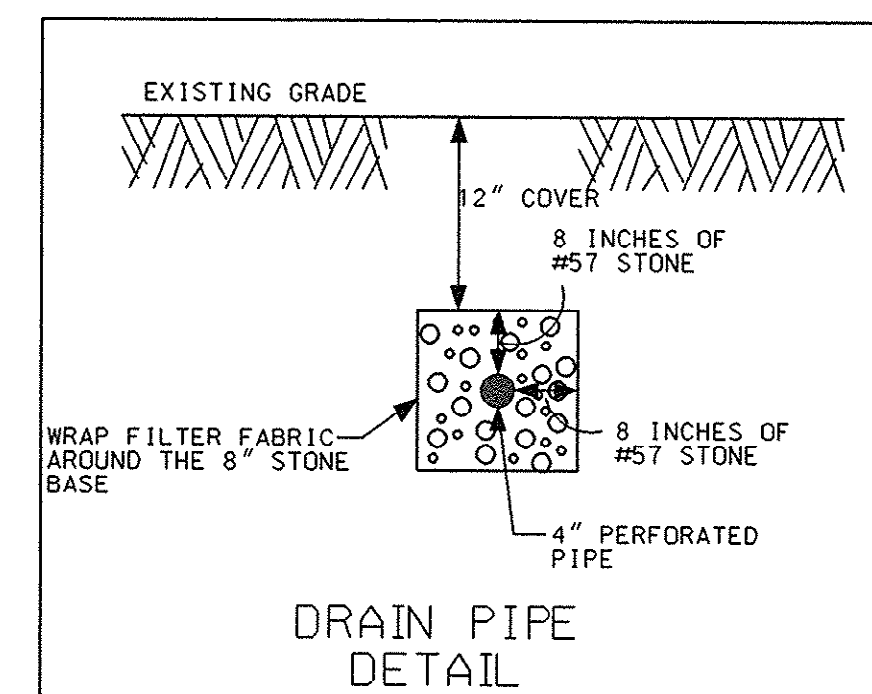
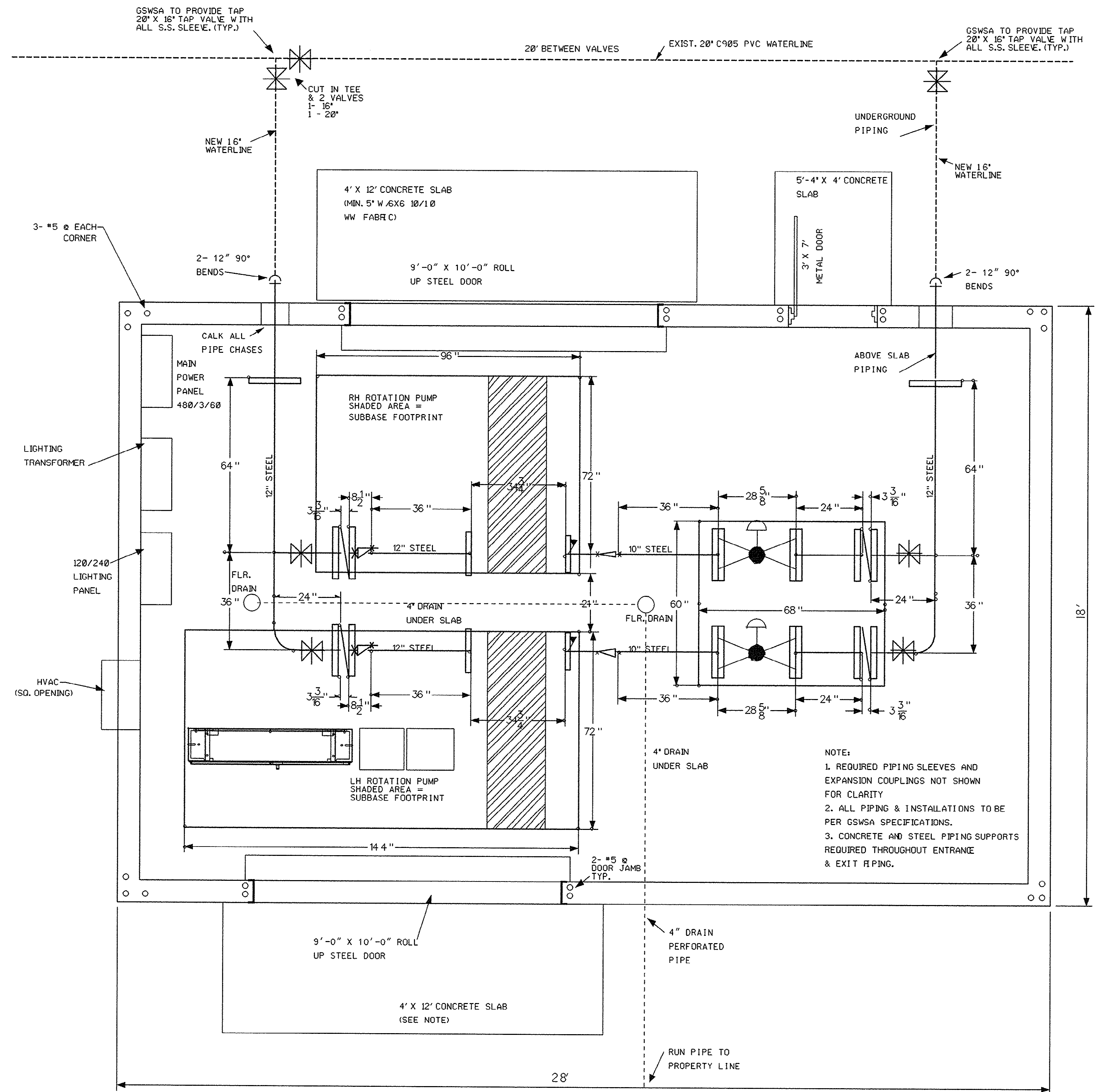
FRED E. AKEL RE. #12859

SHEET 2 OF 4

DRAWING NO. 21-142-002/4-W

1. 18' x 28' x 12'-4" BLOCK BUILDING. ALL WALLS TO BE CONSTRUCTED WITH 8" CONCRETE BLOCK WITH DURA-WALL EVERY OTHER COURSE. BLOCK WALLS TO HAVE #5 REBAR AT 48" O.C. AND AT ALL CORNERS AND OPENINGS AND WILL EXTEND INTO 8" BOND BEAM. ALL CAVITIES WITH REBAR AND BOND BEAM TO BE FILLED WITH CONCRETE.
2. CONCRETE FLOOR TO BE 6" SLAB WITH 10 GA. WIRE MESH AND 6 MIL. VAPOR BARRIER WITH FOUNDATION AS PER DRAWING. DEEPEN SLAB TO 12" AS SHOWN WITH ADDITIONAL REBAR.
3. INSTALL ONE 3' x 7' METAL DOOR WITH FRAME AND KEYLESS LOCK (ILCO UNICAN LEVEL TYPE).
4. FILL ALL BLOCK WALLS WITH VERMICULITE INSULATION.
5. INSTALL WOOD TRUSSES WITH ROOF PITCH AS SHOWN.
6. WOOD GABLES AND SOFFITS TO BE 3/8 " FIR PLYWOOD. ALL FASCIA BOARDS TO BE PINE.
7. INSTALL 5/8 " PLYWOOD FOR ROOF DECKING WITH #15 FELT AND STANDARD SHINGLES WITH DROP CAP.
8. INSTALL 1/2 " FIR PLYWOOD ON INTERIOR CEILING OF BUILDING. INSTALL 1 X 2 TRIM AT TOP OF WALLS.
9. INSTALL TWO 16" x 20" GABLE LOUVERS.
10. INSTALL 9" INSULATION IN ATTIC AREA
11. INSTALL TEN 4" x 16" SOFFIT VENTS.
12. INSTALL TWO 3" FLOOR DRAINS IN SLAB. STUB OUT 5' FROM BUILDING. SEE PLAN FOR LOCATION.
13. INSTALL TWO 9' x 10' STEEL ROLL-UP DOORS.
14. PAINT ALL BLOCK WITH ONE COAT SEALER, ONE COAT PRIMER AND ONE COAT OF FINISH. ON SOFFITS, GABLES & DOORS PAINT ONE COAT PRIMER AND ONE COAT FINISH.
15. BUILDING INSTALLATION INCLUDES CONCRETE DOORWAY PADS. AS SHOWN.
16. SEE ATTACHED FENCE SPECIFICATIONS. SECURITY FENCE TO BE INSTALLED ONE FOOT WITHIN PROPERTY BOUNDARY. THE FENCE SHALL HAVE A 16" DOUBLE GAGE INSTALLED AT DRIVEWAY ENTRANCE.
17. EIGHT 8' INTERIOR FLUORESCENT LIGHTS AS SHOWN ON PLANS.

18. ELECTRICAL OUTLETS AS SHOWN ON PLANS.
19. CONTRACTOR TO INSTALL ALL ELECTRICAL AS SHOWN ON PLANS SUCH AS POWER METER, MAIN POWER, LIGHTING AND HVAC POWER SUPPLY.
20. CONSTRUCTION IS TO MEET HORRY COUNTY BUILDING CODE REQUIREMENTS.
21. BUILDING CONTRACTOR IS TO COORDINATE HIS WORK WITH THE INSTALLER OF THE SKID MOUNTED PUMP PACKAGE AND ANY OTHER CONTRACTOR INSTALLATION SCHEDULES. BUILDING CONTRACTOR TO SUPPLY POWER FROM MAIN POWER TO PREWIRED PUMP CONTROL 400 AMP WITH CONDUITS, PULL CORDS AND EXTRA CONDUCTORS AS MAY BE REQUIRED.
22. PUMP PACKAGE IS TO BE SET ON BUILDING SLAB BEFORE ROOF INSTALLATION.
23. BUILDING CONTRACTOR IS TO GROUT AT PIPE WALL OF SUCTION AND DISCHARGE LINE PRIOR TO PAINTING OF BUILDING. BUILDING CONTRACTOR IS TO LEAVE BLOCK OUTS IN WALL FOR PIPE ENTRANCE & EXITS.
24. PAINT COLOR TO BE SELECTED BY OWNER.
25. ALL HVAC AND ELECTRICAL ARE A PART OF THE BUILDING CONTRACT.
26. BUILDING CONTRACTOR IS TO BLOCK OUT OPENING FOR HVAC AS REQUIRED. ALL OPENINGS ARE TO BE TRIMMED OUT. ELECTRICAL CONTRACTOR TO INSTALL HVAC UNITS.
27. ROLL UP DOOR AND HVAC TO BE PROVIDED BY CONTRACTOR. HVAC TO BE A SUN MANUFACTURING CO. SUN HEAT PUMP HV-36H-4-12-C VERTICAL MOUNT 36,000 BTU HIGH EFFICIENCY 3 PHASE 460 VOLT 12 KW RESISTANCE HEAT W/THERMOSTAT AND CIRCUIT BREAKER.
28. THE BUILDING SITE AND LOCATION WILL BE PREPARED BY THE PIPING AND UTILITY CONTRACTOR WITH COMPACTED SAND AND A BASE AREA PREPARED AND MADE READY FOR THE BUILDING CONTRACTOR PRIOR TO SETTING FORM BOARDS AND PROCEEDING WITH THE INSTALLATION OF THE BUILDING.
29. THE BUILDING CONTRACTOR IS TO ALLOW FOR NOTIFICATION AND TIME FOR THE ELECTRICAL CONTRACTOR/INSTALLER TO INSTALL WITHIN THE SLAB AND FOUNDATION ALL CONDUITS AS MAY BE NECESSARY. SAID ELECTRICAL WORK SHALL BE DONE AFTER THE INSTALLATION OF THE SLAB FORM BOARDS BUT PRIOR TO THE POURING OF THE SLAB. ALL OTHER ELECTRICAL WORK SHALL BE WALL SURFACE MOUNTED AND IS NOT A PART OF THE BUILDING CONTRACTORS' WORK.
30. THE PREFABRICATED PUMP BASES ARE TO BE LEVELED WITH STEEL SHIMMS & GROUTED INTO PLACE. STEEL CLIP ANGLES WITH DRILLED IN ANCHORS ARE TO BE PROVIDED FOR ANCHORAGE OF PUMP PACKAGE. A VIBRATION & ALIGNMENT ANALYSIS IS TO BE PERFORMED PRIOR TO ACCEPTANCE OF THE PUMP INSTALLATION PACKAGE.



NORTH TRANSMISSION BOOSTER PUMP STATION FLOOR PLAN

SCALE $\frac{1}{2}" = 1' - 0"$

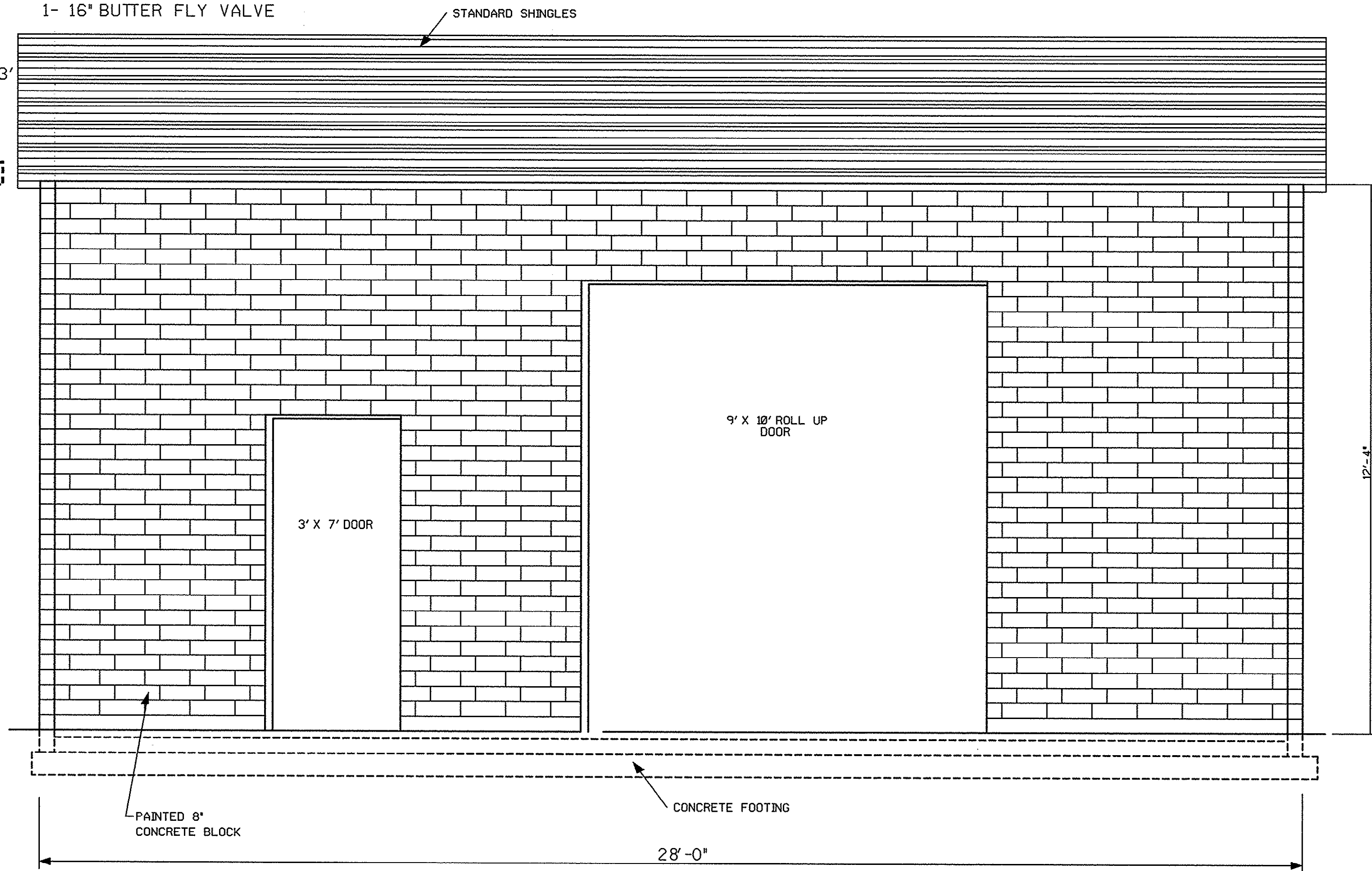
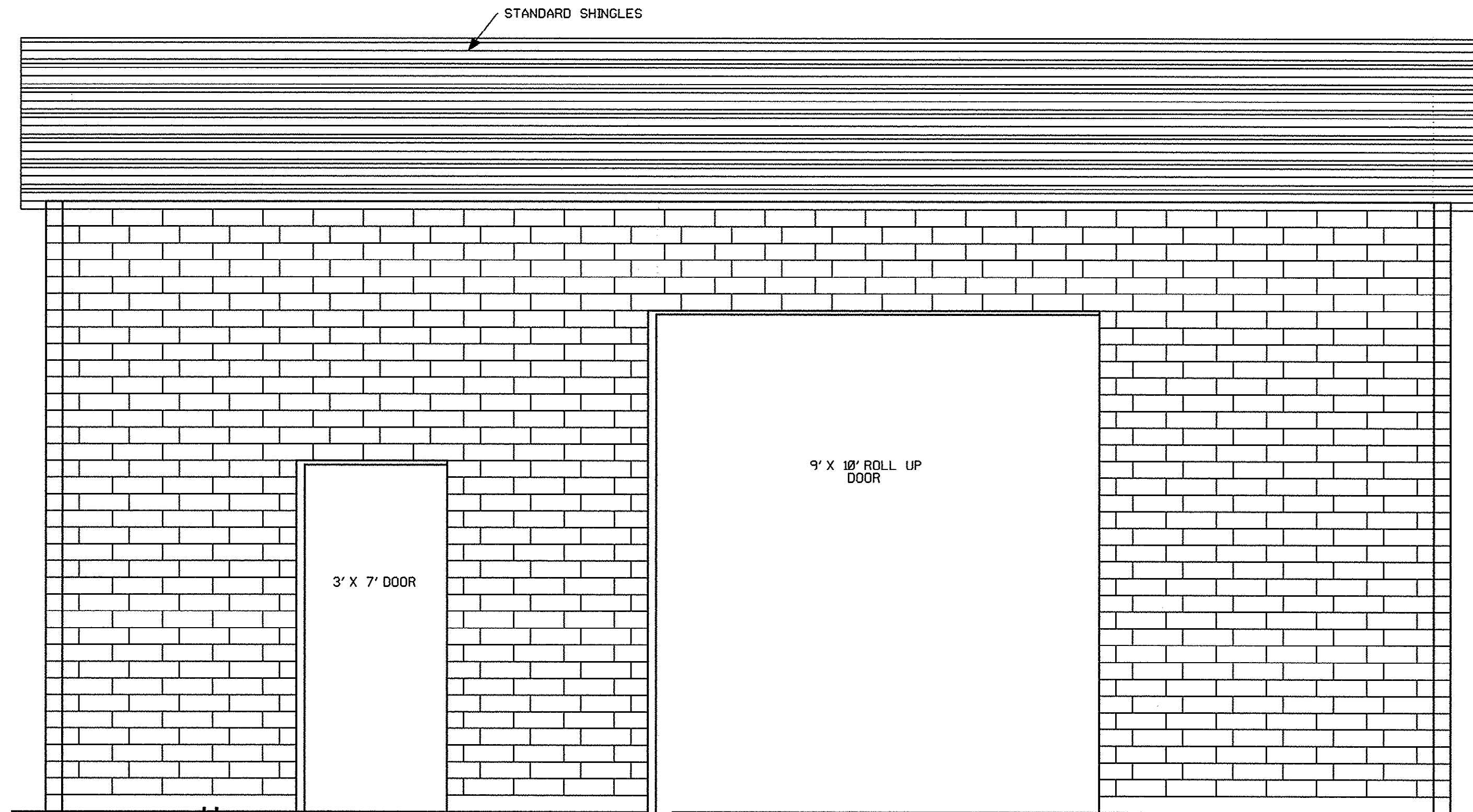
THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY David Strickland 8/16/00
INSPECTIONS DATE

REVIEWED BY _____ DATE _____
ENGINEERING

GRAND STR AND WATER AND SEWER AUTHORITY

PROJECT * 07-442-09		DATE: OCTOBER 1999		SCALE: AS SHOWN		FILENAME: NTRANSBPS	
DRAWN		<i>Carolyn Wright</i>		CAROLYN WRIGHT			
CHECKED							
				DAVID STRICKLAND			
APPROVED BY							
FRED E. AKEL				RE. #12859			
SHEET 3 OF 4							
DRAWING NO.21-142-003/4-W							



FRONT ELEVATION

SCALE 1/2" = 1'-0"

THESE DRAWINGS REFLECT
AS-BUILT
CONSTRUCTION
REVIEWED BY: *David Strickland* 8/14/00
DATE
REVIEWED BY: *David Strickland* 8/14/00
DATE
GRAND STRAND WATER AND SEWER AUTHORITY

NORTH TRANSMISSION BOOSTER
PUMP STATION
GRAND STRAND WATER & SEWER AUTHORITY
P.O. BOX 187, CONWAY, SC 29526
TELEPHONE 803/347-4641 OR 448-1866

PROJECT # 07-442-09

DATE: OCTOBER 1999

SCALE: AS SHOWN

FILENAME: NTRANSBPS

Carolyn Wright
CAROLYN WRIGHT

David Strickland
JIM MEMBREE

APPROVED BY

FRED E. AKEL RE. #12859

SHEET 4 OF 4

DRAWING NO. 21-142-004/4-W

REVISION
AS-BUILT

BY DATE
CAW 8-9-00