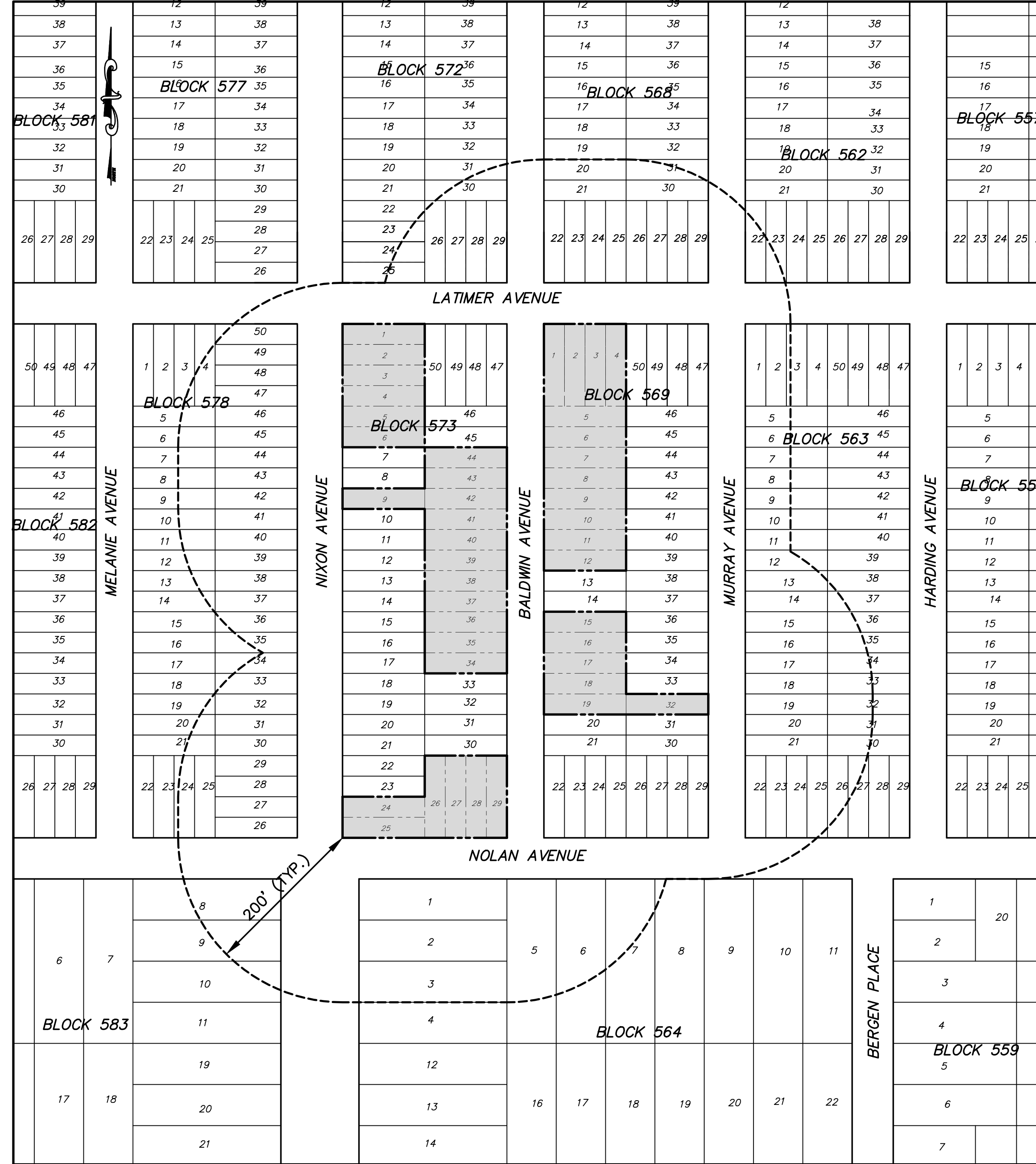
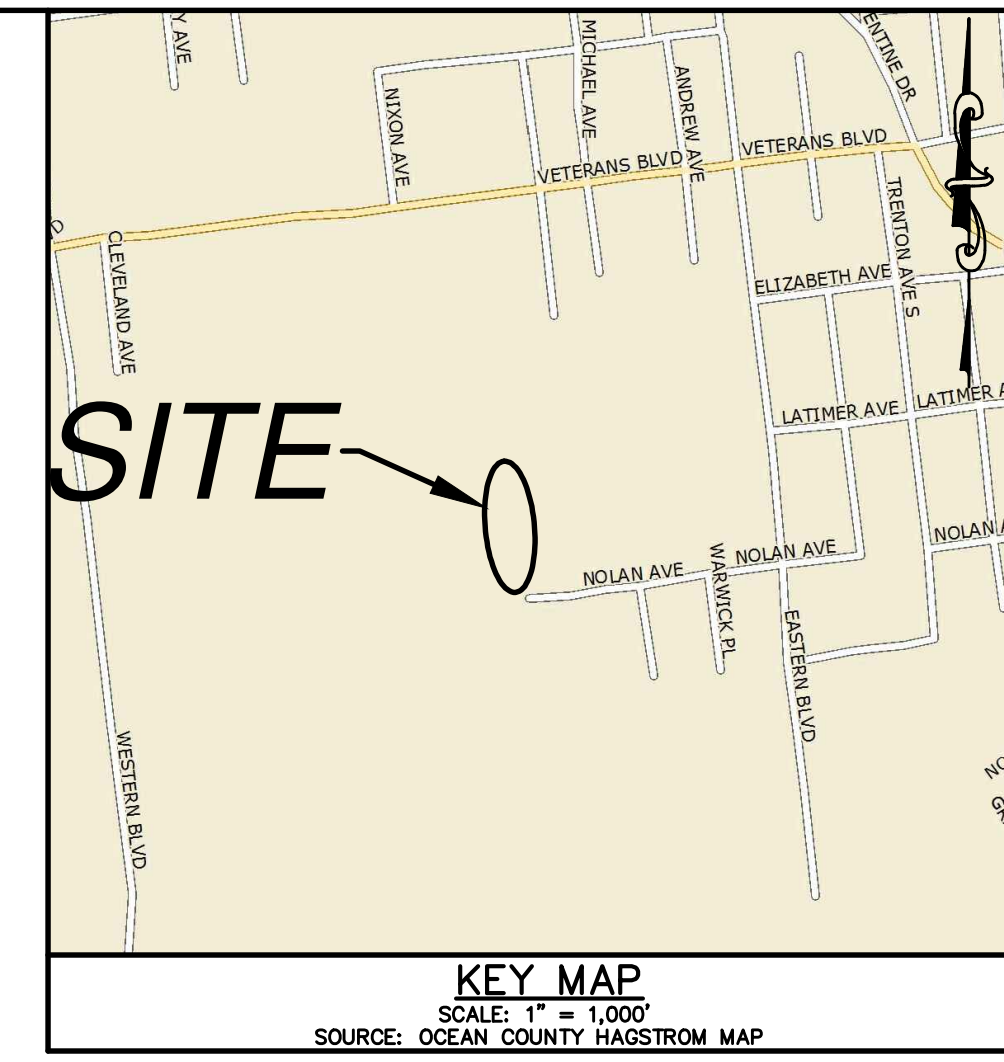
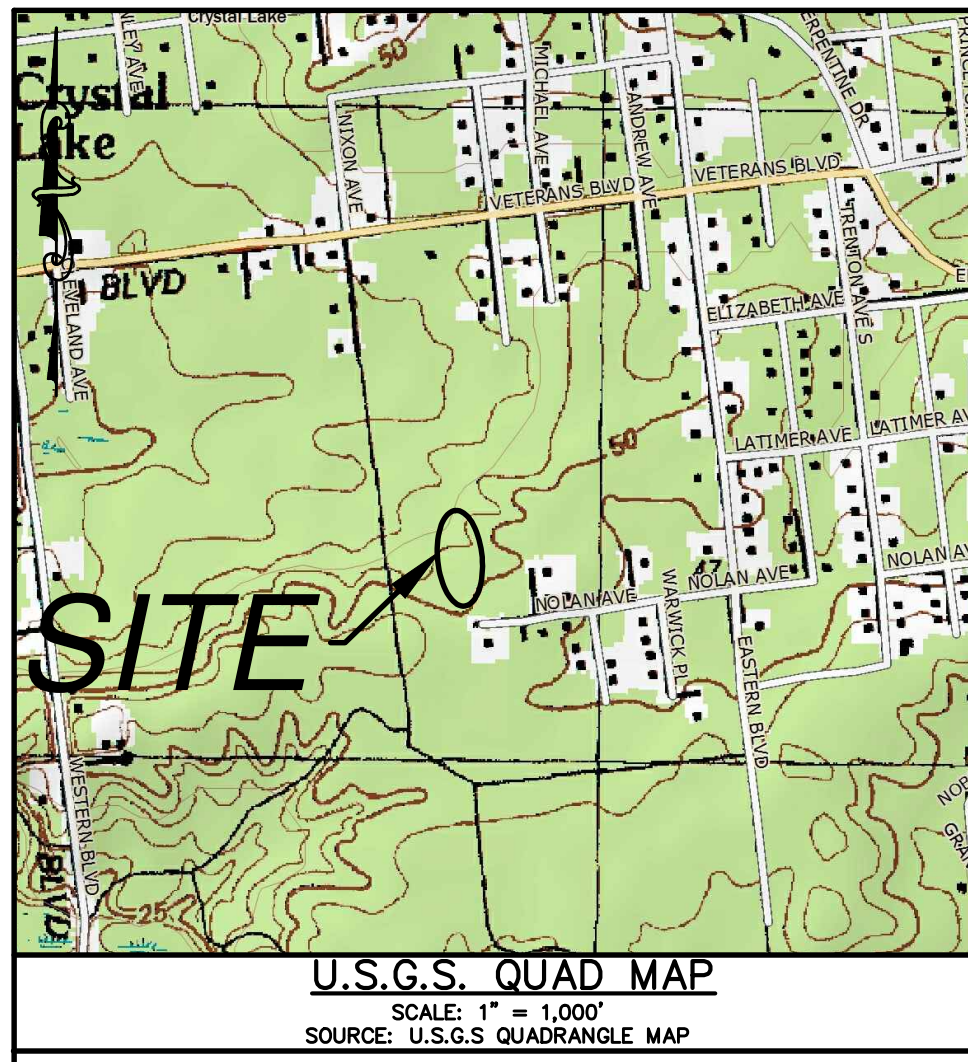


# ROADWAY IMPROVEMENT PLAN FOR PINEWALD ESTATES BLOCK 569 - LOTS 1-12, 15-19, AND 32 BLOCK 573 - LOTS 9, 24-29, AND 34-44 TOWNSHIP OF BERKELEY

OCEAN COUNTY NEW JERSEY



**AREA MAP**  
SCALE: 1" = 100'

INDEX OF DRAWINGS	
SHEET #	DRAWING TITLE
1	COVER SHEET
2	OVERALL DEVELOPMENT PLAN
3	GRADING AND DRAINAGE PLAN
4	LIGHTING & UTILITY PLAN
5	PROFILES
6	CONSTRUCTION DETAILS
SUPPLEMENTAL DRAWINGS	
1-2 OF 2	SOIL EROSION & SEDIMENT CONTROL PLANS
1-3 OF 3	DRAINAGE AREA MAPS
1 OF 1	STORMWATER MAINTENANCE PLAN
1 OF 1	TREE REMOVAL PLAN
1 OF 1	BOUNDARY & TOPOGRAPHIC SURVEY

OWNERSHIP OF DOCUMENTS			
NO.	DATE	DESCRIPTION	BY
3	2/21/14	REVISED FOR RESOLUTION COMPLIANCE	MCS
2	3/12/10	REVISED FOR RESOLUTION COMPLIANCE	MCS
1	1/1/08	REVISED PER PLANNING BOARD ENGINEER	MCS

**OWNER/APPLICANT:**  
OCEAN, INC.  
40 WASHINGTON STREET  
TOMS RIVER NJ 08753

**P.D.S.**  
**PROFESSIONAL DESIGN SERVICES, L.L.C.**  
CONSULTING ENGINEERS, PLANNERS, ENVIRONMENTAL SCIENTISTS  
1245 AIRPORT ROAD, SUITE 1, LAKEWOOD, NEW JERSEY 08701  
PHONE 732 363 0060 FAX 732 363 0073  
ENGINEERING @ PDSDOVER.COM  
NEW JERSEY STATE BOARD OF P.E. & L.S.  
CERTIFICATION OF AUTHORIZATION NO. 24G28125400  
**WILLIAM A. STEVENS, P.E., P.P.**  
PROFESSIONAL ENGINEER NEW JERSEY #29815  
PROFESSIONAL PLANNER NEW JERSEY #43394

**ROADWAY IMPROVEMENT PLANS  
COVER SHEET**  
FOR  
**PINEWALD ESTATES**  
MISC. BLOCKS AND LOTS  
BERKELEY TOWNSHIP  
OCEAN COUNTY NEW JERSEY

SCALE: AS NOTED DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 1  
DRAWN BY: MCS DESIGNED BY: MCS CHECKED BY: MCS

**PROPERTY OWNERS WITHIN 200 FEET**

- CERTIFIED LIST OF PROPERTY OWNERS FROM BERKELEY TOWNSHIP DATED JULY 25, 2007.
- BLOCK 562, LOT 20  
TOWNSHIP OF BERKELEY  
P. O. BOX 8  
BAYVILLE, NJ 08721
  - BLOCK 563, LOT 1  
CHARLES MAGARE  
320 NAVESINK AVENUE  
ATLANTIC HIGHLANDS, NJ 07716
  - BLOCK 564, LOT 7  
BLUE RIDGE SOUTH, L.L.C.  
38 LONGPORT AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 563, LOT 13  
BLUE RIDGE SOUTH, L.L.C.  
38 LONGPORT AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 563, LOT 20  
JOSEPH L. & THERESA A. BAKWELL  
314 NOLAN AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 563, LOT 26  
ROBERT F. & NANCY A. MORRIS, JR.  
308 NOLAN AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 563, LOT 32  
BLUE RIDGE SOUTH, L.L.C.  
38 LONGPORT AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 564, LOT 1  
TOWNSHIP OF BERKELEY  
P. O. BOX 8  
BAYVILLE, NJ 08721
  - BLOCK 564, LOT 3  
JUDITH ANN EDWARDS  
2205 EDGAR ROAD  
POINT PLEASANT, NJ 08742
  - BLOCK 564, LOT 5  
KENNETH J. AUSTIN  
2514 HURRY ROAD  
FORKED RIVER, NJ 08731
  - BLOCK 564, LOT 7  
SUBURBAN AGENCY, INC.  
P. O. BOX 109  
LAKEWOOD, NJ 08701
  - BLOCK 564, LOT 8  
ARLINE OTTOSON  
315 NOLAN AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 564, LOT 17  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 564, LOT 24  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 564, LOT 30  
BADM M. SHEKHAR  
23 DISNEY DRIVE  
TOMS RIVER, NJ 08755
  - BLOCK 569, LOT 1  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 569, LOT 7  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 569, LOT 13  
BRECKENRIDGE PROPERTIES, L.L.C.  
P. O. BOX 308  
MONMOUTH BEACH, NJ 07750
  - BLOCK 569, LOT 15  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 569, LOT 20  
JAMES R. & CHRISTINA P. MCCARTNEY  
285 NOLAN AVENUE  
BAYVILLE, NJ 08721
  - BLOCK 569, LOT 33  
TOWNSHIP OF BERKELEY  
P. O. BOX 8  
BAYVILLE, NJ 08721
  - BLOCK 569, LOT 43  
UNKNOWN  
C/O REALTY PROPERTY, INC.  
122 SPRINGSIDE AVENUE  
TEANECK, NJ 07666
  - BLOCK 569, LOT 46  
TOWNSHIP OF BERKELEY  
P. O. BOX 8  
BAYVILLE, NJ 08721
  - BLOCK 572, LOT 20  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 26  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 1  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 7  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 9  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 10  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 16  
900 SUMMERS  
47 - 07 41ST STREET  
APT. 1H  
SUNNYSIDE, NY 11104
  - BLOCK 573, LOT 18  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 24  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 30  
JEFFREY R. JERMAN  
52 SUNSET AVENUE  
LONG BRANCH, NJ 07740
  - BLOCK 573, LOT 34  
O.C.E.A.N., INC.  
P. O. BOX 1029  
TOMS RIVER, NJ 08754-1029
  - BLOCK 573, LOT 45  
JUDITH ANN EDWARDS  
2205 EDGAR ROAD  
POINT PLEASANT, NJ 08742
  - BLOCK 578, LOT 1  
TOWNSHIP OF BERKELEY  
P. O. BOX 8  
BERKELEY, NJ 08721
  - BLOCK 578, LOT 26  
JUDITH ANN EDWARDS  
2205 EDGAR ROAD  
POINT PLEASANT, NJ 08742
  - STATE OF NEW JERSEY  
DEPARTMENT OF TRANSPORTATION  
1035 PARKWAY AVENUE  
TRENTON, NJ 08618
  - OCEAN COUNTY PLANNING BOARD  
129 HOOPER AVENUE  
TOMS RIVER, NJ 08753
  - TOWNSHIP OF BERKELEY  
MUNICIPAL UTILITIES AUTHORITY  
42 STATION ROAD  
BAYVILLE, NJ 08731
  - UNITED WATER COMPANY  
15 ADAPRE AVENUE  
TOMS RIVER, NJ 08754
  - SEASIDE HEIGHTS WATER COMPANY  
P. O. BOX 38  
SEASIDE HEIGHTS, NJ 08751
  - GARDEN STATE PARKWAY  
NJ HIGHWAY AUTHORITY  
WOODBOROGE, NJ 07095
  - TOWNSHIP OF BERKELEY  
SEWERAGE AUTHORITY  
235 ROUTE 9  
BAYVILLE, NJ 08721
  - BERKELEY WATER COMPANY  
340 ROUTE 9  
BAYVILLE, NJ 08721
  - SHORE WATER COMPANY  
P. O. BOX 408  
SEASIDE PARK, NJ 08752

**GENERAL NOTES:**

- IT IS PROPOSED TO IMPROVE NOLAN AVENUE FROM HARDING AVENUE TO BALDWIN AVENUE. THE ROADS WILL BE DESIGNED TO THE RESIDENTIAL SITE IMPROVEMENT STANDARDS. THE PURPOSE OF THE ROAD IMPROVEMENTS ARE TO PROVIDE ACCESS TO PROPOSED RESIDENTIAL LOTS. CURB AND SIDEWALKS ARE PROPOSED ONLY ON BALDWIN AVENUE.
- THE PROPERTY AND TOPOGRAPHIC INFORMATION IS SHOWN PURSUANT TO A SURVEY ENTITLED, "BOUNDARY & TOPOGRAPHIC SURVEY OF TAX BLOCKS 546, TAX LOTS 20-25, TAX BLOCK 547, TAX LOTS 1-12, 26-36, 39-46, 49 & 50, TAX BLOCK 550, TAX LOTS 20-25, TAX BLOCK 551, TAX LOTS 1-12, 16-19, 32-34, 38-50, TAX BLOCK 557, TAX LOTS 15-42, 45-50, TAX BLOCK 562, TAX LOTS 1-6, 11-15, 18-38, TAX BLOCK 567, TAX LOTS 20-31, TAX BLOCK 568, TAX LOTS 1-6, 11-29, 36-41, 45-50, TAX BLOCK 571, TAX LOTS 20-31, TAX BLOCK 572, TAX LOTS 1-50, REFERENCE TAX MAP SHEET No.'S 53, 54, 57 & 58, TOWNSHIP OF BERKELEY, OCEAN COUNTY, NEW JERSEY", PREPARED BY PROPERTY DEVELOPMENT SURVEYING, L.L.C., ON 2/14/04.
- ALL UTILITIES (ELECTRIC, TELEPHONE, ETC.) TO BE PROVIDED UNDERGROUND. THE CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL DISTURBED AREAS WILL BE VEGETATIVELY STABILIZED IN ACCORDANCE WITH THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN UPON COMPLETION OF THE GRADING ACTIVITIES.
- ALL TRAFFIC CONTROL SIGNAGE INCLUDING PAVEMENT MARKINGS WILL BE PROVIDED IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 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. 5:23-2.21(a) OF THE N.J. UNIFORM CONSTRUCTION CODE AND CFR 1926.32(f) (OSHA COMPETENT PERSON). PROPERTY DEVELOPMENT SERVICES, INC., ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY.
- STREET LIGHTING ALONG THE ROADWAYS WILL BE PROVIDED BY JERSEY CENTRAL POWER AND LIGHT IN ACCORDANCE WITH THE BERKELEY TOWNSHIP ORDINANCE 98-48-OAB (SECTION 35-76). THE DEVELOPER SHALL BE RESPONSIBLE FOR THE FULL COST OF THE INITIAL INSTALLATION OF THE STREET LIGHTS.
- DRIVEWAY APRONS TO BE CONSTRUCTED FOR EACH LOT PURSUANT TO SECTION 35-67.4 OF THE BERKELEY TOWNSHIP CODE.
- DATUM IS IN N.G.V.D. 1929. TO CONVERT TO N.G.V.D. 1988, A CONVERSION FACTOR OF -1.22' MUST BE APPLIED.
- OCEAN, INC., WILL BE RESPONSIBLE FOR THE OWNERSHIP AND MAINTENANCE OF THE TEMPORARY STORMWATER BASIN.
- THERE WILL BE NO PHASING ASSOCIATED WITH THIS PROJECT.
- A TREE REMOVAL PLAN MUST BE SUBMITTED AND APPROVED BY BERKELEY TOWNSHIP PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. CLEARING MAY NOT EXCEED 50% OF THE SIDE AND REAR YARD SETBACKS. THIS ITEM CAN BE CLARIFIED ON THE PLOT PLAN.
- INDIVIDUAL GRADING PLANS ARE REQUIRED PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
- WATER AND SEWER SERVICES SHALL BE COORDINATED THROUGH THE APPROPRIATE UTILITY AUTHORITY.
- ALL PROPOSED DWELLINGS SHALL HAVE A ROOF RECHARGE SYSTEM CONSTRUCTED IN ACCORDANCE WITH THE DETAIL.
- THE MINIMUM SLOPE OF THE YARD SURFACE SHALL BE TWO PERCENT AWAY FROM THE PROPOSED BUILDING TOWARDS THE LOTS PROPERTY LINES. THE MAXIMUM GRADE FOR LAWNS AND DISTURBED AREAS WITHIN FIVE FEET OF A BUILDING SHALL BE 10%, AND FOR LAWNS MORE THAN FIVE FEET FROM A BUILDING, IT SHALL BE 25%, EXCEPT FOR THE DRIVEWAYS WHERE THE MAXIMUM GRADE SHALL BE 10%.
- UPON COMPLETION OF THE INFILTRATION SYSTEM, THE APPLICANT'S ENGINEER SHALL CERTIFY IN WRITING TO THE TOWNSHIP ENGINEER THAT THE SYSTEM WAS CONSTRUCTED IN ACCORDANCE WITH THE DESIGN PLANS APPROVED BY THE BOARD. ASBULT PERMEABILITY TEST RESULTS SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER PRIOR TO THE RELEASE OF PERFORMANCE GUARANTEES.
- IN ACCORDANCE WITH BERKELEY TOWNSHIP ORDINANCE SECTION 12-2.5, THE ENTITY RESPONSIBLE FOR MAINTENANCE OF A STORMWATER MANAGEMENT FACILITY SHALL BE RESPONSIBLE FOR SUBMITTING TO THE PRINCIPAL PUBLIC WORKS MANAGER A SUMMARY OF MAINTENANCE WORK PERFORMED DURING THE REPORTING PERIOD. THIS SUMMARY SHALL BE SUBMITTED ONCE EVERY CALENDAR YEAR BY FEBRUARY 15 OF THE YEAR FOLLOWING THE REPORTING PERIOD.

**R-150 ZONE REQUIREMENTS**

	REQUIRED	PROVIDED
MIN. LOT AREA	15,000 SQ.FT.	15,000 SQ.FT.
MIN. LOT FRONTAGE	100 FT.	100 FT.
MIN. FRONT SETBACK	35 FT.	>35 FT.
MIN. REAR SETBACK	30 FT.	>30 FT.
MIN. SIDE YARD ONE/BOTH	10 FT./25 FT.	>10 FT./>25 FT.
MIN. FLOOR AREA	ONE BEDROOM - 950 SQ.FT. TWO BEDROOM - 1,100 SQ.FT. THREE OR MORE - 1,250 SQ.FT.	ONE BEDROOM - 950 SQ.FT. TWO BEDROOM - 1,100 SQ.FT. THREE OR MORE - 1,250 SQ.FT.
MAX. LOT COVERAGE	25%	<25%
MAX. BLDG. HEIGHT	35 FT.	<35 FT.

**WAIVERS REQUESTED**

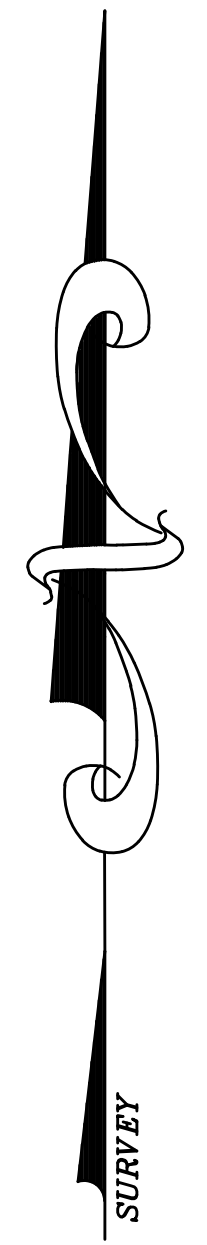
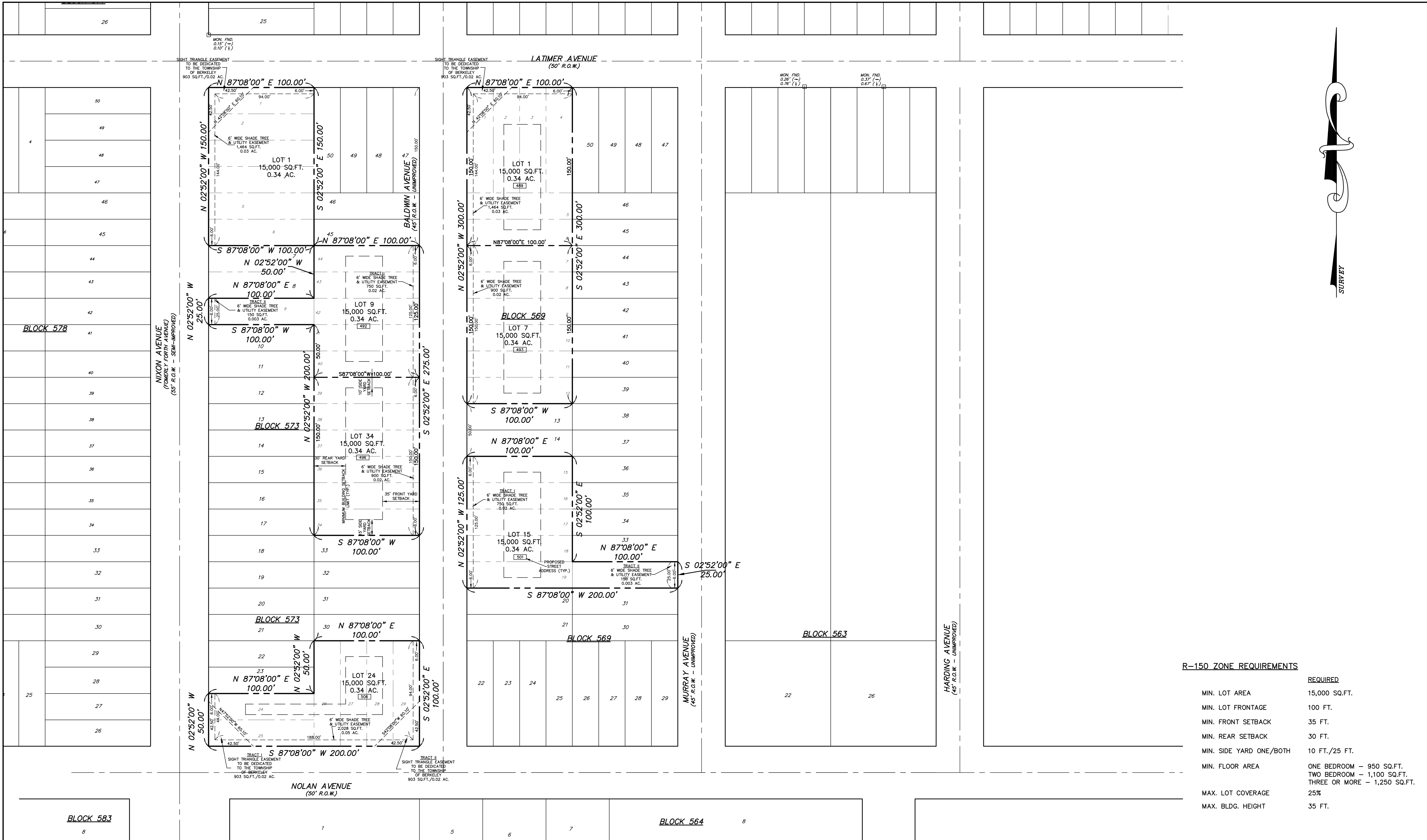
- SIDEWALK REQUIRED ON BOTH SIDES OF STREET; NO SIDEWALK PROVIDED ON NOLAN AVENUE.
- WAIVER FROM PROVIDING STREET TREES ALONG PROPOSED ROADWAYS
- WAIVER FROM PROVIDING A LETTER OF INTERPRETATION FROM THE NJDEP

ROADWAY IMPROVEMENT PLAN(S) APPROVED

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS HAVE BEEN DESIGNED IN CONFORMANCE WITH THE RESIDENTIAL SITE IMPROVEMENT STANDARDS, NJAC 5:21.

*William A. Stevens*  
WILLIAM A. STEVENS, P.E. #39915

PLANNING BOARD CHAIRMAN \_\_\_\_\_  
PLANNING BOARD SECRETARY \_\_\_\_\_  
PLANNING BOARD ENGINEER \_\_\_\_\_  
DATE \_\_\_\_\_



**R-150 ZONE REQUIREMENTS**

	REQUIRED
MIN. LOT AREA	15,000 SQ.FT.
MIN. LOT FRONTAGE	100 FT.
MIN. FRONT SETBACK	35 FT.
MIN. REAR SETBACK	30 FT.
MIN. SIDE YARD ONE/BOTH	10 FT./25 FT.
MIN. FLOOR AREA	ONE BEDROOM - 950 SQ.FT. TWO BEDROOM - 1,100 SQ.FT. THREE OR MORE - 1,250 SQ.FT.
MAX. LOT COVERAGE	25%
MAX. BLDG. HEIGHT	35 FT.

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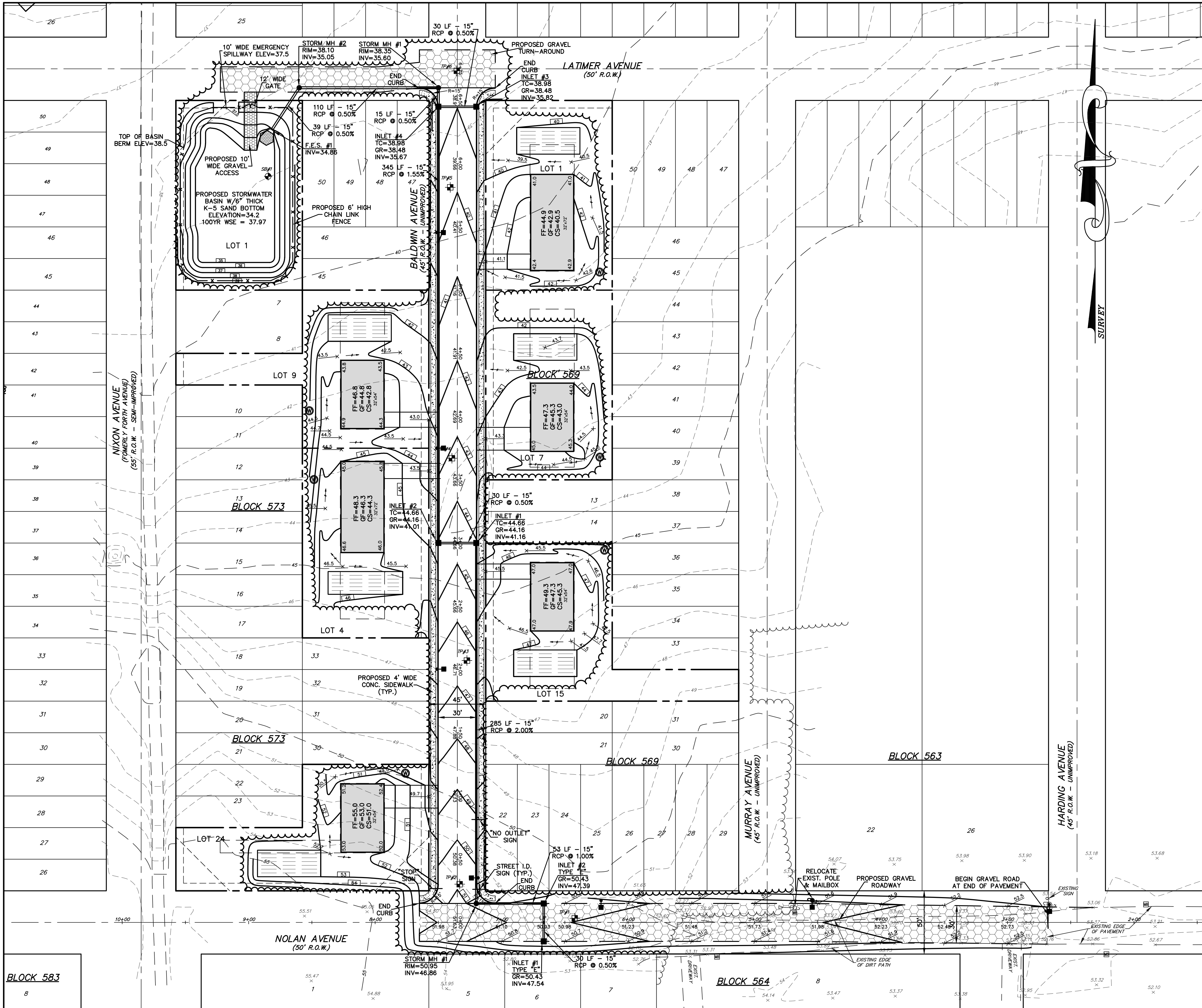
NO.	DATE	REVISION	DESCRIPTION	BY
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3	3/12/10	REVISED PER RESOLUTION COMPLIANCE		MCS
2	10/4/09	REVISED PER RESOLUTION COMPLIANCE		MCS
1	1/11/08	REVISED PER PLANNING BOARD ENGINEER		MCS

**PDS**  
**PROFESSIONAL DESIGN SERVICES, L.L.C.**  
 CONSULTING ENGINEERS, PLANNERS, ENVIRONMENTAL SCIENTISTS  
 1245 AIRPORT ROAD, SUITE 1, LAKEWOOD, NEW JERSEY 05701  
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 CERTIFICATE OF AUTHORIZATION NO. 24GA28125400  
**WILLIAM A. STEVENS, P.E., P.P.**  
PROFESSIONAL ENGINEER NEW JERSEY LIC #28915  
PROFESSIONAL PLANNER NEW JERSEY LIC #2384

**ROADWAY IMPROVEMENT PLANS**  
**OVERALL DEVELOPMENT PLAN**  
 FOR  
**PINEWALD ESTATES**  
**MISC. BLOCKS AND LOTS**  
 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

SCALE: 1"=40' DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 2  
 DRAWN BY: MCS DESIGNED BY: MCS CHECKED BY: MCS





**RSIS ROADWAY CLASSIFICATION**

BALDWIN AVENUE AND NOLAN AVENUE ARE BOTH LOW INTENSITY RESIDENTIAL ACCESS STREETS

	REQUIRED	PROVIDED BALDWIN AVE	PROVIDED NOLAN AVE
TRAVELED WAY	21 FEET	30 FEET	30 FEET
NUMBER OF PARKING LANES	1	2	2
PARKING LANE WIDTH	7 FEET	7 FEET	7 FEET
CARTWAY WIDTH	28 FEET	30 FEET	30 FEET
CURB OR SHOULDER	NONE	CURB	CURB
SIDEWALK OR GRADED AREA	15W/1GA	15W/1GA	15W/1GA
RIGHT OF WAY	50 FEET	45 FEET*	50 FEET

**TEST PIT LOGS**

**TP 1** ELEV=51.5±

0-5 ORGANIC LAYER

5-11 10YR 7/1 SAND

11-16 10YR 5/8 LOAMY SAND

16-35 10YR 7/8 SAND

35-60 10YR 7/8 COARSE SAND

60-76 10YR 5/8 COARSE SAND

76-106 10YR 7/8 SAND

106-116 5YR 5/8 10YR 6/8 LOAMY SAND

116-128 5YR 5/8 10YR 8/1 SAND

128-132 10YR 6/8 8/1 LOAMY SAND

S.H.W.T. @ 108'(42.7±)

NO WATER ENCOUNTERED

**TP 2** ELEV=53.0±

0-6 ORGANIC LAYER

6-13 10YR 7/1 SAND

13-18 10YR 5/8 LOAMY SAND

18-37 10YR 7/8 SAND

37-58 10YR 5/8 COARSE SAND

58-72 10YR 5/8 COARSE LOAMY SAND

72-103 10YR 7/8 SAND

103-114 5YR 5/8 LOAMY SAND

114-125 5YR 5/8 SAND

125-132 10YR 6/8 8/1 LOAMY SAND

S.H.W.T. @ 125'(42.6±)

NO WATER ENCOUNTERED

**TP 3** ELEV=46.3±

0-4 ORGANIC LAYER

4-11 10YR 7/1 SAND

11-20 10YR 5/8 LOAMY SAND

20-29 10YR 6/8 SAND

29-54 5YR 4/6 COARSE LOAMY SAND

54-68 10YR 6/8 LOAMY SAND

68-84 10YR 7/8 LOAMY SAND

84-91 10YR 6/8 CLAY LOAM

91-114 10YR 6/8 7/1 LOAMY SAND

114-120 10YR 8/1 6/8 LOAMY SAND

S.H.W.T. @ 91'(38.8±)

NO WATER ENCOUNTERED

**TP 4** ELEV=43.0±

0-3 ORGANIC LAYER

3-12 10YR 7/1 SAND

12-24 10YR 5/8 LOAMY SAND

24-30 10YR 6/8 SAND

30-59 10YR 6/8 LOAMY SAND

59-68 10YR 8/8 SAND

68-71 10YR 7/3 SILTY CLAY LOAM

71-98 10YR 7/8 LOAMY SAND

98-120 10YR 8/1 6/8 SAND

S.H.W.T. @ 98'(34.9±)

NO WATER ENCOUNTERED

**TP 5** ELEV=39.5±

0-4 ORGANIC LAYER

4-13 10YR 7/1 SAND

13-22 10YR 6/4 LOAMY SAND

22-42 10YR 7/8 LOAMY SAND

42-98 10YR 6/3 FINE SAND

98-120 10YR 8/1 6/8 SAND

S.H.W.T. @ 98'(31.4±)

NO WATER ENCOUNTERED

**TP 6** ELEV=38.6±

0-4 ORGANIC LAYER

4-14 10YR 7/1 SAND

14-21 10YR 5/8 LOAMY SAND

21-45 10YR 8/6 SAND

45-76 2.5Y 8/6 LOAMY SAND

76-88 10YR 6/4 8/1 LOAMY SAND

88-92 10YR 6/8 4/4 LOAMY SAND

92-96 10YR 8/8 8/3 SANDY CLAY LOAM

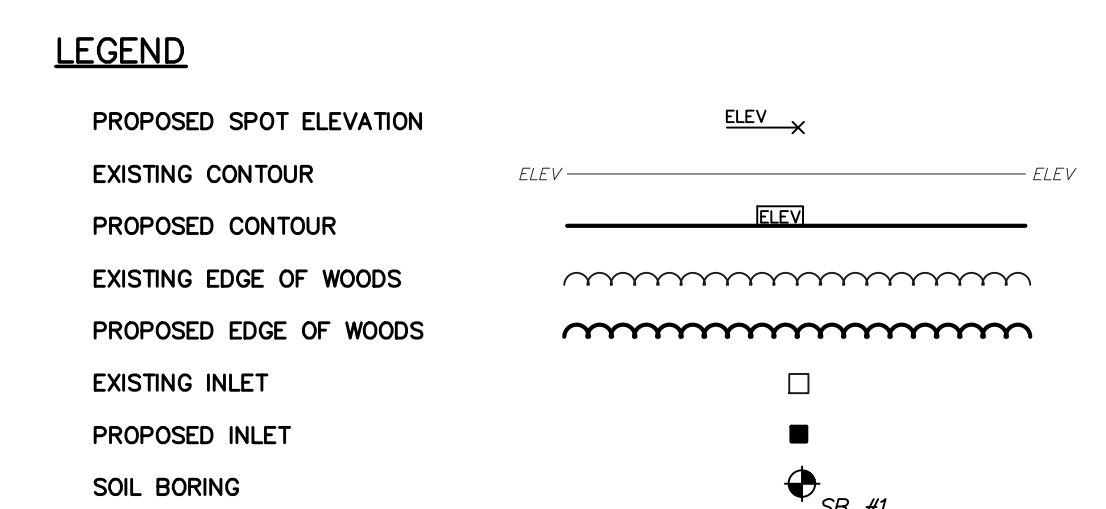
S.H.W.T. @ 88'(31.7±)

NO WATER ENCOUNTERED

SOIL BORING PERFORMED BY P.D.S., ON 3/24/08.

TEST PITS PERFORMED BY P.D.S., ON JULY 24, 2007.

- GRADING & DRAINAGE NOTES:**
- ALL HOUSE GRADING IS BASED UPON EITHER A REGULAR BASEMENT OR A WALK OUT BASEMENT FOUNDATION.
  - ALL DISTURBED AREAS SHALL BE VEGETATIVELY STABILIZED IN ACCORDANCE WITH THE CERTIFIED SOIL EROSION & SEDIMENT CONTROL PLAN. ALL FRONT YARD, SIDE YARD AND REAR YARD (30 FEET BEHIND HOUSE) AREAS ARE TO BE SODDED. ALL OTHER DISTURBED AREAS ARE TO BE SEEDED & MULCHED.
  - ALL STORMWATER INLETS TO BE TYPE "B" UNLESS OTHERWISE NOTED.
  - INLET HOODS SHALL BE PLACED ON ALL PIPES LEAVING THE PROPOSED INLETS.



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2	3/12/10	REVISED FOR RESOLUTION COMPLIANCE	MCS
1	1/11/08	REVISED PER PLANNING BOARD ENGINEER	MCS

**P.D.S. PROFESSIONAL DESIGN SERVICES, L.L.C.**

CONSULTING ENGINEERS, PLANNERS, ENVIRONMENTAL SCIENTISTS

1245 AIRPORT ROAD, SUITE 1, LAKEWOOD, NEW JERSEY 08701

PHONE 732 363 0060 FAX 732 363 0073

ENGINEERING @ PDSOVER.COM

NEW JERSEY STATE BOARD OF P.E. & L.S. CERTIFICATE OF AUTHORIZATION NO. 24GA28125400

**WILLIAM A. STEVENS, P.E., P.P.**

PROFESSIONAL ENGINEER NEW JERSEY LIC #29815  
PROFESSIONAL PLANNER NEW JERSEY LIC #3394

**ROADWAY IMPROVEMENT PLANS**

**GRADING & DRAINAGE PLAN**

FOR

**PINEWALD ESTATES**

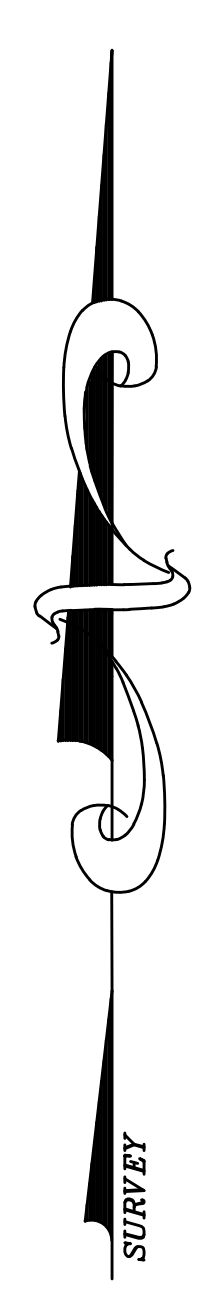
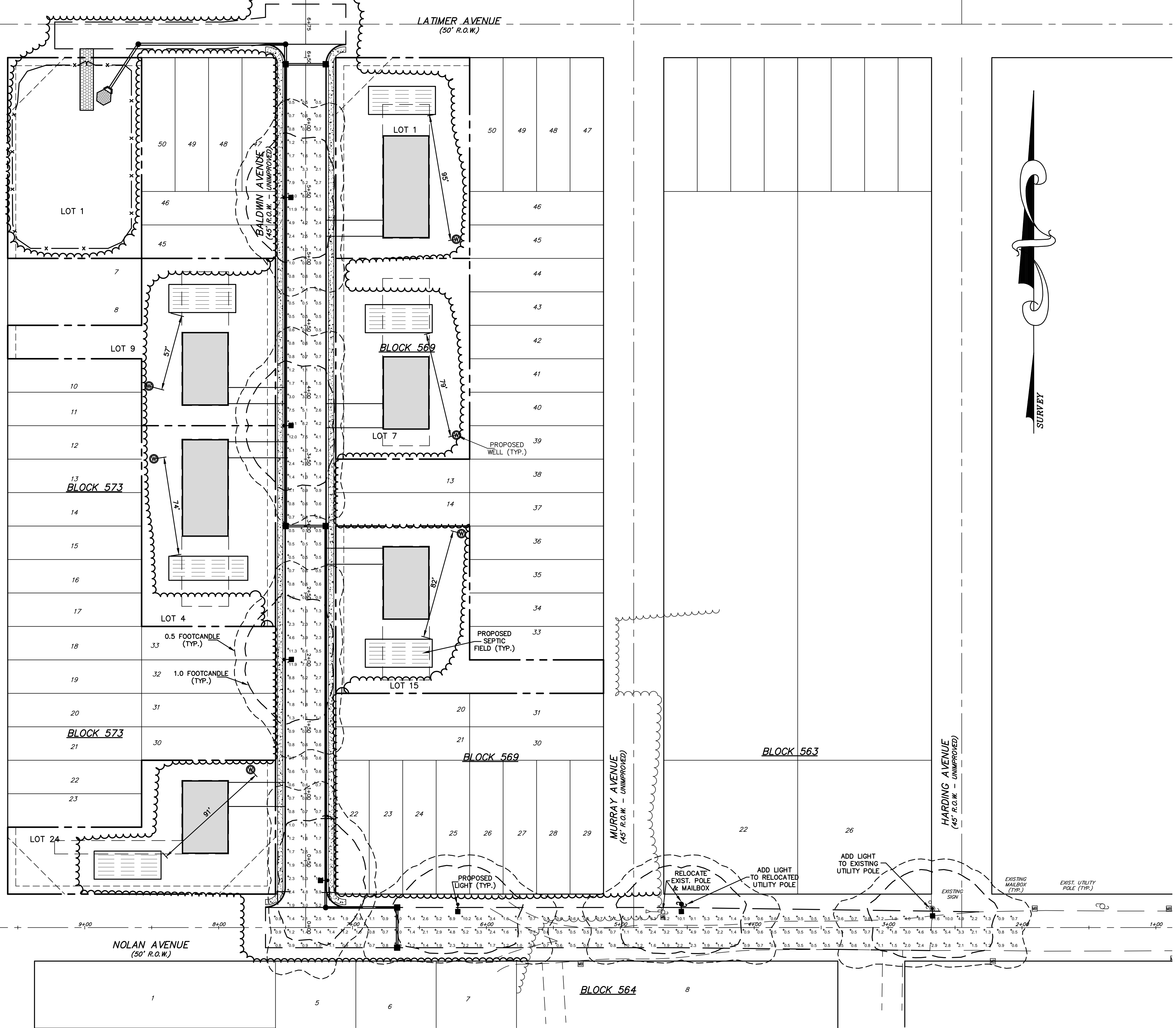
**MISC. BLOCKS AND LOTS**

**BERKELEY TOWNSHIP**

OCEAN COUNTY NEW JERSEY

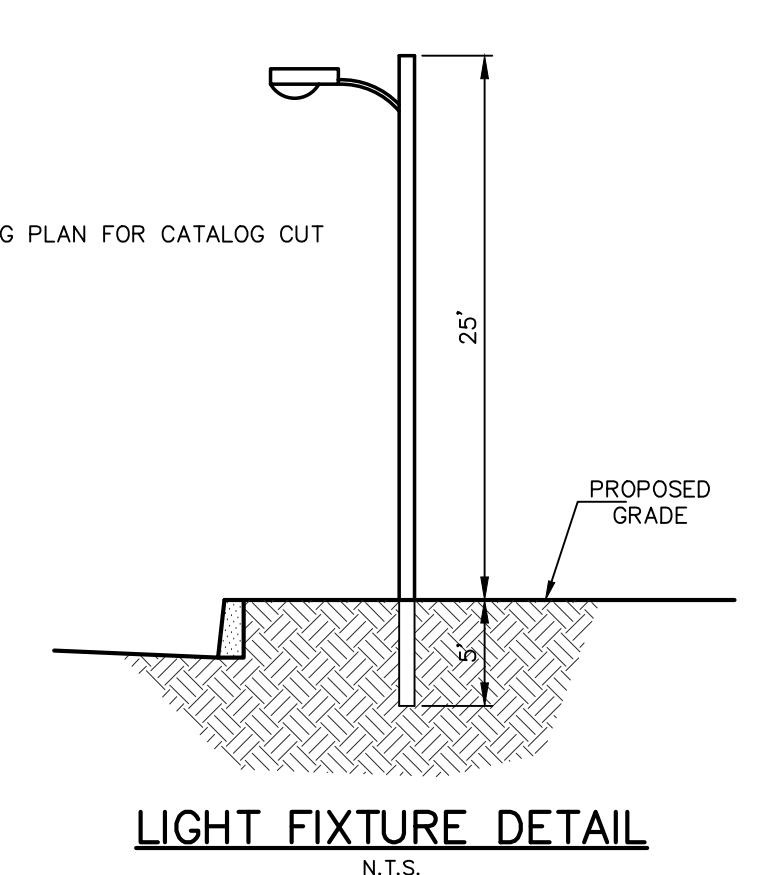
SCALE: 1"=40' DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 3 OF 3

DRAWN BY: MCS DESIGNED BY: WAS CHECKED BY: WAS



**LUMINAIRE:**  
SEE LUMINAIRE SCHEDULE ON LIGHTING PLAN FOR CATALOG CUT

**POLE:**  
POLE TO BE GE POLE, CATALOG CUT:  
A-R-5-A-30-3T-5-B-DB



**STATISTICS**

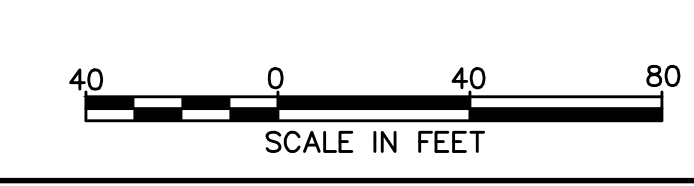
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Roadway Calculation	+	1.9 fc	12.1 fc	0.5 fc	24.2:1	3.8:1

**LUMINAIRE SCHEDULE**

Symbol	Mounting Feet	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
☛	25 feet	7	M2RC-25-S-1-N-2-G-MC3	M-250R2 CUTOFF	1-250W HPS, CLEAR ED18, HORZ	GE177305.IES	28000	1.00	305

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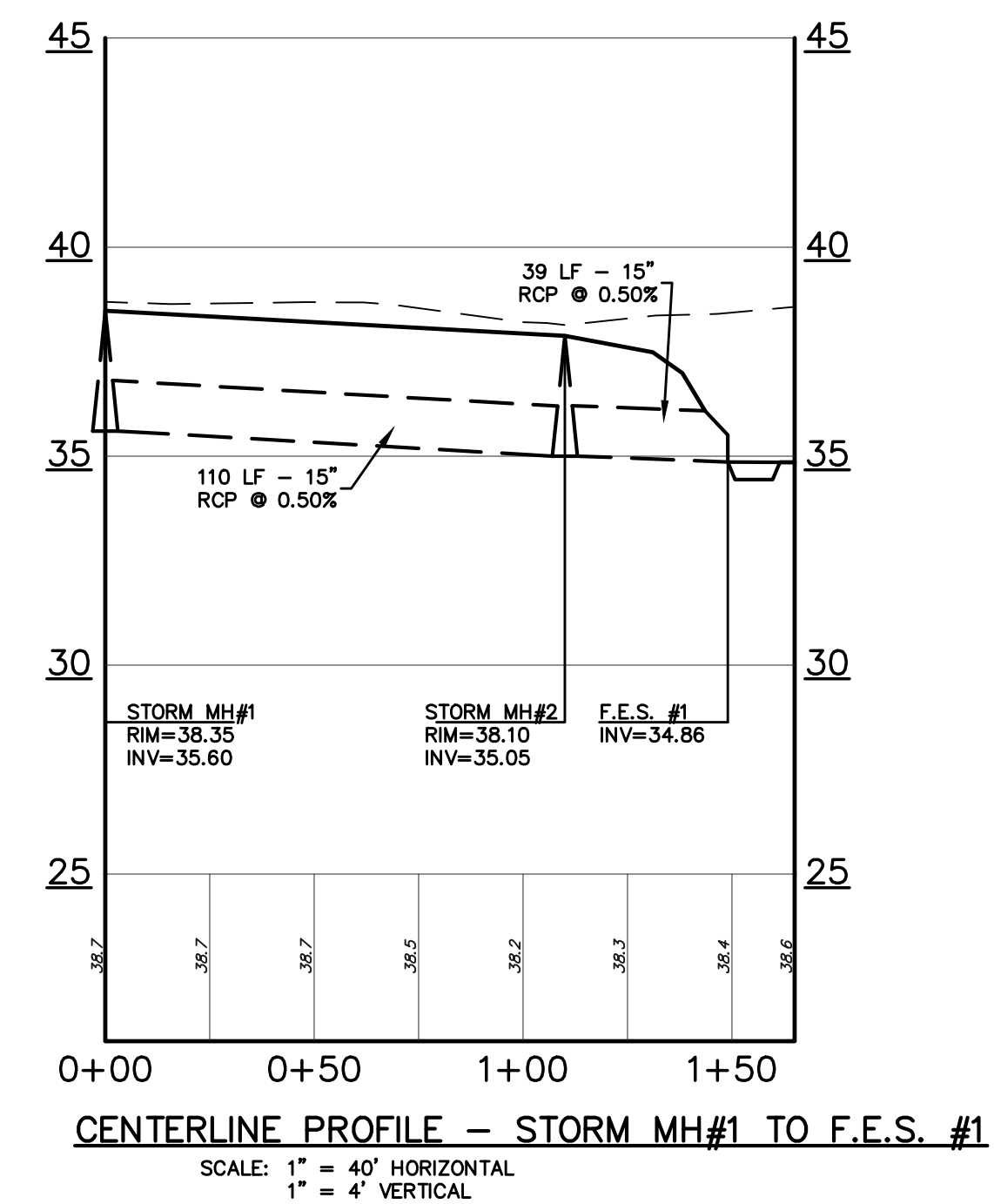
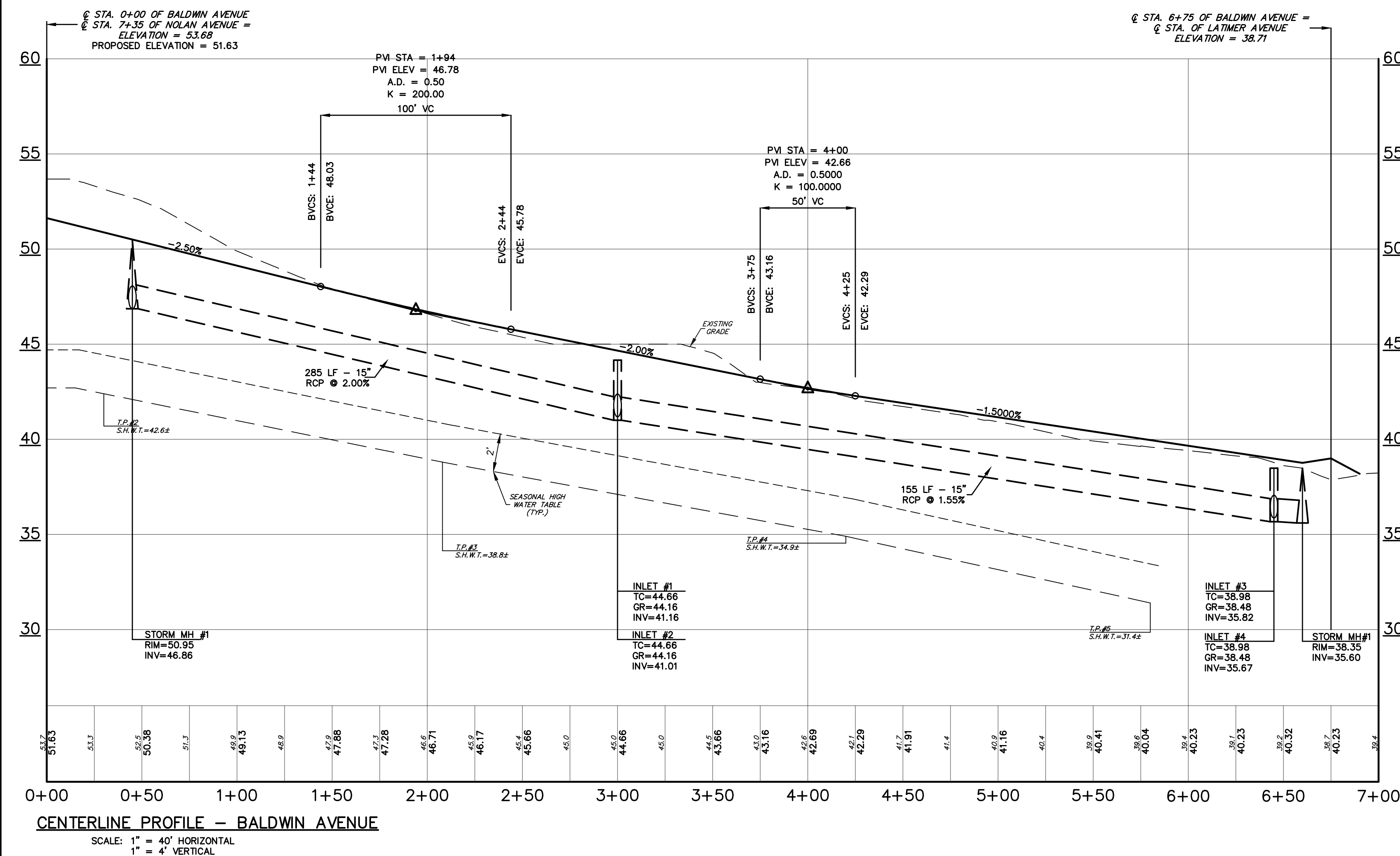
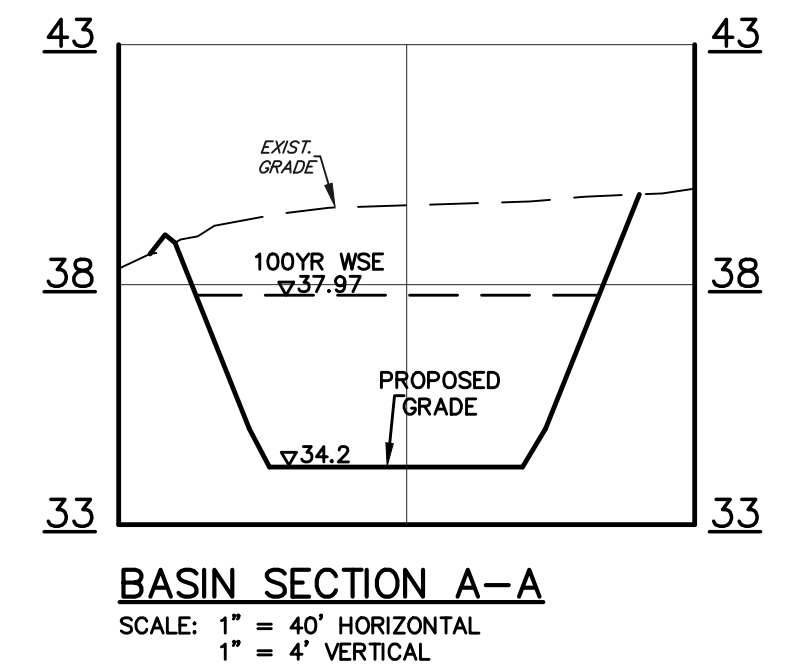
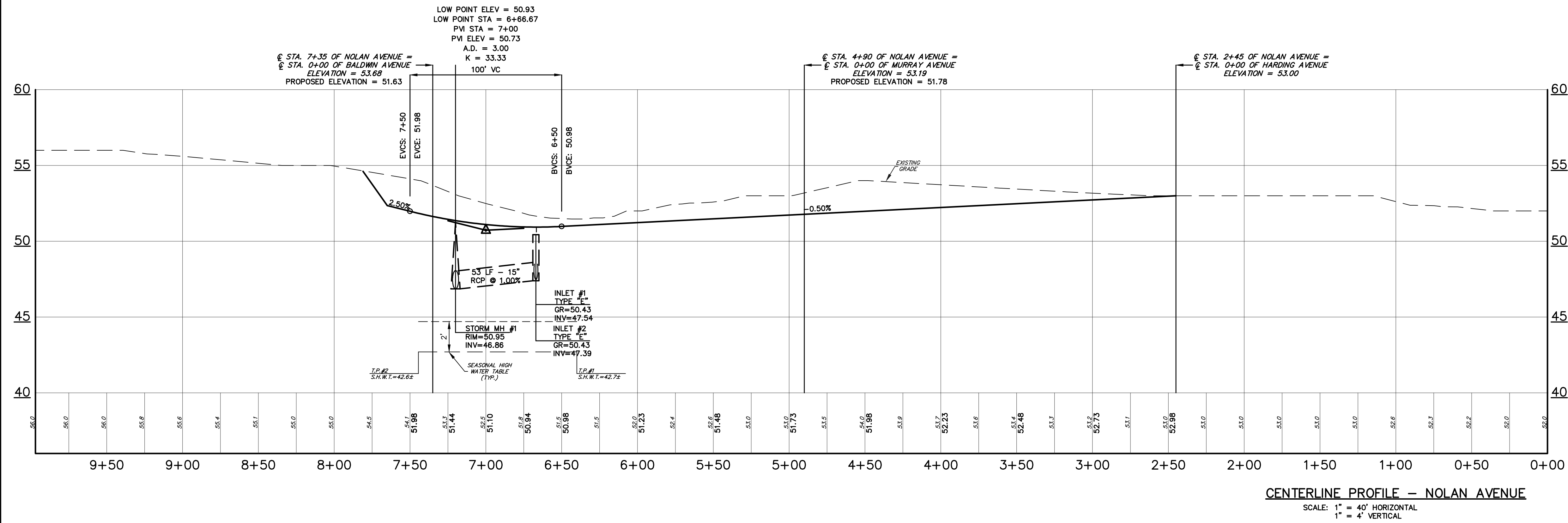
NO.	DATE	DESCRIPTION	BY
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1	1/11/08	REVISED PER PLANNING BOARD ENGINEER	MCS



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**WILLIAM A. STEVENS, P.E., P.P.**  
PROFESSIONAL ENGINEER, NEW JERSEY LIC #22915  
PROFESSIONAL PLASTER, NEW JERSEY LIC #5384

**ROADWAY IMPROVEMENT PLANS  
LIGHTING & UTILITY PLAN**  
FOR  
**PINEWALD ESTATES**  
MISC. BLOCKS AND LOTS  
BERKELEY TOWNSHIP  
OCEAN COUNTY NEW JERSEY

SCALE: 1"=40' DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 4  
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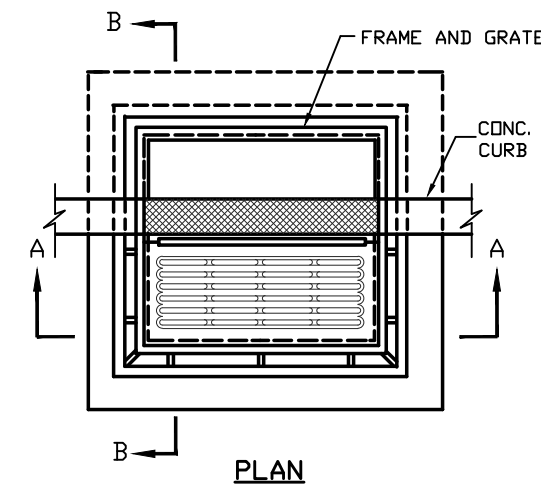
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**WILLIAM A. STEVENS, P.E., P.P.**  
 PROFESSIONAL ENGINEER NEW JERSEY LIC. #39915  
 PROFESSIONAL PLANNER NEW JERSEY LIC. #10000

**ROADWAY IMPROVEMENT PLANS**  
**PROFILES**  
 FOR  
**PINEWALD ESTATES**  
 MISC. BLOCKS AND LOTS  
 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

SCALE: AS NOTED DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 5  
 DRAWN BY: MCS DESIGNED BY: MCS CHECKED BY: MCS

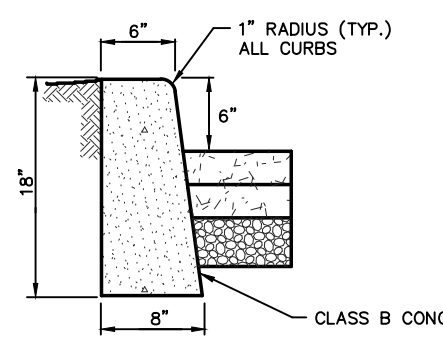
		TABLE OF TRENCH WIDTHS			
COLUMNS	1	2	3	4	5
PIPE DIA.	SPEC. WIDTH	STONE OR GRAVEL BEDDING TO 1/4 POINT TO 1/2 POINT		CONCRETE CRADLE	
6"-8"	2'-6"	3'-0"	3'-0" TO 4'-0"	OVER 4'-0"	
10"-12"	3'-0"	3'-6"	3'-6" TO 5'-0"	OVER 5'-0"	
16"-24"	3'-6"	4'-0"	4'-0" TO 5'-6"	OVER 5'-6"	

- NOTES:
- ALL TRENCHES & EXCAVATIONS TO BE GIVEN THE STEEPEST SIDE SLOPE POSSIBLE.
  - IF THE WIDTH OF THE TRENCH AT OR BELOW THE OUTSIDE TOP OF THE PIPE EXCEEDS THE TRENCH WIDTH IN COLUMN 2, THE SPACE BETWEEN THE PIPE AND THE SIDE OF THE TRENCH OR SHEETING SHALL BE BACKFILLED WITH CLEAN WELL GRADED SAND OR SELECT MATERIAL 1-2 BEDDING TO THE 1/4 POINT OF THE PIPE. IF THE TRENCH WIDTH EXCEEDS THE WIDTH IN COLUMN 3, THE CLEAN WELL GRADED SAND OR SELECT MATERIAL 1-2 SHALL BE BROUGHT UP TO THE 1/2 POINT OF THE PIPE. IF THE TRENCH WIDTH EXCEEDS THE WIDTH IN COLUMN 4, THE CONTRACTOR SHALL PROVIDE A CLASS "B" CONCRETE CRADLE INSTEAD OF CLEAN WELL GRADED SAND OR SELECT MATERIAL 1-2 BEDDING TO THE 1/2 POINT OF THE PIPE, 20" DIAMETER OR SMALLER.
  - COMPACTED BACKFILL SHALL BE AS A MINIMUM 90% OF THE MAXIMUM DRY DENSITY OF SOIL AS DETERMINED BY A.S.T.M. D-1557. ( MODIFIED PROCTOR DENSITY )
  - COMPACTION OF THE TOP 2 FEET OF THE TRENCH (SURFACE ZONE) UNDER AREAS TO BE PAVED SHALL ACHIEVE AS A MINIMUM 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY A.S.T.M. D-1557.
  - SUITABLE BACKFILL MATERIAL SHALL BE SELECT MATERIAL 1-2 (N.J.D.O.T.) WHEN ONSITE SUITABLE MATERIAL IS NOT AVAILABLE.
  - CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE O.S.H.A., OTHER GOVERNMENTAL AGENCIES AND/OR REGULATIONS HAVING JURISDICTION OVER TRENCH DEPTHS AND SIDE SLOPES.



**GENERAL NOTES:**

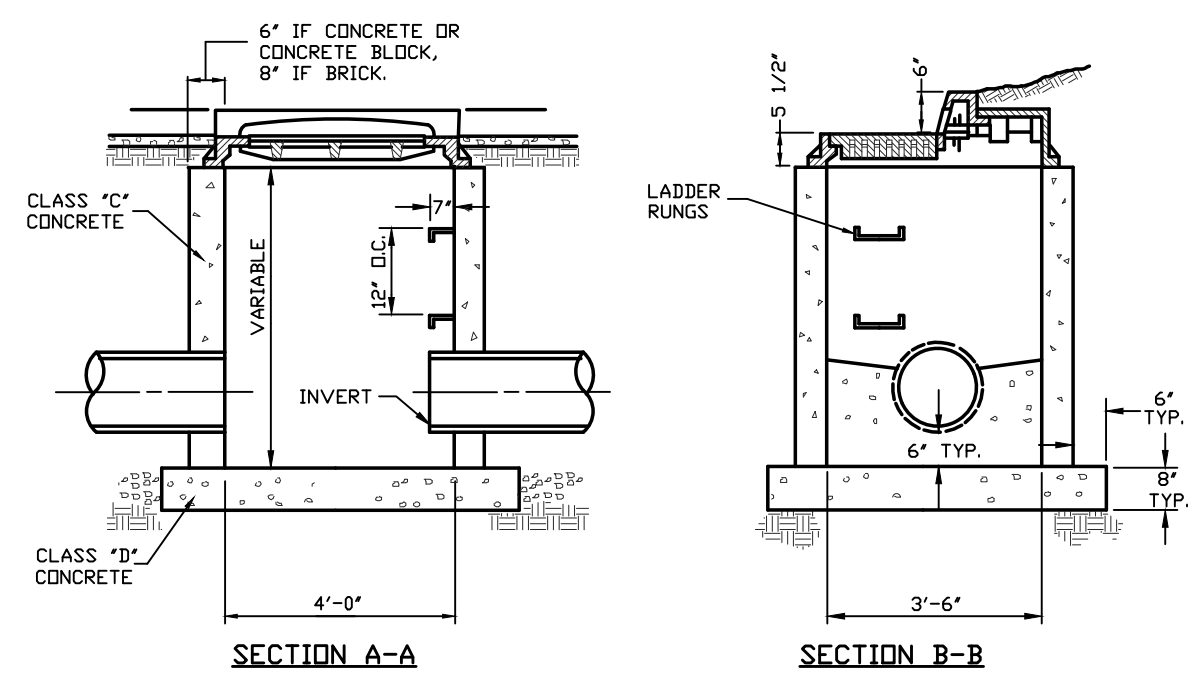
- FOOTER TO BE N.J.D.O.T. CLASS "D" CONC.
- INVERT TO BE CLASS "C" CONCRETE.
- IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER.
- THE GRATE SHALL BE CAMPBELL FOUNDARY NO. 2618 ECO GRATE OR APPROVED EQUAL.
- PROVIDE 7/8" DIA. ALUMINUM LADDER RUNGS, 12" O.C.
- ALL PRECAST STRUCTURES TO RECEIVE 2 COATS PORTLAND CEMENT MORTAR OUTSIDE.



NOTES:

- EXPANSION JOINTS SHALL BE CONSTRUCTED 20' ON CENTER, AND CONTRACTION JOINTS SHALL BE CONSTRUCTED 10' ON CENTER.
- TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20'-0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS IMPREGATED FIBER FILLER, COMPLYING WITH ALL OF THE REQUIREMENTS OF AASHTO SPEC. M 213, RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB. ALL JOINTS TO BE FULL DEPTH OF 18".

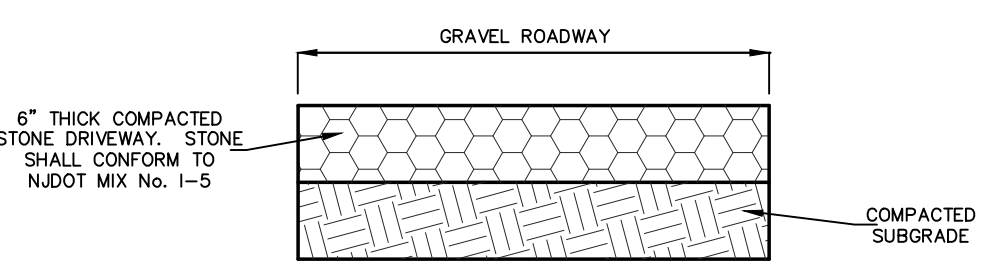
**CONCRETE CURB DETAIL**



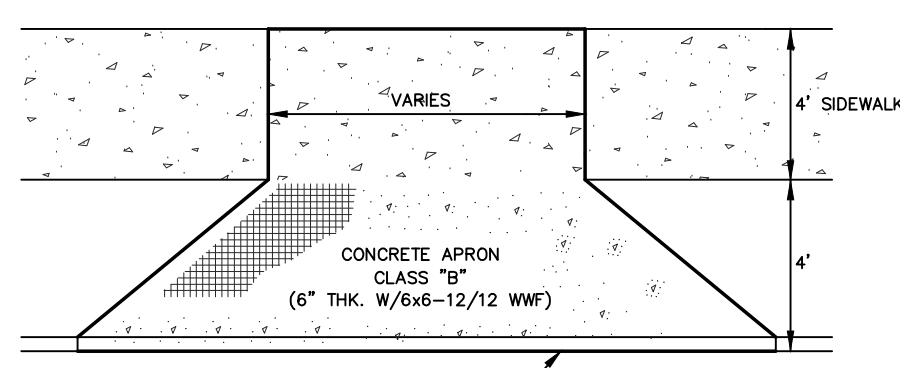
**TYPE "B" INLET**

**TYPICAL TRENCH DETAILS**

N.T.S.



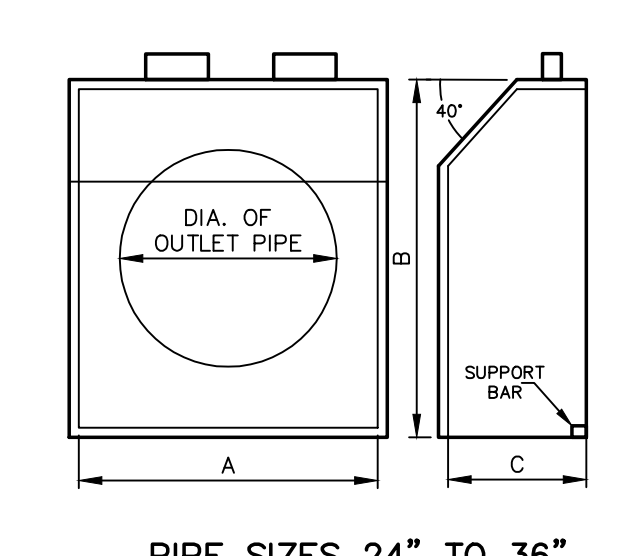
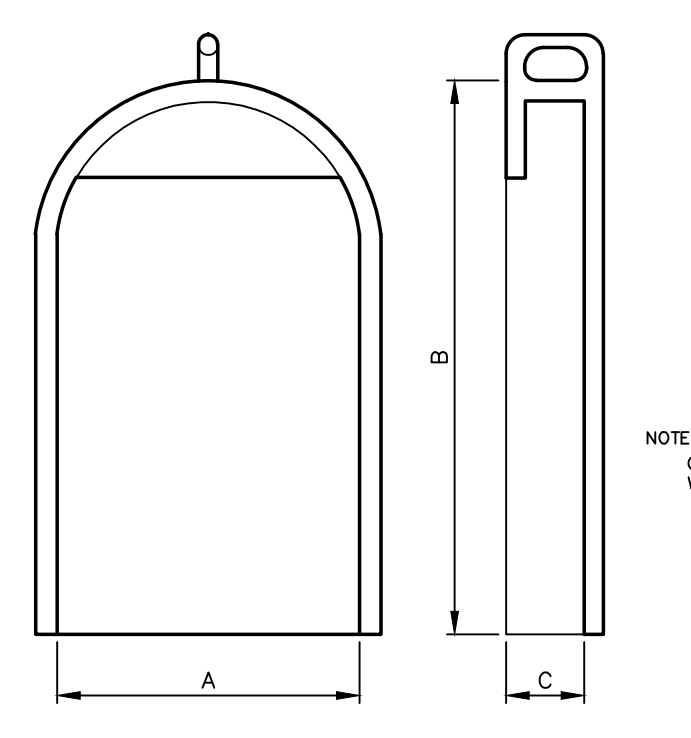
N.T.S.



**DRIVEWAY APRON DETAIL**

N.T.S.

- NOTES:
- CONCRETE TO BE N.J.S.H.D. CLASS "B"
  - PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20'-0" (MAX.) INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS



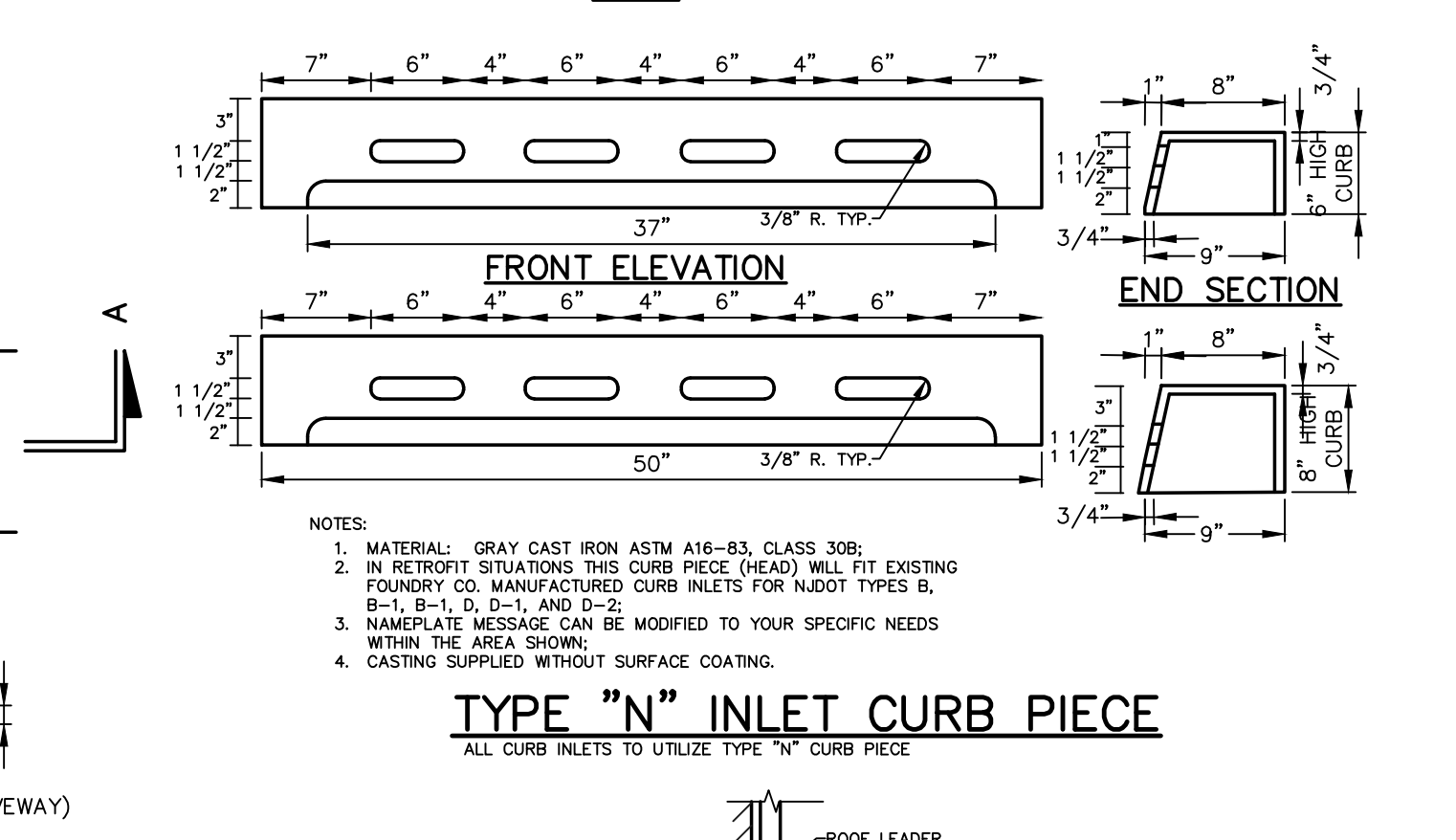
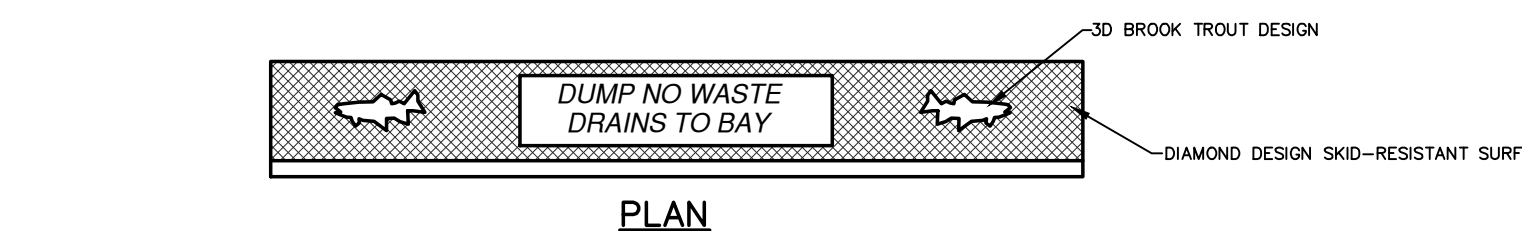
PATTERN NUMBER	DIMENSION IN INCHES			PIPE SIZE
	A	B	C	
2561	8.5	21.5	15	8
2562	11.5	23.5	15	8
2563	15.75	27	15	10
2564	18	27	15	12
2565	20	27	15	14
2566	25.25	30	11.25	21
2568	30	35.75	15	24

PATTERN NUMBER	DIMENSION IN INCHES			PIPE SIZE
	A	B	C	
2569 0344	29	38	15	24
2569 0374	33	39	18	27
2569 0384	36	42	20	30
2569 0364	42	48	22	36
2569 0424	48	54	24	42
2569 0484	54	60	34	48
2569 0544	60	66	38	54

**SIDEWALK NOTES:**

- A PREFORMED, BITUMINOUS EXPANSION JOINT 1/2" THICK, 4" WIDE, AND EXTENDING THE FULL WIDTH OF THE WALK, UNBROKEN, SHALL BE INSTALLED EVERY 30 FEET. CONTRACTION JOINTS SHALL BE INSTALLED EVERY 4 FEET THE FULL WALK WIDTH.
- THERE SHALL BE A FLOAT FINISH WITH THE EDGES FINISHED WITH A SUITABLE TOOL.
- ANY EXISTING SIDEWALK DAMAGED BY CONSTRUCTION SHALL BE REPLACED IN BE REPLACED IN KIND.

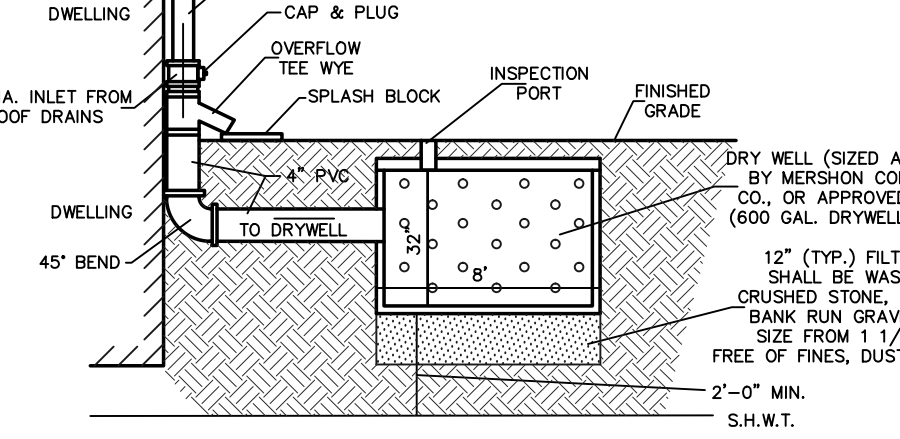
**SIDEWALK DETAIL**



**TYPE "N" INLET CURB PIECE**

- NOTES:
- MATERIAL: GRAY CAST IRON ASTM A16-B3, CLASS 30B;
  - IN NARROW SITUATIONS THIS CURB PIECE (HEAD) WILL FIT EXISTING FOUNDRY CO. MANUFACTURED CURB INLETS FOR NJDOT TYPES B, B-1, B-1, D, D-1, AND D-2;
  - NAMEPLATE MESSAGE CAN BE MODIFIED TO YOUR SPECIFIC NEEDS WITHIN THE AREA SHOWN;
  - CASTING SUPPLIED WITHOUT SURFACE COATING.

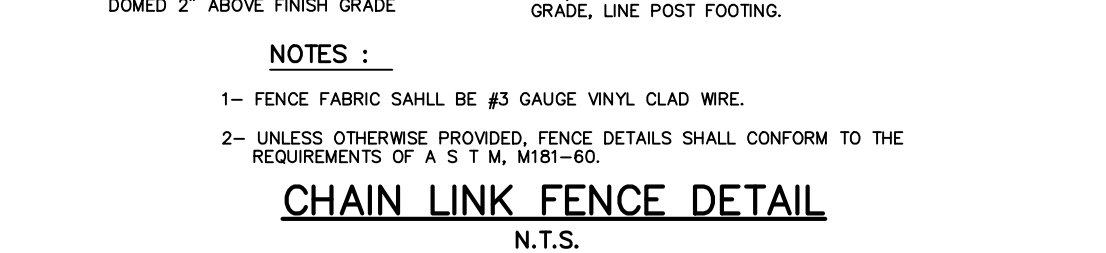
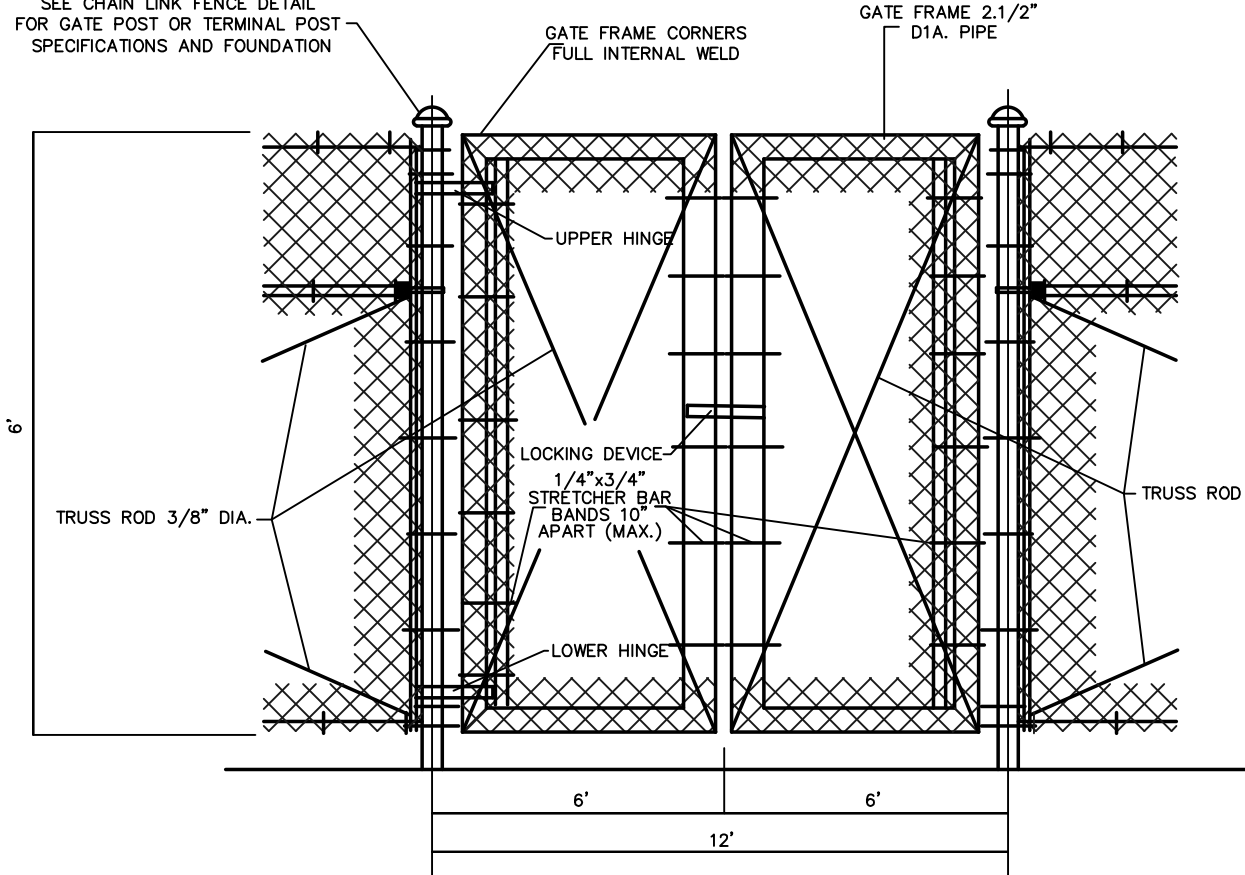
ALL CURB INLETS TO UTILIZE TYPE "N" CURB PIECE



**DRYWELL WITH ROOF LEADER DETAIL**

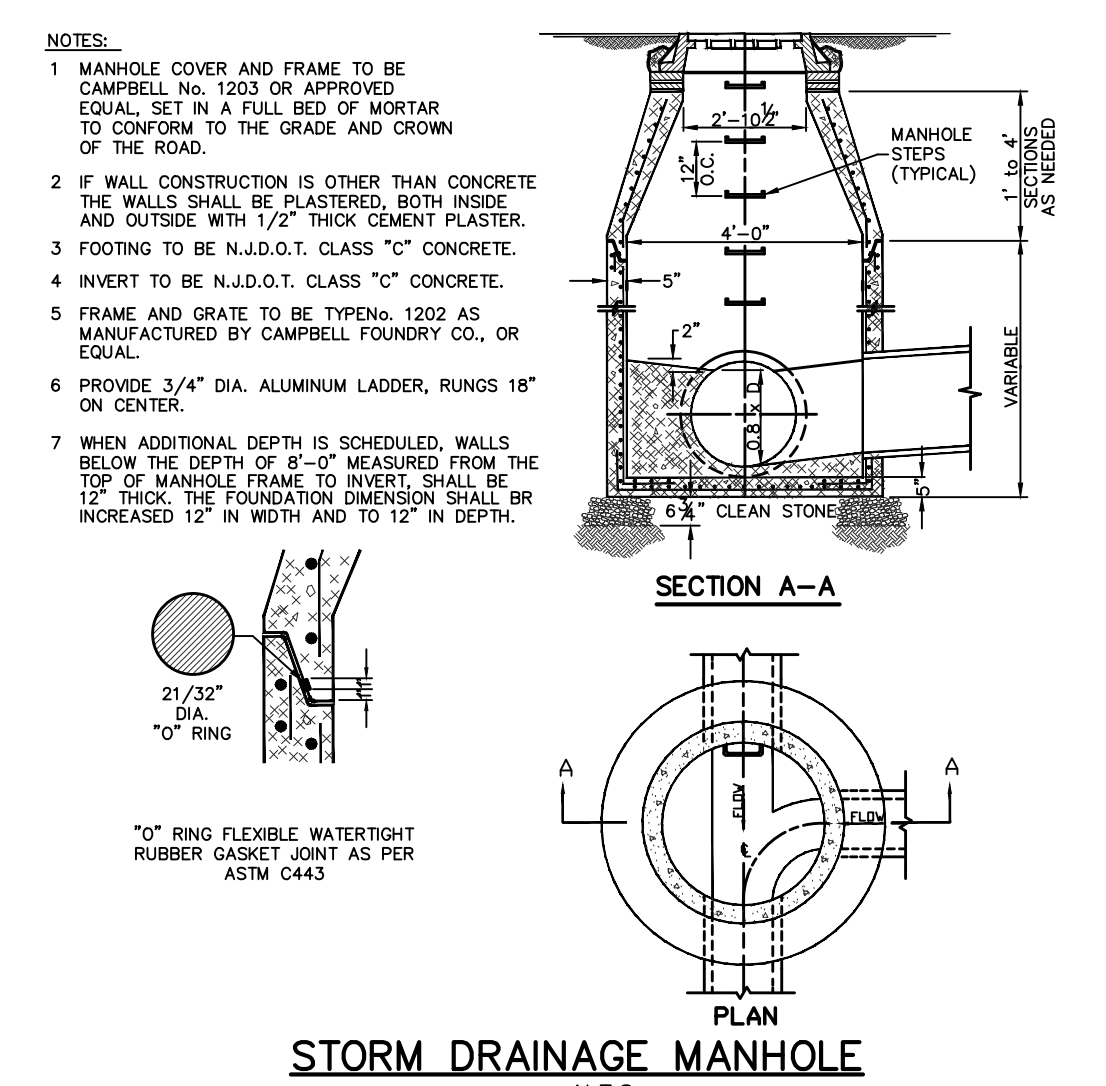
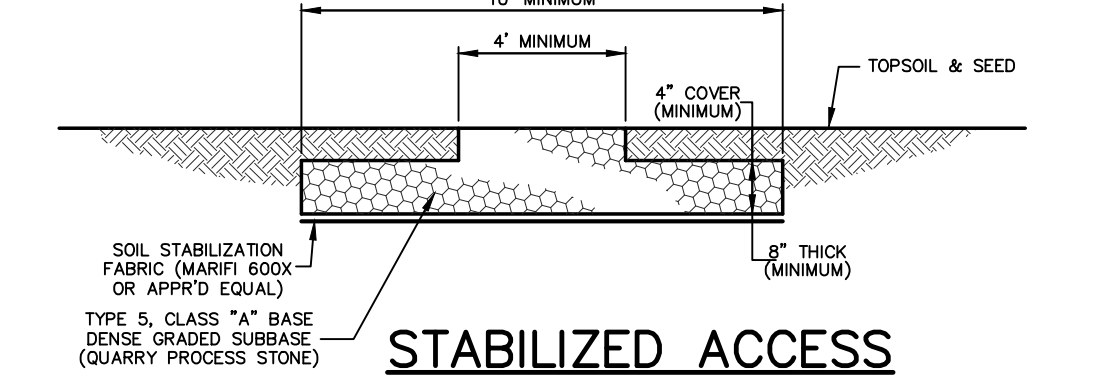
NOTE: DRYWELL TO BE WRAPPED IN FILTER FABRIC.

**CHAIN LINK FENCE GATE DETAIL**

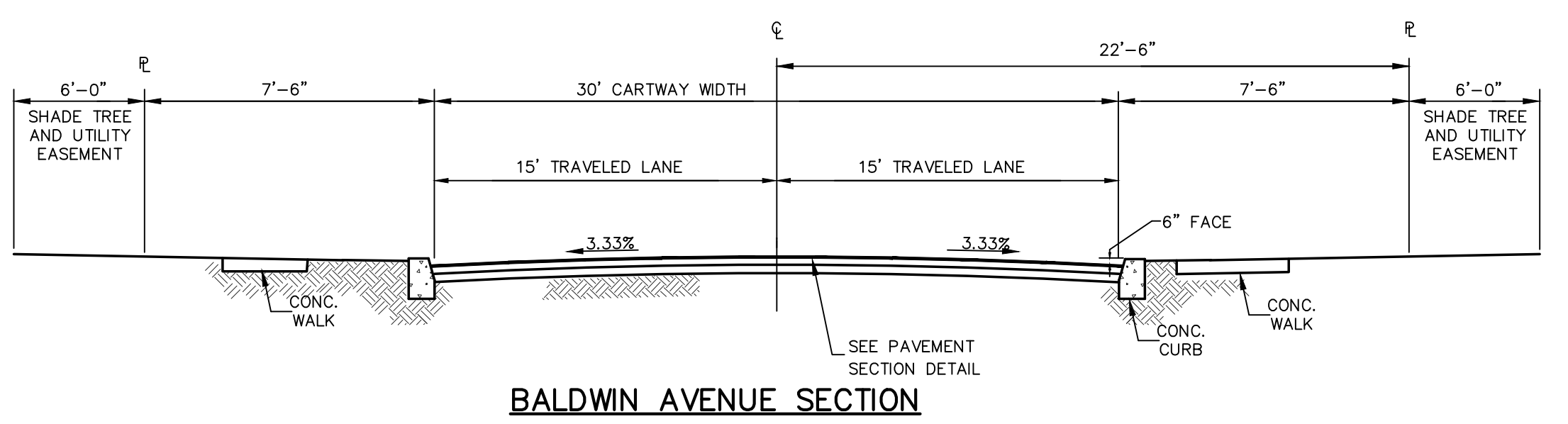


**CHAIN LINK FENCE DETAIL**

- NOTES:
- FENCE FABRIC SHALL BE #3 GAUGE VINYL CLAD WIRE.
  - UNLESS OTHERWISE PROVIDED, FENCE DETAILS SHALL CONFORM TO THE REQUIREMENTS OF A S I M, M181-60.



**STORM DRAINAGE MANHOLE**



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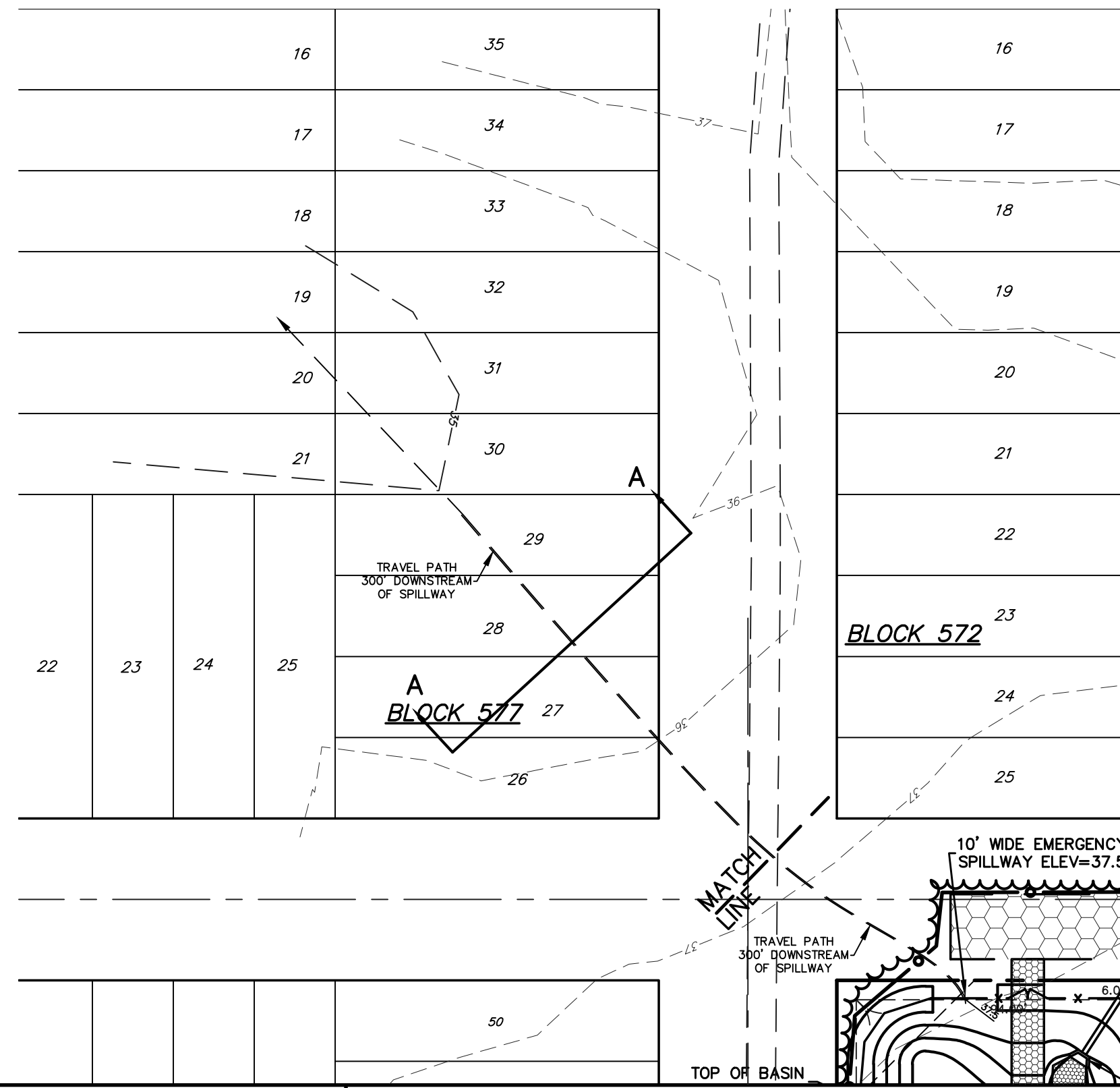
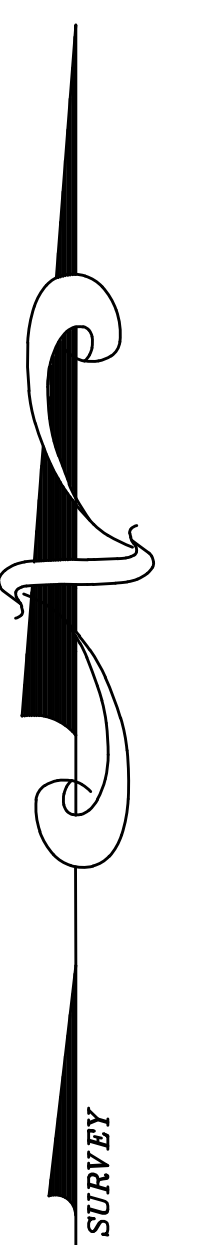
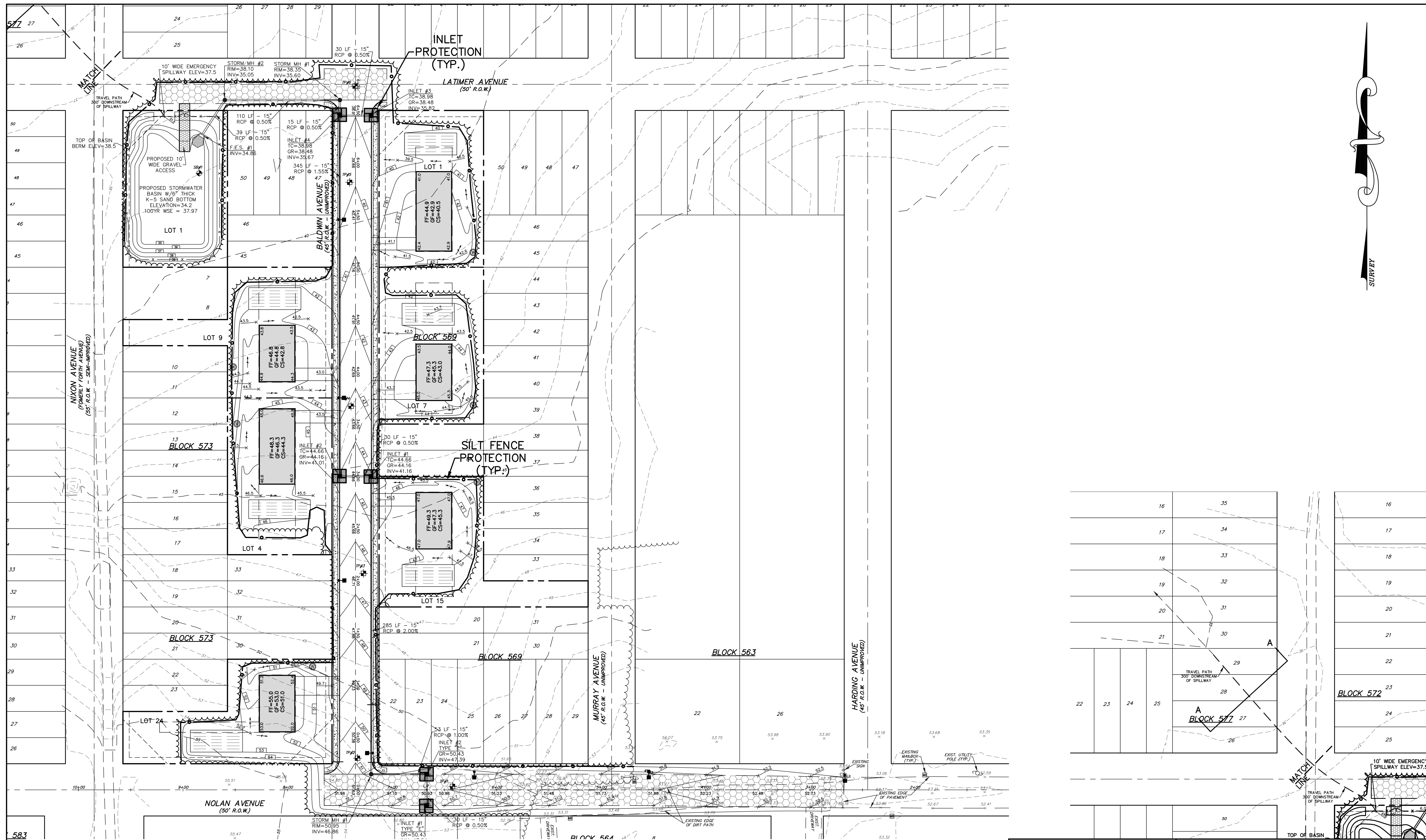
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**WILLIAM A. STEVENS, P.E., P.P.**  
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 PROFESSIONAL PLANNER NEW JERSEY LIC. 8789

**ROADWAY IMPROVEMENT PLANS**  
**CONSTRUCTION DETAILS**  
 FOR  
**PINEWALD ESTATES**  
**MISC. BLOCKS AND LOTS**  
 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

SCALE: N.T.S. DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 6

DRAWN BY: MCS DESIGNED BY: MCS CHECKED BY: MCS



**GENERAL NOTES:**

1. ALL GRAVEL ROADWAYS SHALL BE COVERED WITH A 2" LAYER OF CLEAN STONE.



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**WILLIAM A. STEVENS, P.E., P.P.**  
PROFESSIONAL ENGINEER, NEW JERSEY LIC. #39915  
 PROFESSIONAL PLANNER, NEW JERSEY LIC. #38874

**ROADWAY IMPROVEMENT PLANS**  
**SOIL EROSION & SEDIMENT CONTROL PLAN**  
 FOR  
**PINEWALD ESTATES**  
**MISC. BLOCKS AND LOTS**  
 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

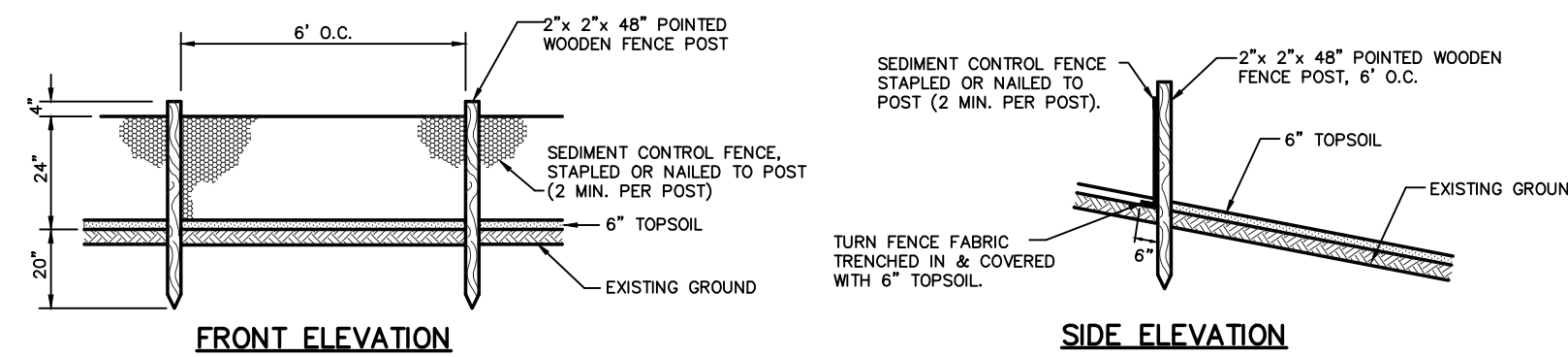
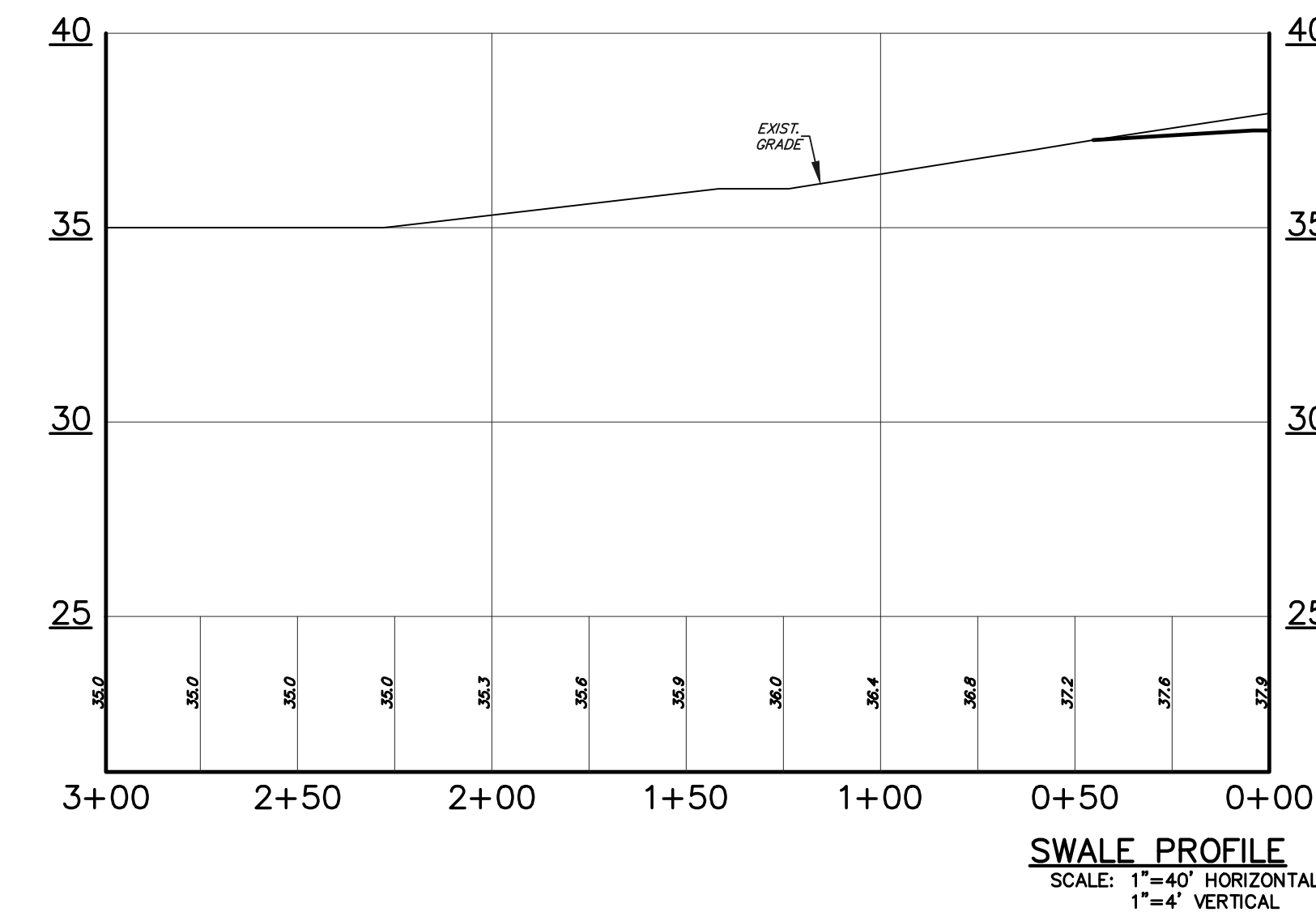
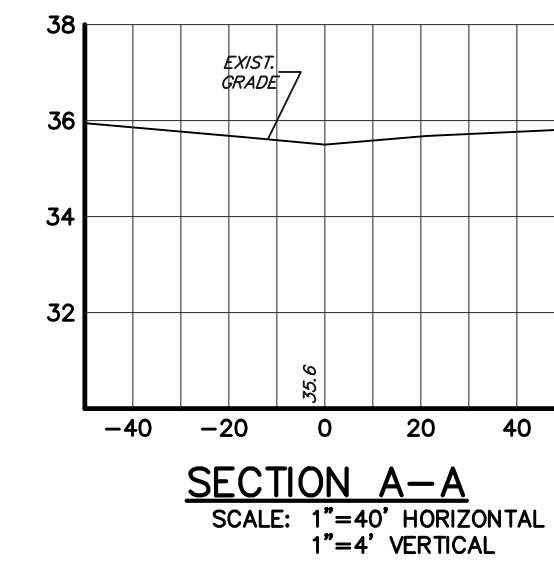
SCALE: 1"=40' DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 1  
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**SOIL EROSION AND SEDIMENT CONTROL NOTES**

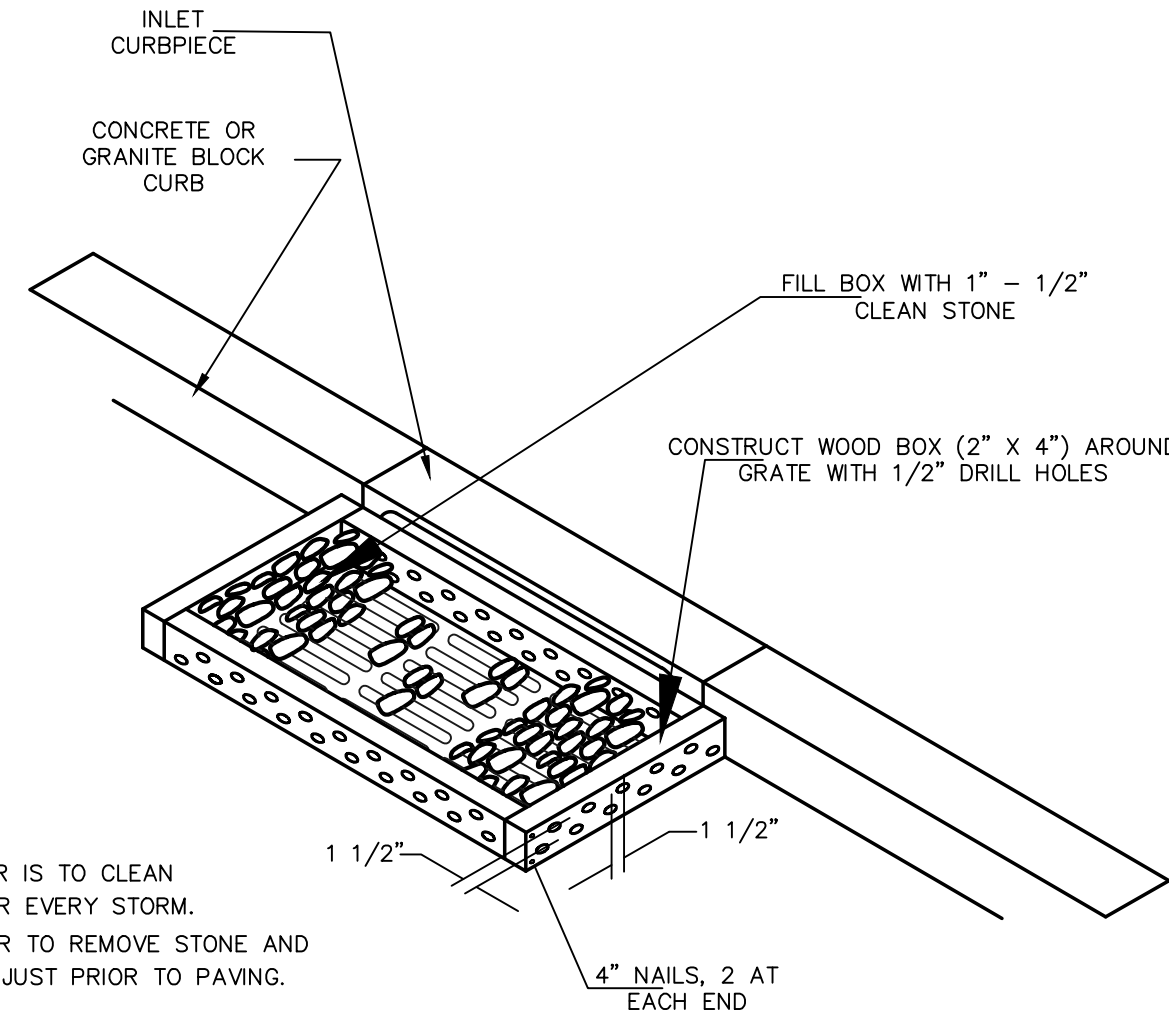
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- PERMANENT VEGETATION TO BE SEED OR SODDED ON ALL EXPOSED AREAS WITHIN THE (10) DAYS AFTER FINAL GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING ESTABLISHED.
- ALL WORK TO BE DONE IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
- A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE ROADWAY AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN 15 DAYS OF THE PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E., SLOPES GREATER THAN 3:1)
- TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 25'X50'X12" THICK PAD OF 1 1/2" STONE TO 2 1/2", AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- IN ACCORDANCE WITH THE STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION.
- ALL SEED MUST BE RAKED OR DRILLING INTO THE SOIL. ALL SEEDED AREAS MUST BE MULCHED AS PER NOTE 6.
- THE OCEAN COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF ANY LAND DISTURBANCE ACTIVITY.
- AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.  
IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATIONS WILL HAVE TO BE EMPLOYED.
- IN THE N.J.S.A. 4:24-39 ET SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR SITE PLANS WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
- ALL STEEP SLOPES WILL BE TEMPORARILY STABILIZED UPON ESTABLISHMENT OFF ROUGH GRADE AND JUTE MATTING WILL BE USED ON ALL STEEP SLOPES TO AID IN ESTABLISHING PERMANENT VEGETATION.
- DUST CONTROL SHALL CONSIST OF CALCIUM CHLORIDE ON ALL ROADWAYS AND A COMBINATION OF MULCH AND VEGETATIVE COVER ON ALL REMAINING AREAS AS NEEDED.
- RESIDENTIAL DEVELOPMENT CONTROL MEASURES TO APPLY TO DWELLING CONSTRUCTION ON INDIVIDUAL LOTS AND NOTATION THAT SUCH CONTROL MEASURES WILL APPLY TO SUBSEQUENT OWNERS IF TITLE IS CONVEYED.
- ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE TOWNSHIP, AND SHALL BECOME THEIR RESPONSIBILITY.
- PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
- DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTRARY SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE ENGINEER OR DISTRICT PERSONNEL.
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- ANY CHANGES TO BE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
- ADDITIONAL STABILIZATION MEASURES MAY BE REQUIRED AS DIRECTED BY THE SOIL CONSERVATION DISTRICT IF RUNOFF FROM ROOF DOWNSPOUTS CREATE EROSION ON ADJACENT SLOPES.
- ADDITIONAL STABILIZATION MEASURES WILL BE REQUIRED IF EROSION OCCURS ALONG THE EDGES OF THE DRIVEWAYS.
- THE DETENTION BASIN SHALL BE CONSTRUCTED AND PERMANENTLY STABILIZED BEFORE RUNOFF IS ALLOWED TO ENTER THE DRAINAGE SYSTEM.
- ROOF RECHARGE SYSTEMS ARE REQUIRED ON EACH LOT.
- INDIVIDUAL LOT ENTRANCES AND EGRESS POINTS AFTER INTERIOR ROADS ARE PAVED, MAY REQUIRE A CONSTRUCTION ACCESS OF 1" TO 2" STONE.
- DURING CONSTRUCTION, THE DEVELOPER WILL BE RESPONSIBLE FOR BASIN MAINTENANCE AND THE TOWNSHIP WILL BE RESPONSIBLE FOR BASIN MAINTENANCE AFTER CONSTRUCTION IS COMPLETED.
- INDIVIDUAL LOT ENTRANCE & EGRESS POINTS AFTER INTERIOR ROADS ARE PAVED, MAY REQUIRE A CONSTRUCTION ACCESS OF 1" TO 2" STONE.
- ROOF RECHARGE SYSTEMS ARE REQUIRED AT EACH LOT.
- THE TOWNSHIP OF BERKELEY WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE BASIN AFTER CONSTRUCTION.
- THE DEVELOPER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE BASIN DURING CONSTRUCTION.

**SEEDING SCHEDULE**

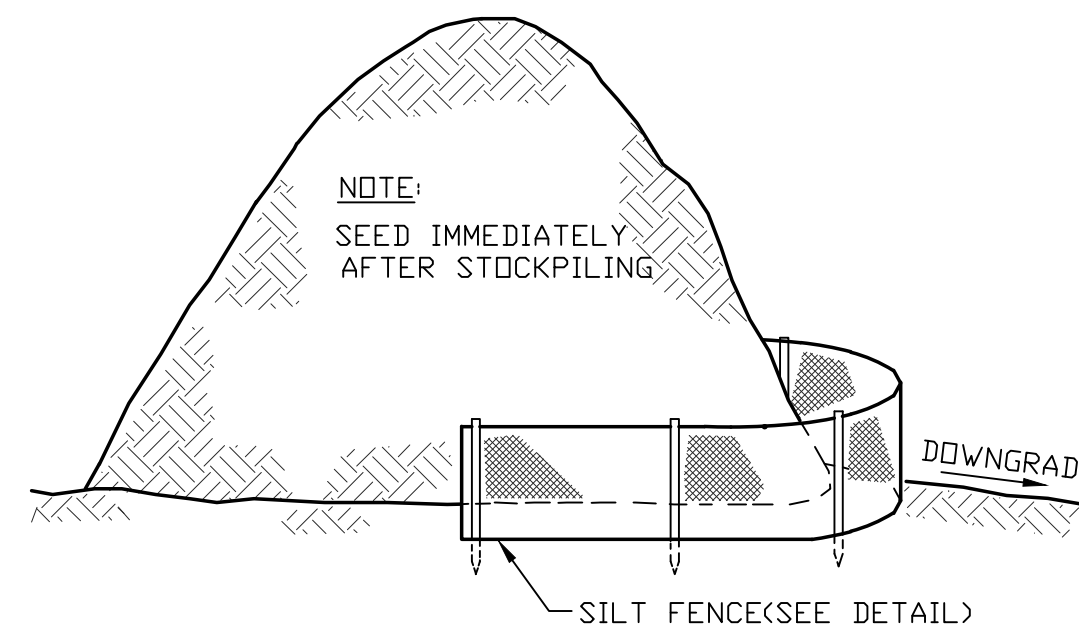
- TEMPORARY SEEDING SHALL CONSIST OF SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER 1,000 S.F. OR GRAIN RYE APPLIED AT A RATE OF 2.4 LBS. PER 1,000 S.F. TEMPORARY SEEDING SHALL BE MULCHED AND MAINTAINED UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING.
- PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL - OPTIMUM SEEDING DATES ARE BETWEEN APRIL 15 AND NOVEMBER 1:  
KENTUCKY 31 TALL FESCUE @ 2.0#/1000 S.F.  
CHEWINGS FESCUE @ 1.0#/1000 S.F.  
CREEPING RED FESCUE @ 1.0#/1000 S.F.  
PERENNIAL RYEGRASS @ 0.5#/1000 S.F.
- PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT A RATE 150#/ACRE. SLOPED AREA TO BE COVERED WITH MULCH AS INDICATED IN NOTE 6.
- FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE 10-20-20 APPLIED AT A RATE OF 14#/1000 S.F. OR AS DETERMINED BY SOIL TEST. LIMESTONE FOR TEMPORARY SEEDING SHALL BE APPLIED AT A RATE OF 90#/1000 S.F. LIMESTONE FOR PERMANENT SEEDING SHALL BE APPLIED AT A RATE OF 135#/1000 S.F.
- IF SEASON PREVENTS THE ESTABLISHMENT TO TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6.
- MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH WOOD AND FIBER MULCH BINDER OR AN APPROVED EQUAL. MULCH WILL BE SPREAD AT RATES OF 90 TO 115 LBS. PER 1000 S.F. AND ANCHORED WITH MULCHED ANCHORING TOOL OR LIQUID MULCH BINDER, AND SHALL BE PROVIDED ON ALL SEEDING.



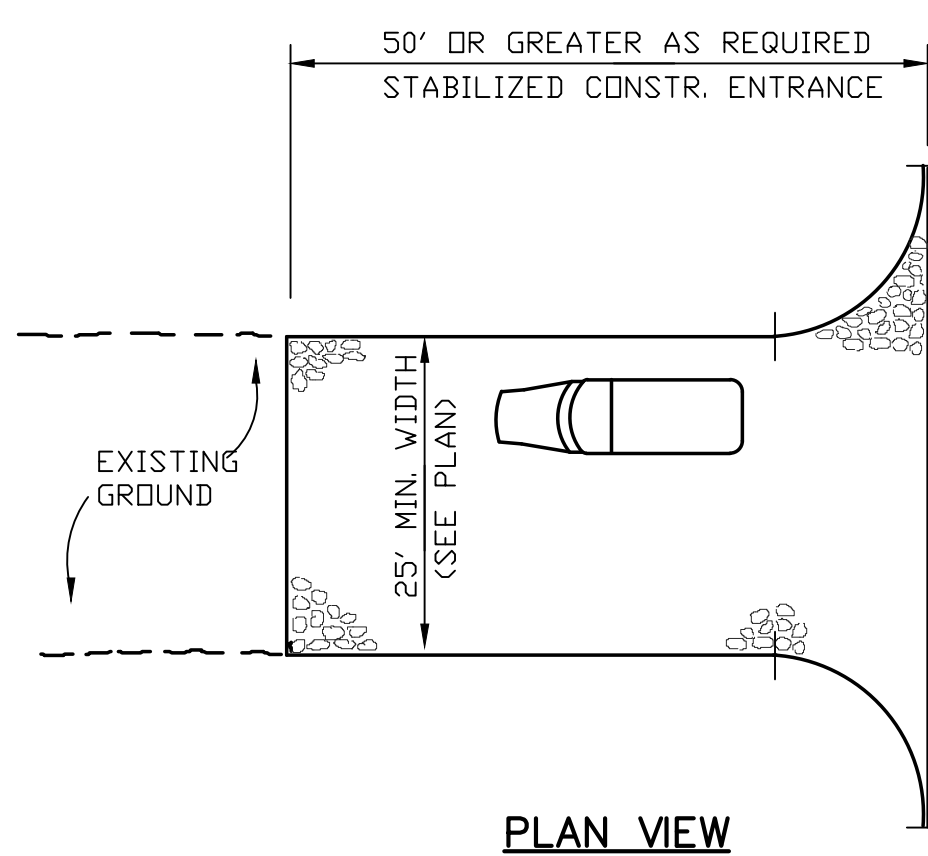
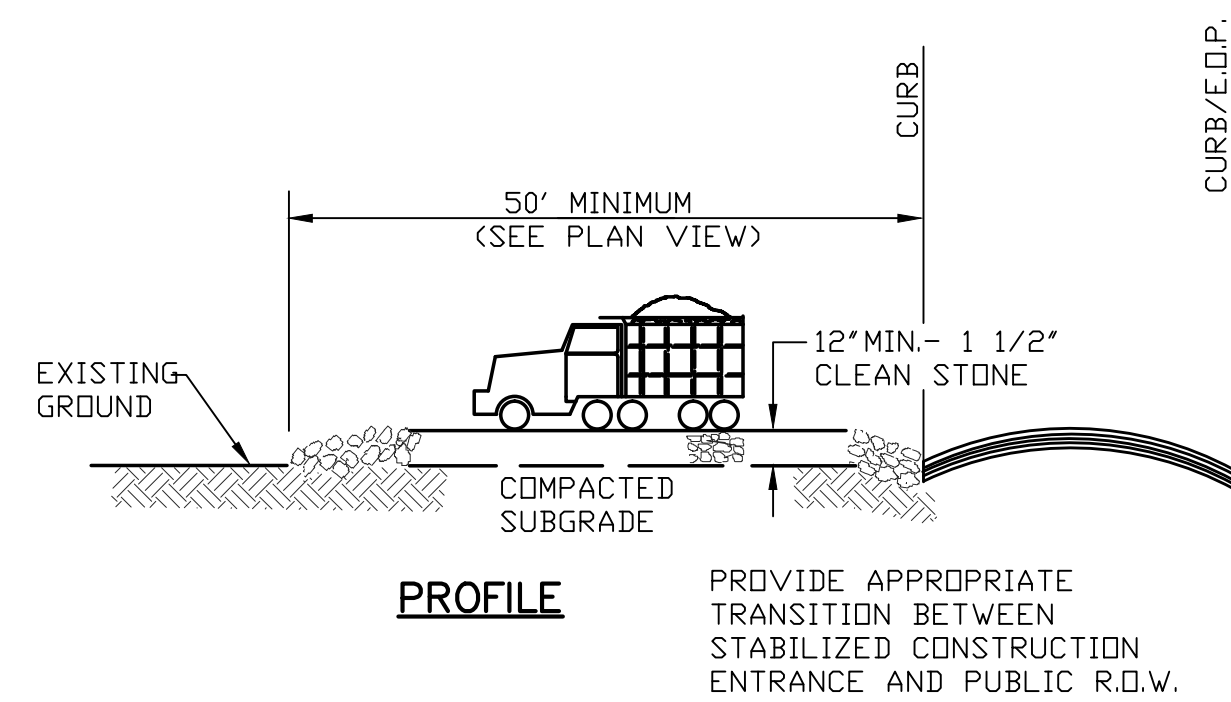
**TEMPORARY SILTATION CONTROL FENCE**



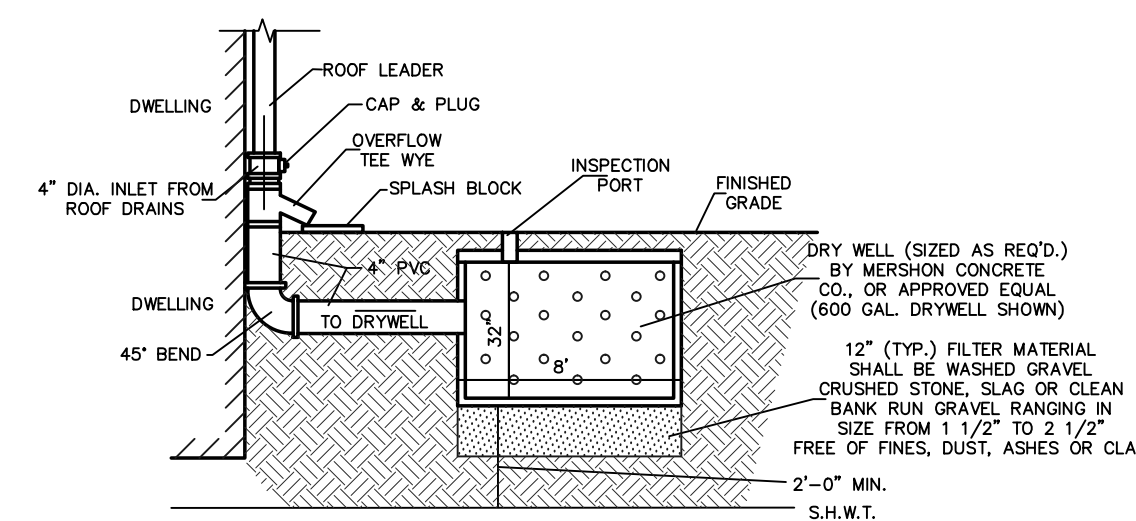
**INLET PROTECTION**



**TYPICAL TOPSOIL STOCKPILE**



**TEMPORARY STABILIZED CONSTRUCTION ENTRANCE**



**DRYWELL WITH ROOF LEADER DETAIL**

**SEQUENCE OF CONSTRUCTION (PER SECTION):**

NO.	DESCRIPTION	APPROXIMATE TIME
1.	INSTALLATION OF SEDIMENT FABRIC PRIOR TO ANY LAND DISTURBANCE.	14 DAYS
2.	APPLICATION OF PROPER MEASURES FOR THE CONTROL OF SOIL EROSION AND SEDIMENT CONTROL INCLUDING THE STAKING OF HAY BALE SEDIMENT BARRIER WHERE SHOWN ON THE PLANS.	30 DAYS
3.	CONSTRUCT VEHICLE WHEEL-CLEANING BLANKET WHERE CONSTRUCTION TRAFFIC ENTERS PAVED ROADWAYS.	7 DAYS
4.	SITE GRADING, CLEARING SITE, SUBGRADE ROAD AND PARKING AREAS AS SHOWN ON THE GRADING PLANS WITH APPROPRIATE EROSION CONTROL FACILITIES.	90 DAYS
5.	PROVIDE AND INSTALL TEMPORARY STABILIZATION MEASURES AS REQUIRED.	30 DAYS
6.	CONSTRUCTION OF VARIOUS DRAINAGE FACILITIES, DETENTION BASIN AND INSTALLATION OF EROSION CONTROL MEASURES FOR DRAINAGE STRUCTURES.	60 DAYS
7.	INSTALLATION OF CONCRETE CURB AND SUB-BASE COURSE AS PER PLAN.	30 DAYS
8.	MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL.	10 DAYS
9.	REGRADE AND STABILIZATION OF LAWN AND BERM AREAS.	30 DAYS
10.	REMOVAL OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES WHEN PERMANENT EROSION CONTROL MEASURES ARE ACCEPTED BY THE TOWNSHIP ENGINEER.	10 DAYS

BUILDING CONSTRUCTION TO TAKE PLACE BETWEEN ITEMS #4 & #10.

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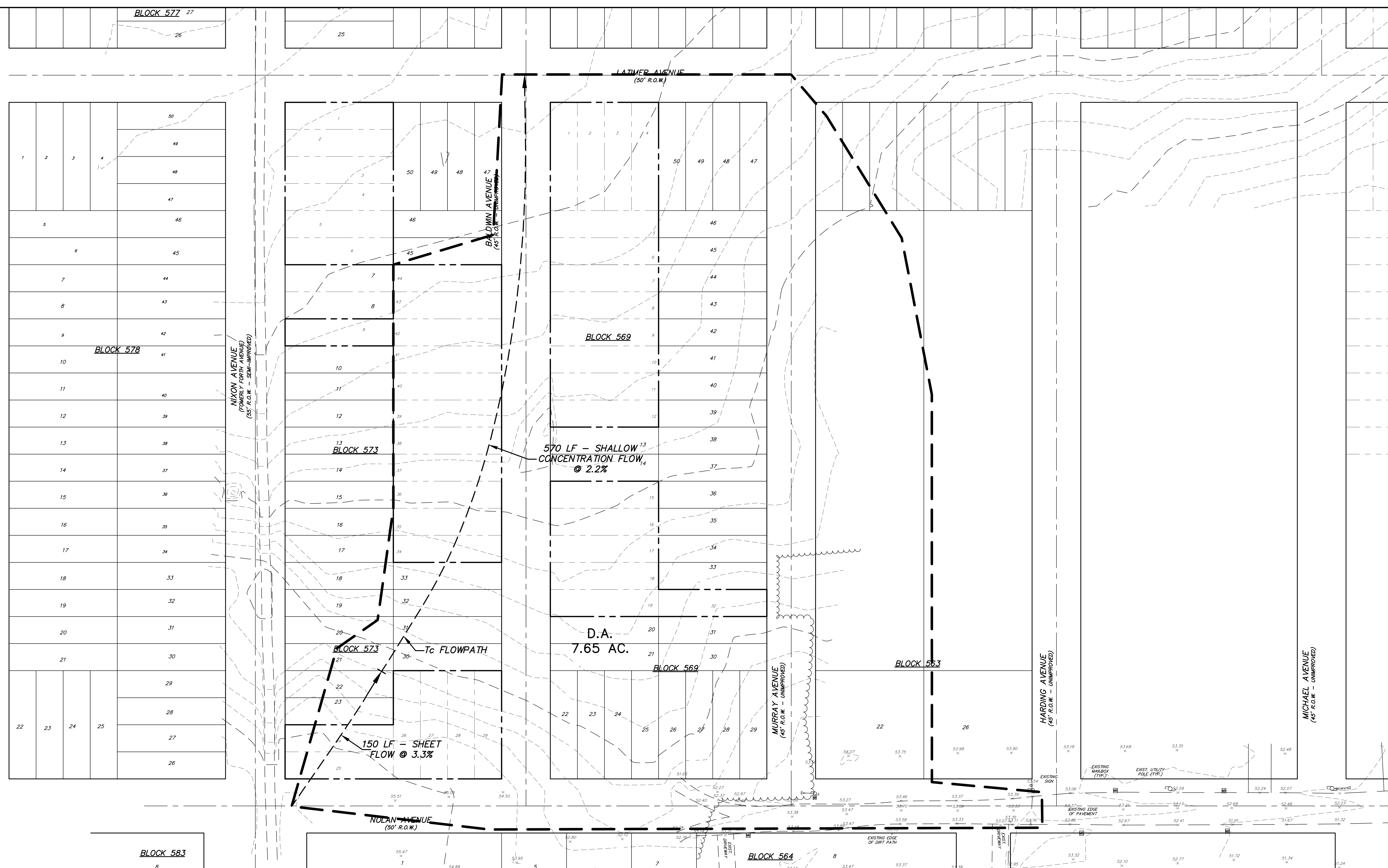
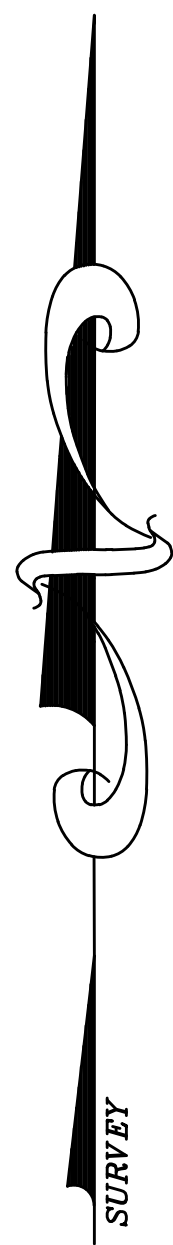
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2	3/12/10	REVISED FOR RESOLUTION COMPLIANCE	MCS
1	1/11/08	REVISED PER PLANNING BOARD ENGINEER	MCS

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PROFESSIONAL ENGINEER NEW JERSEY LIC. #29115  
PROFESSIONAL ARCHITECT NEW JERSEY LIC. #53264

**ROADWAY IMPROVEMENT PLANS**  
**SOIL EROSION CONSTRUCTION DETAILS**  
FOR  
**PINEWALD ESTATES**  
**MISC. BLOCKS AND LOTS**  
**BERKELEY TOWNSHIP**  
**OCEAN COUNTY NEW JERSEY**

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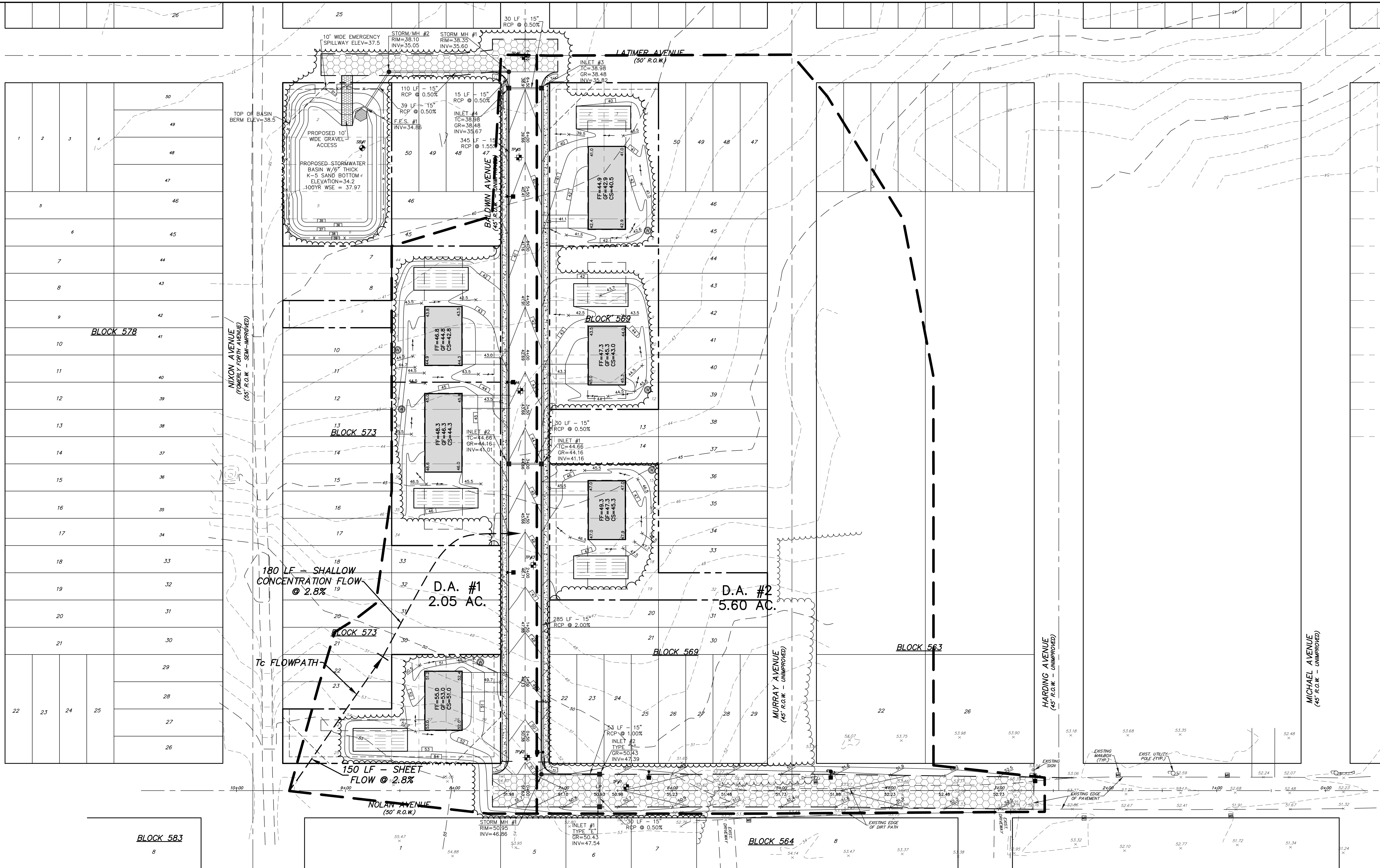
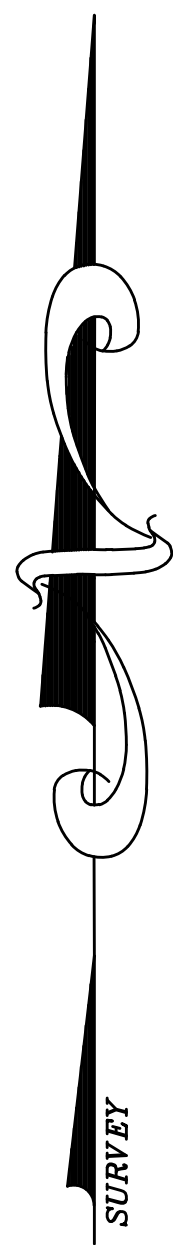
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 PROFESSIONAL PLANNER, NEW JERSEY LIC #3304

**ROADWAY IMPROVEMENT PLANS**  
**PRE-DEVELOPMENT DRAINAGE AREA MAP**  
 FOR  
**PINEWALD ESTATES**  
**MISC. BLOCKS AND LOTS**  
 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

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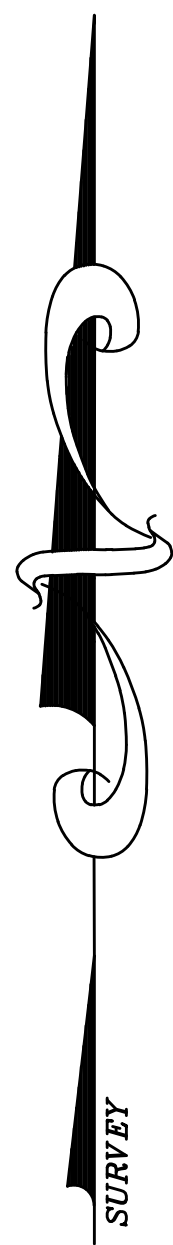
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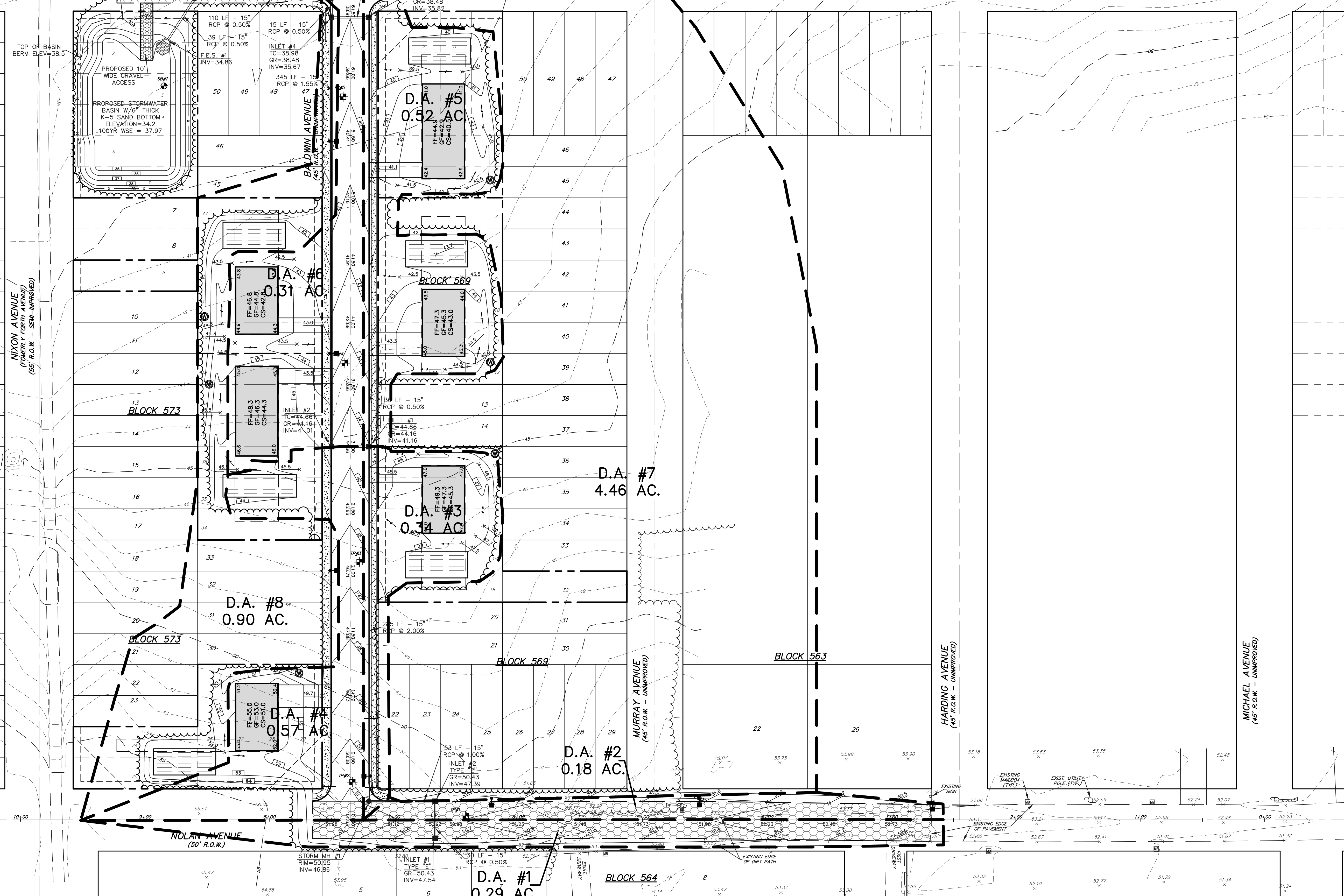
**ROADWAY IMPROVEMENT PLANS**  
**POST-DEVELOPMENT DRAINAGE AREA MAP**  
 FOR  
**PINEWALD ESTATES**  
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 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

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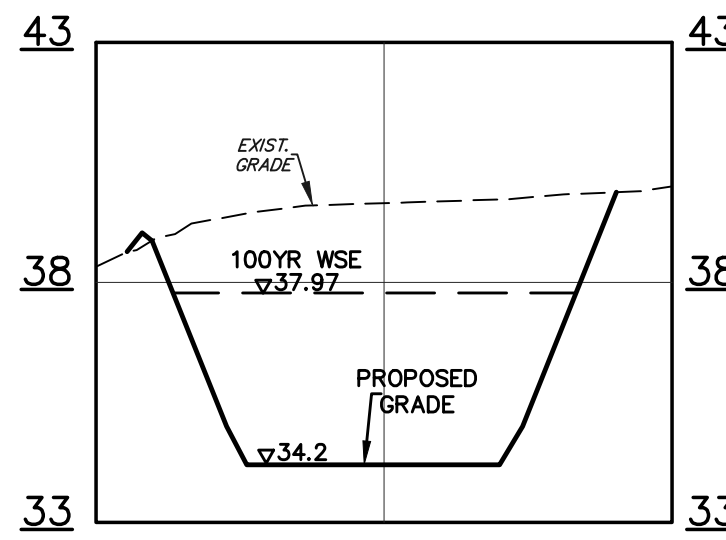
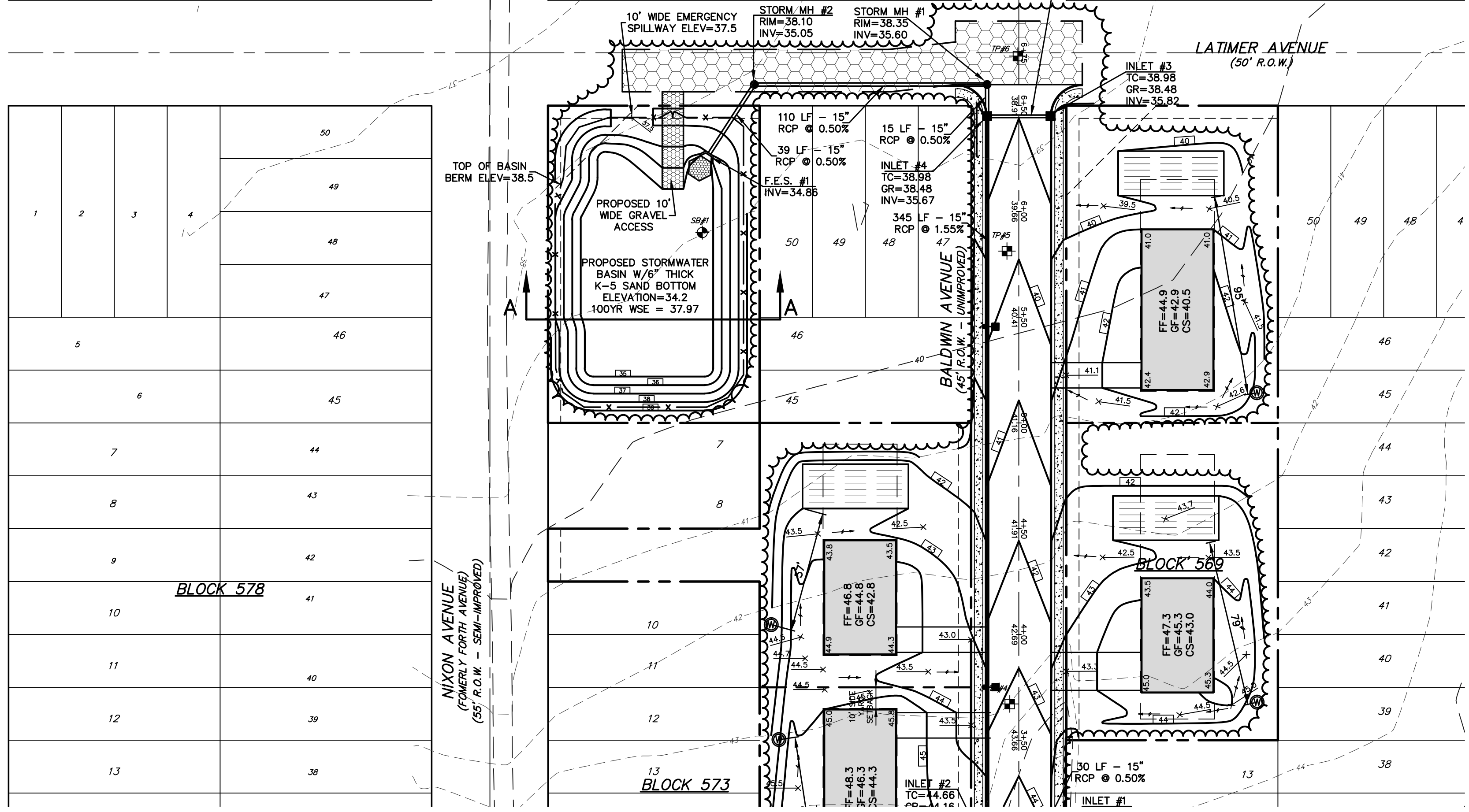
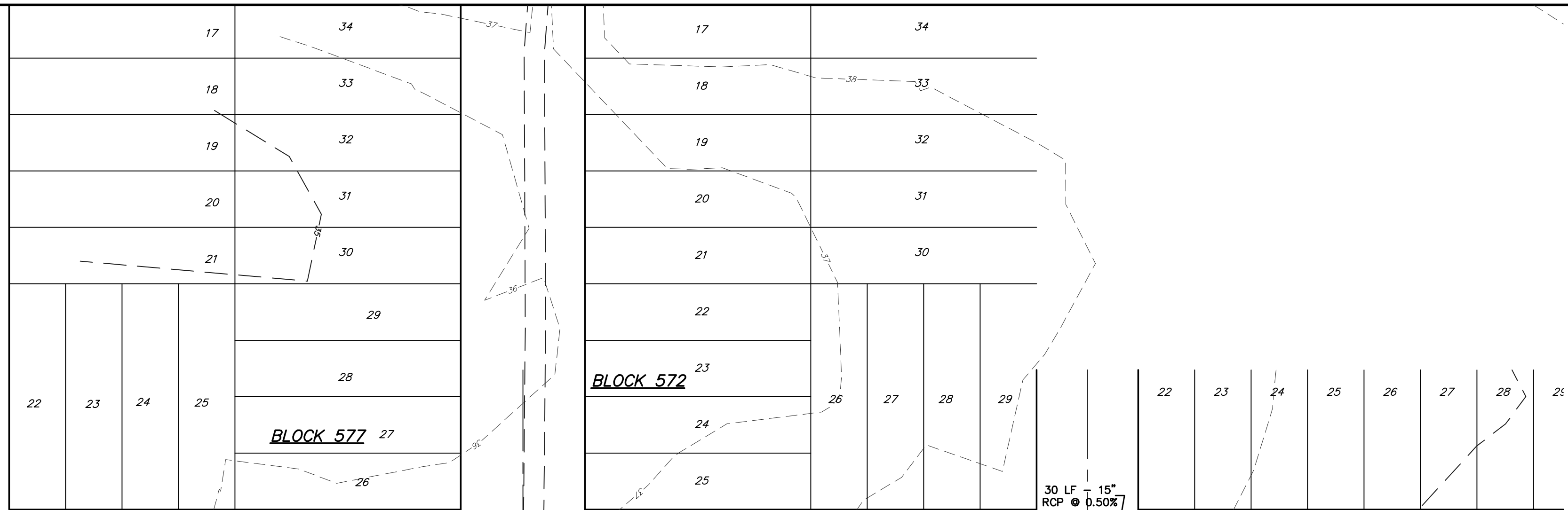
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PROFESSIONAL LANDSCAPE ARCHITECT, NEW JERSEY LIC. #204

**ROADWAY IMPROVEMENT PLANS**  
**COLLECTION SYSTEM DRAINAGE AREA MAP**  
FOR  
**PINEWALD ESTATES**  
MISC. BLOCKS AND LOTS  
BERKELEY TOWNSHIP  
OCEAN COUNTY NEW JERSEY

SCALE: 1"=40' DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 3  
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BASIN SECTION A-A

**NOTE:**  
 1. IN ACCORDANCE WITH BERKELEY TOWNSHIP ORDINANCE SECTION 12-2.5, THE ENTITY RESPONSIBLE FOR MAINTENANCE OF A STORMWATER MANAGEMENT FACILITY SHALL BE RESPONSIBLE FOR SUBMITTING TO THE PRINCIPAL PUBLIC WORKS MANAGER A SUMMARY OF MAINTENANCE WORK PERFORMED DURING THE REPORTING PERIOD. THIS SUMMARY SHALL BE SUBMITTED ONCE EVERY CALENDAR YEAR BY FEBRUARY 15 OF THE YEAR FOLLOWING THE REPORTING PERIOD.

**MAINTENANCE NOTES**  
 REQUIRED MAINTENANCE PLAN PROCEDURES  
 1. COPIES OF THE MAINTENANCE PLAN MUST BE PROVIDED TO THE OWNER AND OPERATOR OF THE STORMWATER MANAGEMENT MEASURE AND TO ALL REVIEWING AGENCIES. A COPY SHOULD ALSO BE PROVIDED TO THE LOCAL MOSQUITO CONTROL OR ESTABLISHMENT COMMISSION UPON REQUEST.  
 2. THE TITLE AND DATE OF THE MAINTENANCE PLAN AND THE NAME AND/OR TITLE AND ADDRESS OF THE PERSON WITH OVERALL MAINTENANCE RESPONSIBILITY MUST BE RECORDED ON THE DEED OF THE PROPERTY ON WHICH THE STORMWATER MANAGEMENT MEASURE IS LOCATED. ANY CHANGE IN THE NAME OF TITLE MUST BE RECORDED ON THE DEED IMMEDIATELY IF THERE IS A CHANGE OF PROPERTY OWNERSHIP.  
 3. THE MAINTENANCE PLAN MUST BE EVALUATED FOR EFFECTIVENESS AT LEAST ANNUALLY AND MUST BE REVISED AS NEEDED.  
 4. A DETAILED, WRITTEN LOG OF ALL PREVENTATIVE AND CORRECTIVE MAINTENANCE PERFORMED AT THE STORMWATER MANAGEMENT MEASURE MUST BE KEPT, INCLUDING A RECORD OF ALL INSPECTIONS AND COPIES OF MAINTENANCE-RELATED WORK ORDERS.  
 5. THE PERSON WITH OVERALL MAINTENANCE RESPONSIBILITY MUST MAKE THE MAINTENANCE PLAN, LOGS, AND OTHER RECORDS AVAILABLE FOR REVIEW UPON REQUEST FROM A PUBLIC ENTITY WITH JURISDICTION OVER THE ACTIVITIES AT THE SITE.

**REQUIRED MAINTENANCE PLAN CONTENTS**  
 1. PERSON RESPONSIBLE FOR OVERALL MAINTENANCE OF THE STORMWATER MANAGEMENT MEASURE:  
 OCEAN, INC.  
 40 WASHINGTON STREET  
 TOMS RIVER NJ 08753  
 2. SCHEDULE OF MAINTENANCE INSPECTIONS AND MAINTENANCE TASKS:  
 EXTENDED DETENTION BASIN  
 A. GENERAL MAINTENANCE  
 ALL EXTENDED DETENTION BASIN COMPONENTS EXPECTED TO RECEIVE AND/OR TRAP DEBRIS AND SEDIMENT MUST BE INSPECTED FOR CLOGGING AND EXCESSIVE DEBRIS AND SEDIMENT ACCUMULATION AT LEAST FOUR TIMES ANNUALLY AS WELL AS AFTER EVERY STORM EXCEEDING 1 INCH OF RAINFALL. SUCH COMPONENTS MAY INCLUDE BOTTOMS, TRASH RACKS, LOW FLOW CHANNELS, OUTLET STRUCTURES, RIPRAP OR GARBAN APRONS, AND INLETS.  
 SEDIMENT REMOVAL SHOULD TAKE PLACE WHEN THE BASIN IS THOROUGHLY DRY. DISPOSAL OF DEBRIS AND TRASH SHOULD BE DONE AT SUITABLE DISPOSAL/RECYCLING REGULATIONS.  
 B. VEGETATED AREAS  
 MOWING AND/OR TRIMMING OF VEGETATION MUST BE PERFORMED ON A REGULAR SCHEDULE BASED ON SPECIFIC SITE CONDITIONS. GRASS SHOULD BE MOWED AT LEAST ONCE A MONTH DURING THE GROWING SEASON. VEGETATED AREAS MUST ALSO BE INSPECTED AT LEAST ANNUALLY FOR EROSION AND SCOUR. VEGETATED AREAS SHOULD ALSO BE INSPECTED AT LEAST ANNUALLY FOR UNWANTED GROWTH, WHICH SHOULD BE REMOVED WITH MINIMUM DISRUPTION TO THE BOTTOM SURFACE AND REMAINING VEGETATION.

**MAINTENANCE PLAN CONSIDERATIONS**  
 ACCESS  
 ALL STORMWATER MANAGEMENT MEASURES COMPONENTS MUST BE READILY ACCESSIBLE FOR INSPECTION AND MAINTENANCE. THEREFORE, ACCESS MUST BE PROVIDED TO THE ENTIRE STORMWATER MEASURE VIA ROADWAYS AND PATHS. TREES, SHRUBS, AND UNDERBUSH MUST BE PRUNED OR TRIMMED AS NECESSARY TO MAINTAIN THIS ACCESS. THIS INCLUDES PATHWAYS THROUGH THE VEGETATION ALONG PERMANENT POOL PERIMETERS, INCLUDING AQUATIC BENCHES, TO ALLOW FOR THE INSPECTION AND CONTROL OF MOSQUITO BREEDING.  
 INSPECTION AND MAINTENANCE EASEMENTS CONNECTED TO THE STREET OR RIGHT-OF-WAY SHOULD BE SPECIFIED ON THE PROJECT PLANS AND INCLUDED IN THE MAINTENANCE PLAN. ACCESS ROADS AND GATES SHOULD BE WIDE ENOUGH TO ALLOW PASSAGE OF NECESSARY MAINTENANCE VEHICLES AND EQUIPMENT, INCLUDING TRUCKS, BACKHOES, GRASS MOWERS, AND MOSQUITO CONTROL EQUIPMENT. IN GENERAL, A MINIMUM ACCESS ROADWAY WIDTH OF 12 FEET INSIDE A MINIMUM RIGHT-OF-WAY WIDTH OF 15 FEET IS RECOMMENDED. A CURB SHOULD BE PROVIDED WHERE AN ACCESS ROAD MEETS A CURBED ROADWAY.  
 TO ALLOW SAFE MOVEMENT OF MAINTENANCE VEHICLES, ACCESS RAMPS SHOULD BE PROVIDED TO THE SHOULDER OR BOTTOM OF ALL FACILITIES WITH SIDE SLOPES GREATER THAN 3 FEET IN HEIGHT. ACCESS RAMPS SHOULD NOT EXCEED 10 PERCENT IN GRADE AND SHOULD BE SUITABLY STABILIZED TO PREVENT DAMAGE BY VEHICLES AND EQUIPMENT. TURNAROUNDS SHOULD BE PROVIDED WHERE BACKUPS UP IS DIFFICULT OR DANGEROUS TO EXPEDITE OVERALL MAINTENANCE, VEHICLE AND EQUIPMENT STAGING AREAS SHOULD BE PROVIDED AT OR NEAR EACH FACILITY SITE.  
 TRAINING OF MAINTENANCE PERSONNEL  
 DEPENDING ON THE SIZE, CHARACTER, COMPONENTS, AND LOCATION OF A STORMWATER MANAGEMENT MEASURE, MAINTENANCE PERSONNEL MAY REQUIRE SPECIALIZED TRAINING TO ENSURE THAT THE MEASURE IS MAINTAINED IN A MANNER CONSISTENT WITH ITS FUNCTION. SUCH TRAINING MAY ADDRESS SPECIALIZED INSPECTION OR MAINTENANCE TASKS AND/OR THE OPERATION OF SPECIALIZED MAINTENANCE EQUIPMENT.  
 DISPOSAL  
 COLLECTION AND DISPOSAL OF SEDIMENT, DEBRIS, AND TRASH FROM STORMWATER MANAGEMENT MEASURES MUST COMPLY WITH LOCAL, STATE, AND FEDERAL WASTE HANDLING AND DISPOSAL REGULATIONS. ALL COLLECTED MATERIAL MUST BE SENT TO APPROPRIATE DISPOSAL/RECYCLING FACILITIES.  
 AESTHETICS  
 THE SAFETY, NEEDS AND AESTHETIC PREFERENCES OF THE ADJACENT COMMUNITY CAN HELP DETERMINE THE TYPE, AMOUNT, AND FREQUENCY OF NECESSARY MAINTENANCE.  
 EMERGENCY MAINTENANCE  
 EMERGENCY MAINTENANCE AND REPAIRS MUST BE PERFORMED IN A TIMELY MANNER.  
 SAFETY  
 DEVELOPMENT OF A STORMWATER MANAGEMENT MEASURE DESIGN AND THE INSPECTION AND MAINTENANCE TASKS NECESSARY TO KEEP IT FUNCTIONING RELIABLY MUST INCLUDE CONSIDERATIONS FOR THE SAFETY OF INSPECTION AND MAINTENANCE PERSONNEL WHO WILL BE WORKING IN OR NEAR THE MEASURE.

**OPERATION AND MAINTENANCE PLAN MUST INDICATE THE APPROXIMATE TIME THAT THE SYSTEM WOULD NORMALLY TAKE TO COMPLETELY DRAIN THE STORMWATER QUALITY DESIGN STORM RUNOFF VOLUME. THIS NORMAL DRAIN TIME SHOULD THEN BE USED TO EVALUATE THE SYSTEM'S ACTUAL PERFORMANCE. IF SIGNIFICANT INCREASES OR DECREASES IN THE DRAIN TIME ARE OBSERVED, THE SYSTEM'S OUTLET STRUCTURE, UNDERDRAIN SYSTEM, AND BOTH GROUNDWATER AND TAILWATER LEVELS MUST BE EVALUATED AND APPROPRIATE MEASURES TAKEN TO COMPLY WITH THE MAXIMUM DRAIN TIME REQUIREMENTS AND MAINTAIN THE PROPER FUNCTIONING OF THE BASIN.**  
**INFILTRATION BASIN**  
 A. GENERAL MAINTENANCE  
 ALL INFILTRATION BASIN COMPONENTS EXPECTED TO RECEIVE AND/OR TRAP DEBRIS AND SEDIMENT MUST BE INSPECTED FOR CLOGGING AND EXCESSIVE DEBRIS AND SEDIMENT ACCUMULATION AT LEAST FOUR TIMES ANNUALLY AS WELL AS AFTER EVERY STORM EXCEEDING ONE INCH OF RAINFALL. SUCH COMPONENTS MAY INCLUDE BOTTOMS, RIPRAP OR GARBAN APRONS, AND INFLOW POINTS. THIS APPLIES TO BOTH SURFACE AND SUBSURFACE INFILTRATION BASINS.  
 SEDIMENT REMOVAL SHOULD TAKE PLACE WHEN THE BASIN IS THOROUGHLY DRY. DISPOSAL OF DEBRIS AND TRASH SHOULD BE DONE AT SUITABLE DISPOSAL/RECYCLING SITES AND IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WASTE REGULATIONS.  
 STUDIES HAVE SHOWN THAT READILY VISIBLE STORMWATER MANAGEMENT FACILITIES LIKE INFILTRATION BASINS RECEIVE MORE FREQUENT AND THOROUGH MAINTENANCE THAN THOSE IN LESS VISIBLE, MORE REMOTE LOCATIONS. READILY VISIBLE FACILITIES CAN ALSO BE INSPECTED FASTER AND MORE EASILY BY MAINTENANCE AND MOSQUITO CONTROL PERSONNEL.  
 B. VEGETATED AREAS  
 MOWING AND/OR TRIMMING OF VEGETATION MUST BE PERFORMED ON A REGULAR SCHEDULE BASED ON SPECIFIC SITE CONDITIONS. GRASS SHOULD BE MOWED AT LEAST ONCE A MONTH DURING THE GROWING SEASON. VEGETATED AREAS MUST ALSO BE INSPECTED AT LEAST ANNUALLY FOR EROSION AND SCOUR. THE STRUCTURE MUST BE INSPECTED FOR UNWANTED TREE GROWTH AT LEAST ONCE A YEAR.  
 WHEN ESTABLISHING OR RESTORING VEGETATION, BIWEEKLY INSPECTIONS OF VEGETATION HEALTH SHOULD BE PERFORMED DURING THE FIRST GROWING SEASON OR UNTIL THE VEGETATION IS ESTABLISHED. ONCE ESTABLISHED, INSPECTIONS OF VEGETATION HEALTH, DENSITY, AND DIVERSITY SHOULD BE PERFORMED AT LEAST TWICE ANNUALLY DURING BOTH THE GROWING AND NON-GROWING SEASONS. IF VEGETATION HAS GREATER THAN 50 PERCENT DAMAGE, THE AREA SHOULD BE REESTABLISHED IN ACCORDANCE WITH THE ORIGINAL SPECIFICATIONS AND THE INSPECTION REQUIREMENTS PRESENTED ABOVE.  
 ALL USE OF FERTILIZERS, MECHANICAL TREATMENTS, PESTICIDES AND OTHER MEANS TO ASSURE OPTIMUM VEGETATION HEALTH MUST NOT COMPROMISE THE INTENDED PURPOSE OF THE BIOPERATION SYSTEM. ALL VEGETATION DEFICIENCIES SHOULD BE ADDRESSED WITHOUT THE USE OF FERTILIZERS AND PESTICIDES WHENEVER POSSIBLE.  
 ALL VEGETATED AREAS SHOULD BE INSPECTED AT LEAST ANNUALLY FOR UNWANTED GROWTH, WHICH SHOULD BE REMOVED WITH MINIMUM DISRUPTION TO THE REMAINING VEGETATION AND BASIN SUBSOIL.  
 C. STRUCTURAL COMPONENTS  
 ALL STRUCTURAL COMPONENTS MUST BE INSPECTED FOR CRACKING, SUBSIDENCE, SPALLING, EROSION, AND DETERIORATION AT LEAST ANNUALLY.  
 D. OTHER MAINTENANCE CRITERIA  
 THE OPERATION AND MAINTENANCE PLAN MUST INDICATE THE APPROXIMATE TIME THAT THE BASIN WOULD NORMALLY TAKE TO DRAIN THE STORMWATER QUALITY DESIGN STORM RUNOFF VOLUME BELOW THE GROUND SURFACE. THIS NORMAL DRAIN OR DRAINDOWN TIME SHOULD THEN BE USED TO EVALUATE THE BASIN'S ACTUAL PERFORMANCE. IF SIGNIFICANT INCREASES OR DECREASES IN THE DRAIN TIME ARE OBSERVED, THE BASIN'S BOTTOM SURFACE, SUBSOIL, AND BOTH GROUNDWATER AND TAILWATER LEVELS MUST BE EVALUATED AND APPROPRIATE MEASURES TAKEN TO COMPLY WITH THE MAXIMUM DRAIN TIME REQUIREMENTS AND MAINTAIN THE PROPER FUNCTIONING OF THE BASIN. THIS APPLIES TO BOTH SURFACE AND SUBSURFACE INFILTRATION BASINS.  
 THE BOTTOM SAND LAYER IN A SURFACE INFILTRATION BASIN SHOULD BE INSPECTED AT LEAST MONTHLY AS WELL AS AFTER EVERY STORM EXCEEDING ONE INCH OF RAINFALL. THE PERMEABILITY RATE OF THE SOIL BELOW THE BASIN MAY ALSO BE RETESTED PERIODICALLY. IF THE WATER FAILS TO INFILTRATE 72 HOURS AFTER THE END OF THE STORM, CORRECTIVE MEASURES MUST BE TAKEN. ANNUAL TILLING BY LIGHT EQUIPMENT CAN ASSIST IN MAINTAINING INFILTRATION CAPACITY AND BREAK UP CLOGGED SURFACES.

3. PROBLEMS FOUND DURING MAINTENANCE INSPECTIONS SHALL BE CORRECTED. THESE INCLUDE THE RESTORATION OF ERODED AREAS, REPAIR OR REPLACEMENT OF STORMWATER MANAGEMENT MEASURE COMPONENTS, RESTORATION OF VEGETATION, AND REPAIR OR REPLACEMENT OF NON-VEGETATED UNINGS.  
 4. THE EQUIPMENT NECESSARY TO PERFORM THE MAINTENANCE TASKS ARE AS FOLLOWS:  
 A. LAWN MOWING EQUIPMENT  
 B. GAS POWERED TRIMMERS  
 C. GAS POWERED BLOWERS  
 D. RAKES  
 E. SHOVELS  
 F. PICKS  
 G. WHEEL BARROWS  
 H. GAS POWERED HEDGE TRIMMERS  
 I. CHAIN SAW  
 J. FERTILIZER/PESTICIDE APPLICATION  
 K. WASTER RECEPTACLES  
 L. MAINTENANCE VEHICLES  
 5. COST ESTIMATE OF THE INSPECTION AND MAINTENANCE TASKS

ITEM #	QTY.	UNIT	ANNUAL EQUIPMENT COST
1	1	LS	\$3,500.00
2	1	LS	\$3,500.00
TOTAL COST			
3	1	LS	\$500.00
4	12	DAVS	\$250.00
TOTAL COST			
TOTAL MAINTENANCE COST (PER YEAR)			
\$7,000.00			

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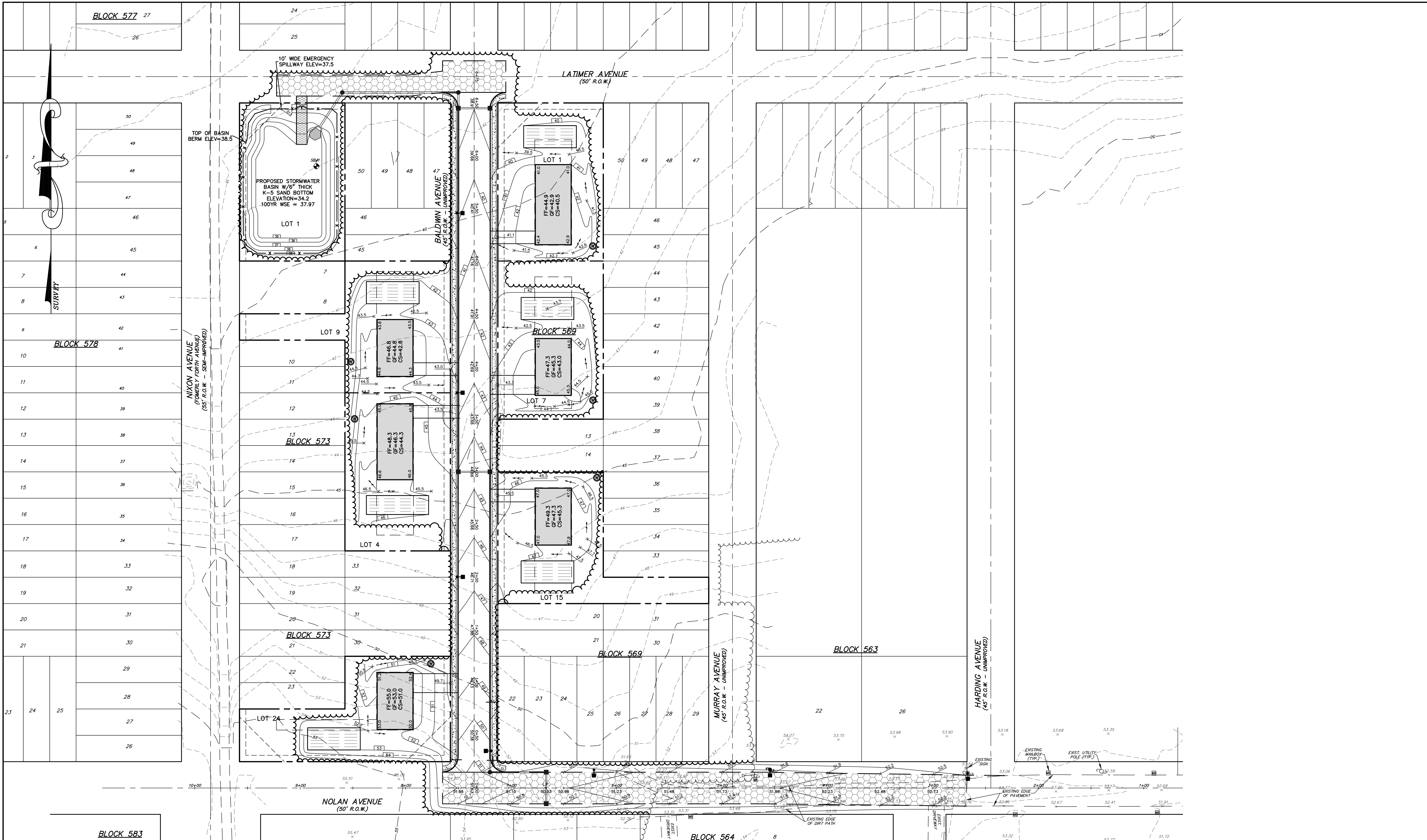
NO.	DATE	DESCRIPTION	BY
3	3/21/14	REVISED FOR RESOLUTION COMPLIANCE	MCS
2	3/12/10	REVISED FOR RESOLUTION COMPLIANCE	MCS
1	1/11/08	REVISED PER PLANNING BOARD ENGINEER	MCS

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 PROFESSIONAL ENGINEER, NEW JERSEY LIC. #29915  
 PROFESSIONAL PLANNER, NEW JERSEY LIC. #2284

**ROADWAY IMPROVEMENT PLANS**  
**BASIN MAINTENANCE PLAN**  
 FOR  
**PINEWALD ESTATES**  
 MISC. BLOCKS AND LOTS  
 BERKELEY TOWNSHIP  
 OCEAN COUNTY NEW JERSEY

SCALE: 1"=40' DATE: JULY 31, 2007 JOB NUMBER: 27048 SHEET 1  
 DRAWN BY: MCS DESIGNED BY: MCS CHECKED BY: MCS





**TREE CLEARING CALCULATIONS:**

LOT:	REAR & SIDE YARD TOTAL (SQ.FT.)	MAXIMUM CLEARING ALLOWED (SQ.FT.)	PROPOSED CLEARING (SQ.FT.)
LOT 1	3975	1988	1995
LOT 7	5375	2687	3517
LOT 15	4625	2312	2475
LOT 9	4625	2312	2341
LOT 24	2975	1487	1600
LOT 34	5375	2687	3178

- NOTES**
- NO TOPSOIL SHALL BE REMOVED FROM THE AREAS INTENDED FOR LAWN OR OPEN SPACE UNLESS SAME IS REQUIRED TO PROVIDE MINIMUM GRADING. TOPSOIL MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED WITHIN THE SITE SO AS TO PROVIDE AT LEAST 4" COVER TO ALL AREAS OF THE SITE AND SHALL BE STABILIZED BY SEEDING OR PLANTING.
  - NO MATERIALS SHALL BE TEMPORARILY DEPOSITED OR STORED WITHIN SIX FEET OF ANY TREES OR SHRUBS DESIGNATED TO REMAIN.
  - EXISTING TREES TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH TREE REMOVAL PERMITS.
  - NO MORE THAN 50% OF THE AREA WITHIN THE SIDE AND REAR YARD SETBACKS MAY BE CLEARED.



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**TREE REMOVAL PLAN**  
 FOR  
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 MISC. BLOCKS AND LOTS  
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