PRELIMINARY SUBDIVISION
PLAN OF LAND
456 MASSACHUSETTS AVE
ACTON, MA

LOCUS

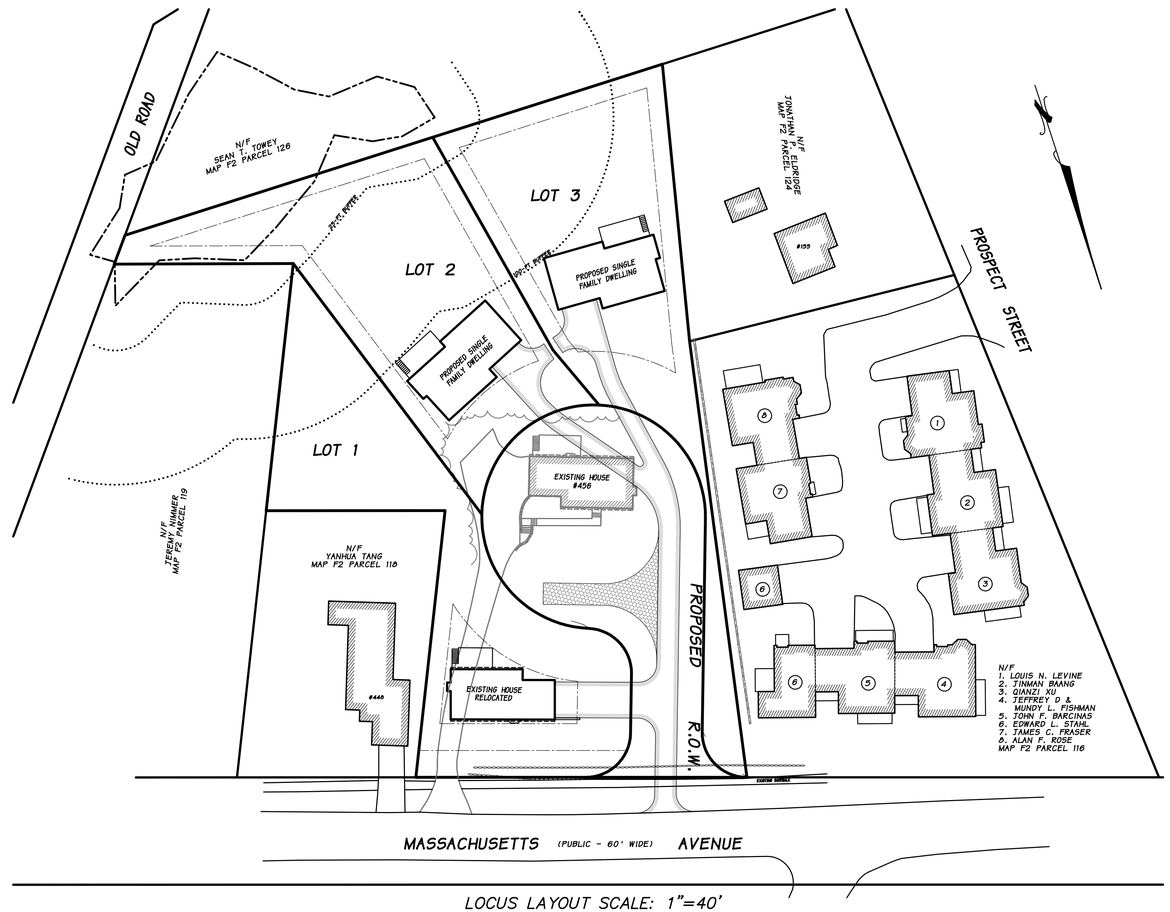
ASSESSORS MAP F-B PCL 117
MIDDLESEX SOUTH REGISTRY OF DEEDS
DEED REFERENCE: B23579 P172
DEED REFERENCE: B12005 P97
PLAN NO. 1195 OF 1961

OWNER

JOSEPH P. & KATHLEEN T. FINNEGAN
456 MASSACHUSETTS AVE
ACTON, MA

APPLICANT

KEENAN & SON, LLP
54 GRISTMILL ROAD
LITTLETON, MA 01460



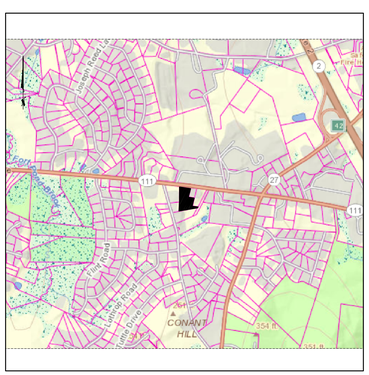
LOCUS LAYOUT SCALE: 1"=40'

ZONING INFO

ZONING DISTRICT RESIDENCE 2 (R2)
AFFORDABLE HOUSING OVERLAY SUB-DISTRICT B

DIMENSIONAL REQUIREMENTS

MIN LOT AREA	20,000 S.F.
MIN LOT FRONTAGE	150'
MIN LOT WIDTH	50'
MIN FRONT YARD	30'
MIN SIDE & REAR YARD	10'



LOCUS MAP
SCALE: 1"=1200'

USGS LOCUS MAP
SCALE: 1=1200'

SHEET INDEX

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DETAIL SHEET	D1

#	DATE	REVISION COMMENT

DATE: 11/03/14

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COMMONWEALTH OF MASSACHUSETTS
IAN M. RUBIN
CIVIL
No. 33758
REGISTERED PROFESSIONAL ENGINEER
11-3-14

COMMONWEALTH OF MASSACHUSETTS
RUSSELL D. WILSON
No. 34626
PROFESSIONAL LAND SURVEYOR
11/03/14

PRELIMINARY SUBDIVISION COVER SHEET
456 MASSACHUSETTS AVE
ACTON, MASSACHUSETTS

CLIENT:
KEENAN & SON, LLP
54 GRISTMILL RD.
LITTLETON, MASSACHUSETTS

360 MASSACHUSETTS AVE, SUITE 202
ACTON, MASSACHUSETTS 01720
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CO

SHEET 1 OF 6
JOB# 5092

OLD ROAD

N/F
SEAN T. TOWEY
MAP F2 PARCEL 126

N/F
JONATHAN P. ELDRIDGE
MAP F2 PARCEL 124

PROSPECT STREET

N/F
JEREMY NIMMER
MAP F2 PARCEL 119

N/F
YANHUA TANG
MAP F2 PARCEL 118

EXISTING HOUSE
#456

#155

#448

EXISTING PAVED DRIVEWAY

ISOLATED BVW

25-FT. BUFFER

100-FT. BUFFER

GC-1 START

N08°37'58"W

S72°09'49"E

S24°16'30"W

N72°26'52"E

S71°58'30"E

N07°26'20"W

I.P.(FND)

I.P. (Fnd) HELD

B.H.(FND)

MHB FND.

EXISTING SIDEWALK

MASSACHUSETTS (PUBLIC - 60' WIDE) AVENUE

N/F
1. LOUIS N. LEVINE
2. JINMAN BAANG
3. QIANZI XU
4. JEFFREY D & MUNDY L. FISHMAN
5. JOHN F. BARCINAS
6. EDWARD L. STAHL
7. JAMES C. FRASER
8. ALAN F. ROSE
MAP F2 PARCEL 116

LEGEND

PROPOSED 2' CONTOUR	
PROPOSED 10' CONTOUR	195
EXISTING 2' CONTOUR	
EXISTING 10' CONTOUR	200
EXISTING SPOT GRADE	195x0
PROPOSED SPOT GRADE	195x0
EXISTING EDGE OF WOODS	
EXISTING STONE WALL	
PROPOSED SILTATION BARRIER	
EXISTING STORM DRAIN	D
EXISTING SEWER LINE	S
PROPOSED 2" FORCE MAIN	2"FM
EXISTING WATER MAIN	W
PROPOSED WATER SERVICE	WS
EXISTING GAS MAIN	G
PROPOSED GAS SERVICE	GS
EXISTING OVERHEAD WIRES	OHW
PROPOSED ELEC., COMMUNICATIONS	E,COM
EXISTING DRAIN MANHOLE	DMH
EXISTING CATCH BASIN	CB
EXISTING SEWER MANHOLE	SMH
PROPOSED SEWER MANHOLE	SMH
EXISTING FIRE HYDRANT	
EXISTING WATER GATE	WG
EXISTING UTILITY POLE	UP
EXISTING TEST PIT LOCATION	TP

GRAPHIC SCALE
SCALE: 1"=20'
0 10 20 40 60 FEET
0 5 10 20 METERS

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COMMONWEALTH OF MASSACHUSETTS HAN M. RUBIN CIVIL No. 33139 PROFESSIONAL ENGINEER 11-3-14

COMMONWEALTH OF MASSACHUSETTS RUSSELL J. WILSON No. 34805 PROFESSIONAL ENGINEER 11/3/14

EXISTING CONDITIONS PLAN
456 MASSACHUSETTS AVE
ACTON, MASSACHUSETTS

CLIENT:
KEENAN & SON, LLP
54 GRISTMILL RD.
LITTLETON, MASSACHUSETTS

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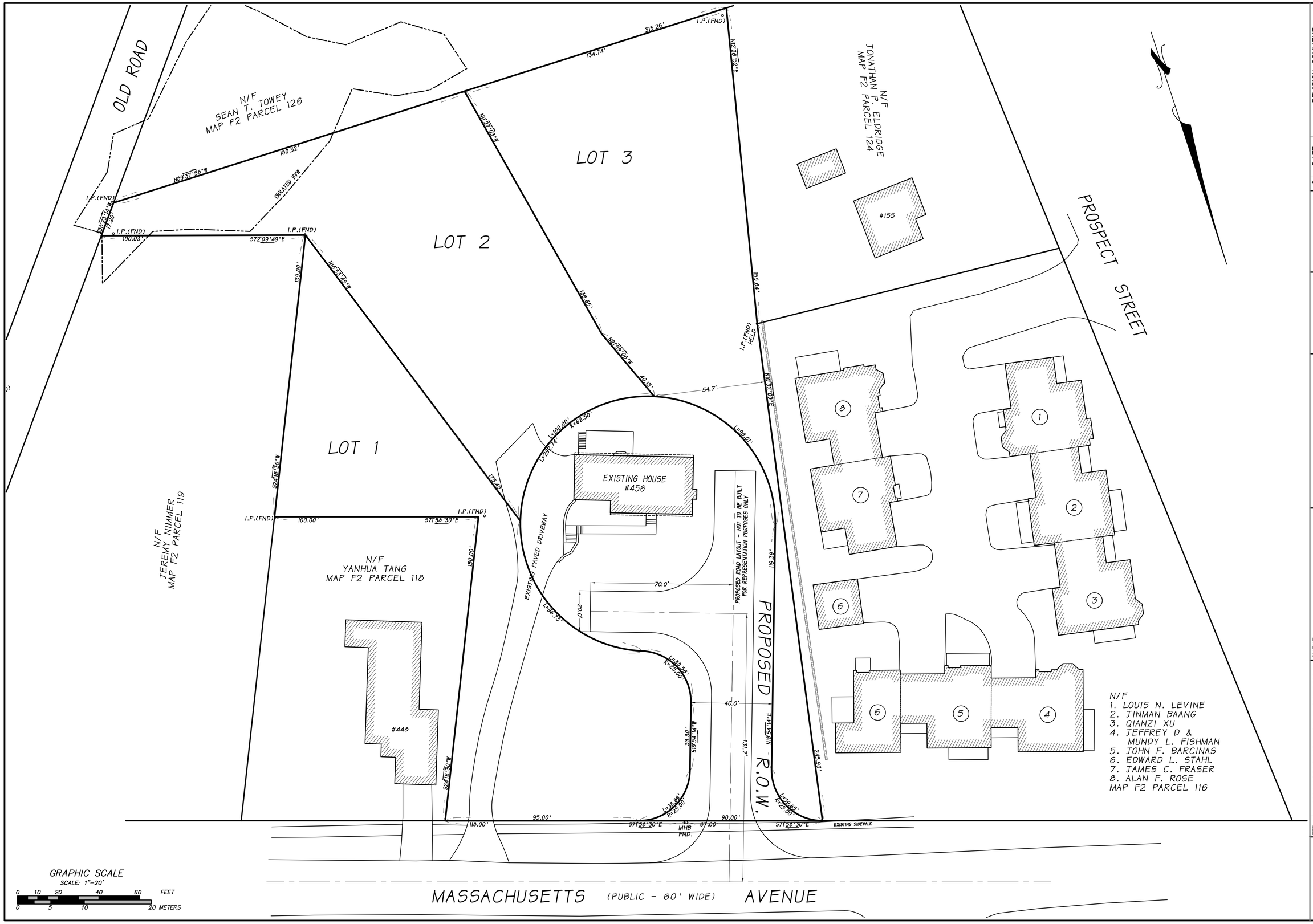
SHEET 2 OF 6

JOB# 5092



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SUBDIVISION LAYOUT PLAN

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SHEET 3 OF 6

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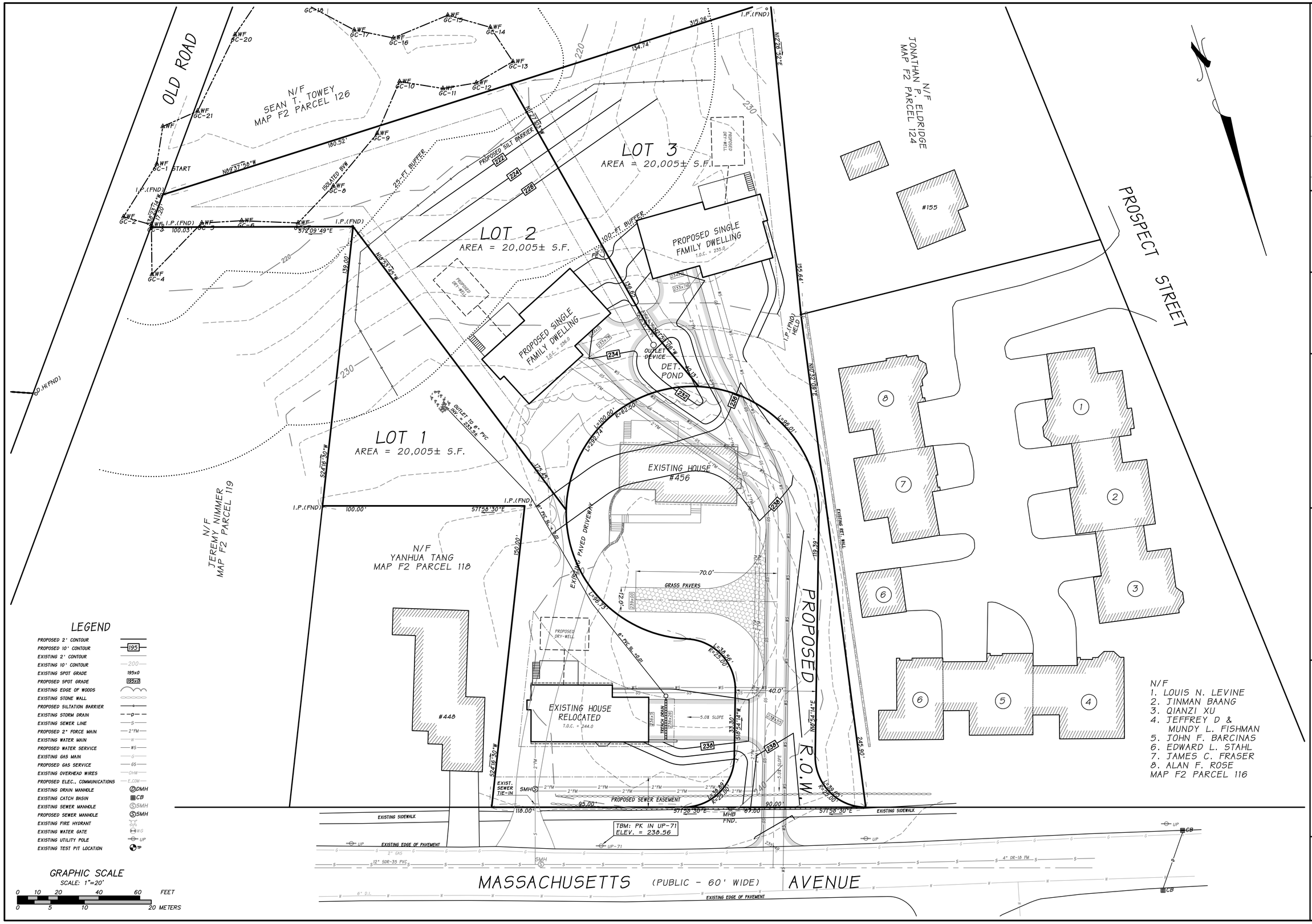

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CONCEPTUAL SUBDIVISION SITE PLAN

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CLIENT:
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54 GRISTMILL RD.
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SHEET 4 OF 6

JOB# 5092

EROSION CONTROL AND SEDIMENTATION NOTES:

1. STRAW WATTLE SILTATION BARRIER: THE SILTATION BARRIER WILL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. AN ADDITIONAL SUPPLY OF STRAW WATTLES SHALL BE ON-SITE TO REPLACE AND OR REPAIR STRAW WATTLES THAT ARE DISTURBED. ON A WEEKLY BASIS AND AFTER EVERY STORM EVENT, THE CONTRACTOR SHALL VERIFY THAT ALL EROSION CONTROL AND STABILIZING MEASURES ARE STILL IN PLACE AND INTACT. ANY BREAKS IN STRAW WATTLES WILL BE CORRECTED IMMEDIATELY.

2. CATCH BASIN INLET PROTECTION: A SILT SACK SHALL BE PLACED IN CATCH BASINS DOWNSTREAM OF ALL NEW CONSTRUCTION (SEE DETAIL). THESE WILL REQUIRE A MINIMUM OF WEEKLY MAINTENANCE AND REPLACEMENT IF NECESSARY.

3. THE SURFACE OF ALL DISTURBED AREAS SHALL BE STABILIZED DURING AND AFTER CONSTRUCTION. TEMPORARY MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT EROSION AND SILTATION. TEMPORARY EROSION CONTROL MEASURES SHALL CONFORM WITH THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES URBAN AND SUBURBAN AREAS" DATED MARCH 1997 AND SHALL BE APPROVED BY THE ENGINEER. ALL DISTURBED SLOPES WILL BE STABILIZED WITH A PERMANENT VEGETATIVE COVER. SOME OR ALL OF THE FOLLOWING MEASURES WILL BE UTILIZED ON THIS PROJECT.
   a. TEMPORARY SEEDING
   b. TEMPORARY MULCHING (STRAW)
   c. PERMANENT SEEDING
   d. PLACEMENT OF SOD
   e. HYDROSEEDING
   f. PLACEMENT OF HAY (WINTER MONTHS)
   g. PLACEMENT OF JUTE NETTING

4. DUST CONTROL: IF DUST IS GENERATED DURING CONSTRUCTION ACTIVITIES THEN THE USE OF WATER TRUCKS OR WATER SPRINKLING WILL BE IMPLEMENTED.

5. DEBRIS & LITTER REMOVAL: ALL DEBRIS & LITTER SHALL BE REMOVED WHEN NECESSARY.

6. CONSTRUCT "TEMPORARY CONSTRUCTION ENTRANCE" AS SHOWN ON DETAIL PLAN PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. ALL CONSTRUCTION VEHICLES SHALL EXIT THE SITE OVER THIS "TEMPORARY CONSTRUCTION ENTRANCE". THE CONTRACTOR SHALL USE THIS AREA TO REMOVE SOIL FROM THE TIRES OF CONSTRUCTION VEHICLES. "TEMPORARY CONSTRUCTION ENTRANCE" SHALL CONSIST OF SIX TO TWELVE INCHES OF TWO TO THREE INCH STONE.

7. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ANY SAND, DIRT, OR DEBRIS WHICH ERODES FROM THE SITE ONTO LOW STREET, OR PRIVATE PROPERTY, AND TO REMOVE SILT OR DEBRIS THAT ENTERS ANY EXISTING DRAINAGE SYSTEM INCLUDING CATCH BASIN SUMPS, PIPE LINES, MANHOLES, AND DITCHES.

8. IF A DRAINAGE OR RUN-OFF PROBLEM OCCURS DURING CONSTRUCTION, THE APPLICANT SHALL TAKE IMMEDIATE CORRECTIVE MEASURES.

9. ANY SILT OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE ACCESS ROAD IMMEDIATELY UPON DISCOVERY. THE ROADWAY SHALL BE SWEPT AS APPROPRIATE FOR DUST CONTROL.

10. AFTER THE VEGETATION IS ESTABLISHED AND THE GRADED SLOPES ARE STABLE, THE CONTRACTOR WILL REMOVE ALL THE TEMPORARY EROSION CONTROL BARRIERS.

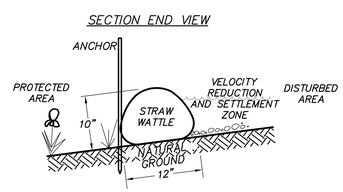
11. STUMPS SHALL BE REMOVED FROM THE SITE. NO STUMPS SHALL BE BURIED ON SITE.

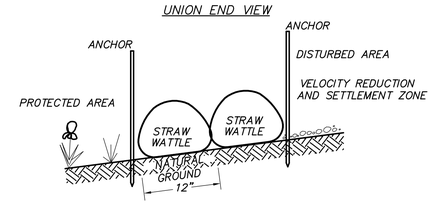
12. ALL STOCKPILES SHALL HAVE EROSION CONTROL MEASURES AROUND THE PERIMETER AT ALL TIMES. STOCKPILES SHALL BE LOCATED ONLY WITHIN THE LIMIT OF WORK BOUNDARIES.

13. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE IMMEDIATELY STABILIZED WITH A 4 TO 6 INCH LAYER OF LOAM AND SEED.

14. AT ALL TIMES DURING AND AFTER CONSTRUCTION, COMPACTION OF SOILS IN DESIGNATED RECHARGE AREAS MUST BE MINIMIZED.

15. AT THE COMPLETION OF THE PROJECT ALL DISTURBED AREAS ARE TO BE PERMANENTLY LOAMED AND SEEDED OR PERMANENTLY STABILIZED WITH OTHER SUITABLE GROUND COVER APPROVED BY THE ENGINEER.





STRAW WATTLE DETAIL
NO SCALE

1. WATTLES SHALL BE CONSTRUCTED OF BIODEGRADEABLE TUBULAR PLASTIC OR SIMILAR MATERIAL, AND SHALL BE FILLED WITH STRAW OR MULCH.

2. INSTALL WATTLES IN LOCATIONS SHOWN ON THE PLAN.

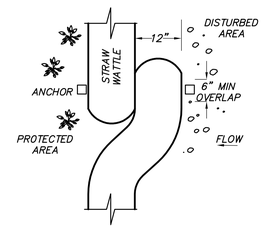
3. INSTALL THE WATTLES SNUGLY INTO A 3-5" DEEP TRENCH AND OVERLAP AS SHOWN IN THE DETAIL.

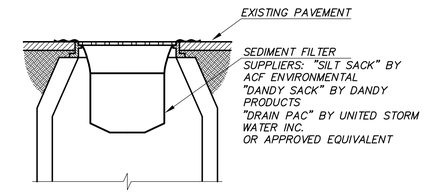
4. INSTALL ANCHOR STAKES ON DOWNHILL SIDE OF THE WATTLES, AND AT 5' SPACING ALONG THE LENGTH OF THE WATTLE.

5. AT A MINIMUM, ANCHOR STAKES SHALL BE 3/4" SQUARE BY 24" LONG. EXISTING VEGETATION GREATER THAN 2" DIAMETER MAY BE USED AS ANCHORS.

6. INSPECT WATTLES AFTER RAINFALL EVENTS TO ENSURE THEY ARE IN CONTACT WITH THE SOIL AND THOROUGHLY ENTRENCHED, AND REPAIR AS NEEDED.

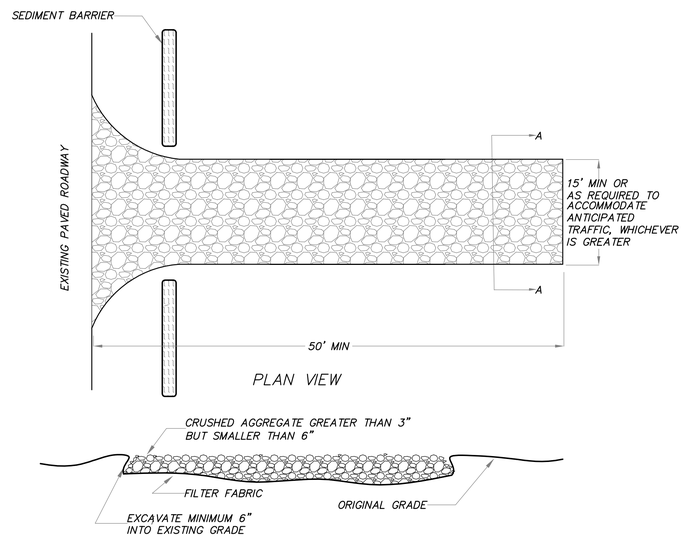
7. INSPECT DOWNGRADIENT SLOPE AFTER SIGNIFICANT RAINFALL EVENTS TO ENSURE SCOUR IS NOT OCCURRING UNDER THE WATTLES, AND REPAIR AS NECESSARY.





NOTE:
SEDIMENT FILTER SHALL BE PLACED IN ALL EXISTING CATCH BASINS DOWNSTREAM OF NEW CONSTRUCTION AND AS SHOWN. THE FILTER SHALL REQUIRE WEEKLY MAINTENANCE, OR AS REQUIRED, AND REPLACED IF NECESSARY.

SEDIMENT FILTER INLET PROTECTION
NO SCALE



CONSTRUCTION ENTRANCE DETAIL

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COMMONWEALTH OF MASSACHUSETTS — IVAN M. RUBIN — CIVIL — No. 35365 — REGISTERED PROFESSIONAL ENGINEER
11-3-14

TITLE:
SEDIMENT & EROSION CONTROL PLAN
456 MASSACHUSETTS AVE
ACTON, MASSACHUSETTS

CLIENT:
KEENAN & SON, LLP
54 GRISTMILL RD.
LITTLETON, MASSACHUSETTS

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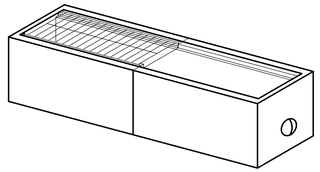
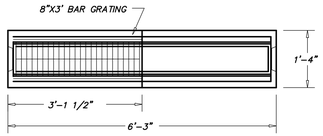
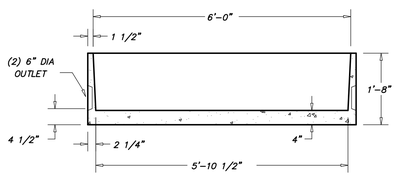
SHEET 5 OF 6
JOB# 5092

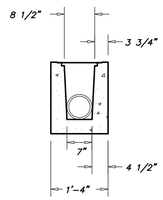




PLAN VIEW



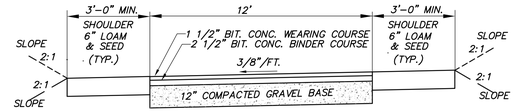
SIDE SECTION VIEW



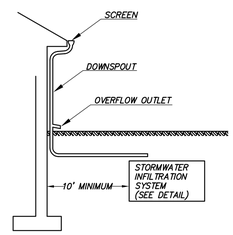
END SECTION VIEW

NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. AVAILABLE IN 3' AND 6' SECTIONS – ITEM NO. M-TD3 OR MTD6.
3. AVAILABLE IN END OR MIDDLE SECTIONS.
4. CONFORMS TO H-20 LOADING.

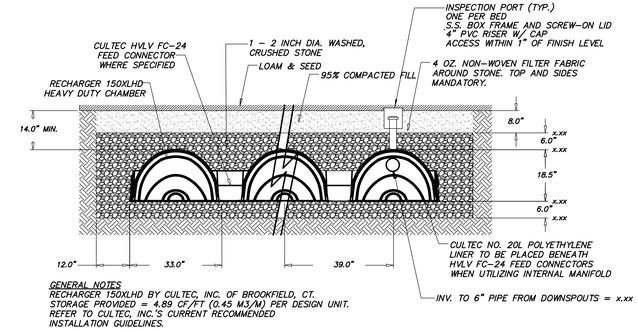
TRENCH DRAIN DETAIL
NO SCALE



COMMON DRIVEWAY SECTION
(NOT TO SCALE)

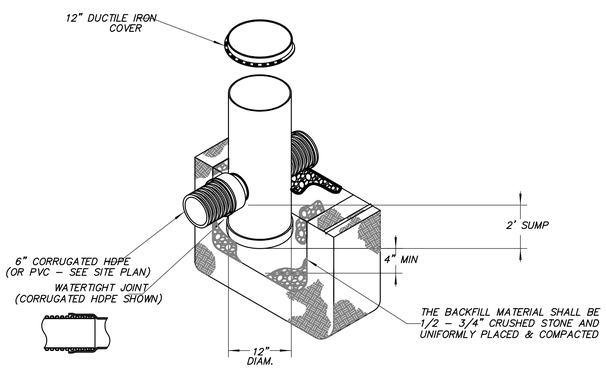


TYPICAL DOWNSPOUT DETAIL
NO SCALE



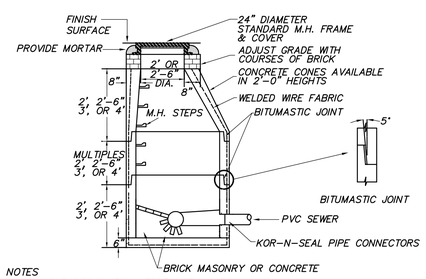
GENERAL NOTES
RECHARGER 150XLHD BY CULTEC, INC. OF BROOKFIELD, CT.
STORAGE PROVIDED = 4.89 CF/FT (0.45 M3/M) PER DESIGN UNIT.
REFER TO CULTEC, INC.'S CURRENT RECOMMENDED
INSTALLATION GUIDELINES.

CULTEC RECHARGER 150XL CHAMBER SYSTEM
STORMWATER INFILTRATION SYSTEM
NO SCALE



NOTE: DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.

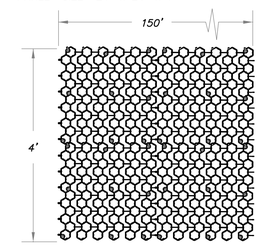
NYLOPLAST CATCH BASIN DETAIL
(WITH SOLID COVER)



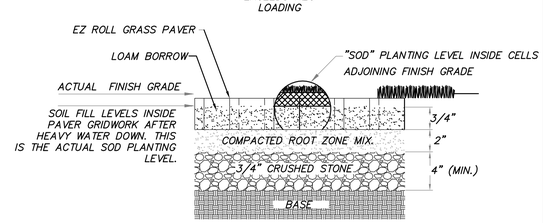
NOTES
1. MANHOLE DESIGN TO LATEST ASTM C478.
2. REINFORCING STEEL CONFORMS TO LATEST ASTM A 185.
3. CONCRETE COMPRESSIVE STRENGTH-4,000 PSI @ 28 DAYS.
4. ONE POUR MONOLITHIC BASE.
5. WHEN SPECIFIED, MANHOLES WATERPROOF COATED.
6. STEPS-STEEL REINFORCED COPOLYMER POLYPROPELENE PLASTIC (PS2-PFSL M.A. INDUSTRIES, INC.) CONFORMS TO LATEST ASTM C478 PARA-12.
7. BITUMASTIC BUTYL RUBBER FOR JOINTS CONFORM TO LATEST ASTM C443 AND FED SS-S-201A SPEC.
8. KOR-N-SEAL FLEXIBLE PIPE CONNECTORS FROM 3.5" TO 21.25" O.D. ASTM C923, A167.

PRECAST CONCRETE SEWER MANHOLE DETAIL (TYP.)
(NOT TO SCALE)

CELLS PER PANEL –(72) – 2–1/4" HEXAGONAL CELLS
STOCK ROLL SIZE'S – 4' x 24' (96 sq. ft.)
PANEL SIZE –24" x 24" x 1"



NESTED HONEYCOMB CELL LAYOUT
COMPRESSIVE STRENGTH (OPEN CELL NO FILL)
63,936 PSF
444 PSI
EXCEEDS H20
LOADING



BASE TO BE COMPRISED OF NATURALLY
OCCURING PERVIOUS MATERIAL. IN LOCATION OF FILL,
BASE SHALL BE COMPRISED OF PERVIOUS
COMMON BORROW COMPACTED IN 6" LIFTS.

EZ ROLL GRASS PAVER DETAIL
NO SCALE

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HAL M. RUBIN
CIVIL
No. 33735
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