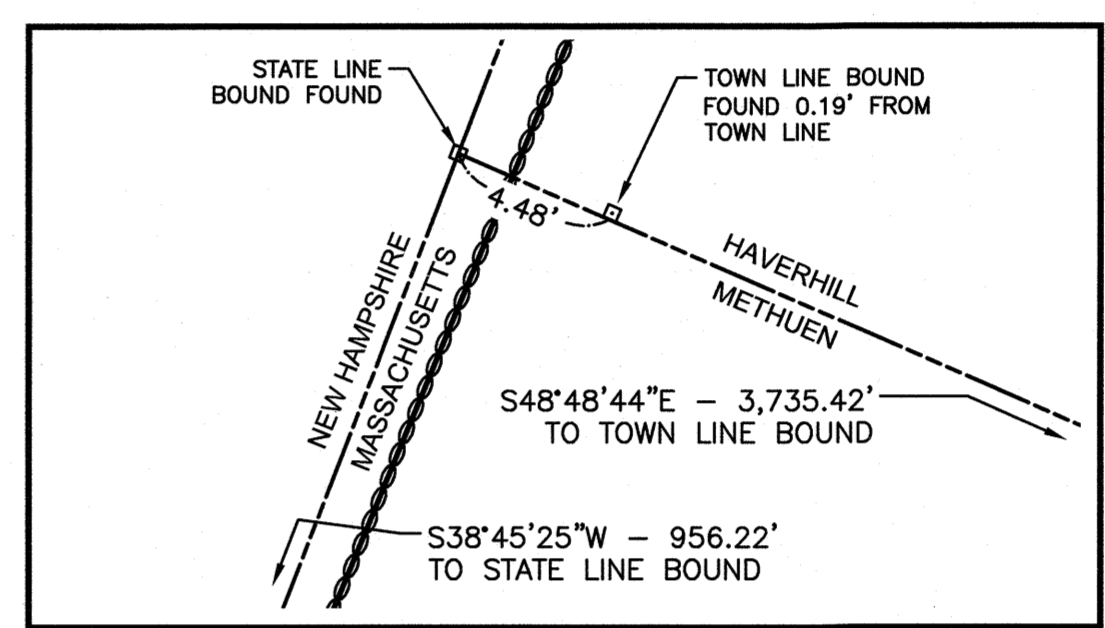
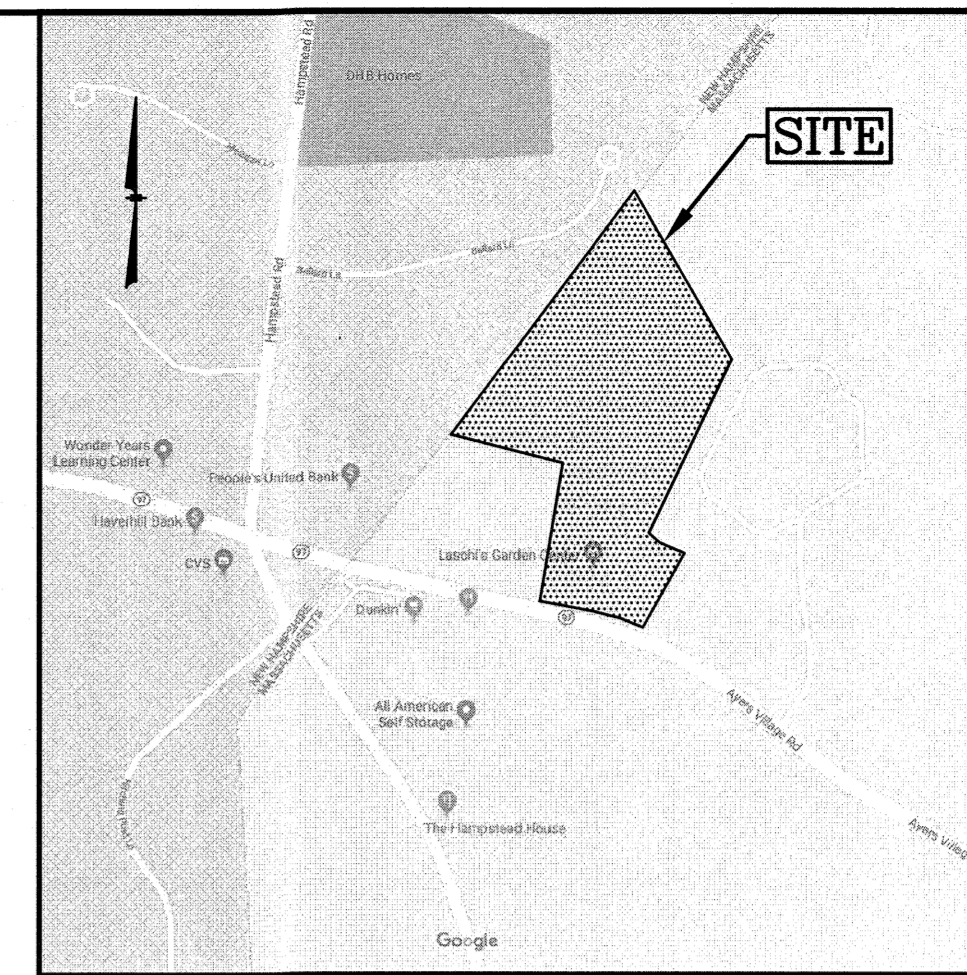


PARCEL ID 702-72A-4 & 702-72A-4C
18-20 AYERS VILLAGE ROAD
METHUEN, MA



OWNERS OF RECORD:
PARCEL ID 702-72A-4 & 702-72A-4C
LASCHI BROS INC.
20 AYERS VILLAGE ROAD
METHUEN, MA 01844
BOOK 3228 PAGE 262

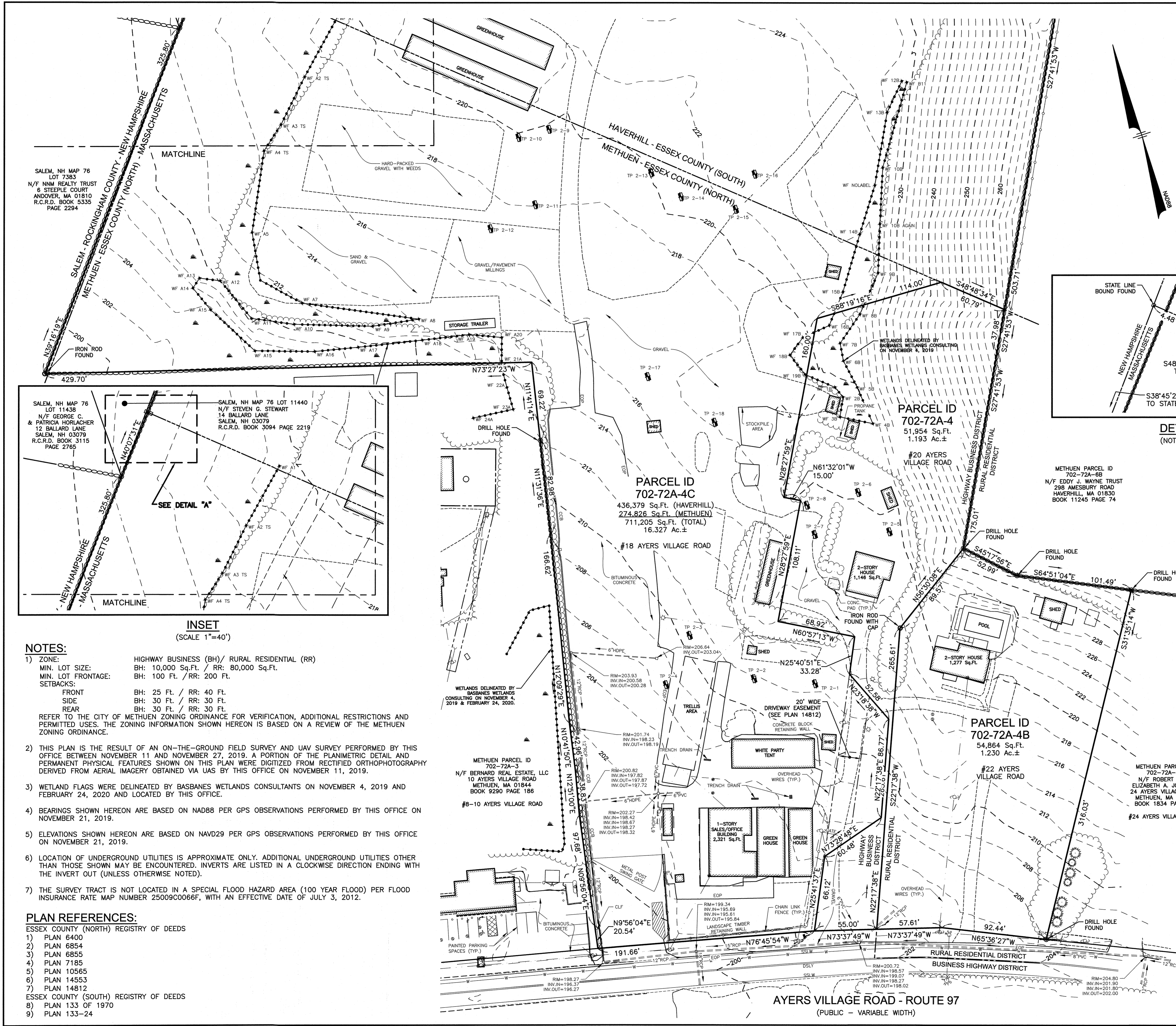


REVISIONS

NO.	REVISION	DATE

OCTOBER 1, 2020
DRAWN/DESIGN BY AKK CHECKED BY DRJ

PARTIAL EXISTING CONDITIONS PLAN
SCALE: 1"=40'
NEX-466019.00
2 OF 12



SALEM, NH MAP 76 LOT 7383
N/F NIM REALTY TRUST
6 STEEPLE COURT
ANDOVER, MA 01810
R.C.R.D. BOOK 5335 PAGE 2294

SALEM, NH MAP 76 LOT 11438
N/F GEORGE C. & PATRICIA HORLACHER
12 BALLARD LANE
SALEM, NH 03079
R.C.R.D. BOOK 3115 PAGE 2765

SALEM, NH MAP 76 LOT 11440
N/F STEVEN G. STEWART
14 BALLARD LANE
SALEM, NH 03079
R.C.R.D. BOOK 3094 PAGE 2219

INSET
(SCALE 1"=40')

- NOTES:**
- 1) ZONE: HIGHWAY BUSINESS (BH)/ RURAL RESIDENTIAL (RR)
MIN. LOT SIZE: BH: 10,000 Sq.Ft. / RR: 80,000 Sq.Ft.
MIN. LOT FRONTAGE: BH: 100 Ft. / RR: 200 Ft.
SETBACKS:
FRONT BH: 25 Ft. / RR: 40 Ft.
SIDE BH: 30 Ft. / RR: 30 Ft.
REAR BH: 30 Ft. / RR: 30 Ft.
REFER TO THE CITY OF METHUEN ZONING ORDINANCE FOR VERIFICATION, ADDITIONAL RESTRICTIONS AND PERMITTED USES. THE ZONING INFORMATION SHOWN HEREON IS BASED ON A REVIEW OF THE METHUEN ZONING ORDINANCE.
 - 2) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY AND UAV SURVEY PERFORMED BY THIS OFFICE BETWEEN NOVEMBER 11 AND NOVEMBER 27, 2019. A PORTION OF THE PLANIMETRIC DETAIL AND PERMANENT PHYSICAL FEATURES SHOWN ON THIS PLAN WERE DIGITIZED FROM RECTIFIED ORTHOPHOTOGRAPHY DERIVED FROM AERIAL IMAGERY OBTAINED VIA UAS BY THIS OFFICE ON NOVEMBER 11, 2019.
 - 3) WETLAND FLAGS WERE DELINEATED BY BASBANES WETLANDS CONSULTANTS ON NOVEMBER 4, 2019 AND FEBRUARY 24, 2020 AND LOCATED BY THIS OFFICE.
 - 4) BEARINGS SHOWN HEREON ARE BASED ON NAD88 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON NOVEMBER 21, 2019.
 - 5) ELEVATIONS SHOWN HEREON ARE BASED ON NAVD29 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON NOVEMBER 21, 2019.
 - 6) LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY. ADDITIONAL UNDERGROUND UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED. INVERTS ARE LISTED IN A CLOCKWISE DIRECTION ENDING WITH THE INVERT OUT (UNLESS OTHERWISE NOTED).
 - 7) THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 25009C0066F, WITH AN EFFECTIVE DATE OF JULY 3, 2012.

- PLAN REFERENCES:**
- ESSEX COUNTY (NORTH) REGISTRY OF DEEDS
- 1) PLAN 6400
 - 2) PLAN 6854
 - 3) PLAN 6855
 - 4) PLAN 7185
 - 5) PLAN 10585
 - 6) PLAN 14553
 - 7) PLAN 14812
- ESSEX COUNTY (SOUTH) REGISTRY OF DEEDS
- 8) PLAN 133 OF 1970
 - 9) PLAN 133-24

LEGEND

--- CCB	CAPE COD BERM
--- DSLY	DOUBLE SOLID LINE YELLOW
--- SSSLW	SINGLE SOLID LINE WHITE
--- CHAIN LINK	CHAIN LINK FENCE
--- 90	CONTOUR ELEVATION
○	TREE
○	UTILITY POLE
○	GUY WIRE
---	OVERHEAD WIRE
---	TREELINE
○	DRAIN MANHOLE
□	CATCH BASIN
○	WATER VALVE
○	WATER SHUT OFF
○	FIRE HYDRANT
○	BOLLARD
---	WETLAND LINE
---	DITCH LINE
---	EASEMENT LINE
---	PROPERTY LINE
---	ABUTTER PROPERTY LINE
---	BUILDING SETBACK
---	ZONE LINE
---	TOWN LINE
---	STATE LINE

0 40 100 160
SCALE: 1"=40'

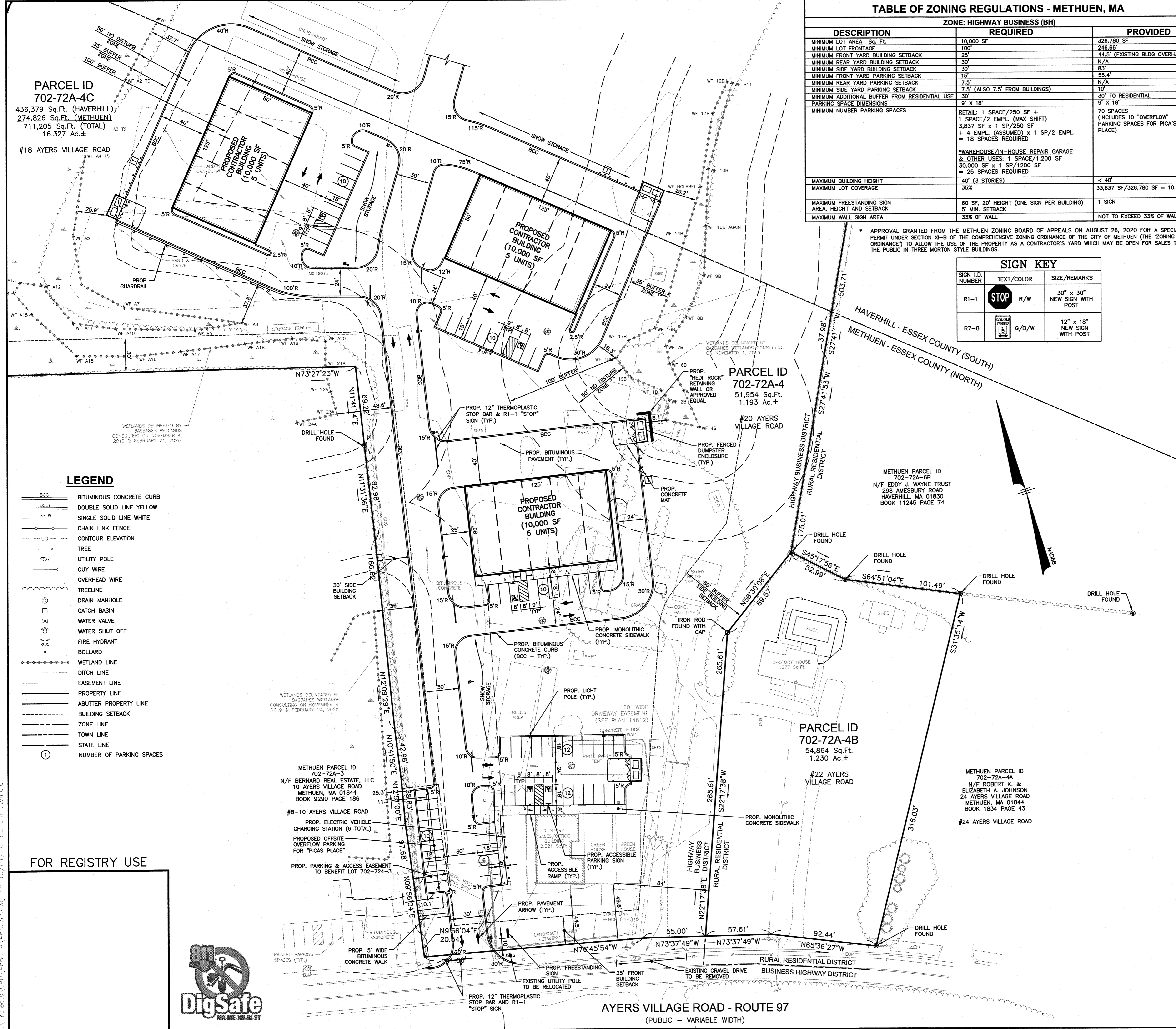


TABLE OF ZONING REGULATIONS - METHUEN, MA

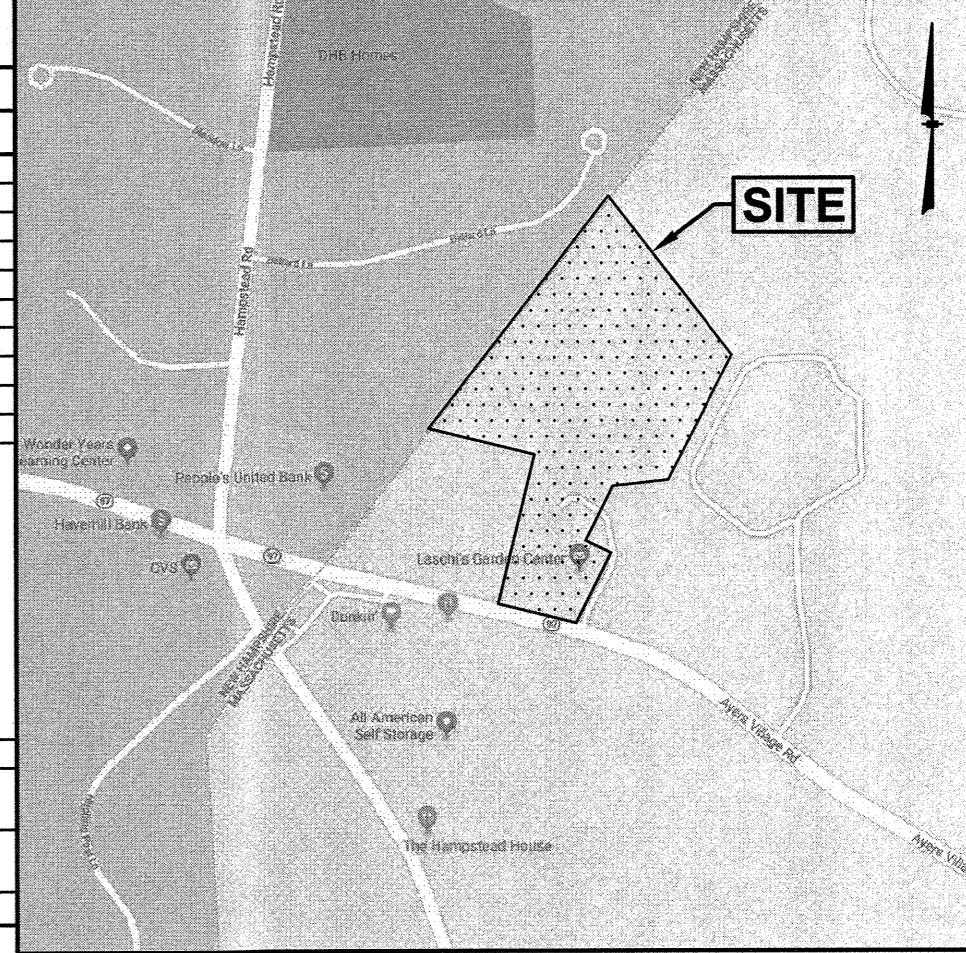
ZONE: HIGHWAY BUSINESS (BH)

DESCRIPTION	REQUIRED	PROVIDED
MINIMUM LOT AREA - Sq. Ft.	10,000 SF	326,780 SF
MINIMUM LOT FRONTAGE	100'	246.66'
MINIMUM FRONT YARD BUILDING SETBACK	25'	44.5' (EXISTING BLDG OVERHANG)
MINIMUM REAR YARD BUILDING SETBACK	30'	N/A
MINIMUM SIDE YARD BUILDING SETBACK	30'	83'
MINIMUM FRONT YARD PARKING SETBACK	15'	55.4'
MINIMUM REAR YARD PARKING SETBACK	7.5'	N/A
MINIMUM SIDE YARD PARKING SETBACK	7.5' (ALSO 7.5' FROM BUILDINGS)	10'
MINIMUM ADDITIONAL BUFFER FROM RESIDENTIAL USE	30'	30' TO RESIDENTIAL
PARKING SPACE DIMENSIONS	9' x 18'	9' x 18'
MINIMUM NUMBER PARKING SPACES	RETAIL: 1 SPACE/250 SF + 1 SPACE/2 EMPL. (MAX SHIFT) 3,837 SF x 1 SP/250 SF + 4 EMPL. (ASSUMED) x 1 SP/2 EMPL. = 18 SPACES REQUIRED *WAREHOUSE/IN-HOUSE REPAIR GARAGE & OTHER USES: 1 SPACE/1,200 SF 30,000 SF x 1 SP/1200 SF = 25 SPACES REQUIRED	70 SPACES (INCLUDES 10 "OVERFLOW" PARKING SPACES FOR PICAS PLACE)
MAXIMUM BUILDING HEIGHT	40' (3 STORIES)	< 40'
MAXIMUM LOT COVERAGE	35%	33,837 SF/326,780 SF = 10.4%
MAXIMUM FREESTANDING SIGN AREA, HEIGHT AND SETBACK	60 SF, 20' HEIGHT (ONE SIGN PER BUILDING) 5' MIN. SETBACK	1 SIGN
MAXIMUM WALL SIGN AREA	33% OF WALL	NOT TO EXCEED 33% OF WALL

* APPROVAL GRANTED FROM THE METHUEN ZONING BOARD OF APPEALS ON AUGUST 26, 2020 FOR A SPECIAL PERMIT UNDER SECTION 9-B OF THE COMPREHENSIVE ZONING ORDINANCE OF THE CITY OF METHUEN (THE ZONING ORDINANCE) TO ALLOW THE USE OF THE PROPERTY AS A CONTRACTOR'S YARD WHICH MAY BE OPEN FOR SALES TO THE PUBLIC IN THREE MORTON STYLE BUILDINGS.

SIGN KEY

SIGN I.D. NUMBER	TEXT/COLOR	SIZE/REMARKS
R1-1	R/W	30" x 30" NEW SIGN WITH POST
R7-8	G/B/W	12" x 18" NEW SIGN WITH POST



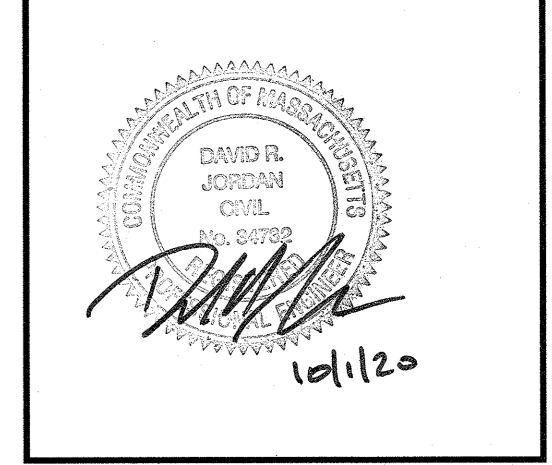
LOCATION MAP (NOT TO SCALE)

- ### NOTES:
- 1) ZONE: HIGHWAY BUSINESS (BH)
 - 2) SETBACKS: FRONT: 25'
SIDE: 30'
REAR: 30'
ADDITIONAL BUFFER ZONE OF 30' IS ADDED TO SETBACK AREA WHEN ADJACENT TO RESIDENTIAL DISTRICT.
 - 3) LOT AREA = 763,159 SF, 18.77 Ac.± (COMBINED LOTS 4 & 4C)
326,780 SF (METHUEN)
436,379 SF (HAVERHILL)
 - 4) EXISTING USE: TWO 2-STORY RESIDENTIAL HOMES & GARDEN CENTER
PROPOSED USE: CONTRACTOR BUILDINGS AND RETAIL STORE
 - 5) ALL BUILDINGS AND SITE CONSTRUCTION SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AS REVISED IN 2010, OR LATEST REVISION.
 - 6) THE LOCATIONS OF EXISTING SUBSURFACE UTILITIES SHOWN ON THIS PLAN WERE COMPILED FROM AVAILABLE RECORD DRAWINGS AND ARE NOT WARRANTED TO BE CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SUBSURFACE UTILITIES PRIOR TO PERFORMING ANY WORK.
 - 7) WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR.
 - 8) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 1-888-344-7233 PRIOR TO ANY EXCAVATION.
 - 9) ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF METHUEN AND THE STATE OF MASSACHUSETTS.
 - 10) THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 250909C0066F, WITH AN EFFECTIVE DATE OF JULY 3, 2012.
 - 11) ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND THE STANDARD CONSTRUCTION DRAWINGS AS SUPPLIED BY THE DEVELOPER.
 - 12) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY GREEMAN PEDERSEN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR AND/OR ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND/OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
 - 13) ALL SNOW SHALL BE STORED IN THE AREA(S) DEPICTED ON THIS PLAN AS SNOW STORAGE AREAS. IN THE EVENT THAT THE AREA(S) APPROVED FOR SNOW STORAGE BECOME FULL, THE OWNER SHALL REASONABLY REMOVE EXCESS SNOW FROM THE SITE, AND SHALL NOT ALLOW SNOW TO BE STORED WITHIN PARKING LOTS OR TRAVEL AISLES.
 - 14) REFER TO DETAIL SHEETS FOR ALL SITE DEVELOPMENT DETAILS AND INFORMATION.
 - 15) EXISTING IMPERVIOUS COVERAGE = 84,924 SF (10.4%)
PROPOSED IMPERVIOUS COVERAGE = 133,631 SF (16.3%)
 - 16) A SIGN PERMIT SHALL BE OBTAINED PRIOR TO INSTALLATION.

GPI Engineering Design Planning Construction Management
603.883.0720 GPINET.COM
Greenman-Pedersen, Inc.
44 Stiles Road, Suite One
Salem, NH 03079

PREPARED FOR
SONNY VALLEY, LLC
2 WATERFORD CIRCLE
METHUEN, MA 01844

PARCEL ID 702-72A-4 & 702-72A-4C
18-20 AYERS VILLAGE ROAD
METHUEN, MA



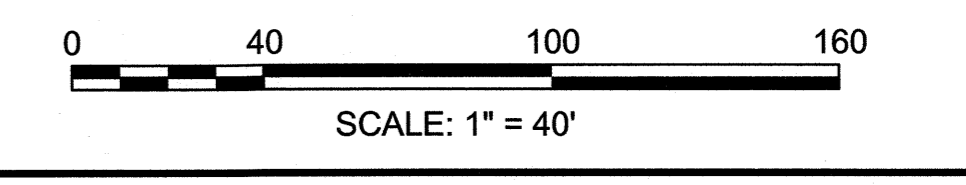
REVISIONS

NO.	REVISION	DATE

OWNERS OF RECORD:
PARCEL ID 702-72A-4 & 702-72A-4C
LASCHI BROS INC.
20 AYERS VILLAGE ROAD
METHUEN, MA 01844
BOOK 3228 PAGE 262

OCTOBER 1, 2020
DRAWN/DESIGN BY: SJB/CMT
CHECKED BY: FCM

SITE PLAN
SCALE: 1"=40'
NEX-466019.00
4 OF 12



APPROVED BY THE CITY OF METHUEN COMMUNITY DEVELOPMENT BOARD

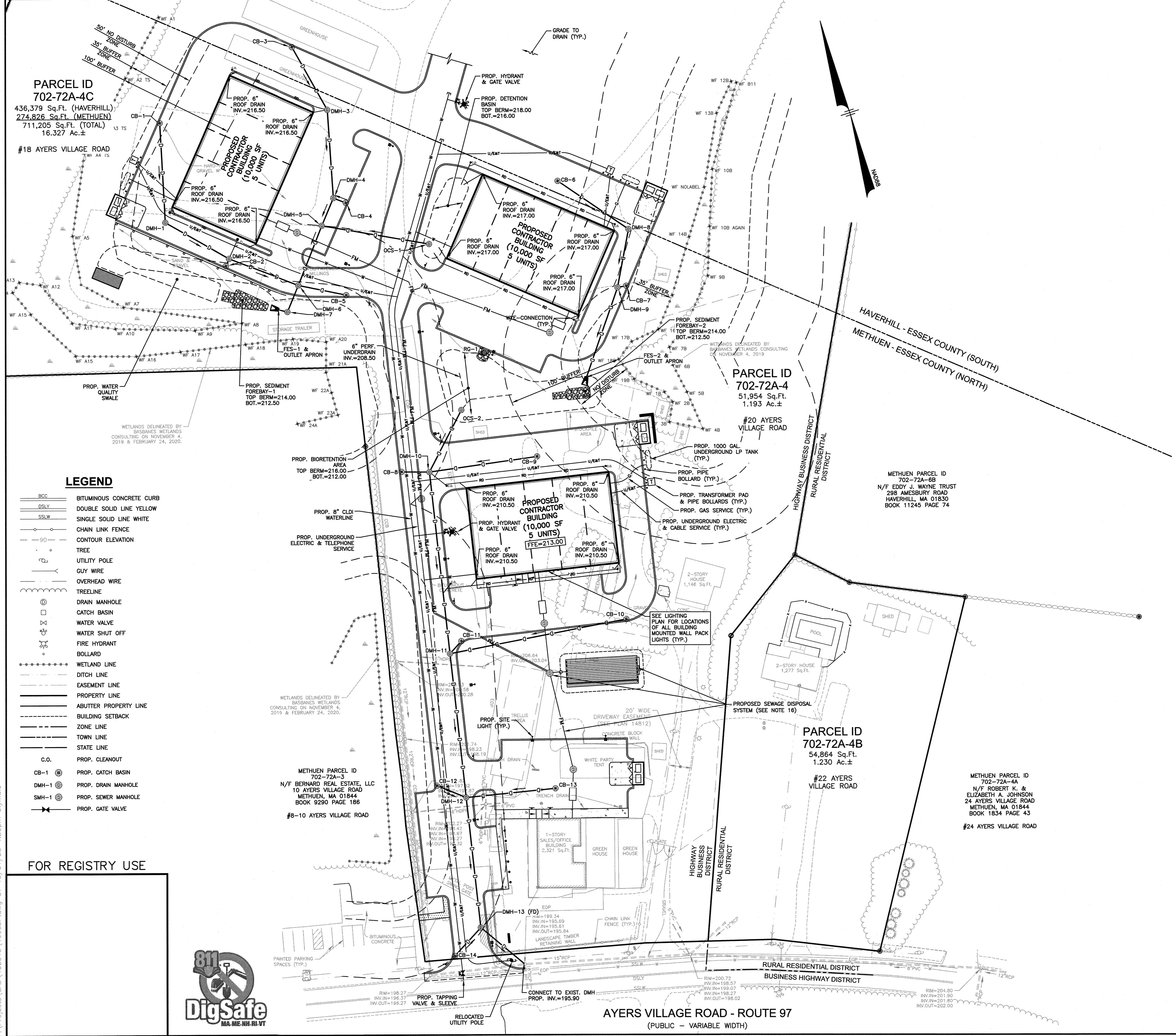
DATE	FILED	HEARING

- ### LEGEND
- BCC BITUMINOUS CONCRETE CURB
 - DSLY DOUBLE SOLID LINE YELLOW
 - SSLW SINGLE SOLID LINE WHITE
 - CHAIN LINK FENCE
 - 90 CONTOUR ELEVATION
 - TREE
 - UTILITY POLE
 - GUY WIRE
 - OVERHEAD WIRE
 - TREELINE
 - DRAIN MANHOLE
 - CATCH BASIN
 - WATER VALVE
 - WATER SHUT OFF
 - FIRE HYDRANT
 - BOLLARD
 - WETLAND LINE
 - DITCH LINE
 - EASEMENT LINE
 - PROPERTY LINE
 - ABUTTER PROPERTY LINE
 - BUILDING SETBACK
 - ZONE LINE
 - TOWN LINE
 - STATE LINE
 - NUMBER OF PARKING SPACES

FOR REGISTRY USE



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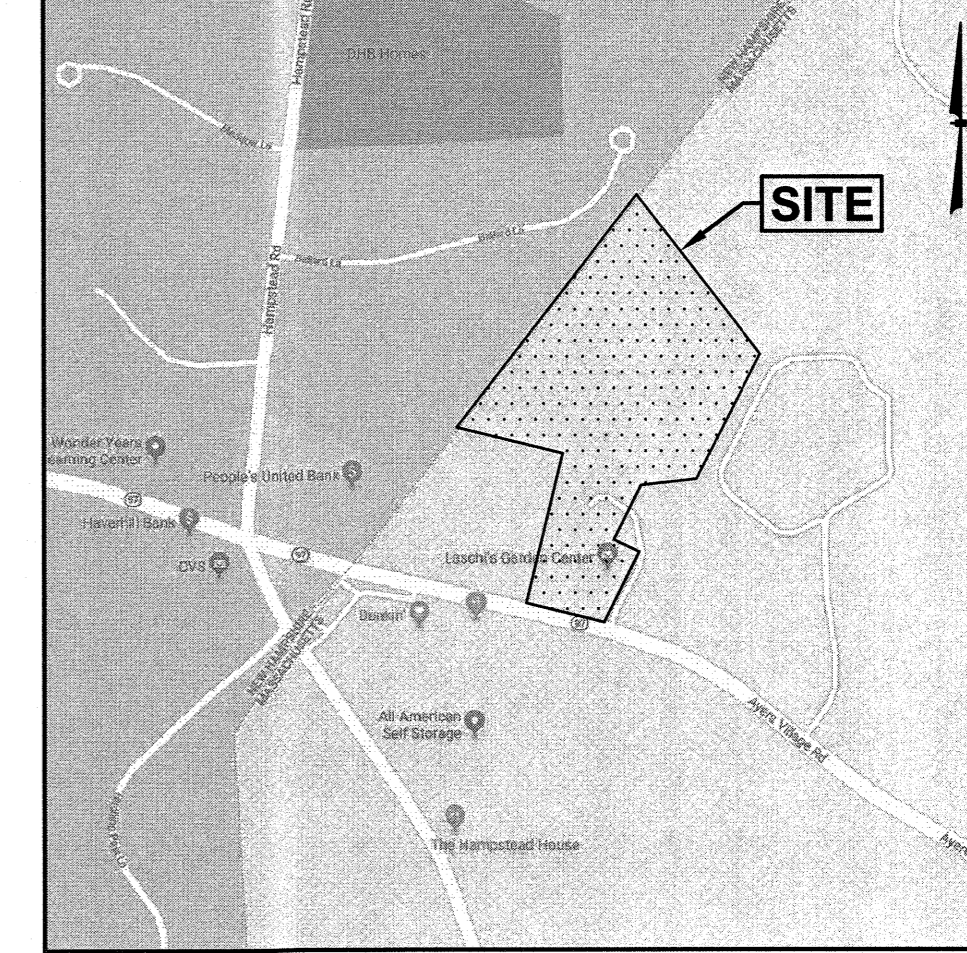
PARCEL ID
702-72A-4C
436,379 Sq.Ft. (HAVERHILL)
274,826 Sq.Ft. (METHUEN)
711,205 Sq.Ft. (TOTAL)
16.327 Ac.±

PARCEL ID
702-72A-4
51,954 Sq.Ft.
1.193 Ac.±

PARCEL ID
702-72A-4B
54,864 Sq.Ft.
1.230 Ac.±

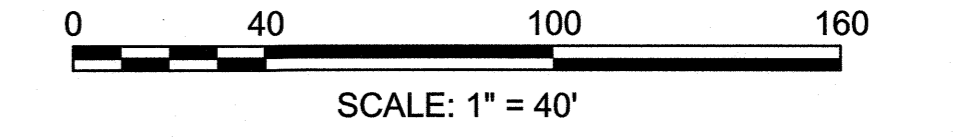
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 - ZONE LINE
 - TOWN LINE
 - STATE LINE
 - C.O. PROP. CLEANOUT
 - CB-1 PROP. CATCH BASIN
 - DMH-1 PROP. DRAIN MANHOLE
 - SMH-1 PROP. SEWER MANHOLE
 - PROP. GATE VALVE

FOR REGISTRY USE



LOCATION MAP
(NOT TO SCALE)

- NOTES:**
- ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE FIELD ENGINEER PRIOR TO INSTALLATION.
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES REGARDING UTILITY CONNECTIONS AND LOADING REQUIREMENTS. ALL UTILITY CONNECTIONS TO BE UNDERGROUND.
 - THE CONTRACTOR SHALL CALL DIGSAFE (811) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
 - ALL SANITARY SEWER WORK SHALL MEET CITY OF METHUEN SPECIFICATIONS.
 - ALL SANITARY SEWER PIPE SHALL BE PVC (SDR-35), UNLESS OTHERWISE NOTED. THE BUILDING SEWER THROUGH THE FOUNDATION AND UP TO A PERPENDICULAR DISTANCE OF 10 FEET FROM THE FOUNDATION SHALL BE CONSTRUCTED OF CAST IRON.
 - ALL SANITARY SEWER PIPE CONNECTIONS AT PRECAST STRUCTURES AND SHALL BE WATER-TIGHT BY USE OF A "QUIKSEAL" CONNECTOR OR APPROVED EQUAL.
 - ALL WATER SERVICE CONNECTIONS SHALL MEET METHUEN WATER DISTRICT SPECIFICATIONS.
 - ALL WATER PIPE SHALL BE COPPER, UNLESS OTHERWISE NOTED ON PLAN.
 - ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE LOCAL AUTHORITIES AND THE DEVELOPER PRIOR TO INSTALLATION.
 - ALL ELECTRIC, TELEPHONE AND CABLE TV LINES ARE TO BE UNDERGROUND AND INSTALLED IN CONFORMANCE WITH APPLICABLE UTILITY CO. SPECIFICATIONS.
 - THE SITE IS SERVICED BY MUNICIPAL WATER PROVIDED BY THE CITY OF METHUEN. THE CONTRACTOR IS TO COORDINATE WITH THE DISTRICT REGARDING WATER PRESSURE AT SERVICE. THE CONTRACTOR IS TO VERIFY IF PRESSURE REDUCING VALVE IS REQUIRED.
 - ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND LOCAL DPW.
 - ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO METHUEN DPW (AS APPLICABLE), SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.
 - SEE GRADING & DRAINAGE PLAN FOR DETAILED DRAINAGE INFORMATION.
 - SEE SEWAGE DISPOSAL PLAN FOR FINAL LOCATION AND INFORMATION ON SEWER COMPONENTS.

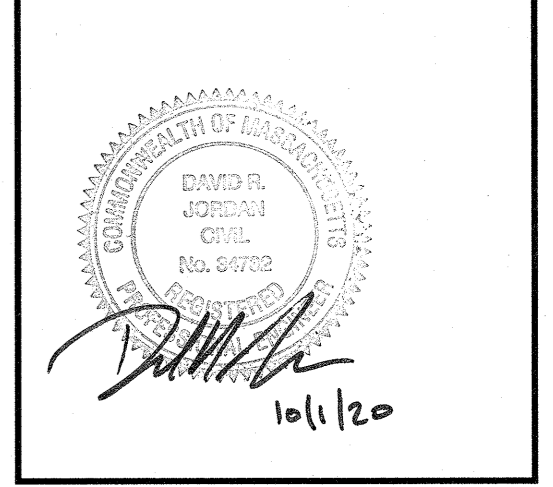


APPROVED BY THE CITY OF METHUEN COMMUNITY DEVELOPMENT BOARD	
_____	DATE _____
_____	FILED _____
_____	HEARING _____

GPI Engineering Design Planning Construction Management
803.893.0720 GPINET.COM
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REVISIONS		
NO.	REVISION	DATE

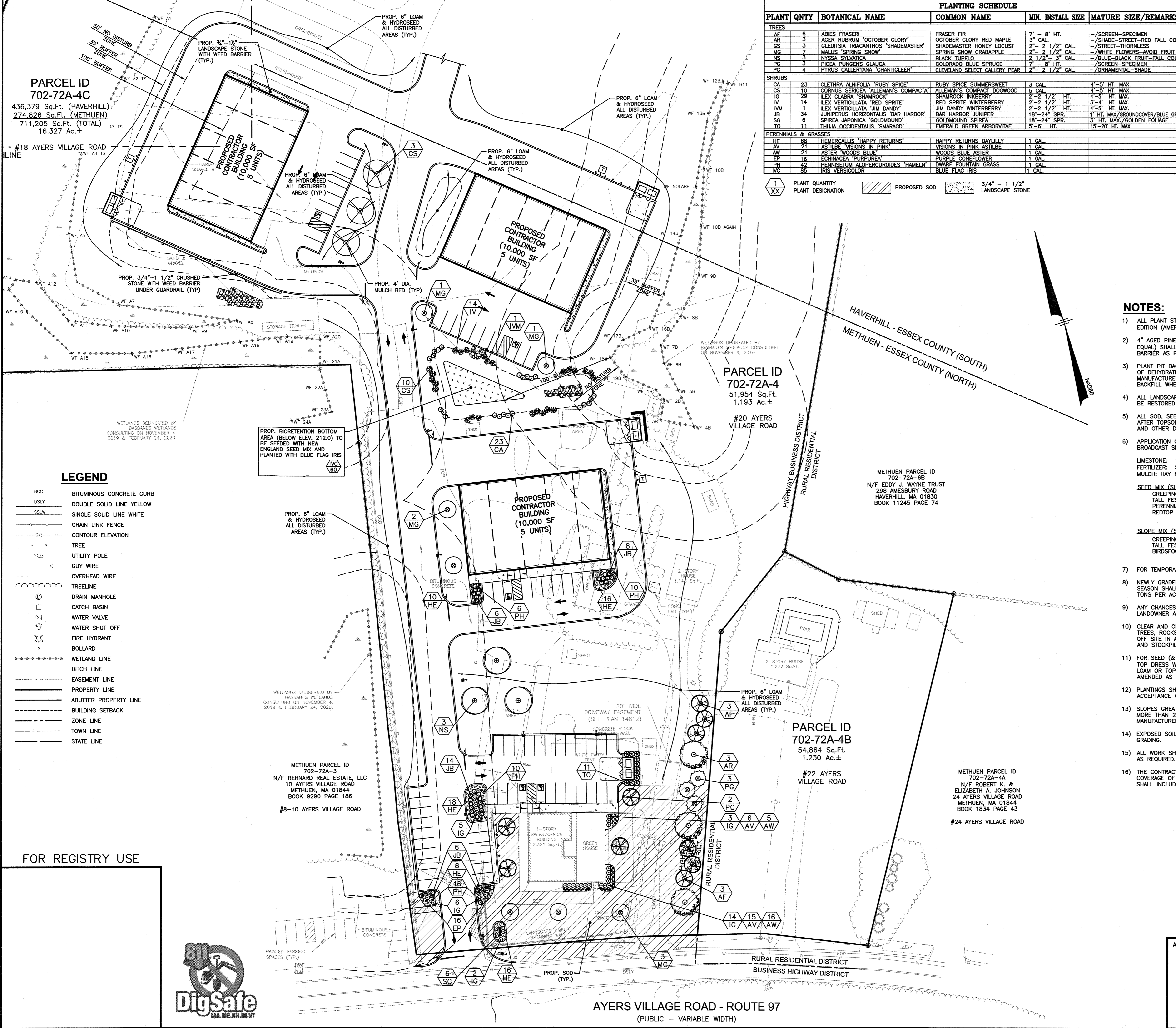
UTILITY PLAN

SCALE: 1"=40'

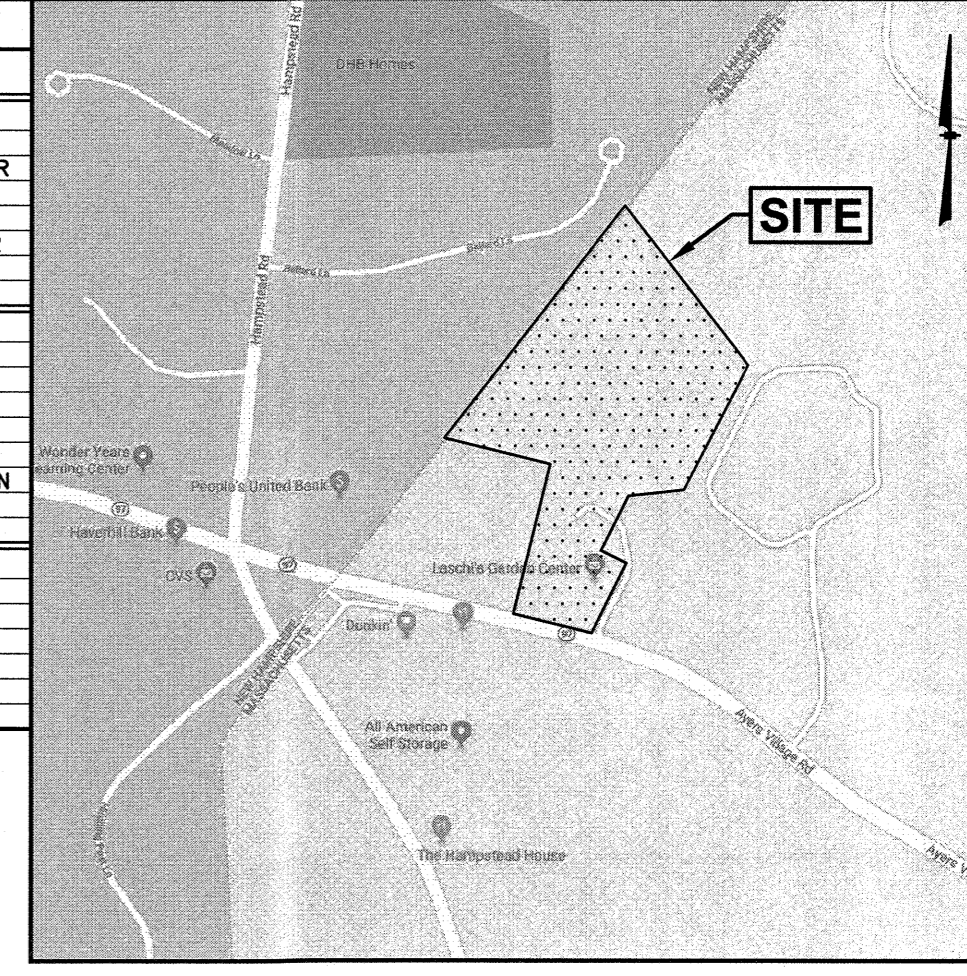
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PLANTING SCHEDULE					
PLANT	QNTY	BOTANICAL NAME	COMMON NAME	MIN. INSTALL SIZE	MATURE SIZE/REMARKS
TREES					
AF	6	ABIES FRASERI	FRASER FIR	7' - 8' HT.	-/SCREEN-SPECIMEN
AR	3	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3" CAL.	-/SHADE-STREET-RED FALL COLOR
GS	3	GLEDITSIA TRIACANTHOS 'SHADEMASTER'	SHADEMASTER HONEY LOCUST	2" - 2 1/2" CAL.	-/STREET-THORNLESS
MG	7	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2" - 2 1/2" CAL.	-/WHITE FLOWERS-AVOID FRUIT
NS	3	NYSSA SYLVATICA	BLACK TUPELO	2 1/2" - 3" CAL.	-/BLUE-BLACK FRUIT-FALL COLOR
PG	3	PICEA PLUNGENS GLAUCO	COLORADO BLUE SPRUCE	7' - 8' HT.	-/SCREEN-SPECIMEN
PC	4	PYRUS CALLERYANA 'CHANTICLEER'	CLEVELAND SELECT CALLERY PEAR	2" - 2 1/2" CAL.	-/ORNAMENTAL-SHADE
SHRUBS					
CA	23	CLETHRA ALNIFOLIA 'RUBY SPICE'	RUBY SPICE SUMMERSWEET	3 GAL.	4'-5' HT. MAX.
CS	10	CORNUS SERICEA 'ALLEMAN'S COMPACTA'	ALLEMAN'S COMPACT DOGWOOD	5 GAL.	4'-5' HT. MAX.
IG	29	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	2" - 2 1/2" HT.	4'-5' HT. MAX.
IV	14	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	2" - 2 1/2" HT.	3'-4' HT. MAX.
JM	1	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	2" - 2 1/2" HT.	4'-5' HT. MAX.
JB	34	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR JUNIPER	18"-24" SPR.	1' HT. MAX./GROUNDCOVER/BLUE GREEN
SC	6	SPIREA JAPONICA 'GOLDMOUND'	GOLDMOUND SPIREA	18"-24" SPR.	3' HT. MAX./GOLDEN FOLIAGE
TO	11	TRILIUM OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	5"-6" HT.	15"-20" HT. MAX.
PERENNIALS & GRASSES					
HE	68	HEMERCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL.	
AV	21	ASTILBE 'VISIONS IN PINK'	VISIONS IN PINK ASTILBE	1 GAL.	
AW	21	ASTER 'WOODS BLUE'	WOODS BLUE ASTER	1 GAL.	
EP	16	ECHINACEA 'PURPUREA'	PURPLE CONFLOWER	1 GAL.	
PH	42	PENNISETUM ALOPERCUROIDES 'HAMELI'	DWARF FOUNTAIN GRASS	1 GAL.	
IVC	85	IRIS VERSICOLOR	BLUE FLAG IRIS	1 GAL.	

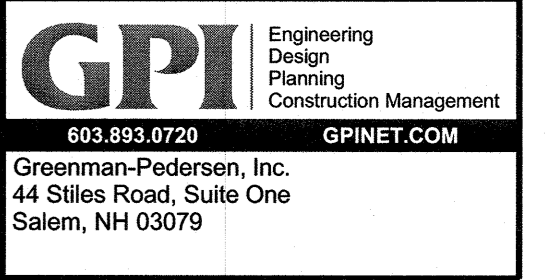


NOTES:

- ALL PLANT STOCK SHALL CONFORM TO ANSI Z260.1 - NURSERY STOCK, LATEST EDITION (AMERICAN ASSOCIATION OF NURSERYMEN, INC.).
- 4" AGED PINEBARK MULCH AND A WEED BARRIER (TY-PAR FABRIC OR APPROVED EQUAL) SHALL BE APPLIED TO ALL SHRUB AND GROUNDCOVER BEDS. INSTALL WEED BARRIER AS PER MANUFACTURERS RECOMMENDATIONS.
- PLANT PIT BACKFILL SHALL BE MIXED AT A RATE OF 7 PARTS OF TOPSOIL TO 2 PARTS OF DEHYDRATED COW MANURE. SLOW RELEASE FERTILIZER SHALL BE APPLIED AS PER MANUFACTURERS RECOMMENDATIONS. USE EXISTING ON-SITE TOPSOIL AS PART OF BACKFILL WHEN AVAILABLE.
- ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUNDCOVER SHALL BE RESTORED WITH SEED OR SOD AS INDICATED ON PLANS.
- ALL SOD, SEED, SHRUB AND TREE AREAS SHALL RECEIVE 6" PH CORRECTED TOPSOIL. AFTER TOPSOIL IS SPREAD EVENLY OVER ENTIRE AREA, ALL CLODS, LUMPS, STONES AND OTHER DELETERIOUS MATERIAL SHALL BE RAKED UP AND REMOVED.
- APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:
 LIMESTONE: 100 LBS./1,000 SQUARE FEET.
 FERTILIZER: 500 LBS./ACRE OF 10-20-20 OR 1000 LBS./ACRE OF 5-10-10.
 MULCH: HAY MULCH APPROXIMATELY 3 TONS/ACRE

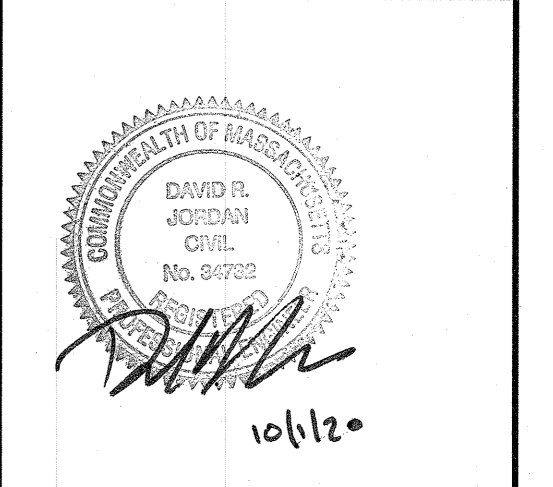
SEED MIX (SLOPES LESS THAN 4:1)	LBS./ACRE
CREeping RED FESCUE	20
TALL FESCUE	15
PERENNIAL RYEGRASS	5
REDTOP	42

SLOPE MIX (SLOPES GREATER THAN 4:1)	LBS./ACRE
CREeping RED FESCUE	20
TALL FESCUE	20
BIRDSPOT TREEFOIL	48
- FOR TEMPORARY EROSION CONTROL NOTES, SEE DETAIL SHEET.
- NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE STRAW MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 3 TONS PER ACRE.
- ANY CHANGES IN PLANT LOCATIONS OR TYPES SHALL BE APPROVED BY THE DEVELOPER, LANDOWNER AND TOWN PRIOR TO INSTALLATION.
- CLEAR AND GRUB (TO LIMITS REQUIRED ON GRADING PLAN) TO REMOVE VEGETATION, TREES, ROCKS, DEBRIS, ROOTS, ETC. STUMPS SHALL BE REMOVED AND DISPOSED OF OFF SITE IN ACCORDANCE WITH STATE REGULATIONS. AFTER CLEARING, ROTOTILL, STRIP AND STOCKPILE ALL ON-SITE TOPSOIL FOR REUSE TO THE MAXIMUM EXTENT POSSIBLE.
- FOR SEED (& SOD) AREAS USE EXISTING TOPSOIL, IF AVAILABLE, FOR A 4" DEPTH AND TOP DRESS WITH 2" OF SCREENED TOPSOIL, UNLESS OTHERWISE NOTED ON PLAN. ALL LOAM OR TOPSOIL IMPORTED OR RE-UTILIZED FROM ON SITE SHALL BE TESTED AND AMENDED AS DIRECTED BY DEVELOPER TO MEET MINIMUM REQUIREMENTS.
- PLANTINGS SHALL BE GUARANTEED BY THE CONTRACTOR FOR ONE YEAR AFTER WRITTEN ACCEPTANCE OF THE DEVELOPER.
- SLOPES GREATER THAN 3:1 SHALL RECEIVE JUTE MESH OR WOOD EXCELSIOR MATTING NO MORE THAN 24 HOURS AFTER SEEDING. MATTING SHALL BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
- EXPOSED SOILS SHALL BE SEEDED OR HAY MULCHED WITHIN 72 HOURS OF FINAL GRADING.
- ALL WORK SHALL BE COORDINATED WITH APPLICABLE EPA NPDES/SWPPP PERMIT WORK AS REQUIRED.
- THE CONTRACTOR SHALL INSTALL AN IRRIGATION SYSTEM TO PROVIDE COMPLETE COVERAGE OF ALL SEED AREAS AND SHRUB BEDS WITHIN THE LEASE AREA. THE SYSTEM SHALL INCLUDE A TIMER AND SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES.



PREPARED FOR
SONNY VALLEY, LLC
 2 WATERFORD CIRCLE
 METHUEN, MA 01844

PARCEL ID 702-72A-4 & 702-72A-4C
18-20 AYERS VILLAGE ROAD
METHUEN, MA



REVISIONS		
NO.	REVISION	DATE

OCTOBER 1, 2020
 DRAWN/DESIGN BY: SJB/CMT
 CHECKED BY: FCM

LANDSCAPE PLAN
 SCALE: 1"=40'
 NEX-466019.00
 8 OF 12

APPROVED BY THE CITY OF METHUEN COMMUNITY DEVELOPMENT BOARD

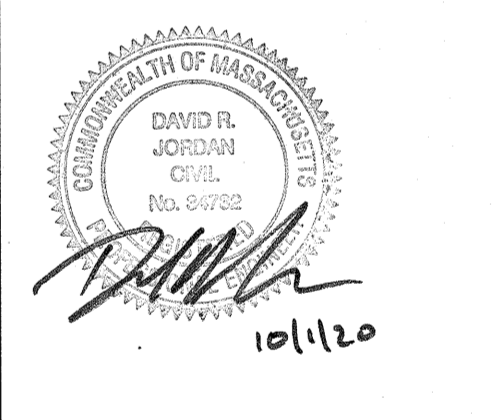
	DATE
	FILED
	HEARING

- LEGEND**
- BCC BITUMINOUS CONCRETE CURB
 - BSLY DOUBLE SOLID LINE YELLOW
 - SSW SINGLE SOLID LINE WHITE
 - CLF CHAIN LINK FENCE
 - CE CONTOUR ELEVATION
 - TREE
 - UP UTILITY POLE
 - GW GUY WIRE
 - OW OVERHEAD WIRE
 - TL TREELINE
 - DM DRAIN MANHOLE
 - CB CATCH BASIN
 - WV WATER VALVE
 - WS WATER SHUT OFF
 - FH FIRE HYDRANT
 - BOLLARD
 - WL WETLAND LINE
 - DL DITCH LINE
 - EL EASEMENT LINE
 - PL PROPERTY LINE
 - APL ABUTTER PROPERTY LINE
 - BS BUILDING SETBACK
 - ZL ZONE LINE
 - TL TOWN LINE
 - SL STATE LINE

FOR REGISTRY USE



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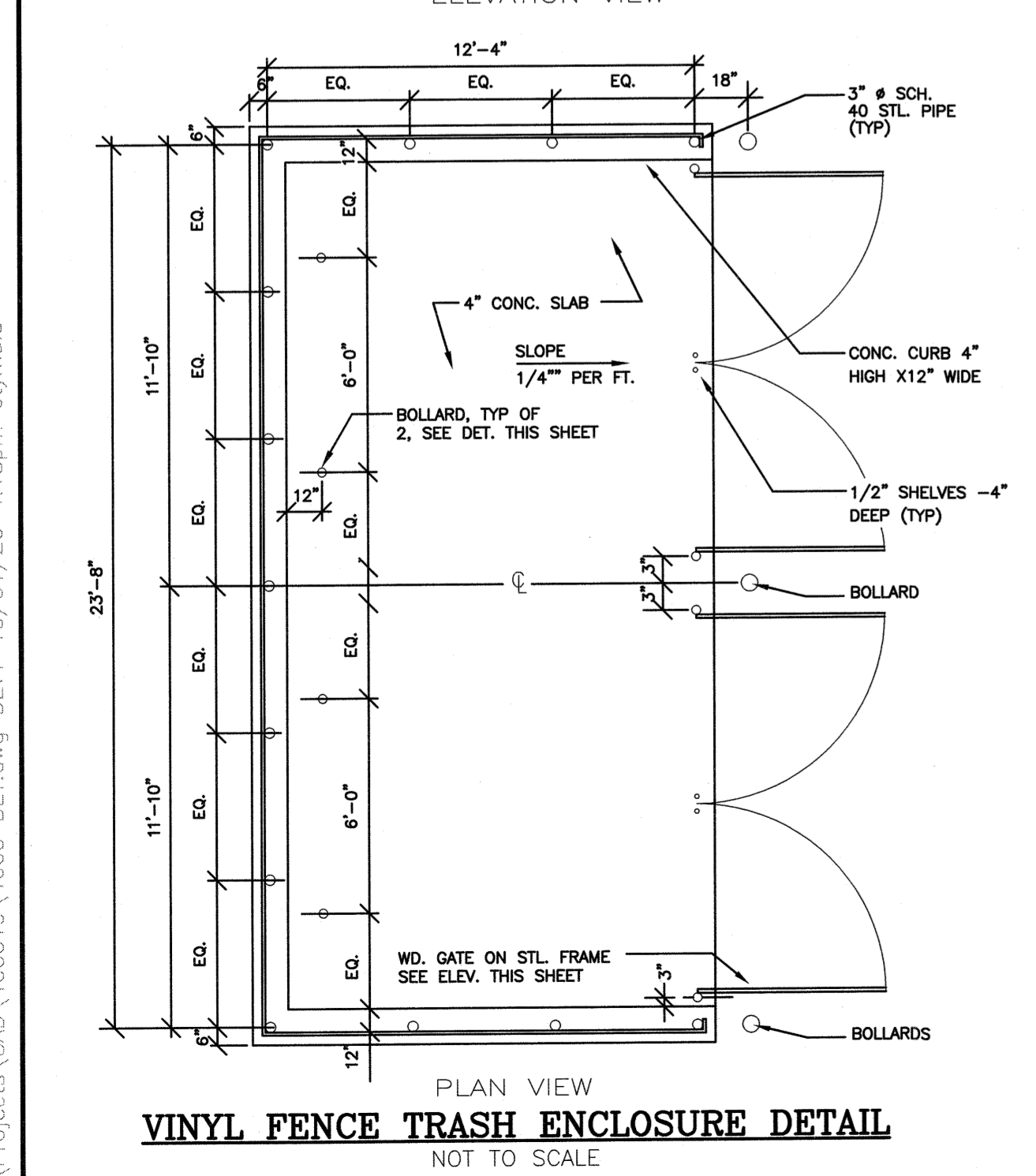
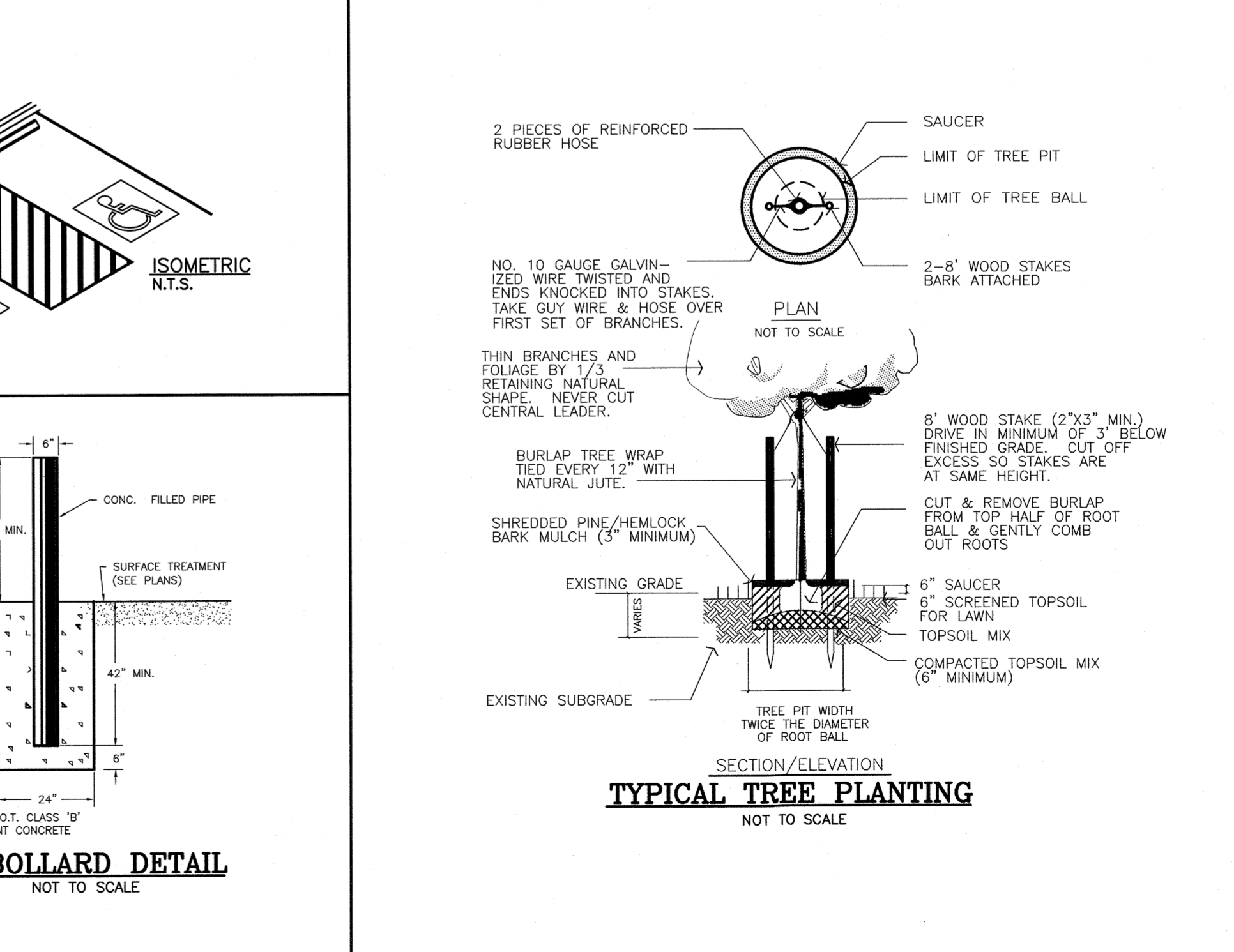
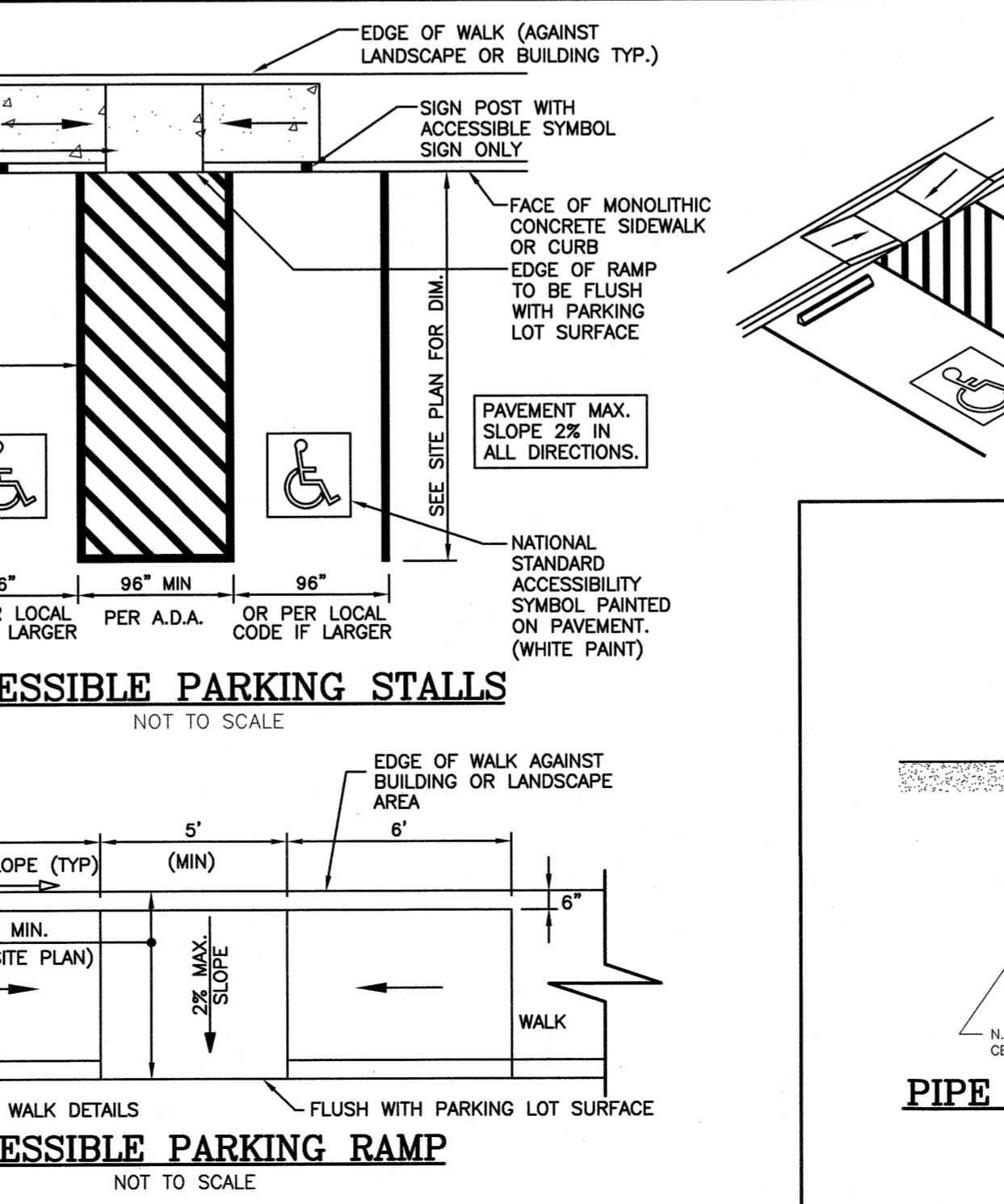
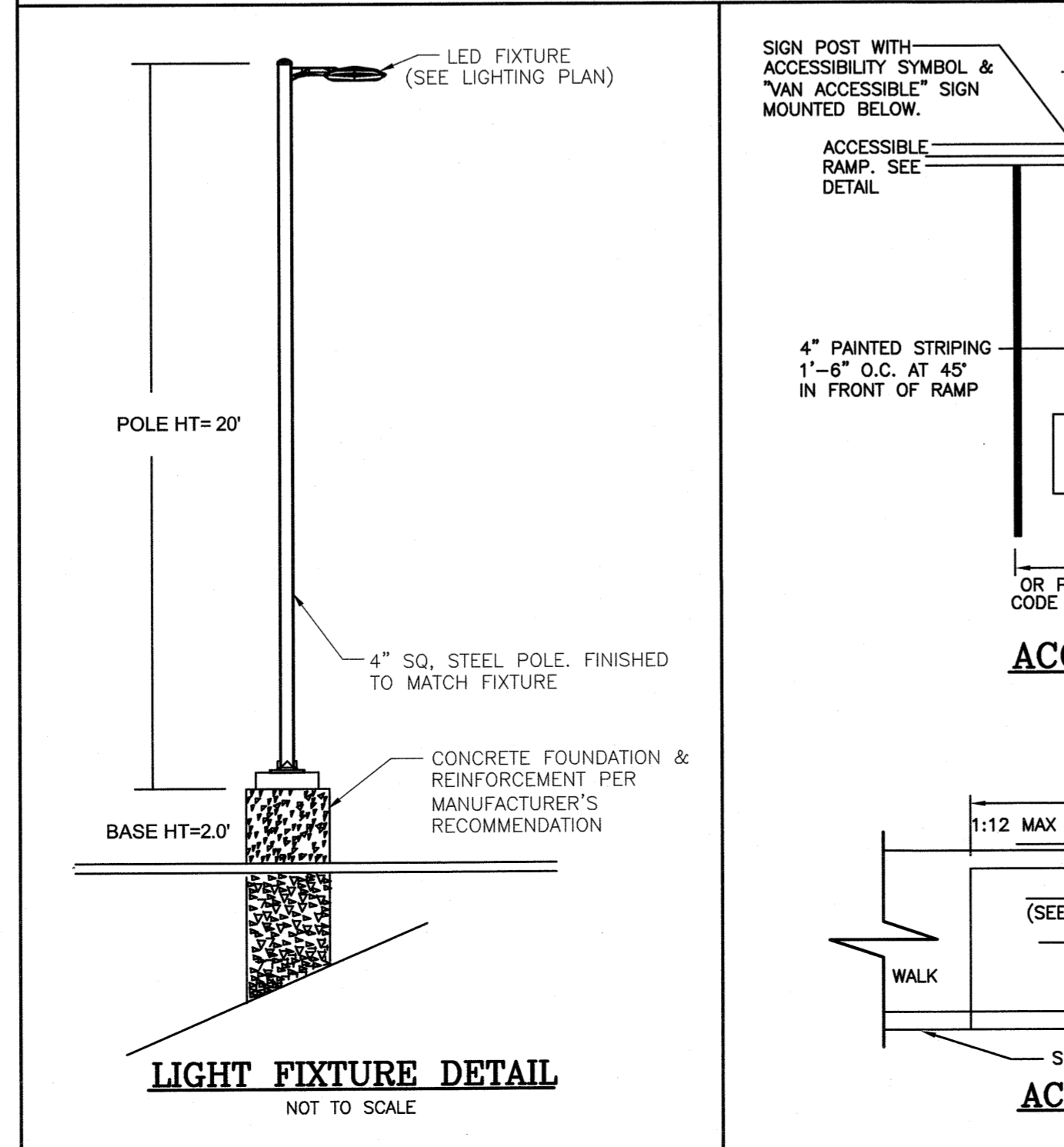
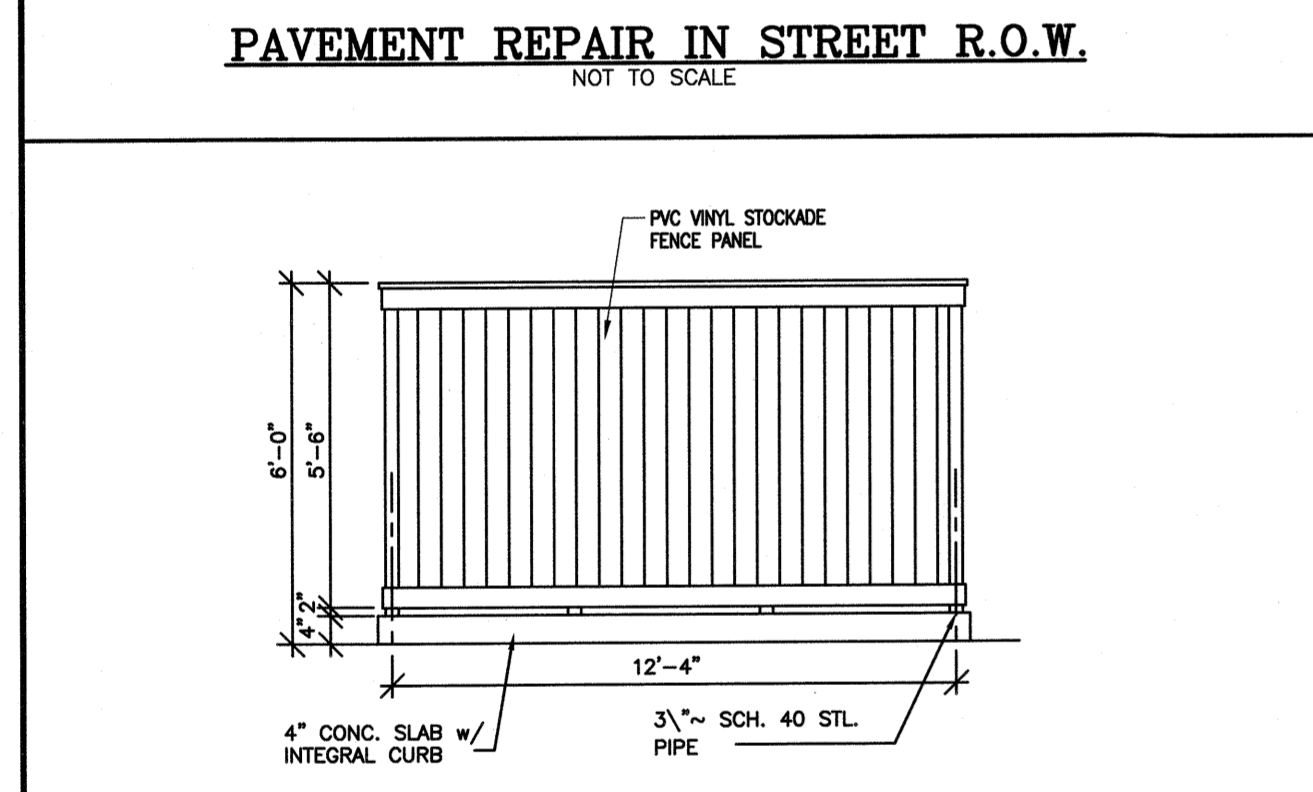
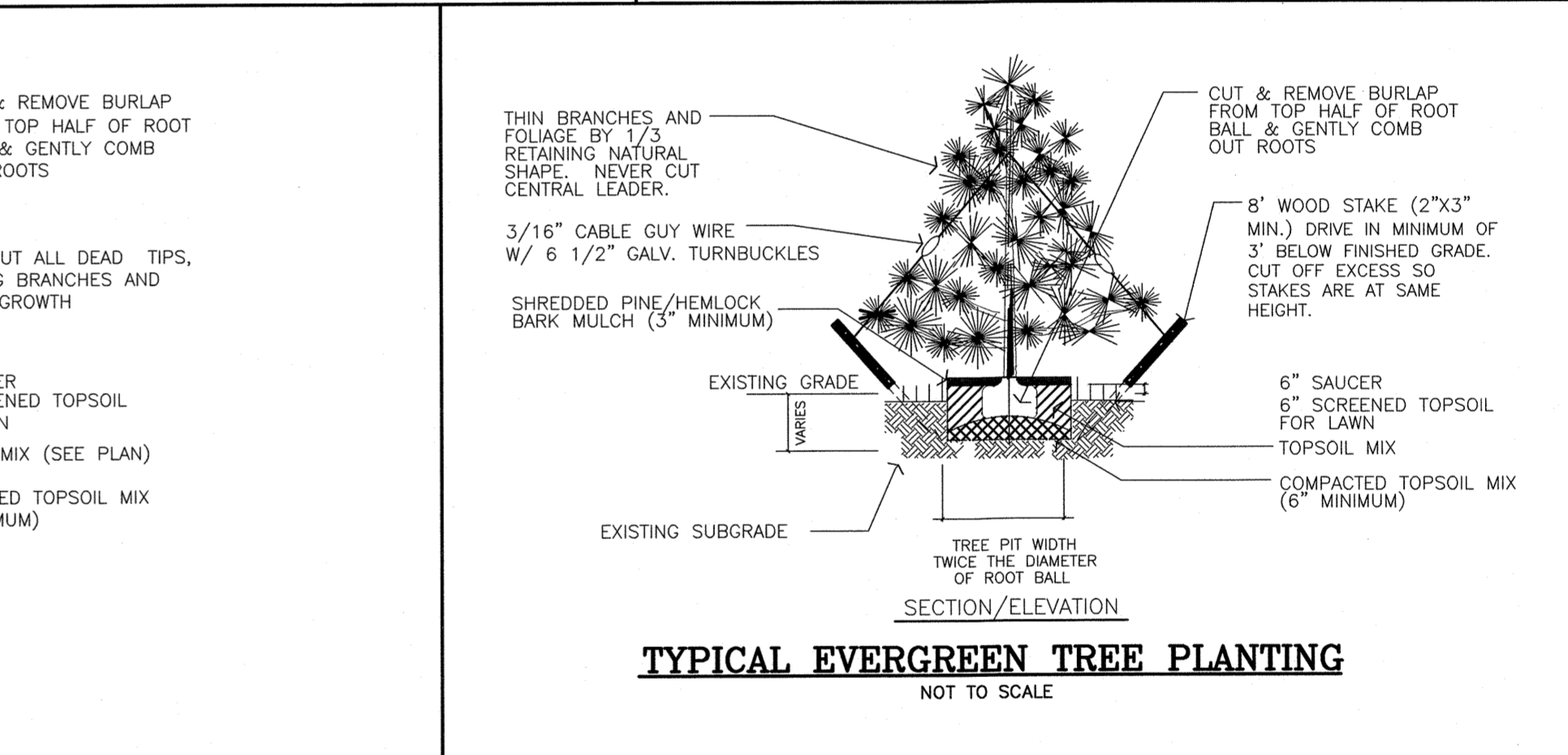
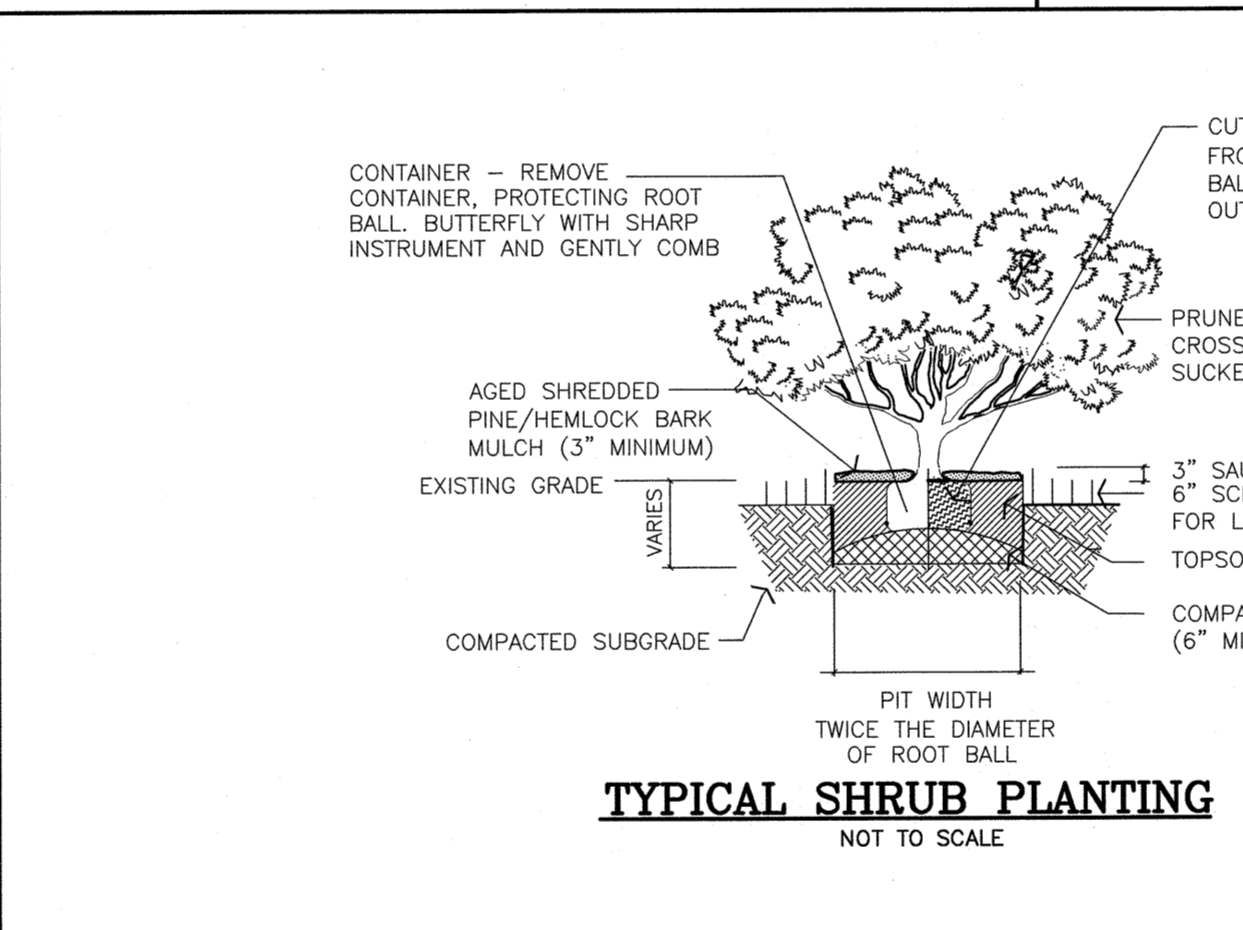
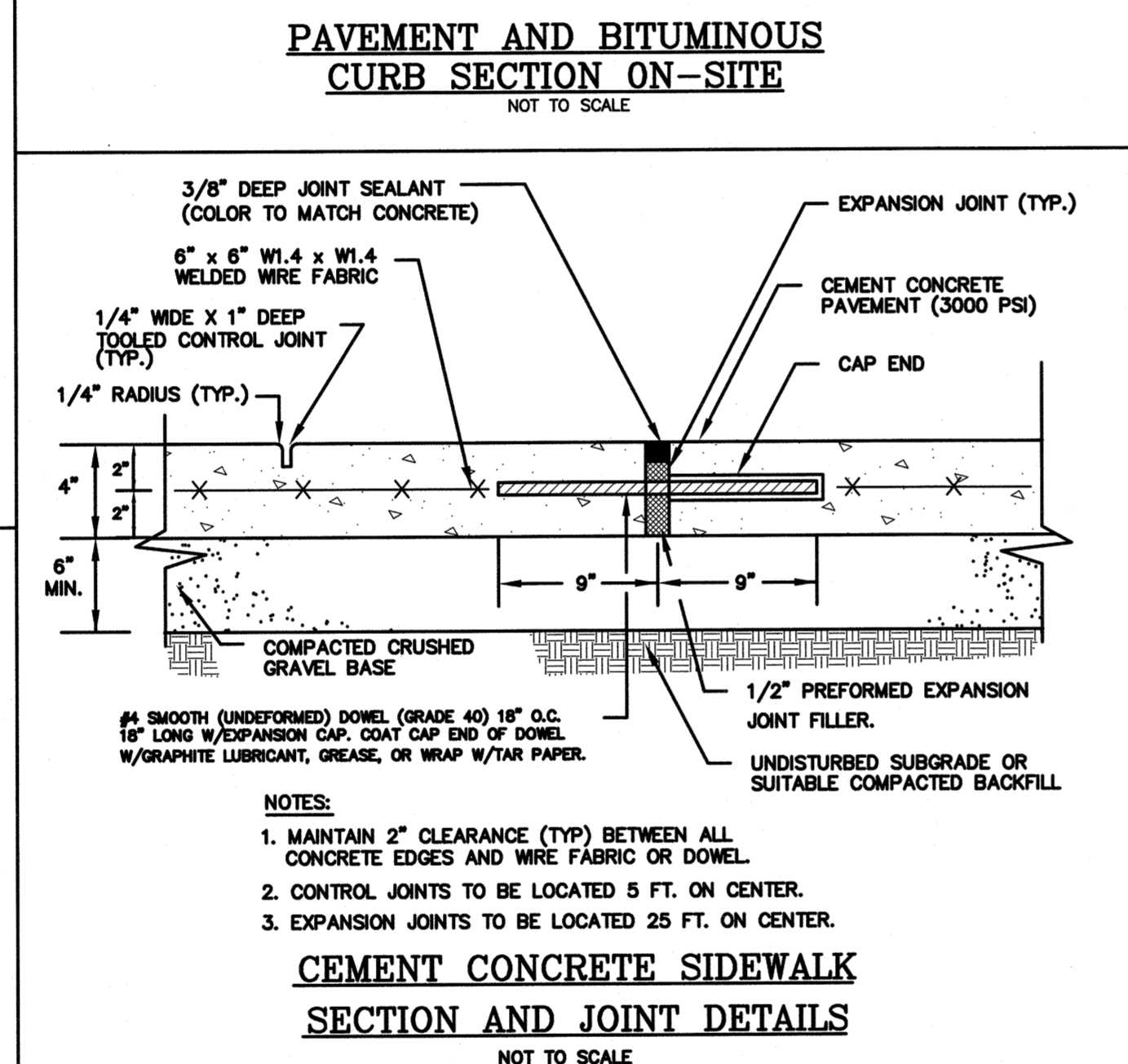
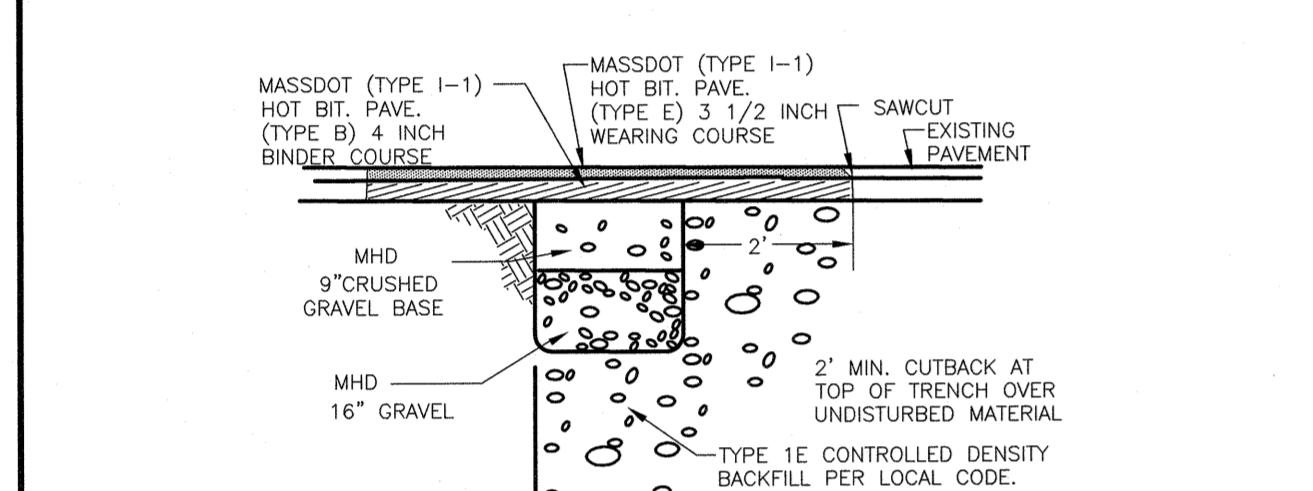
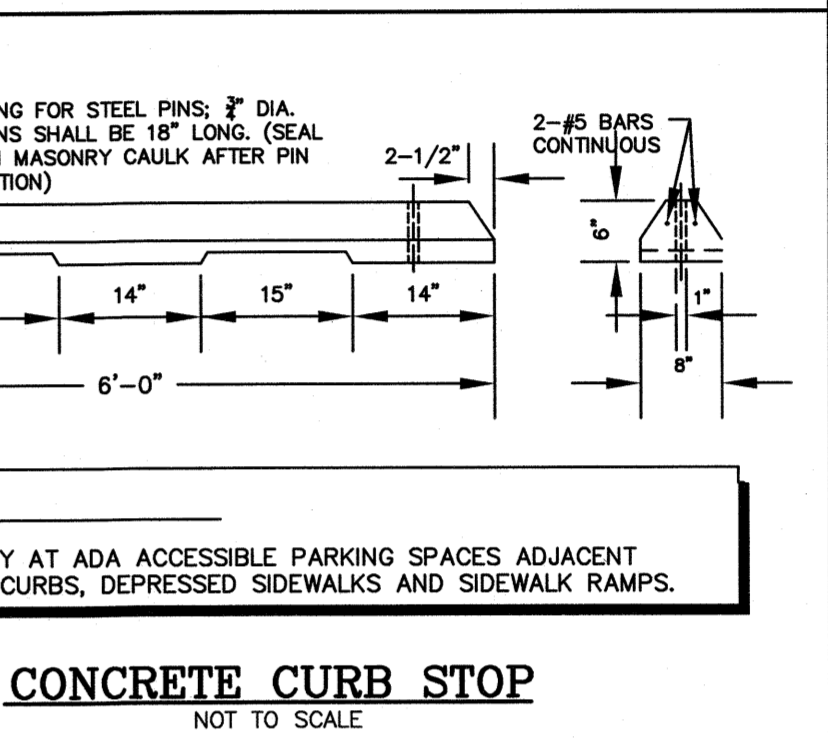
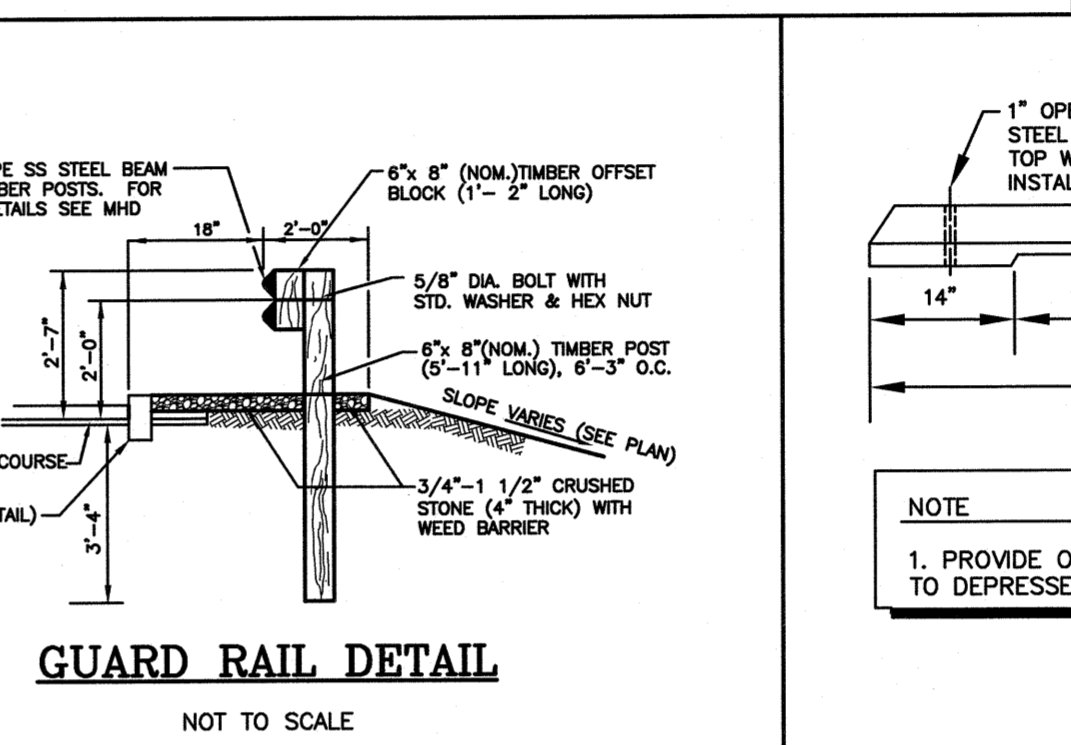
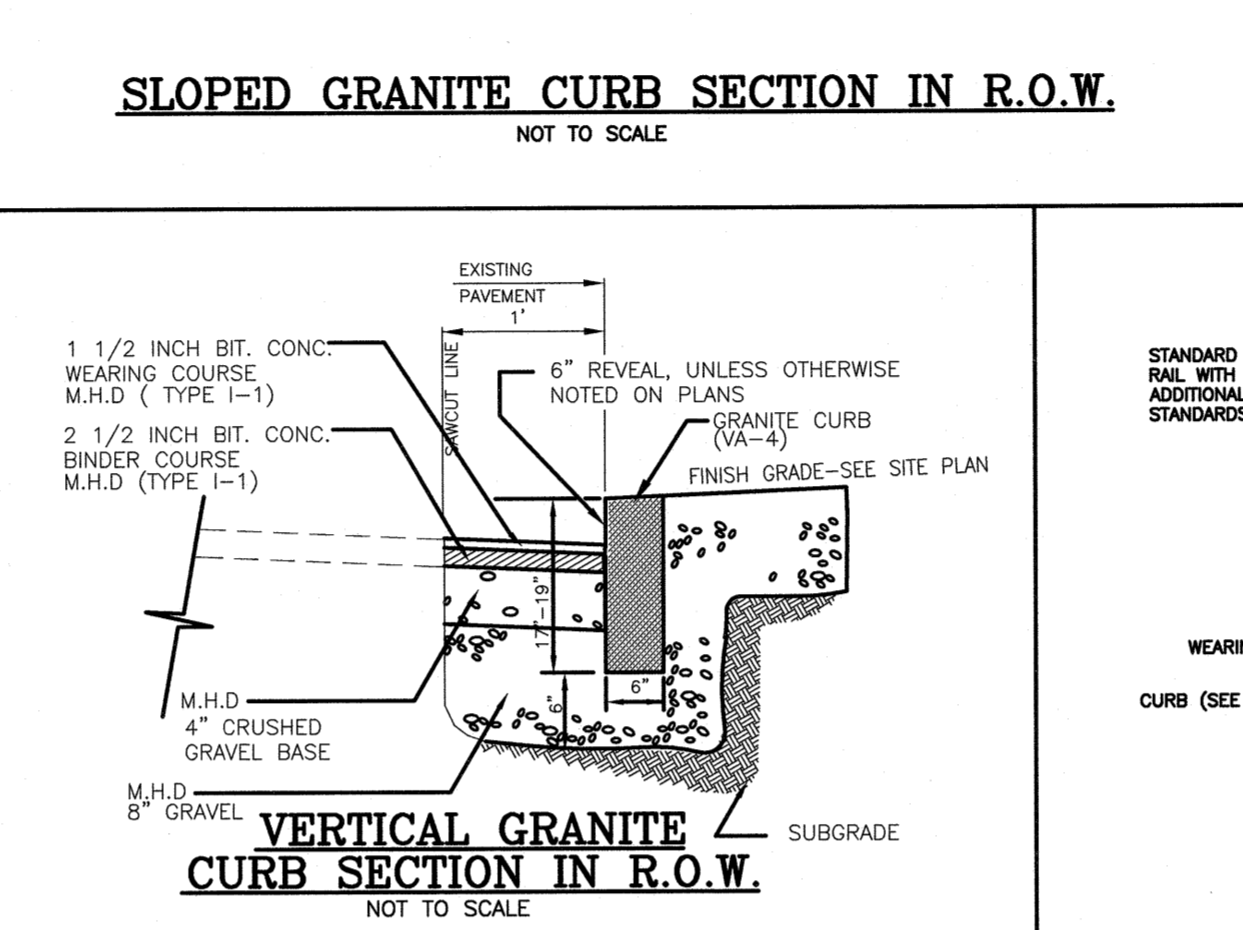
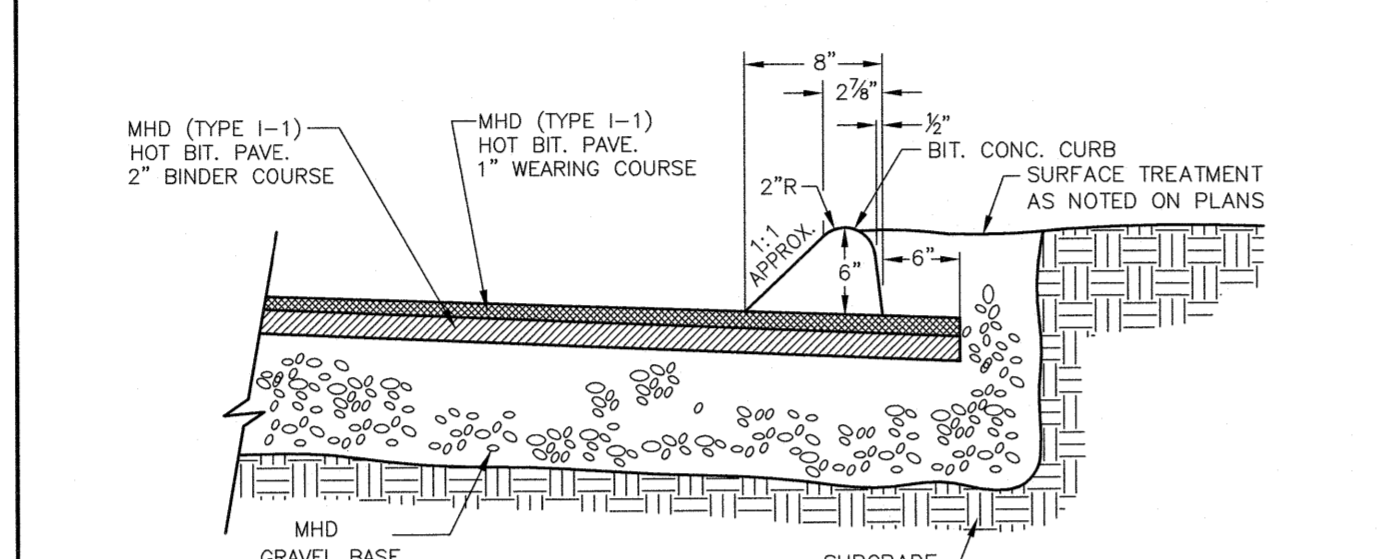
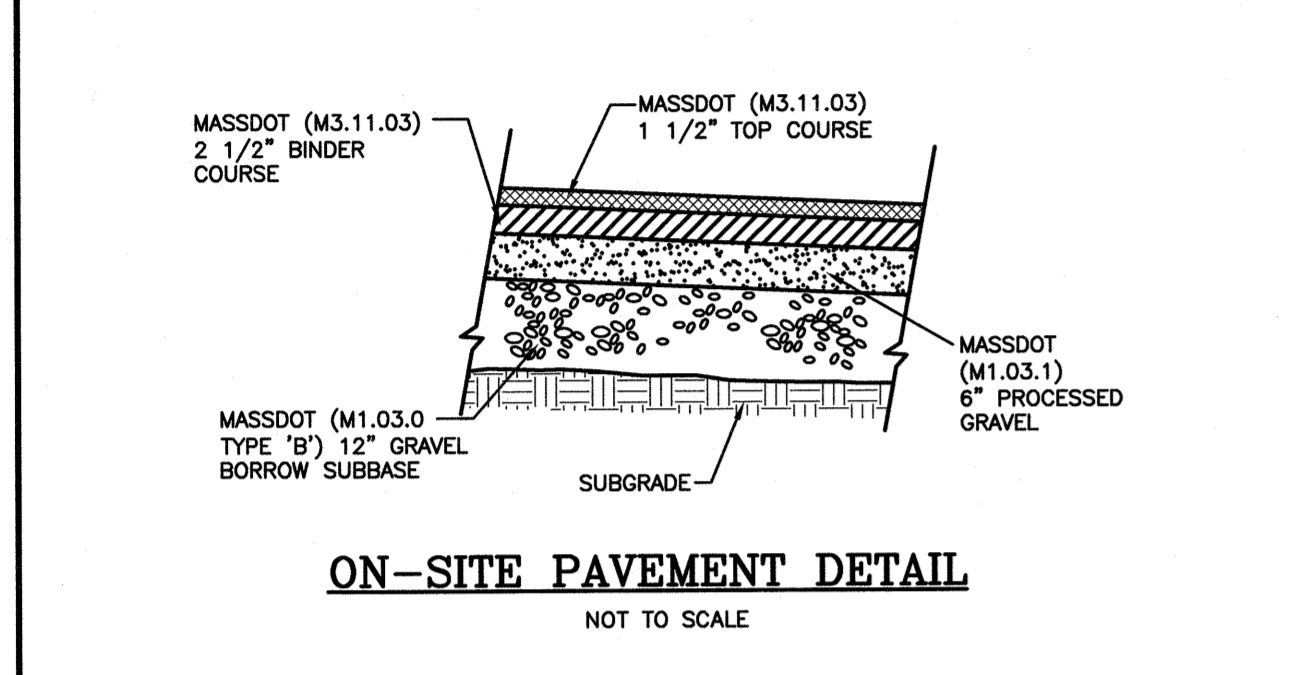
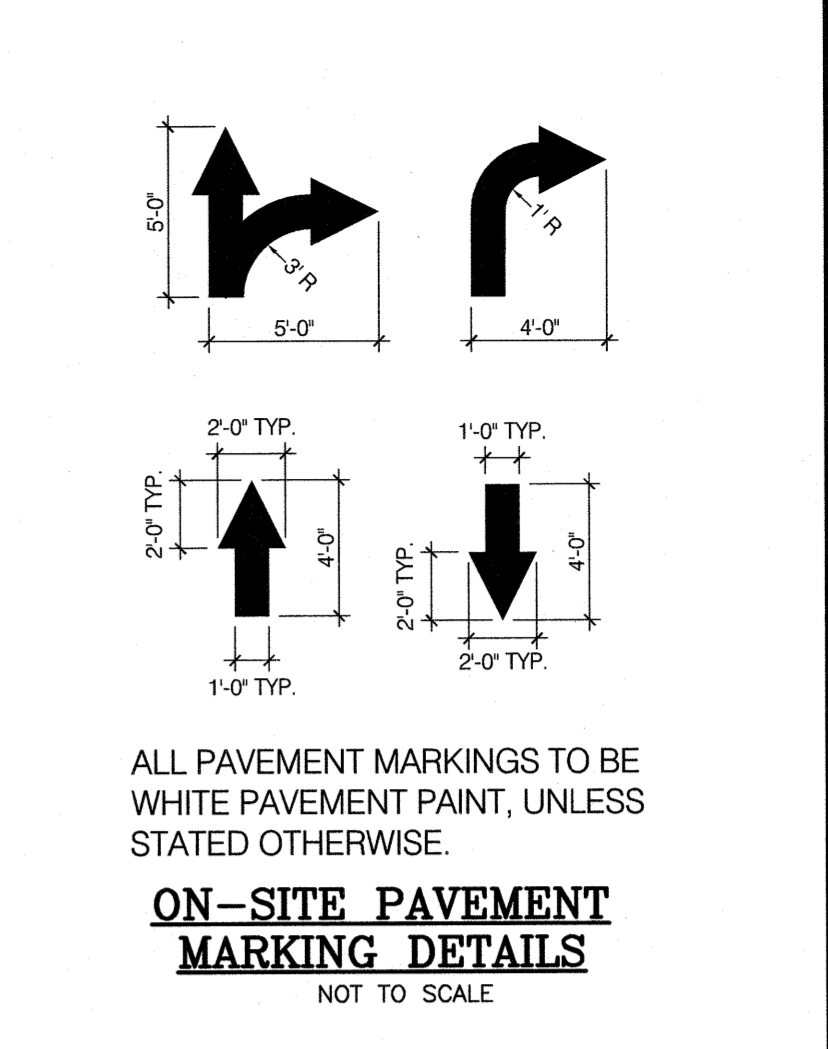
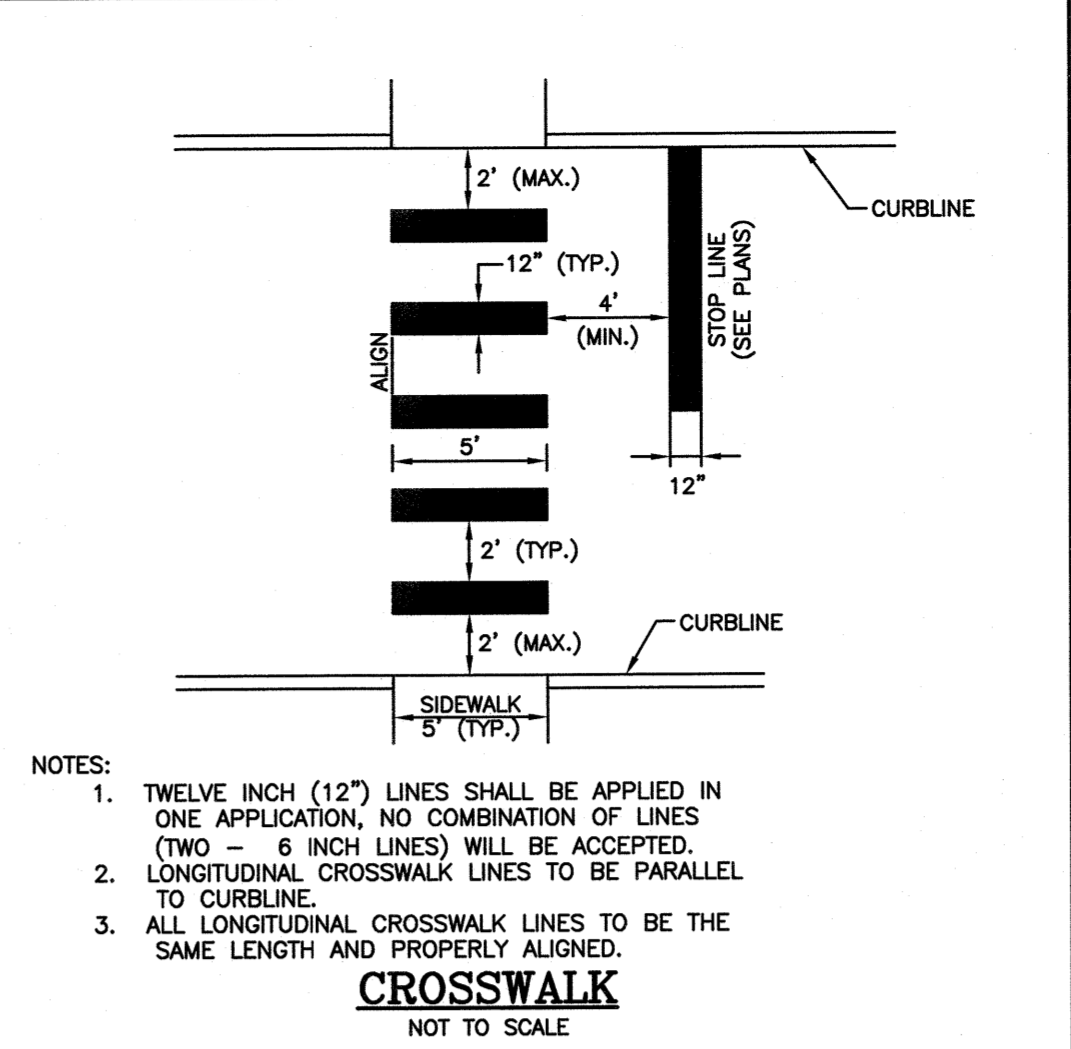
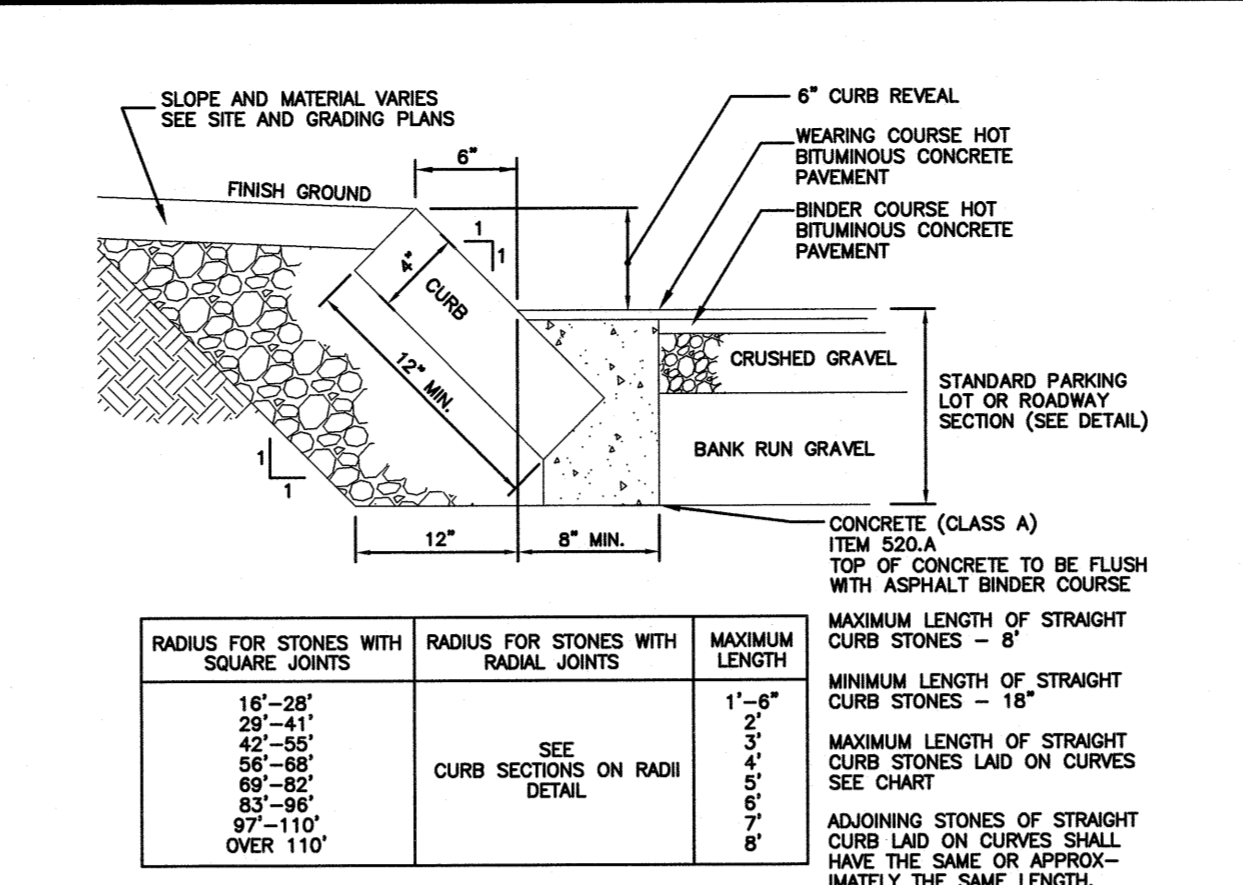
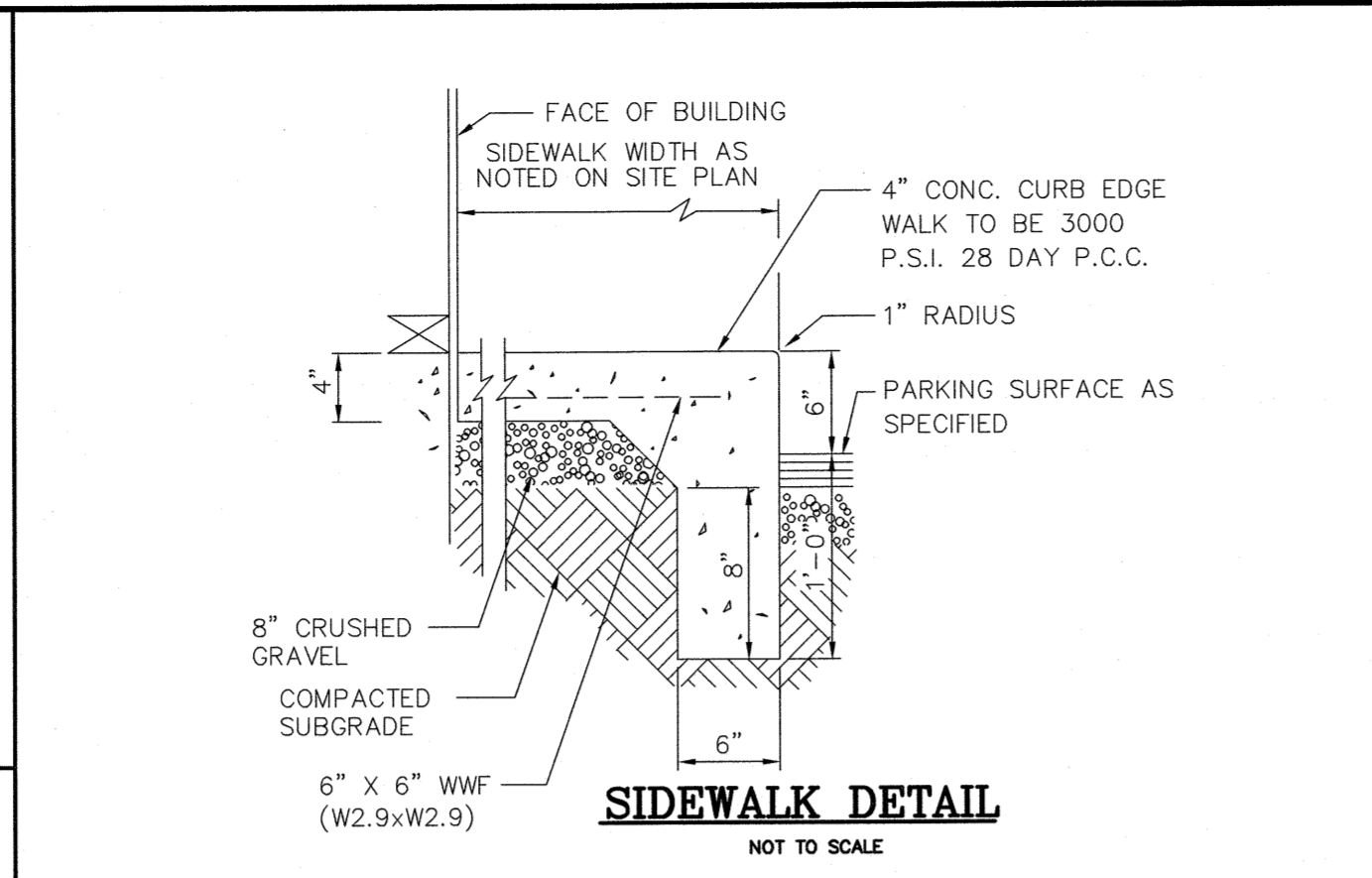
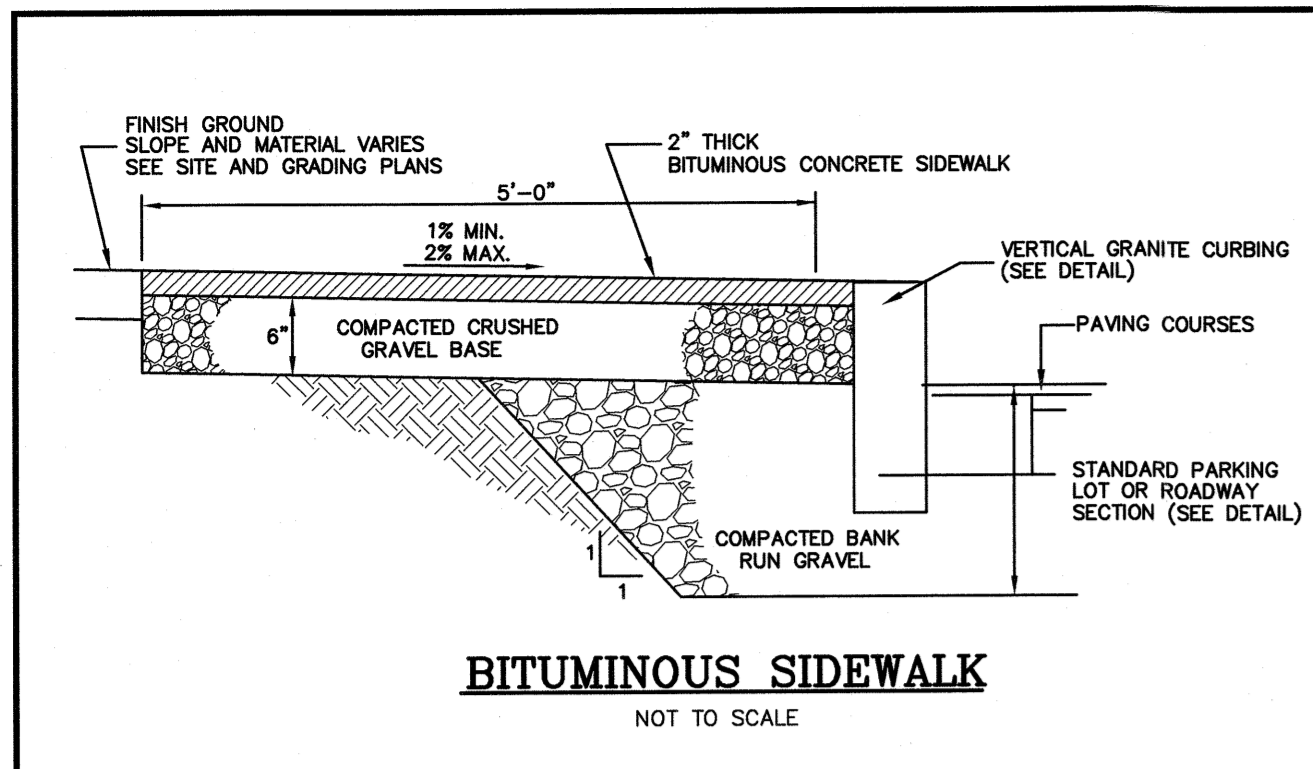


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NO.	REVISION	DATE

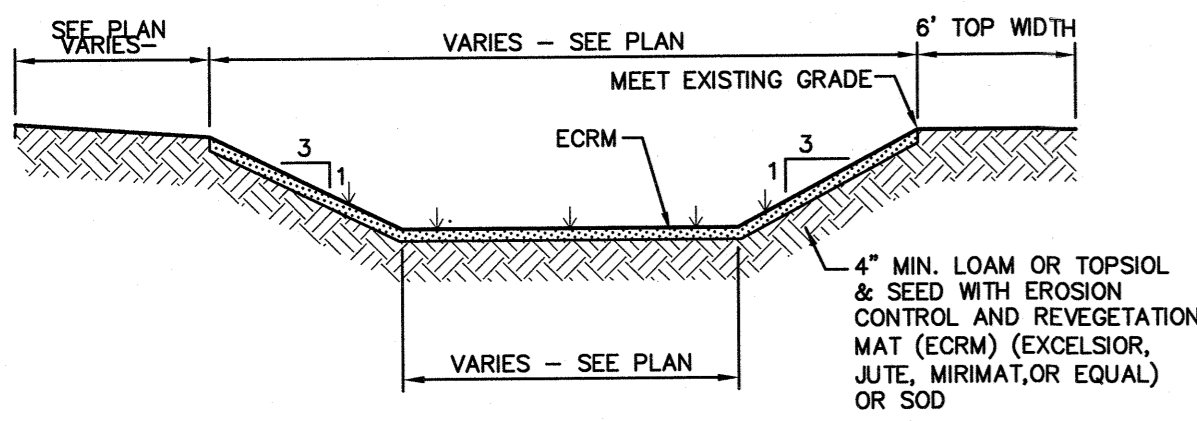
OCTOBER 1, 2020
 DRAWN/DESIGN BY: CCC/CMT
 CHECKED BY: FCM

DETAIL SHEET

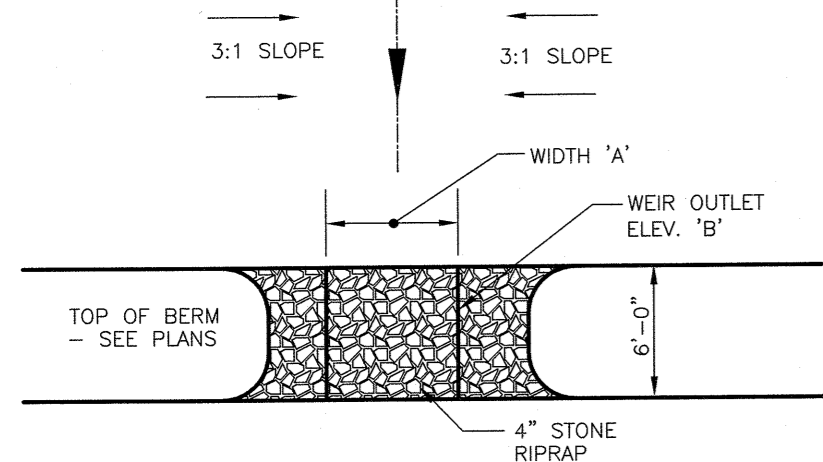
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 9 OF 12



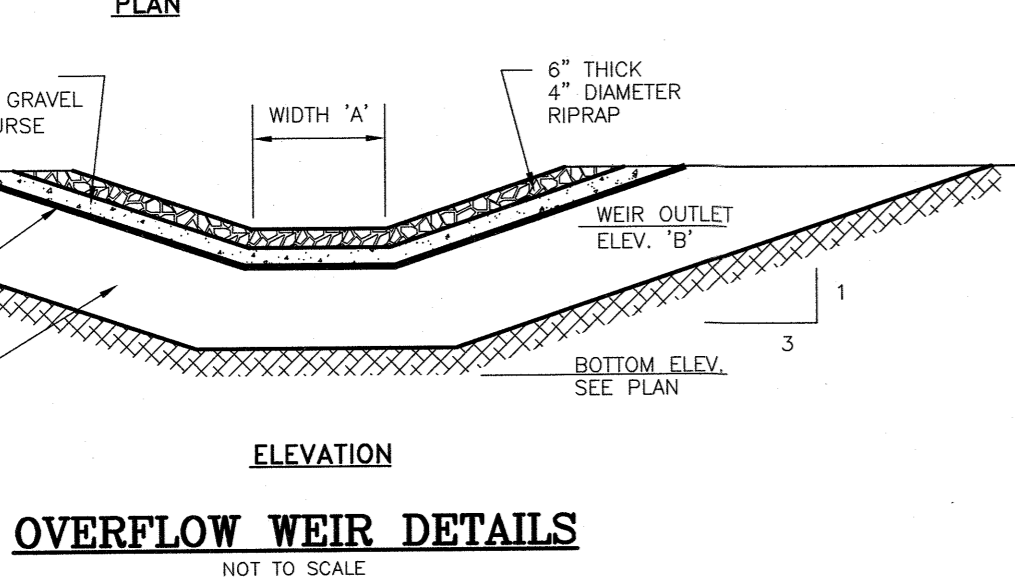
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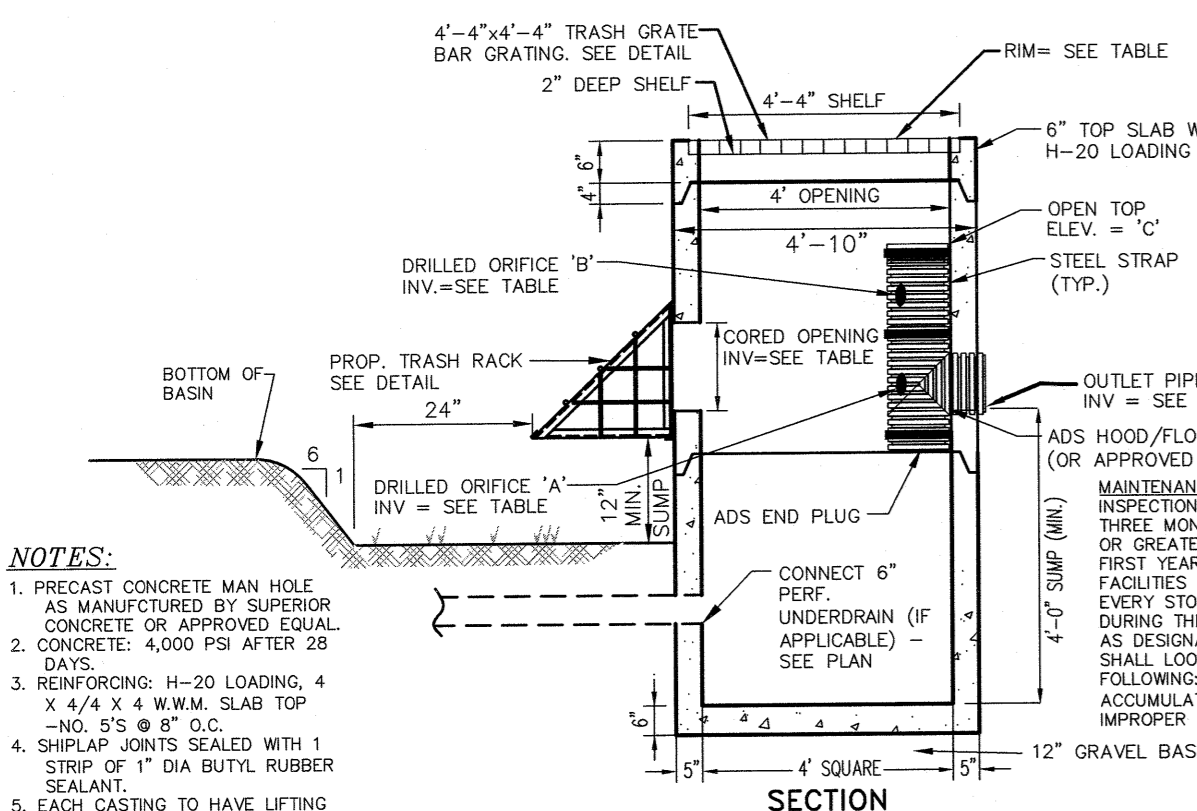
DETENTION BASIN - TYP. CROSS SECTION
NOT TO SCALE



WEIR	WIDTH	WEIR ELEVATION
#1	9'	213.50
#2	5.5'	213.50

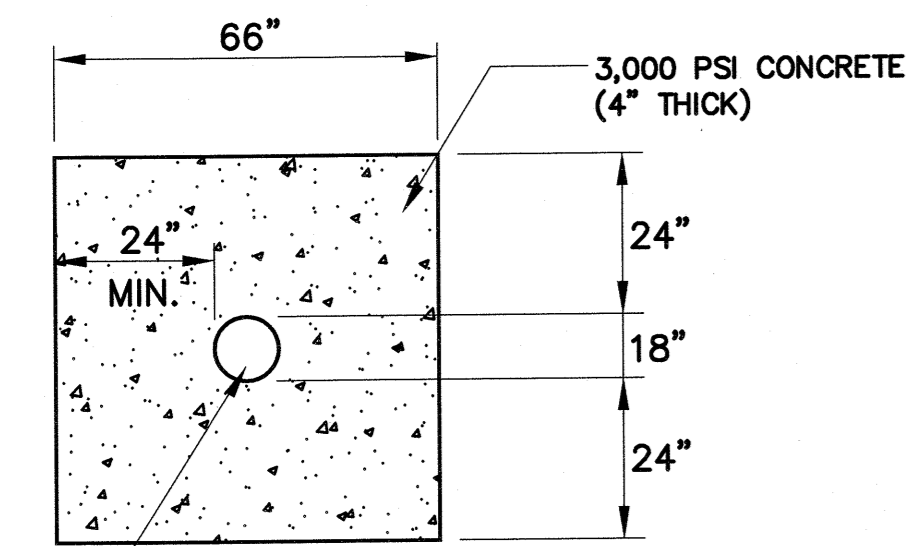


OVERFLOW WEIR DETAILS
NOT TO SCALE



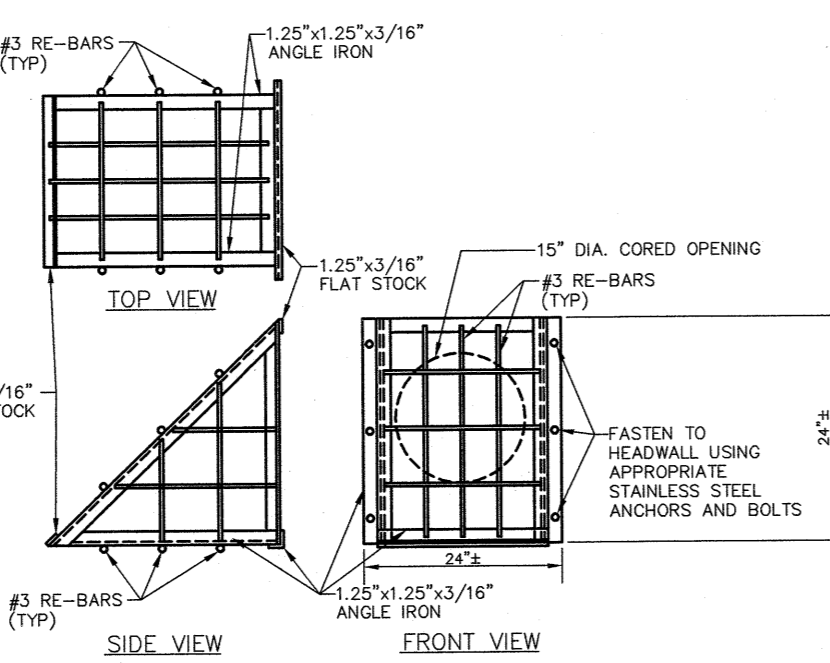
OCS	RIM	ORIFICE	SIZE (IN.)	ELEV.	INV. IN (SIZE)	INV. IN (ELEV.)	INV. OUT (SIZE)	INV. OUT (ELEV.)
#1	218.50	A	12"	216.00	18"	216.00	12"	216.00
		B	8"	212.90	24"	212.90	15"	208.50
		C	12"	214.00	24"	212.50	15"	208.50
#2	215.75	A	8"	212.90	24"	212.50	15"	208.50
		B	12"	214.00	24"	212.50	15"	208.50
		C	12"	214.00	24"	212.50	15"	208.50

PRECAST CONCRETE OUTLET CONTROL STRUCTURE (OCS#1)
NOT TO SCALE



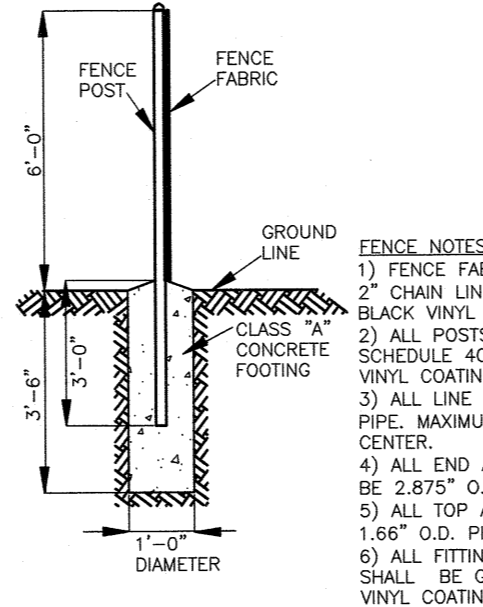
NOTE: TO BE INSTALLED EQUIDISTANT FROM ENDS OF PIPE AND SPACED 20 FEET APART.

ANTI-SEEP COLLAR DETAIL FOR DETENTION BASIN OUTLET
NOT TO SCALE

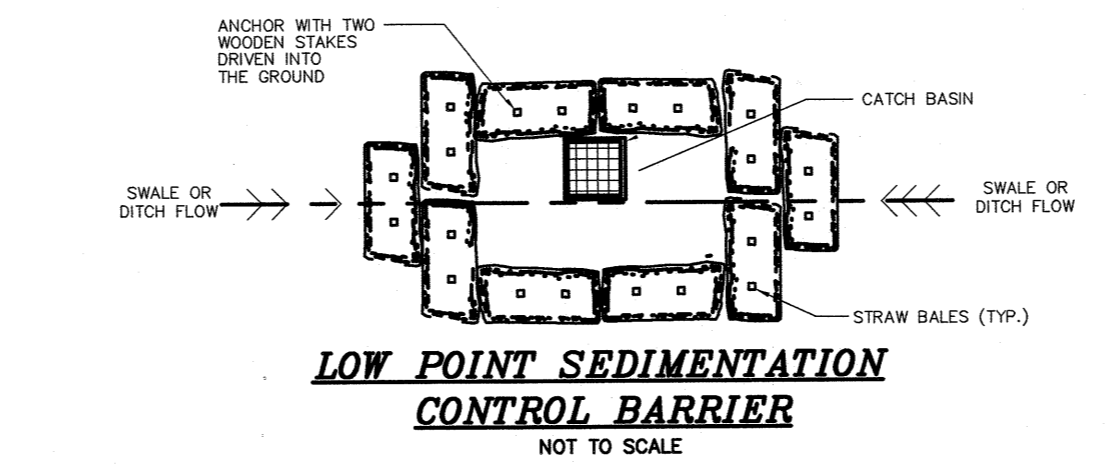


- SPACE BETWEEN RE-BARS SHOULD NOT BE GREATER THAN 3.5 INCHES.
- SEVERAL COATS OF RUST RESISTANT PAINT OR EPOXY ENAMEL TO BE APPLIED TO THE STRUCTURE.
- TRASH RACK TO BE FASTENED TO THE CONCRETE OUTLET STRUCTURE WITH A MINIMUM OF FOUR STAINLESS STEEL BOLTS AND STAINLESS STEEL WEDGE ANCHORS.
- ANGLE IRON MAY BE BOLTED TOGETHER.
- RE-BARS SHALL BE WELDED TO THE ANGLE IRON.

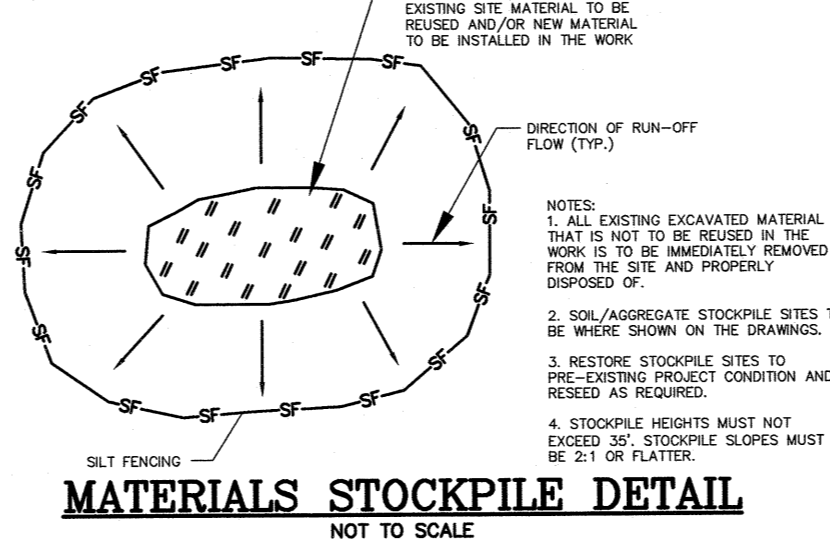
TRASH RACK DETAIL
NOT TO SCALE



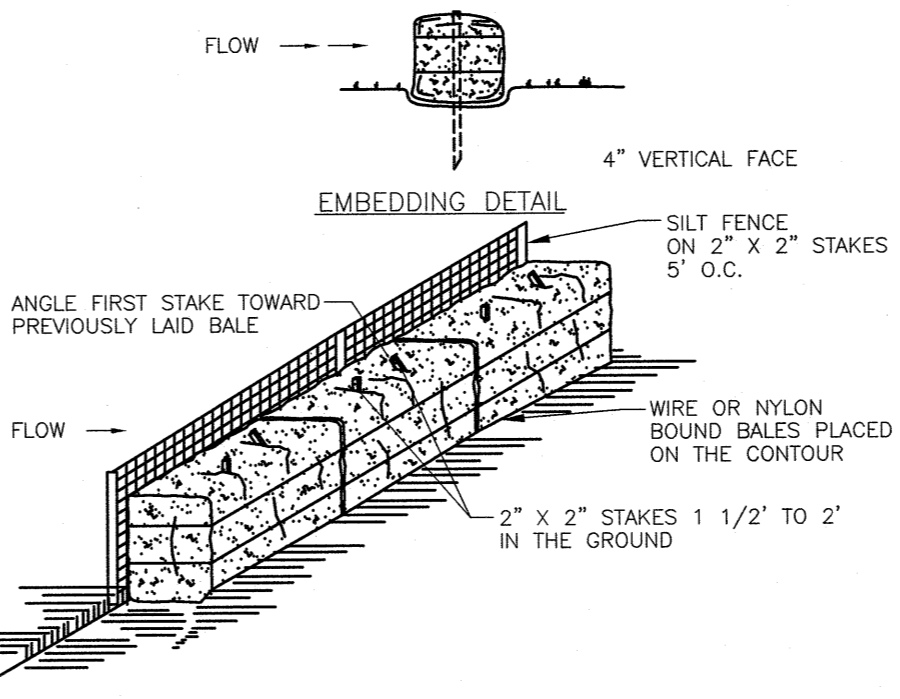
FENCE DETAIL - DETENTION POND
NOT TO SCALE



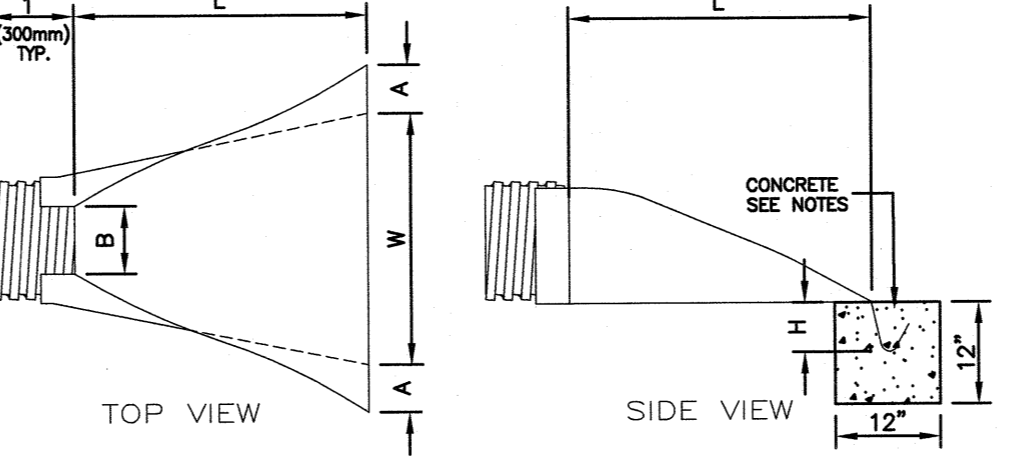
LOW POINT SEDIMENTATION CONTROL BARRIER
NOT TO SCALE



MATERIALS STOCKPILE DETAIL
NOT TO SCALE



HAY BALE & SILT FENCE BARRIER
NOT TO SCALE



PIPE DIAMETER	PART NO.	DIMENSIONS, INCHES (mm)					
		A, ±1 (25)	B MAX	H, ±1 (25)	L, ±1/2 (13)	W, ±2 (50)	
12" (300.375)	1210 NP	6.5 (165)	10 (254)	6.5 (165)	25 (635)	29 (736)	
18" (450)	1810 NP	7.5 (190)	15 (380)	6.5 (165)	32 (812)	35 (890)	
24" (600)	2410 NP	7.5 (190)	18 (450)	6.5 (165)	36 (900)	45 (1140)	
30" (750)	3010 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)	
36" (900)	3610 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)	

CONSTRUCTION SPECIFICATIONS:

PREPARE BEDDING:
BACKFILL MATERIAL AROUND THE END SECTION MAY BE THE SAME AS THE MATERIAL AROUND THE PIPE. PLACE A FEW INCHES OF BACKFILL MATERIAL IN THE TRENCH OR DITCH WHERE THE END SECTION WILL BE PLACED. COMPACT AND CONTOUR THIS BEDDING MATERIAL TO GENERALLY MATCH THE END SECTION. EXCAVATE AN AREA IN THE BEDDING WHERE TROUGH WILL BEAT SO THAT THE END SECTION WILL BE LEVEL WITH THE BOTTOM OF THE TRENCH OR DITCH IN THE FINISHED INSTALLATION.

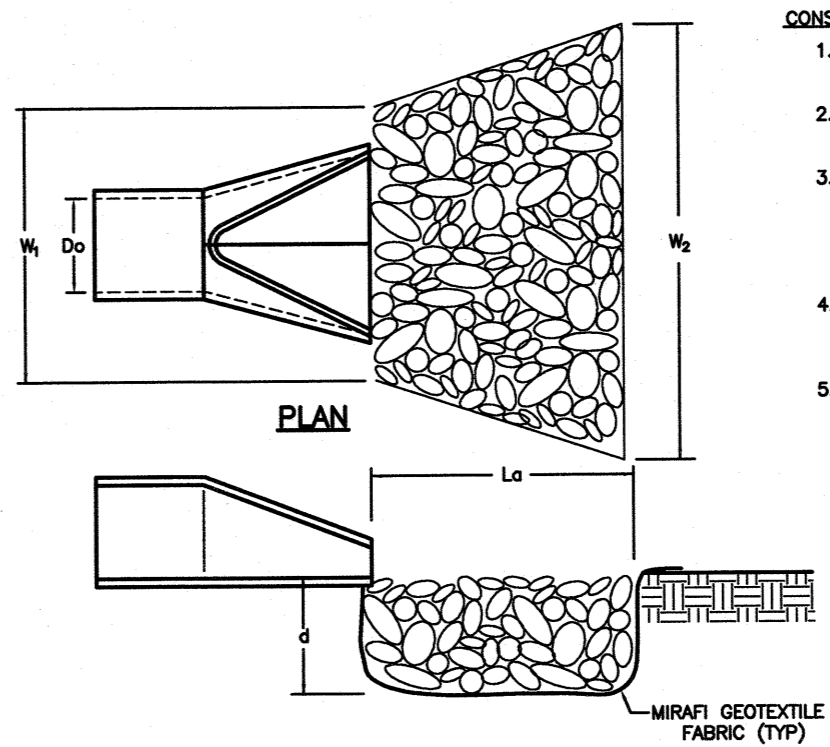
PLACE END SECTION OF PIPE:
OPEN THE END SECTION COLLAR AND SEAT IT OVER THE TWO PIPE CONNECTIONS. ONCE THE END SECTION IS POSITIONED, CHECK TO MAKE SURE THAT THE INVERT OF THE END SECTION MATCHES THE INVERT OF THE PIPE AND THAT THE END SECTION IS LEVEL WITH THE TRENCH OR DITCH BOTTOM.

SECURE THE END SECTION:
SLIP THE STAINLESS STEEL ROD THROUGH THE PRE-DRILLED HOLES AT THE TOP OF THE COLLAR. THE ROD SHOULD BE BETWEEN THE CROWNS OF THE TWO PIPE CONNECTIONS. PLACE A WASHER ON EITHER END OF THE ROD. PLACE A NUT ON EITHER END OF THE ROD AND TIGHTEN WITH A WRENCH.

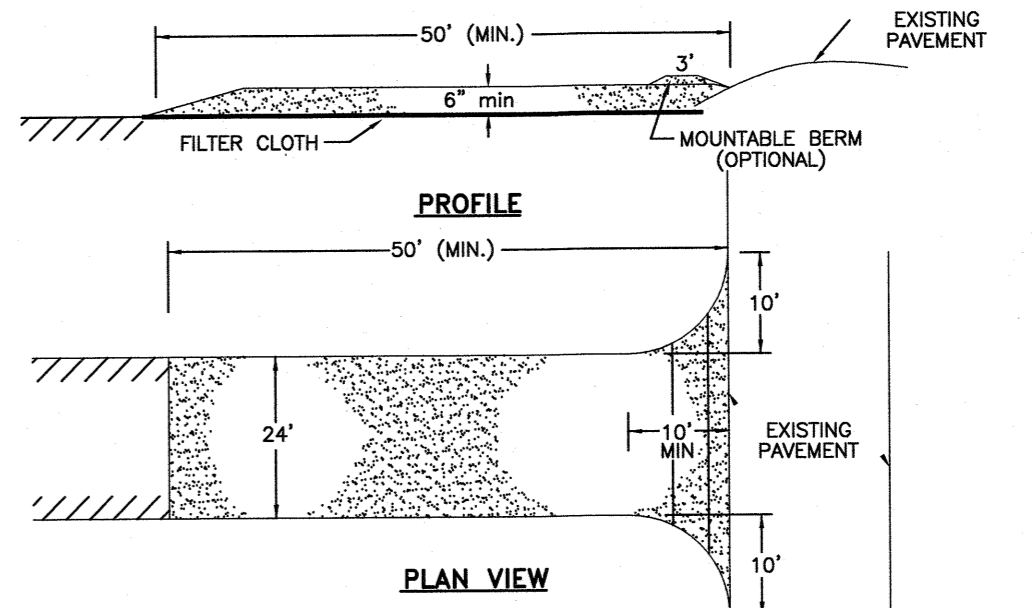
SECURE THE TROUGH:
TO PREVENT WASHOUTS FROM HIGH VELOCITY FLOW, IT IS RECOMMENDED THAT THE TROUGH BE SECURED WITH CONCRETE. POUR CONCRETE IN THE TROUGH UP TO THE LEVEL OF THE TRENCH OR DITCH BOTTOM AND ALONG THE ENTIRE LENGTH OF THE TROUGH.

FINISH BACKFILL:
SHOVEL BACKFILL AROUND THE END SECTION IN 6 TO 8 INCH LAYERS EQUALLY ON BOTH SIDES, KNEADING IT TO ELIMINATE VOIDS. TAMM WITH A SMALL-FACED COMPACTOR OR OTHER EQUIPMENT SUITABLE FOR SMALL AREAS. CONTINUE PLACING, KNEADING, AND COMPACTING BACKFILL LAYERS TO THE TOP OF THE END SECTION TO SEAT IT WELL INTO THE BACKFILL.

FLARED END SECTION HIGH DENSITY POLYETHYLENE (HDPE)
NOT TO SCALE

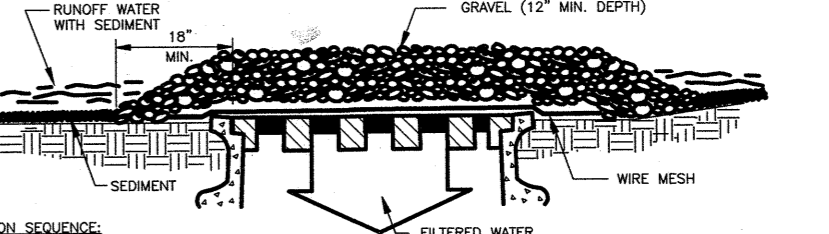


OUTLET PROTECTION DETAIL
NOT TO SCALE



- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM SHALL APPLY.
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

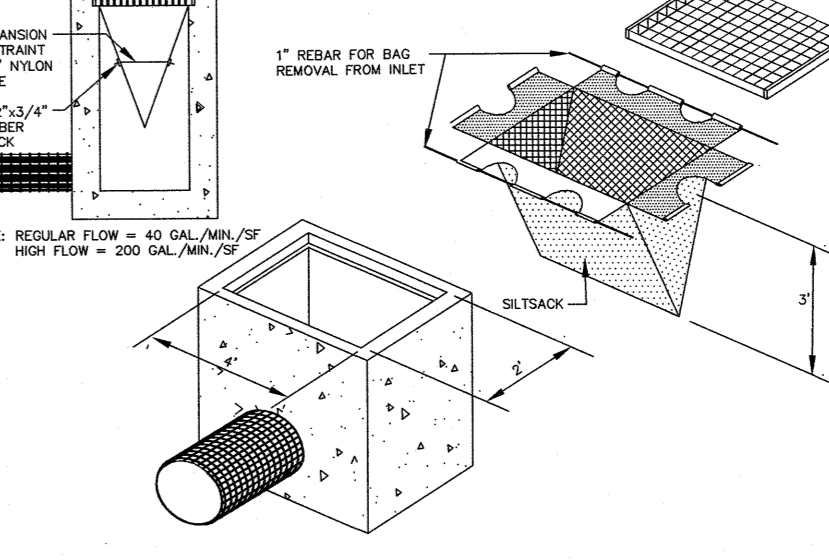
STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



- CONSTRUCTION SEQUENCE:**
- A WIRE MESH SHOULD BE PLACED OVER THE GROSS INLET OR CURB CURBING AND A MINIMUM OF 12 INCHES ABOVE THE OPENING. THE MESH MAY BE ORDINARY HARDWARE CLOTH OR WIRE MESH WITH SPACING OF 12 TO 18 INCHES.
 - THE WIRE MESH SHOULD BE COVERED WITH CLEAN COARSE AGGREGATE SUCH AS SENSER STONE FOR A MINIMUM DEPTH OF 12 INCHES.
 - THE COARSE AGGREGATE SHOULD EXTEND AT LEAST 18 INCHES ON ALL SIDES OF THE DRAIN OPENING.

MAINTENANCE:
ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY MAJOR STORM AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM THE TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE COLLECTED IN A SEPARATE AREA AND PROVIDED FROM EROSION BY STIFF STRUCTURE, OR VEGETATION. MEANS THE TRAPPING DEVICES SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

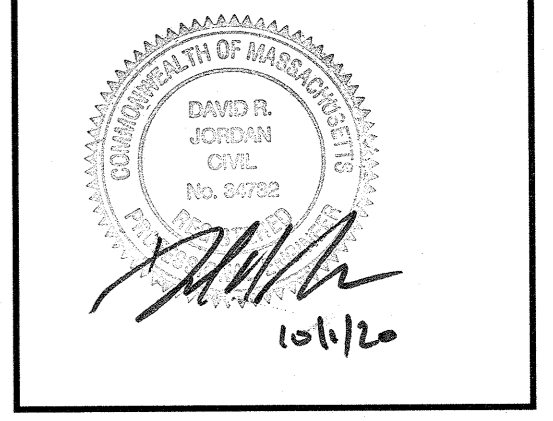
STONE INLET PROTECTION DETAIL-ON SITE
NOT TO SCALE



SILTSACK DETAIL-ON OR OFF SITE
NOT TO SCALE

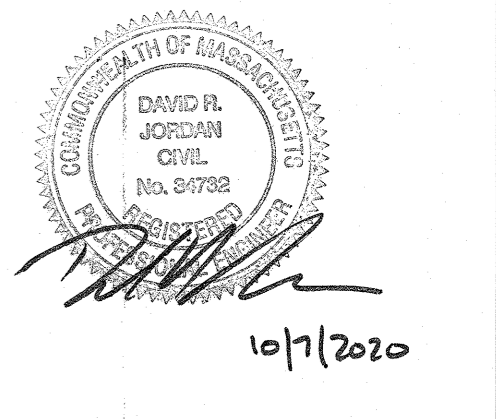
PREPARED FOR
SONNY VALLEY, LLC
2 WATERFORD CIRCLE
METHUEN, MA 01844

PARCEL ID 702-72A-4 & 702-72A-4C
18-20 AYERS VILLAGE ROAD
METHUEN, MA



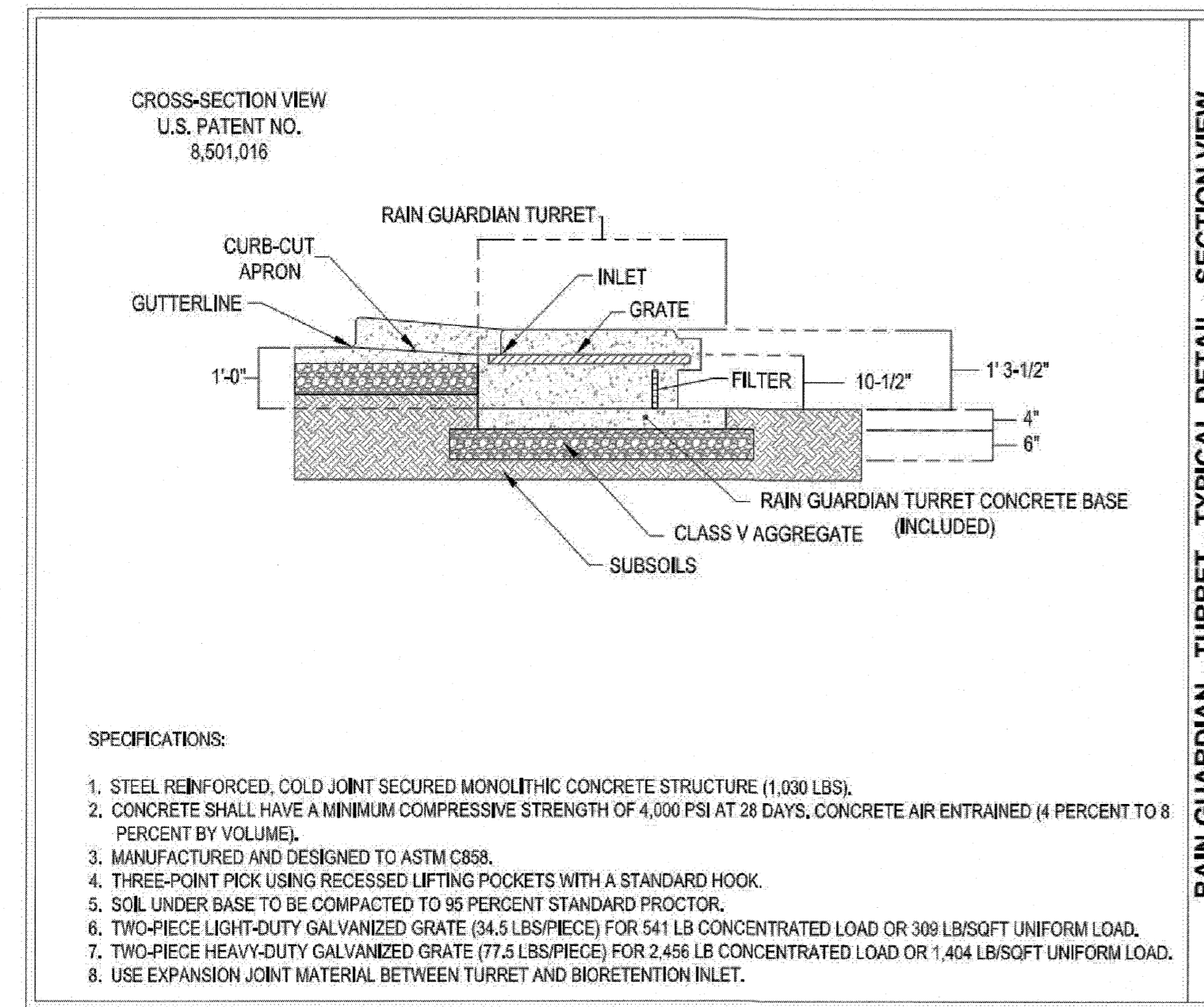
REVISIONS		
NO.	REVISION	DATE

DRAWN/DESIGN BY: CCC/CMT
CHECKED BY: FCM

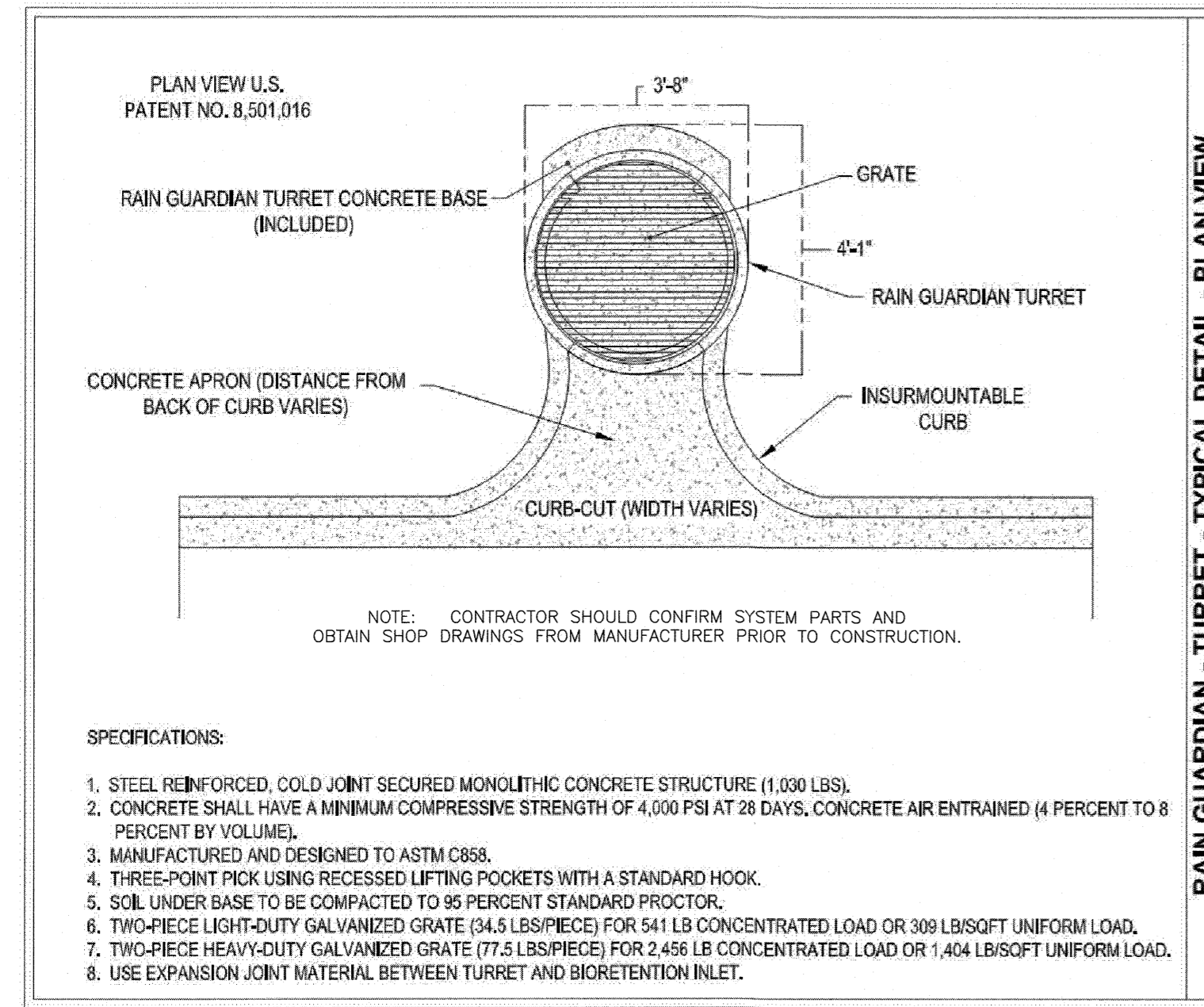


REVISIONS		
NO.	REVISION	DATE
1.	ADD SIGN DETAIL	10/6/20
OCTOBER 1, 2020		
DRAWN/DESIGN BY		CHECKED BY
CCC/CMT		FCM

DETAIL SHEET

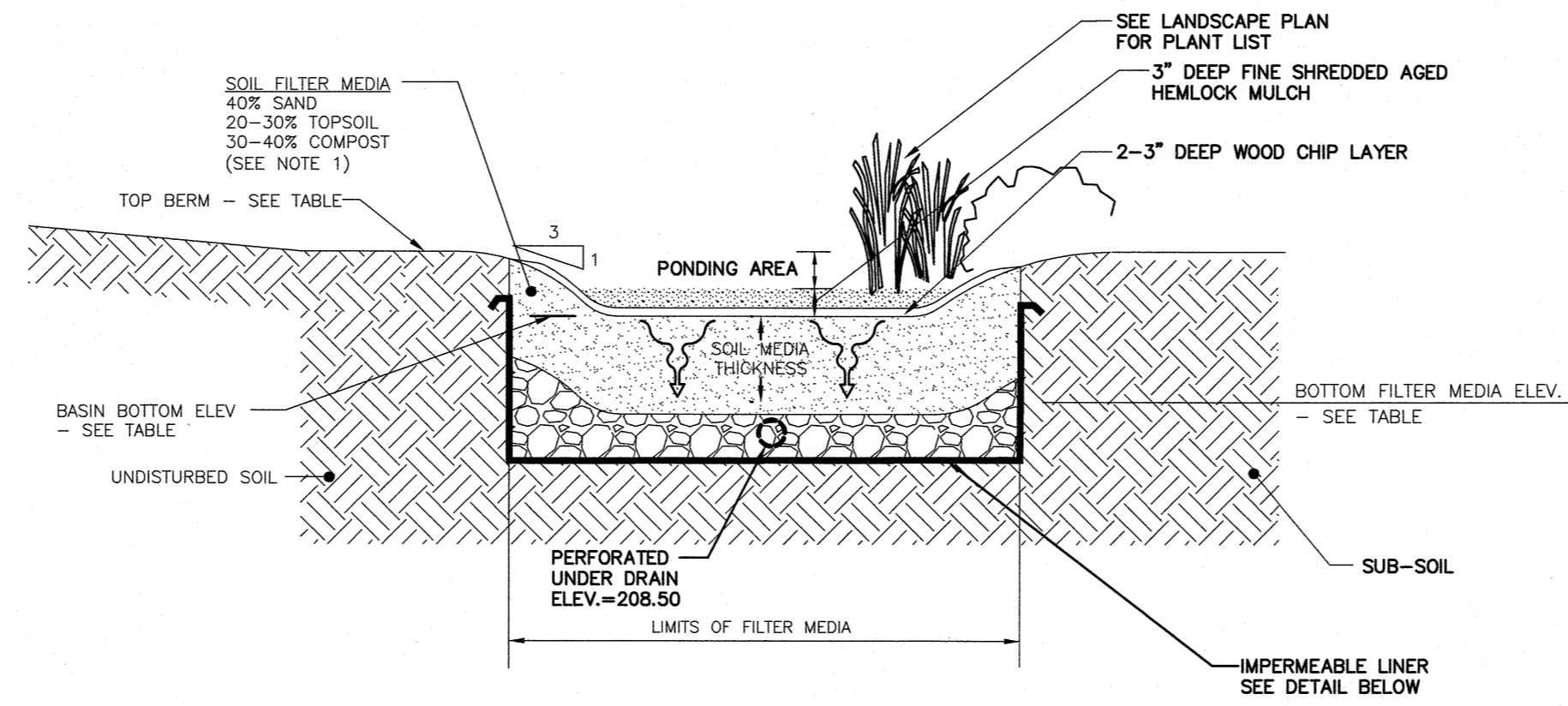


- SPECIFICATIONS:**
1. STEEL REINFORCED, COLD JOINT SECURED MONOLITHIC CONCRETE STRUCTURE (1,000 LBS).
 2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS, CONCRETE AIR ENTRAINED (4 PERCENT TO 8 PERCENT BY VOLUME).
 3. MANUFACTURED AND DESIGNED TO ASTM C688.
 4. THREE-POINT PICK USING RECESSED LIFTING POCKETS WITH A STANDARD HOOK.
 5. SOIL UNDER BASE TO BE COMPACTED TO 95 PERCENT STANDARD PROCTOR.
 6. TWO-PIECE LIGHT-DUTY GALVANIZED GRATE (34.5 LBS/PIECE) FOR 541 LB CONCENTRATED LOAD OR 309 LBS/QFT UNIFORM LOAD.
 7. TWO-PIECE HEAVY-DUTY GALVANIZED GRATE (77.5 LBS/PIECE) FOR 2,456 LB CONCENTRATED LOAD OR 1,404 LBS/QFT UNIFORM LOAD.
 8. USE EXPANSION JOINT MATERIAL BETWEEN TURRET AND BIORETENTION INLET.

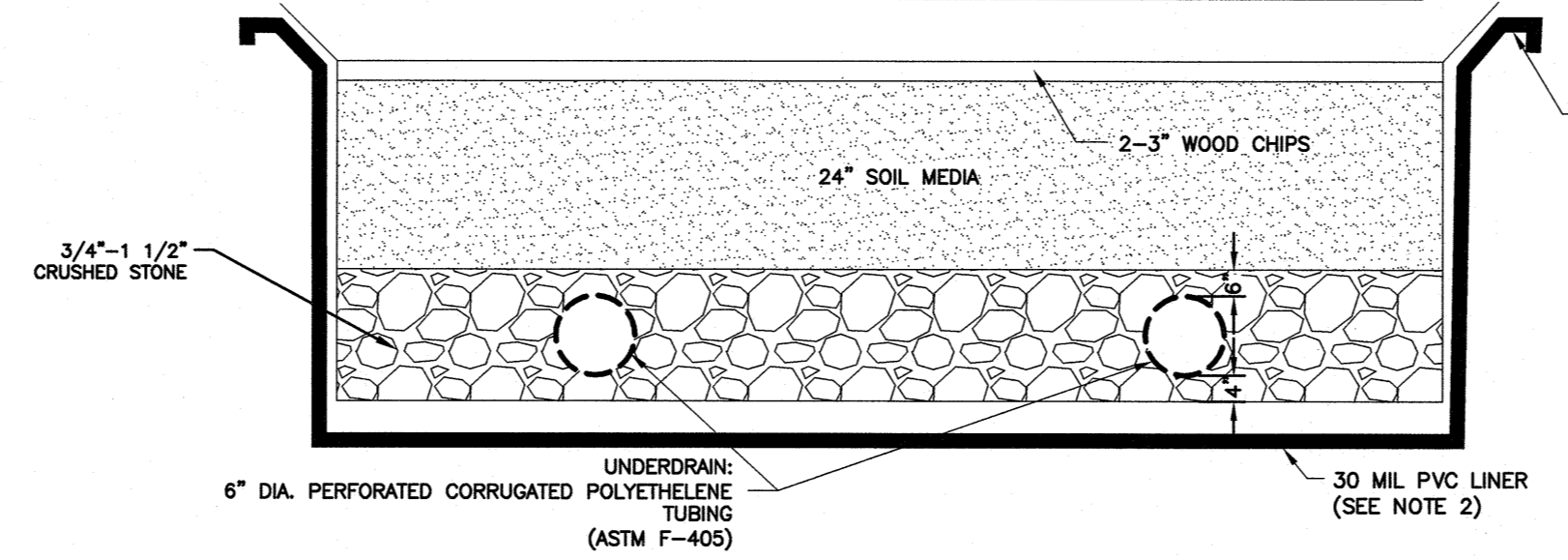


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RAIN GUARDIAN DETAIL
 NOT TO SCALE



BIORETENTION AREA	TOP BERM ELEVATION	BASIN BOTTOM ELEVATION	SOIL MEDIA THICKNESS	BOTTOM FILTER MEDIA ELEV.	UNDERDRAIN ELEV.
BASIN #1	216.00	212.00	30"	209.50	208.50



- NOTES:**
1. FOR ADDITIONAL INFORMATION REFER TO THE MASSACHUSETTS DEP STORMWATER HANDBOOK
 2. A 30 MIL PVC LINER (SOLMAX 230-1000 OR APPROVED EQUAL) SHALL BE INSTALLED UNDER THE PIPE BEDDING FOR BIO-RETENTION BASIN IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. SEAMS SHALL BE HEAT WELDED. EXTRA CARE SHOULD BE TAKEN TO PREVENT AGAINST PUNCTURING DURING INSTALLATION. A MINIMUM 8-OUNCE NON-WOVEN FABRIC UNDERLAYMENT AND OVERLAYMENT SHOULD BE PLACED TO PROTECT LINER.
 3. DO NOT PLACE THE BIO-RETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED
 4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BIO-RETENTION AREA DURING ANY STAGE OF CONSTRUCTION
 5. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

BIORETENTION AREA CONSTRUCTION:

- 1) CLEAR AND GRUB THE AREA WHERE THE POND IS TO BE LOCATED. STOCKPILE LOAM FOR REUSE ON SLOPES.
- 2) THE FOUNDATION AREA SHALL BE SCARIFIED PRIOR TO PLACING FILL. ALL UNSUITABLE MATERIAL UNDER THE EMBANKMENT SHALL BE REMOVED AND REPLACED WITH SUITABLE FOUNDATION MATERIAL.
- 3) FILL MATERIAL SHALL BE FREE OF ORGANICS, FROZEN SOIL AND ROCKS GREATER THAN 6" IN DIAMETER.
- 4) SELECT MATERIALS SHALL BE PLACED AROUND STRUCTURES, PIPES, AND FILTER DIAPHRAGMS. PLACE SELECT MATERIAL IN MAXIMUM 8" LIFTS COMPACTED TO 95% MAXIMUM PROCTOR DENSITY.
- 5) THE EMBANKMENT SHALL BE CONSTRUCTED BEGINNING FROM THE LOWEST POINT UNIFORMLY ALONG ITS ENTIRE LENGTH. PLACE MAXIMUM 8" LIFTS COMPACTED TO 95% MAXIMUM PROCTOR DENSITY.

SAFETY: PONDS THAT ARE EASILY ACCESSIBLE IN POPULATED AREAS SHOULD INCORPORATE ALL POSSIBLE SAFETY PRECAUTIONS. STEEP SIDE SLOPES SHOULD BE AVOIDED. IT IS RECOMMENDED THAT SIDE SLOPES OF 3:1 (HORIZONTAL TO VERTICAL) OR FLATTER SHOULD BE USED WHERE THE TOPOGRAPHY PERMITS. IF THE TOPOGRAPHY WILL NOT ALLOW SUCH SLOPES THEN THE PERIMETER OF THE BASIN SHOULD BE FENCED. WARNING SIGNS AND LIFESAVER EQUIPMENT SHOULD BE AVAILABLE AT EACH STRUCTURE.

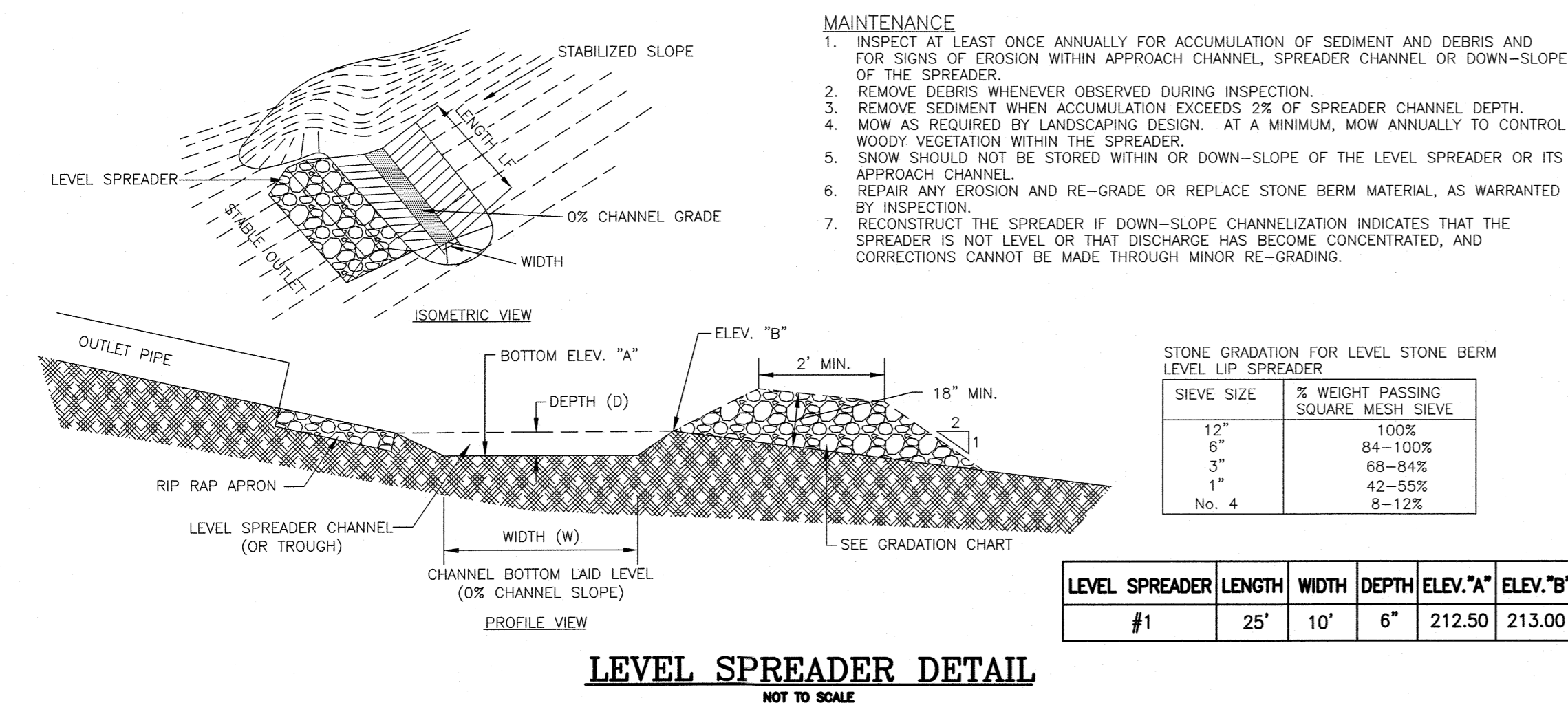
MAINTENANCE:

MAINTENANCE IS NECESSARY IF DETENTION/RETENTION BASINS ARE TO CONTINUE TO FUNCTION AS ORIGINALLY DESIGNED. A LOCAL GOVERNMENT, A DESIGNATED GROUP SUCH AS A HOMEOWNERS ASSOCIATION OR SOME INDIVIDUAL MUST BE ASSIGNED RESPONSIBILITY FOR MAINTAINING THE STRUCTURES AND THE BASIN AREA. A MAINTENANCE PLAN SHOULD BE DEVELOPED THAT OUTLINES THE MAINTENANCE OPERATIONS AND A SCHEDULE FOR CARRYING OUT THE PROCEDURES.

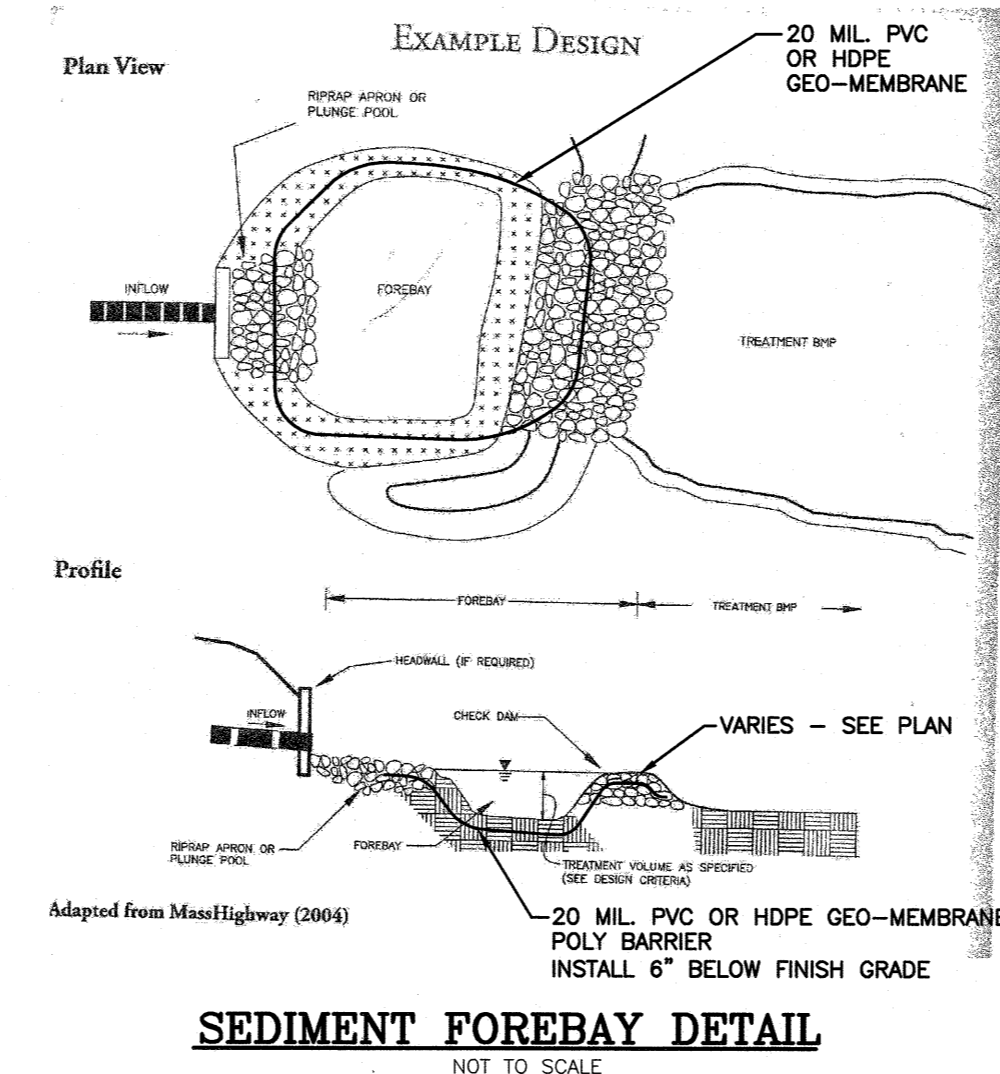
THE FOLLOWING ARE SOME ITEMS WHICH SHOULD BE CONSIDERED IN FORMULATING A MAINTENANCE PLAN:

- A. EMBANKMENT** - THE EMBANKMENT SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS, OR EROSION OF THE FILL IS TAKING PLACE.
- B. VEGETATION** - THE VEGETATED AREAS OF THE STRUCTURE SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS DETERMINED BY SOIL TESTS. TREES AND SHRUBS SHOULD BE KEPT OFF THE EMBANKMENT AND EMERGENCY SPILLWAY AREAS.
- C. INLETS** - PIPE INLETS AND SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED. IF PIPES ARE COATED, THE COATING SHOULD BE CHECKED AND REPAIRED AS NECESSARY.
- D. OUTLETS** - PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EACH MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLET.
- E. SEDIMENT** - SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE PREDETERMINED DESIGN ELEVATION, THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.
- F. SAFETY INSPECTIONS** - ALL PERMANENT IMPOUNDMENTS SHOULD BE INSPECTED BY A QUALIFIED PROFESSIONAL ENGINEER ON A PERIODIC BASIS. IF THERE IS POTENTIAL FOR SIGNIFICANT DAMAGE OR LOSS OF LIFE DOWNSTREAM, THEN THE INSPECTION SHOULD BE CARRIED OUT ANNUALLY. THE DESIGNATED INDIVIDUAL OR GROUP SHOULD ALSO MAKE INSPECTIONS AFTER EVERY MAJOR STORM EVENT.

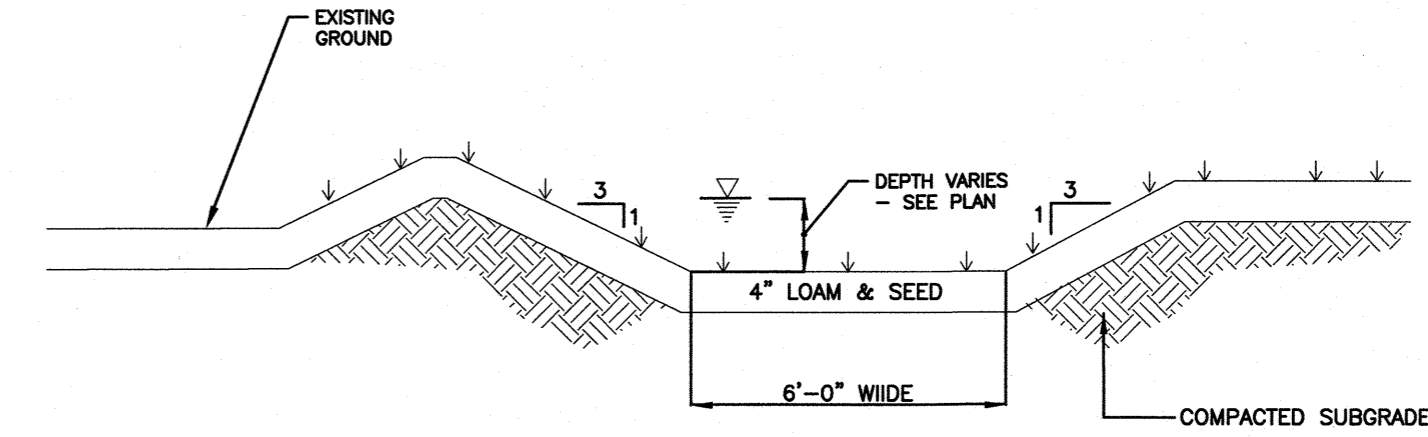
BIORETENTION AREA DETAIL
 NOT TO SCALE



LEVEL SPREADER DETAIL
 NOT TO SCALE



SEDIMENT FOREBAY DETAIL
 NOT TO SCALE

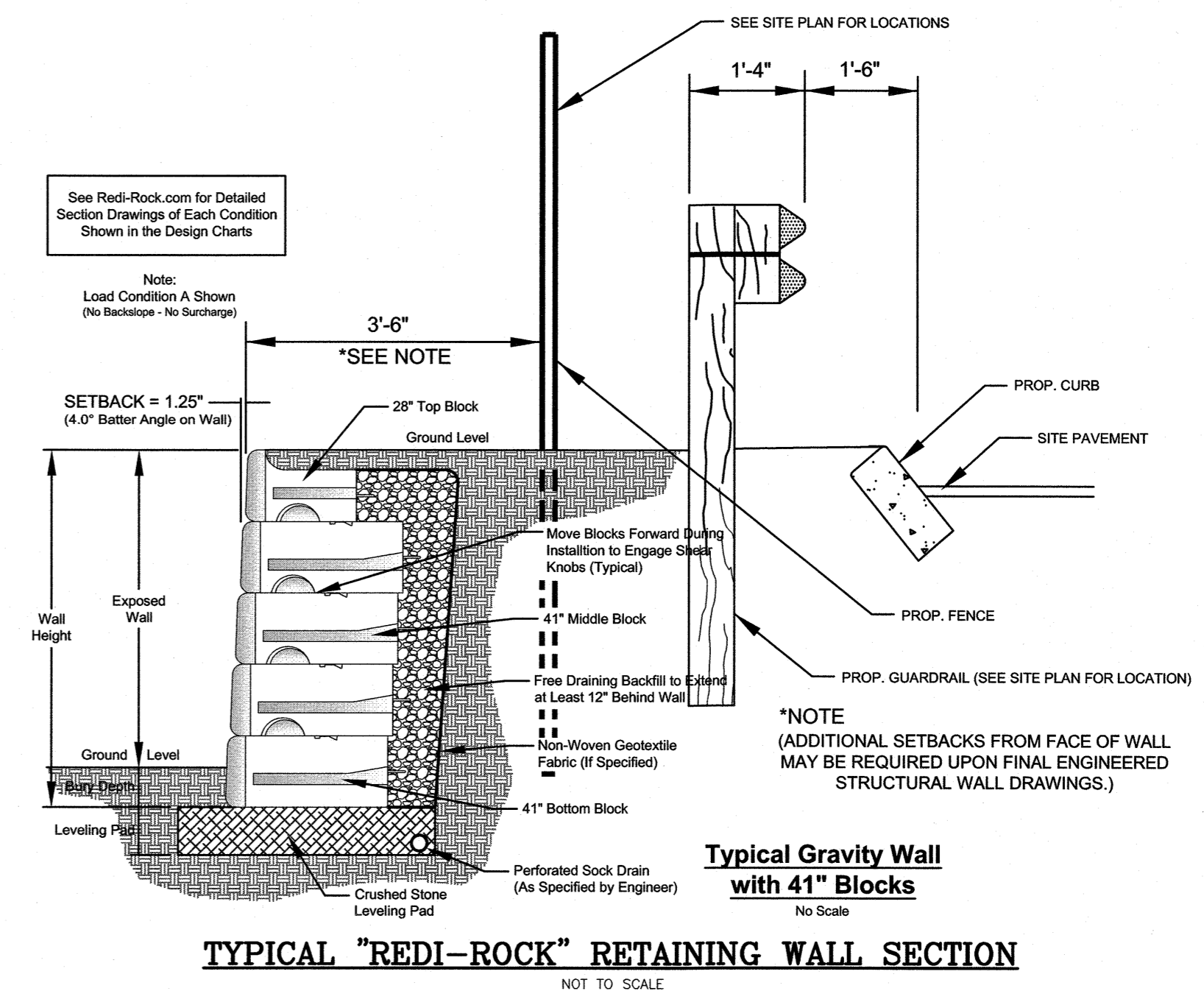


MAINTENANCE DURING CONSTRUCTION:

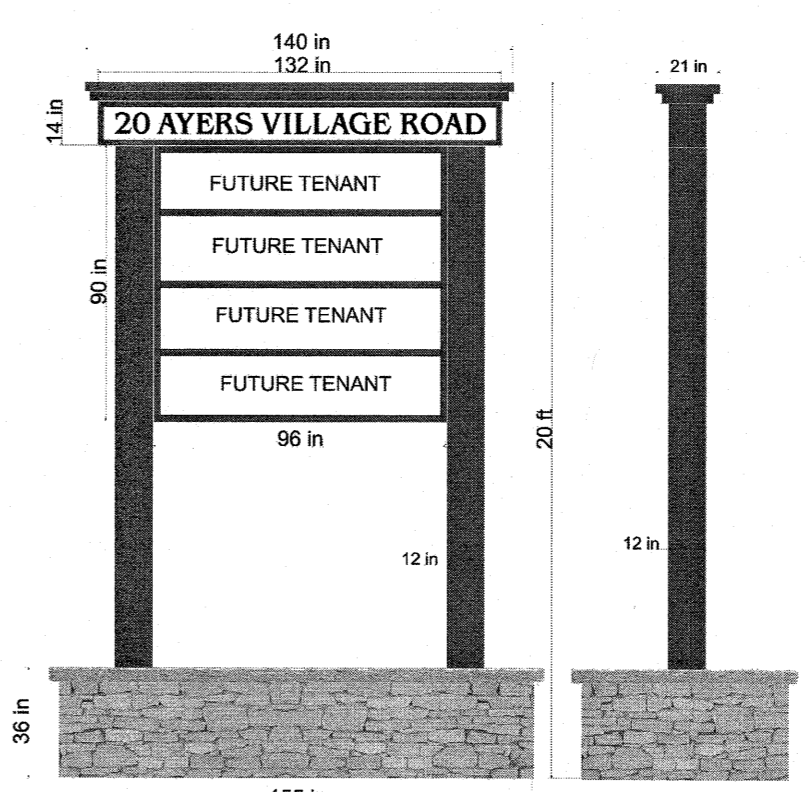
1. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE FILTERING EFFECT.
2. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.
3. THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE.
4. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

WATER QUALITY SWALE FOR STORMWATER RUN-OFF
 NOT TO SCALE

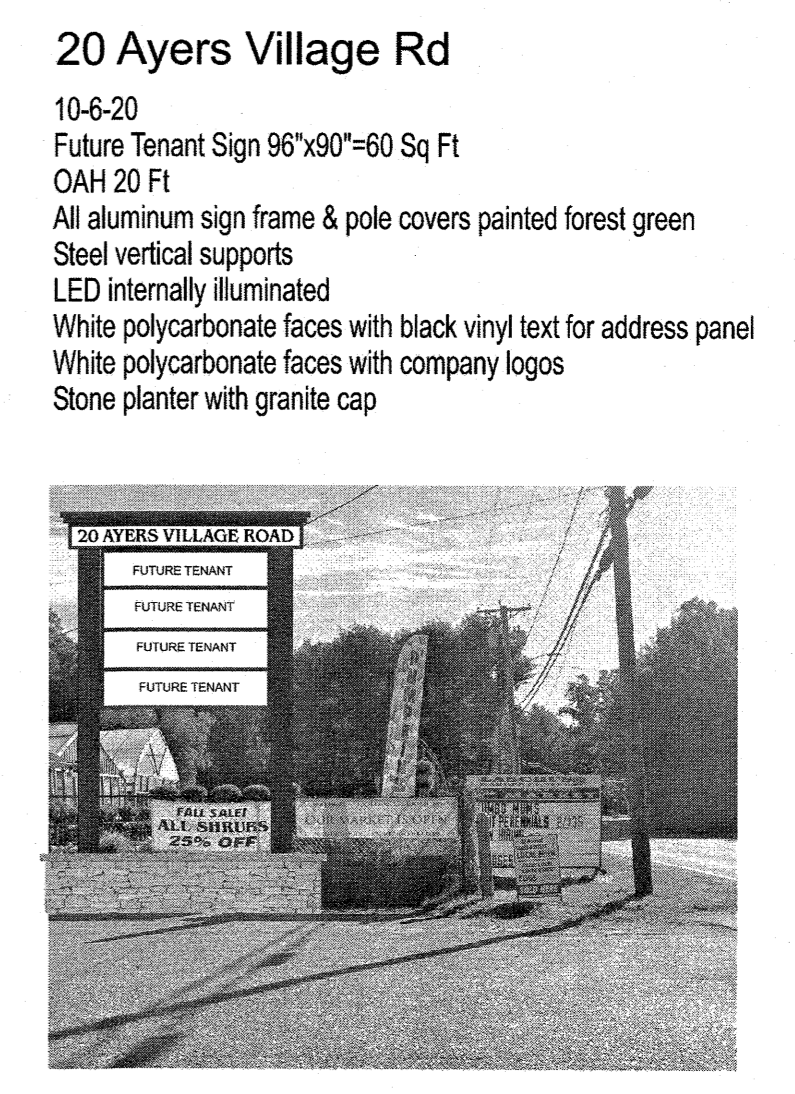
THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO START OF CONSTRUCTION. A RETAINING WALL DESIGN UTILIZING THE "REDI-ROCK" WALL (OR APPROVED EQUAL), PREPARED BY AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER CONFORMING TO LOCAL, STATE AND FEDERAL REQUIREMENTS.



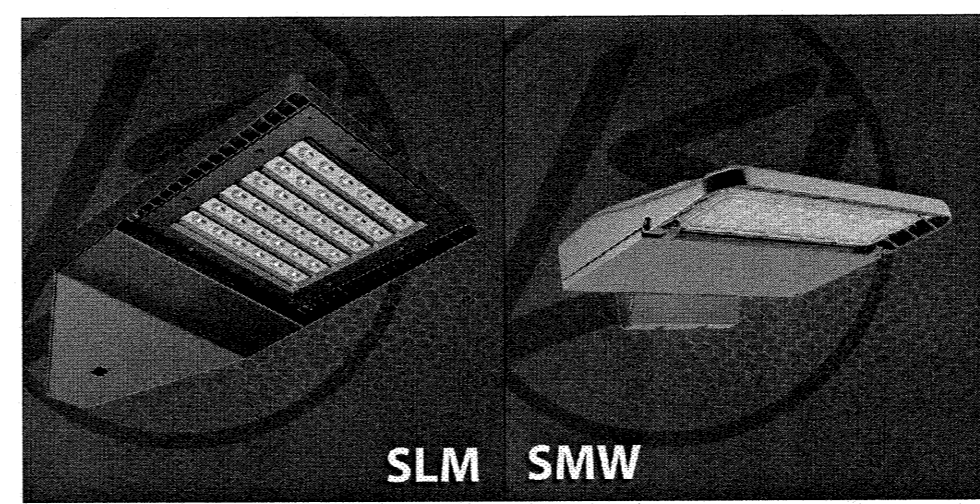
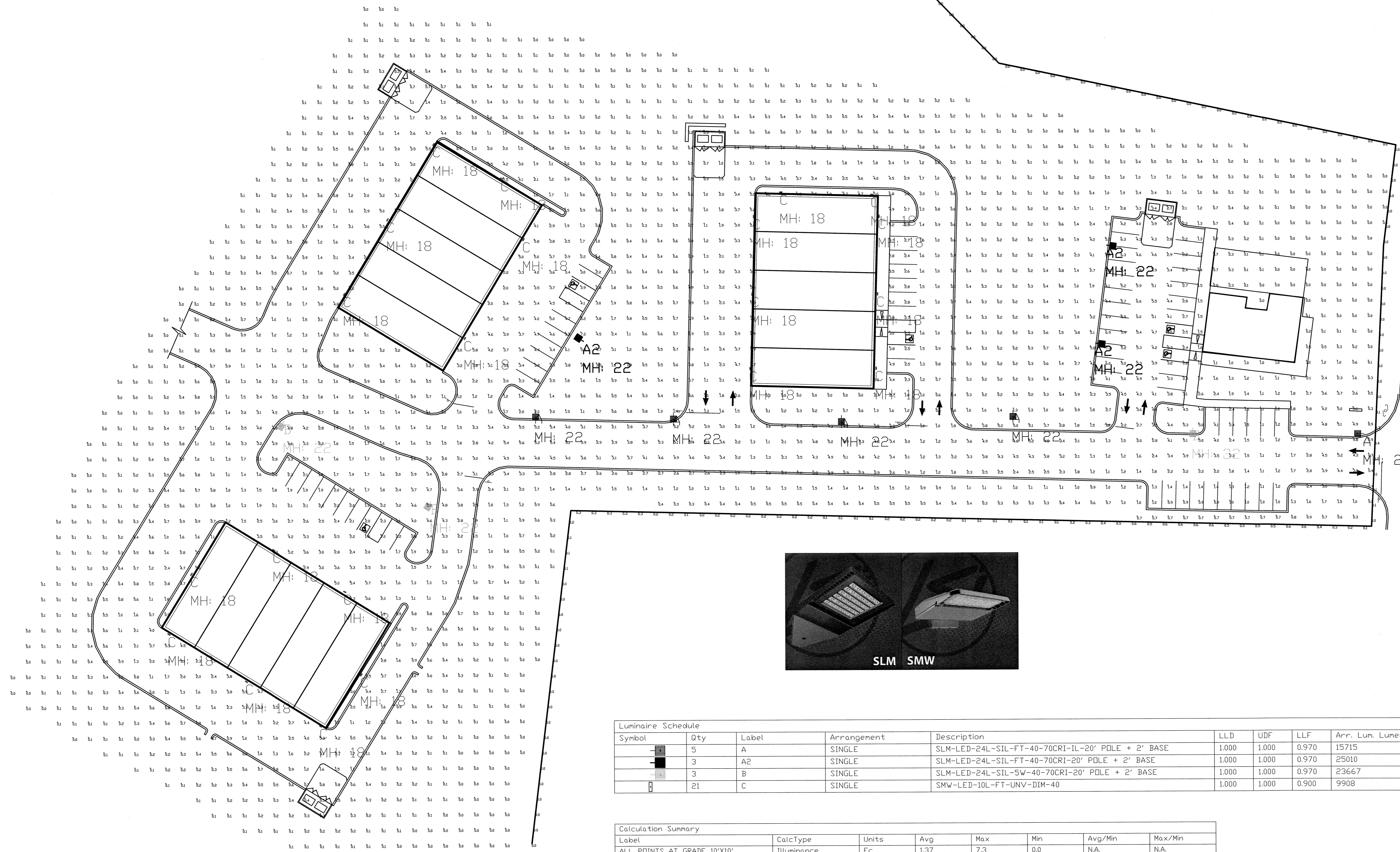
TYPICAL "REDI-ROCK" RETAINING WALL SECTION
 NOT TO SCALE



SIGN DETAIL
 NOT TO SCALE



F:\Projects\CAD\466019\4660 DET.dwg, DET4_10/06/20_4:42pm.ctb



Symbol	Qty	Label	Arrangement	Description	LLD	UDF	LLF	Arr. Lum. Lumens	Arr. Watts
[Symbol A]	5	A	SINGLE	SLM-LED-24L-SIL-FT-40-70CRI-IL-20' POLE + 2' BASE	1000	1000	0.970	15715	188.8
[Symbol A2]	3	A2	SINGLE	SLM-LED-24L-SIL-FT-40-70CRI-20' POLE + 2' BASE	1000	1000	0.970	25010	188.8
[Symbol B]	3	B	SINGLE	SLM-LED-24L-SIL-5W-40-70CRI-20' POLE + 2' BASE	1000	1000	0.970	23667	188.8
[Symbol C]	21	C	SINGLE	SMW-LED-10L-FT-UNV-DIM-40	1000	1000	0.900	9908	78

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL POINTS AT GRADE 10'X10'	Illuminance	Fc	1.37	7.3	0.0	N.A.	N.A.
PROPERTY LINE	Illuminance	Fc	0.11	0.6	0.0	N.A.	N.A.
PARKING AND DRIVE SUMMARY	Illuminance	Fc	2.47	7.3	0.4	6.18	18.25

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

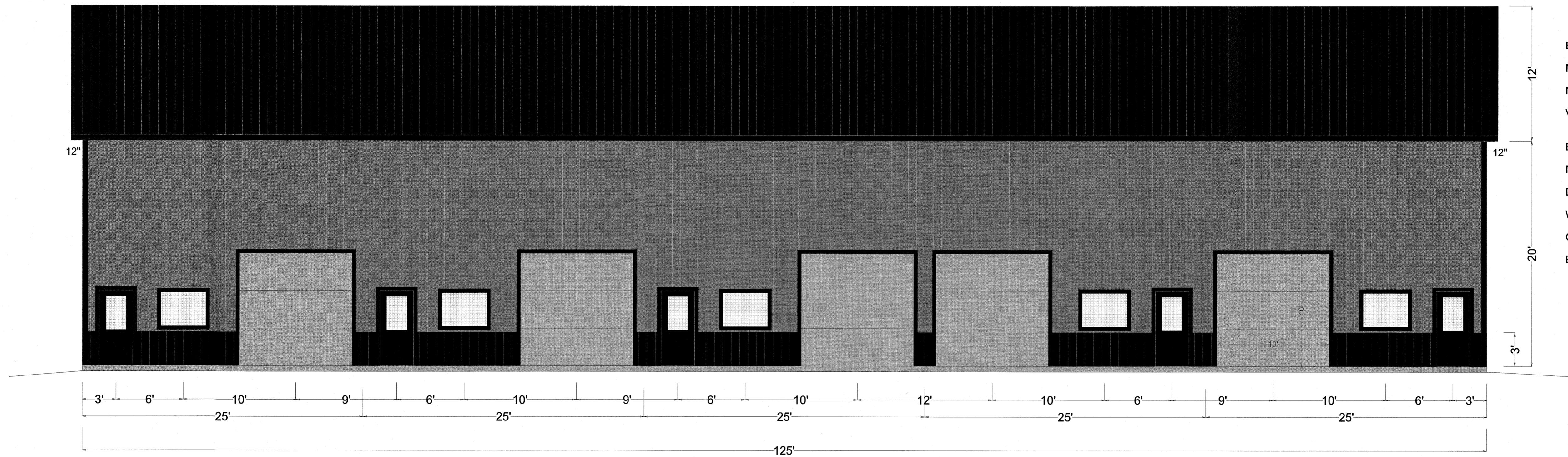
Total Project Watts
Total Watts = 37148

LIGHTING PROPOSAL LD-152211

SBINNY VALLEY LLC
101 LINDBERG AVE.
METHUEN, MA

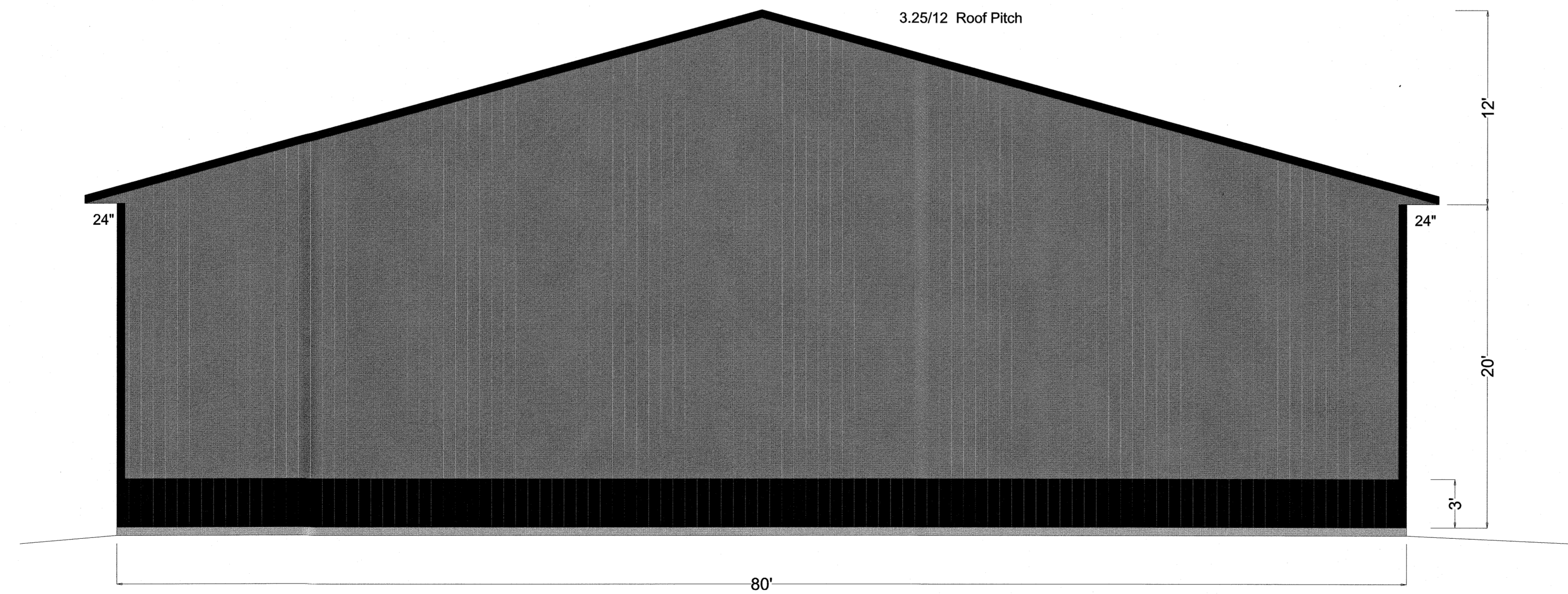
DATE: 9/8/2020 REV: SHEET 1 OF 1

SCALE: 1"=30'



- EPS Metal Roofing - Black
- Metal Rake Trim - Black
- Metal Fascia Trim - Black
- Vented Metal soffit - Black
- EPS Metal siding - Zinc Grey
- Metal Corner Trim - Black
- Door Trim - Black
- Window Trim - Black
- Overhead Door Trim - Black
- EPS Metal Wainscot - Black

- 10' x 10' Overhead Dors - Light Grey
- 3'-0" x 6'-8" Metal Insulated Entry Doors - Black
- 4'-0" x 3'-0" Andersen 100 series windows - Black

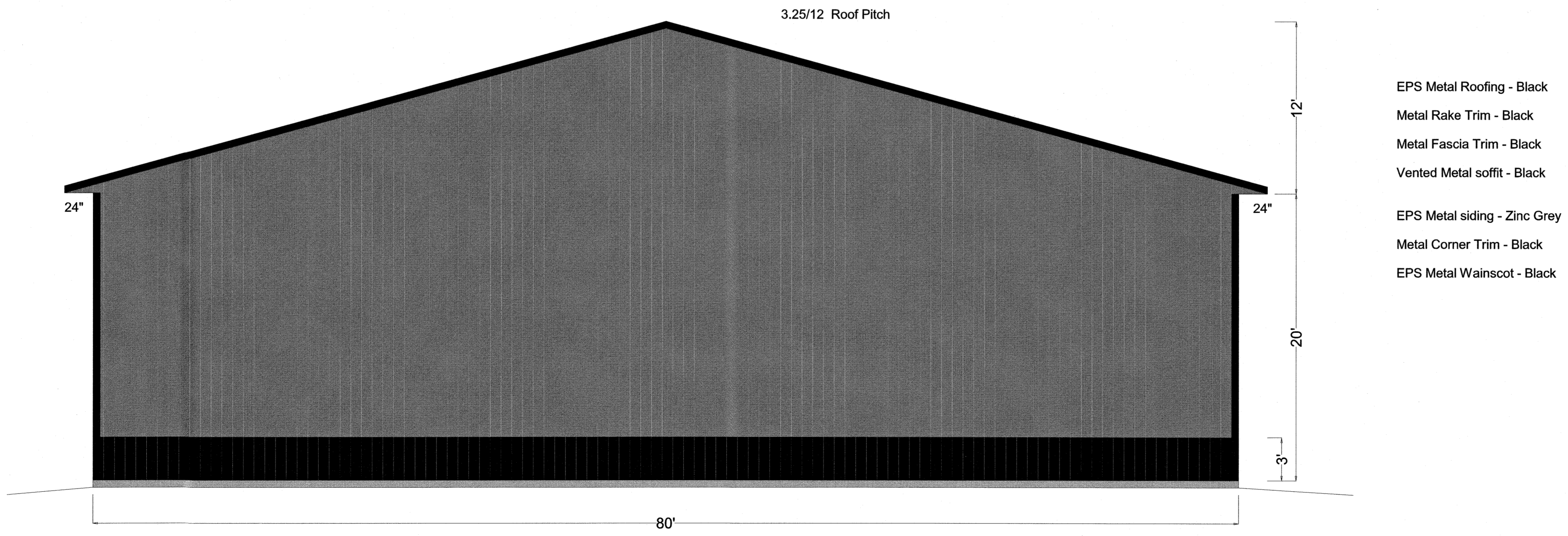
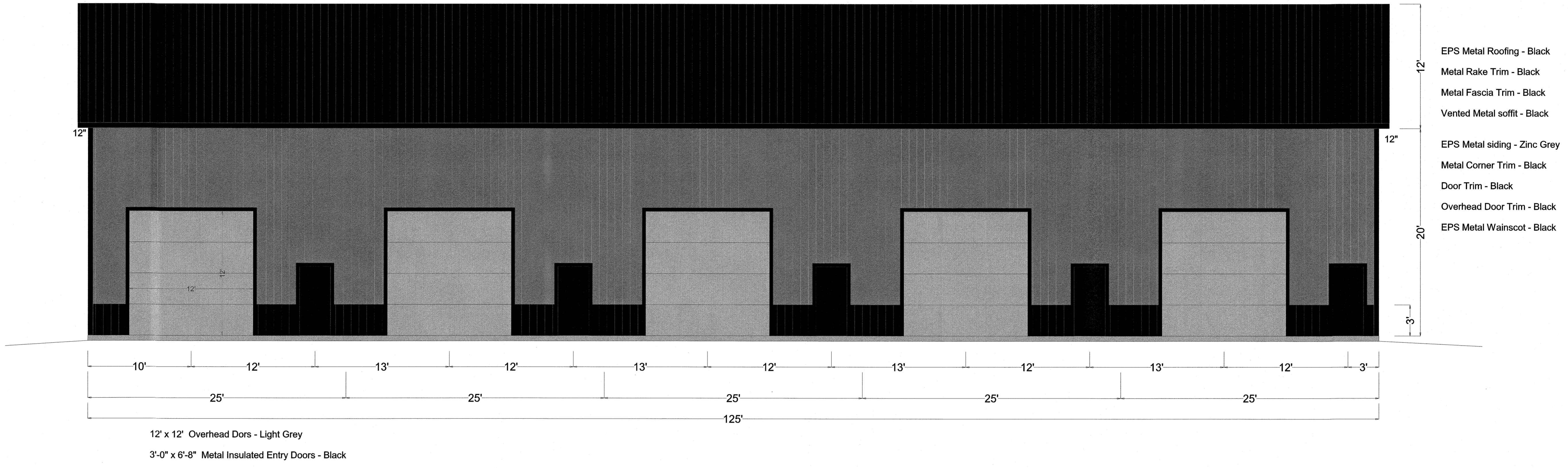


- EPS Metal Roofing - Black
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- EPS Metal siding - Zinc Grey
- Metal Corner Trim - Black
- EPS Metal Wainscot - Black

EPS
Buildings

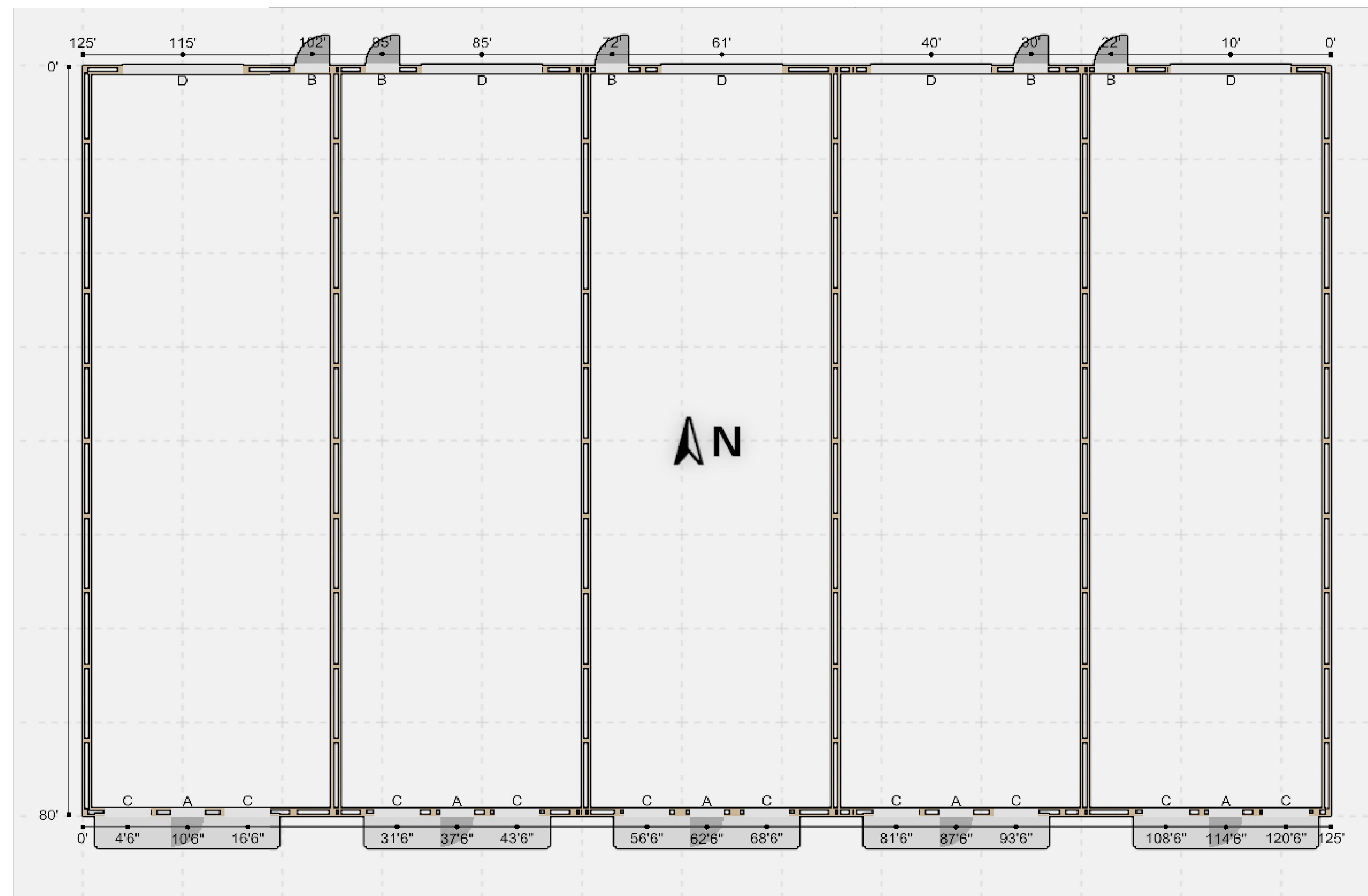
Energy Panel Structures, Inc.
Clyde, NY

Pre-Engineered Solid Core Building
"Structural Insulated Panel" Building System



EPS
 Energy Panel Structures, Inc.
 Clyde, NY
 Pre-Engineered Solid Core Building
 "Structural Insulated Panel" Building System

80' x 16' x 125' with a 3/12 Pitch Roof



FLOOR PLAN
NOT TO SCALE