SANITARY SEWER LIFT STATION AND FORCE MAIN

LATERALS 276, 277, 278 and 279

SOUTHWEST INTERCEPTOR

CITY OF WICHITA, KANSAS

M.E. LINDEBAK CITY ENGINEER

CITY PROJECT NO. 468-76-245-81927-000-000-001
INDEX NO. 608075

APRIL, 1989

NOTES:

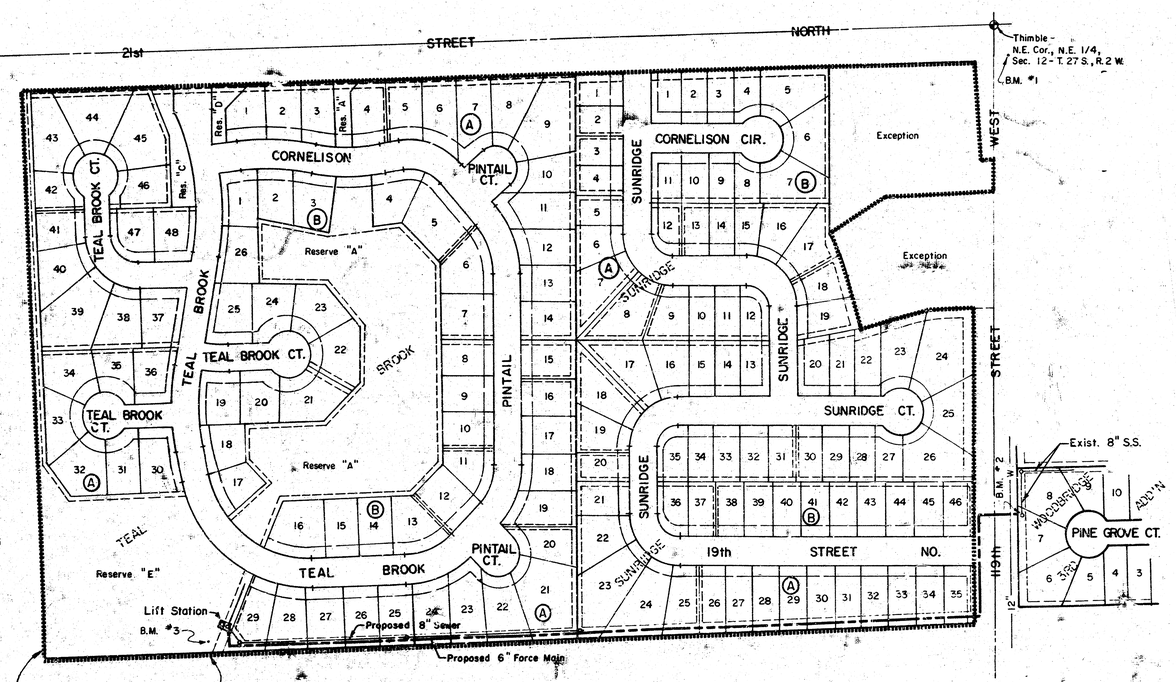
1. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

   KANSAS ONE-CALL 1-800-344-7233

   THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

CABLEVISION	262-4270 OR 263-2061
K.P. & L. GAS SERVICE COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
ARKLA GAS COMPANY	942-8350 OR 263-8161
SOUTHWESTERN BELL TELEPHONE COMPANY	1-571-2611
CITY OF WICHITA WATER DEPARTMENT	268-4908
CITY OF WICHITA SEWER MAINTENANCE	268-4071

2. INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA IS TO BE CARRIED THROUGH CONSTRUCTION. LOCAL BUSINESS OR APARTMENT TRAFFIC GENERATED WITHIN THE PROJECT AREA IS TO BE CARRIED THROUGH CONSTRUCTION.
3. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.
5. THE SANITARY SEWER AND FORCE MAIN SHALL BE CONSTRUCTED ON THE ALIGNMENT SHOWN BY THE PLANS. HEDGE, TREES AND SHRUBS IN EASEMENTS OR PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE. THE COST FOR ANY NECESSARY TREE REMOVAL, TRIMMING, CLEARING AND GRUBBING SHALL BE CONSIDERED SUBSIDIARY AND NOT PAID FOR SEPARATELY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
7. CONTRACTOR TO INSTALL GRAVITY SEWER ALONG THE SOUTH LINE OF LOTS 21-29, BLOCK "A", TEAL BROOK ESTATES, PRIOR TO INSTALLATION OF FORCE MAIN.
8. THE LUMP SUM PRICE BID FOR FURNISHING AND INSTALLING LIFT STATION WITH STANDBY POWER AND MISCELLANEOUS APPURTENANCES COMPLETE IN PLACE SHALL INCLUDE ALL COSTS FOR FURNISHING AND INSTALLING THE LIFT STATION AND STANDBY POWER MODULE AS INDICATED ON THE SITE PLAN COMPLETE IN PLACE AND IN OPERATION. SUCH LUMP SUM BID SHALL INCLUDE THE COST OF CONSTRUCTING AND/OR INSTALLING COMPACTED FILL CONCRETE PAD, ACCESS DRIVE, ELECTRIC PEDESTAL, ELECTRICAL CONDUIT, ELECTRICAL WIRING, DISCONNECT SWITCH, ELECTRICAL POWER SUPPLY, NATURAL GAS FUEL SUPPLY, FINISHED GRADING AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.
9. CONTRACTOR SHALL FURNISH A METER RACK TO SUPPORT THE DISCONNECT AND METER ENCLOSURES IN A LOCATION APPROVED BY THE ENGINEER.
10. A 2" CONDUIT SHALL BE INSTALLED UNDERGROUND FROM THE DISCONNECT SWITCH LOCATED ON THE ELECTRIC SERVICE PEDESTAL TO THE LIFT STATION MODULE AND FROM THE LIFT STATION MODULE TO THE STANDBY POWER MODULE AND FROM THE STANDBY POWER MODULE TO THE DISCONNECT SWITCH LOCATED ON THE ELECTRIC SERVICE PEDESTAL. A 3/4" CONDUIT SHALL BE INSTALLED UNDERGROUND BETWEEN THE LIFT STATION MODULE AND THE ELECTRIC SERVICE PEDESTAL TO FACILITATE CONNECTION OF THE ALARM SYSTEM BY OTHERS. THE ELECTRICAL POWER SUPPLY TO THE METER BASE MUST BE UNDERGROUND. ALL ELECTRICAL WIRING SHALL CONFORM TO THE CITY OF WICHITA CODE.
11. A UL LISTED LIGHTNING ARRESTOR SHALL BE INSTALLED AFTER THE DISCONNECT SWITCH FOR VOLTAGE SURGE PROTECTION OF THE AUTOMATIC TRANSFER SWITCH AND ALL SECONDARY WIRING.
12. THE DRIVE APPROACH TO THE LIFT STATION SHALL BE CONSTRUCTED AS INDICATED ON THE PLAN AND SHALL BE INCLUDED AS PART OF THE LUMP SUM PRICE BID FOR FURNISHING AND INSTALLING LIFT STATION.
13. THE CONTRACTOR SHALL CONTACT K.G.& E. (MIKE PRUITT, 261-6257) TO MAKE ARRANGEMENTS FOR ELECTRICAL SERVICE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGEMENTS WITH ARKLA GAS COMPANY (JERRY WATKINS, 942-8350) FOR EXTENSION OF GAS SERVICE TO THE LIFT STATION SITE, AND FOR PAYMENT OF COSTS OF SUCH EXTENSION AND METER SETTING. LOCATION OF METER TO BE ACCEPTABLE TO ARKLA GAS COMPANY AND TO THE CITY OF WICHITA SEWER MAINTENANCE DEPT.
15. FITTINGS AND CONCRETE THRUST BLOCKS SHALL BE CONSIDERED SUBSIDIARY TO THE INSTALLATION OF THE FORCE MAIN AND NOT PAID FOR SEPERATELY.
16. FORCE MAIN WARNING SIGNS SHALL BE PLACED AT THE FOLLOWING STATIONS: 0+36, 17+86, 20+14, 21+08.



1"=150'

BENCHMARKS:

1) City Disc - 79' South & 46' East of the N.E. Corner of Sec. 12. Elev. = 172.08 City Datum.
2) N. Rim M.H. - 240' North & 110' East of the S.E. Corner of Sunridge Addition. Elev. = 169.11 City Datum.
3) R.R. Spike in 24" Cottonwood - 26' North & 29' West of S.W. Corner, Lot 29, Blk. "A", Teal Brook Estates. Elev. = 152.63 City Datum.

IMPROVEMENT DISTRICT DESCRIPTION

LOTS 1 THROUGH 35 INCLUSIVE, BLOCK A, AND LOTS 1 THROUGH 46 INCLUSIVE, BLOCK B, IN SUNRIDGE ADDITION.

LOTS 1 THROUGH 48 INCLUSIVE, BLOCK A, AND LOTS 1 THROUGH 26 INCLUSIVE, BLOCK B, IN TEAL BROOK ESTATES.

AN UNPLATTED TRACT IN THE N. 1/2 OF THE NE 1/4, SEC. 12, T. 27 S., R. 2 W. OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS.

Sheet No.	Description
1	Cover Sheet
2-3	Plan & Profile
4	Site Plan & Details, Force Main & Lift Station
5	Stand-By Generator & Air Release Manhole
6	Lift Station

BUILT PER PLAN
-ROL 2-90

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA

1 of 6

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STA. 0+00- Begin Force Main at Wet Well Centerline. See sheet 4.

TEAL BROOK

PINTAIL CT.

19th STREET N.

SUNRIDGE

20' Util. Eas't

SS

8"

192.40'

62.78'

62.78'

20.76'

59.27'

80'

76.65'

3.32'

82.26'

71.85'

38.09'

3.96'

58.84'

51.33'

19'

45.05'

216.48'

153.72'

146.48'

10' Util. Eas't

11+00 MATCH LINE

N

1" = 40' Hor.
1" = 5' Vert.

Res. "E"

Iron

182.42'

135.72'

135'

135.03'

151.88'

164.07'

159.20'

154.96'

139.27'

29 28 27 26 25 24 23 22 21 23 24 25 26

Existing Hedge Overhang

Utility

Proposed 8" San. Sewer

Easement

Future 8" San. Sewer

106.58' 103.61' 80' 80' 80' 80' 85' 111.74' 108.60' 49.37' 147.34' 89.52'

15'

Conc. ditch check

Existing Barb-Wire Fence

6" P.V.C. (S.D.R. 26) Force Main

8+51.33

DITCH CHECKS TO BE REMOVED

DITCH CHECK TO BE REMOVED

STA. 0+36
1-6" D.I.C.L. M.J. 90° Bend, Long Radius w/ Thrust Blocks.

NOTE: COST OF REMOVAL OF CONC. DITCH CHECKS TO BE SUBSIDIARY AND NOT PAID FOR SEPERATELY.

PLAN

PROFILE

Wet Well
C/C Top = 168.00

90° Bend

MATCH LINE

Existing Ground

Proposed Finished Grade

Bottom Wet Well = 138.32

6" P.V.C. (SDR 26) 300.0 L.F. at +3.0%

6" P.V.C. (S.D.R. 26) 800.0 L.F. at +0.60%

160 155 150 145 140 135

165 160 155 150 145 140 135

0 +36 1 2 3 4 5 6 7 8 9 10 11

Sheet 2 of 6

Proj. No. 468-76-245-81927-000-000-001

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PLAN — SURVEYED — PLOTTED/CHECKED — NOTE BOOK — ALIGNMENT CHECKED — BY: — DATE: — NO.

1"=40' Horiz.
1"=5' Vert.

STA. 17+86.30
1-6" D.I.C.L. M.J. 90° Bend, Long Radius w/ Thrust Blocks.

STA. 20+00
Install Sewage Combination Air Valve.
See Detail, Sheet 5

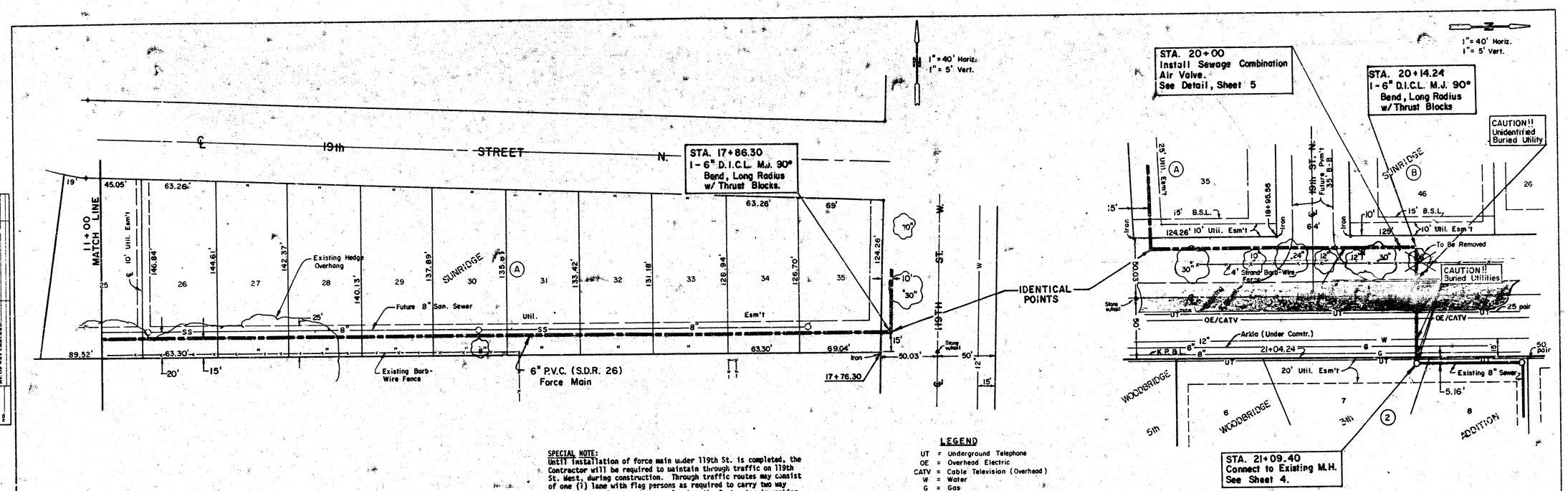
STA. 20+14.24
1-6" D.I.C.L. M.J. 90° Bend, Long Radius w/Thrust Blocks

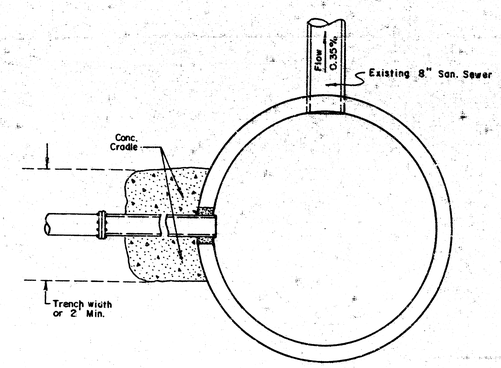
CAUTION!! Unidentified Buried Utility

CAUTION!! Buried Utilities

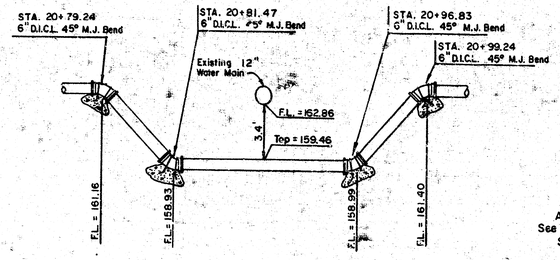
IDENTICAL POINTS

STA. 21+09.40
Connect to Existing M.H.
See Sheet 4.

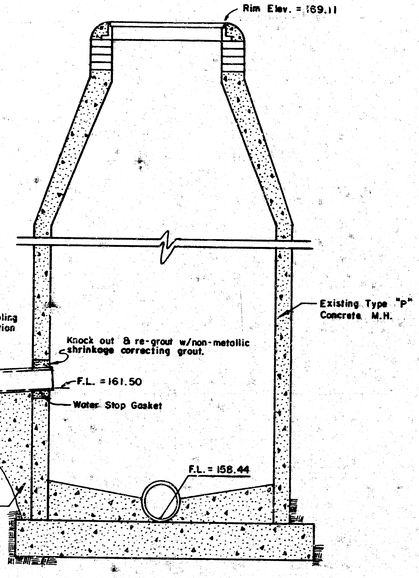

℄ 19th STREET N.
MATCH LINE 11+00
℄ 10' Util. Esm't
Existing Hedge Overhang
Future 8" San. Sewer
SUNRIDGE
Util. Esm't
Existing Barb-Wire Fence
6" P.V.C. (S.D.R. 26) Force Main
Iron
17+76.30
℄ 119th St. W.
Stone w/Wall
Iron
Iron
Iron



PLAN

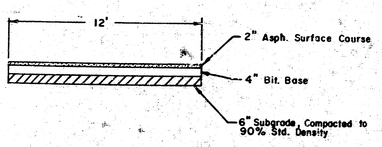


DETAIL
6" FORCE MAIN
UNDER 12" WATER MAIN
No Scale

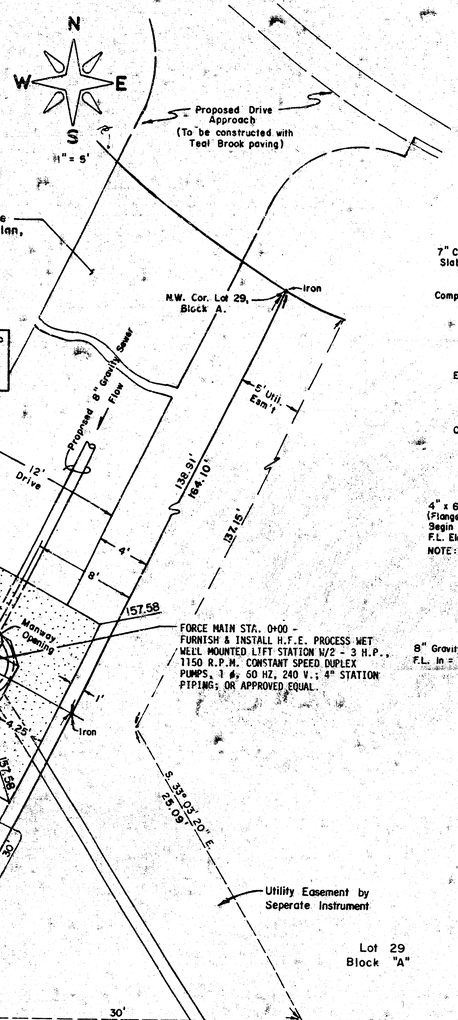


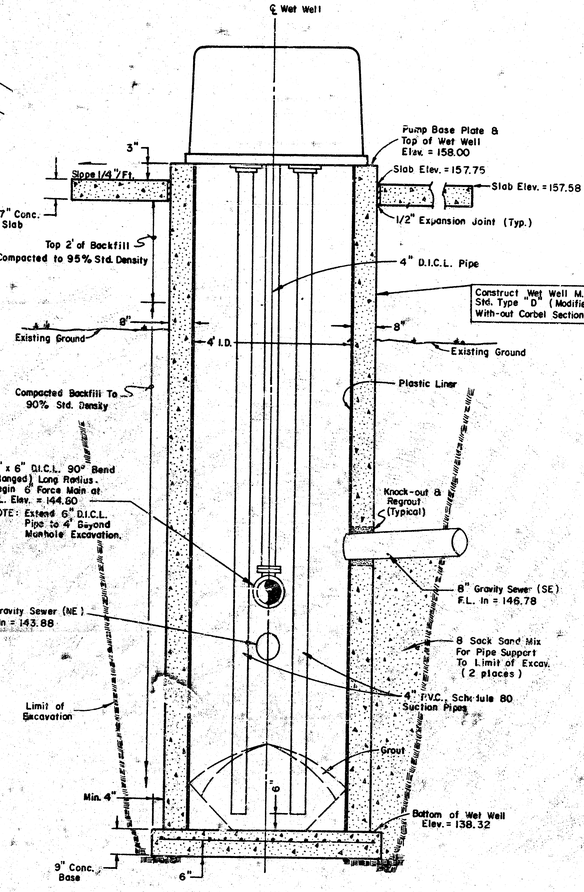
SECTION

RECEIVING MANHOLE CONNECTION DETAIL
No Scale

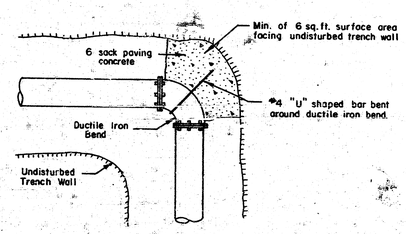


ACCESS DRIVE DETAIL
No Scale





LIFT STATION
SECTIONAL ELEVATION
No Scale



THRUST BLOCK DETAIL
No Scale

MOEHRING & ASSOCIATES — CONSULTING ENGINEERS

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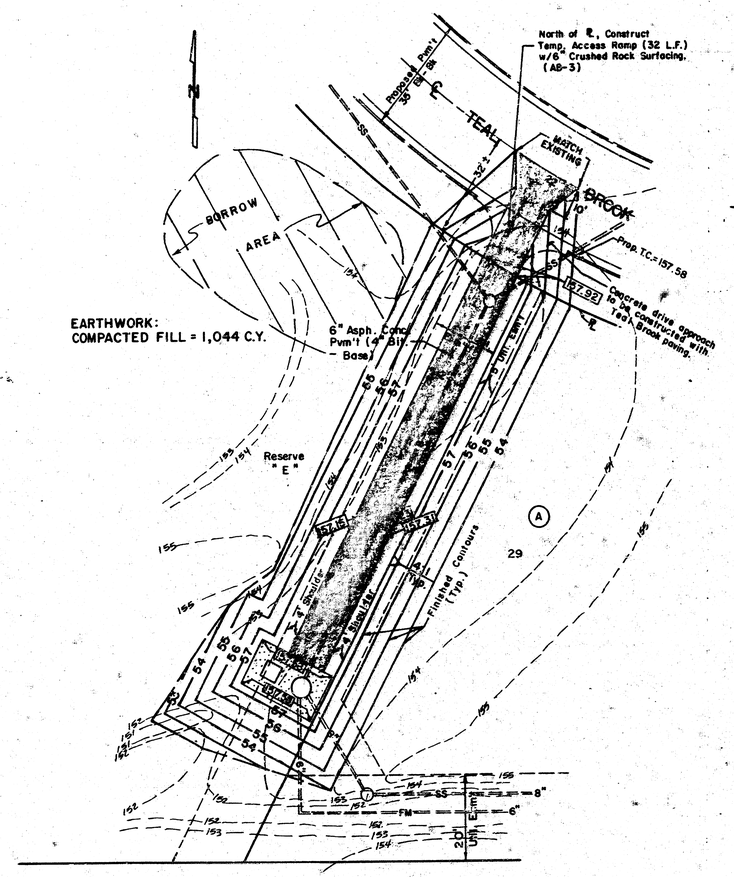
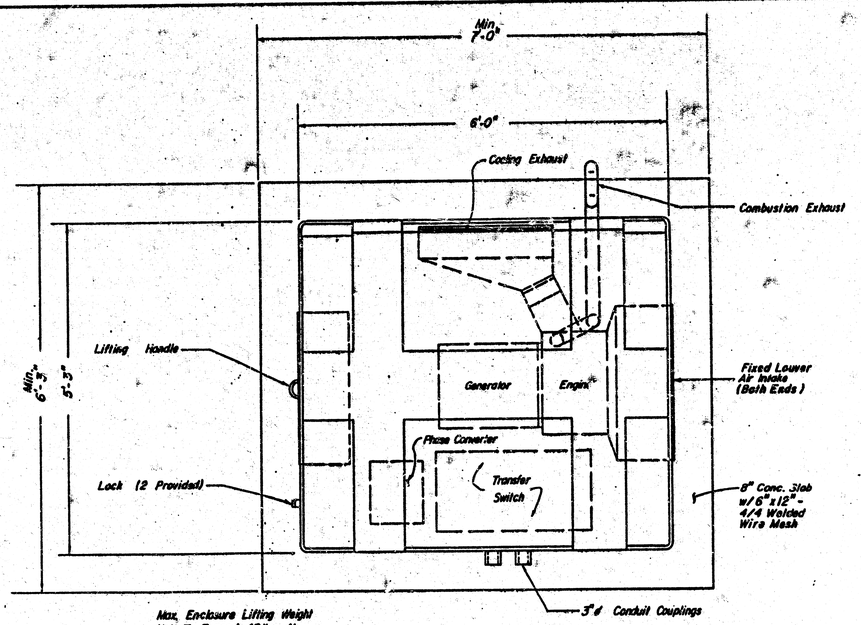


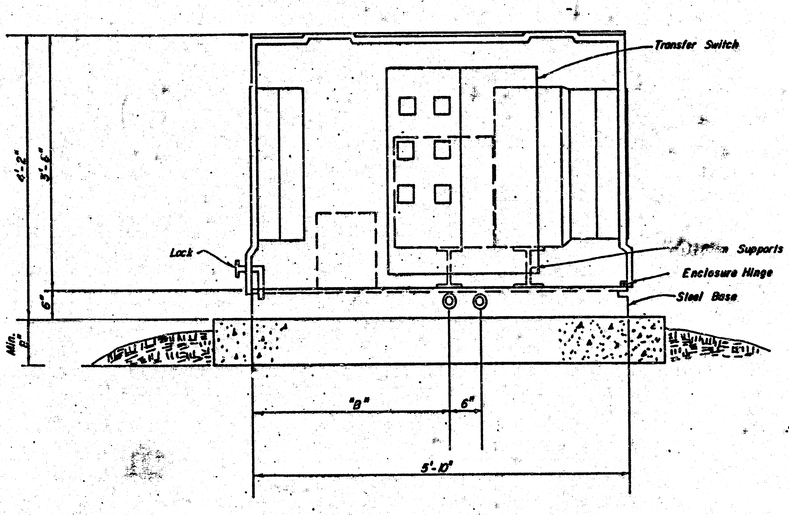
EARTHWORK:
COMPACTED FILL = 1,044 C.Y.

LIFT STATION AND ACCESS DRIVE GRADING PLAN
1" = 20'

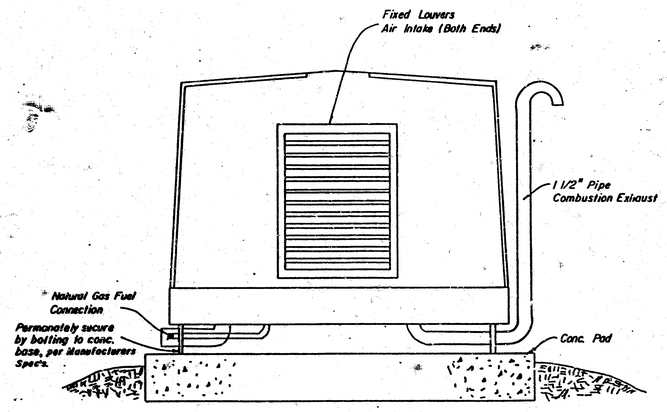


TOP VIEW

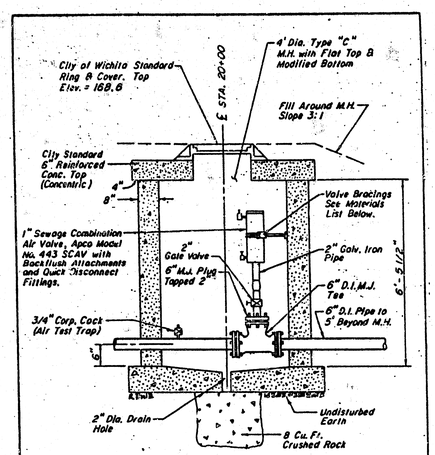
STAND-BY GENERATOR DETAILS
STANNARD POWER EQUIPMENT CO.
SERIES 1000
(N.T.S.)



SECTIONAL ELEVATION



END VIEW



SECTIONAL ELEVATION

AIR RELEASE MANHOLE
NO SCALE

Valve Bracing Materials

1- Ductile Iron, Double Strap Service Saddle, Cascade Cat. No. CDS2, 3/4" I.P. Top.

1- 3/4" Iron Pipe Nipple - Length to fit.

1- Malleable Iron Ceiling/Floor Flange, 3/4" I.P. Threaded. Anchor to Concrete M.H. Wall w/4-#14 Screws @ 1/4" x Short Lag Shields.

MOEHRING & ASSOCIATES — CONSULTING ENGINEERS
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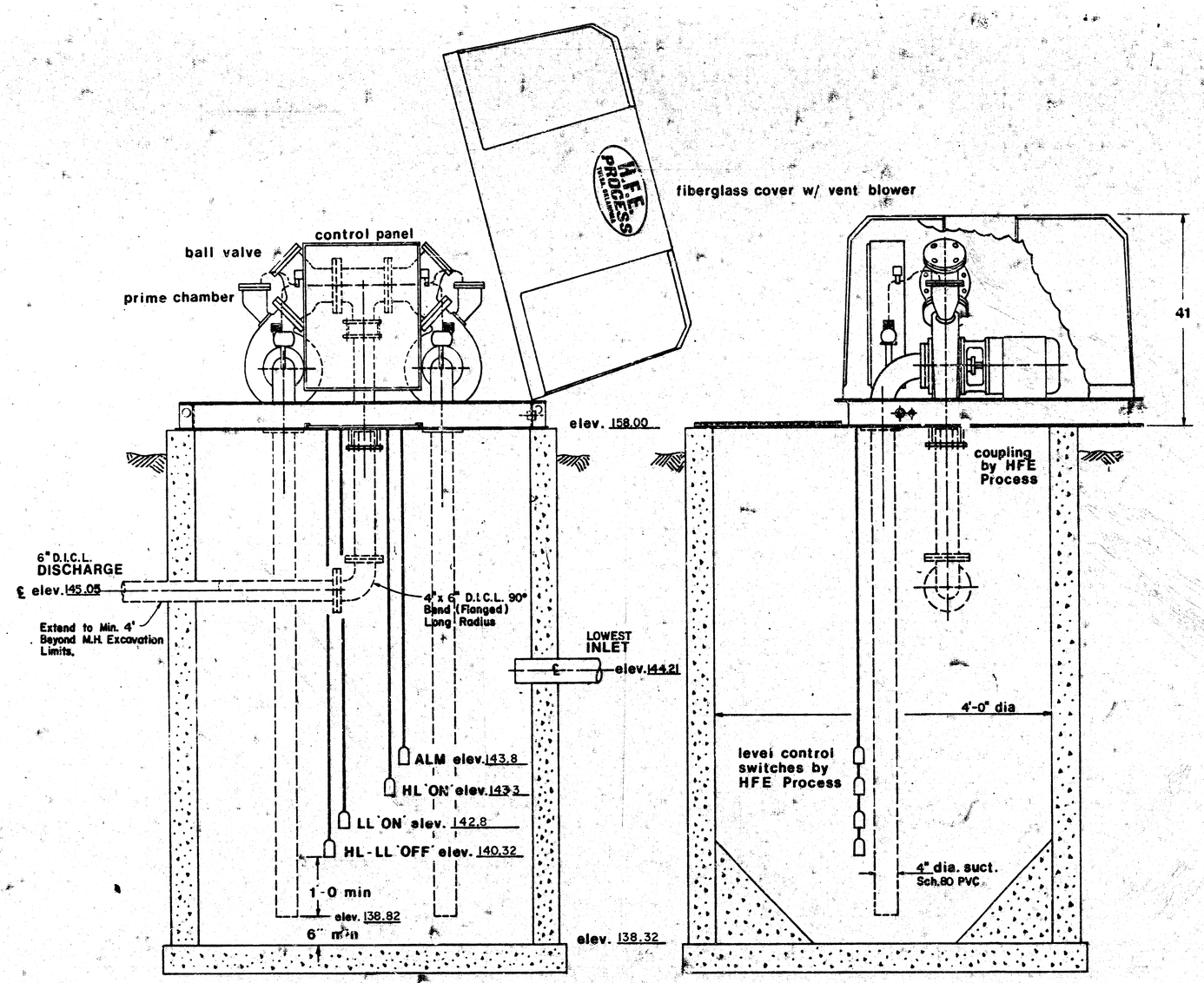
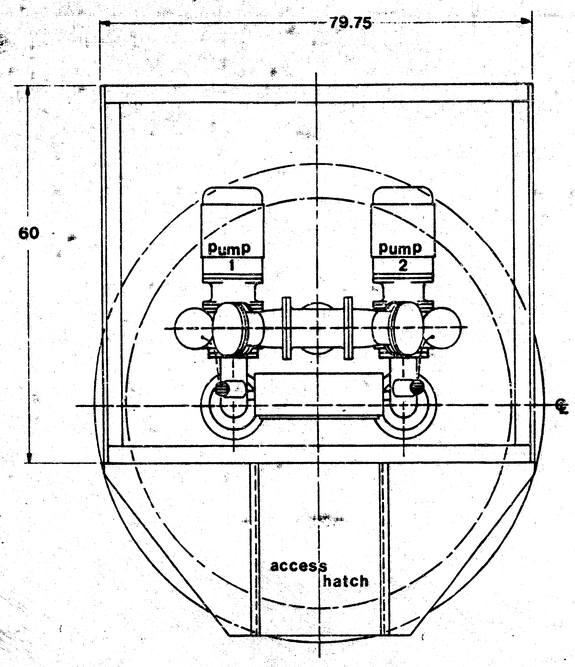


FRONT ELEVATION

SIDE ELEVATION



PLAN VIEW

NOTES: 500 watt heater - std.
250 cfm vent fan - std.
1.5 & .75" service conn.

H.F.E. PROCESS
TULSA, OKLAHOMA

Project No. 465-76-245-81327-000-000-001 Sheet 5 of 6

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