

PRELIMINARY & FINAL MAJOR SUBDIVISION FOR 14 EAST GARFIELD AVENUE

BLOCK 101, LOT 3
TAX MAP SHEET #22

14 EAST GARFIELD AVENUE

BOROUGH OF ATLANTIC HIGHLANDS, MONMOUTH COUNTY, NEW JERSEY

PROPERTY OWNERS WITHIN 200'

7 E LINCOLN AVE	P & C REALTY 2 LLC	10 INDUSTRIAL WAY E	EATONTOWN, NJ 07724
188 1ST AVE	ATLANTIC HIGHLANDS R & E PTRS LL	241 MAIN STREET	WOODBRIIDGE, NJ 07095
165 1ST AVE	PLEGER HEH REALTY	PO BOX 355	ATLANTIC HIGHLANDS, NJ 07716
8 MEMORIAL PKWY	BELLAVANCE, PATRICIA	8 MEMORIAL PKWY	ATLANTIC HIGHLANDS, NJ 07716
18 E GARFIELD AVE	LAURO, CATHERINE & MICHAEL	18 E GARFIELD AVE	ATLANTIC HIGHLANDS, NJ 07716
91 3RD AVE	FISHER, MARK & SHARON	91 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
153 1ST AVE	PFLEGERHEH REALTY COMPANY	PO BOX 355	ATLANTIC HIGHLANDS, NJ 07716
15 E GARFIELD AVE	KING, BRIAN & STEPHANIE	15 E GARFIELD AVE	ATLANTIC HIGHLANDS, NJ 07716
14 MEMORIAL PKWY	MANIGRASSO, MICHAEL & JOAN	14 MEMORIAL PKWY	ATLANTIC HIGHLANDS, NJ 07716
95 3RD AVE	FIRST METHODIST CHURCH	95 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
140 1ST AVE	STEPHEN, KELLY & EUGENIA, NIXON	50 OCEAN AVE	HIGHLANDS, NJ 07732
93 3RD AVE	COLLINS, MICHAEL J	93 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
160 1ST AVE	F&H REALTY	132 LEWIS STREET, UNIT A-2	EATONTOWN, NJ 07724
179 1ST AVE	179 FIRST AVENUE LLC	40 DUCHESS DR	MONROE, NJ 08831
12 MEMORIAL PKWY	KEEL, WILLIAM	12 MEMORIAL PKWY	ATLANTIC HIGHLANDS, NJ 07716
15-17 E LINCOLN AVE	COOMBS, JOHN RYAN	15 E LINCOLN AVE # 17	ATLANTIC HIGHLANDS, NJ 07716
9 E GARFIELD AVE	MENDOZA, GREGORY	9 E GARFIELD AVE	ATLANTIC HILDS, NJ 07716
171 1ST AVE	OCEANIC REALTY CORP	24 YEOMALT AVE	STATEN ISLAND, NY 10312
9 E LINCOLN AVE	WEBER, DANIELLE M	9 E LINCOLN AVE	ATLANTIC HIGHLANDS, NJ 07716
13 E GARFIELD AVE	CARD, WAYNE S & NANETTE C	13 E GARFIELD AVE	ATLANTIC HIGHLANDS, NJ 07716
178 1ST AVE	VERIZON NJ	PO BOX 2749	ADDISON, TX 75001
85 3RD AVE	SWEENEY, MARK J	85 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
6 MEMORIAL PKWY	WESCH, LINDA A	1395 NW 9TH WAY	LAKE PANASOFFKEE, FL 33538
11 E GARFIELD AVE	DREW, WILLIAM B & ERIN P	11 E GARFIELD AVE	ATLANTIC HIGHLANDS, NJ 07716
99 3RD AVE	MCGOLDRICK, JOHN & DONNA	99 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
179 1ST AVE	179 FIRST AVENUE LLC	40 DUCHESS DR	MONROE, NJ 08831
13 E LINCOLN AVE	INGENITO, AUSTIN D & CHRISTINE P	3530 HENRY HUDSON PKWY # 70	BRONX, NY 10463
20 MEMORIAL PKWY	STEIDEL, ELSIE	20 MEMORIAL PKWY	ATLANTIC HIGHLANDS, NJ 07716
11 E LINCOLN AVE	TAGUER, SEAN & LEWIS, MEGAN	11 E LINCOLN AVE	ATLANTIC HIGHLANDS, NJ 07716
89 3RD AVE	DORSEY, JOSEPH III & SAMUELSON, BRI	89 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
97 3RD AVE	URSO, RICK & SUSANNE	97 3RD AVE	ATLANTIC HIGHLANDS, NJ 07716
17 E GARFIELD AVE	BARNETT, MARC B & CAROL	17 E GARFIELD AVE	ATLANTIC HIGHLANDS, NJ 07716

UTILITY CONTACTS

GPU
1500 Florence Ave
Union Beach, NJ 07735

NEW JERSEY AMERICAN WATER COMPANY
Attn: Construction Department
661 Shrewsbury Ave
Shrewsbury, NJ 07702

ATLANTIC HIGHLANDS WATER & SEWER DEPARTMENT
Supervisor, Water & Sewer Dept
100 First Ave
Atlantic Highlands, NJ 07716

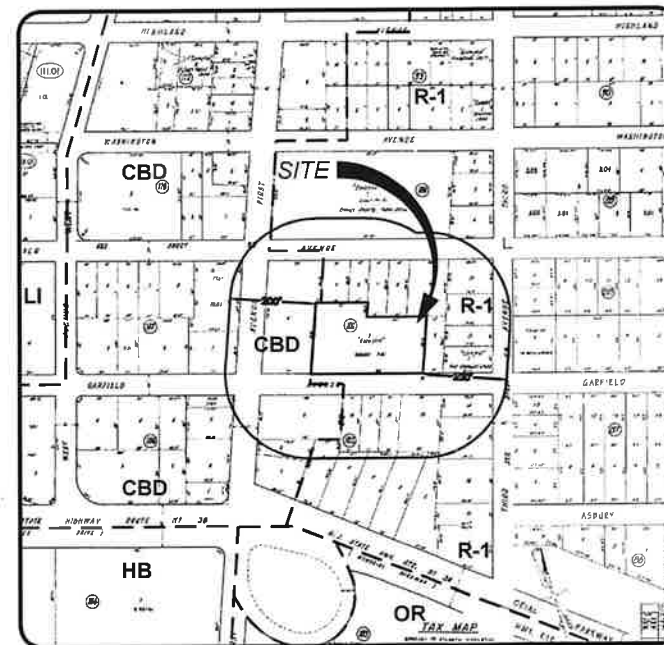
COMCAST COMMUNICATIONS OF MONMOUTH COUNTY
Ron Bertwood, Construction Personnel
403 South St
Eatontown, NJ 07724

VERIZON COMMUNICATIONS
540 Broad St.
Room 1705
Newark NJ 07101

TOWNSHIP OF MIDDLETOWN SEWERAGE AUTHORITY
Robert Eckert, Executive Director
PO Box 205
Belford, NJ 07718

NEW JERSEY NATURAL GAS COMPANY
Attn: Joan Purcuro
PO Box 1464
Wall, NJ 07719

MONMOUTH COUNTY BAYSHORE OUTFALL AUTHORITY
Attn: Executive Director
200 Harbor Way
PO Box 184
Belford, NJ 07718



ZONES
SINGLE FAMILY RESIDENTIAL (R-1)
CENTRAL BUSINESS DISTRICT (CBD)
HIGHWAY BUSINESS (HB)
OFFICE RESIDENTIAL (OR)
LIGHT INDUSTRIAL (LI)

TAX MAP
Scale: 1"=200'



USGS MAP

Scale: 1"=2000'



LOCATION MAP

Scale: 1"=1000'



FEMA EFFECTIVE MAP

Scale: 1"=1000'

CERTIFICATIONS	
OWNER	
I HEREBY CERTIFY THAT I AM THE OWNER OF RECORD OF THE PLAN HEREIN DEPICTED AND THAT I CONCUR WITH THE PLAN.	
OWNER	DATE
NOTARY PUBLIC	
SWORN AND SUBSCRIBED TO BEFORE ME THIS DAY OF	
NOTARY PUBLIC	DATE
PLANNING BOARD	
THE APPLICATION WAS APPROVED AS A MAJOR SUBDIVISION BY THE BOROUGH OF ATLANTIC HIGHLANDS PLANNING BOARD ON	
CHAIRMAN	DATE
SECRETARY	DATE
ENGINEER	DATE

INDEX OF SHEETS		INITIAL	RELEASE	REV	DATE
SHEET #	SHEET TITLE				
C100	TITLE SHEET				12/02/24
C101	PLAN NOTES				12/02/24
C200	EXISTING CONDITIONS & SITE PREPARATION PLAN				12/02/24
C300	SUBDIVISION PLAN				12/02/24
C301	SITE LAYOUT PLAN				12/02/24
C400	GRADING & DRAINAGE PLAN				12/02/24
C500	UTILITY PLAN				12/02/24
C700	CONSTRUCTION DETAILS				12/02/24
C800	SOIL EROSION & SEDIMENT CONTROL PLAN				12/02/24
C901	SOIL EROSION & SEDIMENT CONTROL NOTES				12/02/24
C902	SOIL EROSION & SEDIMENT CONTROL DETAILS				12/02/24

PROJECT INFORMATION	
14 EAST GARFIELD AVENUE	
BLOCK 101, LOT 3 14 EAST GARFIELD AVENUE BOROUGH OF ATLANTIC HIGHLANDS MONMOUTH COUNTY, NJ	
MASONIC HALL 152 MAPLE AVENUE RED BANK, NJ 07701-1716	
KALIAN MANAGEMENT LLC 2 HENNESSEY BOULEVARD, SUITE 1 ATLANTIC HIGHLANDS, NJ 07716	
APPLICANT'S PROFESSIONALS	
ATTORNEY RICK BRODER, ESQ. ANSELL GRIMM & AARON, PC 1500 LAWRENCE AVENUE OCEAN, NJ 07712	
SURVEYOR INSITE SURVEYING, LLC 1855 ROUTE 34, SUITE 1A WALL, NJ 07719	
INSITE ENGINEERING, LLC SINCE 2003	
CALL BEFORE YOU DIG NJ ONE CALL 800-372-1000 NJ ONE CALL 800-372-1000	
INSITE ENGINEERING, LLC Engineering & Surveying Partnership	
CERTIFICATE OF AUTHORIZATION: 24GA0003200 1855 ROUTE 34, SUITE 1A, WALL, NJ 07719 732-531-7100 (PH) 732-531-7344 (FAX) insite@insiteeng.net www.insiteeng.net	
LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA, DELAWARE, CONNECTICUT, NORTH CAROLINA, COLORADO & DISTRICT OF COLUMBIA	
CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED.	
JASON L. FIGHTER, P.E., P.P., C.F.M., C.M.E. PROFESSIONAL ENGINEER, PLANNER N.J.P.E. 43118, N.J.P.P. 5726, P.A.P.E. 61948 D.E.P.E. 3813, N.Y.P.E. 80230, C.I.P.E. 23251 N.C.P.E. 33334, D.C.P.E. 90040, C.O.P.E. 38605	
REVISIONS	
SCALE: AS SHOWN DESIGNED BY: SGM	
DATE: 12/18/23 DRAWN BY: JAR	
JOB #: 23-756-12 CHECKED BY: JLF	
CAD ID: 23-756-124	
NOT FOR CONSTRUCTION	
APPROVED BY	
FOR CONSTRUCTION	
PLAN INFORMATION	
DRAWING TITLE: PRELIMINARY & FINAL MAJOR SUBDIVISION	
SHEET TITLE: TITLE SHEET	
NOTES: C100	

BLOCK 101 LOT 3
14 EAST GARFIELD AVENUE
BOROUGH OF ATLANTIC HIGHLANDS
MONMOUTH COUNTY, NJ

MASONIC HALL
152 MAPLE AVENUE
RED BANK NJ 07701-1716

KALIAN MANAGEMENT LLC
2 HENESSEY BOULEVARD SUITE 1
ATLANTIC HIGHLANDS NJ 07716

APPLICANT'S PROFESSIONALS

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ANSELL GRIMM & AARON, PC
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OCEAN, NJ 07712

SURVEYOR
INSITE SURVEYING, LLC
1553 ROUTE 34 SUITE 1A
WALL NJ 07719



CALL BEFORE YOU DIG

NJ ONE CALL-800-272-1000	
(See back cover for more info)	
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GAS	SEWER
TELEPHONE	CABLE TV
MEDIA	BELL
PLUMBING	PESTS
REPAIR & MAINTENANCE	MAINTENANCE
	WHITE



InSite Engineering, LLC
 CERTIFICATE OF AUTHORIZATION 24GA280K3
 1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
 732-531-7100 (PH) 732-531-7344 (FAX)
 InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN NEW JERSEY NEW YORK PENNSYLVANIA
DELAWARE CONNECTICUT NORTH CAROLINA
COLORADO & DISTRICT OF COLUMBIA

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JASON L. FICHTER, P.E., P.P., CFM, CN
PROFESSIONAL ENGINEER, PLANNER
N.J.P.E. 43118 N.J.P.P. 5726 PAPE 61968
DEPE 3813 NYPE 802295 CTPPE 23291
NCPE 33336 DCPE 900682 COPE 36605

REVISIONS

[illegible][illegible]

4	12/02/24	REVISED LAYOUT
3	07/06/24	REVIEWER REVIEW LETTER
2	04/11/24	REVIEWER COMPLETENESS COMMENT
1	04/02/24	REVIEWER INCOMPLETENESS COMMENT

SCALE 1"=20'	DESIGNED BY SGM
DATE 12/18/23	DRAWN BY JAR

JOB # 23-756-12	CHECKED BY JLF
CAD ID 23-756-12r4	

☒ NOT FOR CONSTRUCTION

FOR CONSTRUCTION	
PLAN INFORMATION	

DRAWING TITLE

PRELIMINARY & FINAL
MAJOR SUBDIVISION

SHEET TITLE	EXISTING
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EXISTING
CONDITIONS & SITE

PREPARATION PLAN



LEGEND

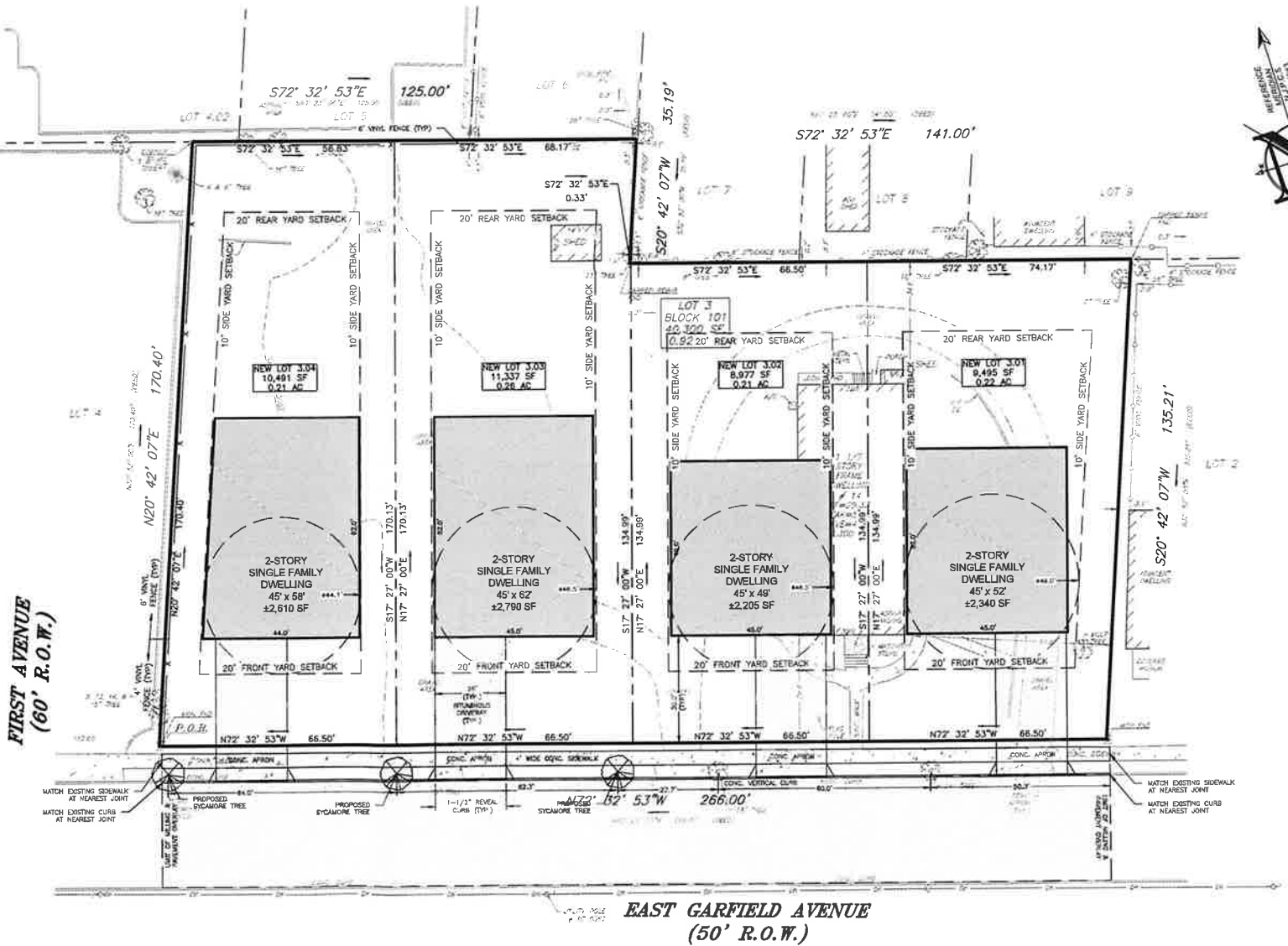
<u>EXISTING</u>		<u>PROPOSED</u>
	BOUNDARY LINE	
	CONTOUR LINE	
	SLOT ELEVATION	
	BUILDING	
	WALL	
	GAS	
	WATER	
	INLET	
	STORM	
	SANITARY MAIN	
	SANITARY LATERAL	
	OVERHEAD WIRE	
	ELECTRAC	
	TELEPHONE	
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
	FENCE	
	LIGHT FIXTURE	
	TEST PIT LOCATION	
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

ZONING COMPLIANCE CHART											
R-1 (SINGLE FAMILY RESIDENTIAL) ZONE (S 150-30)											
PERMITTED USE: SINGLE FAMILY											
ORD. SECTION	STANDARD	REQUIRED	EXISTING LOT 3	NEW LOT 3.01	COMPLIES	NEW LOT 3.02	COMPLIES	NEW LOT 3.03	COMPLIES	NEW LOT 3.04	COMPLIES
SCHED 150-30	MIN. LOT AREA (SF)	7,500 (0.17 AC)	48,300 (0.93 AC)	9,495 (0.22 AC)	YES	8,977 (0.21 AC)	YES	11,337 (0.26 AC)	YES	10,491 (0.24 AC)	YES
SCHED 150-30	MIN. LOT FRONTAGE & WIDTH (FT)	75	266	66.5	(V)	66.5	(V)	66.5	(V)	66.5	(V)
SCHED 150-30	PRINCIPAL BUILDING				YES		YES		YES		YES
SCHED 150-30	MIN. FRONT YARD SETBACK (FT)	10	29.6	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MIN. SIDE YARD SETBACK (FT)	10	55.6	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MIN. TOTAL SIDE YARD SETBACK (FT)	20	233.1	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MIN. REAR YARD SETBACK (FT)	10	34.6	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MAX. BUILDING HEIGHT (FT)	35	24.45	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MAX. BUILDING HEIGHT (STORIES)	2 1/2	1 1/2	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	ACCESSORY BUILDING				YES		YES		YES		YES
SCHED 150-30	MIN. SIDE YARD SETBACK (FT)	5	7.5	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MIN. REAR YARD SETBACK (FT)	5	24.1	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MIN. BUILDING HEIGHT (FT)	16	1	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MAX. BUILDING HEIGHT (STORIES)	1	1	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	LOT SHAPE MIN. DIAMETER (FT)	50	99.0	NO (V)	NO (V)	46.5	(V)	46.5	(V)	44.1	(V)
SCHED 150-30	LOT COVERAGE				YES		YES		YES		YES
SCHED 150-30	MAX. IMPERVIOUS SURFACE (%)	50	35.0	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MAX. BUILDING COVERAGE (%)	25	6.1	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MAX. USABLE FLOOR AREA RATIO	0.4	0.4	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MINIMUM GROSS FLOOR AREA (SF)				YES		YES		YES		YES
SCHED 150-30	1-STORY BUILDING	1,640	N/A	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MORE THAN 1 STORY (1ST FLOOR)	900	(V)	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
SCHED 150-30	MORE THAN 1 STORY (TOTAL FLOORS)	1,500	(V)	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES	TO COMPLY	YES
(150-45.0)(H)	MIN. STREET TREES	1 PER 50' FRONTAGE	4	(V)	2 EXISTING, 3 PROPOSED	YES	(V)				
(N) EXISTING NON-COMPLIANCE		(I) IMPROVED CONDITION		N/A - NOT APPLICABLE							
(E) EXISTING VARIANCE		(D) VARIANCE / NON-COMPLIANCE ELIMINATED		N/S - NOT SPECIFIED							
(V) PROPOSED VARIANCE		(W) PROPOSED WAIVER									
(H) THIS PERTAINS TO AN EXISTING STRUCTURE WHICH WAS NOT MADE AVAILABLE TO THIS OFFICE											

PARKING, DRIVEWAY & LOADING COMPLIANCE CHART			
ORD. SECTION	STANDARD	REQUIRED	PROPOSED
S 345-42 D.2	STALL SIZE (FT)	9 x 18	9 x 18
S 150-50	NUMBER OF PARKING SPACES SINGLE-FAMILY DETACHED, 4 BEDROOMS OR MORE 3 SPACE PER UNIT	4 x 3 = 12	2 CAR GARAGE + 2 DRIVEWAY SPACES = 4.0 SPACES
RSIS TABLE 4.4	NUMBER OF PARKING SPACES SINGLE-FAMILY DETACHED, 4 BEDROOM 2.5 PER DWELLING UNIT	4 x 2.5 = 10	2 CAR GARAGE + 2 DRIVEWAY SPACES = 3.5 SPACES
150-50 D.1	MIN. DRIVEWAY WIDTH (FT)	12	20
150-50 D.2	MAX. DRIVEWAY WIDTH (FT)	30	20
150-72.A	MAX. GARAGE SIZE PER SPACE (FT)	12 (W) x 22 (L) x 16 (H)	TO COMPLY
150-72.A	MAX. NUMBER OF GARAGE SPACES	1 PER 3,000 SF	2 (LOTS 3.01 & 3.02) (V) 2 (LOTS 3.03 & 3.04)
150-50 B.1	MIN. GARAGE FRONT YARD SETBACK (FT)	10	20
150-54.F	MIN. DRIVEWAY/WALKWAY SIDE & REAR YARD SETBACK (FT)	5	TO COMPLY

(N) EXISTING NON-COMPLIANCE (I) IMPROVED CONDITION N/A - NOT APPLICABLE
 (E) EXISTING VARIANCE (D) VARIANCE / NON-COMPLIANCE ELIMINATED N/S - NOT SPECIFIED
 (V) PROPOSED VARIANCE (W) PROPOSED WAIVER

NOTE:
 1. BUILDING FOOTPRINTS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY AND FINAL DESIGN WILL BE PROVIDED DURING THE ZONING APPLICATION AND PLOT PLAN PROCESS.



14 EAST GARFIELD AVENUE

BLOCK 101 LOT 3
 14 EAST GARFIELD AVENUE
 BOROUGH OF ATLANTIC HIGHLANDS
 MONMOUTH COUNTY, NJ

MASONIC HALL
 152 MAPLE AVENUE
 RED BANK, NJ 07701-1716

KALIAN MANAGEMENT LLC
 2 HENESSEY BOULEVARD, SUITE 1
 ATLANTIC HIGHLANDS, NJ 07716

APPLICANTS' PROFESSIONALS

ATTORNEY
 RICH BRODSKY, ESQ.
 ANSELL GRIMM & AARON, PC
 1500 LAWRENCE AVENUE
 OCEAN, NJ 07712

SURVEYOR
 INSITE SURVEYING, LLC
 1955 ROUTE 34, SUITE 1A
 WALL, NJ 07719



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 NJ ONE CALL... 800-472-1000

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 info@insiteeng.net www.insiteeng.net



CERTIFICATE OF AUTHORIZATION: 24020003200
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 DELAWARE, CONNECTICUT, NORTH CAROLINA
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JASON L. CHARTER, P.E., P.F., C.F.M., C.M.E.
 PROFESSIONAL ENGINEER, PLANNER
 NJPE 43118 NJPP 5724 PAPE 61918
 DEPE 3813 NYPE 802295 CPE 23291
 NCPE 33336 DCPE 900692 COPE 36605

REVISIONS

NO.	DATE	DESCRIPTION
1	11/05/23	REVISED LOT LAYOUT
2	11/05/23	REVISED LOT LAYOUT
3	11/05/23	REVISED LOT LAYOUT
4	11/05/23	REVISED LOT LAYOUT
5	11/05/23	REVISED LOT LAYOUT

SCALE: 1"=20'
 DATE: 12/18/23
 JOB #: 23-756-12
 END #: 23-756-12A

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

PRELIMINARY & FINAL
 MAJOR SUBDIVISION

SITE LAYOUT PLAN

DATE: 12/18/23

BY: JAR

CHIEF ENGINEER: JLF

END: 23-756-12A

APPROVED BY:

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END: 23-756-12A

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END: 23-756-12A

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DATE: 12/18/23

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END: 23-756-12A

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DATE: 12/18/23

BY: JAR

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END: 23-756-12A

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BY: JAR

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END: 23-756-12A

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BY: JAR

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END: 23-756-12A

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CHIEF ENGINEER: JLF

END: 23-756-12A

APPROVED BY:

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BY: JAR

CHIEF ENGINEER: JLF

END: 23-756-12A

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END: 23-756-12A

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SITE LAYOUT PLAN

DATE: 12/18/23

14 EAST
GARFIELD
AVENUE

MASONIC HALL
152 MAPLE AVENUE
RED BANK NJ 07701-1716

ATTORNEY:
RICK BRODSKI, ESQ.
ANSELL GRIMM & AARON, PC
1500 LAWRENCE AVENUE
OCEAN, NJ 07712

[illegible]

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REVISIONS

Page #	Date	Comments

1	12/2/2014	REVISED LAYOUT	
2	5/7/2014	REV PER REVIEW LETTER	
2	5/7/2014	REV PER COMPLETION	COMMENTS
1	4/27/2014	REV PER COMPLETION	COMMENTS
1	4/27/2014	INITIAL RELEASE	

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PLAN INFORMATION	
PROJECT TITLE	

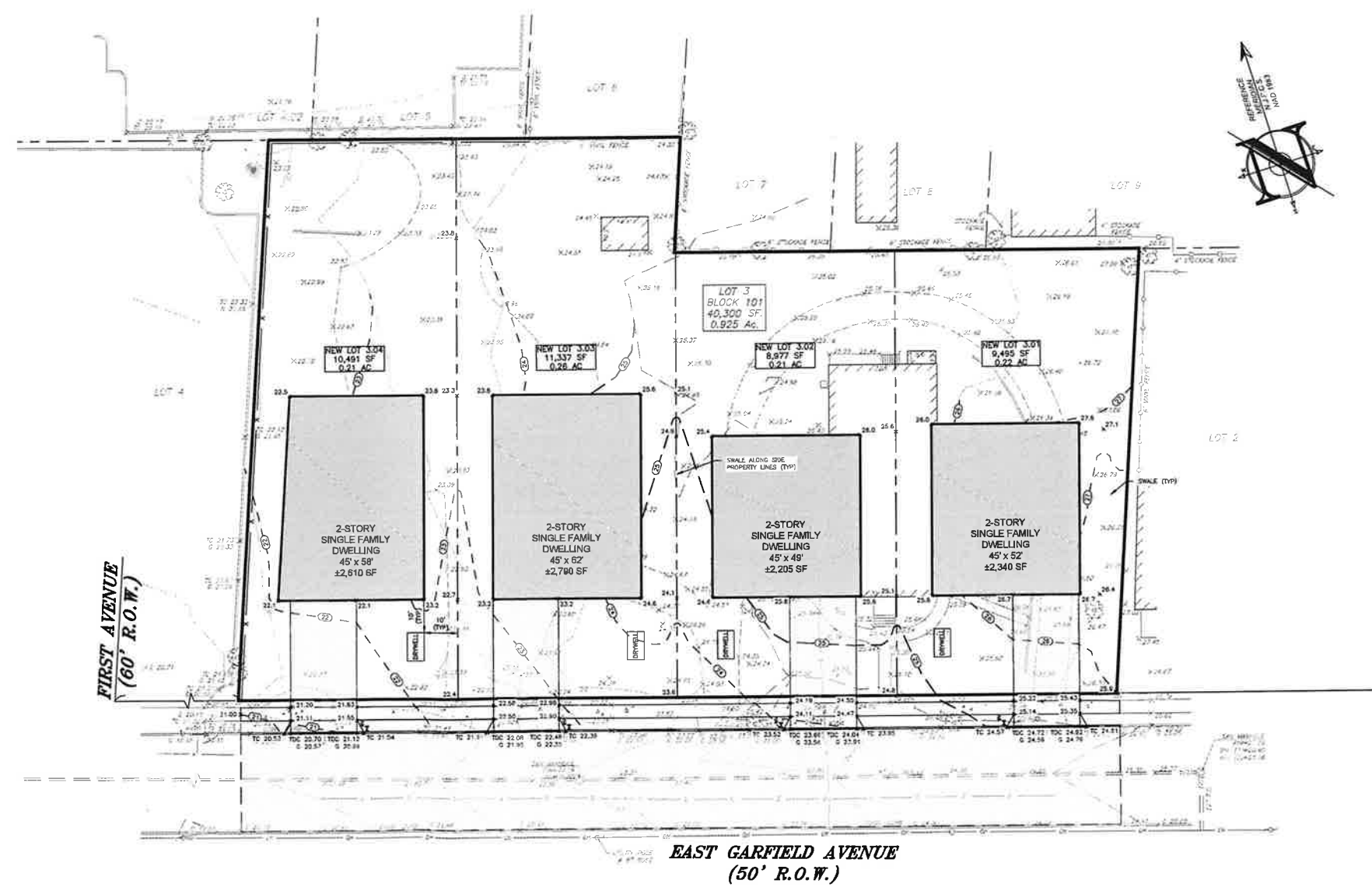
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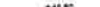
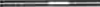
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DRAINAGE PLAN

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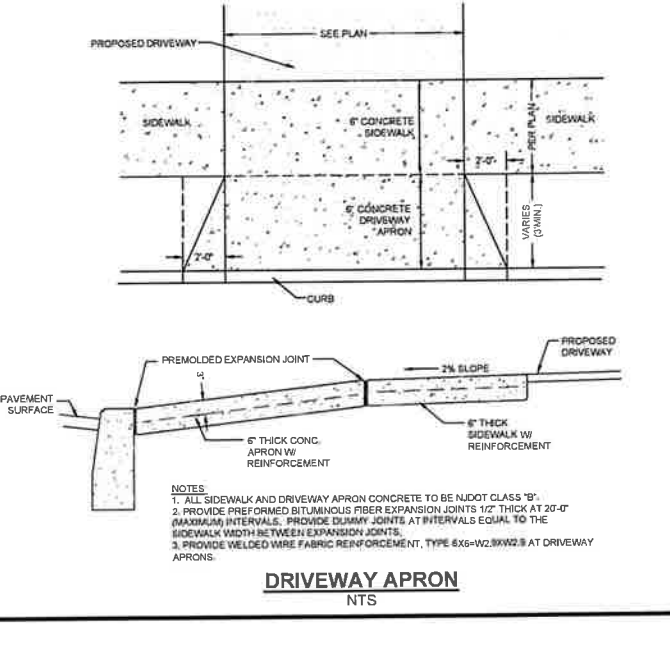
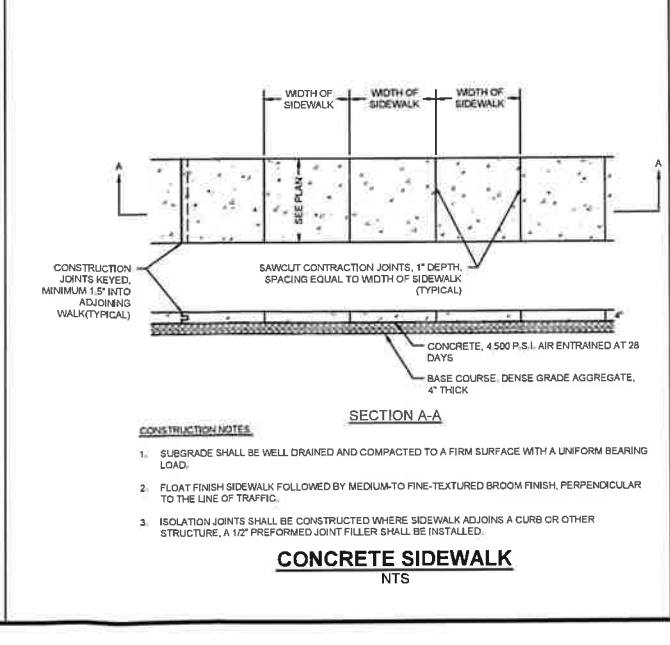
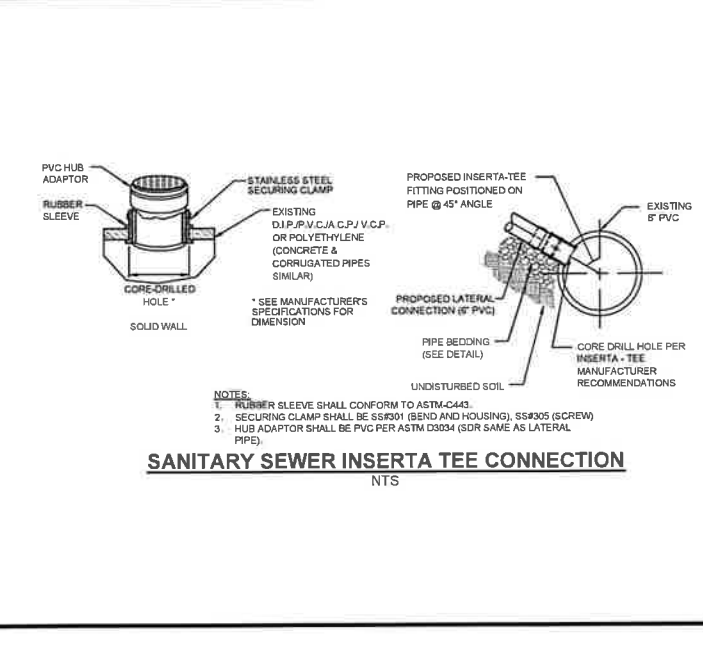
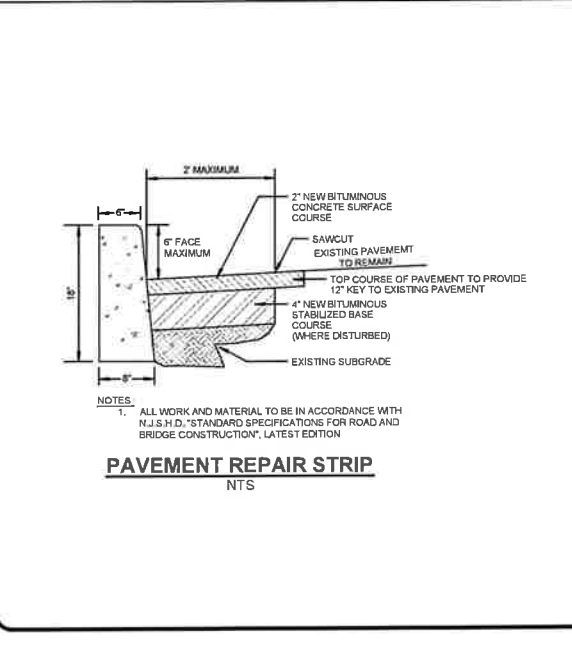
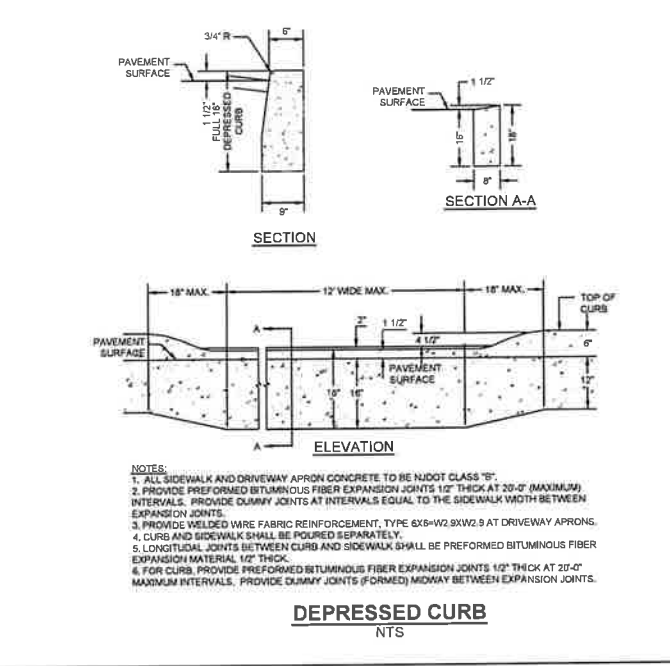
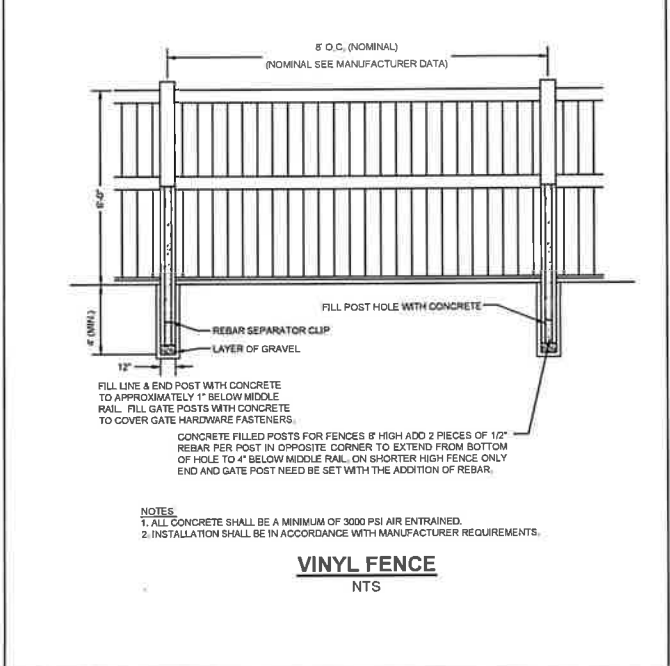
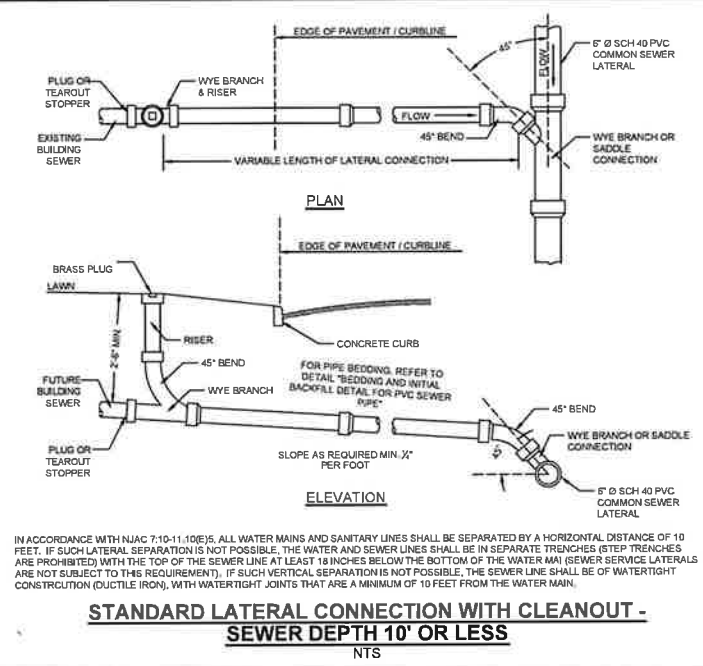
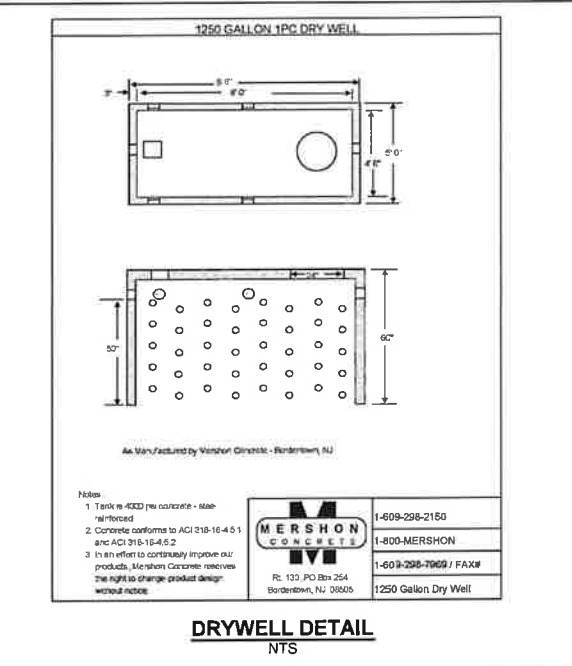
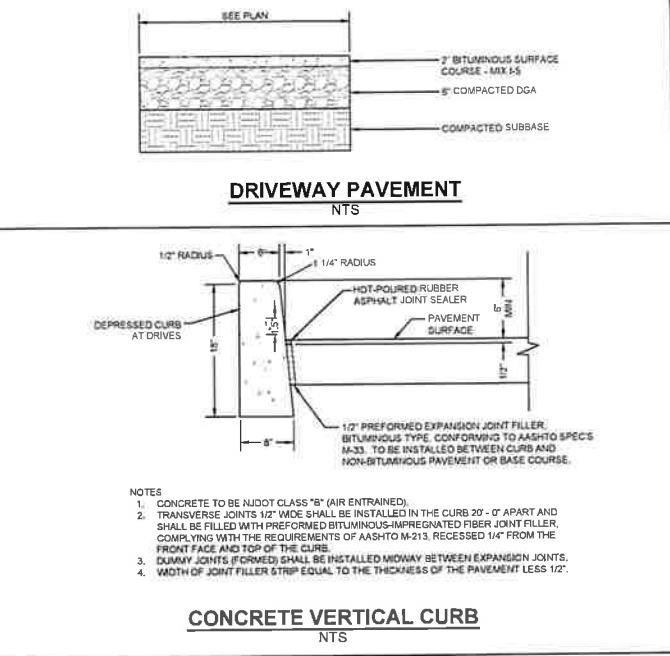
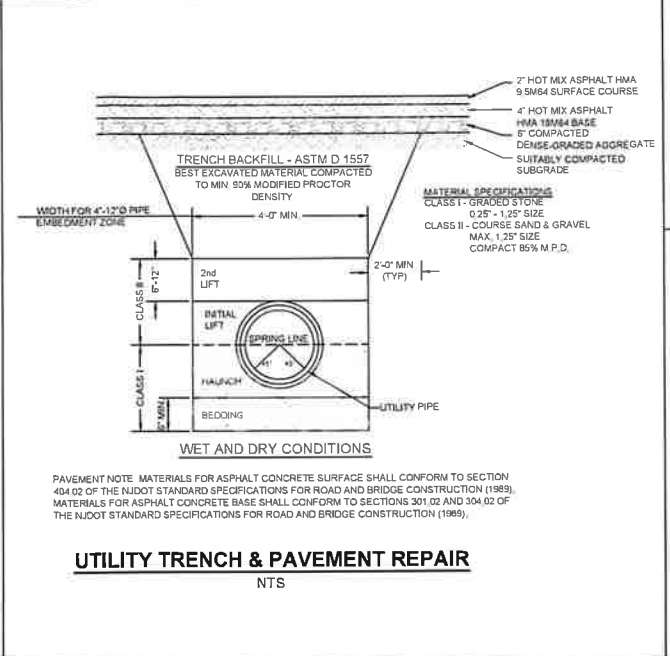
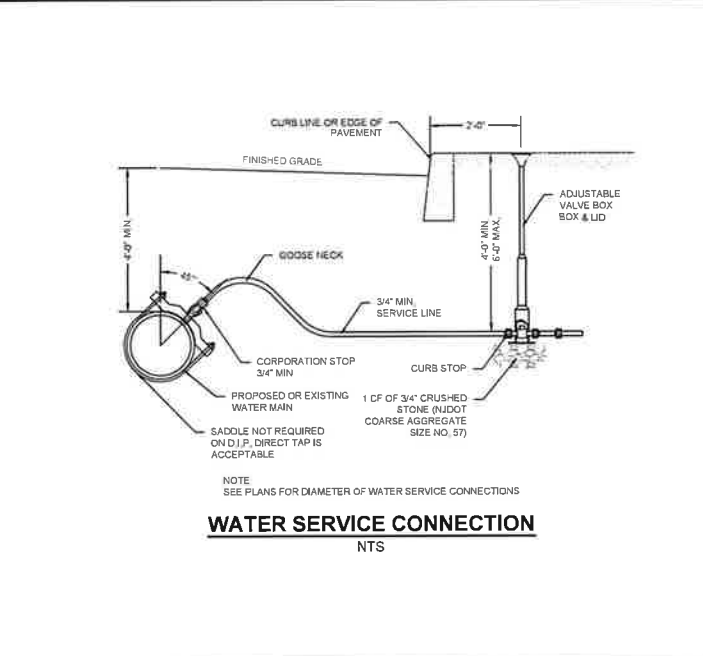
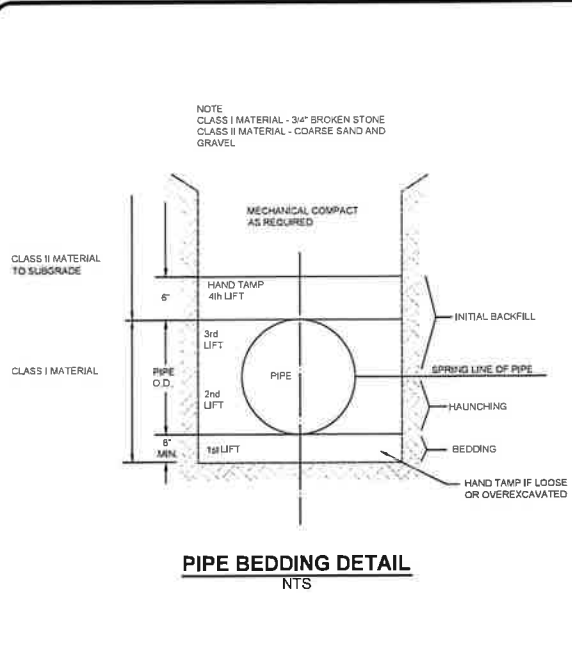


SCALE : 1" = 20'

LEGEND	
EXISTING  BOUNDARY LINE  CONTOUR LINE  SPOT ELEVATION  BUILDING  WALL  GAS  WATER  INLET  STORM  SANITARY MAIN  SANITARY LATERAL OVERHEAD WIRE  ELECTRIC  TELEPHONE  UTILITY POLE  HYDRANT  SIGN POST FENCE  LIGHT FIXTURE  TEST PIT LOCATION  GRADE FLOW ARROW SWALE CENTER LINE 	PROPOSED  BOUNDARY LINE  CONTOUR LINE  SPOT ELEVATION  BUILDING  WALL  GAS  WATER  INLET  STORM  SANITARY MAIN  SANITARY LATERAL OVERHEAD WIRE  ELECTRIC  TELEPHONE  UTILITY POLE  HYDRANT  SIGN POST FENCE  LIGHT FIXTURE  TEST PIT LOCATION  GRADE FLOW ARROW SWALE CENTER LINE 

SEE SHEET C101 FOR PLAN NOTES

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PROJECT INFORMATION

14 EAST GARFIELD AVENUE

BLOCK 101, LOT 9
14 EAST GARFIELD AVENUE
BOROUGH OF ATLANTIC HIGHLANDS,
MONMOUTH COUNTY, NJ

MASONIC HALL
152 MAPLE AVENUE
RED BANK, NJ 07701-1715

KALIAN MANAGEMENT LLC
2 HENNESSY BOULEVARD, SUITE 1
ATLANTIC HIGHLANDS, NJ 07716

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SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 34, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC
SINCE 2003

CALL BEFORE YOU DIG!
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609-118-6000 x 4001

INSITE
Engineering - Surveying - Planning

CERTIFICATE OF AUTHORIZATION: MGA25582300
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
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JASON L. FORTNER, DE, PP, CFM, CME
PROFESSIONAL ENGINEER, PLANNER
NJPE 43118, NJPP 5716, PAPE 4394
DEPE 3813, NYPE 802295, CTPE 22281
NCPPE 33334, CQPE 900482, CQPE 36805

REVISIONS

SCALE: AS SHOWN DESIGNED BY: SGM
DATE: 12/18/23 DRAWN BY: JAR
JOB #: 23-756-12 CHECKED BY: JLF
CADD: 23-756-12d4

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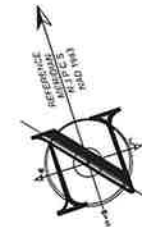
PLAN INFORMATION

PRELIMINARY & FINAL
MAJOR SUBDIVISION

CONSTRUCTION
DETAILS

C700

Plot: N:\Jobs\2178 - InSite - Completed\2178-2178.dwg - 14 East Garfield Avenue - Atlantic Highlands, NJ\2178\2178.dwg User: JLF Date: 12/18/23 10:00 AM
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PROJECT INFORMATION

14 EAST
GARFIELD
AVENUE

BLOCK 101 LOT 3
14 EAST GARFIELD AVENUE
BOROUGH OF ATLANTIC HIGHLANDS
MONMOUTH COUNTY, NJ

MASONIC HALL
155 MAPLE AVENUE
RED BANK, NJ 07701-1715

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SURVEYOR
INSTE SURVEYING, LLC
1955 ROUTE 34, SUITE 1A
WALL, NJ 07719



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STATE	NEW JERSEY
COUNTY	MONMOUTH
CITY	ATLANTIC HIGHLANDS
ZIP	07715
PROJECT NO.	23-756-12
DATE	12/18/23
DRAWN BY	JAR
CHECKED BY	JLF
APPROVED BY	



CERTIFICATE OF AUTHORIZATION: 24GA29083200
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Jason L. Fichter, PE, P.E., C.F.M., C.M.E.
PROFESSIONAL ENGINEER, PLANNER
NJPE 43118 NJPP 5728 PAPE 61948
DCPE 2613 WYPE 80225 CTPE 22291
NYPE 33336 DCPE 900682 COPE 36605

REVISIONS

NO.	DATE	DESCRIPTION
1	12/18/23	REVISED LAYOUT
2	12/18/23	REVISED LAYOUT
3	12/18/23	REVISED LAYOUT
4	12/18/23	REVISED LAYOUT
5	12/18/23	REVISED LAYOUT
6	12/18/23	REVISED LAYOUT
7	12/18/23	REVISED LAYOUT
8	12/18/23	REVISED LAYOUT
9	12/18/23	REVISED LAYOUT
10	12/18/23	REVISED LAYOUT

SCALE: 1"=20'
DATE: 12/18/23
JOB #: 23-756-12
CAD #: 23-756-124

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PLAN INFORMATION

PRELIMINARY & FINAL

MAJOR SUBDIVISION

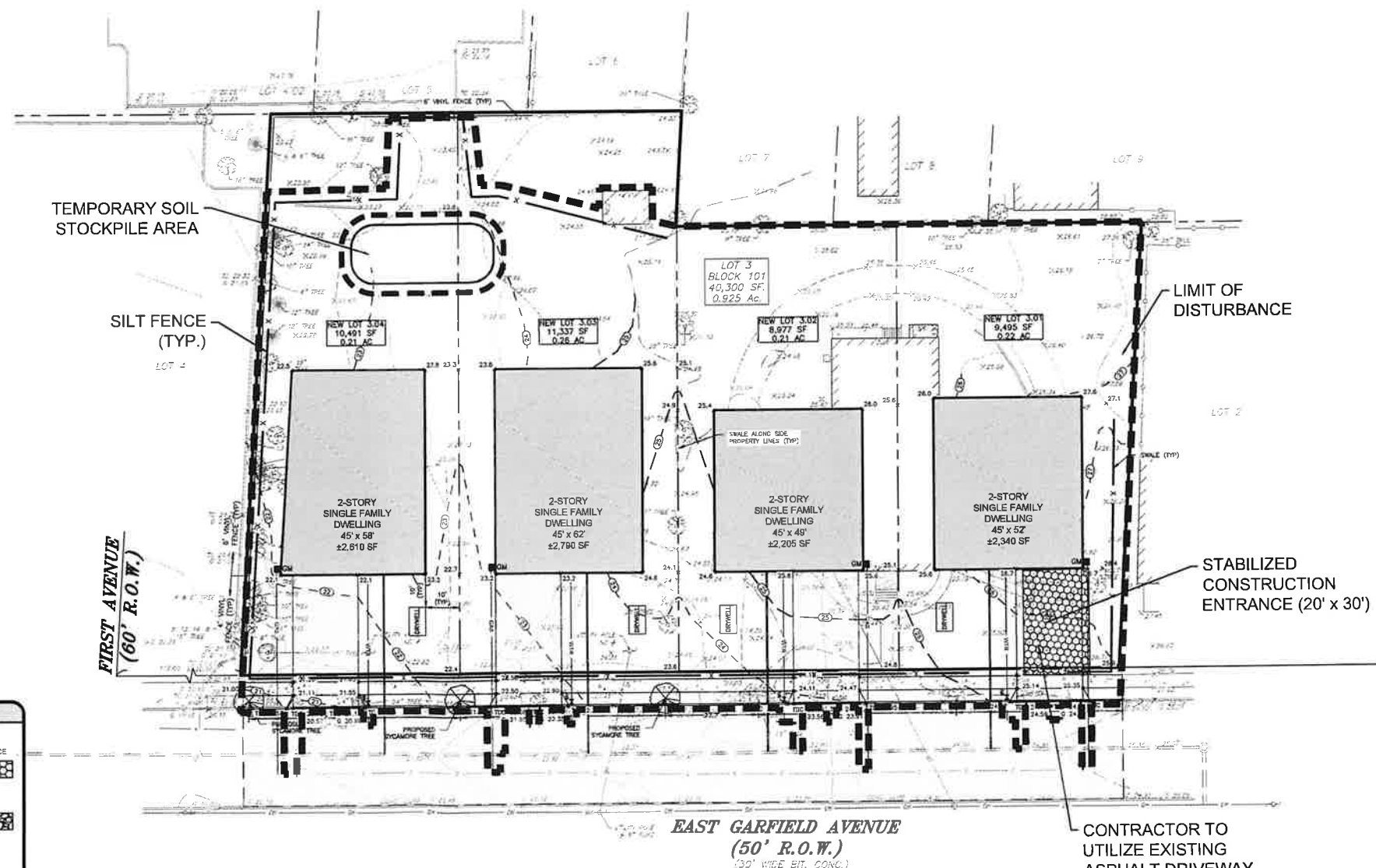
SOIL EROSION

& SEDIMENT CONTROL

PLAN

DATE

C800



LEGEND

EXISTING	PROPOSED
BOUNDARY LINE	BOUNDARY LINE
CONTOUR LINE	CONTOUR LINE
SPOT ELEVATION	SPOT ELEVATION
BUILDING	BUILDING
WALL	WALL
GAS	GAS
WATER	WATER
INLET	INLET
STORM	STORM
SANITARY MAIN	SANITARY MAIN
SANITARY LATERAL	SANITARY LATERAL
OVER-HEAD WIRE	OVER-HEAD WIRE
ELECTRIC	ELECTRIC
TELEPHONE	TELEPHONE
UTILITY POLE	UTILITY POLE
HYDRANT	HYDRANT
SIGN POST	SIGN POST
FENCE	FENCE
LIGHT FIXTURE	LIGHT FIXTURE
TEST PIT LOCATION	TEST PIT LOCATION
GRADE FLOW ARROW	GRADE FLOW ARROW
SWALE CENTER LINE	SWALE CENTER LINE

SOIL EROSION LEGEND

LIMIT OF DISTURBANCE	STABILIZED CONSTRUCTION ENTRANCE
SILT FENCE	RIP-RAP APRON, SCOUR HOLE
INLET PROTECTION	PROPOSED TREE PROTECTION

CONSTRUCTION / SPPP NOTE

THIS PLAN WAS PREPARED TO ADDRESS THE SOIL EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT THE TIME OF DESIGN ONLY. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT ARE TO BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE SITE CONTRACTOR.

PLEASE NOTE - THIS PLAN IS NOT TO BE USED FOR SITE CONSTRUCTION.

TOTAL LIMIT OF DISTURBANCE = 0.95 AC.

[illegible]

1. SITE PREPARATION

A GRASS AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION. SEEDBEDS SHOULD BE PREPARED USING MUCH APPLICATION AND MUCH ANCHORING. ALL GRASSING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING. PG. 19-1.

3. INSTALL NEEDED EROSION CONTROL, PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION, ETC. (SEE SECTIONS 2 AND 3, AND APPENDICES B AND C, STANDARDS 11 THROUGH 42).

4. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCANNED 6 TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC).

2. SEEDBED PREPARATION

A. APPLY ODOOR, LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS COOPERATIVE EXTENSION. SOIL SAMPLE MAKERS ARE AVAILABLE FOR FREE. LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES WILL BE APPLIED THE RATE OF 500 POUNDS PER ACRE, OR 1 POUND PER 1,000 SQUARE FEET OF 15-00-10 OR EQUIVALENT WITH 50% WATER SOLUBLE IRON FERTILIZER. A SOIL TEST INDICATES OTHER FERTILIZER. LIMPH RATE CAN BE DETERMINED BY SOIL TESTING. OR CAN CALCULATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LINE AND FERTILIZER INTO THE SOIL, AS NEARLY AS PRACTICAL. TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTONG OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR CRUSING OPERATION SHOULD BE ON THE GENERAL OUTLINE. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING; IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS. PG. 14-1.

3. SEEDING

A. TEMPORARY VEGETATIVE SEEDING COVER SHALL CONSIST OF PERENNIAL, INCREASED ANNUALS, YAT AT RATE OF 1,000 PER 1,000 SQ. FT. (SEEDING WITH AN OPTIMUM SEED DEPTH OF 3/8" (TWICE THE DEPTH IF SANDY SOILS)).

IN ACCORDANCE WITH 21B-5.1 (2) PAGE 7-3.

SEE DISCUSSION WITH 21B-5.1 AND 515-10.1.

MAY BE IN 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

4. **HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK WITH AN AGITATION SYSTEM AND FOLLOWING PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE SEEDING AREA. SEEDING MUST BE DONE WHILE THE TANK IS MOVING. HYDROSEEDING IS NOT A PREFERRED METHOD FOR SEEDING BECAUSE MULCH SHALL NOT BE RECOMMENDED FOR HYDROSEEDING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SOIL SURFACE. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.**

5. **AFTER REEDING, FIRING THE SOIL WITH A DISBURGATED ROLLER WILL ASSURE GOOD SEED TO SOIL CONTACT, RESTORE CLARITY, AND IMPROVE SEEDING EFFICIENCY. THIS IS THE PREFERRED METHOD. WHEN PERFORMING ON THE CONTIGUOUS SHEET EROSION, MULCH WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAINTAINED.**

4. **MULCHING**

MULCHING IS REQUIRED ON ALL BEEDING. MULCH WILL INURET AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND PROMOTE ESTABLISHMENT AND EARLIER ESTABLISHMENT. THE EXPERIENCE OF VEGETATION SURFACES TO CONTROL SOIL EROSION SHALL BE DETERMINED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

6. **A STRAW OR HAY UNMOUNTED SMALL GRASS STRAW, HAY FREE OF ROCKS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (75 TO 100 POUNDS PER 1,000 SQUARE FEET) EXCEPT THAT WHEN A CROPEN IS USED RATE OF 1/2 TONS PER 1,000 SQUARE FEET. MULCHING SHALL BE APPLIED AT A RATE OF 1 1/2 TONS PER ACRE. MULCH CHOPPED LONGER MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.**

APPLICATION: SPREAD MULCH UNIFORM BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 98% OF THE SOIL SURFACE WILL BE COVERED FOR A PERIOD OF 10 DAYS. APPLY MULCH AT APPROXIMATELY 1,100 LBS PER ACRE.

1. PEO AND DRIVE: 1 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN EACH DIRECTION. DRIVE PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE TO FORM A GRID OF SQUARES BY STRETCHING TENSILE TENSION BETWEEN PEGS IN A CROSS-CROSS AND A SQUARE PATTERN. SECURE TENSION AROUND EACH PEG WITH 2 TO 4 MORE OR MORE LONG NAILS.

2. MULCH NETTINGS: STAPLE PAPER, JUTE, COTTON OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A GEORADAR IF THE NETTING AREAS TO BE MONITORED.

3. CRIMPER MULCH-ANCHORING TOLLS: A TRACTOR-DRIVEN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE STRAWCLOTH LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL, SO AS TO ANCHOR AND LEAVE THE MULCH IN PLACE. THE TOLLS SHOULD BE USED IN THE WINDY DIRECTION OF THE WINDS, OR WHICH MUST OPERATE ON THE CONTROLS OF THE SOILS. STRAW MULCH RATE SHOULD BE 1 TON PER ACRE, NO TACKLING OR OTHER AGENTS IN THE MULCH.

4. LIQUID MULCH-BINDERS: MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

* AFFILIATIONS SHOULD BE HARBOR AT EDGES WHERE, UNDO MAY CATCH THE MULCH IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

WHEN MIXED WITH WATER FORMS A GEL AND WHEN APPLIED TO MUCH UNDER LAYER: BATTERY CURING CONDITIONS WILL FORM MEMBRANES OF INTERLOCKED POLYMERS. THE VEGETABLE GEL SHALL BE PREPARED, IDEALLY, FROM POLYMER AND RESIN IN A WAY TO OBTAIN EFFECTIVE COATINGS. CURING RATE, USE RATES AND WEATHER CONDITIONS ARE RECOMMENDED BY THE MANUFACTURER TO AVOID MOIST MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC RESINS: HIGH POLYMER SYNTHETIC EMULSION. MIXIBLE WITH WATER WHEN OILY AND FOLLOWING APPLICATION TO MUCH DRYING AND CURING SHALL UNDERNEATH BE SOLUBLE OR DISPENSIBLE IN WATER. IT SHALL BE AVAILABLE AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACTIC UNTIL DERMINATION OF GRASS.

B. WOODPILES OR PAPER/BIOMASS PILES SHALL BE MADE FROM WOOD PLANKS/FIRMS OR PAPER CONTAINING NO GROWTH OR NESTING OF ANIMALS. WOODPILES SHALL BE COVERED WITH A 6" MINIMUM THICKNESS OF MULCH APPLIED BY THE PILE MANUFACTURER AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK AFTER USE. USE IS LIMITED TO 1000 PILES PER YEAR.

C. MULCH SHALL BE COVERED AND EXTENDED PAPER AND/OR WOOD FIBER PRODUCTS WHICH MAY CONTAIN GLUE, COPOLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS WHEN APPLIED TO A SEEDBED AREA AND WATERED FOR 24 HOURS SHALL BE COVERED WITH A 6" MINIMUM THICKNESS OF MULCH APPLIED BY THE PILE MANUFACTURER. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADERS AT THE RATE OF 80-120 LBS/1000 SQ. FEET AND ACTIVATED WITH 2.5 TO 4 INCHES OF WATER. MULCH SHALL BE APPLIED TO SEEDBEDS WHERE SEEDS HAVE BEEN PLANTED OR SITES WHERE STRAW/MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

D. APPLYING THE FULL 8.2 TO 10 INCHES OF WATER AFTER SPREADING PELLETED MULCH SHALL BE EXTREMELY IMPORTANT TO OBTAIN FULL SEEDBED COVERAGE.

5. PREPARATION

A. GRADE AS NEEDED AND FERTILIZER TO PREVENT THE USE OF CONVENTIONAL EQUIPMENT FOR SECOND PREPARATION. SEEDING, MULCH APPLICATION, AND MULCH AND/ORING ALL GRADES SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR CONSTRUCTION OF GRADES AND SLOPES.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE 5-SSOL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

C. TOPSOIL SHOULD BE HANDED ONLY WHEN IT IS DEEP ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 15 CM (5 INCHES) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER AS REQUIRED TO MEET THE STANDARD FOR TOPSOIL.

D. INSTALL EROSION CONTROL, PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

6. SECOND PREPARATION

A. UNIFORMLY APPLY SEEDS, LUSINE OR FERTILIZER TO TOPSOIL WHEN THERE HAS BEEN SPREAD AND PROVIDED ACCORDING TO THE TEST RECOMMENDATIONS SUCH AS OFFERED BY NUTRIENT CO-OPERATIVE EXTENSION. SOIL SAMPLE ANALYSES ARE AVAILABLE FROM THE LOCAL RESOURCES CO-OPERATIVE EXTENSION OFFICE. THE FOLLOWING ARE THE RECOMMENDED RATES FOR SEEDING AND FERTILIZING: 1. SEEDING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 2. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 3. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 4. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 5. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 6. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 7. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 8. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 9. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 10. FERTILIZING: 100 LBS PER ACRE (2.2 TONS PER ACRE) OF SEEDS. 11. 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A. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.

SEED MIXTURE #1 FOR JOJO AND AGRAS

	<u>PLANTING RATE (LBS PER 1000 SQ FT)</u>
HARD FESCUE AND/OR CHEWING FESCUE AND/OR STRONG CREEPING RED FESCUE	3 (175)
PERENNIAL RYEGRASS	1 (50)
KENTUCKY BLUEGRASS (BLND)	1 (40)

*ACCEPTABLE SEEDING DATES 3/1-4/30 AND 5/1-6/11**
*OPTIMAL SEEDING DATES 5/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

SEED MIXTURE #2 FOR BASS, ROSE OPELS AND WALES

	<u>PLANTING RATE (LBS PER 1000 SQ FT)</u>
STRONG CREEPING RED FESCUE	3 (175)
KENTUCKY BLUEGRASS	1 (50)
PERENNIAL RYEGRASS	0.5 (20)
OR CRUP	0.5 (20)
PLUS WHITE CLOVER	0.10 (5)

*ACCEPTABLE SEEDING DATES 3/1-4/30 AND 5/1-6/11**
*OPTIMAL SEEDING DATES 5/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

[illegible]

AND EARLIER ESTABLISHMENT, THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DETERMINED COMPLYING WITH THE FOLLOWING REQUIREMENT:

A STRAW OR HAY UNFODDED SMALL GRASS STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1.40 TO 2.05 TONS PER 1000 SQUARE FEET OF SOIL (1000 SQUARE FEET). EXCEPT THAT WHERE A GRASSIES IS USED INSTEAD OF A LEGUM, MULCH CHIPPERS (NOTED) OR ADHESIVE AGENTS, THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHIPPERS MUST BE SUFFICIENT TO COVER THE ENTIRE AREA. HAY OR MULCH IS NOT RECOMMENDED FOR ESTABLISHING PINE TREES OR LAWNS OR TO THE PREVENT OF WEEDS.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 80% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-APPLIED MULCH, CHISEL ARIE AT APPROXIMATELY 1000 SQUARE FEET SECTIONS AND DISTRIBUTE TO 10 TO 20 POUNDS WITH EACH SECTION.

ANCHORING SHALL BE COMPLETED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, SLOPES OF SLOPES, AND COSTS:

WITH TWO OR MORE ROUND TUBES.

2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON OR PLASTIC NETTING TO THE SOIL SURFACE, LIKE A DEGRADABLE NETTING IN AREAS TO BE MOVED.

3. CRUMPER (MULCH ANCHORING COLLIER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH TO 4 INCHES INTO THE SOIL SURFACE AND ANCHOR IT TO THE SOIL SURFACE. THIS TECHNIQUE IS USEFUL IN AREAS TRAVELED BY A TRACTOR, WHICH MUST OPERATE ON THE CONTIGUOUS SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE, NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.

4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY OR STRAW MULCH.

IS LIKE ONE OF THE FOLLOWING

- (1) ORGANIC AND VEGETABLE-BASED BINDER—NATURALLY OCCURRING, POWDER-BASED HYDROPHILIC MATERIALS AND MIXTURES WITH WATER FORM A GEL AND MANIPULATE WATER TO FORM A GEL-LIKE SATURATED CURING CONDITIONS. VULCANIZING MEMBRANES NETWORKS OF INSOLUBLE POLYMERS, THE SCALABLE GEL SHELLS, AND THE GEL SHELLS, WHICH ARE USED TO FORM A GEL-LIKE SATURATED CURING CONDITIONS. WIDE GROWTH OF TURTLE GRASS, LAKE AND RATES AND WEATHER CONDITIONS ARE RECOMMENDED BY THE MANUFACTURER TO ANCHOR SUCH MATERIALS INTO NEW PRODUCTS ARE AVAILABLE. SOME OF WHICH MAY BE USED FURTHER DOWN THE LINE.
- (2) SYNTHETIC BINDERS—HIGH-POLYMER SYNTHETIC EMULSIONS, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION OF MULCH, DRYING AND CURING. EMULSIONS IN DILUTION ARE SOLUBLE OR INSOLUBLE IN WATER. BINDER SHALL BE APPLIED IN RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

[illegible]

VEGETATION WILL ESTABLISHED; THIS IS ESPECIALLY TRUE WHEN SEEDS ARE MADE IN ABRIGUAL DRY OR HOT WEATHER DROUGHTY SITES

5 USE PRELIMINARY

ONCE SOIL ORGANIC MATTER CONTENT AND AVAILABLE NITROGEN FERTILIZER DRAINAGE PROPERTIES ARE PREDETERMINED, THIS STANDARD FOR FOLLOWUP OF TOP DRESSING IS MANDATORY. AN EXISTING WATER MADE WHERE DRAINAGE DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT FUR FILLING MAY DEVELOP, IN THAT INSTANCE TOP DRESS WITH 10-10-10 AT 300 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IS ELIMINATED

7 ESTABLISH PERMANENT VEGETATIVE STABILIZATION

THE QUALITY OF PERMANENT VEGETATION BEATS WITH THE CONTRACTOR THE TIMING OF SEEDING PREPARING THE SEEDBED. NUTRIENTS MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATE IN TAB. 4 ARE REQUIRED WHEN COPIATION IS REQUIRED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATE MAY BE USED IF THE SEED BED IS PREPARED TO THE POINT OF SEEDING FROM THE SEED BED. THE SEED BED SHOULD BE APPLIED TO ALL METHODS OF SEEDING ESTABLISHING PERMANENT VEGETATION MEANS VEGETATIVE COVER OF THE SEEDBED. HOWEVER, NOTE THIS DESIGNATION OF MOVED COVER DOES NOT GUARANTEE THE PERMANENT COVER OF THE TOP SOIL SHOULD THE

INTENTION
THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.

PURPOSE
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCED ON-SITE AND OFF-SITE DUST AND HEALTH HAZARDS AND IMPROVE TRAFFIC SAFETY.

LOCATION WHERE PRACTICE APPLIES
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE AND OFF-SITE DUST LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTION.

WATER QUALITY ENHANCEMENT
SEDIMENTS DEPOSITED AS DUST ARE OFTEN THE COLLOIDAL MATERIAL, WHICH IS EXTREMELY DIFFICULT TO REMOVE. IF IT BECOMES SUSPENDED, USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST ON CONSTRUCTION SITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

PLANNING CRITERIA
THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST

MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG 5-1

VEGETATIVE COVER - SEE STANDARD FOR
TEMPORARY VEGETATIVE COVER, PG. 7-1,
PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, PG. 4-1, AND
PERMANENT STABILIZATION WITH SOD, PG. 8-1

DUST CONTROL MATERIALS			
MATERIALS	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	#200
LATEX EMULSION	12.5:1	FINE SPRAY	235
REGIN IN WATER	8:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) - SPRAY ON	APPLY ACCORDINGLY TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED SOLIDS. SEE SEDIMENT BASIN STANDARD HD 36-1.		
POLYACRYLAMIDE (PAM) - DRY SPREAD			
ADULTED SOY BEAN SOAP 512X	NONE	COARSE SPRAY	1200

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

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

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEE THROU COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE FLOODING OR RUN OFF. USE STEEPER SLOPES THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATIONS ON PLANTS.

STANDARD FOR STABILIZATION WITH MULCH ONLY

DEFINITION:
STABILIZATION EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS EXPOSED FOR PERIODS LONGER THAN 14 DAYS.

PURPOSE:
TO PREVENT EXPOSED SOIL SURFACES FROM EROSION DAMAGE, AND TO REDUCE OFFSITE ENVIRONMENTAL DAMAGE.

CONDITION WHERE PRACTICE APPLIES:
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY TO OCCUR. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTION.

WATER QUALITY ENHANCEMENT:
PRACTICES PROVIDE MECHANICAL PROTECTION AGAINST WIND OR RAINFALL INDUCED SOIL EROSION UNTIL PERMANENT VEGETATION IS ESTABLISHED.

WATERSHED APPLICATION:
PRACTICES ARE APPLICABLE TO AREAS SUBJECT TO EROSION WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION-RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION MAY BE APPLIED.

- A. GRADE AS NEEDED AND FERTILIZE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION. SEE APPLICATION AND MULCH AND ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
- B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
- C. PROTECTIVE MATERIALS:
 - A. UNWOVLED SMALL-GRAIN STRAW AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQ. FT. AND ANCHORED WITH A MULCH ANCHORING LIQUID, WOOD MULCH SHEDDERS, OR NETTING THE OTHER AVAILABLE MATERIALS RECOMMENDED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH IS SPREAD COMPLETELY UNIFORM VISUAL INSPECTION. I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.
 - B. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER BUTLER CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.
 - C. WOOD-CHIP OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A MICROSEEDER.
 - D. MULCH NETTING, SUCH AS PAPER JUTE, EXPOSURE COTTON, OR PLASTIC MAY BE USED.
 - E. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS MUST NOT BE USED ON A FLOWING WATER COURSE TO WASH THEM FROM AN INLET AND PLUS IT.
 - F. GRAVEL, CRUSHED-STONE, OR SLAG AT THE RATE OF 4 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH MAY BE USED. 2 OR 3 (ASTM G-33) IS RECOMMENDED.
- D. MULCH AND ANCHORS SHOULD BE ACQUIRED IMMEDIATELY AFTER PLACEMENT OF JUTE OR STRAW MULCH. MULCH AND ANCHORS MUST BE PLACED ON THE SOIL USING THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA TO BE PROTECTED:

- 8. MULCH- NETTINGS- STAPLE PAPER COTTON OR PLASTIC NETTINGS OVER MULCH CAN DEGRADABLE NETTINGS IN AREAS WHERE NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.
- 9. CRUMPER MULCHING AND CRUMPLE TOOL- A TRACTOR CUMULUS PLYMENT SPECIALLY DESIGNED TO PULCH AND CRUMPLE THE SURFACE THE PRACTICE OF CRUMPLE MULCHING CRACKS CRACKS BUT IT IS LIMITED TO THOSE SLOPES WHERE THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES ON SLOPING LAND THE OPERATOR BE ON THE CONTOUR
- 10. LIQUID MULCH-CHISELS
- 11. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH IN VALLEYS AND AT CRESTS OF ROLLS OF HILLS. BURN A 1/2 INCH OF LIME IN ADVANCE

[illegible]

PHASE	DURATION
1. INSTALL TEMPORARY SOIL EROSION FACILITIES (CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, INSTALL SILT FENCE (INSTALL TREE PROTECTION FENCING))	IMMEDIATELY
2. SITE DEMOLITION	2 WEEKS
3. ROUGH CLEARING AND GRADING	2 WEEKS
4. TEMPORARY SEEDING	IMMEDIATELY
5. UTILITY INSTALLATION	2 WEEKS
6. CURB AND SIDEWALK CONSTRUCTION	1 WEEK
7. CONSTRUCTION OF BUILDING(S)	MARKET
8. MAINTENANCE OF TEMPORARY EROSION CONTROL MEASURES	CONTINUOUSLY
9. FINAL CONSTRUCTION/STABILIZATION OF SITE	1 WEEK

TEMPORARY SEEDING SHALL ALSO BE PERFORMED WHEN NECESSARY IN ACCORDANCE WITH NOTE NO. 1 OF THE SOIL EROSION AND SEDIMENT CONTROL NOTES.

NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. THE PROPERTY OWNERS SHALL ASSUME THE RESPONSIBILITY AFTER CONSTRUCTION IS COMPLETED AND CERTIFICATE OF OCCUPANCY IS ISSUED.

THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED AS DIRECTED BY THE DISTRICT INSPECTOR.

THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE ROADWAY CLEAN AT ALL TIMES ANY SEDIMENT SPILLED OR TRACKED ON THE ROADWAY WILL BE CLEANED UP IMMEDIATELY, AT MINIMUM, BY THE END OF EACH WORK DAY.

SOIL DUST GENERATION SHALL BE CONTROLLED ON A CONSTANT BASIS BY WETTING THE SURFACE AND/OR APPLICATION OF CALCIUM CHLORIDE.

STEEP SLOPES SHALL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR SUITABLE EQUAL. (SEE ANCHORING NOTE NO. 10 OF SOIL EROSION & SEDIMENT CONTROL NOTES)

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON INDIVIDUAL SITES SHALL APPLY TO ANY SUBSEQUENT OWNERS.

1 MATERIALS

A. TOPSOIL SHOULD BE FRAMBLE, LOAMY, FREE OF DEBRIS, DISINTEGRABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCES. IT SHALL BE FREE OF HYDROCARBONS, AND BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD BE ADVERSE CHEMICAL OR PHYSICAL CHARACTERISTICS. TOPSOIL SHALL BE FREE OF SOLUBLE SALTS TO EXCEED 1000 MG/L. TOPSOIL SHOULD BE LESS THAN 2 MILLIMETERS PER CENTIMETER. MORE THAN 60 MILLIMETERS MAY DEGRADE SEEDLING ADVERSELY IMPACT GROWTH. IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 1.5%.

B. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY BE ENRICHED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZERS, AND HAS THE SAME PHYSICAL AND CHEMICAL PROPERTIES AS TOPSOIL. IT SHALL BE FREE OF TOXIC SUBSTANCES, ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPOSITION OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE AND IM-SOLUBLE.

2 STRIPPING AND STOCKPILING

A. FIELD EXPOSURE SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING. STRIPPING SHALL BE LIMITED TO THE IMMEDIATE CONSTRUCTION AREA.

B. WHERE FEASIBLE, LIVE MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BARE THE SOIL APPROPRIATELY.

C. STOCKPILING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.

D. STOCKPILING STOCKPILING DEPTH SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE DRAINAGE.

E. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN. SEED SHALL BE PLANTED (P. 4-1) TEMPORARY 10%+ MUTATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED GROW ON STOCKPILES.

TIME OF THE ESSENCE
B. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR BEDDED PREPARATION, SECONDARY APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 184.
C. THE CONTRACTOR SHALL BE RESPONSIBLE TO TEST THE SOIL TO DETERMINE THE SOIL TYPE. IF NEEDED, SOIL SHALL BE APPLIED TO BEDDING SOIL TO A DEPTH OF APPROXIMATELY 6 IN AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
D. THE TOPDRESSING THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING, PG. 184.
E. EMPLOY OF MODERN EROSION CONTROL PRACTICES SUCH AS DIVERSIFIED VEGETATION, STRUCTURES, CHANNEL, STABILIZATION, SEDIMENTATION BASINS, AND WATERWAYS. SEE STANDARD 11 THROUGH 42.
F. **GRASSING TOPDRESS**
1. TOPDRESS SHOULD BE HARDED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE, I.E. LESS THAN 10% MOISTURE.
2. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5 INCHES. MINIMUM OF ANCHOR- FIRMING IN PLACE IS REQUIRED. A TOPDRESS MAY BE CONSIDERED WHEN SPURDERS, SPILLERS, SPREADERS, LAUNCH PAVING, ETC. SOILS WITH A PM OF 40% OR LESS OR TOPDRESSING ROLLER/SUCTION DISKS WITH A MINIMUM DEPTH OF 30 INCHES OF SOIL MIXING A PM OF 5.0 OR MORE. IN ACCORDANCE WITH THE CONTRACTOR'S RESPONSIBILITY TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN A MINIMUM OF 85% COVERAGE OF THE SOIL WITH VEGETATION. AT LEAST 85% OF THE SOIL SHALL BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO THE PERFORMANCE OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE VEGETATION, SUPPLEMENTAL SEEDING, RE-SEMINATION OF FERTILIZERS AND/OR THE ADDITION OF ORGANIC MATTER E.G. COMPOST AS A TOP DRESSING. SUCH ADDITIONAL MEASURES BASED ON SOIL TESTS SHALL BE THOSE OFFERED BY THE CONTRACTOR. EXTENSIVE SERVICE OR OTHER APPROVED EQUIPMENT SHALL BE OBTAINED BY THE CONTRACTOR. SEE STANDARD 43 THROUGH 45.
G. **GRASSING TOPDRESS**
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PROPERTY ADDRESS:

14 EAST
GARFIELD
AVENUE

PROPERTY LOCATION:

BLOCK 101, LOT 3
14 EAST GARFIELD AVENUE
BOROUGH OF ATLANTIC HIGHLANDS,
MONMOUTH COUNTY, NJ

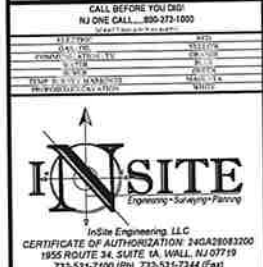
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ATLANTIC HIGHLANDS, NJ 07716

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PRELIMINARY & FINAL
MAJOR SUBDIVISION

SHEET TITLE: SOIL EROSION
& SEDIMENT CONTROL
NOTES

SHEET NO.: C801

