

MIAMI BEACH

PUBLIC WORKS DEPARTMENT

NO. 9 – CITY CENTER
TOPOGRAPHIC SURVEY, LINCOLN ROAD DISTRICT IMPROVEMENTS
DECEMBER 19, 2022 SM-2022 G
100% SUBMITTAL



CITY OF MIAMI BEACH

MAYOR:

COMMISSIONERS:

CITY MANAGER:

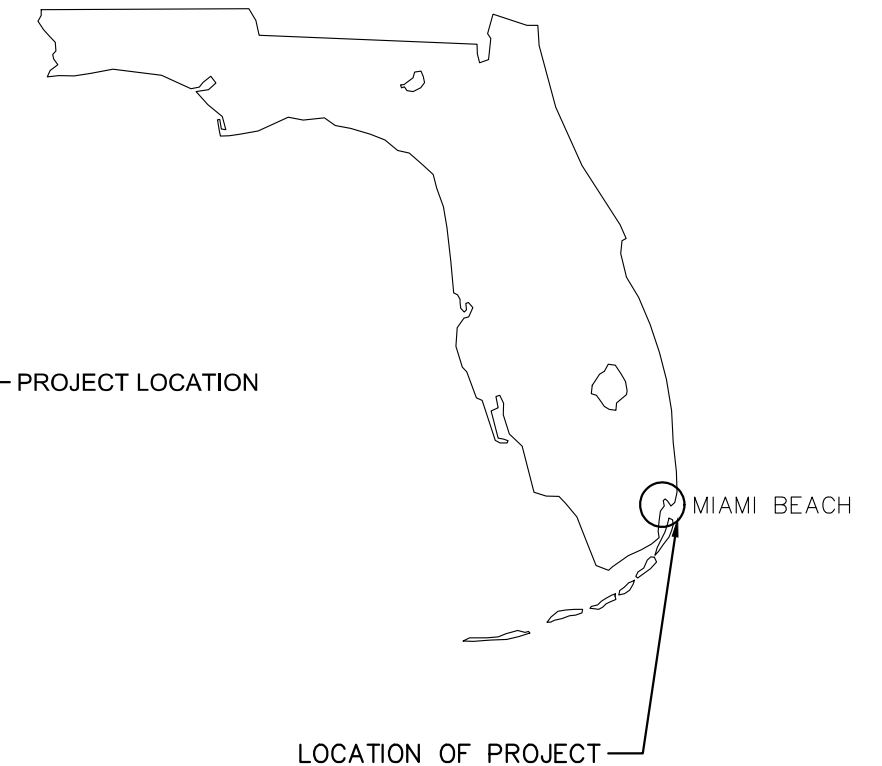
CITY ATTORNEY:

PUBLIC WORKS DIRECTOR:

CITY ENGINEER:



LOCATION MAP
N.T.S.

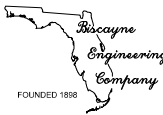


INDEX OF DRAWINGS

SHEET	DRAWING	DESCRIPTION
1	G-01	COVER SHEET & INDEX OF DRAWINGS
2	G-02	KEY SHEET
3	EC-01	SURVEYOR'S NOTES
4	EC-02	PNC SHEETS
5-13	EC-03 TO EC-11	TOPOGRAPHIC SURVEY SHEETS

ACCEPTED BY:

Work Order 03-87520 Sheet 1 of 13 Drawing G-01-COVER



BISCAYNE ENGINEERING COMPANY, INC.
Consulting Engineers - Planners - Surveyors

MIAMI
529 WEST FLAGLER STREET, MIAMI, FL 33130
TEL (305) 324-7671
FAX (305) 324-0809
WEB: WWW.BISCAYNEENGINEERING.COM

PALM BEACH
449 NW 35th STREET, BOCA RATON, FL 33431
TEL (561) 809-2329

CITY SURVEYOR MANAGER

File Path: \\SURVEY\PROJECTS\87000's\87520 JAMES CORNER- LINCOLN ROAD IMPROVEMENTS\2. CAD\2. DWG\87520_LincolnRd_update w exploded pls.dwg

LINCOLN ROAD TOPOGRAPHIC SURVEY NOTES SHEET

SURVEYOR'S NOTES:

- THIS IS NOT A BOUNDARY SURVEY.
- SITE LIMITS WERE DETERMINED BY THE CLIENT AS SHOWN HEREON.
- BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983/2011 ADJUSTMENT, USING REAL TIME KINEMATIC (RTK) GLOBAL POSITION EQUIPMENT HAVING SUB CENTIMETER ACCURACY, USING A TRIMBLE MODEL R8 UNIT (DUAL FREQUENCY), REFERENCED TO TRA 8, NAIL AND WASHER, STAMPED BEC 0129, AND TRA 2, NAIL AND WASHER, STAMPED BEC 0129, HAVING A BEARING OF N88°00'31"W MEASURED BETWEEN THEM.
- RIGHT-OF-WAY LINES SHOWN HEREON ARE BASED ON PLAT DOCUMENTATION UNLESS NOTED OTHERWISE AND ARE SHOWN FOR REFERENCE ONLY. RIGHT-OF-WAY LINES DO NOT REPRESENT AN OPINION OF OWNERSHIP BY THE SURVEYOR.
- THIS SITE LIES IN SECTION 34, TOWNSHIP 53 SOUTH, RANGE 42 EAST, MIAMI-DADE COUNTY FLORIDA.
- THIS SURVEY DOES NOT MAKE ANY REPRESENTATIONS AS TO ZONING, SETBACKS, OR DEVELOPMENT RESTRICTIONS ON THE SUBJECT PROPERTY.
- NO ATTEMPT WAS MADE BY THE SURVEYOR TO DETERMINE MINERAL RIGHTS OWNERSHIP AND/OR RIGHTS-OF-ENTRY APPURTENANT THERETO.
- NOTED RECORDED REFERENCES ARE FROM THE PUBLIC RECORDS OF MIAMI-DADE COUNTY.
- THE CERTIFICATE OF AUTHORIZATION NUMBER OF BISCAYNE ENGINEERING COMPANY (BEC) IS LB-00129.
- FOLIO NUMBERS ADDRESSES ARE PER MIAMI-DADE COUNTY TAX APPRAISER'S WEBSITE.
- TREES WERE LOCATED BUT NOT IDENTIFIED AS TO SIZE OR TYPE.
- DIMENSIONS AND DIRECTIONS INDICATED HEREON ARE CALCULATED FROM FIELD MEASUREMENTS USING A LASER SCANNER, TOTAL STATION ELECTRONIC DISTANCE MEASUREMENT (EDM), LEVELING INSTRUMENT, AND MEASURING TAPE UNLESS OTHERWISE NOTED.
- ALL DISTANCES ARE IN FEET AND DECIMALS THEREOF UNLESS OTHERWISE NOTED.
- SYMBOLS SHOWN HEREON ARE NOT SHOWN TO SCALE.
- THE APPROXIMATE LOCATION OF VISIBLE ABOVE GROUND UTILITIES SHOWN HEREON WERE FIELD LOCATED BY BISCAYNE ENGINEERING COMPANY. NO ATTEMPT WAS MADE BY THE SURVEYOR TO LOCATE UNDERGROUND UTILITIES.
- DIRECTIONS OF SURFACE STORM WATER "DRAINAGE FLOW" NOT DETERMINED BY SURVEYOR.
- UNDERGROUND IMPROVEMENTS AND/OR UNDERGROUND ENCROACHMENTS, WHERE THEY ARE NOT VISIBLE AT SURFACE GROUND LEVEL, ARE NOT SHOWN INCLUDING BUT NOT LIMITED TO BUILDINGS, STRUCTURAL APPURTENANCES, TANKS OR RUBBISH FILLS, ETC.; NO INTERIOR OBSERVATIONS WERE MADE AT THE TIME OF THE SURVEY.
- THE ACCURACY OF THE SURVEY MEASUREMENTS SHOWN HEREON IS BASED ON THE TYPE OF SURVEY AND EXPECTED USE OF THE SURVEY. REDUNDANT MEASUREMENTS AND COMPUTATION RECORDS SUBSTANTIATE THE SURVEY MAP. REDUNDANCY OF MEASUREMENTS WAS OBTAINED BY MULTIPLE OCCUPATIONS OF FOUND AND SET CONTROL POINTS. THESE METHODS HAVE BEEN TESTED BY BE AND FOUND TO HAVE AN EXPECTED ACCURACY OF ± 0.07 FEET HORIZONTALLY, ± 0.03 FEET VERTICALLY ON HARD SURFACES, AND ± 0.1 FEET VERTICALLY ON SOFT SURFACES.
- LANDS SHOWN HEREON ARE LOCATED IN FEDERAL FLOOD ZONE "AE", ELEVATION 8', PER COMMUNITY PANEL NO. 120651-0317-L, MAP REVISED SEPTEMBER 11, 2009.
- ELEVATIONS SHOWN HEREON ARE IN US SURVEY FEET, AND ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88), AND ARE REFERENCED TO THE FOLLOWING BENCHMARKS:
 - I) MIAMI-DADE COUNTY BENCHMARK "A-371", ELEVATION 3.83', FOUND PK NAIL AND WASHER, LOCATED AT THE NW CORNER OF 17TH STREET AND WASHINGTON AVENUE.;
 - II) MIAMI-DADE COUNTY BENCHMARK "D-149", ELEVATION 2.62', PK NAIL AND BRASS WASHER IN CONCRETE, LOCATED ON NE 15TH STREET, 37' SOUTH AND 32' WEST OF THE CENTERLINE OF MERIDIAN AVENUE.
- THERE MAY BE ADDITIONAL RESTRICTIONS AFFECTING THIS PROPERTY FOUND IN THE LAWS OF CITY OF MIAMI BEACH MIAMI-DADE COUNTY, AND THE STATE OF FLORIDA.

REFERENCES:

- LINCOLN DISTRICT - LINCOLN RD. WATERMAIN PLANS, REVISED DATE 5-26-1995, PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC.
- BOUNDARY SURVEY FOR CITY OF MIAMI BEACH PREPARED BY ZURWELLE WHITTAKER, INC., DRAWING No SM 85 J, DATED 12/12/1985.
- SURVEY OF MIAMI BEACH THEATER FOR PERFORMING ART, PREPARED BY ZURWELLE WHITTAKER, INC, REVISION 02/11/86.
- BOUNDARY SURVEY OF HOLOCAUST MEMORIAL PREPARED BY BISCAYNE ENGINEERING COMPANY, INC., DRAWING No DC-3584R (SM 90 E), DATED MAY 3, 1990.
- MIAMI-DADE COUNTY PLATS OF RECORD AND OFFICIAL RECORD BOOKS (ORB).
- MIAMI-DADE COUNTY PROPERTY APPRAISER WEBSITE.

ABBREVIATIONS:

ASPH. = ASPHALT ADIC = 2" ALUMINUM DISC IN CONCRETE ADICM = 2" ALUMINUM DISC IN CONCRETE MONUMENT BCED = BROWARD COUNTY ENGINEERING DEPARTMENT BCR = BROWARD COUNTY RECORDS B.E.C. = BISCAYNE ENGINEERING COMPANY BL = BASELINE BM = BENCHMARK BW = BACK OF SIDEWALK (C) = MEASURED OR CALCULATED FROM FIELD MEASUREMENTS CB = CATCH BASIN CBS = CONCRETE BLOCK STRUCTURE CCR = CERTIFIED CORNER RECORD CL = CLEARANCE CLF = CHAIN LINK FENCE CM = CONCRETE MONUMENT CMP = CORRUGATED METAL PIPE CONC. = CONCRETE COR. = CORNER C&G = CURB AND GUTTER D.B. = DEED BOOK E = EAST EP = EDGE OF PAVEMENT DEP = DEPRESSED CURB DH = DRILL HOLE EL = ELEVATION ENC = ENCROACHMENT FBDIC = FOUND BRASS DISC IN CONCRETE FDIP = FOUND IRON PIPE FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION F.F.E. = FINISH FLOOR ELEVATION O.F.E. = OUTSIDE FINISH ELEVATION	FL = FLOW LINE FND = FOUND ID = IDENTIFICATION INV = INVERT ELEVATION I.P. = IRON PIPE IP&C = IRON PIPE AND CAP IR = IRON ROD NO IDENTIFICATION IR&C = 5/8"Ø IRON ROD AND CAP IRIC = IRON ROD IN CONCRETE (L) = PER LEGAL DESCRIPTION L = ARCH LENGTH LAT = LATITUDE LB = LICENSED BUSINESS LONG = LONGITUDE (M) = MEASURED MH = MANHOLE MN&W = MAG NAIL AND WASHER MON. = MONUMENT N = NORTH N&TT = NAIL AND TIN TAB N&W = NAIL AND WASHER NVAL = NON-VEHICULAR ACCESS LINE PER PLAT O.R.B. = OFFICIAL RECORDS BOOK OFF: = OFFSET (P) = PER PLAT PAV = PAVEMENT P.B. = PLAT BOOK PCC = POINT OF COMPOUND CURVATURE PG. = PAGE	P.I. = POINT OF INTERSECTION PK N&W = PARKER KALON NAIL AND WASHER POB = POINT OF BEGINNING POC = POINT OF COMMENCEMENT PP = POWER POLE PRC = POINT OF REVERSE CURVATURE PT = POINT OF TANGENCY (R) = RECORD R = RADIUS RGE = RANGE R.R. = RAILRD. R/W = RIGHT-OF-WAY S = SOUTH SEC. = SECTION SFWMD = SOUTH FLORIDA WATER MANAGEMENT DISTRICT S.R. = STATE RD. STA: = STATION T.B.M. = TEMPORARY BENCHMARK TC = TOP OF CURB T.O.B. = TOP OF BANK TRAV = TRAVERSE TWP = TOWNSHIP UG = UNDERGROUND U.S. = UNITED STATES W = WEST WM = WATER METER Ø = DIAMETER
---	--	---

LEGAL DESCRIPTION:

THIS IS NOT A BOUNDARY SURVEY

LEGEND:

	CATCH BASIN TYPE "D"		MONITORING WELL		CENTER LINE
	CATCH BASIN TYPE "DC"		POST		RIGHT OF WAY LINE
	CATCH BASIN TYPE "F"		CLEAN OUT		LOT LINE
	ELECTRICAL MANHOLE		SANITARY VALVE		SIDEWALK AND EP
	FIRE HYDRANT		DRAIN		CONCRETE
	GUY WIRE AND ANCHOR		BACKFLOW PREVENTER		FENCE
	HEDGE		WATER VALVE		UG STORM SEWER LINE
	LIGHT POLE LOW LEVEL		FIRE DEPARTMENT CONNECTION		UG SANITARY SEWER LINE
	LIGHT POLE, MAST ARM		IRRIGATION VALVE		UG WATER LINE
	EXISTING LIGHT POLE LOW LEVEL		GAS METER		UG WATER MAIN LINE
	EXISTING LIGHT POLE, MAST ARM		GAS MANHOLE		UG CABLE LINE
	NORTH ORIENTATION		COMMUNICATION BOX		UG ELECTRICAL LINE
	PALM		TELEPHONE BOX		UG GAS LINE
	PINE		ELECTRICAL BOX		LIMITS OF BUILDING
	TREE		SERVICE BOX		
	PARKING METER		ELECTRICAL METER		
	POWER POLE (EXISTING)		ELECTRICAL OUTLET		
	POWER AND TELEPHONE POLE (EXIST.)		WOOD POWER POLE		
	STANDING PIPE		STORM DRAINAGE MANHOLE		
	FLOOD LIGHT		SANITARY SEWER MANHOLE		
	LAMP		SIGN		
	BUS BENCH		SIGNAL CONTROL PANEL		
	BIKE RACK		SIGNAL PEDESTRIAN		
	TRASH CAN		TRAFFIC SIGNAL, MAST ARM		
	FLAG POLE		TELEPHONE POLE (EXISTING)		
	MAILBOX		TELEPHONE MANHOLE		
	FORCE MAIN VALVE BOX		WIRING BOX		
	GAS VALVE		AIR CONDITIONING UNIT		
	EXISTING VALVE		DENOTES EXISTING ELEVATION		
	WATER VALVE BOX		CENTER LINE		
	WATER METER BOX				
	MANHOLE				
	WATER VALVE				

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE ATTACHED "TOPOGRAPHIC SURVEY" WAS PREPARED UNDER MY RESPONSIBLE CHARGE, IN ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR SURVEYING AND MAPPING AS SET FORTH BY THE STATE OF FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027, FLORIDA STATUTES.

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

BISCAYNE ENGINEERING COMPANY, INC.
529 WEST FLAGLER STREET, MIAMI, FL. 33130
(305) 324-7671
STATE OF FLORIDA DEPARTMENT OF AGRICULTURE
LB-0000129

SURVEY DATE: 12-19-2022

Digitally signed by
Alberto J Rabionet
Date: 2023.03.01
17:12:32 -05'00'



ALBERTO J. RABIONET, PSM, FOR THE FIRM
PROFESSIONAL SURVEYOR AND MAPPER NO. 7218
STATE OF FLORIDA

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 5J-17-062, F.A.C.
THIS ITEM HAS BEEN DIGITALLY SIGNED. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



NEIGHBORHOOD:	NO. 9 CITY CENTER
TITLE:	LINCOLN RD. DISTRICT IMPROVEMENTS

BISCAYNE ENGINEERING COMPANY, INC.
Consulting Engineers - Planners - Surveyors
MIAMI
529 WEST FLAGLER STREET, MIAMI, FL 33130
TEL (305) 324-7671
FAX (305) 324-0809
PALM BEACH
440 NW 35th STREET, BOCA RATON, FL 33431
TEL (561) 699-2529
WEB: WWW.BISCAYNEENGINEERING.COM

CITY MANAGER:
DIRECTOR:
CITY ENGINEER:

ENGINEER OF RECORD: _____
DESIGN ENGINEER: _____
DRAWN BY: W.R./P.M.
CHECKER: L.A.G./A.J.R.
SCALE: N/A

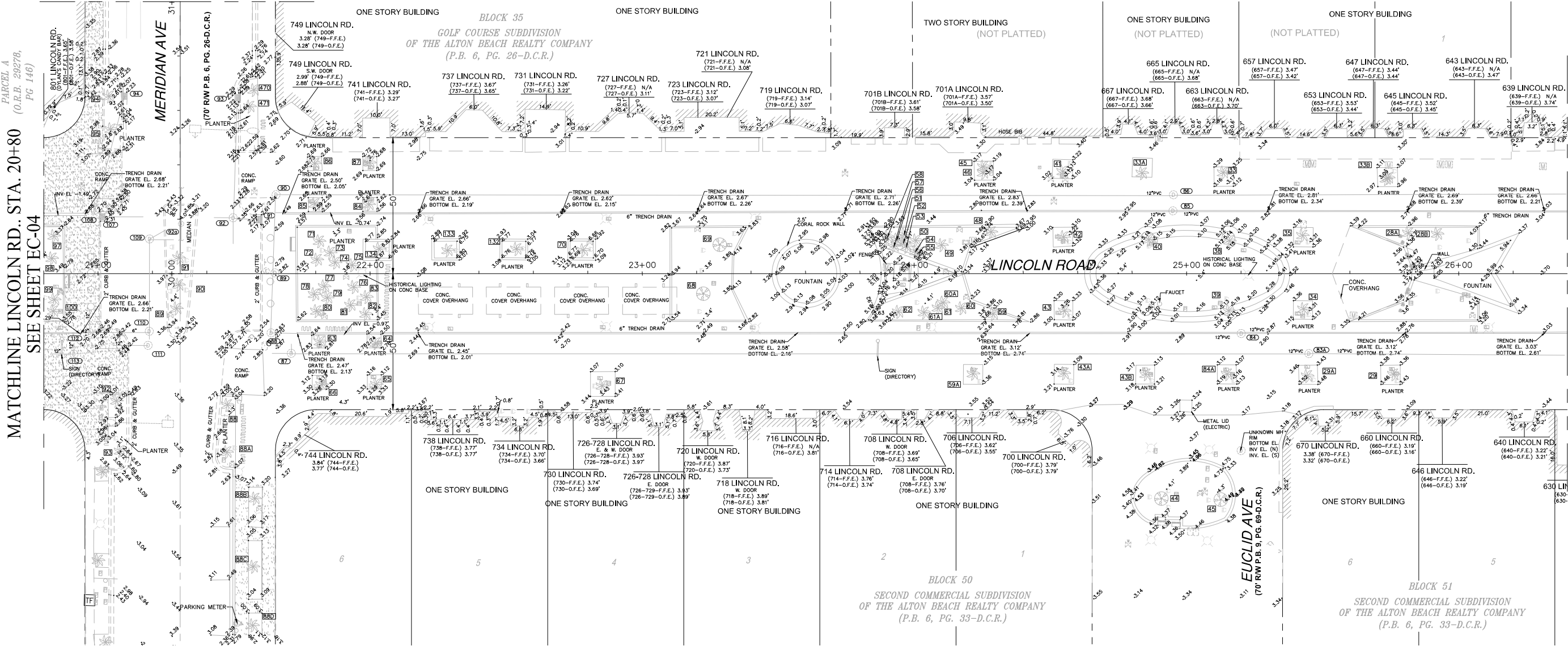
ACCEPTED BY: _____
CITY SURVEYOR MANAGER

5				
4				
3				
2				
1				
NO.	DATE	REVISION	APP'D. BY	

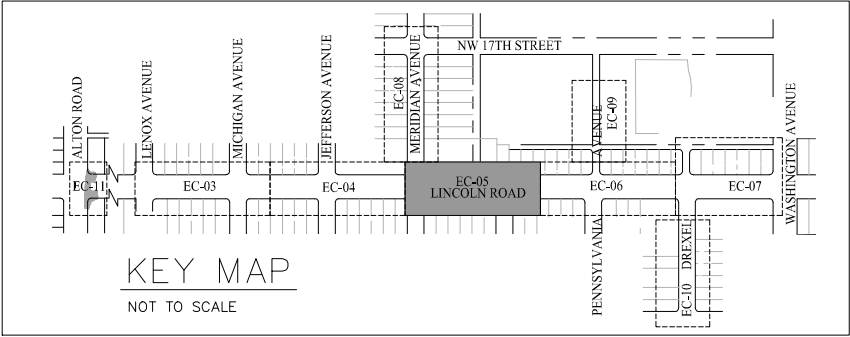
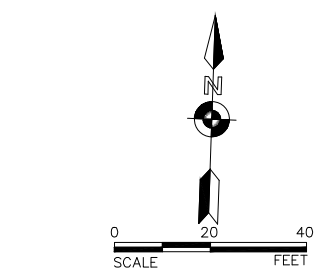
File Name:	SM-2022G - LINCOLN ROAD
Survey Reference:	
Field Book:	2888, 2889, 2891, 2892, 3102/13,14,16, 3108/29
Page:	
Work Order:	03-87520
Date:	12/19/22
Sheet:	3 of 13
Drawing:	EC-01-NOTES

File Path: F:\SURVEY\PROJECTS\87000's\87520 JAMES CORNER- LINCOLN ROAD IMPROVEMENTS\2. CAD\2. DWG

MATCHLINE MERIDIAN AVE. STA. 31+00 SEE SHEET EC-08



STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM EL. (feet)	NAVD88 BOTTOM (feet)	NAVD88 INV. EL. (feet)	DIRECTION	SIZE (inches)	MATERIAL	COMMENTS
83 A	MHD	3.18	-0.02	0.08	WEST	12	PVC	
84	MHD	2.94	-1.26	0.10	EAST	12	PVC	
85	MHD	3.06	0.42	0.41	WEST	12	PVC	
86	MHD	3.14	0.34	0.63	EAST	12	PVC	
87	MHD	2.92	-1.83	-1.76	WEST	12	PVC	CITY UNABLE TO CLEAN
				-1.64	NORTH	12	PVC	FULL OF WATER
				-1.07	WEST	18	METAL	
88	MHD	2.62	-0.45	-0.96	EAST	12	PVC	FULL OF WATER
				-0.83	NORTH	12	PVC	
89	MHD	2.81	-4.59	-2.50	EAST	18	PVC	FULL OF WATER
				-2.28	SOUTH	12	PVC	
90	MHD	2.54	-2.12	-2.06	SOUTH	12	PVC	FULL OF WATER
				-0.74	EAST	12	PVC	
91	CB	2.25	-4.47	-0.43	EAST	12	METAL	FULL OF WATER
92	MHD	2.77	-0.43	-0.16	NORTH	12	PVC	FULL OF WATER
				0.13	SOUTH	12	PVC	
				-0.18	EAST	12	METAL	
				-0.35	WEST	6	METAL	
93	CB	2.24	-0.82	-0.24	SOUTH	12	PVC	FULL OF WATER
94	CB	2.20	-0.91	-0.45	SOUTH	24	CONC	FULL OF WATER
107	CB	2.34	0.34	0.54	EAST	12	CONC	FULL OF WATER & DEBRIS
108	MHD	2.65	-1.17	0.42	SE	36	CONC	FULL OF DEBRIS
				-0.30	WEST	N.V.V.	CONC	FULL OF WATER
				-0.20	NORTH	N.V.V.	N.V.V.	
109	MHD	3.27	-1.52	0.36	NW	12	METAL	FULL OF WATER
				-1.53	SOUTH	N.V.V.	N.V.V.	
				-1.36	EAST	N.V.V.	N.V.V.	
110	MHD	3.03	-1.75	0.53	WEST	6	METAL	FULL OF WATER
				-1.67	SOUTH	N.V.V.	N.V.V.	
				-1.40	NORTH	N.V.V.	N.V.V.	
111	MHD	2.99	-3.61	0.24	WEST	12	METAL	FULL OF WATER
				-1.56	SOUTH	24	CONC	



STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM EL. (feet)	NAVD88 BOTTOM (feet)	NAVD88 INV. EL. (feet)	DIRECTION	SIZE (inches)	MATERIAL	COMMENTS
112	MHD	2.67	-1.17	-0.62	NORTH	12	PVC	FULL OF WATER
				0.03	EAST	N.V.V.	METAL	
				-0.38	WEST	12	PVC	
113	MHD	2.83	-1.94	-1.39	NORTH	12	PVC	FULL OF WATER
				-0.64	WEST	12	PVC	
				0.11	EAST	12	METAL	
92a	MHS	4.16	N/A	-2.54	SOUTH	8	N.V.V.	FULL OF DEBRIS
				-2.29	NORTH	8	N.V.V.	
84a	MH	3.23	-5.62	-1.37	NORTH			-3.85

DRAINAGE AND SANITARY SEWER NOTES AND ABBREVIATIONS:
N.V.V. = NO VISUAL VERIFICATION POSSIBLE. UNABLE TO DETERMINE DRAINAGE INFORMATION IN PART OR IN FULL.

MATCHLINE LINCOLN RD. STA. 32+00
SEE SHEET EC-6

MATCHLINE DREXEL AVE. STA. 34+60
SEE SHEET EC-10



NEIGHBORHOOD: NO. 9 CITY CENTER
TITLE: LINCOLN RD. DISTRICT IMPROVEMENTS

BISCAYNE ENGINEERING COMPANY, INC.
Consulting Engineers - Planners - Surveyors
MIAMI
529 WEST FLAGLER STREET, MIAMI, FL 33130
TEL (305) 354-7671
FAX (305) 354-9809
PALM BEACH
449 NW 35th STREET, BOCA RATON, FL 33431
TEL (561) 996-2329
WEB: WWW.BISCAYNEENGINEERING.COM

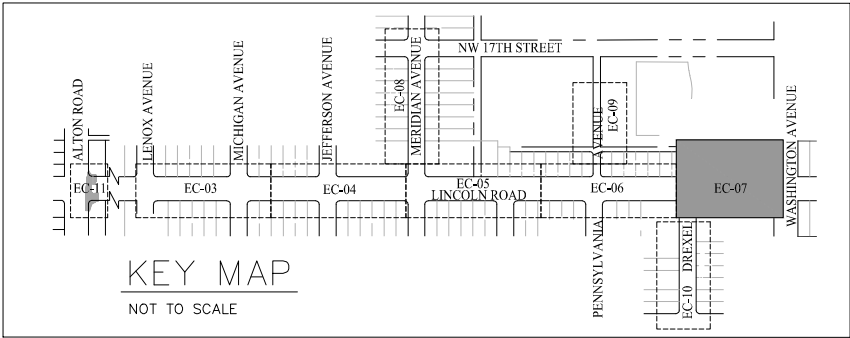
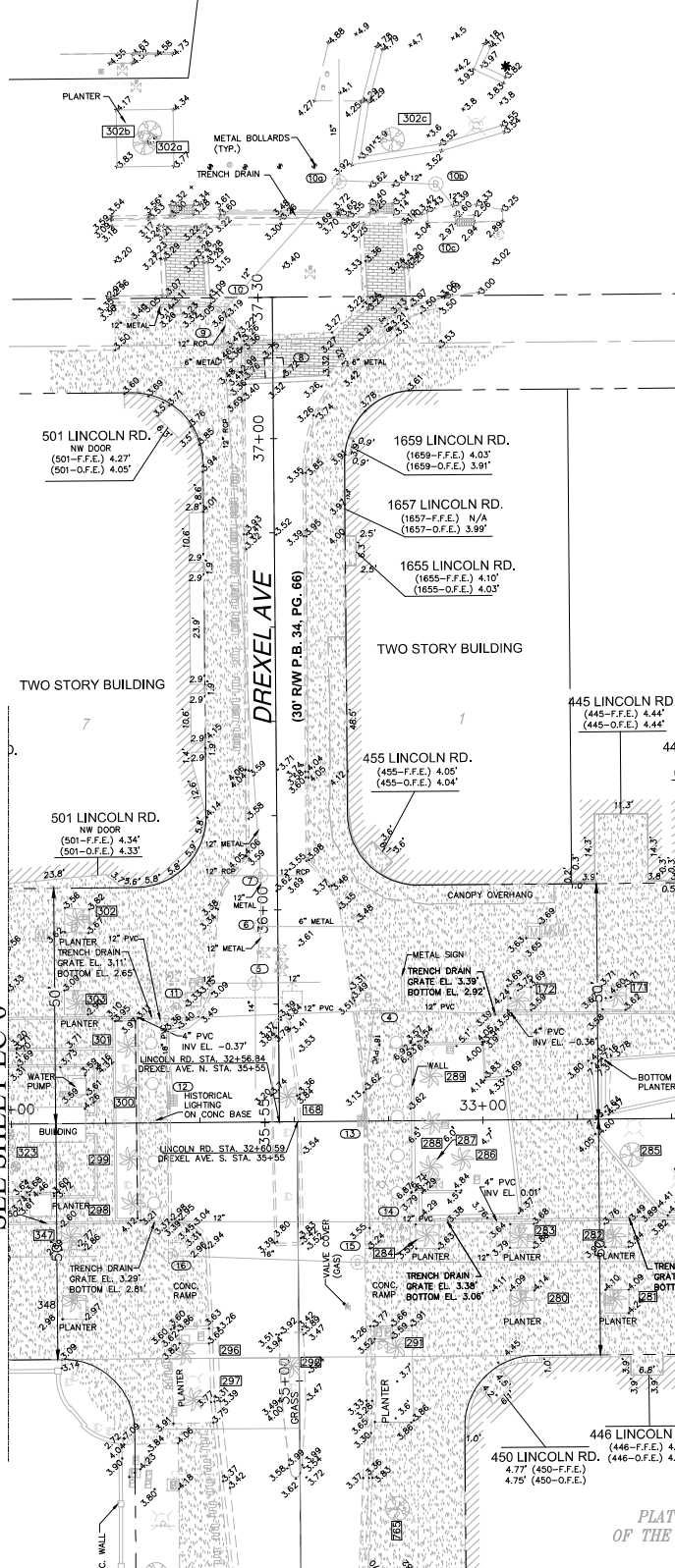
CITY MANAGER:
DIRECTOR:
CITY ENGINEER:

ENGINEER OF RECORD:
DESIGN ENGINEER:
DRAWN BY: W.R./P.M.
CHECKER: L.A.G./A.J.R.
SCALE: 1" = 20'

ACCEPTED BY:
CITY SURVEYOR MANAGER

NO.	DATE	REVISION	APP'D. BY
5			
4			
3			
2			
1			

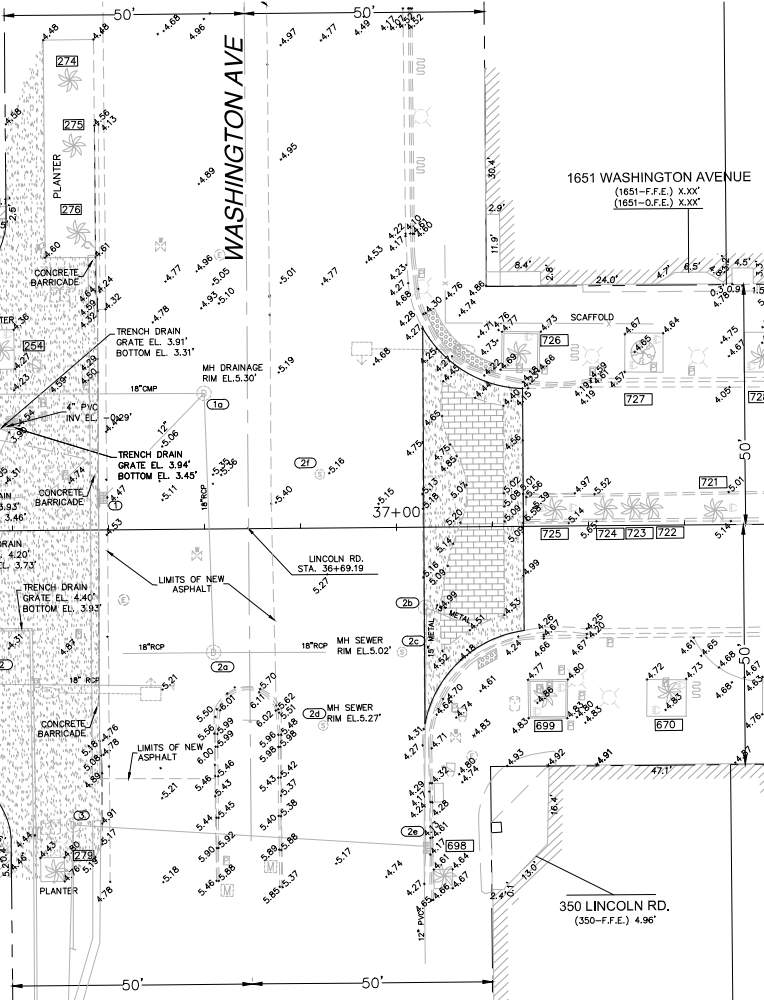
File Name: SM-2022G - LINCOLN ROAD
Survey Reference:
Field Book: 2889, 2889, 2889
3102/13,14,16, 3108/29
Page: Work Order: _03-87520
Date: 10/19/22 Sheet: 9 of 13 Drawing: EC-07



STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM EL. (feet)	NAVD88 BOTTOM (feet)	NAVD88 INV. EL. (feet)	DIRECTION	SIZE (inches)	MATERIAL	COMMENTS
1	CB	4.44	0.57	0.85	NE	12	METAL	
1a	MHD	5.30	0.10	-0.43	SOUTH	18	CONC	
				-0.50	WEST	18	CMP	
				0.06	SOUTHWEST	12	CONC	
2	MHD	4.34	-0.33	-0.05	WEST	18	METAL	
				-0.17	EAST	18	CONC	
				0.86	NORTH	12	METAL	
2a	MHD	5.42	-0.58	-0.55	NORTH	18	CONC	
				-0.48	EAST	18	CONC	
				-0.58	WEST	18	CONC	
2b	MHD	5.02	1.82	1.92	SOUTH	15	STEEL	
				1.94	SOUTHEAST	15	STEEL	
3	MHD	4.83	0.02	3.50	EAST	14	CONC	
				1.39	SOUTH	12	METAL	
				0.31	SOUTH	6	PVC	
4	MHD	3.64	-0.19	-0.02	EAST	12	PVC	
				-0.02	SOUTH	18	PVC	
				-0.06	WEST	12	METAL	
5	MHD	3.36	-3.51	-0.50	NORTH	12	N.V.V.	
				-0.30	WEST	12	N.V.V.	
				-3.19	SOUTH	14	N.V.V.	
				-3.29	EAST	12	N.V.V.	
6	MHD	3.55	-0.64	0.42	SOUTH	12	METAL	
				0.17	NORTH	12	METAL	
				-0.50	EAST	6	METAL	
7	MHD	3.57	0.28	0.28	SOUTH	12	METAL	
				0.28	NORTH	12	METAL	
				1.13	EAST	12	CONC	
				1.13	WEST	12	CONC	
8	MHS	3.40		-0.60	WEST	6	METAL	
				-0.62	EAST	6	METAL	
9	MHD	3.56	0.00	0.05	NORTH	12	CONC	
				0.15	SOUTH	12	CONC	
10	MH NO ID	3.16	-1.92	-1.15	NE	12	N.V.V.	
				-0.14	SOUTH	12	CONC	
				-0.14	WEST	12	METAL	
				-0.33	EAST	12	CONC	
				-0.44	WEST	12	PVC	
				-0.47	SOUTH	18	PVC	
12	CB	2.81	-0.45	-0.34	NORTH	18	PVC	
13	CB	3.12	-0.15	0.03	NORTH	18	PVC	

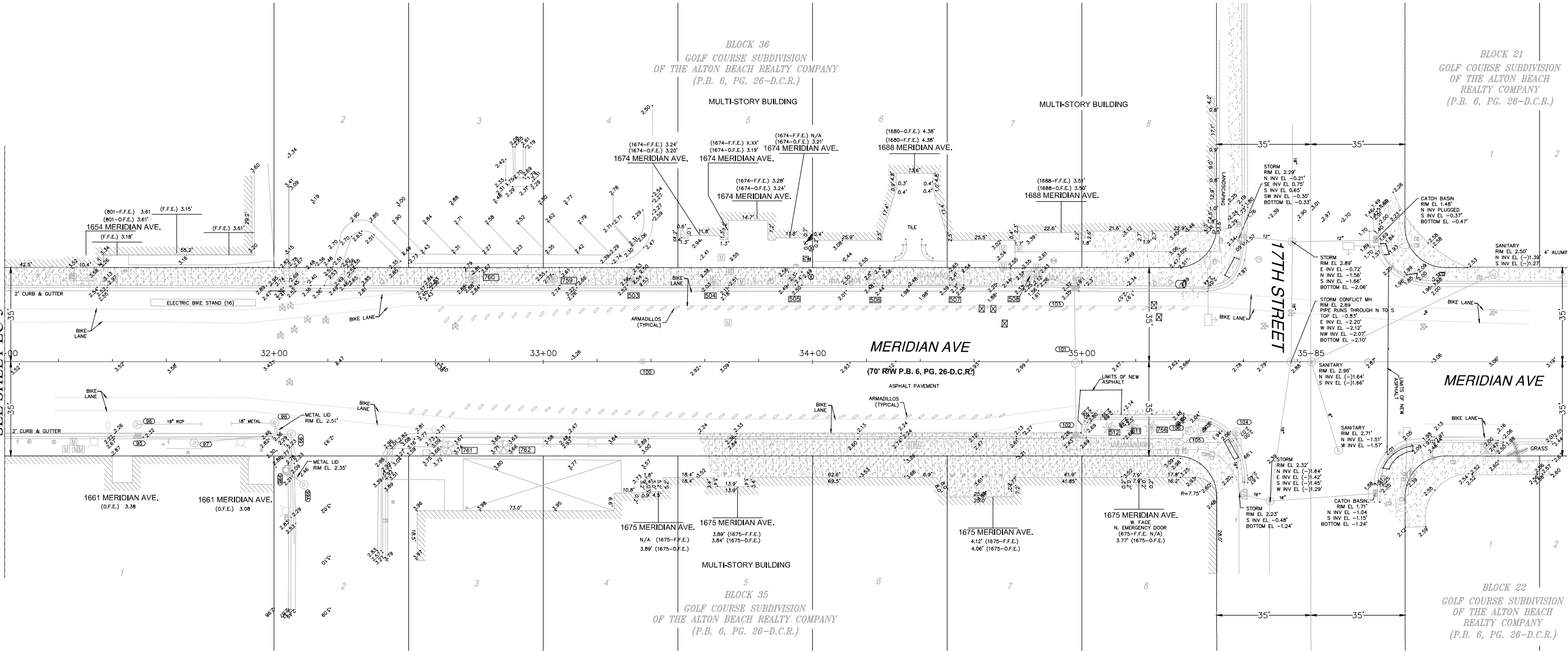
DRAINAGE AND SANITARY SEWER NOTES AND ABBREVIATIONS:
N.V.V. = NO VISUAL VERIFICATION POSSIBLE. UNABLE TO DETERMINE DRAINAGE INFORMATION IN PART OR IN FULL.

STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM EL. (feet)	NAVD88 BOTTOM (feet)	NAVD88 INV. EL. (feet)	DIRECTION	SIZE (inches)	MATERIAL	COMMENTS
1	CB	4.44	0.57	0.85	NE	12	METAL	
1a	MHD	5.30	0.10	-0.43	SOUTH	18	CONC	
				-0.50	WEST	18	CMP	
				0.06	SOUTHWEST	12	CONC	
2	MHD	4.34	-0.33	-0.05	WEST	18	METAL	
				-0.17	EAST	18	CONC	
				0.86	NORTH	12	METAL	
2a	MHD	5.42	-0.58	-0.55	NORTH	18	CONC	
				-0.48	EAST	18	CONC	
				-0.58	WEST	18	CONC	
2b	MHD	5.02	1.82	1.92	SOUTH	15	STEEL	
				1.94	SOUTHEAST	15	STEEL	
3	MHD	4.83	0.02	3.50	EAST	14	CONC	
				1.39	SOUTH	12	METAL	
				0.31	SOUTH	6	PVC	
4	MHD	3.64	-0.19	-0.02	EAST	12	PVC	
				-0.02	SOUTH	18	PVC	
				-0.06	WEST	12	METAL	
5	MHD	3.36	-3.51	-0.50	NORTH	12	N.V.V.	
				-0.30	WEST	12	N.V.V.	
				-3.19	SOUTH	14	N.V.V.	
				-3.29	EAST	12	N.V.V.	
6	MHD	3.55	-0.64	0.42	SOUTH	12	METAL	
				0.17	NORTH	12	METAL	
				-0.50	EAST	6	METAL	
7	MHD	3.57	0.28	0.28	SOUTH	12	METAL	
				0.28	NORTH	12	METAL	
				1.13	EAST	12	CONC	
				1.13	WEST	12	CONC	
8	MHS	3.40		-0.60	WEST	6	METAL	
				-0.62	EAST	6	METAL	
9	MHD	3.56	0.00	0.05	NORTH	12	CONC	
				0.15	SOUTH	12	CONC	
10	MH NO ID	3.16	-1.92	-1.15	NE	12	N.V.V.	
				-0.14	SOUTH	12	CONC	
				-0.14	WEST	12	METAL	
				-0.33	EAST	12	CONC	
				-0.44	WEST	12	PVC	
				-0.47	SOUTH	18	PVC	
12	CB	2.81	-0.45	-0.34	NORTH	18	PVC	
13	CB	3.12	-0.15	0.03	NORTH	18	PVC	

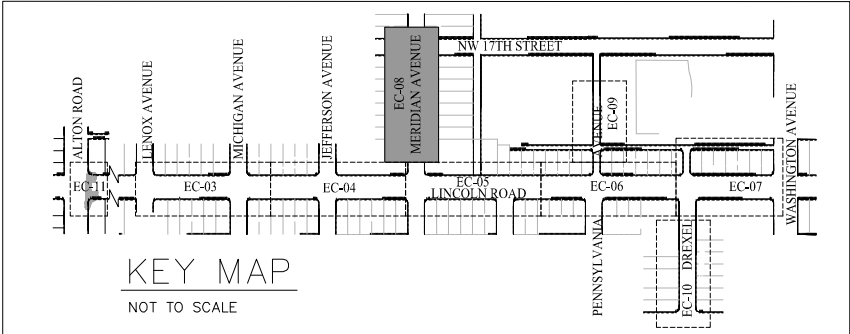
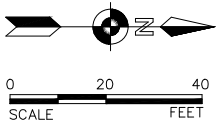


File Path: F:\SURVEY\PROJECTS\87000\87520 JAMES CORNER- LINCOLN ROAD IMPROVEMENTS\2. CAD\2. DWG

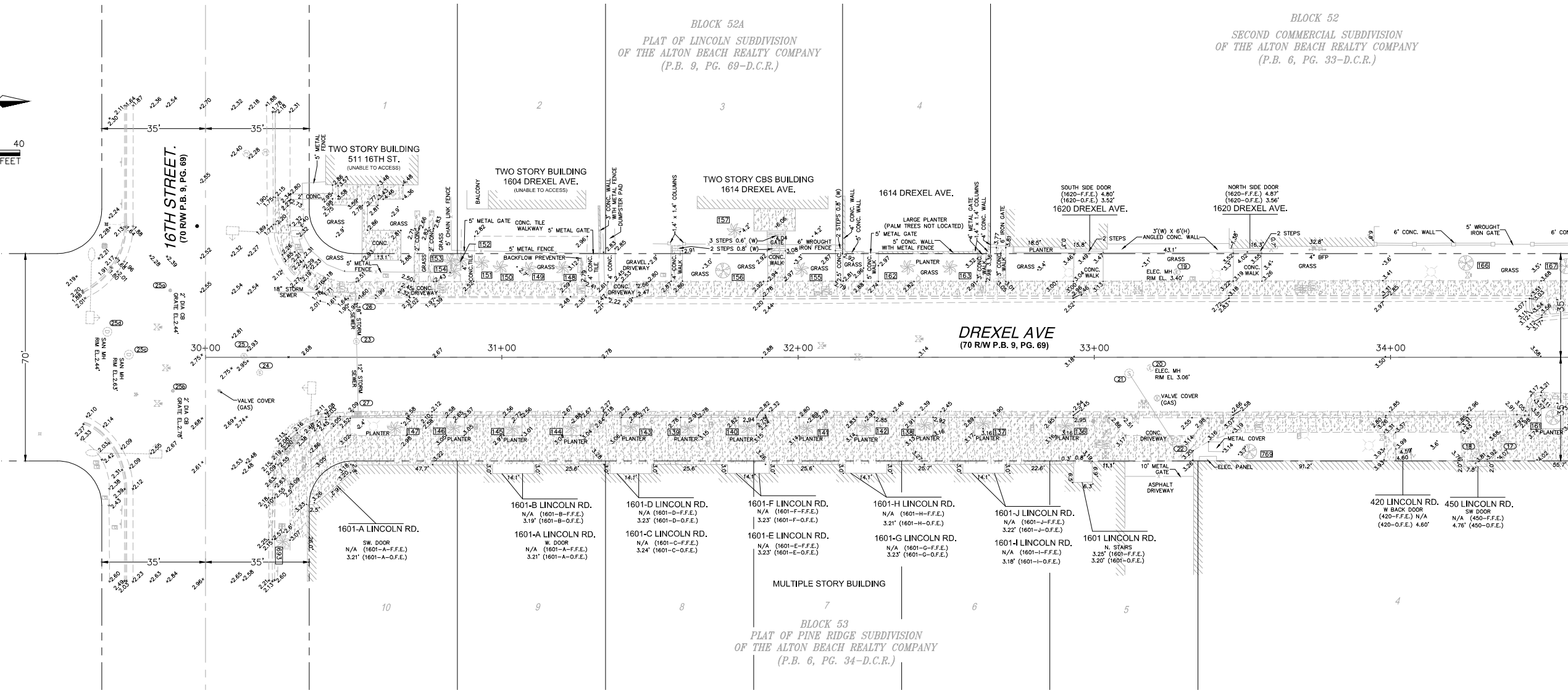
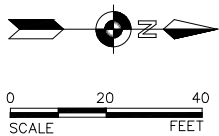
MATCHLINE MERIDIAN AVE. STA. 31+00
SEE SHEET EC-5



STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM EL. (feet)	NAVD88 BOTTOM (feet)	NAVD88 INV. EL. (feet)	DIRECTION	SIZE (inches)	MATERIAL	COMMENTS
96	MHD	2.58	0.44	0.44	NORTH	18	CONC	98 MHD 2.70 -0.12 0.82 NE
	18	CONC						
101	MHD	2.99	-1.98	0.37	SOUTH	18	CONC	
				-1.40	EAST	15	N.V.V.	FULL OF WATER, TOP OF
				-0.85	WEST	18	N.V.V.	CONFLICT PIPE EL. = -1.06'
102	CB	2.24	-2.16	-1.77	WEST	12	N.V.V.	FULL OF WATER
				-1.70	NORTH	12	N.V.V.	
103	CB	1.90	-1.77	0.35	SW	12	PVC	
				-0.40	EAST	12	N.V.V.	
104	MHD	2.21	-2.46	-0.80	EAST	12	CONC	FULL OF WATER
105	MHD	2.49	-4.51	-1.90	SOUTH	18	METAL	
106	MHD (WELL)	2.61	-0.16	-1.41	NORTH	18	METAL	FULL OF WATER & DEBRIS WELL, TOP OF VERTICAL PIPE ELEVATION = 0.31
97	MHS	2.90	0.20	-0.75	SW	8	PVC	FULL OF WATER & DEBRIS
N.V.V.	N	8	PVC					
99	MHS	2.59		0.39	SOUTH	8	PVC	
				0.40	EAST	8	CONC	
100	MHS	3.23		N.V.V.	N.V.V.	N.V.V.	N.V.V.	FULL OF WASTE
95	CB	2.25	-0.59					
99A	MHD	2.82	0.27	0.35	EAST	18	RCP	
				0.52	SW	12	PVC	
99B	MHD	2.84	0.54	0.59	NE	12	PVC	
				0.58	SOUTH	9	METAL	
				0.57	WEST	15	RCP	



DRAINAGE AND SANITARY SEWER NOTES AND ABBREVIATIONS:
N.V.V. = NO VISUAL VERIFICATION POSSIBLE. UNABLE TO DETERMINE DRAINAGE INFORMATION IN PART OR IN FULL.



MATCHLINE DREXEL AVE. STA. 34+60
SEE SHEET EC-7

STRUCTURE NUMBER	TYPE OF STRUCTURE	RIM EL. (feet)	NAVD88 BOTTOM (feet)	NAVD88 INV. EL.(feet)	DIRECTION	SIZE (inches)	MATERIAL	COMMENTS
(*) 18	MHD	3.65	-1.53	N.V.V.	N.V.V.	N.V.V.	N.V.V.	CLOGGED,CAN'T FIND
PIPES								
26	CB	2.48	-1.24	-0.56	EAST	18	METAL	
27	CB	2.03	-4.22	-0.03	SOUTH	18	PVC	
30	MHD	3.05	-1.80	-1.95	WEST	12	N.V.V.	
17	MHS	3.82	-0.27	-0.03	NORTH	24	N.V.V.	
				-1.50	SOUTH	N.V.V.	N.V.V.	
21	MHS	3.07	-0.78	0.06	EAST	6	N.V.V.	
				-0.36	SOUTH	6	N.V.V.	
22	MHS	3.13	-0.64	-0.81	SOUTH	12	METAL	
				-0.75	NE	12	CONC	
				-0.64	NORTH	8	METAL	
				-0.48	EAST	6	METAL	
23	MHS	2.63	-1.53	-0.68	SW	8	CONC	
				-0.64	EAST	N.V.V.	N.V.V.	STRUCTURE IS MADE OF
				-0.61	WEST	18	N.V.V.	BRICKS.
				1.34	NORTH-SOUTH	18	METAL	ELEV. TO TOP OF PIPE
24	MHS	2.82	-2.52	-2.30	NORTH	N.V.V.	N.V.V.	
25	MHS	2.97	-1.99	-2.15	SW	N.V.V.	N.V.V.	
				-2.33	EAST	N.V.V.	N.V.V.	
29	MHS	3.79	-2.66	-2.29	SOUTH	N.V.V.	N.V.V.	
				-2.50	WEST	24	PVC	
				-2.70	NE	24	PVC	

DRAINAGE AND SANITARY SEWER NOTES AND ABBREVIATIONS:
N.V.V. = NO VISUAL VERIFICATION POSSIBLE. UNABLE TO DETERMINE DRAINAGE INFORMATION IN PART OR IN FULL.

