

PERMIT SITE PLAN

9/25/06 - 6

124 MAIN STREET
ACTON, MASSACHUSETTS 01720

FOR

FRANK CHEN and XIAO FAN ZHANG

PERMIT
SITE
PLAN

124 Main Street
Acton, Massachusetts 01720

PREPARED FOR:

Frank
Chen

124 Main Street
Acton, Massachusetts 01720

**HANCOCK
ASSOCIATES**

Civil Engineers

Land Surveyors

Landscape Architects

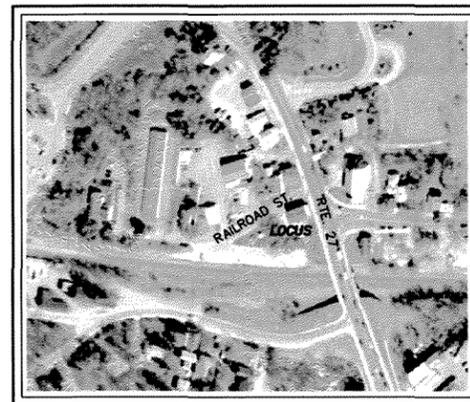
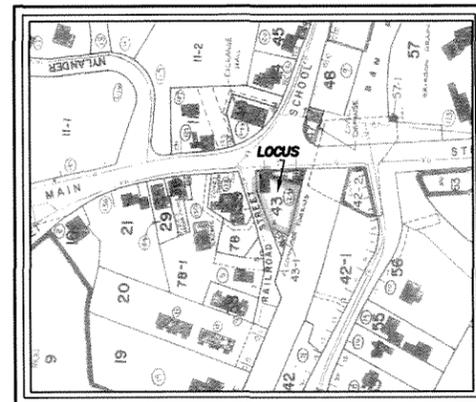
Environmental
Consultants

185 CENTRE STREET, DANVERS, MA 01923
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM

PROJECT TEAM

CIVIL ENGINEERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS:

HANCOCK ASSOCIATES
185 CENTRE STREET
DANVERS, MASSACHUSETTS 01923



VICINITY MAPS

SCALE: 1"=200'

OWNER/APPLICANT:

FRANK CHEN
124 MAIN STREET
ACTON, MASSACHUSETTS 01720

SHEET INDEX

- SHEET 1..... TITLE SHEET
- SHEET 2..... NOTES, REFERENCES & LEGEND
- SHEET 3..... EXISTING CONDITIONS PLAN OF LAND IN ACTON, MA.
- SHEET 4..... SITE PLAN
- SHEET 5..... LANDSCAPE PLAN
- SHEET 6..... DETAIL SHEET 1
- SHEET 7..... DETAIL SHEET 2

1	TSM	RFD	8/31/06	TOWN RECOMMENDATIONS
NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
DATE:	6/28/06	DESIGN BY:	TSM	
SCALE:	AS SHOWN	DRAWN BY:	TSM	
		CHECK BY:	RFD	

**TITLE
SHEET**

<small>PLOT DATE: Sep 01, 2006 10:46 am PATH: F:\Land Projects\12536\Wing\DWG\</small>	PS-1
DWG: 12536-SP3.dwg	
LAYOUT: TS01A	
SHEET: 1 OF 7	
PROJECT NO.: 12536	

ZONING

SAV- SOUTH ACTON VILLAGE

ASSESSORS

MAP H-2A, LOT 43

REFERENCES

DEED BOOK 43559, PAGE 297
PLAN 393 OF 2000

RECORD OWNER

FRANK CHEN & XIAO FAN ZHANG
124 MAIN STREET
ACTON, MA 01720

SITE DATA

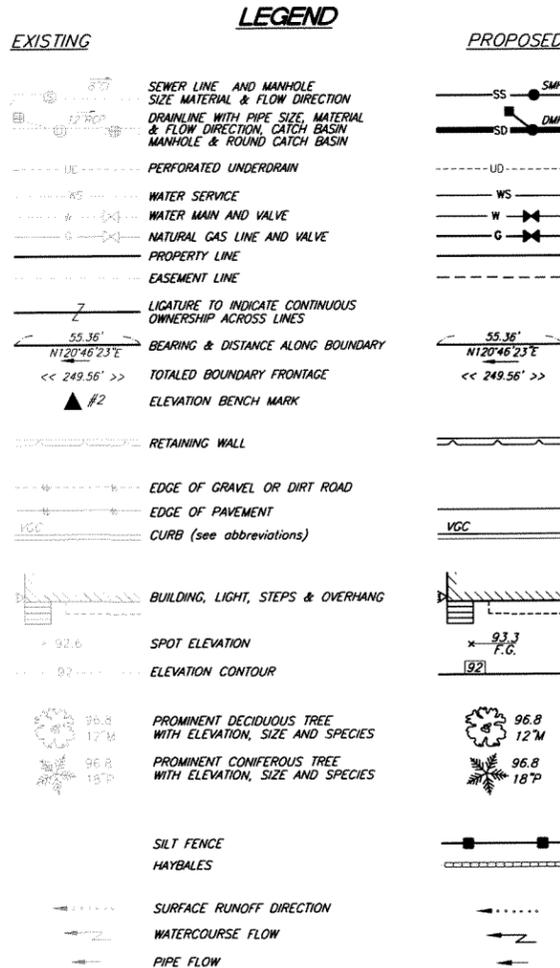
LOT AREA	7511± sq. ft.	
IMPERVIOUS AREA - TOTAL SITE	PRE-DEVELOPMENT	POST-DEVELOPMENT
BUILDING AREA	985± SF (13.0%)	985± SF (13.1%)
PAVEMENT & SIDEWALK AREA	246± SF (3.3%)	4,010± SF (53.3%)
TOTAL IMPERVIOUS AREA	1,231± SF (16.3%)	4,995± SF (66.5%)
GRAVEL AREA	2450± SF	
IMPERVIOUS AREA WITHIN 100' WETLAND BUFFER ZONE	N/A	N/A
OPEN SPACE & LANDSCAPED AREA	3,830± SF (50.1%)	2,516± SF (33.5%)
PARKING:		
REQUIRED:		
1 SPACE/300 SF FLOOR AREA	5	
2 SPACES/DWELLING UNIT	2	
TOTAL	7	
PROVIDED:		
STANDARD	9	
OVERSIZED	1	
TOTAL	10	

DIMENSIONAL REQUIREMENTS

MIN. LOT AREA	N/R
FRONTAGE	N/R
FRONT YARD	10 FT
SIDE YARD	10 FT
REAR YARD	10 FT
MAXIMUM BUILDING HEIGHT	36 FT
MAXIMUM FL. AREA RATIO	0.20

DRAINAGE ANALYSIS:

Proposed Renovated Impervious Area = 4,010 sq.ft.
Estimated Perc. rate = 2 min./inch
Total volume of stormceptor watershed runoff during 1 inch storm: 7405 sq. ft. x 0.0833 ft. = 617 cu. ft.
Volume of runoff during 6 inch 24 hr. storm event (25 YR 24 HR Cornell estimate): 7405 x 0.500 ft. = 3,702 cu. ft./24 hrs.
Total volume provided in groundwater recharge area, 28 Model 330HD units & surrounding stone = 11.32 cf/LI x 50LI = 566 cf.
stone above chambers = 0.5x21x15 = 157 cf.
Total Infiltration = 315 sq.ft. x 1inch/2min. x 1ft. /12 inch x 1440 min./24 hr. = 39,600 cu. ft./24hr. = 676 cf.



GENERAL NOTES

- LOCATIONS OF EXISTING UNDERGROUND UTILITIES/OBSTRUCTIONS/SYSTEMS SHOWN HEREON ARE APPROXIMATE ONLY. ALL UTILITIES/OBSTRUCTIONS/SYSTEMS MAY NOT BE SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES/OBSTRUCTIONS/SYSTEMS, WHETHER OR NOT SHOWN HEREON.
- UNLESS OTHERWISE SHOWN, ALL NEW UTILITIES SHALL BE UNDERGROUND.
- CONTRACTOR SHALL FURNISH CONSTRUCTION LAYOUT OF BUILDING AND SITE IMPROVEMENTS. THIS WORK SHALL BE PERFORMED BY A PROFESSIONAL LAND SURVEYOR.
- SAFETY MEASURES, CONSTRUCTION METHODS AND CONTROL OF WORK SHALL BE RESPONSIBILITY OF CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION THAT ARE NOT DESIGNATED FOR DEMOLITION AND / OR REMOVAL HEREON. DAMAGED IMPROVEMENTS SHALL BE REPAIRED TO THE SATISFACTION OF THEIR RESPECTIVE OWNERS.
- THIS PLAN IS NOT INTENDED TO SHOW AN ENGINEERED BUILDING FOUNDATION DESIGN, WHICH WOULD INCLUDE DETAILS AND FINAL ELEVATIONS OF FOOTINGS, WALLS AND SUBSURFACE DRAINAGE TO PREVENT INTERIOR FLOODING. SEE ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS.
- ANY INTENDED REVISION OF THE HORIZONTAL AND/OR VERTICAL LOCATION OF IMPROVEMENTS TO BE CONSTRUCTED AS SHOWN HEREON SHALL BE REVIEWED AND APPROVED BY ENGINEER PRIOR TO IMPLEMENTATION.
- RIM ELEVATIONS SHOWN FOR NEW STRUCTURES ARE APPROXIMATE AND ARE PROVIDED TO ASSIST CONTRACTOR WITH MATERIAL TAKEOFFS. FINISH RIM ELEVATIONS SHOULD MATCH PAVEMENT, GRADING OR LANDSCAPING, UNLESS SPECIFICALLY INDICATED OTHERWISE.
- WHERE EXISTING UTILITY LINES/STRUCTURES ARE TO BE CUT/BROKEN DOWN/ ABANDONED, LINES/STRUCTURES SHALL BE PLUGGED/CAPPED/FILLED IN ACCORDANCE WITH OWNER REQUIREMENTS.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND RELATIVE ELEVATION OF BENCH MARKS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
- PROPOSED BUILDING FOUNDATION CONFIGURATION AND LOCATION ON THE LOT AS SHOWN ARE CONCEPTUAL AND SHALL BE VERIFIED AS TO CONFORMANCE WITH FINAL ARCHITECTURAL PLANS AND ZONING ORDINANCES PRIOR TO CONSTRUCTION.
- SILT FENCE AND/OR HAYBALES SHOWN HEREON SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION, AND SHALL SERVE AS THE LIMIT OF WORK.
- CONTRACTOR TO VERIFY EXISTING ELEVATION AT BUILDING DISCHARGE PIPES PRIOR TO PLACEMENT OF GREASE TRAP.
- STRUCTURE DETAILS FROM INDEPENDENT VENDORS ARE CONSTANTLY CHANGING. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT DETAILS SHOWN, MATCH CURRENT DETAILS AND SPECIFICATIONS FROM VENDORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CLEAN-UP SAND, DIRT, & DEBRIS WHICH MAY ERODE FROM THE PROPERTY. SILT AND DEBRIS THAT ENTERS THE EXISTING DRAINAGE SYSTEM SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY.

REGULATORY NOTES

- CONTRACTOR SHALL CONTACT DIG-SAFE FOR UNDERGROUND UTILITY MARKING AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.
- CONTRACTOR SHALL MAKE HIMSELF AWARE OF ALL CONSTRUCTION REQUIREMENTS, CONDITIONS, AND LIMITATIONS IMPOSED BY PERMITS AND APPROVALS ISSUED BY REGULATORY AUTHORITIES PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL COORDINATE AND OBTAIN ALL 24B CMR 2.00. CONSTRUCTION PERMITS REQUIRED BY REGULATORY AUTHORITIES.
- ALL WORK OUTSIDE OF BUILDING THAT IS LESS THAN 10 FEET FROM THE INSIDE FACE OF BUILDING FOUNDATIONS SHALL CONFORM WITH THE UNIFORM STATE PLUMBING CODE OF MASSACHUSETTS.
- THE TOWN OF ACTON RECOMMENDS THAT THE LIMITS OF WORK BE STAKED BY A LAND SURVEYOR.

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SCALE:	AS SHOWN	DRAWN BY:	TSM	
		CHECK BY:	RFD	

NOTES, REFERENCES AND LEGEND

PLOT DATE: Sep 14, 2006 9:21 am
PATH: F:\Land Projects\12536\map\DWG\

DWG: 12536-SP3.dwg

LAYOUT: NRL01A

SHEET: 2 OF 7

PROJECT NO.:

PS-2

12536

ASSESSORS:

MAP H-2A, LOT 43

ZONING:

SAV - SOUTH ACTON VILLAGE

NOTES:

- 1) ELEVATIONS SHOWN HEREON REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (MEAN SEA LEVEL).
- 2) UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD LOCATIONS OF STRUCTURES. OTHER UNDERGROUND UTILITIES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER AND THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
- 3) BUILDING OFFSETS SHOWN HEREON ARE TO WOOD SIDING.

REFERENCES:

DEED BOOK 43559, PAGE 297
PLAN 393 OF 2000

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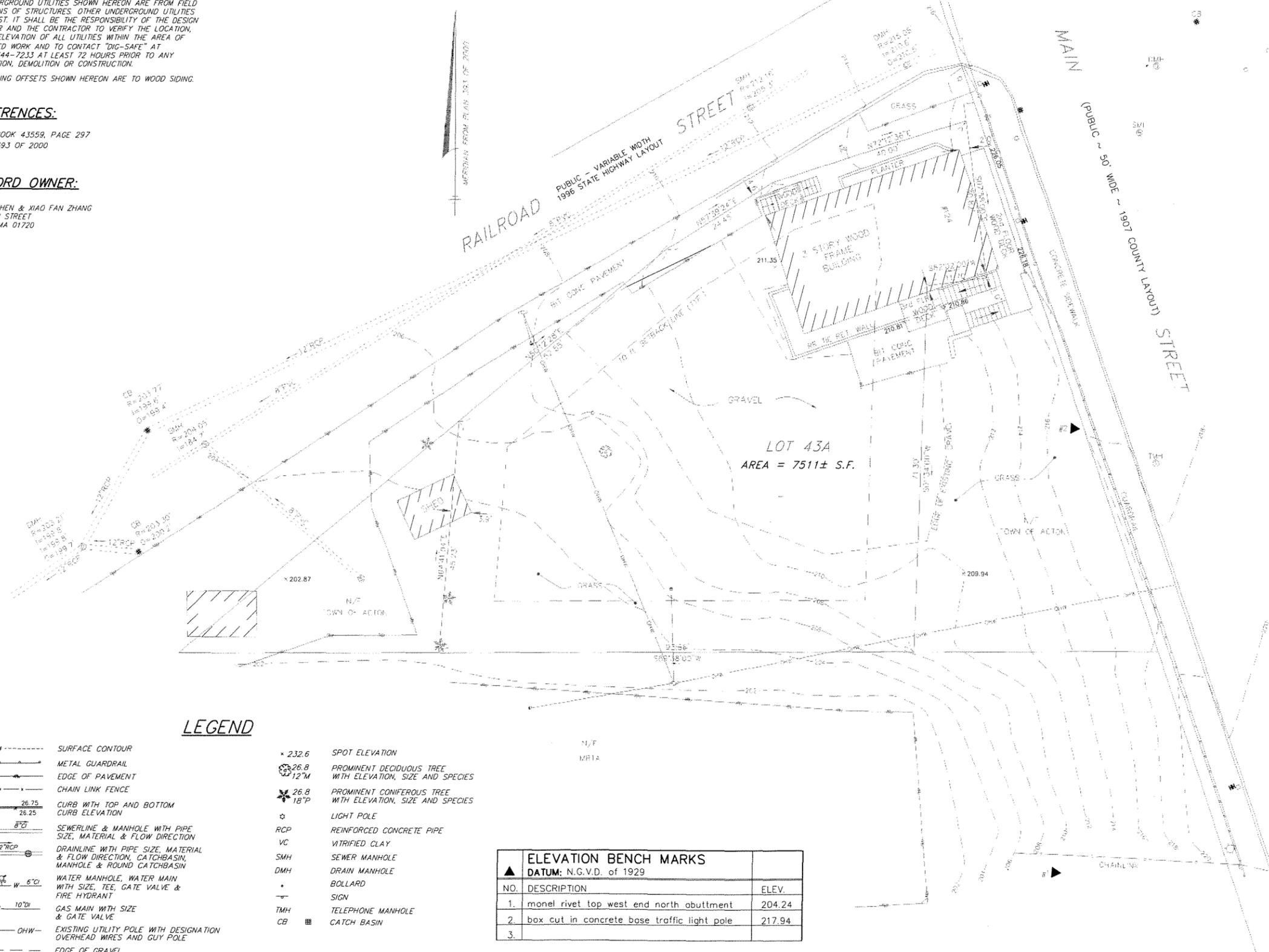
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LEGEND

- 234--- SURFACE CONTOUR
- x—x— METAL GUARDRAIL
- x—x— EDGE OF PAVEMENT
- x—x— CHAIN LINK FENCE
- 26.75— CURB WITH TOP AND BOTTOM CURB ELEVATION
- 8"RCP— SEWERLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION
- 12"RCP— DRAINLINE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION, CATCHBASIN, MANHOLE & ROUND CATCHBASIN
- 6"CI— WATER MANHOLE, WATER MAIN WITH SIZE, TEE, GATE VALVE & FIRE HYDRANT
- 10"GI— GAS MAIN WITH SIZE & GATE VALVE
- OHW— EXISTING UTILITY POLE WITH DESIGNATION OVERHEAD WIRES AND GUY POLE
- x—x— EDGE OF GRAVEL
- x 232.6 SPOT ELEVATION
- 26.8 PROMINENT DECIDUOUS TREE WITH ELEVATION, SIZE AND SPECIES
- 26.8 PROMINENT CONIFEROUS TREE WITH ELEVATION, SIZE AND SPECIES
- ☆ LIGHT POLE
- RCP REINFORCED CONCRETE PIPE
- VC VITRIFIED CLAY
- SMH SEWER MANHOLE
- DMH DRAIN MANHOLE
- BOLLARD
- SIGN
- TMH TELEPHONE MANHOLE
- CB CATCH BASIN

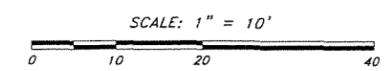
ELEVATION BENCH MARKS		
DATUM: N.G.V.D. of 1929		
NO.	DESCRIPTION	ELEV.
1.	monel rivet top west end north abutment	204.24
2.	box cut in concrete base traffic light pole	217.94
3.		

NO.	BY	APP.	DATE	ISSUE/REVISION DESCRIPTION
1	TSM	RFD	8/31/06	TOWN RECOMMENDATIONS

EXISTING CONDITIONS PLAN OF LAND IN ACTON, MA

DATE: 4/13/06 DRAWN BY: MDS
SCALE: AS SHOWN CHECK BY: MDB
DWG: 12536-SP3.dwg
LAYOUT: EC
SHEET: 3 OF 7
PROJECT NO.: 12536

PS-3



EROSION AND SEDIMENTATION PLAN

Best management practices (BMP) for erosion and sedimentation control are staked hay bales, and filter fences. Many stormwater BMP technologies (e.g., infiltration technologies) are not designed to handle the high concentrations of sediments typically found in construction runoff and must be protected from construction-related sediment loadings. Construction BMPs must be maintained.

In developing the proposed project certain measures will be implemented to minimize impacts erosion and sedimentation could have on the surrounding areas. This section addresses items that involve proper construction techniques, close surveillance of workmanship, and immediate response to emergency situations. The contractor must be prepared to provide whatever reasonable measures are necessary to protect the environment during construction and to stabilize all disturbed areas as soon as construction ends.

* REFER TO THE OPERATION AND MAINTENANCE DOCUMENT FOR MORE DETAIL.

HISTORIC DISTRICT COMMISSION NOTES:

- 1.) THE HISTORIC DISTRICT COMMISSION BELIEVES THAT THE PROPOSED PARKING LOT OPENING SHOULD BE REDUCED TO 20 FT. IN ORDER TO MINIMIZE THE IMPACT. FOR MINIMUM MANEUVERABILITY REQUIREMENTS, THE ISLE WIDTH MUST INCREASE TO 22 FT. WIDE.
- 2.) AS REQUESTED BY THE HISTORIC DISTRICT COMMISSION(HDC), SCREEN PLANTINGS ARE PROPOSED EITHER SIDE OF THE OPENING. THE SPECIES IS TO BE SALT RESISTANT.
- 3.) THE PROPOSED RETAINING WALL IS FOR PERMITTING PURPOSES ONLY. THE OWNER MAY CONTRACT TO DESIGN & CONSTRUCT ANY OTHER APPROPRIATE RETAINING WALL.
- 4.) THE HDC BELIEVES THE SHED SHOULD REMAIN IN ITS PRESENT LOCATION.
- 5.) THE HDC PREFERS THE TRASH RECEPTACLE TO REMAIN WHERE IT IS NOW POSITIONED.
- 6.) THE HDC PREFERS A STONE WALL OR POURED CONCRETE RETAINING WALL ALONG THE MBTA LAND.

CUCUMBER MAGNOLIA TREE TO REMAIN. ROOT SYSTEM SHALL BE PROTECTED DURING CONSTRUCTION.

CONSTRUCTION KEY NOTES:

(NOT A CONSTRUCTION SEQUENCE)

- 1 INSTALL HAY BALES & SILT FENCE.
- 2 PROTECT AND DO NOT DISTURB THE LARGE CUCUMBER MAGNOLIA TREE.
- 3 EXISTING RETAINING WALL TO BE REMOVED.
- 4 INSTALL RETAINING WALL, TO BE DESIGNED BY OTHERS.
- 5 INSTALL BITUMINOUS CONCRETE CURB.
- 6 INSTALL RINKER STC 450I STORMCEPTOR
RIM = 206.0'
INV. = 203.5'
- 7 INSTALL CULTEC RECHARGER 330HD UNITS OR EQUIVALENT INCLUDED IN THE INSTALLATION ARE THREE 4" PERFORATED PVC PIPES SLOPED TO DAYLIGHT THROUGH THE RETAINING WALL. THESE PIPES ARE FOR SECONDARY DISCHARGE, SEE DETAIL ON SHEET 6.
INV. = 203.16' (IN FROM STORMCEPTOR)
INV. = 205.71' (4" PERFORATED SECONDARY DISCHARGE)
- 8 INSTALL 1000-GALLON GREASE TRAP
INV. = 208.5±(FROM BUILDING)
INV. = 208.25' (OUT TO EXISTING)
- 9 INSTALL BITUMINOUS CONCRETE PAVEMENT.
- 10 SAWCUT PAVEMENT & INSTALL 4" PVC CONNECTION TO EXISTING LINE
INV. = 200.5±
- 11 INSTALL 4" PVC SEWER LINE.
- 12 EXISTING SEPTIC TANK(S) / CESSPOOL(S) / LEACH PIT(S) SHALL BE PROPERLY ABANDONED: PUMPED EMPTY, CRUSHED AND FILLED WITH CLEAN SAND, IN ACCORDANCE WITH 310 CMR 15.354
- 13 PROPOSED BUILDING OUTLET INV. = 209.0± (KITCHEN)
- 14 BUILDING OUTLET INV. = 209.0± (BATHROOMS)
- 15 INSTALL 40 LF OF 8" HDPE DRAIN PIPE.
- 16 INSTALL WOOD GUARD RAIL.
- 17 UTILITY POLE GUY WIRE TO BE RELOCATED BY UTILITY COMPANY.
- 18 INSTALL BITUMINOUS CONCRETE SIDEWALK ALONG BUILDING.
- 19 INSTALL GRASS PAVERS IN SNOW STORAGE AREA.
INSTALL PROPOSED DROP SEWER MANHOLE.
RIM EL=209.7±
INV IN FROM GREASE TRAP = 208.00
INV IN DIRECTLY FROM BUILDING = 208.00
INV OUT TO TOWN TIE IN = 201.00
- 20
- 21 LOAM & SEED THE SECTION OF THE EXISTING GRAVEL AREA THAT EXTENDS ONTO THE TOWN PARCEL WHERE THE SLOPE WILL BE REGRADED.
- 22 REMOVE EXISTING CLEAN OUT.
- 23 PLANT HONEY LOCUST & YEW FOR NATURAL SCREENING @ ENTRANCE FROM RAILROAD STREET.
- 24 THE CONTRACTOR WILL BE REQUIRED TO APPLY FOR A PERMIT TO CONSTRUCT WITHIN A PUBLIC WAY FOR ANY WORK SHOWN IN THE RIGHT OF WAY OF RAILROAD STREET.

PERMIT SITE PLAN

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Acton, Massachusetts 01720

PREPARED FOR:

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		CHECK BY:	RFD	

SITE PLAN

ABBREVIATIONS:

TBR TO BE REMOVED

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DWG: 12536-SP3.dwg

LAYOUT: SP

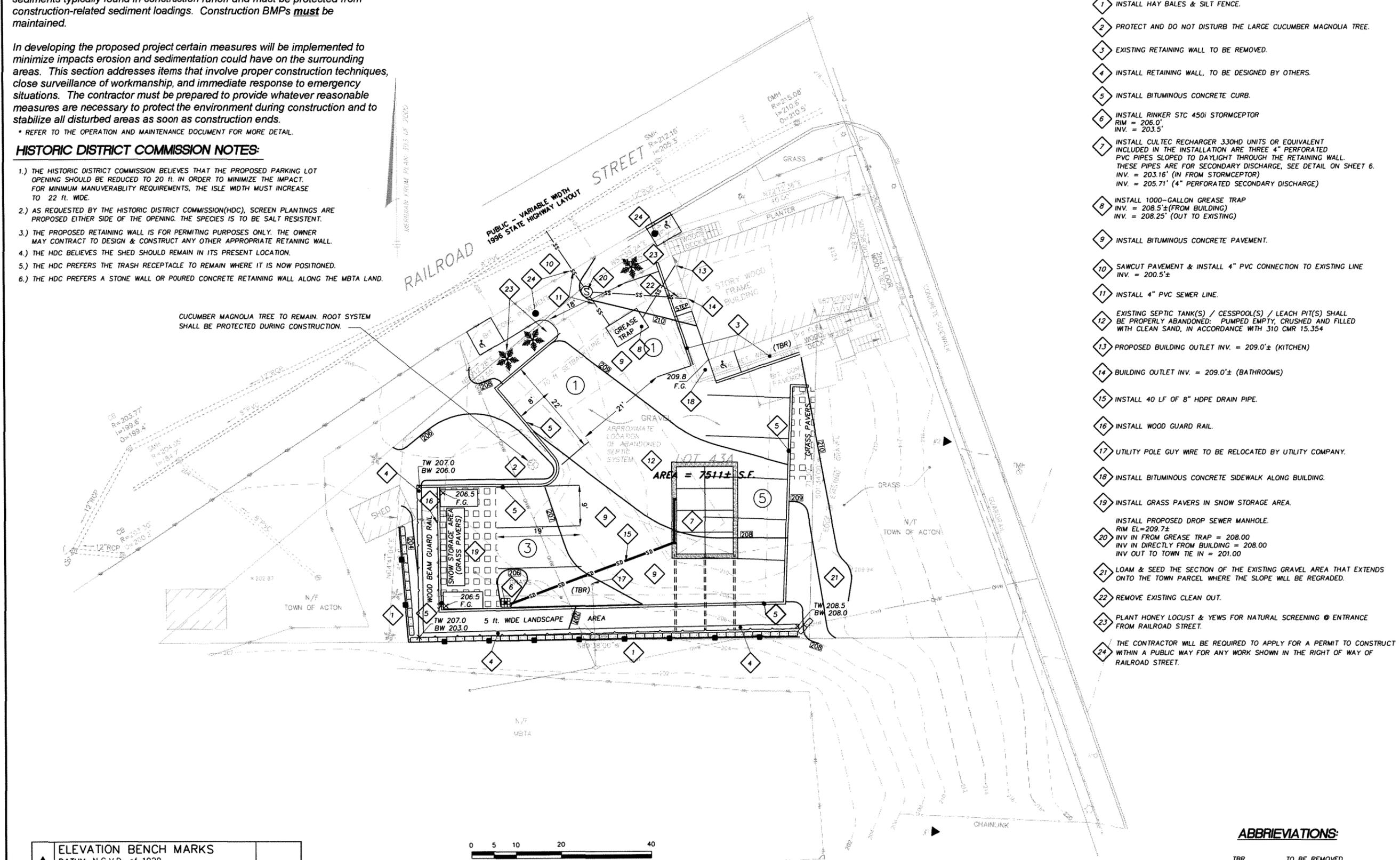
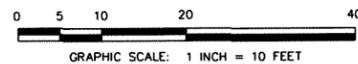
SHEET: 4 OF 7

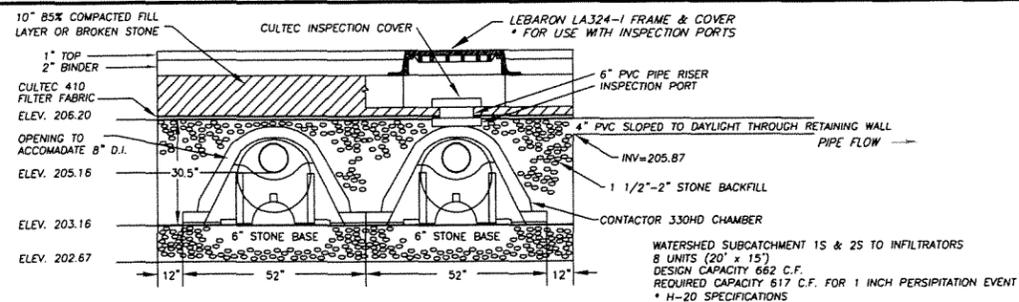
PROJECT NO.:

PS-4

12536

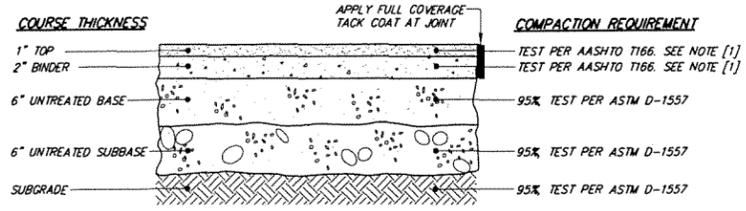
ELEVATION BENCH MARKS		
DATUM: N.G.V.D. of 1929		
NO.	DESCRIPTION	ELEV.
1.	monel rivet top west end north abutment	204.24
2.	box cut in concrete base traffic light pole	217.94
3.		





CONTACTOR 330HD STORMWATER MANAGEMENT
NOT TO SCALE

WATERSHED SUBCATCHMENT 1S & 2S TO INFILTRATORS
8 UNITS (20' x 15')
DESIGN CAPACITY 662 C.F.
REQUIRED CAPACITY 617 C.F. FOR 1 INCH PERSIPITATION EVENT
* H-20 SPECIFICATIONS

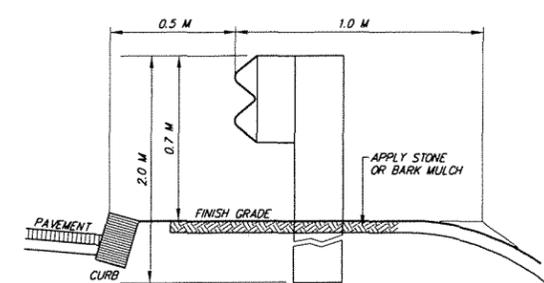


COMPACTION REQUIREMENT
TEST PER AASHTO T166. SEE NOTE [1]
TEST PER AASHTO T166. SEE NOTE [1]
95% TEST PER ASTM D-1557
95% TEST PER ASTM D-1557
95% TEST PER ASTM D-1557

NOTES:
[1] COMPACT TO TEST AVERAGE OF 96% NO TEST LOWER THAN 94%

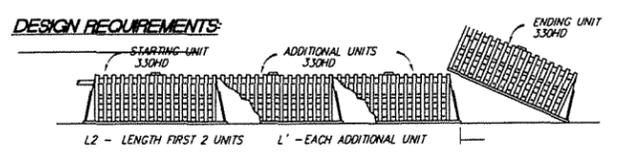
MATERIAL	SPECIFICATION	MAXIMUM AGGREGATE OR PARTICLE SIZE (IN.)
TOP - BITUMINOUS CONCRETE	MHD M3.11.03 CLASS I, TYPE I-1	1/2
BINDER - BITUMINOUS CONCRETE	MHD M3.11.03 CLASS I, TYPE I-1	1
BASE - GRAVEL BORROW	MHD M1.03.0 TYPE C	2
SUBBASE - GRAVEL BORROW	MHD M1.03.0 TYPE C	2
UNSUITABLE SUBGRADE - ORDINARY BORROW	MHD M1.01.0	12

BITUMINOUS CONCRETE PAVEMENT
TYPICAL CROSS SECTION
NOT TO SCALE



NOTE:
ALL MATERIALS AND MEASUREMENTS SHALL BE IN ACCORDANCE WITH MASS HIGHWAY CONSTRUCTION STANDARDS DRAWING NUMBER 401.1 OR 2/3/97

WOOD-BEAM GUARDRAIL, TYPE SS
TYPICAL CROSS SECTION
NOT TO SCALE



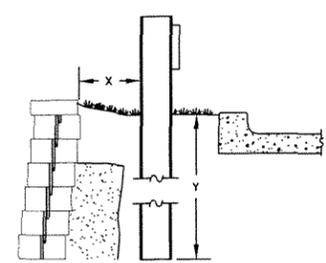
MODEL	330 HD
L	6.25'
1st 2 UNITS, L2	13.67'
S	64"
C	18" MIN.
H	30.5"

RECOMMENDED DESIGN SINGLE UNIT DATA

STONE SEPARATION	0"
STONE BASE	6"
UNIT WIDTH	52"
UNIT CAPACITY (90%)	484.0
UNIT CAPACITY (C.F.)	64.7

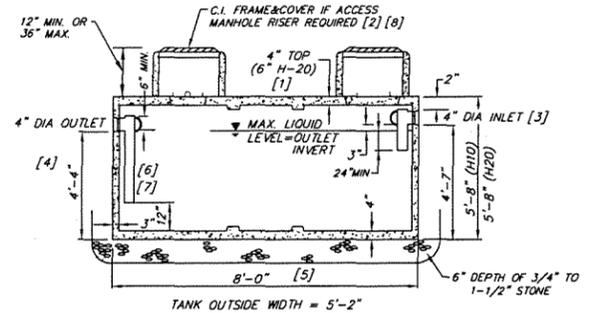
INFILTRATION AREA

MODEL NO.	330
NO. OF UNITS	8
TOP OF STONE	206.20
INV. 4" PVC SECONDARY DISCHARGE	205.87
INLET INV. (CB 2)	205.16
INLET INV. (CB1, STORMCEPTOR)	203.16
BOTTOM OF CHAMBER	203.16
BOTTOM OF STONE	202.67



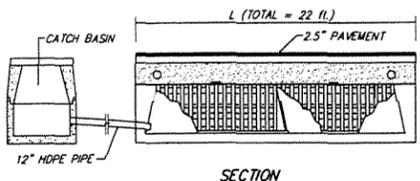
RETAINING WALL SHALL BE VERSA-FAST CONCRETE BLOCK RETAINING WALL SYSTEM, OR EQUAL CONSTRUCT WALL AS PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. SUBMIT DETAILED SHOP DRAWINGS STAMPED BY A REGISTERED ENGINEER IN MASSACHUSETTS

RETAINING WALL SPECIFICATIONS
SCALE: NOT TO SCALE

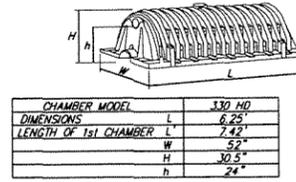


- [1] PRECAST REINFORCED CONCRETE CONSTRUCTION, LOAD RATING: H20 FULLY DAM PROOFED EXTERIOR, ALL OPENINGS SEALED WATER TIGHT, AS MANUFACTURED BY E.F. SHEA OF WILMINGTON, MA, OR EQUAL.
- [2] MANHOLE RISER REQUIRED: YES NO IF YES, APPROX. DEPTH OF COVER OVER RISER RIM: _____ INCHES
- [3] IF SIDE INLET OF GREASE TRAP IS USED, EXTEND INLET PIPE TO CENTER OF TANK.
- [4] WHERE UNDER OR ADJACENT TO AREA TO BE PAVED, COMPACT BACKFILL TO 95% PER ASTM D-1557.
- [5] UNDISTURBED SOIL OR SUBGRADE COMPACTED TO 95% PER ASTM D-1557.
- [6] OUTLET TEES SHALL BE EQUIPPED WITH A CORROSION-RESISTANT GAS DEFLECTOR.
- [7] INSTALL EFFLUENT FILTER: ZABEL A1800 OR EQUAL. BRING MANHOLE ABOVE FILTER TO GRADE AND LABEL IT ZABEL FILTER.
- [8] PLASTIC RISER AND COVER CAN BE USED UNDER H10 LOADING CONDITIONS.

1000 GALLON GREASE TRAP
(310 CMR 15.223 - 15.227)
TYPICAL CROSS SECTION
NOT TO SCALE



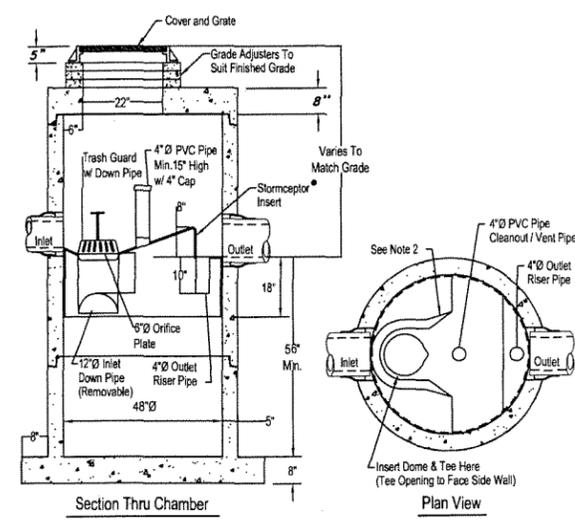
SECTION



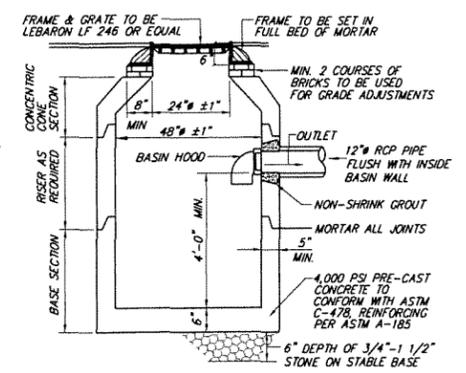
CHAMBER MODEL	330 HD
DIMENSIONS L	6.25'
LENGTH OF 1st CHAMBER L'	7.42'
W	52"
H	30.5"
h	24"

STORMWATER INFILTRATION SYSTEM
NOT TO SCALE

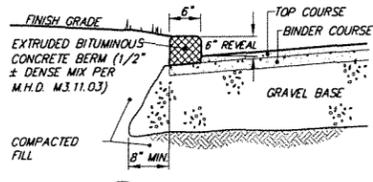
STC 450i Precast Concrete Stormceptor
(450 U.S. Gallon Capacity)



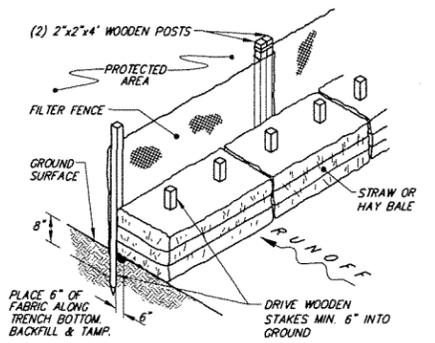
STC 450i PRECAST CONCRETE STORMCEPTOR
NOT TO SCALE



CATCH BASIN WITH HOOD
TYPICAL CROSS SECTION - NOT TO SCALE



BITUMINOUS BERM
CROSS SECTION
NOT TO SCALE



HAY BALE AND SILT FENCE BARRIER
ISOMETRIC VIEW
NOT TO SCALE

NOTE: STRUCTURE DETAILS FROM INDEPENDENT VENDORS ARE CONSTANTLY CHANGING. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT DETAILS SHOWN MATCH CURRENT DETAILS AND SPECIFICATIONS FROM VENDORS.

PERMIT SITE PLAN

124 Main Street
Acton, Massachusetts 01720

PREPARED FOR:

Frank Chen

124 Main Street
Acton, Massachusetts 01720

HANCOCK ASSOCIATES

Civil Engineers
Land Surveyors
Landscape Architects
Environmental Consultants

185 CENTRE STREET, DANVERS, MA 01923
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM

NO. BY	APP	DATE	ISSUE/REVISION DESCRIPTION
DATE:	6/28/06	DESIGN BY:	TSM
SCALE:	AS SHOWN	DRAWN BY:	TSM
		CHECK BY:	RFD

DETAILS

PLOT DATE: Jun 30, 2006 13:20 pm
P&ID: F:\Land Projects\0212536\04.dwg

DWG: 12536-SP2.dwg
LAYOUT: DETAILS
SHEET: 6 OF 6

PROJECT NO.: 12536

PS-6

PERMIT SITE PLAN

124 Main Street
Acton, Massachusetts 01720

PREPARED FOR:

**Frank
Chen**

124 Main Street
Acton, Massachusetts 01720

HANCOCK ASSOCIATES

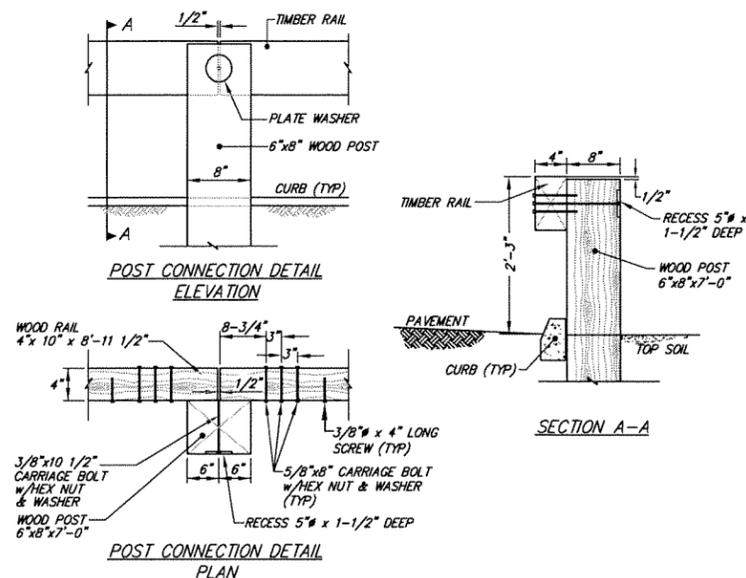
Civil Engineers

Land Surveyors

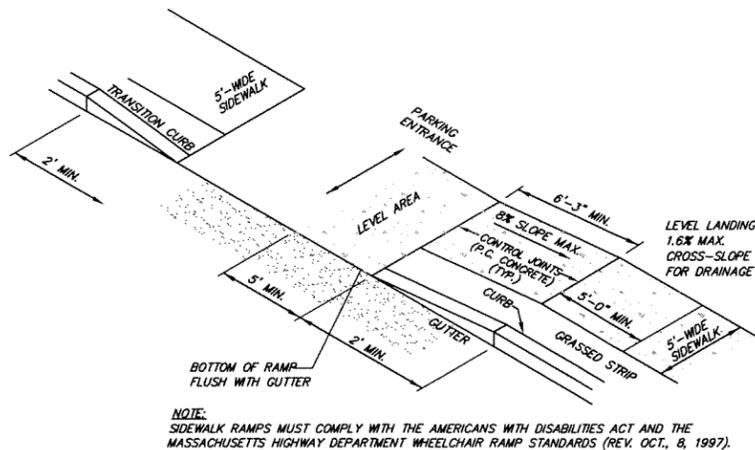
Landscape Architects

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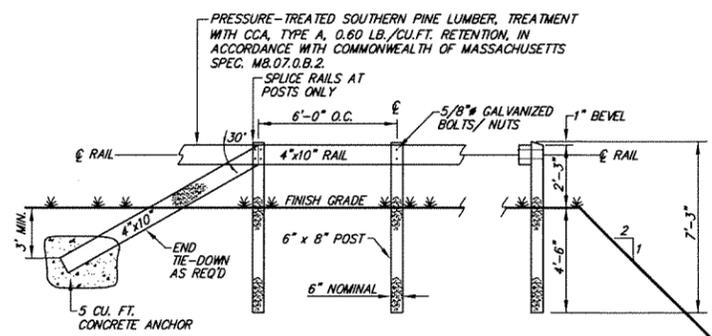


WOOD GUARD RAIL
NOT TO SCALE

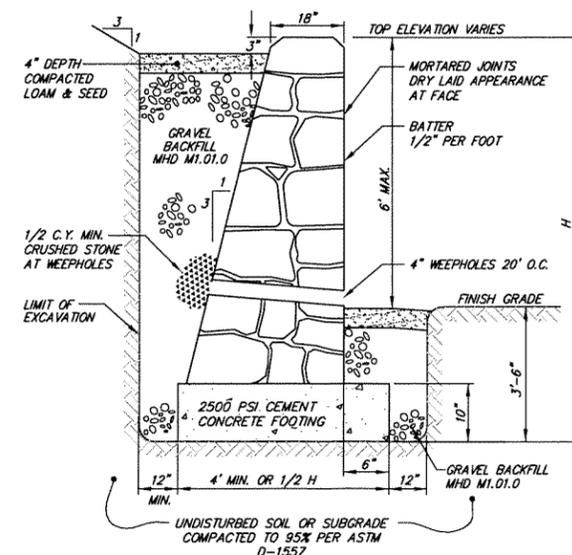


HANDICAP RAMP
ISOMETRIC VIEW
NOT TO SCALE

NOTE:
SIDEWALK RAMP MUST COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND THE MASSACHUSETTS HIGHWAY DEPARTMENT WHEELCHAIR RAMP STANDARDS (REV. OCT. 8, 1997).

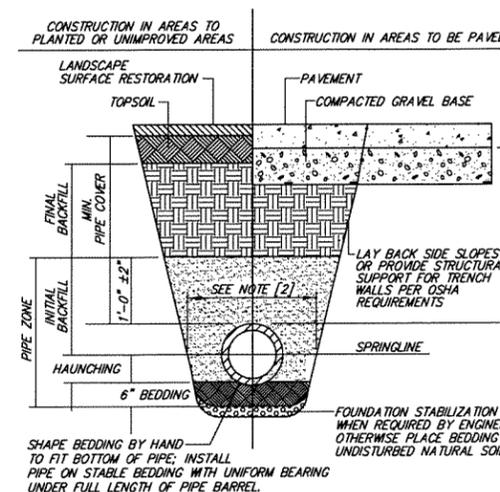


GUARDRAIL - ELEVATION VIEWS
NOT TO SCALE



FIELDSTONE RETAINING WALL
CROSS SECTION
NOT TO SCALE

* TO BE DESIGNED BY OTHERS IF REQUIRED BY THE BUILDING INSPECTOR.



PIPE TRENCH
TYPICAL CROSS SECTION
NOT TO SCALE

FOUNDATION, BEDDING, & BACKFILL MATERIALS		
PIPE MATERIAL	HDP, PVC	RC, DI
FOUNDATION STABILIZATION	[6]	[6]
BEDDING	[1]	[1]
HAUNCHING	[1]	[1]
INITIAL BACKFILL	[1]	[1]
FINAL BACKFILL	[4]	[4]
MIN. PIPE COVER	[5]	[5]

NOTES:
[1] PLACE 3/4"± GRADED GRANULAR BACKFILL AT OPTIMUM MOISTURE IN HORIZONTAL, 8"-DEEP, LOOSE LAYERS; COMPACT TO 95% PER ASTM D-1557.
[2] MINIMUM WIDTH OF TRENCH MEASURED AT THE SPRINGLINE OF THE PIPE, INCLUDING ANY NECESSARY SHEATHING:

PIPE I.D.	WIDTH
LESS THAN 21"	O.D. + 12"
21" TO 42"	O.D. + 24"
GREATER THAN 42"	O.D. + 30"

[3] INSTALL PIPE IN CENTER OF TRENCH.
[4] IN PLANTED OR UNIMPROVED AREAS, USE ON-SITE EXCAVATED MATERIAL FOR FINAL BACKFILL. COMPACT TO 95% PER ASTM D-1557. IN PAVED AREAS, OBTAIN ENGINEER APPROVAL OF ON-SITE EXCAVATED MATERIALS FOR USE AS FINAL BACKFILL.
[5] MINIMUM COVER OVER TOP OF PIPE:

PIPE MATERIAL	HDP, PVC	RC, DI
WATER	5'-0"	5'-0"
SEWER	4'-0"	4'-0"
DRAIN	1'-6"	1'-0"

[6] FOR FOUNDATION STABILIZATION, USE 2"± CRUSHED STONE.

NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
1	TSM	RFD	8/31/06	TOWN RECOMMENDATIONS

DATE: 6/28/06 DESIGN BY: TSM
SCALE: AS SHOWN DRAWN BY: TSM
CHECK BY: RFD

DETAILS

PLT DATE: Sep 14, 2006 11:07 am
PATH: F:\Land Projects R212300\shg\DWG

DWG: 12536-SP3.dwg

LAYOUT: D2

SHEET: 7 OF 7

PROJECT NO.: 12536

PS-7