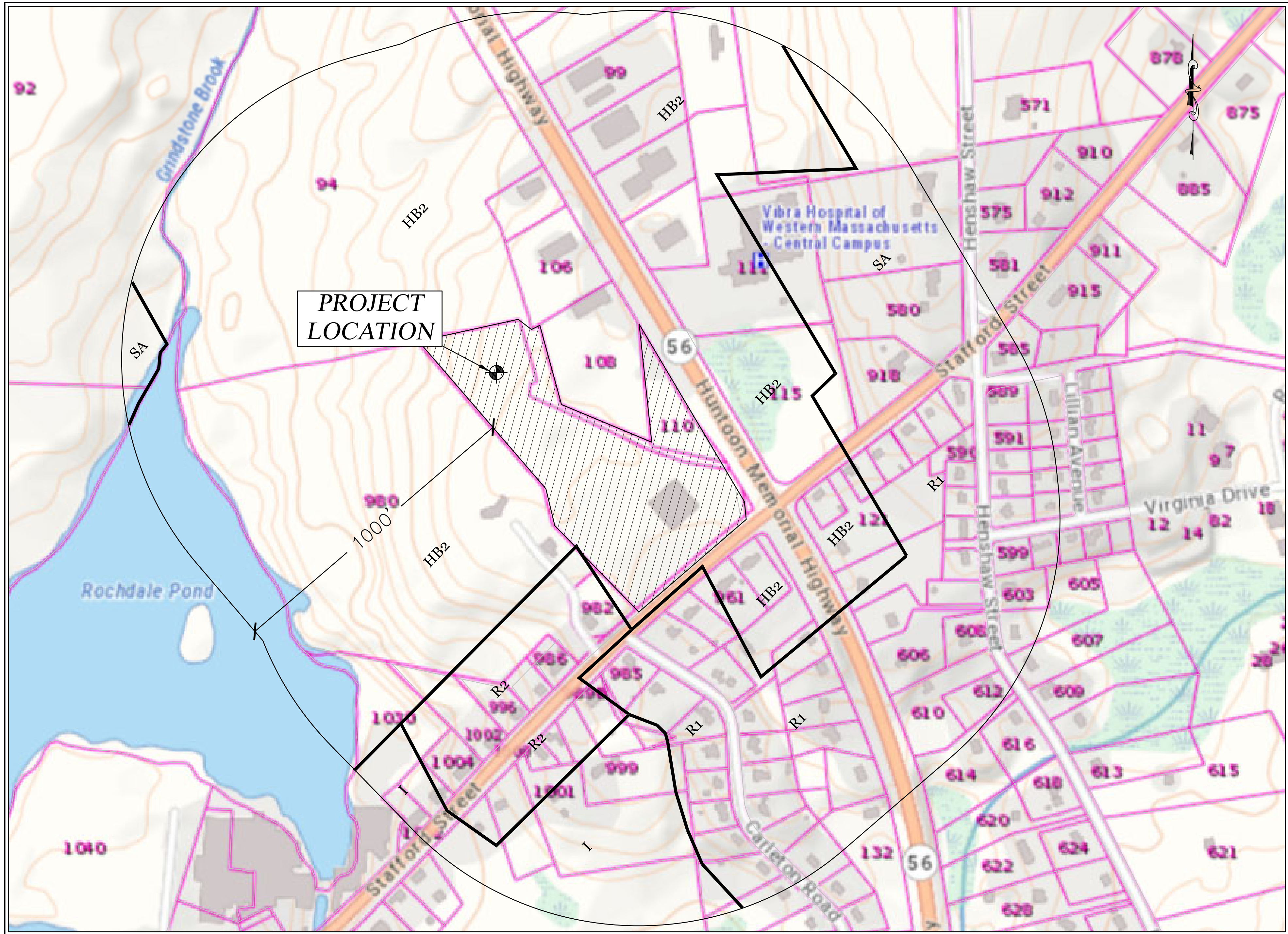


SITE PLAN MODIFICATION
GRAVEL PARKING EXPANSION
CENTRAL MASS CRANE
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA 01542



SITE LOCUS

1" = 200'

DRAWING INDEX

- C-1 TITLE SHEET
C-2 EXISTING CONDITIONS PLAN
C-3 LAYOUT, GRADING, AND UTILITIES PLAN
C-4 EROSION AND SEDIMENTATION CONTROL PLAN
C-5 CONSTRUCTION DETAILS
C-6 CONSTRUCTION DETAILS

DIG-SAFE (1-888-344-7233) NOTE:
CONTRACTOR REQUIRED TO NOTIFY "DIG SAFE" 72 HOURS
PRIOR TO ANY ON-SITE EXCAVATION OR CONSTRUCTION
AT 1-888-344-7233. CONTRACTOR SHALL ALSO NOTIFY
LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT
THEIR UTILITIES.

APPLICANT / PROPERTY INFORMATION:

APPLICANT:
CENTRAL MASS CRANE
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA 01542-0338

OWNER:
HUNTOON HIGHWAY, LLC.
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA 01542-0338

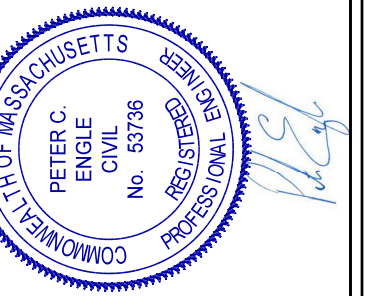
ASSESSORS ID: 46-A-1.2, 44-A-7 (FORMERLY), 44-A-10
DEED REFERENCE: WORCESTER COUNTY REGISTRY OF DEEDS
DEED BOOK 52916, PAGE 330
DEED BOOK 64563, PAGE 143
DEED BOOK 63722, PAGE 154
PLAN BOOK 897 PLAN 103
PLAN BOOK 953 PLAN 19
PLAN BOOK 954 PLAN 101

PROJECT ENGINEER:
PETER ENGLE, P.E.
MCCLURE ENGINEERING, INC.
119 WORCESTER ROAD
CHARLTON, MA 01507
PHONE: (508)-248-2005

PROJECT SURVEYOR:
MARK LAPRAD, P.L.S.
MCCLURE ENGINEERING, INC.
119 WORCESTER ROAD
CHARLTON, MA 01507
PHONE: (508)-248-2005

GENERAL NOTES:

1. THE BASE PLAN FOR THIS DESIGN WAS COMPILED FROM AN ON THE GROUND SURVEY CONDUCTED BY MCCLURE ENGINEERING ON DATE AND SUPPLEMENTED WITH TOPOGRAPHY TAKEN FROM 2013-2014 USGS LIDAR: POST SANDY (MA, NH, RI) TAKEN FROM NOAA ON LINE DATA ACCESS VIEWER.
2. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. HORIZONTAL CONTROL IS BASED UPON THE NORTH AMERICAN DATUM OF 1983.
4. PROPERTY IS LOCATED WITHIN THE HB2 DISTRICT AND HAS THE FOLLOWING DIMENSIONAL REQUIREMENTS:
MINIMUM LOT AREA: 45,000 S.F.
MINIMUM LOT FRONTAGE: 200' FEET
MINIMUM YARD SETBACKS (FRONT/SIDE/REAR): 50'/50'/50'
MAXIMUM BUILDING HEIGHT: 55'
MAXIMUM STORIES: 5 1/2
MAXIMUM COVERAGE: 40%
5. PROPERTY DOES NOT LIE WITHIN THE SPECIAL FLOOD HAZARD AREA. FOR REFERENCE SEE THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 25027C0784E FOR COMMUNITY NO. 250313 AND DATED JULY 4, 2011.
6. THIS PLAN IS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY MATTERS THAT SUCH A REPORT MAY DISCLOSE.



PETER C. ENGLE, P.E.
PROFESSIONAL ENGINEER

MA LIC. NO. 53736

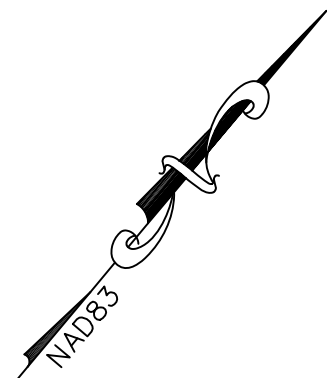
McCLURE
ENGINEERING, INC.
119 Worcester Road
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Tel: (508) 248-2005
Fax: (508) 248-4887
Email: pengle@mcclureengineers.com

SITE PLAN MODIFICATION
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA
PREPARED FOR
HUNTOON HIGHWAY, LLC.
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA 01542-0338

DRAWN BY: WN
DATE: 8.20.21
CHK BY: PE
SCALE: 1"=200'
PROJ. NO. 151-2415-M

TITLE SHEET

C1



EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THERE MAY BE EXISTING LINES OTHER THAN THOSE INDICATED. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER PUBLIC UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED.

ASSESSOR'S
REFERENCE:
46-A1-0
N/F
NANCY E.
O'NEIL

ASSESSOR'S
REFERENCE:
46-A1-10
N/F
MELISSA M.
DIGUETTE

ASSESSOR'S
REFERENCE:
46-A1-20
N/F
HUNTOON HIGHWAY, LLC.
DEED BOOK 52916, PAGE 330

ASSESSOR'S
REFERENCE:
44-A9-0
N/F
ESAV REALTY, LLC.

ASSESSOR'S
REFERENCE:
44-A10-0
N/F
HUNTOON HIGHWAY, LLC.
DEED BOOK 64563, PAGE 154

SOIL TESTING
DECEMBER 5, 2012
PERFORMED BY SHELLEY HAMMOND
WITNESSED BY KEVIN QUINN

DH-1
DEPTH = 107"
ESHOW @ 20"
NO REFUSAL

DH-2
DEPTH = 92"
ESHOW @ 23"
NO REFUSAL

DH-3
DEPTH = 71"
ESHOW @ 22"
NO REFUSAL

DH-4
DEPTH = 112"
ESHOW @ 31"
NO REFUSAL

DH-5
DEPTH = 118"
ESHOW @ 31"
NO REFUSAL

DH-6
DEPTH = 46"
ESHOW @ 32"
REFUSAL @ 46"

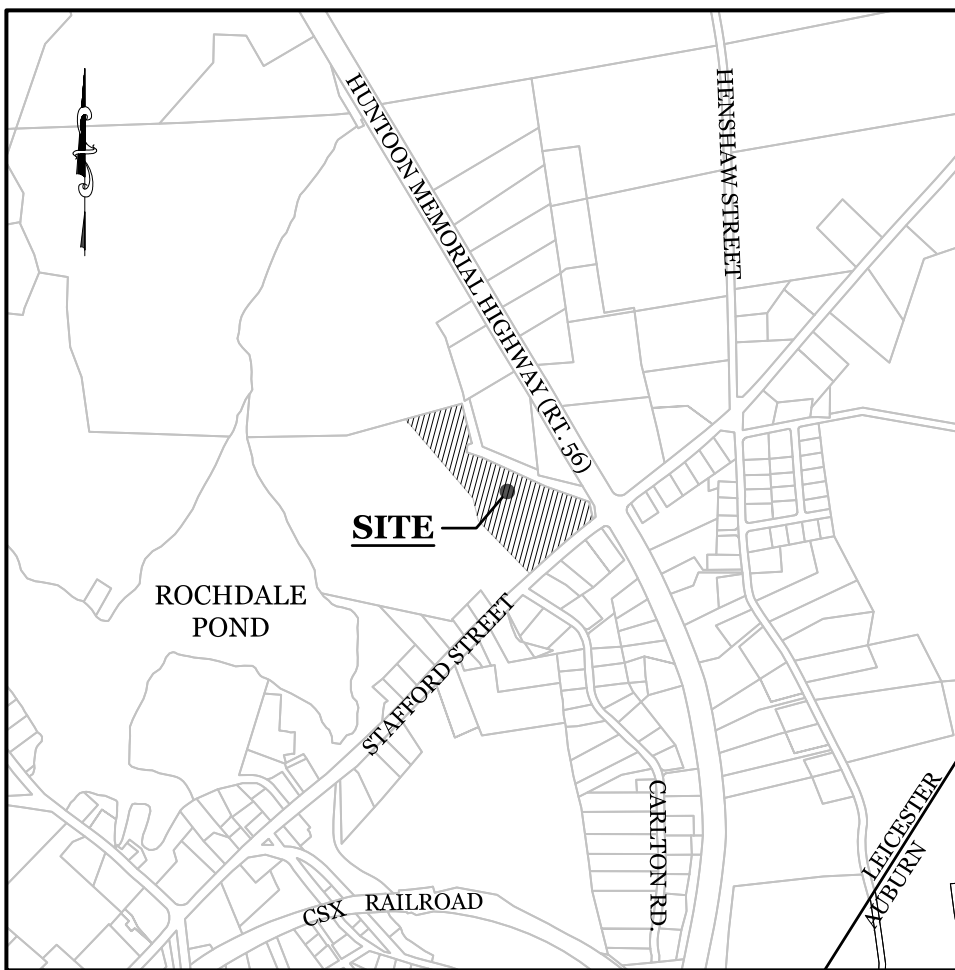
DH-7
DEPTH = 58"
ESHOW @ 31"
REFUSAL RANGES FROM 25"-58"

DH-8
DEPTH = 82"
ESHOW @ 33"
REFUSAL @ 82"

LEGEND:

BIT. BITUMINOUS
CB CATCH BASIN
CO CLEAN OUT
CONC. CONCRETE
62 CONTOUR
CPP CORRUGATED PLASTIC PIPE
DH DRILL HOLE
DMH DRAIN MANHOLE
EM DRAINAGE LINE
EXIST. EXISTING
FF FIRST FLOOR ELEVATION
FH FIRE HYDRANT
FND FLARED END SECTION
FOUND

GM GAS METER
HDPE HIGH DENSITY POLYETHYLENE PIPE
IP IRON PIN
R LIGHT POLE
R RIM ELEVATION
RCP REINFORCED CONCRETE PIPE
SMH SANITARY SEWER MANHOLE
SMH SEWER PIPE
T/TOP OF
TREELINE
TYP. TYPICAL
WATER GATE
APPROXIMATE LIMIT OF WETLANDS



LOCUS PLAN
SCALE: 1" = 1,000'

NOTES:

- 1). OWNER OF RECORD:
HUNTOON HIGHWAY, LLC.
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA 01542-0338
- 2). SURVEYOR OF RECORD:
MCCLURE ENGINEERING
119 WORCESTER ROAD
CHARLTON, MA 01507
508-248-2005
3. THE BASE PLAN FOR THIS DESIGN WAS COMPILED FROM AN ON THE GROUND SURVEY CONDUCTED BY MCCLURE ENGINEERING ON DATE AND SUPPLEMENTED WITH TOPOGRAPHY TAKEN FROM 2013-2014 USGS LIDAR: POST SANDY (MA, NH, RI) TAKEN FROM NOAA ON LINE DATA ACCESS VIEWER.
4. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988.
5. HORIZONTAL CONTROL IS BASED UPON THE NORTH AMERICAN DATUM OF 1983.
6. PROPERTY IS LOCATED WITHIN THE HB2 DISTRICT AND HAS THE FOLLOWING DIMENSIONAL REQUIREMENTS:
MINIMUM LOT AREA: 45,000 S.F.
MINIMUM LOT FRONTAGE: 200' FEET
MINIMUM YARD SETBACKS (FRONT/SIDE/REAR): 50'/50'/50'
MAXIMUM BUILDING HEIGHT: 55'
MAXIMUM STORIES: 5
MAXIMUM COVERAGE: 40%
7. PROPERTY DOES NOT LIE WITHIN THE SPECIAL FLOOD HAZARD AREA. FOR REFERENCE SEE THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 25027C0784E FOR COMMUNITY NO. 250313 AND DATED JULY 4, 2011.
8. THIS PLAN IS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY MATTERS THAT SUCH A REPORT MAY DISCLOSE.

REFERENCES:

WORCESTER COUNTY REGISTRY OF DEEDS
DEED BOOK 52916 PAGE 330
DEED BOOK 63722 PAGE 154
DEED BOOK 64563 PAGE 143
PLAN BOOK 897 PLAN 103
PLAN BOOK 953 PLAN 19
PLAN BOOK 954 PLAN 101

"PROPOSED SITE PLAN, CENTRAL MASS CRANE" PREPARED BY JH ENGINEERING DATED AUGUST 4, 2014.

WETLANDS:
THE SITE IS SUBJECT TO THE MASSACHUSETTS WETLANDS PROTECTION ACT. THE WETLANDS BOUNDARIES AS SHOWN WERE TAKEN FROM THE 2014 SITE PLAN PREPARED BY JH ENGINEERING. THE WETLAND RESOURCE AREAS WERE DELINEATED BY ECOTEC INC. IN NOVEMBER OF 2012.

SITE PLAN MODIFICATION
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA
PREPARED FOR
CENTRAL MASS CRANE
112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA 01542-0338

DRAWN BY: WN
DATE: 8.20.21
CHK BY: PE
SCALE: 1"=40'
PROJ. NO. 151-2415-M

EXISTING
CONDITIONS PLAN

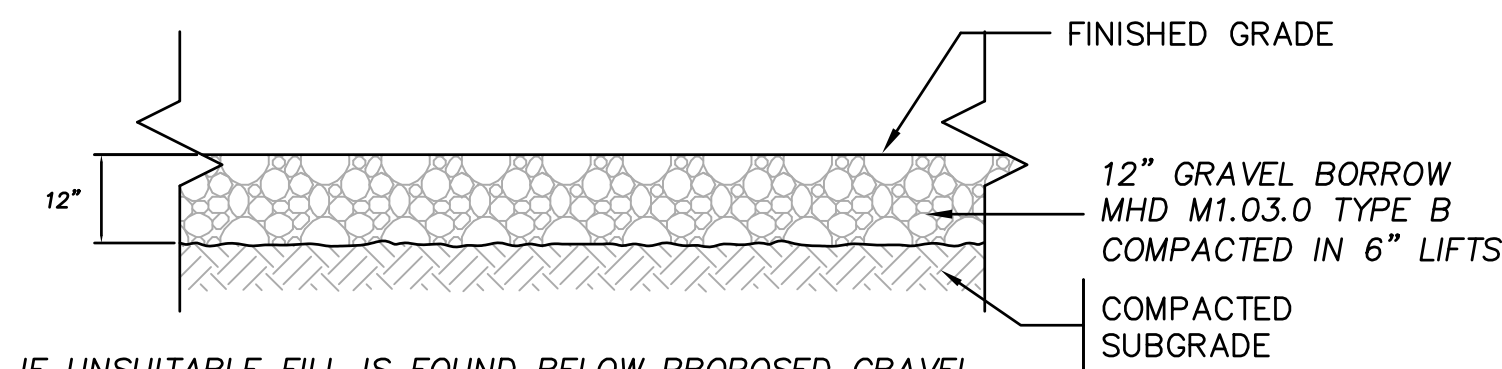


McCLURE
ENGINEERING, INC
119 Worcester Road
Charlton, MA 01507
Tel: (508) 248-2005
Fax: (508) 248-4887
Email: pengle@mcclureengineers.com

PETER C. ENGLE, P.E.
PROFESSIONAL ENGINEER
MA LIC. NO. 53736

REVISIONS		MADE APVD	
REV	DATE	DESCRIPTION	

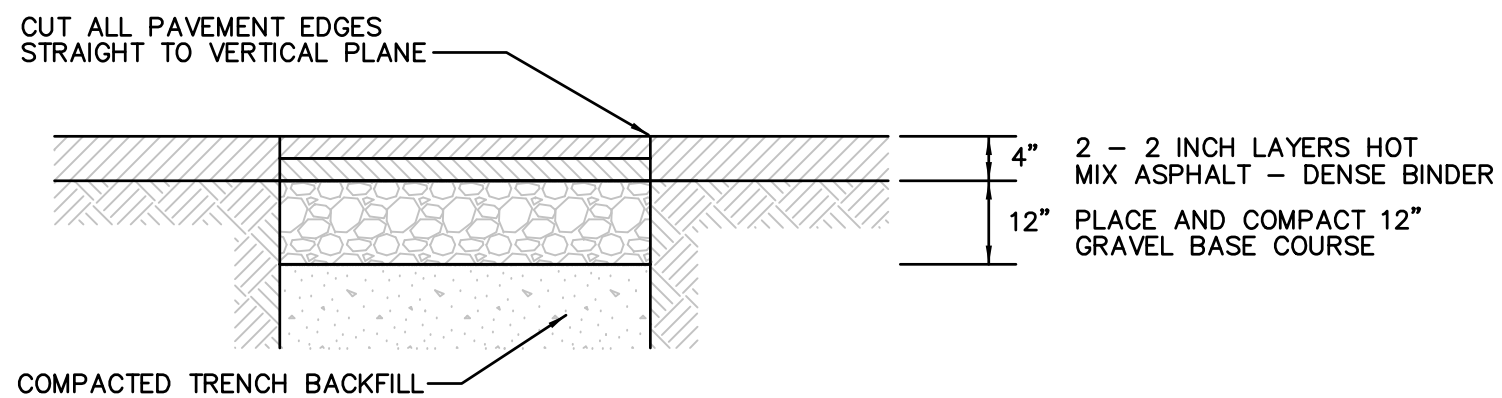
HOR. SCALE IN FEET: 1"=40'



IF UNSUITABLE FILL IS FOUND BELOW PROPOSED GRAVEL PARKING AREA, FILL IS TO BE REMOVED TO AT LEAST 36" BELOW FINISHED GRADE, GEOTEXTILE REINFORCEMENT IS TO BE INSTALLED BEYOND LIMITS OF FILL, AND BACKFILLED WITH CLEAN COMPACTED FILL IN 6" LIFTS

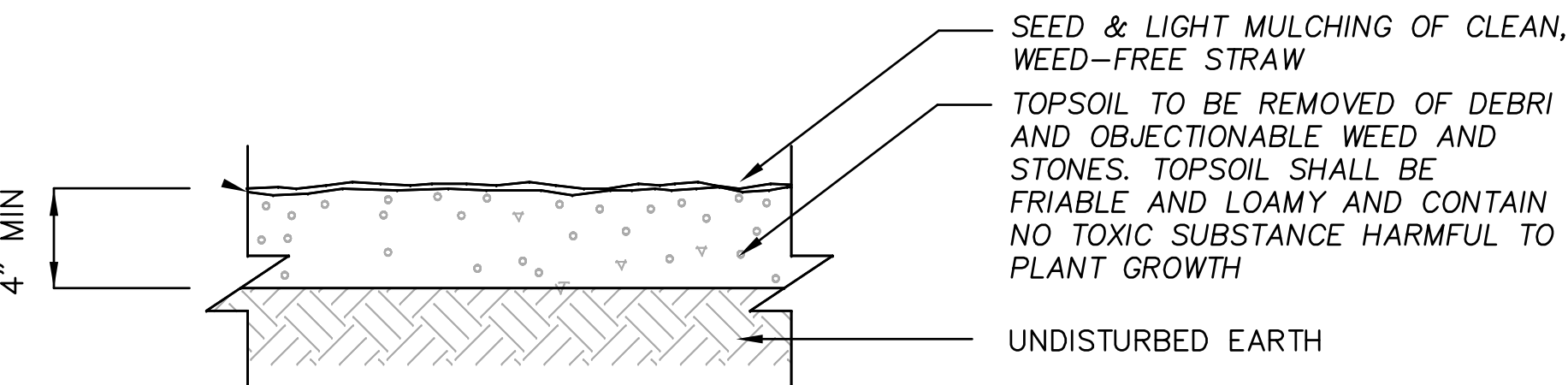
GRAVEL PARKING LOT DETAIL

NOT TO SCALE



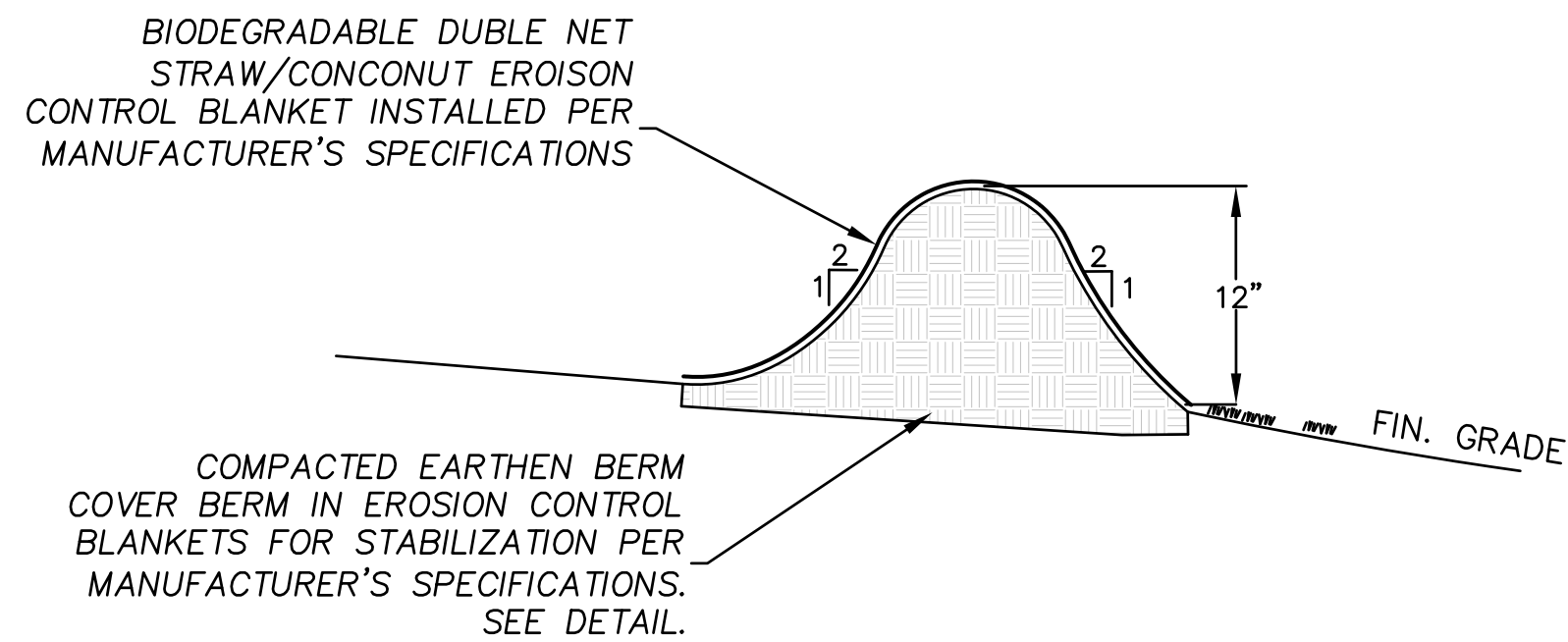
PAVEMENT PATCH/ TRENCH REPAIR DETAIL

NOT TO SCALE



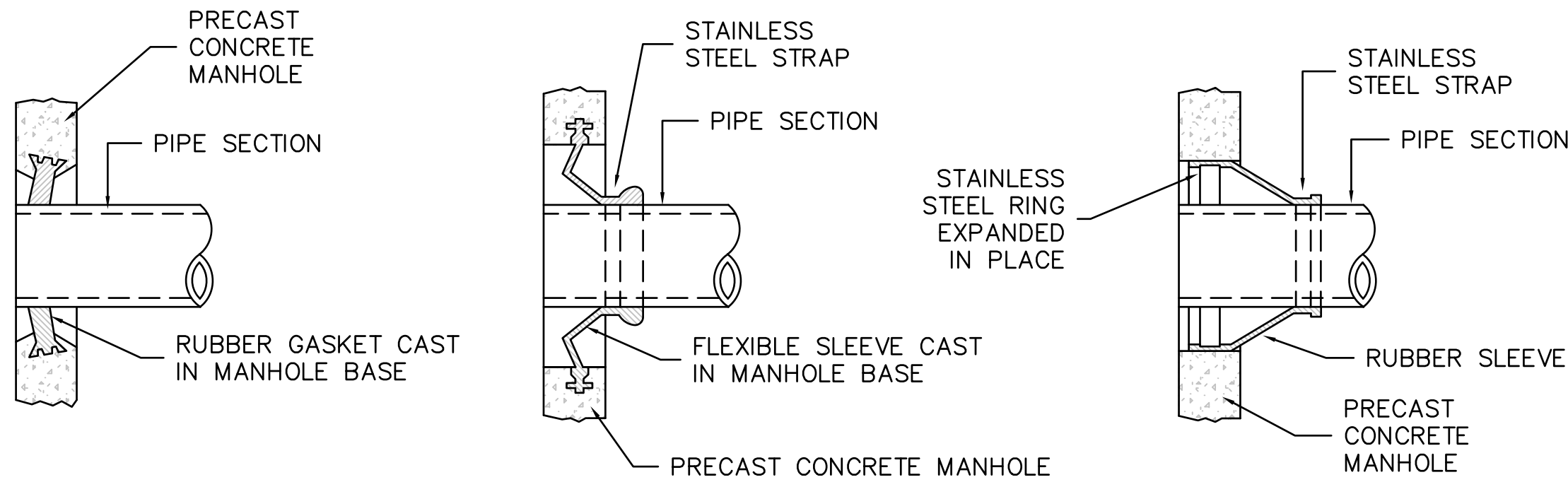
TOP SOIL & SEEDING DETAIL

NOT TO SCALE



EARTHEN DIVERSION BERM DETAIL

NOT TO SCALE

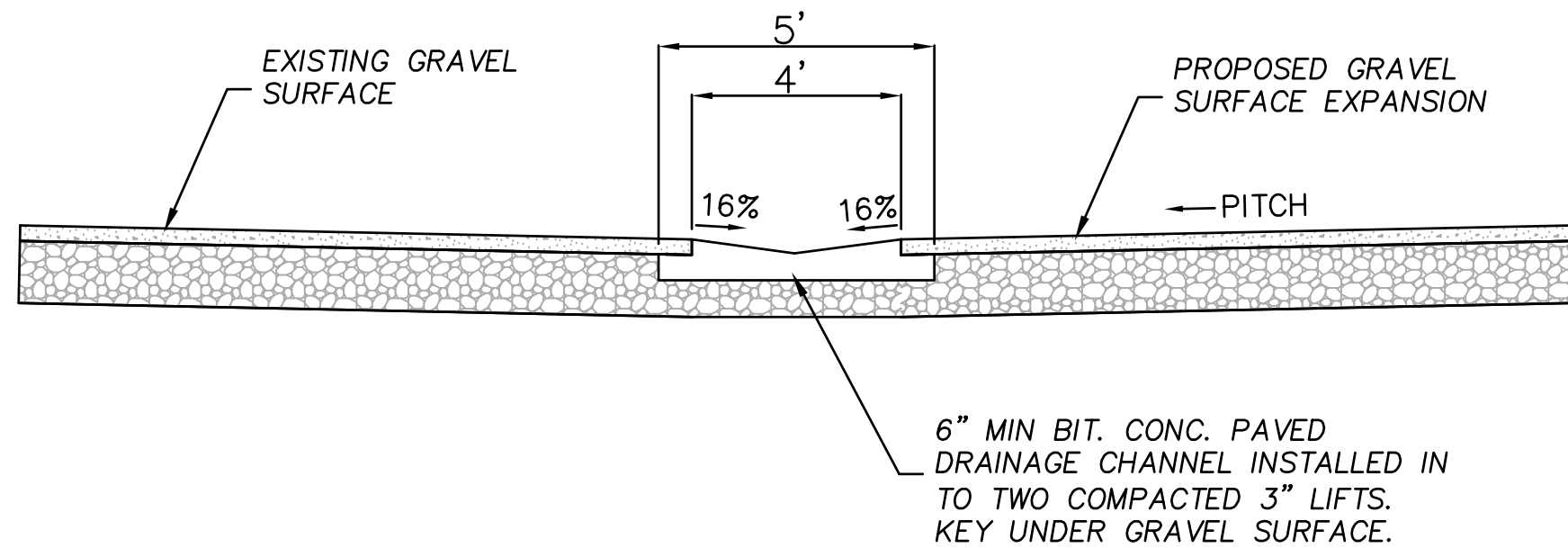


NOTE:

- 1) CONTRACTOR SHALL BE REQUIRED TO MAKE ALL PIPE PENETRATIONS WATER TIGHT.
- 2) THE PIPE TO MANHOLE CONNECTION SHALL BE A FLEXIBLE RUBBER PIPE SLEEVE EITHER CAST IN PRECAST MANHOLE SECTION OR HELD IN PLACE BY STAINLESS STEEL RINGS EXPANDED IN PLACE TO MEET SPECIFICATIONS OF ASTM C923.

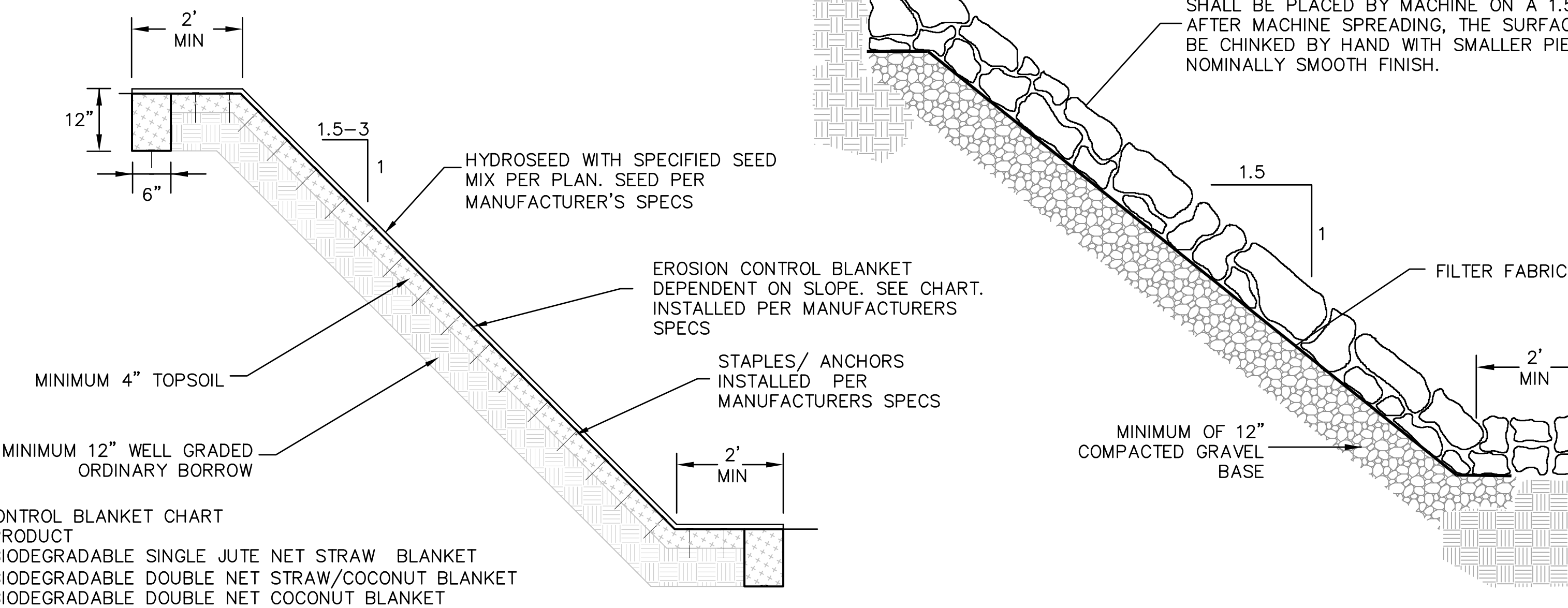
MANHOLE SEAL DETAILS

NOT TO SCALE



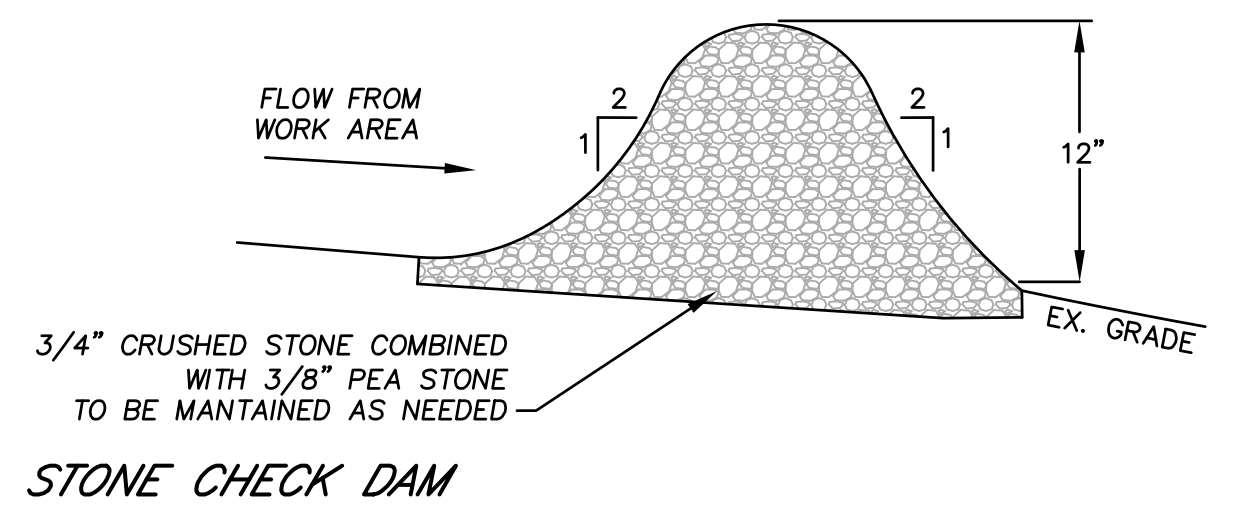
BIT. CONCRETE DRAINAGE CHANNEL DETAIL

NOT TO SCALE



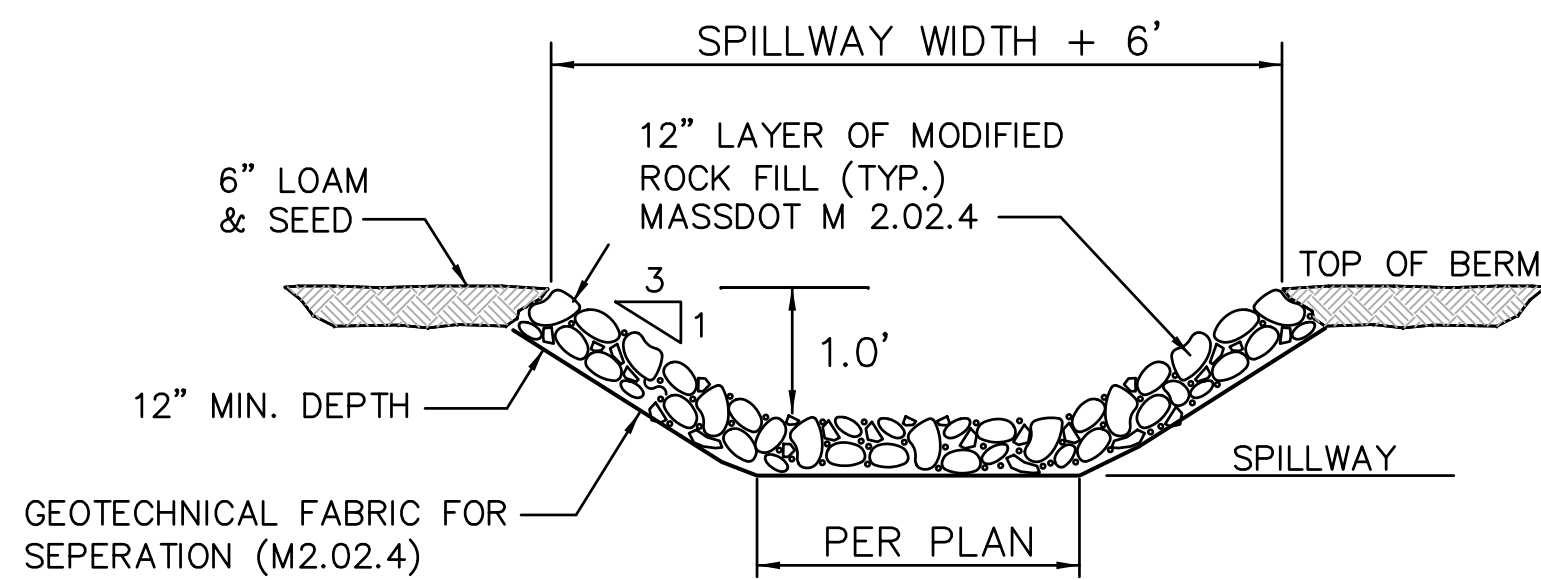
SLOPE STABILIZATION DETAILS

NOT TO SCALE



STONE CHECK DAM

NOT TO SCALE

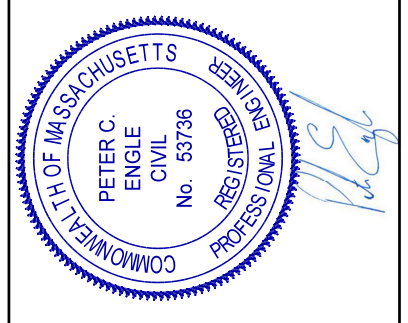


EMERGENCY SPILLWAY DETAIL

NOT TO SCALE

REV	DATE	DESCRIPTION	MADE	APVD

PETER C. ENGLE, P.E. PROFESSIONAL ENGINEER	MA LIC. NO. 53736
---	-------------------



McCLURE ENGINEERING, INC	Tel: (508) 248-2005 Fax: (508) 248-4887
119 Worcester Road Charlton, MA 01507	Email: pengle@mcclureengineers.com

SITE PLAN MODIFICATION 112 HUNTON MEMORIAL HIGHWAY ROCHDALE, MA PREPARED FOR CENTRAL MASS CRANE 112 HUNTON MEMORIAL HIGHWAY ROCHDALE, MA 01542-0338
--

DRAWN BY: WN
DATE: 8.20.21
CHK BY: PE
SCALE: N.T.S.
PROJ. NO. 151-2415-M

CONSTRUCTION
DETAILS

RAIN GARDEN 2 CROSS SECTION

RAIN GARDEN 1 CROSS SECTION

PRECAST CONCRETE DRAINAGE MANHOLE

SECTION A-A

GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. STORMCATCHER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STORMCATCHER SHALL MEET A MINIMUM 52.5 PSI MINIMUM RATING, ASSUMING EARTH COVER OF 0' - 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. STORMCATCHER STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE.
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STORMCEPTOR 450i DETAILS

NOTE:
UNTIL THE PLANT MATERIAL HAS TAKEN ROOT, WATER THE RAIN GARDEN ON A DAILY BASIS. IN ADDITION, WATER THE RAIN GARDEN DURING DROUGHT CONDITIONS. INSPECT THE SOIL AN DREPAIR ERODED AREAS OF THE RAIN GARDEN MONTHLY. RE-MULCH VOID AREAS AS NEEDED. REMOVE LITTER AND DEBRIS MONTHLY. TREAT ALL EXPOSED VEGETATION AS NEEDED. REMOVE AND REPLACE DEAD VEGETATION TWICE PER YEAR (SPRING AND FALL). REMOVE INVASIVE SPECIES INCLUDING WEEDS. NEEDED TO PREVENT THESE SPECIES FROM SPREADING INTO THE RAIN GARDEN. REPLACE MULCH EVERY TWO YEARS, IN THE EARLY SPRING. UPON FAILURE, EXCAVATE THE RAIN GARDEN AREA, SCARIFY THE BOTTOM AND SEDS, REPLACE SOIL, REPLANT, AND MULCH.

RAINGARDEN PLANTING SCHEDULE:

- SIDE SLOPES:
(10) LOWBUSH BLUEBERRY (*VACCINIUM ANGUSTIFOLIUM*), 12" TALL, 3' O.C.
(8) MEADOWSWEET (*SPIRAEA LATIFOLIA*), 2-3' TALL, 3' O.C.
(10) BLACK CHOKEBERRY (*ARONIA MELANOCARPA*), 2-3' TALL, 4' O.C.
(48) BEARBERRY (*ARCTOSTAPHYLOS UVA-URSI*), 12" TALL, 12" O.C.

- BASE OF RAIN GARDEN:
 (50) NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), 2" PLUGS, 2' O.C.
 (50) SENSITIVE FERN (ONOCLEA SENSIBILIS), 2" PLUGS, 2' O.C.
 (50) GRASS-LEAVED GOLDENROD (EUTHAMIA GRAMINIFOLIA), 2" PLUGS, 2' O.C.
 (100) BLUE FLAG IRIS (IREX VERSICOLOR), 2" PLUGS, 18" O.C.
 (50) BROOM SEDGE (CAREX SCOPARIA), 2" PLUGS, 2' O.C.

SALVAGE AND REPLANT EXISTING VEGETATION WHERE POSSIBLE.
CAREFULLY REMOVE AND POT DURING CONSTRUCTION AND TRANSPLANT
IMMEDIATELY AFTER RAIN GARDEN REGRADING IS COMPLETED.

TYP. RAIN GARDEN DETAIL

GENERAL NOTES:

1. IF SIGNIFICANT LEDGE IS ENCOUNTERED THE ENGINEER WILL BE INFORMED AND A PLAN FOR EXPECTED METHODS AND SCHEDULE OF REMOVAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

TYPICAL DRAIN LINE TRENCH DETAIL

REVISIONS			
REV	DATE	DESCRIPTION	MADE BY

PETER C. ENGLE, P.E.
PROFESSIONAL ENGINEER

MA LIC. NO. 53736

REC'D
NO. 53/38
FEB 1968

McCLURE
ENGINEERING INC.

Tel: (508) 248-2005
Fax (508) 248-4887

Email: pengle@mclureengineers.com

SITE PLAN MODIFICATION
1112 HUNTOON MEMORIAL HIGHWAY
ROCHDALE, MA

PROCEEDINGS, MAY
PREPARED FOR
CENTRAL MASS CRANE
HUNTOON MEMORIAL HIGHWAY

ROCHDALE, MA 01542-0338

DRAWN BY:	WN
DATE:	8.20.21
CHK BY:	PE
SCALE:	N.T.S.
PROJ. NO.	151-2415-M

CONSTRUCTION DETAILS