Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

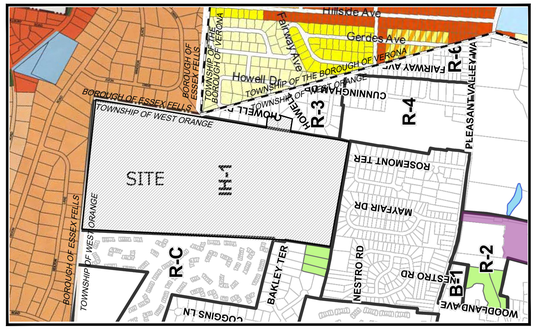
PRELIMINARY AND FINAL SITE PLAN

WEST ESSEX HIGHLANDS

BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TAX MAP # 130

TOWNSHIP OF WEST ORANGE

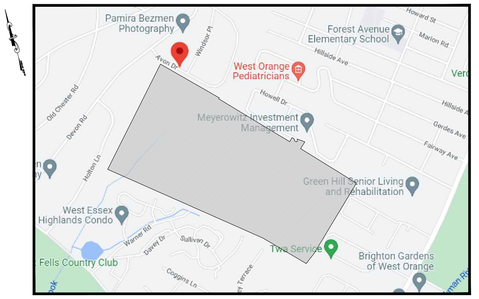
ESSEX COUNTY, NEW JERSEY



SOURCE:

ZONING MAP
N.T.S.

SOURCE:
TWP. OF WEST ORANGE ZONING MAP
BOROUGH OF ESSEX FELLS ZONING MAP
TWP. OF VERONA ZONING MAP

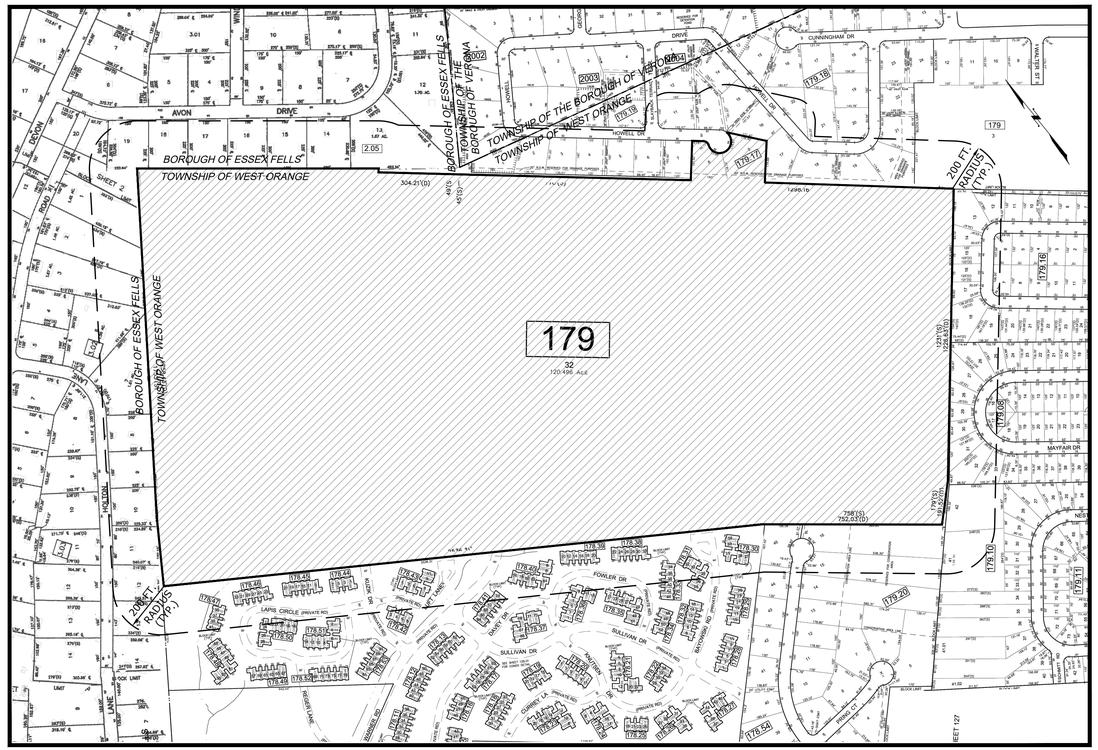


SOURCE: GOOGLE MAP

STREET MAP
N.T.S.

INDEX OF DRAWINGS

SHEET No.	SHEET TITLE
SP-1	COVER SHEET
SP-2	200' PROPERTY OWNERS LIST
SP-3	NOTES AND ZONING
SP-4	OVERRALL SITE PLAN
SP-5	SITE PLAN A
SP-6	SITE PLAN B
SP-7	SITE PLAN C
SP-8	SITE PLAN D
SP-9	SITE PLAN E
SP-10	SITE PLAN F
SP-11	OVERALL GRADING PLAN
SP-12	GRADING PLAN A
SP-13	GRADING PLAN B
SP-14	GRADING PLAN C
SP-15	GRADING PLAN D
SP-16	GRADING PLAN E
SP-17	GRADING PLAN F
SP-18	OVERALL UTILITY PLAN
SP-19	UTILITY PLAN A
SP-20	UTILITY PLAN B
SP-21	UTILITY PLAN C
SP-22	UTILITY PLAN D
SP-23	UTILITY PLAN E
SP-24	UTILITY PLAN F
SP-25	UTILITY DETAILS A
SP-26	UTILITY DETAILS B
SP-27	UTILITY DETAILS C
SP-28	UTILITY DETAILS D
SP-29	OVERALL LANDSCAPE PLAN
SP-30	LANDSCAPE PLAN A
SP-31	LANDSCAPE PLAN B + C
SP-32	LANDSCAPE PLAN D
SP-33	LANDSCAPE PLAN WARNER ROAD
SP-34	LANDSCAPE PLAN KUZIK ENTRANCE
SP-35	LIGHTING PLAN A
SP-36	LIGHTING PLAN B
SP-37	LIGHTING PLAN C
SP-38	LIGHTING PLAN D
SP-39	LIGHTING PLAN E
SP-40	LIGHTING PLAN F
SP-41	SOIL EROSION & SEDIMENT CONTROL PLAN A
SP-42	SOIL EROSION & SEDIMENT CONTROL PLAN B
SP-43	SOIL EROSION & SEDIMENT CONTROL DETAILS
SP-44	WARNER ROAD PLAN & PROFILE
SP-45	BUILDING A PLAN & PROFILE
SP-46	KUZIK ROAD PLAN & PROFILE A
SP-47	KUZIK ROAD PLAN & PROFILE B
SP-48	ROAD 'D' PLAN & PROFILE A
SP-49	ROAD 'D' PLAN & PROFILE B
SP-50	ROADWAY CROSS SECTIONS WARNER ROAD
SP-51	ROADWAY CROSS SECTIONS KUZIK ROAD A
SP-52	ROADWAY CROSS SECTIONS KUZIK ROAD B
SP-53	ROADWAY CROSS SECTIONS ROAD 'D' A
SP-54	ROADWAY CROSS SECTIONS ROAD 'D' A
SP-55	BASIN CROSS SECTIONS A
SP-56	BASIN CROSS SECTIONS B
SP-57	BASIN DISCHARGE PROFILES
SP-58	BOARDWALK PROFILE
SP-59	CONSTRUCTION DETAILS A
SP-60	CONSTRUCTION DETAILS B



SOURCE:
TAX MAP # 128,129,130,131,132,133 – TWP. OF WEST ORANGE
TAX MAP # 2,3,4 – BOROUGH OF ESSEX FELLS
TAX MAP #20 – TWP. OF VERONA

TAX MAP
SCALE: 1"= 300'

OWNER

WEST ESSEX HIGHLANDS, INC.
820 MORRIS TURNPIKE
SHORT HILLS, NJ 07078
973-467-5000

APPLICANT

WEST ESSEX HIGHLANDS, INC.
820 MORRIS TURNPIKE
SHORT HILLS, NJ 07078
973-467-5000

PLANNING BOARD APPROVALS

PLANNING BOARD CHAIRMAN — DATE

PLANNING BOARD SECRETARY — DATE

TOWNSHIP ENGINEER — DATE

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS RAISED SEAL OF P.E.
DocuSigned by: Paul Anderson 3029E8668C924BD...

10/28/24	N/DEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N.JDEP RESUBMISSION	
06/24/24	REVSE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/02/23	PER NJDEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

COVER SHEET

SP-1

SHEET 1 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

THE FOLLOWING CERTIFIED LISTS OF PROPERTY OWNERS WITHIN 200 FEET OF THE SUBJECT PROPERTY MUST BE NOTIFIED PRIOR TO BEGINNING ANY CONSTRUCTION ON THE PREMISES

Parcel Limits (4)

Municipality	Block	Lot	Qualifier	Location	Owner	Owner Street	Owner CityState	Owner Zip
Verona Township	2002	6		46 HOWELL DRIVE	ROSS, CHRISTOPHER & ROSS LOREN	46 HOWELL DRIVE	VERONA,NJ	07044
Verona Township	2002	7		48 HOWELL DRIVE	GARDEN HOMES REALTY CORP.	820 MORRIS TURNPIKE	SHORT HILLS, NEW JERSEY	07078
Verona Township	2002	8		ASSESSED IN WEST ORANGE	UNKNOWN	HOWELL DRIVE	WEST ORANGE, NEW JERSEY	07052
Verona Township	2002	9		ASSESSED IN WEST ORANGE	FEITSOV, VIACHESLAV & LADLENA	65 AVON DRIVE	ESSEX FELLS, NEW JERSEY	07021

BLOCK	LOT	QUALIFIER	PROPERTY_LOCATION	PROPERTY_PROPERTY_CLASS	OWNER_OWNER	OWNER_ADDRESS	OWNER_CITYSTATE	OWNER_ZIP
179	1		EAGLE ROCK AVENUE	15C	TOWNSHIP OF WEST ORANGE	66 MAIN STREET	WEST ORANGE,NJ	07052
176	1.01		750 EAGLE ROCK AVENUE	4A	CHESTNUT COUNTRY CLUB	750 EAGLE ROCK AVENUE	WEST ORANGE,NEW JERSEY	07052
177.01	20		EAGLE ROCK AVENUE	4A	STEIN FELLS CO.%PRV CLUB	235 DEVON ROAD	ROSELAND,NJ	07068
177.08	1		753 EAGLE ROCK AVENUE		MEJIA, TELESFORO & DAMAILLA	15 COOLIDGE AVE	WEST ORANGE,NJ	07052
177.09	3		21 WAKEMAN STREET		EMERALDO, PETER & KIM	21 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	4		23 WAKEMAN STREET		JOSEPH,-PIERRE A+=RAGOS,BRIDETTE	23 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	5		27 WAKEMAN STREET		CHAMBERS, STEVEN	27 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	6		29 WAKEMAN STREET		CHAMBERS, STEVEN	29 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	7		33 WAKEMAN STREET		PATTISON, SAMUEL & CAROLE A	33 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	8		35 WAKEMAN STREET		PATEL, GANSHI & MANSHRUTI	35 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	9		37 WAKEMAN STREET		CHOUDHARY, ASHOK & NISHAT	37 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	10		39 WAKEMAN STREET		ZONDLO, SUEETA BURGESS-A NISHAT	39 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	11		41 WAKEMAN STREET		ZONDLO, COLES & GISELLE	30 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	3		747 EAGLE ROCK AVENUE		CORCORAN, JOHN & & ERIN L	745 EAGLE ROCK AVENUE	WEST ORANGE,NJ	07052
177.09	4		741 EAGLE ROCK AVENUE		PORRISI, ROSE C	741 EAGLE ROCK AVE	WEST ORANGE,NJ	07052
177.09	5		739 EAGLE ROCK AVENUE		THOMPSON,-KENNETH A+=PADOVANO,KAYLIN	739 EAGLE ROCK AVENUE	WEST ORANGE,NJ	07052
177.09	14		18 WAKEMAN STREET		CHITWITE, ROLAINE & RANDOLPH	18 WAKEMAN STREET	WEST ORANGE,NJ	07052
177.09	36		36 WAKEMAN STREET		THONTIKUTRA, SUELERNEE & YOLANDA	34 WAKEMAN ST	WEST ORANGE,NJ	07052
177.09	37		31 WAKEMAN STREET		DESAI, RAMESH & BHARTI	36 WAKEMAN ST	WEST ORANGE,NJ	07052
177.09	38		33 WAKEMAN STREET		SINGHN, WYCARY & SJOY	38 WAKEMAN ST	WEST ORANGE,NJ	07052
177.14	60		757 EAGLE ROCK AVENUE	4A	PLASANTDALE CHATEAU & CORNER, INC.	757 EAGLE ROCK AVENUE	WEST ORANGE,NJ	07052
178.01	1.01		OVAL ROAD	15F3	WEST ESSEX HIGHLANDS	1 REGER LANE	WEST ORANGE,NJ	07052
178.01	1.01C0000		1 BOWGART DRIVE		MONTILLO, MARC D	1 BOWGART DR	WEST ORANGE,NJ	07052
178.01	1.01C0001		3 BOWGART DRIVE		MCDONNELL, KENNETH & EDITH	3 BOWGART DR	WEST ORANGE,NJ	07052
178.01	1.01C0002		5 BOWGART DRIVE		MCDONNELL, KENNETH & EDITH	5 BOWGART DR	WEST ORANGE,NJ	07052
178.01	1.01C0003		7 CADMUS COURT		STEVENS WEINBERG, CORMUND	2 CADMUS CT	WEST ORANGE,NJ	07052
178.01	1.01C0004		9 CADMUS COURT		DAWSON, RODNEY WILLIS & BARBARA	9603 WEHAWKEN AVE FLANE 85503	FT MYERS, FLORIDA	33931
178.01	1.01C0006		7 CADMUS COURT		KAMISBERG, ANDREAS	7 CADMUS CT	WEST ORANGE,NJ	07052
178.01	1.01C0007		5 CADMUS COURT		EDWENSON, ROBERT L & ESNATT L	5 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0008		11 CADMUS COURT		EBJAUSTEN, MARY A	11 CADMUS CT	WEST ORANGE,NJ	07052
178.01	1.01C0009		13 CADMUS COURT		EVILSINGER, LAURA B & RAJAN BEVRES	13 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0010		17 CADMUS COURT		EGRIEGEORG, BANDI	17 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0011		15 CADMUS COURT		SHAHAPUR, MAJID	15 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0012		21 CADMUS COURT		EPSCHLER, DAVID E. & JANET	21 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0013		23 CADMUS COURT		EBERGEN, CHRISTINE N	23 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0014		4 CADMUS COURT		EMARGELL, LEE J	4 CADMUS CT	WEST ORANGE,NJ	07052
178.01	1.01C0015		6 CADMUS COURT		EARLHAM, BETTY & MARSHA	6 CADMUS COURT	WEST ORANGE,NJ	07052
178.01	1.01C0016		1 DAVEY DRIVE		EMARTIN, ANNE & BARBARA	1 DAVEY DR	W ORANGE, N.J.	07052
178.01	1.01C0017		3 DAVEY DRIVE		EADAMSON, SAMUEL	3 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01C0018		5 DAVEY DRIVE		EKHANDLER, EDMUND & MICHELLE	5 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01C0019		7 DAVEY DRIVE		EMIZEN, LESLIE	1 BOWGART DR	WEST ORANGE,NJ	07052
178.01	1.01C0020		9 DAVEY DRIVE		EMCCLAIN, JAMES & WILKINS, JERRY	9 DAVEY DR	WEST ORANGE,NJ	07052
178.01	1.01C0021		11 DAVEY DRIVE		EMAUK, EMMA	11 BOWGART DR	WEST ORANGE,NJ	07052
178.01	1.01C0028		7 BOWGART DRIVE		EPRINCO'S, WILLIAM & ANNA	7 BOWGART DR.	WEST ORANGE, NJ	07052
178.01	1.01C0029		9 BOWGART DRIVE		EHOLLANDER, LINDA	9 BOWGART DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0000		11 BOWGART DRIVE		EUERMAN, DIANE	11 BOWGART DR	WEST ORANGE, NJ	07052
178.01	1.01D0001		15 DAVEY DRIVE		EDOUSTEN, LARRY & DEBORAH	15 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0002		16 DAVEY DRIVE		EMM, HSCUNG-TAE& SUH, WONSOO	16 DAVEY DR JEF	WEST ORANGE NJ	07052
178.01	1.01D0003		14 DAVEY DRIVE		EMARIN, RICARDO & MARIBEL	14 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0049		30 DAVEY DRIVE		ECHELANDER, MARK T & TANYA V	65 ANDREW DR	MANAHAWKIN, NJ	08050
178.01	1.01D0050		32 DAVEY DRIVE		TREVES, TEUMAN A & TAITEL, MIRIAM D	12 DAWEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0051		34 DAVEY DRIVE		EJ 14 DAVEY DRIVE CO.	14 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0052		36 DAVEY DRIVE		EPEDANTIS, KAREN M	16 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0053		38 DAVEY DRIVE		EPONDOR, ALLAN	18 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0054		40 DAVEY DRIVE		ETUNNELL, RUTH A	20 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0055		42 DAVEY DRIVE		EDAVIS, DONNA & STEVEN	22 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0056		24 DAVEY DRIVE		EBELL, SUSAN	24 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0057		26 DAVEY DRIVE		EWITMER, PETER C	26 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0058		28 DAVEY DRIVE		EMRIGIN, MARGARET	28 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0059		30 DAVEY DRIVE		EMAHRE, ALUNA + CAROL	30 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0060		32 DAVEY DRIVE		EBARBRA, LAVEN	32 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0061		34 DAVEY DRIVE		EHORJCRA, STEPHEN	34 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0062		36 DAVEY DRIVE		EJASTBOL, LISA P	36 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0063		38 DAVEY DRIVE		EELSBRAUN, JANET & DEEVAL	38 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0064		40 DAVEY DRIVE		EHAAS, PAUL & VEERA	40 DAVEY DRIVE	WEST ORANGE, NEW JERSEY	07052
178.01	1.01D0065		42 DAVEY DRIVE		EHOUSTON, TAMARA & DENNIS	42 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0066		44 DAVEY DRIVE		EALBOUNI, ELLEN	44 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0067		46 DAVEY DRIVE		EBACHZIEGEL, DANIEL & STORCH, ADAM	46 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0068		59 DAVEY DRIVE		EGOLLSTEIN, ANTHONY R. & KAREN E.	52 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0069		57 DAVEY DRIVE		EMARTIN, JOHN	54 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0070		55 DAVEY DRIVE		EGALANT, KIRTH & ANNA	54 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0071		56 DAVEY DRIVE		EMILLER,BRUCE & JENNIFER	56 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0072		58 DAVEY DRIVE		ECHAKRAVARUR, CHARLES	58 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D0078		60 DAVEY DRIVE		EJIRI, NORMAN JEE YING'LS	60 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D0079		62 DAVEY DRIVE		EWEISY, ANDREW	550 LEONARDO LANE	MANHATTAN BEA	90743
178.01	1.01D0099		68 DAVEY DRIVE		ECAVILLE, LEONARD MARK & JACQUELINE	68 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D1500		70 DAVEY DRIVE		EWELLS, SCOTT & ROBYLENE	70 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D1625		72 DAVEY DRIVE		ECHASSO, DENNIS A	72 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D1750		74 DAVEY DRIVE		EPEREL, AUDREY	74 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D1875		76 DAVEY DRIVE		EFORBES, SANDY	76 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D2000		78 DAVEY DRIVE		ECUMMEL,ANDREA &	78 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D2125		80 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D2250		82 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D2375		84 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D2500		86 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D2625		88 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D2750		90 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D2875		92 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D3000		94 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D3125		96 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D3250		98 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D3375		100 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D3500		102 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D3625		104 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D3750		106 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D3875		108 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D4000		110 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D4125		112 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D4250		114 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D4375		116 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D4500		118 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D4625		120 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D4750		122 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D4875		124 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D5000		126 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D5125		128 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D5250		130 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D5375		132 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D5500		134 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D5625		136 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D5750		138 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D5875		140 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D6000		142 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D6125		144 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D6250		146 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D6375		148 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D6500		150 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D6625		152 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D6750		154 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D6875		156 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D7000		158 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D7125		160 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D7250		162 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D7375		164 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D7500		166 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D7625		168 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D7750		170 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D7875		172 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D8000		174 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D8125		176 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D8250		178 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D8375		180 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D8500		182 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D8625		184 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D8750		186 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D8875		188 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D9000		190 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D9125		192 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D9250		194 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D9375		196 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D9500		198 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D9625		200 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D9750		202 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D9875		204 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D10000		206 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D10125		208 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D10250		210 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D10375		212 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D10500		214 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D10625		216 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D10750		218 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D10875		220 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D11000		222 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D11125		224 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D11250		226 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D11375		228 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D11500		230 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D11625		232 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D11750		234 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D11875		236 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D12000		238 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D12125		240 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D12250		242 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D12375		244 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D12500		246 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D12625		248 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D12750		250 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D12875		252 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D13000		254 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D13125		256 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D13250		258 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D13375		260 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D13500		262 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D13625		264 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D13750		266 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D13875		268 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D14000		270 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D14125		272 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D14250		274 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D14375		276 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D14500		278 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D14625		280 DAVEY DRIVE		EJURIO, LIAN & TAVAREZ, ADELADA	80 DAVEY DRIVE	WEST ORANGE, NJ	07052
178.01	1.01D14750		282 DAVEY DRIVE		EPATTERSON, TRENINA V	82 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D14875		284 DAVEY DRIVE		EHECK, WYENNEN L & BITTY A	84 DAVEY DR	WEST ORANGE, NJ	07052
178.01	1.01D15000		286 DAVEY DRIVE		EHARRADA, ANDREA & RECUL CHARLES R	86 DAVEY DRIVE	WEST ORANGE, NJ	07052
178

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

GENERAL NOTES

1. THE PROPOSED STREETS ON SITE; WARNER ROAD, KUZIK DRIVE, AND ROAD 'D' SHALL BE PRIVATE STREETS.
2. ALL WORK SHALL COMPLY WITH ALL APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL CODES AND STANDARDS. WHERE DISCREPANCIES OCCUR BETWEEN CODES, THE MORE STRINGENT SHALL APPLY.
3. TOPOGRAPHIC AND BOUNDARY INFORMATION BASED ON REFERENCED SURVEY. ADDITIONAL INFORMATION BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. ALL EXISTING FEATURES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO PROJECT ENGINEER PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. PROTECTION OF EXISTING TREES, WALLS, BUILDING FACILITIES, UTILITIES AND OTHER SITE IMPROVEMENTS TO REMAIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY DAMAGE DONE TO ENTITIES TO REMAIN SHALL BE REPORTED TO THE PROJECT ENGINEER AND OWNER AND REPLACED AT CONTRACTORS EXPENSE.
6. CONTRACTOR TO PROVIDE TEMPORARY SIDEWALK FACILITIES WHEN NECESSARY DURING CONSTRUCTION. TEMPORARY SIDEWALKS TO COMPLY WITH LOCAL, COUNTY, STATE AND FEDERAL REGULATIONS.
7. CONTRACTOR TO COORDINATE DELIVERY OF MATERIALS WITH THE TOWNSHIP OF WEST ORANGE POLICE DEPARTMENT.
8. ALL AREAS DISTURBED FOR CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO SITE ACCESS, MATERIAL STOCKPILE, CONSTRUCTION TRAILERS ETC. SHALL BE RESTORED TO A SAFE AND SERVICEABLE CONDITION TO THE SATISFACTION OF THE OWNER UPON PROJECT COMPLETION.
9. REFER TO ARCHITECTURAL PLANS FOR BUILDING DESIGN INFORMATION.
10. THE FOLLOWING STANDARD CODES AND SPECIFICATIONS SHALL BE CONSIDERED PART OF THESE DRAWINGS WHERE SUCH SPECIFICATIONS ARE APPLICABLE AND SHALL INCLUDE ALL CURRENT CHANGES AND REVISIONS:
    - –NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
    - –TOWNSHIP OF WEST ORANGE STANDARDS
    - –ESSEX COUNTY DEPARTMENT OF ENGINEERING STANDARDS
    - –STATE OF NEW JERSEY UNIFORM CONSTRUCTION CODE
    - –HUDSON–ESSEX–PASSAIC SOIL EROSION AND SEDIMENT CONTROL STANDARDS
    - –AMERICANS WITH DISABILITIES ACT (ADA)
    - –UNITED STATES ACCESS BOARD PUBLIC RIGHT–OF–WAY ACCESS GUIDELINES (PROWAG)

LAYOUT AND MATERIAL NOTES

1. ALL PRODUCTS AND MATERIALS TO COMPLY WITH DESIGNATED DESIGN STANDARDS. NO SUBSTITUTION OR DEVIATION FROM SPECIFIED PRODUCTS OR MATERIALS ALLOWED WITHOUT PRIOR APPROVAL FROM THE DESIGN ENGINEER, ARCHITECT AND OWNER. ANY NON–APPROVED PRODUCTS OR MATERIALS INSTALLED WITHOUT PRIOR APPROVAL SHALL BE REMOVED AND REPLACED AT CONTRACTORS EXPENSE.
2. THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND ACTUAL CONDITIONS AT THE SITE SHALL BE REPORTED TO THE PROJECT ENGINEER IMMEDIATELY.
3. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK.
4. LAYOUT ALL NEW WORK PRIOR TO CONSTRUCTION FOR PROJECT ENGINEER'S APPROVAL. ANY WORK INSTALLED BY THE CONTRACTOR IN LOCATIONS NOT APPROVED BY THE PROJECT ENGINEER SHALL BE REMOVED BY THE CONTRACTOR AND REPLACED AS PER THE PROJECT ENGINEER'S INSTRUCTIONS AT NO COST TO THE OWNER.
5. ALL LAYOUT WORK SHALL BE DONE BY A LAND SURVEYOR LICENSED IN THE STATE OF NEW JERSEY.
6. PROTECTION OF EXISTING UTILITIES AND OTHER SITE IMPROVEMENTS TO REMAIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ANY FACILITIES THAT ARE TO REMAIN THAT ARE DAMAGED DURING THE COURSE OF THE WORK SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AND PROJECT ENGINEER.
7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL SITE IMPROVEMENTS AND MATERIALS FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION.
8. THE CONTRACTOR SHALL COORDINATE HOURS AND LOCATIONS OF WORK WITH THE OWNER AND ENGINEER. ACCESS TO ALL BUILDINGS MUST BE MAINTAINED DURING OPEN HOURS. PROVIDE TEMPORARY WALKWAYS AS REQUIRED.
9. ALL WALKWAYS AND CURB RAMPS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE AMERICAN ACCESS BOARD PUBLIC RIGHT–OF–WAY GUIDELINES (PROWAG).
10. CONTRACTOR TO COORDINATE ANY WORK OR DELIVERIES WITHIN ROADWAY RIGHT–OF–WAY WITH WEST ORANGE POLICE DEPARTMENT AS NECESSARY.
11. ALL CURB RAMPS, RAMPS AND ACCESS ROUTES SHALL COMPLY WITH ALL ADA REQUIREMENTS. ANY RAMP EXCEEDING 6" RISE SHALL HAVE HANDRAILS.
12. ALL STOP SIGNS ON SITE SHALL BE STANDARD MUTCD SPECIFICATION 30"X30".
13. ALL CURBING SHALL BE BELGIAN BLOCK UNLESS NOTED

PAVEMENT MARKINGS:

STRIPING, PAVEMENT MARKINGS, AND TRAFFIC CONTROL SIGNS SHALL BE THERMOPLASTIC PAINT IN ACCORDANCE WITH THE CURRENT EDITION OF THE MUTCD AND N.J.D.O.T. ROAD AND BRIDGE SPECIFICATIONS.

ACCESS DRIVES	– DOUBLE YELLOW 4" CENTER OF 2–WAY ALL ACCESS DRIVES
PARKING STRIPING	– WHITE 4" WIDE AT ANGLE AND DIMENSIONS SHOWN – SPACES TO BE 18" HAIRPIN DESIGN
ACCESSIBLE PARKING	– BLUE 4" WIDE, STALLS AS SHOWN, OTHER STRIPPING 4" WIDE @ 2'–0" O.C. @ 45° (AS SHOWN).
STOP LINES	– WHITE 24" WIDE EXTENDING ACROSS APPROACH LANE.
FIRE/NO PARKING	– YELLOW 4" WIDE @ 5'–0" O.C. @ 45° TO CURBLINE.

FIRE LANE MARKINGS AND SIGNAGE SHALL BE AS PER WEST ORANGE FIRE DEPARTMENT STANDARDS AND AS DIRECTED BY FIRE MARSHALL

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

GRADING NOTES:

1. THE CONTRACTOR SHALL BLEND ALL NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDING AT ALL TOP AND BOTTOM OF SLOPES.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING GRADES IN THE FIELD PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER.
3. ALL AREAS ADJACENT TO BUILDING LINES SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDING TO PREVENT PONDING. ALL FINISH GRADE SURFACES SHALL BE FREE FROM IRREGULAR GRADE CHANGES.
4. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING CUT AND FILL CALCULATIONS TO DETERMINE SITE REQUIREMENTS. FAILURE TO DO SO SHALL BE AT THE CONTRACTOR'S RISK AND COST.
5. ALL SUBGRADES TO BE CROWNED AND SLOPED TO PROVIDE DRAINAGE OF THE BASE COURSE TO GRANULAR BACKFILLED UTILITY TRENCHES AND UNDERDRAINS.
6. CONTRACTOR IS RESPONSIBLE FOR DEWATERING OF ALL EXCAVATION AREAS.
7. ALL TOPSOIL IS TO BE REMOVED FROM CONSTRUCTED AREAS.
8. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES IN AREA OF CONSTRUCTION. SHOULD A CONFLICT WITH EXISTING UTILITIES BE IDENTIFIED, CONTRACTOR SHALL NOTIFY PROJECT ENGINEER PRIOR TO PROCEEDING WITH WORK.
9. ALL SIDEWALKS TO BE MAXIMUM 2% CROSS SLOPE
10. SEE SOIL EROSION AND SEDIMENT CONTROL PLANS FOR STABILIZATION OF ALL EXPOSED SOIL AREAS.

UTILITY NOTES:

1. ANY UTILITIES SHOWN ON THESE PLANS NOT SHOWN ON THE ORIGINAL SIGNED SURVEY HAVE BEEN ADDED BY THE DESIGNER BASED ON FIELD OBSERVATIONS AND RECORD DRAWINGS. SUCH UTILITIES ARE NOT VERIFIED AND CONSIDERED TO BE APPROXIMATE. USE OF THESE ELEMENTS WITHOUT FIELD VERIFICATION IS DONE SO AT THE CONTRACTORS RISK.
2. CONTRACTOR SHALL VERIFY TYPE, LOCATION AND DEPTH OF ALL EXISTING UTILITIES INCLUDING ANY NOT SHOWN ON THESE PLANS AS WELL AS ANY PREVIOUSLY ABANDONED UTILITIES PRIOR TO CONSTRUCTION.
3. BUILDING SERVICE CONNECTIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT AND PROJECT MEP ENGINEER.
4. GAS SERVICE LINE WORK SHALL BE COORDINATED WITH GAS COMPANY. ALL WORK SHALL COMPLY WITH GAS COMPANY DETAILS AND SPECIFICATIONS.
5. WATER SERVICE WORK SHALL COMPLY WITH WATER COMPANY DETAILS AND SPECIFICATIONS FOR ALL LINES, VALVES, HYDRANTS ETC. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR ALL WATER SERVICE MATERIALS FOR APPROVAL BY WATER COMPANY AND PROJECT ENGINEER.
6. WORK WITHIN RIGHT–OF–WAYS SHALL COMPLY WITH TOWNSHIP OF WEST ORANGE STANDARDS
7. SANITARY CONNECTION TO BE COORDINATED WITH BUILDING PLUMBING DRAWINGS.
8. ROOF LEADER/STORM LINE CONNECTION SHALL BE COORDINATED WITH ARCHITECTURAL/PLUMBING PLANS.
9. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL INLETS, PIPES AND DRAINAGE SYSTEMS FOR APPROVAL.
10. TRAFFIC RATED MANHOLES OR CLEANOUT COVERS SHALL BE USED IN ALL PAVEMENT AREAS
11. ANY INLET CURB PIECES OR GRATES ON SITE THAT DO NOT CONFORM WITH BOROUGH DEP PERMIT ARE TO BE REMOVED AND REPLACED WITH NEW PIECES CONFORMING TO BOROUGH AND NJDEP STANDARDS.
12. PAVEMENT MILLINGS ARE NOT PERMITTED AS ACCEPTABLE TRENCH BACKFILL MATERIAL

TREE REPLACMENT CALCULATION

THE EXISTING TREE COUNT ON THE TRACT SHALL BE ESTABLISHED AT 212 TREES PER ACRE.

TREE BASELINE LOSS = ACRES DISTURBED X 212 TREES

27.85 ACRES X 212 = 5,904 TREES

TREE BASELINE LOSS SHALL BE REDUCED FOR EACH HEALTHY MAJOR TREE (GREATER THAN SIX INCHES) WITHIN THE PROPOSED AREA OF DISTURBANCE THAT IS NOT REMOVED IN CONNECTION WITH A PROPOSED DEVELOPMENT.

TREES NOT REMOVED = 0 TREES

TREE BASELINE LOSS SHALL BE REDUCED FOR EACH NONINVASIVE MAJOR TREE OR MINOR TREE (AS DEFINED IN THE TOWNSHIP OF WEST ORANGE CODE) PROPOSED AS PART OF A LANDSCAPE PLAN. THE TREE REPLACEMENT CALCULATION SHALL APPLY ONE CREDIT FOR EACH SUCH TREE WHICH IS A NATIVE SPECIES AND 1/4 CREDIT FOR EACH SUCH TREE WHICH IS NOT A NATIVE SPECIES.

PROPOSED NATIVE = 279 TREES X 1.0 = 279 CREDITS
PROPOSED NON–NATIVE = 0 TREES X 0.25 = 0 CREDITS

THE TREE BASELINE LOSS SHALL BE REDUCED BY 212 TREES FOR EACH ACRE OF FOREST OUTSIDE THE AREA OF DISTURBANCE ENCLOSED BY A CONTROLLED, GATED ACCESS DEER FENCE THAT IS EIGHT FEET IN HEIGHT, THE PURPOSE OF WHICH IS TO REGENERATE THE GROWTH OF THE NATIVE FOREST, AND WHICH DEER FENCING SHALL BE MAINTAINED IN PERPETUITY.

ACRES OF FENCING = 33.6 ACRES X 212 = 7,123 CREDIT

ADJUSTED BASELINE TREE LOSS

TREE LOSS	5,904 TREES
TREE SAVED	0 TREES
PROPOSED TREE CREDIT	279 CREDIT
DEER FENCE CREDIT	7,123 TREES
REQUIRED REPLACEMENT	+1,498 OVER REQUIREMENT

ZONING SCHEDULE

PROPERTY INFO	ZONE: IH–1 (INCLUSIONARY HOUSING DISTRICT) BLOCK 179, LOT 32 TAX MAP #130			
ADDRESS	–			
	REQUIRED/ PERMITTED	**EXISTING CONDITIONS**	**PROPOSED**	**STATUS**
PERMITTED USE(§25-19.d)	MULTIFAMILY RESIDENTIAL OPEN SPACE	VACANT	MULTIFAMILY RESIDENTIAL	CONFORMS
LOT REQUIREMENTS				
MIN. LOT AREA	NO REQUIREMENT	5,245,870 SF/120.429 AC	NO CHANGE	CONFORMS
MAX. DISTURBANCE	30 ACRES	N/A	27.77 Acres	CONFORMS
BUFFER	100 FT	N/A		
BUILDING REQUIREMENTS (§3-5\D SCHEDULE "D")				
TOTAL UNITS	496	N/A	496	CONFORMS
AFFORDABLE UNITS	20% TOTAL UNITS	99.2	100	CONFORMS
MAX. STORIES	4 STY	N/A	4 STY	CONFORMS
MAX HEIGHT	75 FT	N/A	47.5 FT (BLDG D)	CONFORMS
PARKING AND LOADING REQUIREMENTS				
QUANTITY	966 SPACES	N/A	1,070	CONFORMS
SPACE SIZE	–	N/A	9' X 18'	–
SIGN REQUIRMENTS ()				
DEVELOPMENT SIGN	10'X8'			
IDENTIFICATION SIGN				
BUILDING SIGN				

1. VARIANCE REQUIRED FOR THE PERCENTAGE OF FOUNDATION EXPOSURE.

BUILDING TYPE 1		4 STORIES RESIDENTIAL				
		1 STORY PARKING UNDER				
BUILDING A.1	Bedrooms	#	RSIS	REQ.		
	1	16	1.8	31.2		
	2	30	2.0	61		
	3	17	2.1	35.7		
	TOTAL	63		124.3		
BUILDING A.2	Bedrooms	#	RSIS	REQ.		
	1	12	1.8	23.0		
	2	27	2.0	55	UNDER BUILDING PARKING	175
	3	20	2.1	42.0	SURFACE LOT PARKING	87
	TOTAL	59		120.0		262
BUILDING TYPE 2		4 STORIES RESIDENTIAL				
		1 STORY PARKING UNDER				
BUILDING B	Bedrooms	#	RSIS	REQ.		
	1	27	1.8	51.2	PARKING PROVIDED	
	2	22	2	44.6	UNDER BUILDING PARKING	73
	3	19	2.1	39.9	SURFACE LOT PARKING	63
	TOTAL	68		135.7		136

BUILDING TYPE 3		4 STORIES RESIDENTIAL				
150 UNITS		1 STORY PARKING UNDER				
BUILDING C	Bedrooms	#	RSIS	REQ.		
	1	59	1.8	111.4	PARKING PROVIDED	
	2	56	2	116.1	UNDER BUILDING PARKING	205
	3	24	2.1	50.4	SURFACE LOT PARKING	81
	TOTAL	139		277.9		286
BUILDING TYPE 4		4 STORIES RESIDENTIAL				
		1 STORY PARKING UNDER				
BUILDING D.1	Bedrooms	#	RSIS	REQ.		
	1	35	1.8	67.2	PARKING PROVIDED	
	2	31	2	64.4	UNDER BUILDING PARKING	172
	3	14	2.1	29.4	SURFACE LOT PARKING	34
	TOTAL	80		161.0		206
BUILDING D.2	Bedrooms	#	RSIS	REQ.		
	1	32	1.8	62.0	PARKING PROVIDED	
	2	43	2	88.8	UNDER BUILDING PARKING	171
	3	11	2.1	23.1	SURFACE LOT PARKING	34
	TOTAL	86		173.9		205

OVERALL DEVELOPEMENT SUMMARY							
APARTMENT BUILDING DATA				APARTMENT PARKING PROVIDED			
BUILDING	BUILDING TYPE	UNITS	PARKING REQ.	UNDER BLDG.	SURFACE PARKING	TOTAL PER BLDG.	TOTAL
A.1	1	63	124.3	87	45	132	262
A.1	1	59	120.0	88	42	130	
B	2	69	135.7	73	63	136	136
C	3	139	277.9	205	81	286	286
D.1	4	80	161.0	172	34	206	411
D.2	4	86	173.9	171	34	205	
TOTALS		496	992.8	796	324	1,103	1,103

NOTE:
1. BEDROOM DISTRIBUTION SHOWN IS FOR CALCULATION OF PARKING REQUIREMENT ONLY. ACTUAL BEDROOM DISTRIBUTION MAY VARY EXCEPT FOR COAH UNITS WHICH WILL FOLLOW THE SETTLEMENT AGREEMENT.
2. EV PARKING SPACES WILL BE PROVIDED FOR 5 % OF THE TOTAL PARKING ON SITE.
3. MODEL UNITS AND SUPERINTENDENTS UNITS WILL NOT COUNT TOWARDS THE UNIT COUNT
4. CLUBHOUSE PARKING IS INCLUDED IN UNIT COUNT AS CLUBHOUSE IS FOR RESIDENTS OF THE DEVELOPMENT ONLY.
5. IN ADDITION TO THE REQUIRED PARKING FOR THE BUILDINGS, THE PROJECT HAS 55 PARKING SPACES IN THE CLUBHOUSE PARKING LOT, 40 SPACES AVAILABLE FOR OVERFLOW PARKING AT THE CLUBHOUSE IN BUILDING C LOWER LEVEL PARKING GARAGE, AND 18 PARKING SPACES FOR THE DOG PARK AND MAINTENANCE BUILDINGS. SEE NOTE 4 ABOVE.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS ORIGINAL SEAL OF P.E.
DocuSigned by: Paul Anderson
SIGNATURE/DATE/GMT

Rev.	Date	Description
1	10/26/24	NJDEP RESUBMISSION
2	10/01/24	PER NJDEP COMMENTS
3	07/09/24	NJDEP RESUBMISSION
4	06/24/24	REVISE FOR NJDEP SUBMISSION
5	04/29/24	REVISED GRADING & DRAINAGE
6	10/26/23	PER NJDEP COMMENTS
7	10/23/23	PER NJDEP COMMENTS
8	10/03/23	PER NJDEP COMMENTS
9	9/07/23	PER NJDEP COMMENTS
10	7/11/23	PER NJDEP WETLANDS COMMENTS
11	7/07/23	PER NJDEP COMMENTS
	REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
Tel: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022	
Date	9–23–22	
Drawn by	BCA	
Designed by	PWA	
Checked by	PWA	
Scale	AS SHOWN	

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

NOTES AND ZONING

SP-3

SHEET 3 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

DEER FENCE
684,410 SF
(15.7 Acres)

LOT 32
BLOCK 179
(TM)
5,245,870 S.F.
120.429 Acres

PROPOSED
BOARD WALK

DEER FENCE
780,663 SF
(17.9 Acres)

VACANT

BLDG A.1
BLDG A.2
BLDG B
BLDG C
BLDG D.1
BLDG D.2
CLUBHOUSE

HOWELL DRIVE
ROSEMONT TERRACE
MAYFAIR DRIVE
HOLTON LANE
WARNER ROAD
LUFT LANE
LAPIS CIRCLE
FOWLER DRIVE
BAYOWSKI ROAD
IBARKELY TERRACE

BOROUGH OF ESSEX FELLS
TOWNSHIP OF WEST ORANGE
BLOCK LIMIT

BLOCK 179,17
BLOCK 179
BLOCK 179.1
BLOCK 179.07
BLOCK 179.10
BLOCK 179.20
BLOCK 178
BLOCK 178.54
BLOCK 4C
BLOCK 6

S 53°34'53" E 1012.66'
S 52°08'52" E 340.81'
S 52°17'46" E 774.11'
S 51°41'21" E 1297.86'
S 39°09'13" W 15.00'
N 53°01'05" W 752.03'
N 59°32'47" W 2535.46'
N 33°11'56" E 1481.42'
S 37°34'26" W 1225.27'
S 45°37'34" W 89.82'

988.3'
658.3'
300.8'
217.9'
471.8'
106.3'
723.6'
534.3'

25' WIDE UTILITY EASEMENT
10.55' OVERLAP AS MONUMENTED
GAP BETWEEN SUBDIVISIONS
5.14' OVERLAP AS MONUMENTED

GRAPHIC SCALE
120 0 60 120 240 480
(IN FEET)
1 inch = 120 ft.

UNDISTURBED / PRESERVED:	4,034,100.3 SF 92.61 Acres
DISTURBED:	1,211,769.7 SF 27.82 Acres
TOTAL IMPERVIOUS:	595,540.7 SF 13.68 Acres
MOTOR VEHICLE SURFACE AREA:	273,689.0 SF 6.28 Acres

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3025E8666C924AD...
SIGNATURE INVALID UNLESS PROTECTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
5/05/23	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHER ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

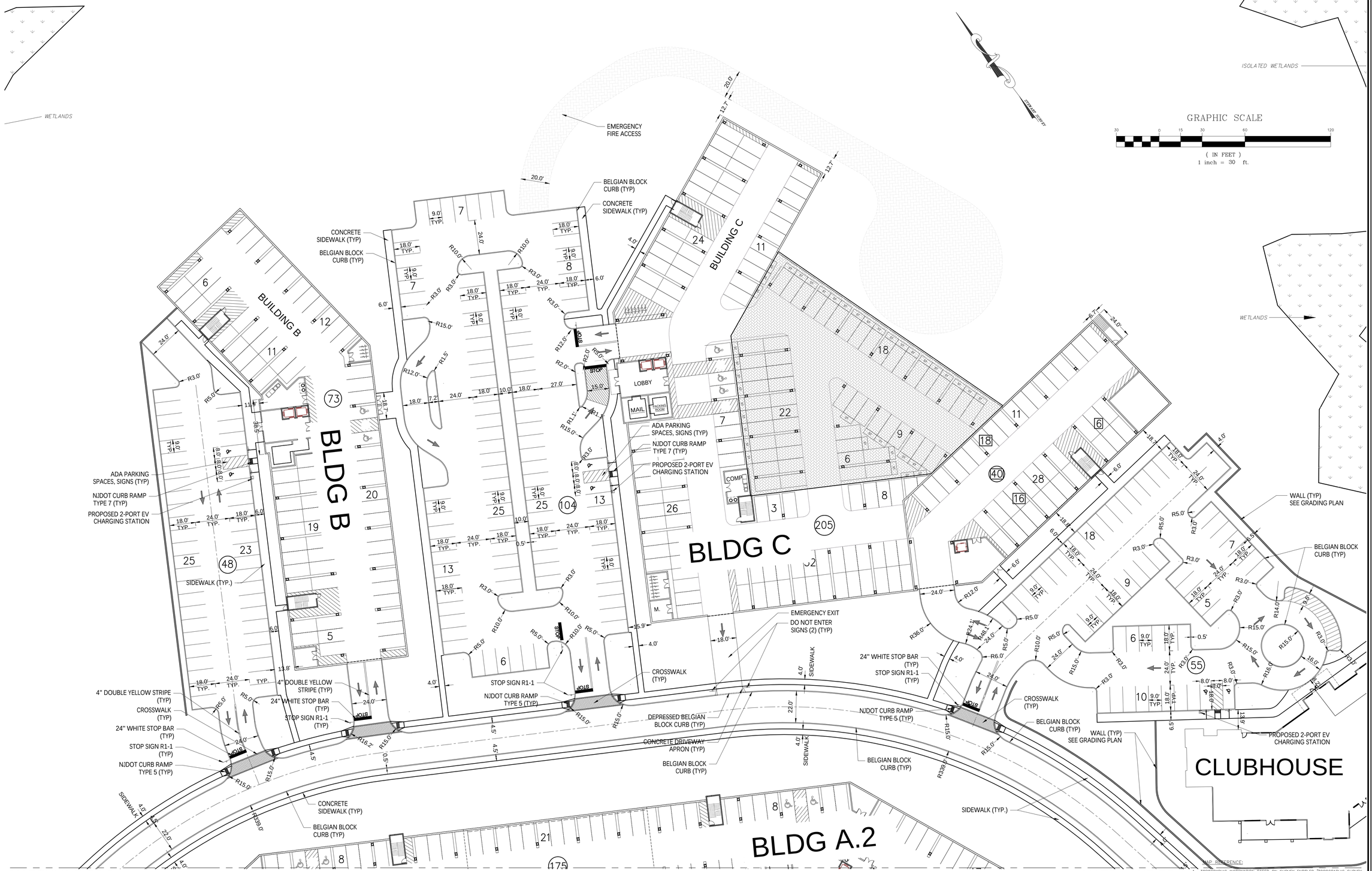
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

OVERALL SITE PLAN

SP-4

SHEET 4 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06



811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24410
DocuSigned by: Paul Anderson 3029E8668C9248D...
SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/05/23	PER NJDEP COMMENTS	
REVISIONS		

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES, LLC SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN. THEY ARE NOT TO BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WLM'2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA	Checked by	PWA
		Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SITE PLAN A

SP-5

SHEET 5 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

MATCHLINE SP-5

MATCHLINE SP-5

BLDG A.1

BLDG A.2

MATCHLINE SP-8

MATCHLINE SP-8

MAINTENANCE BLDG

KENNEL BLDG

DOG PARK

MATCHLINE SP-7

MATCHLINE SP-7

4" DOUBLE YELLOW STRIPE (TYP)
CROSSWALK (TYP)
24" WHITE STOP BAR (TYP)
STOP SIGN R1-1 (TYP)
NJDOT CURB RAMP TYPE 5 (TYP)
4" DOUBLE YELLOW STRIPE (TYP)
24" WHITE STOP BAR (TYP)
STOP SIGN R1-1 (TYP)
STOP SIGN R1-1 (TYP)
NJDOT CURB RAMP TYPE 5 (TYP)
CROSSWALK (TYP)
DEPRESSED BELGIAN BLOCK CURB (TYP)
CONCRETE DRIVEWAY APRON (TYP)
BELGIAN BLOCK CURB (TYP)
STOP SIGN R1-1 (TYP)
NJDOT CURB RAMP TYPE 5 (TYP)
CROSSWALK (TYP)
BELGIAN BLOCK CURB (TYP)
WALL (TYP) SEE GRADING PLAN
CONCRETE SIDEWALK (TYP)
BELGIAN BLOCK CURB (TYP)
SIDEWALK (TYP.)
NJDOT CURB RAMP TYPE 7 (TYP)
ADA PARKING SPACES, SIGNS (TYP)
BELGIAN BLOCK CURB (TYP)
CONCRETE SIDEWALK (TYP)
PROPOSED 2-PORT EV CHARGING STATION
PROPOSED 2-PORT EV CHARGING STATION
KEEP RIGHT AROUND CIRCLE SIGN
DUMPSTER ENCLOSURE AREA
NJDOT CURB RAMP TYPE 1 (TYP)
NJDOT CURB RAMP TYPE 7 (TYP)
ADA PARKING SPACES, SIGNS (TYP)
BELGIAN BLOCK CURB (TYP)
CONCRETE SIDEWALK (TYP)
DEPRESSED BELGIAN BLOCK CURB (TYP)
WALL (TYP) SEE GRADING PLAN
CONCRETE SIDEWALK (TYP)
PEDESTRIAN CROSSING SIGN (TYP)
CROSSWALK (TYP)
WALL (TYP) SEE GRADING PLAN
WETLANDS
STOP SIGN R1-1 (TYP)
24" WHITE STOP BAR (TYP)
CONCRETE SIDEWALK (TYP)
BELGIAN BLOCK CURB (TYP)
ADA PARKING SPACES, SIGNS (TYP)
CHAIN LINK FENCE (TYP)
BELGIAN BLOCK CURB (TYP)
WALL (TYP) SEE GRADING PLAN
WALL (TYP) SEE GRADING PLAN
CONCRETE SIDEWALK (TYP)
SIDEWALK
KEEP RIGHT
STRAUB SURVEY

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson
SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	PER NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC AGAINST ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SITE PLAN B

SP-6

SHEET 6 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

MATCHLINE SP-6

WETLANDS

STREAM

'BASIN 1'
SEE GRADING
PLAN

TYPE 5 (TYP)

BELGIAN BLOCK CURB (TYP)

CONCRETE SIDEWALK (TYP)

22.0'

MAINTENANCE BLDG

R3.0'

R3.0'

8

9

0.5'

4.4'

0.5'

BELGIAN BLOCK CURB (TYP)

ADA PARKING SPACES, SIGNS (TYP)

CHAIN LINK FENCE (TYP)

DOG PARK

KENNEL BLDG

4.0' SIDEWALK

4.5'

22.0'

4.5'

4.0' SIDEWALK

CONCRETE SIDEWALK (TYP)

BELGIAN BLOCK CURB (TYP)

CONCRETE SIDEWALK (TYP)

BELGIAN BLOCK CURB (TYP)

KUZIK DRIVE

SWINGING GATE

40.4'

KUZIK DRIVE

MATCHLINE SP-6

'BASIN 2'
SEE GRADING PLAN

WETLANDS

N 59°32'47" W

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711, ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 11/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3026E8668C92480...

SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E.

No.	Date	Revision
8	10/28/24	NJDEP RESUBMISSION
7	10/01/24	PER NJDEP COMMENTS
6	07/09/24	NJDEP RESUBMISSION
5	06/24/24	REVISE FOR NJDEP SUBMISSION
4	04/29/24	REVISED GRADING & DRAINAGE
3	10/26/23	PER NJDEP COMMENTS
2	10/03/23	PER NJDEP COMMENTS
1	9/07/23	PER NJDEP COMMENTS
	7/11/23	PER NJDEP WETLANDS COMMENTS
	6/07/23	PER NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHER ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION 24GA28182400

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SITE PLAN C

SP-7

SHEET 7 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

MATCHLINE

MATCHLINE SP-9

BELGIAN BLOCK CURB (TYP)

WALL (TYP) SEE GRADING PLAN

4.0' SIDEWALK

R489.0'

CONCRETE SIDEWALK (TYP)

TED WATER BANK

22.0'

WARNER ROAD

'BASIN 7' SEE GRADING PLAN

CONCRETE SIDEWALK (TYP)

BELGIAN BLOCK CURB (TYP)

,35.46'

CROSSWALK (TYP)

SIDEWALK (TYP.)

R338.0'

CLUBHOUSE

PROPOSED 2-PORT EV CHARGING STATION

RAISED BOARDWALK PLATFORM SEE DETAILS ON SP-28

WETLAND EDUCATIONAL SIGN SEE DETAILS ON SP-28

REGULATED WATER TOP OF BANK

TENNIS COURTS (2)

PROPOSED PERGOLA

PROPOSED POOL

PROPOSED GAZEBO

CONCRETE SIDEWALK (TYP)

R50.0'

R60.0'

YIELD

R6-5P KEEP RIGHT & YIELD SIGN (TYP)

R20.0'

60 FT SPAN BRIDGE

PEDESTRIAN CROSSING SIGN (TYP)

NJDOT CURB RAMP TYPE 1 (TYP)

R89.0'

MATCHLINE

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04182400

DocuSigned by: Paul Anderson 3029E8668C9248D...

SIGNATURE INVALID UNLESS PROTECTED SEAL OF P.E.

10/26/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVSE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/09/23	PER NJDEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC. ANY USE OR REUSE, WITHOUT SUCH VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC, AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION 24GA28182400

ACS Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Scale	AS SHOWN
Designed by	PWA		
Checked by	PWA		

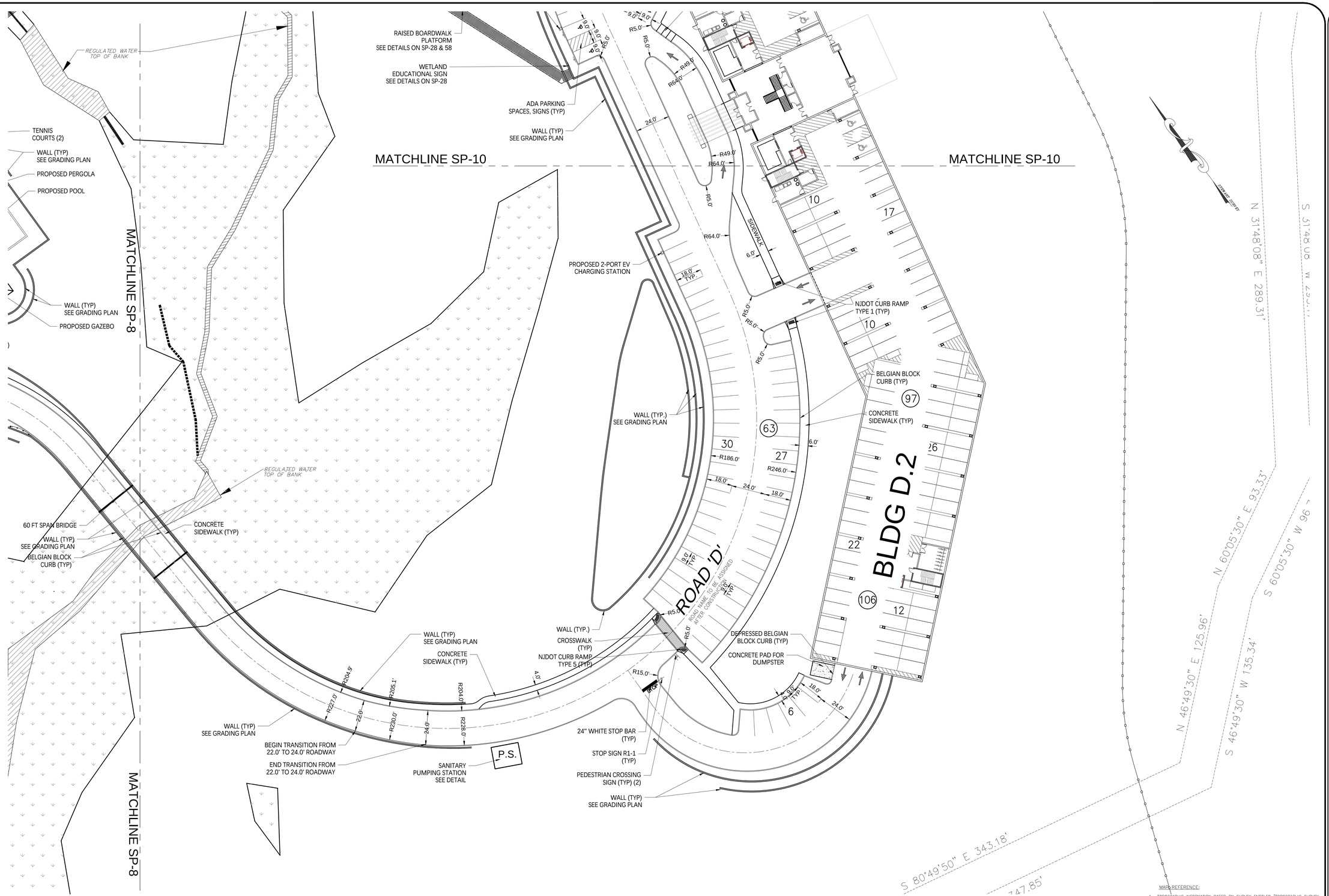
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SITE PLAN D

SP-8

SHEET 8 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

811 Know what's Below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAPS REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 = BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04182400
DocuSigned by: Paul Anderson 302DE8665C292480
SIGNATURE INVALID UNLESS RAISED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP COMMENTS	
7/11/23	PER NJDEP WETLANDS COMMENTS	
6/06/23	PER NJDEP COMMENTS	
REVISIONS		

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY SUCH REUSE OR MODIFICATION WITHOUT INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC. AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC. HARMLESS AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION 24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA	Checked by	PWA
		Scale	AS SHOWN

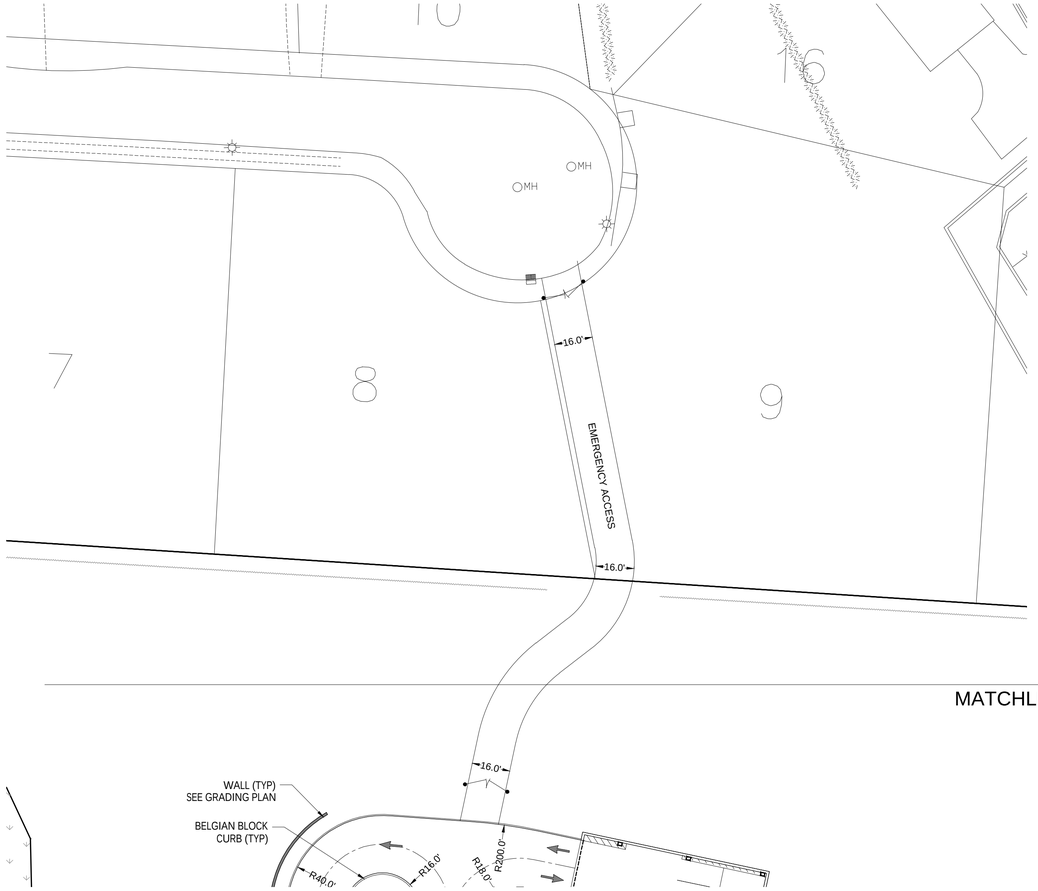
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

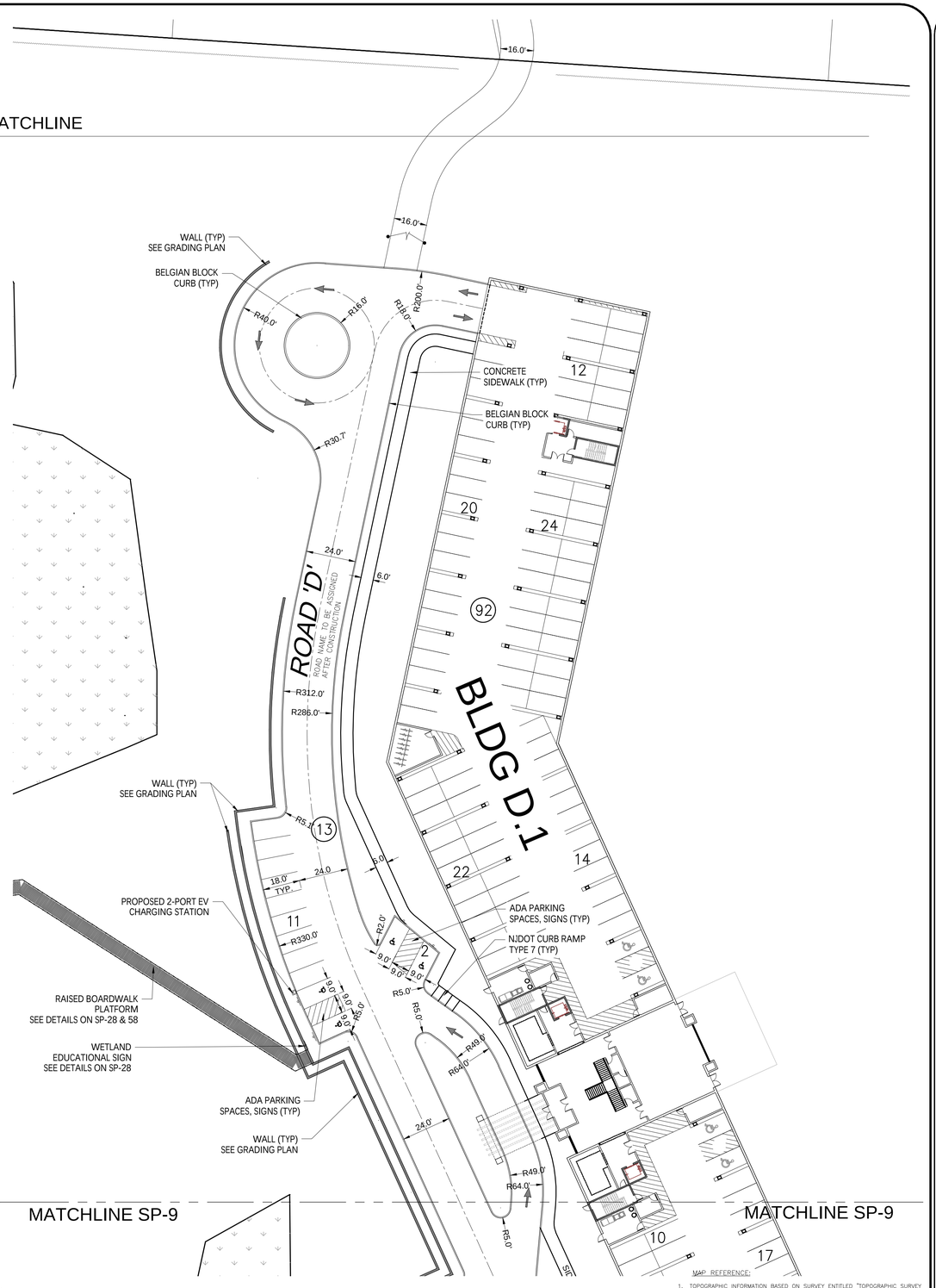
SITE PLAN E

SP-9

SHEET 9 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06





MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO.: 24GE04182400

DocuSigned by:
Paul Anderson
3029E866BC9248D...

SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E.

10/26/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/07/23	PER NJDEP COMMENTS	
REVISIONS		

ALL DOCUMENTS, PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SITE PLAN F

SP-10

SHEET 10 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

UNDISTURBED / PRESERVED:	4,034,100.3 SF 92.61 Acres
DISTURBED:	1,211,769.7 SF 27.82 Acres
TOTAL IMPERVIOUS:	595,540.7 SF 13.68 Acres
MOTOR VEHICLE SURFACE AREA:	273,689.0 SF 6.28 Acres

GRAPHIC SCALE

120 0 60 120 240 480

(IN FEET)
1 inch = 120 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
SIGNATURE INVALID UNLESS DIGITALLY SIGNED & SEALED

SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC, ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, LOSSES, DAMAGES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9–23–22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

OVERALL GRADING PLAN

SP-11

SHEET 11 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

BUILDING B

BUILDING C

GF:606.5

GF:597.0

FF:606.0
GF:594.5

BUILDING C FF:619.0

BUILDING A.2
FF:602.0
GF:579.0

FF:600.1
BF:587.1
CLUBHOUSE

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

MATCHLINE SP-13

MATCHLINE SP-13

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCES

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO.: 24GE04182400
DocuSigned by: Paul Anderson
SIGNATURE INVALID UNLESS ORIGINAL EMBOSSED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP COMMENTS
7/11/23	PER NJDEP WETLANDS COMMENTS
7/07/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT ONLY WITH THE WRITTEN VERIFICATION OF ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Designed by	PWA
Checked by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING PLAN A

SP-12
SHEET 12 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

BUILDING A.1
FF:602.0
GF:579.0

BUILDING A.2
FF:602.0
GF:579.0

FF:564.0

FF:564.0

FF:563.0

DOG PARK

GRAPHIC SCALE
(IN FEET)
1 inch/= 30 ft.

MATCHLINE SP-14

MATCHLINE SP-14

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

1. REFERENCE IS MADE TO A SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOT 1, 2, 3 & 4, IN BLOCK 161, TAX LOT 1701 = BLOCK 179.01, 1701-1721 TRUMBULL STREET & TAX LOT 1 IN BLOCK 179.17, 1-3 PARK PLACE, WEST ESSEX, MORRIS COUNTY, NEW JERSEY" DATED 4/1/16 AND LAST REVISED 1-26-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIPONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS RAISED SEAL OF P.E.
DocuSigned by: Paul Anderson
3029E8668B924A0...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP METLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING PLAN B

SP-13

SHEET 13 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

MATCHLINE SP-13

MATCHLINE SP-13

811 Know what's Below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 = BLOCK 161 TAX LOT 3.01 = BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-25-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY, NJ. SIGNED BY MARC J. CITONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT.
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04218400
SIGNATURE INVALID UNLESS RAISED SEAL OF P.E.
DocuSigned by: Paul Anderson
Signature: 10/28/2024

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/06/23	REVISIONS	

ALL DOCUMENTS, PREPARED BY ANDERSON CONSULTING SERVICES, LLC, ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES, LLC, SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN. THE CLIENT OR OTHERS ON THE PROJECT SHALL NOT REUSE OR MAKE ANY MODIFICATIONS TO THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC, WITHOUT THE PRIOR WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC, FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC, AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC, HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING PLAN C

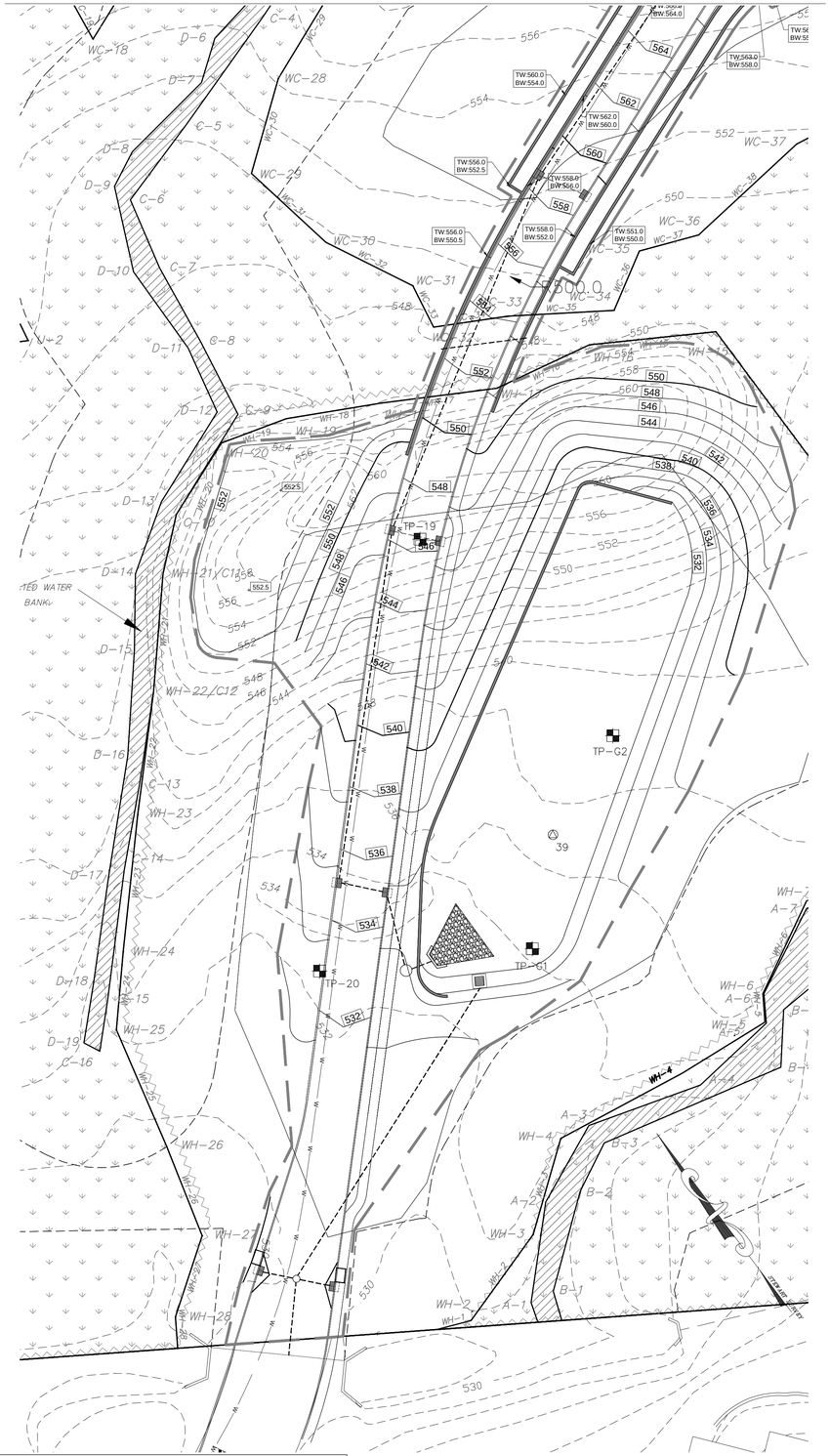
SP-14

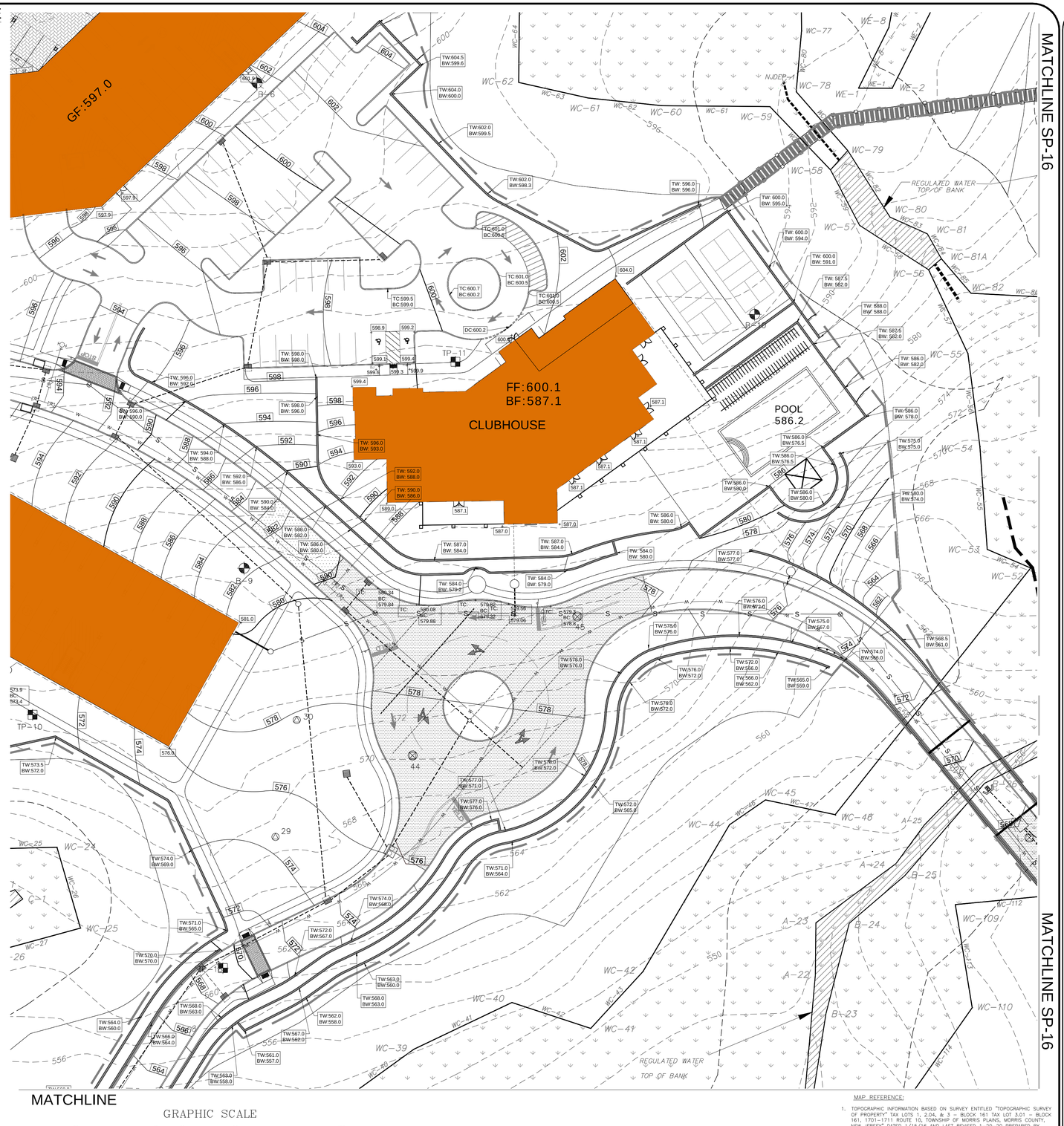
SHEET 14 OF 60

Docusign Envelope ID: 8614BAE7-C2B8-4BA3-92D4-6CA634514E06

MATCHLINE

MATCHLINE SP-16





MATCHLINE

811 know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 = BLOCK 161 TAX LOT 3.01 = BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by: Paul Anderson 3029E8668C9248D...

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY UNAUTHORIZED USE OF UNSEALED OR UNSIGNED DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF.2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP COMMENTS
7/11/23	PER NJDEP METLANDS COMMENTS
6/05/23	PER NJDEP COMMENTS

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING PLAN D

SP-15

SHEET 15 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

MATCHLINE SP-15

MATCHLINE SP-17

MATCHLINE SP-17

MATCHLINE SP-15

FF:618.0
GF:597.0

FF:618.0
GF:594.0

BUILDING D.2

LGF:582.0

POOL
586.2

P.S.

REGULATED WATER
TOP OF BANK

REGULATED WATER
TOP OF BANK

S 51°48'08" W 289.31'

N 31°48'08" E 289.31'

S 80°05'30" W 96.33'

N 80°05'30" E 125.96'

S 46°49'30" W 135.34'

N 46°49'30" E 343.18'

S 80°49'50" E 343.18'

A7.85'

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS RAISED SEAL OF P.E.
DocuSigned by: Paul Anderson 3029E866BC9248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVSE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP METLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE SUITABLE FOR REUSE BY OWNER OR OTHER ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

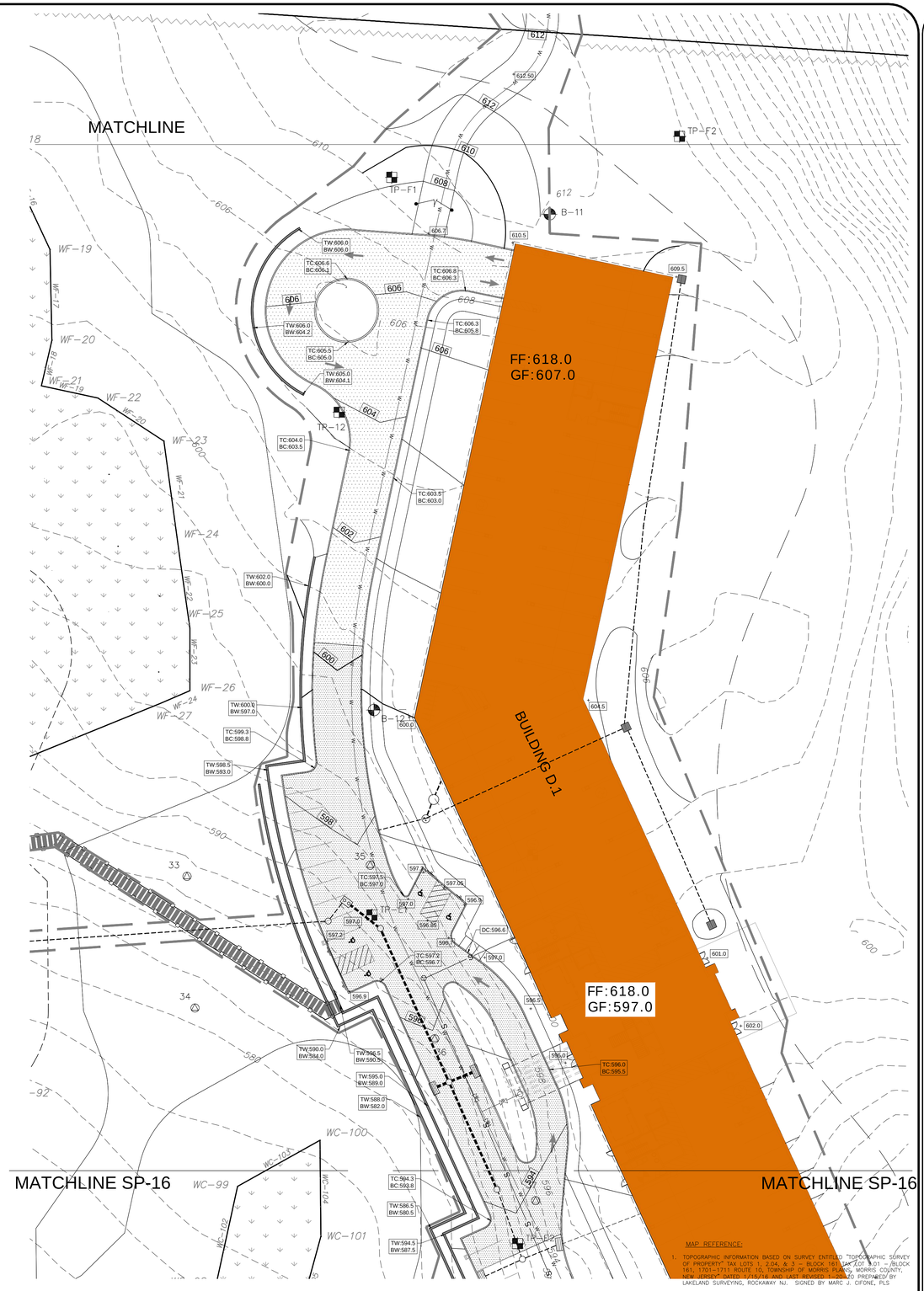
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING PLAN E

SP-16

SHEET 16 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B



MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161, TAX LOT 3.01 – BLOCK 161.1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 11-30-16 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04182400

DocuSigned by:
Paul Anderson
3029E8668C9248D...

SIGNATURE INVALID UNLESS ORIGINAL EMBOSSED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT ONLY WITH THE PRIOR WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING PLAN F

SP-17

SHEET 17 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

GRAPHIC SCALE

120 0 60 120 240 480

(IN FEET)
1 inch = 120 ft.

UNDISTURBED / PRESERVED:	4,034,100.3 SF 92.61 Acres
DISTURBED:	1,211,769.7 SF 27.82 Acres
TOTAL IMPERVIOUS:	595,540.7 SF 13.68 Acres
MOTOR VEHICLE SURFACE AREA:	273,689.0 SF 6.28 Acres

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029E866BC9248D...
SIGNATURE INVALID UNLESS PROTECTED SEAL OF P.E.

10/26/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/05/23	PER NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com
CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022	Scale	AS SHOWN
Date	9–23–22	Checked by	PWA
Drawn by	BCA	Designed by	PWA

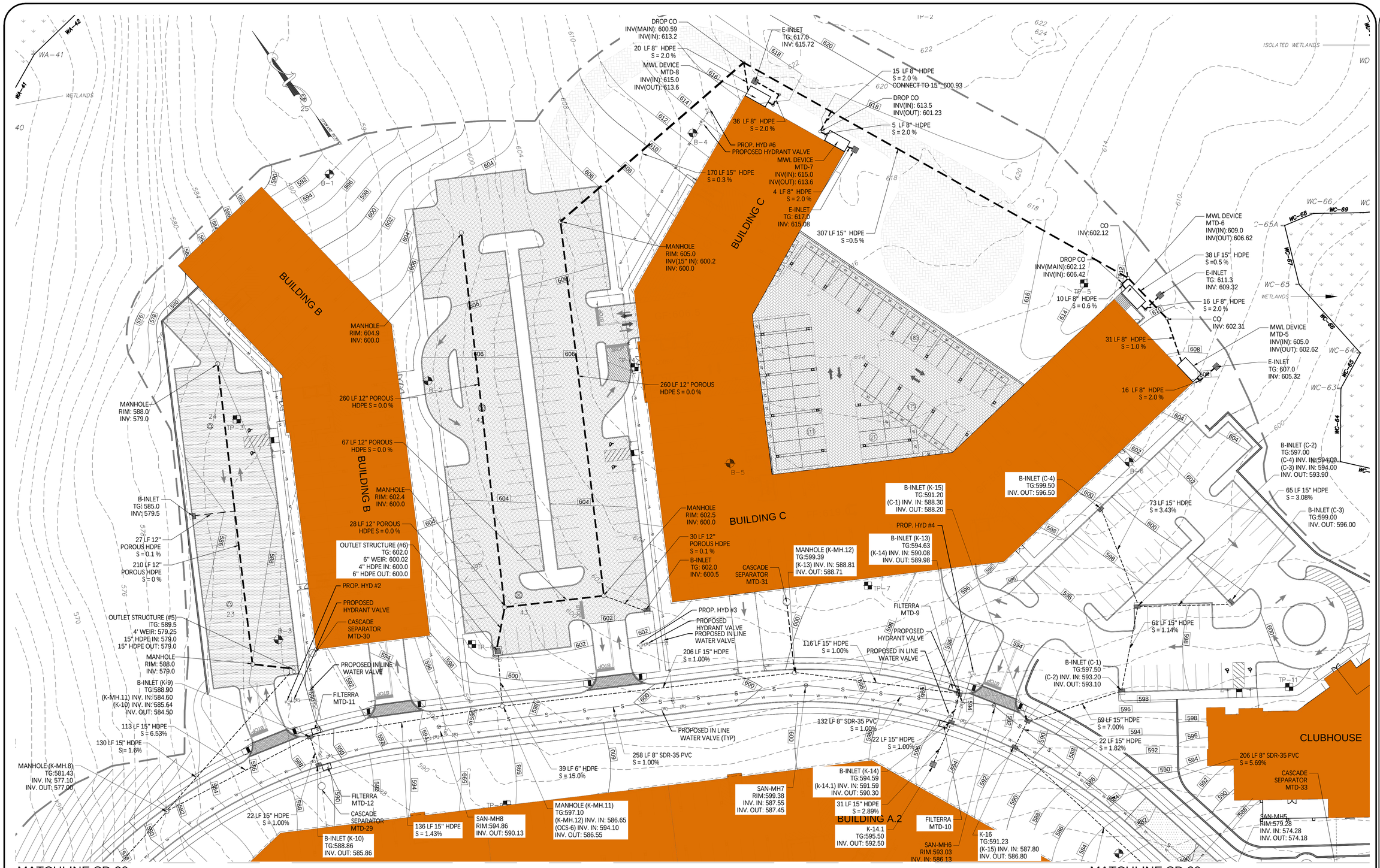
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

OVERALL UTILITY PLAN

SP-18

SHEET 18 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 - BLOCK 161 TAX LOT 3.01 - BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO.: 24GA28182400
DocuSigned by: Paul Anderson 3029E866E9248D...
SIGNATURE INVALID UNLESS ELECTRONICALLY SIGNED AND SEALED BY P.E.

10/28/24	N/DEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N/DEP RESUBMISSION	
06/24/24	REVISE FOR N/DEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/06/23	N/DEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC AND WITHOUT WRITTEN VERIFICATION OF ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Prof. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Checked by	PWA
Designed by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

UTILITY PLAN A

SP-19

SHEET 19 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.

MTD-30
4' WEIR: 579.20
15" HDPE IN: 579.0
15" HDPE OUT: 579.0
MANHOLE
RIM: 588.0
INV: 579.0
B-INLET (K-9)
TG:588.90
(K-MH.11) INV. IN: 584.60
(K-10) INV. IN: 585.64
INV. OUT: 584.50
113 LF 15" HDPE
S = 6.53%
130 LF 15" HDPE
S = 1.6%
PROPOSED IN LINE WATER VALVE
FILTERRA MTD-11
PROPOSED IN LINE WATER VALVE
206 LF 15" HDPE
S = 1.00%
116 LF 15" HDPE
S = 1.00%
PROPOSED IN LINE WATER VALVE
HYDRANT VALVE
B-INLET (C-1)
TG:597.50
(C-2) INV. IN: 593.20
INV. OUT: 593.10
69 LF 15" HDPE
S = 7.00%
22 LF 15" HDPE
S = 1.82%
PROPOSED IN LINE WATER VALVE (TYP)
132 LF 8" SDR-35 PVC
S = 1.00%
22 LF 15" HDPE
S = 1.00%
258 LF 8" SDR-35 PVC
S = 1.00%
39 LF 6" HDPE
S = 15.0%
MANHOLE (K-MH.8)
TG:581.43
INV. IN: 577.10
INV. OUT: 577.00
FILTERRA MTD-12
CASCADE SEPARATOR MTD-29
22 LF 15" HDPE
S = 1.00%
B-INLET (K-10)
TG:588.86
INV. OUT: 585.86
136 LF 15" HDPE
S = 1.43%
SAN-MH8
RIM:594.86
INV. OUT: 590.13
MANHOLE (K-MH.11)
TG:597.10
(K-MH.12) INV. IN: 586.65
(OCS-6) INV. IN: 594.10
INV. OUT: 586.55
SAN-MH7
RIM:599.38
INV. IN: 587.55
INV. OUT: 587.45
B-INLET (K-14)
TG:594.59
(K-14.1) INV. IN: 591.59
INV. OUT: 590.30
31 LF 15" HDPE
S = 2.89%
K-14.1
TG:595.50
INV. OUT: 592.50
BUILDING A.2
FILTERRA MTD-10
SAN-MH6
RIM:593.03
INV. IN: 586.13
INV. OUT: 586.03
K-16
TG:591.23
(K-15) INV. IN: 587.80
INV. OUT: 586.80
BUILDING A.1
158 LF 15" HDPE
S = 8.72%
FILTERRA MTD-14
FILTERRA MTD-13
B-INLET (K-6)
TG:567.49
(K-MH.8) INV. IN: 563.21
(K-7) INV. IN: 564.18
INV. OUT: 563.21
22 LF 15" HDPE
S = 1.00%
140 LF 15" HDPE
S = 6.75%
E-INLET (A-5)
TG:559.50
INV. OUT: 556.50
B-INLET (A-4)
TG:559.87
INV. OUT: 556.87
MANHOLE (K-MH.5)
TG:558.53
(K-6) INV. IN: 553.74
INV. OUT: 553.64
42 LF 15" HDPE
S = 4.86%
B-INLET (A-6)
TG:557.28
(A-5) INV. IN: 554.28
INV. OUT: 554.18
20 LF 15" HDPE
S = 1.02%
B-INLET (A-7)
TG:557.55
(A-6) INV. IN: 553.93
INV. OUT: 553.83
160 LF 15" HDPE
S = 2.95%
CASCADE SEPARATOR MTD-26
18 LF 15" HDPE
S = 1.00%
FILTERRA MTD-17
B-INLET (K-3)
TG:553.34
(K-MH.5) INV. IN: 548.82
(K-4) INV. IN: 548.82
INV. OUT: 548.72
95 LF 36" HDPE
S = 5.0%
INV: 544.0
CASCADE SEPARATOR MTD-28
E-INLET (K-7.1)
TG:570.25
INV. OUT: 567.25
30 LF 15" HDPE
S = 9.03%
B-INLET (K-7)
TG:567.50
(K-7.1) INV. IN: 564.50
INV. OUT: 564.40
PROPOSED IN LINE WATER VALVE
PROPOSED HYDRANT VALVE
PROP. HYD #1
CASCADE SEPARATOR MTD-27
FILTERRA MTD-15
85 LF 15" HDPE
S = 1.87%
FILTERRA MTD-16
114 LF 15" HDPE
S = 3.05%
B-INLET
TG: 562.0
INV: 559.1
FILTERRA MTD-18
B-INLET (K-4)
TG:553.34
(A-7) INV. IN: 550.34
INV. OUT: 549.04
OUTLET STRUCTURE (#3)
TG: 563.2
4' WEIR: 559.22
4" HDPE IN: 559.0
12" HDPE OUT: 559.0
26 LF 4" HDPE
S = 0.4 %
DOG PARK
CASCADE SEPARATOR
A-2
TG:572.07
(OCS-4) INV. IN: 567.80
INV. OUT: 567.70
143 LF 15" HDPE
S = 1.00%
187 LF 15" HDPE
S = 4.39%
B-INLET (A-1)
TG:563.10
(A-2) INV. IN: 559.50
(A-4) INV. IN: 555.20
INV. OUT: 555.10
43 LF 15" HDPE
S = 1.01%
E-INLET (A-1.1)
TG:561.76
(A-1) INV. IN: 554.64
(OVERFLOW) INV. IN: 554.64
INV. OUT: 554.54
33 LF 15" HDPE
S = 3.07%
MANHOLE (A-MH.1)
TG:560.44
(A-1.1) INV. IN: 553.42
(OCS-3) INV. IN: 556.40
INV. OUT: 556.30
56 LF 12" HDPE
S = 2.8%
115 LF 24" HDPE
S = 9.26%
234 LF 15" HDPE
S = 0.0%
OUTLET STRUCTURE (#4)
TG: 578.2
4' WEIR: 574.0
6" ORIFICE: 572.5
15" HDPE IN: 572.0
15" HDPE OUT: 572.0
A-E
TG:573.50
INV. OUT: 572.0
CASCADE SEPARATOR MTD-32
140 LF 15" HDPE
S = 7.50%
MANHOLE (K-MH.17)
TG:580.30
(K-16) INV. IN: 576.30
INV. OUT: 576.20
C.O. INV(IN):573.0
INV(OUT):569.2
74 LF 8" SDR-35 SEWER PVC
12" DISTRIBUTION PIPES (TYP)
168 LF 15" HDPE
S = 3.55%
W-9
TG:576.50
INV. OUT: 573.50
48 LF 15" HDPE
S = 1.24%
B-INLET (W-6)
TG:573.60
(K-MH.17) INV. IN: 570.24
(OCS8) INV. IN: 570.24
INV. OUT: 570.14
81 LF 15" HDPE
S = 7.35%
B-INLET (W-5)
TG:568.67
(W-6) INV. IN: 564.18
(W-5.1) INV. IN: 565.23
INV. OUT: 564.08
135 LF 15" HDPE
S = 7.29%
B-INLET (W-5.1)
TG:568.45
INV. OUT: 565.45
B-INLET (W-4)
TG:558.52
(W-5) INV. IN: 554.22
(W-4.1) INV. IN: 555.52
INV. OUT: 554.12
22 LF 15" HDPE
S = 1.08%
B-INLET (W-4.1)
TG:558.76
INV. OUT: 555.76
40 LF 12" SCH 40 PVC OPEN ON BOTH ENDS TO MAINTAIN NATURAL WATER LEVEL IN WETLANDS
S = 0.0 %
B-INLET (W-3)
TG:546.31
(W-4) INV. IN: 542.02
(W-3.1) INV. IN: 543.11
INV. OUT: 541.92
WETLANDS
100' BUFFER
MATCHLINE SP-21

811 Know what's below. Call before you dig.
NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCES:
1. TOPOGRAPHIC SURVEY BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY TAX LOTS 1, 2.04 & 3, & BLOCK 161 TAX LOT 1.01 BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS ORIGINAL EMBOSSED SEAL OF P.E.
DocuSigned by: Paul Anderson 3029EB668C9248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP METLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
5/26/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF.2022		
Date	9-23-22		
Drawn by	BCA	Checked by	PWA
Designed by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

UTILITY PLAN B

SP-20
SHEET 20 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

MATCHLINE SP-20

MATCHLINE SP-20

160 LF 15" HDPE
S = 2.95%

CASCADE SEPARATOR MTD-26

18 LF 15" HDPE
S = 1.00%

FILTERRA MTD-17

B-INLET (K-3)
TG:553.34
(K-MH.5) INV. IN: 548.82
(K-4) INV. IN: 548.82
INV. OUT: 548.72

95 LF 36" HDPE
S = 5.0%

TP-24

INV: 544.0

HEADWALL WITH STONE RIP RAP
B1-1 - SEE TABLE ON SP-28 FOR MORE INFORMATION
D_{50} = 6"

114 LF 15" HDPE
S = 3.05%

B-INLET
TG: 562.0
INV: 559.1

FILTERRA MTD-18

B-INLET (K-4)
TG:553.34
(A-7) INV. IN: 550.34
INV. OUT: 549.04

OUTLET STRUCTURE (#3)
TG: 563.2
4" WEIR: 559.22
4" HDPE IN: 559.0
12" HDPE OUT: 559.0

26 LF 4" HDPE
S = 0.4 %

E-INLET (A-1.1)
TG:561.76
(A-1) INV. IN: 554.64
(OVERFLOW) INV. IN: 554.64
INV. OUT: 554.54

33 LF 15" HDPE
S = 3.07%

MANHOLE (A-MH.1)
TG:560.44
(A-1.1) INV. IN: 553.42
(OCS-3) INV. IN: 556.40
INV. OUT: 556.30

56 LF 12" HDPE
S = 2.8%

115 LF 24" HDPE
S = 9.26%

CASCADE SEPARATOR MTD-19

35 LF 24" HDPE
S = 9.26%
INV: 544.50

HEADWALL WITH STONE RIP RAP
B2-2 - SEE TABLE ON SP-28 FOR MORE INFORMATION
D_{50} = 6"

TP-22

TP-B2

B-INLET (K-1)
TG:546.57
(K-2) INV. IN: 544.27
INV. OUT: 544.27

CASCADE SEPARATOR MTD-20

HEADWALL WITH STONE RIP RAP
B2-1 - SEE TABLE ON SP-28 FOR MORE INFORMATION
D_{50} = 6"

INV: 544.50

6 LF 15" HDPE
S = 1.5%

TP-B1

15 LF 15" HDPE
S = 0.67%

TP-A2

TP-25

22 LF 15" HDPE
S = 0.45%

B-INLET (K-2)
TG:546.67
INV. OUT: 544.37

TP-A1

TP-27

OUTLET STRUCTURE (#1)
TG: 546.0
8"x48" OPENING: 544.4
10" ORIFICE: 544.0
15" HDPE OUT: 533.0

TP-26

INV: 530.5

115 LF 15" HDPE
S = 2.17 %

HEADWALL WITH STONE RIP RAP
B1 - SEE TABLE ON SP-28 FOR MORE INFORMATION
D_{50} = 6"

OUTLET STRUCTURE (#2)
TG: 545.5
18" SHARP CRESTED WEIR: 545.2
15" HDPE OUT: 538.89

70 LF 15" HDPE
S = 2.7 %

MH RIM: 541.0
INV: 537.0

143 LF 15" HDPE
S = 3.6 %

TP-23

37 LF 15" HDPE
S = 1.0 %

FILTERRA MTD-21

B-INLET
TG: 533.5
INV: 531.5

FILTERRA MTD-22

B-INLET
TG: 533.5
INV: 531.8

145 LF 15" HDPE
S = 3.8 %
CONNECT TO EXISTING INLET
INV: 526.0

EXTEND PROPOSED WATER MAIN TO CONNECT TO THE EXISTING WATER MAIN IN KUZIK DRIVE. CONNECT WITH WET TAP AND GATE VALVE

KUZIK DR

WETLANDS

WETLANDS

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 5.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY, NJ. SIGNED BY MARC J. CIPONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT.
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-87-0004.1, FWW170001

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. GE 24182
SIGNATURE INVALID UNLESS PROTECTED SEAL OF P.E.
DocuSigned by: Paul Anderson
3029E866BC9248D...

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP COMMENTS	
7/11/23	PER NJDEP WETLANDS COMMENTS	
6/06/23	PER NJDEP COMMENTS	
REVISIONS		

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ALL REPORTS, PLANS, SPECIFICATIONS, BOUNDARY SURVEYS AND OTHER DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE NOT TO BE USED IN WHOLE OR IN PART FOR RE-USE BY OWNER OR OTHER ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR SUCH USE. ANY UNAUTHORIZED USE SHALL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022	
Date	9-23-22	
Drawn by	BCA	
Designed by	PWA	
Checked by	PWA	
Scale	AS SHOWN	

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

UTILITY PLAN C

SP-21

SHEET 21 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

MATCHLINE

B-INLET (W-4)
TG:558.52
(W-5) INV. IN: 554.22
(W-4.1) INV. IN: 555.52
INV. OUT: 554.12

22 LF 15" HDPE
S = 1.08%

B-INLET (W-4.1)
TG:558.76
INV. OUT: 555.76

40 LF 12" SCH 40 PVC
OPEN ON BOTH ENDS TO
MAINTAIN NATURAL WATER
LEVEL IN WETLANDS
S = 0.0 %

B-INLET (W-3)
TG:546.31
(W-4) INV. IN: 542.02
(W-3.1) INV. IN: 543.11
INV. OUT: 541.92

B-INLET (W-3.1)
TG:546.33
INV. OUT: 543.33

22 LF 15" HDPE
S = 1.00%

153 LF 15" HDPE
S = 5.88%

W-1
TG:535.00
(W-2) INV. IN: 532.60
INV. OUT: 532.50

W-2
TG:535.00
(W-3) INV. IN: 532.92
INV. OUT: 532.82

34 LF 24" HDPE
S = 0.87%
INV: 531.00

HEADWALL WITH
STONE RIP RAP
B7 - SEE TABLE ON
SP-28 FOR MORE
INFORMATION
D_{50} = 6"

20 LF 18" HDPE
S = 1.00%

CASCADE
SEPARATOR
MTD-23

OUTLET STRUCTURE (#7)
TG: 533.00
12" ORIFICE: 531.38
INV: 531.0 (15" OUT)

CASCADE SEPARATOR
TG:534.00
(W-1) INV. IN: 532.20
INV. OUT: 532.12

14 LF 15" HDPE
S = 0.60%

FILTERRA
MTD-24

B-INLET (W-8)
TG:529.80
INV. OUT: 528.40

W-MH.2
TG:530.00
(W-MH.1) INV. IN: 528.30
(W-9) INV. IN: 528.30
(W-8) INV. IN: 528.30
INV. OUT: 528.20

150 LF 15" HDPE
S = 1.8%

FILTERRA
MTD-25

B-INLET (W-9)
TG: 529.80
INV. IN: 528.40

33 LF 15" HDPE
S = 0.64%

EXTEND PROPOSED WATER MAIN TO
CONNECT TO THE EXISTING WATER MAIN IN
WARNER ROAD. CONNECT WITH WET TAP
AND GATE VALVE

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.
NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MATCHLINE SP-23

E-INLET
TG: 607.0
INV: 605.32

16 LF 8" HDPE
S = 2.0 %

B-INLET (C-4)
TG:599.50
INV. OUT: 596.50

B-INLET (C-2)
TG:597.00
(C-4) INV. IN: 594.00
(C-3) INV. IN: 594.00
INV. OUT: 593.90

65 LF 15" HDPE
S = 3.08%

B-INLET (C-3)
TG:599.00
INV. OUT: 596.00

73 LF 15" HDPE
S = 3.43%

WETLANDS
EDUCATIONAL
SIGN

61 LF 15" HDPE
S = 1.14%

B-INLET (C-1)
TG:597.50
(C-2) INV. IN: 593.20
INV. OUT: 593.10

69 LF 15" HDPE
S = 7.00%

22 LF 15" HDPE
S = 1.82%

CLUBHOUSE

206 LF 8" SDR-35 PVC
S = 5.69%

CASCADE
SEPARATOR
MTD-33

SAN-MH5
RIM:579.28
INV. IN: 574.28
INV. OUT: 574.18

263 LF 8" SDR-35 RVC
S = 2.00%

POOL
586.2

CASCADE
SEPARATOR
MTD-34

SAN-MH4
RIM:574.63
INV. IN: 568.93
INV. OUT: 568.83

REGULATED WATER
TOP OF BANK

TERRA
MTD-10

K-16
TG:591.23
(K-15) INV. IN: 587.80
INV. OUT: 586.80

A-E
TG:573.50
INV. OUT: 572.0

CASCADE
SEPARATOR
MTD-32

140 LF 15" HDPE
S = 7.50%

MANHOLE (K-MH.17)
TG:580.30
(K-16) INV. IN: 576.30
INV. OUT: 576.20

C.O. INV(IN):573.0
INV(OUT):569.2

74 LF 8" SDR-35 SANITARY
SEWER PVC S = 0.5%

12"
DISTRIBUTION
PIPES (TYP)

168 LF 15" HDPE
S = 3.55%

W-9
TG:576.50
INV. OUT: 573.50

48 LF 15" HDPE
S = 1.24%

4" DISTRIBUTION
PIPES (TYP)

196 LF 8" SDR-35 PVC
S = 2.00%

60 FT BRIDGE
SPANNING WETLANDS

B-INLET (W-6)
TG:573.60
(K-MH.17) INV. IN: 570.24
(OCS8) INV. IN: 570.24
INV. OUT: 570.14

CO
INV: 573.0

82 LF 12" HDPE
S = 0.0%

81 LF 15" HDPE
S = 7.35%

B-INLET (W-5)
TG:568.67
(W-6) INV. IN: 564.18
(W-5.1) INV. IN: 565.23
INV. OUT: 564.08

OUTLET STRUCTURE (#8)
RIM: 575.7
4' WEIR: 575.0
6" ORIFICE: 573.45
INV: 573.0 (12" IN & OUT)

42 LF 15" HDPE
S = 6.57%

119 LF 15" HDPE
S = 1.7 %

135 LF 15" HDPE
S = 7.29%

22 LF 15" HDPE
S = 1.00%

B-INLET (W-5.1)
TG:568.45
INV. OUT: 565.45

MATCHLINE

MAP REFERENCE:
1. TOPOGRAPHIC INFORMATION BASED ON A SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2, 3 & 3 = BLOCK 161 TAX LOT 3.01 = BLOCK 161, 1701-1713 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 5/15/19 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROXBARY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 ADD 1.11'
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE NO. 1423-07-0001.1 FWW190001

MATCHLINE SP-23

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029EB66BC9245D...
SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE USED FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY REUSE WITHOUT SUCH VERIFICATION OR ADAPTATION SHALL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

UTILITY PLAN D

SP-22
SHEET 22 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

STORM MH
RIM: 597.0
INV: 589.25 (IN)
INV: 582.0 (OUT)

INV: 578.5

175 LF 15" SOLID HDPE
S = 1.0 %

PROPOSED HEADWALL
WITH LEVEL SPREADER
D_{50} = 6"
V_{riprap} = 3.11 CY

80 LF 12"
POROUS HDPE
S = 0 %

5 LF 15" SOLID HDPE
S = 1.0 %

WETLANDS
EDUCATIONAL
SIGN

STORM MH
RIM: 594.96
INV: 590.0 (15" IN)
INV: 590.0 (15" OUT)
INV: 590.0 (12")

56 LF 12"
POROUS HDPE
S = 0 %

STORM MANHOLE
RIM: 594.0
(STORM MH)INV(IN):590.0
INV: 590.0

STORM MANHOLE
RIM: 593.55
(SP-73)INV(IN):590.10
(SP-74)INV(IN):590.10
INV: 590.20

B-INLET (D-13)
TG:593.00
INV. OUT: 590.00

19 LF 15" SOLID HDPE
S = 3.42 %

B-INLET (D-8)
TG:589.50
(D-7) INV. IN: 585.90
INV. OUT: 576.20

ENCASE PIPE IN CEMENT
UNDER WALL

STONE RIP RAP
B10-2 - SEE TABLE ON SP-28
FOR MORE INFORMATION
D_{50} = 6"

B-INLET (D-6)
TG:580.29
(D-5) INV. IN: 575.15
INV. OUT: 576.13

INV: 576.00

STONE RIP RAP
B10-1 - SEE TABLE ON
SP-28 FOR MORE
INFORMATION
D_{50} = 6"

INV: 576.00

OCS-10
TG:577.50
42"x12" OPENING: 576.25
INV. OUT: 573.75

5 LF 15" HDPE
S = 1.05%

CASCADE SEPARATOR
MTD-2

84 LF 15" HDPE
S = 3.75 %

73 LF 15" HDPE
S = 7.85 %

FILTERRA
MTD-3

STORM MANHOLE
RIM: 569.0
INV:565.0

116 LF 15" HDPE
S = 6.1%

B-INLET (D-17)
TG:565.52
INV(OUT):562.80

114 LF 8" SDR-35 PVC
S = 1.01%

119 LF 15" HDPE
S= 1.7 %

SAN-MH3
RIM:566.76
INV. IN: 564.90
INV. OUT: 564.80

115 LF 15" SOLID HDPE
S = 3.1%
INV: 562.0

16 LF 12" POROUS HDPE
S = 0%
INV: 562.8

STORM MANHOLE
RIM: 565.8
INV:558.0

B-INLET (D-18)
TG:565.52
INV:562.80

SAN-MH2
RIM:566.09
INV. IN: 563.65
INV. OUT: 563.55

124 LF 8" SDR-35 PVC
S = 0.52%

PUMP STATION-MH1
RIM:570.66
INV. IN: 562.90
INV. IN: 563.00

B-INLET (D-2)
TG:573.75
INV. IN: 570.75
INV. OUT: 570.65

23 LF 15" HDPE
S = 1.08%

B-INLET (D-1)
TG:573.75
INV. OUT: 571.00

FILTERRA
MTD-4

175 LF 8" SDR-35
PVC
S = 5.81%

50 LF 8" SDR-35
PVC
S = 1.38%

B-INLET (D-5)
TG:580.22
(D-4) INV. IN: 575.85
INV. OUT: 575.75

62 LF 15" HDPE
S = 1.01%

B-INLET (D-3)
TG:580.00
INV. OUT: 577.00

42 LF 15" HDPE
S = 1.00%

D-4
TG:580.00
(D-3) INV. IN: 576.58
INV. OUT: 576.48

SAN-MH 9
RIM:580.94
INV. IN: 573.29
INV. OUT: 573.19

60 LF 15" HDPE
S = 1.00%

BUILDING D.2

SAN-MH 10
RIM:592.27
INV. IN: 577.43
INV. OUT: 577.33

203 LF 8" SDR-35 PVC
S = 1.99%

B-INLET (D-7)
TG:589.50
INV. OUT: 586.50

CASCADE
SEPARATOR
MTD-35

213 LF 8" SDR-35 PVC
S = 2.00%

B-INLET (D-14)
TG:593.00
INV. OUT: 590.00

SAN-MH 11
RIM:596.54
INV. OUT: 581.69

11 LF 15" SOLID HDPE
S = 1.0 %

B-INLET (CB-42)
TG: 594.94
INV(OUT): 590.05

B-INLET (CB-41)
TG:594.94
INV(OUT):590.05

PROP. HYD #5

PROPOSED HYDRANT VALVE

PROPOSED IN LINE WATER VALVE

D-9
TG:601.50
INV. OUT: 598.50

196 LF 8" SDR-35 PVC
S = 2.00%

60 FT BRIDGE
SPANNING WETLANDS

2'x3' SCOUR HOLE
D50 = 6"
HW INV: 555.00
26 LF 12" DIP
S = 1.0%

OUTLET STRUCTURE (#9)
TG:568.2
4' WEIR: 584.0
3" ORIFICE: 963.0
INV(12" IN): 562.8
INV(15" IN): 556.0
INV (12" OUT): 555.25

MATCHLINE SP-22

MATCHLINE SP-24

MATCHLINE SP-24

MATCHLINE SP-22

REGULATED WATER
TOP OF BANK

REGULATED WATER
TOP OF BANK

POOL
586.2

CASCADE
SEPARATOR
MTD-34

SAN-MH4
RIM:574.63
INV. IN: 568.93
INV. OUT: 568.83

TP-C1
TP-17
TP-C2
TP-D1
TP-D2
TP-14
TP-15
TP-18

P.S.

N 31°48'08" W 293.17'
S 31°48'08" E 289.31'
N 46°49'30" E 125.96'
S 46°49'30" W 135.34'
S 60°55'30" E 93.33'
N 60°55'30" W 96.27'
S 80°49'50" E 343.18'
N 80°49'50" W 347.85'

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:
TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 - BLOCK 161 TAX LST 3.01 - BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY MAYLAND SURVEYING, ROCKAWAY, NJ. SIGNED BY MARC J. CIFONE, PLS

1. VERTICAL DATUM IS NAVD 1988
3. NAD83 TO NGVD1988 + + 103 FT.
4. FRESHWATERS, WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04182400
SIGNATURE INVALID UNLESS SIGNED AND DATED SEAL OF P.E.
DocuSigned by: Paul Anderson 3029E8668C92480...

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/05/23	PER NJDEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. THE REUSE OF ANY DRAWINGS, INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022	Scale	AS SHOWN
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		

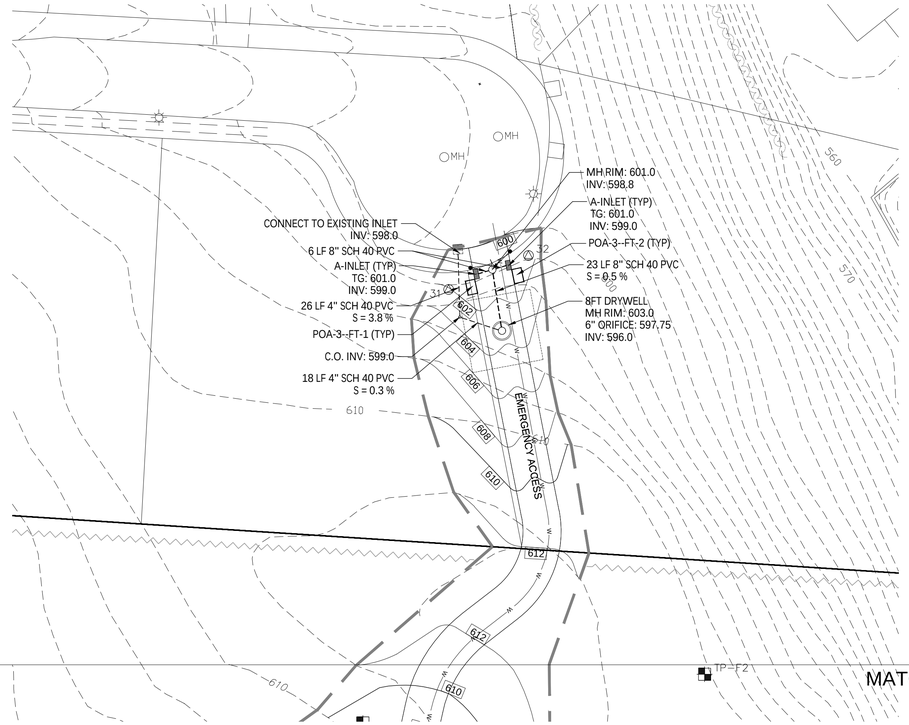
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

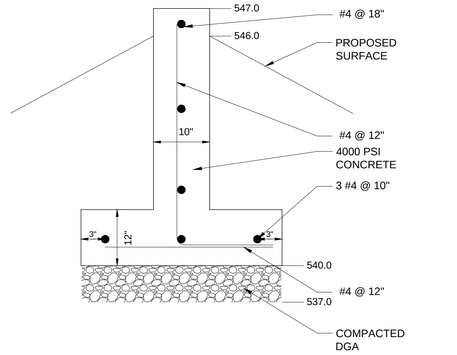
UTILITY PLAN E

SP-23

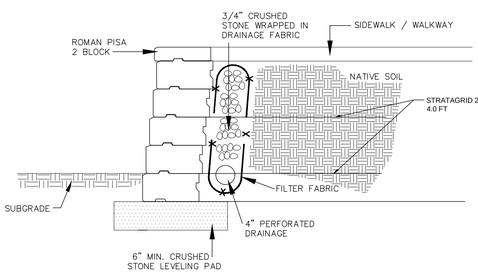
SHEET 23 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

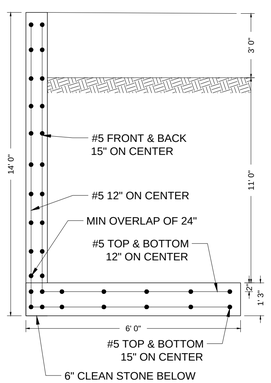




BASIN 2 EMBANKMENT WALL
SCALE: NTS



MODULAR BLOCK WALL (4FT MAX)
SCALE: NTS

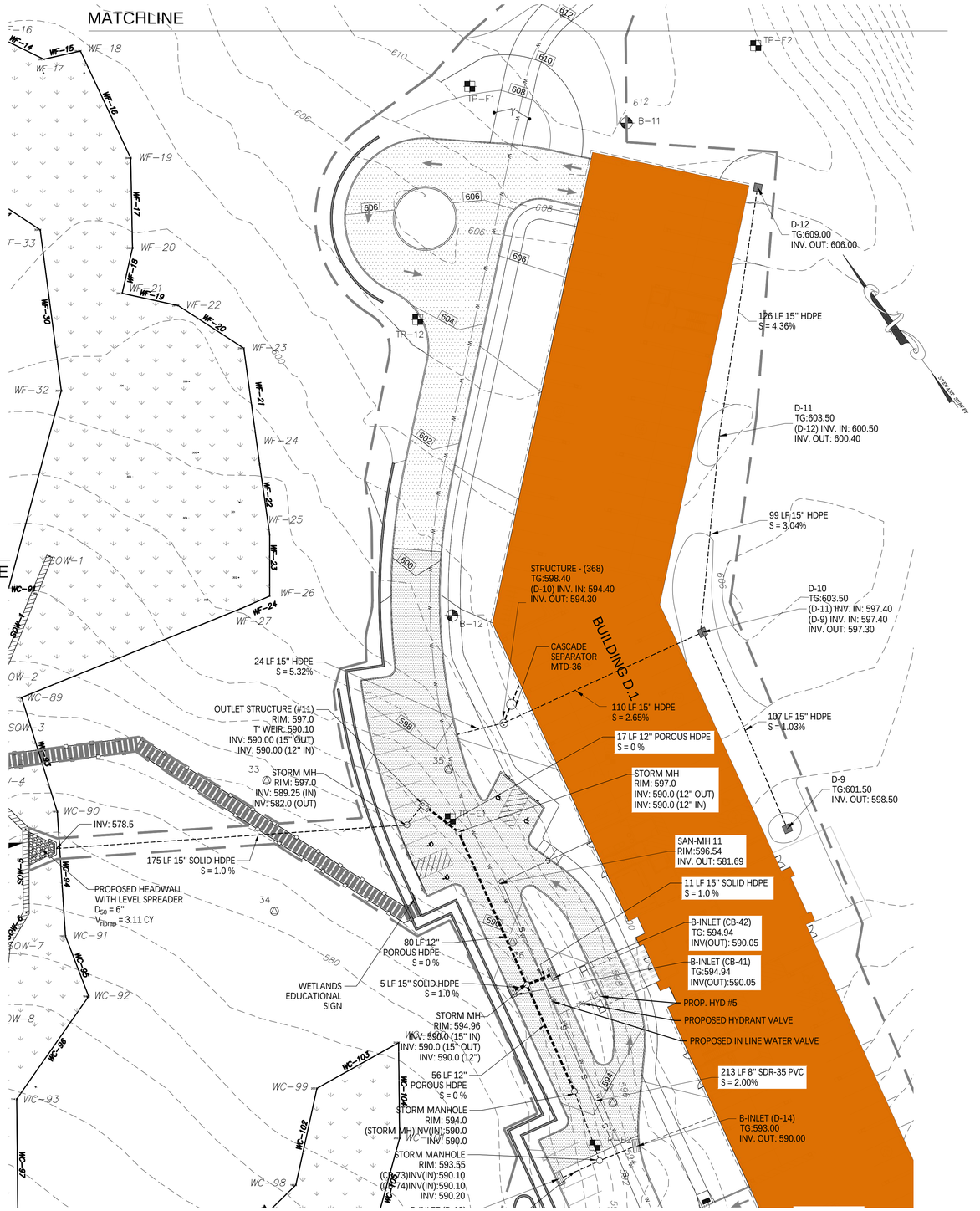


ROAD D WALL DETAIL
SCALE: NTS

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO.: 24GA28182400
DocuSigned by: Paul Anderson
3029E8668C9248D...
SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/16/23	REVISIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9–23–22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

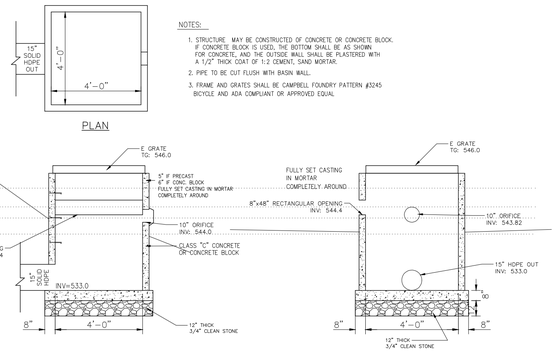
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

UTILITY PLAN F

SP-24

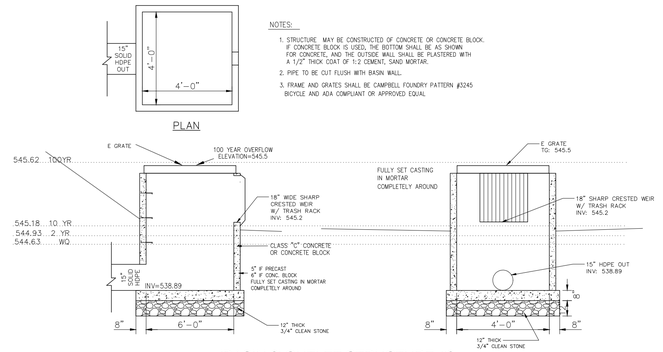
SHEET 24 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B



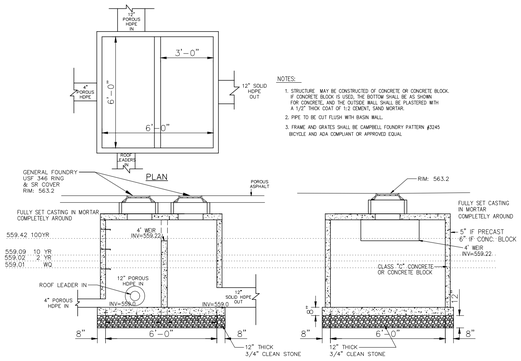
'BASIN 1' OUTLET STRUCTURE #1

SCALE: NTS



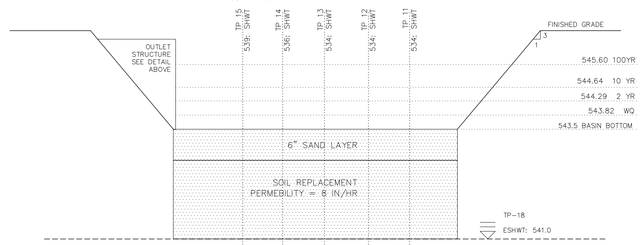
'BASIN 2' OUTLET STRUCTURE #2

SCALE: NTS



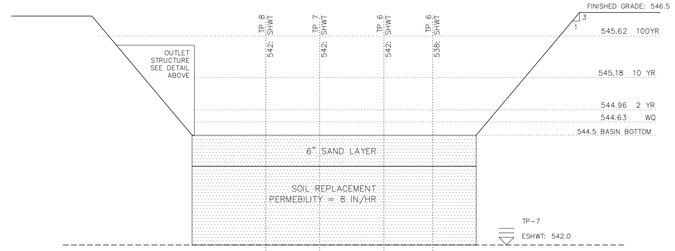
'BASIN' OUTLET STRUCTURE #3

SCALE: NTS



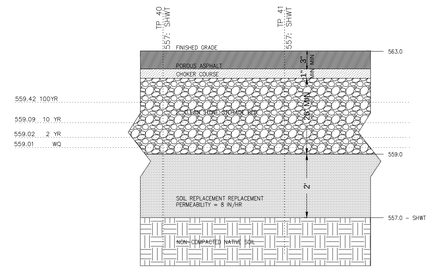
INFILTRATION BASIN #1 SECTION

SCALE: NTS



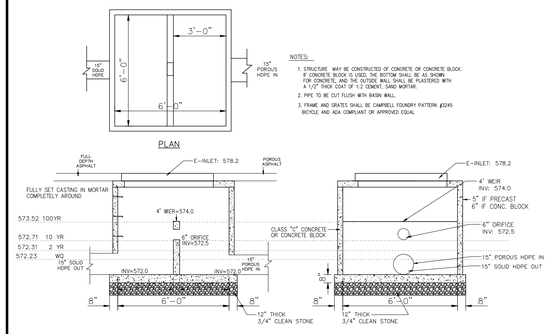
INFILTRATION BASIN #2 SECTION

SCALE: NTS



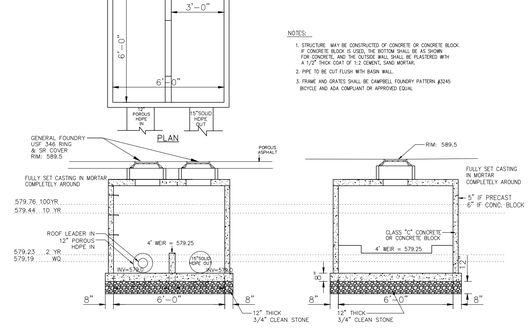
POROUS PAVEMENT #3 SECTION

SCALE: NTS



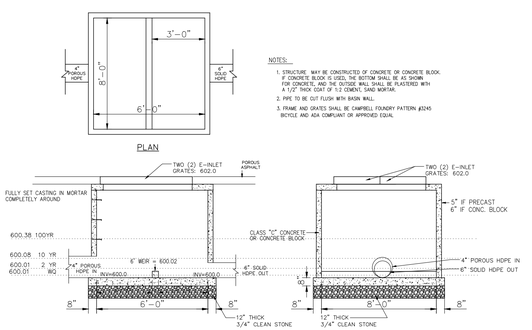
'BASIN 4' OUTLET STRUCTURE #4

SCALE: NTS



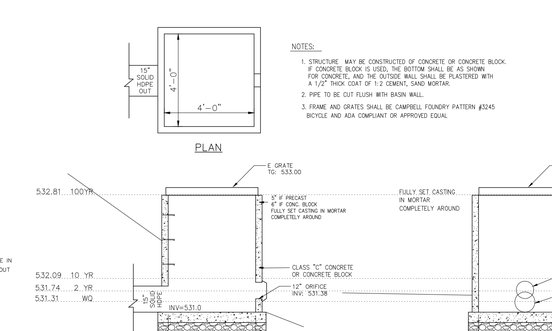
'BASIN 5' OUTLET STRUCTURE #5

SCALE: NTS



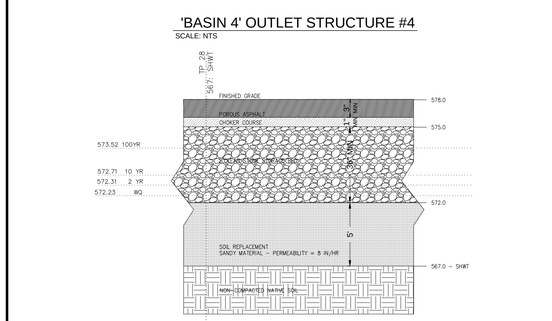
'BASIN 6' OUTLET STRUCTURE #6

SCALE: NTS



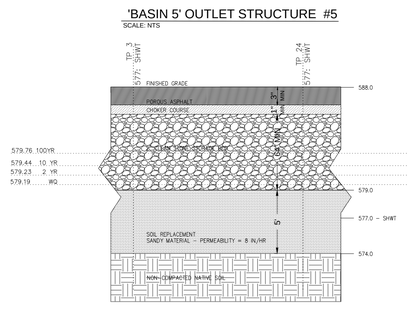
'BASIN 7' OUTLET STRUCTURE #7

SCALE: NTS



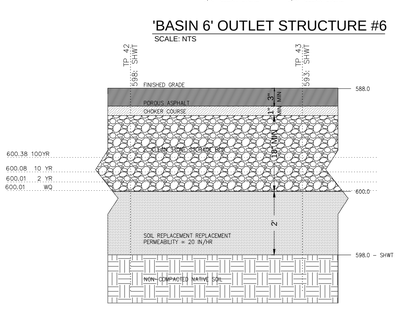
POROUS PAVEMENT #4 SECTION

SCALE: NTS



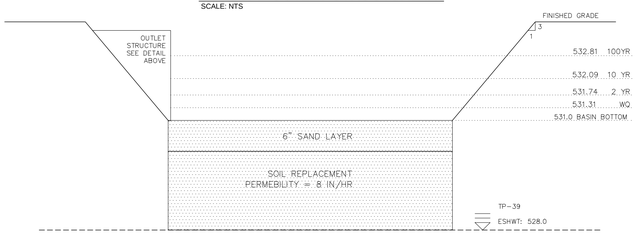
POROUS PAVEMENT #5 SECTION

SCALE: NTS



POROUS PAVEMENT #6 SECTION

SCALE: NTS



INFILTRATION BASIN #7 SECTION

SCALE: NTS

811 Know what's Below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 - BLOCK 161 TAX LOT 3.01 - BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
No. 24GA28182400
DocuSigned by: Paul Anderson 3029E8666BC9248D...
SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP RETAINGS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	NJDEP COMMENTS
Revisions	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES LLC FOR THIS PROJECT ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE AND SHALL REMAIN THE PROPERTY OF ANDERSON CONSULTING SERVICES LLC AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES LLC. ANY UNAUTHORIZED USE, REPRODUCTION OR INTENTION WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES LLC. AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022	Checked by	PWA
Date	9-23-22	Scale	AS SHOWN
Drawn by	BCA		
Designed by	PWA		

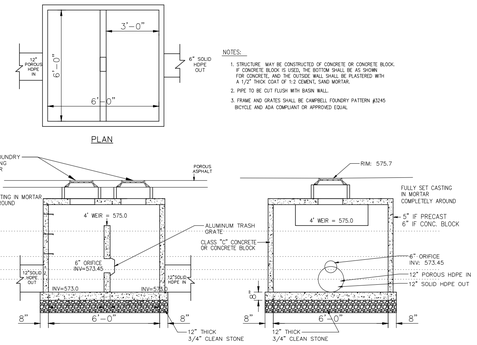
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

DRAINAGE CONSTRUCTION DETAILS

SP-25

SHEET 25 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B



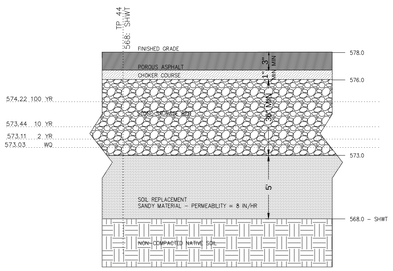
PLAN

'BASIN 8' OUTLET STRUCTURE #8

SCALE: NTS

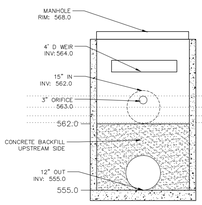
NOTES:

1. STRUCTURE MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE, AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF 1:2 CEMENT, SAND MORTAR.
2. PIPE TO BE CUT FLUSH WITH BASIN WALL.
3. FRAME AND GRATES SHALL BE CAMPBELL FOUNDRY PATTERN #3245 BICYCLE AND ADA COMPLIANT OR APPROVED EQUAL



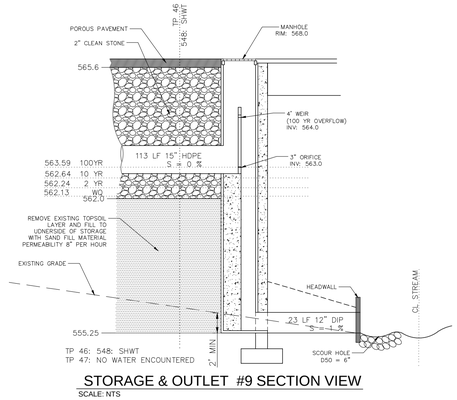
POROUS PAVEMENT #8 SECTION

SCALE: NTS



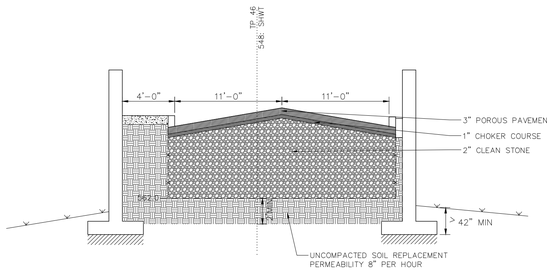
'BASIN 9' OUTLET STRUCTURE #9

SCALE: NTS



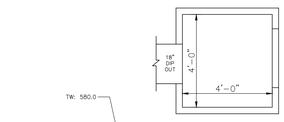
STORAGE & OUTLET #9 SECTION VIEW

SCALE: NTS



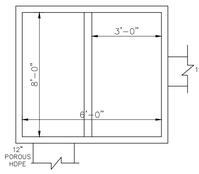
BASIN #9 SECTION

SCALE: NTS



NOTES:

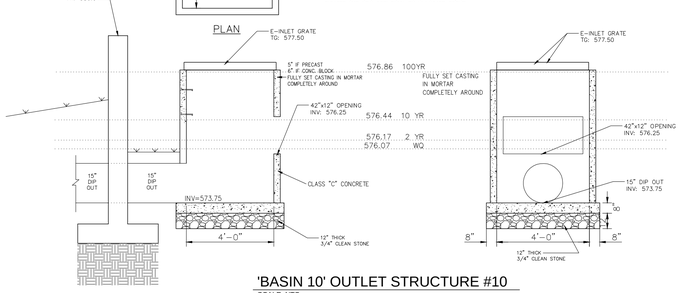
1. STRUCTURE MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE, AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF 1:2 CEMENT, SAND MORTAR.
2. PIPE TO BE CUT FLUSH WITH BASIN WALL.
3. FRAME AND GRATES SHALL BE CAMPBELL FOUNDRY PATTERN #3245 BICYCLE AND ADA COMPLIANT OR APPROVED EQUAL



PLAN

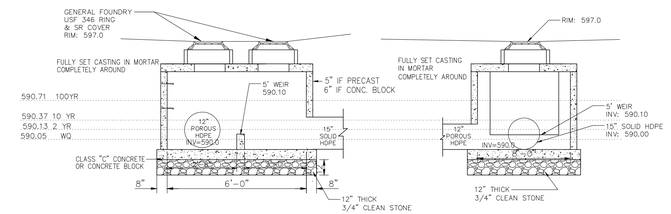
NOTES:

1. STRUCTURE MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE, AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF 1:2 CEMENT, SAND MORTAR.
2. PIPE TO BE CUT FLUSH WITH BASIN WALL.
3. FRAME AND GRATES SHALL BE CAMPBELL FOUNDRY PATTERN #3245 BICYCLE AND ADA COMPLIANT OR APPROVED EQUAL



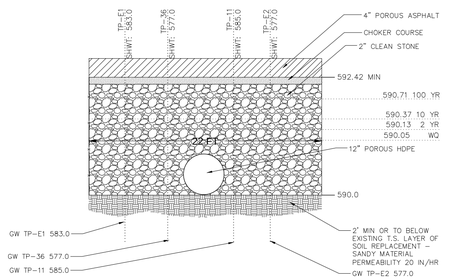
'BASIN 10' OUTLET STRUCTURE #10

SCALE: NTS



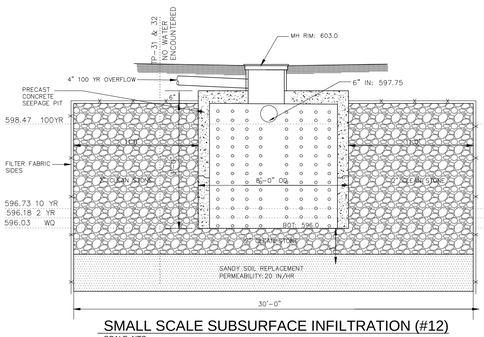
'BASIN 11' OUTLET STRUCTURE #11

SCALE: NTS



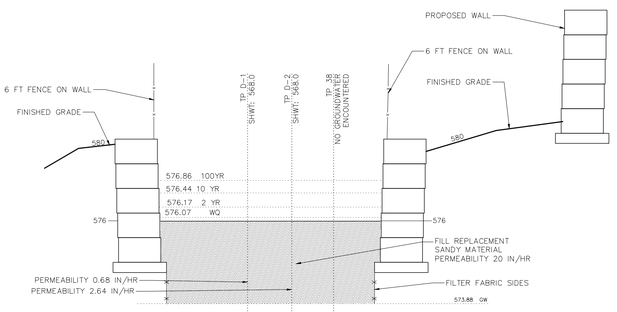
'BASIN 11' POROUS PAVEMENT SECTION

SCALE: NTS



SMALL SCALE SUBSURFACE INFILTRATION (#12)

SCALE: NTS



'BASIN 10' SECTION

SCALE: NTS

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E866BC9248D...

SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E.

10/26/24	N.JDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	N.JDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	FOR NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION 24GA28182400

Prof. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Checked by	PWA
Designed by	PWA	Scale	AS SHOWN

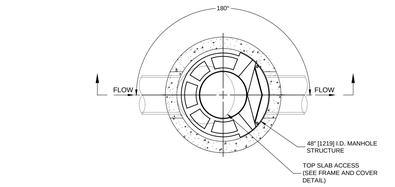
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

DRAINAGE CONSTRUCTION DETAILS

SP-26

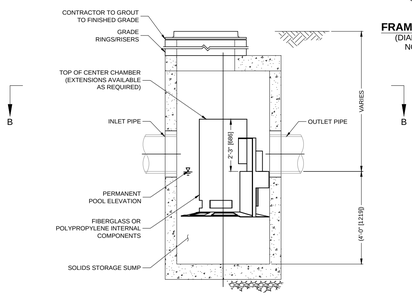
SHEET 26 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B



PLAN VIEW B-B
NOT TO SCALE

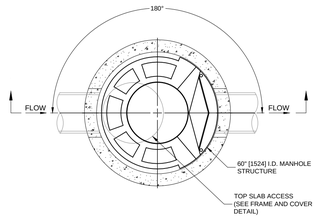
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

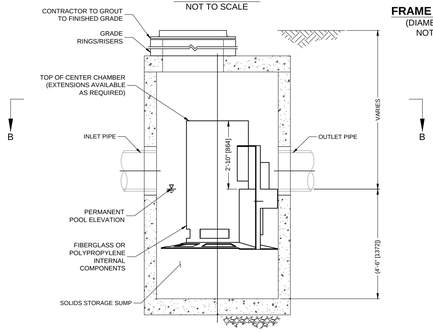
CASCADE SEPARATOR CS-4

SCALE: NTS



PLAN VIEW B-B
NOT TO SCALE

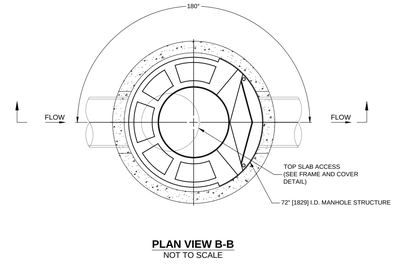
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

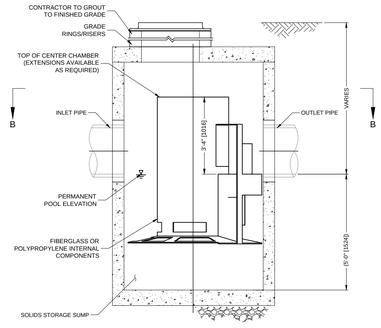
CASCADE SEPARATOR CS-5

SCALE: NTS



PLAN VIEW B-B
NOT TO SCALE

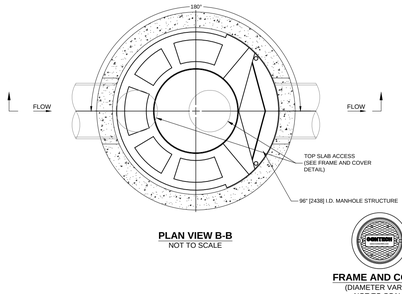
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

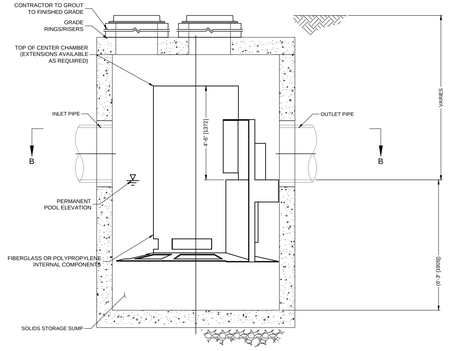
CASCADE SEPARATOR CS-6

SCALE: NTS



PLAN VIEW B-B
NOT TO SCALE

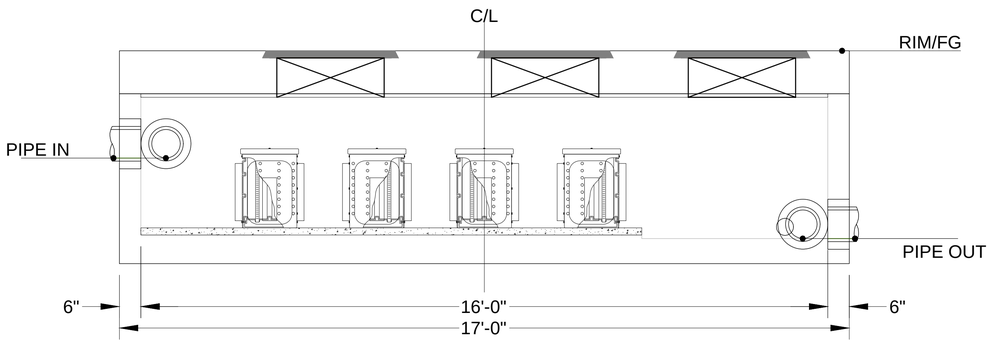
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

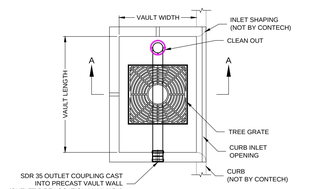
CASCADE SEPARATOR CS-8

SCALE: NTS

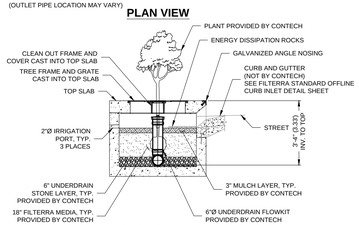


MWS L-8-16-4'-3.5'-V TREATMENT DEVICE

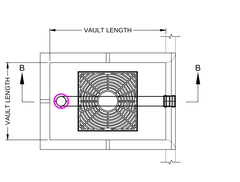
SCALE: NTS



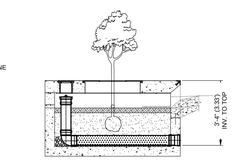
PLAN VIEW



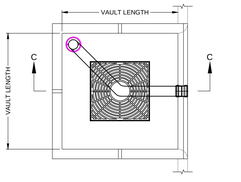
SECTION A-A



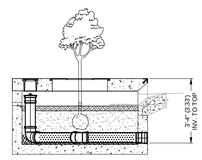
PLAN VIEW



SECTION B-B



PLAN VIEW



SECTION C-C

FT-HC LONG SIDE INLET CONFIGURATION

DESIGNATION	AVAILABILITY	MEDIA BAY SIZE	VAULT SIZE (L x W)	OUTLET PIPE DIA	TREE GRATE QTY & SIZE
FT0604-HC	ALL	6 x 4	6 x 4	6" SDR 35	(1) 3' x 3'
FT078045-HC	DE, MD, NJ, PA, VA, WV ONLY	7.83 x 4.5	7.83 x 4.5	6" SDR 35	(1) 3' x 3'
FT0804-HC	N/A DE, MD, NJ, PA, VA, WV	8 x 4	8 x 4	6" SDR 35	(1) 3' x 3'
FT0806-HC	ALL	8 x 6	8 x 6	6" SDR 35	(1) 4' x 4'
FT1006-HC	ALL	10 x 6	10 x 6	6" SDR 35	(1) 4' x 4'
FT1206-HC	ALL	12 x 6	12 x 6	6" SDR 35	(2) 4' x 4'
FT1307-HC	ALL	13 x 7	13 x 7	6" SDR 35	(2) 4' x 4'
FT1408-HC	CALL CONTECH	14 x 8	14 x 8	6" SDR 35	(2) 4' x 4'
FT1509-HC	CALL CONTECH	15 x 9	15 x 9	6" SDR 35	(2) 4' x 4'
FT1608-HC	CALL CONTECH	16 x 8	16 x 8	6" SDR 35	(2) 4' x 4'
FT1808-HC	CALL CONTECH	18 x 8	18 x 8	6" SDR 35	(3) 4' x 4'
FT2008-HC	CALL CONTECH	20 x 8	20 x 8	6" SDR 35	(3) 4' x 4'
FT2208-HC	CALL CONTECH	22 x 8	22 x 8	6" SDR 35	(3) 4' x 4'

N/A = NOT AVAILABLE

FT-HC SHORT SIDE INLET CONFIGURATION

DESIGNATION	AVAILABILITY	MEDIA BAY SIZE	VAULT SIZE (W x L)	OUTLET PIPE DIA	TREE GRATE QTY & SIZE
FT0406-HC	ALL	4 x 6	4 x 6	6" SDR 35	(1) 3' x 3'
FT0408-HC	N/A DE, MD, NJ, PA, VA, WV	4 x 8	4 x 8	6" SDR 35	(1) 3' x 3'
FT045078-HC	DE, MD, NJ, PA, VA, WV ONLY	4.5 x 7.83	4.5 x 7.83	6" SDR 35	(1) 3' x 3'
FT0608-HC	ALL	6 x 8	6 x 8	6" SDR 35	(1) 4' x 4'
FT0610-HC	ALL	6 x 10	6 x 10	6" SDR 35	(1) 4' x 4'
FT0612-HC	ALL	6 x 12	6 x 12	6" SDR 35	(2) 4' x 4'
FT0713-HC	ALL	7 x 13	7 x 13	6" SDR 35	(2) 4' x 4'

N/A = NOT AVAILABLE

FT-HC SQUARE INLET CONFIGURATION

DESIGNATION	AVAILABILITY	MEDIA BAY SIZE	VAULT SIZE (W x L)	OUTLET PIPE DIA	TREE GRATE QTY & SIZE
FT0404-HC	ALL	4 x 4	4 x 4	6" SDR 35	(1) 3' x 3'
FT0606-HC	ALL	6 x 6	6 x 6	6" SDR 35	(1) 3' x 3'

N/A = NOT AVAILABLE

FILTERRA HC OFFLINE (FT-HC)

SCALE: NTS

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E866BC92483D...

SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E.

10/28/24	N/JDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N/JDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP RETAINGS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/16/23	N/JDEP SUBMISSION	
REVISIONS		

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
Tel: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Designed by	PWA
Checked by	PWA	Scale	AS SHOWN

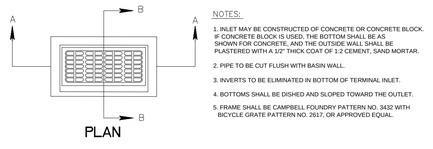
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

DRAINAGE CONSTRUCTION DETAILS

SP-27

SHEET 27 OF 60

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

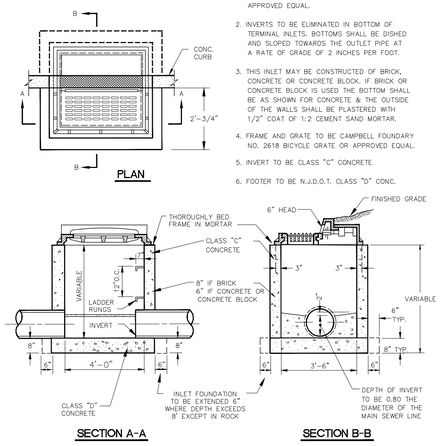


NOTES:

1. INLET MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE, AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF 1:2 CEMENT, SAND MORTAR.
2. PIPE TO BE CUT FLUSH WITH BASIN WALL.
3. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLET.
4. BOTTOMS SHALL BE DISHED AND SLOPED TOWARD THE OUTLET.
5. FRAME SHALL BE CAMPBELL FOUNDRY PATTERN NO. 3432 WITH BICYCLE GRATE PATTERN NO. 2617, OR APPROVED EQUAL.

TYPE 'A' INLET

SCALE: NTS

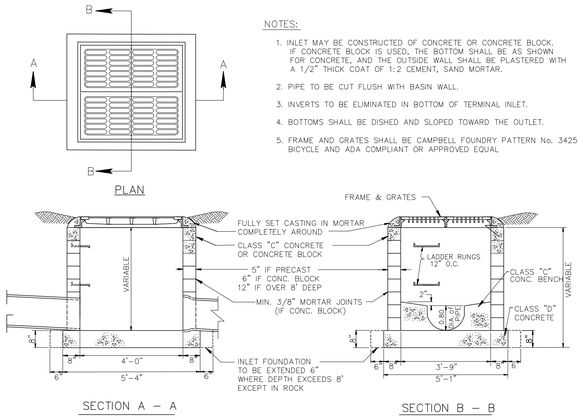


GENERAL NOTES

1. ALL PRECAST CONCRETE STRUCTURES SHALL BE COATED WITH COAL TAR EPOXY OR APPROVED EQUAL.
2. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF GRADE OF 2 INCHES PER FOOT.
3. THIS INLET MAY BE CONSTRUCTED OF BRICK, CONCRETE OR CONCRETE BLOCK. IF BRICK OR CONCRETE BLOCK IS USED THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT SAND MORTAR.
4. FRAME AND GRATE TO BE CAMPBELL FOUNDARY NO. 2618 BICYCLE GRATE OR APPROVED EQUAL.
5. INVERT TO BE CLASS "C" CONCRETE.
6. FOOTER TO BE N.J.D.O.T. CLASS "D" CONC.

INLET TYPE "B"

SCALE: NTS



NOTES:

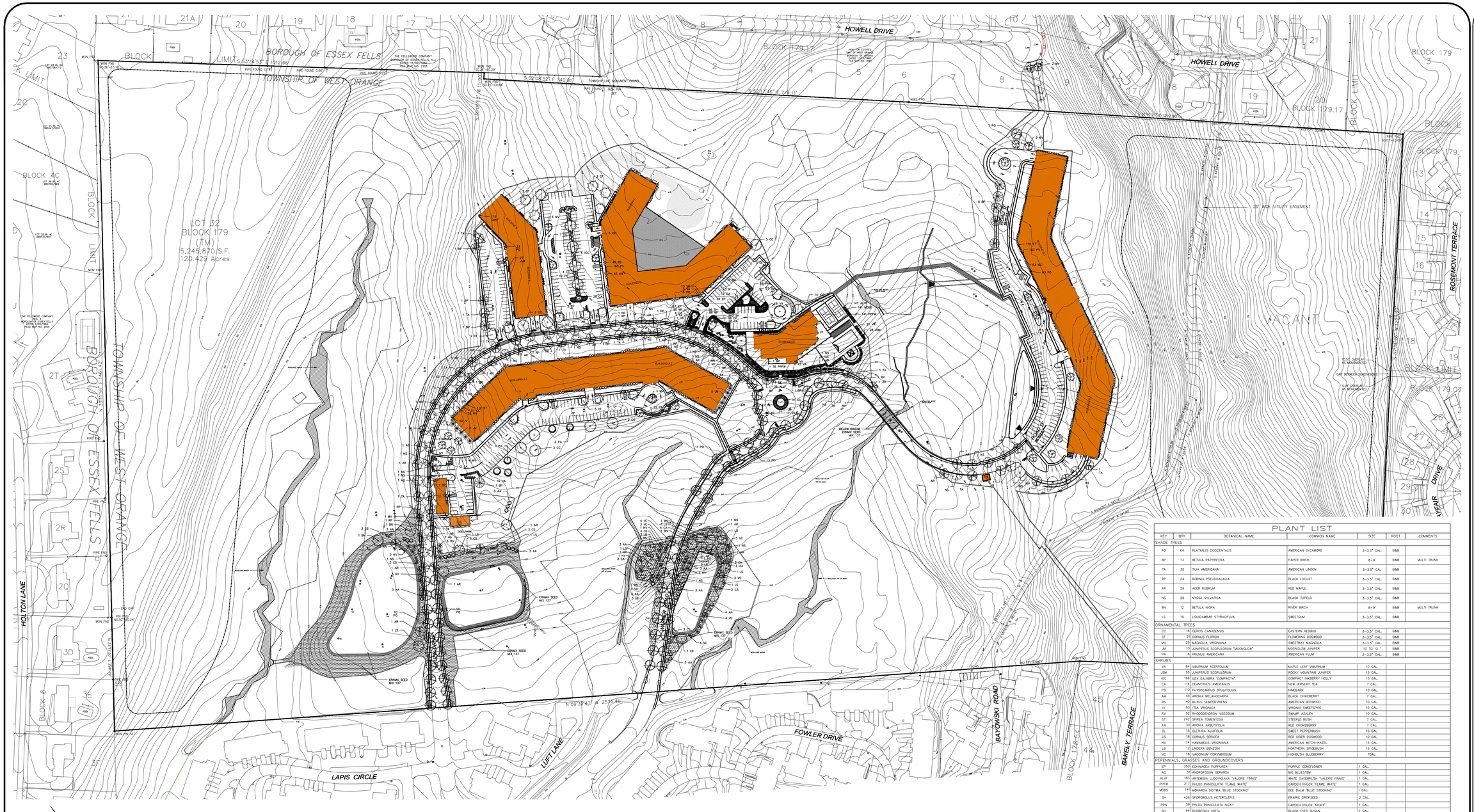
1. INLET MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE, AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF 1:2 CEMENT, SAND MORTAR.
2. PIPE TO BE CUT FLUSH WITH BASIN WALL.
3. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLET.
4. BOTTOMS SHALL BE DISHED AND SLOPED TOWARD THE OUTLET.
5. FRAME AND GRATES SHALL BE CAMPBELL FOUNDRY PATTERN No. 3425 BICYCLE AND ADA COMPLIANT OR APPROVED EQUAL

TYPE "E" INLET

SCALE: NTS

DRAGONFLIES & DAMSELFLIES
Helpful Hunters of the Wetlands
Buzzing through the air, these insect predators spend most of their time looking for their favorite food—mosquitoes, horseflies, and deerflies. They have the ability to fly at high speeds, stop abruptly, perch, hover, change course, and fly backwards or sideways. With colorful names such as "mosquito hawk," "snake doctor," and "Devil's darning needle," these aerial acrobats are fun to watch as they help keep insect populations under control.
Skimmer Dragonflies
Clubtail Dragonflies
Darners
Damselflies
Dragonflies
Pond Damselflies
Meadowhawk Dragonflies
Darners
Darners
Darners

Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B



Docusign Envelope ID: 25C8EA16-B6C8-4E08-848F-6BB276A3D02B

MATCHLINE SP-31

BUILDING A.1

BUILDING A.2

LIMIT OF PROPOSED GRADING

DOG PARK

MATCHLINE SP-34

MATCHLINE SP-33

STEARNS STREET

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04028400

DocuSigned by:
Paul Anderson
3029E8668C9248D...

SIGNATURE INVALID UNLESS PROTECTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/01/23	PER NJDEP COMMENTS	
7/11/23	PER NJDEP WETLANDS COMMENTS	
6/05/23	PER NJDEP COMMENTS	

ALL DRAWINGS, PREPARED BY ANDERSON CONSULTING SERVICES, LLC, ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES, LLC, SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING COPYRIGHT. THEY ARE NOT TO BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC, FOR THE SPECIFIC PURPOSE INTENDED AND DID BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC. AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC, HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9–23–22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

BLDG A LANDSCAPE PLAN

SP-30

SHEET 30 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

811 know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 - BLOCK 161 TAX LOT 3.01 - BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

MAP REFERENCE

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04228400

DocuSigned by:
Paul Anderson
3029EB668C9248D...

SIGNATURE INVALID UNLESS ACCOMPANIED BY RAISED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP COMMENTS
7/11/23	PER NJDEP WETLANDS COMMENTS
7/07/23	PER NJDEP COMMENTS
6/06/23	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY UNAUTHORIZED USE IS UNINTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

BLDG B+C LANDSCAPE PLAN

SP-31

SHEET 31 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE

MATCHLINE SP-34

REGULATED WATER
TOP OF BANK

BUILDING D.2

ROAD 'D'
ROAD NAME TO BE ASSIGNED AFTER CONSTRUCTION

P.S.

LIMIT OF PROPOSED GRADING

S 80°49'50" E 343.18'

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

2 MV
1 PO
9 MV
5 BP
112 ST
153 PV
63 IGC
63 PO
EMERGENCY ACCESS
STEAMTOWN ROAD

MATCHLINE

MAP REFERENCE

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 - BLOCK 167 TAX LOT 3.01 - BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/19/18 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NAVD1988 = + 0.96 FT
4. FRESHWATERS WETLANDS BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04182400
DocuSigned by:
Paul Anderson
3029E8668C9248D...
SIGNATURE INVALID UNLESS ELECTRONICALLY SIGNED AND SEALED

REVISIONS	
10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC AND ITS OFFICERS AND EMPLOYEES FROM ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Designed by	PWA
Checked by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

BLDG D LANDSCAPE PLAN

SP-32

SHEET 32 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE

4 VC
3 VC
1 HV
3 CS
3 LB
1 BN
1 BN
1 LS
4 CA
1 BN
1 BN
3 AA
1 LS
1 AR
1 HV
3 CA
3 VC
3 AA
3 LB
1 BN
1 NS
1 AR
1 LS
5 VC
1 NS
1 AR
1 TA
1 PO
1 NS
3 LB
3 AA
3 HV
3 CA
3 AA
1 LS
3 VC
1 NS
1 LS
3 CS
1 BN
3 AA
4 AA
4 VC
3 CS
ERNMX SEED
MIX 137
4 VC
1 LS
1 BN
3 AA
LIMIT OF PROPOSED
GRADING
WARNER ROAD
WF-4
5 CF
1 RH
59 PPW
57 SH
263 SH
96 EP
28 CA
10 IGC
18 VA
CLUBHOUSE
1 BP
48 VV
12 VA
76 PPFW
118 EP
36 ALVE
1 BP
1 BP
31 AG
30 EP
17 VA
13 PO
MATCHLINE
REGULATED WATER
TOP OF BANK
147 ALVF
141 MDBS
141 PPFW
21 VA
28 JSM
LIMIT OF PROPOSED
GRADING
1 NS
24 IGC
1 AR
1 TA
1 RP
1 AR
MATCHLINE SP-33
REGULATED WATER
TOP OF BANK
BELOW BRIDGE
ERNMX SEED
MIX 137
1 NS
1 TA
1 RP
1 AR
REGULATED WATER
TOP OF BANK
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by:
Paul Anderson
3029E8668C924BD...
SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	PER NJDEP COMMENTS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE AND SHALL REMAIN THE PROPERTY OF SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY SUCH REUSE OR MODIFICATION, UNTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

WARNER ROAD LANDSCAPE PLAN

SP-33

SHEET 33 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE SP-30

MATCHLINE SP-30

DOG PARK

KUZIK DRIVE

1 TA
1 RP
1 MV
1 BN
3 CS
3 AA
1 AR
3 HV
1 NS
1 LS
10 PO

ERNMX SEED MIX 137

LIMIT OF PROPOSED GRADING

REGULATE TOP OF B

N 59°32'47" W 25.

STREAM SURVEY

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 - BLOCK 161 TAX LOT 3.01 - BLOCK 161.1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04243400

DocuSigned by:
Paul Anderson
3029E8668C92480...

SIGNATURE INVALID UNLESS ORIGINAL EMBOSSED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/09/23	PER NJDEP COMMENTS	
REVISIONS		

ALL DOCUMENTS, PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

KUZIK ENTRANCE LANDSCAPE PLAN

SP-34

SHEET 34 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

BUILDING A.2

BUILDING B

BUILDING C

CLUBHOUSE

MATCHLINE SP-36

MATCHLINE SP-36

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

1. MAP REFERENCE:
   1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029E866BC9248D...
SIGNATURE INVALID UNLESS ELECTRONICALLY SIGNED AND SEALED

10/28/24	N/DEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N/DEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/05/23	PER NJDEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF.2022			
Date	9-23-22	Drawn by	BCA	
		Designed by	PWA	
		Checked by	PWA	
		Scale	AS SHOWN	

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN A

SP-35

SHEET 35 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE SP-35

MATCHLINE SP-35

BUILDING A.1

BUILDING A.2

DOG PARK

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

MATCHLINE SP-37

MATCHLINE SP-37

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

SIGNATURE INVALID UNLESS IT HAS AN ORIGINAL EMBOSSED SEAL OF P.E.

DocuSigned by:
Paul Anderson
[illegible]

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/06/23	PER NJDEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION 24GA28182400

Proj. No.	WEMF2022.03	Checked by	PWA
Date	9-23-22	Scale	AS SHOWN
Drawn by	BCA		
Designed by	PWA		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN B

SP-36

SHEET 36 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE SP-36

MATCHLINE SP-36

A @ 13'

A @ 13'

A @ 13'

D @ 3.66'

D @ 3.66'

D @ 3.66'

DOG PARK

A @ 13'

A @ 13'

A @ 13'

A @ 13'

A @ 13'

A @ 13'

A @ 13'

N 59°32'47" W 2

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY, NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E866BC8248D...

SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC AND ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION 24GA28182400

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN C

SP-37

SHEET 37 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE

MATCHLINE SP-39

MATCHLINE

MATCHLINE SP-39

CLUBHOUSE

MAP REFERENCE:

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E8668C9248D...

SIGNATURE INVALID UNLESS ELECTRONICALLY SIGNED AND SEALED BY P.E.

10/28/24	N.JDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N.JDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/20/23	PER NJDEP COMMENTS	
6/06/23		

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT AND ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY SUCH USE OR REUSE, OR MODIFICATION WITHOUT SUCH VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. SHALL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC. AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC. HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9–23–22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN D

SP-38

SHEET 38 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

MATCHLINE SP-40

MATCHLINE SP-38

MATCHLINE SP-40

MATCHLINE SP-38

BUILDING D.2

P.S.

A @ 13'

D @ 3.66'

B2 @ 13'

S 80°-11'-50" E 1017.85'

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

REFERENCE NOTES:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIPONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E8668C9248D...

SIGNATURE INVALID UNLESS PRESENTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/06/23	PER NJDEP COMMENTS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Checked by	PWA
Designed by	PWA	Scale	AS SHOWN

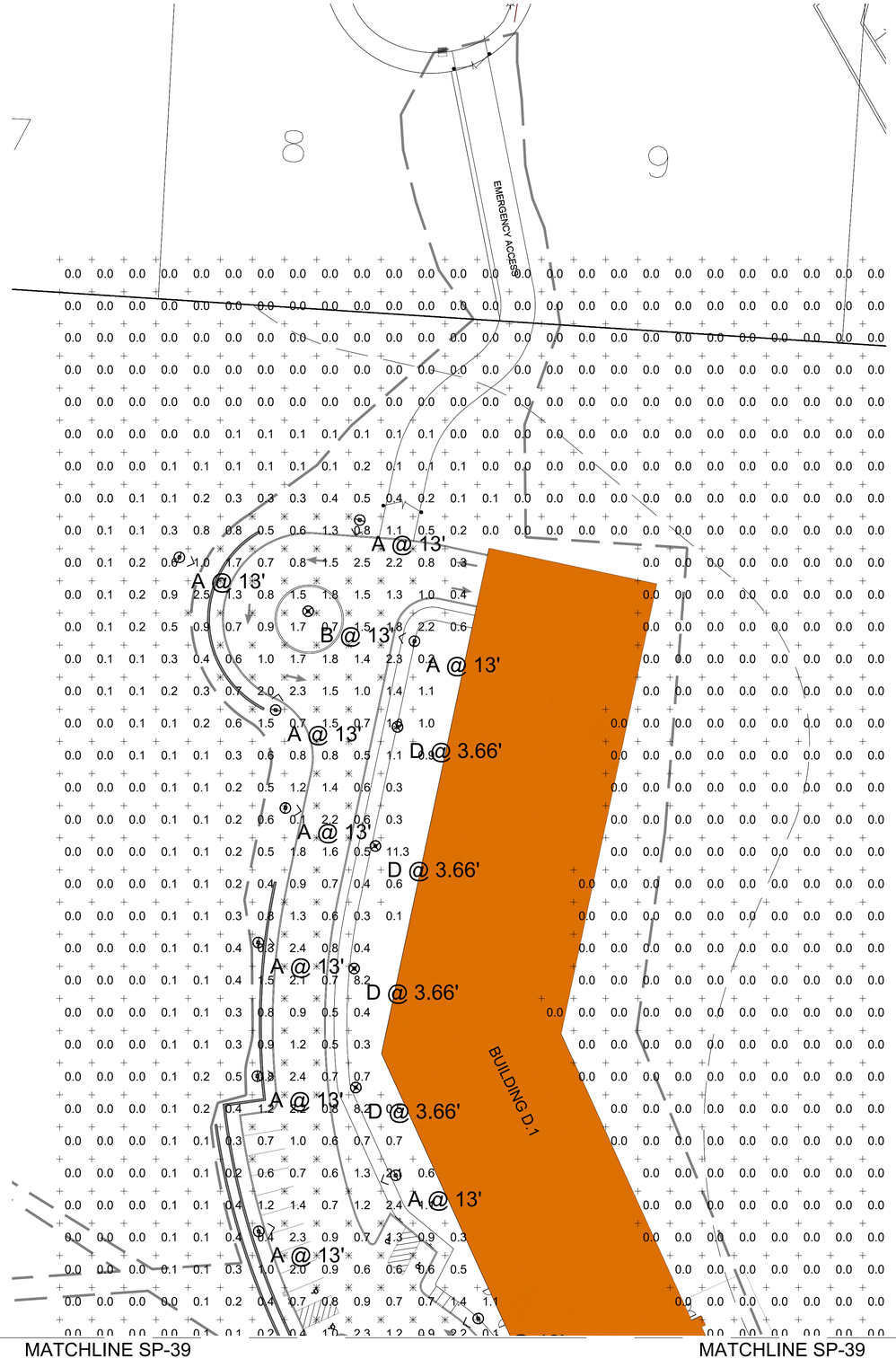
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN E

SP-39

SHEET 39 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E8668C9248D...

SIGNATURE INVALID UNLESS ORIGINAL EMBOSSED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP COMMENTS	
7/11/23	PER NJDEP WETLANDS COMMENTS	
6/07/23	PER NJDEP COMMENTS	
REVISIONS		

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC, ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC AGAINST ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022	
Date	9–23–22	
Drawn by	BCA	
Designed by	PWA	
Checked by	PWA	
Scale	AS SHOWN	

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN F

SP-40

SHEET 40 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD

FELLSWOOD COMPANY
IGH OF ESSEX FELLS, N.J.
DATED 11/02/1956
FILE MAP NO. 2251

BOROUGH OF VERONA
DATED 11/15/1983
FILE MAP NO. 3561

MON FND
S0.26'-E0.29'

MON FND
S0.25'-E0.44'

S 39°09'13" W 115.90'

S 52°08'52" E 340.81'

TOWNSHIP LINE MONUMENT FOUND

PIPE FOUND
0.14'

IRON PIN
SET

S 52°17'46" E 774.11'

PIPE FND

SILT FENCE (TYP)

SOIL COMPACTION TESTING
LOCATION (TYP)

BUILDING B

BUILDING C

BUILDING A.1

BUILDING A.2

CLUBHOUSE

POOL
666.2

BUILDING D.1

BUILDING D.2

ROAD D
R.O.W. VARIES
PVMT. VARIES

ROAD D

SOIL COMPACTION TESTING
LOCATION (TYP)

INLET PROTECTION FENCING
(TYP)

INLET PROTECTION FENCING
(TYP)

REGULATED WATER
TOP OF BANK

UNDISTURBED / PRESERVED:	4,034,100.3 SF	92.61 Acres
DISTURBED:	1,211,769.7 SF	27.82 Acres
TOTAL IMPERVIOUS:	595,540.7 SF	13.68 Acres
MOTOR VEHICLE SURFACE AREA:	273,689.0 SF	6.28 Acres

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MATCHLINE SP-42

MATCHLINE SP-42

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400

DocuSigned by:
Paul Anderson
3029E8668C92485D...

SIGNATURE INVALID UNLESS ELECTRONICALLY SEALED BY P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE SPECIFIC WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY REUSE WITHOUT SUCH VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, LOSSES, DAMAGES, COSTS AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMT2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA	Scale	AS SHOWN

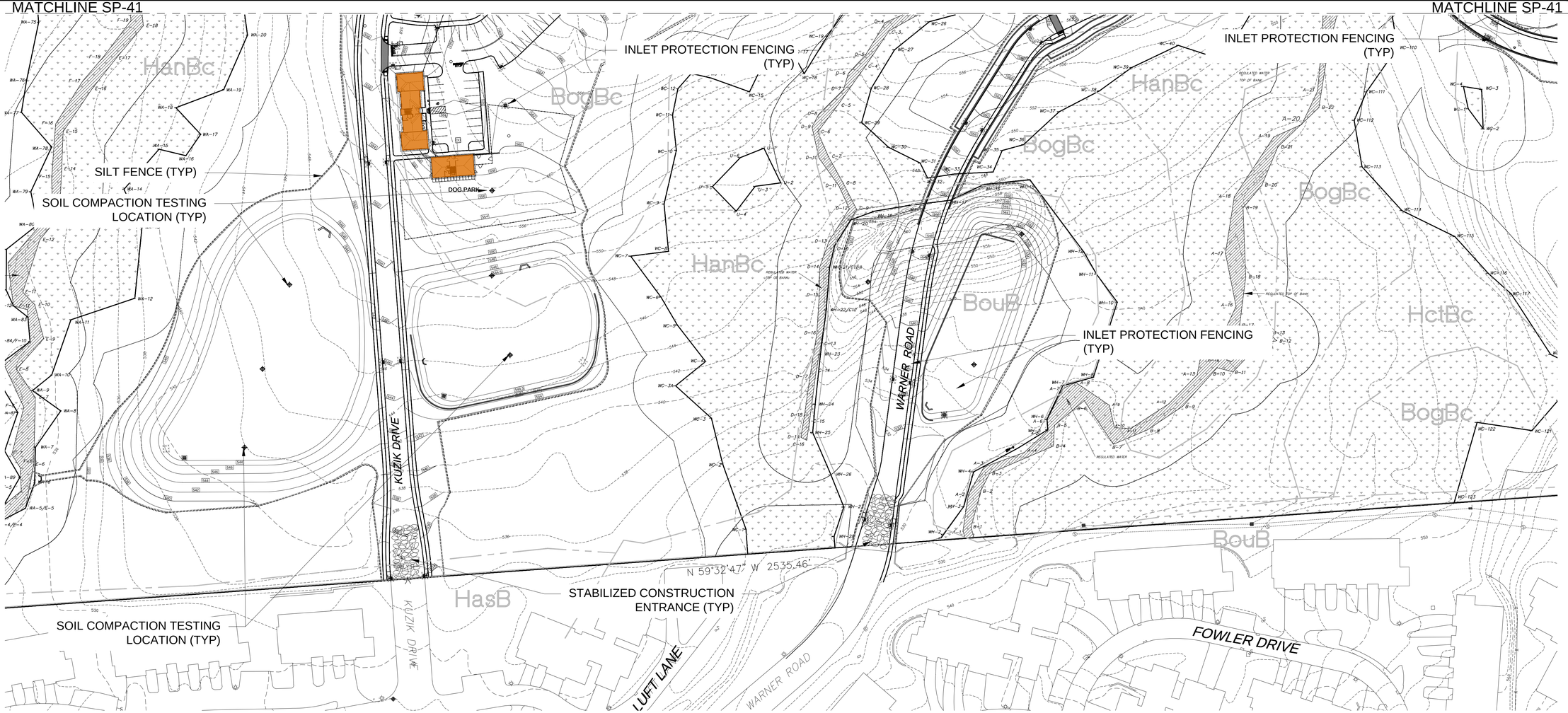
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SOIL EROSION AND
SEDIMENT CONTROL PLAN - A

SP-41

SHEET 41 OF 60

Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD



UNDISTURBED / PRESERVED:	4,034,100.3 SF	92.61 Acres
DISTURBED:	1,211,769.7 SF	27.82 Acres
TOTAL IMPERVIOUS:	595,540.7 SF	13.68 Acres
MOTOR VEHICLE SURFACE AREA:	273,689.0 SF	6.28 Acres

CONSTRUCTION SEQUENCE

ITEM DESCRIPTION	DURATION
–INSTALL SOIL EROSION CONTROL MEASURES	5 DAYS
–DEMOLITION AND CLEARING	2 WEEKS
–ROUGH GRADING	1 MONTH
–BUILDING CONSTRUCTION	12 MONTHS
–UTILITIES AND DRAINAGE	4 WEEKS
–PARKING LOT CONSTRUCTION	6 WEEKS
–FINAL GRADING AND SEEDING	1 WEEK
–UNIFORMLY APPLY TOPSOIL TO AN AVERAGE DEPTH OF 5", MINIMUM 4", FIRMED IN PLACE	2 DAYS
–REMOVE SESC MEASURES UPON COMPLETION	3 DAYS

SEE SHEET SP-43 FOR ADDITIONAL NOTES AND DETAILS

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

LEGEND

- SILT FENCE
- LIMIT OF DISTURBANCE
- NRCS SOILTYPE LINE
- HasB — NRCS SOILTYPE
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE / WHEEL CLEANING BLANKET
- SOIL COMPACTION TESTING LOCATION

SOIL DATA:

BogBc – Boonton loam, extremely stony: 0 to 8 % slopes

BogCc – Boonton loam. extremely stony: 8 to 15 % slopes

BogDc – Boonton loam, extremely stony: 15 to 35 % slopes

BouB – Boonton – Urban land, Boonton substratum complex: 0 to 8 % slopes

BouC – Boonton – Urban land, Boonton substratum complex: 8 to 15 % slopes

BouD – Boonton – Urban land, Boonton substratum complex: 15 to 25 % slopes

HanBc – Haledon silt loam, extremely stony: 0 to 8 % slopes

HasB – Haledon – Urban land, Haledon substratum complex: 0 to 8 % slopes

HctBc – Hasbrouck silt loam, extremely stony: 0 to 8 % slopes

PecmBc – Peckmantown silt loam, extremely stony: 0 to 8 % slopes

PecuuB – Peckmantown – Urban land, Peckmantown substratum complex: 0 to 8 % slopes

NOTE:
1. SOIL TYPES BASED ON NRCS SOIL SURVEY. GEOTECHNICAL REPORT REQUIRED FOR SITE SPECIFIC SOIL DATA AND PROFILES.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029E8668C9248D...
SIGNATURE INVALID UNLESS PROTECTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHER ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, LOSSES, DAMAGES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION 24GA28182400

ACS Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Checked by	PWA
Designed by	PWA	Scale	AS SHOWN

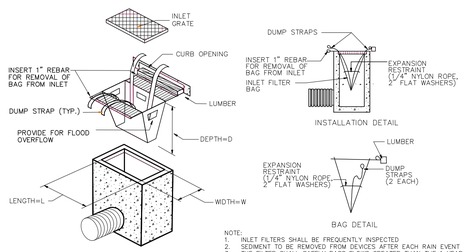
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SOIL EROSION AND SEDIMENT CONTROL PLAN - B

SP-42

SHEET 42 OF 60

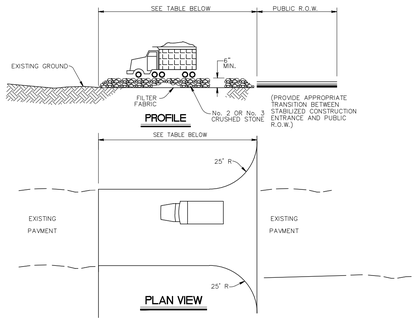
Docusign Envelope ID: A01D5F45-C892-47B7-A4D4-559017BC9DFD



NOTE:
1. INLET FILTERS SHALL BE FREQUENTLY INSPECTED
2. SEDIMENT TO BE REMOVED FROM DEVICES AFTER EACH RAIN EVENT
3. THE FILTER SHALL SAFELY PASS FLOWS GREATER THAN THE 1 YEAR, 24 HOUR DURATION STORM.

INLET SEDIMENT CONTROL DEVICE

SCALE: NTS

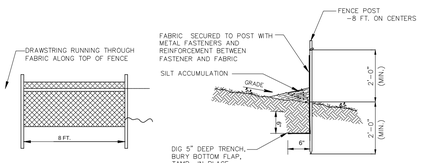


PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 – 2%	50 FT	100 FT
2 – 5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE*	

* AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING BODY.

STABILIZED CONSTRUCTION ENTRANCE

SCALE: NTS

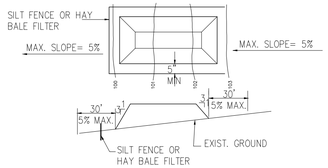


REQUIREMENTS FOR SILT FENCE

1. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AND LEAST 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1 1/2 INCHES.
2. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
3. A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS, ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

SILT FENCE DETAIL

SCALE: NTS



NOTES:

1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN
2. ALL SIDE SLOPES SHALL BE MAXIMUM 3:1
3. STOCKPILE SHALL RECIEVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS AS STATED ON THIS SHEET.
4. SILT FENCE OR HAY BALE FILTER SHALL BE INSTALLED AS DETAILED HEREON.

SOIL STOCKPILE

SCALE: NTS

DUST CONTROL NOTES:

TABLE 16-1: DUST CONTROL MATERIALS:

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS / ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM)– SPRAY ON POLYACRYLAMIDE (PAM)– DRY SPRAY	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD (PG. 26-1)		
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

TILLAGE: TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

SPRINKLING: SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

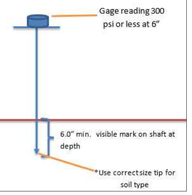
BARRIERS: SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE: SHALL BE IN THE FORM OF LOOSE, DRY GRANULATES OF FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS, OR ACCUMULATION AROUND PLANTS.

STONE: COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

Handheld Soil Penetrometer Test

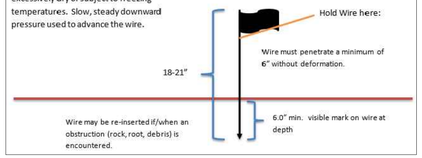
Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the probe. Probe must penetrate at least 6" with less than 300 psi reading on the gauge.



Penetrometer may be re-inserted if/when an obstruction (rock, root, debris) is encountered.

Probing Wire Test- 15.5 ga steel wire (survey flag)

Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing temperatures. Slow, steady downward pressure used to advance the wire.



SOIL COMPACTION TESTING REQUIREMENTS

1. SUBGRADE SOILS **PRIOR TO THE APPLICATION OF TOPSOIL** (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE **GRAPHICALLY DENOTED** ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
3. **COMPACTION TESTING LOCATIONS** ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

COMPACTION TESTING METHODS

A. PROBING WIRE TEST (SEE DETAIL)
B. HAND-HELD PENETROMETER TEST (SEE DETAIL)
C. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED
D. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)

NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.

SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

PROCEDURES FOR SOIL COMPACTION MITIGATION

PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION **PRIOR TO PLACEMENT** OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

SOIL EROSION & SEDIMENT CONTROL NOTES:

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN WILL BE CONSTRUCTED IN ACCORDANCE WITH THE "NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL" 7TH EDITION LAST REVISED DECEMBER 2017. THESE MEASURES WILL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ALL SOIL TO BE EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 14 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION, WILL BE TEMPORARILY SEEDED AND HAY MULCHED OR OTHERWISE PROVIDED WITH VEGETATIVE COVER. THIS TEMPORARY COVER SHALL BE MAINTAINED UNTIL SUCH TIME WHEREBY PERMANENT RESTABILIZATION IS ESTABLISHED.
3. SEEDING DATES: THE FOLLOWING SEEDING DATES ARE RECOMMENDED TO BEST ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE HEPSCD: SPRING – 3/1–5/15 AND FALL – 8/15 – 10/1
4. SEDIMENT FENCES ARE TO BE PROPERLY TRENCHED AND MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED
5. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY ONE OF THE PRACTICES ACCEPTED IN THE STANDARDS, AND PROTECTION SHALL REMAIN UNTIL PERMANENT STABILIZATION HAS BEEN ESTABLISHED. STORM DRAINAGE OUTLET POINTS SHALL BE PROTECTED AS REQUIRED BEFORE THEY BECOME FUNCTIONAL.
6. MULCH MATERIALS SHALL BE UN-ROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 70 TO 90 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
7. ALL EROSION CONTROL DEVICES SHALL BE PERIODICALLY INSPECTED, MAINTAINED AND CORRECTED BY THE CONTRACTOR. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
8. THE HUDSON–ESSEX–PASSAIC SOIL CONSERVATION DISTRICT WILL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO ANY SOIL DISTURBING ACTIVITIES. FAX – (862) 333–4507 OR EMAIL – INFORMATION@HEPSCD.ORG
9. **THE APPLICANT MUST OBTAIN A DISTRICT ISSUED REPORT–OF–COMPLIANCE PRIOR TO APPLYING FOR THE CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY FROM THE RESPECTIVE MUNICIPALITY, NJ – DCA OR ANY OTHER CONTROLLING AGENCY.** CONTACT THE DISTRICT AT 862–333–4505 TO REQUEST A FINAL INSPECTION, GIVING ADVANCED NOTICE UPON COMPLETION OF THE RESTABILIZATION MEASURES. A PERFORMANCE DEPOSIT MAY BE POSTED WITH THE DISTRICT WHEN WINTER WEATHER OR SNOW COVER PROHIBITS THE PROPER APPLICATION OF SEED, MULCH, FERTILIZER OR HYDRO–SEED.
10. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. DO NOT UTILIZE A FIRE OR GARDEN HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT BASIN. WATER PUMPED OUT OF THE EXCAVATED AREAS CONTAINS SEDIMENTS THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER USING REMOVABLE PUMPING STATIONS, SUMP PITS, PORTABLE SEDIMENTATION TANKS AND/OR SILT CONTROL BAGS.
11. ALL SURFACES HAVING LAWN OR LANDSCAPING AS FINAL COVER ARE TO BE PROVIDED TOPSOIL PRIOR TO RE–SEEDING, SODDING OR PLANTING. A DEPTH OF 5.0 INCHES, FIRMED IN PLACE, IS REQUIRED, AS PER THE STANDARDS FOR TOPSOILING AND LAND GRADING, LAST REVISED DECEMBER 2017.
12. ALL PLAN REVISIONS MUST BE SUBMITTED TO THE DISTRICT FOR PROPER REVIEW AND APPROVAL.
13. A CRUSHED STONE WHEEL CLEANING TRACKING–PAD IS TO BE INSTALLED AT ALL SITE EXITS USING 2½ –1" CRUSHED ANGULAR STONE (ASTM 2 OR 3) TO A MINIMUM LENGTH OF 50 FEET AND MINIMUM DEPTH OF 6". ALL DRIVEWAYS MUST BE PROVIDED WITH CRUSHED STONE UNTIL PAVING IS COMPLETE.
14. STEEP SLOPES INCURRING DISTURBANCE MAY REQUIRE ADDITIONAL STABILIZATION MEASURES. THESE "SPECIAL" MEASURES SHALL BE DESIGNED BY THE APPLICANT'S ENGINEER AND BE APPROVED BY THE SOIL CONSERVATION DISTRICT.
15. **THE HUDSON–ESSEX–PASSAIC SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED, IN WRITING, FOR THE SALE OF ANY PORTION OF THE PROJECT OR FOR THE SALE OF INDIVIDUAL LOTS. NEW OWNERS' INFORMATION SHALL BE PROVIDED. ADDITIONAL MEASURES DEEMED NECESSARY BY DISTRICT OFFICIALS SHALL BE IMPLEMENTED AS CONDITIONS WARRANT.**

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE04182400
SIGNATURE INVALID UNLESS SIGNED AND SEALED
DocuSigned by: Paul Anderson 3029EB668C9248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	N.JDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/06/23	REVISIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT ONLY WITH THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY REUSE WITHOUT SUCH VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC IS AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Designed by	PWA
Checked by	PWA	Scale	AS SHOWN

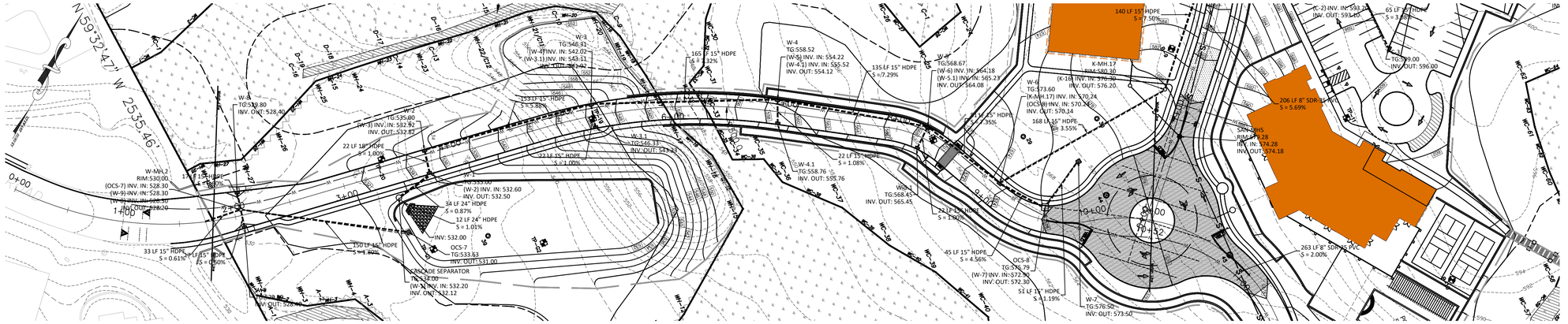
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

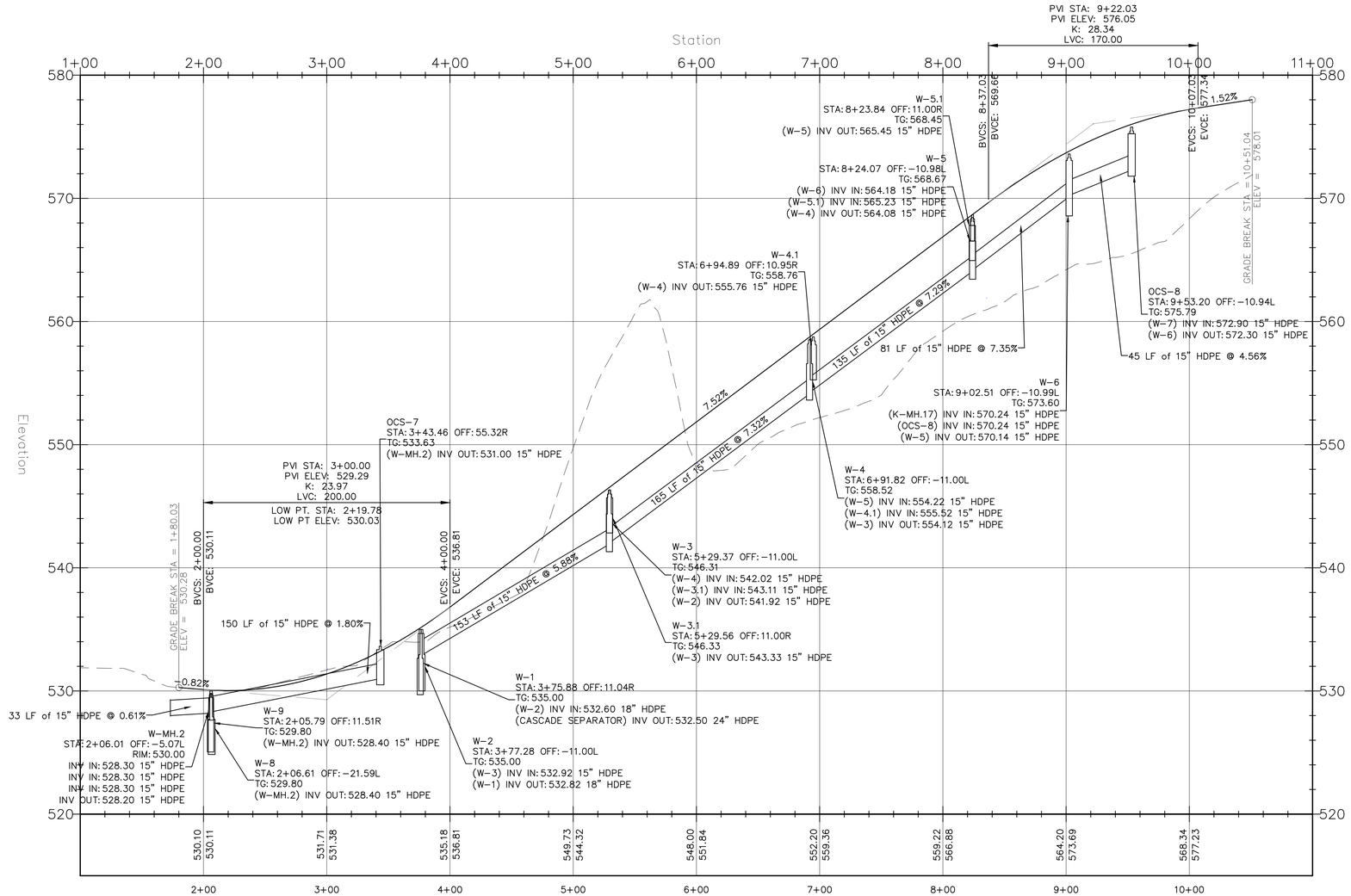
SOIL EROSION AND SEDIMENT CONTROL DETAILS

SP-43

SHEET 43 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4





PROFILE - WARNER ROAD

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

HORIZONTAL

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

VERTICAL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS PROCESSED WITH DIGITAL SIGNATURE AND EMBOSSED SEAL OF P.E.

DocuSigned by:
Paul Anderson
302BE8068C9248D...

10/28/24	N/DEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N.DEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/31/23	PER NJDEP COMMENTS	
6/07/23	PER NJDEP COMMENTS	
DATE	REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC AND SHALL NOT BE LOANED, COPIED OR ALTERED IN ANY FORM WHATSOEVER WITHOUT THE EXPRESSED WRITTEN CONSENT OF ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION 24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

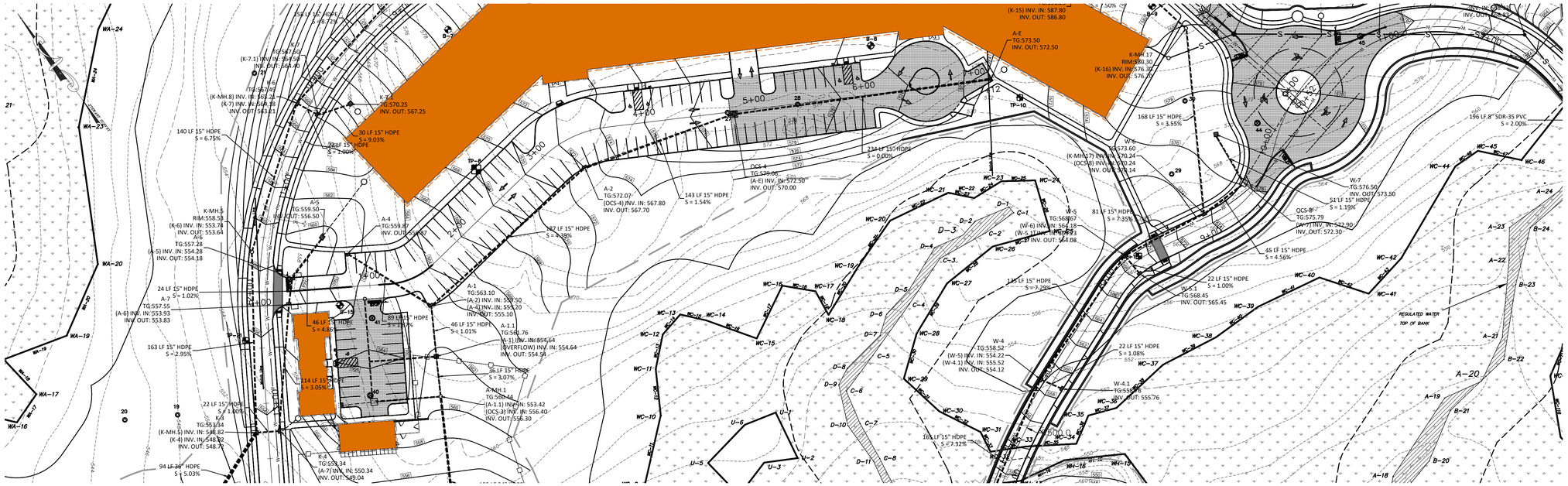
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

WARNER ROAD PLAN AND PROFILE

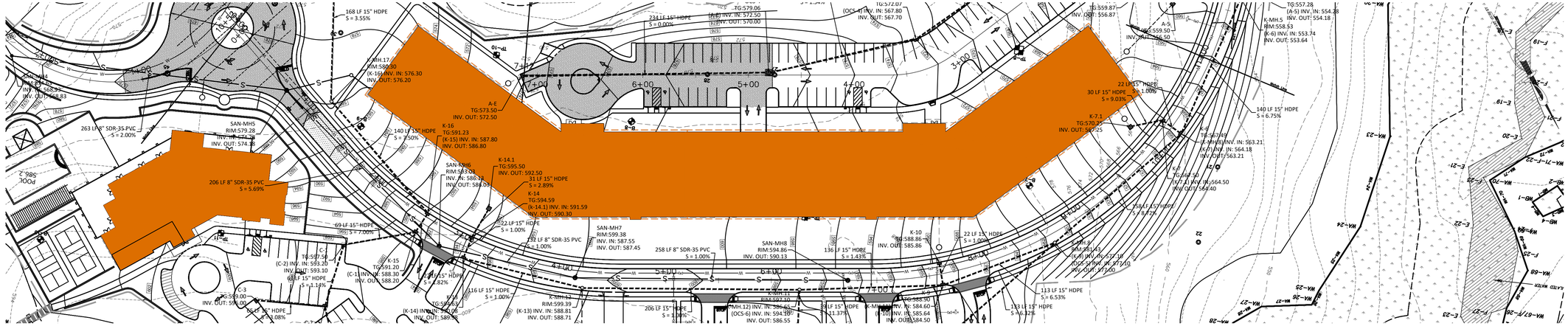
SP-44

SHEET 44 OF 60

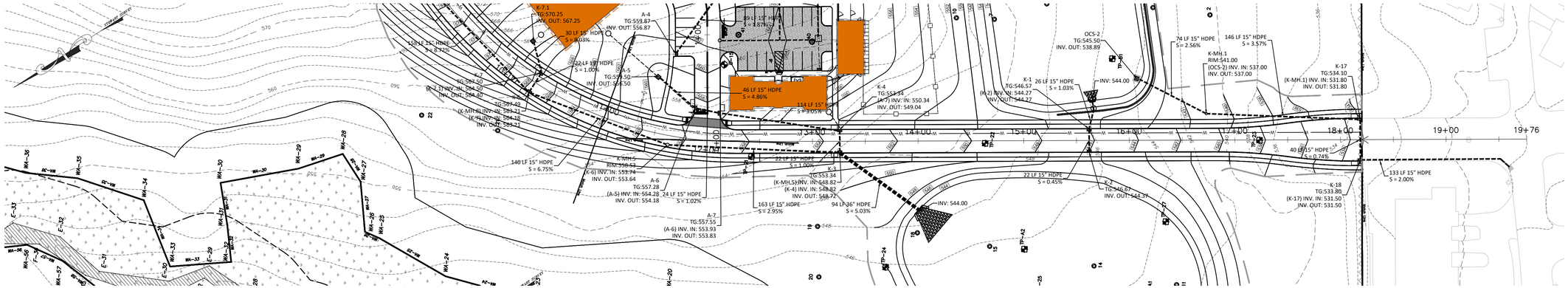
Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4

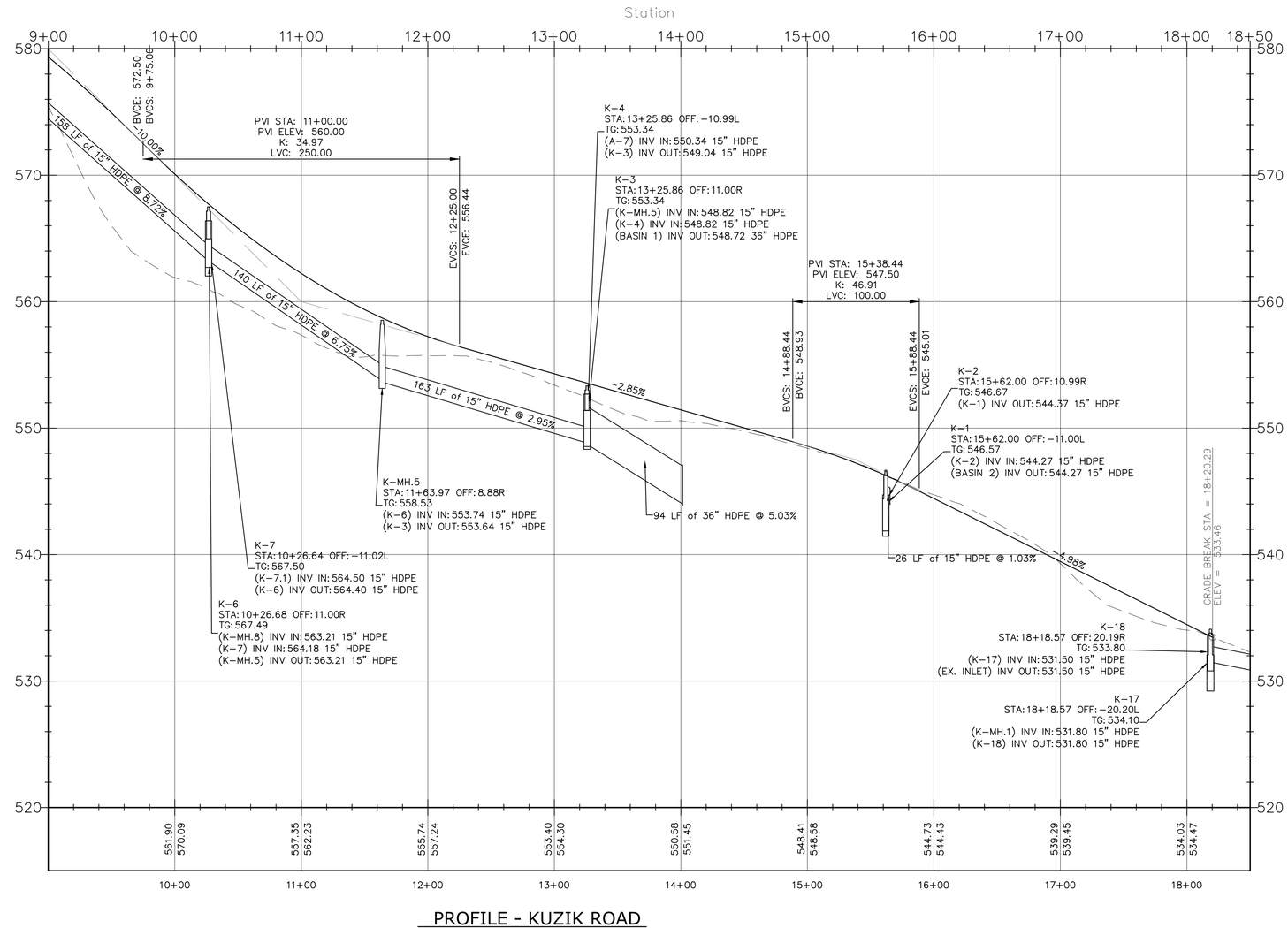


Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4


168 LF 15" HDPE S = 3.55%
SAN-MH4 RIM:582.32 INV. OUT: 568.83
263 LF 8" SDR-35 PVC S = 2.00%
SAN-MH5 RIM:579.28 INV. IN: 574.28 INV. OUT: 574.18
206 LF 8" SDR-35 PVC S = 5.69%
69 LF 15" HDPE S = 7.00%
60 LF 15" HDPE S = 4.08%
60 LF 15" HDPE S = 5.14%
140 LF 15" HDPE S = 7.50%
K-16 TG:591.23 (K-15) INV. IN: 587.80 INV. OUT: 586.80
K-15 TG:591.20 (C-1) INV. IN: 588.30 INV. OUT: 588.20
C-3 TG:593.00 INV. OUT: 590.00
K-14 TG:594.59 (K-14) INV. IN: 590.08 INV. OUT: 589.98
K-13 TG:594.63 (K-13) INV. IN: 588.81 INV. OUT: 588.71
K-MH.17 RIM:580.30 (K-16) INV. IN: 576.30 INV. OUT: 576.20
A-E TG:573.50 INV. OUT: 572.50
K-14.1 TG:595.50 INV. OUT: 592.50
31 LF 15" HDPE S = 2.89%
K-14 TG:594.59 (k-14.1) INV. IN: 591.59 INV. OUT: 590.30
22 LF 15" HDPE S = 1.00%
132 LF 8" SDR-35 PVC S = 1.00%
SAN-MH7 RIM:599.38 INV. IN: 587.55 INV. OUT: 587.45
116 LF 15" HDPE S = 1.00%
K-MH.12 RIM:599.39 (K-13) INV. IN: 588.81 INV. OUT: 588.71
206 LF 15" HDPE S = 1.00%
K-MH.11 RIM:597.10 (K-MH.12) INV. IN: 586.65 INV. OUT: 586.55
258 LF 8" SDR-35 PVC S = 1.00%
SAN-MH8 RIM:594.86 INV. OUT: 590.13
136 LF 15" HDPE S = 1.43%
K-10 TG:588.86 INV. OUT: 585.86
22 LF 15" HDPE S = 1.00%
K-MH.9 RIM:581.13 (K-9) INV. IN: 577.10 (OCS-5) INV. IN: 577.10 INV. OUT: 577.00
113 LF 15" HDPE S = 6.53%
113 LF 15" HDPE S = 6.32%
K-MH.8 RIM:581.13 (K-9) INV. IN: 577.10 (OCS-5) INV. IN: 577.10 INV. OUT: 577.00
K-MH.5 RIM:558.53 (K-6) INV. IN: 553.74 INV. OUT: 553.64
TG:557.28 (A-5) INV. IN: 554.28 INV. OUT: 554.18
A-5 TG:559.50 INV. OUT: 556.50
TG:559.87 INV. OUT: 556.87
22 LF 15" HDPE S = 1.00%
30 LF 15" HDPE S = 9.03%
K-7.1 TG:570.25 INV. OUT: 567.25
140 LF 15" HDPE S = 6.75%
K-6 TG:567.49 (K-MH.8) INV. IN: 563.21 (K-7) INV. IN: 564.18 INV. OUT: 563.21
K-7 TG:567.50 (K-7.1) INV. IN: 564.50 INV. OUT: 564.40
158 LF 15" HDPE S = 6.72%
POC 586.2
TP-10
TP-11
TP-12
TP-13
TP-14
TP-15
TP-16
TP-17
TP-18
TP-19
TP-20
TP-21
TP-22
TP-23
TP-24
TP-25
TP-26
TP-27
TP-28
TP-29
TP-30
TP-31
TP-32
TP-33
TP-34
TP-35
TP-36
TP-37
TP-38
TP-39
TP-40
TP-41
TP-42
TP-43
TP-44
TP-45
TP-46
TP-47
TP-48
TP-49

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4





PROFILE - KUZIK ROAD

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

HORIZONTAL

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

VERTICAL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
STATE OF NEW JERSEY
DocuSigned by: Paul Anderson 3029E868C9204SD...
SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP COMMENTS
7/11/23	PER NJDEP WETLANDS COMMENTS
6/07/23	PER NJDEP COMMENTS
DATE	REVISIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES, LLC AND THE ARCHITECT SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN. NO PART OF THESE DOCUMENTS MAY BE REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF ANDERSON CONSULTING SERVICES, LLC. THESE DOCUMENTS ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC AND ITS OFFICERS AND EMPLOYEES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

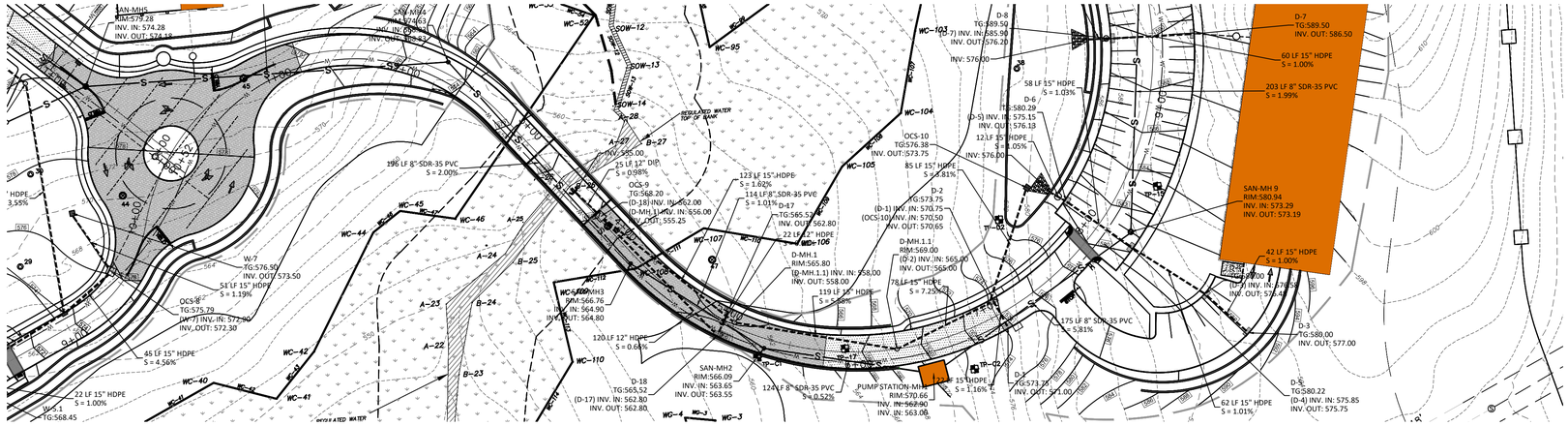
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

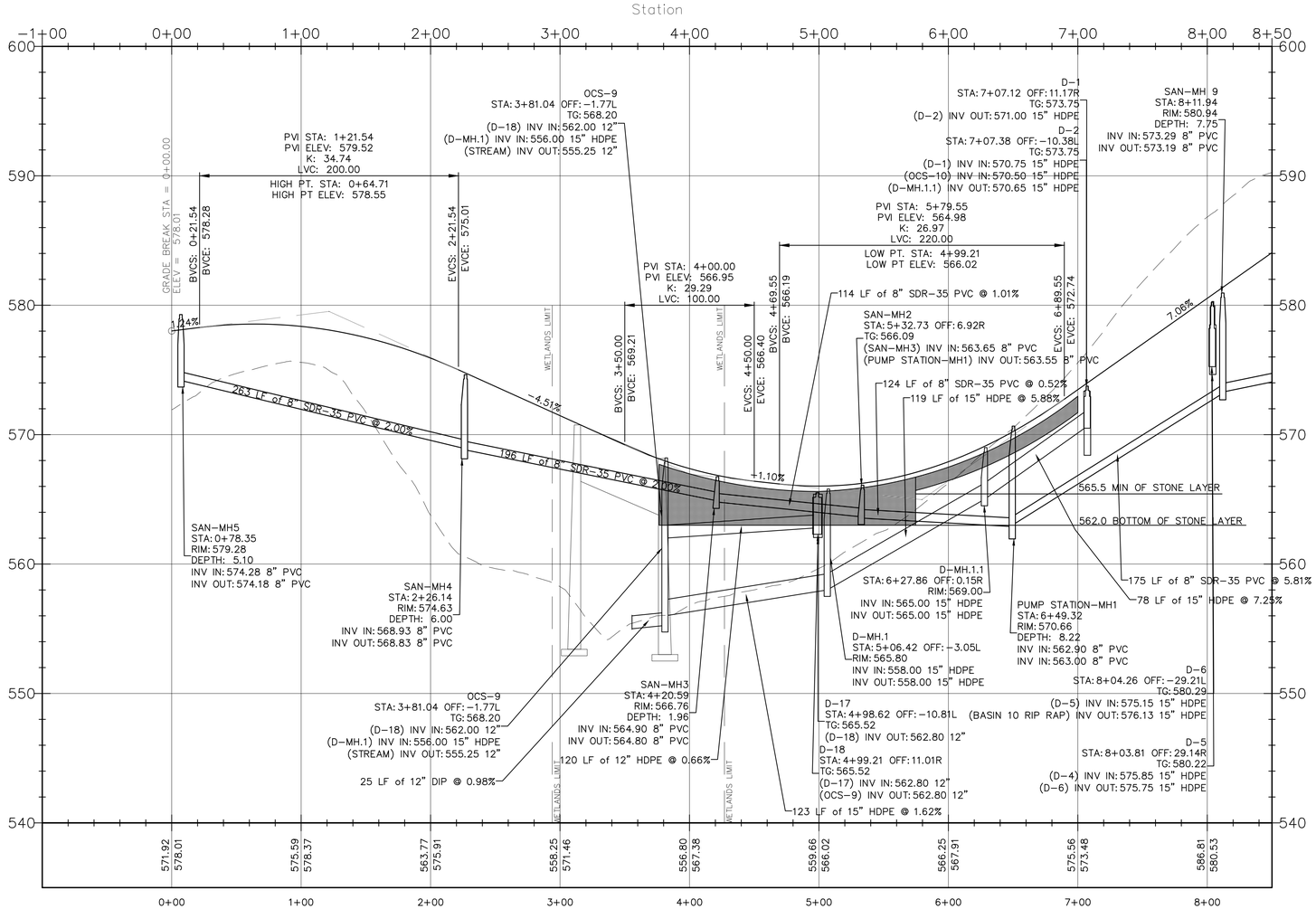
KUZIK ROAD PLAN AND PROFILE B

SP-47

SHEET 47 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4





PROFILE - ROAD "D"

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

HORIZONTAL

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

VERTICAL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029E8668C9248D...
SIGNATURE INVALID UNLESS ORIGINAL SEAL OF P.E. IS COLORED

10/28/24	N.JDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	N.JDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY REUSE WITHOUT SUCH VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC SHALL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

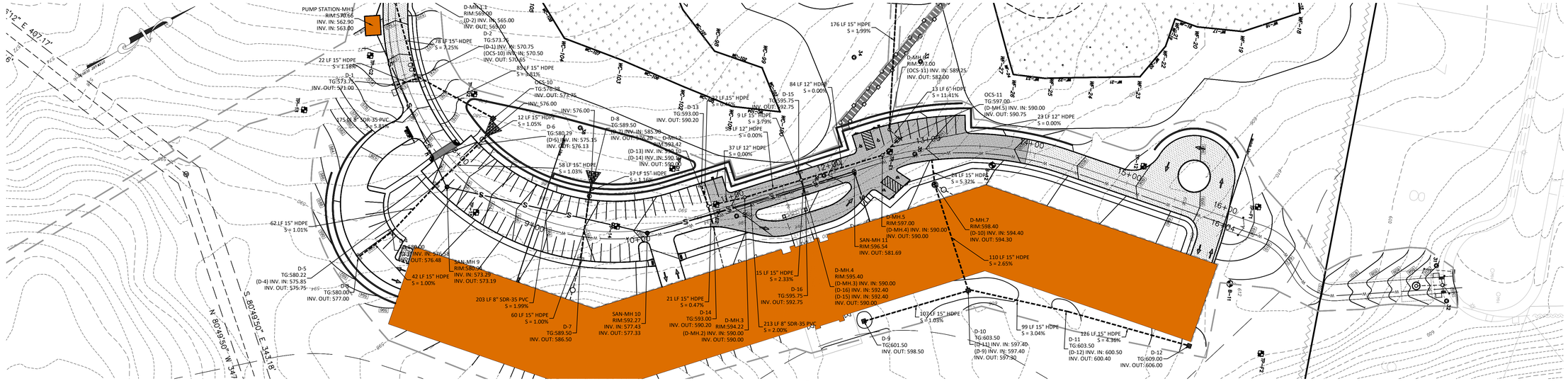
ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

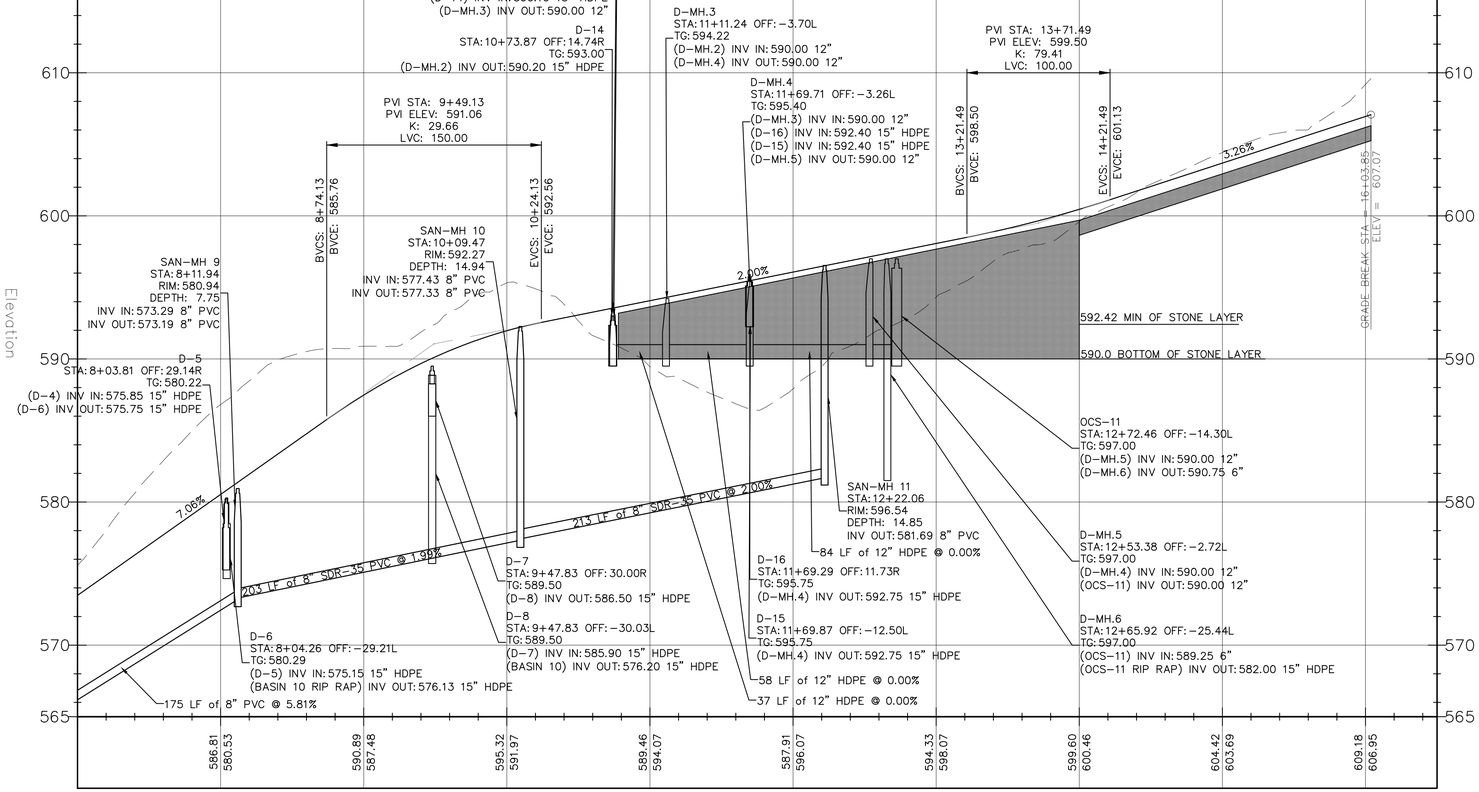
CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX CO

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4





PROFILE - ROAD "D"

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

HORIZONTAL

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

VERTICAL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 in BLOCK 161 TAX LOT 3.01 – BLOCK 181, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson
3029E8668C92480...
SIGNATURE INVALID UNLESS PRESENTED SEAL OF P.E.

10/28/24	N.JDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	N.DEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
DATE	REVISIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES, LLC SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN. NO PERSON SHALL MAKE ANY USE OF THE INFORMATION CONTAINED ON, IN OR ATTACHED TO THESE PLANS AND DOCUMENTS WITHOUT THE SPECIFIC WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED BY THE ORIGINAL PREPARER. ANY SUCH USE OR REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION SHALL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022
Date	9–23–22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

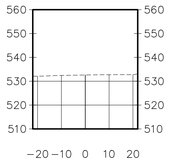
ROAD D PLAN AND PROFILE B

SP-49

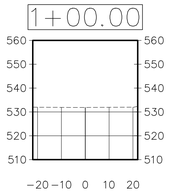
SHEET 49 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4

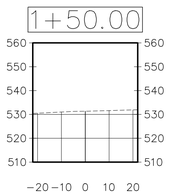
0+50.00



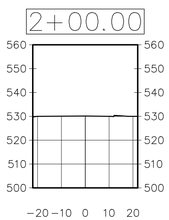
1+00.00



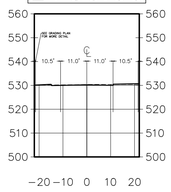
1+50.00



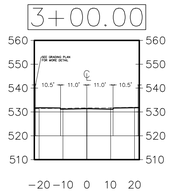
2+00.00



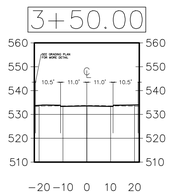
2+50.00



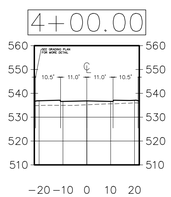
3+00.00



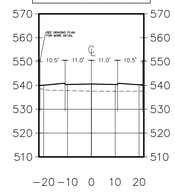
3+50.00



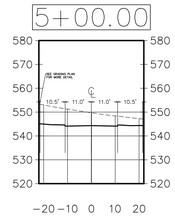
4+00.00



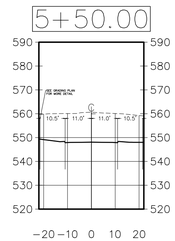
4+50.00



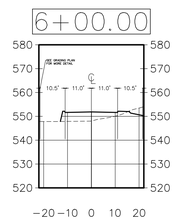
5+00.00



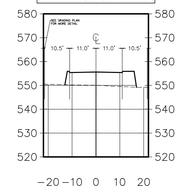
5+50.00



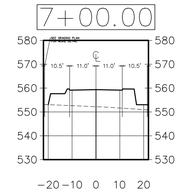
6+00.00



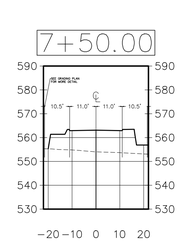
6+50.00



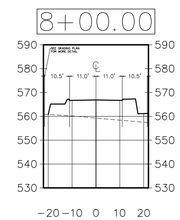
7+00.00



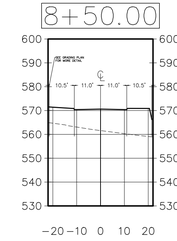
7+50.00



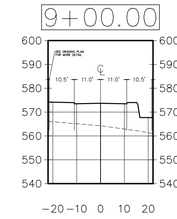
8+00.00



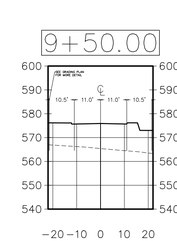
8+50.00



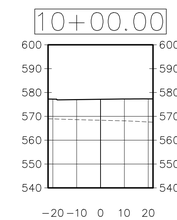
9+00.00



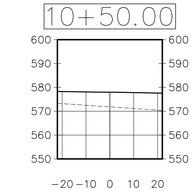
9+50.00



10+00.00



10+50.00



HORIZONTAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

VERTICAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1−800−272−1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 ⇨ BLOCK 161 TAX LOT 3.01 ⇨ BLOCK 181, 1701−1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1−20−20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423−07−0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LICENSE NUMBER 24GE04228600
STATE OF NEW JERSEY
PAUL W. ANDERSON
No. 24GE04228600
PROFESSIONAL ENGINEER
SIGNATURE INVALID UNLESS SIGNED AND DATED SEAL OF P.E.

DocuSigned by:
Paul Anderson
3029E8668C9248D...

10/28/24	N/DEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N.DEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP WETLANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/07/23	PER NJDEP COMMENTS	
DATE	REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES LLC AND ANY OTHER PERSON OR ENTITY PREPARING ANY PLANS OR OTHER DOCUMENTS SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT SHALL OBTAIN THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9−23−22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

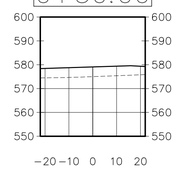
ROADWAY CROSS SECTIONS
WARNER ROAD 0+50 TO 10+50

SP-50

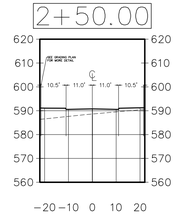
SHEET 50 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4

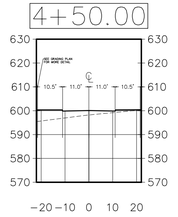
0+50.00



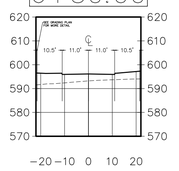
2+50.00



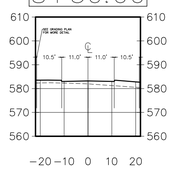
4+50.00



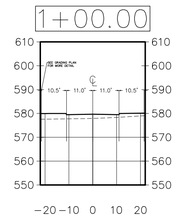
6+50.00



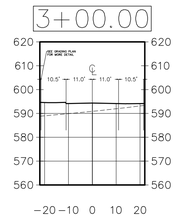
8+50.00



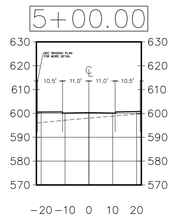
1+00.00



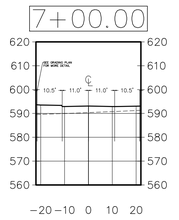
3+00.00



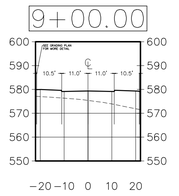
5+00.00



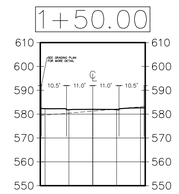
7+00.00



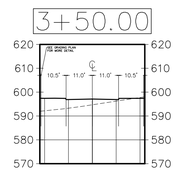
9+00.00



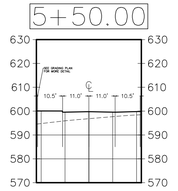
1+50.00



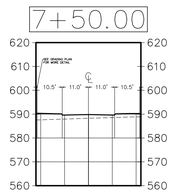
3+50.00



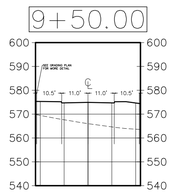
5+50.00



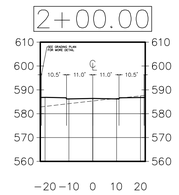
7+50.00



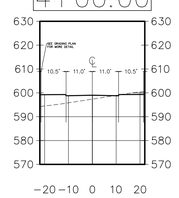
9+50.00



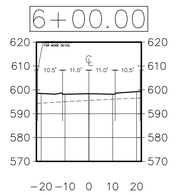
2+00.00



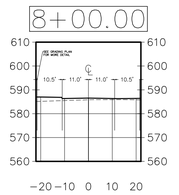
4+00.00



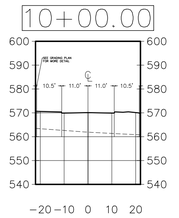
6+00.00



8+00.00



10+00.00



HORIZONTAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

VERTICAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 -- BLOCK 161 TAX LOT 3.01 -- BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. CERT. NUMBER 24GE04243600
STATE OF NEW JERSEY
PAUL W. ANDERSON
No. 24GE04243600
PROFESSIONAL ENGINEER
SIGNATURE INVALID UNLESS ORIGINAL EMBOSSED SEAL OF P.E.

DocuSigned by:
Paul Anderson
3029E8668C9248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
DATE(S)	REVISION(S)

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND SHALL NOT BE USED BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY UNAUTHORIZED USE IS INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC. AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC. HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

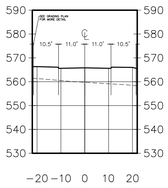
ROADWAY CROSS SECTIONS
KUZIK ROAD 0+50 TO 10+00

SP-51

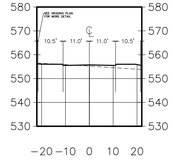
SHEET 51 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4

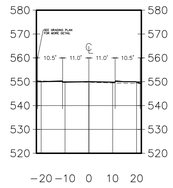
10+50.00



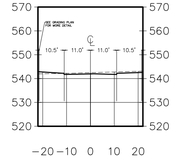
12+50.00



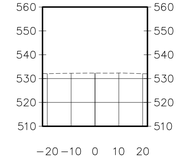
14+50.00



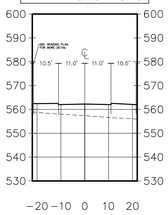
16+50.00



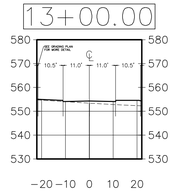
18+50.00



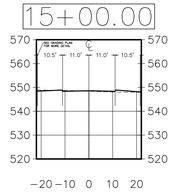
11+00.00



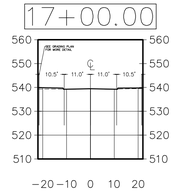
13+00.00



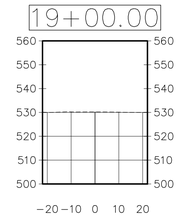
15+00.00



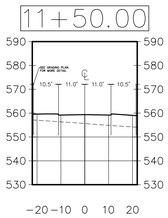
17+00.00



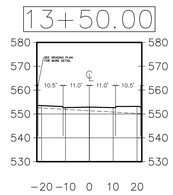
19+00.00



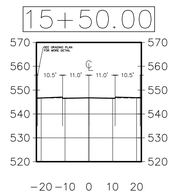
11+50.00



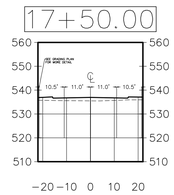
13+50.00



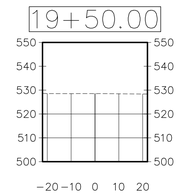
15+50.00



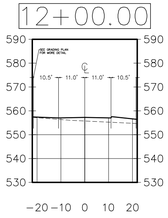
17+50.00



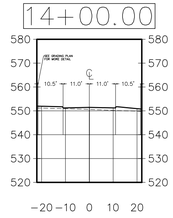
19+50.00



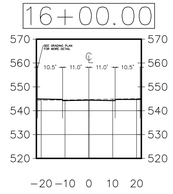
12+00.00



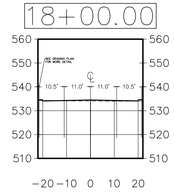
14+00.00



16+00.00



18+00.00



HORIZONTAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

VERTICAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 -- BLOCK 161 TAX LOT 3.01 -- BLOCK 181, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NUMBER 24GE04228400
STATE OF NEW JERSEY
No. 24GE04228400
PROFESSIONAL ENGINEER
SIGNATURE INVALID UNLESS SIGNED AND DATED SEAL OF P.E.

DocuSigned by:
Paul Anderson
3029E8668C9248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP - WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC. ANY REUSE WITHOUT SUCH VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC IS UNDERSTOOD AND INTENDED BY ALL BY OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC, AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEl: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

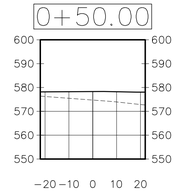
ROADWAY CROSS SECTIONS
KUZIK ROAD 10+50 TO 19+50

SP-52

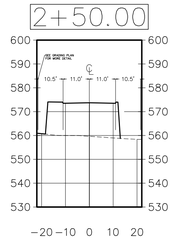
SHEET 52 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4

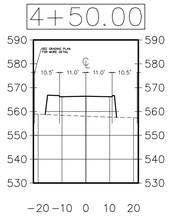
0+50.00



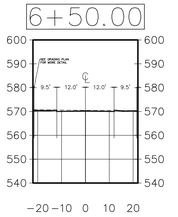
2+50.00



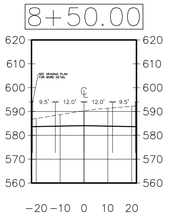
4+50.00



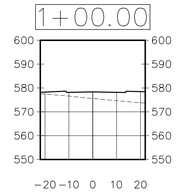
6+50.00



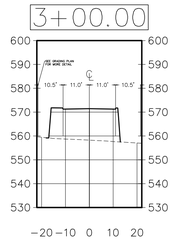
8+50.00



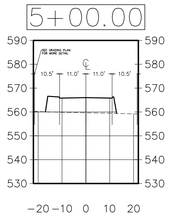
1+00.00



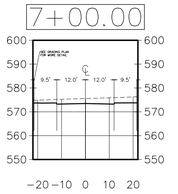
3+00.00



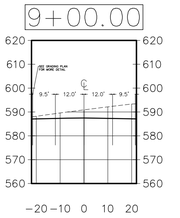
5+00.00



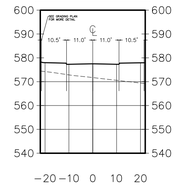
7+00.00



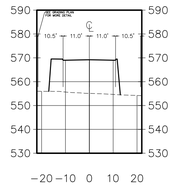
9+00.00



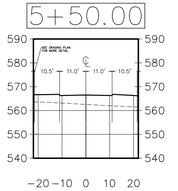
1+50.00



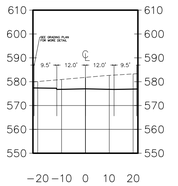
3+50.00



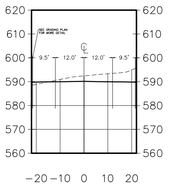
5+50.00



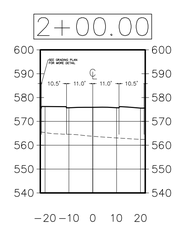
7+50.00



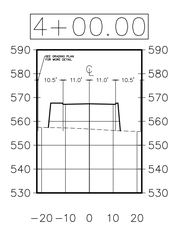
9+50.00



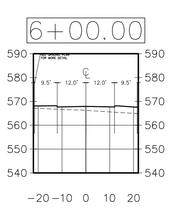
2+00.00



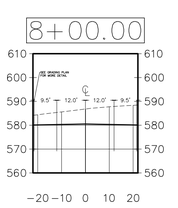
4+00.00



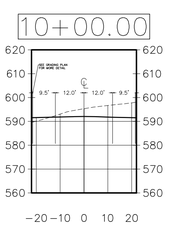
6+00.00



8+00.00



10+00.00



HORIZONTAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

VERTICAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LICENSE NUMBER 24GA28182400
STATE OF NEW JERSEY
PAUL W. ANDERSON
No. 24GA28182400
PROFESSIONAL ENGINEER
DocuSigned by:
Paul Anderson
3029E8668C9248D...
SIGNATURE INVALID UNLESS ELECTRONICALLY SIGNED AND SEALED BY P.E.

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. NO ARTICLE, BLOCK OR PLAN SHALL BE USED BY ANY PERSON OTHER THAN THE PERSON FOR WHOM IT WAS PREPARED, AND SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT, WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION 24GA28182400

Proj. No.	WEMF2022
Date	9–23–22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

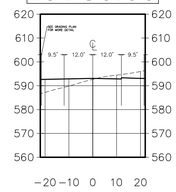
ROADWAY CROSS SECTIONS
ROAD D 0+50 TO 10+00

SP-53

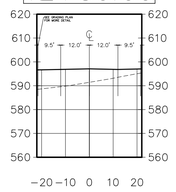
SHEET 53 OF 60

Docusign Envelope ID: D1D04BF9-1B5C-42D6-BFBB-04E6737374A4

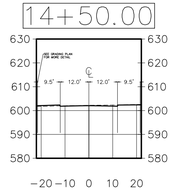
10+50.00



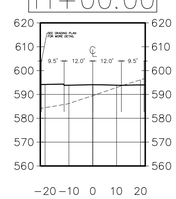
12+50.00



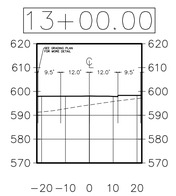
14+50.00



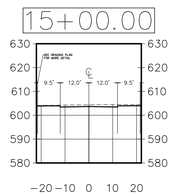
11+00.00



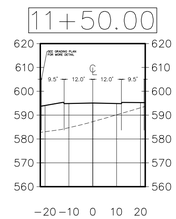
13+00.00



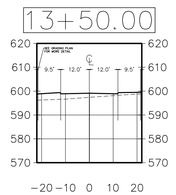
15+00.00



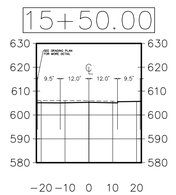
11+50.00



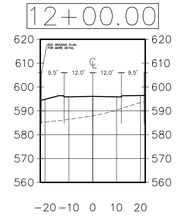
13+50.00



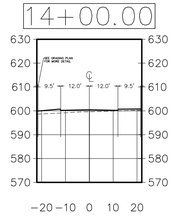
15+50.00



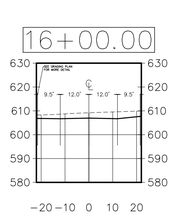
12+00.00



14+00.00



16+00.00



HORIZONTAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

VERTICAL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 -- BLOCK 161 TAX LOT 3.01 -- BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GE02818400
STATE OF NEW JERSEY
SIGNATURE INVALID UNLESS SIGNED AND SEALED BY P.E.
DocuSigned by:
Paul Anderson
3029E8668C9248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
DATE	REVISIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. ANDERSON CONSULTING SERVICES, LLC SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN. NO PERSON SHALL MAKE ANY CHANGES TO THESE DOCUMENTS WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC, AND UNAUTHORIZED CHANGES AND USES SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ANDERSON CONSULTING SERVICES, LLC. THE USER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC AND ITS OFFICERS AND EMPLOYEES HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION
24GA28182400

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA		
Designed by	PWA		
Checked by	PWA		
Scale	AS SHOWN		

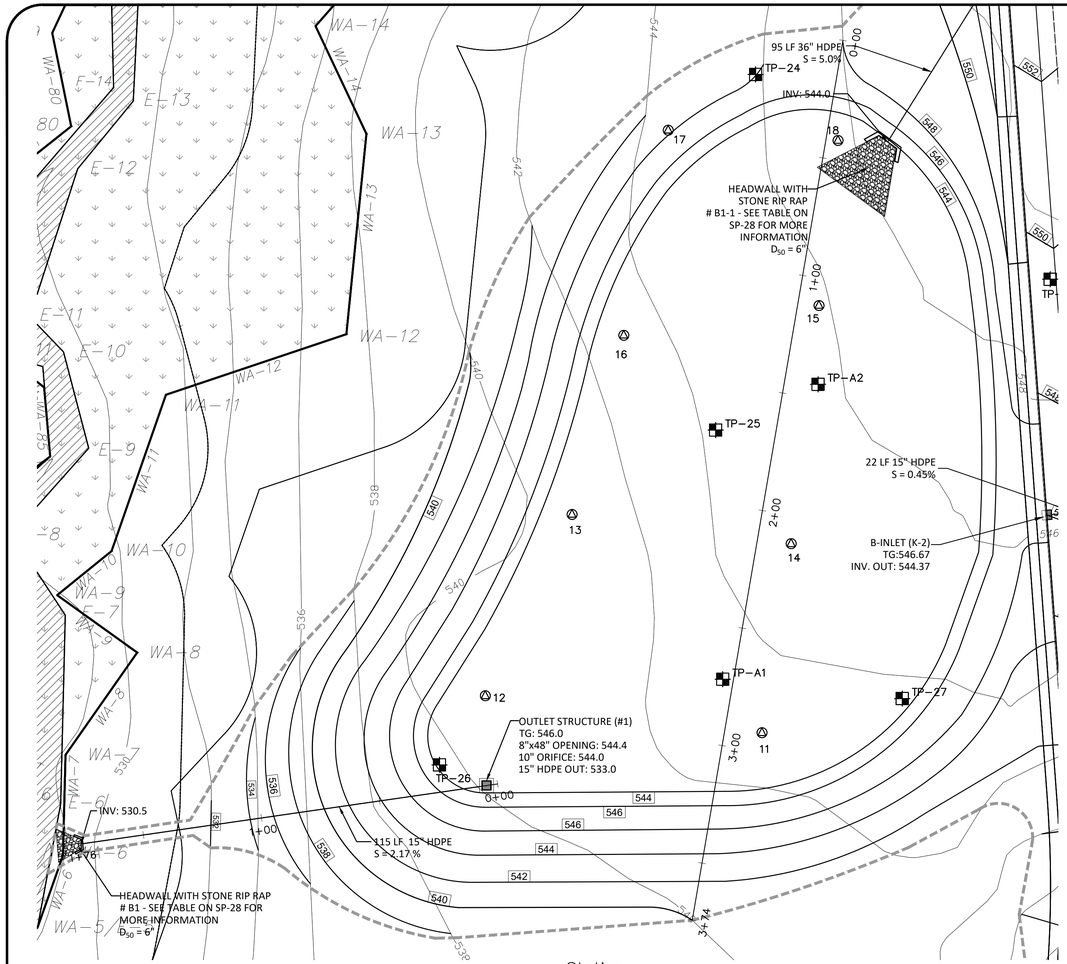
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

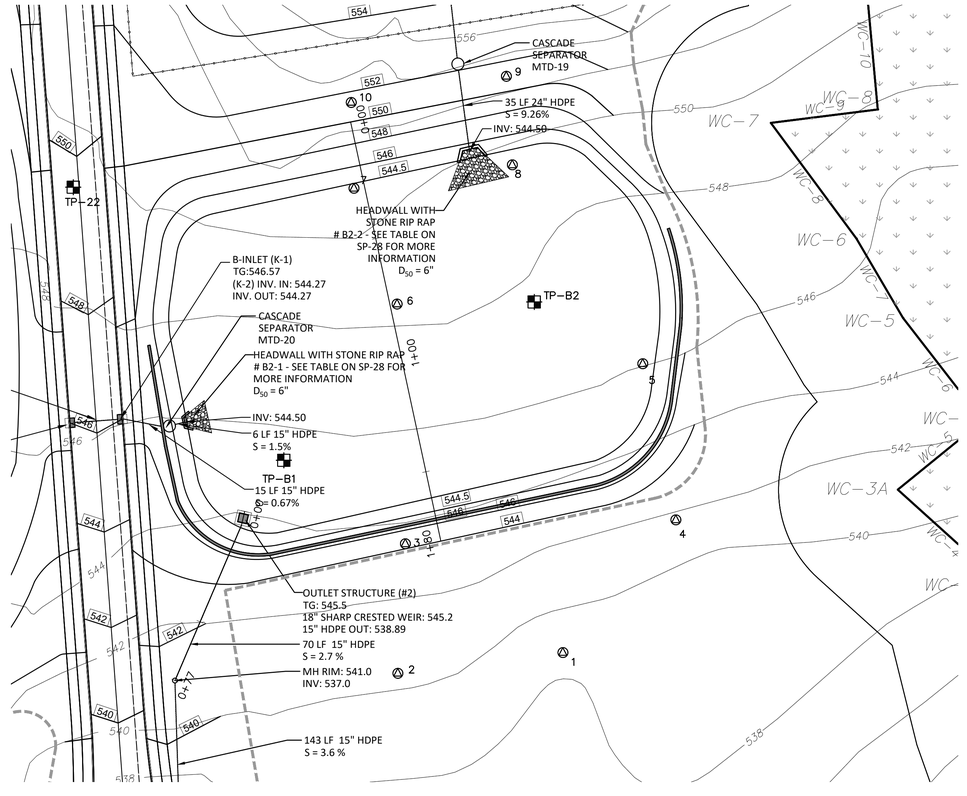
ROADWAY CROSS SECTIONS
ROAD D 10+50 TO 16+00

SP-54

SHEET 54 OF 60

Docusign Envelope ID: 1D90532D-13B2-4B20-B09E-14585552A3CB

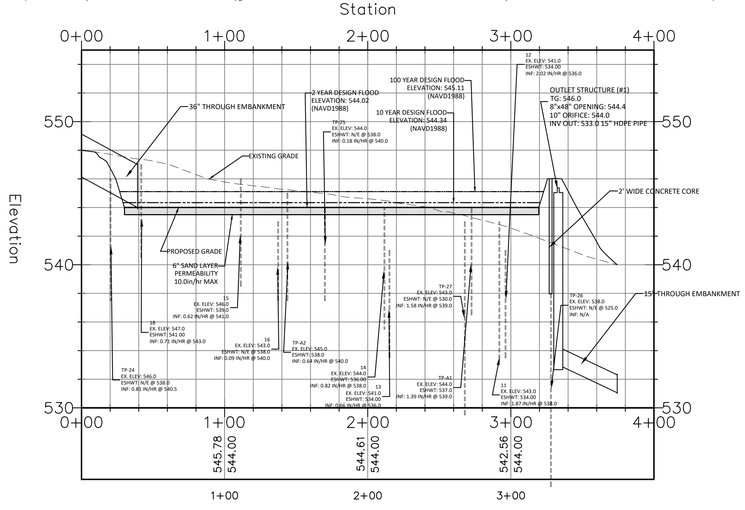




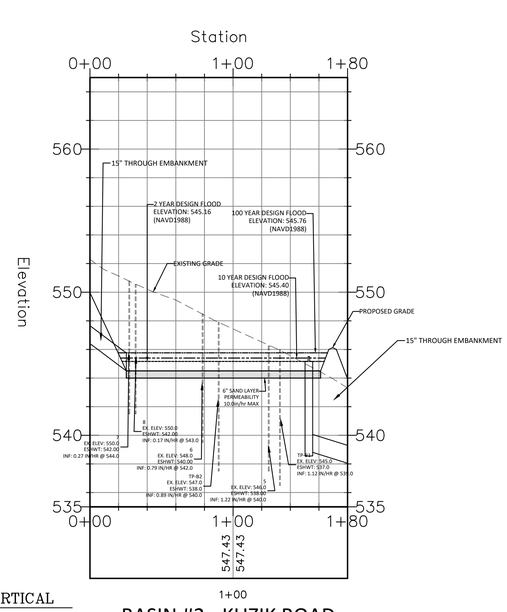
GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



BASIN #1 - KUZIK ROAD



BASIN #2 - KUZIK ROAD

HORIZONTAL
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

VERTICAL
GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
SIGNATURE INVALID UNLESS ORIGINAL SEAL OF P.E.

DocuSigned by: Paul Anderson 3029E866BC8248D...

10/28/24	NJDEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	NJDEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/11/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
DATE	REVISIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHER ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

CERTIFICATE OF AUTHORIZATION 24GA28182400

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

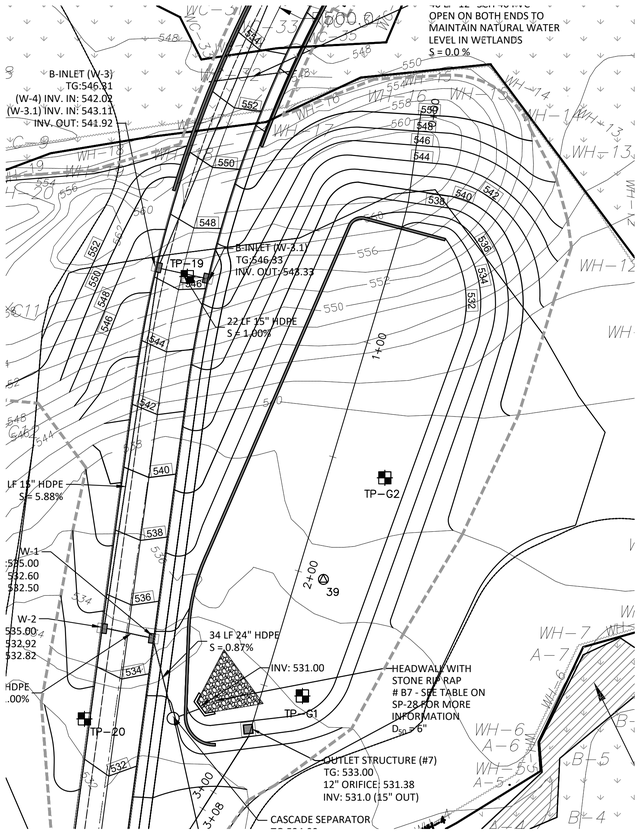
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

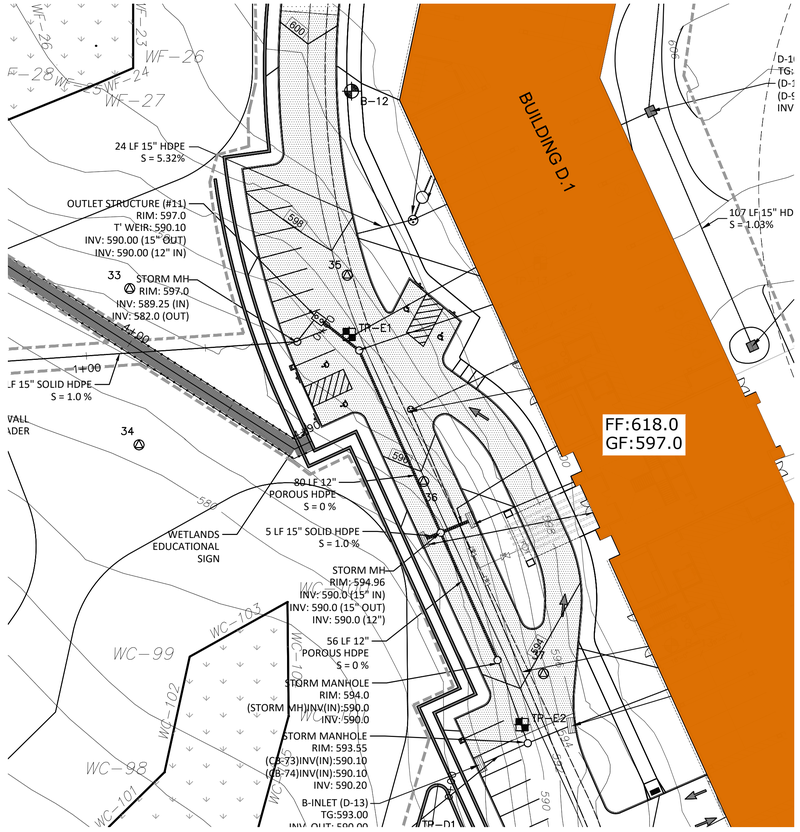
BASIN CROSS SECTIONS-A

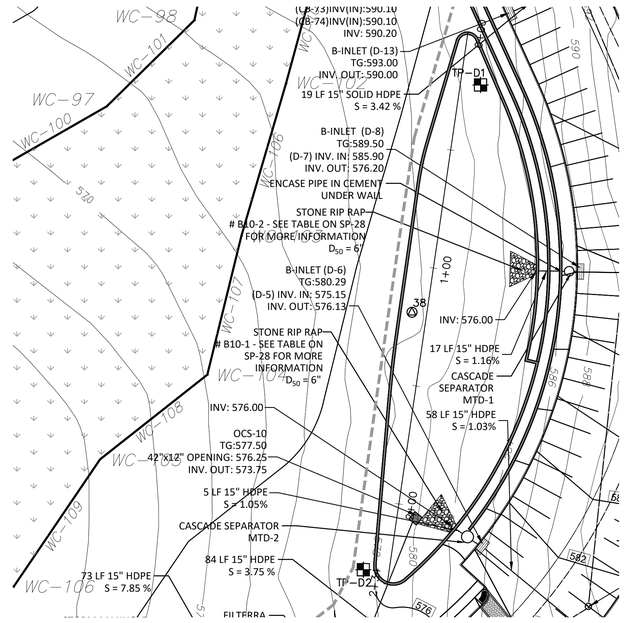
SP-55

SHEET 55 OF 60

Docusign Envelope ID: 1D90532D-13B2-4B20-B09E-14585552A3CB





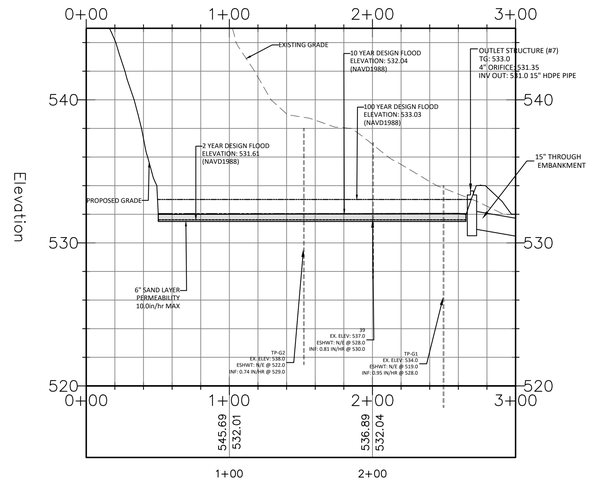


GRAPHIC SCALE

30 0 15 30 60 120

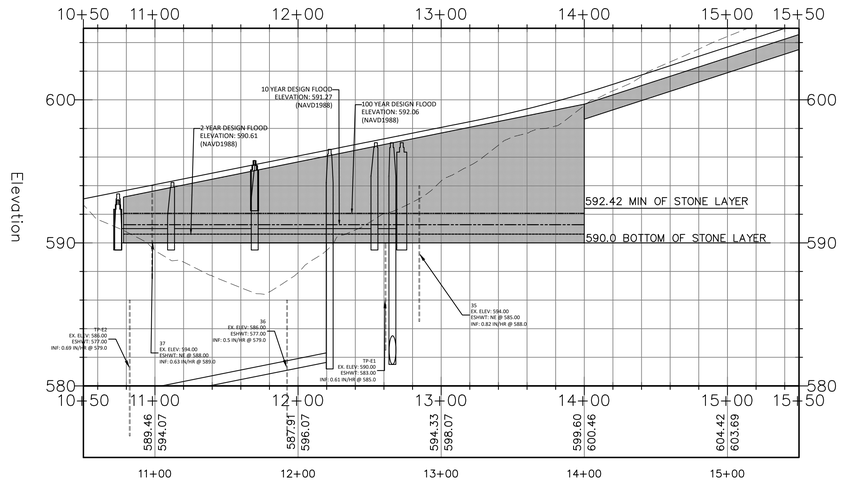
(IN FEET)
1 inch = 30 ft.

Station



BASIN #7 - WARNER ROAD

Station



ROAD D POROUS PAVEMENT

BASIN 11

HORIZONTAL

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

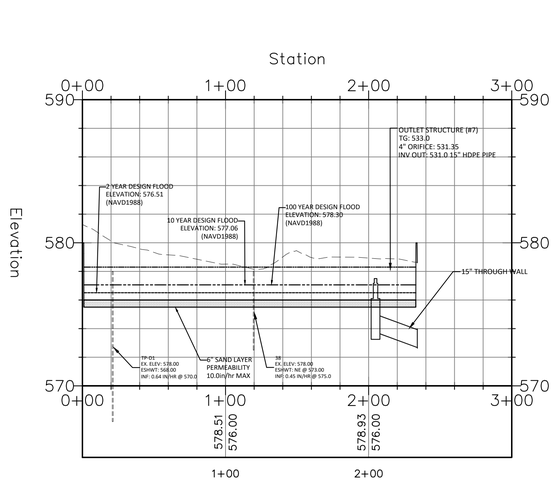
VERTICAL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

Station



ROAD D BASIN

BASIN 10

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 – BLOCK 161 TAX LOT 3.01 – BLOCK 161, 1701–1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1–20–20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423–07–0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1–800–272–1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029E8668C9248D...
SIGNATURE INVALID UNLESS PRINTED SEAL OF P.E.

10/28/24	N/DEP RESUBMISSION
10/01/24	PER NJDEP COMMENTS
07/09/24	N.DEP RESUBMISSION
06/24/24	REVISE FOR NJDEP SUBMISSION
04/29/24	REVISED GRADING & DRAINAGE
10/26/23	PER NJDEP COMMENTS
10/23/23	PER NJDEP COMMENTS
10/03/23	PER NJDEP COMMENTS
9/07/23	PER NJDEP WETLANDS COMMENTS
7/31/23	PER NJDEP COMMENTS
6/07/23	PER NJDEP COMMENTS
DATE(S)	REVISION(S)

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT FOR WHICH THEY WERE PREPARED AND ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION 24GA28182400

Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9–23–22		
Drawn by	BCA	Designed by	PWA
Checked by	PWA	Scale	AS SHOWN

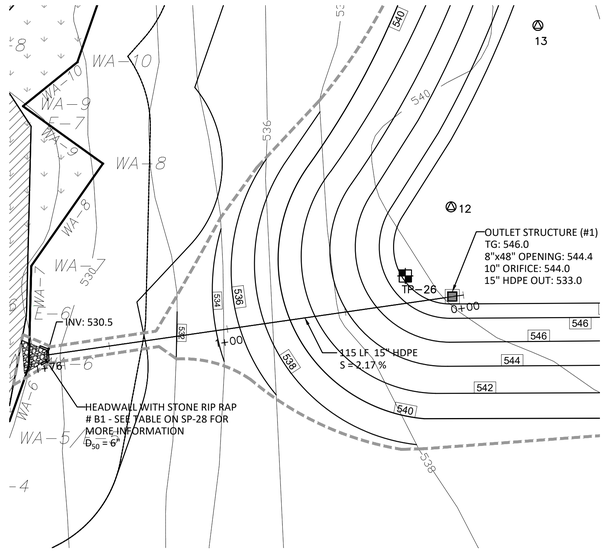
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

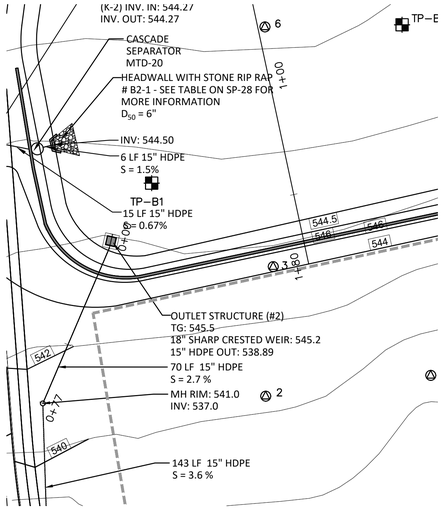
BASIN CROSS SECTIONS-B

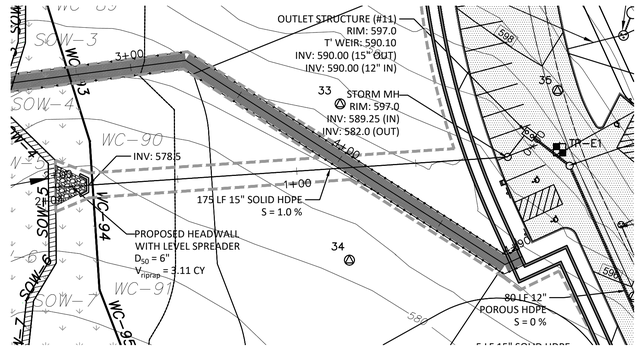
SP-56

SHEET 56 OF 60

Docusign Envelope ID: 1D90532D-13B2-4B20-B09E-14585552A3CB



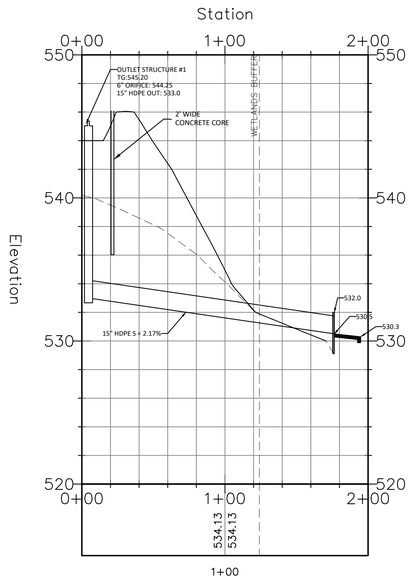




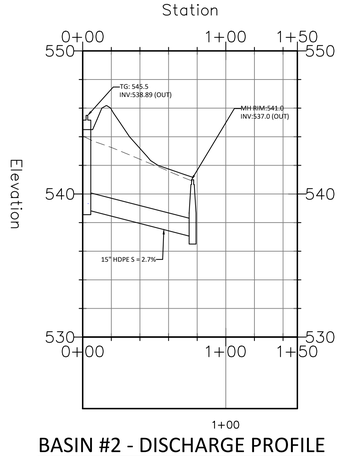
GRAPHIC SCALE

30 0 15 30 60 120

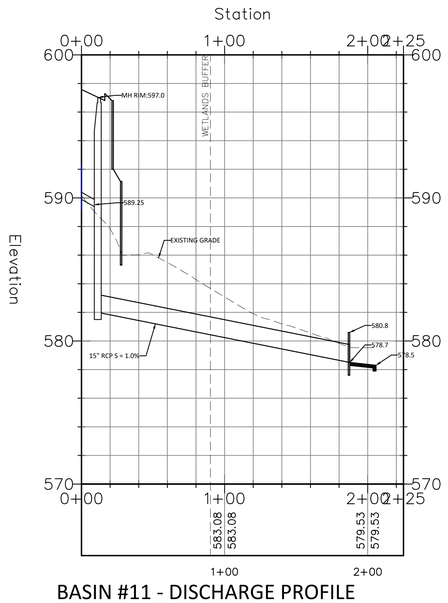
(IN FEET)
1 inch = 30 ft.



BASIN #1 - DISCHARGE PROFILE



BASIN #2 - DISCHARGE PROFILE



BASIN #11 - DISCHARGE PROFILE

BASIN #10 - DISCHARGE PROFILE

HORIZONTAL

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

VERTICAL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

MAP REFERENCE:

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY ENTITLED "TOPOGRAPHIC SURVEY OF PROPERTY" TAX LOTS 1, 2.04, & 3 — BLOCK 161 TAX LOT 3.01 — BLOCK 161, 1701-1711 ROUTE 10, TOWNSHIP OF MORRIS PLAINS, MORRIS COUNTY, NEW JERSEY" DATED 1/15/16 AND LAST REVISED 1-20-20 PREPARED BY LAKELAND SURVEYING, ROCKAWAY NJ. SIGNED BY MARC J. CIFONE, PLS
2. VERTICAL DATUM IS NAVD 1988
3. NGVD29 TO NGVD1988 = + 1.03 FT
4. FRESHWATERS WETLANDS/BOUNDARY LINE AS VERIFIED BY NJDEP FILE No. 1423-07-0001.1, FWW190001

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. #GE 24A 28182400
NO. 28182
STATE OF NEW JERSEY
PROFESSIONAL ENGINEER
DocuSigned by: Paul Anderson
SIGNATURE INVALID UNLESS ELECTRONIC SEAL OF P.E. APPEARS

10/28/24	N/DEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	N.DEP RESUBMISSION	
06/24/24	REVSE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP COMMENTS	
7/11/23	PER NJDEP WETLANDS COMMENTS	
6/07/23	PER NJDEP COMMENTS	
DATE	REVISIONS	

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Checked by	PWA
Designed by	PWA	Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

BASIN DISCHARGE PROFILE

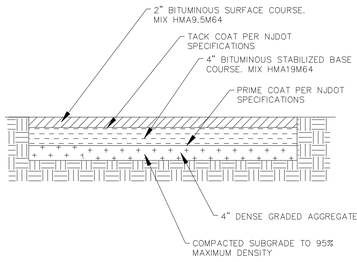
SP-57

SHEET 57 OF 60

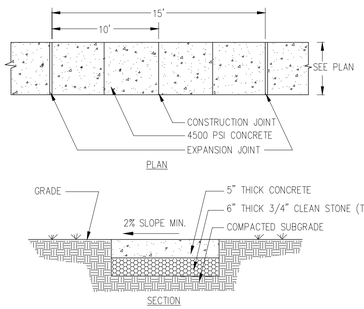
Docusign Envelope ID: 1D90532D-13B2-4B20-B09E-14585552A3CB

INV(IN): 613.5
INV(OUT): 601.23
5 LF 8" HDPE
S = 2.0 %
307 LF 15" HDPE
S =0.5 %
CO
INV: 602.12
DROP CO
INV(MAIN):602.12
INV(IN): 606.42
TP-5
10 LF 8" HDPE
S = 0.6 %
MWL DEVICE
MTD-6
INV(IN):609.0
INV(OUT):606.62
38 LF 15" HDPE
S =0.1 %
E-INLET
TG: 607.6
INV: 606.32
16 LF 8" HDPE
S = 2.0 %
CO
INV: 602.32
MWL DEVICE
MTD-5
INV(IN):605.0
INV(OUT): 602.62
E-INLET
TG: 607.0
INV: 605.32
B-INLET (C-2)
TG:597.00
(C-4) INV. IN: 594.00
(C-3) INV. IN: 594.00
INV. OUT: 593.90
65 LF 15" HDPE
S = 3.08%
B-INLET (C-3)
TG:599.00
INV. OUT: 596.00
73 LF 15" HDPE
S = 5.43%
WETLANDS
EDUCATIONAL
SIGN
TP-7
FIBERRA
MTD-9
64 LF 15" HDPE
S = 14.1%
116 LF 15" HDPE
S = 1.00%
B-INLET (C-1)
TG:597.50
(C-2) INV. IN: 593.20
INV. OUT: 593.10
TP-11
69 LF 15" HDPE
S = 7.00%
102 LF 15" HDPE
S = 1.00%
132 LF 8" SDR 35 PVC
S = 1.00%
102 LF 15" HDPE
S = 1.00%
FF:600.1
BF:587.1
CLUBHOUSE
POOL
586.2
BUILDING A.2
FF:602.0
GF:579.0
RIM:579.78
INV. IN: 574.28
INV. OUT: 574.18
263 LF 8" SDR 35 PVC
S = 2.00%
CASCADE
SEPARATOR
MH-1
BUILDING C
FF:619.0
GF:597.0
REGRADED WATER
TOP OF BANK
PROPOSED HEADWALL
WITH LEVEL SPREADER
D50 = 6"
V = 1.11 CY
INV: 578.5
175 LF 15" SOLID ADS
S = 1.0 %
WETLANDS
EDUCATIONAL
SIGN
OUTLET STRUCTURE (FSL)
RIM: 597.0
1' WIDE: 590.10
INV: 590.00 (15" OUT)
INV: 590.00 (12" IN)
33
TYGBM MH
RIM: 599.2
INV: 589.25 (IN)
INV: 589.0 (OUT)
24 LF 15" HDPE
S = 5.32%
TP-12
BUILDING D.1
FF:618.0
GF:597.0
126 LF 15" HDPE
S = 4.36%
D-11
TG:603.50
(D-12) INV. IN: 600.50
INV. OUT: 600.40
99 LF 15" HDPE
S = 3.04%
D-10
TG:603.50
(D-11) INV. IN: 597.40
(D-9) INV. IN: 597.40
INV. OUT: 597.30
107 LF 15" HDPE
S = 1.00%
D-9
TG:601.50
INV. OUT: 598.50
FF:618.0
GF:597.0
TP-E1
TP-E2
TP-E3
TP-E4
TP-E5
TP-E6
TP-E7
TP-E8
TP-E9
TP-E10
TP-E11
TP-E12
TP-E13
TP-E14
TP-E15
TP-E16
TP-E17
TP-E18
TP-E19
TP-E20
TP-E21
TP-E22
TP-E23
TP-E24
TP-E25
TP-E26
TP-E27
TP-E28
TP-E29
TP-E30
TP-E31
TP-E32
TP-E33
TP-E34
TP-E35
TP-E36
TP-E37
TP-E38
TP-E39
TP-E40

Docusign Envelope ID: 1D90532D-13B2-4B20-B09E-14585552A3CB

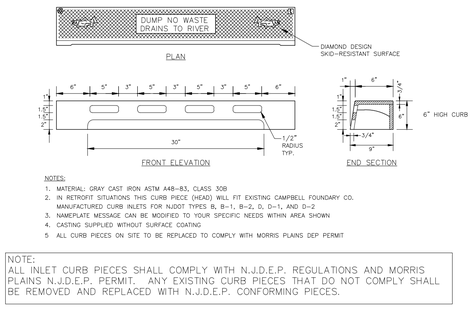


1 FULL DEPTH PAVEMENT (SITE) SCALE: NTS



NOTE:
1. ALL CONCRETE SHALL CONFORM TO 2001 STANDARD N.J.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 914 CLASS "B", AIR-ENTRAINED, 4500 P.S.I. MINIMUM AT 28 DAYS. ALL CONCRETE WORK SHALL HAVE A WOOD FLOAT AND TRANSVERCE BROOM FINISH. BROOMING SHALL BE DONE BEFORE INITIAL SET USING A STEEL OR BARN BROOM.
2. SUBBASE AND FORMWORK SHALL BE FIRM AND APPROVED BY THE CITY ENGINEER OR HIS/HER REPRESENTITIVE PRIOR TO POURING.
3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO NJDOT 2001 STANDARDS, SPECIFICATIONS AND INSPECTIONS.
4. WHEN SIDEWALK ABUTS CURB OR SIDEWALK, A 1/2" THICK NON-EXTRUDABLE, FIBROUS BITUMASTIC EXPANSION JOINT IS REQUIRED.
5. FOR SCORING PATTERN, SIDEWALK SHALL BE DIVIDED INTO TWO LONGITUDINAL SECTIONS.
6. ALL JOINTS SHALL SAW CUT. NO TOOLED JOINTS ARE PERMITTED.

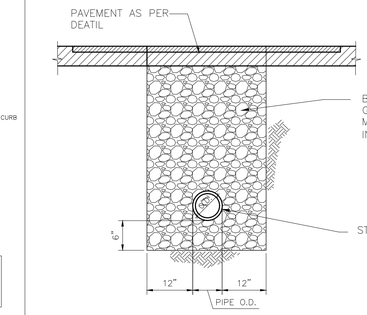
2 CONCRETE SIDEWALK SCALE: NTS



NOTES:
1. MATERIAL: GRAY CAST IRON ASTM A48-83, CLASS 30B
2. IN RETROFIT SITUATIONS THIS CURB PIECE (HEAD) WILL FIT EXISTING CAMPBELL FOUNDARY CO. MANUFACTURED CURB INLETS FOR NJDOT TYPES B, B-1, B-2, D, D-1, AND D-2
3. NAMEPLATE MESSAGE CAN BE MODIFIED TO YOUR SPECIFIC NEEDS WITHIN AREA SHOWN
4. CASTING SUPPLIED WITHOUT SURFACE COATING
5. ALL CURB PIECES ON SITE TO BE REPLACED TO COMPLY WITH MORRIS PLAINS DEP PERMIT

NOTE:
ALL INLET CURB PIECES SHALL COMPLY WITH N.J.D.E.P. REGULATIONS AND MORRIS PLAINS N.J.D.E.P. PERMIT. ANY EXISTING CURB PIECES THAT DO NOT COMPLY SHALL BE REMOVED AND REPLACED WITH N.J.D.E.P. CONFORMING PIECES.

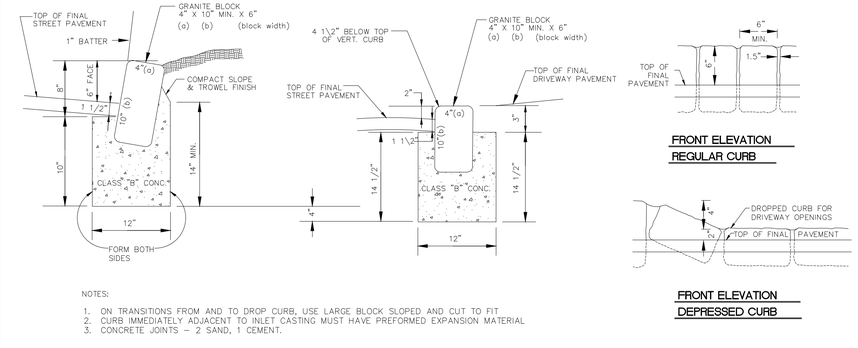
3 TYPE N-ECO CURB PIECE SCALE: NTS



NOTES:
1. TRENCH CONSTRUCTED OUT OF PAVEMENT AREA SHALL REQUIRE 4" OF TOPSOIL AND SEEDING AND SHALL BE BACKFILLED WITH SUITABLE EXCAVATED MATERIAL.
2. MILLINGS SHALL NOT BE AN ACCEPTABLE BACKFILL MATERIAL FOR ANY TRENCHING

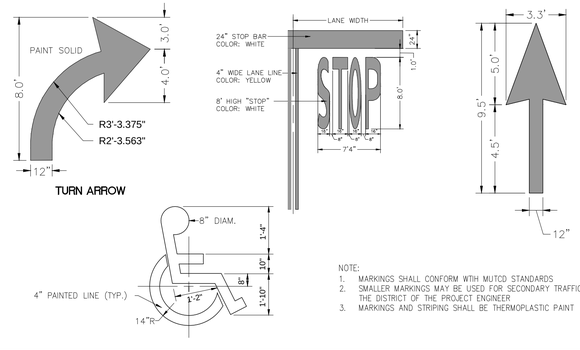
4 STANDARD STORM PIPE TRENCH DETAIL SCALE: NTS

5



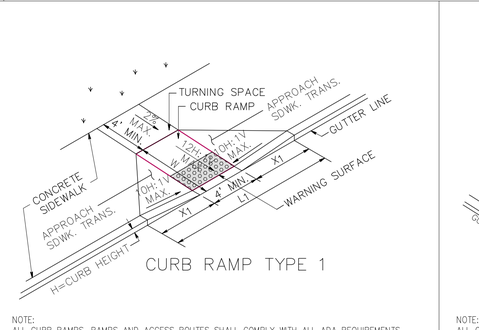
NOTES:
1. ON TRANSITIONS FROM AND TO DROP CURB, USE LARGE BLOCK SLOPED AND CUT TO FIT
2. CURB IMMEDIATELY ADJACENT TO INLET CASTING MUST HAVE PREFORMED EXPANSION MATERIAL
3. CONCRETE JOINTS – 2 SAND, 1 CEMENT.

6 BELGIAN BLOCK CURB SCALE: NTS



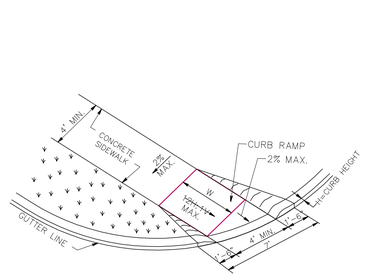
NOTE:
1. MARKINGS SHALL CONFORM WITH MUTCD STANDARDS
2. SMALLER MARKINGS MAY BE USED FOR SECONDARY TRAFFIC AREAS AND PARKING AISLES THE DISTRICT OF THE PROJECT ENGINEER
3. MARKINGS AND STRIPING SHALL BE THERMOPLASTIC PAINT

7 PAVEMENT MARKINGS SCALE: NTS



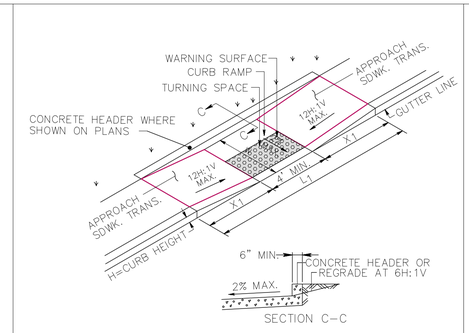
NOTE:
ALL CURB RAMPS, RAMPS AND ACCESS ROUTES SHALL COMPLY WITH ALL ADA REQUIREMENTS. ANY RAMP EXCEEDING 6" RISE SHALL HAVE HANDRAILS.

8 CURB RAMP NJDOT TYPE 1 SCALE: NTS



NOTE:
ALL CURB RAMPS, RAMPS AND ACCESS ROUTES SHALL COMPLY WITH ALL ADA REQUIREMENTS. ANY RAMP EXCEEDING 6" RISE SHALL HAVE HANDRAILS.

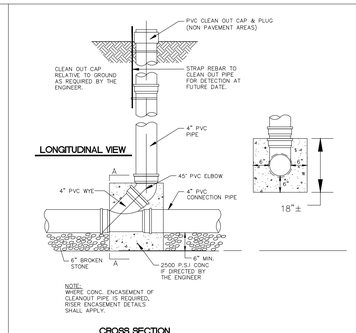
9 CURB RAMP NJDOT TYPE 5 SCALE: NTS



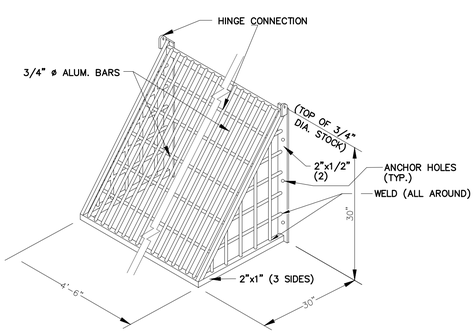
SCALE: NTS

10

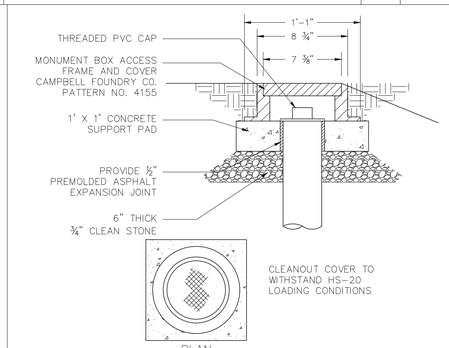
11 TRAFFIC SIGNAGE SCALE: NTS



12 CLEAN OUT DETAIL SCALE: NTS

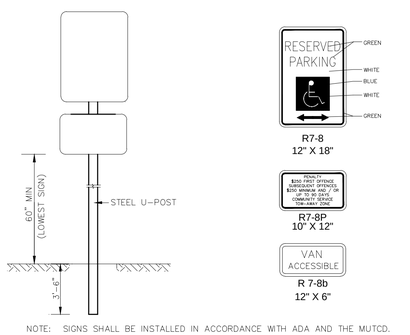


13 TRASH RACK FOR ORIFICE OPENING SCALE: NTS



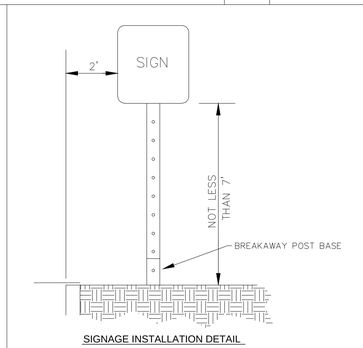
SCALE: NTS

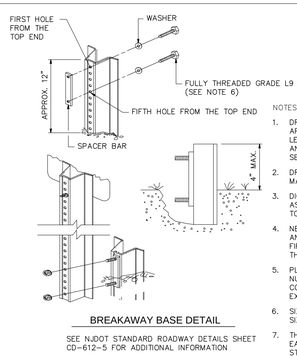
14 CLEAN OUT COVER (TRAFFIC AREA) SCALE: NTS



NOTE: SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH ADA AND THE MUTCD.

15 HANDICAP SIGN DETAIL SCALE: NTS





SEE NJDOT STANDARD ROADWAY DETAILS SHEET CD-612-5 FOR ADDITIONAL INFORMATION

NOTES:
1. DRIVE ANCHOR POST ASSEMBLY TO WITHIN APPROXIMATELY 12 INCHES ABOVE GROUND LEVEL. PLACE BOLT AND WASHER IN FIRST AND FIFTH HOLES FROM THE TOP END, AND SECURE BOLTS ONTO SPACER.
2. DRIVE ANCHOR POST ASSEMBLY TO WITHIN A MAXIMUM OF 4 INCHES ABOVE GROUND LEVEL.
3. DIG OUT AROUND BACK OF ANCHOR POST ASSEMBLY TO ALLOW ROOM FOR TOP POST TO BE ATTACHED.
4. NEST TOP POST ASSEMBLY ONTO PROTRUDING ANCHOR POST ASSEMBLY BOLTS, THROUGH THE FIRST AND FIFTH HOLES FROM THE BOTTOM OF THE TOP POST.
5. PLACE AND TIGHTEN A SELF-LOCKING FLANGE NUT ON EACH BOLT. WHEN INSTALLATION IS COMPLETE, TOP OF GROUND POST NOT TO EXCEED 4 INCHES ABOVE GROUND LEVEL.
6. SIZE OF CONNECTOR BOLT FOR TYPE 1, 5/16" x 11/2" SIZE OF CONNECTOR BOLT FOR TYPE 2, 5/16" x 2"
7. THE CONNECTOR BOLTS ARE TO BE FULLY THREADED. EACH CONNECTOR BOLT AND NUT TO BE CLEARLY STAMPED WITH MANUFACTURER'S IDENTIFYING MARK.

16 TRAFFIC SIGN INSTALLATION SCALE: NTS

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. GE 24181
NOT VALID WITHOUT RAISED SEAL OF P.E.
SIGNATURE INVALID UNLESS DOCUMENT HAS BEEN DIGITALLY SIGNED
DocuSigned by: Paul Anderson 3029E866BC9248D...

10/28/24	NJDEP RESUBMISSION	
10/01/24	PER NJDEP COMMENTS	
07/09/24	NJDEP RESUBMISSION	
06/24/24	REVISE FOR NJDEP SUBMISSION	
04/29/24	REVISED GRADING & DRAINAGE	
10/26/23	PER NJDEP COMMENTS	
10/23/23	PER NJDEP COMMENTS	
10/03/23	PER NJDEP COMMENTS	
9/07/23	PER NJDEP MET-LANDS COMMENTS	
7/11/23	PER NJDEP COMMENTS	
6/06/23	NJDEP COMMENTS	

ALL DOCUMENTS, PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC AND SHALL NOT BE LOANED, COPIED OR REPRODUCED WITHOUT THE INTENDED WRITTEN CONSENT OF ANDERSON CONSULTING SERVICES, LLC. ANY UNAUTHORIZED USE, REUSE OR MODIFICATION OF THIS DOCUMENT SHALL BE AT THE USERS SOLE RISK AND WITHOUT LIABILITY TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD ANDERSON CONSULTING SERVICES, LLC HARMLESS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022		
Date	9-23-22		
Drawn by	BCA	Designed by	PWA
Checked by	PWA	Scale	AS SHOWN

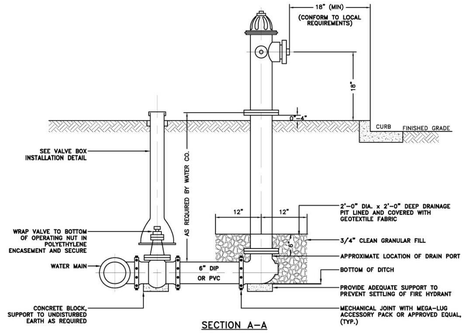
PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

CONSTRUCTION DETAILS A

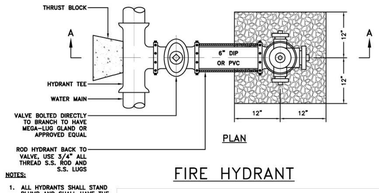
SP-59

SHEET 59 OF 60

Docusign Envelope ID: 1D90532D-13B2-4B20-B09E-14585552A3CB



SECTION A–A



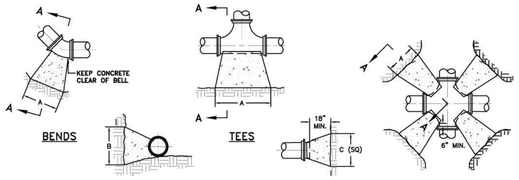
PLAN

FIRE HYDRANT

NOTES:

1. ALL HYDRANTS SHALL STAND PLUMB AND SHALL HAVE THE PUMPER NOZZLE FACING THE CURB.
2. HYDRANT BONNETS SHALL BE PAINTED TO INDICATE AVAILABLE FIRE FLOW IN ACCORDANCE WITH AMERICAN WATER SPECIFICATIONS.
3. IF HYDRANT LATERAL IS NOT RESTRAINED, CONTRACTOR SHALL PROVIDE A THRUST BLOCK BEHIND HYDRANT SHOE.
4. AMERICAN WATER RESERVES THE RIGHT TO WAIVE STRICT COMPLIANCE WITH THIS DETAIL IN THE EVENT THAT FIELD CONDITIONS OR O&M WORK REQUIRE A WAIVER.

1 TYPICAL HYDRANT INSTALLATION SCALE: NTS



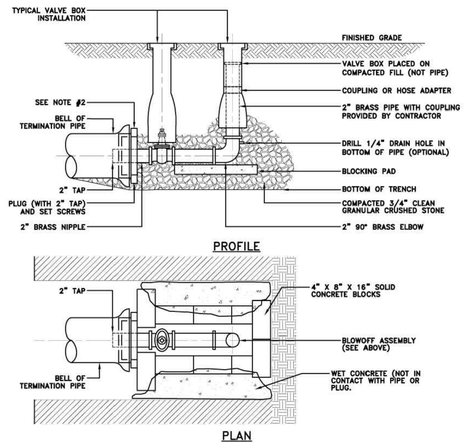
REQUIRED BEARING AREA ON UNDISTURBED SOIL AND TYPICAL DIMENSIONS														
SIZE	CROSSES/90° BENDS			45° BENDS			11–1/4° BENDS			22–1/2° BENDS			TEES & PLUGS		
	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"
6"	4.0	32"	18"	2.2	18"	16"	0.6	5"	18"	1.1	9"	18"	2.8	23"	18"
8"	7.0	42"	24"	3.8	23"	24"	1.0	8"	24"	2.0	12"	24"	5.0	30"	24"
10"	11.0	53"	30"	6.3	30"	30"	1.6	8"	30"	3.1	15"	30"	8.0	38"	30"
12"	16.1	64"	36"	10.0	40"	36"	2.2	9"	36"	4.4	18"	36"	11.3	45"	36"
14"	21.6	74"	42"	12.5	43"	42"	3.0	10"	42"	6.0	21"	42"	15.5	53"	42"
16"	28.3	85"	48"	17.7	53"	48"	4.0	12"	48"	7.7	23"	48"	20.1	60"	48"

* SURFACE AREA OF BEARING SOIL IS PROVIDED FOR 200 PSI MAXIMUM PRESSURE (INCLUDING SURGE) AND 2000 PSF SOIL BEARING. IF PRESSURE IS HIGHER OR SOIL BEARING IS POTENTIALLY LOWER, CONSULT THE ENGINEER FOR ADJUSTMENTS.

NOTES:

1. COVER OVER TOP OF PIPE SHALL BE BELOW THE FROST LINE OR 30" MINIMUM, 72" MAXIMUM ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON THE SAID PLANS.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
4. THRUST BLOCKING MUST FIT WITHIN THE EASEMENT.
5. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED BASED ON 150 PSI STATIC PRESSURE, PLUS 50 PSI WATER HAMMER AND 2000 PSF SOIL BEARING.
6. POLYETHYLENE ENCASEMENT IS REQUIRED ON ALL D.I. PIPE AND FITTINGS.
7. THRUST BLOCKING SHALL BE PERFORMED SUCH THAT PIPE JOINTS AND BOLTS ARE ACCESSIBLE.
8. SUFFICIENT CLEARANCE SHALL BE ALLOWED BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
9. ALL ANCHOR BOLTS SHALL BE STAINLESS STEEL, MINIMUM 3/4" DIAMETER.
10. ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL BE WRAPPED IN POLYWRAP. CONTRACTOR SHALL ENSURE THAT POLYWRAP EXTENDS FAR ENOUGH BEYOND THE FITTING TO ENCLOSE ALL BOLTS WITHIN THE POLYWRAP.
11. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
12. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN 3000 PSI CONCRETE.
13. FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
14. FOR MAIN SIZES GREATER THAN 16", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.

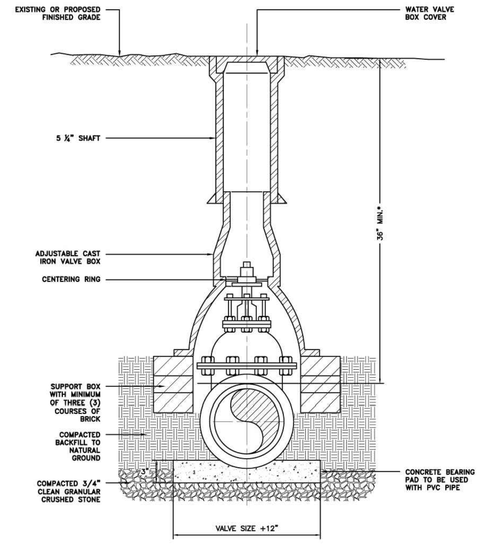
2 THRUST BLOCK SCHEDULE SCALE: NTS



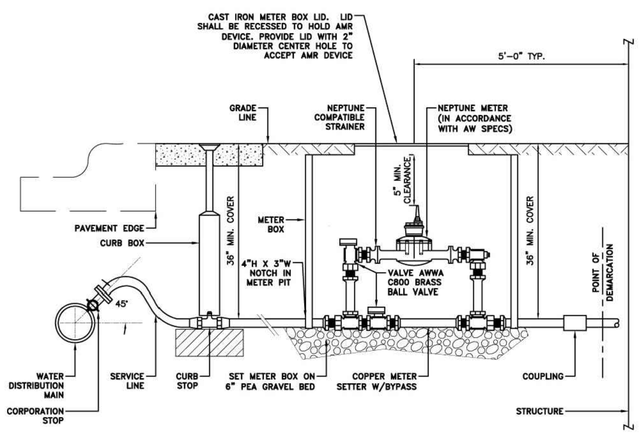
PROFILE

PLAN

3 BLOW OFF ASSEMBLY DETAIL SCALE: NTS



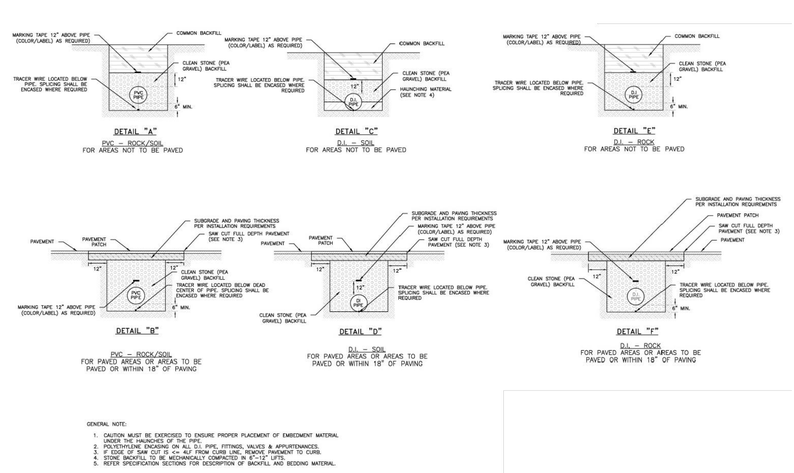
4 TYPICAL VALVE BOX INSTALLATION SCALE: NTS



NOTES:

1. CENTER METER IN BOX, MIN 3" CLEARANCE ON ALL SIDES.
2. TRENCH, INSTALL AND BACKFILL SERVICE LINE IN ACCORDANCE WITH AW SPECIFICATIONS.
3. POINT OF DEMARCATION FOR SERVICE LINE OWNERSHIP PER PRIME CONTRACT BETWEEN AW AND GOVERNMENT.
4. SERVICE LINE MATERIALS SHALL MEET AW SPECIFICATIONS.
5. SERVICE LINE BEDDING SHALL BE IN ACCORDANCE WITH AW SPECIFICATIONS.
6. PROVIDE TRACE WIRE ALONG WATER SERVICE LINE. TRACE WIRE SHALL EXTEND INTO THE CURB BOX AND METER PIT AND TERMINATE IN THE METER PIT.

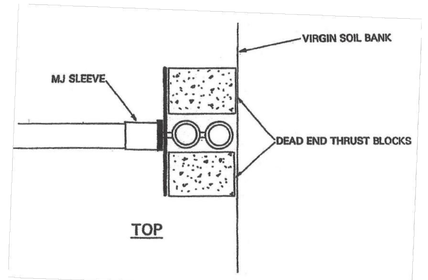
5 TYPICAL 1" SERVICE OUTSIDE METER TILE SCALE: NTS



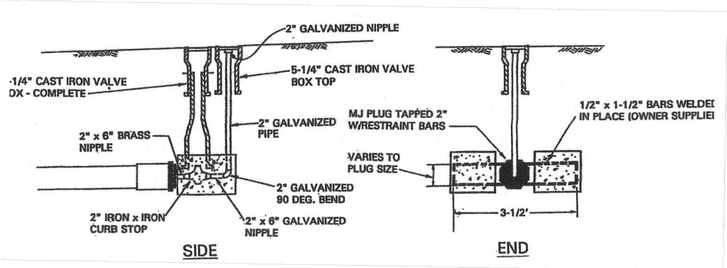
GENERAL NOTE:

1. CAUTION MUST BE EXERCISED TO ENSURE PROPER PLACEMENT OF EMBEDMENT MATERIAL UNDER THE HAUNCHES OF THE PIPE.
2. POLYETHYLENE ENCASING ON ALL D.I. PIPE, FITTINGS, VALVES & APPURTENANCES.
3. 9" EDGE OF SAW CUT IS <= 4LF TROM CURB LINE, REMOVE PAVEMENT TO CURB.
4. STONE BACKFILL TO BE MECHANICALLY COMPACTED IN 6"-12" LIFTS.
5. REFER SPECIFICATION SECTIONS FOR DESCRIPTION OF BACKFILL AND BEDDING MATERIAL.

6 TRENCH RESTORATION DETAIL SCALE: NTS



TOP



SIDE END

7 2" BLOW-OFF INSTALLATION SCALE: NTS

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 24GA28182400
DocuSigned by: Paul Anderson 3029E8668C9248D...
SIGNATURE INVALID UNLESS ELECTRONICALLY SIGNED AND SEALED BY P.E.

No.	Date	Description
9	10/28/24	NJDEP RESUBMISSION
8	10/01/24	PER NJDEP COMMENTS
7	07/09/24	NJDEP RESUBMISSION
6	06/24/24	REVISE FOR NJDEP SUBMISSION
5	04/29/24	REVISED GRADING & DRAINAGE
4	10/26/23	PER NJDEP COMMENTS
3	10/23/23	PER NJDEP COMMENTS
2	10/03/23	PER NJDEP COMMENTS
1	9/07/23	PER NJDEP METLANDS COMMENTS
	7/11/23	PER NJDEP COMMENTS
	6/26/23	PERMISSIONS

ALL DOCUMENTS PREPARED BY ANDERSON CONSULTING SERVICES, LLC ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY ANDERSON CONSULTING SERVICES, LLC FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO ANDERSON CONSULTING SERVICES, LLC AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS ANDERSON CONSULTING SERVICES, LLC FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

CERTIFICATE OF AUTHORIZATION
24GA28182400

ACS
Anderson Consulting Services LLC
40 Miller Drive
Boonton, NJ 07005
TEL: 973.975.0703
Fax: 973.975.0703
www.pwanderson-cs.com

Proj. No.	WEMF2022
Date	9-23-22
Drawn by	BCA
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

PRELIMINARY AND FINAL SITE PLAN
WEST ESSEX HIGHLANDS
BLOCK 179 LOT 32
BLOCK 179.17 LOTS 8 & 9
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

CONSTRUCTION DETAILS B

SP-60

SHEET 60 OF 60