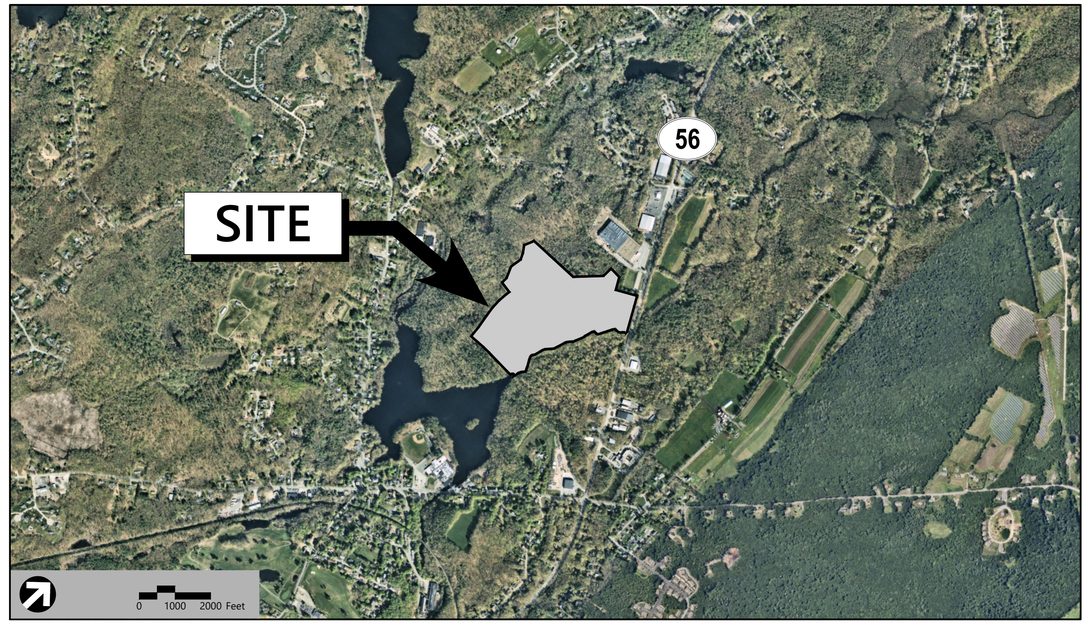
Site Plans

Issued for	Local Approvals
Date Issued	December 7, 2021
Latest Issue	December 7, 2021

Leicester Central

0, 90, & 92 Huntoon Memorial Highway
Leicester, MA 01524



Owners

JMC/TBG Leicester, LLC
100 Grandview Road
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781.849.0011

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Mashpee, MA 02649

Applicant

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100 Grandview Road
Suite 203
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781.849.0011

Parcel ID's: 44 A4.1 0, 44 A6 0, & 44 A5 0

Sheet Index

Reference Drawings

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APEX Lighting Solutions
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VHB Project : 15392.00 - Leicester Central
Issued for : Local Approvals - 12/7/2021

\\VHB\GBL\PROJ\WORCESTER\15392.00 LEICESTER WAREHOUSE\CAD\LD\PLANSET\15392.00 - COV 14 December 2021

Legend

Exist.	Prop.	
		PROPERTY LINE
		PROJECT LIMIT LINE
		RIGHT-OF-WAY/PROPERTY LINE
		EASEMENT
		BUILDING SETBACK
		PARKING SETBACK
10+00	10+00	BASELINE
		CONSTRUCTION LAYOUT
		ZONING LINE
		TOWN LINE
		LIMIT OF DISTURBANCE
		WETLAND LINE WITH FLAG
		FLOODPLAIN
BLSF		BORDERING LAND SUBJECT TO FLOODING
BZ		WETLAND BUFFER ZONE
NDZ		NO DISTURB ZONE
200'RA		200' RIVERFRONT AREA
		GRAVEL ROAD
EOP	EOP	EDGE OF PAVEMENT
BB	BB	BITUMINOUS BERM
BC	BC	BITUMINOUS CURB
CC	CC	CONCRETE CURB
	CG	CURB AND GUTTER
CC	ECC	EXTRUDED CONCRETE CURB
CC	MCC	MONOLITHIC CONCRETE CURB
CC	PCC	PRECAST CONC. CURB
SGE	SGE	SLOPED GRAN. EDGING
VGC	VGC	VERT. GRAN. CURB
		LIMIT OF CURB TYPE
		SAWCUT
		BUILDING
	EN	BUILDING ENTRANCE
	LD	LOADING DOCK
		BOLLARD
D	D	DUMPSTER PAD
		SIGN
		DOUBLE SIGN
		STEEL GUARDRAIL
		WOOD GUARDRAIL
		PATH
		TREE LINE
		WIRE FENCE
		FENCE
		STOCKADE FENCE
		STONE WALL
		RETAINING WALL
		STREAM / POND / WATER COURSE
		DETENTION BASIN
		HAY BALES
		SILT FENCE
		SILT SOCK / STRAW WATTLE
4	4	MINOR CONTOUR
20	20	MAJOR CONTOUR
10	10	PARKING COUNT
	C10	COMPACT PARKING STALLS
DYL	DYL	DOUBLE YELLOW LINE
SL	SL	STOP LINE
		CROSSWALK
		ACCESSIBLE CURB RAMP
		ACCESSIBLE PARKING
VAN	VAN	VAN-ACCESSIBLE PARKING

Exist.	Prop.	
		CONCRETE
		HEAVY DUTY PAVEMENT
		BUILDINGS
		RIPRAP
		CONSTRUCTION EXIT
27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
132.75 ×	132.75 ×	SPOT ELEVATION
45.0 TW× 38.5 BW×	45.0 TW× 38.5 BW×	TOP & BOTTOM OF WALL ELEVATION
		BORING LOCATION
		TEST PIT LOCATION
MW	MW	MONITORING WELL
UD	UD	UNDERDRAIN
12"D	12"D	DRAIN
6"RD	6"RD	ROOF DRAIN
12"S	12"S	SEWER
FM	FM	FORCE MAIN
OHW	OHW	OVERHEAD WIRE
6"W	6"W	WATER
4"FP	4"FP	FIRE PROTECTION
	2"DW	DOMESTIC WATER
3"G	G	GAS
E	E	ELECTRIC
STM	STM	STEAM
T	T	TELEPHONE
FA	FA	FIRE ALARM
CATV	CATV	CABLE TV
		CATCH BASIN CONCENTRIC
		CATCH BASIN ECCENTRIC
		DOUBLE CATCH BASIN CONCENTRIC
		DOUBLE CATCH BASIN ECCENTRIC
		GUTTER INLET
		DRAIN MANHOLE CONCENTRIC
		DRAIN MANHOLE ECCENTRIC
TD		TRENCH DRAIN
E	E	PLUG OR CAP
CO	CO	CLEANOUT
		FLARED END SECTION
		HEADWALL
S		SEWER MANHOLE CONCENTRIC
S		SEWER MANHOLE ECCENTRIC
CS	CS	CURB STOP & BOX
WV	WV	WATER VALVE & BOX
TSV	TSV	TAPPING SLEEVE, VALVE & BOX
		FIRE DEPARTMENT CONNECTION
HYD	HYD	FIRE HYDRANT
WM	WM	WATER METER
PIV	PIV	POST INDICATOR VALVE
W	W	WATER WELL
GC	GC	GAS GATE
GM	GM	GAS METER
E	EMH	ELECTRIC MANHOLE
EM	EM	ELECTRIC METER
		LIGHT POLE
T	TMH	TELEPHONE MANHOLE
T	T	TRANSFORMER PAD
		UTILITY POLE
		GUY POLE
		GUY WIRE & ANCHOR
HH	HH	HAND HOLE
PB	PB	PULL BOX
		MATCHLINE

Abbreviations

General

ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL

Utility

CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Notes

General

1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE SIX INCHES LOAM AND SEED.
5. WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.
6. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
7. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
8. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
9. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
10. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
11. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
12. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
13. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
14. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.

Utilities

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
   - A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
   - B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
   - C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
   - A. WATER PIPES SHALL BE DUCTILE IRON (DI) CLASS 52
   - B. SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE SDR-35
   - C. STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HDPE)
   - D. PIPE INSTALLATION AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING CODE WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE WITH LOCAL PLUMBING INSPECTOR PRIOR TO BEGINNING WORK.
8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
10. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

Layout and Materials

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE THREE FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE PRECAST CONCRETE CURB WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
4. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Demolition

1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
4 THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Erosion Control

1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

Existing Conditions Information

1. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC., IN JULY, 2019 AND FROM DEEDS AND PLANS OF RECORD. THE EXISTING CONDITIONS SHOWN ON THESE PLANS WERE DEVELOPED FROM A COMBINED EFFORT OF LIDAR & AERIAL PHOTOGRAMMETRIC MAPPING BY EASTERN TOPOGRAPHICS, INC., BASED ON AERIAL PHOTOGRAPHS TAKEN ON APRIL 25, 2019, AND AUGMENTED BY AN ON-THE-GROUND SURVEY PERFORMED BY VHB DURING JULY, 2019 AND NOVEMBER, 2021.
   - A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB ENVIRONMENTAL GROUP IN JUNE, 2019 AND REFLAGGED IN OCTOBER 2021
2. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD 1988.
3. GEOTECHNICAL DATA INCLUDING TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED FROM YANKEE ENGINEERING & TESTING, INC.

Document Use

1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

vhb.com

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Leicester Central

0, 90, & 92 Huntoon Memorial Highway
Leicester, MA 01524

No.	Revision	Date	Appvd.

Designed by CSH | Checked by JWD
Issued for **Local Approvals** | Date **December 7, 2021**

Not Approved for Construction

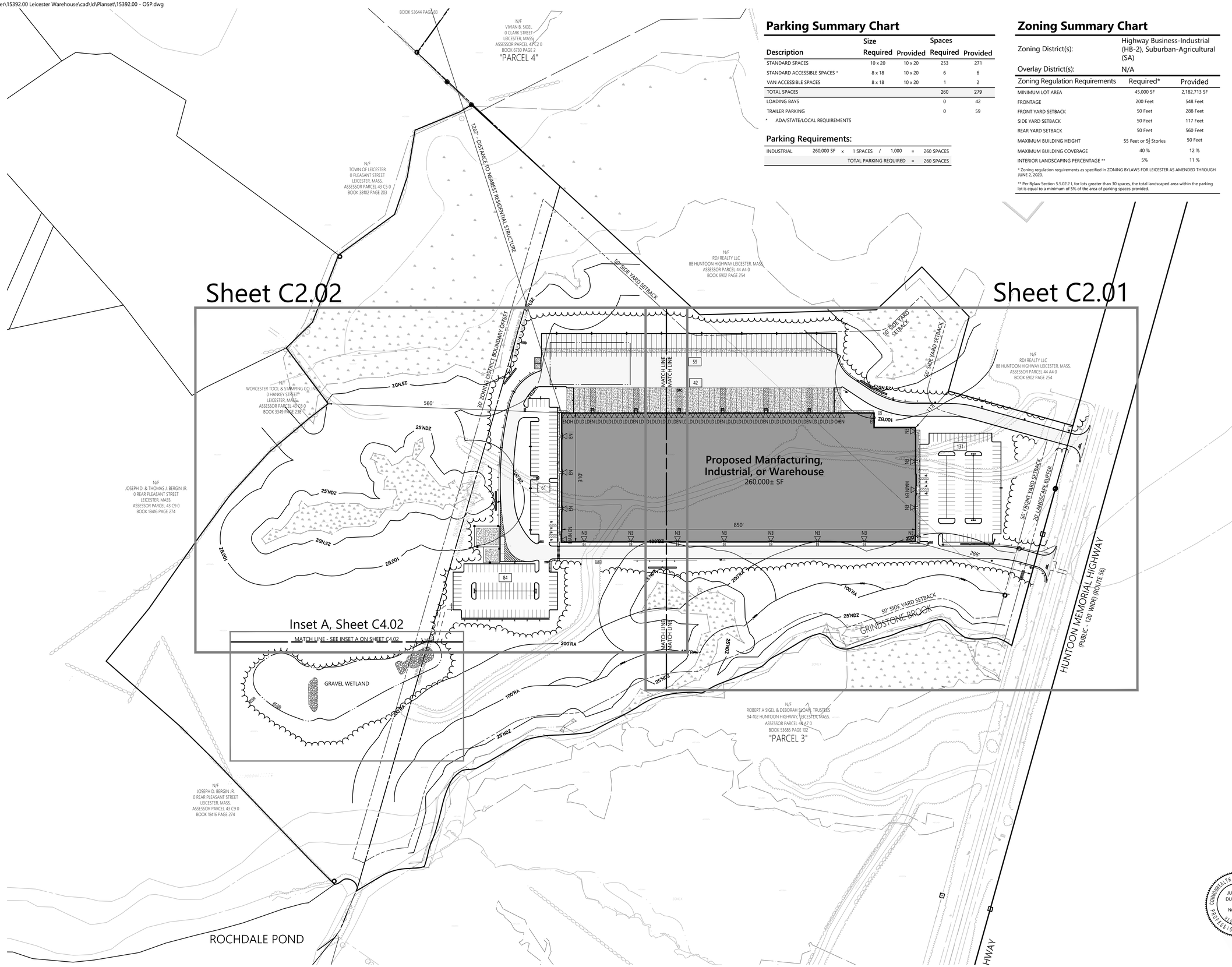
Drawing Title
Legend and General Notes

Drawing Number
C1.00

Sheet 1 of 17

Project Number
15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER



Parking Summary Chart

Description	Size Required	Size Provided	Spaces Required	Spaces Provided
STANDARD SPACES	10 x 20	10 x 20	253	271
STANDARD ACCESSIBLE SPACES *	8 x 18	10 x 20	6	6
VAN ACCESSIBLE SPACES	8 x 18	10 x 20	1	2
TOTAL SPACES			260	279
LOADING BAYS			0	42
TRAILER PARKING			0	59

* ADA/STATE/LOCAL REQUIREMENTS

Parking Requirements:

INDUSTRIAL	260,000 SF	x	1 SPACES	/ 1,000	=	260 SPACES
			TOTAL PARKING REQUIRED		=	260 SPACES

Zoning Summary Chart

Zoning District(s):	Highway Business-Industrial (HB-2), Suburban-Agricultural (SA)
Overlay District(s):	N/A

Zoning Regulation Requirements	Required*	Provided
MINIMUM LOT AREA	45,000 SF	2,182,713 SF
FRONTAGE	200 Feet	548 Feet
FRONT YARD SETBACK	50 Feet	288 Feet
SIDE YARD SETBACK	50 Feet	117 Feet
REAR YARD SETBACK	50 Feet	560 Feet
MAXIMUM BUILDING HEIGHT	55 Feet or 5½ Stories	50 Feet
MAXIMUM BUILDING COVERAGE	40 %	12 %
INTERIOR LANDSCAPING PERCENTAGE **	5%	11 %

* Zoning regulation requirements as specified in ZONING BYLAWS FOR LEICESTER AS AMENDED THROUGH JUNE 2, 2020.

** Per Bylaw Section 5.5.02.2 I, for lots greater than 30 spaces, the total landscaped area within the parking lot is equal to a minimum of 5% of the area of parking spaces provided.

Riverfront Area Notes

1. TOTAL RIVERFRONT AREA: 367,157 SF
2. PROJECT PROPOSES 34,406 SF (9.4%) OF DISTURBANCE

vhb.com
vhb
120 Front Street
Suite 500
Worcester, MA 01608
508.752.1001

0 50 100 200 Feet

Leicester Central

0, 90, & 92 Huntoon Memorial Highway
Leicester, MA 01524

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Drawing Title
Overall Site Plan/Locus Plan

Drawing Number
C2.00

Sheet 2 of 17

Project Number
15392.00

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JUSTIN W. DUFRESNE
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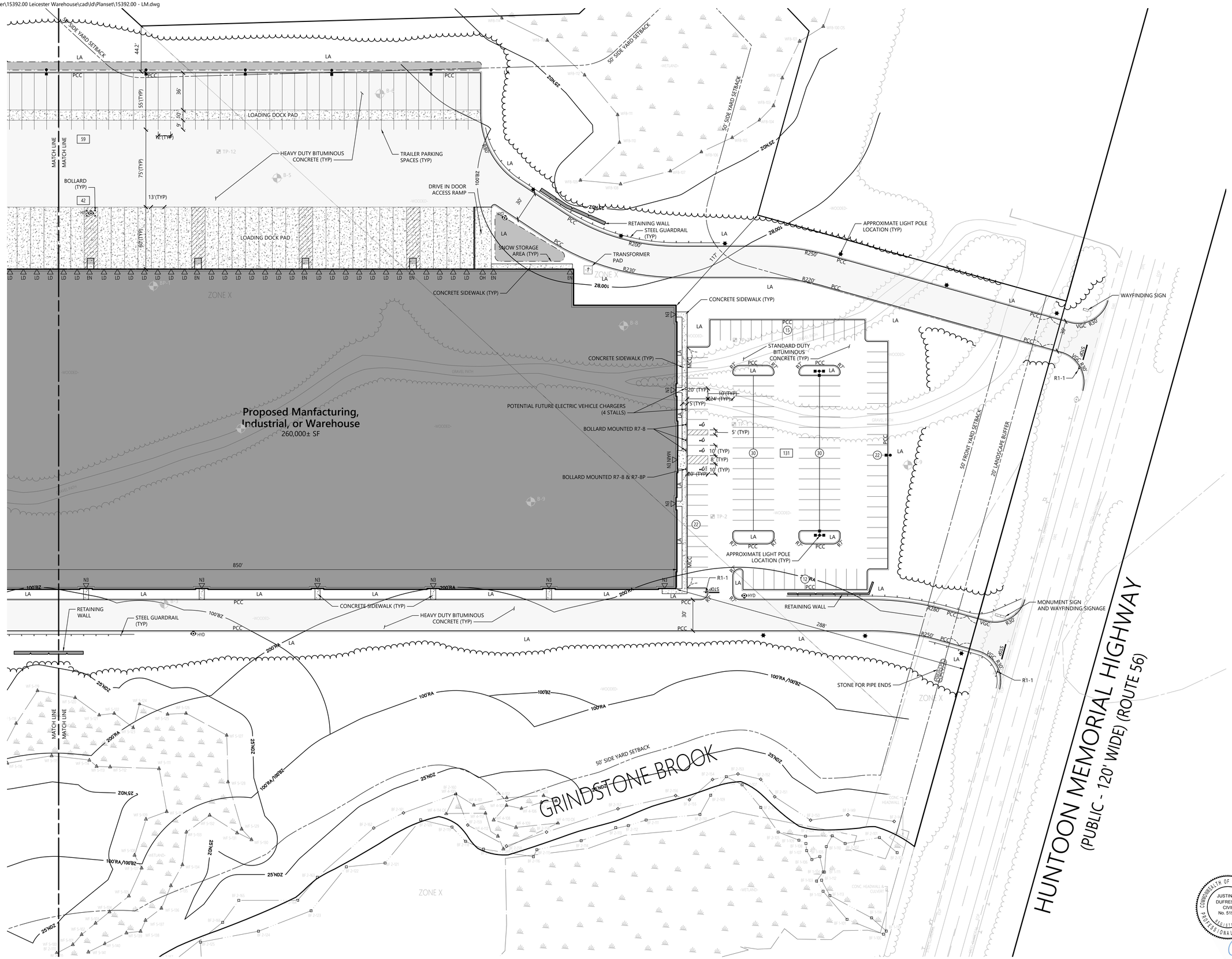
No. 51506
REGISTERED PROFESSIONAL ENGINEER



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Worcester, MA 01608
508.752.1001

Sign Summary

M.U.T.C.D. Number	Specification Width	Specification Height	Desc.
R1–1	30"	30"	STOP
R7–8	12"	18"	RESERVED PARKING
R7–8P	12"	6"	VAN ACCESSIBLE

0 20 40 80 Feet

Leicester Central

0, 90, & 92 Huntoon Memorial Highway
Leicester, MA 01524

No.	Revision	Date	Appvd.

Designed by CSH
Checked by JWD
Issued for Local Approvals
Date December 7, 2021

Not Approved for Construction

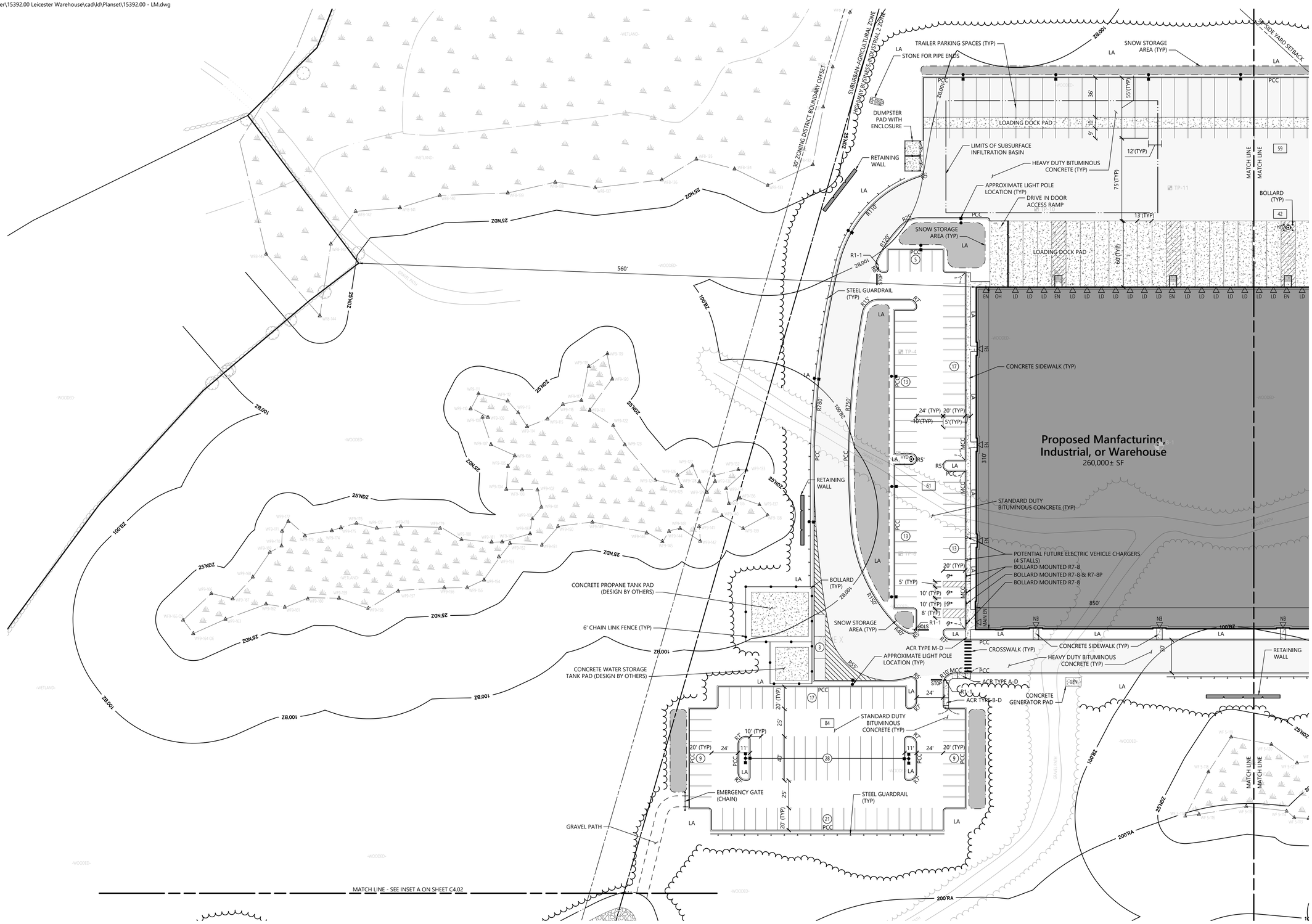
Drawing Title
Layout and Materials Plan

Drawing Number
C2.01

Sheet 3 of 17

Project Number 15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER



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Sign Summary

M.U.T.C.D. Number	Specification Width	Specification Height	Desc.
R1-1	30"	30"	STOP
R7-8	12"	18"	RESERVED PARKING
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0 20 40 80 Feet

Leicester Central

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Leicester, MA 01524

No.	Revision	Date	Appvd.

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Drawing Title
Layout and Materials Plan

Drawing Number
C2.02

Sheet 4 of 17

Project Number
15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

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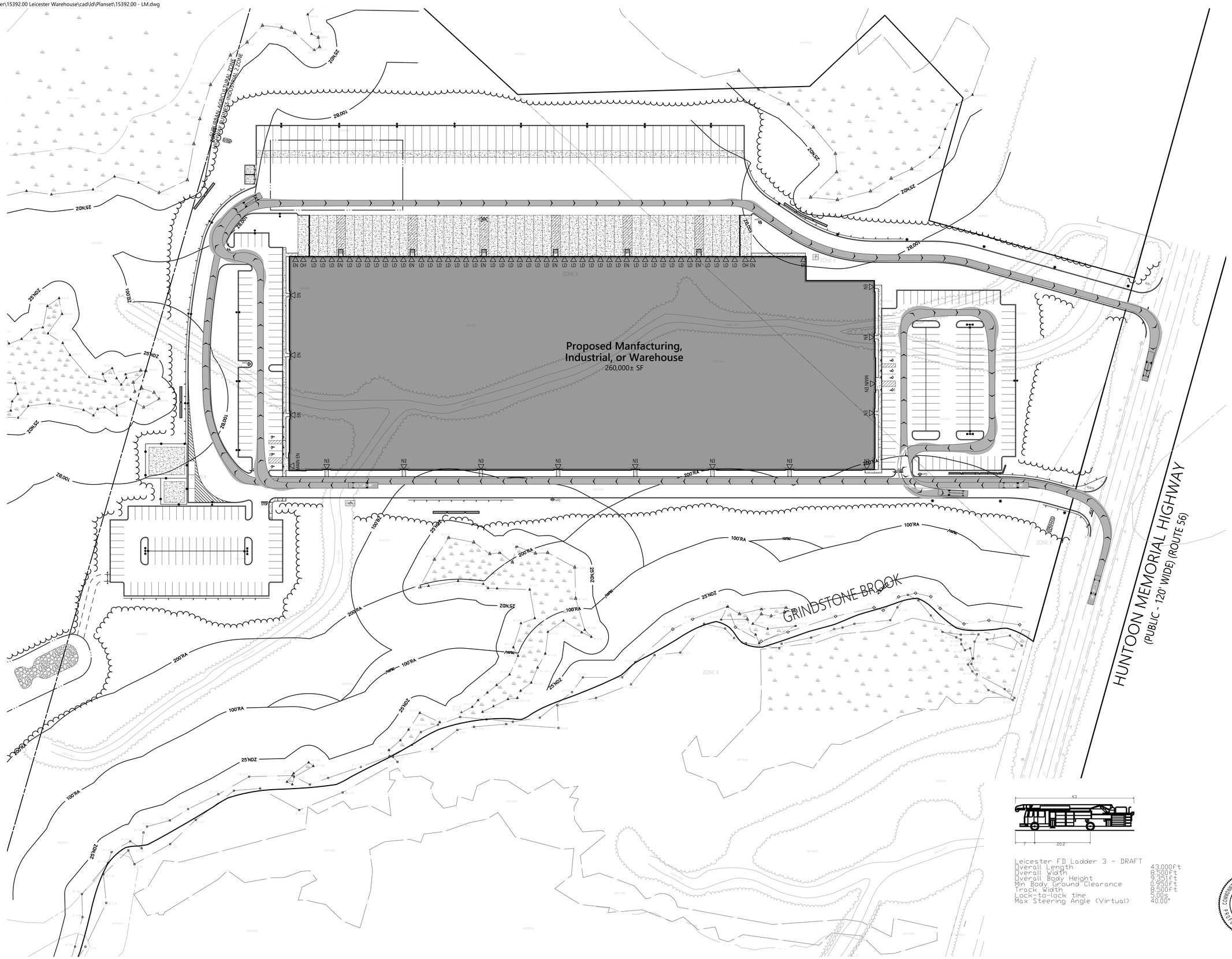

Leicester FD Ladder 3 - DRAFT

Overall Length	43.000ft
Overall Width	8.500ft
Overall Body Height	9.351ft
Min Body Ground Clearance	0.950ft
Track Width	8.500ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	40.00°

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0 30 60 120 Feet

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Drawing Title
Fire Access Plan

Drawing Number
C3.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

Sheet 5 of 17

Project Number 15392.00

Saved Tuesday, December 14, 2021 3:30:47 PM CHAGEN Plotted Tuesday, December 14, 2021 4:57:15 PM Chris Hagen

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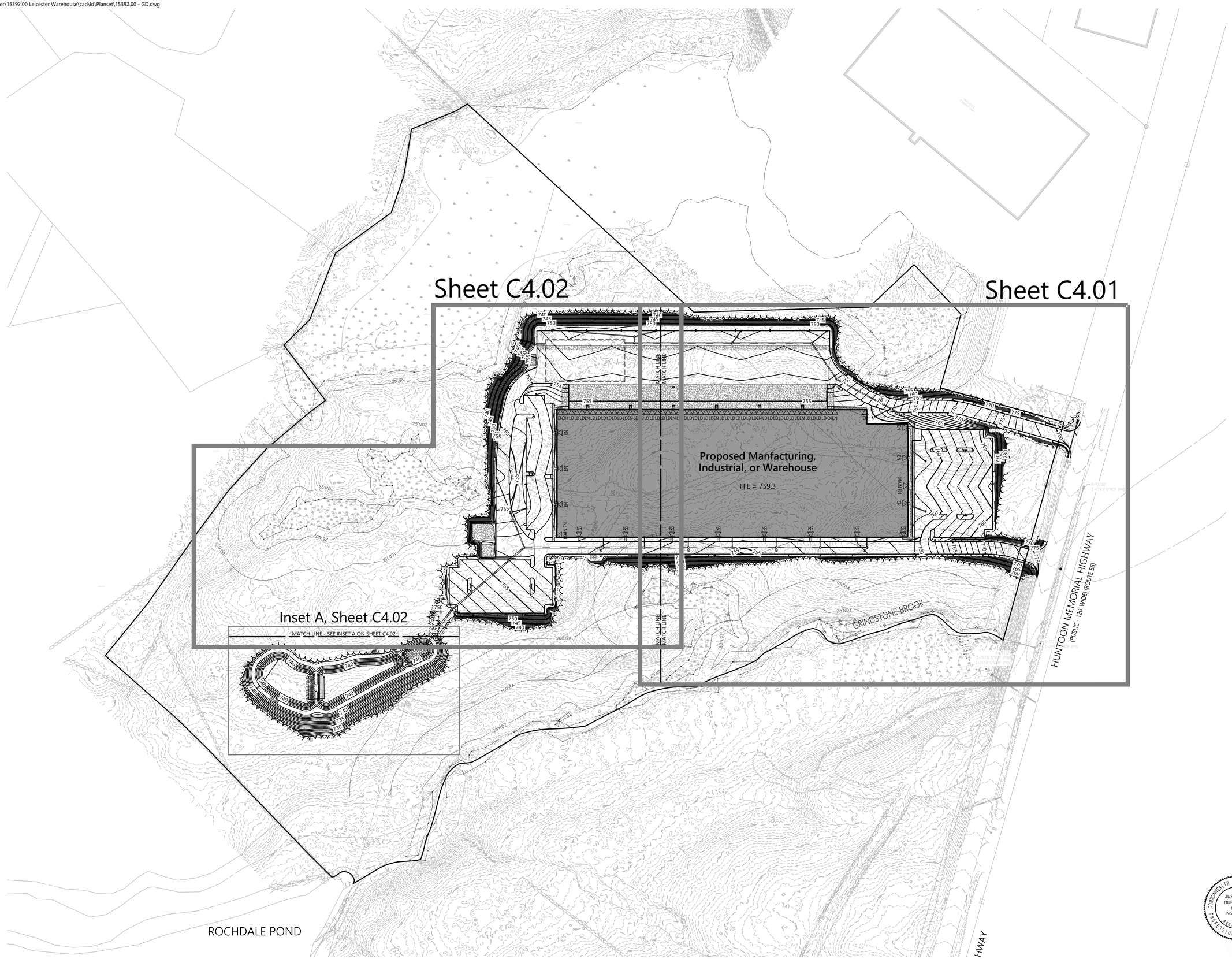

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0 50 100 200 Feet

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Date December 7, 2021

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Drawing Title
Overall Grading, Drainage, and Erosion Control Plan

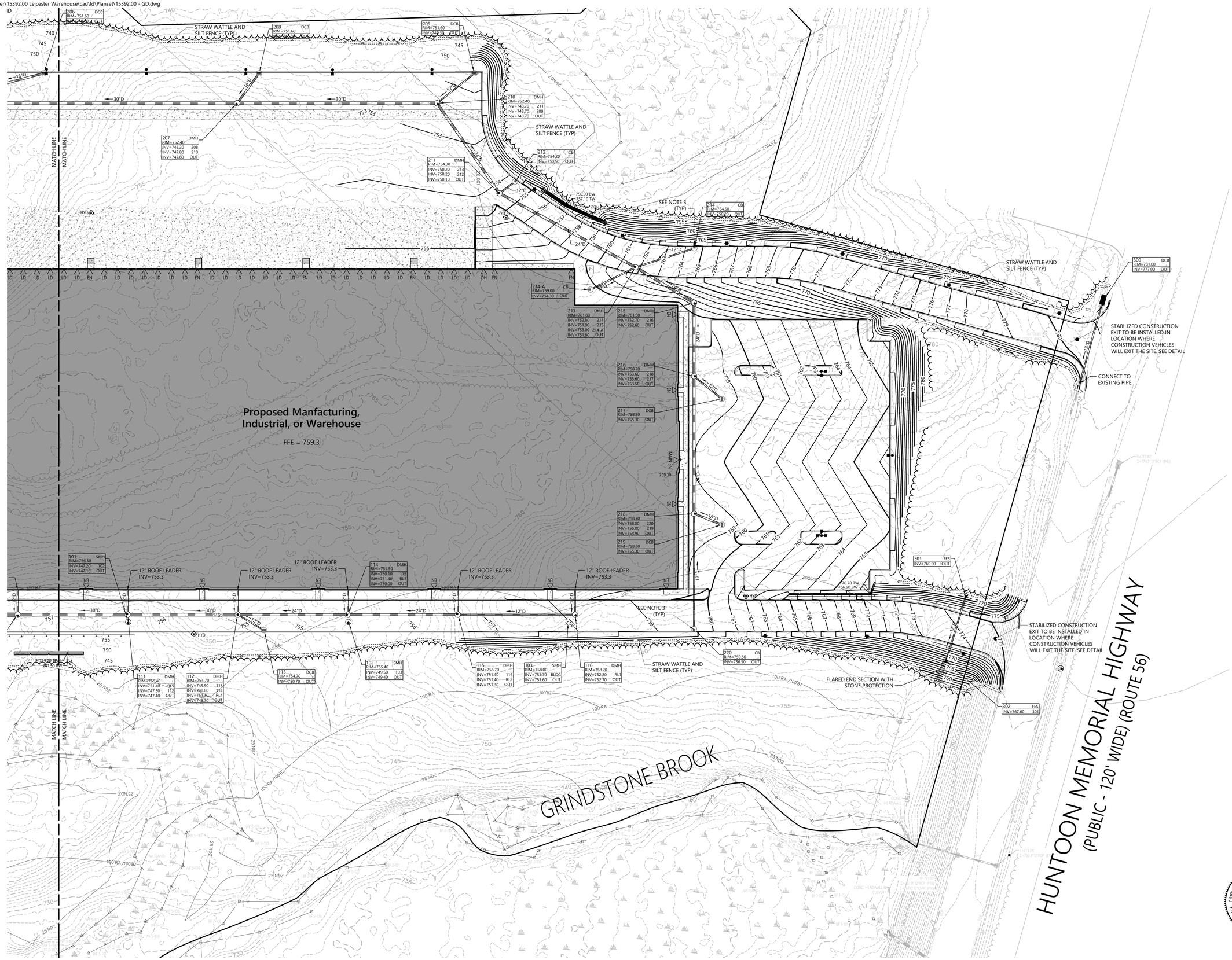
Drawing Number
C4.00

Sheet 6 of 17

Project Number 15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

Saved Monday, December 13, 2021 6:16:35 PM CHAGEN Plotted Tuesday, December 14, 2021 4:57:35 PM Chris Hagen



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Notes

1. STABILIZED CONSTRUCTION EXIT TO BE FIELD LOCATED AT LIMIT OF DISTURBANCE.
2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION. CONTRACTOR TO CONFIRM EROSION AND SEDIMENTATION CONTROLS IN PLACE DURING CONSTRUCTION ARE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF LEICESTER REQUIREMENTS.
3. SILT SACKS SHALL BE INSTALLED AND MAINTAINED IN ALL CATCH BASINS ONLINE DURING CONSTRUCTION.

0 20 40 80 Feet

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No.	Revision	Date	Appvd.

Designed by CSH
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Issued for Local Approvals
Date December 7, 2021

Not Approved for Construction

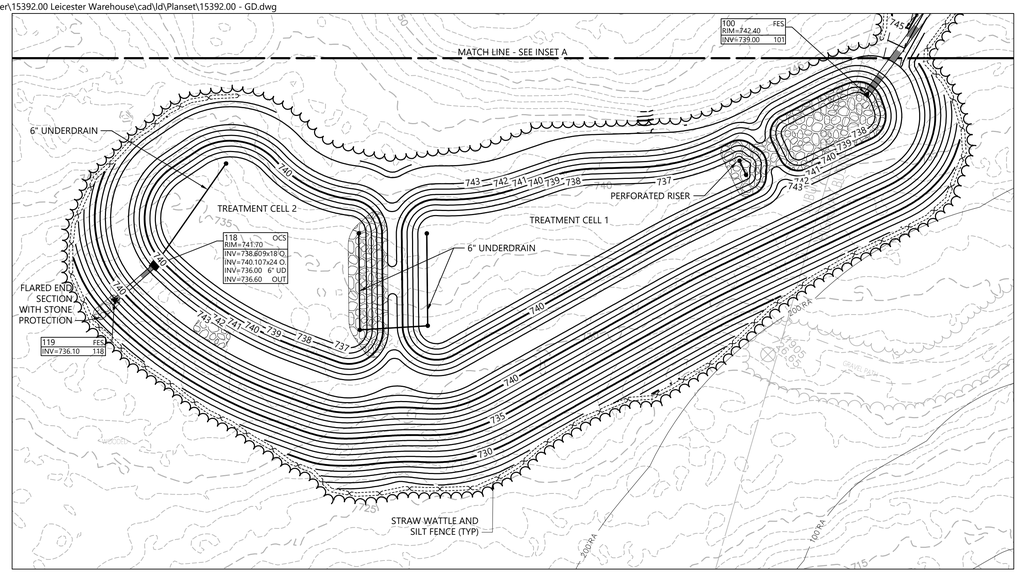
Drawing Title
Grading, Drainage, and Erosion Control Plan

Drawing Number
C4.01

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUPRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

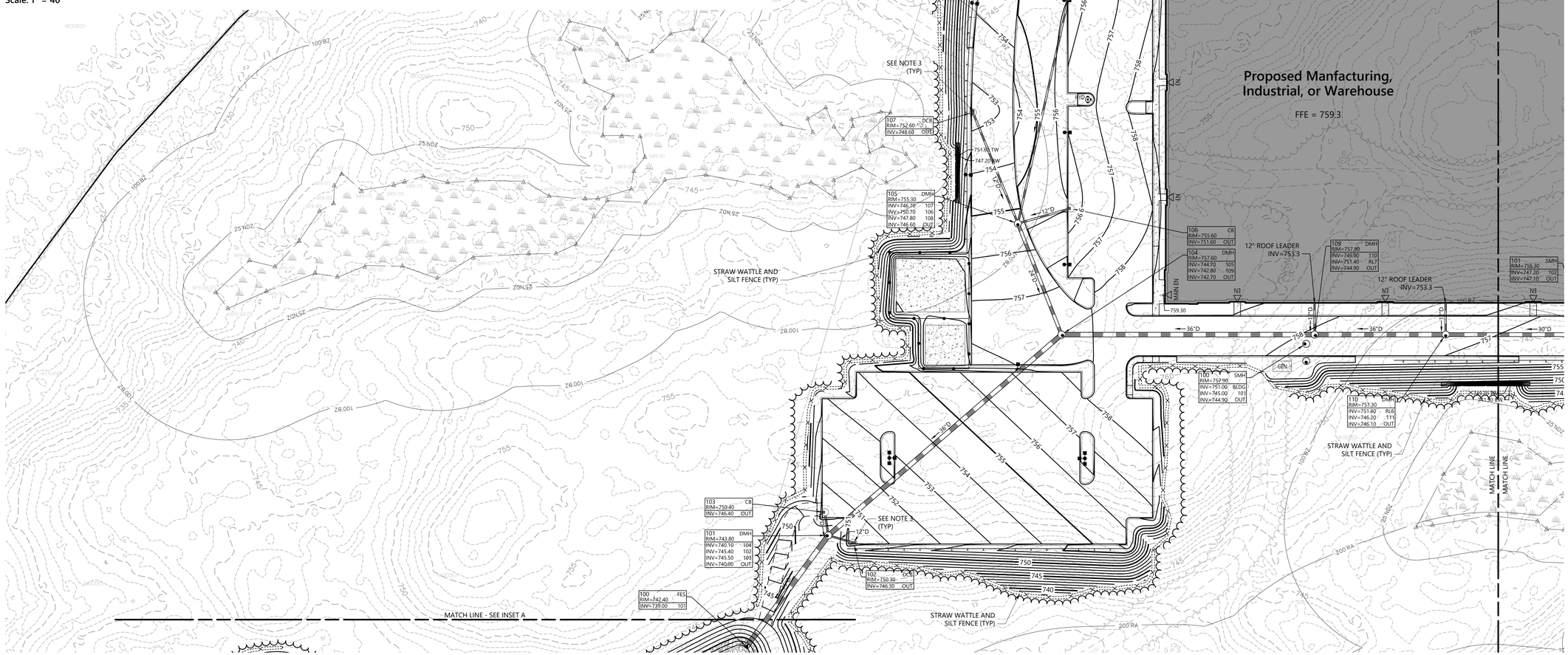
Sheet 7 of 17

Project Number 15392.00



Inset A

Scale: 1" = 40'



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Notes

1. STABILIZED CONSTRUCTION EXIT TO BE FIELD LOCATED AT LIMIT OF DISTURBANCE.
2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION. CONTRACTOR TO CONFIRM EROSION AND SEDIMENTATION CONTROLS IN PLACE DURING CONSTRUCTION ARE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF LEICESTER REQUIREMENTS.
3. SILT SACKS SHALL BE INSTALLED AND MAINTAINED IN ALL CATCH BASINS ONLINE DURING CONSTRUCTION.

0 20 40 80 Feet

Leicester Central

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No.	Revision	Date	Appvd.

Designed by CSH
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Date December 7, 2021

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Drawing Title
Grading, Drainage, and Erosion Control Plan

Drawing Number
C4.02

Sheet 8 of 17

Project Number 15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

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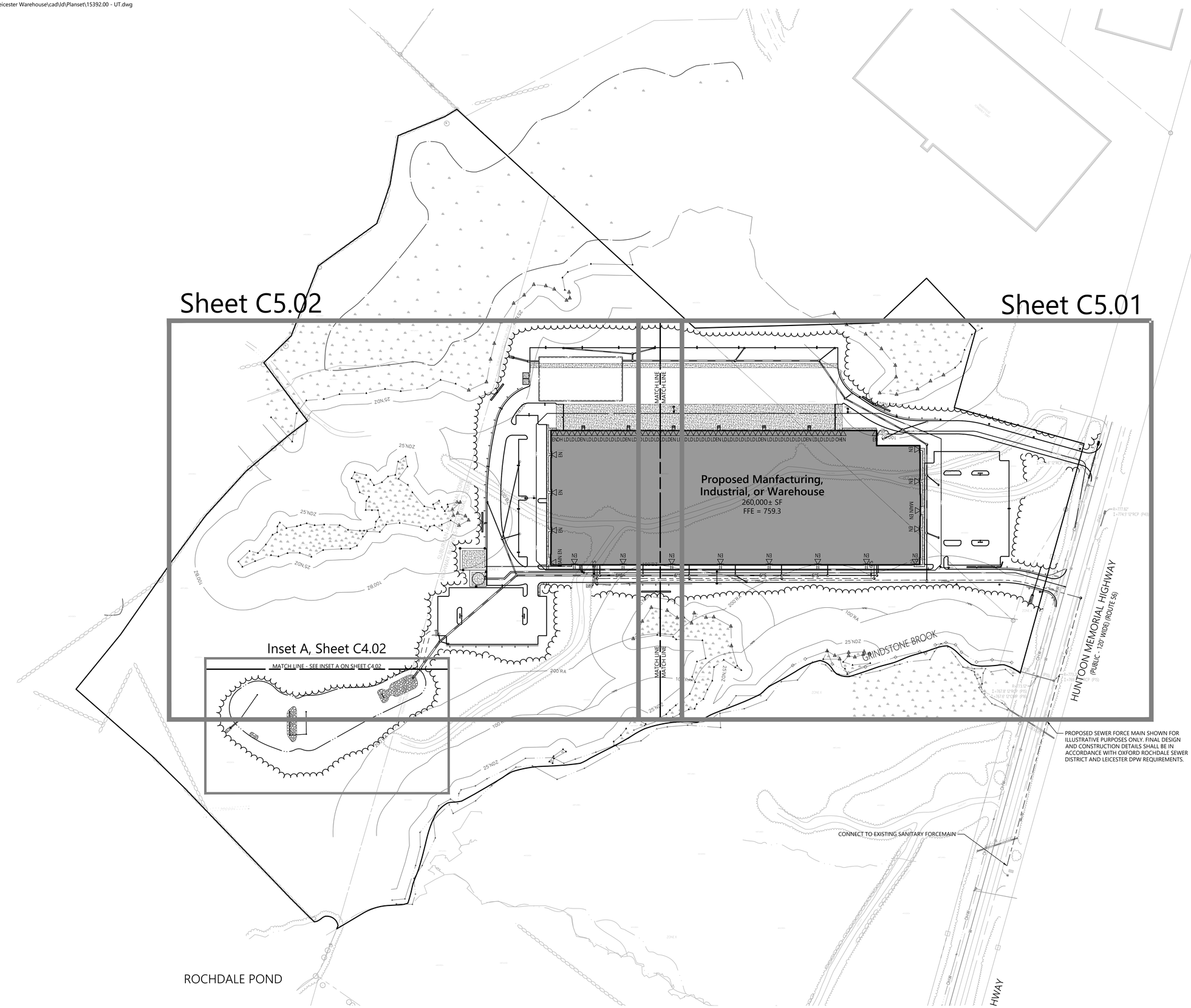

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0 50 100 200 Feet

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Date December 7, 2021

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Drawing Title
Overall Utility Plan

Drawing Number
C5.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

Sheet 9 of 17

Project Number
15392.00

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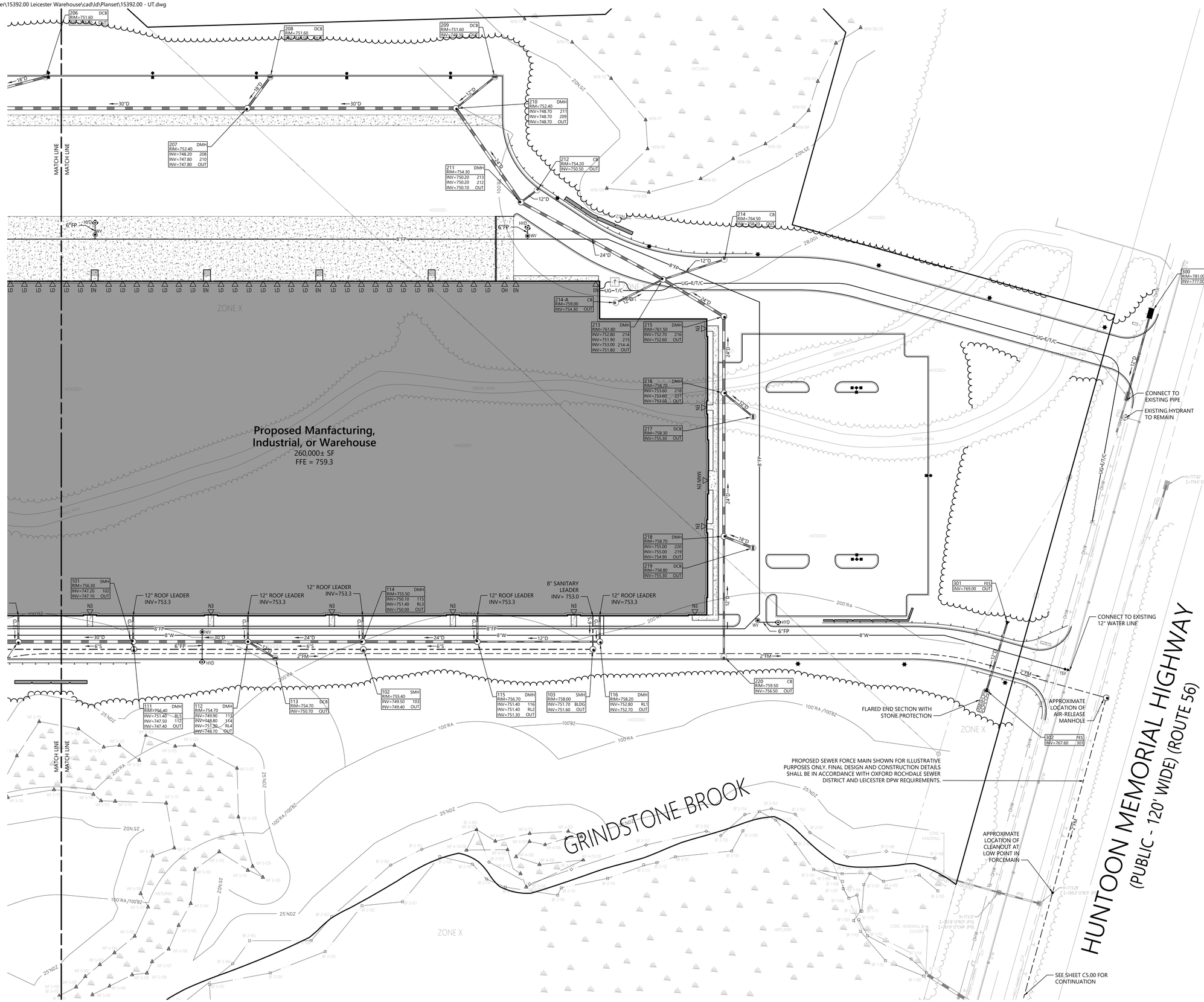

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0 20 40 80 Feet

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Date December 7, 2021

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Drawing Title
Utility Plan

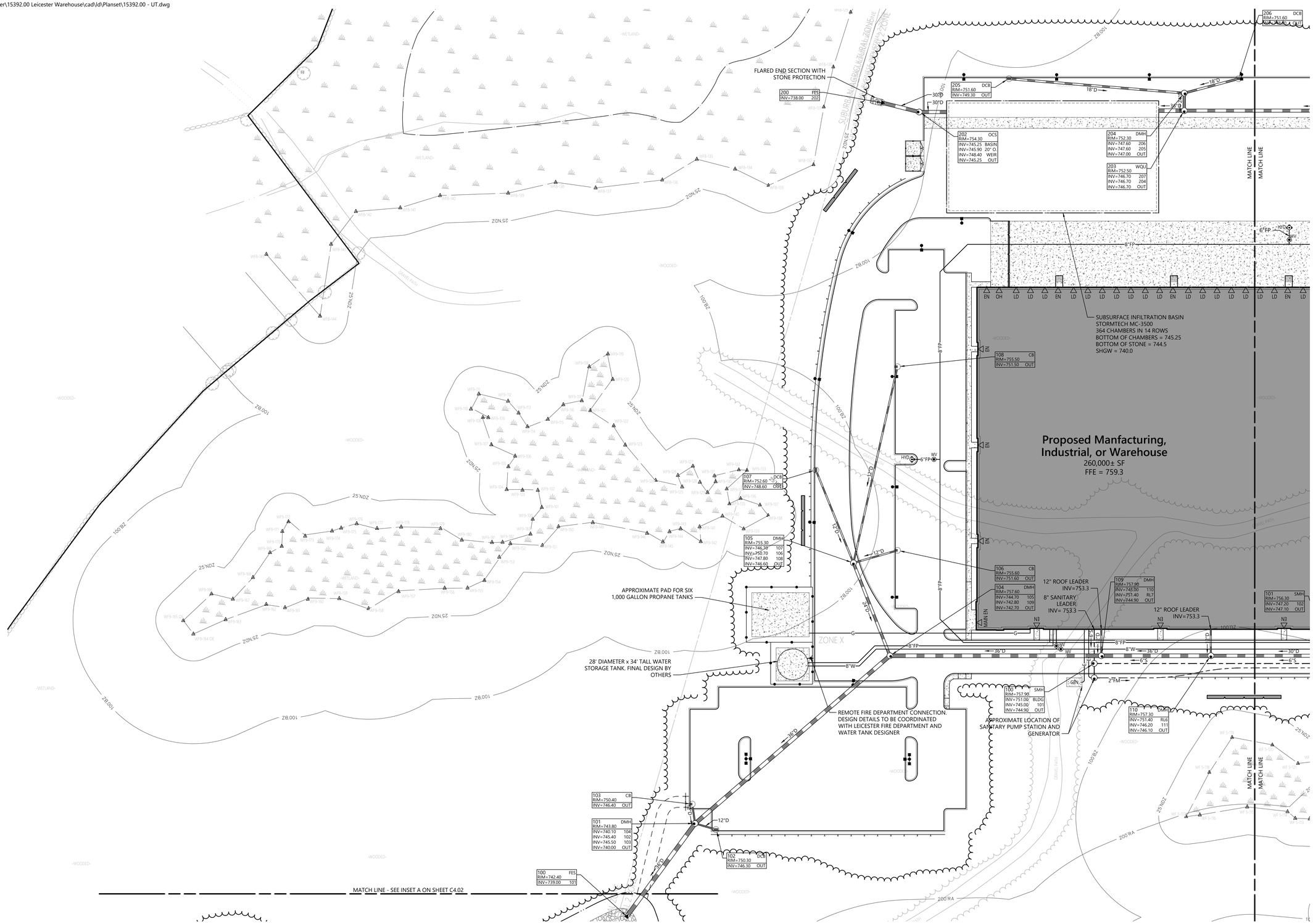
Drawing Number
C5.01

Sheet 10 of 17

Project Number 15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

Saved Tuesday, December 14, 2021 4:41:48 PM CHAGEN Plotted Tuesday, December 14, 2021 5:01:15 PM Chris Hagen



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0 20 40 80 Feet

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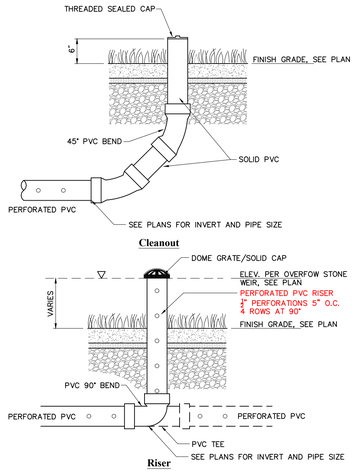
Drawing Title
Utility Plan

Drawing Number
C5.02

Sheet 11 of 17

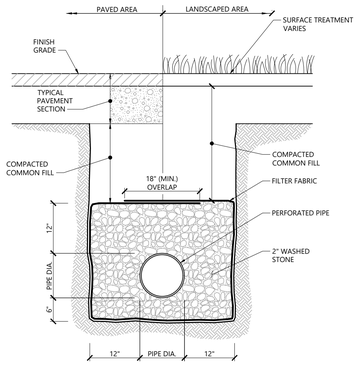
Project Number
15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER



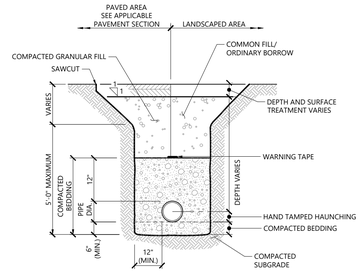
Gravel Wetland Subdrain 6/08

N.T.S. Source: VHB



Underdrain (UD) 1/16

N.T.S. Source: VHB LD_184

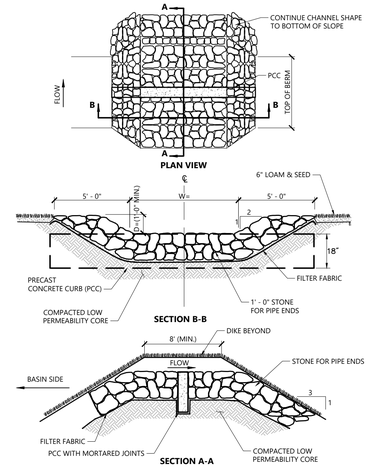


NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
3. COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY ENGINEER.

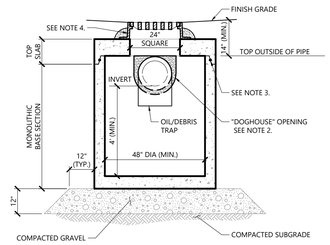
Utility Trench 11/19

N.T.S. Source: VHB LD_300



Overflow Stone Swale 1/16

N.T.S. Source: VHB LD_161



NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE DOGHOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHALL NOT REST DIRECTLY ON PIPE. GROUT ALL PIPE CONNECTIONS (NON-SHRINK GROUT).
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE (4"DEPTH) SHALL BE SET IN FULL MORTAR BED.
5. ADJUST TO FINISH GRADE WITH CLAY BRICK AND MORTAR AS REQUIRED.

Catch Basin (CB) Shallow Cover with Oil/Debris Trap 1/16

N.T.S. Source: VHB LD_105

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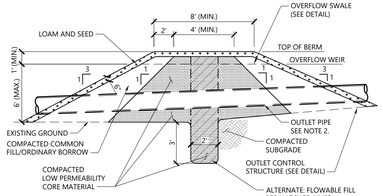
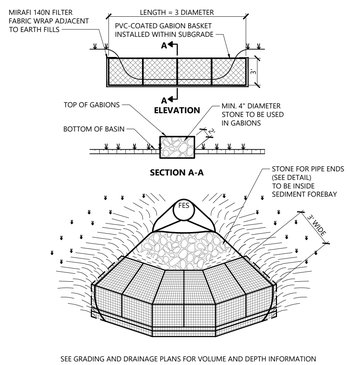


NOTES

1. LOW PERMEABILITY CORE MATERIAL IS CONTINUOUS FOR THE FULL LENGTH OF THE EMBANKMENT.
2. WHERE PIPES PENETRATE THE LOW PERMEABILITY CORE, PIPE SHALL BE BEDDED IN THE LOW PERMEABILITY CORE MATERIAL.
3. THE BERM SECTION IS SUBJECT TO CHANGE AND WILL BE BASED ON THE RESULTS OF FURTHER GEOTECHNICAL INVESTIGATIONS.

Detention Basin Berm Section 12/20

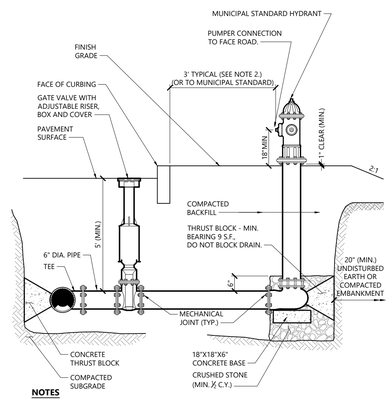
N.T.S. Source: VHB LD_160



SEE GRADING AND DRAINAGE PLANS FOR VOLUME AND DEPTH INFORMATION

Sediment Forebay with Gabion Baffles 1/16

N.T.S. Source: VHB LD_166



NOTES

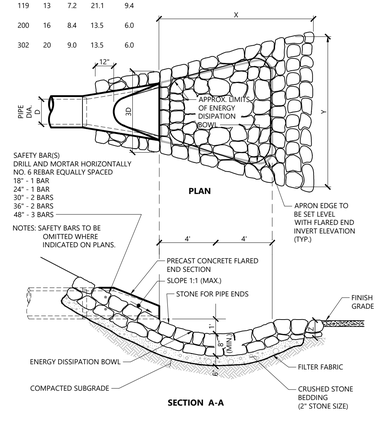
1. CONCRETE THRUST BLOCKS TO BE USED ONLY WHERE THEY CAN BEAR ON UNDISTURBED EARTH AS SHOWN. USE CLAMPS AND TIE RODS OR OTHER ACCEPTABLE METHOD OF JOINT RESTRAINT WHERE SOIL CONDITIONS PROHIBIT THE USE OF THRUST BLOCKS.
2. HYDRANT IN SIDEWALK AREAS TO BE LOCATED TO PROVIDE MINIMUM CLEAR SIDEWALK PASSAGE WIDTH OF 3 FEET AT HYDRANT.
3. A 36-INCH CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT UNLESS OTHERWISE APPROVED BY AUTHORITY HAVING JURISDICTION.

Hydrant Construction 12/19

N.T.S. Source: VHB LD_250

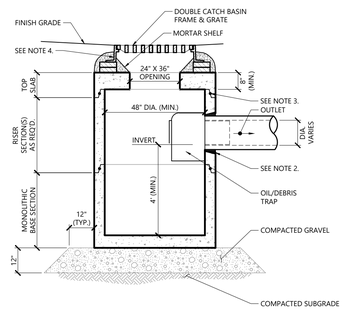
RIPRAP STONE

FES NO.	X	Y	Z	STONE DIA. (D50)
100	20	11.0	18.9	8.4
119	13	7.2	21.1	9.4
200	16	8.4	13.5	6.0
302	20	9.0	13.5	6.0



Flared End Section (FES) with Stone Protection 3/19

N.T.S. Source: VHB LD_134



NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
4. DOUBLE CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICKS TYPICALLY, 5 BRICK COURSES MAXIMUM).

Double Grate Catch Basin (DCB) with Oil/Debris Trap 11/19

N.T.S. Source: VHB LD_103

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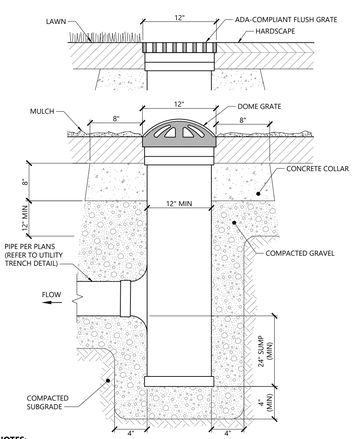
Drawing Title
Site Details

Drawing Number
C6.00

Sheet 12 of 17

Project Number
15392.00

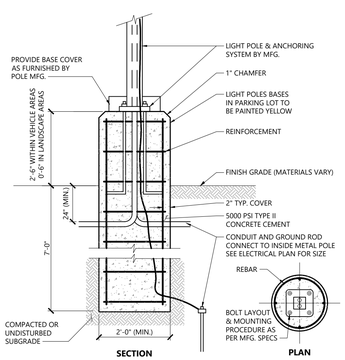


NOTES:

1. AREA DRAINS SHALL BE NYLOPLAST 12" DIAMETER DRAIN BASIN, OR APPROVED EQUAL.
2. GRATES SHALL BE NYLOPLAST 12" PEDESTRIAN MODEL 1299CGP OR 12" DOME GRATE MODEL 1299CGD (OR APPROVED EQUAL).

Area Drain (AD) Type 1 12/19

N.T.S. Source: VHB LD_193

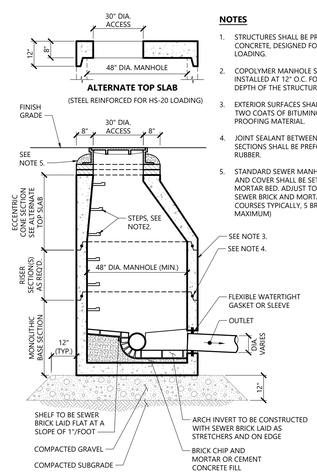


NOTES

DETAIL PROVIDED FOR GENERAL INFORMATION ONLY. CONTRACTOR TO PROVIDE STAMPED FINAL DESIGN OF LIGHT POLE FOUNDATION BASED ON RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER.

Light Pole Foundation Detail (Up to 40' Pole) 12/19

N.T.S. Source: VHB LD_310

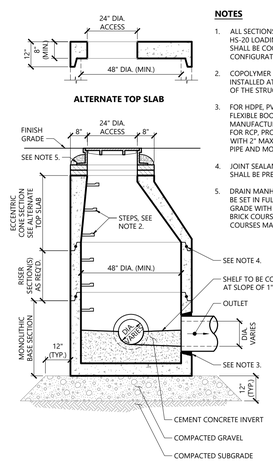


NOTES

1. STRUCTURES SHALL BE PRECAST CONCRETE, DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

Sanitary Sewer Manhole (SMH) 1/16

N.T.S. Source: VHB LD_200

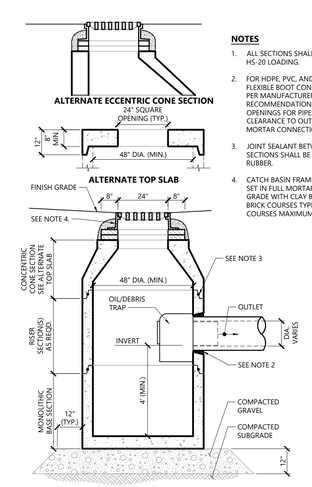


NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

Drain Manhole (DMH) 11/19

N.T.S. Source: VHB LD_115



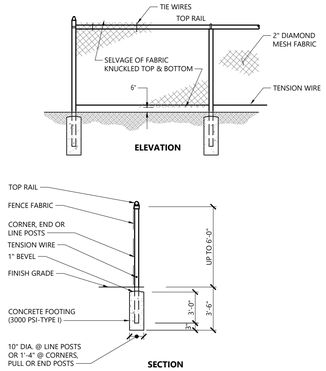
NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Catch Basin (CB) With Oil/Debris Trap 3/21

N.T.S. Source: VHB LD_101

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER



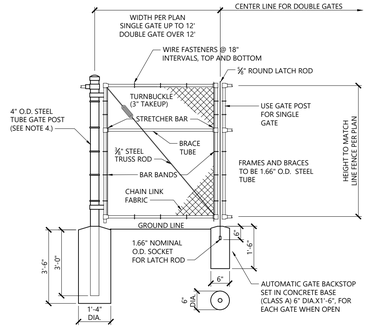
NOTE

1. MATERIALS TO BE SUPPLIED AND INSTALLED IN CONFORMANCE WITH "CHAIN LINK MANUFACTURER'S INSTITUTE" PRODUCT MANUAL.

Chain Link Fence up to 6'

12/19

N.T.S. Source: VHB LD_481_MA



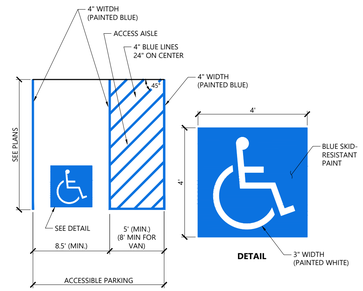
NOTES

1. CHAIN LINK FABRIC FOR GATES TO BE THE SAME AS REQUIRED FOR FENCE.
2. GATE POST BASE-PORTLAND CEMENT CONCRETE (3000 PSI).
3. FENCE FABRIC, POSTS, FRAMEWORKS, AND HARDWARE SHALL BE GALVANIZED STEEL PER SPECIFICATIONS.
4. GATE POSTS TO BE USED ON EACH SIDE OF SINGLE AND DOUBLE GATE OPENINGS.

Chain Link Fence Gate

1/16

N.T.S. Source: VHB LD_482



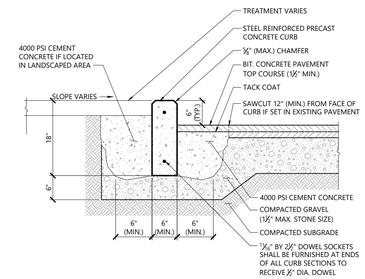
NOTES

1. ALL DIMENSIONS TO CENTER OF 4" PAVEMENT STRIPING.
2. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.

Accessible Parking Space

12/19

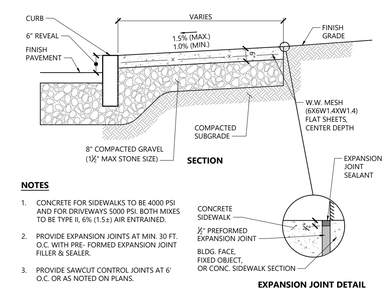
N.T.S. Source: VHB LD_552B



Precast Concrete Curb (PCC)

3/20

N.T.S. Source: VHB LD_404



NOTES

1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE SAWCUT CONTROL JOINTS AT 6' O.C. OR AS NOTED ON PLANS.
4. PROVIDE MEDIUM BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT.

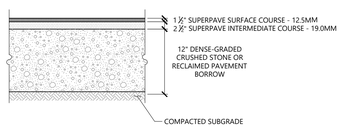
Concrete Sidewalk

3/20

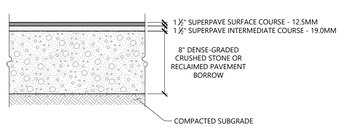
N.T.S. Source: VHB LD_420

vhb.com

120 Front Street
Suite 500
Worcester, MA 01608
508.752.1001



HEAVY DUTY FLEXIBLE PAVEMENT - 15-YEAR DESIGN LIFE

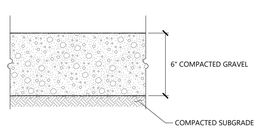


STANDARD DUTY FLEXIBLE PAVEMENT - 15-YEAR DESIGN LIFE

Bituminous Concrete Pavement Sections

11/19

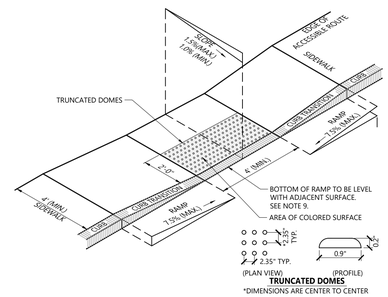
N.T.S. Source: VHB REV LD_430



Gravel Path

6/21

N.T.S. Source: VHB



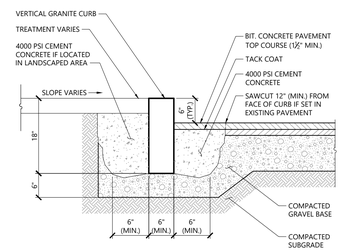
NOTES

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 AT 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. RAMP, CURB, AND ADJACENT PAVEMENTS 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 CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'A-D'

12/20

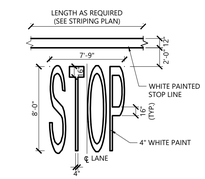
N.T.S. Source: VHB LD_500



Vertical Granite Curb (VGC)

3/20

N.T.S. Source: VHB LD_402



NOTES

1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON SITE WORK IN LOCATIONS SHOWN.

Painted Pavement Markings - On Site

1/16

N.T.S. Source: VHB LD_554

Leicester Central

0, 90, & 92 Huntoon Memorial Highway
Leicester, MA 01524

No.	Revision	Date	Appvd.

Designed by CSH | Checked by JWD

Issued for: Local Approvals | Date: December 7, 2021

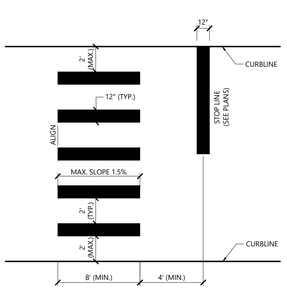
Not Approved for Construction

Drawing Title: Site Details

Drawing Number: C6.01

Sheet 13 of 17

Project Number: 15392.00

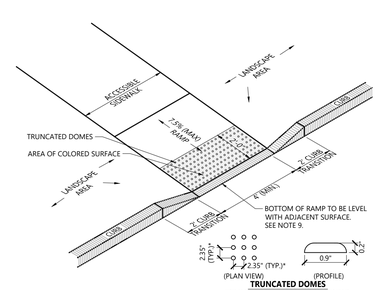


NOTES

1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
2. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
3. ALL LONGITUDINAL CROSSWALK LINES SHALL BE THE SAME LENGTH AND PROPERLY ALIGNED.
4. CROSS WALK SIDESLOPE SHALL NOT EXCEED 1.5%.

Crosswalk

12/19

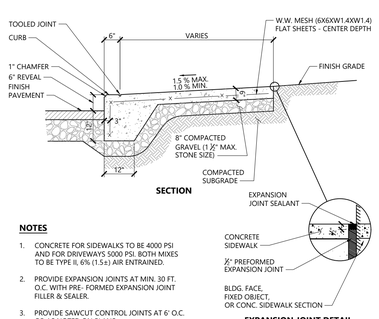


NOTES

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 AT 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. RAMP, CURB AND ADJACENT PAVEMENTS 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 CURBING (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAYS.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

Accessible Curb Ramp (ACR) Type 'M-D'

12/20

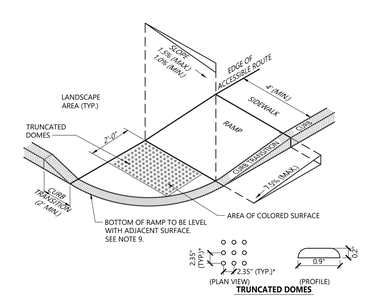


NOTES

1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES TO BE TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE SAWCUT CONTROL JOINTS AT 6' O.C. OR AS NOTED ON PLANS.
4. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT.

Monolithic Concrete Curb (MCC) & Sidewalk

3/20



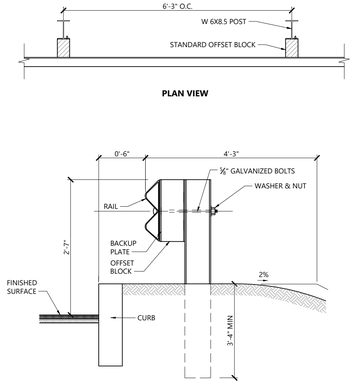
NOTES

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 AT 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. RAMP, CURB AND ADJACENT PAVEMENTS 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 CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) - Type 'B-D'

12/20

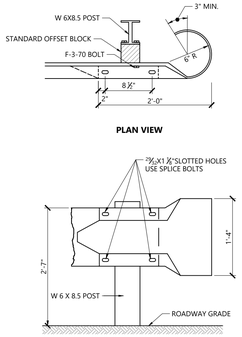
COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

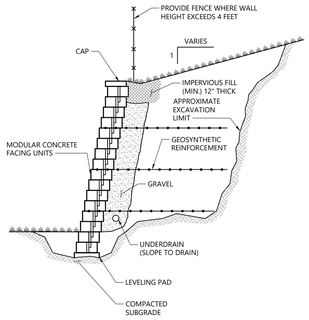


Steel Beam Guardrail with Steel Post

10/20

N.T.S. Source: VHB LD_456





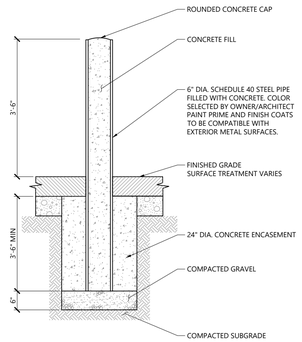
NOTES

DETAIL PROVIDED FOR GENERAL INFORMATION ONLY. STAMPED FINAL DESIGN OF MODULAR WALL SYSTEM TO BE PROVIDED BY CONTRACTOR BASED ON GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

Modular Retaining Wall

10/20

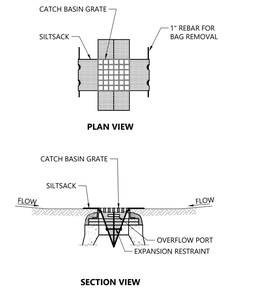
N.T.S. Source: VHB LD_750



Bollard

12/19

N.T.S. Source: VHB LD_700



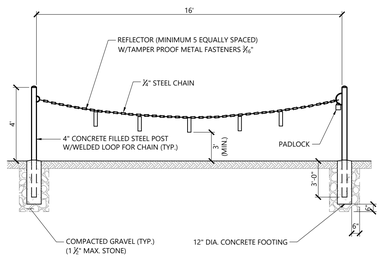
NOTES

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILTSACK.
3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment Trap

1/20

N.T.S. Source: VHB LD_674



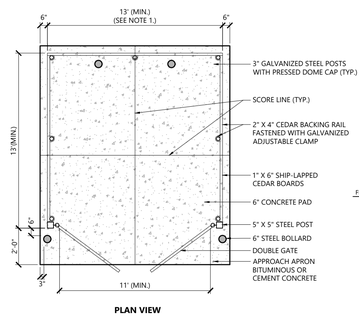
NOTES

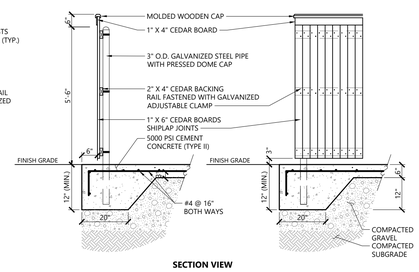
1. SHOP PRIME & PAINT EXPOSED SURFACES FIELD PAINT EPOXY ENAMEL-YELLOW.
2. PROVIDE "MASTER" PADLOCK WITH QUANTITY OF KEYS AS REQUIRED BY MUNICIPALITY.
3. 3,000 PSI CONCRETE FOOTING & PIPE FILL

Emergency Gate (Chain)

12/19

N.T.S. Source: VHB LD_487





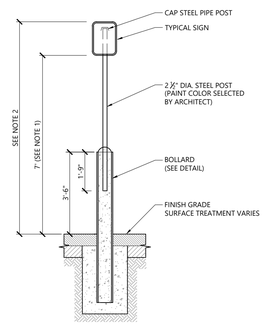
NOTES

1. DUMPSTER PAD DIMENSIONS SHOWN AS MINIMUM. REFER TO PLAN FOR ACTUAL DIMENSION.
2. PAD DESIGNED FOR 6 YARD DUMPSTER.

Dumpster Pad w/ Enclosure

1/20

N.T.S. Source: VHB LD_713

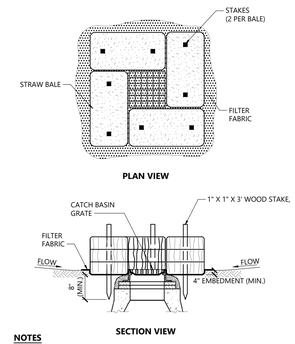


1. THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.
2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE

Bollard Mounted Sign

2/20

N.T.S. Source: VHB LD_703



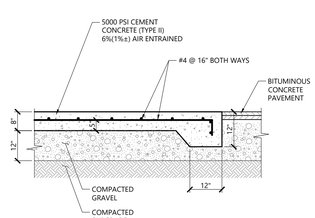
NOTES

1. ENCLOSE STRUCTURE WITH HAYBALES IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING BINDER COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. IF GRATE IS AGAINST EXISTING CURB THEN BALES ARE TO BE PLACED AROUND THREE SIDES OF GRATE ONLY.
3. GRATE TO BE PLACED OVER FILTER FABRIC.
4. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

Catch Basin Sediment Trap

1/16

N.T.S. Source: VHB LD_673



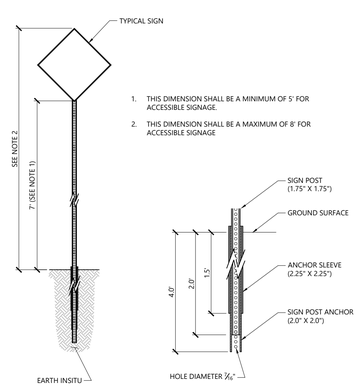
NOTES

1. SIZE OF PAD TO BE AS INDICATED ON PLANS.
2. CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 30 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

Loading Dock Pad / Compactor Pad

1/20

N.T.S. Source: VHB LD_711

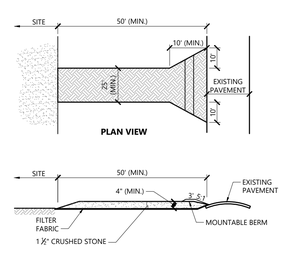


1. THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR ACCESSIBLE SIGNAGE.
2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR ACCESSIBLE SIGNAGE

Sign Post - Type 'B'

3/19

N.T.S. Source: VHB LD_702



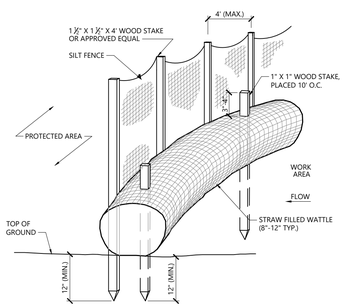
NOTES

1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit

1/16

N.T.S. Source: VHB LD_682



NOTES

1. STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Straw Wattle - Erosion Control Barrier

10/21

N.T.S. Source: VHB LD_659-A

vhb.com

120 Front Street
Suite 500
Worcester, MA 01608
508.752.1001

Leicester Central

0, 90, & 92 Huntoon Memorial Highway
Leicester, MA 01524

No.	Revision	Date	Appvd.

Designed by CSH | Checked by JWD

Issued for: Local Approvals | Date: December 7, 2021

Not Approved for Construction

Drawing Title: Site Details

Drawing Number: C6.02

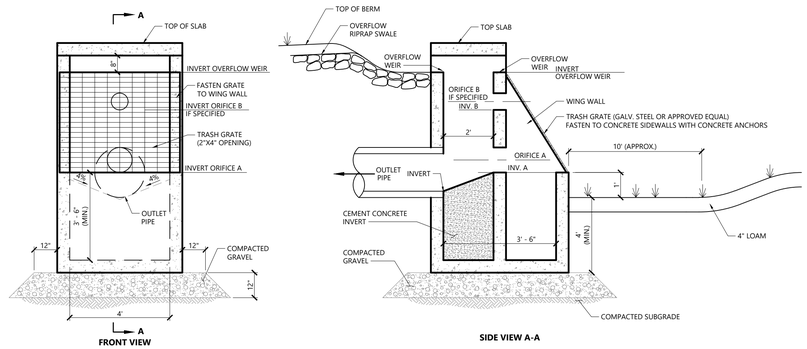
Sheet 14 of 17

Project Number: 15392.00

COMMONWEALTH OF MASSACHUSETTS
JUSTIN W. DUFRESNE
CIVIL
No. 51506
REGISTERED PROFESSIONAL ENGINEER

DETENTION BASIN

DETENTION BASIN NO.	DIAMETER ORIFICE A	INVERT ORIFICE A	DIAMETER ORIFICE B	INVERT ORIFICE B	DIAMETER OUTLET PIPE	OUTLET PIPE INVERT	OVERFLOW WEIR ELEV.	OVERFLOW SWALE DIMENSIONS W= D=	OVERFLOW SWALE ELEV.	TOP OF BERM



Basin Multi-Stage Outlet Control Structure (OCS)

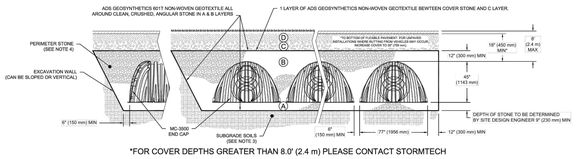
2/20

N.T.S. Source: VHB LD_162B

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (18" LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS (FROM THE FOUNDATION STONE ON LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. UNLESS NOTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



*FOR COVER DEPTHS GREATER THAN 8.0' (2.4 m) PLEASE CONTACT STORMTECH

NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45476 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

Stormtech MC-3500

N.T.S. Source: VHB LD_

MC-3500 STANDARD CROSS SECTION

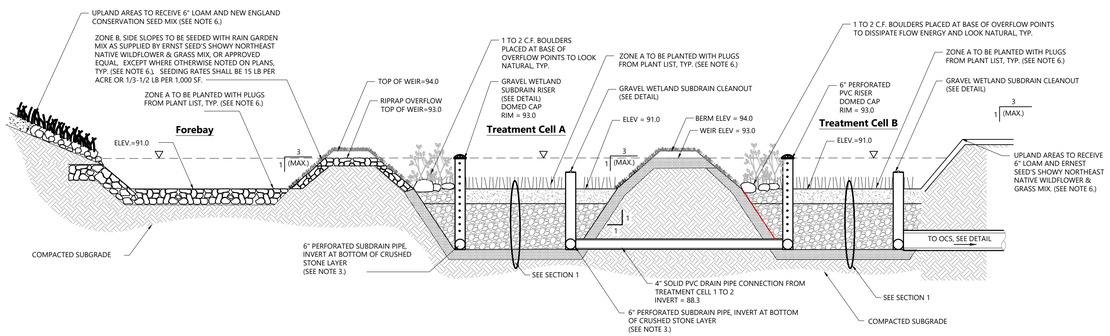
DATE: 03-13-19 DRAWN: NR CHECKED: NR PROJECT #: 15392.00 SCALE: NTS

REVISIONS: DATE | DRAWN | CHECKED

StormTech — 520 SPRING PARK PLACE, SUITE 350, HERNDON, VA 20170, PHONE: 866-879-8427, FAX: 866-879-8423, WWW.STORMTECH.COM

ADS — 4640 TRUEMAN BLVD, HILLIARD, OH 43026, PHONE: 800-821-6710, FAX: 800-821-6833, WWW.ADSPIPE.COM

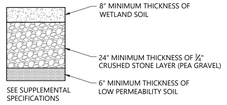
1 SHEET OF 1



Notes:

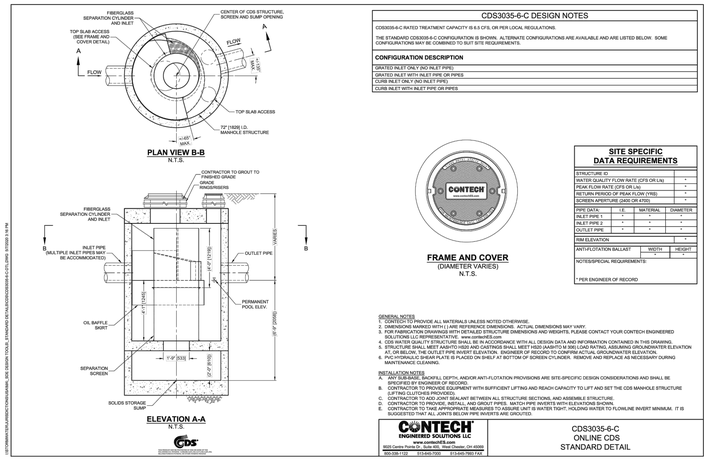
1. SIDE SLOPES SHALL BE 3:1 MAX. 3% MIN.
2. PVC DRAIN PIPES SHALL CONFORM TO ASTM F810. PERFORATIONS, WHEN APPLICABLE, SHALL BE 3/4" HOLES ON 5" CENTERS AND IN THREE ROWS 120° APART.
3. PIPE INVERTS AND STRUCTURE LOCATIONS AS SPECIFIED PER PLAN
4. LOW PERMEABILITY SOIL MATERIAL IS CONTINUOUS FOR THE FULL LENGTH OF THE EMBANKMENT WITH A MINIMUM 6" THICKNESS. PERMEABILITY = 1 x 10-5 cm/s
5. WHERE PIPES PENETRATE THE LOW PERMEABILITY SOIL, PIPE SHALL BE BEDDED IN THE LOW PERMEABILITY MATERIAL.
6. SEE PLANTING PLAN AND DETAILS FOR PLANT TYPES AND SEED MIX.

Section 1:



Gravel Wetland

N.T.S. Source: VHB



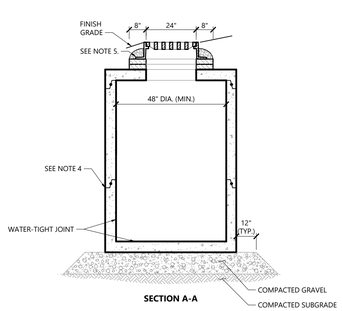
Water Quality Unit (WQU)

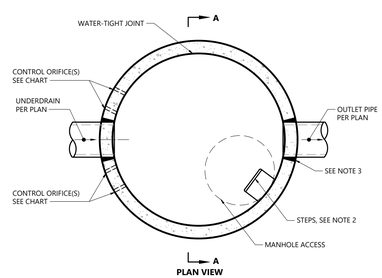
10/20

N.T.S. Source: StormTech

OUTLET STRUCTURE CHART

DETENTION BASIN	STRUCTURE NUMBER	TOP OF GRATE ELEVATION	DIMENSIONS ORIFICE A	INVERT ORIFICE A	DIMENSIONS ORIFICE B	INVERT ORIFICE B
GRAVEL WETLAND	118	741.7	9"H x 18"W	738.6	7"H x 24"W	741.1





NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

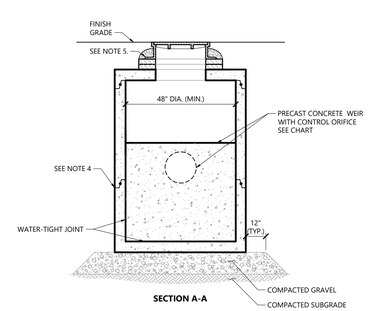
Outlet Control Structure (OCS) - Gravel Wetland

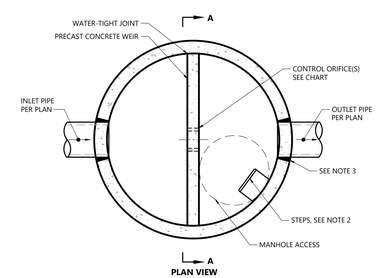
3/20

N.T.S. Source: VHB REV LD_162A

OUTLET STRUCTURE CHART

DETENTION BASIN	STRUCTURE NUMBER	TOP OF WEIR ELEVATION	DIMENSIONS ORIFICE A	INVERT ORIFICE A
SUBSURFACE INFILTRATION BASIN	202	748.4	20" DIA.	745.9





NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

Outlet Control Structure with Weir (OCS) - Subsurface Infiltration Basin

3/20

N.T.S. Source: VHB REV LD_162A

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No.	Revision	Date	Appvd.

Designed by CSH | Checked by JWD

Issued for: Local Approvals | Date: December 7, 2021

Not Approved for Construction

Drawing Title: Site Details

Drawing Number: C6.03

COMMONWEALTH OF MASSACHUSETTS — JUSTIN W. DUFRESNE — CIVIL — No. 51506 — REGISTERED PROFESSIONAL ENGINEER

Sheet 15 of 17

Project Number: 15392.00

Planting Notes

1. ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
3. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
4. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
6. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
10. AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
11. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
12. THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

Plant Maintenance Notes

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION IS PROPOSED FOR THIS SITE. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE PERIOD.
2. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY THE CONTRACTOR.
3. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.

Edge of Woods Clearing

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY EROSION CONTROL FENCE AND HAY BALE BARRIER. ERECT BARRIER AT EDGE OF THE EARTHWORK CUT LINE PRIOR TO TREE CLEARING. LAY OUT THIS LINE BY FIELD SURVEY.

Tree Protection

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY CONSTRUCTION FENCE. ERECT FENCE AT EDGE OF THE TREE DRIPLINE PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA. CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY WASTE MATERIALS, WITHIN THE TREE PROTECTION AREA.
3. DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.

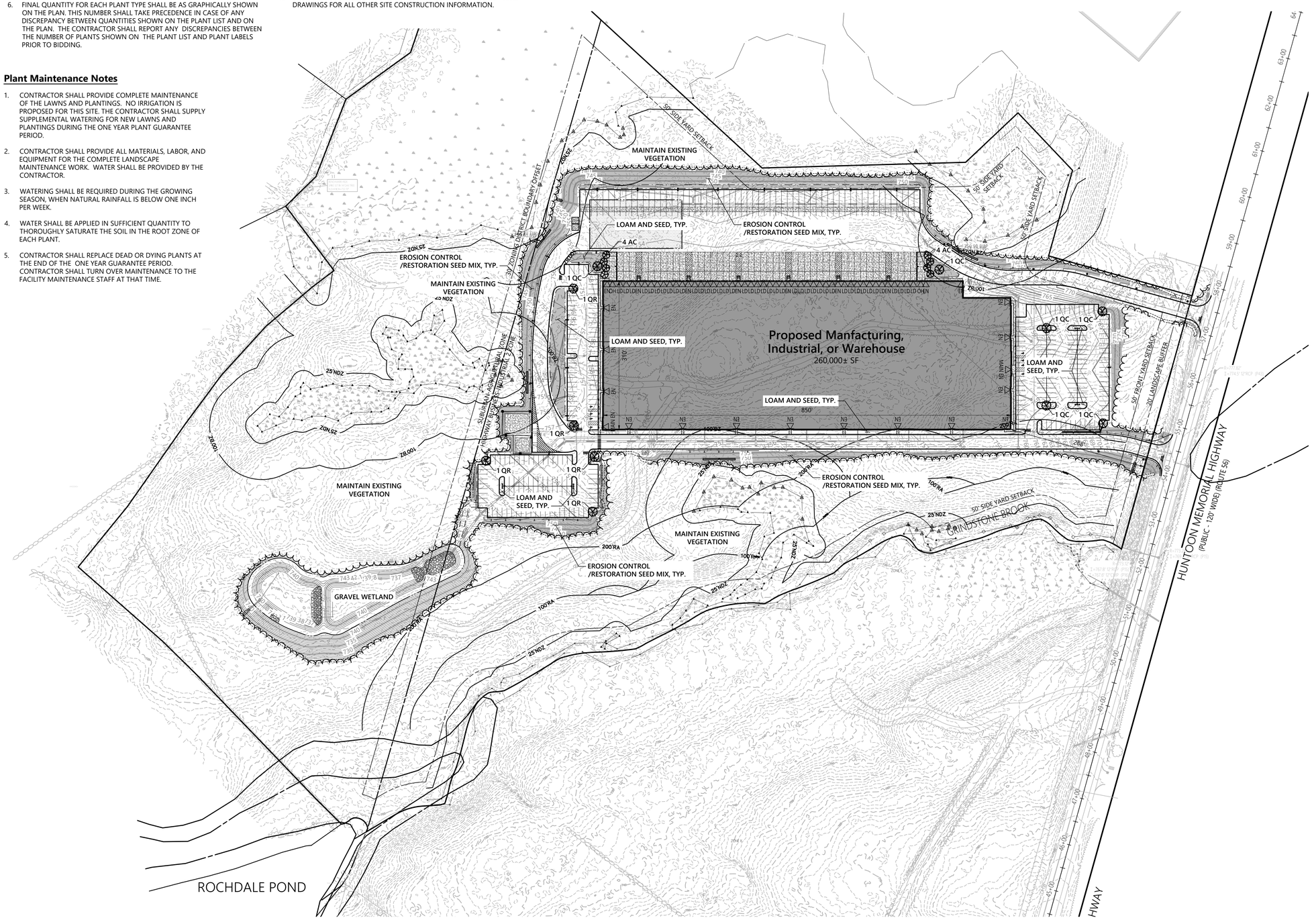
PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
QC	6	Quercus coccinea	Scarlet Oak	2 1/2 - 3" CAL.
QR	5	Quercus rubra	Red Oak	2 1/2 - 3" CAL.

EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AC	8	Abies concolor	White Fir	6 - 7' HT.

Seed Mixtures:

1. AREAS INDICATED AS "EROSION CONTROL/RESTORATION SEED MIX" ARE TO BE SEEDED WITH NEW ENGLAND CONSERVATION EROSION CONTROL/RESTORATION MIX FOR DRY SITES, AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (413) 548-8000, www.NEWP.com,OR AN APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



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No.	Revision	Date	Appvd.

Designed by MF
Checked by EB
Issued for Local Approvals
Date December 7, 2021

Not Approved for Construction

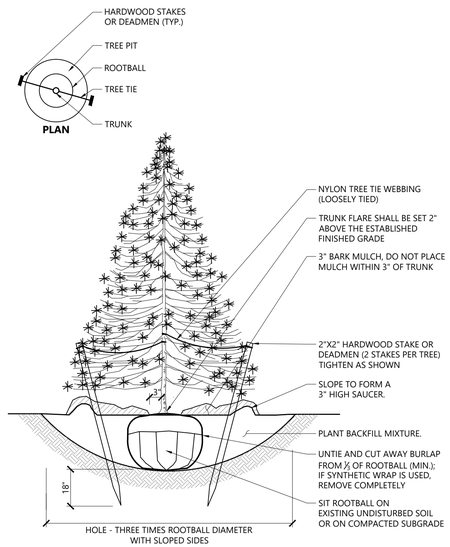
Drawing Title
Planting Plan

Drawing Number
L1.00

Sheet 16 of 17

Project Number 15392.00

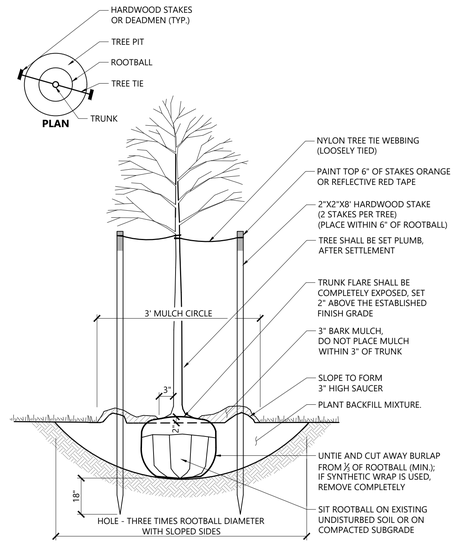
MASSACHUSETTS ERIK BEDNARSKI NO. 1508 LANDSCAPE ARCHITECT
12/14/2021



Evergreen Tree Planting

9/21

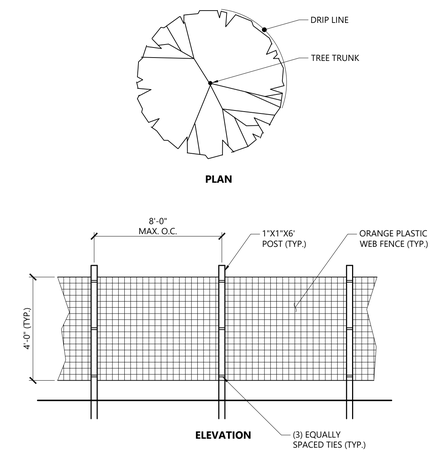
N.T.S. Source: VHB LD_604



Tree Planting (For Trees Under 4" Caliper)

9/21

N.T.S. Source: VHB LD_602



NOTES

1. INSTALL TREE PROTECTION FENCE AT THE DRIP LINE OF EXISTING TREES TO REMAIN.

Tree Protection Fence

1/16

N.T.S. Source: VHB LD_610

vhb.com
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Leicester Central

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Leicester, MA 01524

No.	Revision	Date	Appvd.

Designed by MF
Checked by EB
Issued for Local Approvals
Date December 7, 2021

Not Approved for Construction

Drawing Title
Planting Details

Drawing Number
L2.00

Sheet 17 of 17

Project Number
15392.00

MASSACHUSETTS ERIK BEDNARSKI REGISTERED LANDSCAPE ARCHITECT NO. 1598
12/14/2021

General Notes

1) THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN JULY, 2019 AND FROM DEEDS AND PLANS OF RECORD.

2) THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE DEVELOPED FROM A COMBINED EFFORT OF LIDAR & AERIAL PHOTOGRAMMETRIC MAPPING BY EASTERN TOPOGRAPHICS, INC., BASED ON AERIAL PHOTOGRAPHS TAKEN ON APRIL 25, 2019, AND AUGMENTED BY AN ON-THE-GROUND SURVEY PERFORMED BY VHB DURING JULY 2019.

3) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.

4) HORIZONTAL DATUM IS BASED ON MASS. GRID SYSTEM, NAD 1983. ELEVATIONS SHOWN ON THIS PLAN REFER TO NAVD OF 1988.

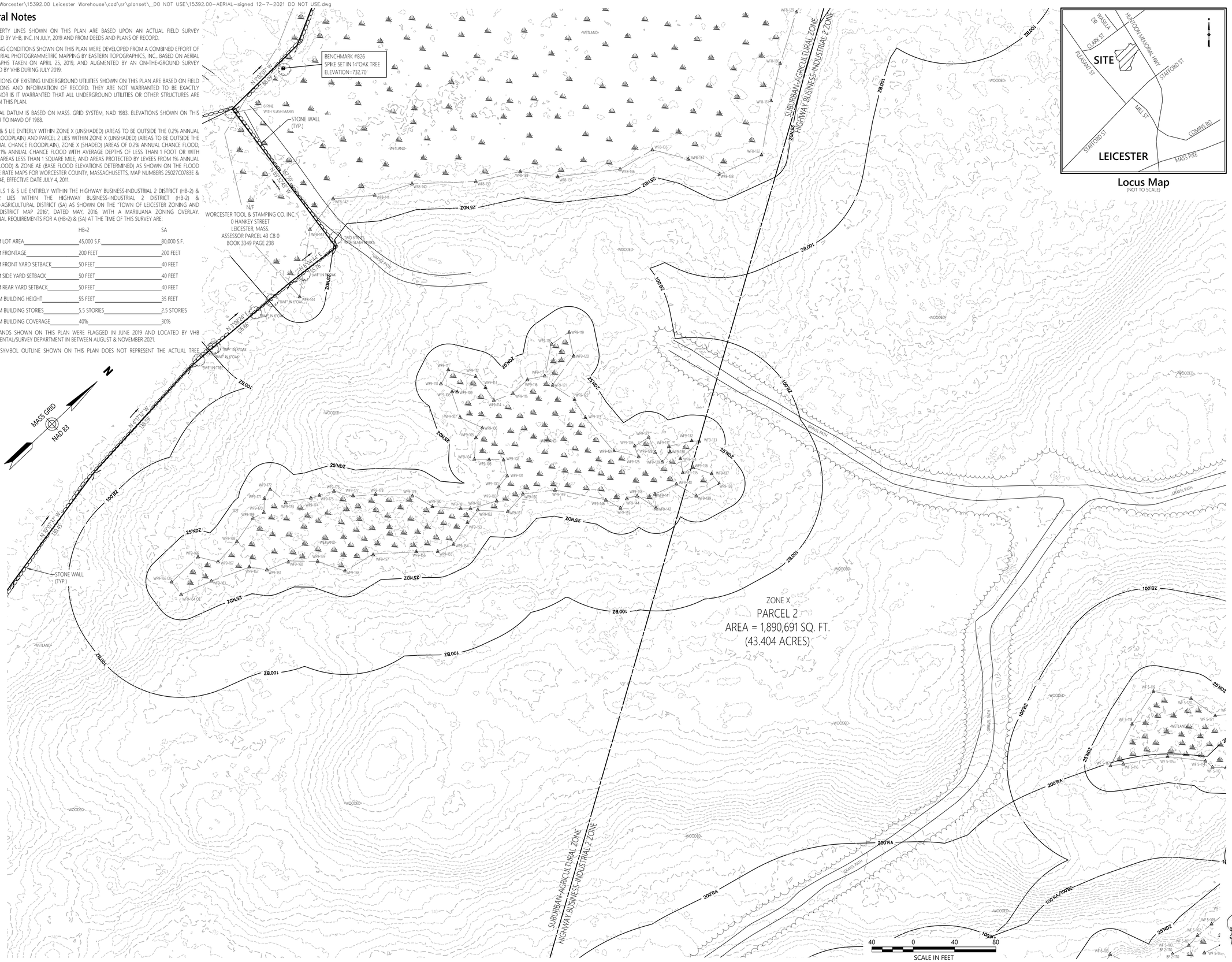
5) PARCELS 1 & 5 LIE ENTIERLY WITHIN ZONE X (UNSHADED) (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND PARCEL 2 LIES WITHIN ZONE X (UNSHADED) (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), ZONE X (SHADED) (AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD) & ZONE AE (BASE FLOOD ELEVATIONS DETERMINED) AS SHOWN ON THE FLOOD INSURANCE RATE MAPS FOR WORCESTER COUNTY, MASSACHUSETTS, MAP NUMBERS 25027C0783E & 25027C0784E, EFFECTIVE DATE JULY 4, 2011.

6) THE PARCELS 1 & 5 LIE ENTIRELY WITHIN THE HIGHWAY BUSINESS-INDUSTRIAL 2 DISTRICT (HB-2) & PARCEL 2 LIES WITHIN THE HIGHWAY BUSINESS-INDUSTRIAL 2 DISTRICT (HB-2) & SUBURBAN-AGRICULTURAL DISTRICT (SA) AS SHOWN ON THE TOWN OF LEICESTER ZONING AND OVERLAY DISTRICT MAP 2016", DATED MAY, 2016, WITH A MARIJUANA ZONING OVERLAY. DIMENSIONAL REQUIREMENTS FOR A (HB-2) & (SA) AT THE TIME OF THIS SURVEY ARE:

	HB-2	SA
MINIMUM LOT AREA	45,000 S.F.	80,000 S.F.
MINIMUM FRONTAGE	200 FEET	200 FEET
MINIMUM FRONT YARD SETBACK	50 FEET	40 FEET
MINIMUM SIDE YARD SETBACK	50 FEET	40 FEET
MINIMUM REAR YARD SETBACK	50 FEET	40 FEET
MAXIMUM BUILDING HEIGHT	55 FEET	35 FEET
MAXIMUM BUILDING STORIES	5.5 STORIES	2.5 STORIES
MAXIMUM BUILDING COVERAGE	40%	30%

7) THE WETLANDS SHOWN ON THIS PLAN WERE FLAGGED IN JUNE 2019 AND LOCATED BY VHB ENVIRONMENTAL/SURVEY DEPARTMENT IN BETWEEN AUGUST & NOVEMBER 2021.

8) THE TREE SYMBOL OUTLINE SHOWN ON THIS PLAN DOES NOT REPRESENT THE ACTUAL TREE CANOPY.



Locus Map
(NOT TO SCALE)

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- MONITORING WELL
- FLOOD LIGHT
- WELL
- MARSH
- F.F.E =45.27' FINISHED FLOOR ELEVATION
- CNO COULD NOT OPEN
- NPV NO PIPES VISIBLE
- DYL DOUBLE YELLOW LINE
- DWL DASHED WHITE LINE
- SYL SINGLE WHITE LINE
- EOP EDGE OF PAVEMENT
- CC CONCRETE CURB
- VGC VERTICAL GRANITE CURB
- SGE SLOPED GRANITE EDGE
- BB BITUMINOUS BERM
- BC BITUMINOUS CURB
- GUARD RAIL
- CHAIN LINK FENCE
- DRAINAGE LINE
- SEWER LINE
- OHW OVERHEAD WIRE
- E UNDERGROUND ELECTRIC
- T TELEPHONE LINE
- G GAS LINE
- W WATER LINE
- STONE WALL
- TREE LINE
- 100'BZ 100-FT BUFFER ZONE
- 100'RA 100-FT RIVER FRONT AREA
- 200'RA 200-FT RIVER FRONT AREA
- AP1-100 LIMIT MEAN ANNUAL HIGH WATER
- BF1-100 LIMIT OF BANK
- WF1-100 VEGETATED WETLAND BOUNDARY

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No.	Revision	Date	Appvd.

Designed by | Checked by

Issued for | Date
December 6, 2021

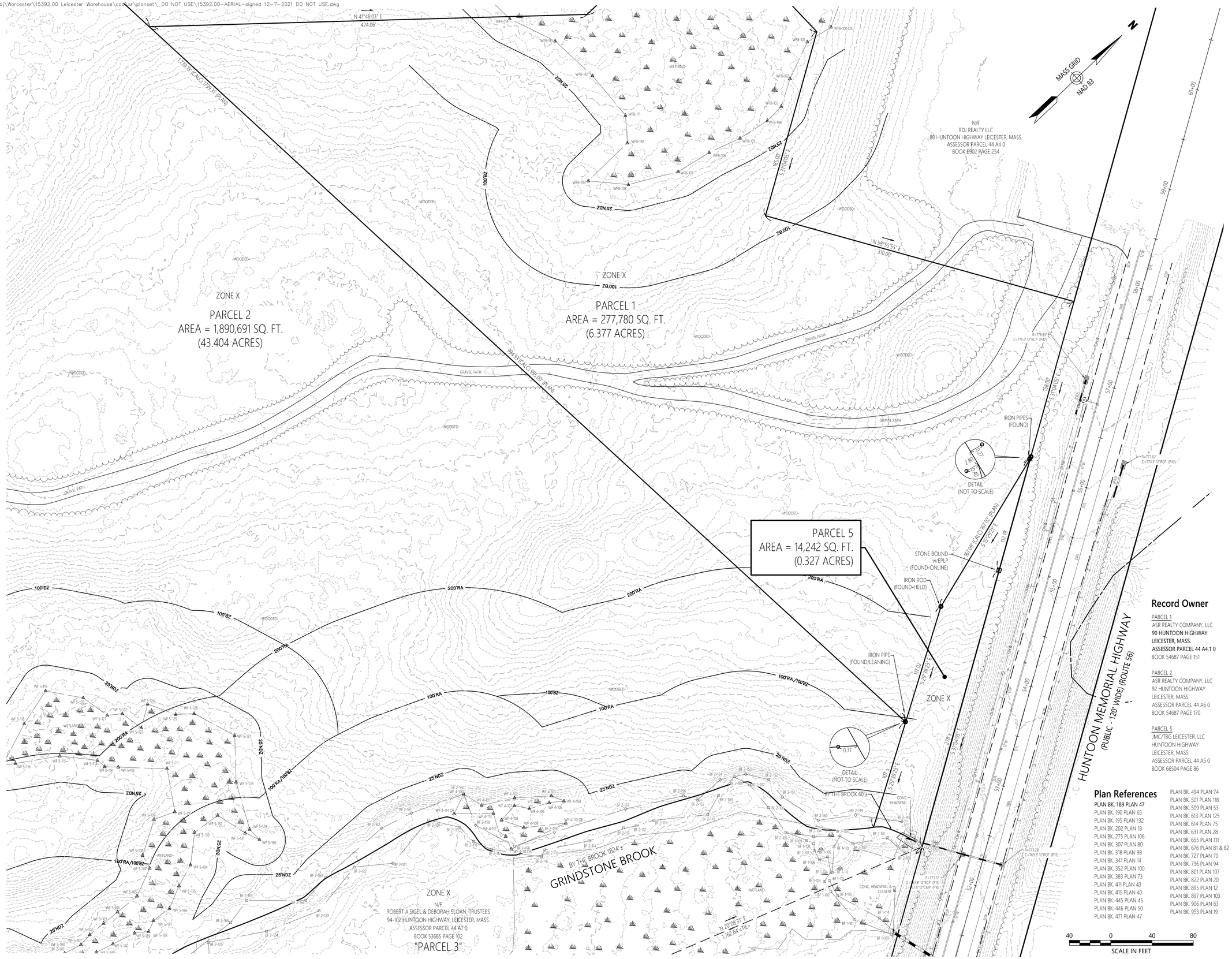
Drawing Title
Existing Conditions Plan of Land

Drawing Number
Sv-1

COMMONWEALTH OF MASSACHUSETTS
RUSSELL J. BOUSQUET
NO. 35389
REGISTERED PROFESSIONAL LAND SURVEYOR
12-7-2021

Sheet 1 of 2

Project Number
15392.00



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Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- MONITORING WELL
- FLOOD LIGHT
- WELL
- MARSH
- F.F.E =45.27' FINISHED FLOOR ELEVATION
- CNO COULD NOT OPEN
- NPV NO PIPES VISIBLE
- DYL DOUBLE YELLOW LINE
- DWL DASHED WHITE LINE
- SYL SINGLE WHITE LINE
- EOP EDGE OF PAVEMENT
- CC CONCRETE CURB
- VGC VERTICAL GRANITE CURB
- SGE SLOPED GRANITE EDGE
- BB BITUMINOUS BERM
- BC BITUMINOUS CURB
- GUARD RAIL
- CHAIN LINK FENCE
- DRAINAGE LINE
- SEWER LINE
- OHW OVERHEAD WIRE
- E UNDERGROUND ELECTRIC
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- BF1-100 LIMIT OF BANK
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Record Owner

PARCEL 1
ASR REALTY COMPANY, LLC
90 HUNTOON HIGHWAY
LEICESTER, MASS.
ASSESSOR PARCEL 44 A4.1 0
BOOK 54687 PAGE 151

PARCEL 2
ASR REALTY COMPANY, LLC
92 HUNTOON HIGHWAY
LEICESTER, MASS.
ASSESSOR PARCEL 44 A6 0
BOOK 54687 PAGE 170

PARCEL 5
JMC/TBG LEICESTER, LLC
HUNTOON HIGHWAY
LEICESTER, MASS.
ASSESSOR PARCEL 44 A5 0
BOOK 66504 PAGE 86

Plan References

PLAN BK. 189 PLAN 47
PLAN BK. 190 PLAN 65
PLAN BK. 195 PLAN 132
PLAN BK. 202 PLAN 18
PLAN BK. 275 PLAN 106
PLAN BK. 307 PLAN 80
PLAN BK. 318 PLAN 98
PLAN BK. 341 PLAN 14
PLAN BK. 352 PLAN 100
PLAN BK. 383 PLAN 73
PLAN BK. 411 PLAN 43
PLAN BK. 415 PLAN 40
PLAN BK. 445 PLAN 45
PLAN BK. 446 PLAN 50
PLAN BK. 471 PLAN 47
PLAN BK. 494 PLAN 74
PLAN BK. 501 PLAN 118
PLAN BK. 509 PLAN 53
PLAN BK. 613 PLAN 125
PLAN BK. 614 PLAN 75
PLAN BK. 631 PLAN 28
PLAN BK. 655 PLAN 111
PLAN BK. 676 PLAN 81 & 82
PLAN BK. 727 PLAN 70
PLAN BK. 736 PLAN 94
PLAN BK. 801 PLAN 107
PLAN BK. 822 PLAN 20
PLAN BK. 895 PLAN 12
PLAN BK. 897 PLAN 103
PLAN BK. 906 PLAN 63
PLAN BK. 953 PLAN 19

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Sheet 2 of 2

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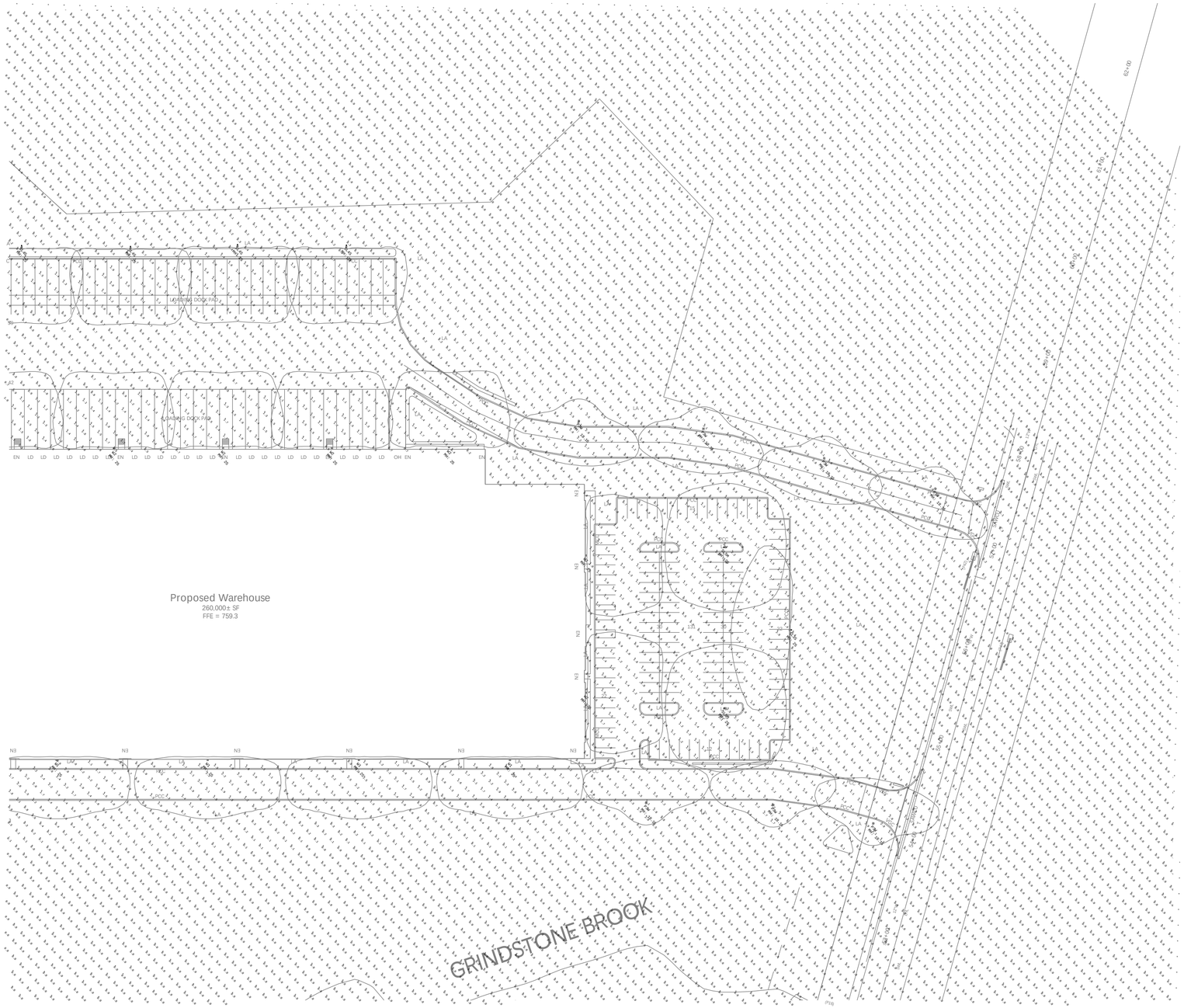

JOB NAME: 90 & 92 HUNTOON MEMORIAL HIGHWAY - LEICESTER, MA
APEX LIGHTING SOLUTIONS
WORKPLANE/CALC PLANE: @ FINISH GRADE
MOUNTING HEIGHT: SEE LUMINAIRE SCHEDULE
APPS: LC
SALES: SP
SPECIFIER: VHB

Luminaire Schedule

Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
7	P3W	SINGLE	9013	64.7	0.850	B2-U0-G3	US ARCH RZR-PTY-LED-III-W-40LED-525mA-NW-VOLT-FINISH / SNTS-164-11-PT27-FINISH
3	SL3S	SINGLE	11696	128.2	0.850	B1-U0-G3	US ARCH RZR-PLED-III-W-40LED-1050mA-NW-VOLT-FINISH-HS-PLED / SNTS-255-7-1-FINISH
1	SL4	SINGLE	14858	128.2	0.850	B3-U0-G3	US ARCH RZR-PLED-IV-FT-40LED-1050mA-NW-VOLT-FINISH / SNTS-255-7-1-FINISH
11	SL4S	SINGLE	11665	128.2	0.850	B1-U0-G3	US ARCH RZR-PLED-IV-FT-40LED-1050mA-NW-VOLT-FINISH-HS-PLED / SNTS-255-7-1-FINISH
2	SL5DM	BACK-BACK	16716	128.2	0.850	B4-U0-G2	US ARCH RZR-PLED-VSQ-M-40LED-1050mA-NW-VOLT-FINISH / SNTS-255-7-2-FINISH
2	SL5M	SINGLE	16716	128.2	0.850	B4-U0-G2	US ARCH RZR-PLED-VSQ-M-40LED-1050mA-NW-VOLT-FINISH / SNTS-255-7-1-FINISH
6	W1	SINGLE	11950	128.2	0.850	B1-U0-G3	US ARCH RZR-WM2-PLED-III-40LED-1050mA-NW-VOLT-FINISH-HS-PLED / WALL MOUNTED @25 AFG TO BOF
9	W2	SINGLE	11665	128.2	0.850	B1-U0-G3	US ARCH RZR-WM2-PLED-IV-FT-40LED-1050mA-NW-VOLT-FINISH-HS-PLED / WALL MOUNTED @25 AFG TO BOF

Calculation Summary

Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	0	0.10	4.3	0.0	N.A.	N.A.
BACK ACCESS ROAD		1.44	3.2	0.8	1.80	4.00
BACK PARKING AND ROADWAY		1.49	2.6	0.5	2.98	5.20
FRONT PARKING LOT		1.25	2.6	0.4	3.13	6.50
LOADING DOCK PAD - DRIVING AREA		1.06	3.0	0.3	3.53	10.00
SMALL PARKING LOT		1.89	4.3	0.4	4.73	10.75

GENERAL DISCLAIMER:

Calculations have been performed according to IES standards and good practice Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

* LLF Determined Using Current Published Lamp Data

NOTE TO REVIEWER:

Total Light Loss Factor (LLF) applied at time of design is determined by applying the Lamp Lumen Depreciation (LLD) from current lamp manufacturer's catalog, a Luminaire Dirt Depreciation Factor (LDD) based on IES recommended values and a Ballast Factor (BF) from current ballast specification sheets. Application of an incorrect Light Loss Factor (LLF) will result in forecasts of performance that will not accurately depict actual results.

For proper comparison of photometric layouts, it is essential that you insist all designers use correct Light Loss Factors.

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PROJECT TITLE:

90 & 92 HUNTOON MEMORIAL HIGHWAY
LEICESTER, MA

DRAWING TITLE:

SITE LIGHTING
PHOTOMETRIC CALCULATION

SCALE : 1"=50'-0"

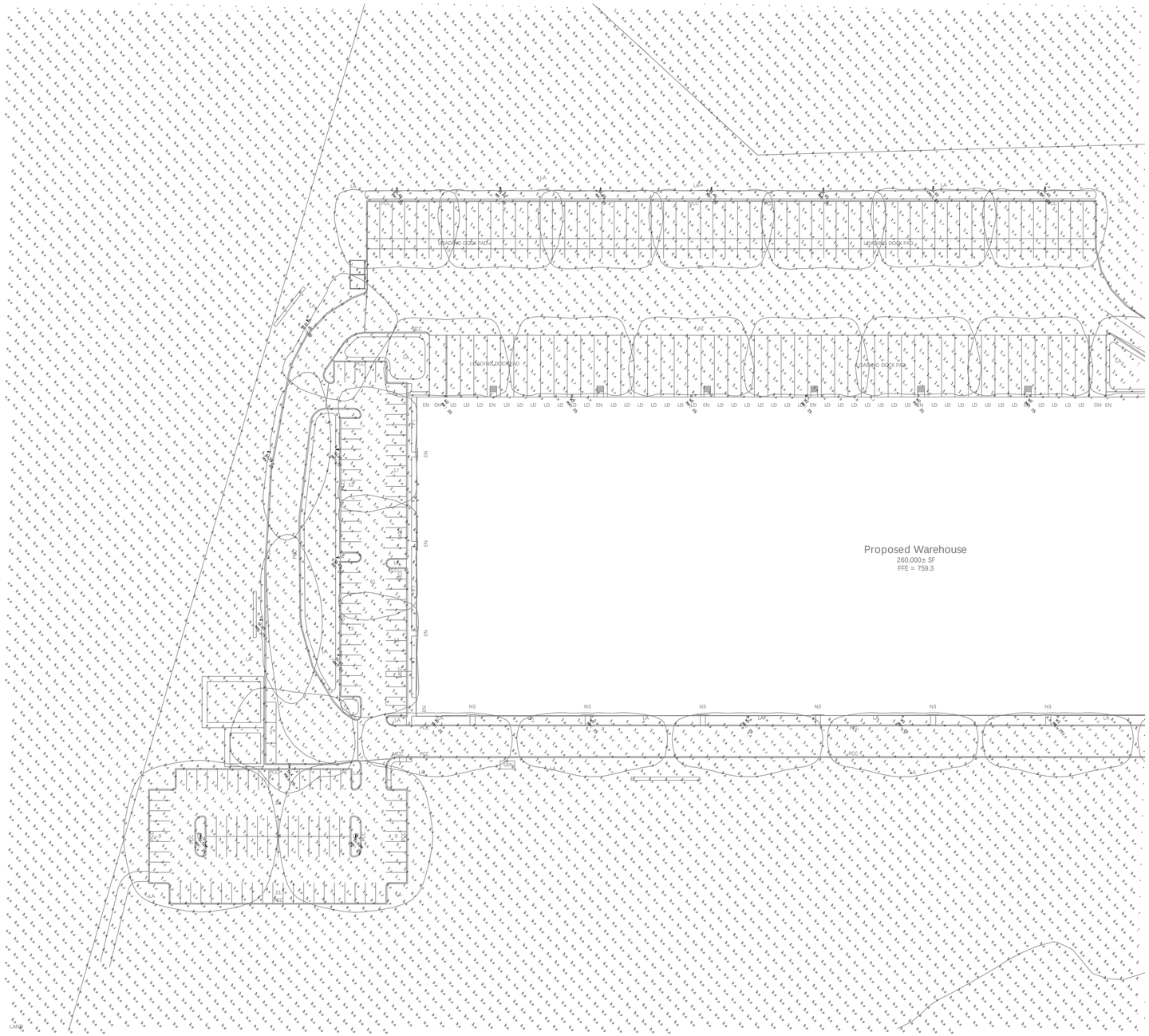
DATE: 12/7/21

DRAWN BY: LC

SHEET:

SL-2C

FILE NAME: SL-2C 90-92 HUNTOON MEMORIAL HIGHWAY - LEICESTER, MA 12-13-2021 LC.dwg



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11	SL4S	SINGLE	11665	128.2	0.850	B1-U0-G3	US ARCH RZR-PLED-IV-FT-40LED-1050mA-NW-VOLT-FINISH-HS-PLED / SNTS-255-7-1-FINISH
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9	W2	SINGLE	11665	128.2	0.850	B1-U0-G3	US ARCH RZR-WM2-PLED-IV-FT-40LED-1050mA-NW-VOLT-FINISH-HS-PLED / WALL MOUNTED @25 AFG TO BOF

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90 & 92 HUNTOON MEMORIAL HIGHWAY
LEICESTER, MA

DRAWING TITLE:

SITE LIGHTING
PHOTOMETRIC CALCULATION

SCALE : 1"=50'-0"

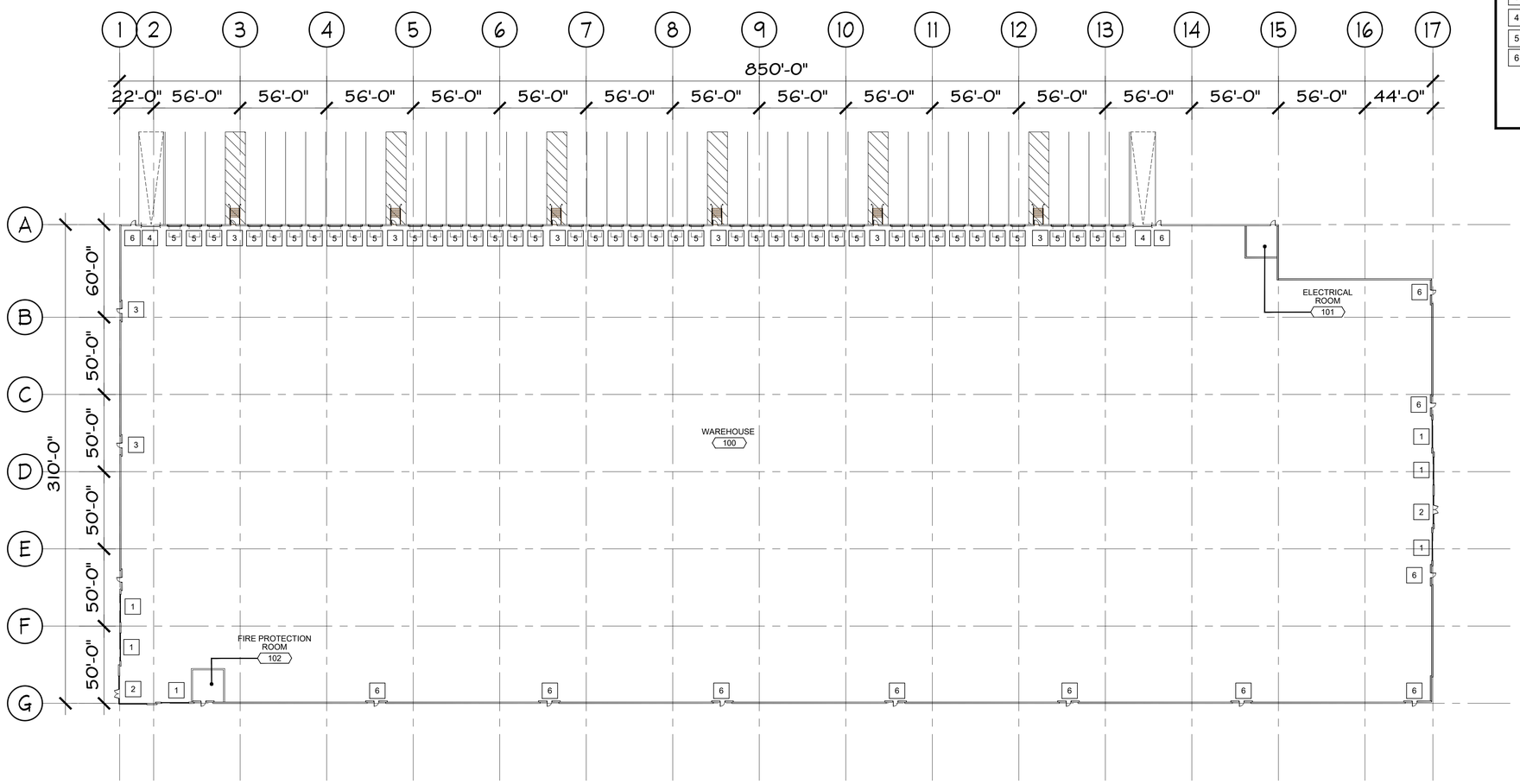
DATE: 12/7/21

DRAWN BY: LC

SHEET:

SL-2D

FILE NAME: SL-2C 90-92 HUNTOON MEMORIAL HIGHWAY - LEICESTER, MA 12-13-2021 LC.dwg



1 / A1.0 OVERALL FLOOR PLAN

SCALE :1"=40'-0"

GENERAL FLOOR PLAN NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS AT THE JOB SITE AND NOTIFY ARCHITECT OF ANY OMISSIONS, DISCREPANCIES, AND/OR CONFLICTS BEFORE PROCEEDING WITH THE WORK.
2. GLAZING AND EQUIPMENT SUPPLIERS SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
3. DOORS SHOWN ADJACENT TO WALLS ARE TYPICALLY 4" FROM ADJACENT UNLESS NOTED OTHERWISE.
4. ALL DIMENSIONS ARE TO FACE OF PARTITIONS.
5. ALL EXTERIOR AND EXPOSED INTERIOR TILT CONCRETE JOINTS SHALL BE CAULKED USING A TWO (2) PART TREMCO DYMERIC POLYURETHANE OR EQUAL. THE JOINTS SHALL ALSO HAVE A BACKER ROD BEHIND THE CAULK.
6. EXTERIOR PAINT SYSTEM FOR THE CONCRETE TILT-UP PANELS SHALL CONSIST OF (1) COAT OF A RESISTANT PRIMER AND (1) COAT OF A MEDIUM TEXTURE PAINT. SYSTEM TO CARRY A 10 YEAR WARRANTY.
7. COORDINATE FIRE EXTINGUISHERS LOCATIONS WITH ARCHITECT AND LOCAL FIRE MARSHALL. LOCATIONS SHALL FOLLOW NFPA 472 AND ADA GUIDELINES. SEE SHEET LS1.1

FLOOR PLAN KEY NOTES

1. KNOCK OUT (K.O.) FOR FUTURE STOREFRONT SYSTEM.
2. NEW STOREFRONT ENTRANCE
3. TYPICAL DOCK STAIR AND MAN DOOR.
4. TYPICAL DRIVE IN DOOR
5. TYPICAL OVERHEAD DOOR
6. TYPICAL MAN DOOR

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PLUMBING: NAME / ADDRESS / CITY / STATE / ZIP / CONTACT INFO
FIRE PROTECTION: NAME / ADDRESS / CITY / STATE / ZIP / CONTACT INFO

LEICESTER CENTRAL

HUNTOON MEMORIAL HIGHWAY
LEICESTER, MASSACHUSETTS

JOB NO : SP8228
PA : BJC
DATE : 12.06.2021

REVISIONS

SHEET NUMBER

A1.0

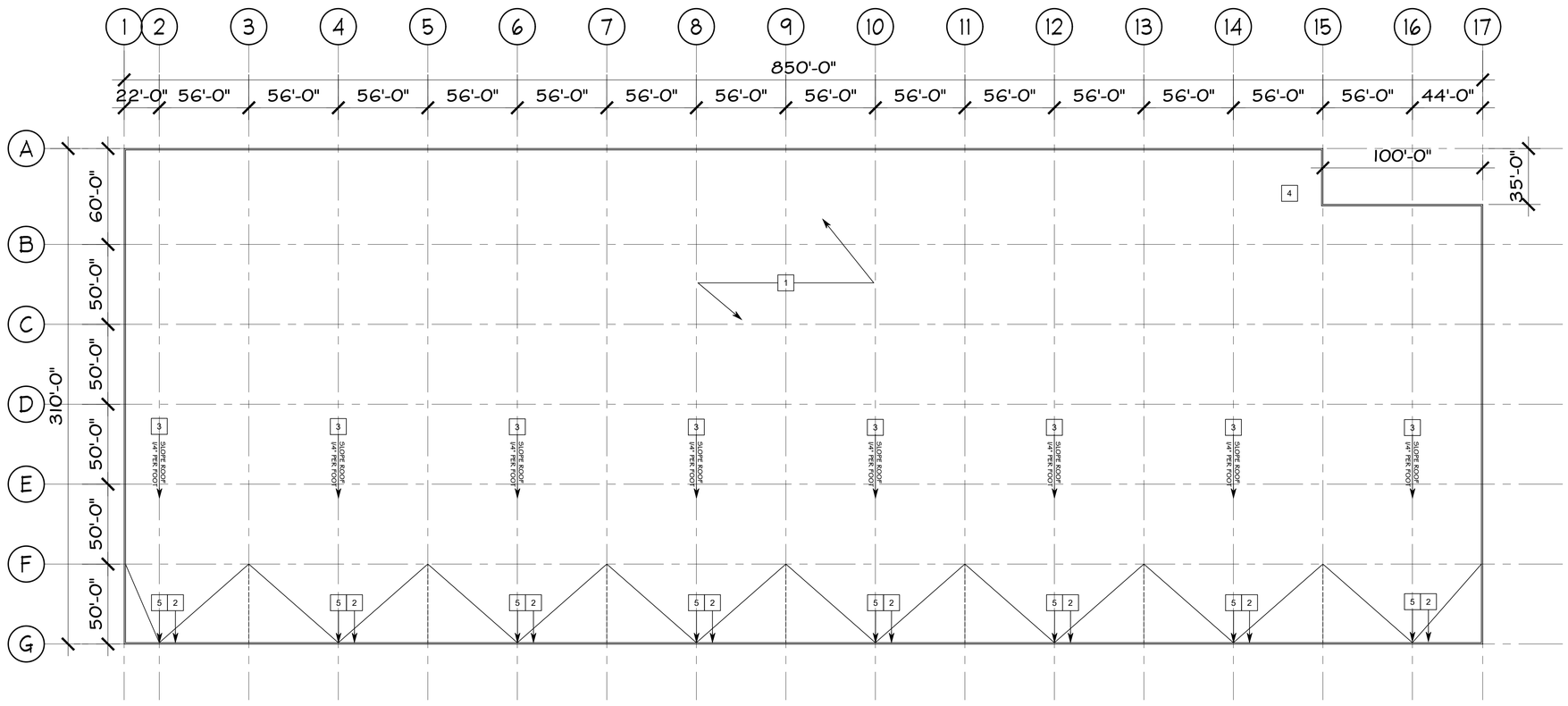
OVERALL FLOOR PLAN

GENERAL ROOF PLAN NOTES

1. GALVANIZED METAL ROOF DECK SHALL BE FACTORY PRIMED. BAR JOISTS SHALL BE PAINTED WITH GRAY FACTORY PRIMER
2. FLASH MECHANICAL EQUIPMENT AND PENETRATIONS ON THE ROOF ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
3. FLASHING AND COUNTER FLASHING FOR ROOF TOP UNITS SHALL BE COMPLETED IN ACCORDANCE WITH SMACNA
4. 10'-0" MINIMUM DISTANCE ANY VENT TO AIR INTAKE.
5. ALL ROOF AREAS TO BE SLOPED 1/4" PER FOOT MIN. UNLESS NOTED OTHERWISE. SEE THE PLANS FOR AREAS OF STRUCTURE SLOPE.
6. ALL PLBG., MECH., ELECT., ETC. ITEMS MOUNTED ON OR PENETRATING ROOF MAY NOT BE SHOWN, SEE RESPECTIVE PLANS FOR LOCATIONS. PENETRATIONS, ETC. THROUGH ROOF SYSTEM SHALL COMPLY W/ROOF MANUFACTURER'S PRINTED INSTRUCTIONS & STANDARDS.
7. ALL WORK & MATERIALS BELONGING TO & ADJACENT TO ROOF SHALL BE IN FULL COMPLIANCE WITH ROOF MANUFACTURER'S STANDARD INSTALLATION DETAILS & WARRANTY.
8. PROVIDE CRICKETS ADJACENT TO ALL ROOF-TOP EQUIPMENT, ETC. (TYPICAL). MINIMUM 1/4" PER FOOT SLOPE ON ALL CRICKETS.

ROOF PLAN KEY NOTES

1. MECHANICALLY FASTENED OVER 60 MIL WHITE TPO ROOFING MEMBRANE AND POLYISO RIGID INSULATION (R-30) - TWO LAYERS OF APPROXIMATELY 2.6", APPROXIMATELY 5.2" TOTAL THICKNESS, STAGGER LAYERS OF INSULATION OVER SLOPED STRUCTURAL STEEL OPEN WEB JOISTS AND METAL DECK (TYP). LAP INSULATION JOINTS. LOCATED OVER AMBIENT WAREHOUSE
2. OVERFLOW SCUPPER (24" WIDE X 8" HIGH) .
3. SLOPED STRUCTURE AT 1/4" PER FOOT MINIMUM.
4. ROOF LADDER.
5. ROOF DRAIN. SEE PLUMBING DRAWINGS.



1 / A2.0 OVERALL ROOF PLAN

SCALE :1"=40'-0"

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LEICESTER CENTRAL

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LEICESTER, MASSACHUSETTS

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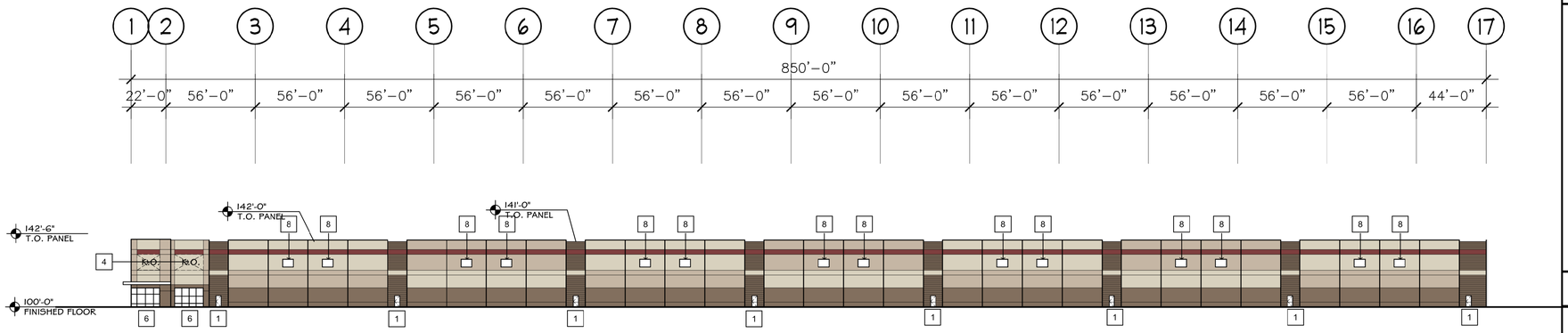
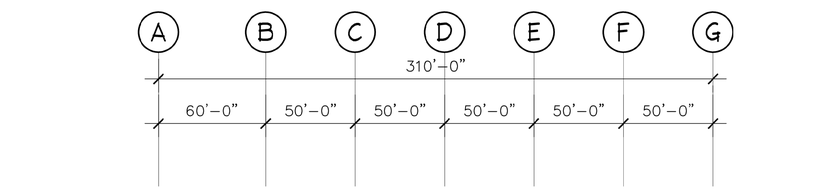
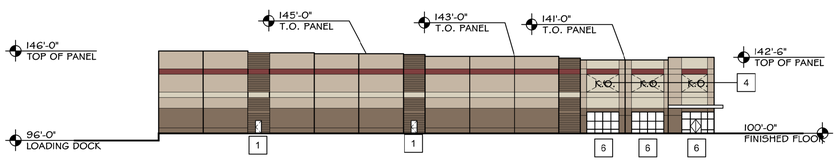
REVISIONS △

SHEET NUMBER
A2.0
ROOF PLAN



1 A2 SOUTH ELEVATION
SCALE: 1" = 40'-0"





1 A2 WEST ELEVATION
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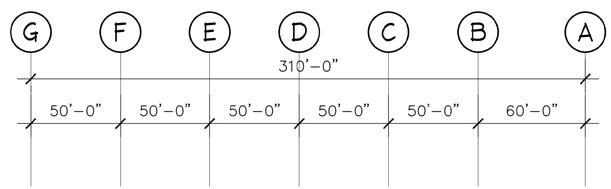

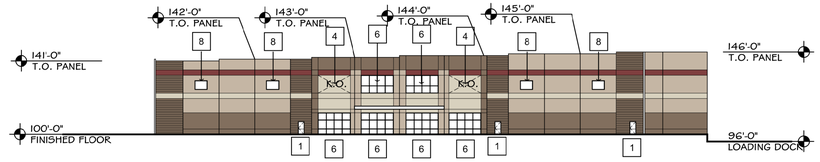

1 A2 EAST ELEVATION
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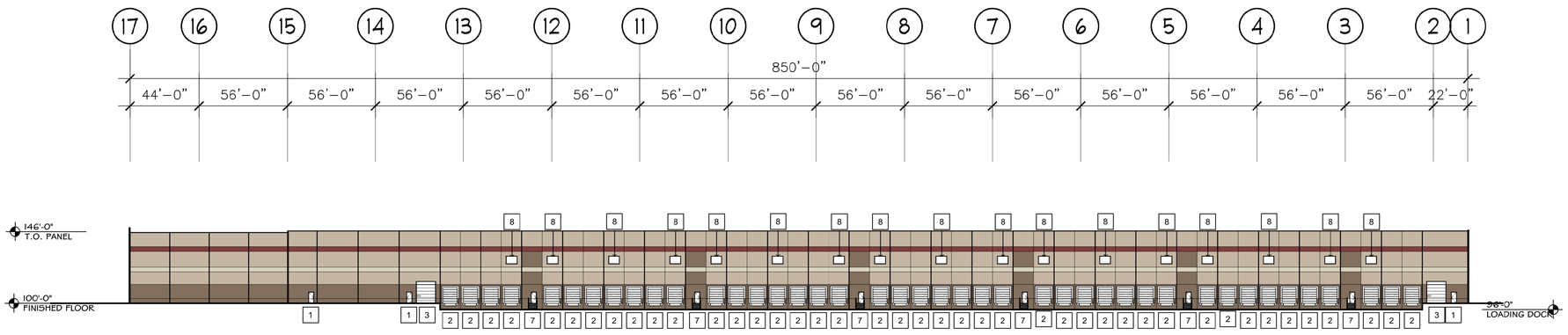

1 A2 NORTH ELEVATION
SCALE: 1" = 40'-0"

ELEVATION KEY NOTES

1. SCHEDULED DOOR AND FRAME. RE: FLOOR PLANS AND DOOR SCHEDULE.
2. SCHEDULED OVERHEAD DOOR WITH MECHANICAL DOCK LEVELERS. RE: FLOOR PLANS AND DOOR SCHEDULE.
3. SCHEDULED DRIVE-IN DOOR. RE: FLOOR PLAN AND DOOR SCHEDULE.
4. KNOCK-OUT PANEL FOR FUTURE STOREFRONT SYSTEM.
5. PAINTED CONCRETE TILT-UP PANEL, RE: STRUCTURAL FOR ADDITIONAL INFORMATION.
6. INSULATED GLAZING IN ALUMINUM WINDOW SYSTEM.
7. DOCK STAIR WITH HANDRAILS AND GUARDRAILS.

FINISH SCHEDULE

P-1	SHERWIN WILLIAMS: TBD
P-2	SHERWIN WILLIAMS: TBD
P-3	SHERWIN WILLIAMS: TBD
P-4	SHERWIN WILLIAMS: TBD
P-5	SHERWIN WILLIAMS: TBD

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ELECTRICAL: NAME / ADDRESS / CITY / STATE / ZIP / CONTACT INFO
PLUMBING: NAME / ADDRESS / CITY / STATE / ZIP / CONTACT INFO
FIRE PROTECTION: NAME / ADDRESS / CITY / STATE / ZIP / CONTACT INFO

LEICESTER CENTRAL
HUNTOON MEMORIAL HIGHWAY
LEICESTER, MASSACHUSETTS

JOB NO : SP8228
PA : BJC
DATE : 12.06.2021

REVISIONS

SHEET NUMBER
A5.0
EXTERIOR ELEVATIONS