

SITE DEVELOPMENT PLANS

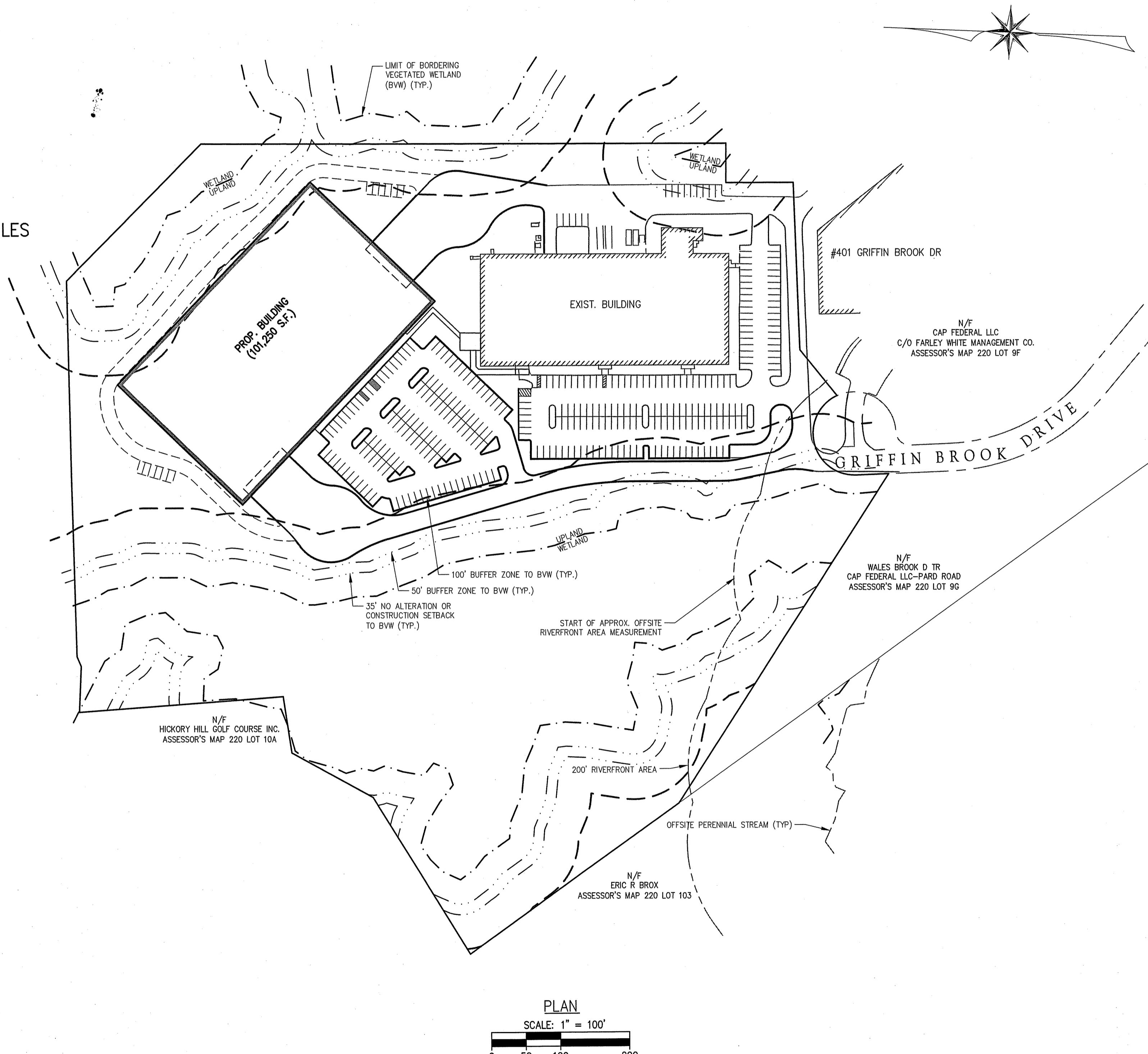
501 & 600 GRIFFIN BROOK DRIVE

METHUEN, MASSACHUSETTS

(ASSESSOR'S MAP 220, LOT 9D & 9E)

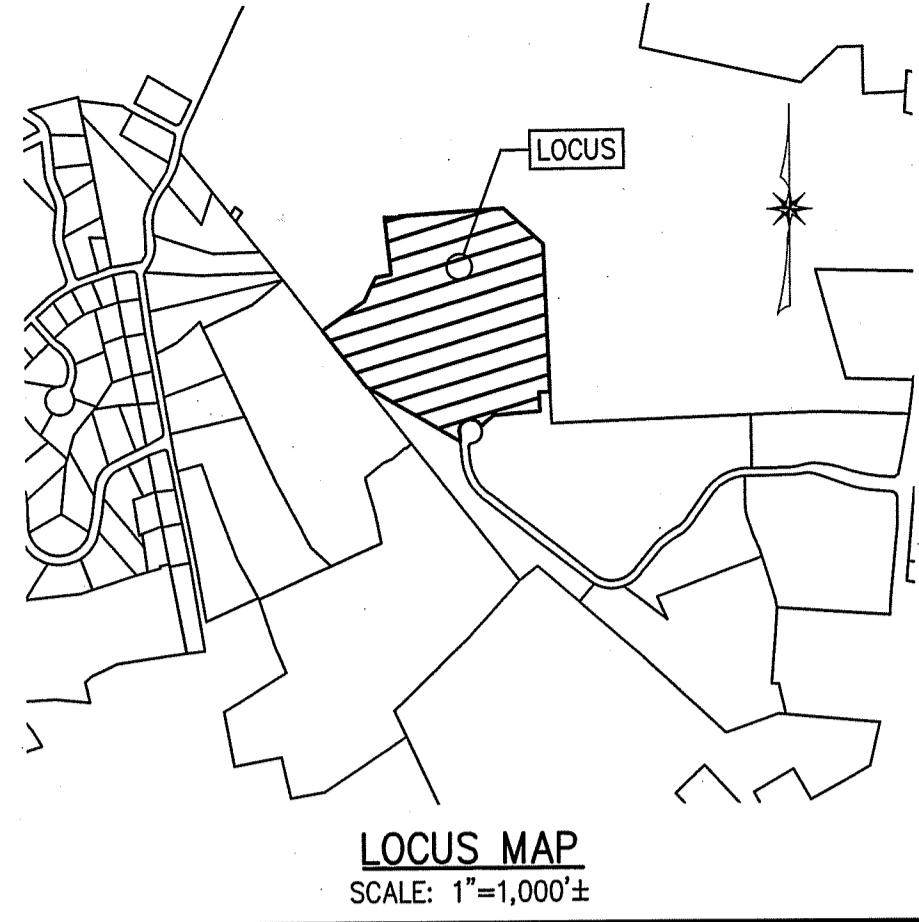
SCHEDULE OF PLAN SET DRAWINGS:

CS-1	COVER SHEET
C-1	GENERAL NOTES, ABBREVIATIONS, & LEGEND
C-2	Sheet Index & Erosion Control Plan
C-3	EXISTING CONDITIONS PLAN
C-4	EXISTING CONDITIONS PLAN
C-5	SITE LAYOUT PLAN
C-6	GRADING AND DRAINAGE PLAN
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C-10	SITE DETAILS
C-11	UTILITY DETAILS
C-12	DRAINAGE DETAILS
C-13	DRAINAGE DETAILS
C-14	DRAINAGE DETAILS
C-15	TEST HOLE LOGS
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE PLAN ENLARGEMENT AND PLANTING SCHEDULES
L1.2	LANDSCAPE DETAILS AND PLANTING NOTES
L2.0	LIGHTING PLAN
A1.2	BUILDING ELEVATIONS



GENERAL NOTE:
THESE PLANS ARE PREPARED FOR PERMITTING WITH THE CITY OF METHUEN. THE PLANS SHALL NOT BE USED FOR CONSTRUCTION OR FOR ANY OTHER PURPOSES WITHOUT WRITTEN PERMISSION FROM THE MORIN-CAMERON GROUP, INC.

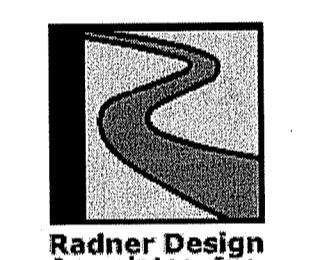
ISSUED APRIL 6, 2022



APPLICANT/OWNER:
GRIFFIN BROOK DRIVE OWNER LLC
55 CAMBRIDGE STREET
BURLINGTON, MA 01803

CIVIL ENGINEER:
THE MORIN-CAMERON GROUP, INC.
25 KENOZA AVENUE
HAVERHILL, MA 01830
PHONE: 978-777-8586

The
Morin-Cameron
GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS

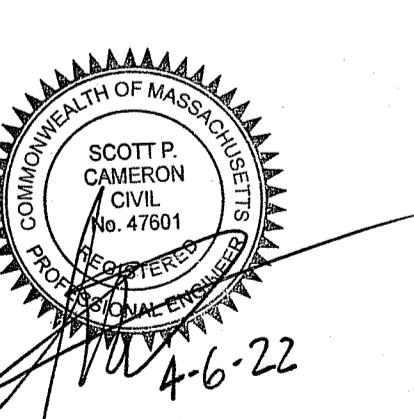


LANDSCAPE ARCHITECT:
RADNER DESIGN ASSOCIATES, INC.
3 ALLIED DRIVE, SUITE 303
DEDHAM, MA 02026
PHONE: 508-736-6144

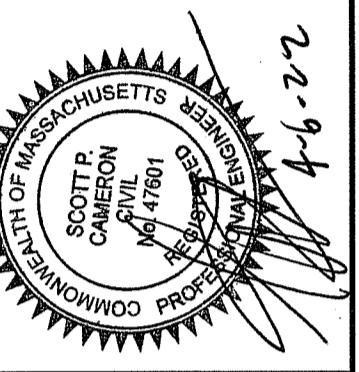
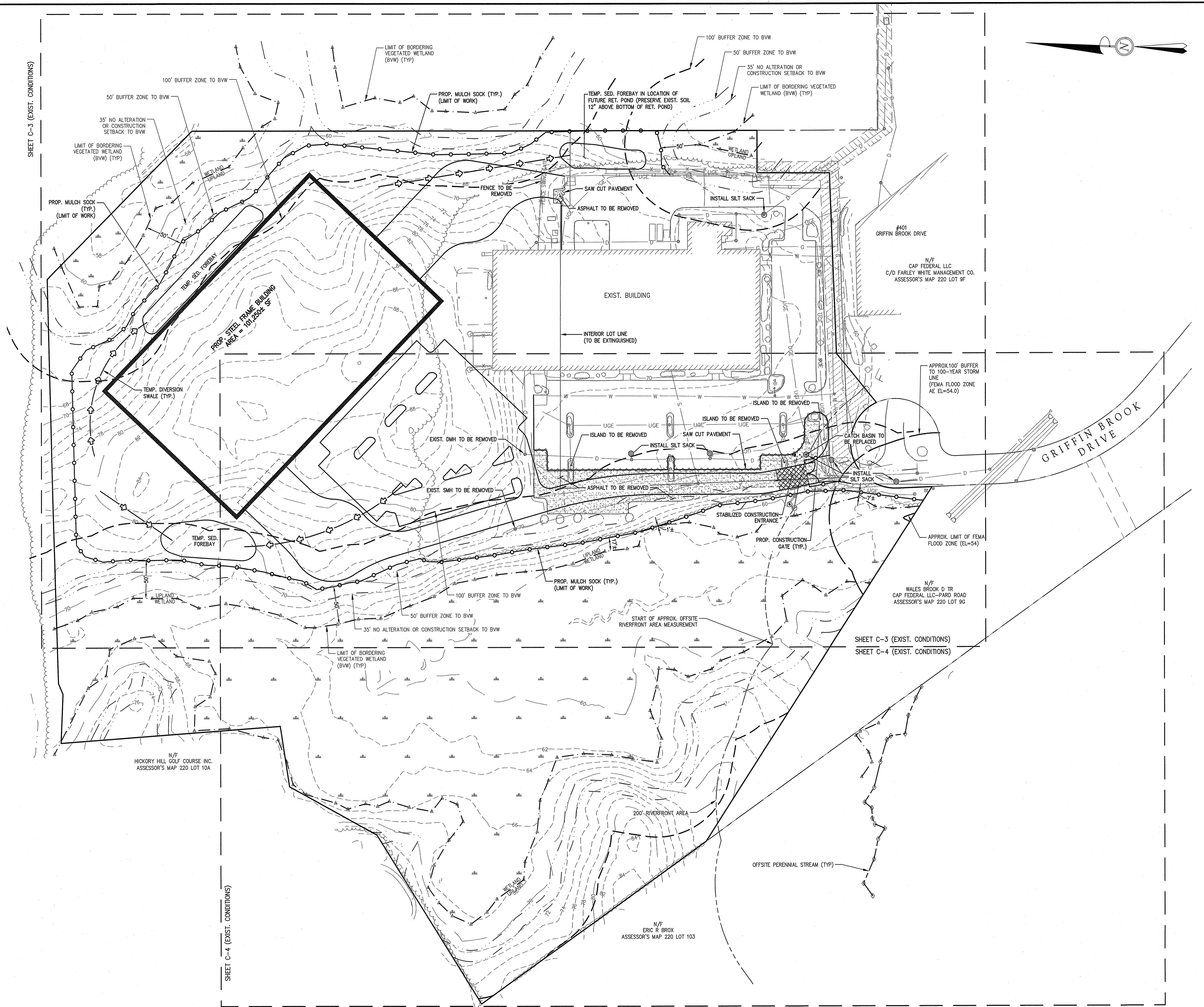
LEC

WETLAND SCIENTIST:
LEC ENVIRONMENTAL CONSULTANTS, INC.
380 LOWELL STREET, SUITE 101
WAKEFIELD, MA 01880
PHONE: 781-245-2500

BAYSIDE
ENGINEERING



REVISIONS			DRAWING NO.
NO.	DESCRIPTION	DATE	
			SURVEY BY: MCG DRAFTED BY: CM/LO CHECKED BY: SPC APPROVED BY: SPC SCALE: AS NOTED DATE: APRIL 6, 2022
			COVER SHEET
			CS-1



Inc. Morin-Cameron

GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENOZA AVE, HAVERHILL, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

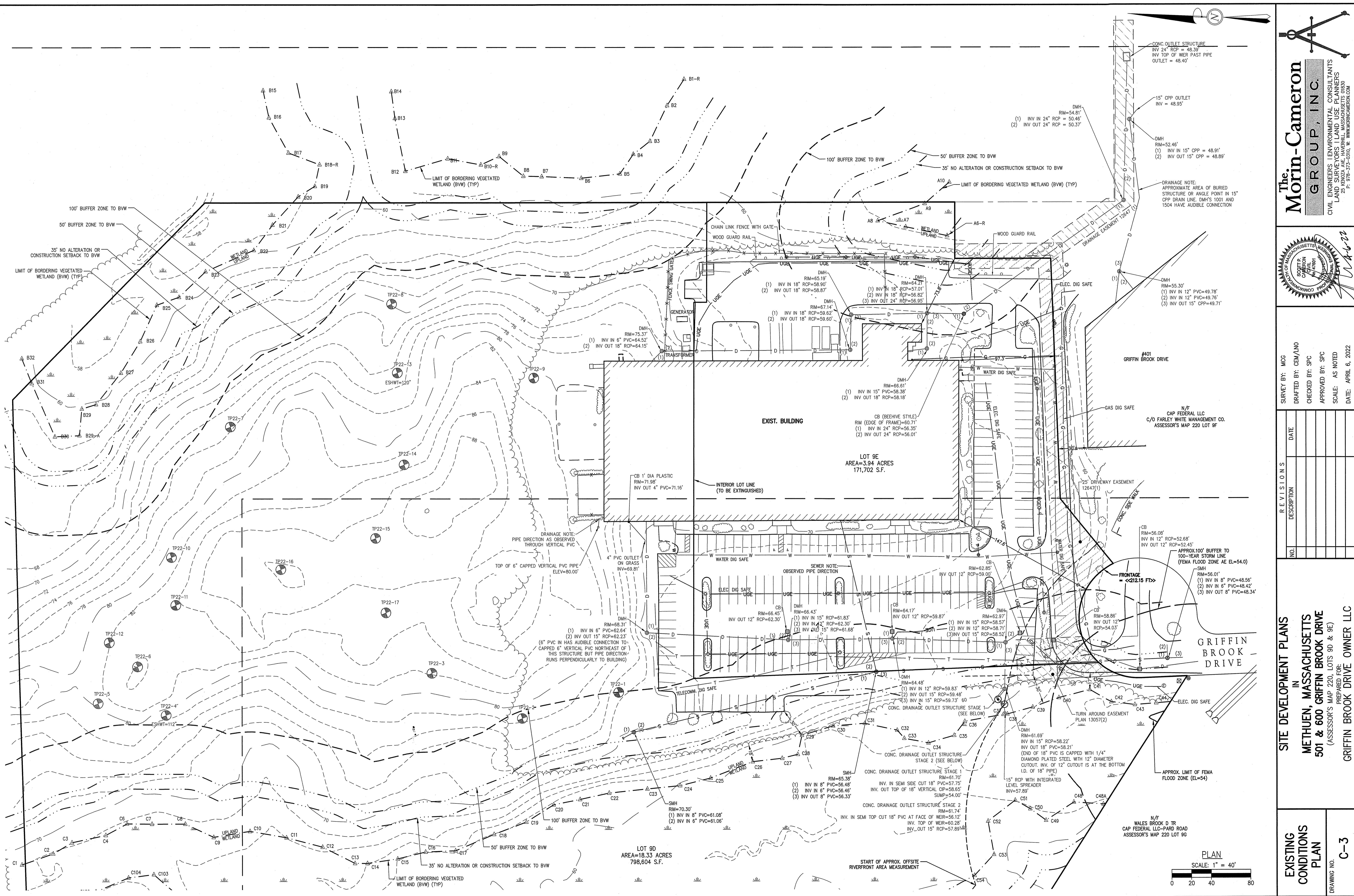
NO. _____

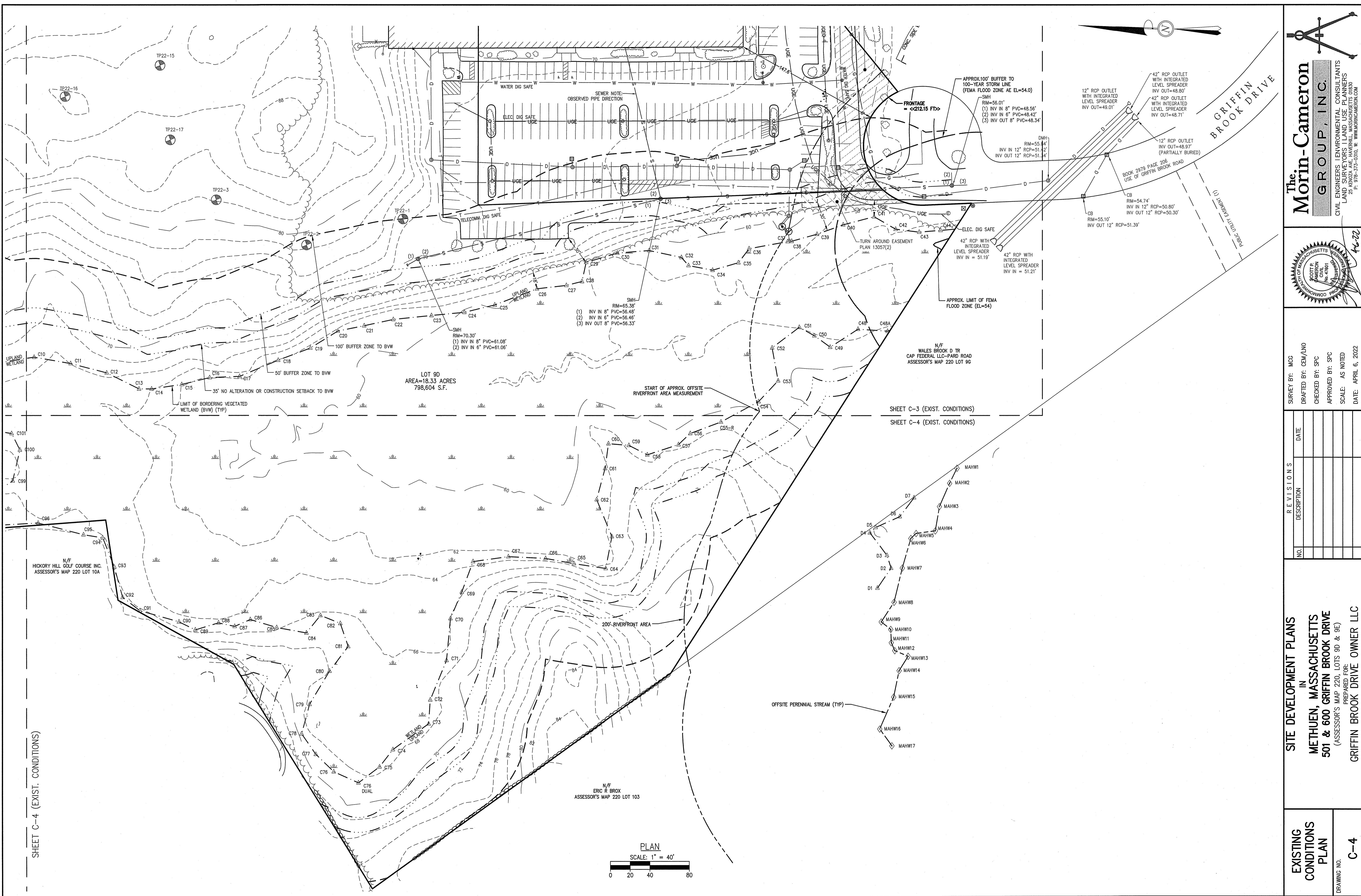
SITE DEVELOPMENT PLANS
IN
METHIEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 9D & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC

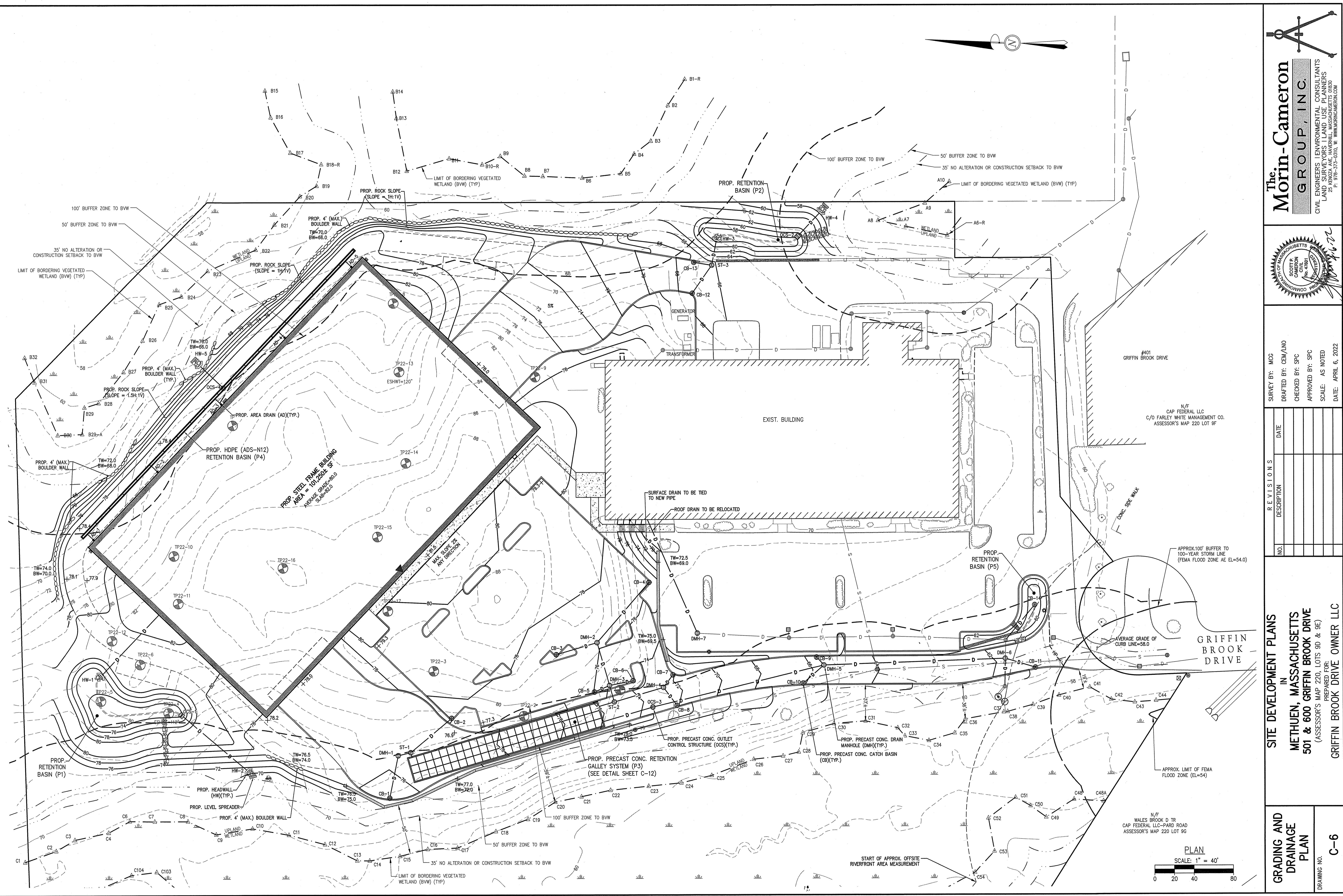
**SHEET INDEX
& EROSION
CONTROL**

DRAWING NO. **C-2**

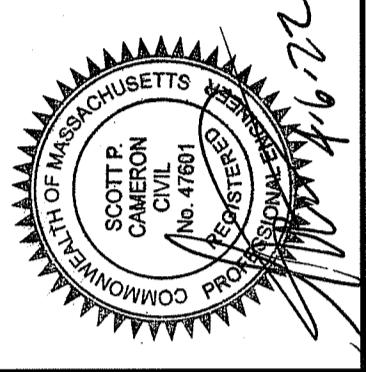
PROJ. #4046







The Morin-Cameron Group, Inc.



REVISIONS		SURVEY BY: MCG
DESCRIPTION	DATE	DRAFTED BY: CEM/
		CHECKED BY: SPC
		APPROVED BY: SP
		SCALE: AS NOTED
		DATE: APRIL 6, 2011

**SITE DEVELOPMENT PLANS
IN
METHUEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 9D & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC**

**GRADING AND
DRAINAGE
PLAN**

C-6

DRAWING NO.

UPSTREAM			CONNECTING PIPE		DOWNTSTREAM STRUCTURE	PIPE INFORMATION				
ID	RIM	SUMP	INV. START	INV. END		LENGTH	DIAMETER	SLOPE	TYPE	NOTES
CB-1	75.8	65	69.00	68.81	DMH-1	38	12	0.005	HDPE	DOUBLE RIM
DMH-1	76.3	63.8	67.81	67.76	ST-1	10	12	0.005	HDPE	CONTECH CDS
CB-2	77.6	65	69.06	68.81	ST-1	50	12	0.005	HDPE	CONTECH CDS
ST-1	76.4	63.6	67.66	67.60	TANK	3	15	0.020	HDPE	
CB-3	77.0	64.5	68.57	68.375	DMH-2	38	12	0.005	HDPE	
CB-4	76.3	64.7	68.76	68.375	DMH-2	77	12	0.005	HDPE	
DMH-2	76.3	64.2	68.28	68.07	DMH-3	41	12	0.005	HDPE	
CB-5	76.0	64.1	68.14	68.07	DMH-3	13	12	0.005	HDPE	
CB-6	76.7	64.1	68.18	68.07	DMH-3	21	12	0.005	HDPE	
DMH-3	75.5	63.9	67.97	67.84	ST-2	13	12	0.010	HDPE	CONTECH CDS
CB-7	72.0	64.4	68.48	68.42	DMH-4	12	12	0.005	HDPE	
CB-8	72.1	64.5	68.52	68.42	DMH-4	19	12	0.005	HDPE	
DMH-4	72.5	64.3	68.32	67.84	ST-2	48	12	0.010	HDPE	CONTECH CDS
ST-2	75.5	63.7	67.74	67.60	P3	14	15	0.010	HDPE	POND 3
OCS3	75.5	60	64.00	61.30	DMH-5	175	18	-0.004	HDPE	
DMH-5	66.5	57.9	61.97	58.368	DMH-6	180	18	0.02	HDPE	
CB-9	66.0	58.1	62.10	62.068	DMH-5	7	12	0.005	HDPE	
CB-10	66.0	58.1	62.19	62.068	DMH-5	24	12	0.005	HDPE	
CB-11	61.7	54.5	58.51	58.368	DMH-6	28	12	0.005	HDPE	
DMH-6	61.9	54.2	58.27	58.22	EXIST. DMH	24	18	0.002	HDPE	DMH BY WETLAND
CB-12	68.0	56.6	60.65	60.50	ST-3	30	12	0.005	HDPE	CONTECH CDS
CB-13	68.0	56.5	60.57	60.50	ST-3	14	12	0.005	HDPE	CONTECH CDS
ST-3	65.8	56.4	60.40	60.20	HW-3	22	12	0.001	HDPE	HEADWALL
CB-14	60.0	54.5	58.56	58.52	Exist. DMH	43	12	0.001	HDPE	
AD-1	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-2	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-3	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-4	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-5	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	

PLAN
SCALE: 1" = 40'
0 20 40 80

SITE DEVELOPMENT PLANS
IN
METHUEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 90 & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC
DRAWING NO. C-7

DRAINAGE
SCHEDULE

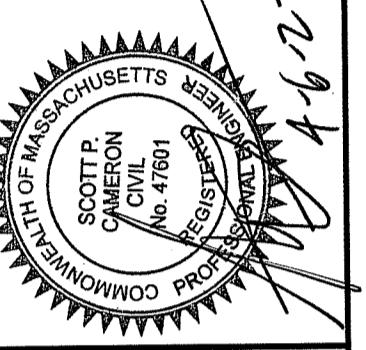
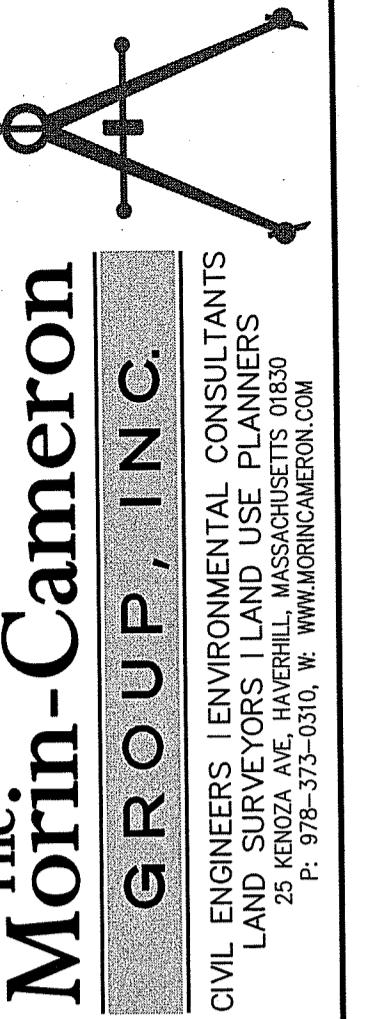
DRAWING NO.

C-7

SURVEY BY: MCG	DRAFTED BY: GEM/LNO
DATE	CHECKED BY: SPC
	APPROVED BY: SPC
SCALE: AS NOTED	DATE: APRIL 6, 2022

THE MORIN-CAMERON GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 ENDZA AVE, HANOVER, MASSACHUSETTS 02343
P: 978-755-1350, F: 978-755-1350, E: MM@MORINCAMERON.COM

APR 6 2022



**SITE DEVELOPMENT PLANS
IN
METHUEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 9D & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC**

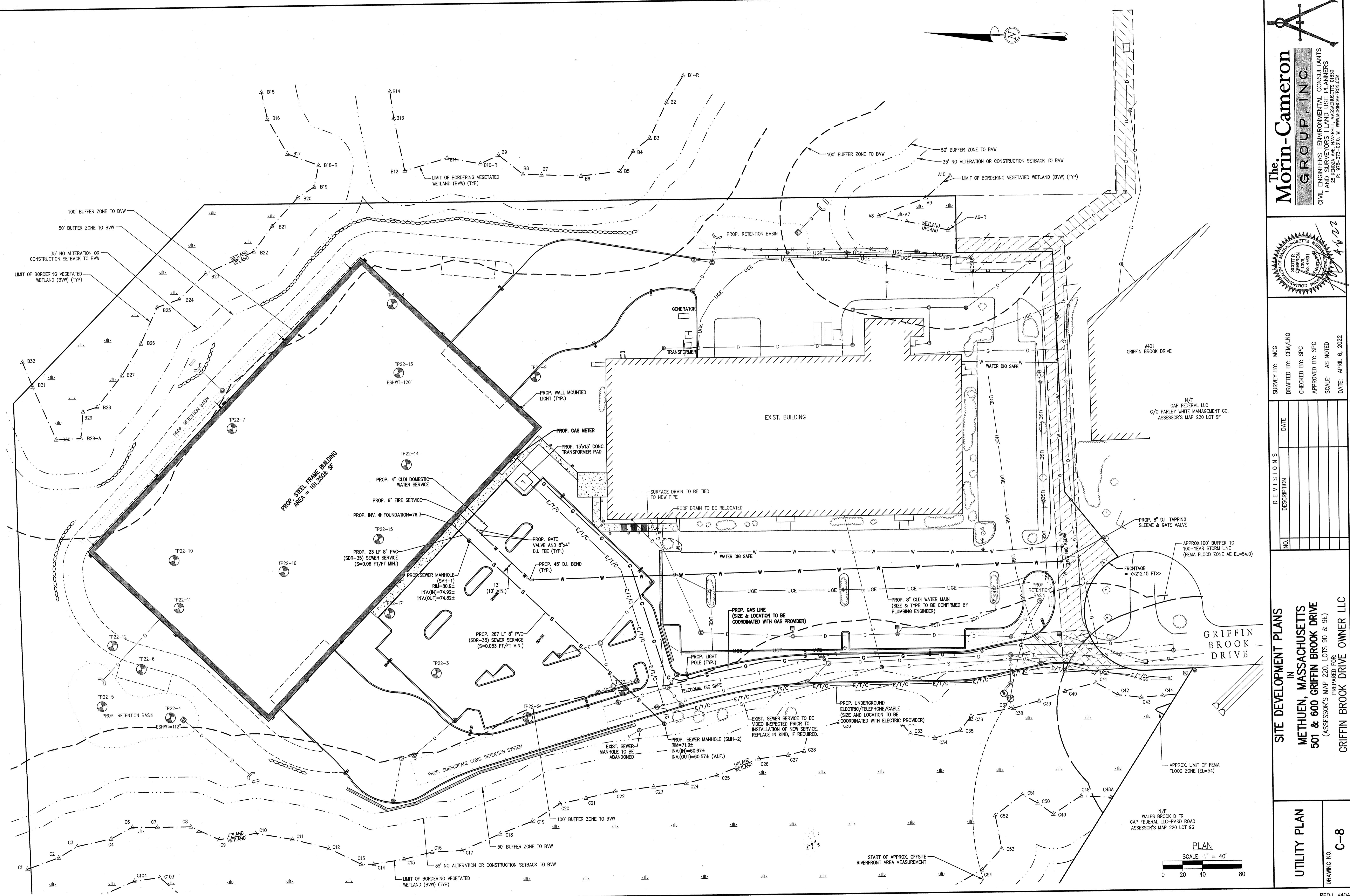
UTILITY PLAN

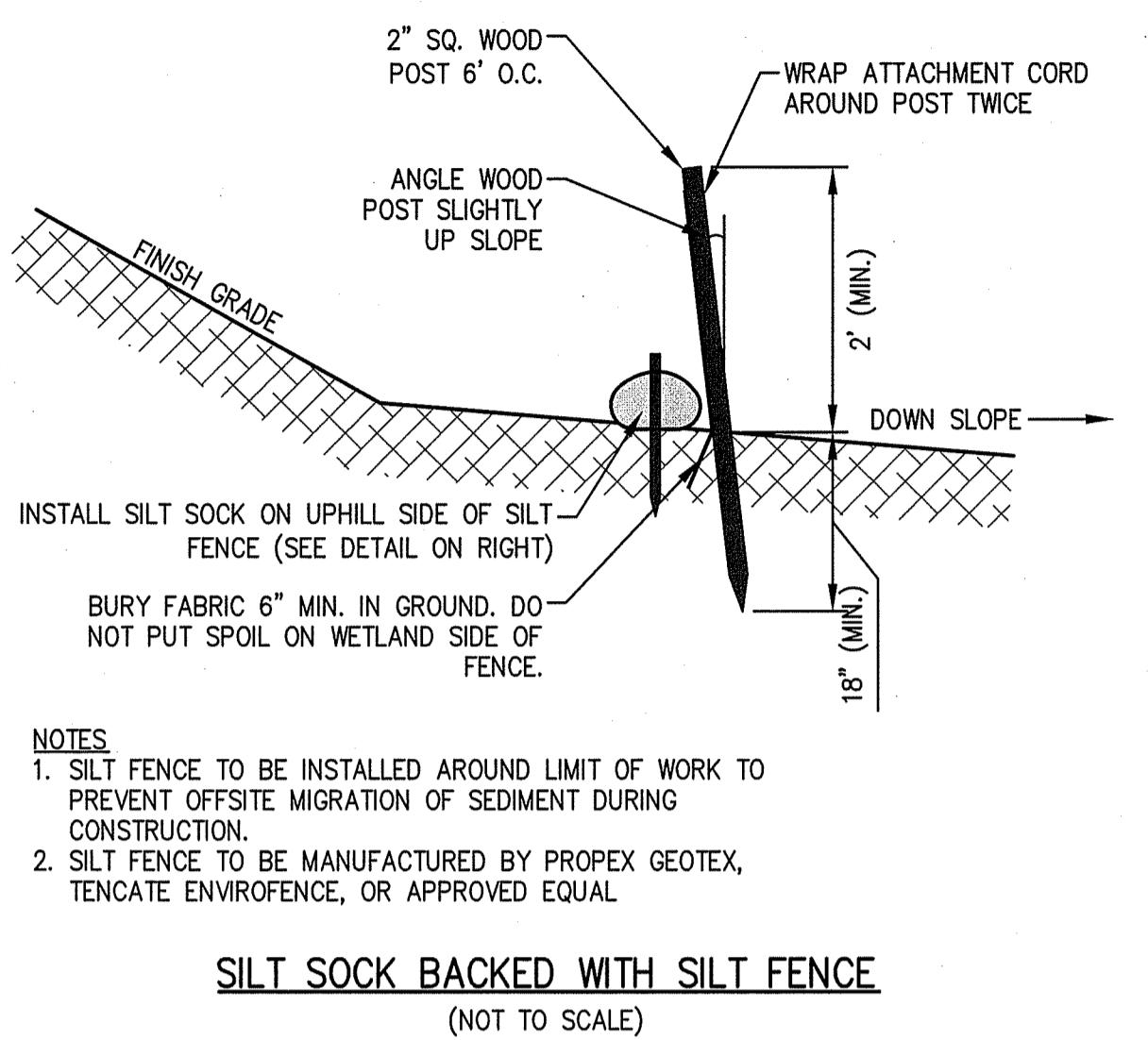
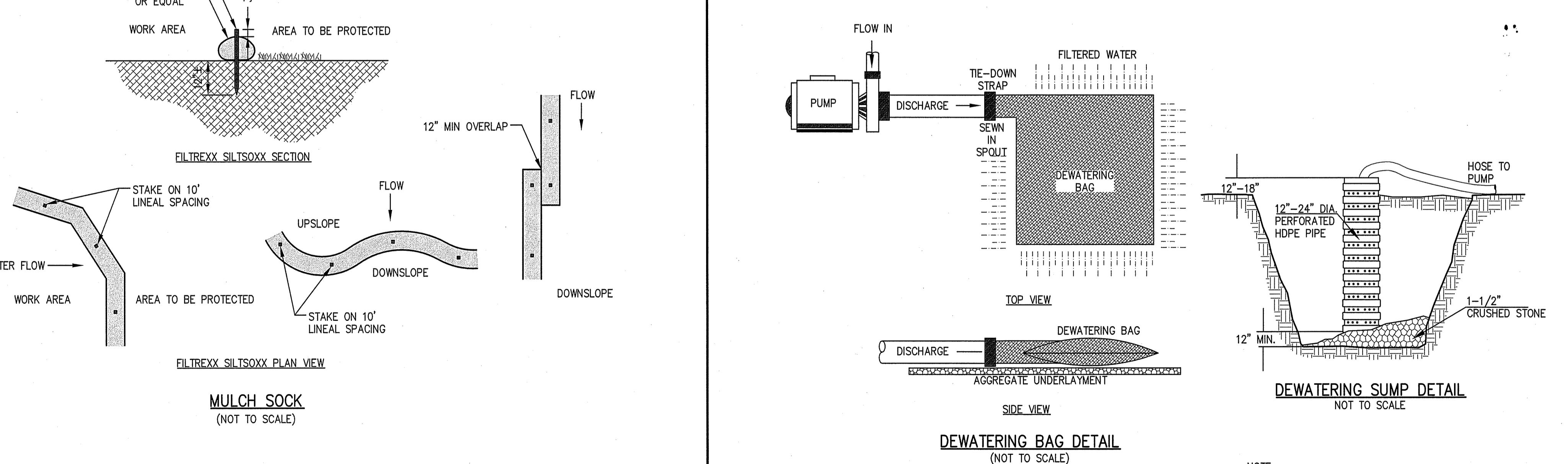
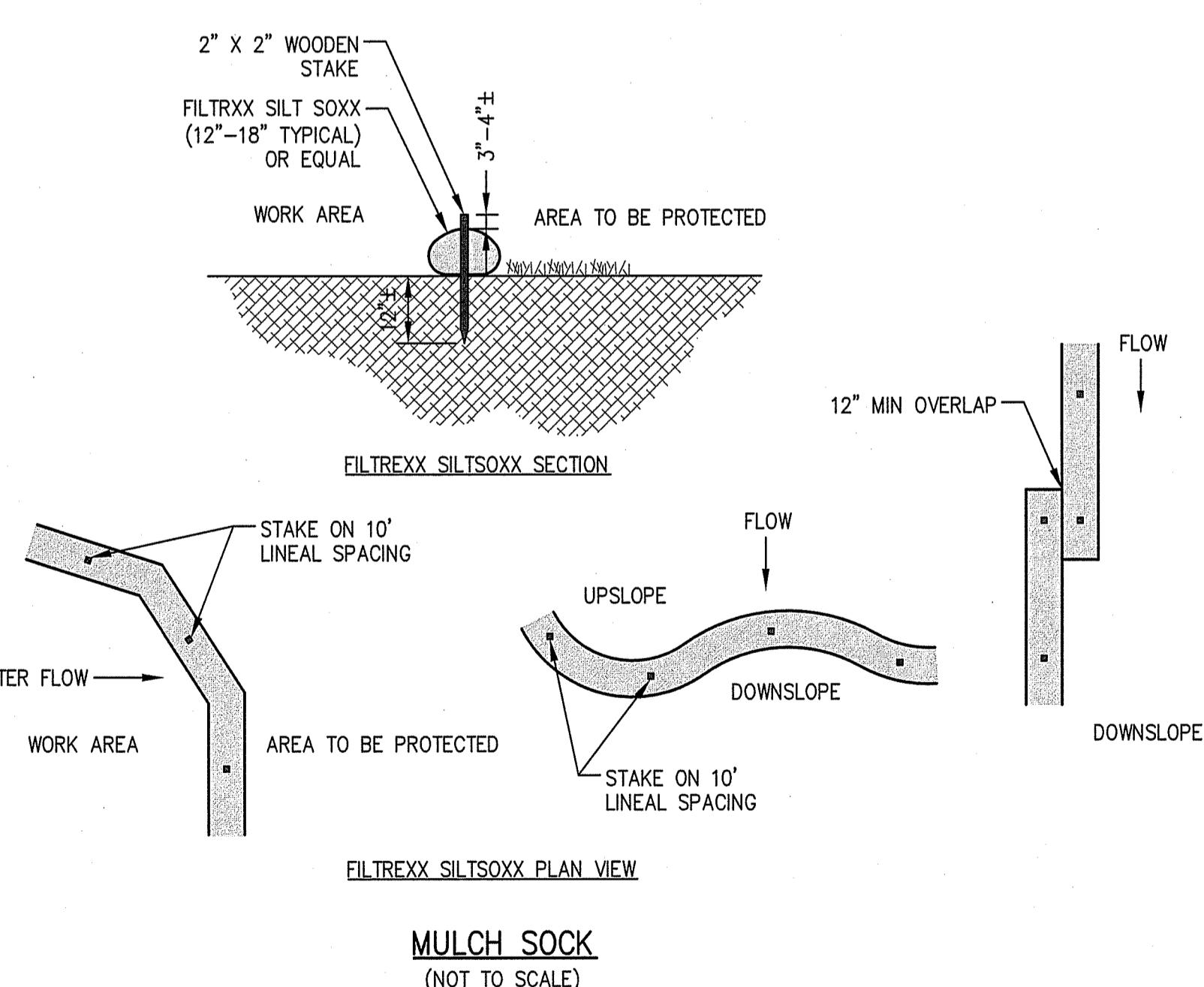
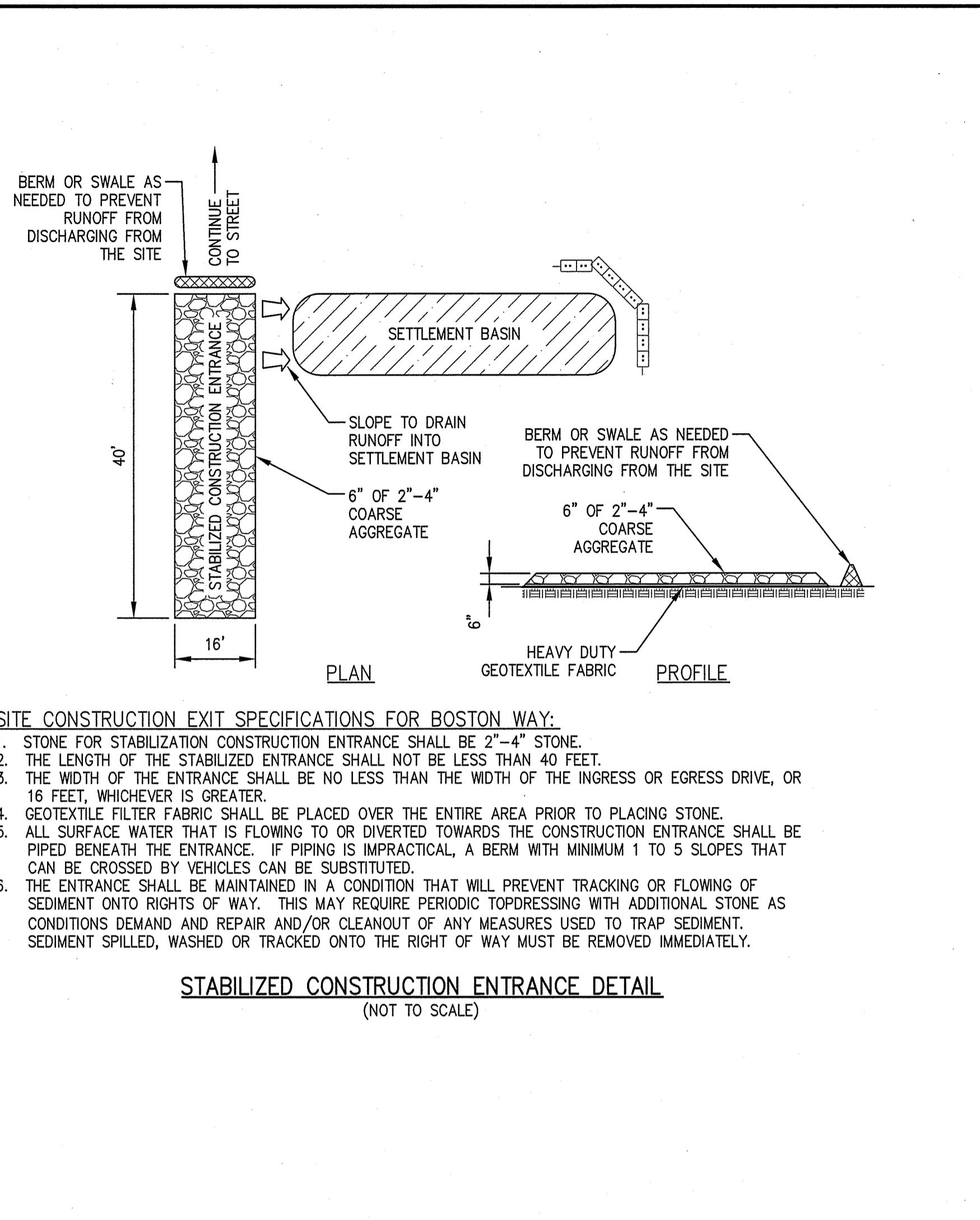
C-8

DRAWING NO.

PROJ. #4046
4046 MAIN

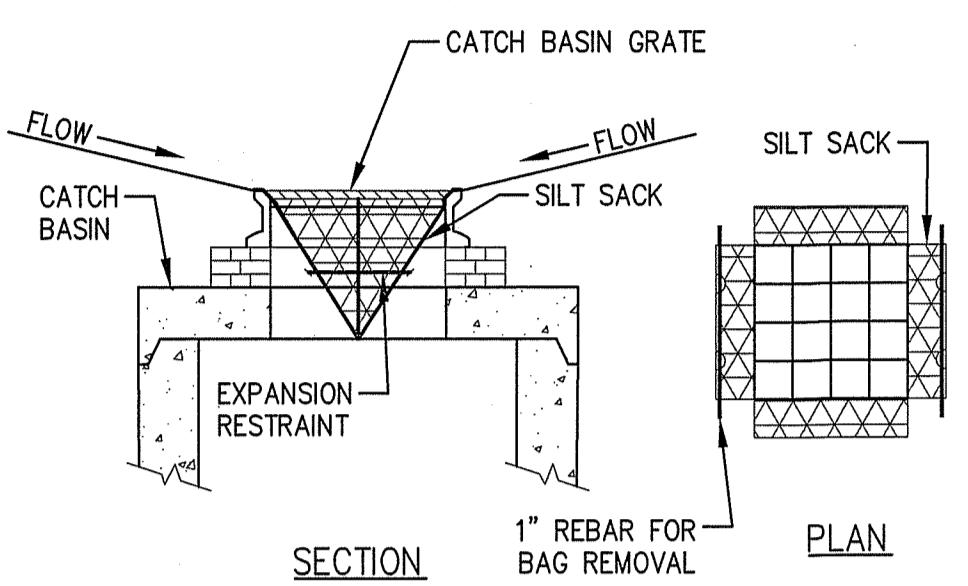
DRAWING: Z:\A.B.O. Projects\4046\Engineer\Drawing\Current\4046 MAIN



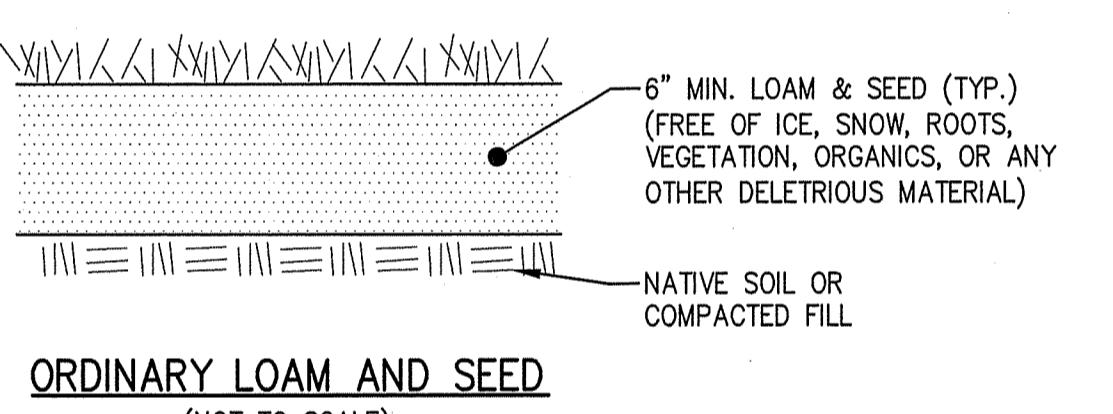


SILT SACK NOTES:

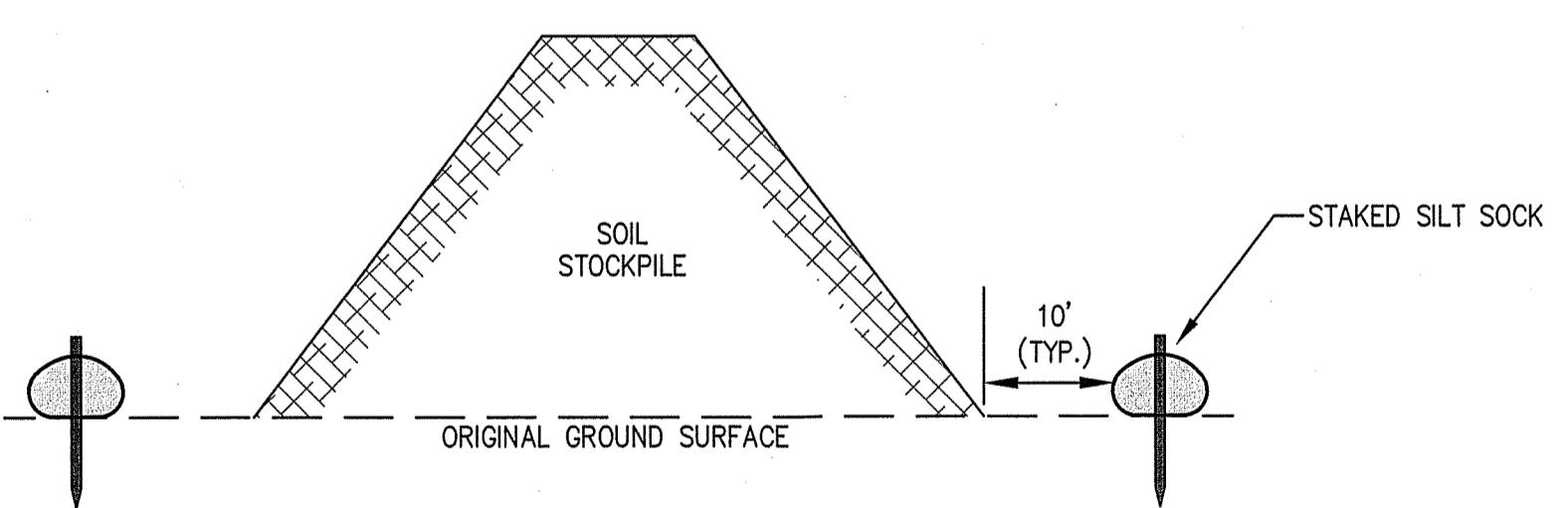
1. INSTALL SILT SACKS IN EXISTING CATCH BASINS. INSTALL SILT SACKS IN NEW CATCH BASINS AFTER INSTALLATION.
2. GRATES TO BE PLACED OVER SILT SACKS.
3. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED WHEN DEPTH OF SEDIMENT IS WITHIN 6" OF GRATE.



SILT SACK SEDIMENT TRAP
(NOT TO SCALE)



ORDINARY LOAM AND SEED
(NOT TO SCALE)



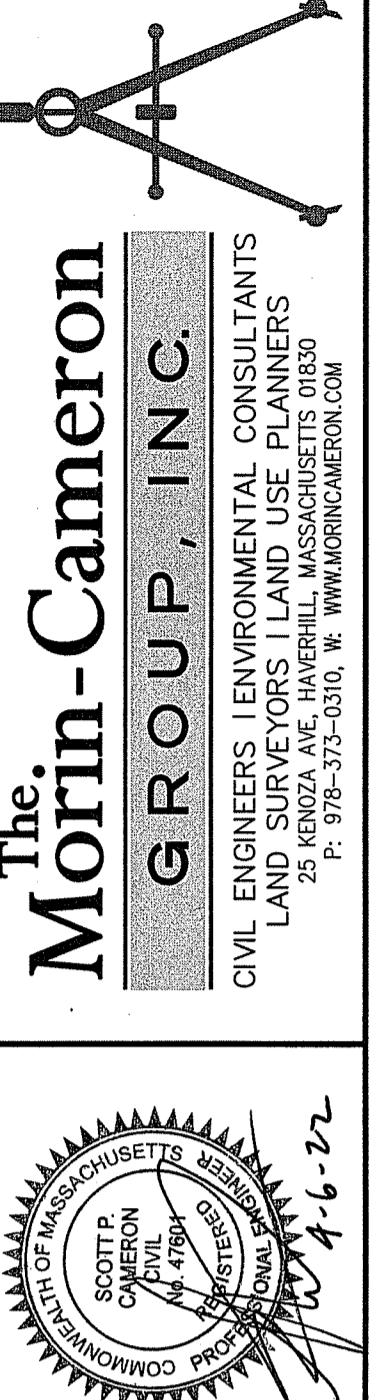
NOTES:

1. SILT SOCK TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE IF ON LEVEL GROUND OR TO EXTEND AROUND DOWNGRADIENT PORTION STOCKPILE IS ON SLOPE.
2. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS IT SHALL BE STABILIZED WITH AN EROSION CONTROL BLANKET OR SEEDED (IF LOAM).
3. INSPECTION OF SILT SOCKS SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF 1/2". REPAIR OR REPLACEMENT OF SILT SOCK SHALL BE MADE PROMPTLY AS NEEDED.
4. SEDIMENT TRAPPED BY SILT SOCKS SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN SEDIMENT DEPTH REACHES 12".
5. SILT SOCKS SHALL BE MAINTAINED UNTIL STOCKPILE IS ELIMINATED.

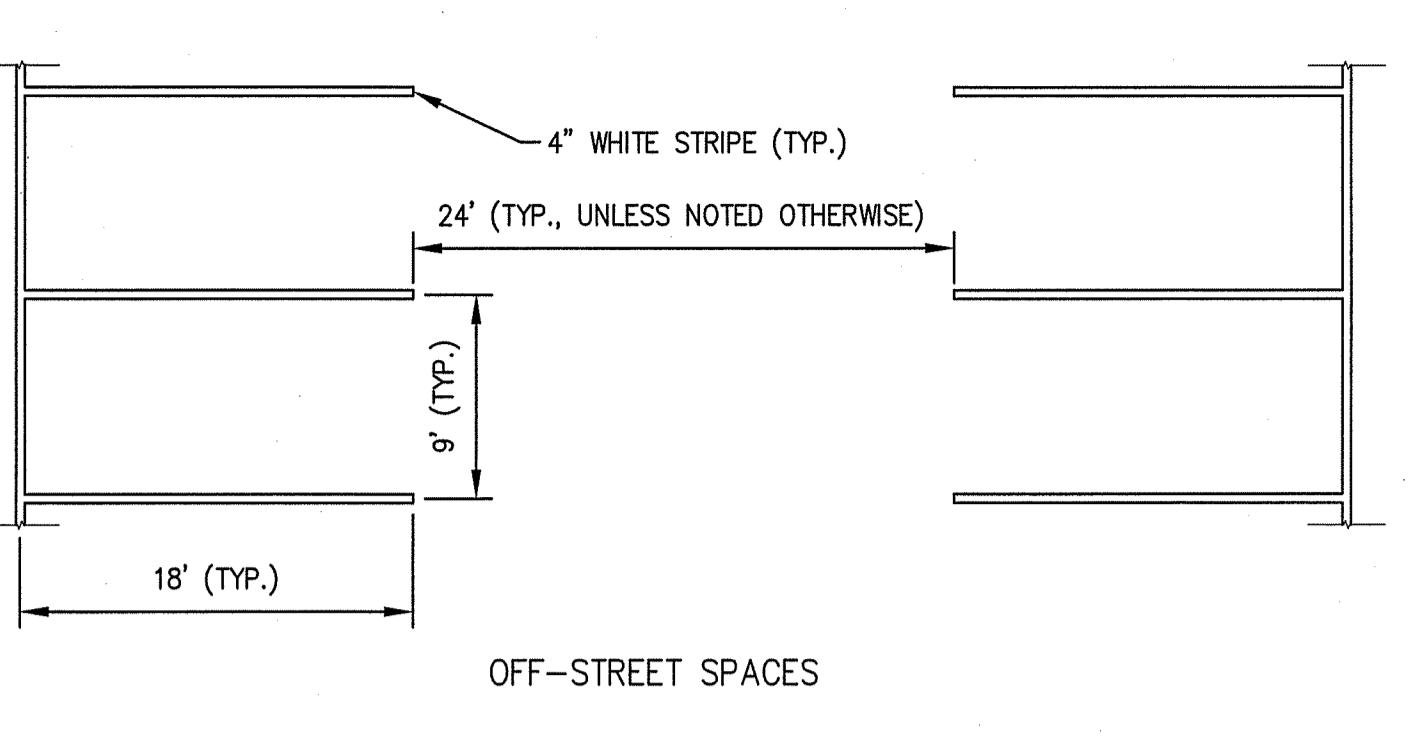
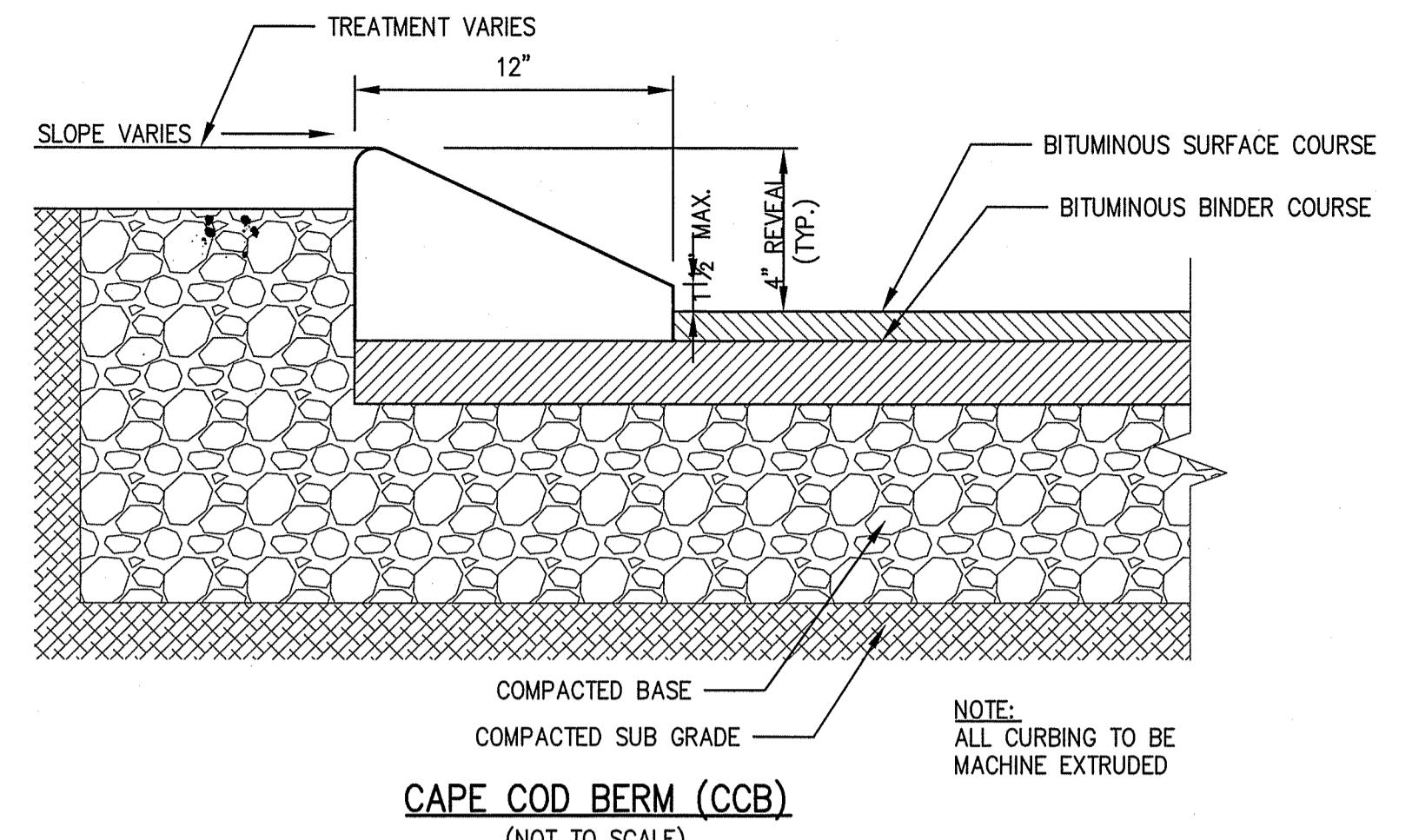
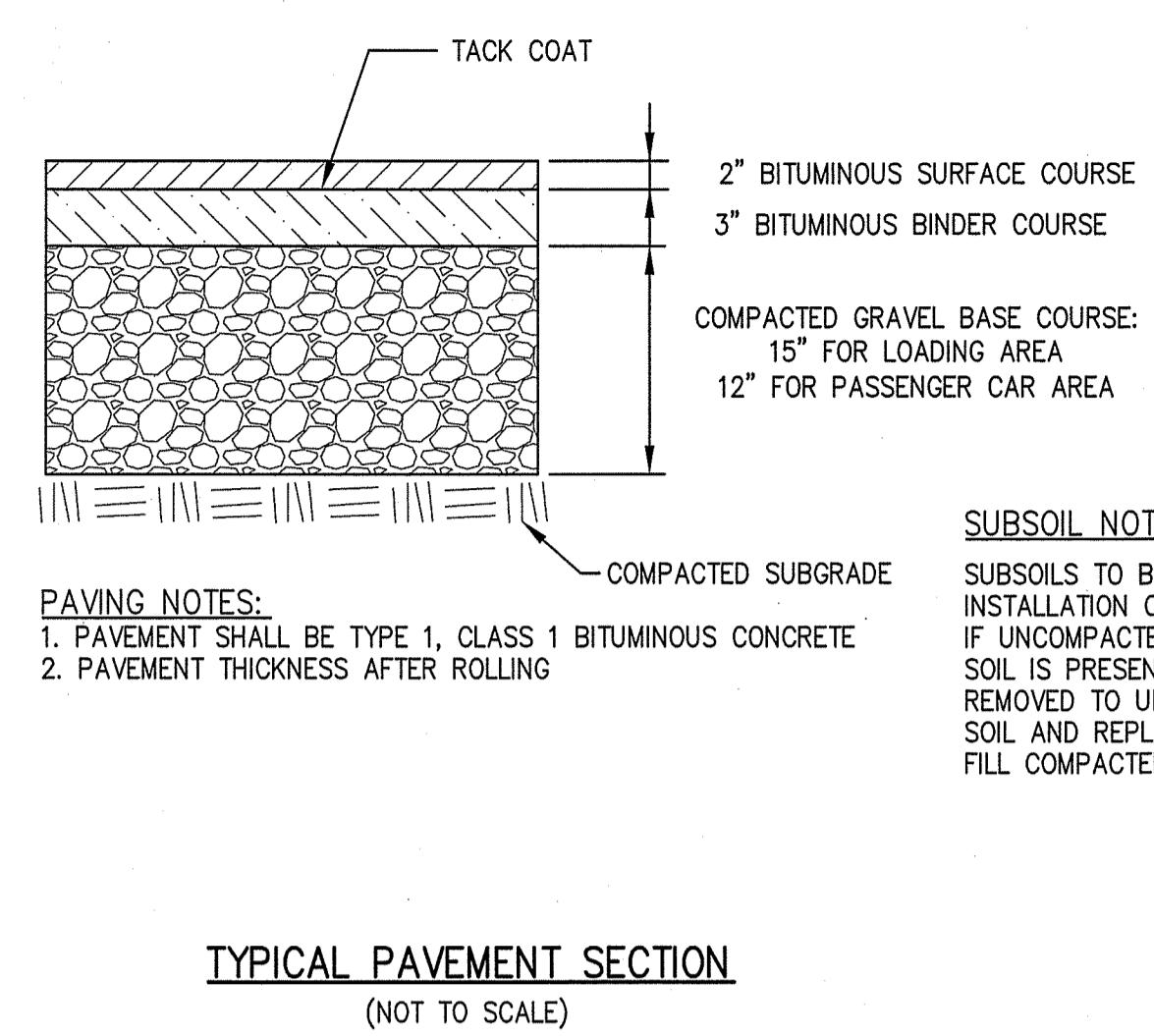
TEMPORARY SOIL STOCKPILE
(NOT TO SCALE)

SITE DEVELOPMENT PLANS
IN MASSACHUSETTS
METHUEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 9D & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC

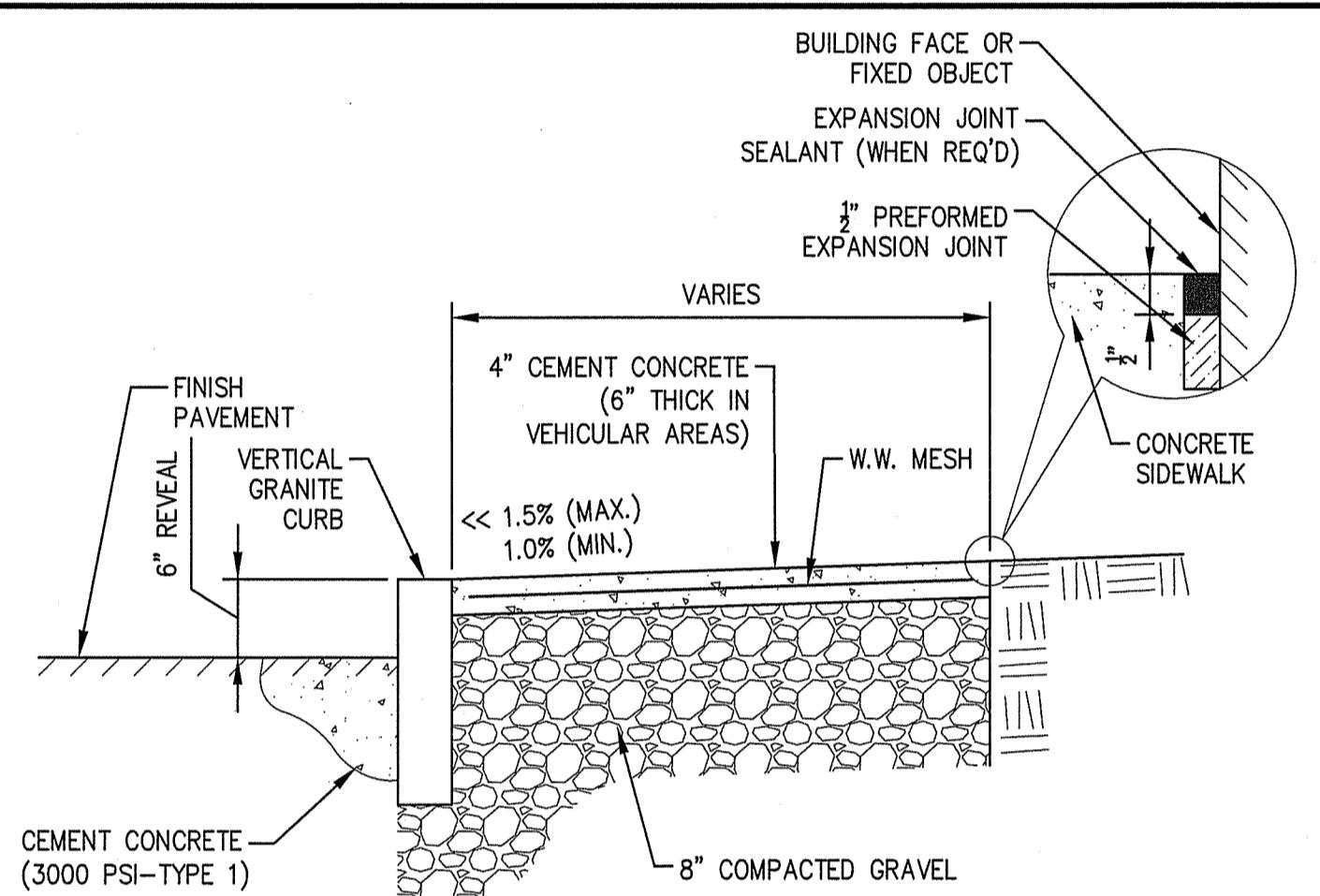
EROSION CONTROL DETAILS
DRAWING NO. C-9



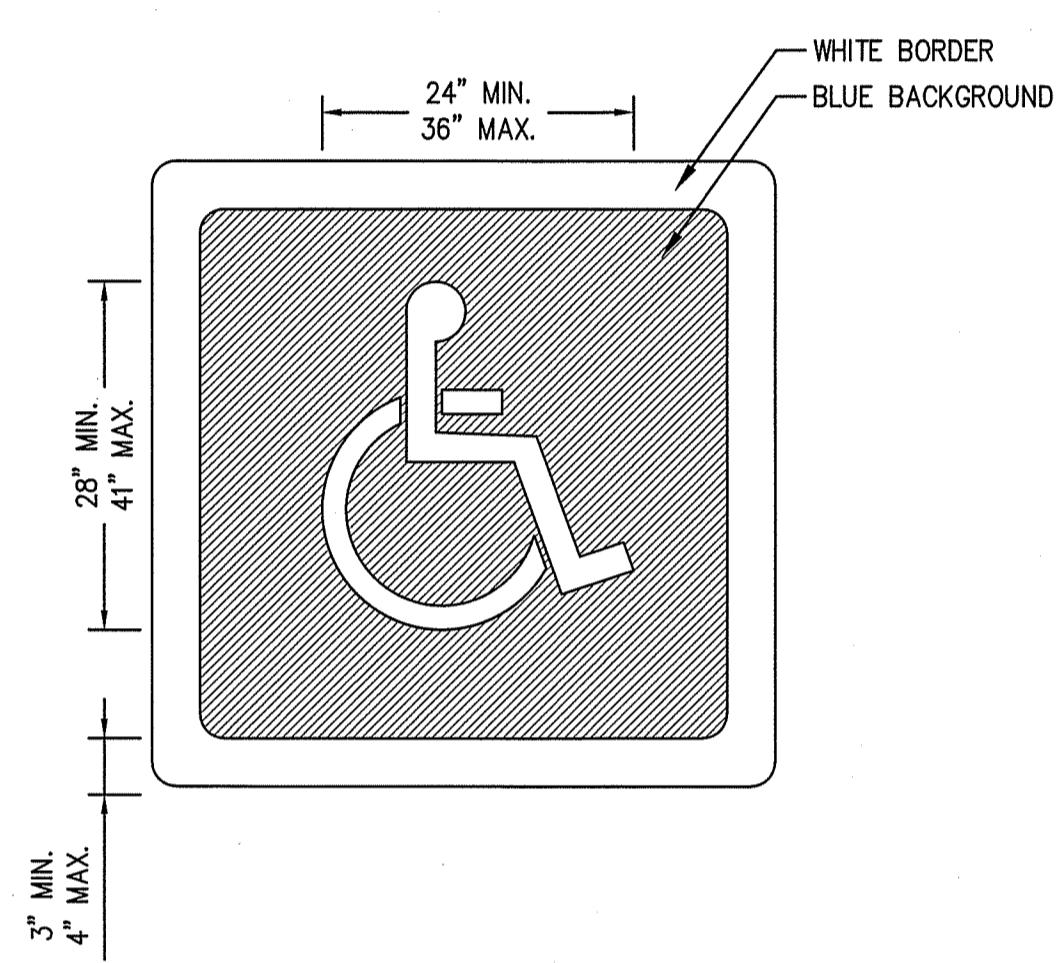
SURVEY BY: MCG
DRAFTED BY: CEM/LNO
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: APRIL 6, 2022



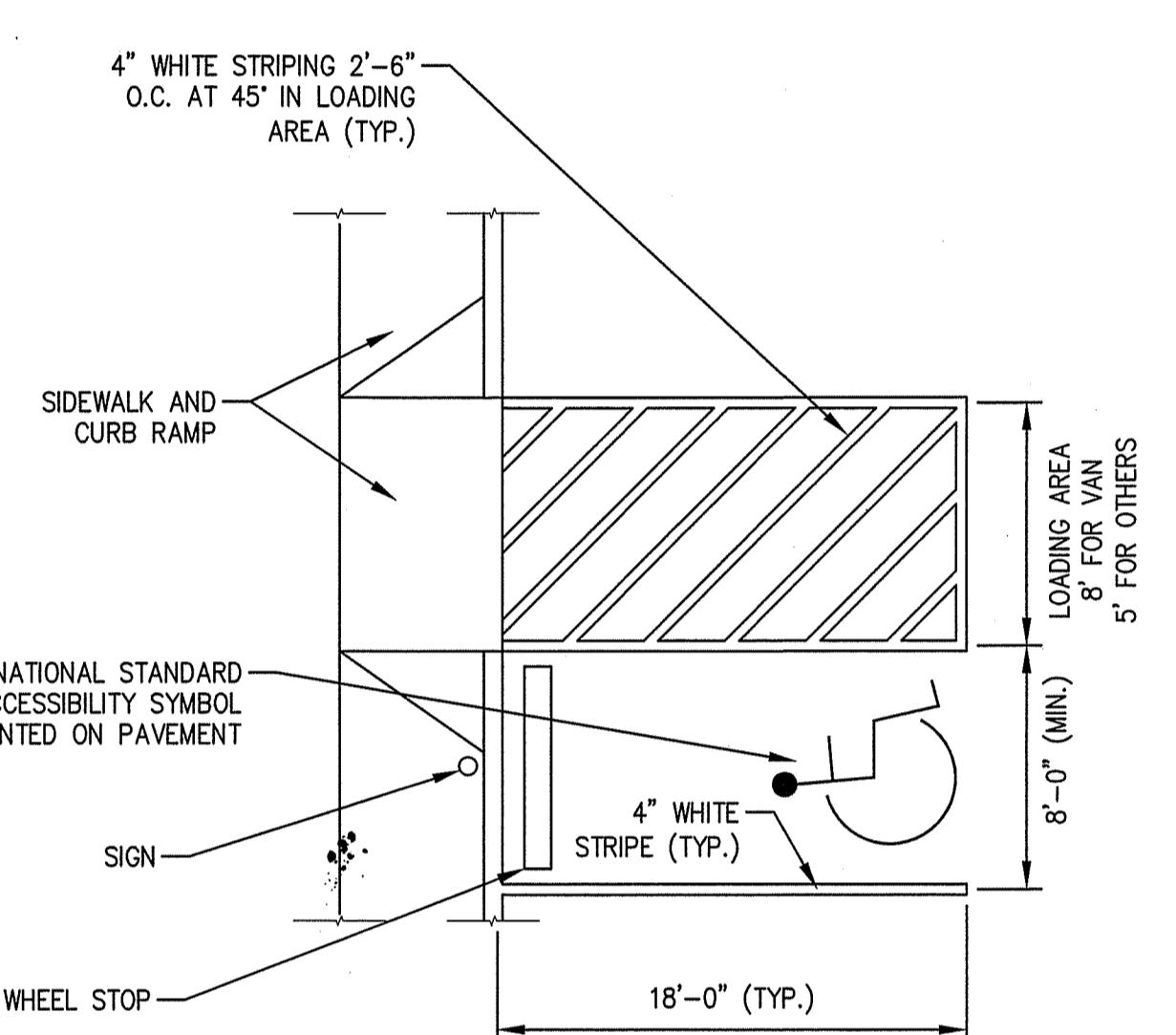
PARKING SPACE STRIPING
(NOT TO SCALE)



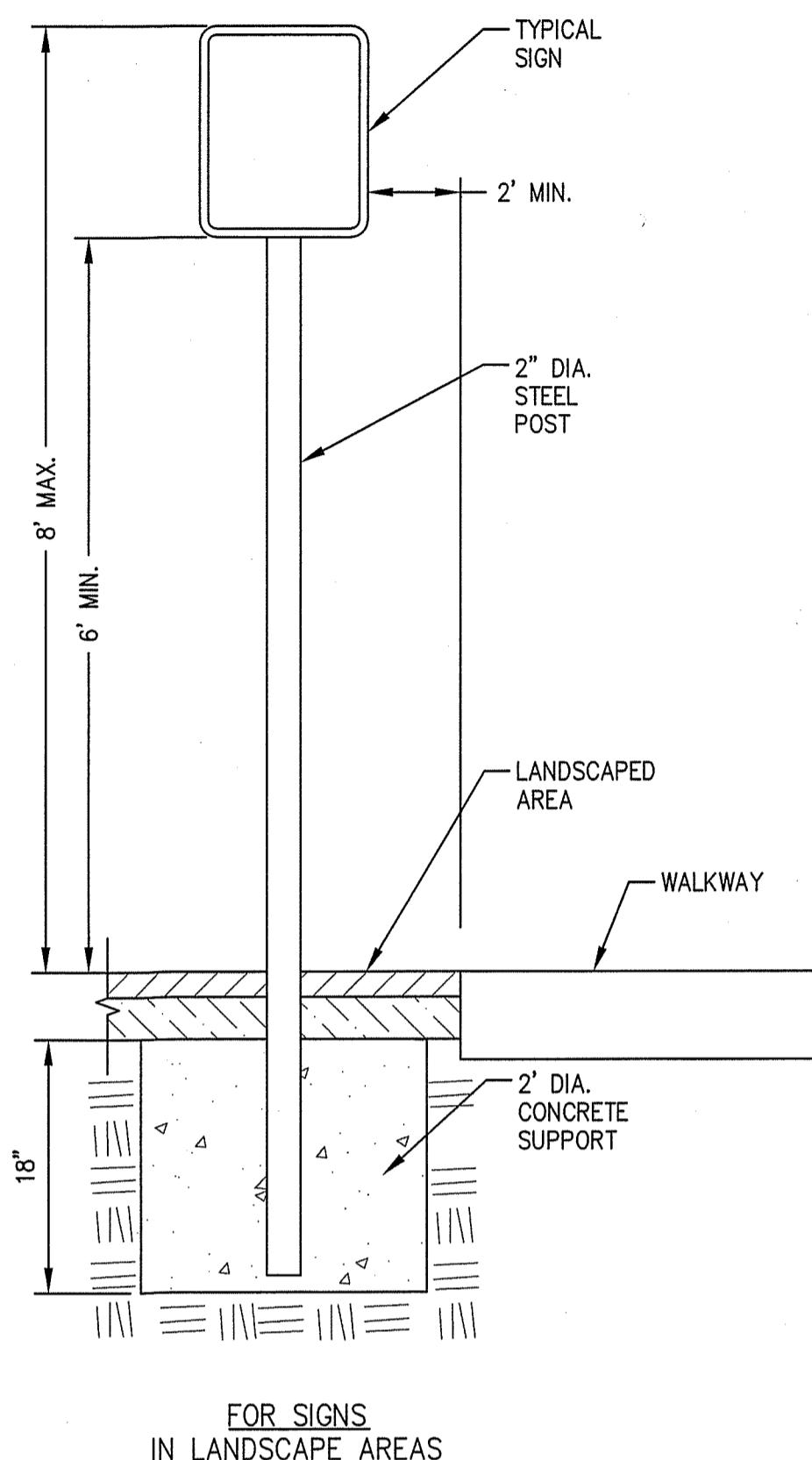
CONCRETE SIDEWALK
(NOT TO SCALE)



INTERNATIONAL ACCESSIBILITY PARKING SPACE SYMBOL
(NOT TO SCALE)



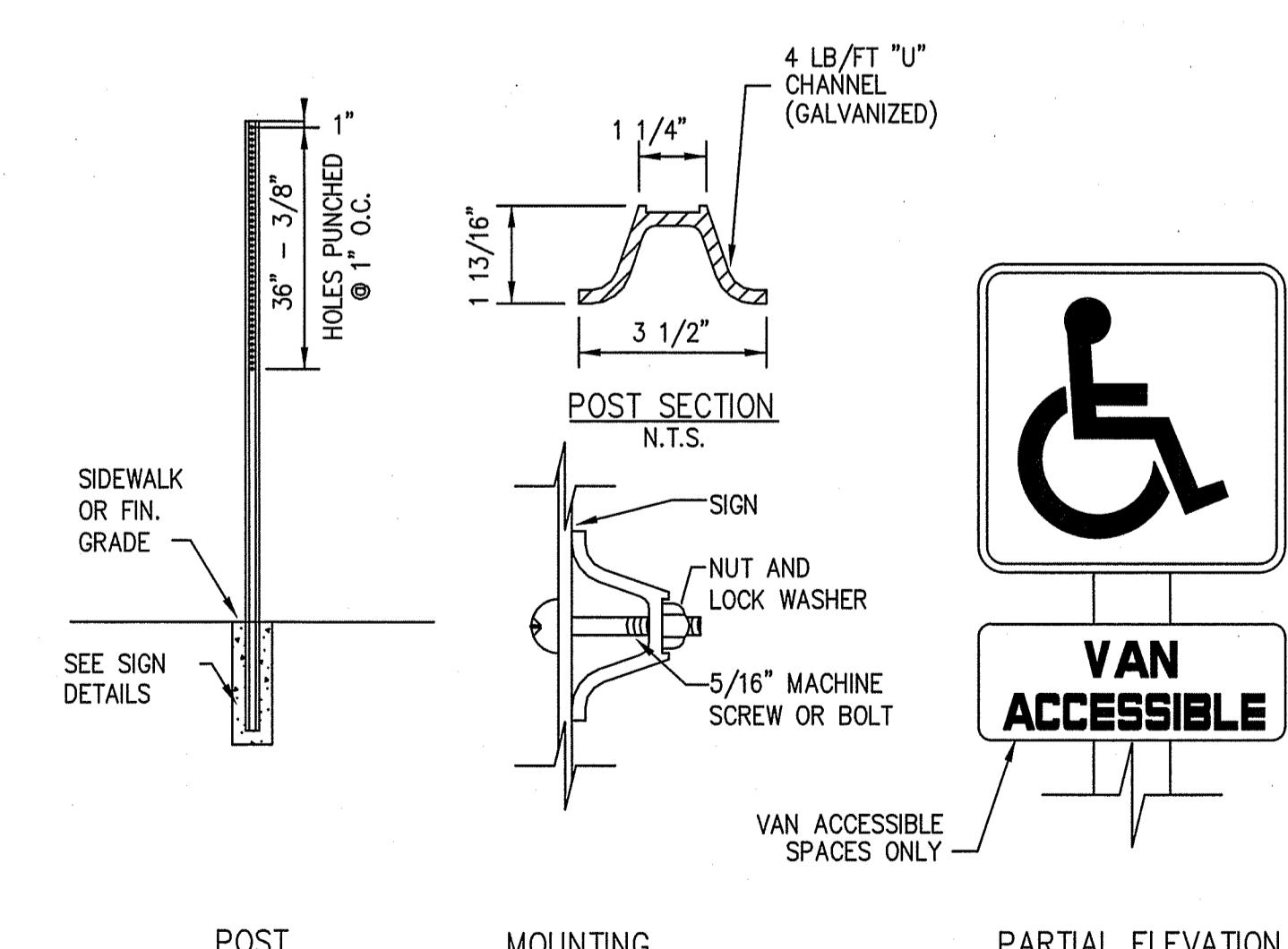
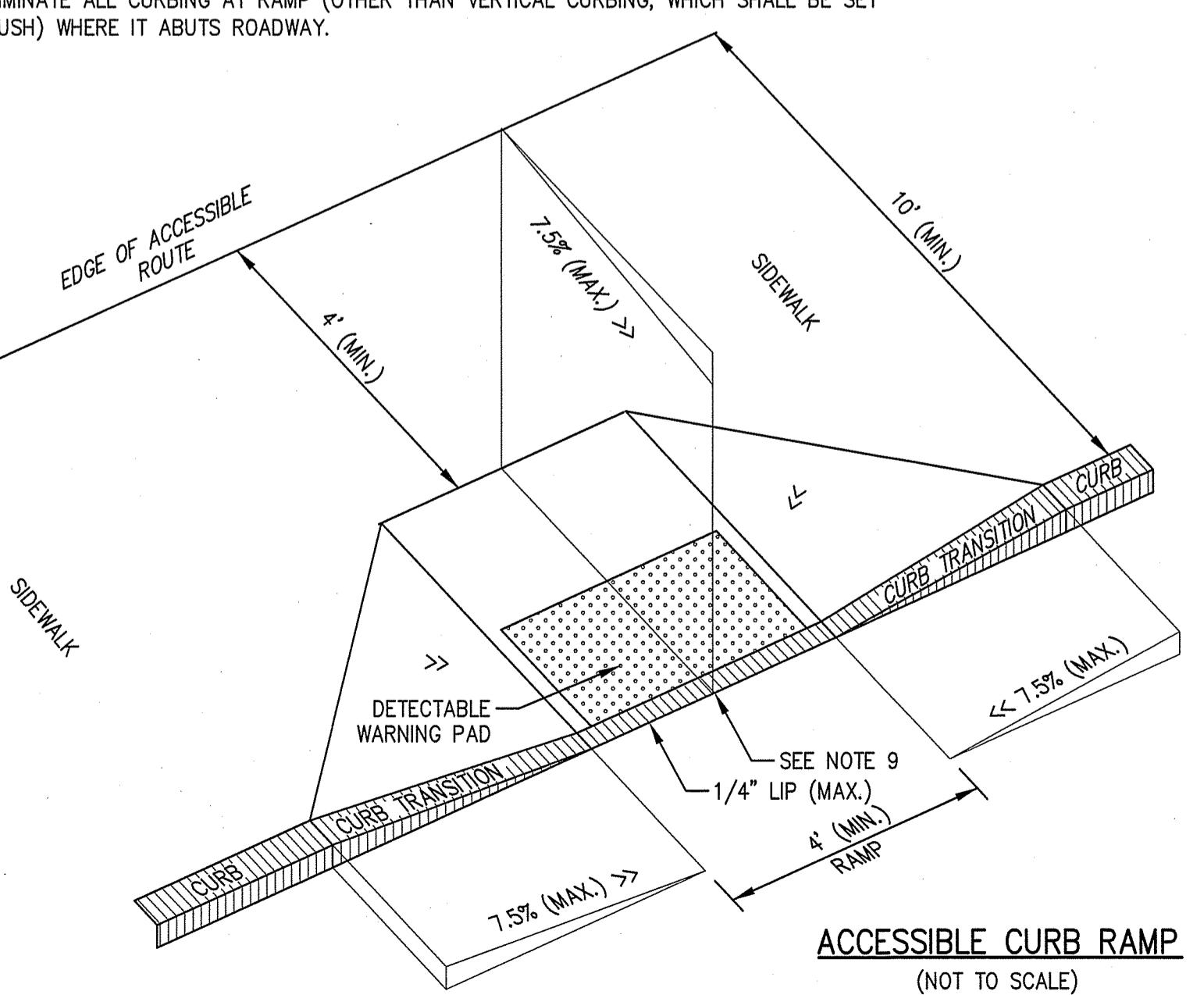
ACCESSIBLE PARKING SPACE
(NOT TO SCALE)



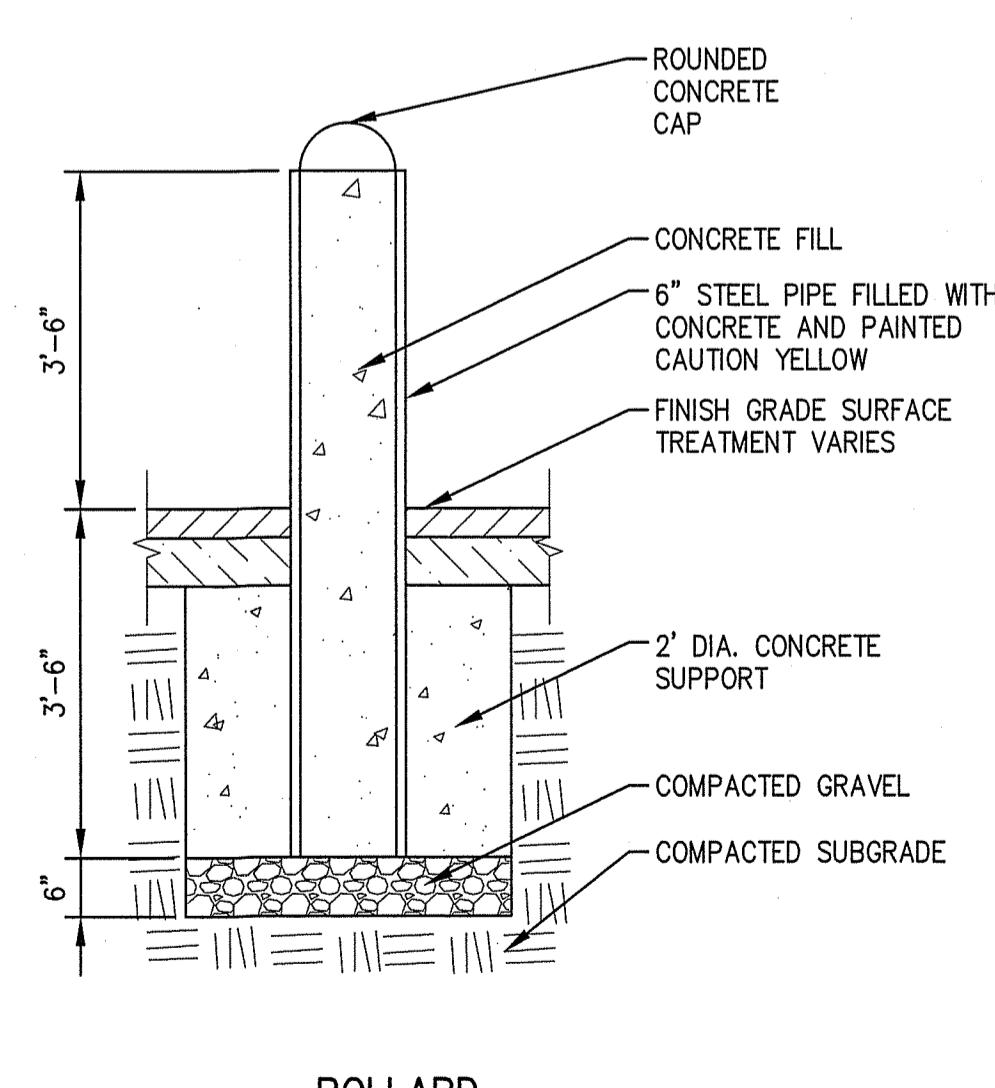
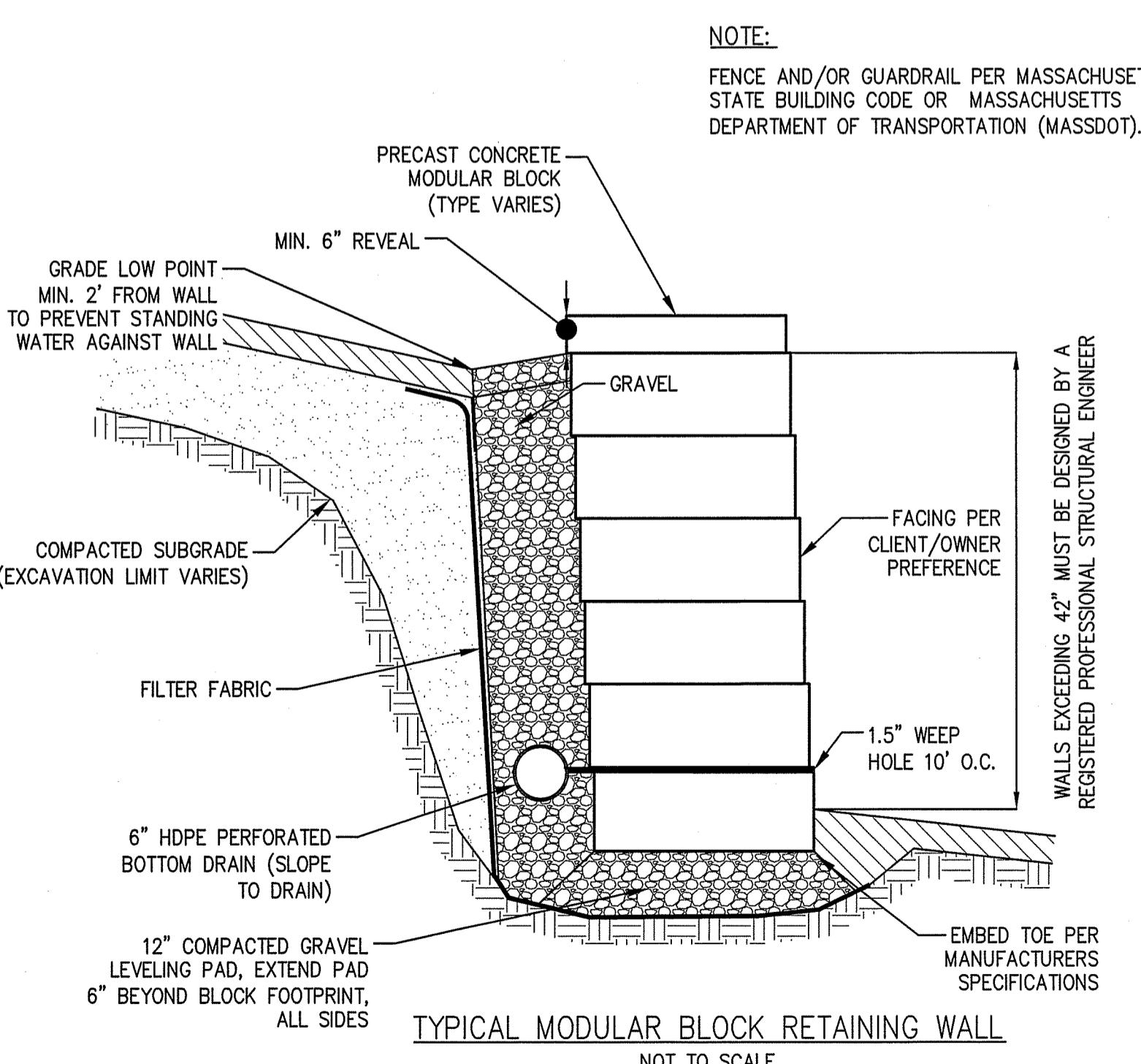
SIGN POST
(NOT TO SCALE)

NOTES:

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE ALL CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.



ACCESSIBLE PARKING SPACE SIGN
(NOT TO SCALE)



BOLLARD
(NOT TO SCALE)

SITE DEVELOPMENT PLANS
IN
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501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 9D & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC

SITE DETAILS
DRAWING NO. C-10

The Morin-Cameron GROUP, INC.
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25 KENZIA AVE, HANPHILL, MASSACHUSETTS 01830
P: 978-372-0310, W: WWW.MORINCAMERON.COM

4/6/22

R E V I S I O N S

NO.	DESCRIPTION	DATE

SURVEY BY: MCG

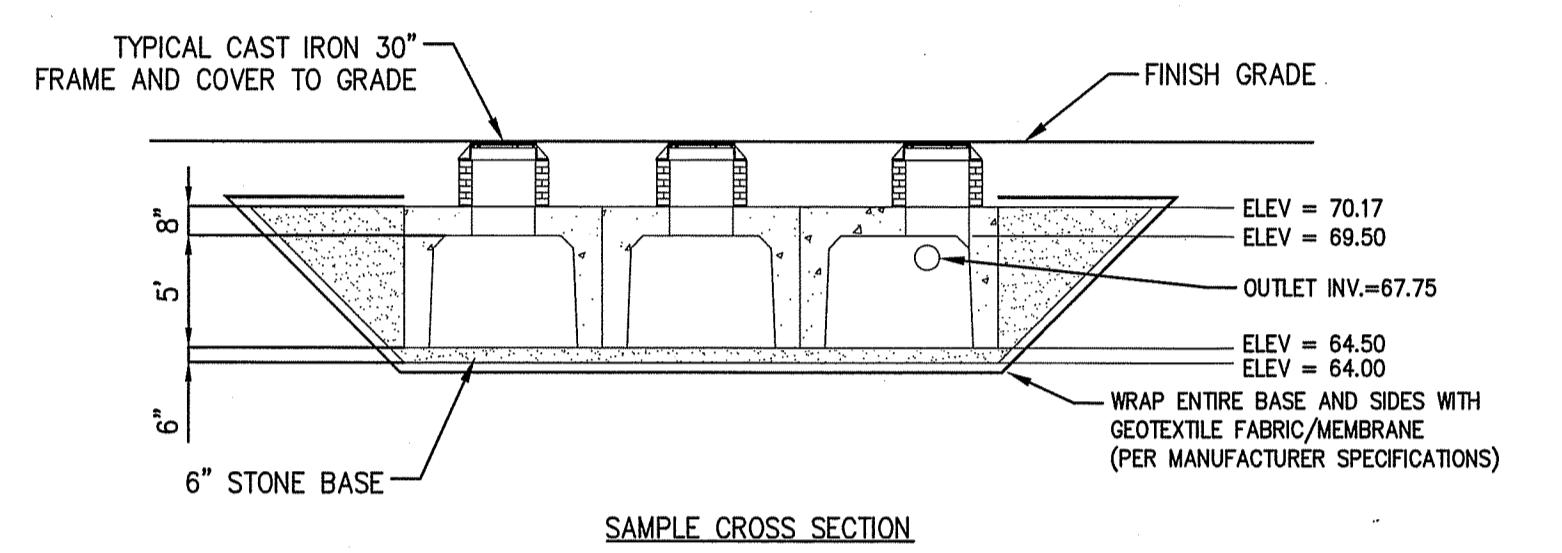
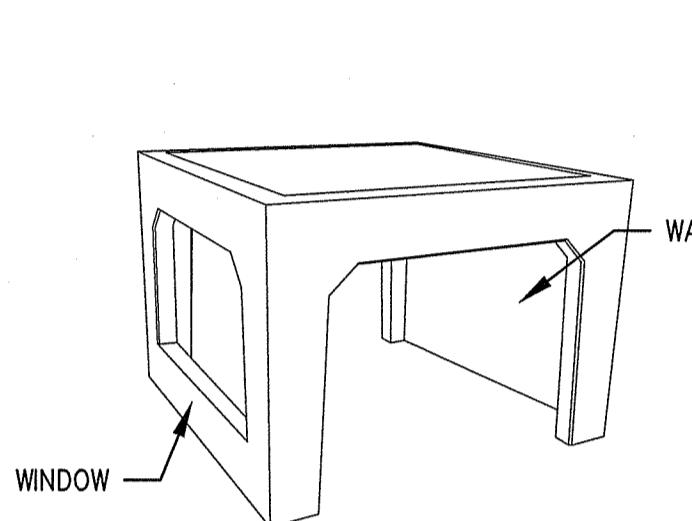
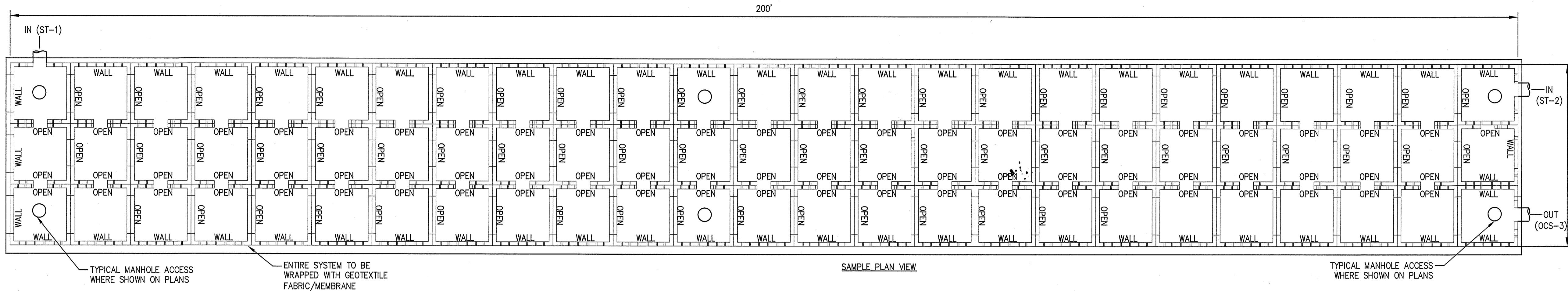
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CHECKED BY: SPC

APPROVED BY: SPC

SCALE: AS NOTED

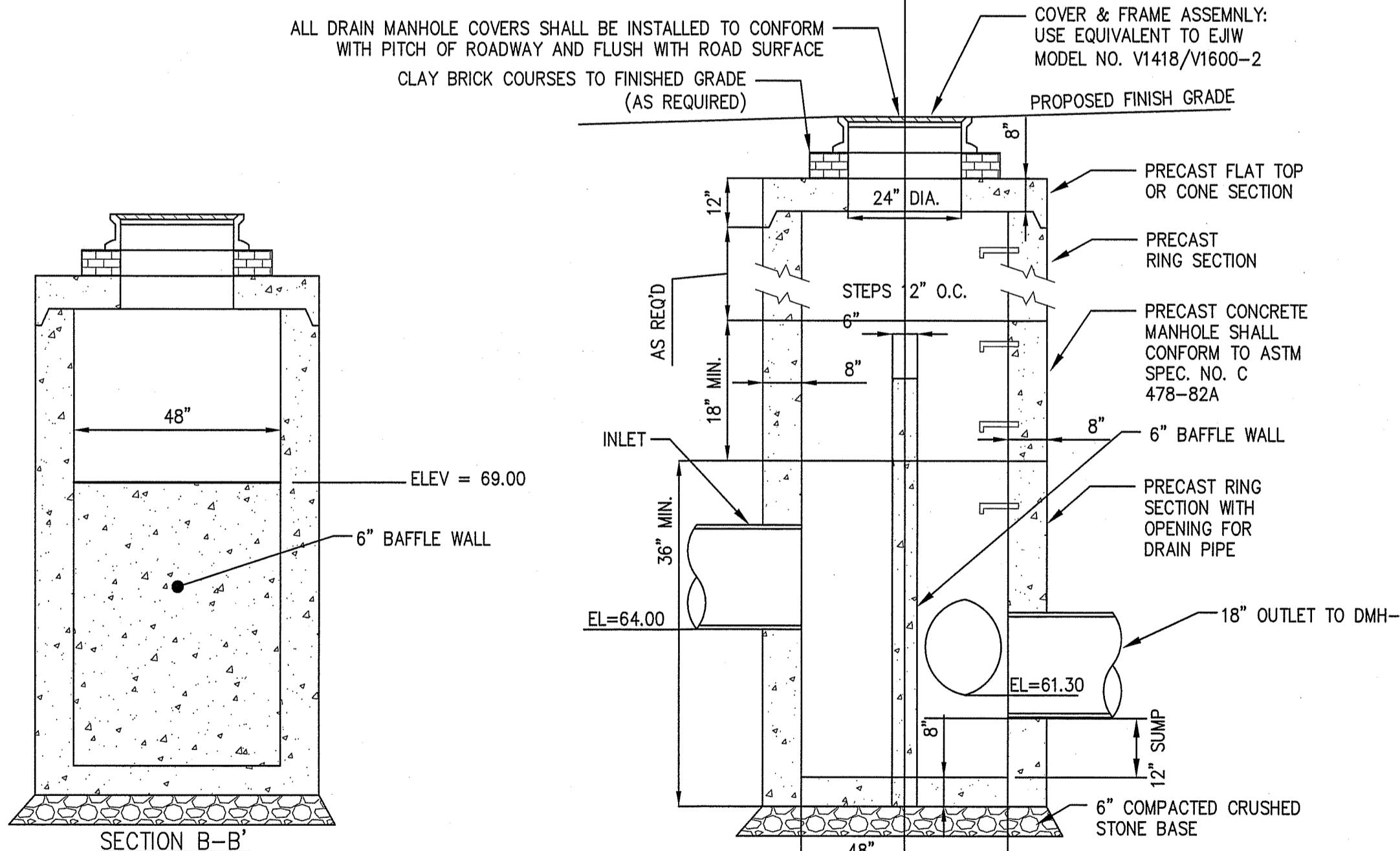
DATE: APRIL 6, 2022



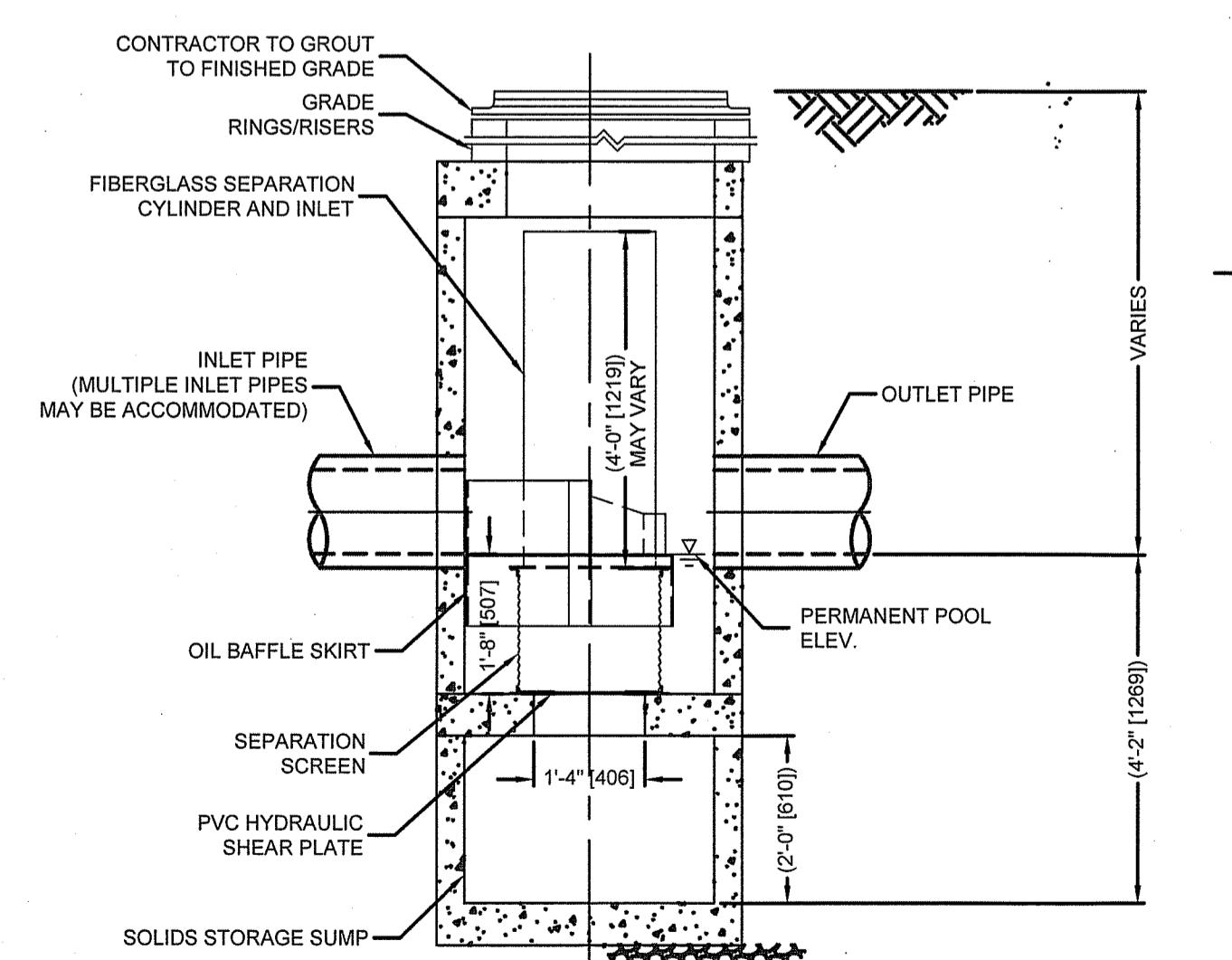
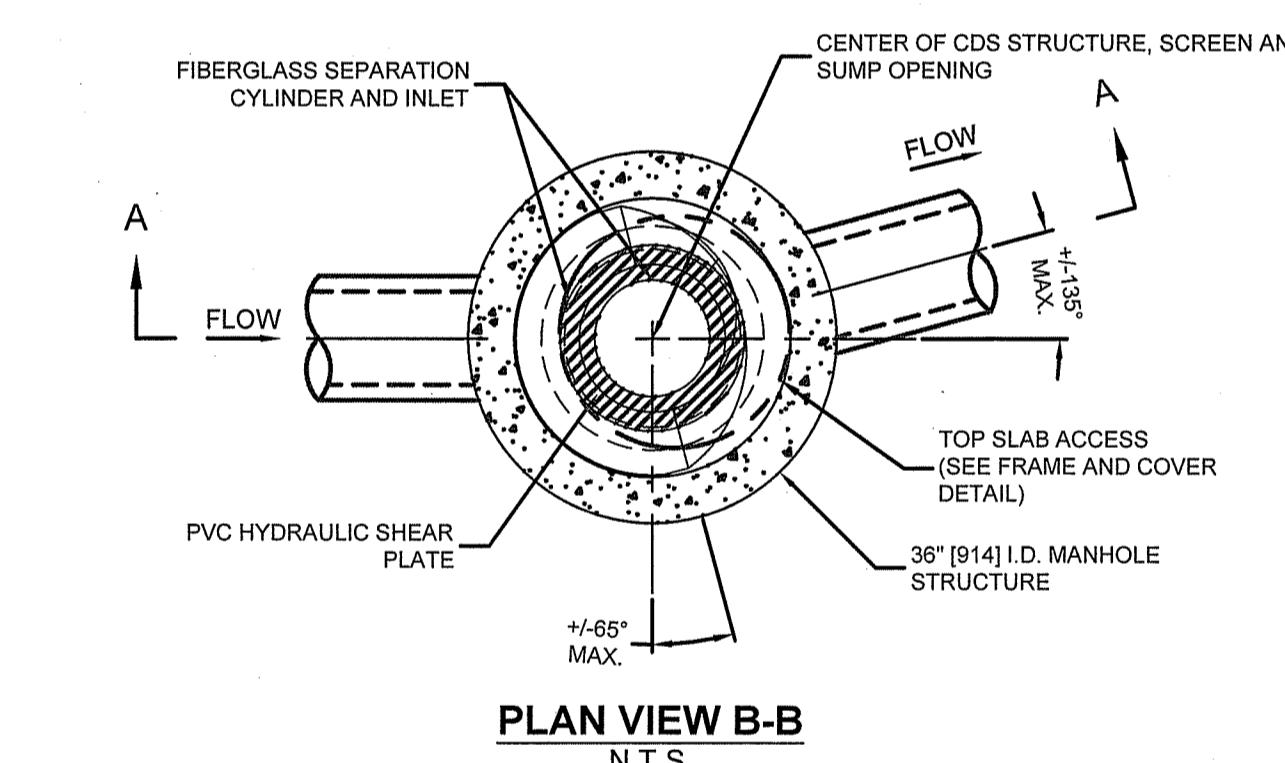
100-YEAR STORM ELEV. = 69.12
10-YEAR STORM ELEV. = 69.99
2-YEAR STORM ELEV. = 65.50

RETAIN-IT CHAMBER COMPONENT DETAIL
(NOT TO SCALE)

SUBSURFACE RETENTION SYSTEM (P3) (RETAIN-IT MODULES)
(NOT TO SCALE)

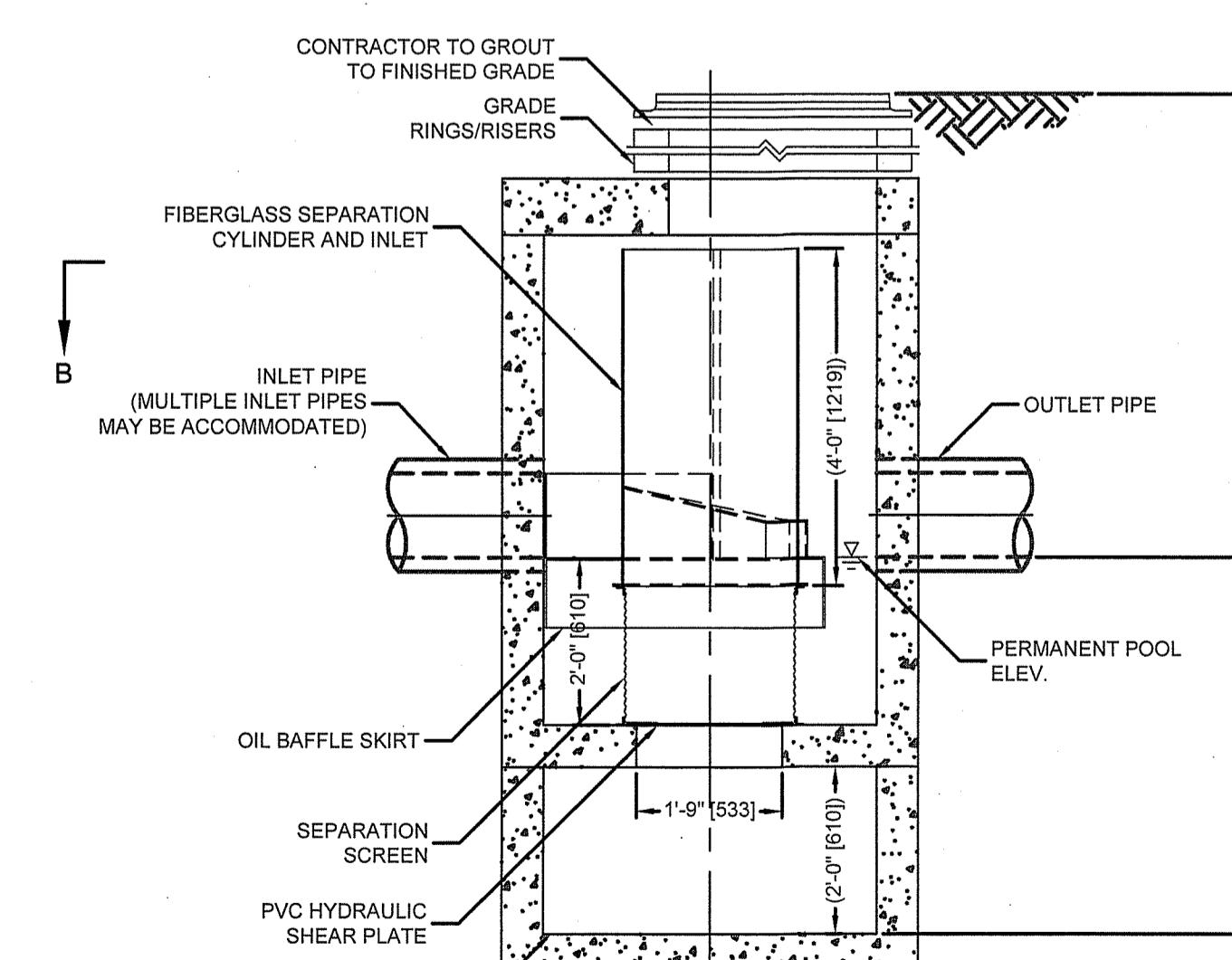
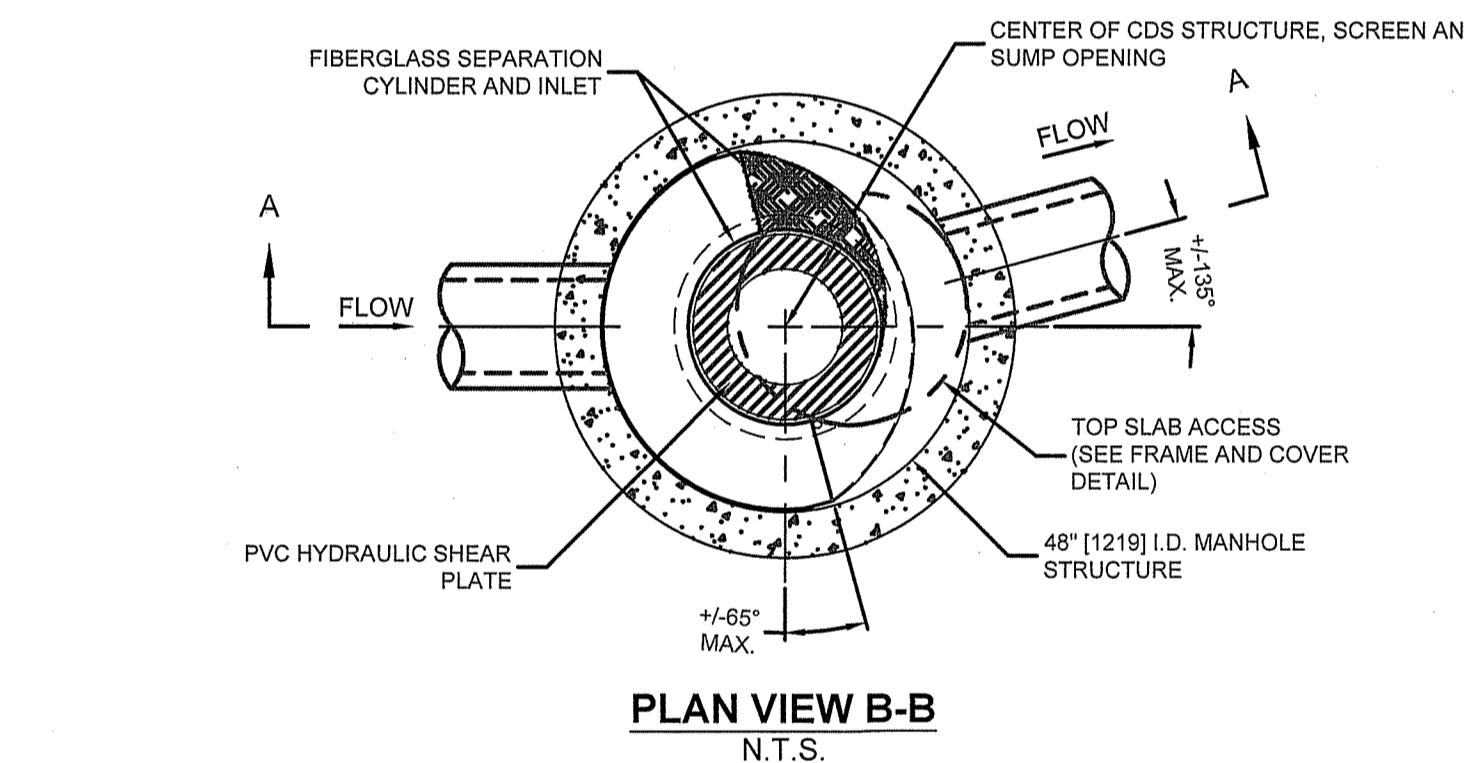


OUTLET CONTROL STRUCTURE (OCS-3)
(NOT TO SCALE)



CONTECH CDS1515-3-C (ST-1)
(NOT TO SCALE)

ELEVATION A-A
N.T.S.



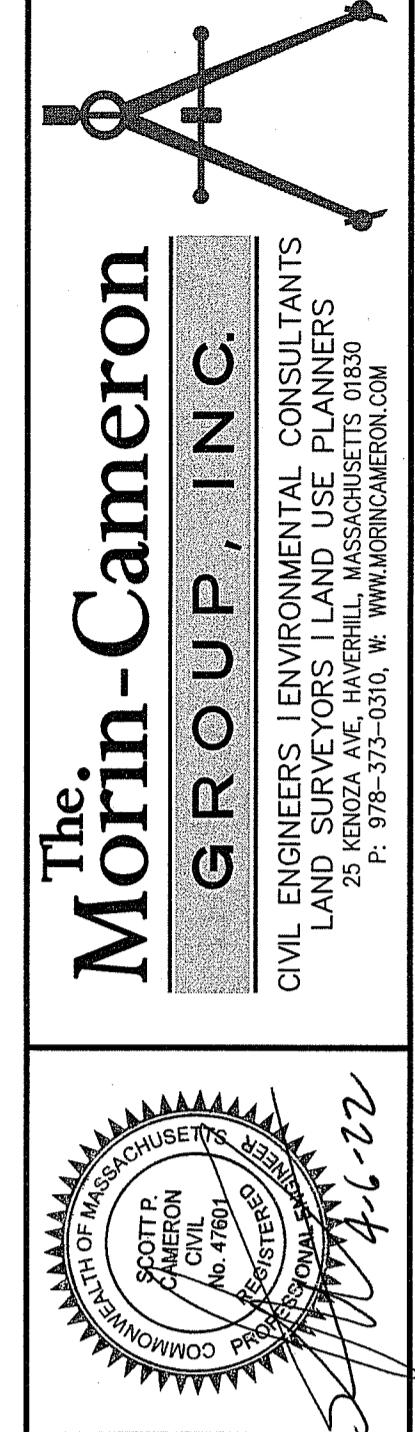
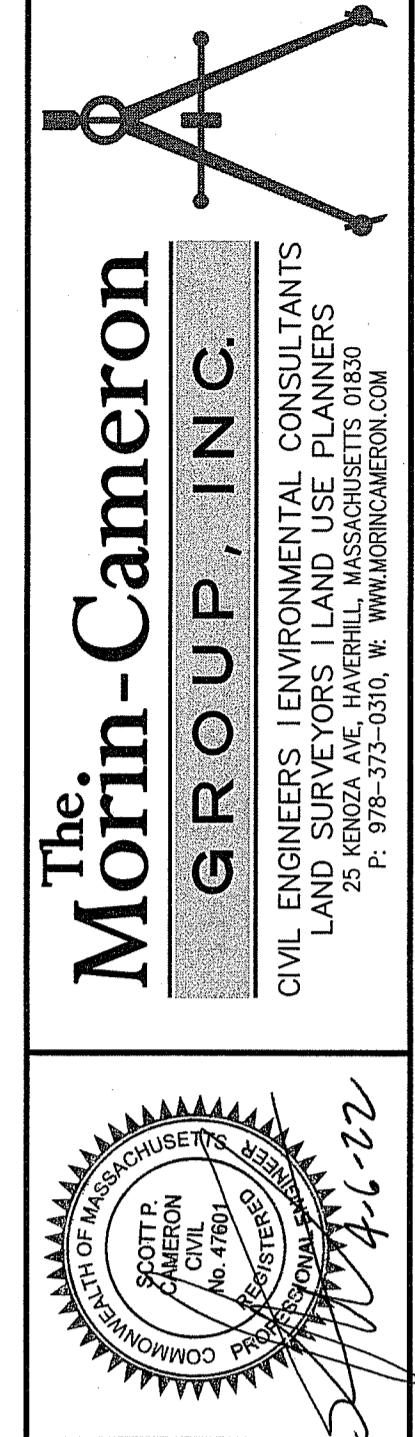
CONTECH CDS2015-4-C (ST-2)
(NOT TO SCALE)

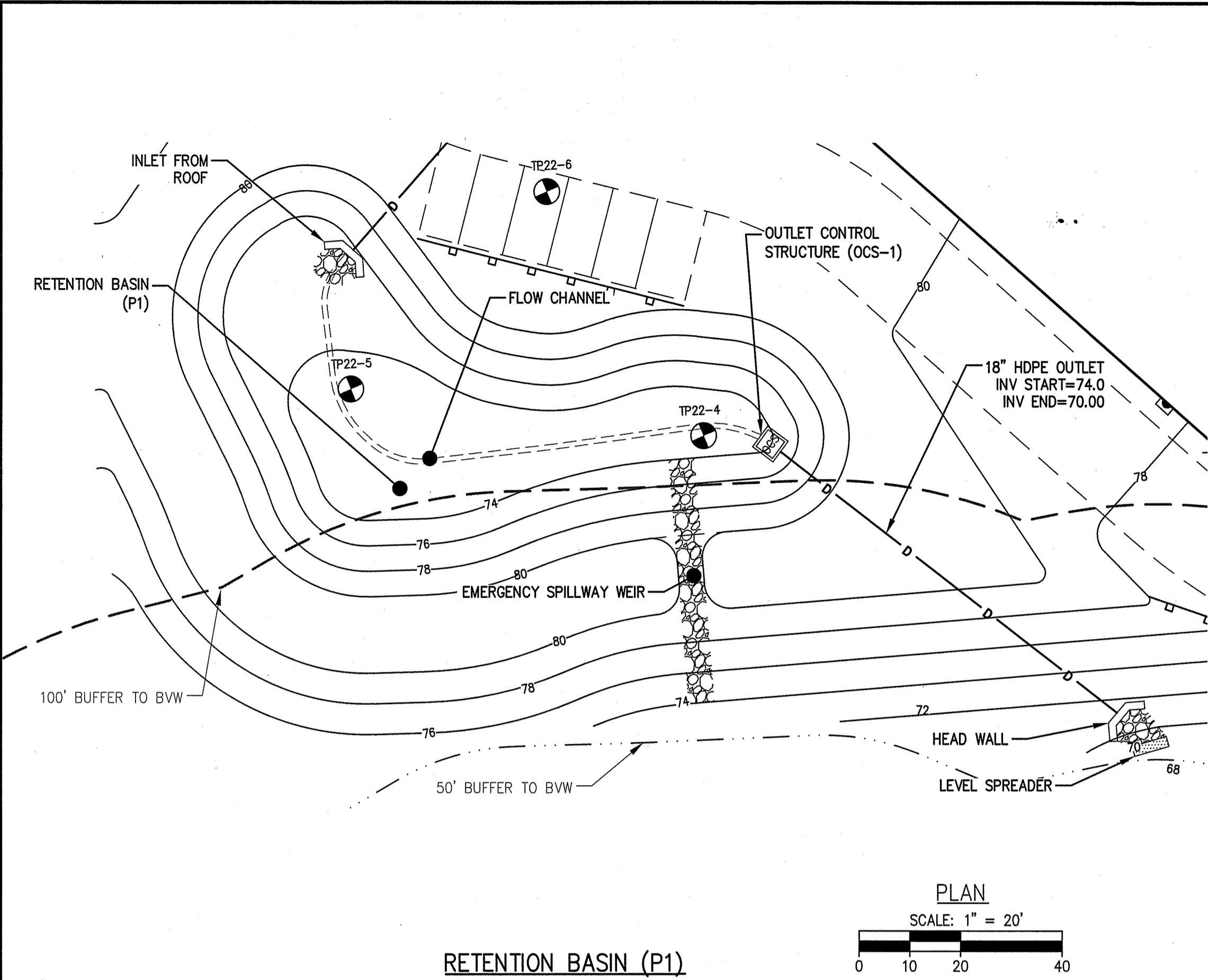
ELEVATION A-A
N.T.S.

SITE DEVELOPMENT PLANS
IN
METHUEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 90 & 9E)
PREPARED FOR:
GRIFFIN BROOK DRIVE OWNER LLC

DRAINAGE DETAILS
DRAWING NO. C-12

SURVEY BY: MCG
DRAFTED BY: CEM/LNO
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: APRIL 6, 2022

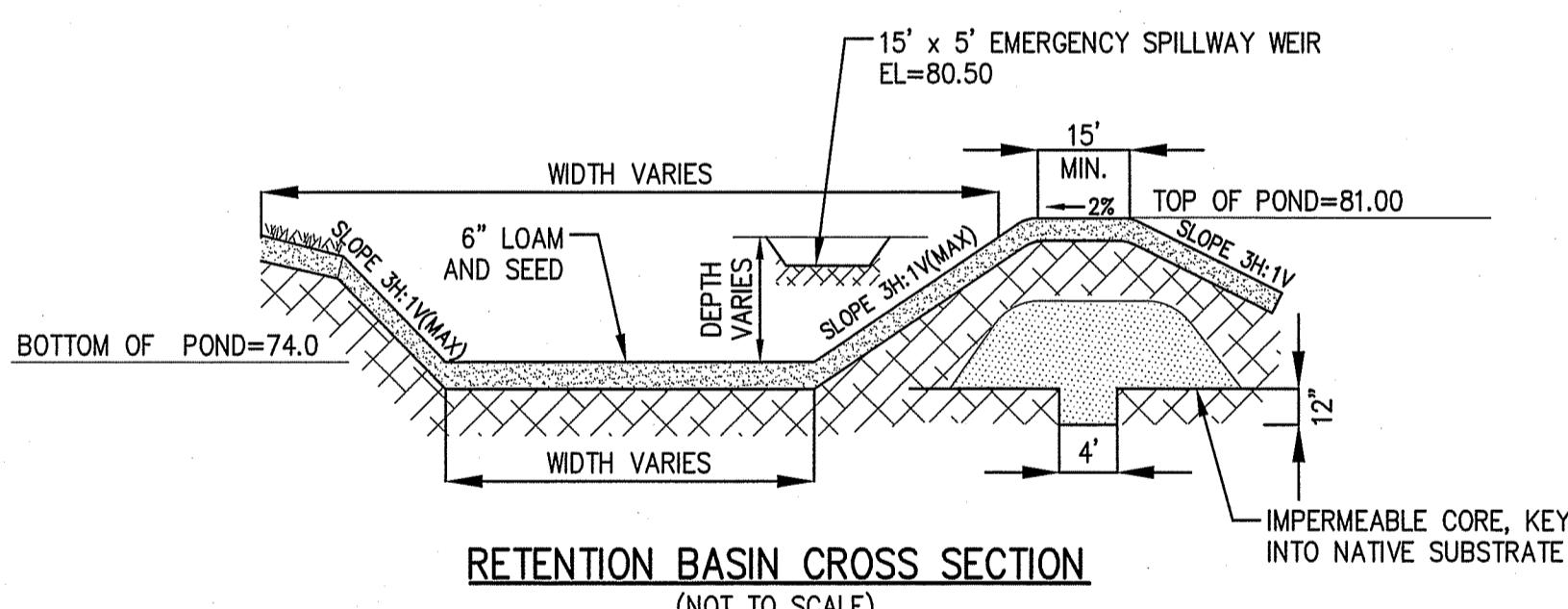




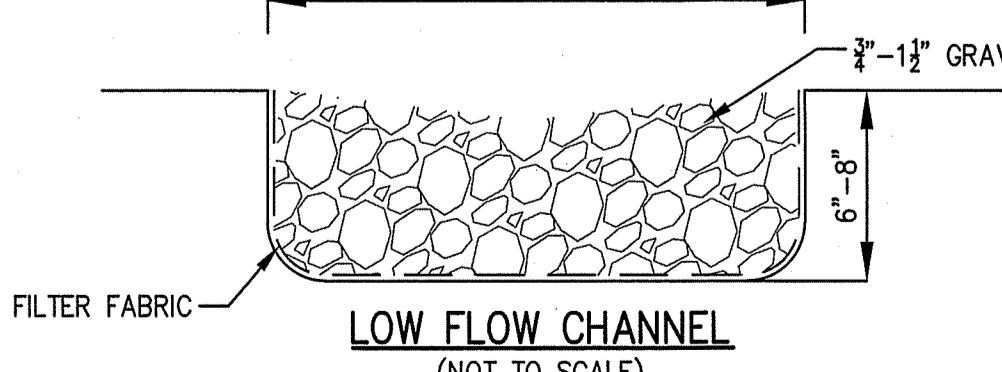
CONSTRUCTION INSPECTION NOTE:

AT LEAST 48-HOURS PRIOR TO FINALIZING BASIN GRADING AND STABILIZATION, CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AND METHUEN CITY ENGINEER THAT THE BOTTOM OF BASIN BED IS READY FOR INSPECTION. THE BASIN BOTTOM SHOULD BE SCARIFIED, FREE OF BEDROCK AND STONES OVER 6 INCHES DIAMETER.

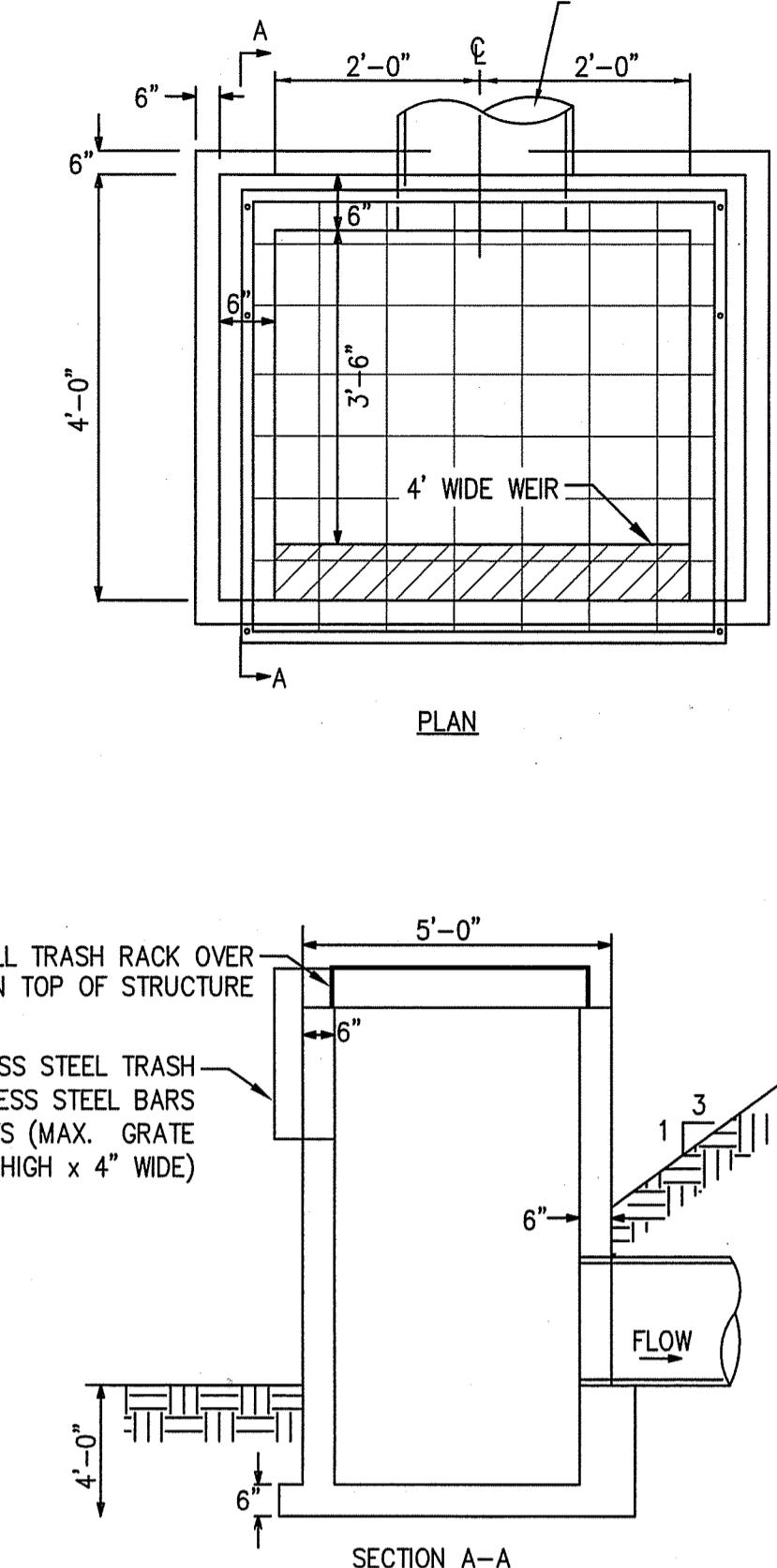
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10-YEAR STORM ELEV. = 79.26
2-YEAR STORM ELEV. = 77.29



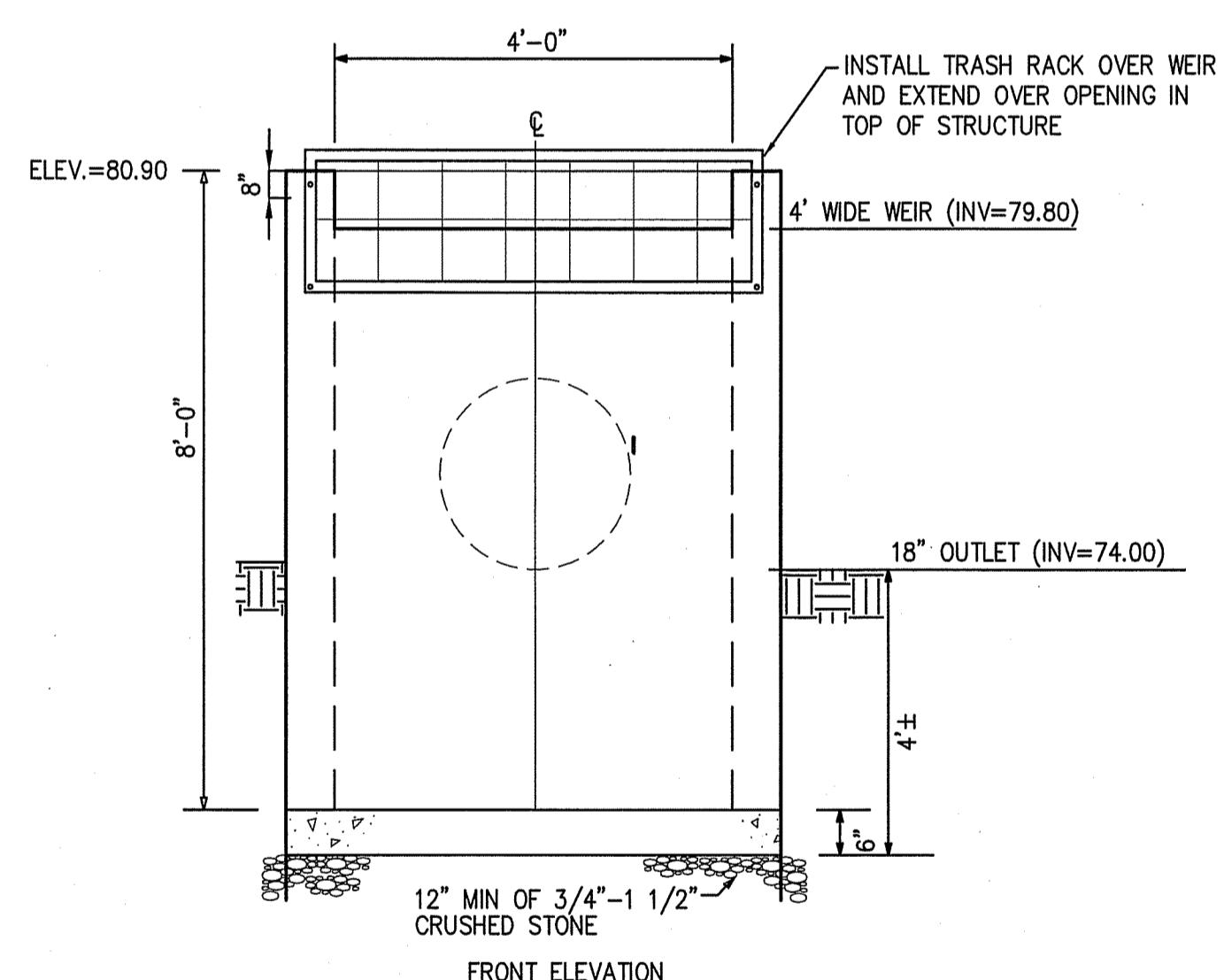
RETENTION BASIN CROSS SECTION



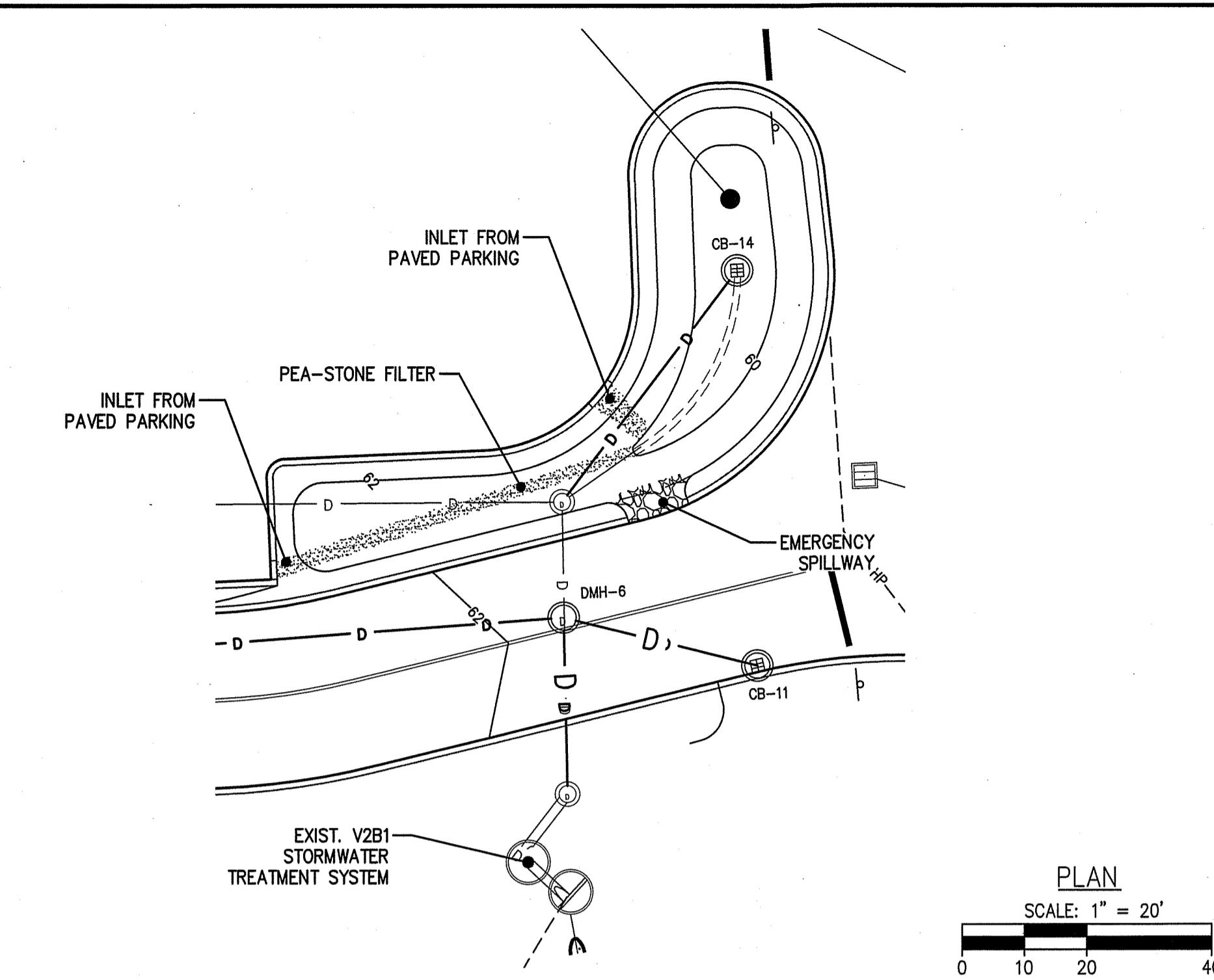
LOW FLOW CHANNEL
(NOT TO SCALE)



OUTLET CONTROL STRUCTURE (OCS-1)
(NOT TO SCALE)

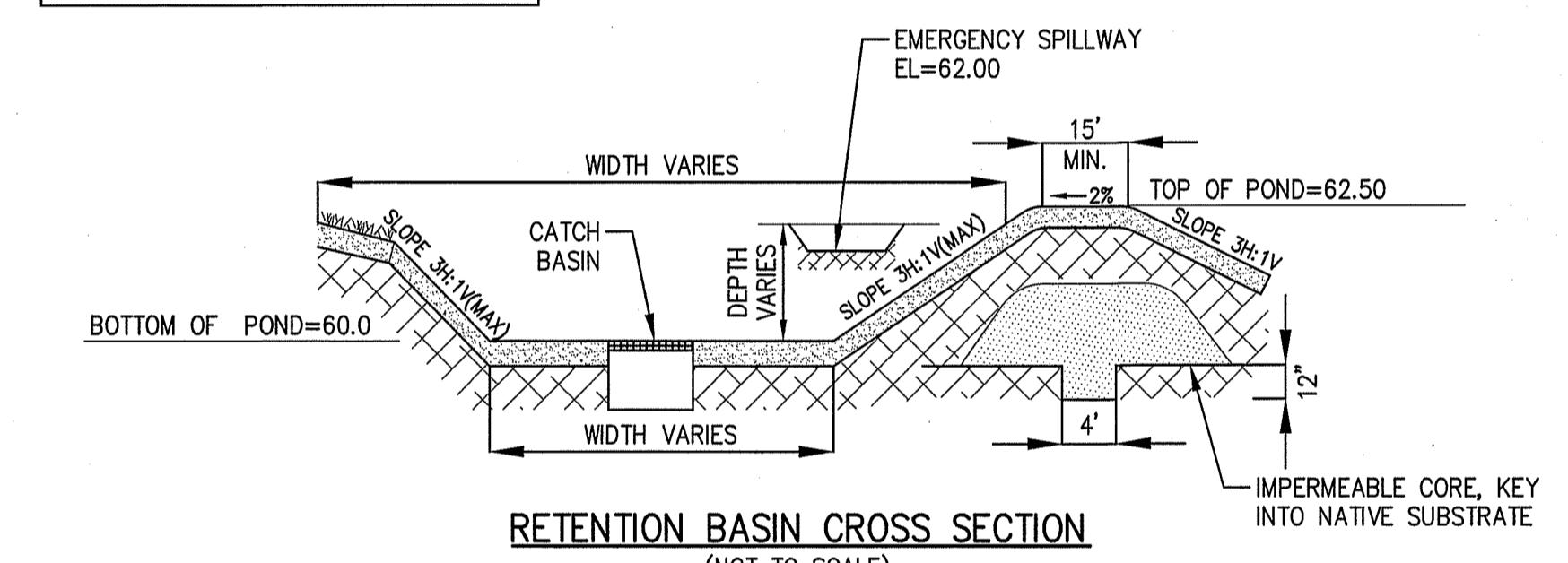


Technical drawing showing a trash rack detail. The main frame is a rectangle with vertical and horizontal bars. A corner detail is shown with a vertical bar and a horizontal bar. A callout points to the corner detail with the text: "1/2" x 4" L STAINLESS BOLT INTO CONCRETE 12" O.C." and "3" x 3" STAINLESS STEEL ANGLE IRON". Another callout points to the vertical bar with the text: "STAINLESS BARS TO RONS" and "VERTICAL & 4" O.C. HORIZONTAL".

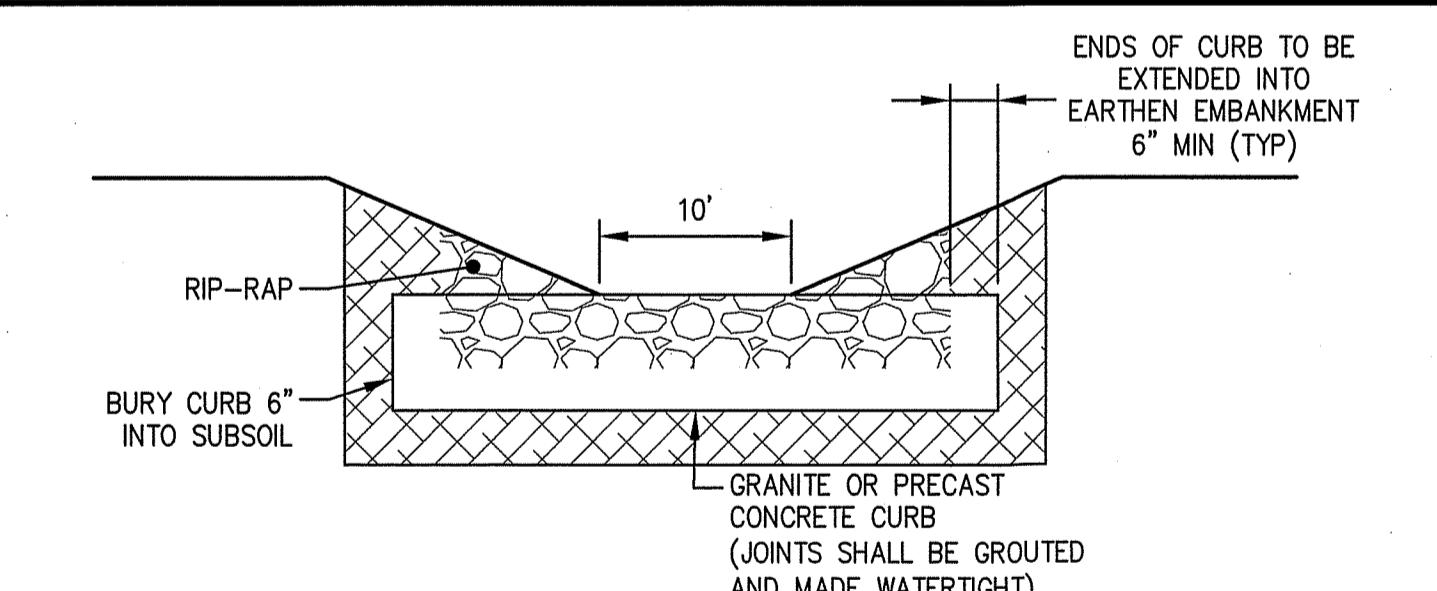


RETENTION BASIN (P5)

100-YEAR STORM ELEV. = 62.00
10-YEAR STORM ELEV. = 61.87
2-YEAR STORM ELEV. = 61.13



RETENTION BASIN CROSS SECTION



The diagram illustrates the cross-section of an Emergency Spillway Weir. It features a concrete curb (labeled 'GRANITE OR PRECAST CONCRETE CURB') with a height of 18" and a thickness of 6". The curb is set into subsoil, which is to be buried 6" deep. The top of the curb is protected by a layer of rip-rap (labeled 'RIP-RAP (D50 = 8" MIN.)') with a thickness of 12" MIN. The entire structure is shown in perspective, with the concrete curb standing upright and the rip-rap layer sloping down to the left.

Site Development Plans
In
Methuen, Massachusetts
501 & 600 Griffin Brook Drive
(Assessor's Map 220, Lots 9D & 9E)
Prepared for:
Griffin Brook Drive Owner LLC

DRAINAGE DETAILS

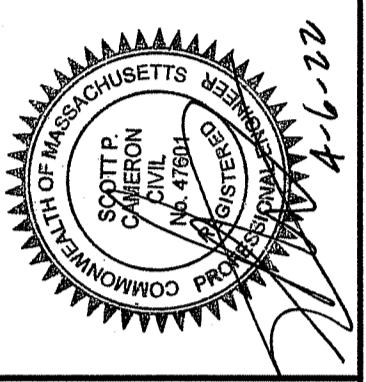
DRA
DE

The Morin-Cameron Group, Inc.

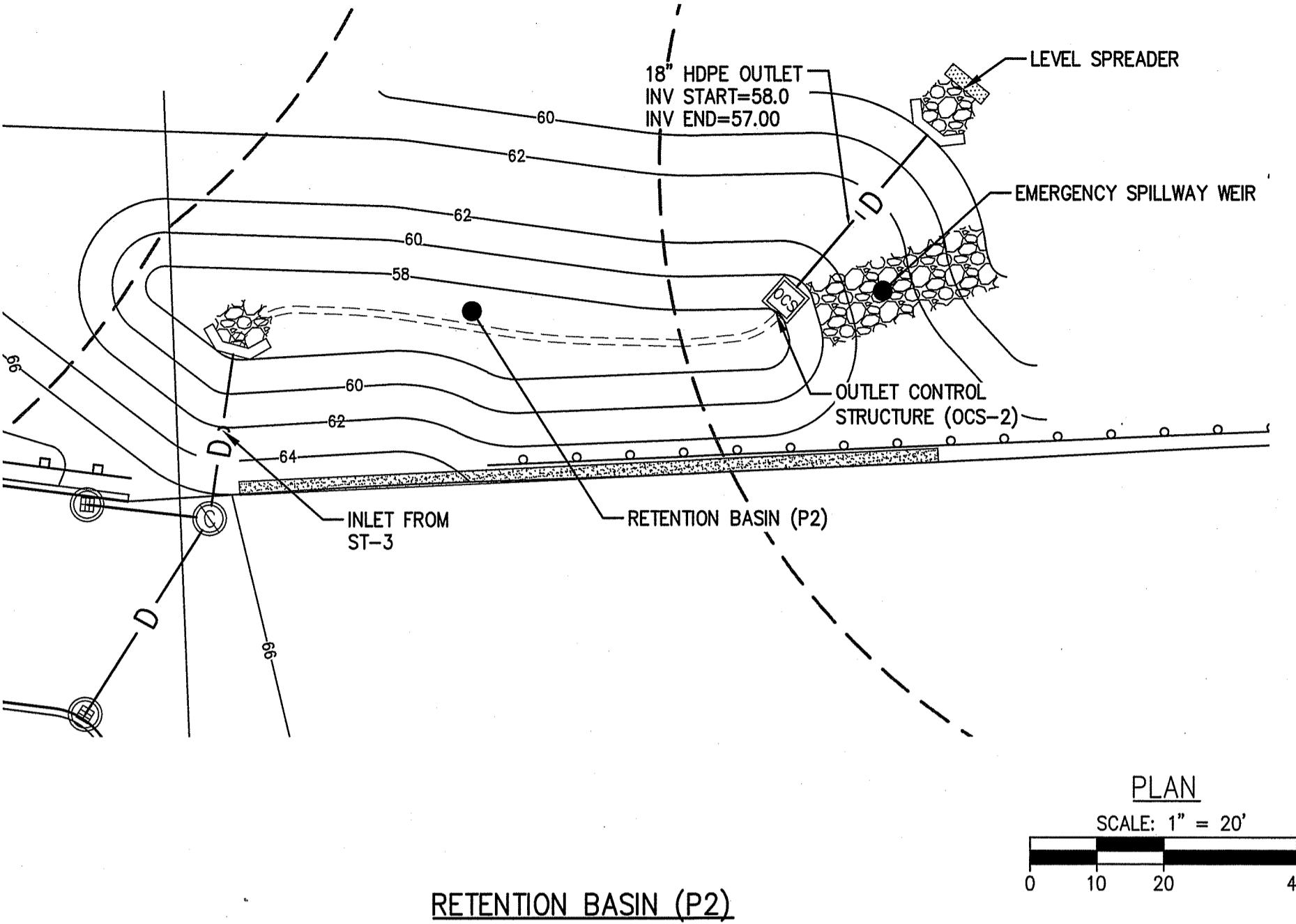
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 KENOZA AVE, HAVERHILL, MASSACHUSETTS 01830
P: 978-373-0310, W: WWW.MORINCAMERON.COM

SCOTT P. CAMERON CIVIL No. 47601 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

4-6-22



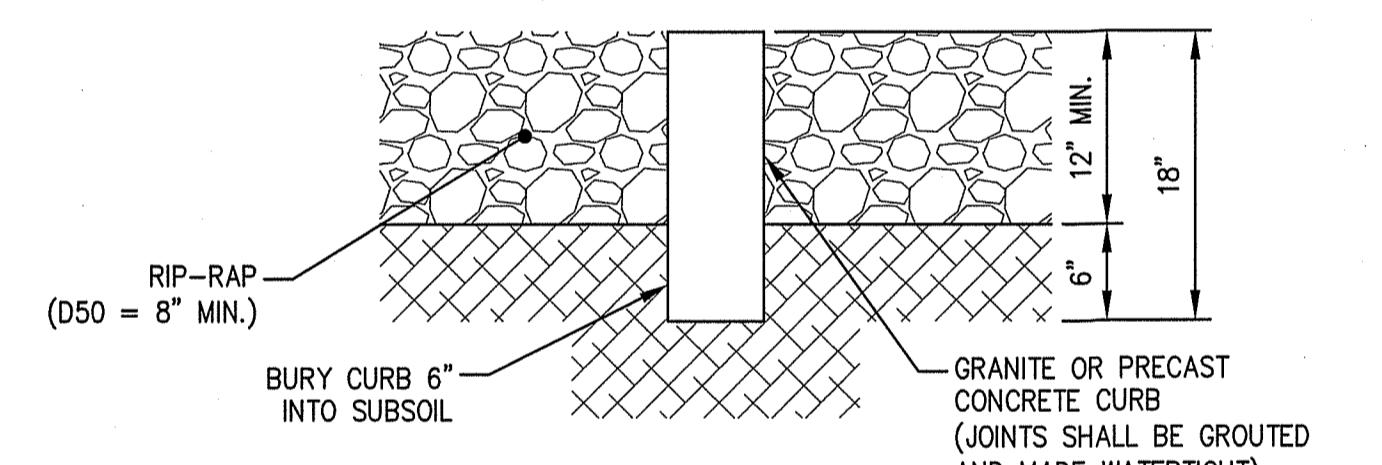
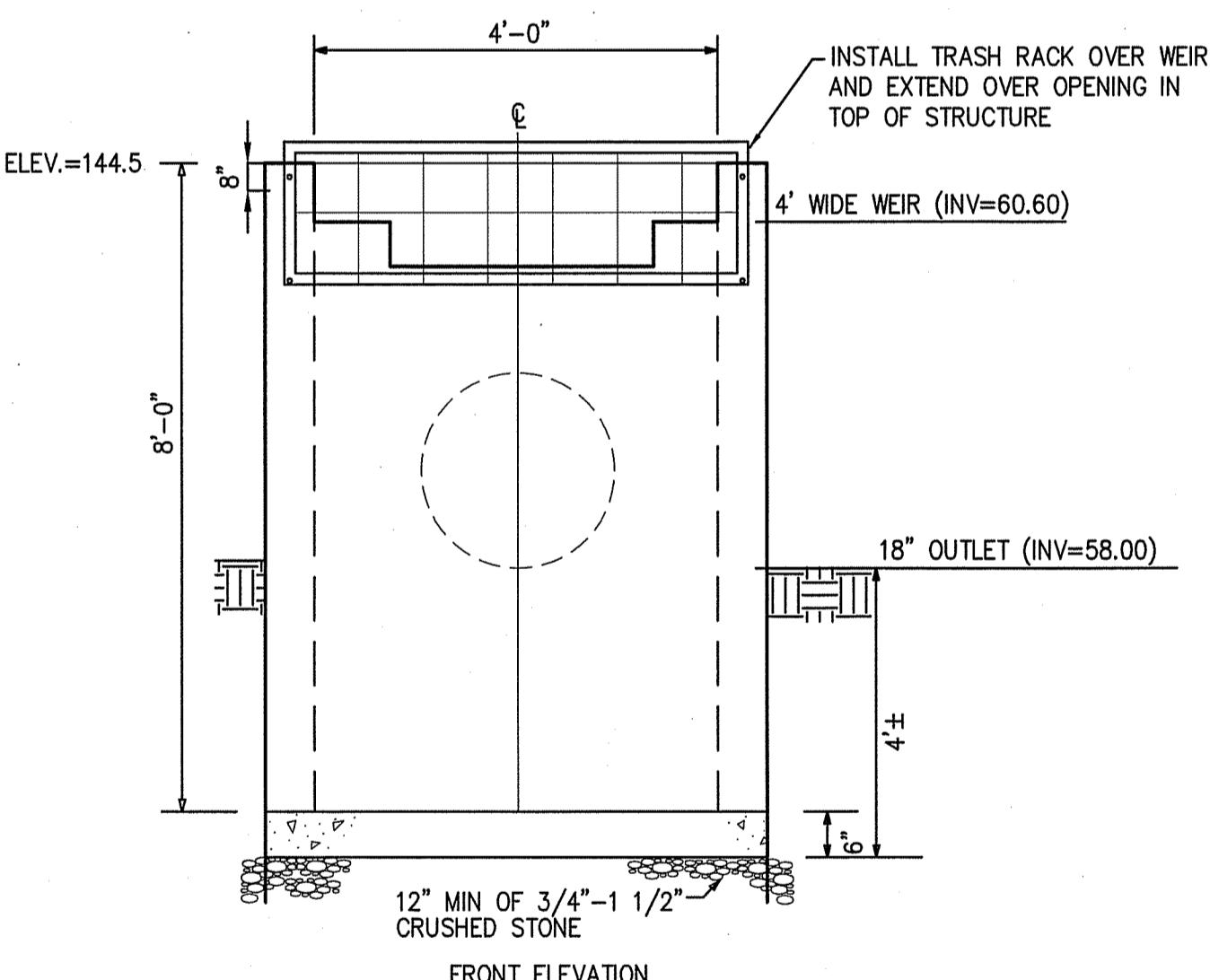
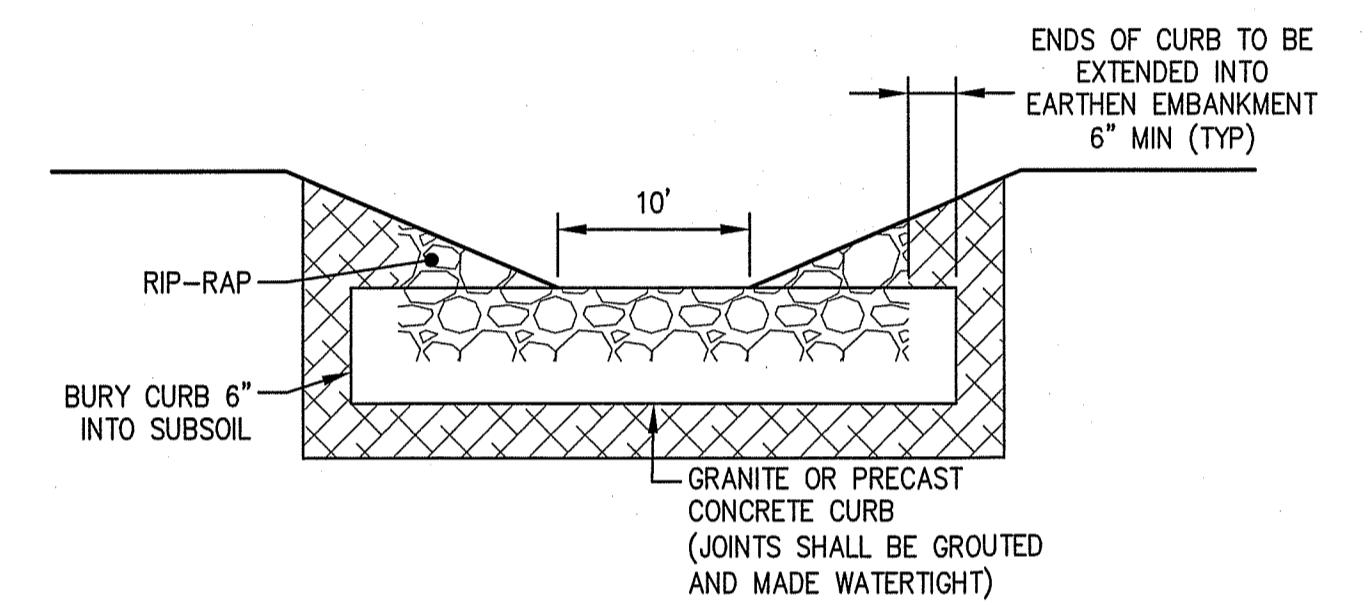
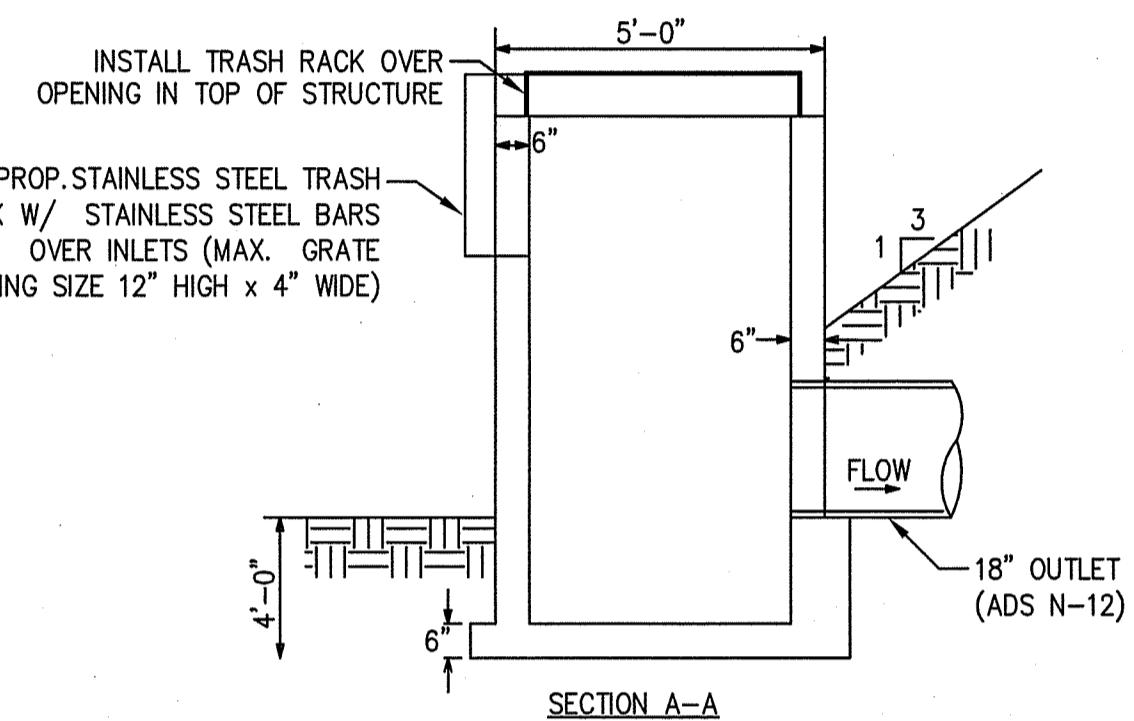
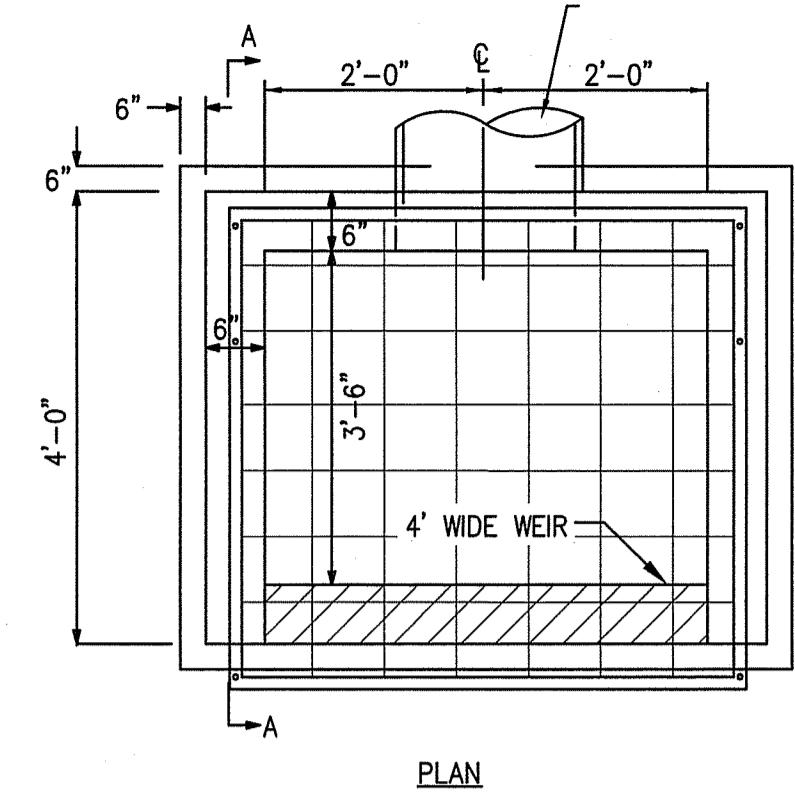
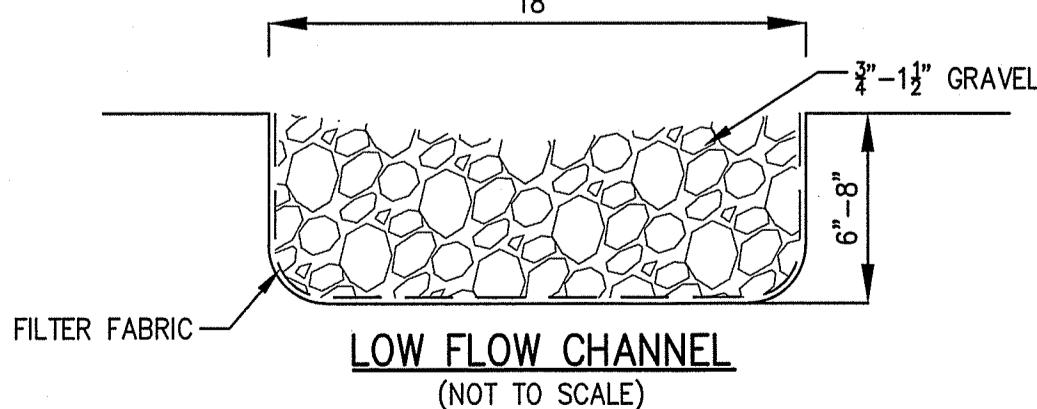
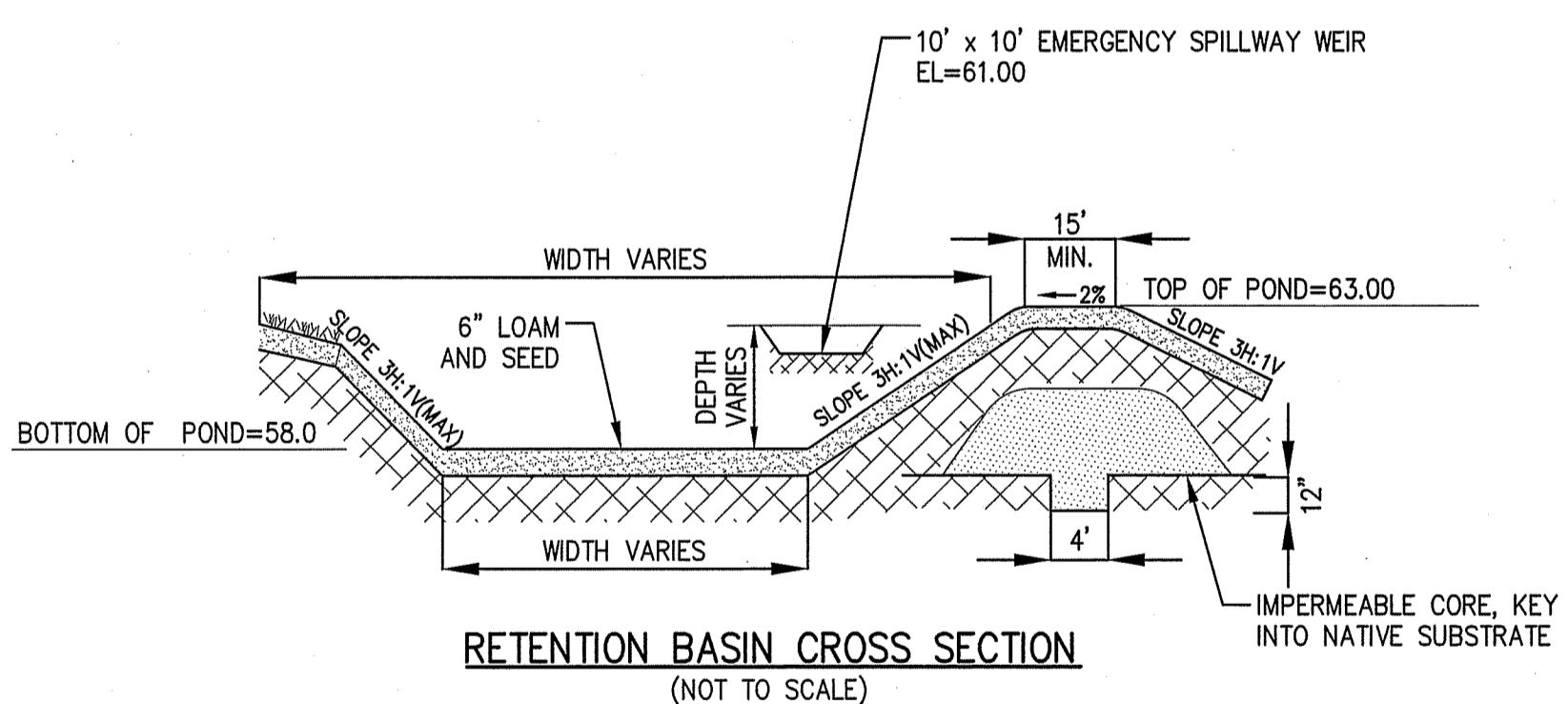
SURVEY BY: MCC	REVISIONS
DRAFTED BY: GEM/INO	DESCRIPTION
CHECKED BY: SPC	DATE
APPROVED BY: SPC	
SCALE: AS NOTED	
DATE: APRIL 6, 2022	



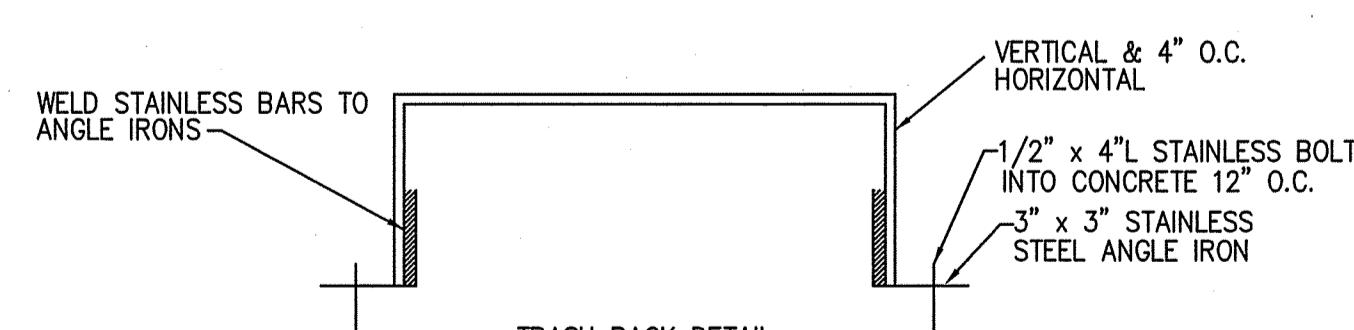
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100-YEAR STORM ELEV. = 60.87
 10-YEAR STORM ELEV. = 60.13
 2-YEAR STORM ELEV. = 58.67



EMERGENCY SPILLWAY WEIR
 NOT TO SCALE



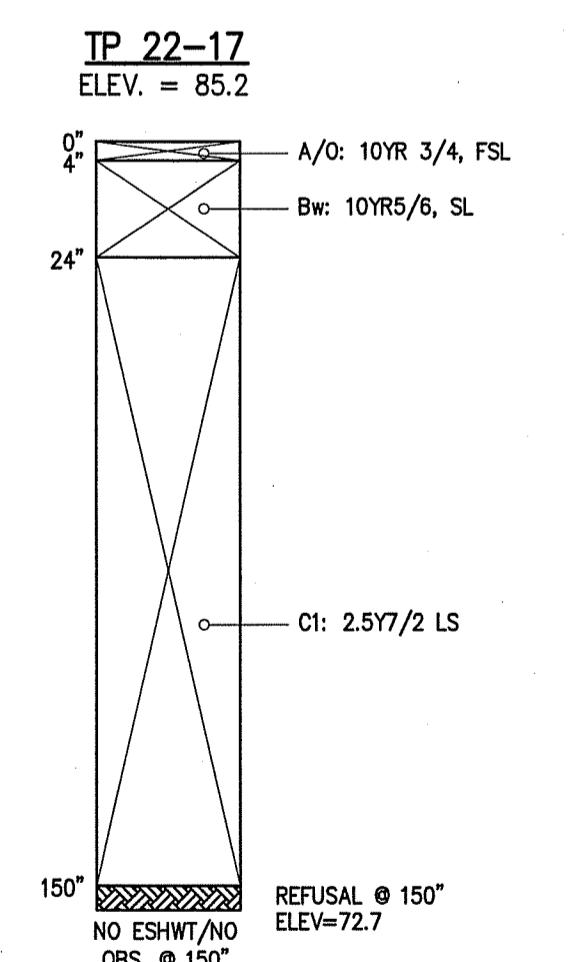
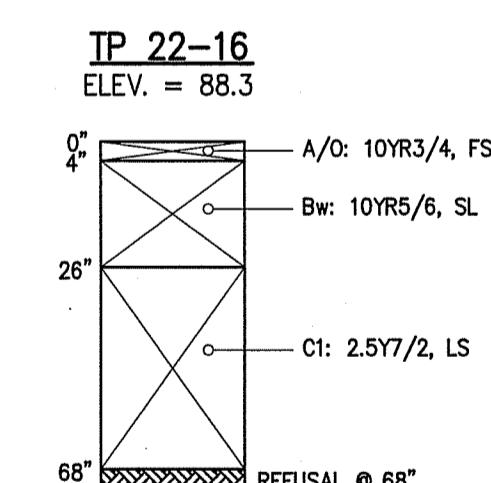
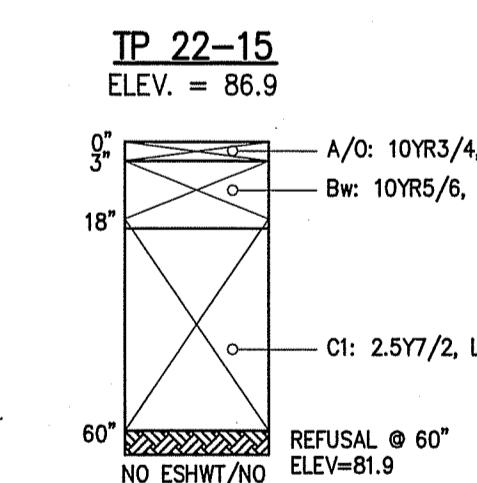
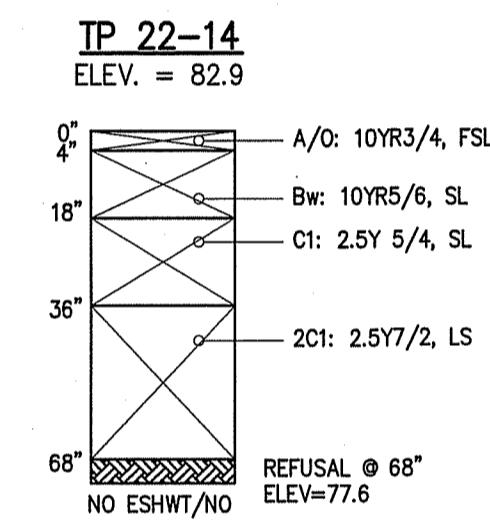
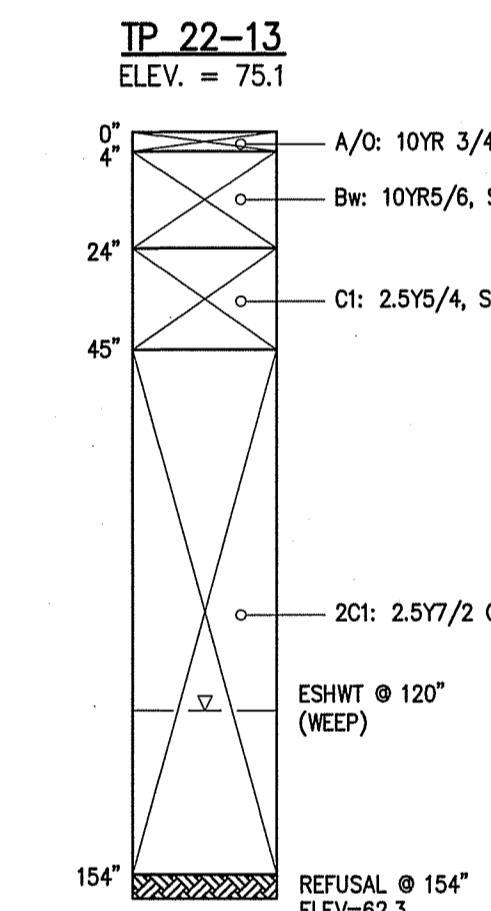
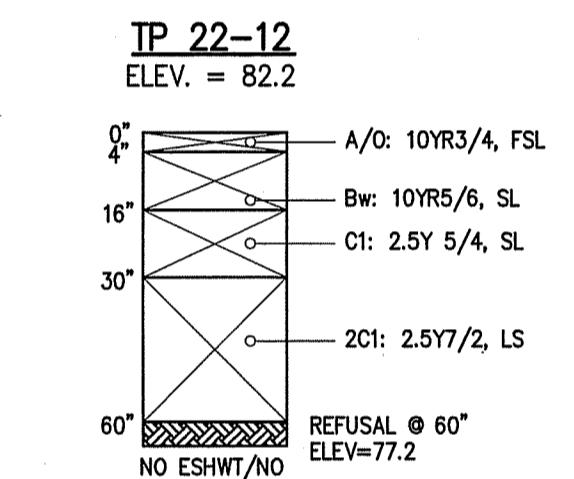
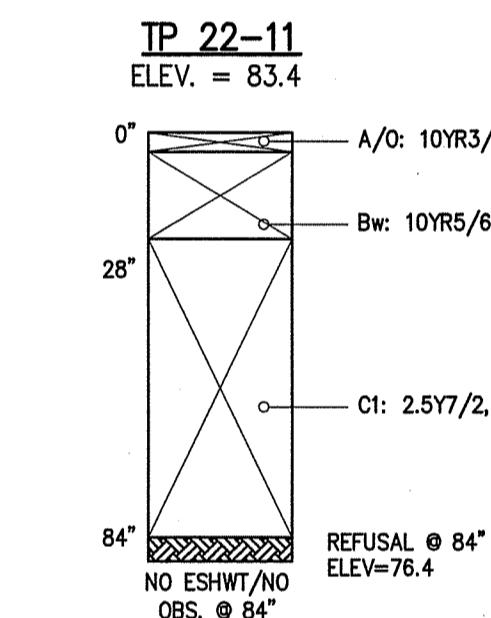
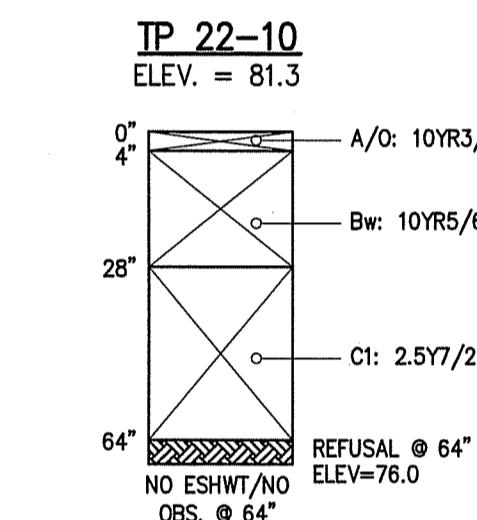
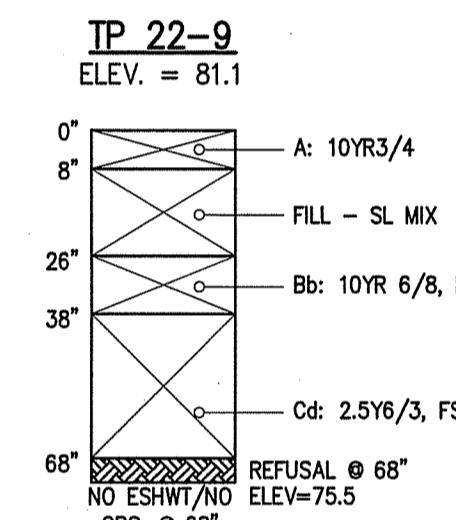
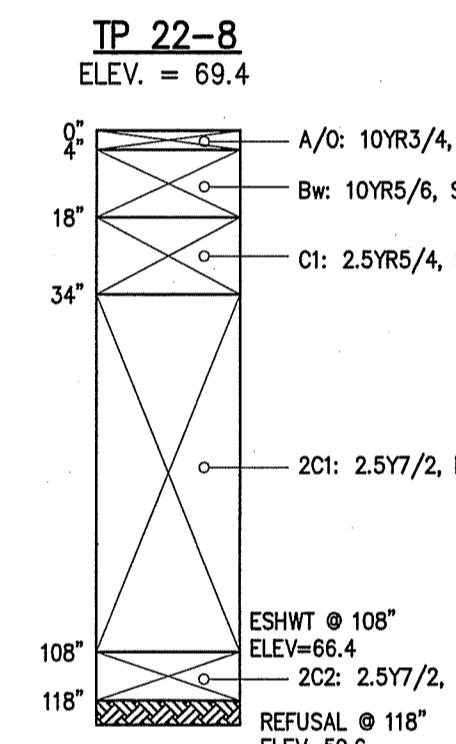
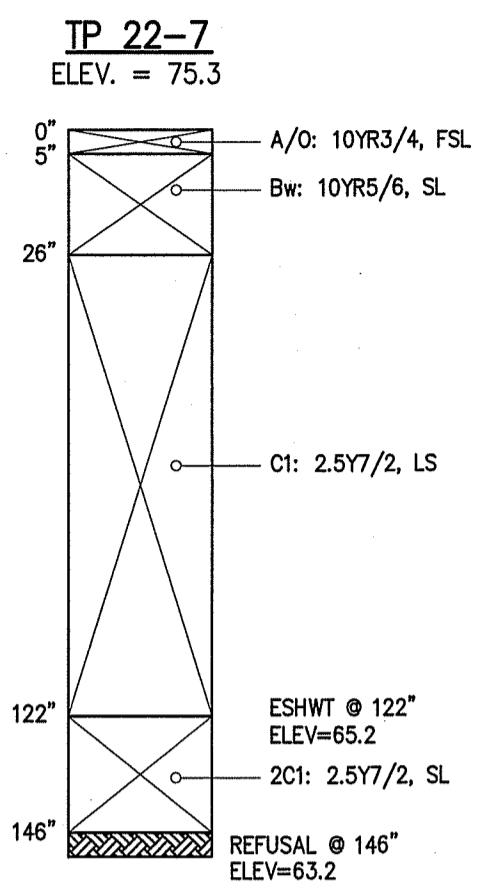
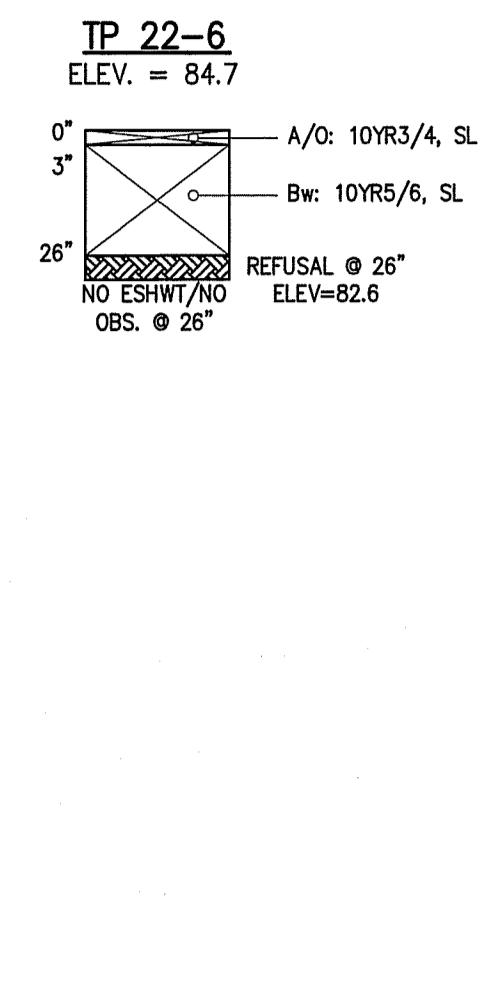
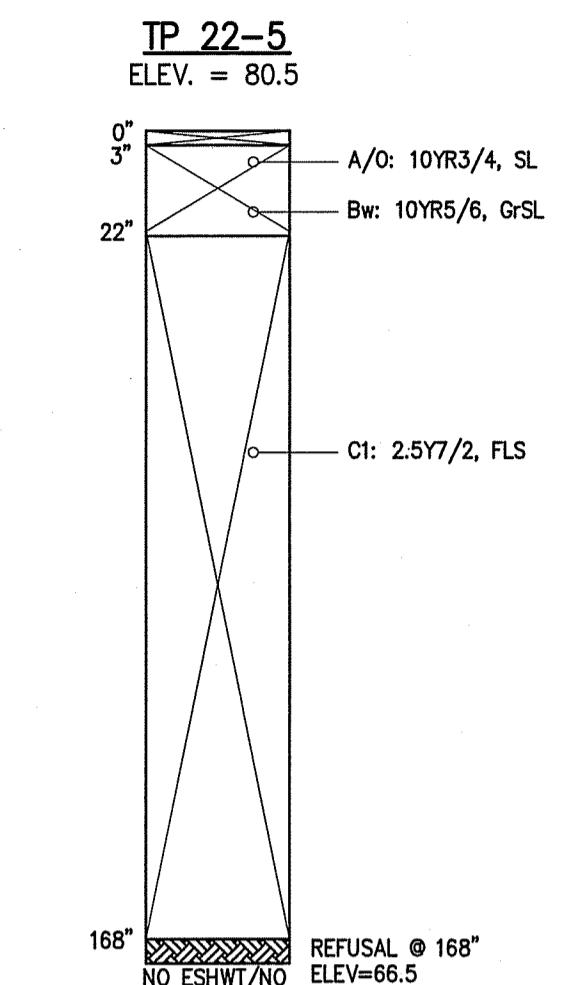
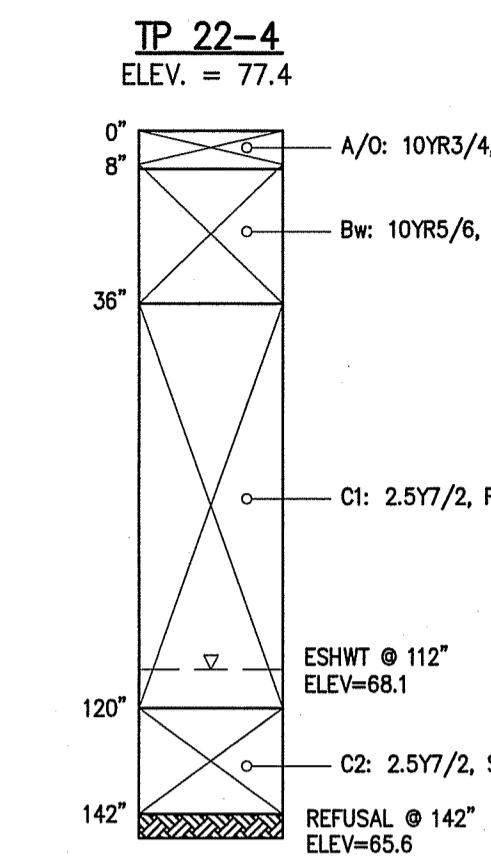
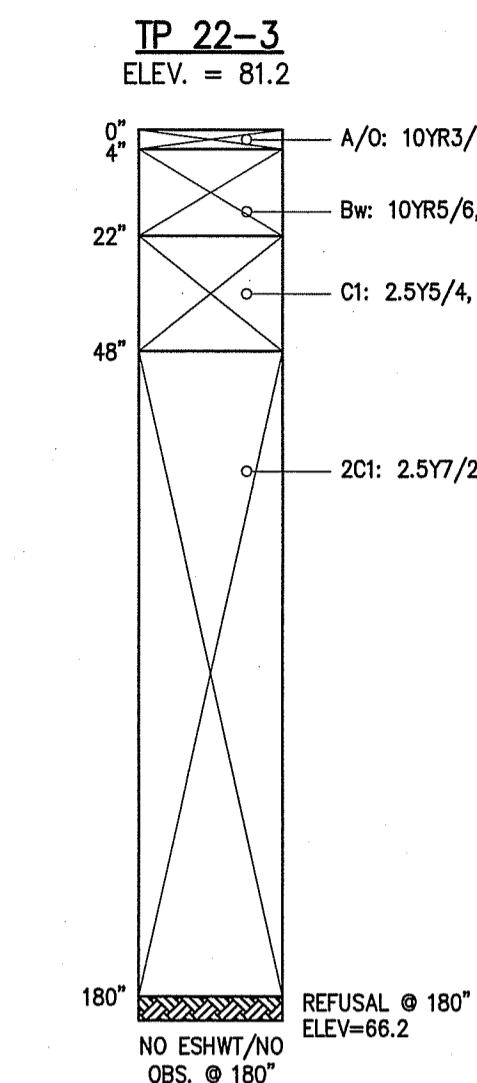
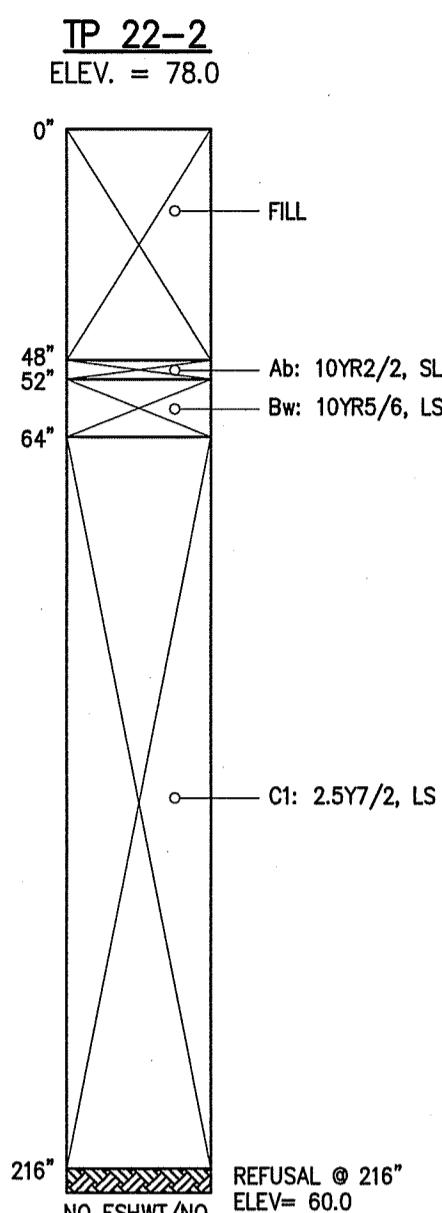
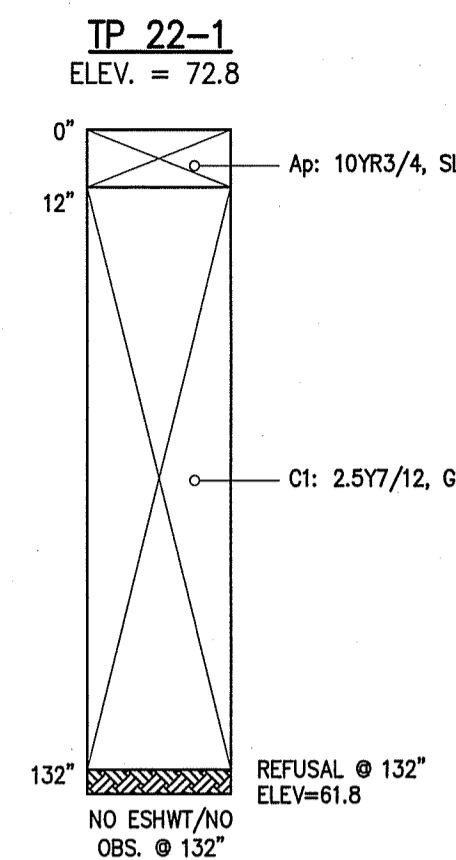
OUTLET CONTROL STRUCTURE (OCS-1)
 (NOT TO SCALE)

SITE DEVELOPMENT PLANS
 IN
 METHUEN, MASSACHUSETTS
 501 & 600 GRIFFIN BROOK DRIVE
 (ASSESSOR'S MAP 220, LOTS 90 & 9E)
 PREPARED FOR:
 GRIFFIN BROOK DRIVE OWNER LLC

DRAINAGE DETAILS
 DRAWING NO. C-14
 DRAWING NO. C-14

SOIL LOGS

DATE PERFORMED: 02/07/2022 & 02/08/2022
PERFORMED BY: WILL SCHKUTA, SE #14030



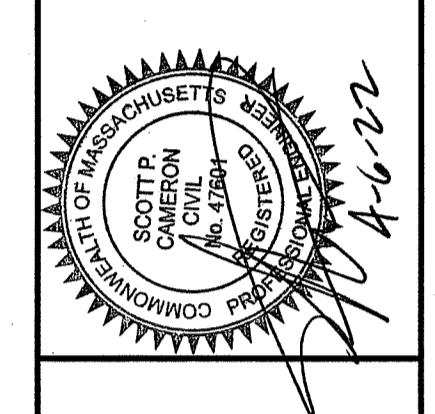
SITE DEVELOPMENT PLANS
IN
METHUEN, MASSACHUSETTS
501 & 600 GRIFFIN BROOK DRIVE
(ASSESSOR'S MAP 220, LOTS 9D & 9E)
PREPARED FOR
GRIFFIN BROOK DRIVE OWNER LLC

TEST HOLE
LOGS
DRAWING NO. C-15

SURVEY BY: MCS
DRAFTED BY: CEM/LNO
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: APRIL 6, 2022

REVISIONS
NO. DESCRIPTION DATE

The Morin-Cameron
GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
25 FENWICK AVE, HANOVER, MASSACHUSETTS 02343
P: 978-457-3510, W: WWW.MORINCAMERON.COM



4-6-22



501 & 600 Griffin
Brook Drive
Methuen, MA

Client
**Griffin Brook Drive
Owner LLC**

Civil Enginee

The Morin-Cameron Group, Inc.
25 Kenoza Avenue
Haverhill, MA

Landscape Architect



**Radner Design
Associates, Inc.**



Revision:

Drawn: kc

Checked by: mr

Scale: 1

Sheet Name:
Landscape Plan

Project No.:
22-02

Issue Date:

Sheet No.:

L1.0



Suggested Plant Palette			
Latin Name	Common Name	Size	Remarks
<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple	3-3.5' Cal.	B&B, full, round, symmetrical, high-branched
<i>Celtis occidentalis</i>	Hackberry	3-3.5' Cal.	B&B, full, round, symmetrical, high-branched
<i>Gleditsia triacanthos inermis</i> 'Skyline'	Skyline Honeylocust	3-3.5' Cal.	B&B, full, round, symmetrical, high-branched
<i>Ostrya virginiana</i>	American Hop hornbeam	3-3.5' Cal.	B&B, full, round, symmetrical, high-branched
<i>Quercus palustris</i> 'Pacific Brilliance'	Pacific Brilliance Pin Oak	3-3.5' Cal.	B&B, full, round, symmetrical, high-branched
Ornamental Flowering Trees			
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	8-10' Ht.	B&B, full, round, multi-stem
<i>Cercis canadensis</i>	Eastern Rebdud	8-10' Ht.	B&B, full, round, multi-stem
<i>Cornus florida</i>	Flowering Dogwood	8-10' Ht.	B&B, full, round, multi-stem
<i>Crataegus phaeopyrum</i>	Washington Hawthorn	8-10' Ht.	B&B, full, round, multi-stem
<i>Hamamelis virginiana</i>	Witch Hazel	8-10' Ht.	B&B, full, round, multi-stem
Shrubs			
<i>Aronia arbutifolia</i>	Red Chokeberry	3-4' Ht.	Container
<i>Clethra alnifolia</i>	Summersweet	3-4' Ht.	Container
<i>Forsythia intermedia</i>	Border Forsythia	3-4' Ht.	Container
<i>Hibiscus syriacus</i>	Rose of Sharon	3-4' Ht.	Container
<i>Hydrangea macrophylla</i> 'All Summer Beauty'	All Summer Beauty Hydrangea	7 Gal.	Container
<i>Hydrangea macrophylla</i> 'Nikko Blue'	Nikko Hydrangea	7 Gal.	Container
<i>Ilex crenata</i>	Japanese Holly	5 Gal.	Container
<i>Ilex glabra</i>	Inkberry Holly	5 Gal.	Container
<i>Juniperus chinensis</i> 'Ietzi Columnaris'	Upright Hetz Juniper	4-5' Ht.	Container
<i>Juniperus chinensis</i> 'Seagreen'	Seagreen Juniper	12-18' Spr.	Container
<i>Juniperus horizontalis</i> 'Blue Chip'	Blue Chip Juniper	12-18' Spr.	Container
<i>Myrica pensylvanica</i>	Northern Bayberry	24-30' Ht.	Container
<i>Physocarpus opulifolium</i> 'Diabolo'	Ninebark	3-4' Ht.	Container
<i>Potentilla fruticosa</i> 'Abbotswood'	Abbotswood Potentilla	12-18' Ht.	Container
<i>Rosa rugosa</i>	Beech Rose	5 Gal.	Container
<i>Spiraea betulifolia</i>	Birdleaf Spirea	12-18' Ht.	Container
<i>Syringa vulgaris</i>	Lilac	5 Gal.	Container
<i>Viburnum trilobum</i>	American Cranberrybush	7 Gal.	Container
Perennials, Grasses and Groundcovers			
<i>Arcostaphylos uva-ursi</i>	Bearberry	1 Gal.	Container
<i>Asclepias tuberosa</i>	Butterfly Weed	1 Gal.	Container
<i>Aster novae-angliae</i>	New England Aster	1 Gal.	Container
<i>Carex pensylvanica</i>	Oak Sedge	1 Gal.	Container
<i>Coreopsis verticillata</i> 'Moonbeam'	Moonbeam Coreopsis	1 Gal.	Container
<i>Echinacea purpurea</i> 'Magnus'	Magnus Coneflower	1 Gal.	Container
<i>Gaultheria procumbens</i>	Eastern Teaberry	1 Gal.	Container
<i>Hemerocallis x</i> 'Pardon Me'	Pardon Me Daylily	1 Gal.	Container
<i>Hemerocallis x</i> 'Stella de Oro'	Stella D'Oro Daylily	1 Gal.	Container
<i>Liatris spicata</i> 'Kobolt'	Kobolt Blazing Star	1 Gal.	Container
<i>Liriope muscari</i> 'Variegata'	Variegated Lilyturf	1 Gal.	Container
<i>Neopeta x faassenii</i> 'Walker's Low'	Walker's Low Catmint	1 Gal.	Container
<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Switch Grass	1 Gal.	Container
<i>Pennisetum alopecuroides</i>	Fountain Grass	1 Gal.	Container
<i>Phlox subulata</i>	Moss Phlox	1 Gal.	Container
<i>Rudbeckia</i> 'American Gold Rush'	American Gold Rush Black-Eyed Susan	1 Gal.	Container
<i>sedum</i> 'Autumn Joy'	Autumn Joy Stonecrop	1 Gal.	Container

Bufferzone Restoration, Slope Stabilization Planting and Stormwater Basins			
Latin Name	Common Name	Size	Remarks
<i>Arctostaphylos uva-ursi</i>	Bearberry	1 Gal.	Container
<i>Forsythia x intermedia</i> 'Gold Tide'	Gold Tide Forsythia	3 Gal.	Container
<i>Juniperus virginiana</i> 'Grey Owl'	Grey Owl Juniper	3 Gal.	Container
<i>Rhus aromatica</i> 'Gro-low'	Gro-low Sumac	3 Gal.	Container
Perennials, Grasses and Groundcovers			
New England Wetland Plants - New England Conservation/Wildlife Mix	Seeds		Apply 25 lbs per acre @ Bufferzone Restoration Area
New England Wetland Plants - New England Erosion Control/Restoration Mix for Dry Sites	Seeds		Apply 35 lbs per acre @ Stormwater Detention Basins - Slope
New England Wetland Plants - New England Erosion Control/Restoration Mix for Detention Basins - Bottom	Seeds		Apply 35 lbs per acre @ Stormwater Detention Basins - Bottom

NOTE:
PLANT SELECTION SUBJECT TO CHANGE DEPENDING ON PLANT AVAILABILITY AT THE TIME OF PLANTING

NEW ENGLAND WETLAND PLANTS, INC.
820 WEST STREET, AMHERST, MA 01002
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
<i>Elymus riparius</i>	Riverbank Wild Rye	FACW
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Chamaecrista fasciculata</i>	Partridge Pea	FACU
<i>Desmodium canadense</i>	Showy Tick Trefoil	FAC
<i>Asclepias speciosa</i>	Butterfly Milkweed	NI
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium purpureum</i> (<i>Eutrochium maculatum</i>)	Purple Joe Pye Weed	FAC
<i>Rudbeckia hirta</i>	Black Eyed Susan	FACU
<i>Aster pilosus</i> (<i>Sympyotrichum pilosum</i>)	Heath (or Hairy) Aster	UPL
<i>Solidago juncea</i>	Early Goldenrod	

PRICE PER LB. \$39.50 MIN. QUANTITY 2 LBS. TOTAL: \$79.00 APPLY: 25 LBS/ACRE:1750 sq ft/lb
The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes
For both good erosion control and wildlife habitat value. The mix is designed to be a no maintenance seeding, and is appropriate for cut and fill slopes, detention basin side slopes, and disturbed areas adjacent to commercial and residential projects.
New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse, Plus SH and applicable taxes.

NEW ENGLAND WETLAND PLANTS, INC.
820 WEST STREET, AMHERST, MA 01002
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Conservation/Wildlife Mix

Botanical Name	Common Name	Indicator
<i>Elymus virginicus</i>	Virginia Wild Rye	FACW-
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Andropogon gerardii</i>	Big Bluestem	FAC
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Sorghastrum nutans</i>	Indian Grass	UPL
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Chamaecrista fasciculata</i>	Partridge Pea	FACU
<i>Desmodium canadense</i>	Showy Tick Trefoil	FAC
<i>Asclepias speciosa</i>	Butterfly Milkweed	NI
<i>Bidens frondosa</i>	Beggar Ticks	FACW
<i>Eupatorium purpureum</i> (<i>Eutrochium maculatum</i>)	Purple Joe Pye Weed	FAC
<i>Rudbeckia hirta</i>	Black Eyed Susan	FACU
<i>Aster pilosus</i> (<i>Sympyotrichum pilosum</i>)	Heath (or Hairy) Aster	UPL
<i>Solidago juncea</i>	Early Goldenrod	

PRICE PER LB. \$39.50 MIN. QUANTITY 2 LBS. TOTAL: \$79.00 APPLY: 25 LBS/ACRE:1750 sq ft/lb

The New England Conservation/Wildlife Mix provides a permanent cover of grasses, wildflowers, and legumes

For both good erosion control and wildlife habitat value. The mix is designed to be a no maintenance seeding, and is appropriate for cut

and fill slopes, detention basin side slopes, and disturbed areas adjacent to commercial and residential projects.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse, Plus SH and applicable taxes.

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PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix for Dry Sites

Botanical Name	Common Name	Indicator
<i>Elymus canadensis</i>	Canada Wild Rye	FACU+
<i>Festuca rubra</i>	Red Fescue	FACU
<i>Lolium multiflorum</i>	Annual Ryegrass	
<i>Lolium perenne</i>	Perennial Ryegrass	
<i>Schizachyrium scoparium</i>	Little Bluestem	FACU
<i>Panicum virgatum</i>	Switch Grass	FAC
<i>Sorghastrum nutans</i>	Indian Grass	UPL

PRICE PER LB. \$18.00 MIN. QUANTITY 5 LBS. TOTAL: \$90.00 APPLY: 35 LBS/ACRE:1250 sq ft/lb

The New England Erosion Control/Restoration Mix For Dry Sites provides an appropriate selection of native and naturalized grasses to

ensure that dry and recently disturbed sites will be quickly revegetated and the soil surface stabilized. It is an appropriate seed mix for road

cuts, pipelines, steeper slopes, and areas requiring quick cover during the ecological restoration process. The mix may be applied by hydro-

seeding, by mechanical spreader, or on small sites it can be spread by hand. Lightly rake, or roll to ensure proper soil seed contact. Best

results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of weed-free straw is recommended.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is \$/bulk pound, FOB warehouse, Plus SH and applicable taxes.

501 & 600 Griffin Brook Drive
Methuen, MA

Client
Griffin Brook Drive
Owner LLC

Civil Engineer

The Morin-Cameron Group, Inc.
25 Kenoza Avenue
Haverhill, MA

Landscape Architect

Radner Design
Associates, Inc.
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Sheet Name:
Landscape Plan
Enlargement
and Planting Schedules

Project No.:
22-02

Issue Date:
04/06/2022

Sheet No.:

L1.1

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501 & 600 Griffin
Brook Drive
Methuen, MA

Client
Griffin Brook Drive
Owner LLC

Civil Engineer

The Morin-Cameron Group, Inc.
25 Kenoza Avenue
Haverhill, MA

Landscape Architect



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Revision:

Drawn: kc

Checked by: mr

Scale: AS SHOWN

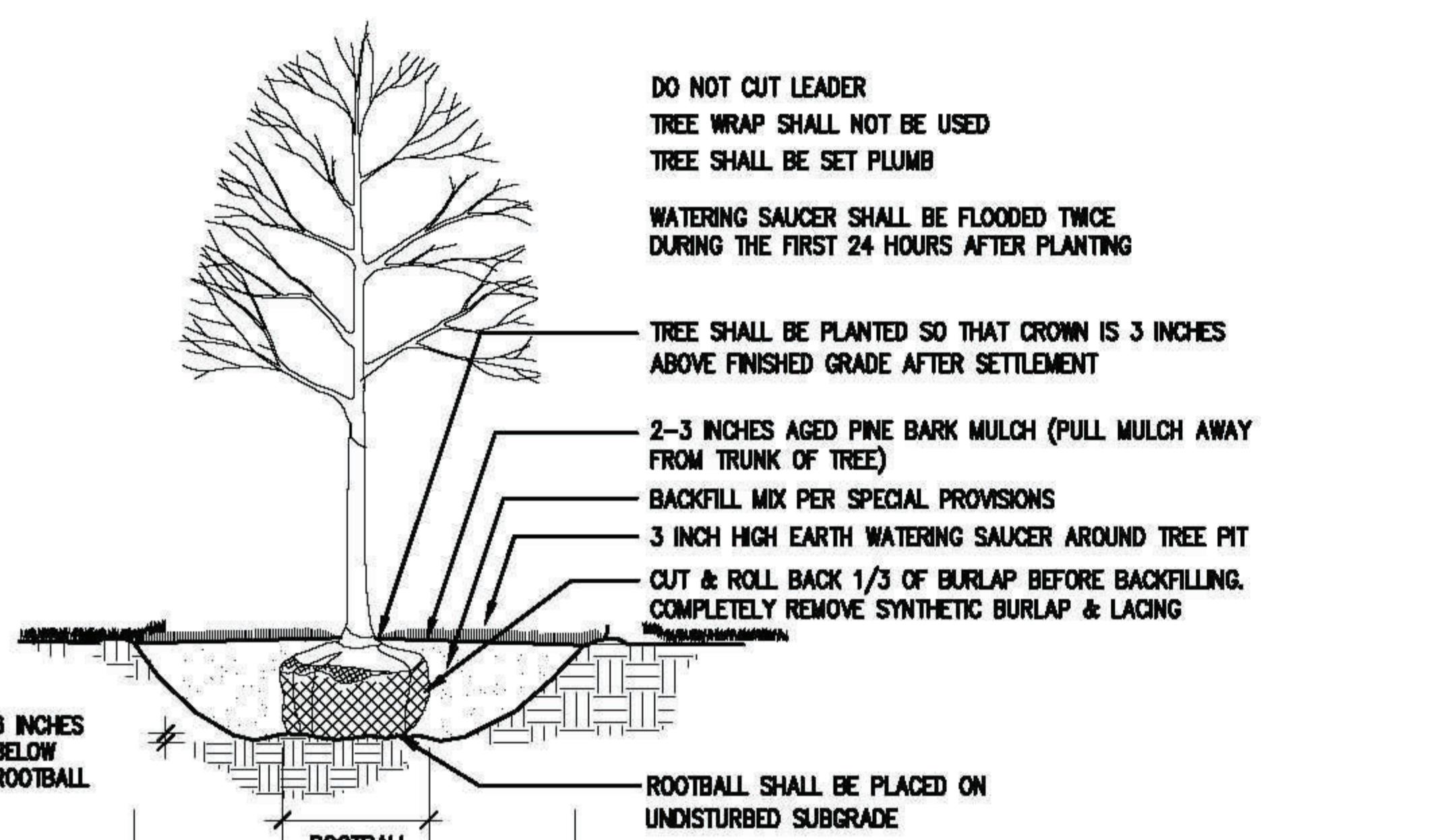
Key Plan:

Sheet Name:
Landscape Details
and Planting Notes

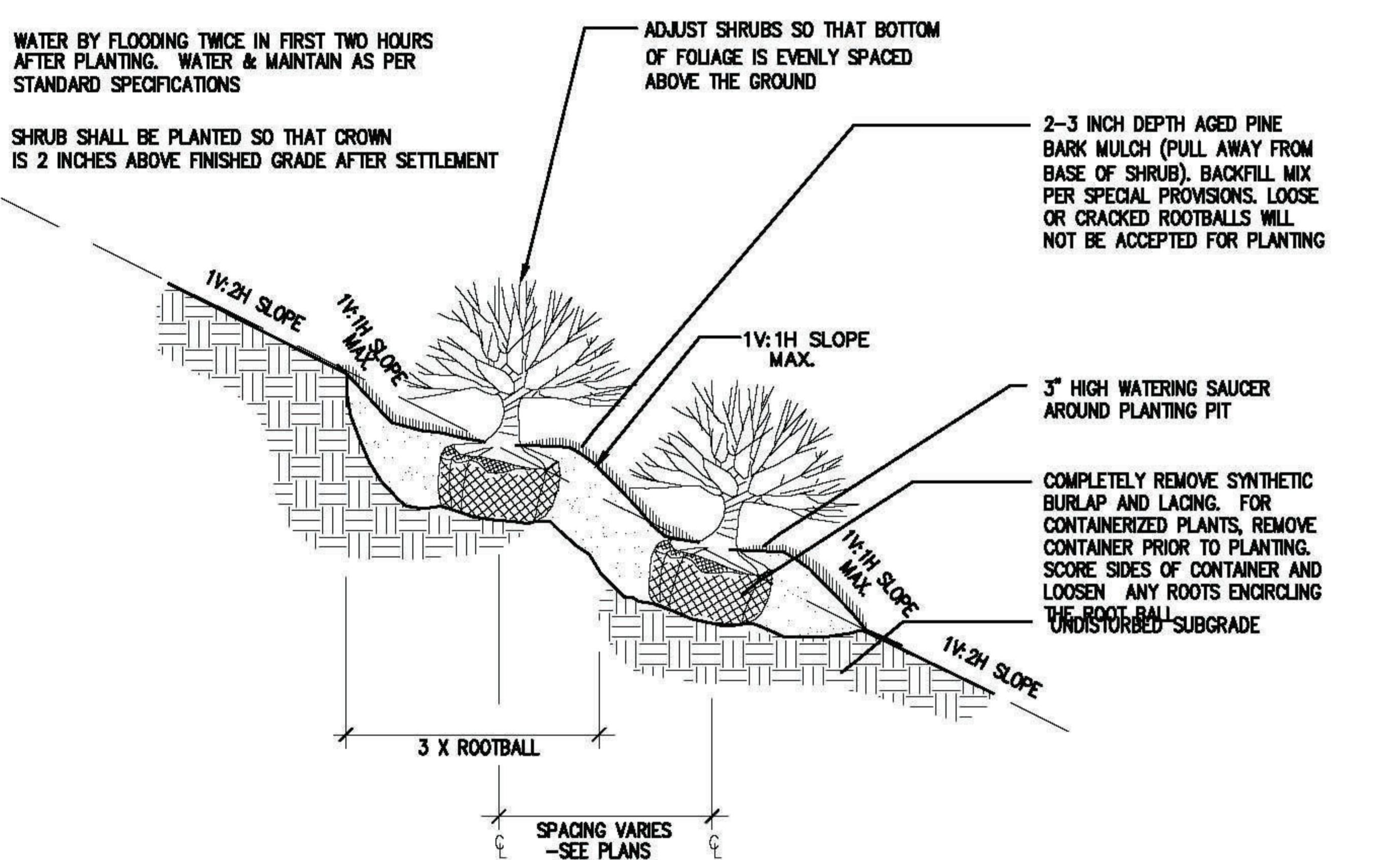
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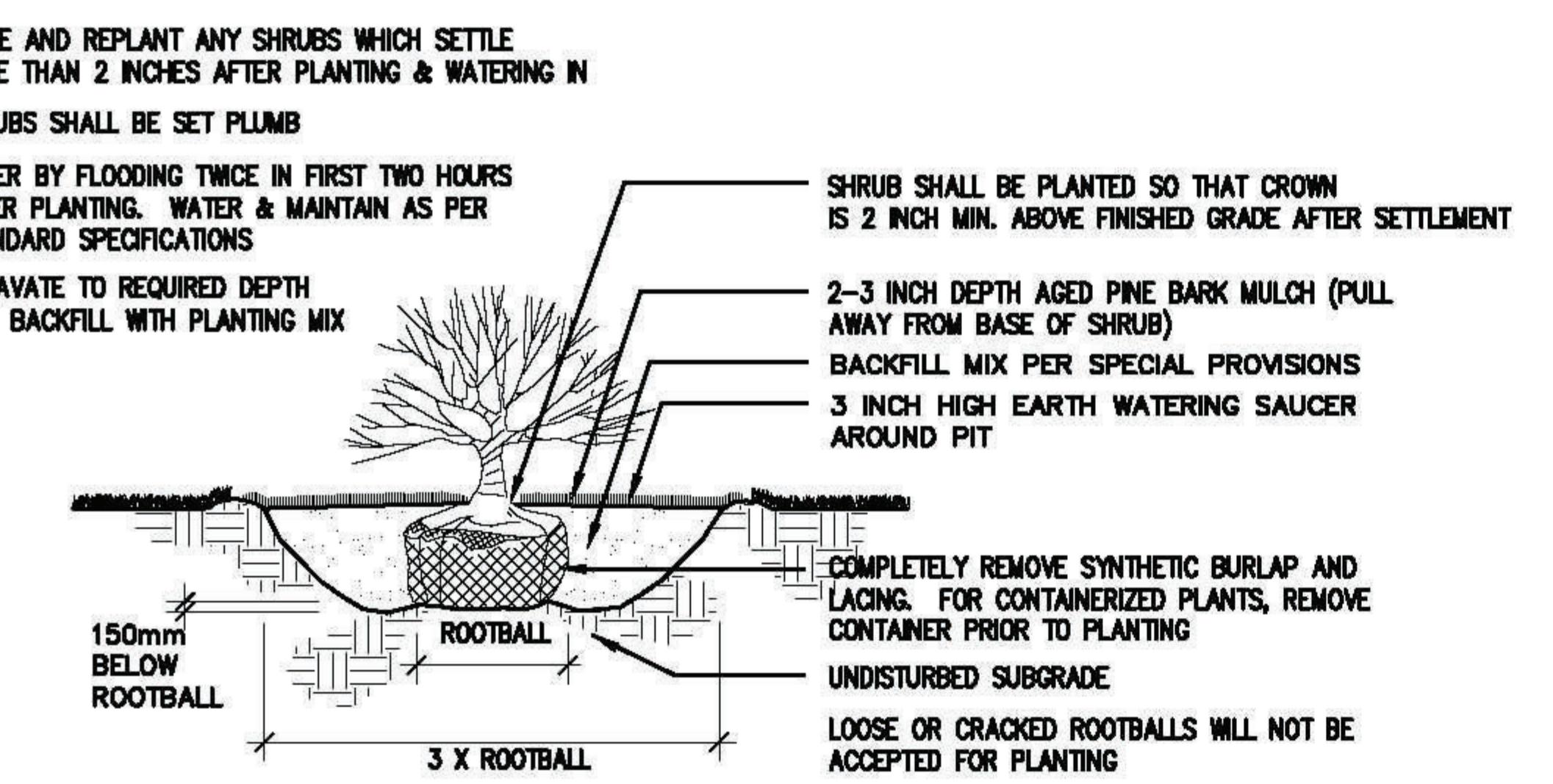
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L1.2



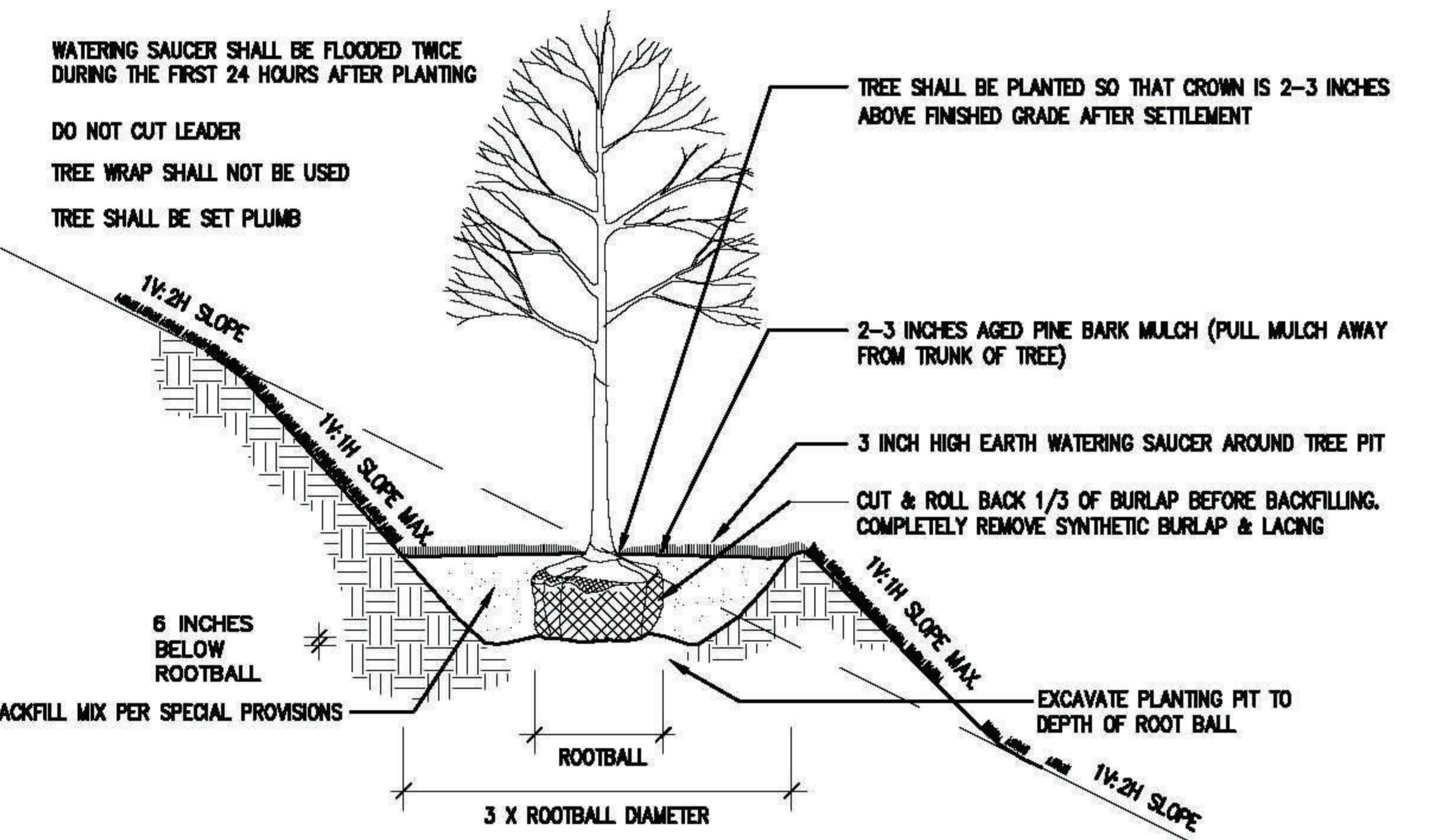
DECIDUOUS TREE PLANTING
NOT TO SCALE



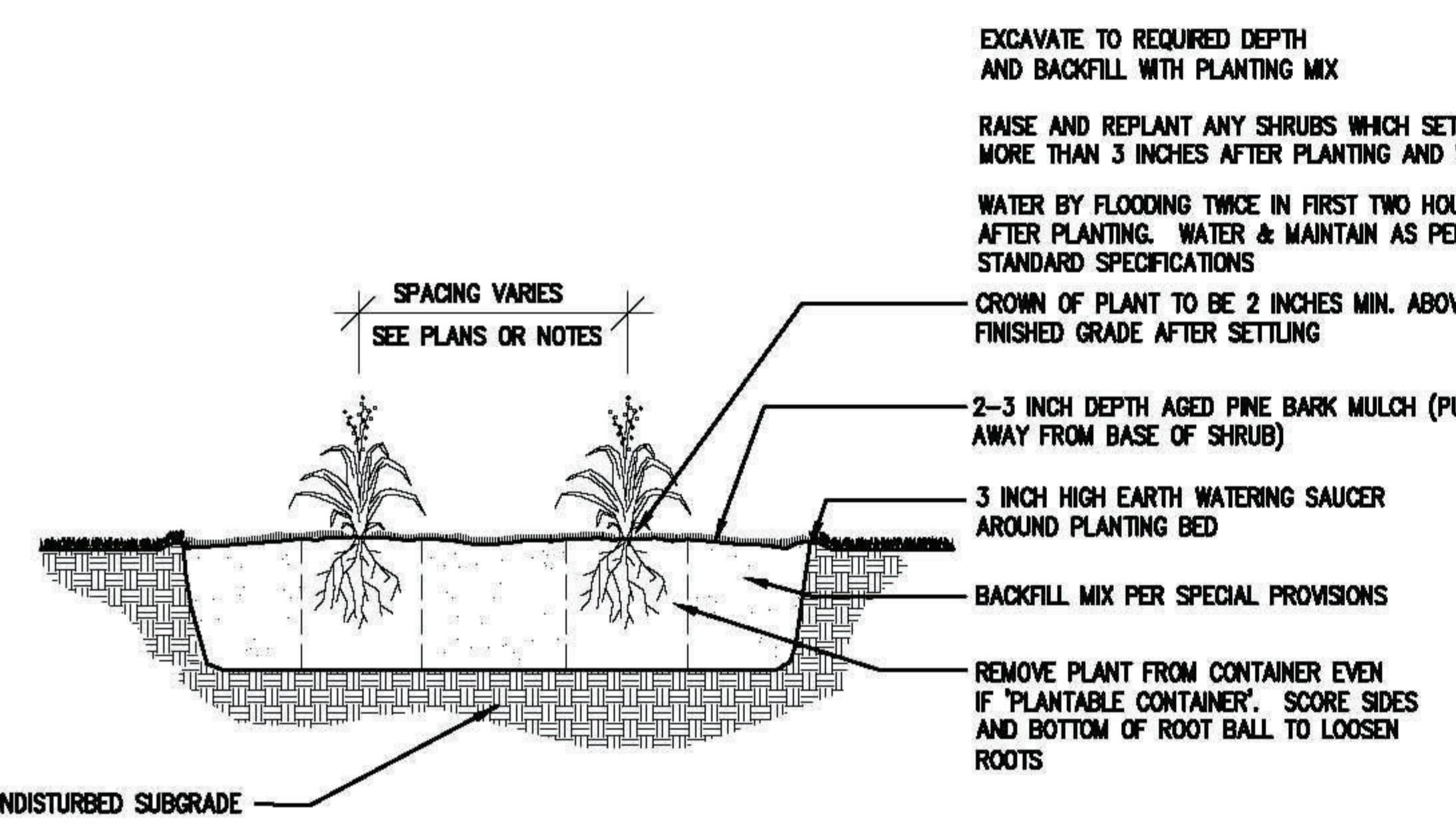
CONTAINERIZED SHRUB PLANTING (SLOPE) DETAIL
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE




DECIDUOUS TREE PLANTING (SLOPE)
NOT TO SCALE



PERENNIAL PLANTING
NOT TO SCALE

PLANTING NOTES

1. FURNISH AND INSTALL PLANTS AS SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR QUANTITY OF SHRUBS GRAPHICALLY SHOWN ON PLANS. IF THERE IS A DISCREPANCY BETWEEN PLANT LIST QUANTITIES AND GRAPHICS, THE GRAPHIC SHALL TAKE PRECEDENCE.
2. PRIOR TO THE START OF EXCAVATION FOR THE PROJECT BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED A DIGSAFE NUMBER INDICATING THAT EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
3. CONTRACTOR SHALL BEGIN 90 DAY MAINTENANCE PERIOD IMMEDIATELY UPON PLANTING AND WILL CONTINUE UNTIL FINAL ACCEPTANCE.
4. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS, STRUCTURES, AND PLANTING BEDS.
5. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS, STRUCTURES, AND PLANTING BEDS.
6. MAXIMUM SLOPE WITHIN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
7. PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
8. PLANT MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY "THE AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
9. PLANTS TO BE PLANTED IN BURIED OR CONTAINERIZED.
10. MULCH FOR PLANTED AREAS TO BE AGED PINE BARK: PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
11. PLANTING SOIL MIX LOAM THOROUGHLY INCORPORATED WITH ROTTED MANURE PROPORTIONED 5 C.Y. TO 1 C.Y. OR EQUIVALENT. USE OF PEAT MOSS IS PROHIBITED.
12. THE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE. REQUEST THE LANDSCAPE ARCHITECT PROVIDE A WRITTEN LETTER OF ACCEPTANCE UPON COMPLETION OF EACH PHASE.
13. PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE NURSERY, AND AT THE SITE.
14. LANDSCAPE ARCHITECT TO FLAG TREES TO BE TRANSPLANTED PRIOR TO CONSTRUCTION START.
15. AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOADED WITH TOPSOIL TO A MINIMUM DEPTH OF 6" AND SEEDED WITH A MIX CONSISTING OF 40% PERENNIAL RYE GRASS, 30% CHEWINGS FESCUE, 30% KENTUCKY BLUEGRASS.
16. SOILS AND GROUNDS WHICH CONTAIN EXISTING CONDITIONS UNUSUAL OR ARE IMPOSED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED, AND/OR CARED OR DEMOLISHED AS REQUIRED.
17. PROVIDE AUTOMATIC IRRIGATION SYSTEM FOR PLANTINGS AND LAWN AREAS UNLESS OTHERWISE NOTED. SUBMIT DESIGN PLANS AND PRODUCT LITERATURE PER THE SPECIFICATIONS.
18. THERE SHALL BE NO SUBSTITUTION OF PLANT SPECIES WITHOUT AUTHORIZATION BY THE LANDSCAPE ARCHITECT.
19. NO PLANT SHALL BE INSTALLED BEFORE ACCEPTANCE OF ROUGH GRADING.
20. PLANTS TO BE THOROUGHLY WATERED AFTER INSTALLATION, AT LEAST TWICE WITHIN THE FIRST 24 HOURS.



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Landscape Architect



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Associates, Inc.**



Revision:

Drawn: kc

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Scale: 1"=40'-0"

Key Plan:

Sheet Name:
Lighting Plan

Project No.:
22-02

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04/06/2022

Sheet No.:

L2.0



QSC

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sheet title: BUILDING ELEVATIONS

project name:
PROPOSED WARE
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600 GRIFFIN BRO
METHUEN, MA

issue date: 04/06/22
revisions:

A large black rectangular redaction box covers the bottom half of the page content, starting below the header and ending above the footer. It obscures the detailed construction plans and text that would normally be present in that area.

ARCHITECT WHOSE SIGNATURE AND SEAL MAY BE
AFFIXED TO THESE DRAWINGS.

Job number:

GSD-22-005

A1-2

ART

