

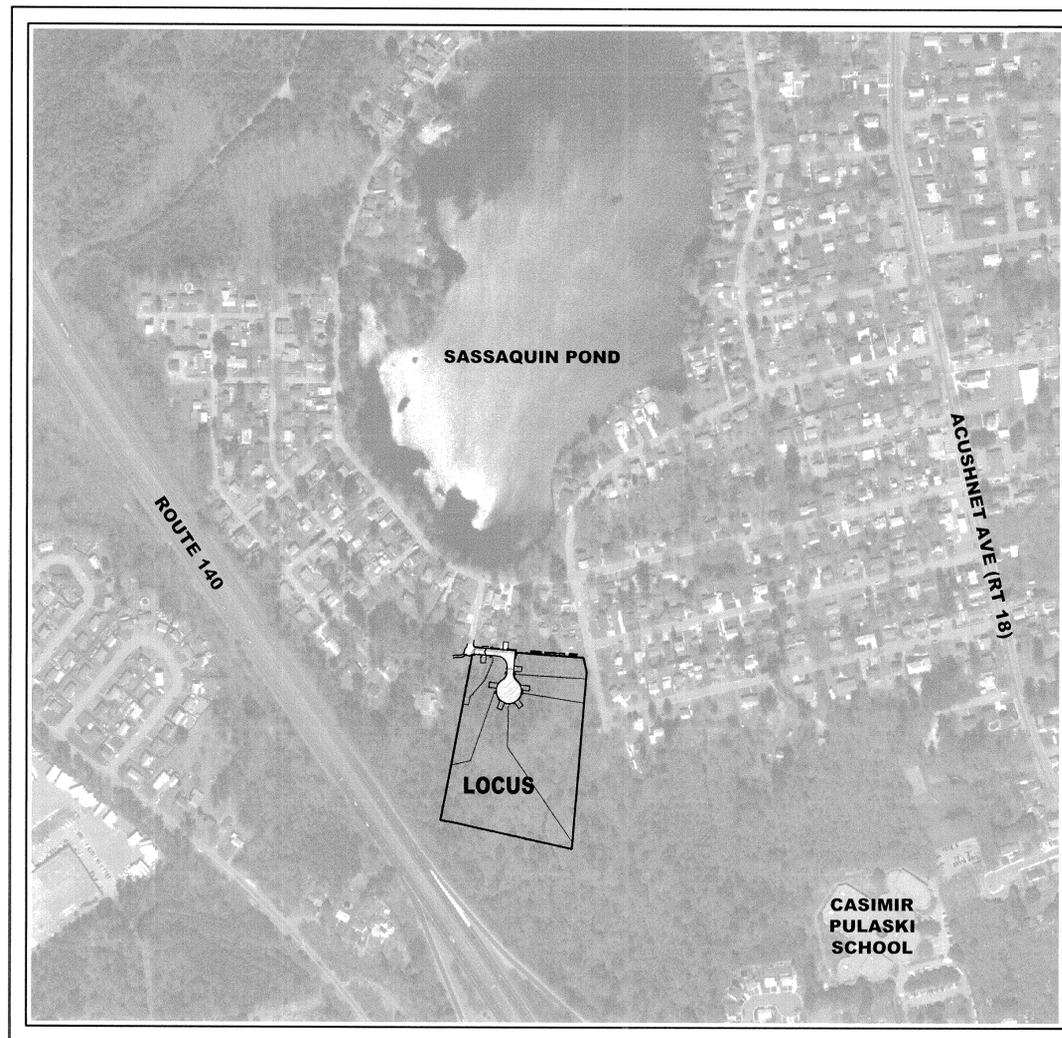
CARDINAL PLACE

DEFINITIVE PLAN FOR A RESIDENTIAL SUBDIVISION

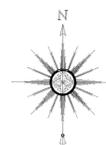
CARDINAL STREET & AVA'S WAY, NEW BEDFORD, MASSACHUSETTS

OWNERS:
 THOMAS GRENIER
 560 ROCKDALE AVE.
 NEW BEDFORD, MASSACHUSETTS

APPLICANT:
 RICHARD HOPPS
 302 ELM STREET
 DARTMOUTH, MASSACHUSETTS



LOCUS PLAN
SCALE: 1"=300'±



APRIL 22, 2013
REVISED MARCH 17, 2014

REQUESTED WAIVERS:

THE FOLLOWING WAIVERS ARE HEREBY REQUESTED:

1. A WAIVER TO ELIMINATE THE CUL-DE-SAC ISLAND.
2. A WAIVER TO ALLOW FOR A 40-FOOT RIGHT OF WAY.
3. A WAIVER TO ALLOW FOR A 24' PAVEMENT WIDTH.
4. A WAIVER TO ELIMINATE THE SIDEWALK.

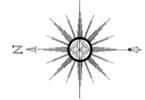
SCHEDULE OF DRAWINGS

SHEET NUMBER	PLAN TITLE
CS1	COVER SHEET
DF1	DEFINITIVE LOTTING SHEET
EX1	EXISTING CONDITIONS PLAN
GD1	GRADING AND DRAINAGE PLAN
UT1	UTILITY PLAN
RP1	ROAD PLAN AND PROFILE
DE1-2	DETAIL SHEET
LP1	LANDSCAPE AND LIGHTING PLAN
ER1-2	EROSION CONTROL PLANS

PREPARED BY:



CIVIL ENGINEERING—LAND SURVEYING—ENVIRONMENTAL ASSESSMENT
 P.O. BOX 1088, 350 BEDFORD STREET, LAKEVILLE, MA 02347
 TEL: 508.947.0050 FAX: 508.947.2004



CHEROKEE STREET (PUBLIC - 50' WIDE)

PEQUOT STREET (PUBLIC - 50' WIDE)

TOBEY (PUBLIC - 50' WIDE) STREET

CARDINAL STREET (EXISTING PRIVATE - 15' WIDE)

CARDINAL STREET (40' WIDE ROW)

SWALLOW (PUBLIC - 30' WIDE) STREET

CARDINAL STREET (PUBLIC - 30' WIDE)

SWALLOW STREET EXT. (40' WIDE - P.B. 157, P.G. 8)

APPLICANT

RICHARD HOPPS
302 ELM STREET
DARTMOUTH, MA 02748

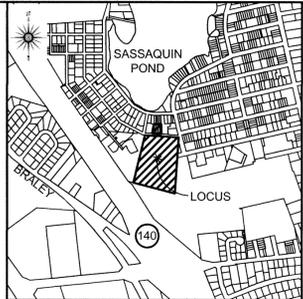
OWNER
THOMAS GRENIER
560 ROCKDALE AVENUE
NEW BEDFORD, MA 02740

DIMENSIONAL REQUIREMENTS

MINIMUM LOT AREA	8000 S.F.
MINIMUM FRONTAGE	75 FT
MINIMUM FRONT SETBACK	15 FT
MINIMUM REAR SETBACK	30 FT
MINIMUM SIDE SETBACK	12 FT AND 10 FT

TABLE OF FRONTAGES AND AREAS

	FRONTAGE	LOT AREA
MIN. REQUIRED	75'	8,000 S.F.
LOT 1	75.00'	8,796 S.F.
LOT 2	163.76'	26,427 S.F.
LOT 3	75.00'	109,896 S.F.
LOT 4	75.00'	88,891 S.F.
LOT 5	75.00'	17,274 S.F.
LOT 6	76.55'	18,487 S.F.
LOT 7	75.10'	10,804 S.F.



LOCUS SCALE: 1" = 1000'

FOR REGISTRY USE ONLY

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS



MARCH 17, 2014
DATE
BERNARD J. PERROTTY, P.L.S.

NOTES:

- THE SUBJECT PROPERTY IS SHOWN ON THE CITY OF NEW BEDFORD ASSESSORS' MAP 136 AS LOT 353.
- FOR TITLE REFERENCE TO THE SUBJECT PROPERTY REFER TO DEED BOOK 5380, PAGE 116 ON FILE AT THE BRISTOL COUNTY REGISTRY OF DEEDS.
- THE SUBJECT PROPERTY IS ZONED "RESIDENTIAL A" AS SHOWN ON THE ZONING MAP FOR THE CITY OF NEW BEDFORD.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X (UNHATCHED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE MAP FOR BRISTOL COUNTY, MASSACHUSETTS, PANEL 377 OF 550, MAP NUMBER 25005-C-0377F, EFFECTIVE DATE: JULY 7, 2009.
- THE EASEMENTS SHOWN HEREON ARE DEFINED AS FOLLOWS:

- EASEMENT 1-A IS A DRAINAGE EASEMENT ON LOT 1.
- EASEMENT 2-A IS A DRAINAGE EASEMENT ON LOT 2.
- EASEMENT 2-B IS A DRAINAGE EASEMENT ON LOT 2.
- EASEMENT 3-A IS A DRAINAGE EASEMENT ON LOT 3.
- EASEMENT 4-A IS A DRAINAGE EASEMENT ON LOT 4.
- EASEMENTS AU-1 AND AU-2 ARE EASEMENTS THAT HAVE BEEN GRANTED BY THE OWNER OF THE SWALLOW STREET EXTENSION TO CONSTRUCT A ROADWAY AND PROVIDE UTILITIES.

NEW BEDFORD PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

DATE: _____

DEFINITIVE PLAN OF
CARDINAL PLACE
IN
NEW BEDFORD, MASSACHUSETTS

PREPARED FOR
RICHARD HOPPS

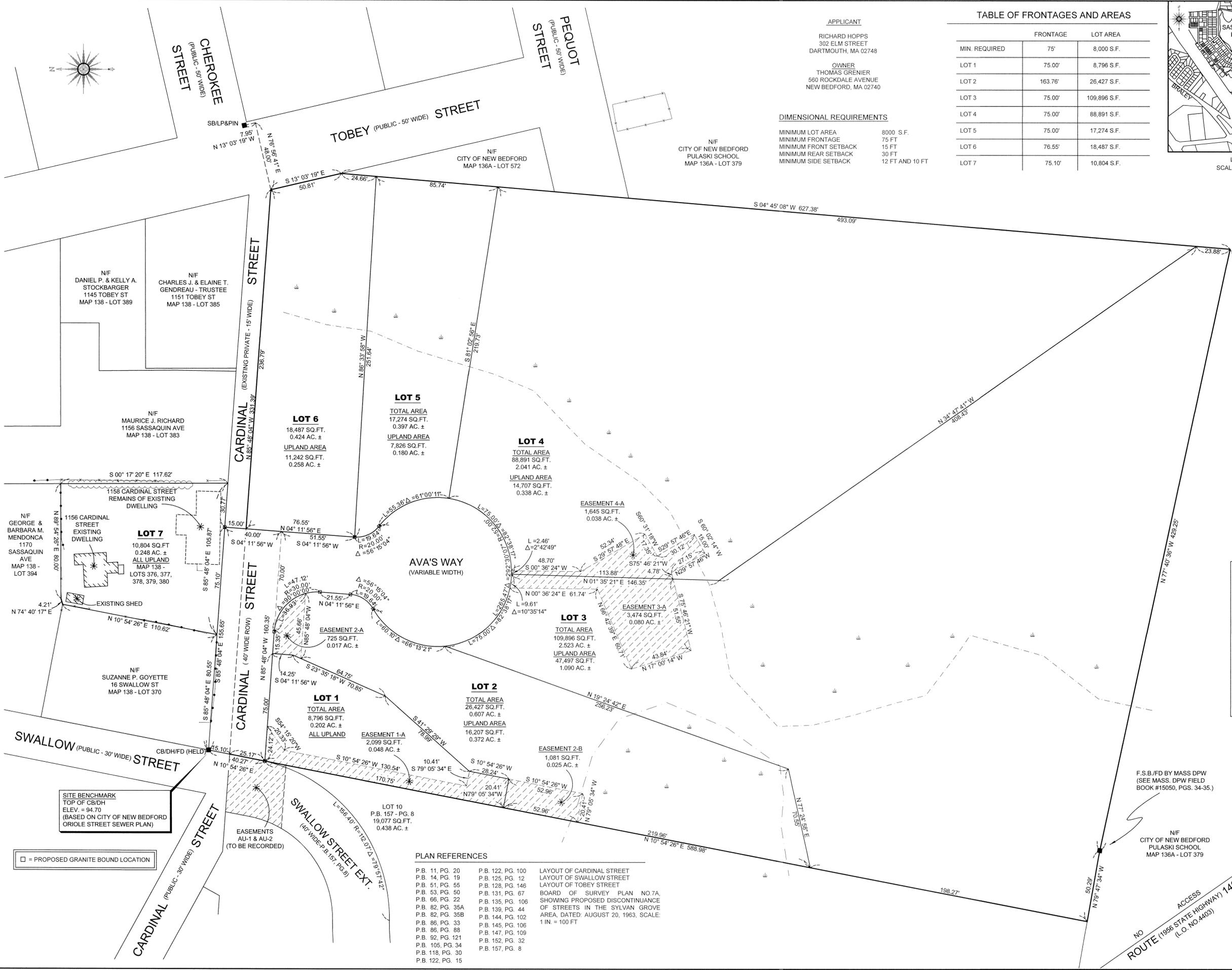
DATE: DECEMBER 27, 2013 SCALE: 1"=30'
REVISION DATE: MARCH 17, 2014



PREPARED BY:



CIVIL ENGINEERING-LAND SURVEYING-ENVIRONMENTAL ASSESSMENT
P.O. BOX 1088, 350 BEDFORD STREET, LAKEVILLE, MA 02347
TEL: 508.947.0050 FAX: 508.947.2004



PLAN REFERENCES

- | | | |
|------------------|-------------------|--------------------------------------|
| P.B. 11, PG. 20 | P.B. 122, PG. 100 | LAYOUT OF CARDINAL STREET |
| P.B. 14, PG. 19 | P.B. 125, PG. 12 | LAYOUT OF SWALLOW STREET |
| P.B. 51, PG. 55 | P.B. 128, PG. 146 | LAYOUT OF TOBEY STREET |
| P.B. 53, PG. 50 | P.B. 131, PG. 67 | BOARD OF SURVEY PLAN NO.7A, |
| P.B. 66, PG. 22 | P.B. 135, PG. 106 | SHOWING PROPOSED DISCONTINUANCE |
| P.B. 82, PG. 35A | P.B. 139, PG. 44 | OF STREETS IN THE SYLVAN GROVE |
| P.B. 82, PG. 35B | P.B. 144, PG. 102 | AREA, DATED: AUGUST 20, 1963, SCALE: |
| P.B. 86, PG. 33 | P.B. 145, PG. 106 | 1 IN. = 100 FT |
| P.B. 86, PG. 88 | P.B. 147, PG. 109 | |
| P.B. 92, PG. 121 | P.B. 152, PG. 32 | |
| P.B. 105, PG. 34 | P.B. 157, PG. 8 | |
| P.B. 118, PG. 30 | | |
| P.B. 122, PG. 15 | | |

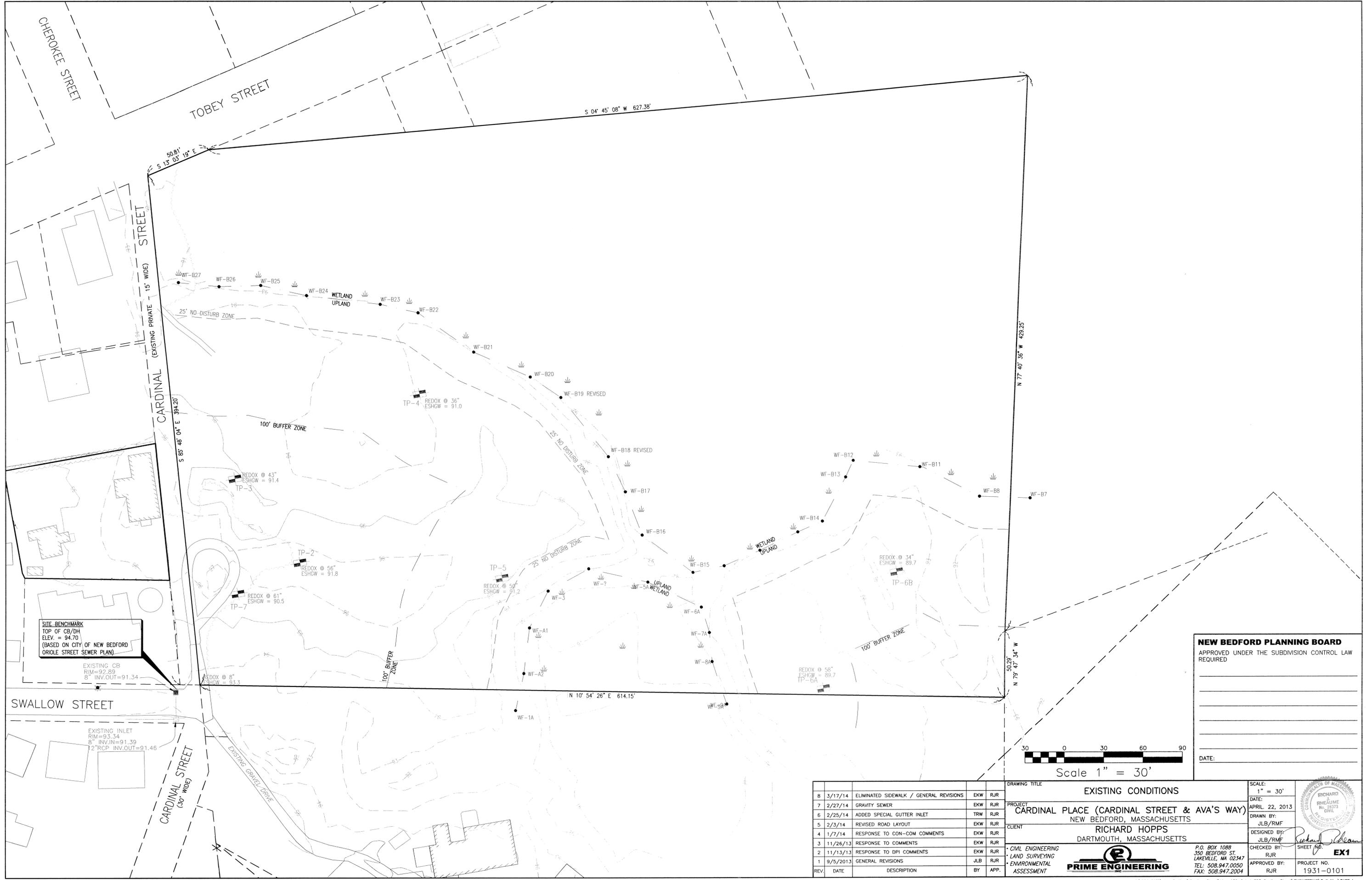
SITE BENCHMARK
TOP OF CB/DH
ELEV. = 94.70
(BASED ON CITY OF NEW BEDFORD
ORIOLE STREET SEWER PLAN)

□ = PROPOSED GRANITE BOUND LOCATION

F.S.B./FD BY MASS DPW
(SEE MASS. DPW FIELD
BOOK #15050, PGS. 34-35.)

N/F
CITY OF NEW BEDFORD
PULASKI SCHOOL
MAP 136A - LOT 379

NO ACCESS
ROUTE (1956 STATE HIGHWAY) 140
(L.O. NO.44033)



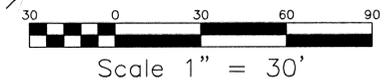
SITE BENCHMARK
 TOP OF CB/OH
 ELEV. = 94.70
 (BASED ON CITY OF NEW BEDFORD
 ORIOLE STREET SEWER PLAN)

EXISTING CB
 RIM=92.89
 8" INV.OUT=91.34

EXISTING INLET
 RIM=93.34
 8" INV.IN=91.39
 12" RCP INV.OUT=91.46

NEW BEDFORD PLANNING BOARD
 APPROVED UNDER THE SUBDIVISION CONTROL LAW
 REQUIRED

DATE: _____



REV.	DATE	DESCRIPTION	BY	APP.
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR
7	2/27/14	GRAVITY SEWER	EKW	RJR
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR
1	9/5/2013	GENERAL REVISIONS	JLB	RJR

DRAWING TITLE: **EXISTING CONDITIONS**

PROJECT: **CARDINAL PLACE (CARDINAL STREET & AVA'S WAY)**
 NEW BEDFORD, MASSACHUSETTS

CLIENT: **RICHARD HOPPS**
 DARTMOUTH, MASSACHUSETTS

SCALE: 1" = 30'

DATE: **APRIL 22, 2013**

DRAWN BY: JLB/RMF

DESIGNED BY: JLB/RMF

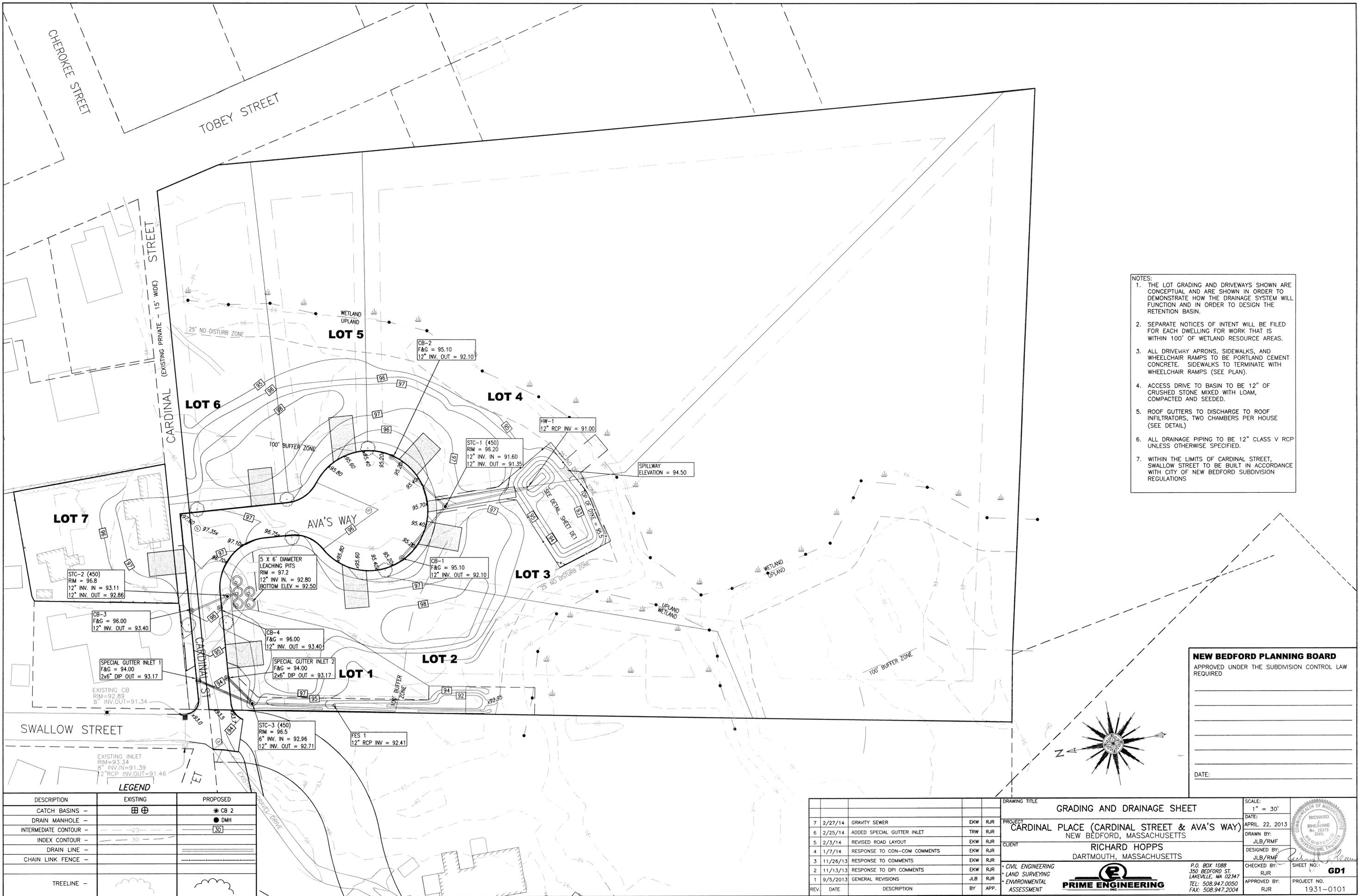
CHECKED BY: RJR

APPROVED BY: RJR

PROJECT NO. 1931-0101

PRIME ENGINEERING
 P.O. BOX 1088
 350 BEDFORD ST.
 LAKEVILLE, MA 02347
 TEL: 508.947.0050
 FAX: 508.947.2004

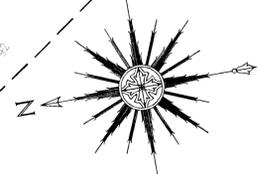
EX1



- NOTES:
1. THE LOT GRADING AND DRIVEWAYS SHOWN ARE CONCEPTUAL AND ARE SHOWN IN ORDER TO DEMONSTRATE HOW THE DRAINAGE SYSTEM WILL FUNCTION AND IN ORDER TO DESIGN THE RETENTION BASIN.
 2. SEPARATE NOTICES OF INTENT WILL BE FILED FOR EACH DWELLING FOR WORK THAT IS WITHIN 100' OF WETLAND RESOURCE AREAS.
 3. ALL DRIVEWAY APRONS, SIDEWALKS, AND WHEELCHAIR RAMPS TO BE PORTLAND CEMENT CONCRETE. SIDEWALKS TO TERMINATE WITH WHEELCHAIR RAMPS (SEE PLAN).
 4. ACCESS DRIVE TO BASIN TO BE 12" OF CRUSHED STONE MIXED WITH LOAM, COMPACTED AND SEEDED.
 5. ROOF GUTTERS TO DISCHARGE TO ROOF INFILTRATORS, TWO CHAMBERS PER HOUSE (SEE DETAIL)
 6. ALL DRAINAGE PIPING TO BE 12" CLASS V RCP UNLESS OTHERWISE SPECIFIED.
 7. WITHIN THE LIMITS OF CARDINAL STREET, SWALLOW STREET TO BE BUILT IN ACCORDANCE WITH CITY OF NEW BEDFORD SUBDIVISION REGULATIONS

NEW BEDFORD PLANNING BOARD
 APPROVED UNDER THE SUBDIVISION CONTROL LAW
 REQUIRED

DATE: _____



LEGEND

DESCRIPTION	EXISTING	PROPOSED
CATCH BASINS	⊕	⊙ CB 2
DRAIN MANHOLE	—	● DMH
INTERMEDIATE CONTOUR	-20-	30
INDEX CONTOUR	-30-	
DRAIN LINE	—	
CHAIN LINK FENCE	—	
TREELINE	—	

REV	DATE	DESCRIPTION	BY	APP.
7	2/27/14	GRAVITY SEWER	EKW	RJR
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR
1	9/5/2013	GENERAL REVISIONS	JLB	RJR

DRAWING TITLE
 GRADING AND DRAINAGE SHEET

PROJECT
 CARDINAL PLACE (CARDINAL STREET & AVA'S WAY)
 NEW BEDFORD, MASSACHUSETTS

CLIENT
 RICHARD HOPPS
 DARTMOUTH, MASSACHUSETTS

SCALE:
 1" = 30'

DATE:
 APRIL 22, 2013

DRAWN BY:
 JLB/RMF

DESIGNED BY:
 JLB/RMF

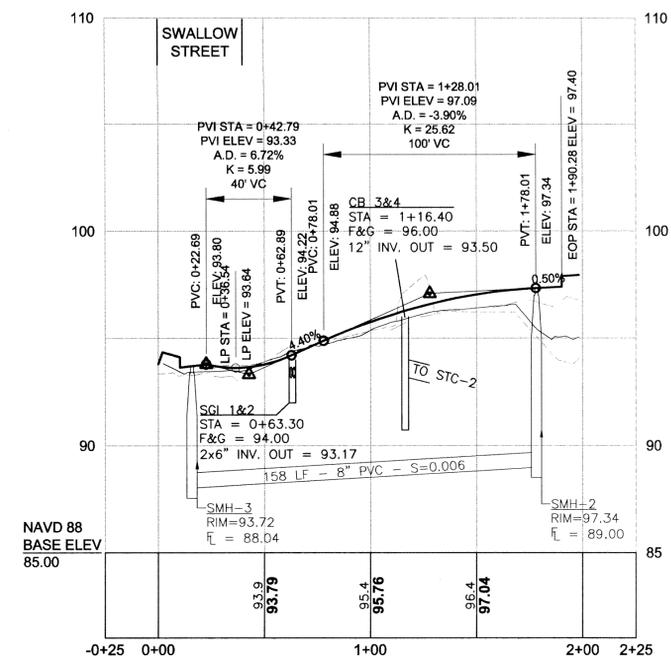
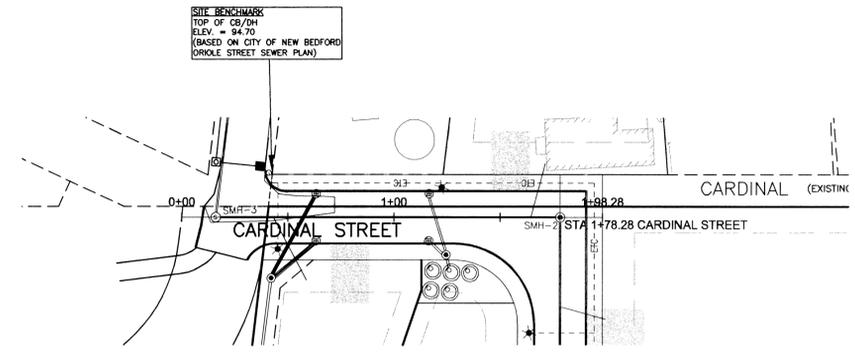
CHECKED BY:
 RJR

APPROVED BY:
 RJR

PROJECT NO.:
 1931-0101

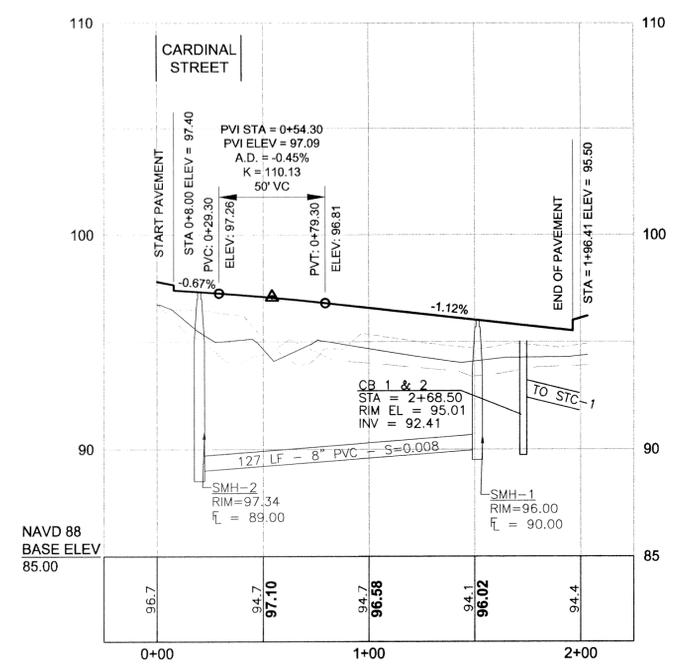
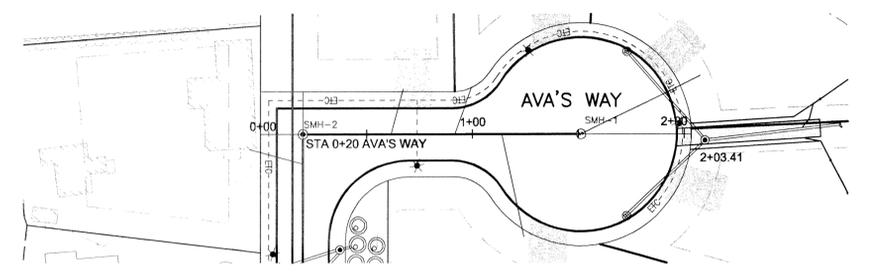
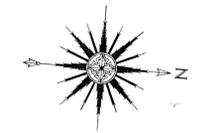
SEAL:
 RICHARD HOPPS
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF MASSACHUSETTS
 No. 28373

PRIME ENGINEERING INC.
 P.O. BOX 1088
 350 BEDFORD ST.
 LAKEVILLE, MA 02347
 TEL: 508.947.0050
 FAX: 508.947.2004



CARDINAL STREET PLAN AND PROFILE

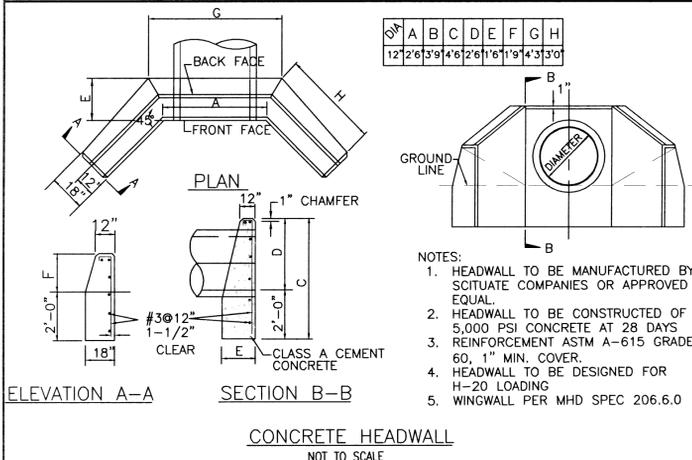
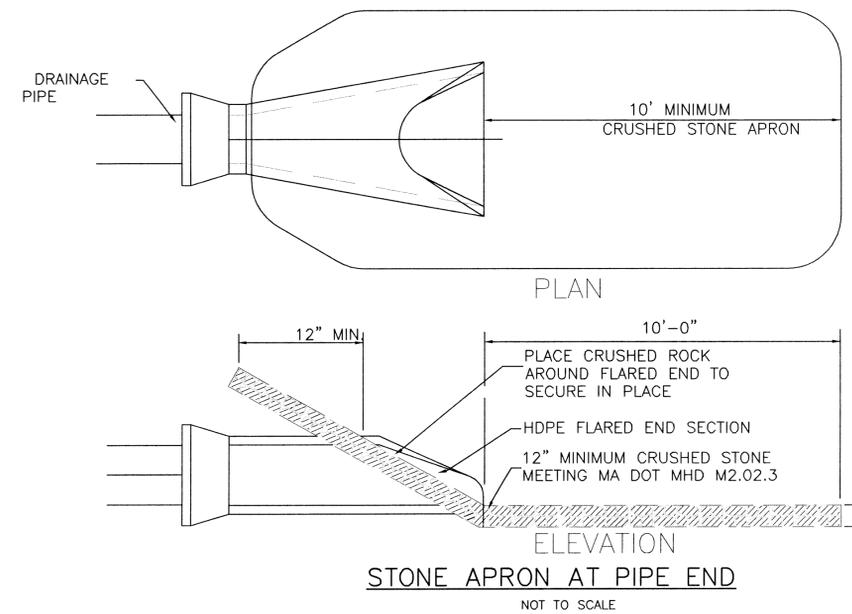
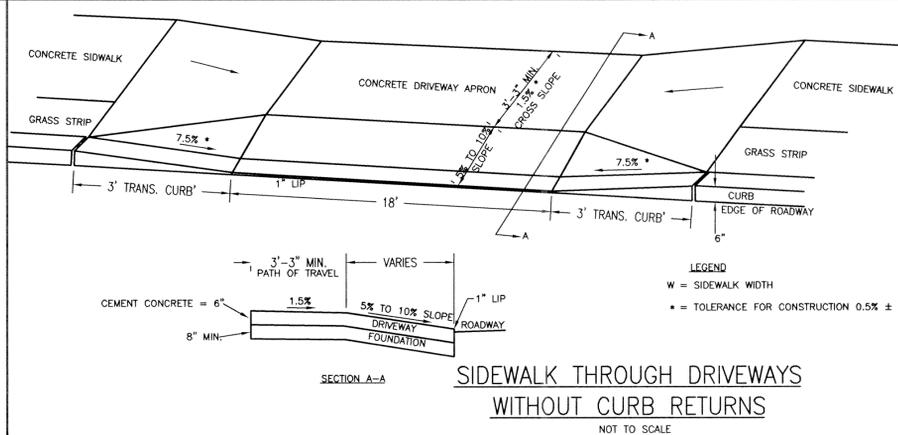
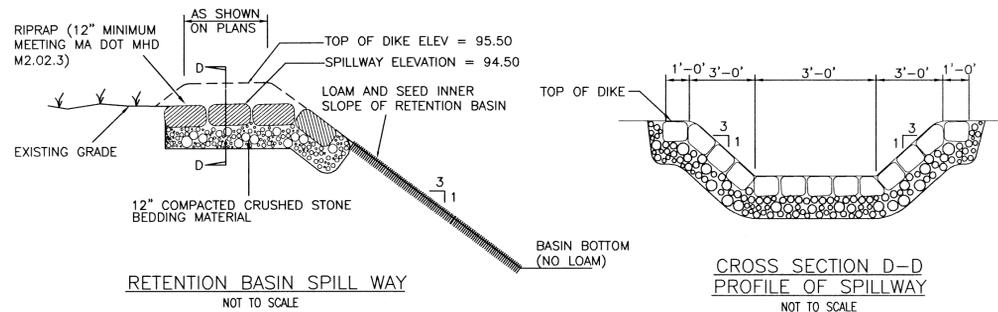
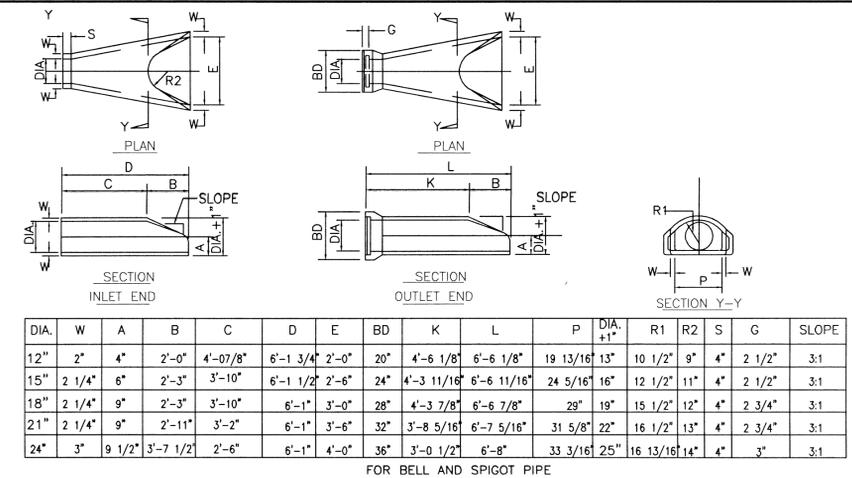
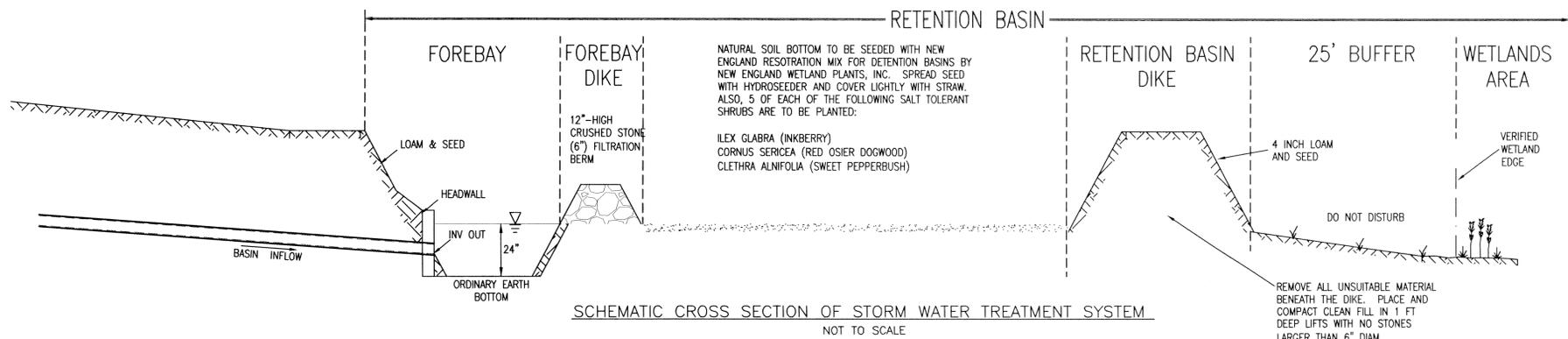
SCALES:
 1" = 40' HOR
 1" = 4' VER



AVA'S WAY PLAN AND PROFILE

SCALES:
 1" = 40' HOR
 1" = 4' VER

REV.	DATE	DESCRIPTION	BY	APP.	DRAWING TITLE	SCALE:
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR	ROADWAY PLAN AND PROFILE	AS NOTED
7	2/27/14	GRAVITY SEWER	EKW	RJR	PROJECT CARDINAL PLACE (CARDINAL STREET & AVA'S WAY) NEW BEDFORD, MASSACHUSETTS	DATE: APRIL 22, 2013
5	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR		DRAWN BY: JLB/RMF
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR	CLIENT RICHARD HOPPS DARTMOUTH, MASSACHUSETTS	DESIGNED BY: JLB/RMF
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR	CONSULTING ENGINEER PRIME ENGINEERING LAND SURVEYING ENVIRONMENTAL ASSESSMENT	CHECKED BY: RJR
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR		APPROVED BY: RJR
2	10/29/13	RESPONSE TO DPI COMMENTS	EKW	RJR	P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004	SHEET NO.: RP1
1	9/5/2013	GENERAL REVISIONS	JLB	RJR		PROJECT NO. 1931-0101



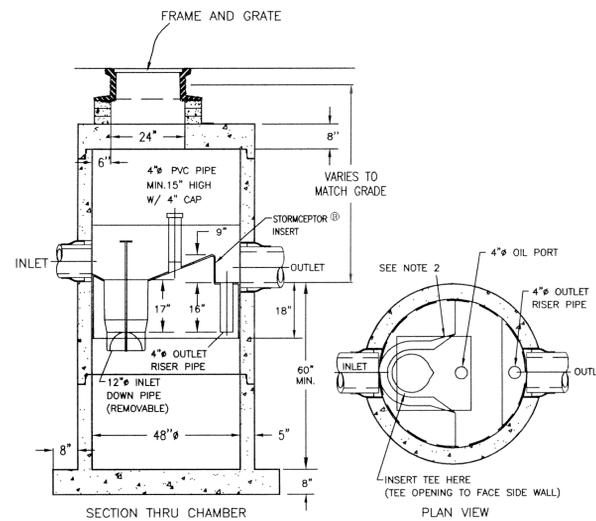
RECOMMENDED MAINTENANCE PROCEDURE:
OIL IS REMOVED THROUGH THE 6" INSPECTION/OIL PORT AND SEDIMENT IS REMOVED THROUGH THE 24" DIAMETER OUTLET RISER PIPE. ALTERNATIVELY, OIL COULD BE REMOVED FROM THE 24" OPENING IF WATER IS REMOVED FROM TREATMENT CHAMBER, LOWERING THE OIL LEVEL BELOW THE DROP PIPES.

THE DEPTH OF SEDIMENT CAN BE MEASURED FROM THE SURFACE OF THE STORMCEPTOR WITH A DIPSTICK TUBE EQUIPPED WITH A BALL VALVE (SLUDGE JUDGE). RINKER MATERIALS RECOMMENDS MAINTENANCE BE PERFORMED ONCE THE SEDIMENT DEPTH EXCEEDS THE GUIDELINE VALUE PROVIDED IN TABLE BELOW.

TABLE SEDIMENT DEPTHS INDICATING REQUIRED MAINTENANCE*

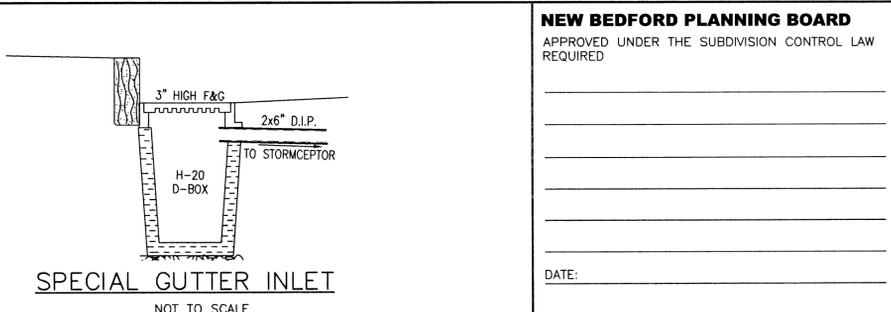
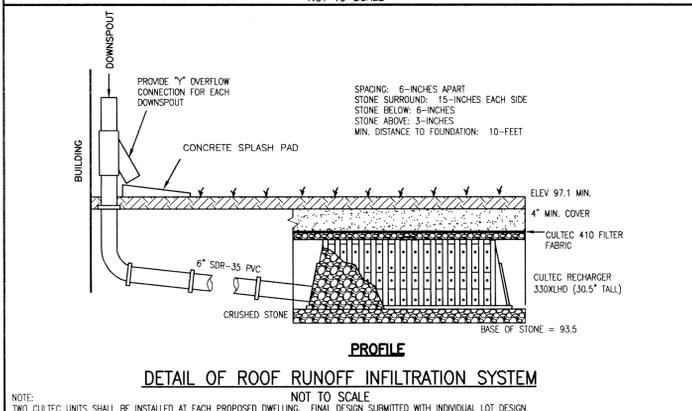
MODEL	SEDIMENT DEPTH
450i	8" (200MM)
900	8" (200MM)
1200	10" (250MM)
1800	15" (375MM)
2400	12" (300MM)
3600	17" (425MM)
4800	15" (375MM)
6000	18" (450MM)
7200	15" (375MM)
11000s	17" (425MM)**
13000s	20" (500MM)**
16000s	17" (425MM)**

* DEPTHS ARE APPROXIMATE
** DEPTHS IN EACH STRUCTURE



- NOTES:
- THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
 - THE COVER SHOULD BE POSITIONED OVER THE INLET DROP PIPE AND THE OIL PORT.
 - THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 - CONTACT A CONCRETE PIPE DIVISION REPRESENTATIVE FOR FURTHER DETAILS NOT LISTED ON THIS DRAWING.

TYPICALLY, MAINTENANCE IS PERFORMED BY THE VACUUM SERVICE INDUSTRY, A WELL ESTABLISHED SECTOR OF THE SERVICE INDUSTRY THAT CLEANS UNDERGROUND TANKS, SEWERS, AND CATCH-BASINS. COSTS TO CLEAN THE STORMCEPTOR WILL VARY BASED ON THE SIZE OF THE UNIT AND TRANSPORTATION DISTANCES. IF YOU NEED ASSISTANCE FOR CLEANING A STORMCEPTOR UNIT, CONTACT YOUR LOCAL RINKER MATERIALS REPRESENTATIVE, OR THE RINKER MATERIALS STORMCEPTOR INFORMATION LINE AT (800) 909-7763.



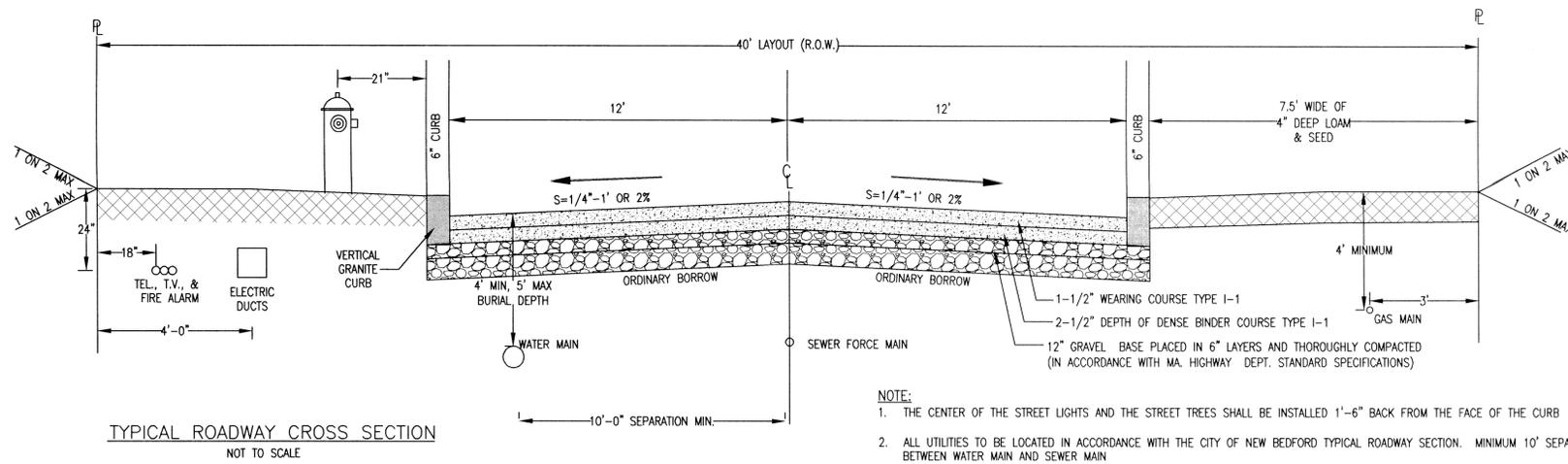
NEW BEDFORD PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE:

REV.	DATE	DESCRIPTION	BY	APP.	DRAWING TITLE	SCALE:	AS NOTED
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR	DETAIL SHEET PROJECT: CARDINAL PLACE (CARDINAL STREET & AVA'S WAY) NEW BEDFORD, MASSACHUSETTS CLIENT: RICHARD HOPPS DARTMOUTH, MASSACHUSETTS	SCALE: AS NOTED DATE: APRIL 22, 2013 DRAWN BY: JLB/RMF DESIGNED BY: JLB/RMF CHECKED BY: RJR APPROVED BY: RJR	SHEET NO. DE1 PROJECT NO. 1931-0101
7	2/27/14	GRAVITY SEWER	EKW	RJR			
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR			
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR			
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR			
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR			
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR			
1	9/5/2013	GENERAL REVISIONS	JLB	RJR			
REV.	DATE	DESCRIPTION	JLB	APP.			

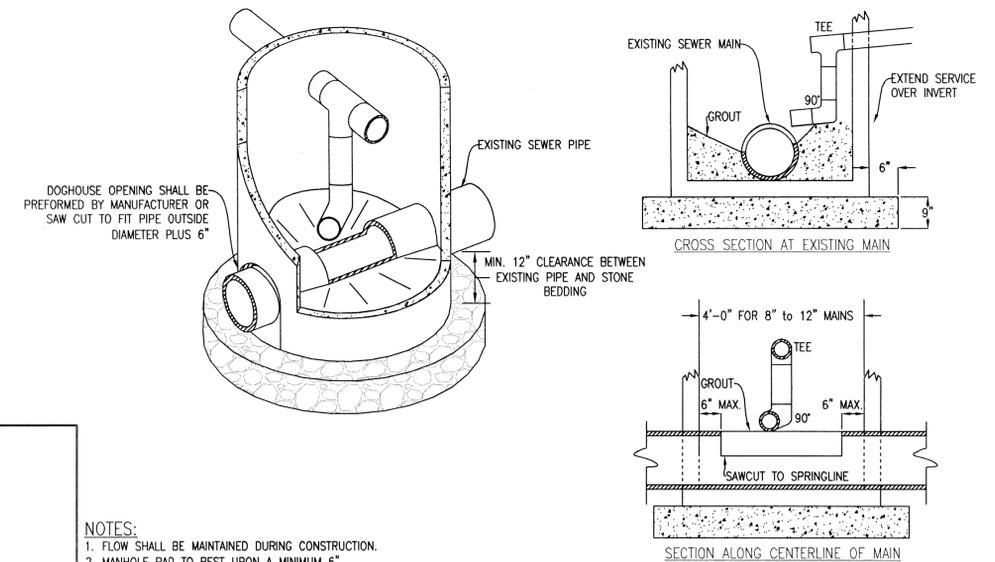
PRIME ENGINEERING
P.O. BOX 1088
350 BEDFORD ST.
LAKEVILLE, MA 02347
TEL: 508.947.0050
FAX: 508.947.2004

PROJECTS: New Bedford/Swallow Street/Map 136-2 Lot 353 Swallow Street/ENGINEERING/Definitive/BASE.dwg



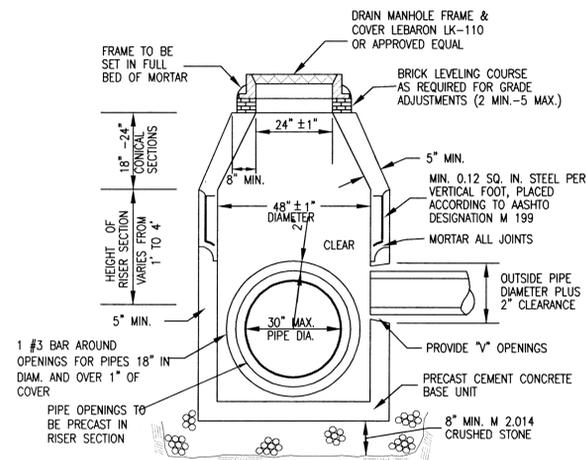
TYPICAL ROADWAY CROSS SECTION
NOT TO SCALE

- NOTE:
1. THE CENTER OF THE STREET LIGHTS AND THE STREET TREES SHALL BE INSTALLED 1'-6" BACK FROM THE FACE OF THE CURB
 2. ALL UTILITIES TO BE LOCATED IN ACCORDANCE WITH THE CITY OF NEW BEDFORD TYPICAL ROADWAY SECTION. MINIMUM 10' SEPARATION BETWEEN WATER MAIN AND SEWER MAIN

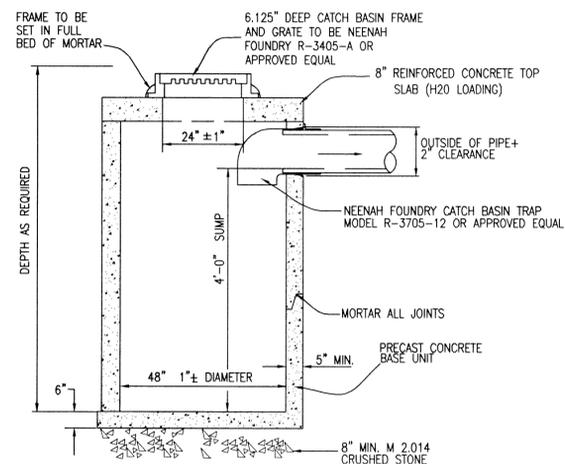


- NOTES:
1. FLOW SHALL BE MAINTAINED DURING CONSTRUCTION.
 2. MANHOLE PAD TO REST UPON A MINIMUM 6" COMPACTED #67 STONE BASE.
 3. A WATER TIGHT SEAL MUST BE CONSTRUCTED BETWEEN THE MANHOLE, THE BASE AND THE MANHOLE SECTIONS AROUND THE PIPES.

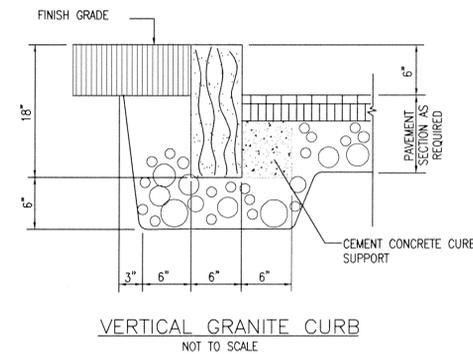
DOGHOUSE MANHOLE (WITH DROP INLET) INSTALLATION OVER EXISTING SEWER MAIN
NOT TO SCALE



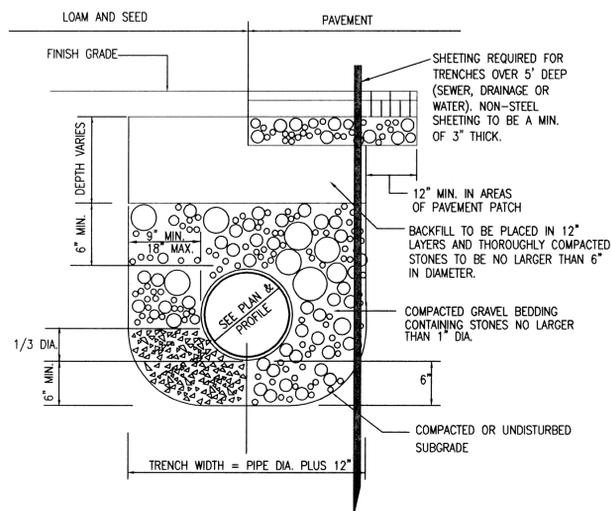
PRECAST CONCRETE
DRAIN MANHOLE
NOT TO SCALE



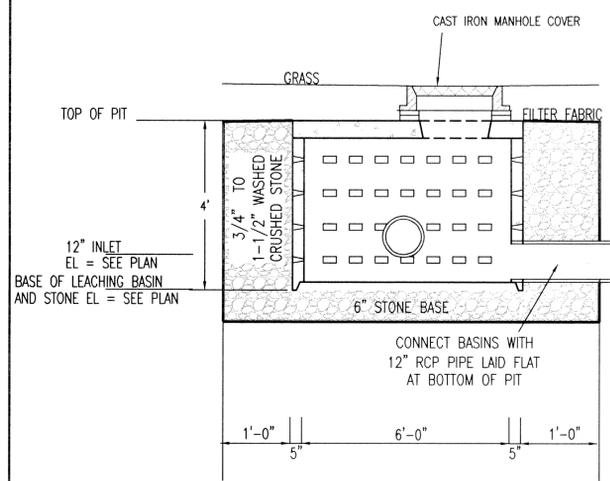
TYPICAL FLAT TOP CATCH BASIN
NOT TO SCALE



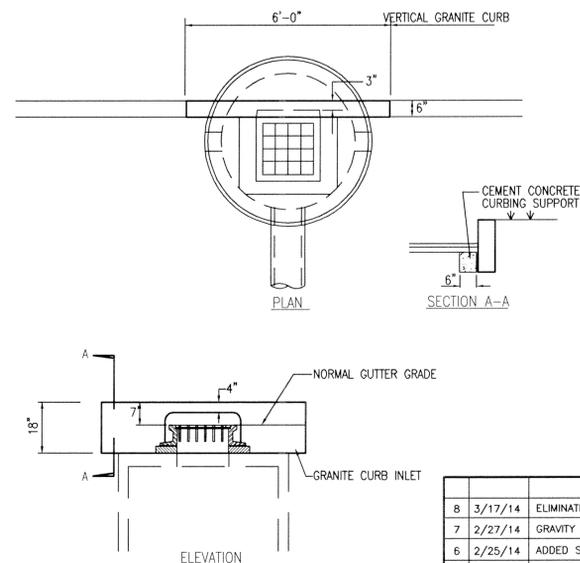
VERTICAL GRANITE CURB
NOT TO SCALE



PIPE TRENCH DETAIL
NOT TO SCALE



LEACHING PIT DETAIL
NOT TO SCALE



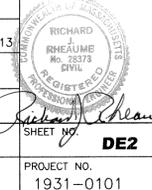
GRANITE CURB INLET
NOT TO SCALE

REV.	DATE	DESCRIPTION	BY	APP.
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR
7	2/27/14	GRAVITY SEWER	EKW	RJR
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR
1	9/5/2013	GENERAL REVISIONS	JLB	RJR

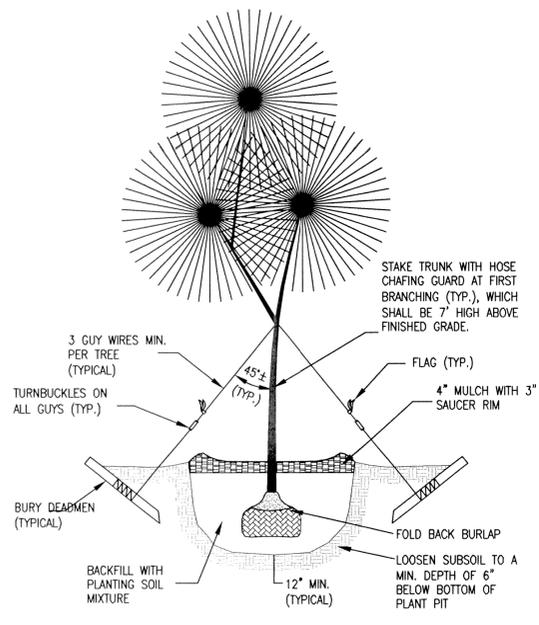
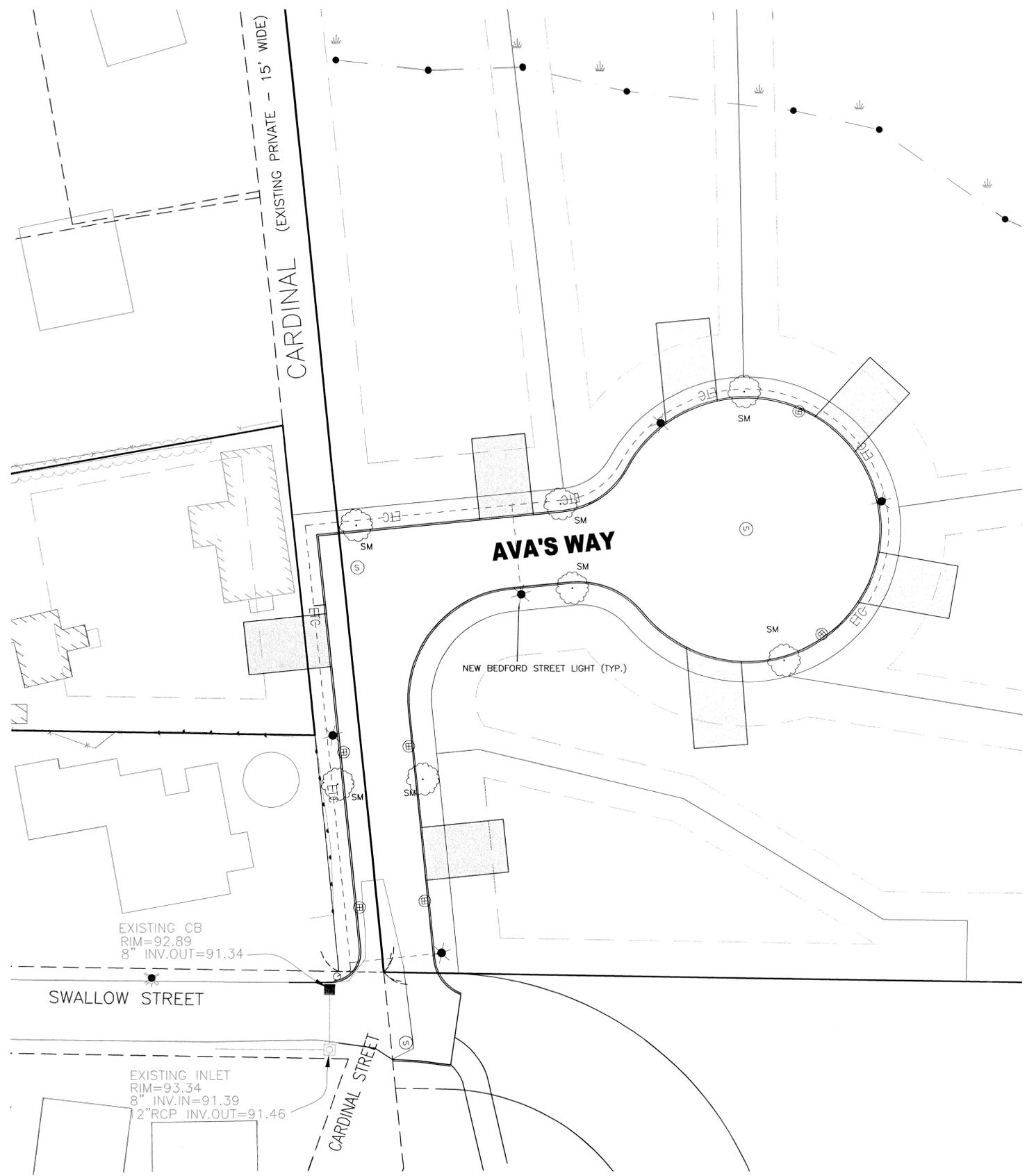
DRAWING TITLE		SCALE:	
DETAIL SHEET		AS NOTED	
PROJECT		DATE:	
CARDINAL PLACE (CARDINAL STREET & AVA'S WAY) NEW BEDFORD, MASSACHUSETTS		APRIL 22, 2013	
CLIENT		DRAWN BY:	
RICHARD HOPPS DARTMOUTH, MASSACHUSETTS		JLB/RMF	
DESIGNED BY:		CHECKED BY:	
JLB/RMF		RJR	
APPROVED BY:		PROJECT NO.	
RJR		1931-0101	

NEW BEDFORD PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW REQUIRED

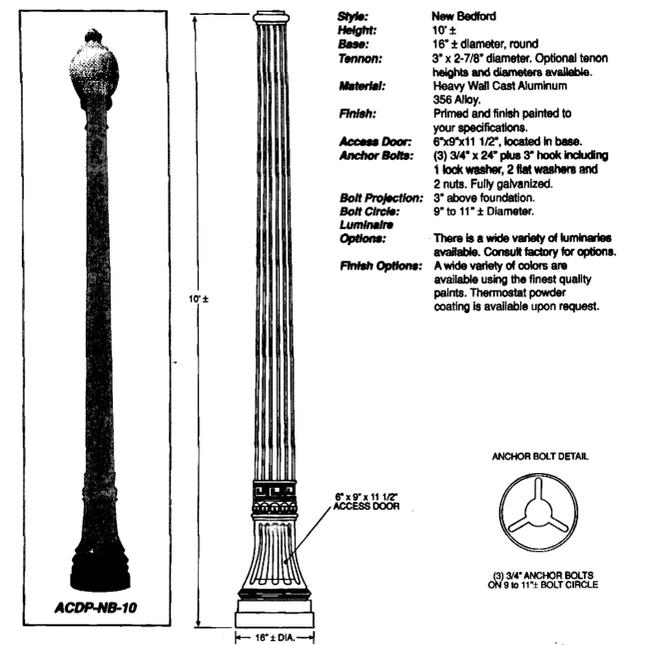
DATE: _____



P.O. BOX 1088
350 BEDFORD ST.
LAKEVILLE, MA 02347
TEL: 508.947.0050
FAX: 508.947.2004



NOTE: ALL STREET TREES SHALL HAVE A MIN. 3" CALIPER AT A HEIGHT OF 12'.
STREET TREE PLANTING
 NOT TO SCALE



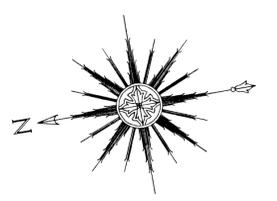
10' HIGH NEW BEDFORD STYLE LIGHT
 NOT TO SCALE

From **ALLOY CASTINGS CO., INC.**
 Quality Aluminum Castings Since 1948
 151 West Union Street • East Bridgewater, MA 02333
 Telephone: (508) 378-2541 • FAX: (508) 378-1240
 www.alloycastings.com

- NOTES:
- ONE STREET TREE TO BE PROVIDED PER LOT AND SHALL BE PLANTED IN ACCORDANCE WITH ARTICLE VII, SECTION J OF THE CITY OF NEW BEDFORD REGULATIONS.
 - THE ACTUAL INTERVAL, FREQUENCY, CANDLEPOWER AND SIZE OF LIGHTING FIXTURE SHALL BE DETERMINED BY THE INSPECTOR OF WIRES OF THE CITY OF NEW BEDFORD AND SHALL BE INSTALLED IN ACCORDANCE WITH SUBDIVISION REGULATIONS, ARTICLE VII, SECTION H.
 - THE DEVELOPER OR GENERAL CONTRACTOR SHALL ALSO PROVIDE TO THE CITY A NUMBER OF LIGHT POLES AND FIXTURES EQUIVALENT TO TEN PERCENT OF THE TOTAL NUMBER INSTALLED AS PART OF THE SUBDIVISION, BUT IN NO CASE LESS THAN ONE LIGHT POLE AND ONE FIXTURE.

PLANT KEY

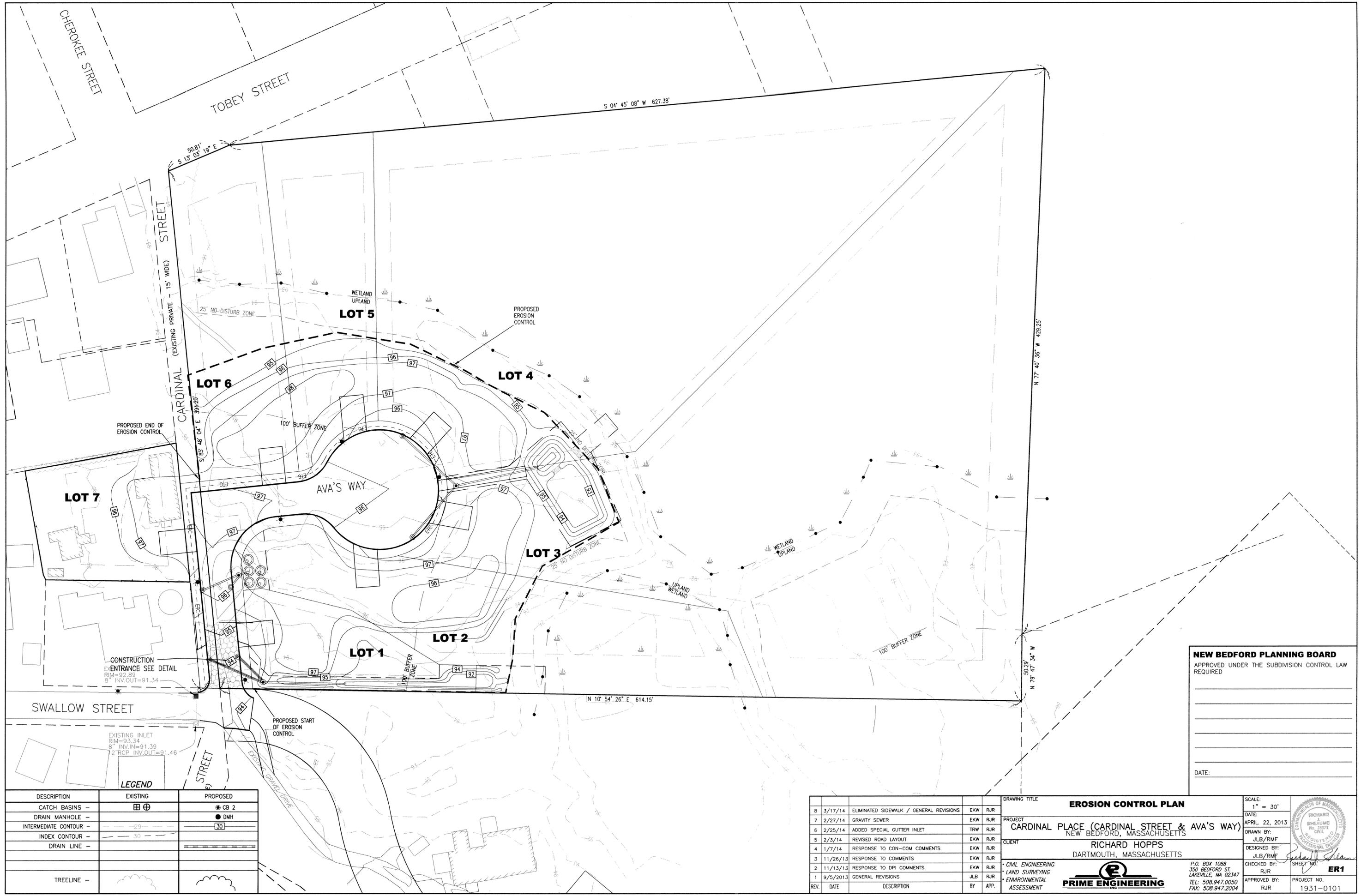
SYMBOL	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SIZE
SM	7	ACER SACCHARUM	SUGAR MAPLE	12' TALL 2" CALIPER



NEW BEDFORD PLANNING BOARD
 APPROVED UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE: _____

REV.	DATE	DESCRIPTION	BY	APP.	DRAWING TITLE	SCALE:
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR	LANDSCAPE AND LIGHTING PLAN	1" = 20'
7	2/27/14	GRAVITY SEWER	EKW	RJR		
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR	PROJECT	DATE: APRIL 22, 2013
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR	CARDINAL PLACE (CARDINAL STREET & AVA'S WAY) NEW BEDFORD, MASSACHUSETTS	DRAWN BY: JLB/RMF
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR	CLIENT	DESIGNED BY: JLB/RMF
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR	RICHARD HOPPS DARTMOUTH, MASSACHUSETTS	CHECKED BY: RJR
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR	CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL ASSESSMENT	APPROVED BY: RJR
1	9/5/2013	GENERAL REVISIONS	JLB	RJR	P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004	PROJECT NO. 1931-0101



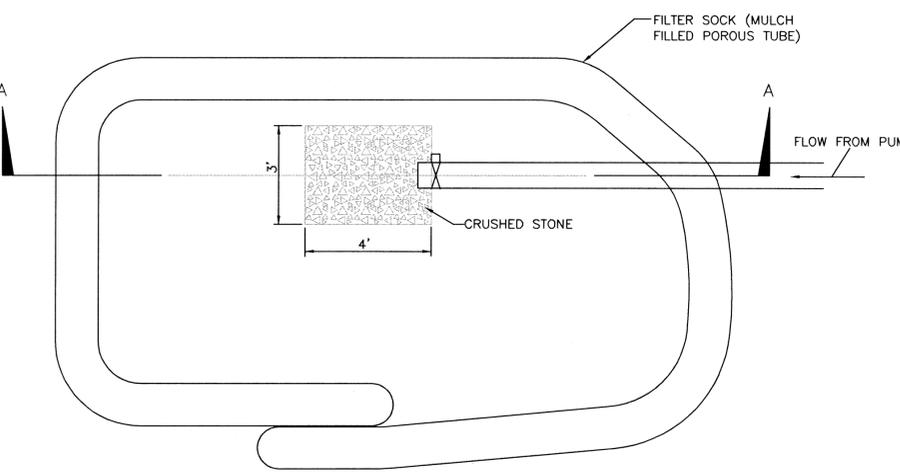
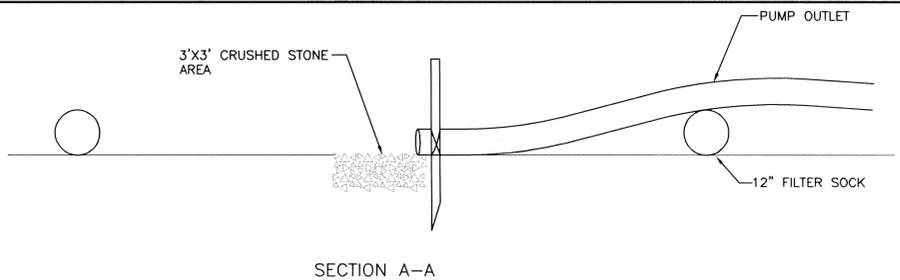
NEW BEDFORD PLANNING BOARD
 APPROVED UNDER THE SUBDIVISION CONTROL LAW
 REQUIRED

DATE: _____

DESCRIPTION	EXISTING	PROPOSED
CATCH BASINS -	⊕	⊕ CB 2
DRAIN MANHOLE -	●	● DMH
INTERMEDIATE CONTOUR -	---	---
INDEX CONTOUR -	---	---
DRAIN LINE -	---	---
TREELINE -	---	---

REV.	DATE	DESCRIPTION	BY	APP.
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR
7	2/27/14	GRAVITY SEWER	EKW	RJR
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR
1	9/5/2013	GENERAL REVISIONS	JLB	RJR

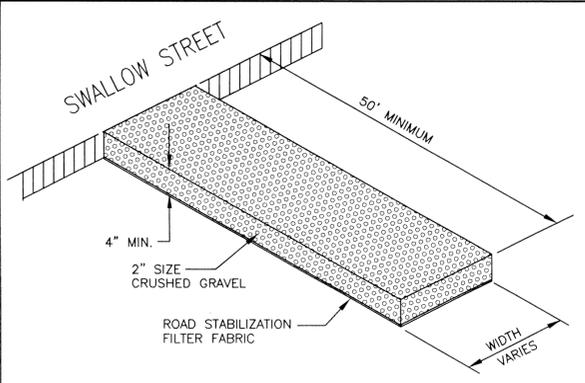
DRAWING TITLE EROSION CONTROL PLAN		SCALE: 1" = 30'
PROJECT CARDINAL PLACE (CARDINAL STREET & AVA'S WAY) NEW BEDFORD, MASSACHUSETTS		DATE: APRIL 22, 2013
CLIENT RICHARD HOPPS DARTMOUTH, MASSACHUSETTS		DRAWN BY: JLB/RMF
DESIGNED BY: JLB/RMF		CHECKED BY: RJR
CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL ASSESSMENT		APPROVED BY: RJR
 PRIME ENGINEERING P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004		SHEET NO. ER1 PROJECT NO. 1931-0101



DEWATERING BASIN PLAN
NOT TO SCALE

CONSTRUCTION OPERATION AND MAINTENANCE SCHEDULE

- THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PHASE IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR SITE CONTRACTOR. THE OUTLINE BELOW SHALL BE ADHERED TO AS CLOSELY AS POSSIBLE TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE SYSTEM.
- PRIOR TO CONSTRUCTION, HAYBALES AND SILT FENCE SHALL BE INSTALLED PER THE APPROVED PLANS. THE HAY BALES AND SILT FENCE SHALL BE INSPECTED PRIOR TO A LARGE STORM EVENT TO ENSURE THAT THE EROSION CONTROL WILL FUNCTION AS REQUIRED AND FOLLOWING A STORM TO INSPECT FOR DAMAGE TO THE EROSION CONTROL ELEMENTS. ANY DAMAGE OR IMPROPER INSTALLATION THAT IS NOTICED PRIOR TO OR FOLLOWING A STORM EVENT SHALL BE PROMPTLY REPLACED OR REPAIRED IN A SATISFACTORY MANNER SO AS TO PREVENT SEDIMENT FROM BYPASSING THE EROSION CONTROL BARRIER.
 - THE LIMIT OF CLEARING SHOWN ON THE APPROVED PLAN SHALL BE STRICTLY ADHERED TO. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE LEVEL OF SAFETY OF STANDING TREES.
 - IN CONJUNCTION WITH THE ROADWAY CONSTRUCTION, ALL DRAINAGE STRUCTURES, INCLUDING THE RETENTION BASIN, SHALL BE CONSTRUCTED AND STABILIZED AS SOON AS POSSIBLE. METHODS OF STABILIZATION INCLUDE, BUT ARE NOT LIMITED TO, HYDROSEED, LOAM AND SEED, STRAW MULCH, EROSION CONTROL BLANKETS, ETC.
 - THE CATCH BASINS AND SEDIMENT FOREBAYS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. ANY SEDIMENT BUILDUP OF EIGHT (8) INCH DEPTH IN EITHER OF THE STRUCTURES SHALL BE PROMPTLY REMOVED BY HAND OR MECHANICAL METHODS AND ALL DEBRIS REMOVED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
 - THE RETENTION BASIN AND FOREBAYS SHALL BE INSPECTED WEEKLY OR AFTER ALL RAINFALL EVENTS GREATER THAN 1/2 INCH, WHICHEVER OCCURS SOONER. ANY EROSION WITHIN THE BASIN OR FOREBAYS SHALL BE FILLED AND RESTABILIZED IN A MANNER TO PREVENT FUTURE EROSION. IN ADDITION, THE OUTER PORTIONS OF THE RETENTION BASINS SHALL BE INSPECTED IN A SIMILAR MANNER.
 - THIS SCHEDULE MUST BE ADHERED TO BY THE OWNER AND/OR CONTRACTOR UNTIL THE ROADWAY IS ACCEPTED BY THE TOWN.



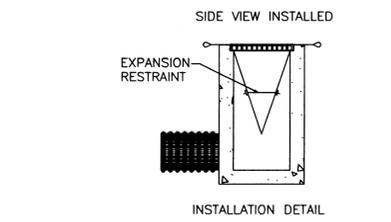
ANTI-TRACKING PAD
NOT TO SCALE

EROSION & SEDIMENT CONTROL NOTES:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND PREVENT SEDIMENTATION WITHIN THE 25' NO DISTURB ZONE OR OFFSITE PROPERTIES. IT IS INTENDED THAT THE IMPLEMENTATION OF THE FOLLOWING MEASURES WILL MEET THIS GOAL. WHEN IT IS CLEAR TO THE DESIGNER THAT EROSION AND SEDIMENTATION HAVE BEEN ADEQUATELY CONTROLLED WITHOUT THE IMPLEMENTATION OF EVERY MEASURE, ADDITIONAL MEASURES NEED NOT BE IMPLEMENTED. ALTERNATIVELY, IF ALL OF THE FOLLOWING MEASURES HAVE BEEN IMPLEMENTED AND THE CONTROL OF EROSION AND SEDIMENTATION IS INADEQUATE, THE CONTRACTOR MUST EMPLOY SUFFICIENT SUPPLEMENTAL MEASURES BEYOND THE SCOPE OF THIS PLAN.
- EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO STUMP REMOVAL AND CONSTRUCTION. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
 - ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL MUNICIPAL REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION. A STAKED HAYBALE DAM SHALL BE INSTALLED DOWN GRADIENT OF ALL DRAINAGE OUTFALLS.
 - ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE OWNER OR AGENTS OF THE OWNER.
 - CATCH BASINS WILL BE PROTECTED WITH HAYBALE FILTERS THROUGHOUT THE CONSTRUCTION PERIOD UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SILT SOCKS SHOULD BE INSTALLED UNDER GRATE OPENING UNTIL PAVEMENT IS IN PLACE AND GROUND SURFACE IS STABILIZED.
 - SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:

KENTUCKY BLUE GRASS	45%
CREeping RED FESCUE	45%
PERENNIAL RYEGRASS	10%

 SEED TO BE APPLIED AT A RATE OF 4 LBS./1000 SQ. FT.
PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15. AFTER OCTOBER 15, AREAS WILL BE STABILIZED WITH HAYBALE CHECK, FILTER FABRIC, OR WOODCHIP MULCH, AS REQUIRED, TO CONTROL EROSION.
 - AREAS THAT ARE NOT THE LOCATION OF ACTIVE CONSTRUCTION WHICH ARE TO BE LEFT BARE FOR OVER ONE MONTH BEFORE FINISHED GRADING AND SEEDING IS ACHIEVED, SHALL BE MULCHED OR RECEIVE TEMPORARY STABILIZATION SUCH AS JUTE NETTING OR SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYEGRASS APPLIED TO A RATE OF 2 LBS./1,000 SQ. FT. LIMESTONE (EQUIVALENT TO BE 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 90 LBS./1,000 SQ. FT. PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COARSE MATTER.
 - AT ALL PROPOSED FILL AREAS WHICH ARE NOT CURRENTLY SHOWN ON THESE PLANS, THE CONTRACTOR SHALL ESTABLISH AN EROSION CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) ABOUT TEN (10') FEET FROM TOE TO SLOPE OF PROPOSED FILL AREAS PRIOR TO BEGINNING FILL INSTALLATION. STABILIZATION OF SLOPES IN FILL AREAS (USING MULCH OR GRASS) SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMMENCEMENT OF FILL INSTALLATION.
 - STABILIZATION OF SLOPES IN CUT AREAS (USING MULCH OR GRASS) AND THE INSTALLATION OF CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) AT THE TOE OF SLOPE SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMPLETION.
 - SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN. ALL HAYBALES OR SILT FENCE RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS SHALL BE REPAIRED OR REPLACED.
 - CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFYING THE ROCHESTER PLANNING BOARD OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
 - THE CONTRACTOR SHALL SECURE THE SERVICES OF A PROFESSIONAL ENGINEER, WHO SHALL VERIFY IN THE FIELD THAT THE CONTROLS REQUIRED BY THIS PLAN ARE PROPERLY INSTALLED, SHALL MAKE INSPECTION OF SUCH FACILITIES NOT LESS FREQUENTLY THAN EVERY 14 DAYS OR AFTER A RAINFALL IN EXCESS OF 1/2 INCH, WHICHEVER OCCURS FIRST. THE INSPECTION REPORTS SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT AND CONSERVATION COMMISSION OFFICE ON A MONTHLY BASIS.
 - STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF SOIL STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAYBALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
 - THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC.
 - IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN THIRTY (30) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS.
 - HAYBALES SHALL BE USED ONLY AS A TEMPORARY MEASURE. WHERE CONTROL MEASURES WILL BE REQUIRED FOR LONGER THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED.
 - WHERE DEWATERING IS NECESSARY, THERE SHALL NOT BE A DISCHARGE DIRECTLY INTO WETLANDS OR WATERCOURSES. PROPER METHODS AND DEVICES SHALL BE UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO A TEMPORARY SEDIMENTATION BOWL, PROVIDING SURGE PROTECTION AT THE INLET AND THE OUTLET OF PUMPS, OR FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS. IF A PUMPING OPERATION IS CAUSING TURBIDITY PROBLEMS, SAID OPERATION SHALL CEASE UNTIL SUCH TIME AS FEASIBLE MEANS OF CONTROLLING TURBIDITY ARE DETERMINED AND IMPLEMENTED. SAID DISCHARGE POINTS SHALL BE LOCATED OVER 100 FEET FROM THE DELINEATED WETLANDS AS INDICATED ON THIS PLAN.



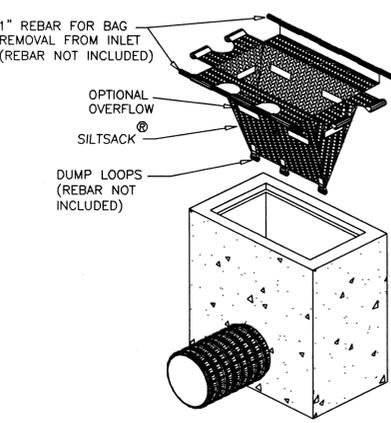
NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK®
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

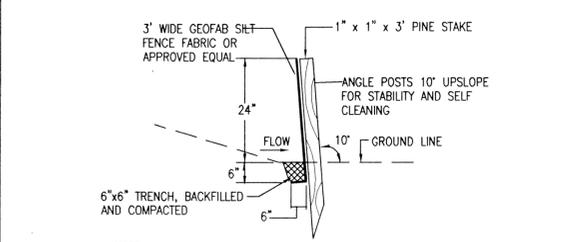
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE	ASTM D-4632	300 LBS
STRENGTH GRAB	ASTM D-4632	20%
TENSILE ELONGATION	ASTM D-4833	120 LBS
PUNCTURE MULLEN	ASTM D-3786	800 PSI
BURST TRAPEZOID	ASTM D-4533	120 LBS
TEAR UV RESISTANCE	ASTM D-4355	80%
APPARENT OPENING	ASTM D-4751	40 US SIEVE
SIZE FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT 0.55
PERMITTIVITY	ASTM D-4491	SEC -1

HI-FLOW SILTSACK®
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE	ASTM D-4632	265 LBS
STRENGTH GRAB	ASTM D-4632	20%
TENSILE ELONGATION	ASTM D-4833	135 LBS
PUNCTURE MULLEN	ASTM D-3786	420 PSI
BURST TRAPEZOID	ASTM D-4533	45 LBS
TEAR UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING	ASTM D-4751	20 US SIEVE
SIZE FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT 1.5
PERMITTIVITY	ASTM D-4491	SEC -1

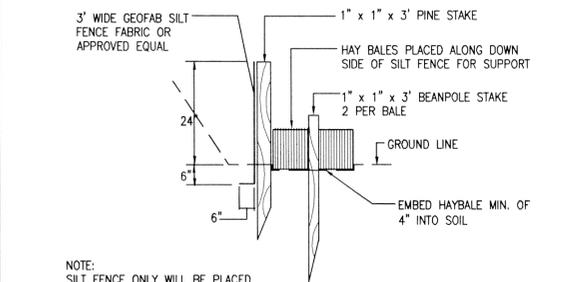


DETAIL OF INLET SEDIMENT CONTROL DEVICE
WITH CURB DEFLECTOR ("SILT SACK")
NOT TO SCALE



NOTE: SILT FENCE ONLY WILL BE PLACED AS SHOWN ON THE "EROSION CONTROL PLAN".

SILT FENCE DETAIL
NOT TO SCALE



NOTE: SILT FENCE ONLY WILL BE PLACED AS SHOWN ON THE "EROSION CONTROL PLAN".

HAY BALE AND SILT FENCE DETAIL
NOT TO SCALE

NEW BEDFORD PLANNING BOARD

APPROVED UNDER THE SUBDIVISION CONTROL LAW REQUIRED

DATE: _____

DATE: _____

REV.	DATE	DESCRIPTION	BY	APP.	DRAWING TITLE	SCALE
8	3/17/14	ELIMINATED SIDEWALK / GENERAL REVISIONS	EKW	RJR	EROSION CONTROL DETAIL SHEET	AS-NOTED
7	2/27/14	GRAVITY SEWER	EKW	RJR		DATE: APRIL 22, 2013
6	2/25/14	ADDED SPECIAL GUTTER INLET	TRW	RJR	PROJECT	CARDINAL PLACE (CARDINAL STREET & AVA'S WAY) NEW BEDFORD, MASSACHUSETTS
5	2/3/14	REVISED ROAD LAYOUT	EKW	RJR	CHECKED BY:	JLB/RMF
4	1/7/14	RESPONSE TO CON-COM COMMENTS	EKW	RJR	DESIGNED BY:	JLB/RMF
3	11/26/13	RESPONSE TO COMMENTS	EKW	RJR	CHECKED BY:	JLB/RMF
2	11/13/13	RESPONSE TO DPI COMMENTS	EKW	RJR	CLIENT	RICHARD HOPPS DARTMOUTH, MASSACHUSETTS
1	9/5/2013	GENERAL REVISIONS	JLB	RJR	CIVIL ENGINEERING LAND SURVEYING ENVIRONMENTAL ASSESSMENT	PRIME ENGINEERING P.O. BOX 1088 300 BEDFORD ST. LAKESVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004
REV.						APPROVED BY: _____ PROJECT NO. 1931-0101