# Site Plans

Issued for Local Approvals

Date Issued July 11, 2024

November 18, 2024

Multifamily Development

Latest Issue

10 Grosvenor Street Worcester, MA

# Owner / Applicant

Polar Views, LLC 89 West Main Street Unit 101 Northborough, MA 01590



Shee	Sheet Index					
No.	Drawing Title	Latest Issue				
C1.01	Legend and General Notes	August 30, 2024				
C2.01	Site Plan	November 18, 2024				
C3.01	Site Details	October 24, 2024				
C3.02	Site Details	October 24, 2024				
L1.01	Planting Plan and Details	November 18, 2024				

Refe	Reference Drawings					
No.	Drawing Title	Latest Issue				
	Existing Conditions Plan of Land	February 24, 2024				
-1	10 Grosvenor Site - Photometric Calculation	August 30, 2024				
	Architectural Floor Plans	November 18, 2024				
	Architectural Elevations	November 18, 2024				
	Architectural Perspectives	November 18, 2024				
	Architectural Shadow Study	October 11, 2024				



# Architect

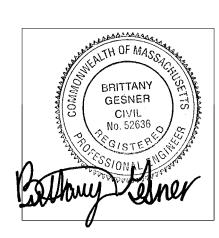
Maugel Destefano Architects 200 Ayer Road, Suite 200 Harvard, MA 01451 978.456.2884

# Surveyor

508.752.1001

Geo Network Land Survey 645 Chandler St Worcester, MA 01602 508.755.7003

Assessor's Map-Block-Lot: 05-014-0046A



نڌ		
=		
2		
=		
5		
>		
2		
ò		
i		
ţ		
5		
J		
ń		
_		
Ų		
É		
Ū		
>		
ź		
\$		
Ē,		
7		
צ		
-		
2		
ב		
2		
_		
=		
5		
ζ		
,		
_		
-		
- -		
j		
7		
-		
t		
2		
J		
Š		
כ		
Š		
ž		
y, August 50, 2024 1.54.55 FIVI CTACEN FIGURE I desugy, NOVETIBEL 19, 2024 5.57.55 FIVI CTITS HAY		
_		
u - IIday,		
2		
=		
3		

MASTER TANK   MASTER TO ANALYS	AN ABANDON  R ACCESSIBLE CURB RAMP  J ADJUST			Prop.	Exist.		Prop.	Exist.
PRICE   CANADA   CA	ACCESSIBLE CURB RAMP  J ADJUST  PROX APPROXIMATE  BITUMINOUS	ABAN						
MASCAL DIPUT LINE	D ADJUST PROX APPROXIMATE BITUMINOUS		CONCRETE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The state of the s	DRODERTYLING		
BRIDINGS   AFFI   AFF	PROX APPROXIMATE  BITUMINOUS	ACR						
DOGS-DEATH   DOG	PROX APPROXIMATE  BITUMINOUS	ADI						
MILLIONS STREACK	BITUMINOUS							
Part					152Un052U			
SEASON   S	BOTTOM OF SLOPE			0/6/40/6/Xd				
CONSTRUCTION LAYOUT			TOP OF CURB ELEVATION	27.35 TC×	27.35 TC×		10+00	10+00
TOWN OF DESTURBANCE   100	LL BROKEN WHITE LANE LINE	BWLL	BOTTOM OF CURB ELEVATION	26.85 BC×	26.85 BC×			1
TOWN LINE	NC CONCRETE	CONC	SPOT ELEVATION	132.75 ×	132.75 ×			
IMMI DE BISTURBANCE   II	CL DOUBLE YELLOW CENTER LINE	DYCL	TOP & BOTTOM OF WALL ELEVATION	45.0 TW× 38.5 BW	45.0 TW× 38.5 BW			
WHI AND LINE WITH A 2G	ELEVATION	EL	BORING LOCATION	lack	- 🔷	TOWN LINE		
HOUDH ANN	V ELEVATION	ELEV	TEST PIT LOCATION		E8	LIMIT OF DISTURBANCE		
PLOCOPIUM	EXISTING	FX	MONITORING WELL	→ MW	<b>○</b> MW	WETLAND LINE WITH FLAG		<u>&amp;</u> _ ·
BOSDERING LAND SURRETT   128   170						FLOODPLAIN		
NO DISTURE ZONE						BORDERING LAND SUBJECT		RI SE
NO DISTURE ZONE				6"RD»				
DECEMBER	AN GRANITE	GRAN				WETLAND BUFFER ZONE		
SOR	O GRADE TO DRAIN	GTD				NO DISTURB ZONE		NDZ
GRAVEL ROAD   6"W   WATER   MAX   M.	LANDSCAPE AREA	LA			_	200' RIVERFRONT AREA		200′RA—
DE COLOR PAYEMENT  BE BE BE BETAMONOUS CUBB  COC COCKESTE CUBB  COC CO	D LIMIT OF DISTURBANCE	LOD				GRAVEL ROAD		
188	X MAXIMUM	MAX					— — — — EOP	EOP
BE BITUMINOUS CURB  GC GG CONCRETE CUBB  GC CONC	N MINIMUM	MIN			——4"FP——		BB	
CC CONCRETE CUBB C C ILICITAIC NIS NO  GG CURB AND GUTTER SIN SIN STEAM  GG CURB AND GUTTER SIN SIN STEAM  GG CURB AND GUTTER SIN SIN STEAM  GG CONCRETE CUBB TO THE TELEPHONE  GG CONCRETE CUB				2″DW	00			
CUBB AND GUTTER  STM STM STEAM  PERF PER  COL 15C EXTRUDED CONCRETE CUBB  TO TO THE PHONE  PROP PR  PROP PR  PRE ALAMM  REM RE  COL PPC PRECAT CONC. CUBB  ST SUPED GRAN EDGING  WET, CARN. CUBB  COL CUBB AND GUTTER  ST SUPED GRAN. EDGING  WET, CARN. CUBB  COL CUBB AND GUTTER  CARLE TV  CARLE TV  CARLE TV  CARLE TV  CARLE TV  RET  READ  RE  CATCH BASIN CONCENTRIC  SWEL SO  CATCH BASIN CONCENTRIC  SWEL  CATCH BASIN CONCENTRIC  SWEL  CATCH BASIN ECCENTRIC  SWEL  SWEL  SWEL  CATCH BASIN ECCENTRIC  SWEL				———G———	3"G			
EGC BY AUD OTTEN  FINDED CONCRETE CUBB  T T TELEPHONE  PROP PROP PROP PROP PROP PROP PROP PRO				——Е——	——E——			
MONOLITHIC CONCRETE CURB				——————————————————————————————————————	STM			
PRECAST CONC. CURB  SEE  SEE  SEE  SEE  SEE  SEE  SEE  S	DP PROPOSED	PROP		T	T			
SSE SLOPED GRAN EDGING  VERT, GRAN, CURB  LIMIT OF CURE TYPE  LIMIT OF CURE TYPE  LIMIT OF CURE TYPE  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING BUILDING ENTRANCE  DEAN MANHOLE CONCENTRIC  DEAN MANHOLE CONCENTRIC  TYP TY  LIMIT OF CURB TYPE  BUILDING BUILDING ENTRANCE  DEAN MANHOLE CONCENTRIC  DEAN MANHOLE CONCENTRIC  DEAN MANHOLE CONCENTRIC  LIMIT OF CURB TYPE  BUILDING BUILDING ENTRANCE  DEAN MANHOLE CONCENTRIC  DEAN MANHOLE CONCENTRIC  LIMIT OF CURB TYPE  TYP TY  LIMIT OF CURB TYPE  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING ENTRANCE  DEAN MANHOLE CONCENTRIC  DEAN MANHOLE CONCENTRIC  LIMIT OF CURB TYPE  LIMIT OF CURB TYPE  LIMIT OF CURB TYPE  TRENCH DRAIN  LIMIT OF CURB TYPE  LIMIT	A REMOVE	REM	FIRE ALARM					
WE VERT GRAN CURB  LIMIT OF CURB TYPE  LIMIT OF CURB TYPE  BUILDING  BUILDIN	RETAIN	RET	CABLE TV	—— CATV——	CATV			
VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. TO DOUBLE GECENTRIC  VENT. GRAN MANHOLE CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN CURB  VENT. GRAN CONCENTRIC  VENT. GRAN CONCENTRIC  VENT. GRAN CURB  VENT. GRAN MANHOLE  VENT. GRAN MANHOLE  VENT. GRAN CONCENTRIC  VENT. GRAN MANHOLE  VENT. GRAN CONCENTRIC  VENT. GRAN MANHOLE  VENT. GRAN MANHOLE  VENT. GRAN CONCENTRIC  VENT. GRAN MANHOLE  VENT. GRAN MANHOLE  VENT. GRAN CONCENTRIC  VENT. GRAN MANHOLE  VENT. GRAN CONCENTRIC  VENT. GRAN MANHOLE  VENT. GRAN MAN	D REMOVE AND DISPOSE	R&D	CATCH BASIN CONCENTRIC					
DOUBLE CATCH BASIN CONCENTRIC  SAWCUT  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING  BUILDING ENTRANCE  DOUBLE CATCH BASIN ECCENTRIC  SWILL SO  DRAIN MANHOLE ECCENTRIC  DRAIN MANHOLE ECCENTRIC  DRAIN MANHOLE ECCENTRIC  DRAIN MANHOLE ECCENTRIC  DUMPSTER PAD  CB  CB  CA  TRENCH DRAIN  DUMPSTER PAD  CB  CB  CA  CLEANOUT  BUILDING  CO  CLEANOUT  CMP  CC  CC  CLEANOUT  CMP  CC  CC  CC  CLEANOUT  DOUBLE SIGN  FLARED END SECTION  CO  CLEANOUT  DOUBLE SIGN  CO  CLEANOUT  CMP  CC  CC  CC  CC  CC  CC  CC  CC  C	R REMOVE AND RESET	R&R	CATCH BASIN ECCENTRIC	_				
DOUBLE CATCH BASIN ECCENTRIC  BUILDING  BUILDI	EL SOLID WHITE EDGE LINE	SWEL	DOUBLE CATCH BASIN CONCENTRIC					
BUILDING  BUILDI			DOUBLE CATCH BASIN ECCENTRIC		_	SAWCUI		
DRAIN MANHOLE CONCENTRIC  TYP TY  DRAIN MANHOLE ECCENTRIC  DRAIN MANHOLE ECCENTRIC  DRAIN MANHOLE ECCENTRIC  TRENCH DRAIN  TRENCH DRAIN  DUBLARD  TRENCH DRAIN  TRENCH DRAIN  TRENCH DRAIN  DUBLARD  TRENCH DRAIN  T			GUTTER INLET	<b>###</b>	BBB	BUIL DING		1/1/1/1/1/
DRAIN MANHOLE ECCENTRIC  CB CA  CC CL  CLEANOUT  HEADWALL  DCB DC  CC CL  DCB CA  CC CL  DCB CC  CC CL  DCB CA  CC CL			DRAIN MANHOLE CONCENTRIC	lacktriangle	(D)		_	7/
TRENCH DRAIN  DEBOLLARD  DEBOLLAR	TYPICAL	ТҮР	DRAIN MANHOLE ECCENTRIC	_	(D)		=	
D DUMPSTER PAD  SIGN  DOUBLE SIGN  STEEL GUARDRAIL  WOOD GUARDRAIL  PATH  PATH  CURB STOP & BOX  TREE LINE  WIRE FENCE  F	ility	Utility	TRENCH DRAIN		=TD=		_	_
SIGN  DOUBLE SIGN  FLARED END SECTION  HEADWALL  SEVER MANHOLE CONCENTRIC  DMH DR  WOOD GUARDRAIL  SEWER MANHOLE ECCENTRIC  CIP CA  COND CC  CURB STOP & BOX  COND CC  CURB STOP & BOX  TREE LINE  WIRE FENCE  FENCE  FENCE  FIRE DEPARTMENT CONNECTION  FIRE DEPARTMENT CONNECTION  FIRE DEPARTMENT CONNECTION  FIRE PARTMENT FAWGRE FROM  STOCKADE FENCE  FIRE HYDRANT  FENCE  FENCE  FIRE HYDRANT  FENCE  FENCE  FIRE HYDRANT  FENCE  FENCE  FOST INDICATOR VALVE  GI GG  GG  GG  GAS GATE  HDPE  HIM  HM  HE  HIM  HIM  HE  FENCE  FIRE HYDRANHOLE  FENCE  FENCE	CATCH BASIN		PLUG OR CAP	r	r			•
DOUBLE SIGN  FLARED END SECTION  HEADWALL  DCB  DCB  DCB  DCB  DCB  DCB  DCB  D			CLEANOUT	co ●	CO			D
HEADWALL  STEEL GUARDRAIL  WOOD GUARDRAIL  PATH  PATH  TREE LINE  WIRE FENCE  FENCE  FENCE  FIRE DEPARTMENT CONNECTION  FIRE LPYDRANT  STOCKADE FENCE  FIRE HYDRANT  FENCE  FENCE  FENCE  FENCE  FIRE HYDRANT  FENCE  FENCE  FENCE  FENCE  FIRE HYDRANT  FENCE  FIRE HYDRANT  FENCE  FENCE			FLARED END SECTION	<b>&gt;</b>	<b>&gt;</b>			<del>-</del>
STEEL GUARDRAIL  WOOD GUARDRAIL  SEWER MANHOLE CONCENTRIC  CIP CA  COND CC			HEADWALL	$\checkmark$		DOORTE 2IGN	-	<u> </u>
WOOD GUARDRAIL  SEWER MANHOLE ECCENTRIC  CIP CA  COND CC  COND CC  WATER VALVE & BOX  TREE LINE  WATER VALVE & BOX  FENCE  FENCE  FENCE  FIRE DEPARTMENT CONNECTION  FIRE PATH  WATER METER  FENCE  RETAINING WALL  FENCE  RETAINING WALL  FENCE  RETAINING WALL  FOR THE PATH  WATER METER  FENCE  WATER WALVE  WATER WALVE  WATER WALVE  WATER WALVE  WATER WALVE  WATER WALVE  FOR THE DEPARTMENT CONNECTION  FIRE DEPARTMENT CONNECTION  FOR FOR  WATER WALVE  WATER WALVE  FENCE  FENCE  FENCE  FENCE  FENCE  FIRE HYDRANT  FENCE  FOR GAS GAS GATE  HAY BALES  FENCE	B DOUBLE CATCH BASIN	DCB				STEFI GUARDRAII		
SEWER MANHOLE ELCENTRIC  CIP CA  COND CC  COND CC  TREE LINE  TREE LINE  WW WATER VALVE & BOX  FES FL  TAPPING SLEEVE, VALVE & BOX  FES FL  FENCE  FOUNDATION  FO	H DRAIN MANHOLE	DMH		_				
TREE LINE  WATER VALVE & BOX  DIP  DL  TREE LINE  WATER VALVE & BOX  FES  FL  TAPPING SLEEVE, VALVE & BOX  FES  FL  FENCE  FINE DEPARTMENT CONNECTION  FM  FO  TREE HYDRANT  F&G  FR  FR  FR  FR  FR  FR  FR  FR  FR  F	CAST IRON PIPE	CIP	SEWER MANHOLE ECCENTRIC					
TREE LINE  WATER VALVE & BOX  DIP  DL  TSV  TAPPING SLEEVE, VALVE & BOX  FES  FL  FENCE  FIRE DEPARTMENT CONNECTION  FM  FO  FIRE HYDRANT  F&G  FRC  FRC  STOCKADE FENCE  WM  WM  WM  WATER WELL  FRC  FRC  FRC  FRC  FRC  FRC  FRC  F	ND CONDUIT	COND	CURB STOP & BOX	CS <b>●</b>	CS ●	PATH	====	
WIRE FENCE  FENCE  FENCE  FIRE DEPARTMENT CONNECTION  FM FO  FREG FR.  FREG	DUCTILE IRON PIPE	DIP	WATER VALVE & BOX	₩V ●	₩V ●	TREE LINE	$\sim$	~~~
FENCE  STOCKADE FENCE  STOCKADE FENCE  WM WM WM WM WATER METER  STONE WALL  RETAINING WALL  STREAM / POND / WATER COURSE  WM PPV PV PV PV PV WATER WELL  GI GL  WATER WELL  GI GR  WATER WELL  GI GR  GAS GATE  HAY BALES  SILT FENCE  ELECTRIC MANHOLE  HYD HID  FM FO  FRE DEPARTMENT CONNECTION  FRE DEPARTMENT CONNECTION  FM FO  FRE DEPARTMENT CONNECTION  FRE SECTION  FROM FROM FROM FROM FROM FROM FROM FROM	FLARED END SECTION	FES	TAPPING SLEEVE, VALVE & BOX	TSV <del></del>	TSV	WIRE FENCE	<del>-xx</del>	× ×
STOCKADE FENCE  STOCKADE FENCE  STOCKADE FENCE  STOCKADE FENCE  STOCKADE FENCE  STOCKADE FENCE  FIRE HYDRANT  WATER METER  POV PIV PIV POST INDICATOR VALVE  GI GL  WATER WELL  GT GR  GM GAS GATE  HDPE HIK  GENERAL SILT FENCE  EMH ELECTRIC MANHOLE  HW HE	FORCE MAIN	FM	FIRE DEPARTMENT CONNECTION			FENCE	•	<b>-</b>
STONE WALL  RETAINING WALL  STREAM / POND / WATER COURSE  DETENTION BASIN  GG GG GAS GATE  HAY BALES  SILT FENCE  ELECTRIC MANHOLE  WATER METER  POST INDICATOR VALVE  WATER WELL  GG GG GG GAS GATE  HDPE HIGH HIM HA			FIRE HYDRANT	•		STOCKADE FENCE	-	
RETAINING WALL  STREAM / POND / WATER COURSE  DETENTION BASIN  GG GG GAS GATE  HAY BALES  M GAS METER  HH HA  HA  SILT FENCE  EMH ELECTRIC MANHOLE			WATER METER	•	•		$\infty$	000000
STREAM / POND / WATER COURSE  DETENTION BASIN  GG GG GG GG GG GAS GATE  HDPE HICE  WATER WELL  GT GR HDPE HICE  ELECTRIC MANHOLE  HW HE			POST INDICATOR VALVE	PIV ●				
DETENTION BASIN  GG GG GAS GATE  HDPE HIGH  MAY BALES  SILT FENCE  ELECTRIC MANHOLE  HW HE	GUTTER INLET		WATER WELL		<b>W</b>	STREAM / POND / WATER COURSE		
HAY BALES  M GAS METER  HH HA  HAY BALES  SILT FENCE  ELECTRIC MANHOLE  HW HE	GREASE TRAP		GAS GATE	GG	GG	DETENTION BASIN	··	
——————————————————————————————————————	PE HIGH DENSITY POLYETHYLENE PIPE	HDPE			GM	HAY BALES		0 0 0 0 0 0 0 0 0 0 0
C CILT COCK / STDAM MATTIE	HANDHOLE	НН				SILT FENCE	——×——	×
	HEADWALL	HW	ELECTRIC MANHOLE	•		SILT SOCK / STRAW WATTLE	· C::::::> ·	· <> ·
HYD HY	D HYDRANT	HYD	ELECTRIC METER	EM □		MINOR CONTOUR		1
4 <del>4 M</del> INOR CONTOUR	INVERT ELEVATION	INV	LIGHT POLE	·	<b>\$</b>		4	20
——————————————————————————————————————	INVERT ELEVATION		TELEPHONE MANHOLE	● <sup>TMH</sup>	①	MAJOR CONTOUR	20	— — Z0— — ——————————————————————————————
(10) PARKING COUNT TO THE TRANSFORMED DAD	LIGHT POLE		TRANSFORMER PAD	T	T	PARKING COUNT	10	(10)
©10) COMPACT PARKING STALLS						COMPACT PARKING STALLS	C10	
DYL DOUBLE YELLOW LINE			UTILITY POLE	•	-0-	DOUBLE YELLOW LINE	DYL	DYL
SL STOP LINE PIV PO				•- I	0-		SL	SL
GUY WIRE & ANCHOR PWW PA	W PAVED WATER WAY	PWW		НН				
	POLYVINYLCHLORIDE PIPE	PVC	HAND HOLE	⊡	٠			
PULL BOX  RCP RE	REINFORCED CONCRETE PIPE	RCP	PULL BOX	<u>.</u>				0
E ACCESSIBLE PARKING  R= RIM	RIM ELEVATION	R=						
VAN VAN VAN			MATCHLINE			VAIN-ACCESSIBLE PARKING	VAN	VAN
SMH SE								
<del></del>								
	1 IN 18	UG						
UG UN		UP						

# 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
- 4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE SIX (6) INCHES LOAM AND SEED.

LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).

- 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
- 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
- 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.

### 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.
- 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)
  - B. SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE
  - C. STORM DRAINAGE PIPES SHALL BE
    1: 8" PIPE BETWEEN CATCH BASINS AND MANHOLES: SDR-18
  - 2: 12" OR GREATER PIPE: HIGH DENSITY POLYETHYLENE (HDPE)
  - 3: PIPES LOCATED WITHIN CITY RIGHT-OF-WAY: REINFORCED CONCRETE PIPE (RCP) 4: 6" AREA DRAIN PIPE: HIGH DENSITY POLYTHYLENE (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.
- 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 (3) FEET UNLESS OTHERWISE NOTED.
- 3. CURBING SHALL BE VERTICAL GRANITE CURB (VGC) 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
- 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
- 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**

- 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 GEO NETWORK LAND SURVEY, AND FROM PLANS OF RECORD. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY GEONETWORK LAND SURVEY, DURING FEBRUARY 2024.
- 2. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD88

# 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.
- 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.



Multifamily Development

10 Grosvenor Street Worcester, MA

1	Address City Comments	08/30/2024	ВМ

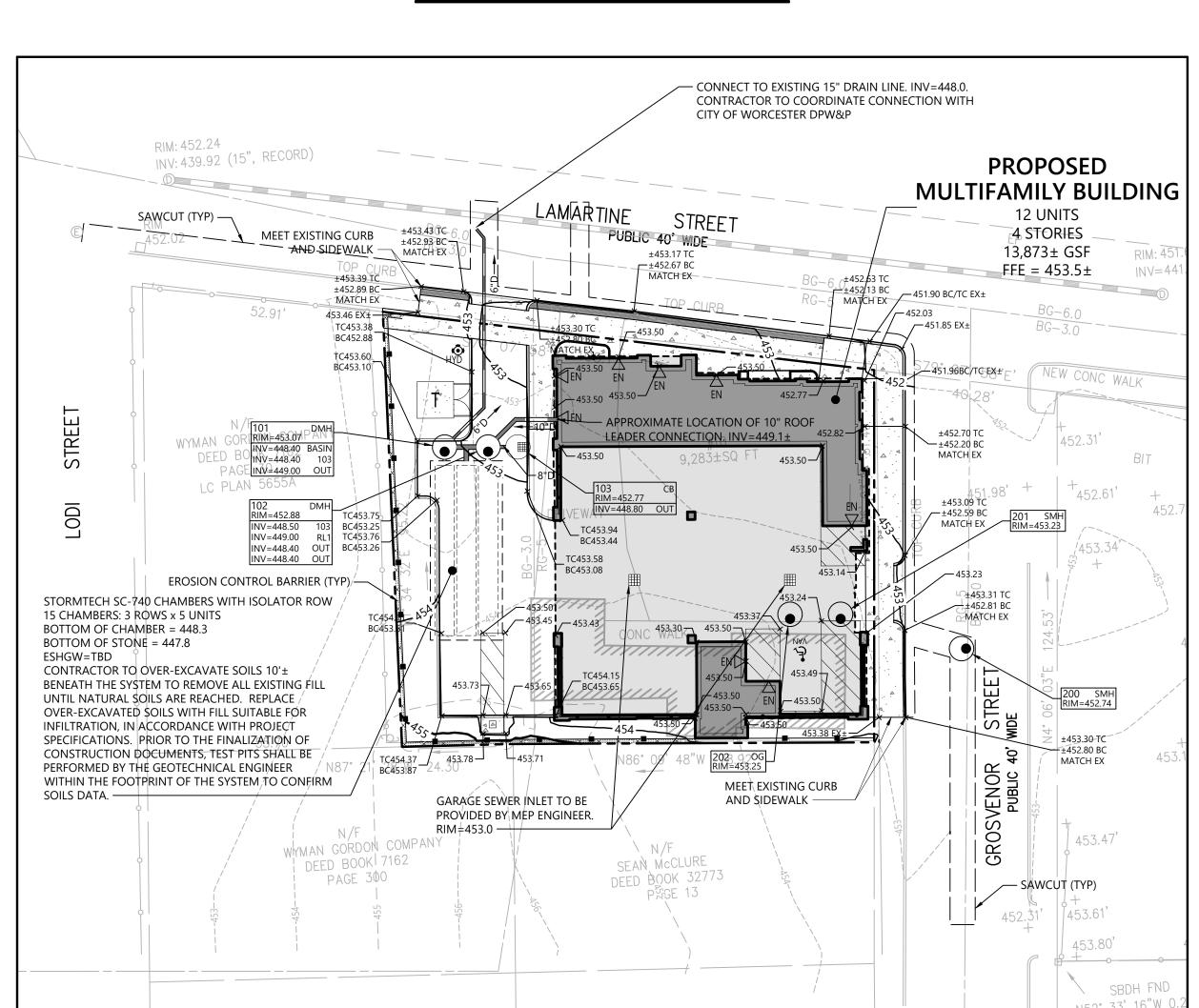
Designed by	Checked by
CSH	BMG
Issued for	Date
Local Approvals	July 11, 202

Not Approved for Construction





**Layout and Materials Plan** 



**Grading, Drainage, and Erosion Control Plan** 

**Sign Summary** 

9		- <b>J</b>	
.U.T.C.D.	Specif	ication	Doss
lumber	Width	Height	Desc.
R1-1	30"	30"	STOP
R5-1	30"	30"	DONOT
R7-2a	12"	18"	NO PARKING 8:00 AM TO 8:00 PM
R7-8	12"	18"	RESERVED PARKING
R7-8aP	12"	6"	VAN
R8-3gP	12"	12"	LOADING ZONE
D9-11B	12"	18"	

Parking Requi	rements	•					
RESIDENTIAL	12 UNITS	Х	2 SPACES	/	1 UNIT	=	24 SPACES
15% DENSITY BONUS	REDUCTION						- 3 SPACES
25% ELIGIBLE DEVELO	DPMENT RED	UCT	ION				- 5 SPACES
50% SPECIAL PERMIT	REDUCTION	*					- 4 SPACES
			TOTAL PARKI	NG F	REQUIRED	=	12 SPACES

\* THE 50% SPECIAL PERMIT REDUCTION OF 4 SPACES IS BASED ON A TOTAL SPACES REQUIRED BEING 24 SPACES, WHICH ALLOWS A TOTAL REDUCTION OF 12

- CONNECT TO EXISTING ELECTRIC

ELECTRIC ENGINEER

INFRASTRUCTURE PER UTILITY PROVIDERS

APPROXIMATE LOCATION OF

APPROXIMATE LOCATION OF

WYMAN GC

STORMTECH SC-740 CHAMBERS WITH ISOLATOR ROW

BENEATH THE SYSTEM TO REMOVE ALL EXISTING FILL

CONTRACTOR TO OVER-EXCAVATE SOILS 10'±

UNTIL NATURAL SOILS ARE REACHED. REPLACE OVER-EXCAVATED SOILS WITH FILL SUITABLE FOR

INFILTRATION, IN ACCORDANCE WITH PROJECT

SPECIFICATIONS. PRIOR TO THE FINALIZATION OF

CONSTRUCTION DOCUMENTS, TEST PITS SHALL BE

PERFORMED BY THE GEOTECHNICAL ENGINEER

WITHIN THE FOOTPRINT OF THE SYSTEM TO CONFIRM

EV CHARGERS. FINAL DESIGN AND

LOCATION TO BE DETERMINED BY

DEED BOOK 7162

PAGE 300

ELECTRICAL ENGINEER WAYMAN GO

15 CHAMBERS: 3 ROWS x 5 UNITS

BOTTOM OF CHAMBER = 448.3

BOTTOM OF STONE = 447.8

ESHGW=TBD

SOILS DATA. ——

ST

PROPOSED TRANSFORMER. FINAL

DESIGN, SIZE, AND LOCATION TO BE PROVIDED BY ELECTRIC ENGINEER —

UNDERGROUND ELECTRIC CONNECTION -

VYMAN GOR RIME453.07 PANN INV=448,40 BASIN DEED BONNV=448,40 103 PAGE INV=449.00 OUT

INV=448.40 OUT

INV=448.40 OUT

LOCATION TO BE COORDINATED WITH

**Zoning Summary Chart** 

Zoning District(s):	Residence, General (RG-5), & Business, General (BG-3.0)						
Overlay District(s):	N/A						
Zoning Regulation Requirements	Required (RG-5) <sup>1</sup>	Eligible Development Reduction <sup>2</sup>	Provided				
MINIMUM LOT AREA	13,250 SF <sup>3</sup>	11,262.5 SF <sup>4</sup>	9,283± SF				
MINIMUM FRONTAGE <sup>5</sup>	100 Feet <sup>6</sup>	96 Feet <sup>7</sup>	81.4 Feet				
FRONT YARD SETBACK <sup>5</sup>	7.67 Feet <sup>8</sup>	-	1.1 Feet <sup>9</sup>				
EXTERIOR SIDE YARD SETBACK <sup>5</sup>	10 Feet	-	2.1 Feet <sup>9</sup>				
SIDE YARD SETBACK <sup>5</sup>	10 Feet	-	1.1 Feet <sup>9</sup>				
MAXIMUM BUILDING HEIGHT	90 Feet	-	49 Feet 10 Inches				
MAXIMUM BUILDING HEIGHT	8+ Stories	-	4 Stories				
MAXIMUM FRONT YARD IMPERVIOUS AREA	50 %	-	93 %				
MAYIMI IM EYTERIOR SIDE VARD IMPERVIOLIS AREA	50 %	_	(94%) (4)				

- 1. Zoning regulation requirements as specified in the City of Worcester Zoning Ordinance, dated April 2, 1991 as amended through May 9, 2023. 2. The project is an Eligible Development per Article VII Section 6, and can reduce the dimensional requirements by 15% in RG-5 districts.
- 4. With the Eligible Development Reduction (15%), required lot area based on a 15% reduction of 13,250 SF is 11,262.5 SF. (13,250 x 0.85 = 11,262.5 SF).
- 5. The lot is a corner lot has identified Grosvenor Street as its front lot line. Lamartine St. is considered a exterior side lot line.

3. Within the RG-5 district, required lot area based on 12 dwelling units is 13,250 SF. (5,000 SF + (750 SF x 11 DU) = 13,250 SF).

- 6. Within the RG-5 district, required frontage based on 12 dwelling units is 100 Feet (50 Feet + (5 Feet x 11 DU) = 105 Feet) which exceeds the 100 feet
- 8. The required front yard setback is based on Note 6 of Table 4.2 which provides that the average front yard setback of the existing buildings fronting on the same street and block within 150 feet shall be the required front yard setback. (12 Grosvenor St. = 5.75'; 16 Grosvenor St. = 3.75'; 20 Grosvenor Street = 13.5';

7. With the Eligible Development Reduction (15%), required frontage based on a 15% reduction of the total number of dwelling units is 96 Feet. (12 DU x 0.85)

- 9. No building is proposed within the BG-3.0 District. As such, only the RG-5 required setbacks apply.
- 10. Regularity Factor for 10 Grosvenor Street =  $(16 \times 9,283 \text{ sf}) \div 388.02^2 = 0.987$

CONNECT TO EXISTING 15" DRAIN LINE. INV=448.0.

- APPROXIMATE CONNECTION LOCATION TO 12" WATER MAIN. CONTRACTOR TO COORDINATE

CITY OF WORCESTER DPW&P

- APPROXIMATE LOCATION OF 10" ROOF

INV=448.90

APPROXIMATE CONNECTION LOCATION TO 10" CITY

SEWER MAIN. CONTRACTOR TO VERIFY EXISTING INVERT ELEVATIONS AND REPORT FINDINGS BACK TO PROJECT ENGINEER. CONTRACTOR TO COORDINATE WITH CITY

CONTRACTOR TO VERIFY WATER AND

TELECOM DUCTBANK ELEVATIONS TO

CONFIRM CROSSING FEASIBILITY ——

LEADER CONNECTION, INV=449.1±

- APPROXIMATE LOCATION OF

TELECOM CONNECTION

WITH CITY OF WORCESTER DPW&P

CONTRACTOR TO COORDINATE CONNECTION WITH

**Parking Summary Chart** 

	Size		Spaces		
Description	Required	Provided	Existing	Required	Provided
STANDARD SPACES	9 x 18	9 x 18	2	-	3
COMPACT SPACES (25% ALLOWED, 50% WITH SP)	8 x 16	8 x 16	-	-	6
STANDARD ACCESSIBLE SPACES <sup>1</sup>	8 x 18	-	-	-	0
VAN ACCESSIBLE SPACES <sup>2</sup>	8 x 18	9 x 18	-	-	1
STANDARD ELECTRIC VEHICLE SPACES <sup>3</sup>	9 x 18	9 x 18	-	-	1
ELECTRIC VEHICLE SPACES (DESIGNED TO BE ACCESSIBLE) <sup>4</sup>	11 x 18	11 x 18	-	-	1
TOTAL SPACES			2	12	12

1. REQUIRED ACCESSIBLE SPACES IS BASED ON 10 TOTAL SPACES PROVIDED PER MAAB (1 ACCESSIBLE SPACE REQUIRED) 2. REQUIRED ACCESSIBLE VAN SPACES IS BASED ON 1 TOTAL ACCESSIBLE SPACES PROVIDED. (ONE IN EVERY EIGHT SPACES SHALL BE A DESIGNATED VAN ACCESSIBLE STALL PER MAAB = 1 SPACE)

3. REQUIRED ELECTRIC VEHICLE SPACES IS BASED ON 10 TOTAL SPACES PROVIDED. (20% OF 10 SPACES = 2 SPACES REQUIRED TO BE

4. REQUIRED ELECTRIC VEHICLE SPACES DESIGNED TO BE ACCESSIBLE IS BASED ON 2 TOTAL ELECTRIC VEHICLE SPACES PROVIDED. (2 TOTAL SPACES = 1 ACCESSIBLE SPACE PER MAAB)

**PROPOSED** 

12 UNITS

4 STORIES

13,873 ± GSF

FFE = 453.5±

- APPROXIMATE LOCATION

INV. = 449.5'±

OF 6" SANITARY SEWER CONNECTION

INV=448.80

INV=446.80 (

INFRASTRUCTURE PER UTILITY

FINAL CONNECTION LOCATION

SBDH FND

PROVIDERS REQUIREMENTS.

TO BE COORDINATED WITH

ELECTRIC ENGINEER

- APPROXIMATE LOCATION OF 4" DOMESTIC AND 6" FIRE PROTECTION CONNECTIONS MULTIFAMILY BUILDING

	<del>J</del>				
	Size		Spaces		
Description	Required	Provided	Existing	Required	Provided
STANDARD SPACES	9 x 18	9 x 18	2	-	3
COMPACT SPACES (25% ALLOWED, 50% WITH SP)	8 x 16	8 x 16	-	-	6
STANDARD ACCESSIBLE SPACES 1	8 x 18	-	-	-	0
VAN ACCESSIBLE SPACES <sup>2</sup>	8 x 18	9 x 18	-	-	1
STANDARD ELECTRIC VEHICLE SPACES <sup>3</sup>	9 x 18	9 x 18	-	-	1
ELECTRIC VEHICLE SPACES (DESIGNED TO BE ACCESSIBLE) <sup>4</sup>	11 x 18	11 x 18	-	-	1
TOTAL SPACES			2	12	12

Multifamily

120 Front Street

Worcester, MA 01608

Suite 500

1. STABILIZED CONSTRUCTION EXIT TO BE FIELD LOCATED AT LIMIT OF

2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO

CONSTRUCTION. CONTRACTOR TO CONFIRM EROSION AND

INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF

WORCESTER REQUIREMENTS.

ONLINE DURING CONSTRUCTION.

SEDIMENTATION CONTROLS IN PLACE DURING CONSTRUCTION ARE

3. SILT SACK SHALL BE INSTALLED AND MAINTAINED IN ALL CATCH BASINS

Notes

508.752.1001

10 Grosvenor Street

No.	Revision	Date	Appvd.
1	Address City Comments	07/11/2024	BMG
2	Address City Comments	08/30/2024	BMG
3	Address City Comments	10/24/2024	BMG
4	Address City Comments	11/18/2024	BMG

Local Approvals	July 11, 2024	
Issued for	Date	
CSH	Checked by BMG	

**Not Approved for Construction** 





**Utility Plan** 

OF WORCESTER DPW&P -

GARAGE SEWER INLET TO BE

PROVIDED BY MEP ENGINEER.

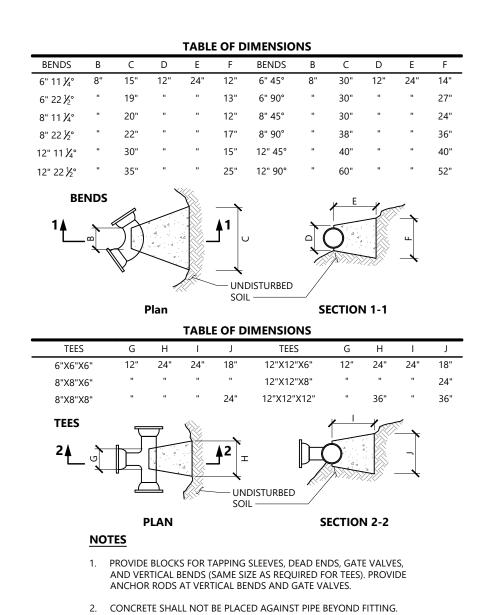
RIM=453.0 —

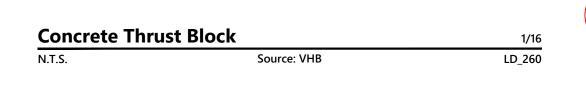
Address City Comments	07/11/2024	BMG
Address City Comments	08/30/2024	BMG
Address City Comments	10/24/2024	BMG
Address City Comments	11/18/2024	BMG

Local Approvais

2. ALL STEEL SHALL BE HOT DIPPED GALVANIZED WITH FACTORY APPLIED EPOXY ENAMEL FINISH TO MATCH EXISTING FENCE.

5' Ht. Metal Fence N.T.S. Source: Ameristar Fence





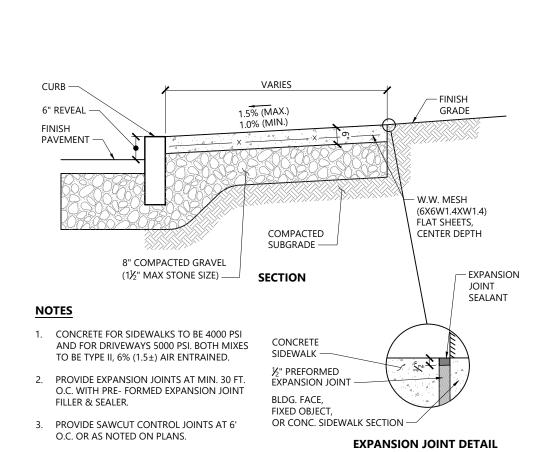
3. CONCRETE SHALL BE 3,000 PSI-TYPE I.

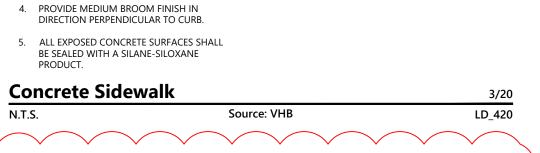
2'-6"MIN.

<u>PLAN</u>

BERM\_GRADE

\_GUTTER\_GRADE





OPENING AT CENTER AS SHOWN

FRAME AND GRATE MAY VARY WHERE CATCH BASIN IS NOT AGAINST CURB

WORCESTER STANDARD
CURB INLET PITCHED
TO GRADE

Catch Basin (CB)

N.T.S.

-WORCESTER STANDARD FRAME & GRATE PITCHED TO GRADE FRAME: LEBARON FOUNDRY LF288 OR EJIW 7288Z1 (3-FLANGE), EJIW 7288Z

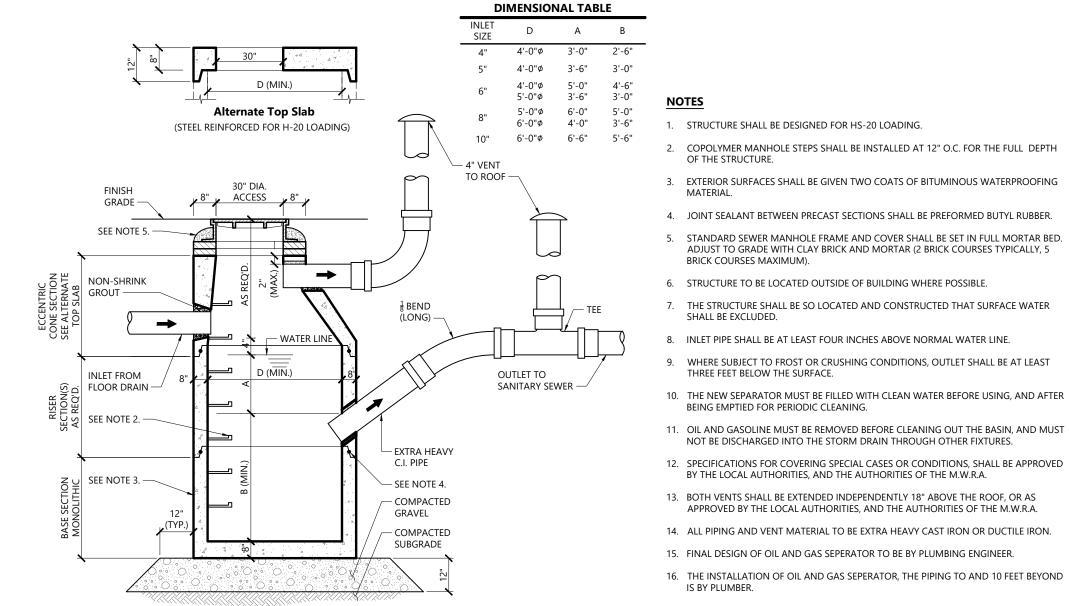
EBARON FOUNDRY L28SG1 OR EJIW

W/ 30"x36" OPENING

-8" THICK TOP SLAB

-0.15 SQUARE INCH PER

L.F. REINFORCEMENT FOR WALLS & BASE



— BIT. CONCRETE PAVEMENT

- SAWCUT 12" (MIN ) FROM

COMPACTED **GRAVEL BASE** 

- COMPACTED

3/20

LD\_402

10/20

SUBGRADE

FACE OF CURB IF SET IN

EXISTING PAVEMENT

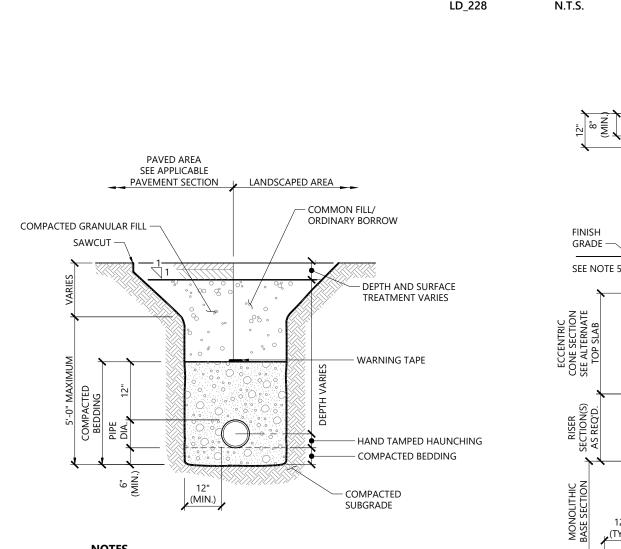
TOP COURSE (1½" MIN.)

— TACK COAT

CONCRETE

- 4000 PSI CEMENT

Oil And Gasoline Separator		10/20
.T.S.	Source: VHB	LD_228



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.

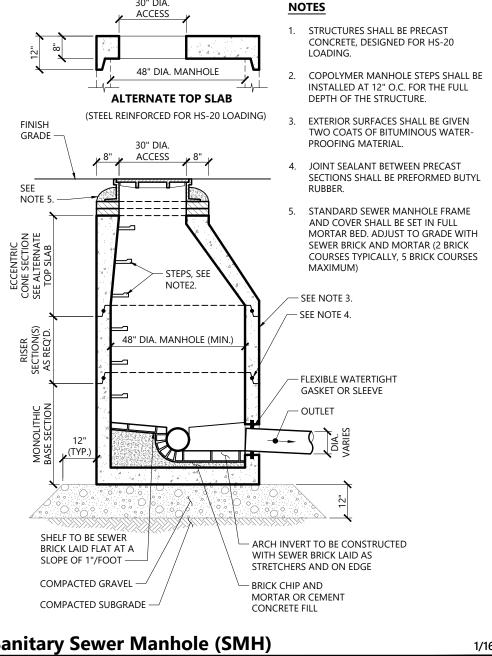
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES. 3. COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY ENGINEER.

**Utility Trench** 11/19 N.T.S. LD\_300 Source: VHB

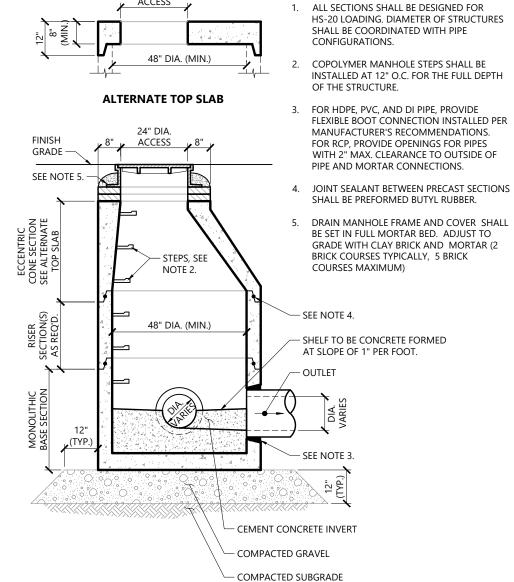
COVER ENTIRE ISOLATOR ROW WITH AD

24" SUMP DEPTH

8' (2.4 m) MIN WIDE



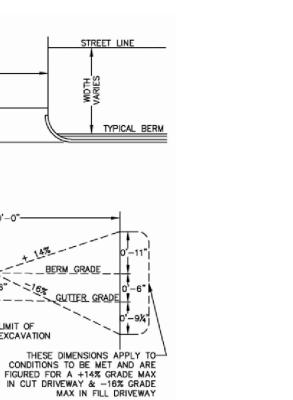
Sanitary Sev	wer Manhole (SMH)	1/16
N.T.S.	Source: VHB	LD_200



- OPTIONAL INSPECTION PORT

SC-740 END CAP





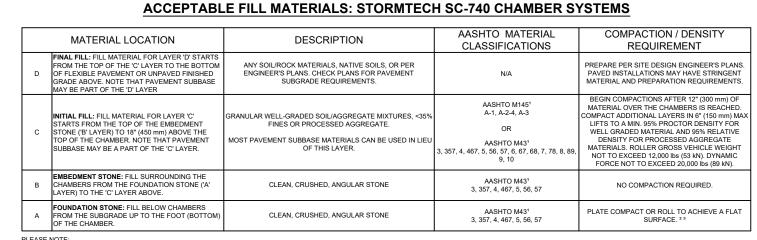
SIDEWALK GRADE SHALL BE MAINTAINED ACROSS DRIVEWAY OPENING.

TYPICAL DRIVEWAY

**Typical Driveway** Source: City of Worcester

SECTION A-A NOT TO SCALE

-SUPERPAVE



09/09

VERTICAL GRANITE CURB —

TREATMENT VARIES —

CONCRETE IF LOCATED

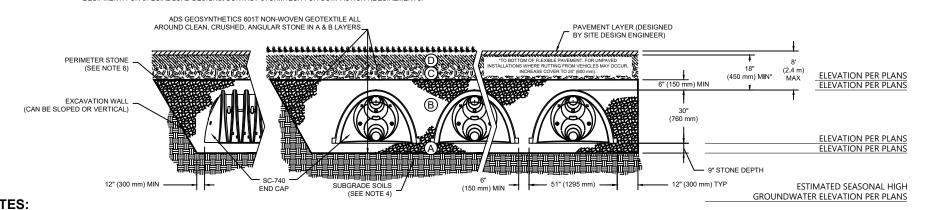
IN LANDSCAPED AREA -

SLOPE VARIES --

**Vertical Granite Curb (VGC)** 

4000 PSI CEMENT

THE LISTED 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. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, ANGULAR. FO ANGULAR NO. 4 (AASHTO M43) STONE".
STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. 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.



# 1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

- 2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL
- 4. 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. 5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS
- 6. 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.

**Subsurface Detention/Infiltration System (StormTech SC-740)** Source: StormTech

CONCRETE COLLAR -- 18" (450 mm) MIN WIDTH 12" (300 mm) NYLOPLAST INLINE CONCRETE SLA PART#6IPSSWST74IF INSERTA TEE TO BE CENTERED SC-740 CHAMBER

SC-740 6" INSPECTION PORT DETAIL

**StormTech SC-740 Isolator Row Profile** 

SC-740 ISOLATOR ROW DETAIL

# Multifamily **Development**

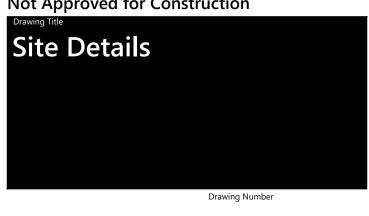
10 Grosvenor Street Worcester, MA

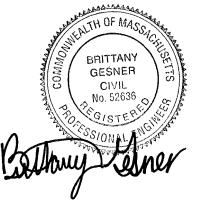
Address City Comments

2	Address City Comments	10/24/2024	BMG

Designed by CSH	Checked by BMG
Issued for	Date
Local Approvals	July 11, 2024

Not Approved for Construction





16406.00

08/30/2024 BMG

120 Front Street

Worcester, MA 01608

Suite 500

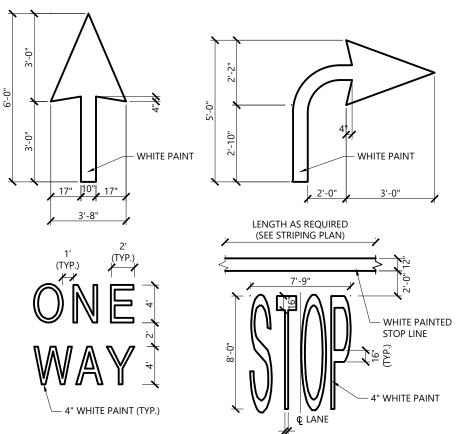
508.752.1001

LD\_182-740

Source: StormTech

N.T.S.

 CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, BASED ON FIELD MEASUREMENTS, FOR APPROVAL PRIOR TO FABRICATION.



1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON

Source: VHB

SITE WORK IN LOCATIONS SHOWN.

**Painted Pavement Markings - On Site** 

6" DIA BOLLARD (TYP) -

2' TRANSITION

4" GREEN LINES @ 45°

ACCESSIBLE PARKING (NOT RESERVED)

2. ALL SLOPES THROUGH OUT THE ACCESSIBLE PARKING AND AISLE SHALL NOT EXCEED 1.5%

(SEE NOTE 1.)

**PLAN VIEW** 

**ELECTRIC VEHICLE CHARGING SPACES ADJACENT TO LANDSCAPE AREA** 

1. ALL DIMENSION TO CENTER OF STRIPING.

24" ON CENTER(TYP)

CURB —

D9-11Bp

N.T.S.

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

1/16

D9-11Bp

— CONCRETE PAD

LD\_554

SEE DETAIL 1

— EV CHARGER AND FOUNDATION
PER MANUFACTURER REQUIREMENTS

— FLUSH CONCRETE PAD

– 4" WIDTH (PAINTED

4" WITDH (PAINTED BLUE)

∠ SEE DETAIL

8.5' (MIN.)

**Accessible Parking Space** 

ACCESSIBLE PARKING

— ACCESS AISLE

5' (MIN.)

(8' MIN FOR

VAN)

— EV CHARGER AND FOUNDATION

PER MANUFACTURER REQUIREMENTS

Source: VHB

DETAIL 1

- MOLDED WOODEN CAP

— 1" X 4" CEDAR BOARD —

- 3" O.D. GALVANIZED STEEL PIPE

RAIL FASTENED WITH GALVANIZED

- #4 @ 16"

**BOTH WAYS** 

**SECTION VIEW** 

WITH PRESSED DOME CAP

- 2" X 4" CEDAR BACKING

ADJUSTABLE CLAMP —

SHIPLAP JOINTS —

5000 PSI CEMENT

CONCRETE (TYPE II)

1" X 6" CEDAR BOARDS

24" ON CENTER

(PAINTED BLUE)

DETAIL

(PAINTED WHITE)

12/19

LD\_552B

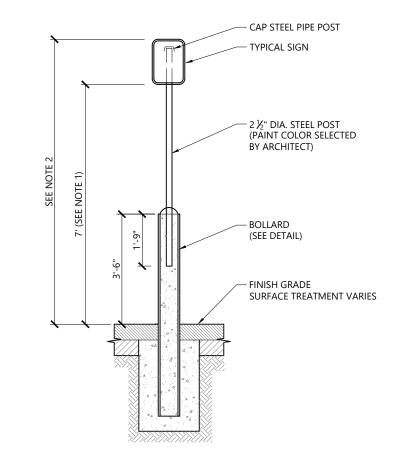
LD\_772

COMPACTED

GRAVEL

- WHITE SKID

RESISTANT



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

2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR

TYPICAL SIGN

ACCESSIBLE SIGNAGE

**Bollard Mounted Sign** 2/20 LD\_703 Source: VHB N.T.S.

THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR

— SIGN POST

(1.75" X 1.75")

— GROUND SURFACE

ANCHOR SLEEVE

— SIGN POST ANCHOR

3/19

LD\_702

(2.0" X 2.0")

ROUNDED CONCRETE CAP

– 6" DIA. SCHEDULE 40 STEEL PIPE

FILLED WITH CONCRETE. COLOR

SELECTED BY OWNER/ARCHITECT

PAINT PRIME AND FINISH COATS

TO BE COMPATIBLE WITH

FINISHED GRADE

EXTERIOR METAL SURFACES.

SURFACE TREATMENT VARIES

– 24" DIA. CONCRETE ENCASEMENT

- COMPACTED GRAVEL

— COMPACTED SUBGRADE

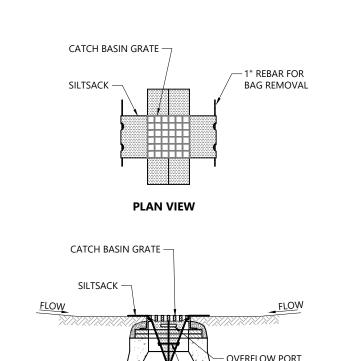
2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR

HOLE DIAMETER ¾6" –

Source: VHB

ACCESSIBLE SIGNAGE.

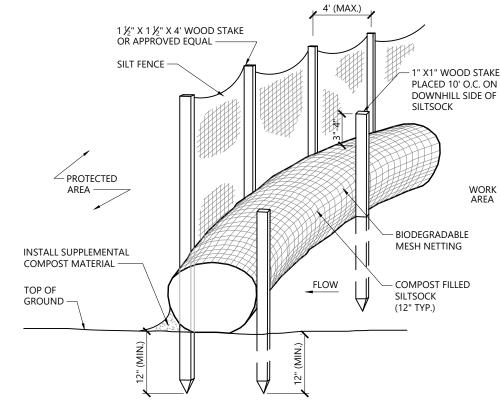
ACCESSIBLE SIGNAGE



### **SECTION VIEW**

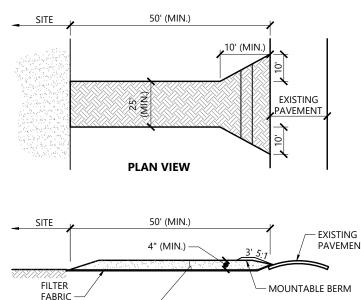
- 1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND STRAW BALES HAVE BEEN REMOVED.
- 2. GRATE TO BE PLACED OVER SILTSACK.
- 3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING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

Siltsack Sedim	ent Trap	1/20
N.T.S.	Source: VHB	LD_674



- 1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL.
- 2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
- EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY
- SITE, AS DETERMINED BY THE ENGINEER.
- IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Siltsock / Silt	Fence Barrier	10/20
N.T.S.	Source: VHB	LD_658-A



# CROSS-SECTION

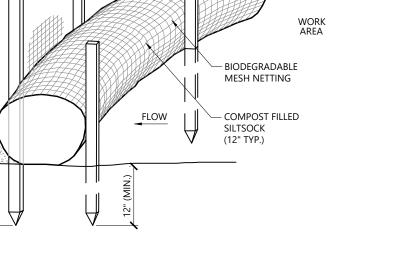
1½" CRUSHED STONE —

 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** Source: VHB



- 3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM
- 4. UPON SITE STABILIZATION, COMPOST MATERIAL SHALL BE DISPERSED ON

Siltsock /	Silt Fence Barrier	10/20
NTC	Cource: VIII	1D 6E9 A

SITE	50' (MIN.)	
	PLAN VIEW	
SITE	50' (MIN.)  4" (MIN.)  3' 5.7  EXISTING PAVEMENT	



08/30/2024 BMG

10/24/2024 BMG

July 11, 2024

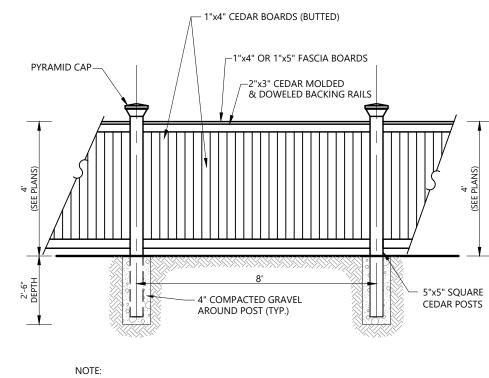
120 Front Street

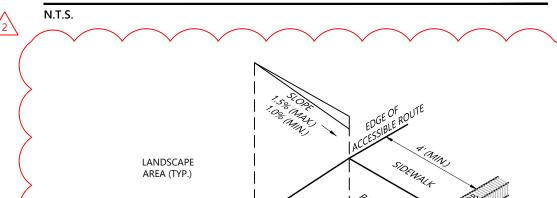
Worcester, MA 01608

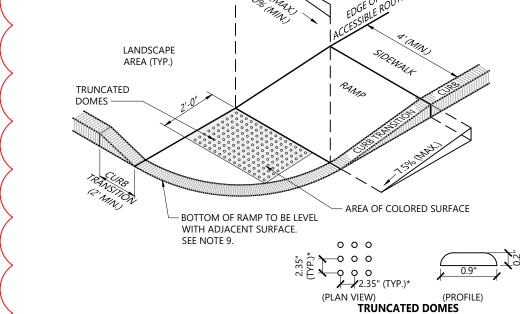
Suite 500

508.752.1001

16406.00







4' Ht. Board Fence

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).

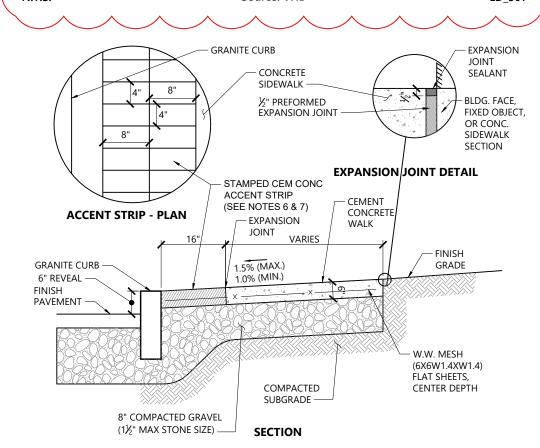
\*DIMENSIONS ARE CENTER TO CENTER

12/20

N.T.S.

- 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

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



- 1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES TO BE TYPE II, 6%
- 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.
- 5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT.

4. PROVIDE MEDIUM BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB ON ALL CONCRETE WALK

6. ACCENT STRIP SHALL BE CEMENT CONCRETE COLORED RED THROUGHOUT STAMP/IMPRINT WITH A BRICK

# ACCENT STRIP SHALL BE FORMED AGAINST GRANITE CURB/CURB INLET AT THE FRONT. WOOD FORMING AT THE BACK AND SHALL BE PLACED PRIOR TO CEMENT CONCRETE WALK SURFACE OR SIDEWALK.

**Concrete Sidewalk with Accent Strip** 

**Dumpster Pad w/ Enclosure** 

Source: VHB

TO PLAN FOR ACTUAL DIMENSION.

2. PAD DESIGNED FOR 6 YARD DUMPSTER.

1. DUMPSTER PAD DIMENSIONS SHOWN AS MINIMUM. REFER

3" GALVANIZED STEEL POSTS

- 2" X 4" CEDAR BACKING RAIL

ADJUSTABLE CLAMP

— 1" X 6" SHIP-LAPPED

CEDAR BOARDS

— 6" CONCRETE PAD

--- 5" X 5" STEEL POST

— 6" STEEL BOLLARD

- DOUBLE GATE - APPROACH APRON

BITUMINOUS OR

CEMENT CONCRETE

FASTENED WITH GALVANIZED

— SCORE LINE (TYP.)

WITH PRESSED DOME CAP (TYP.)

N.T.S. LD\_713

Earth insitu $^{igtharpoonup}$ 

Sign Post - Type 'B'

Source: VHB LD\_700

**Bollard** 

BRITTANY GESNER

Multifamily

Development

10 Grosvenor Street

Address City Comments

Address City Comments

Worcester, MA

CSH

**Local Approvals** 

### SIZE SYMBOL CODE QTY BOTANICAL NAME **COMMON NAME DECIDUOUS TREES** Liquidambar styraciflua 'Slender Silhouette' Slender Silhouette Sweetgum 3" CAL LSS NST Nyssa sylvatica 'Tupelo Tower 3" CAL. QP Quercus palustris 'Pringreen Green Pillar® Pin Oak 3" CAL. Tilia americana 3" CAL. American Linden **EVERGREEN TREES** Thuja occidentalis 'Degroot's Spire' Degroot's Spire Arborvitae CODE **COMMON NAME SPACING** llex crenata 'Helleri' 18 - 24" HT. 36" o.c. **Heler Japanese Holly** IGS Ilex glabra `Shamrock` Shamrock Inkberry 18 - 24" HT. 36" o.c. **PERENNIALS** Hemerocallis x 'Rosy Returns' Rosy Returns Daylily **PLANTERS** NF-R Nepeta x faassenii Pennisetum alopecuroides 'Hameln PAH-R \ 41 **Dwarf Fountain Grass** Sedum rupestre 'Angelina' Angelina Stonecrop Sedum x 'Autumn Joy' **Autumn Joy Sedum** ORNAMENTAL GRASSES CKF Calamagrostis x acutiflora `Karl Foerster` Karl Foerster Feather Reed Grass #1 POT /////// ES **Eragrostis spectabilis** Purple Lovegrass 1////// Panicum virgatum 'Shenandoah' #2 POT Shenendoah Switch Grass

# **Plant Note**

1. ALL TREE AND STUMP REMOVAL SHALL BE IN ACCORDANCE WITH THE ASIAN LONGHORNED BEETLE PROGRAM REQUIREMENTS. ALL NEW TREES AND SHRUB PLANTINGS SHALL BE ASIAN LONGHORNED BEETLE AND EMERALD ASH BORER RESISTANT.

# **Planting Notes**

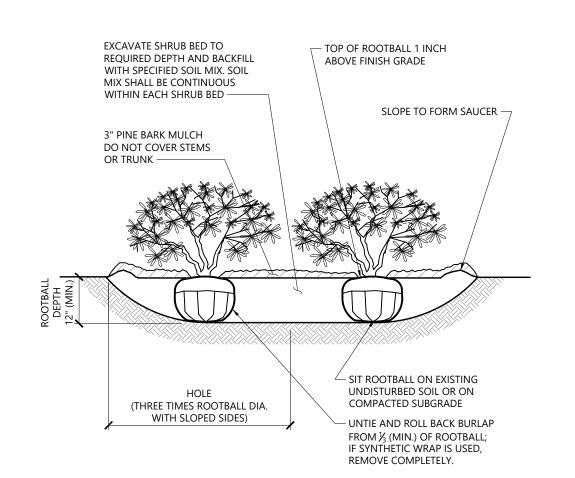
- 1. ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
- 3. NO PLANT 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.

### **Irrigation Notes**

- CONTRACTOR SHALL PROVIDE COMPLETE IRRIGATION SYSTEM DESIGN AND INSTALLATION FOR PLANTINGS AND LAWN AREAS DESIGN SHALL BE CERTIFIED BY A PROFESSIONAL LANDSCAPE ARCHITECT, ENGINEER, OR CERTIFIED IRRIGATION DESIGNER. DESIGN PLANS SHALL BE SUBMITTED TO OWNER'S REPRESENTATIVE FOR APPROVAL.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE INSTALLATION OF THE IRRIGATION SYSTEM.
- CONTRACTOR SHALL PROVIDE DRAWINGS, MATERIAL SPECIFICATIONS, SCHEMATICS, AND OTHER LITERATURE AS MAY BE REQUIRED, FOR ALL CONDUIT, CONTROLS, TIMERS, VALVES, SPRINKLER HEADS, CONNECTORS, WIRING, RAIN GAUGE, ETC. TO THE OWNER'S CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO INSTALLATION.
- 4. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND SUB CONTRACTORS.
- 5. BACKFLOW PREVENTER AND METER IS REQUIRED. IT SHALL BE IN CONFORMANCE WITH STATE AND MUNICIPAL REQUIREMENTS.
- IRRIGATION CONTROL PANEL, BACKFLOW PREVENTER AND METER SHALL BE LOCATED IN THE BUILDING MECHANICAL ROOM. COORDINATE WITH THE GENERAL CONTRACTOR.
- 7. SITE CONTRACTOR SHALL PROVIDE 4" SCHEDULE 40 PVC SLEEVES UNDER PAVEMENT TO PROVIDE ACCESS FOR IRRIGATION LINES TO ALL IRRIGATED AREAS.

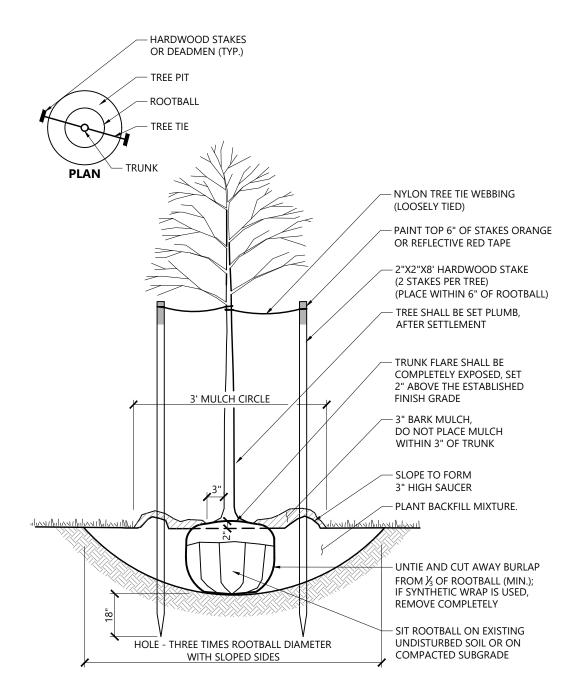
# Planter Notes

- 1. PLANTERS WILL BE SPECIFIED BY OTHERS.
- 2. ASSUMED THAT PLANTERS WILL BE HAND WATERED, WITH A SOIL DEPTH OF AT LEAST 18", AND THAT THE PLANTERS WILL BE FREE DRAINING.
- 3. PLANTER SOIL SHALL BE A STANDARD POTTING SOIL MIXTURE



1. LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER GROWN SHRUBS.

<b>Shrub Bed Planting</b>		1/
N.T.S.	Source: VHB	LD_6



# **Tree Planting (For Trees Under 4" Caliper)**

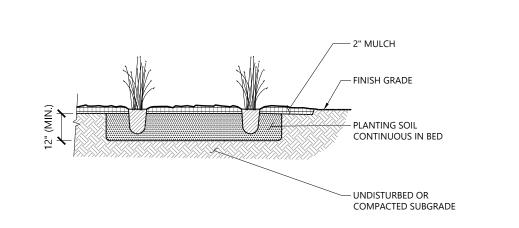
54 IN. O.C.

PLANT SPACING

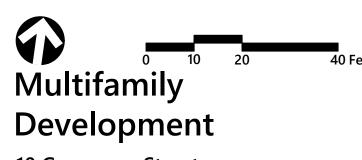
60 IN. O.C.

3	
PACING ("B")	"A"
IN. O.C.	
IN. O.C.	
N. O.C.	
½ IN. O.C.	
IN. O.C.	Ž, 60°
IN. O.C.	
IN. O.C.	
IN. O.C.	<i>F</i>
INL O C	

PLANT SPACING("A")	ROW SPACING ("B")	<u> </u>
6 IN. O.C.	5 IN. O.C.	
8 IN. O.C.	7 IN. O.C.	
10 IN. O.C.	8 ½ IN. O.C.	
12 IN. O.C.	10 ⅓ IN. O.C.	60°
15 IN. O.C.	13 IN. O.C.	
18 IN. O.C.	16 IN. O.C.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
24 IN. O.C.	21 IN. O.C.	
30 IN. O.C.	26 IN. O.C.	•
36 IN. O.C.	30 IN. O.C.	
48 IN. O.C.	42 IN. O.C.	
54 IN O C	48 IN O C	



Perennial and	d Ornamental Grass Planting
N.T.S.	Source: VHB



120 Front Street

Worcester, MA 01608

Suite 500

508.752.1001

10 Grosvenor Street Worcester, MA

LD\_602

9/21 LD\_602

No.	Revision	Date	Appvd.
1	Address City Comments	08/30/2024	BMG
2	Roof Deck Plantings	09/30/2024	BMG
3	Address City Comments	10/21/2024	BMG
4	Address City Comments	10/24/2024	BMG
5	Address City Comments	11/18/2024	BMG

Local Approvals	July 11, 2024
Issued for	Date
Designed by SC	Checked by MK

Not Approved for Construction





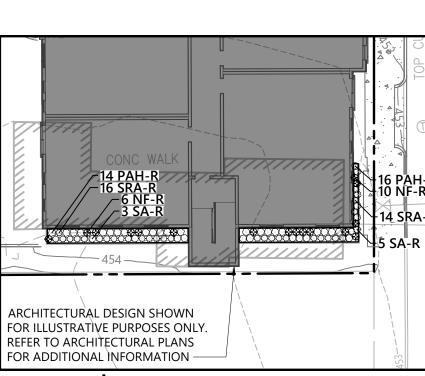
Project Number 16406.00

**Planting Plan** PLANT SCHEDULE

FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION -

4<sup>th</sup> Floor Roof Deck Planting Plan

ARCHITECTURAL DESIGN SHOWN



3<sup>rd</sup> Floor Planting Plan

**Evergreen Tree Planting** 

HOLE - THREE TIMES ROOTBALL DIAMETER

WITH SLOPED SIDES

- HARDWOOD STAKES

OR DEADMEN (TYP.)

- TREE PIT

LD\_604 

– NYLON TREE TIE WEBBING

TRUNK FLARE SHALL BE SET 2 ABOVE THE ESTABLISHED FINISHED GRADE

- 3" BARK MULCH, DO NOT PLACE MULCH WITHIN 3" OF TRUNK

– 2"X2" HARDWOOD STAKE OR DEADMEN (2 STAKES PER TREE) TIGHTEN AS SHOWN

- SLOPE TO FORM A

– SIT ROOTBALL ON

- PLANT BACKFILL MIXTURE.

- UNTIE AND CUT AWAY BURLAP

FROM ⅓ OF ROOTBALL (MIN.);

IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY

EXISTING UNDISTURBED SOIL

OR ON COMPACTED SUBGRADE

3" HIGH SAUCER.

Lumi	naire :	Schedule			
Qty	Label	Arr. Watts	Arrangement	LLF	Description
4	G1	22.6	SINGLE	0.900	SRT1-20-3K7-5QW-UNV
2	W1	14.5	SINGLE	0.900	RWL1-48L-15-3K7-4W-U
1	<b>W</b> 2	10.1	SINGLE	0.900	RWL1-48L-10-3K7-3-U

Calculation Summary								
Label	Units	Avg	Max	Min	Avg/Min	Max/Min		
Site	Fc	0.38	3.0	0.0	N P.	N	OSED	1
							USEL	

MIULITAMILY BUILDING 12 UNITS 
 0.1
 0.1
 0.1
 0.1
 0.2
 0.2
 0.2
 0.2
 0.2
 0.1
 PUBLIC 40' WIDE 4 STORIES 
 0.1
 0.1
 0.2
 0.2
 0.2
 0.2
 0.3
 0.3
 0.3
 0.3
 13,873± GSF 0.2 0.4 0.4 0.5 0.7 0.8 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.1 to,5 to to.8 to.9 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.2 0.1 0.2 0.2 0.2 0.1 0.1 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.2 
 to.2
 to.3
 to.3
 to.2
 to.2
 to.1
 to to to the total to the tota <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.2 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.2 **EN** b.4 b.6 b.6 b.5 b.4 b.3 b.2 b.1 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.2 
 0.6
 0.7
 0.6
 0.4
 0.3
 0.2
 0.1
 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.2 
 0.8
 0.8
 0.6
 0.5
 0.3
 0.2
 0.1

 1.2
 0.8
 0.7
 0.5
 0.3
 0.2
 0.1

 5.1
 5.1
 5.2
 5.5
 5.5
 5.8
 5.8
 5.0
 5.4
 5.0
 5.4
 5.0
 5.4
 5.0
 5.2
 5.2
 5.2
 5.1
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2
 5.2</t 
 0.7
 0.9
 1.3
 1.7
 1.6
 2.1
 2.3
 2.2
 2.4
 2.5
 2.2
 2.0
 2.3
 2.5
 2.5
 2.4
 2.2
 1.7

 1.2
 1.0
 0.8
 0.6
 0.4
 0.2
 0.2
 to 1.9 t 1.**♣** 1.6 1.8 1.9 1.9 1.8 1.3 1.4 1.7 1.7 1.2 
 0.5
 0.5
 0.4
 0.4

 5.1
 5.2

 5.4
 5.3

 5.3

 0.1
 0.1
 0.2
 0.2
 0.2
 0.3
 0.3
 0.3
 0.3
 0.3

 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1
 0.1</td to.1 to.1 to.1

<sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.1 <sup>†</sup>0.1

Project: 10 Grosvenor Street - Site

Contact: Steve Johnson Applications Specialist (603) 490-2446

Detail: Photometric Calculation Date: 08/30/2024 Revision:----Scale: 1" = 10'-0" sjohnson@illuminatene.com Drawn By: SHJ

illůminate 263 Winn Street

Burlington, MA 01803 (781) 935-8500 333 Pleasant Valley Road

South Windsor, CT 06074 Sheet 1 of 1 (860) 282-0597

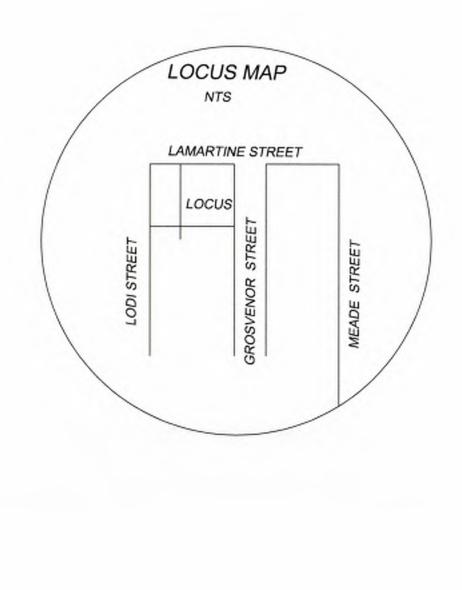
Drawing Number:

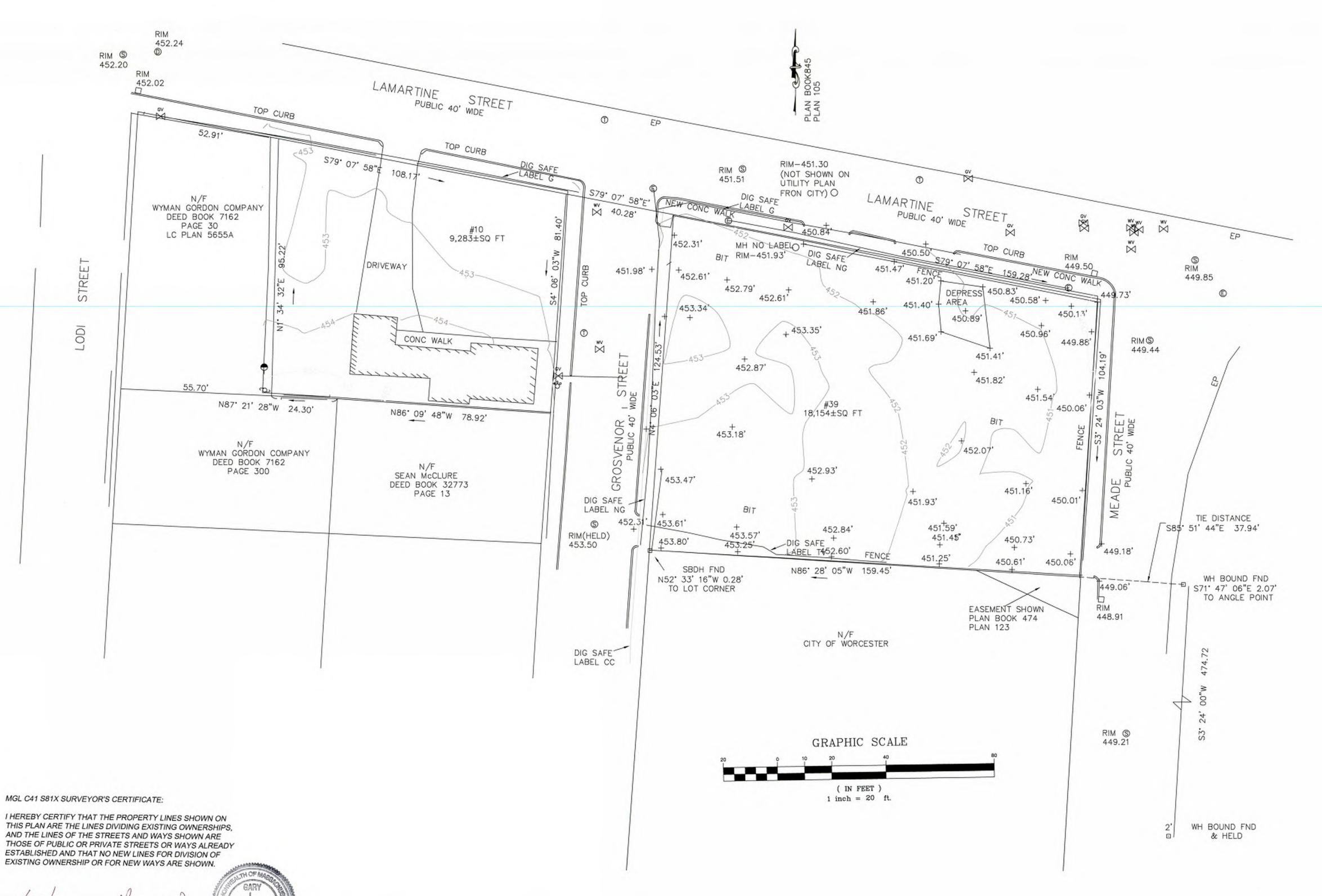
 $\Gamma - T$ 

# **PLAN REFERENCES**

PLAN BOOK 474 PLAN 123 PLAN BOOK 842 PLAN 40 PLAN BOOK 845 PLAN 105 LAND COURT PLAN 5655A

> CITY OF WORCESTER PLANS LAMARTINE STREET (H-15 6741-1) MEADE STREET (H-9286) GROSVENOR STREET (H-9323) LODI STREET





# NOTES

- 1,) DATUM TAKEN FROM SMH ON UNTILITY
- 449.31 PLAN FROM CITY OF WORCESTER
  - 2.) CONSRTUUCTION ON LOTS OR LAND IS SUBJECT TO ANY EASEMENTS, RIGHT OF WAYS, RESTRICTION RESERVATIONS OR LIMITATIONS ON RECORD
  - 3.) UTILITIED SHOWN ARE FROM FIELD LOCATIONS
    IT SHALL BE THE RESPONSIBILTY OF THE DESIGN ENGINEER
    AND THE CONTRACTOR TO VERIFY THE SIZE, EVEVATION AND
    LOCATION, AND TO CONTACT "DIG-SAFE ST LEAST 72
    HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR
    CONSTRUCTION

OWNER OF RECORD
39 LAMARTINE STREET LLC
DEED BOOK 66121 PAGE 389
10 GROSVENOR STREET
DANIEL YARNIE
DEED BOOK 69833
PAGE 270

PLAN OF LAND

10 GROSVENOR STREET

39 LAMARTINE STREET

WORCESTER, MA

PREPARED FOR: DANIEL AND REBECCA YARNIE FEBRUARY 24, 2024 SCALE 1' = 20'

GEO / NETWORK LAND SURVEY, INC.
645 CHANDLER STREET SUITE 7
WORCESTER, MASSACHUSETTS 01610
508-755-7003 FAX 508-755-8003