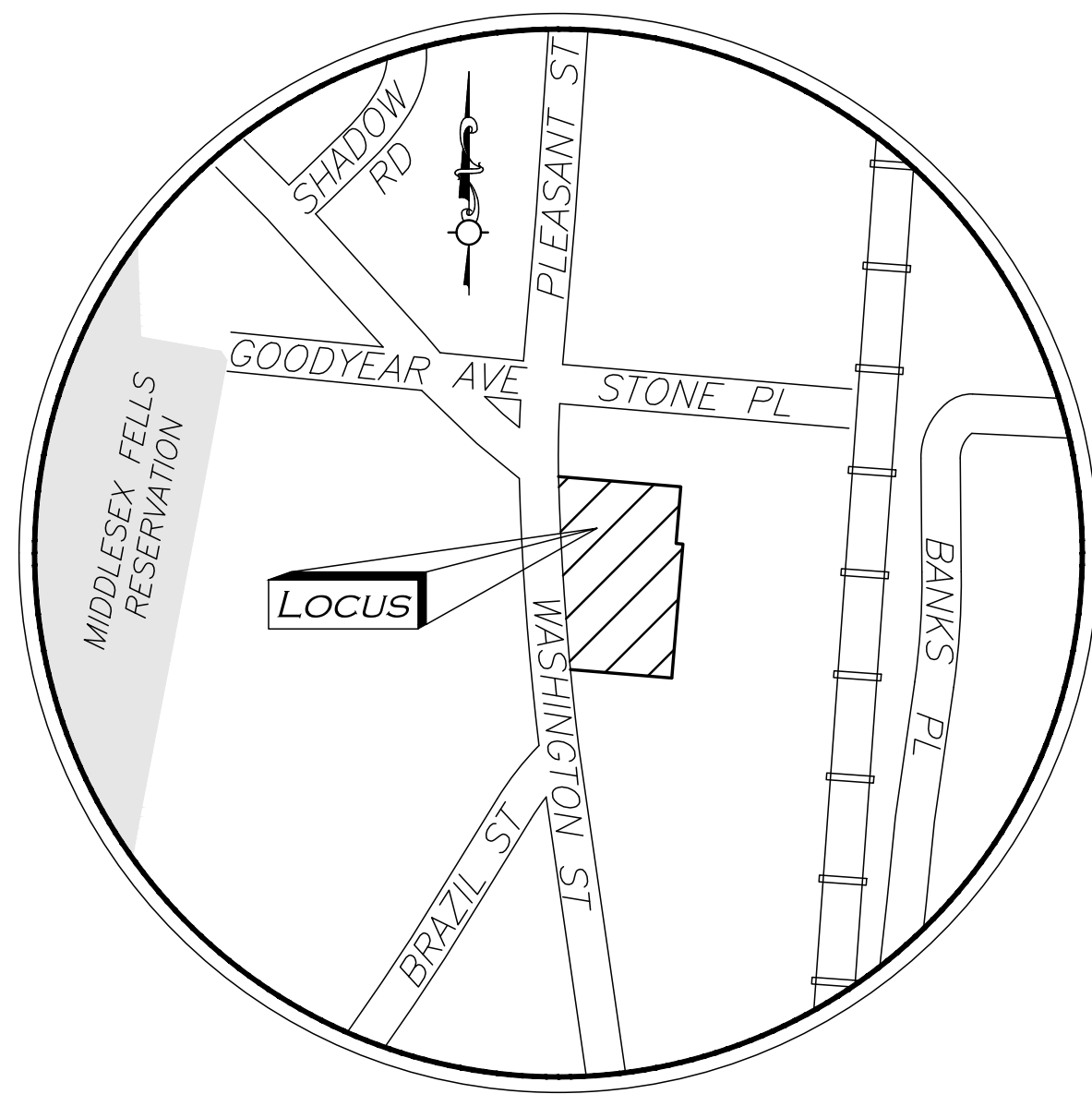


SITE DEVELOPMENT PLANS FOR OAK GROVE MILL 99 WASHINGTON STREET MELROSE, MA 02176

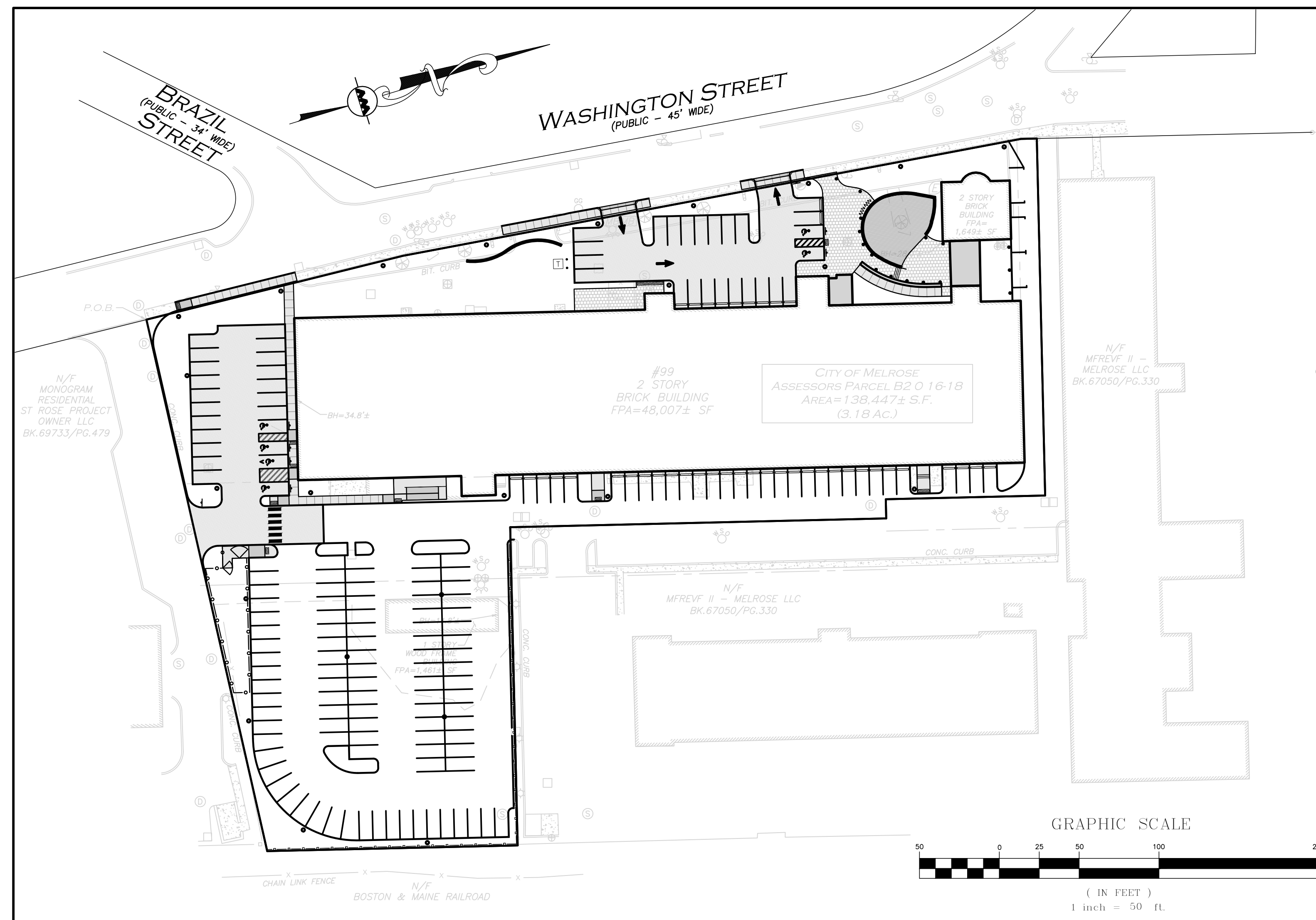


LOCUS MAP
NOT TO SCALE

APPLICANT:
OAK GROVE MILL, LLC
ONE MARINA PARK DRIVE
SUITE 1500
BOSTON, MA 02210

CIVIL ENGINEER / SURVEYOR:
ALLEN & MAJOR ASSOCIATES, INC.
100 COMMERCE WAY, SUITE 5
WOBURN, MA 01801

ARCHITECT:
ICON ARCHITECTURE
101 SUMMER STREET
BOSTON, MA 02110



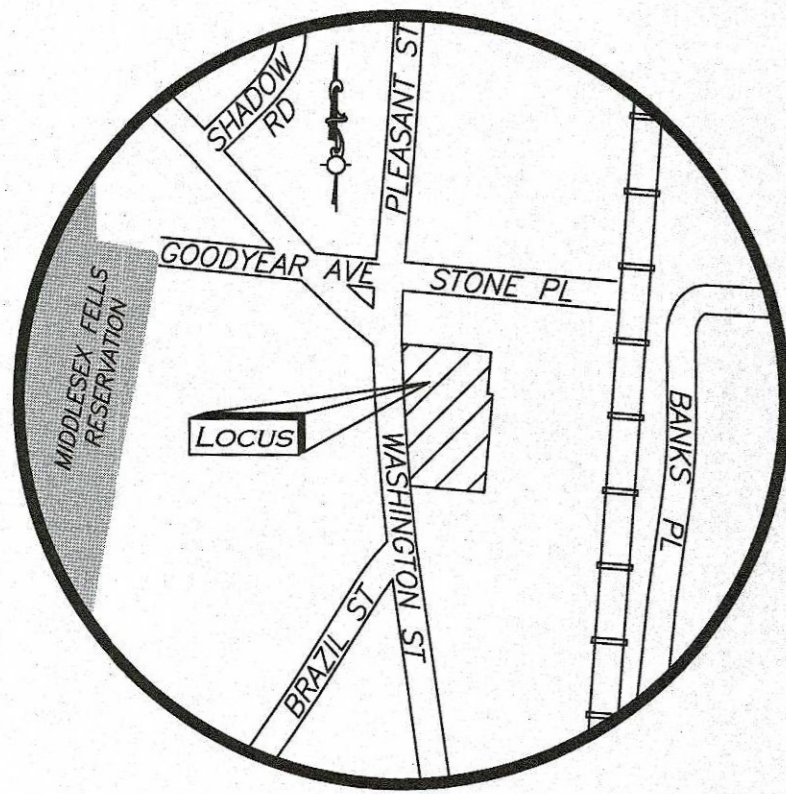
LIST OF DRAWINGS			
DRAWING TITLE	SHEET NO.	ISSUED	REVISED
EXISTING CONDITIONS	V-101	11-25-19	-
SITE PREPARATION PLAN	C-101	11-25-19	02-27-20
LAYOUT & MATERIALS PLAN	C-102A	11-25-19	02-27-20
BUILDING HEIGHT DIAGRAMS	C-102B	11-25-19	02-27-20
GRADING & DRAINAGE PLAN	C-103	11-25-19	02-27-20
UTILITIES PLAN	C-104	11-25-19	02-27-20
DETAILS	C-501	11-25-19	02-27-20
DETAILS	C-502	11-25-19	02-27-20
DETAILS	C-503	11-25-19	02-27-20
DETAILS	C-504	11-25-19	02-27-20
LIGHTING PLAN	E-101	11-25-19	02-27-20



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
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WOBURN MA 01801
TEL: (781) 933-6889
FAX: (781) 933-2896
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ISSUED FOR SITE PLAN REVIEW: NOVEMBER 25, 2019
REVISION 1 - PER CITY COMMENTS: FEBRUARY 27, 2020



LOCUS MAP
(NOT TO SCALE)

LOCUS REFERENCES

- CITY OF MELROSE ASSESSORS PARCEL B2 0 16-18
- DEED BOOK 17055, PAGE 439
- PLAN 896 OF 1971
- OWNER OF RECORD: JOSEPH J. TOZZA, TRUSTEE OF FURNITURE REALTY TRUST

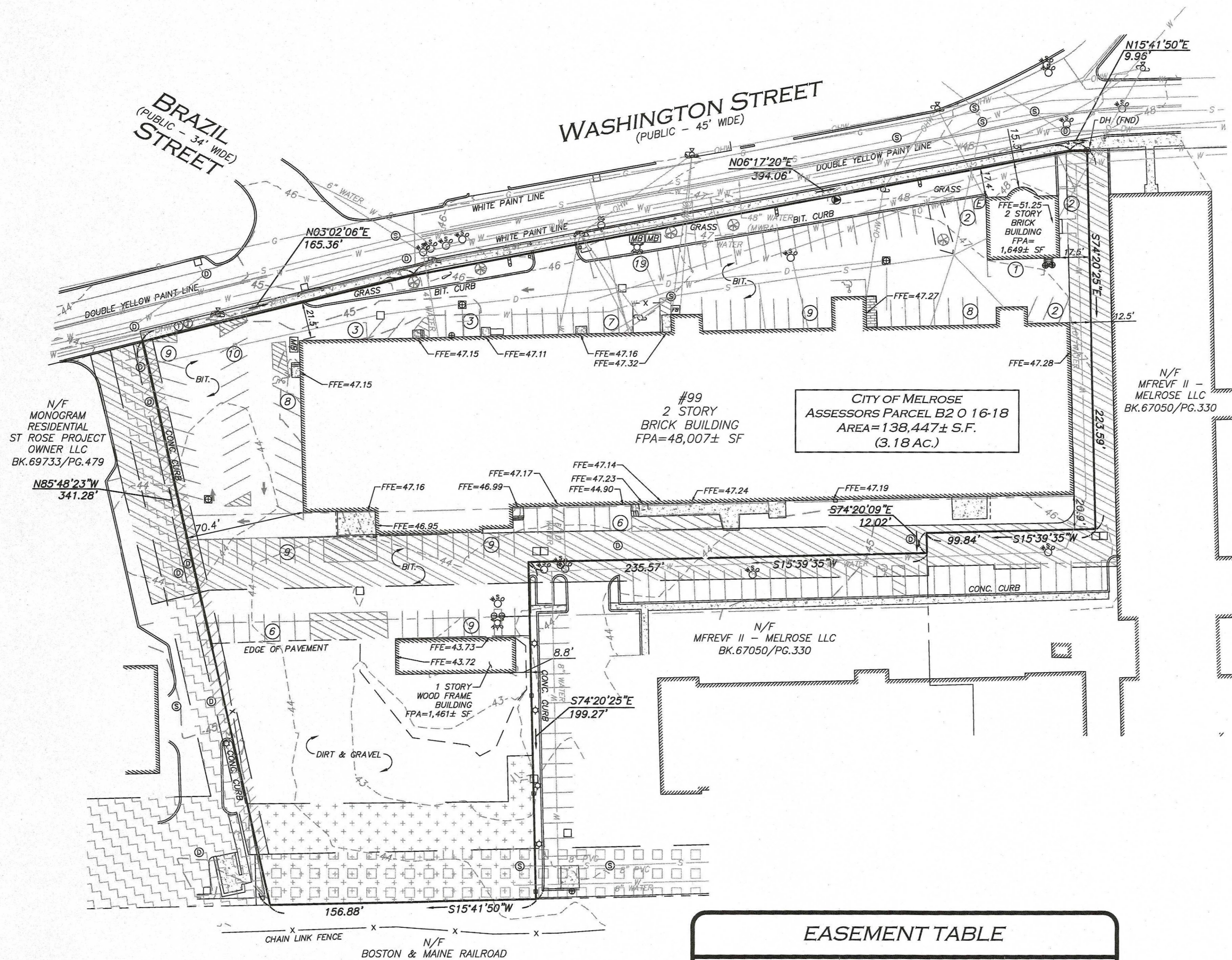
PLAN REFERENCES

- PLAN 1019 OF 1957
- PLAN 1058 OF 1957
- PLAN 896 OF 1976
- PLAN 249 OF 2011
- PLAN 265 OF 2011
- PLAN 297 OF 2011
- PLAN W/BK.6638/PG.487
- PLAN W/BK.5663/PG.149
- 1889 COUNTY LAYOUT OF WASHINGTON STREET

FOR REGISTRY USE ONLY

NOTES

1. PROPERTY LINE AND NORTH ARROW TAKEN FROM PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY - JEFFERSON AT OAK GROVE - MELROSE, MA (MIDDLESEX COUNTY)". DATED OCTOBER 2, 2007. SCALE: 1" = 30'. PREPARED BY BEALS AND THOMAS, INC.
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA.
3. VERTICAL DATUM IS NGVD OF 1929.
4. CONTOUR INTERVAL IS ONE FOOT (1').
5. ALL CURBING SHOWN HEREON IS GRANITE UNLESS OTHERWISE NOTED.

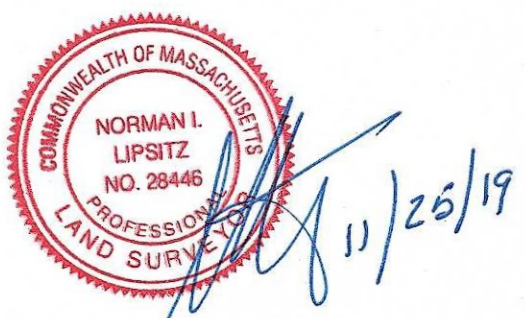


LEGEND

- DRILL HOLE (DH)
- DRAIN MANHOLE (DMH)
- SEWER MANHOLE (SMH)
- TELEPHONE MANHOLE
- CATCH BASIN (CB)
- ROUND CATCH BASIN (RCB)
- UTILITY POLE
- UTILITY POLE W/RISER
- UTILITY POLE W/LIGHT
- GUY WIRE
- FIRE HYDRANT
- WATER GATE
- GAS GATE
- BOLLARD
- LIGHT
- TREE
- SIGN
- SIGN
- MAILBOX
- FLAG POLE
- GAS METER
- ELECTRIC METER
- HANDICAPPED PARKING SPACE
- PAINTED ARROW
- PARKING SPACE COUNT
- CONCRETE
- BRICK
- BUILDING
- BUILDING OVERHANG
- EASEMENT LINE
- 1' CONTOUR
- 5' CONTOUR
- PROPERTY LINE
- CONCRETE RETAINING WALL
- EDGE OF PAVEMENT
- EDGE OF BRICK
- CURB
- CHAIN LINK FENCE
- STOCKADE FENCE
- WATER LINE
- SEWER LINE
- DRAIN LINE
- GAS LINE
- OVERHEAD WIRES
- FOOTPRINT AREA
- FINISHED FLOOR ELEVATION
- BITUMINOUS
- CONCRETE
- GRANITE
- BOTTOM CENTER (BC)
- REINFORCED CONCRETE PIPE
- POLYVINYL CHLORIDE PIPE
- CORRUGATED METAL PIPE
- CAST IRON PIPE
- DUCTILE IRON PIPE
- HIGH DENSITY POLYETHYLENE PIPE
- FOUND
- NOW OR FORMERLY
- BOOK
- PAGE

WE HEREBY CERTIFY THAT:
THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN MARCH 11, 2019 AND JULY 26, 2019.
THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.
ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.
THE ABOVE CERTIFICATION IS INTENDED TO MEET REGISTRY OF DEED REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT CITY OF MELROSE ASSESSORS INFORMATION.
THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF TO THE ABOVE NAMED PARTIES AND NO OTHERS.

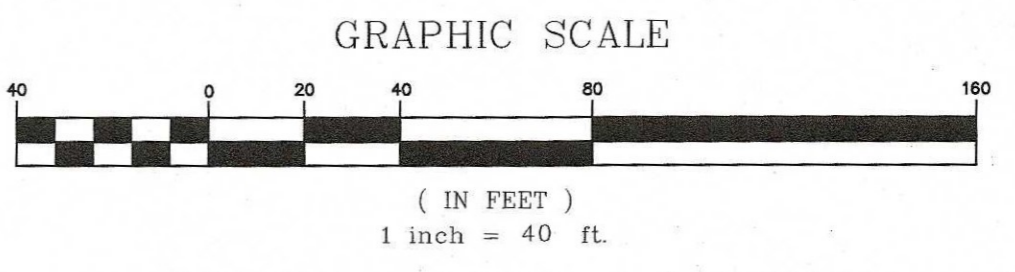
ALLEN & MAJOR ASSOCIATES, INC.
Nov 25, 2019
PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.



UTILITY STATEMENT
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

PARKING SUMMARY	
STANDARD STALLS	120
HANDICAPPED STALLS	2
TOTAL STALLS	122

EASEMENT TABLE		
DESCRIPTION	REFERENCE	HATCH
BROOK EASEMENT	BK.5663/PG.149 PLAN 459 OF 1932	
DRAINAGE EASEMENT	BK.8986/PG.555	
RECIPROCAL EASEMENT AREA	BK.56835/PG.492 PLAN 265 OF 2011	
GRADING, UTILITY AND ACCESS EASEMENT "B"	BK.56835/PG.492 PLAN 265 OF 2011	
GRADING, UTILITY AND ACCESS EASEMENT "D"	BK.56835/PG.492 PLAN 265 OF 2011	
ACCESS AND UTILITY EASEMENT "G"	BK.56835/PG.492 PLAN 265 OF 2011	



N:\PROJECTS\2674-01\SURVEY\DRAWINGS\CURRENT\S-2674-01-EC.DWG

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
OAK GROVE MILL LLC
c/o EASTERN REAL ESTATE LLC
ONE MARINA PARK DRIVE - SUITE 1500
BOSTON, MA 02210

PROJECT:
**99 WASHINGTON STREET
MELROSE, MA**

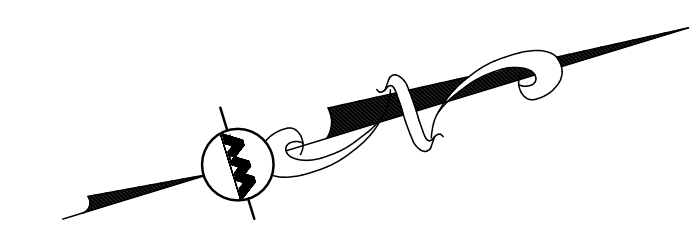
PROJECT NO.	2674-01	DATE:	11/25/19
SCALE:	1" = 40'	DWG. NAME:	S-2674-01-EC
DRAFTED BY:	KAC/COB	CHECKED BY:	NIL

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
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environmental consulting • landscape architecture
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FAX: (781) 935-2896

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DRAWING TITLE: **EXISTING CONDITIONS** SHEET No. **V-101**



LEGEND	
BUILDING TO BE REMOVED	
PAVEMENT TO BE REMOVED	
UTILITY CUT AND CAP	
TEMPORARY FENCE	
TUBULAR BARRIER	
CATCH BASIN FILTER	
STOCKPILE/STAGING AREA	

- NOTES:**
1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 2. GRADING / DEMOLITION OUTSIDE OF THE PROJECT BOUNDARIES REQUIRES A TEMPORARY CONSTRUCTION/GRADING EASEMENT FROM THE LANDOWNER (BY OTHERS).
 3. ALTHOUGH CERTAIN ITEMS HAVE BEEN NOTED ON THIS DRAWING FOR DEMOLITION, NO ATTEMPT HAS BEEN MADE TO DELINEATE EACH AND EVERY ITEM THAT REQUIRES DEMOLITION FOR THE COMPLETION OF THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL NECESSARY DEMOLITION WORK TO COMPLETE THE PROJECT. ALLEN & MAJOR ASSOCIATES, INC. IS NOT RESPONSIBLE FOR SITE DEMOLITION ITEMS NOT SHOWN ON THE SURVEY, OR SPECIFICALLY NOTED. THE DEMOLITION NOTES AND ARROWS ON THIS PLAN ARE TYPICAL AND DO NOT REFLECT QUANTITY.
 4. WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS OR CONDITIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR.
 5. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
 6. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

APPLICANT/OWNER:
OAK GROVE MILL, LLC
 ONE MARINA PARK DRIVE
 SUITE 1500
 BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
 MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	1" = 30'	DWG. NAME:	C2674-01A
DESIGNED BY:	SM	CHECKED BY:	BDJ

PREPARED BY:

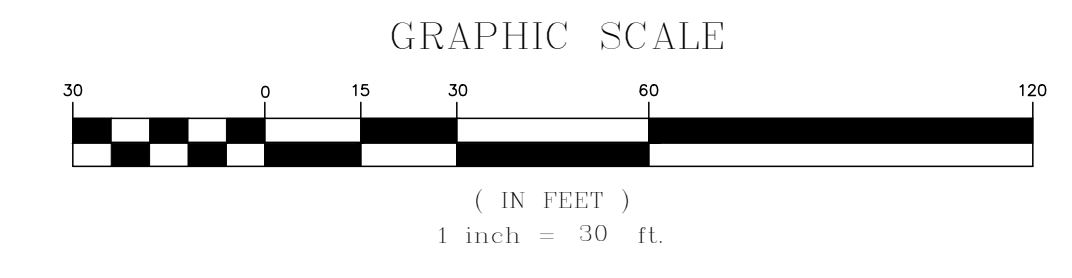
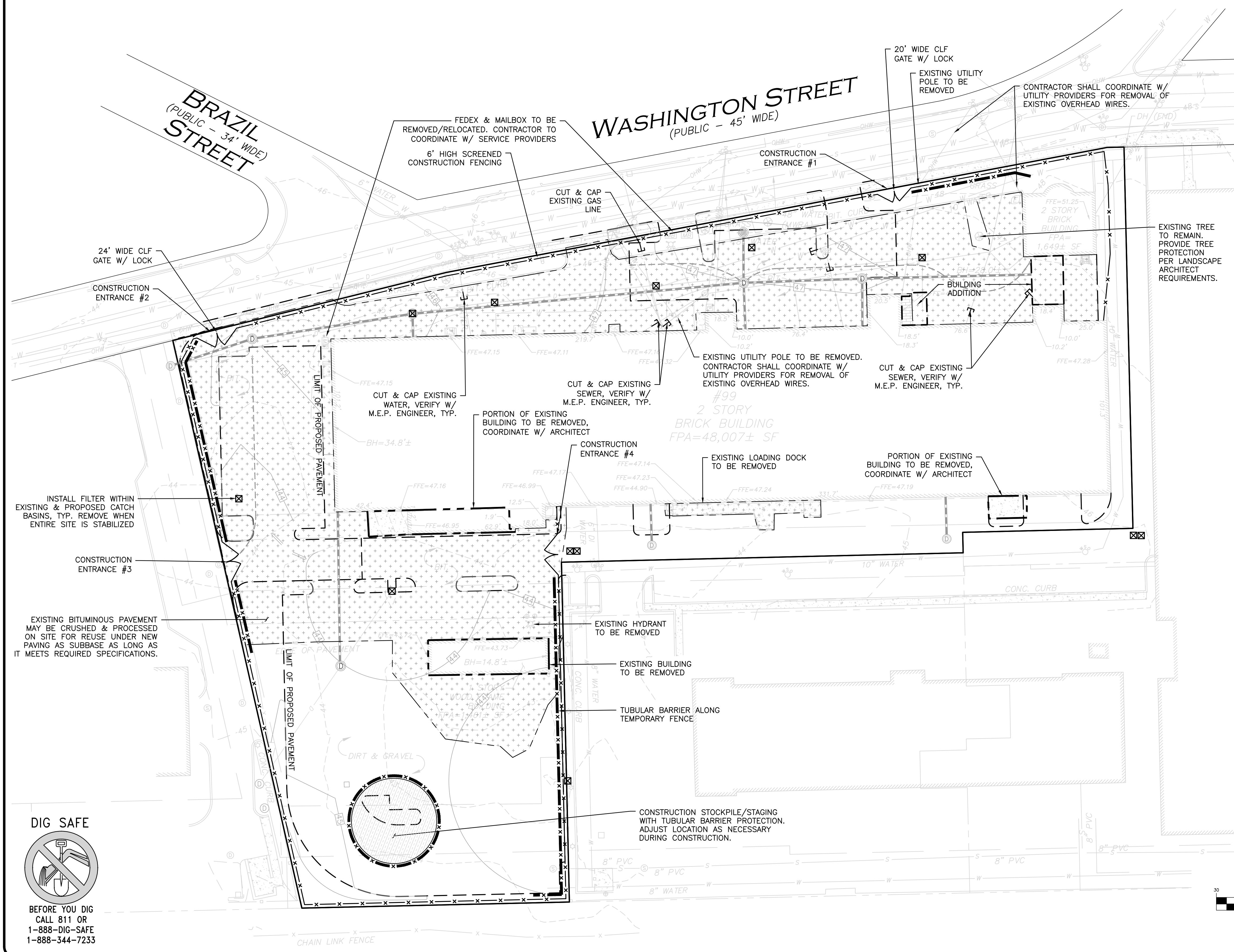
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DRAWING TITLE:	SHEET No.
SITE PREPARATION PLAN	C-101

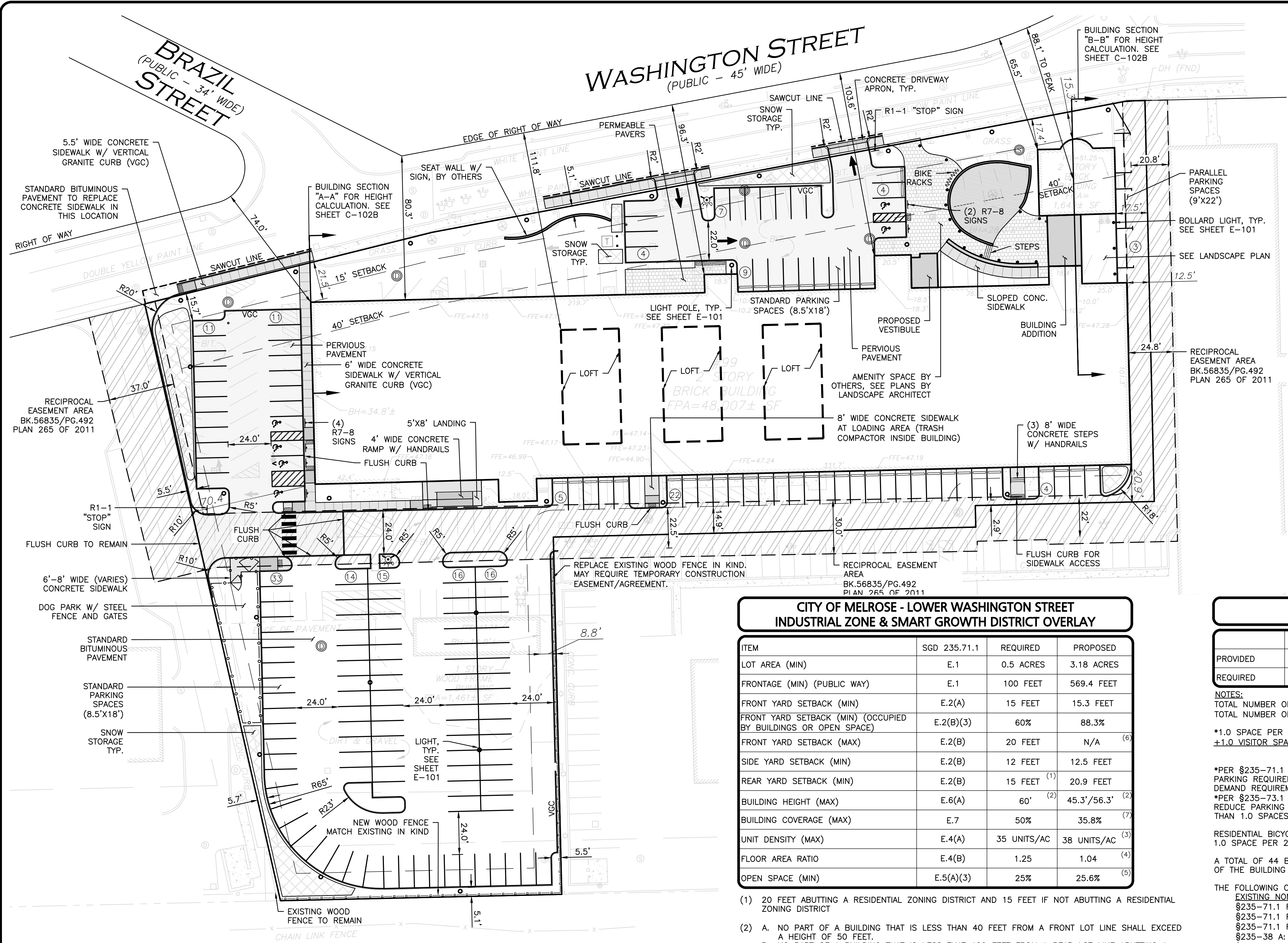
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LEGEND:

- PROPERTY LINE
- SIGN
- BOLLARD
- PROPOSED BUILDING
- CURB
- RETAINING WALL
- PARKING STRIPING
- CONCRETE SIDEWALK
- PERMEABLE PAVERS
- PERVIOUS PAVEMENT
- ADA ACCESSIBLE RAMP
- DETECTABLE WARNING PAVEMENT
- SETBACK LINE
- PARKING COUNT
- SNOW STORAGE
- TRANSFORMER
- WOODEN FENCE
- STEEL FENCE

- NOTES:**
- UNIT/BEDROOM COUNTS PROVIDED TO A&M BY ICON ARCHITECTURE, ON SEPTEMBER 17, 2019.
 - PROPOSED BUILDING AREA PROVIDED BY ICON ARCHITECTURE, ON FEBRUARY 26, 2020.
 - CURB RADII ARE 3' UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED TO THE FACE OF CURB.
 - THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

CITY OF MELROSE - LOWER WASHINGTON STREET INDUSTRIAL ZONE & SMART GROWTH DISTRICT OVERLAY

ITEM	SGD 235.71.1	REQUIRED	PROPOSED
LOT AREA (MIN)	E.1	0.5 ACRES	3.18 ACRES
FRONTAGE (MIN) (PUBLIC WAY)	E.1	100 FEET	569.4 FEET
FRONT YARD SETBACK (MIN)	E.2(A)	15 FEET	15.3 FEET
FRONT YARD SETBACK (MIN) (OCCUPIED BY BUILDINGS OR OPEN SPACE)	E.2(B)(3)	60%	88.3%
FRONT YARD SETBACK (MAX)	E.2(B)	20 FEET	N/A (6)
SIDE YARD SETBACK (MIN)	E.2(B)	12 FEET	12.5 FEET
REAR YARD SETBACK (MIN)	E.2(B)	15 FEET (1)	20.9 FEET
BUILDING HEIGHT (MAX)	E.6(A)	60' (2)	45.3'/56.3' (2)
BUILDING COVERAGE (MAX)	E.7	50%	35.8% (7)
UNIT DENSITY (MAX)	E.4(A)	35 UNITS/AC	38 UNITS/AC (3)
FLOOR AREA RATIO	E.4(B)	1.25	1.04 (4)
OPEN SPACE (MIN)	E.5(A)(3)	25%	25.6% (5)

- 20 FEET ABUTTING A RESIDENTIAL ZONING DISTRICT AND 15 FEET IF NOT ABUTTING A RESIDENTIAL ZONING DISTRICT
- A. NO PART OF A BUILDING THAT IS LESS THAN 40 FEET FROM A FRONT LOT LINE SHALL EXCEED A HEIGHT OF 50 FEET.
B. NO PART OF A BUILDING THAT IS LESS THAN 100 FEET FROM A REAR LOT LINE ABUTTING A RESIDENTIAL DISTRICT SHALL EXCEED 50 FEET.
C. A ROOF APPURTENANCE ENCLOSING MECHANICAL EQUIPMENT MAY EXCEED THE MAXIMUM BUILDING HEIGHT OF NO MORE THAN 10 FEET ABOVE THE ROOF SURFACE, NO LESS THAN 10 FEET FROM EXTERIOR WALL AND THAT THE TOTAL HORIZONTAL AREA OF ALL SUCH APPURTENANCES DOES NOT EXCEED 20 PERCENT OF THE BUILDING FOOTPRINT.
D. SEE BUILDING HEIGHT DIAGRAM SHOWN ON SHEET C-102B.
- 3.18 AC. X 35 UNITS = 111 UNITS ALLOWED + 17 BONUS UNITS = 128 UNITS ALLOWED
141 UNITS PROVIDED - 15% AFFORDABLE = 120 UNITS/3.18 ACRES = 38 UNITS/ACRE PROPOSED
*VARIANCE REQUIRED
- FLOOR AREA RATIO = (TOTAL AREA ON ALL FLOORS) / (AREA OF THE LOT)
TOTAL GROSS FLOOR AREA = 143,406 S.F.
FLOOR AREA RATIO = 143,406 / 138,447 = 1.04
- OPEN SPACE = (TOTAL OPEN SPACE)/(AREA OF THE LOT)
OPEN SPACE = 35,491 / 138,447 = 0.256 OR 25.6%
- SGD §235-71.1 E.(2)(b) APPLIES TO NEW BUILDINGS ONLY
- BUILDING COVERAGE = TOTAL BUILDING FOOTPRINT / AREA OF THE LOT
EXISTING BUILDING FOOTPRINT AREA = 48,798.2 S.F.
ADDITIONAL BUILDING FOOTPRINT AREA = 796.1 S.F.
TOTAL BUILDING FOOTPRINT AREA = 49,594.3 S.F.
BUILDING COVERAGE = 49,594.3 / 138,447 = 35.8%

OFF-STREET PARKING SUMMARY

	STANDARD	ADA	TOTAL	BICYCLE
PROVIDED	168	6	174	44+
REQUIRED	149	6	155	7

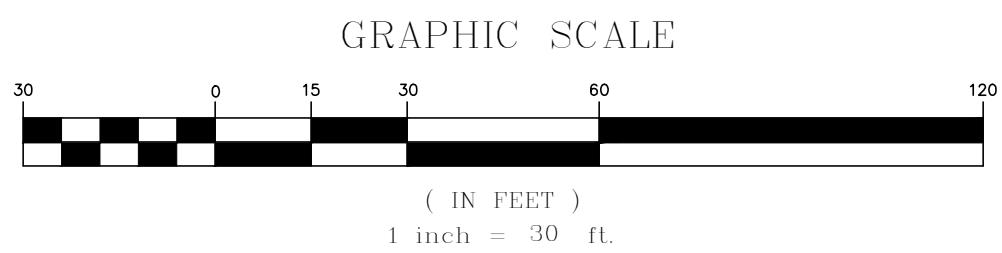
NOTES:
TOTAL NUMBER OF UNITS = 141
TOTAL NUMBER OF PARKING SPACES REQUIRED = 155 (SEE BELOW)
*1.0 SPACE PER DWELLING UNIT.....141 UNITSx1.0 = 141
*1.0 VISITOR SPACE PER 10 RESIDENTIAL UNITS.....141 UNITS/10 = 14.1
TOTAL SPACES REQUIRED = 155.1

*PER §235-71.1 F(4), THE PLANNING BOARD MAY ALLOW SHARED OR REDUCED PARKING REQUIREMENTS FOR USES HAVING DIFFERENT PEAK TIMES OF PARKING DEMAND REQUIREMENTS.
*PER §235-73.1 D, THE PLANNING BOARD MAY GRANT A SPECIAL PERMIT TO REDUCE PARKING REQUIREMENTS BY 0.5 SPACES PER UNIT, BUT NOT LESS THAN 1.0 SPACES PER UNIT.

RESIDENTIAL BICYCLE PARKING REQUIREMENT:
1.0 SPACE PER 20 DWELLING UNITS = 7.05

A TOTAL OF 44 BICYCLE PARKING SPACES WILL BE PROVIDED ON THE INTERIOR OF THE BUILDING IN ADDITION TO THE EXTERIOR BIKE RACKS.

THE FOLLOWING OFF-STREET PARKING VARIANCES ARE REQUIRED:
EXISTING NON-CONFORMING TO REMAIN
§235-71.1 F.(5)(a)[1]: PARKING WITHIN 30' OF A PUBLIC STREET
§235-71.1 F.(5)(a)[3]: PARKING WITHIN 10' OF A STRUCTURE
§235-71.1 F.(5)(a)[4]: PARKING WITHIN 5' OF A REAR LOT LINE
§235-38 A: PARKING WITHIN FRONT YARD SETBACK
§235-41 N: PARKING STALL DIMENSION, WIDTH REDUCED FROM 9' TO 8.5'
§235-41 O: DRIVE AISLE DIMENSION



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- LIST OF POTENTIAL VARIANCES**
- SGD §235-71.1 F.(5)(a)[1]: PARKING WITHIN 30' OF A PUBLIC STREET
 - SGD §235-71.1 F.(5)(a)[3]: PARKING WITHIN 10' OF A STRUCTURE
 - SGD §235-71.1 F.(5)(a)[4]: PARKING WITHIN 5' OF A REAR LOT LINE
 - SGD §235-71.1 E.(4)(a): DEVELOPMENT DENSITY EXCEEDS 35 UNITS PER ACRE
 - §235-31.1 D.(3): SIGN LESS THAN 10 FEET FROM THE FRONT LOT LINE
 - §235-38 A: PARKING WITHIN FRONT YARD SETBACK
 - §235-41 N: PARKING STALL DIMENSION, WIDTH REDUCED FROM 9' TO 8.5'
 - §235-41 O: DRIVE AISLE DIMENSION

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

APPLICANT/OWNER:
OAK GROVE MILL, LLC
ONE MARINA PARK DRIVE
SUITE 1500
BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	1" = 30'	DWG. NAME:	C267401A
DESIGNED BY:	SM	CHECKED BY:	BDJ

PREPARED BY:

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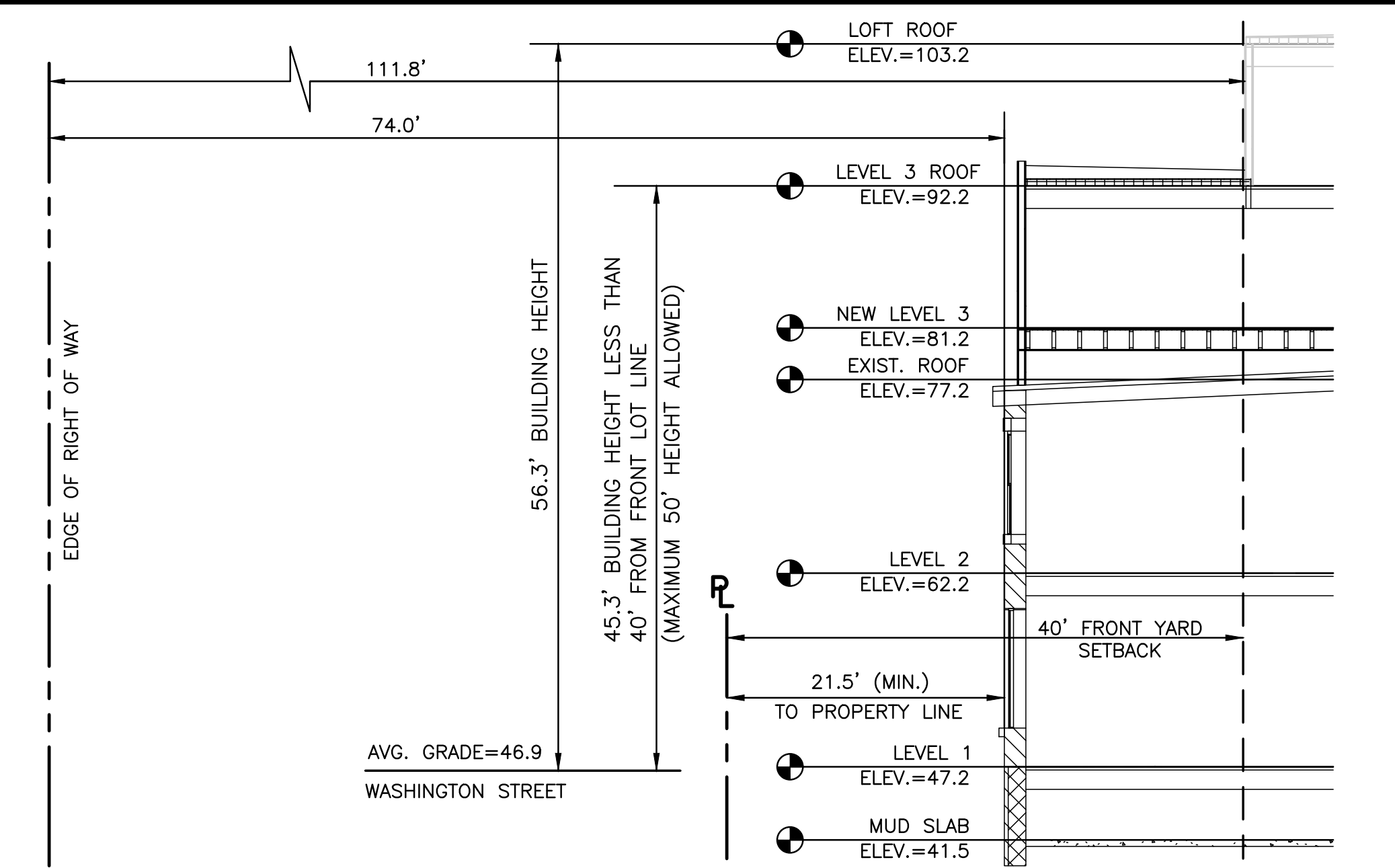
DRAWING TITLE:	SHEET No.
LAYOUT & MATERIALS PLAN	C-102A

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BUILDING HEIGHT DIAGRAM

SECTION A-A

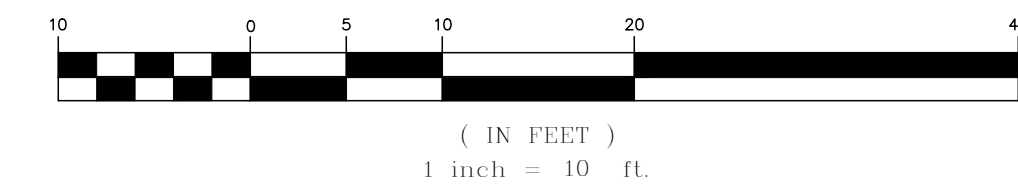


ALLOWABLE HEIGHT CALCULATION

NO PART OF A BUILDING SHALL HAVE A HEIGHT THAT IS GREATER THAN ITS DISTANCE TO THE FRONT LOT LINE OF ANY RESIDENTIALLY ZONED PROPERTY ON THE OPPOSITE SIDE OF THE STREET, LESS 25 FEET.

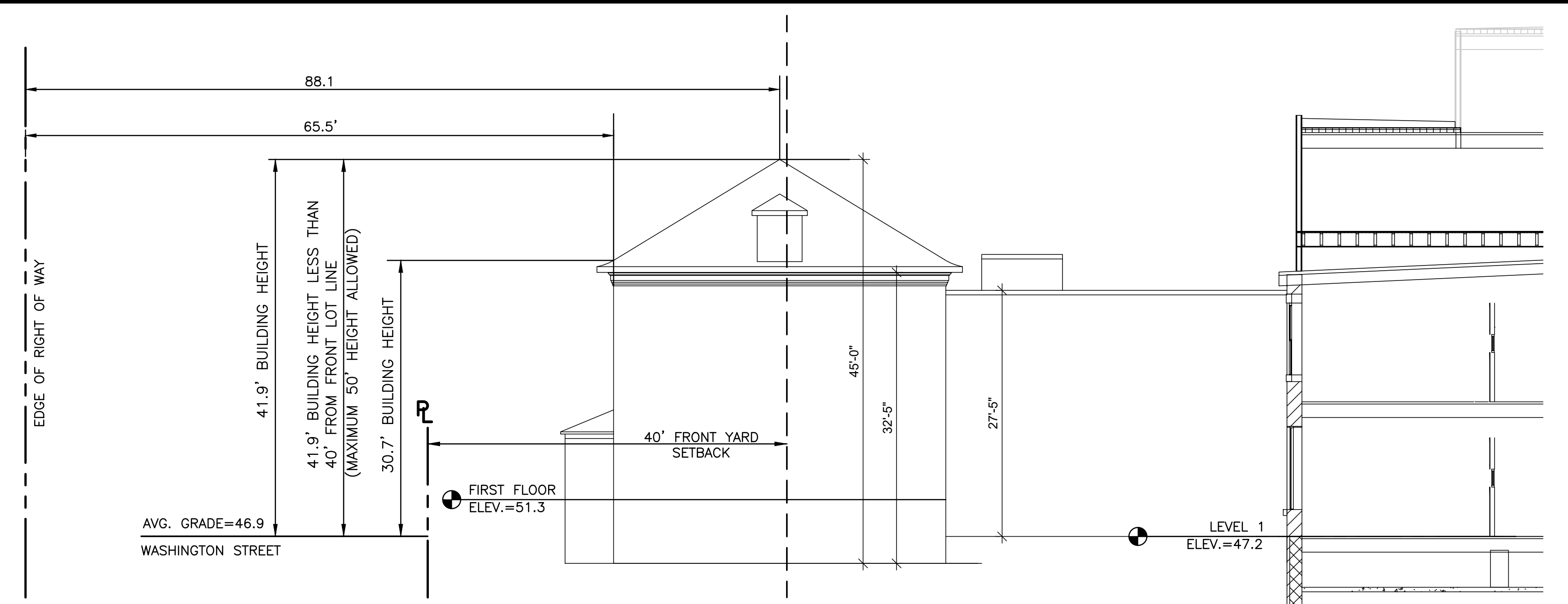
- LEVEL 4 MAXIMUM ALLOWABLE HEIGHT = 74.0 FEET - 25 FEET = 49.0 FEET > 45.3 FEET PROPOSED
- LEVEL 5 MAXIMUM ALLOWABLE HEIGHT = 111.8 FEET - 25 FEET = 86.8 FEET > 56.3 FEET PROPOSED

GRAPHIC SCALE



BUILDING HEIGHT DIAGRAM

SECTION B-B

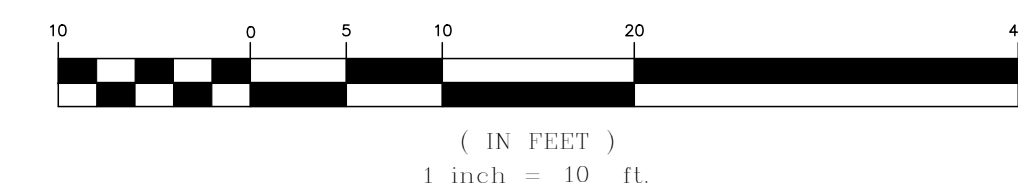


ALLOWABLE HEIGHT CALCULATION

NO PART OF A BUILDING SHALL HAVE A HEIGHT THAT IS GREATER THAN ITS DISTANCE TO THE FRONT LOT LINE OF ANY RESIDENTIALLY ZONED PROPERTY ON THE OPPOSITE SIDE OF THE STREET, LESS 25 FEET.

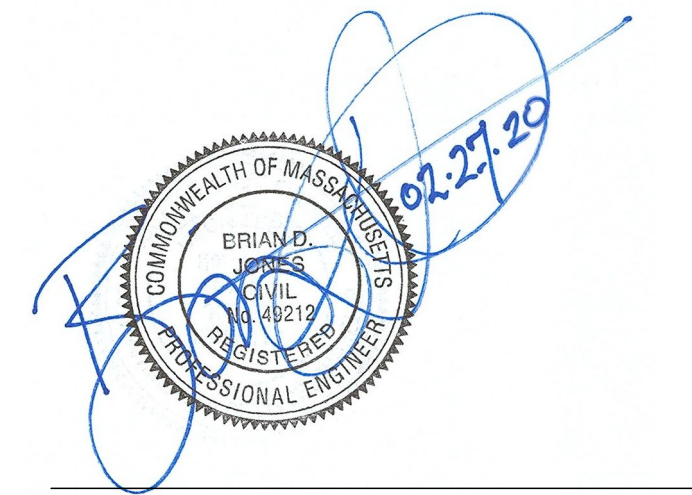
- MAXIMUM ALLOWED HEIGHT AT THE EVE = 65.5 FEET - 25 FEET = 41.8 FEET > 30.7 FEET EXISTING TO REMAIN
- MAXIMUM ALLOWED HEIGHT AT THE PEAK = 88.1 FEET - 25 FEET = 63.1 FEET > 41.9 FEET EXISTING TO REMAIN

GRAPHIC SCALE



LIST OF POTENTIAL VARIANCES

- SGD §235-71.1 F.(5)(a)[1]: PARKING WITHIN 30' OF A PUBLIC STREET
- SGD §235-71.1 F.(5)(a)[3]: PARKING WITHIN 10' OF A STRUCTURE
- SGD §235-71.1 F.(5)(A)[4]: PARKING WITHIN 5' OF A REAR LOT LINE
- SGD §235-71.1 E.(4)(a): DEVELOPMENT DENSITY EXCEEDS 35 UNITS PER ACRE
- §235-31.1 D.(3): SIGN LESS THAN 10 FEET FROM THE FRONT LOT LINE
- §235-38 A: PARKING WITHIN FRONT YARD SETBACK
- §235-41 N: PARKING STALL DIMENSION, WIDTH REDUCED FROM 9' TO 8.5'
- §235-41 O: DRIVE AISLE DIMENSION



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

APPLICANT/OWNER:
OAK GROVE MILL, LLC
ONE MARINA PARK DRIVE
SUITE 1500
BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	1"=10'	DWG. NAME:	C267401A
DESIGNED BY:	SM	CHECKED BY:	BDJ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
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environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

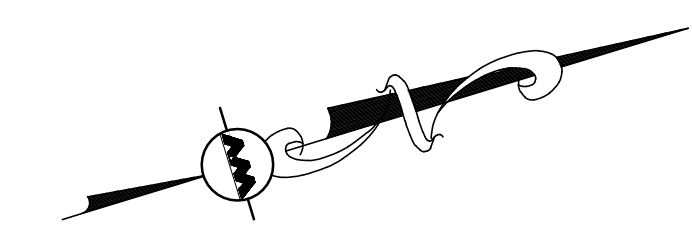
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DRAWING TITLE: BUILDING HEIGHT DIAGRAMS	SHEET No. C-102B
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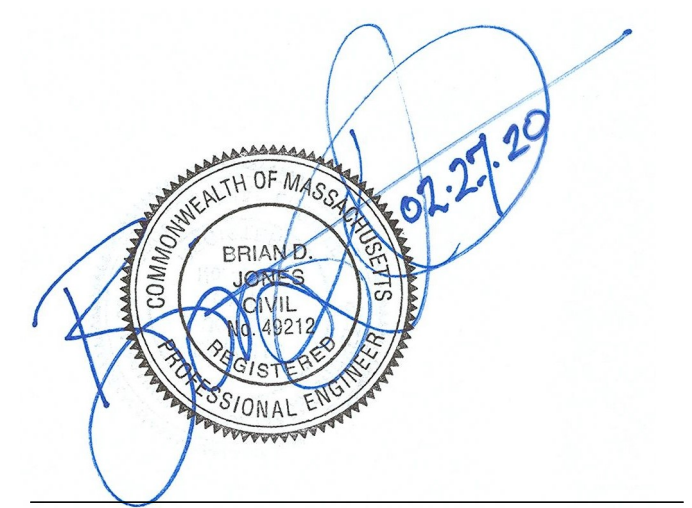


LEGEND

DRAIN MANHOLE	⊕
CATCH BASIN	⊙
DRAIN LINE	—
5' CONTOUR	—45
1' CONTOUR	—47
SPOT GRADE	×45.50
UNDERDRAIN	- - -
FLOW DIRECTION	→

GRADING & DRAINAGE NOTES

- CONTRACTOR TO VERIFY EXISTING INVERTS PRIOR TO CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.
- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- STORM PIPE SHALL BE HDPE UNLESS OTHERWISE NOTED.
- EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ENSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "DRAIN".
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ENSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- ALL PROPOSED CATCH BASINS ON-SITE SHALL BE EQUIPPED WITH HOODS AND 4 FOOT SUMPS AND SHALL CONFORM TO LOCAL DRAINAGE REQUIREMENTS.
- IN THE CASE THAT WATER MAINS CROSS SANITARY SEWER MAINS AND/OR STORM DRAINS AND ARE SEPARATED BY LESS THAN 18" OF VERTICAL CLEARANCE, THE CROSSING PIPES SHALL BE SLEEVED IN A LARGER DIAMETER PIPE FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
- ALL DRAINAGE SHALL CONFORM TO LOCAL REQUIREMENTS.
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PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

1	02-27-2020	REVISED PER CITY COMMENTS
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APPLICANT/OWNER:
OAK GROVE MILL, LLC
 ONE MARINA PARK DRIVE
 SUITE 1500
 BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
 MELROSE, MA

PROJECT NO. 2674-01A DATE: 11-25-19

SCALE: 1" = 30' DWG. NAME: C1674-01A

DESIGNED BY: SM CHECKED BY: BDI

PREPARED BY:

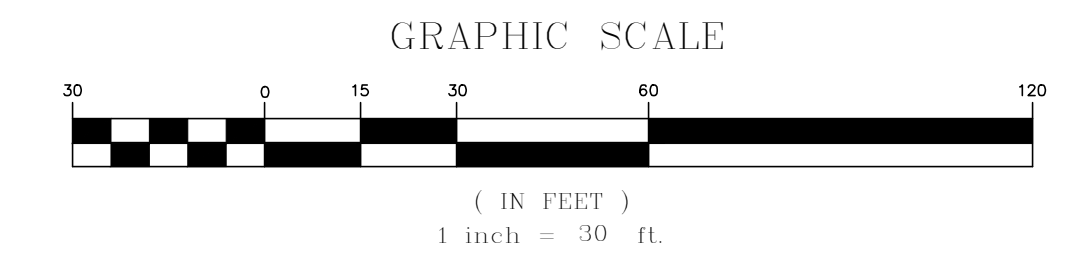
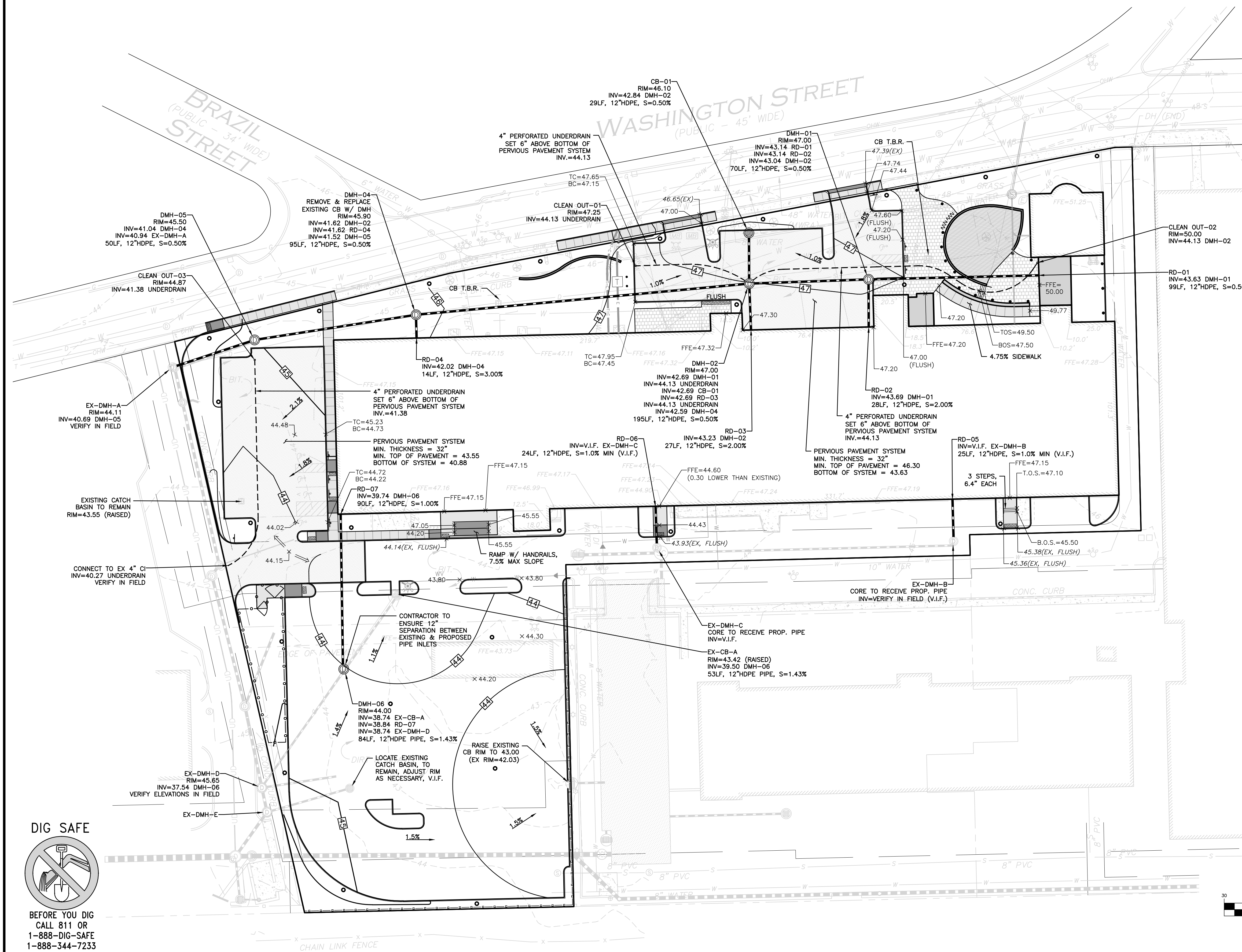
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DRAWING TITLE: GRADING & DRAINAGE PLAN SHEET No. C-103

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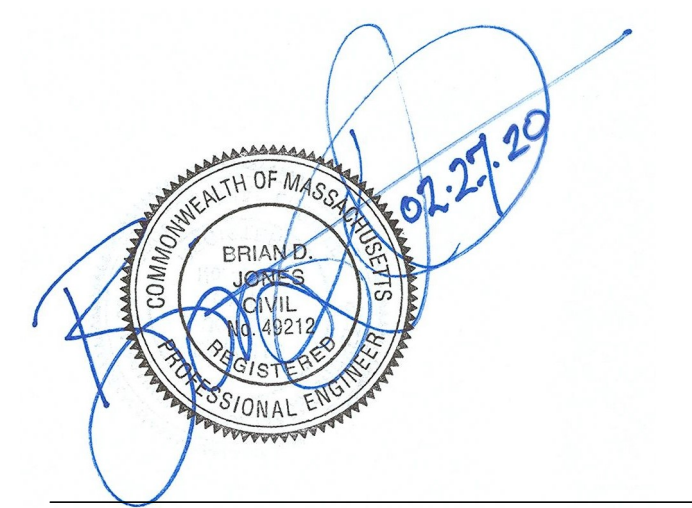
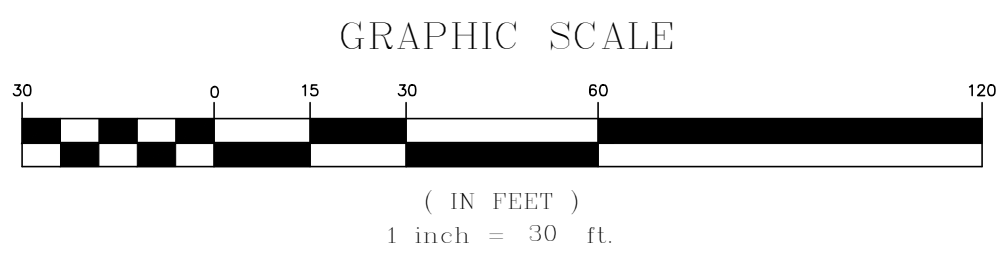
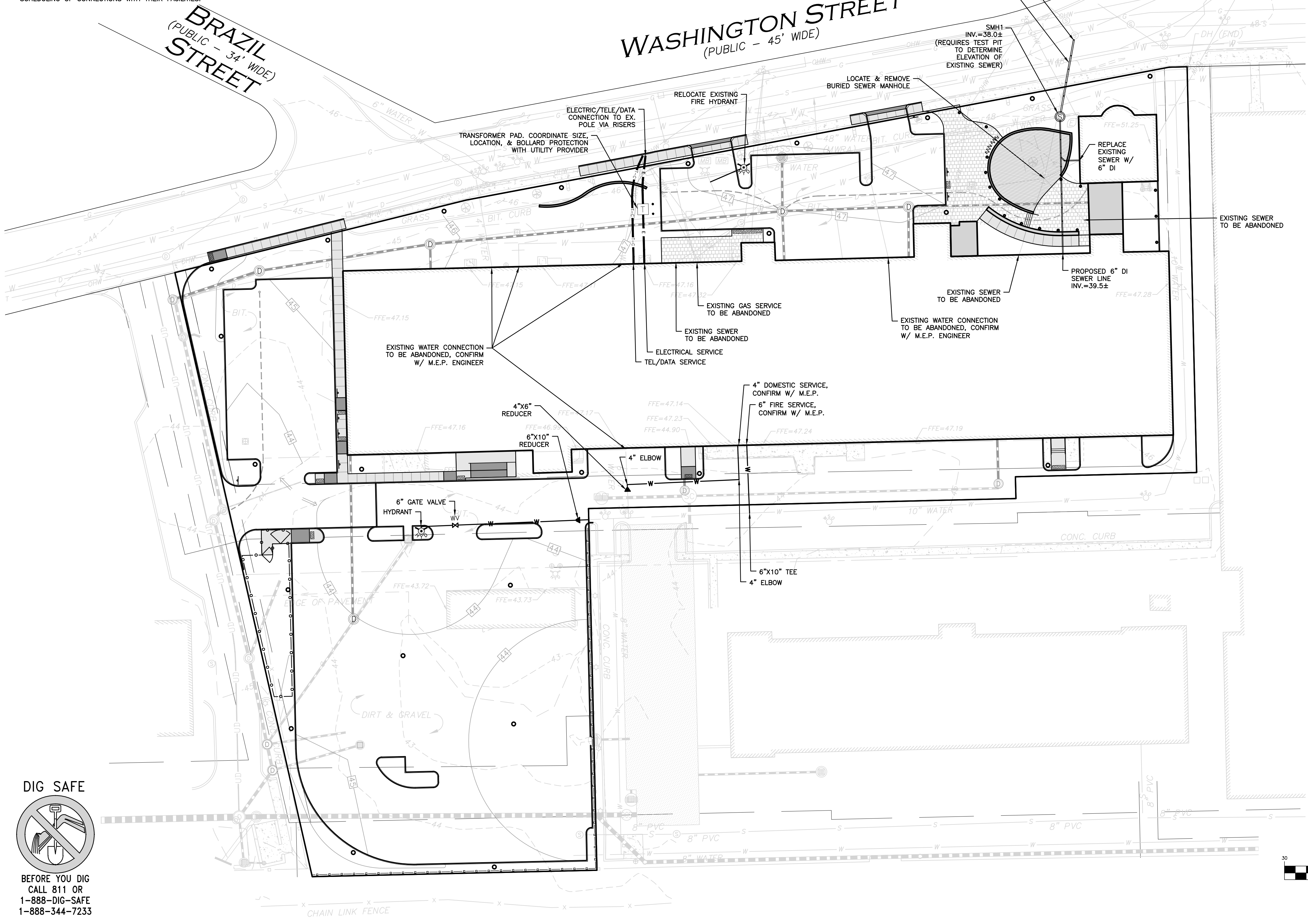
UTILITY NOTES:

1. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND/OR STORM DRAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE DIFFERENCE IN ELEVATION BETWEEN THE WATER MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES.
2. IN THE CASE THAT WATER MAINS CROSS SANITARY SEWER MAINS AND/OR STORM DRAINS AND ARE SEPARATED BY LESS THAN 18" OF VERTICAL CLEARANCE, THE CROSSING PIPES SHALL BE SLEEVED IN A LARGER DIAMETER PIPE FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
3. THE LATEST STANDARDS OF THE CITY OF MELROSE, MA DEPARTMENT OF PUBLIC WORKS, WASTEWATER DIVISION SHALL BE FOLLOWED WHEN PERFORMING ANY SANITARY SEWER WORK. SEWER WORK WILL BE INSPECTED BY CITY OF MELROSE PERSONNEL AND ALL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE LATEST STANDARDS OF THE CITY OF MELROSE AND DEPARTMENT OF PUBLIC WORKS SHALL BE FOLLOWED WHEN INSTALLING ANY WATER LINES, AND ALL WATER LINE WORK WILL BE INSPECTED BY CITY OF MELROSE PERSONNEL. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR PRESSURE TESTING, DISINFECTING, AND FLUSHING OF LINES. INSPECTION COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND REMOVAL OF ALL NECESSARY DISINFECTING AND FLUSHING TAPS AS DIRECTED.
5. THE CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL ROOF DRAIN LATERALS AND UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRIC, TELEPHONE, AND GAS SERVICE. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND COORDINATE WITH THE PROPER AGENCY THE LOCATION AND SCHEDULING OF CONNECTIONS WITH THEIR FACILITIES.
6. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION.
7. ABANDONED EXISTING UTILITIES AND UTILITIES TO BE ABANDONED SHALL EITHER BE ABANDONED IN PLACE AS NOTED OR SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED. ALL UTILITIES SCHEDULED FOR ABANDONMENT OR REMOVAL AND DISPOSAL MUST BE COORDINATED BY THE CONTRACTOR WITH THE RESPECTIVE UTILITY OWNER. WHEN ABANDONED UTILITIES ARE TO BE LEFT IN PLACE, PLUG OR CAP THE ENDS OF THE CONDUITS AND PIPES. REMOVE ABANDONED UTILITY MANHOLES, JUNCTION BOXES AND SIMILAR STRUCTURES TO A MINIMUM DEPTH OF 4 FEET BELOW FINISHED GRADE AND PUNCTURE OR BREAK THE BOTTOM SLABS OF MANHOLES AND SIMILAR STRUCTURE TO ALLOW DRAINAGE. BACKFILL AND COMPACT EXCAVATIONS RESULTING FROM REMOVAL OF UTILITY FACILITIES, AS REQUIRED TO RESTORE THE ORIGINAL GRADE.
8. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENTS OF NATURAL GAS, ELECTRIC, TELEPHONE AND ANY OTHER UTILITY BY THE UTILITY OWNER.
9. THE CONTRACTOR SHALL USE THE FOLLOWING PIPE MATERIALS:
SEWER - DI (DUCTILE IRON), ASTM A746 (UNLESS OTHERWISE NOTED)
DRAIN - HDPE (HIGH DENSITY CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INNER WALL), ASTM D2321 (UNLESS OTHERWISE SPECIFIED ON PLAN)
- RCP CLASS IV (REINFORCED CONCRETE PIPE, WHERE SPECIFIED ON PLAN)
WATER - CLDI (CEMENT LINED DUCTILE IRON) CLASS 52 AND SHALL BE RESTRAINED AT ALL JOINTS WITH MEGALUG TYPE RESTRAINED JOINT.

10. ALL UTILITY CONNECTIONS THROUGH THE BUILDING WALL SHALL BE BY MEANS OF FLEXIBLE JOINTS.
11. ALL WATER GATES TO PROPOSED HYDRANTS ARE 6" DIAMETER UNLESS OTHERWISE NOTED.
12. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 4.5 FEET OF COVER AND A MAXIMUM OF 8 FEET OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE.
13. ALL HYDRANTS SHALL BE INSTALLED WITH A 6 INCH CLDI RUNOUT AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED GATE VALVE, BOX, AND TEE FITTING. ALL HYDRANTS SHALL MEET LOCAL MUNICIPAL SPECIFICATION REQUIREMENTS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
14. ALL WATER MAINS 3 INCHES AND LARGER SHALL BE CEMENT LINED DUCTILE IRON - CLASS 52, AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED FITTINGS AND GATE VALVES.
15. DOMESTIC WATER SERVICES SHALL BE INSTALLED WITH APPROPRIATELY SIZED GATE, BOX AND TEE FITTINGS.
16. ALL WATER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE CITY OF MELROSE REQUIREMENTS.
17. GENERALLY, WATER MAIN FITTINGS, VALVES AND HYDRANTS SHOWN ON THIS DRAWING ARE FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR SHALL NOTE THAT NOT ALL FITTINGS, VALVES AND HYDRANTS ARE NOTED, SHOWN OR INDICATED.
18. ALL WATER MAIN FITTINGS, VALVES AND TEES ETC. SHALL BE RESTRAINED WITH THRUST BLOCKS AS REQUIRED BY THE CITY OF MELROSE WHERE ADEQUATE RESTRAINT CANNOT BE OBTAINED WITH THRUST BLOCKS, USE OF RETAINER GLANDS IS REQUIRED.
19. THE CONTRACTOR SHALL FIELD VERIFY/LOCATE EXISTING WATER MAINS AND WATER SERVICES. THE EXISTING WATER SERVICE IS TO BE CUT AND CAPPED AT THE WATER MAIN.
20. VALVES 8 INCHES AND SMALLER SHALL BE GATE VALVES AND SHALL BE RESILIENT SEAT, MODIFIED WEDGE DISK CONFORMING TO AWWA C-509, AND BE APPROVED BY THE MUNICIPALITY.
21. PRESSURE AND LEAKAGE TEST, DISINFECTING AND FLUSHING SHALL BE IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTION WITH UTILITY TESTS, FLUSHING AND INSPECTIONS AS REQUIRED BY THE LOCAL MUNICIPALITY.
22. EXISTING SEWER SERVICE TO 99 WASHINGTON STREET TO BE VIDEO INSPECTED TO DETERMINE SIZE AND CONDITION. WILL LIKELY REQUIRE PVC SLIP LINE.
VENDOR INFORMATION FOR "AM-LINER" PVC PIPE LINER:
AMERICAN PIPE & PLASTICS, INC.
PHONE: (607) 775-4340
WEBSITE: amliner.com

LEGEND

- SEWER MANHOLE
- SEWER LINE
- WATER LINE
- WATER VALVE
- HYDRANT
- WATER LINE REDUCER
- ELECTRICAL CONDUIT
- TELE/CABLE CONDUIT



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

APPLICANT/OWNER:
OAK GROVE MILL, LLC
ONE MARINA PARK DRIVE
SUITE 1500
BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	1" = 30'	DWG. NAME:	C267401A
DESIGNED BY:	SM	CHECKED BY:	BDJ

PREPARED BY:

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DRAWING TITLE:	SHEET No.
UTILITIES PLAN	C-104

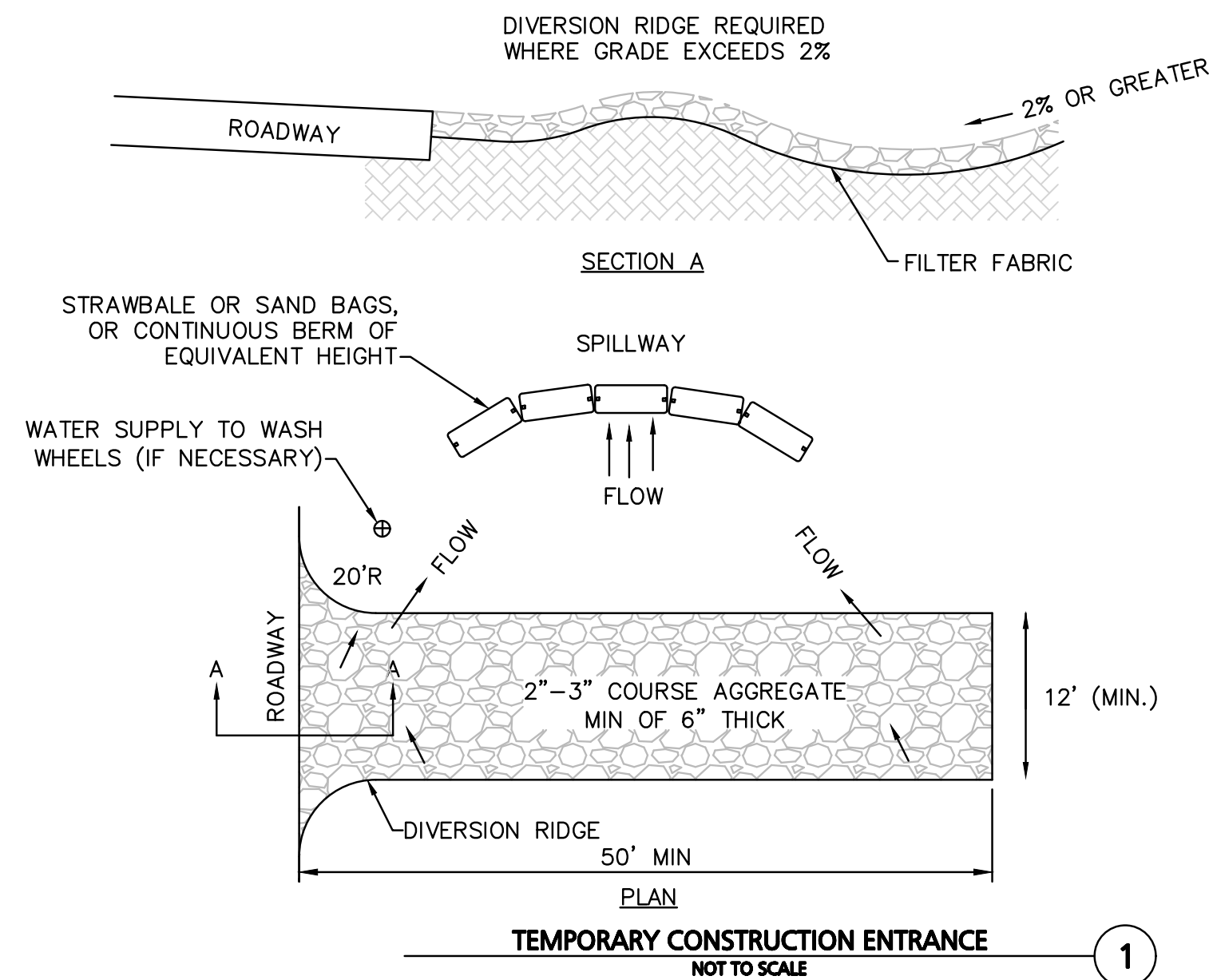
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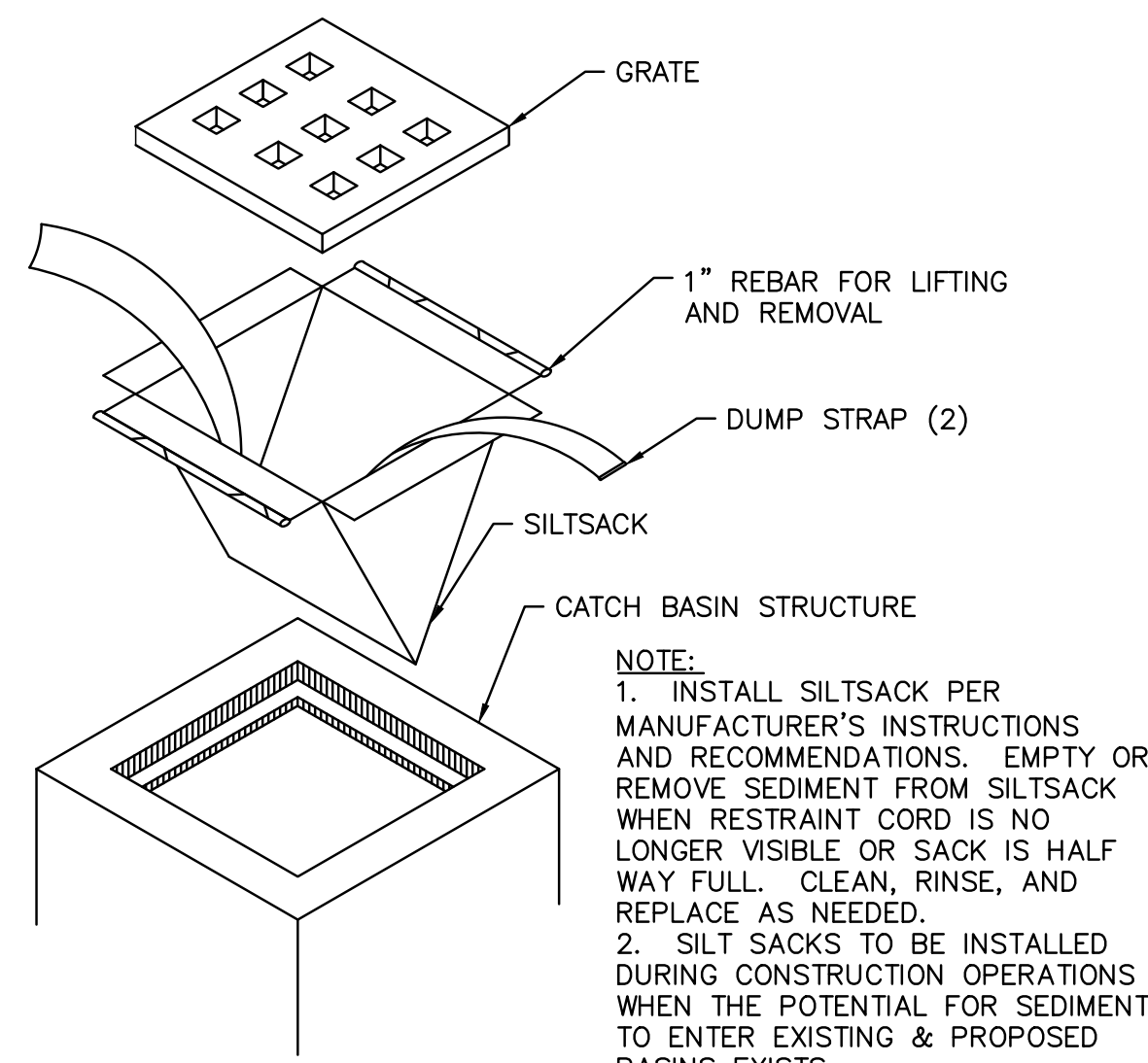
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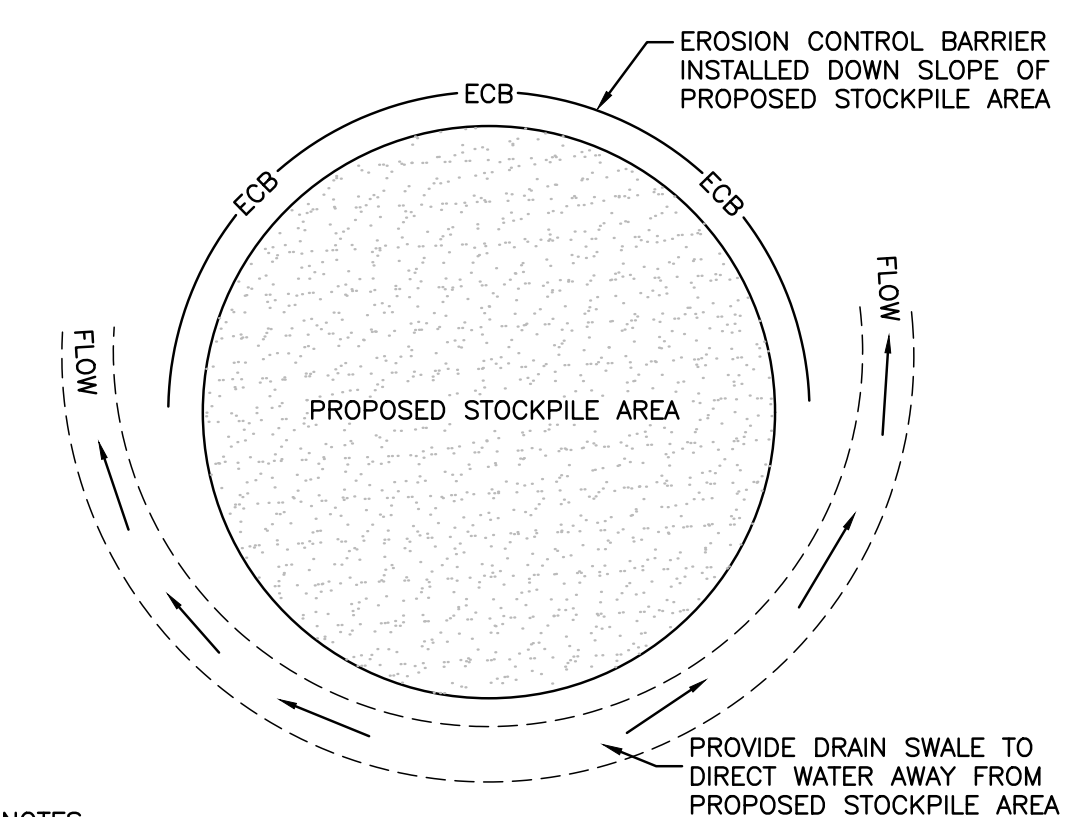
- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTERING THE PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 4. USE SANDBAGS, STRAW BALES, OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.



TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE

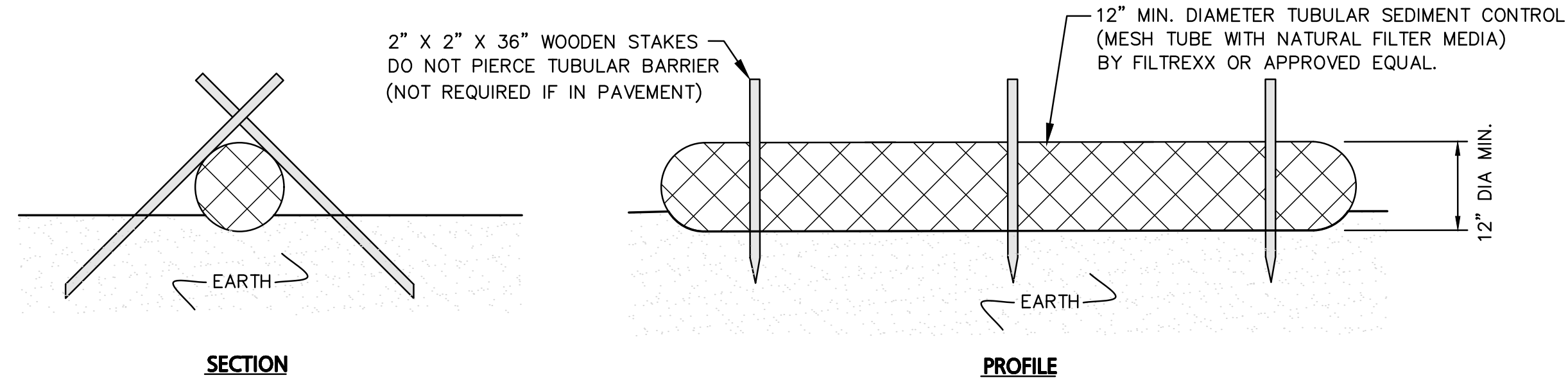


INLET PROTECTION
NOT TO SCALE



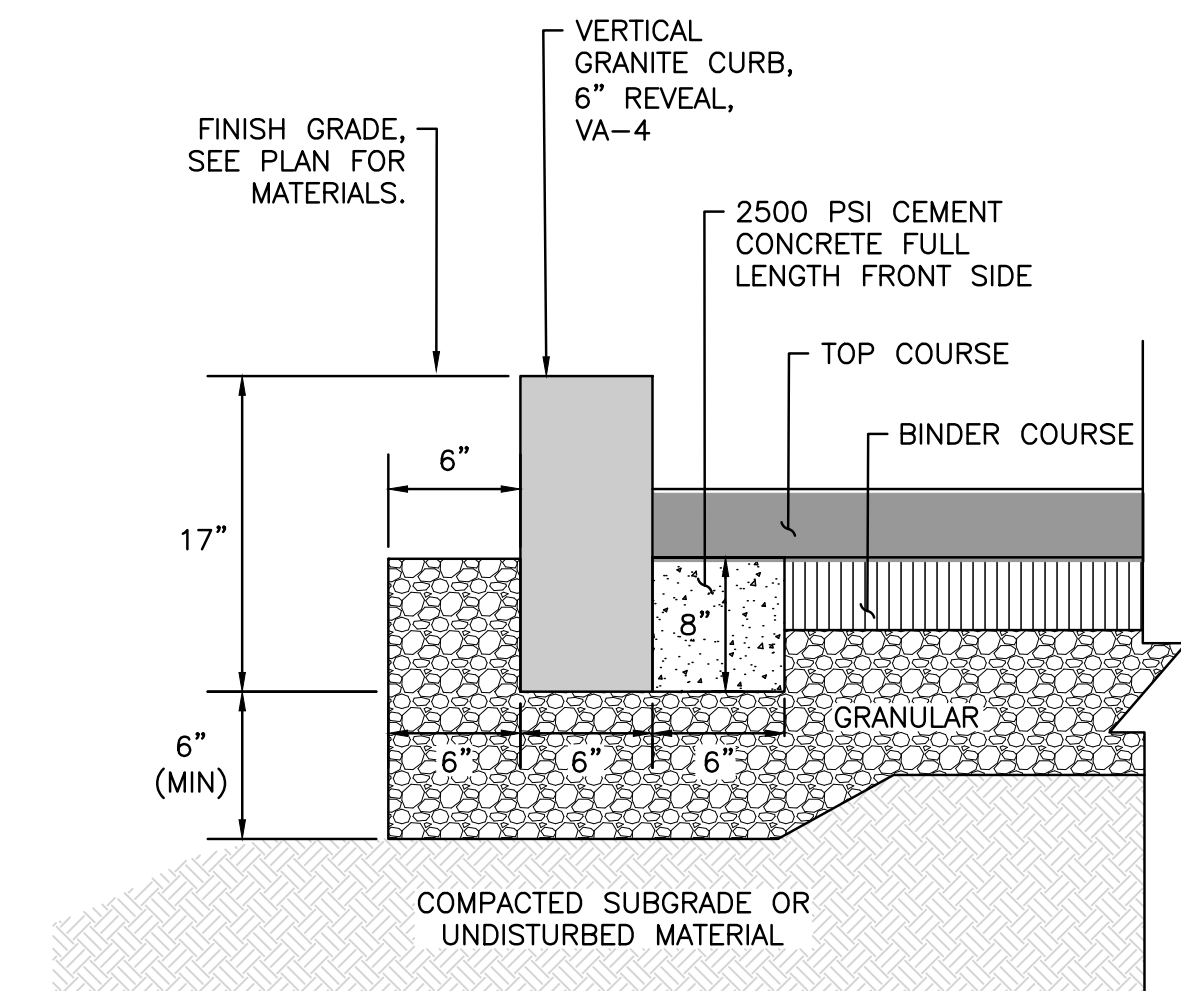
- NOTES:**
1. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 90 DAYS SHALL BE COVERED WITH STRAW AND MULCH (AT 100 LBS/1,000 S.F.), OR WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
 2. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR 90 DAYS OR MORE SHALL BE SEEDED WITH WINTER RYE (FOR FALL SEEDING AT 1LB/1,000 SF) OR OATS (FOR SUMMER SEEDING AT 2LB/1,000 SF) AND THEN COVERED WITH STRAW MULCH (AT 100LB/1,000 SF) OR AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.

STOCKPILE
NOT TO SCALE

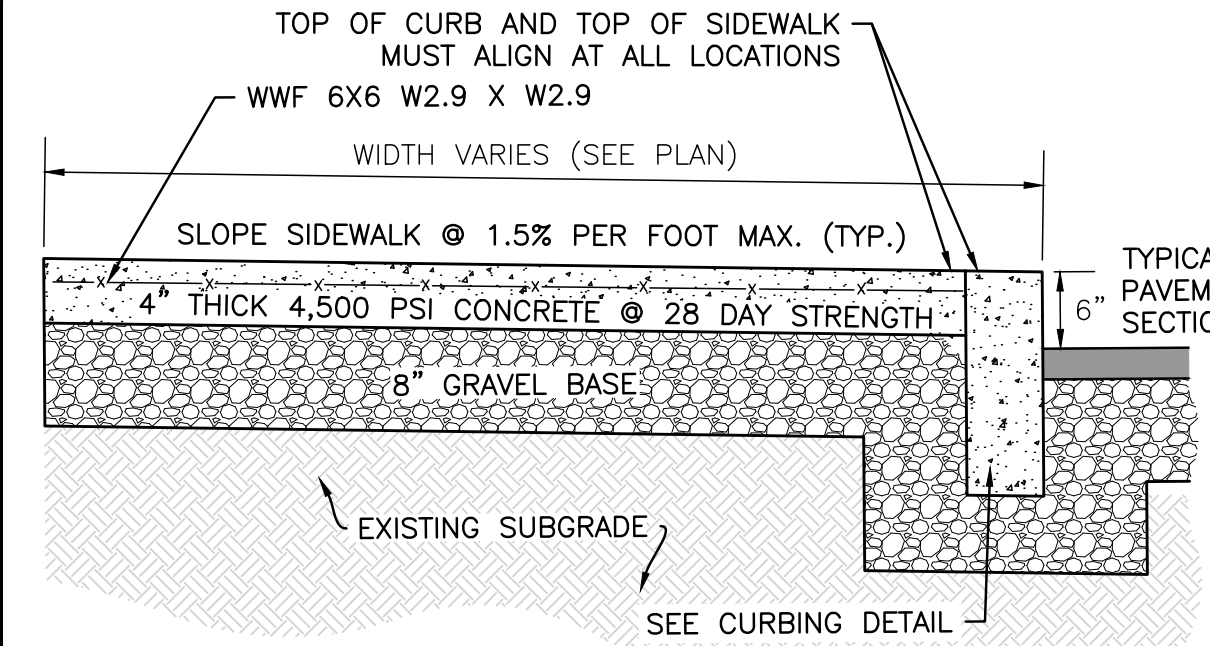


- NOTES:**
1. ALL MATERIALS TO MEET MANUFACTURERS SPECIFICATIONS.
 2. INSTALL WOODEN STAKES IN A CRISS-CROSS PATTERN EVERY 8' ON CENTER.
 3. THE CONTRACTOR SHALL MAINTAIN THE TUBULAR BARRIERS IN A FUNCTIONAL CONDITION AT ALL TIMES. THE CONTROLS SHALL BE ROUTINELY INSPECTED BY THE CONTRACTOR.
 4. WHERE THE TUBULAR BARRIERS REQUIRE REPAIR OR SEDIMENT REMOVAL, IT WILL BE COMPLETED BY THE CONTRACTOR AT NO ADDITIONAL COST.
 5. AT A MINIMUM, THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE WHEN THEY REACH 1/3 THE EXPOSED HEIGHT OF THE BARRIER.

TUBULAR SEDIMENT BARRIER
NOT TO SCALE

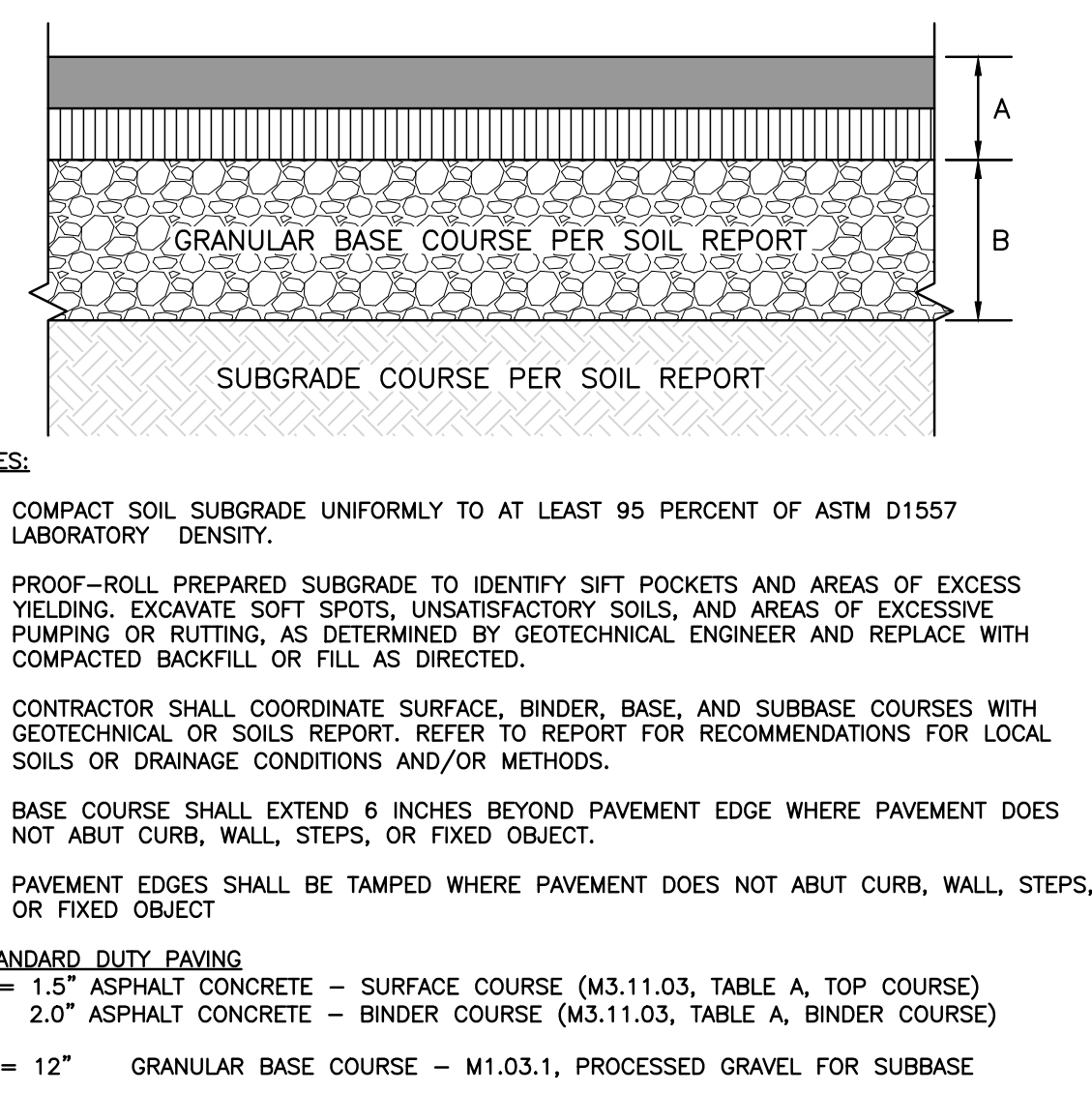


VERTICAL GRANITE CURB
NOT TO SCALE



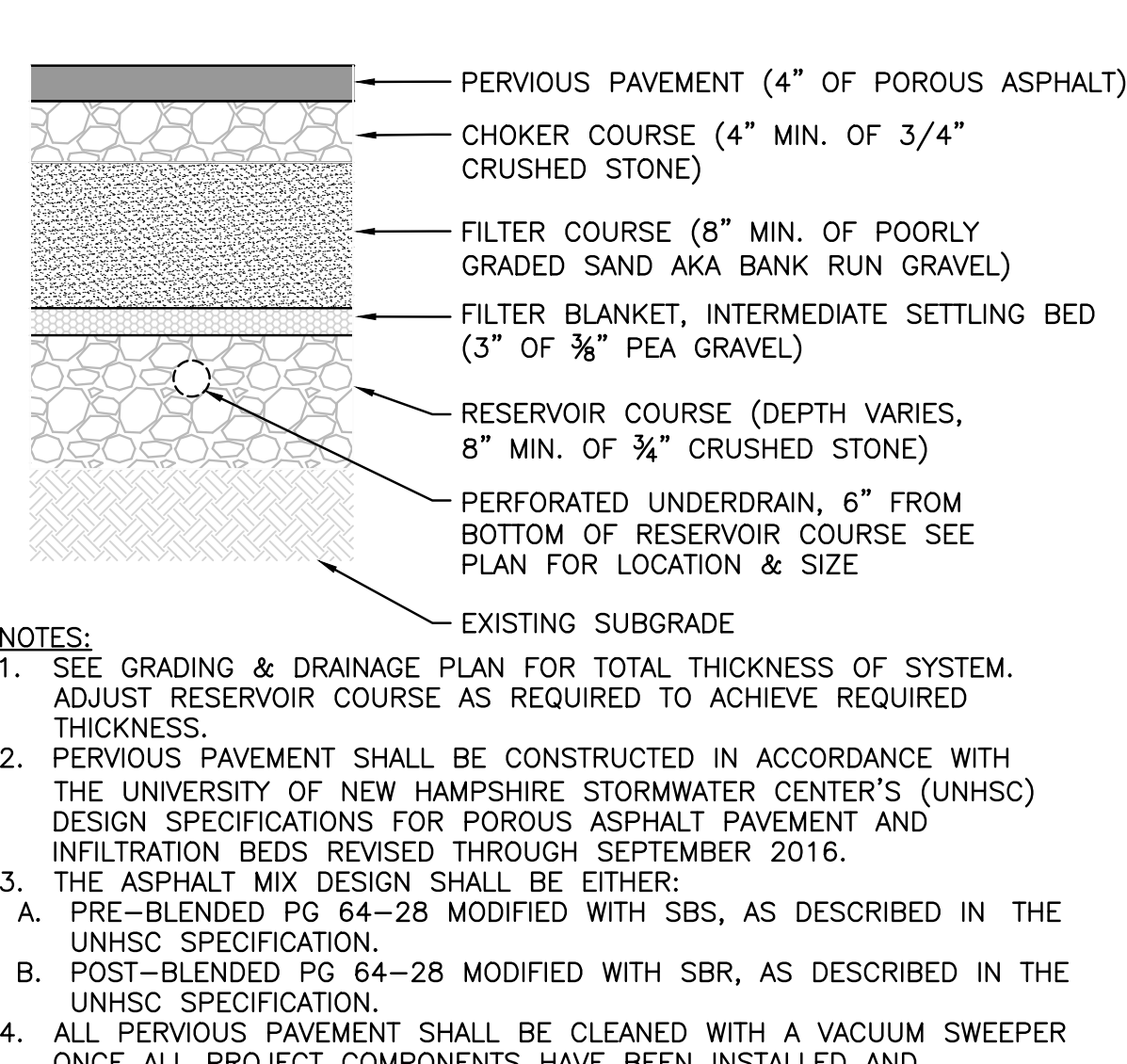
- NOTES:**
1. SIDEWALK TO HAVE TOOLED JOINTS IN A 5' x 5' (TYP.) GRID WITH EXPANSION JOINTS 15' ON CENTER AND PREMOLDED FILLER
 2. TOOLED JOINT 6" FROM FACE OF CURB
 3. SEE PLAN FOR ELEVATIONS AT CURB
 4. SIDEWALK CROSS SLOPE TO BE 1.5% MAX & SIDEWALK LONGITUDINAL SLOPE TO BE 4.5% MAX, TYP.

CONCRETE SIDEWALK WITH CURB
NOT TO SCALE



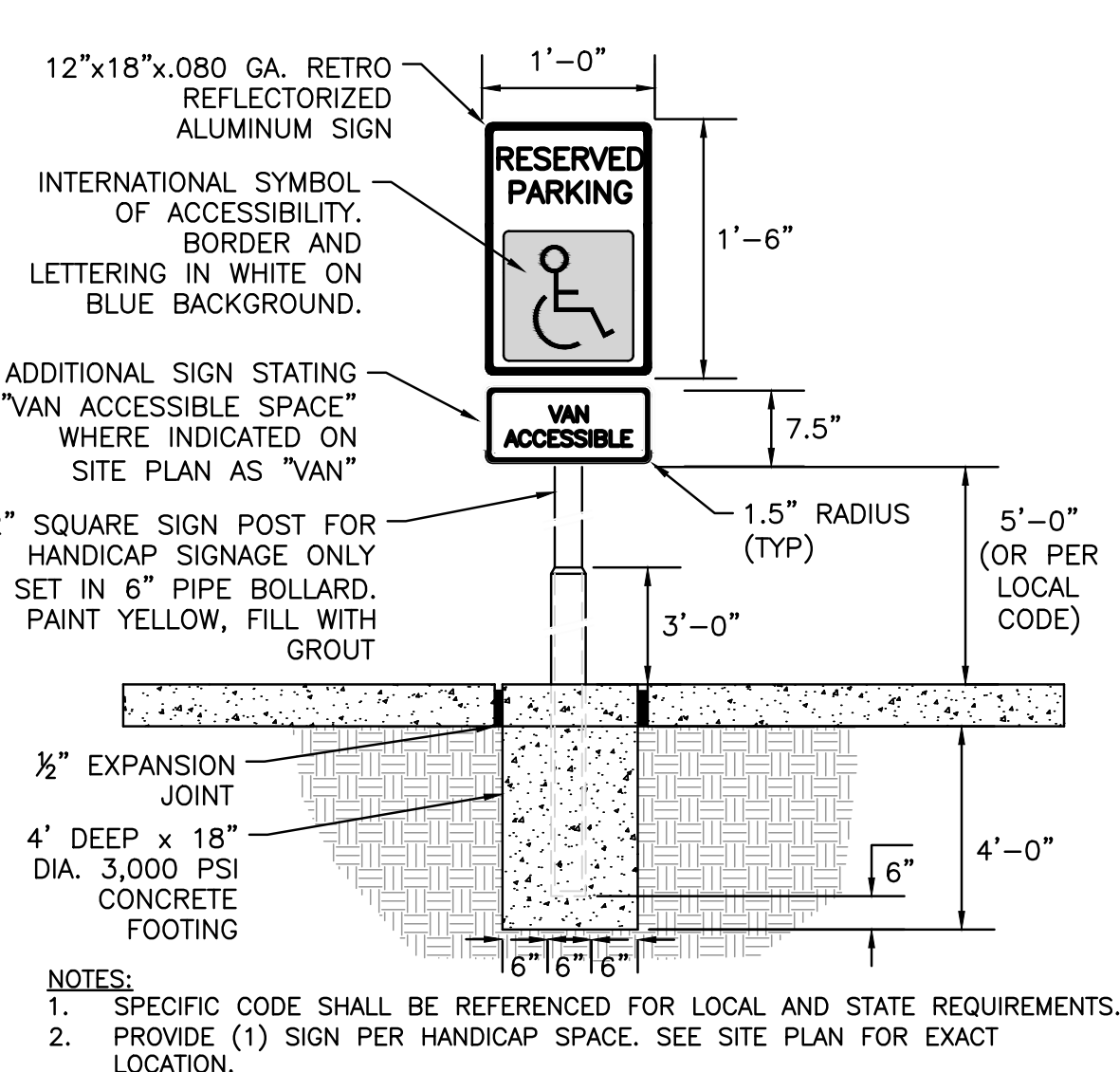
- NOTES:**
1. COMPACT SOIL SUBGRADE UNIFORMLY TO AT LEAST 95 PERCENT OF ASTM D1557 LABORATORY DENSITY.
 2. PROOF-ROLL PREPARED SUBGRADE TO IDENTIFY SIFT POCKETS AND AREAS OF EXCESS YIELDING. EXCAVATE SOFT SPOTS, UNSATISFACTORY SOILS, AND AREAS OF EXCESSIVE PUMPING OR RUTTING, AS DETERMINED BY GEOTECHNICAL ENGINEER AND REPLACE WITH COMPACTED BACKFILL OR FILL AS DIRECTED.
 3. CONTRACTOR SHALL COORDINATE SURFACE, BINDER, BASE, AND SUBBASE COURSES WITH GEOTECHNICAL OR SOILS REPORT. REFER TO REPORT FOR RECOMMENDATIONS FOR LOCAL SOILS OR DRAINAGE CONDITIONS AND/OR METHODS.
 4. BASE COURSE SHALL EXTEND 6 INCHES BEYOND PAVEMENT EDGE WHERE PAVEMENT DOES NOT ABUT CURB, WALL, STEPS, OR FIXED OBJECT.
 5. PAVEMENT EDGES SHALL BE TAMPED WHERE PAVEMENT DOES NOT ABUT CURB, WALL, STEPS, OR FIXED OBJECT.
- STANDARD DUTY PAVING**
A = 1.5" ASPHALT CONCRETE - SURFACE COURSE (M3.11.03, TABLE A, TOP COURSE)
2.0" ASPHALT CONCRETE - BINDER COURSE (M3.11.03, TABLE A, BINDER COURSE)
B = 12" GRANULAR BASE COURSE - M1.03.1, PROCESSED GRAVEL FOR SUBBASE

STANDARD DUTY BITUMINOUS PAVEMENT
NOT TO SCALE



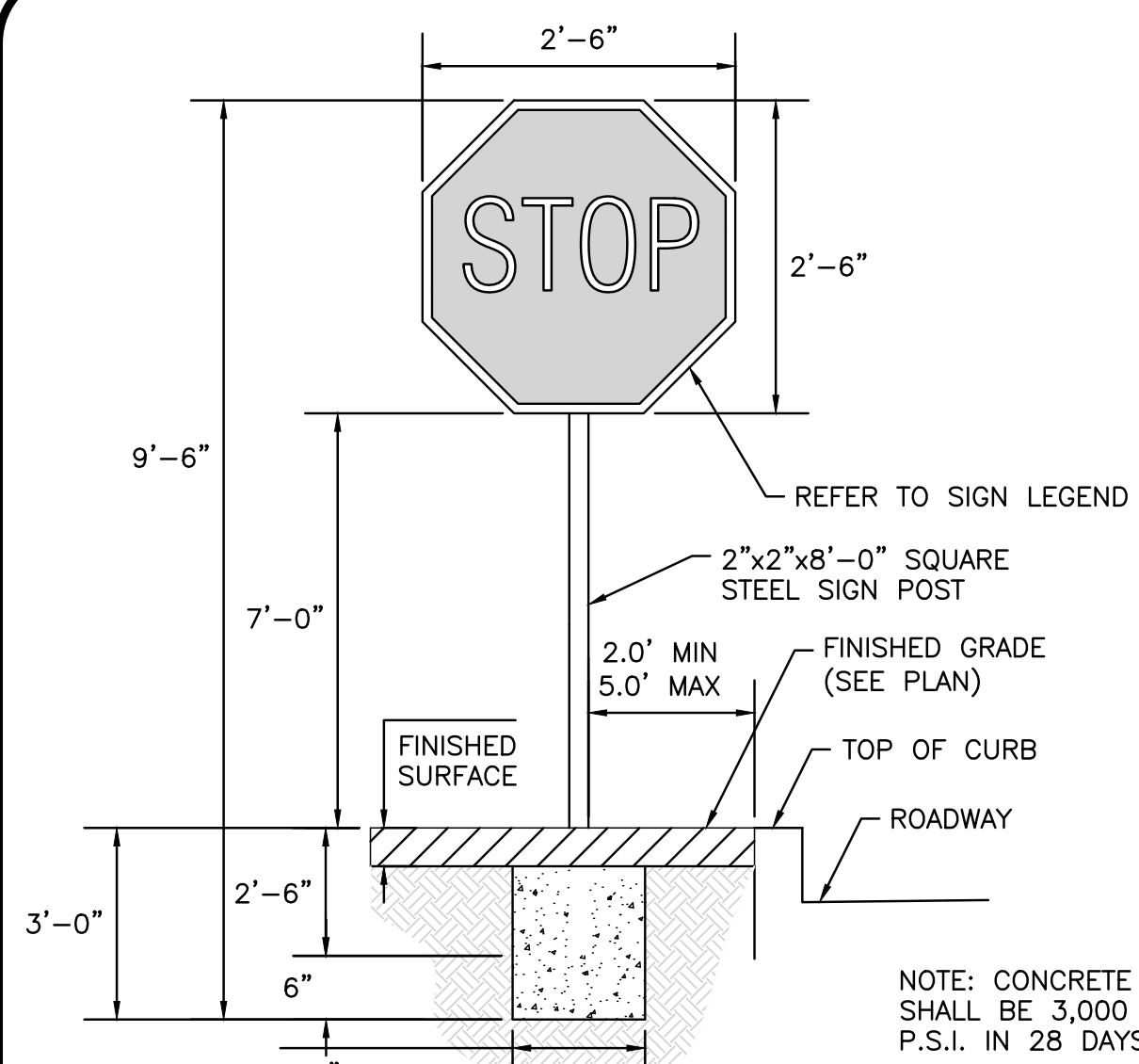
- NOTES:**
1. SEE GRADING & DRAINAGE PLAN FOR TOTAL THICKNESS OF SYSTEM. ADJUST RESERVOIR COURSE AS REQUIRED TO ACHIEVE REQUIRED THICKNESS.
 2. PERVIOUS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE UNIVERSITY OF NEW HAMPSHIRE STORMWATER CENTER'S (UNHSC) DESIGN SPECIFICATIONS FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS REVISED THROUGH SEPTEMBER 2016.
 3. THE ASPHALT MIX DESIGN SHALL BE EITHER:
A. PRE-BLENDED PG 64-28 MODIFIED WITH SBS, AS DESCRIBED IN THE UNHSC SPECIFICATION.
B. POST-BLENDED PG 64-28 MODIFIED WITH SBR, AS DESCRIBED IN THE UNHSC SPECIFICATION.
 4. ALL PERVIOUS PAVEMENT SHALL BE CLEANED WITH A VACUUM SWEEPER ONCE ALL PROJECT COMPONENTS HAVE BEEN INSTALLED AND STABILIZED.

PERVIOUS PAVEMENT - UNHSC SECTION
NOT TO SCALE



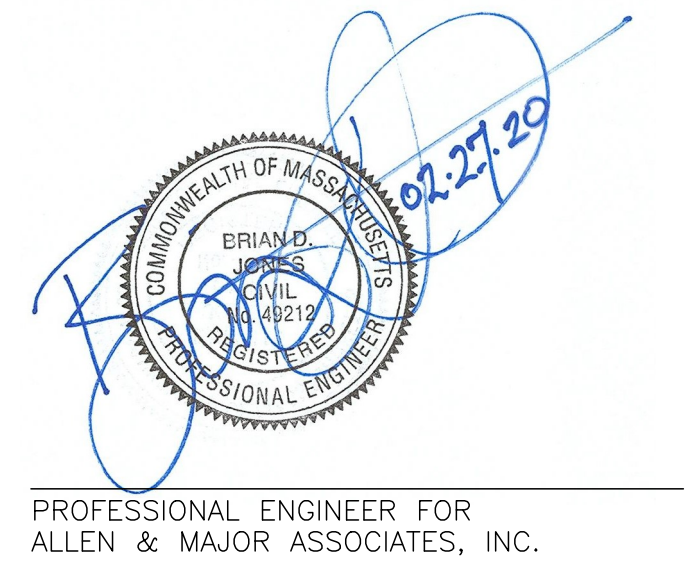
- NOTES:**
1. SPECIFIC CODE SHALL BE REFERENCED FOR LOCAL AND STATE REQUIREMENTS.
 2. PROVIDE (1) SIGN PER HANDICAP SPACE. SEE SITE PLAN FOR EXACT LOCATION.
 3. EXPANSION JOINT MATERIAL NOT REQUIRED WITH FLEXIBLE PAVEMENT.

ACCESSIBLE PARKING SIGN
NOT TO SCALE



- NOTE:** CONCRETE SHALL BE 3,000 P.S.I. IN 28 DAYS

STOP SIGN DETAIL
NOT TO SCALE



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

APPLICANT/OWNER:
OAK GROVE MILL, LLC
ONE MARINA PARK DRIVE
SUITE 1500
BOSTON, MA 02210

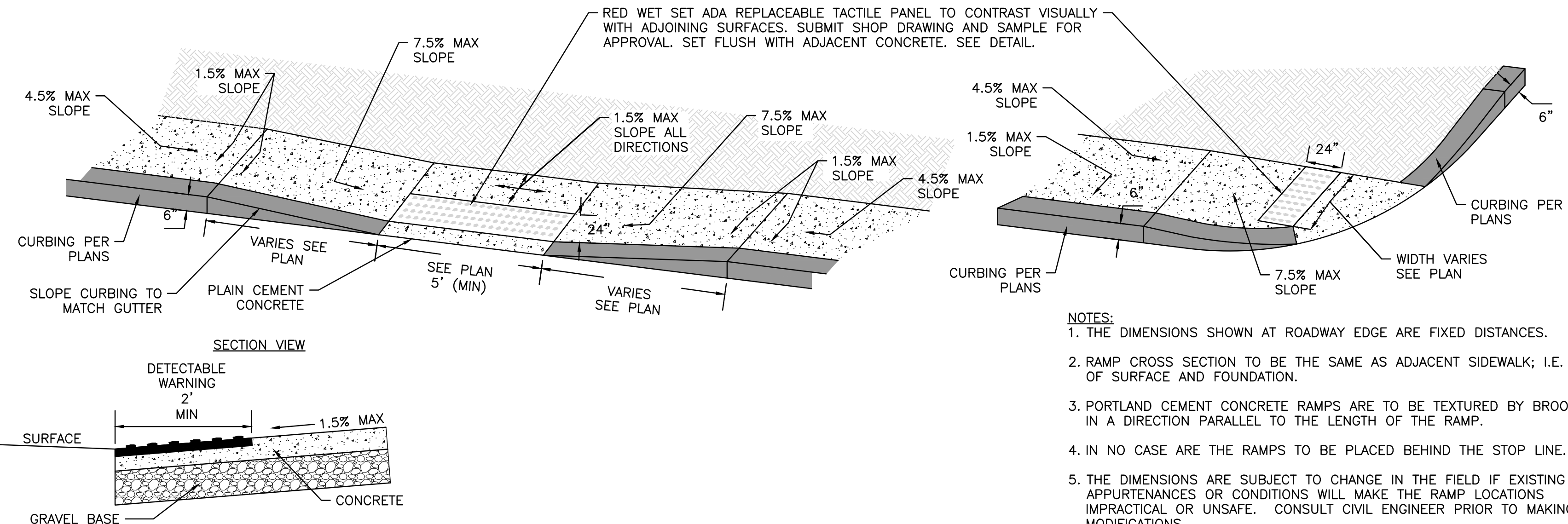
PROJECT:
99 WASHINGTON STREET
MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	AS SHOWN	DWG. NAME:	C2674-01A
DESIGNED BY:	SM	CHECKED BY:	BDJ



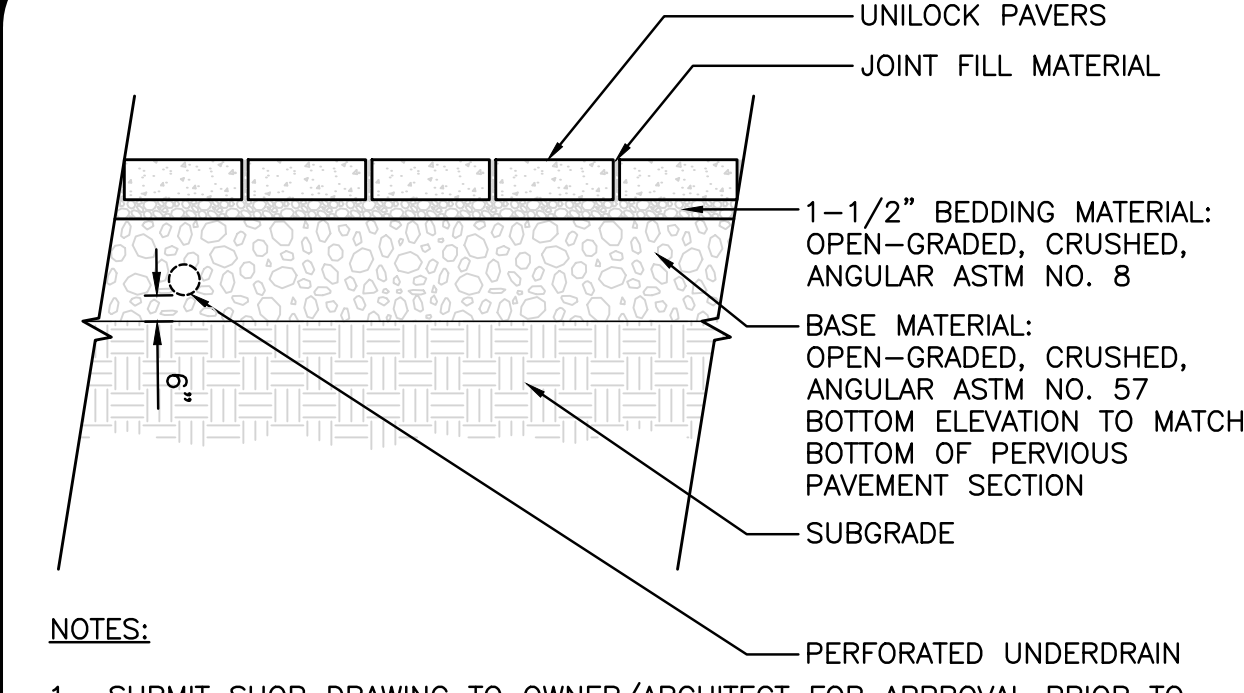
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DRAWING TITLE: **DETAILS** SHEET No. **C-501**



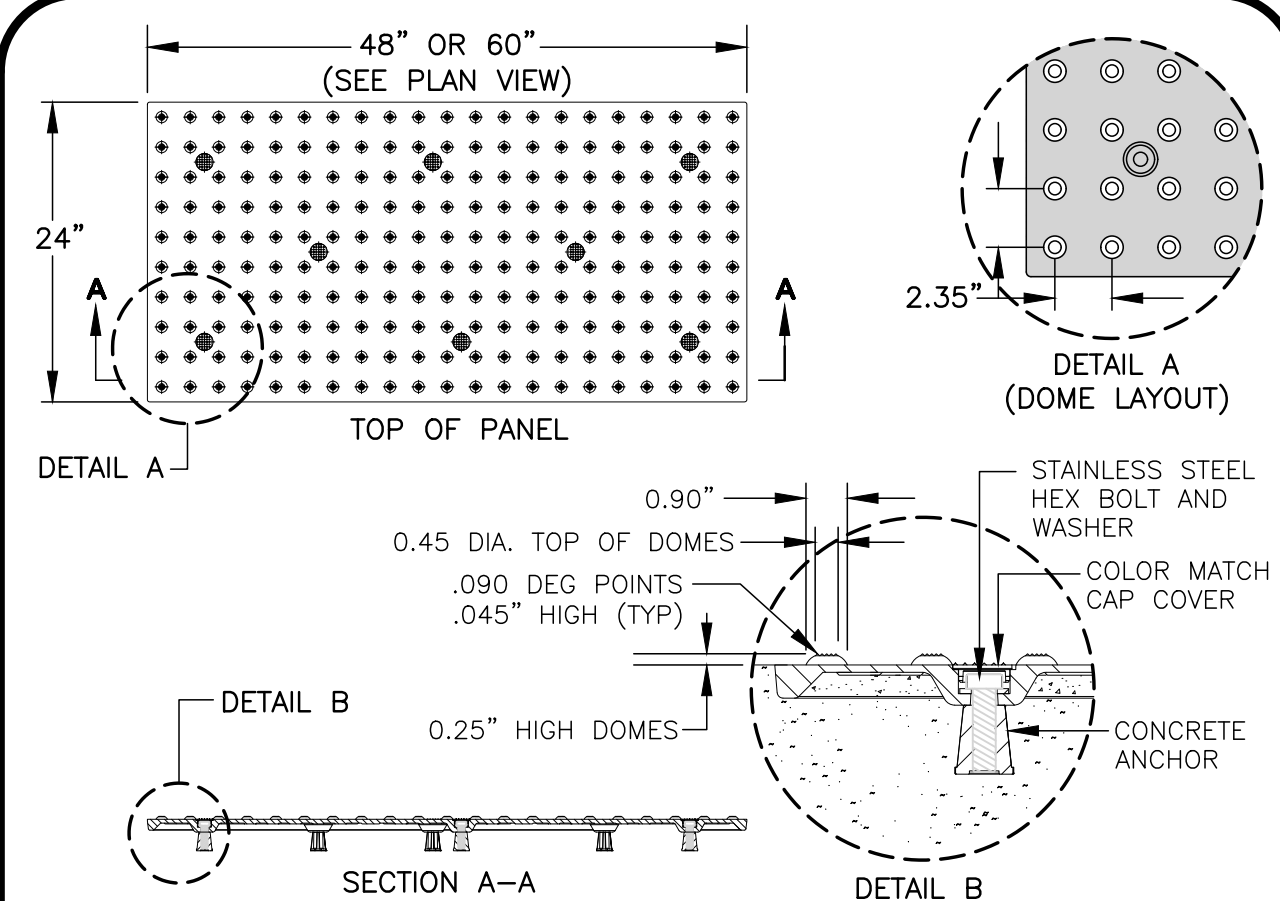
ACCESSIBLE CURB CUT AND TRANSITION
NOT TO SCALE

- NOTES:
1. THE DIMENSIONS SHOWN AT ROADWAY EDGE ARE FIXED DISTANCES.
 2. RAMP CROSS SECTION TO BE THE SAME AS ADJACENT SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.
 3. PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
 4. IN NO CASE ARE THE RAMPS TO BE PLACED BEHIND THE STOP LINE.
 5. THE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IF EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE. CONSULT CIVIL ENGINEER PRIOR TO MAKING ANY MODIFICATIONS.



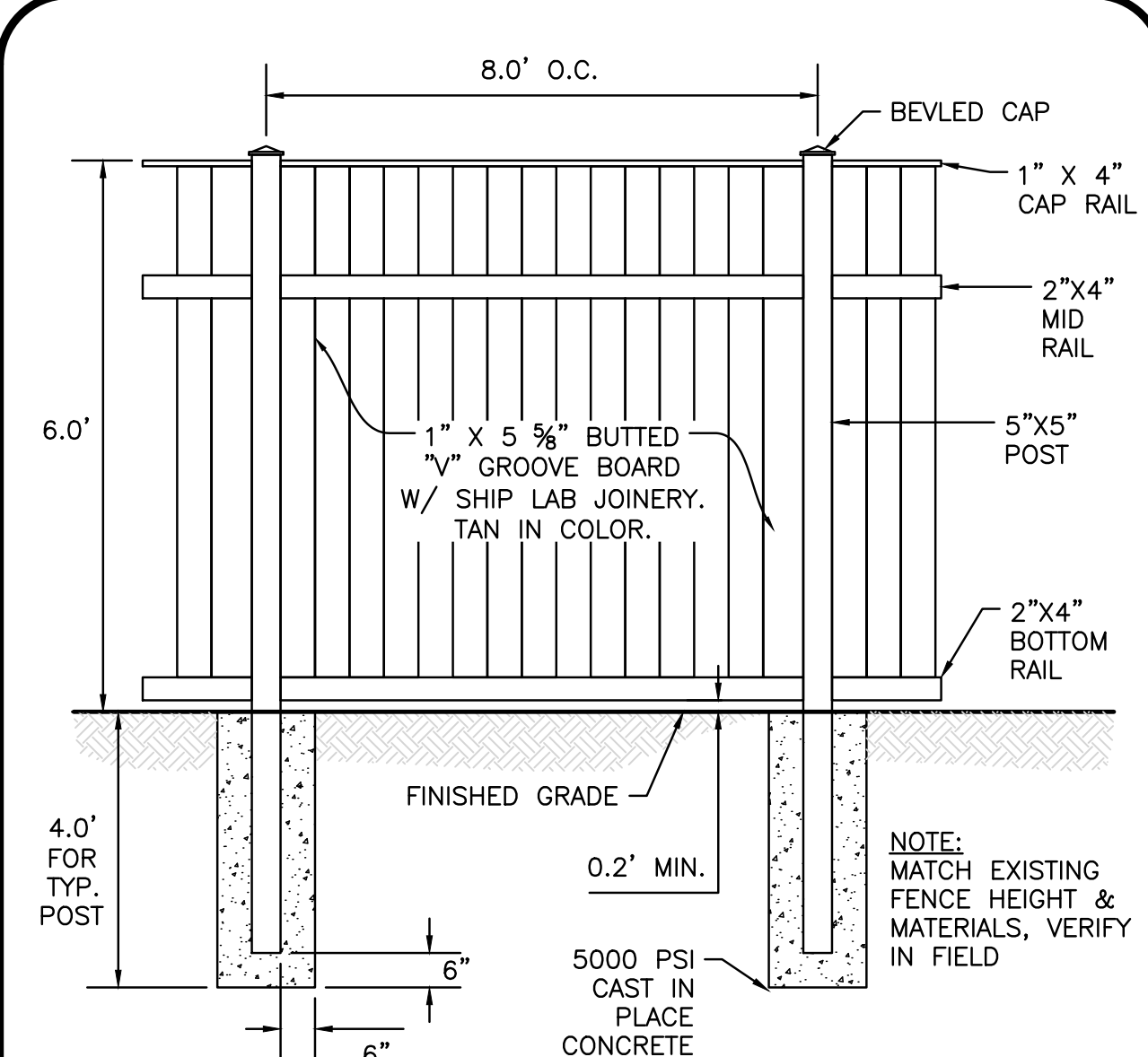
PERMEABLE PAVER SECTION
NOT TO SCALE

- NOTES:
1. SUBMIT SHOP DRAWING TO OWNER/ARCHITECT FOR APPROVAL PRIOR TO PURCHASE.
 2. ALL AGGREGATE MATERIAL SHALL BE CRUSHED, ANGULAR STONE AND FREE OF FINES.
 3. SURFACE SLOPE SHALL BE A MINIMUM OF 1% AND A MAXIMUM OF 5%.
 4. INSTALL PERFORATED UNDERDRAIN, SEE PLAN FOR LOCATION, SIZE, AND INVERTS.
 5. MAINTAIN A MINIMUM DISTANCE OF 2' BETWEEN BOTTOM OF PERMEABLE BASE AND WATER TABLE.
 6. THE MINIMUM AGGREGATE THICKNESSES ARE AFTER COMPACTION.
 7. ONLY USE CRUSHED, ANGULAR GRANITE CHIPS FOR JOINT MATERIAL IN ROADWAY APPLICATIONS.

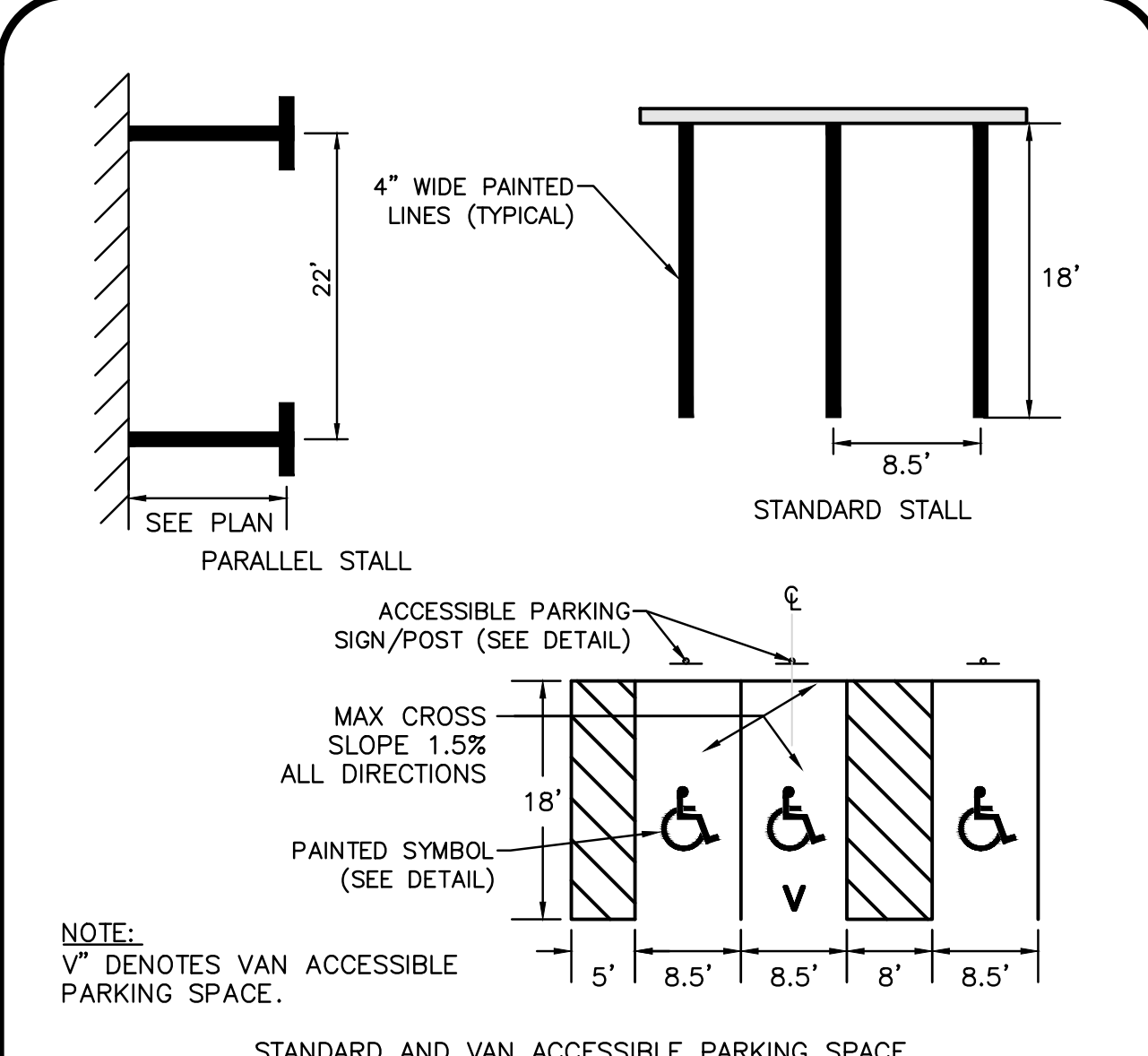


WET SET ADA REPLACEABLE TACTILE PANEL DETAIL
NOT TO SCALE

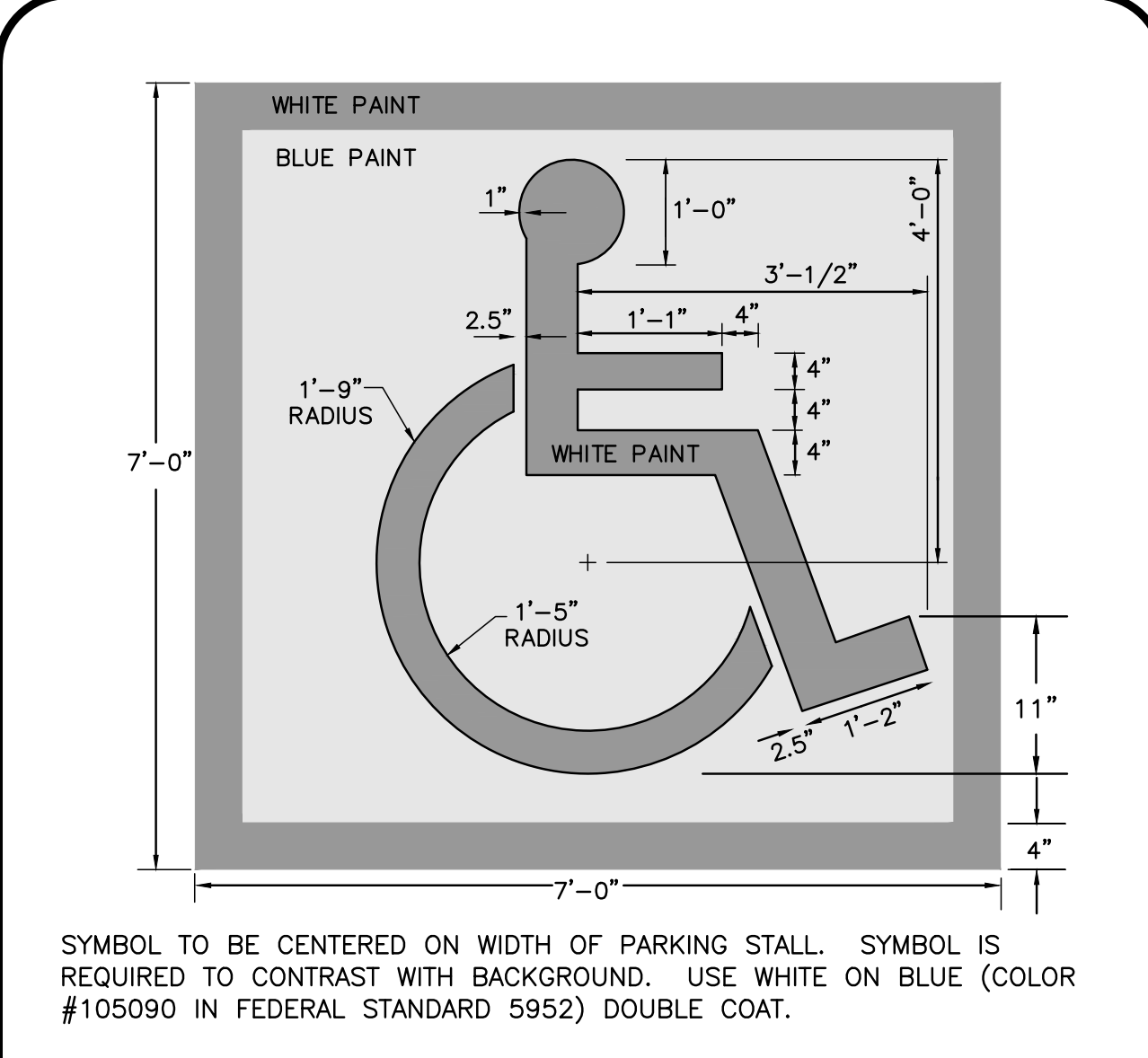
- NOTES:
1. VENDOR INFORMATION: "ADATILE" WET SET ADA REPLACEABLE TACTILE (OR APPROVED EQUAL) AS MANUFACTURED BY ADATILE, PHONE: 1-800-372-0519, WWW.ADATILE.COM, EMAIL: INFO@ADATILE.COM
 2. COLOR SHALL BE RED.
 3. INSTALL PER MANUFACTURER'S INSTALLATION GUIDELINES.



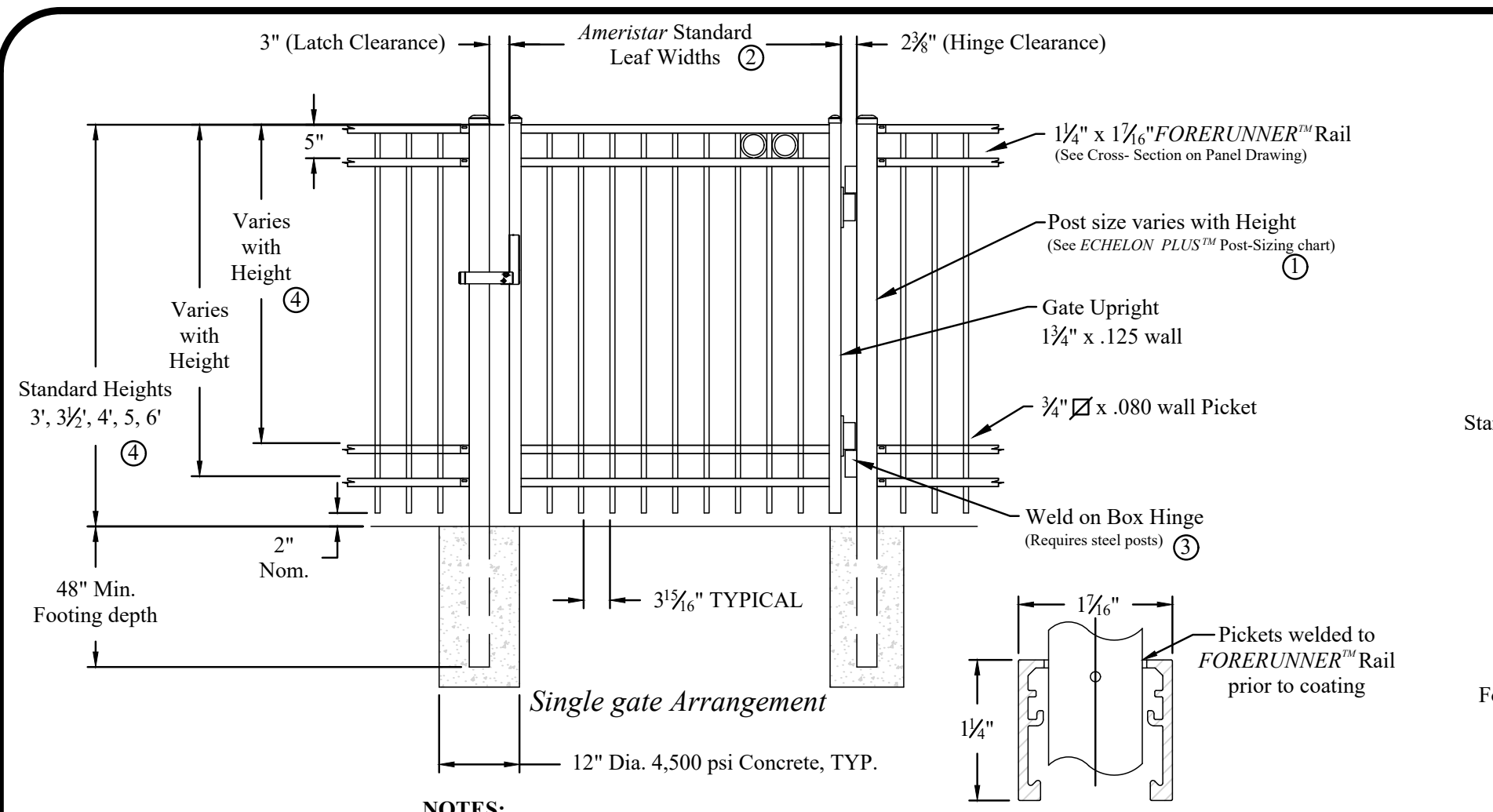
6' HIGH WOOD FENCE DETAIL
NOT TO SCALE



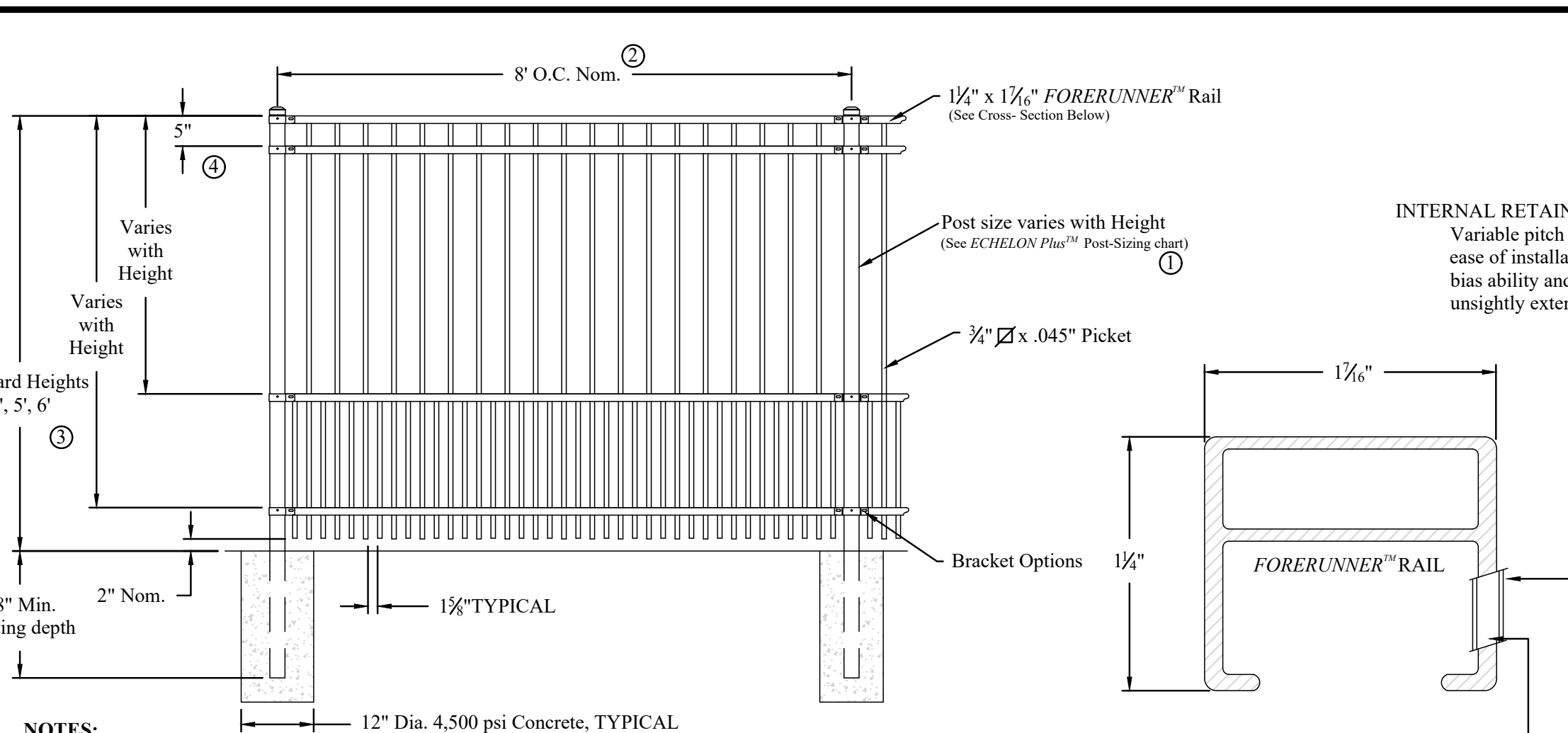
ACCESSIBLE AND STANDARD PARKING STRIPING
NOT TO SCALE



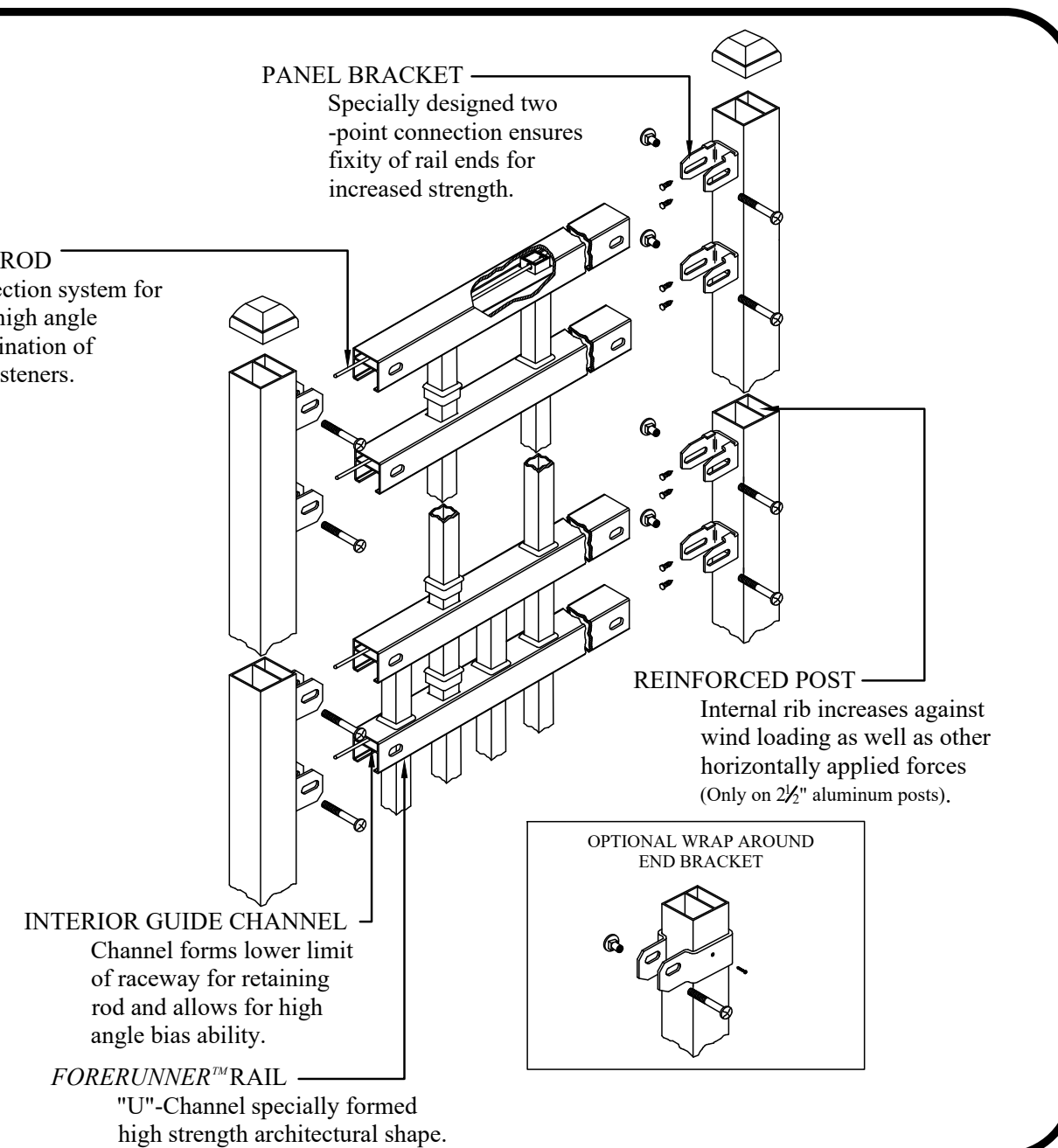
ACCESSIBLE PARKING STALL PAVEMENT MARKING
NOT TO SCALE



- NOTES:
- 1.) Post size depends on fence height, weight and wind loads. See ECHOLON PLUS post sizing chart.
 - 2.) See Ameristar gate table for standard out to outs. Custom gate openings available for special out to out/leaf widths.
 - 3.) Additional styles of gate hardware are available on request. This could change the Latch & Hinge Clearance.
 - 4.) Fourth rail optional. Some heights noted require a fourth rail.



- NOTES:
- 1.) Post size depends on fence height and wind loads. See ECHOLON PLUS post sizing chart.
 - 2.) Panels also available for 6' on center post spacing
 - 3.) Additional heights available on request
 - 4.) Fourth rail optional. Some heights noted require a fourth rail.
- Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.



AMERISTAR ECHOLON PLUS MAJESTIC WITH PUPPY PANEL
NOT TO SCALE



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

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OAK GROVE MILL, LLC
ONE MARINA PARK DRIVE
SUITE 1500
BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	AS SHOWN	DWG. NAME:	C2674-01A
DESIGNED BY:	SM	CHECKED BY:	BDJ

PREPARED BY:



ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

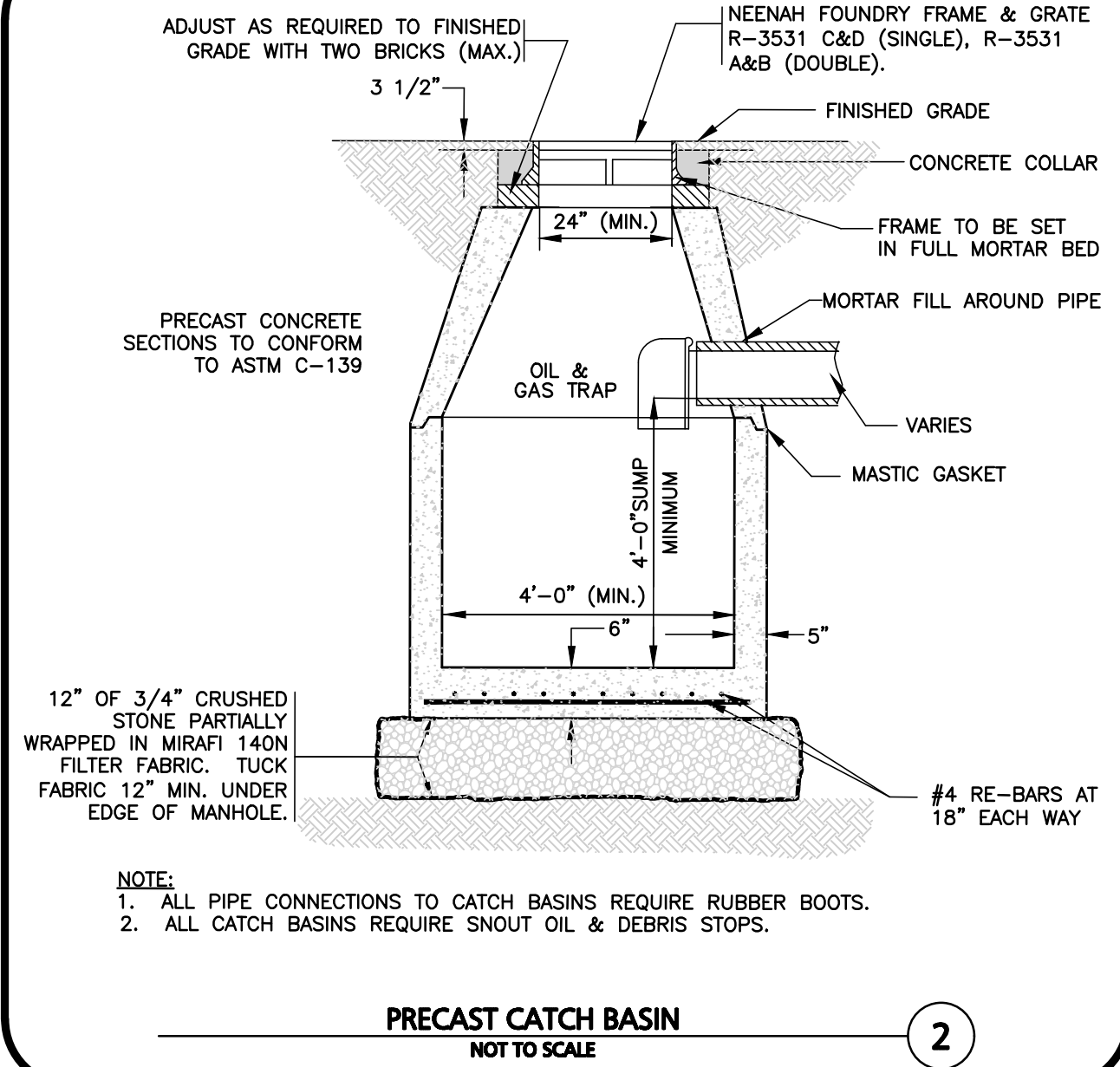
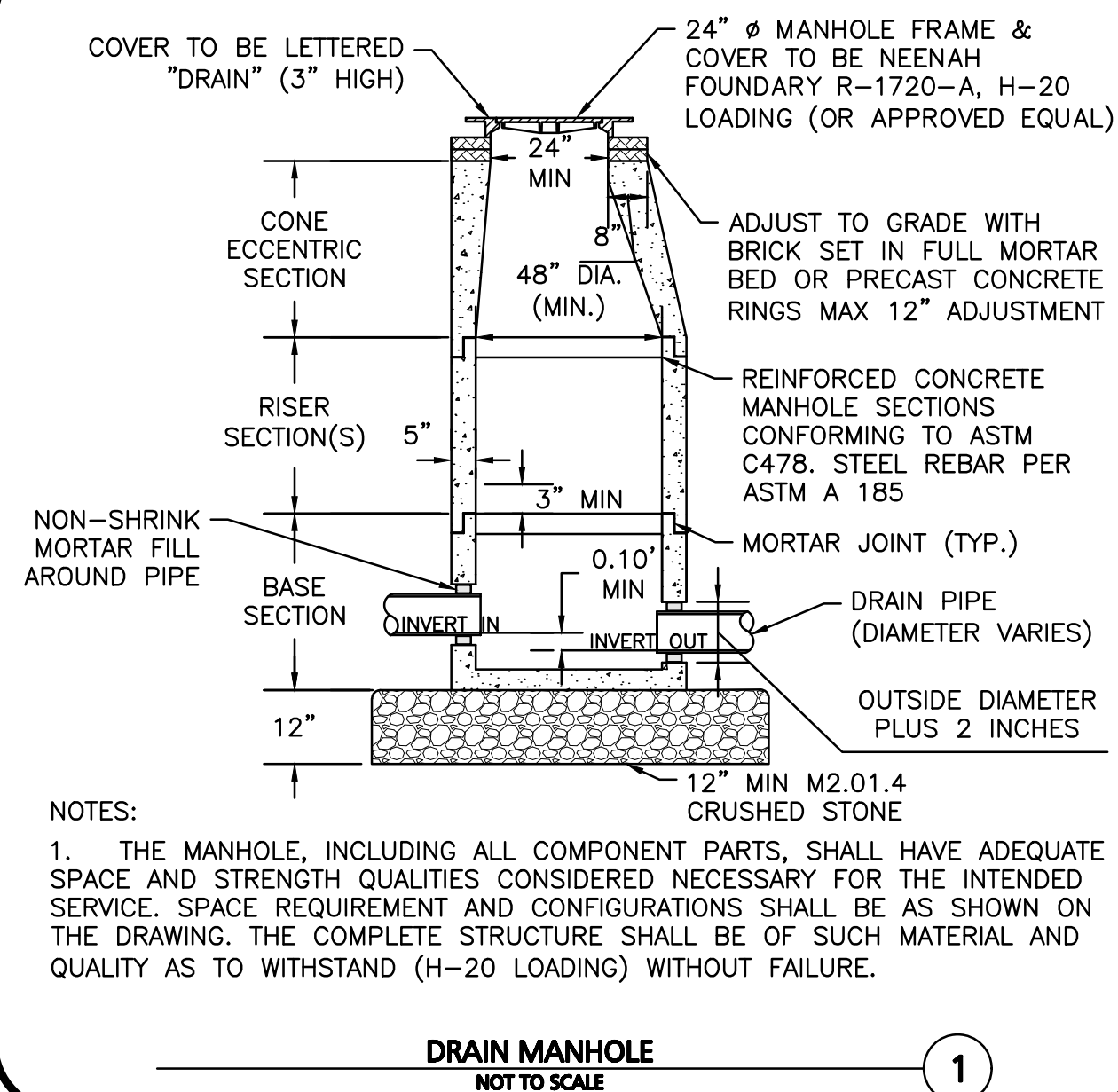
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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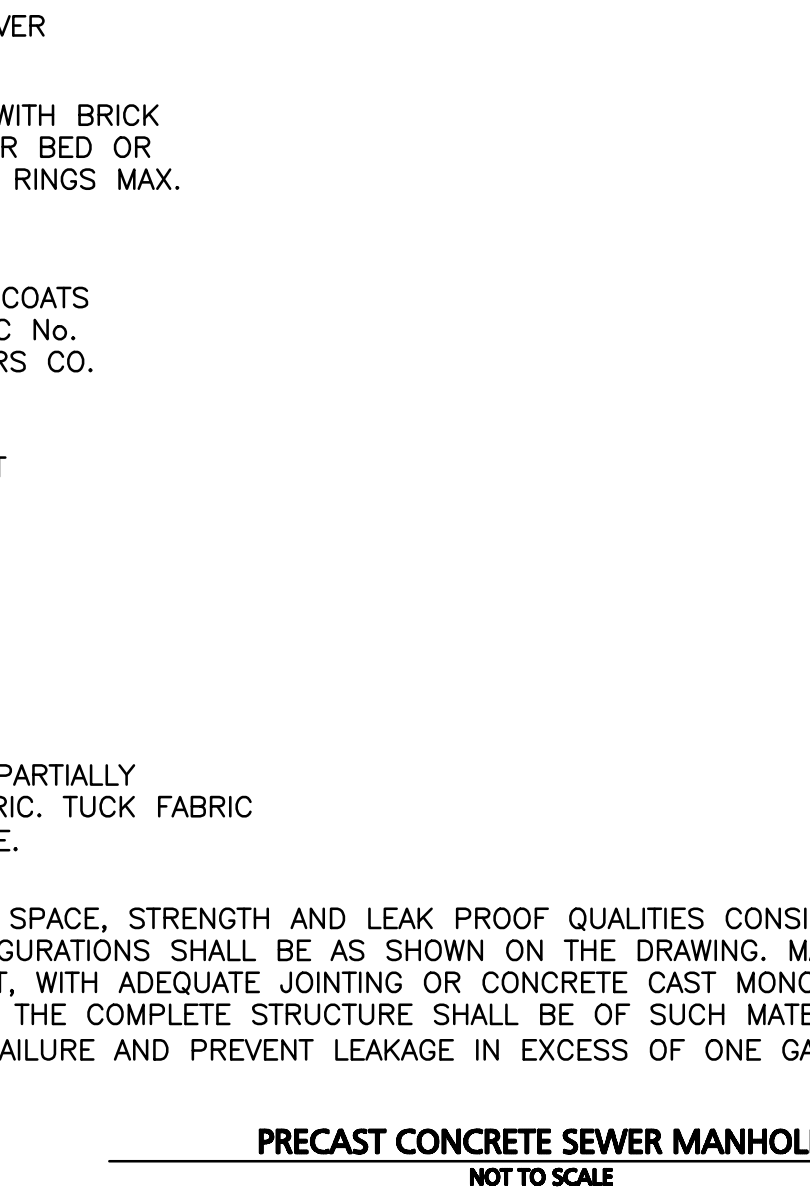
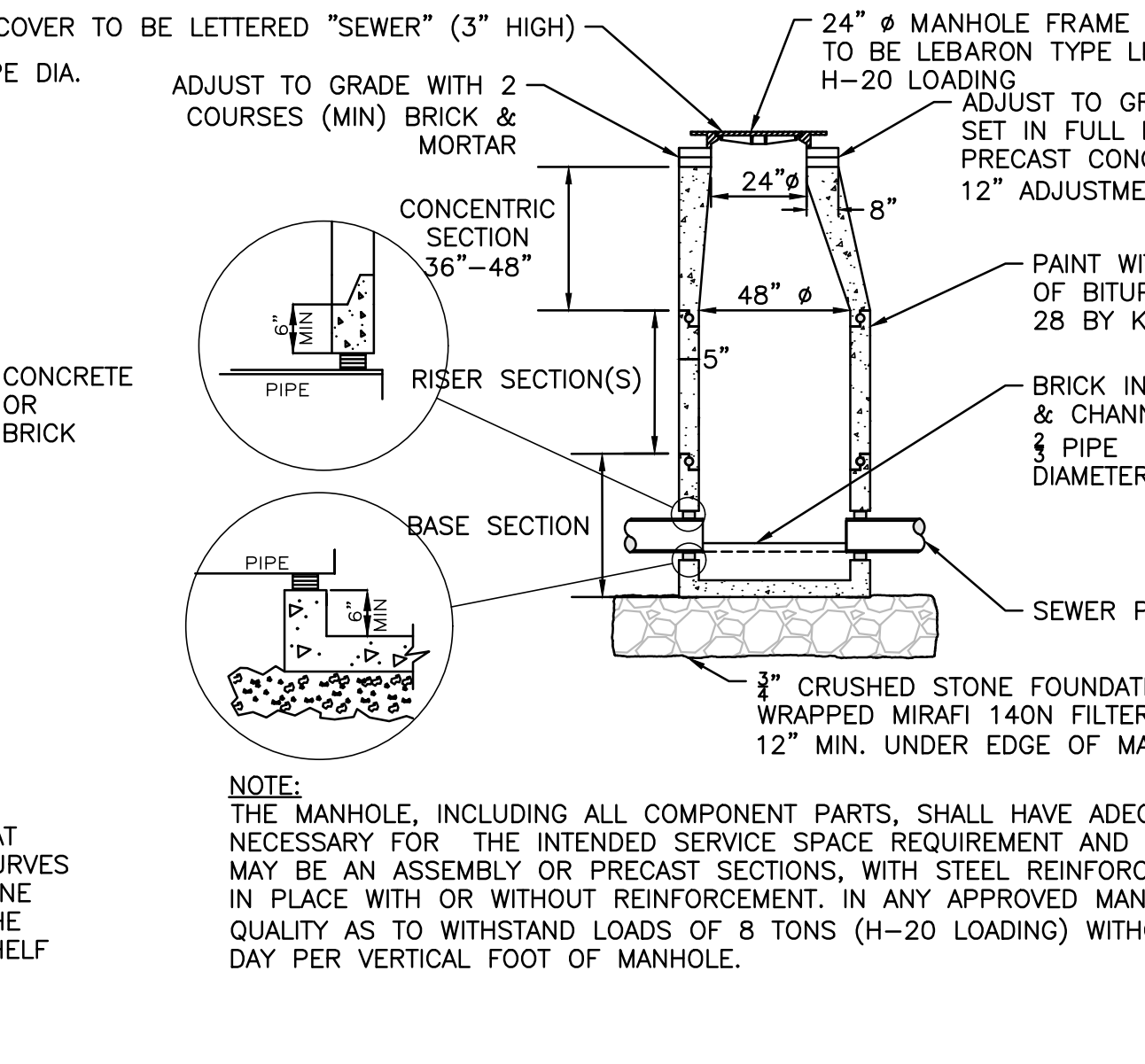
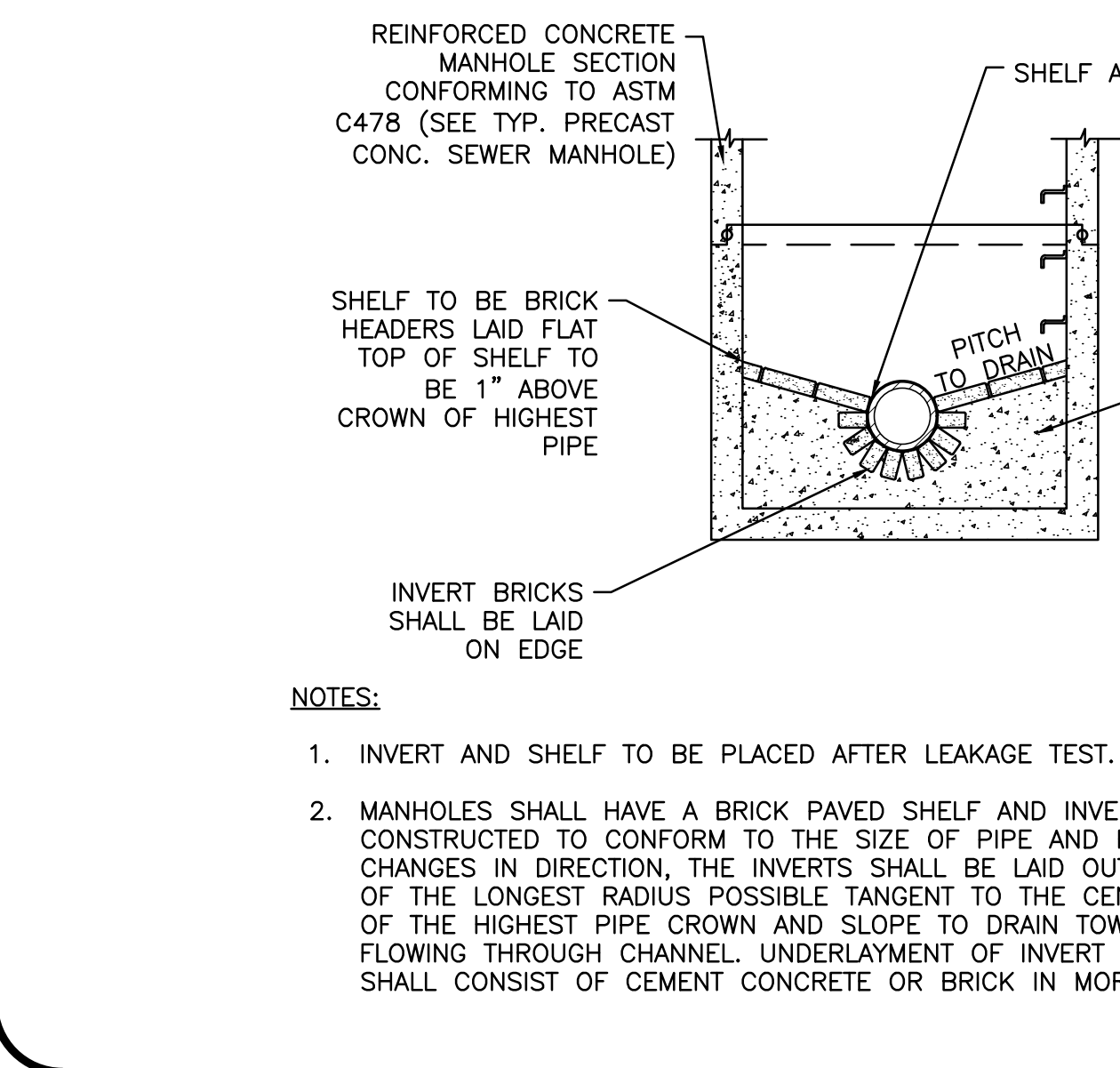
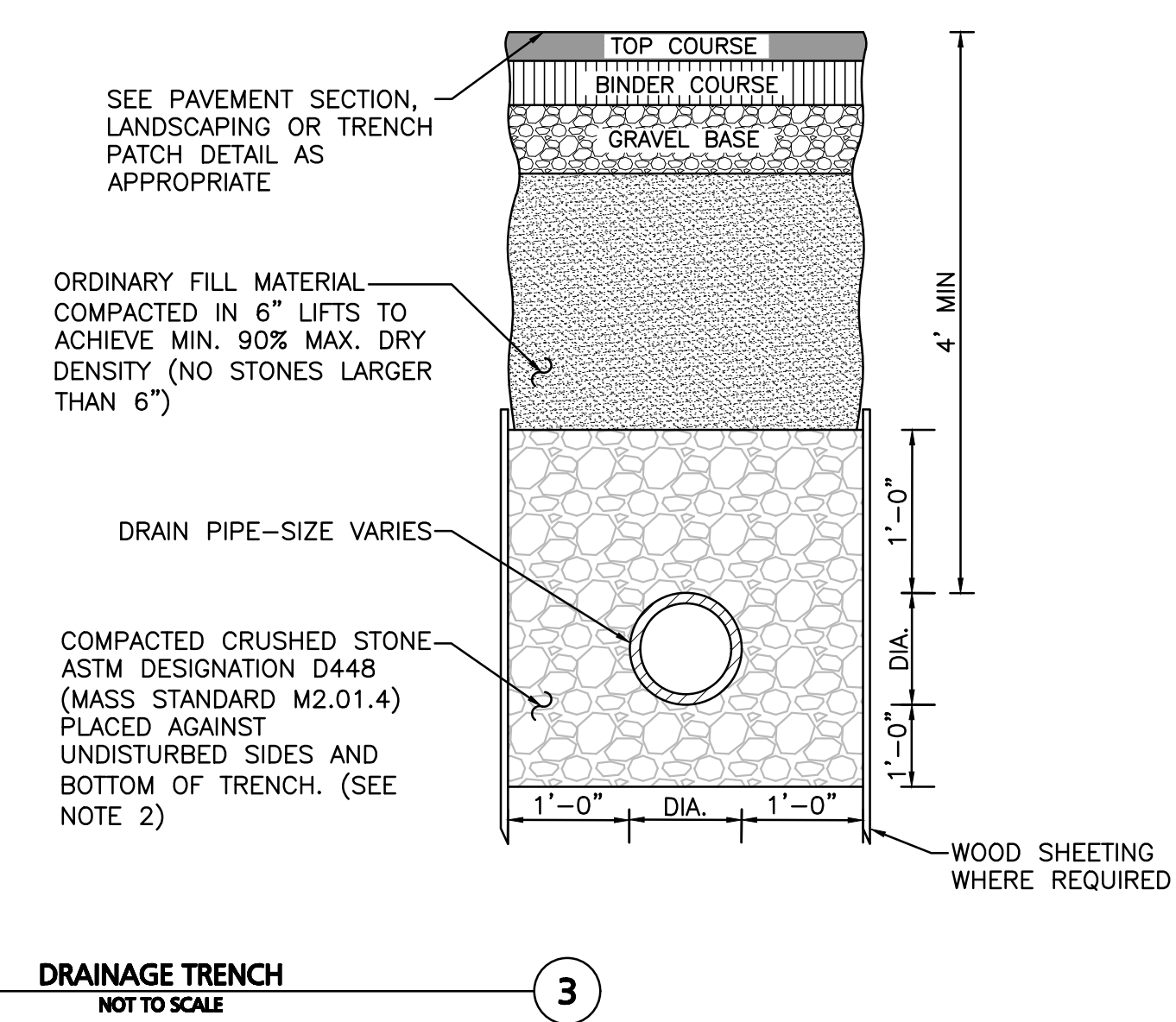
DRAWING TITLE: DETAILS SHEET NO. C-502

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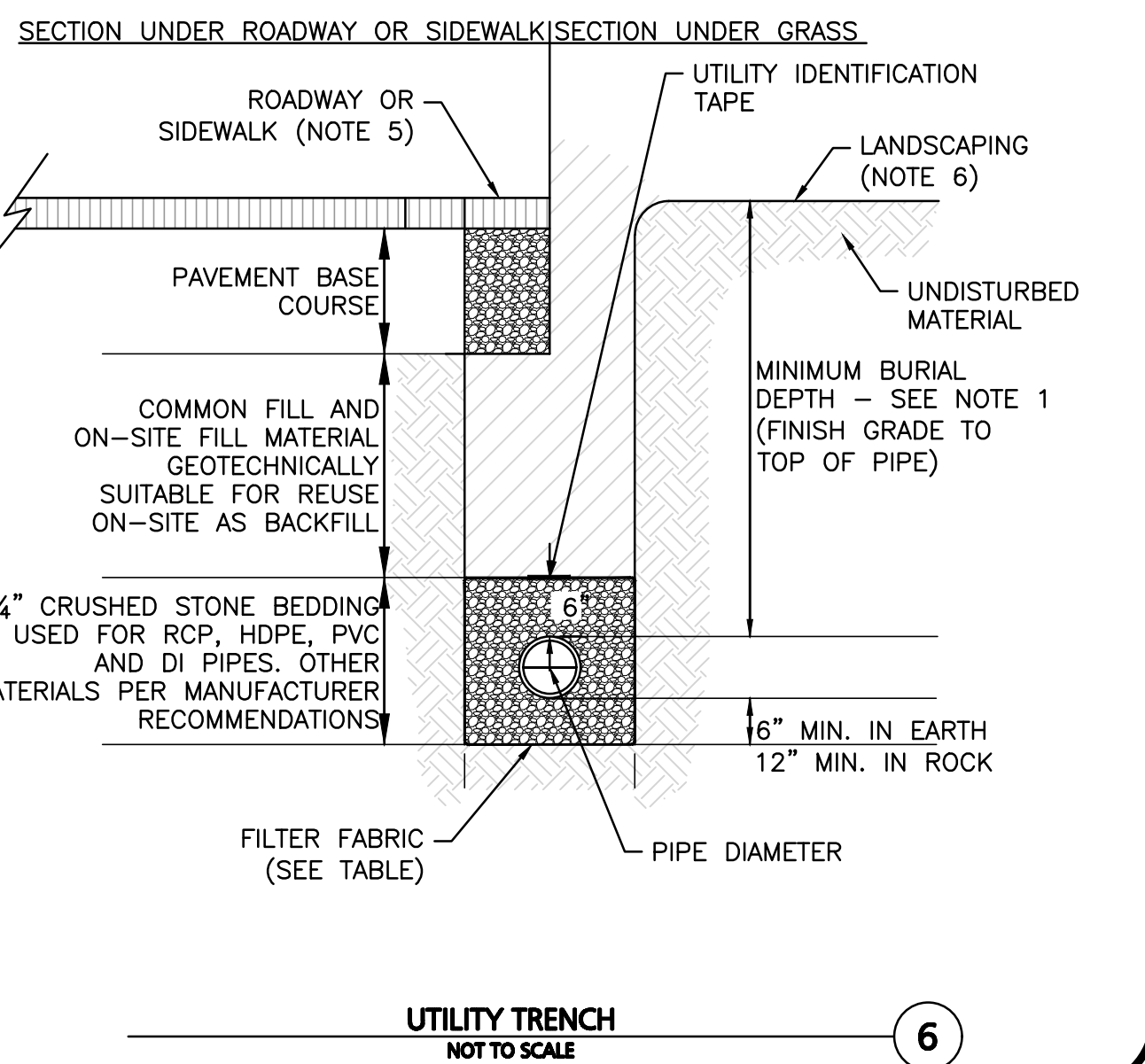
R:\PROJECTS\2674-01A\CIVIL\DRAWINGS\CURRENT\C-2674-01A-DETAILS.DWG



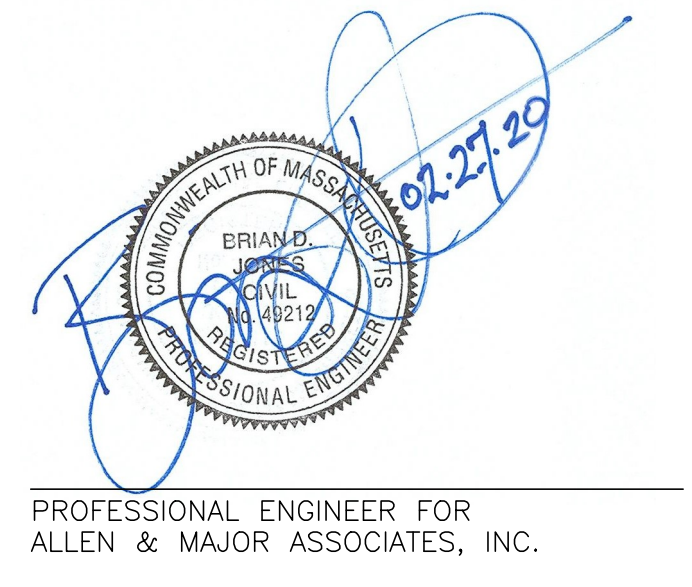
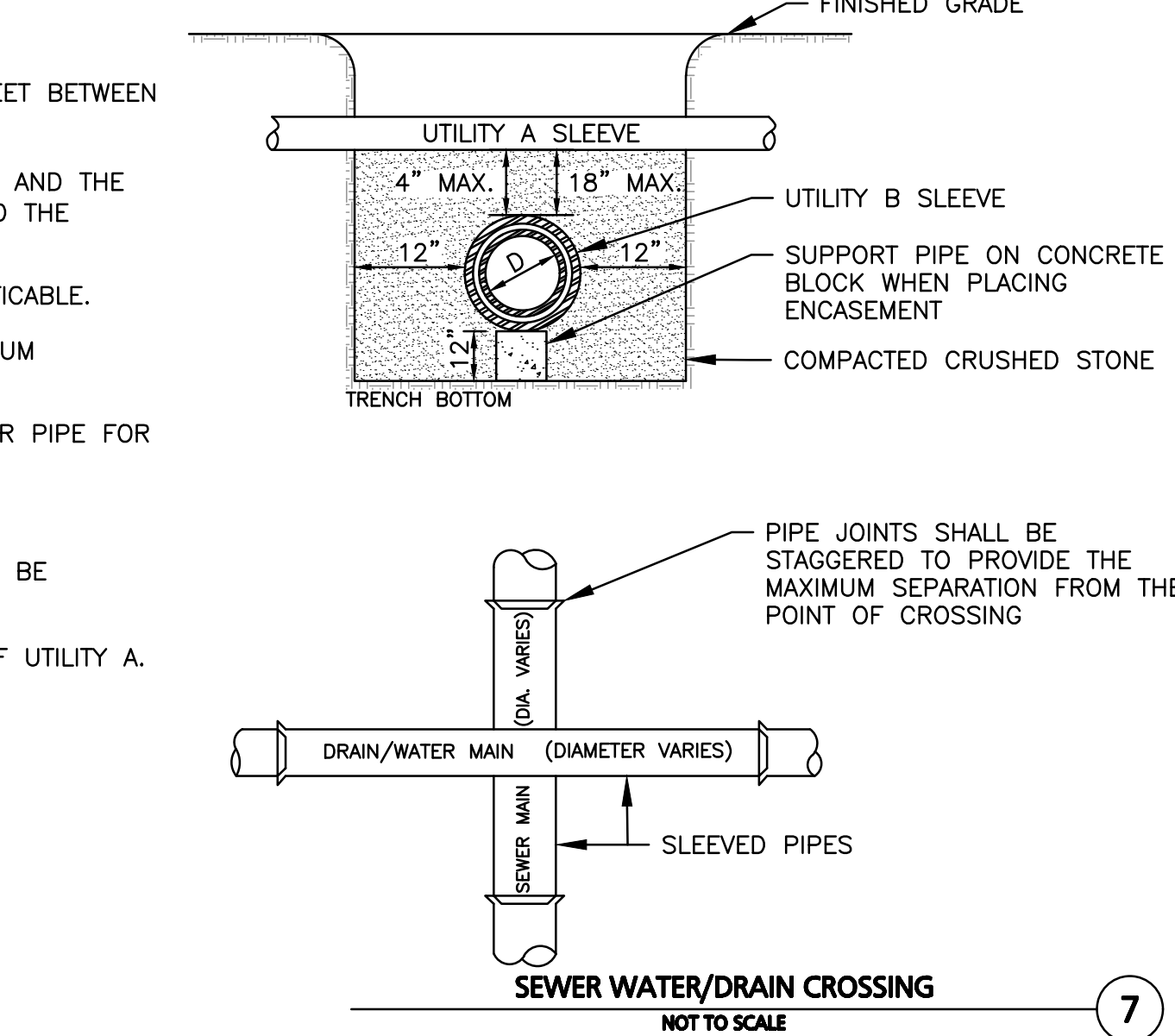
- NOTES:**
- SHEETING, WHEN REQUIRED, TO BE CUT OFF AT LEAST 5' BELOW STREET AND A MINIMUM OF 1' ABOVE TOP OF PIPE. WOOD SHEETING DRIVEN BELOW MID-DIAMETER OF THE PIPE SHALL BE LEFT IN PLACE. STEEL SHEETING DRIVEN BELOW MID-DIAMETER MAY BE WITHDRAWN IF APPROVED IN WRITING BY THE ENGINEER. FOR PVC PIPE ALL SHEETING DRIVEN BELOW MID-DIAMETER SHALL BE LEFT IN PLACE.
 - WHEN APPROVED BY THE ENGINEER FOR PIPES OTHER THAN PVC, SELECTED GRAVEL FILL MATERIAL MAY BE USED FROM MID-DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE. NO STONES LARGER THAN 2" IN ANY DIMENSION WILL BE PERMITTED IN THIS AREA - MASSDOT MATERIAL STANDARD M1.03.0 TYPE C.
 - PROVIDE AT LEAST ONE IMPERVIOUS DAM IN GRAVEL BEDDING BETWEEN EACH MANHOLE WHERE DIRECTED, OR EVERY 300 FT, WHICHEVER IS LESS.
 - BEDDING MATERIAL FOR PVC PIPE SHALL MEET THE REQUIREMENTS OF ASTM D2321 CLASS I OR CLASS II EMBEDMENT MATERIALS.



- NOTES:**
- MINIMUM BURIAL DEPTH (FINISH GRADE TO TOP OF PIPE) GRAVITY PIPE (SEWER & DRAIN) - SEE PLAN OR PROFILE PRESSURE PIPE UNDER PAVING - 4' PRESSURE PIPE BENEATH UNPAVED - 3' WATER PIPE - 5'
 - WHERE BACKFILL IS DESIGNATED AS COMPACTED, THIS MEANS 90 TO 95% STANDARD PROCTOR. AASHTO T-99. ALL FILL PLACED BELOW PIPES AND STRUCTURES MUST MEET THIS REQUIREMENT.
 - TRENCHES WITHIN PUBLIC RIGHT OF WAY MAY REQUIRE FLOWABLE FILL. VERIFY WITH MUNICIPAL ENGINEER.
 - WHERE WASTE FILLS ARE ENCOUNTERED AT SUBGRADE LEVEL FOR NEW UTILITIES, THE FILL SHOULD BE OVER-EXCAVATED, THE SUBGRADE SHOULD BE RE-COMPACTED, AND BACKFILL CONSISTING OF PIPE BEDDING MATERIAL, CRUSHED STONE OR OTHER SUITABLE GRANULAR FILL SHOULD BE PLACED TO A SUFFICIENT DEPTH TO CREATE A FIRM AND STABLE SUBGRADE (TYPICALLY 12 TO 18 INCHES OVER-EXCAVATION).
 - REFER TO PAVING, CURBS, WALKS AND DRIVEWAY DETAILS.
 - REFER TO LANDSCAPING DETAILS.
- | | FILTER FABRIC USE | |
|--------------------|----------------------------|----------------------------|
| | SILT OR CLAY | GRANULAR SOIL |
| ABOVE GROUND WATER | FILTER FABRIC NOT REQUIRED | FILTER FABRIC NOT REQUIRED |
| BELOW GROUND WATER | FILTER FABRIC REQUIRED | FILTER FABRIC NOT REQUIRED |



- NOTES:**
- WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET BETWEEN A SEWER MAIN AND A WATER/RAIN MAIN:
- THE WATER/RAIN MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE DIFFERENCE IN ELEVATION BETWEEN THE WATER/RAIN MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES.
 - THE PIPE CROSSING SHALL OCCUR AS CLOSE TO 90° AS PRACTICABLE.
 - THE PIPE JOINTS SHALL BE STAGGERED TO PROVIDE THE MAXIMUM SEPARATION FROM THE POINT OF CROSSING.
 - THE CROSSING PIPES SHALL BE SLEEVED IN A LARGER DIAMETER PIPE FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING.
 - UTILITIES A AND B CAN BE EITHER NEW OR EXISTING.
 - WHEN ONE UTILITY IS A SANITARY SEWER, IT IS PREFERABLE TO BE POSITIONED AS SHOWN FOR UTILITY B.
 - SLEEVE EXTENDS 10'-0" ON EACH SIDE OF THE CENTERLINE OF UTILITY A.



REV	DATE	DESCRIPTION
1	02-27-2020	REVISED PER CITY COMMENTS

APPLICANT/OWNER:
OAK GROVE MILL, LLC
 ONE MARINA PARK DRIVE
 SUITE 1500
 BOSTON, MA 02210

PROJECT:
 99 WASHINGTON STREET
 MELROSE, MA

PROJECT NO. 2674-01A	DATE: 11-25-19
SCALE: AS SHOWN	DWG. NAME: C2674-01A
DESIGNED BY: SM	CHECKED BY: BDI

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
 civil engineering • land surveying
 environmental consulting • landscape architecture
 www.allenmajor.com
 100 COMMERCE WAY, SUITE 5
 WOBURN MA 01801
 TEL: (781) 935-6889
 FAX: (781) 935-2896

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DRAWING TITLE:	SHEET No.
DETAILS	C-503

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NOTES:

1. ALL WATER MAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE RESTRAINED W/ THRUST BLOCKS EXCEPT WHERE NOTED.
2. ALL THRUST BLOCKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
3. SIZE OF CONCRETE THRUST BLOCKS SHALL BE AS NOTED BELOW.
4. MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 3,000 P.S.I.
5. KEEP CONCRETE CLEAR OF MECHANICAL JOINTS.
6. THE BELOW PREDICATED ON A WATER PRESSURE OF 225 PSI AND A SOIL RESISTANCE OF 2000 PSF (TILL). FOR OTHER SOILS THE VALUES IN THE ABOVE TABLE SHALL BE MULTIPLIED BY:

PLAN **ELEVATION**

PIPE Ø	90° BEND (SQ. FT)	45° BEND (SQ. FT)	22.5° BEND (SQ. FT)	TEES, PLUGS, CAPS & HYD. (SQ. FT)
6"	5	3	3	4
8"	9	6	3	9
10"	13	7	4	12
12"	20	10	5	16

THRUST BLOCK DETAILS
NOT TO SCALE **1**

GATE VALVE
NOT TO SCALE **2**

NOTE:
1. CONTRACTOR MAY USE ANCHOR TEES AT HIS OPTION.
2. HYDRANTS AND VALVES TO OPERATE PER MUNICIPAL STANDARDS

TRANSFORMER PAD
NOT TO SCALE **3**

NOTE:
REFERENCE MECHANICAL ENGINEER'S PLANS FOR ANY PIPE, CONDUIT AND GROUND WIRE LOCATIONS



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

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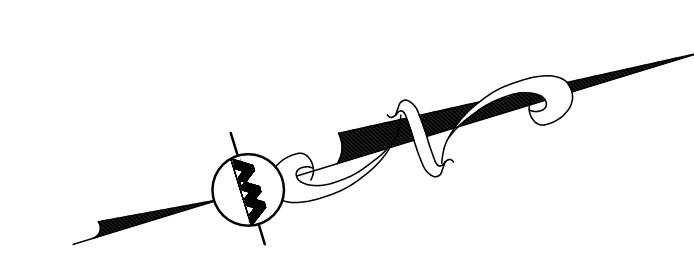
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DRAWING TITLE: DETAILS	SHEET No. C-504
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BRAZIL STREET (PUBLIC - 34' WIDE)
 WASHINGTON STREET (PUBLIC - 45' WIDE)

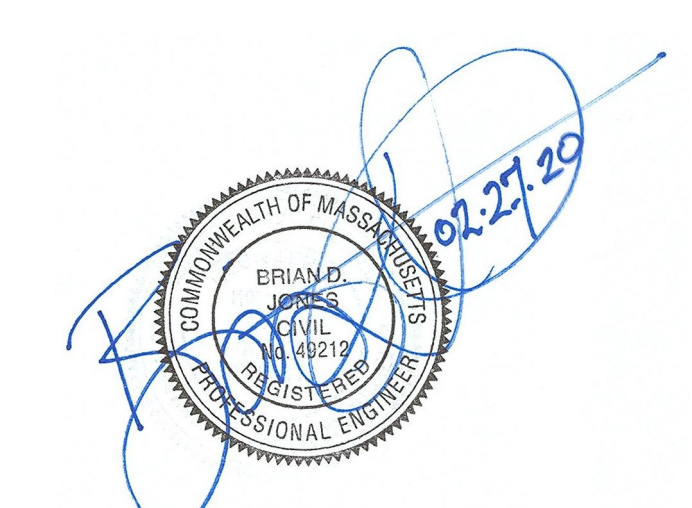


LEGEND:

TYPE 'A' & 'B' POLE LIGHTS	
TYPE 'C' DOUBLE POLE LIGHT	
TYPE 'D' BOLLARD LIGHT	
TYPE 'E' UP LIGHT	
PHOTOMETRICS	0.0 0.2 0.6
LIGHTING CONDUIT	0.1 0.5 10.0

NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. LIGHTS WITHIN THE PARKING AREAS AND ACCESS DRIVES SHALL OPERATE ON A PHOTO-CELL & PROGRAMMABLE TIMER.
3. COURTYARD LIGHTS SHALL OPERATE ON A SEPARATE CIRCUIT FROM THE PARKING AREAS AND ACCESS DRIVES.
4. CONTROLS FOR ALL EXTERIOR LIGHTING BY BUILDING CONTRACTOR.
5. WIRING OF BUILDING MOUNTED FIXTURES (IF ANY) BY BUILDING CONTRACTOR.
6. SEE SITE ELECTRICAL PLAN BY ELECTRICAL ENGINEER FOR LOCATIONS AND SIZING OF LIGHTING CONDUITS AND WIRES.
7. LIGHTING PROVIDED BY illuminate CONTACT INFORMATION: MIKE SMITH, DIRECTOR OF COMMERCIAL SALES, PRINCIPAL O: 781-935-8500 C: 617-413-5917 MikeS@illuminate.com
8. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION, ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.



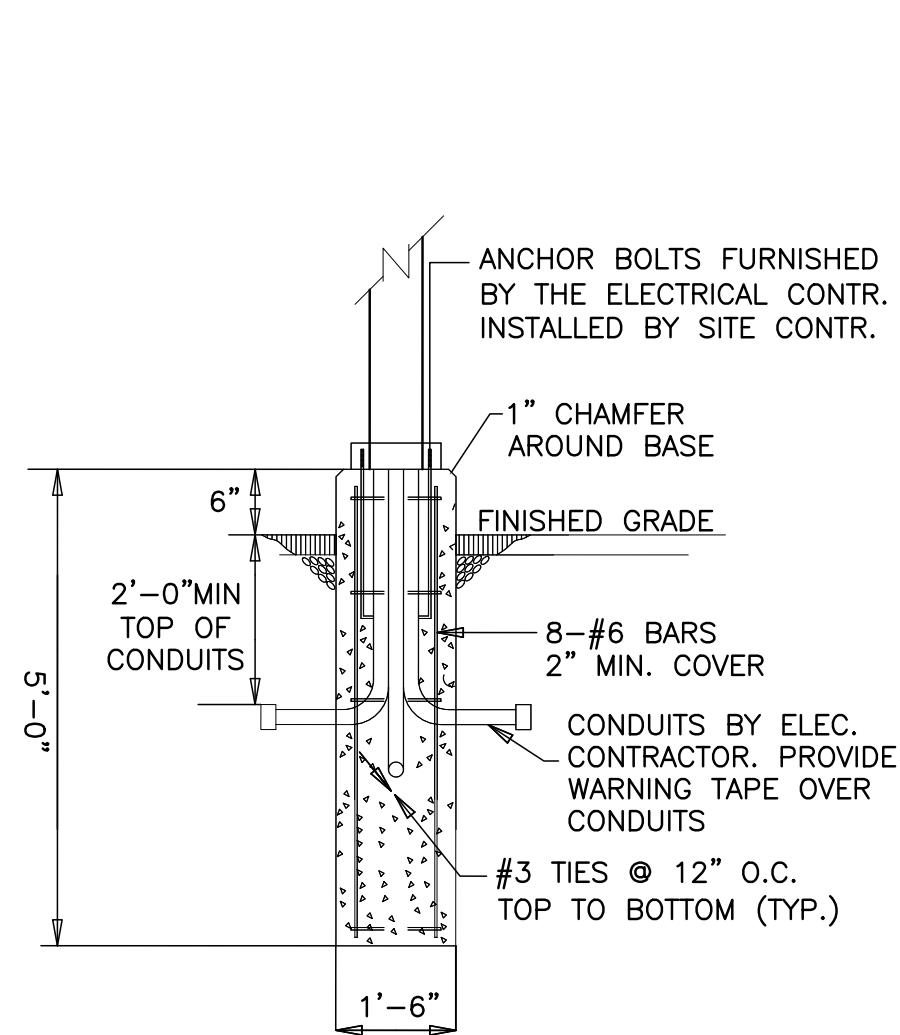
PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

ILLUMINANCE CALCULATION SUMMARY

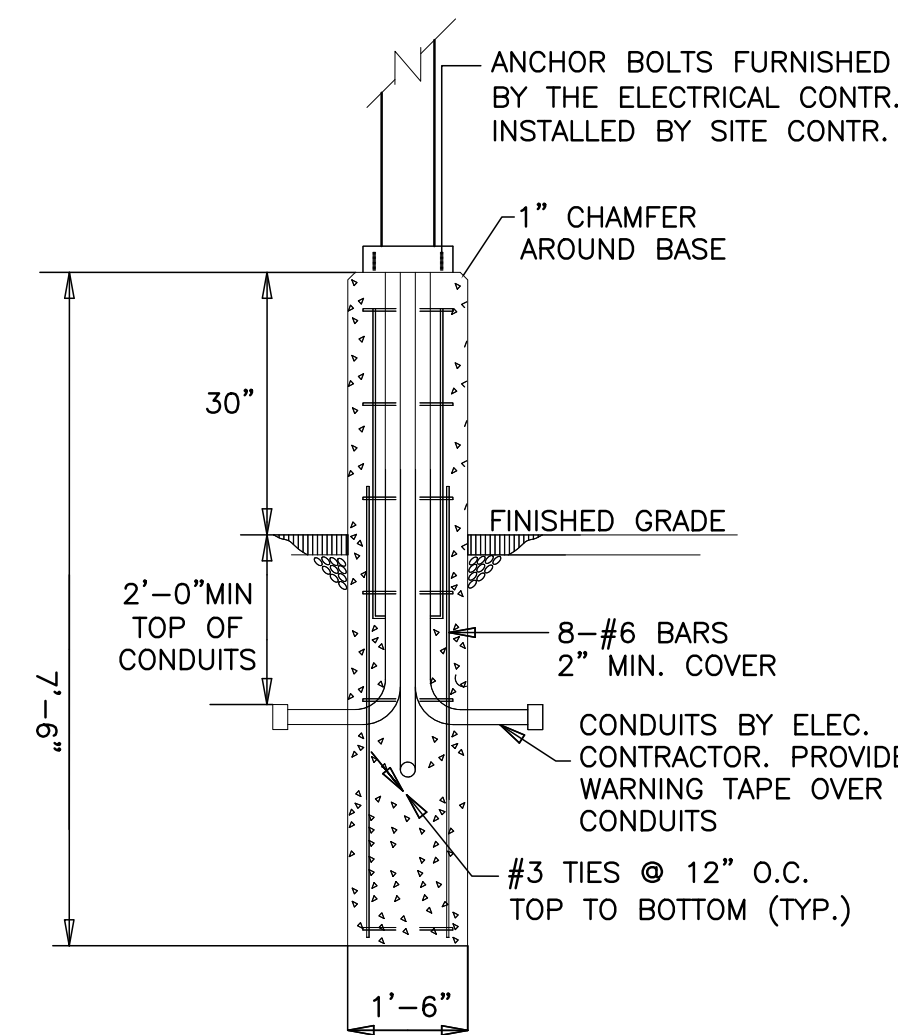
OVERALL SITE	Units	Avg
PARKING AREA	Fc	0.7
	Fc	1.9

LUMINAIRE SCHEDULE

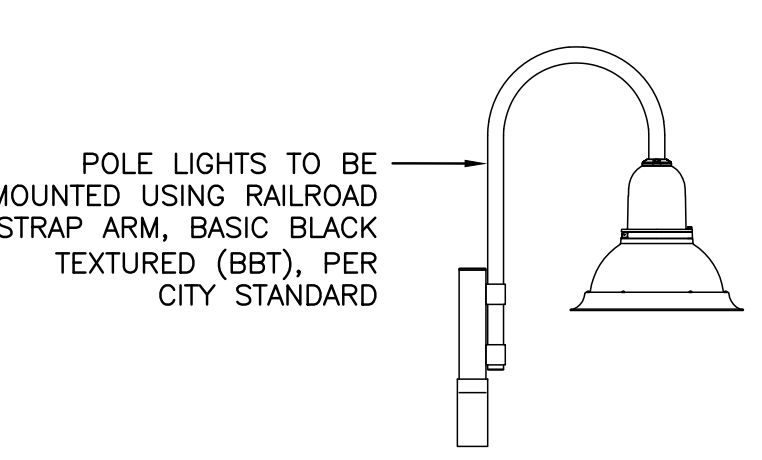
SYMBOL	QTY	LABEL	ARRANGEMENT	HEIGHT	LUMENS	WATTS	DESCRIPTION
	15	A	SINGLE/POLE	15'	8415	80W	BEACON: URB CAP-26 36NB-80 4K UNV T2 BBT
	8	A(E)	SINGLE/POLE	15'	8415	80W	BEACON: URB CAP-26 36NB-80 4K UNV T2 BBT
	15	B	SINGLE/POLE	15'	9040	80W	BEACON: URB CAP-26 36NB-80 4K UNV T5W BBT
	3	C	DOUBLE/POLE	15'	9040	80W	BEACON: URB CAP-26 36NB-80 4K UNV T5W BBT
	16	D	BOLLARD	42"	703	33W	BEACON: BRP42-AF-12NB-36-4K-UNV-IND5-AB-BBT



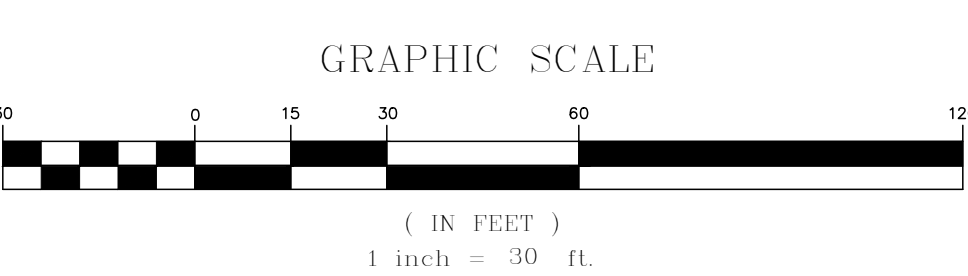
SITE LIGHTING TYPE "A" & "B" CONCRETE BASE
NOT TO SCALE



SITE LIGHTING TYPE "C" CONCRETE BASE
NOT TO SCALE



TYPICAL LIGHT POLE ARM
NOT TO SCALE



DIG SAFE
BEFORE YOU DIG CALL 811 OR 1-888-DIG-SAFE 1-888-344-7233

1	02-27-2020	REVISED PER CITY COMMENTS
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APPLICANT/OWNER:
OAK GROVE MILL, LLC
 ONE MARINA PARK DRIVE
 SUITE 1500
 BOSTON, MA 02210

PROJECT:
99 WASHINGTON STREET
 MELROSE, MA

PROJECT NO.	2674-01A	DATE:	11-25-19
SCALE:	1" = 30'	DWG. NAME:	C2674-01A
DESIGNED BY:	SM	CHECKED BY:	BDJ

PREPARED BY:

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 civil engineering • land surveying
 environmental consulting • landscape architecture
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DRAWING TITLE:	SHEET No.
SITE LIGHTING PLAN	E-101

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