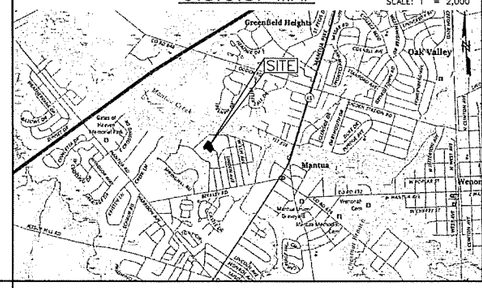
CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL PROCURE ALL REQUIRED PERMITS, LICENSES AND INSPECTIONS, PAY ALL CHARGES AND FEES AND GIVE NOTICES NECESSARY FOR AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE PROJECT.
2. THE CONTRACTOR SHALL BECOME RESPONSIBLE FOR THE LOCATING AND MARKOUT OF ALL EXISTING UTILITIES.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INDIVIDUALLY AND SHALL NOTIFY THE UNDERGROUND UTILITIES NOTIFICATION SERVICE AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ANY DIGGING BY CALLING 1-800-272-1000.
4. NO MATERIAL SHALL BE PLACED OR ANY DISTURBANCE PERMITTED BEYOND THE PROJECT PROPERTY LINE OR RIGHT-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY INVOLVED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING, GRUBBING, PAVING, TOPSOILING, FERTILIZING AND SEEDING OR OTHERWISE RESTORING ALL AREAS DISTURBED BY HIS ACTIVITIES.
6. INSPECTION OF, OR FAILURE TO INSPECT ANY MATERIALS OR WORKMANSHIP BY STATE, COUNTY OR TOWNSHIP OFFICIALS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PLANS, SPECIFICATIONS AND LAWS.
7. THE OWNER OR HIS REPRESENTATIVE IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS PURSUANT TO N.J.A.C. 5:23-3.21(e) OF THE N.J. UNIFORM CONSTRUCTION CODE AND CFR 1926.32(i) (OSHA COMPETENT PERSON).

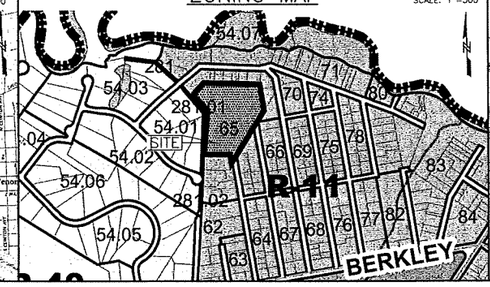
U.S.G.S. MAP

SCALE: 1" = 2,000'



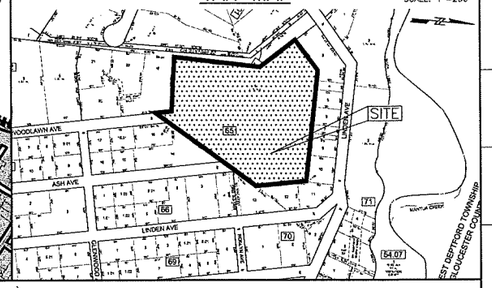
ZONING MAP

SCALE: 1"=500'



TAX MAP

SCALE: 1"=250'



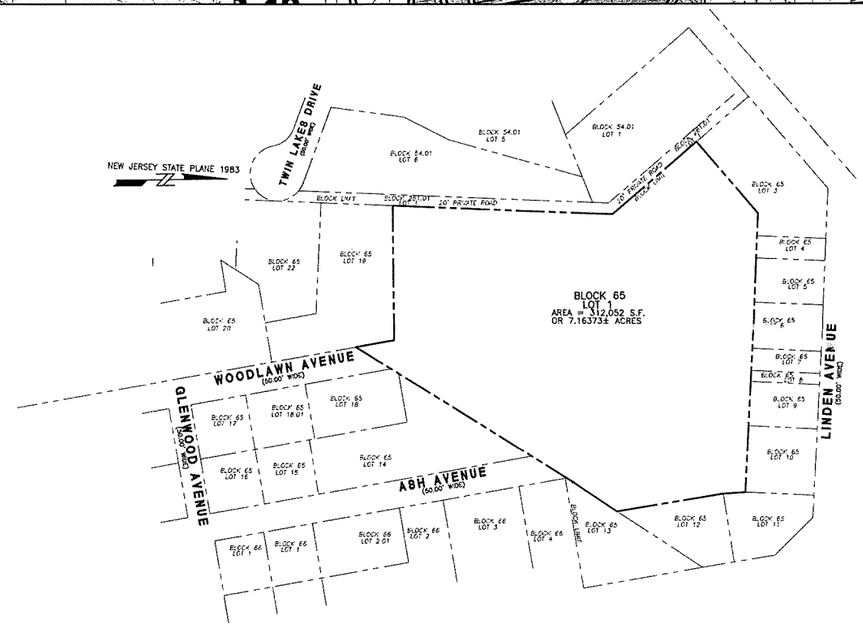
AGENCY APPROVALS

GLOUCESTER COUNTY PLANNING BOARD CHAIRMAN	DATE
GLOUCESTER COUNTY PLANNING BOARD SECRETARY	DATE
TOWNSHIP OF MANTUA LAND USE BOARD CHAIRMAN	DATE
TOWNSHIP OF MANTUA LAND USE BOARD SECRETARY	DATE
TOWNSHIP OF MANTUA LAND USE BOARD ENGINEER	DATE
TOWNSHIP OF MANTUA CLERK	DATE

ADJACENT PROPERTY OWNERS

LIST OF PROPERTY OWNERS WITHIN 200 FEET AS PROVIDED BY THE TOWNSHIP OF MANTUA'S CLERK'S OFFICE ON NOVEMBER 9, 2023

BLOCK	LOT	OWNER	ADDRESS
54.01	1	NICHOLAS M. & TATYANA HLUSHKO	24 LINDEN AVENUE MANTUA, N.J. 08051
54.01	2	EDWARD R. & CHERIE PEARSON	22 LINDEN AVENUE MANTUA, N.J. 08051
54.01	4	DAVID W. & BONNIE K. DOUKE	222 TWIN LAKES DRIVE MANTUA, N.J. 08051
54.01	5	PETER & KAREN BETH LEVINSON	P.O. BOX 364 MANTUA, N.J. 08051
54.01	6	PETER & KAREN BETH LEVINSON	P.O. BOX 364 MANTUA, N.J. 08051
54.03	9	MICHAEL J. & TERESA M. WANGER	23 LINDEN AVENUE MANTUA, N.J. 08051
65	3	AARON & NOELLE MALVANEY	28 LINDEN AVENUE MANTUA, N.J. 08051
65	4	AARON & NOELLE MALVANEY	28 LINDEN AVENUE MANTUA, N.J. 08051
65	5	EDWARD C. & CAROL G. MERKLEIN	30 LINDEN AVENUE MANTUA, N.J. 08051
65	6	KATHLEEN S. & MICHAEL C. JR. MCGOUGH	34 LINDEN AVENUE MANTUA, N.J. 08051
65	7	STEPHEN M. CARLIN	35 LINDEN AVENUE MANTUA, N.J. 08051
65	8	STEPHEN M. CARLIN	38 LINDEN AVENUE MANTUA, N.J. 08051
65	9	KATHLEEN GIAMARELLO	407 HERITAGE ROAD SEWELL, N.J. 08080
65	10	JOSEPH S.JR. & PATRICIA L. RAPPO	44 LINDEN AVENUE MANTUA, N.J. 08051
65	11	ANNA VIGNOLA	48 LINDEN AVENUE MANTUA, N.J. 08051
65	12	GEORGE & LINDA OLSEN	52 LINDEN AVENUE MANTUA, N.J. 08051
65	13	FELIPE R. URRUTIA GODOY	58 LINDEN AVENUE MANTUA, N.J. 08051
65	14	CLARA E. & LOUIS GRANATO	P.O. BOX 114 MANTUA, N.J. 08051
65	15	CLARA E. & LOUIS GRANATO	P.O. BOX 114 MANTUA, N.J. 08051
65	18	DAVID T. FLOOD & MICHELE FLANAGAN	127 WOODLAWN AVENUE MANTUA, N.J. 08051
65	18.01	IRA O. III & ELAINE POWERS	129 WOODLAWN AVENUE MANTUA, N.J. 08051
65	19	BRUCE S. & HELEN J. REYNOLDS	128 WOODLAWN AVENUE MANTUA, N.J. 08051
65	20	MARIE JEANNE MACMULLIN	140 WOODLAWN AVENUE MANTUA, N.J. 08051
65	22	MIDWEST REAL ESTATE LLC	P.O. BOX 332 MARLTON, N.J. 08053
66	2	KENNETH & HELENE HOFFMAN	118 LINDEN AVENUE MANTUA, N.J. 08051
66	3	CLARA E. & LOUIS GRANATO	P.O. BOX 114 MANTUA, N.J. 08051
66	4	JOHN MILCHANOSKI	81 BRIAR PATCH LANE SEWELL, N.J. 08080
70	1	BERNICE ZEDMAN	57 LINDEN AVENUE MANTUA, N.J. 08051
70	2	MICHAEL J. SR. & CHERYL L. BINGHAM	55 LINDEN AVENUE MANTUA, N.J. 08051
70	3	NICHOLAS SALERNO	715 KINGS HIGHWAY MICKLETON, N.J. 08056
70	4	NICHOLAS SALERNO	715 KINGS HIGHWAY MICKLETON, N.J. 08056
71	1	JAMES A. & SUSAN M. BALDWIN	27 LINDEN AVENUE MANTUA, N.J. 08051
71	2	AMBER & CHRISTOPHER I. & F. AVELLINO	31 LINDEN AVENUE MANTUA, N.J. 08051
71	3	KEVIN L. CARLIN	1762 CROWN POINT ROAD #516 WEST DEPTFORD, N.J. 08086
281	1	GLOUCESTER COUNTY UTILITIES AUTHORITY	P.O. BOX 340 THOROFARE, N.J. 08086
281.01	1	GLOUCESTER COUNTY UTILITIES AUTHORITY	P.O. BOX 340 THOROFARE, N.J. 08086



KEY MAP

1" = 100'

ZONING REQUIREMENTS

R-11: HIGH-DENSITY RESIDENTIAL DISTRICT

DESCRIPTION	REQUIRED	PROVIDED	VARIANCE
MINIMUM LOT AREA	0.25 ACRES (10,890 S.F.)	0.25565± ACRES (11,136 S.F.)	NO
MINIMUM STREET FRONTAGE	80 FEET	80.0 FEET	NO
MINIMUM LOT WIDTH	90 FEET	90 FEET	NO
MINIMUM LOT DEPTH	100 FEET	104.45 FEET	NO
MINIMUM FRONT YARD SETBACK	30 FEET	30 FEET	NO
MINIMUM SIDE YARD SETBACK	15 FEET	15 FEET	NO
MINIMUM REAR YARD SETBACK	35 FEET	35 FEET	NO
MAXIMUM BUILDING COVERAGE	25%	15% (1,670± S.F.)	NO
MAXIMUM IMPERVIOUS COVERAGE	35%	25% (2,785± S.F.)	NO
MAXIMUM BUILDING HEIGHT	[illegible]	< [illegible]	NO

* BASIN LOT

VARIANCES AND WAIVERS

1. A PARTIAL WAIVER IS REQUESTED FROM §230-38.C(13) FROM PROVIDING TWELVE CERTIFIED SOIL BORINGS, ONE FOR EACH PROPOSED DWELLING. A TOTAL OF FIVE SOIL BORINGS HAS BEEN PROVIDED.
2. A WAIVER IS REQUESTED FROM §230-31.G.6(a) FROM INSTALLING UNDERGROUND IRRIGATION SYSTEMS IN ALL BUFFERS AND OTHER AREAS OF MASS PLANTING.
3. A WAIVER IS REQUESTED FROM §230-31.H.11 FROM PROVIDING A WATERING SCHEDULE FOR THE LANDSCAPE PLAN.
4. A WAIVER IS REQUESTED FROM §230-34.A.12 FROM PROVIDING STREET SOIL BORINGS TAKEN AT 400 INTERVALS.
5. A WAIVER IS REQUESTED FROM THE TOWNSHIP OF MANTUA CHECKLIST OF MAJOR SUB-DIVISIONS FOR §230-83.B(25) FROM SHOWING CONNECTIONS TO GAS, TELEPHONE AND ELECTRICAL UTILITY SYSTEMS.
6. A WAIVER IS REQUESTED FROM THE TOWNSHIP OF MANTUA CHECKLIST OF MAJOR SUB-DIVISIONS FOR §230-83.B(29) FOR TRAFFIC STUDY.
7. A WAIVER IS REQUESTED FROM §387-5.A TO ALLOW THE REMOVAL OF LANDMARK TREES (POOR/DEAD CONDITION) WITHIN THE LOT.
8. A WAIVER IS REQUESTED FROM §387-8.D TO ALLOW THE REMOVAL OF SPECIMEN TREES WITHIN THE LOT.
9. A WAIVER IS REQUESTED FROM §387-9.A(2) FROM PROVIDING REPLACEMENT TREES FOR THE POOR/DEAD LANDMARK TREES REMOVED WITHIN THE LOT.
10. ANY AND ALL OTHER VARIANCES AND WAIVERS AS DEEMED NECESSARY BY THE BOARD.

UTILITY COMPANIES

ELECTRIC
ATLANTIC CITY ELECTRIC REAL ESTATE DEPT.
5100 HARDING HIGHWAY, SUITE 398
MAYS LANDING, NEW JERSEY 08330

GAS
SOUTH JERSEY GAS
1 SOUTH JERSEY PLAZA
FOLSOM, NEW JERSEY 08037

CABLE
COMCAST CABLE CO.
1250 HADDONFIELD-BERLIN ROAD
CHERRY HILL, NEW JERSEY 08034

TOWNSHIP
MANTUA TOWNSHIP CLERK
401 MAIN STREET
MANTUA TOWNSHIP, NEW JERSEY 08051

MUNICIPAL UTILITIES
MANTUA TOWNSHIP MUA
397 MAIN STREET
MANTUA, NEW JERSEY 08051

COUNTY
GLOUCESTER COUNTY PLANNING DEPARTMENT
1200 NORTH DELSEA DRIVE
CLAYTON, N.J. 08312

IF SUBJECT PROPERTY IS ON A COUNTY ROAD:
GLOUCESTER COUNTY HIGHWAY DEPARTMENT
1200 NORTH DELSEA DRIVE
CLAYTON, N.J. 08312

STATE
IF SUBJECT PROPERTY IS ON A STATE HIGHWAY:
STATE OF N.J. DEPT. OF TRANSPORTATION
1035 PARKWAY AVENUE/P.O. BOX 101
TRENTON, NEW JERSEY 08625

FOR UNDERGROUND DIG INFORMATION CALL 1-800-272-1000

UTILITY MARKOUT REQUIRED.
CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

REVISED APRIL 15, 2025
REVISED DECEMBER 31, 2024
REVISED NOVEMBER 25, 2024
REVISED JUNE 28, 2024
REVISED MARCH 26, 2024
FEBRUARY 13, 2024

PRELIMINARY AND FINAL

MAJOR SUBDIVISION

FOR

#120 WOODLAWN AVENUE

SITUATE

PLATE 17, BLOCK 65, LOT 1

TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

PINCHIN, LLC
#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
(CERTIFICATE OF AUTHORIZATION #24GA28173300)

4/17/25
SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

FILE NO. 210.90140.002

OWNER/APPLICANT

OWNER
ANTHONY & JONI BOCCHICCHIO
120 WOODLAWN AVENUE
MANTUA, NEW JERSEY, 08051

APPLICANT
KAREN SALERNO
49 LINDEN AVENUE
MANTUA, NEW JERSEY, 08051
PHONE: (856) 468-9955

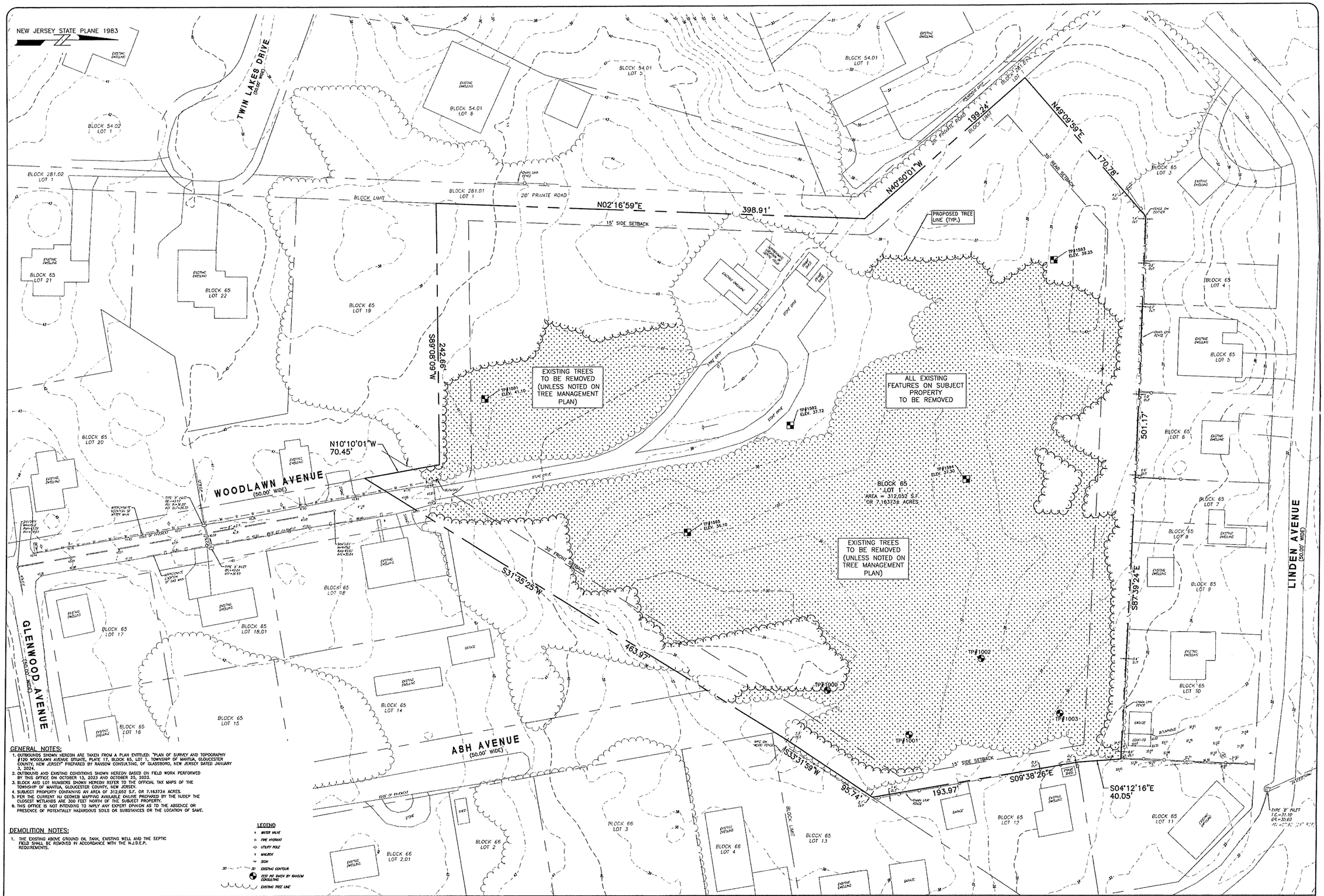
OWNER/APPLICANT CERTIFICATION

"I HEREBY CERTIFY THAT I AM THE OWNER AND APPLICANT FOR PRELIMINARY AND FINAL SITE PLAN AND CONSENT TO THE FILING OF THESE PLANS.

OWNER DATE

SHEET INDEX

1 OF 15 - COVER SHEET
2 OF 15 - EXISTING CONDITIONS AND DEMOLITION PLAN
3 OF 15 - TREE MANAGEMENT PLAN
4 OF 15 - SITE PLAN FOR MAJOR SUBDIVISION
5 OF 15 - UTILITY PLAN
6 OF 15 - LANDSCAPING AND LIGHTING PLAN
7 OF 15 - GRADING AND DRAINAGE PLAN
8 OF 15 - SOIL EROSION AND SEDIMENT CONTROL PLAN
9 OF 15 - SOIL EROSION AND SEDIMENT CONTROL DETAILS
10 OF 15 - WOODLAWN AVENUE PROFILES
11 OF 15 - WOODLAWN AVENUE CROSS SECTIONS
12 OF 15 - UTILITY PROFILES AND BASIN CROSS SECTIONS
13 OF 15 - CONSTRUCTION DETAILS - 1
14 OF 15 - CONSTRUCTION DETAILS - 2
15 OF 15 - CONSTRUCTION DETAILS - 3



GENERAL NOTES:

1. OUTBOUNDS SHOWN HEREON ARE TAKEN FROM A PLAN ENTITLED: "PLAN OF SURVEY AND TOPOGRAPHY #120 WOODLAWN AVENUE SITUATE, PLATE 17, BLOCK 65, LOT 1, TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY" PREPARED BY RANSOM CONSULTING, OF GLASSBORO, NEW JERSEY DATED JANUARY 3, 2024.
2. OUTBOUND AND EXISTING CONDITIONS SHOWN HEREON BASED ON FIELD WORK PERFORMED BY THIS OFFICE ON OCTOBER 13, 2023 AND OCTOBER 25, 2023.
3. BLOCK AND LOT NUMBERS SHOWN HEREON REFER TO THE OFFICIAL TAX MAPS OF THE TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY.
4. SUBJECT PROPERTY CONTAINING AN AREA OF 312,052 S.F. OR 7.16373± ACRES.
5. PER THE PRESENT NJ GEOWEB MAPPING AVAILABLE ONLINE PREPARED BY THE NJDEP THE CLOSEST WETLANDS ARE 300 FEET NORTH OF THE SUBJECT PROPERTY.
6. THIS OFFICE IS NOT INTENDING TO IMPLY ANY EXPERT OPINION AS TO THE ABSENCE OR PRESENCE OF POTENTIALLY HAZARDOUS SOILS OR SUBSTANCES OR THE LOCATION OF SAME.

DEMOLITION NOTES:

1. THE EXISTING ABOVE GROUND OIL TANK, EXISTING WELL AND THE SEPTIC FIELD SHALL BE REMOVED IN ACCORDANCE WITH THE N.J.D.E.P. REQUIREMENTS.

LEGEND

- WATER VALVE
- FIRE HYDRANT
- UTILITY POLE
- MAILBOX
- SIGN
- EXISTING CONTOUR
- TEST PIT TAKEN BY RANSOM CONSULTING
- EXISTING TREE LINE

4/17/25
SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

UTILITY MARKOUT REQUIRED: CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

Revisions:	Date:	Drawn by:
5. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	4/15/2025	F/AD
4. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	12/21/2024	F/AD
3. REVISED LAYOUT	11/25/2024	F/AD
2. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	6/28/2024	F/AD
1. REVISED TO SHOW APPROVED LOT MARKERS.	3/26/2024	F

PINCHIN

PINCHIN, LLC
#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
(CERTIFICATE OF AUTHORIZATION #24GA28173300)

Proj. No.:	210.90140.002
Date:	02/09/2024
Scale:	1" = 30'
Drawn By:	AD/JF
Checked By:	SDB

30 0 30 60 90
Scale 1" = 30'

EXISTING CONDITIONS & DEMOLITION PLAN

WOODLAWN MAJOR SUBDIVISION

SITUATE

PLATE 17, BLOCK 65, LOT 1

TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

EXISTING TREES AS SHOWN ON THIS PLAN

Beech Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
1	Beech	6"	Fair	3
2	Beech	7"	Fair	3
3	Beech	8"	Fair	2
4	Beech	9"	Good	1
5	Beech	9"	Fair	1
6	Beech	10"	Good	2
7	Beech	10"	Fair	2
8	Beech	13"	Fair	1
9	Beech	14"	Fair	1
10	Beech	16"	Good	2
11	Beech	20"	Fair	1
12	Beech	21"	Fair	2

Black Tupelo Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
13	Black Tupelo	6"	Good	2
14	Black Tupelo	6"	Fair	2
15	Black Tupelo	7"	Poor/Dead	1
16	Black Tupelo	8"	Fair	2
17	Black Tupelo	8"	Poor/Dead	1
18	Black Tupelo	9"	Fair	2
19	Black Tupelo	9"	Poor/Dead	1
20	Black Tupelo	10"	Good	1
21	Black Tupelo	10"	Fair	1
22	Black Tupelo	10"	Poor/Dead	2
23	Black Tupelo	11" Twin	Fair	1
24	Black Tupelo	11"	Poor/Dead	2
25	Black Tupelo	12"	Good	1
26	Black Tupelo	12"	Dead	1
27	Black Tupelo	13"	Good	1
28	Black Tupelo	13"	Poor/Dead	3
29	Black Tupelo	14"	Fair	3
30	Black Tupelo	15"	Fair	1
31	Black Tupelo	15"	Poor/Dead	2
32	Black Tupelo	16"	Good	1
34	Black Tupelo	17"	Good	1
35	Black Tupelo	18"	Fair	2
36	Black Tupelo	19"	Good	1
37	Black Tupelo	20"	Fair	2
38	Black Tupelo	22"	Fair	1
39	Black Tupelo	29" Group	Fair	1
40	Black Tupelo	26"	Good	1

Mullberry Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
42	Mulberry	6"	Fair	2
43	Mulberry	6"	Poor/Dead	8
44	Mulberry	7"	Fair	1
45	Mulberry	7"	Poor/Dead	7
46	Mulberry	8"	Poor/Dead	9
47	Mulberry	9"	Fair	2
48	Mulberry	9"	Poor/Dead	18
49	Mulberry	10"	Fair	2
50	Mulberry	10"	Poor/Dead	3
51	Mulberry	11"	Fair	2
52	Mulberry	11"	Poor/Dead	7
53	Mulberry	12"	Good	1
54	Mulberry	12"	Fair	1
55	Mulberry	12"	Poor/Dead	10
56	Mulberry	13"	Fair	1
57	Mulberry	13"	Poor/Dead	1
58	Mulberry	14"	Fair	2
59	Mulberry	14"	Poor/Dead	5
60	Mulberry	16"	Poor/Dead	1
61	Mulberry	18"	Poor/Dead	1
62	Mulberry	19"	Poor/Dead	3

Cedar Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
64	Cedar	6"	Poor/Dead	9
65	Cedar	7"	Poor/Dead	9
66	Cedar	8"	Poor/Dead	2
67	Cedar	9"	Poor/Dead	3
68	Cedar	10"	Poor/Dead	7
69	Cedar	11"	Fair	2
70	Cedar	12"	Poor/Dead	5
71	Cedar	13"	Poor/Dead	1
72	Cedar	15"	Poor/Dead	1

Cherry Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
73	Cherry	6"	Fair	1
73a	Cherry	18"	Fair	2
63	Cherry	20"	Poor/Dead	2
41	Cherry	34"	Poor	1

Chestnut Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
74	Chestnut	6"	Good	1
75	Chestnut	6"	Fair	1
76	Chestnut	7"	Good	1
77	Chestnut	12"	Good	1
78	Chestnut	15"	Poor/Dead	2
79	Chestnut	17"	Fair	1
80	Chestnut	18"	Good	1

Dogwood Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
81	Dogwood	6"	Poor/Dead	2

Hackberry Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
82	Hackberry	6"	Good	2
83	Hackberry	6"	Poor/Dead	1
84	Hackberry	7"	Fair	1
85	Hackberry	7"	Poor/Dead	1
86	Hackberry	14"	Poor/Dead	2

Holly Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
87	Holly	6"	Good	5
88	Holly	6"	Fair	3
89	Holly	7"	Good	1
90	Holly	8"	Good	1
91	Holly	8"	Fair	1
92	Holly	15"	Fair	1
93	Holly	20"	Fair	1

Maple (Swamp, Silver, Red, Bigleaf, Sugar, Sweetgum) Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
94	Maple	6"	Good	2
95	Maple	6"	Fair	16
96	Maple	6"	Poor/Dead	10
97	Maple	7"	Good	2
98	Maple	7"	Fair	14
99	Maple	7"	Poor/Dead	6
100	Maple	8"	Good	1
101	Maple	8"	Fair	3
102	Maple	8"	Poor/Dead	6
103	Maple	9"	Good	2
104	Maple	9"	Fair	6
105	Maple	9"	Poor/Dead	5
106	Maple	10"	Good	1
107	Maple	10"	Fair	9
108	Maple	10"	Poor/Dead	6
109	Maple	11"	Good	1
110	Maple	11"	Fair	3
111	Maple	11"	Poor/Dead	3
112	Maple	12"	Good	1
113	Maple	12"	Fair	8
114	Maple	12"	Poor/Dead	5
115	Maple	13"	Good	1
116	Maple	13"	Fair	4
117	Maple	13"	Poor/Dead	4
118	Maple	14"	Good	2
119	Maple	14"	Fair	1
120	Maple	14"	Poor/Dead	2
121	Maple	15"	Fair	5
122	Maple	15"	Poor/Dead	2
123	Maple	16"	Fair	4
124	Maple	16" Twin	Poor/Dead	1
125	Maple	17"	Good	1
126	Maple	17"	Fair	3
127	Maple	17"	Poor/Dead	3
128	Maple	18"	Fair	5
130	Maple	19"	Good	2
131	Maple	19"	Fair	2
132	Maple	19"	Fair	1
133	Maple	20"	Fair	3
134	Maple	21"	Good	1
135	Maple	21"	Poor/Dead	1
136	Maple	22"	Good	2
137	Maple	22"	Fair	1
138	Maple	22"	Poor/Dead	1
139	Maple	23"	Fair	1
140	Maple	23"	Poor/Dead	1
141	Maple	25"	Fair	1
142	Maple	27"	Fair	1
143	Maple	28"	Fair	1
144	Maple	29"	Fair	2
145	Maple	30"	Fair	1
147	Maple	31"	Poor	1
148	Maple	36"	Fair	1
149	Maple	42"	Fair	1

Mullberry Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
150	Mulberry	6"	Fair	1
151	Mulberry	6"	Poor/Dead	2
152	Mulberry	7"	Poor/Dead	1
153	Mulberry	8"	Fair	2
154	Mulberry	11"	Fair	1
155	Mulberry	12"	Fair	3

Catalpa Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
156	Catalpa	17"	Good	1

Oak Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
157	Oak	6"	Good	2
158	Oak	6"	Fair	5
159	Oak	6"	Poor/Dead	2
160	Oak	7"	Good	3
161	Oak	7"	Fair	2
162	Oak	7"	Poor/Dead	5
163	Oak	8"	Fair	2
164	Oak	8"	Poor/Dead	2
165	Oak	9"	Good	2
166	Oak	9"	Fair	5
167	Oak	9"	Poor/Dead	7
168	Oak	10"	Good	1
169	Oak	10"	Fair	1
170	Oak	10"	Poor/Dead	2
171	Oak	12"	Fair	2
172	Oak	12"	Poor/Dead	2
173	Oak	13"	Poor/Dead	2
174	Oak	14"	Good	1
175	Oak	14"	Fair	2
176	Oak	15"	Fair	2
177	Oak	15"	Poor/Dead	5
178	Oak	16"	Poor/Dead	1
179	Oak	17"	Fair	2
181	Oak	18"	Poor/Dead	7
182	Oak	19"	Fair	4
183	Oak	19"	Poor/Dead	1
184	Oak	20"	Fair	6
185	Oak	18"	Good	9
186	Oak	21"	Poor/Dead	1
187	Oak	22"	Good	3
188	Oak	22"	Fair	2
189	Oak	22"	Poor/Dead	1
190	Oak	24"	Poor/Dead	1
191	Oak	25"	Good	2
192	Oak	27"	Poor/Dead	1
192a	Oak	27"	Good	1
193	Oak	28"	Fair	1
194	Oak	28"	Poor/Dead	1
195	Oak	29"	Poor/Dead	1
196	Oak	30"	Fair	1
197	Oak	32"	Fair	2
198	Oak	33"	Good	1
199	Oak	33"	Fair	1

Pine Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
200	Pine	6"	Poor/Dead	1
201	Pine	10"	Poor/Dead	1
202	Pine	12"	Poor/Dead	5
203	Pine	13"	Poor/Dead	1
204	Pine	14"	Poor/Dead	2
205	Pine	15"	Poor/Dead	4
206	Pine	16"	Poor/Dead	2
207	Pine	17"	Poor/Dead	5
208	Pine	18"	Poor/Dead	2
209	Pine	19"	Poor/Dead	1
210	Pine	33"	Fair	1

Sassafras Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
211	Sassafras	6"	Fair	8
212	Sassafras	6"	Poor/Dead	24
213	Sassafras	7"	Fair	7
214	Sassafras	7"	Poor/Dead	34
215	Sassafras	8"	Poor/Dead	16
216	Sassafras	9"	Fair	32
217	Sassafras	9"	Poor/Dead	2
218	Sassafras	10"	Fair	4
219	Sassafras	10"	Poor/Dead	27
220	Sassafras	11"	Fair	2
221	Sassafras	11"	Poor/Dead	11
222	Sassafras	12"	Fair	2
223	Sassafras	12"	Poor/Dead	9
224	Sassafras	13"	Poor/Dead	6
225	Sassafras	14"	Good	1
226	Sassafras	14"	Fair	2
227	Sassafras	15"	Poor/Dead	7
228	Sassafras	17"	Good	3
229	Sassafras	18"	Fair	2
230	Sassafras	19"	Fair	1
231	Sassafras	22"	Fair	1
232	Sassafras	22"	Poor/Dead	2

Sumac Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
234	Sumac	7"	Poor/Dead	1
235	Sumac	8"	Fair	3
236	Sumac	8"	Poor/Dead	2
237	Sumac	9"	Fair	2
238	Sumac	9"	Poor/Dead	6
239	Sumac	10"	Poor/Dead	2
240	Sumac	11"	Fair	1
242	Sumac	13"	Poor/Dead	6
243	Sumac	14"	Fair	2
244	Sumac	14"	Poor/Dead	1
245	Sumac	15"	Fair	1
246	Sumac	15"	Poor/Dead	3
247	Sumac	16"	Poor/Dead	3
248	Sumac	17"	Fair	1
249	Sumac	20"	Poor/Dead	1

Tulip Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
251	Tulip	6"	Fair	1
252	Tulip	19"	Good	1
253	Tulip	10"	Good	1
254	Tulip	11"	Poor/Dead	1
255	Tulip	12"	Good	1
256	Tulip	12"	Fair	2
257	Tulip	21"	Good	3
258	Tulip	26"	Poor/Dead	1
259	Tulip	27"	Good	1
260	Tulip	27"	Fair	2
261	Tulip	28"	Good	1
262	Tulip	29"	Fair	1
263	Tulip	30"	Poor/Dead	3
264	Tulip	33"	Poor	1
265	Tulip	30"	Fair	1

Walnut Tree

SYMBOL	TYPE	SIZE	CONDITION	QUAN.
250	Walnut	23"	Good	2
266	Walnut	20"	Good	1

THERE IS ONE(1) LANDMARK TREE(210) TO BE REMOVED DUE TO CONSTRUCTION WITH A DIAMETER OF 33 INCHES. TREE HAS BEEN VERIFIED TO BE IN FAIR CONDITION WITH A LOW SUITABILITY FOR PRESERVATION.

THERE ARE A TOTAL OF SIXTY TWO(62) SPECIMEN TREES TO BE REMOVED DUE TO CONSTRUCTION WITH A TOTAL DIAMETER OF 1,254 INCHES.

THERE IS ONE(1) NON-SPECIMEN TREE LOCATED WITHIN THE TREE PROTECTION ZONE TO BE REMOVED DUE TO CONSTRUCTION WITH A DIAMETER OF 8 INCHES.

1254 + 8 = 1262 TOTAL INCHES OF TREES TO BE REMOVED. PER §387-9.A(1) FOR EVERY FOUR(4) INCHES OF EXISTING TREE DIAMETER REMOVED ONE(1) INCH OF NEW TREE SHALL BE REPLANTED.

1262/4 = 316 INCHES OF REPLACEMENT TREES. NEW REPLACEMENT TREES SHOULD HAVE A MINIMUM DIAMETER OF 2.5 INCHES. 3 INCH TREES TO BE UTILIZED. 316/3 = 105.3 = 106 REPLACEMENT TREES REQUIRED.

SEE LANDSCAPING AND LIGHTING PLAN FOR COMPENSATORY TREE PLANTINGS

LEGEND

- LANDMARK TREE
- SPECIMEN TREE TO REMAIN
- SPECIMEN TREE TO BE REMOVED
- NON SPECIMEN TREE TO REMAIN
- NON SPECIMEN TREE WITHIN TREE PROTECTION ZONE TO BE REMOVED
- NON SPECIMEN TREE WITHIN DISTURBANCE ZONE TO BE REMOVED
- DYING OR DEAD LANDMARK TREE
- DYING OR DEAD TREE
- DYING OR DEAD SPECIMEN TREE WITHIN DISTURBANCE ZONE TO BE REMOVED

4/17/25
SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

UTILITY MARKOUT REQUIRED: CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

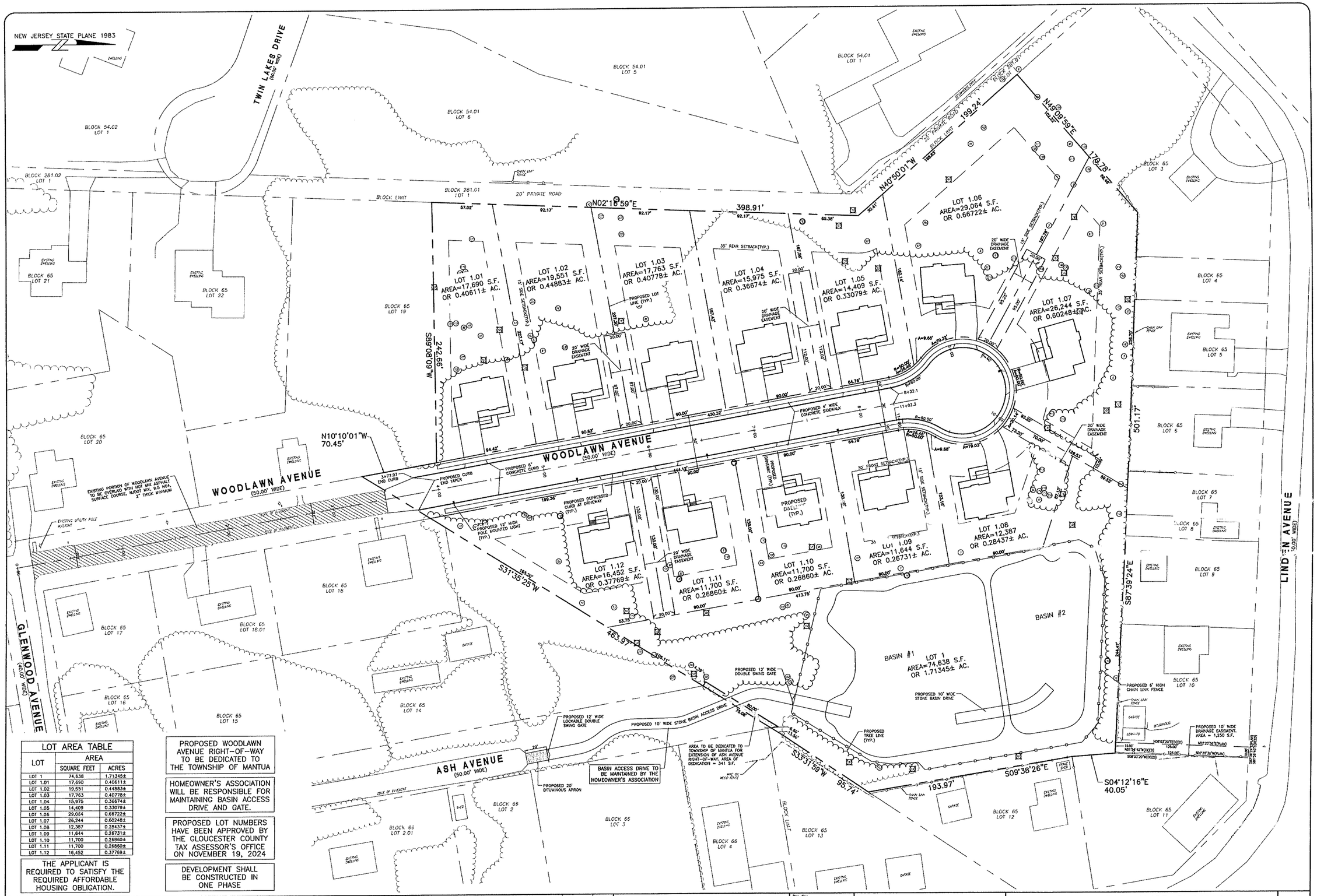
Revisions:	Date:	Drawn by:
5. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	4/15/2025	IF/AO
4. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	12/31/2024	IF/AO
3. REVISED LAYOUT	11/25/2024	IF/AO
2. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	8/28/2024	IF/AO
1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/28/2024	IF

PINCHIN, LLC
#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
(CERTIFICATE OF AUTHORIZATION #24GA28173300)

Proj. No.:	210.90140.002
Date:	11/22/2024
Scale:	1" = 30'
Drawn By:	AO/IF
Checked By:	SDB

30 0 30 60 90
Scale 1" = 30'

TREE MANAGEMENT PLAN
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY



LOT AREA TABLE		
LOT	AREA	
	SQUARE FEET	ACRES
LOT 1	74,638	1.71345±
LOT 1.01	17,690	0.40611±
LOT 1.02	19,551	0.44883±
LOT 1.03	17,763	0.40778±
LOT 1.04	15,975	0.36674±
LOT 1.05	14,409	0.33079±
LOT 1.06	29,064	0.66722±
LOT 1.07	26,244	0.60248±
LOT 1.08	12,387	0.28437±
LOT 1.09	11,644	0.26731±
LOT 1.10	11,700	0.26860±
LOT 1.11	11,700	0.26860±
LOT 1.12	16,452	0.37769±

THE APPLICANT IS REQUIRED TO SATISFY THE REQUIRED AFFORDABLE HOUSING OBLIGATION.

PROPOSED WOODLAWN AVENUE RIGHT-OF-WAY TO BE DEDICATED TO THE TOWNSHIP OF MANTUA

HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR MAINTAINING BASIN ACCESS DRIVE AND GATE.

PROPOSED LOT NUMBERS HAVE BEEN APPROVED BY THE GLOUCESTER COUNTY TAX ASSESSOR'S OFFICE ON NOVEMBER 19, 2024

DEVELOPMENT SHALL BE CONSTRUCTED IN ONE PHASE

4/17/25

SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

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1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/26/2024	F

PINCHIN

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209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
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30 0 30 60 90
Scale 1" = 30'

SITE PLAN FOR MAJOR SUBDIVISION

WOODLAWN MAJOR SUBDIVISION

SITUATE

PLATE 17, BLOCK 65, LOT 1

TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

UTILITY NOTES:

1. ALL ELECTRIC, TELEPHONE, AND OTHER COMMUNICATION FACILITIES, BOTH MAIN AND SERVICE LINES SERVICING NEW DEVELOPMENTS, SHALL BE PROVIDED BY UNDERGROUND WIRING WITHIN EASEMENTS OR DEDICATED RIGHTS-OF-WAY, INSTALLED IN ACCORDANCE WITH THE PREVAILING STANDARDS AND PRACTICES OF THE UTILITY OR OTHER COMPANIES PROVIDING SUCH SERVICE.

4/17/25

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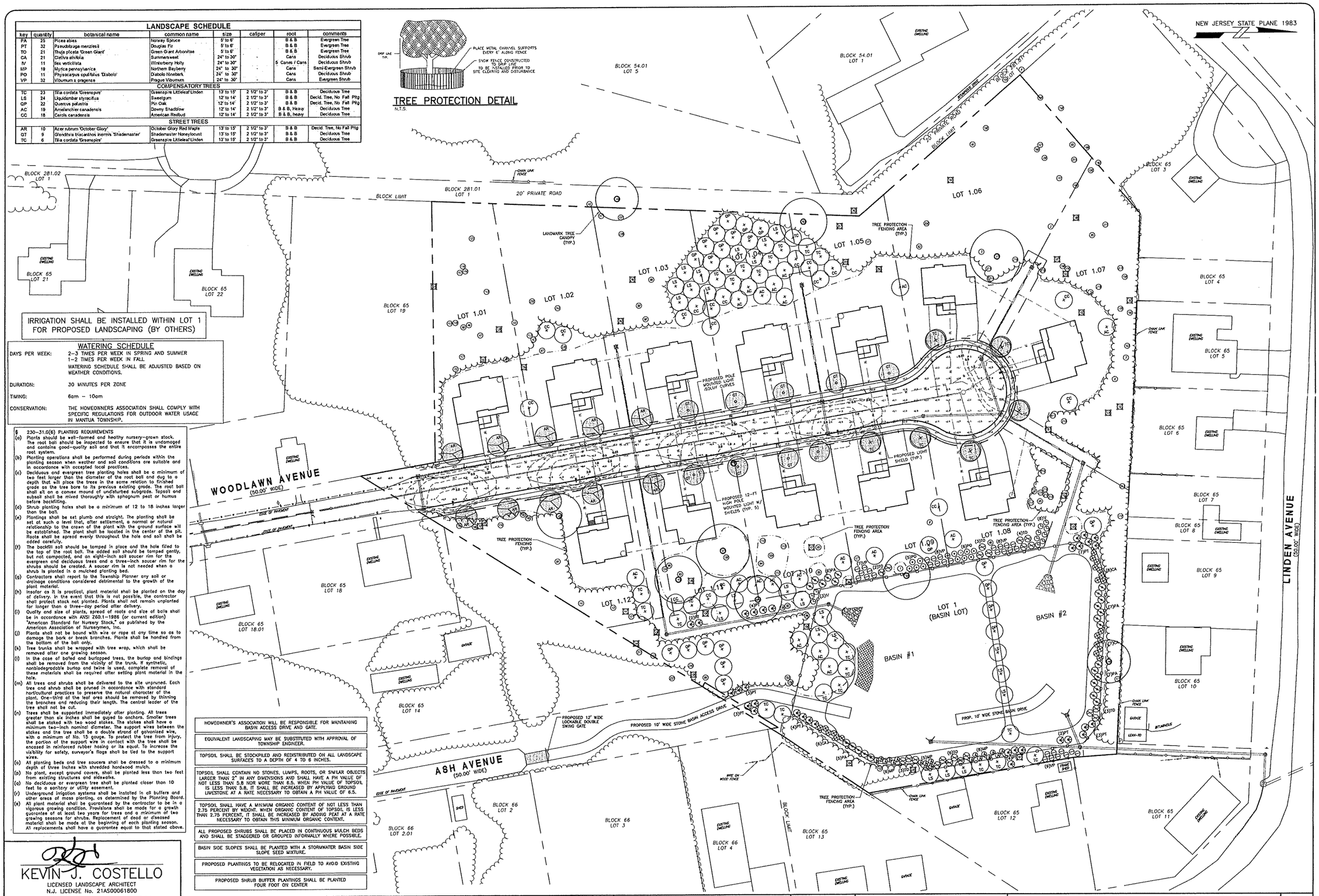
UTILITY PLAN
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

LANDSCAPE SCHEDULE

key	quantity	botanical name	common name	size	caliper	root	comments
PA	25	Picea abies	Norway Spruce	5' to 6'		B & B	Evergreen Tree
PT	32	Pseudotsuga menziesii	Douglas Fir	5' to 6'		B & B	Evergreen Tree
TO	21	Thuja plicata 'Green Giant'	Green Giant Arborvitae	5' to 6'		B & B	Evergreen Tree
CA	21	Clethra alnifolia	Summersweet	24" to 30"		Cans	Deciduous Shrub
IV	11	Ilex verticillata	Winterberry Holly	24" to 30"		5 Canes / Cans	Deciduous Shrub
MP	19	Myrica pensylvanica	Northern Bayberry	24" to 30"		Cans	Semi-Evergreen Shrub
PO	11	Physocarpus opulifolius 'Diabolo'	Diabolo Ninebark	24" to 30"		Cans	Deciduous Shrub
VP	32	Viburnum x pragense	Prague Viburnum	24" to 30"		Cans	Evergreen Shrub
COMPENSATORY TREES							
TC	23	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	13' to 15'	2 1/2" to 3"	B & B	Deciduous Tree
LS	24	Liquidambar styraciflua	Sweetgum	12' to 14'	2 1/2" to 3"	B & B	Decid. Tree, No Fall Prtg
QP	22	Quercus palustris	Pin Oak	12' to 14'	2 1/2" to 3"	B & B	Decid. Tree, No Fall Prtg
AC	19	Amelanchier canadensis	Downy Shadblow	12' to 14'	2 1/2" to 3"	B & B, Heavy	Deciduous Tree
CC	18	Cercis canadensis	American Redbud	12' to 14'	2 1/2" to 3"	B & B, heavy	Deciduous Tree
STREET TREES							
AR	10	Acer rubrum 'October Glory'	October Glory Red Maple	13' to 15'	2 1/2" to 3"	B & B	Decid. Tree, No Fall Prtg
GT	9	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Honeylocust	13' to 15'	2 1/2" to 3"	B & B	Deciduous Tree
TC	6	Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden	13' to 15'	2 1/2" to 3"	B & B	Deciduous Tree

TREE PROTECTION DETAIL
N.T.S.



IRRIGATION SHALL BE INSTALLED WITHIN LOT 1 FOR PROPOSED LANDSCAPING (BY OTHERS)

WATERING SCHEDULE

DAYS PER WEEK:	2-3 TIMES PER WEEK IN SPRING AND SUMMER 1-2 TIMES PER WEEK IN FALL WATERING SCHEDULE SHALL BE ADJUSTED BASED ON WEATHER CONDITIONS.
DURATION:	30 MINUTES PER ZONE
TIMING:	6am - 10am
CONSERVATION:	THE HOMEOWNERS ASSOCIATION SHALL COMPLY WITH SPECIFIC REGULATIONS FOR OUTDOOR WATER USAGE IN MANTUA TOWNSHIP.

§ 230-31.0(6) PLANTING REQUIREMENTS

(a) Plants should be well-formed and healthy nursery-grown stock. The root ball should be inspected to ensure that it is undamaged and contains good-quality soil and that it encompasses the entire root system.
(b) Planting operations shall be performed during periods within the planting season when weather and soil conditions are suitable and in accordance with accepted local practices.
(c) Deciduous and evergreen tree planting holes shall be a minimum of two feet larger than the diameter of the root ball and dug to a depth that will place the trees in the same relation to finished grade as the tree bore to its previous existing grade. The root ball shall sit on a convex mound of undisturbed subgrade. Topsoil and subsoil shall be mixed thoroughly with sphagnum peat or humus before backfilling.
(d) Shrub planting holes shall be a minimum of 12 to 18 inches larger than the ball.
(e) Plantings shall be set plumb and straight. The planting shall be set at such a level that, after settlement, a normal or natural relationship to the crown of the plant with the ground surface will be established. The plant shall be located in the center of the pit. Roots shall be spread evenly throughout the hole and soil shall be added carefully.
(f) The backfill soil should be tamped in place and the hole filled to the top of the root ball. The added soil should be tamped gently, but not compacted, and an eight-inch soil saucer rim for the evergreen and deciduous trees and a three-inch saucer rim for the shrubs should be created. A saucer rim is not needed when a shrub is planted in a mulched planting bed.
(g) Contractors shall report to the Township Planner any soil or drainage conditions considered detrimental to the growth of the plant material.
(h) Insofar as it is practical, plant material shall be planted on the day of delivery. In the event that this is not possible, the contractor shall protect stock not planted. Plants shall not remain unplanted for longer than a three-day period after delivery.
(i) Quality and size of plants, spread of roots and size of balls shall be in accordance with ANSI Z60.1-1986 (or current edition) "American Standard for Nursery Stock," as published by the American Association of Nurserymen, Inc.
(j) Plants shall not be bound with wire or rope at any time so as to damage the bark or break branches. Plants shall be handled from the bottom of the ball only.
(k) Tree trunks shall be wrapped with tree wrap, which shall be removed after one growing season.
(l) In the case of balled and burlapped trees, the burlap and bindings shall be removed from the vicinity of the trunk. If synthetic, nonbiodegradable burlap and twine is used, complete removal of these materials shall be required after setting plant material in the hole.
(m) All trees and shrubs shall be delivered to the site unpruned. Each tree and shrub shall be pruned in accordance with standard horticultural practices to preserve the natural character of the plant. One-third of the leaf area should be removed by thinning the branches and reducing their length. The central leader of the tree shall not be cut.
(n) Trees shall be supported immediately after planting. All trees greater than six inches shall be guyed to anchors. Smaller trees shall be staked with two wood stakes. The stakes shall have a minimum two-inch nominal diameter. The support wires between the stakes and the tree shall be a double strand of galvanized wire, with a minimum of No. 15 gauge. To protect the tree from injury, the portion of the support wire in contact with the tree shall be encased in reinforced rubber hosing or its equal. To increase the visibility for safety, surveyor's flags shall be tied to the support wires.
(o) All planting beds and tree saucers shall be dressed to a minimum depth of three inches with shredded hardwood mulch.
(p) No plant, except ground covers, shall be planted less than two feet from existing structures and sidewalks.
(q) No deciduous or evergreen tree shall be planted closer than 10 feet to a sanitary or utility easement.
(r) Underground irrigation systems shall be installed in all buffers and other areas of moss planting, as determined by the Planning Board.
(s) All plant material shall be guaranteed by the contractor to be in a vigorous growing condition. Provisions shall be made for a growth guarantee of at least two years for trees and a minimum of two growing seasons for shrubs. Replacement of dead or diseased material shall be made at the beginning of each planting season. All replacements shall have a guarantee equal to that stated above.

HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR MAINTAINING BASIN ACCESS DRIVE AND GATE.

EQUIVALENT LANDSCAPING MAY BE SUBSTITUTED WITH APPROVAL OF TOWNSHIP ENGINEER.

TOPSOIL SHALL BE STOCKPILED AND REDISTRIBUTED ON ALL LANDSCAPE SURFACES TO A DEPTH OF 4 TO 6 INCHES.

TOPSOIL SHALL CONTAIN NO STONES, LUMPS, ROOTS, OR SIMILAR OBJECTS LARGER THAN 2" IN ANY DIMENSIONS AND SHALL HAVE A PH VALUE OF NOT LESS THAN 5.8 NOR MORE THAN 6.5. WHEN PH VALUE OF TOPSOIL IS LESS THAN 5.8, IT SHALL BE INCREASED BY APPLYING GROUND LIMESTONE AT A RATE NECESSARY TO OBTAIN A PH VALUE OF 6.5.

TOPSOIL SHALL HAVE A MINIMUM ORGANIC CONTENT OF NOT LESS THAN 2.75 PERCENT BY WEIGHT. WHEN ORGANIC CONTENT OF TOPSOIL IS LESS THAN 2.75 PERCENT, IT SHALL BE INCREASED BY ADDING PEAT AT A RATE NECESSARY TO OBTAIN THIS MINIMUM ORGANIC CONTENT.

ALL PROPOSED SHRUBS SHALL BE PLACED IN CONTINUOUS MULCH BEDS AND SHALL BE STAGGERED OR GROUPED INFORMALLY WHERE POSSIBLE.

BASIN SIDE SLOPES SHALL BE PLANTED WITH A STORMWATER BASIN SIDE SLOPE SEED MIXTURE.

PROPOSED PLANTINGS TO BE RELOCATED IN FIELD TO AVOID EXISTING VEGETATION AS NECESSARY.

PROPOSED SHRUB BUFFER PLANTINGS SHALL BE PLANTED FOUR FOOT ON CENTER

KEVIN J. COSTELLO
LICENSED LANDSCAPE ARCHITECT
N.J. LICENSE No. 21AS00061800

4/17/25
SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

UTILITY MARKOUT REQUESTED: CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

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4. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	12/31/2024	E/AD
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1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/26/2024	W

PINCHIN
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#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
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30 0 30 60 90
Scale 1" = 30'

LANDSCAPE AND LIGHTING PLAN

WOODLAWN MAJOR SUBDIVISION

SITUATE

PLATE 17, BLOCK 65, LOT 1

TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

MAINTENANCE PLAN STANDARDS
The following Stormwater Maintenance Plan was prepared in accordance with the New Jersey Stormwater Best Management Practices Manual as published by the New Jersey Department of Environmental Protection, Division of Watershed Management.

DESIGN PLANS AND SPECIFICATIONS
Stormwater management design details and specifications are per plans entitled "Major Subdivision for #120 Woodlawn Avenue, situate, Block 65, Lot 1, Township of Mantua, Gloucester County, New Jersey" by Pinchin, LLC (formerly Ransom Consulting, LLC) dated February 9, 2024, including subsequent revisions.

DESCRIPTION OF STORMWATER MANAGEMENT SYSTEM
The stormwater management system covered by this Maintenance Plan is comprised of two (2) small-scale infiltration extended detention basins designed to reduce the runoff from the 2-, 10, and 100-year storms generated by the addition of dwellings, driveways, sidewalks, and roadway. There are eleven (11) 15-inch HDPE pipes, three (3) 18-inch HDPE pipes, and six (6) 15-inch RCP pipes. There are two (2) outlet structures and two (2) headwalls within the basins. The storm sewer system discharges to an existing inlet on Linden Avenue.

OWNERSHIP AND MAINTENANCE RESPONSIBILITIES
The maintenance of the basins will be the responsibility of a Homeowner's Association (HOA). Until the Homeowner's Association is established the maintenance of the basins will be the responsibility of:

Contact Name. Karen Salerno
Phone: 856-468-9955
Email. salernoconstructioncorp@gmail.com

MAINTENANCE PROCEDURES AND SPECIFICATIONS
The basins are designed to retain stormwater collected from the dwellings, driveways, sidewalk, and roadway through the stormwater structures as well as through natural runoff. The following maintenance procedures for the two small-scale infiltration extended detention basins should be employed to ensure proper functioning of the system:

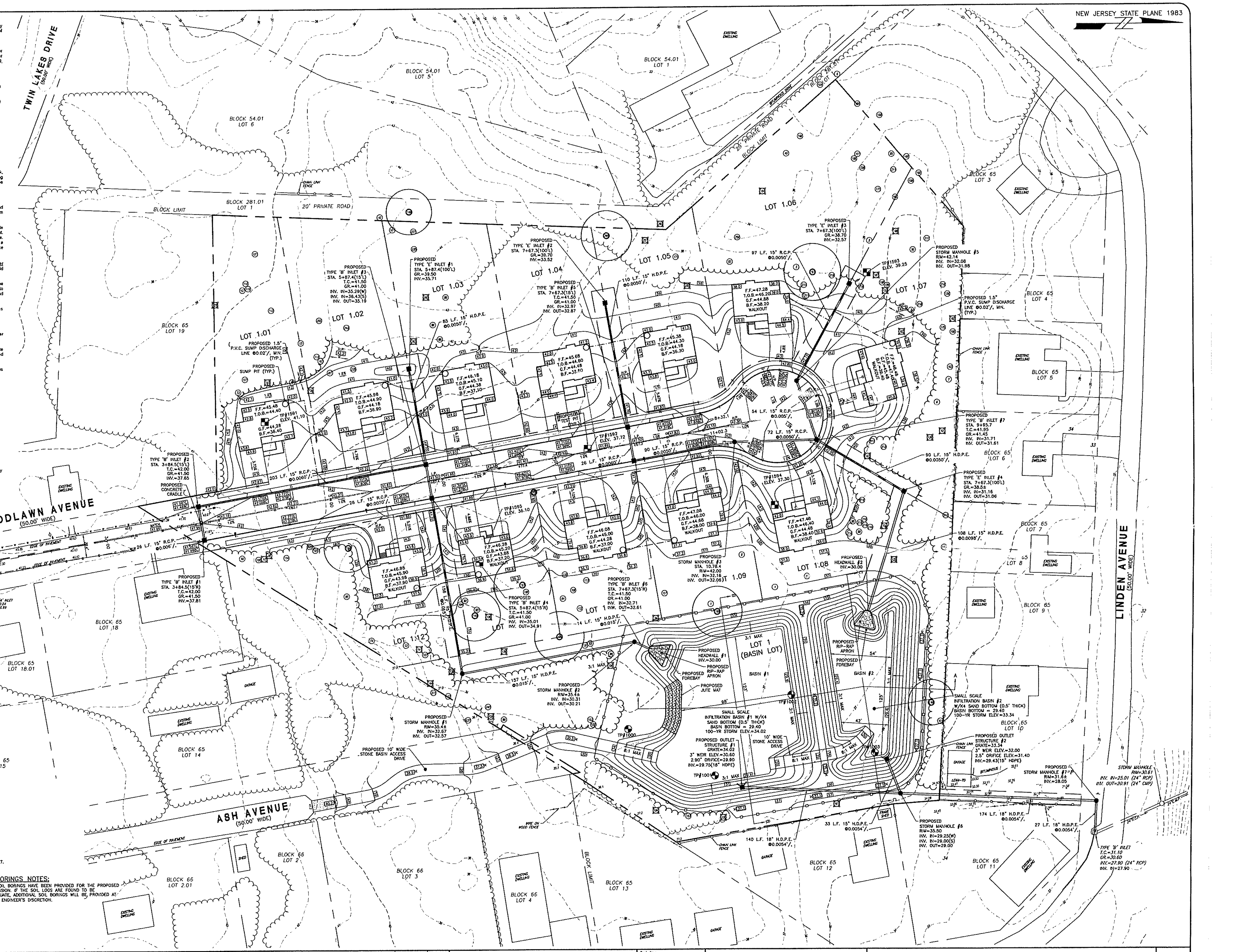
1. The basins shall be inspected only when the basins are dry.
2. The basins shall be inspected for leaves, excessive vegetation, debris, and sediment accumulation at least four (4) times annually as well as after every storm event exceeding 4-inches of rainfall.
3. The small-scale infiltration extended detention basins are designed to infiltrate stormwater runoff into the soil within a maximum of 72 hours after the storm event. Over time, the basins will acquire silt build-up that will decrease their performance. If inspection reveals the basins are taking more than 72 hours to evacuate, a licensed Professional Engineer should then inspect the basins and make recommendations as to repairs or replacement of the soils.
4. The small-scale infiltration extended basins are designed to infiltrate stormwater only. Do not add oils, chemicals, soaps, septic waste, grey water or any other liquid substance to the basins or its collection components.
5. Grass within the basin's side slopes shall be mowed once per month during the growing season to a height of 2-4 inches. All grass clippings shall be removed to allow infiltration of stormwater through the 6-inch-thick sand bottom. The sand bottom shall not be disturbed to prolong its effectiveness as a silt filter.
6. The basins shall be inspected for erosion of the side slopes at least four (4) times annually. Eroded areas shall be repaired with soil having a permeability rate between 6 and 20 inches/hour and re-vegetated in accordance with the Soil Conservation District's Standards.
7. The basins shall not be used for recreation or any other purpose or activity other than its intended use.
8. Maintenance within Basin #2 will require access through Basin #1. Any disturbance of the sand bottom within Basin #1 must be immediately repaired and fully restored to its original design condition.
9. Additional owner responsibilities, maintenance procedures and recommendations not expressly listed may be found in the above referenced Maintenance Plan Standards.

LOCATION OF STORMWATER MANAGEMENT SYSTEM
The approximate location of the Stormwater Management System basin #1 and basin #2 is at these geographic (NAD83) coordinates:
North 39° 47' 42.48" Latitude
West 75° 10' 52.94" Longitude

ANNUAL MAINTENANCE REPORT
An inspection, maintenance and repair report shall be submitted to the municipality annually in accordance with N.J.A.C. 7:50-684(a)6.viii.

COSTS OF INSPECTION AND MAINTENANCE
Inspection of the Stormwater Management basins will be the responsibility of the Homeowners Association (HOA). Annual routine maintenance costs are estimated to be between $750 and $1,000. Non-routine maintenance or repairs may be done as the need arises. Until the Homeowner's Association is established the maintenance of the basins will be the responsibility of.

Contact Name: Karen Salerno
Phone: 856-468-9955
Email: salernoconstructioncorp@gmail.com



GRADING NOTES:

1. ALL CONSTRUCTED SLOPES SHALL NOT EXCEED 3:1 MAX.
2. ALL CONSTRUCTED SLOPES SHALL NOT BE LESS THAN 1.5%.
3. THE HOMEOWNERS ASSOCIATION SHALL BE THE RESPONSIBLE ENTITY OF OWNERSHIP FOR THE PROPOSED STORMWATER SYSTEM INCLUDING ALL OF THE DEVELOPMENT'S STORMWATER PIPES, STRUCTURES AND BASINS.
4. PROPOSED DRAINAGE EASEMENTS SHALL BE DEDICATED TO THE HOMEOWNERS ASSOCIATION.
5. SEDIMENT ACCUMULATED WITHIN THE INFILTRATION BASINS DURING CONSTRUCTION MUST BE REMOVED AND DISPOSED OF ACCORDING TO STATE REGULATIONS.
6. ALL BASEMENT SUMP PUMPS SHALL BE CONNECTED TO THE STORMWATER DRAINAGE SYSTEM VIA A 1 1/2" PVC DISCHARGE. THE GRAVITY DRAINAGE PORTION OF THE PIPE SHALL BE AT A 2% MINIMUM SLOPE.
7. ALL DOWNSPOUTS LOCATED AT FRONT OF HOUSES TO BE DIRECTED TOWARD THE STREET.
8. ALL DOWNSPOUTS ADJACENT TO STORM PIPING WILL TIE INTO THE STORM SYSTEM.

BASIN MAINTENANCE NOTES:

1. DUE TO THE BASIN MAINTENANCE ACCESS DRIVE FROM BASIN #1 TO BASIN #2, ANY MAINTENANCE OR REPAIR ACTIVITIES FOR BASIN #2 THAT NECESSITATE ACCESS THROUGH BASIN #1 SHALL INCLUDE REPAIRS TO BASIN #1 TO RESTORE ANY DAMAGE RESULTING FROM THE ACCESS. BASIN #1 SHALL BE FULLY RESTORED FOLLOWING EACH ACCESS FOR BASIN #2 MAINTENANCE TO ENSURE IT REMAINS IN ITS INTENDED CONDITION.
2. FOR ALL POST CONSTRUCTION STORMWATER MANAGEMENT SYSTEM MAINTENANCE SCHEDULES AND PROCEDURES SEE THE "STORMWATER MANAGEMENT MAINTENANCE PLAN FOR #120 WOODLAWN AVE, BLOCK 65, LOT 1, MANTUA TOWNSHIP, NJ" PREPARED BY RANSOM CONSULTING, OF GLASSBORO, NEW JERSEY. ALSO SEE ABOVE.

SOIL BORINGS NOTES:

1. FIVE SOIL BORINGS HAVE BEEN PROVIDED FOR THE PROPOSED SUBDIVISION. IF THE SOIL LOGS ARE FOUND TO BE INADEQUATE, ADDITIONAL SOIL BORINGS WILL BE PROVIDED AT BOARD ENGINEER'S DISCRETION.

4/17/25
SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

UTILITY MARKOUT REQUIRED:
CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

Revisions:	Date:	Drawn by:
5. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	4/15/2025	IF/AD
4. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	12/31/2024	IF/AD
3. REVISED LAYOUT	11/25/2024	IF/AD
2. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	6/28/2024	IF/AD
1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/26/2024	IF

PINCHIN

PINCHIN, LLC
#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
(CERTIFICATE OF AUTHORIZATION #24GA28173300)

Proj. No.:	210.90140.002
Date:	02/09/2024
Scale:	1" = 30'
Drawn By:	AD/IF
Checked By:	SDB

30 0 30 60 90
Scale 1" = 30'

GRADING PLAN
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

SOIL TYPE INFORMATION	
MAP UNIT SYMBOL	MAP UNIT NAME
FrtB	FREEHOLD LOAMY SAND, 8 TO 5 PERCENT SLOPES
FrtB	FREEHOLD-URBAN LAND COMPLEX, 8 TO 5 PERCENT SLOPES

LEGEND

- SOIL COMPACTION TESTING LOCATIONS
- REINFORCED HEAVY DUTY SILT FENCE
- SILT FENCE
- LIMIT OF DISTURBANCE
- TREE PROTECTION FENCE (INSTALLED AT DRIP LINE)
- TEST PIT

AREA OF DISTURBANCE = 5.07 ACRES

4/17/25

SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

UTILITY MARK-OUT REQUIRED.
CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

Revisions:	Date:	Drawn by:
5. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	4/15/2025	F/AD
4. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	12/11/2024	F/AD
3. REVISED LAYOUT	11/25/2024	F/AD
2. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	8/28/2024	F/AD
1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/26/2024	F

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30 0 30 60 90
Scale 1" = 30'

SOIL EROSION AND SEDIMENT CONTROL PLAN

WOODLAWN MAJOR SUBDIVISION

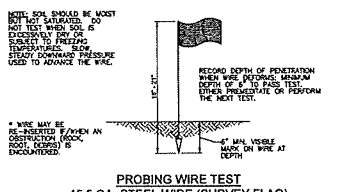
SITUATE

PLATE 17, BLOCK 65, LOT 1

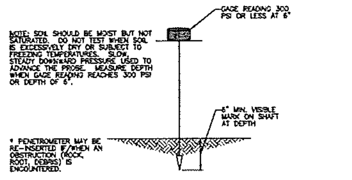
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

GLOUCESTER COUNTY SOIL EROSION NOTES:

1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.
5. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).
6. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE GLOUCESTER SOIL CONSERVATION DISTRICT.
7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.
8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
10. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS.
11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2 1/2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
12. PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.
13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.
14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABLE SEDIMENT FILTER FABRIC. (SEE DETAIL). THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM.
16. N.J.S.A. 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE AS A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
17. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO ENSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.
18. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.
19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
20. THE GLOUCESTER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY LAND DISTURBANCE.
21. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.
22. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER. STABILIZE TOPSOIL STOCKPILE WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT BARRIER.
23. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE GLOUCESTER SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
24. METHODS FOR THE MANAGEMENT OF HIGH ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS. HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A pH OF 4 OR LESS.
25. TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS, AND MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).
26. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.
27. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE NEW JERSEY STANDARDS AND MAY INCLUDE WATERING WITH A SOLUTION OF CALCIUM CHLORIDE AND WATER.
28. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.
29. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.
30. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMAN AND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.
31. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPING PLAN.
32. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.



PROBING WIRE TEST
15.5 GA. STEEL WIRE (SURVEY FLAG)
N.T.S.



HANDHELD SOIL PENETROMETER TEST
N.T.S.

A. SOIL COMPACTION TESTING REQUIREMENTS

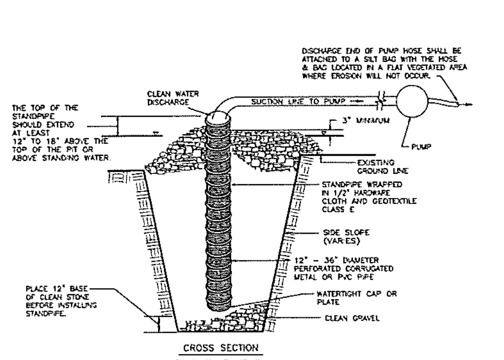
1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION AREA GRAPHICALLY DENOTED ON THIS PLAN.
3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THIS PLAN. LOCATION ID'S SHALL BE USED TO COMPLETE 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 INDICATED 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.

B. COMPACTION TESTING METHODS

1. PROBING WIRE TEST (SEE DETAIL)
2. HAND-HELD PENETROMETER TEST (SEE DETAIL)
3. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL REQUIRED)
4. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL REQUIRED)
5. 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.
6. DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 19 "STANDARD FOR LAND GRADING" OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
7. 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.

C. PROCEDURES FOR SOIL COMPACTION MITIGATION

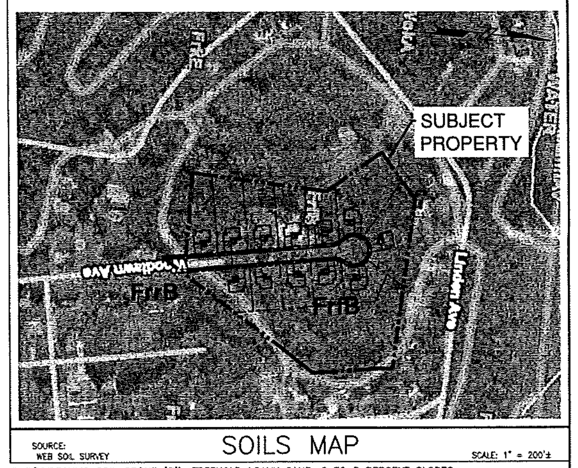
1. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.



CROSS SECTION

Construction Specifications
1. Pit dimensions are variable, with the minimum diameter being 2 times the standpipe diameter.
2. The standpipe should be constructed by perforating a 12" to 24" diameter corrugated metal or PVC pipe. Then wrapping with 1/2" hardware cloth and Geotextile Class E. The perforations shall be 1/2" x 6" slits or 1" diameter holes.
3. A base of filter material consisting of clean gravel or ASTM C33 stone should be placed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with the same filter material.
4. The standpipe should extend 12" to 18" above the lip of the pit or the riser crest elevation (basin dewatering only) and the filter material should extend 3" minimum above the anticipated standing water elevation.

SUMP PIT DETAIL
N.T.S.

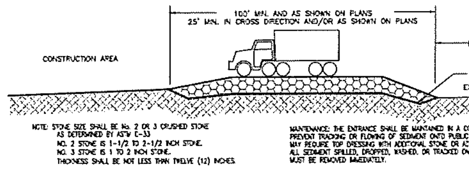


SOURCE: WEB SOIL SURVEY

SOILS MAP

SCALE: 1" = 200'±

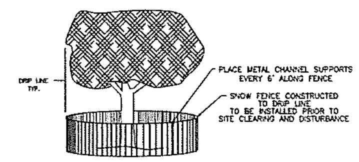
FrfB(HYDRAULIC SOIL GROUP 'B'): FREEHOLD LOAMY SAND, 0 TO 5 PERCENT SLOPES
FrrB(HYDRAULIC SOIL GROUP 'B'): FREEHOLD-URBAN LAND COMPLEX, 0 TO 5 PERCENT SLOPES



NOTE: STONE SIZE SHALL BE No. 2 OR 3 CRUSHED STONE AS DETERMINED BY ASTM C-33
NO. 2 STONE IS 1-1/2 TO 2-1/2 INCH STONE.
NO. 3 STONE IS 1 TO 2 INCH STONE.
THICKNESS SHALL BE NOT LESS THAN TWELVE (12) INCHES.

MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS NEEDED ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



TEMPORARY TREE PROTECTION DETAIL
N.T.S.

PERMANENT SOIL STABILIZATION SPECIFICATIONS: (ZONE 7A)

1. FERTILIZER – 10-10-10 AT RATE OF 11LBS./1000 S.F. OR 500 LBS./ACRE OR EQUIVALENT W/ 50% WATER INSOLABLE NITROGEN.
2. LIMESTONE, PULVERIZED DOLOMITIC – 90 LBS./1000 S.F. OR 2 TONS/ACRE.
3. SEED – APPLY THE FOLLOWING SEED MIXTURE AT THE SPECIFIED RATES:
   (SEED MIXTURE #15)
   HARD FESCUE – 130 LBS./ACRE OR 3 LBS./1000 S.F.
   CHEWINGS FESCUE – 45 LBS./ACRE OR 1 LBS./1000 S.F.
   STRONG CREEPING RED FESCUE – 45 LBS./ACRE OR 1 LBS./1000 S.F.
   PERENNIAL RYEGRASS – 10 LBS./ACRE OR 0.25 LBS./1000 S.F.
   OPTIMUM SEEDING DATES = 8/15 – 10/30
   ACCEPTABLE SEEDING DATES = 2/1 – 4/30 OR *5/1 – 8/14
   *SUMMER SEEDING SHOULD ONLY BE CONDUCTED WHEN THE SITE IS IRRIGATED. MIXES INCLUDING WHITE CLOVER REQUIRE THAT AT LEAST SIX WEEKS OF GROWING SEASON REMAIN AFTER SEEDING TO ENSURE ESTABLISHMENT BEFORE FREEZING CONDITIONS.
4. MULCH – UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS AT RATE OF 70-90 LBS./1000 S.F. OR 1.5-2 TONS/ACRE. MULCH TO BE ANCHORED BY USE OF MULCH ANCHORING TOOL, OR LIQUID MULCH-BINDER.
5. THE STRAW MULCH APPLIED TO THE SIDE SLOPES OF THE DETENTION BASIN WILL BE ANCHORED IN PLACE BY COATING THE STRAW WITH AN APPLICATION OF LIQUID MULCH BINDERS OR EROSION CONTROL NETTING.
6. SHOULD HYDROSEEDING BE CHOSEN AS A METHOD OF SEED APPLICATION, SEEDING RATE SHALL BE 5 LBS./1000 S.F., RECEIVING MULCH & TACKIFIER.
7. HYDROSEEDING USE IS LIMITED TO FLAT AREAS OF THE SITE AND CAN ONLY BE APPLIED DURING THE OPTIMUM SEEDING DATES SPECIFIED ABOVE.

TEMPORARY SOIL STABILIZATION SPECIFICATIONS: (ZONE 7A)

1. FERTILIZER – 10-20-10 AT RATE OF 11 LBS./1000 S.F. OR 500 LBS./ACRE.
2. LIMESTONE, PULVERIZED DOLOMITIC – 90 LBS./1000 S.F. OR 2 TONS/ACRE.
3. SEED PERENNIAL RYEGRASS AT RATE OF ONE (1) LB./1000 S.F. OR 100 LBS./ACRE.
   OPTIMUM SEEDING DATES = 2/15 – 5/1 OR 8/15 – 10/15
4. SHOULD HYDROSEEDING BE CHOSEN AS A METHOD OF SEED APPLICATION, SEEDING RATES SHALL BE 3 LBS./1000 S.F.
5. MULCH – UNROTTED SALT HAY, HAY OR SMALL GRAIN STRAW AT RATE OF 70-90 LBS./1000 S.F. OR 1.5-2 TONS/ACRE. MULCH TO BE ANCHORED BY USE OF MULCH ANCHORING TOOL, OR LIQUID MULCH-BINDER.

NON-GROWING SEASON SOIL STABILIZATION SPECIFICATIONS:

1. APPLY UNROTTED SALT HAY, HAY OR SMALL GRAIN STRAW AT RATE OF 90-115 LBS./1000 S.F.
2. MULCH TO BE ANCHORED USING MULCH ANCHORING TOOL WITH 3-4 INCH PENETRATION.

TEMPORARY AND PERMANENT SEEDBED PREPARATION:

WORK LIME AND FERTILIZER INTO SOIL WITH A DISC, SPRING TOOTH HARROW, ETC.

APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDED, DROP SEEDER, DRILL, CULTIPACKER, ETC. INCORPORATE SEED INTO THE SOIL BY RAKING OR DRAGGING.

MULCHING ON ALL NEWLY SEEDED AREAS IS REQUIRED. MULCH MATERIAL SHOULD BE UNROTTED SMALL GRAIN HAY. SPREAD UNIFORMLY BY HAND OR MACHINE. MULCH ANCHORING TO BE PLACED IMMEDIATELY AFTER MULCHING.

DUST CONTROL MEASURES:

MULCHES – SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY (p. 5-1).

VEGETATIVE COVER – SEE STANDARDS FOR:
(P. 7-1). TEMPORARY VEGETATIVE COVER
(P. 4-1). PERMANENT VEGETATIVE COVER
(P. 6-1). PERMANENT STABILIZATION WITH SOD

SPRAY-ON-ADHESIVES – ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300

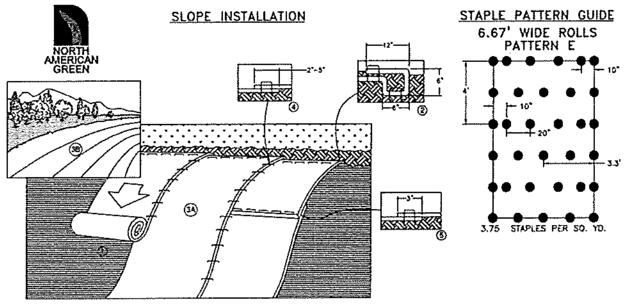
TILLAGE – TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE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

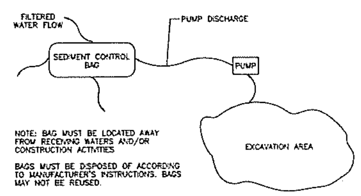
CALCIUM CHLORIDE – SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION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

STONE – COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM*, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

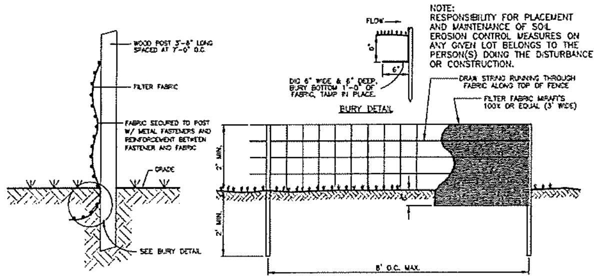
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.



NOTE: BAG MUST BE LOCATED AWAY FROM RECEIVING WATERS AND/OR CONSTRUCTION ACTIVITIES

BAGS MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAGS MAY NOT BE REUSED.

SEDIMENT CONTROL BAG FOR DEWATERING
N.T.S.

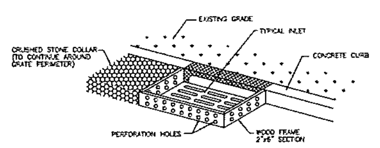


NOTE:
RESPONSIBILITY FOR PLACEMENT AND MAINTENANCE OF SOIL EROSION CONTROL MEASURES ON ANY GIVEN LOT BELONGS TO THE PERSON(S) DOING THE DISTURBANCE OR CONSTRUCTION.

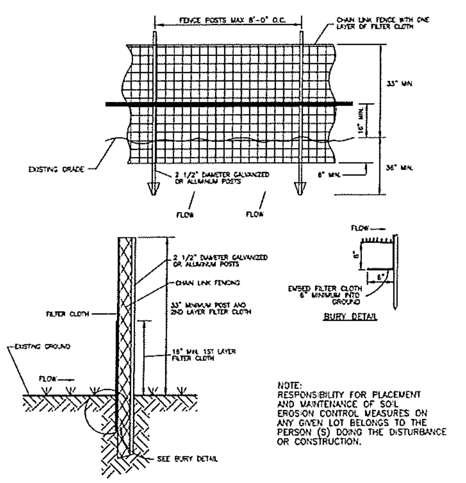
FILTER FABRIC SILT FENCE DETAIL
N.T.S.

SEQUENCE OF CONSTRUCTION

1. CONSTRUCTION OF TEMPORARY SILT FENCE, AND STONE STONE CONSTRUCTION ENTRANCE. (8 DAYS)
2. PRELIMINARY CLEARING, CONSTRUCT INFILTRATION BASINS AND PROVIDE PERMANENT VEGETATIVE STABILIZATION (3 WEEKS)
3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES IN BASINS (5 DAYS)
4. CONSTRUCTION OF STORM SEWER. (4 WEEKS)
5. CONSTRUCT SANITARY SEWER AND WATER MAINS COMPLETE. (4 WEEKS)
6. INSTALL ROADWAY SUBGRADE AND BASE COURSE. (4 WEEKS)
7. CONSTRUCT SIDEWALK AND CURB. (3 WEEKS)
8. CONSTRUCTION OF DWELLINGS. (24 MONTHS)
9. FINAL GRADING. (4 WEEKS)
10. FINAL PAVING. (2 WEEKS)
11. INSTALL SAND BOTTOM TO INFILTRATION BASINS AFTER ALL LOTS HAVE BEEN STABILIZED AND ACCUMULATED SEDIMENT, DEBRIS AND 12" OF SOIL HAVE BEEN REMOVED. (10 DAYS)
12. INSTALL STREET TREES AND BASIN LANDSCAPING. (7 DAYS)
13. TOPSOIL AND SEED AREAS DISTURBED DURING CONSTRUCTION (2 WEEKS)
14. REMOVE SILT FENCE AND OTHER SOIL EROSION DEVICES AS GROUND COVER BECOMES ESTABLISHED. (3 DAYS)



TEMPORARY SILTATION WEIR DETAIL
N.T.S.



NOTE:
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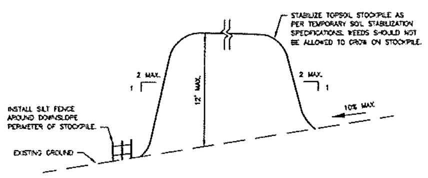
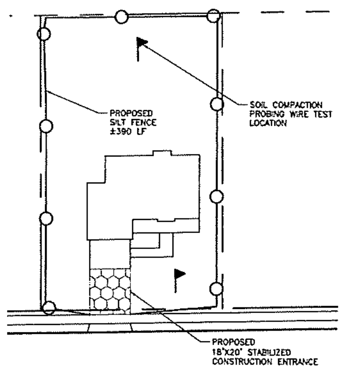
HEAVY DUTY
REINFORCED SILT FENCE
N.T.S.



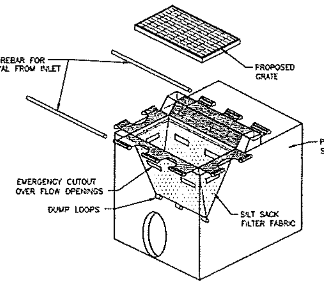
STOCKPILE STABILIZATION DETAIL
N.T.S.

NOTE: SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN 50 FEET OF A FLOODPLAIN, SLOPES, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES TO BE PROTECTED BY A HAY BALE BARRIER OR SEDIMENT FENCE.



TYPICAL SOIL EROSION LOT DETAIL
N.T.S.

NOTE: THIS DETAIL IS ONLY TO ILLUSTRATE THE CONSTRUCTION ENTRANCE, SOIL COMPACTION TESTING, AND SILT FENCE SOIL EROSION MEASURES. FOR THE FULL EXTENT OF THE SOIL EROSION MEASURES SEE THE 'SOIL EROSION AND SEDIMENT CONTROL PLAN' (SHEET 7 OF 12).



TEMPORARY
INLET PROTECTION TYPE B INLET
SILT SACKS TO BE PROVIDED ALONG COUNTY ROAD ONLY

SCOTT D. BROWN 4/17/25
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000

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2. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	6/28/2024	IF/AD
1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/26/2024	IF

PINCHIN
PINCHIN, LLC
#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
(CERTIFICATE OF AUTHORIZATION #24GA28173300)

Proj. No.:	210.90140.002
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Drawn By:	AD/IF
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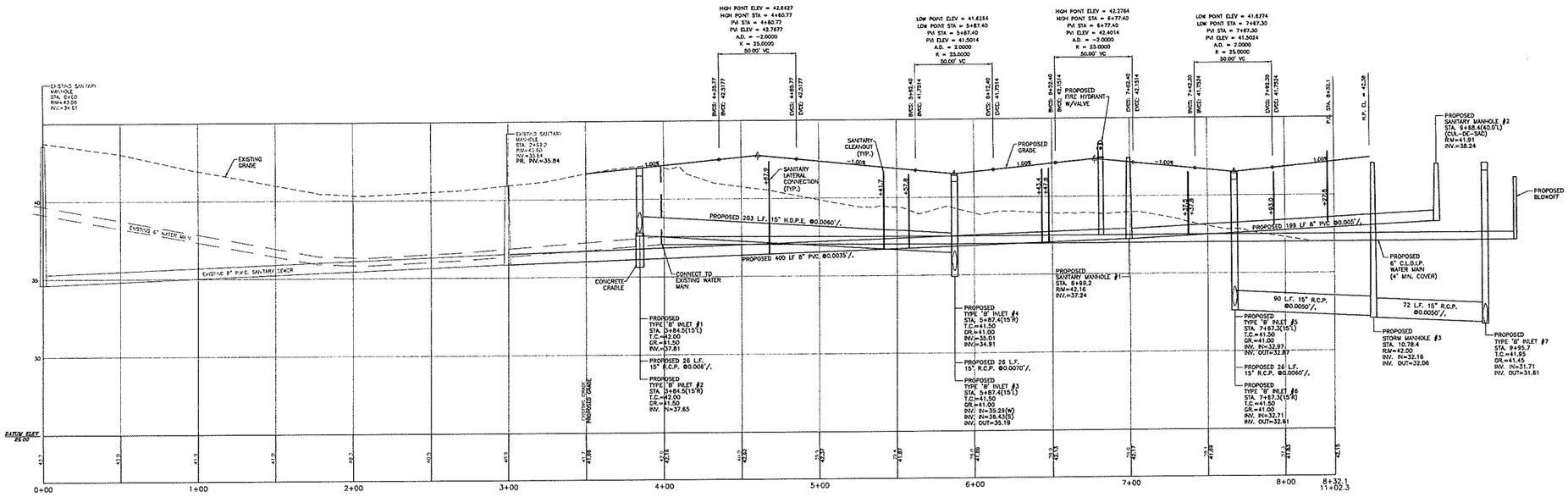
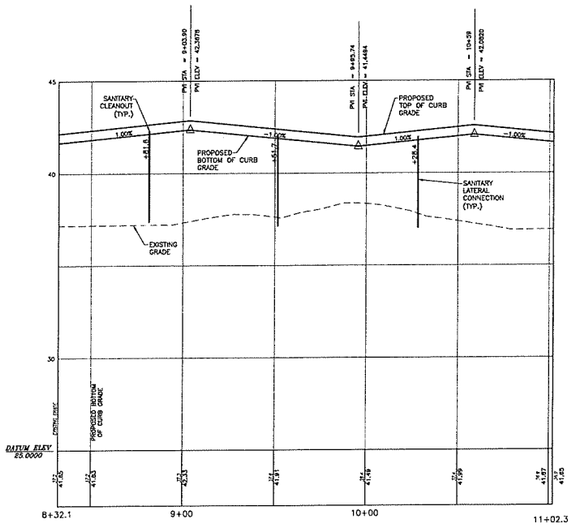
SOIL EROSION AND SEDIMENT CONTROL DETAILS
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY



CENTERLINE PROFILE – WOODLAWN AVENUE



CURBLINE PROFILE – WOODLAWN AVENUE CUL-DE-SAC

Horiz. Scale 1" = 30'

Vert. Scale 1" = 3'

4/17/25
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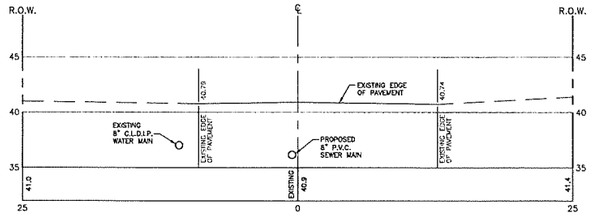
WOODLAWN AVENUE PROFILES
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY



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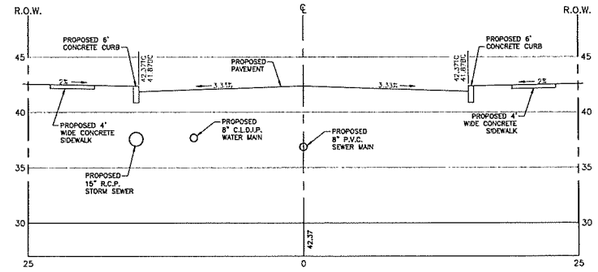

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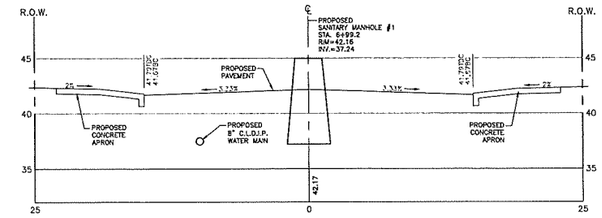

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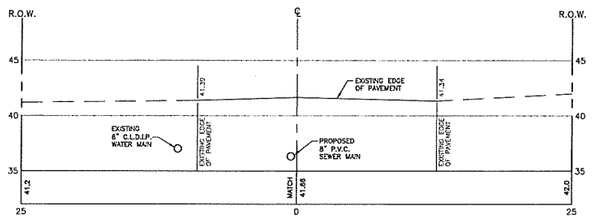

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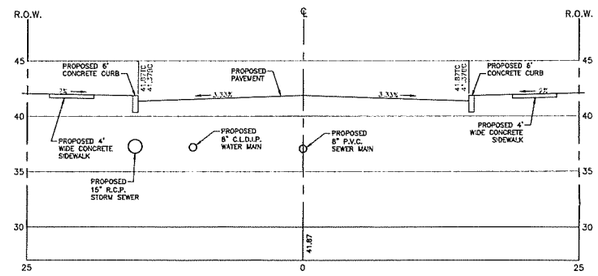

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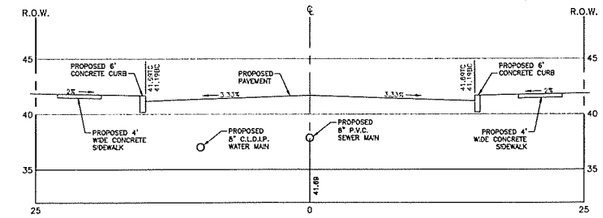

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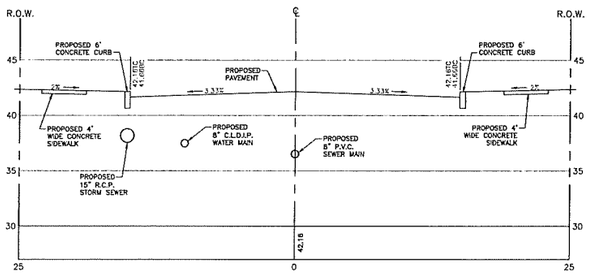

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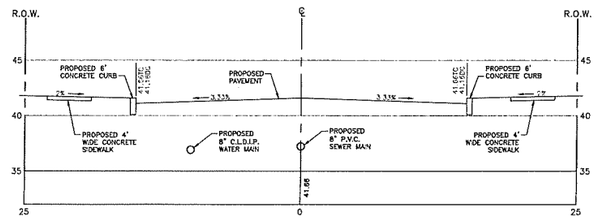

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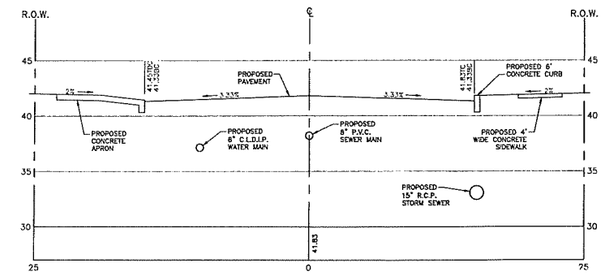

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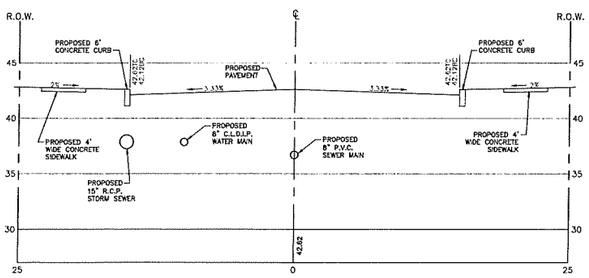

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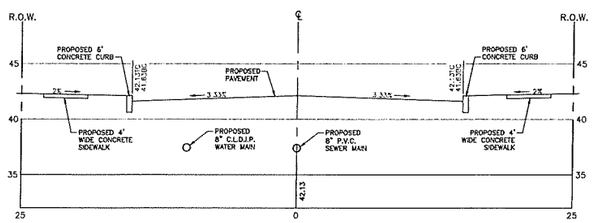

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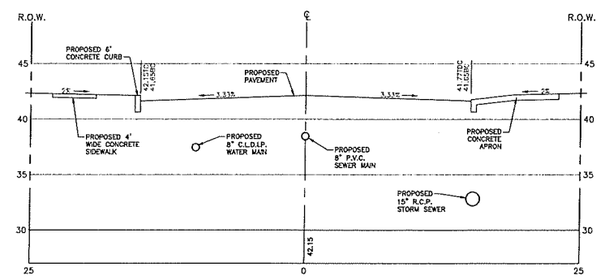

8+32.1

5 0 5 10 15

Horiz. Scale 1" = 5'

5 0 5 10 15

Vert. Scale 1" = 5'

4/17/25

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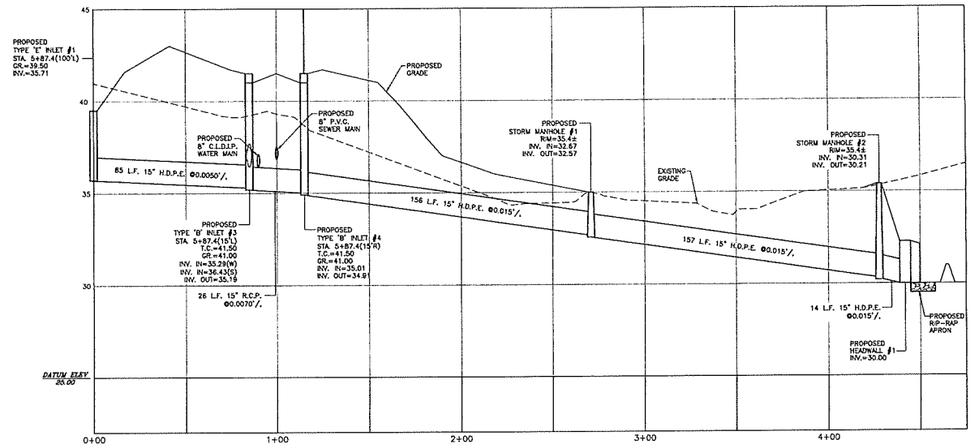
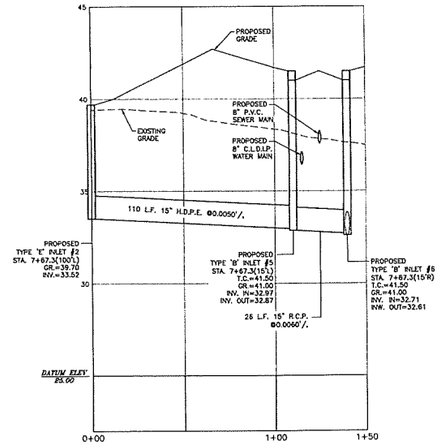
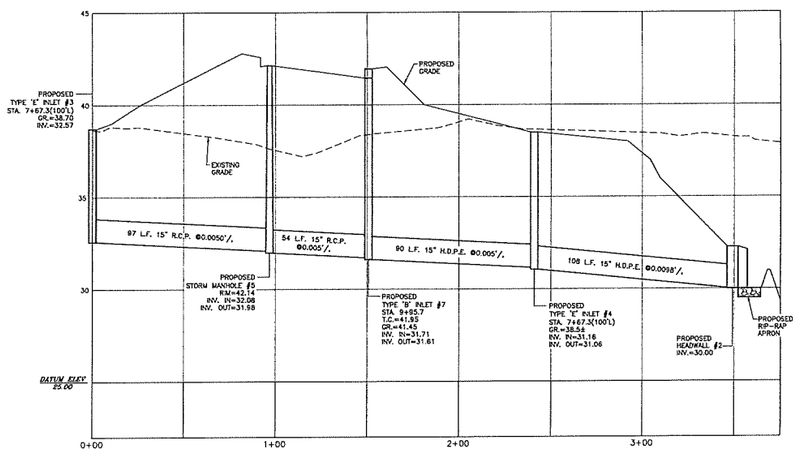
WOODLAWN AVENUE CROSS SECTIONS
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY



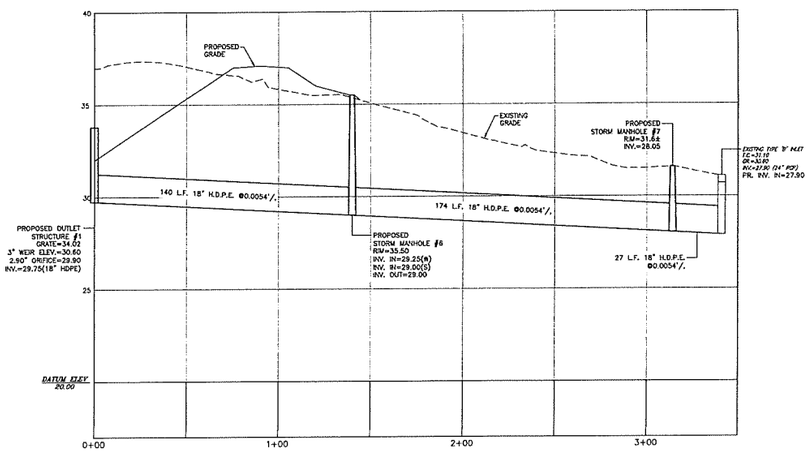
STORM SEWER PROFILE – 'E' INLET #1 TO HEADWALL #1



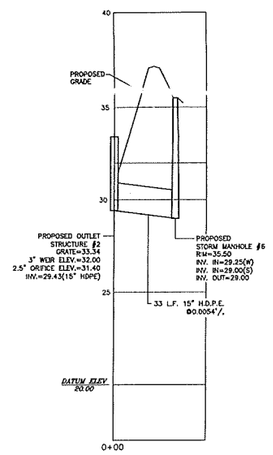
STORM SEWER PROFILE – 'E' INLET #2 TO 'B' INLET #6



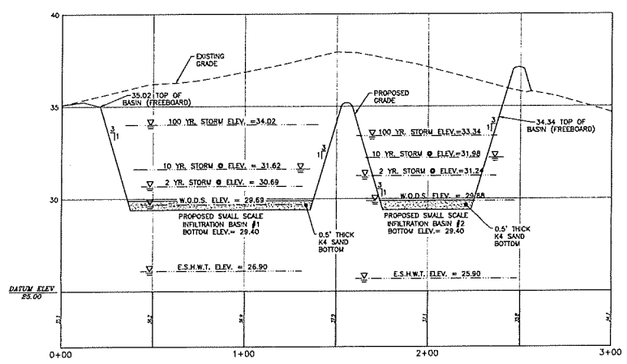
STORM SEWER PROFILE – 'E' INLET #3 TO HEADWALL #2



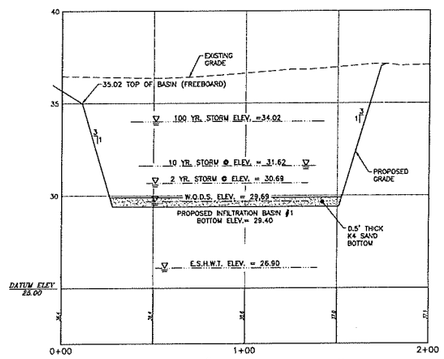
STORM SEWER PROFILE – OUTLET STRUCTURE #1 TO EXISTING INLET IN LINDEN AVENUE



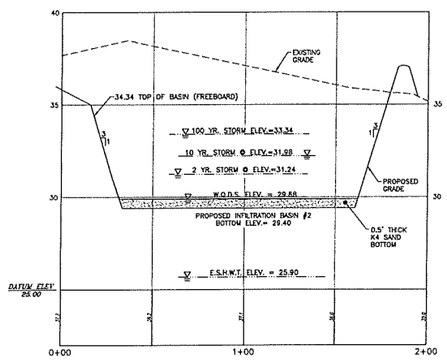
STORM SEWER PROFILE
OUTLET STRUCTURE #2 TO MANHOLE #6



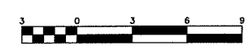
BASIN SECTION A–A



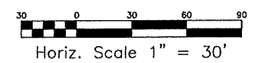
BASIN #1 SECTION B–B



BASIN #2 SECTION C–C



Vert. Scale 1" = 3'



Horiz. Scale 1" = 30'

4/17/25
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(CERTIFICATE OF AUTHORIZATION #24GA28173300)

Proj. No.:	210.90140.002
Date:	02/09/2024
Scale:	AS SHOWN
Drawn By:	AD/IF
Checked By:	SDB

UTILITY PROFILES AND BASIN CROSS SECTIONS
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY

Test Pit #TP-1591		ELEVATION 41.10					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 10 "	41.10 - 40.27	-	-	-	-	-	TOPSOIL
10 "- 41 "	40.27 - 37.68	7.5 YR 8/2	PINKISH WHITE	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	-
41 "- 108 "	37.68 - 32.10	10 YR 6/4	LIGHT YELLOWISH BROWN	SANDY LOAM	SUBANGULAR BLOCKY	DRY SOFT	-
108 "- 121 "	32.10 - 31.02	5 YR 5/6	YELLOWISH RED	SILT LOAM	SUBANGULAR BLOCKY	MOIST FRIABLE	DEPTH TO TOP: 108" (ELEV. 32.10) MUNSEL INDEX: 10 R 4/8, MUNSEL COLOR: RED, CONTRAST: DISTINCT, QUANTITY: COMMON 2%-20%, SIZE: FINE < 5MM
MOTTLING ENCOUNTERED. DEPTH TO TOP: 108" (ELEV. 32.10)							
NO WATER ENCOUNTERED							
ESHWT = 108" (ELEV. 32.10)							

Test Pit #TP-1592		ELEVATION 37.72					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 10 "	37.72 - 36.89	-	-	-	-	-	TOPSOIL
10 "- 130 "	36.89 - 26.89	7.5 YR 6/6	REDDISH YELLOW	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	-
NO MOTTLING ENCOUNTERED							
NO WATER ENCOUNTERED							
ESHWT = 130" (ELEV. 26.89)							

Test Pit #TP-1593		ELEVATION 39.25					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 10 "	39.25 - 38.42	-	-	-	-	-	TOPSOIL
10 "- 55 "	38.42 - 34.67	7.5 YR 8/2	PINKISH WHITE	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	-
55 "- 63 "	34.67 - 34.00	7.5 YR 6/4	LIGHT BROWN	SANDY LOAM	MASSIVE	DRY HARD	VERY COMPACTED HARD PAN LAYER WITH TRACE PEA GRAVEL. GRAVEL 1% @ 0.1" TO 2"
63 "- 121 "	34.00 - 29.17	7.5 YR 6/6	REDDISH YELLOW	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	NO MOTTLING ENCOUNTERED
NO MOTTLING ENCOUNTERED							
NO WATER ENCOUNTERED							
ESHWT = 121" (ELEV. 29.17)							

Test Pit #TP-1594		ELEVATION 37.30					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 10 "	37.30 - 36.47	-	-	-	-	-	TOPSOIL
10 "- 41 "	36.47 - 33.68	7.5 YR 8/2	PINKISH WHITE	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	-
41 "- 123 "	33.68 - 27.06	7.5 YR 6/6	REDDISH YELLOW	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	-
NO MOTTLING ENCOUNTERED							
NO WATER ENCOUNTERED							
ESHWT = 123" (ELEV. 27.06)							

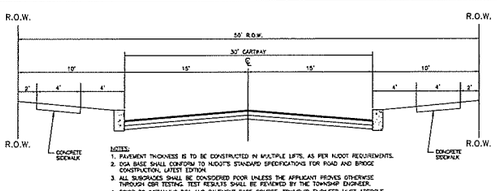
Test Pit #TP-1595		ELEVATION 36.10					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 10 "	36.10 - 35.27	-	-	-	-	-	TOPSOIL
10 "- 32 "	35.27 - 33.43	7.5 YR 8/2	PINKISH WHITE	LOAMY SAND	SUBANGULAR BLOCKY	DRY SOFT	-
32 "- 54 "	33.43 - 31.60	10 YR 6/4	LIGHT YELLOWISH BROWN	SILT LOAM	SUBANGULAR BLOCKY	MOIST FRIABLE	-
54 "- 90 "	31.60 - 28.60	10 YR 6/6	BROWNISH YELLOW	SANDY LOAM	SUBANGULAR BLOCKY	MOIST FRIABLE	MOTTLING PERCHED ON SANDY CLAY LOAM LAYER BELOW. DEPTH TO TOP: 89" (ELEV. 28.68) MUNSEL INDEX: 10 R 4/8, MUNSEL COLOR: RED, CONTRAST: D
90 "- 120 "	28.60 - 26.10	10 YR 2/1	BLACK	SANDY CLAY LOAM	SUBANGULAR BLOCKY	MOIST FRIABLE	NO MOTTLING ENCOUNTERED
MOTTLING ENCOUNTERED. DEPTH TO TOP: 89" (ELEV. 28.68)							
NO WATER ENCOUNTERED							
ESHWT = 120" (ELEV. 26.10)							

Test Pit #TP-1000		GROUND ELEVATION 35.6					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 6 "	35.60 - 35.10	-	-	-	-	-	TOPSOIL
6 "- 32 "	35.10 - 32.93	7.5 YR 3/3	DARK BROWN	SANDY LOAM	SUBANGULAR BLOCKY	DRY, SOFT	ENCOUNTERED BUILDING DEBRIS AND PRIOR GROUND DISTURBANCE
32 "- 50 "	32.93 - 31.44	7.5 YR 4/1	DARK GRAY	SANDY LOAM	SUBANGULAR BLOCKY	DRY, SOFT	ENCOUNTERED BUILDING DEBRIS AND PRIOR GROUND DISTURBANCE
50 "- 63 "	31.44 - 30.60	7.5 YR 7/1	LIGHT GRAY	SILT LOAM	-	DRY, SLIGHTLY HARD	MOTTLING ENCOUNTERED @ 50" (ELEV. 31.44) 7.5 YR 5/8, STRONG BROWN, CONTRAST: FAINT, QUANTITY: FEW <2%, SIZE: FINE <5.0MM
63 "- 108 "	30.60 - 26.60	2.5 YR 4/3	DUSKY BROWN	COARSE LOAMY SAND	SUBANGULAR BLOCKY	MOIST, FRIABLE	NO MOTTLING IN THIS LAYER, ONLY SILT LOAM LAYER ABOVE. PERC. TEST TAKEN AT 70" (ELEV. 32.17), K = 8.4 IN/HR
ESHWT = 108" (ELEV. 26.60)							
MOTTLING ENCOUNTERED @ 50" (ELEV. 31.44) PERCHED							
NO SEEPAGE ENCOUNTERED							

Test Pit #TP-1001		GROUND ELEVATION 36.8					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 12 "	36.80 - 35.80	-	-	-	-	-	TOPSOIL
12 "- 33 "	35.80 - 34.05	10 YR 6/6	BROWNISH YELLOW	LOAMY SAND	SUBANGULAR BLOCKY	DRY, SOFT	-
33 "- 123 "	34.05 - 26.55	10 YR 7/3	VERY PALE BROWN	COARSE LOAMY SAND	SUBANGULAR BLOCKY	MOIST FRIABLE	HARDPAN LAYER AT 48" - 52" +/- NOT CONTINUOUS THROUGHOUT. PERCOLATION TEST TAKEN @ 70" (ELEV. 32.47) K = 8.2 IN/HR
ESHWT = 123" (ELEV. 26.55)							
NO MOTTLING ENCOUNTERED							
NO SEEPAGE ENCOUNTERED							

Test Pit #TP-1002		GROUND ELEVATION 37.6					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 12 "	37.60 - 36.60	-	-	-	-	-	TOPSOIL
12 "- 29 "	36.60 - 35.18	10 YR 6/6	BROWNISH YELLOW	LOAMY SAND	SUBANGULAR BLOCKY	DRY, SOFT	-
29 "- 42 "	35.18 - 34.10	10 YR 4/6	DARK YELLOWISH BROWN	SANDY CLAY LOAM	ANGULAR BLOCKY	MOIST, FRIABLE	-
42 "- 126.40 "	34.10 - 26.90	5 YR 7/6	YELLOW	SAND	-	DRY, LOOSE	PERC. TEST TAKEN AT 80" (ELEV. 32.6) K = 20.8 IN/HR
ESHWT = 126.40" (ELEV. 26.90)							
NO MOTTLING ENCOUNTERED							
NO SEEPAGE ENCOUNTERED							

Test Pit #TP-1003		GROUND ELEVATION 35.9					
DEPTH	PLAN ELEVATION	MUNSELL INDEX	SOIL COLOR	TEXTURE	SOIL STRUCTURE	CONSISTENCY	COMMENTS
0 "- 12 "	35.90 - 34.90	-	-	-	-	-	TOPSOIL
12 "- 120 "	34.90 - 25.90	10 YR 6/8	YELLOWISH BROWN	SAND	SUBANGULAR BLOCKY	DRY, LOOSE	PERC. TEST TAKEN AT 85" (ELEV. 30.65) K = 29.3 IN/HR
ESHWT = 120" (ELEV. 25.90)							
NO MOTTLING ENCOUNTERED							
NO SEEPAGE ENCOUNTERED							

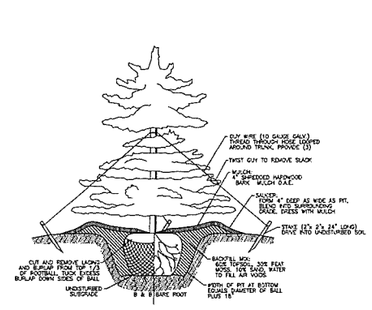


NOTES:
1. PAVEMENT THICKNESS IS TO BE CONSTRUCTED IN MULTIPLE LIFTS, AS PER NJDOT REQUIREMENTS.
2. DGA BASE SHALL CONFORM TO NJDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. ALL SUBGRADES SHALL BE CONSIDERED POOR UNLESS THE APPLICANT PROVES OTHERWISE THROUGH CBR TESTING. TEST RESULTS SHALL BE REVIEWED BY THE TOWNSHIP ENGINEER.
4. PRIOR TO INSTALLING DGA AND PAVEMENT BASE COURSE, TOWNSHIP ENGINEER MUST APPROVE COMPACTED SUBGRADE AND DGA COMPACTION.

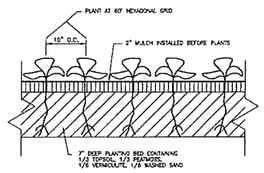
TYPICAL ROAD CROSS SECTION DETAIL
N.T.S.

LANDSCAPING NOTES:

1. EXISTING SPECIMEN TREES AND SHRUBS SHALL BE SAVED WHERE POSSIBLE. USE SNOW FENCING AND TREE WELLS AT DRIP LINE. LIMITED FILL AT BASE (MAX. SIX (6) INCHES, NOT COMPACTED), AND TRUNK PROTECTION AS REQUIRED. REFER TO DETAILS.
2. EXISTING SPECIMEN TREES AND SHRUBS TO BE SAVED SHALL BE FLAGGED OR OTHERWISE CLEARLY MARKED PRIOR TO SITE CLEARING AND GRUBBING.
3. ALL TREE AND SHRUB PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING ACTIVITIES.
4. NO CONSTRUCTION EQUIPMENT IS PERMITTED WITHIN THE DRIP LINE OF TREES AND SHRUBS TO BE SAVED.
5. ALL PROPOSED PLANT MATERIAL LOCATIONS ARE DIAGRAMMATIC AND SUBJECT TO ADJUSTMENTS IN THE FIELD AND AVAILABILITY. IF THERE IS ANY CONFLICT BETWEEN PROPOSED OR EXISTING UTILITY LINES AND THE PROPOSED PLANTINGS, THE UTILITY LINE LOCATION SHALL DOVETAIL SHIFT THE PLANT LOCATION AS REQUIRED.
6. ALL GRASS SEED OR SOD SHALL BE INSTALLED OVER A MINIMUM OF 6" OF CLEAN TOPSOIL. ALL PLANTING BEDS SHALL RECEIVE A MINIMUM OF 6" OF CLEAN TOPSOIL.
7. FOR APPLICATION OF SEED, FERTILIZER, LIMESTONE, AND HAY MULCH FOR ALL GRASSED AREAS REFER TO PERMANENT SOIL STABILIZATION SPECIFICATIONS BELOW.
8. MINIMIZE GRADING WITHIN THE DRIP LINE OF EXISTING TREES TO BE SAVED. SPLAY AND REMOVE VINES AND UNDERBRUSH AROUND EXISTING TREES TO BE USED AS SPECIMENS.
9. A MINIMUM OF 3" OF SHREDDED BARK MULCH SHALL BE PLACED IN ALL PLANTING BEDS
10. EACH PLANT TO BE IN THE TOP OF ITS SIZE CLASS AFTER SHEARING AND PRUNING.
11. EACH PLANT TO BE FREE FROM DISEASE, INSECT INFESTATION, AND MECHANICAL INJURIES, AND IN ALL RESPECTS BE SUITABLE FOR FIELD PLANTING.
12. ALL PLANTS TO BE FULLY GUARANTEED (LABOR AND MATERIAL) FOR A PERIOD OF NOT LESS THAN TWO (2) YEARS FROM DATE OF INSTALLATION.
13. PLANTS TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-1986 IN REGARD TO SIZING, GROWING, AND BASE SPECIFICATIONS.
14. SIZE OF PLANTINGS AS NOTED IN THE LANDSCAPE SCHEDULE IS AT THE TIME OF PLANTING.
15. ALL LAWN AREAS DISTURBED DURING CONSTRUCTION SHALL BE TOPSOILED, FERTILIZED AND SEEDED USING THE PERMANENT STABILIZATION SEEDING SPECIFICATIONS ABOVE.
16. ALL TREE/SHRUB STAKES AND GUY WIRES SHALL BE REMOVED AFTER ONE GROWING SEASON.
17. TOPSOIL TO BE REMOVED FROM THE SITE SHALL BE MINIMIZED AS MUCH AS POSSIBLE, BUT NOT USED AS SPOIL. TOPSOIL MOVED DURING CONSTRUCTION SHOULD BE REDISTRIBUTED SO AS TO PROVIDE A MINIMUM 4" TO 6" OF COVER TO ALL AREAS AND SHALL BE STABILIZED BY SEEDING OR PLANTINGS.
18. STREET TREES AND PARKING LOT TREES SHALL HAVE NO BRANCHES LOWER THAN 7' ABOVE GRADE.
19. BURLAP AND TWINE SHOULD BE REMOVED FROM THE TOP OF THE ROOT BALL.
20. ALL DEAD OR SEVERELY DECLINING PLANTS SHALL BE REPLANTED WITHIN THE NEXT GROWING SEASON FOR TWO (2) YEAR FROM THE DATE OF PLANTING.
21. ALL STAKES AND GUYS SHALL BE REMOVED AFTER ONE (1) GROWING SEASON.
22. 6" OF TOPSOIL SHALL BE PROVIDED IN ALL LAWN AND PLANTING AREAS.
23. TREE PROTECTION FENCING WILL BE STAKED IN THE FIELD AND APPROVED BY THE TOWNSHIP OF MANTUA PRIOR TO ANY CLEARING.
24. AREAS OF NEW LAWN TO BE SEEDED AND NOT SPRIGGED.
25. ALL PROPOSED VEGETATION MAY BE SUBSTITUTED FOR AN APPROVED EQUAL AT TIME OF PLANTING
26. PLANTINGS IN ALL BUFFER AREAS SHALL BE PERMANENTLY MAINTAINED BY THE PROPERTY OWNER.

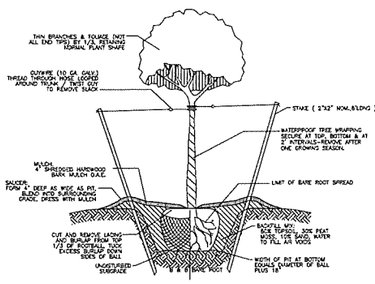


SHRUB PLANTING DETAIL
N.T.S.

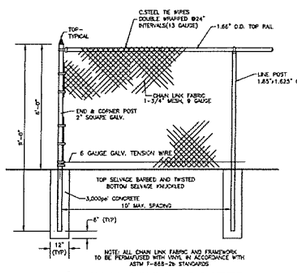


CONIFEROUS TREE PLANTING DETAIL
N.T.S.

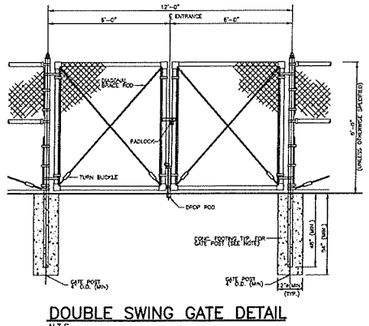
GROUND COVER PLANTING DETAIL
N.T.S.



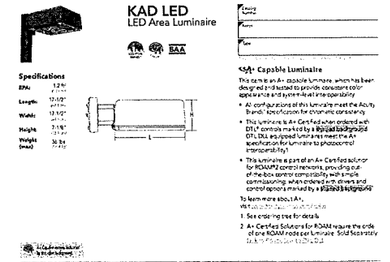
DECIDUOUS TREE PLANTING DETAIL
N.T.S.



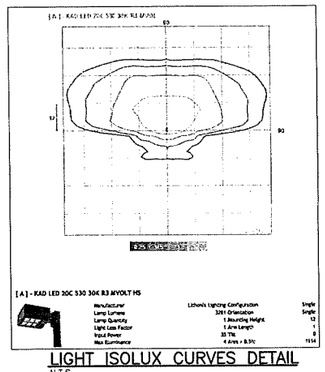
6' HIGH VINYL COATED CHAIN LINK FENCE DETAIL
N.T.S.

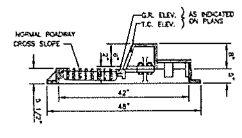


DOUBLE SWING GATE DETAIL
N.T.S.

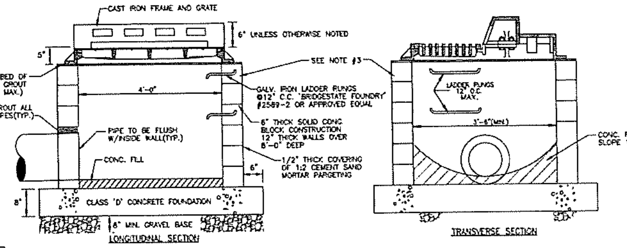


LIGHT FOUNDATION DETAIL
N.T.S.

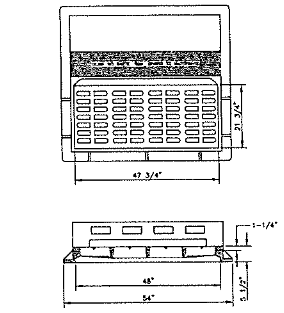

[A] - KAD LED 20C 530 30K R3 MVOLT HS
Manufacturer: Lithonia Lighting
Lamp Lumens: 3261
Lamp Quantity: 1
Lumens/Lamp: 3261
Total Lumens: 3261
Input Power: 35.7W
Max Luminance: 4.4cd/mm²
Luminaire Efficacy: 91.3 lm/W
Luminaire Efficiency: 91.3%
Light Loss Factor: 1.0000
Ballast Factor: 1.0000
Distribution: Type III Medium
Mounting Height: 12 ft
Luminaire Length: 1 ft
Luminaire Weight: 15 lbs
Luminaire Area: 0.4 ft²
Luminaire Lumens: 3261
Luminaire Watts: 35.7W
Luminaire Efficacy: 91.3 lm/W
Luminaire Efficiency: 91.3%
Light Loss Factor: 1.0000
Ballast Factor: 1.0000
Input Power: 35.7W
Max Luminance: 4.4cd/mm²



INLET NOTES
1. TOP OF INLET CURB SHALL BE CONSTRUCTED AT THE SAME ELEVATION AS EXISTING TOP OF CURB.
2. WALLS OF INLETS OR MANHOLES BELOW THE DEPTH OF 8'-0", MEASURED FROM TOP OF MANHOLE FRAME OR INLET GUTTER TO INVERT, SHALL BE 12" THICK AND THE OVERALL HORIZONTAL DIMENSIONS OF FOUNDATION SHALL BE INCREASED BY 12" AND THE DEPTH TO 12" THICK.
3. INLETS SHALL BE ENLARGED AS REQUIRED TO ACCOMMODATE PIPES LARGER THAN 36 INCHES IN DIAMETER. TOP OF STRUCTURE TO BE CORBEL TO CASTING DIMENSIONS.
4. ALL JOINTS SHALL BE POINTED FULL AND FLUSH WITH 1/2 CEMENT-SAND MORTAR.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 603 OF THE CURRENT N.J.D.O.T. STANDARD SPECIFICATIONS FOR INLETS AND MANHOLE.
6. ALL MANHOLES AND INLETS SHALL BE CONSTRUCTED WATERTIGHT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ADEQUATE BALLAST TO OFFSET FLOATATION FORCES ACTING ON MANHOLES AND INLETS INSTALLED IN WET AREAS.
8. INLET FOUNDATIONS WHICH ARE PRECAST SHALL BE PLACED ON A 6" THICK BED OF COMPACTED COARSE AGGREGATE SIZE #57 AND SHALL EXTEND 6" BEYOND THE LIMITS OF THE INLET FOUNDATION.
9. ALL TYPE 'B' INLETS SHALL HAVE BICYCLE SAFE TYPE GRATES.

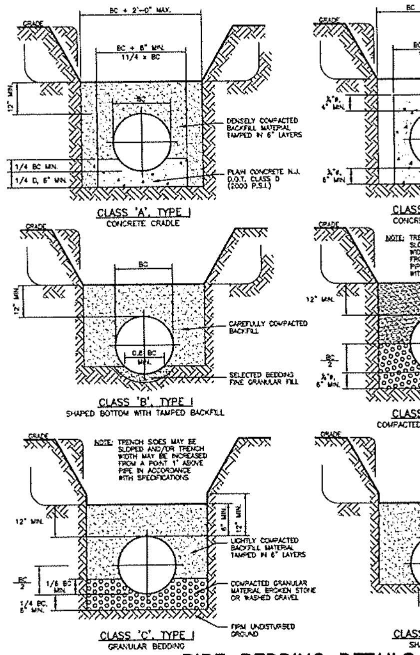


TYPE 'B' OR 'E' INLET DETAIL
N.T.S



FRAME AND GRATE SHALL BE BRIDGESTATE FOUNDRY COMPANY BICYCLE GRATE PATTERN NUMBER 2618 WITH TYPE N ECO CURB PIECE OR APPROVED EQUAL

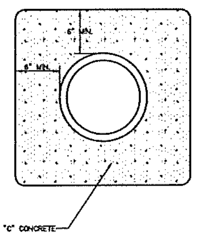
TYPE 'B' GRATE DETAIL
N.T.S



PIPE BEDDING DETAILS
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

NOTE:
CONCRETE ENCASEMENT TO BE PROVIDED WHEN AND WHERE DIRECTED ON PLANS OR BY MANTUA TWP. M.U.A. FIELD REPRESENTATIVE

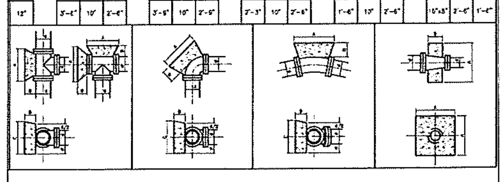


CONCRETE ENCASEMENT DETAIL
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

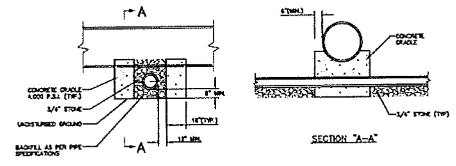
MINIMUM SIZE OF CONCRETE THRUST BLOCKS

d		A	B	C		A	B	C		A	B	C		A	B	C		dxd	A	B
6"	TEES & CROSSES	2'-0"	8"	1'-3"	90° BENDS	2'-6"	8"	1'-3"	45° BENDS	1'-6"	8"	1'-3"	22.5° & 11.25° BENDS	1'-6"	8"	1'-3"	REDUCERS	6"x4"	1'-6"	1'-0"
8"		2'-6"	8"	1'-6"		3'-0"	8"	1'-6"		1'-6"	8"	1'-6"		1'-6"	8"	1'-9"		8"x4"	2'-0"	1'-0"
10"		3'-0"	10"	2'-0"		3'-6"	10"	2'-0"		2'-3"	10"	2'-0"		1'-6"	10"	2'-0"		10"x6"	2'-4"	1'-3"
12"		3'-6"	10"	2'-6"		3'-9"	10"	2'-9"		2'-3"	10"	2'-6"		1'-6"	10"	2'-6"		10"x8"	2'-6"	1'-6"



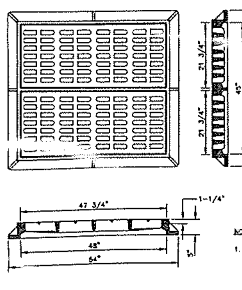
THRUST BLOCK DETAILS
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY



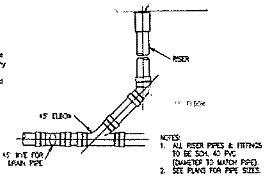
CONCRETE CRADLE DETAIL
N.T.S.

NOTES:
1. CONCRETE CRADLE TO BE PROVIDED WHEN AND WHERE DIRECTED ON PLANS OR BY MANTUA TOWNSHIP M.U.A. FIELD REPRESENTATIVE
2. CRADLES OR ENCASEMENTS ARE REQUIRED WHEN LESS THAN 18" VERTICAL SEPARATION BETWEEN OUTSIDE WALLS OF CROSSING PIPES. PLACE AS DIRECTED BY THE M.M.U.A. FIELD REPRESENTATIVE.



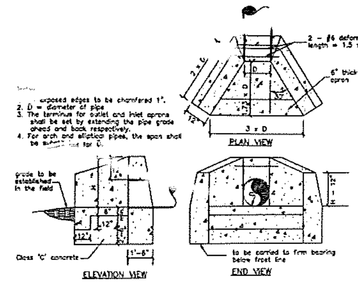
NOTE:
1. Frame and grate shall be Campbell Foundry Company bicycle grate Pattern Number 3425 or approved equal.

TYPE 'E' GRATE DETAIL
N.T.S



NOTES:
1. ALL RISER PIPES & FITTINGS TO BE SCH. 40 PVC (DIAMETER TO MATCH PIPE).
2. SEE PLANS FOR PIPE SIZES.

CLEANOUT DETAIL
N.T.S. (GRASS LOCATION)

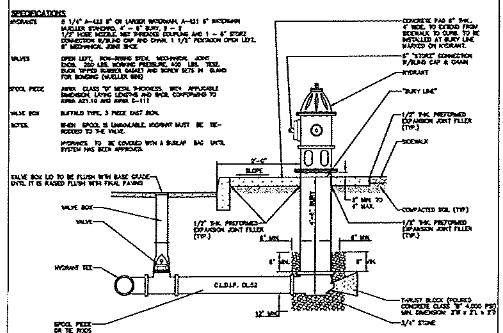


exposed edges to be chamfered 1".
2. D = diameter of pipe
3. The terminus for outlet and inlet aprons shall be set by extending the pipe grade ahead and back respectively.
4. For arch and elliptical pipes, the span shall be [illegible] for D.

HEADWALL DETAIL
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

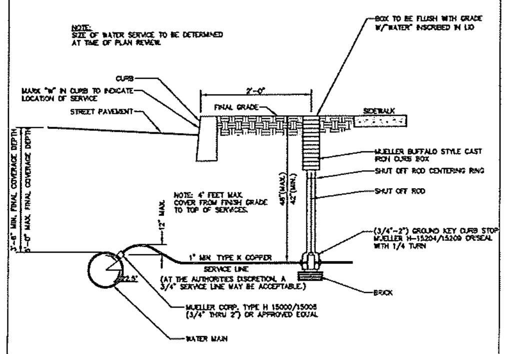
SPECIFICATIONS
HYDRANTS: 5 1/4" A-423 8" OR LARGER WATERMAIN, A-421 6" WATERMAIN MUELLER STANDARD, 4' - 6" BURY, 2 - 2 1/2" HOSE NOZZLE, NST THREADED COUPLING AND 1 - 6" STORZ CONNECTION W/BLIND CAP AND CHAIN, 1 1/2" PENTAGON OPEN LEFT, 6" MECHANICAL JOINT SHOE
VALVES: OPEN LEFT, NON-RISING STEM, MECHANICAL JOINT ENDS, 200 LBS. WORKING PRESSURE, 400 LBS. TEST, DUCK TIPPED RUBBER GASKET AND SCREW SETS IN GLAND FOR BONDING (MUELLER 666)
SPOOL PIECE: AWWA CLASS "D" METAL THICKNESS, WITH APPLICABLE DIMENSION, LAYING LENGTHS AND BOLTS CONFORMING TO AWWA A21.10 AND AWWA C-111
VALVE BOX: BUFFALO TYPE, 3 PIECE CAST IRON
NOTES: WHEN SPOOL IS UNAVAILABLE, HYDRANT MUST BE RE-RODDED TO THE VALVE.
HYDRANTS TO BE COVERED WITH A BURLAP BAG UNTIL SYSTEM HAS BEEN APPROVED.



FIRE HYDRANT DETAIL
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

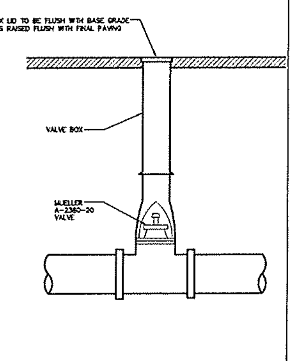
NOTE:
SIZE OF WATER SERVICE TO BE DETERMINED AT TIME OF PLAN REVIEW.



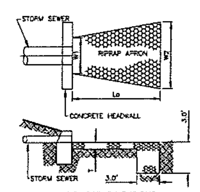
WATER SERVICE DETAIL
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

NOTES
1. VALVE TO OPEN LEFT AND HAVE A NON-RISING STEM, MECHANICAL JOINT ENDS, 200-lb WORKING PRESSURE, 400-lb TEST PRESSURE, DUCK TIPPED RUBBER GASKET AND SCREW SETS IN GLAND FOR BONDING (MUELLER 666).
2. VALVE BOX TO BE BUFFALO TYPE, 3 PIECE CAST IRON, SLIDE OR SCREW TYPE. TABS WITHIN SLIDE MODEL SHALL NOT BE REMOVED.
3. RISERS MAYBE PERMITTED FOR ADJUSTMENT OF FINAL GRADE OF VALVE BOXES PER MUA ENGINEERS APPROVAL.
4. VALVE BOX MUST BE PLUMB AND CLEANED OF ALL DEBRIS. THE SHUT-OFF NUT MUST BE CENTERED WITHIN THE BOX AND HAVE 1" CLEARANCE BETWEEN THE INSIDE OF THE BOX AND THE VALVE WRENCH.
5. VALVE BOX LID TO HAVE THE WORD "WATER" CAST IN, WITH AN ARROW SHOWING THE OPENING DIRECTION, AND THE WORD " OPEN " CLEARLY CAST THEREON.



GATE VALVE & VALVE BOX DETAIL
N.T.S.



RIP-RAP DIMENSIONS

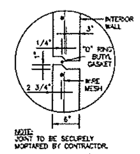
STRUCTURE	Q 25-yr(cfs)	Dia.	L_a	W_1	W_2	d_{50}	Min. Thickness
HEADWALL #1	2.615	15" HDPE	12'	4'	18'	2"*	6"
HEADWALL #2	3.201	15" HDPE	13'	4'	17'	2"*	6"

*NOTE: USED AS A MINIMUM STONE SIZE. CALCULATED VALUE IS LESS.

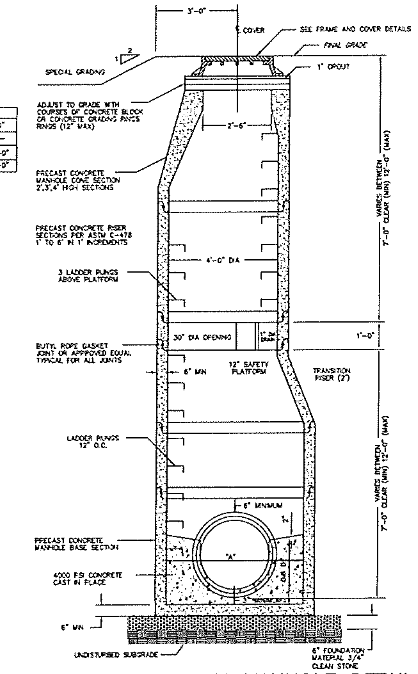
RIP-RAP APRON FOR CONCRETE HEADWALLS
N.T.S.

MANHOLE SCHEDULE

PIPE I.D.	"A"	"B"	"C"	"D"
8"-24"	4' - 0"	5"	6"	—
27"-36"	5' - 0"	6"	6"	2'-0"
42"-48"	6' - 0"	7"	8"	3'-0"

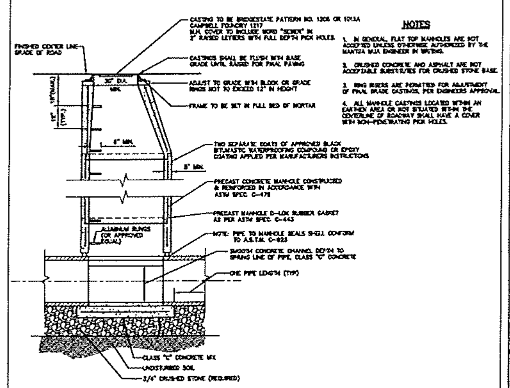


NOTE:
JOINT TO BE SECURELY MORTARED BY CONTRACTOR.
RISER JOINT DETAIL



PRECAST DEEP STORM MANHOLE DETAIL
N.T.S.

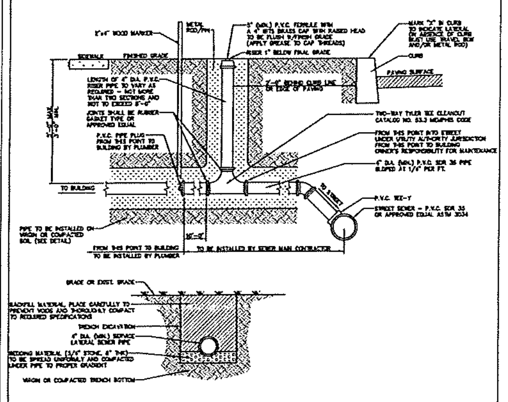
MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY



NOTES
1. IN GENERAL, FLAT TOP MANHOLES ARE NOT ACCEPTED UNLESS OTHERWISE AUTHORIZED BY THE MANTUA MUA ENGINEER IN WRITING.
2. CRUSHED CONCRETE AND ASPHALT ARE NOT ACCEPTABLE SUBSTITUTES FOR CRUSHED STONE BASE.
3. RING RISERS ARE PERMITTED FOR ADJUSTMENT OF FINAL GRADE CASTINGS, PER ENGINEERS APPROVAL.
4. ALL MANHOLE CASTINGS LOCATED WITHIN AN EARTHEN AREA OR NOT SITUATED WITHIN THE CENTERLINE OF ROADWAY SHALL HAVE A COVER WITH NON-PENETRATING PICK HOLES.

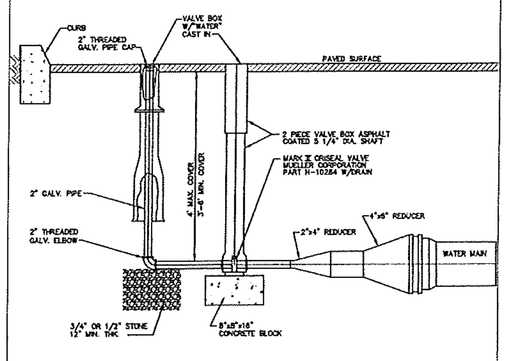
PRECAST CONCRETE MANHOLE DETAIL
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

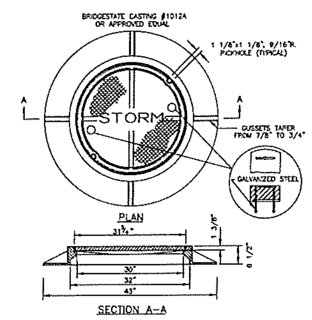


STANDARD LATERAL DETAIL
3'-8" IN DEPTH
N.T.S.

MANTUA TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY



BLOW-OFF DETAIL
N.T.S.



STORM MANHOLE RIM DETAIL
N.T.S.

SCOTT D. BROWN
PROFESSIONAL ENGINEER & LAND SURVEYOR
N.J. LICENSE No. 24GB03825000
4/17/25

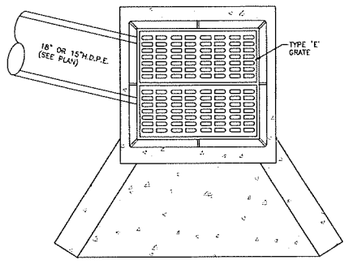
UTILITY MARKOUT REQUIRED:
CONTRACTOR IS RESPONSIBLE TO CALL NEW JERSEY ONE CALL (800-272-1000) FOR UTILITY MARK-OUT 3 FULL BUSINESS DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

Revisions:	Date:	Drawn by:
5. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	4/15/2025	IF/AD
4. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	12/31/2024	IF/AD
3. REVISED LAYOUT	11/25/2024	IF/AD
2. REVISED PER BOARD PROFESSIONALS' REVIEW LETTERS	6/28/2024	IF/AD
1. REVISED TO SHOW APPROVED LOT NUMBERS.	3/26/2024	IF

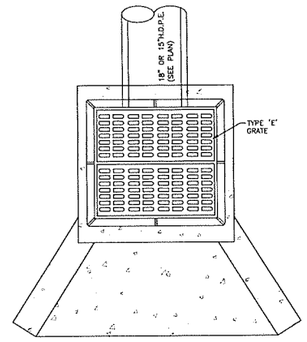
PINCHIN, LLC
#209 ROWAN BOULEVARD
GLASSBORO, NEW JERSEY 08028
TELEPHONE (856) 403-7016
email: glassboro@pinchin.com
(CERTIFICATE OF AUTHORIZATION #24GA28173300)

Proj. No.:	210.90140.002
Date:	02/09/2024
Scale:	AS SHOWN
Drawn By:	AD/IF
Checked By:	SDB

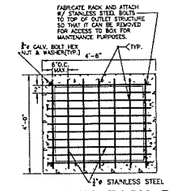
CONSTRUCTION DETAILS – 2
WOODLAWN MAJOR SUBDIVISION
SITUATE
PLATE 17, BLOCK 65, LOT 1
TOWNSHIP OF MANTUA, GLOUCESTER COUNTY, NEW JERSEY



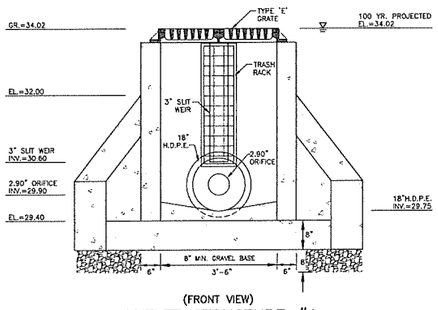
(TOP VIEW)



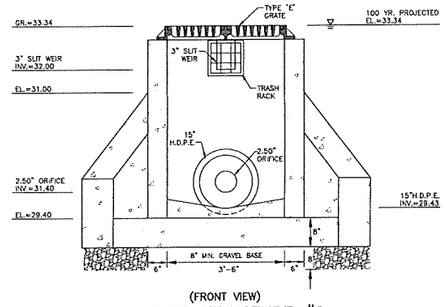
(TOP VIEW)



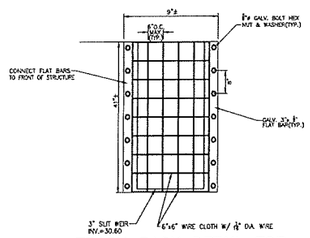
TOP TRASH RACK DETAIL
N.T.S.



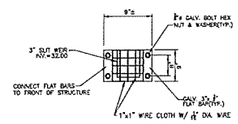
(FRONT VIEW)
OUTLET STRUCTURE #1
N.T.S.



(FRONT VIEW)
OUTLET STRUCTURE #2
N.T.S.



TRASH RACK DETAIL FOR
OUTLET STRUCTURE #1
N.T.S.



TRASH RACK DETAIL FOR
OUTLET STRUCTURE #2
N.T.S.

4/17/25
SCOTT D. BROWN
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N.J. LICENSE No. 24GB03825000

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