MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

1022 26th Avenue East
Bradenton, FL 34208

FORCE MAIN 27-A
FROM 51ST ST. W. TO THE SWWRF
PLAN & PROFILE

STA: 86+01 36' R INSTALL: 2-45° BENDS
STA: 86+18 36' R INSTALL: ARV IN MH
FUT. 10" SD BY OTHERS
RELOC. GAS LINE (BY OTHERS) IF REQD.
STA: 87+19 35' R INSTALL:1-24" BFV
STA: 88+09 REPLACE LEAKING 24" BFV TO ALLOW SHUT OFF & CONNECT TO EX. ROW MAIN
EX. 24" RCW (UNKNOWN)
WEST
87+00
88+00
2+00
3+00
4+00
6+00
7+00
65TH ST. W.
65TH STREET WEST
ASPHALT ROAD
MATCH LINE STA: 7+20
2-2" HDPE DR 11 ASTM F2160 ELECTRICAL CONDUITS TO LIFT STATION PANEL. SEE SHEET 20
FUT. 20" FM, METER & VAULT, BY OTHERS, SEE DETAIL SHEET 19
INSTALL ARV IN MH
STA: 2+07 5' R, INSTALL:
1-20"X18" TEE
1-20" GATE VALVE
1-20" PLUG
1-18" GATE VALVE, (NC)
RELOCATE 8" WM W/1-45° LF-L OF DIP & BENDS ALL RJ
STA: 2+22 56' R, INSTALL:
1-18" RESTRAINED DI PLUG & 45°± OF 18" DIP INTERCONNECT, ALL RJ
STA: 3+41 3'R
INSTALL: 1-42"X18" TEE
1-18" GV,
1-18"X8" REDUCER, BENDS AS REQD, & 95' CL350 DIP
BASE & RESURFACE TYPE 1 SOUTH OF THIS LINE, 65th ST. W, TYPE 2
3+68 3'R
INSTALL: 1-42"ø PLUG VALVE (PV)
1-DEADMAN THRUST BLOCK TO RESTRAIN PROP. PLUG VALVE,
ORDER DIP WITH WELDED THRUS COLLAR FOR BLOCK
REGRADE ROW TO DRAIN TO EX. INLET
3+94 54'R
INSTALL:
1-20"X18" TAP VALVE & 1-18" 90° BEND
IRC 15.22' STA: 92+13.71 98.58 L (53RD SURVEY BASELINE)
LINE STOP, TYP.
DEADMAN THRUST BLOCK, TYP.
CONTRACTOR SHALL PROVIDE A MIN. OF 2 LANES SMOOTH DUSTLESS ACCESS ROAD TO GOLF COURSE AT ALL TIMES.
PID 5182410109 (ORB 642 PAGE 105)
10 0 10 20
SCALE IN FEET
INSTALL MIN. 12' WIDE TEMP ROAD DURING CONSTRUCTION ALONG 65TH ST W TO MAINTAIN PLANT & GOLF COURSE ACCESS FOR SEMI-TRAILER SIZE TRUCKS. MIN 8" OPTIONAL BASE GROUP 6. RESTORE ALL DISTURBED AREA WITH HYDROSEEDING PER FDOT SPECS.
GRADE TO PROVIDE DRAINAGE TO PROP. INLET
SEE ROADWAY PLANS FOR PORPOSED EDGE OF PAVEMENT ALIGNMENT & GRADES FOR 65TH STREET WEST, SOUTH OF STA: 6+40 .
MAY NOT BE PRESENT
REPLACE FULL WIDTH OF 65TH ST. W. PAVEMENT WITH 2.5" MIN ASPHALT ON 8" OPTIONAL BASE GROUP 6 (FDOT) & 12" SUBASE LBR 60' (BASE & RESURFACE TYPE 2)
APPROXIMATE PARCEL BOUNDARY
EXISTING SHRUB LINE
MANATEE COUNTY GOLF COURSE
PID 5182410208
GOLF COURSE ENTRANCE ASPHALT DRIVEWAY
20" DIP LONG BOAT KEY FORCE MAIN
EXISTING 20" CAST IRON, LONG BOAT KEY FORCE MAIN
30" DIP MARS LINE
16" RCW (TREATED EFFLUENT) LINE
19"x30" RCP
CHAINLINK FENCE
GRATE 15.14' E INV 12.67'
GRATE 15.00' W INV 12.16' E INV 12.00'
GRATE 14.00' S INV 11.78' N INV 11.75'
CURB INLET RIM=16.21 INV=11.82 N INV=11.78 S
RIM 16.38' N INV 11.24' S INV 11.24' E INV 12.13' W INV 12.45'
BM 1
STR. 0+40.85' 65th ST. 88.85 R
NUT 11.92'
NUT 11.9'
NUT 11.82'
NUT 11.67'
RIM 16.17' S INV 11.72' N INV 11.57' E INV 11.67' W INV 11.67'
LONG BOAT KEY 18" DUCTILE IRON PIPE FORCE MAIN BYPASS
FUTURE METER VAULT & ARV FOR FUTURE LBK FM
PROP. ARV IN MH ON LBK FM, APPROX. F.G. 17.15'
RELOC ARV FOR 24" RCWM
PROP. ARV FOR 8" WM
FUTURE ROAD WIDENING
FUTURE 10" DRAINAGE PIPE NOT PART OF UTILITY WORK
FUTURE GRADE
FUTURE R/W
EXIST R/W
CONST. ℄
PROP. ℄
53rd AVE. W.
EX. ℄
EXIST R/W
EX. ASPHALT
EX. ASPHALT 65TH STREET WEST ENTRACE TO SWWRF AND MANATEE COUNTY GOLF COURSE
65th STREET WEST
APPROX. LOC. EX. 16" RCW. MAIN ASSUMED DEPTH 16" BELOW GRADE AT STA: 87+30 115' R CROSSING OF FUTURE LBK FM
EXISTING GRADE 65TH STREET ℄
INSTALL 18"ø D.I. TEMP. BYPASS OF LBK FM, RESTRAIN ALL JOINTS
PROP. 8" WM RELOCATION
ABANDONDED 10" PVC RCW MAIN APPROX. LOC., DEPTH UNKNOWN. CONTRACTOR TO REMOVE AS NECCESARY FOR CONSTRUCTION.
EX. VERIZ. CON.
EX. 18" DIP WATERMAIN@ STA: 87+08 52° R T.O.P. EL. 11.73
ABANDONDED 15" PVC RCW MAIN APPROX. LOC., DEPTH UNKNOWN (SHOWN AT EST. DEPTH 3'BELOW GRADE. IN CONFLICT W/EX. STORM DRAIN) CONTRACTOR TO REMOVE AS NECCESARY FOR CONSTRUCTION.
EX. ATMS
EX. 19X30 RCP STORM SEWER TO BE EXTENDED SOUTH BY ROAD PROJECT AT ELEVATION SHOWN.
EX. 6" WM
EX. VERIZON CONDUIT SYSTEMT
45° TYP.
CONNECT 18"ø D.I. TEMP LBK BYPASS TO EX. LBK FMW 18" TAPPING VALVE
12" MIN CLR
CONNECT TO EX. 8" AC (TRANSITE) WM WITH HYMAX COUPLING
EX. 8" AC WM
APPROX. LOC. EX. 20" LBK FM
SUGGESTED LOCATION FOR PROP. THRUST BLOCK ON LBK FM, AS REQD. FOR LINE STOP
PROP. 20" LINE STOP IN EXISTING LBK FM
INSTALL 42"ø CL350 D.I. FM
INSTALL 42"ø GV
INV. 7.10 42" FM
INSTALL 42"ø CL350 D.I. FM
6" MIN TO BOT. OF PROP. 20" FM
12" MIN. TO TOP OF PROP. 20" FM
PROP. 20" FM DIP STUB FOR FUTURE LBK FM CONNECTION
SUGGESTED LOCATION FOR PROP. THRUST BLOCK ON LBK FM
CONNECT 18"ø D.I. TEMP LBK BYPASS TO EX. LBK FM
EX. GAS MAIN DIA.& DEPTH TO BE CONFIRMED, TO BE RELOCATED TO CLEAR FM (BY OTHERS) IF REQD.
PROP. 20" LINE STOP IN EXISTING LBK FM
EX. 18" DIP WATERMAIN@ V V H #4 T.O.P. EL. 7.43 STA: 87+31 52° R
CONNECT TO EX. 8" WM
12" MIN CLR. PROP 8" WM TO PROP 24" RCW
8" CL350 DIP
EX. 8" EL.CON FM
PROP. 20"ø D.I. LBK FM RELOCATION
EX. 24" RCW. MAIN (2006)@ V V H #2 T.O.P. STA: 87+30
EX. 24" RCW. MAIN (1990) AT PROP. LBK CROSSING
PROP 24" RCW RELOCATION
65TH STREET WEST BASELINE
2+00
3+00
4+00
5+00
6+00
7+00

NOTES:

1. PROVIDE RESTRAINTS AND/OR THRUST BLOCKS ON EX. 20" LBK FM & 8" WM, AND OTHER PIPING AS NECESSARY FOR CONSTRUCTION TO AVOID BLOW OUTS.

NO.	REVISION DESCRIPTION	BY	DATE
1	42" GV CHANGED TO PV	JS	3/24/15

PROJECT #	406-6082980
SURVEY #	3825
SEC./TWN./RGE	16,17,18/35/17
VERT. SCALE	1"=2'
HORZ. SCALE	1"=20'

	BY	DATE
SURVEYED	LSF/HYATT	2001/2012
DESIGNED	LSF/JS	2002/2013
DRAWN	BLR	03/2013
CHECKED	JS	03/2013

JAMES STOCKWELL, P.E.
FLORIDA P.E. LICENSE NO. 67198
STATE OF FLORIDA PROFESSIONAL ENGINEER
JAMES DAVID STOCKWELL LICENSE NO. 67198

SHEET 13 OF 27

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S:\PWD_Engineering_Share\Util Eng Design\PROJ\--SAN SWR Proj\FM-53rd Ave W\DWGS\FM 27-A.dwg,13, 3/24/2015 2:16 PM Bruce Robertson, 1:1, ANSI full bleed D (34.00 x 22.00 Inches)

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ENGINEERING SERVICES

1022 26th Avenue East
Bradenton, FL 34208

FORCE MAIN 27-A FROM 51st ST. W. TO THE SWWRF

PLAN & PROFILE RCWM

BASE AND RESURFACE ASPHALT TYPE 1

FUT. T.S. POLE

66TH ST. W.

STA: 75+47 90'L
CONNECT PROP 24" RCW MAIN TO EX. RCWM
1-45° BEND, INST. DEADMAN THRUST BLOCK, 8LF DIP 24"

STA: 75+57 86'L
INSTALL: 1-24" BFV,

STA: 75+66 82'L
INSTALL: 1-24" BFV, 1-45° BEND

1-BURIED 50 PAIR COPPER CABLE

STORM MH
RIM=16.46
INV.=14.05 N
INV.=11.57 S
INV.=10.21 E&W

4" PE GAS PIPE

INSTALL 4-24" 45° BENDS IN RCWM
& 12LF DIP 24"

INSTALL 110±LF OF 24" DIP, RESTRAIN ALL JOINTS UNDER ROAD

53RD AVENUE WEST

STA: 75+68 37'R
INSTALL: 1-24" CROSS,
2-24" BUTTERFLY VALVES (BV)

SCALE IN FEET
10 0 10 20

N&D

TP-IRC

REMOVE EX. 24" RCWM
AND 36" CASING

REMOVE & RELOCATE VERIZON
TELEPHONE RISER (BY OTHERS)

REMOVE EX. 24" RCWM FROM
65TH ST TO 66TH ST. TIE IN

PROP. 24" CL 350 DIP RCW MAIN

VERZ. 4-4" PVC WITH FIBER

6" PE GAS MAIN

GAS VALVE 13.31'

BM

IR

STA: 66+06 76' R
INSTALL F.H. ASSY

FUT. T.S. POLE

STA: 75+55 81'R
INSTALL 24: STUB, 40±LF DIP
& BENDS AS REQD.

MATCH LINE STA. 79+80

EXISTING GROUND EL OVER PORPOSED RCW MAIN
EXISTING GROUND EL AT THE CONSTRUCTION BASE LINE
FUTURE ROAD PGL BY OTHERS

EX. 12"x18" RCP

12"x18" RCP (TO BE REMOVED)

EX. DBL. 8'x3' BOX CULVERT

EX. 24" RCW. MAIN

EX. 15" RCP

VERZ. 4-4" PVC WITH FIBER

EX. 30" RCP

12" MIN CLR
SD TO RCW

EX. 24" RCP

PROP. 24" CL 350 DIP RCW MAIN

FUT. 6" GAS MAIN
(BY OTHERS)

NO.	REVISION DESCRIPTION	BY	DATE
1	PVMT. REPAIR ADDED FOR 24" RCWM	JS	3/24/15

PROJECT #	406-6082980
SURVEY #	3825
SEC./TWN./RGE	16,17,18/35/17
VERT. SCALE	1"=2'
HORZ. SCALE	1"=20'

	BY	DATE
SURVEYED	LSF/HYATT	2001/2012
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3/24/15
Date

SHEET 019 OF 27

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