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

PLAN & PROFILE

MANATEE COUNTY GOVERNMENT
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES

1022 26th Avenue East
Bradenton, FL 34208

MANATEE COUNTY GOLF COURSE

BASE AND RESURFACE ASPHALT TYPE 1

MILL & RESURFACE ASPHALT

ALL PAVEMENT DAMAGED BY FORCEMAIN CONTRACTOR NORTH OF PROPOSED NORTH MEDIAN CURB SHALL BE REPAIRED AT NO COST TO COUNTY, EXCEPT WHERE SHOWN OTHERWISE.

SCALE IN FEET 10 0 10 20

CAP & GROUT EX. 8" FM TO STA: 101+19

STA: 86+37 50'L
INSTALL: 8" DI BENDS AS REQD.
CONNECT TO EX. FM
W/HDPE MJ ADAPTER

STA: 87+39 23'L
INSTALL: 1-42" 45° BEND

STA: 87+60 3'L
INSTALL: 1-42" 45° BEND

REMOVE & REPLACE 30 LF± OF 19"x 30" RCP SD. (CREATE A HIGH SPOT) RAISE APPROX. 0.7 FT TO CLEAR PROP 42" FM BY 6" MIN. SEE NOTE 4.

INSTALL 125 LF± 20" DIP & 4-45° BENDS TO REMOVE & RELOCATE 20" FM UNDER 42" FM & 24" RCW, ALL JOINTS TO BE RESTRAINED BETWEEN DEADMAN BLOCKS.

GROUT FILL EX. 8" FM

STA: 85+55 36' R
INSTALL: 2-45° BENDS

STA: 87+48 15'L
INSTALL: 1-42"X20"TEE
1-20" GV

INSTALL ARV FOR 8" WL

INSTALL 2" ARV ON 42" FM, SEE NOTE 5.

RELOCATE ARV FOR 24" RCWM (N)

ALL 42" JOINTS SHALL BE RESTRAINED FROM 42" GV AT STA. 3+60 TO MIN. STA. 89+00

INSTALL 42"ø CL350 D.I. FM

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

STA: 87+39 6'L
INSTALL: 1-20" 45° BEND

STA: 88+09 REPLACE LEAKING 24" BFV TO ALLOW SHUT OFF & CONNECT TO EX. RCW MAIN

RELOCATE 8" WM W/145' LF± OF DIP & BENDS ALL RJ

REMOVE & REPLACE EX. 24" RCW W/100 LF± OF DIP & BENDS BLOCK & RESTRAIN EX. 24" RCW AS NECCESARY

PROP. 24" DIP RCW MAIN

INSTALL 18"ø D.I. BYPASS OF LBK FM W/150 LF± DIP & BENDS AS NECESSARY, ALL JOINTS RESTRAINED

STA: 87+19 35' R
INSTALL:1-24" BFV

RELOC. GAS LINE (BY OTHERS) IF REQD.

STA: 87+92 49'R
INSTALL:
1-20"X18" TAP VALVE &
1-18" 90° BEND

FUT. 10" SD BY OTHERS

INSTALL 120LF± OF 20"ø D.I. FM STUB OUT FOR FUTURE LBK FM CONNECTION.

STA: 86+18 36' R
INSTALL: ARV IN MH

STA: 86+01 36' R
INSTALL: 2-45° BENDS

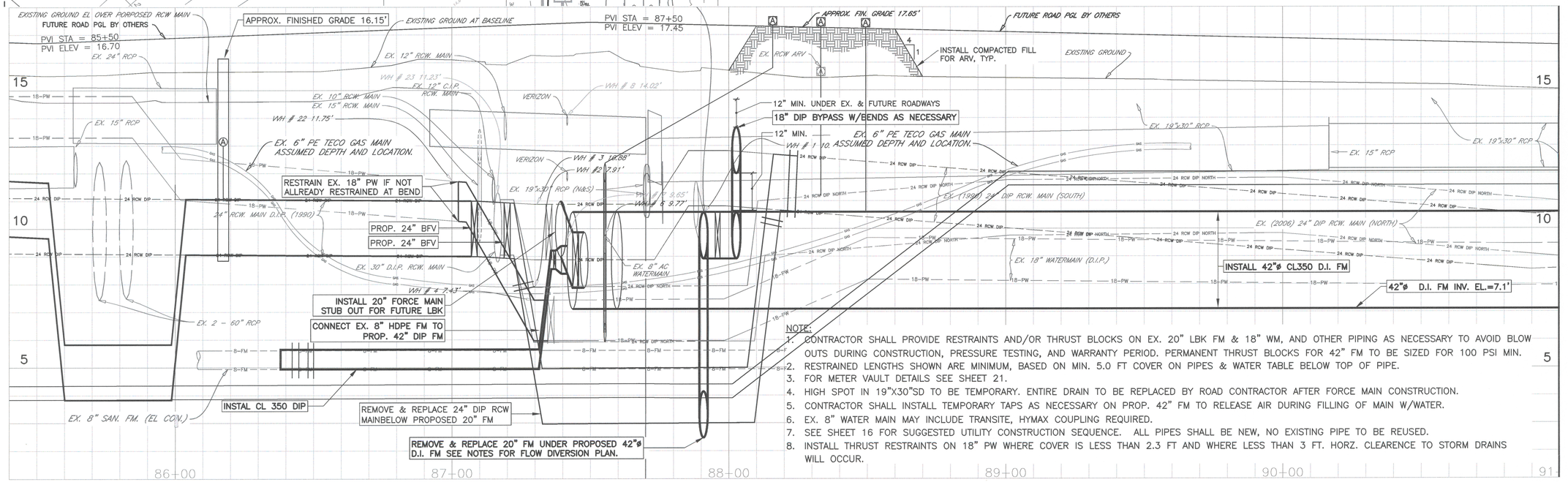
DEADMAN THRUST BLOCK, TYP. SEE NOTE *

FUT. METER VAULT BY OTHERS

CONTRACTOR SHALL MAINTAIN LONGBOAT KEY FORCEMAIN FLOWS AT ALL TIMES & COORDINATE WORK WITH CITY OF LBK AS REQD.

FUT. 6" GAS MAIN (BY OTHERS)

* CONTRACTOR SHALL SUBMIT DETAILED DESIGN PLANS & CALCS FOR DEADMAN THRUST BLOCKS, SEALED BY LICENSED FL PE TO COUNTY FOR REVIEW AND APPROVAL. PILES OR OTHER MEANS OF RESTRAINT MAY BE NECESSARY, DEPENDING ON CONTRACTORS MEANS AND METHODS AND ACTUAL SOIL CONDITIONS FOR SOME THRUST BLOCKS.



NOTE:

1. CONTRACTOR SHALL PROVIDE RESTRAINTS AND/OR THRUST BLOCKS ON EX. 20" LBK FM & 18" WM, AND OTHER PIPING AS NECESSARY TO AVOID BLOW OUTS DURING CONSTRUCTION, PRESSURE TESTING, AND WARRANTY PERIOD. PERMANENT THRUST BLOCKS FOR 42" FM TO BE SIZED FOR 100 PSI MIN.
2. RESTRAINED LENGTHS SHOWN ARE MINIMUM, BASED ON MIN. 5.0 FT COVER ON PIPES & WATER TABLE BELOW TOP OF PIPE.
3. FOR METER VAULT DETAILS SEE SHEET 21.
4. HIGH SPOT IN 19"X30"SD TO BE TEMPORARY. ENTIRE DRAIN TO BE REPLACED BY ROAD CONTRACTOR AFTER FORCE MAIN CONSTRUCTION.
5. CONTRACTOR SHALL INSTALL TEMPORARY TAPS AS NECESSARY ON PROP. 42" FM TO RELEASE AIR DURING FILLING OF MAIN W/WATER.
6. EX. 8" WATER MAIN MAY INCLUDE TRANSITE, HYMAX COUPLING REQUIRED.
7. SEE SHEET 16 FOR SUGGESTED UTILITY CONSTRUCTION SEQUENCE. ALL PIPES SHALL BE NEW, NO EXISTING PIPE TO BE REUSED.
8. INSTALL THRUST RESTRAINTS ON 18" PW WHERE COVER IS LESS THAN 2.3 FT AND WHERE LESS THAN 3 FT. HORZ. CLEARENCE TO STORM DRAINS WILL OCCUR.

NO.	REVISION DESCRIPTION	BY	DATE

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. # 67198

Professional Engineer & Director

SHEET 2 OF 27

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