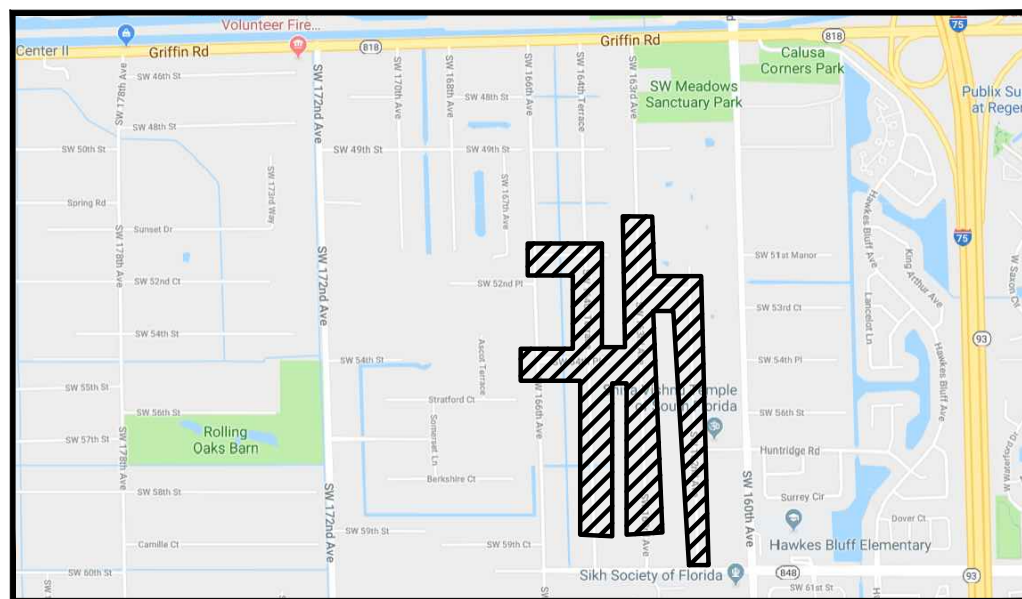


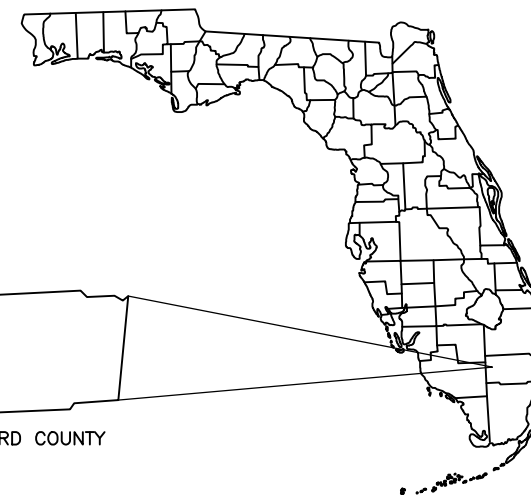
GREEN MEADOWS STORMWATER IMPROVEMENTS



LOCATION MAP



PROJECT LOCATION



BROWARD COUNTY

VICINITY MAP
SCALE: N.T.S.

TOWN COUNCIL

MAYOR	DOUG MCKAY
VICE MAYOR	GARY JABLONSKI
COUNCIL MEMBER	FREDDY FISIKELLI
COUNCIL MEMBER	BOB HARTMAN
COUNCIL MEMBER	DENISE "DEE" SCHROEDER
TOWN ADMINISTRATOR	ANDREW BERNS

PREPARED FOR:
TOWN OF
SOUTHWEST RANCHES



Know what's below.
Call before you dig.

FILE NAME: 00-2035-G-00-CVR.dwg

FOR CONSTRUCTION



CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS—PLANNERS—SURVEYORS
21045 COMMERCIAL TRIAL — BOCA RATON, FLORIDA 33486
(561) 314-4445 WWW.CRAIGASMITH.COM
CERTIFICATE OF AUTHORIZATION NUMBER: LB0003110



ORLANDO A. RUBIO, P.E. (CML)
DATE _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green-Meadows-Stormwater-Improvements\09-Plans\00-2035-G-00-CVR.dwg, 12/21/2020 7:55:45 AM, mmarencio, 1:2

GENERAL ABBREVIATIONS

ABRV	DESCRIPTION	ABRV	DESCRIPTION
A/C	AIR CONDITION PAD	NTS	NOT TO SCALE
ACP	ASBESTOS CEMENT PIPE	ORB	OFFICIAL RECORDS BOOK
ALUM	ALUMINUM	O / S	OFF SET
APPROX	APPROXIMATELY	(P)	PLAT
B.C.R.	BROWARD COUNTY RECORDS	P.B.	PLAT BOOK
B/L	BASELINE	P.B.C.R.	PALM BEACH COUNTY RECORDS
BOTT	BOTTOM	PC	POINT OF CURVE
(C)	CALCULATED	PCP	PERMANENT CONTROL POINT
CIP	CAST IRON PIPE	PGS	PAGES
CL	CENTER LINE	PHDPE	PERFORATED HIGH DENSITY POLYETHYLENE
CONC	CONCRETE	PI	POINT OF INTERSECTION
D	DEED/DESCRIPTION	PK&D	PK NAIL AND DISK
D.E.	DRAINAGE EASEMENT	PRC	POINT OF REVERSE CURVE
DIA	DIAMETER	PROP	PROPOSED
DIP	DUCTILE IRON PIPE	PRM	PERMANENT REFERENCE MARKER
ELEV	ELEVATION	PSM	PROFESSIONAL SURVEYOR AND MAPPER
EOW	EDGE OF WATER	PT	POINT OF TANGENCY
EP	EDGE OF PAVEMENT	PVC	POLY VINYL CHLORIDE
EXIST	EXISTING	R	RADIUS
FF	FINISHED FLOOR	RCP	REINFORCED CONCRETE PIPE
FND	FOUND	R.E.	RIM ELEVATION
FPL	FLORIDA POWER & LIGHT	RGE	RANGE
GFF	GARAGE FINISHED FLOOR	R/W	RIGHT-OF-WAY LINE
HDPE	HIGH DENSITY POLYETHYLENE	SEC	SECTION
I.E.	INVERT ELEVATION	TOB	TOP OF BANK
IR	IRON ROD	TOE	TOE OF SLOPE
IR&C	IRON ROD AND CAP	TOP	TOP OF PIPE
IP	IRON PIPE	TWP	TOWNSHIP
L	ARC LENGTH	TYP	TYPICAL
LB	LICENSED BUSINESS	U.E.	UTILITY EASEMENT
LF	LINEAR FEET	VCP	VITRIFIED CLAY PIPE
(M)	MEASURED	Δ	DELTA

GENERAL SYMBOL LEGEND

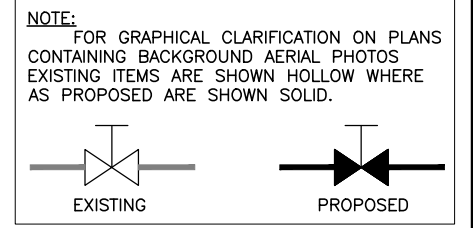
	SYM.	DESCRIPTION		SYM.	DESCRIPTION
CONTROL	☒	AERIAL TARGET	GAS / FUEL	GM	GAS METER
	⊕	BENCH MARK		GMH	GAS MANHOLE
	■	CONCRETE MONUMENT		GSV	GAS VALVE
	○	IRON PIPE		MW	MONITORING WELL
	●	IRON ROD		VEP	VAPOR EXTRACTION POINT
	⊙ ND	NAIL & DISC		GSP	FUEL PUMP DISPENSER
	△	TRAVERSE POINT		GASM	GAS MARKER
	⊙	IRON ROD AND CAP		VTP	VENT PIPE
	⊗	X CUT		VBG	GAS VALVE BOX
	● DH	DRILL HOLE		FCAP	FUEL FILL CAP
PIPE FITTINGS	┌	11.25° PIPE BEND	TELE / TV	⊗ PJB	TELEPHONE JUNCTION BOX
	└	22.5° PIPE BEND		PR	TELEPHONE RISER
	└┐	45° PIPE BEND		TMH	TELEPHONE MANHOLE
	┌┐	90° PIPE BEND		FIBO	FIBER OPTIC CABLE MARKER
	┌┐┌	CROSS PIPE FITTING		CATV	CATV RISER
	┌┐┌┐	TEE PIPE FITTING		N	BACKFLOW PREVENTOR
	└┐┐	WYE PIPE FITTING		BO	BLOW OFF
ELECTRICAL	▶	REDUCER PIPE FITTING	WATER / IRRIGATION	ARV	AIR RELEASE VALVE
	○ EMH	ELECTRIC MANHOLE		SP	SAMPLE POINT
	⊙ EMTR	ELECTRIC MOTOR		FH	FIRE HYDRANT
	⊕	ELECTRICAL OUTLET		SIA	SIAMESE CONNECTION
	⚡	GROUND LIGHT		WM	WATER METER
	⊗ EJB	ELECTRIC JUNCTION BOX		WV	WATER VALVE
	⊗ EM	ELECTRIC METER		WSP	WATER SPIGOT
	⊗ LPB	LIGHT POLE BOX		ICV	IRRIGATION CONTROL VALVE
	⊗ TCB	TRAFFIC CONTROL BOX		IM	IRRIGATION METER
	⊗ ER	ELECTRICAL RISER		SPR	SPRINKLER
UTILITY POLES	⊕	GUY WIRE	TREES	○ ²	CITRUS TREE
	⊕	GUY POLE		○ ¹²	CYPRESS TREE
	⊕	LIGHT POLE		○ ¹²	GENERIC TREE
	⊕	CONCRETE UTILITY POLE		○ ²	OAK TREE
	⊕	METAL UTILITY POLE		○ ²	PINE TREE
	⊕	WOOD UTILITY POLE		○ ²	PALM TREE
	⊕	MAST ARM POLE		○	MANGROVE
	○ CO	CLEAN OUT		⊙ GPR	GROUND PENETRATING RADAR
	○ SMH	SANITARY MANHOLE		●	BORING HOLE
	○ SO	STUB OUT		⊕ M	METER (UNKNOWN)
SAN SWR	⊗	STAND PIPE	MISCELLANEOUS	⊕	BOLLARD
	⊗ SV	SEWER VALVE		□	COLUMN
	⊗ CB	CATCH BASIN		⊗ MB	MAIL BOX
	⊗ SDMH	STORM DRAIN MANHOLE		● FP	FLAG POLE
	⊗ YD	YARD DRAIN		♿	HANDICAP MARKER
	○	CURB INLET		○ MH	MANHOLE (UNKNOWN)
	○	CURB INLET W/ MANHOLE		⊗	SATELLITE DISH
	○	CURB INLET W/ GRATE		⊗	SIGN
	○	CI W/ MANHOLE & GRATE		⊗ PM	PARKING METER
	○			⊕	POST
STORM	⊕	CONCRETE	MISCELLANEOUS	⊕ UB	UTILITY BOX
	⊕	BRICK		⊕ UR	UTILITY RISER
	⊕	STONE		⊕	CEMETERY HEAD STONE
	⊕	ASPHALT			

STANDARD HATCH PATTERNS

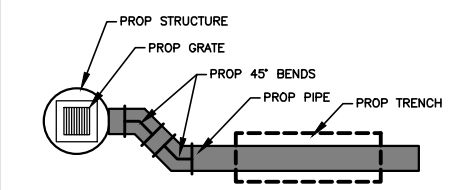
SYM	DESCRIPTION	SYM	DESCRIPTION
⊕	CONCRETE	⊕	STONE
⊕	BRICK	⊕	ASPHALT

LINE WEIGHTS

EXISTING	SHADED SOLID LINES & TEXT DENOTE EXISTING EQUIPMENT, STRUCTURES AND WORK.
FUTURE	NON-SHADED DASHED LINES & TEXT DENOTE FUTURE EQUIPMENT, STRUCTURES AND WORK.
PROPOSED	NON-SHADED, BOLD, SOLID LINES & TEXT DENOTE PROPOSED EQUIPMENT, STRUCTURES AND WORK.



PIPE LEGEND

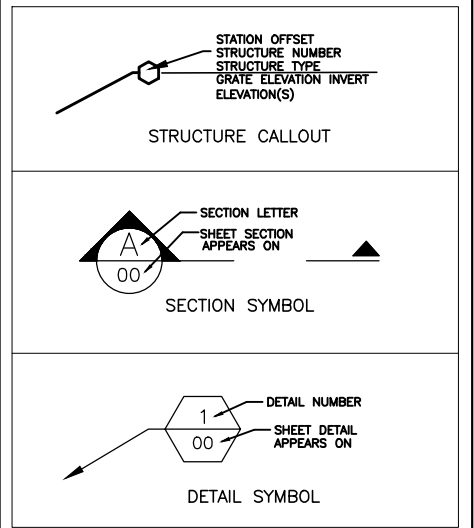


PIPE FITTINGS

SYM	DESC	SYM	DESC
┌	11.25° BEND	└	45° BEND
└	22.5° BEND	└┐	90° BEND
┌┐	TEE	└┐┐	WYE
▶	REDUCER	⊕	PLUG
]	CAP		

NOTE: THE LEGEND SHOWN HEREON IS REPRESENTATIVE OF ALL GAS DRAFTING STANDARDS AND IS NOT PROJECT SPECIFIC.

TAGS



FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date:	04/15/19
Designed:	OAR
Drawn:	KJL
Checked:	SCS

APPROVED BY:	ORLANDO A. RUBIO, P.E.
DATE:	
FLORIDA PROFESSIONAL ENGINEER NO.	48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

PREPARED FOR:
**TOWN OF
SOUTHWEST RANCHES**

**GREEN MEADOWS
STORMWATER IMPROVEMENTS
CIVIL ABBREVIATIONS
& LEGEND SHEET**

FILE NAME: 00-2035-6-01-LGND.dwg
LAST SAVED: 11/11/19 - 2:57pm
GAS PROJECT NUMBER
19-2035

SHEET
G-01

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green-Meadows-Stormwater-Improvements\08-Plans\00-2035-6-01-LGND.dwg, 12/21/2020 7:56:37 AM, rmarcano, 1/2

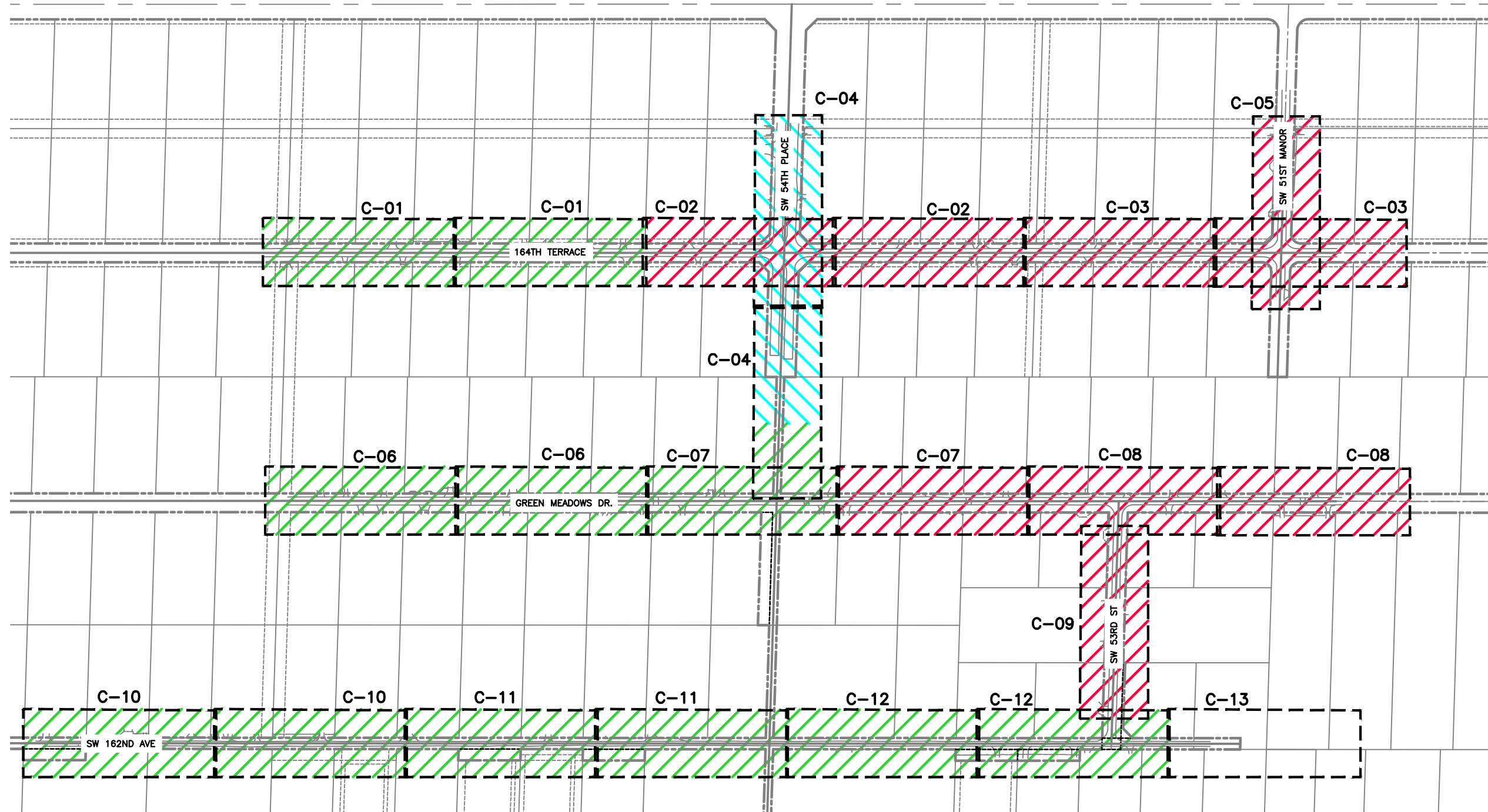
SHEET INDEX

SHEET	DESCRIPTION
G-00	COVER SHEET
G-01	CIVIL ABBREVIATIONS & LEGEND SHEET
G-02	KEY SHEET & INDEX
V-01 - V-12	SURVEY SHEETS (BY OTHERS)
C-01 - C-13	PLAN VIEWS
C-14 - C-20	STANDARD DETAILS



0 75 150 300
 HORIZONTAL GRAPHIC SCALE
 24" x 36" SCALE: 1" = 150'-0"
 11" x 17" SCALE: 1" = 300'-0"

- NOTES:**
1. THE EXISTENCE AND LOCATION OF ANY OF THE WATER AND/OR WASTEWATER LINES, VALVES, HYDRANTS, LIFT STATIONS, ETC., SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE MD-WASA OR CAS AND MUST BE VERIFIED IN THE FIELD.
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 5. ELEVATIONS SHOWN HEREON ARE IN NAVD '88, ADD 1.51' TO OBTAIN NGVD '29.



- PREVIOUSLY CONSTRUCTED PHASE
- BASE BID
- ADDITIVE ALTERNATE BID

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
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 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
**TOWN OF
 SOUTHWEST RANCHES**

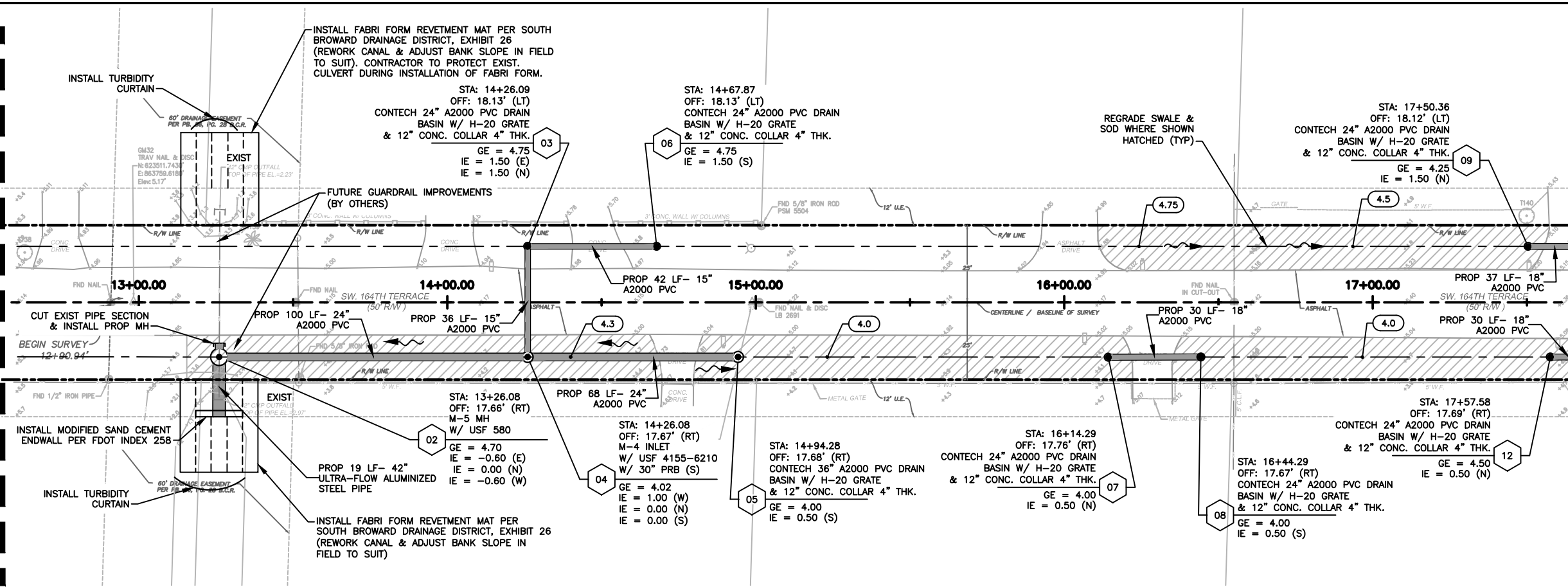
**GREEN MEADOWS
 STORMWATER IMPROVEMENTS
 KEY SHEET
 & SHEET INDEX**

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 GAS PROJECT NUMBER
 19-2035

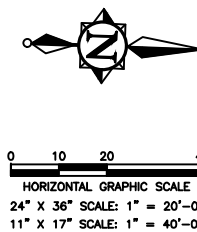
SHEET
G-02

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LIMITS OF PROJECT SW. 164TH TERR.
STA: 13+00.00

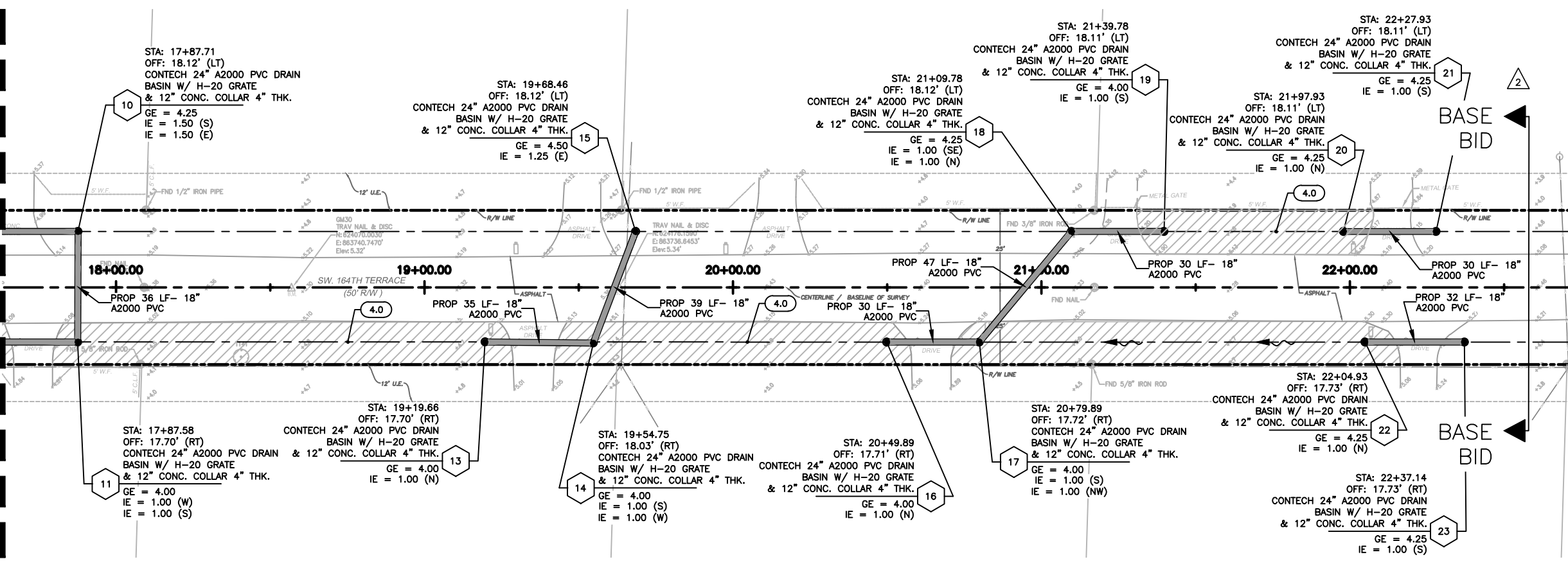


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FOR CONTINUATION

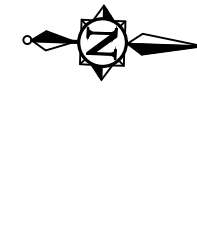


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 4. ALL STRUCTURES TO HAVE MIN. 18\"/>

SEE TOP RIGHT (THIS SHEET)
FOR CONTINUATION



SEE SHEET C-2 FOR CONTINUATION



FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE: _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

PREPARED FOR:
**TOWN OF
SOUTHWEST RANCHES**

**GREEN MEADOWS
STORMWATER IMPROVEMENTS**
SW. 164TH TERR.
STA: 13+00 - 22+55

FILE NAME: 02-2035-C-01-STRM.dwg
LAST SAVED: 12/21/20 - 7:24am
GAS PROJECT NUMBER
19-2035

SHEET
C-01

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green Meadows Stormwater Improvements\09-Plans\02-2035-C-01-STRM.dwg, 12/21/2020 9:50:59 AM, immatenco, i:2

SEE SHEET C-04 FOR CONTINUATION



HORIZONTAL GRAPHIC SCALE
24" X 36" SCALE: 1" = 20'-0"
11" X 17" SCALE: 1" = 40'-0"

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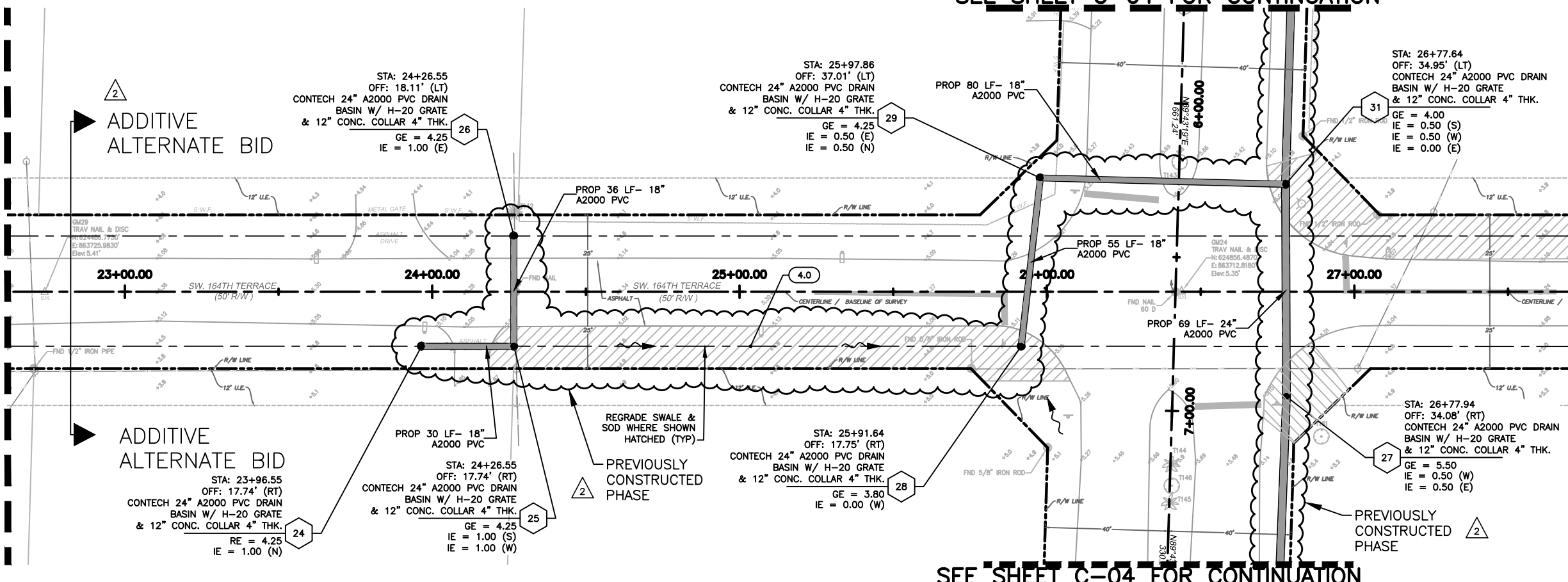
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SEE SHEET C-1 FOR CONTINUATION

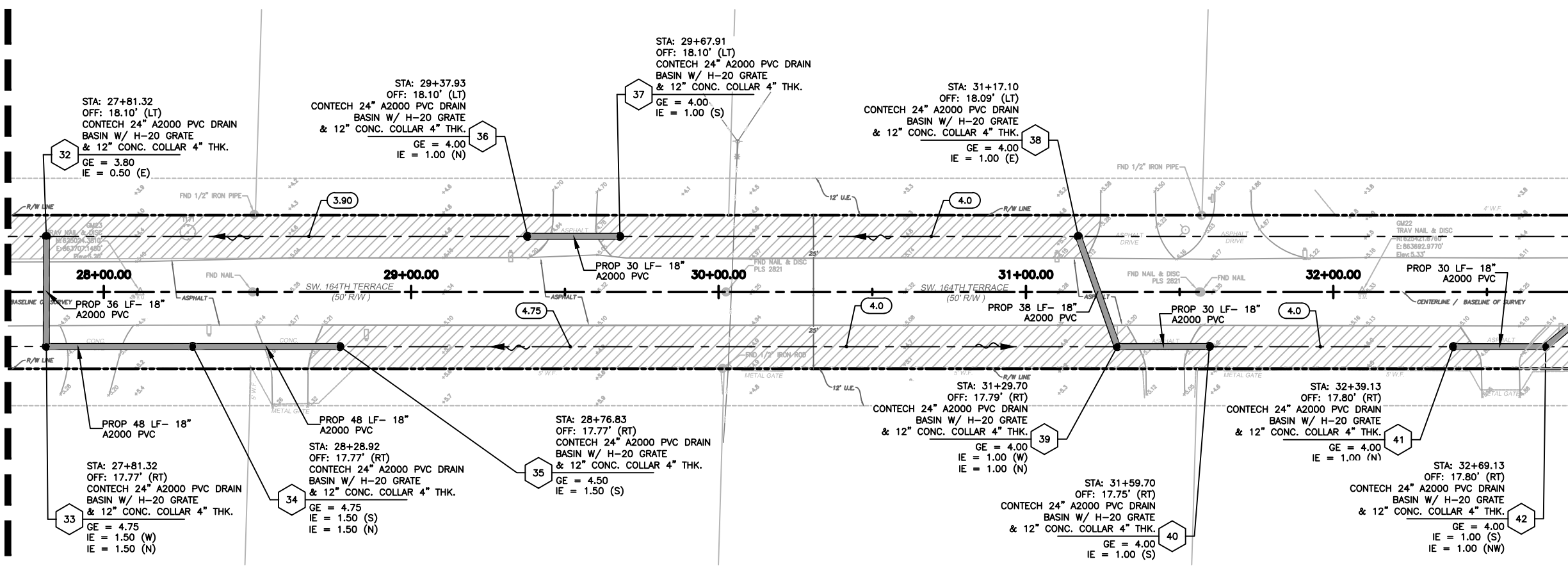
SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION

SEE SHEET C-3 FOR CONTINUATION

FOR CONSTRUCTION



SEE SHEET C-04 FOR CONTINUATION



NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS
 SW. 164TH TERR.
 STA: 22+55 - 32+55

FILE NAME: 02-2035-C-02-STRM.dwg
 LAST SAVED: 12/21/20 - 7:26am
 GAS PROJECT NUMBER
 19-2035

SHEET
C-02

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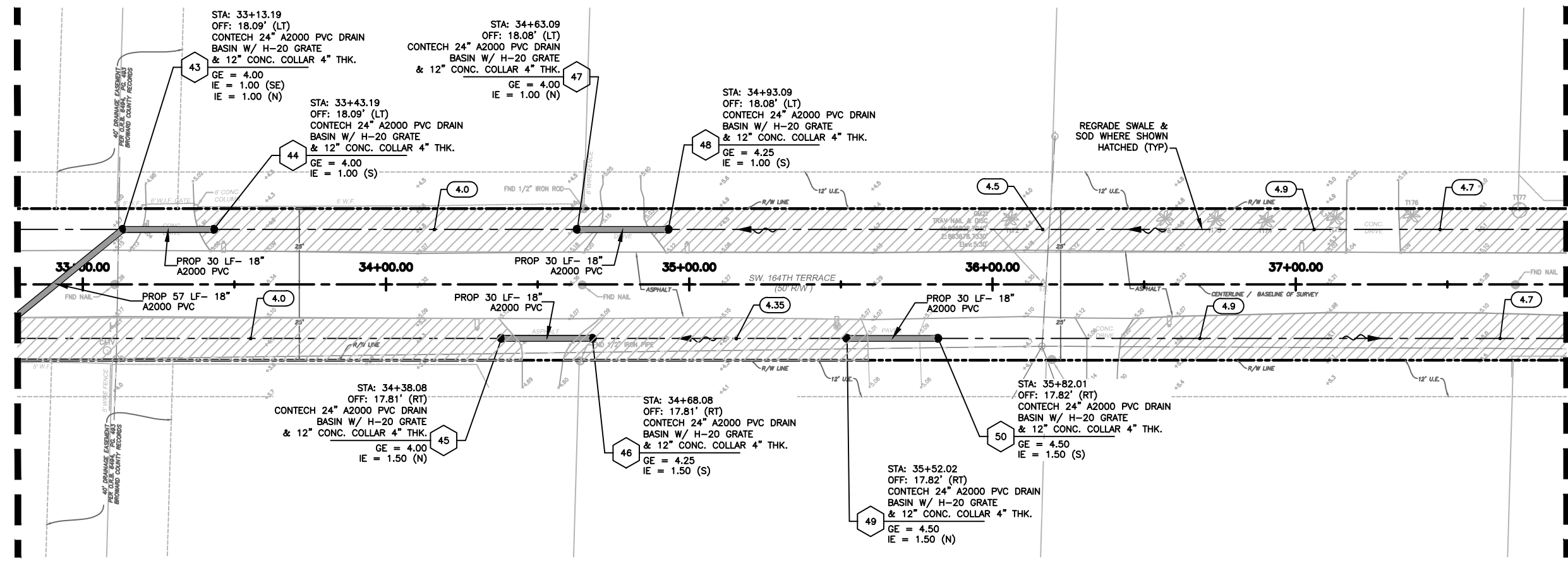
SEE SHEET C-2 FOR CONTINUATION

SEE BOTTOM LEFT (THIS SHEET) FOR CONTINUATION



HORIZONTAL GRAPHIC SCALE
 24" X 36" SCALE: 1" = 20'-0"
 11" X 17" SCALE: 1" = 40'-0"

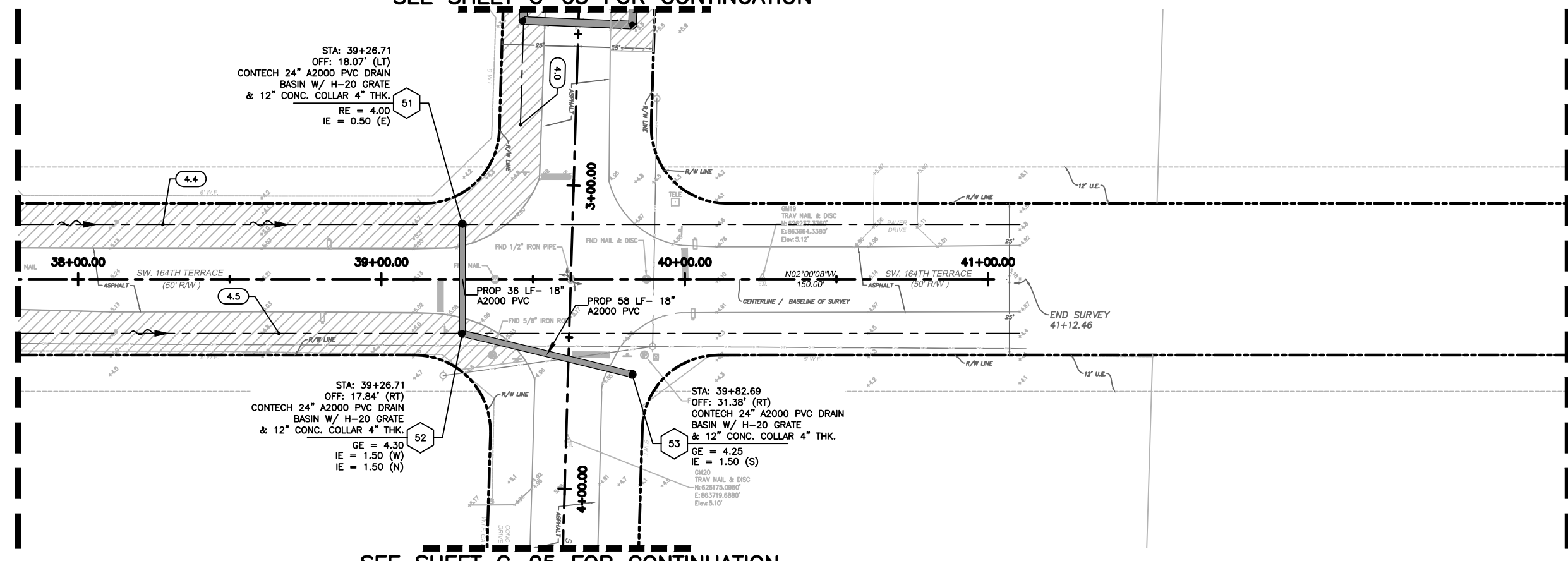
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SEE SHEET C-05 FOR CONTINUATION

SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION

PROJECT LIMITS SW. 164TH TERR
 STA: 41+00.00



SEE SHEET C-05 FOR CONTINUATION

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

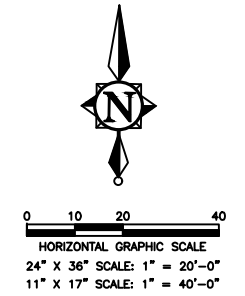
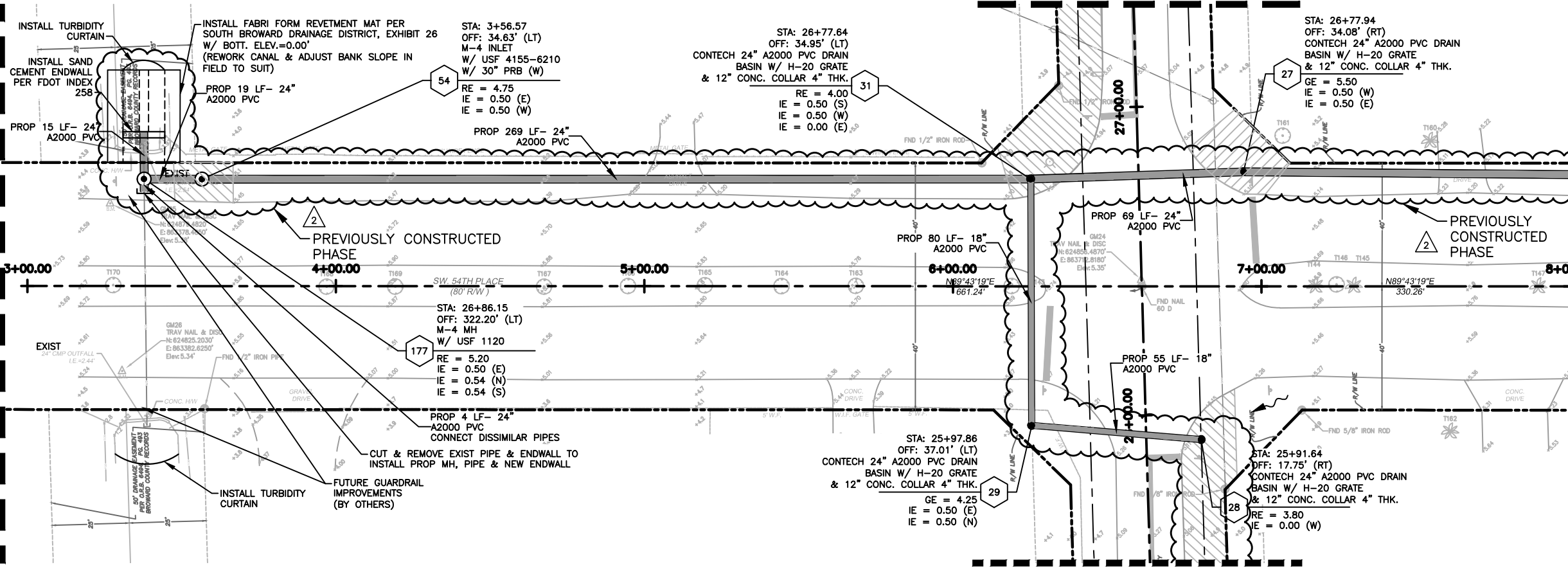
GREEN MEADOWS
 STORMWATER IMPROVEMENTS
 SW. 164TH TERR.
 STA: 32+55 - 41+00

FILE NAME: 02-2035-C-03-STRM.dwg
 LAST SAVED: 11/11/19 - 10:58am
 CAS PROJECT NUMBER
 19-2035

SHEET
C-03

SEE SHEET C-2 FOR CONTINUATION

LIMITS OF PROJECT SW. 54TH PLACE
STA: 03+00.00

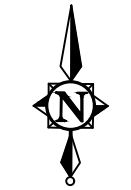
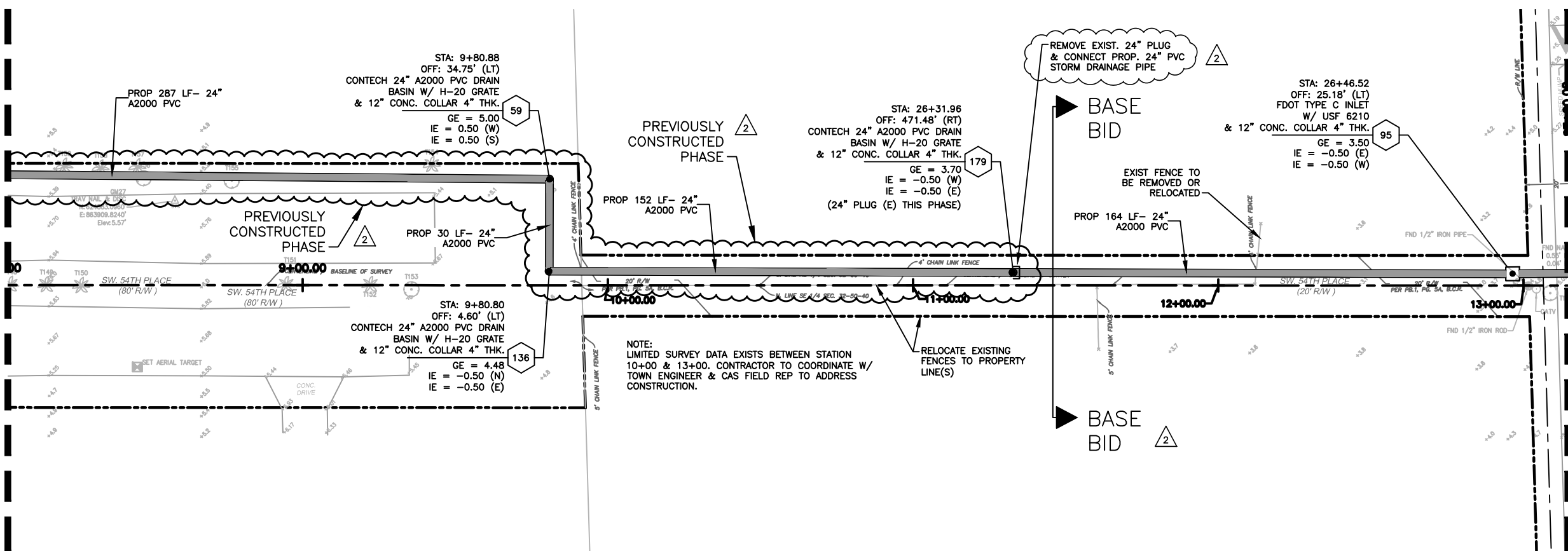


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 - 5. ELEVATIONS SHOWN HEREON ARE IN NAVD '88, ADD 1.51' TO OBTAIN NGVD '29.

SEE SHEET C-2 FOR CONTINUATION

SEE BOTTOM LEFT (THIS SHEET) FOR CONTINUATION

SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION



SEE SHEET C-7 FOR CONTINUATION

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
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PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS
 SW. 54TH PLACE
 STA: 03+00 - 13+00

FILE NAME: 02-2035-C-04-STRM.dwg
 LAST SAVED: 12/21/20 - 10:28am
 GAS PROJECT NUMBER
 19-2035

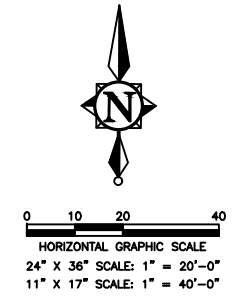
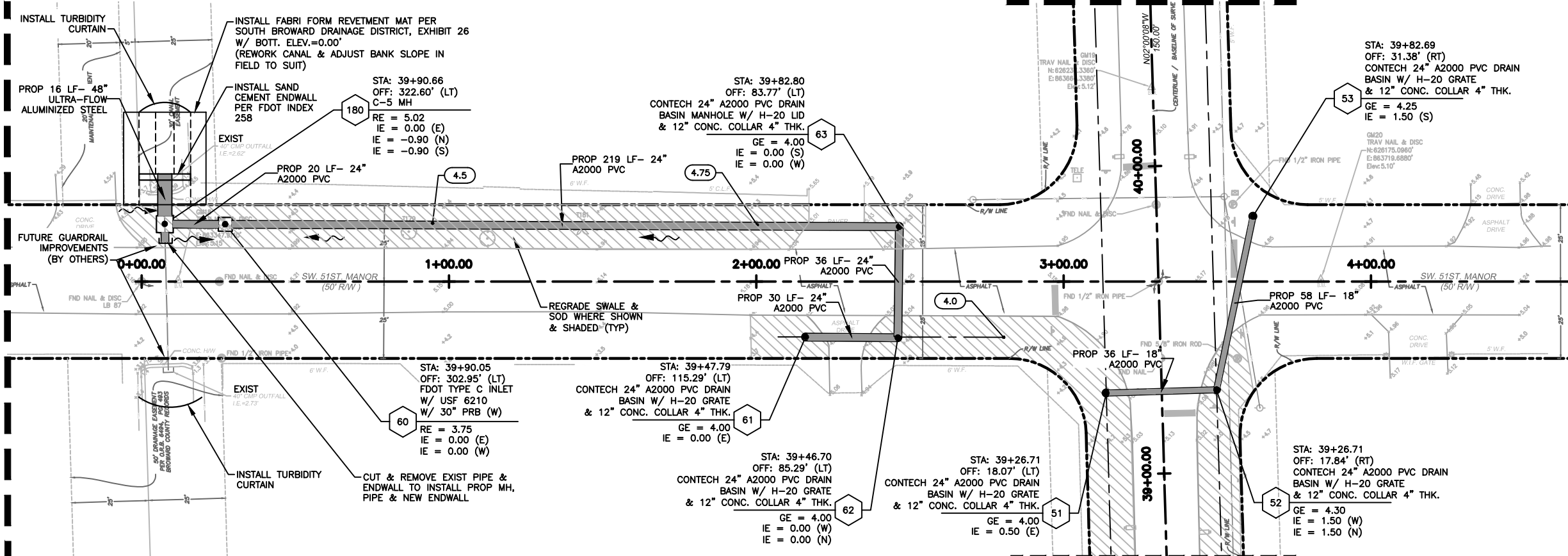
SHEET
C-04

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-15-Green Meadows Stormwater Improvements\09-Plans\02-2035-C-04-STRM.dwg, 12/21/2020 11:25:25 AM, mmareno, 1:2

SEE SHEET C-3 FOR CONTINUATION

LIMITS OF PROJECT SW. 51ST MANOR
STA: 0+00.00

LIMITS OF PROJECT SW. 51ST MANOR
STA: 4+55.00



- NOTES:
1. THE EXISTENCE AND LOCATION OF ANY OF THE WATER AND/OR WASTEWATER LINES, VALVES, HYDRANTS, LIFT STATIONS, ETC., SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE MD-WASA OR CAS AND MUST BE VERIFIED IN THE FIELD.
 2. CONTRACTOR WILL OBTAIN A WATER USE PERMIT FOR ANY CONSTRUCTION DEWATERING AS NECESSARY FROM ANY WATER MANAGEMENT DISTRICT AND BROWARD COUNTY.
 3. CONTRACTOR WILL OBTAIN A N.P.D.E.S. N.O.I. PERMIT FROM F.D.E.P. PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 4. ALL STRUCTURES TO HAVE MIN. 18" SUMP FROM LOWEST PIPE INVERT; 24" WHERE BAFFLE IS CALLED OUT.
 5. ELEVATIONS SHOWN HEREON ARE IN NAVD '88, ADD 1.51' TO OBTAIN NGVD '29.

SEE SHEET C-3 FOR CONTINUATION

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
**TOWN OF
 SOUTHWEST RANCHES**

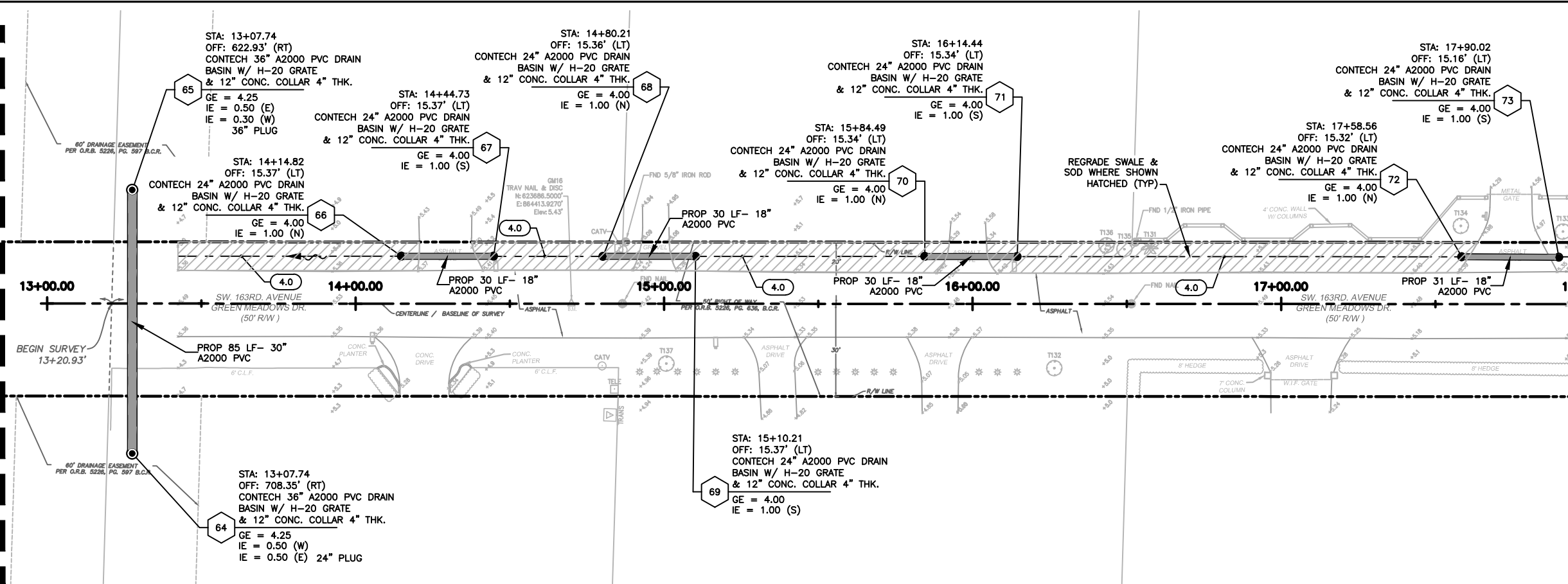
**GREEN MEADOWS
 STORMWATER IMPROVEMENTS**
 SW. 51ST MANOR
 STA: 00+00 - 04+55

FILE NAME: 02-2035-C-05-STRM.dwg
 LAST SAVED: 11/11/19 - 11:03am
 GAS PROJECT NUMBER
 19-2035

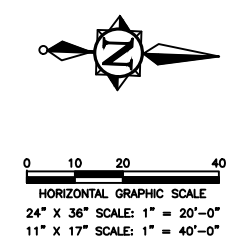
SHEET
C-05

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green Meadows Stormwater Improvements\09-Plans\02-2035-C-05-STRM.dwg, 12/21/2020 7:40:40 AM, mmarcano, 1:2

LIMITS OF PROJECT SW. 163RD AVE
STA: 13+00

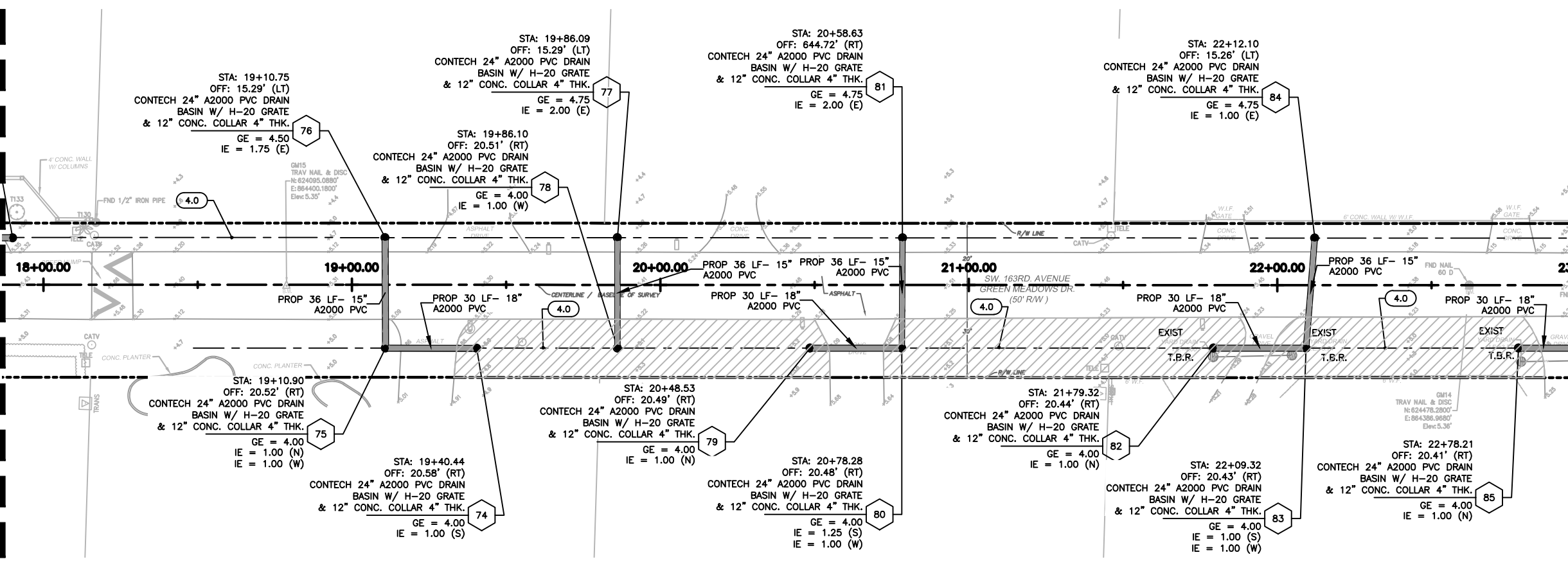


SEE BOTTOM LEFT (THIS SHEET)
FOR CONTINUATION

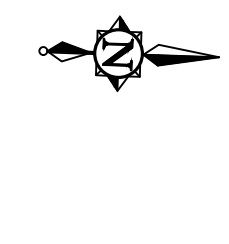


- NOTES:
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SEE TOP RIGHT (THIS SHEET)
FOR CONTINUATION



SEE SHEET C-7 FOR CONTINUATION



FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE: _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

PREPARED FOR:
**TOWN OF
SOUTHWEST RANCHES**

**GREEN MEADOWS
STORMWATER IMPROVEMENTS**
SW. 163RD AVE.
STA: 13+00 - 230+00

FILE NAME: 02-2035-C-06-STRM.dwg
LAST SAVED: 11/11/19 - 11:05am
GAS PROJECT NUMBER
19-2035

SHEET
C-06

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green Meadows Stormwater Improvements\09-Plans\02-2035-C-06-STRM.dwg, 12/21/2020 10:31:01 AM, rmarcano, 1,2

SEE SHEET C-4 FOR CONTINUATION

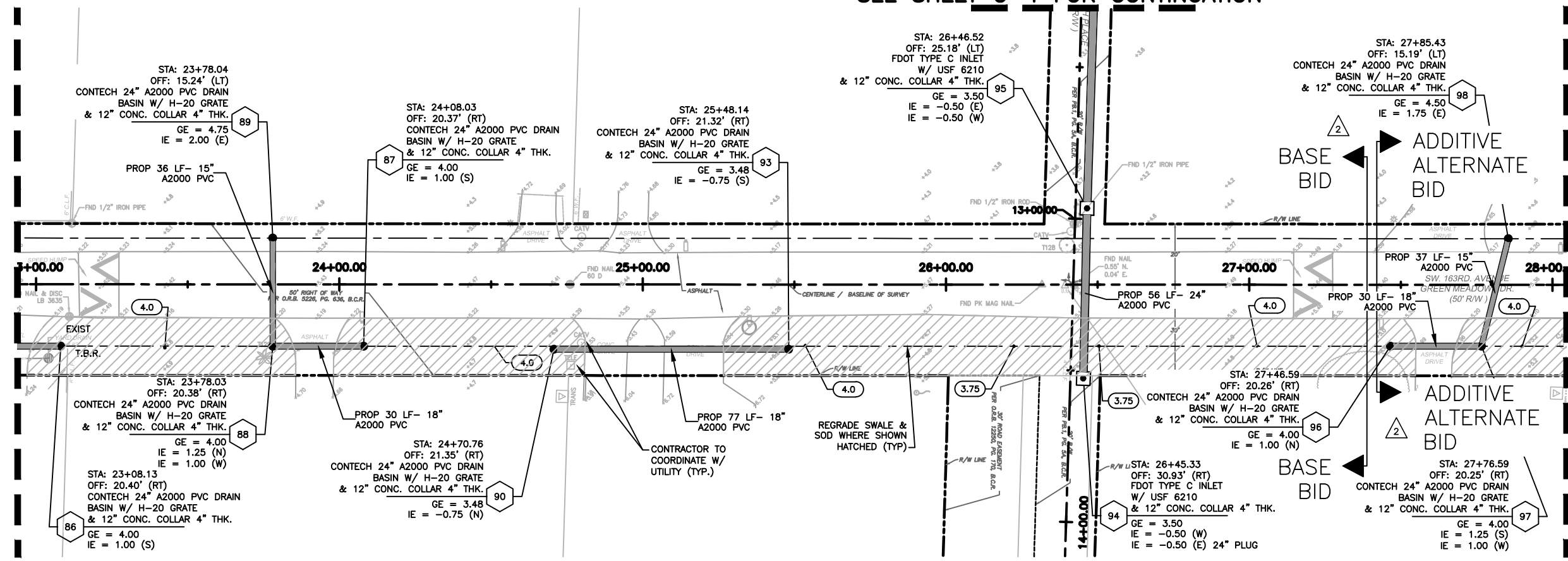
SEE SHEET C-6 FOR CONTINUATION

SEE BOTTOM LEFT (THIS SHEET) FOR CONTINUATION



0 10 20 40
HORIZONTAL GRAPHIC SCALE
24" X 36" SCALE: 1" = 20'-0"
11" X 17" SCALE: 1" = 40'-0"

- NOTES:
1. THE EXISTENCE AND LOCATION OF ANY OF THE WATER AND/OR WASTEWATER LINES, VALVES, HYDRANTS, LIFT STATIONS, ETC., SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE MD-WASA OR CAS AND MUST BE VERIFIED IN THE FIELD.
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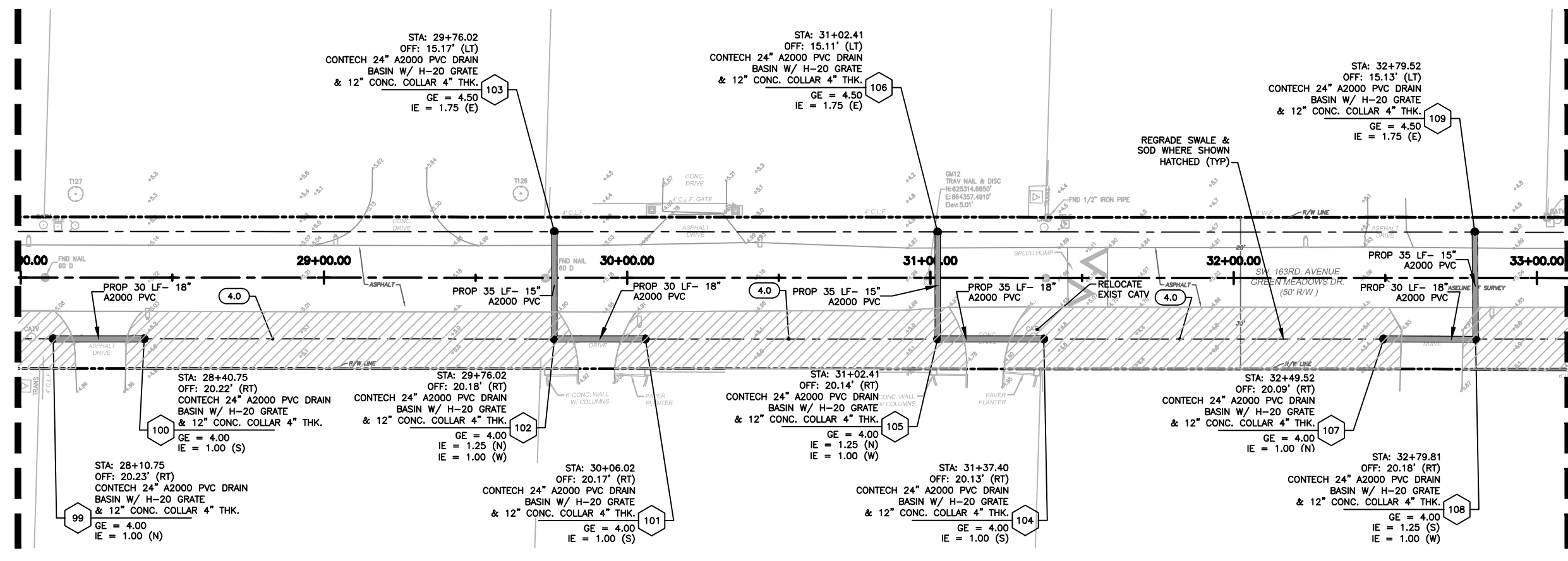


SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION

SEE SHEET C-8 FOR CONTINUATION



FOR CONSTRUCTION



NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE: _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS
SW. 163RD AVE.
STA: 23+00 -33+00

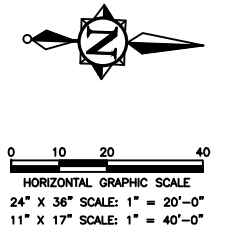
FILE NAME: 02-2035-C-07-STRM.dwg
LAST SAVED: 12/21/20 - 7:30am
GAS PROJECT NUMBER
19-2035

SHEET
C-07

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green Meadows Stormwater Improvements\09-Plans\02-2035-C-08-STRM.dwg, 12/21/2020 10:35:10 AM, mmarcano, 1:2

SEE SHEET C-7 FOR CONTINUATION

SEE BOTTOM LEFT (THIS SHEET) FOR CONTINUATION



- NOTES:
1. THE EXISTENCE AND LOCATION OF ANY OF THE WATER AND/OR WASTEWATER LINES, VALVES, HYDRANTS, LIFT STATIONS, ETC., SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE MD-WASA OR CAS AND MUST BE VERIFIED IN THE FIELD.
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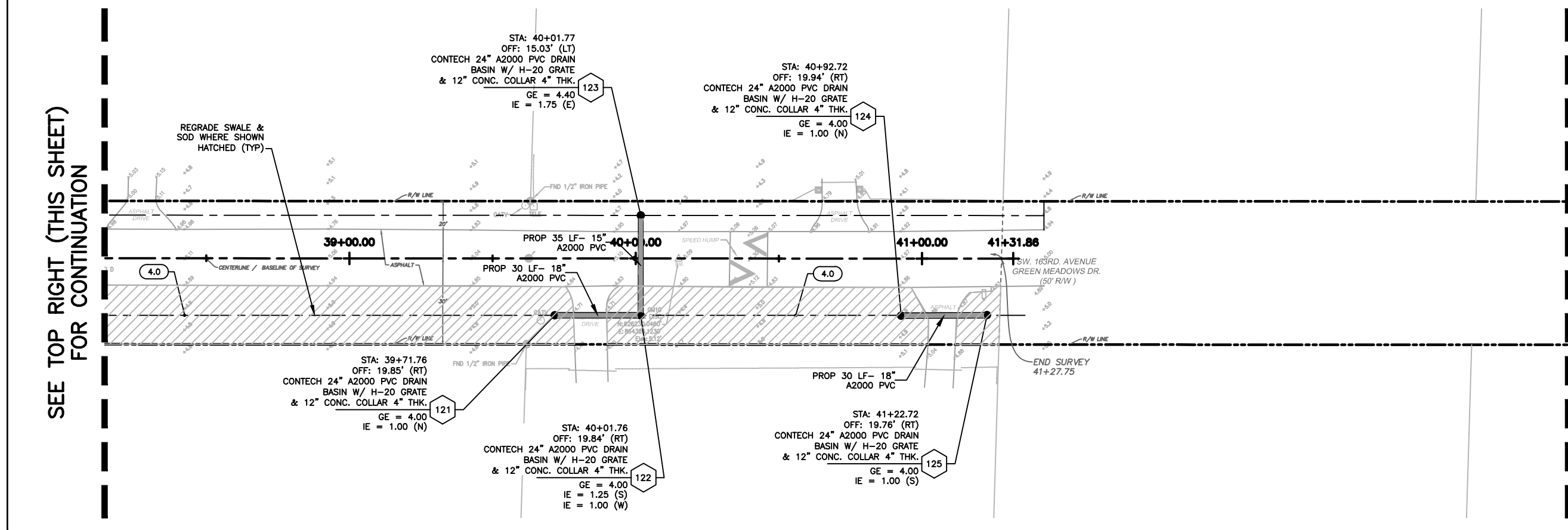
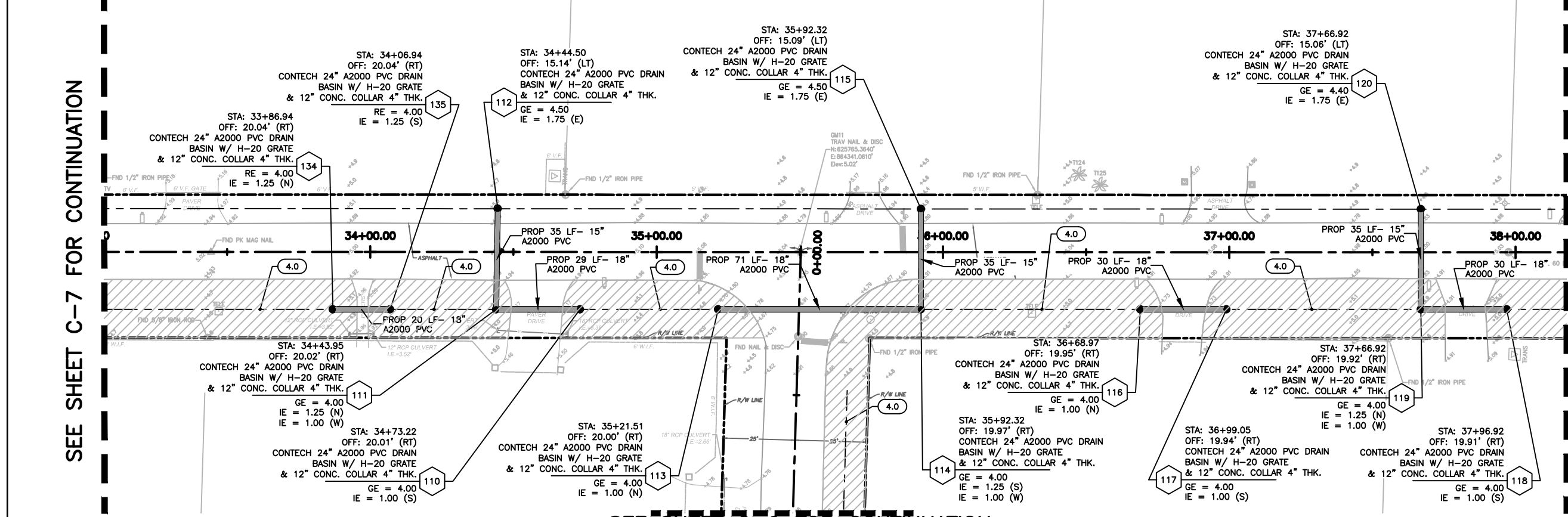
SEE SHEET C-9 FOR CONTINUATION

SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION

LIMITS OF PROJECT SW. 163RD AVE. STA: 41+20



FOR CONSTRUCTION



NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS
 SW. 163RD AVE.
 STA: 33+00 - 41+20

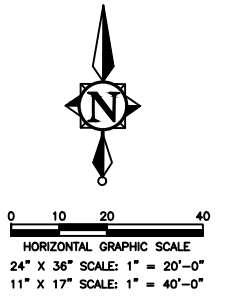
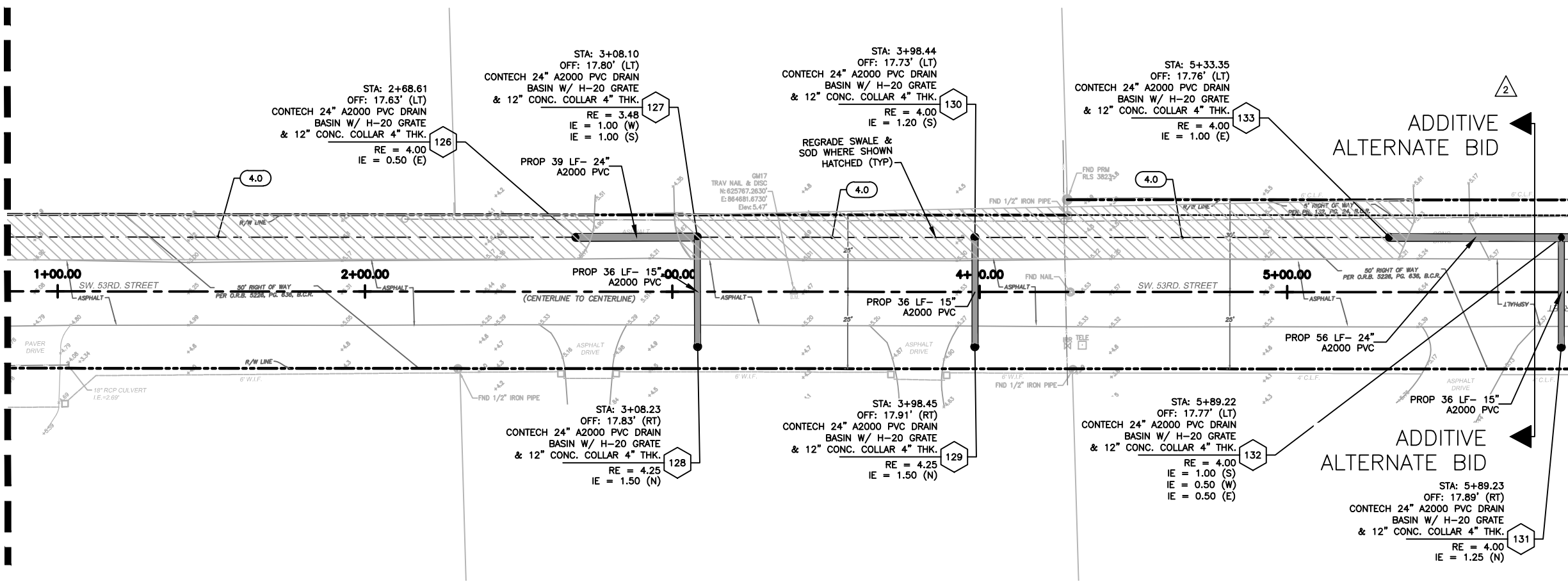
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 LAST SAVED: 11/11/19 - 11:08am
 GAS PROJECT NUMBER
 19-2035

SHEET
C-08

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green Meadows Stormwater Improvements\02-2035-C-09-STRM.dwg, 12/21/2020 7:44:09 AM, mmercino, 1/2

SEE SHEET C-8 FOR CONTINUATION

SEE SHEET C-12 FOR CONTINUATION



- NOTES:
1. THE EXISTENCE AND LOCATION OF ANY OF THE WATER AND/OR WASTEWATER LINES, VALVES, HYDRANTS, LIFT STATIONS, ETC., SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE MD-WASA OR CAS AND MUST BE VERIFIED IN THE FIELD.
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FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
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 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

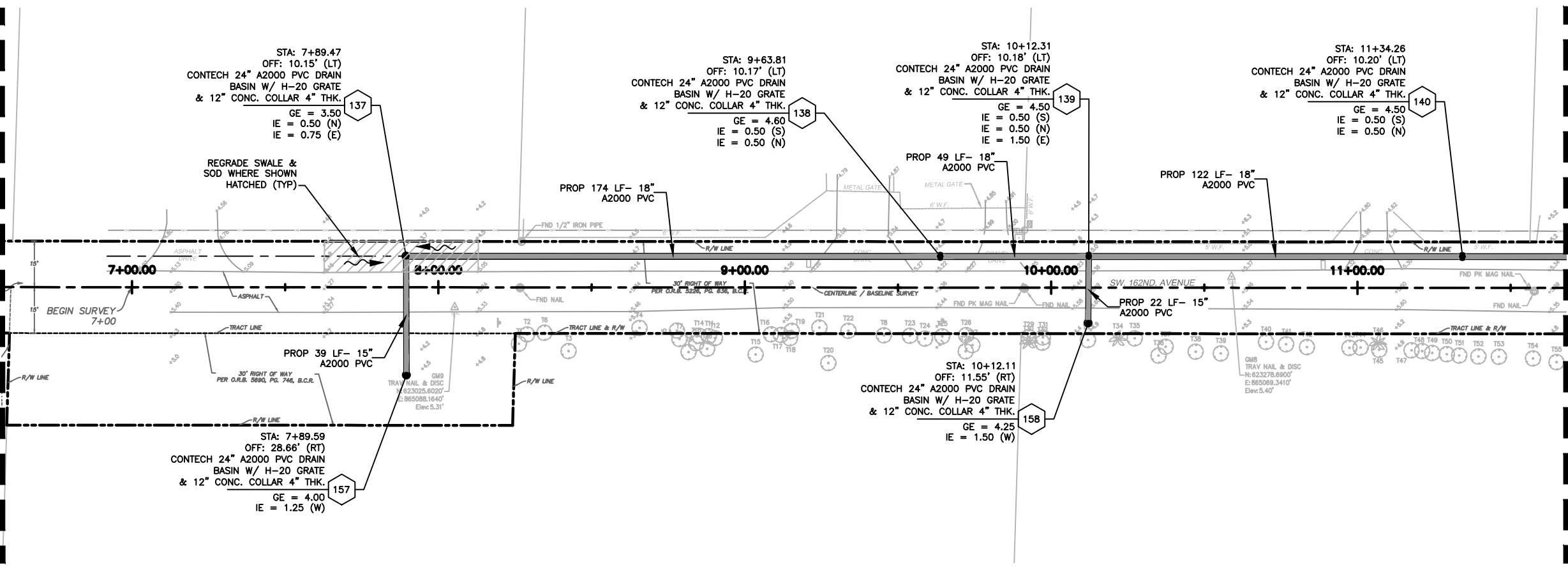
GREEN MEADOWS STORMWATER IMPROVEMENTS
 SW. 53RD STREET
 STA: 01+00 - 06+00

FILE NAME: 02-2035-C-09-STRM.dwg
 LAST SAVED: 12/21/20 - 7:32am
 GAS PROJECT NUMBER
 19-2035

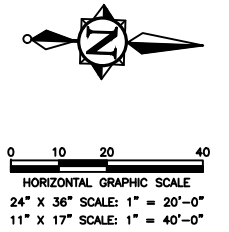
SHEET
C-09

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LIMITS OF PROJECT SW. 162ND AVE.
STA: 7+00

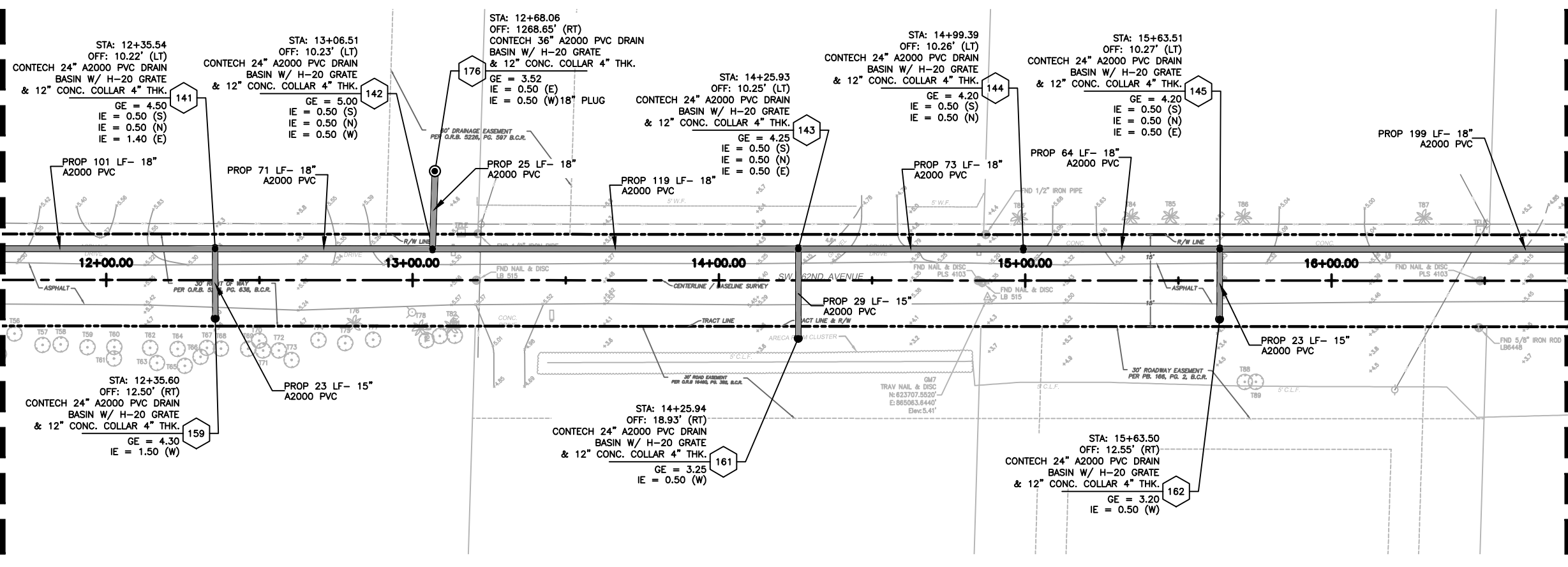


SEE BOTTOM LEFT (THIS SHEET)
FOR CONTINUATION

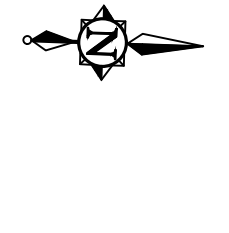


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SEE TOP RIGHT (THIS SHEET)
FOR CONTINUATION



SEE SHEET C-11 FOR CONTINUATION



FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE: _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS
SW. 162ND AVE.
STA: 07+00 - 17+00

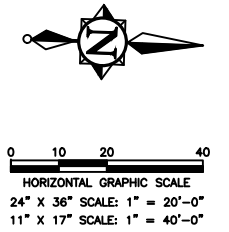
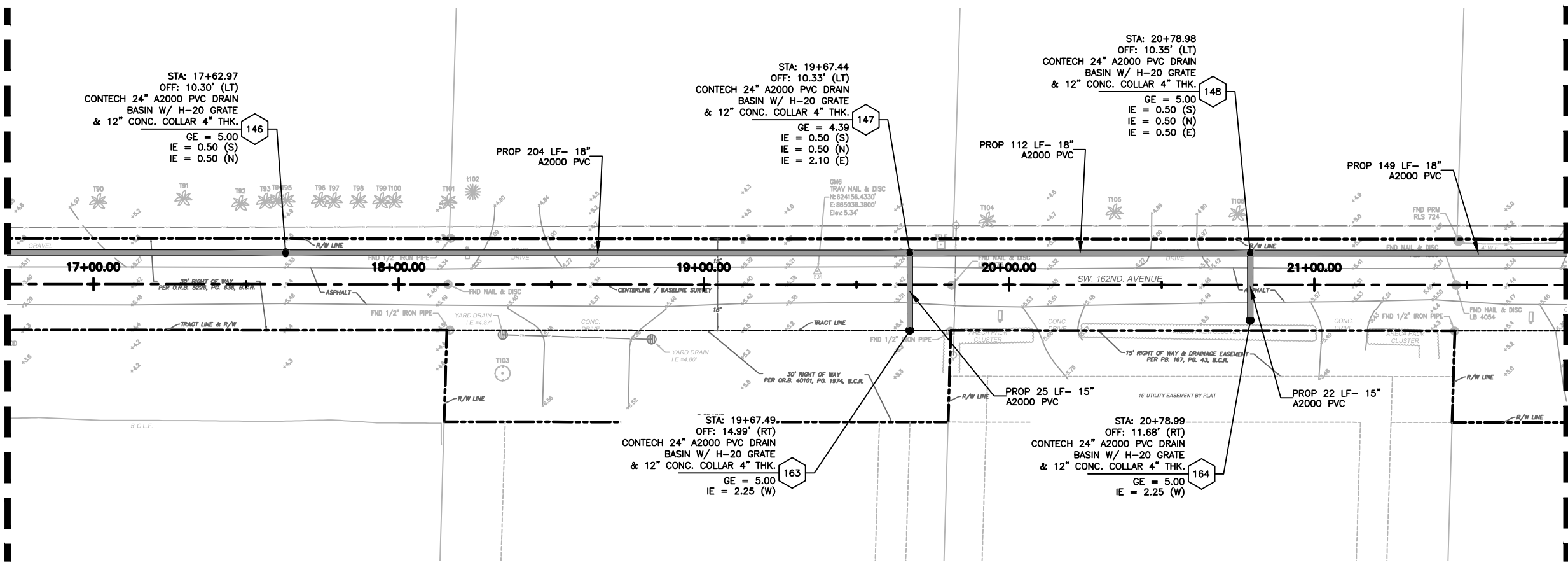
FILE NAME: 02-2035-C-10-STRM.dwg
LAST SAVED: 11/11/19 - 11:11am
GAS PROJECT NUMBER
19-2035

SHEET
C-10

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-11-5-Strm\Improvements\09-Plans\02-2035-C-11-STRM.dwg, 12/21/2020 10:40:11 AM, mmarenco, 1/2

SEE SHEET C-10 FOR CONTINUATION

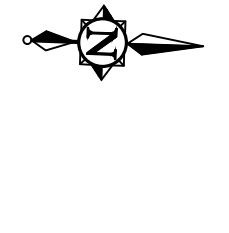
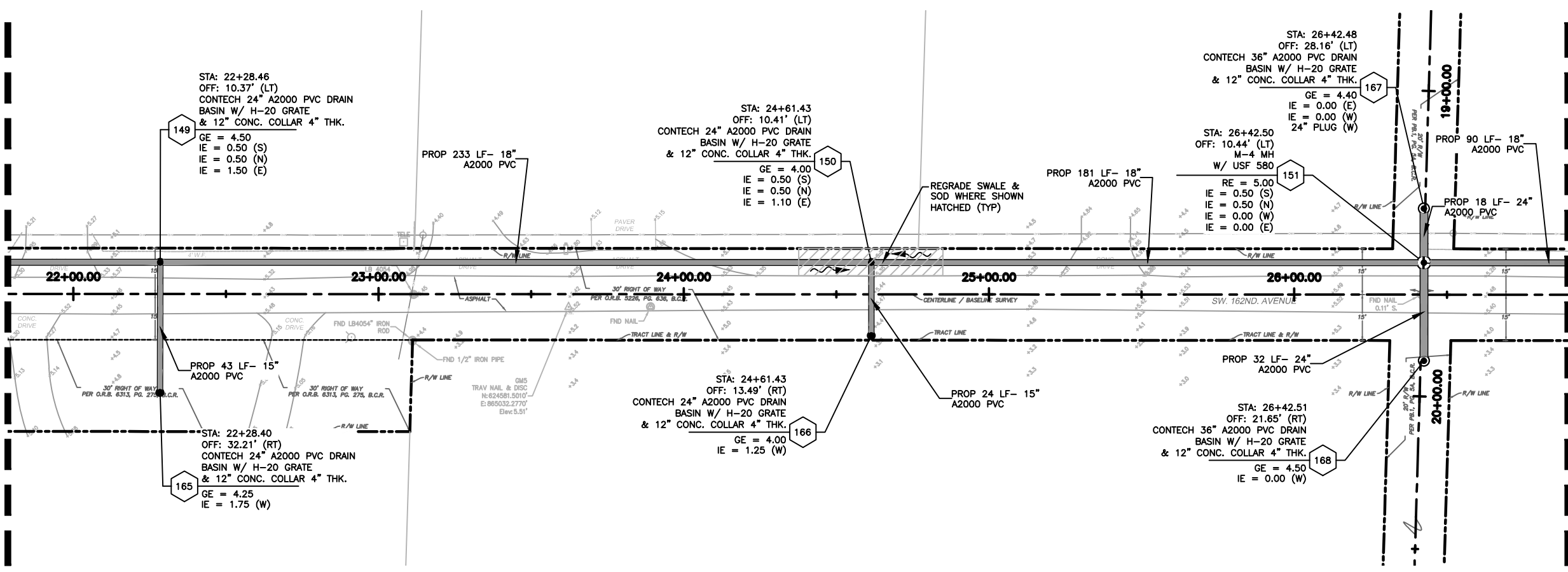
SEE BOTTOM LEFT (THIS SHEET) FOR CONTINUATION



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SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION

SEE SHEET C-12 FOR CONTINUATION



FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110 

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

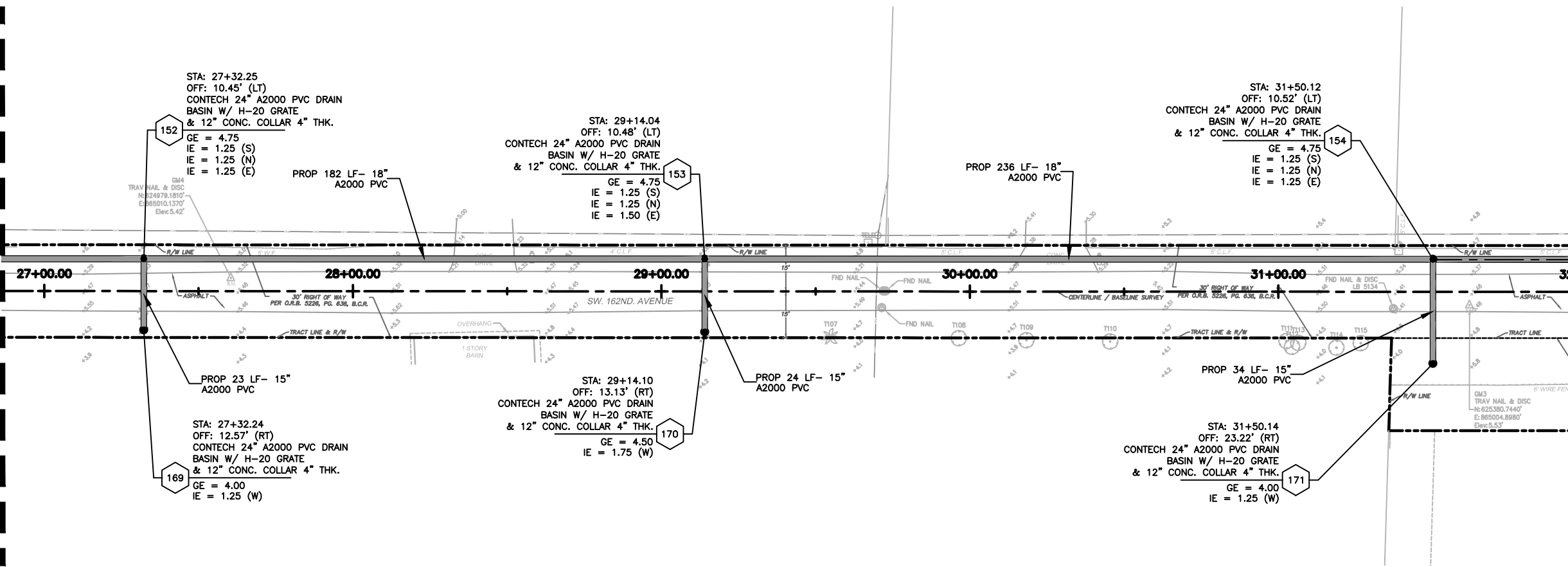
GREEN MEADOWS STORMWATER IMPROVEMENTS
 SW. 162ND AVE.
 STA: 16+50 - 27+00

FILE NAME: 02-2035-C-11-STRM.dwg
 LAST SAVED: 11/11/19 - 11:14am
 GAS PROJECT NUMBER
 19-2035

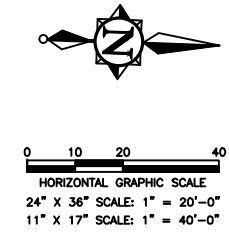
SHEET
C-11

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SEE SHEET C-11 FOR CONTINUATION

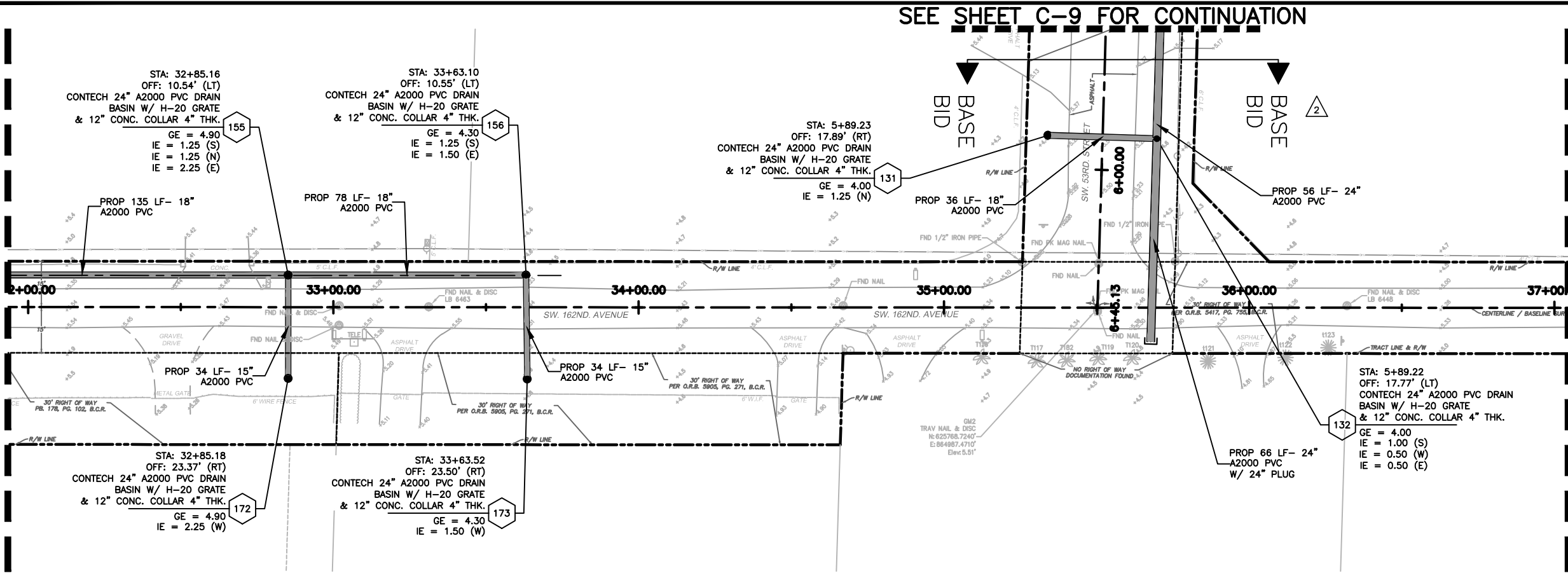


SEE BOTTOM LEFT (THIS SHEET) FOR CONTINUATION

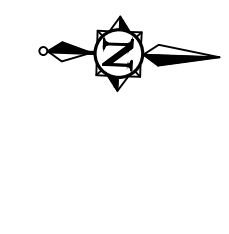


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SEE TOP RIGHT (THIS SHEET) FOR CONTINUATION



SEE SHEET C-13 FOR CONTINUATION



FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
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 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

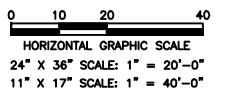
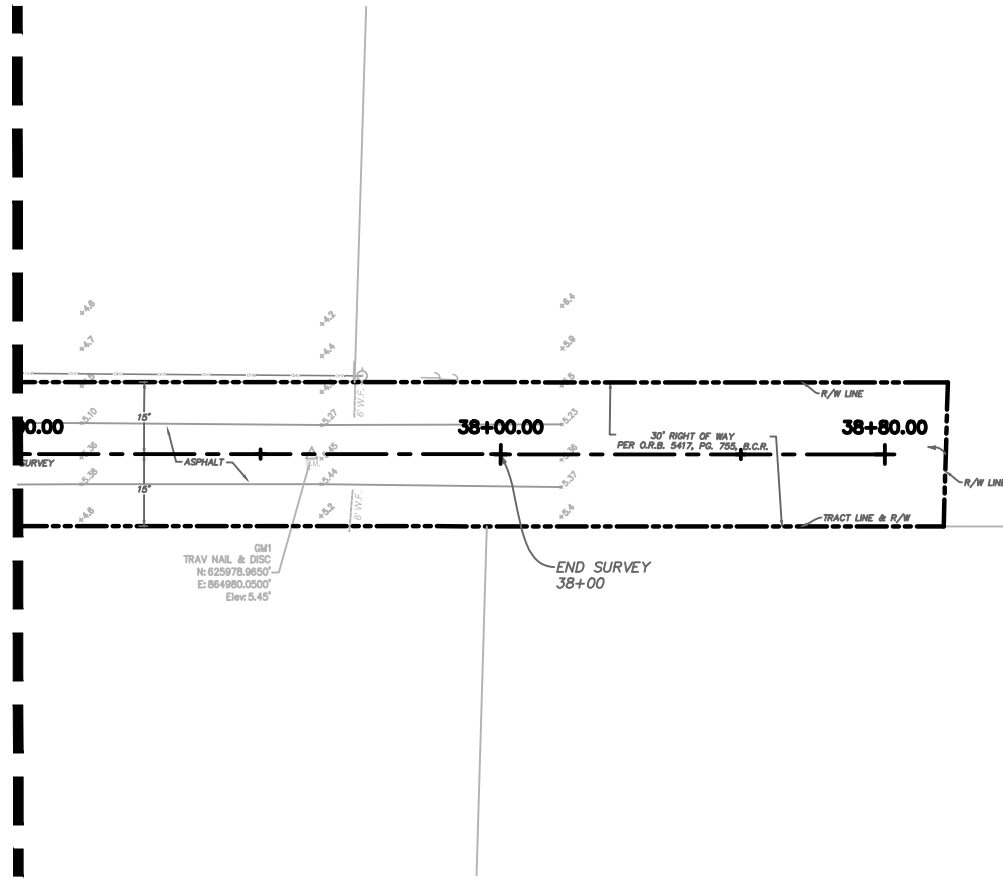
GREEN MEADOWS STORMWATER IMPROVEMENTS
 SW. 162ND AVE.
 STA: 27+00 - 37+00

FILE NAME: 02-2035-C-12-STRM.dwg
 LAST SAVED: 12/21/20 - 7:34am
 GAS PROJECT NUMBER
 19-2035

SHEET
C-12

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green Meadows Stormwater Improvements\02-2035-C-13-STRM.dwg, 12/21/2020 7:47:45 AM, mmarcano, 1:2

SEE SHEET C-12 FOR CONTINUATION



LIMITS OF PROJECT SW. 162ND AVE.
STA: 38+80

- NOTES:
1. THE EXISTENCE AND LOCATION OF ANY OF THE WATER AND/OR WASTEWATER LINES, VALVES, HYDRANTS, LIFT STATIONS, ETC., SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE MD-WASA OR CAS AND MUST BE VERIFIED IN THE FIELD.
 2. CONTRACTOR WILL OBTAIN A WATER USE PERMIT FOR ANY CONSTRUCTION DEWATERING AS NECESSARY FROM ANY WATER MANAGEMENT DISTRICT AND BROWARD COUNTY.
 3. CONTRACTOR WILL OBTAIN A N.P.D.E.S. N.O.I. PERMIT FROM F.D.E.P. PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 4. ALL STRUCTURES TO HAVE MIN. 18" SUMP FROM LOWEST PIPE INVERT; 24" WHERE BAFFLE IS CALLED OUT.
 5. ELEVATIONS SHOWN HEREON ARE IN NAVD '88, ADD 1.51' TO OBTAIN NGVD '29.

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

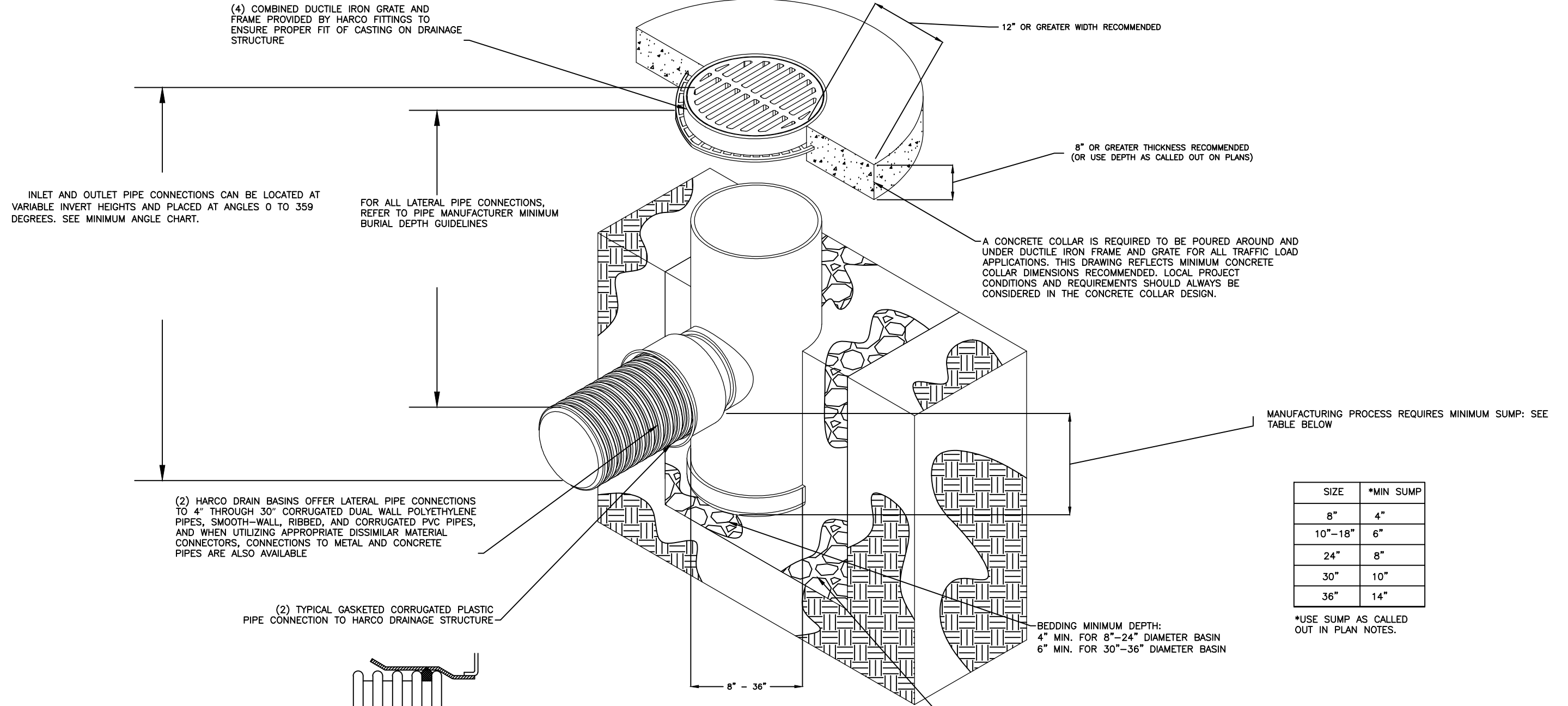
PREPARED FOR:
**TOWN OF
 SOUTHWEST RANCHES**

**GREEN MEADOWS
 STORMWATER IMPROVEMENTS**
 SW. 162ND AVE.
 STA: 37+00 -38+80

FILE NAME: 02-2035-C-13-STRM.dwg
 LAST SAVED: 11/11/19 - 11:17am
 CAS PROJECT NUMBER
 19-2035

SHEET
C-13

HARCO DRAIN BASIN STANDARD DETAIL



- HARCO plastic drainage structures, including drain basins and inline drains, are fabricated from PVC pipe stock. HARCO employs a thermo-molding process to ensure a consistent watertight seal throughout the drainage structure and its outlet stubs. The PVC resin utilized to make this PVC stock conforms to ASTM D1784 cell class 12454
- The outlet stubs for HARCO plastic drainage structures are also manufactured from PVC pipe stock utilizing thermo-molding process to ensure a tight pipe-to-structure fit, so that when utilizing the appropriate pipe gaskets, the pipe-to-structure connection meets or exceeds the pressure requirements of the ASTM D3212 standard for pipe connections of plastic drainage pipe and sewer pipe using flexible lastomeric seals. These pipe gaskets must meet ASTM F477 requirements.
- Riser pipe extensions are required for drain basins taller than 84" due to shipping restrictions, and are available for convenient in-the-field drain basin height adjustments.
- HARCO grates, covers, and frames shall be constructed of ductile iron meeting ASTM A536 Grade 80-55-06. 12" through 36" round and square hinged standard grates and solid covers meet H25 load rating. 12" through 24" round and square hinged pedestrian grates meet H10 load rating. Traffic family and Curb Inlet 2'x2' and 2'x3' grates meet H25 load rating. 8" and 10" grates and solid covers are one-piece drop-in castings designed for light duty load applications. All domed grates are not load rated.

FOR CONSTRUCTION

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1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

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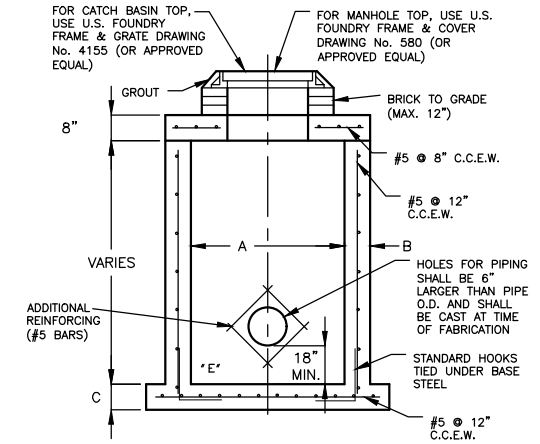
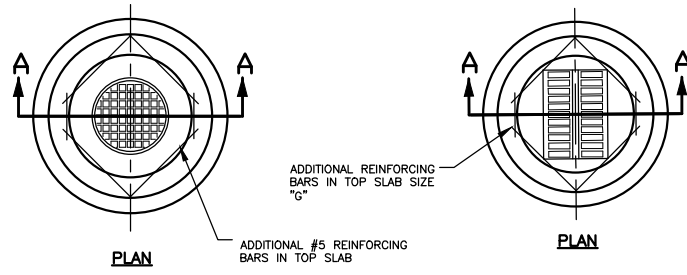
PREPARED FOR:
**TOWN OF
SOUTHWEST RANCHES**

**GREEN MEADOWS
STORMWATER IMPROVEMENTS
STANDARD DETAILS**

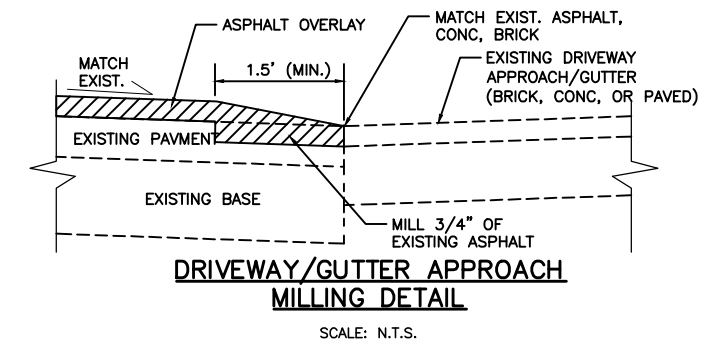
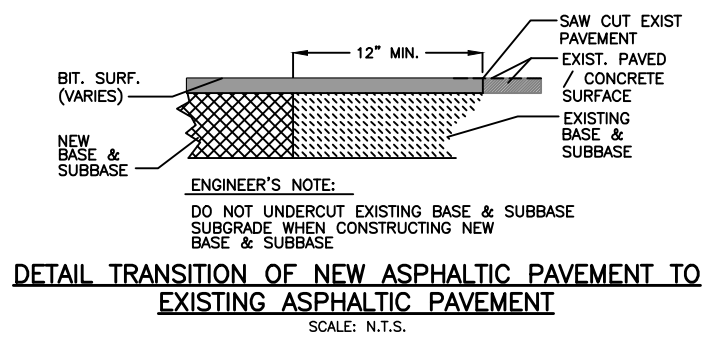
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LAST SAVED: 12/17/19 - 9:07am
GAS PROJECT NUMBER
19-2035

SHEET
C-14

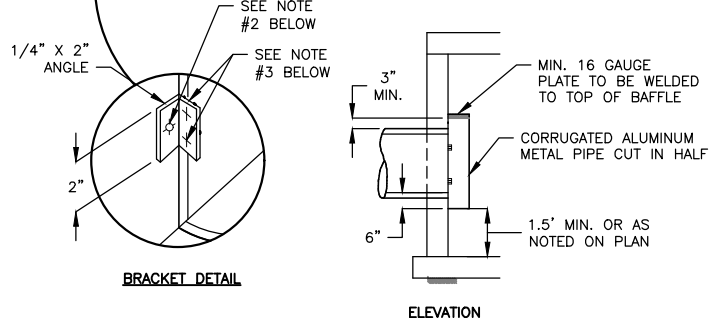
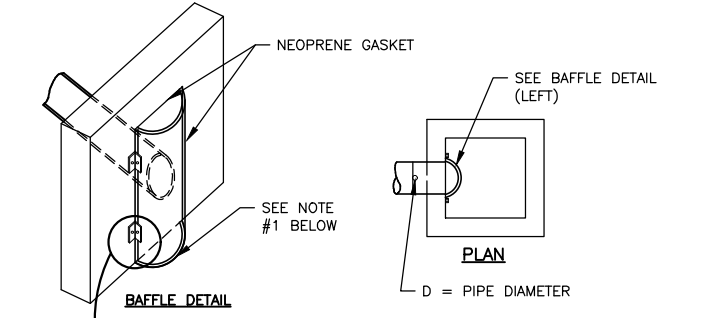
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PRECAST DRAINAGE MANHOLE / CATCH BASIN



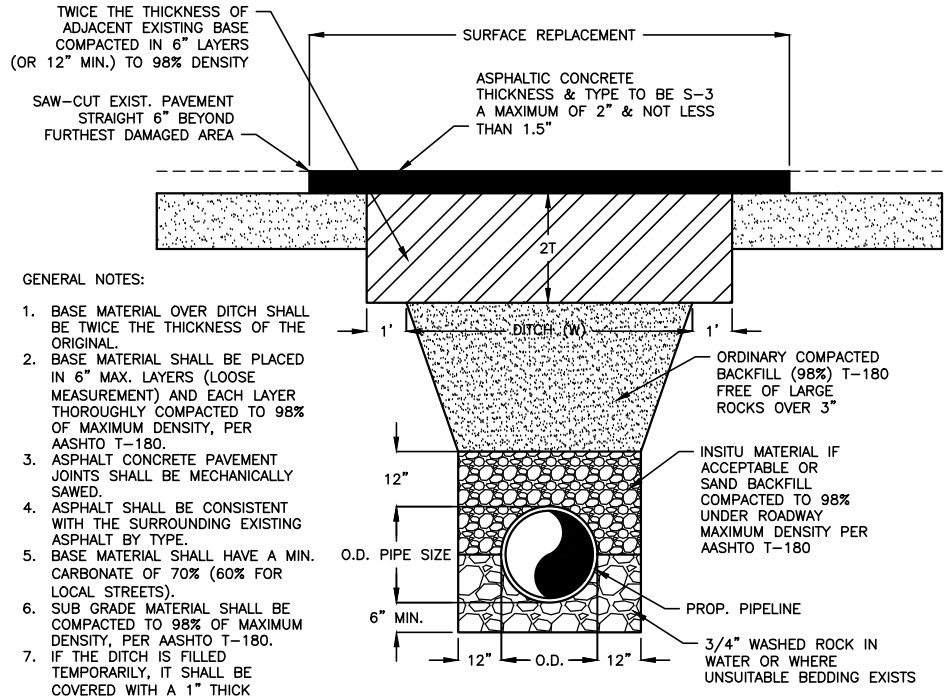
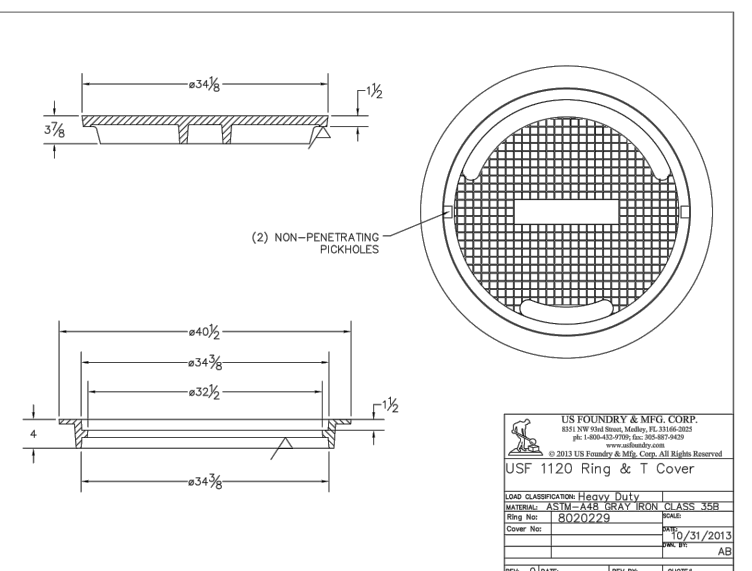
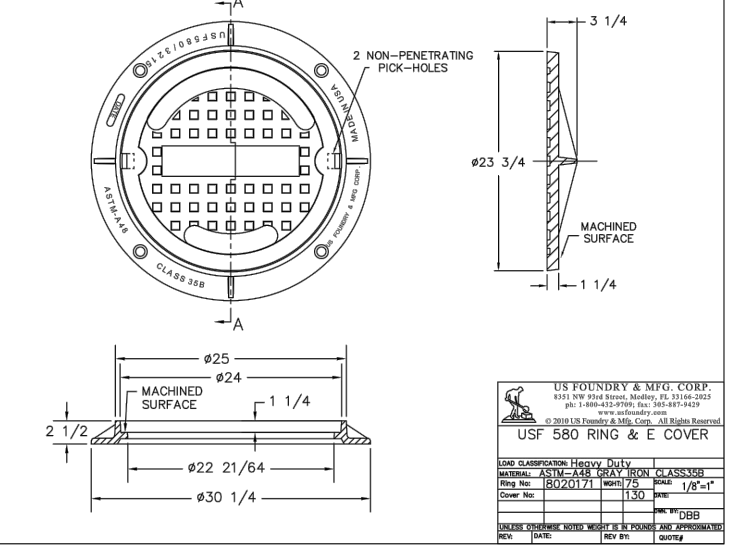
TYPE	"A"	"B"	"C"	"D"	"E"	"F"	"G"
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C-5 / M-5	5'-0"	8"	8"	#5 @ 12" C.C.E.W.	#5 @ 12" C.C.E.W.	7'-4"DIA	#5 @ 8" C.C.E.W.
C-6 / M-6	6'-0"	8"	10"	#5 @ 12" C.C.E.W.	#5 @ 6" C.C.E.W.	8'-4"DIA	#5 @ 6" C.C.E.W.
C-7 / M-7	7'-0"	8"	10"	#5 @ 12" C.C.E.W.	#5 @ 6" C.C.E.W.	9'-4"DIA	#5 @ 6" C.C.E.W.
C-8 / M-8	8'-0"	10"	10"	2-W.W.W./#4 @ 12" C.C. VERT.	#5 @ 6" C.C.E.W.	10'-8"DIA	#5 @ 6" C.C.E.W.



NOTES:

- SECTION OF A.C.M.P. CUT IN HALF. BAFFLE DIAMETER SHALL BE ONE SIZE LARGER THAN THE DISCHARGE PIPE (OR APPROVED EQUAL).
- 1/2" GALVANIZED LAG BOLT IN LEAD SHIELD
- 2-1/4" THRU BOLTS.

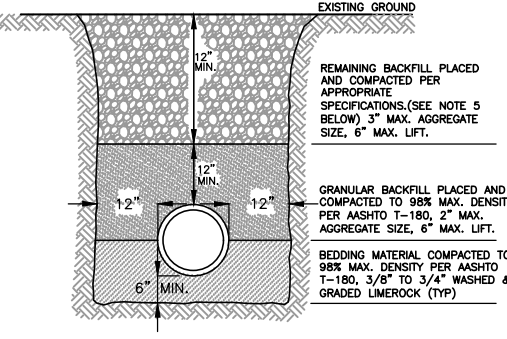
POLLUTION RETARDANT BASIN BAFFLE TYPE
SCALE: N.T.S.



- GENERAL NOTES:**
- BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL.
 - BASE MATERIAL SHALL BE PLACED IN 6" MAX. LAYERS (LOOSE MEASUREMENT) AND EACH LAYER THOROUGHLY COMPACTED TO 98% OF MAXIMUM DENSITY, PER AASHTO T-180.
 - ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWS.
 - ASPHALT SHALL BE CONSISTENT WITH THE SURROUNDING EXISTING ASPHALT BY TYPE.
 - BASE MATERIAL SHALL HAVE A MIN. CARBONATE OF 70% (60% FOR LOCAL STREETS).
 - SUB GRADE MATERIAL SHALL BE COMPACTED TO 98% OF MAXIMUM DENSITY, PER AASHTO T-180.
 - IF THE DITCH IS FILLED TEMPORARILY, IT SHALL BE COVERED WITH A 1" THICK ASPHALT CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING, AND BE MAINTAINED UNTIL REPLACED WITH A PERMANENT PATCH.
 - COST OF ALL BACKFILL, BASE AND PAVEMENT RESTORATION TO BE INCLUDED IN THE LINEAR FOOT PRICE FOR PIPE BEING INSTALLED.

PAVEMENT RESTORATION AND INSTALLATION DETAILS

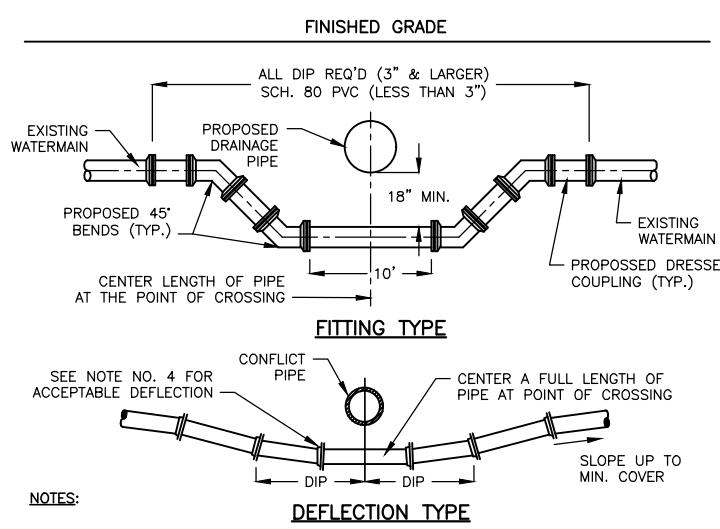
SCALE: N.T.S.



- NOTES:**
- CONTRACTOR TO PROVIDE SAFE TRENCH SLOPES PER OSHA REQUIREMENTS. WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED, CONTRACTOR IS TO PROVIDE APPROVED MEANS OF CONSTRUCTION.
 - UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGE ROCKS SHALL BE REMOVED; BEDDING MATERIAL AND BACKFILL SHALL CONSIST OF WASHED AND GRADED LIMEROCK.
 - THE PIPE AND/OR STRUCTURE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
 - BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
 - COMPACT BACKFILL TO 98% DENSITY UNDER PAVEMENT AND TO 95% DENSITY ELSEWHERE (AASHTO T-180)
 - COMPACTION AND DENSITY TESTS SHALL BE COMPLETED DURING BACKFILL OPERATIONS, CONTRACTORS NOT FOLLOWING THIS PROCEDURE, FOR WHATEVER REASONS, SHALL BE REQUIRED TO RE-EXCAVATE THE AREA IN QUESTION, DOWN TO THE BEDDING MATERIAL, THEN BACKFILL FOLLOWING THE ABOVE PROCEDURES.
 - SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
 - MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL (WITHIN 12" OF TOP PIPE).
 - WHERE UNSUITABLE SOILS ARE ENCOUNTERED AT THE PIPE INVERT, THE BEDDING MATERIAL IS TO BE EXTENDED TO A MIN. OF 16" BELOW THE INVERT ELEVATION AND NON-WOVEN FILTER FABRIC TO BE LAID BETWEEN UNSUITABLE SOILS & BASE. FILTER FABRIC TO EXTEND MIN. 12" ABOVE TOP OF PIPE.

TYPICAL TRENCH DETAIL

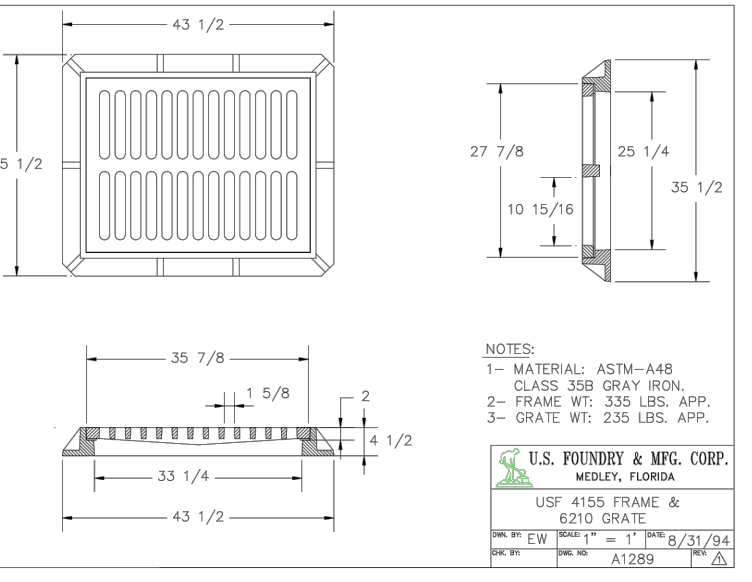
SCALE: N.T.S.



- NOTES:**
- STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MIN. VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MIN. SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT AND FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.I.P. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER A WATER MAIN, THE CRITERIA FOR MIN. SEPARATION BETWEEN LINES AND JOINTS IN THE ABOVE SHALL BE REQUIRED AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION. D.I.P. IS NOT REQUIRED FOR STORM SEWER.
 - MAINTAIN TEN (10) FEET HORIZONTAL DISTANCE BETWEEN WATER MAIN AND STORM SEWER, AS MINIMUM.
 - FITTINGS SHALL BE RESTRAINED WITH MEGALUG SERIES 1100 AS MANUFACTURED BY EBAA IRON INC. OR APPROVED EQUAL.
 - THE DEFLECTION TYPE CROSSING IS PREFERRED.
 - DO NOT EXCEED 75% OF MANUFACTURER'S RECOMMENDED MAX. JOINT DEFLECTION.
 - ALL EXPOSED TIE RODS/ STEEL SHALL BE COATED w/ COAL-TAR EXPOXY.

TYPICAL UTILITY CROSSING

SCALE: N.T.S.



- NOTES:**
- MATERIAL: ASTM-A48 CLASS 35B GRAY IRON.
 - FRAME WT: 335 LBS. APP.
 - GRATE WT: 235 LBS. APP.

U.S. FOUNDRY & MFG. CORP.
MEDLEY, FLORIDA
USF 4155 FRAME & 6210 GRATE
SCALE: 1" = 1'
DATE: 8/31/94
REV: A1289

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE: _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
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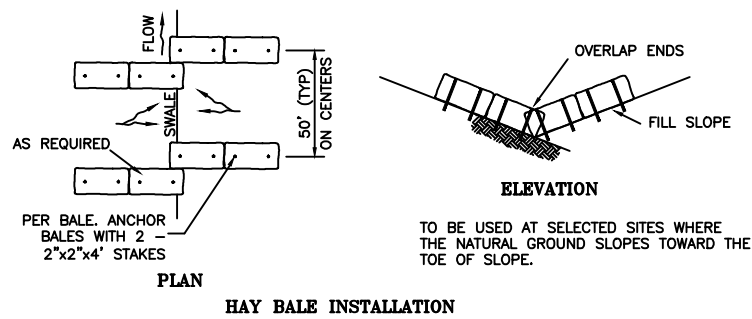
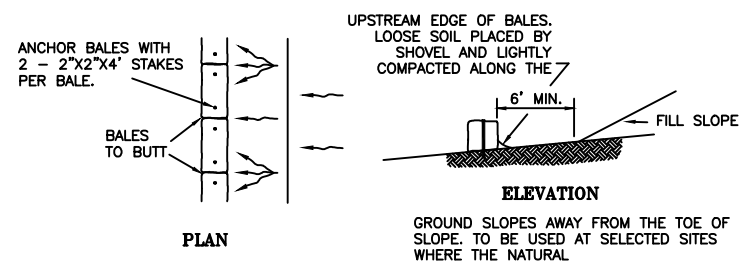
PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS STANDARD DRAINAGE DETAILS

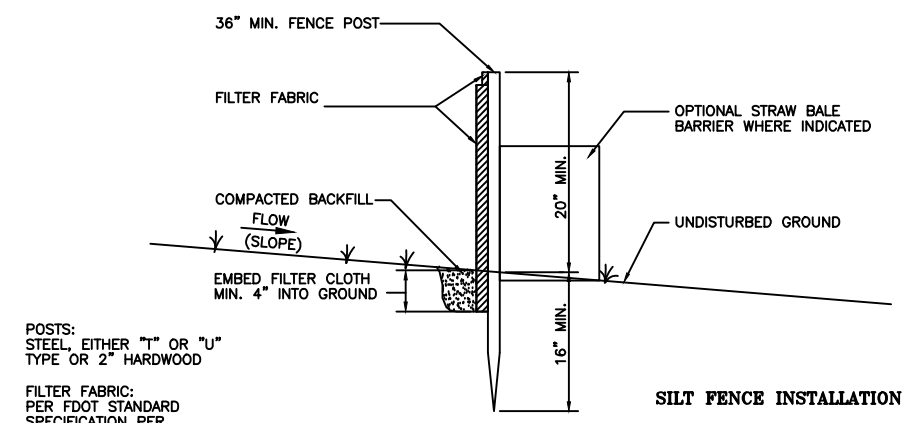
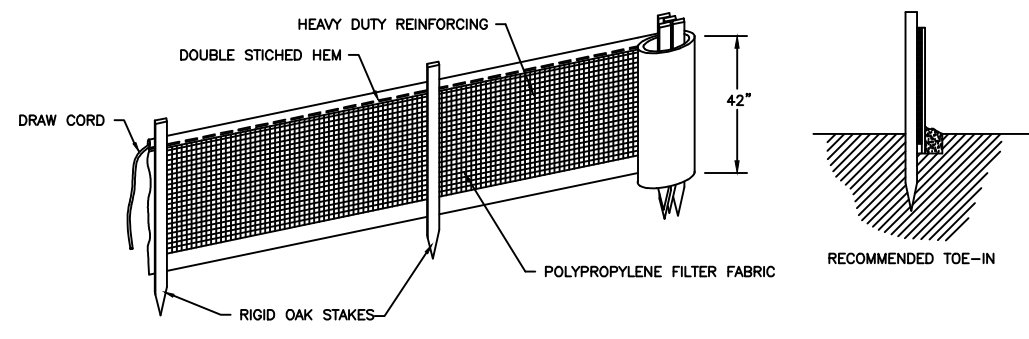
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HAY BALE INSTALLATION



POSTS:
STEEL, EITHER "I" OR "U"
TYPE OR 2" HARDWOOD

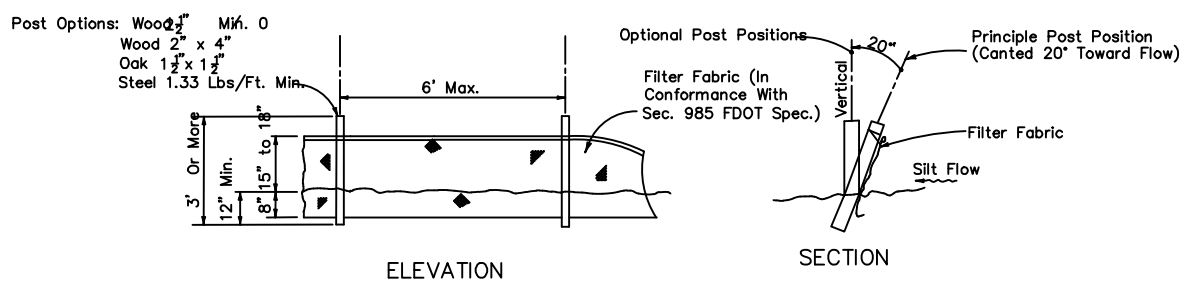
FILTER FABRIC:
PER FDOT STANDARD
SPECIFICATION PER
FDOT INDEX 102

PREFABRICATED UNIT:
GEOFAB, ENVIROFENCE,
OR APPROVED EQUAL

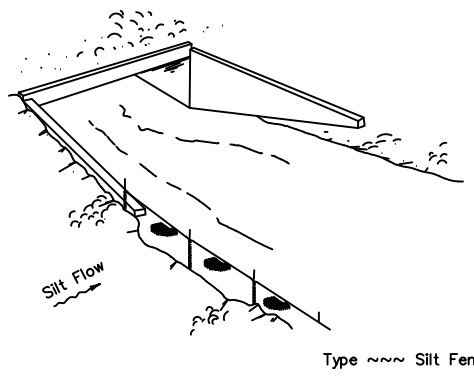
SILT FENCE INSTALLATION

SILT FENCE NOTES:

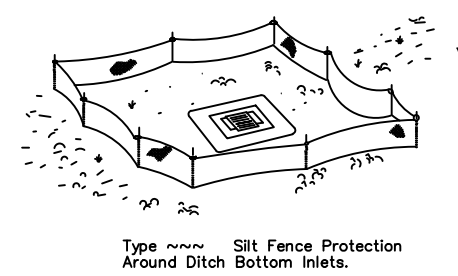
1. FILTER FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH TIES SPACED EVERY 24 INCHES AT TOP AND MID. SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR DEPTH OF ACCUMULATED SEDIMENT REACHES 6 INCHES.
5. SILT FENCE SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL CONSTRUCTION IS COMPLETE.
6. THE CONTRACTOR SHALL INSPECT AND REPAIR THE SILT FENCE AFTER EACH RAIN EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
7. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFFSITE AND CAN BE PERMANENTLY STABILIZED.
8. THE SILT FENCE SHALL BE PLACED ON SLOPE CONTOUR TO MAXIMIZE ITS PONDING EFFICIENCY.
9. IF DITCH LEVEL IS DEEPER THAN 30", THEN A FLOATING SILT SCREEN SHALL BE USED



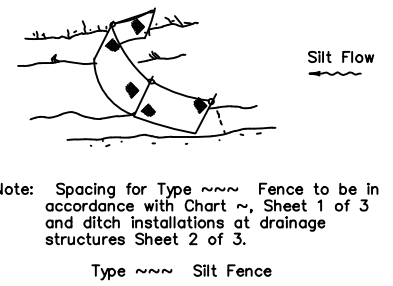
Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).
TYPE ~~~ SILT FENCE



Type ~~~ Silt Fence



Type ~~~ Silt Fence Protection Around Ditch Bottom Inlets.



Note: Spacing for Type ~~~ Fence to be in accordance with Chart ~, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3.
Type ~~~ Silt Fence

Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

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BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

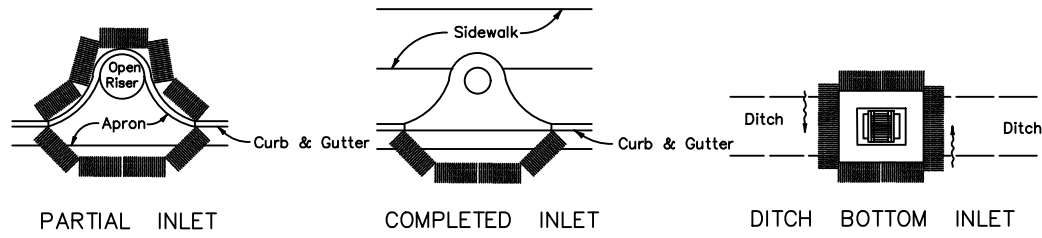
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**TOWN OF
SOUTHWEST RANCHES**

**GREEN MEADOWS
STORMWATER IMPROVEMENTS
GUIDE FOR SEDIMENT & EROSION
CONTROL BMP'S**

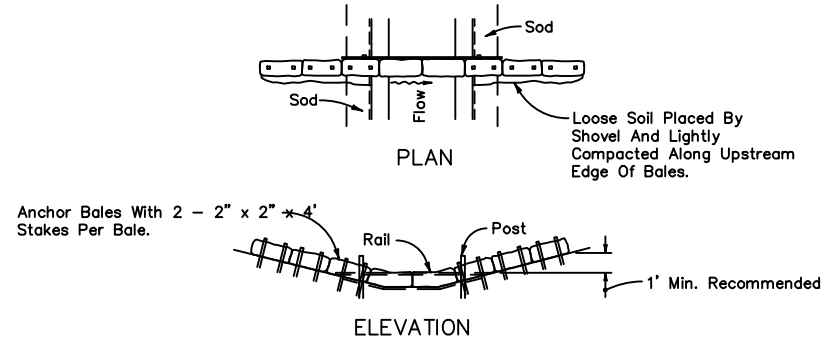
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19-2035

SHEET
C-16

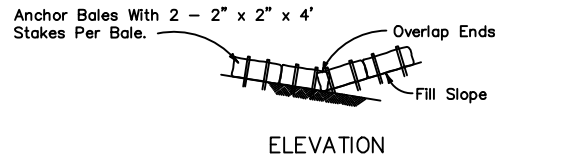
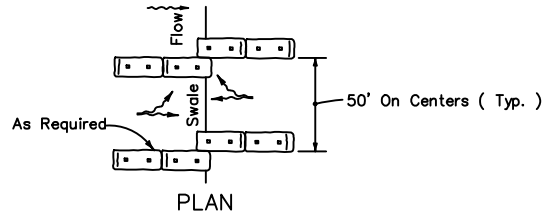
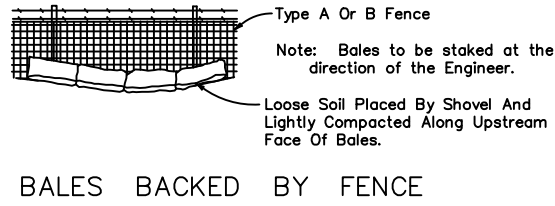
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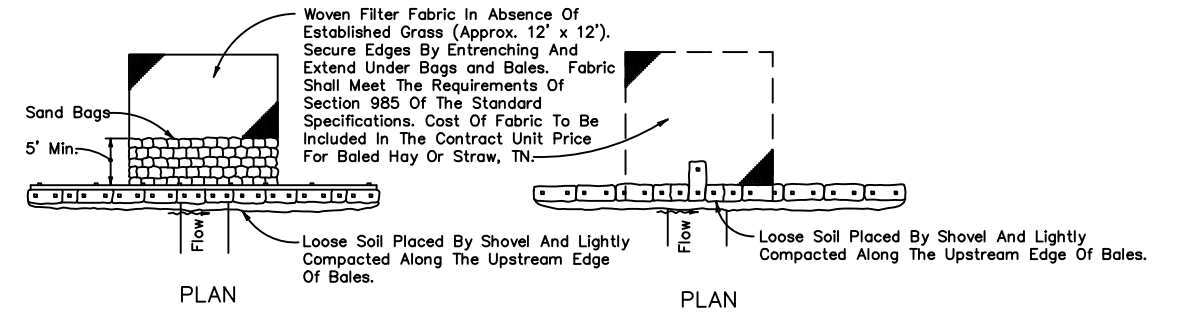
Anchor Bales With 2 - 2" x 2" Stakes Per Bale.
PROTECTION AROUND INLETS OR SIMILAR STRUCTURES



Spacing: Bale barriers for paved ditches should be spaced in accordance with Chart J, Sheet 1 of 3, Index No. 102
BARRIER FOR PAVED DITCH



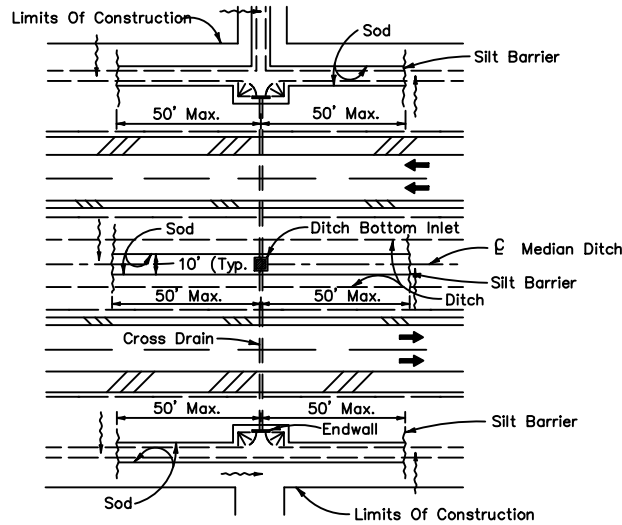
TO BE USED AT SELECTED SITES WHERE THE NATURAL GROUND SLOPES TOWARD THE TOE OF SLOPE



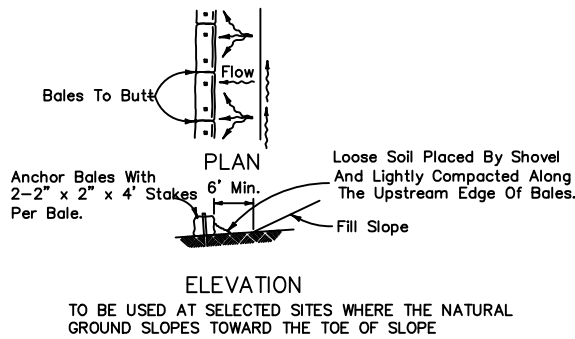
Anchor Lower Bales With 2 - 2" x 2" x 4" Stakes Per Bale.
 Anchor Top Bales To Lower Bales With 2 - 2" x 2" x 4" Stakes Per Bale.
 Anchor Bales With 2 - 2" x 2" x 4" Stakes Per Bale

Application and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in Chart I, Sheet 1 of 3, Index No. 102

TYPE II **TYPE I**
BARRIER FOR UNPAVED DITCHES



DITCH INSTALLATIONS AT DRAINAGE STRUCTURES



BARRIERS FOR FILL SLOPES

FOR CONSTRUCTION

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NO.	DATE	REVISION	BY
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1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date:	04/15/19
Designed:	OAR
Drawn:	KJL
Checked:	SCS

APPROVED BY:	ORLANDO A. RUBIO, P.E.
DATE:	
FLORIDA PROFESSIONAL ENGINEER NO.	48265

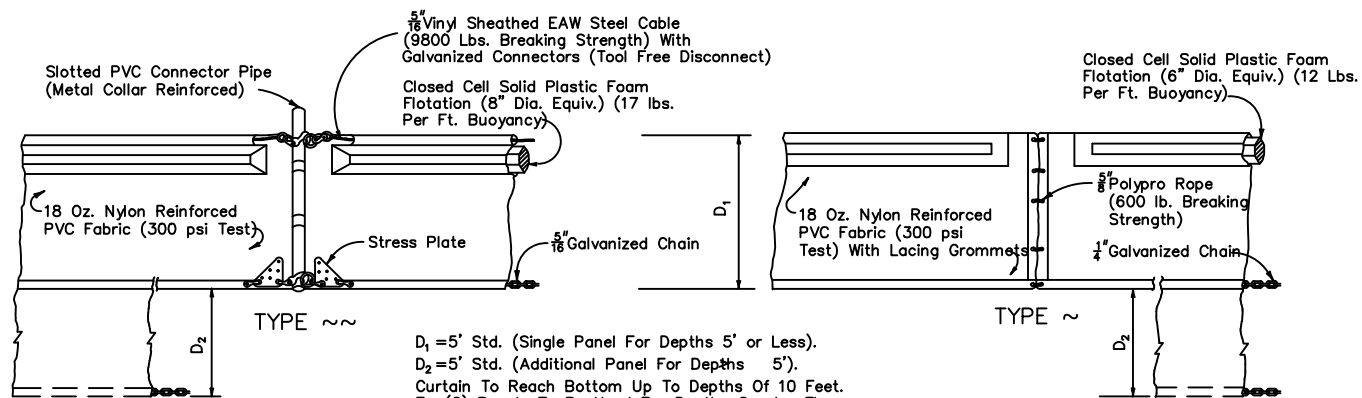
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 GUIDE FOR SEDIMENT & EROSION CONTROL BMP'S

FILE NAME: 04-2035-C-17-DTL.dwg
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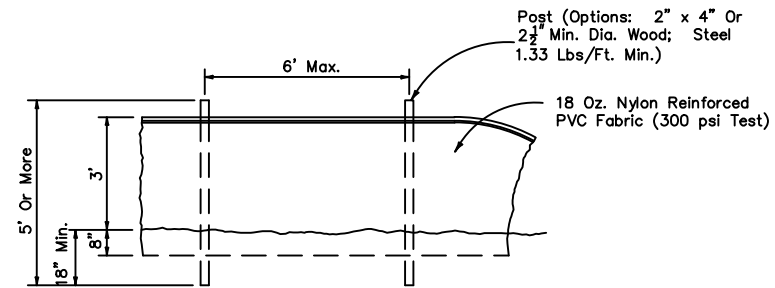
SHEET
C-17



TYPE ~
 $D_1 = 5'$ Std. (Single Panel For Depths 5' or Less).
 $D_2 = 5'$ Std. (Additional Panel For Depths > 5').
 Curtain To Reach Bottom Up To Depths Of 10 Feet.
 Two(2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Called For In The Plans Or As Determined By The Engineer.

NOTICE: COMPONENTS OF TYPES ~ AND ~ MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES ~ AND ~ SHALL BE AS APPROVED BY THE ENGINEER.

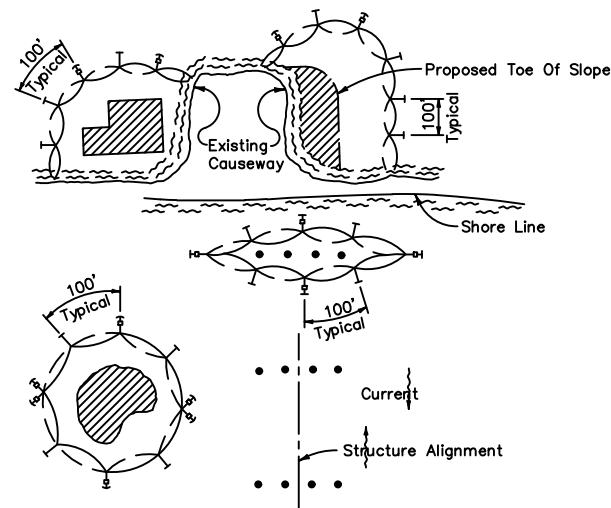
FLOATING TURBIDITY BARRIERS



STAKED TURBIDITY BARRIER

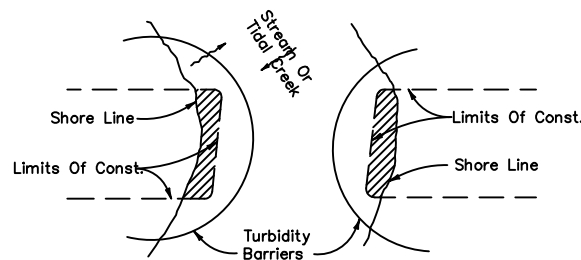
GENERAL NOTES

1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.



LEGEND

- Pile Locations
- ▨ Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- ⤷ Barrier Movement Due To Current Action



NOTES:

1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

Note:
 Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

TURBIDITY BARRIER APPLICATIONS

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

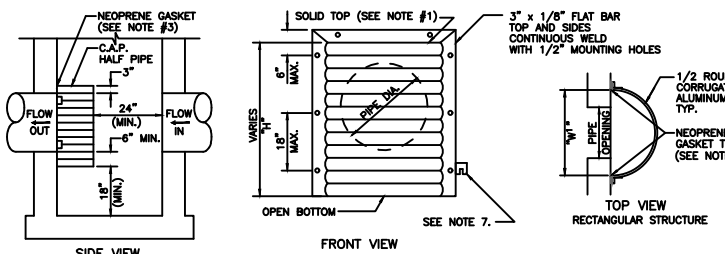
PREPARED FOR:
TOWN OF SOUTHWEST RANCHES

GREEN MEADOWS STORMWATER IMPROVEMENTS
 GUIDE FOR SEDIMENT & EROSION CONTROL BMP'S

FILE NAME: 04-2035-C-18-DTLS.dwg
 LAST SAVED: 05/06/19 - 10:26am
 GAS PROJECT NUMBER
 19-2035

SHEET
C-18

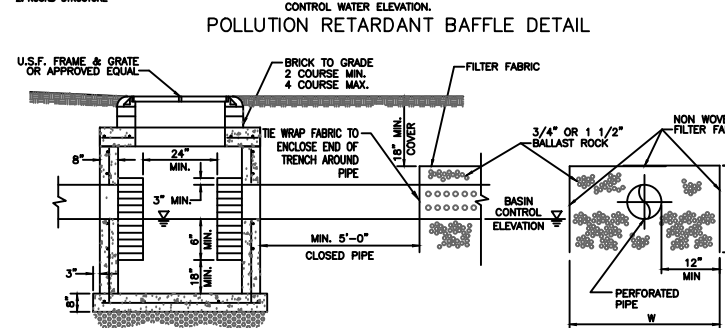
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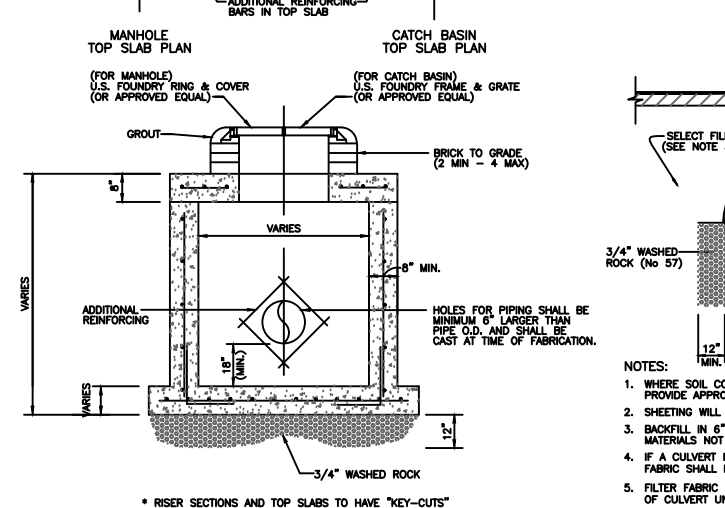
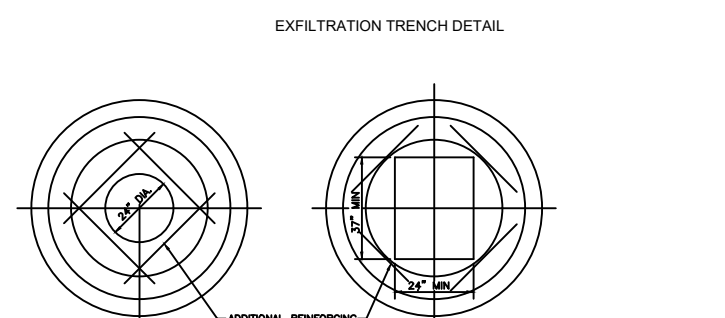
NOTES:

- ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING AT THE TOP.
- NEOPRENE ADHESIVE BACKED GASKET, OR APPROVED EQUAL (1" x 3") SHALL BE INSTALLED ON THE SIDES AND TOP OF ALL BAFFLES.
- POLLUTION RETARDANT BAFFLES TO BE FASTENED IN PLACE WITH 3/8" x 4" STAINLESS STEEL "RED HEADS", OR APPROVED EQUAL.
- ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE (SEE EXFILTRATION TRENCH DETAIL). THE BOTTOM OF THE BAFFLE SHALL BE A MIN. OF 12" BELOW C.W.E.
- FIBERGLASS BAFFLES ARE NOT PERMITTED.
- MOUNTING BRACKETS MAY BE ADDED TO FLAT BARS TO EASE INSTALLATION IN ROUND STRUCTURES. SPACING TO MATCH HOLES IN FLAT BARS.
- FOR POLLUTION RETARDANT BASINS THE BOTTOM ELEVATION OF THE BAFFLE MUST BE A MINIMUM OF 2' BELOW THE CONTROL WATER ELEVATION.

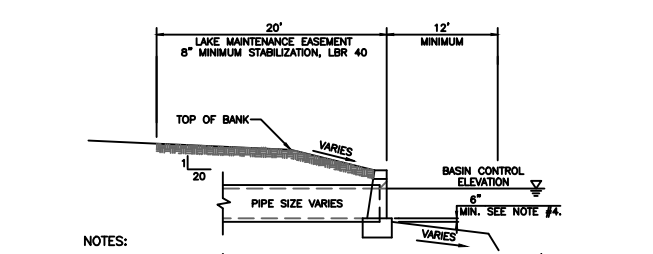
PIPE DIA.	W (IN)	W ² (IN)	T (GAUGE)	H (IN)
15"	21"	21"	16	VARIES
18"	24"	24"	16	VARIES
21"	30"	30"	16	VARIES
24"	36"	36"	16	VARIES
36"	42"	48"	14	VARIES
42"	48"	54"	14	VARIES
48"	54"	60"	14	VARIES
54"	60"	66"	14	VARIES



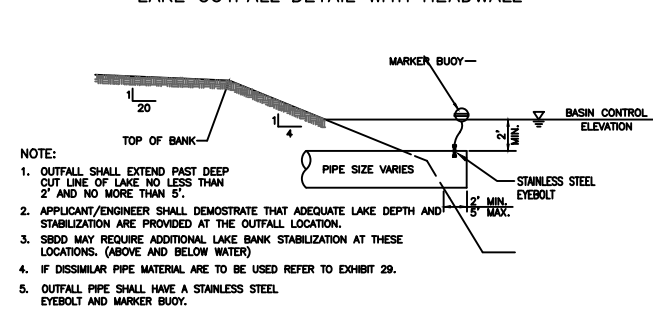
- NOTES:
- SIDES AND TOP OF TRENCH ONLY TO BE LINED WITH FILTER FABRIC. OVERLAP LINER A MINIMUM OF 2' AT THE TOP OF THE TRENCH.
 - WASHED ROCK SHALL BE FROM FRESH WATER, WASHED AND FREE OF DELETERIOUS MATTER.
 - ALL EXFILTRATION TRENCHES SHALL HAVE A POLLUTION RETARDANT BAFFLE AT EACH CONNECTION POINT TO A STRUCTURE (SEE POLLUTION RETARDANT BAFFLE DETAIL, EXHIBIT 28).
 - GASKETS SHALL BE USED WITH RCP IN EXFILTRATION TRENCH.



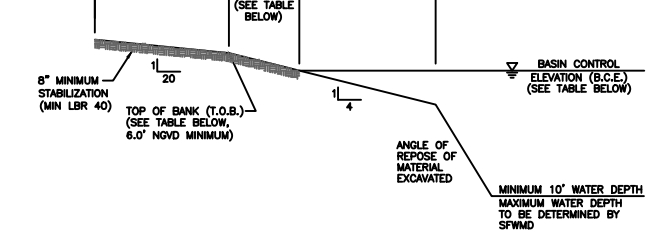
PRECAST CATCH BASIN AND MANHOLE DETAIL



- NOTES:
- TOP OF CAP TO BE 1' ABOVE THE BASIN CONTROL ELEVATION FOR LAKES AND 2' ABOVE BASIN CONTROL ELEVATION FOR CANALS, UNLESS OTHERWISE APPROVED BY THE DISTRICT.
 - HEADWALLS ARE REQUIRED FOR ALL LAKE AND CANAL INTERCONNECTS.
 - CONCRETE AND RIP-RAP ENDWALLS ARE ACCEPTED PER FDOT INDEX 250-255 AND INDEX 258 WITH EXCEPTIONS AS NOTED IN SECTION 3.7.7 OF THE SBDD DESIGN CRITERIA MANUAL.
 - CHANNEL IN FRONT OF PIPE TO BE MIN 6" BELOW THE INVERT OF THE PIPE AND AT LEAST 1 1/2 TIMES THE DIA. OF THE PIPE TO THE DEEP CUT LINE AND CENTERED ON THE PIPE.
 - FACE OF HEADWALL TO BE LOCATED AT DESIGN EDGE OF WATER.

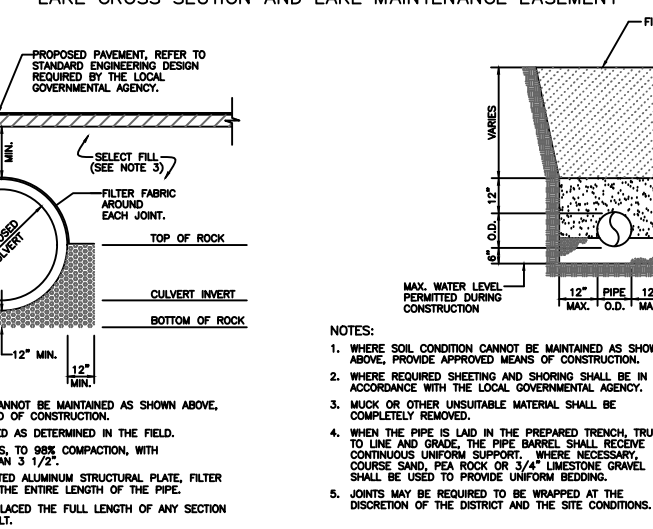


- NOTE:
- OUTFALL SHALL EXTEND PAST DEEP CUT LINE OF LAKE NO LESS THAN 2' AND NO MORE THAN 5'.
 - APPLICANT/ENGINEER SHALL DEMONSTRATE THAT ADEQUATE LAKE DEPTH AND STABILIZATION ARE PROVIDED AT THE OUTFALL LOCATION.
 - SBDD MAY REQUIRE ADDITIONAL LAKE BANK STABILIZATION AT THESE LOCATIONS. (ABOVE AND BELOW WATER).
 - IF DISSIMILAR PIPE MATERIAL ARE TO BE USED REFER TO EXHIBIT 29.
 - OUTFALL PIPE SHALL HAVE A STAINLESS STEEL EYEBOLT AND MARKER BUOY.

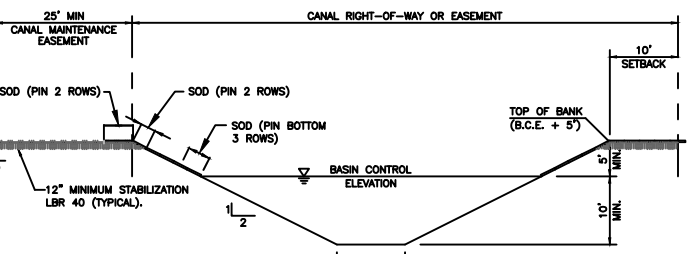


BASIN No.	B.C.E. (FT-NGVD)	T.O.B. (FT-NGVD)	L (FT)	BASIN No.	B.C.E. (FT-NGVD)	T.O.B. (FT-NGVD)	L (FT)
S-1	2.50	6.50	16.00	S-8	3.50	6.00	10.00
S-2 & S-7	2.70	6.00	13.20	S-9 & S-10	4.00	6.50	12.00
S-3	3.00	6.50	14.00	S-12	3.00	6.50	14.00
S-4	3.50	6.00	10.00	S-13	3.00	6.50	14.00
S-5	4.00	6.00	8.00				
	4.25	6.50	8.00				
	4.50	6.50	8.00				

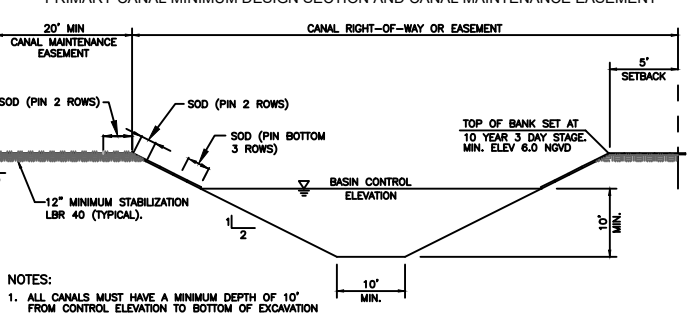
LAKE CROSS SECTION AND LAKE MAINTENANCE EASEMENT



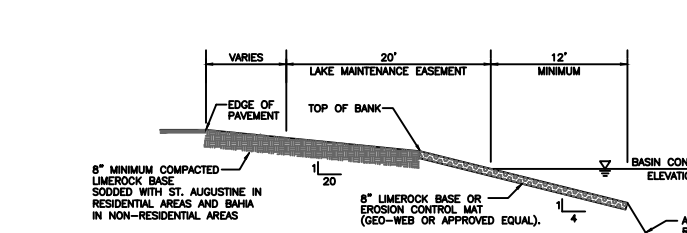
LAKE/CANAL INTERCONNECT BEDDING DETAIL



- NOTES:
- ALL CANALS MUST HAVE A MINIMUM DEPTH OF 10' FROM CONTROL ELEVATION TO BOTTOM OF EXCAVATION
 - MINIMUM CANAL BOTTOM IS 10' WIDE
 - ALL PROPERTIES ADJACENT TO THE CANAL MUST SLOPE BANKS, SOD AND PROVIDE AS-BUILTS TO THE ABOVE DESIGN.
 - THERE SHALL BE NO MUCK WITHIN THE CANAL RIGHT OF WAY AND MAINTENANCE EASEMENT.
 - SOD PINS MUST BE WOOD.

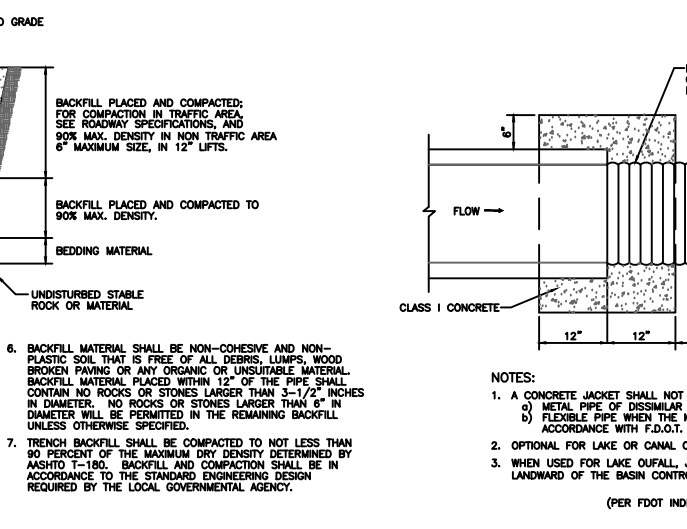


- NOTES:
- ALL CANALS MUST HAVE A MINIMUM DEPTH OF 10' FROM CONTROL ELEVATION TO BOTTOM OF EXCAVATION
 - MINIMUM CANAL BOTTOM IS 10' WIDE
 - ALL PROPERTIES ADJACENT TO THE CANAL MUST SLOPE BANKS, SOD AND PROVIDE AS-BUILTS TO THE ABOVE DESIGN.
 - THERE SHALL BE NO MUCK WITHIN THE CANAL RIGHT OF WAY AND MAINTENANCE EASEMENT.
 - SOD PINS MUST BE WOOD.



- NOTES:
- LOCATION OF BOAT RAMP(S) MUST BE IDENTIFIED, INSPECTED AND APPROVED BY SBDD PRIOR TO CONSTRUCTION
 - SLOPE DETAILS AS OUTLINED ABOVE MUST BE INSPECTED AND APPROVED BY THE DISTRICT PRIOR TO INSTALLATION OF EROSION CONTROL MAT.
 - UPON COMPLETION OF BOAT RAMP, DISTRICT MUST BE NOTIFIED FOR FINAL APPROVAL.
 - BOAT RAMP MUST INTERSECT ADJACENT ROAD AND WATER BODY AT 90° ANGLE UNLESS OTHERWISE APPROVED.
 - THE BOAT RAMP(S) MUST BE MINIMUM 12' WIDE.
 - PROVIDE DROP CURB AT PAVEMENT WHERE APPLICABLE.
 - FOR BOAT RAMP CONSTRUCTED ON AN SBDD CANAL A SLOPE OF 3:1 CAN BE USED FROM EDGE OF WATER UP TO TOP OF BANK.
 - BOAT RAMP SHALL BE CONSTRUCTED OF LIMEROCK OR EROSION CONTROL MAT, AT THE DISCRETION OF THE DISTRICT.
 - IF SBDD OPTS FOR AN EROSION CONTROL MAT, THE MAT SHALL BE FILLED WITH AT LEAST 4" OF 3/4" ROCK.

BOAT RAMP DETAIL



TRENCH EXCAVATION DETAIL

- GENERAL NOTES
- THE FOLLOWING GENERAL NOTES ARE REQUIRED BY THE SOUTH BROWARD DRAINAGE DISTRICT (SBDD). THEY ARE NOT MEANT TO BE ALL INCLUSIVE. IT IS THE ENGINEER'S RESPONSIBILITY TO ADD ANY NOTES WHICH WILL INFORM THE OWNER AND THE CONTRACTOR OF ANY ADDITIONAL REQUIREMENTS OF SBDD.
- THE CONTRACTOR SHALL CONTACT SBDD 48 HOURS OR TWO (2) WORKING DAYS PRIOR TO ANY REQUIRED INSPECTION. TO SCHEDULE INSPECTIONS, PLEASE CALL SBDD AT (954)800-3337. SBDD'S WORKING HOURS ARE FROM 8:00 AM TO 4:30 PM MONDAY THROUGH FRIDAY EXCEPT HOLIDAYS.
 - ANY REVISIONS TO PLANS PERMITTED BY SBDD MUST BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.
 - A PRECONSTRUCTION MEETING SHALL BE SCHEDULED AND HELD AT LEAST FIVE (5) DAYS PRIOR TO BEGINNING CONSTRUCTION.
 - A SET OF SHOP DRAWINGS SHALL BE SUBMITTED TO SBDD AFTER APPROVAL BY THE ENGINEER OF RECORD, PRIOR TO BEGINNING CONSTRUCTION.
 - DURING CONSTRUCTION, SBDD PERSONNEL WILL INSPECT THE FOLLOWING:
 - INSTALLATION OF ALL UNDERGROUND DRAINAGE FACILITIES BEFORE BACKFILLING.
 - BACKFILLING OF DRAINAGE TRENCHES.
 - SHORING OF CANAL AND LAKE BANKS FROM THE DEEP CUT TO THE UPLAND EASEMENT LINE OR AS REQUIRED BY SBDD, AND ANY OTHER DRAINAGE RELATED CONSTRUCTION WORK.
 SHORING OF CANAL AND LAKE BANKS FROM THE DEEP CUT TO THE UPLAND EASEMENT LINE OR AS REQUIRED BY SBDD, AND ANY OTHER DRAINAGE RELATED CONSTRUCTION WORK. SHALL BE SUBJECT TO ADDITIONAL FEE CHARGES BY SBDD.
 - THE CONTRACTOR CONSTRUCTING OR EXCAVATING LINES OR OTHER WATER BODIES SHALL EXERCISE EXTREME CAUTION TO ENSURE THAT THE SIDE SLOPES AND DEEP CUT LINES ARE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS FOR THE DEVELOPMENT. THE CONTRACTOR OR OWNER SHALL PERIODICALLY, OR AS REQUIRED BY SBDD, OBTAIN A SURVEY, FROM A FLORIDA REGISTERED SURVEYOR OF THE LOCATION OF THE DEEP CUT LINES PRIOR TO FORMING THE SIDE SLOPES. THIS SURVEY SHALL BE PERFORMED PRIOR TO THE OWNER/CONTRACTOR BEGINNING CONSTRUCTION OF ANY BUILDING PADS ADJACENT TO THE WATER BODY. IN THE EVENT THAT THE CONTRACTOR OVER DIPS THE WATER BODY, THE OWNER/CONTRACTOR SHALL SUBMIT TO SBDD ITS SOLUTION TO CORRECT THE OVER DIGGING. ANY SUGGESTED REMEDY OR CORRECTION MUST BE APPROVED BY SBDD BEFORE THE CONTRACTOR BEGINS THE PROPOSED CORRECTION/REMEDY.
 - PAVING AND DRAINAGE "AS-BUILT" PLANS CERTIFIED BY THE ENGINEER OF RECORD AND APPROVED BY THE DISTRICT'S ENGINEER SHALL BE REQUIRED BEFORE THE RELEASE OF THE BOND OR LETTER OF CREDIT. AS-BUILTS SHALL BE PROVIDED AS AN OVERLAY OF THE APPROVED CONSTRUCTION DRAWINGS AND AT THE SAME SCALE AS ORIGINALLY SUBMITTED. AS-BUILT SUBMITTALS SHALL CONFORM TO THE REQUIREMENTS OF SBDD'S CRITERIA MANUAL. AS-BUILTS MUST ALSO BE PROVIDED IN ELECTRONIC FORMAT.
 - AS-BUILT DRAWINGS OF WATER BODIES SHALL INCLUDE THE DATA REQUIRED UNDER EXHIBIT 39 OF SBDD'S CRITERIA MANUAL. THE AS-BUILT CROSS SECTIONS SHALL BE PROVIDED AT NOT MORE THAN 100 FOOT INTERVALS AND AT ALL OUTFALL PIPES CONSTRUCTED WITHOUT HEADWALLS.
 - SBDD WILL NOT COMPLETE THE FINAL INSPECTION UNTIL RECEIPT OF THE AS-BUILT PACKAGE WHICH MUST INCLUDE THE ENGINEER'S CERTIFICATION AND TEST RESULTS FOR STABILIZATION OF LAKE/CANAL MAINTENANCE EASEMENTS, ARE RECEIVED.

UPDATED 3/26/2015
FOR CONSTRUCTION

P:\Cities_Villages_Towns\Southwest Ranches\19-2035-115-Green Meadows Stormwater Improvements\09-Plans\04-2035-C-19-DTL5.dwg, 12/21/2020 7:48:58 AM, mrcarranco, 1:2

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
Designed: OAR
Drawn: KJL
Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
DATE: _____
FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
CONSULTING ENGINEERS-PLANNERS-SURVEYORS
21045 COMMERCIAL TRAIL
BOCA RATON, FLORIDA 33486
(561) 314-4445
CERTIFICATE NO. LB0003110

PREPARED FOR:
TOWN OF
SOUTHWEST RANCHES

GREEN MEADOWS
STORMWATER IMPROVEMENTS
SOUTH BROWARD DRAINAGE DISTRICT
EXHIBIT 16

FILE NAME: 04-2035-C-19-DTL5.dwg
LAST SAVED: 10/31/19 - 2:50pm
GAS PROJECT NUMBER
19-2035

SHEET
C-19

THE FOLLOWING GENERAL NOTES ARE REQUIRED BY THE SOUTH BROWARD DRAINAGE DISTRICT (SBDD). THEY ARE NOT MEANT TO BE ALL INCLUSIVE. IT IS THE ENGINEER'S RESPONSIBILITY TO ADD ANY NOTES WHICH WILL INFORM THE OWNER AND THE CONTRACTOR OF ANY ADDITIONAL REQUIREMENTS OF SBDD.

- 1 THE CONTRACTOR SHALL CONTACT SBDD 48 HOURS OR TWO (2) WORKING DAYS PRIOR TO ANY REQUIRED INSPECTION. TO SCHEDULE INSPECTIONS, PLEASE CALL SBDD AT (954)680-3337. SBDD'S WORKING HOURS ARE FROM 8:00 AM TO 4:30 PM. MONDAY THROUGH FRIDAY EXCEPT HOLIDAYS.
- 2 ANY REVISIONS TO PLANS PERMITTED BY SBDD MUST BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.
- 3 A PRECONSTRUCTION MEETING SHALL BE SCHEDULED AND HELD AT LEAST FIVE (5) DAYS PRIOR TO BEGINNING CONSTRUCTION.
- 4 A SET OF SHOP DRAWINGS SHALL BE SUBMITTED TO SBDD AFTER APPROVAL BY THE ENGINEER OF RECORD, PRIOR TO BEGINNING CONSTRUCTION
- 5 DURING CONSTRUCTION, SBDD PERSONNEL WILL INSPECT THE FOLLOWING:
 - .. INSTALLATION OF ALL UNDERGROUND DRAINAGE FACILITIES BEFORE BACKFILLING,
 - .. BACKFILLING OF DRAINAGE TRENCHES,
 - .. SHAPING OF CANAL AND LAKE BANKS FROM THE DEEP CUT TO THE UPLAND EASEMENT LINE OR AS REQUIRED BY SBDD,
 AND ANY OTHER DRAINAGE RELATED CONSTRUCTION WORK. RE-INSPECTIONS AND EXTRAORDINARY INSPECTIONS WILL BE SUBJECT TO ADDITIONAL FEE CHARGES BY SBDD.
- 6 THE CONTRACTOR CONSTRUCTING OR EXCAVATING LAKES OR OTHER WATER BODIES SHALL EXERCISE EXTREME CAUTION TO ENSURE THAT THE SIDE SLOPES AND DEEP CUT LINES ARE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS FOR THE DEVELOPMENT. THE CONTRACTOR OR OWNER SHALL PERIODICALLY, OR AS REQUIRED BY SBDD, OBTAIN A SURVEY, FROM A FLORIDA REGISTERED SURVEYOR OF THE LOCATION OF THE DEEP CUT LINES PRIOR TO FORMING THE SIDE SLOPES. THIS SURVEY SHALL BE PERFORMED PRIOR TO THE OWNER/CONTRACTOR BEGINNING CONSTRUCTION OF ANY BUILDING PADS ADJACENT TO THE WATER BODY. IN THE EVENT THAT THE CONTRACTOR OVER DIGS THE WATER BODY, THE OWNER/CONTRACTOR SHALL SUBMIT TO SBDD ITS SOLUTION TO CORRECT THE OVER DIGGING. ANY SUGGESTED REMEDY OR CORRECTION MUST BE APPROVED BY SBDD BEFORE THE CONTRACTOR BEGINS THE PROPOSED CORRECTION/REMEDY.
- 7 PAVING AND DRAINAGE "AS-BUILT" PLANS CERTIFIED BY THE ENGINEER OF RECORD AND APPROVED BY THE DISTRICT'S ENGINEER SHALL BE REQUIRED BEFORE THE RELEASE OF THE BOND OR LETTER OF CREDIT. AS-BUILTS SHALL BE PROVIDED AS AN OVERLAY OF THE APPROVED CONSTRUCTION DRAWINGS AND AT THE SAME SCALE AS ORIGINALLY SUBMITTED. AS-BUILT SUBMITTALS SHALL CONFORM TO THE REQUIREMENTS OF SBDD'S CRITERIA MANUAL. AS-BUILTS MUST ALSO BE PROVIDED IN ELECTRONIC FORMAT.
- 8 AS-BUILT DRAWINGS OF WATER BODIES SHALL INCLUDE THE DATA REQUIRED UNDER EXHIBIT 39 OF SBDD'S CRITERIA MANUAL. THE AS-BUILT CROSS SECTIONS SHALL BE PROVIDED AT NOT MORE THAN 100 FOOT INTERVALS AND AT ALL OUTFALL PIPES CONSTRUCTED WITHOUT HEADWALLS.
- 9 SBDD WILL NOT COMPLETE THE FINAL INSPECTION UNTIL RECEIPT OF THE AS-BUILT PACKAGE WHICH MUST INCLUDE THE ENGINEER'S CERTIFICATION AND TEST RESULTS FOR STABILIZATION OF LAKE/CANAL MAINTENANCE EASEMENTS, ARE RECEIVED.

EXHIBIT 17

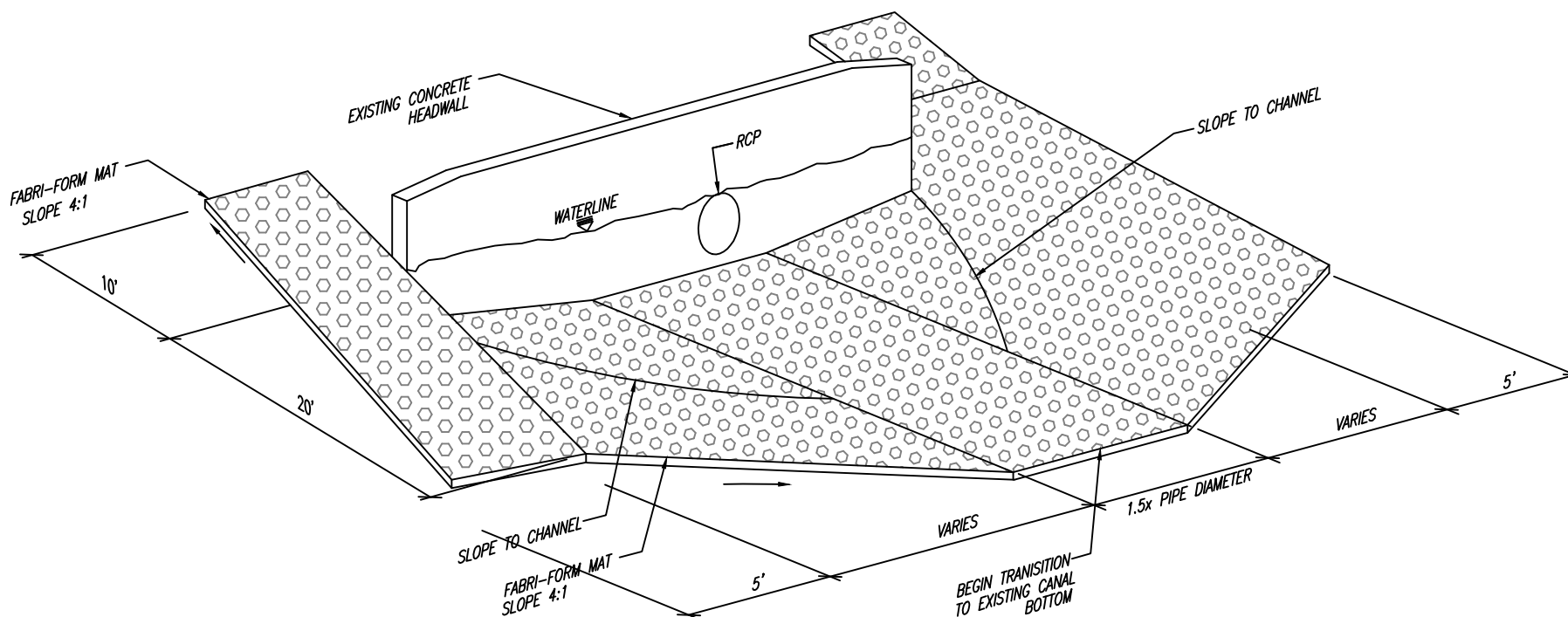


EXHIBIT 26

FOR CONSTRUCTION

NO.	DATE	REVISION	BY
2	12/21/20	REVISED PHASES BY CLIENT	MM
1	11/11/19	PHASE 1 REVISED BY CLIENT	MM

Date: 04/15/19
 Designed: OAR
 Drawn: KJL
 Checked: SCS

APPROVED BY: ORLANDO A. RUBIO, P.E.
 DATE: _____
 FLORIDA PROFESSIONAL ENGINEER NO. 48265

CRAIG A. SMITH & ASSOCIATES
 CONSULTING ENGINEERS-PLANNERS-SURVEYORS
 21045 COMMERCIAL TRAIL
 BOCA RATON, FLORIDA 33486
 (561) 314-4445
 CERTIFICATE NO. LB0003110

PREPARED FOR:
**TOWN OF
 SOUTHWEST RANCHES**

**GREEN MEADOWS
 STORMWATER IMPROVEMENTS**
 SOUTH BROWARD DRAINAGE DISTRICT
 EXHIBIT 17 & 26

FILE NAME: 04-2035-C-20-DTLS.dwg
 LAST SAVED: 10/31/19 - 3:56pm
 CAS PROJECT NUMBER
 19-2035

SHEET
C-20

P:\Cities_Villages_Towns\Southwest-Ranches\19-2035-115-Green-Meadows-Stormwater-Improvements\09-Plans\04-2035-C-20-DTLS.dwg, 12/21/2020 7:49:09 AM, mmarenco, 1/2