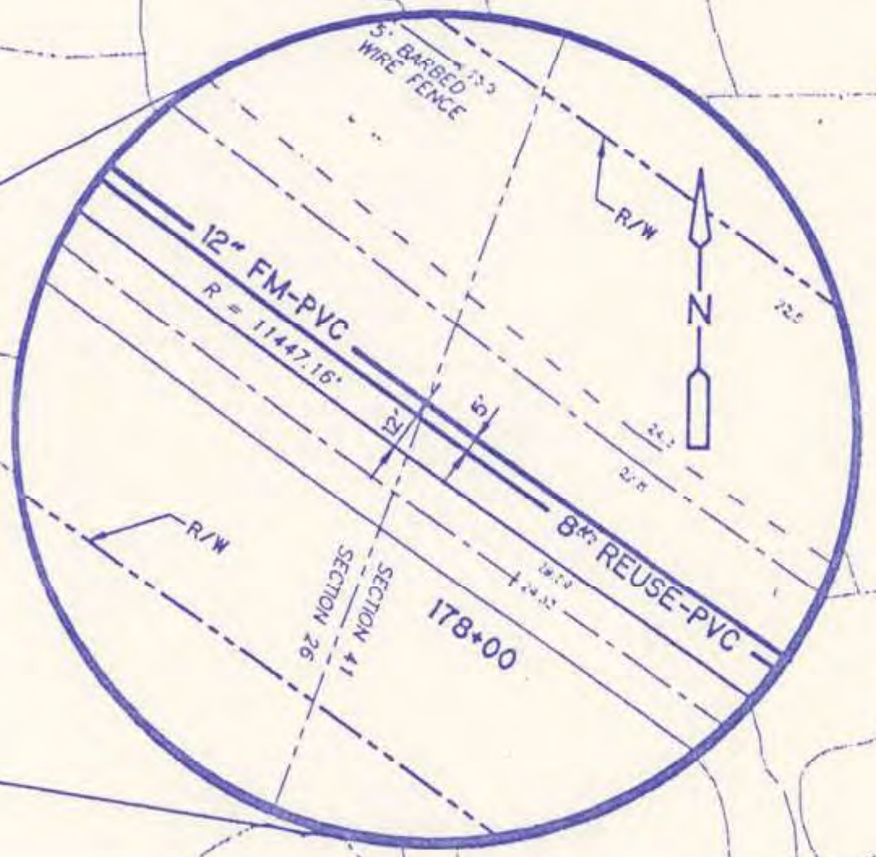
St. Johns County Utility Department

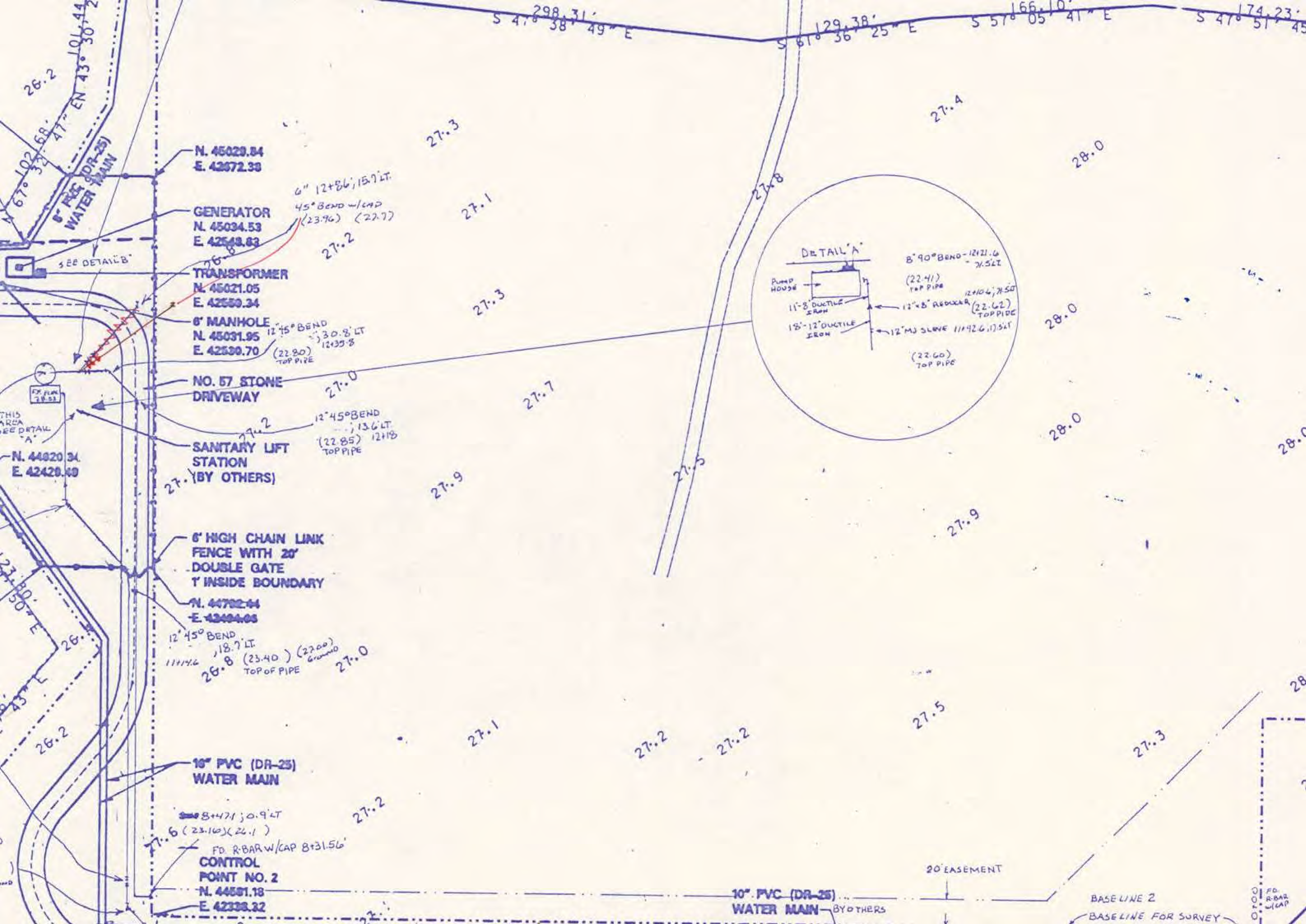
Forms and Figures

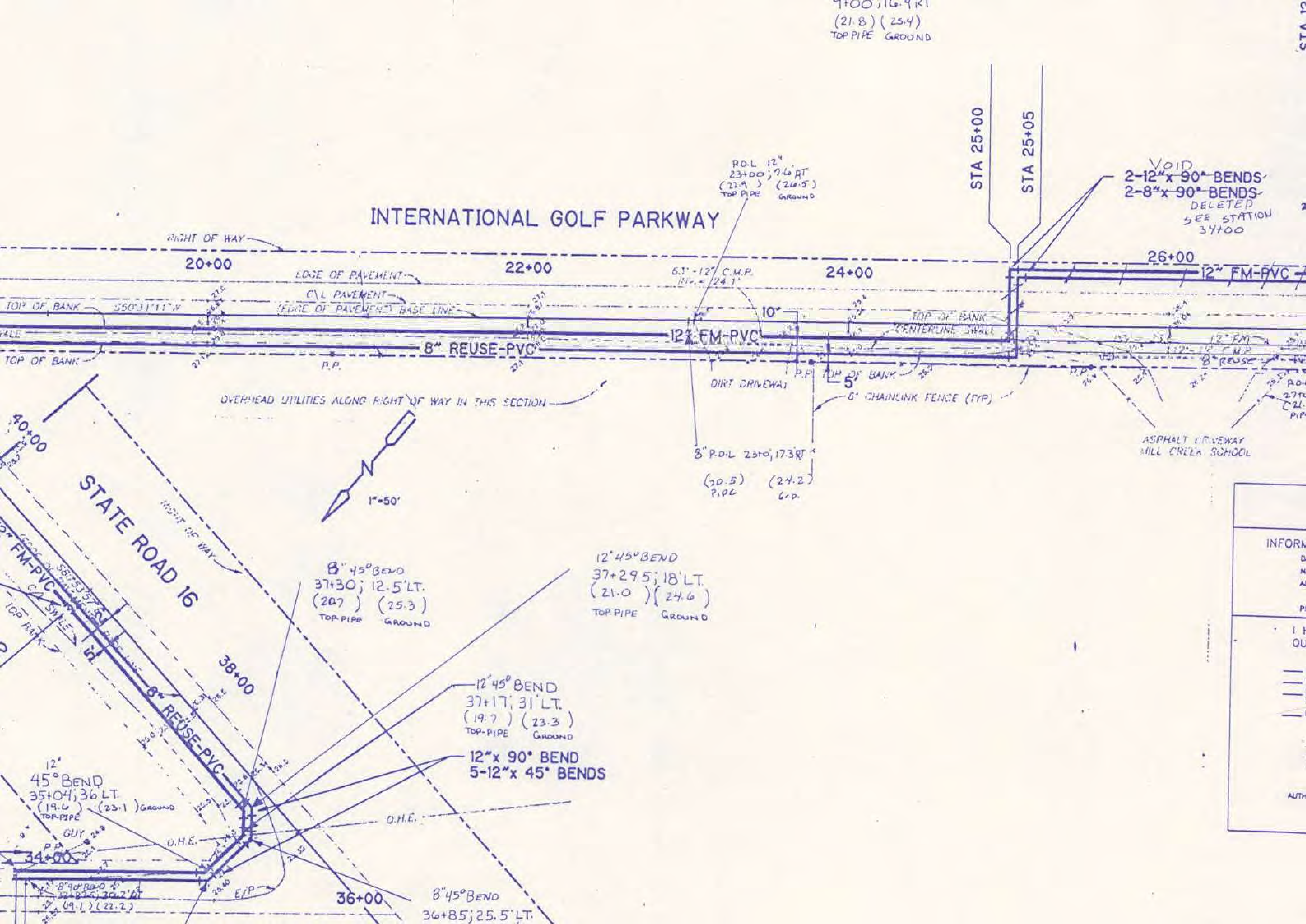
1995 NW International Golf Parkway

As Built Drawings

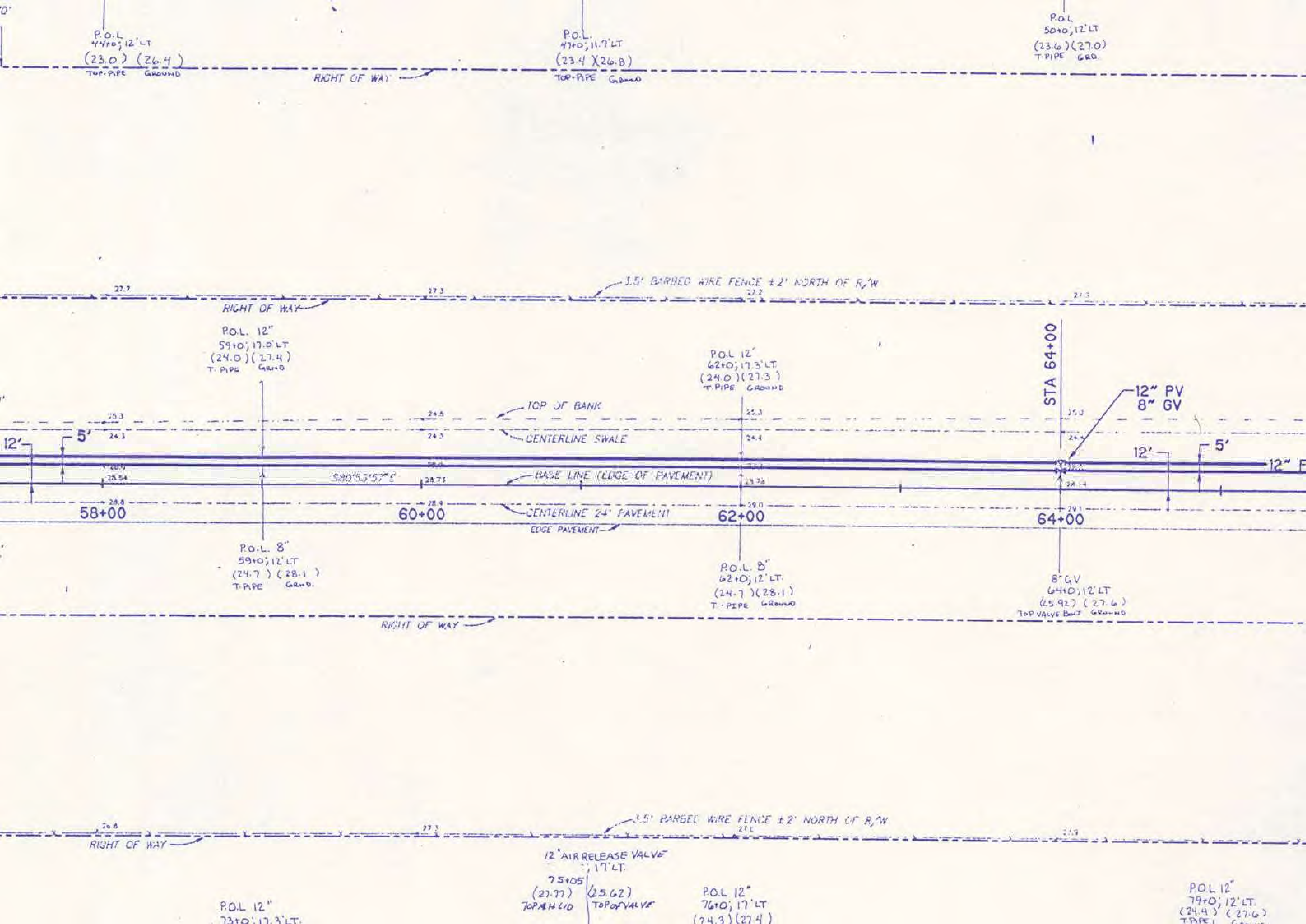


TYPICAL PIPING ROUTING


S 47° 38' 49" E 298.31'
S 61° 36' 25" E 129.38'
S 57° 05' 41" E 166.10'
S 47° 51' 45" E 174.23'
101.44'
N 43° 30' 2
EN 43°
102.68'
N 67° 32' 47"
6" PVC (DR-25) WATER MAIN
N. 45029.84
E. 42672.38
6" 12+86; 15.7' LT.
45° BEND w/CAP
(23.96) (22.7)
GENERATOR
N. 45034.53
E. 42548.83
SEE DETAIL B
TRANSFORMER
N. 45021.05
E. 42550.34
6' MANHOLE
N. 45031.95
E. 42530.70
12" 45° BEND
; 30.8' LT
12+35.8
(22.80)
TOP PIPE
NO. 57 STONE
DRIVEWAY
THIS
AREA
SEE DETAIL
"A"
12" 45° BEND
; 13.6' LT.
(22.85) 12+18
TOP PIPE
SANITARY LIFT
STATION
(BY OTHERS)
N. 44820.34
E. 42420.49
DETAIL "A"
PUMP HOUSE
11'-8" DUCTILE IRON
18'-12" DUCTILE IRON
8" 90° BEND - 12+21.6
- 71.5' LT
(22.41)
TOP PIPE
12"x8" REDUCER
12+10.4; 71.50
(22.62)
TOP PIPE
12" MJ SLEEVE 11+92.6; 17.5' LT
(22.60)
TOP PIPE
6' HIGH CHAIN LINK
FENCE WITH 20'
DOUBLE GATE
1' INSIDE BOUNDARY
N. 44782.44
E. 42494.05
12" 45° BEND
, 18.7' LT.
11+14.6
(23.40) (27.00)
TOP OF PIPE
GROUND
10" PVC (DR-25)
WATER MAIN
8+47.1; 0.9' LT
(23.16) (26.1)
FD. R-BAR W/CAP 8+31.56'
CONTROL
POINT NO. 2
N. 44581.18
E. 42338.32
20' EASEMENT
10" PVC (DR-25)
WATER MAIN - BY OTHERS
BASE LINE 2
BASE LINE FOR SURVEY
FD R-BAR W/CAP
27.3
27.4
28.0
27.8
27.1
27.2
27.3
28.0
27.0
27.7
27.2
28.0
27.5
27.9
27.9
26.8
27.0
27.1
27.2
27.2
27.5
27.3
27.2
26.2
26.2
27.6



(21.8) (25.4)
TOP PIPE GROUND
STA 25+00
STA 25+05
P.O.L 12"
23+00; 7.6 RT
(22.9) (26.5)
TOP PIPE GROUND
VOID
2-12"x 90° BENDS
2-8"x 90° BENDS
DELETED
SEE STATION
34+00
INTERNATIONAL GOLF PARKWAY
RIGHT OF WAY
20+00
22+00
24+00
26+00
EDGE OF PAVEMENT
C\L PAVEMENT
EDGE OF PAVEMENT BASE LINE
TOP OF BANK
12" FM-PVC
8" REUSE-PVC
P.P.
DIRT DRIVEWAY
TOP OF BANK
CENTERLINE SWALE
6' CHAINLINK FENCE (TYP)
OVERHEAD UTILITIES ALONG RIGHT OF WAY IN THIS SECTION
8" P.O.L 23+0; 17.3 RT
(20.5) (24.2)
ASPHALT DRIVEWAY
MILL CREEK SCHOOL
1"=50'
40+00
STATE ROAD 16
RIGHT OF WAY
FM-PVC
8" 45° BEND
37+30; 12.5' LT.
(20.7) (25.3)
TOP PIPE GROUND
12" 45° BEND
37+29.5; 18' LT.
(21.0) (24.6)
TOP PIPE GROUND
38+00
8" REUSE-PVC
12" 45° BEND
37+17; 31' LT.
(19.7) (23.3)
TOP-PIPE GROUND
12"x 90° BEND
5-12"x 45° BENDS
12"
45° BEND
35+04; 36 LT.
(19.6) (23.1) GROUND
TOP-PIPE
GUY
O.H.E.
34+00
E/P
36+00
8" 45° BEND
36+85; 25.5' LT.
INFORM



P.O.L
44+0; 12' LT
(23.0) (26.4)
TOP-PIPE GROUND
P.O.L.
47+0; 11.7' LT
(23.4)(26.8)
TOP-PIPE GROUND
P.O.L
50+0; 12' LT
(23.6)(27.0)
T-PIPE GRD.
RIGHT OF WAY
3.5' BARBED WIRE FENCE ±2' NORTH OF R/W
RIGHT OF WAY
P.O.L. 12"
59+0; 17.0' LT
(24.0)(27.4)
T. PIPE GRND
P.O.L 12"
62+0; 17.3' LT
(24.0)(27.3)
T-PIPE GROUND
STA 64+00
12" PV
8" GV
TOP OF BANK
CENTERLINE SWALE
12'
5'
S80°53'57"E
BASE LINE (EDGE OF PAVEMENT)
CENTERLINE 24' PAVEMENT
EDGE PAVEMENT
58+00
60+00
62+00
64+00
P.O.L. 8"
59+0; 12' LT
(24.7) (28.1)
T-PIPE GRND.
P.O.L. 8"
62+0; 12' LT.
(24.7)(28.1)
T-PIPE GROUND
8" GV
64+0; 12' LT
(25.92) (27.6)
TOP VALVE BOLT GROUND
RIGHT OF WAY
3.5' BARBED WIRE FENCE ±2' NORTH OF R/W
RIGHT OF WAY
12" AIR RELEASE VALVE
; 17' LT.
75+05
(27.77) (25.62)
TOP M.H LID TOP OF VALVE
P.O.L 12"
76+0; 17' LT
(24.3)(27.4)
P.O.L 12"
73+0; 17.3' LT.
P.O.L 12"
79+0; 12' LT.
(24.4) (27.6)
T-PIPE

P.O.L 8"
85+0; 12' LT.
(24.6)(28.0)
T. PIPE GRND.

86+00

70'

RIGHT OF WAY

P.O.L 8"
88+0; 12' LT.
(24.5)(27.8)

3.5' BARBED WIRE FENCE ±2' NORTH OF R/W

RIGHT OF WAY

GUY POLE

GUY POLE

POWER POLE

O.H.E.

12" AIR RELEASE VALVE
17' LT.
(27.39) (25.87)
TOP M.H. VALVE

100+05

130'

DEFLECT PIPE JOINTS AS REQUIRED

P.O.L 12"
102+0; 17.4' LT
(24.7 X 27.8)
T. PIPE GRND

TOP BANK

CENTERLINE SWALE

BASE LINE (EDGE OF PAVEMENT)
R = 17200.80'

CENTERLINE 24' PAVEMENT

P.O.L 12"
105+0; 17' LT
(24.3) (27.8)
T. PIPE GROUND

SOIL DRIVEWAY

18" R.C.P.
INV = 25.4'
INV = 25.2'

VALVE BOX

ASPH. APRON

SE-PVC

8" AIR RELEASE VALVE
95+95 ; 12' LT.
(28.06) (25.91)
TOP M.H. TOP VALVE

100+00

70'

STATE ROAD 16

RIGHT OF WAY

102+00

104+00

P.O.L 8"
105+00
(24.9) (28.0)
T. PIPE GROUND

106+00

P.O.L 8"
102+0; 12' LT
(24.8)(28.0)
T. PIPE GRND.

3.5' BARBED WIRE FENCE ±2' NORTH OF R/W

BEGIN FENCE

RIGHT OF WAY

STA 114+00

P.O.L 12"
115+00; 17' LT
(24.6) (27.2)
T. PIPE GROUND

12" PV
8" GV

E. CROSSING

SOIL DRIVEWAY

P.O.L 12"
118+00; 16.7' LT
(25.7) (28.5)
T. PIPE GRND
SOIL DRIVEWAY

O.H.E.

TOP BANK

SOIL DRIVEWAY

BEGIN FENCE

POWER POLE

O.H.E.

P.O.L 12"
121+00; 17' LT.
(25.5) (28.4)
T. PIPE GRD.

STATE ROAD 16

RIGHT OF WAY

8"45° BEND
127+23, 12'LT
(21.5) (29.0)
T.PIPE GRD

8"45° BEND
127+28, 12'LT
(25.6) (29.0)
T.PIPE GRD.

128+00

4-12"x 45° BENDS
4-8"x 45° BENDS

130+00
P.O.L 8"
130+00, 11.6'LT
(26.4)(29.3)
T.PIPE GRD.

EDGE PAVEMENT

AS BUILT

RIGHT OF WAY

VALVE

GUY POLE

SOIL DRIVEWAY

P.O.L 12"
142+00, 17'LT
(26.4) (29.0)
T.PIPE GRD

30" R.C.P.
INV.=21.9'
INV.=21.8'

12"FM-PVC

ASPH. APRON

BASE LINE (EDGE OF PAVEMENT)

CENTERLINE 24' PAVEMENT

EDGE PAVEMENT

S47°51'00"E

142+00
P.O.L 8"
142+00, 12'LT
(26.4) (29.2)
T.PIPE GRD

144+00

146+00

148+00
P.O.L 8"
148+00, 12'LT
(26.0 X 28.9)
T.PIPE GRD.

STATE ROAD 16

P.O.L 8"
145+00, 12'LT
(26.0)(29.0)
T.PIPE GRD.

P.O.L 12"
145+00, 17'LT
(26.1)(28.9)
T.PIPE GROUND

P.O.L 12"
148+00, 17'LT
(25.9)(28.7)
T.PIPE GRD

TOP BANK

CENTERLINE SWALE

PT = 141+25.60

RIGHT OF WAY

CREEK

RIGHT OF WAY

POWER POLE
12"AIR RELEASE VALVE
160+00, 17'LT.
(27.46) M.H. (24.3) VALVE

P.O.L 12"
161+00, 17'LT

8" 45° BEND
171+87; 12' LT
(24.45) (27.7) 172+00
T. PIPE GRD.

8" 45° BEND
171+92.5; 12' LT.
(19.28) (27.7)
T. PIPE GRD.

8" 45° BEND
172+09.4; 12' LT.
(19.43) (27.7) GROUND
TOP PIPE

8" 45° BEND
172+14.3; 12' LT.
TOP PIPE 24.75) (27.2) GROUND

CENTERLINE 24' PAVEMENT

RIGHT OF WAY

STATE ROAD 16

174+00

P.O.L. 175+00 8"
12' LT.
(25.0) (28.3)
TOP PIPE GROUND

176+00

MAIL BOXES

ASPH. APRON

12" FM-PVC

12"

OOD FENCE

4" BARBED WIRE FENCE

RIGHT OF WAY

POWER POLE

GUY POLE

12" P.O.L
185+00; 17' LT.
(24.3) (28.0)
T. PIPE GRND.

SOIL DRIVEWAY

STA 189+00

12" P.VALVE 189+04; 17' LT
(23.87) (27.2)
TOP VALVE GROUND

12" PV
8" GV

12" AIR RELEASE VALVE
190+00; 17' LT.
(25.42) (27.70)
M.H

TOP BANK

CENTERLINE ANGLE

BASE LINE (EDGE OF PAVEMENT)

12" FM-P

BOX

ASPH. APRON

CENTERLINE 24' PAVEMENT

184+00

8" P.O.L
185+00; 12' LT
(24.7) (28.6)
T. PIPE GRND.

186+00

136+68.55

188+00

8" GATEVALVE
189+00; 12' LT
(25.62) (28.1)
TOP VALVE GROUND

190+00

8" AIR RELEASE VALVE
190+00; 12' LT.
(28.30) (25.95)
M.H

STATE ROAD 16

RIGHT OF WAY

12" P.O.L
201+00; 17' LT
(24.6) (28.3)
T. PIPE GRND.

SOIL DRWY.

SOIL DRWY

TOP BANK

12" 45° BEND
204+88; 17.5 LT
(21.3) (28.8)
PIPE GROUND

12" 45° BEND
204+82; 17.7 LT
(24.7) (28.8)
PIPE GROUND

212+00

214+00

8 AIR RELEASE VALVE
215+0', 12' LT.
(30.00 m.H.) (27.77 VALVE)

216+00

EDGE PAVEMENT
8" P.O.L
217+0', 12' LT.
(26.0) (29.4)
TOP PIPE GROUND

218+00

STATE ROAD 16

RIGHT OF WAY

PIPE JOINTS AS REQUIRED

AS BUILT

INFORMATION PROVIDED BY:

DATE: 5-6-96

NAME: Eighteen CONSTRUCTION

ADDRESS: 1275 County Road 210 WEST

PHONE #: 808-1818

I HEREBY CERTIFY THAT THE MATERIALS AND QUANITIES USED IN THE CONSTRUCTION OF:

- ___ PAVEMENT
- ___ CURB & GUTTER
- ___ STORM & DRAINAGE SYSTEM
- ___ UNDERDRAIN
- ___ WATER MAIN
- ___ SANITARY GRAVITY SYSTEM
- X FORCE MAIN
- ___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE

CONTRACTOR

RIGHT OF WAY

12" P.O.L
227+00', 17' LT.
(24.1) (27.8)
TOP PIPE GROUND

P.O.L 12"
230+0', 17' LT
(23.4) (27.1)
TOP PIPE GROUND

12" P.O.L
233+0
(23.4)
TOP PIPE

TOP OF BANK

CENTERLINE SWALE

EDGE PAVEMENT

BASE LINE (EDGE OF PAVEMENT)

S35°39'52"E

CENTERLINE 24' PAVEMENT

EDGE PAVEMENT

12"

226+00

8" P.O.L
227+00', 12' LT
(24.8) (28.3)
TOP PIPE GROUND

228+00

230+00

8" P.O.L
230+00', 12' LT
(24.1) (27.6)
TOP PIPE GROUND

232+00

STATE ROAD 16

RIGHT OF WAY

12" P.V. 239+0', 17' LT.
(23.84) (27.9)
TOP VALVE GROUND

12" PV
8" GV

P.O.L 12"
242+0', 17' LT
(23.8) (26.8)
TOP PIPE GROUND

P.O.L 12"
246+0', 17' LT
(24.0) (27.5)
TOP PIPE GROUND

SOIL GRAV

256+00

CENTERLINE 24' PAVEMENT

EDGE OF PAVEMENT

P.O.L 8"
257+0; 12'LT.
(26.0)(29.7)
TOP PIPE GROUND

258+00

12" FM-PVC

260+00
P.O.L. 8"
260+0; 12'LT.
(26.1)(29.8)
TOP PIPE GROUND

STATE ROAD 16

DEFLECT PIPE JOINTS AS REQUIRED

RIGHT OF WAY

RIGHT OF WAY

12" P.O.L
268+0; 17'LT
(27.5)(30.4)
TOP PIPE GROUND

12" P.O.L
272+00; 17'LT
(27.1)(31.0)
TOP PIPE GROUND

TOP BANK

CENTERLINE SWALE

BASE LINE (EDGE OF PAVEMENT)

S86°21'02"E

CENTERLINE 24' PAVEMENT

EDGE PAVEMENT

268+00
8" P.O.L
268+0; 12'LT
(27.1)(31.0)
TOP Pipe Ground

270+00

272+00
8" P.O.L
(27.6)(31.6)
TOP PIPE GROUND

274+00

70'

PT = 267+43.90

PT = 810+27.56 (F.D.O.T.)

STATE ROAD 16

RIGHT OF WAY

END B/H FENCE

BEGIN WOOD FENCE

RIGHT OF WAY

CUT

POWER POLE

P.O.L. 12"
284+0; 17'LT
(38.5)(41.7)
T. PIPE GRD.

SOIL CURWY.

GATE

WOOD FENCE

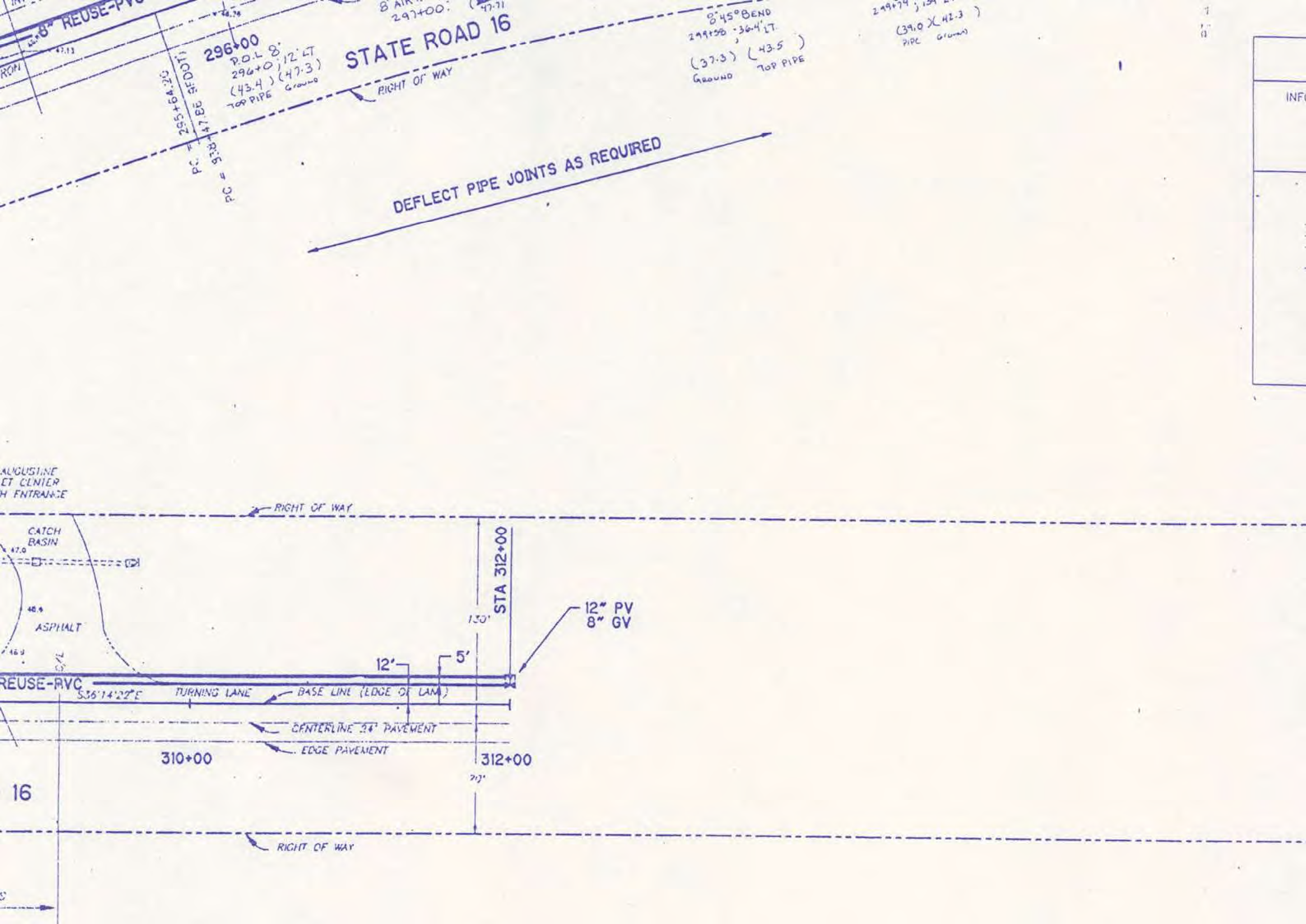
TOWNSHIP 6 SOUTH

TOWNSHIP 7 SOUTH

P.O.L. 12"
287+00; 17'LT.
(38.7)(42.5)

150'

TOP BANK


8" REUSE-PVC
STATE ROAD 16
296+00
P.O.L 8"
296+0 ; 12' LT
(43.4) (47.3)
TOP PIPE GROUND
RIGHT OF WAY
297+00
8" 45° BEND
299+58 - 36.4' LT.
(37.3) (43.5)
GROUND TOP PIPE
(39.0) (42.3)
PIPE GROUND
PC = 295+64.20
DEFLECT PIPE JOINTS AS REQUIRED
RIGHT OF WAY
CATCH BASIN
ASPHALT
STA 312+00
12" PV
8" GV
12'
5'
REUSE-RVC
S36°14'22"E
TURNING LANE
BASE LINE (EDGE OF LANE)
CENTERLINE 24' PAVEMENT
EDGE PAVEMENT
310+00
312+00
16
RIGHT OF WAY

ST. JOHNS COUNTY UTILITY DEPARTME

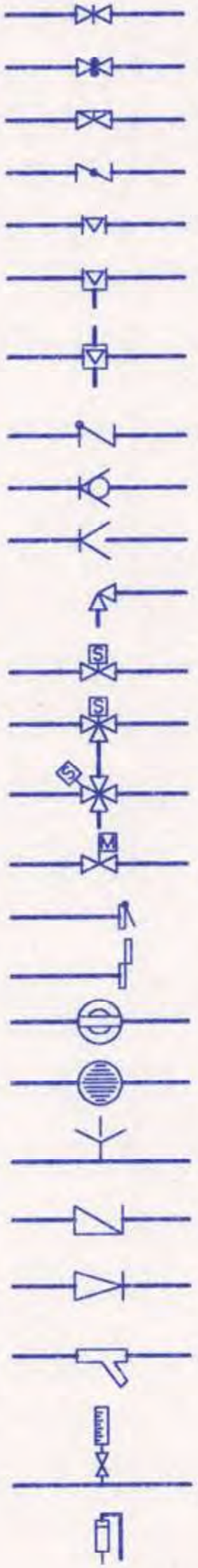
ST. JOHNS COUNTY, FLORIDA

INTERNATIONAL GOLF PARKWAY UTILITIES EXTENSION SECTION A

NS
CT SITE)

ATLANTIC
OCEAN

LAN
PLAN
PLAN
PLAN
PLAN
PLAN



NEEDLE VALVE

PINCH VALVE

DIAPHRAGM VALVE

BUTTERFLY VALVE

PLUG VALVE

3-WAY PLUG VALVE

4-WAY PLUG VALVE

CHECK VALVE, GENERAL SYMBOL

BALL CHECK VALVE

DOUBLE DOOR CHECK VALVE

ANGLE VALVE

SOLENOID VALVE

THREE WAY SOLENOID VALVE

FOUR WAY SOLENOID VALVE

MOTOR OPERATED VALVE

FLAP VALVE

SHEAR GATE

MUD VALVE

FLOOR DRAIN

OPEN EQUIPMENT DRAIN

ECCENTRIC REDUCER OR REDUCING BUSHING

CONCENTRIC REDUCER OR REDUCING BUSHING

Y-STRAINER

CALIBRATION CYLINDER

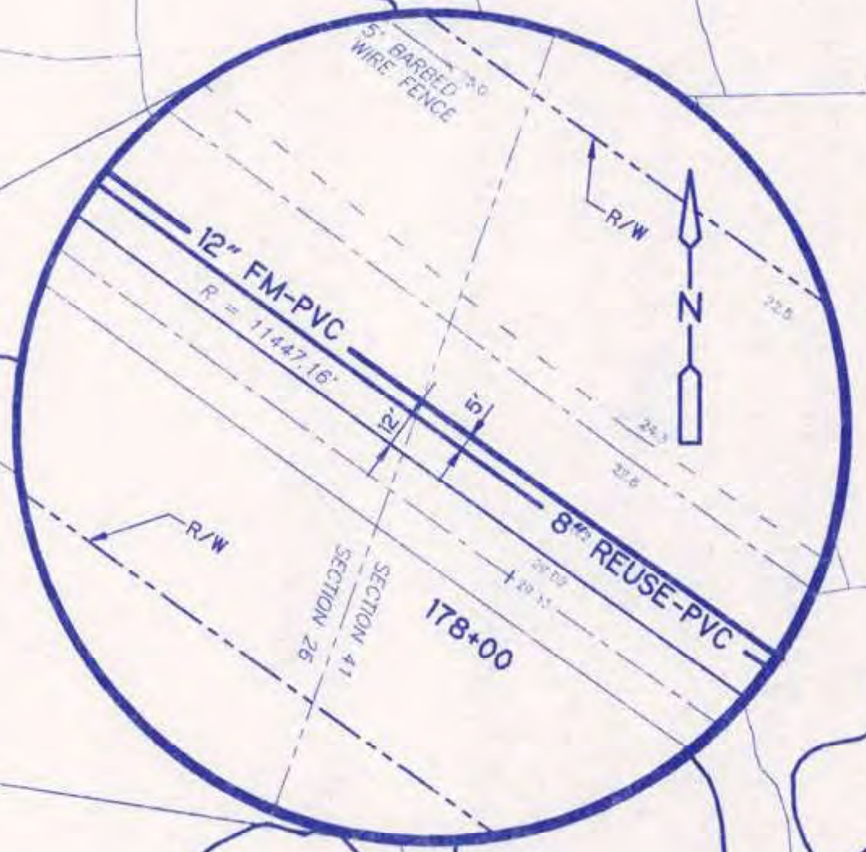
AIR RELEASE VALVE

FLOOR	FL.
HIGH	H.
HIGH POINT	H.P.
INFLUENT	INFL.
LONG	LG.
LOW POINT	L.P.
MATERIAL	MTL.
MANUFACTURE	MFG.
MAXIMUM	MAX.
MECHANICAL	MECH.
METAL	MET.
MINIMUM	MIN.
MOUNTED	MTD.
NOMINAL	NOM.
NOT TO SCALE	N.T.S.
NUMBER	NO.
ON CENTER	O.C.
OPTION	OPT.
OPPOSITE	OPP.
OPENING	OPNG.
OR EQUAL	O/E.
PIECE	PC.
POINT	PT.
POUND	LB.
PLATE	PL.
RADIUS	RAD., R.
REQUIRED	REQ'D
RIGHT OF WAY	R/W
ROOM	RM.
SQUARE	SQ.
STAINLESS STEEL	S.S.
SIDEWALK	SDWK.
SHEET	SH., SHT.
SYMMETRICAL	SYMM.
SECTION	SEC.
STANDARD	ST'D
STEEL	STL.
THICK	THK.
TYPICAL	TYP.
TEMPORARY	TEMP.
THREADED	THD.
UTILITY EASEMENT	U.E.
VERTICAL	VERT.
WEST	W.
WITH	W/
WATER LEVEL	W.L.
WEATHERPROOF	WPF.
WATER	WTR.

FLOOR STAND
GATE VALVE
HARNESSED FLANGE ADAPTER COUPLING
HOSE BIBB
HYDRAULIC VALVE ACTUATOR
MECHANICAL JOINT PLUG
PLASTIC BALL VALVE
PLASTIC CHECK VALVE
PLUG VALVE
SILENT CHECK VALVE
UNION
VALVE BOX
VICTAULIC COUPLING (GROOVED ENDS)
VICTAULIC COUPLING (SHOULDERED ENDS)
WALL SLEEVE
WALL PIECE (WITH WATER STOP)

PIPE

ASBESTOS CEMENT PIPE
BLACK STEEL PIPE
CAST IRON
CAST IRON PIPE
CAST IRON SOIL PIPE
CONCRETE PRESSURE PIPE
COPPER PIPE
DUCTILE IRON PIPE
DUCTILE IRON
FIBERGLASS REINFORCED PIPE
FLANGE
GALVANIZED STEEL PIPE
MECHANICAL JOINT
METAL REINFORCED PLASTIC PIPE
POLYETHYLENE PIPE
POLYVINYLCHLORIDE
REINFORCED CONCRETE PIPE
RESTRAINED JOINT
SLIP-ON JOINT
STEEL PIPE
TIED JOINT
VITRIFIED CLAY PIPE



TYPICAL PIPING ROUTING

I-95

SR 16

SR 16

SR 16

S 41° 38' 49" E 298.31'

S 61° 36' 25" E 129.38'

S 51° 05' 41" E

S 47° 51' 45" E

8" PVC (DR-25) WATER MAIN

N. 45029.84
E. 42572.38

GENERATOR
N. 45034.53
E. 42563.63

6" 12+86; 15.9' LT.
45° BEND w/END
(23.96) (27.7)

SEE DETAIL "B"

TRANSFORMER
N. 45021.05
E. 42559.34

6" MANHOLE
N. 45031.95
E. 42530.70

12" 45° BEND
; 30.8' LT
12+39.8
(22.80)
TOP PIPE

NO. 57 STONE
DRIVEWAY

12" 45° BEND
; 13.6' LT.
12+18
(22.85)
TOP PIPE

SANITARY LIFT
STATION
(BY OTHERS)

6' HIGH CHAIN LINK
FENCE WITH 20'
DOUBLE GATE
1' INSIDE BOUNDARY

N. 44702.44
E. 42494.06

12" 45° BEND
; 18.7' LT.
11+14.6
(23.40) (27.00)
TOP OF PIPE

10" PVC (DR-25)
WATER MAIN

8+47.1 ; 0.9' LT
(23.16) (26.1)

FD. R-BAR W/CAP 8+31.56'

CONTROL
POINT NO. 2
N. 44581.18
E. 42338.32

DETAIL "A"

PUMP HOUSE

8" 90° BEND - 12+21.6
; 11.5' LT
(22.41)
TOP PIPE

11'-8" DUCTILE IRON

12"x8" REDUCER
12+10.6; 11.5' LT
(22.62)
TOP PIPE

18'-12" DUCTILE IRON

12" MJ SLEEVE 11+92.6 (1) 11.5' LT

(22.60)
TOP PIPE

10" PVC (DR-25)
WATER MAIN — BY OTHERS

20' EASEMENT

BASE LINE 2
BASE LINE FOR SURVEY

FD. R-BAR W/CAP

27.0
27.1
27.2
27.3
27.4
27.5
27.7
27.8
27.9
28.0
26.2

6" SANITARY SEWER
(BY OTHERS)

STA 12+36.8, 84.8' LT
℄ WET WELL
TOP EL 28.53
BOT EL 7.65

SEE PUMP STATION 1
PLAN AND DETAILS
ON SHEET M-1

28

80' RJ

STA 12+18, 13.6' LT
12"x45° BEND
TOP-PIPE EL 22.85

STA 11+36, 71.1' LT
12"x45° BEND
TOP-PIPE EL 22.90
GND EL 26.8

STA 11+14.6, 18.7' LT
12"x45° BEND
TOP-PIPE EL 23.40
GND EL 27.0

15'

6" PVC (DR-25)
WATER MAIN

12" FM PVC

FM
(DRY LINES)

STA 8+47.10, 0.9' LT
TOP-PIPE EL 23.16
GND EL 26.10

STA 8+31.56
W/CAP

100' RJ

12" FM PVC

14'

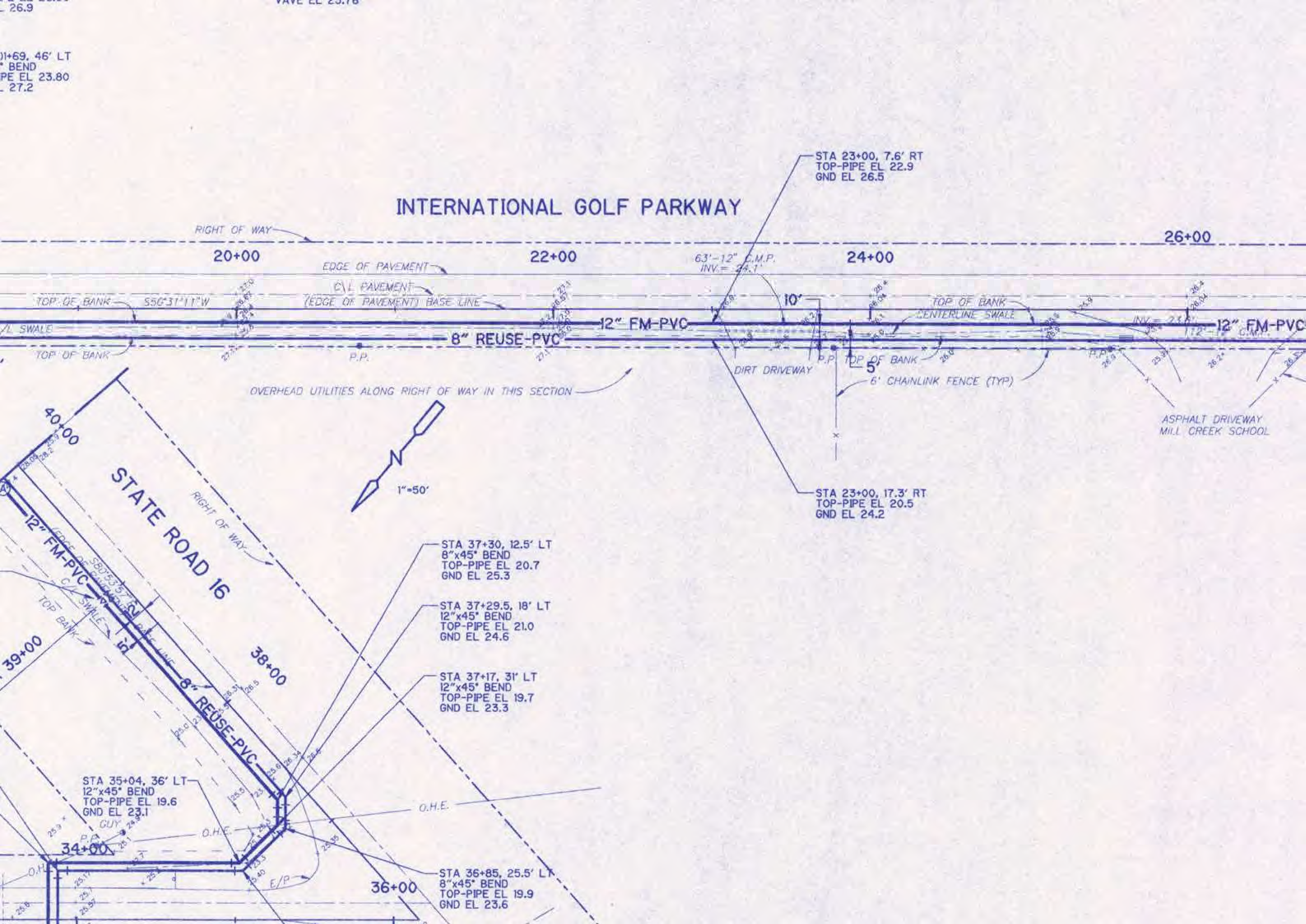
PUMP
HOUSE

STA 12+21.60, 71.5' LT
8"X90° BEND UP
TOP-PIPE EL 22.41

STA 12+10.60, 71.5' LT
12"x8" RED
TOP-PIPE EL 22.62

STA 11+92.60, 17.5' LT
12" MJ SLEEVE
TOP-PIPE EL 22.60

DETAIL A
NTS
C-1



L 26.9
VAVE EL 23.78
)1+69, 46' LT
° BEND
PE EL 23.80
L 27.2
STA 23+00, 7.6' RT
TOP-PIPE EL 22.9
GND EL 26.5
INTERNATIONAL GOLF PARKWAY
RIGHT OF WAY
20+00
22+00
24+00
26+00
63'-12" C.M.P.
INV.= 24.1'
EDGE OF PAVEMENT
C/L PAVEMENT
(EDGE OF PAVEMENT) BASE LINE
TOP OF BANK
S56°31'11"W
C/L SWALE
12" FM-PVC
8" REUSE-PVC
10'
5'
TOP OF BANK
CENTERLINE SWALE
P.P.
DIRT DRIVEWAY
6' CHAINLINK FENCE (TYP)
OVERHEAD UTILITIES ALONG RIGHT OF WAY IN THIS SECTION
ASPHALT DRIVEWAY
MILL CREEK SCHOOL
N
1"=50'
STA 23+00, 17.3' RT
TOP-PIPE EL 20.5
GND EL 24.2
STATE ROAD 16
RIGHT OF WAY
40+00
39+00
38+00
36+00
34+00
12" FM-PVC
8" REUSE-PVC
C/L SWALE
TOP BANK
STA 37+30, 12.5' LT
8"x45° BEND
TOP-PIPE EL 20.7
GND EL 25.3
STA 37+29.5, 18' LT
12"x45° BEND
TOP-PIPE EL 21.0
GND EL 24.6
STA 37+17, 31' LT
12"x45° BEND
TOP-PIPE EL 19.7
GND EL 23.3
STA 35+04, 36' LT
12"x45° BEND
TOP-PIPE EL 19.6
GND EL 23.1
GUY
P.P.
O.H.E.
E/P
STA 36+85, 25.5' LT
8"x45° BEND
TOP-PIPE EL 19.9
GND EL 23.6

70'

STA 44+00, 12' LT
TOP-PIPE EL 23.0
GND EL 26.4

EDGE PAVEMENT

STA 47+00, 11.7' LT
TOP-PIPE EL 23.4
GND EL 26.8

STA 50+00, 12' LT
TOP-PIPE EL 23.6
GND EL 27.0

STATE ROAD 16

RIGHT OF WAY

27.7 27.3 3.5' BARBED WIRE FENCE ±2' NORTH OF R/W 27.2 27.3

RIGHT OF WAY

130'

STA 59+00, 17.0' LT
TOP-PIPE EL 24.0
GND EL 27.4

STA 62+00, 17.3' LT
TOP-PIPE EL 24.0
GND EL 27.3

STA 64+00

12" PV

25.3 24.8 TOP OF BANK 25.3 25.0

12' 5' 24.3 24.3 CENTERLINE SWALE 24.3 24.4 12' 5' 12"

28.54 28.73 S80°53'57"E BASE LINE (EDGE OF PAVEMENT) 28.28 28.74

28.8 28.9 29.0 29.1

58+00 60+00 CENTERLINE 24' PAVEMENT 62+00 64+00

EDGE PAVEMENT

70'

STA 59+00, 12.0' LT
TOP-PIPE EL 24.7
GND EL 28.1

STA 62+00, 12.0' LT
TOP-PIPE EL 24.7
GND EL 28.1

STA 64+00, 12' LT
8" GV
TOP-GV EL 25.92
GND EL 27.6

RIGHT OF WAY

26.8 27.3 3.5' BARBED WIRE FENCE ±2' NORTH OF R/W 27.6 27.9

RIGHT OF WAY

STA 73+00, 17.3' LT
TOP-PIPE EL 24.2
GND EL 27.6

STA 75+07, 17' LT
12" ARV/V
MH TOP EL 27.77

STA 76+00, 17' LT
TOP-PIPE EL 24.3
GND EL 27.4

STA 85+00, 12' LT
TOP-PIPE EL 24.6
GND EL 28.0

86+00

70'

RIGHT OF WAY

STA 88+00, 12' LT
TOP-PIPE EL 24.5
GND EL 27.8

88+00

STA 88+96, 12' LT
8" GV

STATE ROAD 16

3.5' BARBED WIRE FENCE ±2' NORTH OF R/W

RIGHT OF WAY

GUY POLE

GUY POLE

POWER POLE

O.H.E.

STA 105+00, 17' LT
TOP-PIPE EL 24.3
GND EL 27.8

SOIL DRIVEWAY

DEFLECT PIPE JOINTS AS REQUIRED

STA 99+00, 17' LT
TOP-PIPE EL 24.9
GND EL 27.9

STA 100+05, 17' LT
12" ARV/V
MH TOP EL 27.39
TOP-VALVE EL 25.87

STA 102+00, 17.4' LT
TOP-PIPE EL 24.7
GND EL 27.8

TOP BANK

CENTERLINE SWALE

BASE LINE (EDGE OF PAVEMENT)
R = 17200.80'

CENTERLINE 24' PAVEMENT

18" R.C.P.
INV=25.4'
INV=25.2'

MAN BOX

ASPH. APRON

8" REUSE-PVC

100+00

102+00

104+00

106+00

STA 99+95, 12' LT
8" ARV/V
MH TOP EL 28.06
TOP-VALVE EL 25.91

STA 99+00, 12' LT
TOP-PIPE EL 25.0
GND EL 28.2

RIGHT OF WAY

STA 102+00, 12' LT
TOP-PIPE EL 24.8
GND EL 28.0

STA 105+00, 12' LT
TOP-PIPE EL 24.9
GND EL 28.0

STATE ROAD 16

3.5' BARBED WIRE FENCE ±2' NORTH OF R/W

BEGIN FENCE

RIGHT OF WAY

BEGIN FENCE

POWER POLE

STA 114+00

STA 115+00, 17' LT
TOP-PIPE EL 24.6

STA 118+00, 16.7' LT
TOP-PIPE EL 25.7
GND EL 28.5

SOIL DRIVEWAY

SOIL DRIVEWAY

STOP SIGN

EADWALL

STA 130+00, 11.6' LT
TOP-PIPE EL 26.4
GND EL 29.3

STA 132+00, 11.6' LT
TOP-PIPE EL 26.4
GND EL 29.4

STATE ROAD 16

EDGE PAVEMENT

128+00

130+00

132+00

RIGHT OF WAY

STA 127+28, 12' LT
8"x45° BEND
TOP-PIPE EL 25.6
GND EL 29.0

STA 127+23, 12' LT
8"x45° BEND
TOP-PIPE EL 21.5
GND EL 29.0

RIGHT OF WAY

SOIL DRIVEWAY

STA 142+00, 17' LT
TOP-PIPE EL 26.4
GND EL 29.0

36" R.C.P.

INV.=21.9'

INV.=21.8'

TOP BANK

CENTERLINE SWALE

BASE LINE (EDGE OF PAVEMENT)

S47°53'07"E

ASPH. APRON

CENTERLINE 24' PAVEMENT

EDGE PAVEMENT

STA 142+00, 12' LT
TOP-PIPE EL 26.4
GND EL 29.2

STA 145+00, 17' LT
TOP-PIPE EL 26.1
GND EL 28.9

STA 145+00, 12' LT
TOP-PIPE EL 26.0
GND EL 29.0

STA 148+00, 17' LT
TOP-PIPE EL 25.9
GND EL 28.7

STA 148+00, 12' LT
TOP-PIPE EL 26.0
GND EL 28.9

12" FM-PVC

130'

70'

142+00

144+00

146+00

148+00

STATE ROAD 16

RIGHT OF WAY

RIGHT OF WAY

POWER POLE

170+00

172+00

174+00

176+00

178

70'

STA 171+87, 12' LT
8"x45° BEND
TOP-PIPE EL 24.45
GND EL 27.7

STA 171+92.5, 12' LT
8"x45° BEND
TOP-PIPE EL 19.28
GND EL 27.7

STA 172+14.3, 12' LT
8"x45° BEND
TOP-PIPE EL 24.75
GND EL 27.7

STA 172+09.4, 12' LT
8"x45° BEND
TOP-PIPE EL 19.63
GND EL 27.7

STA 175+00, 12' LT
TOP-PIPE EL 25.0
GND EL 28.3

BASE LINE (EDGE OF PAVEMENT)

CENTERLINE 24' PAVEMENT

RIGHT OF WAY

MAIL BOXES

ASPH. APRON

12" FM-PVC

R = 11447.16'

5'

12'

STATE ROAD 16

SECTION 41
SECTION 26

4' BARBED WIRE FENCE

POWER POLE

SOIL DRIVEWAY

O.H.E.

GUY POLE

STA 189+00

STA 189+04, 17' LT
12" PV
TOP-VALVE EL 23.87
GND EL 27.2

STA 190+00, 17' LT
12" ARV/V
MH TOP EL 27.70
TOP-VALVE EL 25.42

STA 185+00, 17' LT
TOP-PIPE EL 24.3
GND EL 28.0

130'

70'

STA 185+00, 12' LT
TOP-PIPE EL 24.7
GND EL 28.6

TOP BANK

CENTERLINE SWALE

184+00

186+00

188+00

190+00

PI = 186+68.35

STA 189+00, 12' LT
8" GV
TOP-GV EL 25.62
GND EL 28.1

STA 190+00, 12' LT
8" ARV/V
MH TOP EL 28.30
TOP-VALVE EL 25.95

STATE ROAD 16

RIGHT OF WAY

STA 204+88, 17.5' LT
12"x45° BEND
TOP-PIPE EL 21.3
GND EL 28.8

STA 204+82, 17.7' LT
12"x45° BEND
TOP-PIPE EL 24.7
GND EL 28.8

STA 201+00, 17' LT
TOP-PIPE EL 24.6
GND EL 28.3

SOIL DRWY.

STA 197+00, 17' LT
TOP-PIPE EL 24.2
GND EL 27.8

SOIL DRWY.

TOP BANK

212+00

214+00

STA 213+99, 12' LT
8" GV
TOP-GV EL 28.69
GND EL 30.9

216+00

EDGE PAVEMENT

218+00

STA 217+00, 12' LT
TOP-PIPE EL 26.0
GND EL 29.4

STATE ROAD 16

STA 215+00, 12' LT
8" ARV/V
MH TOP EL 30.00
TOP-VALVE EL 27.77

RIGHT OF WAY

S REQUIRED

N

RIGHT OF WAY

STA 227+00, 17' LT
TOP-PIPE EL 24.1
GND EL 27.8

STA 230+00, 17' LT
TOP-PIPE EL 23.4
GND EL 27.1

STA 233+00, 17' LT
TOP-PIPE EL 23.4
GND EL 26.8

TOP OF BANK

CENTERLINE SWALE

BOTTOM BANK

BASE LINE (EDGE OF PAVEMENT)

S36°39'52"E

CENTERLINE 24' PAVEMENT

EDGE PAVEMENT

12" FM-PVC

SE-PVC

226+00

228+00

230+00

232+00

STA 227+00, 12' LT
TOP-PIPE EL 24.8
GND EL 28.3

STA 230+00, 12' LT
TOP-PIPE EL 24.1
GND EL 27.6

STA 233+00, 12' LT
TOP-PIPE EL 24.4
GND EL 27.5

STATE ROAD 16

RIGHT OF WAY

RIGHT OF WAY

STA 242+00, 17' LT
TOP-PIPE EL 23.8

STA 246+00, 17' LT
TOP-PIPE EL 24.0

E JOINTS AS REQUIRED

STATE ROAD 16

RIGHT OF WAY

256+00

CENTERLINE 24' PAVEMENT

EDGE OF PAVEMENT

BASE LINE (EDGE OF PAVEMENT)

BOTTOM BANK

INV.=25.9'

24" C.M.P

INV.=25.6'

258+00

STA 257+00, 12' LT
TOP-PIPE EL 26.0
GND EL 29.7

260+00

12" FM-PVC

8" REUSE

STA 260+00, 12' LT
TOP-PIPE EL 26.1
GND EL 29.8

TOP-PIPE EL 25.2
GND EL 28.8

RIGHT OF WAY

5' BARBED WIRE FENCE

STA 268+00, 17' LT
TOP-PIPE EL 27.5
GND EL 30.4

TOP BANK

CENTERLINE SWALE

BASE LINE (EDGE OF PAVEMENT)

CENTERLINE 24' PAVEMENT

EDGE PAVEMENT

268+00

270+00

272+00

274+00

STA 268+00, 12' LT
TOP-PIPE EL 27.1
GND EL 31.0

STA 272+00, 17' LT
TOP-PIPE EL 27.1
GND EL 31.0

130'

S56°01'07"E

70'

12" FM-PVC

STA 272+00, 12' LT
TOP-PIPE EL 27.6
GND EL 31.6

STATE ROAD 16

RIGHT OF WAY

RANGE 28 EAST

RANGE 29 EAST

SECTION 36

SECTION 31

END B/W FENCE

BEGIN WOOD FENCE

RIGHT OF WAY

GUY

POWER POLE

GATE

WOOD FENCE

POWER POLE

289+20

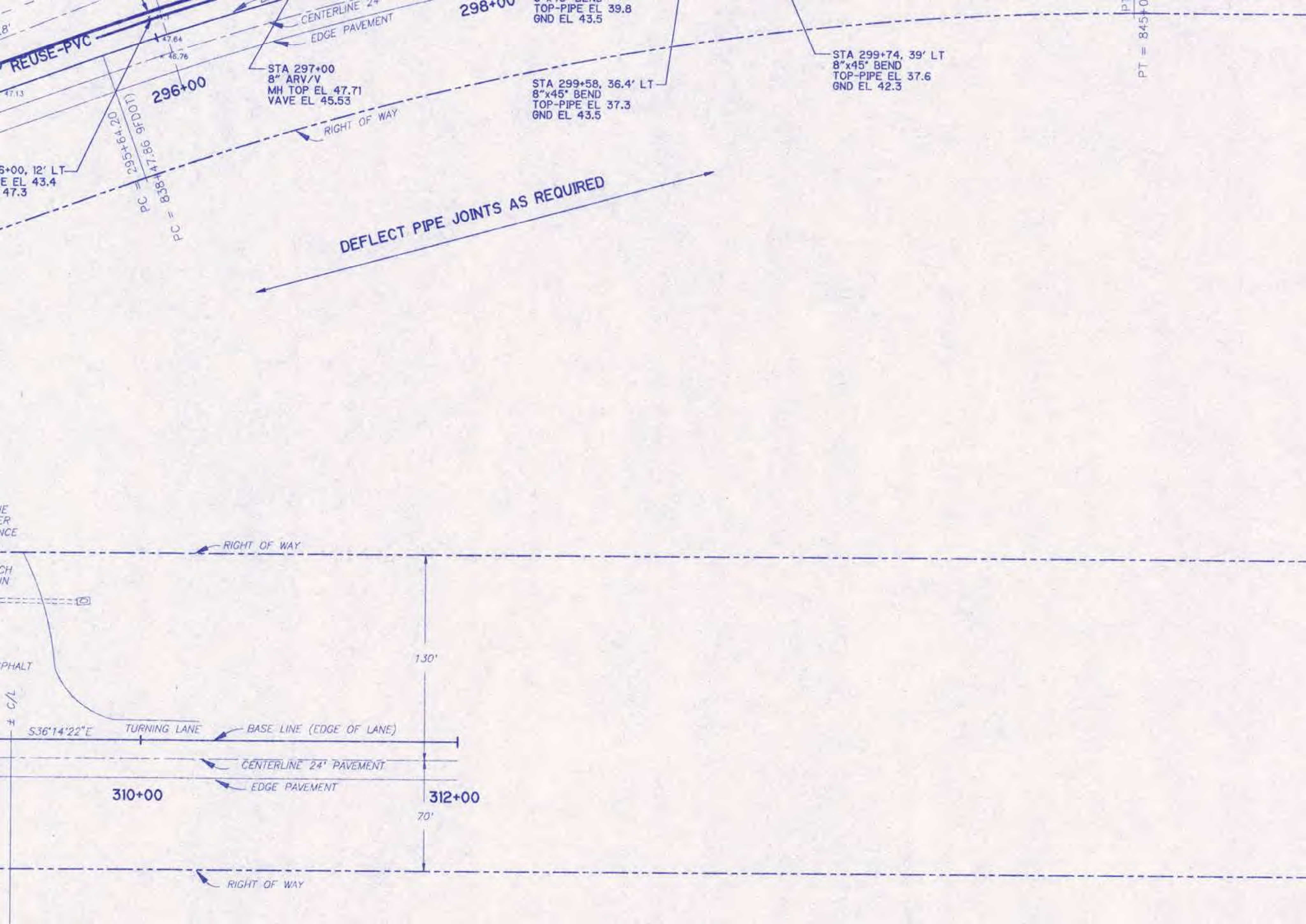
STA 284+00, 17' LT
TOP-PIPE EL 38.5
GND EL 41.7

STA 287+00, 17' LT
TOP-PIPE EL 38.2
GND EL 42.5

TOWNSHIP 6 SOUTH

RANGE 7 SOUTH

STA 289
12" FM-PVC


REUSE-PVC
CENTERLINE 24
EDGE PAVEMENT
298+00
TOP-PIPE EL 39.8
GND EL 43.5
STA 297+00
8" ARV/V
MH TOP EL 47.71
VAVE EL 45.53
296+00
STA 299+58, 36.4' LT
8"x45° BEND
TOP-PIPE EL 37.3
GND EL 43.5
STA 299+74, 39' LT
8"x45° BEND
TOP-PIPE EL 37.6
GND EL 42.3
RIGHT OF WAY
PC = 295+64.20
PC = 838+47.86 9FDOT)
PT = 845+0
DEFLECT PIPE JOINTS AS REQUIRED
RIGHT OF WAY
130'
S36°14'22"E
TURNING LANE
BASE LINE (EDGE OF LANE)
CENTERLINE 24' PAVEMENT
EDGE PAVEMENT
310+00
312+00
70'
RIGHT OF WAY

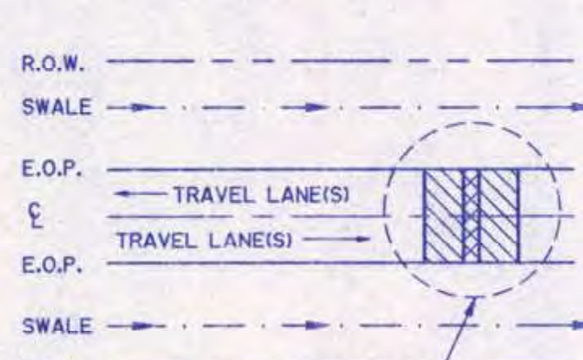
2. BASE MATERIAL SHALL BE PLACED IN TWO OR THREE LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO MINIMUM DENSITY OF 98% BY A.A.S.H.T.O. T-180 SPEC. LBR100
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.
5. NEW SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
6. WHERE TRAFFIC SIGNALIZATION EXISTS IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THE SYSTEM DISTURBED IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S REQUIREMENTS.
7. ALL ROADWAY REPLACEMENT SHALL BE IN COMPLIANCE WITH GOVERNING AUTHORITY WHERE CUT IS MADE.
8. FOR PVC PIPE ONLY - INSTALL METALLIC TAPE OVER FULL LENGTH OF PIPE. SEE SPECIFICATIIONS.

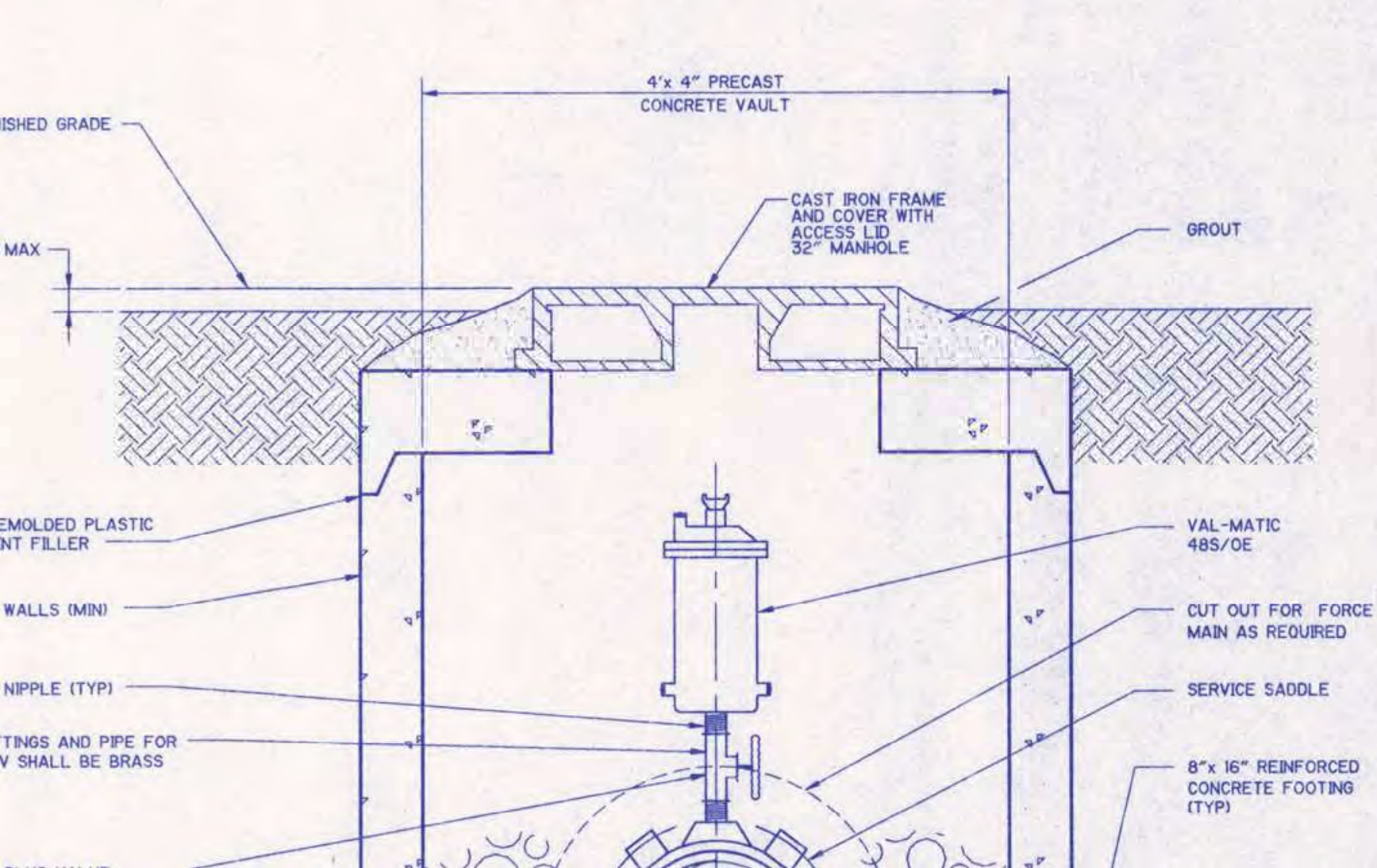
OPEN CUT PAVEMENT REPAIR

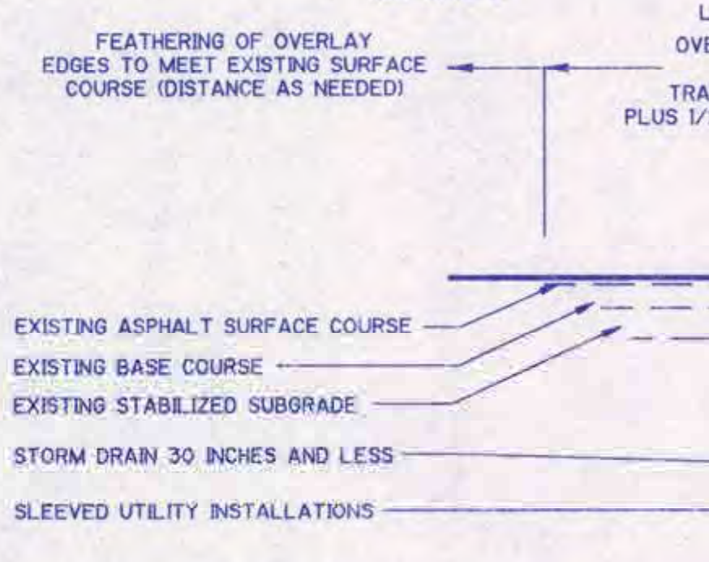
NTS

LIMEROCK PATCH IN SHOULDER & SWALE

NTS







FLOWABLE FILL MATERIAL SHALL BE PROPORTIONED TO PRODU A 28 DAY COMPRESSIVE STRENGTH OF 150 POUNDS PER SQUARE INCH (psi). FLOWABLE FILL SHALL BE PLACED FROM THE TOP O THE PIPE BEDDING TO THE TOP OF THE EXISTING ROADWAY LIMEROCK BASE COURSE.

PIPE DIAMETER OR SPAN WIDTH	'X'
< = 15"	12 INCHES
< = 24"	16 INCHES
< = 30"	24 INCHES

PIPE BEDDING SHA

TO
COVER
BELOW

LL LENGTH
HE
SSING

TYPE

VER
R

URERS

LY.

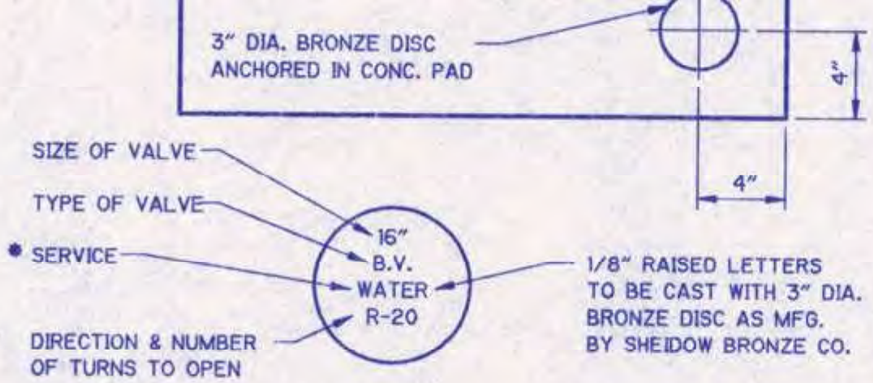
DS OF

TATEMENT

IS SHALL BE LAID TO PROVIDE
WEEN THE INVERT OF THE
S MINIMUM SEPARATION
SO THAT THE SEWER PIPE
POINT OF CROSSING WITH
BOTH PIPES SHALL BE
ROSSING OVER A WATER
ES AND JOINTS IN THE
IRRESPECTIVE OF

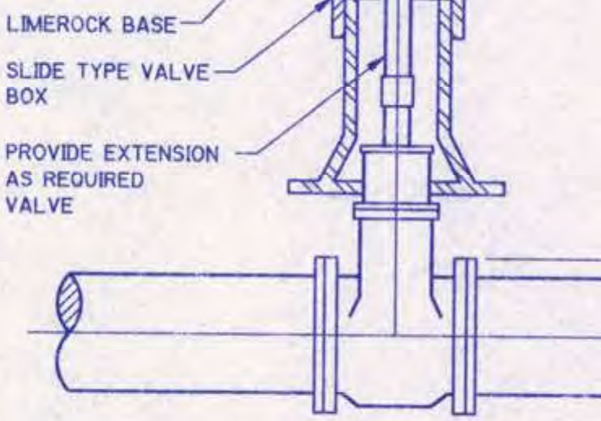
TER MAIN AND STORM OR

IDE A MIMIMUM VERTICAL
THE FORCE MAIN AND
HE FORCE MAIN.



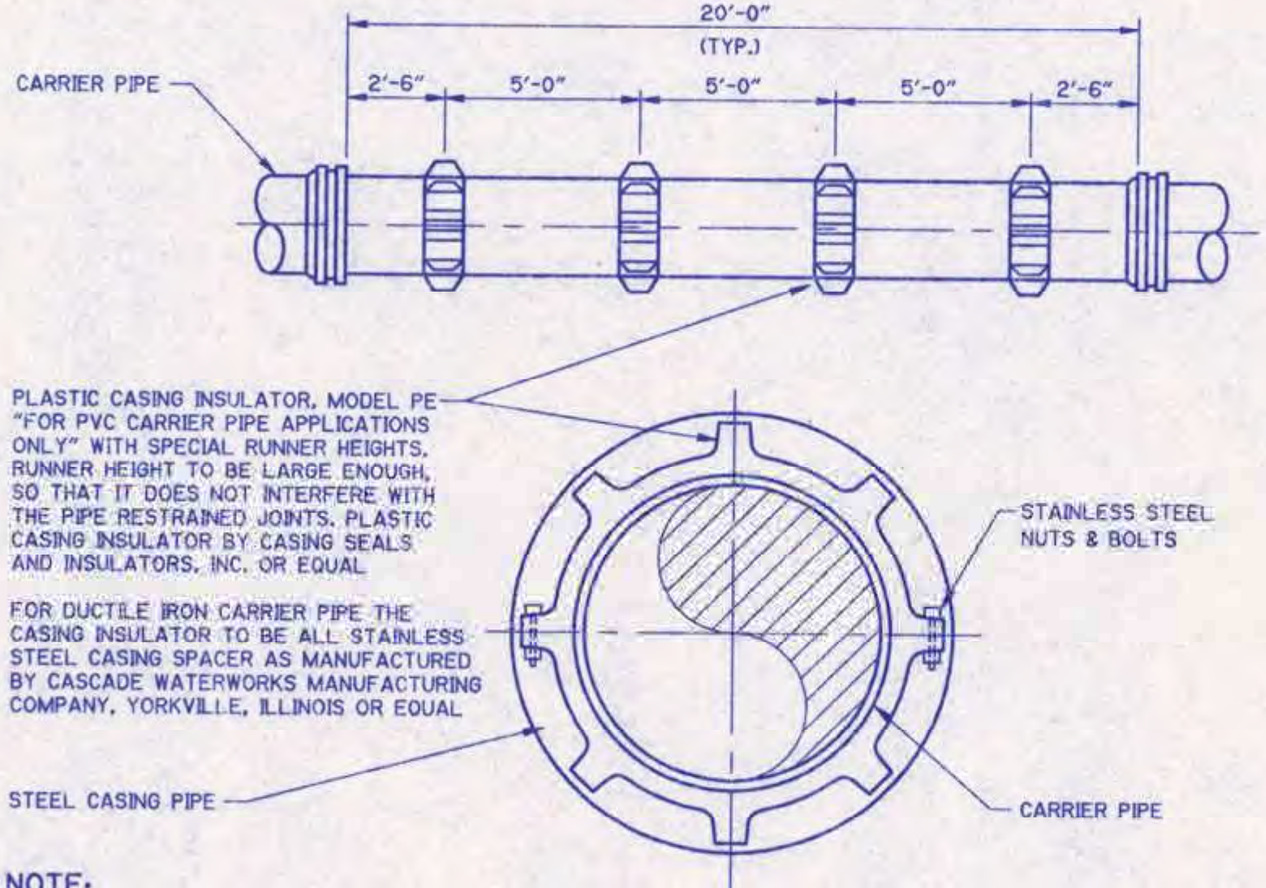
CONCRETE VALVE PAD/IDENT. DISC.

NTS



VALVE AND BOX

NTS



NOTE:

2"X180? RETURN BEND

SEE SPEC'S. FOR PAINTIN

STAINLESS STEEL
INSECT SCREEN

OFFSET WITH BENDS
AS REQUIRED

2" DIA. GAL'V. STEEL PIP
AND FITTINGS (WELDED
ON NEW STEEL CASING)

MECHANICAL OR MASONRY
SEAL REQ'D. AROUND PIPE

MAIN

NO

1999 MWS St Johns Mini Golf

Water Sewer

As Built Drawings

PROPOSED MAZE SITE

PHASE 2 PARKING

T.P. 43.41' AB

2-8" SLEEVES FOR FUTURE

8,440 SQ.FT. AREA

FUTURE EXPANSION AREA

C.O. TOP=48.00' INV.= 43.82 AB

CLEANOUT TOP= 47.50' INV. = 42.98 AB

1-2" B.Q. AB

1-2" TEE AB

1-2" TEE

1-2" ELBOW 43.32 AB

18.5' LF AB

7.8 LF AB

96.7 LF AB

72.56 LF

223.0'-4" PVC SPRINKLER MAIN

4"-90° ELBOW

18 HOLE MINIATURE GOLF 16,523 SQ.FT.

PYLON SIGN

2" B.F.P.

METER

8" PVC BLUE

ELECTRIC KIDDIE CARS

LANE ENDS LAKE LEFT

EXISTING 12" FORCE MAIN

EXISTING 8" REUSE LINE

ASPHALT ROAD

STATE ROAD 16

CONCRETE

GRASS

ASPHALT ROAD

SPEED LIMIT 45

SEE BLOWUP BELOW "A"

OVERHEAD POWER LINE

SKETCH OF WATER MAIN AND SANITARY SEWER

6+00 5+00 4+00 3+00 2+00 1+00 0+00 −0+77.06

R/W ℄ PUBLIC

IRON PIN

SAMPLE POINT

16"x8" SEWER STUBOUT W/CAP INV. ELEV. = 42.30 AB

STA: 0+99.90
OFFSET: 10.13 L AB

STA: −0+11.11
OFFSET: 10.09 L AB
T.P. 43.00 AB

STA: −0+76.99
OFFSET: 10.79 L AB

JACK & BORES AB
T.P. 47.67
INV. 44.50

STA: −0+76.95
OFFSET: 20.11 L AB

STA: 2+25.50
OFFSET: 20.55 L AB
MANHOLE #1
TP: 45.18 AB
INV: 42.24' AB

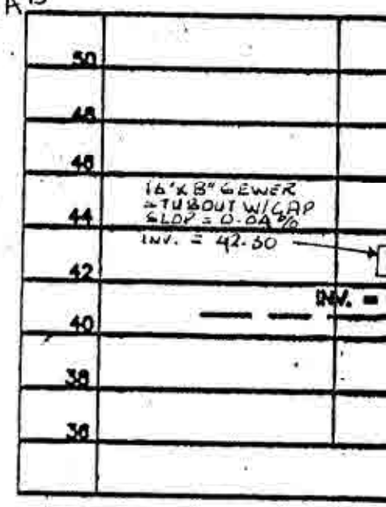
STA: 0+99.72
OFFSET: 20.01 L AB

STA: −0+10.96
OFFSET: 20.19 L AB

STA: 2+69.13
OFFSET: 10.14 L
TP ELV: 44.70 AB

STA: 3+91.59
OFFSET: 10.02 L AB

DETAIL "A"



CKFLOW
TER
1-HYDRANT ASSEMBLY WITH 6" G.V.
PL
6" G.V.

DETAIL "B"

6" SEWER

DETAIL "C"

2" WATER

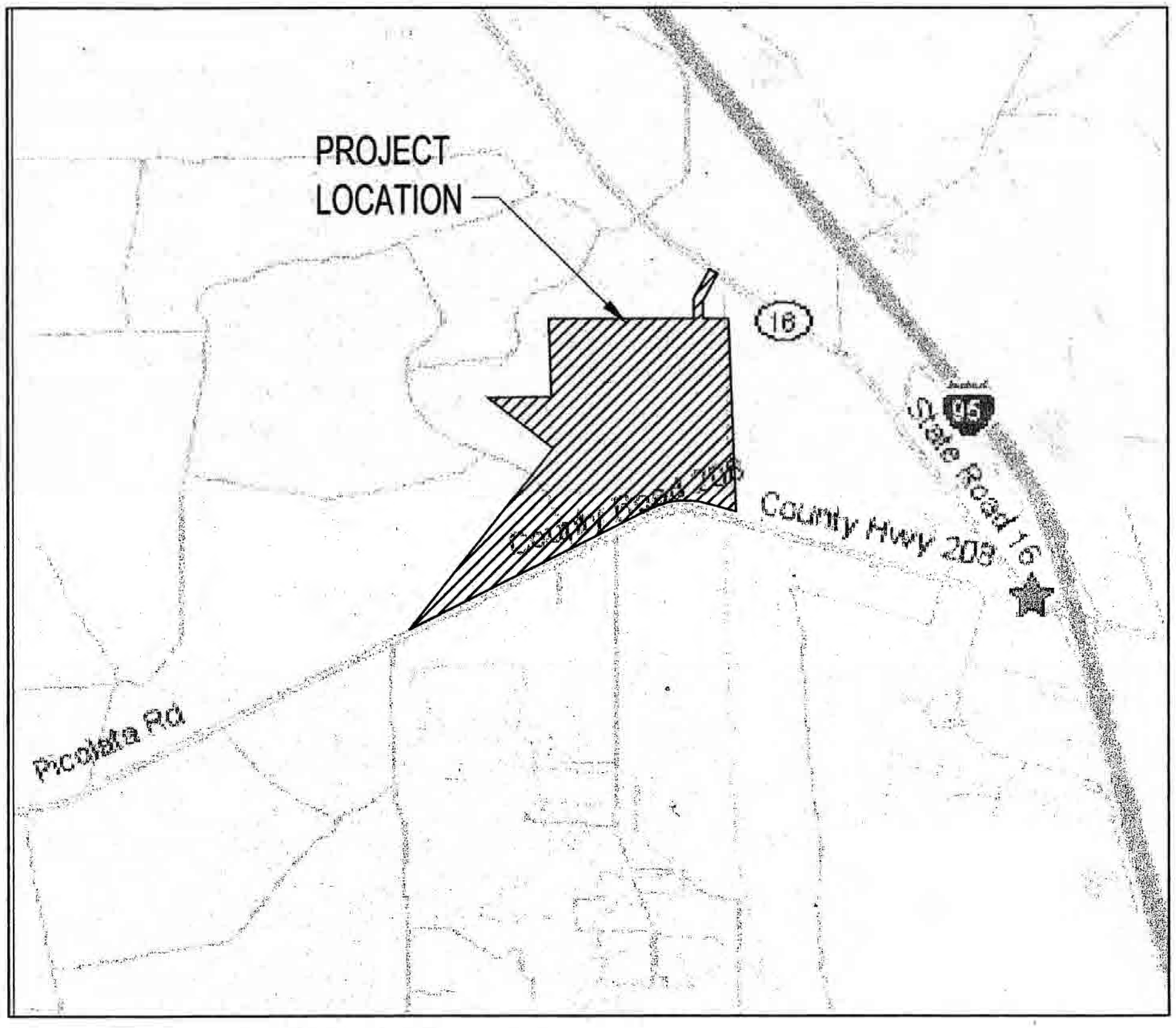
2003 MWS Whisper Ridge Sub P1

Water Sewer

As Built Drawings

WILDCAT VENTURES

SECTION 1,36 & 42, TOWNSHIP 6S&7S, RANGE 28E
ST. JOHNS COUNTY, FLORIDA



LOCATION MAP

C1
C2
C3-C5
C6
C7
C8-C16
C17
C18,C19,C19
C20&C21
C22&C23
C24, C25
C28, C30
C31
C37
C38

C39

C40-C42
C43
C44&C45
C46
C47
C48

C49
C50
C51

C52
C53
C54

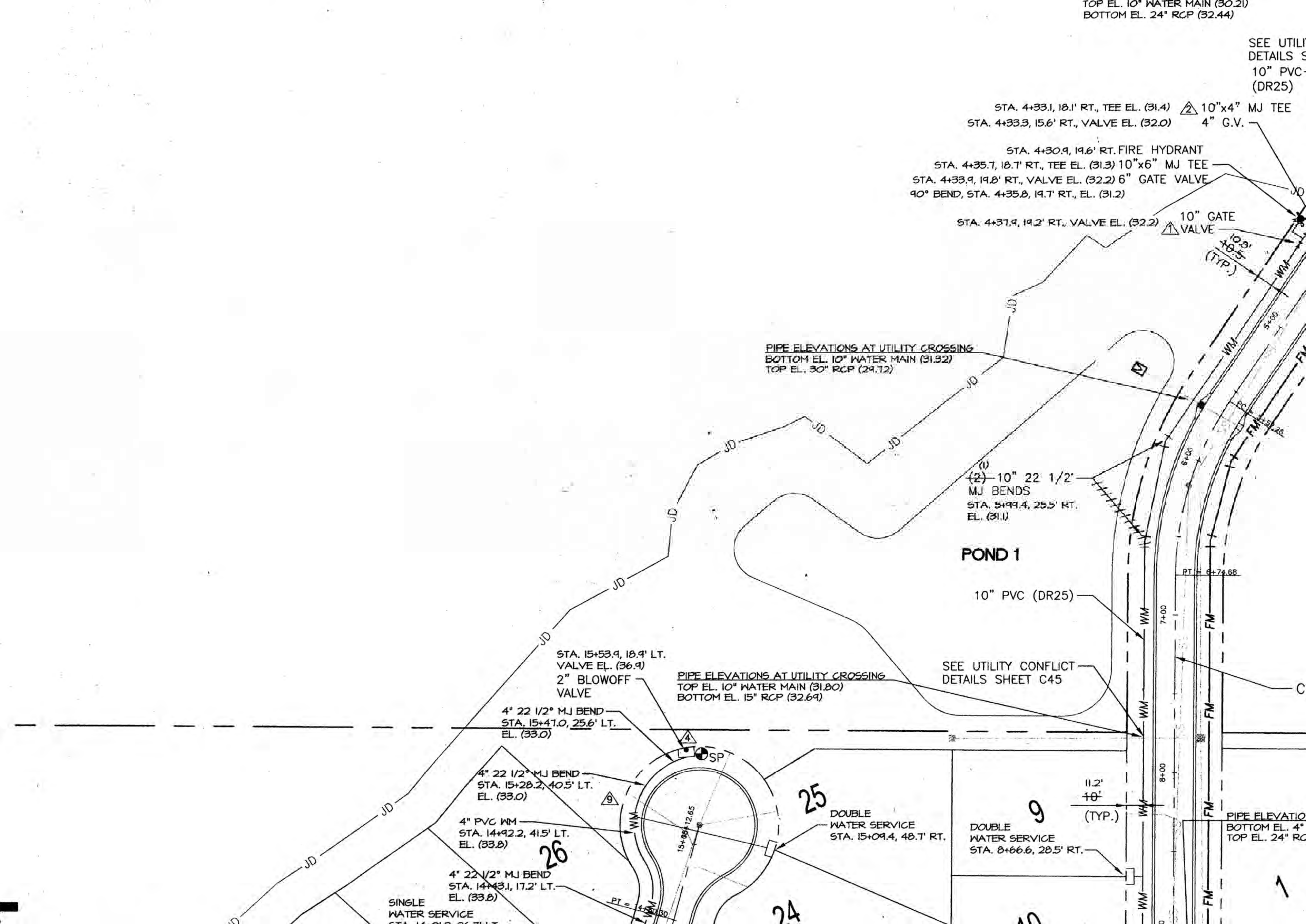
35
268-8558

7
346-0087

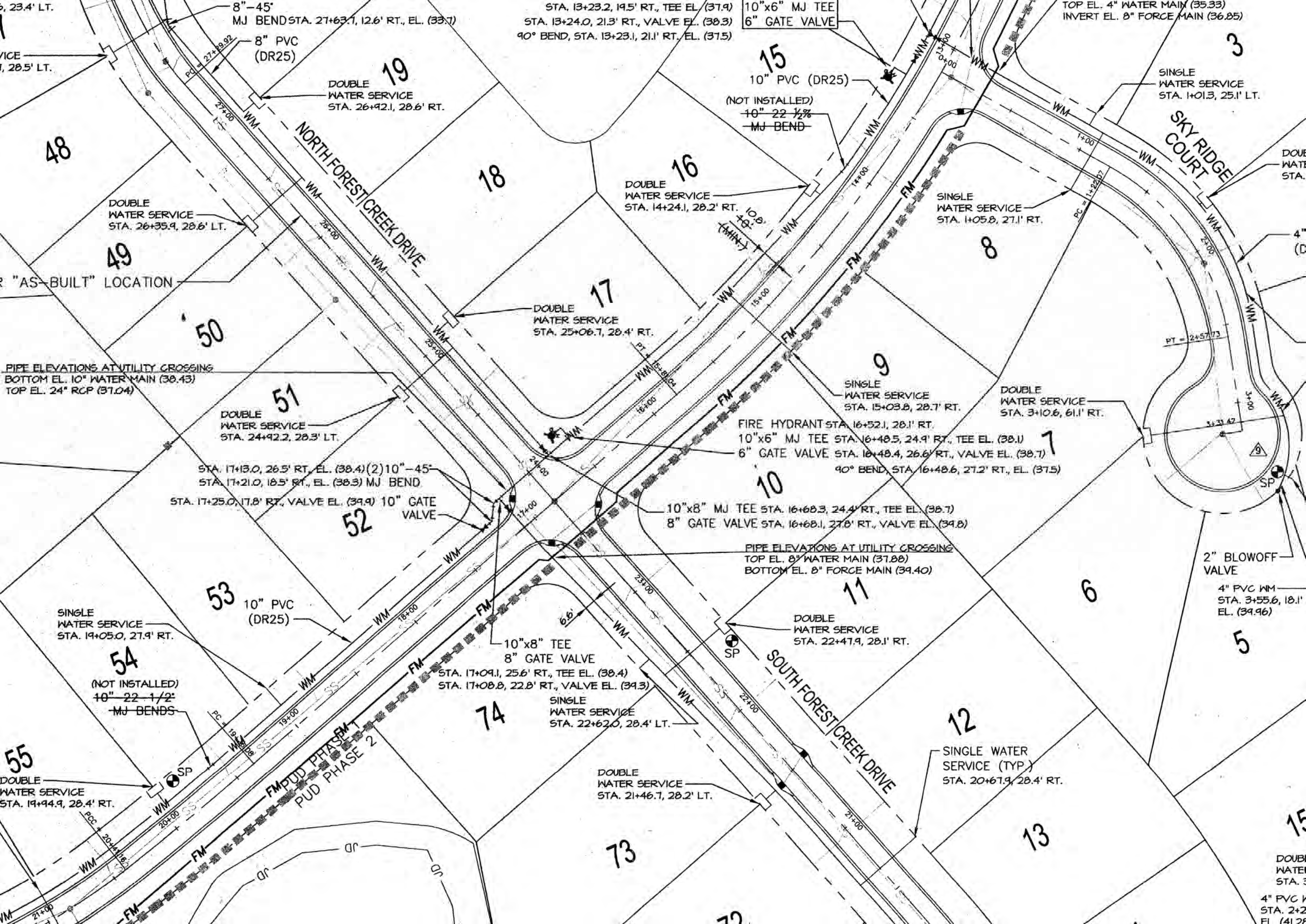
ATES

6
721-5758

E 200
250
285-1929



TOP EL. 10" WATER MAIN (30.21)
BOTTOM EL. 24" RCP (32.44)
SEE UTILI
DETAILS S
10" PVC
(DR25)
STA. 4+33.1, 18.1' RT., TEE EL. (31.4)
10"x4" MJ TEE
STA. 4+33.3, 15.6' RT., VALVE EL. (32.0)
4" G.V.
STA. 4+30.9, 19.6' RT. FIRE HYDRANT
STA. 4+35.7, 18.7' RT., TEE EL. (31.3) 10"x6" MJ TEE
STA. 4+33.9, 19.8' RT., VALVE EL. (32.2) 6" GATE VALVE
90° BEND, STA. 4+35.8, 19.7' RT., EL. (31.2)
STA. 4+37.9, 19.2' RT., VALVE EL. (32.2)
10" GATE VALVE
10.8'
10.5'
(TYP.)
PIPE ELEVATIONS AT UTILITY CROSSING
BOTTOM EL. 10" WATER MAIN (31.32)
TOP EL. 30" RCP (29.72)
(1)
(2) 10" 22 1/2° MJ BENDS
STA. 5+99.4, 25.5' RT.
EL. (31.1)
POND 1
PT = 6+74.68
10" PVC (DR25)
SEE UTILITY CONFLICT DETAILS SHEET C45
STA. 15+53.9, 18.9' LT.
VALVE EL. (36.9)
2" BLOWOFF VALVE
PIPE ELEVATIONS AT UTILITY CROSSING
TOP EL. 10" WATER MAIN (31.80)
BOTTOM EL. 15" RCP (32.69)
4" 22 1/2° MJ BEND
STA. 15+47.0, 25.6' LT.
EL. (33.0)
SP
4" 22 1/2° MJ BEND
STA. 15+28.2, 40.5' LT.
EL. (33.0)
4" PVC WM
STA. 14+92.2, 41.5' LT.
EL. (33.8)
4" 22 1/2° MJ BEND
STA. 14+43.1, 17.2' LT.
EL. (33.8)
SINGLE
WATER SERVICE
25
26
24
9
DOUBLE
WATER SERVICE
STA. 15+09.4, 48.7' RT.
DOUBLE
WATER SERVICE
STA. 8+66.6, 28.5' RT.
11.2'
10'
(TYP.)
PIPE ELEVATIO
BOTTOM EL. 4"
TOP EL. 24" RC
1
POND 1
JD
WM
FM
5+00
6+00
7+00
8+00



8"-45°
MJ BEND STA. 27+63.1, 12.6' RT., EL. (33.7)
STA. 13+23.2, 19.5' RT., TEE EL. (37.9)
STA. 13+24.0, 21.3' RT., VALVE EL. (38.3)
90° BEND, STA. 13+23.1, 21.1' RT., EL. (37.5)
10"x6" MJ TEE
6" GATE VALVE
TOP EL. 4" WATER MAIN (35.33)
INVERT EL. 8" FORCE MAIN (36.85)
8" PVC (DR25)
15
10" PVC (DR25)
3
19
DOUBLE WATER SERVICE STA. 26+92.1, 28.6' RT.
(NOT INSTALLED)
10" 22 ½% MJ BEND
SINGLE WATER SERVICE STA. 1+01.3, 25.1' LT.
SKY RIDGE COURT
48
NORTH FOREST CREEK DRIVE
18
16
DOUBLE WATER SERVICE STA. 14+24.1, 28.2' RT.
10.6' (MIN.)
SINGLE WATER SERVICE STA. 1+05.8, 27.1' RT.
8
DOUBLE WATER SERVICE STA. 26+35.9, 28.6' LT.
49
"AS-BUILT" LOCATION
17
DOUBLE WATER SERVICE STA. 25+06.7, 28.4' RT.
50
PT = 2+57.73
9
SINGLE WATER SERVICE STA. 15+03.8, 28.7' RT.
DOUBLE WATER SERVICE STA. 3+10.6, 61.1' RT.
PIPE ELEVATIONS AT UTILITY CROSSING
BOTTOM EL. 10" WATER MAIN (38.43)
TOP EL. 24" RCP (37.04)
51
DOUBLE WATER SERVICE STA. 24+92.2, 28.3' LT.
FIRE HYDRANT STA. 16+52.1, 28.1' RT.
10"x6" MJ TEE STA. 16+48.5, 24.9' RT., TEE EL. (38.1)
6" GATE VALVE STA. 16+48.4, 26.6' RT., VALVE EL. (38.7)
90° BEND, STA. 16+48.6, 27.2' RT., EL. (37.5)
7
STA. 17+13.0, 26.5' RT., EL. (38.4) (2) 10"-45°
STA. 17+21.0, 18.5' RT., EL. (38.3) MJ BEND
STA. 17+25.0, 17.8' RT., VALVE EL. (39.9) 10" GATE VALVE
52
10
10"x8" MJ TEE STA. 16+68.3, 24.4' RT., TEE EL. (38.7)
8" GATE VALVE STA. 16+68.1, 27.8' RT., VALVE EL. (39.8)
SP
PIPE ELEVATIONS AT UTILITY CROSSING
TOP EL. 8" WATER MAIN (37.88)
BOTTOM EL. 8" FORCE MAIN (39.40)
2" BLOWOFF VALVE
4" PVC WM STA. 3+55.6, 18.1' EL. (39.96)
53
10" PVC (DR25)
11
6
SINGLE WATER SERVICE STA. 19+05.0, 27.9' RT.
10"x8" TEE
8" GATE VALVE
STA. 17+09.1, 25.6' RT., TEE EL. (38.4)
STA. 17+08.8, 22.8' RT., VALVE EL. (39.3)
DOUBLE WATER SERVICE STA. 22+47.9, 28.1' RT.
5
54
(NOT INSTALLED)
10" 22-1/2° MJ BENDS
74
SINGLE WATER SERVICE STA. 22+62.0, 28.4' LT.
SOUTH FOREST CREEK DRIVE
12
SINGLE WATER SERVICE (TYP.) STA. 20+67.9, 28.4' RT.
55
DOUBLE WATER SERVICE STA. 19+94.9, 28.4' RT.
PUD PHASE 1
PUD PHASE 2
DOUBLE WATER SERVICE STA. 21+46.7, 28.2' LT.
73
13
WM
FM
SS

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE

POND #4

KEY MAP

99
98
97
96
95
68
67
66
65
64
63
33
34
35
36
37
29

10" PVC (DR25)

8" PVC (DR25)

FIRE HYDRANT
8"x6" MJ TEE
6" GATE VALVE

8" PVC (DR25)

HYDRANT
MJ TEE
TE VALVE

SOUTH FOREST CREEK DRIVE

PC = 15+67.48

15+67.48

15+90

JD

WM

SS

SP

EGEND

TE BOUNDARY

ROPOSED PAVEMENT

TILITY EASEMENT

ROPOSED STORM WATER

...ONDITION.

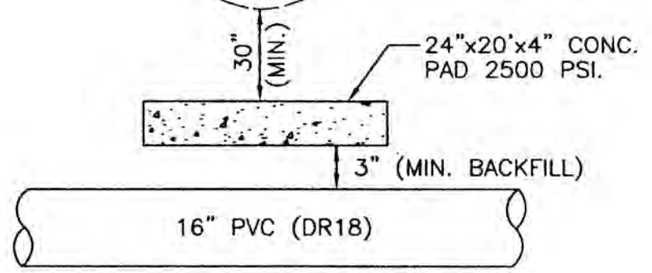
...NS AT UTILITY CROSSING
...ER MAIN (26.80)
...ORCE MAIN (29.09)

PITS SHALL BE FILLED & COMPACTED IN ACCORDANCE WITH FDOT SPECIFICATIONS.

2. MAINTENANCE OF TRAFFIC REQUIREMENTS PER FDOT INDEX 602. IT SHALL BE ALSO APPLICABLE TO THE CONSTRUCTION OF "EMERGENCY TRAFFIC SIGNALS" AS MAY BE NECESSARY.

3. DEWATERING IS REQUIRED TO CONTROL GROUNDWATER ELEVATION AROUND THE DRILLING AND RECEIVING PITS.

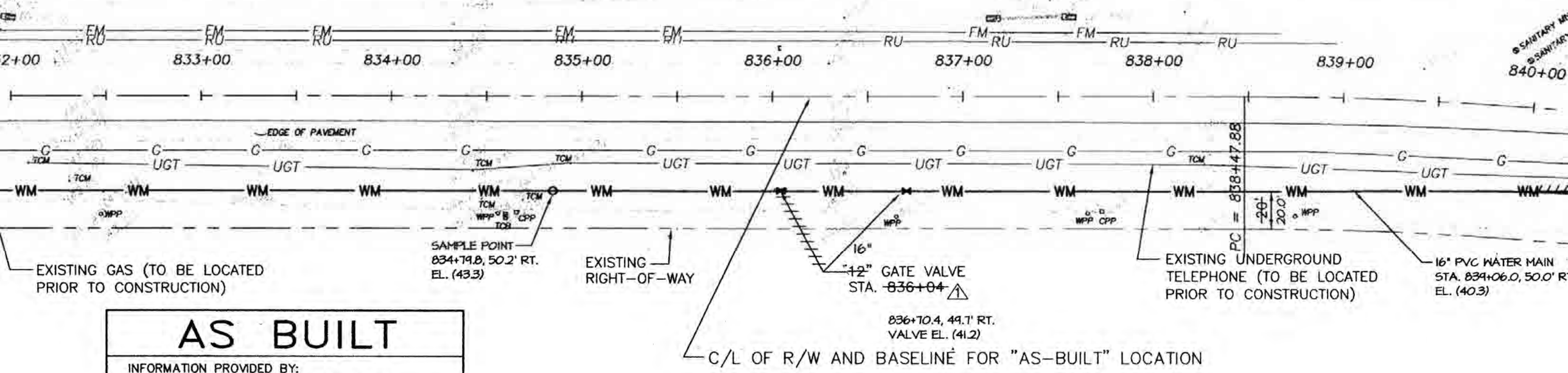
4. UNDERGROUND UTILITY LOCATION (HORIZONTAL AND VERTICAL) SHOWN IS BASED ON THE SURVEY DATA PREPARED BY RICHARD A. MILLER AND ASSOCIATES AND SOFT DIG INFORMATION BY CLARY & ASSOCIATES, INC.



DITCH CROSSING DETAIL

NTS

PRIOR TO CONSTR...



AS BUILT

INFORMATION PROVIDED BY:

NAME: VALLENCOURT CONSTRUCTION CO., INC.
DATE: FEBRUARY 16, 2004
ADDRESS: P.O. BOX 65849
ORANGE PARK, FL 32065
PHONE: (904) 291-9330

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

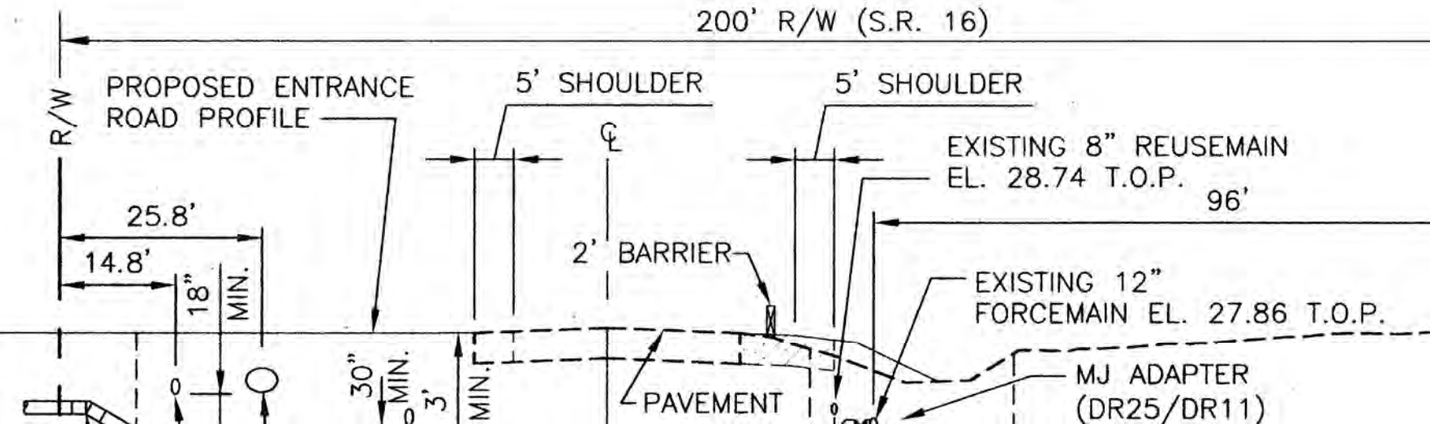
___ PAVEMENT	_✓_ WATER MAIN
___ CURB & GUTTER	___ SANITARY GRAVITY SYSTEM
___ STORM & DRAINAGE SYSTEM	_✓_ FORCE MAIN
	___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE

...42'
...00'
...14"
...5'

...8'57"W



LOCATION
CONC. ISLAND
EXISTI
PAVEM
SR 16
849+00
850+00
851+00
852+00
853+00
854+00
855+00
856+00
G
UGT
TCM
GLM
WM
WPP
CPP
EXISTING UNDERGROUND TELEPHONE (TO BE LOCATED PRIOR TO CONSTRUCTION)
16" ~~12"~~ GATE VALVE
STA. ~~852+00~~ 1
851+11.7, 48.7' RT.
VALVE EL. (41.4)
16" ~~12"~~ PVC (DR25) WATER MAIN
16" PVC WATER MAIN
STA. 854+77.0, 48.8' RT.
EL. (40.8)
SAMPLE POINT
854+94.0, 48.3' RT.
EL. (44.9)
AY
EXISTING GAS (TO BE LOCATED PRIOR TO CONSTRUCTION)
EXISTING UNDERGROUND TELEPHONE (TO BE LOCATED PRIOR TO CONSTRUCTION)
C/L OF R/W AND BASELINE FOR "AS-BUILT" LOCATION
EXISTING EDGE OF PAVEMENT
866+00
867+00
868+00
869+00
870+00
871+00
SR 16
872+00
873+00
EDGE OF PAVEMENT
XISTING TELEPHONE MH
G DRIVEWAY TO BE
ED TO EXISTING
ION.
EXISTING RIGHT-OF-WAY
SAMPLE POINT
867+97.0, 48.0' RT.
EL. (44.5)
16" ~~12"~~ GATE VALVE
STA. ~~868+00~~ 1
867+09.1, 48.4' RT.
VALVE EL. (43.9)
16" ~~12"~~ PVC (DR25) WATER MAIN
EXISTING DRIVEWAY TO BE REPAIRED TO EXISTING CONDITION.
16" PVC WATER MAIN
STA. 872+25.9, 48.5' RT.
EL. (42.2)
16" PVC WATER MAI
STA. 873+82.9, 48.4
EL. (43.0)
21.6

8" PVC FORCE MAIN
STA. 7+77.4, 23.1' LT.
EL. (33.8)

8" PVC FM
(DR18)

22.92' LT.
8" 45°MJ BEND
TOP (35.97) AB

1

9+00

12

PIPE ELEVATIONS AT UTILITY CROSSING
TOP EL. 8" FORCE MAIN (34.22)
INVERT EL. 8" PVC SEWER (36.09)

MH7

11

C/L OF R/W AND BASELINE FOR "AS-BUILT" LOCATION

S9

8+00

37.6'AB

41.3'AB

8" PVC FORCE MAIN
STA. 8+88.0, 20.0' LT.
EL. (35.2)

10

NOT INSTALLED AB
~~(2) 8" 45°~~
~~MJ BEND~~

7+00

PI SPRING RIDGE CT
STA. 0+00
PI WHISPER RIDGE DRIVE
STA. 9+66.74

9

SEE UTILITY CONFLICT
DETAILS SHEET C45

8" PLUG
INV. 32.20
25'~8"PVC (SDR35)
@ 0.40% 2

S8

4+00

5+00

6+00

MH9A

S7

MH9

S6

8" PVC FORCE MAIN
STA. 4+71.4, 22.5' LT.
EL. (31.0)

8" PVC FORCE MAIN
STA. 5+54.4, 21.2' LT.
EL. (31.6)

8" PVC FORCE MAIN
STA. 6+07.8, 20.3' LT.
EL. (31.9)

8" PVC FORCE MAIN
STA. 6+73.3, 20.7' LT.
EL. (32.0)

WHISPER RIDGE DRIVE

10+92.98AB
39.67AB
28.92AB
24.13AB

HIGH POINT ELEV = 40.09
HIGH POINT STA = 9+63.51
PVI STA = 9+30
PVI ELEV = 40.22
100' VC

LOW POINT ELEV = 39.
LOW POINT STA = 11+08
PVI STA = 11+36
PVI ELEV = 39.60
100' VC

LOW POINT ELEV = 35.10
LOW POINT STA = 5+56.44
PVI STA = 5+80
PVI ELEV = 34.90
100' VC

BVCS: 8+80
BVCE: 39.46
EVCS: 9+80
EVCE: 40.07

BVCS: 5+30
BVCE: 35.17
EVCS: 6+30
EVCE: 35.66

BVCS: 10+86
BVCE: 39.75

MH9A
STA ~~4+50.71~~ 4+50.51AB
TOP ~~35.60~~ 35.61AB
INVERT ~~32.10~~ (E) 32.10AB
INVERT ~~32.00~~ (S) 31.96AB

MH9
STA ~~6+16.89~~ 6+16.24AB
TOP ~~35.50~~ 35.47AB
INVERT ~~31.34~~ (N) 31.29AB
INVERT ~~31.24~~ (S) 31.11AB

MH6
STA ~~10+92.77~~
TOP ~~39.75~~
INVERT ~~29.24~~(N)
INVERT ~~29.14~~(S)

S7&S8

S9

S10

S11

S12

PROPOSED
℄ GRADE

-0.55%

4" WATER MAIN
(DR25)

EXISTING
GRADE

163'
~~166'~~ 2

SLOPE ~~0.40%~~ 0.41%

(DR18)
8" PVC

347'
~~349'~~ 2

SLOPE ~~0.40%~~ 0.35%

24"HDPE

8" PVC (SDR35)

125'
~~126'~~ SLOPE ~~0.40%~~ 0.67%

24"HDPE
(SDR35)
8" PVC

30"HDPE
222'
~~223'~~

36"H

SLO

-0.30%

18" MIN.

4" WATER MAIN
(DR25)

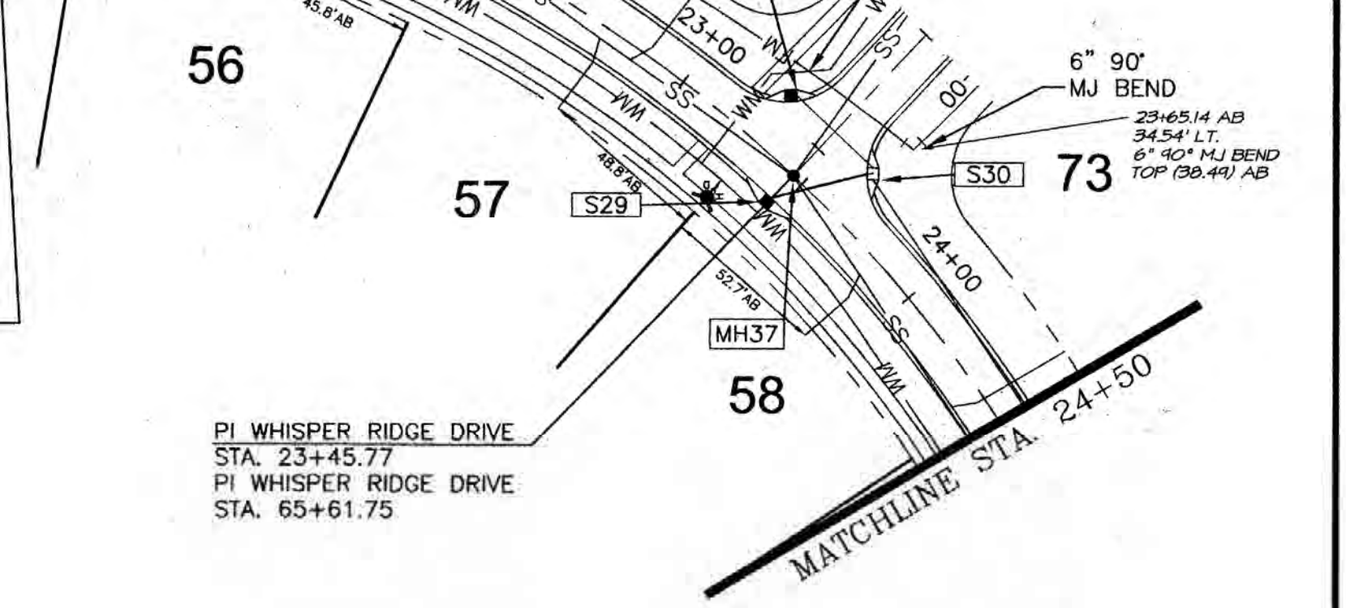
15"HDPE

30"HDPE

30"HDPE

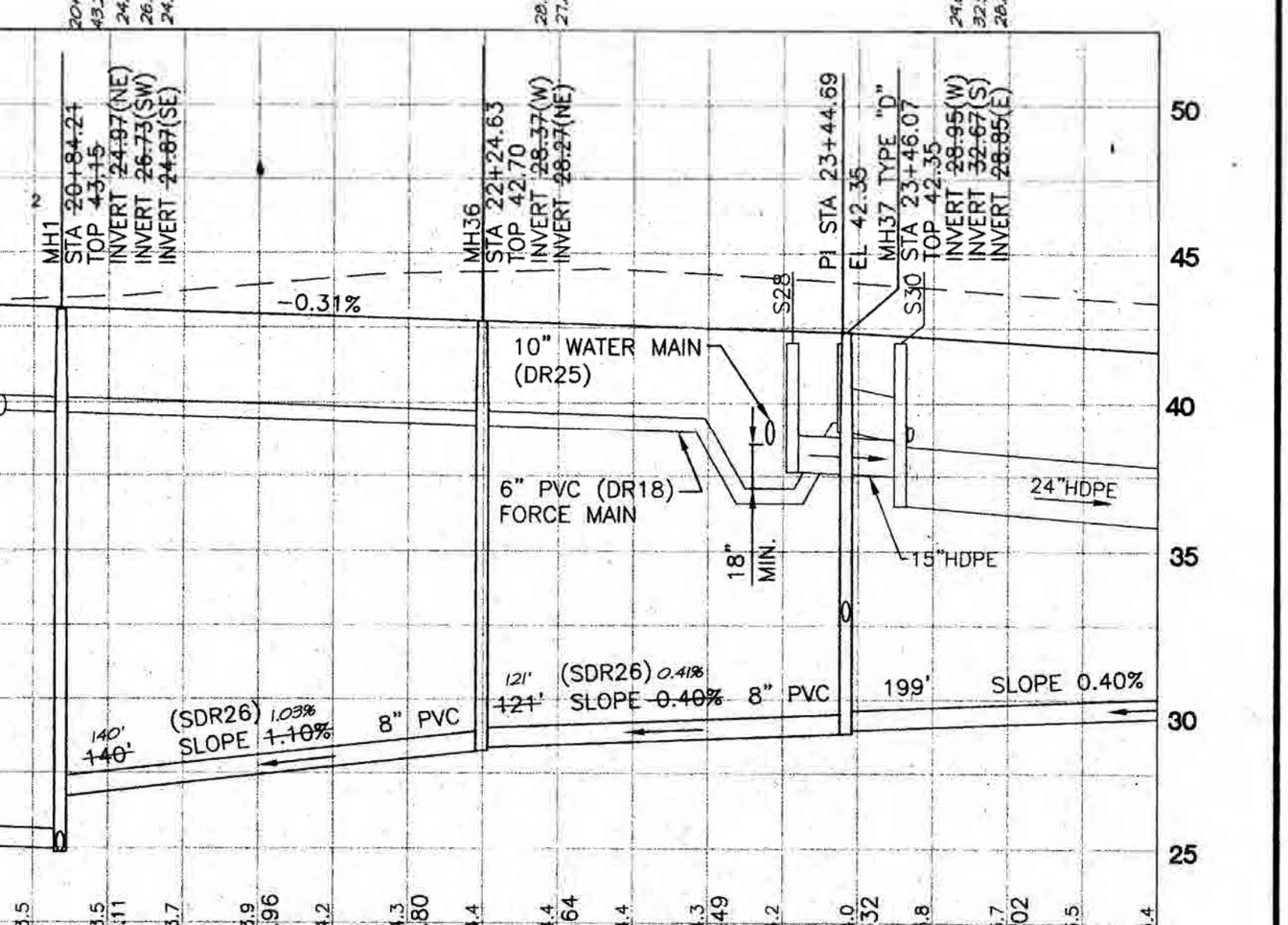
18" MIN.

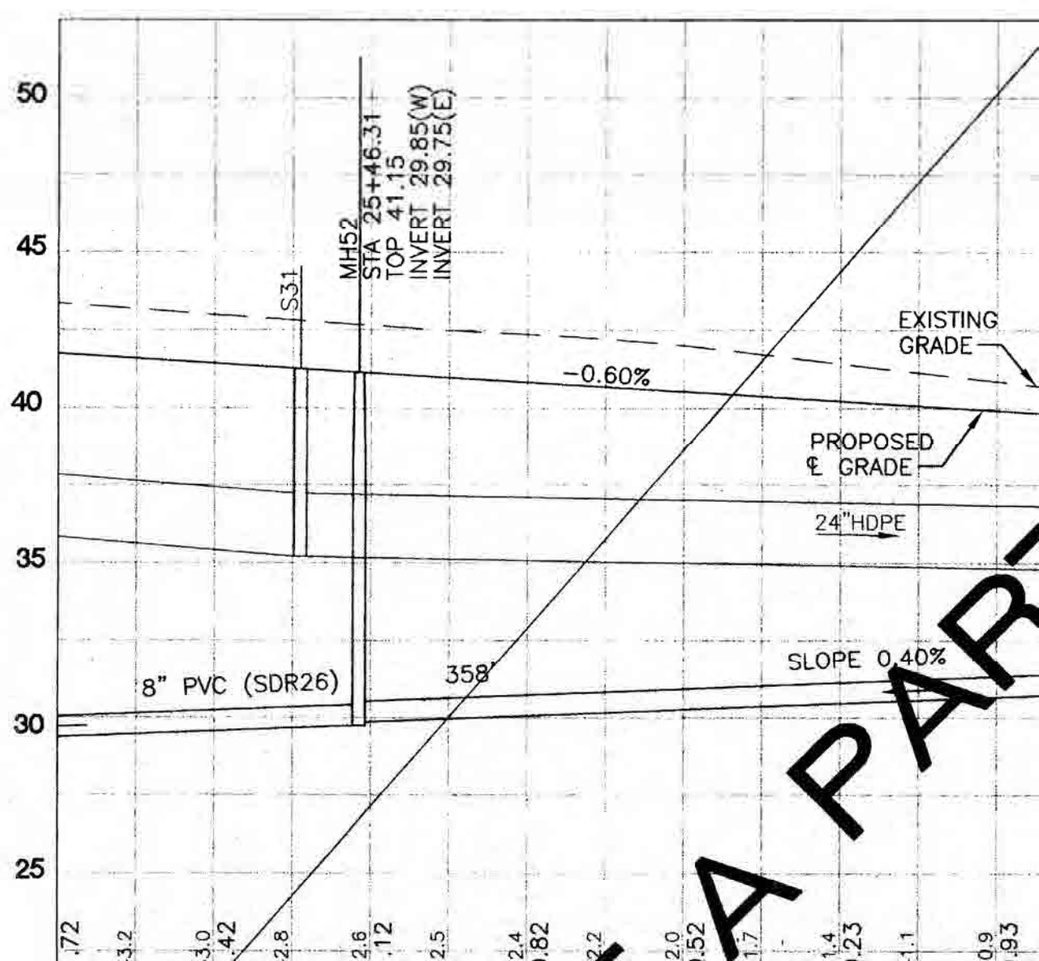
TYPE "D"
9+66.74
40.10
~~29.84~~(N)
~~36.05~~(E)
~~29.74~~(S)



DRIVE

WHISP





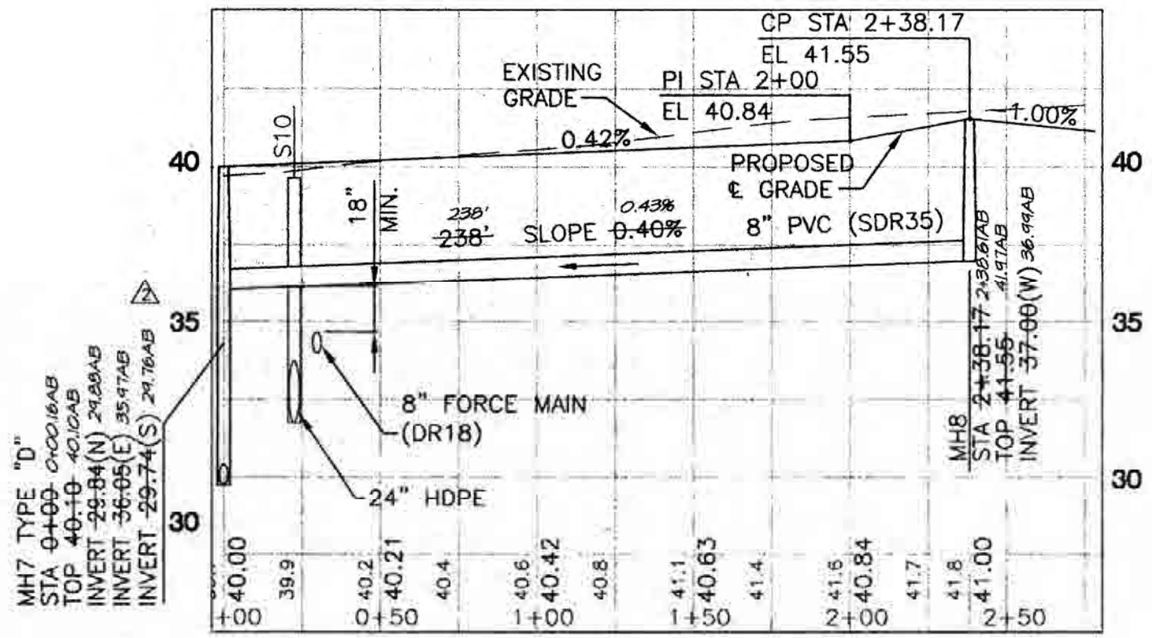
APA

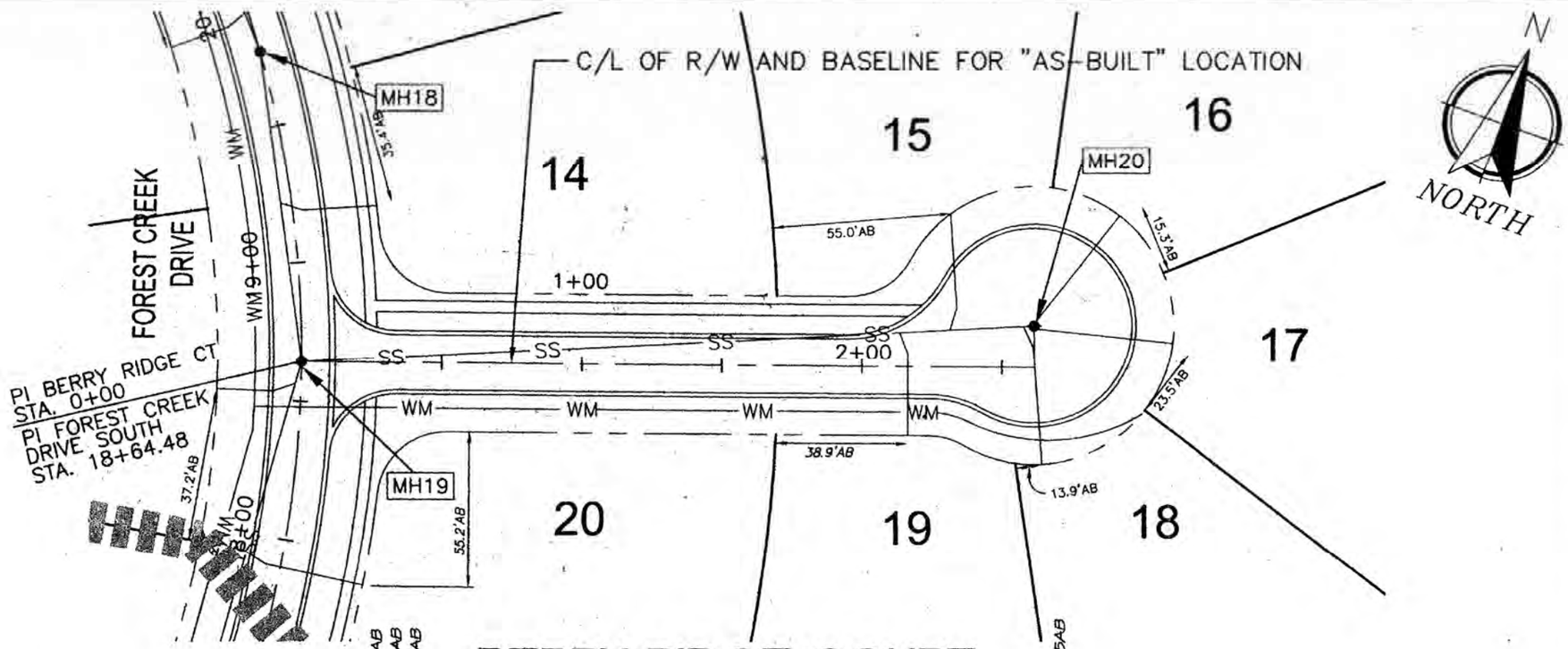
MH37

S29

WHISPER RIDGE DRIVE
+45.77
ER RIDGE DRIVE
75

SPRING RIDGE COURT





BERRY RIDGE COURT

PI BUCKHORN WAY
STA. 0+00
PI FOREST CREEK DRI
SOUTH STA. 5+01.30

INVERT EL. 8" FORCE MAIN (37.67)
TOP EL. 8" PVC SEWER (30.99)

FOREST CREEK DRIVE

PI STA 21+50.00
EL 43.45

PVI STA = 23+77
PVI ELEV = 42.50
100' VC

BVCS: 23+27
BVCE: 42.71

EVCS: 24+27
EVCE: 41.76

S16 S15 S18 S19 S131 S20 S22 S21

-0.41%

18" MIN.

18"HDPE

24"HDPE

10" WATER MAIN (DR25)

EXISTING GRADE

PROPOSED ℄ GRADE

-1.48%

15"HDPE

MH2 TYPE "D"
23+76.07AB STA ~~23+77.04~~
42.43AB TOP ~~42.50~~
26.73AB INVERT IN ~~26.67~~(NE)
28.43AB INVERT IN ~~28.52~~(NW)
30.21AB INVERT IN ~~30.38~~(SE)
26.56AB INVERT OUT ~~26.57~~(SW)

8" FORCE MAIN (DR18)

0.39% SLOPE ~~0.50%~~

8" PVC (SDR35)

372' ~~371'~~

0.43% SLOPE ~~0.40%~~

8" PVC (SDR26)

MH10
STA ~~27+48.39~~ 27+48.75AB
TOP ~~37.00~~ 36.90AB
INVERT ~~30.11~~(NW) 30.11AB
INVERT ~~30.01~~(SE) 30.04AB

MH11
STA ~~28+50.01~~ 28+50.46AB
TOP ~~35.50~~ 35.50AB
INVERT ~~30.51~~(SW) 30.47AB
INVERT ~~31.14~~(NE) 31.04AB
INVERT ~~30.51~~(SE) 30.47AB

101' 24"HDPE ~~101'~~ 0.36%

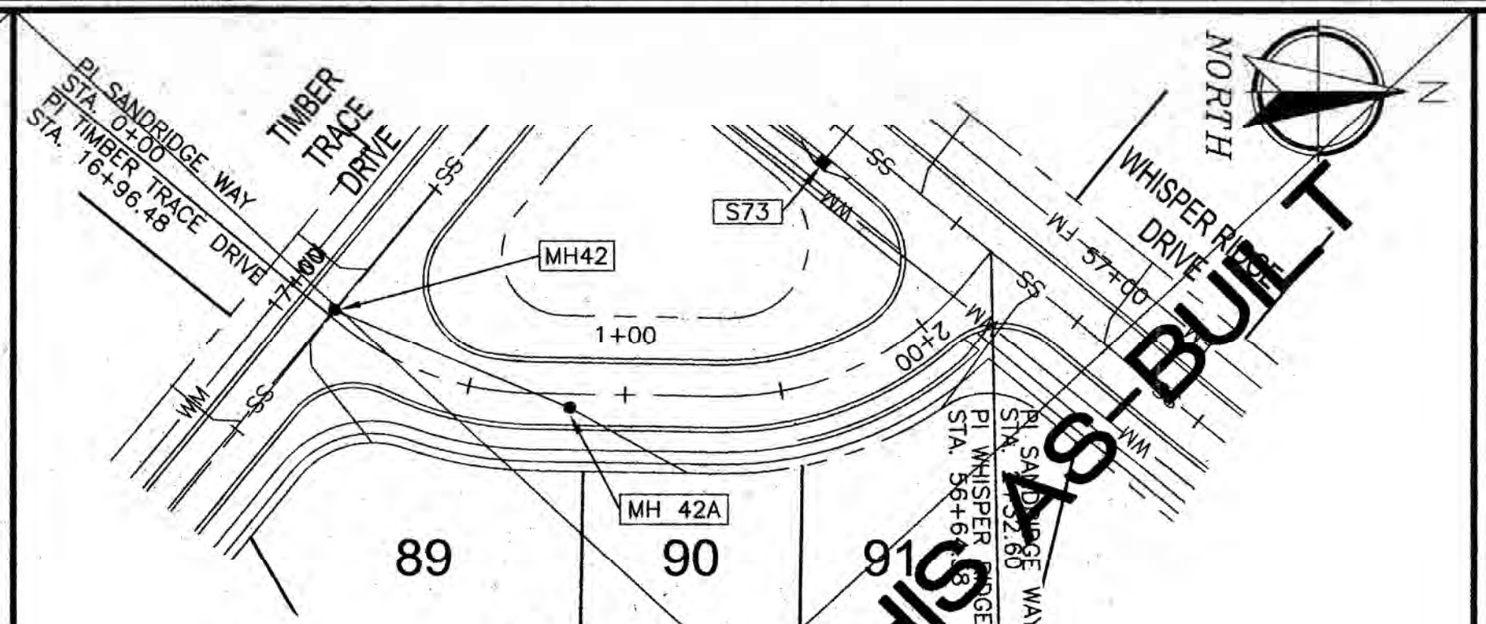
SLOPE ~~0.40%~~

8" PVC (SDR35)

24"HDPE

21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00	26+50	27+00	27+50	28+00	28-
44.3 43.44	44.1	43.8 43.23	43.6	43.3 43.03	43.1	42.8 42.82	42.6	42.4 42.58	42.1	42.39	42.0 42.12	41.8 41.79	41.6 41.42	41.4	41.2 40.68	41.0	40.8 39.94	40.3	40.0 39.20	39.6	39.3 38.46	39.0	38.6 37.72	38.3	37.9 36.98	37.6	37.2 36.24	36.9	36.5

45
40
35



MH42
STA 00+00.00
TOP 48.40
INVERT 38.41(SE)
INVERT 40.02(NE)
INVERT 38.31(NW)

MH42A
STA 0+~~52.60~~
TOP ~~48.65~~
INVERT ~~41.00~~(SW)

50 50

AS BUILT

INFORMATION PROVIDED BY:
NAME: VALLENCOURT CONSTRUCTION CO., INC.
DATE: FEBRUARY 16, 2004
ADDRESS: P.O. BOX 65849
ORANGE PARK, FL 32065
PHONE: (904) 291-9330

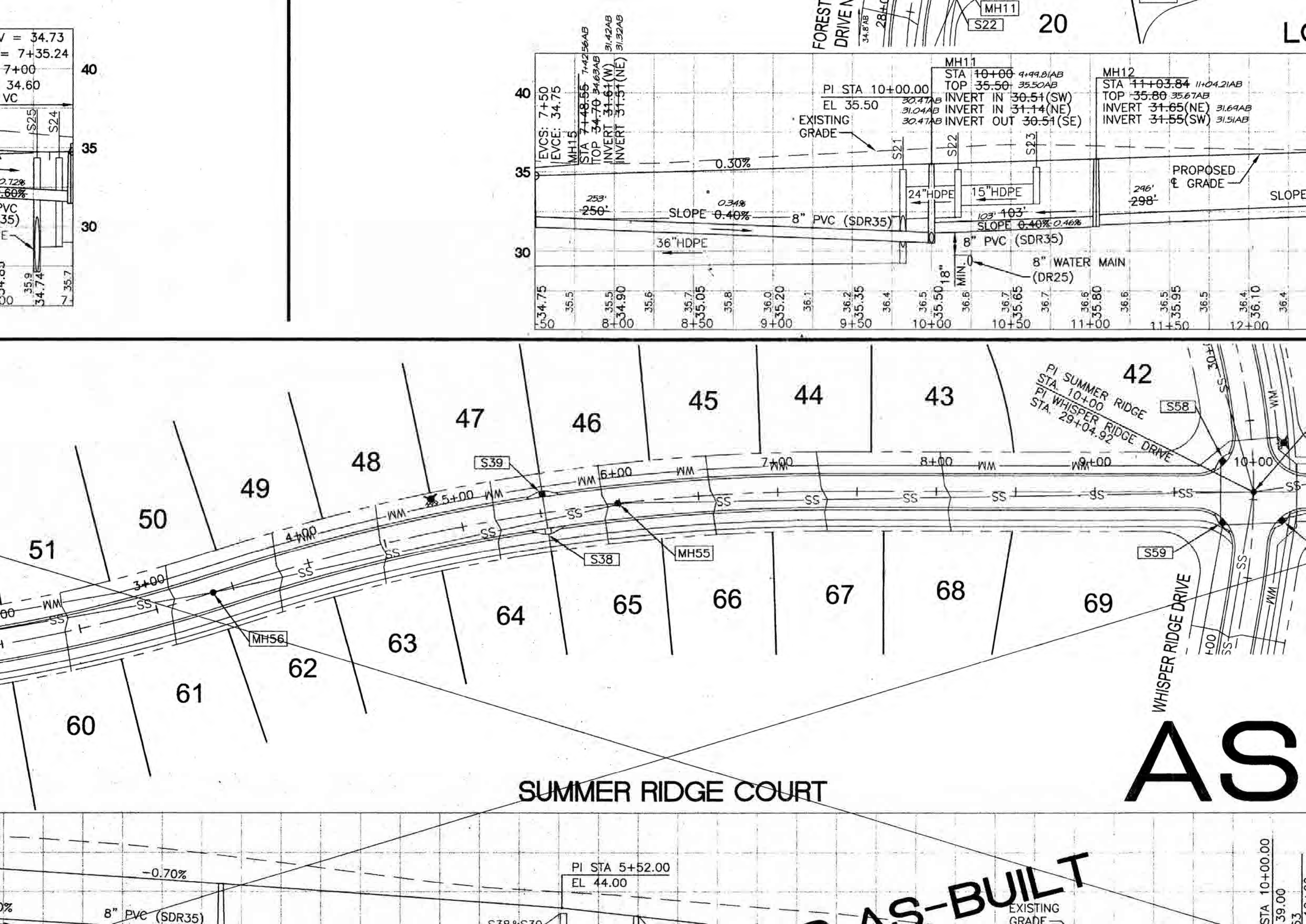
I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

___ PAVEMENT	___ WATER MAIN
___ CURB & GUTTER	X SANITARY GRAVITY SYSTEM
___ STORM & DRAINAGE SYSTEM	X FORCE MAIN
	___ LIFT STATION

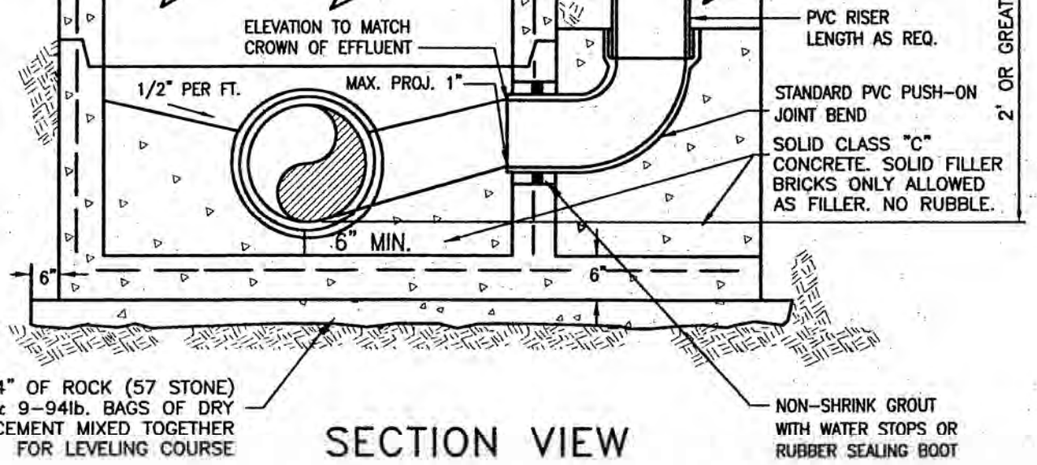
ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE

AS BUILT



MH11
S22
20
FOREST DRIVE
MH11
STA 10+00 9+99.81AB
TOP 35.50 35.50AB
INVERT IN 30.51(SW) 30.47AB
INVERT IN 31.14(NE) 31.04AB
INVERT OUT 30.51(SE) 30.47AB
MH12
STA 11+03.84 11+04.21AB
TOP 35.80 35.67AB
INVERT 31.65(NE) 31.69AB
INVERT 31.55(SW) 31.51AB
PI STA 10+00.00
EL 35.50
EXISTING GRADE
EVCS: 7+50
EVCE: 34.75
MH15
STA 7+48.55 7+42.56AB
TOP 34.70 34.63AB
INVERT 31.61(W) 31.42AB
INVERT 31.51(NE) 31.32AB
0.30%
S21
S22
S23
24"HDPE
15"HDPE
PROPOSED ℄ GRADE
SLOPE
253'
250'
SLOPE 0.40% 0.34%
8" PVC (SDR35)
36"HDPE
103' 103'
SLOPE 0.40% 0.46%
8" PVC (SDR35)
296'
298'
18" MIN.
8" WATER MAIN (DR25)
S25
S24
0.72%
0.60%
PVC
35)
34.73
7+35.24
7+00
34.60
VC
42
43
44
45
46
47
48
49
50
51
60
61
62
63
64
65
66
67
68
69
PI SUMMER RIDGE STA. 10+00
PI WHISPER RIDGE DRIVE STA. 29+04.92
S58
S39
S38
MH55
MH56
S59
WHISPER RIDGE DRIVE
SUMMER RIDGE COURT
AS
-0.70%
PI STA 5+52.00
EL 44.00
8" PVC (SDR35)
S38&S39
EXISTING GRADE
AS-BUILT
STA 10+00.00
39.00

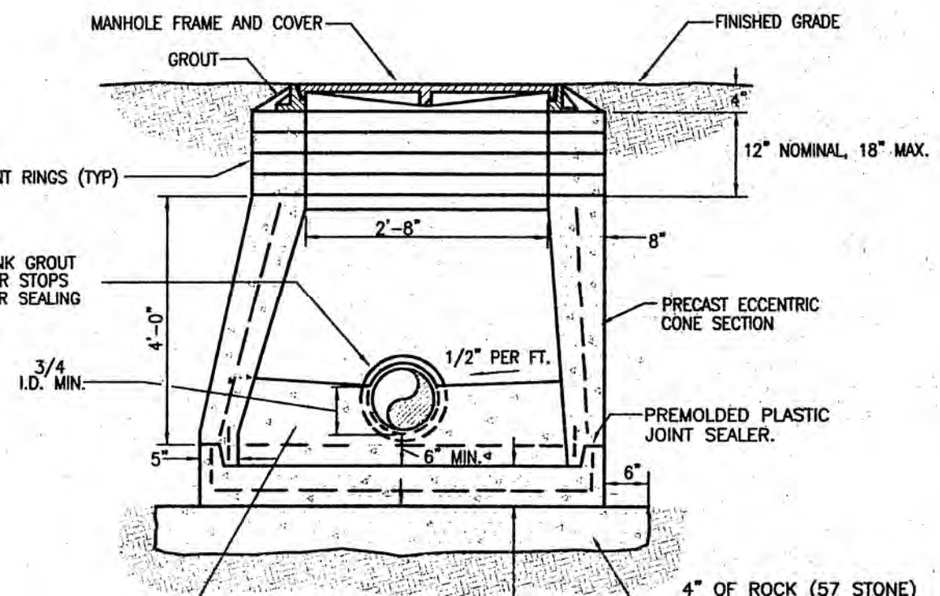


SECTION VIEW

INTERIOR AND EXTERIOR OF MANHOLE AND ADJUSTMENT RINGS SHALL BE GIVEN TWO COATS OF MINOUS WATERPROOFING MATERIAL. DO NOT COAT JOINT OR PIPE OPENING SURFACES.
PECIALITY LINER IS TO BE INSTALLED ON INSIDE OF MANHOLE, BITUMINOUS WATERPROOFING MATERIAL L BE OMITTED ON INTERIOR.
"D" MANHOLE MUST BE USED FOR 2' OR GREATER INFLUENT DROP AND FOR MULTIPLE DROPS.
CAST MANHOLE SECTIONS TO BE MANUFACTURED IN ACCORDANCE WITH LATEST EDITIONS OF ASTM C478
4000 LB. CONCRETE, TYPE II CONCRETE
MANHOLES WITH THREE (3) OR MORE INVERTS ARE REQUIRED TO BE LINED
AGRU GRIP OR SPECTRA SHIELD PER S.J.C.U.D. SPECIFICATIONS.

SECTION-STANDARD EXTERIOR DROP MANHOLE (TYPE "D")

CHARLES BASSETT & ASSOCIATES, INC.
SURVEYORS – ENGINEERS – LAND PLANNERS
200 CENTURY 21 DRIVE
JACKSONVILLE, FLORIDA 32216
PHONE (904) 724-9433



AS BUILT

INFORMATION PROVIDED BY:
NAME: VALLENCOURT CONSTRUCTION CO., INC.
DATE: FEBRUARY 16, 2004
ADDRESS: P.O. BOX 65849
ORANGE PARK, FL 32065
PHONE: (904) 291-9330

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

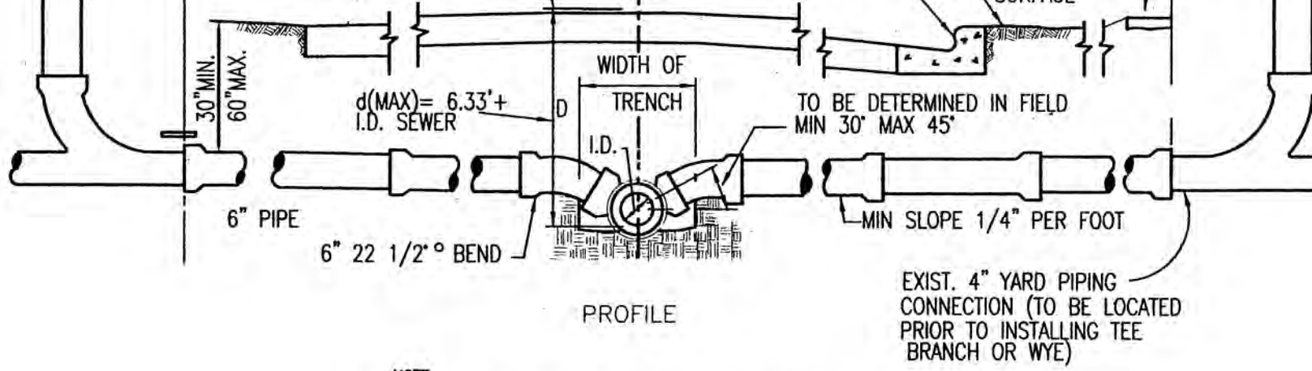
____ PAVEMENT	✓ WATER MAIN
____ CURB & GUTTER	✓ SANITARY GRAVITY SYSTEM
____ STORM & DRAINAGE SYSTEM	✓ FORCE MAIN
	____ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE

AS BUILT

INFORMATION PROVIDED BY:
NAME: CHARLES BASSETT & ASSOCIATES, INC.
DATE: FEBRUARY 16, 2004
ADDRESS: 200 CENTURY 21 DRIVE

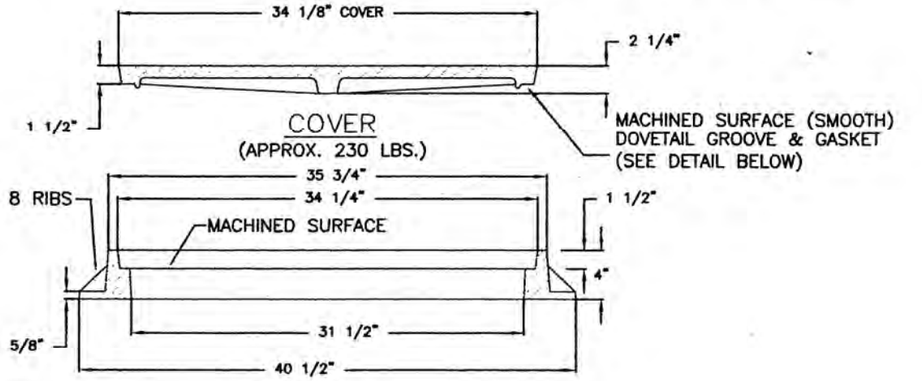


PROFILE

NOTE:
1) CLEAN OUTS SHALL BE INSTALLD BY THE UTILITY CONTRACTOR IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2) LOCATE SINGLE LATERAL IN THE CENTER OF PROPERTY LOT LINE .
3) INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4) DOUBLE WYE SHALL NOT BE USED FOR St. JOHNS COUNTY UTILIY DEPARTMENT OWNED OR OPERATED SYSTEMS.

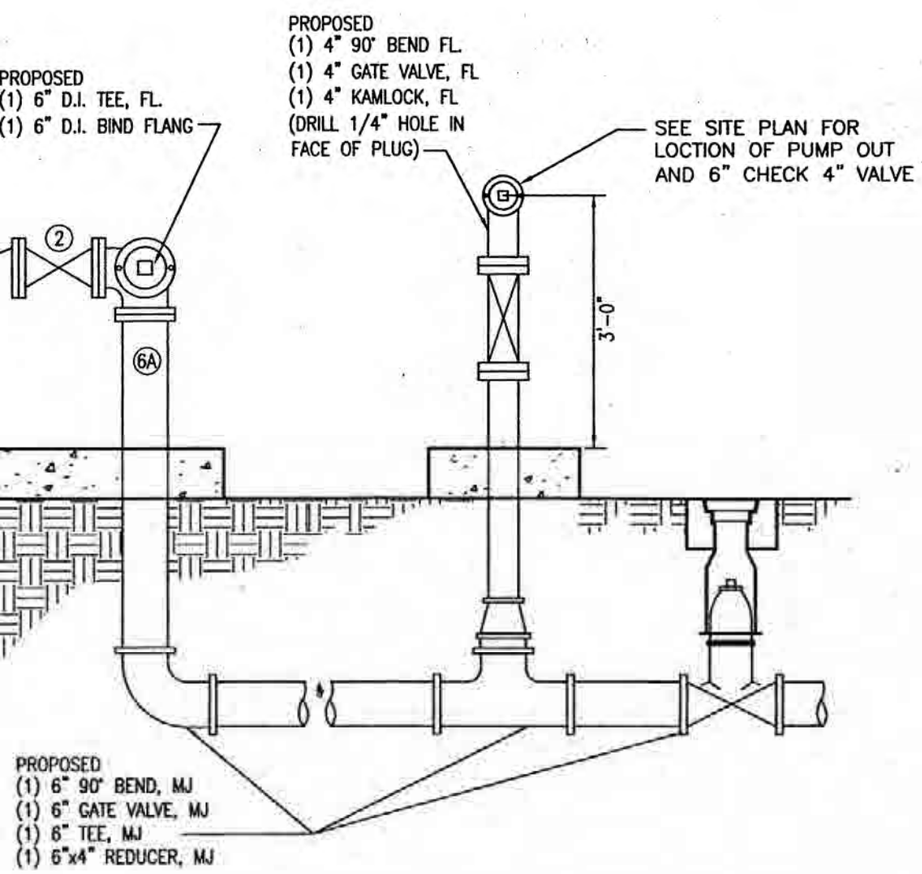
SERVICE LATERAL

NOTES:
1) MATERIAL: ASTM-A48 CLASS 35B GRAY IRON
2) RING WGT. 230 LBS. APPROX.
3) COVER WGT. 230 LBS. APPROX.
5) ALL DIMENSIONS ARE SHOWN IN INCHES



COVER
(APPROX. 230 LBS.)

FRAME



IPE ROTATED
OR CLARITY

AS BUILT

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____ PAVEMENT	____ WATER MAIN
____ CURB & GUTTER	____ SANITARY GRAVITY SYSTEM
____ STORM & DRAINAGE SYSTEM	____ FORCE MAIN
	___✓___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE _____

AS BUILT

INFORMATION PROVIDED BY:

NAME: CHARLES BASSETT & ASSOCIATES, INC.
DATE: FEBRUARY 16, 2004

WETWELL SPECIFICATIONS

THE INTERIOR OF THE WET WELL SHALL BE COATED WITH SPECTRASHIELD. THE SURFACE OF THE EXISTING WET WELL SHALL FIRST BE PREPARED BY GROUTING THE WELL AS REQUIRED TO OBTAIN A SMOOTH SURFACE.

STATION 1
MECHANICAL EQUIPMENT SCHEDULE

1. 6" CHECK VALVE, MUELLER OR M&H SWING-TYPE, LEVER & SPRING OPERATED, IRON BODY, BRONZE MOUNTED
2. 6" PLUG VALVE, DEZURIK, CAST IRON BODY, LEVER ACTUATED
2A. PRESSURE SENSOR, RED VALVE, SERIES 40, STAINLESS STEEL 304 BODY FLANGES & VITON SENSING SLEEVE
3. 6" STAINLESS STEEL 316L TEE
4. 6" STAINLESS STEEL SHORT RADIUS 90° BEND
5. 6" STAINLESS STEEL 45° BEND
6. 6" STAINLESS STEEL PIPE
6A. 6" DUCTILE IRON PIPE
7. 6" STAINLESS STEEL PUMP BASE
8. 8" INFLUENT PIPE, SDR-18 PVC
9. 6' DIAMETER PRECAST CONCRETE WETWELL, MINIMUM WALL THICKNESS 7" (ASTM C-478)
10. FLYGT PUMP MODEL NO. C-3152, IMPELLER NO. 454, HP 20, 1750 RPM. 3 PHASE, 230 VOLTS (AS APPROVED BY ST.JOHNS COUNTY UTILITY DEPT.
11. ALUMINUM WETWELL ACCESS COVER WITH A _____" x _____" CLEAR DIMENSION AND RECESSED LOCK. MODEL NO. _____ (H-20 LOADING)
12. STAINLESS STEEL GUIDE RAILS
13. LEVEL TRANSDUCER PROVIDED BY PUMP MANUFACTURE
14. PUMP MOTOR CABLE
15. 4" SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE SCREEN
16. STAINLESS STEEL CABLE HOLDER
17. (2) EMERGENCY HIGH LEVEL LIQUID LEVEL SENSORS (ROTO FLOATS TYPE S NO. SPST 120V AC 125 V.A. DIRECT ACTING SUSPENDED)
18. 12" BOTTOM SLAB OVER HANG
19. 12" BOTTOM SLAB THICKNESS

BYPASS LINE:

20. 4" - 90° BEND STAINLESS STEEL
21. 4" - 45° BEND STAINLESS STEEL
22. 4" SCHEDULE 80 STAINLESS STEEL PIPE, LENGTH VARIES.

STATION 2
MECHANICAL EQUIPMENT SC

1. 6" CHECK VALVE, MUELLER OR M&H SWING-TYPE OPERATED, IRON BODY, BRONZE MOUNTED
2. 6" PLUG VALVE, DEZURIK, CAST IRON BODY, LEVE
2A. PRESSURE SENSOR, RED VALVE, SERIES 40, STAINLES FLANGES & VITON SENSING SLEEVE
3. 6" STAINLESS STEEL 316L TEE
4. 6" STAINLESS STEEL SHORT RADIUS 90° BEND
5. 6" STAINLESS STEEL 45° BEND
6. 6" STAINLESS STEEL PIPE
6A. 6" DUCTILE IRON PIPE
7. 6" STAINLESS STEEL PUMP BASE
8. 8" INFLUENT PIPE, SDR-18 PVC
9. 6' DIAMETER PRECAST CONCRETE WETWELL, MINIM
10. FLYGT PUMP MODEL NO. C-3152, IMPELLER NO. 4 (AS APPROVED BY ST.JOHNS COUNTY UTILITY DEPT
11. ALUMINUM WETWELL ACCESS COVER WITH A _____ DIMENSION AND RECESSED LOCK. MODEL NO. ____
12. STAINLESS STEEL GUIDE RAILS
13. LEVEL TRANSDUCER PROVIDED BY PUMP MANUFACT
14. PUMP MOTOR CABLE
15. 4" SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE
16. STAINLESS STEEL CABLE HOLDER
17. (2) EMERGENCY HIGH LEVEL LIQUID LEVEL SENSOR NO. SPST 120V AC 125 V.A. DIRECT ACTING SUSP
18. 12" BOTTOM SLAB OVER HANG
19. 12" BOTTOM SLAB THICKNESS

BYPASS LINE:

20. 4" - 90° BEND STAINLESS STEEL
21. 4" - 45° BEND STAINLESS STEEL
22. 4" SCHEDULE 80 STAINLESS STEEL PI

2005 MWS Jehovahs Witness

State Road 16 Water-Sewer

As Built Drawings

AS-BUILT SURVEY FOR
NORTH CONGREGATION OF JEHOVAH'S WITNESS

POINT OF COMMENCMENT
N.E. CNR. GOV'T LOT 4 &
N.W. CNR. SEC. 6

S 33°05'00" W 100.19'

S 56°58'07" E 552.81'

P/O GOV'T LOT 4

N 12°47'13" E 412.38'

4' CHAINLINK

S 12°47'13" W 71.75'
TO JURISDICTIONAL LINE

N 88°04'04" E 200.00'

NORTHERLY Y SECTION LINE

S 06°21'57" W 571.00'

N 54°17'51" W 188.85'
A=186.91', R=2028.32'

N 56°58'07" W 90.08'

POINT OF BEGINNING

END SECTION
=43.67

END SECTION
=43.76

LIGHT POLE (TYPICAL)

WOOD POWER POLE W/ GUY WIRE (TYP.)

OHE

TOP OF BANK

EDGE OF WATER

BOTTOM ELEV.=37.2 ON 2-9-07

POND

WATER END SECTION
INV=42.76'

CATCH BASIN
TOP=46.67'
S.O.I.=44.80'
INV.=44.18'
6" ORIFICE=44.76

WATER END SECTION
INV.=44.11'

ELECTRIC BOX

CATCH BASIN
TOP=46.20'
EAST INV.=43.03'
SOUTH INV.=42.81'
NORTH INV.=42.67'

18" RCP

12" PVC

CONCRETE PARKING

8" HEADER CURB (TYPICAL)

142.7'

CATCH BASIN
TOP=46.55'
NORTH INV.=43.57'

CATCH BASIN
TOP=46.40'
WEST INV.=44.21'
SOUTH INV.=44.09'

DETAIL A

FIRE HYDRANT

GATE VALVE

WATER VALVE

2" STEEL

BACK FLOW PREVENTER

ELECTRIC BOX

2" WATER MAIN

102.1'

COVERED CONCRETE

94.00'

48.00'

1 STORY STUCCO
FINISHED FLOOR = 48.50'

94.00'

48.0'

.70" CONC. WALL

STUCCO SHED

CLEAN OUT (TYPICAL)

A/C

TRANSFORMER PAD

POWER PANEL

DETAIL B

124.6'

2" WATER MAIN

4" FORCE MAIN

METER PANEL

VALVE BOX
FORCE MAIN = 45.6'

WET WELL
TOP=47.70'
BOTTOM=39.68'
INV=45.07'

4" CHECK VALVE BOX
FORCE MAIN = 42.8'

WET WELL

CONC.

POWER PANEL

4" PVC

TOP=47.70'
INV=45.07'

BOT=39.38'

P/O GOV'T LOT 4

2006 MWS Calvary Baptist Church

Water-Sewer

As Built Drawings

CONTRACTOR'S FAILURE TO
HALL BE REPAIRED AT THE

SERVICE INTERRUPTIONS AT
R IN WHICH THIS IS
THE DISCRETION OF THE
QUIREMENTS OF THE CONTRACT
E SERVICE SHALL BE LEFT
WORK DAY.

N AND PROFILES ARE FROM
OR ALONG THE CENTER LINE OF

NO LESS THAN A 6 INCH
OTHER THAN WATER MAINS WHICH
ARTMENT PERMIT CONDITIONS.

AWINGS REFER TO THE CENTERLINE
INDICATED.

LOWED BY EXCEPTION, SHALL NOT
COMMENDED BY THE
TYPE OF JOINT.

LAND SURVEYOR, REGISTERED IN
ENCE AND RESTORE PROPERTY
MAY BE DISTURBED BY
OCATIONS ARE AVAILABLE FROM
NG DIVISION.

TATION AND RAILROAD
IN ADVANCE OF CONSTRUCTION
CONDITIONS.

PPLICABLE UTILITY CONTACT
WEEK PRIOR TO CONSTRUCTION OF
EAS.

ALL DITCHES, SWALES, CULVERTS,
TS AND ANY OTHER DRAINAGE
BY THE CONSTRUCTION
TEMS SHALL BE INCLUDED IN THE
NSTALLING ANY NEW ITEM CAUSING

WATER SERVICE LINES MAY NOT
HE LOCATION OF PROPOSED NEW
N THE FIELD.

COUNTY UTILITY DEPT. STANDARD SPECIFICATIONS & DETAILS AND ANY OTHER STANDARDS, LISTED OR REFERENCED, ARE INCLUDED IN THE PROJECT DOCUMENTS.

14. TREE PROTECTION SHALL BE IN ACCORDANCE WITH ST JOHNS COUNTY ORDINANCE CODE AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS.

15. INSTALL BLUE ROAD REFLECTORS IN THE CENTER OF THE ROADS/DRIVEWAYS IN FRONT OF FIRE HYDDRANTS ACCORDING TO ST JOHNS COUNTY FIRE SERVICES STANDARD.

16. FIRE LANES SHALL BE MARKED WITH FREESTANDING SIGNS WITH THE WORDING "NO PARKING FIRE LANE BY ORDER OF THE FIRE DEPARTMENT." SUCH SIGNS SHALL BE 12 INCHES BY 18 INCHES WITH WHITE BACKGROUND AND RED LETTERS AND SHALL BE A MAXIMUM OF 7 FEET IN HEIGHT FROM THE ROADWAY TO THE BOTTOM PART OF THE SIGN. THE SIGNS SHALL BE WITHIN SIGHT OF THE TRAFFIC FLOW AND BE A MAXIMUM OF 60 FEET APART.

17. NO OPEN CUTTING OF ANY RIGHT OF WAY PAVEMENT PERMITTED; BORE AND JACK, OR DIRECTIONAL BORE UNDER PAVEMENT.

18. A SEPARATE FIRE MARSHALL'S PERMIT IS REQUIRED FOR ANY UNDERGROUND WATER MAIN THAT SUPPLIES FIRE PROTECTION SYSTEMS. THIS REQUIREMENT DOES NOT APPLY TO THOSE PORTIONS OF WATER MAINS THAT SUPPLY BOTH DOMESTIC AND FIRE PROTECTION SYSTEMS.

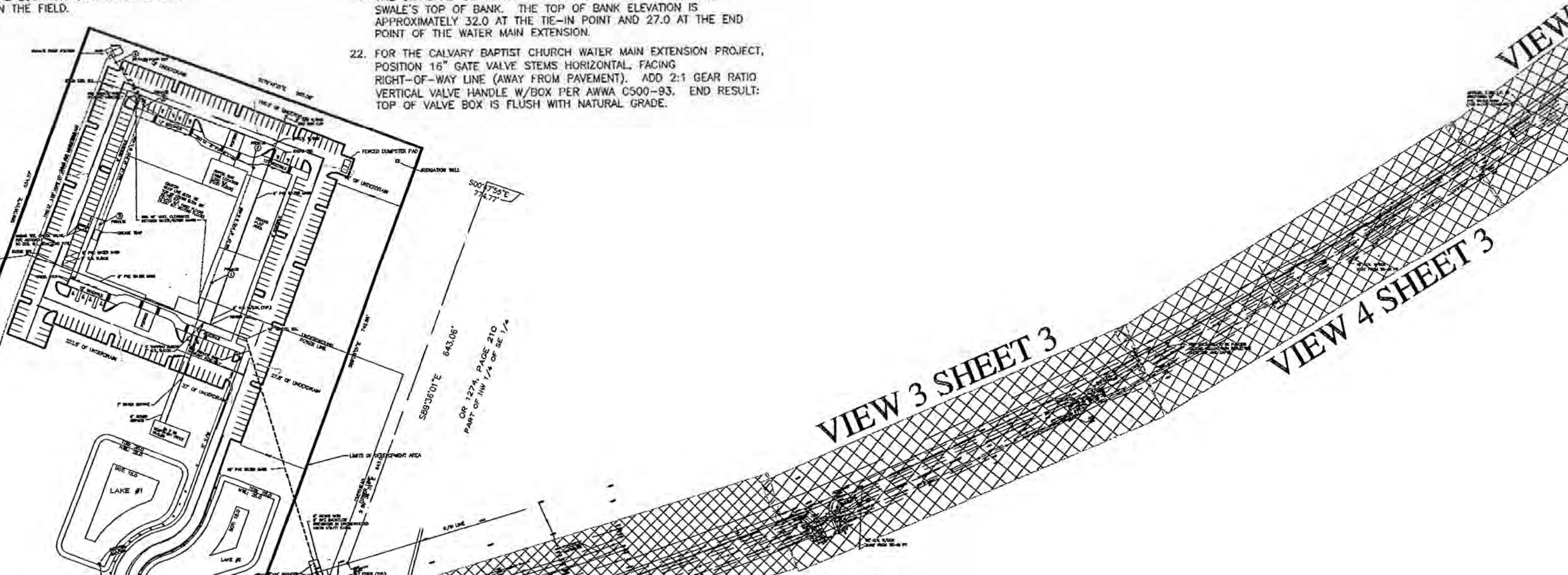
19. CONTRACTORS INSTALLING THE UNDERGROUND PIPING SUPPLYING A FIRE PROTECTION SYSTEM MAY BE REQUIRED TO HAVE A CLASS I, II, OR V FIRE PROTECTION CONTRACTORS LICENSE PURSUANT TO CHAPTER 633, FLORIDA STATUTES. GENERAL CONTRACTORS ARE RESPONSIBLE FOR VERIFYING THAT THEIR SUBCONTRACTORS HOLD THE REQUIRED LICENSES. CONTRACTORS FOUND TO BE VIOLATING THIS REQUIREMENT MAY BE REPORTED TO THE DEPT. OF BUSINESS AND PROFESSIONAL REGULATION AND/OR THE STATE FIRE MARSHALL'S REGULATORY LICENSING SECTION.

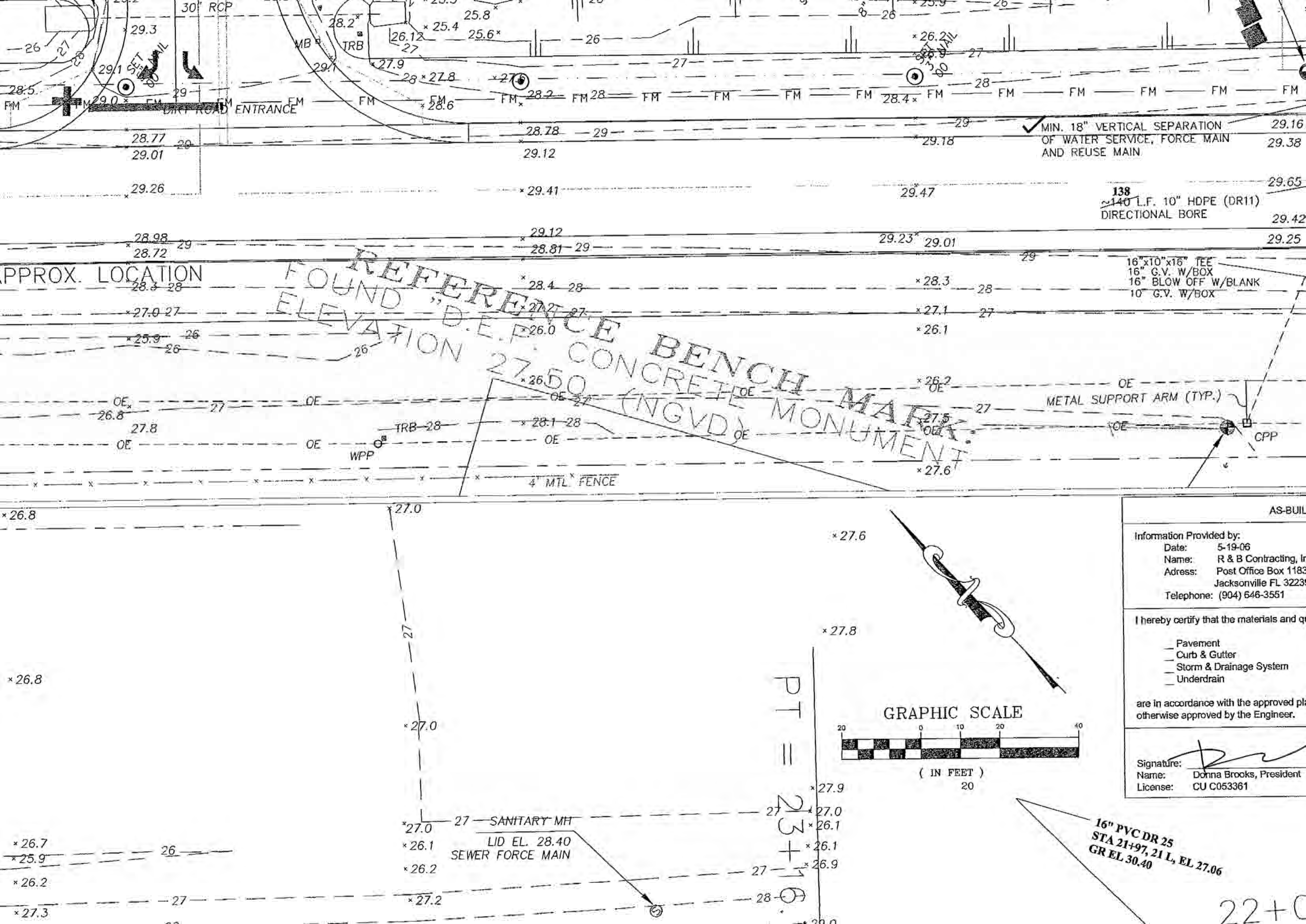
20. SEED OR SOD, THEN MULCH DISTURBED RIGHT-OF-WAY UNTIL VEGETATION IS RESTABLISHED PER FDOT STANDARDS.

21. THE STANDARD SWALE DESIGN WATER LEVEL IS 1' BELOW THE SWALE'S TOP OF BANK. THE TOP OF BANK ELEVATION IS APPROXIMATELY 32.0 AT THE TIE-IN POINT AND 27.0 AT THE END POINT OF THE WATER MAIN EXTENSION.

22. FOR THE CALVARY BAPTIST CHURCH WATER MAIN EXTENSION PROJECT, POSITION 16" GATE VALVE STEMS HORIZONTAL, FACING RIGHT-OF-WAY LINE (AWAY FROM PAVEMENT). ADD 2:1 GEAR RATIO VERTICAL VALVE HANDLE W/BOX PER AWWA C500-93, END RESULT: TOP OF VALVE BOX IS FLUSH WITH NATURAL GRADE.

FM —— FM ——




30" RCP
DIRT ROAD ENTRANCE
SET NAIL
SET NAIL
MIN. 18" VERTICAL SEPARATION OF WATER SERVICE, FORCE MAIN AND REUSE MAIN
138
~~140~~ L.F. 10" HDPE (DR11) DIRECTIONAL BORE
16"x10"x16" TEE
16" G.V. W/BOX
16" BLOW OFF W/BLANK
10" G.V. W/BOX
APPROX. LOCATION
REFERENCE BENCH MARK
FOUND "D.E.P." CONCRETE MONUMENT
ELEVATION 27.50 (NGVD)
METAL SUPPORT ARM (TYP.)
CPP
WPP
TRB
MB
4' MTL. FENCE
SANITARY MH
LID EL. 28.40
SEWER FORCE MAIN
PT = 23+76.
22+0
GRAPHIC SCALE
(IN FEET)
20
16" PVC DR 25
STA 21+97, 21 L, EL 27.06
GR EL 30.40
AS-BUIL
Information Provided by:
Date: 5-19-06
Name: R & B Contracting, In
Adress: Post Office Box 1183
Jacksonville FL 3223
Telephone: (904) 646-3551
I hereby certify that the materials and qu
_ Pavement
_ Curb & Gutter
_ Storm & Drainage System
_ Underdrain
are in accordance with the approved pla
otherwise approved by the Engineer.
Signature:
Name: Donna Brooks, President
License: CU C053361

EL 27.56

EL 27.24

16" GATE VALVE
STA 19+25, 23 L, EL 27.25
GR EL 30.53

+31.41

+30.6

+26.9

+26.1

+26.8

+28.8

+28.4

27.5+

26.8+

27.1+

26.9+

28.5+

29.1+

16" PVC DR 25
STA 11+36, 24 L, EL 28.62
GR EL 32.01

16" GATE VALVE
STA 9+98, 24 L, EL 29.29
GR EL 32.26

16" SLEEVE
STA 10+02, 24 L, EL 29.12
GR EL 32.16

+32.25

+32.0

+27.8

+26.7

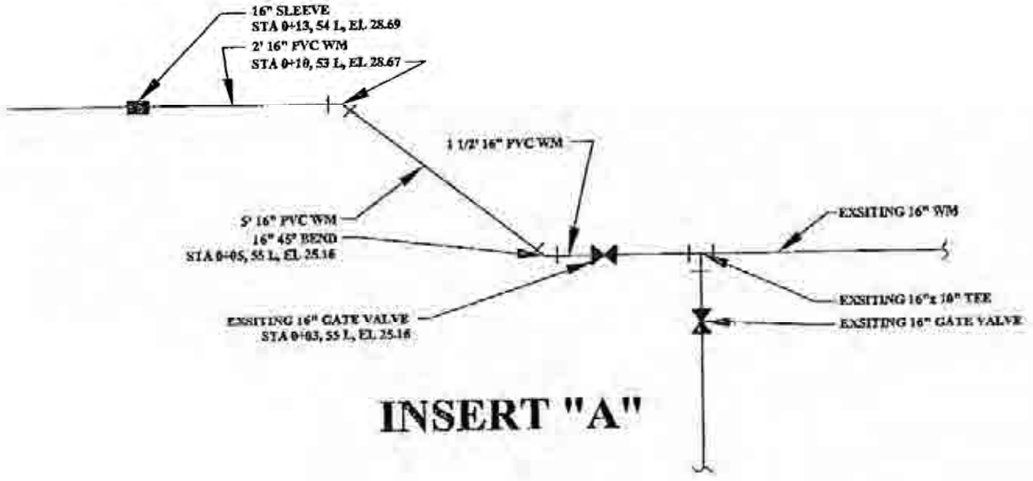
+26.9

13+00

12+00

11+00

10+



INSERT "A"

528
533 L.F. OF 16" PVC WATER MAIN FROM TIE-IN POINT TO ELBOW (PER SJCUD STANDARDS)

1+00

0+00

STATIONING START POINT
0+00.00
70' L

EXISTING 16 X 10" TEE

EXISTING 10" GATE VALVE

EX. INLET 33.33
NW INV 29.14
SE INV 29.17

EX. M.E.S. 31.98
NW INV 28.59

EX. 30"RCP

EX. M.E.S. 32.79
SE INV 29.49

EX. 32.18
WATER METER

EXISTING 10" WATER MAIN

EX. SIGNS

EX. SIGNS

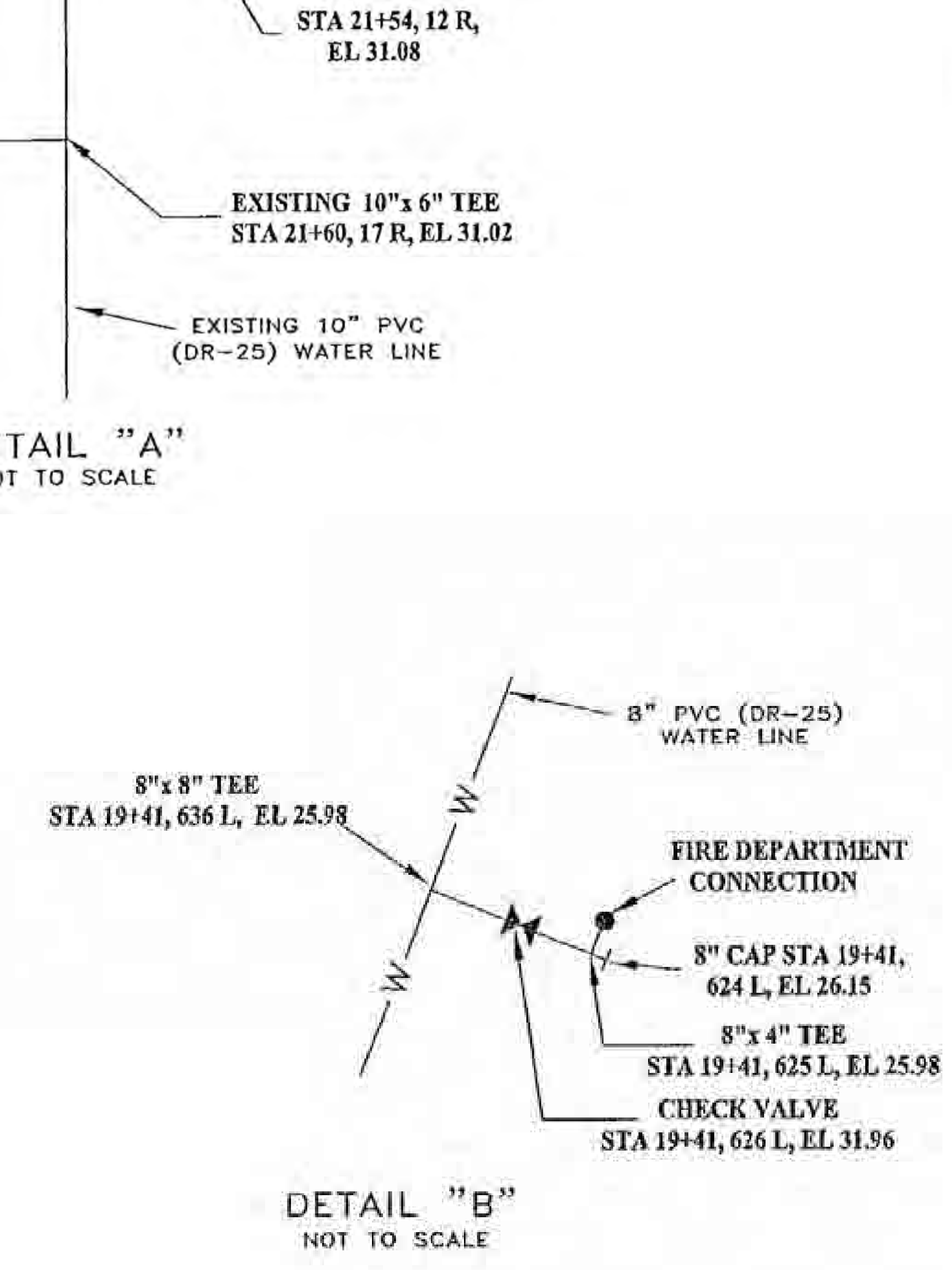
45
32 L.F. OF 16" PVC WATER MAIN 45° ELLS CONSTRUCTED AND RESTRAINED PER SJCUD STANDARDS

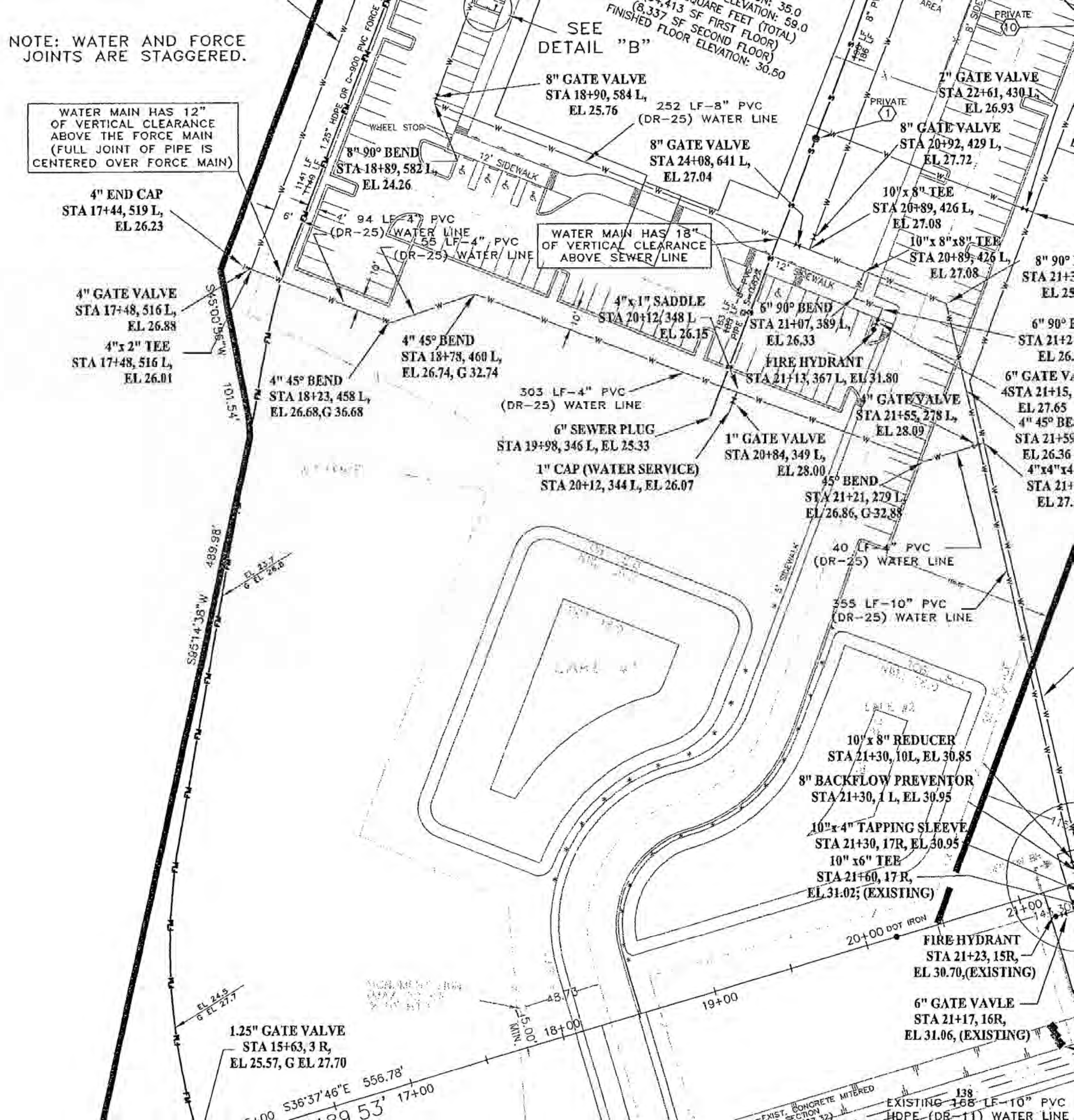
16" 45° BEND
STA 5+28, 58 L, EL 25.78
GROUND EL 29.42

MINIMUM 36" SOIL CO
IN SWALE BOTTOM

GRAPHIC

(IN FE


STA 21+54, 12 R, EL 31.08
EXISTING 10"x 6" TEE STA 21+60, 17 R, EL 31.02
EXISTING 10" PVC (DR-25) WATER LINE
TAIL "A"
T TO SCALE
8" PVC (DR-25) WATER LINE
8"x 8" TEE STA 19+41, 636 L, EL 25.98
FIRE DEPARTMENT CONNECTION
8" CAP STA 19+41, 624 L, EL 26.15
8"x 4" TEE STA 19+41, 625 L, EL 25.98
CHECK VALVE STA 19+41, 626 L, EL 31.96
DETAIL "B"
NOT TO SCALE


NOTE: WATER AND FORCE JOINTS ARE STAGGERED.
SEE DETAIL "B"
WATER MAIN HAS 12" OF VERTICAL CLEARANCE ABOVE THE FORCE MAIN (FULL JOINT OF PIPE IS CENTERED OVER FORCE MAIN)
4" END CAP STA 17+44, 519 L, EL 26.23
4" GATE VALVE STA 17+48, 516 L, EL 26.88
4"x 2" TEE STA 17+48, 516 L, EL 26.01
8" GATE VALVE STA 18+90, 584 L, EL 25.76
252 LF-8" PVC (DR-25) WATER LINE
8" 90° BEND STA 18+89, 582 L, EL 24.26
8" GATE VALVE STA 24+08, 641 L, EL 27.04
4' 94 LF-4" PVC (DR-25) WATER LINE
55 LF-4" PVC (DR-25) WATER LINE
WATER MAIN HAS 18" OF VERTICAL CLEARANCE ABOVE SEWER LINE
4" 45° BEND STA 18+23, 458 L, EL 26.68, G 36.68
4" 45° BEND STA 18+78, 460 L, EL 26.74, G 32.74
4"x 1" SADDLE STA 20+12, 348 L, EL 26.15
6" 90° BEND STA 21+07, 389 L, EL 26.33
FIRE HYDRANT STA 21+13, 367 L, EL 31.80
303 LF-4" PVC (DR-25) WATER LINE
6" SEWER PLUG STA 19+98, 346 L, EL 25.33
1" CAP (WATER SERVICE) STA 20+12, 344 L, EL 26.07
1" GATE VALVE STA 20+84, 349 L, EL 28.00
4" GATE VALVE STA 21+55, 278 L, EL 28.09
45° BEND STA 21+21, 279 L, EL 26.86, G 32.88
40 LF-4" PVC (DR-25) WATER LINE
355 LF-10" PVC (DR-25) WATER LINE
2" GATE VALVE STA 22+61, 430 L, EL 26.93
8" GATE VALVE STA 20+92, 429 L, EL 27.72
10"x 8" TEE STA 20+89, 426 L, EL 27.08
10"x 8"x8" TEE STA 20+89, 426 L, EL 27.08
10"x 8" REDUCER STA 21+30, 10L, EL 30.85
8" BACKFLOW PREVENTOR STA 21+30, 1 L, EL 30.95
10"x 4" TAPPING SLEEVE STA 21+30, 17R, EL 30.95
10" x6" TEE STA 21+60, 17 R, EL 31.02, (EXISTING)
FIRE HYDRANT STA 21+23, 15R, EL 30.70, (EXISTING)
6" GATE VAVLE STA 21+17, 16R, EL 31.06, (EXISTING)
1.25" GATE VALVE STA 15+63, 3 R, EL 25.57, G EL 27.70
EXISTING 168 138 LF-10" PVC HDPE-(DR-11) WATER LINE
S36°37'46"E 556.78'
S86°14'38"W 489.98'
101.54'
12' SIDEWALK
WHEEL STOP
PRIVATE
17+00
18+00
19+00
20+00
21+00

PROPOSED SEWER SHEDULE

EV	N INVERT	E INVERT	S INVERT	W INVERT	TYPE
0		24.00			A
0	23.24			23.24	A
0	22.44		22.44	22.44	A
5	22.12		22.12		A
0		23.27			A
7			22.06		A
0	23.88				A

"AS - BUILT" SEWER SHEDULE

EV	N INVERT	E INVERT	S INVERT	W INVERT	TYPE
9		24.05			A
6	23.21		23.21	23.21	A
2	22.34		22.38	22.33	A
0	22.02		22.02		A
3		23.31			A

lld state and
flash the alarm
tely 60 flashes per

called on the

apacitor. A
apacitor shall be
d connected to the
restor shall meet
ANSI/IEEE Std.
.3. Surge
required condition.

third float shall
urth float shall

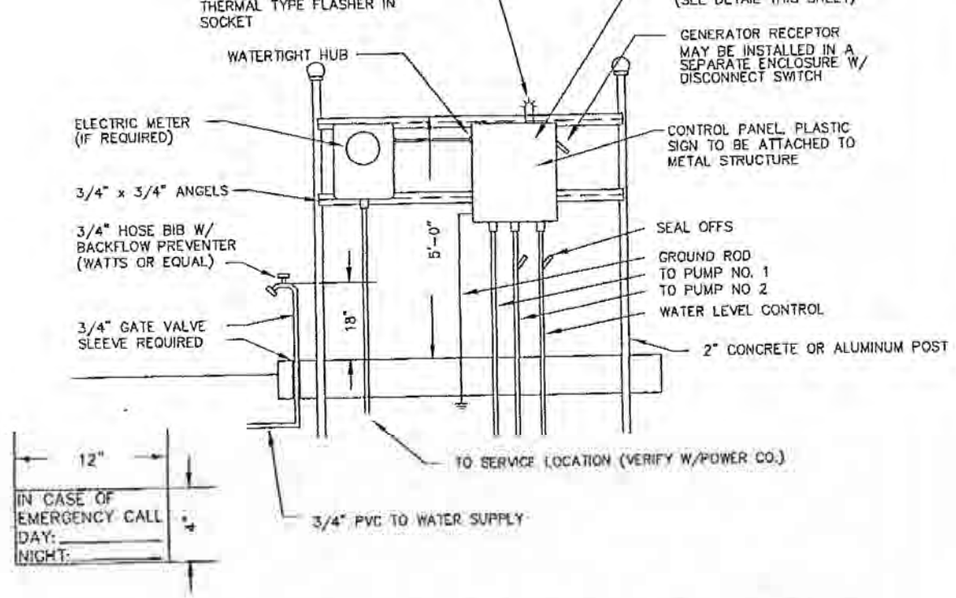
ttable elapsed time
e deadfront to

device for
on either loss of

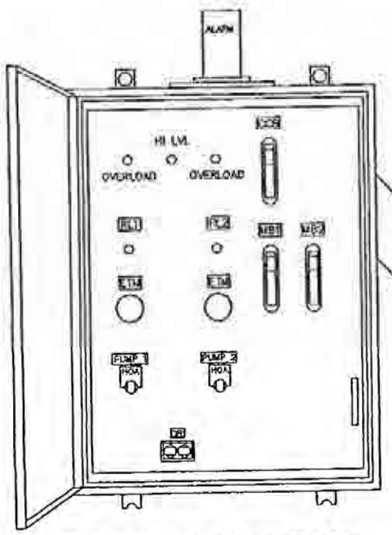
h a 30 degree panel
er shall be supplied
urer - Russell Stoll
a disconnect and
used in lieu of the

he pump wet well base,
rn to the requirements of
ion for Precast Reinforced
Cement shall meet the
test, Specification for
ed at 4,000 P.S.I. Minimum.
be 1/12 the inside diameter

be cast intergrally with
The base section shall be
rse of 2500 P.S.I. concrete
red subgrade. In order to
ton section and insure full
se, the section shall be
set of the concrete leveling

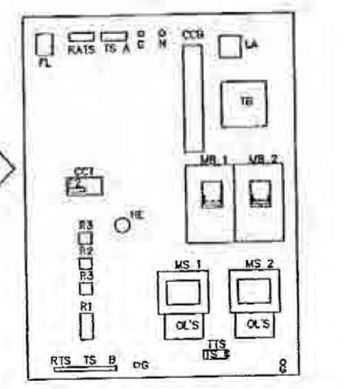


PANEL/METER PEDESTAL DETAIL



DEAD FRONT LAYOUT "TYPICAL" N.T.S

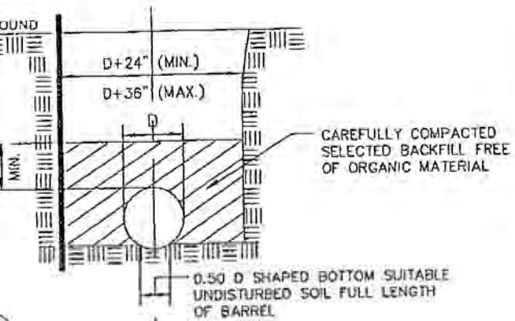
ENCLOSURE - N.E.M.A. 3R FIBERGLASS W/ PADLOCKABLE LATCHED COVER

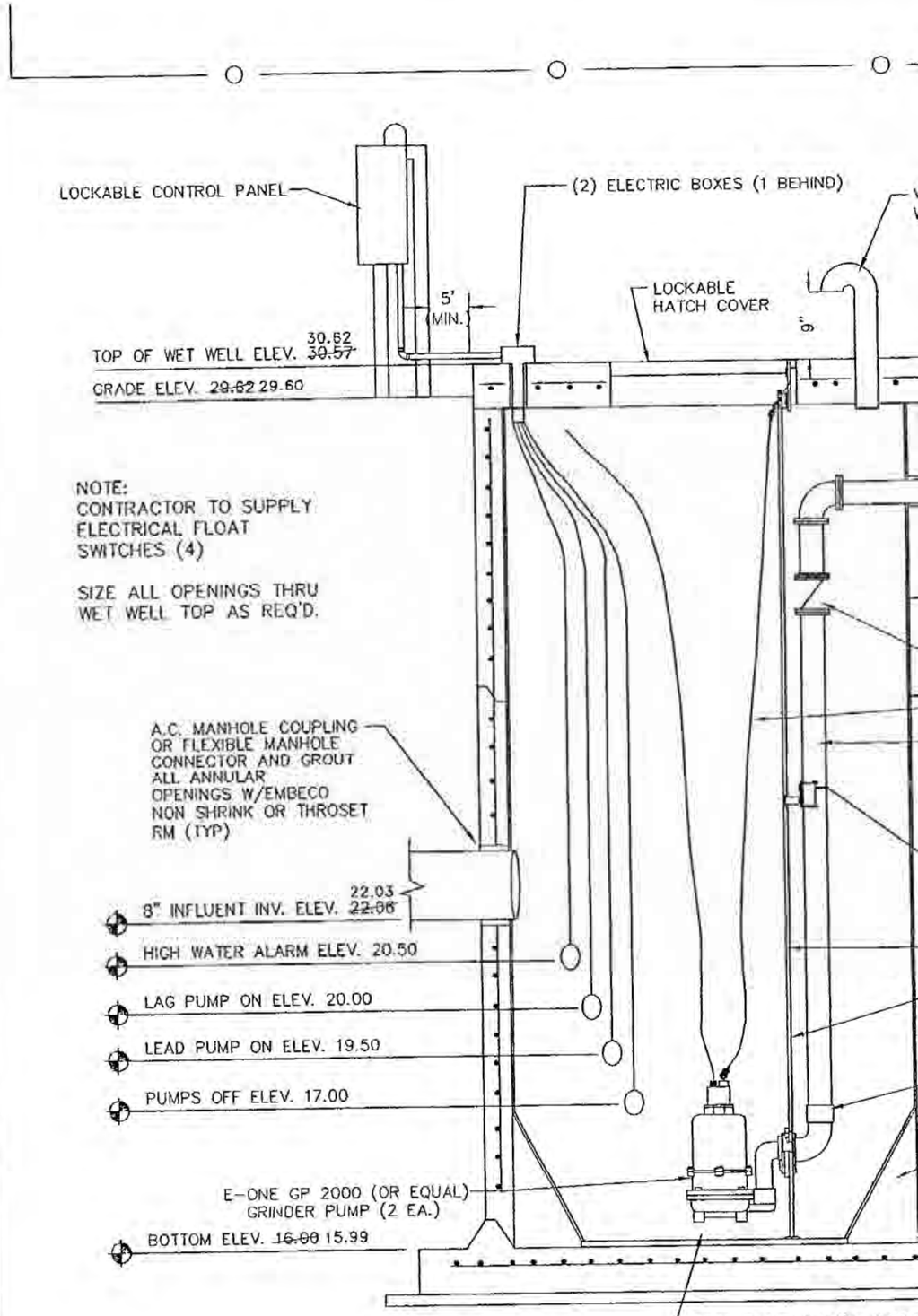


SUB PANEL LAYOUT "TYPICAL" N.T.S.

CCB	CONTROL CIRCUIT BREAKER	SPM	SINGLE PHASE MODULE
DRB	DUPLEX RECEPTACLE BREAKER	PTS	PUMP TERMINAL STRIP
MB	MOTOR BREAKER	MCB	MAIN CIRCUIT BREAKER
MS	MOTOR STARTER	GR	GENERATOR RECEPTACLE
RL	PUMP RUN INDICATORS	ETM	ELAPSED TIME METER
PL	LEVEL INDICATORS	AB	ALARM BELL
OL	OVERLOAD HEATERS	ASB	ALARM BELL SILENCER
HOA	HAND-OFF-AUTOMATIC SELECTOR	LA	LIGHTNING ARRESTOR
DR	DUPLEX RECEPTACLE	SPM	SINGLE PHASE MODULE
NEUT	NEUTRAL	SC	START CAPACITOR (10)
PAA	PUMP AUTOMATIC ALTERNATOR	RC	RUN CAPACITOR (10)
ATS	ALTERNATOR TEST SWITCH	SR	START RELAY
R	RELAYS	ST	STARTER TERMINAL
CT	CONTROL TRANSFORMER	PTS	PUMP TERMINAL STRIP
GRD	GROUND	RD	DISCHARGE RESISTOR
F	FUSE	ECB	EMERGENCY CIRCUIT BREAKER
RTS	REGULATOR TERMINAL STRIP	VM	VOLTAGE MONITOR
FR	FLOAT REGULATOR	SA	SURGE CAPACITOR

DUPLEX PUMP CONTROL PANEL





NOTE: BOTTOM OF BASIN MUST HAVE SMOOTH TROWELED SURFACE FOR MTG. SUPPORT CASTING

CONCRETE DUPLEX SUBMERSIBLE

2006 Sevilla Phase 2

As Built Drawings

CASA SEVILLA AVE.

PORTO CRISTO

AS-BUILT DRAWINGS

EXISTING PHASE 1 (NIC)

PHASE 2

15 FT. DRAINAGE EASEMENT

10' UTILITY EASEMENT

WATER MAIN CASING

4" WATER MAIN

REMOVE E
TEMPORAR

8" GATE
41+46.9
TIE TO E

8" GATE
8" X 6"
FIRE HYDR
ASSEMBLY
FIRE HYDR

(4) 4" 45° BENDS
312+77.4 (25.1 RT)
312+95.2 (18.3 RT)
313+15.7 (9.3 LT)
313+08.7 (46.8 LT)

DBL. WATER SERVICE
312+93.3 (19.1 RT)

CLEANOUTS
313+26.6 (10.0 RT)
312+82.2 (42.8 RT)
312+24.3 (44.5 RT)

6.4' HORIZ. SEPARATION
1.1' SEPARATION
WATER OVER STORM

DBL. WATER SERVICE
312+98.9 (55.5 LT)

2" FLUSHING HYDRANT
313+24.2 (26.5 RT)
SAMPLE POINT NO. 14

CLEANOUTS
313+25.5 (47.4 LT)
312+80.9 (82.1 LT)
312+31.8 (71.2 LT)
311+33.4 (43.0 LT)

DBL. WATER SERVICES
311+82.3 (28.0 RT)
312+01.9 (27.4 LT)

CLEANOUTS
311+66.8 (55.7 RT)
310+82.1 (55.6 RT)

DBL. WATER SERVICES
310+64.4 (29.2 RT)
310+28.7 (28.8 LT)
310+04.8 (27.4 RT)

CLEANOUTS
310+41.9 (45.6 RT)
310+20.6 (39.6 RT)

6" X 4" REDUCER

CLEANOUTS
42+83.4 (46.7 RT)
41+92.2 (56.1 RT)

DBL. WATER SERVICE
43+15.1 (28.5 RT)
43+51.0 (27.7 LT)

MH 1
MH 16
MH 17
MH 18
MH 19
MH 40
MH 43
MH 44
MH 45

166 167 168 169 170 171 172 173 174

31 32 33 34 35 36 37 38 39 40 41 42

339 340 341 342 343 344 345 346 347 338 312 313

EXISTING PHASE 1 DITCH

CASA SEVILLA AVE.

CASA SEVILLA AVE.

CRUZ STREET

CLEANOUTS
304+65.7 (44.0 LT)
305+32.2 (43.7 LT)

8" 90° BEND 304+69.7 (19.1 RT)
8" X 6" TEE 304+69.8 (21.3 RT)
FIRE HYDRANT 304+66.3 (18.9 RT)
8" X 6" RED. 301+72.9 (21.2 RT)
6" GATE VALVE 304+68.7 (18.7 RT)

SAMPLE POINT NO. 17

DBL. WATER SERVICES
48+64.6 (28.5 RT)
48+91.9 (28.0 LT)

DBL. WATER SERVICES
304+33.1 (28.4 LT)
304+45.9 (27.9 RT)

6.7' HORIZ. SEPARATION

CLEANOUTS
49+49.1 (40.3 RT)
48+82.4 (38.7 RT)

CLEANOUTS
304+14.1 (46.2 RT)
303+52.6 (43.3 RT)

CLEANOUTS
303+46.0 (44.7 LT)
304+02.1 (45.2 LT)

8" WATER MAIN
303+75.0 (22.4 RT)

DBL. WATER SERVICES
49+75.7 (29.0 RT)
49+93.2 (28.6 LT)

DBL. WATER SERVICES
303+19.0 (27.6 LT)
302+68.9 (27.8 RT)

8" WATER MAIN
302+87.7 (20.5 RT)

4.4' SEPARATION
WATER OVER SEWER

8" 45° BEND
50+87.2 (19.9 RT)
51+09.3 (38.4 RT)

8" WATER MAIN
302+10.3 (22.3 RT)

CLEANOUTS
301+45.8 (46.1 RT)
300+66.5 (43.5 RT)

CLEANOUTS
302+44.8 (43.1 LT)
302+91.7 (45.9 LT)

8" WATER MAIN
301+41.9 (22.1 RT)

DBL. WATER SERVICE
302+18.2 (27.3 LT)

CLEANOUTS
300+76.3 (43.2 LT)
301+40.2 (40.7 LT)
301+88.4 (44.8 LT)

DBL. WATER SERVICE
301+18.1 (28.4 LT)

8" WATER MAIN
300+84.8 (21.4 RT)

13.8' HORIZ. SEPARATION

CLEANOUTS
70+92.4 (44.2 RT)
70+27.7 (45.5 RT)
69+72.4 (44.6 RT)
69+14.2 (46.7 RT)

DBL. WATER SERVICES
68+39.7 (27.5 RT)
68+73.3 (28.2 LT)

CLEANOUTS
67+57.1 (46.6 RT)
68+07.4 (45.3 RT)
68+63.7 (44.4 RT)

DBL. WATER SERVICES
67+66.0 (28.4 LT)
67+31.7 (28.6 RT)

AIR RELEASE VALVE, STA. 66+80
66+80.2 (22.5 RT) AB

CLEANOUTS
66+44.8 (44.0 RT)
65+91.2 (43.6 RT)

8" GATE VALVE
66+16.0 (23.1 RT)

15 FT. DRAINAGE EASEMENT

AIR RELEASE VALVE (DELETED

CLEANOUTS
53+64.4 (48.5 RT)
53+10.4 (39.1 RT)

8" GATE VALVE
53+81.0 (22.1 LT)

DBL. WATER SERVICES
53+18.1 (27.8 LT)
53+87.8 (27.8 RT)
54+25.6 (28.9 LT)

MH 42
MH 47
MH 48
MH 49
MH 50
MH 65

323 324 325 326 327 328 329
356 357 358 359 360 361 362 363 364 365
379 380 381 382 383 384 385 386 387

8" W.M.
12" W.M.
30.0
30.5

CARMONA PLACE

REAR LOT LINE

4.9' SEPARATION WATER OVER STORM
(2) 8" D.I. M.J. 45° BENDS
60+86.3 (29.0 LT)
61+02.1 (34.1 LT)
(2) 6" D.I. M.J. 45° BENDS
200+17.8 (30.3 LT)
200+46.5 (18.5 LT)

CLEANOUTS
60+64.1 (42.9 LT)
60+16.2 (43.3 LT)
59+64.0 (41.8 LT)
59+21.4 (43.3 LT)

DBL. WATER SERVICE
59+43.6 (28.3 LT)
58+62.6 (28.3 LT)
SINGLE WATER SERVICE
59+29.3 (28.8 RT)

CLEANOUTS
58+83.2 (41.2 LT)
58+37.6 (42.3 LT)

DBL. WATER SERVICES
60+42.2 (28.9 RT)
60+38.7 (28.6 LT)

DBL. WATER SERVICES
200+97.8 (29.7 RT)
201+92.5 (28.2 RT)

12" X 6" TEE
FIRE HYDRANT ASSEMBLY

15 FT. DRAINAGE EASEMENT

8" X 6" TEE
58+45.8 (18.4 LT)
8" 90° BEND
58+46.0 (16.8 LT)
8" GATE VALVE
58+47.2 (16.8 LT)
FIRE HYDRANT
58+48.8 (17.1 LT)

15' WATER REUSE UTILITY EASEMENT

15 FT. DRAINAGE EASEMENT

20' VEGETATED BUFFER

6" FORCE MAIN
202+03.8 (20.5 LT)

12.4' SEPARATION WATER OVER SEWER
SAMPLE POINT NO. 19

6" 90° BEND
202+93.3 (20.5 LT)

CLEANOUT
203+17.8 (38.8 LT)

7.1' HORIZ. SEPARATION

CLEANOUTS
206+08.8 (41.9 LT)
205+52.7 (40.4 LT)
205+05.1 (40.6 LT)
204+40.8 (45.5 LT)

FORCE MAIN CASING

DBL. WATER SERVICES
204+70.9 (28.1 RT)
204+77.2 (28.3 LT)
205+80.4 (28.4 LT)
205+94.9 (28.5 RT)

WATER SERVICE W/SLEEVE (TYP.)

CLEANOUTS
206+58.4 (40.2 LT)

DBL. WATER SERVICE
206+89.1 (28.2 LT)

CLEANOUTS
207+19.5 (41.7 LT)

CLEANOUTS
207+70.3 (39.1 LT)

DBL. WATER SERVICE
208+00.7 (28.8 LT)

CLEANOUTS
208+32.2 (38.4 LT)

15 FT. DRAINAGE EASEMENT

CLEANOUTS
208+91.1 (41.1 LT)

SINGLE WATER SERVICE
209+22.1 (28.0 LT)

CLEANOUTS
209+49.0 (51.2 LT)

CLEANOUTS
209+93.3 (73.0 LT)
210+32.1 (60.4 LT)

2" FLUSHING HYDR
SAMPLE POINT NO.
210+35.0 (37.4 RT

CLEANOUTS
58.0' (42.5 RT)
44.7' (43.7 RT)
01.7' (42.3 RT)

DBL. WATER SERVICE
203+70.6 (28.6 RT)
SINGLE WATER SERVICE
204+01.9 (28.5 LT)

12" WATER MAIN
204+24.8 (29.9 RT)

CONSTRUCT 52.2' L.F.
10" PVC SDR-26 @ S=~~0.40%~~ 0.56%

CLEANOUTS
204+47.8 (41.5 RT)
204+91.0 (43.3 RT)

6" WATER MAIN

12" TEE,
205+26.1 (23.7 RT)
2-12" GATE VALVES,
205+19.8 (23.8 RT)
205+26.5 (38.7 RT)
12"x6" RED.
205+28.7 (23.8 RT)

CLEANOUTS
205+64.8 (44.6 RT)
206+20.4 (43.0 RT)

12" WATER MAIN
205+27.9 (134.3 RT)

4.8' HORIZ. SEPARATION

15 FT. UTILITY TRACT NO. 3

CLEANOUTS
206+78.6 (42.8 RT)

DBL. WATER SERVICE
206+99.3 (27.2 RT)

CLEANOUTS
207+23.9 (42.0 RT)

6" TEE
205+97.0 (19.7 RT)
FIRE HYDRANT ASSEMBLY
6" 90° BEND
205+97.5 (18.3 RT)
6" GATE VALVE
205+94.3 (18.5 RT)
FIRE HYDRANT
205+90.9 (18.3 RT)
6" X 4" REDUCER
206+03.2 (20.0 RT)

CLEANOUTS
207+73.9 (40.9 RT)

DBL. WATER SERVICE
208+03.1 (27.8 RT)

CLEANOUTS
208+26.0 (42.2 RT)

4" WATER MAIN
208+29.0 (20.2 RT)
4.7' HORIZ. SEPARATION

CLEANOUTS
208+80.8 (40.8 RT)

DBL. WATER SERVICE
209+08.8 (28.0 RT)

CLEANOUTS
209+34.8 (42.8 RT)

10' UTILITY EASEMENT

35' DEVELOPMENT EDGE

2" FLUSHING HYDRANT
205+70.2 (212.5 RT)

FUTURE ACCESS CONNECTION FOR AFFORDABLE HOUSING DEVELOPMENT

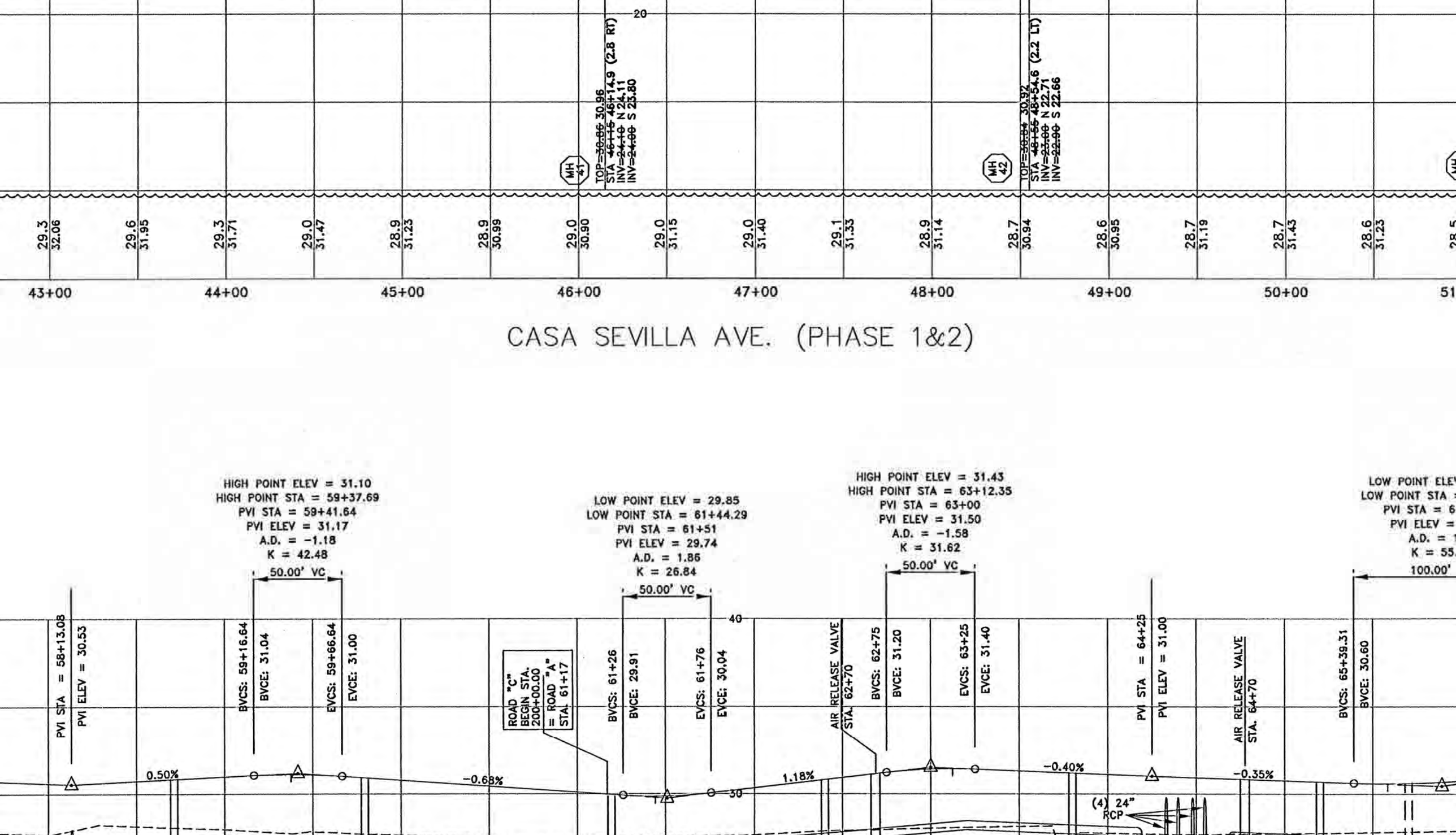
LEGEND
X PROTECTED TREE TO BE REMOVED
TREE TO BE PRESERVED WITH TREE PROTECTION BARRICADE

SCENIC EDGE
20' VEGETATED BUFFER

MH 70 · MH 71 · MH 82 · MH 81 · MH 80 · MH 78 · MH 77 · MH 76

279 · 278 · 277 · 276 · 275 · 274 · 273 · 272 · 271 · 270 · 269 · 268 · 267 · 266 · 265 · 264 · 263 · 262 · 252 · 253 · 254 · 255 · 256 · 257 · 258 · 251 · 250 · 249 · 248 · 247 · 246

200+00 · 201+00 · 202+00 · 203+00 · 204+00 · 205+00 · 206+00 · 207+00 · 208+00 · 209+00 · 210+00 · 211+00 · 212+00 · 213+00



CASA SEVILLA AVE. (PHASE 1&2)

HIGH POINT ELEV = 31.10
HIGH POINT STA = 59+37.69
PVI STA = 59+41.64
PVI ELEV = 31.17
A.D. = −1.18
K = 42.48
50.00' VC

LOW POINT ELEV = 29.85
LOW POINT STA = 61+44.29
PVI STA = 61+51
PVI ELEV = 29.74
A.D. = 1.86
K = 26.84
50.00' VC

HIGH POINT ELEV = 31.43
HIGH POINT STA = 63+12.35
PVI STA = 63+00
PVI ELEV = 31.50
A.D. = −1.58
K = 31.62
50.00' VC

LOW POINT ELEV
LOW POINT STA
PVI STA = 6
PVI ELEV =
A.D. =
K = 55
100.00'

PVI STA = 58+13.08
PVI ELEV = 30.53

BVCS: 59+16.64
BVCE: 31.04
EVCS: 59+66.64
EVCE: 31.00

ROAD "C" BEGIN STA. 200+00.00 = ROAD "A" STA. 61+17

BVCS: 61+26
BVCE: 29.91
EVCS: 61+76
EVCE: 30.04

AIR RELEASE VALVE STA. 62+70

BVCS: 62+75
BVCE: 31.20
EVCS: 63+25
EVCE: 31.40

PVI STA = 64+25
PVI ELEV = 31.00

AIR RELEASE VALVE STA. 64+70

BVCS: 65+39.31
BVCE: 30.60

0.50%
−0.68%
1.18%
−0.40%
−0.35%

24" RCP

6" FORCE MAIN – SEE BEGIN ROAD "C" (STA. 200+00) FOR CONTINUATION

18" RCP

6" FORCE MAIN

(4) 24" RCP

18" MIN.

24" RCP

18" MIN.

SDR-26 PVC

107.8'
~~108~~ LF 8" SDR-26 PVC
@ S=~~0.50%~~
0.49%
(1.6 RT)

148.6'
~~149~~ LF 8" SDR-26 PVC
@ S=~~0.50%~~
0.49%
(4.1 LT)

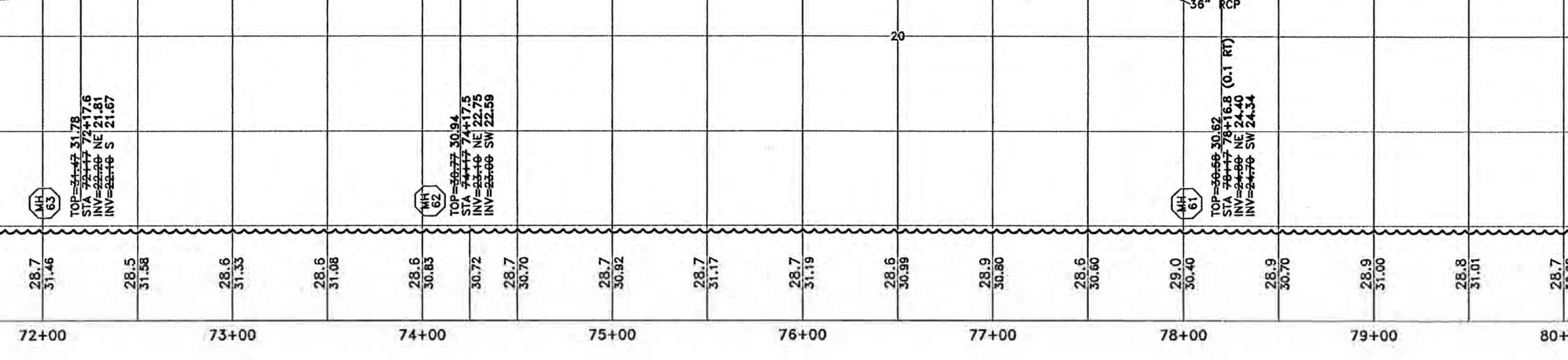
123.6'
~~119~~ LF 8" SDR-26 PVC
@ S=~~0.50%~~
0.49%
(2.8 RT)

147.5'
~~138~~ LF 8" SDR-26 PVC
@ S=~~0.43%~~
0.41%
(4.1 LT)

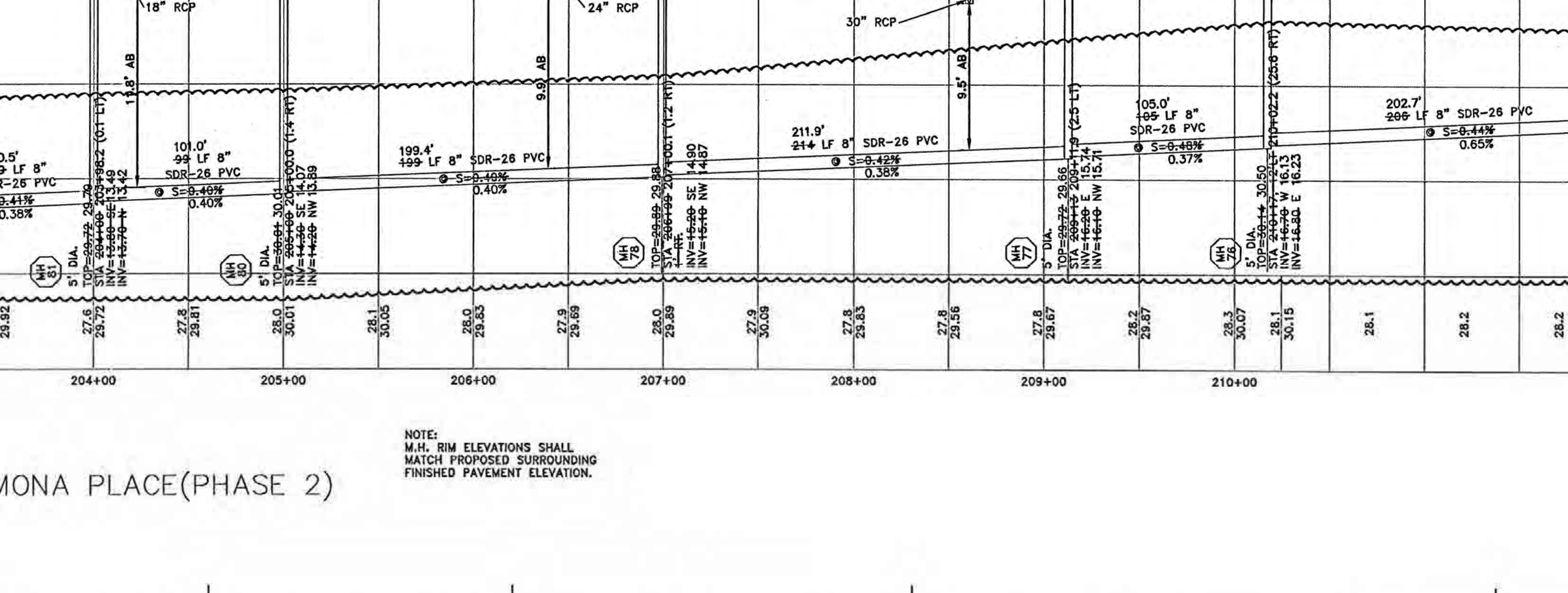
127.2'
~~140~~ LF 8" SDR-26 PVC
@ S=~~0.43%~~
0.40%
(2.0 LT)

(0.7 LT)

20
30

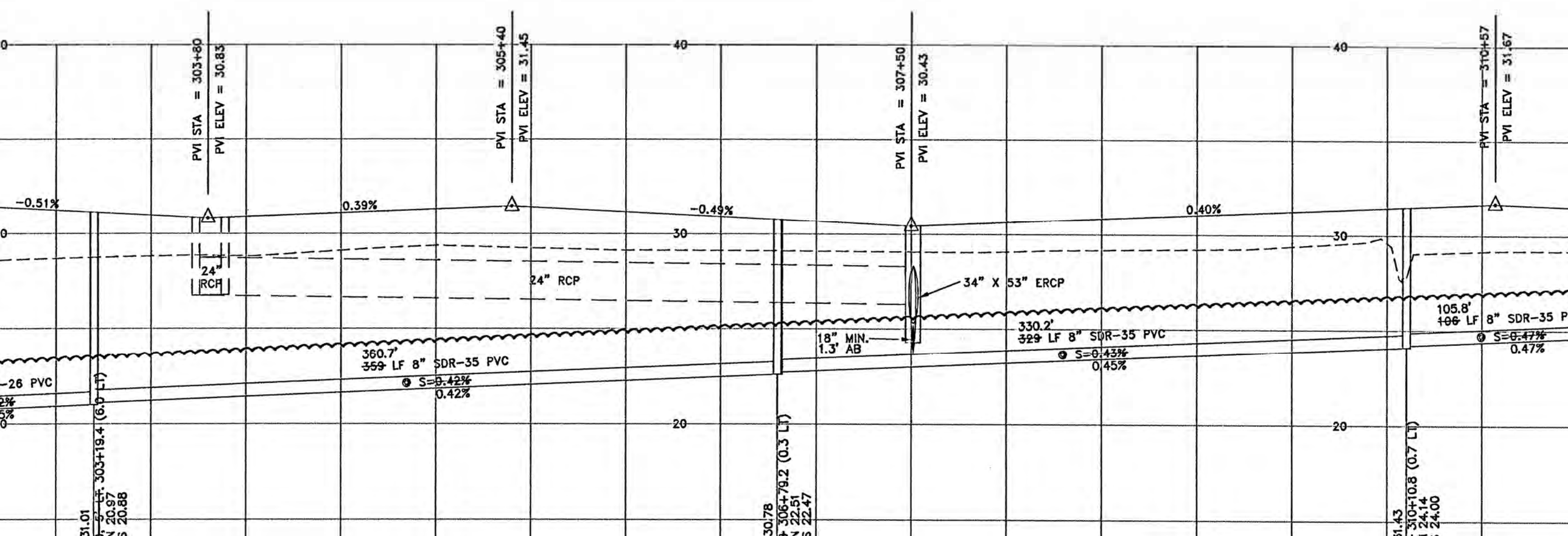


CASA SEVILLA AVE.
(PHASE 2)



NOTE:
M.H. RIM ELEVATIONS SHALL MATCH PROPOSED SURROUNDING FINISHED PAVEMENT ELEVATION.

MONA PLACE(PHASE 2)



CONTRACTOR SHALL INSTALL A 1" S.S. TAP, NIPPLE AND BALL VALVE (FIP, HAYWARD OR APPROVED EQUAL)

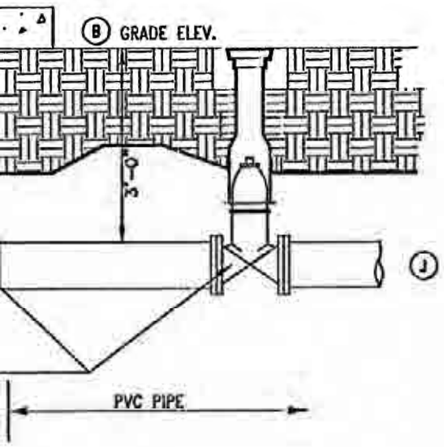
DESIGN POINT 200 GPM AT 62 FT.TDH

PUMP ACCESS HATCH SIZE 34" x 49"

Ⓘ"x Ⓙ" TEE

Ⓘ" PLUG VALVE

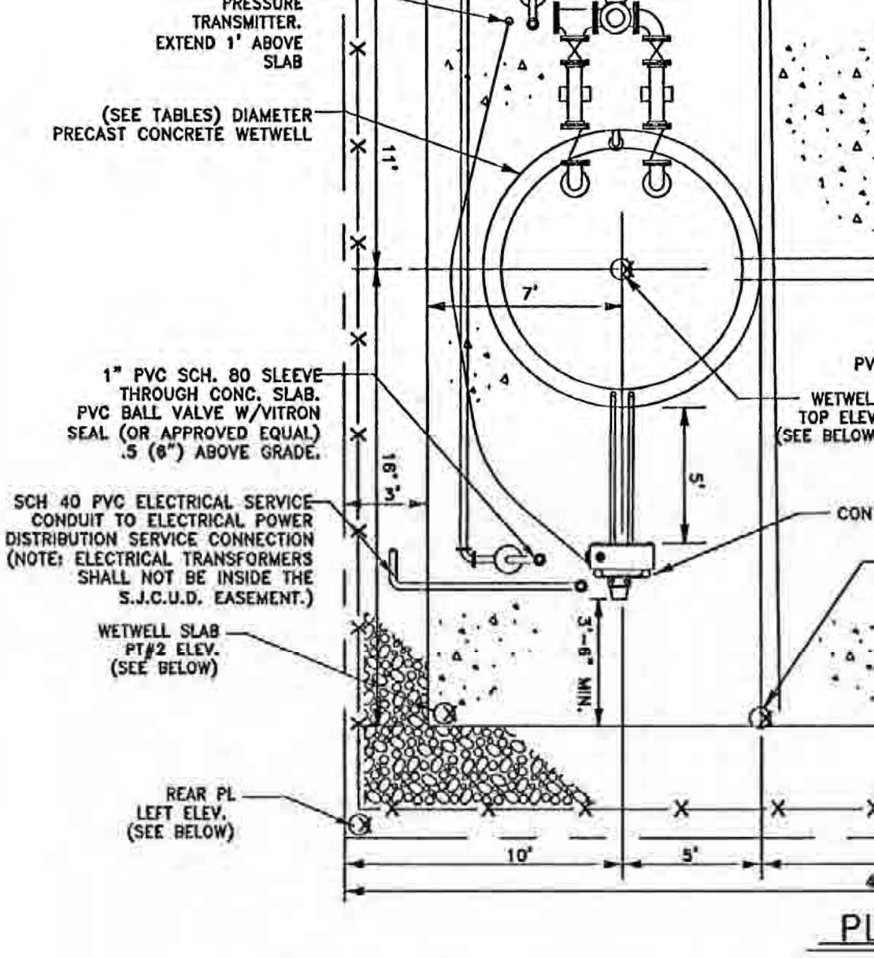
Ⓘ" KAMLOCK



KNESS

MECHANICAL EQUIPMENT SCHEDULE

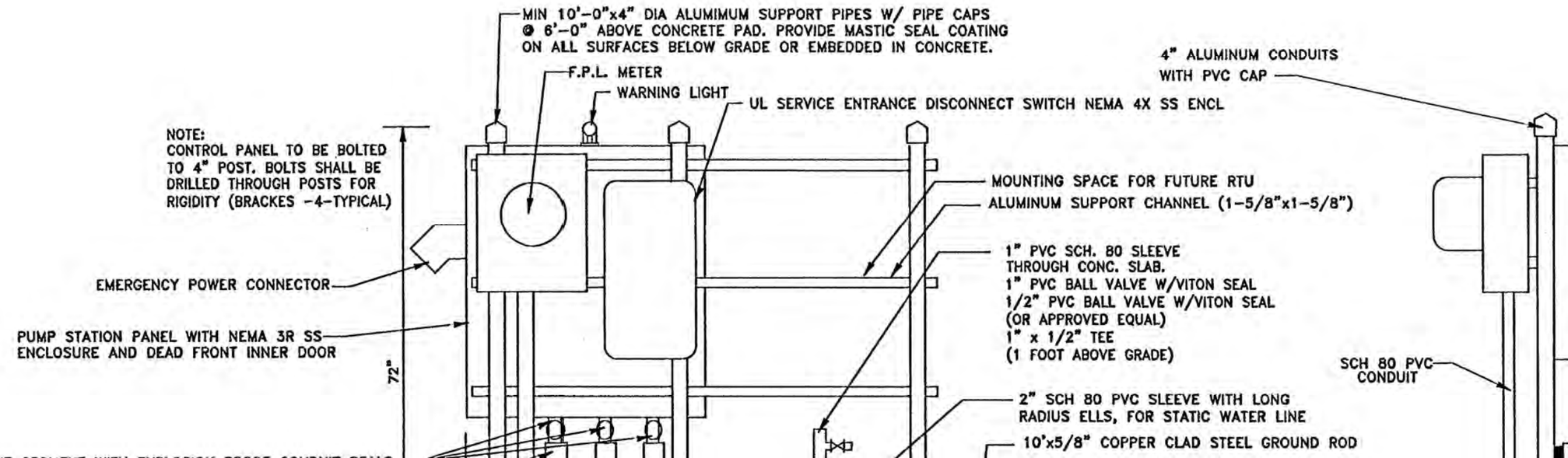
1. CHECK VALVE, MUELLER OR M&H SWING-TYPE, LEVER & SPRING OPERATED, IRON BODY, BRONZE MOUNTED
2. PLUG VALVE, DEZURIK, CAST IRON BODY, LEVER ACTUATED
2A. CONTRACTOR TO INSTALL PRESSURE SENSOR, ONYX, PART #160-0400-22-09-03, PSW-STAINLESS STEEL, VITRON SEAL, SILICON FILL W/ 1/2" NPT CONNECTION INCLUDING A PRESSURE TRANSMITTER, ABB PART #264HSPSBA1 CALIBRATOR 0-150 PSI (OR S.J.C.U.D. APPROVED EQUAL)
3. STAINLESS STEEL TEE
4. STAINLESS STEEL SHORT RADIUS 90° BEND
5. STAINLESS STEEL 45° BEND
6. 316 STAINLESS STEEL PIPE
7. DUCTILE IRON PUMP BASE
8. INFLUENT PIPE (SEE PLANS)
9. CONCRETE WETWELL
10. FLYGT PUMP (AS APPROVED BY ST. JOHNS COUNTY UTILITY DEPARTMENT)
11. ALUMINUM WETWELL ACCESS COVER (OPENING PER PUMP MANUFACTURER)
12. STAINLESS STEEL GUIDE RAILS
13. LEVEL TRANSDUCER, HIGH AND LOW ALARM FLOATS PROVIDED BY PUMP MANUFACTURER
14. PUMP MOTOR CABLE
15. 4" TEE SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE SCREENS
16. STAINLESS STEEL CABLE HOLDER
17. 1" STAINLESS BLOW OFF LINE TO WETWELL-SECURE LINE TO WETWELL SLAB W/ UNISTRUT.



PL

STATION NO.	EOP/ CENTER DRIVE	ROW/ CENTER DRIVE	ROW/ RIGHT PL	ROW/ LEFT PL	MANHO TOP
LIFT STATION #1	30.07	30.20	30.30	30.30	31.2

R., MJ



2008 NW Veteran Affairs

As Built Drawings

R10' (TYP.)
FIRE DEPARTMENT CONNECTION
4" SERVICE
8 FUEL EFFICIENT VEHICLE SIGN (SEE DETAIL, SHEET #12)
R20' (TYP.)
CARPOOL VEHICLE SIGN (SEE DETAIL, SHEET #12)
4" WATER LINE
(3)4" 90° BENDS
8" FIRE LINE
(2)8" 90° BENDS
CLEAN-OUT INV. =28.46
STORAGE BUILDING
4,400 S.F.
6" FIRE LINE
(1)6" 90° BEND
NEW FIRE HYDRANT
8"SAN
4"FIRE
6"FIRE
6"S
4"S
4"W
8"FIRE
8"x6" TEE
NEW TYPE "A" M.H. 4
RIM=29.40
(NW) INV=21.27
6" SERVICE
CLEAN-OUT INV.=21.77
CLEAN-OUT INV.=26.00
6" FIRE LINE
(1)6" 90° BEND
FIRE DEPARTMENT CONNECTION
4" SERVICE
1 STORY BUILDING
96,400 S.F.
BIKE RACK
9.0' (TYP.)
17.5' (TYP.)
24" STOP BAR (TYP.)
R10' (TYP.)
R20'
N10°18'50"E
30.81'
S51°30'45"E
32.88'
SIDEWALK TO BE 7' THICK AT FIRE ACCESS
FIRE DEPT. ACCESS
SWMF #2
17,566 S.F.
N 71°37'31" W
482.93'
263.54'
41.17'
59.86'
RADIUS=17,318.80'
DELTA=01°10'12"
ARC=353.67'
CHORD=353.67' N72°12'37"W
8"WOOD GUY POLE ON PROPERTY LINE
SET 1/2"REBAR WITH CAP, NO. LB7062
GUY ANCHOR
8"WOOD GUY POLE
30.0' SCENIC BUFFER
BENCHMARK 'X'CUT IN HEADWALL ELEVATION=28.69
REFLECTOR
R30'
R15'
12"PINE
STOP

CUT

35.0' DEVELOPMENT EDGE

PART OF THE ANTONIO HUERTAS GRANT SECTION 38, TOWNSHIP 6 SOUTH, RANGE 28 EAST

S 72°23'11" E

1,090.11'

TOP OF SLOPE

TOE OF SLOPE

TOE OF SLOPE

TOP OF SLOPE

NEW TYPE "A" M.H. (PRIVATE) (2)
RIM=28.0±
(NW&S) INV.=19.67

CONST. 219 L.F. ~
8" PVC @ 0.40%

8"SAN

WETLAND 2.63| ACRES

TREATMENT SWALE

R30'

MATCHLINE

SAN

NOT
E
G

2009 NW Turnbull Booster Pump Station

As Built Drawings

OSTER POMP STATIO

T. JOHNS COUNTY, FLORIDA

PREPARED FOR

JOHNS COUNTY UTILITY DEPARTMENT

1205 STATE ROAD 16
ST. AUGUSTINE, FLORIDA 32084
PHONE: (904) 209-2626
FAX: (904) 209-2627

AS-BUILT

AS-BUILT CERTIFICATIONS	
CONTRACTOR'S STATEMENT	SURVEYOR'S STATEMENT
DATE: 9/21/12 CO. NAME: Ortega ADRESS: 6415 Greenland Rd Jacksonville, FL 32258 PHONE # 904-268-2181	I HEREBY CERTIFY THAT THE X PAVEMENT — X WATER MAIN X CURB & GUTTER — X SANITARY GRAVITY SYSTEM X STORM & DRAINAGE — X FORCE MAIN

WMD.
1
GN-
2
3A-
4A-
5A-
6
7A-
8
9
10
11A-

STORM PIPE, STRUCTURES,
E ELEMENTS SHALL BE
BACKFILL, PROPERLY
OTECHNICAL REPORT.

TION OF ALL SURVEY AND
S DISTURBED, THE
SURVEYOR OF RECORD FOR

LED UNDER PAVEMENT MUST
SUBGRADE FOR PAVEMENT.

HIS CONSTRUCTION WITH
OF ANY CONFLICT
TIFY THE ENGINEER AND
RUCTION.

AWINGS ON ALL MATERIALS
VAL PRIOR TO PURCHASE
RM PIPE OR STRUCTURE.

E RATE MAPS PANEL NO.

NS, DETAILS AND NOTES
RACTOR IS TO COORDINATE
O CLEARING OPERATIONS.

REFERENCED BY ST. JOHNS
VEYING AND MAPPING
AS PUBLISHED BY
88, FEET).

VEY PROVIDED BY ST.
HS SURVEYING AND MAPPING

Y PROVIDED BY DEGROVE
AME 2002201 (PORTIONS
HNS COUNTY LAND
PPING DIVISION DATED

OMPLETE ACCORDANCE WITH
SPECIFICATIONS AND ALL
NDARD DETAILS AND
CTION. THE WORK SHALL
RDANCE WITH THE
TECHNICAL ENGINEER'S

TERIAL SHALL BE REMOVED
SS DIRECTED OTHERWISE BY

LUDING BENCHMARKS, IS
04.00 OF THE ST. JOHNS
CTION 15, "AS-BUILTS" OF
TO SCHEDULING A FINAL
DING DEPARTMENT OR THE

NSPECTOR SHALL BE
SSARY SITE WORK
NAL INSPECTION.

T OF TRANSPORTATION
D BY THE LATEST FDOT

PACTS, WETLAND MITIGATION
ON THESE PLANS MATCH
E ST. JOHNS RIVER WATER
L IS PENDING FINAL REVIEW

CONTRACTOR IS
NOTICE OF COMMENCEMENT
TO THE FLORIDA
N. CONTACT NPDES
FLORIDA DEPARTMENT OF
TONE ROAD, TALLAHASSEE,

INTERVALS ALONG POND BANK FOR ALL POND CONSTRUCTION. ALL DIMENSIONS AND ELEVATIONS ON THE CONTROL STRUCTURE DETAILS SHALL BE SHOWN ON AS-BUILT DRAWINGS. CONTRACTOR SHALL SHOW ALL CASING AND SLEEVE LOCATIONS AND INVERT ELEVATIONS. ALL DEVIATIONS FROM PLANS SHALL BE CLEARLY INDICATED ON THE AS-BUILT DRAWINGS.

7. ALL PAVEMENT MARKING SHALL BE EXTRUDED THERMOPLASTIC, IN ACCORDANCE WITH FDOT SPECIFICATIONS. REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT STANDARDS AND SPECIFICATIONS.

8. THE CONTRACTOR SHALL PROVIDE ACCESSIBLE RAMPS AT ALL SIDEWALK AND CURB CONNECTIONS. ACCESSIBLE RAMPS SHALL MEET ALL APPLICABLE ADA AND ST. JOHNS COUNTY REQUIREMENTS.

9. FOR SPECIAL PAVING AND DRAINAGE DETAILS SEE DRAWING NO. 6. FOR ALL STANDARD DETAILS SEE ST. JOHNS COUNTY LDC AND STANDARD DETAILS, LATEST REVISIONS.

10. STORM DRAINS SHOWN IN PUBLIC RIGHT-OF-WAYS OR OTHERWISE INDICATED AS "TV REQUIRED" SHALL BE VIDEO INSPECTED AND RECORDED IN ACCORDANCE WITH ST. JOHNS COUNTY LDC.

11. A PRE-CONSTRUCTION/PRE PERMIT MEETING WITH ST. JOHNS COUNTY IS REQUIRED PRIOR TO STARTING ANY SITE ACTIVITIES. PRE CONSTRUCTION MEETING CAN BE HELD IN CONJUNCTION WITH SJCUD/JEA PRECONSTRUCTION CONFERENCE IF APPLICABLE. CONTACT CARL COLEE AT 904-209-0736 TO SCHEDULE A MEETING.

12. ALL DETECTABLE WARNING SURFACES FOR SIDEWALK AT CURB CUT HANDICAP RAMPS UNDER THE JURISDICTION OF ST. JOHNS COUNTY SHALL BE A COUNTY APPROVED YELLOW COLORED COMPOSITE MATERIAL ANCHORED IN THE CONCRETE SIDEWALK RAMP. ANCHORED COMPOSITE WARNING AREA INSERTS ARE TO BE COLORED "SAFETY YELLOW", ARE TO BE SET INTO THE CONCRETE AND ARE TO BE FLUSH WITH CONCRETE SURFACE ALONG ALL FOUR SIDES. DESIGN DIMENSIONS OF DETECTABLE WARNING AREA SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDES 304, SHEETS 1 THROUGH 6, AND 28 CODE OF FEDERAL REGULATIONS (CFR) PART 36, APPENDIX A LATEST REVISION, AS WELL AS APPLICABLE COUNTY REQUIREMENTS. ACCEPTABLE PRODUCTS ARE CAST IN PLACE COMPOSITE TACTILE BY ADA SOLUTIONS, INC., AND CAST IN PLACE DETACTABLE WARNING PANEL BY ARMORCAST. THE STANDARD COLOR FOR THE DETECTABLE WARNING SURFACE SHALL BE YELLOW. A DIFFERENT CONTRASTING COLOR MAY BE APPROVED WHEN SUBMITTED AS PART OF A UNIFORM SIGNAGE PLAN FOR A DEVELOPMENT. ANY TYPE OF ADHESIVE OR GLUE DOWN MATS; STAMPED CONCRETE OR ANY VARIATION OTHER THAN WHAT IS SPECIFIED ABOVE WILL NOT BE ACCEPTED BY THE COUNTY. THE COUNTY WILL CONSIDER ALTERNATIVES THAT ARE EQUAL TO THE PRODUCTS SPECIFIED ABOVE. THE COUNTY ENGINEER AND THE CHIEF ENGINEER FOR DEVELOPMENT SERVICES WILL HAVE THE SOLE RESPONSIBILITY FOR DETERMINING THE PRODUCT ACCEPTABILITY.

13. ALL EROSION AND SEDIMENT CONTROL MEASURES, INDLUDING SILT FENCE, HAY BALES. AND FILTER FABRIC INSIDE DRAINAGE STRUCTURES SHALL BE REMOVED PRIOR TO FINAL INSPECTION, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE ENGINEER.

CONTRACT THE ST. JOHNS COUNTY UTILITY DEPARTMENT TO SCHEDULE THIS CONFERENCE.

11. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AND MAINTAIN ANY EXISTING WA ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED CU INTERRUPTION OF SERVICE.

12. ALL ELECTRICAL CONDUIT WORK SHALL BE COMPLETED PRIOR TO THE PRESSURE TESTING OUTFALL PIPING. ALL PRESSURE TESTING AND PUMP TESTING SHALL BE WITNESSED BY ST

13. ALL UTILITY MAINS 12" AND LARGER SHALL HAVE 42" MINIMUM COVER AND 54" MAXIMUM SHALL HAVE 30" MINIMUM COVER UNDER UNPAVED AREAS AND 36" MINIMUM COVER FROM ADDITIONAL COVER IS REQUIRED FOR VALVE INSTALLATION CLEARANCE FOR PIPE GREATER CONTRACTOR TO PROTECT INSTALLED PIPING UNTIL FINAL ACCEPTANCE BY F.D.E.P AND ST. CONFLICTS.

14. ALL UTILITY MAINS SHALL BE FLUSHED IN ACCORDANCE WITH, AND UNDER THE DIRECTION

15. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND REUSE MAINS AND H REUSE MAINS TO OTHER UTILITIES SHALL BE IN ACCORDANCE WITH ST. JOHNS COUNTY UTI

16. ALL GATE VALVES SHALL BE ST. JOHNS COUNTY UTILITY DEPARTMENT STANDARD. VALVES RESILIENT SEAT. ALL VALVES SHALL OPEN BY TURNING TO THE LEFT. VALVES SHALL BE PRESSURE.

17. ALL NEW AND / OR RELOCATED WATER MAIN AND REUSE MAIN PIPE AND FITTINGS SHALL AND JOINT MATERIALS USED IN THE JOINTS SHALL CONFORM WITH ALL APPLICABLE AWWA PLUMBING SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD AND ALL SOLDERS AND F

18. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AN PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATER AREA. THE DUCTILE PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED AN IMPERMEABLE MAT AND COVERED WITH A WATERPROOF COVERING. THE PROPER AUTH PROPER DISPOSAL.

19. ALL UTILITY MAINS ARE DESIGNED TO FINISHED GRADES AND SHALL BE PROTECTED UNTIL COUNTY UTILITY DEPARTMENT.

20. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL AIR RELEASE VALVES AT CHANGES IN E NOT IDENTIFIED ON THESE DESIGN PLANS.

21. ALL EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING SILT FENCE, HAY BALES, AND SHALL BE REMOVED PRIOR TO FINAL INSPECTION, UNLESS OTHERWISE DIRECTED BY THE OW

22. THESE ENGINEERING DRAWINGS MAY NOT SHOW ALL OF THE STANDARD DETAILS REQUIRED IS THE CONTRACTOR'S RESPONSIBILITY THAT THE CONSTRUCTION BE IN ACCORDANCE WITH COUNTY UTILITIES STANDARD DETAILS AND SPECIFICATIONS. THE CONTRACTOR SHALL OBTA DETAILS AND SPECIFICATIONS FROM THE DEPARTMENT OF PUBLIC WORKS AS WELL AS A CO DETAILS AND SPECIFICATIONS PRIOR TO BEGINNING CONSTRUCTION.

AS-BUIL

CONTRACTOR'S STATEMENT

DATE: 9/21/12
CO. NAME: See Cover
ADRESS: _____
_____
PHONE #: _____

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

___ PAVEMENT	___ WATER MAIN
___ CURB & GUTTER	___ SANITARY GRAVITY SYSTEM
___ STORM & DRAINAGE SYSTEM	___ FORCE MAIN
	___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE: _____

N19°21'56"E
360.60
(DEGROVE)

JURISDICTIONAL WETLANDS
(CONSERVATION AREA)

R=4513.66'
L=124.63'
C=124.62'
CH. BRG.=S67°34'53"E
(DEGROVE)

82.57' TO CL STA. 12+00.53

REMOVE AND REPLACE 70 LF ~ FENCE AND GATE WITH 6' CHAIN LINK FENCE AND 12' DOUBLE SWING GATE (COORDINATE WITH S.J.C.) CONNECT TO EXISTING FENCE

R=100.00'
L=18.56'
TAN.=9.31
DELTA=10°38'09"
CH.=18.54'
CH. BRG.=N24°49'04"E

STA. ~~12+01.19~~, ~~6.00~~ R
STA. 11+95.95, 6.02 R

R=100.00'
L=18.56'
TAN.=9.31
DELTA=10°38'09"
CH.=18.54'
CH. BRG.=N24°49'04"E

STA. ~~11+41.15~~,
STA. 11+41.58,

1-2" AIR RELEASE VALVE
STA. ~~13+78.74~~, ~~13.50~~ L
STA. 13+78.79, 12.55 L

N30°08'09"E
44.60'

5.0'
SHOULDER

12.0'

6" WHITE EDGE LINE
TO TERMINATE AT
S.R.16 R/W LINE

P.C. STA.
11+69.58

R35.0'
(TYP.)

11

13

12

UE UE UE UE UE UE UE UE UE UE UE UE

RM (*12" MIN.
ENDS (AS
ATED 45° TO
'S FIELD NOTES.

6.0' O.C.

P.T. STA.
12+51.30

1-2" AIR RELEASE VALVE
STA. ~~12+53.74~~, ~~7.50~~ L
STA. 12+55.32, 7.12 L

1-8" D.I. 22.5° BEND
STA. ~~12+40.76~~, ~~6.98~~ L
STA. 12+40.31, 8.06 L

TOP OF 45 EL=22.00'

1-8" D.I. 22.5° BEND
STA. 12+42.04, 13.13 L
STA. ~~12+56.88~~, ~~11.55~~ L

TOP OF 45 EL=22.38'

P.C. STA.
12+32.74

10.0' FPL
EASEMENT

JURISDICTIONAL WETLANDS
(CONSERVATION AREA)

24" WHITE
STOP BAR

STA. ~~11+99.62~~, ~~6.90~~ L
STA. 11+95.20, 5.39 L

P.T. STA.
11+88.14

1-8" D.I. 22.5° BEND
STA. ~~12+00.85~~, ~~23.07~~ L
STA. 12+03.08, 22.58 L

1-8" D.I. 22.5° BEND
STA. ~~12+01.63~~, ~~29.22~~ L
STA. 12+04.66, 28.04 L

REUSE MAINS UNDER EXISTING
24" C.M.P. (TO REMAIN)
(RESTORE CULVERT AND
MITERED END SECTION TO
ORIGINAL CONDITION IF
DISTURBED.)
(12" MIN. SEPARATION)
8-8" 45° BENDS (AS REQ'D)

APPROXIMATE LOCATION OF EXISTING
4" S.E.P. GAS MAIN (CONTRACTOR
SHALL USE EXTREME CAUTION WHEN
WORKING NEAR EXISTING UTILITIES)

6.0'
O.C.

1-8" GATE VALVE
STA. ~~11+68.78~~, ~~20.67~~ L
STA. 11+93.71, 22.05 L

1-8" GATE VALVE
STA. ~~11+68.78~~, ~~26.68~~ L
STA. 11.93.27, 26.66 L

36" R1-1
STOP SIGN

STA. ~~11+45.82~~, 43.
STA. 11+46.14, 41.4

5.0'
SHOULDER

STATE ROAD 16
(EXISTING 200' R/W)

AS-BUILT CERTIFICATIONS	AS-BUILT CERTIFICATIONS
CONTRACTOR'S STATEMENT	SURVEYOR'S STATEMENT
DATE: 9/4/13	

AS-BUILT CERTIFICATIONS

CONTRACTOR'S STATEMENT

DATE: 9/21/12

CO. NAME: SEE COVER

ADRESS: ______

PHONE #: ______

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

- ___ PAVEMENT
- ___ CURB & GUTTER
- ___ STORM & DRAINAGE SYSTEM
- ___ WATER MAIN
- ___ SANITARY GRAVITY SYSTEM
- ___ FORCE MAIN
- ___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE: ______

AS-BUILT CERTIFICATIONS

SURVEYOR'S STATEMENT

I HEREBY CERTIFY THAT THE

- X PAVEMENT
- X CURB & GUTTER
- X STORM & DRAINAGE SYSTEM
- X WATER MAIN
- X SANITARY GRAVITY SYSTEM
- X FORCE MAIN
- X LIFT STATION

"I HEREBY CERTIFY, that this map graphically depicts the results of a field survey made under my responsible direction and complies with the latest Minimum Technical Standards for Surveys as promulgated by the Florida State Board of Professional Surveyors and Mappers, Chapter 5J-17.051 & 5J-17.052, Florida Administrative Code; Pursuant to Section 472.027, Florida Statutes; subject to all notes and notations shown hereon.

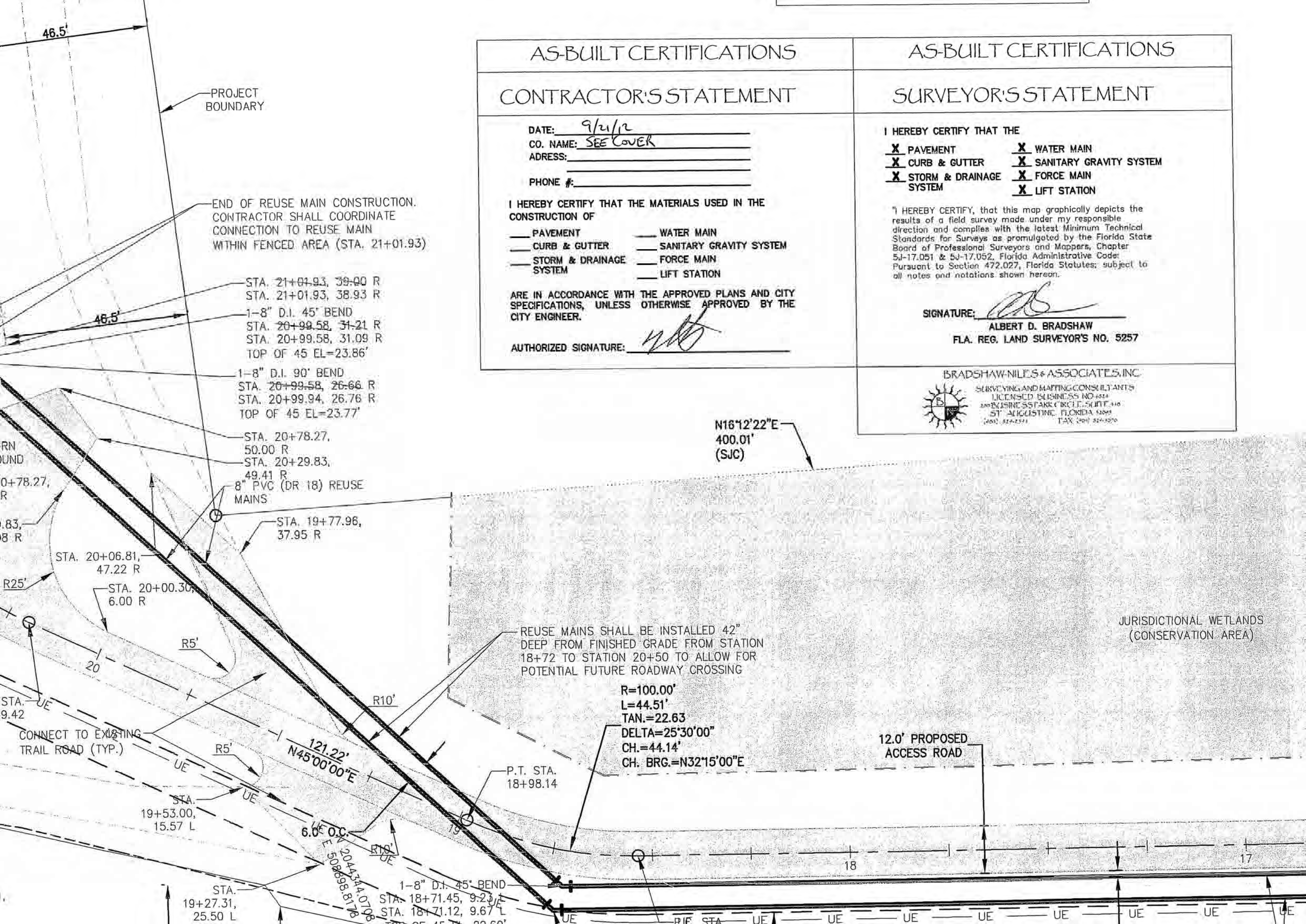
SIGNATURE: ______

ALBERT D. BRADSHAW

FLA. REG. LAND SURVEYOR'S NO. 5257

BRADSHAW-NILES & ASSOCIATES, INC.

SURVEYING AND MAPPING CONSULTANTS



UNLESS BOTH SHEETS.

PROVIDE 6'X6' RIPRAP PAD AT MOUTH OF MES (1' MIN. DEPTH OF STONE OF SIZE 3"-6" OVER TOP OF FILTER FABRIC)

EXISTING UTILITY POLE. CONTRACTOR SHALL COORDINATE WITH FPL TO RAISE POWER LINES AS REQUIRED

JURISDICTIONAL WETLANDS (CONSERVATION AREA)

STATE ROAD 16 (EXISTING 200' R/W)

R.C.P. TO

STD. MES INV. EL. = ~~24.00~~ *23.60

ACCESS ROAD WITHIN STATE ROAD 16 R/W TO BE CONSTRUCTED PER STATE ROAD 16 PAVEMENT SECTION (SEE GENERAL DETAILS)

STD. MES *21.95 INV. EL. = ~~21.40~~

PROVIDE 6'X6' RIPRAP PAD AT MOUTH OF MES (1' MIN. DEPTH OF STONE OF SIZE 3"-6" OVER TOP OF FILTER FABRIC)

EXISTING DITCH TO REMAIN UNDISTURBED

6:1 SLOPE TO MEET NATURAL GRADE AT EAST SIDE OF TRAIL ROAD (SEED AND MULCH ALL DISTURBED AREA) (SEE TYPICAL SECTION, THIS SHEET)

JURISDICTIONAL WETLANDS (CONSERVATION AREA)

10.0' FPL EASEMENT

EXISTING 24" C.M.P. CULVERT WITH M.E.S.'s TO REMAIN (CONTRACTOR SHALL REPAIR/REPLACE AS REQ'D)
WEST INV. EL. = 22.44
EAST INV. EL. = 22.43

APPROXIMATE LOCATION OF EXISTING 4" S.E.P. GAS MAIN (CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR EXISTING UTILITIES)

EXISTING UTILITY MARKER (TYP.)

R/W LINE

EXISTING UTILITY POLE. CONTRACTOR SHALL COORDINATE WITH FPL TO RAISE POWER LINES AS REQUIRED

EL. = 26.80

WETLANDS (NO WORK WITHIN WETLANDS)

ACCESS ROAD SECTION (SEE GENERAL DETAILS)

AS-BUILT CERTIFICATIONS

SURVEYOR'S STATEMENT

I HEREBY CERTIFY THAT THE

AND MULCH ALL DISTURBED AREA)
(DETAILED GRADING WITHIN BOOSTER
PUMP STATION SITE BY OTHERS)

BOOSTER PUMP STATION SITE
(DESIGN BY OTHERS)

SWALE #1
CONSTRUCT V-SWALE
WITH 4:1 SIDE SLOPES
(SEED AND MULCH ALL
4:1 SLOPES, TYP.)

25.0

26.0

TURN-AROUND

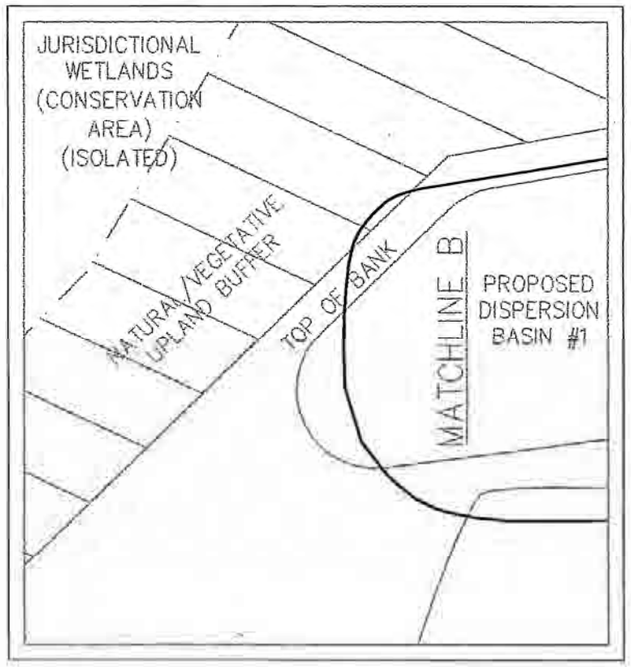
EXISTING TRAIL ROAD

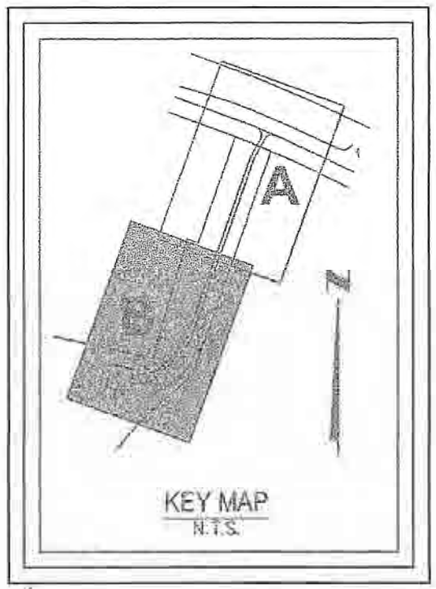
26.0

TRANSITION TO
EXISTING TRAIL ROAD
AT 20:1 SLOPE

AUTHORIZED SIGNATURE: _____

FPL EASEMENT. (REFER TO CLEARING PLAN





JURISDICTIONAL
WETLANDS
(CONSERVATION AREA)

EL. = 26.80

4:1 SLOPE TO MEET NATURAL
GRADE AT WEST SIDE OF
TRAIL ROAD (SEED AND MULCH
ALL DISTURBED AREA) (SEE
TYPICAL SECTION, THIS SHEET)

TRANSITION TO
EXISTING TRAIL ROAD
AT 20:1 SLOPE

TOP OF BANK

16 RIGHT-OF-WAY (EXISTING)

PVI STA = 11+80.00
ELEV = 26.80

-1.60%

0.00%

CENTERLINE OF ACCESS ROAD

APPROXIMATE LOCATION OF EXISTING 4" S.E.P. GAS MAIN. CONTRACTOR SHALL LOCATE EXISTING GAS MAIN AND PROVIDE 12" MIN. CLEARANCE AND 36" MIN. COVER (BENDS AS REQ'D, COORDINATE WITH GAS COMPANY AS REQUIRED)

APPROXIMATE LOCATION OF EXISTING 24" C.M.P. CULVERT

EXISTING GRADE

PROPOSED 24" R.C.P. CULVERT

8" ~~DUSIBLE~~ PVC (DR 18) REUSE MAINS

INVERT OF PIPE EL. = 22.4±

AIR RELEASE VALVE AT STA. 12+53.74 (SEE SITE AND UTILITY PLAN)

CONTRACTOR SHALL CONSTRUCT REUSE MAINS WITH 36" MIN. COVER FROM FINISHED GRADE FROM S.R. 16 TO STA. 18+72

AIR RELEASE VALVE AT STA. 13+78.74 (SEE SITE AND UTILITY PLAN)

07/13/09

A1

ING 8"
LD
ISTING
N)

20" STEEL CASINGS WITH SPACES PER SJCUD SPECS. (SEE PLAN)

PROPOSED 8" REUSE MAINS UNDER EXISTING STORM (12" MIN. CLEARANCE)

27.28 | 26.80 | 26.80 | 26.80 | 26.80 | 26.80

11+00 | 11+50 | 12+00 | 12+50 | 13+00 | 13+50 | 14+0

ROAD B

0.00%

EXISTING GRADE

8" FUSIBLE PVC (DR 18) REUSE MAINS

CONTRACTOR SHALL CONSTRUCT REUSE MAIN WITH 36" MIN. COVER FROM FINISHED GRADE FROM S.R. 16 TO STA. 18+72

07/13/09

A2

TRANSITION TO 42" MIN. DEPTH (BENDS AS REQ'D)

CONTRACTOR SHALL CONSTRUCT REUSE MAIN WITH 42" MIN. COVER FROM FINISHED GRADE FROM STA 18+72 TO STA. 21+00

25

20

26.80 26.80 26.80 26.80 26.80 26.80

16+00 16+50 17+00 17+50 18+00 18+50 19+00

ROAD B

(14+50.00–19+00.00)

30 30 30 30

25 25 25 25

ETLANDS ORK WITHIN ETLANDS

EXISTING GRADE

WETLANDS NO WORK WITHIN WETLANDS

PROPOSED 10.0' FPL ESM'T

9.0'

PROPOSED 12.0' ACCESS ROAD

1.0' AT 6:1 SLOPE

WETLANDS NO WORK WITHIN WETLANDS

PROJECT BOUNDARY

2.0%

6:1

4:1

PROPOSED GRADE

PROPOSED REUSE MAINS

1.5' 6.0' 1.5'

EXISTING GRADE

PROJECT BOUNDARY

PROPOSED 10.0' FPL ESM'T 9.0'

6:1

4:1

1.5' 6.0'

PVI STA = 21+00.00
ELEV = 27.60

PVI STA = 21+77.00
ELEV = 27.60

BOOSTER PUMP SITE
(FINE GRADING BY
OTHERS)

0.80%

0.00%

4:1 SLOPE TO
MEET EXISTING
GRADE

EXISTING
GRADE

PROPOSED SWALE (SEE
GRADING AND DRAINAGE
PLAN)

MAINS

END OF CONSTRUCTION BY CONTRACTOR
(STA. 21+01.93) (DESIGN WITHIN
BOOSTER PUMP SITE BY OTHERS)
(CONTRACTOR SHALL COORDINATE
CONNECTION TO REUSE MAIN WITHIN
FENCED AREA)

27.60

27.60

50

21+00

21+50

22+00

22+50

23+00

ROAD B

(19+00.00–23+00.00)

0

30

-5

25

-10

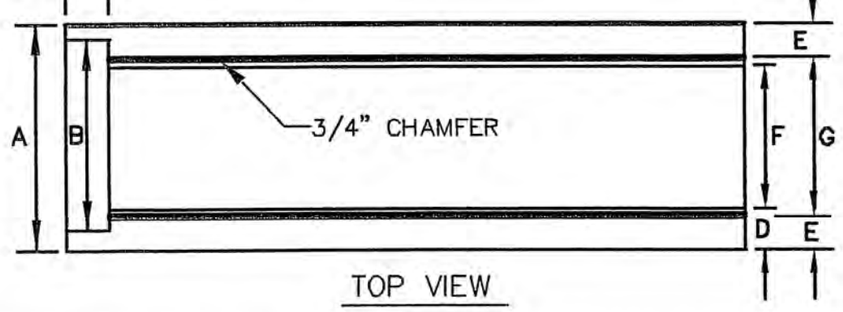
20

-15

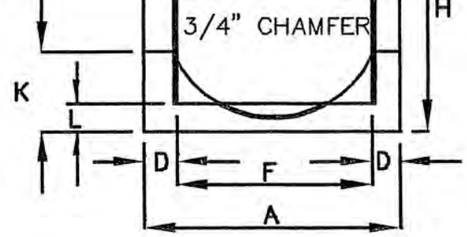
-20

DEPTH (FEET)

07/13/09



TOP VIEW



END VIEW

RCP/CMP	A	B	C	D	E	F	G	H	J	K	L	M	N
15" – 18"	2'–7"	2'–1"	6"	6"	6 3/4"	1'–6"	1'–7"	2'–10"	2'–4"	8"	6"	6'–10"	7'–0"
24"	2'–11"	2'–8"	6"	5"	4 1/2"	1'–11"	2'–0"	3'–6"	3'–1"	7 1/2"	5"	10'–0"	10'–3 1/2"
30"	3'–6"	3'–2"	6"	6"	5 1/2"	2'–5"	2'–6 1/2"	3'–9"	3'–5"	7"	5"	11'–5"	11'–8 1/4"
36"	4'–1"	3'–10"	6"	7"	5 1/2"	2'–9"	3'–0"	4'–6"	4'–0"	6"	6"	14'–0"	14'–4 1/2"

NOTES:
1. MITERED END SECTION SHALL MATCH SIDE SLOPE OF LAKE BANK.
2. PIPE LENGTH SHOWN ON PLANS ARE FROM BACK OF MITERED END SECTION TO CENTER OF STRUCTURE

STANDARD MITERED END SECTION

N.T.S.

CONTRACTOR'S STATEMENT

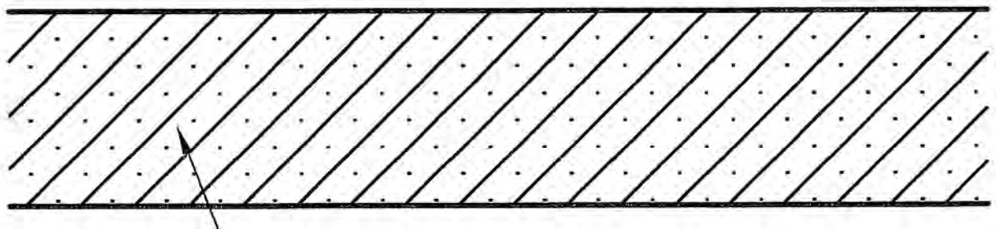
DATE: 9/21/12
CO. NAME: SEE COVER
ADRESS: _____
_____
PHONE #: _____

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

___ PAVEMENT
___ CURB & GUTTER
___ STORM & DRAINAGE SYSTEM
___ WATER MAIN
___ SANITARY GRAVITY SYSTEM
___ FORCE MAIN
___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE: _____



JURISDICTIONAL WETLANDS
(CONSERVATION AREA)

SILT FENCE /
LIMITS OF
CLEARING (TYP.)

PROPOSED
ACCESS ROAD

HAY BALE WITH
SILT FENCE IN
EXISTING DITCH

SELECTIVE
CLEARING
(TYP.)

JURISDICTIONAL WETLANDS
(CONSERVATION AREA)

HAY BALE WITH
SILT FENCE IN
EXISTING
ROADSIDE SWALE

STATE ROAD 16
(EXISTING 200' R/W)

AS-BUILT

CLEARING
(TYP.)

PROJECT
BOUNDARY

EXISTING
TRAIL ROAD

PROPOSED
ACCESS ROAD

AREA TO BE
CLEARED (TYP.)

JURISDICTIONAL WETLANDS
(CONSERVATION AREA)

CONTRACTOR'S STATEMENT

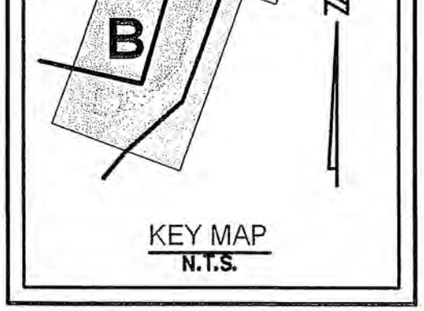
DATE: 9/21/12
CO. NAME: SEE COVER
ADRESS: _____
_____
PHONE #: _____

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

___ PAVEMENT	___ WATER MAIN
___ CURB & GUTTER	___ SANITARY GRAVITY SYSTEM
___ STORM & DRAINAGE SYSTEM	___ FORCE MAIN
	___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE: _____



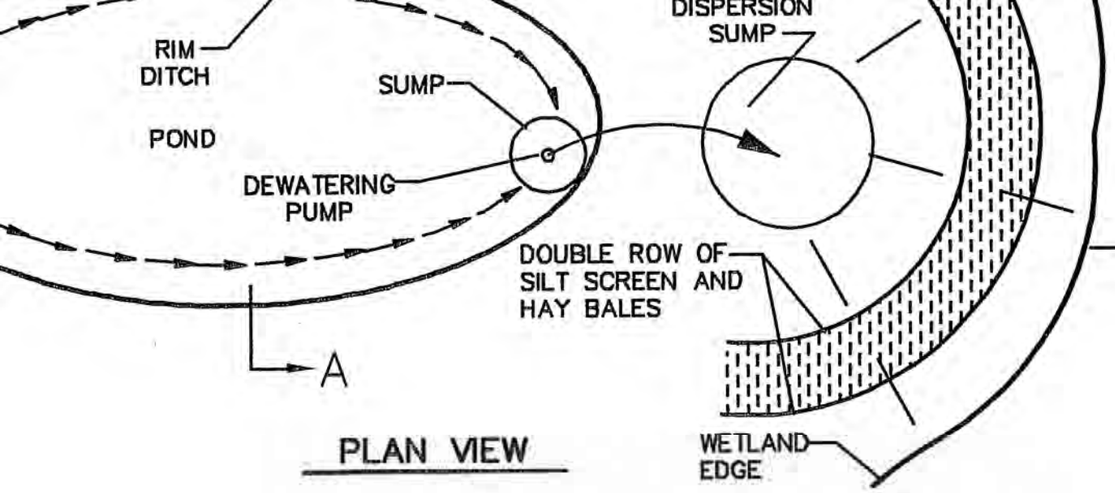
CLEARING NOTES)

WETLANDS

NATURAL / VEGETATIVE
UPLAND BUFFER

SILT FENCE /
LIMITS OF CLEARING

TREE TO REMAIN

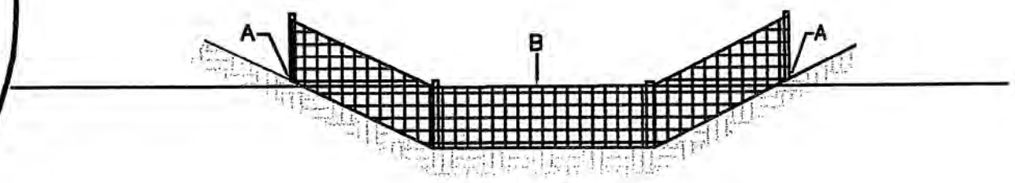


PLAN VIEW

TEMPORARY DEWATERING DETAIL

N.T.S.

PLAN VIEW



SECTION VIEW

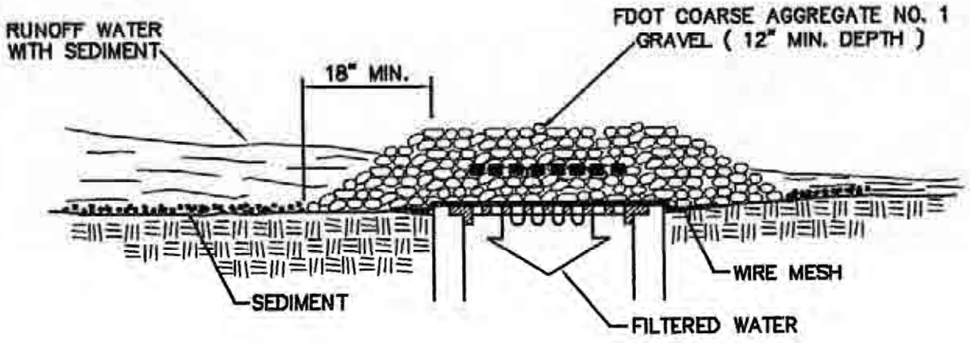
POINTS A SHOULD BE HIGHER THAN POINT B

PROPER PLACEMENT OF A FILTER BARRIER IN DRAINAGE WAY

N.T.S.

STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

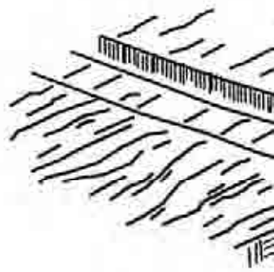


SPECIFIC APPLICATION

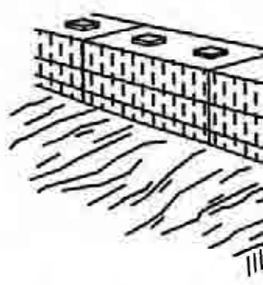
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

N.T.S.



1. EXCAVATE THE TRENC



3. WEDGE LOOSE STRAW

CO

1. SET THE STAKES.

IF REQUIRED
Y GRADING
D
AREAS AND
I AS

SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

ONSTRUCTION OF THE BUILDING WILL BE TAKING
NG ALL THE SEQUENCE STEPS LISTED ABOVE

NG OF CONTROLS/MEASURES

ENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND
NSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE
EARING OR GRADING OF ANY OTHER PORTIONS OF
ASURES SHALL BE INITIATED AS SOON AS PRACTICAL
HERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY
ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY
LL BE STABILIZED PERMANENTLY IN ACCORDANCE
E ENTIRE SITE IS STABILIZED, THE ACCUMULATED
FROM THE SEDIMENT TRAPS AND THE EARTH
ADED/REMOVED AND STABILIZED IN ACCORDANCE
MENT AND EROSION CONTROL PLAN (DRAWING NO.

CONTROLS

ESPONSIBILITY TO IMPLEMENT THE EROSION AND
HOWN ON THE SEDIMENT AND EROSION CONTROL PLAN.
ORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE
INTAINED AND FUNCTIONING PROPERLY TO PREVENT
ER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR
AND TURBIDITY CONTROLS SHOWN ON THE SEDIMENT
AN AND ADD ADDITIONAL CONTROL MEASURES, AS
SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION
REQUIREMENTS. ANY CHANGES OR ADDITIONS TO THE
ONTROL PLAN MUST BE NOTED ON THE CONTRACTOR'S
DATE AND TIME IMPLEMENTED. THE FOLLOWING BEST
WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED
IMENT CONTROL PLAN AND AS REQUIRED TO MEET THE
REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE

ITROLS

STRAW BALE BARRIERS CAN BE USED BELOW
JECT TO SHEET AND RILL EROSION WITH THE
:
UM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
OR DITCH LINES WHERE THE MAXIMUM
AINAGE AREA IS NO GREATER THAN 2 ACRES.
ESS IS REQUIRED FOR LESS THAN 3 MONTHS.
OULD BE MADE TO LIMIT THE USE OF STRAW BALE
UCTED IN LIVE STREAMS OR IN SWALES WHERE
SSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES
TO PROPERLY ANCHOR BALES TO INSURE
T.

: FILTER FABRIC BARRIERS CAN BE USED BELOW
JECT TO SHEET AND RILL EROSION WITH THE
:
UM SLOPE BEHIND THE BARRIER IS 33 PERCENT.
OR DITCH LINES WHERE THE MAXIMUM
AINAGE AREA IS NO GREATER THAN 2 ACRES.

FILTER FABRIC: BRUSH BARRIER MAY BE USED

11. TEMPORARY REGRASSING : IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

14. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY.

2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP IS USUALLY INSTALLED IN AN DRAINAGEWAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA WITH THE FOLLOWING LIMITATIONS:
   A. THE SEDIMENT TRAP MAY BE CONSTRUCTED EITHER INDEPENDENTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION DIKE.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE VELOCITY OF FLOW AT DESIGN CAPACITY OF THE OUTLET WILL EXCEED THE PERMISSIBLE VELOCITY OF THE RECEIVING CHANNEL OR AREA.

4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME, THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS. THESE SEDIMENT BASINS MUST PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABILIZATION OF THE SITE. THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE AREAS AND FLOWS FROM ONSITE AREAS THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR STRUCTURAL FILL. ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED

THE ORIGINAL MANUFACTURER'S LABEL.

* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL.

HAZARDOUS PRODUCTS

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS

CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL

INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (i.e. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ILIZATION MEASURES

DATE OF NEXT TURBANCE	STABILIZED ? (YES/NO)	STABILIZED WITH	CONDITION

_____ ON OR BEFORE _____

TO BE PERFORMED BY: _____

CATCH BASIN/CURB INLET/OUTFALL

STRUCTURE/ OUTFALL	ARE TURBIDITY CONTROLS IN PLACE	ANY EVIDENCE OF CLOGGING/WASHOUT OR BYPASSING ?

MAINTENANCE REQUIRED FOR CATCH BASIN/CURB INLETS/O

TO BE PERFORMED BY: _____

EUSE BOOSTER PUMP STATION

POLLUTION PREVENTION PLAN
D MAINTENANCE REPORT FORM

SEDIMENT BASIN

ENT	ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT ?	CONDITION OF OUTFALL FROM SEDIMENT BASIN

N: _____

_____ ON OR BEFORE _____

OTHER CONTROLS

ED CONSTRUCTION ENTRANCE

	DOES ALL TRAFFIC	IS THE CULVERT

TURNBULL IN-LINE REUSE B

STORM WATER POLLUTION
INSPECTION AND MAINTEN

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN: _____

REASONS FOR CHANGES: _____

PARCEL BOUNDARY

WETLAND IMPACT
A1 = 0.08 AC.±

WETLAND IMPACT
B2 = 0.01 AC.±

WETLAND CUT
DITCH IMPACT
B3 = 0.10 AC.±

JURISDICTIONAL WETLANDS
(CONSERVATION AREA)
(TO REMAIN)
(0.20 AC.±)

PARCEL BOUNDARY

PROPOSED ACCESS ROAD

STATE ROAD 16
(EXISTING 200' R/W)

AS-BUILT

CONTRACTOR'S STATEMENT

DATE: 9/21/12
CO. NAME: SEE COVER

AS-BUILT

CONTRACTOR'S STATEMENT

DATE: 9/21/12
CO. NAME: SEE COVER
ADRESS: _____
_____
PHONE #: _____

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

___ PAVEMENT	___ WATER MAIN
___ CURB & GUTTER	___ SANITARY GRAVITY SYSTEM
___ STORM & DRAINAGE SYSTEM	___ FORCE MAIN
	___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE: _____

20'

UP

DESCRIP
IMPACT
TOTAL

PROJECT BOUNDARY

PROPOSED ACCESS ROAD

WETLAND CUT DITCH IMPACT A2 = 0.12 AC.±

EXTENTS OF IMPACTS (TYP.)

WETLAND IMPACT A3 = 0.02 AC.±

ANS. THE CONTRACTOR SHALL RESPOND
ED BY THE PROJECT ENGINEER WITHOUT
CONTRACTOR SHALL ALSO RESPOND WITHIN
E PROJECT ENGINEER TO ANY REQUESTS
DIFICATION TO THE TRAFFIC CONTROL PLAN

ONLY AND DO NOT REPRESENT

XCEPT FLAGGERS) AND THEIR ACTIVITIES
SIDE OF THE PAVEMENT.

MAINTAINED AT ALL TIMES.

ALL NOT BE ALLOWED BETWEEN THE
3:00 PM TO 7:00 PM. ANY NIGHT TIME
RESENCE OF AN OFF-DUTY LAW
ATROL CAR.

G CONDITIONS AT PROJECT BEGINNING
NEER.

ST MOUNTED. WHEN NO WORK IS BEING
N TO TWO-WAY TRAFFIC, THE "ONE-LANE
FULLY COVERED.

ONTRACTOR SHALL REFER TO STANDARD

MENT OF TRANSPORTATION (FDOT)
Y THE LATEST FDOT DESIGN STANDARDS

INDEX NO. 603.
2. TIE IN PROPOSED REUSE MAINS TO EXISTING REUSE MAIN AS SHOWN IN THE T.C.P. (SEE SHEET NO. 13).
3. PROVIDING SMOOTH TRANSITION, TIE ROAD BACK TO EXISTING STATE ROAD 16 AS SHOWN IN THE T.C.P. (SEE SHEET NO. 13).
4. RESTORE AREA TO PRE-CONSTRUCTION (OR BETTER) CONDITIONS.

PHASE III (NO PLANS)

1. MILL AND RESURFACE SR 16 (SEE THE LIMITS AS SHOWN ON SHEET NO. 3A)
2. FOR PLACEMENT OF TRAFFIC CONTROL DEVICES REFER TO PHASES I AND II (AND F.D.O.T. STANDARD INDEX NO. 603).
3. PLACE PERMANENT PAVEMENT MARKINGS ON SR 16 (AS SHOWN ON SHEET NO. 3A). REFER TO F.D.O.T. STANDARD INDEX NO. 607.

AS-BUILT

CONTRACTOR'S STATEMENT

DATE: 9/21/12
CO. NAME: SEE COVER
ADRESS: _____
_____
PHONE #: _____

I HEREBY CERTIFY THAT THE MATERIALS USED IN THE CONSTRUCTION OF

___ PAVEMENT
___ CURB & GUTTER
___ STORM & DRAINAGE SYSTEM
___ WATER MAIN
___ SANITARY GRAVITY SYSTEM
___ FORCE MAIN
___ LIFT STATION

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND CITY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

AUTHORIZED SIGNATURE: _____

ON

PHASE II T.C.P. TYPICAL SECTION

N.T.S.

TYPE I OR TYPE II BARRICADES OR DRUMS ON TAPER SHALL BE 20'.

DRUMS ON TANGENT SHALL BE 50'.

170'

1140'

1000'

100'

570'

WORK AREA (TYP.)

500'

PHASE II

TOR:S STATEMENT

HAT THE MATERIALS USED IN THE

___ WATER MAIN
___ SANITARY GRAVITY SYSTEM
___ FORCE MAIN
___ LIFT STATION

E WITH THE APPROVED PLANS AND CITY
LESS OTHERWISE APPROVED BY THE

URE: _____

WORK AREA (TYP.)

570'

S. FRANCIS ROAD

100'

1000'

2014 MSW Watermain Interconnect

State Road 16

As Built Drawings

AS-BUILTS

Florida Map

N.T.S.

NOTICE

THIS SET OF PLANS IS NOT VALID FOR CONSTRUCTION PURPOSES WITHOUT BEING STAMPED "APPROVED FOR CONSTRUCTION BY CPH INC." PLANS WITHOUT THIS STAMP ARE GIVEN FOR INFORMATIONAL PURPOSES ONLY.

Surveyor's Notes:

1. "SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NO WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF LICENSED SURVEYOR AND MAPPER."
2. "ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRIT OF THE SIGNING PARTY OR PARTIES."
3. THE TWO SITE BENCHMARKS FOR THIS TOPOGRAPHIC SURVEY ON THE RESPECTIVE SURVEY FILE. THIS FIELDWORK WAS PERF A TOPCON LEVEL MODEL # AT-G4, AND REFERENCES THE F PUBLISHED BENCHMARKS AS ESTABLISHED BY THE NORTH AM VERTICAL DATUM OF 1988 (NAVD '88) AND SAID ELEVATIONS VERTICAL CONTROL BENCHMARKS SUPPLIED BY ST. JOHNS CO ENGINEERING DEPARTMENT FOR STATE ROAD 16 WATER MAIN
   a) DESIGNATION #1 SURVEY DISK STAMPED H 482, ELE
   b) DESIGNATION #2 SURVEY DISK STAMPED J 482, ELE
4. SITE BENCHMARKS ARE AS LISTED ON SHEET 3.
5. THIS SURVEY IS NOT VALID WITHOUT SHEETS 1, 3 THROUGH 1
6. THE LAST DAY FIELD WORK WAS PERFORMED WAS SEPTEMBER
7. BEARINGS SHOWN HEREON ARE RELATIVE TO BASELINE SURVE CENTERLINE OF CONSTRUCTION BEING S80°53'55"E.
8. HORIZONTAL WELL-IDENTIFIED FEATURES IN THIS SURVEY AND BEEN MEASURED TO AN ESTIMATED HORIZONTAL POSITIONAL A 0.07'. THE EQUIPMENT USED TO LOCATE THE FEATURES WAS TOTAL STATION MODEL # GPT-3005W
9. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN A OPINION OF TITLE. NO INSTRUMENTS OF RECORD REFLECTING RIGHTS-OF-WAY, AND/OR OWNERSHIP WERE FURNISHED TO T EXCEPT AS NOTED.
10. NO UNDERGROUND UTILITIES, FOUNDATIONS OR IMPROVEMENTS BEEN LOCATED EXCEPT AS SHOWN.
11. VERTICAL FEATURE ACCURACY: ELEVATIONS OF WELL-IDENTIFI CONTAINED IN THIS SURVEY AND MAP HAVE BEEN MEASURED ESTIMATED VERTICAL POSITIONAL ACCURACY OF 0.04'.
12. THIS IS NOT A BOUNDARY SURVEY.
13. DIMENSIONS ARE SHOWN RELATIVE TO UNITED STATES STANDA DECIMALS THEREOF, UNLESS THE OBJECT SHOWN IS COMMONL INCHES, I.E. TREE DIAMETER, PIPE DIAMETER, ETC. TREES DEF

ATLANTIC DIRECTIONAL DRILLING, INC.
BORE LOG

Masci
14
BA
d 16
ore: E to W
15'

Job Name: SR 16 Wm Connection
Footage: 375 ft
Start Station #: 699+35
End Station #: 695+60
Print #: 9 5/10"
Pipe Size: 20" FPVC Wm

ATLANTIC DIRECTIONAL DRILLING, INC.
BORE LOG

Contractor: Masci
Date: 4-24-14
Bored By: BB
Address: SR 16
Direction of Bore: W to E
Rod Length: 15'

Job Name: SR 16 Wm Interconnect
Footage: 120'
Start Station #: 747+20
End Station #: 748+40
Print #: 13
Pipe Size: 20" FPVC Wm

INV = INVERT

MH = MAN HOLE

ATT = AMERICAN TELEPHONE & TELEGRAPH

X24.5 = ELEVATION SHOT

CONC = CONCRETE

W = WATER METER

TOB = TOP OF BANK

= WOOD OR METAL POST

= SINGLE POST SIGN

= DOUBLE POST SIGN

BH-1 = BORING HOLE LOCATION

= TREE LINE

ICB = IRRIGATION CONTROL BOX

FND = FOUND

CM = CONCRETE MONUMENT

N&D = NAIL AND DISK

IP = IRON PIPE

IR = IRON ROD

SIR TR = SET 1/2" IR WITH RED CAP "SJC TRAV"

SND TR = SET NAIL AND DISK "SJC TRAV"

SMS = SET MAG SPIKE

NO ID = NO IDENTIFICATION STAMPED

PC = POINT OF CURVE

= WOOD UTILITY POLE

= WOOD UTILITY POLE WITH GUY ANCHOR

= UNDERGROUND UTILITY MARKER

THP = TELEPHONE HAND HOLE

T = TELEPHONE MAN HOLE

EB = ELECTRIC BOX

= BACK-FLOW PREVENTER

GV = GAS VALVE

= LIGHT POLE

= UNDERGROUND MARKINGS-CABLE

= UNDERGROUND MARKINGS-ELECTRIC

= UNDERGROUND MARKINGS-GAS

= UNDERGROUND MARKINGS-WATER

= UNDERGROUND MARKINGS-FLAG

FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION

PCC = POINT OF COMPOUND CURVE

PT = POINT OF TANGENT

PI = POINT OF INTERSECTION

PRC = POINT OF REVERSE CURVE

LT = LEFT

RT = RIGHT

BP = BEGIN POINT

EP = END POINT

C/L = CENTERLINE

THE NAD 83/90. ST. JOHNS CO

5. THIS IS A TOPOGRAPHIC SURVE
6. BENCHMARK BASIS: NGS PUBL
7. THE INTENDED FEATURES LOC
8. THE UNDERGROUND MARKING
9. THE PROPERTY LINES AND RIG
   MONUMENTATION.
10. SEE STATE ROAD DEPARTMENT
11. AERIAL PHOTOGRAPHY, IF SHO

30 0 15

ZONTAL DIRECTIONAL DRILL PIPE MAY BE 20" FUSIBLE PVC OR 24"
DR 11, DIPS
ISTURBED AREAS SHALL BE SODDED TO MATCH EXISTING GRASS
RIVEWAYS TO BE REPLACED TO PRE EXISTING CONDITION OR BETTER.
URBED DRIVEWAYS ARE TO BE TEMPORARILY STABILIZED WITH
CLED ASPHALT TO MAINTAIN SERVICE UNTIL RESTORATION CAN
OMPLETED.
IPING TO BE INSTALLED WITH 42" MIN. COVER.
RACTOR SHALL MEET WITH OWNER OF EASEMENT TO HELP MINIMIZE DAMAGE TO IRRIGATION SYSTEM
T LOCATION OF PROPOSED FIRE HYDRANTS MAY BE ADJUSTED DURING CONSTRUCTION
THE APPROVAL OF FDOT AND SJCUD
WATERING IS REQUIRED THE APPROPRIATE PERMITS MUST BE OBTAINED PRIOR
Y DEWATERING ACTIVITIES. (SEE PROJECT SPECIFICATIONS)

RIGHT OF WAY LINE

130'

598+00 599+00 S80°53'55"E 5248.11' 600+00 STATE ROAD 16 601+00 602+00

(200' RIGHT OF WAY)
ASPHALT

C/L OF SURVEY

602+3
18.68
SI

CONCRETE ISLAND
WITH 6" CURB

27.32 27.29 27.24 27.20 27.1 27.46 27.3

609+30.79
19.54' LT
SIR TR

607+00 608+00 609+00 610+00 611+00

STATE ROAD 16
(200' RIGHT OF WAY)
ASPHALT

C/L OF SURVEY S80°53'55"E

x 27.94 x 27.91 x 27.90

GAS MAIN

TOH

TOB

90'

20" WM
STA 607+25, 74'RT
PIPE DEPTH 3.6'

1'x2' WIRE PULL BOX
STA 607+26, 74'RT

20" WM
STA 610+50, 74'RT
PIPE DEPTH 3.4'

OLD ASPHALT

1'x2' WIRE
STA 610+

SLEEVE
STA 610+
PIPE DEP

240LF OF
SEE NOTE

HORIZONTA
TOTAL HORI

RIGHT OF WAY LINE

15FT WIDE UTILITY
EASMENT

TEMP. SAMPLE POINT NO. 2
STA 610+51, 74'RT

~~BEGIN DIRECTIONAL DRILL~~

A
4 16

SIGN

MURABELLA UNIT TWO
MAP BOOK 54 PAGE 56-59

UNIT FOUR
PAGE 93-98

MURABELLA UNIT
MAP BOOK 57 PAG

RIGHT OF WAY LINE

130'

616+26.99
20.50' LT
SIR TR

616+00 617+00 618+00 619+00

STATE ROAD 16 S80°53'55"E

624+00
S80°53'55"E
625+00
626+00
STATE ROAD 16
627+00
628+00
C/L OF SURVEY
(200' RIGHT OF WAY)
ASPHALT
TOB
DITCH
GAS MAIN
70'
RIGHT OF WAY LINE
MES
INV=24.90
MES
INV=24.80
1'x2' WIRE PULL BOX
STA 623+45, 70'RT
1'x2' WIRE PULL
STA 628+09, 70'
850 LF OF 20" DR25 PVC PIPE, C905
20" WM
STA 628+00, 74'RT
PIPE DEPTH 3.9'
3.9'
30
130'
633+00
634+00
635+00
STATE ROAD 16
636+00
637+00
C/L OF SURVEY
(200' RIGHT OF WAY)
ASPHALT
27.67
27.45
27.47
27.56

642+00 643+00 STATE ROAD 16 644+00 645+00 646+

C/L OF SURVEY

(200' RIGHT OF WAY)
ASPHALT

GAS UTILITY MARKERS

BH-5

COMMUNICATION CABLE MARKERS

70'

TOB

DITCH

TOB

RIGHT OF WAY LINE

EXISTING 20" PVC WATER MAIN

RIGHT OF WAY LINE

EXISTING 12" WATER SUPPLY
VA FACILITY

130'

651+50.54
25.76' LT
SIR TR

PT: 653+71.57

CONC HW
INV=23.32

30

651+00 652+00 STATE ROAD 16 653+00 654+00

C/L OF SURVEY

(200' RIGHT OF WAY)
ASPHALT

1117.23'

659+00

660+00

661+00

STATE ROAD 16

(200' RIGHT OF WAY)
ASPHALT

662+00

663+00

(2) 20" 45° BENDS DI,MJ

5° BEND
659+14, 41.1'RT
DEPTH 3.6'

.0'RT

20" WM
STA 660+48, 42.5'RT
PIPE DEPTH 3.1'

20" TEE, 3.1' DEEP
STA 661+45, 41.5'RT

20" WM
STA 662+32, 43.6'RT
PIPE DEPTH 3.7'

DITCH

TOB

GAS MAIN

COMMUNICATION
CABLE MARKERS

70'

30'

28.5'

MES
INV=22.89

MES
INV=23.05

MES
INV=22.87

MES
INV=22.90

MES
INV=23.12

MES
INV=23.37

26.4'

26.7'

10'

9.0'

WAY LINE

659+30.39 x 27.1
70.54' RT
FIP ⅝" FOOT

27 LF
~~28 LF~~ OF 20" DR25 PVC PIPE, C905

FH ASSEMBLY
STA 661+45, 55'RT
GATE VALVE
STA 661+45, 51'RT

TEMP. SAMPLE POINT NO. 8
STA 662+35, 43.6'RT

1'x2' WIRE PULL BOX
STA 663+01, 55.0'RT

612 LF
~~563 LF~~ OF 20" DR25 PVC PIPE,
C905

671+09.50
132.16' LT
FCM NOID BROKEN

671+09.19
132.02' LT
FIP 1" NOID

S FRANCIS RD
(59' COUNTY MAINTAINED RIGHT OF
ASPHALT

131.5'

MATCHLINE I

BELL SOUTH BOX

CONC HW
INV=22.75
INV=22.80

8"RECLAIMED WATER

WATER VALVE HAS NO
COVER AND WIRES
INSIDE

STATE ROAD 16

(200' RIGHT OF WAY)
ASPHALT

668+00

669+00

670+00

C/L OF SURVEY

L BOX
5.0'RT

20" GATE VALVE
STA 668+76, 43.5'RT

CONC DRIVE

GRASS DRIVE

20" WM
STA 668+97, 43.5'RT

~~(2) 20" 45° BENDS DI,MJ~~

671+70.90
36.98' LT
SND TR

30 LF OF 20" DR
PIPE, C905

TOB
GAS MAIN
DITCH
CMP
MES
INV=21.99
GUY ANCHORS FOR SHRUBS
674+56.65
65.68' RT
FIR ¾" FDOT
675+04.96
65.38' RT
FIR ¾" LB 4958
822 LF OF 20" DR25 PVC PIPE, C905
RIGHT OF WAY LINE
65.9'
28.3'
25.2'
1'x2' WIRE PULL BOX
STA 676+60, 40.2'RT
684+64.72
135.97' LT
FIR ¾" FDOT
136.5'
684+43.15
30.03' LT
SIR TR
PT: 683+88.58
STATE ROAD 16
(200' RIGHT OF WAY)
ASPHALT
S47°53'05"E
C/L OF SURVEY
20" TEE, 4.3' DEEP
STA 681+46, 39.8'RT
TEMP. SAMPLE POINT NO. 10
STA 681+50, 40.9'RT
BH-9
COMMUNICATION CABLE MARKERS
1'x2' WIRE PULL BOX
STA 685+57, 33.5'RT
682+00
683+00
684+00
685+00
686+00

RIGHT OF WAY LINE

137.2'

CDH

NOTES:

1 HORIZONTAL DIRECTIONAL DRILL PIPE MAY BE 20" FUSIBLE HDPE DR 11, DIPS
2 ALL DISTURBED AREAS SHALL BE SODDED TO MATCH EXIS
3 ALL DRIVEWAYS TO BE REPLACED TO PRE EXISTING COND
4 DISTURBED DRIVEWAYS ARE TO BE TEMPORARILY STABIL RECYCLED ASPHALT TO MAINTAIN SERVICE UNTIL RESTOR BE COMPLETED.
5 ALL PIPING TO BE INSTALLED WITH 42" MIN. COVER.
6 EXACT LOCATION OF PROPOSED FIRE HYDRANTS MAY BE DURING CONSTRUCTION WITH THE APPROVAL OF FDOT AN
7 IF DEWATERING IS REQUIRED THE APPROPRIATE PERMITS TO ANY DEWATERING ACTIVITIES. (SEE PROJECT SPECIFIC

STATE ROAD 16

(200' RIGHT OF WAY)
ASPHALT

691+00 692+00 693+00 694+00 695+00

S47°53'05"E
C/L OF SURVEY

20" WM
STA 691+00, 37.4'RT
PIPE DEPTH 3.1'

20" WM
STA 693+00, 36.3'RT
PIPE DEPTH 3.2'

TEMP. SAMPLE POINT NO. 11
STA 694+83, 35.8'RT

BH-10 (APPROXIMATE LOCATION)

COMMUNICATION CABLE MARKERS

TOB

62.8'

DITCH

24'

27.2'

4' WOOD FENCE

RIGHT OF WAY LINE

750 LF OF 20" DR25 PVC PIPE, C905

20" GATEVALVE
~~STA 695+05~~
STA 695+04, 35'RT

BEGIN DIRECTIONAL DRILL
STA 695+65

B
9 17

NOTES:

1 HORIZONTAL DIRECTIONAL DRILL PIPE MAY BE 20" FUSIBLE HDPE DR 11, DIPS

2 ALL DISTURBED AREAS SHALL BE SODDED TO MATCH EXIS

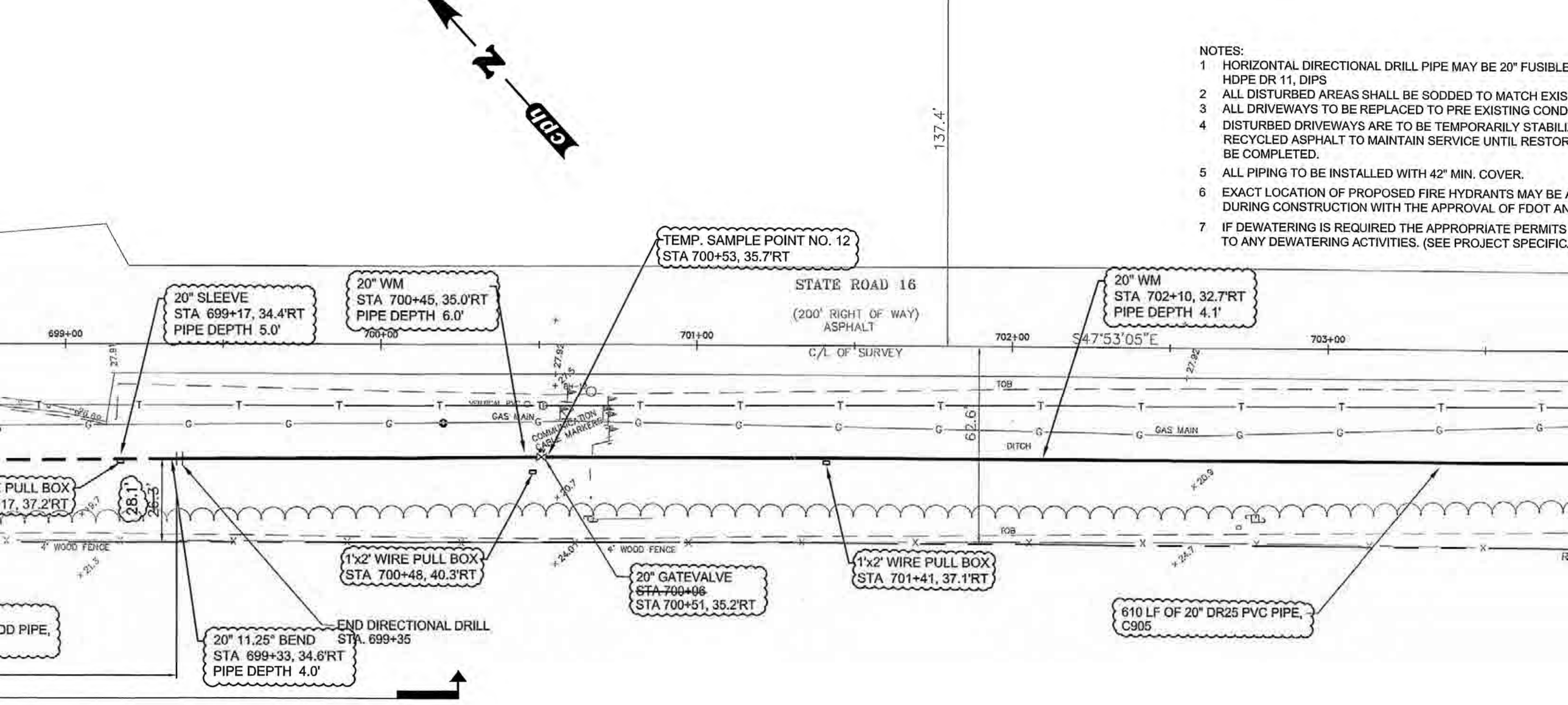
3 ALL DRIVEWAYS TO BE REPLACED TO PRE EXISTING COND

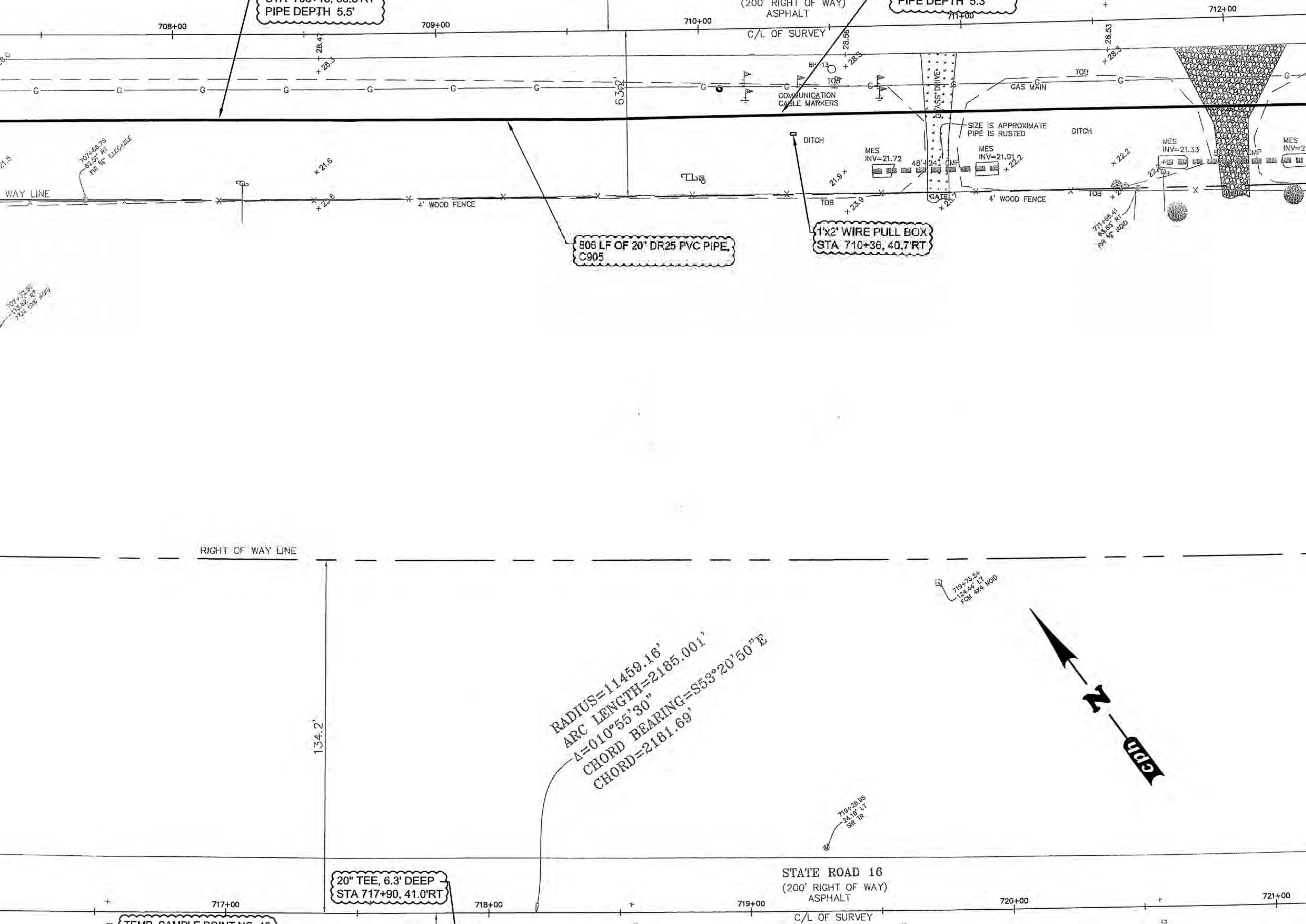
4 DISTURBED DRIVEWAYS ARE TO BE TEMPORARILY STABILI RECYCLED ASPHALT TO MAINTAIN SERVICE UNTIL RESTOR BE COMPLETED.

5 ALL PIPING TO BE INSTALLED WITH 42" MIN. COVER.

6 EXACT LOCATION OF PROPOSED FIRE HYDRANTS MAY BE A DURING CONSTRUCTION WITH THE APPROVAL OF FDOT AN

7 IF DEWATERING IS REQUIRED THE APPROPRIATE PERMITS TO ANY DEWATERING ACTIVITIES. (SEE PROJECT SPECIFIC




STA 708+18, 35.5'RT
PIPE DEPTH 5.5'
(200' RIGHT OF WAY)
ASPHALT
PIPE DEPTH 5.3'
708+00
709+00
710+00
711+00
712+00
C/L OF SURVEY
6.362'
BH-13
TOB
COMMUNICATION CABLE MARKERS
GAS MAIN
SIZE IS APPROXIMATE
PIPE IS RUSTED
DITCH
MES
INV=21.72
MES
INV=21.91
MES
INV=21.33
48'-24" CMP
GATE
4' WOOD FENCE
WAY LINE
707+66.75
62.51' RT
FIR 5/8" ILLEGIBLE
711+65.41
63.65' RT
FIR 5/8" NOID
806 LF OF 20" DR25 PVC PIPE,
C905
1'x2' WIRE PULL BOX
STA 710+36, 40.7'RT
RIGHT OF WAY LINE
134.2'
719+73.54
124.44' LT
FCM 4X4 NOID
RADIUS=11459.16'
ARC LENGTH=2185.001'
Δ=010°55'30"
CHORD BEARING=S53°20'50"E
CHORD=2181.69'
N
cpd
719+28.95
24.18' LT
SIR IR
STATE ROAD 16
(200' RIGHT OF WAY)
ASPHALT
20" TEE, 6.3' DEEP
STA 717+90, 41.0'RT
717+00
718+00
719+00
720+00
721+00
C/L OF SURVEY
TEMP. SAMPLE POINT NO. 16

725+00
726+00
727+00
728+00
729+00
STATE ROAD 16
(200' RIGHT OF WAY)
ASPHALT
C/L OF SURVEY
PIPE DEPTH 4.6
20" TEE, 5.6' DEEP
STA 726+77, 39.1'RT
20" WM
STA 728+50, 37.1'RT
PIPE DEPTH 5.0'
GAS MAIN
TOB
MES
INV=24.27
INV=24.30
CMP
DITCH
3.5' WOOD FENCE
3' WOOD FENCE
PA
4' WIRE FENCE
691'
96 LF OF 20" DR25 PVC PIPE,
C905
FH ASSEMBLY
STA 726+77, 55.6'RT
GATE VALVE
STA 726+77, 52'RT
20" GATE VALVE
~~STA 726+30~~
STA 726+81, 39.1'RT
1'x2' WIRE PULL BOX
STA 727+26, 42.6'RT
497 LF O
C905
RIGHT OF WAY LINE
130'
70'
734+00
735+00
736+00
737+00
738+00
S58°48'35"E
2000.
C/L OF SURVEY
20" WM
STA 734+35, 37.2'RT
PIPE DEPTH 4.8'
20" TEE, 4.3' DEEP
STA 736+12, 39.4'RT
TEMP. SAMPLE POINT NO. 15
STA 736+13, 39.2' RT
20" WM
STA 738+20, 40.2'RT
PIPE DEPTH 4.0'
ASPHAL

20" TEE, 3.8' DEEP
STA 744+42, 39.7'RT

(200' RIGHT OF WAY)
ASPHALT

20" WM
STA 745+82, 40.2'RT
PIPE DEPTH 4.4'

STA 747+80, 40.9'RT
PIPE DEPTH 4.0'

GAS MAIN

70'

30'

29.5'

DITCH

MES
INV=22.46

MES
INV=22.19

52' CMP

TOB

20' X 50' BORE PIT (8° ENTRY/ EXIT ANGLE)

4' WOOD FENCE

FH ASSEMBLY
STA 744+42, 64.0'RT
GATE VALVE
STA 744+42, 61'RT

GATE

1'x2' WIRE PULL BOX
STA 744+77, 44'RT

D
13 16

RIGHT OF WAY LINE

753+67.37
129.53' LT
FOM 4X4 RLS 2020

130'

RADIUS=1909.86'
ARC LENGTH=738.195'
Δ=022°08'45"
CHORD BEARING=S47°44'12"E
CHORD=733.61'

753+36.52
19.93' LT
SIR TR

752+00

STATE ROAD 16

753+00

C/L OF SURVEY

754+00

COMMUNICATION CABLE MARKERS

TEMP. SAMPLE POINT NO. 17
STA 753+81, 39' RT

20" TEE, 3.6' DEEP
STA 753+80, 39'RT

1'x2' WIRE PULL BOX
STA 754+41, 46'RT

N

1'x2' WIRE PULL BOX
STA 758+89, 55.7'RT

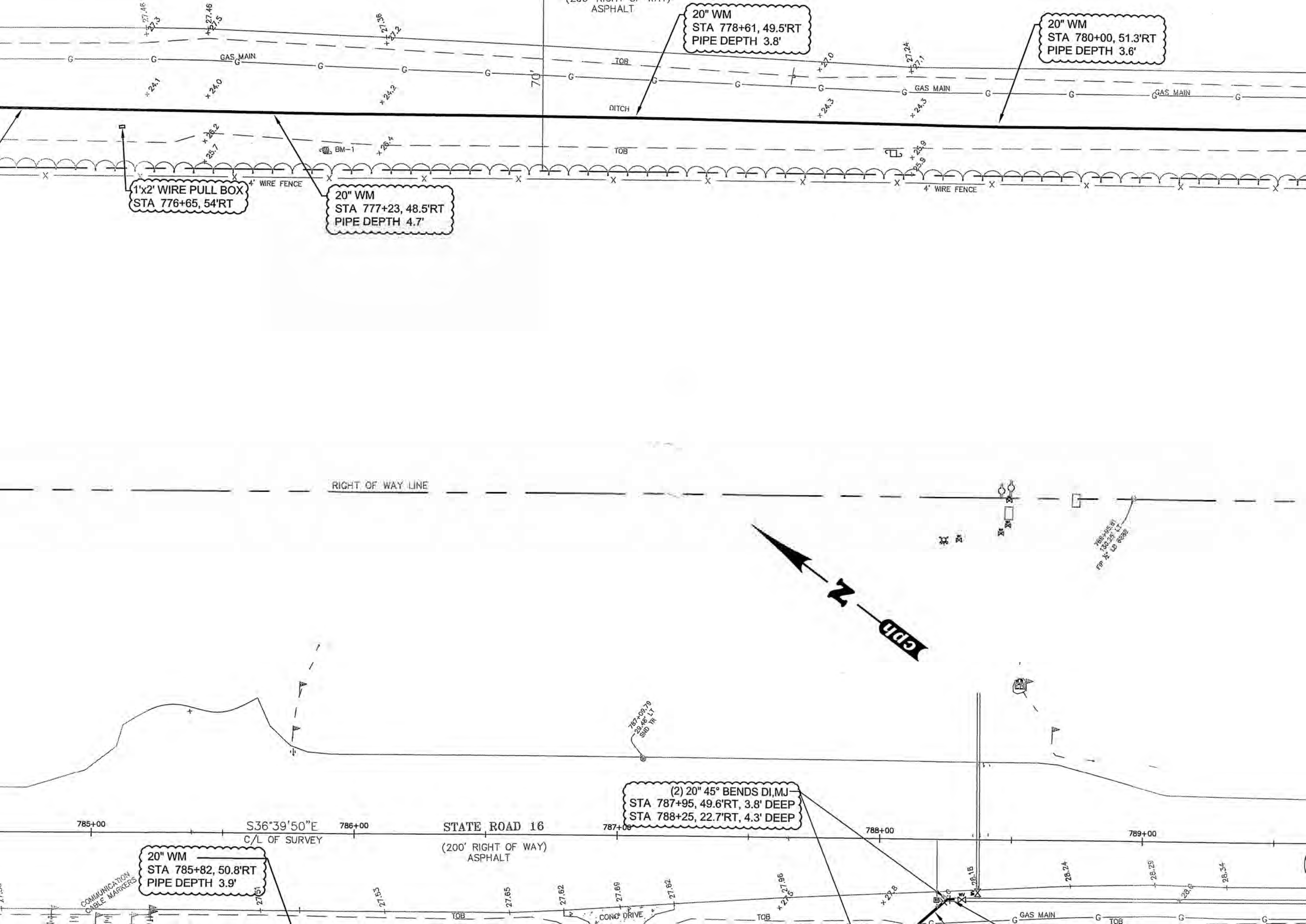
875 LF OF 20" DR25 PVC PIPE, C905

20" WM
STA 767+20, 47.8'RT
PIPE DEPTH 3.4'

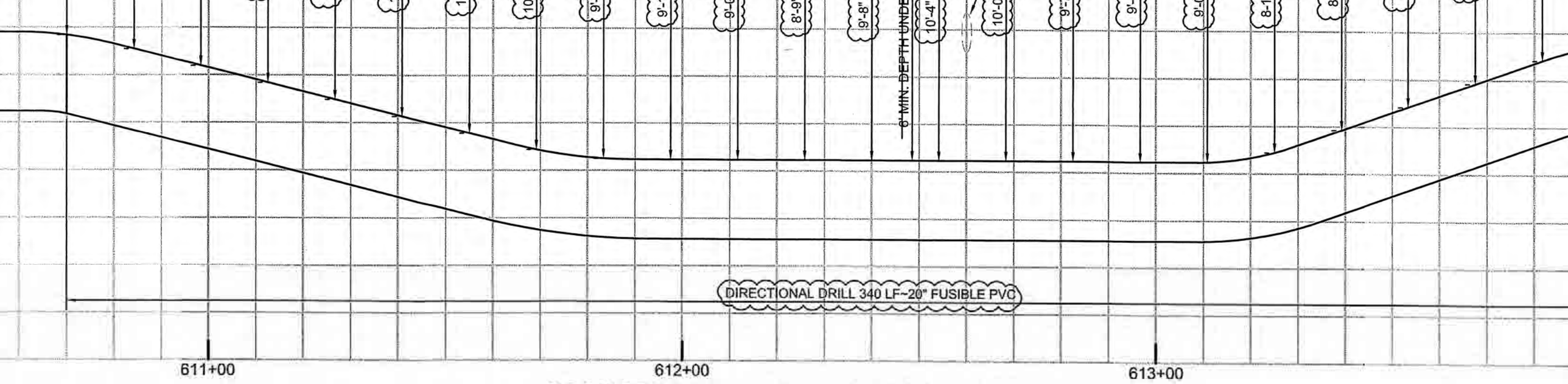
20" WM
STA 769+35, 49.2'RT
PIPE DEPTH 4.5'

20" WM
STA 771+26, 48.1'RT
PIPE DEPTH 4.4'

20" WM
STA 77
PIPE D



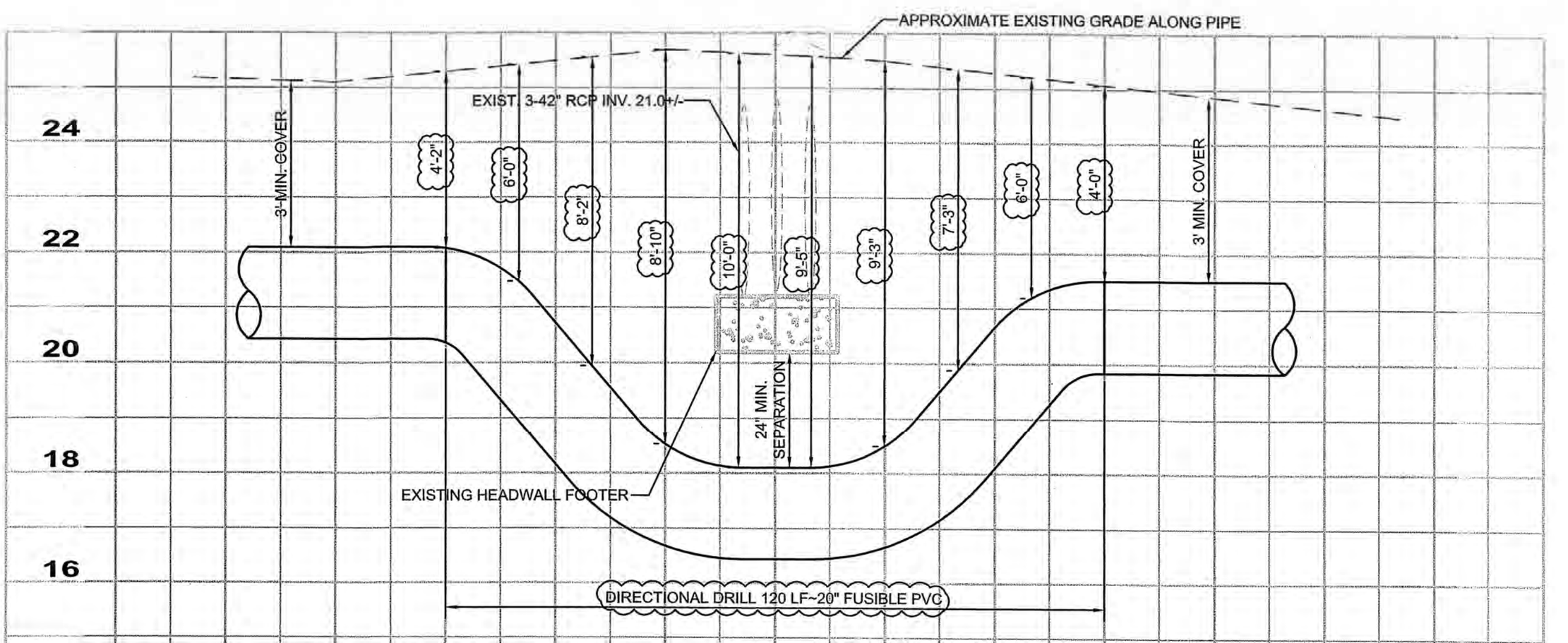
ASPHALT
20" WM
STA 778+61, 49.5'RT
PIPE DEPTH 3.8'
20" WM
STA 780+00, 51.3'RT
PIPE DEPTH 3.6'
GAS MAIN
TOB
70'
DITCH
BM-1
1'x2' WIRE PULL BOX
STA 776+65, 54'RT
4' WIRE FENCE
20" WM
STA 777+23, 48.5'RT
PIPE DEPTH 4.7'
RIGHT OF WAY LINE
N
cph
(2) 20" 45° BENDS DI,MJ
STA 787+95, 49.6'RT, 3.8' DEEP
STA 788+25, 22.7'RT, 4.3' DEEP
785+00
S36°39'50"E
C/L OF SURVEY
786+00
STATE ROAD 16
787+00
788+00
789+00
(200' RIGHT OF WAY)
ASPHALT
20" WM
STA 785+82, 50.8'RT
PIPE DEPTH 3.9'
COMMUNICATION CABLE MARKERS
CONC DRIVE



610+70 to Sta. 614+10
Section A Sta. 610+00 to Sta. 614+00

SCALE: 1" = 20' - 1" = 2'

A
14 | 16



22'-0"
23'-0"
21'-6"
21'-2"
20'-9"
20'-8"
20'-6"
20'-4"
20'-2"
21'-3"
10' MIN. COVER FROM CREEK BOTTOM

375 LF
DIRECTIONAL DRILL ~~370 LF~~ 20" FUSIBLE PVC

696+00
697+00
698+00
699+00

695+60 to Sta. 699+35
Section B Sta. ~~695+00 to Sta. 700+20~~

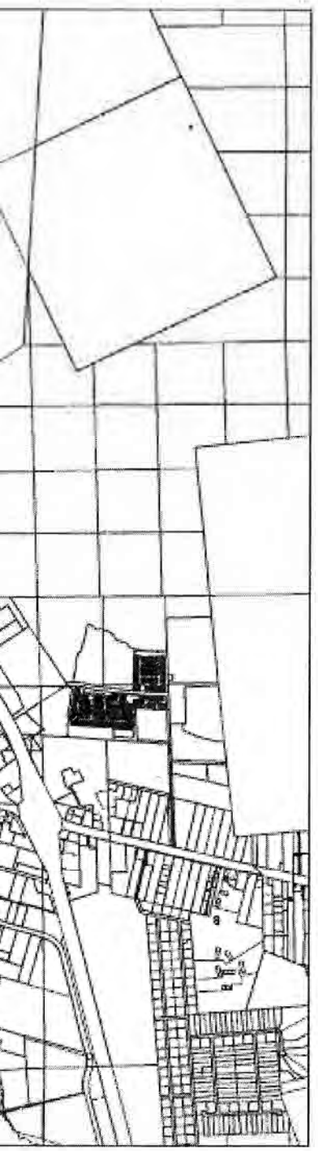
SCALE: 1" = 20' - 1" = 2'

B
14 | 17

2015 MSW Windward Ranch

As Built Drawings

T. JOHNS COUNTY, FLORIDA



INDEX O

1
2-4
5
6
7-9
10-12
(Attached

AS-BUILT

INFORMATION PROVIDED BY:

199
199 L.F. ~
PVC (SDR35)
@ S = 0.40%
0.41%

62
63 L.F. ~
PVC (SDR35)
@ S = 0.40%
0.42%

INV. OUT = 24.15 W
SINGLE SANITARY
SERVICE (TYP.)
STA. 15+04.56, 59.7' L

10.0' FPL
ELEC. ESM'T

MH# 86, TYPE "A", JUNCT. MH
STA. 15+23.52, 0.36' L
TOP EL. = 30.41 30.86
INV. IN = 23.60 NE 23.59
INV. IN = 23.90 E 23.89
INV. OUT = 23.50 S 23.49

142
142 L.F. ~
PVC (SDR26)
@ S = 0.40% 0.38%

MH# 151, TYPE "A"
STA. 16+64.23, 22.7' L
TOP EL. = 30.50 30.46
INV. IN = 22.94 N 22.95
INV. OUT = 22.84 S 22.86

SINGLE SANITARY
SERVICE (TYP.)
STA. 16+81.94, 1.48' L

159
159 L.F. ~
PVC (SDR35)
@ S = 0.40%
0.45%

MH# 85, TYPE "B", JUNCT. MH
STA. 25+59.00, 0.55' L
TOP EL. = 30.33 30.49
INV. IN = 22.20 N 22.15
INV. IN = 17.05 W 16.95
INV. OUT = 16.95 E 16.85

MH# 64, TYPE "A", JUNCT. MH
STA. 26+09.13, 0.48' L
TOP EL. = 30.39 30.46
INV. IN = 17.37 E 17.40
INV. IN = 16.75 W 16.82
INV. OUT = 16.55 S 16.51

190
188 L.F. ~
PVC (SDR26)
@ S = 0.40%
0.41%

MH# 65, TYPE "A", JUNCT. MH
STA. 27+99.14, 0.87' R
TOP EL. = ~~30.75~~ 30.78
INV. IN = ~~19.29~~ E 19.33
INV. IN = ~~18.32~~ S 18.36
INV. OUT = ~~18.12~~ W 18.18

396
~~397~~ L.F. ~
PVC (SDR26)
@ S = ~~0.40%~~
0.40%

MH# 66, TYPE "A"
STA. 31+95.45, 1.33' L
TOP EL. = ~~30.49~~ 30.58
INV. IN = ~~20.98~~ E 21.00
INV. OUT = ~~20.88~~ W 20.93

179
~~180~~ L.F.
PVC (SDR
@ S = ~~0.~~

10.0' FPL
ELEC. ESM'T

LIFT STATION TRACT

62
57 L.F. ~
PVC (SDR26)
@ S = ~~0.45%~~
0.45%

NATURAL / VEGETATIVE UPLAND BUFFER

29.50 | 32.75 | 29.75 | 31.53 | 32.34 | 32.18 | 35.16 | 30.79 | 30.15

OUT PARCEL
OFFICIAL RECORDS
1636, PAGE 1

L.F. ~
(SDR26)
S = 0.40%
0.39%

225
225 L.F. ~
PVC (SDR35)
@ S = 0.40%
0.38%

33.01

82 51 52 53 54 55 56 57 58

SMF-04 STORMWATER
MANAGEMENT FACILITY
EASEMENT FOR DRAINAGE
ACCESS AND MAINTENANCE

. MH

80

NORMAL WATER LEVEL
TOP OF BANK

73

204
204 L.F. ~
PVC (SDR26)
@ S = 0.40%
0.40%

78 77 76 75 74 73 72 71 70

MH# 78, TYPE "A", JUNCT. MH
STA. 52+21.23, 0.54' L
TOP EL. = 30.75 30.87
INV. IN = 21.36 SE 21.40
INV. IN = 23.21 SW 23.25
INV. OUT = 21.26 NW 21.30

20.0
DRAINAGE
EASEMENT

36.04
30.21
38.70
54.84
32.30
30.16
38.75
32.66
29.29
26.13

142
142 L.F. ~
PVC (SDR35)
@ S = 0.40%
0.38%

276
276 L.F. ~
PVC (SDR35)
@ S = 0.40%
0.41%

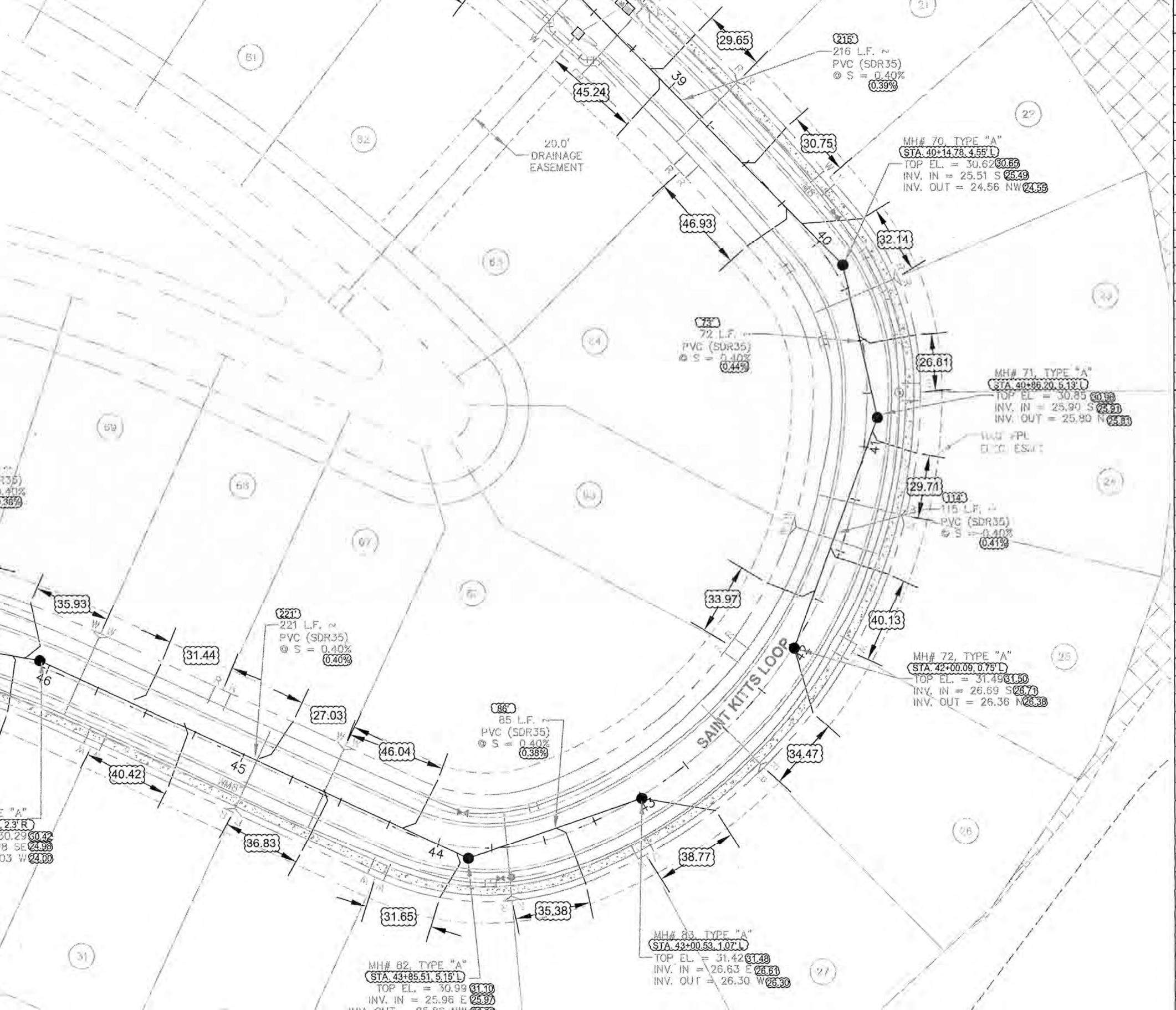
200
200 L.F
PVC (S
@ S =

53 52 51 50 49 48 47

SAINT KITTS LOOP

ALT CAY PLACE

61.92
37.14
38.04



Lot	20	Sewer Service	
Lot	21	Sewer Service	
Lot	22	Sewer Service	
Lot	23	Sewer Service	
Lot	24	Sewer Service	
Lot	25	Sewer Service	
Lot	26	Sewer Service	
Lot	27	Sewer Service	
Lot	28	Sewer Service	
Lot	29	Sewer Service	
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Lot	63	Sewer Service	
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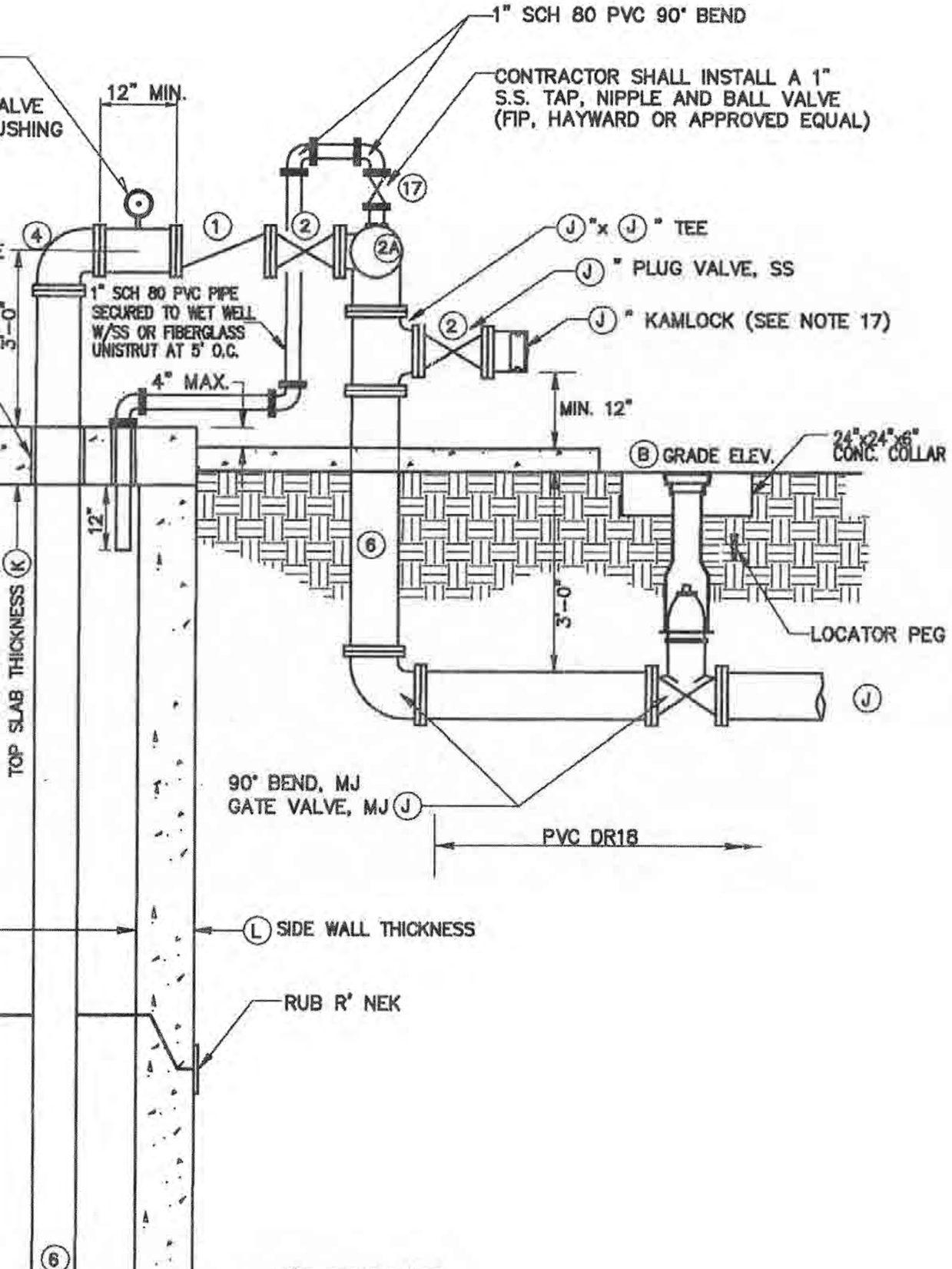
Lot	65	Sewer Service	
Lot	66	Sewer Service	
Lot	67	Sewer Service	
Lot	68	Sewer Service	
Lot	69	Sewer Service	
Lot	70	Sewer Service	
Lot	71	Sewer Service	
Lot	72	Sewer Service	
Lot	73	Sewer Service	
Lot	74	Sewer Service	
Lot	75	Sewer Service	
Lot	76	Sewer Service	


(36" MIN. COVER)
8" FM TOP EL.=27.00
8" SANITARY INV. EL.=24.58
SEPARATION=1.08'
14
15
10.0' FPL
ELEC. ESM'T
30.0' BUFFER
WATER OVER SANITARY
(6" MIN. CLEAR)
(36" MIN. COVER)
8" WM EL.=27.60
8" SANITARY INV. EL.=18.18
SEPARATION=8.08'
WATER OVER SANITARY
(6" MIN. CLEAR)
(36" MIN. COVER)
10" WM EL.=27.70
8" SANITARY INV. EL.=22.20
SEPARATION=3.8'
WATER OVER SANITARY
(6" MIN. CLEAR)
(36" MIN. COVER)
12" WM EL.=27.50
8" SANITARY INV. EL.=22.20
SEPARATION=3.6'
1
2
3
4
5
6
UPLAN
R R
W W

FM-2013	CL 8"X4" REDUCER	18+
FM-2014	CL 8" 45° BEND	18+
FM-2015	CL 8" 45° BEND	18+
FM-2016	CL 8"X6" REDUCER	18+
FM-2017	CL 6" X4" TEE	18+
FM-2018	CL 6"X4" REDUCER	18+
FM-2019	CL 4" GATE VALVE	18+
FM-2020	CL 4" GATE VALVE	18+
FM-2021	CL 4" 45° BEND	18-
FM-2022	CL 4" 45° BEND	18-
FM-2023	CL 4" 90° BEND	18-
FM-2024	CL 4" GATE VALVE	18-
FM-2025	CL 2" FLUSHING HYDRANT	24+
FM-2026	CL 2" FLUSHING HYDRANT	19-
FM-2027	CL 8" AIR RELEASE VALVE	12-

AS–BUIL



NUMBER OF PUMPS 2
PUMP MANUFACTURER FLYGT
PUMP MODEL NP 3153 HT 3~ 462
MOTOR N 3153.181 21-18-4AA-W
IMPELLER ID 276 MM
DISCHARGE 4" MOTOR RPM 1755
20 HP 460V VOLTS 3 PHASE 60 HZ
DESIGN POINT 142 GPM AT 112.8 FT.TDH
OPERATING COND. 158 GPM AT 119.6 FT.TDH
PUMP ACCESS HATCH SIZE 36" x 54"

MECHANICAL EQUIPMENT SCHEDULE

(1) CHECK VALVE, MUELLER OR M&H SWING-TYPE LEVER FACING OUTSIDE, LEVER & SPRING OPERATED, IRON BODY, BRONZE MOUNTED

(2) PLUG VALVE, DEZURIK, CAST IRON BODY, LEVER ACTUATED

(2A) CONTRACTOR TO INSTALL PRESSURE SENSOR, ONYX, PART #160-0400-22-09-03, PSW-STAINLESS STEEL, VITRON SEAL, SILICON FILL W/ 1/2" NPT CONNECTION INCLUDING A PRESSURE TRANSMITTER, ABB PART #264HSPSBA1 CALIBRATOR 0-150 PSI (OR S.J.C.U.D. APPROVED EQUAL)

(3) STAINLESS STEEL TEE

(4) STAINLESS STEEL SHORT RADIUS 90° BEND

(5) STAINLESS STEEL 45° BEND

(6) 316 STAINLESS STEEL PIPE (SCH 10)

(7) DUCTILE IRON PUMP BASE

(8) INFLUENT PIPE (SEE PLANS)

(9) CONCRETE WETWELL

(10) FLYGT PUMP (AS APPROVED BY ST. JOHNS COUNTY UTILITY DEPARTMENT)

(11) ALUMINUM WETWELL ACCESS COVER (OPENING PER PUMP MANUFACTURER)

(12) STAINLESS STEEL GUIDE RAILS

(13) LEVEL TRANSDUCER, HIGH AND LOW ALARM FLOATS PROVIDED BY PUMP MANUFACTURER

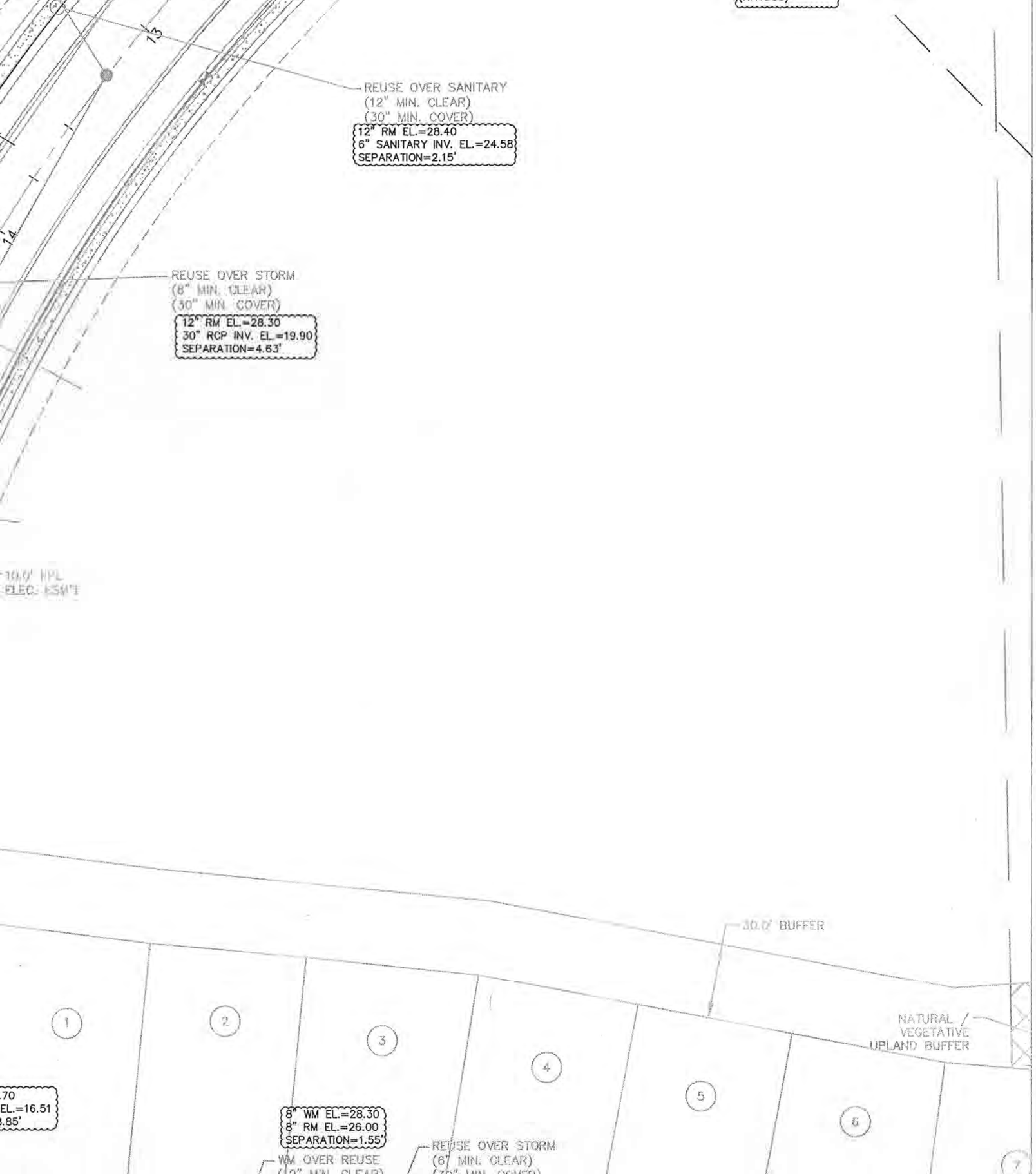
(14) PUMP MOTOR CABLE

(15) 4" TEE SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE SCREENS

(16) STAINLESS STEEL CABLE HOLDER

(17) 1" STAINLESS BLOW OFF LINE TO WETWELL-SECURE LINE TO WETWELL SLAB W/ UNISTRUT.

(18) 1/4" STAINLESS STEEL WITH 18" OF CHAIN LINKS (FLYGT GRIP EYE



RM-4026	CL 8" 45° BEND	58+26, 19.2' R	26.80	30.70
RM-4027	CL 8" 45° BEND	28+35, 17.0' R	27.40	31.00
RM-4028	CL 8" REUSEMAIN	29+48, 18.7' R	27.60	31.30
RM-4029	CL 8" 22½° BEND	30+56, 22.3' R	27.90	31.10
RM-4030	CL 8" REUSEMAIN	31+96, 17.4' R	27.20	30.70
RM-4031	CL 8" REUSEMAIN	33+27, 17.3' R	27.60	30.70
RM-4032	CL 8" REUSEMAIN	34+25, 17.1' R	27.20	30.90
RM-4033	CL 8" REUSEMAIN	35+23, 17.4' R	27.70	31.30
RM-4034	CL 8" GATE VALVE	36+07, 17.1' R	28.60	31.10
RM-4035	CL 8" REUSEMAIN	36+97, 16.9' R	27.60	30.90
RM-4036	CL 8" REUSEMAIN	37+65, 16.9' R	27.10	30.70
RM-4037	CL 8" 45° BEND	38+36, 16.3' R	27.00	30.50
RM-4038	CL 8" 45° BEND	38+40, 19.9' R	27.10	30.50
RM-4039	CL 8" 45° BEND	38+61, 19.7' R	27.20	30.50
RM-4040	CL 8" 45° BEND	38+66, 15.2' R	27.00	30.50
RM-4041	CL 8" REUSEMAIN	39+36, 16.7' R	26.80	30.70
RM-4042	CL 8" 11¼° BEND	40+01, 17.4' R	27.00	30.90
RM-4043	CL 8" 11¼° BEND	40+46, 17.7' R	27.10	31.00
RM-4044	CL 8" REUSEMAIN	41+17, 17.7' R	27.20	31.20
RM-4045	CL 8" REUSEMAIN	41+83, 17.0' R	27.50	31.30
RM-4046	CL 8" REUSEMAIN	42+50, 17.9' R	28.20	31.40
RM-4047	CL 8" 22½° BEND	43+51, 16.9' R	27.80	31.50
RM-4048	CL 8" GATE VALVE	43+91, 15.3' R	29.50	31.50
RM-4049	CL 8" REUSEMAIN	44+68, 18.1' R	27.40	31.10
RM-4050	CL 8" REUSEMAIN	45+76, 17.8' R	27.20	30.70
RM-4051	CL 8" 22½° BEND	46+43, 19.2' R	26.70	30.50
RM-4052	CL 8" REUSEMAIN	47+01, 16.8' R	26.90	30.60
RM-4053	CL 8" 22½° BEND	48+26, 19.1' R	27.80	31.00
RM-4054	CL 8" REUSEMAIN	49+25, 17.0' R	27.90	31.40
RM-4055	CL 8" REUSEMAIN	49+91, 16.6' R	28.30	31.50
RM-4056	CL 8" REUSEMAIN	51+16, 17.3' R	28.30	31.30
RM-4057	CL 8"X4" TEE	51+92, 16.4' R	28.00	31.00
RM-4058	CL 8" GATE VALVE	51+89, 16.4' R	29.50	31.00
RM-4059	CL 4" GATE VALVE	51+92, 13.4' R	28.70	31.00
RM-4060	CL 4" 45° BEND	51+89, 20.5' L	25.80	30.90
RM-4061	CL 4" 45° BEND	51+93, 25.5' L	26.00	30.90
RM-4062	CL 4"X2" REDUCER	10+45, 28.0' L	26.20	31.10
RM-4063	CL 2" REUSEMAIN	11+19, 47.5' L	27.80	31.40
RM-4064	CL 2" REUSEMAIN	11+52, 24.5' R	28.00	31.50
RM-4065	CL 2" FLUSHING HYDRANT	52+70, 109.1' L	30.70	31.20
RM-4066	CL 8" 45° BEND	52+14, 14.6' R	27.60	30.90
RM-4067	CL 8" 45° BEND	52+21, 21.4' R	27.80	30.90
RM-4068	CL 8" 45° BEND	52+36, 20.7' R	28.00	30.90
RM-4069	CL 8" 45° BEND	52+42, 15.7' R	27.70	30.90
RM-4070	CL 8" REUSEMAIN	53+22, 15.9' R	28.00	31.20
RM-4071	CL 8" 11¼° BEND	54+28, 17.8' R	28.10	31.40
RM-4072	CL 8" 11¼° BEND	55+66, 16.6' R	29.00	32.50
RM-4073	CL 8"X4" TEE	55+82, 16.3' R	28.70	32.50
RM-4074	CL 8" GATE VALVE	55+77, 16.2' R	30.20	32.50
RM-4075	CL 4" GATE VALVE	55+82, 13.5' R	29.60	32.50
RM-4076	CL 4"X2" REDUCER	55+80, 24.9' L	28.40	32.00
RM-4077	CL 2" REUSEMAIN	55+44, 82.4' L	28.00	32.50
RM-4078	CL 2" FLUSHING HYDRANT	55+01, 54.0' L	31.80	32.30
RM-4079	CL 8" REUSEMAIN	56+76, 16.4' R	28.10	31.30
RM-4080	CL 8" REUSEMAIN	57+75, 15.1' R	27.50	30.90
RM-4081	CL 2" FLUSHING HYDRANT	24+71, 21.3' R	*	*
RM-4082	CL 2" FLUSHING HYDRANT	19+02, 31.8' R	*	*

INSTALLE

AS–BUIL

RM-4033
8" REUSEMAIN

1-8" GATE VALVE
RM-4034

SMF-04 STORMWATER
MANAGEMENT FACILITY
EASEMENT FOR DRAINAGE,
ACCESS AND MAINTENANCE

NORMAL WATER LEVEL

TOP OF BANK

RM-4066
RM-4067
RM-4068
RM-4069
4-8" 45°
BENDS

PVC DR-25 CASING
PER SJCUD DETAIL

1-8"X4" TEE RM-4057
1-8" GATE VALVE RM-4058
1-4" GATE VALVE RM-4059

4" RM EL.=27.87
8"SEWER INV. EL.=21.56
SEPARATION=5.31'

RM-4056
8" REUSEMAIN

RM-4055
8" REUSEMAIN

8" PVC (DR18) REUSE
MAIN 8.5' OFF R/W

RM-4054
8" REUSEMAIN

20.0'
DRAINAGE
EASEMENT

REUSE OVER STORM
(6" MIN. CLEAR)
(30" MIN. COVER)
8" RM EL.=27.80
36" RCP INV. EL.=21.65
SEPARATION=2.13'

RM-4053
1-8" 22½° BEND

RM-4052
8" REUSEMAIN

RM-4051
1-8" 22½° BEND

SAINT KITTS LOOP

2-4" 45° BENDS
RM-4060 RM-4061

RM-4033
USEMAIN

1-8" GATE VALVE
RM-4034

RM-4035
8" REUSEMAIN

RM-4036
8" REUSEMAIN

REUSE OVER STORM
(6" MIN. CLEAR)
(30" MIN. COVER)
8" RM EL.=27.20
24" RCP INV. EL.=23.55
SEPARATION=0.71'

4-8" 45° BENDS
RM-4037 RM-4038
RM-4039 RM-4040

20.0'
DRAINAGE
EASEMENT

NATURAL
VEGETATIVE
UPLAND BUFFER

RM-4041
8" REUSEMAIN

2-8" 11.25° BENDS
RM-4042 RM-4043

RM-4044
8" REUSEMAIN

10.0' FPL
ELEC. ESM'T

8" PVC (DR18) REUSE
MAIN 8.5' OFF R/W

RM-4045
8" REUSEMAIN

RM-4046
8" REUSEMAIN

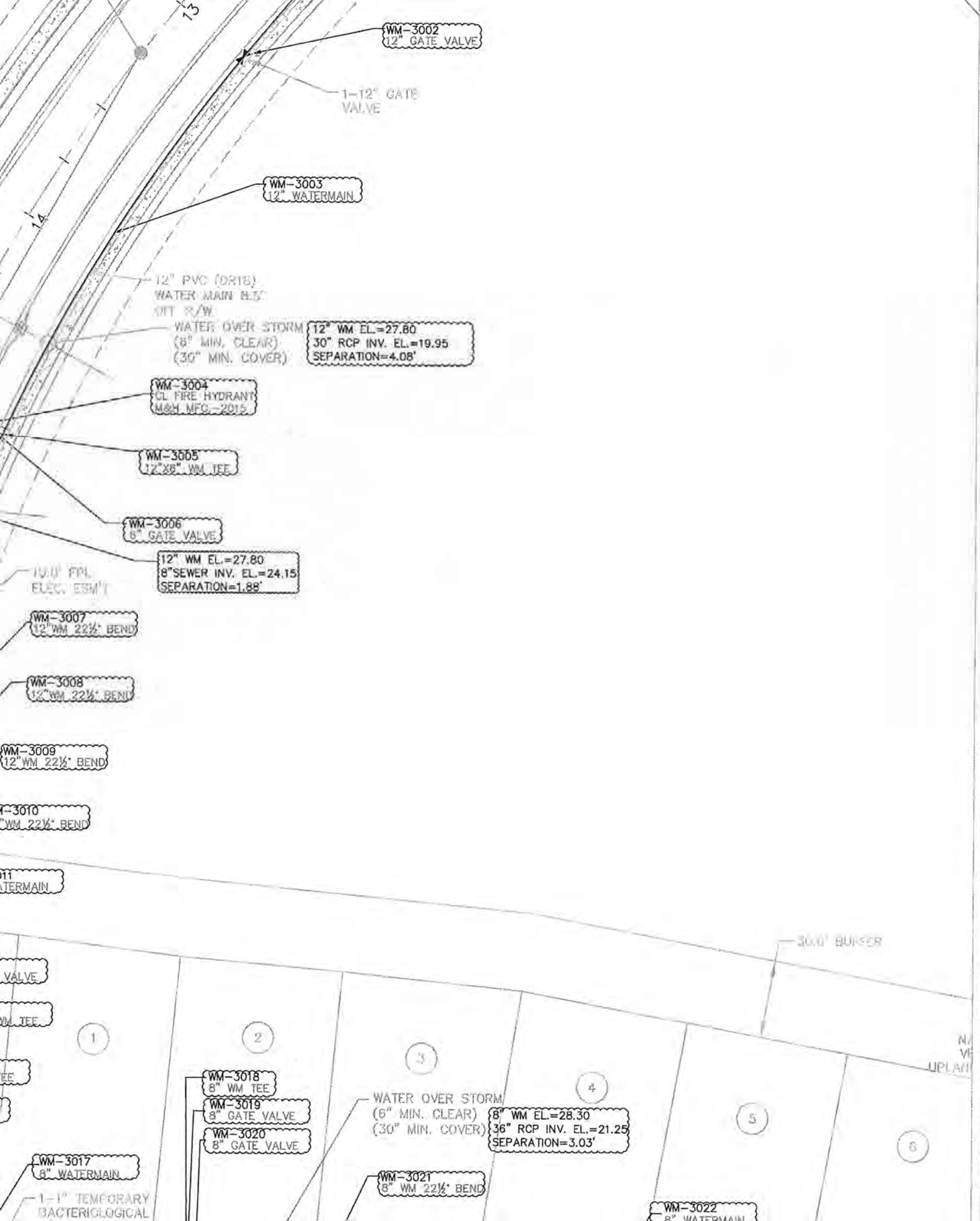
KITTS LOOP

52
EMAIN

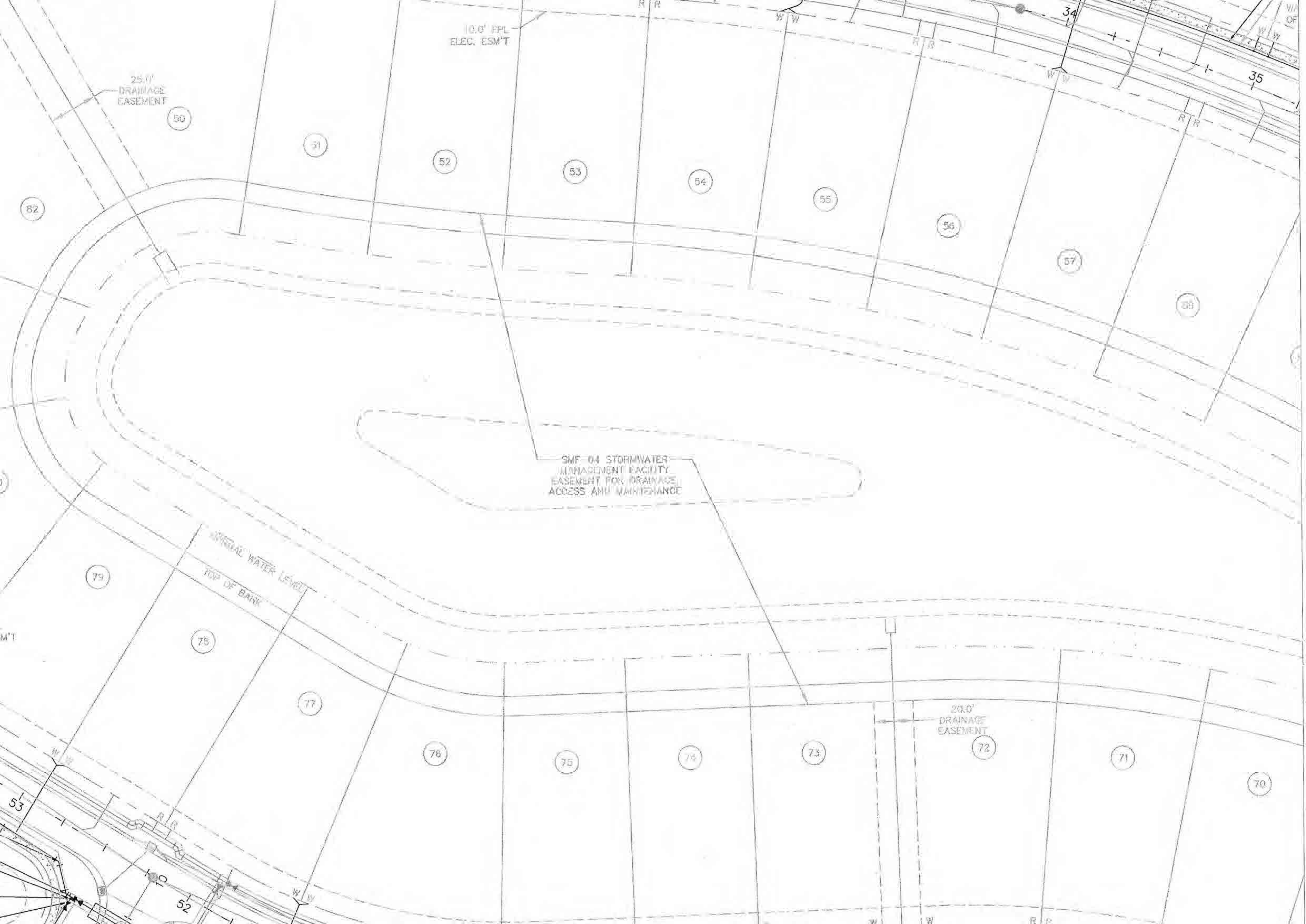
RM-4051
1-8" 22½° BEND

RM-4050
8" REUSEMAIN

RM-4049
8" REUSEMAIN



WM-3022	CL 8" WATERMAIN	29+14, 16.5' L	27.50	31.20	3.7	
WM-3023	CL 8" WATERMAIN	30+32, 17.0' L	27.20	31.00	3.8	
WM-3024	CL 8"X6" TEE	31+28, 16.8' L	27.70	30.80	3.1	
WM-3025	CL 6" 90° BEND	31+28, 15.0' L	27.60	30.80	3.2	
WM-3026	CL 6" GATE VALVE	30+32, 17.0' L	28.80	30.80	2.0	M&H VA
WM-3027	CL FIRE HYDRANT	31+33, 15.3' L	*	*	*	
WM-3028	CL 8" WATERMAIN	32+49, 18.8' L	27.10	30.40	3.3	
WM-3029	CL 8" GATE VALVE	33+90, 16.2' L	28.60	30.80	2.2	M&H VA
WM-3030	CL 8" WATERMAIN	34+81, 16.7' L	27.80	31.20	3.4	
WM-3031	CL 8" WATERMAIN	36+04, 17.0' L	27.20	31.10	3.9	
WM-3032	CL 8"X6" TEE	37+34, 16.5' L	27.70	30.80	3.1	
WM-3033	CL 6" 90° BEND	37+34, 15.5' L	27.60	30.80	3.2	
WM-3034	CL 6" GATE VALVE	37+36, 15.3' L	28.90	30.80	1.9	M&H VA
WM-3035	CL FIRE HYDRANT	37+39, 15.3' L	*	*	*	
WM-3036	CL 8" WATERMAIN	38+59, 18.1' L	27.10	30.50	3.4	
WM-3037	CL 8" WATERMAIN	39+19, 17.7' L	27.50	30.60	3.1	
WM-3038	CL 8" GATE VALVE	39+95, 15.7' L	28.80	30.90	2.1	M&H VA
WM-3039	CL 8" 11¼° BEND	40+16, 15.6' L	26.80	31.00	4.2	
WM-3040	CL 8" 11¼° BEND	40+35, 16.1' L	26.60	31.00	4.4	
WM-3041	CL 8" WATERMAIN	40+52, 15.6' L	26.70	31.10	4.4	
WM-3042	CL 8" WATERMAIN	41+48, 14.7' L	28.20	31.40	3.2	
WM-3043	CL 8" WATERMAIN	42+45, 16.3' L	28.60	31.70	3.1	
WM-3044	CL 8"X6" TEE	43+76, 16.4' L	28.40	31.40	3.0	
WM-3045	CL 6" 90° BEND	43+76, 15.2' L	28.30	31.40	3.1	
WM-3046	CL 6" GATE VALVE	43+72, 14.8' L	29.40	31.40	2.0	M&H VA
WM-3047	CL FIRE HYDRANT	43+67, 14.3' L	*	*	*	
WM-3048	CL 8" WATERMAIN	44+67, 17.1' L	27.60	31.00	3.4	
WM-3049	CL 8" WATERMAIN	45+66, 16.6' L	27.10	30.70	3.6	
WM-3050	CL 8" GATE VALVE	46+47, 17.3' L	28.60	30.50	1.9	M&H VA
WM-3051	CL 8" WATERMAIN	47+70, 16.3' L	27.50	30.80	3.3	
WM-3052	CL 8" WATERMAIN	48+71, 16.6' L	27.70	31.10	3.4	
WM-3053	CL 8"X6" TEE	49+91, 16.8' L	28.10	31.60	3.5	
WM-3054	CL 6" 90° BEND	49+91, 15.4' L	28.30	31.60	3.3	
WM-3055	CL 6" GATE VALVE	49+92, 15.3' L	29.40	31.60	2.2	M&H VA
WM-3056	CL FIRE HYDRANT	49+96, 15.0' L	*	*	*	
WM-3057	CL 8" WATERMAIN	50+99, 16.7' L	27.50	31.40	3.9	
WM-3058	CL 8" 45° BEND	51+77, 16.2' L	27.60	30.90	3.3	
WM-3059	CL 8" 45° BEND	51+90, 31.1' L	27.70	30.90	3.2	
WM-3060	CL 8" GATE VALVE	52+48, 31.0' L	28.70	31.10	2.4	M&H VA
WM-3061	CL 8"X4" TEE	52+52, 31.4' L	27.70	31.10	3.4	
WM-3062	CL 4" GATE VALVE	52+52, 33.9' L	28.50	31.10	2.6	M&H VA
WM-3063	CL 4" 45° BEND	52+52, 69.1' L	27.50	31.20	3.7	
WM-3064	CL 4" 22½° BEND	52+69, 85.1' L	27.40	31.20	3.8	
WM-3065	CL 4" CAP TAPPED 2"	52+72, 98.1' L	27.60	31.20	3.6	
WM-3066	CL 2" WATERMAIN	52+46, 155.4' L	28.00	31.50	3.5	
WM-3067	CL 2" FLUSHING HYDRANT	51+82, 141.4' L	30.90	31.40	0.5	
WM-3068	CL 8" 45° BEND	52+55, 30.7' L	28.00	31.10	3.1	
WM-3069	CL 8" 45° BEND	52+67, 18.5' L	27.50	31.10	3.6	
WM-3070	CL 8" WATERMAIN	53+52, 15.9' L	27.90	31.30	3.4	
WM-3071	CL 8" WATERMAIN	54+52, 16.6' L	28.50	31.90	3.4	
WM-3072	CL 8" 45° BEND	54+74, 17.3' L	28.60	32.00	3.4	
WM-3073	CL 8" 45° BEND	54+90, 31.4' L	28.70	32.30	3.6	
WM-3074	CL 8" 22½° BEND	54+94, 49.8' L	29.10	32.30	3.2	
WM-3075	CL 8" 22½° BEND	55+02, 66.7' L	29.50	32.30	2.8	
WM-3076	CL 8" 22½° BEND	55+13, 78.3' L	29.10	32.40	3.3	
WM-3077	CL 8" 22½° BEND	55+26, 87.0' L	29.20	32.50	3.3	
WM-3078	CL 8" 22½° BEND	55+44, 88.8' L	29.30	32.50	3.2	
WM-3079	CL 8" 22½° BEND	55+57, 83.0' L	29.30	32.40	3.1	
WM-3080	CL 8" 22½° BEND	55+68, 70.7' L	29.20	32.30	3.1	
WM-3081	CL 8" 22½° BEND	55+78, 55.5' L	28.50	32.30	3.8	



10.0' FPL
ELEC. ESM'T
25.0'
DRAINAGE
EASEMENT
50
51
52
53
54
55
56
57
58
82
34
35
SMF-04 STORMWATER
MANAGEMENT FACILITY
EASEMENT FOR DRAINAGE,
ACCESS AND MAINTENANCE
NORMAL WATER LEVEL
TOP OF BANK
79
78
77
76
75
74
73
72
71
70
20.0'
DRAINAGE
EASEMENT
53
52

WM-3033
6" WM 90° BEND

WM-3035
CL FIRE HYDRANT
M&H MFG.-2015

WM-3036
8" WATERMAIN

NATURAL /
VEGETATIVE
UPLAND BUFFER

WM-3037
8" WATERMAIN

WM-3038
8" GATE VALVE

20.0'
DRAINAGE
EASEMENT

WM-3039
8" WM 11¼° BEND

WM-3040
8" WM 11¼° BEND

WM-3041
8" WM 11¼° BEND

STA: 40+75, 15.0' L
1-1" TEMPORARY
BACTERIOLOGICAL
SAMPLING POINT #5

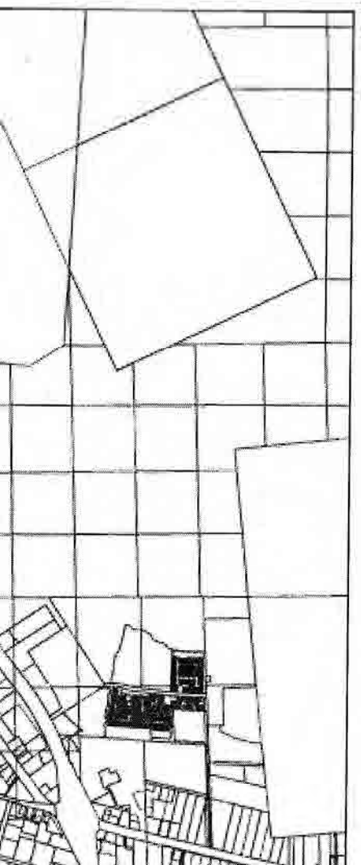
10.0' FPL
ELEC. ESM'T

WM-3042
8" WATERMAIN

KITTS LOOP

OFFSITE UTILITY AS-BUILT

T. JOHNS COUNTY, FLORIDA



INDEX OF DR

1	Co
2-3	Fo
4-5	Re
6	W

EXISTING 12" FORCE MAIN BETWEEN PLUGS TO BE COMPLETELY REMOVED

STA: 22+59, 38.7' R
CL 12" FM
TOP =23.3
GRND 26.6

CONTRACTOR SHALL RESTRAIN ALL JOINTS WITHIN 166' OF VALVE AND TO NEXT JOINT

STA: 21+85, 38.5' R
CL 12" FM
TOP =22.5
GRND 26.5

DIRECTIONAL DRILL 10" HDPE DR-11 FORCE MAIN UNDER S.R. 16 AND USE 14" DIA. BACK REAMER

STA: 20+80, 41.4' R
12" GATE VALVE
TN = 24.68

STA: 20+75, 42.0' R
CL 12"x8" TEE
TOP =23.0
GRND 26.5

1-12" X 8" TEE
1-12" GATE VALVE
1-8" GATE VALVE
(FITTINGS AS REQUIRED TO TRANSITION FROM 10" HDPE DR-11 TO PVC DR-25)

STA: 20+76, 37.3' R
8" GATE VALVE
TN = 24.07

CONTRACTOR SHALL RESTRAIN ALL JOINTS WITHIN 166' OF VALVE AND TO NEXT JOINT

STA: 10+22, 51.6' R
10" FORCEMAIN
TOP= 26.9
GRND= 30.5

STA: 20+14, 41.0' R
CL 12" FM
TOP =23.0
GRND 26.5

UTILITY EASEMENT

2-8" 45° BENDS

STA: 18+90, 42.1' R
CL 12" FM
TOP =22.5
GRND 26.1

8" PVC C900 (DR25) FORCE MAIN 12.5' OFF R/W

UTILITY EASEMENT

STA: 17+80
41.2' R
CL 12" FM
TOP =23.1
GRND 26.6

10.0' FPL ELEC. ESM'T

STATE ROAD 16

WINDWARD RANCH

WPP

23+50.00
23+00.00
22+50.00
22+00.00
21+50.00
21+00.00
20+50.00
20+00.00
19+50.00
19+00.00
18+50.00
18+00.00
11+00.00
10+50.00
12+00.00
9+50.00
8+00.00

STA: 13+55
39.5' R
CL 12" FM
TOP =22.5
GRND 26.9

STA: 12+60
39.3' R
CL 12" FM
TOP =24.3
GRND 27.3

STA: 11+64
39.6' R
CL 12" FM
TOP =24.0
GRND 27.6

EXISTING 12" FORCE MAIN BETWEEN PLUGS TO BE COMPLETELY REMOVED

STA: 10+67
40.1' R
CL 12" FM
TOP =23.4
GRND 27.7

STA: 9+68
38.8' R
CL 12" FM
TOP =23.4
GRND 28.1

CONTRACTOR SHALL RESTRAIN ALL JOINTS WITHIN 166' OF VALVE AND TO NEXT JOINT

STA: 8+69
38.6' R
CL 12" FM
TOP =22.8
GRND 27.8

STATE ROAD 16

WPP

CPP

PROJECT BOUNDARY

SJRWMD JURISDICTIONAL WETLANDS (CONSERVATION AREA) (ISOLATED)

JURISDICTIONAL WETLAND LINE

NATURAL VEGETATIVE UPLAND BUFFER

12

13

14

15

16

STA: 23+03
35.5' R
CL 16" RM
TOP =22.7
GRND=26.2

5.05'
5.0' SEPARATION (TYP.)
(3.0' MIN. OUTSIDE OF PIPE
TO OUTSIDE OF PIPE)

EXISTING 8" REUSE MAIN
BETWEEN CAPS TO BE
COMPLETELY REMOVED

STA: 22+36
35.1' R
CL 16" RM
TOP =22.5
GRND=26.0

CONTRACTOR SHALL RESTRAIN
ALL JOINTS WITHIN 155' OF
VALVE AND TO NEXT JOINT

STA: 21+61
35.3' R
CL 16" RM
TOP =22.3
GRND=25.8

STA: 20+85
34.6' R
16" RM GATE VALVE
TOP =27.1
GRND=29.0

CONTRACTOR MAY DIRECTIONAL DRILL PAST
REUSE MAIN AS REQUIRED AND CONNECT ON
THE BACK SIDE OF REUSE MAIN TO MAINTAIN
17' MIN. DEPTH UNDER S.R. 15 (REUSE MAIN
12" MIN OVER FORCE MAIN, 30" MIN. COVER)

1-16" GATE VALVE WITH
ABOVE GROUND MARKER
1-16" X 12" TEE
1-12" GATE VALVE

STA: 20+81
34.3' R
16"x8" TEE RM
TOP =25.3
GRND=29.0

STA: 20+81
29.7' R
8" RM GATE VALE
TN =26.5

STATE ROAD 15

WPR

DIRECTIONAL DRILL 14"
HDPE DR-11 REUSE MAIN
UNDER S.R. 15 AND USE
20" MAX. DIA. BACK
REAMER

STA: 10+20, 58.1' R
CL 16" RM
TOP =26.3
GRND=30.5

, 58.2' R
2" TEE
.9
.5

TRANSITION 14" HDPE DR-11
REUSE MAIN TO 12" PVC
DR-18 REUSE MAIN (BENDS
AND FITTINGS AS REQUIRED)

CONTRACTOR SHALL RESTRAIN
ALL JOINTS WITHIN 155' OF
VALVE AND TO NEXT JOINT

STA: 19+41
35.2' R
CL 16" RM
TOP =23.4
GRND=26.9

UTILITY
EASEMENT

57.8' R
BEND

5.11'

2-12" 45° BENDS

0+82, 35.6' R
2" 45° BEND
=27.0
=31.0

WINDWARD RANCH

STA: 18+66
35.7' R
CL 16" RM
TOP =23.7
GRND=27.2

16" RM TOP=25.3
8" FM TOP=23.0
SEPARATION=1.0'

UTILITY
EASEMENT

STA: 17+62
35.1' R
CL 16" RM
TOP =23.3
GRND=26.8

10.0' FPL
ELEC. ESM'T

STA: 16+88
34.9' R
CL 16" RM

WPR

23+50.00
23+00.00
22+50.00
22+00.00
21+50.00
21+00.00
20+50.00
20+00.00
19+50.00
19+00.00
18+50.00
18+00.00

STA: 13+29
33.2' R
CL 16" RM
TOP =23.2
GRND=26.9

16" PVC DR-18
REUSE MAIN LOCATED
8.0' OFF PROPOSED
PAVED SHOULDER
(42" MIN. COVER)

STA: 12+49
32.1' R
CL 16" RM
TOP =24.6
GRND=28.1

5.14'
~~5.0~~ SEPARATION (TYP.)
(3.0' MIN. OUTSIDE OF PIPE
TO OUTSIDE OF PIPE)

STA: 10+62
36.3' R
CL 16" RM
TOP =24.2
GRND=27.7

EXISTING 8" REUSE MAIN
BETWEEN PLUGS TO BE
COMPLETELY REMOVED

EXISTING 12" FORCE
MAIN BETWEEN PLUGS
TO BE COMPLETELY
REMOVED

STA: 9+44
31.9' R
CL 16" RM
TOP =25.0
GRND=28.5

STA: 8+70
31.8' R
CL 16" RM
TOP =24.7
GRND=28.2

CONTRACTOR SHALL RES
ALL JOINTS WITHIN 155'
VALVE AND TO NEXT JOI

1-8" TAPPING SLEEVE
1-8" GATE VALVE
1-16" X 8" TEE

STA: 7+56
33.9' R
16"X8" RM TEE
TOP =26.0
GRND=29.0

1-16" GATE VALVE WITH
ABOVE GROUND MARKER
1-16" PLUG FOR FUTURE
CONNECTION

CAP EXISTING 8"
REUSE MAIN

STA: 7+44
35.3' R
16" FM GATE VALVE
TOP =28.3

WPP

CPF

PROJECT
BOUNDARY

STATE ROAD 16

JURISDICTIONAL
WETLAND LINE

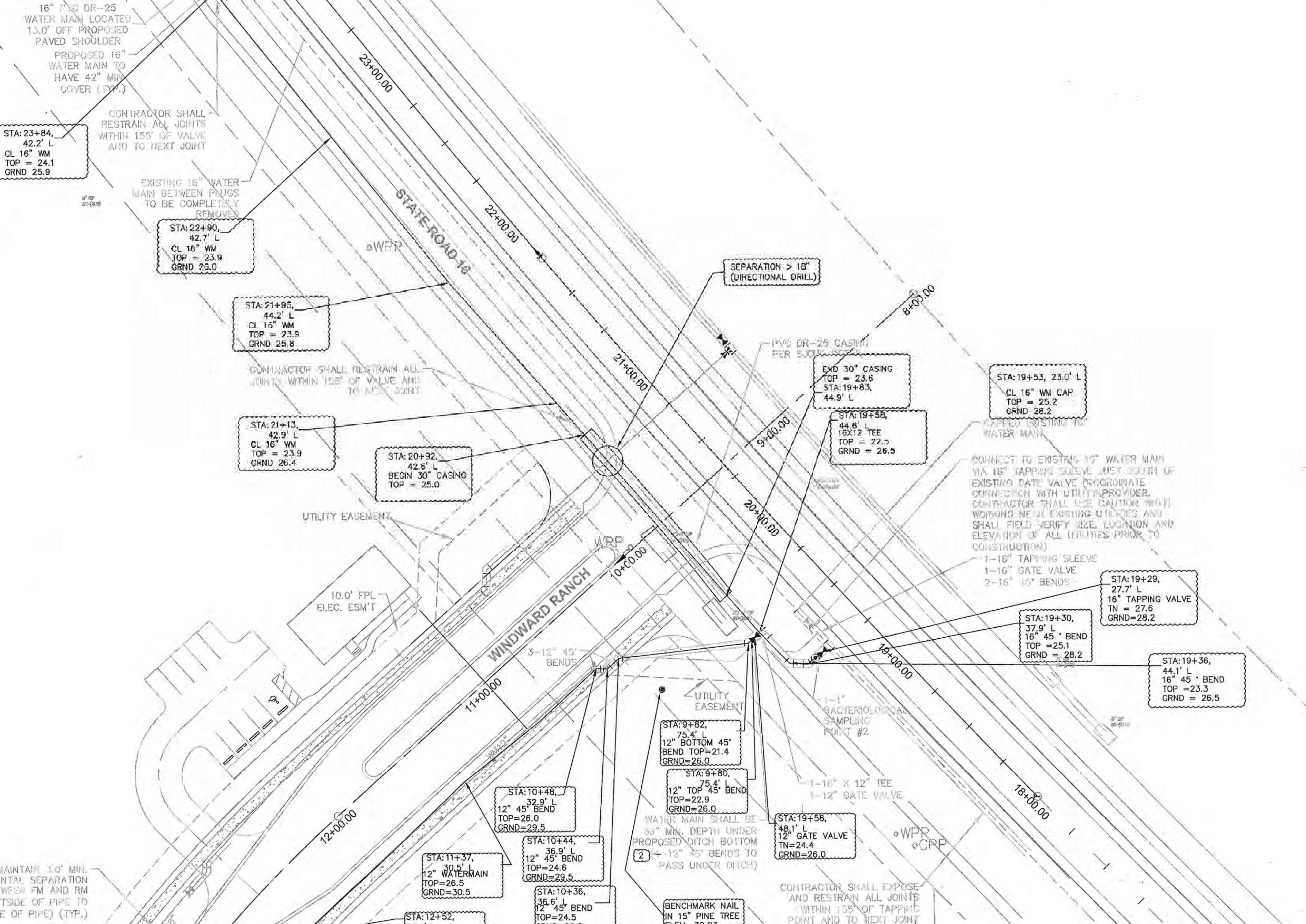
NATURAL
VEGETATIVE
UPLAND BUFFER

WMD
CTIONAL
LANDS
TION AREA)
LATED)

14

15

16


16" PVC DR-25 WATER MAIN LOCATED 13.0' OFF PROPOSED PAVED SHOULDER
PROPOSED 16" WATER MAIN TO HAVE 42" MIN COVER (TYP.)
CONTRACTOR SHALL RESTRAIN ALL JOINTS WITHIN 155' OF VALVE AND TO NEXT JOINT
STA: 23+84, 42.2' L CL 16" WM TOP = 24.1 GRND 25.9
EXISTING 16" WATER MAIN BETWEEN PLUGS TO BE COMPLETELY REMOVED
STA: 22+90, 42.7' L CL 16" WM TOP = 23.9 GRND 26.0
23+00.00
22+00.00
21+00.00
20+00.00
19+00.00
18+00.00
STATE ROAD 16
WPP
STA: 21+95, 44.2' L CL 16" WM TOP = 23.9 GRND 25.8
SEPARATION > 18" (DIRECTIONAL DRILL)
8+00.00
9+00.00
PVC DR-25 CASING PER SJCUD DETAIL
END 30" CASING TOP = 23.6 STA: 19+83, 44.9' L
STA: 19+53, 23.0' L CL 16" WM CAP TOP = 25.2 GRND 28.2
CAPPED EXISTING 16" WATER MAIN
CONTRACTOR SHALL RESTRAIN ALL JOINTS WITHIN 155' OF VALVE AND TO NEXT JOINT
STA: 19+58, 44.6' L 16X12 TEE TOP = 22.5 GRND = 26.5
STA: 21+13, 42.9' L CL 16" WM TOP = 23.9 GRND 26.4
STA: 20+92, 42.6' L BEGIN 30" CASING TOP = 25.0
CONNECT TO EXISTING 16" WATER MAIN VIA 16" TAPPING SLEEVE JUST SOUTH OF EXISTING GATE VALVE (COORDINATE CONNECTION WITH UTILITY PROVIDER. CONTRACTOR SHALL USE CAUTION WHEN WORKING NEAR EXISTING UTILITIES AND SHALL FIELD VERIFY SIZE, LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION)
1-16" TAPPING SLEEVE
1-16" GATE VALVE
2-16" 45' BENDS
UTILITY EASEMENT
WRP
10+00.00
10.0' FPL ELEC. ESM'T
WINDWARD RANCH
STA: 19+29, 27.7' L 16" TAPPING VALVE TN = 27.6 GRND=28.2
STA: 19+30, 37.9' L 16" 45 ° BEND TOP =25.1 GRND = 28.2
STA: 19+36, 44.1' L 16" 45 ° BEND TOP =23.3 GRND = 26.5
3-12" 45' BENDS
11+00.00
UTILITY EASEMENT
1-1" BACTERIOLOGICAL SAMPLING POINT #2
STA: 9+82, 75.4' L 12" BOTTOM 45' BEND TOP=21.4 GRND=26.0
STA: 9+80, 75.4' L 12" TOP 45' BEND TOP=22.9 GRND=26.0
1-16" X 12" TEE
1-12" GATE VALVE
STA: 10+48, 32.9' L 12" 45' BEND TOP=26.0 GRND=29.5
12+00.00
WATER MAIN SHALL BE 36" MIN. DEPTH UNDER PROPOSED DITCH BOTTOM
2 - 12" 45' BENDS TO PASS UNDER DITCH)
STA: 19+58, 48.1' L 12" GATE VALVE TN=24.4 GRND=26.0
WPP
CPP
STA: 10+44, 36.9' L 12" 45' BEND TOP=24.6 GRND=29.5
STA: 11+37, 30.5' L 12" WATERMAIN TOP=26.5 GRND=30.5
MAINTAIN 3.0' MIN. HORIZONTAL SEPARATION BETWEEN FM AND RM (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) (TYP.)
STA: 10+36, 36.6' L 12" 45' BEND TOP=24.5
BENCHMARK NAIL IN 15" PINE TREE
CONTRACTOR SHALL EXPOSE AND RESTRAIN ALL JOINTS WITHIN 155' OF TAPPING POINT AND TO NEXT JOINT
STA: 12+52,

2017 NW Park Place Water-Sewer

As Built Drawings

PUD 2006-34

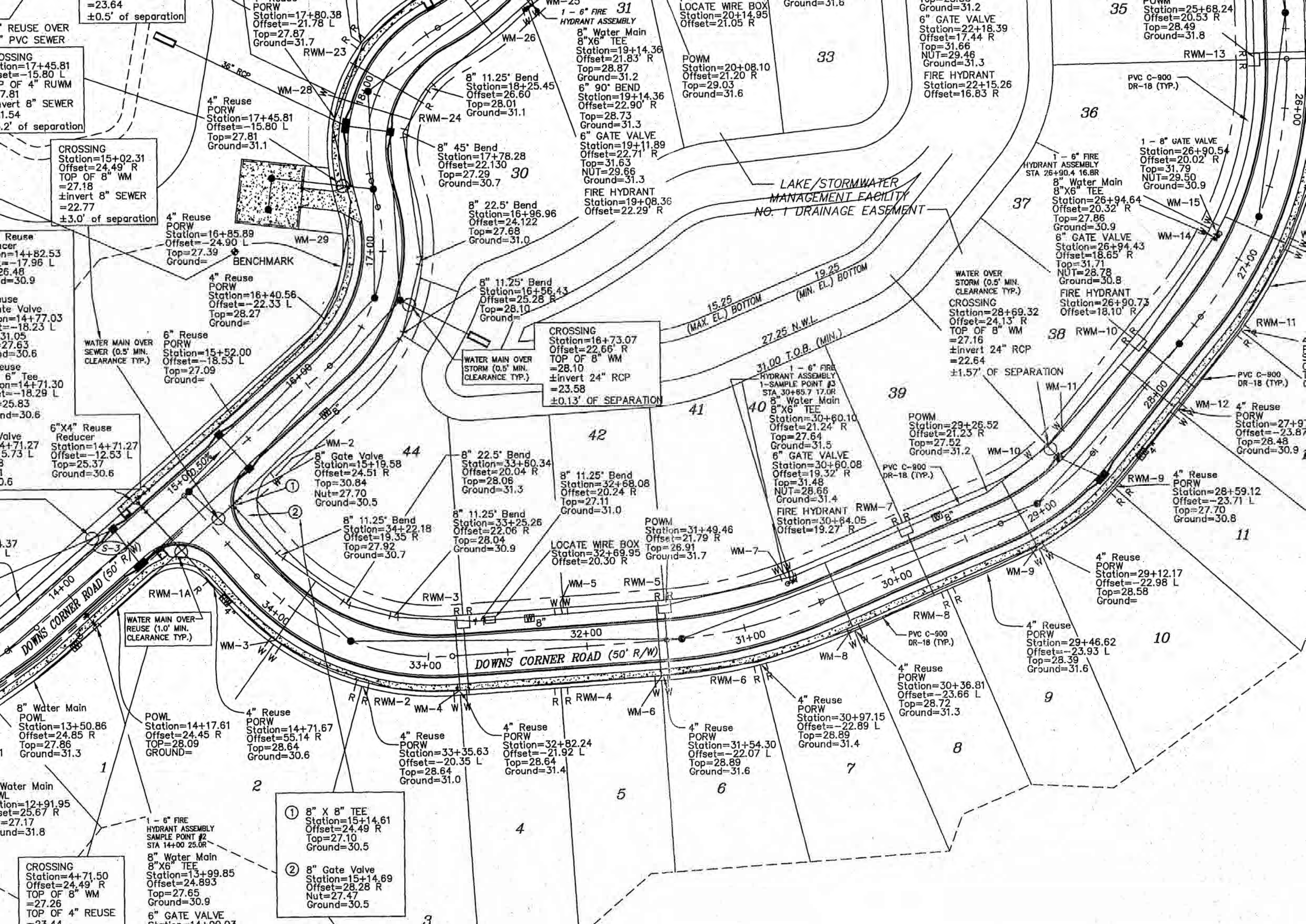
FOR

HRHR, L.L.C.

4314 PABLO OAKS COURT
JACKSONVILLE, FLORIDA 32256
(904) 992-9750

ST. JOHNS COUNTY, FLORIDA

WATER AND REUSE WATER
AS BUILT



=23.64
±0.5' of separation
REUSE OVER
PVC SEWER
CROSSING
Station=17+45.81
Offset=-15.80 L
TOP OF 4" RUWM
=27.81
±invert 8" SEWER
=21.54
±2.2' of separation
CROSSING
Station=15+02.31
Offset=24.49' R
TOP OF 8" WM
=27.18
±invert 8" SEWER
=22.77
±3.0' of separation
PORW
Station=17+80.38
Offset=-21.78 L
Top=27.87
Ground=31.7
RWM-23
36" RCP
WM-28
4" Reuse
PORW
Station=17+45.81
Offset=-15.80 L
Top=27.81
Ground=31.1
4" Reuse
PORW
Station=16+85.89
Offset=-24.90 L
Top=27.39
Ground=
BENCHMARK
WM-29
4" Reuse
PORW
Station=16+40.56
Offset=-22.33 L
Top=28.27
Ground=
6" Reuse
PORW
Station=15+52.00
Offset=-18.53 L
Top=27.09
Ground=
WATER MAIN OVER SEWER (0.5' MIN. CLEARANCE TYP.)
6"X4" Reuse Reducer
Station=14+71.27
Offset=-12.53 L
Top=25.37
Ground=30.6
WM-26
1 - 6" FIRE HYDRANT ASSEMBLY
31
8" Water Main
8"X6" TEE
Station=19+14.36
Offset=21.83' R
Top=28.87
Ground=31.2
6" 90° BEND
Station=19+14.36
Offset=22.90' R
Top=28.73
Ground=31.3
6" GATE VALVE
Station=19+11.89
Offset=22.71' R
Top=31.63
NUT=29.66
Ground=31.3
FIRE HYDRANT
Station=19+08.36
Offset=22.29' R
8" 11.25° Bend
Station=18+25.45
Offset=26.60
Top=28.01
Ground=31.1
RWM-24
8" 45° Bend
Station=17+78.28
Offset=22.130
Top=27.29
Ground=30.7
30
8" 22.5° Bend
Station=16+96.96
Offset=24.122
Top=27.68
Ground=31.0
8" 11.25° Bend
Station=16+56.43
Offset=25.28 R
Top=28.10
Ground=
CROSSING
Station=16+73.07
Offset=22.66' R
TOP OF 8" WM
=28.10
±invert 24" RCP
=23.58
±0.13' OF SEPARATION
WATER MAIN OVER STORM (0.5' MIN. CLEARANCE TYP.)
LOCATE WIRE BOX
Station=20+14.95
Offset=21.05 R
POWM
Station=20+08.10
Offset=21.20 R
Top=29.03
Ground=31.6
33
LAKE/STORMWATER MANAGEMENT FACILITY NO. 1 DRAINAGE EASEMENT
15.25 (MAX. EL.) BOTTOM
19.25 (MIN. EL.) BOTTOM
27.25 N.W.L.
31.00 T.O.B. (MIN.)
Ground=31.6
Ground=31.2
6" GATE VALVE
Station=22+18.39
Offset=17.44 R
Top=31.66
NUT=29.46
Ground=31.3
FIRE HYDRANT
Station=22+15.26
Offset=16.83 R
35
POWM
Station=25+68.24
Offset=20.53 R
Top=28.49
Ground=31.8
RWM-13
PVC C-900 DR-18 (TYP.)
36
1 - 8" GATE VALVE
Station=26+90.54
Offset=20.02' R
Top=31.79
NUT=29.50
Ground=30.9
1 - 6" FIRE HYDRANT ASSEMBLY STA 26+90.4 16.8R
8" Water Main
8"X6" TEE
Station=26+94.64
Offset=20.32' R
Top=27.86
Ground=30.9
6" GATE VALVE
Station=26+94.43
Offset=18.65' R
Top=31.71
NUT=28.78
Ground=30.8
FIRE HYDRANT
Station=26+90.73
Offset=18.10' R
37
WM-15
WM-14
WATER OVER STORM (0.5' MIN. CLEARANCE TYP.)
CROSSING
Station=28+69.32
Offset=24.13' R
TOP OF 8" WM
=27.16
±invert 24" RCP
=22.64
±1.57' OF SEPARATION
38
RWM-10
RWM-11
PVC C-900 DR-18 (TYP.)
WM-11
WM-12
4" Reuse
PORW
Station=27+97
Offset=-23.87
Top=28.48
Ground=30.9
39
1 - 6" FIRE HYDRANT ASSEMBLY 1-SAMPLE POINT #3 STA 30+65.7 17.0R
40
8" Water Main
8"X6" TEE
Station=30+60.10
Offset=21.24' R
Top=27.64
Ground=31.5
6" GATE VALVE
Station=30+60.08
Offset=19.32' R
Top=31.48
NUT=28.66
Ground=31.4
FIRE HYDRANT
Station=30+64.05
Offset=19.27' R
41
42
44
POWM
Station=29+26.52
Offset=21.23 R
Top=27.52
Ground=31.2
WM-10
PVC C-900 DR-18 (TYP.)
RWM-9
4" Reuse
PORW
Station=28+59.12
Offset=-23.71 L
Top=27.70
Ground=30.8
11
WM-2
8" Gate Valve
Station=15+19.58
Offset=24.51 R
Top=30.84
Nut=27.70
Ground=30.5
8" 22.5° Bend
Station=33+60.34
Offset=20.04 R
Top=28.06
Ground=31.3
8" 11.25° Bend
Station=32+68.08
Offset=20.24 R
Top=27.11
Ground=31.0
8" 11.25° Bend
Station=34+22.18
Offset=19.35 R
Top=27.92
Ground=30.7
8" 11.25° Bend
Station=33+25.26
Offset=22.06 R
Top=28.04
Ground=30.9
LOCATE WIRE BOX
Station=32+69.95
Offset=20.30 R
POWM
Station=31+49.46
Offset=21.79 R
Top=26.91
Ground=31.7
WM-7
RWM-7
WM-9
4" Reuse
PORW
Station=29+12.17
Offset=-22.98 L
Top=28.58
Ground=
RWM-1A
WM-5
RWM-5
RWM-3
S-3
WATER MAIN OVER REUSE (1.0' MIN. CLEARANCE TYP.)
DOWNS CORNER ROAD (50' R/W)
14+00
15+00
16+00
17+00
18+00
26+00
27+00
28+00
29+00
30+00
31+00
32+00
33+00
34+00
RWM-8
PVC C-900 DR-18 (TYP.)
WM-3
WM-8
4" Reuse
PORW
Station=29+46.62
Offset=-23.93 L
Top=28.39
Ground=31.6
10
RWM-6
RWM-4
RWM-2
WM-4
WM-6
4" Reuse
PORW
Station=30+36.81
Offset=-23.66 L
Top=28.72
Ground=31.3
9
4" Reuse
PORW
Station=30+97.15
Offset=-22.89 L
Top=28.89
Ground=31.4
8
8" Water Main
POWL
Station=13+50.86
Offset=24.85 R
Top=27.86
Ground=31.3
POWL
Station=14+17.61
Offset=24.45 R
TOP=28.09
GROUND=
4" Reuse
PORW
Station=14+71.67
Offset=55.14 R
Top=28.64
Ground=30.6
4" Reuse
PORW
Station=33+35.63
Offset=-20.35 L
Top=28.64
Ground=31.0
4" Reuse
PORW
Station=32+82.24
Offset=-21.92 L
Top=28.64
Ground=31.4
4" Reuse
PORW
Station=31+54.30
Offset=-22.07 L
Top=28.89
Ground=31.6
7
6
5
4
1
2
3
Water Main
Station=12+91.95
Offset=25.67 R
=27.17
Ground=31.8
1 - 6" FIRE HYDRANT ASSEMBLY SAMPLE POINT #2 STA 14+00 25.0R
8" Water Main
8"X6" TEE
Station=13+99.85
Offset=24.893
Top=27.65
Ground=30.9
6" GATE VALVE
CROSSING
Station=4+71.50
Offset=24.49' R
TOP OF 8" WM
=27.26
TOP OF 4" REUSE
① 8" X 8" TEE
Station=15+14.61
Offset=24.49 R
Top=27.10
Ground=30.5
② 8" Gate Valve
Station=15+14.69
Offset=28.28 R
Nut=27.47
Ground=30.5

PUD 2006-34

FOR

HRHR, L.L.C.

4314 PABLO OAKS COURT
JACKSONVILLE, FLORIDA 32256
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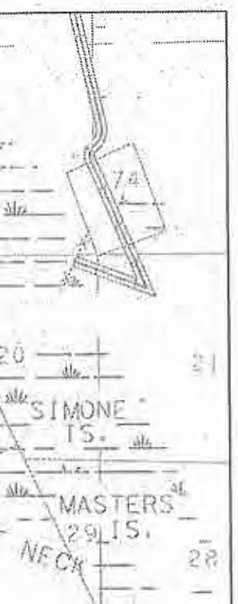
ST. JOHNS COUNTY, FLORIDA

GRAVITY SEWER, FORCE MAIN AND LIFT STATION AS BUILT



PUD 2006-34

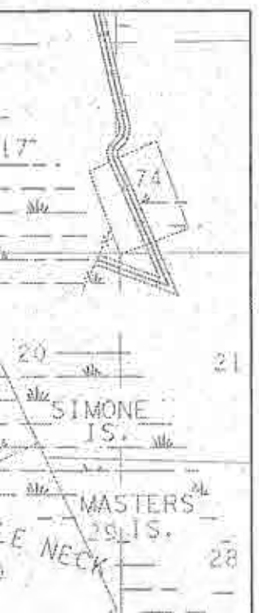
FOR

HRHR, L.L.C.

4314 PABLO OAKS COURT
JACKSONVILLE, FLORIDA 32256
(904) 992-9750

ST. JOHNS COUNTY, FLORIDA

PAVING AND DRAINAGE
AS BUILT



LAKE/STORMWATER MANAGEMENT FACILITY NO. 2 DRAINAGE EASEMENT

SEE AS BUILT SHEETS THREE AND FOUR FOR LIFT STATION

59
~~61±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.44%

59
~~61±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.36%

MH-1 TYPE A
(LINED)
TOP EL. = ~~31.85~~ 32.10
INV. IN = ~~21.48~~ (E)21.33
INV. OUT = ~~21.36~~ (W)21.30

BENCHMARK
60d NAIL IN NORTH FACE OF A ±11" PINE
ELEVATION (30.21)
NAVD 1988

17
~~15±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.82%

LIFT STATION
TOP EL. = ~~31.85~~ 32.12
INV. IN = ~~21.28~~ (S)21.16
BOTTOM 14.19

3" FORCE MAIN POFM
STA: 16+81.71
OFFSET: 29.72 L
TOP = 27.70
GROUND = 31.0

3" FORCE MAIN POFM
STA: 16+04.85
OFFSET: 23.49 L
TOP = 27.34
GROUND = 30.8

MH-11 TYPE A
(JUNCTION - LINED)
STA. ~~15+00.00~~
STA: 15+00.41
OFFSET: 0.01 R
TOP EL. = ~~31.09~~ 30.99
INV. IN = ~~23.53~~ (SW)23.17
INV. IN = ~~22.95~~ (SE)22.67
INV. OUT = ~~22.85~~ (NE)22.64

3" FORCE MAIN POFM
STA: 14+98.17
OFFSET: 25.55 L
TOP = 26.95
GROUND = 31.0

3" FORCE MAIN POFM
STA: 14+16.07
OFFSET: 25.09 L
TOP = 23.96
GROUND = 30.7

151
~~155±~~ LF ~ 8" PVC SDR 26 @ ~~0.4~~ % SLOPE
0.51%

3" FORCE MAIN POFM
STA: 13+08.48
OFFSET: 23.72 L
TOP = 27.50
GROUND = 31.9

DOWNS CORNER ROAD (50' R/W)

REC. AREA
0.20 Ac.±

MH-2 TYPE A
(JUNCTION - LINED)
STA. ~~17+40.00~~
STA: 17+39.51
OFFSET: 0.71 L
TOP EL. = ~~31.14~~ 30.93
INV. IN = ~~22.12~~ (N)22.07
INV. IN = ~~21.78~~ (S)21.56
INV. OUT = ~~21.68~~ (W)21.54

64
~~69±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.42%

3" FORCE MAIN
* 90° BEND
STA: 17+30.29
OFFSET: 28.59 L
TOP = 27.43
GROUND = 31.0
* INFORMATION PROVIDED BY CONTRACTOR

MH-2 TYPE A
STA. ~~16+70.00~~
STA: 16+71.10
OFFSET: 0.50 R
TOP EL. = ~~31.35~~
INV. OUT = ~~22.00~~ (N)21.83
INV. IN = ~~22.18~~ (SW)21.86

3" FORCE MAIN
LOCATE WIRE BOX
STA: 16+83.29
OFFSET: 29.53 L

3" FORCE MAIN
GATE VALVE
STA: 17+36+98
OFFSET: 44.64 L

LAKE/STORMWATER MANAGEMENT FACILITY NO. 1 DRAINAGE EASEMENT

15.25 (MAX. EL.) BOTTOM
19.25 (MIN. EL.) BOTTOM
27.25 N.W.L.
31.00 T.O.B. (MIN.)

165
~~172±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.47%

MH-14 TYPE A
STA. ~~31+40.00~~
STA: 31+41.71
OFFSET: 0.27 L
TOP EL. = ~~32.00~~ 31.86
INV. IN = ~~24.56~~ (E) 24.31
INV. OUT = ~~24.45~~ (W) 24.21

134
~~138±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.43%

204
~~208±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.45%

236
~~239±~~ LF ~ 8" PVC SDR 26 @ ~~0.4%~~ SLOPE
0.44%

MH-13 TYPE A
STA. ~~33+50.00~~
STA: 33+50.92
OFFSET: 0.52 R
TOP EL. = ~~31.38~~ 31.34
INV. IN = ~~23.61~~ (E)23.29
INV. OUT = ~~23.51~~ (NW)23.24

DOWNS CORNER ROAD (50' R/W)

29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

REC. AREA
0.20 Ac.±

(PC = 12+04.36 ±)

2

3

4

5

6

M.E.S.
DBL 36" RCP
N. INVERT (24.87)
S. INVERT (24.82)

170 (AB)
170 L.F. ~
DBL 36" RCP

REGRADE 500± L.F. OF EXIST.
ROADSIDE DITCH W/ 6:1 SIDESLOPES
& MATCH EXIST.DITCH BOTTOM
ELEVATIONS & SLOPE. CONSTRUCT
PER FDOT STDS. & SPECIFICATIONS.

TOP OF BANK

75' SCENIC
EDGE (TYP.)

TOE OF SLOPE

STATE ROAD 16
RIGHT-OF-WAY &
PROJECT BOUNDARY

STATE JURISDICTIONAL
WETLAND LINE

25' AVERAGE (10' MIN.) NATURAL
VEGETATIVE UPLAND BUFFER (TYP.)

IMATE LOCATION OF
MAIN OBTAINED FROM SJCUD

500± L.F. OF EXIST. ROADSIDE
/ 6:1 SIDESLOPES & MATCH EXIST.
TTOM ELEVATIONS & SLOPE.
CT PER FDOT STDS. & SPECIFICATIONS.

STATION 806+13±
MATCH EXISTING GRADE
AND PAVEMENT WIDTH

MATCH EXISTING PAVEMENT (30.13)

STATE RO

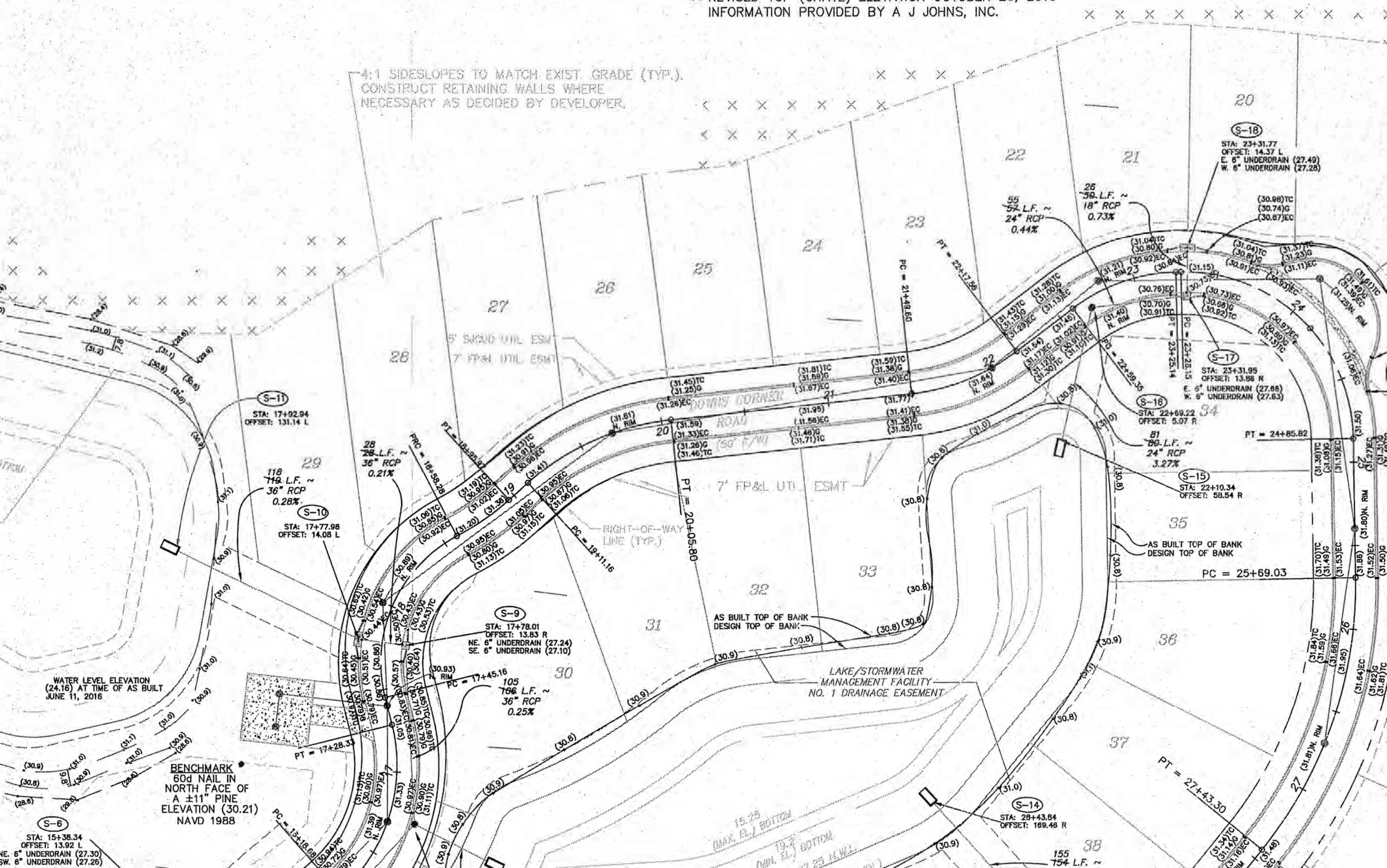
STATE ROAD 16

LOCATION OF EXIST. RECLAIM & FORCE MAIN

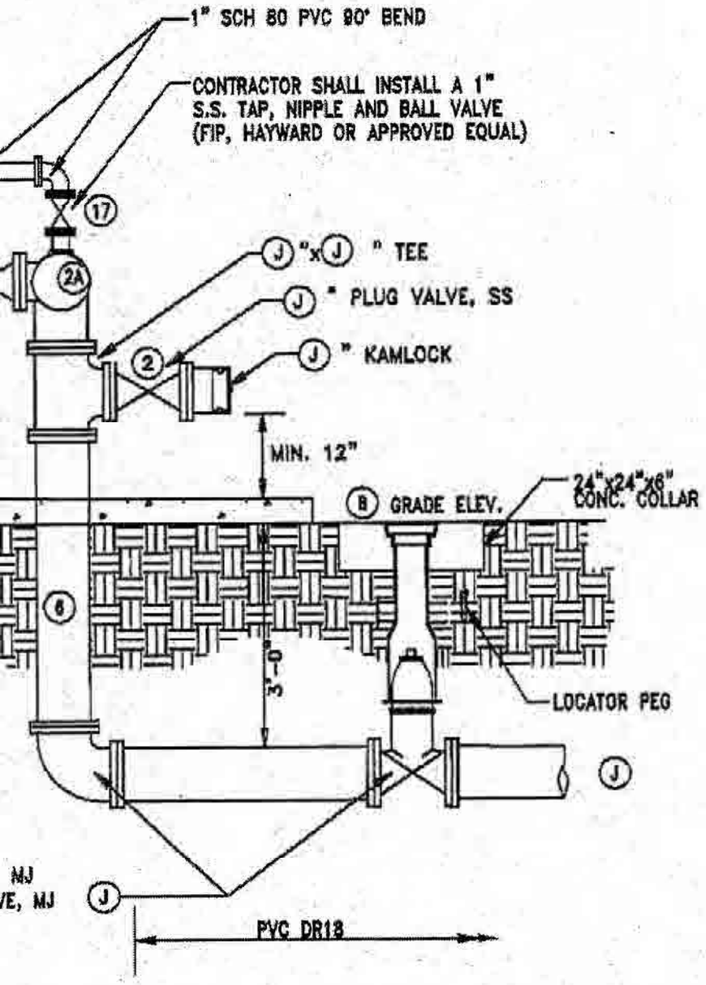
S–18	DOUBLE CURB INLET	30.73	26.70 (S)
S–19	36" MES	–	21.00
S–20	CONTROL STRUCTURE	31.00	26.25 (N) 21.50 (S)
S–21	36" MES	–	26.00

S–18	DOUBLE CURB INLET	30.70	26.90 (S)
S–19	36" MES	–	20.86
S–20	CONTROL STRUCTURE	~~30.49~~ **30.58	25.79 (N) 21.07 (S)
S–21	36" MES	–	25.33

** REVISED TOP (GRATE) ELEVATION OCTOBER 20, 2016
INFORMATION PROVIDED BY A J JOHNS, INC.



GAUGE



E WALL THICKNESS

9 R' NEK

PIECE BASE

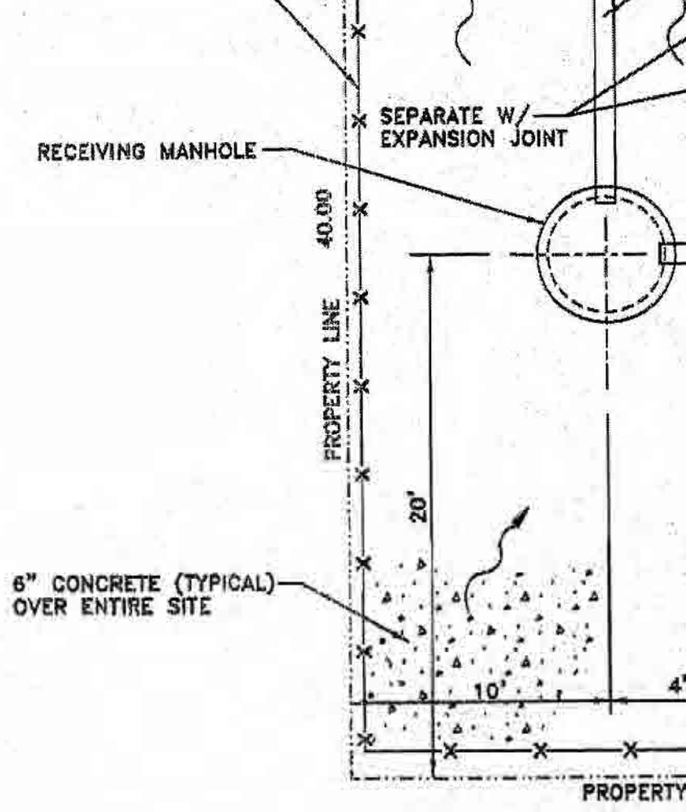
⑨ EMERGENCY SUCTION PIPING SIZE	4"

PUMP INFORMATION

NUMBER OF PUMPS 2
PUMP MANUFACTURER FLYGT
NON-CLOG SUBMERSIBLE
MODEL MP 3102 IMPELLER 142
DISCHARGE ____ MOTOR RPM 3475
6 HP 208 VOLTS 3 PHASE 60 HZ
DESIGN POINT 36 GPM AT 104 FT.TDH
OPERATING COND. 47 GPM AT 109 FT.TDH
PUMP ACCESS HATCH SIZE 3' x 4'

MECHANICAL EQUIPMENT SCHEDULE

1. CHECK VALVE, MUELLER OR M&H SWING-TYPE LEVER FACING OUTSIDE, LEVER & SPRING OPERATED, IRON BODY, BRONZE MOUNTED
2. PLUG VALVE, DEZURIK, CAST IRON BODY, LEVER ACTUATED
2A. CONTRACTOR TO INSTALL PRESSURE SENSOR, ONYX, PART #160-0400-22-09-03, PSW-STAINLESS STEEL, VITRON SEAL, SILICON FILL W/ 1/2" NPT CONNECTION INCLUDING A PRESSURE TRANSMITTER, ABB PART #264HSPSBA1 CALIBRATOR 0-150 PSI (OR S.J.C.U.D. APPROVED EQUAL)
3. STAINLESS STEEL TEE
4. STAINLESS STEEL SHORT RADIUS 90° BEND
5. STAINLESS STEEL 45° BEND
6. 316 STAINLESS STEEL PIPE (SCH 10)
7. DUCTILE IRON PUMP BASE
8. INFLUENT PIPE (SEE PLANS)
9. CONCRETE WETWELL
10. FLYGT PUMP (AS APPROVED BY ST. JOHNS COUNTY UTILITY DEPARTMENT) NON-CLOG SUBMERSIBLE, 3"
11. ALUMINUM WETWELL ACCESS COVER (OPENING PER PUMP MANUFACTURER)
12. STAINLESS STEEL GUIDE RAILS
13. LEVEL TRANSDUCER, HIGH AND LOW ALARM FLOATS PROVIDED BY PUMP MANUFACTURER
14. PUMP MOTOR CABLE
15. 4" TEE SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE SCREENS
16. STAINLESS STEEL CABLE HOLDER
17. 1" STAINLESS BLOW OFF LINE TO WETWELL--SECURE LINE TO WETWELL SLAB W/ UNISTRUT.
18. 1/4" STAINLESS STEEL WITH 18" OF CHAIN LINKS (FLYGT GRIP EYE CONNECTOR).



SITE LIGHT POLE PER
(SEE ELECTRICAL PLAN
FROM EDGE OF WET WE
FIXTURE IN FRONT OF

AS-BUILT PROFESSIONAL SURVEYOR AND MAPPER C

INFORMATION PROVIDED BY: A & J LAND SURVEYORS, INC.
DATE: SEPTEMBER 8, 2016
NAME: GEORGE J. WARD
ADDRESS: 5847 LUELLA STREET
JACKSONVILLE, FLORIDA 32207
PHONE NO.: (904) 346-1733

I HEREBY CERTIFY THAT THE

___ PAVEMENT	___ CHILLED WATER
___ CURB & GUTTER	___ WATER MAIN
___ STORM & DRAINAGE SYSTEM	___ RECLAIMED WATER
___ LAKE OR POND	_X_ FORCE MAIN
___ UNDERDRAIN CONNECTIONS	_X_ SANITARY GRAVITY
___ FIRE WATER MAIN	_X_ LIFT STATION

ARE AT THE HORIZONTAL AND VERTICAL LOCATIONS AS SHOWN
DRAWINGS AND MEET THE MINIMAL TECHNICAL STANDARDS SET
OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G
PURSUANT TO SECTION 472.027 FLORIDA STAUTES.

DATE OF FIELD SURVEY SEPTEMBER 8, 2016
SIGNATURE:
NAME: GEORGE J. WARD.
FLORIDA REGISTERED LAND SURVEYOR'S NUMBER PLS 5155

NOTES:

12. PLUG VALVE SEAT

SHEET TWO
THS, INVERTS

6.0' CHAIN
LINK FENCE

LS-9

31.93

31.32

31.21

SWINGING
GATE

31.92

31.36

31.32

31.31

30.82

31.90

31.39

31.36

31.35

30.90

LS-10

31.96

31.38

31.34

13

LS-4 LS-3 LS-2 LS-1

HDPE DR-9
TIC LINE

PC = 17+45.16

PT = 17+28.33

LS-11
1 - 3"
90° BEND

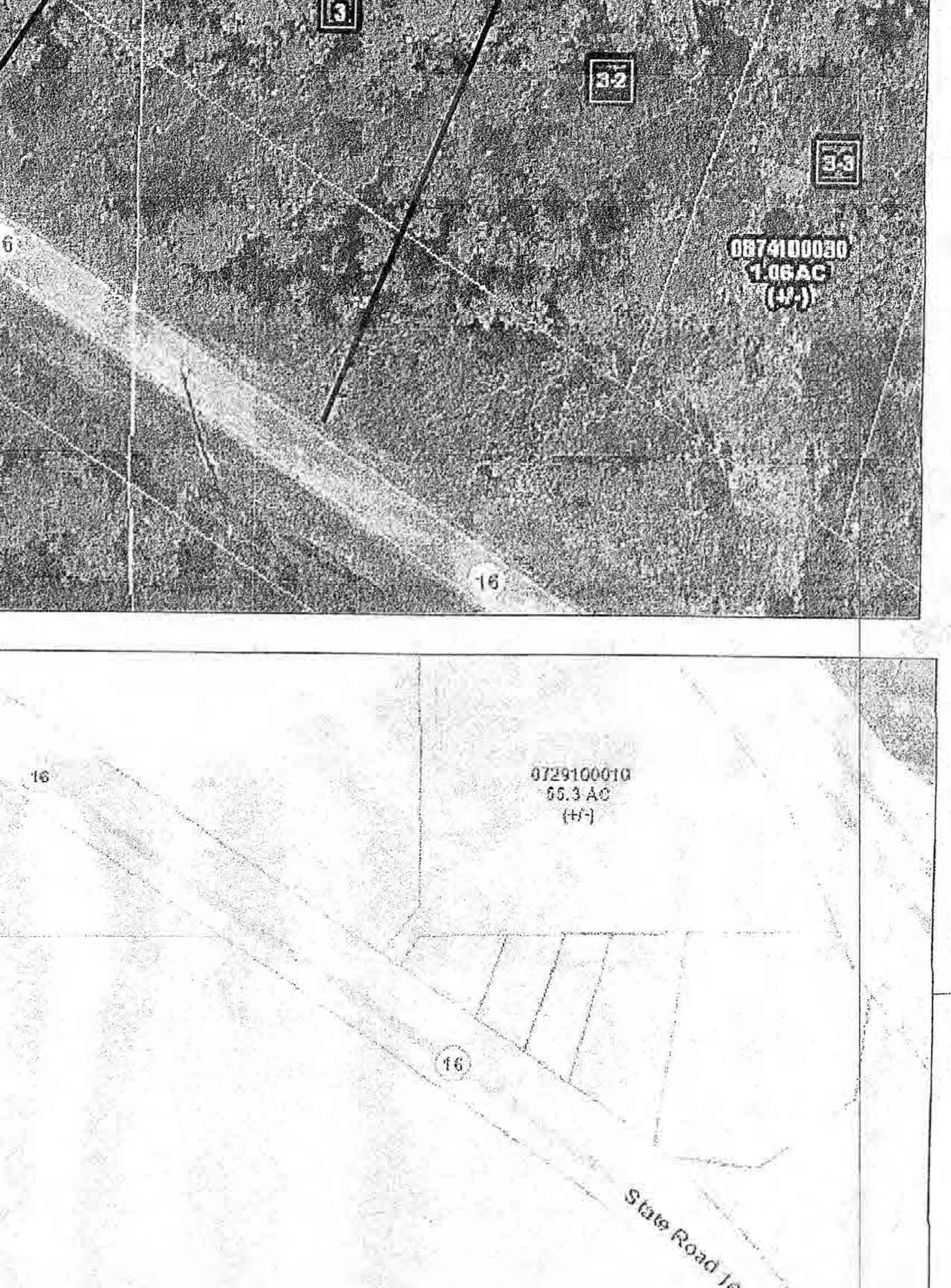
1" HDPE DR-9
WATER SERVICE

17

	P
LS-4	H
LS-5	CO C
LS-6	EL EQ R
LS-7	FIE LIG
LS-8	CO C
LS-9	CO C
LS-10	FC
LS-11	3
LS-12	STA L CO
LS-13	1 PR TRA

2017 NW Tadpole Prep

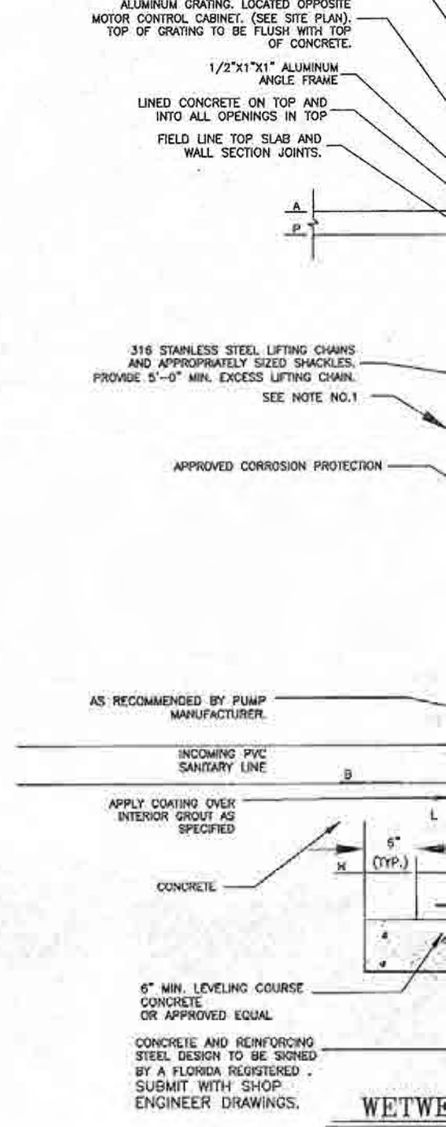
As Built Drawings



KB PR
RON
3 CHARL
ST. AUGUST
904-6

PROJECT
LOCATION

BERM AROUND WETWELL & VALVE VAULTTOP EL 46.25
PROPOSED LIFT STATION DETAILS NEXT SHEET
CENTER OF WET WELL STA: 1+99.3 OFFSET: 106.1 L
END 1" POLY SERVICE STA: 2+12.3 OFFSET: 1.5 L
CONSTRUCT 2x1 REDUCER, 1" METER & RPZBFP
10"OAK
6" 45° BEND STA: 2+79.4 OFFSET: 16.0 R
S 56°54'18" E (M)
273.38'(M)
SERVICE VALVE STA: 2+11.7 OFFSET: 18.0 R
PROVIDE BERM ALONG RIGHT OF WAY LINE TOP OF BERM EL TO BE 45.00
6" 45° BEND STA: 2+81.0 OFFSET: 17.7 R
= NAIL AND DISK SET ON NORTHERLY EDGE OF PAVEMENT AT THE EASTERLY PROPERTY LINE EXTENDED
BM #2
CONTRACTOR TO MAKE 2x16 WET TAP W/ STAINLESS TAPPING SLEEVE & VALVE
CONTRACTOR TO MAKE 6x16 WET TAP W/ STAINLESS TAPPING SLEEVE & VALVE
150 LF 2" HDPE
150 LF 6" HDPE DR11
EXIST. DITCH
SOUTH ROW LINE
TERMINATE DIRECTIONAL BORE
EDGE OF PAVEMENT
CENTER LINE
EDGE OF PAVEMENT
SR16
EXIT ANGLE TO BE 18°
EXIST 4" PVC GAS MAIN
EXIST 16" PVC WATER MAIN
45
44
43
42
41
40
39
38
37
36
35


ALUMINUM GRATING. LOCATED OPPOSITE MOTOR CONTROL CABINET. (SEE SITE PLAN). TOP OF GRATING TO BE FLUSH WITH TOP OF CONCRETE.
1/2"X1"X1" ALUMINUM ANGLE FRAME
LINED CONCRETE ON TOP AND INTO ALL OPENINGS IN TOP
FIELD LINE TOP SLAB AND WALL SECTION JOINTS.
A
P
316 STAINLESS STEEL LIFTING CHAINS AND APPROPRIATELY SIZED SHACKLES. PROVIDE 5'-0" MIN. EXCESS LIFTING CHAIN.
SEE NOTE NO.1
APPROVED CORROSION PROTECTION
AS RECOMMENDED BY PUMP MANUFACTURER.
INCOMING PVC SANITARY LINE
B
APPLY COATING OVER INTERIOR GROUT AS SPECIFIED
L
H
6" (TYP.)
CONCRETE
6" MIN. LEVELING COURSE CONCRETE OR APPROVED EQUAL
CONCRETE AND REINFORCING STEEL DESIGN TO BE SIGNED BY A FLORIDA REGISTERED . SUBMIT WITH SHOP ENGINEER DRAWINGS.
WETWE
6"
SEA
6"

2018 NW Mill Creek North

As Built Drawings

ASH PROPERTIES

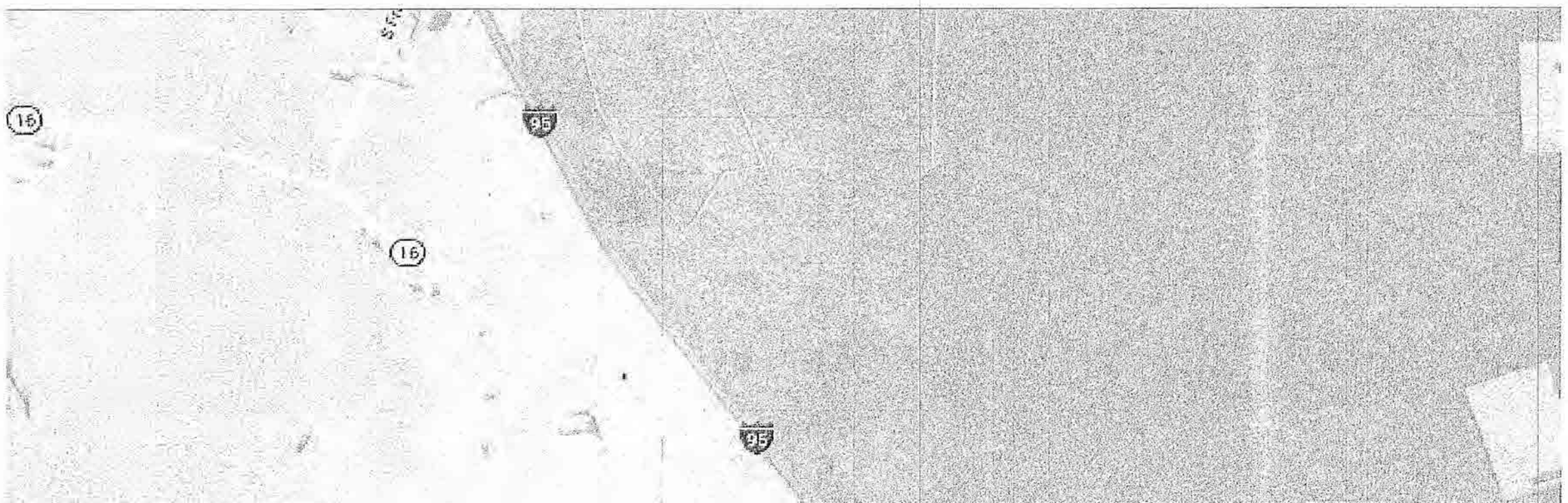
7880 Gate Parkway, Suite 300
Jacksonville, Florida 32256

N# 087360-0000 & 087360-00

PREPARED BY:

RAY THOMPSON SURVEYING, INC.

1825 University Boulevard West
Jacksonville, Florida 32217
(Phone) 904-448-5125



LABEL/SIZE/TYPE	MANUFACTURER	# TU
W-2 10" GATE VALVE	MULLER	
W-9 4" GATE VALVE	MULLER	
W-11 4" GATE VALVE	MULLER	
W-13 4" DCDA RPZ-BFP	ZURN WILKINS	
W-14 8" GATE VALVE	MULLER	
W-15 8" DCDA RPZ-BFP	ZURN WILKINS	

BENCH MARK:
EL. 47.22

W-11 4" GATE VALVE
W-12 2" METER IN 4" METER BOX
W-13 4" DCDA RPZ-BFP

PRIVATE UTILITIES

ROW LINE

PUBLIC UTILITIES

4" DR-18 PVC WM

W-14 8" GATE VALVE
W-15 8" DCDA RPZ-BFP

W-7 10"X8" TEE
W-8 8"X4" REDUCER
W-9 4" GATE VALVE
W-10 4" 90° BEND

W-6 10" 45° BEND

W-5 10" 45° BEND

10" DR-18 PVC WM

W-4 10"X12 HDPE/PVC ADAPTER

12" HDPE DIRECTIONAL DRILL WM

W-3 10"X12 HDPE/PVC ADAPTER

10" DR-18 PVC WM

10" WATER MAIN UNDER 16" WATER MAIN

W-1 16"x10" TAPPING SLEEVE
W-2 10" GATE VALVE

W-2A 10" 90° BEND
W-2B 10" 90° BEND

STATE ROAD NO. 16

5+00.00 4+50.00 4+00.00 3+50.00 3+00.00 2+50.00 2+00.00 3+50.00

FM RU WM

BTI HD Drilling, Inc.

LOCATION
49.08
04.842R

LOCATION
5.72
3.381R

AS-BUILT LOCATIO
STA:=4+30.67
Offset=17.193R
AS-BUILT LOCATIO
STA:=4+30.38
Offset=14.218R

4+00.00

BENCH MARK:
EL. 47.22

CONCRETE HEADWALL
ELEVATION=44.22
36" PIPE INVERT=40.41

TOP OF BANK

TOP OF BANK

INV. = 42.75

BOX

MES

7+00.00

6+50.00

6+00.00

5+50.00

5+00.00

4+50.00

4+00.00

3+50.00

3+00.00

ASPHALT

BENCH MARK:
EL. 47.22

CONCRETE HEADWALL
ELEVATION=44.22
36" PIPE INVERT=40.41

TOP OF BANK

RW

RW

TOP OF BANK

RU

6+50.00

6+00.00

5+50.00

5+00.00

4+50.00

4+00.00

3+50.00

3+00.00

2+50.00

ASPHALT

36" CONCRETE PIPE

STATE ROAD NO. 16

CONCRETE
HEADWALL

6" 90° BEND
EL. 42.66
6" GATE VALVE
EL. 42.82
PRIVATE 6" FIRE HYDRANT

7.49'AB
9.75'AB
11.50'AB

6.28'AB
7.65'AB
9.28'AB

6" DR-18 PVC FIRE MAIN

6" 90° BEND
EL. 42.66
6" GATE VALVE
EL. 42.82
PRIVATE 6" FIRE HYDRANT

17.99'AB
7.30'AB
13.73'AB
11.11'AB

6" DR-18 PVC FIRE MAIN

14.23'AB
14.52'AB
3.55'AB
3.15'AB
5.97'AB

8" 90° BEND
EL. 42.70
8"X6" REDUCER
EL. 42.88

6" 45° BEND
EL. 42.79

38.84'AB
29.86'AB
24.02'AB
18.89'AB
32.31'AB
24.16'AB
25.43'AB
20.38'AB
13.82'AB
48.46'AB

6" DR-18 PVC FIRE MAIN

8"X6" TEE
EL. 42.00
8" GATE VALVE
42.89

8" x 8" TEE
EL. 41.77
6" GATE VALVE
EL. 42.64
PRIVATE 6" FIRE HYDRANT

13.82'AB

8" 11.25° BEND
EL. 41.67

8" DR-18 PVC FIRE

CO 1
CLEAN OUT
~~TOP ELEV 45.70~~ 45.70
~~INV 36.37(SE)~~ 37.16(SE)
~~INV 36.37(SW)~~ 37.16(SW)

8"X6" TEE
EL. 42.31
8" 45° BEND
EL. 42.40

4" x 4" TEE
EL. 43.55
4"X2" REDUCER
EL. 43.47
4" GATE VALVE
EL. 43.85
2" SCHEDULE 80 PVC
WATER MAIN FOR HOSE BIBB
AT RV DUMP AND LIFT STATION

198 LF ~ 6" SDR-35 PVC @ 1.07%
~~216 LF ~ 6" SDR-35 PVC @ 1.00%~~

CO 2
CLEAN OUT
~~TOP ELEV 46.75~~ TOP ELEV 46.80
~~INV 38.52(SE)~~ INV 39.28(SE)
~~INV 38.52(NW)~~ INV 39.28(NW)

240 LF~6" SDR-35 PVC @ 1.31%
~~234 LF~6" SDR-35 PVC @ 1.43%~~

CO 4
CLEAN OUT
~~TOP ELEV 45.87~~ 45.49
~~INV 42.67(SE)~~ INV 43.26(SE)
~~INV 42.67(W)~~ INV 43.26(W)

CO 3
CLEAN OUT
~~TOP ELEV 46.50~~ TOP ELEV 46.
~~INV 41.87(E)~~ INV 42.42(E)
~~INV 41.87(NW)~~ INV 42.42(NW

6" DR-18 PVC FIRE
4" DR-18 PVC WM
6" DR-18 PVC WM
4" DR-18 PVC WM

6" 90° BEND
EL. 41.43
4" 90° BEND
EL. 41.27

C/L OF ROAD
1.28'AB
5.20'AB
23.88'AB
47.71'AB
49.87'AB
43.82'AB
10.61'AB
11.91'AB
19.52'AB
66.56'AB
71.89'AB
74.43'AB
98.44'AB
103.10'AB

77 LF~6" SDR-3
80 LF~6" SDR-3

RECREATIONAL VEHICLE WAGE DUMP STATION

W-11 4" GATE VALVE
W-12 2" METER IN 4" METER BOX
W-13 4" DCDA RPZ-BFP

PRIVATE UTILITIES
ROW LINE
PUBLIC UTILITIES

4" DR-18 PVC WM

W-7 10"X8" TEE
W-8 8"X4" REDUCER
W-9 4" GATE VALVE
W-10 4" 90° BEND

10" DR-18 PVC WM

TOP OF BANK

45° BEND

HDPE/PVC

VE

TOP OF BANK

STATE ROAD NO. 16

36" CONCRETE PIPE

12" HDPE DIRECTIONAL DRILL WM

ASPHALT

10" DR-18 PVC WM

W-1 12"x10" TAPPING SLEEVE
W-2 10" GATE VALVE

HDPE/PVC ADAPTER

CONCRETE HEADWALL

30.35'AB
FIRE
6"X6" TEE
EL. 41.43
14.72'AB
16.49'AB
18.40'AB
11.60'AB
6" DR-18 PVC FIRE MAIN
6" DR-18 PVC FIRE MAIN
COMPACT SPACES 9' WIDE PARKING (TYP)
COMPACT
30.70'AB
29.47'AB
8.85'AB
6" 90° BEND
EL. 43.80
9.03'AB
C/L OF ROAD
30.06'AB
8.83'AB
9'
6" DR-18 PVC FIRE MAIN
6" x 6" TEE
EL. 41.07
69.60'AB
66.55'AB
60.33'AB
60.42'AB
17.94'AB
18.30'AB
6"X6" TEE
EL. 42.91
6" GATE VALVE
EL. 42.78
PRIVATE 6" FIRE HYDRANT
6" GATE VALVE
EL. 44.56
PRIVATE 6" FIRE HYDRANT
20.22'AB
17.14'AB
26.60'AB
1.28'AB
C/L OF ROAD
5.20'AB
6" DR-18 PVC FIRE MAIN
4" DR-18 PVC WM
8.91'AB
POTABLE WATER CONNECTION
SANITARY SEWER CONNECTION
INV 43.00
43.54
CO 4
CLEAN OUT
~~TOP ELEV 45.87~~ 45.49
~~INV 42.67(SE)~~ INV 43.26(SE)
~~INV 42.67(W)~~ INV 43.26(W)
34.17'AB
32.04'AB
28.87'AB
9.32'AB
10.52'AB
66.56'AB
71.89'AB
74.43'AB
33 LF~ 6" SDR-35 PVC @ 1.00%
25 LF~ 6" SDR-35 PVC @ 1.12%
77 LF~6" SDR-35 PVC @ 1.09%
80 LF~6" SDR-35 PVC @ 1.00%
64.83'AB
6" 90° BEND
EL. 41.43
4" 90° BEND
EL. 41.27
CO 3
CLEAN OUT
~~TOP ELEV 46.50~~ TOP ELEV 46.50
~~INV 41.87(E)~~ INV 42.42(E)
~~INV 41.87(NW)~~ INV 42.42(NW)
98.44'AB
103.10'AB

2018 NW Tomoka Pines

As Built Drawings

ST. JOHNS COUNTY, FLORIDA

LOCATION MAP

N.T.S.

TANTS

RE BLVD.
A 32256

G GROUP, INC.
, SUITE 204
A 32216
S
(904) 854-4505

PING, LLC
D
2
904) 777-8271

LITY DEPARTMENT

A 32085

12" STABILIZED SUBGRADE
LBR 40/98% MAXIMUM DENSITY

ROAD NO. 16

LBR 40/95% MAXIMUM DENSITY

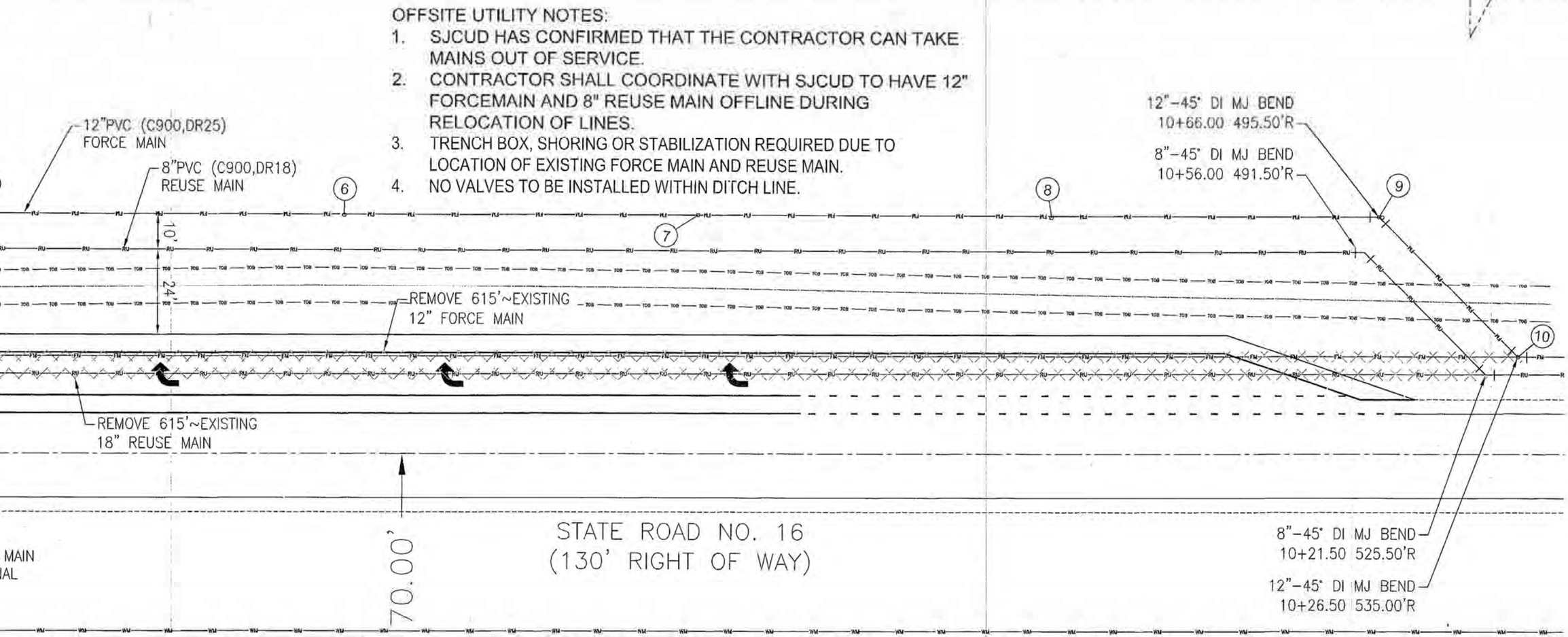
98% MINIMUM DENSITY AASHTO T-180
(MODIFIED PROCTOR)

SECTION B-B TOMOKA PINES DRIVE

N.T.S

OFFSITE UTILITY NOTES:

1. SJCUD HAS CONFIRMED THAT THE CONTRACTOR CAN TAKE MAINS OUT OF SERVICE.
2. CONTRACTOR SHALL COORDINATE WITH SJCUD TO HAVE 12" FORCEMAIN AND 8" REUSE MAIN OFFLINE DURING RELOCATION OF LINES.
3. TRENCH BOX, SHORING OR STABILIZATION REQUIRED DUE TO LOCATION OF EXISTING FORCE MAIN AND REUSE MAIN.
4. NO VALVES TO BE INSTALLED WITHIN DITCH LINE.



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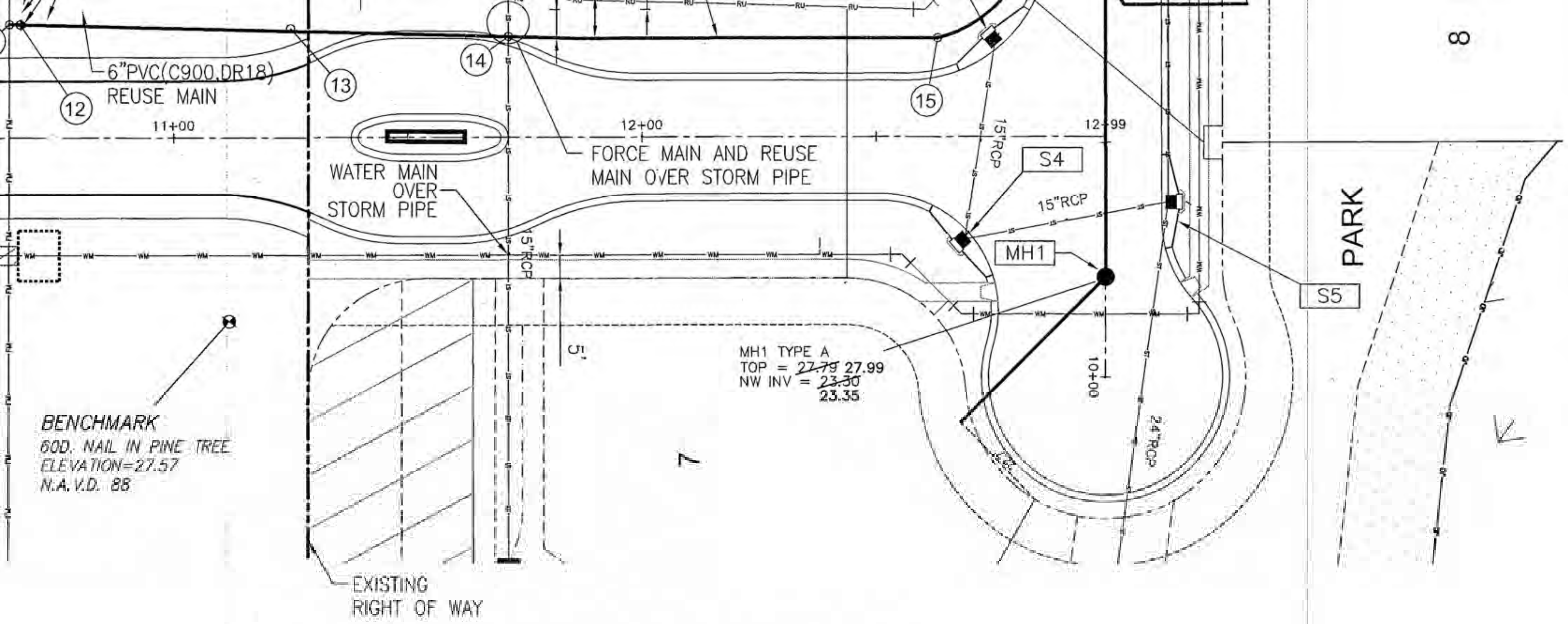
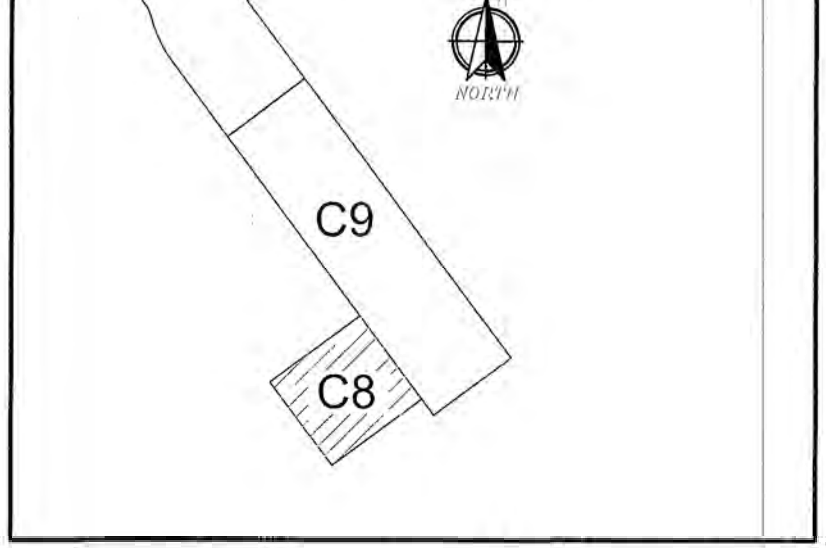
CATASTI
15. RPM'S
16. CONTRA
17. LANE C
10:00 A



TOMOKA PINES DRIVE



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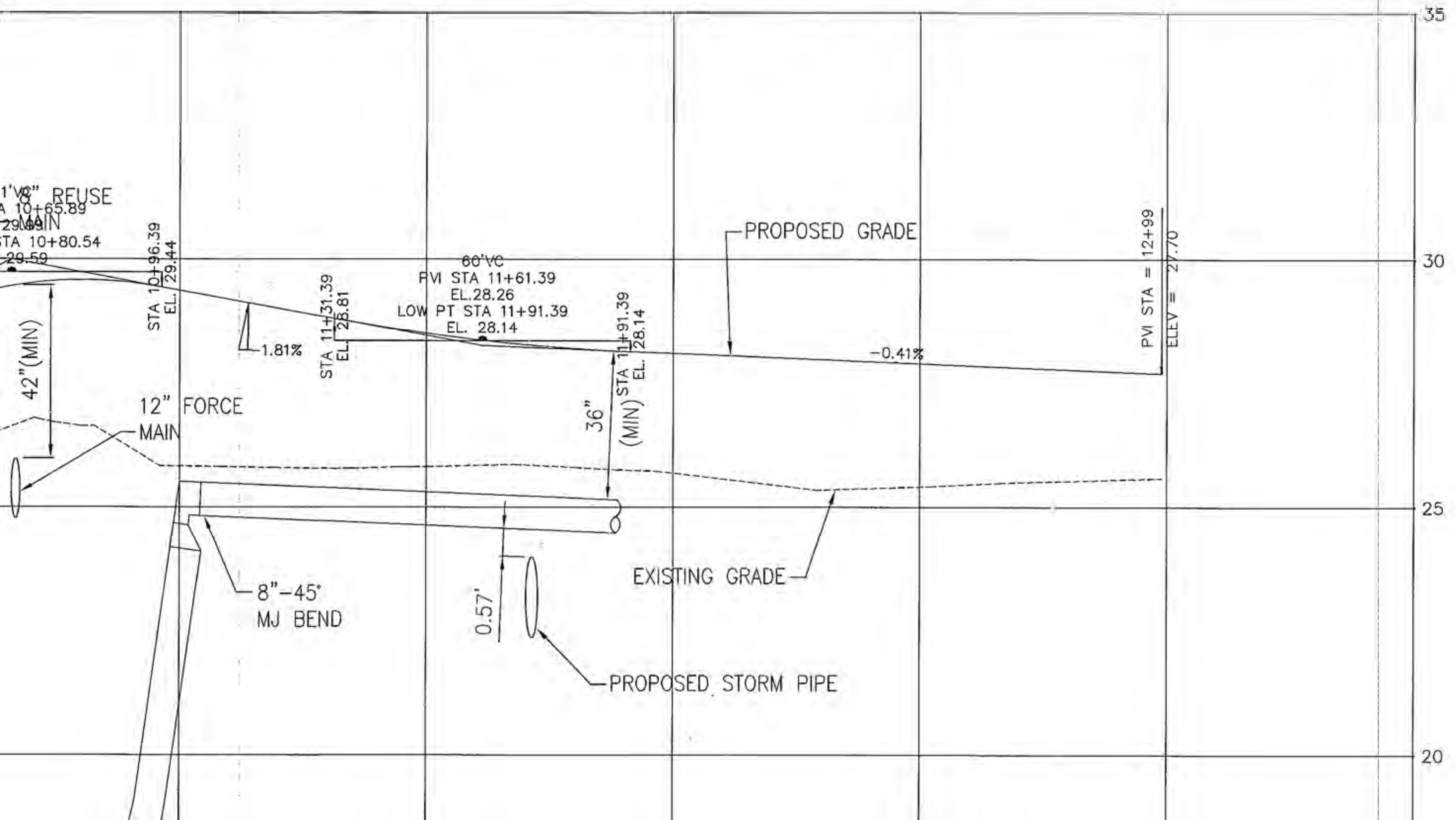


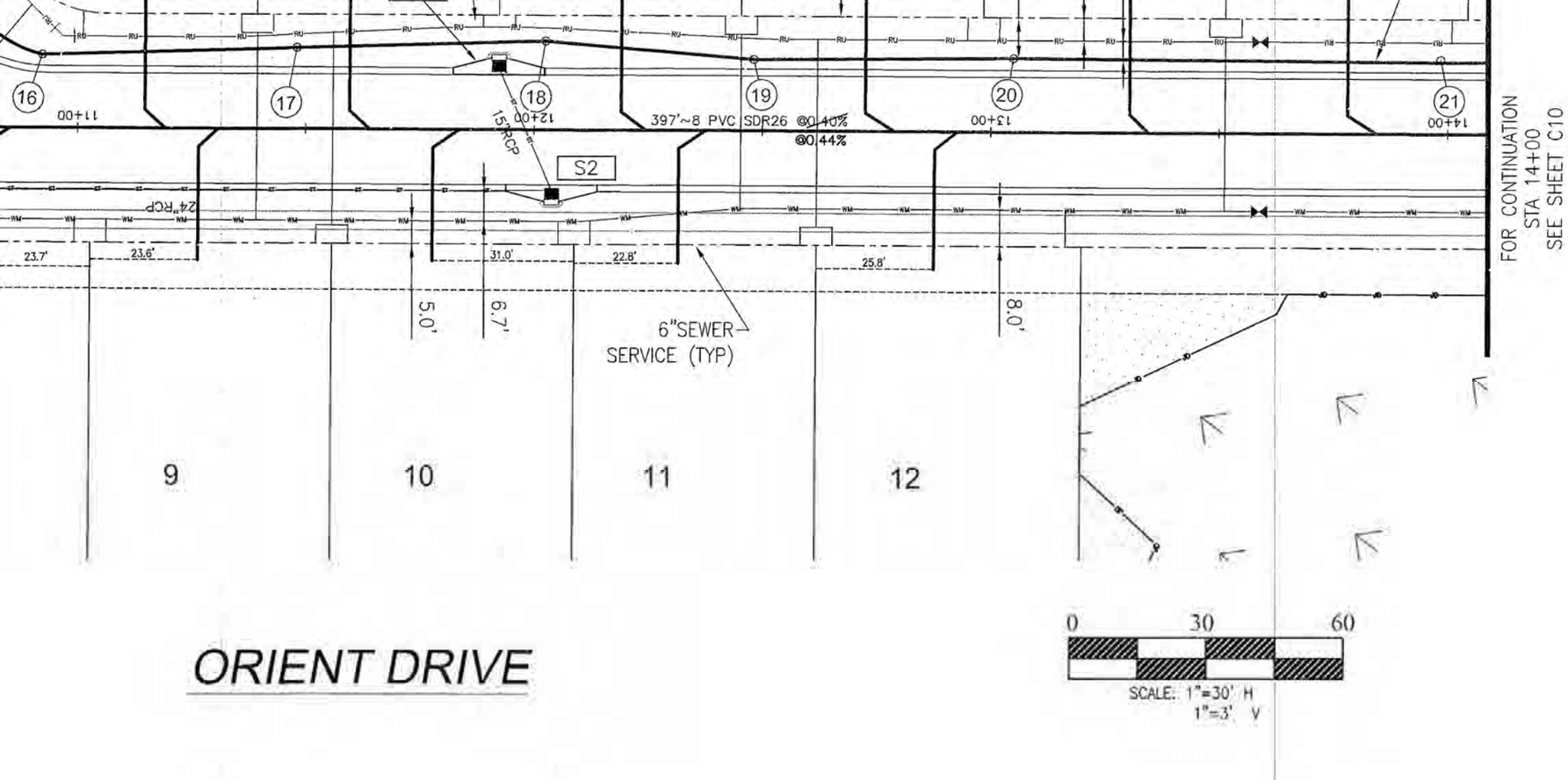
AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-February 2018
NAME: Burnham Construction, Inc.
ADDRESS: 11413 Enterprise East Blvd. Macclenny, Florida 32063
PHONE NO: (904) 256-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED IN THE CONSTRUCTION OF:

____	Pavement	____	Chilled Water
____	Curb + Gutter	____	Water Main
____	Sorm + Drainage System	____	Reclaimed Water Main
____	Lake or Pond	X	Force Main
____	Underdrain Connections	X	Sanitary Gravity System
		____	Lift Station

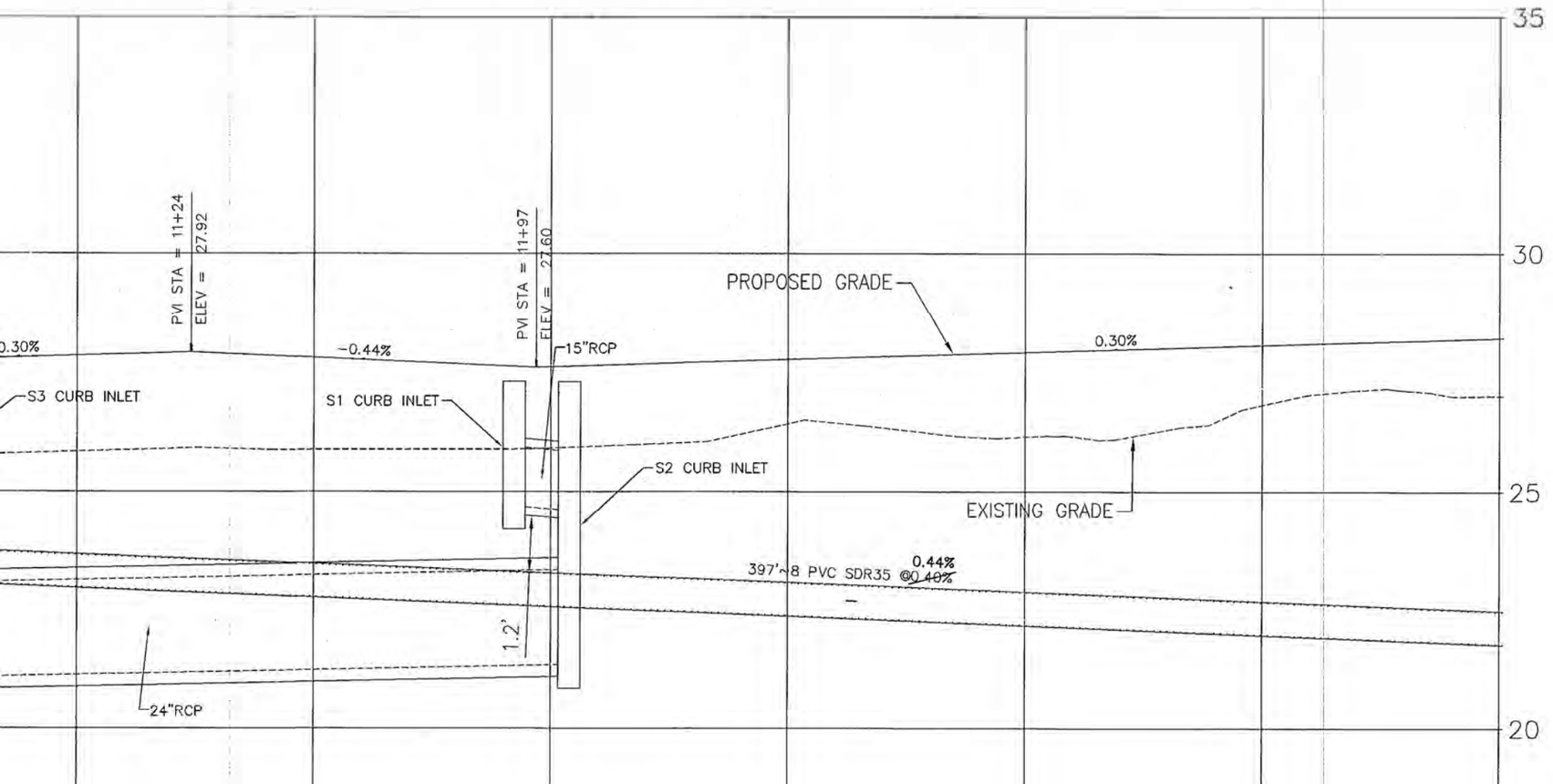
ARE IN ACCORDANCE WITH THE APPROVED PLANS AND JEA STANDARDS AND COUNTY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE REGULATORY AGENCY.



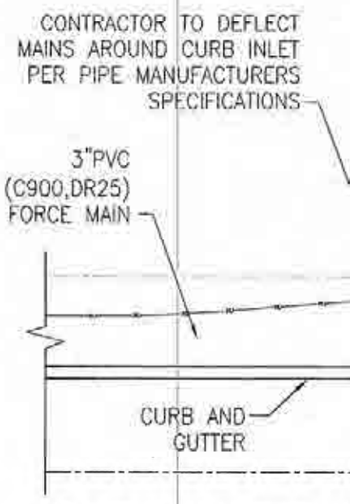
ORIENT DRIVE

0 30 60

SCALE: 1"=30' H
1"=3' V



1. AREAS DISTURBED IN FDOT RIGHT OF WAY SHALL BE SODDED.
2. HOUSE WATER METER SIZES, SHALL BE 5/8" MINIMU
3. ALL WATER AND SEWER CONSTRUCTION SHALL COMPL THE LATEST SJCUD CONSTRUCTION STANDARDS AND SPECIFICATIONS.
4. IT IS THE REQUIREMENT OF SJCUD THAT WHEN TREE TO BE PLANTED OR TO REMAIN LOCATED NEAR PUBL OWNED OR MAINTAINED PROPPOSED OR EXISTING UTI LINES, THAT THE TREES MUST NOT BE WITHIN 7.5 F (BOTH WAYS) FROM THE CENTERLINE OF THE PROPO EXISTING UTILITY LINE. PLEASE ENSURE THAT THE UT CONSTRUCTION PLANS ARE COORDINATED WITH THE LANDSCAPE/TREE MITIGATION PLANS. (MANUAL OF WA WASTEWATER AND REUSE DESIGN STANDARDS AND SPECIFICATIONS, PART VI, SJCUD GENERAL NOTES).
5. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIO CONSTRUCTION.



CURB INLET U

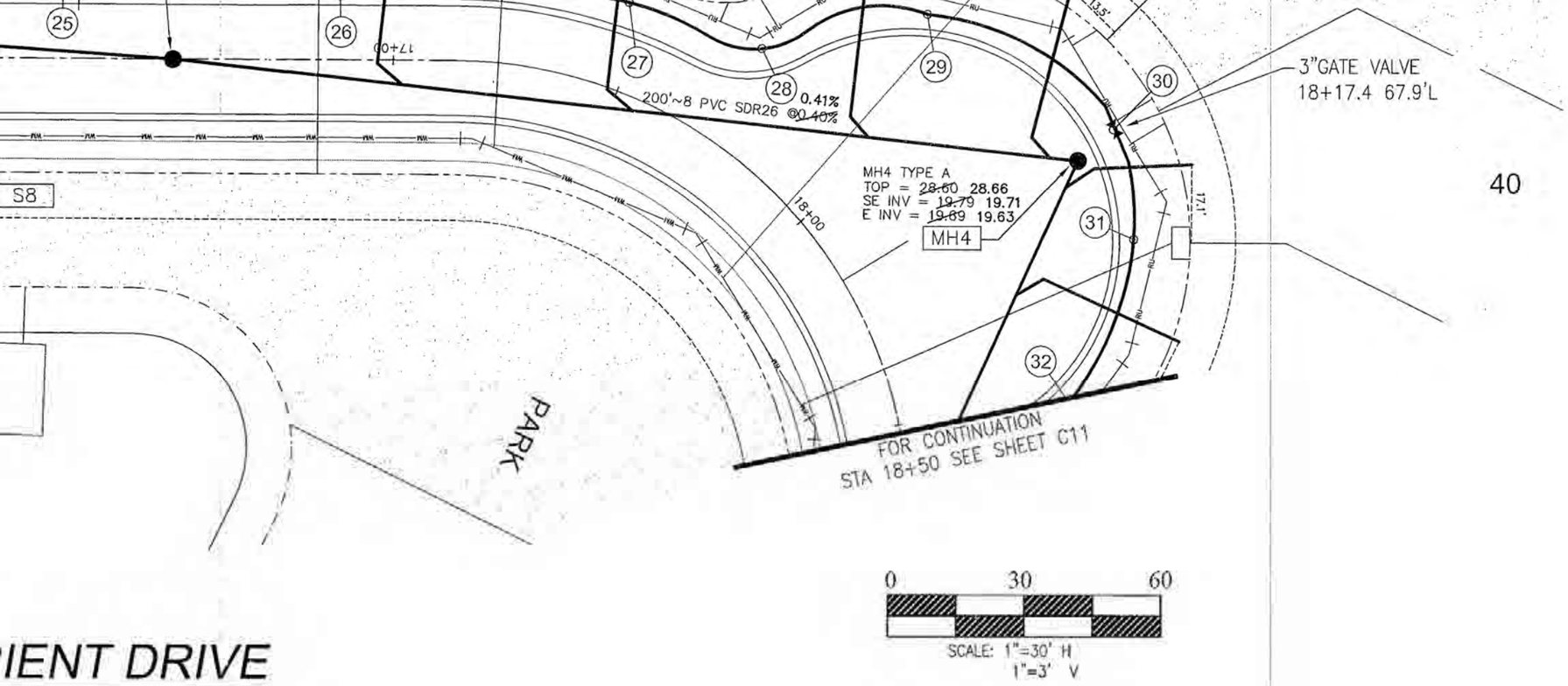
AS-BUILT

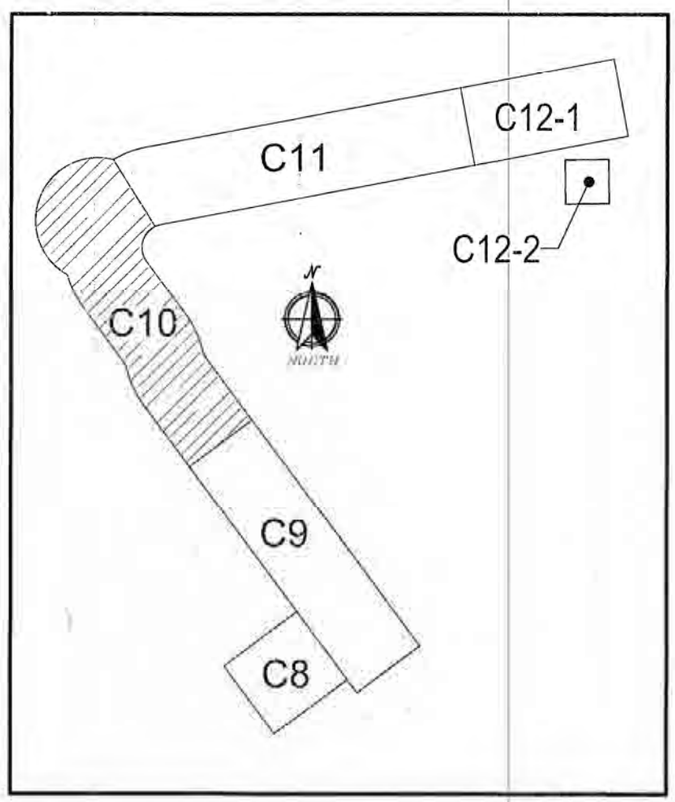
INFORMATION PROVIDED BY:

DATE:	November 2017-February 2018
NAME:	Burnham Construction, Inc.
ADDRESS:	11413 Enterprise East Blvd. Macclenny, Florida 32063
PHONE NO:	(904) 256-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED CONSTRUCTION OF:

____ Pavement	____ Chilled Water
____ Curb + Gutter	____ Water Main
____ Storm + Drainage System	____ Reclaimed Water
____ Lake or Pond	_X_ Force Main
	_X_ Sanitary Gravity

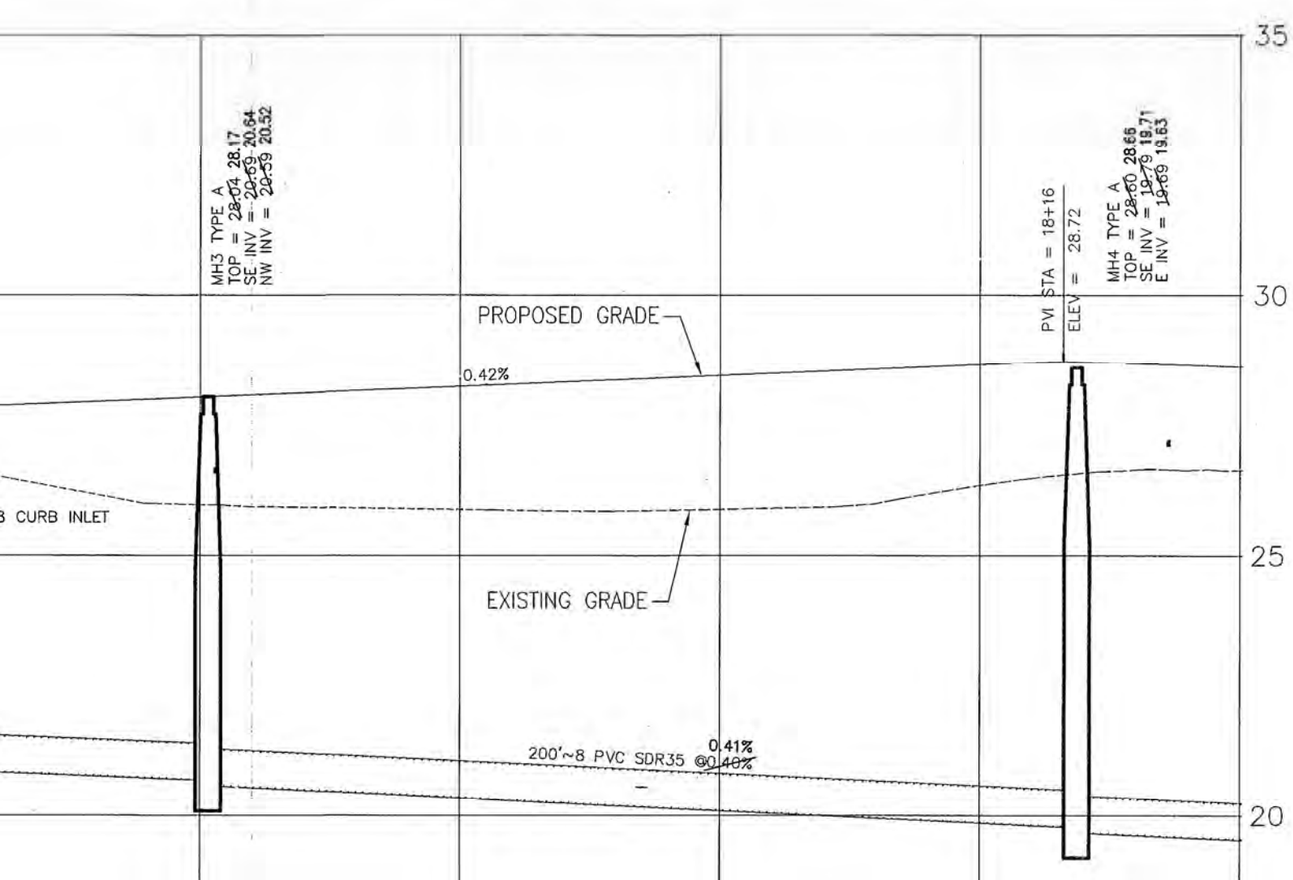




IENT DRIVE

0 30 60

SCALE: 1"=30' H
1"=3' V



AS-BUILT

INFORMATION PROVIDED BY:

DATE:	November 2017-February 2018
NAME:	Burnham Construction, Inc.
ADDRESS:	11413 Enterprise East Blvd. Macclenny, Florida 32063
PHONE NO:	(904) 259-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED IN THE CONSTRUCTION OF:

____ Pavement	____ Chilled Water
____ Curb + Gutter	____ Water Main
____ Sorm + Drainage System	____ Reclaimed Water Main
____ Lake or Pond	X Force Main
____ Underdrain Connections	X Sanitary Gravity System
	____ Lift Station

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND JEA STANDARDS AND COUNTY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE REGULATORY AGENCY.

INFORMATION PRO
NAME:
ADDRES
PHONE

I HEREBY CERTIF
____ Pavemer
____ Curb +
____ Sorm +
____ Lake or
____ Underdr

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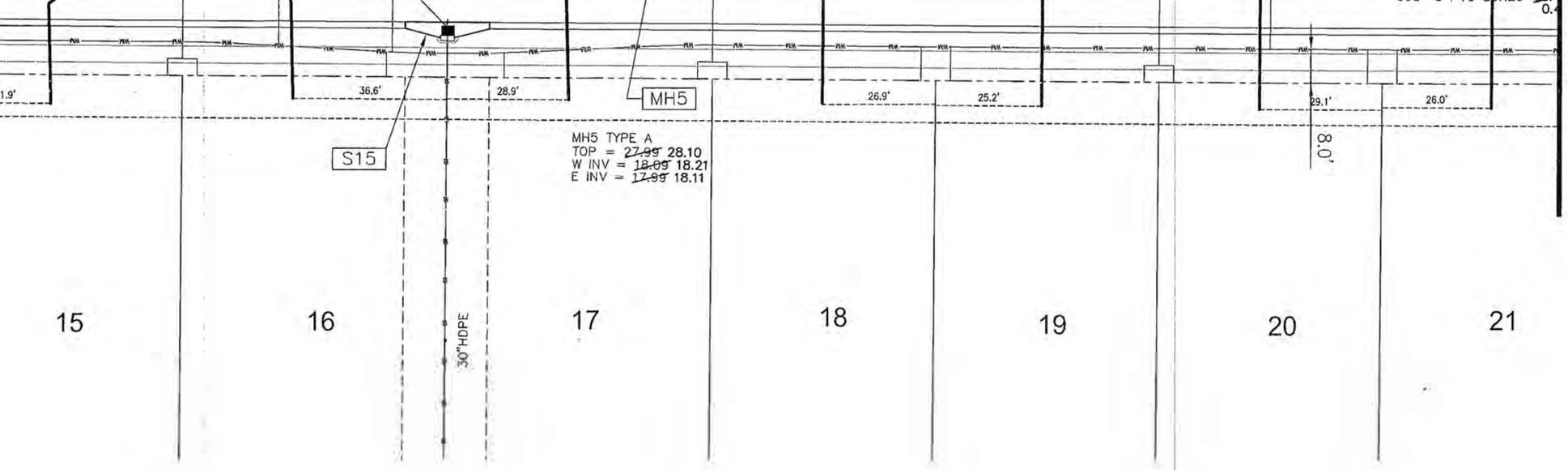


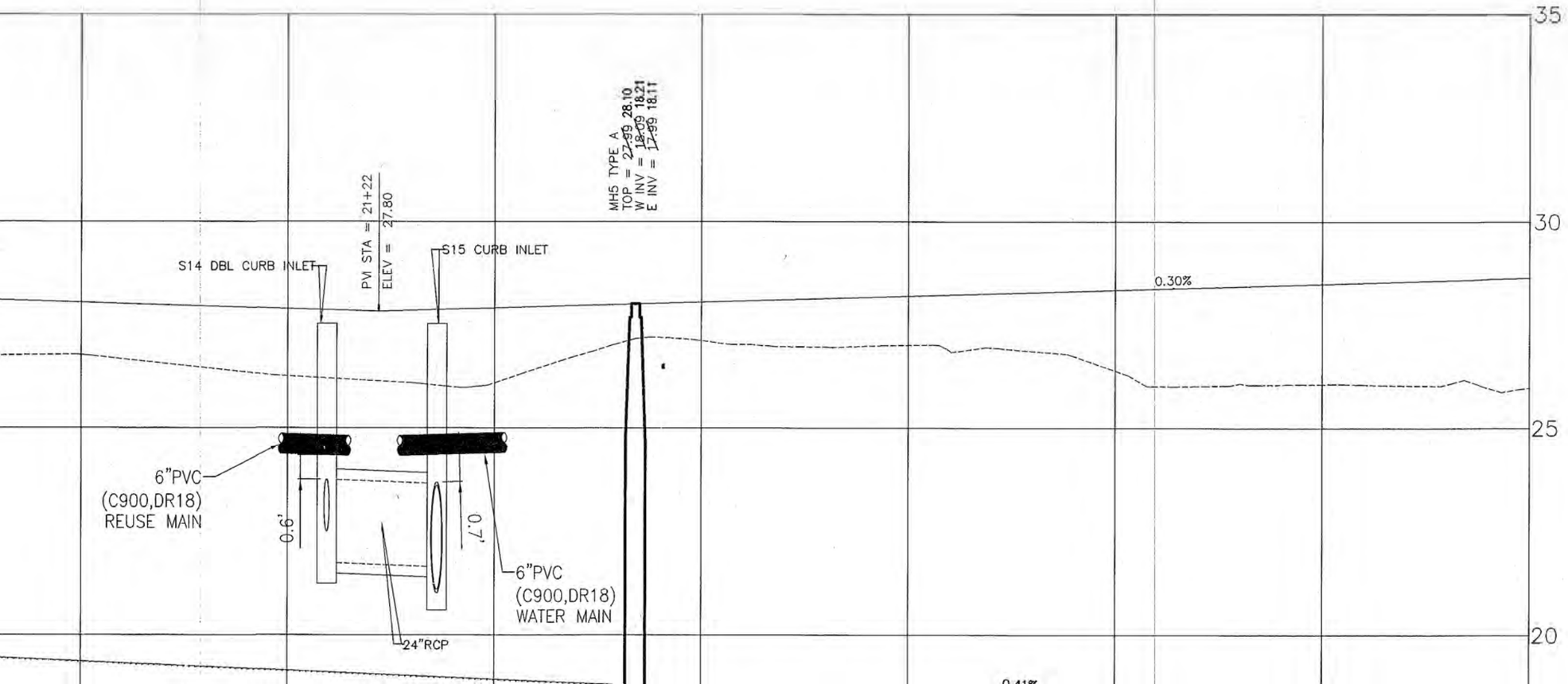
NOTES:

1. AREAS DISTURBED SODDED.
2. HOUSE WATER ME
3. ALL WATER AND S THE LATEST SJCU SPECIFICATIONS.
4. IT IS THE REQUIR TO BE PLANTED O OWNED OR MAINTA LINES, THAT THE (BOTH WAYS) FRO EXISTING UTILITY L CONSTRUCTION PL LANDSCAPE/TREE WASTEWATER AND SPECIFICATIONS, F
5. CONTRACTOR TO L CONSTRUCTION.

GATE VALVE NOTES:

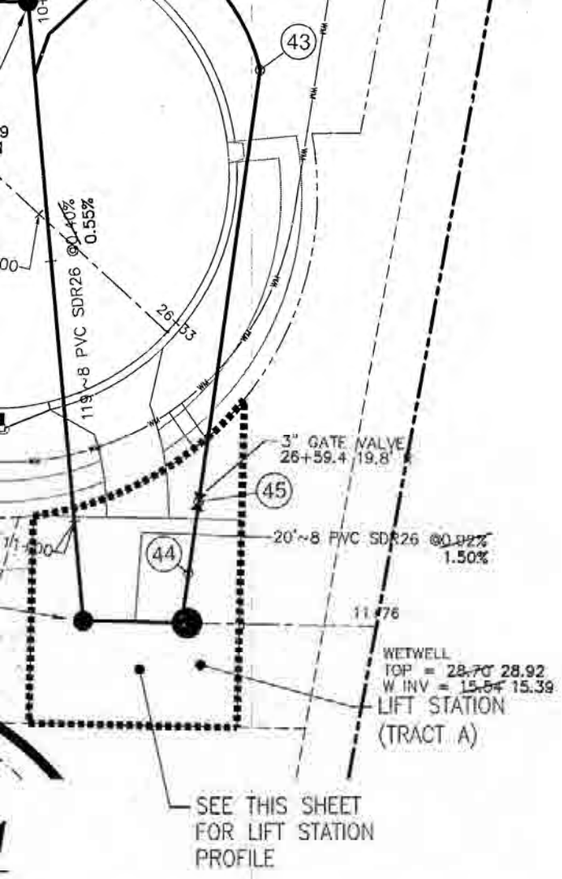
- .....

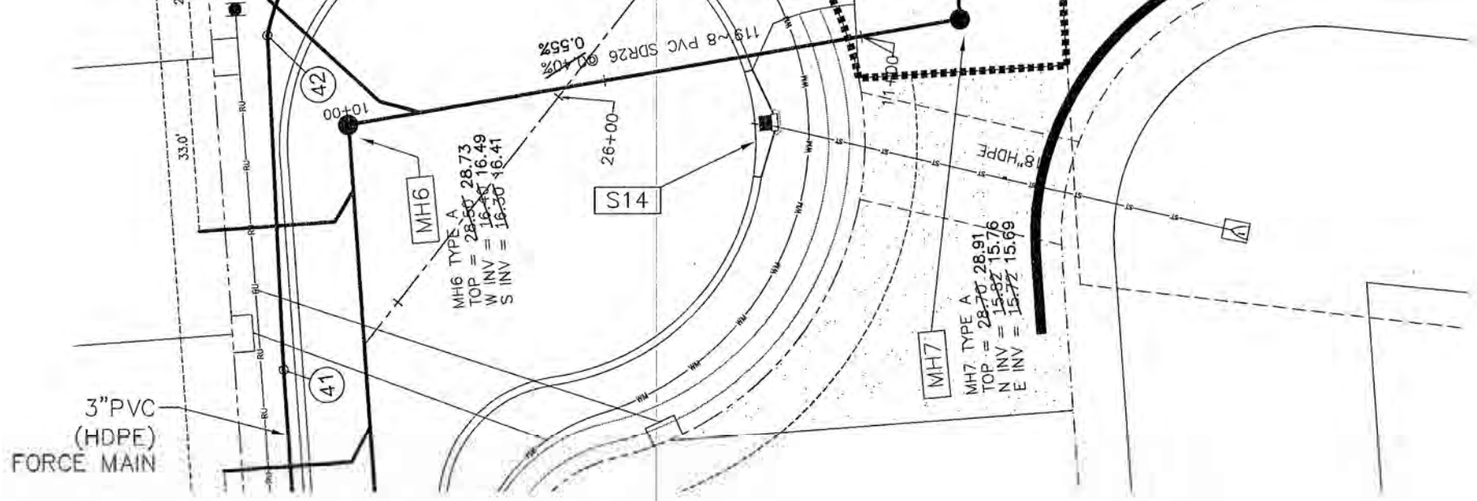
ORIENT DRIVE



AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-Februar
NAME: Burnham Construction, In
ADDRESS: 11413 Enterprise East D
Macclenny, Florida 32

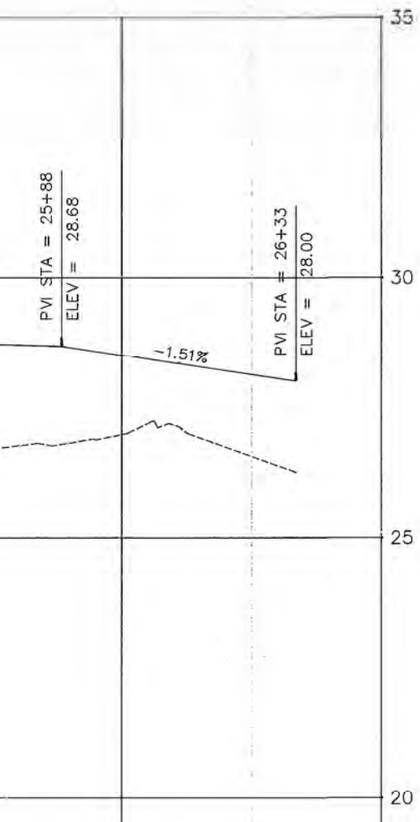


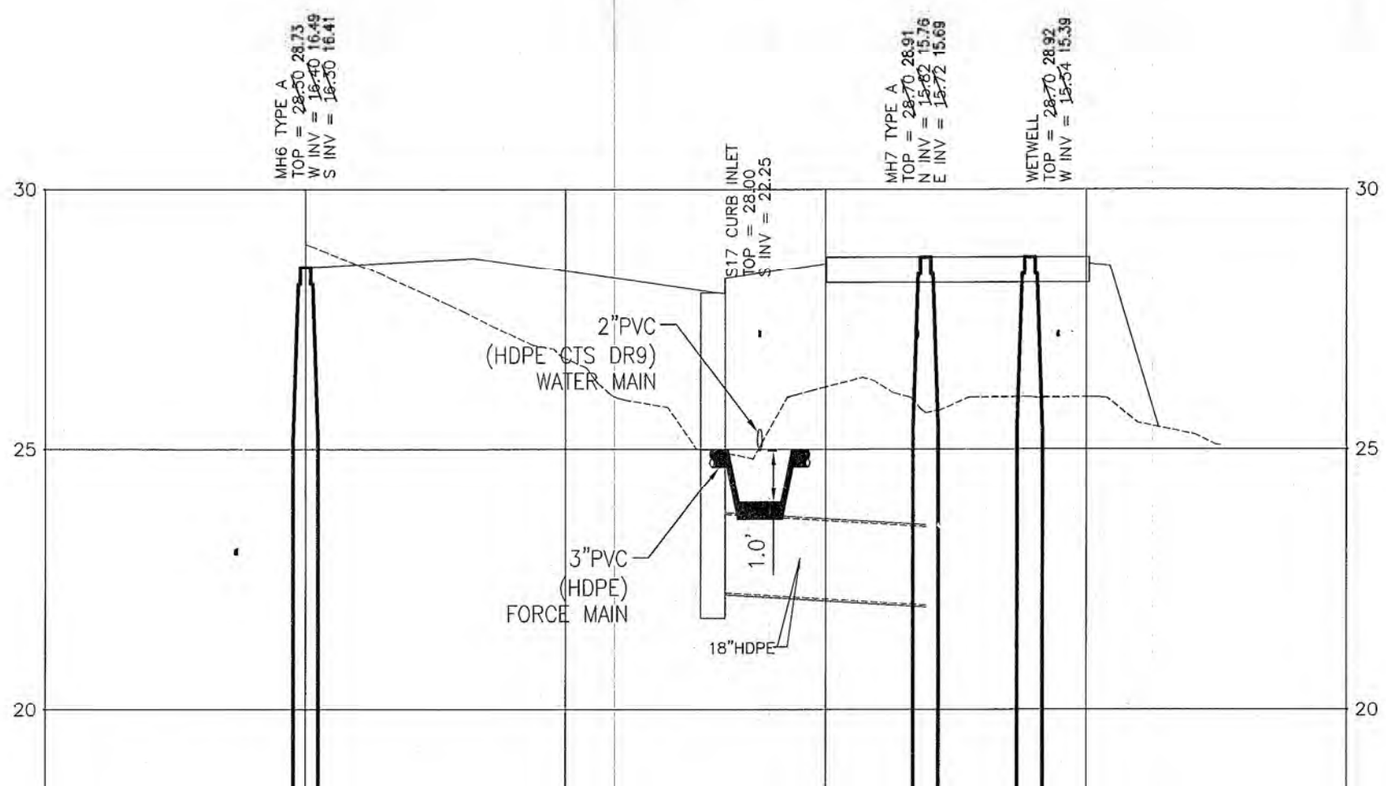


LIFT STATION-2

0 30 60

SCALE: 1"=30' H
1"=3' V





INFORMATION PROVIDED BY:
DATE:
NAME:
ADDRESS:

PHONE NO:

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Point Table

Description	Northing	Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
fm.45bend.tiein	2039080.5	516817.8	N29°56'30.97"	W81°26'23.90"	23.4	26.9	3.5	.	12"	.
fm.45bend	2039067.0	516874.0	N29°56'30.84"	W81°26'23.26"	20.3	24.9	4.6	.	12"	.
CONFLICT	2039050.2	516885.7	N29°56'30.68"	W81°26'23.12"	20.0	24.6	4.6	21.5	6" RU	1.0'
CONFLICT	2039005.1	516921.6	N29°56'30.23"	W81°26'22.71"	20.1	25.5	5.4	18.0	10" WL	1.1'
fm.top.12in	2038942.8	516968.2	N29°56'29.62"	W81°26'22.18"	20.9	25.7	4.8	.	12"	.
fm.top.12in	2038862.3	517027.3	N29°56'28.82"	W81°26'21.51"	20.6	25.1	4.5	.	12"	.
fm.top.12in	2038781.9	517087.1	N29°56'28.03"	W81°26'20.82"	21.5	25.4	3.9	.	12"	.
fm.top.12in	2038701.4	517146.4	N29°56'27.23"	W81°26'20.15"	21.8	25.5	3.7	.	12"	.
fm.45bend	2038626.4	517202.3	N29°56'26.49"	W81°26'19.51"	22.9	25.9	3.0	.	12"	.
fm.45bend.tiein	2038574.1	517193.5	N29°56'25.98"	W81°26'19.61"	21.7	24.7	3.0	.	12"	.
fm.12x4.tee	2039042.8	516891.2	N29°56'30.60"	W81°26'23.06"	20.0	28.2	8.2	.	12"	.
fm.4x3.reducer	2039044.3	516893.0	N29°56'30.62"	W81°26'23.04"	20.0	28.2	8.2	.	3"	.
fm.top.3in	2039078.4	516939.5	N29°56'30.96"	W81°26'22.51"	23.2	28.7	5.5	.	3"	.
CONFLICT	2039104.8	516977.9	N29°56'31.22"	W81°26'22.08"	25.0	27.9	2.9	24.1	15"HDPE	0.6'
fm.top.3in	2039159.2	517051.7	N29°56'31.76"	W81°26'21.24"	25.1	27.8	2.7	.	3"	.
fm.top.3in	2039187.1	517055.5	N29°56'32.04"	W81°26'21.20"	25.3	27.8	2.5	.	3"	.
fm.top.3in	2039230.7	517020.8	N29°56'32.47"	W81°26'21.60"	24.9	28.0	3.1	.	3"	.
fm.top.3in	2039273.3	516986.8	N29°56'32.89"	W81°26'21.98"	24.1	27.8	3.7	.	3"	.
fm.top.3in	2039312.2	516962.7	N29°56'33.27"	W81°26'22.26"	24.3	28.0	3.7	.	3"	.
fm.top.3in	2039357.4	516928.2	N29°56'33.72"	W81°26'22.65"	24.8	28.1	3.3	.	3"	.
fm.locate.wire.box	2039432.3	516872.2	N29°56'34.46"	W81°26'23.29"	28.0	28.0	.	.	3"	.
CONFLICT	2039499.3	516822.5	N29°56'35.12"	W81°26'23.86"	23.7	28.0	4.3	26.5	18" RCP	1.1'
fm.top.3in	2039513.0	516812.3	N29°56'35.25"	W81°26'23.98"	23.8	28.0	4.2	.	3"	.
fm.top.3in	2039594.8	516763.3	N29°56'36.06"	W81°26'24.54"	24.4	28.0	3.6	.	3"	.
fm.top.3in	2039624.2	516750.2	N29°56'36.35"	W81°26'24.69"	24.7	28.0	3.3	.	3"	.
fm.top.3in	2039673.5	516714.3	N29°56'36.84"	W81°26'25.10"	25.5	28.3	2.8	.	3"	.
fm.top.3in	2039725.1	516677.3	N29°56'37.35"	W81°26'25.52"	25.3	28.6	3.3	.	3"	.
fm.top.3in	2039754.6	516667.8	N29°56'37.64"	W81°26'25.63"	25.1	28.7	3.6	.	3"	.
fm.top.3in	2039779.0	516639.9	N29°56'37.88"	W81°26'25.95"	25.2	29.0	3.8	.	3"	.
fm.top.valve	2039779.0	516639.9	N29°56'37.88"	W81°26'25.95"	25.2	29.1	3.9	.	3"	.
fm.top.3in	2039844.9	516651.9	N29°56'38.53"	W81°26'25.82"	25.7	29.0	3.3	.	3"	.
fm.top.3in	2039855.1	516689.0	N29°56'38.64"	W81°26'25.40"	25.9	28.8	2.9	.	3"	.
fm.top.3in	2039855.9	516715.7	N29°56'38.65"	W81°26'25.09"	25.8	28.7	2.9	.	3"	.
fm.top.3in	2039875.2	516767.7	N29°56'38.84"	W81°26'24.50"	25.2	28.6	3.4	.	3"	.
fm.top.3in	2039891.3	516844.9	N29°56'39.00"	W81°26'23.62"	25.3	28.4	3.1	.	3"	.
CONFLICT	2039914.7	516958.2	N29°56'39.24"	W81°26'22.34"	25.2	28.0	2.8	23.2	15"HDPE	1.7'
fm.top.3in	2039927.8	517042.8	N29°56'39.37"	W81°26'21.38"	25.3	28.2	2.9	.	3"	.
fm.top.3in	2039943.3	517125.5	N29°56'39.53"	W81°26'20.44"	25.6	28.5	2.9	.	3"	.
fm.top.3in	2039965.9	517244.9	N29°56'39.75"	W81°26'19.08"	25.5	28.8	3.3	.	3"	.
fm.top.3in	2039982.0	517331.3	N29°56'39.92"	W81°26'18.10"	25.9	29.1	3.2	.	3"	.

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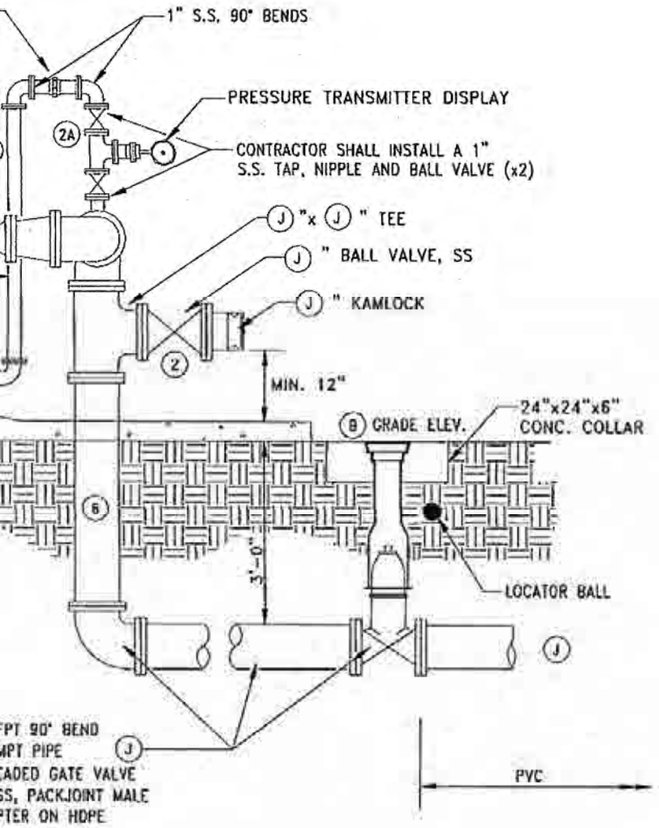
INFORMATION PROVIDED B
DATE:
NAME:
ADDRESS:

PHONE NO:

3"x4" REDUCER

ESSURE GAUGE



SIDE WALL THICKNESS

- RUB R' NEK

- PROVIDE INTERMEDIATE BRACKETS AS REQ'D. BY MANUFACTURER

- 2"x3" REDUCER

- ONE PIECE BASE

- SCH 40

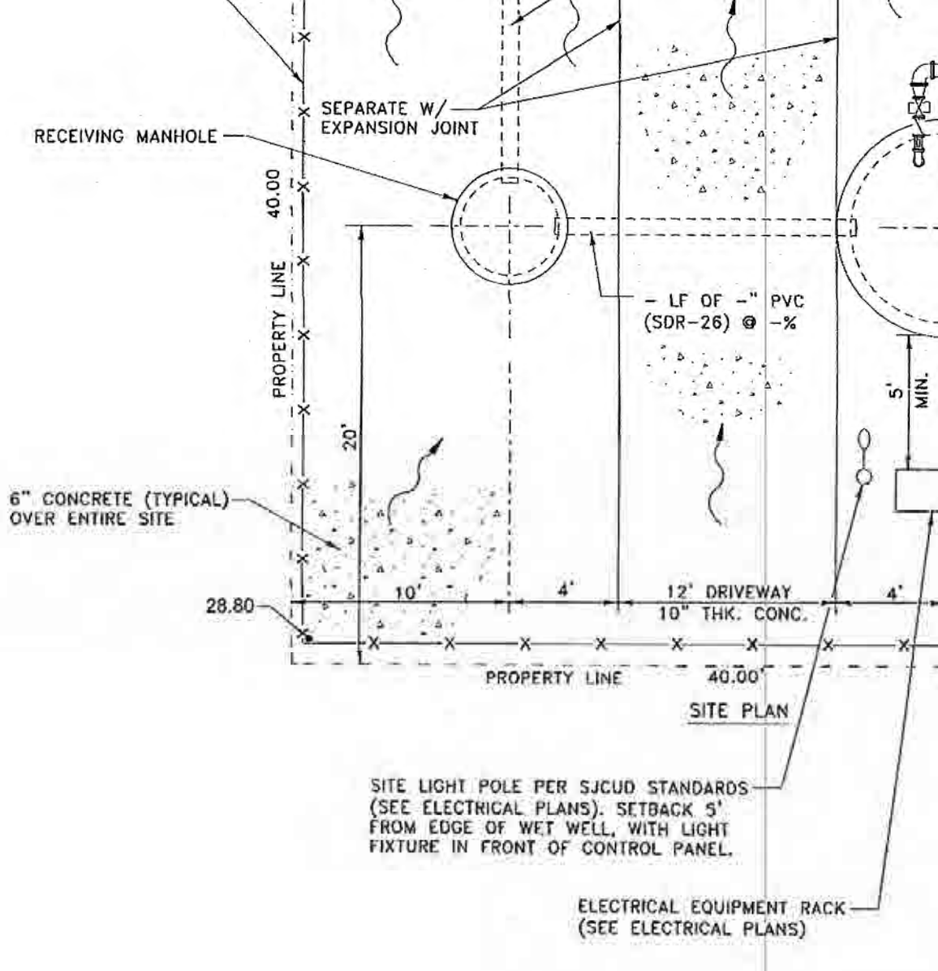
- THREADED

BOTTOM SLAB THICKNESS

PUMP INFORMATION	
NUMBER OF PUMPS	2
PUMP MANUFACTURER	(10) FLYGT
PUMP MODEL	MP3102 HT 3~263 (10)
IMPELLER ID	40 MM
DISCHARGE	1 1/4"
MOTOR RPM	3500
HP	6
VOLTS	230
PHASE	3
HZ	60
MANIFOLD COND.	47 GPM AT 123 FT.TDH
RUN-OUT COND.	100 GPM AT 65 FT.TDH
PUMP ACCESS HATCH SIZE	_____ x _____
ELECTRICAL SERVICE AMPS (100 or 200)	100

MECHANICAL EQUIPMENT SCHEDULE

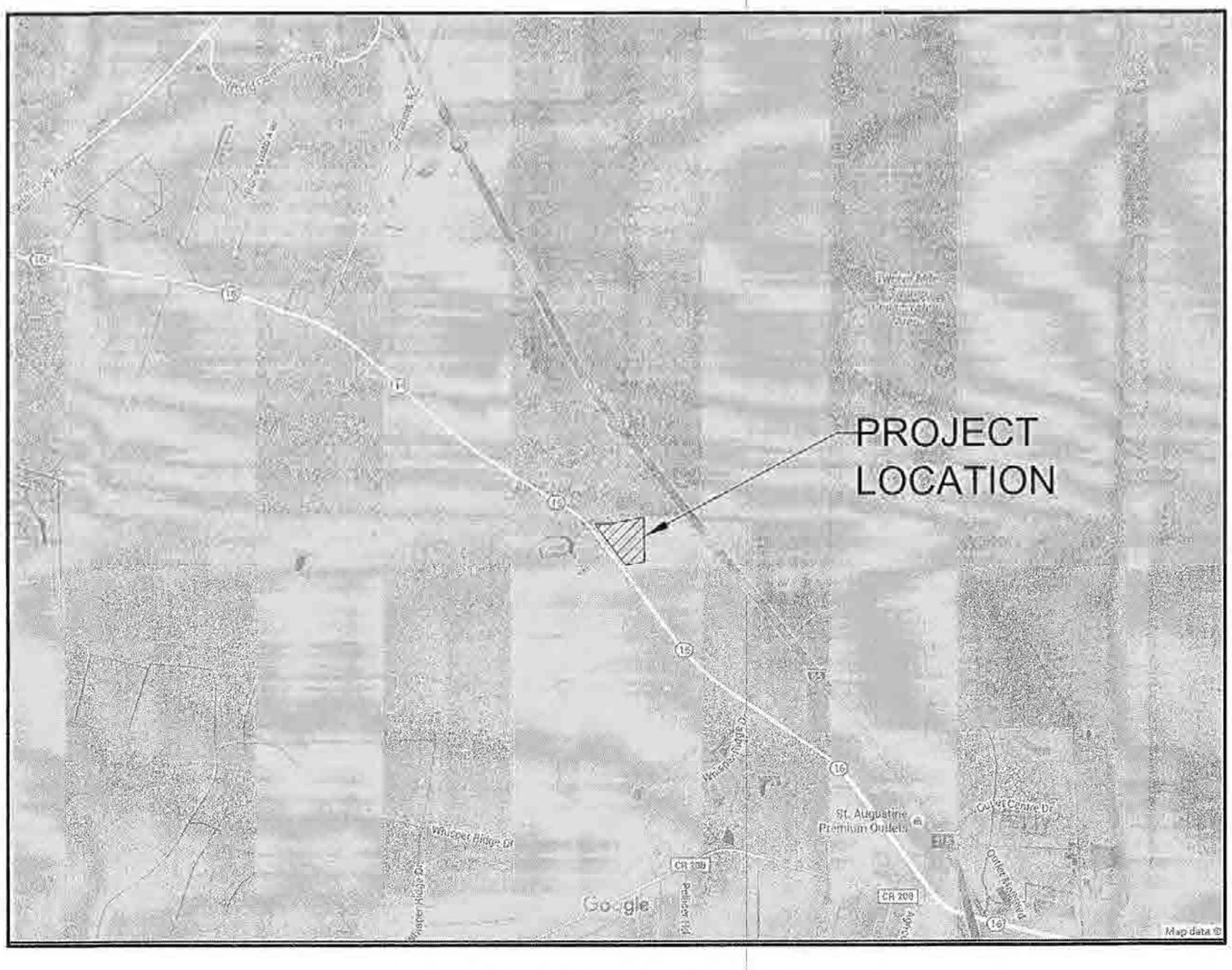
1. CHECK VALVE, FLAPPER TYPE, FULL PORT, THREADED BRASS; INSTALLED IN VERTICAL POSITION
2. PLUG VALVE, CAST SS, FULL PORT
2A. CONTRACTOR TO INSTALL:
(2)-1" STAINLESS STEEL BALL VALVES
1"x1" STAINLESS STEEL TEE
1"x1/2" DIAPHRAGM - SEE INSTRUMENTATION
1/2"x1/2" MALE TO MALE NIPPLE
3. STAINLESS STEEL TEE
4. STAINLESS STEEL SHORT RADIUS 90° BEND
5. STAINLESS STEEL 45° BEND
6. 316 STAINLESS STEEL PIPE (SCH 40)
7. 1/4" SST BRAIDED WIRE CABLE WITH 18" OF CHAIN
8. INFLUENT PIPE (SEE PLANS)
9. CONCRETE WETWELL
10. PUMP (AS APPROVED BY ST. JOHNS COUNTY UTILITY DEPARTMENT) GRINDER, 2"
11. ALUMINUM WETWELL ACCESS COVER (OPENING PER PUMP MANUFACTURER)
12. STAINLESS STEEL GUIDE RAILS
13. LEVEL STICK, HIGH AND LOW ALARM FLOATS PROVIDED BY PUMP MANUFACTURER
14. PUMP MOTOR CABLE
15. 4" TEE SCHEDULE 80 PVC AIR VENT WITH PROTECTIVE SCREENS
16. STAINLESS STEEL CABLE HOLDER
17. 1" STAINLESS BLOW OFF LINE TO WETWELL-SECURE LINE TO WETWELL SLAB WITH UNISTRUT WITH UNIONS



NOTES:

1. ACCESS COVER FOR THE WETWELL SHALL BE 1/4" ALUM. TREAD PLATE WITH STAINLESS STEEL HARDWARE. COVER SHALL BE PROVIDED WITH LIFTING HANDLE. LOCKING HASP AND SAFETY LATCH TO HOLD COVERS OPEN. OPENING IN WETWELL SLAB AS PER MANUFACTURERS SPECIFICATIONS.
2. ALL CONCRETE SHALL BE 6" THICK AND REINFORCED WITH 6 X 6 10/10 WWM EXCEPT THE DRIVEWAY WHICH SHALL BE 10" THICK.
3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PRECAST WETWELL. SHOP DRAWINGS SHALL INCLUDE ALL NECESSARY STRUCTURAL AND FLOTATION CALCULATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ELECTRICAL POWER TO THE PUMPING STATION. THREE PHASE POWER IS REQUIRED. THIS WORK IS TO BE COORDINATED WITH FLORIDA POWER AND LIGHT.
5. THE INTERIOR OF THE WET WELL AND RECEIVING MANHOLE SHALL BE COATED WITH LINER BY APPROVED MANUFACTURER.
6. A LIGHTNING ARRESTER SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
7. A SURGE SUPPRESSER SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
8. AN AUDIBLE ALARM SHALL BE SUPPLIED AND INSTALLED BY THE "SYSTEM" SUPPLIER.
9. THE SURFACE OF THE WET WELL SHALL FIRST BE PREPARED BY GROUTING THE WET WELL AS REQUIRED TO OBTAIN A SMOOTH SURFACE. THE
12. SITE GRADING SHALL PROVIDE FOR DRAINAGE OF WATER T
13. SIZES SHOWN IN "STATION INFORMATION" ABOVE ARE MINI
14. ALL ABOVE GRADE FITTINGS SHALL BE PAINTED FOREST GR
15. ALL STAINLESS STEEL MUST BE SCHEDULE 40.
16. ROTATE THE PRESSURE TRANSMITTER DISPLAY TO MATCH T MOUNTING TEE SUCH THAT THE PRESSURE TRANSMITTER DI

ST. JOHNS COUNTY, FLORIDA



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LOCATION MAP

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C8-C12

ANTS

E BLVD.
32256

GROUP, INC.
SUITE 204
32216

904) 854-4505

NG, LLC

04) 777-8271

TY DEPARTMENT

AS

INFORMATION PROVIDED BY:
DATE: Nove
NAME: Burn
ADDRESS: 1141
Mac
PHONE NO: (90

I HEREBY CERTIFY THAT THE MATER
CONSTRUCTION OF:

_____ Pavement
_____ Curb + Gutter
_____ Sorm + Drainage System
_____ Lake or Pond
_____ Underdrain Connections

ARE IN ACCORDANCE WITH THE APP
AND COUNTY SPECIFICATIONS, UNLE
REGULATORY AGENCY.

AUTHORIZED SIGNATURE

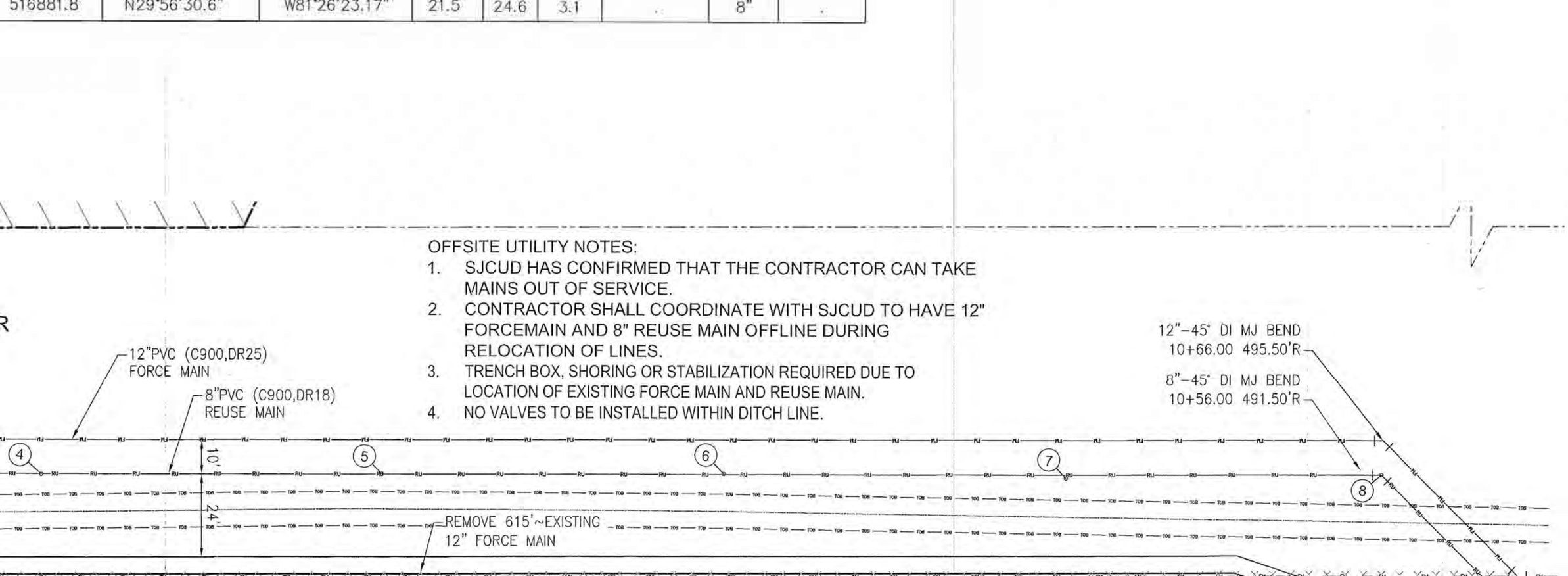
NOTE: SOME INFORMATION SHOWN

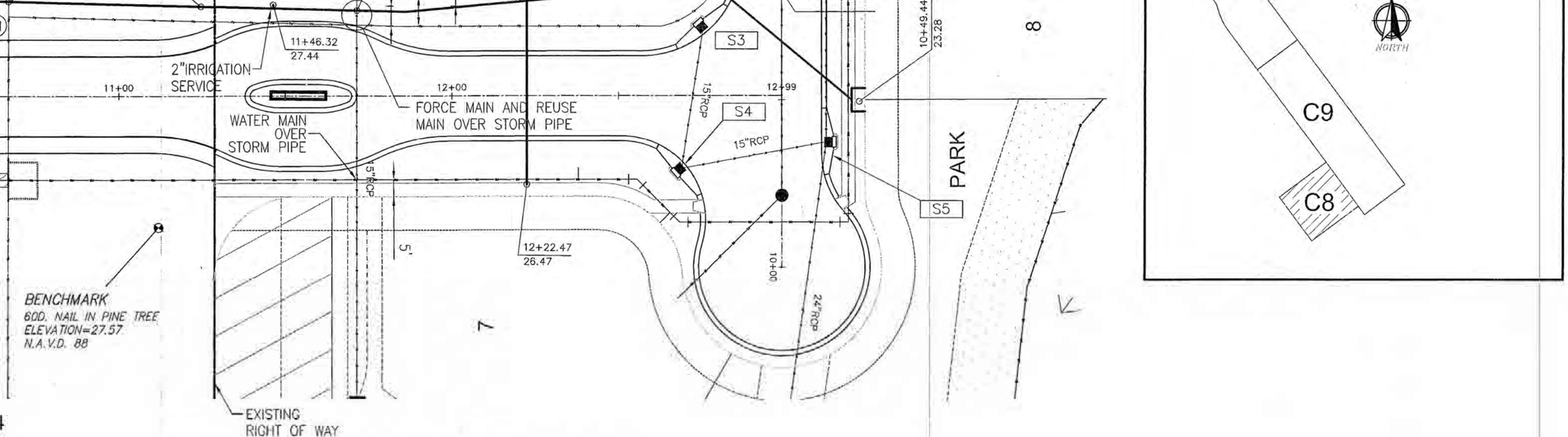
Point Table

Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
516815.3	N29°56'30.91"	W81°26'23.93"	24.5	27.6	3.1	.	8"	.
516870.0	N29°56'30.79"	W81°26'23.30"	21.4	24.4	3.0	.	8"	.
516915.2	N29°56'30.15"	W81°26'22.79"	22.0	25.3	3.3	23.8	8" WL	1.1'
516960.0	N29°56'29.55"	W81°26'22.28"	22.4	25.4	3.0	.	8"	.
517019.5	N29°56'28.76"	W81°26'21.60"	22.2	25.1	2.9	.	8"	.
517079.1	N29°56'27.97"	W81°26'20.91"	21.8	24.7	2.9	.	8"	.
517137.8	N29°56'27.17"	W81°26'20.24"	21.6	24.5	2.9	.	8"	.
517194.4	N29°56'26.43"	W81°26'19.60"	22.9	25.9	3.0	.	8"	.
517186.7	N29°56'25.99"	W81°26'19.68"	21.7	24.7	3.0	.	8"	.
516881.8	N29°56'30.6"	W81°26'23.17"	21.5	24.6	3.1	.	8"	.

OFFSITE UTILITY NOTES:

1. SJCUD HAS CONFIRMED THAT THE CONTRACTOR CAN TAKE MAINS OUT OF SERVICE.
2. CONTRACTOR SHALL COORDINATE WITH SJCUD TO HAVE 12" FORCEMAIN AND 8" REUSE MAIN OFFLINE DURING RELOCATION OF LINES.
3. TRENCH BOX, SHORING OR STABILIZATION REQUIRED DUE TO LOCATION OF EXISTING FORCE MAIN AND REUSE MAIN.
4. NO VALVES TO BE INSTALLED WITHIN DITCH LINE.





TOMOKA PINES DRIVE

Size	Type	Manufacturer	#Turns to Open	Depth of Nut	Direction to Open
6"	Gate	M+H	19.5	1.8'	Left

Point Table

Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
16881.8	N29°56'30.60"	W81°26'23.17"	21.5	24.6	3.1	.	8"	.
16883.5	N29°56'30.61"	W81°26'23.15"	22.8	24.6	1.8	.	6"	.
16885.7	N29°56'30.68"	W81°26'23.12"	21.5	24.6	3.1	20.9	12" FM	1.0'

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GATE
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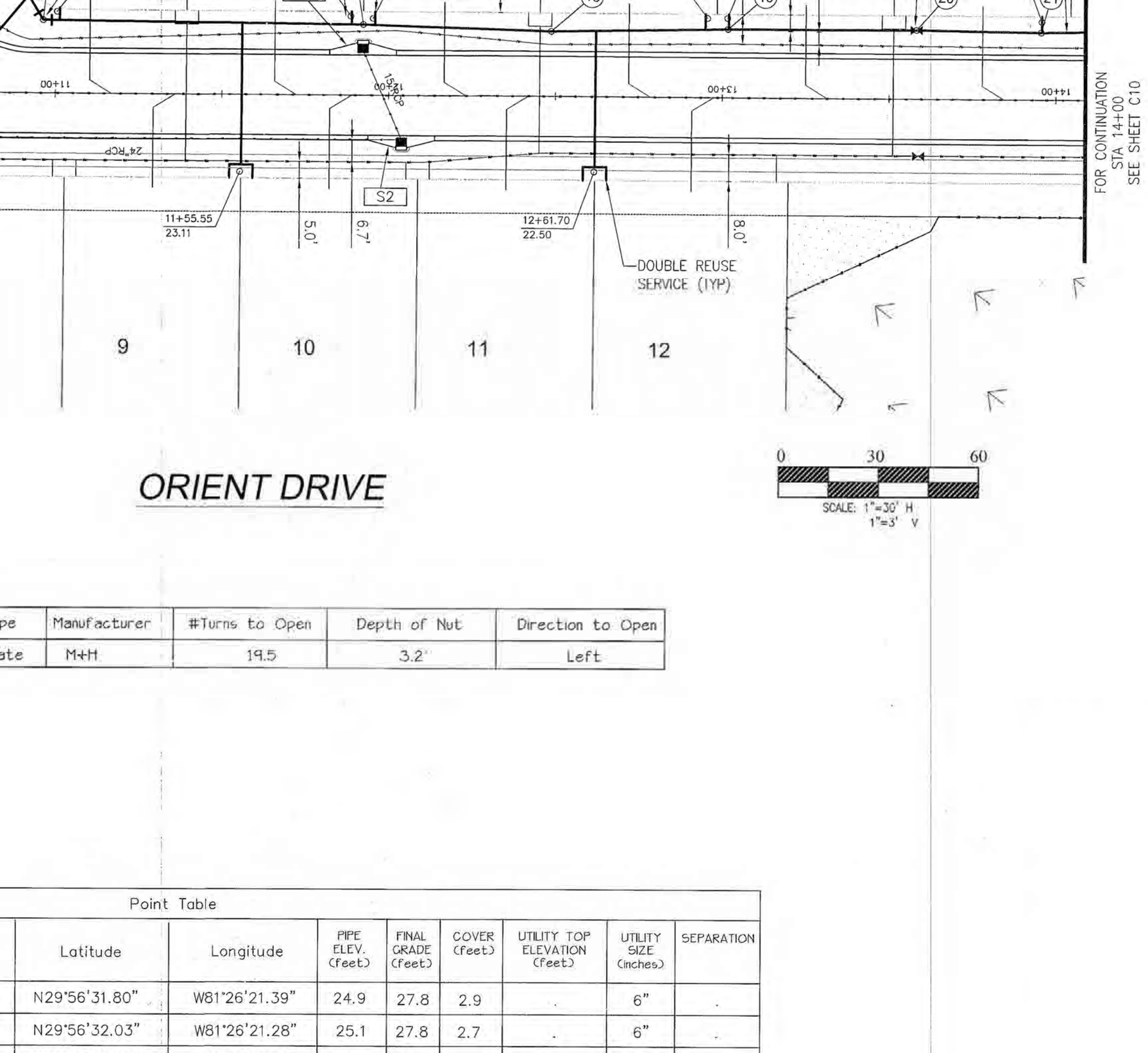
AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-January 2018
NAME: Burnham Construction, Inc.
ADDRESS: 11413 Enterprise East Blvd.
Macclenny, Florida 32063
PHONE NO: (904) 256-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED IN THE CONSTRUCTION OF:

____ Pavement	____ Chilled Water
____ Curb + Gutter	____ Water Main
____ Sorm + Drainage System	_X_ Reclaimed Water Main
____ Lake or Pond	____ Force Main
____ Underdrain Connections	____ Sanitary Gravity System
	____ Lift Station

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND JEA STANDARDS AND COUNTY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE REGULATORY AGENCY.



ORIENT DRIVE

0 30 60

SCALE: 1"=30' H
1"=3' V

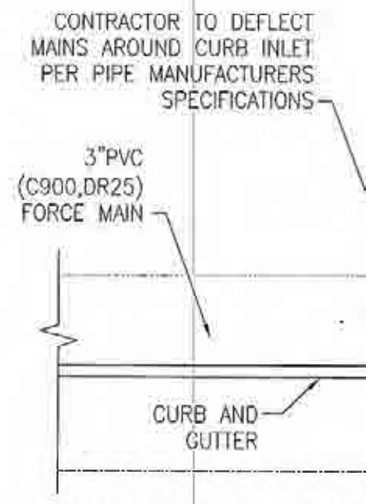
pe	Manufacturer	#Turns to Open	Depth of Nut	Direction to Open
ate	M+H	19.5	3.2'	Left

Point Table

	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
	N29°56'31.80"	W81°26'21.39"	24.9	27.8	2.9	.	6"	.
	N29°56'32.03"	W81°26'21.28"	25.1	27.8	2.7	.	6"	.
	N29°56'32.80"	W81°26'21.93"	27.7	27.8	.	.	6"	.
	N29°56'33.25"	W81°26'22.30"	24.6	28.0	3.4	.	6"	.
	N29°56'33.67"	W81°26'22.67"	24.9	28.1	3.2	.	6"	.
	N29°56'34.11"	W81°26'23.06"	26.0	28.3	2.3	.	6"	.

NOTES:

1. AREAS DISTURBED IN FDOT RIGHT OF WAY SHALL BE SODDED.
2. HOUSE WATER METER SIZES, SHALL BE 5/8" MINIMU
3. ALL WATER AND SEWER CONSTRUCTION SHALL COMPL THE LATEST SJCUD CONSTRUCTION STANDARDS AND SPECIFICATIONS.
4. IT IS THE REQUIREMENT OF SJCUD THAT WHEN TREE TO BE PLANTED OR TO REMAIN LOCATED NEAR PUBL OWNED OR MAINTAINED PROPPOSED OR EXISTING UTI LINES, THAT THE TREES MUST NOT BE WITHIN 7.5 FT (BOTH WAYS) FROM THE CENTERLINE OF THE PROPO EXISTING UTILITY LINE. PLEASE ENSURE THAT THE UT CONSTRUCTION PLANS ARE COORDINATED WITH THE LANDSCAPE/TREE MITIGATION PLANS. (MANUAL OF WA WASTEWATER AND REUSE DESIGN STANDARDS AND SPECIFICATIONS, PART VI, SJCUD GENERAL NOTES).
5. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIO CONSTRUCTION.



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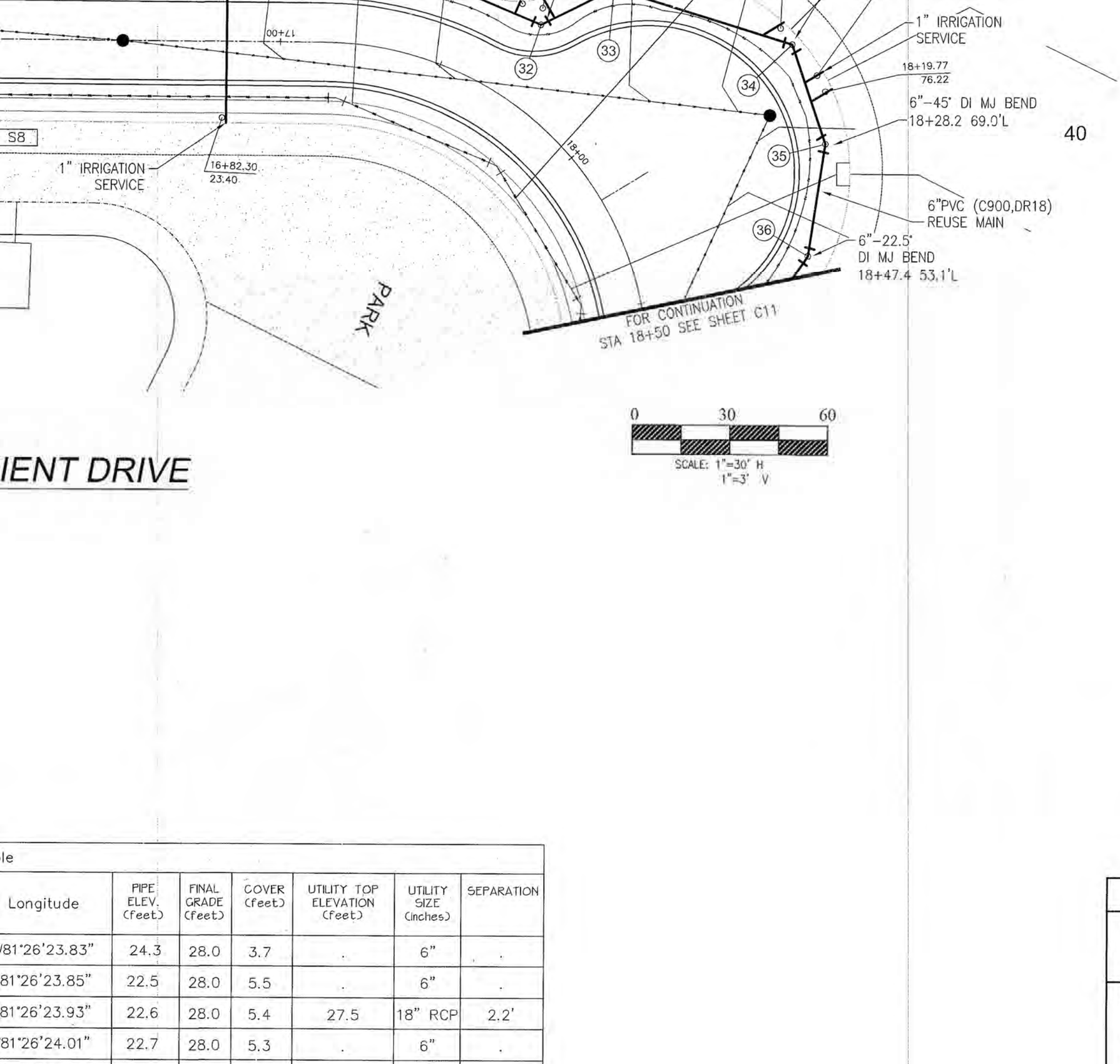
AS-BUILT

INFORMATION PROVIDED BY:

DATE: November 2017-January 2018
NAME: Burnham Construction, Inc.
ADDRESS: 11413 Enterprise East Blvd.
Macclenny, Florida 32063
PHONE NO: (904) 259-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED I CONSTRUCTION OF:

____ Pavement	____ Chilled Water
____ Curb + Gutter	____ Water Main
____ Storm + Drainage System	X Reclaimed Water
____ Lake or Pond	____ Force Main
	____ Sanitary Gravity



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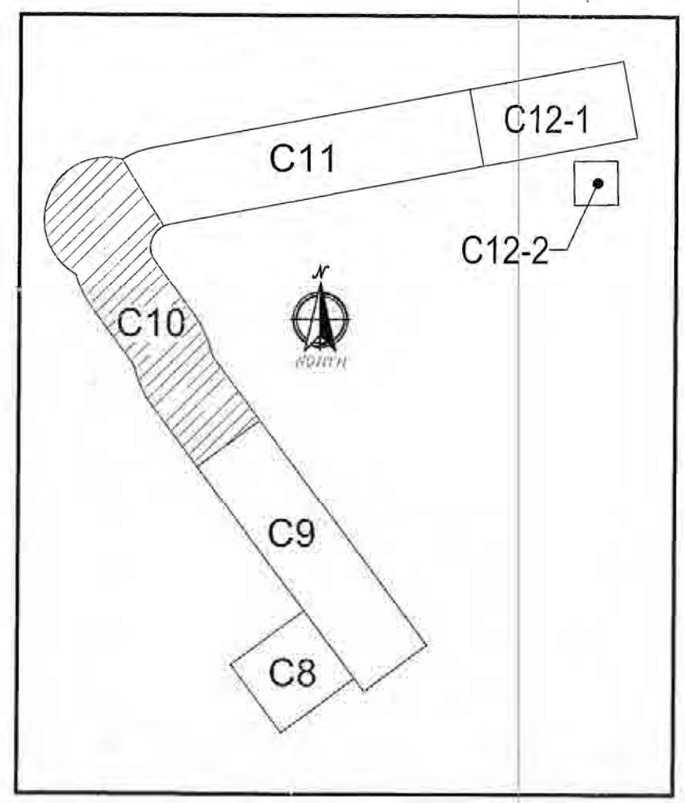

le

Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
/81°26'23.83"	24.3	28.0	3.7	.	6"	.
81°26'23.85"	22.5	28.0	5.5	.	6"	.
81°26'23.93"	22.6	28.0	5.4	27.5	18" RCP	2.2'
81°26'24.01"	22.7	28.0	5.3	.	6"	.
81°26'24.01"	24.1	28.0	3.9	.	6"	.
81°26'24.29"	24.7	28.0	3.3	.	6"	.
81°26'24.58"	24.5	28.0	3.5	.	6"	.

AS-BUILT

INFORMATION PROVIDED BY:

DATE:	November 2017-January 2018
NAME:	Burnham Construction, Inc.
ADDRESS:	11413 Enterprise East Blvd. Macclenny, Florida 32063
PHONE NO:	(904) 256-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED IN THE CONSTRUCTION OF:

____	Pavement	____	Chilled Water
____	Curb + Gutter	____	Water Main
____	Sorm + Drainage System	_X_	Reclaimed Water Main
____	Lake or Pond	____	Force Main
____	Underdrain Connections	____	Sanitary Gravity System
		____	Lift Station

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND JEA STANDARDS AND COUNTY SPECIFICATIONS, UNLESS OTHERWISE APPROVED BY THE REGULATORY AGENCY.

INFORMATION PRO
NAME:
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PHONE N
I HEREBY CERTIFY
____ Pavement
____ Curb +
____ Sorm +
____ Lake or
____ Underdra
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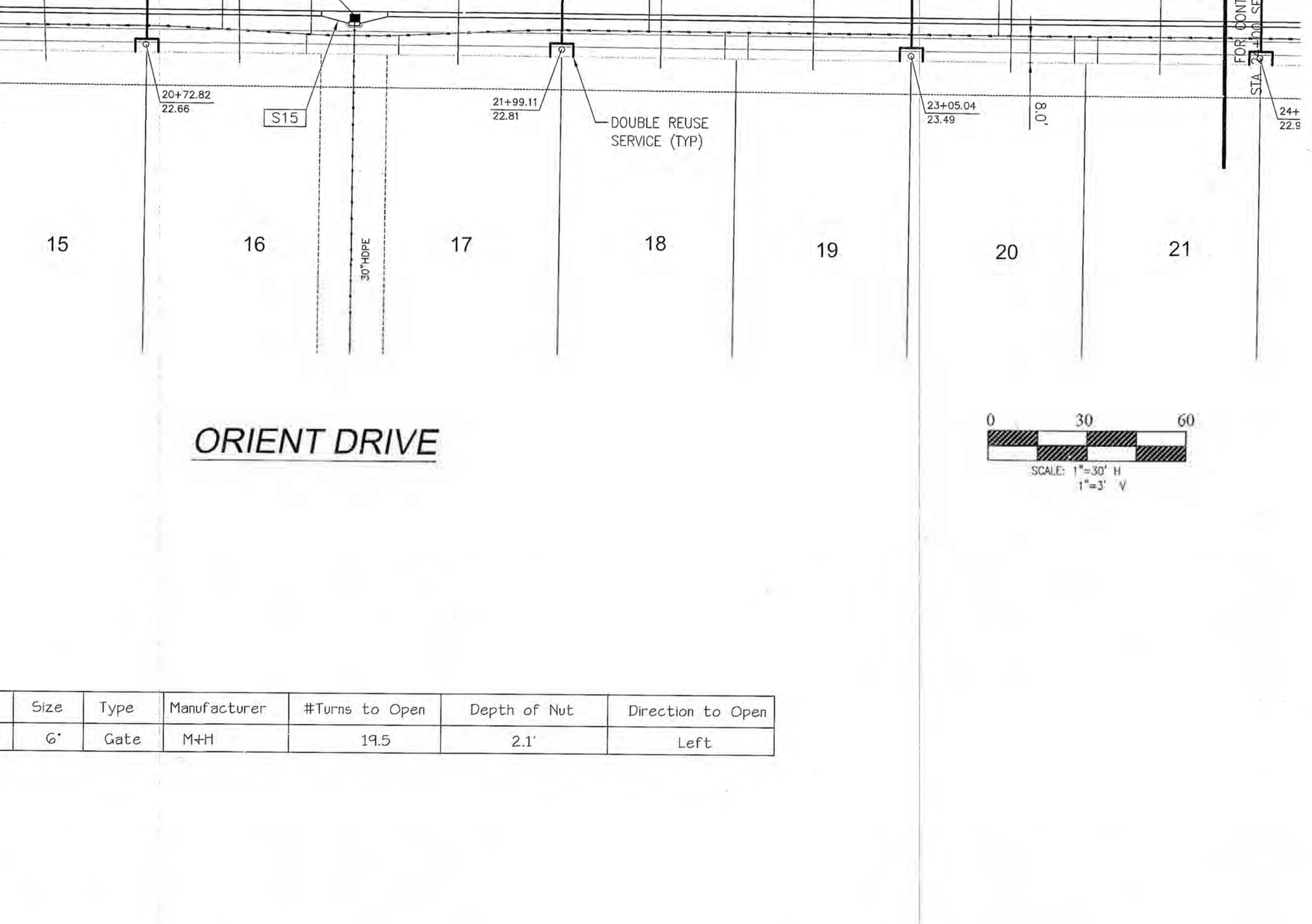


ORIENT DRIVE

NOTES:

1. AREAS DISTURBED
   SODDED.
2. HOUSE WATER ME
3. ALL WATER AND
   THE LATEST SJCU
   SPECIFICATIONS.
4. IT IS THE REQUIR
   TO BE PLANTED
   OWNED OR MAINT
   LINES, THAT THE
   (BOTH WAYS) FRO
   EXISTING UTILITY
   CONSTRUCTION PI
   LANDSCAPE/TREE
   WASTEWATER AND
   SPECIFICATIONS, F
5. CONTRACTOR TO
   CONSTRUCTION.

GATE VALVE NOTES:

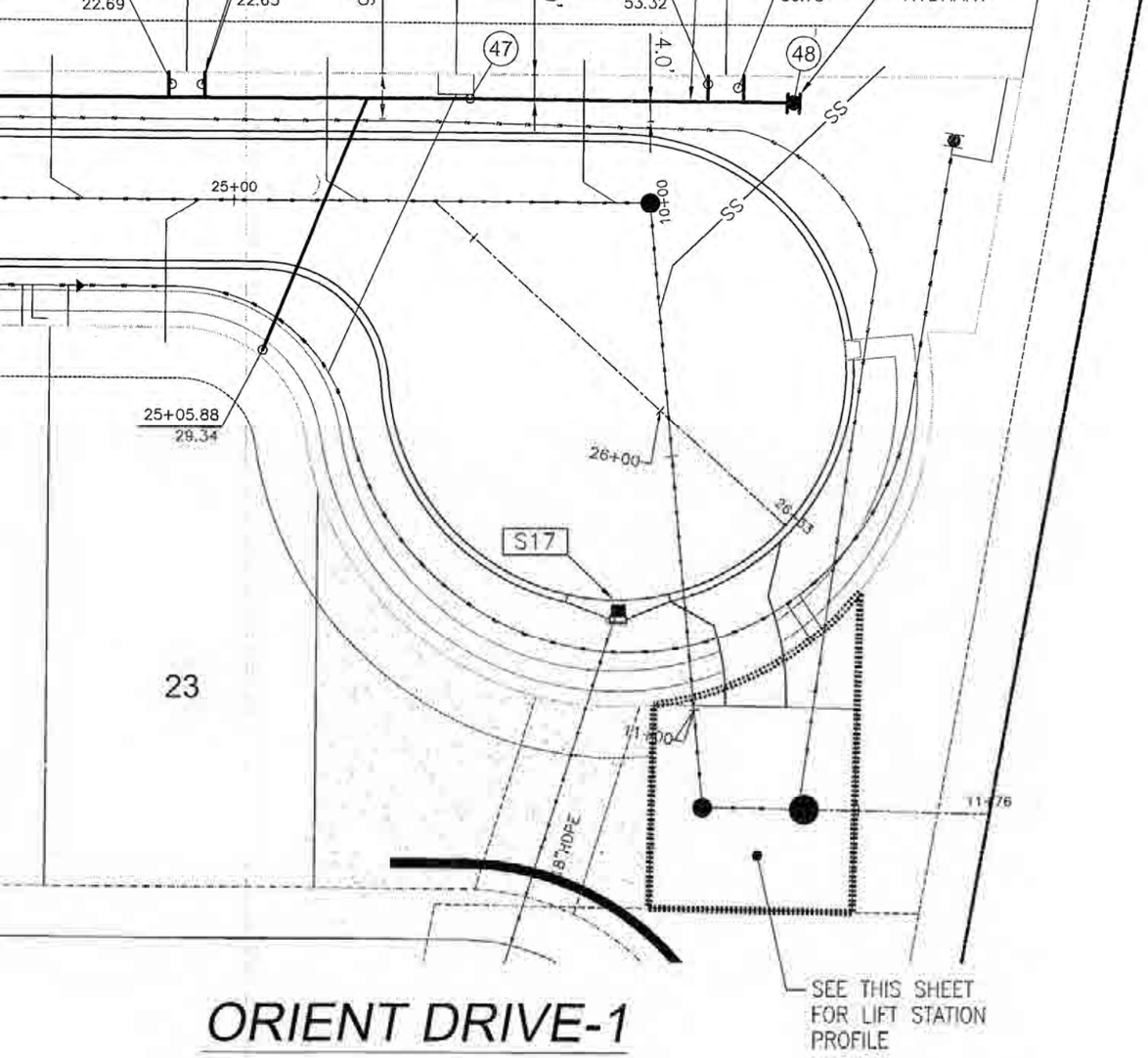
	Size	Type	Manufacturer	#Turns to Open	Depth of Nut	Direction to Open
	6"	Gate	M+H	19.5	2.1'	Left

Point Table

ng	Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
.6	516723.1	N29°56'38.71"	W81°26'25.01"	25.9	28.7	2.8	.	6"	.
.1	516755.9	N29°56'38.87"	W81°26'24.64"	25.6	28.7	3.1	.	6"	.

AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-January
NAME: Burnham Construction, Inc
ADDRESS: 11413 Enterprise East
Macclenny, Florida 32



ORIENT DRIVE-1

0 30 60

SCALE: 1"=30' H
1"=3' V

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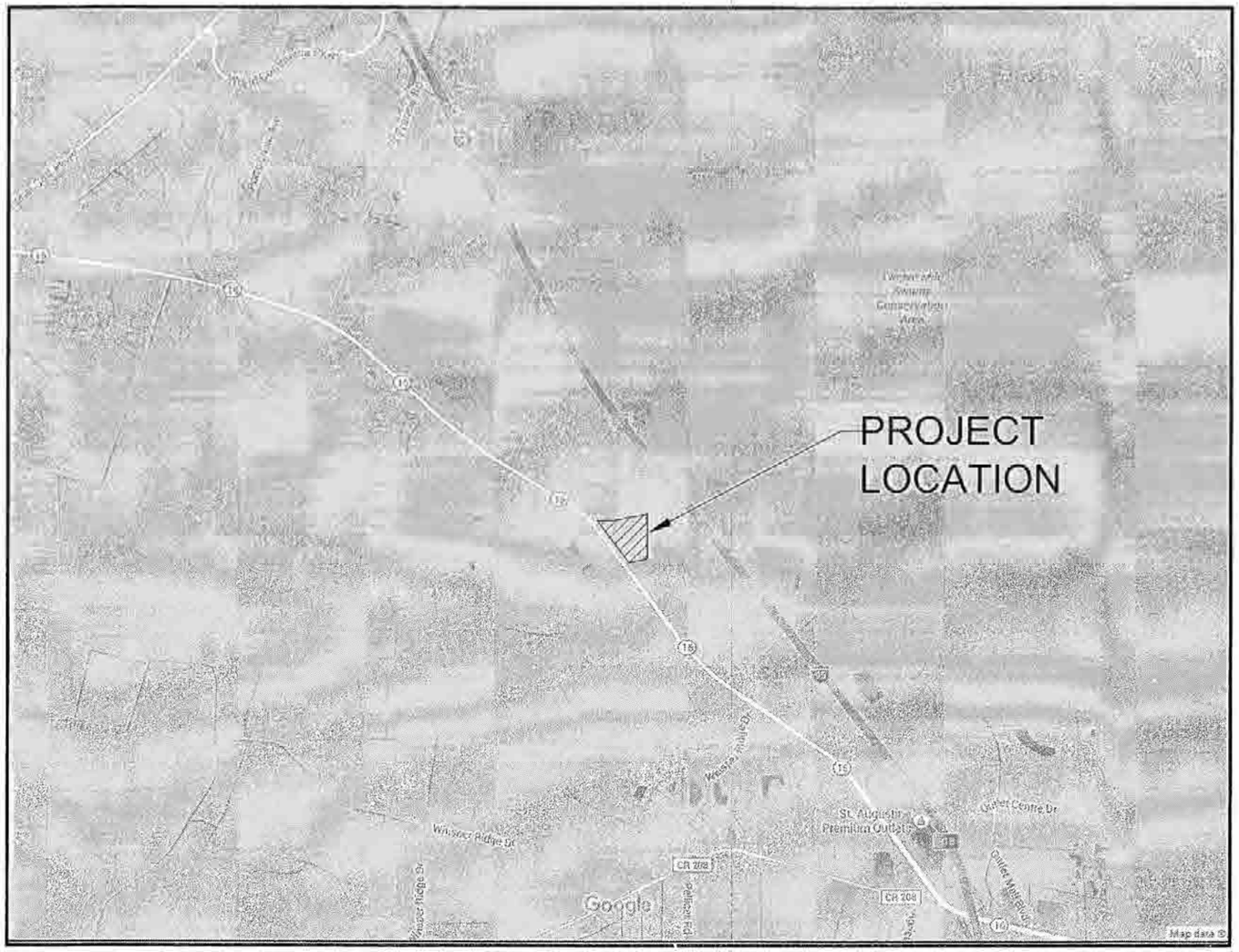
Point Table

orthing	Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
9977.8	517287.0	N29°56'39.87"	W81°26'18.60"	25.9	28.9	3.0	.	6"	.

INFORMATION PROVIDED BY:
DATE:
NAME:
ADDRESS:

PHONE NO:

ST. JOHNS COUNTY, FLORIDA



N

NORTH

LOCATION MAP

N.T.S.

TANTS

E BLVD.
A 32256

G GROUP, INC.
, SUITE 204
A 32216
S
(904) 854-4505

PING, LLC
0
2
904) 777-8271

ITY DEPARTMENT

A 32085

INDEX OF

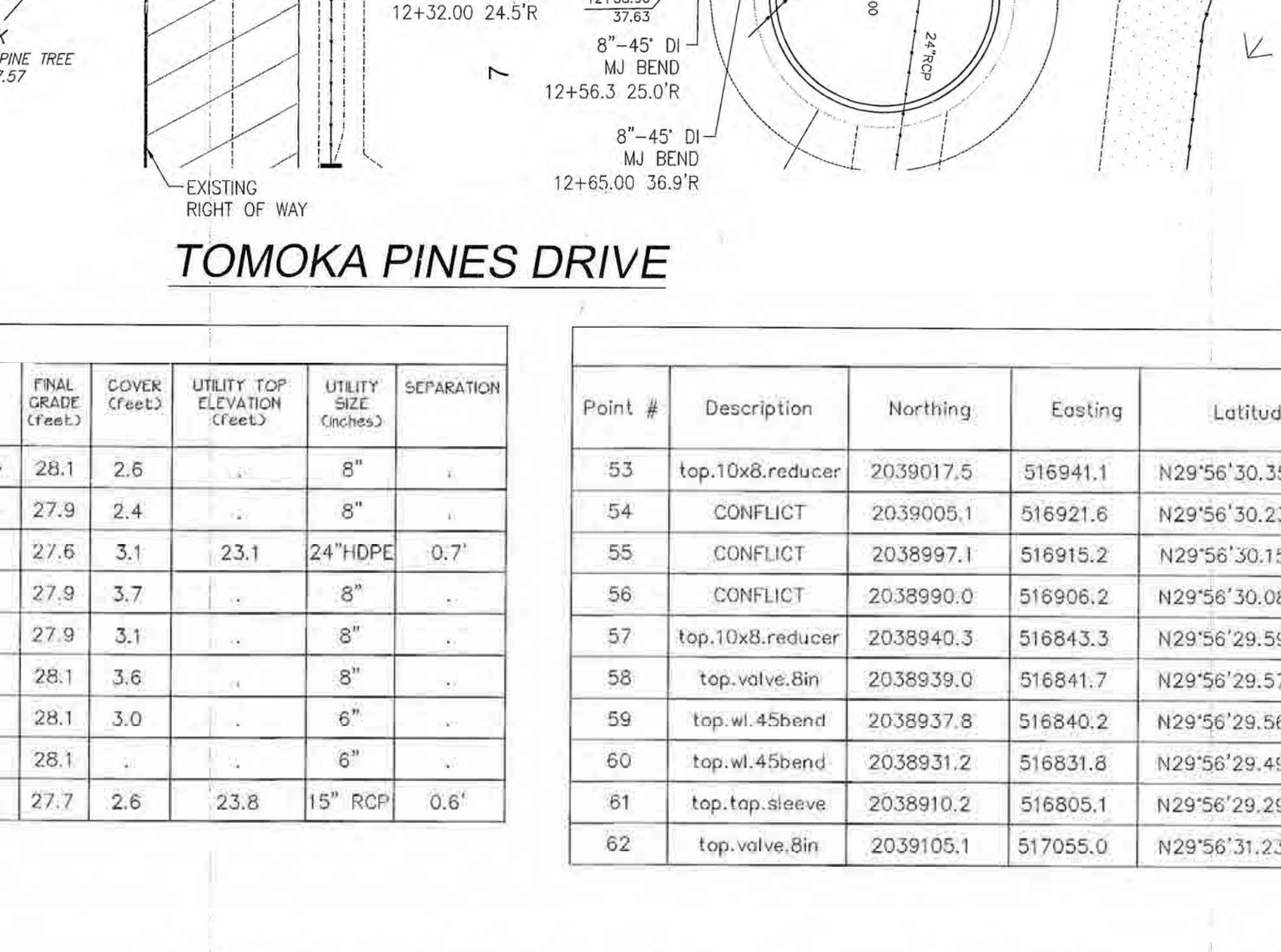
T-1
C8-C12

AS

INFORMATION PROVIDED BY:
DATE:
NAME:
ADDRESS:
PHONE NO:

I HEREBY CERTIFY THAT THE MATE
CONSTRUCTION OF:

- Pavement
- Curb + Gutter
- Storm + Drainage System
- Lake or Pond
- Underdrain Connections

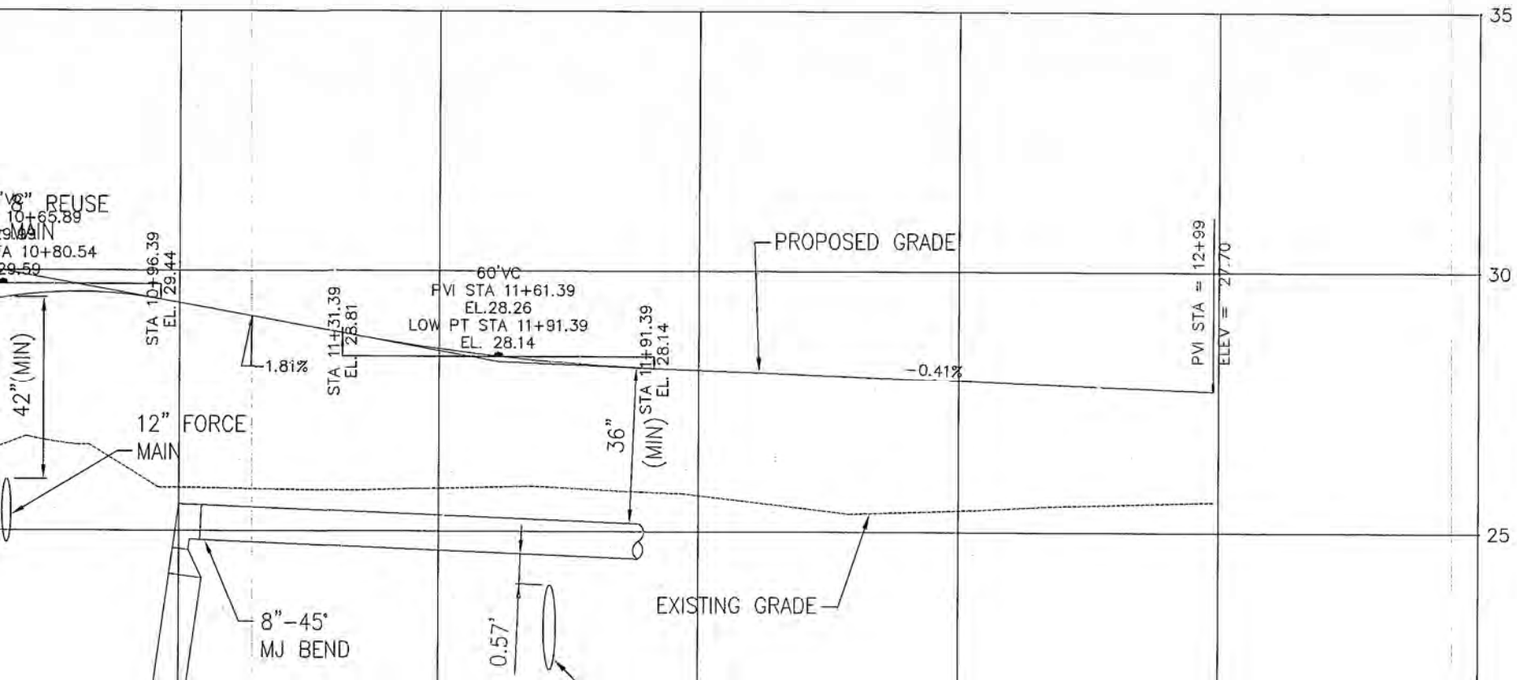


TOMOKA PINES DRIVE

	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
	28.1	2.6	.	8"	.
	27.9	2.4	.	8"	.
	27.6	3.1	23.1	24"HDPE	0.7'
	27.9	3.7	.	8"	.
	27.9	3.1	.	8"	.
	28.1	3.6	.	8"	.
	28.1	3.0	.	6"	.
	28.1	.	.	6"	.
	27.7	2.6	23.8	15" RCP	0.6'

Point Table

Point #	Description	Northing	Easting	Latitude	Longitude	PIPE ELEV. (Feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
53	top.10x8.reducer	2039017.5	516941.1	N29°56'30.35"	W81°26'22.49"	23.8	26.9	3.1	.	10"	.
54	CONFLICT	2039005.1	516921.6	N29°56'30.23"	W81°26'22.71"	18.0	25.5	7.5	20.1	12" FM	1.1'
55	CONFLICT	2038997.1	516915.2	N29°56'30.15"	W81°26'22.79"	17.6	25.3	7.7	22.8	8" RU	4.5'
56	CONFLICT	2038990.0	516906.2	N29°56'30.08"	W81°26'22.89"	15.8	23.5	7.7	26.8	30"x60" ERCP	7.6'
57	top.10x8.reducer	2038940.3	516843.3	N29°56'29.59"	W81°26'23.60"	19.6	27.3	7.7	.	10"	.
58	top.valve.8in	2038939.0	516841.7	N29°56'29.57"	W81°26'23.62"	21.0	23.9	2.9	.	8"	.
59	top.wl.45bend	2038937.8	516840.2	N29°56'29.56"	W81°26'23.64"	19.5	23.9	4.4	.	8"	.
60	top.wl.45bend	2038931.2	516831.8	N29°56'29.49"	W81°26'23.73"	17.8	23.9	6.1	.	8"	.
61	top.tap.sleeve	2038910.2	516805.1	N29°56'29.29"	W81°26'24.03"	18.0	25.6	7.6	.	8"	.
62	top.valve.8in	2039105.1	517055.0	N29°56'31.23"	W81°26'21.20"	25.8	28.1	2.3	.	8"	.

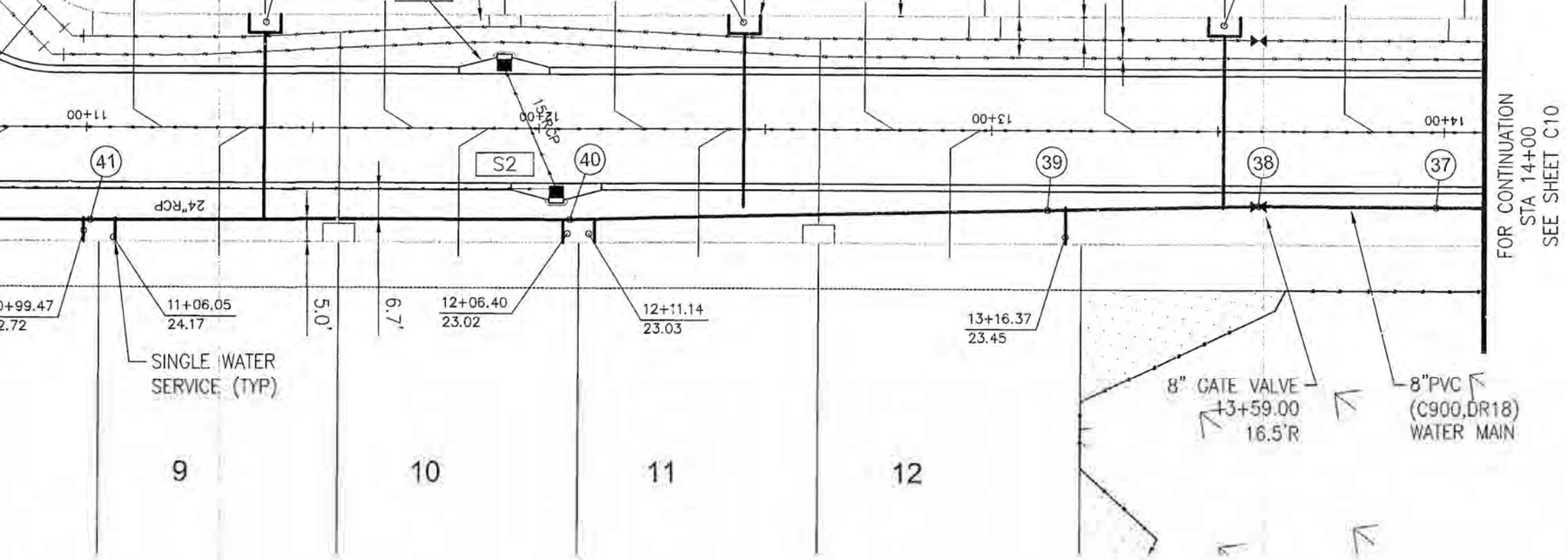


Hydrant Number	Manufa
48	M+H

Valve Number	Size	Type	Manufacturer
47	6"	Gate	M+H
58	8"	Gate	M+H
62	8"	Gate	M+H

AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-January 2018
NAME: Burnham Construction, Inc.

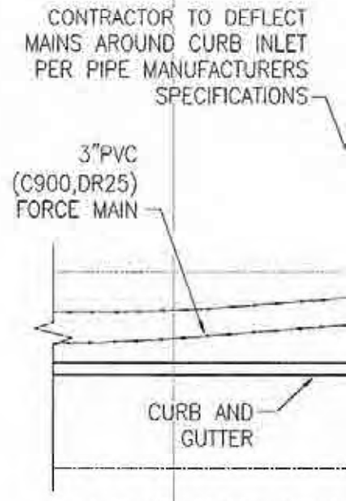


ORIENT DRIVE

0 30 60

SCALE: 1"=30' H
1"=3' V

1. AREAS DISTURBED IN FDOT RIGHT OF WAY SHALL B SODDED.
2. HOUSE WATER METER SIZES, SHALL BE 5/8" MINIMU
3. ALL WATER AND SEWER CONSTRUCTION SHALL COMP THE LATEST SJCUD CONSTRUCTION STANDARDS AND SPECIFICATIONS.
4. IT IS THE REQUIREMENT OF SJCUD THAT WHEN TRE TO BE PLANTED OR TO REMAIN LOCATED NEAR PUB OWNED OR MAINTAINED PROPPOSED OR EXISTING UT LINES, THAT THE TREES MUST NOT BE WITHIN 7.5 F (BOTH WAYS) FROM THE CENTERLINE OF THE PROP EXISTING UTILITY LINE. PLEASE ENSURE THAT THE U CONSTRUCTION PLANS ARE COORDINATED WITH THE LANDSCAPE/TREE MITIGATION PLANS. (MANUAL OF W WASTEWATER AND REUSE DESIGN STANDARDS AND SPECIFICATIONS, PART VI, SJCUD GENERAL NOTES).
5. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRI CONSTRUCTION.



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Point Table

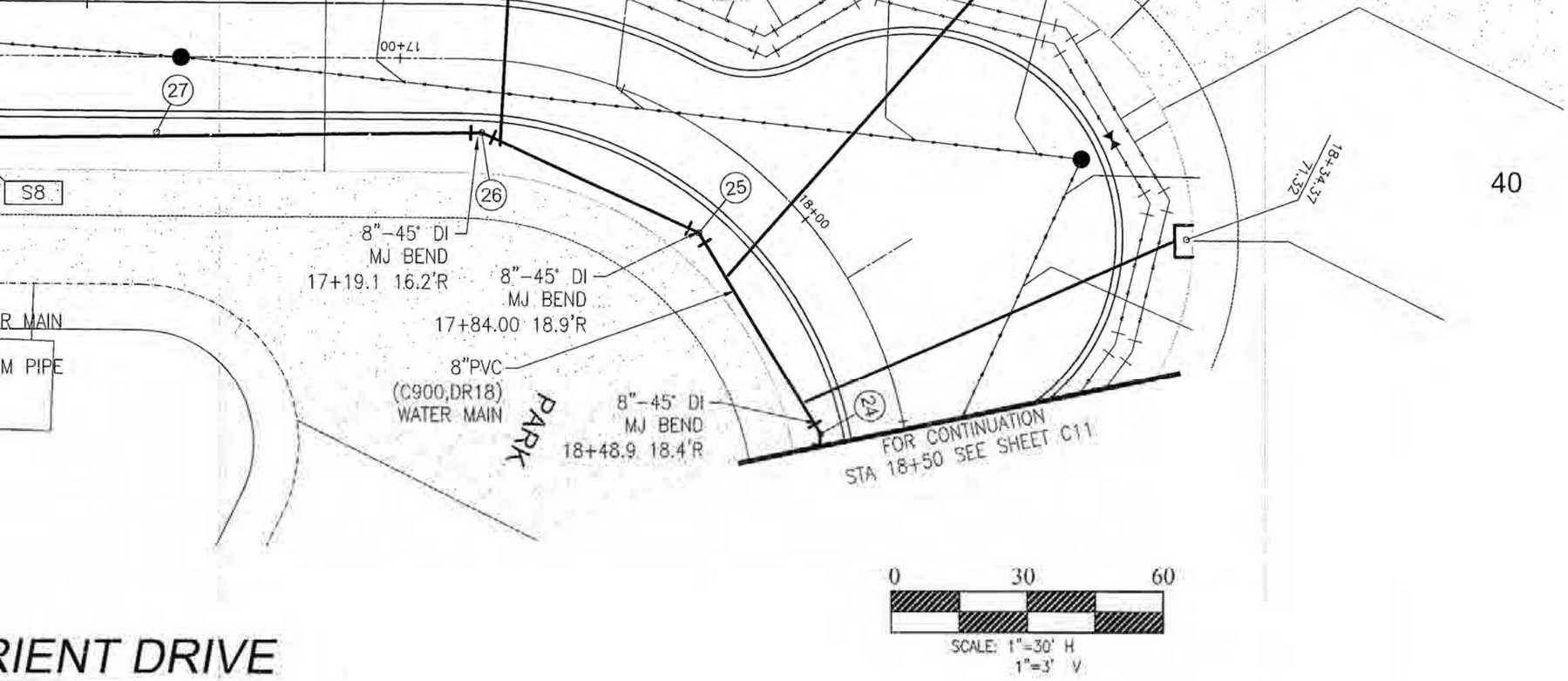
Northing	Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
2039451.8	516889.6	N29°56'34.65"	W81°26'23.00"	24.9	28.2	3.3	.	8"	.
2039420.3	516922.0	N29°56'34.34"	W81°26'22.73"	26.3	28.2	1.9	.	8"	.
2039383.6	516950.7	N29°56'33.98"	W81°26'22.40"	24.8	28.2	3.4	.	8"	.
2039300.5	517015.7	N29°56'33.16"	W81°26'21.66"	25.0	27.8	2.8	.	8"	.
2039215.8	517079.4	N29°56'32.32"	W81°26'20.93"	25.5	28.1	2.6	.	8"	.
2039145.7	517132.0	N29°56'31.63"	W81°26'20.33"	24.5	27.9	2.4	.	8"	.
2039139.6	517123.5	N29°56'31.57"	W81°26'20.43"	24.5	27.6	3.1	23.1	24"HDPE	0.7'

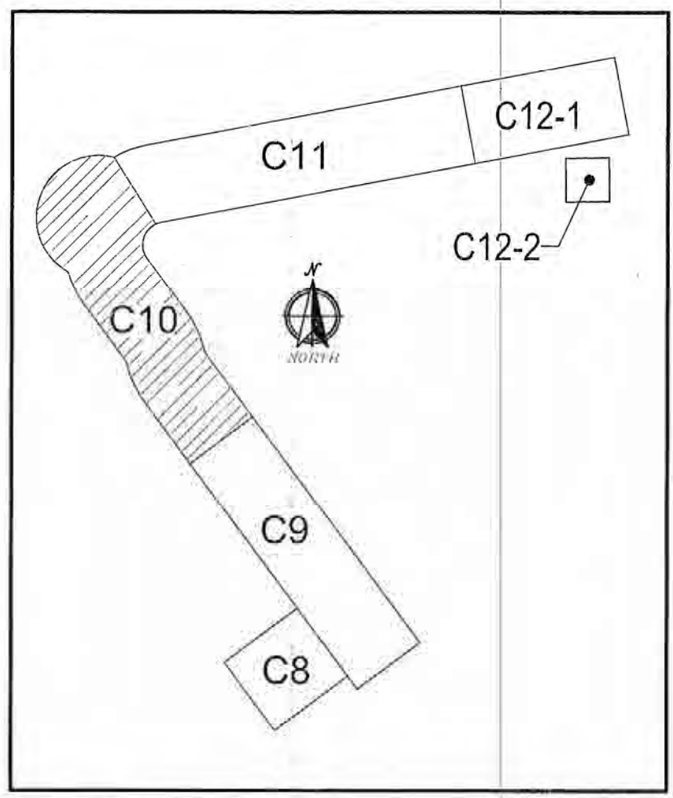
AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-January 2018
NAME: Burnham Construction. Inc.
ADDRESS: 11413 Enterprise East Blvd. Macclenny, Florida 32063
PHONE NO: (904) 256-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED CONSTRUCTION OF:

____ Pavement	____ Chilled Water
____ Curb + Gutter	X Water Main
____ Sorm + Drainage System	____ Reclaimed Wate
____ Lake or Pond	____ Force Main
____ Underdrain Connections	____ Sanitary Gravit





RIENT DRIVE

Hydrant Number	Manufacturer	Date of Manufacture and Installation
52	M+H	2017/2018

	Type	Manufacturer	#Turns to Open	Depth of Nut	Direction to Open
	Gate	M+H	19.5	2.0'	Left

Point Table

Easting	Latitude	Longitude	PIPE ELEV. (feet)	FINAL GRADE (feet)	COVER (feet)	UTILITY TOP ELEVATION (feet)	UTILITY SIZE (inches)	SEPARATION
516728.5	N29°56'38.25"	W81°26'24.94"	25.6	28.8	3.2	.	8"	.
516709.4	N29°56'37.77"	W81°26'25.16"	25.6	28.7	3.1	.	8"	.
516720.7	N29°56'37.26"	W81°26'25.03"	24.7	28.5	3.8	.	8"	.

AS-BUILT

INFORMATION PROVIDED BY:
DATE: November 2017-January 2018
NAME: Burnham Construction, Inc.
ADDRESS: 11413 Enterprise East Blvd.
Macclenny, Florida 32063
PHONE NO: (904) 256-5360

I HEREBY CERTIFY THAT THE MATERIALS AND QUANTITIES USED IN THE CONSTRUCTION OF:

____ Pavement	____ Chilled Water
____ Curb + Gutter	_X_ Water Main
____ Sorm + Drainage System	____ Reclaimed Water Main
____ Lake or Pond	____ Force Main
____ Underdrain Connections	____ Sanitary Gravity System
	____ Lift Station

ARE IN ACCORDANCE WITH THE APPROVED PLANS AND JEA STANDARDS AND COUNTY SPECIFICATIONS. UNLESS OTHERWISE APPROVED BY THE REGULATORY AGENCY.

INFORMATION PR
NAME:
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I HEREBY CERTIF
____ Paveme
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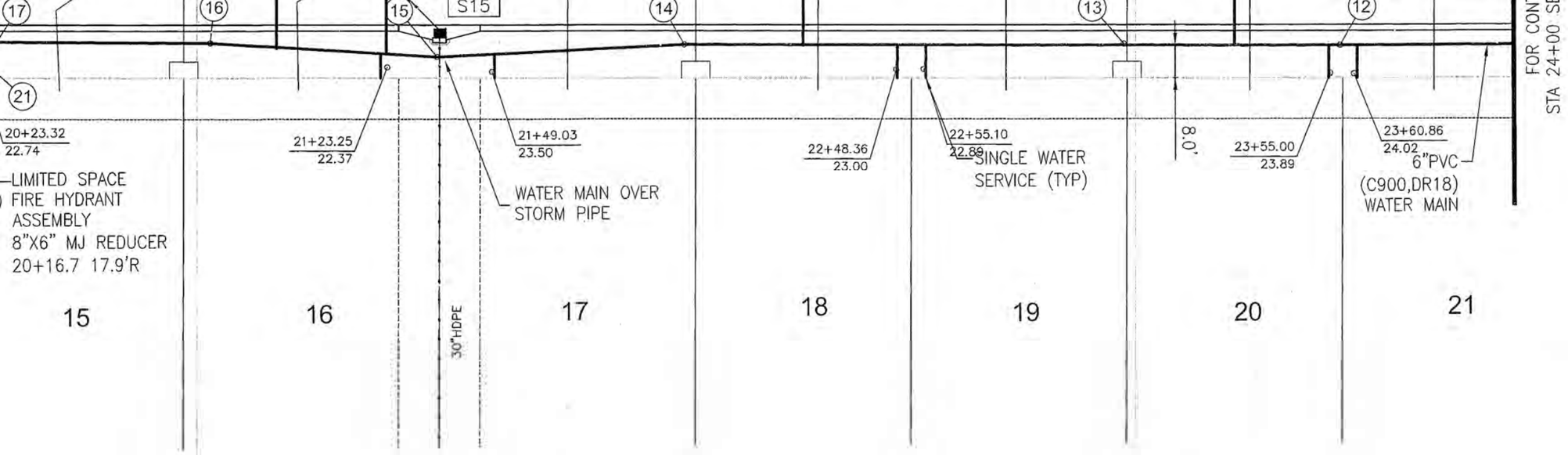


ORIENT DRIVE

0 30 60

SCALE: 1"=30' H
1"=3' V

Hydrant Number	Manufacturer	Date of Manufacture and Installation
63	M+H	2017/2018

Size	Type	Manufacturer	#Turns to Open	Depth of Nut	Direction to Open
6"	Gate	M+H	29.5	2.2'	Left
8"	Gate	M+H	25.5	2.0'	Left

Point Table

				PIPE	FINAL	COVER	UTILITY TOP	UTILITY	SEPARATION

NOTES:

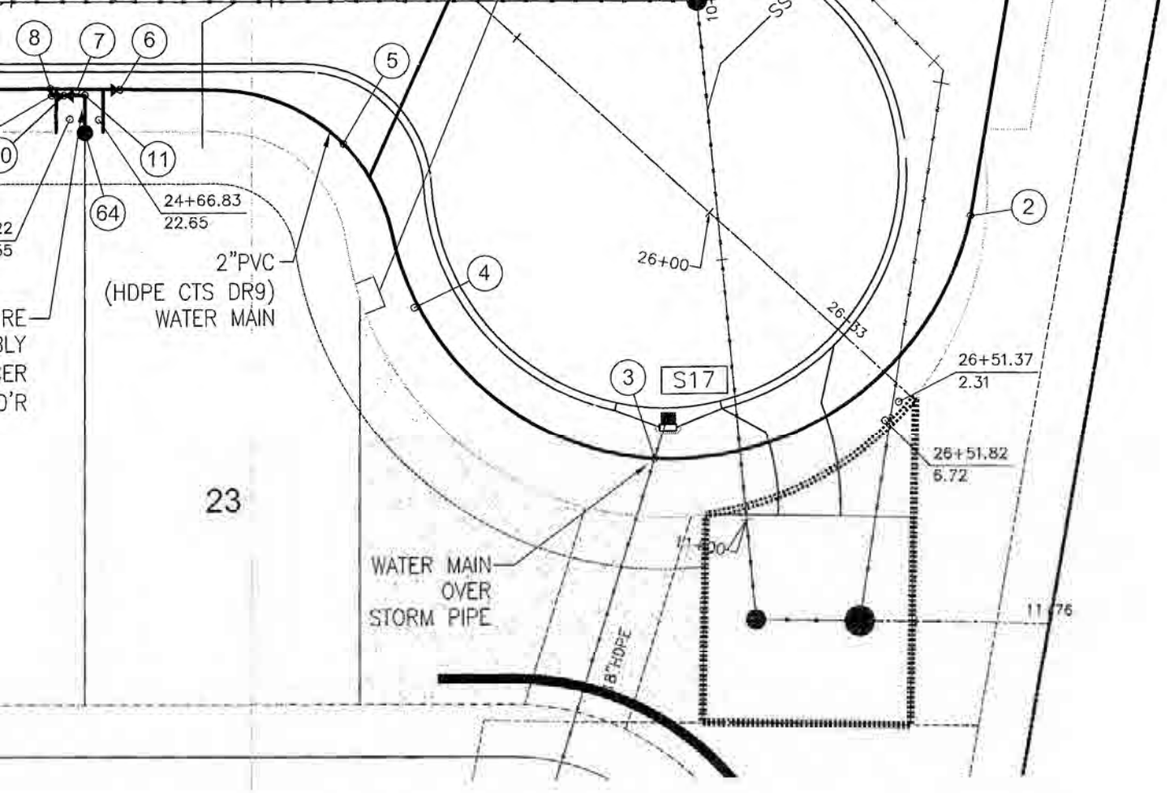
1. AREAS DISTURBED SODDED.
2. HOUSE WATER ME
3. ALL WATER AND THE LATEST SJCU SPECIFICATIONS.
4. IT IS THE REQUIR TO BE PLANTED OWNED OR MAINT LINES, THAT THE (BOTH WAYS) FR EXISTING UTILITY CONSTRUCTION P LANDSCAPE/TREE WASTEWATER AND SPECIFICATIONS.
5. CONTRACTOR TO CONSTRUCTION.

GATE VALVE NOTES:

AS-BUILT

INFORMATION PROVIDED BY:
DATE:
NAME:
ADDRESS:
PHONE NO:

November 2017-Janu
Burnham Construction
11413 Enterprise Eas
Macclenny, Florida
(904) 256-5360



ORIENT DRIVE-1

Hydrant Number	Manufacturer	Date of Manufacture and Installation
64	M+H	2017/2018

er	Size	Type	Manufacturer	#Turns to Open	Depth of Nut	Direction to Open
	6"	Gate	M+H	19.5	1.9"	Left

Point Table

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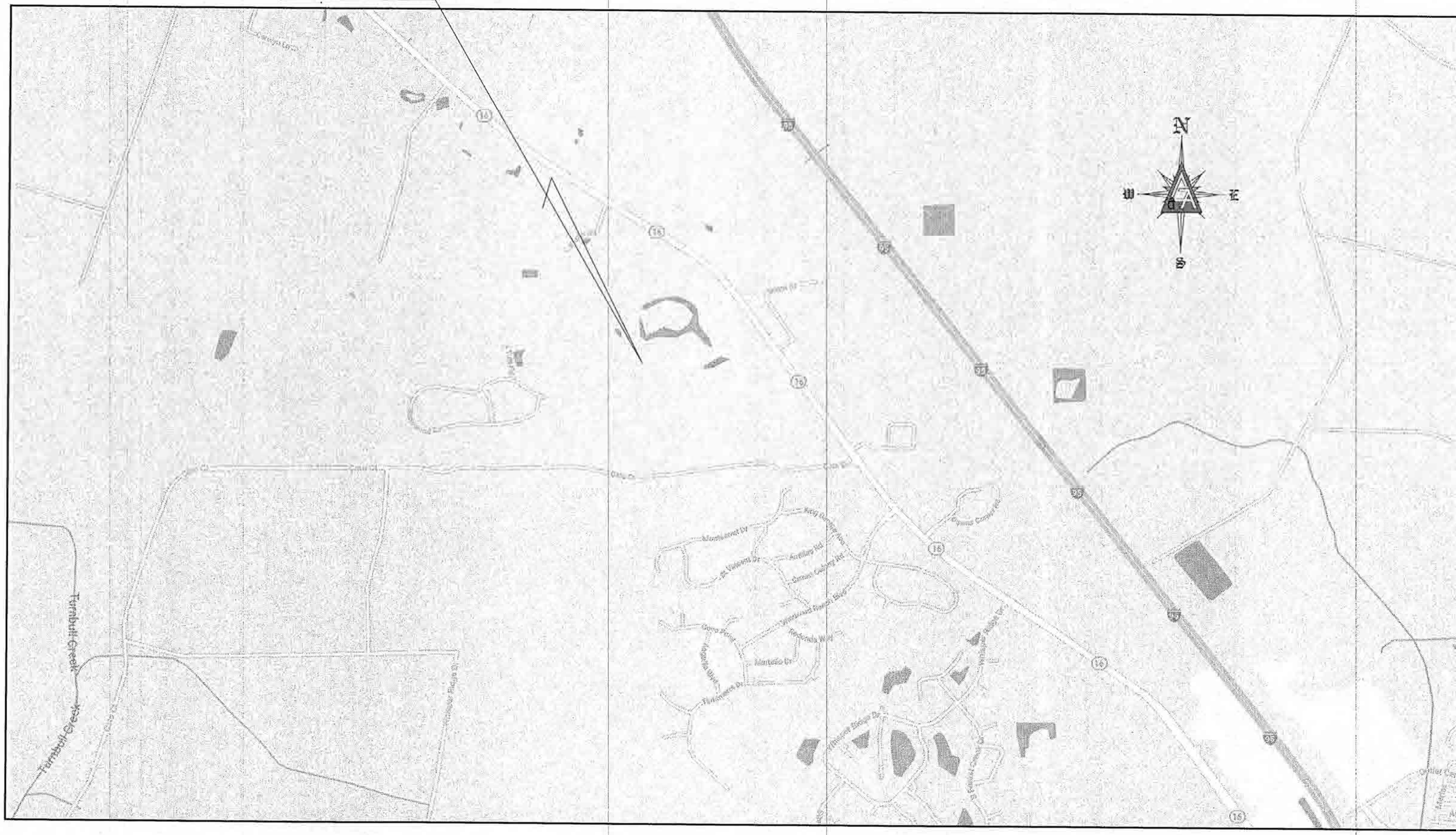
INFORMATION PROVIDED
DATE:
NAME:
ADDRESS:

PHONE NO:

I HEREBY CERTIFY THAT

2021 NW Grand Oaks Phase 1

As Built Drawings



LOCATION MAP

(NOT TO SCALE)

19+00
18+00
17+00
16+00
TURNBULL CREEK ROAD
AB 6" GATE VALVE
STA.=16+16.23 O/S=45.98L
NUT EL. = 25.87
AB 6" FIRE HYDRANT
STA.=16+19.50 O/S=46.25L
AB 6" 90° M.J. BEND
STA: 16+13
O/S: 45.72L
T.O.P. EL. = 24.35
O/S: 43.50L
T.O.P. EL. = 24.84
AB 8" GATE VALVE
STA.=15+47.79 O/S=44.91L
NUT EL. = 26.36
12" PVC DR18 WATER MAIN
AB TOP OF 12" DR18
WATER MAIN
STA: 18+75.76
O/S: 48.05L
T.O.P. EL. = 22.39
AB SAMPLE POINT
STA: 17+50.25
O/S: 47.38L
T.O.P. EL. = 24.32
AB 12"X6" M.J. 'TEE'
STA: 16+13.05
O/S: 47.67L
T.O.P. EL. = 24.78
AB 12" GATE VALVE
STA.=15+50.36 O/S=47.77L
NUT EL. = 26.88
AB 12"X8" M.J. 'TEE'
STA: 15+47.97
O/S: 47.78L
T.O.P. EL. = 24.88
AB TOP OF 12" DR18
WATER MAIN
STA: 14+48.11
O/S: 47.76L
T.O.P. EL. = 22.59
10' ELEC. EASEMENT
AB TOP OF 12" DR18
WATER MAIN
STA: 13+57.74
O/S: 51.43L
T.O.P. EL. = 21.76
8' MULTIF
(TYPICAL)
5
6
7
8
12
13
14
19' ELEC. EASEMENT
AB 16" WATERMAIN CROSSING
OVER FORCE MAIN
N: 2038690.01
LAT: N029° 56' 27.1"
E: 515320.55
LON: W081° 26' 40.9"
T.O.P. WATERMAIN EL. = 25.60
T.O.P. CROSSING UTILITY EL. = 23.16
CROSSING UTILITY SIZE = 8"
SEPARATION = 1.10'
AB 16"X12" M.J. REDUCER
STA: 26+39.19
O/S: 51.71L
T.O.P. EL. = 25.64
AB 12" 22.5° M.J. BEND
STA: 26+75.32
O/S: 45.53L
T.O.P. EL. = 25.83
AB 12" GATE VALVE
STA.=25+45.31 O/S=51.02L
NUT EL. = 26.04
AB 12"X8" M.J. 'TEE'
STA: 25+41.70
O/S: 50.61L
T.O.P. EL. = 26.04
5' SIDEWALK
(TYPICAL)
16" HDPE DR11
WATER MAIN
AB 8" GATE VALVE
STA.=25+41.40 O/S=53.77L
NUT EL. = 27.48
AB TOP OF 12" DR18
WATER MAIN
STA: 27+98.91
O/S: 45.86L
T.O.P. EL. = 25.40
AB 6" FIRE HYDRANT
STA.=25+56.69 O/S=70.27L
AB 6" GATE VALVE
STA.=25+55.10 O/S=71.36L
NUT EL. = 26.76
AB 6" 45° M.J. BEND
STA: 25+41.51
O/S: 58.63L
T.O.P. EL. = 25.81
12" PVC DR18 WATER MAIN
AB 8" 45° M.J. BEND
STA: 25+57.73
O/S: 75.54L
T.O.P. EL. = 23.60
AB 8"X6" M.J. 'TEE'
STA: 25+54.24
O/S: 71.95L
T.O.P. EL. = 24.02
AB TOP OF 12" DR18
WATER MAIN
STA: 28+87.90
O/S: 42.10L
T.O.P. EL. = 25.08
AB 8" GATE VALVE
STA.=25+56.04 O/S=81.19L
NUT EL. = 26.64
AB 8" M.J. PLUG
STA: 25+54.17
12" PVC DR18 WATER MAIN
AB TOP OF 12" DR18
WATER MAIN
STA: 24+22.48
O/S: 47.73L
19' ELEC. EASEMENT
29+00
28+00
27+00
24+00

IPURPOSE PATH (TYPICAL)

AB TOP OF 12" DR18 WATER MAIN
STA: 41+16.97
O/S: 25.46L
T.O.P. EL. = 22.95

AB 6" FIRE HYDRANT
STA.=40+07.52 O/S=21.14L

AB 6" GATE VALVE
STA.=40+07.39 O/S=22.40L
NUT EL. = 24.32

AB 16"X12" M.J. ADAPTER HDPE TO PVC
STA: 38+56.29
O/S: 23.82L
T.O.P. EL. = 24.22

16" HDPE DR11 WATER MAIN

AB 8" GATE VALVE
STA.=38+02.32 O/S=27.32L
NUT EL. = 24.96

8" PVC DR18 WATER MAIN

AB 8"X6" M.J. 'TEE'
STA: 38+00.84
O/S: 63.95L
T.O.P. EL. = 22.77

AB 8" M.J. PLUG
STA: 38+01.53
O/S: 81.38L
T.O.P. EL. = 25.15

AB 12" WATERMAIN CROSSING OVER STORM
N: 2038858.98
LAT: N029° 56' 28.7"
E: 514482.84
LON: W081° 26' 50.4"
T.O.P. WATERMAIN EL. = 22.20
INV. CROSSING UTILITY EL. = 12.72
CROSSING UTILITY SIZE = 36"
SEPARATION = 5.14'

AB 12"X6" M.J. 'TEE'
STA: 40+07.12
O/S: 25.11L
T.O.P. EL. = 23.30

AB TOP OF 12" DR18 WATER MAIN
STA: 39+67.09
O/S: 25.00L
T.O.P. EL. = 23.41

AB 6" FIRE HYDRANT
STA.=38+12.98 O/S=64.73L

AB 6" GATE VALVE
STA.=38+03.41 O/S=64.12L
NUT EL. = 25.25

AB 12" WATERMAIN CROSSING OVER REUSE
N: 2038904.70
LAT: N029° 56' 29.1"
E: 514136.84
LON: W081° 26' 54.4"
T.O.P. WATERMAIN EL. = 24.22
T.O.P. CROSSING UTILITY EL. = 19.77
CROSSING UTILITY SIZE = 4"
SEPARATION = 3.45'

40+00
39+00
38+00
12+00
40
1
2
3

NBULL CREEK ROAD
7+00
46+00
44+

MATCH LINE "B"

AB TOP OF 12" DR18 WATER MAIN
STA: 44+35.64
O/S: 25.34L
T.O.P. EL. = 22.74

12" PVC DR18 WATER MAIN

AB TOP OF 12" DR18 WATER MAIN
STA: 45+83.66
O/S: 24.13L
T.O.P. EL. = 24.17

AB TOP OF 12" DR18 WATER MAIN
STA: 46+92.69
O/S: 24.76L
T.O.P. EL. = 22.62

10' ELEC. EASEMENT

N

AB 12" 45° M.J. BEND
STA: 50+77.45
O/S: 31.94R
T.O.P. EL. = 22.96

AB 12" GATE VALVE
STA.=50+78.97 O/S=40.18L
NUT EL. = 24.58

AB 12" 45° M.J. BEND
STA: 50+95.26
O/S: 39.53L
T.O.P. EL. = 22.52

AB 12" 45° M.J. BEND
STA: 51+04.24
O/S: 48.39L
T.O.P. EL. = 22.37

AB 12" GATE VALVE
STA.=10+66.79
O/S=21.16L
NUT EL. = 24.67
GROUND EL. =

AB 12" GATE VALVE
STA.=10+70.14 O/S=18.18L
NUT EL. = 24.90

AB 12" WATERMAIN CROSSING
OVER FORCE MAIN
N: 2038949.58
LAT: N029° 56' 29.5"
E: 512948.01
LON: W081° 27' 07.9"
T.O.P. WATERMAIN EL. = 22.57
T.O.P. CROSSING UTILITY EL. = 19.06
CROSSING UTILITY SIZE = 10"
SEPARATION = 2.41'

AB 16"X12" M.J. ADAPTER
HDPE TO PVC
STA: 10+68.66
O/S: 14.76R
T.O.P. EL. = 22.70

AB 12" WATERMAIN CROSSING
OVER STORM
N: 2038954.85
LAT: N029° 56' 29.6"
E: 512938.98
LON: W081° 27' 08.0"
T.O.P. WATERMAIN EL. = 22.73
INV. CROSSING UTILITY EL. = 18.41
CROSSING UTILITY SIZE = 24"
SEPARATION = 1.12'

AB 12" 45° M.J. BEND
STA: 00+00.00
O/S: 00.00
T.O.P. EL. = 23.09

AB 12" M.J. PLUG
STA: 51+79.68
O/S: 41.42L
T.O.P. EL. = 22.69

5' SIDEWALK
(TYPICAL)

AB 10"X12" M.J. REDUCER
STA: 10+72.83
O/S: 20.71L
T.O.P. EL. = 22.87

AB 12"X12" M.J. 'TEE'
STA: 10+70.18
O/S: 21.22L
T.O.P. EL. = 23.00

AB 12" GATE VALVE
STA.=10+74.88 O/S=20.79L
NUT EL. = 24.74

20'UDE

AB 10" WATERMAIN CROSSING
OVER STORM
N: 2038938.43
LAT: N029° 56' 29.4"
E: 512999.85
LON: W081° 27' 07.3"
T.O.P. WATERMAIN EL. = 22.83
INV. CROSSING UTILITY EL. = 19.77
CROSSING UTILITY SIZE = 18"
SEPARATION = 0.53'

AB 12"X16" M.J. ADAPTER
PVC TO HDPE
STA: 10+70.11
O/S: 15.74L
T.O.P. EL. = 23.04

AB 16" DR11 WATERMAIN CROSSING
OVER SEWER
N: 2038950.43
LAT: N029° 56' 29.5"
E: 512976.08
LON: W081° 27' 07.6"
T.O.P. WATERMAIN EL. = 22.86
INV. CROSSING UTILITY EL. = 10.96
CROSSING UTILITY SIZE = 8"
SEPARATION = 9.85'

AB 12" 45° M.J. BEND
STA: 10+68.82
O/S: 22.19R
T.O.P. EL. = 22.47

AB 12" WATERMAIN CROSSING
OVER REUSE MAIN
N: 2038945.75
LAT: N029° 56' 29.5"
E: 512954.33
LON: W081° 27' 07.8"
T.O.P. WATERMAIN EL. = 22.47
T.O.P. CROSSING UTILITY EL. = 18.35
CROSSING UTILITY SIZE = 6"
SEPARATION = 3.12

8' MULTIPURPOSE PATH
(TYPICAL)

AB 10"X6" M.J. 'TEE'
STA: 11+03.66
O/S: 21.85L
T.O.P. EL. = 22.78

AB 6" GATE VALVE
STA.=11+03.72 O/S=19.55L
NUT EL. = 23.71

AB 6" FIRE HYDRANT
STA.=11+03.77 O/S=17.57L

5' SIDEWALK
(TYPICAL)

AB TOP OF 10" DR18
WATER MAIN
STA: 12+49.68
O/S: 21.05L
T.O.P. EL. = 22.62

10" PVC DR18
WATER MAIN

AB 10" M.J. PLUG
STA: 12+68.14
O/S: 21.13L
T.O.P. EL. = 22.69

12+00

TULE ROAD

1" HDPE SDR9 SERVICE LINE

1" HDPE SDR9 STATIC LINE

AB SINGLE WATER SERVICE METER
STA.=12+44.73
O/S=37.92R

0

19+00
18+00
17+00
16+00
10' ELEC. EASEMENT
8' MULTI
(TYPICAL
5
6
7
8
9
10
11
12
13
14
10' ELEC. EASEMENT
AB 6" GATE VALVE
STA.=27+20.19 O/S=51.66R
NUT EL. = 26.22
AB TOP OF 6" DR18 REUSE MAIN
STA: 28+52.29
O/S: 50.01R
T.O.P. EL. = 23.45
AB TOP OF 6" DR18 REUSE MAIN
STA: 29+65.95
O/S: 48.96R
T.O.P. EL. = 22.93
AB TOP OF 6" DR18 REUSE MAIN
STA: 25+65.76
O/S: 51.62R
T.O.P. EL. = 23.90
AB TOP OF 6" DR18 REUSE MAIN
STA: 25+19.85
O/S: 50.29R
T.O.P. EL. = 24.21
AB TOP OF 6" DR18 REUSE MAIN
STA: 24+90.23
O/S: 51.45R
T.O.P. EL. = 24.90
AB TOP OF 6" DR18 REUSE MAIN
STA: 24+21.21
O/S: 50.95R
T.O.P. EL. = 23.74
5' SIDEWALK
(TYPICAL)
6" PVC DR18 REUSE MAIN
29+00
28+00
27+00
26+00
25+00
24+00
23+0
TURNBULL CREEK ROAD

MULTIPURPOSE PATH (TYPICAL)
LON: W081° 26' 55.5"
T.O.P. REUSE MAIN EL. = 22.60
INV. CROSSING UTILITY EL. = 19.46
CROSSING UTILITY SIZE = 8"
SEPARATION = 1.33'
AB 4" GATE VALVE
STA.=38+65.45 O/S=39.41R
NUT EL. = 24.70
STA: 38+65.51
O/S: 40.90R
T.O.P. EL. = 23.88
T.O.P. CROSSING UTILITY EL. = 22.48
CROSSING UTILITY SIZE = 10"
SEPARATION = 1.28'
6" HDPE DR11 REUSE MAIN
AB TOP OF 6" DR11 REUSE MAIN
STA: 38+63.43
O/S: 19.79L
T.O.P. EL. = 19.57
40+00
39+00
AB 6" REUSE MAIN CROSSING
OVER SEWER
N: 2038930.44
LAT: N029° 56' 29.4"
E: 514136.72
LON: W081° 26' 54.4"
T.O.P. REUSE MAIN EL. = 22.33
INV. CROSSING UTILITY EL. = 16.15
CROSSING UTILITY SIZE = 8"
SEPARATION = 4.97'
AB 6"X4" M.J. ADAPTER
HDPE IP PVC
STA: 38+62.75
O/S: 29.05L
T.O.P. EL. = 20.09
AB 4" 22.5° M.J. BEND
STA: 38+62.25
O/S: 37.62L
T.O.P. EL. = 20.56
AB 4" M.J. PLUG
STA: 38+63.11
O/S: 43.86L
T.O.P. EL. = 26.59
11+00
12+00
1
2
3
40
34+00
33+00
9
10
11
12
13
14
10' ELEC. EASEMENT
AB 12" GATE VALVE
STA.=45+08.81 O/S=39.45R
NUT EL. = 25.74
AB TOP OF 12" DR18 REUSE MAIN
STA: 44+29.16
O/S: 38.94R
T.O.P. EL. = 22.06
AB TOP OF 12" DR18 REUSE MAIN
STA: 46+16.65
O/S: 39.02R
T.O.P. EL. = 25.08
12" PVC DR18 REUSE MAIN
TURNBULL CREEK ROAD
46+00
47+00
TCH LINE "D"

HDPE DR11 REUSE MAIN

AB 12"X12" M.J. "CROSS"
STA: 51+57.57
O/S: 44.59R
T.O.P. EL. = 24.14

AB 6"X6" M.J. REDUCER
STA: 51+57.20
O/S: 42.30R
T.O.P. EL. = 23.87

8" HDPE DR11 REUSE MAIN

AB 6" GATE VALVE
STA.=51+57.22 O/S=41.30R
NUT EL. = 25.11

AB 12" GATE VALVE
STA.=51+59.21 O/S=44.61R
NUT EL. = 25.69

5' SIDEWALK
(TYPICAL)

AB 6" 45° M.J. BEND ROLLED
STA: 10+64.17
O/S: 21.67R
T.O.P. EL. = 18.30

AB 6" 45° M.J. BEND ROLLED
STA: 10+58.41
O/S: 21.60R
T.O.P. EL. = 22.59

AB 6" 45° M.J. BEND
STA: 10+54.90
O/S: 21.55R
T.O.P. EL. = 23.90

AB 6" REUSE MAIN CROSSING
OVER STORM
N: 2038363.47
LAT: N029° 56' 29.7"
E: 512945.62
LON: W081° 27' 07.9"
T.O.P. REUSE MAIN EL. = 23.42
INV. CROSSING UTILITY EL. = 18.42
CROSSING UTILITY SIZE = 24"
SEPARATION = 2.34'

AB 8"X6" M.J. REDUCER
STA: 51+58.32
O/S: 39.31L
T.O.P. EL. = 22.74

AB 6" 45° M.J. BEND
STA: 51+57.82
O/S: 44.40L
T.O.P. EL. = 22.82

20'UDE

8' MULTIPURPOSE PATH
(TYPICAL)

AB 6" 45° M.J. BEND ROLLED
STA: 10+73.45
O/S: 21.67R
T.O.P. EL. = 18.41

AB 6" 45° M.J. BEND ROLLED
STA: 10+79.21
O/S: 21.60R
T.O.P. EL. = 22.59

6" PVC DR18 REUSE MAIN

AB 6" REUSE MAIN CROSSING
OVER STORM
N: 2038913.93
LAT: N029° 56' 29.2"
E: 512961.38
LON: W081° 27' 07.7"
T.O.P. REUSE MAIN EL. = 22.56
INV. CROSSING UTILITY EL. = 19.59
CROSSING UTILITY SIZE = 6"
SEPARATION = 0.77'

AB 6" REUSE MAIN CROSSING
OVER STORM
N: 2038841.06
LAT: N029° 56' 28.5"
E: 512977.17
LON: W081° 27' 07.5"
T.O.P. REUSE MAIN EL. = 22.21
INV. CROSSING UTILITY EL. = 18.88
CROSSING UTILITY SIZE = 15"
SEPARATION = 1.35'

5' SIDEWALK
(TYPICAL)

AB TOP OF 6" DR18 REUSE MAIN
STA: 11+67.75
O/S: 21.45R
T.O.P. EL. = 22.48

AB 6" REUSE MAIN CROSSING
OVER SEWER
N: 2038800.74
LAT: N029° 56' 28.1"
E: 512985.79
LON: W081° 27' 07.4"
T.O.P. REUSE MAIN EL. = 22.23
INV. CROSSING UTILITY EL. = 10.45
CROSSING UTILITY SIZE = 6"
SEPARATION = 10.57'

AB TOP OF 6" DR18 REUSE MAIN
STA: 12+36.48
O/S: 21.40R
T.O.P. EL. = 25.34

TULE ROAD

POINT OF CONNECTION FOR
PHASE 1C1

0

AB TOP OF 10" DR18 FORCE MAIN
STA: 15+92.22
O/S: 57.85R
T.O.P. EL. = 25.90

AB 12"X10" M.J. ADAPTER
STA: 15+91
O/S: 55.16R
T.O.P. EL. = 24.77

AB TOP OF 10" DR18 FORCE MAIN
STA: 17+51.69
O/S: 45.00R
T.O.P. EL. = 23.52

AB 10" 45° M.J. BEND
STA: 15+99.37
O/S: 55.45R
T.O.P. EL. = 24.75

AB TOP OF 10" DR18 FORCE MAIN
STA: 13+30.95
O/S: 49.62R
T.O.P. EL. = 24.41

AB 10"X12" M.J. ADAPTER
STA: 15+40.82
O/S: 54.09R
T.O.P. EL. = 25.10

12" HDPE DR11 FORCE MAIN

AB 10" GATE VALVE
STA: 16+55.61
O/S: 45.10R
T.O.P. EL. = 21.16

AB 6"X10" M.J. 'TEE'
STA: 15+91.96
O/S: 55.18R
T.O.P. EL. = 24.78

AB 10" 45° M.J. BEND
STA: 16+08.85
O/S: 45.38R
T.O.P. EL. = 24.62

AB TOP OF 10" DR18 FORCE MAIN
STA: 18+92.27
O/S: 44.66R
T.O.P. EL. = 21.06

19+00
18+00
17+00
16+00
15+00
14+00
13+00

TURNBULL CREEK ROAD

10' ELEC. EASEMENT

5
6
7
8
9
10
11
12
13
14

AB 10"X6" M.J. 'TEE'
STA: 26+19.16
O/S: 47.42R
T.O.P. EL. = 25.32

AB 10" GATE VALVE
STA: 25+65.46
O/S: 47.42R
T.O.P. EL. = 27.53

AB TOP OF 10" DR18 FORCE MAIN
STA: 25+19.28
O/S: 46.87R
T.O.P. EL. = 24.32

AB TOP OF 10" DR18 FORCE MAIN
STA: 27+20.39
O/S: 48.00R
T.O.P. EL. = 25.27

AB 6" GATE VALVE
STA: 26+19.14
O/S: 44.62R
T.O.P. EL. = 26.41

10" PVC DR18 FORCE MAIN

AB TOP OF 10" DR18 FORCE MAIN
STA: 24+22.12
O/S: 47.55R
T.O.P. EL. = 24.95

AB LOCATE WIRE BOX
STA: 28+51.56
O/S: 46.49R

AB 6"X8" M.J. ADAPTER
PVC TO HDPE
STA: 26+19.08
O/S: 43.20R
T.O.P. EL. = 25.01

AB TOP OF 10" DR18 FORCE MAIN
STA: 24+90.49
O/S: 47.70R
T.O.P. EL. = 25.36

5' SIDEWALK
(TYPICAL)

AB LOCATE WIRE BOX
STA: 24+21.95
O/S: 47.50R

AB TOP OF 10" DR18 FORCE MAIN
STA: 23+60.75
O/S: 47.35R
T.O.P. EL. = 23.99

AB 8" FORCE MAIN CROSSING
OVER STORM
N: 2038754.27
LAT: N029° 56' 27.7"
E: 515320.71
LON: W081° 26' 40.9"
T.O.P. FORCE MAIN EL. = 24.74
INV. CROSSING UTILITY EL. = 19.52
CROSSING UTILITY SIZE = 24"
SEPARATION = 2.22'

8" HDPE DR11 FORCE MAIN

AB TOP OF 10" DR18 FORCE MAIN
STA: 28+51.69
O/S: 46.30R
T.O.P. EL. = 24.82

AB 8"X6" M.J. ADAPTER
HDPE TO PVC
STA: 26+24.35
O/S: 66.33L
T.O.P. EL. = 24.04

29+00
28+00
27+00
26+00
25+00
24+00

TURNBULL CREEK ROAD

AB TOP OF 10" DR18 FORCE MAIN
STA: 41+41.95
O/S: 42.50R
T.O.P. EL. = 22.69

AB LOCATE WIRE BOX
STA: 41+41.69
O/S: 42.36R

AB 260 L.F. OF 8" SDR26
PVC @ 0.42% AB

41+00

AB 8" SANITARY SEWER
CROSSING UNDER STORM
N: 2039060.81
LAT: N029° 56' 30.7"
E: 513891.58
LON: W081° 26' 57.2"
INV. SEWER EL. = 14.98
INV. CROSSING UTILITY EL. = 22.33
CROSSING UTILITY SIZE = 15"
SEPARATION = 6.44'

AB SEWER MANHOLE MH22
STA: 39+92.63
O/S: 4.12R
TOP EL. = 26.51
INV. EL. = 15.63 E. 8" PVC
INV. EL. = 19.26 NE. 8" PVC
INV. EL. = 15.63 NW. 8" PVC

40+00

AB 12"X10" M.J. ADAPTER
HDPE TO PVC
STA: 38+57.17
O/S: 39.76R
T.O.P. EL. = 22.48

AB SEWER MANHOLE MH22A
STA: 39+83.28
O/S: 64.78R
TOP EL. = 26.06
INV. EL. = 19.55 SW. 8" PVC

AB 60 L.F. OF 8" SDR26
PVC @ 0.48% AB

AB 133 L.F. OF 8" SDR26
PVC @ 0.41% AB

39+00

AB SEWER MANHOLE MH21
STA: 38+56.63
O/S: 0.14R
TOP EL. = 27.08
INV. EL. = 16.19 E. 8" PVC
INV. EL. = 16.27 S. 8" PVC
INV. EL. = 16.18 W. 8" PVC

38+00

AB TOP OF 10" DR18 FORCE MAIN
STA: 37+02.38
O/S: 40.15R
T.O.P. EL. = 22.21

10" PVC DR18 FORCE MAIN

AB TOP OF 10" DR18 FORCE MAIN
STA: 37+92.92
O/S: 38.79R
T.O.P. EL. = 24.09

AB 257 L.F. OF 8" SDR26
PVC @ 0.39% AB

37+00

AB LOCATE WIRE BOX
STA: 36+34.99
O/S: 39.35R

36+00

AB 8" SANITARY SEWER
CROSSING OVER STORM
N: 2038875.95
LAT: N029° 56' 28.9"
E: 514490.11
LON: W081° 26' 50.3"
INV. SEWER EL. = 17.80
INV. CROSSING UTILITY EL. = 12.93
CROSSING UTILITY SIZE = 36"
SEPARATION = 1.50'

AB SEWER MANHOLE MH13
STA: 35+98
O/S: 0.40R
TOP EL. = 26.29
INV. EL. = 17.34 SE. 8" PVC
INV. EL. = 17.19 W. 8" PVC

35+00

AB 209
PVC

11+00

12+00

1

2

3

40

9

10

11

12

10' ELEC. EASEMENT

AB TOP OF 10" DR18 FORCE MAIN
STA: 46+16.84
O/S: 34.78R
T.O.P. EL. = 23.34

AB TOP OF 10" DR18 FORCE MAIN
STA: 45+08.29
O/S: 34.93R
T.O.P. EL. = 23.54

10" PVC DR18 FORCE MAIN

"F" LINE

SEWER

T.O.P. EL. = 20.76

STA: 00+00.00
O/S: 00.00
T.O.P. EL. = 21.19

AB SEWER MANHOLE MH47
STA: 51+24.77
O/S: 0.31L
TOP EL. = 26.13
INV. EL. = 11.29 E. 8" PVC
INV. EL. = 11.38 N. 8" PVC
INV. EL. = 11.29 S. 8" PVC

AB 8" SANITARY SEWER
CROSSING UNDER STORM
N: 2038978.99
LAT: N029° 56' 29.8"
E: 512969.84
LON: W081° 27' 07.6"
INV. SEWER EL. = 11.06
INV. CROSSING UTILITY EL. = 21.80
CROSSING UTILITY SIZE = 18"
SEPARATION = 9.83'

AB 8" SANITARY SEWER
CROSSING UNDER STORM
N: 2038926.62
LAT: N029° 56' 29.3"
E: 512981.29
LON: W081° 27' 07.5"
INV. SEWER EL. = 10.89
INV. CROSSING UTILITY EL. = 19.68
CROSSING UTILITY SIZE = 18"
SEPARATION = 7.88'

AB 8" SANITARY SEWER
CROSSING UNDER STORM
N: 2038842.77
LAT: N029° 56' 28.5"
E: 512999.62
LON: W081° 27' 07.3"
INV. SEWER EL. = 10.63
INV. CROSSING UTILITY EL. = 21.74
CROSSING UTILITY SIZE = 15"
SEPARATION = 10.20'

5' SIDEWALK
(TYPICAL)

20'UDE

51+00

10+00

11+00

12+00

12" HDPE DR11 FORCE MAIN

AB 214 L.F. OF 8" SDR26
PVC @ 0.35% AB

AB 61 L.F. OF 8" SDR26
PVC @ 0.36% AB

AB 6" 45° M.J. BEND
STA: 10+57.01
O/S: 26.07R
T.O.P. EL. = 21.60

AB 8"X6" M.J. REDUCER
STA: 51+63.20
O/S: 38.74L
T.O.P. EL. = 21.09

AB 6" 45° M.J. BEND ROLLED
STA: 10+79.92
O/S: 25.99R
T.O.P. EL. = 22.55

AB 6" 45° M.J. BEND ROLLED
STA: 10+76.36
O/S: 26.42R
T.O.P. EL. = 19.35

AB 6" 45° M.J. BEND ROLLED
STA: 10+64.21
O/S: 27.14R
T.O.P. EL. = 19.06

AB 6" 45° M.J. BEND ROLLED
STA: 10+59.52
O/S: 26.48R
T.O.P. EL. = 22.65

AB TOP OF 6" DR18 FORCE MAIN
STA: 11+68.04
O/S: 25.89R
T.O.P. EL. = 21.12

AB 6" FORCE MAIN CROSSING
OVER STORM
N: 2038911.40
LAT: N029° 56' 29.2"
E: 512957.42
LON: W081° 27' 07.8"
T.O.P. FORCE MAIN EL. = 22.16
INV. CROSSING UTILITY EL. = 19.26
CROSSING UTILITY SIZE = 18"
SEPARATION = 0.70'

AB SEWER MANHOLE MH-76
STA: 12+16.20
O/S: 0.94L
TOP EL. = 25.69
INV. EL. = 10.54 N. 8" PVC
INV. EL. = 10.88 S. 8" PVC
INV. EL. = 10.54 W. 8" PVC

6" PVC DR18 FORCE MAIN

AB 6" FORCE MAIN CROSSING
OVER STORM
N: 2038841.91
LAT: N029° 56' 28.5"
E: 512972.46
LON: W081° 27' 07.6"
T.O.P. FORCE MAIN EL. = 21.39
INV. CROSSING UTILITY EL. = 18.88
CROSSING UTILITY SIZE = 15"
SEPARATION = 0.70'

AB SEWER MANHOLE MH77
STA: 12+20.68
O/S: 61.26R
TOP EL. = 26.60
INV. EL. = 10.32 E. 8" PVC
INV. EL. = 10.31 S. 8" PVC

TULI

" M.J. ADAPTER
HDPE TO PVC
STA: 51+48.30
O/S: 39.48R
P. EL. = 23.85

J. BEND ROLLED
STA: 51+50.56
O/S: 39.43R
P. EL. = 23.86

BEND ROLLED
A: 51+53.74
O/S: 39.48R
EL. = 21.42

M.J. 'TEE'
51+62.25
S: 39.38R
. = 21.99

10" GATE VALVE
STA: 51+63.94
O/S: 39.34R
P. EL. = 23.87

AB 6" GATE VALVE
STA: 51+62.27
O/S: 37.37R
T.O.P. EL. = 22.99

8" HDPE DR11 FORCE MAIN

AB 6" 45° M.J. BEND
STA: 51+60.10
O/S: 47.80L
T.O.P. EL. = 22.57

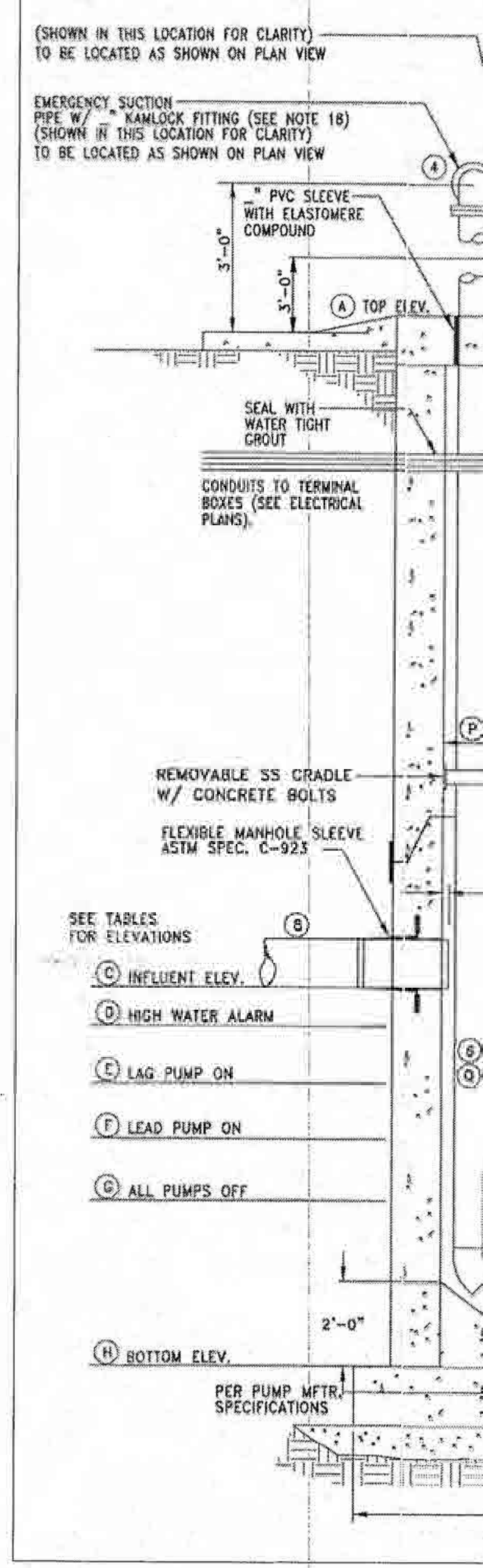
5' SIDEWALK
(TYPICAL)

AB 10" M.J. 'PLUG
STA: 51+77.32
O/S: 39.00R
T.O.P. EL. = 22.22

8' MULTIPURPOSE PATH
(TYPICAL)

AB 6" FORCE MAIN CROSSING
OVER STORM
N: 2038959.98
LAT: N029° 56' 29.6"
E: 512942.93
LON: W081° 27' 07.9"
T.O.P. FORCE MAIN EL. = 22.02
INV. CROSSING UTILITY EL. = 18.42
CROSSING UTILITY SIZE = 24"
SEPARATION = 0.57'


SEPARATION = 9.76'
26.72EP
26.50EP
D ROLLED
ALVE
UG VALVE
36.53
54R
= 30.60
" 90° M.J. BEND
12+36.50
53.95R
. EL. = 30.01
B 6"X6" M.J. "TEE"
TA: 12+38.03
/S: 53.90R
O.P. EL. = 30.02
12.3'
11.7'
26.47EP
25.68TC
25.52EP
26.70EP
AB 6" GATE VALVE
STA: 12+37.85
O/S: 38.08R
T.O.P. EL. = 23.42
AB 6" 90° M.J. BEND
STA: 12+36.66
O/S: 25.67R
T.O.P. EL. = 21.52
1" HDPE SDR9 SERVICE LINE
AB 6" CAMLOCK
STA: 12+38.19
O/S: 52.75R
T.O.P. EL. = 28.69
AB SINGLE WATER SERVICE METER
STA.=12+44.73
O/S=37.92R
AB 6" 90° M.J. BEND
STA: 12+39.60
O/S: 53.88R
T.O.P. EL. = 30.02
AB 6" PLUG VALVE
STA: 12+39.63
O/S: 54.70R
NUT EL. = 30.62
3.4'
AB 2" BACKFLOW
PREVENTER
STA: 12+44.74
O/S: 42.92R
T.O.P. EL. = 27.75
1" HDPE SDR9 STATIC LINE
3.8'
3.8'
0.6'
26.70EC
0.5'
ROLLED
AB HOSE BIB
STA: 12+44.93
O/S: 47.11R
T.O.P. EL. = 27.75
AB 112 L.F. OF 8" SDR26
PVC @ 0.40% AB


(SHOWN IN THIS LOCATION FOR CLARITY)
TO BE LOCATED AS SHOWN ON PLAN VIEW
EMERGENCY SUCTION
PIPE W/ _" KAMLOCK FITTING (SEE NOTE 18)
(SHOWN IN THIS LOCATION FOR CLARITY)
TO BE LOCATED AS SHOWN ON PLAN VIEW
_" PVC SLEEVE
WITH ELASTOMERE
COMPOUND
3'-0"
3'-0"
(A) TOP ELEV.
SEAL WITH
WATER TIGHT
GROUT
CONDUITS TO TERMINAL
BOXES (SEE ELECTRICAL
PLANS).
REMOVABLE SS CRADLE
W/ CONCRETE BOLTS
FLEXIBLE MANHOLE SLEEVE
ASTM SPEC. C-923
SEE TABLES
FOR ELEVATIONS
(C) INFLUENT ELEV.
(D) HIGH WATER ALARM
(E) LAG PUMP ON
(F) LEAD PUMP ON
(G) ALL PUMPS OFF
2'-0"
(H) BOTTOM ELEV.
PER PUMP MFTR.
SPECIFICATIONS

PVI STA
ELEV =

MH13
TOP =
STA 35
1.00
SE INV
W INV =

0.30%

PVI S
ELE
(WILL

MH21
TOP =
STA
0.01
E INV
S INV
W INV
TO BE

4"PVC DR18
REUSE MAIN

12"PVC (C900,DR18)
WATER MAIN

6"PVC (C900,DR18)
REUSE MAIN

10"PVC (C900,DR25)
FORCE MAIN

12"HDPE
(C906,DR11)
WATER MAIN

EL: 23.92(FM)

EL: 22.67(FM)

10"PVC (C900,DR25)
FORCE MAIN

209 AB
~~213'~~ ~8 PVC SDR26 @~~0.40%~~

0.48% AB

EL: 18.23(SAN)

257 AB
~~254'~~ ~8 PVC SDR26 @~~0.40%~~

0.39% AB

133 AB
~~129'~~ ~8 PVC SDR26 @~~0.40%~~

0.41% AB

FG=26.20

EG=24.95
FG=26.35

EG=25.02
FG=26.50

EG=24.57
FG=26.65

EG=24.00
FG=26.80

EG=25.13
FG=26.95

EG=25.26
FG=27.11

EG=25.49
FG=27.16

EG=25.44
FG=27.00

EG=25.75
FG=26.84

+00

36+00

37+00

38+00

39+00

TURNBULL CREEK RD PROFILE

MH
TOP
STA
E
W

0.30%

AB
8 PVC SDR26 @0.40%

0.37% AB

388 AB
400'~8 PVC SDR26 @0.40%

0.38% AB

EG=25.02
FG=26.81

EG=25.18
FG=26.96

EG=25.31
FG=27.11

EG=25.28
FG=27.26

EG=25.50
FG=27.41

EG=25.98
FG=27.57

EG=25.96
FG=27.72

EG=26.00
FG=27.87

EG=26.00
FG=27.67

00

44+00

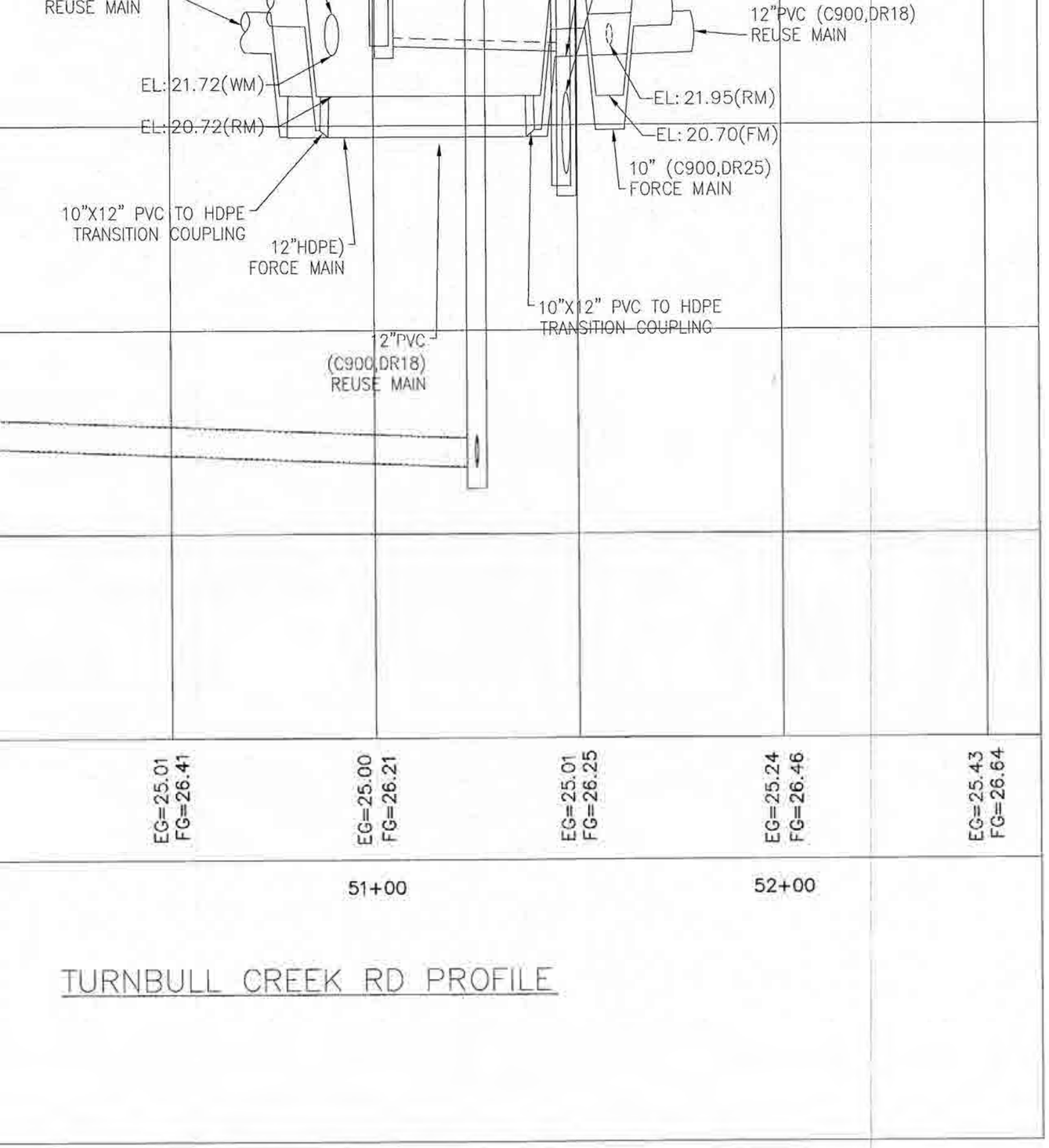
45+00

46+00

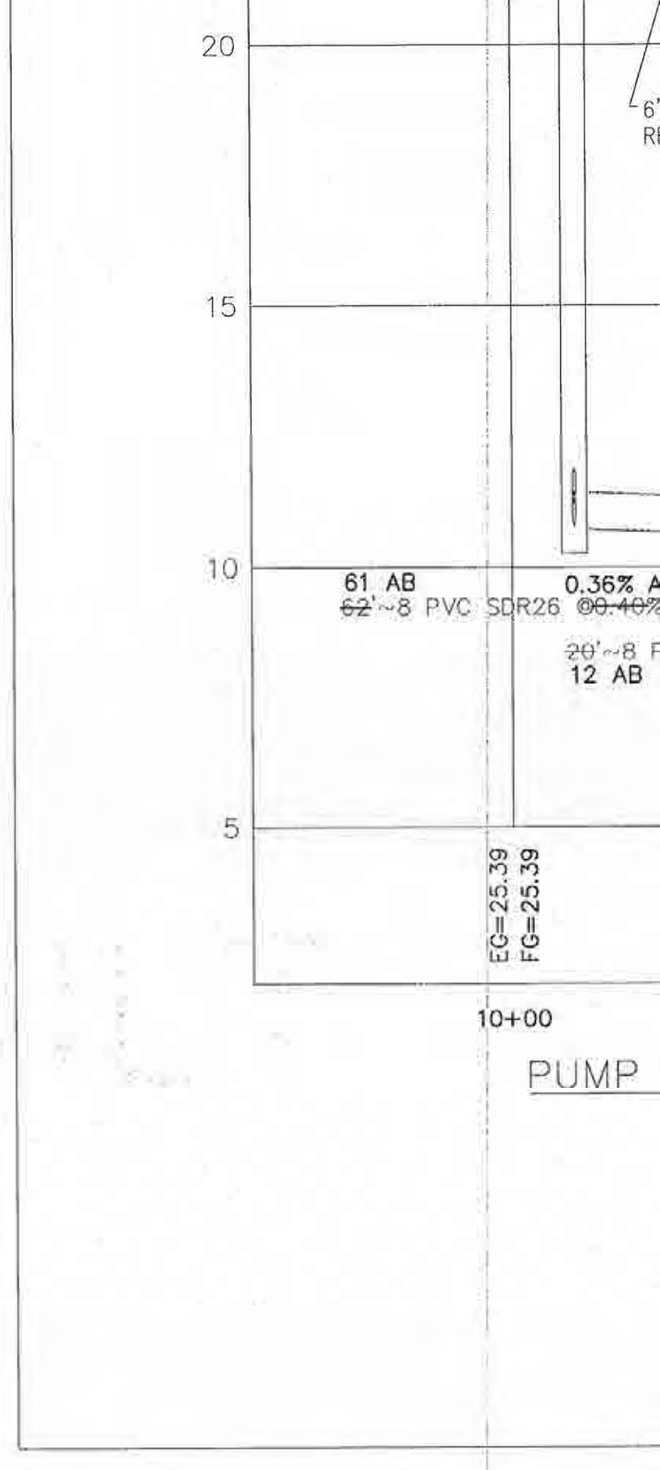
47+00

48

TURNBULL CREEK RD PROFILE



TURNBULL CREEK RD PROFILE



PUMP

REUSE MAIN
EL: 21.74(RM)
4"PP
EL: 21.15(ST)
EL: 22.38(FM)
EL: 21.12(ST)
S120 CURB INLET
24"RCP
EL: 20.80(ST)
S123 CURB INLET
EL: 21.71(RM)
EL: 20.72(RM)
EL: 21.39(WM)
EL: 22.31(FM)
EL: 21.26(ST)
18" STORM PIPE
10"PVC (C900,DR18)
WATER MAIN
EL: 21.72(FM)
EL: 20.64(ST)

0.44% AB
SDR26 ~~@0.40%~~
214 AB
~~216'~~8 PVC SDR26 0.35% AB ~~@0.40%~~
112 AB
~~113'~~8 PVC SDR26 0.40% AB ~~@0.41%~~
142'~8

EG=25.91	FG=26.54		EG=25.39	FG=26.61		EG=24.88	FG=26.10		EG=25.00	FG=25.95		EG=25.11	FG=25.80		EG=25.44	FG=25.64		EG=25.40	FG=25.68		EG=25.72	FG=25.99		EG=25.71	FG=26.30		EG=26.03	FG=26.61
9+00						10+00						11+00						12+00						13+00				

TULE RD PROFILE

AB TOP OF 20" DR18
WATER MAIN
STA: 11+07.14
O/S: 55.21R
T.O.P. EL. = 21.39
GROUND EL. = 25.7
COVER = 4.3

AB TOP OF 20" DR18
WATER MAIN
STA: 13+06.01
O/S: 54.69R
T.O.P. EL. = 21.81
GROUND EL. = 26.7
COVER = 4.9

AB TOP OF 20" DR18
WATER MAIN
STA: 14+04.92
O/S: 53.91R
T.O.P. EL. = 21.96
GROUND EL. = 26.9
COVER = 4.9

AB TOP OF 20" DR18
WATER MAIN
STA: 15+35.53
O/S: 46.08R
T.O.P. EL. = 21.17
GROUND EL. = 27.4
COVER = 6.2

24" DR11 HDPE WATER MAIN

AB TOP OF 20" DR18
WATER MAIN
STA: 12+05.65
O/S: 54.81R
T.O.P. EL. = 22.04
GROUND EL. = 25.7
COVER = 3.7

AB 20" WATERMAIN CROSSING
UNDER STORM
N: 2039132.86
LAT: N029° 56' 31.5"
E: 516673.45
LON: W081° 26' 25.5"
T.O.P. WATERMAIN EL. = 21.86
INV. CROSSING UTILITY EL. = 23.42
CROSSING UTILITY SIZE = 24"
SEPARATION = 1.31'

AB 24"X20" M.J. ADAPTER
HDPE TO PVC
STA: 14+49.20
O/S: 53.74R
T.O.P. EL. = 21.53
GROUND EL. = 27.5
COVER = 6.0

AB TOP OF 24" DR11
WATER MAIN
STA: 14+61.51
O/S: 54.14R
T.O.P. EL. = 21.73
GROUND EL. = 27.6
COVER = 5.9

AB 20"X24" M.J. ADAPTER
PVC TO HDPE
STA: 15+48.04
O/S: 54.18R
T.O.P. EL. = 20.54
GROUND EL. = 27.3
COVER = 6.8

AB 20"X8" M.J. 'TEE'
STA: 15+51.27
O/S: 54.10R
T.O.P. EL. = 20.78
GROUND EL. = 27.3
COVER = 6.5

AB 20" GATE VALVE
STA.=15+61.04 O/S=58.06R
NUT EL. = 20.54
GROUND EL. = 27.1
COVER = 6.6'

AB LOCATE WIRE
STA: 15+54
O/S: 154.
T.O.P. EL. = 27

SCENIC EDGE

TURNBULL CREEK ROAD

DETAIL #2
SCALE 1" = 10'

EP

ASHPHALT SHLDR

AB 20"X12" TAPPING SLEEVE
STA: 15+61.06
O/S: 54.51R
T.O.P. EL. = 21.36
GROUND EL. = 27.0
COVER = 5.6

AB 20"X20" TAPPING SLEEVE
STA: 16+17.28
O/S: 49.70R
T.O.P. EL. = 21.20
GROUND EL. = 26.0
COVER = 4.8

AB 10" REUSE MAIN CROSSING
EXISTING WATER MAIN
N: 2038847.18
LAT: N029° 56' 28.7"
E: 516892.18
LON: W081° 26' 23.0"
T.O.P. REUSE EL. = 14.23
T.O.P. CROSSING UTILITY EL. = 21.20
CROSSING UTILITY SIZE = 20"
SEPARATION = 5.30'

SHLDR

SW'LY R/W LINE

DITCH

PUBLIC

PRIVATE

10+00

11+00

4' FW

AB 8" M.J. PLUG
STA: 10+02.91
O/S: 45.09R
T.O.P. EL. = 22.34
GROUND EL. = 26.2
COVER = 3.9'

AB 10"X8" M.J. ADAPTER
HDPE TO PVC (BORING END)
STA: 10+02.91
O/S: 45.09R
T.O.P. EL. = 22.34
GROUND EL. = 26.2
COVER = 3.9'

WESTERLY RIGHT OF WAY LINE

1" = 30'
GRAPHIC SCALE
0 15' 30' 60'

30

25

20

25'±
ROADWAY WIDTH

8" MJ TEE
8+86.60
143.0'L

42"(MIN)

8"-45° DI
MJ BEND

EXISTING
8" REUSE
MAIN

10'(MIN)

EXISTING
GAS MAIN

8" PLUG
8+80.61 143.15'L

8"-90° DI MJ BEND
8+86.36 128.05'L

12"
(MIN)

10" HDPE
(C906,DR11)

EXISTING 20"
WATER MAIN

8"X10" PVC TO HDPE
TRANSITION COUPLING
8+92.80 144'L

EXISTING 12"
FORCE MAIN

BENDING RADIUS IS 35'

NOTE: REAMER SIZE FOR 10" SHALL BE 12"

8"-45° DI
MJ BEND

8"PVC
(C900,DR18)
REUSE MAIN

36"(MIN)

REUSE CONTROL
VALVE ELECTRICAL
CABINET

8"X10" PVC TO HDPE
TRANSITION COUPLING
10+57.61 140.3'L
(TURNBULL CREEK ROAD)

12"
(MIN)

BENDING RADIUS IS 30'
MAX BENDING RADIUS IS 23'

10" HDPE
(C906,DR11)

AB 12" FORCE MAIN CROSSING
UNDER WATERMAIN
N: 2039044.10
LAT: N029° 56' 30.6"
E: 516740.40
LON: W081° 26' 24.8"
T.O.P. FORCE MAIN EL. = 9.70
T.O.P. CROSSING UTILITY EL. = 21.77
CROSSING UTILITY SIZE = 20"
SEPARATION = 10.20'

AB 12"X10" M.J. ADAPTER
HDPE TO PVC (BORING BEGIN)
STA: 10+60.13
O/S: 107.68R
T.O.P. EL. = 20.15
GROUND EL. = 26.0
COVER = 5.9'

AB 10" 90° M.J. BEND
STA: 10+63.96
O/S: 107.85R
T.O.P. EL. = 20.69
GROUND EL. = 26.2
COVER = 5.5'

AB 10" 90° M.J. BEND
STA: 10+66.07
O/S: 46.94R
T.O.P. EL. = 23.28
GROUND EL. = 27.8
COVER = 4.5'

AB 10" M.J. SLEEVE
(REMOVED EXISTING PLUG)
STA: 10+86.87
O/S: 46.68R
T.O.P. EL. = 24.05
GROUND EL. = 27.9
COVER = 3.9'

10" DR18 PVC FORCE MAIN
GRAND OAKS PHASE 1

AB LOCATE WIRE BOX
STA: 12+03.29
O/S: 43.44R

SW'LY R/W LINE

PUBLIC

PRIVATE

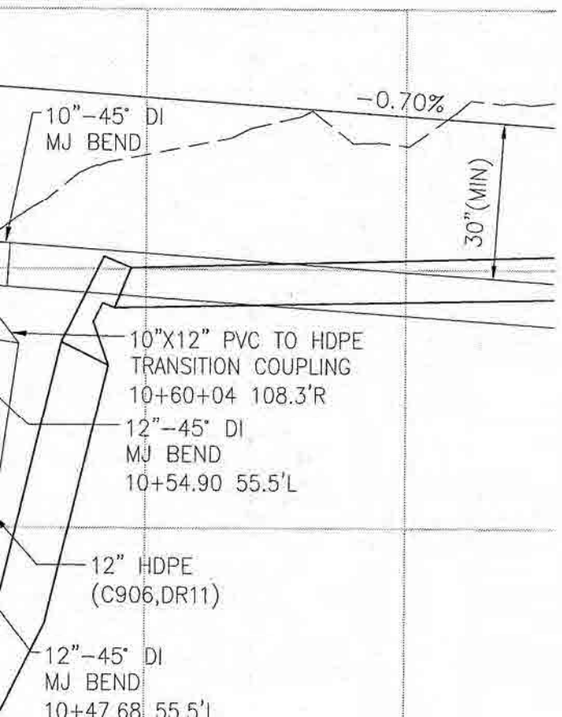
WESTERLY RIGHT
OF WAY LINE

TURNBULL CREEK ROAD

11+00

12+00

STA = 10+63
EV = 28.57



T B LANDMARK CONSTRUCTION, INC.
BORE PROFILE LOG

OWNER/GC: W. Gardner LLC **DATE:** 11/3/2020

SITE: Started dilling east under SR 16

STATION START: 89' west of c/l to SR 16, 110' north of c/l to turn bull creek rd

STATION END: 33' east of c/l to state road 16, 115' noth of c/l to tomoka pines

JOB NUMBER: 8384 **BORE #:** 2

JOB NAME: Grand Oaks Phase 1 **SIZE:** 12"

DRILLER: Carlos Rivera / Lee Ashbaugh **PIPE TYPE:** HDPE

ROD	DEPTH	STATION #
15	3'6"	Power 4'
30	8'5"	
45	11'10"	Water main 6' top
60	15'9"	
75	18'11"	Gas 4'
90	18'11"	
105	17'1"	

ROD	DEPTH	STATION #
540		
555		
570		
585		
600		
615		
630		

FO

2022 MWS Grand Oaks Offsite

Watermain

As Built Drawings

AS-BUILT) AS

VICINITY MAP

LEGEND
± – DENOTES PLUS OR MINUS
AB – DENOTES AS-BUILT
AL – DENOTES ARC LENGTH
ALUM – DENOTES ALUMINUM
BM – DENOTES BENCHMARK
BOC – DENOTES BACK OF CURB
℄ – DENOTES CENTERLINE
C# – DENOTES CURVE NUMBER
C/L – DENOTES CENTERLINE
CB – DENOTES CHORD BEARING

11+00 12+00 13+00 14+00 15+00 16+00 17+00

WM JD JD WM JD WM JD WM

ALIGNMENT=CENTERLINE OF CR2209
STATION=11+29.50
OFFSET=0.00
NORTHING=2048911.84
EASTING=502939.42

24" HDPE WATER MAIN

WLR 6
24" X 20" REDUCER

SP 1
SAMPLE POINT

PROPOSED GRADE (TYP)

20" 90° MJ BEND

EXISTING GRADE

42" (MIN)

CONTRACTOR SHALL COMFIRM THE ELEVATION OF THE WATER MAIN. NOTIFY ENGINEER OF RECORD OF ANY AND ALL DESCREPANCIES.

20" PVC (C900,DR18) WATER MAIN

WM
JD
PC: 22+65.53
21+00
22+00
23+00
24+00
25+00
26+00
27+00
PROPOSED
GRADE (TYP)
EXISTING
GRADE
42"
(MIN)

WM

JD

WLB 14
6" 90° BEND

WV 27
6" GATE VALVE

WV 26
20" GATE VALVE

FHYD 13
FIRE HYDRANT

30+00 31+00 32+00 33+00 34+00 35+00

PROPOSED
GRADE (TYP)

EXISTING
GRADE

20" GATE VALVE

42"
(MIN)

39+00

40+00

41+00

42+00

43+00

44+00

JD

JD

JD

JD

JD

JD

SR 16
(200' R/W)

B-8
(24.7)

42"
(MIN)

20" GATE VALVE

BENDING RADIUS IS 100'
MIN BENDING RADIUS IS 54'

EXISTING 8"
REUSE MAIN

EXISTING 12"
FORCE MAIN

20" WATER MAIN

20" PVC (C900,DR18)
WATER MAIN

24" HDPE TO 20" PVC
TRANSITION COUPLING

EXISTING GAS MAIN
(SEE NOTE 4)

30'
(MIN)
(10 x BORE DIAMETER)

BENDING RADIUS IS 500'
MIN BENDING RADIUS IS 54'

NATURAL GROUND=26.00

48+00 49+00 50+00 51+00 52+00 53+00 54+00

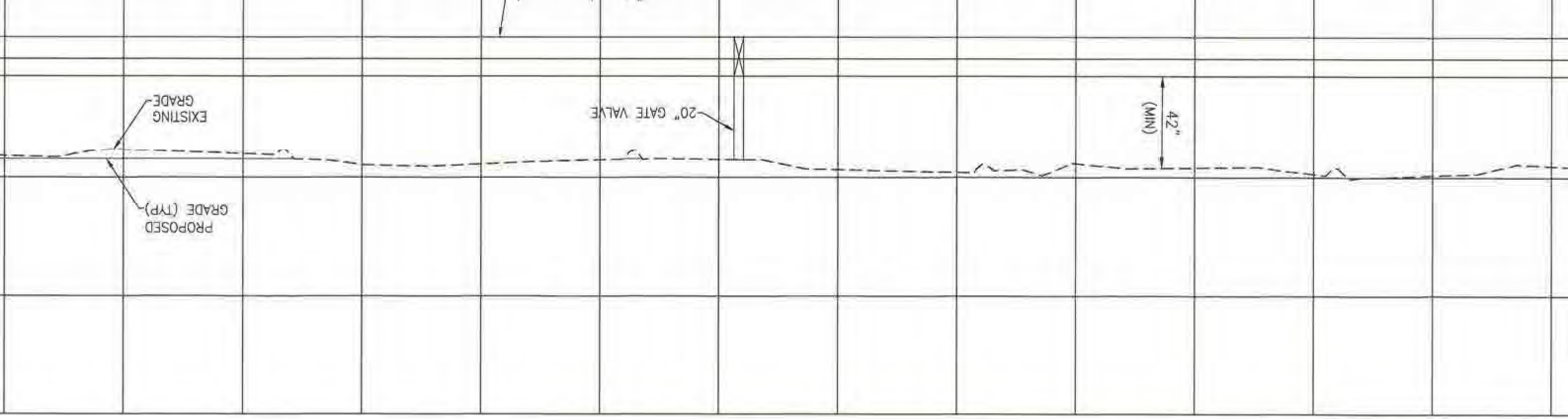
JD JD JD

EXISTING GRADE

20" GATE VALVE

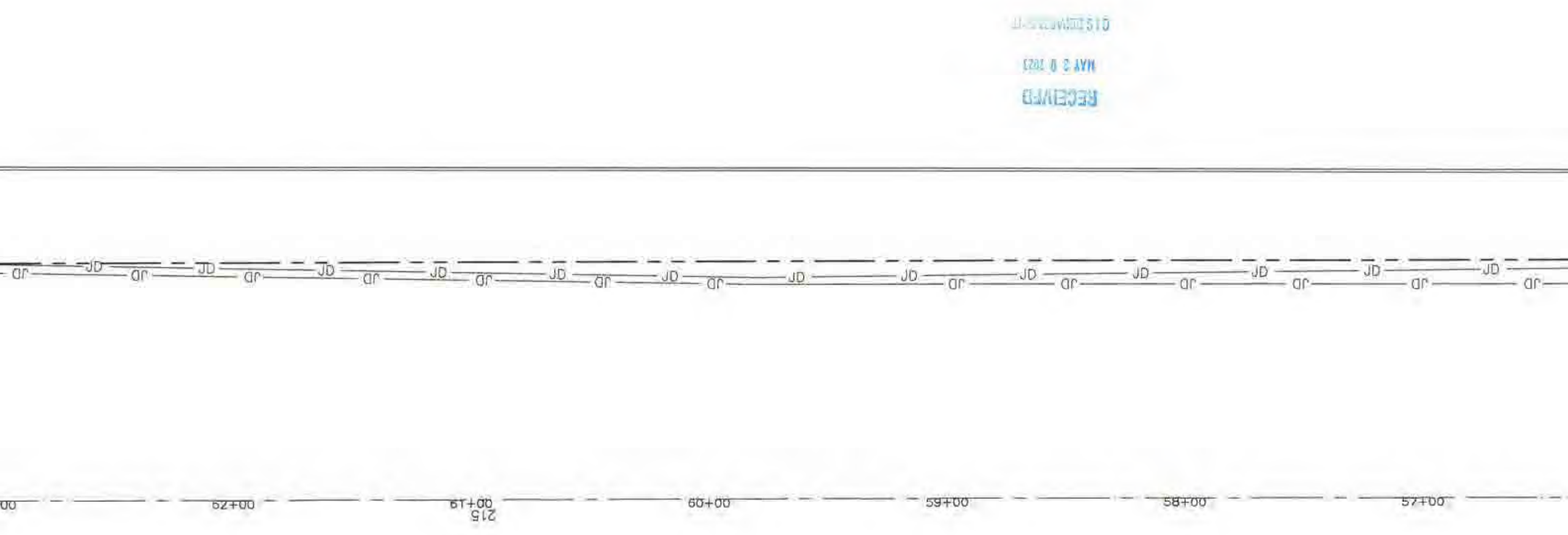
PROPOSED GRADE (TYP)

42" (MIN)



MWS-4057

RECEIVED
MAY 2 0 2021



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

SED
(TYP)

42"
(MIN)

20" GATE VALVE

00

75+00

76+00

77+00

78+00

79+00

MWS-4359

EXISTING GRADE

42" (MIN)

20" GATE VALVE

20" PVC (C900,DR18) WATER MAIN

85+00

86+00

87+00

88+00

89+00

EXISTING GRADE

42" (MIN)

20" PVC (C900,DR18) WATER MAIN

20" GATE VALVE

93+00

94+00

95+00

96+00

97+00

98+00

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

EXISTING GRADE

42" (MIN)

20" GATE VALVE

20" PVC (C900,DR18) WATER MAIN

EXISTING GRADE

42" (MIN)

20" GATE VALVE

20" PVC (C900,DR18) WATER MAIN

110+00 111+00 112+00 113+00 114+00 115+00 116+00

JD JD JD JD JD JD JD JD

EXISTING GRADE

42" (MIN)

20" PVC (C900,DR18) WATER MAIN

EG=20.5 FG=20.54 | EG=20.14 | EG=20.1 FG=20.11 | EG=20.3 FG=20.31 | EG=20.7 FG=20.74 | EG=20.8 FG=20.81 | EG=20.7 FG=20.68 | EG=20.6 FG=20.62 | EG=20.6 FG=20.61 | EG=21.2 FG=21.20 | EG=22.1 FG=22.12 | EG=22.7 FG=22.71 | EG=23.0 FG=23.03

+00 +00 +00 +00 +00 +00 +00 +00 +00 +00 +00 +00 +00 +00

119+00 120+00 121+00 122+00 123+00 124+00 125+00

JD

42" (MIN)

20" PVC (C900,DR18) WATER MAIN

20" GATE VALVE

24" HDPE TO 20" PVC TRANSITION COUPLING

BENDING RADIUS IS 500'
MIN BENDING RADIUS IS 54'

970

BENDING RADIUS
MIN BENDING RAD

NOTE
SIZE
SHAL

EG=22.2 FG=22.17
EG=22.6 FG=22.63
EG=22.9 FG=22.95
EG=22.7 FG=22.67
EG=21.9 FG=21.89
EG=21.9 FG=21.92
EG=22.8 FG=22.82
EG=22.4 FG=22.40
EG=21.9 FG=21.93
EG=21.4 FG=21.45
EG=21.0 FG=21.04
EG=20.1 FG=20.12
EG=19.2 FG=19.19

128+00
129+00
130+00
131+00
132+00
133+00
134+00
JD
JD
JD
JD
970'±
TURNBULL CREEK
EXISTING GRADE
24" HDPE WATER MAIN DIRECTIONAL DRILL
8' (MIN)
15' (MIN)
NOTE: REAMER SIZE FOR 24" SHALL BE 36"
BENDING RADIUS IS 500'
MIN BENDING RADIUS IS 54'
BENDING RADIUS IS 100'
MIN BENDING RADIUS IS
24" HDPE TO 20
TRANSITION COU
20

LOCATE WIRE BOX

138+00 139+00 140+00 141+00 142+00 143+00

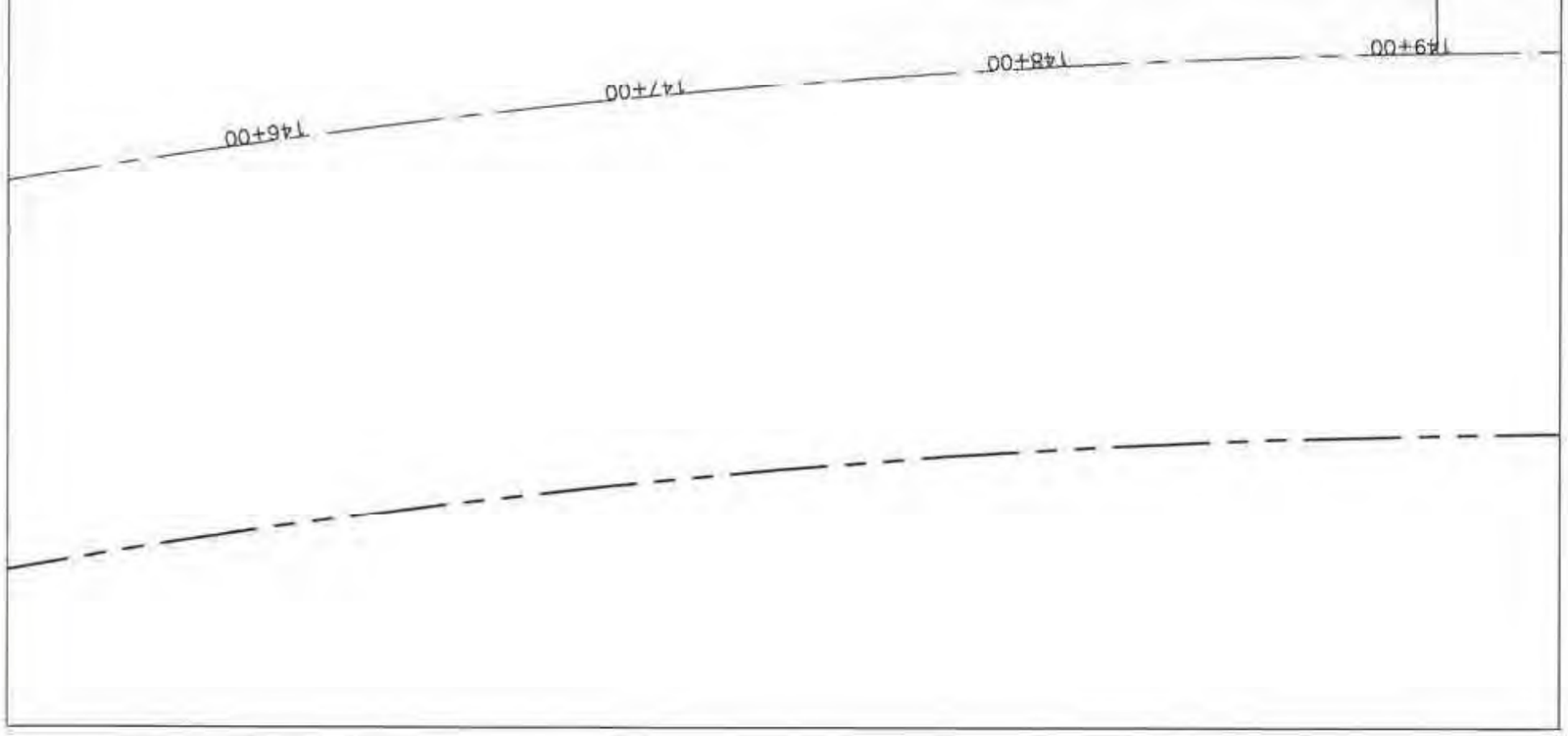
JD

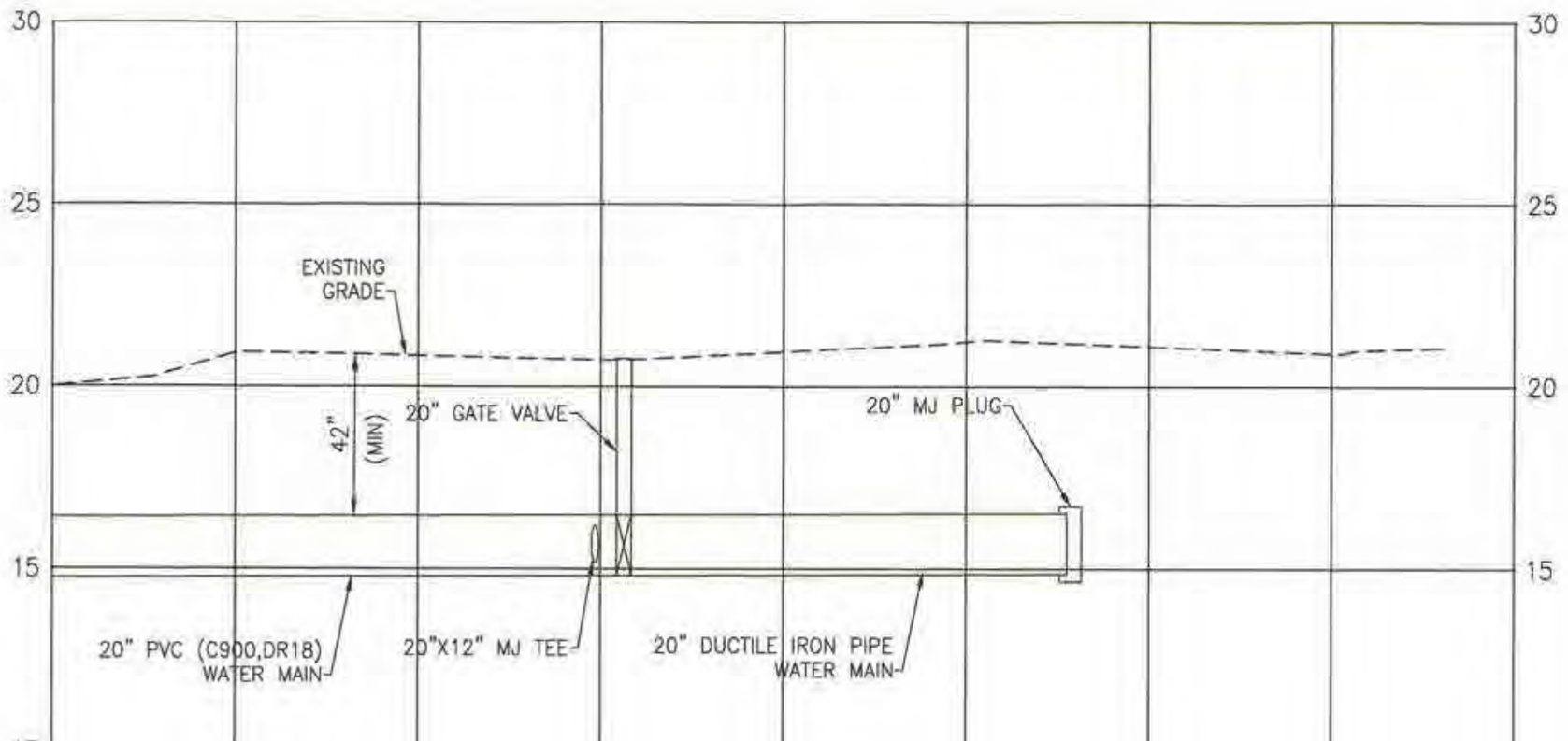
42" (MIN)

EXISTING GRADE

20" PVC (C900,DR18) WATER MAIN

SHEET 16


146+00
147+00
148+00
149+00


30
25
20
15
EXISTING GRADE
42" (MIN)
20" GATE VALVE
20" MJ PLUG
20" PVC (C900,DR18) WATER MAIN
20"X12" MJ TEE
20" DUCTILE IRON PIPE WATER MAIN

ERICAN PIPE COMPANY	DI	EPOXY	19.26	22.60	3.34	508148.22	2039685.03	029.94350511	-081.46735135
ERICAN PIPE COMPANY	DI	EPOXY	16.06	20.20	4.14	508673.55	2037819.65	029.93838175	-081.46566885
ERICAN PIPE COMPANY	DI	EPOXY	22.87	26.40	3.53	502824.75	2048835.84	029.96860632	-081.48428107
ERICAN PIPE COMPANY	DI	EPOXY	21.21	25.90	4.69	504552.53	2046028.60	029.96090722	-081.47878759
ERICAN PIPE COMPANY	DI	EPOXY	21.31	26.40	5.09	504519.38	2046494.99	029.96218926	-081.47889840
ERICAN PIPE COMPANY	DI	EPOXY	19.49	22.60	3.11	508163.78	2039670.14	029.94346433	-081.46730205
ERICAN PIPE COMPANY	DI	EPOXY	16.79	21.20	4.41	508599.26	2038783.00	029.94102984	-081.46591572
ERICAN PIPE COMPANY	DI	EPOXY	22.80	26.40	3.60	502997.14	2048978.98	029.96900189	-081.48373855
ERICAN PIPE COMPANY	DI	EPOXY	22.10	26.60	4.50	502834.51	2048841.00	029.96862061	-081.48425031
ERICAN PIPE COMPANY	DI	EPOXY	20.59	24.20	3.61	505083.13	2042772.35	029.95195963	-081.47706928
ERICAN PIPE COMPANY	DI	EPOXY	19.22	24.00	4.78	506568.73	2041881.51	029.94952699	-081.47236683
ERICAN PIPE COMPANY	DI	EPOXY	20.69	24.30	3.61	507195.86	2041121.89	029.94744535	-081.47037682
ERICAN PIPE COMPANY	DI	EPOXY	19.69	23.60	3.91	507747.57	2040296.43	029.94518179	-081.46862422
ERICAN PIPE COMPANY	DI	EPOXY	17.67	21.20	3.53	508613.51	2038729.95	029.94088413	-081.46587005
ERICAN PIPE COMPANY	DI	EPOXY	23.38	26.80	3.42	503687.41	2048341.46	029.96725691	-081.48155014
ERICAN PIPE COMPANY	DI	EPOXY	21.40	26.50	5.10	504554.70	2046007.53	029.96084932	-081.47878046
ERICAN PIPE COMPANY	DI	EPOXY	21.89	26.00	4.11	504584.10	2045610.88	029.95975696	-081.47868237
ERICAN PIPE COMPANY	DI	EPOXY	21.01	24.70	3.69	504657.00	2044623.91	029.95704597	-081.47843918
ERICAN PIPE COMPANY	DI	EPOXY	21.50	23.30	1.80	505809.00	2042296.51	029.95065950	-081.47477109
ERICAN PIPE COMPANY	DI	EPOXY	20.90	24.30	3.40	504732.66	2043631.24	029.95431731	-081.47818720
ERICAN PIPE COMPANY	DI	EPOXY	21.19	22.19	1.00	504510.84	2046602.50	029.96248479	-081.47892680
ERICAN PIPE COMPANY	DI	EPOXY	23.12	26.80	3.68	504312.60	2047553.49	029.96509745	-081.47956538
ERICAN PIPE COMPANY	DI	EPOXY	19.04	22.60	3.56	508154.20	2039686.00	029.94350785	-081.46733249
ERICAN PIPE COMPANY	DI	EPOXY	15.89	20.20	4.31	508675.99	2037619.58	029.93838158	-081.46566115
ERICAN PIPE COMPANY	DI	EPOXY	15.92	20.90	4.98	508625.06	2037505.62	029.93751770	-081.46581791

LOCATE WIR		
NO.	LOCATE BOX SUBTYPE	NORTHIN
W LOC BX 1	MECHANICAL FITTING	2040156.46
W LOC BX 2	MECHANICAL FITTING	2043852.84
W LOC BX 3	MECHANICAL FITTING	2043442.52
W LOC BX 4	MECHANICAL FITTING	2048691.73
W LOC BX 5	MECHANICAL FITTING	2048402.15
W LOC BX 6	MECHANICAL FITTING	2047366.82
W LOC BX 7	MECHANICAL FITTING	2046913.21
W LOC BX 8	MECHANICAL FITTING	2046036.49
W LOC BX 9	MECHANICAL FITTING	2045583.20
W LOC BX 10	MECHANICAL FITTING	2045118.28
W LOC BX 11	MECHANICAL FITTING	2042504.58
W LOC BX 12	MECHANICAL FITTING	2042423.26
W LOC BX 13	MECHANICAL FITTING	2042105.97
W LOC BX 14	MECHANICAL FITTING	2041591.07
W LOC BX 15	MECHANICAL FITTING	2040520.44
W LOC BX 16	MECHANICAL FITTING	2039742.26
W LOC BX 17	MECHANICAL FITTING	2040880.12
W LOC BX 18	MECHANICAL FITTING	2040863.98
W LOC BX 19	MECHANICAL FITTING	2038756.00
W LOC BX 20	MECHANICAL FITTING	2038278.71
W LOC BX 21	MECHANICAL FITTING	2037463.43

DETAIL TABLE

PTH NUT	MANUFACTURER	NORTHING LATITUDE	EASTING LONGITUDE	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)
67	AMERICAN FLOW CONTROL	2042767.9630	505083.04	029.95194756	-081.47706951
77	AMERICAN FLOW CONTROL	2042766.7080	505087.97	029.95194417	-081.47705390
10	AMERICAN FLOW CONTROL	2042291.4620	505809.44	029.95064561	-081.47476961
96	AMERICAN FLOW CONTROL	2042293.6770	505815.35	029.95065177	-081.47475100
30	AMERICAN FLOW CONTROL	2041878.2710	506570.77	029.94951810	-081.47236033
59	AMERICAN FLOW CONTROL	2041876.0417	506576.06	029.94951203	-081.47234362
70	AMERICAN FLOW CONTROL	2041115.4960	507200.50	029.94742781	-081.47036211
42	AMERICAN FLOW CONTROL	2041117.0260	507194.39	029.94743195	-081.47038141
43	AMERICAN FLOW CONTROL	2040296.9830	507742.71	029.94518325	-081.46863957
36	AMERICAN FLOW CONTROL	2040288.8240	507752.56	029.94516092	-081.46860836
40	AMERICAN FLOW CONTROL	2038731.3210	508608.29	029.94088784	-081.46588656
01	AMERICAN FLOW CONTROL	2048338.1350	503686.21	029.96724775	-081.48155391
90	AMERICAN FLOW CONTROL	2048333.7540	503695.49	029.96723581	-081.48152454
04	AMERICAN FLOW CONTROL	2046016.3770	504553.94	029.96087363	-081.47878298
79	AMERICAN FLOW CONTROL	2046015.9190	504543.77	029.96087226	-081.47881508
84	AMERICAN FLOW CONTROL	2045607.8730	504581.65	029.95975069	-081.47869009

OFFSITE

MAIN A

DATE: 11/10/2021

BORE #:

SIZE: 24"

PIPE TYPE:

ROD	DEPTH	STATION #
800	22'3"	
820	20'4"	
840	19'4"	
860	20'	
880	19'	
900	16'3"	
920	13'2"	
940	9'9"	
960	7'	
980	5'	
1000	pit	
1020		
1040		
1060		
1080		
1100		
1120		
1140		
1160		
1180		
1200		
1220		
1240		
1260		
1280		
1300		
1320		
1340		
1360		
1380		
1400		
1420		
1440		
1460		
1480		

OWNER/GC: Southeast Development Partners **DATE:**

SITE: SR-16

STATION START:

STATION END:

JOB NUMBER: 8726 **BORE #:**

JOB NAME: Grand Oaks Offsite Water Main **SIZE:**

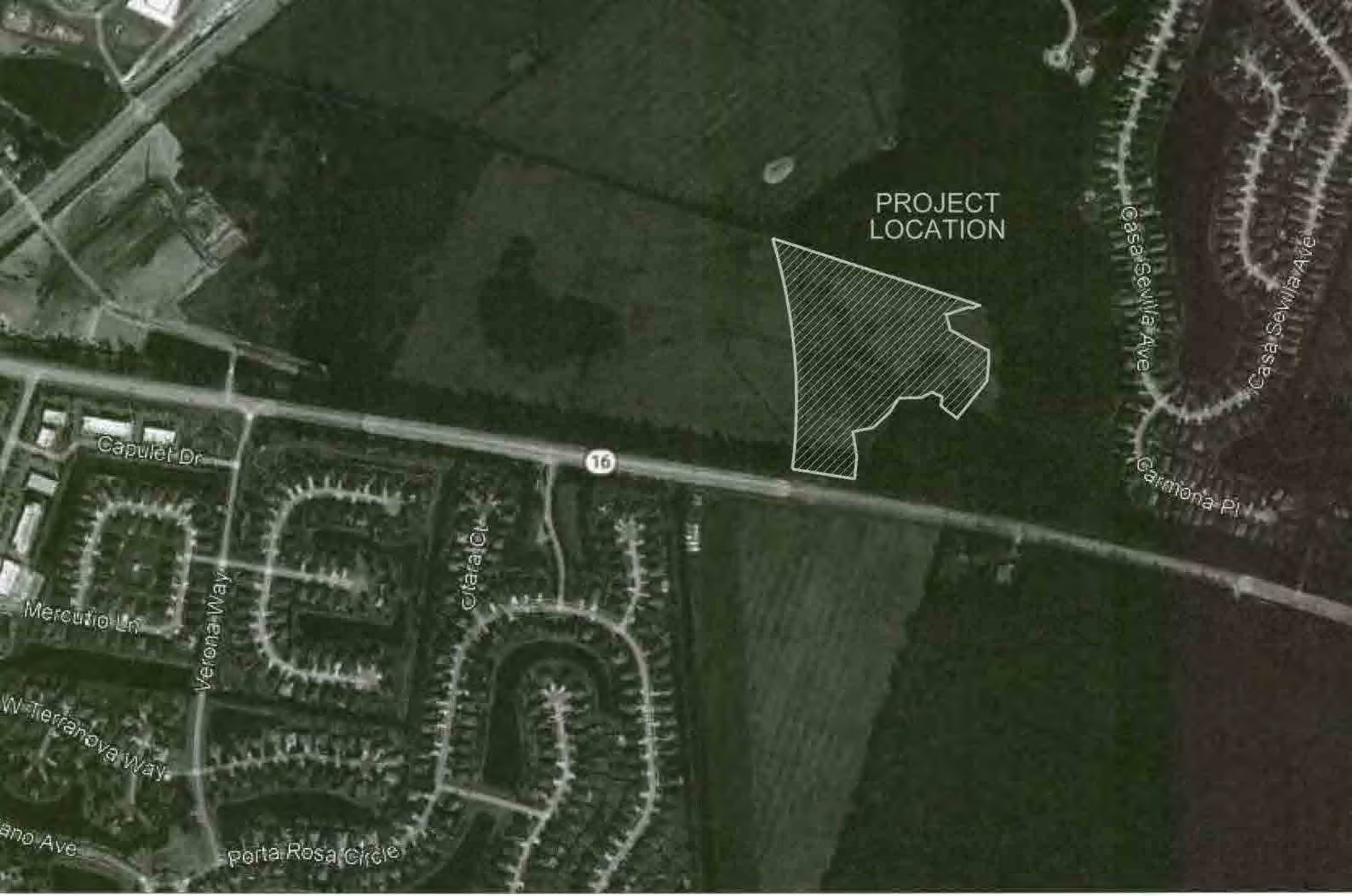
DRILLER: Danny Bryan **PIPE TYPE:**

ROD	DEPTH	STATION #
20	2'2"	
40	7'4"	
60	11'0"	
80	14'0"	
100	17'8"	
120	20'2"	
140	21'0"	
160	22'6"	
180	23'1"	
200	24'6"	
220	24'7"	
240	24'2"	
260	25'4"	
280	27'1"	
300	26'7"	
320	24'5"	
340	19'11"	
360	17'0"	
380	13'2"	
400	10'11"	
420	9'9"	
440	6'4"	
460	4'4"	
480	2'3"	
500	1'10"	
520		
540		
560		
580		
600		
620		
640		
660		
680		
700		
720		

ROD	DEP
800	
820	
840	
860	
880	
900	
920	
940	
960	
980	
1000	
1020	
1040	
1060	
1080	
1100	
1120	
1140	
1160	
1180	
1200	
1220	
1240	
1260	
1280	
1300	
1320	
1340	
1360	
1380	
1400	
1420	
1440	
1460	
1480	
1500	

2023 NW Senior Living Green

As Built Drawings

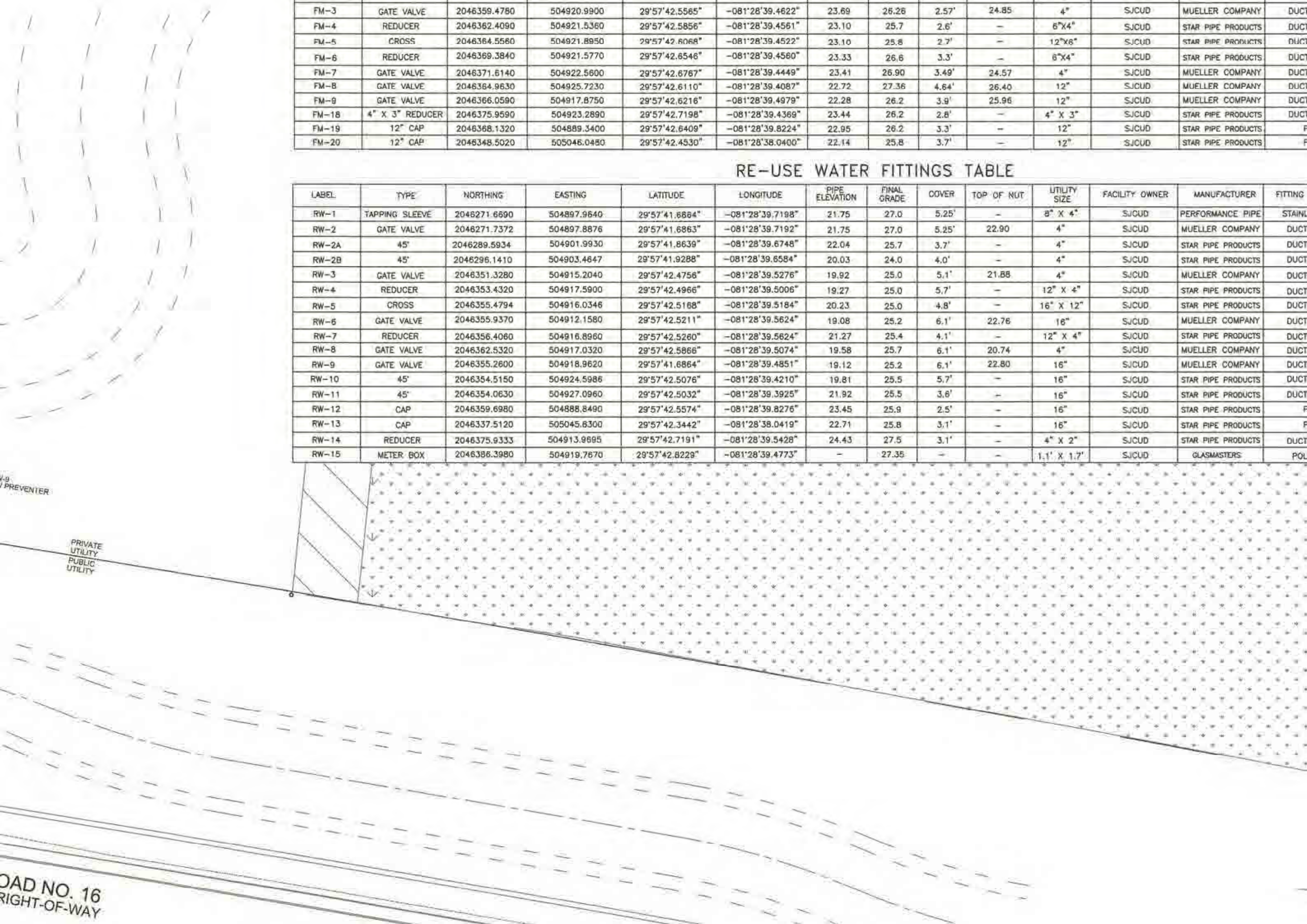


VICINITY MAP
NOT TO SCALE

FM-3	GATE VALVE	2046359.4780	504920.9900	29°57'42.5565"	-081°28'39.4622"	23.69	26.26	2.57'	24.85	4"	SJCUD	MUELLER COMPANY	DUCT
FM-4	REDUCER	2046362.4090	504921.5360	29°57'42.5856"	-081°28'39.4561"	23.10	25.7	2.6'	–	6"X4"	SJCUD	STAR PIPE PRODUCTS	DUCT
FM-5	CROSS	2046364.5560	504921.8950	29°57'42.6068"	-081°28'39.4522"	23.10	25.8	2.7'	–	12"X6"	SJCUD	STAR PIPE PRODUCTS	DUCT
FM-6	REDUCER	2046369.3840	504921.5770	29°57'42.6546"	-081°28'39.4560"	23.33	26.6	3.3'	–	6"X4"	SJCUD	STAR PIPE PRODUCTS	DUCT
FM-7	GATE VALVE	2046371.6140	504922.5600	29°57'42.6767"	-081°28'39.4449"	23.41	26.90	3.49'	24.57	4"	SJCUD	MUELLER COMPANY	DUCT
FM-8	GATE VALVE	2046364.9630	504925.7230	29°57'42.6110"	-081°28'39.4087"	22.72	27.36	4.64'	26.40	12"	SJCUD	MUELLER COMPANY	DUCT
FM-9	GATE VALVE	2046366.0590	504917.8750	29°57'42.6216"	-081°28'39.4979"	22.28	26.2	3.9'	25.96	12"	SJCUD	MUELLER COMPANY	DUCT
FM-18	4" X 3" REDUCER	2046375.9590	504923.2890	29°57'42.7198"	-081°28'39.4369"	23.44	26.2	2.8'	–	4" X 3"	SJCUD	STAR PIPE PRODUCTS	DUCT
FM-19	12" CAP	2046368.1320	504889.3400	29°57'42.6409"	-081°28'39.8224"	22.95	26.2	3.3'	–	12"	SJCUD	STAR PIPE PRODUCTS	F
FM-20	12" CAP	2046348.5020	505046.0460	29°57'42.4530"	-081°28'38.0400"	22.14	25.8	3.7'	–	12"	SJCUD	STAR PIPE PRODUCTS	F

RE-USE WATER FITTINGS TABLE

LABEL	TYPE	NORTHING	EASTING	LATITUDE	LONGITUDE	PIPE ELEVATION	FINAL GRADE	COVER	TOP OF NUT	UTILITY SIZE	FACILITY OWNER	MANUFACTURER	FITTING
RW-1	TAPPING SLEEVE	2046271.6690	504897.9640	29°57'41.6864"	-081°28'39.7198"	21.75	27.0	5.25'	–	8" X 4"	SJCUD	PERFORMANCE PIPE	STAINL
RW-2	GATE VALVE	2046271.7372	504897.8876	29°57'41.6863"	-081°28'39.7192"	21.75	27.0	5.25'	22.90	4"	SJCUD	MUELLER COMPANY	DUCT
RW-2A	45°	2046289.5934	504901.9930	29°57'41.8639"	-081°28'39.6748"	22.04	25.7	3.7'	–	4"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-2B	45°	2046296.1410	504903.4647	29°57'41.9288"	-081°28'39.6584"	20.03	24.0	4.0'	–	4"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-3	GATE VALVE	2046351.3280	504915.2040	29°57'42.4756"	-081°28'39.5276"	19.92	25.0	5.1'	21.88	4"	SJCUD	MUELLER COMPANY	DUCT
RW-4	REDUCER	2046353.4320	504917.5900	29°57'42.4966"	-081°28'39.5006"	19.27	25.0	5.7'	–	12" X 4"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-5	CROSS	2046355.4794	504916.0346	29°57'42.5168"	-081°28'39.5184"	20.23	25.0	4.8'	–	16" X 12"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-6	GATE VALVE	2046355.9370	504912.1580	29°57'42.5211"	-081°28'39.5624"	19.08	25.2	6.1'	22.76	16"	SJCUD	MUELLER COMPANY	DUCT
RW-7	REDUCER	2046356.4060	504916.8960	29°57'42.5260"	-081°28'39.5624"	21.27	25.4	4.1'	–	12" X 4"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-8	GATE VALVE	2046362.5320	504917.0320	29°57'42.5866"	-081°28'39.5074"	19.58	25.7	6.1'	20.74	4"	SJCUD	MUELLER COMPANY	DUCT
RW-9	GATE VALVE	2046355.2600	504918.9620	29°57'41.6864"	-081°28'39.4851"	19.12	25.2	6.1'	22.80	16"	SJCUD	MUELLER COMPANY	DUCT
RW-10	45°	2046354.5150	504924.5986	29°57'42.5076"	-081°28'39.4210"	19.81	25.5	5.7'	–	16"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-11	45°	2046354.0630	504927.0960	29°57'42.5032"	-081°28'39.3925"	21.92	25.5	3.6'	–	16"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-12	CAP	2046359.6980	504888.8490	29°57'42.5574"	-081°28'39.8276"	23.45	25.9	2.5'	–	16"	SJCUD	STAR PIPE PRODUCTS	F
RW-13	CAP	2046337.5120	505045.6300	29°57'42.3442"	-081°28'38.0419"	22.71	25.8	3.1'	–	16"	SJCUD	STAR PIPE PRODUCTS	F
RW-14	REDUCER	2046375.9333	504913.9695	29°57'42.7191"	-081°28'39.5428"	24.43	27.5	3.1'	–	4" X 2"	SJCUD	STAR PIPE PRODUCTS	DUCT
RW-15	METER BOX	2046386.3980	504919.7670	29°57'42.8229"	-081°28'39.4773"	–	27.35	–	–	1.1' X 1.7'	SJCUD	GLASMASTERS	POL



GREASE TRAP
TOP=31.44
INV. N=28.30 (AB)
INV. S=28.40 (AB)
W-20
4" GATE VALVE
W-23
2.5" BFP
W-19
8"X4" TEE
W-24
4"X2.5" REDUCER
FP-10
8" GATE VALVE
W-25
4" GATE VALVE
8" PVC (DR-18) PRIVATE FIRE MAIN
FP-24
8" 11.25°
FP-23
8" 11.25°
SJCUD EASEMENT
W-21
METER BOX
W-31A
8" GATE VALVE
W-30
4" 90°
W-31
4" 90°
3" PVC (DR18) PRIVATE WATER MAIN
W-35
3" 11.25°
W-34
3" 11.25°
W-33
3" 11.25°
SS-1
8" PVC PIPE WITH CAP
W-29
3" BFP
W-28
4"X3" REDUCER
W-27
4" GATE VALVE
W-26
4" TEE
FP-14
FIRE HYDRANT
FP-15
8" GATE VALVE
FP-22
8" X 8" TEE
FP-21
8" X 6" REDUCER
FP-21A
8" X 6" REDUCER
FP-19
FIRE DEPT CONNECTION
GREASE TRAP
TOP=31.00
3" PVC (DR-18) PRIVATE WATER MAIN
FP-16
6" 90°
FP-17
6" BFP
FP-18
6" TEE
6" PVC (DR-18) PRIVATE FIRE MAIN
FP-20
6" 90°
W-32
3" 90°

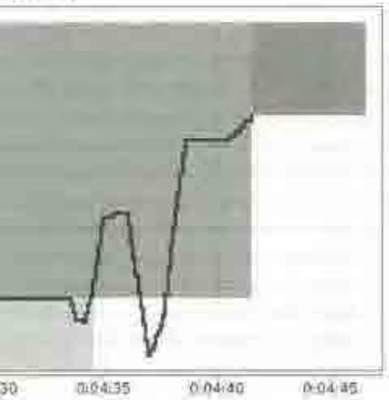
TYPE	NORTHING	EASTING	LATITUDE	LONGITUDE	PIPE ELEVATION	FINAL GRADE	COVER	TOP OF NUT	UTILITY SIZE	FACILITY OWNER	MANUFACTURER	FITTING MATERIAL	LINING MATERIAL
TEE	2047114.2965	505019.6980	29°57'50.0325"	-081°28'38.3758"	26.49	29.5	3.6'	–	8"X8"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
TEE	2047121.9437	505129.7077	29°57'50.1127"	-081°28'37.1255"	27.10	31.1	4.0'	–	8"X4"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
E VALVE	2047120.5730	505130.1900	29°57'50.0991"	-081°28'37.1199"	26.66	30.96	4.30'	28.26	4"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
ER BOX	2047115.7530	505130.5285	29°57'50.0514"	-081°28'37.1156"	–	30.96	–	–	4.5'X4.5'	SJCUD	GLASMASTERS	FIBERGLASS	FIBERGLASS
SE BIB	2047197.4140	505076.7890	29°57'50.8575"	-081°28'37.7306"	–	30.57	–		1.5"	SJCUD	NORTH AMERICAN PIPE CORPORATION	PVC	PVC
TEE	2047094.3667	505079.1504	29°57'49.8376"	-081°28'37.6989"	27.53	31.0	3.5'	–	2.5'X2.5'X1.5"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
BFP	2047095.2720	505100.0860	29°57'49.8475"	-081°28'37.4610"	–	32.2	–	–	2.5"	SJCUD	ZURN WILKINS	CAST IRON	FUSION BONDED EPOXY
EDUCER	2047096.1309	505104.2176	29°57'49.8561"	-081°28'37.4140"	28.17	32.2	4.0'	–	4" X 2.5"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
E VALVE	2047097.2100	505107.9300	29°57'49.8670"	-081°28'37.3719"	28.14	32.2	4.1'	29.30	4"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
TEE	2047097.1500	505109.9620	29°57'49.8665"	-081°28'37.3488"	28.14	31.7	3.6'	–	4"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
E VALVE	2047096.2300	505113.7800	29°57'49.8575"	-081°28'37.3053"	28.43	31.7	3.3'	29.59	4"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
EDUCER	2047097.0100	505117.1751	29°57'49.8654"	-081°28'37.2668"	28.16	31.7	3.5'	–	4" X 3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
EDUCER	2047096.8960	505120.3680	29°57'49.8644"	-081°28'37.2305"	–	31.3	–	–	2.5"	SJCUD	ZURN WILKINS	CAST IRON	FUSION BONDED EPOXY
90°	2047104.8980	505110.8330	29°57'49.9432"	-081°28'37.3392"	28.16	31.0	2.8'	–	4"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
90°	2047104.5490	505129.5850	29°57'49.9405"	-081°28'37.1260"	28.23	31.2	3.0'	–	4"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
E VALVE	2047110.6996	505130.5655	29°57'49.9321"	-081°28'37.1175"	28.17	31.2	3.0'	29.67	8"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
90°	2047022.1161	505498.4199	29°57'49.1397"	-081°28'32.9290"	29.11	32.2	3.1'	–	3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
11.25°	2047088.7730	505368.0090	29°57'49.7941"	-081°28'34.4148"	28.34	31.3	3.0'	–	3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
11.25°	2047101.9950	505329.5620	29°57'49.9234"	-081°28'34.8525"	27.74	31.1	3.4'	–	3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
11.25°	2047107.0750	505234.7820	29°57'49.9698"	-081°28'35.9302"	26.67	30.5	3.8'	–	3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT

FIRE PROTECTION FITTINGS TABLE

TYPE	NORTHING	EASTING	LATITUDE	LONGITUDE	PIPE ELEVATION	FINAL GRADE	COVER	TOP OF NUT	UTILITY SIZE	FACILITY OWNER	MANUFACTURER	FITTING MATERIAL	LINING MATERIAL
E VALVE	2046809.7590	504979.0280	29°57'47.0162"	-081°28'38.8237"	26.21	30.65	4.44'	27.71	6"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
22.5°	2046771.6480	505347.5370	29°57'46.6541"	-081°28'34.6325"	27.93	29.6	1.7'	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
E VALVE	2046760.8450	505460.0540	29°57'46.5518"	-081°28'33.3529"	24.94	29.8	4.9'	26.44	6"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
HYDRANT	2046760.9420	505463.5940	29°57'46.5529"	-081°28'33.3126"	–	32.9	–	–	6"	SJCUD	WATTS	DUCTILE IRON	SILICONE
E VALVE	2047126.9630	504971.5520	29°57'50.1559"	-081°28'38.9237"	27.59	31.04	3.45	28.75	6"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
HYDRANT	2047129.5290	504971.4530	29°57'50.1812"	-081°28'38.9250"	–	33.4	–	–	6"	SJCUD	WATTS	DUCTILE IRON	SILICONE
E VALVE	2047108.5920	505019.1980	29°57'49.9760"	-081°28'38.3812"	26.49	29.5	3.0'	28.24	8"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
OW PREVENTER	2047103.3130	505020.9830	29°57'49.9238"	-081°28'38.3606"	–	34.1	–	–	8"	SJCUD	MUELLER COMPANY	CAST IRON	FUSION BONDED EPOXY
EPT. CONNECT	2047133.2590	505047.7980	29°57'50.2213"	-081°28'38.0572"	–	30.5	–	–	6"	SJCUD	WATTS	DUCTILE IRON	SILICONE
E VALVE	2047122.6280	505132.4900	29°57'50.1196"	-081°28'37.0939"	27.74	31.11	3.37'	29.24	8"	SJCUD	MUELLER COMPANY	DUCTILE IRON	FUSION BONDED EPOXY
90°	2047091.7030	2220,26.6010	29°57'49.8089"	-081°28'38.3574"	26.60	31.5	4.9'	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
TEE	2047092.3250	505049.6370	29°57'49.8162"	-081°28'38.0344"	26.23	31.5	5.3	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
90°	2047094.1260	505076.4600	29°57'49.8351"	-081°28'37.7295"	27.62	30.0	2.4	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
RE DEPT. NNECTION	2047092.6010	505450.1000	29°57'49.8354"	-081°28'33.4817"	–	29.0	–	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
TE VALVE	2047089.9930	505448.8910	29°57'49.8095"	-081°28'33.4953"	27.74	29.1	1.4'	28.90	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
90°	2047060.2810	505434.2850	29°57'49.5148"	-081°28'33.6510"	29.13	31.6	2.5'	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
BFP	2047057.2210	505438.6190	29°57'49.4847"	-081°28'33.6105"	–	31.7	–	–	6"	SJCUD	ZURN WILKINS	CAST IRON	FUSION BONDED EPOXY
TEE	2047050.0180	505453.1570	29°57'49.4140"	-081°28'33.4449"	28.81	31.2	2.4'	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
RE DEPT. NNECTION	2047082.2340	505467.6420	29°57'49.7335"	-081°28'33.2818"	–	30.2	–	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
90°	2047023.0640	505508.4980	29°57'49.1495"	-081°28'32.8145"	29.11	32.2	3.1'	–	6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
DUCER	2047076.2010	505442.0210	29°57'49.6727"	-081°28'33.5728"	28.44	30.3	1.9'	–	8"X6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
DUCER	2047085.2892	505446.8561	29°57'49.7628"	-081°28'33.5182"	28.34	30.3	2.0'	–	8"X6"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
TEE	2047078.5380	505442.3010	29°57'49.6959"	-081°28'33.5697"	28.34	30.3	2.0'	–	8"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
11.25°	2047132.3910	505325.3820	29°57'50.2241"	-081°28'34.9014"	27.07	30.7	3.6'	–	8"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
11.25°	2047133.0970	505314.6800	29°57'50.2307"	-081°28'35.0231"	27.29	30.5	3.2'	–	8"	SJCUD	STAR PIPE PRODUCTS	PVC	PVC
OF 6" PVC	2046828.3230	505102.2793	29°57'47.2051"	-081°28'37.4234"	27.93	31.3	3.4'	–	8"	SJCUD	STAR PIPE PRODUCTS	PVC	PVC
OF 6" PVC	2046796.7160	505294.2001	29°57'46.9001"	-081°28'35.2401"	28.27	29.6	1.3'	–	8"	SJCUD	STAR PIPE PRODUCTS	PVC	PVC

FORCE MAIN FITTINGS TABLE

TYPE	NORTHING	EASTING	LATITUDE	LONGITUDE	PIPE ELEVATION	FINAL GRADE	COVER	TOP OF NUT	UTILITY SIZE	FACILITY OWNER	MANUFACTURER	FITTING MATERIAL	LINING MATERIAL
45°	2047146.4130	504912.6080	29°57'50.3460"	-081°28'39.5946"	24.65	28.7	4.1'	–	3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
45°	2047204.1760	504972.1780	29°57'50.9202"	-081°28'38.9203"	25.06	27.7	2.6'	–	3"	SJCUD	STAR PIPE PRODUCTS	DUCTILE IRON	ASPHALT SEAL COAT
P 3" PVC	2047044.7980	504913.8970	29°57'49.3401"	-081°28'39.5753"	24.79	30.2	5.4'	–	3"	SJCUD	STAR PIPE PRODUCTS	PVC	PVC



Pressures

Drag Pressure	65 psi		
		Interfacial	Gauge
Bead Up		60 psi	228 psi
Heat Soak		0 psi	65 psi
Fuse		60 psi	228 psi
Cool		0 psi	0 psi

Fusion Specification

Fusion Type	Butt Fusion
Fusion Specification	ASTM F2620
Bead Time	0 seconds
Bead Size	1/4"
Heat/Soak Time	272 seconds
Fuse Time	665 seconds
Open/Close Time	15 seconds
Cool Time	0 seconds

	Minimum	Maximum
Bead Up	227 psi	309 psi
Heat Soak	0 psi	65 psi
Fuse	227 psi	309 psi
Cool	0 psi	0 psi

External Heater Temperatures

	Side A	Side B
One	425 °F	425 °F
Two	425 °F	425 °F
Three	425 °F	425 °F
Four	425 °F	425 °F

GPS Location

	Latitude	Longitude
2021-09-09 18:16:07 UTC	29°57'47.6"N	81°28'38.9"W

Logged Data Summary

Number of Data Points	82
Total Fusion Time	1095 seconds
Maximum Recorded Pressure	228 psi

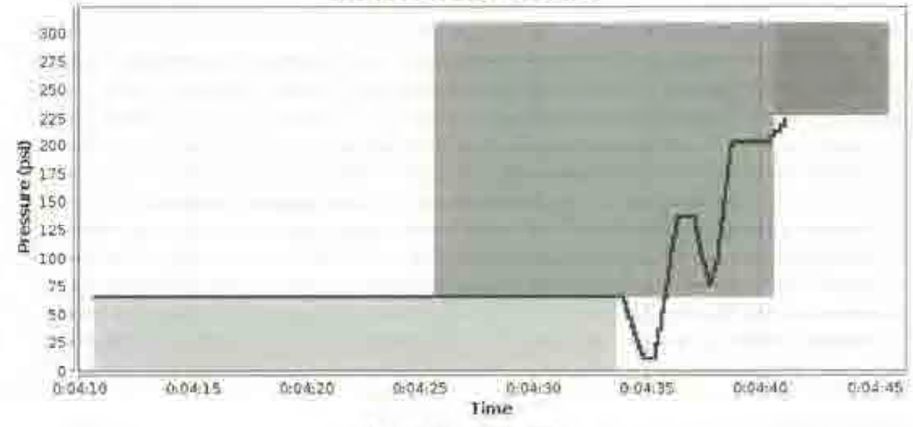
Device Information

DataLogger Serial Number	MDL5-0751
Calibration Date	2020-11-19
Firmware Version	v5.1
Software Version	v1.1.2
Software Product Name	DL5m

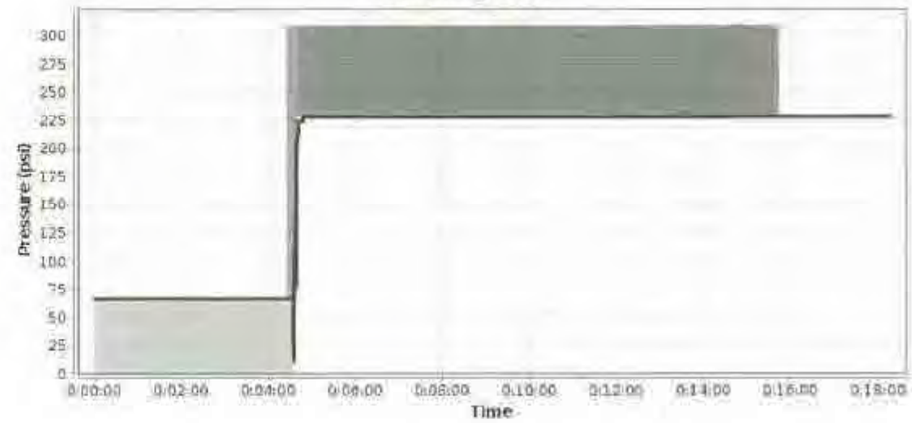
Data Source

File Name	DL5 2010-10-26 12-54-06 Joint 2 Job 8946 by bj.DL5
Upload Time	2021-09-10 11:13:07 GMT

Heater Removal Plot



Summary Plot



Notes

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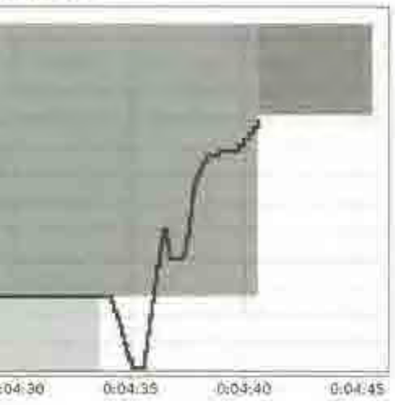


lot

Pressures

Drag Pressure	67 psi		
		Interfacial	Gauge
Bead Up		60 psi	230 psi
Heat Soak		0 psi	67 psi
Fuse		60 psi	230 psi
Cool		0 psi	0 psi

Fusion Specification

Fusion Type	Butt Fusion
Fusion Specification	ASTM F2620
Bead Time	0 seconds
Bead Size	1/4"
Heat/Soak Time	272 seconds
Fuse Time	665 seconds
Open/Close Time	15 seconds
Cool Time	0 seconds

	Minimum	Maximum
Bead Up	229 psi	311 psi
Heat Soak	0 psi	67 psi
Fuse	229 psi	311 psi
Cool	0 psi	0 psi

External Heater Temperatures

	Side A	Side B
One	429 °F	429 °F
Two	427 °F	429 °F
Three	429 °F	427 °F
Four	427 °F	429 °F

GPS Location

	Latitude	Longitude
2021-09-09 20:03:50 UTC	29°57'47.5"N	81°28'38.9"W

Logged Data Summary

Number of Data Points	126
Total Fusion Time	1083 seconds
Maximum Recorded Pressure	227 psi

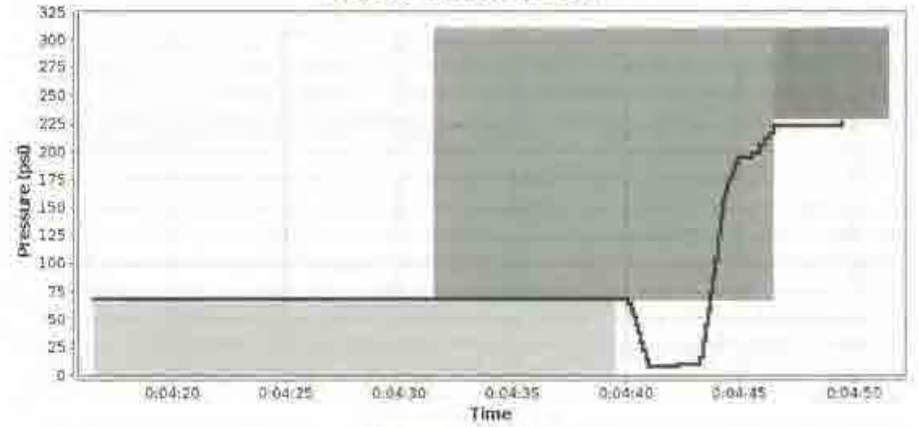
Device Information

DataLogger Serial Number	MDL5-0751
Calibration Date	2020-11-19
Firmware Version	v5.1
Software Version	v1.1.2
Software Product Name	DL5m

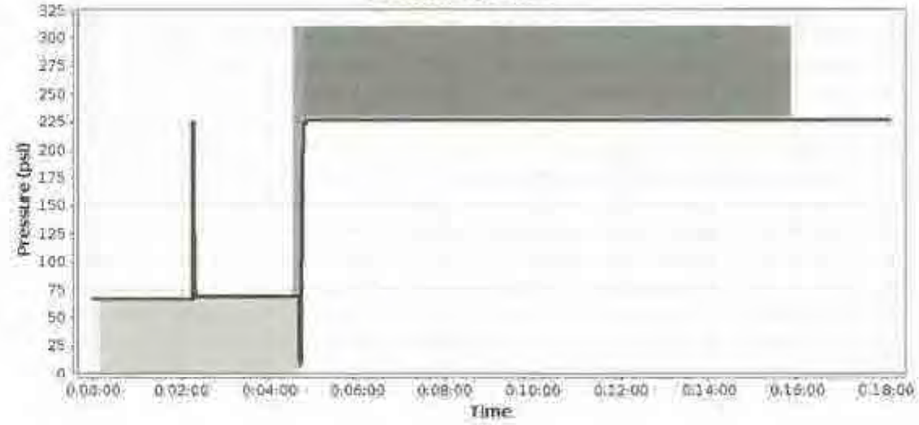
Data Source

File Name	DL5 2010-10-26 14-41-48 Joint 6 Job 8946 by bj.DL5
Upload Time	2021-09-10 11:13:10 GMT

Heater Removal Plot



Summary Plot



Notes

pull head

Pressures

Drag Pressure	67 psi	
	Interfacial	Gauge
Bead Up	60 psi	230 psi
Heat Soak	0 psi	67 psi
Fuse	60 psi	230 psi
Cool	0 psi	0 psi

Fusion Specification

Fusion Type	Butt Fusion
Fusion Specification	ASTM F2620
Bead Time	0 seconds
Bead Size	1/4"
Heat/Soak Time	272 seconds
Fuse Time	665 seconds
Open/Close Time	15 seconds
Cool Time	0 seconds

	Minimum	Maximum
Bead Up	229 psi	311 psi
Heat Soak	0 psi	67 psi
Fuse	229 psi	311 psi
Cool	0 psi	0 psi

External Heater Temperatures

	Side A	Side B
One	433 °F	431 °F
Two	433 °F	431 °F
Three	431 °F	425 °F
Four	429 °F	429 °F

GPS Location

	Latitude	Longitude
2021-09-09 20:32:45 UTC	29°57'47.5"N	81°28'38.9"W

Logged Data Summary

Number of Data Points	68
Total Fusion Time	1081 seconds
Maximum Recorded Pressure	225 psi

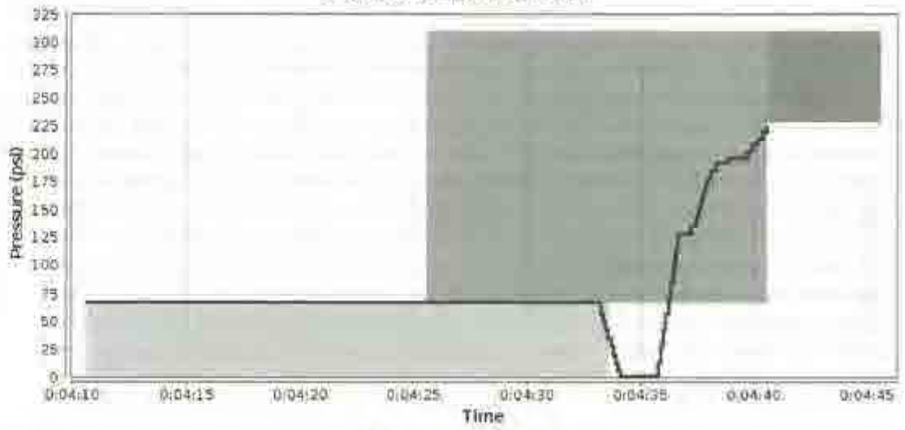
Device Information

DataLogger Serial Number	MDL5-0751
Calibration Date	2020-11-19
Firmware Version	v5.1
Software Version	v1.1.2
Software Product Name	DL5m

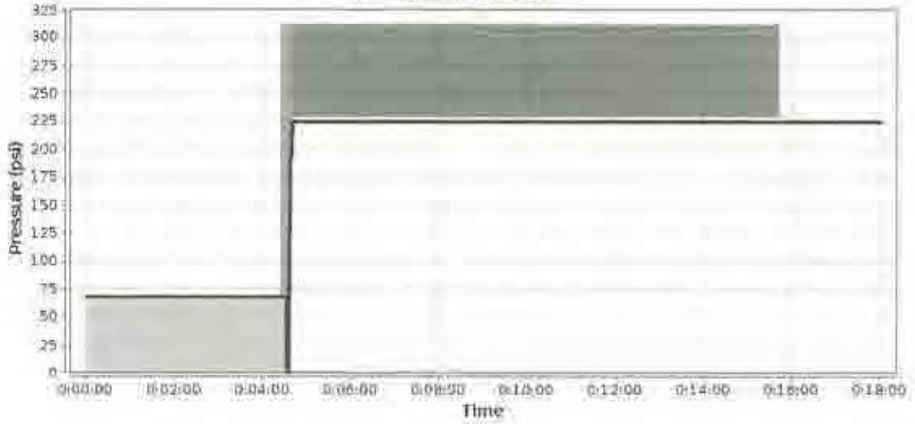
Data Source

File Name	DL5 2010-10-26 15-10-43 Joint 7 Job 8946 by bj.DL5
Upload Time	2021-09-10 11:13:10 GMT

Heater Removal Plot



Summary Plot



Notes

pull head

NW CR 2209 RM FM International Grand Parkway State Road 16

As Built Drawings

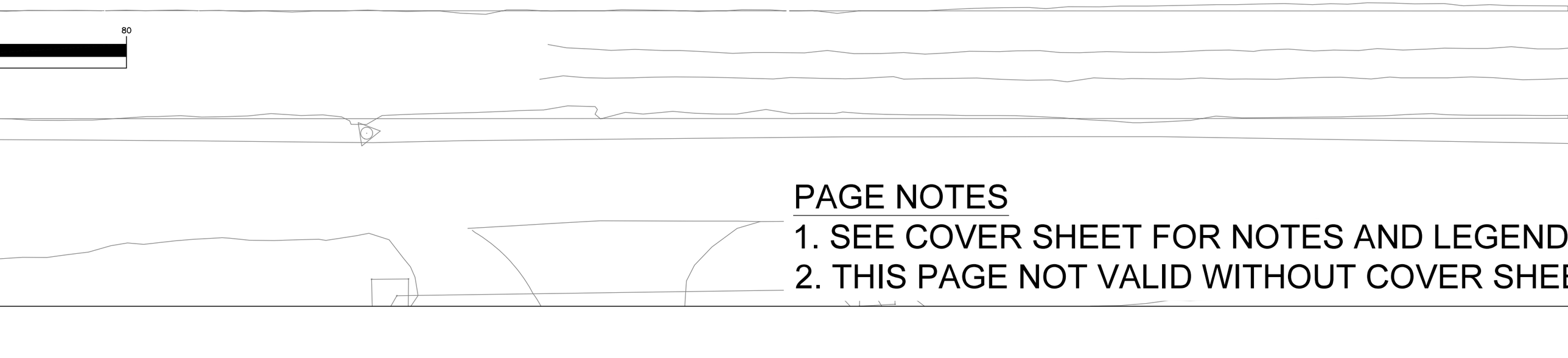
VICINITY MAP

N.T.S.

S–BUILT) AS

LEGEND

± – DENOTES PLUS OR MINUS
AB – DENOTES AS–BUILT
AL – DENOTES ARC LENGTH
ALUM – DENOTES ALUMINUM
BM – DENOTES BENCHMARK
BOC – DENOTES BACK OF CURB
℄ – DENOTES CENTERLINE
C# – DENOTES CURVE NUMBER



PAGE NOTES

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FORCE MA

AS-BUIL

TRAINED.

RANSITION FROM 20" HDPE
BOLTED TO TEE

20" DR-11 HDPE FORCE MAIN
TOP PIPE ELEV. 21.75
FINISHED GRADE=25.60

FM

8+00.00

FM

FM

9+00.00

FM

20" DR-11 HDPE FORCE MAIN
TOP PIPE ELEV. -0.88
FINISHED GRADE=25.90

FM

10+00.00

FM

20" DR-11 HDPE FORCE MAIN
TOP PIPE ELEV. 21.93
FINISHED GRADE=25.60

80

PAGE NOTES

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HDD ENTRY POINT
STA 8+52.45
EL 26.078

ARV

20" HDPE DR 11 FM

20" DR 11 HDPE 45° BEND
ELEV=22.46

HDD 21.85

PC = 9+11.64

20" DR 11 HDPE 45° BEND
ELEV=22.46

RADIUS = 800'

FM

11+00.00

FM

20" DR-11 HDPE FORCE MAIN
TOP PIPE ELEV. -5.39
FINISHED GRADE=30.23

80

RWM

RWM

W

2' MINIMUM
SEPARATION

SADDLE TAP AND
2" POLYETHYLENE TUBING TO ARV
STA 14+10.35
TOP EL 22.10

SADDLE TAP AND
2" POLYETHYLENE TUBING TO MARV
STA 14+03.85
TOP EL 22.10

TRANSITION FROM 24" DR 11 HDPE
TO 20" DR 25 C900 PVC USING
24"X20" MJ REDUCER.
EXTEND PVC TO TIE INTO TO
EXISTING 20" VALVE

PC = 13+60.65

RADIUS = 900'

20" DR 11 HDPE 11.25° BEND

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20" D

FORCE
AS-BU

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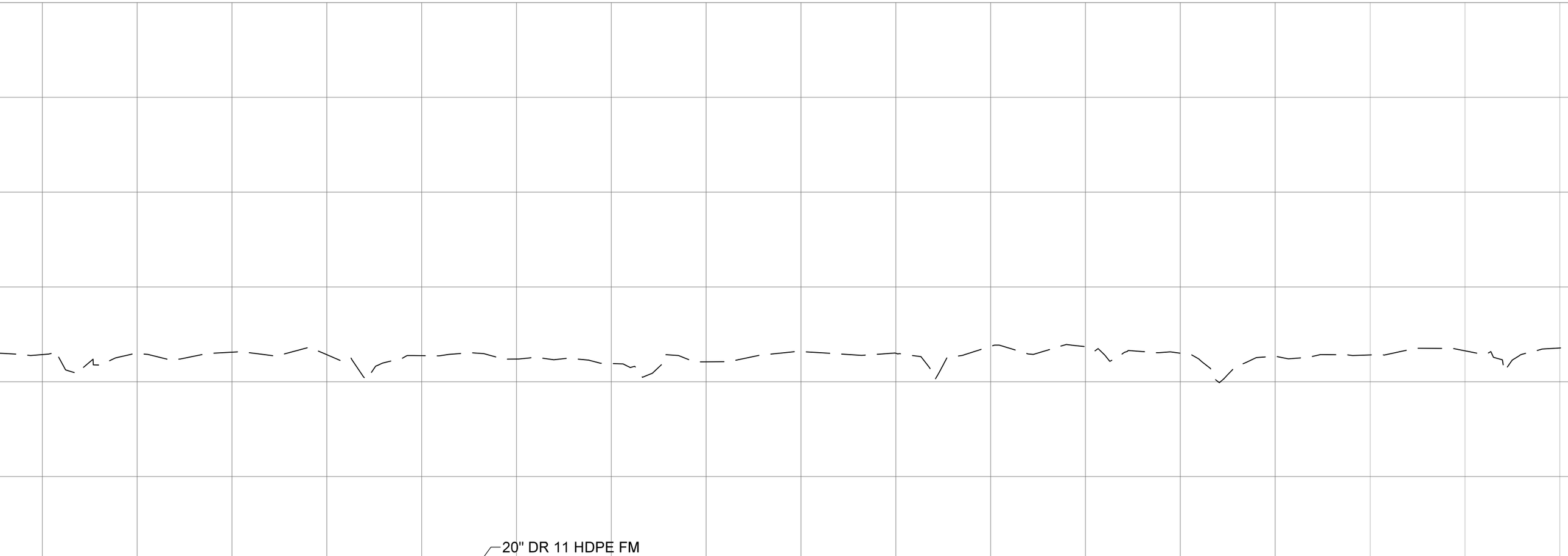

IAIN

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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

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MAIN
ILT

PAGE NOTES

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20" DR 11 HDPE FM

RWM RWM RWM RWM RWM RWM

MAIN

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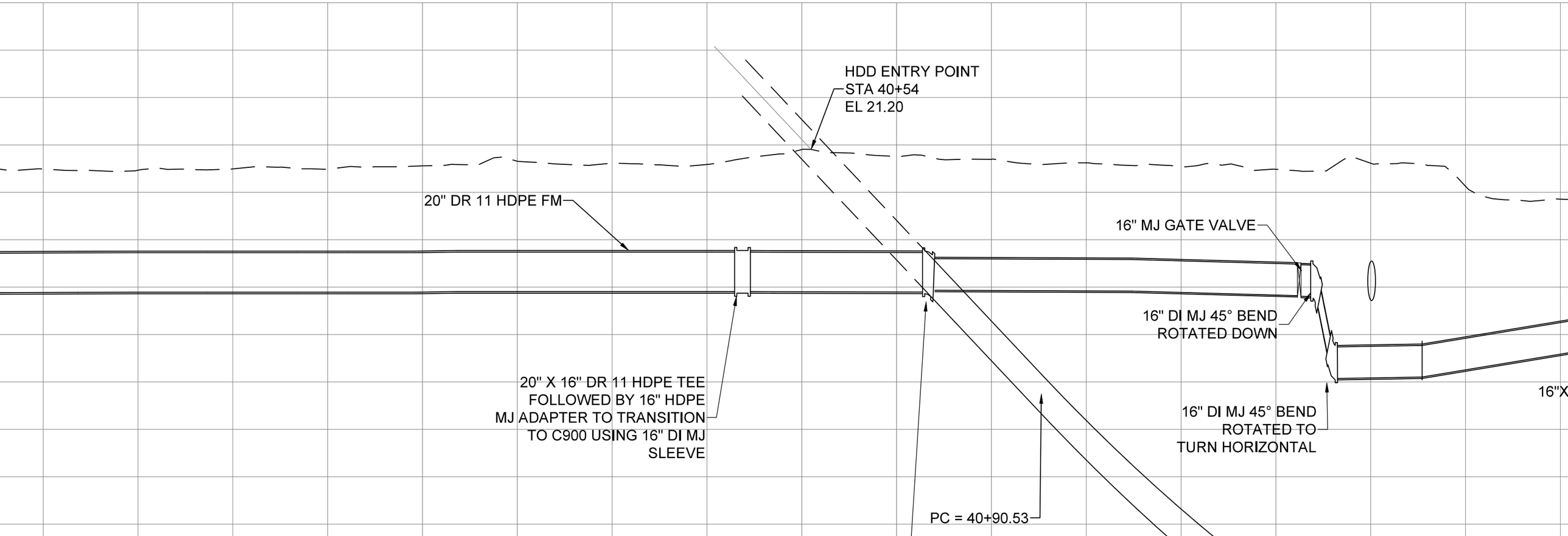

GRAPHIC SCALE

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(IN FEET)
1 inch = 20 ft.

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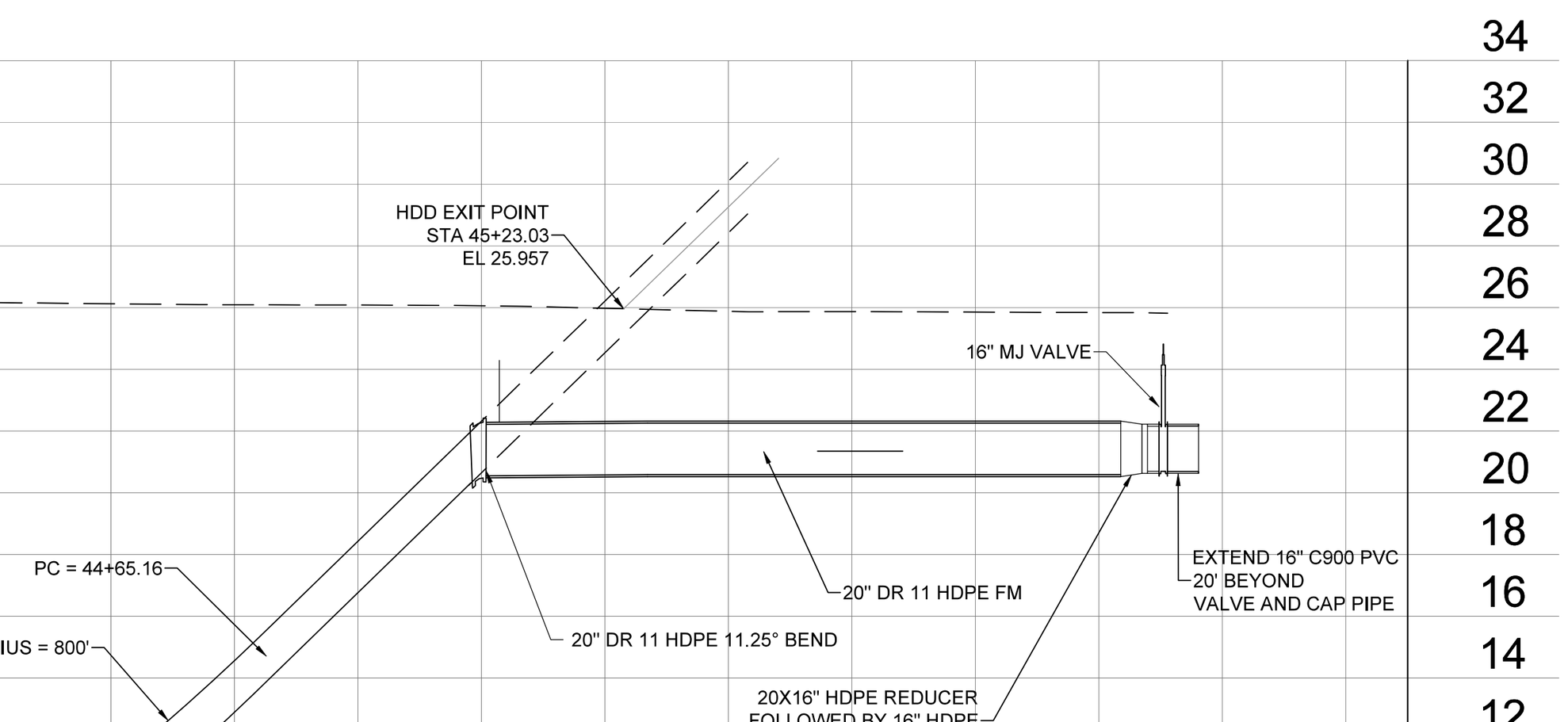


RWM RWM RWM RWM RWM RWM

B3

B4

SAN

MH

FORCE M

AS-BU

T

OHU

RW

ATE VALVE

RWM

FO

EXISTING 12"
C900 PVC FM

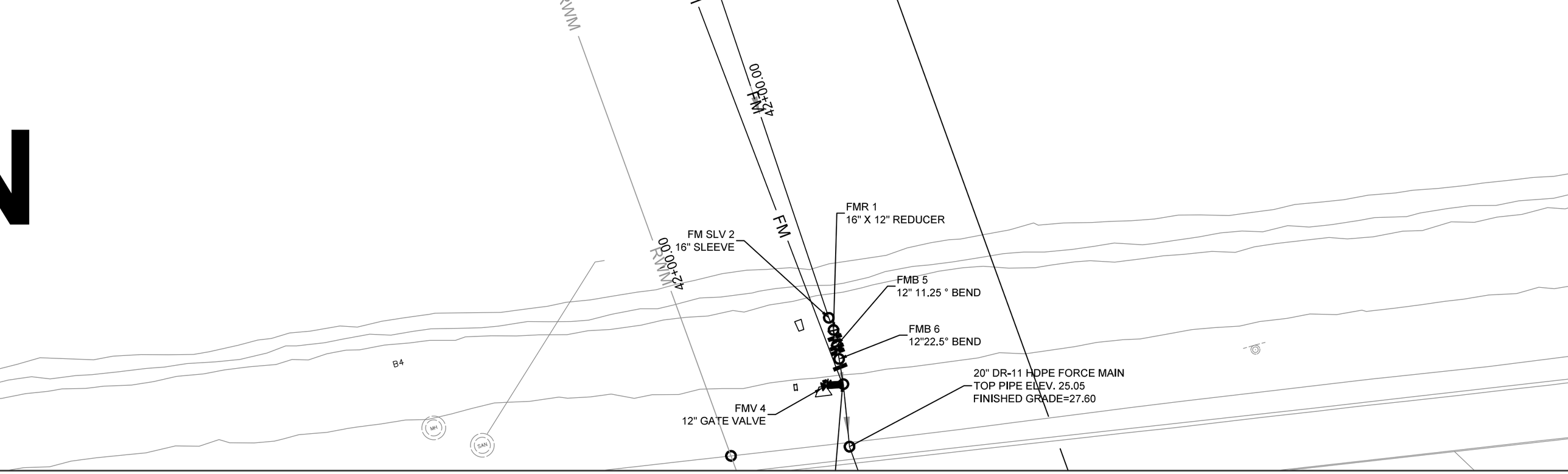
EL

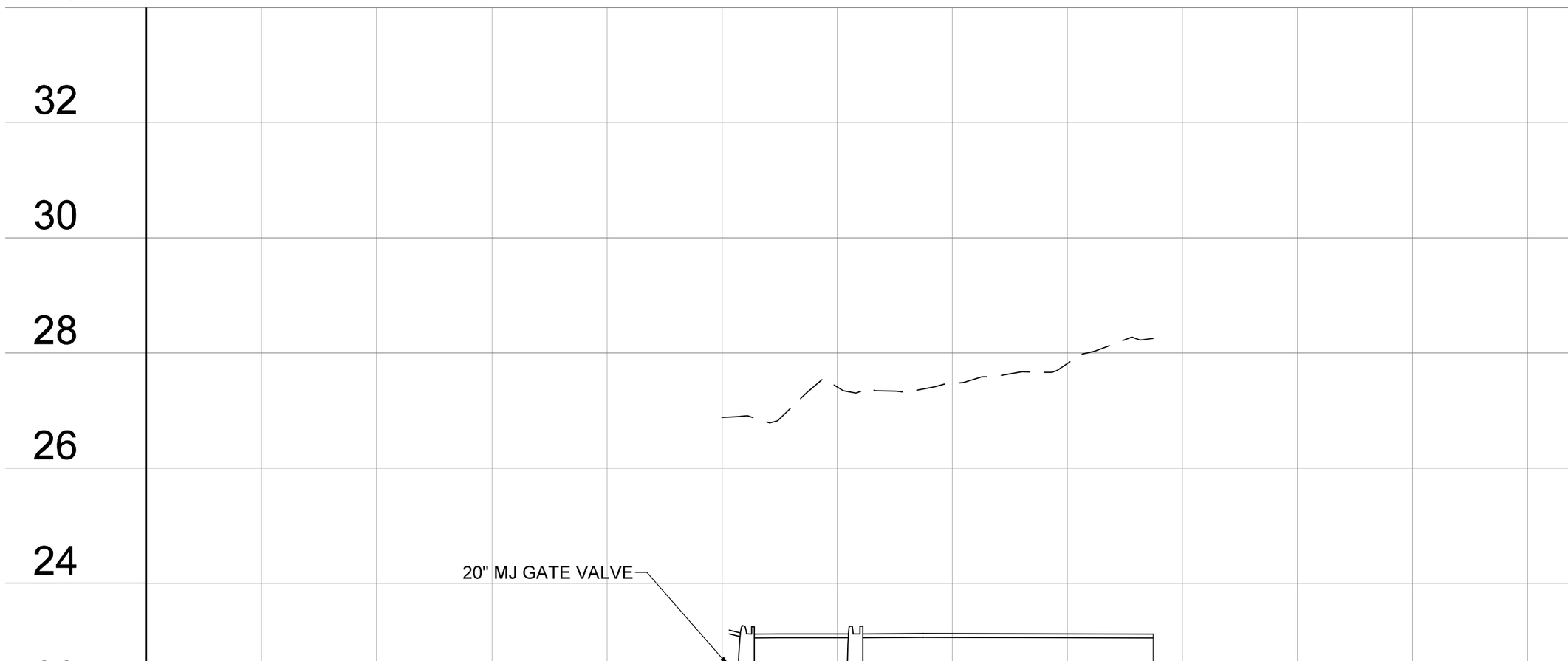
UNKNOWN

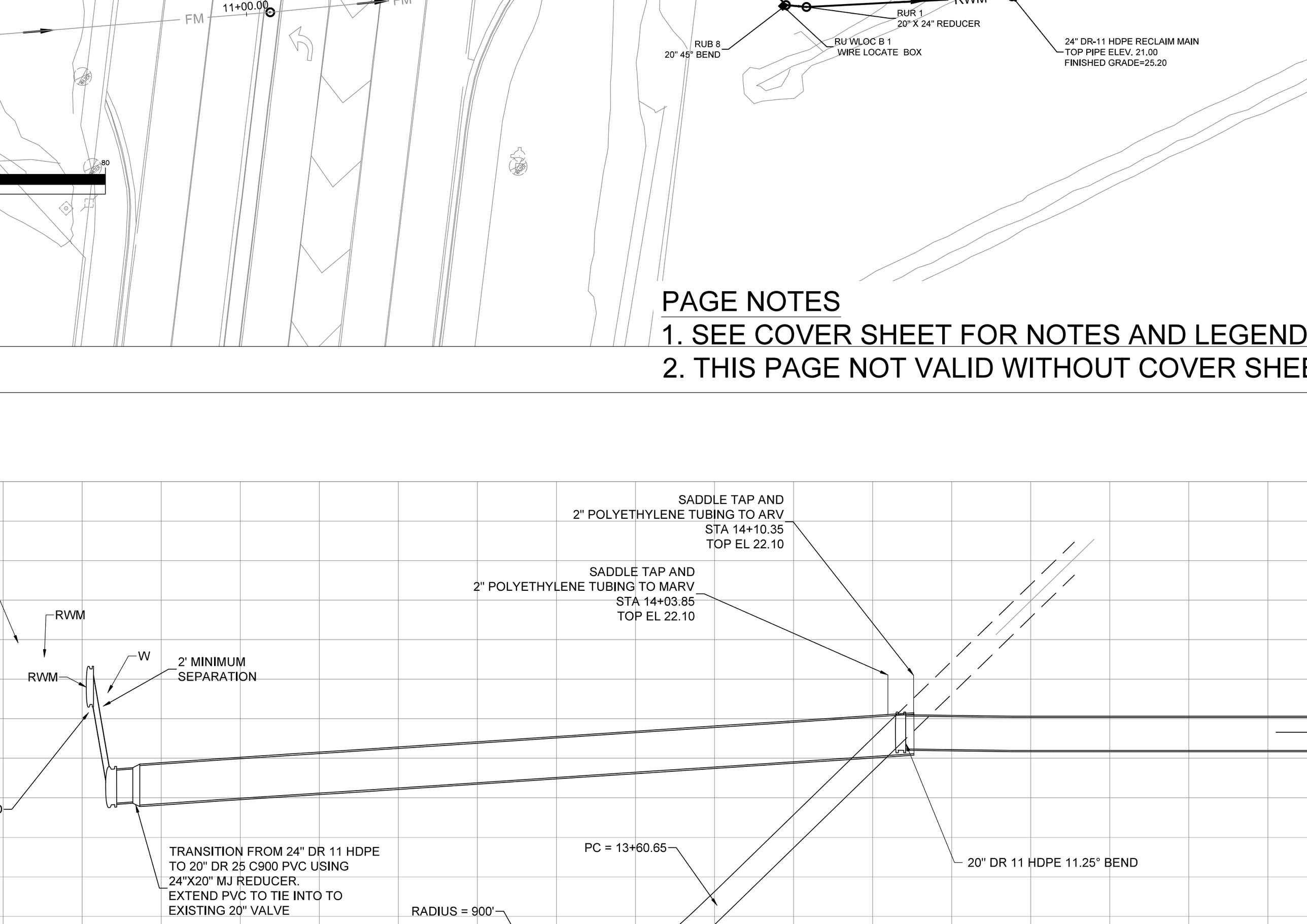
GAS

30.33'

PC = STA 44+65.16


FM
42+00.00
RWM
FM SLV 2
16" SLEEVE
FMR 1
16" X 12" REDUCER
FMB 5
12" 11.25 ° BEND
FMB 6
12"22.5° BEND
FMV 4
12" GATE VALVE
20" DR-11 HDPE FORCE MAIN
TOP PIPE ELEV. 25.05
FINISHED GRADE=27.60
B4
MH
SAN


34
32
30
28
26
24
20" MJ GATE VALVE



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24" DR-11 HDPE RECLAIM MAIN
TOP PIPE ELEV. 21.94
FINISHED GRADE=26.54

24" DR-11 HDPE RECLAIM MAIN
TOP PIPE ELEV. 22.04
FINISHED GRADE=26.10

24" DR-11 HDPE RECLAIM MAIN
TOP PIPE ELEV. 22.23
FINISHED GRADE=26.50

80

PAGE NOTES

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20" D

FINISHED GRADE=26.40

FINISHED GRADE=26.30

WIRE LOCATE BOX

80

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20" DR 11 HDPE FM

IM

LT

24" DR-11 HDPE RECLAIM
TOP PIPE ELEV.
FINISHED GRADE=

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PAGE NOTES

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TOP PIPE ELEV. 22.95
FINISHED GRADE=27.10

AIM

ILT

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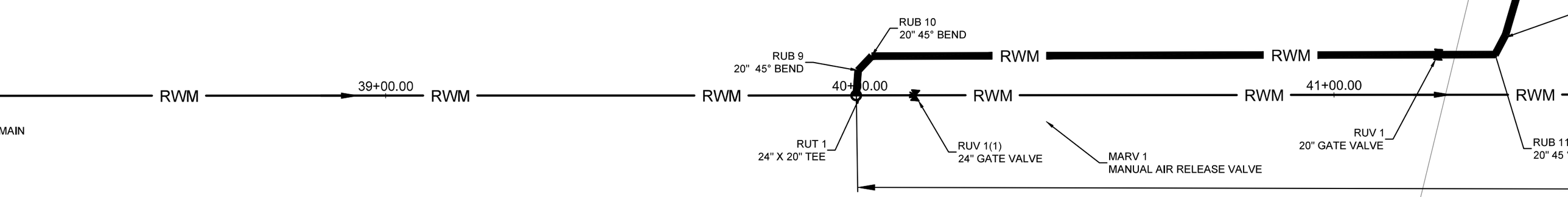
20" DR 11 HDPE FM



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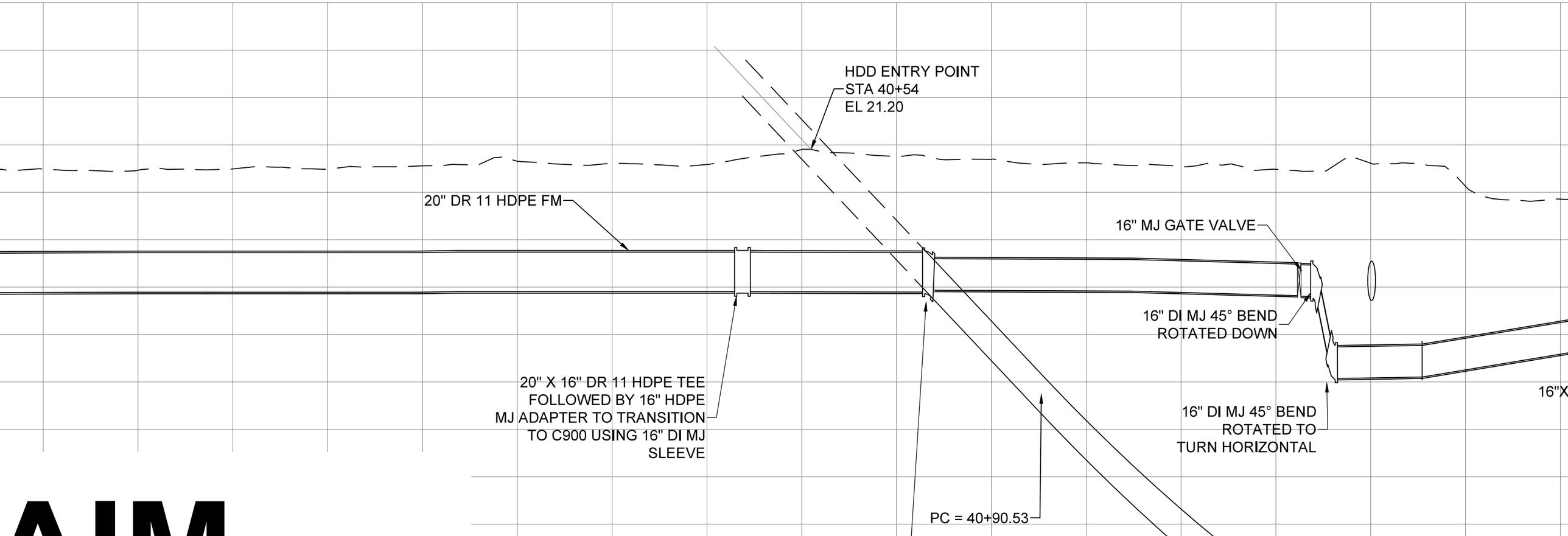
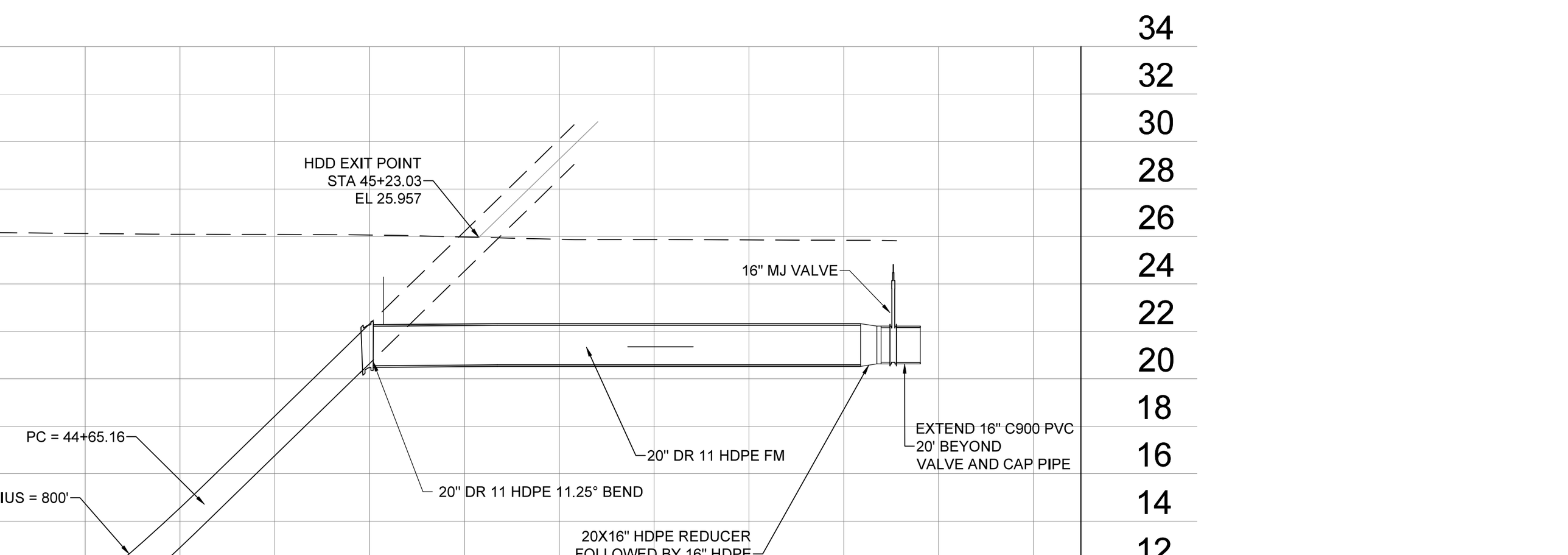


PE ELEV. 2.90
GRADE=0.00

RUC 1
20" CAP

RUV 2
20" GATE VALVE



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RWM

RUB 11
20" 45 ° BEND

BORE # 1
11/30/2023
511 LF OF
24" HDPE RWM

RWM

24" DR-11 HDPE RECLAIM MAIN
TOP PIPE ELEV. -4.33
FINISHED GRADE=28.25

RWM

RWM

BORE # 1
11/30/2023
511 LF OF
24" HDPE RWM

RWM

24" DR-11 HDPE RECLAIM MAIN
TOP PIPE ELEV. 2.90
FINISHED GRADE=0.00

RWM

B4

T

RECLA

AS-BU

OHU

RW

ATE VALVE

RWM

FO

EXISTING 12"
C900 PVC FM

EL

UNKNOWN

GAS

30.33'

PC = STA 44+65.16

RUB 11
20" 45 ° BEND

RUB 12
20" 22.5° BEND

42+00.00 FM

BORE # 1
11/30/2023
511 LF OF
24" HDPE RWM

42+06.06 RWM

FM

B4

24" DR-11 HDPE RECLAIM MAIN
TOP PIPE ELEV. -4.33
FINISHED GRADE=28.25

MH

SAN

PAGE NOTES

1. SEE COVER SHEET FOR NOTES AND LEGEND
2. THIS PAGE NOT VALID WITHOUT COVER SHEE

34

32

30

28

26

24

20" MJ GATE VALVE

	DI	EPOXY	21.20	26.70	5.50	504324.50	2046593.54	029.96246	-081.47952

E DETAIL TABLE

DEPTH TO NUT	MANUFACTURER	NORTHING LATITUDE	EASTING LONGITUDE	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)
-27.35		2046553.93	504322.17	029.58	-081.29
0.25		2046472.65	504342.67	029.58	-081.29
5.90		2046581.95	504325.59	029.58	-081.29
-25.33		2046070.14	504364.46	029.58	-081.29
4.60		2049642.65	502281.16	029.58	-081.29

T B LANDMARK CONSTRUCTIO
BORE PROFILE LOG

OWNER/GC: St. Johns County Utilities Department

SITE: CR2209 Corridor @ SR16

STATION START: 40+29

STATION END: 45+38

JOB NUMBER: 9317 **B**

JOB NAME: CR2209 FM & RWM Ext. from IGP to SR16

DRILLER: Freddy **PIPE**

ROD	DEPTH	STATION #
20	3'	
40	7'4"	
60	11'9"	
80	17'6"	
100	19'7"	
120	22'7"	
140	23'1"	
160	26'10"	
180	27'6"	
200	27'11"	
220	29'	
240	31'11"	
260	29'10"	
280	29'10"	
300	27'	
320	26'9"	
340	25'11"	
360	23'10"	
380	20'8"	
400	18'2"	
420	14'5"	
440	11'1"	
460	7'6"	
480	3'6"	

ROD
800
820
840
860
880
900
920
940
960
980
100
102
104
106
108
110
112
114
116
118
120
122
124
126

ICAL FITTING		DI	EPOXY	20.54	27.00	7.06	504371.57	2046571.69	029.96163	-081.47956
POLY		DI	EPOXY	23.81	27.10	3.29	504348.86	2046589.40	029.96245	-081.47944
ICAL FITTING		DI	EPOXY	22.63	27.60	4.97	504370.39	2046360.39	029.96182	-081.47937
ICAL FITTING		DI	EPOXY	19.76	24.20	4.44	502277.48	2049638.76	029.97081	-081.48602

CE MAIN VALVE DETAIL TABLE

P NUT	FINISH GRADE	DEPTH TO NUT	MANUFACTURER	NORTHING	EASTING	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)
2.40	25.50	3.10		2048681.44	503067.07	029.96818	-081.48351
1.87	26.87	5.00		2049184.55	502472.28	029.96956	-081.48540
2.40	25.70	3.30		2046079.92	504388.66	029.96105	-081.47931
3.14	25.50	2.36		2049663.53	502248.89	029.97088	-081.48611
5.85	27.10	1.25		2046589.62	504353.22	029.96245	-081.47942
5.52	27.00	1.48		2046480.55	504365.15	029.96215	-081.47939
4.21	27.60	3.39		2046361.00	504367.11	029.96182	-081.47938
3.40	25.70	2.30		2046072.96	504389.10	029.96103	-081.47930

LOCAT

NO.	LOCATE BOX SUBTYPE	NO
FM WLOC B 1	WIRE LOCATE BOX	
FM WLOC B 3	WIRE LOCATE BOX	
FM WLOC B 4	WIRE LOCATE BOX	
FM WLOC B 5	WIRE LOCATE BOX	
FM WLOC B 6	WIRE LOCATE BOX	
FM WLOC B 7	WIRE LOCATE BOX	

T B LANDMARK CONSTRUCTION, INC.
BORE PROFILE LOG

OWNER/GC: St. Johns County Utilities Department **DATE:** 12/4/2023
SITE: CR2209 Corridor @ SR16
STATION START: 40+42
STATION END: 45+63
JOB NUMBER: 9317 **BORE #:** 2
JOB NAME: CR2209 FM & RWM Ext. from IGP to SR16 **SIZE:** 20"
DRILLER: Freddy **PIPE TYPE:** HDPE FM

ROD	DEPTH	STATION #
20	3'	
40	6'10"	
60	10'8"	
80	14'9"	
100	18'2"	
120	21'9"	
140	23'8"	
160	25'9"	
180	27'7"	
200	28'4"	
220	26'9"	
240	31'4"	
260	31'	
280	31'	
300	29'11"	
320	26'4"	
340	26'	
360	26'2"	
380	23'9"	
400	20'11"	

ROD	DEPTH	STATION #
800		
820		
840		
860		
880		
900		
920		
940		
960		
980		
1000		
1020		
1040		
1060		
1080		
1100		
1120		
1140		
1160		
1180		

T B LANDMARK CONSTRUCTION, INC.
BORE PROFILE LOG

OWNER/GC: St. Johns County Utility Department **DATE:**
SITE: North Side of International Golf Parkway at St. Johns Parkway
STATION START: 8+52
STATION END: 14+91
JOB NUMBER: 9317 **BORE #:**
JOB NAME: CR2209 FM & RWM Ext from IGP to SR16 **SIZE:**
DRILLER: Freddy **PIPE TYPE:**

ROD	DEPTH	STATION #
20	3'	
40	6'4"	
60	11'1"	
80	14'7"	
100	18'4"	
120	21'6"	
140	24'10"	
160	26'10"	
180	28'7"	
200	29'6"	
220	31'	
240	33'9"	
260	33'6"	
280	33'11"	
300	35'	
320	34'1"	
340	35'10"	
360	33'11"	
380	30'4"	
400	29'10"	

ROD	
800	
820	
840	
860	
880	
900	
920	
940	
960	
980	
1000	
1020	
1040	
1060	
1080	
1100	
1120	
1140	
1160	
1180	

Proposed Reclaimed Water Main

Design Plans

P STMP DRMP LB #2648 78060 TBM3

VING AT THE GREENS

FOR UTILITY CONNECTIONS
IN THIS AREA
SEE DETAIL AA & SHEET 22

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

CONTROL POINT **S8**
SET 5/8" IR W/ CAP "DRMP INC. TRAV"
N = 2046280.95
E = 504480.06

STATE ROAD No. 16
(200' R/W)

℄ OF SURVEY

S 80° 53' 46" E

540+00 541+00 542+00 543+00

SEE TABLE OF INVERTS BELOW

#2	
#4	
#6	
#8	
#10	

MES

4" RCP
4" RCP
4" RCP
4" RCP
4" RCP

4' HOG WIRE

BACK FLOW PREVENTER

WATER

GAS

TECO PEOPLES GAS

SOUTHERN BELL

B/D

T/D

EOI

EP

BFOC(B)
BE(B)
S(B)
NPW(B)
W(B)
G(B)
(G)S
(G)W
(G)M

00

553+00

554+00

555+00

£ OF SURVEY

CL1

STATE ROAD No. 16

(200' R/W)

CURVE CL1
PI STA. = 561+22.13
DELTA = 09°16'00"
D = 00°20'00"
T = 1393.04'
L = 2780.00'
R = 17188.73'
PC STA. = 547+29.09
PT STA. = 575+09.10

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

INV. ELEV. = 23.61'

565+00

566+00

567+00

£ OF SURVEY

CL1

STATE ROAD No. 16
(200' R/W)

CURVE CL1
PI STA. = 561+22.13
DELTA = 09°16'00"
D = 00°20'00"
T = 1393.04'
L = 2780.00'
R = 17188.73'
PC STA. = 547+29.09
PT STA. = 575+09.10

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

12" WOOD WITH UG

CATCH BASIN
TOP=27.82'

INV. ELEV. = 24.12'

35' TIMBERED, CLEARED, & GRUBBED AREA

GENERAL LOCATION OF
12" WATER SERVICE

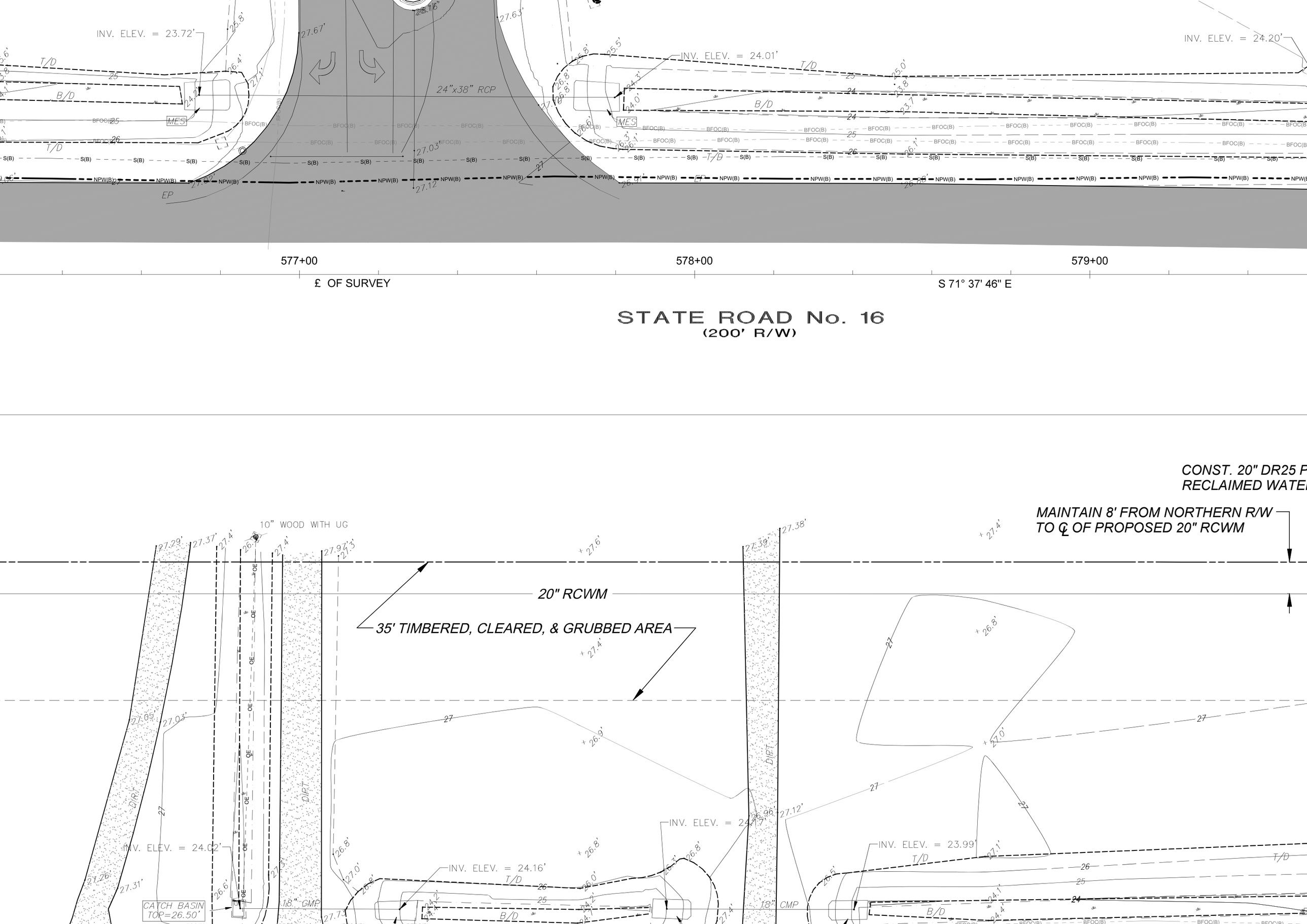
GENERAL LOCATION OF
2" RCWM

18"X30" RCP

MES

INV. ELEV. = 24.02'

30" MHS



STATE ROAD No. 16
(200' R/W)

INV. ELEV. = 23.93'

INV. ELEV. = 22.79'

INV. ELEV. = 22.80'

589+00

590+00

591+00

£ OF SURVEY

CL2

STATE ROAD No. 16
(200' R/W)

CURVE CL2
PI STA. = 596+11.01
DELTA = 23°43'51"
D = 01°15'00"
T = 963.04'
L = 1898.47'
R = 4583.66'
PC STA. = 586+47.97
PT STA. = 605+46.43

DIR ONLY

12" WOOD

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

INV. ELEV. = 23.64'

INV. ELEV. = 23.41'

18" CMP

24" RCP

24" RCP

601+00

602+00

603+00

£ OF SURVEY

CL2

CURVE CL2
PI STA. = 596+11.01
DELTA = 23°43'51"
D = 01°15'00"
T = 963.04'
L = 1898.47'
R = 4583.66'
PC STA. = 586+47.97
PT STA. = 605+46.43

STATE ROAD No. 16
(200' R/W)

602+45
73.0'

BENCHMARK: **BM7**
SET 5/8" X 30" IR W/ ALUM CAP STMP DRMP LB #2648 78060 TBM7
N = 2044389
E = 510204
ELEV. = 25.43' (NAVD88)

CONST. 20" DR25 PVC RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

INV. ELEV. = 20.77'

613+00 614+00 615+00 616+00

£ OF SURVEY

S 47° 53' 55" E

613+18

66.6'

BENCHMARK: BM8
SET 5/8" X 30" IR W/ ALUM CAP STMP DRMP LB #2648 78060 TBM8
N = 2043685
E = 511008
ELEV. = 21.63' (NAVD88)

STATE ROAD No. 16
(200' R/W)

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

24" HDD FROM STA. 614+40 TO STA. 620+50

625+00 626+00 627+00 628+00

£ OF SURVEY

S 47° 53' 55" E

CURVE
PI STA.
DELTA
D =
T =
L = 2
R =
PC STA.
PT STA.

STATE ROAD No. 16
(200' R/W)

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

638+00

639+00

640+00

£ OF SURVEY

CL3

CURVE CL3
PI STA. = 640+03.54
DELTA = 10°55'00"
D = 00°30'00"
T = 1094.98'
L = 2183.34'
R = 11459.16'
PC STA. = 629+08.55
PT STA. = 650+91.89

CONTROL POINT **S21**
SET 5/8" IR W/ CAP "DRMP IN
N = 2041949.14
E = 513055.49

STATE ROAD No. 16
(200' R/W)

4040 S.R. 16

4000 S.R. 16

MAINTAIN 5' (MIN.) BETWEEN
RCWM & POWER POLE

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

INSTALL
(2) 22.5° BENDS

4" POST & RAIL

11" WOOD WITH UG

ASPHALT

METAL GATE

GATE KEYPAD

DIR ONLY

INV. ELEV. = 22.12'

INV. ELEV. = 22.52'

INV. ELEV. = 23.05'

INV. ELEV. = 21.82

24" CMP

18" CMP

MES

T/D

B/D

OE

DIP

CURVE CL3
PI STA. = 640+03.54
DELTA = 10°55'00"
D = 00°30'00"
T = 1094.98'
L = 2183.34'
R = 11459.16'
PC STA. = 629+08.55
PT STA. = 650+91.89

STATE ROAD No. 16
(200' R/W)

CONTROL POINT **S22**
SET 5/8" IR W/ CAP "DRMP INC. TRAV"
N = 2041342.50
E = 513961.50

PT STA. 650+91.89

650+00 651+00 652+00

£ OF SURVEY

S 58° 48' 55" E

DIR ONLY

T/D B/D

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

CONDUIT FOR FUTURE FOC

CONDUIT FOR FUTURE FOC

INV. ELEV. = 22.77'

24" CMP

MES

MES

CONDUIT FOR FUTURE FOC

662+00

663+00

664+00

£ OF SURVEY

S 58° 48' 55" E

STATE ROAD No. 16
(200' R/W)

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

SINGLE CASE B UNDER
EACH DITCH
(42" OF COVER MIN.)

35' TIMBERED, CLEARED, & GRUBBED AREA

SEE TABLE OF
INVERTS BELOW

#1 #3 #5

3EW

674+00

675+00

676+00

£ OF SURVEY

CL4

STATE ROAD No. 16
(200' R/W)

CONTROL POINT **S25**
SET 5/8" IR W/ CAP "DRMP INC. TRAV"
N = 2040109.14
E = 515938.989

CURVE CL4
PI STA. = 674+25.77
DELTA = 22°08'38"
D = 03°00'00"
T = 373.73'
L = 738.13'
R = 1909.86'
PC STA. = 670+52.04
PT STA. = 677+90.17

BENCH
SET 5/
N = 20
E = 51
ELEV.

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

METAL GATE
BROKEN
WOOD

MES

S 44° 24' 48" E

686+00 687+00 688+00 689+00

£ OF SURVEY

S 36° 40' 17" E

686+53 61.0'

BENCHMARK: **BM13**
SET NL W/ DISK STMP DRMP BENCHMARK TBM13
N = 2039130
E = 516668
ELEV. = 26.92' (NAVD88)

STATE ROAD No. 16
(200' R/W)

CONST. 20" DR25 PVC RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

8+00 699+00 700+00 701+00

£ OF SURVEY

S 36° 40' 17" E

STATE ROAD No. 16
(200' R/W)

CONTROL POINT **S28**
SET 5/8" IR W/ CAP "DRMP INC. TRAV"
N = 2038152.89
E = 517427.52

PROTECT OAKS

14" PINE

21" OAK

13" OAK

17" OAK

35' TIMBERED, CLEARED, & GRUBBED AREA

20" RCWM

CASE "B" UNDER FM

18' (TYP.)

CONST. 20" DR25 PVC RECLAIMED WATER MAIN

24" HDD UNDER DRIVEWAY

CALVARY CHURCH & ACADEMY

11" MAPLE

11" OAK

17" OAK

APPROXIMATE LOCATION OF 4" PVC FM

18" OAK

20" MAPLE

7" OAK

11" MAPLE

13" MAPLE

10" MAPLE

14" MAPLE

24" RCP DIR ONLY

INV. ELEV. = 24.50'

INV. ELEV. = 24.12'

INV. ELEV. = 24.14'

24" CMP

24" CMP

36" MHS

36" MH

T/D

B/D

EP

MES

SCHOOL ZONE SIGNAL

PC STA. 712+34.37

711+00

712+00

713+00

£ OF SURVEY

S 36° 40' 17" E

CL5

STATE ROAD No. 16
(200' R/W)

CONTROL POINT **S30**
SET 5/8" IR W/ CAP "DRMP INC. TRAV"
N = 2037065.94
E = 518243.40

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

4' METAL
SWING GAT

INV. ELEV. = 24.69'

MES

723+00

724+00

725+00

£ OF SURVEY

CL5

FOR UTILITY CONNECTIONS
IN THIS AREA
SEE DETAIL EE & SHEET 22

STATE ROAD No. 16
(200' R/W)

CURVE CL5
PI STA. = 722+11.00
DELTA = 19°20'48"
D = 01°00'00"
T = 976.63'
L = 1934.67'
R = 5729.58'
PC STA. = 712+34.37
PT STA. = 731+69.04

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

CONST. 20" DR25 PVC
RECLAIMED WATER MAIN

MAINTAIN 8' FROM NORTHERN R/W
TO ℄ OF PROPOSED 20" RCWM

20" RCWM

35' TIMBERED, CLEARED, & GRUBBED AREA

735+00

736+00

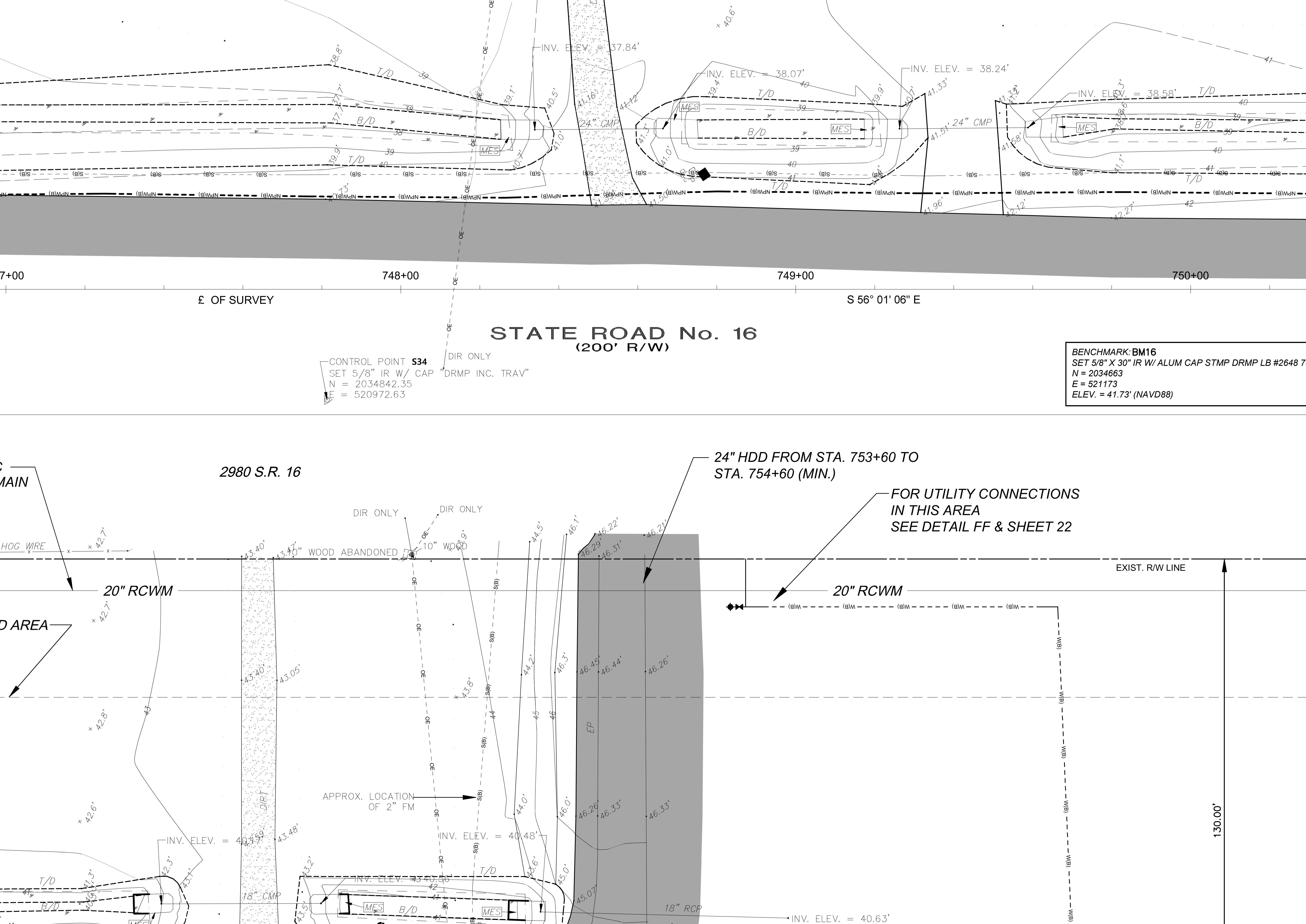
737+00

738+00

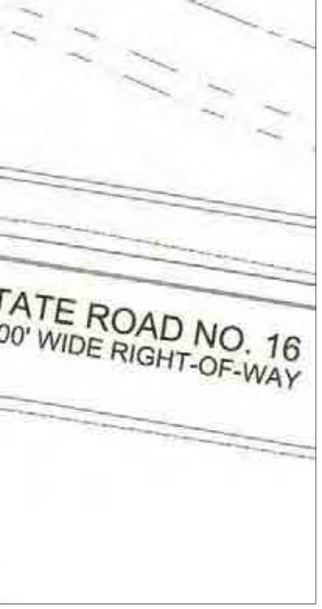
℄ OF SURVEY

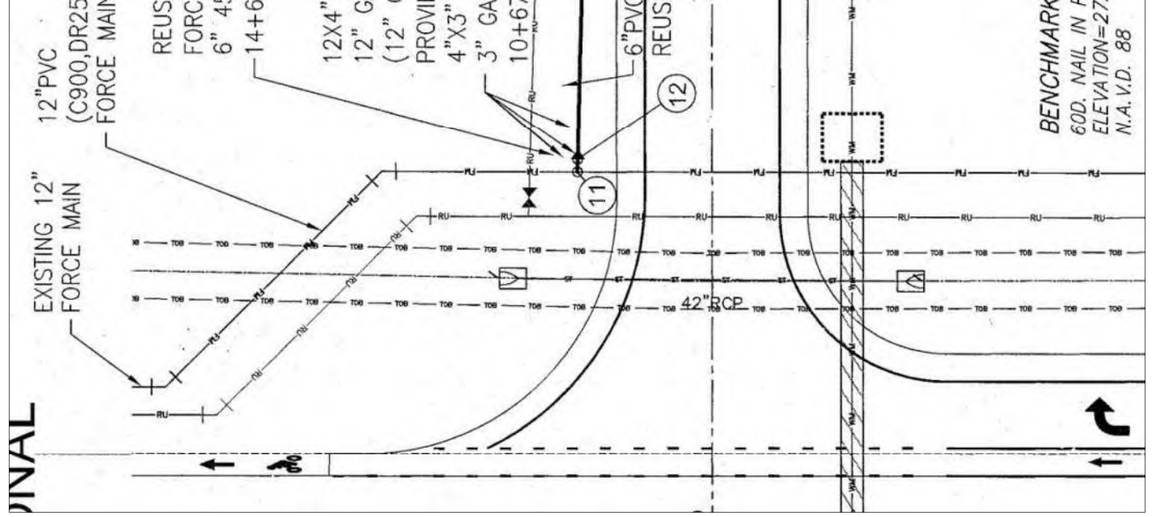
S 56° 01' 06" E

STATE ROAD No. 16
(200' R/W)



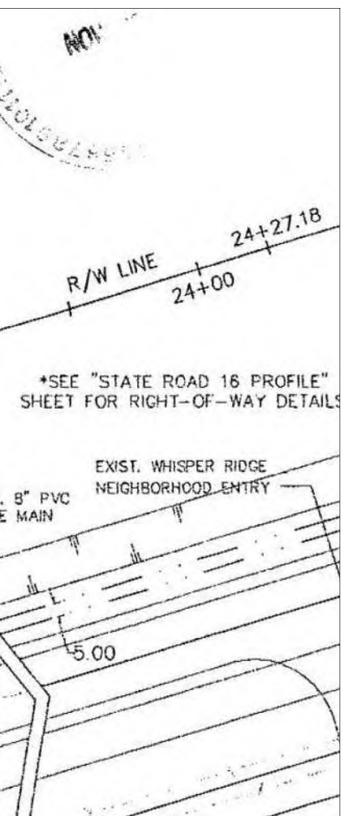
INV. ELEV. = 37.84'
INV. ELEV. = 38.07'
INV. ELEV. = 38.24'
INV. ELEV. = 38.58'
24" CMP
24" CMP
MES
T/D
B/D
748+00
749+00
750+00
£ OF SURVEY
S 56° 01' 06" E
STATE ROAD No. 16
(200' R/W)
CONTROL POINT S34
SET 5/8" IR W/ CAP "DRMP INC. TRAV"
N = 2034842.35
E = 520972.63
DIR ONLY
BENCHMARK: BM16
SET 5/8" X 30" IR W/ ALUM CAP STMP DRMP LB #2648 7
N = 2034663
E = 521173
ELEV. = 41.73' (NAVD88)
2980 S.R. 16
24" HDD FROM STA. 753+60 TO
STA. 754+60 (MIN.)
FOR UTILITY CONNECTIONS
IN THIS AREA
SEE DETAIL FF & SHEET 22
MAIN
D AREA
HOG WIRE
10" WOOD ABANDONED
10" WOOD
DIR ONLY
DIR ONLY
20" RCWM
20" RCWM
EXIST. R/W LINE
APPROX. LOCATION
OF 2" FM
INV. ELEV. = 40.59'
INV. ELEV. = 40.48'
INV. ELEV. = 43 40.56'
INV. ELEV. = 40.63'
18" CMP
18" RCP
DIRT
EP
130.00'

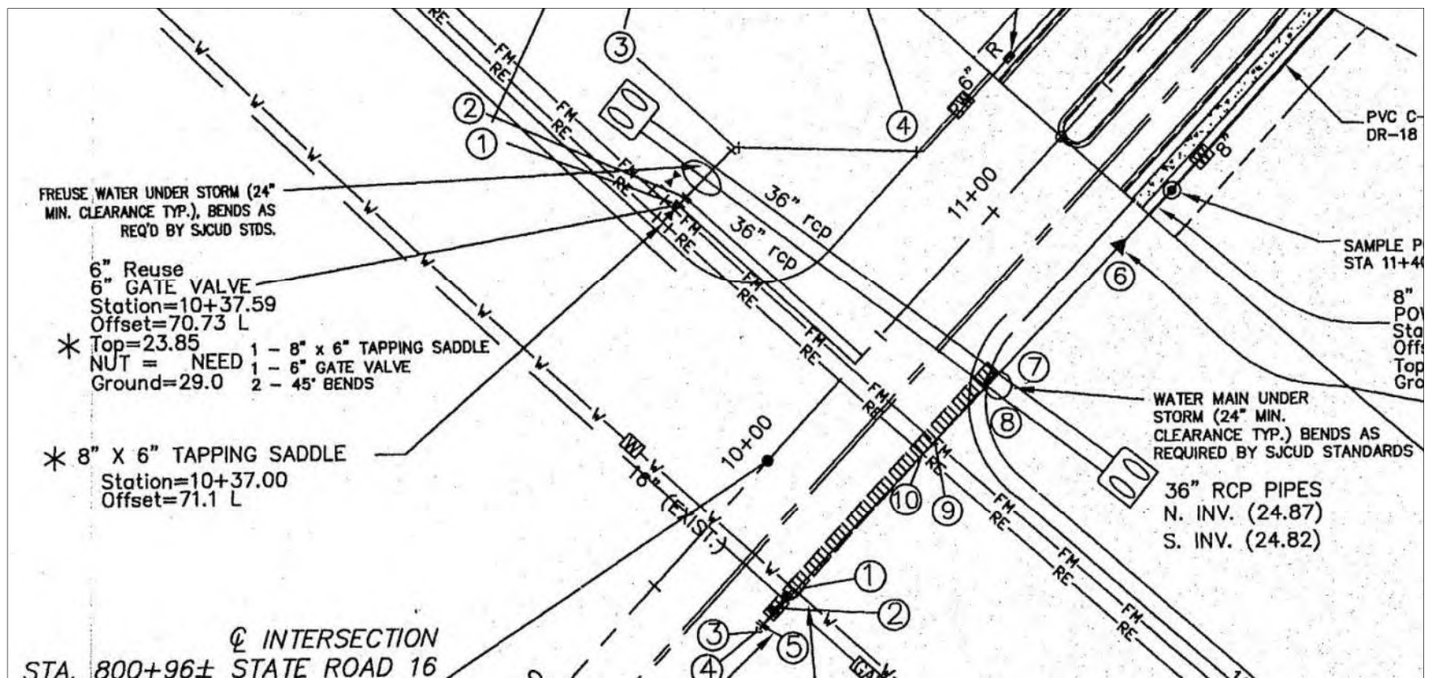


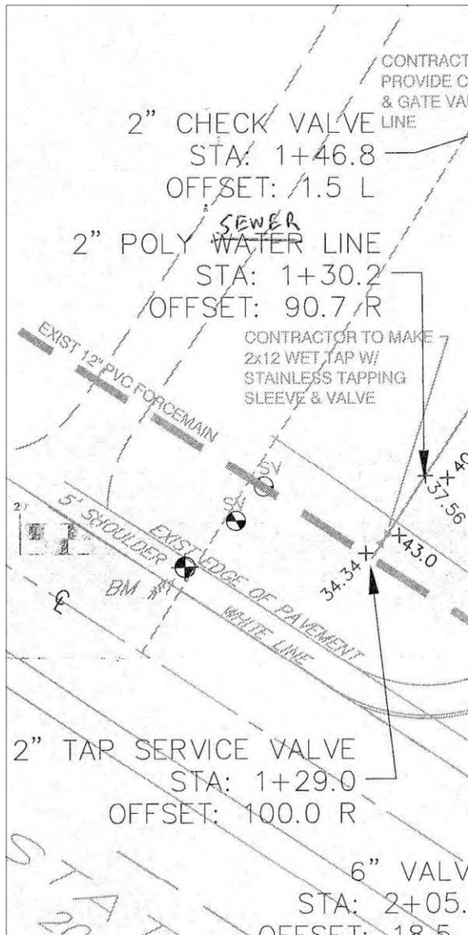


DETAIL BB

N.T.S.







EXISTING 8" REUSE MAIN
TO BE ABANDONED IN PLACE

EXISTING STORM DRAIN
TO REMAIN IN PLACE

10+00

8" MJ 90° BEND
(45° FROM VERT.)
STA 284+84.91, 11.87' LT

8" MJ GATE VALVE
STA 284+94.91, 14.37' LT

285+00

286+00

287+00

STA 284+50

8" MJ 90° BEND
(45° FROM VERT.)
STA 284+94.91, 11.87' LT

S56°01'39"E 1118.79'

STATE ROAD 16
200' RIGHT-OF-WAY

N51°15'42"E 93.49'

TOP OF BANK

TOP OF BANK

RIGHT-OF-WAY LINE

FOUND 4"x4" CM
"LB#6824"

EXISTING GROUND

20" DR25 PVC RW

16"x8" MJ TEE

42" MIN.

8" MJ G.V. W/
BOX & COVER

PRIVATE DRIVEWAY

EXISTING 24" CMP
TO REMAIN IN PLACE

EXISTING 18" RCP
TO REMAIN IN PLACE

EXISTING 8" REUSE MAIN
TO BE ABANDONED IN PLACE

289+00 290+00 291+00 292+00

S56°01'39"E 1118.79'

STATE ROAD 16
200' RIGHT-OF-WAY

TOP OF BANK

RIGHT-OF-WAY LINE

DIRT
DRIVEWAY

PRIVATE
COMMERCIAL DRIVEWAY
(TADPOLE PREP)

EXISTING GROUND

20", 24"

16" 11.25° MJ BEND (VERT.)

16" PVC TO 20" HDPE
TRANSITION COUPLING

24", 20"

20"

16" 11.25° MJ BEND (VERT.)

20" HDPE TO 16" PVC
TRANSITION COUPLING

42" MIN.

20" DR25 PVC RW

EXISTING 8" REUSE MAIN
TO BE ABANDONED IN PLACE

EXISTING 18" CMP
TO REMAIN IN PLACE

EXISTING 18" CMP
TO REMAIN IN PLACE

18" CMP
INVERT =
42.77'

294+00

295+00

296+00

S56°01'39"E 1118.79'

C=659.85'
CB=N46°08'33"W
L=663.13'
R=1921.86'
Δ=19°46'11"

PC: 295+68.79

STATE ROAD 16
200' RIGHT-OF-WAY

RIGHT-OF-WAY LINE

DIRT
DRIVEWAY

PRIVATE
COMMERCIAL DRIVEWAY
KINGDOM HALL
OF JEHOVAH'S
WITNESSES

AIR RELEASE VALVE
(PER SJCUD W-20)

EXISTING GROUND

AIR RELEASE VALVE
(PER SJCUD W-20)

20" DR25 PVC RW

20"

16" 11.25° MJ BEND (VERT.)

20", 24"

16" PVC TO 20" HDPE
TRANSITION COUPLING

EXISTING WATERMAIN
(TO REMAIN IN PLACE)

20"

24", 20"

16" 11.25° MJ BEND (VERT.)

20" HDPE TO 16" PVC
TRANSITION COUPLING

20" DR25 PV

298+00

299+00

300+00

C=659.85'
CB=N46°08'33"W
L=663.13'
R=1921.86'
Δ=19°46'11"

STATE ROAD 16
200' RIGHT-OF-WAY

BENCHMARKK: 1/2" IRON PIPE
LB 6824
ELEVATION = 44.44' N.A.V.D. 88
N 2,033,842.27
E 522,352.74

N81°42'39"E 42.69'

TOP OF BANK

CONCRETE WITH CABLE BOX

EX. 36" RCP

WM

OHE

RIGHT-OF-WAY LINE

EXISTING GROUND

20" DR25 PVC RW

EXISTING 4" FORCEMAIN
(TO REMAIN IN PLACE)

12" MIN.

42" MIN.

20" DR25 PVC RW

STATE ROAD 16
200' RIGHT-OF-WAY
GRASS MEDIAN

302+00 303+00 304+00 305+00

S36°15'28"E 688.56'

PT: 302+31.92

EDGE OF PAVEMENT

RIGHT-OF-WAY LINE

PRIVATE COMMERCIAL DRIVEWAY
ATLANTIC SELF STORAGE

20"

EXISTING GROUND

EXISTING 30" RCP

20"

20" DR25 PVC RW

42" MIN.

16" MJ G.V. W/
BOX & COVER

16" 11.25° MJ BEND (VERT.)

24"

20" HDPE TO 16" PVC
TRANSITION COUPLING

AIR RELE
(PER SJC

CONCRETE

STATE ROAD 16
200' RIGHT-OF-WAY

307+00 308+00 309+00 309+20

S36°15'28"E 688.56'

852+00

BP: 852+00.00

EP: 309+20.48

STATION EQUATION
STA. 309+20.48 (STATE ROAD 16 NORTH) =
STA. 852+00.00 (STATE ROAD 16 SOUTH)

WM OHE RIGHT-OF-WAY LINE

JACK AND BORE IN THIS AREA (BY OTHERS).
WHICH EVER PROJECT IS INSTALLED FIRST
WILL CONNECT WITH THE OTHER PROJECT.

PRIVATE
COMMERCIAL DRIVEWAY
ST. AUGUSTINE PRIME OUTLETS
(NORTH ENTRANCE)

AIR RELEASE VALVE
(PER SJCUD W-20)

42" MIN.

R800'

16" MJ G.V. W/
BOX & COVER

16" 11.25° MJ BEND (VERT.)

16" PVC TO 20" HDPE
TRANSITION COUPLING