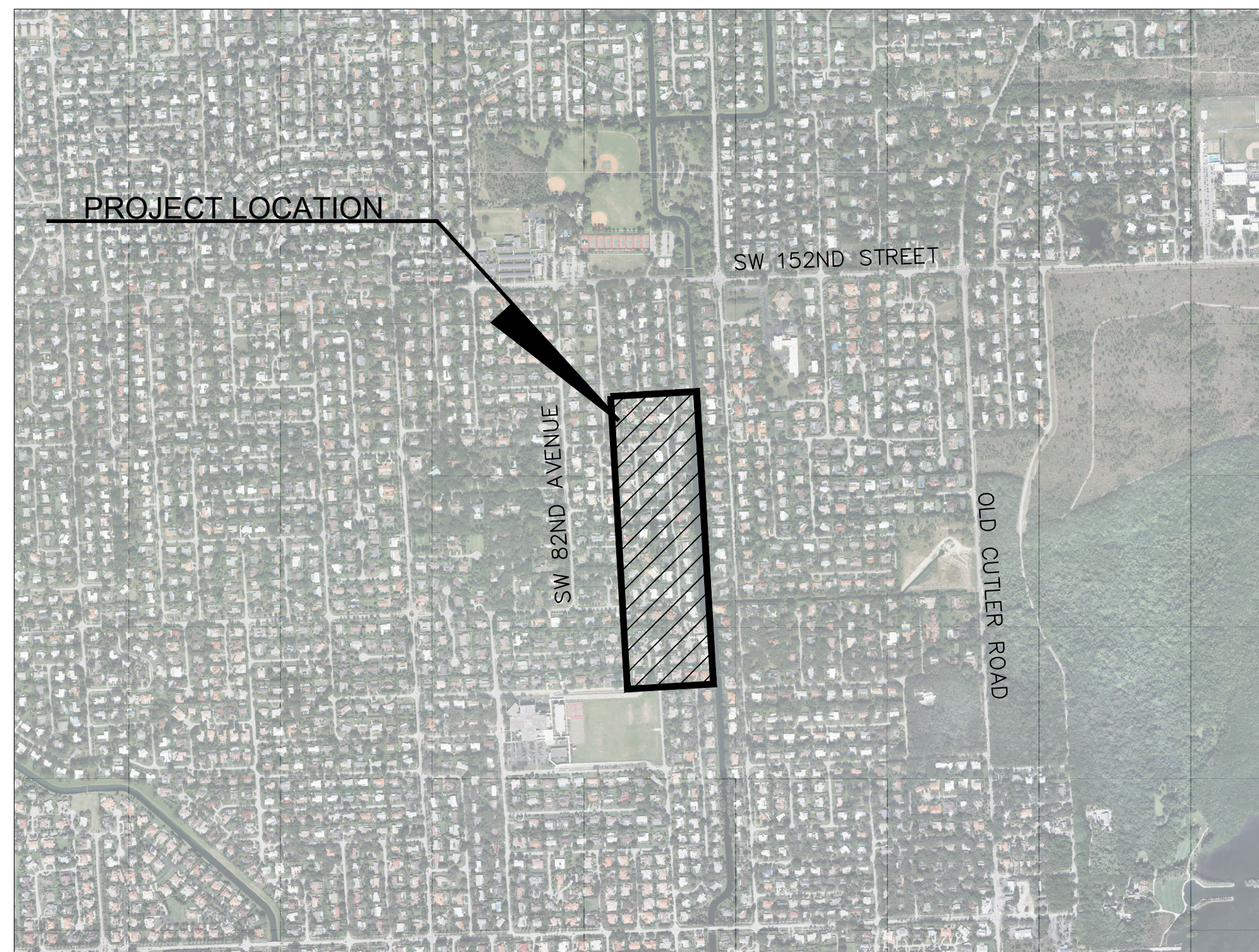


VILLAGE OF PALMETTO BAY SUB-BASIN 61

PAVING AND DRAINAGE IMPROVEMENTS

JANUARY 2021



VICINITY MAP

COMMUNITY OFFICIALS

- | | |
|--------------------------|------------------|
| Mayor | Karyn Cunningham |
| Vice-Mayor | Leanne Tellam |
| Council Member | Patrick Fiore |
| Council Member | Steve Cody |
| Council Member | Marsha Matson |
| Manager | Nick Marano |
| Attorney | John Dellagloria |
| Clerk | Missy Arocha |
| Director of Public Works | Dionisio Torres |

Sheet List Table	
Sheet Number	Sheet Title
C000.0	COVER SHEET
C100.1	KEY SHEET
C100.2	GENERAL NOTES
C200.1	PAVING & DRAINAGE, PLAN & PROFILE SW 77TH COURT
C200.2	PAVING & DRAINAGE, PLAN & PROFILE SW 77TH COURT
C200.3	PAVING & DRAINAGE, PLAN & PROFILE SW 77TH COURT
C200.4	PAVING & DRAINAGE, PLAN & PROFILE SW 160TH STREET
C200.5	PAVING & DRAINAGE, PLAN & PROFILE SW 157TH TERRACE
C200.6	PAVING & DRAINAGE, PLAN & PROFILE SW 156TH TERRACE
C300.1	PAVING & DRAINAGE DETAILS
C300.2	PAVING & DRAINAGE DETAILS
C300.3	PAVING & DRAINAGE DETAILS
C300.4	PAVING & DRAINAGE DETAILS
C300.5	TYPICAL CROSS SECTIONS
C400.1	STORMWATER POLLUTION PREVENTION PLAN
C400.2	STORMWATER POLLUTION PREVENTION PLAN
C400.3	STORMWATER POLLUTION PREVENTION PLAN
C400.4	STORMWATER POLLUTION PREVENTION NOTES
C500.1	SIGNING & MARKING PLAN SW 77TH COURT
C500.2	SIGNING & MARKING PLAN SW 77TH AVE, SW 160 ST & SW 78TH AVE
C500.3	SIGNING & MARKING PLAN S.W. 156TH STREET & S.W. 157TH TERRACE

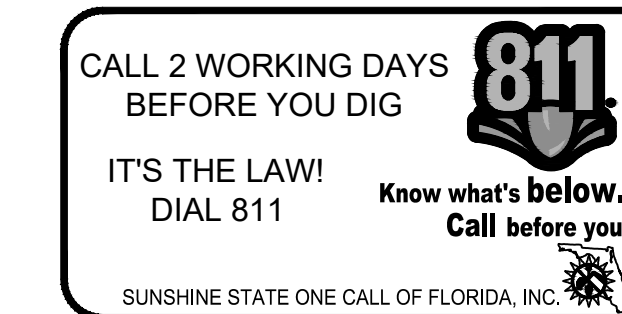
UTILITY PROVIDERS

- | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| WATER SUPPLY AND SEWAGE TREATMENT:
Miami-Dade Water & Sewer Department
3575 South LeJuene Road
Miami, Florida 33146
Water Phone: (786) 268-5401
Water Contact: Luis Aguilar
Sewer Phone: (786) 268-5025
Sewer Contact: Rod Lovett | POWER:
Florida Power and Light Company
10705 Quail Roost Drive
Miami, Florida 33157
Phone: (305) 586-6403
Contact: Edgar Aguilar | TELEPHONE:
AT&T
1120 South Rogers Circle
Boca Raton, Florida 33487
Phone: (561) 997-0240
Contact: Dino Farruggio | GAS:
Florida City Gas
4045 NW 97th Avenue
Doral, Florida 33178
Phone: (305) 835-3612 x63612
Contact: Harry Rocha |
| STORM DRAINAGE PERMITTING
Miami-Dade County DERM
Water Control Section
33 SW 2nd Avenue, Suite 200
Miami, Florida 33130
Phone: (305) 372-6681
Contact: Camilo P. Ignacio | CABLE TELEVISION:
Comcast Cable
2601 SW 145th Avenue
Miramar, Florida 33027
Phone: (954) 447-8405
Contact: Leonard Maxwell-Newbold | | |

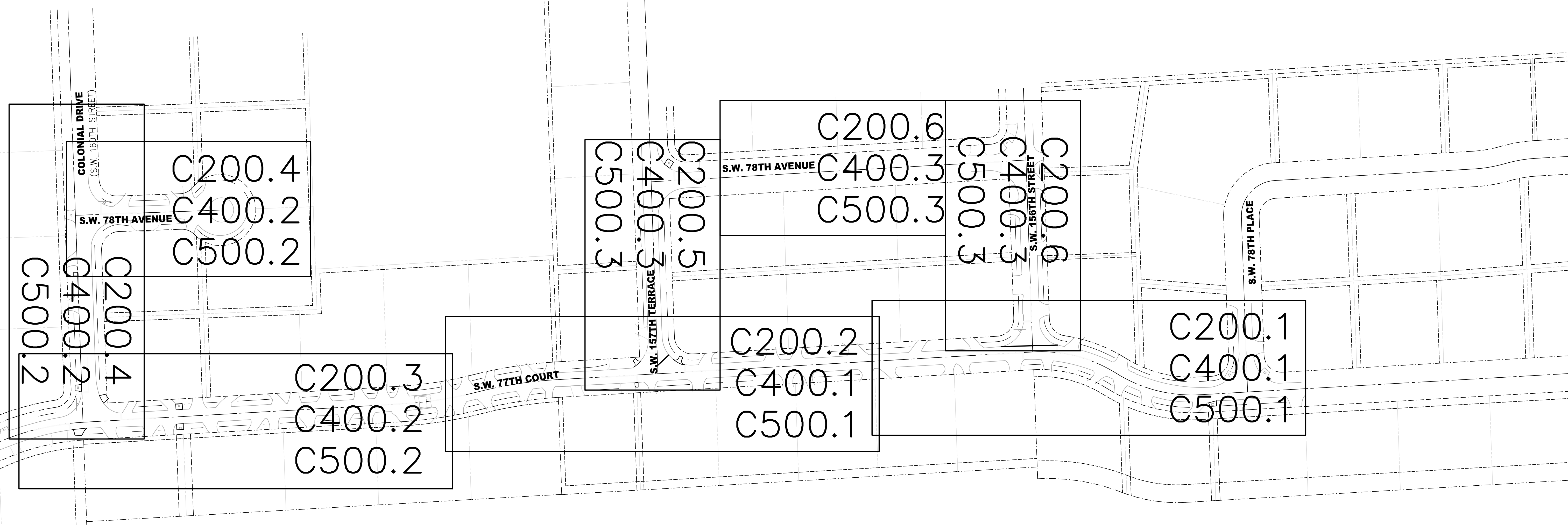
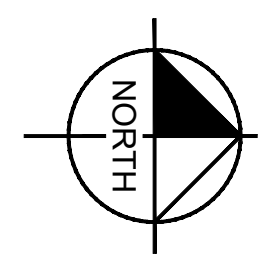
DESIGN TEAM

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CIVIL ENGINEER/
Kimley-Horn and Associates, Inc.
600 N. Pine Island Road
Suite 450
Ft. Lauderdale, FL 33324
Phone: (954)535-5100
Contact: Gary R. Rotay, P.E. | SURVEYOR:
Avrom & Associates, Inc.
50 SW 2nd Avenue
Suite 102
Boca Raton, FL 33432
Phone: (561)392-2594
Fax: (561)394-7125
Contact: John T. Doogan, P.L.S. |
| OWNER
Village of Palmetto Bay
9705 East Hibiscus Street
Palmetto Bay, FL 33157
Phone: (305)259-1234
Fax: (305)259-1290
Contact: Dionisio Torres | GEOTECHNICAL ENGINEER:
Tierra South Florida, Inc.
2765 Vista Parkway
Suite 10
West Palm Beach, FL 33411
Phone: (561)687-8539
Fax: (561)687-8570
Contact: Ramakumar Vedula, P.E. |

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



FOR BIDDING



Plotted By: Stanton, Tiffany
 Sheet: S&S-SUB-BASIN_61_PAVING AND DRAINAGE IMPROVEMENTS - Layout/Layout1 - March 27, 2019 - 11:17:17am
 K:\11_civil\044_jobs\04649021-sub-basin_61_design\CAD\planstreets\C100.1-Key_Sheet.dwg
 This document, together with the concepts and design presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	JU
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS

PREPARED FOR
VILLAGE OF PALMETTO BAY

PALMETTO BAY FLORIDA

LICENSED PROFESSIONAL

STEFANO VIOLA

FLORIDA LICENSE NUMBER
 74655

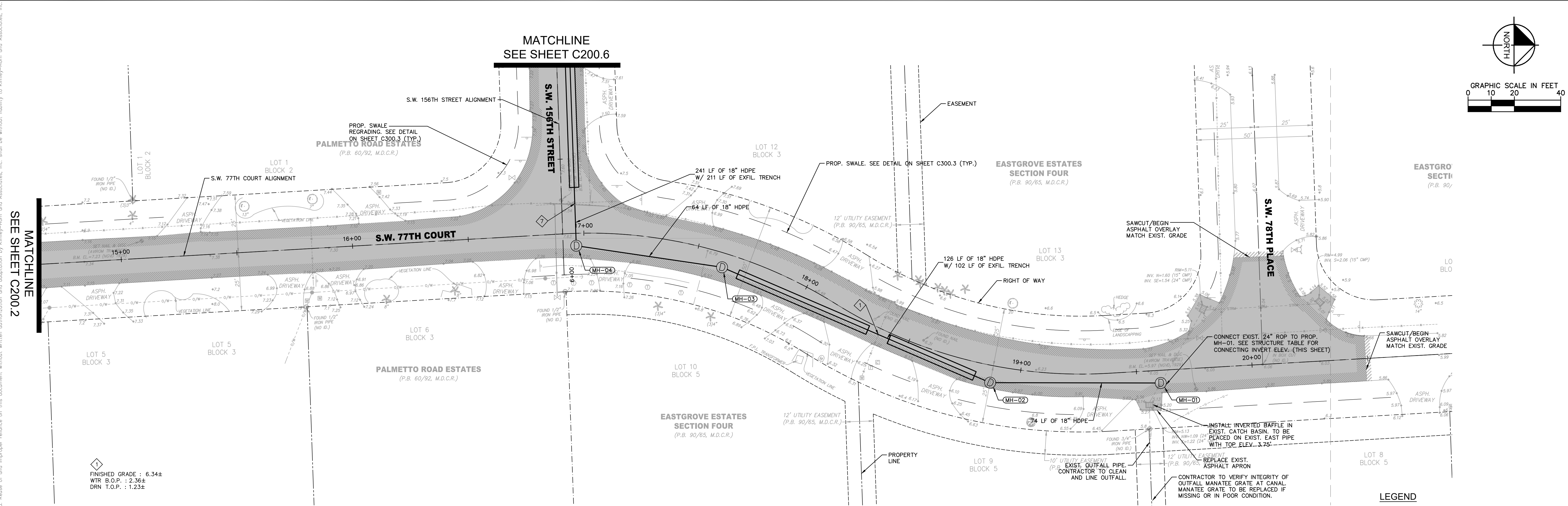
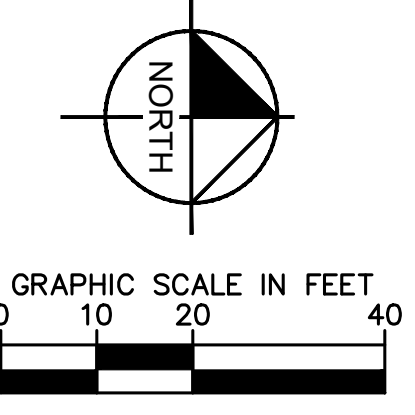
DATE: 3/27/19

KEY SHEET

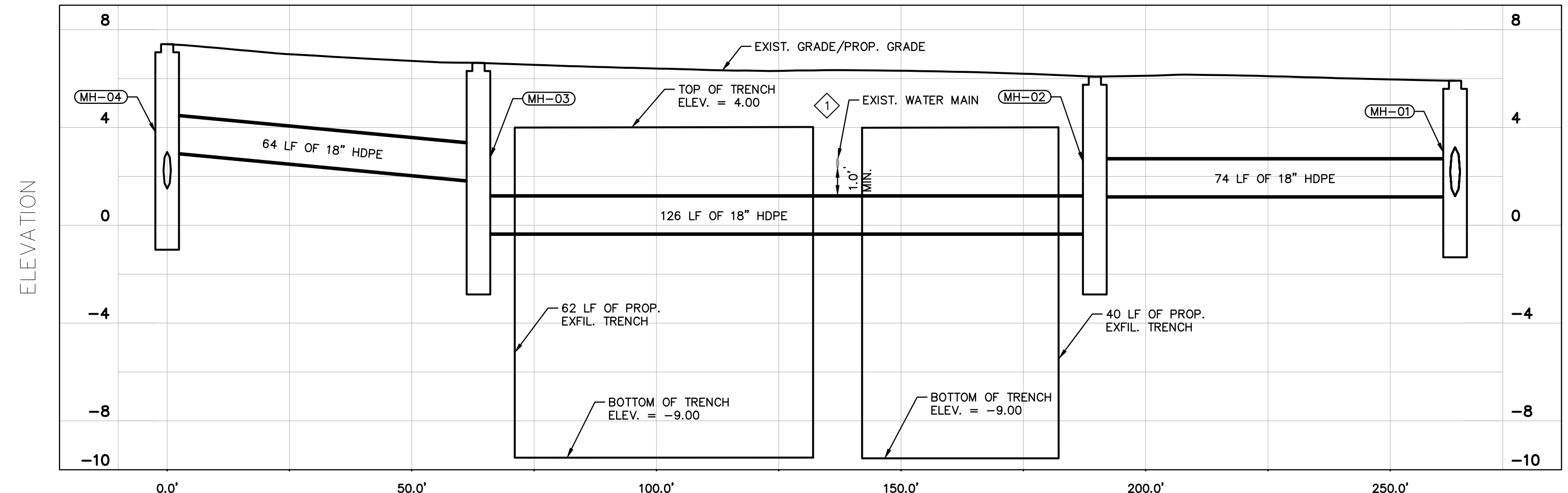
SHEET NUMBER

C100.1

Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C200.1 - March 27, 2019 11:17:34am
 K:\file\civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C200.1_Drainage_Plan_and_Profile.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
MH-01	PROP. DOGHOUSE MANHOLE	5.91	-0.81	18" HDPE, INV. 1.19 (S) 24" RCP (EXIST.), INV. 1.19 (SE) 24" RCP (EXIST.), INV. 1.19 (NW)	S.W. 77TH COURT STA. 19+80 5.5' RT
MH-02	PROP. TYPE P-7T MANHOLE W/ BAFFLE (SW)	6.08	-2.33	18" HDPE W/ EXFIL. TRENCH, INV. -0.33 (SW) 18" HDPE, INV. 1.19 (N)	S.W. 77TH COURT STA. 18+88 7.4' RT
MH-03	PROP. TYPE P-7T MANHOLE	6.64	-2.33	18" HDPE, INV. 1.80 (S) 18" HDPE W/ EXFIL. TRENCH, INV. -0.33 (NE)	S.W. 77TH COURT STA. 17+62 6.1' RT
MH-04	PROP. TYPE P-7T MANHOLE	7.41	-0.50	18" HDPE W/ EXFIL. TRENCH, INV. 1.50 (W) 18" HDPE, INV. 3.00 (N)	S.W. 77TH COURT STA. 16+97 5.4' RT



S.W. 77TH COURT DRAINAGE (3) PROFILE
 SCALE: 1"=20' (HORZ.)
 1"=2' (VERT.)

- LEGEND**
- CENTER LINE
 - - - RIGHT-OF-WAY
 - PROPERTY LINE
 - PROPOSED SWALE REGRADING
 - EXISTING WATER MAIN
 - EXISTING SANITARY SEWER MAIN
 - EXISTING CATCH BASIN
 - EXISTING MANHOLE
 - EXISTING DRAINAGE PIPE
 - PROPOSED DRAINAGE PIPE
 - PROPOSED EXFILTRATION TRENCH
 - PROPOSED MANHOLE
 - XXX PROPOSED GRADE
 - M.E. MATCH EXISTING GRADE
 - PROPOSED ASPHALT OVERLAY
 - 4.0' OF MILLING/ASPHALT TRANSITION PRIOR TO ASPHALT OVERLAY (1-INCH DEPTH)
 - FILL AND REGRADE AS REQUIRED, 2" TOP SOIL AND SOD
- NOTES:
 1. WHERE PROPOSED ASPHALT IS TO MEET EXISTING DRIVEWAY, MATCH EXISTING DRIVEWAY GRADE.

No.	REVISIONS	DATE	BY

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	JU
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 PALMETTO BAY FLORIDA

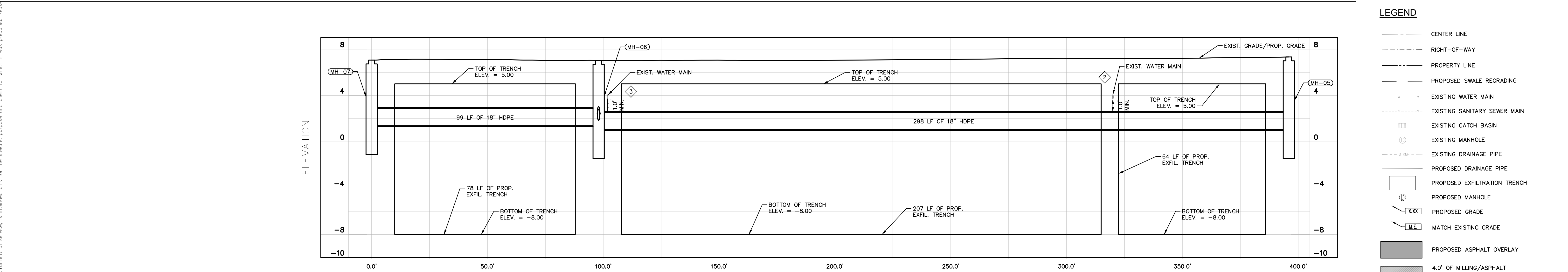
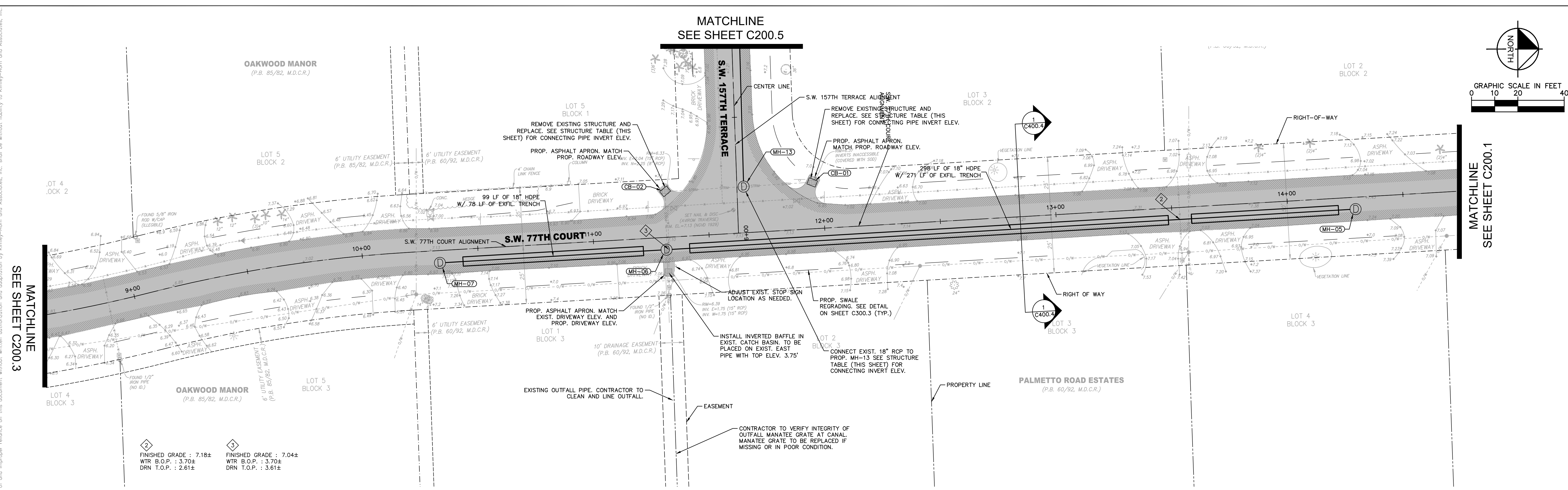
LICENSED PROFESSIONAL	STEFANO VIOLA
FLORIDA LICENSE NUMBER	74655
DATE:	3/27/19

PAVING & DRAINAGE, PLAN & PROFILE SW 77TH COURT

SHEET NUMBER	C200.1
--------------	--------

KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
 It's fast. It's free. It's the low.
www.callsunshine.com

Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C200.2 - March 27, 2019 11:17:44am
 K:\19_civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C200.1_Drainage_Plan_and_Profile.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Read of and proper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



S.W. 77TH COURT DRAINAGE (2) PROFILE
SCALE: 1"=20' (HORZ.)

STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
CB-01	PROP. TYPE P-10M CATCH BASIN	6.37	0.57	18" RCP (EXIST.), INV. 2.57 (S)	S.W. 77TH COURT STA. 11+96 -20.0' LT
CB-02	PROP. TYPE P-10M CATCH BASIN	6.33	0.04	15" RCP (EXIST.), INV. 2.04 (E) 18" RCP (EXIST.), INV. 2.25 (N)	S.W. 77TH COURT STA. 11+32 -19.8' LT
MH-05	PROP. TYPE P-7T MANHOLE	7.33	-0.95	18" HDPE W/ EXFIL. TRENCH, INV. 1.05 (S)	S.W. 77TH COURT STA. 14+29 5.1' RT
MH-06	PROP. DOGHOUSE MANHOLE W/ BAFFLE (N), (E), & (S)	7.04	-0.95	18" HDPE W/ EXFIL. TRENCH, INV. 1.38 (N) 15" RCP (EXIST.), INV. 1.83 (W) 15" RCP (EXIST.), INV. 1.83 (E)	S.W. 77TH COURT STA. 11+31 5.3' RT
MH-07	PROP. TYPE P-7T MANHOLE	7.06	-0.62	18" HDPE W/ EXFIL. TRENCH, INV. 1.38 (N)	S.W. 77TH COURT STA. 10+33 5.3' RT
MH-13	PROP. DOGHOUSE MANHOLE W/ BAFFLE (W)	7.10	0.42	18" RCP (EXIST.), INV. 2.42 (S) 18" RCP (EXIST.), INV. 2.42 (N) 18" HDPE W/ EXFIL. TRENCH, INV. 2.48 (W)	S.W. 157TH TERRACE STA. 5+80 -2.9' LT

LEGEND

- CENTER LINE
- - - RIGHT-OF-WAY
- PROPERTY LINE
- - - PROPOSED SWALE REGRADING
- EXISTING WATER MAIN
- EXISTING SANITARY SEWER MAIN
- EXISTING CATCH BASIN
- EXISTING MANHOLE
- EXISTING DRAINAGE PIPE
- PROPOSED DRAINAGE PIPE
- PROPOSED EXFILTRATION TRENCH
- PROPOSED MANHOLE
- PROPOSED GRADE
- MATCH EXISTING GRADE
- PROPOSED ASPHALT OVERLAY
- 4.0' OF MILLING/ASPHALT TRANSITION PRIOR TO ASPHALT OVERLAY (1-INCH DEPTH)
- FILL AND REGRADE AS REQUIRED, 2" TOP SOIL AND 50D

NOTES:
1. WHERE PROPOSED ASPHALT IS TO MEET EXISTING DRIVEWAY, MATCH EXISTING DRIVEWAY GRADE.

KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG

It's fast. It's free. It's the low.

www.callsunshine.com

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT
044649021
DATE
APRIL 2018
SCALE AS SHOWN
DESIGNED BY TS
DRAWN BY JU
CHECKED BY SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
PREPARED FOR
VILLAGE OF PALMETTO BAY

LICENSED PROFESSIONAL
STEFANO VIOLA
FLORIDA LICENSE NUMBER
74655

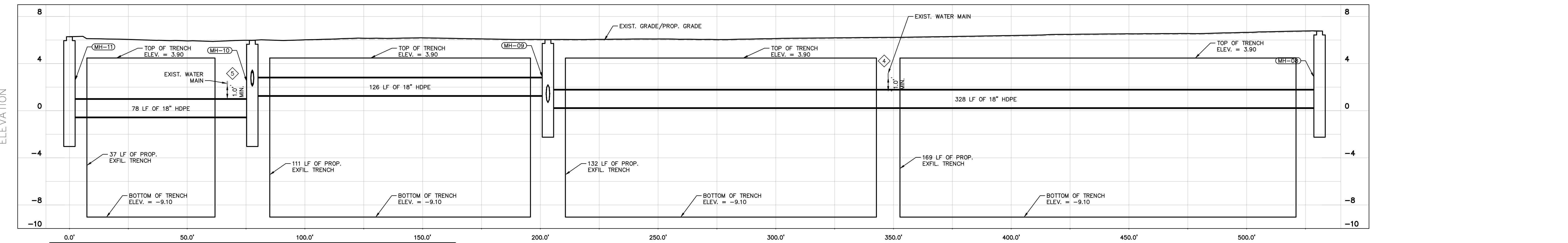
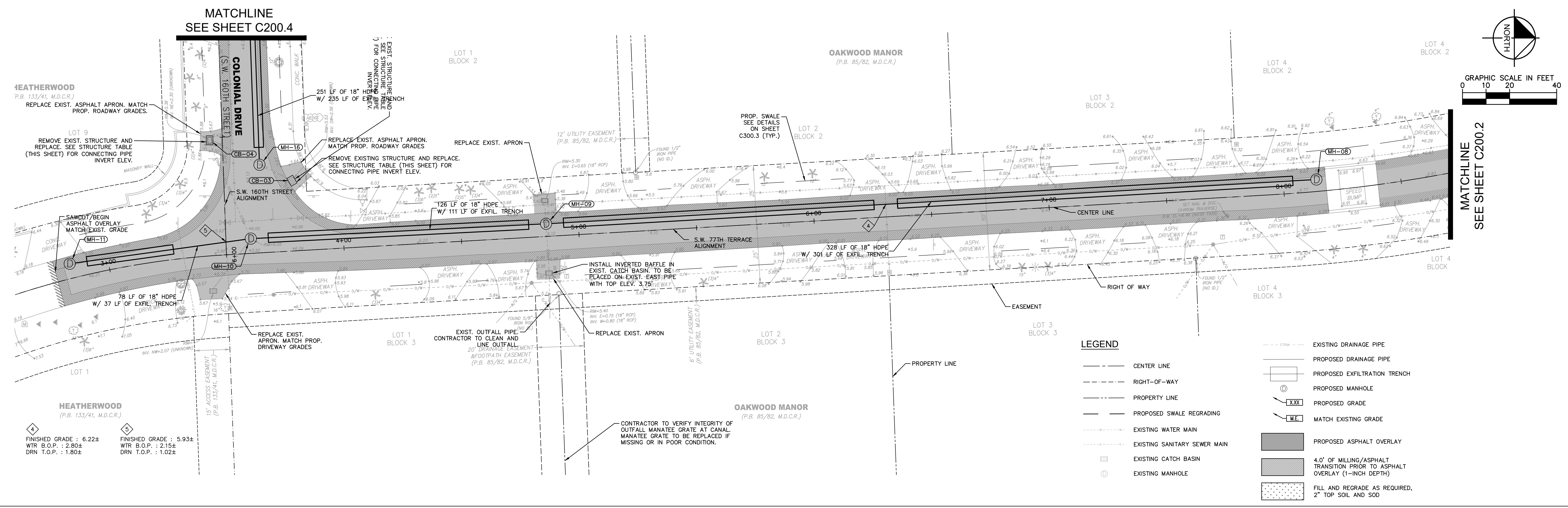
PAVING & DRAINAGE, PLAN & PROFILE SW 77TH COURT

SHEET NUMBER
C200.2

No.	REVISIONS	DATE	BY

PALMETTO BAY FLORIDA DATE: 3/27/19

Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C200.3 - March 27, 2019 11:17:56am
 K:\1910_civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C200.1_Drainage_Plan_and_Profile.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
CB-03	PROP. TYPE P-10M CATCH BASIN	5.77	0.56	18" RCP (EXIST.), INV. 2.56 (SW)	S.W. 77TH COURT STA. 3+80 -29.9' LT
CB-04	PROP. TYPE P-10M CATCH BASIN	5.43	0.30	15" RCP (EXIST.), INV. 2.30 (NE) 18" RCP (EXIST.), INV. 2.30 (NE)	S.W. 77TH COURT STA. 3+46 -49.0' LT
MH-08	PROP. TYPE P-7T MANHOLE	6.76	-1.75	18" HDPE W/ EXFIL. TRENCH, INV. 0.25 (S)	S.W. 77TH COURT STA. 8+14 -5.1' LT
MH-09	PROP. DOGHOUSE MANHOLE W/ BAFFLE (N), (S), & (E)	6.04	-1.75	18" RCP (EXIST.), INV. 0.70 (E) 18" RCP (EXIST.), INV. 0.70 (W) 18" HDPE W/ EXFIL. TRENCH, INV. 1.28 (S) 18" HDPE W/ EXFIL. TRENCH, INV. 0.25 (N)	S.W. 77TH COURT STA. 4+86 -5.4' LT
MH-10	PROP. TYPE J-7T MANHOLE W/ BAFFLE (N), (S), & (SE)	5.97	-2.54	18" HDPE W/ EXFIL. TRENCH, INV. 1.28 (N) 15" RCP (EXIST.), INV. 2.20 (SE) 15" RCP (EXIST.), INV. 2.08 (SW) 18" HDPE W/ EXFIL. TRENCH, INV. -0.54 (S)	S.W. 77TH COURT STA. 3+61 -6.3' LT
MH-11	PROP. TYPE P-7T MANHOLE	6.28	-2.54	18" HDPE W/ EXFIL. TRENCH, INV. -0.54 (N)	S.W. 77TH COURT STA. 2+84 -6.2' LT
MH-16	PROP. DOGHOUSE MANHOLE W/ BAFFLE (W)	6.03	-0.82	18" HDPE W/ EXFIL. TRENCH, INV. 1.38 (W) 18" RCP (EXIST.), INV. 2.46 (SW) 18" RCP (EXIST.), INV. 2.46 (NE)	S.W. 160TH STREET STA. 5+62 -15.4' LT

S.W. 77TH COURT DRAINAGE (1) PROFILE
 SCALE: 1"=20' (HORZ.)
 1"=2' (VERT.)



© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT
 044649021
 DATE
 APRIL 2018
 SCALE AS SHOWN
 DESIGNED BY TS
 DRAWN BY JU
 CHECKED BY SV

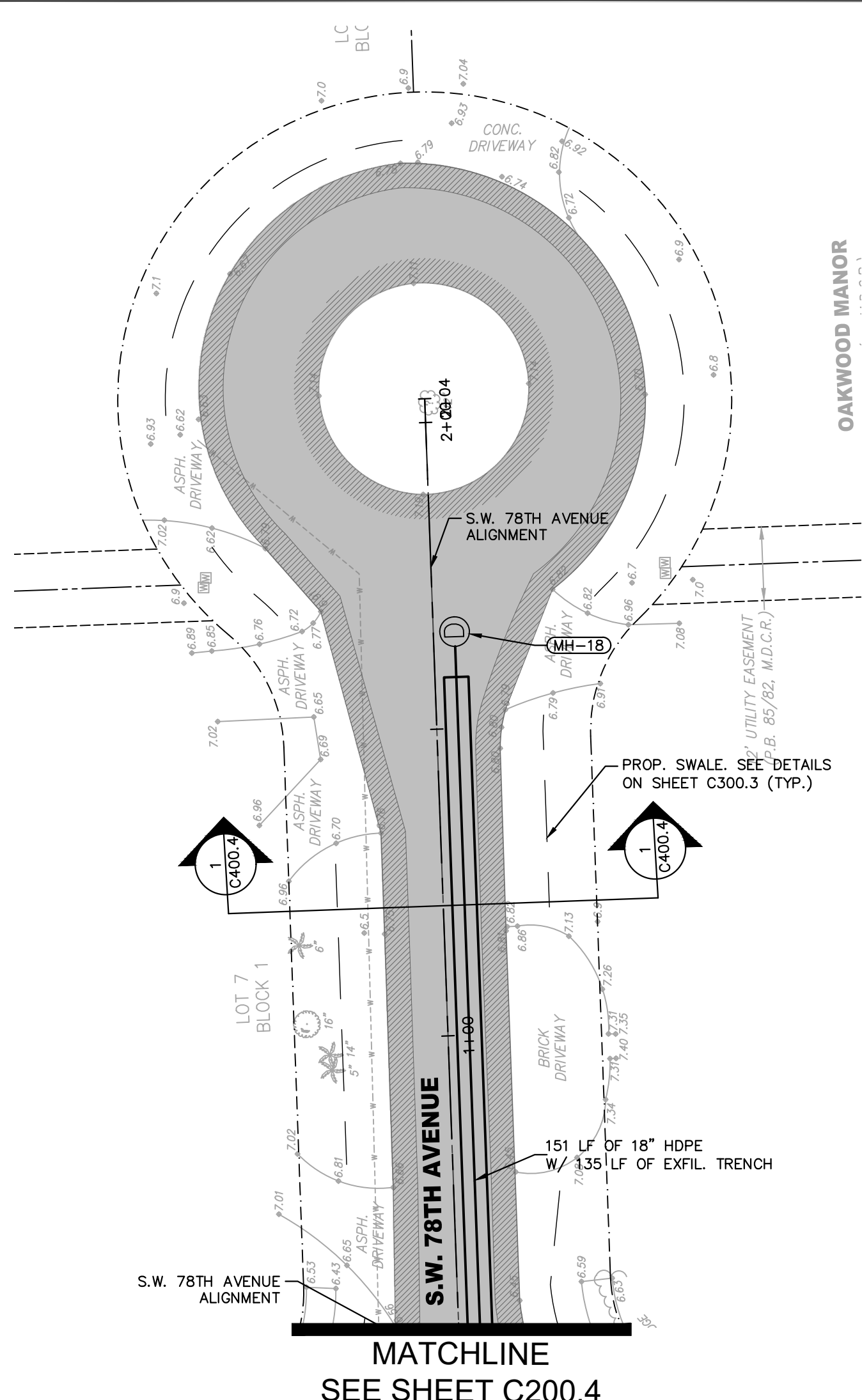
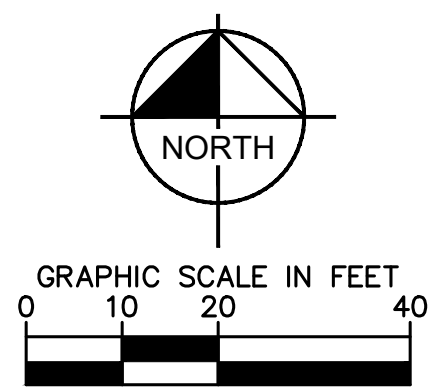
SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 PALMETTO BAY FLORIDA

LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

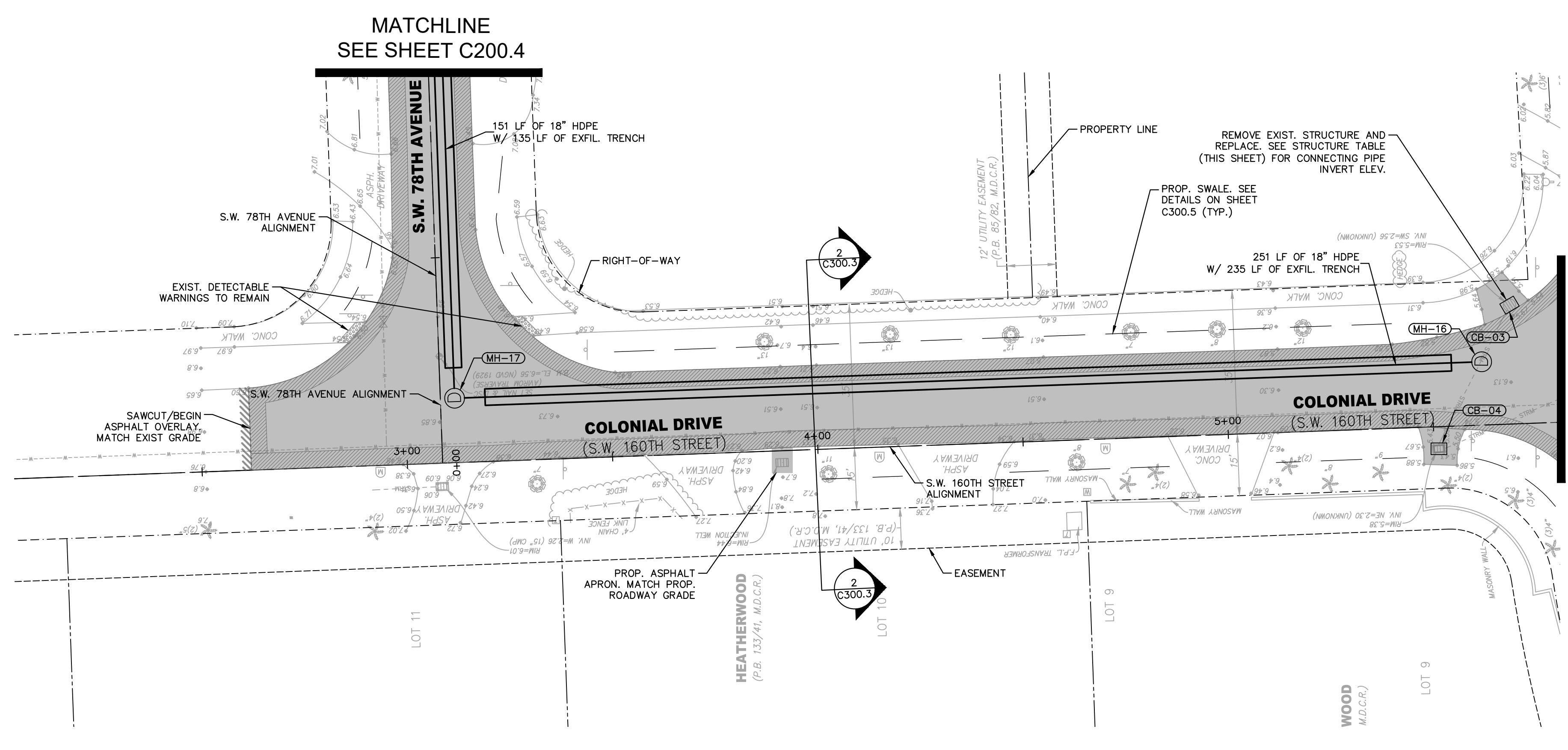
PAVING & DRAINAGE, PLAN & PROFILE SW 77TH COURT

SHEET NUMBER
C200.3

Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C200.4 - March 27, 2019 11:18:06am
 K:\1\civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C200.1_Drainage_Plan_and_Profile.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or improper reliance on this document without written authorization and adaptation by Kinley-Horn and Associates, Inc. shall be without liability to Kinley-Horn and Associates, Inc.



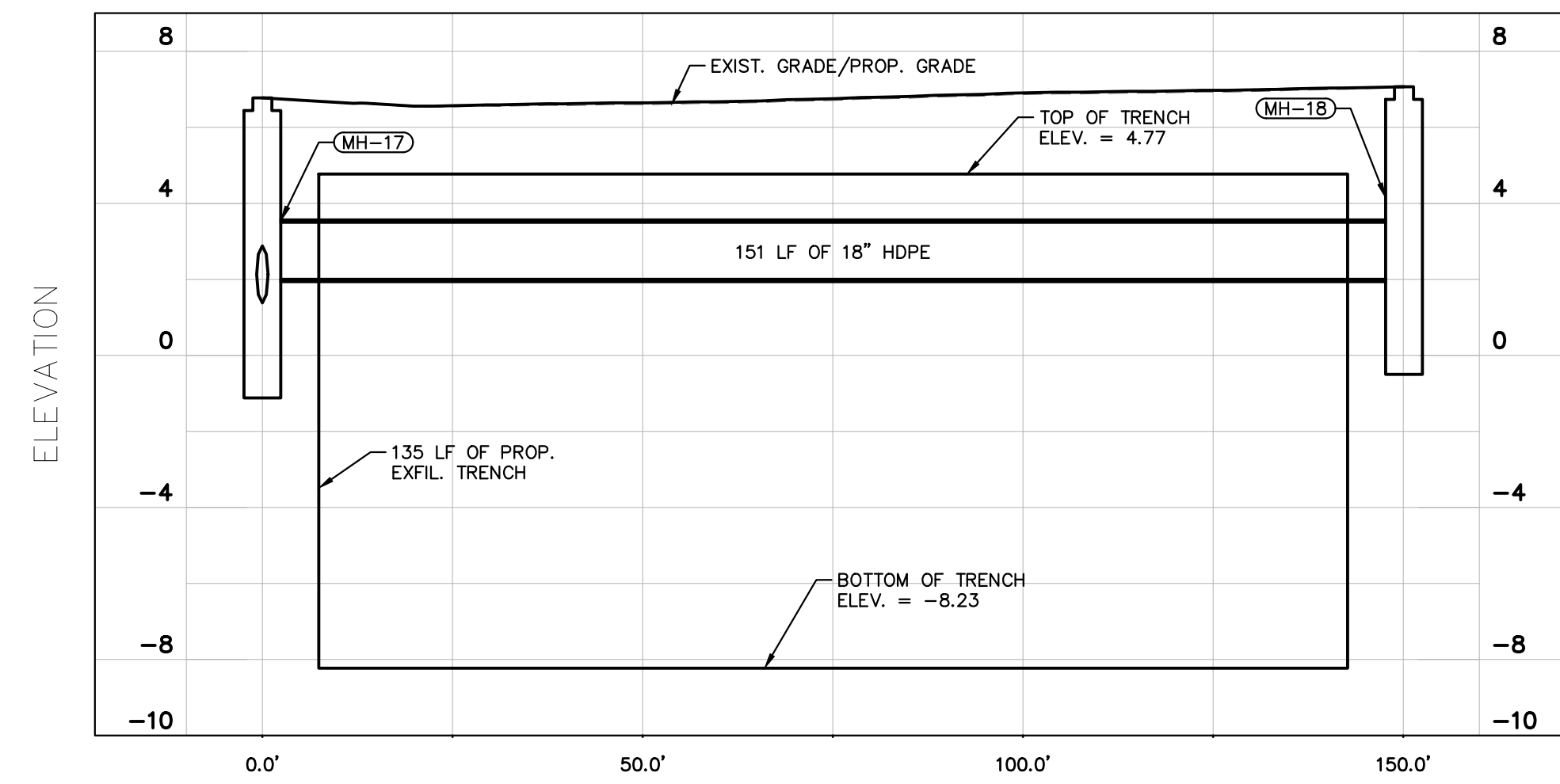
MATCHLINE
SEE SHEET C200.4



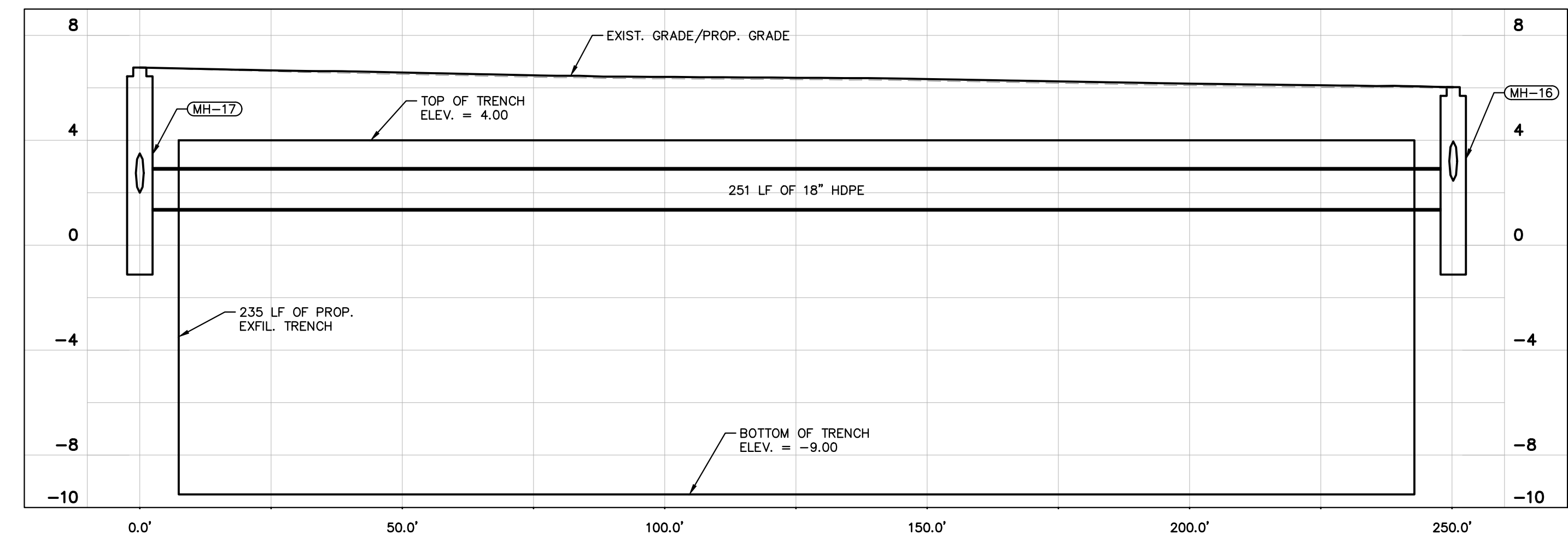
MATCHLINE
SEE SHEET C200.3

- LEGEND**
- CENTER LINE
 - RIGHT-OF-WAY
 - PROPERTY LINE
 - PROPOSED SWALE REGRADING
 - EXISTING WATER MAIN
 - EXISTING SANITARY SEWER MAIN
 - ▭ EXISTING CATCH BASIN
 - ⊕ EXISTING MANHOLE
 - EXISTING DRAINAGE PIPE
 - PROPOSED DRAINAGE PIPE
 - ▭ PROPOSED EXFILTRATION TRENCH
 - ⊕ PROPOSED MANHOLE
 - PROPOSED GRADE
 - MATCH EXISTING GRADE
 - ▨ PROPOSED ASPHALT OVERLAY
 - ▨ 4.0' OF MILLING/ASPHALT TRANSITION PRIOR TO ASPHALT OVERLAY (1-INCH DEPTH)
 - ▨ FILL AND REGRADE AS REQUIRED, 2" TOP SOIL AND SOD

NOTES:
1. WHERE PROPOSED ASPHALT IS TO MEET EXISTING DRIVEWAY, MATCH EXISTING DRIVEWAY GRADE.



S.W. 78TH AVENUE DRAINAGE PROFILE
SCALE: 1"=20' (HORZ.)
1"=2' (VERT.)



S.W. 160TH DRIVE DRAINAGE PROFILE
SCALE: 1"=20' (HORZ.)
1"=2' (VERT.)

STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
CB-03	PROP. TYPE P-10M CATCH BASIN	5.77	0.56	18" RCP (EXIST.), INV. 2.56 (SW)	S.W. 77TH COURT STA. 3+80 -29.9' LT
CB-04	PROP. TYPE P-10M CATCH BASIN	5.43	0.30	15" RCP (EXIST.), INV. 2.30 (NE) 18" RCP (EXIST.), INV. 2.30 (NE)	S.W. 77TH COURT STA. 3+46 -49.0' LT
MH-16	PROP. DOGHOUSE MANHOLE W/ BAFFLE (W)	6.03	-0.62	18" HDPE W/ EXFIL. TRENCH, INV. 1.38 (W) 18" RCP (EXIST.), INV. 2.46 (SW) 18" RCP (EXIST.), INV. 2.46 (NE)	S.W. 160TH STREET STA. 5+62 -15.4' LT

STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
MH-17	PROP. TYPE P-7T MANHOLE	6.77	-0.62	18" HDPE W/ EXFIL. TRENCH, INV. 1.38 (E) 18" HDPE W/ EXFIL. TRENCH, INV. 2.00 (N)	S.W. 160TH STREET STA. 3+12 -15.7' LT
MH-18	PROP. TYPE P-7T MANHOLE	7.06	0.00	18" HDPE W/ EXFIL. TRENCH, INV. 2.00 (S)	S.W. 78TH AVENUE STA. 1+66 3.5' RT



Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
044649021
DATE
APRIL 2018
SCALE AS SHOWN
DESIGNED BY TS
DRAWN BY JU
CHECKED BY SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 FLORIDA

LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

PAVING & DRAINAGE, PLAN & PROFILE SW 160TH STREET

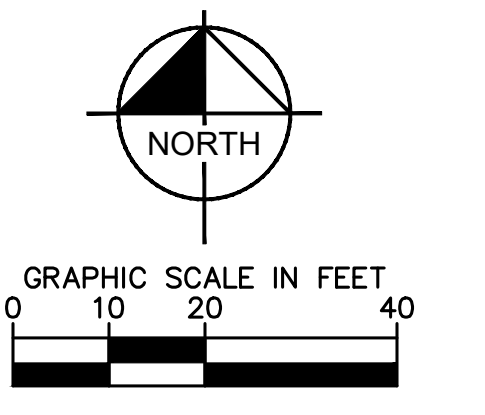
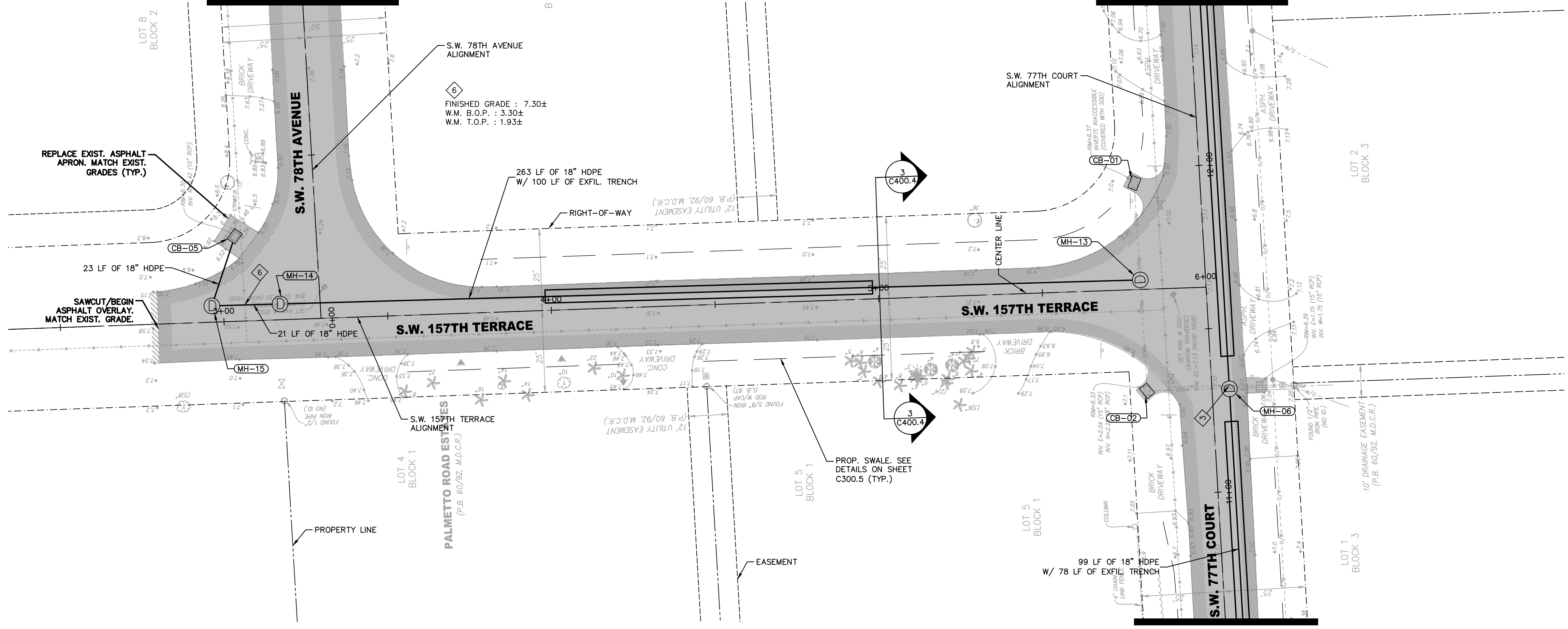
SHEET NUMBER
C200.4

No.	REVISIONS	DATE	BY

Plotted By: Stanton, Tiffany Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS Layout: C200.5 March 27, 2019 11:18:13am K:\FI\civil\44 Jobs\044649021-sub basin 61 design\CAD\plansheets\C200.1 Drainage Plan and Profile.dwg
 This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE
SEE SHEET C200.6

MATCHLINE
SEE SHEET C200.2

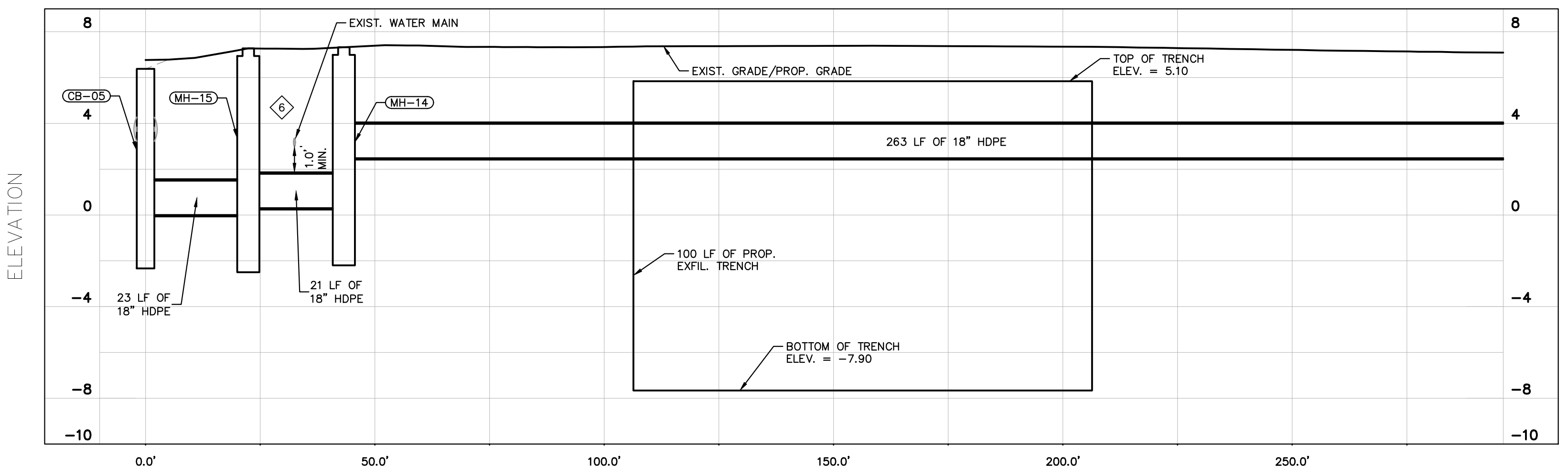


LEGEND

- CENTER LINE
- - - RIGHT-OF-WAY
- - - PROPERTY LINE
- - - PROPOSED SWALE REGRADING
- - - EXISTING WATER MAIN
- - - EXISTING SANITARY SEWER MAIN
- ▣ EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- - - EXISTING DRAINAGE PIPE
- - - PROPOSED DRAINAGE PIPE
- ▭ PROPOSED EXFILTRATION TRENCH
- ⊙ PROPOSED MANHOLE
- XXX PROPOSED GRADE
- M.E. MATCH EXISTING GRADE
- ▨ PROPOSED ASPHALT OVERLAY
- ▨ 4.0' OF MILLING/ASPHALT TRANSITION PRIOR TO ASPHALT OVERLAY (1-INCH DEPTH)
- ▨ FILL AND REGRADE AS REQUIRED, 2" TOP SOIL AND SOD

NOTES:
1. WHERE PROPOSED ASPHALT IS TO MEET EXISTING DRIVEWAY, MATCH EXISTING DRIVEWAY GRADE.

MATCHLINE
SEE SHEET C200.2



S.W. 157TH TERRACE DRAINAGE PROFILE
SCALE: 1"=20' (HORZ.)
1"=2' (VERT.)

STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
CB-05	PROP. DOGHOUSE CATCH BASIN	6.38	-2.00	18" HDPE, INV. 0.00 (S) 15" RCP, INV. 3.12 (N)	S.W. 157TH TERRACE STA. 3+04 -26.0' LT
MH-13	PROP. DOGHOUSE MANHOLE W/ BAFFLE (W)	7.10	0.42	18" RCP (EXIST.), INV. 2.42 (S) 18" RCP (EXIST.), INV. 2.42 (N) 18" HDPE W/ EXFIL. TRENCH, INV. 2.48 (W)	S.W. 157TH TERRACE STA. 5+80 -2.9' LT
MH-14	PROP. TYPE P-7T MANHOLE W/ BAFFLE (E)	7.32	-1.70	18" HDPE W/ EXFIL. TRENCH, INV. 2.48 (E) 18" HDPE, INV. 0.30 (W)	S.W. 157TH TERRACE DRAINAGE STA. 0+43 0.0'
MH-15	PROP. TYPE P-7T MANHOLE	7.27	-2.00	18" HDPE, INV. 0.00 (N) 18" HDPE, INV. 0.30 (E)	S.W. 157TH TERRACE STA. 2+96 -5.0' LT



© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT
044649021
DATE
APRIL 2018
SCALE AS SHOWN
DESIGNED BY TS
DRAWN BY JU
CHECKED BY SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
PREPARED FOR
VILLAGE OF PALMETTO BAY
PALMETTO BAY FLORIDA

LICENSED PROFESSIONAL
STEFANO VIOLA
FLORIDA LICENSE NUMBER
74655
DATE: 3/27/19

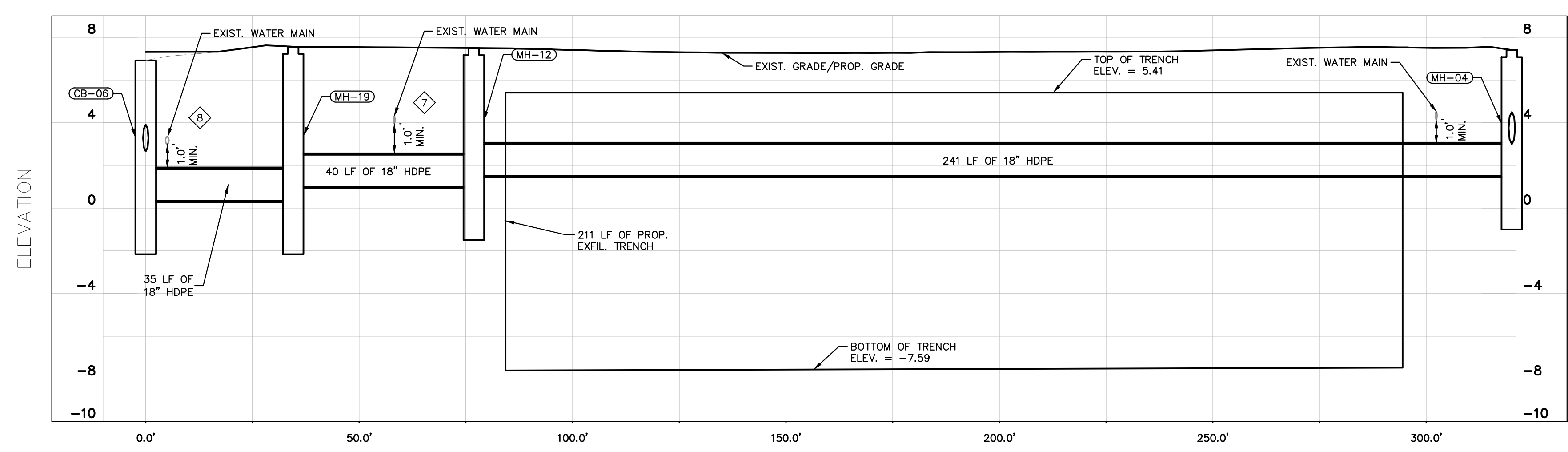
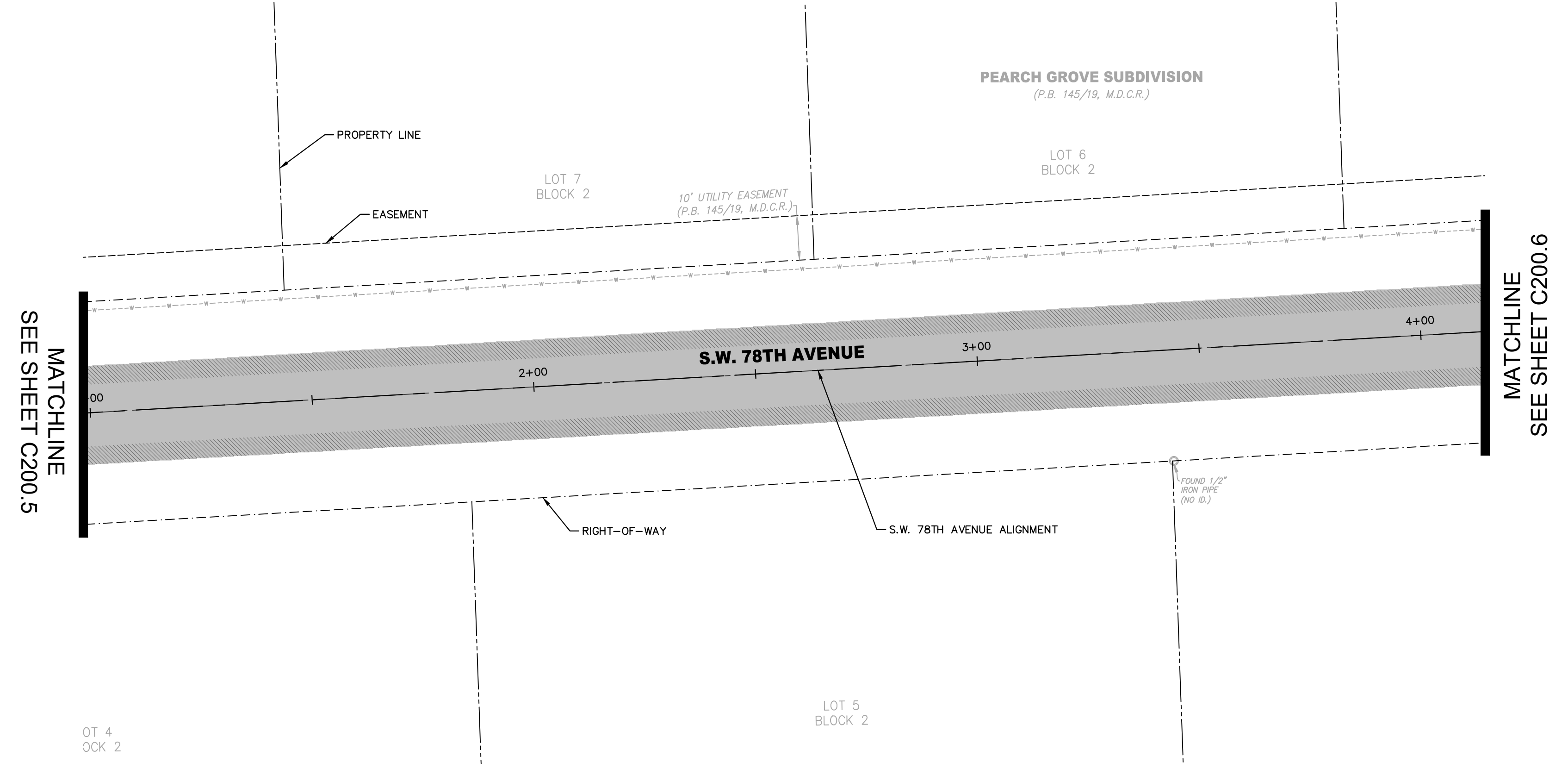
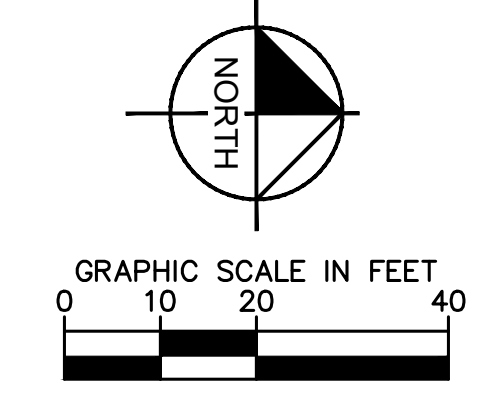
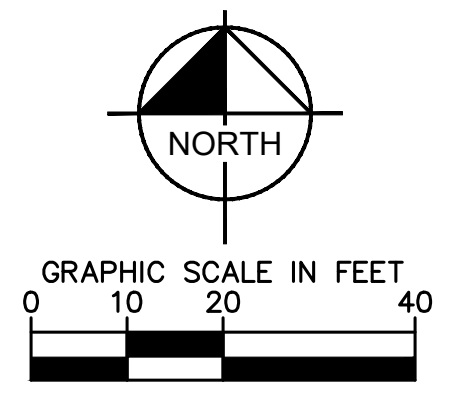
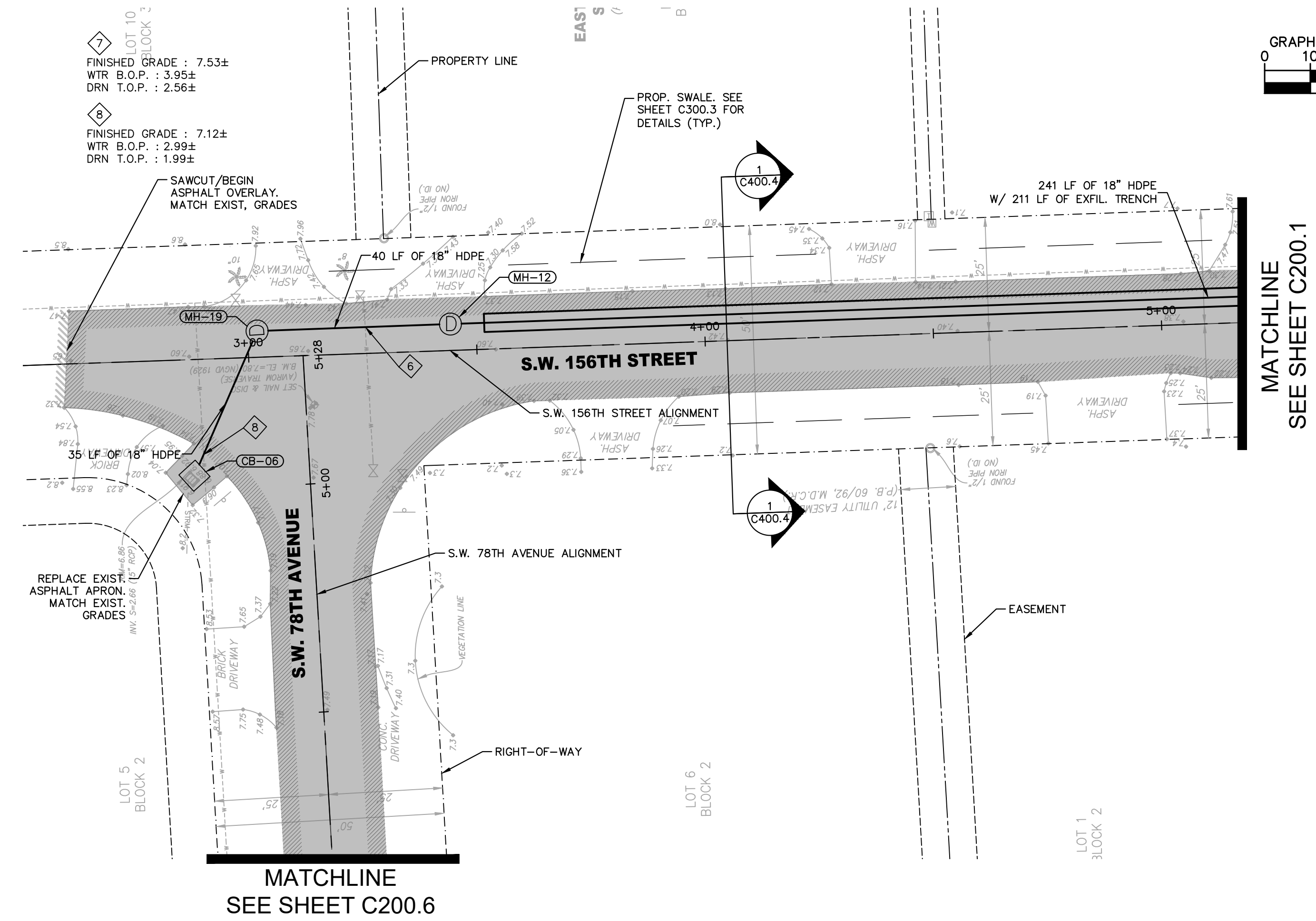
PAVING & DRAINAGE, PLAN & PROFILE SW 157TH TERRACE

SHEET NUMBER

C200.5

No.	REVISIONS	DATE	BY

Plotted By: Stanton, Tiffany Sheet: SWSUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS Layout: C200.6 March 27, 2019 11:18:23am K:\1\civil\044 Jobs\044649021-sub-basin 61 design\CAD\plansheets\C200.1 Drainage Plan and Profile.dwg
 This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



S.W. 156TH STREET DRAINAGE PROFILE
 SCALE: 1"=20' (HORZ.)
 1"=2' (VERT.)

STRUCTURE TABLE					
STRUCT. NAME	STRUCT. TYPE	RIM ELEV.	SUMP ELEV.	PIPES	STATION
CB-06	PROP. TYPE P-10M CATCH BASIN	6.92	-1.66	15" RCP (EXIST.), INV. 2.66 (S) 18" HDPE, INV. 0.34 (NE)	S.W. 156TH STREET STA. 2+87 25.4' RT
MH-04	PROP. TYPE P-7T MANHOLE	7.41	-0.50	18" HDPE W/ EXFIL. TRENCH, INV. 1.50 (W) 18" HDPE, INV. 3.00 (N)	S.W. 77TH COURT STA. 16+97 5.4' RT
MH-12	PROP. TYPE P-7T MANHOLE W/ BAFFLE (E)	7.50	-1.00	18" HDPE W/ EXFIL. TRENCH, INV. 1.50 (E) 18" HDPE, INV. 1.00 (W)	S.W. 156TH STREET STA. 3+44 -5.8' LT
MH-19	PROP. TYPE P-7T MANHOLE	7.56	-1.66	18" HDPE, INV. 0.34 (SW) 18" HDPE, INV. 1.00 (E)	S.W. 156TH STREET STA. 3+02 -5.8' LT

LEGEND

- CENTER LINE
- - - RIGHT-OF-WAY
- PROPERTY LINE
- - - PROPOSED SWALE REGRADING
- - - EXISTING WATER MAIN
- - - EXISTING SANITARY SEWER MAIN
- ▣ EXISTING CATCH BASIN
- ⊙ EXISTING MANHOLE
- - - EXISTING DRAINAGE PIPE
- - - PROPOSED DRAINAGE PIPE
- ▭ PROPOSED EXFILTRATION TRENCH
- ⊙ PROPOSED MANHOLE
- XXX PROPOSED GRADE
- ME MATCH EXISTING GRADE
- ▨ PROPOSED ASPHALT OVERLAY
- ▨ 4.0' OF MILLING/ASPHALT TRANSITION PRIOR TO ASPHALT OVERLAY (1-INCH DEPTH)
- ▨ FILL AND REGRADE AS REQUIRED, 2" TOP SOIL AND SOD

NOTES:
 1. WHERE PROPOSED ASPHALT IS TO MEET EXISTING DRIVEWAY, MATCH EXISTING DRIVEWAY GRADE.

811 KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 It's fast. It's free. It's the law.
 www.callsunshine.com

Kimley»Horn
 © 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT
 044649021
 DATE
 APRIL 2018
 SCALE AS SHOWN
 DESIGNED BY TS
 DRAWN BY JU
 CHECKED BY SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 PALMETTO BAY

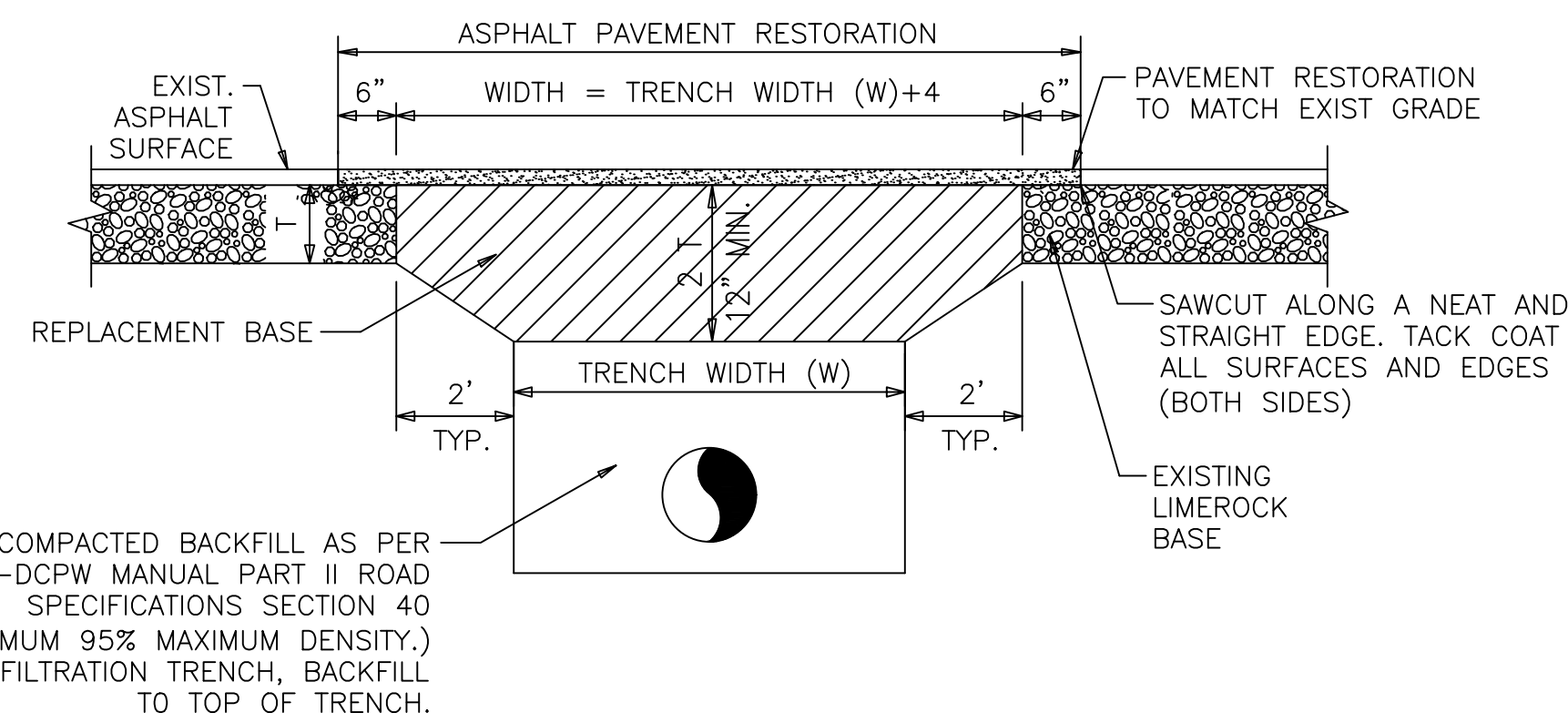
LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

PAVING & DRAINAGE, PLAN & PROFILE SW 156TH TERRACE

SHEET NUMBER
C200.6

No.	REVISIONS	DATE	BY

Plotted By: Stanton, Tiffany Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS Layout: C300.1 March 27, 2019 11:18:32am K:\file\civil\044 Jobs\044649021-sub-basin 61 design\CAD\plansheets\C300.1 Detail Sheet.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

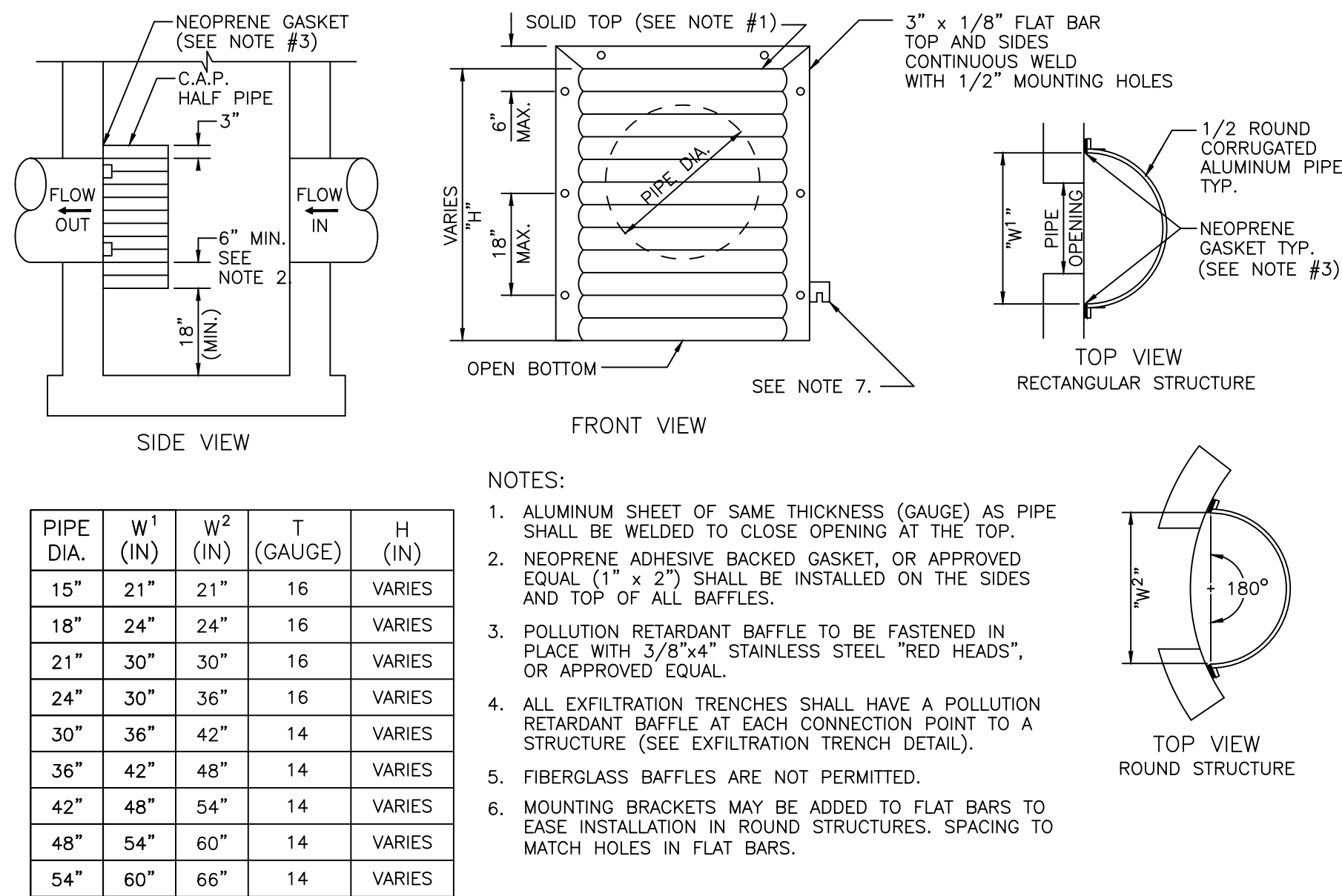


GENERAL NOTES :

- REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE. BUT NOT LESS THAN 12".
- BASE MATERIAL SHALL BE PLACED IN 6 INCH MAXIMUM LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO 98% OF MAXIMUM DENSITY, PER AASHTO T-180. BASE MATERIAL SHALL HAVE A MINIMUM LBR OF 100.
- ASPHALTIC CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
- SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED AND FEATHERED.
- PAVEMENT MATERIAL SHALL BE FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE STRUCTURAL COURSE (1" THICK). MATCH EXISTING GRADES AT LIMIT OF SAWCUT.
- UPON COMPLETION OF TRENCHING AND TRENCH/PAVEMENT RESTORATION FOR THE ENTIRE PROJECT, RESURFACE ENTIRE ROADWAY WIDTH WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE OVERLAY (1" MINIMUM THICKNESS).
- BID PRICES FOR PIPE AND/OR FRENCH DRAIN SHALL INCLUDE PAVEMENT RESTORATION TO MATCH EXISTING GRADES. CONTRACTOR SHALL NOT LEAVE MORE THAN 1,000- FEET OF EXPOSED LIMEROCK BASE AT ANY TIME DURING THE TRENCH/PAVEMENT RESTORATION PROCESS. ONLY THE FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE OVERLAY WILL BE PAID SEPARATELY.
- WHEN TRENCHING OUTSIDE THE PAVEMENT AREA, ASPHALT AND BASE MATERIAL REFERENCED IN GENERAL NOTES 1-5 ARE NOT REQUIRED. RESTORE OR REPLACE ALL PUBLIC OR PRIVATE PROPERTY TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL IMPACTED AREAS SHALL BE COMPACTED TO 95% DENSITY IN 6-INCH MAXIMUM LIFTS.
- CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL SOILS INFORMATION TO UNDERSTAND EXISTING CONDITIONS.

TRENCH / PAVEMENT RESTORATION

SCALE: N.T.S.



PIPE DIA.	W ¹ (IN)	W ² (IN)	T (GAUGE)	H (IN)
15"	21"	21"	16	VARIES
18"	24"	24"	16	VARIES
21"	30"	30"	16	VARIES
24"	30"	36"	16	VARIES
30"	36"	42"	14	VARIES
36"	42"	48"	14	VARIES
42"	48"	54"	14	VARIES
48"	54"	60"	14	VARIES
54"	60"	66"	14	VARIES

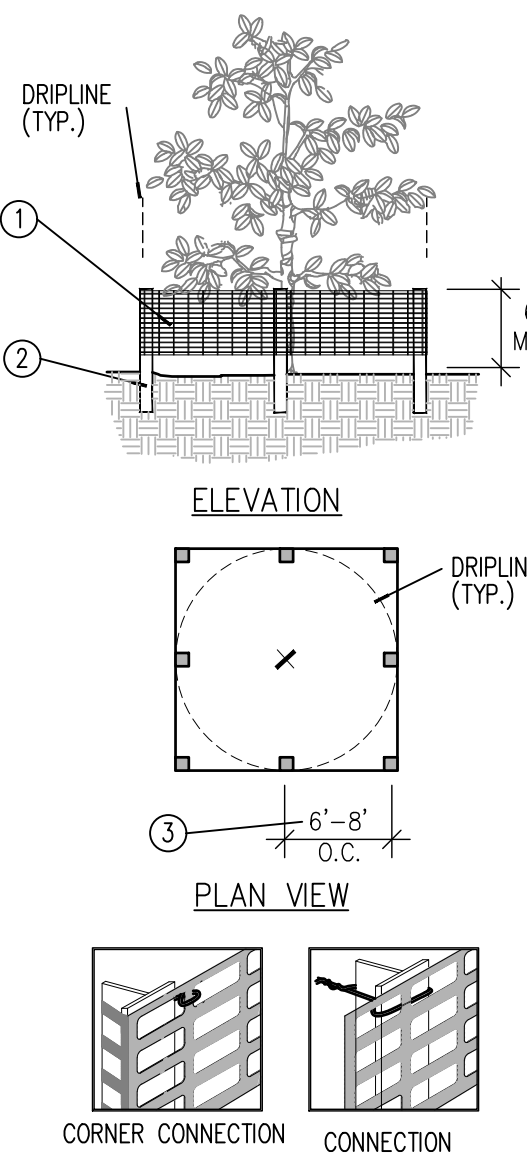
POLLUTION RETARDANT Baffle Detail

SCALE: N.T.S.

LOCATION OF PUBLIC WATER SYSTEM MAINS ACCORDANCE WITH F.A.C. RULE 62-555.314			
OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING @ CROSSINGS (FULL LENGTH OF PIPE CENTERED)
Storm Sewer; Stormwater Force Main; Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum.	Alternate: 3 ft minimum Water Main
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate: 3 ft minimum Water Main
Gravity or Pressure; Sanitary Sewer; Sanitary Sewer Force Main; Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum.	Alternate: 6 ft minimum Water Main
On-Site Sewage Treatment & Disposal System	10 ft minimum	-	-

NOTES:

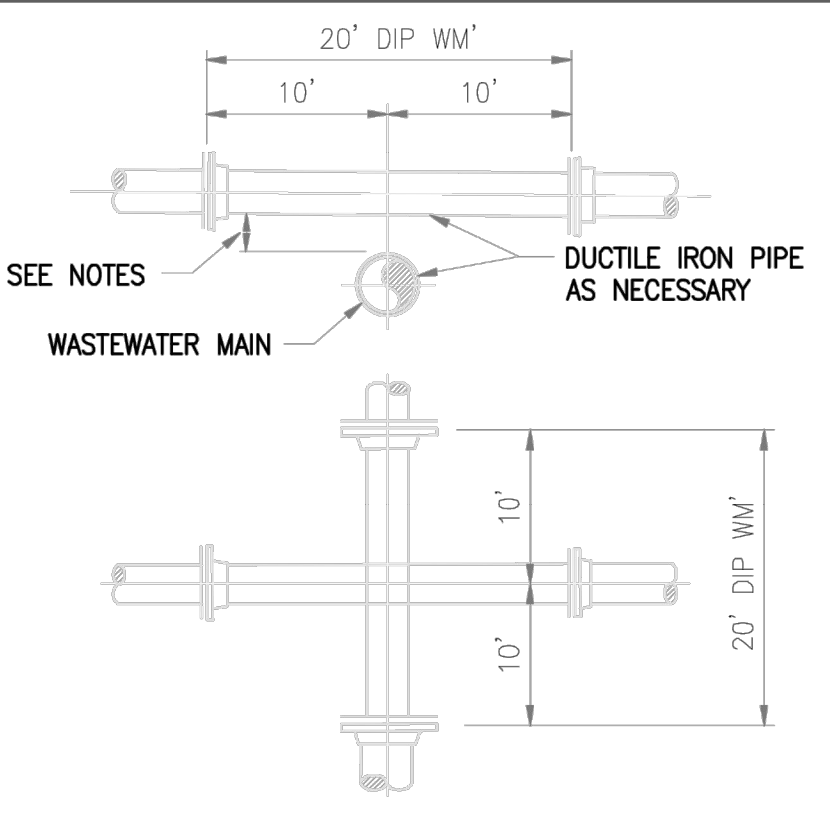
- WATER MAIN SHOULD BE ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
- RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- 3 FT. GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
- RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.



Tree/Shrub Protector Barrier Detail

TREE PROTECTION DETAIL

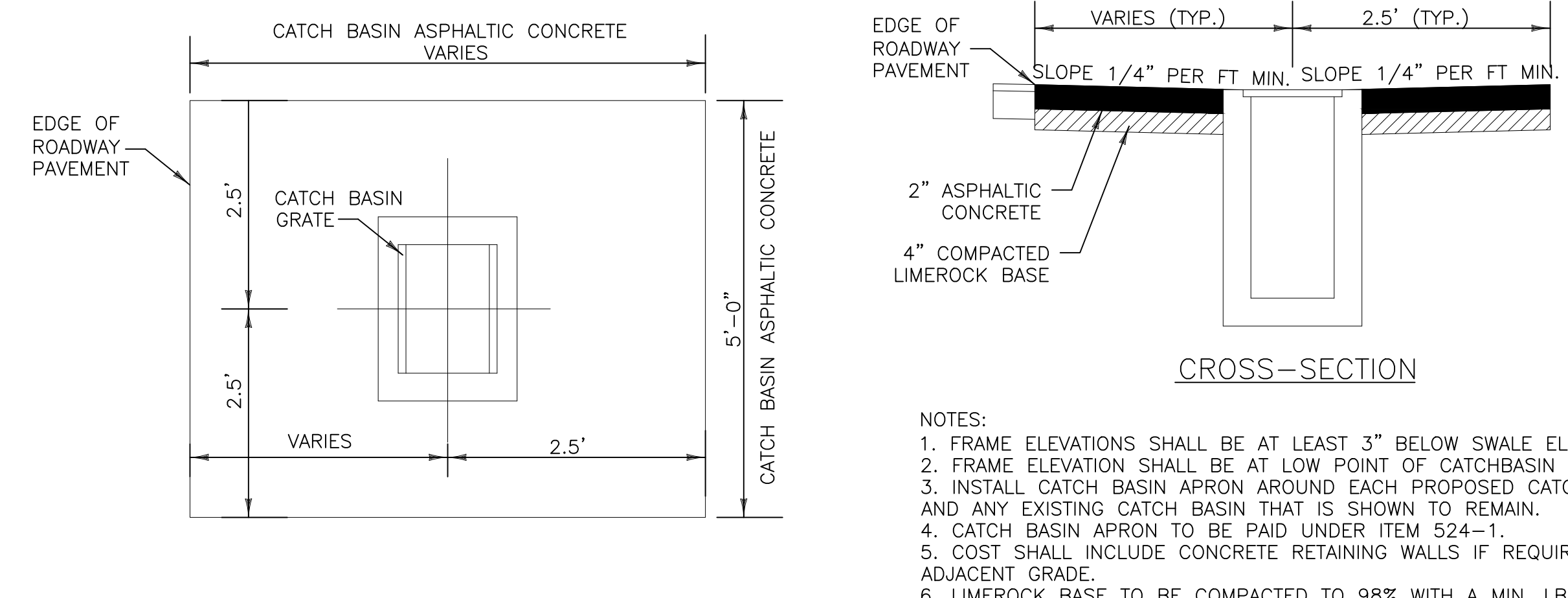
SCALE: N.T.S.



NOTES:

- STORM SEWER, GRAVITY WASTEWATER AND RECLAIMED WATER MAIN CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/WASTEWATER/RECLAIMED WATER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS, BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/RECLAIMED WATER PIPES CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM 12" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED, AND BOTH PIPES SHALL BE D.I.P. D.I.P. IS NOT REQUIRED FOR STORM SEWERS.
- WHENEVER POSSIBLE MAINTAIN MIN. TEN (10) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN POTABLE WATER MAIN AND STORM SEWER, WASTEWATER MAIN, OR FORCE MAIN (A MIN. 6" SEPARATION MAY BE APPROVED ON A CASE BY CASE BASIS). MAINTAIN MIN. THREE (3) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN RECLAIMED WATER MAIN AND POTABLE WATER MAIN, STORM SEWER, WASTEWATER GRAVITY MAIN OR FORCE MAIN.
- FORCE MAIN CROSSING POTABLE WATER MAIN OR RECLAIMED WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN WITH THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN CROSSING OVER THE FORCE MAIN.
- WASTEWATER LATERALS SHALL CROSS UNDER POTABLE WATER MAINS WITH A MIN. 12" VERTICAL SEPARATION WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, A 20' SECTION OF DUCTILE IRON PIPE POTABLE WATER MAIN CENTERED ON THE CROSSING IS REQUIRED AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6". WHERE THERE IS NO ALTERNATIVE TO A WASTEWATER LATERAL PIPE CROSSING OVER A POTABLE WATER MAIN, A MINIMUM 12" VERTICAL SEPARATION IS REQUIRED, THE LATERAL SHALL BE P.V.C. C-900 SDR18 OR BETTER, THE POTABLE WATER MAIN SHALL BE D.I.P. AND THE PIPE JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING.
- POTABLE WATER SERVICE LINES SHALL CROSS OVER WASTEWATER MAINS WITH A MIN. 12" VERTICAL SEPARATION. WHERE THIS MIN. SEPARATION CAN NOT BE MAINTAINED, THE WATER SERVICE SHALL BE ENCASED IN A MIN. 10' LONG PVC CASING CENTERED OVER THE CROSSING WITH MIN. 6" VERTICAL SEPARATION.
- WASTEWATER MAINS, WATER MAINS, STORM PIPES AND OTHER UTILITY PIPES SHALL CROSS PERPENDICULAR WHENEVER POSSIBLE.

ISSUE DATE	APPROVED BY	STANDARD DETAIL	GS
10/1/2017	D.V.	WATER AND SEWER MAINS CROSSING	1.5
			SHEET 2 OF 2



ASPHALTIC CONCRETE CATCH BASIN APRON DETAIL

SCALE: N.T.S.

Kimley»Horn
 © 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT 044649021
 DATE APRIL 2018
 SCALE AS SHOWN
 DESIGNED BY TS
 DRAWN BY JU
 CHECKED BY SV
SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 PALMETTO BAY FLORIDA

LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER 74655
 DATE: 3/27/19

SHEET NUMBER
PAVING & DRAINAGE DETAILS
C300.1

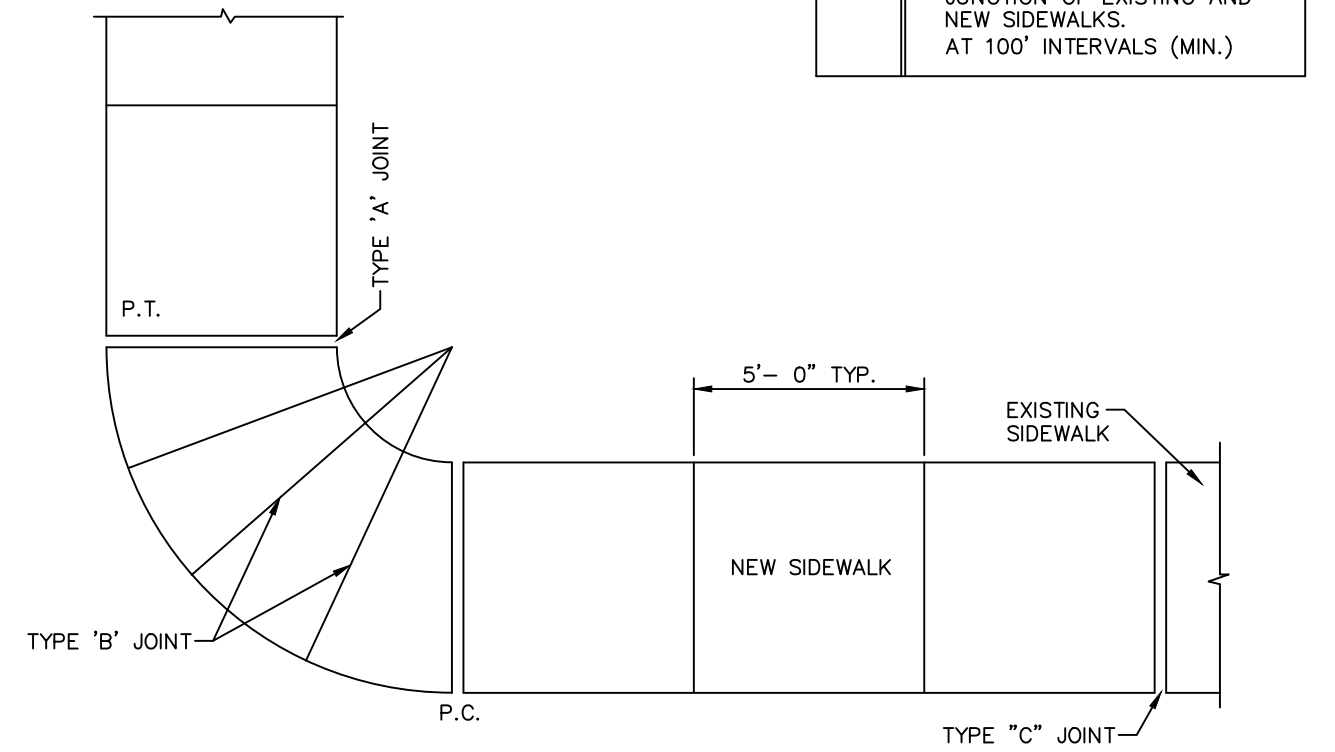
No.	REVISIONS	DATE	BY

Plotted By: Stanton, Tiffany Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS Layout: C300.2 March 27, 2019 11:18:32am K:\V\civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C300.1_Detail_Sheet.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

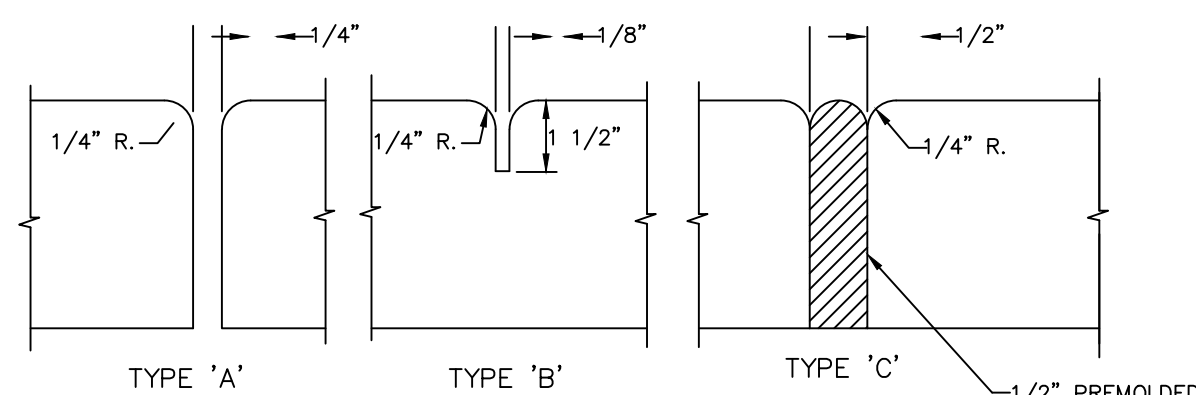
TABLE OF SIDEWALK THICKNESS - "T"	
LOCATION	"T"
NON-TRAFFIC AREAS	4"
AT DRIVEWAYS AND OTHER AREAS	6"

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	P.C. AND P.T. OF CURVES.
'B'	5'-0" CENTER TO CENTER ON SIDEWALKS.
'C'	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES. JUNCTION OF EXISTING AND NEW SIDEWALKS. AT 100' INTERVALS (MIN.)

NOTE: CONCRETE TO BE 3,000 P.S.I. AT 28 DAYS



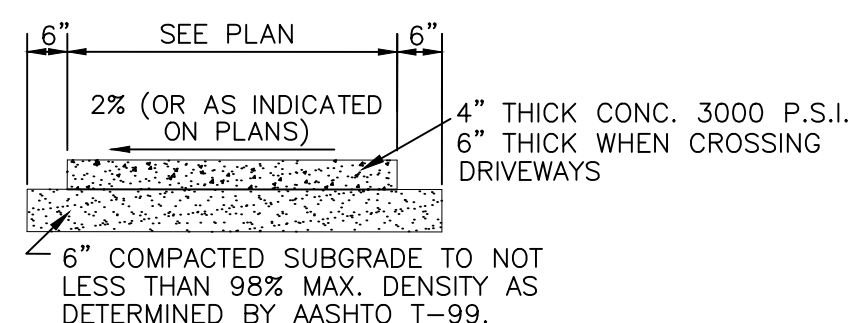
PLAN



SIDEWALK JOINTS

SIDEWALK CONSTRUCTION

N.T.S.



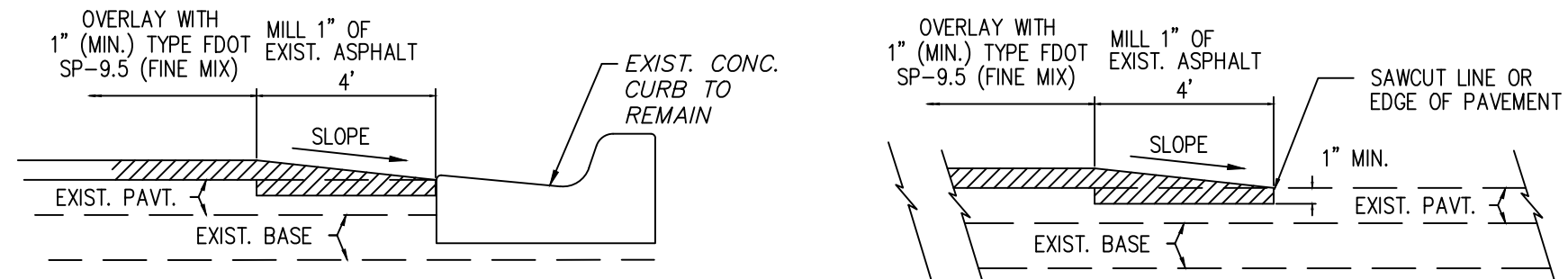
- TOOLED JOINTS TO OCCUR AT INTERVALS EQUAL TO WIDTH OF SIDEWALK
- SIDEWALK TO HAVE BROOM FINISH PERPENDICULAR TO PATH OF TRAVEL.

TYPICAL SIDEWALK CROSS-SECTION

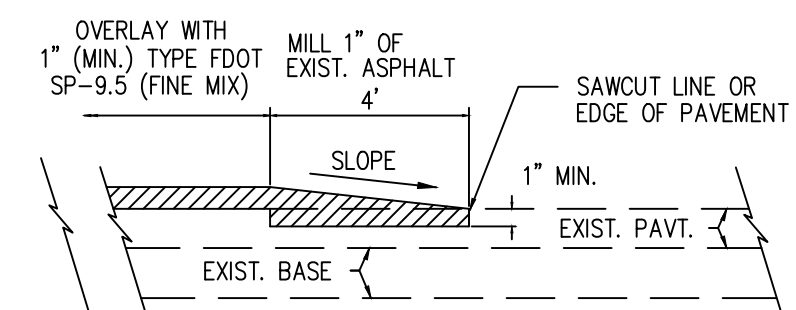
N.T.S.

NOTES:

- CONTRACTOR SHALL REPAIR AND RESTORE ALL AREAS WITHIN THE ABUTTING R/W DISTURBED DURING CONSTRUCTION TO A CONDITION EQUAL TO OR BETTER THAN EXISTING AT NO ADDITIONAL COST TO THE OWNER.
- SILT SCREENS SHALL BE USED WHERE NECESSARY TO PREVENT ADVERSE STORMWATER RUN-OFF FROM LEAVING THE SITE CONSTRUCTION.
- ALL DEMOLISHED SIDEWALKS AND ADDITIONS ARE TO BE REPLACED WITH CONCRETE SIDEWALK TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER.
- ALL DEMOLISHED SIDEWALK RAMP ARE TO BE REPLACED AS PER ADA STANDARDS AND INCLUDE ADA COMPLIANT DETECTABLE WARNING AT NO ADDITIONAL COST TO OWNER.



ASPHALT TRANSITION DETAIL ADJACENT TO CURB



ASPHALT TRANSITION DETAIL AT BEGINNING/ENDING OF ASPHALT OVERLAY

NOTES:

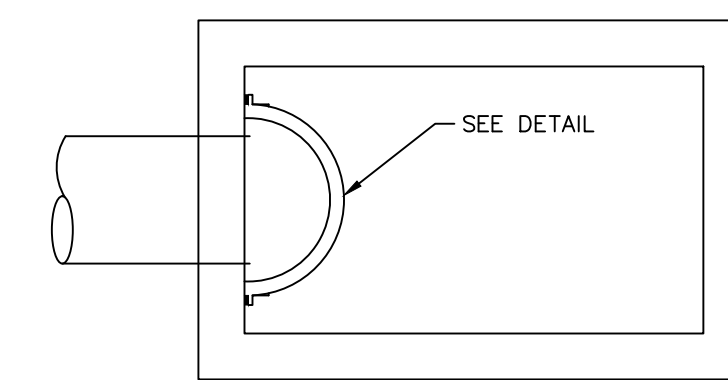
- OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS) AS SHOWN.

AT THE BEGINNING & END OF ASPHALT OVERLAY AND AT EDGE OF PAVEMENT ADJACENT TO CURBS, THE EXIST. PAVEMENT SHALL BE SAWCUT TO AN APPROXIMATE DEPTH OF 1" TO MAKE A CLEAN BUTT JOINT, & ENOUGH MATERIAL REMOVED FOR A SMOOTH TIE-IN AS SHOWN IN THE DETAIL.

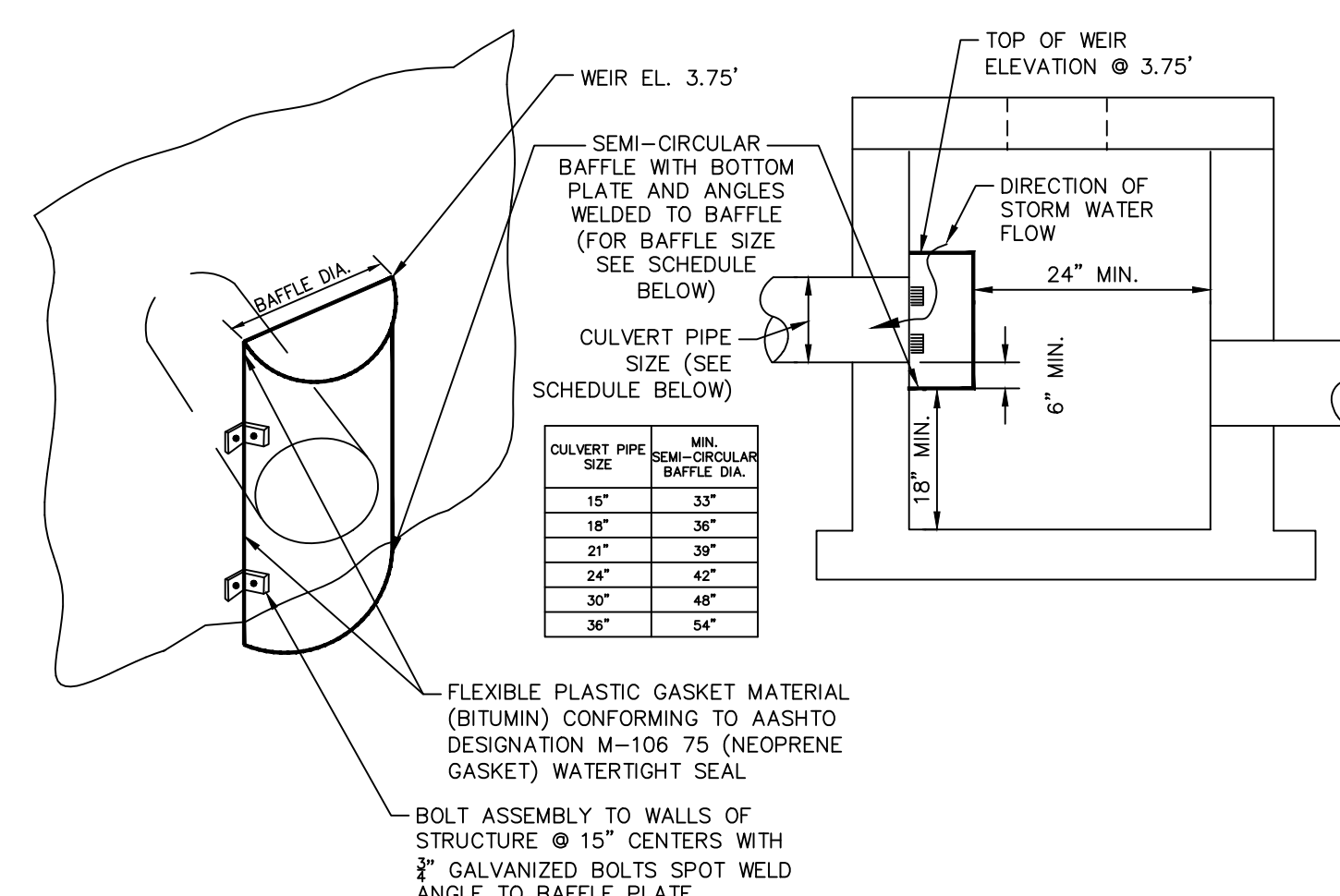
CONTRACTOR TO PROVIDE SMOOTH AND CONTINUOUS GRADING DURING ASPHALT OVERLAY PROCESS TO AVOID AREAS OF STANDING WATER. THE COST SHALL BE INCLUDED IN THE ASPHALTIC CONCRETE SURFACE COURSE OVERLAY PAY ITEM.

ASPHALT OVERLAY DETAILS

SCALE: N.T.S.



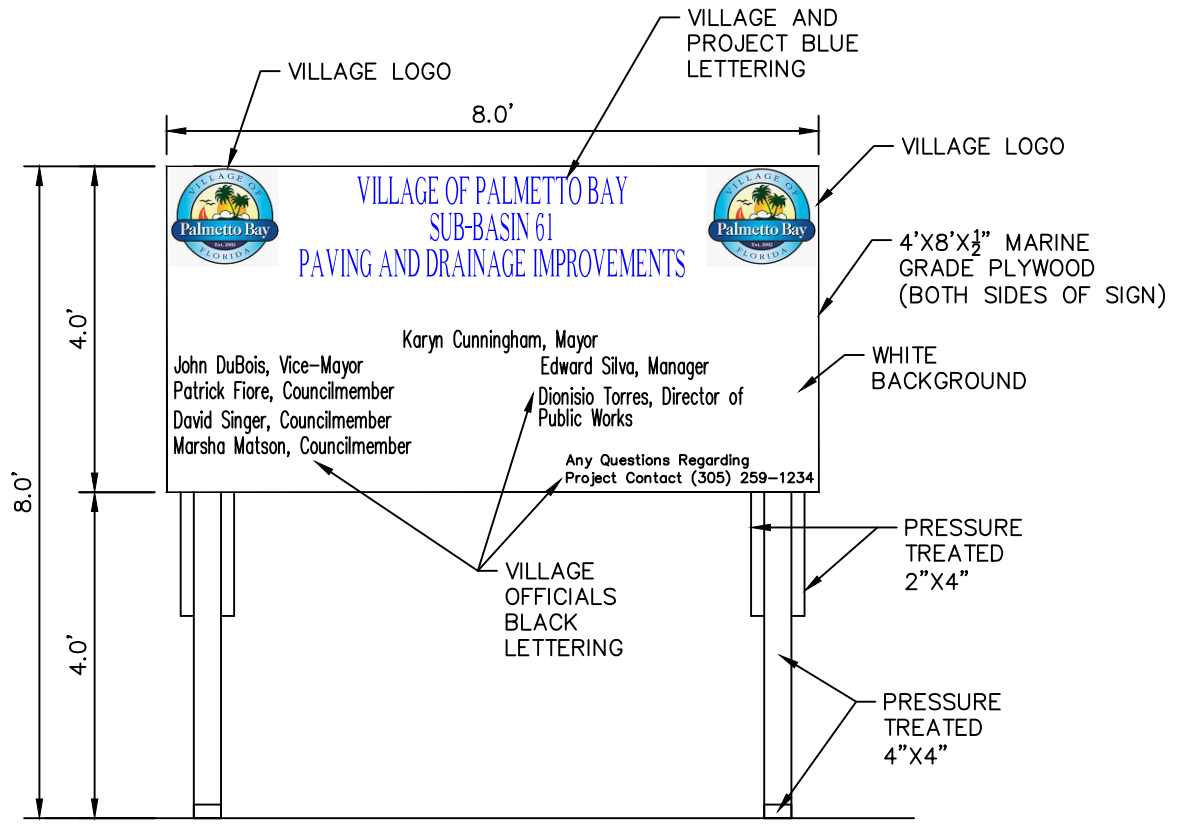
PLAN VIEW



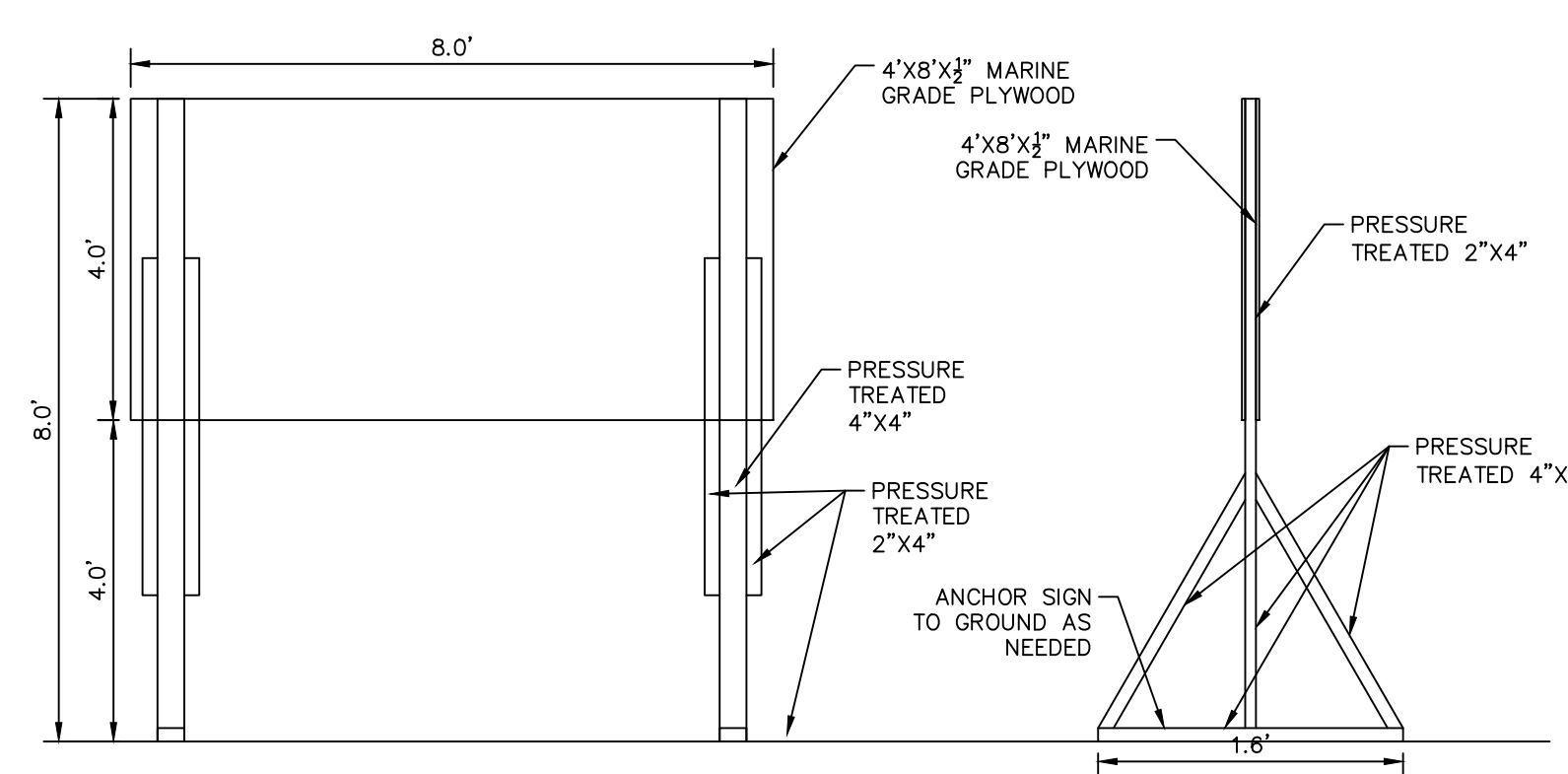
INVERTED BAFFLE

N.T.S.

NOTES: HALF ROUND PLATE TO BE WELDED TO BOTTOM FOR OVERFLOW



FRONT VIEW



CROSS-SECTION

SIDE OF SIGN

PROJECT SIGN

SCALE: N.T.S.



© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE AS SHOWN	
DESIGNED BY	TS
DRAWN BY	JU
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY

PALMETTO BAY

LICENSED PROFESSIONAL	
STEFANO VIOLA	
FLORIDA LICENSE NUMBER	74655
DATE:	3/27/19

PAVING & DRAINAGE DETAILS

SHEET NUMBER	C300.2
--------------	--------

No.	REVISIONS	DATE	BY

Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C300.3 - March 27, 2019 11:18:33am
 K:\V\civil\044 - Jobs\044649021-sub basin 61 design\CAD\plan\sheet\C300.1 Detail - Sheet.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

LONGITUDINAL SECTION

TRANSVERSE SECTION

ALT. TRANS. SECTION*

NOTES:

- AFTER THE COARSE AGGREGATE HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER, OR TAMPERED, TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL NO. 4 COARSE AGGREGATE SHALL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.
- MINIMUM NON-ROADWAY SURFACE
- FOR TRENCHES UNDER ROADWAY
- MIN. 18" BELOW FINISH GROUND UNLESS OTHERWISE APPROVED BY THE DEPARTMENT
- PIPE DIA. AS PER PLAN (MIN. 18")
- WOVEN PLASTIC FILTER FABRIC OVERLAP 1' MIN.
- GROUND ELEVATION
- PIPE INV. ELEV. (SEE SCHEDULE OF DRAINAGE STRUCTURES)
- NO. 4 COARSE AGGREGATE
- WOVEN PLASTIC FILTER FABRIC
- PROP. BOTTOM OF TRENCH
- SELECT FILL
- PIPE DIAMETER AS PER PLAN (MIN. 18")
- WOVEN PLASTIC FILTER FABRIC OVERLAP 1' MIN.
- GROUND ELEVATION
- PIPE INV. ELEV. (SEE SCHEDULE OF DRAINAGE STRUCTURES)
- NO. 4 COARSE AGGREGATE
- WOVEN PLASTIC FILTER FABRIC
- PROP. BOTTOM OF TRENCH
- SELECT FILL
- PIPE DIAMETER AS PER PLAN (MIN. 18")
- WOVEN PLASTIC FILTER FABRIC OVERLAP 1' MIN.
- GROUND ELEVATION
- PIPE INV. ELEV. (SEE SCHEDULE OF DRAINAGE STRUCTURES)
- NO. 4 COARSE AGGREGATE
- WOVEN PLASTIC FILTER FABRIC
- PROP. BOTTOM OF TRENCH
- SELECT FILL
- PIPE DIAMETER AS PER PLAN (MIN. 18")
- WOVEN PLASTIC FILTER FABRIC OVERLAP 1' MIN.
- GROUND ELEVATION
- PIPE INV. ELEV. (SEE SCHEDULE OF DRAINAGE STRUCTURES)
- NO. 4 COARSE AGGREGATE
- WOVEN PLASTIC FILTER FABRIC
- PROP. BOTTOM OF TRENCH
- SELECT FILL
- PIPE DIAMETER AS PER PLAN (MIN. 18")
- WOVEN PLASTIC FILTER FABRIC OVERLAP 1' MIN.
- GROUND ELEVATION
- PIPE INV. ELEV. (SEE SCHEDULE OF DRAINAGE STRUCTURES)
- NO. 4 COARSE AGGREGATE
- WOVEN PLASTIC FILTER FABRIC
- PROP. BOTTOM OF TRENCH
- SELECT FILL
- PIPE DIAMETER AS PER PLAN (MIN. 18")
- WOVEN PLASTIC FILTER FABRIC OVERLAP 1' MIN.
- GROUND ELEVATION
- PIPE INV. ELEV. (SEE SCHEDULE OF DRAINAGE STRUCTURES)
- NO. 4 COARSE AGGREGATE
- WOVEN PLASTIC FILTER FABRIC
- PROP. BOTTOM OF TRENCH

* MAY BE USED IN AREAS WHERE TRENCH WALLS WILL NOT STAND VERTICAL, OR WHERE CAVE-IN BELOW THE WATER TABLE IS LIKELY TO OCCUR. TO BE USED AT THE ENGINEER'S DISCRETION.

NOTES (CONTINUED ON NEXT PAGE)

- PLASTIC FILTER FABRIC SHALL BE WOVEN MONOFILAMENT POLYPROPYLENE GEOTEXTILE. PERMITTIVITY SHALL BE GREATER THAN 0.50 SEC AND FLOW RATE GREATER OR EQUAL TO 50 gal/min.
- MAXIMUM EXFILTRATION RATE WHICH CAN BE USED IN CALCULATING FRENCH DRAIN LENGTH IS 0.1 cfm/ft.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	04/16/2015	02/08/2011 09/26/2012 10/19/2012	EXFILTRATION TRENCH (FRENCH DRAIN)	1.1
				SHEET 1 OF 2

TYPICAL SECTION

NOTES:

- CAST TOP SLAB TO FIT WALL USED.
- USE 4,000 PSI CONCRETE (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
- PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
- APPLY A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/9/2018 9/19/2013 9/28/2012 3/8/2011 3/7/1981	PRECAST CATCH BASIN (D-3)	2.2
				SHEET 1 OF 2

P-7T

ROUND TOP

SQUARE TOP

SECTION

CONSTRUCTION JOINT (OPTIONAL)

NOTES:

- CAST TOP SLAB TO FIT WALL USED.
- PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
- USE 4,000 PSI CONCRETE (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
- APPLY A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/9/2018	MANHOLE AND INLET (TYPE P)	2.7
				SHEET 1 OF 4

P-10M

ROUND TOP

SQUARE TOP

SECTION

CONSTRUCTION JOINT (OPTIONAL)

NOTES:

- CAST TOP SLAB TO FIT WALL USED.
- PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
- USE 4,000 PSI CONCRETE (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
- APPLY A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.
- USE 5129-6176 MAY ONLY USED WHEN STRUCTURES ARE TO BE PLACED WITHIN THE RADIUS OF A CORNER AND ITS USE MUST BE APPROVED BY THE DEPARTMENT. THE USE OF THIS FRAME AND GRATE IS NOT INTENDED TO REPLACE STANDARD CURB INLET TOPS. FOR CURB INLETS PLEASE REFER TO FOOT DESIGN STANDARDS INDEX 210 AND 211. INSTALLATION IN OTHER LOCATIONS IS NOT PERMITTED UNLESS APPROVED BY THE DEPARTMENT AS A RESULT OF MITIGATING CIRCUMSTANCES.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/9/2018	MANHOLE AND INLET (TYPE P)	2.7
				SHEET 2 OF 4

NOTES (CONTINUED)

- THE MINIMUM PIPE DIAMETER FOR DRAINAGE SYSTEM WITHIN THE ROADWAY RIGHT-OF-WAY SHALL BE 18 INCHES. 15 INCH PIPE MAY BE USED IN PRIVATE ROADWAYS.
- NO TREES TO BE PLANTED WITHIN 5 FEET OF THE EDGE OF THE TRENCH.
- TYPE "P" S.D. 2.8 STRUCTURE IS RECOMMENDED FOR SMALL DRAINAGE AREAS LESS THAN 0.2 ACRE PER CATCH BASIN.
- TYPE "V" S.D. 2.8 STRUCTURE IS RECOMMENDED FOR AREAS LARGER THAN 0.2 ACRE.
- ALL INVERTS OF PERFORATED PIPES TO BE AT MEAN HIGH OCTOBER WATER TABLE W.C. 2.2.
- PIPES CAN BE ALLOWED BELOW MEAN HIGH OCTOBER WATER TABLE DUE TO UTILITY CONFLICTS OR IN ORDER TO PROVIDE THE REQUIRED MINIMUM COVER.
- NEOPRENE GASKET REQUIRED FOR BAFFLES ON ALL CONTACT EDGES MOUNTED ON WALL.
- OIL AND GREASE BAFFLE IS REQUIRED FOR ALL DRAINAGE STRUCTURES PRECEDING AN OUTFALL OR EXFILTRATION TRENCHES, IN PROJECTS LOCATED IN WETLAND PROTECTION AREAS, ROAD INTERSECTIONS WITH TRAFFIC LIGHTS, AND LARGE PARKING LOTS WHICH INCLUDE 15 PARKING SPACES OR MORE.
- OIL AND GREASE BAFFLE MAY BE WAIVED IN SUBURBAN RESIDENTIAL AREAS.

GENERAL NOTES FOR PIPE CULVERTS

CONTRACTOR HAS THE OPTION OF INSTALLING ANY PIPE MEETING THE REQUIREMENTS OF SECTION 443-2 OF THE FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS LONG AS THE MANUFACTURER IS LISTED, AT THE TIME OF PIPE INSTALLATION, IN FDOT'S LIST OF PRODUCERS WITH ACCEPTED QUALITY CONTROL PROGRAMS. PIPES WITH LESS THAN A 100-YEAR CERTIFICATION CANNOT BE USED ON SECTION LINE, HALF SECTION LINE, COLLECTOR ROADWAYS, AND ARTERIALS. 50-YEAR PIPE CERTIFICATION REQUIRED FOR ALL OTHER MINOR/LOCAL ROADWAYS.

PIPE DIAMETER (Inches)	OUTER SHELL		LINER
	No. of 3/8" Dia. Holes (PER LIN. FT. OF PIPE)	No. of 1/2" Dia. Holes (PER LIN. FT. OF PIPE)	
15	100	50	
18	120	60	
24	160	80	
30	200	100	
36	240	120	
42	275	140	
48	315	150	
54	355	180	
60	395	200	
72	470	235	
84	550	275	

NOTE:

PERFORATIONS SHALL BE UNIFORMLY SPACED AROUND THE FULL PERIPHERY OF THE PIPE TO WITHIN 4" OF EACH END OF EACH LENGTH OF PIPE. THE NUMBER OF PERFORATIONS PER LINEAR FOOT OF PIPE AND THE DIAMETER OF THE PERFORATIONS SHALL BE AS SHOWN ON THE ABOVE TABLE.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	04/16/2015	06-04-86 10-22-13 05-02-81	EXFILTRATION TRENCH (PIPE CULVERT NOTES)	1.1
				SHEET 2 OF 2

SQUARE STRUCTURE

Standard Detail	Width (ft)	Length (ft)	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.2	3	3	0.0 - 5.0	6	#4@10"H #4@10"V	8	#4@5" E.W.	8	#4@10" E.W.
2.2	3	3	5.1 - 10.0	6	#4@7.5"H #4@10"V	8	#4@5" E.W.	8	#4@10" E.W.
2.2	3	3	10.1 - 15.0	6	#5@7.5"H #4@10"V	8	#4@5" E.W.	8	#4@10" E.W.

ROUND STRUCTURE

Standard Detail	Dia. (ft)	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.2	3	0.0 - 5.0	6	8 X 8 W20 #4@10"E.W.	8	#4@5" E.W.	8	#4@10" E.W.
2.2	3	5.1 - 15.0	6	8 X 8 W20 #4@10"E.W.	8	#4@5" E.W.	8	#4@10" E.W.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/9/2018	PRECAST CATH BASIN (TYPE D-3)	2.2
				SHEET 2 OF 2

TYPE P-10

STEEL GRATING

PLAN

CONSTRUCTION JOINT (OPTIONAL)

NOTE:

- ANY GRATING THAT IS CAPABLE OF SUPPORTING H=20 LOADS MAY BE SUBSTITUTED FOR THE U.S. FOUNDRY NO. 6646 UPON APPROVAL OF THE DEPARTMENT PROVIDING IT MEETS THE FOLLOWING CONDITIONS:
 - MANUFACTURER MUST BE LISTED IN FDOT'S QPL.
 - THE NET OPEN AREA OF THE GRATE MUST NOT BE LESS THAN THAT OF THE U.S. FOUNDRY NO. 6646.
 - THE MAXIMUM DISTANCE (MEASURED PERPENDICULAR) BETWEEN RETICULE BARS 1 1/2" X 3" WEIGHT 445 LBS. (APPROX.)
- PIPES MAY EXTEND INTO CATCH BASIN MAXIMUM OF 4".
- USE 4,000 PSI CONCRETE (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/9/2018	MANHOLE AND INLET (TYPE P)	2.7
				SHEET 2 OF 4

Standard Detail	Width (ft)	Length (ft)	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.7	3.5	3.5	0.0 - 5.0	6.0	#4@10"H #4@10"V	8.0	#4@7" E.W.	8.0	#4@10" E.W.
2.7	3.5	3.5	5.1 - 10.0	6.0	#4@9"H #4@10"V	8.0	#4@6" E.W.	8.0	#4@10" E.W.
2.7	3.5	3.5	10.1 - 15.0	6.0	#5@6"H #4@10"V	8.0	#4@6.5" E.W.	8.0	#4@10" E.W.

Standard Detail	Dia. (ft)	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel	
2.7	3.5	4.0	0.0 - 5.0	6.0	8 X 8 W20 or #4@10"E.W.	8.0	#4@7" E.W.	8.0	#4@10" E.W.
2.7	3.5	4.0	5.1 - 10.0	6.0	8 X 8 W20 or #4@10"E.W.	8.0	#4@6" E.W.	8.0	#4@10" E.W.
2.7	3.5	4.0	10.1 - 15.0	6.0	8 X 8 W20 or #4@10"E.W.	8.0	#4@6.5" E.W.	8.0	#4@10" E.W.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/9/2018	MANHOLE AND INLET (TYPE P)	2.7
				SHEET 4 OF 4

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
044649021
DATE
APRIL 2018
SCALE AS SHOWN
DESIGNED BY TS
DRAWN BY JU
CHECKED BY SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS

PREPARED FOR
VILLAGE OF PALMETTO BAY

PALMETTO BAY

LICENSED PROFESSIONAL
STEFANO VIOLA
FLORIDA LICENSE NUMBER
74655

FLORIDA DATE: 3/27/19

PAVING & DRAINAGE DETAILS

SHEET NUMBER

C300.3

No.	REVISIONS	DATE	BY

Plotled By: Stanton, Tiffany
 Sheet: SCLSUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C300.4 - March 27, 2019 11:18:43am
 K:\V\civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C300.1_Detail_Sheet.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

J-7T

SQUARE TOP **ROUND TOP**

SECTION

CONSTRUCTION JOINT (OPTIONAL)

NOTES:

- 1- CAST TOP SLAB TO FIT WALL USED.
- 2- USE 4,000 psi CONCRETE (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
- 3- PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
- 4- APPLY A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
- 5- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018 9/16/2013 9/25/2012 8/2/2011	MANHOLE AND INLET (TYPE J)	2.6
				SHEET 1 OF 4

J-10

SQUARE TOP **ROUND TOP**

SECTION

CONSTRUCTION JOINT (OPTIONAL)

NOTES:

- 1- CAST TOP SLAB TO FIT WALL USED.
- 2- USE 4,000 psi CONCRETE (MINIMUM), MAXIMUM W/C=0.53 GRADE 60 STEEL FOR REBAR AND 65 FOR WWF.
- 3- PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
- 4- APPLY A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
- 5- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.

STEEL GRATING
 U.S. FOUNDRY NO. 6646 GRATE (OR EQUAL)
 STRAIGHT BARS 6" x 1"
 RETICULINE BARS 1" x 1"
 WEIGHT 445 lbs. (APPROX.)

NOTE:
 ANY GRATING THAT IS CAPABLE OF SUPPORTING H=20 LOADS MAY BE SUBSTITUTED FOR THE USF No. 6646 UPON APPROVAL BY THE DEPARTMENT PROVIDED IT MEETS THE FOLLOWING TWO CONDITIONS:
 1- THE NET OPEN AREA OF THE GRATE MUST NOT BE LESS THAN THAT OF THE USF No. 6646.
 2- THE MAXIMUM DISTANCE (MEASURED PERPENDICULAR) BETWEEN BARS DOES NOT EXCEED 3".
 3- MANUFACTURER MUST BE LISTED IN FDOT'S OPL.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018 9/16/2013 9/25/2012 8/2/2011	MANHOLE AND INLET (TYPE J)	2.6
				SHEET 3 OF 4

SLIDE GRATE DETAIL

SECTION A-A

SECTION B-B

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018	MANATEE GRATE	5.1
				SHEET 1 OF 4

MANATEE GRATE TABLE

SECTION E-E

D	A	C	E	AI	a	b	c	d	e	No. of Bars @ 6" o.c.
18	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X3"	4
24	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X3"	5
30	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X3"	6
36	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X4"	7
42	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X4"	8
48	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X4"	8
54	E+12"	VARIABLE	O.D.	A-1"	3/4" PLATE	C127X2 1/2X2 1/2	3/4X4 1/2X3"	L3 1/2X3 1/2X1/2"	C1/8X1 1/4X4"	10
60	E+12"	VARIABLE	O.D.	A-1"	3/4" PLATE	C127X2 1/2X2 1/2	3/4X4 1/2X3"	L3 1/2X3 1/2X1/2"	C1/8X1 1/4X4"	11

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018	MANATEE GRATE TABLE	5.1
				SHEET 2 OF 4

J-10M

SQUARE TOP **ROUND TOP**

SECTION

CONSTRUCTION JOINT (OPTIONAL)

NOTES:

- 1- CAST TOP SLAB TO FIT WALL USED.
- 2- USE 4,000 psi CONCRETE (MINIMUM), MAXIMUM W/C=0.53 GRADE 60 STEEL FOR REBAR AND 65 FOR WWF.
- 3- PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
- 4- A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
- 5- WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE BOTTOM OF THE STRUCTURE.
- 6- USF 5129-6176 MAY ONLY BE USED WHEN STRUCTURES ARE TO BE PLACED WITHIN THE RADIUS OF A CORNER AND ITS USE MUST BE APPROVED BY THE DEPARTMENT. THE USE OF THIS FRAME AND GRATE IS NOT INTENDED TO REPLACE STANDARD CURB INLET TOPS. FOR CURB INLETS PLEASE REFER TO FOOT DESIGN STANDARDS INDEX 210 AND 211. INSTALLATION IN OTHER LOCATIONS IS NOT PERMITTED UNLESS APPROVED BY THE DEPARTMENT AS A RESULT OF MITIGATING CIRCUMSTANCES.
- 7- ALTERNATIVE GRATE 5112-6143 MAY BE USED ON NON-RESIDENTIAL ROADWAYS.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018 9/16/2013 9/25/2012 8/2/2011	MANHOLE AND INLET (TYPE J)	2.6
				SHEET 2 OF 4

SQUARE STRUCTURE

Standard Detail	Width (ft) Min.	Length (ft) Max.	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.6	8	8	0.0 - 5.0	8	#4@7"H	10	#6@6" E.W.	10	#5@8.5" E.W.
2.6	8	8	5.1 - 10.0	8	#5@7.5"H	10	#6@6" E.W.	10	#5@8.5" E.W.
2.6	8	8	10.1 - 15.0	8	#7@7"H	10	#6@6" E.W.	10	#5@8.5" E.W.

ROUND STRUCTURE

Standard Detail	Dia. (ft) Min.	Dia. (ft) Max.	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.6	5	7	0.0 - 5.0	8	8 x 8 W20 OR #4@10"E.W.	10	#6@6" E.W.	10	#5@8.5" E.W.
2.6	5	7	5.1 - 10.0	8	8 x 8 W20 OR #4@10"E.W.	10	#6@6" E.W.	10	#5@8.5" E.W.
2.6	5	7	10.1 - 15.0	8	8 x 8 W20 OR #4@10"E.W.	10	#6@6" E.W.	10	#5@8.5" E.W.

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018 11/26/2012 8/3/2011	MANHOLE AND INLET (TYPE J)	2.6
				SHEET 3 OF 4

FRAME

SECTION A-A

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018	MANATEE GRATE	5.1
				SHEET 2 OF 4

MANATEE GRATE TABLE

D	A	C	E	AI	a	b	c	d	e	No. of Bars @ 6" o.c.
18	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X3"	4
24	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X3"	5
30	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X3"	6
36	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X4"	7
42	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X4"	8
48	E+12"	VARIABLE	O.D.	A-1"	3/8" PLATE	C147X2 1/2X2 1/2	3/8X2 1/2X3"	L3 1/2X3 1/2X3/8"	C1/8X1 1/4X4"	8
54	E+12"	VARIABLE	O.D.	A-1"	3/4" PLATE	C127X2 1/2X2 1/2	3/4X4 1/2X3"	L3 1/2X3 1/2X1/2"	C1/8X1 1/4X4"	10
60	E+12"	VARIABLE	O.D.	A-1"	3/4" PLATE	C127X2 1/2X2 1/2	3/4X4 1/2X3"	L3 1/2X3 1/2X1/2"	C1/8X1 1/4X4"	11

MIAMI-DADE COUNTY	APPROVED	REVISED	STANDARD STORM DRAINAGE DETAIL	SD
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	A.B.	5/8/2018	MANATEE GRATE TABLE	5.1
				SHEET 2 OF 4

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
044649021
DATE
APRIL 2018
SCALE AS SHOWN
DESIGNED BY TS
DRAWN BY JU
CHECKED BY SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 PALMETTO BAY FLORIDA

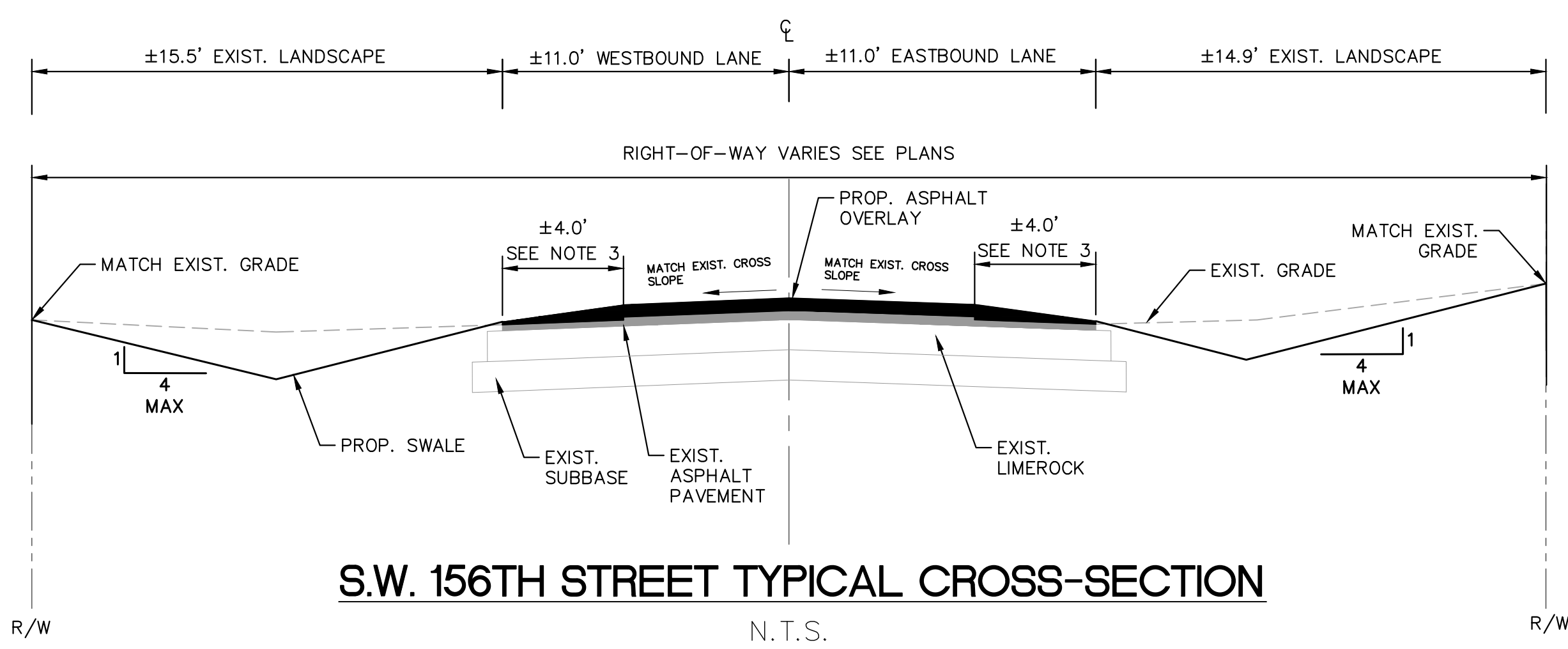
LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

PAVING & DRAINAGE DETAILS

SHEET NUMBER
C300.4

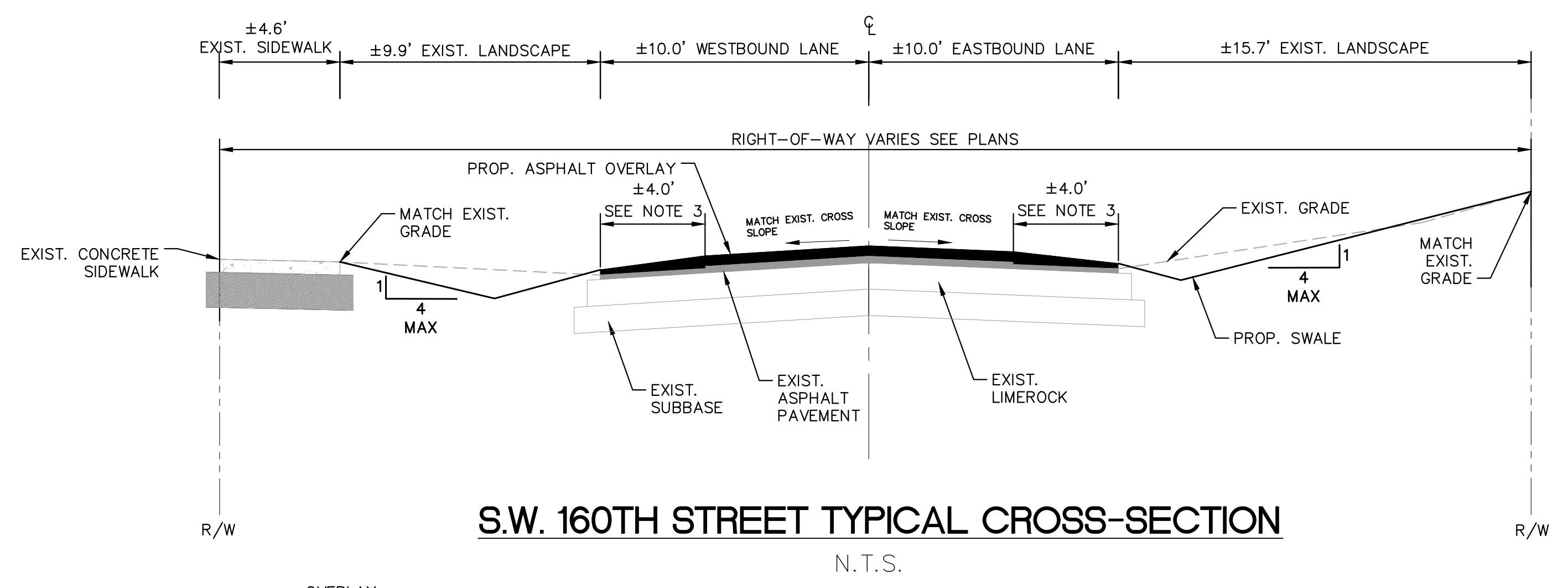
No.	REVISIONS	DATE	BY

Plotted By: Stanton, Tiffany
 Sheet: Sub-Basin 61 Paving and Drainage Improvements - Layout: C300.4 - March 27, 2019 11:18:55am
 K:\1\civil\144_Jobs\04649021-sub-basin_61_design\CAD\plansheets\C300.3_Typical_Cross_Sections.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



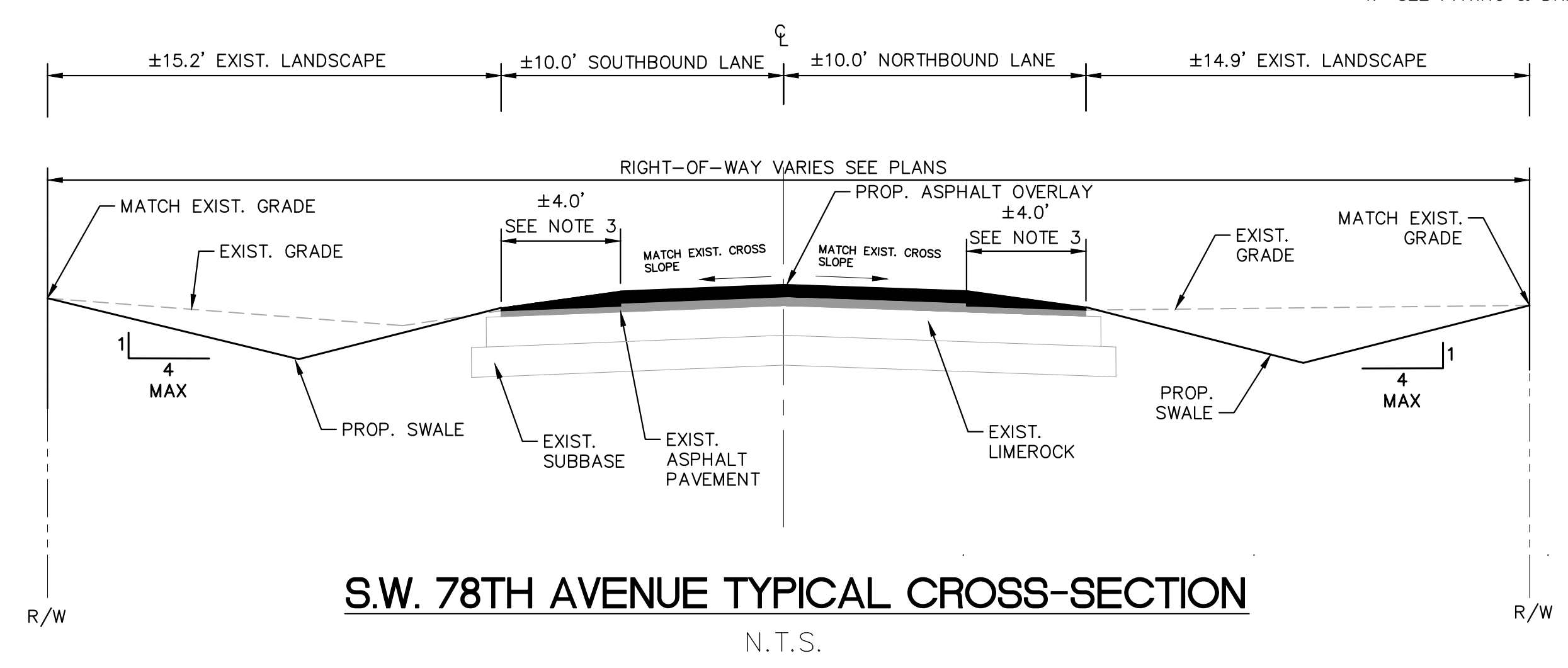
S.W. 156TH STREET TYPICAL CROSS-SECTION
N.T.S.

- OVERLAY:
1. OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS)
 2. PLEASE REFER TO GENERAL NOTES, APPLICABLE CODES, AND GEOTECHNICAL REQUIREMENTS PRIOR TO PAVEMENT CONSTRUCTION.
 3. ±4.0' OF EXISTING ASPHALT EDGE TO BE MILLED PRIOR TO OVERLAY. OVERLAY ASPHALT TO BE TAPERED TO MATCH EXISTING ASPHALT GRADES AT EDGES.
 4. SEE PAVING & DRAINAGE DETAILS FOR EXFILTRATION TRENCH, PAVEMENT RESTORATION, AND ASPHALT OVERLAY DETAILS



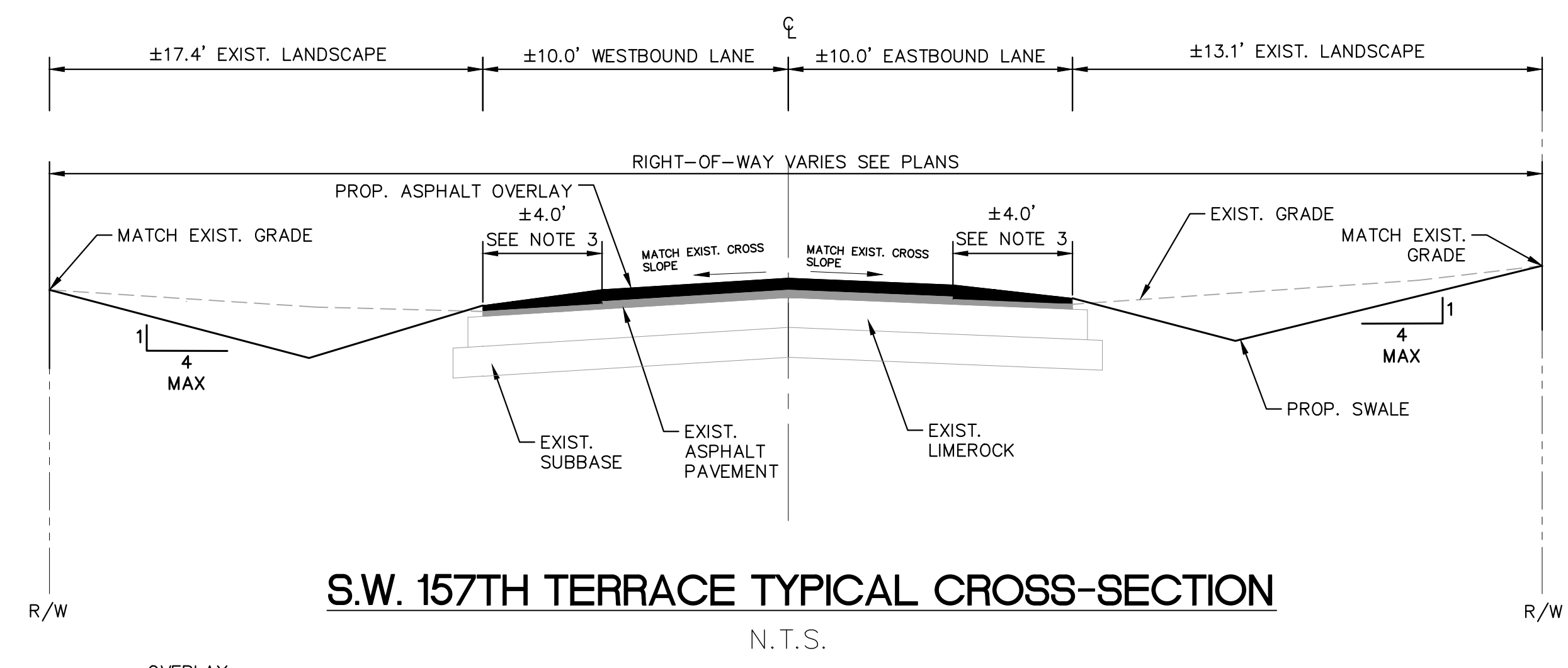
S.W. 160TH STREET TYPICAL CROSS-SECTION
N.T.S.

- OVERLAY:
1. OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS)
 2. PLEASE REFER TO GENERAL NOTES, APPLICABLE CODES, AND GEOTECHNICAL REQUIREMENTS PRIOR TO PAVEMENT CONSTRUCTION.
 3. ±4.0' OF EXISTING ASPHALT EDGE TO BE MILLED PRIOR TO OVERLAY. OVERLAY ASPHALT TO BE TAPERED TO MATCH EXISTING ASPHALT GRADES AT EDGES.
 4. SEE PAVING & DRAINAGE DETAILS FOR EXFILTRATION TRENCH, PAVEMENT RESTORATION, AND ASPHALT OVERLAY DETAILS



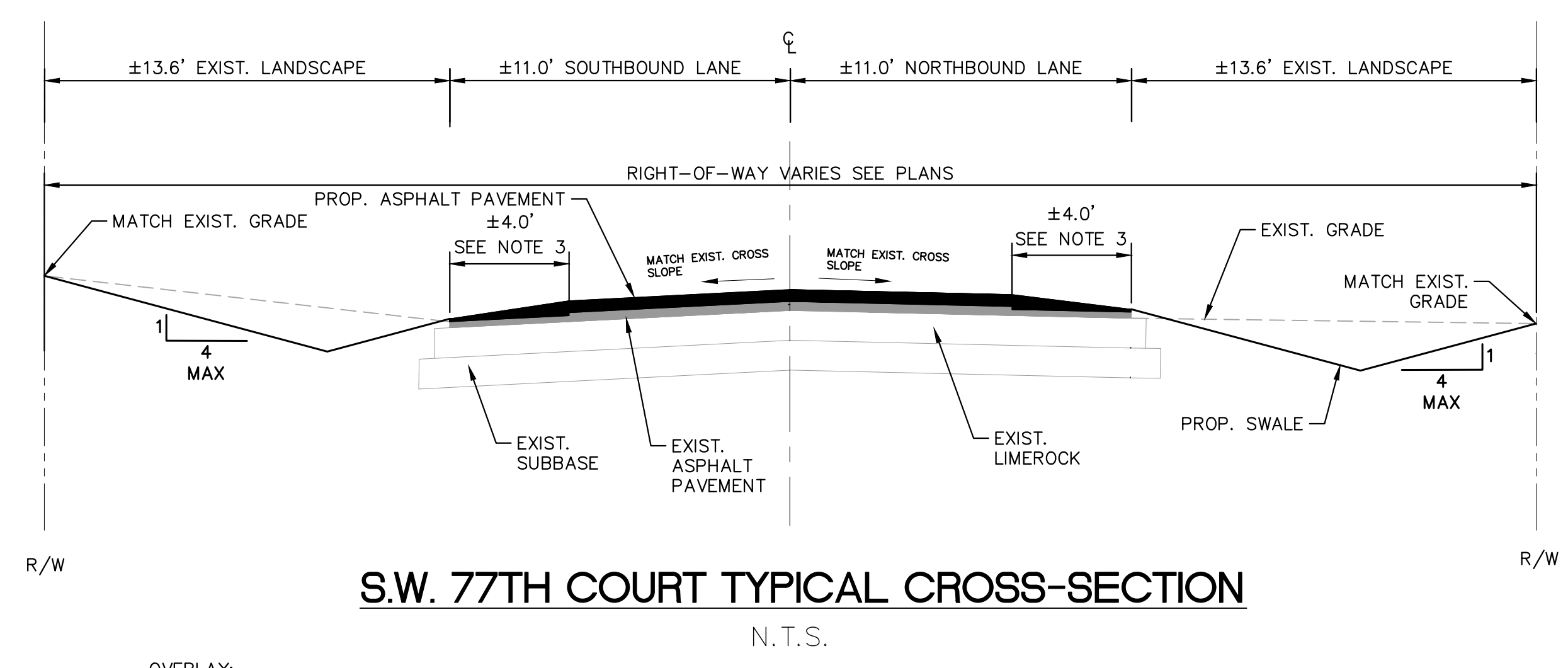
S.W. 78TH AVENUE TYPICAL CROSS-SECTION
N.T.S.

- OVERLAY:
1. OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS)
 2. PLEASE REFER TO GENERAL NOTES, APPLICABLE CODES, AND GEOTECHNICAL REQUIREMENTS PRIOR TO PAVEMENT CONSTRUCTION.
 3. ±4.0' OF EXISTING ASPHALT EDGE TO BE MILLED PRIOR TO OVERLAY. OVERLAY ASPHALT TO BE TAPERED TO MATCH EXISTING ASPHALT GRADES AT EDGES.
 4. SEE PAVING & DRAINAGE DETAILS FOR EXFILTRATION TRENCH, PAVEMENT RESTORATION, AND ASPHALT OVERLAY DETAILS



S.W. 157TH TERRACE TYPICAL CROSS-SECTION
N.T.S.

- OVERLAY:
1. OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS)
 2. PLEASE REFER TO GENERAL NOTES, APPLICABLE CODES, AND GEOTECHNICAL REQUIREMENTS PRIOR TO PAVEMENT CONSTRUCTION.
 3. ±4.0' OF EXISTING ASPHALT EDGE TO BE MILLED PRIOR TO OVERLAY. OVERLAY ASPHALT TO BE TAPERED TO MATCH EXISTING ASPHALT GRADES AT EDGES.
 4. SEE PAVING & DRAINAGE DETAILS FOR EXFILTRATION TRENCH, PAVEMENT RESTORATION, AND ASPHALT OVERLAY DETAILS



S.W. 77TH COURT TYPICAL CROSS-SECTION
N.T.S.

- OVERLAY:
1. OVERLAY WITH FDOT TYPE SP-9.5 (FINE MIX) ASPHALTIC CONCRETE SURFACE COURSE (1" MIN. THICKNESS)
 2. PLEASE REFER TO GENERAL NOTES, APPLICABLE CODES, AND GEOTECHNICAL REQUIREMENTS PRIOR TO PAVEMENT CONSTRUCTION.
 3. ±4.0' OF EXISTING ASPHALT EDGE TO BE MILLED PRIOR TO OVERLAY. OVERLAY ASPHALT TO BE TAPERED TO MATCH EXISTING ASPHALT GRADES AT EDGES.
 4. SEE PAVING & DRAINAGE DETAILS FOR EXFILTRATION TRENCH, PAVEMENT RESTORATION, AND ASPHALT OVERLAY DETAILS

No.	REVISIONS	DATE	BY

Kimley»Horn
 © 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	AL
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 PALMETTO BAY FLORIDA


LICENSED PROFESSIONAL	STEFANO VIOLA
FLORIDA LICENSE NUMBER	74655
DATE:	3/27/19

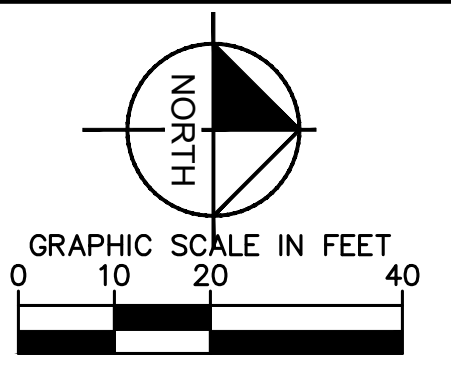
TYPICAL CROSS SECTIONS
C300.5

SHEET NUMBER	C300.5
--------------	--------

Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C400.1 - March 27, 2019 11:19:05am
 K:\file_civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C400.1_Stormwater_Pollution_Prevention_Plan.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

LEGEND


 STRUCTURE TO BE PROTECTED
 WITH BALED HAY OR
 EXCAVATED GRAVEL AND
 FILTER FABRIC

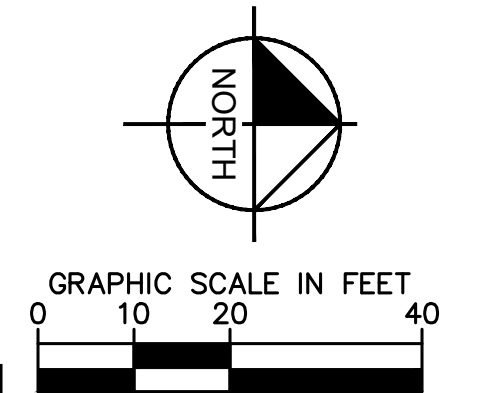
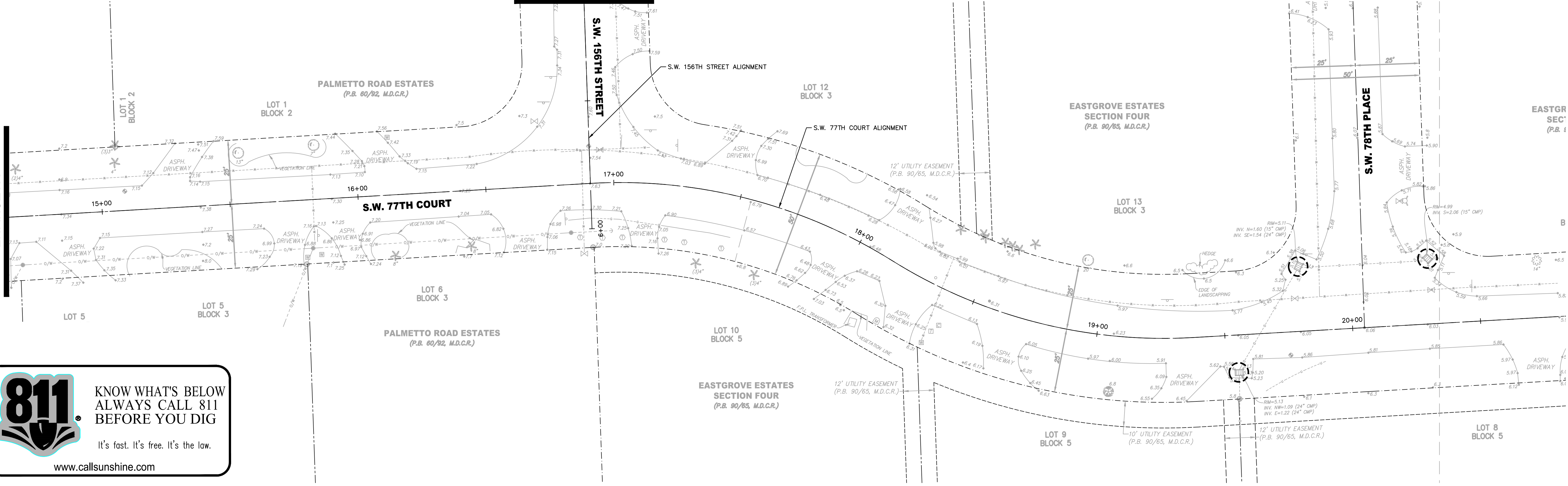


MATCHLINE
SEE SHEET C400.1

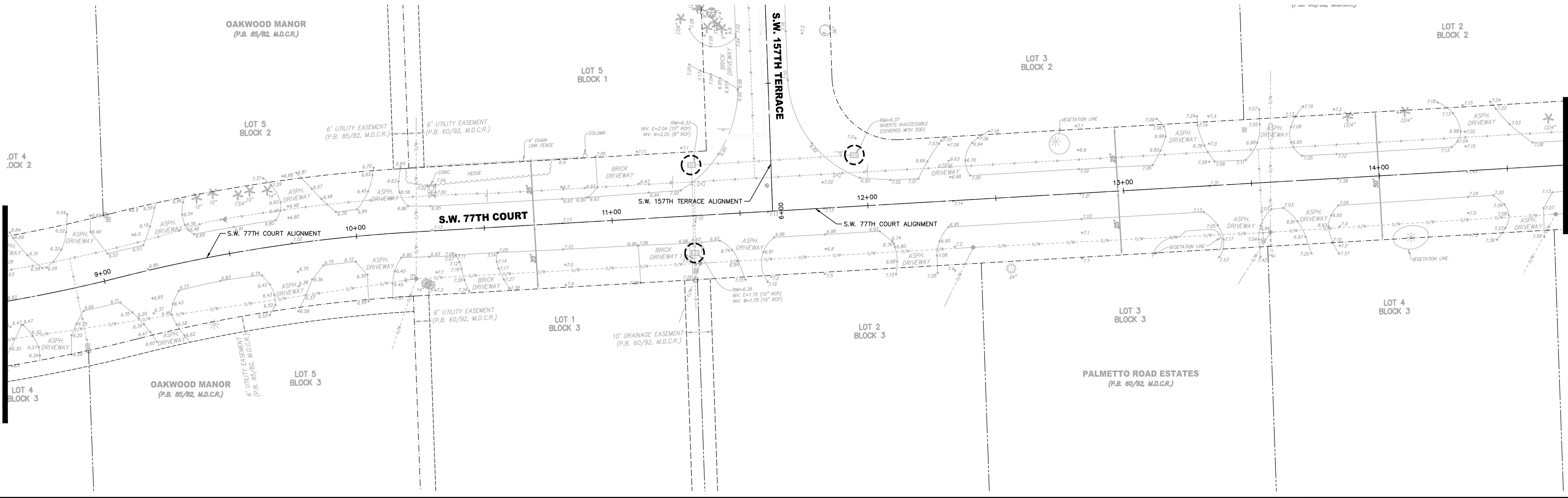


**KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG**
 It's fast. It's free. It's the law.
www.callsunshine.com

MATCHLINE
SEE SHEET C400.3



MATCHLINE
SEE SHEET 400.2



MATCHLINE
SEE SHEET 400.1

No.	REVISIONS	DATE	BY


 © 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
 044649021
 DATE
 APRIL 2018
 SCALE AS SHOWN
 DESIGNED BY TS
 DRAWN BY KV
 CHECKED BY SV

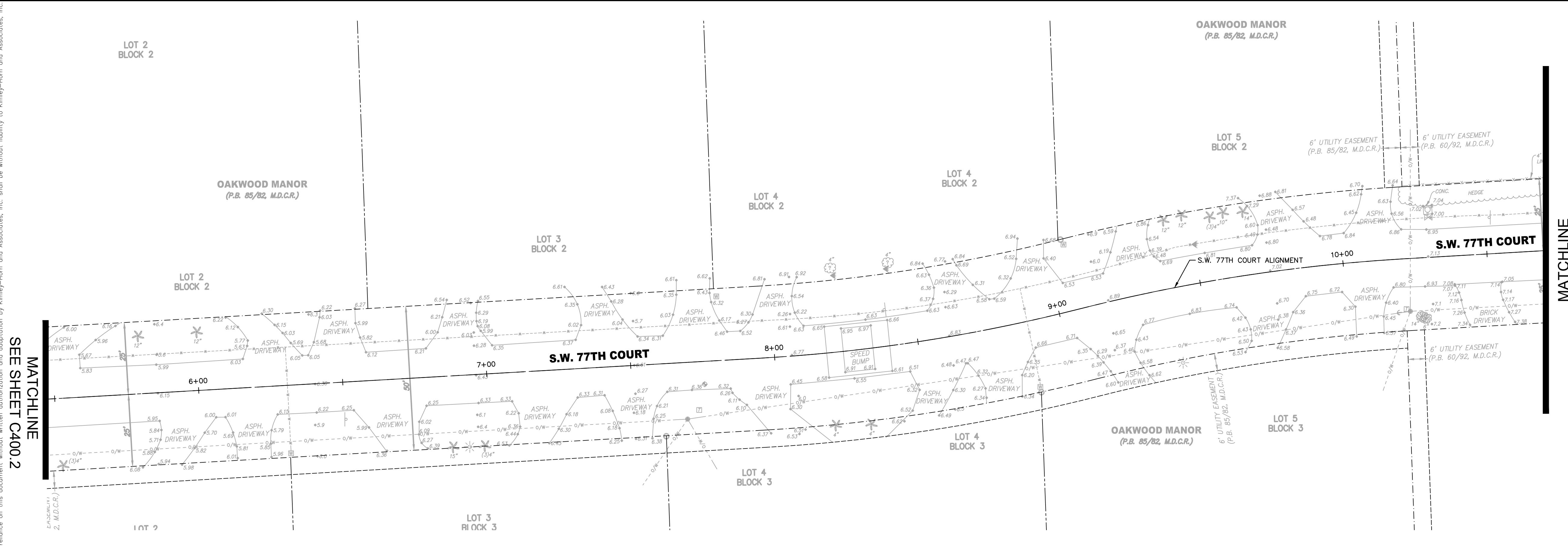
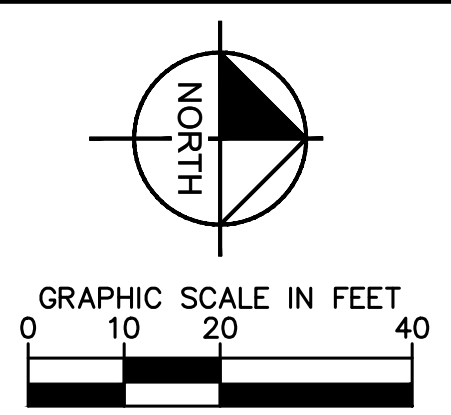
**SUB-BASIN 61 PAVING AND
 DRAINAGE IMPROVEMENTS**
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 FLORIDA

LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

**STORMWATER POLLUTION
 PREVENTION PLAN**
S.W. 77TH COURT

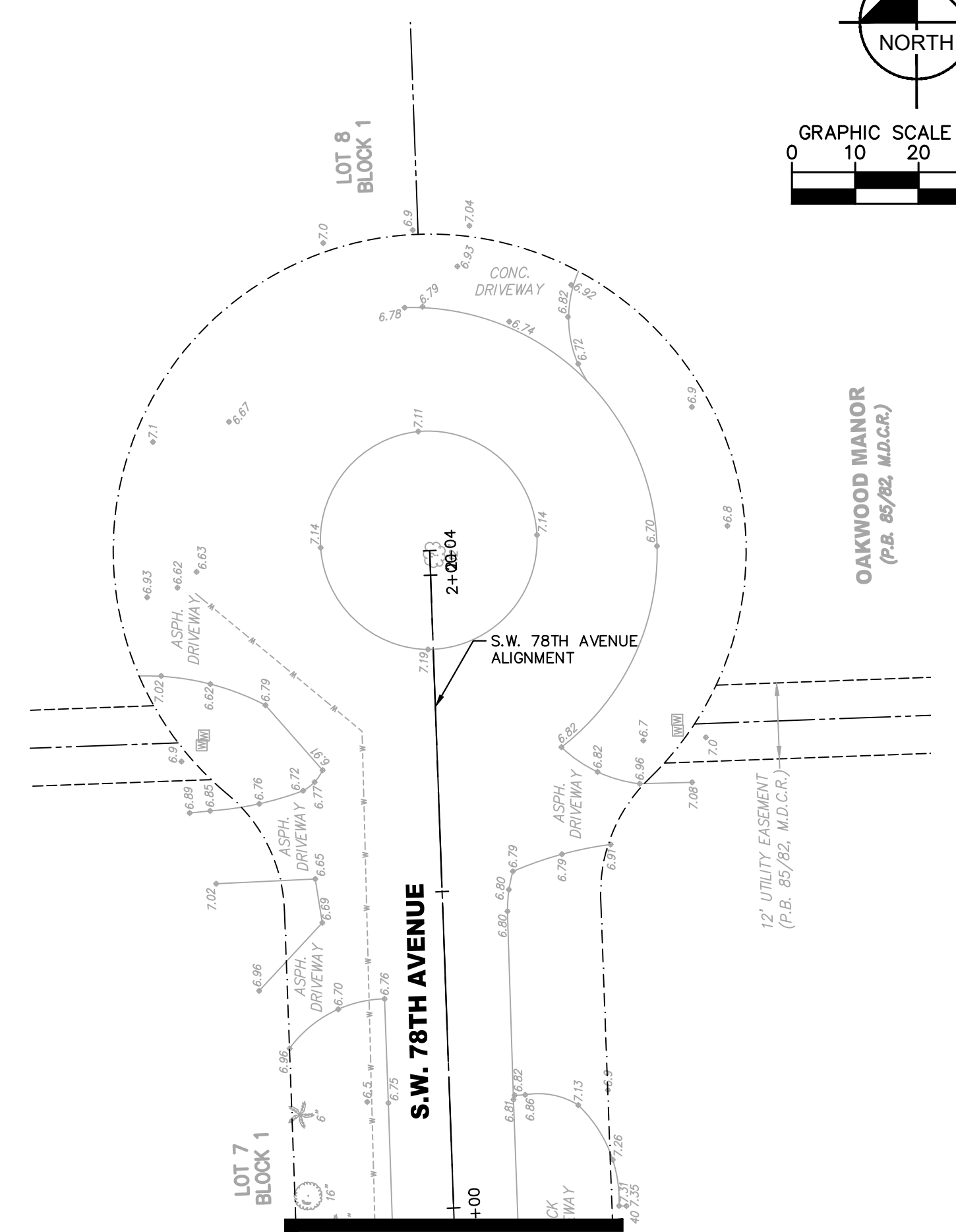
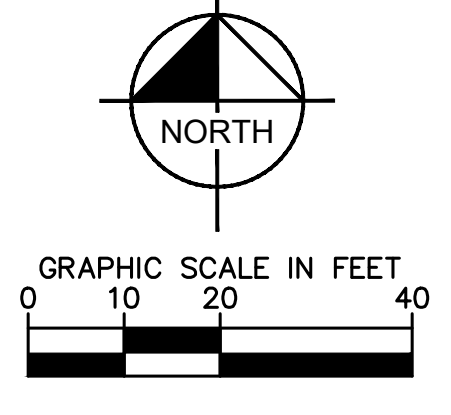
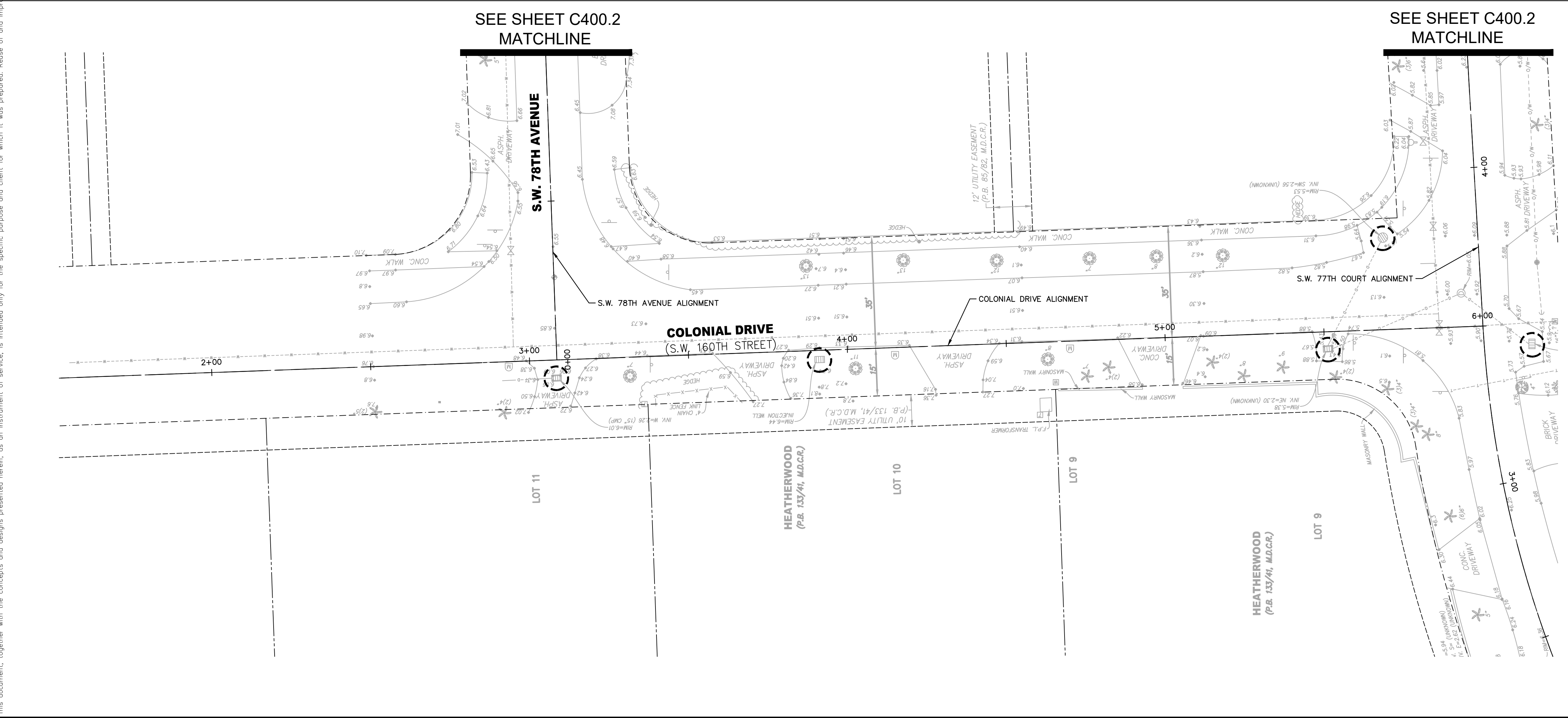
SHEET NUMBER
C400.1

Plotted By: Stanton, Tiffany Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS Layout: C400.2 March 27, 2019 11:19:12am K:\In\Civil\044 Jobs\044649021-sub-basin_61_design\CAD\plansheets\C400.1 Stormwater Pollution Prevention Plan.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and/or reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

STRUCTURE TO BE PROTECTED WITH BALED HAY OR EXCAVATED GRAVEL AND FILTER FABRIC



MATCHLINE
SEE SHEET C400.2

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	KV
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS

PREPARED FOR
VILLAGE OF PALMETTO BAY
 FLORIDA

LICENSED PROFESSIONAL	STEFANO VIOLA
FLORIDA LICENSE NUMBER	74655
DATE:	3/27/19

STORMWATER POLLUTION PREVENTION PLAN

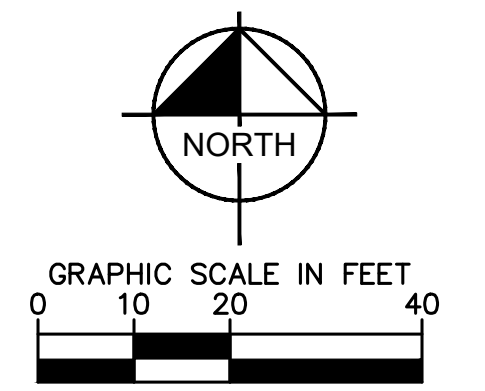
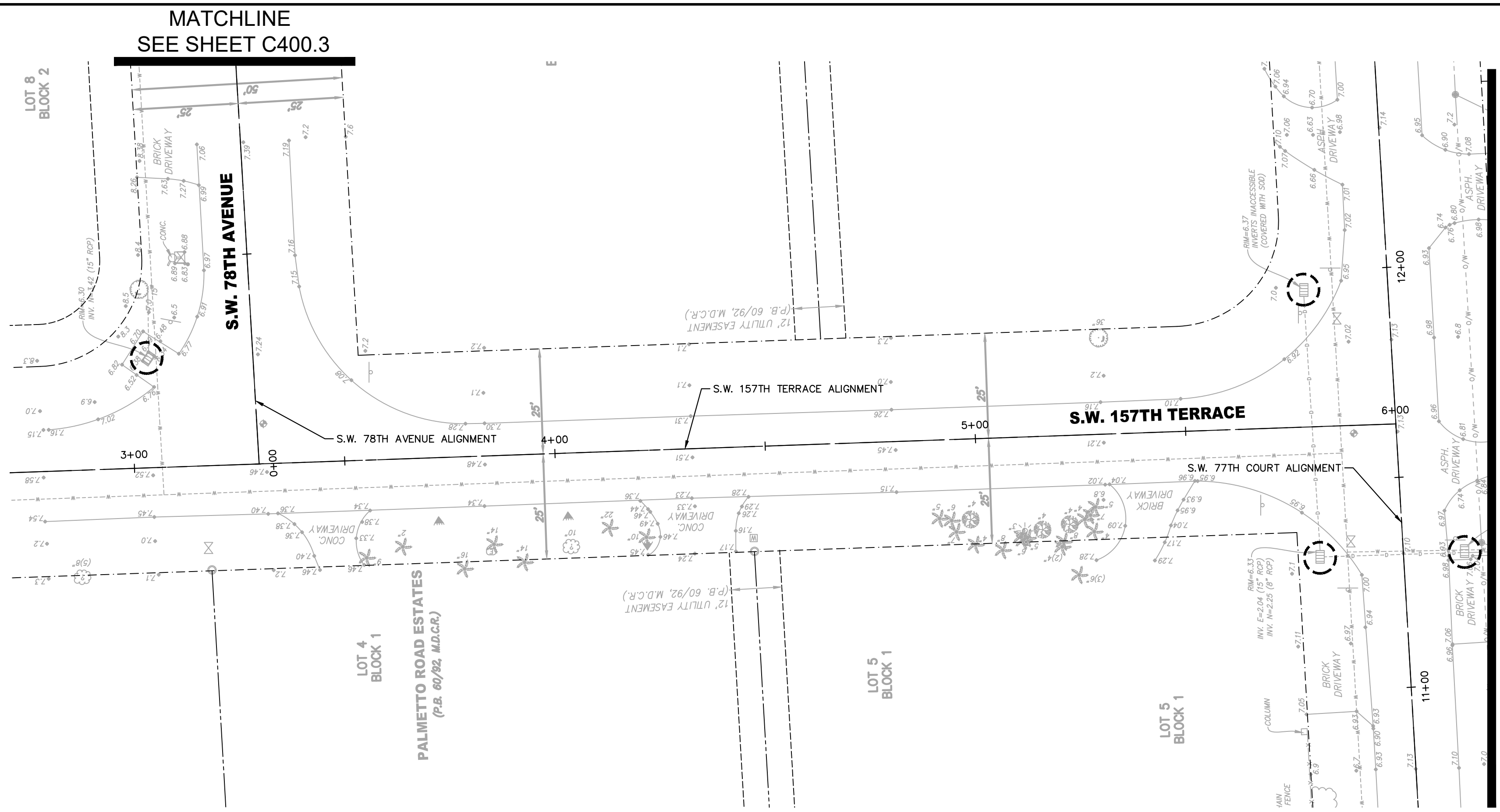
S.W. 77TH COURT, S.W. 160TH STREET, & S.W. 78TH AVENUE


SHEET NUMBER
C400.2

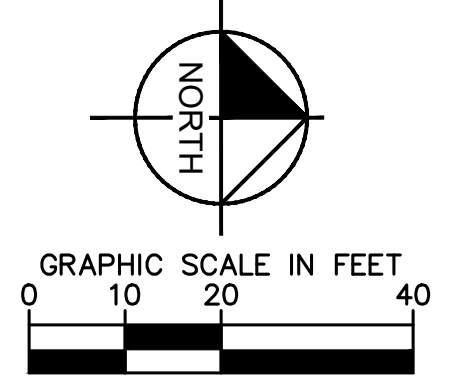
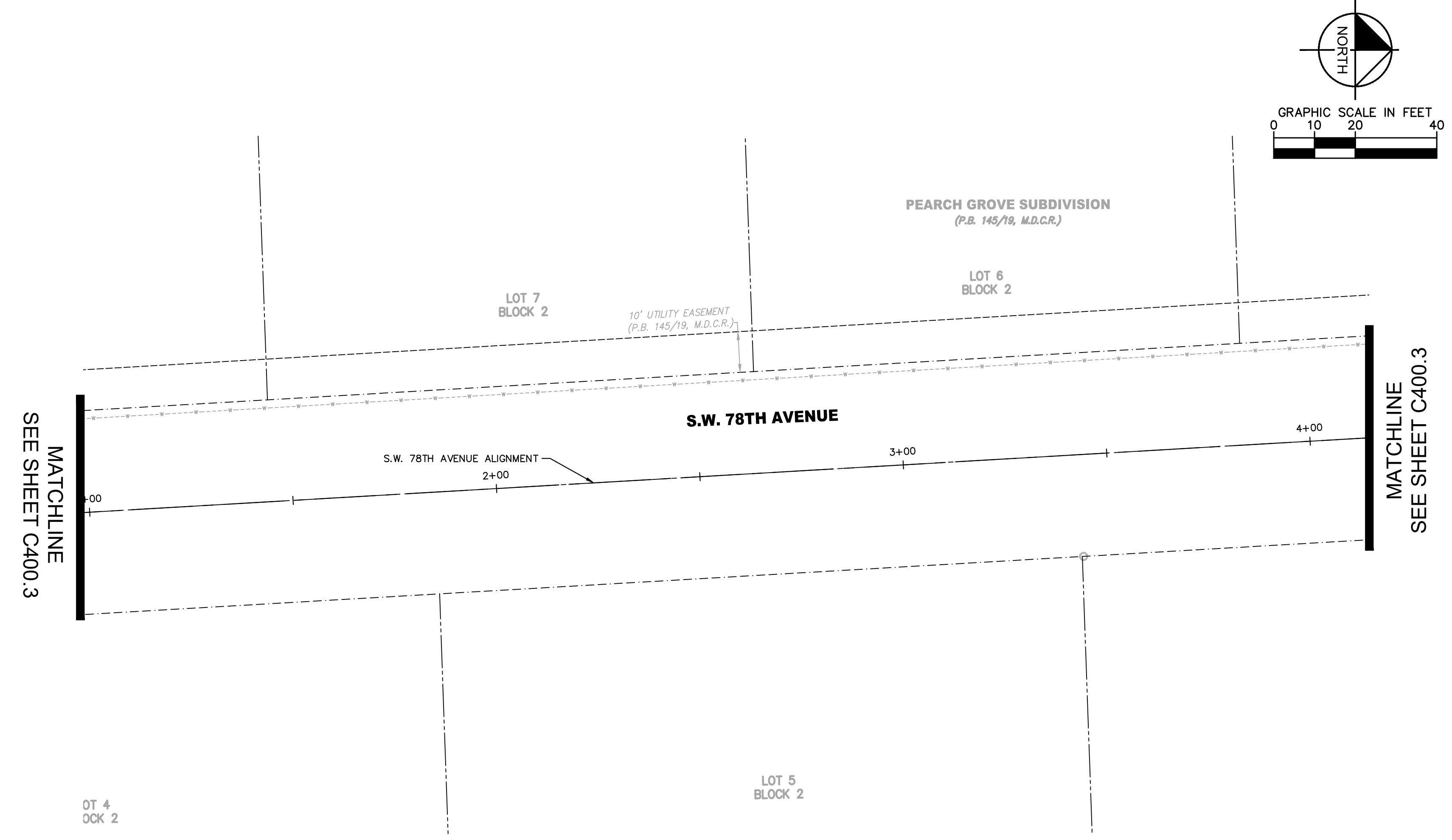
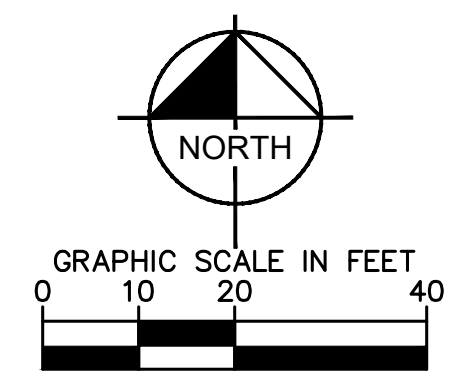
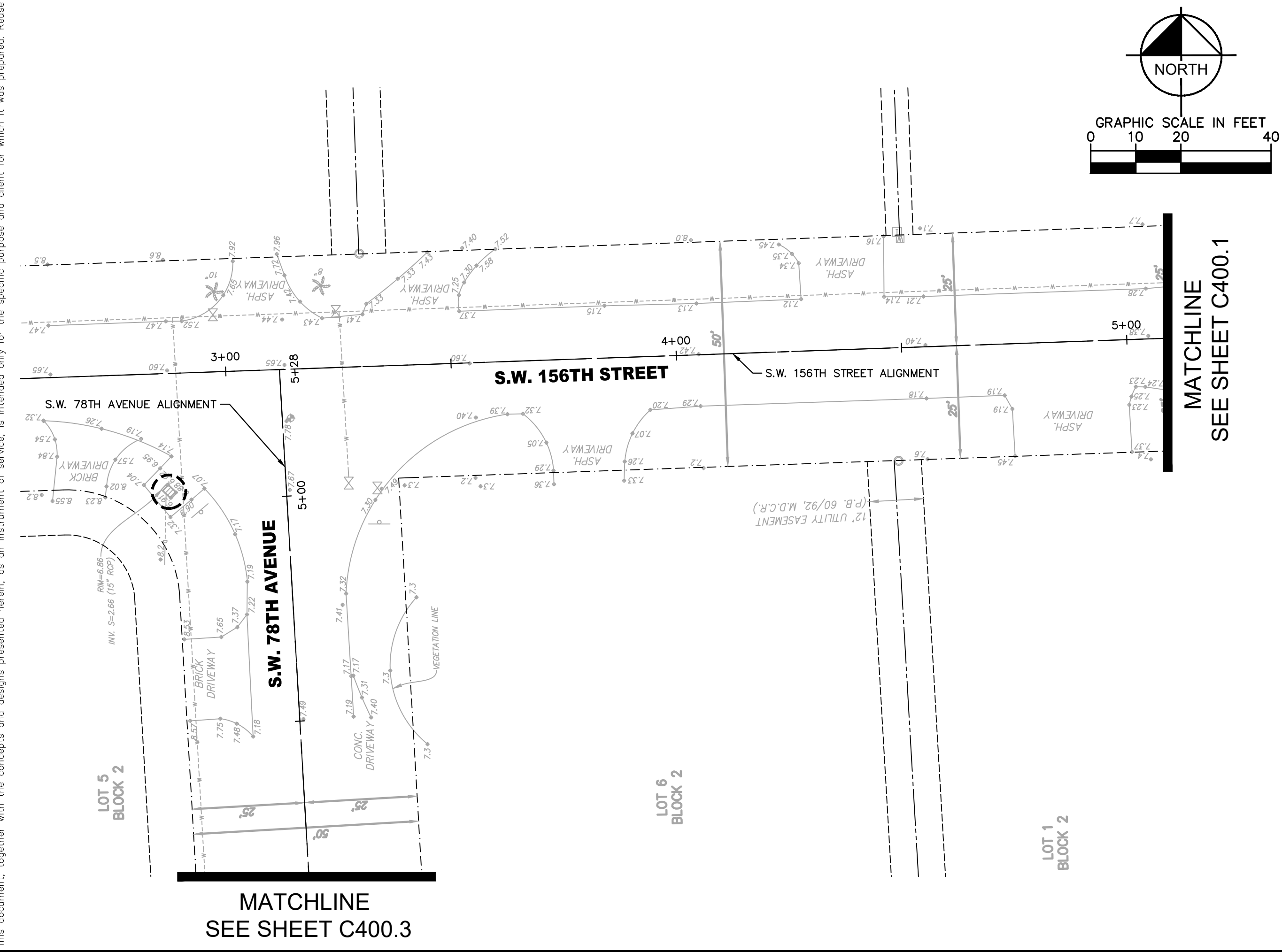
Plotted By: Stanton, Tiffany
 Sheet: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C400.3 - March 27, 2019 11:19:19am
 K:\file\civil\044_Jobs\044649021-sub-basin_61_design\CAD\plansheets\C400.1_Stormwater_Pollution_Prevention_Plan.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



811
 KNOW WHAT'S BELOW
 ALWAYS CALL 811
 BEFORE YOU DIG
 It's fast. It's free. It's the law.
www.callsunshine.com



LEGEND

 STRUCTURE TO BE PROTECTED
 WITH BALED HAY OR
 EXCAVATED GRAVEL AND
 FILTER FABRIC



No.	REVISIONS	DATE	BY

Kimley»Horn
 © 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	KV
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 FLORIDA

LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

STORMWATER POLLUTION PREVENTION PLAN
S.W. 156TH STREET
S.W. 157TH TERRACE

SHEET NUMBER
C400.3

Plotted By: Stanton, Tiffany
 Sheet: Selsub-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout/Notes - March 27, 2019 11:19:20am - K:\Horn\civil\044_suba\044649021-sub basin 61 design\CAD\plansheets\C400.1 Stormwater Pollution Prevention Plan.dwg
 This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

SITE DESCRIPTION

PROJECT NAME: Sub Basin 61 Roadway & Drainage Improvements
 PROJECT LOCATION: Village of Palmetto Bay, Florida
 OWNER LOCATION: Palmetto Bay
 OWNER ADDRESS: 9705 Hibiscus Street
 Palmetto Bay, FL 33014

PROJECT DESCRIPTION AND SOIL DISTRIBUTING ACTIVITIES:

This project consists of improvements to paving, drainage, underground, utilities. New roadway pavement includes limerock base and asphaltic concrete as well as areas of milling existing asphaltic concrete and resurfacing. New drainage involves the excavation of trenches.

SITE AREA: 21.83± Acres
 ROW Area 3.78± Acres

SEQUENCE OF MAJOR ACTIVITIES:

1. Install structural erosion control measures.
2. Install drainage structures, exfiltration and piping where shown on plans.
3. Install sidewalk and paving where shown on plans.
4. Install permanent landscaping throughout project.

CONTROLS

TEMPORARY STABILIZATION:

Disturbed portions of site where construction activity temporarily ceases for at least 21 days, shall be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area.

PERMANENT STABILIZATION:

Disturbed portions of the site where construction activity permanently ceases shall be stabilized with sod no later than 14 days after the last construction activity.

STRUCTURAL PRACTICES

Baled hay will be placed around all drainage structures in the flow pattern of the area that is disturbed, or excavated gravel and filter fabric protection will be installed in the drainage structures.

Floating turbidity barrier will be installed around canal bank area to be disturbed during outfall and endwall construction.

STORM WATER MANAGEMENT

Stormwater drainage from the completed project will be provided by curb and gutter, catch basins and storm sewer. As part of the storm sewer installation, exfiltration trench will be constructed with pollution retardant baffles, and will discharge overflow into retention areas located within the project boundaries.

WASTE DISPOSAL:

Waste Materials:

Any waste materials will be handled and disposed of according to local ordinances. The contractor will be required to uphold and enforce any such ordinances.

Sanitary Waste:

All sanitary waste will be collected from the portable units by a licensed sanitary waste management contractor as required by local regulations.

Dewatering of Excavation:

All dewatering will use the well point system.

OFF-SITE VEHICLE TRACKING:

Dump trucks hauling material from the construction site will be covered with a tarpaulin. Prior to leaving the site, excess sediment shall be removed from trucks in the cleansing area indicated on the plans.

TIMING OF CONTROLS AND MEASURES

Baled hay or excavated gravel and filter fabric protection shall be placed at inlets where the possibility of runoff from a disturbed area exist, whether the runoff is generated by stormwater or dewatering activities.

Floating turbidity barrier shall be installed prior to construction and installation of drainage outfall pipe and endwall.

Existing drainage flow patterns and positive drainage to existing outfalls shall be maintained throughout construction.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

The stormwater pollution prevention plan reflects requirements for stormwater management and erosion and sediment control. This project complies with SFWMD, DPEP, FDEP and FDOT requirements.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

The erosion control features installed by the contractor shall be acceptably maintained by the contractor during the construction period. Inspection of erosion measures (baled hay and turbidity barriers and silt fences) will occur daily throughout the construction period.

A maintenance inspection report will be made after each inspection, and the contractor will be responsible for keeping a weekly log of stormwater pollution and prevention control activities.

All measures will be maintained in good working order; if repair is necessary, it will be initiated within 24 hours of the report.

NON-STORMWATER DISCHARGES

It is expected that the following non-stormwater discharges will occur from the site during the construction period:

Uncontaminated groundwater (from dewatering excavation or truck cleansing)

All non-stormwater discharges will be directed through the baled hay and turbidity barriers.

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present on-site during construction:

Concrete	Reinforcing Steel	Landscape and Plant
Asphaltic Concrete	Concrete Drainage Structures	Materials
Asphalt	Concrete Pipe	Polyethylene pipe
Limerock	Sign Materials	PVC Conduit
Pavement Marking Materials		

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

GOOD HOUSEKEEPING:

The following good housekeeping practices will be followed on-site during the construction project.

An effort will be made to store only enough product required to do the job. All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure. Products will be kept in their original containers with the original manufacturer's label. Whenever possible, all of a product will be used up before disposing of the container. Manufacturers' recommendations for proper use and disposal will be followed. The site superintendent will inspect daily to ensure proper use and disposal of materials on-site.

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, manufacturers' or local and State recommended methods for proper disposal will be followed.

PETROLEUM PRODUCTS:

All on-site 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 on-site 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 stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

PAINTS AND PAVEMENT MARKING MATERIAL:

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 and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

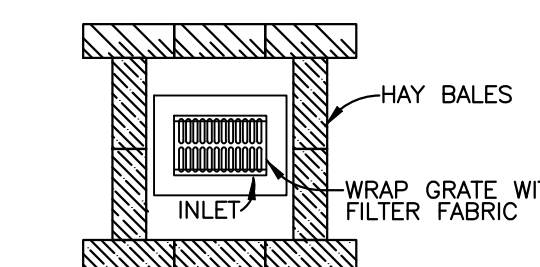
Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

All spills will be cleaned up immediately after discovery.

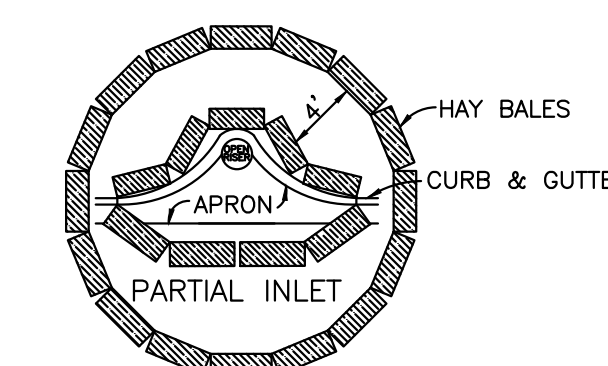
The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.

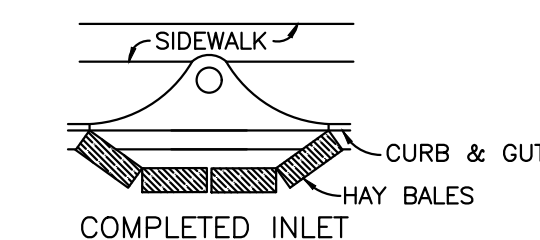
The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.



INLET



COMPLETED INLET



BALED HAY AROUND DRAINAGE STRUCTURES

MATERIALS

- HARDWARE CLOTH OR WIRE MESH WITH 1/4 INCH OPENINGS.
- FILTER FABRIC CONSISTING OF A PERVIOUS SHEET OF POLYPROPYLENE, NYLON, POLYESTER, OR POLYETHYLENE YARN CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	75%-85% (MINIMUM)
TENSILE STRENGTH AT 20% (MAXIMUM) ELONGATION	30 LB/ LINEAR INCH (MINIMUM)
SLURRY FLOW RATE	0.3 GAL/SQ. FT/ MIN. (MINIMUM)

- WASHED GRAVEL 3/4 INCHES TO 4 INCHES IN DIAMETER

CONSTRUCTION SPECIFICATIONS

- REMOVE ANY OBSTRUCTIONS TO EXCAVATION AND GRADING. EXCAVATED SUMP AREA, GRADE SLOPES AND PROPERLY DISPOSE OF SOIL.
- THE INLET GRATE SHOULD BE SECURED TO PREVENT SEEPAGE OF SEDIMENT LADEN WATER.
- PLACE WIRE MESH OVER THE INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. OVERLAP STRIPS OF MESH IF MORE THAN ONE IS NECESSARY.
- PLACE FILTER FABRIC OVER THE MESH EXTENDING AT LEAST 18 INCHES BEYOND THE INLET OPENING ON ALL SIDES. ENSURE ANY WEEP HOLES IN INLET ARE PROTECTED BY FILTER FABRIC AND GRAVEL.
- PLACE GRAVEL OVER THE FABRIC/ WIRE MESH TO A DEPTH OF AT LEAST ONE FOOT.

EXCAVATED GRAVEL AND FILTER FABRIC PROTECTION OF DRAINAGE STRUCTURES

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 0000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	KV
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS

PREPARED FOR
VILLAGE OF PALMETTO BAY

PALMETTO BAY FLORIDA

LICENSED PROFESSIONAL

STEFANO VIOLA

FLORIDA LICENSE NUMBER 74655

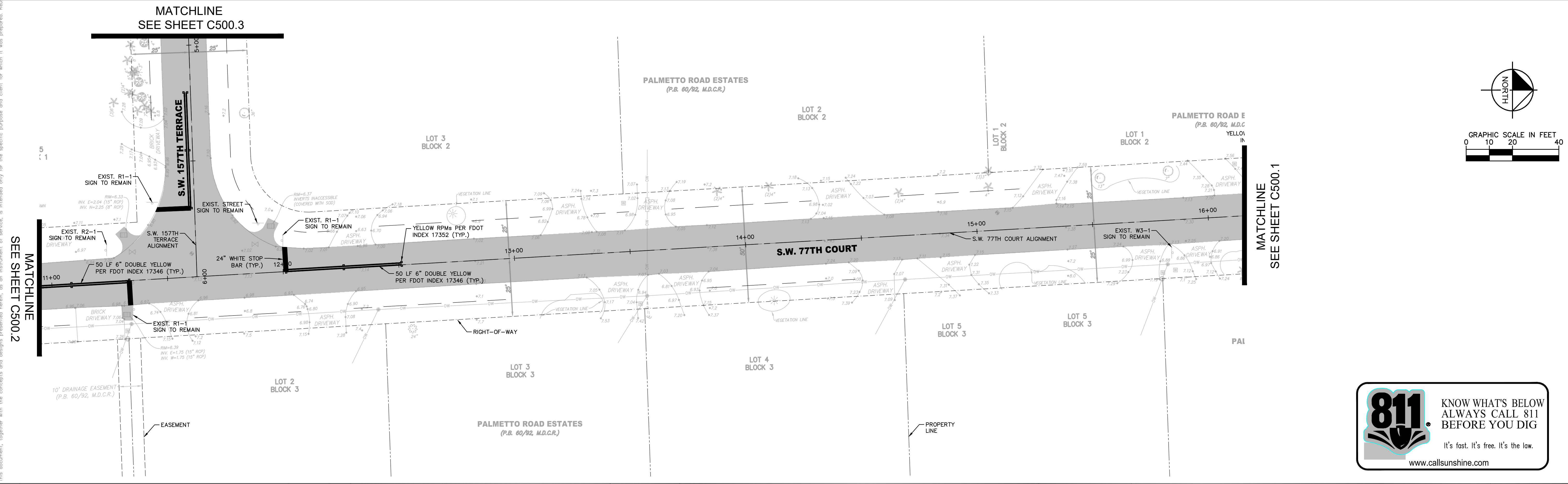
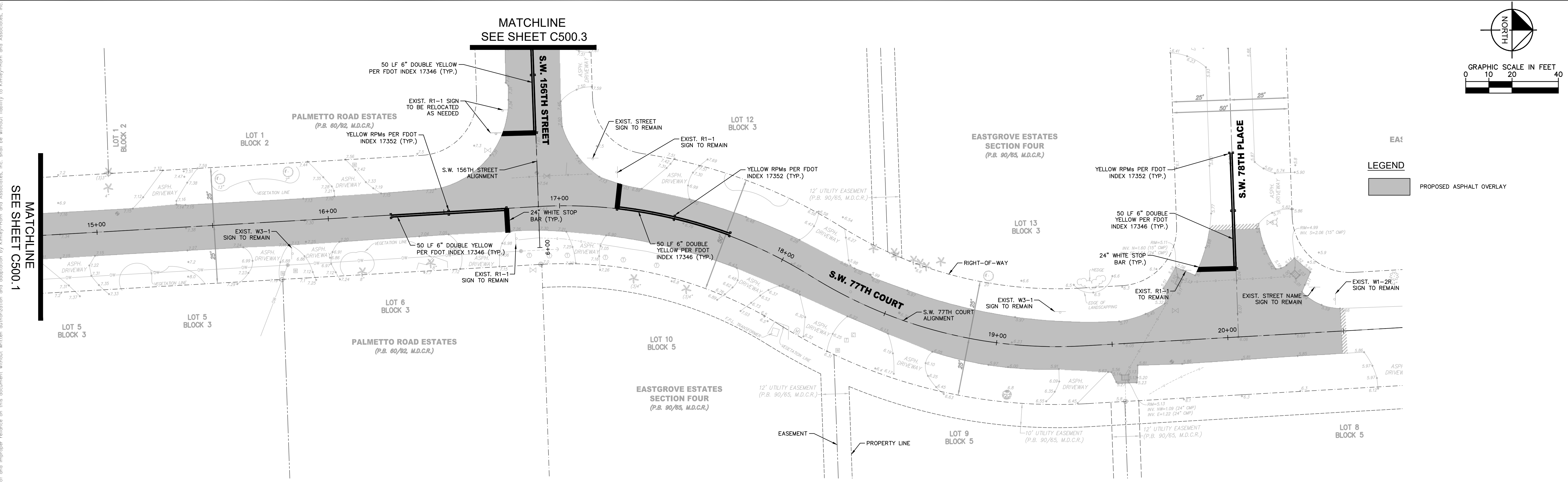
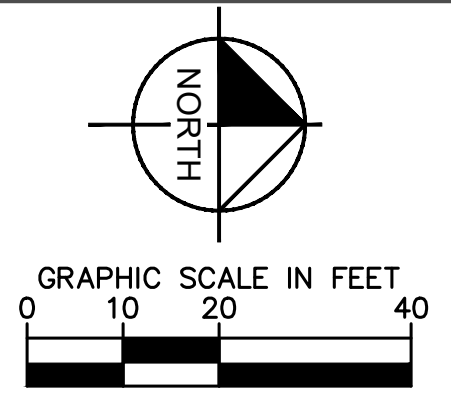
DATE: 3/27/19

SHEET NUMBER

C400.4

STORMWATER POLLUTION PREVENTION NOTES
S.W. 78TH AVENUE

Plotted By: Stanton, Tiffany
 Sheet Set: SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS - Layout: C500.1, March 27, 2019, 11:19:34am, K:\Fla\Civil\C44 Jobs\044649021-sub-basin_61_design\CAD\plansheets\C500.1_Signing_and_Marking_Plan.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



No.	REVISIONS	DATE	BY

Kimley»Horn
 © 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE	AS SHOWN
DESIGNED BY	TS
DRAWN BY	MM
CHECKED BY	SV

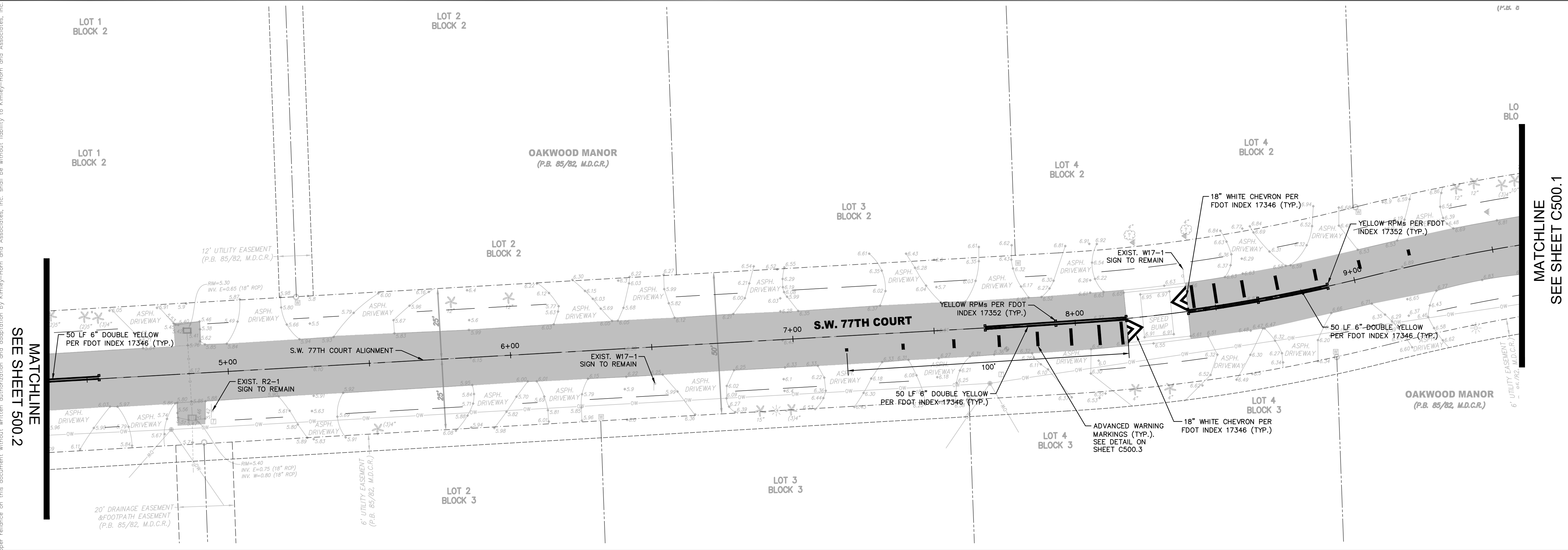
SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 FLORIDA

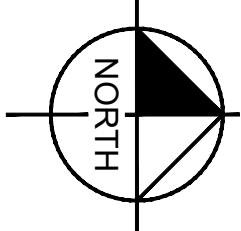
LICENSED PROFESSIONAL	STEFANO VIOLA
FLORIDA LICENSE NUMBER	74655

SIGNING & MARKING PLAN
SW 77TH COURT
 SHEET NUMBER
C500.1



Plotted By: Stanton, Tiffany
 Sheet: Sub-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS, Layout: C500.2, March 27, 2019, 11:19:44am, K:\In\Civil\044 Jobs\044649021-sub-basin_61_design\CAD\plansheets\C500.1_Signing and Marking Plan.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and impropriety reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.






GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

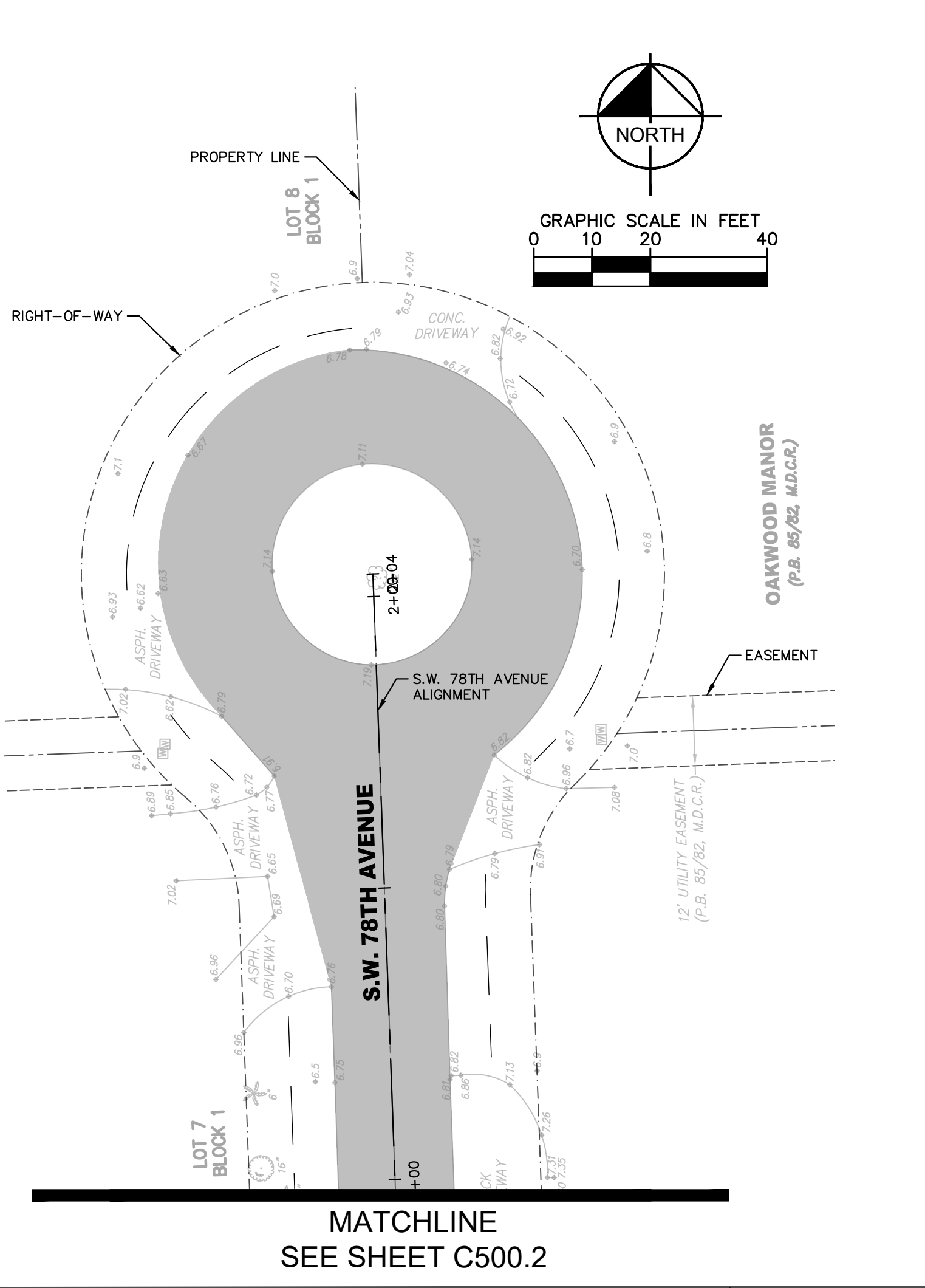
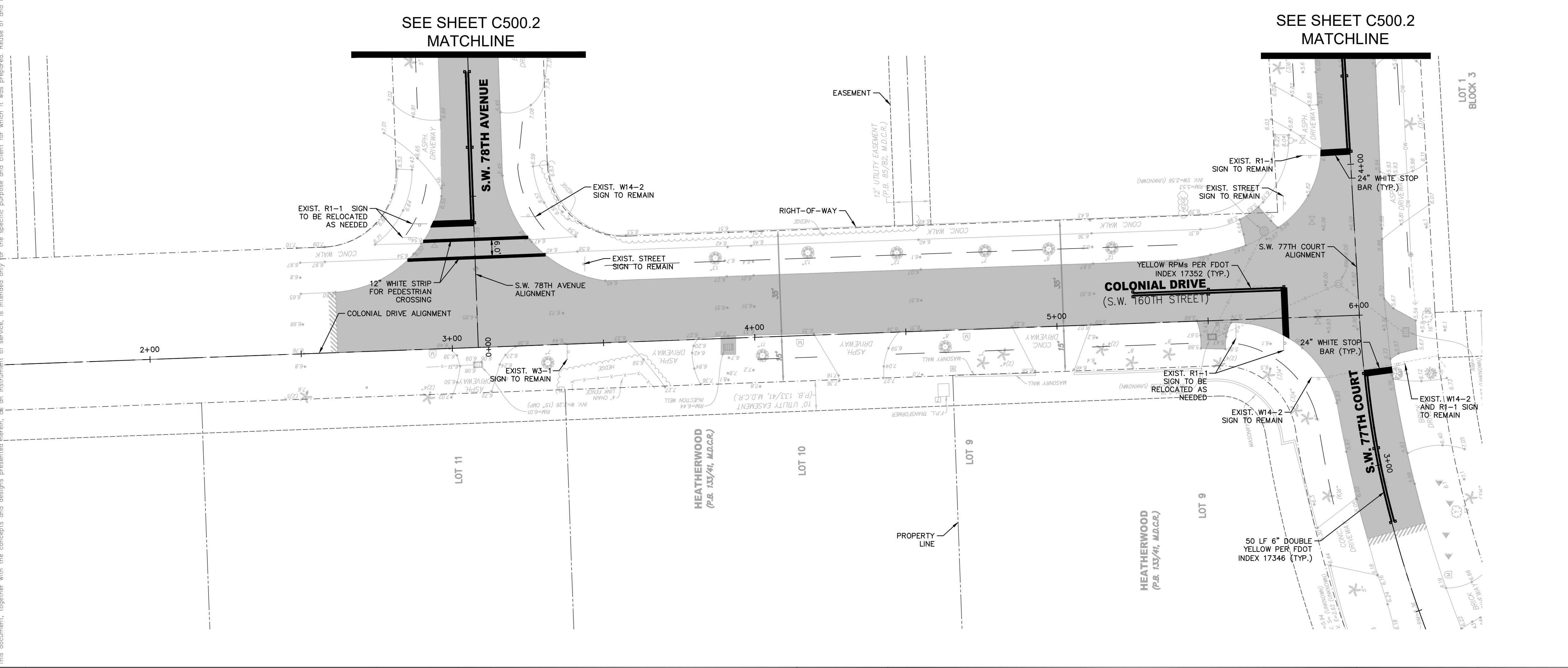
PROPOSED ASPHALT OVERLAY



**KNOW WHAT'S BELOW
ALWAYS CALL 811
BEFORE YOU DIG**

It's fast. It's free. It's the law.

www.callsunshine.com



No.	REVISIONS	DATE	BY

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5100 FAX: 954-739-2247
WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT
044649021
 DATE
APRIL 2018
 SCALE AS SHOWN
 DESIGNED BY TS
 DRAWN BY MM
 CHECKED BY SV

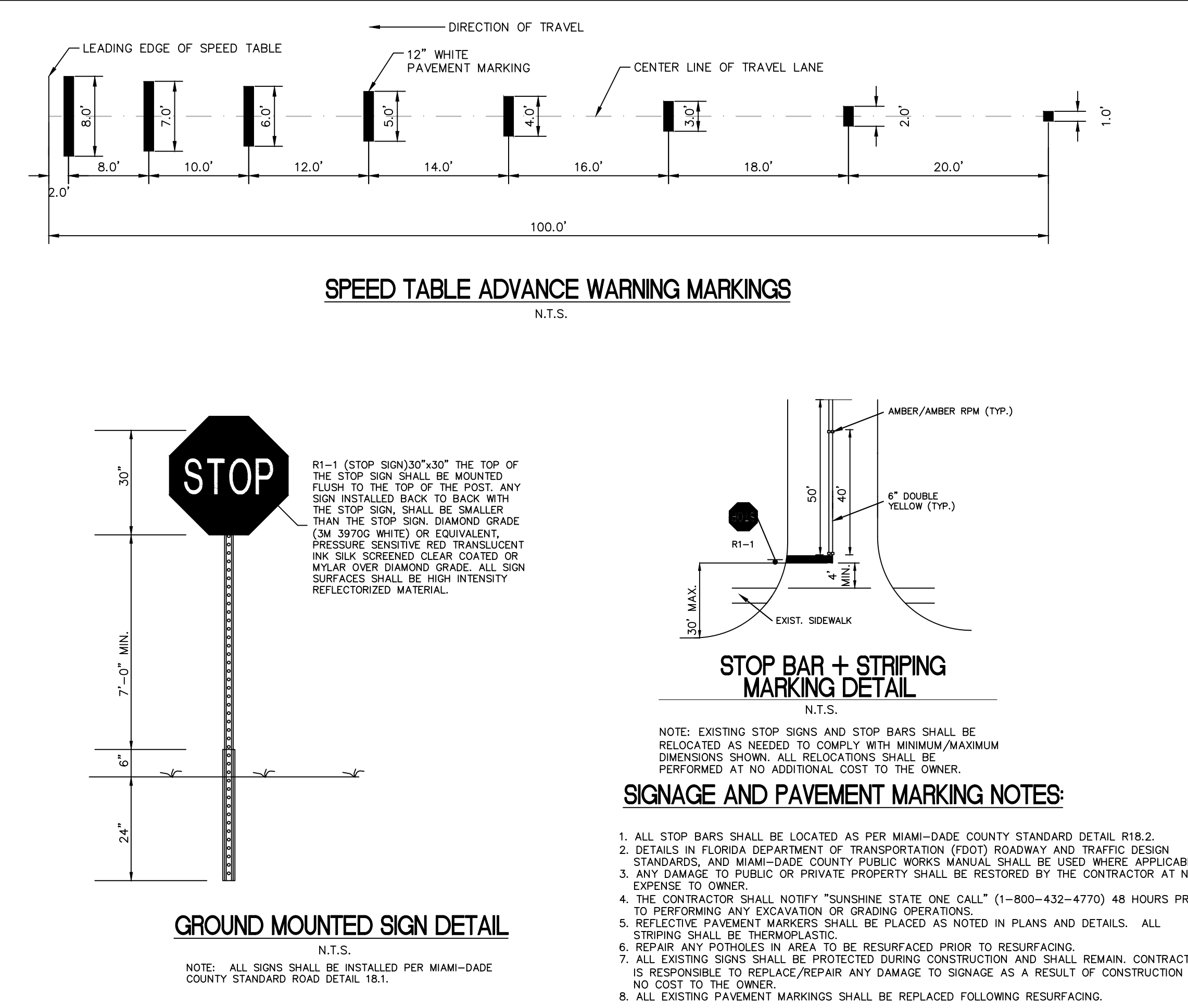
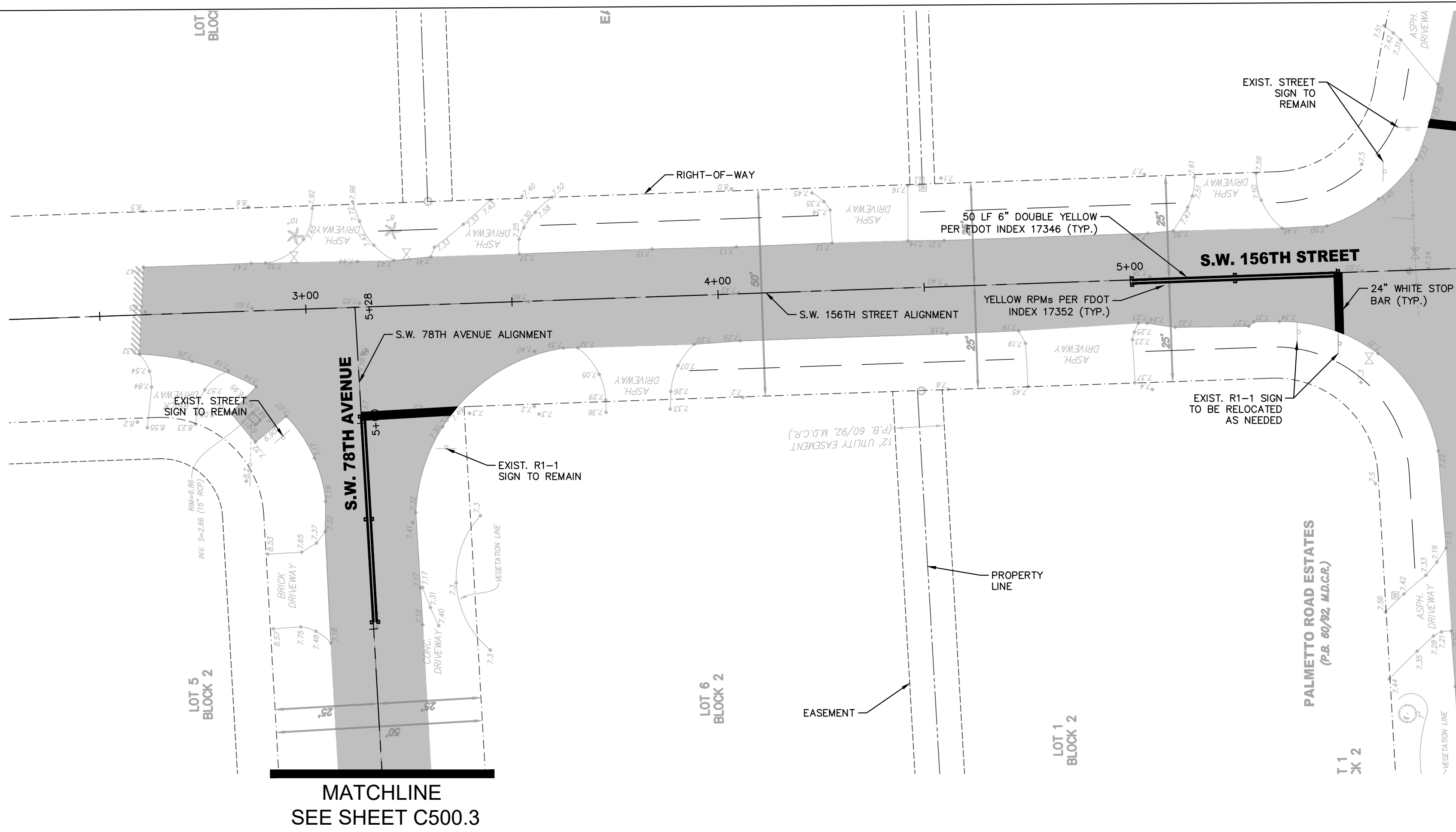
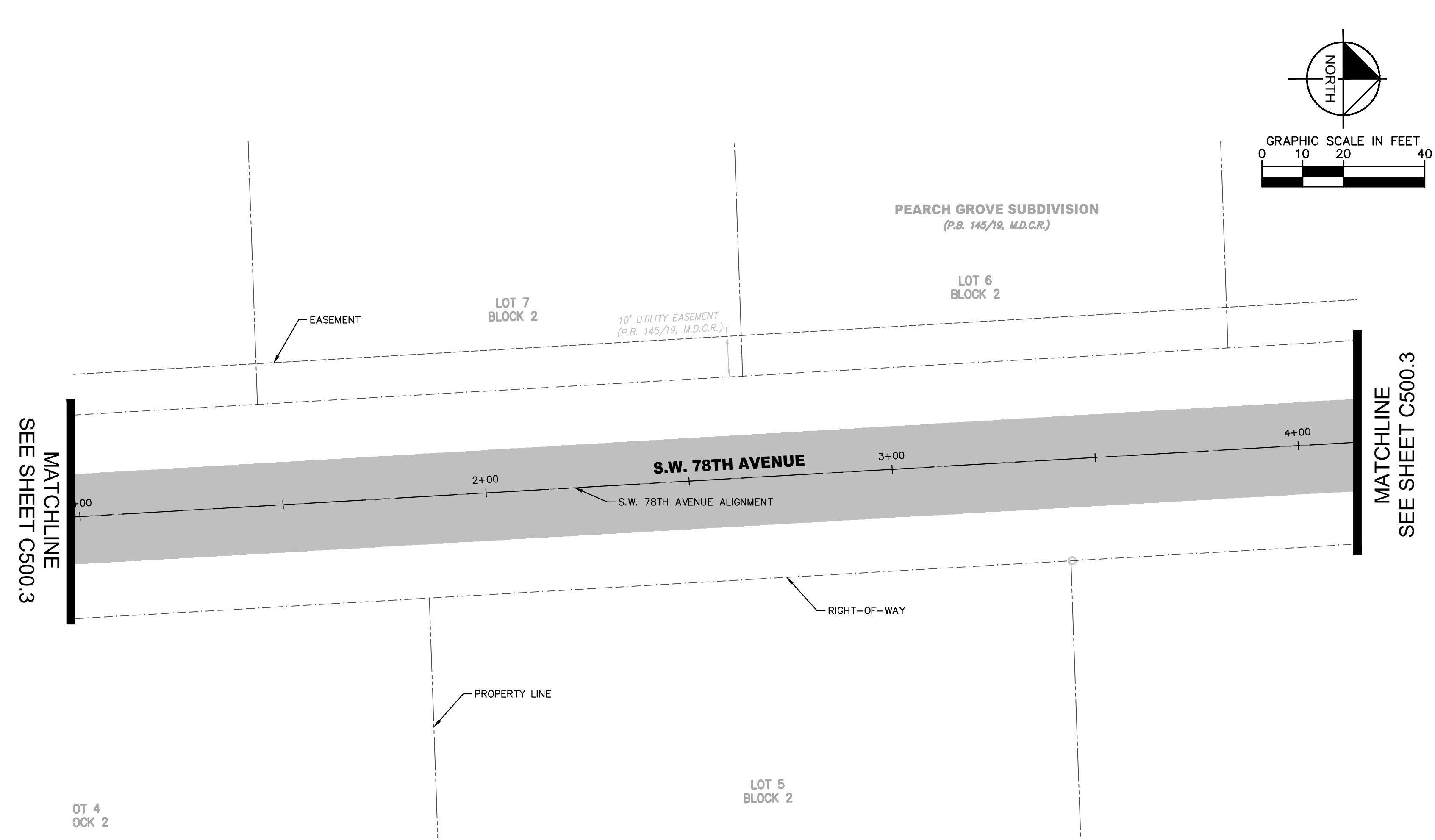
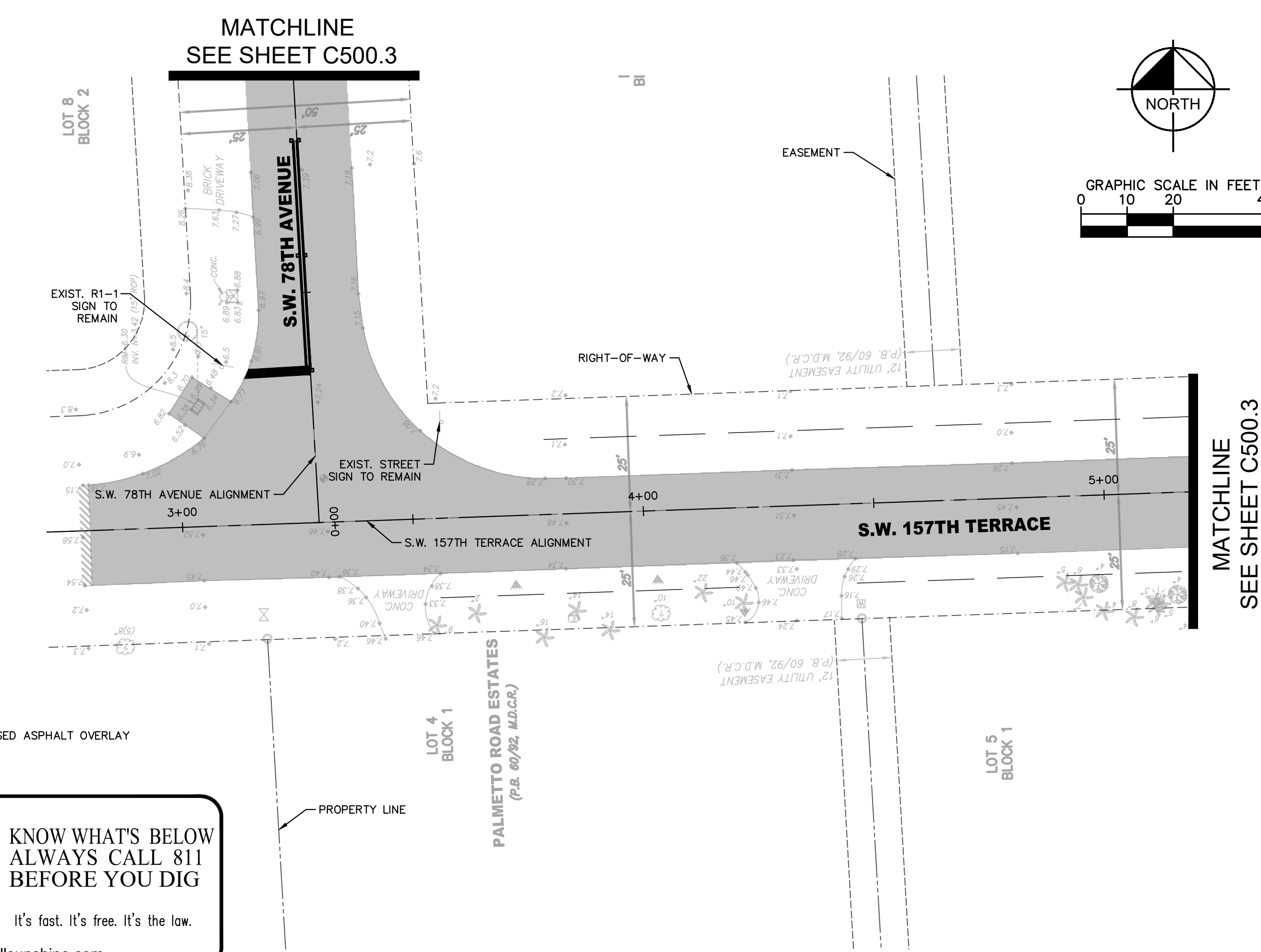
**SUB-BASIN 61 PAVING AND
DRAINAGE IMPROVEMENTS**
 PREPARED FOR
VILLAGE OF PALMETTO BAY
 FLORIDA

LICENSED PROFESSIONAL
 STEFANO VIOLA
 FLORIDA LICENSE NUMBER
 74655
 DATE: 3/27/19

**SIGNING & MARKING PLAN
SW 77TH AVE, SW 160 ST &
SW 78TH AVE**

SHEET NUMBER
C500.2

Plotted By: Stanton, Tiffany
 Sheet: Sub-Basin 61 Paving and Drainage Improvements - Layout: C500.3 - March 27, 2019 11:19:54am
 K:\N\civil\044_Jobs\044649021-sub-basin_61_design\CAD\plan\sheet\C500.3.dwg
 This document, together with the concepts and designs presented herein, is an instrument of service, intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



No.	REVISIONS	DATE	BY

Kimley»Horn

© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
 600 NORTH PINE ISLAND ROAD, SUITE 450, PLANTATION, FL 33324
 PHONE: 954-535-5100 FAX: 954-739-2247
 WWW.KIMLEY-HORN.COM CA 00000696

KHA PROJECT	044649021
DATE	APRIL 2018
SCALE AS SHOWN	
DESIGNED BY	TS
DRAWN BY	MM
CHECKED BY	SV

SUB-BASIN 61 PAVING AND DRAINAGE IMPROVEMENTS

PREPARED FOR
VILLAGE OF PALMETTO BAY

FLORIDA

LICENSED PROFESSIONAL	
STEFANO VIOLA	
FLORIDA LICENSE NUMBER	74655

SIGNING & MARKING PLAN S.W. 156TH STREET & S.W. 157TH TERRACE

SHEET NUMBER
C500.3