

# 120 ROOM EXTENDED STAY HOTEL 1 McGRATH HIGHWAY 263 MSGR. O'BRIEN HIGHWAY

SOMERVILLE, MA

MAP 115, BLOCK B, LOT 8

CAMBRIDGE, MA MAP 7, LOT 35

1 inch = 30 ft.

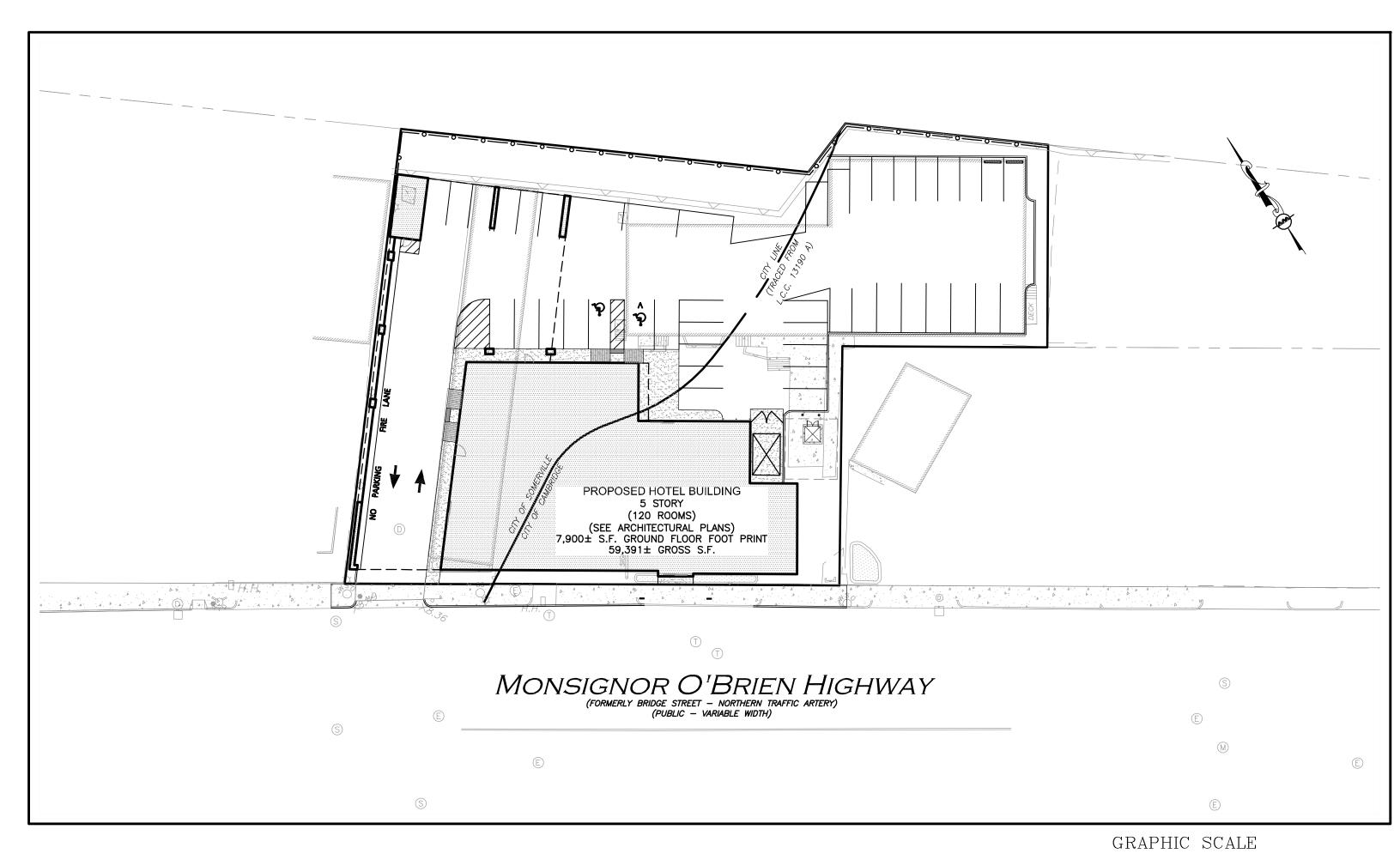
**LOCUS MAP NOT TO SCALE** 

OWNER: SOMERBRIDGE HOTEL LLC C/O JAL HOSPITALITY DESIGN, LLC 227 MARGINAL STREET CHELSEA MA 02150

SITE ENGINEER/LANDSCAPE ARCHITECT: ALLEN & MAJOR ASSOCIATES, INC. 400 HARVEY ROAD MANCHESTER, NH 03103

**SURVEYOR:** ALLEN & MAJOR ASSOCIATES, INC. 100 COMMERCE WAY WOBURN, MA 01888-0118

ARCHITECT: JAL HOSPITALITY DESIGN, LLC 227 MARGINAL STREET CHELSEA MA 02150



SITE DEVELOPMENT PLANS FOR

DEMOLITION PLAN	C-1	08-22-16
LAYOUT & MATERIALS PLAN	C-2	08-22-16
GRADING & DRAINAGE PLAN	C-3	08-22-16
UTILITY PLAN	C-4	08-22-16
LANDSCAPING PLAN	C-5	08-22-16
LANDSCAPING DETAILS	C-6	08-22-16
STORMWATER POLLUTION PREVENTION PLAN	SWPPP 1	08-22-16
STORMWATER POLLUTION PREVENTION PLAN	SWPPP 2	08-22-16
STORMWATER POLLUTION PREVENTION PLAN	SWPPP 3	08-22-16
DETAILS	D-1	08-22-16
DETAILS	D 2	08-22-16
DETAILS	D 3	08-22-16
DETAILS	D 4	08-22-16
DETAILS	D 5	08-22-16
DETAILS	D 6	08-22-16
PRE DEVELOPMENT WATERSHED PLAN	WS1	08-22-16
POST DEVELOPMENT WATERSHED PLAN	WS2	08-22-16

LIST OF DRAWINGS

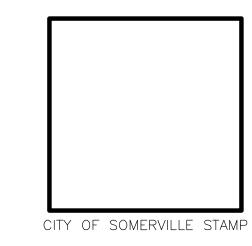
SHEET NO.

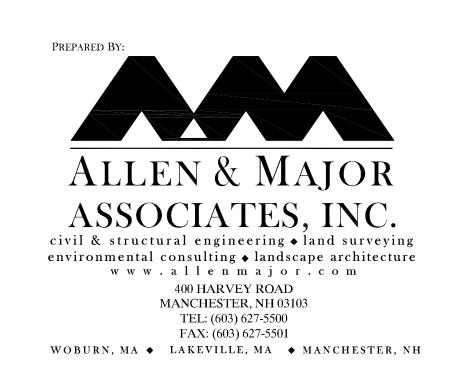
**ISSUED** 

03-09-16

DRAWING TITLE

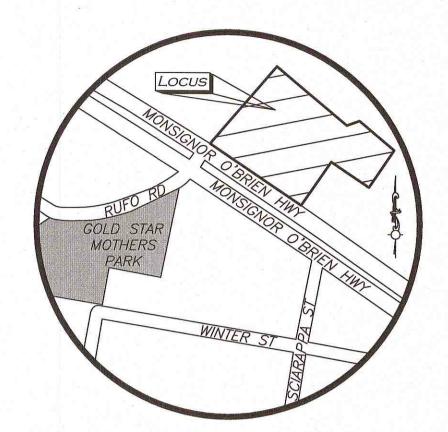
**EXISTING CONDITIONS** 







ISSUED FOR SUBMISSION: AUGUST 22, 2016



LOCUS MAP (NOT TO SCALE)

ZONING TABLE CITY OF CAMBRIDGE - SPECIAL DISTRICT 1*			
<u>ITEM</u>	<u>REQUIRED</u>		
LOT WIDTH (MIN)	50'		
FRONT YARD SETBACK (MIN)	3'		
SIDE YARD SETBACK (MIN)	NONE		
REAR YARD SETBACK (MIN)	NONE		
BUILDING HEIGHT (MAX) 85'			

N55°50'31"W

MAJOR ASSOCIATES, INC.

\*ALL REQUIREMENTS OF AND REGULATIONS APPLICABLE TO THE INDUSTRY A-1 DISTRICT SHALL APPLY EQUALLY TO THE SPECIAL DISTRICT 1.

#### ZONING TABLE CITY OF SOMERVILLE - IA DISTRICT REQUIRED FRONTAGE (MIN) N/A FRONT YARD SETBACK (MIN) N/A SIDE YARD SETBACK (MIN) N/A REAR YARD SETBACK (MIN) N/A BUILDING HEIGHT (MAX) 50'

#### LEGAL DESCRIPTION EXHIBIT "A" FROM COMMONWEALTH LAND TITLE INSURANCE COMPANY'S TITLE COMMITMENT NUMBER SPECIMEN 59869-O, HAVING AN EFFECTIVE DATE OF MAY 22, 2015 THE LAND AT 263 MONSIGNOR O'BRIEN HIGHWAY, CAMBRIDGE AND 1 MCGRATH HIGHWAY, SOMERVILLE, MIDDLESEX COUNTY, MASSACHUSETTS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: PARCEL ONE: LAND IN CAMBRIDGE AND SOMERVILLE THE LAND AS SHOWN ON BRIDGE STREET (NOW MONSIGNOR O'BRIEN HIGHWAY), CAMBRIDGE AND SOMERVILLE, MIDDLESEX COUNTY, MASSACHUSETTS. MORE PARTICULARLY SHOWN AS LOT A AS CONTAINING 27.060 SQUARE FEET ON A "PLAN OF LAND IN CAMBRIDGE AND SOMERVILLE" DATED DECEMBER 14, 1953 BY WM. S. CROCKER, C.E, RECORDED WITH MIDDLESEX SOUTH DISTRICT DEEDS AS PLAN NO. 124 OF 1954 IN BOOK 8207, PAGE 269. PARCEL TWO: LAND IN CAMBRIDGE THE LAND OFF MONSIGNOR O'BRIEN HIGHWAY, CAMBRIDGE, MIDDLESEX COUNTY, MASSACHUSETTS, MORE PARTICULARLY SHOWN AS PARCEL CONTAINING 5739 SQUARE FEET ON A "PLAN OF LAND IN CAMBRIDGE - MASS." DATED FEBRUARY 3, 1956 BY WILLIAM S. CROCKER, CIVIL ENGINEER, RECORDED WITH MIDDLESEX SOUTH DISTRICT DEEDS AS PLAN NO. 475 OF 1956 IN BOOK 8697, PAGE 363. THE PARCEL REFERENCED ABOVE CAN ALSO BE DESCRIBED AS THE PARCEL OF LAND SITUATED ON THE EASTERLY SIDE OF MONSIGNOR O'BRIEN HIGHWAY IN THE CITIES OF CAMBRIDGE AND SOMERVILLE, COUNTY OF MIDDLESEX, COMMONWEALTH OF MASSACHUSETTS, BOUNDED AND DESCRIBED AS FOLLOWS: BEGINNING AT THE WESTERLY MOST POINT OF THE PARCEL TO BE DESCRIBED HEREAFTER, SAID POINT BEING SHOWN AS "P.O.B." ON THE HEREINAFTER REFERENCED PLAN: THENCE N41°03'37"E ONE HUNDRED SIXTY-SIX AND SEVENTY-SEVEN HUNDREDTHS FEET (166.77') TO A POINT; THENCE S49°58'47"E ONE HUNDRED FORTY-NINE AND EIGHT HUNDREDTHS FEET (149.08') TO A POINT; THENCE TWENTY-TWO AND TWENTY-SIX HUNDREDTHS FEET (22.26') TO A POINT; THENCE N71°24'56"E SEVENTY-FOUR AND EIGHTEEN HUNDREDTHS FEET (74.18') TO A POINT; THENCE S49°58'47"E S34°16'35"W SEVENTY-THREE AND SIXTY-SIX HUNDREDTHS FEET (73.66') TO A POINT; THENCE N55°43'52"W SEVENTY-FOUR AND FIFTY-TWO HUNDREDTHS FEET (74.52') TO A POINT; THENCE 534°46'47"W EIGHTY-SEVEN AND ONE HUNDREDTHS FEET (87.01') TO A POINT; THENCE N55°43'52"W ONE HUNDRED TWENTY—SIX AND ONE HUNDREDTHS FEET (126.01') TO A POINT;THENCE TWENTY HUNDREDTHS FEET (0.20') TO A POINT; THENCE S30°20'10"W

FIFTY-FOUR AND NO HUNDREDTHS FEET (54.00') TO THE POINT OF BEGINNING.

SHOWN ON A PLAN ENTITLED, "ALTA/ACSM LAND TITLE SURVEY - 263 MONSIGNOR O'BRIEN HIGHWAY, CAMBRIDGE, MA, 1 MCGRATH

THE ABOVE DESCRIBED PARCEL CONTAINS AN AREA OF 32,806 SQUARE FEET (0.75 ACRES), MORE OR LESS, AND IS MORE PARTICULARLY

HIGHWAY, SOMERVILLE, MA", DATED AUGUST 31, 2015. SCALE 1" = 20'. PREPARED FOR JAL HOSPITALITY LLC. PREPARED BY ALLEN &

MASSACHUSETTS BAY N/F TRANSPORTATION AUTHORITY MASSACHUSETTS BAY S49°58'47"E-TRANSPORTATION AUTHORITY S49°58'47"E--POSSIBLE AREA OF 22.26 **ENCROACHMENT** AREA UNDER CONSTRUCTION GRAN. RETAINING WALL \_\_FFE=9.76 EASTMAN BROOK LLC BH=10.7'±-L.C. BK.1377/PG.128 FFE=10.20-74.0' 1 STORY *—BH=24.5'±* BRICK BUILDING 2 STORY BRICK & CONCRETE BUILDING FPA=7,596± S.F. MW FFE=13.06 FFE=12.89 -POSSIBLE EDGE OF FFE=13.06 PAVEMENT ENCROACHMENT STORY (145.3)× **BRICK** BUILDING 74.52' N55'43'52"W FPA= LABEN REALTY LLC 3,116± S.F. BK.50626/PG.97 POSSIBLE FENCE 22.7' **ENCROACHMENT** N41°03'37" PARCEL 1 S34°46'47"W 166.77 POSSIBLE EDGE OF STORY PAVEMENT ENCROACHMENT CONCRETE BUILDING CITY OF SOMERVILLE ASSESSORS MAP 115, BLOCK B, LOT CITY OF CAMBRIDGE POSSIBLE EDGE OF AREA=17,316± S.F. ASSESSORS MAP 7. LOT 35 PAVEMENT ENCROACHMENT (0.40± Ac.) AREA=15,490± S.F.  $(0.35 \pm Ac.)$ PECTEN PROPERTIES, LLC BK.54357/PG.456 FFE=9.13 GRASS -- DMH PAVED CONC. RETAINING WALL -OVER, UNABLE /RIM=9.17 /RIM=7.01 INV=3.27(SUMP) CONC. RETAINING WALL | INV(a) = 5.4168'-N55°43'52"W GRAN. CURB GRAN. CURB S30°20'10"W DASHED WHITE PAINT LINE RIM=8.86 INV(a) = 3.86INV=2.36(BC)WHITE PAINT LINE RIM=8.58 INV=2.68(SUMP) SMH /RIM=9.54 WHITE PAINT LINE (FORMERLY BRIDGE STREET — NORTHERN TRAFFIC ARTERY, (PUBLIC - VARIABLE WIDTH) INV=0.09(BC)YELLOW PAINT LINE

### 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 SUMMAR	<u>?Y</u>
STANDARD STALLS	7
HANDICAPPED STALLS	0
TOTAL STALLS	7

GRAN. CURB

COMMONWEALTH LAND TITLE INSURANCE COMPANY ALTA COMMITMENT NUMBER: SPECIMEN 59869-0 EFFECTIVE DATE: DECEMBER MAY 22, 2015 SCHEDULE B - SECTION 2 EXCEPTIONS ITEM NUMBER REFERENCE **DESCRIPTION** NOT SURVEY RELATED 1 - 4BK.25982/PG.479 ACTIVITY AND USE (5) LIMITATION AREA BK.26221/PG.445

GRAN. CURB

LOCUS REFERENCES

-CITY OF CAMBRIDGE ASSESSORS MAP 7, LOT 35 -CITY OF SOMERVILLE ASSESSORS MAP 115, BLOCK B LOT 8 -DEED BOOK 20124, PAGE 348

-PLAN 124 OF 1954 -PLAN 475 OF 1956

#### PLAN REFERENCES

-L.C.C. 13190

-STATE HIGHWAY LAYOUT# 6643 -STATE HIGHWAY LAYOUT# 3614 -STATE HIGHWAY LAYOUT# 3615 -PLAN 1915 OF 1954 -PLAN 149 OF 2002

1. NORTH ARROW IS BASED ON MASSACHUSETTS STATE PLANE

COORDINATE SYSTEM (MAINLAND ZONE) (NAD '83). 2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM

MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA. 3. VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM

OF 1988 (NAVD '88). 4. CONTOUR INTERVAL IS ONE FOOT (1') **LEGEND** 

DRAIN MANHOLE (DMH)

FOR REGISTRY USE ONLY

S SEWER MANHOLE (SMH) (E) ELECTRIC MANHOLE (EMH) MISC. MANHOLE (MH) T TELEPHONE MANHOLE (TMH) CATCH BASIN (CB) ROUND CATCH BASIN (RCB) WATER GATE GAS GATE BOLLARD LIGHT TEST PIT LOCATION SIGN 00 (MW) MONITOR WELL HANDICAP RAMP  $\square H.H.$ HAND HOLE VACUUM ELECTRIC BOX GAS METER ELECTRIC METER TRAFFIC SIGNAL PARKING SPACE COUNT CONCRETE A A . . . LANDSCAPED AREA (LSA) BUILDING 1' CONTOUR 5' CONTOUR -- 10 -- -PROPERTY LINE ABUTTERS LINE TOWN LINE INDUSTRIBUTION CONTROL CONTROL CONCRETE RETAINING WALL EDGE OF PAVEMENT \_ \_\_ \_\_ **CURB** CHAIN LINK FENCE SEWER LINE DRAIN LINE GAS LINE ELECTRIC LINE TELEPHONE LINE FOOTPRINT AREA FPA FFE FINISHED FLOOR ELEVATION BUILDING HEIGHT BHBIT. BITUMINOUS CONC. CONCRETE GRAN. **GRANITE** (BC) BOTTOM CENTER NO PIPES VISIBLE N.P.V. PVC POLYVINYL CHLORIDE PIPE FND **FOUND** POINT OF BEGINNING P.O.B. NOW OR FORMERLY N/F BK. BOOK PAGE PG. PB. PLAN BOOK PLAN PL.CERTIFICATE OF TITLE COT L.C. LAND COURT

LAND COURT CASE

GRAPHIC SCALE

( IN FEET )

1 inch = 20 ft.

L.C.C.

N:\PROJECTS\1362-16\SURVEY\DRAWINGS\S-1362-16-ALTA.DWG FB# 1708 PG. 7

TO: SOMERBRIDGE HOTEL LLC, JAL HOSPITALITY LLC, COMMONWEALTH LAND TITLE INSURANCE COMPANY AND NO OTHERS.

THIS IS TO CERTIFY THAT: THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN JULY 9, 2015 AND JULY 28, 2015. THIS PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS. JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS AND INCLUDES ITEMS 2, 3, 4, 5, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 11(b) AND 13 OF

TABLE A THEREOF. THE SUBJECT PREMISES IS LOCATED IN ZONE X(UNSHADED) "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AS SHOWN ON FLOOD INSURANCE

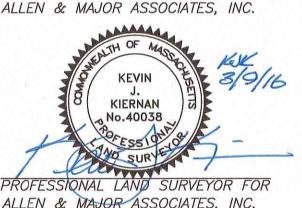
RATE MAP FOR THE CITY OF CAMBRIDGE & SOMERVILLE MASSACHUSETTS, MIDDLESEX COUNT COMMUNITY PANEL NUMBER 25017C0577E HAVING AN EFFECTIVE DATE OF JUNE 4, 2010. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.

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

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 CAMBRIDGE AND SOMERVILLE ASSESSOR'S INFORMATION. THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND

BELIEF TO THE ABOVE NAMED PARTIES AND NO

OTHERS.



REV DATE DESCRIPTION

JAL HOSPITALITY LLC P.O. BOX 4430 MANCHESTER, NH 03108

APPLICANT\OWNER:

**263 MONSIGNOR** O'BRIEN HIGHWAY CAMBRIDGE, MA 1 MCGRATH HIGHWAY SOMERVILLE, MA

PROJECT NO. 1362-16 DATE:

3/9/16

SCALE: 1" = 20' DWG. NAME: S-1362-16-ALTA DRAFTED BY: KAC CHECKED BY: COB/KJK



ALLEN & MAJOR ASSOCIATES.

ivil & structural engineering + land surveying nvironmental consulting + landscape architecture www.allenmajor.com

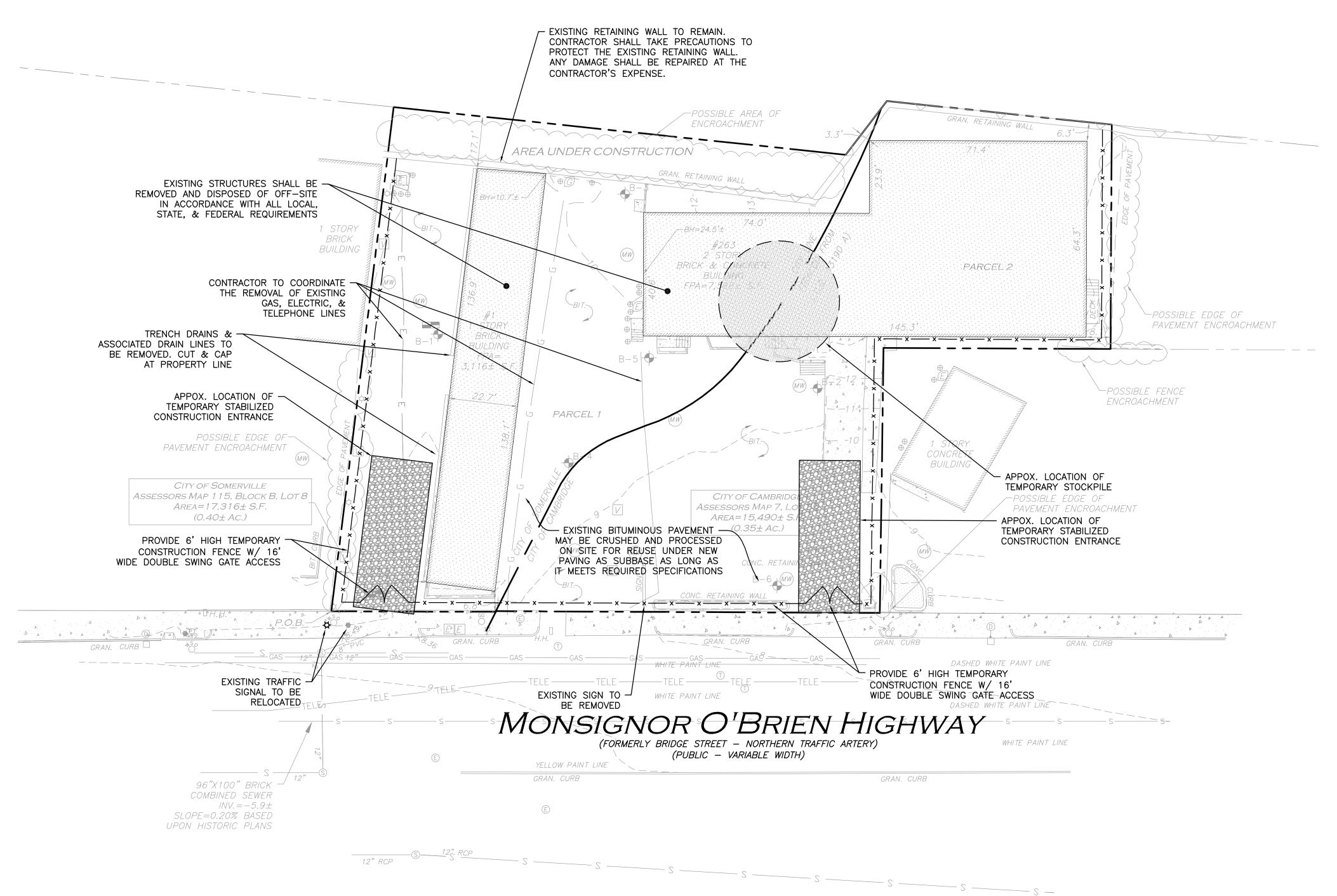
100 COMMERCE WAY P.O. BOX 2118 WOBURN MA 01888-0118 TEL: (781) 935-6889 FAX: (781) 935-2896

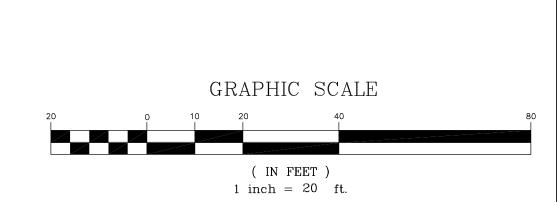
WOBURN, MA . LAKEVILLE, MA . MANCHESTER, NH THIS DRAWING HAS BEEN PREPARED IN ELECTRONIC FORMAT CLIENT/CLIENT'S REPRESENTATIVE OR CONSULTANT MAY BE

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## **DEMO 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 IT'S 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 DELINEATED 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 4. CLEAR GRUB AND REMOVE ALL EXISTING VEGETATION ON SITE, EXCEPT AS NOTED ON PLAN. 5. REFER TO STORMWATER POLLUTION PREVENTION PLANS FOR ADDITIONAL DETAIL REGARDING EROSION CONTROL MEASURES. 6. WITHIN THE LIMITS OF WORK, ALL TOPSOIL IS TO BE STOCKPILED AND RE-USED WITHIN THE PROPOSED LANDSCAPE AREAS. 7. REFER TO THE LANDSCAPE DRAWINGS AND SPECIFICATIONS REGARDING THE TREATMENT OF 8. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S 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.





 $R:\PROJECTS\1362-16\CIVIL\DRAWINGS\CURRENT\1362-16\_DEMO.DWG$ 

PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC. REV DATE DESCRIPTION SOMERBRIDGE HOTEL LLC c/o JAL HOSPITALITY DESIGN, LLC 227 MARGINAL STREET CHELSEA MA 021500 120 ROOM EXTENDED STAY HOTEL **263 MONSIGNOR O'BRIEN HIGHWAY** CAMBRIDGE, MA 1 McGrath Highway SOMERVILLE, MA 1362-16 DATE: 08-22-16 PROJECT NO. 1362-16\_Demo 1" = 20' DWG.: **DESIGNED BY:** SM | CHECKED BY: ALLEN & MAJOR ASSOCIATES, INC. civil & structural engineering • land surveying environmental consulting • landscape architecture www.allenmajor.com 400 HARVEY ROAD MANCHESTER, NH 03103

PROJECT:

TEL: (603) 627-5500 FAX: (603) 627-5501

WOBURN, MA ♦ LAKEVILLE, MA ♦ MANCHESTER, NH

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SHEET No. DRAWING TITLE:

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CITY OF SOMERVILLE (IA) INDUSTRIAL A DISTRICT			
ITEM	EXISTING	REQUIRED/ ALLOWED	PROPOSED
LOT AREA (MIN)	17,316 SF	N/A	17,316 SF
FLOOR AREA RATIO (MAX)	3.3	2.0	1.9
BUILDING HEIGHT (MAX)	15'±	50'	64'*
FRONT YARD SETBACK (MIN)	6.8'	N/A	5.2'
SIDE YARD SETBACK (MIN)	29.8'	N/A	0.7'
REAR YARD SETBACK (MIN)	17.1'	N/A	16.5'
FRONTAGE (MIN)	54'	N/A	54'
LOADING ZONES (MIN)	N/A	2	0*
GROUND COVERAGE (MAX)	29.9%	80%	56.4%
LANDSCAPED AREA (MIN)	12.5%	10%	12.9%

#### \* VARIANCE REQUIRED

HOTEL USE

- 1. FLOOR AREA RATIO (FAR) BASED UPON THE ASSUMPTION OF 32,978 G.S.F. OF BUILDING WITHIN THE SOMERVILLE CITY LIMITS. (AN ADDITIONAL 3,192 G.S.F. NOT USED IN FAR CALCULATION PER
- ZONING ORDINANCE ITEM 2.2.58) 2. REQUIRED LOADING ZONE DIMENSIONS: 30 FEET LONG X 12 WIDE X 14 FEET HIGH.

SPECIAL PERMIT REQUIRED FOR:

### OFF STREET PARKING SUMMARY - SOMERVILLE

USE:	HOTEL, MOTEL (ORDINANCE SECTION 9.5)	
	0.8 SPACE FOR GUESTROOM (74 GUESTROOMS)	= 60
	AND 0.5 SPACE FOR EACH EMPLOYEES ON PEAK SHIFT (10 EMP)	= 5
PLUS '	1/4 THE NORMAL REQUIREMENT FOR ANY OTHER USE IN THE HOTEL (N/A)	= 0
SITE TO	DTAL OFF—STREET PARKING REQUIRED	= 65 SPACES

ADA REQUIRED: 2 TOTAL PARKING STALLS SHALL BE ACCESSIBLE

ADA PROVIDED: 2 TOTAL ACCESSIBLE PARKING STALLS ARE PROVIDED

(MINIMUM OF 1 ACCESSIBLE STALL BE VAN ACCESSIBLE)

(1 IS VAN ACCESSIBLE)

COMPACT SPACES (ORDINANCE SECTION 9.11.C) COMPACT SPACES MAY NOT ACCOUNT FOR MORE THAN 20% OF REQUIRED SPACES 11 PROVIDED / 65 REQUIRED = 16.9% COMPACT SPACES

•				
	STANDARD (9'x18')	ADA ACCESSIBLE	COMPACT (8'x16')	TOTAL PROVIDED
	8	2	11	21*

## \*VARIANCE REQUIRED

ONSITE PARKING

. PARKING CALCULATIONS BASED UPON 120 GUESTROOMS, 74 OF WHICH LIE WITHIN SOMERVILLE CITY LIMITS, WITH A MAXIMUM OF 10 EMPLOYEES ON THE LARGEST SHIFT.

BUTT PROPOSED BUILDING WALL TO -

EXISTING RETAINING WALL. MATCH

BITUMINOUS PAVEMENT, TYP. -

LABEN REALTY LLC

BK.50626/PG.97

FLUSH ADA ACCESS WITH -DETECTABLE WARNING

WITH INTEGRAL CURB

PROPOSED LANDSCAPED AREA -

PROPOSED CONCRETE WALK

CITY OF SOMERVILLE

ASSESSORS MAP 115, BLOCK B, LOT 8 AREA=17,316± S.F.

 $(0.40 \pm Ac.)$ 

GRAN. CURB □

PROPOSED CONCRETE WALK
WITH INTEGRAL CURB

EXISTING TOP OF WALL ELEVATION.



, ,			
ITEM	EXISTING	REQUIRED/ ALLOWED	PROPOSED
LOT AREA (MIN.)	15,490 S.F.	N/A	15,490 S.F.
FLOOR AREA RATIO (MAX)	2.8	1.5	1.5
BUILDING HEIGHT (MAX)	>85'	85'	64'
FRONT YARD SETBACK (MIN)	91'±	3'	3'
SIDE YARD SETBACK (MIN)	3.3'	N/A	15.4'
REAR YARD SETBACK (MIN)	6.3'	N/A	113.8'
FRONTAGE (MIN)	126'	N/A	126'
LOADING ZONES (MIN)	1	1	0*
PARKING SETBACK (MIN)	0	5'	5'

#### \* VARIANCE REQUIRED

- 1. FLOOR AREA RATIO BASED UPON THE ASSUMPTION OF 23,221 G.S.F. OF BUILDING
- WITHIN THE CAMBRIDGE CITY LIMITS 2. REQUIRED LOADING ZONE DIMENSIONS: 30 FEET LONG X 10 WIDE X 14 FEET HIGH.
- SPECIAL PERMIT REQUIRED FOR:

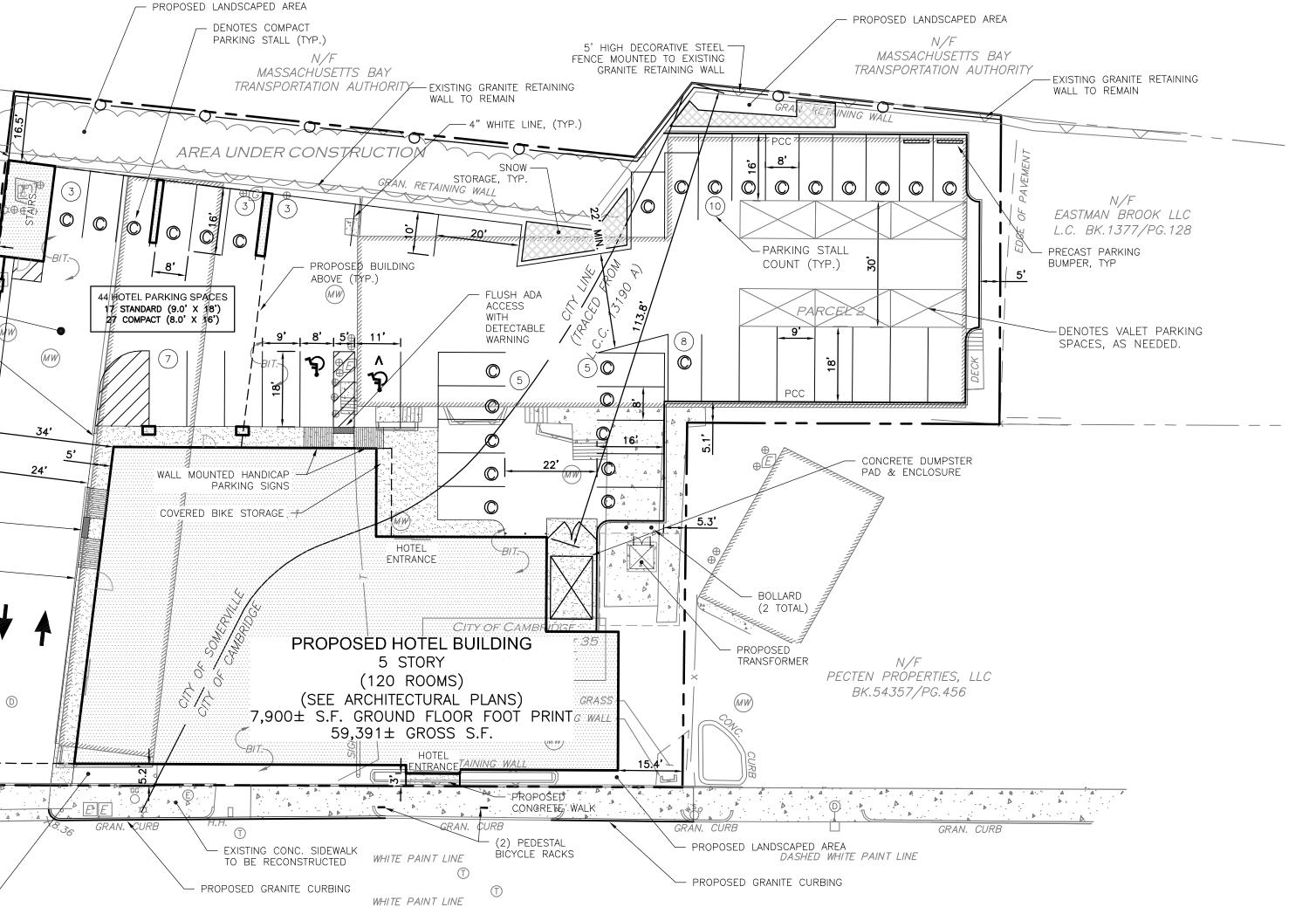
HOTEL USE

## OFF STREET PARKING SUMMARY - CAMBRIDGE

USE: HOTEL (ORDINANCE SECTION 6.36.1.1.2) 1 SPACE PER 2 SLEEPING ROOMS (46 SLEEPING ROOMS) = 23						
SITE TOTAL OFF-STREET PARKING	SITE TOTAL OFF-STREET PARKING REQUIRED = 23 SPAGE					
· ·	ADA REQUIRED: 1 TOTAL PARKING STALL SHALL BE ACCESSIBLE  (MINIMUM OF 1 ACCESSIBLE STALL BE VAN ACCESSIBLE)					
	ADA PROVIDED: O TOTAL ACCESSIBLE PARKING STALLS ARE PROVIDED  (ACCESSIBLE PARKING STALLS ARE PROVIDED ON SOMERVILLE SIDE OF PROJECT)					
COMPACT SPACES (ORDINANCE SECTION 6.34)  COMPACT SPACES MAY NOT ACCOUNT FOR MORE THAN 50% OF REQUIRED SPACES  16 PROVIDED / 23 REQUIRED = 69.6% COMPACT SPACES*						
	STANDARD (9'x18')	ADA ACCESSIBLE	COMPACT (8'x16')	TOTAL PROVIDED		
ONSITE PARKING	7	0*	16	23		

#### \*VARIANCE REQUIRED

. PARKING CALCULATIONS BASED UPON 120 GUESTROOMS, 46 OF WHICH LIE WITHIN CAMBRIDGE CITY LIMITS.



MONSIGNOR O'BRIEN HIGHWAY

(FORMERLY BRIDGE STREET - NORTHERN TRAFFIC ARTERY)

(PUBLIC - VARIABLE WIDTH)

YELLOW PAINT LINE

GRAN. CURB

DASHED WHITE PAINT LINE

GRAN. CURB

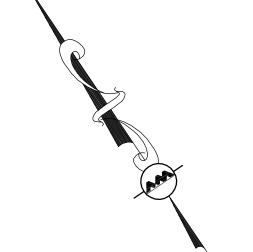
WHITE PAINT LINE

#### PLAN NOTES:

- MAJOR ASSOCIATES AS WELL AS AVAILABLE RECORD PLANS OBTAINED FROM THE CITY ENGINEERING DEPARTMENT AND OTHER SOURCES.
- 2. 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
- 3. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR SHALL ALSO CONTACT THE CITY DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF LOCAL UTILITIES.

#### LAYOUT NOTES:

- 1. CURB RADII SHALL BE AS SHOWN ON THE PLAN, THOUGH TYPICALLY 10-FT. AT CORNERS AND 2-FT. ADJACENT TO PARKING STALLS.
- 2. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 3. 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. ALL SITE ITEMS SHALL BE LAID OUT AND AS BUILT BY A LICENSED LAND SURVEYOR.

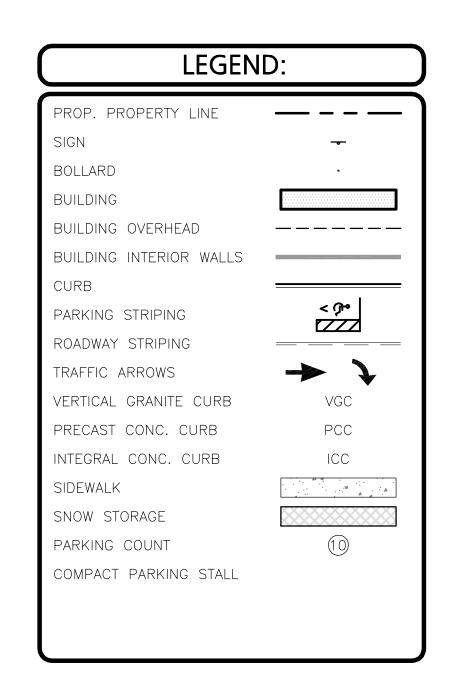


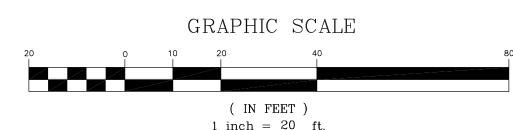
## **GENERAL NOTES:**

- 1. EXISTING CONDITIONS WERE COMPILED FROM AN ON THE GROUND SURVEY PERFORMED BY ALLEN & 1. THIS PROJECT WILL BE SERVED BY PUBLIC SEWER, WATER, NATURAL GAS, TELEPHONE, CABLE AND ELECTRIC. ALL UTILITY LINES WILL BE INSTALLED UNDERGROUND.
  - 2. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTIES DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AND RESTORED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
  - 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
  - 4. ALL PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AND RESTORED BY A SURVEYOR REGISTERED IN THE STATE OF MASSACHUSETTS AT THE CONTRACTORS EXPENSE.
  - 5. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION MEETING WITH THE CITY, THE APPROPRIATE UTILITY COMPANIES, THE OWNER AND OWNER'S REPRESENTATIVE. THE MEETING SHALL TAKE PLACE PRIOR TO THE START OF CONSTRUCTION AND THE CONTRACTOR MUST PROVIDE 48 HOURS NOTICE TO ALL ATTENDEES PRIOR TO THE START OF THE MEETING.
  - 6. APPROPRIATE WARNING SIGNS, MARKERS, BARRICADES AND/OR FLAGMEN SHALL BE PROVIDED TO REGULATE TRAFFIC. CONSTRUCTION TRAFFIC CONTROL SHALL BE IMPLEMENTED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE LOCAL AUTHORITY.
  - 7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ADDITIONAL BENCHMARK INFORMATION IF REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING BENCHMARKS. IF IT IS NECESSARY TO RELOCATE A BENCHMARK, IT SHALL BE RELOCATED BY A MASSACHUSETTS

PROFESSIONAL LAND SURVEYOR AND DONE SO AT THE CONTRACTOR'S EXPENSE.

- 8. ALL PERMITS AND APPROVALS NECESSARY FROM AGENCIES GOVERNING THE WORK SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.
- 9. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTHWORK OPERATIONS, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DETERMINED NECESSARY BY ON SITE INSPECTIONS BY THE OWNER, THEIR REPRESENTATIVES, OR REGULATORY AGENCIES HAVING JURISDICTION AT NO ADDITIONAL COST TO THE OWNER.
- 10. CONSTRUCTION DURING WET WEATHER OR WINTER CONDITIONS IS TO BE ANTICIPATED AND PROVISIONS TO ADEQUATELY ADDRESS THESE CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 11. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS INCLUDING THE CITY, MADOT, MADEP, MUTCD, AND AASHTO.
- 12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY ALLEN & MAJOR ASSOCIATES DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK, OR THE OWNER'S EMPLOYEES, CUSTOMERS, OR THE GENERAL PUBLIC. THE SEAL OF THE ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE, AND LOCAL REGULATIONS.
- 13. GRANITE CURBING REMOVED FROM PUBLIC ROADS SHALL BE STOCKPILED AND RETURNED TO THE RESPECTIVE CITY DPW.
- 14. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COSTS SHALL BE INCLUDED IN BASE BID.
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY'S GOVERNING AUTHORITY'S SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COSTS SHALL BE INCLUDED IN BASE BID.
- 16. A SIGN PERMIT APPLICATION SHALL BE APPROVED BY THE TOWN PRIOR TO INSTALLATION OF FREESTANDING BUILDING/WALL SIGNS.
- 17. SEE SHEET 1 FOR EXISTING CONDITIONS.
- 18. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S 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.
- 19. SNOW STORAGE SHOWN FOR CONCEPTUAL PURPOSES ONLY. SNOW SHALL BE TAKEN OFF-SITE ONCE SNOW STORAGE AREAS ON SITE BECOME INADEQUATE, AND BEGINS TO BLOCK ACCESS TO AND FROM THE SITE OR BLOCKS THE USE OF ON-SITE PARKING. ANY EXCESS WILL BE BE TRUCKED OFF-SITE & DISPOSED OF IN ACCORDANCE WITH CITY AND MADEP REQUIREMENTS.





1 inch = 20 ft.



ALLEN & MAJOR ASSOCIATES, INC.

REV DATE DESCRIPTION

SOMERBRIDGE HOTEL LLC c/o JAL HOSPITALITY DESIGN, LLC 227 MARGINAL STREET CHELSEA MA 021500

120 ROOM EXTENDED STAY HOTEL **263 MONSIGNOR O'BRIEN HIGHWAY** CAMBRIDGE, MA

> 1 McGRATH HIGHWAY SOMERVILLE, MA

1362-16 DATE: PROJECT NO. 08-22-16 1" = 20' DWG.: 1362-16 Layout and Materials **DESIGNED BY:** SM | CHECKED BY:



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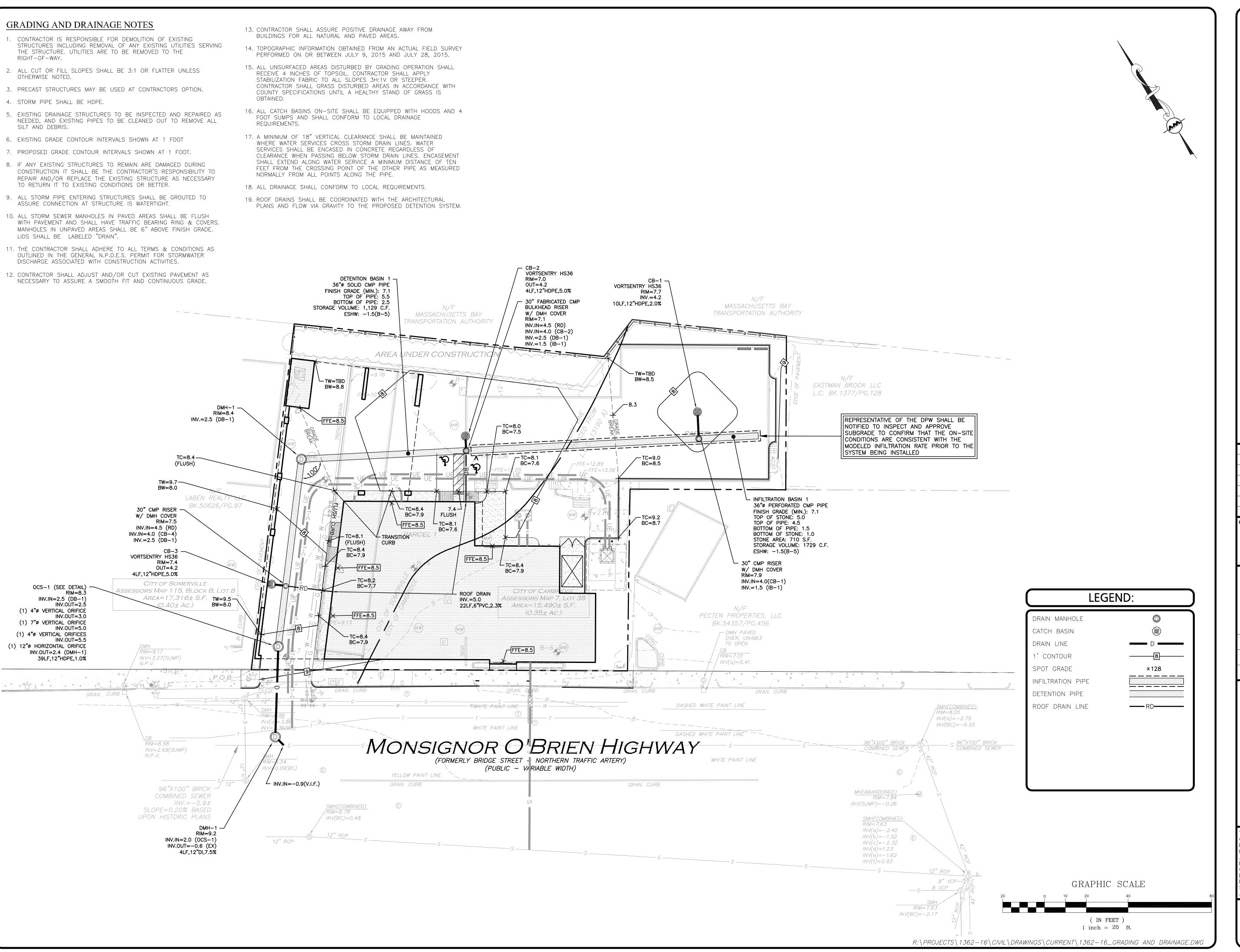
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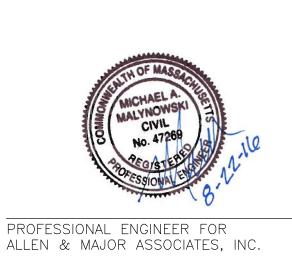
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DRAWING TITLE: LAYOUT & MATERIALS PLAN

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ALLEN & MAJOR ASSOCIATES, INC.

DATE DESCRIPTION

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PROJECT:

120 ROOM EXTENDED STAY HOTEL **263 MONSIGNOR O'BRIEN HIGHWAY** CAMBRIDGE, MA

1 McGRATH HIGHWAY

SOMERVILLE, MA 1362-16 DATE: PROJECT NO.

08-22-10

SHEET No.

**C3** 

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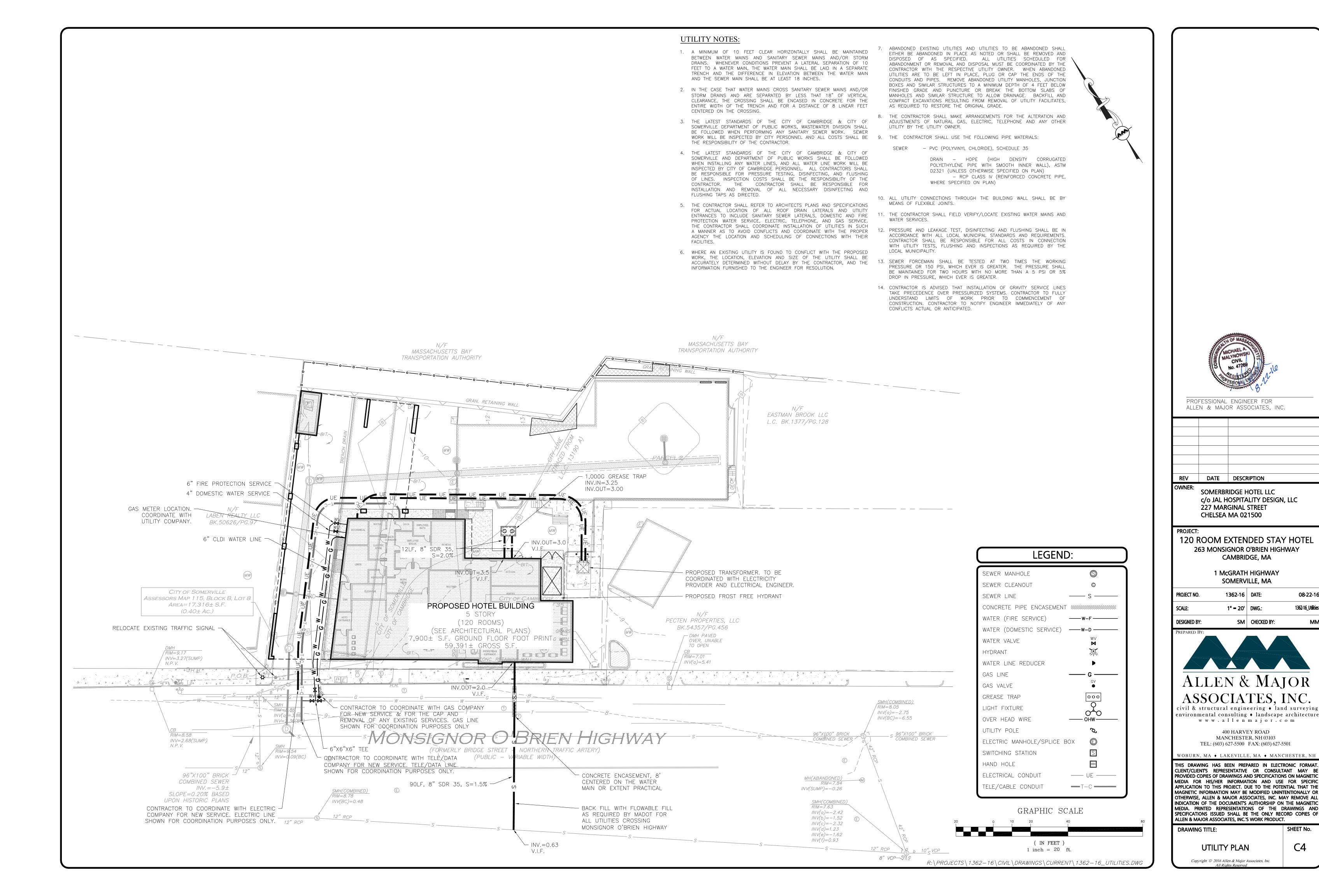
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DRAWING TITLE:

**GRADING AND** DRAINAGE PLAN

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#### LANDSCAPE REGULATIONS - CAMBRIDGE

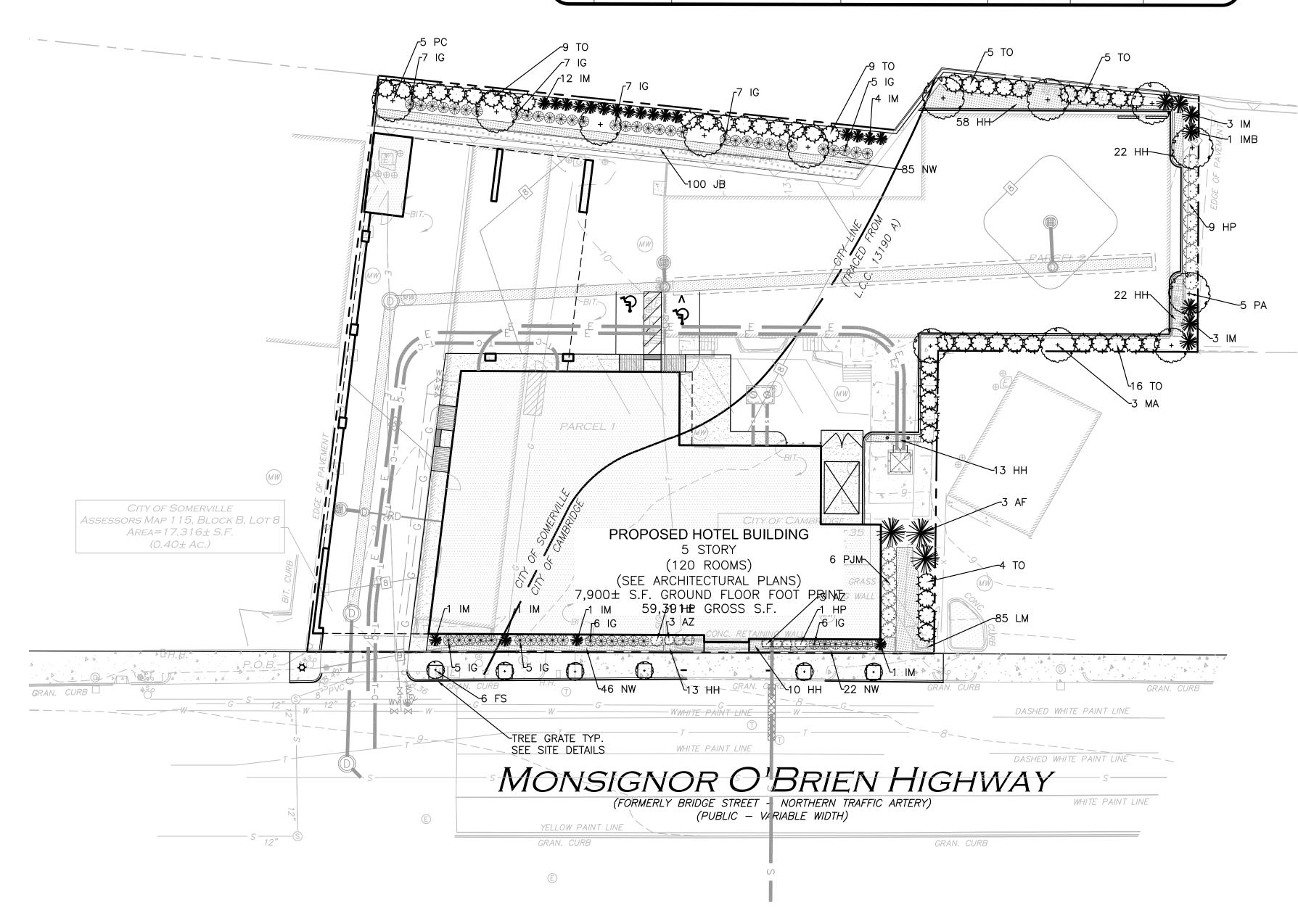
REGULATION	ITEM	REQUIRED/ALLOWED	PROPOSED	
17.152 TREE PLANTING	AT LEAST ONE STREET TREE, MIN. CAL. 3" SHALL BE LOCATED IN THE FRONT YARD ALONG MONSIGNOR O'BRIEN HIGHWAY, FOR EACH 25' OF FRONTAGE ON THE HIGHWAY	1 TREE PER 25' OF FRONTAGE 125' OF FRONTAGE = 5 TREES MIN	5 TREES MIN ALONG MONSIGNOR O'BRIEN HWY.	
6.48 PARKING	A. AT LEAST 5% OF THE INTERIOR OF THE PARKING FACILITY SHALL BE LANDSCAPED.	MIN 5% INTERIOR OF PARKING AREA LANDSCAPED	33% AREA LANDSCAPED 2,312 SF LANDSCAPE	
LANDSCAPING	B. EACH PLANTING AREA SHALL BE AT LEAST 25 SF IN AREA AND HAVE NO DIMENSION LESS THAN 5'.	PLANTING AREA MIN. 25 SF AND NO DIMENSION LESS THAN 5'	PLANTING AREA MIN. 25 SF AND NO DIMENSION LESS THAN 5'	
	C. EACH PLANTING AREA SHALL CONTAIN AT LEAST 1 TREE AND THE FACILITY AS A WHOLE SHALL CONTAIN AT LEAST 1 TREE FOR EVERY 10 PARKING SPACES	MIN. 1 TREE PER 10 PARKING SPACES	MIN. 1 TREE PER 10 PARKING SPACES	
	D. TREES USED TO SATISFY PARKING LOT LANDSCAPEING REQUIREMENTS SHALL BE A MIN. OF 3" CAL.	MIN. 3" CAL. TREES	MIN. 3" CAL. TREES	

## LANDSCAPE REGULATIONS - SOMERVILLE

REGULATION	ITEM	REQUIRED/ALLOWED	PROPOSED
LANDSCAPING	AT LEAST 10% OF THE LOT AREA SHALL BE LANDSCAPED.	MIN 10% LOT AREA LANDSCAPED  LOT = 17,316 SF 10% = 1,731 SF MIN.	12.9% OF LOT IS LANDSCAPED 2,233.76 SF

## PLANTING SCHEDULE-TREES, SHRUBS, GROUNDCOVERS & PERENNIALS

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	SPACING	COMMENTS
DECII	DUOUS TRE	EES				
FS		FAGUS SYLVATICA 'DAWYKII GREEN'	FASTIGIATE BEECH	3-3.5" CAL.	AS SHOWN	B&B
PA	5	PLATANUS ACERIFOLIA 'EXCLAMATION'	EXCLAMATION PLANETREE	3-3.5" CAL.	AS SHOWN	B&B
EVER	GREEN/FLO	DWERING TREES				
AF	3	ABIES FRASERI	FRASER FIR	8'-9' HT.	AS SHOWN	B&B
IM	26	ILEX M. 'BLUE PRINCESS'	BLUE PRINCESS HOLLY	3.5-4' HT.	AS SHOWN	B&B
IMB	1	ILEX M. 'BLUE PRINCE'	BLUE PRINCE HOLLY	3.5-4' HT.	AS SHOWN	B&B
MA	3	MALUS ADIRONDAK	ADIRONDAK CRABAPPLE	3-3.5" CAL.	AS SHOWN	B&B
PC	5	PYRUS C. 'CHANTICLEER'	CHANTICLEER FLOWERING PEAR	3-3.5" CAL.	AS SHOWN	B&B
ТО	48	THUJA O. 'WINTERGREEN'	WINTERGREEN ARBORVITAE	8-10' HT.	AS SHOWN	B&B
SHRU	JBS					
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	SPACING	COMMENTS
AZ	6	AZALEA X 'DELAWARE VALLEY WHITE'	AZALEA	2'-2.5' HT.	AS SHOWN	POT
HP	11	HYDRANGEA P. 'LITTLE LIME'	LITTLE LIME HYDRANGEA	2-3' HT.	AS SHOWN	B&B
IG	48	ILEX GLABRA 'SHAMROCK'	INKBERRY	2'-2.5' HT.	AS SHOWN	POT
JB	100	JUNIPERUS SABINA 'BROADMOORE'	BROADMOORE JUNIPER	#2	24" O.C.	POT
РЈМ	6	RHODODENDRON 'PJM'	PJM RHODODENDRON	2.5'-3' HT.	AS SHOWN	POT
PERE	PERENNIALS/BULBS					
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	SPACING	COMMENTS
LM	85	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LIRIOPE	#1	18" O.C.	STAGGERED
НН	125	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1	18" O.C.	STAGGERED
NW	153	NEPETA 'WALKER'S LOW'	WALKER'S LOW CATMINT	#1	18" O.C.	STAGGERED

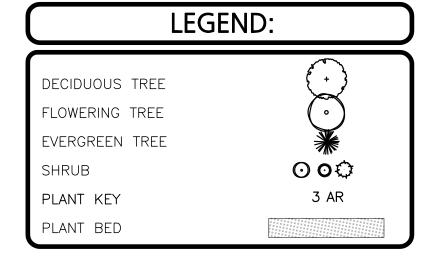


#### GENERAL NOTES

- 1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S 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. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S 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
- 3. THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF CAMBRIDGE DPW AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.

1-800-344-7233 TOWN OF CAMBRIDGE DPW: 1-617-349-4800

- 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. ALL SITE ITEMS SHALL BE LAYED OUT AND ASBUILTED BY A LICENSED LAND SURVEYOR.
- 5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK, OR THE OWNER'S EMPLOYEES, CUSTOMERS, OR THE GENERAL PUBLIC. THE SEAL OF THE ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE, AND LOCAL REGULATIONS.
- 6. REFER TO ARCHITECTURAL PLANS FOR LIGHTING PROVIDED ON BUILDING.



SPRAY WITH WILT PROOF ACCORDING TO MANUFACTURERS INSTRUCTIONS IF FOLIAGE IS PRESENT

## LANDSCAPE NOTES

ACCEPTANCE.

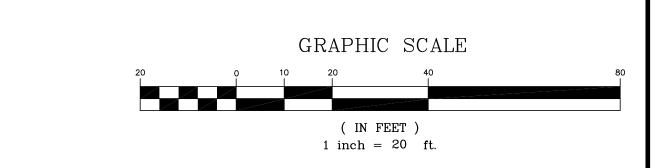
FOR FALL PLANTING.

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITIES OF CAMBRIDGE, MA AND SOMERVILLE, MA SPECIFICATIONS.
- 2. PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES, ANY PERMITTING AGENCIES, AND "DIG-SAFE" (1-888-DIG-SAFE) AT LEAST 72 HOURS IN ADVANCE OF ANY WORK THAT WILL REQUIRE EXCAVATION. CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS IN WRITING.
- 4. NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA, ANY TREES NOTED AS "SEAL OR SELECTED SPECIMEN" SHALL BE TAGGED AND SEALED BY THE LANDSCAPE ARCHITECT.
- 5. ALL TREES SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE NOTED OR
- APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT. 6. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT LIST. QUANTITIES SHOWN ON
- PLANS SHALL GOVERN OVER PLANT LIST. 7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- 8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE GUIDELINES ESTABLISHED BY THE
- 9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF

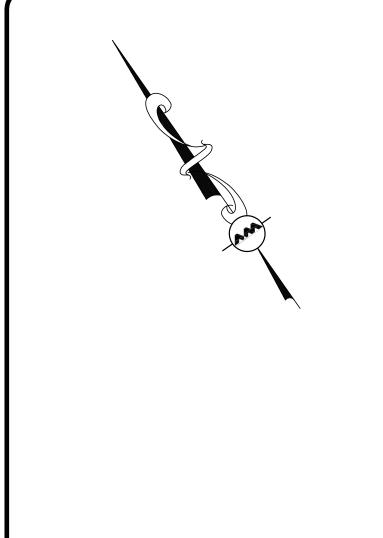
STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF

LAWNS WITH OVER 3:1 SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL

- 10. ALL DISTURBED AREAS NOT OTHERWISE NOTED SHALL RECEIVE 4" OF LOAM AND SEED.
- 11. ANY FALL TRANSPLANTING HAZARD PLANTS SHALL BE DUG IN THE SPRING AND STORED
- 12. TREES SHALL HAVE A MINIMUM CALIPER OF 2 1/2" ONE FOOT ABOVE THE ROOT
- 13. ALL PLANT BEDS AND TREE SAUCERS TO RECEIVE 3" OF PINE BARK MULCH, AND GROUND COVER AREAS SHALL RECEIVE 1" OF PINE BARK MULCH.
- 14. ALL DECIDUOUS TREES ADJACENT TO WALKWAYS AND ROADWAYS SHALL HAVE A BRANCHING PATTERN TO ALLOW FOR A MINIMUM OF 7' OF CLEARANCE BETWEEN THE GROUND AND
- 15. CONTRACTOR RESPONSIBLE FOR WATERING, AND RESEEDING OF BARE SPOTS UNTIL A UNIFORM STAND OF VEGETATION IS ESTABLISHED AND ACCEPTED.
- 16. ALL PARKING ISLANDS PLANTED WITH SHRUBS SHALL HAVE 24" OF TOP SOIL. FINISH GRADE SHALL BE EQUAL TO THE TOP OF CURB.
- 17. SOIL SAMPLES AND TESTS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT OR THE
- 18. REFER TO NEW ENGLAND WETLAND PLANS, INC (WWW.NEWP.COM) FOR CURRENT SEED MIXES & APPLICATION RATES.



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PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

DATE DESCRIPTION SOMERBRIDGE HOTEL LLC

c/o JAL HOSPITALITY DESIGN, LLC 227 MARGINAL STREET CHELSEA MA 021500

120 ROOM EXTENDED STAY HOTEL 263 MONSIGNOR O'BRIEN HIGHWAY CAMBRIDGE, MA

1 McGRATH HIGHWAY

SOMERVILLE, MA

PROJECT NO.	1362-16	DATE:	08-22-1
SCALE:	1" = 20'	DWG.:	1362-16_Landscap
DESIGNED BY:	BCD	CHECKED BY:	MN



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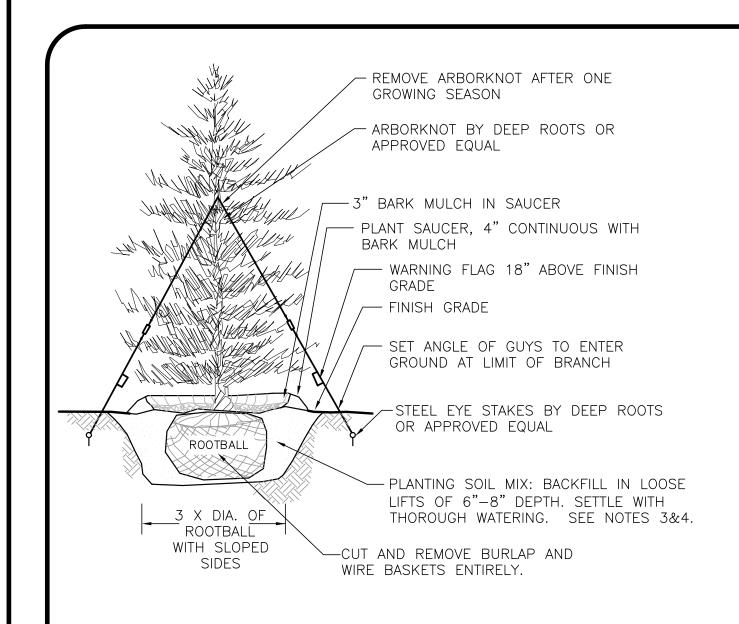
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LANDSCAPE PLAN

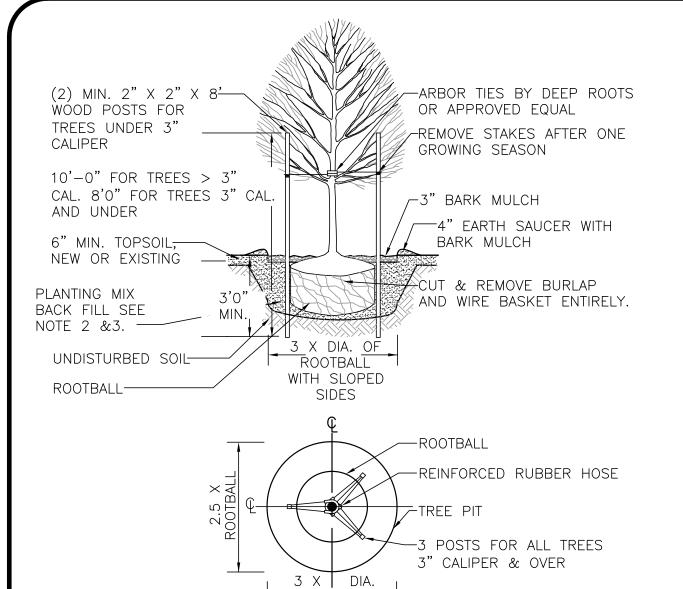


#### NOTES

- 1. TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT BORE TO NURSERY OR FIELD GRADE. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL TOP OF ROOTBALL AREA.
- 2. INSTALL THREE GUYS PER TREE; EQUALLY SPACED AROUND BALL.
- 3. ATTACH GUYS AT 2/3 HEIGHT OF TREE.
- 4. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
- 5. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

EVERGREEN TREE DETAIL

NOT TO SCALE



ROOTBALL

WITH SLOPED SIDES

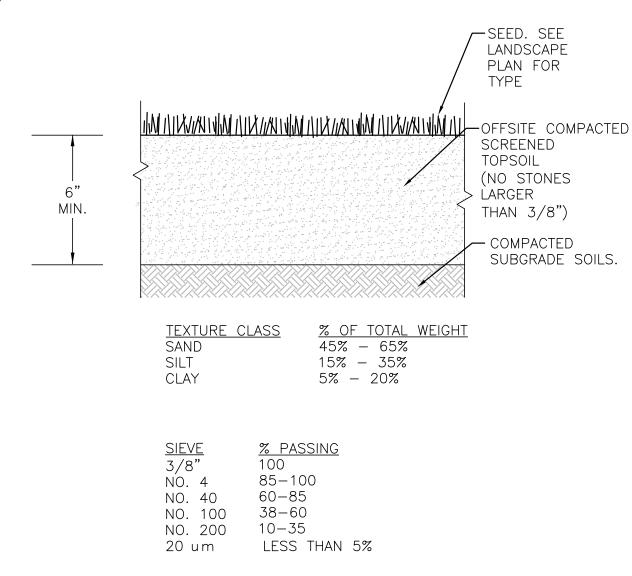
#### NOTES

- 1. ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL ROOTBALL AREA.
- 2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
- 3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE





#### NOTES:

- 1. TOP OF LOAM (TOPSOIL) IS FINISH GRADE.
- 2. ALL TOPSOIL (BOTH ONSITE AND OFFSITE SOURCES) SHALL BE COMPOSED OF A NATURAL, FERTILE, FRIABLE SOIL TYPICAL OF CULTIVATED TOPSOILS OF THE LOCALITY. OFFSITE SOIL SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH, WITH ADDITIVES, IF REQUIRED, TO ACHIEVE PARTICLE DISTRIBUTION AND ORGANIC CONTENT BELOW. TOPSOIL SHALL BE TAKEN FROM A WELL-DRAINED, ARIABLE SITE, FREE OF SUBSOIL, LARGE STONES, EARTH CLODS, STICKS, STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEOUS MATTER OR DEBRIS NOR CONTAIN TOXIC SUBSTANCES.
- 3. THE CONTRACTOR SHALL PROVIDE THE OWNER / LANDSCAPE ARCHITECT WITH TOPSOIL TEST RESULTS (RECOMMEND UMASS AMHERST SOIL TESTING LAB) FOR APPROVAL PRIOR TO OBTAINING AND PLACING THE SOIL. IF ANY TOPSOIL IS PURCHASED OR PLACED PRIOR TO APPROVAL BY OWNER / LANDSCAPE ARCHITECT, IT IS AT CONTRACTORS RISK, AND IT CAN BE REMOVED AT NO ADDITIONAL COST TO THE OWNER. IF THE PLANTING SOIL (BOTH ONSITE AND OFFSITE SOURCES) DOES NOT FALL WITHIN THE REQUIRED SIEVE ANALYSIS, TEXTURAL CLASS, ORGANIC CONTENT, OR PH RANGE, IT SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS AT NO ADDITIONAL COST TO THE OWNER.
- 4. TOPSOIL SHALL HAVE A PH VALUE BETWEEN 5.5 AND 6.5. TOPSOIL SHALL CONTAIN BETWEEN 4% AND 8% ORGANIC MATTER OF TOTAL DRY WEIGHT AND SHALL CONFORM TO THE FOLLOWING GRADATION AND TEXTURE CLASS ABOVE.

TOPSOIL FOR LAWN, TREES, SHRUBS, & PERENNIALS

NOT TO SCALE

<u>s</u> 3

#### LANDSCAPE MANAGEMENT NOTES:

LANDSCAPE MANAGEMENT PLAN
IT SHOULD BE RECOGNIZED THAT THIS IS A GENERAL GUIDELINE TOWARDS ACHIEVING HIGH QUALITY
AND WELL GROOMED LANDSCAPED AREAS. THE GROUNDS STAFF / LANDSCAPE CONTRACTOR MUST
RECOGNIZE THE SHORTCOMINGS OF A GENERAL MAINTENANCE PROGRAM SUCH AS THIS, AND
MODIFY AND/OR AUGMENT IT BASED ON WEEKLY, MONTHLY, AND YEARLY OBSERVATIONS. IN ORDER
TO ASSURE THE HIGHEST QUALITY CONDITIONS, THE STAFF MUST ALSO RECOGNIZE AND
APPRECIATE THE NEED TO BE AWARE OF THE CONSTANTLY CHANGING CONDITIONS OF THE
LANDSCAPING AND BE ABLE TO RESPOND TO THEM ON A PROACTIVE BASIS.

FERTILIZER
MAINTENANCE PRACTICES SHOULD BE AIMED AT REDUCING ENVIRONMENTAL, MECHANICAL AND PEST
STRESSES TO PROMOTE HEALTHY AND VIGOROUS GROWTH. WHEN NECESSARY, PEST OUTBREAKS
SHOULD BE TREATED WITH THE MOST SENSITIVE CONTROL MEASURE AVAILABLE. SYNTHETIC
CHEMICAL CONTROLS SHOULD BE USED ONLY AS A LAST RESORT TO ORGANIC AND BIOLOGICAL
CONTROL METHODS. FERTILIZER, SYNTHETIC CHEMICAL CONTROLS AND PEST MANAGEMENT
APPLICATIONS (WHEN NECESSARY) SHOULD BE PERFORMED ONLY BY LICENSED APPLICATORS IN
ACCORDANCE WITH THE MANUFACTURER'S LABEL INSTRUCTIONS WHEN ENVIRONMENTAL CONDITIONS
ARE CONDUCIVE TO CONTROLLED PRODUCT APPLICATION.

ONLY SLOW-RELEASE ORGANIC FERTILIZERS SHOULD BE USED IN THE LANDSCAPED AREAS TO LIMIT THE AMOUNT OF NUTRIENTS THAT COULD ENTER DOWNSTREAM RESOURCE AREAS. FERTILIZATION OF DEVELOPED AREAS ON SITE WILL BE PERFORMED WITHIN MANUFACTURERS LABELING INSTRUCTIONS AND SHALL NOT EXCEED AN NPK RATION OF 1:1:1 (I.E. TRIPLE 10 FERTILIZER MIX), CONSIDERED A LOW NITROGEN MIXTURE. ADDITIONALLY, THE FERTILIZER WILL INCLUDE A SLOW RELEASE ELEMENT.

SUGGESTED AERATION PROGRAM
IN-SEASON AERATION OF LAWN AREAS IS GOOD CULTURAL PRACTICE, AND IS RECOMMENDED
WHENEVER FEASIBLE. IT SHOULD BE ACCOMPLISHED WITH A SOLID THIN TIME AERATION METHOD TO
REDUCE DISRUPTION TO THE USE OF THE AREA. THE DEPTH OF SOLID TIME AERATION IS SIMILAR
TO CORE TYPE, BUT SHOULD BE PERFORMED WHEN THE SOIL IS SOMEWHAT DRIER FOR A

DEPENDING ON THE INTENSITY OF USE, IT CAN BE EXPECTED THAT ALL LANDSCAPED LAWN AREAS WILL NEED AERATION TO REDUCE COMPACTION AT LEAST ONCE PER YEAR. THE FIRST OPERATION SHOULD OCCUR IN LATE MAY FOLLOWING THE SPRING SEASON. METHODS OF REDUCING COMPACTION WILL VARY BASED ON THE NATURE OF THE COMPACTION. COMPACTION ON NEWLY ESTABLISHED LANDSCAPED AREAS IS GENERALLY LIMITED TO THE TOP 2-3" AND CAN BE ALLEVIATED USING HOLLOW CORE OR THIN TINE AERATION METHODS.

THE SPRING AERATION SHOULD CONSIST OF TWO PASSES AT OPPOSITE DIRECTIONS WITH 1/4" HOLLOW CORE TINES PENETRATING 3-5" INTO THE SOIL PROFILE. AERATION SHOULD OCCUR WHEN THE SOIL IS MOIST BUT NOT SATURATED. THE CORES SHOULD BE SHATTERED IN PLACE AND DRAGGED OR SWEPT BACK INTO THE TURF TO CONTROL THATCH. IF DESIRED THE CORES MAY ALSO BE REMOVED AND THE AREA TOP-DRESSED WITH SAND OR SANDY LOAM. IF THE AREA DRAINS ON AVERAGE TOO SLOWLY, THE TOPDRESSING SHOULD CONTAIN A HIGHER PERCENTAGE OF SAND. IF IT IS DRAINING ON AVERAGE TOO QUICKLY, THE TOP DRESSING SHOULD CONTAIN A HIGHER PERCENTAGE OF SOIL AND ORGANIC MATTER.

#### LANDSCAPE MAINTENANCE PROGRAM PRACTICES:

- MOW A MINIMUM OF ONCE A WEEK IN SPRING, TO A HEIGHT OF 2" TO 2 1/2" HIGH. MOWING SHOULD BE FREQUENT ENOUGH SO THAT NO MORE THAN 1/3 OF GRASS BLADE IS REMOVED AT EACH MOWING. THE TOP GROWTH SUPPORTS THE ROOTS; THE SHORTER THE GRASS IS CUT, THE LESS THE ROOTS WILL GROW. SHORT CUTTING ALSO DRIES OUT THE SOIL AND
- ENCOURAGES WEEDS TO GERMINATE.
   MOW APPROXIMATELY ONCE EVERY TWO WEEKS FROM JULY 1ST TO AUGUST 15TH DEPENDING ON LAWN GROWTH.
- MOW ON A TEN-DAY CYCLE IN FALL, WHEN GROWTH IS STIMULATED BY COOLER NIGHTS AND INCREASED MOISTURE.
   DO NOT REMOVE GRASS CLIPPINGS AFTER MOWING.
- KEEP MOWER BLADES SHARP TO PREVENT RAGGED CUTS ON GRASS LEAVES, WHICH CAUSE A BROWNISH APPEARANCE AND INCREASE THE CHANCE FOR DISEASE TO ENTER A LEAF.

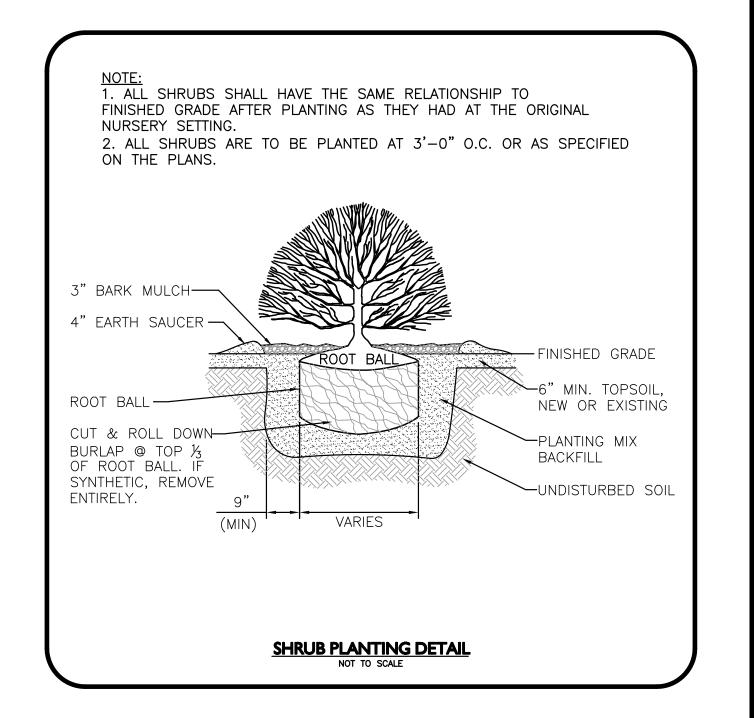
## SHRUBS • MULCH NOT MORE THAN 3" DEPTH WITH SHREDDED PINE OR FIR BARK.

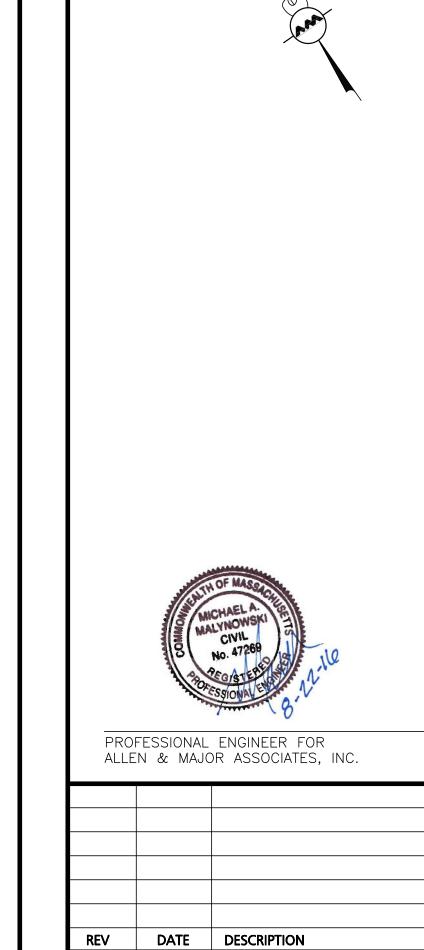
- HAND PRUNE ANNUALLY, IMMEDIATELY AFTER BLOOMING, TO REMOVE 1/3 OF THE ABOVE-GROUND BIOMASS (OLDER STEMS). STEM REMOVALS TO OCCUR WITHIN 6" OF THE
- GROUND TO OPEN UP SHRUB AND MAINTAIN TWO-YEAR WOOD (THE BLOOMING WOOD).

   FERTILIZE WITH ½ LB. SLOW-RELEASE FERTILIZER (SEE ABOVE SECTION ON FERTILIZER) EVERY SECOND YEAR.
- HAND PRUNE EVERGREEN SHRUBS ONLY AS NEEDED TO REMOVE DEAD AND DAMAGED WOOD AND TO MAINTAIN THE NATURALISTIC FORM OF THE SHRUB. NEVER MECHANICALLY SHEAR EVERGREEN SHRUBS.

### IREES • PROVIDE AFTERCARE FOR NEW TREE PLANTINGS FOR THE FIRST THREE YEARS.

- PROVIDE AFTERCARE FOR NEW TREE FLANTINGS FOR THE FIRST THREE TEARS.
   DO NOT FERTILIZE TREES, IT ARTIFICIALLY STIMULATES THEM (UNLESS TREE HEALTH WARRANTS).
   WATER THREE TEARS.
- PRUNE TREES ON A FOUR—YEAR CYCLE.
   ORNAMENTAL GRASSES
- APPLY LOW— NITROGEN 10-10-10 FERTILIZER AS GROWTH RESUMES IN THE SPRING. WATER IN THOROUGHLY.
- GRASSES DO NOT NEED TO BE CUT DOWN BEFORE WINTER. IN FACT, THEY ARE ATTRACTIVE WHEN LEFT STANDING AND THE FOLIAGE HELPS TO INSULATE THE CROWN OF THE PLANT. CUT BACK THE FOLIAGE TO ABOUT 4—6 INCHES IN THE SPRING BEFORE GROWTH RESUMES. WHEN FOLIAGE IS REMOVED, SPRING GROWTH WILL BEGIN EARLIER. OLD FOLIAGE LEFT ON THE PLANT CAN DELAY THE CROWN'S WARMING AND SUBSEQUENT GROWTH BY AS MUCH AS 3 WEEKS.





PROJECT:
120 ROOM EXTENDED STAY HOTEL
263 MONSIGNOR O'BRIEN HIGHWAY
CAMBRIDGE, MA

SOMERBRIDGE HOTEL LLC

227 MARGINAL STREET

CHELSEA MA 021500

c/o JAL HOSPITALITY DESIGN, LLC

1 McGrath Highway Somerville, ma

 PROJECT NO.
 1362-16
 DATE:
 08-22-16

 SCALE:
 AS SHOWN
 DWG.:
 1362-16\_Landscape

 DESIGNED BY:
 BCD
 CHECKED BY:
 MN



civil & structural engineering • land surveying environmental consulting • landscape architecture w w w w . a l l e n m a j o r . c o m

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DRAWING TITLE:

LANDSCAPING DETAILS

SHEET No.

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#### GENERALIZED CONSTRUCTION SEQUENCE

- THE BMP'S ASSOCIATED WITH THIS PROJECT WILL BE OWNED BY THE DEVELOPER, WHO WILL BE RESPONSIBLE FOR INSPECTION, OPERATION, AND MAINTENANCE.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES.
- PREPARE TEMPORARY PARKING AND STORAGE AREA. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA POTTY, WHEEL WASH, CONCRETE WASHOUT, MASONS AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., DENOTE THEM ON THE SITE MAPS IMMEDIATELY AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
- INSTALL SILTATION FENCES AND CATCH BASIN INLET PROTECTION IN LOCATIONS SHOWN ON PLANS AND/OR AS DIRECTED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION. PREPARE STABILIZED CONSTRUCTION ENTRANCE IN SUITABLE LOCATIONS AS SHOWN ON THE PLANS OR AT LOCATIONS WHERE CONSTRUCTION VEHICLES ARE EXITING ONTO PUBLIC ROADWAYS.
- CUT AND CLEAR TREES; CHIP WOOD STUMPS; DISPOSE OF DEBRIS. STRIPPED TOPSOIL SHALL BE STOCKPILED, WITHOUT COMPACTION, AND STABILIZED WITH TEMPORARY SEEDING AGAINST EROSION. SILT FENCE SHALL BE PLACED AROUND STOCKPILES.
- . CONSTRUCT AREAS TO BE USED AS SEDIMENT PONDS DURING CONSTRUCTION, AS NEEDED.
- THE WORK AREA SHALL BE GRADED, SHAPED, AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE LIMITS OF THE WORK AREA. SILT FENCES, AND/OR SEDIMENTATION BASINS MAY BE NECESSARY TO ACCOMPLISH THIS END.
- PERFORM SITE GRADING. INSTALL DRAINAGE SYSTEMS AND UTILITIES. DISTURBED AREAS SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL NOTES. INSTALL INLET PROTECTION IN ALL CATCH BASINS. ALL SIDE SLOPES SHALL BE STABILIZED WITHIN 72 HOURS.
- . FINALIZE GRADING AND PLACEMENT OF SELECTS.
- INSTALL EROSION CONTROL PROTECTION ON CATCH BASIN RIMS UNTIL ROADWAY IS PAVED. IF SEDIMENT IS COLLECTING AROUND CATCH BASINS AFTER THE PLACEMENT OF THE BINDER COURSE, THE SILT SACKS SHALL REMAIN AND HAYBALES SHALL BE PLACED AROUND CATCH BASINS
- . INSPECT AND MAINTAIN EROSION CONTROL MEASURES WEEKLY AND AFTER EVERY RAIN EVENT OF 0.5" OR GREATER. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES SILTATION DEVICES SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- I. FINISH GRADING TO PREPARE FOR PAVEMENT, LOAMING AND SEEDING. NO PORTION OF THIS SITE SHALL REMAIN UNSTABILIZED FOR OVER 45 DAYS. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF FINAL GRADING.
- 12. FINISH PAVING ROADWAY AND CONSTRUCT DRIVES. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 3. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED AND HAVE A HEALTHY VEGETATIVE COVER. ONCE A HEALTHY VEGETATIVE COVER HAS BEEN ESTABLISHED ALL SILT FENCES, SILT SACKS, CATCH BASIN EROSION CONTROL, STONE CHECK DAMS AND ORANGE CONSTRUCTION FENCE SHALL BE REMOVED.
- 14. WINTERIZATION EFFORTS FOR AREAS NOT STABILIZED BY NOV. 1ST SHALL BE MADE BY THE APPROPRIATE USE OF MATTING, BLANKETS, MULCH AND SEEDING.
- 15. A CONSTRUCTION AREA SHALL BE CONSIDERED STABLE IF:
- A. COMPACTED BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO RECEIVE PAVEMENT.
- B. A MINIMUM OF 70% VEGETATED GROWTH HAS BEEN ESTABLISHED.
- C. CUT OR FILL SLOPES HAVE A MINIMUM OF 3" NON- EROSIVE MATERIAL SUCH AS STONE OR RIP RAP OR EROSION CONTROL BLANKETS HAVE BEEN INSTALLED. D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 14. CLEAN ALL DRAINAGE STRUCTURE SUMPS OF SEDIMENT AND DEBRIS (INCLUDING ALL STRUCTURES WITHIN THE LIMIT OF WORK).
- 15. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER AND/OR CALCIUM
- CHLORIDE.
- 6. THE DETENTION/INFILTRATION BASINS MUST BE CLEANED OUT, SEEDED AND MATTED UPON COMPLETION OF THIS PROJECT. NO STORMWATER WILL BE ALLOWED TO BE DISCHARGED UNLESS PERMANENT SEEDING HAS BEEN WELL ESTABLISHED. THE FOLLOWING PRECAUTIONS WILL BE OBSERVED DURING THE CONSTRUCTION OF THE INFILTRATION BASINS.
- A. PROPOSED INFILTRATION BASINS SHOULD NEVER SERVE AS TEMPORARY SEDIMENT TRAPS FOR CONSTRUCTION:
- B. BEFORE THE DEVELOPMENT SITE IS GRADED, THE AREA OF THE INFILTRATION BASINS SHOULD BE ROPED OFF AND FLAGGED TO PREVENT HEAVY EQUIPMENT FROM COMPACTING THE UNDERLYING SOILS; C. INFILTRATION TRENCHES SHOULD NOT BE CONSTRUCTED UNTIL THE ENTIRE CONTRIBUTING DRAINAGE
- AREA HAS BEEN STABILIZED. D. DIVERSION BERMS SHOULD BE PLACED AROUND THE PERIMETER OF THE INFILTRATION BASIN DURING ALL PHASES ON CONSTRUCTION. SEDIMENT AND EROSION CONTROLS SHOULD BE USED TO KEEP RUNOFF AND SEDIMENT AWAY FROM THE TRENCH;
- DURING AND AFTER EXCAVATION, ALL EXCAVATED MATERIALS SHOULD BE PLACED DOWNSTREAM, AWAY FROM THE INFILTRATION TRENCH, TO PREVENT REDEPOSITION OF THESE MATERIALS DURING RUNOFF EVENTS. THESE MATERIALS SHOULD BE PROPERLY HANDLED AND DISPOSED OF DURING AND AFTER CONSTRUCTION.
- F. LIGHT EARTH-MOVING EQUIPMENT SHOULD BE USED TO EXCAVATE THE INFILTRATION TRENCH. USE OF HEAVY EQUIPMENT CAUSES COMPACTION OF THE SOILS BENEATH THEIR TRENCH FLOOR, RESULTING IN REDUCED INFILTRATION CAPACITY.

### 7. SEEDING SCHEDULE

- A. SEEDING OPERATIONS SHOULD BE PERFORMED AS AN EARLY SPRING SEEDING (APRIL 1-MAY 15) WITH THE USE OF COLD TREATED SEED. A LATE FALL EARLY WINTER DORMANT SEEDING (NOVEMBER 1 -DECEMBER 15) CAN ALSO BE MADE, HOWEVER THE SEEDING RATE WILL NEED TO BE INCREASED BY
- B. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST. IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES, MULCH ACCORDING TO THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS. CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

## 18. FSTABLISHING A STAND

- A. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA. B. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF
- 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED. C. IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING THE GROWING SEASON
- D. APPLY UNIFORMLY 2 TONS OF GROUND LIMESTONE PER ACRE (100 LBS. PER 1,000 SQ. FT.) OR ACCORDING TO SOIL TEST. APPLY UNIFORMLY 10-10-10 ANALYSIS FERTILIZER AT THE RATE OF 400 LBS. PER ACRE (14 LBS. PER 1,000 SQ. FT.) OR AS INDICATED BY SOIL TEST. FORTY PERCENT OF
- THE NITROGEN SHOULD BE IN ORGANIC FORM. 9. WORK IN LIME AND FERTILIZER TO A DEPTH OF 4 INCHES USING ANY SUITABLE EQUIPMENT. SEED SHOULD BE SPREAD UNIFORMLY BY A METHOD MOST APPROPRIATE FOR THE SITE. SEEDING SHOULD BE PERFORMED
- BY ONE OF THE FOLLOWING METHODS: DRILL SEEDINGS (DE-AWNED OR DE-BEARDED SEED SHOULD BE USED UNLESS THE DRILL IS EQUIPPED WITH SPECIAL FEATURES TO ACCEPT AWNED SEED)
- BROADCAST SEEDING WITH SUBSEQUENT ROLLING, CULTIPACKING OR TRACKING THE SEEDING WITH SMALL TRACK CONSTRUCTION EQUIPMENT. TRACKING SHOULD BE ORIENTED UP AND DOWN THE SLOPE.
- HYDROSEEDING WITH SUBSEQUENT TRACKING. IF WOOD FIBER MULCH IS USED, IT SHOULD BE APPLIED AS A SEPARATE OPERATION AFTER SEEDING AND TRACKING TO ASSURE GOOD SEED TO SOIL CONTACT

### SEEDING FOR TEMPORARY COVER

SPECIES	POUNDS PER 1,000 SQ. FT.	POUNDS PER ACRE	RECOMMENDED SEEDING DATES
ANNUAL RYE GRASS AUG. 15 TO SEPT. 15	1	40	APRIL 1 TO JUNE 1
FOXTAIL MILLET	0.7	30	MAY 1 TO JUNE 30
OATS	2	80	APRIL 1 TO JULY 1 AUGUST 15 TO SEPT. 15
WINTER RYE	3	120	AUG. 15 TO OCT. 15

### CONSTRUCTION GENERAL PERMIT NOTES

NARRATIVE: THE STORMWATER POLLUTION PREVENTION PLANS TOGETHER WITH AN EXISTING CONDITIONS PLAN, AND GRADING PLAN ARE THE TOTAL EROSION CONTROL MEASURES.

THE STORMWATER POLLUTION PREVENTION PLANS CONSIST OF:

### NOTES SHEETS, SWPPP-1

- THE STORMWATER PREVENTION POLLUTION PLAN: SWPPP-2 (SHOWING THE EROSION CONTROL MEASURES)
- THE STORMWATER PREVENTION POLLUTION DETAILS: SWPPP-3

### THE EROSION CONTROL PLAN WILL BE IMPLEMENTED TO:

- A. TREAT EROSION AS SOON AS POSSIBLE AFTER DISTURBANCE.
- B. PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA AND ENTERING THE MUNICIPAL SYSTEM.
- C. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED TO MINIMIZE EROSION.
- D. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.

#### **CONSTRUCTION PHASE**

THE OWNER IS TO BE RESPONSIBLE FOR MAINTENANCE OF ALL DRAINAGE STRUCTURES IN THE PROJECT -INCLUDING DRAIN PIPES, ABOVEGROUND DETENTION BASINS AND SUBSURFACE INFILTRATION SYSTEMS. THE DEVELOPER WILL ULTIMATELY BE RESPONSIBLE FOR COMPLIANCE WITH THE PLAN.

#### REGULAR MAINTENANCE IS TO INCLUDE THE FOLLOWING:

- 1. DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS
- 2. INSTALLATION OF SILTATION FENCES SHALL BE COMPLETED PRIOR TO THE START OF THE SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILTATION FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS
- 3. SILTATION FENCES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A HEALTHY STAND OF VEGETATIVE COVER. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAIN EVENT OF 0.5" OR GREATER.
- 4. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE
- 5. THE AREA OF LAND EXPOSED AND THE TIME OF EXPOSURE SHALL BE MINIMIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING WITH EITHER PERMANENT MEASURES OR TEMPORARY MEASURES. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 45 DAYS SHALL BE STABILIZED
- 6. IN NO CASE SHALL ANY DISTURBED AREAS BE LEFT UNSTABILIZED WITH EITHER PERMANENT OR TEMPORARY EROSION CONTROL MEASURES FOR MORE THAN 72 HOURS, OR AS NEEDED TO ENSURE SUFFICIENT STABILIZATION DUE TO WEATHER OR OTHER CONDITIONS.
- 7. SIMULTANEOUS WORK IN MULTIPLE AREAS MAY BE PERMITTED AS NEEDED, SUBJECT TO THE ABOVE, HOWEVER THE CONTRACTOR SHALL NOT DISTURB AREAS THAT CANNOT REASONABLY BE PROPERLY STABILIZED AND MAINTAINED WITHIN 72 HOURS.
- 8. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM INSTALLED WITH NOT LESS THAN 1.1 POUNDS OF SEED MIX PER 1,000 SQ. FT. SEED MIXTURE SHALL BE: A SLOPE AND DETENTION MIX (MIX 6)

4. SLOPE AND DETENTION WIT	(IVIIA O)
CREEPING RED FESCUE	- 0.25 LBS
CANADA BLUEGRASS	- 0.25 LBS
PERENNIAL RYEGRASS	- 0.25 LBS
RED TOP	- 0.10 LBS
B. MIX: LAWN: MIX (MIX 11):	

- CREEPING BENTGRASS BLUEJOINT REED GRASS - 0.10 LBS VIRGINIA WILD RYE - 0.10 LBS FOWL MEADOW GRASS - 0.25 LBS SHOWY TICK TREFOIL - 0.10 LBS RED TOP - 0.10 LBS
- 9. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF SEEDING. A MINIMUM OF 25 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
- 10. HAY MULCH AND SLOPE PROTECTION BLANKET SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. SLOPE PROTECTION BLANKET SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR THE DETAILS.
- 11. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY FALL. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM APRIL 1 TO MAY 15 OR FROM AUGUST 1 TO SEPTEMBER 10, DORMANT SEEDING RATE WILL NEED TO BE INCREASED BY 50%. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
- 12. CALCIUM CHLORIDE AND/OR WATER SHALL BE USED FOR DUST CONTROL IN APPROPRIATE AREAS.
- 13. ALTERNATE PERMANENT SEEDING FOR AREAS NOT RECEIVING LAWN OR LANDSCAPING SHALL BE AS FOLLOWS: THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES PROVIDES AN APPROPRIATE SELECTION OF NATIVE AND NON-NATIVE GRASSES TO ENSURE THAT DRY AND RECENTLY DISTURBED SITES WILL BE QUICKLY REVEGETATED AND THE SOIL SURFACE STABILIZED. IT IS AN APPROPRIATE SEED MIX FOR ROAD CUTS, PIPELINES, DETENTION BASIN SIDE SLOPES, AND AREAS REQUIRING TEMPORARY COVER DURING THE ECOLOGICAL RESTORATION PROCESS. THE MIX MAY BE APPLIED BY HYDRO SEEDING, BY MECHANICAL SPREADER, OR ON SMALL SITES IT MAY BE SPREAD BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, AND THEN LIGHTLY RAKE OVER. THIS MIX MAY BE APPLIED AT ANY TIME OF THE YEAR. A LIGHT MULCHING OF WEED FREE STRAW TO CONSERVE MOISTURE AND TO AID IN SLOPE STABILIZATION AND FERTILIZATION WITH 10-10-10 IS RECOMMENDED.
- A. APPLICATION RATE:35 LBS/ACRE (1245 SQ FT/LB) B. SPECIES: CREEPING RED FESCUE (FESTUCA RUBRA), ANNUAL RYE-GRASS (LOLIUM MULTIFLORUM), TIMOTHY (PHLEUM PRATENSE), WHITE CLOVER (TRIFOLIUM REPENS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), RED TOP (AGROSTIS ALBA), SIDE-OATS GRAMMA-GRASS (BOUTELOUA CURTIPENDULA), SWITCHGRASS (PANICUM VIRGATUM), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), CREEPING RED FESCUE (FESTUCA RUBRA), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS STOLONIFERA), SILKY WILD RYE (ELYMUS VILLOSUS), NODDING BUR-MARIGOLD (BIDENS CERNUA). SOFT RUSH (JUNCUS EFFUSUS), GRASS-LEAVED GOLDENROD (SOLIDAGO GRAMINIFOLIA), SENSITIVE FERN (ONOCLEA SENSIBILIS), JOE-PYE WEED (EUPATORIUM MACULATUM), BONESET (EUPATORIUM PERFOLIATUM), FLAT-TOP ASTER (ASTER UMBELLATUS), NEW YORK ASTER (ASTER NOVI-BELGII), BLUE VERVAIN
- 25. IF, DURING CONSTRUCTION, IT COMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO IMMEDIATELY INSTALL AND MAINTAIN THE NECESSARY EROSION

## POST CONSTRUCTION PHASE

THE DEVELOPER (OWNER) WILL BE RESPONSIBLE FOR MAINTENANCE OF THE SYSTEMS IN ACCORDANCE WITH THE PROJECT OPERATION AND MAINTENANCE PLAN INCLUDING THE FOLLOWING:

- 1. INSPECTION OF ALL DRAINAGE FACILITIES AND SYSTEMS THREE MONTHS. DURING THE FIRST YEAR OF OPERATION, ALL DRAINAGE FACILITIES SHOULD BE INSPECTED AFTER EVERY STORM, AND 2-3 DAYS AFTERWARD. THESE INSPECTIONS SHOULD LOOK FOR EVIDENCE STRUCTURAL DAMAGE, SILT ACCUMULATION (NEAR INLET INVERTS ON CATCH BASINS), AND IMPROPER FUNCTION.
- 2. AFTER INSPECTION, IF ANY OF THE ABOVE CONDITIONS EXIST, THE OWNER SHALL IMMEDIATELY ARRANGE FOR ALL NECESSARY REPAIRS AND SEDIMENT REMOVAL.
- 3. THE CATCH BASINS AND DETENTION BASIN ARE TO BE INSPECTED ANNUALLY. REMOVE OIL, DEBRIS, AND SEDIMENT AFTER INSPECTIONS.
- 4. ALL GRADED SLOPES SHALL BE INSPECTED FOR EROSION. UPON DISCOVERY OF ANY EROSION, LOAM AND SEED SHALL BE PUT IN PLACE AND NURTURED.

### **MAINTENANCE**

CONDITIONS DEMAND.

- 1. ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN AND NOTES, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
- 2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
- 3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED. 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE
- REMOVED FROM THE SILT FENCES WHEN IT REACHES SIX INCHES IN HEIGHT, OR AS REQUESTED BY THE OWNER OR ENGINEER.

FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE

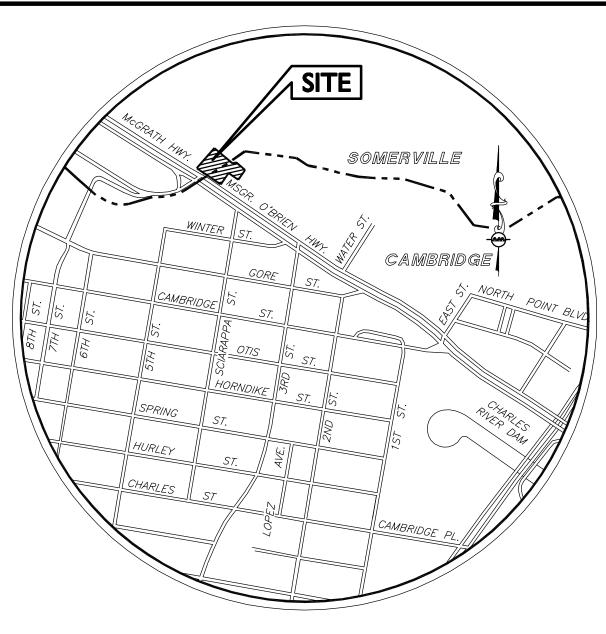
CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND. 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS

5. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR

- 1. REFER TO PROJECT PLANS FOR ADDITIONAL INFORMATION.
- 2. AS CONSTRUCTION DISTURBANCE IS LESS THAN 1 ACRE, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT NOI, AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ARE NOT REQUIRED. THESE PLANS WILL MEET ALL LOCAL REQUIREMENTS FOR EROSION CONTROLS AND STORM WATER POLLUTION PREVENTION.

EROSION CONTROL AND SEDIMENT CONTROL NOTES:

- 3. SILT CONTROL SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE. ANY MODIFICATIONS TO SILT CONTROLS SHOWN ON THE APPROVED PLANS AS A RESULT OF ACTUAL FIELD CONDITIONS OR CONSTRUCTION PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH B.M.P. (BEST MANAGEMENT PRACTICES) PER THE E.P.A. 1992 "STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES" MANUAL. ANY SUCH MODIFICATIONS SHALL BE INSTALLED AS APPROVED BY THE ENGINEER.
- 4. AREAS OF EXPOSED SOIL UNDERGOING CONSTRUCTION THAT WILL NOT BE COVERED AND OR FINISHED GRADED WITHIN 7 DAYS OF EXPOSURE SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL MEASURES WITHIN 7 DAYS OF DISTURBANCE. TEMPORARY EROSION CONTROL MEASURES SHALL INCLUDE EROSION CONTROL MESH, NETTING OR MULCH AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND SHOWN ON THE DESIGN PLANS. IF MULCH IS USED, HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 LBS PER 1,000 SQUARE FEET. APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE. MULCH SHALL BE KEPT MOIST TO AVOID LOSS DUE TO WIND. MULCH AND NETTING SHALL BE APPLIED IN THE BASE OF ALL GRASSED WATERWAYS AND IN VEGETATIVE SLOPES WHICH EXCEED 15% AND DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS.
- 5. IF DISTURBED AREAS DO NOT RECEIVE FINAL SEEDING BY SEPTEMBER 15 OF THE CONSTRUCTION YEAR, THEN ALL DISTURBED AREAS SHALL BE SEEDED WITH A WINTER COVER CROP AT THE RATE OF 3 LBS PER 1,000 SQUARE FEET. WINTER SEEDING SHALL BE COVERED WITH EROSION CONTROL MESH (MULCH AND NETTING). HEAVY GRADE MATS SHALL BE USED IN THE BASE OF ALL GRASSED WATERWAYS ON VEGETATED SLOPES IN EXCESS OF 15%, AND ANY DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS. MULCH AND NETTING SHALL ALSO BE PROVIDED FOR ADDITIONAL WINTER PROTECTION
- 6. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 90 DAYS SHALL BE COVERED WITH HAY AND MULCH (AT 100LBS/1,000 SF), OR WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR 90 DAYS OR MORE SHALL BE SEEDED WITH WINTER RYE (FOR FALL SEEDING AT 3LB/1,000 SF) OR OATS (FOR SUMMER SEEDING AT 2LB/1,000 SF) AND THEN COVERED WITH HAY MULCH (AT 100LB/1,000 SF) OR AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL. LOAM SHALL BE STOCKPILED AT LOCATIONS DESIGNATED BY THE OWNER AND ENGINEER.
- 7. ALL HAYBALE FILTER BARRIERS, SILT SACKS, AND FILTER FABRICS SHALL BE INSTALLED ACCORDING TO THE EROSION CONTROL PLAN. THESE SHALL BE MAINTAINED DURING CONSTRUCTION TO REMOVE SEDIMENT FROM RUNOFF WATER. ALL THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER ANY RAINFALL OR RUNOFF EVENT, MAINTAINED AND CLEANED UNTIL ALL AREAS HAVE AT LEAST 85-90% VIGOROUS PERENNIAL COVER OF GRASSES.
- 8. THE EXISTING PARKING LOT SHALL BE PERIODICALLY SWEPT OR WASHED TO AVOID TRACKING MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. A WATERING TRUCK WILL BE USED TO PERIODICALLY SPRINKLE CONSTRUCTION AREAS IN ORDER TO KEEP THE LEVEL OF DUST TO A MINIMUM DURING THE DRY MONTHS AND AS REQUIRED.
- 9. THE CONTRACTOR SHALL USE EXTREME CAUTION TO AVOID ALLOWING SEDIMENTS TO ENTER THE STORM DRAIN SYSTEM DURING CONSTRUCTION. CATCH BASIN INLETS SHALL ALSO BE PROTECTED DURING CONSTRUCTION BY THE USE OF STRAW BALE BARRIERS AROUND EACH INLET. SILT SACKS SHALL BE INSTALLED IN ALL EXISTING BASINS. INLET PROTECTION MAY BE REMOVED ONLY AFTER FINISHED AREAS ARE PAVED AND THE VEGETATED SLOPES ARE ESTABLISHED WITH AT LEAST 85-90% OF VIGOROUS PERENNIAL GROWTH.
- 10. REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON THE COMPLETION OF CONSTRUCTION. FOLLOWING SEED BED PREPARATION ALL AREAS NOT NOTED TO RECEIVE COVER SHALL BE LOAM AND SEEDED. AREAS SEEDED BETWEEN MAY 15 TO AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15TH. HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 LBS. PER 1,000 S.F.
- 11. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS FOR TEMPORARY SEEDED AREAS MAY BE APPLIED AS FOLLOWS:
- 10-10-10 FERTILIZER (N-P205-K20 OR EQUAL)- APPLICATION RATE= 25 LBS/1,000 S.F. • GROUND LIMESTONE (85% OF TOTAL CARBONATES. LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT 50% WILL PASS A 100 MESH SIEVE AND 90% WILL PASS THROUGH A 20 MESH
- SIEVE. APPLICATION RATE= 100 LB/1,000 S.F. • WHEN FERTILIZER IS APPLIED WITHIN 100' OF ANY RIVER, STREAM, POND, OR LAKE IT SHALL BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER.
- 14. LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE PER SPECIFICATIONS. LOAM SHALL BE FREE OF SOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER INCH IN DIAMETER, AND WITHOUT WEEDS, ROOTS OR OTHER DELETERIOUS MATERIAL AND MEET THE LOAM SPECIFICATION DETAIL.
- 15. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISHED SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.
- 16. AT THE OWNER'S DISCRETION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED TO MAINTAIN STABILITY OF EARTHWORKS AND FINISHED GRADED AREAS. THE CONTRACTOR, AT HIS EXPENSE, WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ADDITIONAL MEASURES AS SPECIFIED BY THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO REQUESTS BY EPA AND THE MUNICIPALITY, AS AUTHORIZED BY THE OWNER.
- 17. INSPECTIONS AND MONITORING MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. WEEKLY INSPECTIONS SHALL BE HELD THROUGH THE DURATION OF CONSTRUCTION ACTIVITY. WEFKLY INSPECTION REPORTS SHALL BE MAINTAINED IN THE CONTRACTORS FIELD OFFICE. IN ADDITION TO THE NORMAL WEEKLY INSPECTIONS, THE CONTRACTOR SHALL PERFORM AN INSPECTION OF ALL EROSION CONTROL MEASURES AFTER EACH RAINFALL OR RUNOFF EVENT, AND PERFORM THE NECESSARY REPAIRS. THE INSPECTIONS SHALL INCLUDE BUT NOT BE LIMITED TO THE SITE'S DOWN STREAM DISCHARGE POINTS.
- 18. IF ANY EVIDENCE OF SEDIMENTATION IS OBSERVED IN THE INLETS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, PROVIDE A PLAN TO THE ENGINEER TO REMOVE ANY ACCUMULATED SEDIMENT IN THESE AREAS. THE CONTRACTOR SHALL ALSO IMMEDIATELY PROVIDE ADDITIONAL ON SITE EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT FURTHER DEGRADATION OF THE AREA.
- 19. FOLLOWING THE TEMPORARY OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA BIMONTHLY TO ENSURE THE AREAS HAVE A MINIMUM OF 85-90% VEGETATED VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW UP INSPECTIONS IN THE EVEN OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.
- 20. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.



## LOCUS MAP

#### CAMBRIDGE EROSION CONTROL NOTES

- 1. PRIOR TO ANY LAND DISTURBANCE ACTIVITIES COMMENCING ON THE SITE, THE DEVELOPER SHALL PHYSICALLY MARK LIMITS OF NO LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS, OR ORANGE CONSTRUCTION FENCE, SO THAT WORKERS CAN SEE THE AREAS TO BE PROTECTED. THE PHYSICAL MARKERS SHALL REMAIN IN PLACE UNTIL A CERTIFICATE OF COMPLETION HAS BEEN ISSUED.
- 2. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SOIL DISTURBANCE. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
- 3. MINIMIZE TOTAL AREA OF DISTURBANCE AND PROTECT NATURAL FEATURES AND SOIL.
- 4. THE CONTRACTOR SHALL SEQUENCE ALL ACTIVITIES TO MINIMIZE SIMULTANEOUS AREAS OF DISTURBANCE. MASS CLEARINGS AND GRADING OF THE ENTIRE SITE SHALL BE AVOIDED.
- 5. MINIMIZE SOIL EROSION AND CONTROL SEDIMENTATION DURING CONSTRUCTION,
- 6. DIVERT UNCONTAMINATED WATER AROUND DISTURBED AREAS.
- 7. INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE MANUFACTURER6 SPECIFICATIONS AND GOOD ENGINEERING PRACTICES OR THE 2008 EPA'S CONSTRUCTION GENERAL PERMIT.
- 8. PROTECT AND MANAGE ON AND OFF-SITE MATERIAL STORAGE AREAS (OVERBURDEN AND STOCKPILES OF DIRT, BORROW AREAS, OR OTHER AREAS USED SOLELY BY THE PERMITTED PROJECT ARE CONSIDERED A PART OF THE PROJECT).

9. COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS INCLUDING

- WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS, AND AIR QUALITY REQUIREMENTS, INCLUDING DUST CONTROL. 10. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF
- THE EROSION CONTROL DEVICE. SEDIMENT SHALL BE REMOVED FROM SILT FENCE PRIOR TO REACHING THE LOAD-BEARING CAPACITY OF THE SILT FENCE WHICH MAY BE LOWER THAN
- 11. SEDIMENT FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS SHALL BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT. 12. BMPS TO BE USED FOR INFILTRATION AFTER CONSTRUCTION SHALL NOT BE USED AS BMPS DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE BOARD, MANY INFILTRATION TECHNOLOGIES ARE NOT DESIGNED TO HANDLE THE HIGH CONCENTRATIONS OF SEDIMENTS
- TYPICALLY FOUND IN CONSTRUCTION RUNOFF, AND THUS MUST BE PROTECTED FROM CONSTRUCTION RELATED SEDIMENT LOADINGS. 13. SOIL STOCKPILES MUST BE STABILIZED OR COVERED AT THE END OF EACH WORKDAY.

STOCKPILE SIDE SLOPES SHALL NOT BE GREATER THAN 2:1. ALL STOCKPILES SHALL BE

- SURROUNDED BY SEDIMENT CONTROLS. 14. FOR ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS AND AREAS WITHIN 50 FEET OF A BUILDING UNDER CONSTRUCTION. A PERIMETER SEDIMENT CONTROL SYSTEM SHALL BE INSTALLED AND MAINTAINED TO CONTAIN
- 15. A TRACKING PAD OR OTHER APPROVED STABILIZATION METHOD SHALL BE CONSTRUCTED AT ALL ENTRANCE/EXIST POINTS OF THE SITE TO REDUCE THE AMOUNT OF SOIL CARRIED ONTO ROADWAYS AND OFF THE SITE.
- 16. ON THE CUT SIDE OF ROADS, DITCHES SHALL BE STABILIZED IMMEDIATELY WITH ROCK RIP-RAP OR OTHER NON-ERODIBLE LINERS, OR WHERE APPROPRIATE, VEGETATIVE MEASURES SUCH AS HYDRO SEEDING OR JUTE MATTING.
- 17. PERMANENT SEEDING SHALL BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM AUGUST TO OCTOBER 15. DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15, WHEN SEEDING IS FOUND TO BE IMPRACTICAL APPROPRIATE TEMPORARY STABILIZATION SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.
- 18. ALL SLOPES STEEPER THAN 3:1 (H: V, 33.3%), AS WELL AS PERIMETER DIKES, SEDIMENT BASINS OR TRAPS, AND EMBANKMENTS MUST, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST NOT BE DISTURBED.
- 19. TEMPORARY SEDIMENT TRAPPING DEVICES MUST NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTRIBUTORY DRAINAGE AREAS.
- 20. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL.
- 21. PROPERLY MANAGE ON-SITE CONSTRUCTION AND WASTE MATERIALS.

STABILIZING THE AREA THROUGH GROUND COVER PRACTICES..

- 22. PREVENT OFF-SITE VEHICLE TRACKING OF SEDIMENTS.
- 23. DUST SHALL BE CONTROLLED AT THE SITE.
- 24. ALL PREVIOUSLY DISTURBED LAND SHALL BE STABILIZED BY APPROVED METHODS AFTER 14 DAYS IF LEFT UNDISTURBED. THIS INCLUDES STOCKPILES, CONSTRUCTION ENTRANCES, GRADED AREAS AND OTHER CONSTRUCTION ACTIVITY RELATED CLEARING.
- 25. IF WORK IS HALTED OVER WINTER MONTHS THE CONTRACTOR SHALL BE RESPONSIBLE FOR

## GENERAL NOTES

- 1. SEE SHEET 1 FOR EXISTING CONDITIONS.
- 2. SEE SHEET C3 FOR GRADING AND DRAINAGE
- 3. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S 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.

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DATE DESCRIPTION

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120 ROOM EXTENDED STAY HOTEL 263 MONSIGNOR O'BRIEN HIGHWAY CAMBRIDGE, MA

1 McGRATH HIGHWAY SOMERVILLE, MA Project no. 1362-16 DATE:

08-22-1 AS SHOWN DWG.: 1362-16-SWPPP-Erosion Contro **DESIGNED BY** SM | CHECKED BY:



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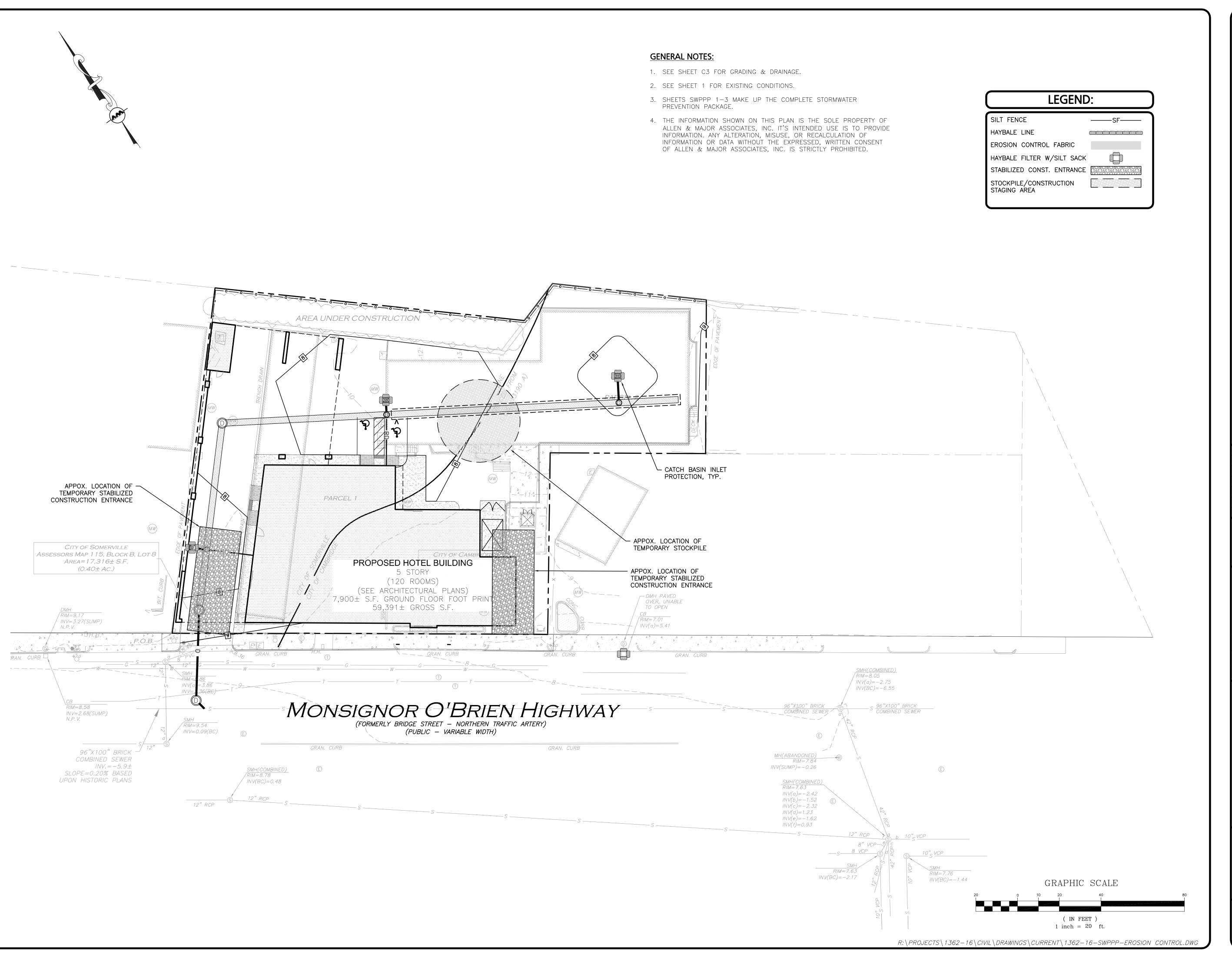
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STORMWATER POLLUTION PREVENTION NOTES

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SHEET No.





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> 1 McGrath Highway SOMERVILLE, MA

1362-16 DATE: PROJECT NO. **DESIGNED BY:** 

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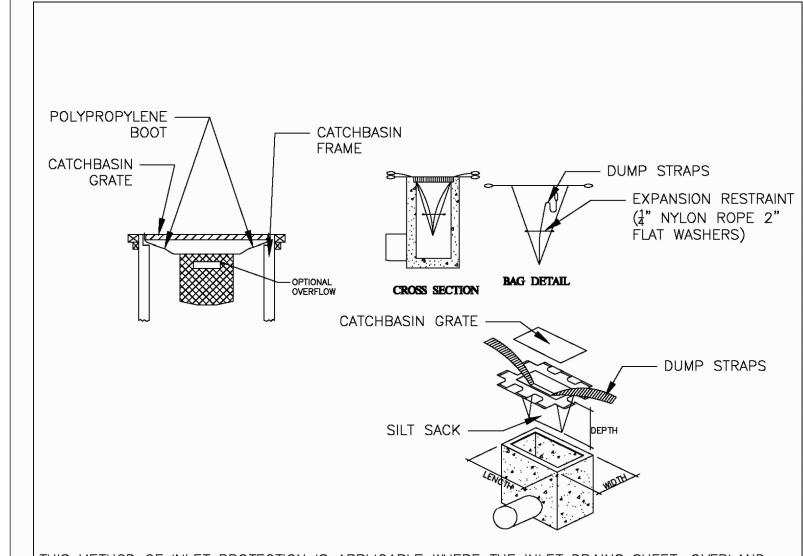
DRAWING TITLE:

SHEET No.

SWPPP 2

STORMWATER POLLUTION PREVENTION PLAN

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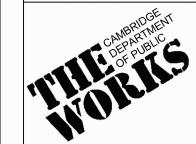
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS SHEET, OVERLAND AND CONCENTRATED FLOWS (NOT GREATER THAN 1 CFS). THE METHOD CAN DRAIN FLAT AREA TO STEEP SLOPES. INLET CAPACITY WILL DECREASE WITH THIS METHOD AND CONTRACTOR SHALL EXPECT FLOODING TO OCCUR DURING HIGH FLOW EVENTS.

INSPECTION SCHEDULE SHALL COMPLY WITH THE 2008 EPA CONSTRUCTION GENERAL PERMIT MAINTENANCE SHALL OCCUR WHEN NECESSARY. SILT SACKS SHALL BE CLEANED ONCE THE BAG IS FILLED HALF WAY WITH DEBRIS. CONTRACTOR SHALL REMOVE SILT SACK AND PLACE NEW UNIT. DO NOT EMPTY SILT SACK CONTENTS INTO THE CATCHBASIN.

# CATCH BASIN W/ SILT SACK INLET PROTECTION

NOT TO SCALE

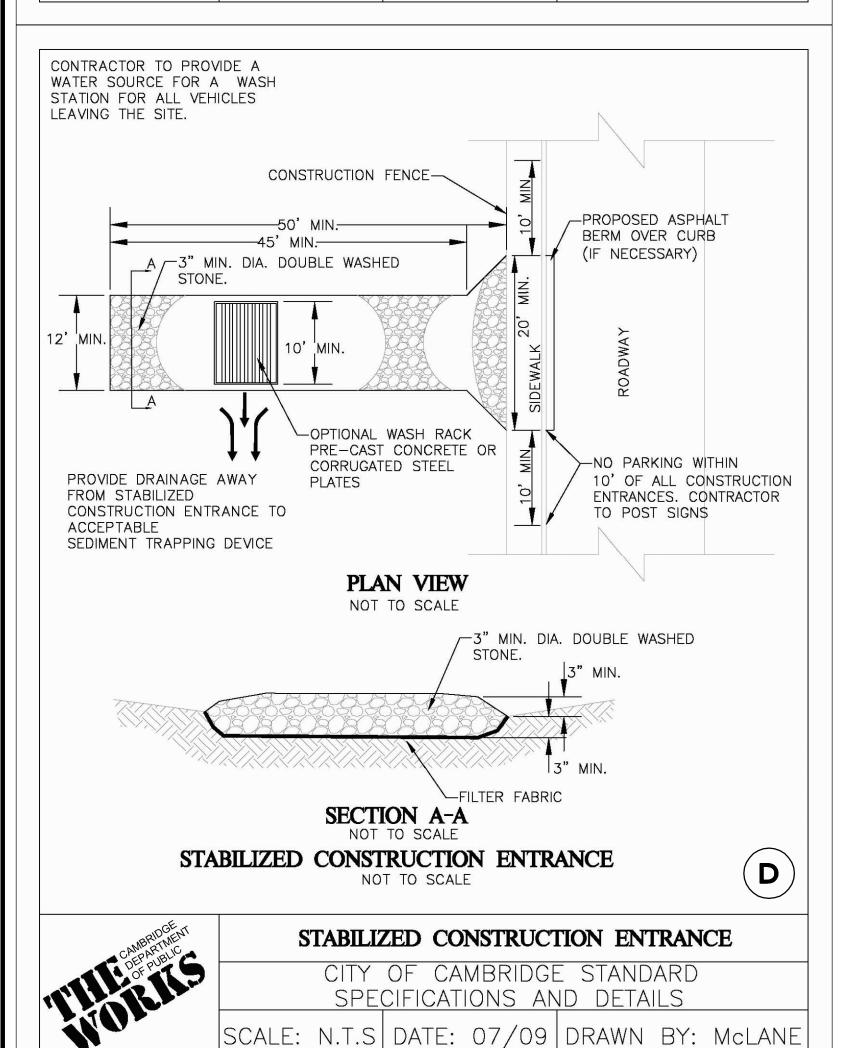


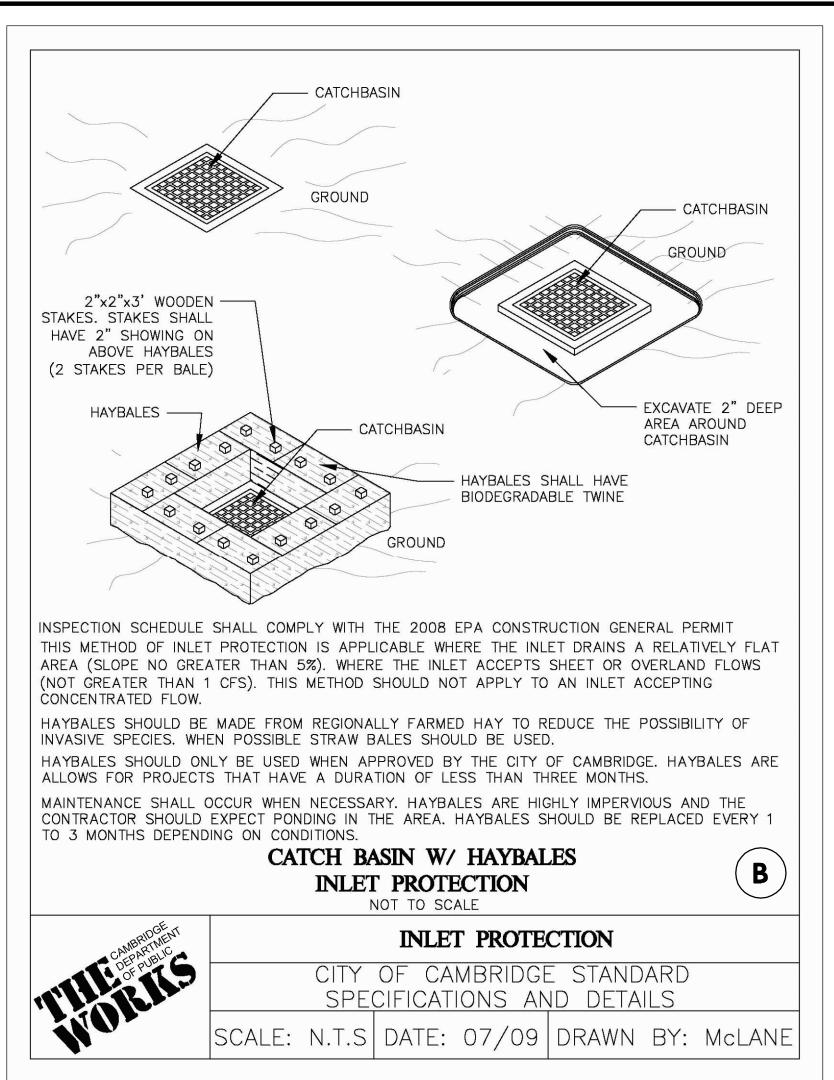


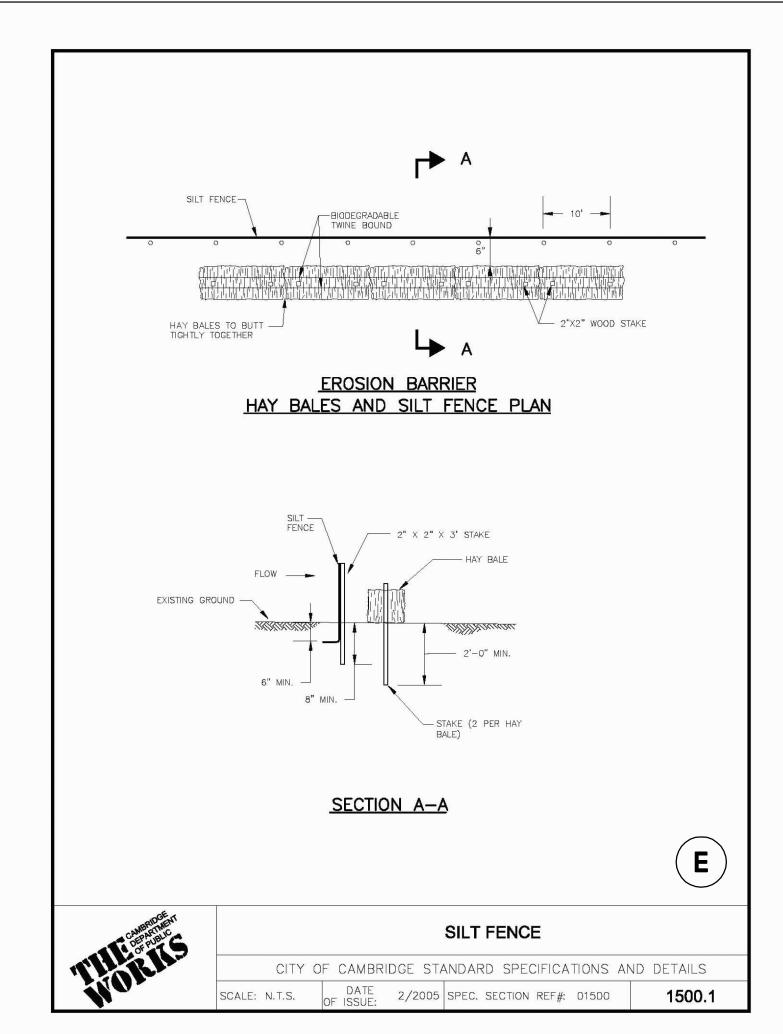
## INLET PROTECTION

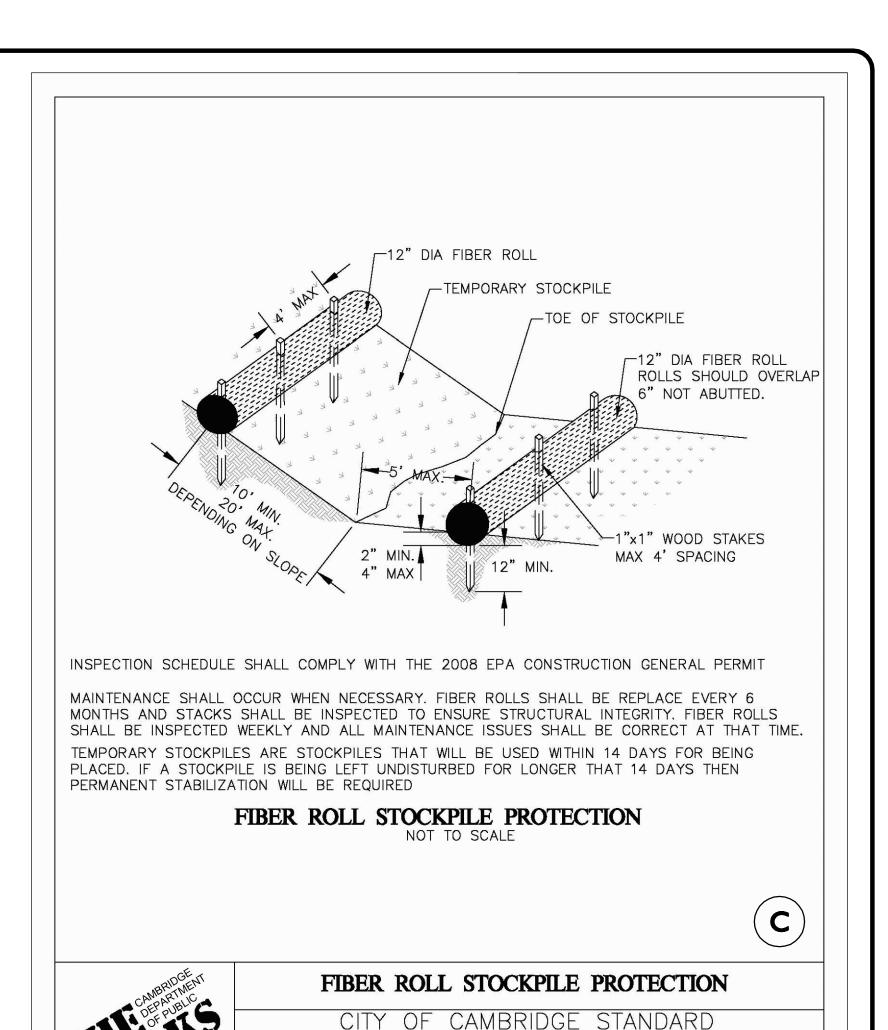
CITY OF CAMBRIDGE STANDARD SPECIFICATIONS AND DETAILS

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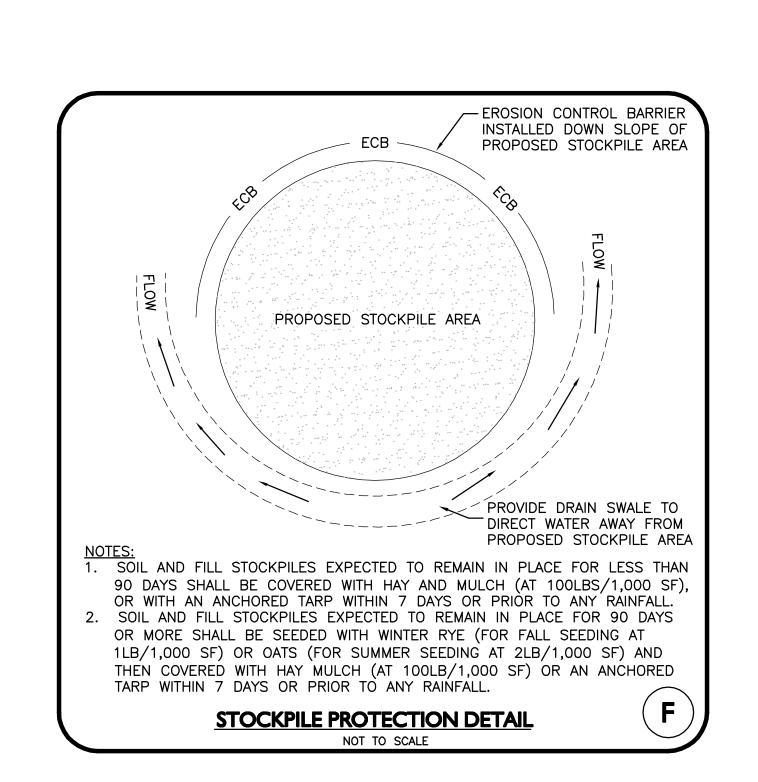






SPECIFICATIONS AND DETAILS

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120 ROOM EXTENDED STAY HOTEL 263 MONSIGNOR O'BRIEN HIGHWAY CAMBRIDGE, MA

> 1 McGrath Highway Somerville, Ma

PROJECT NO. 1362-16 DATE: 08-22-16

SCALE: AS SHOWN DWG.: 1362-16-SWPPP-Epograp.Control

DESIGNED BY: SM CHECKED BY: MIN

PREPARED BY:

ALLEN & MAJOR

ASSOCIATES, INC.

civil & structural engineering • land surveying
environmental consulting • landscape architecture

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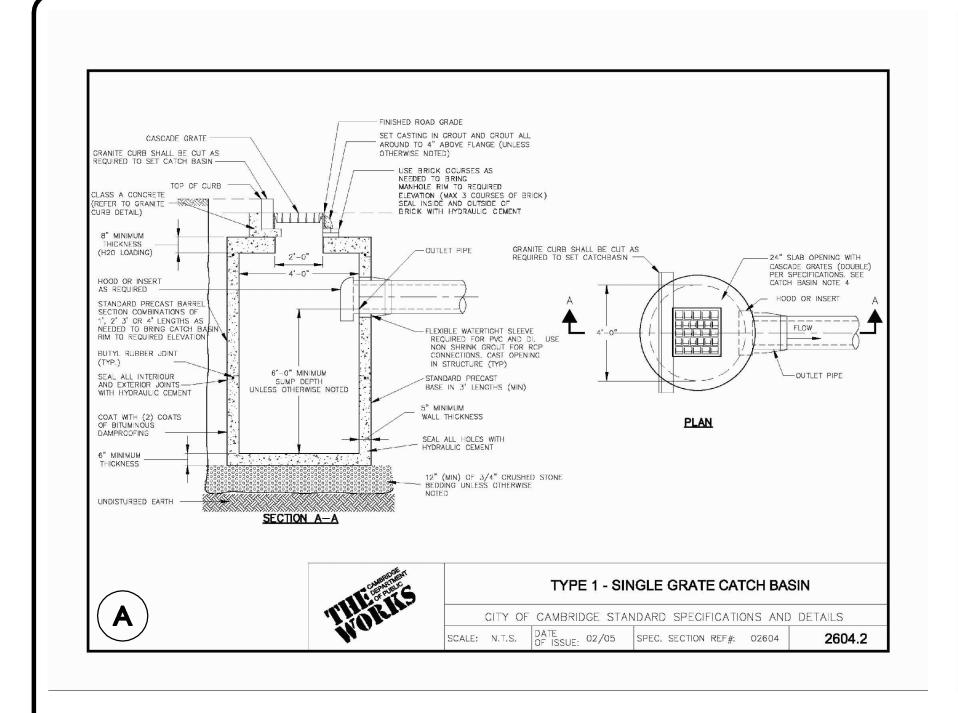
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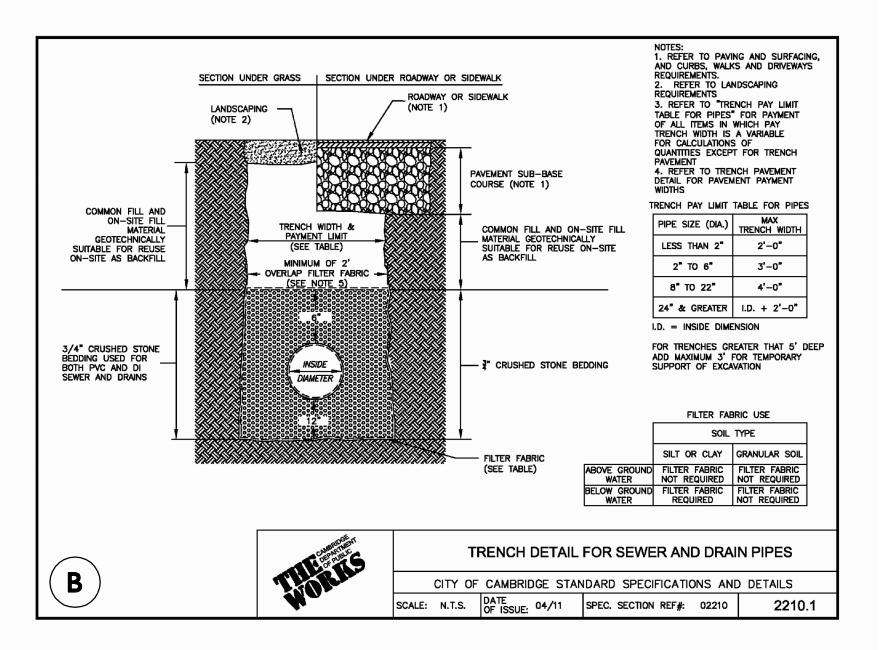
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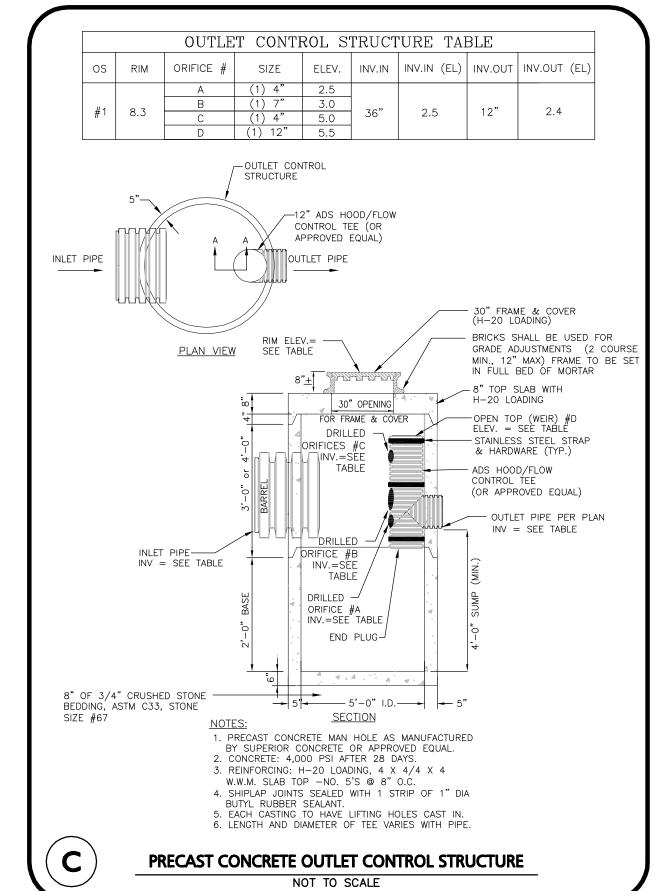
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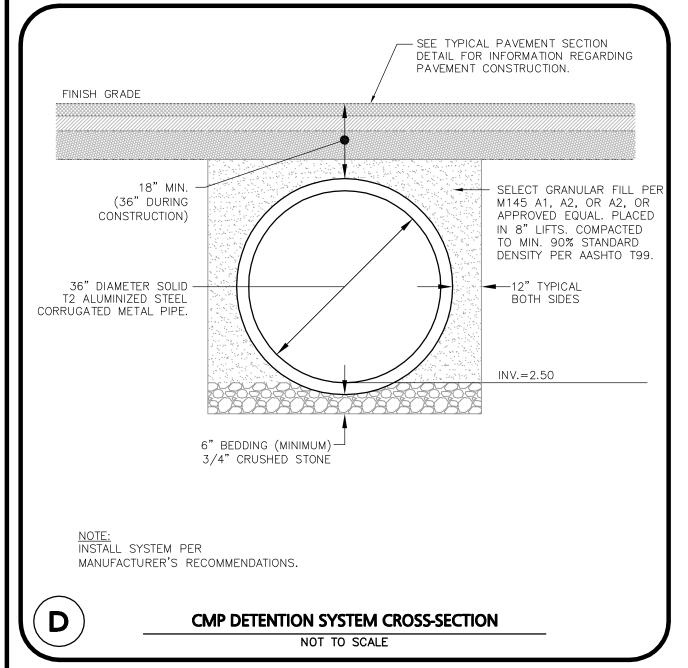
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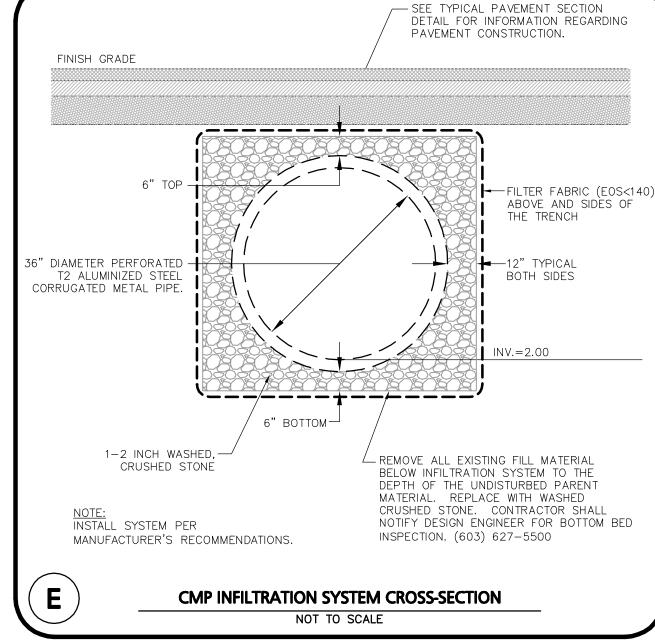
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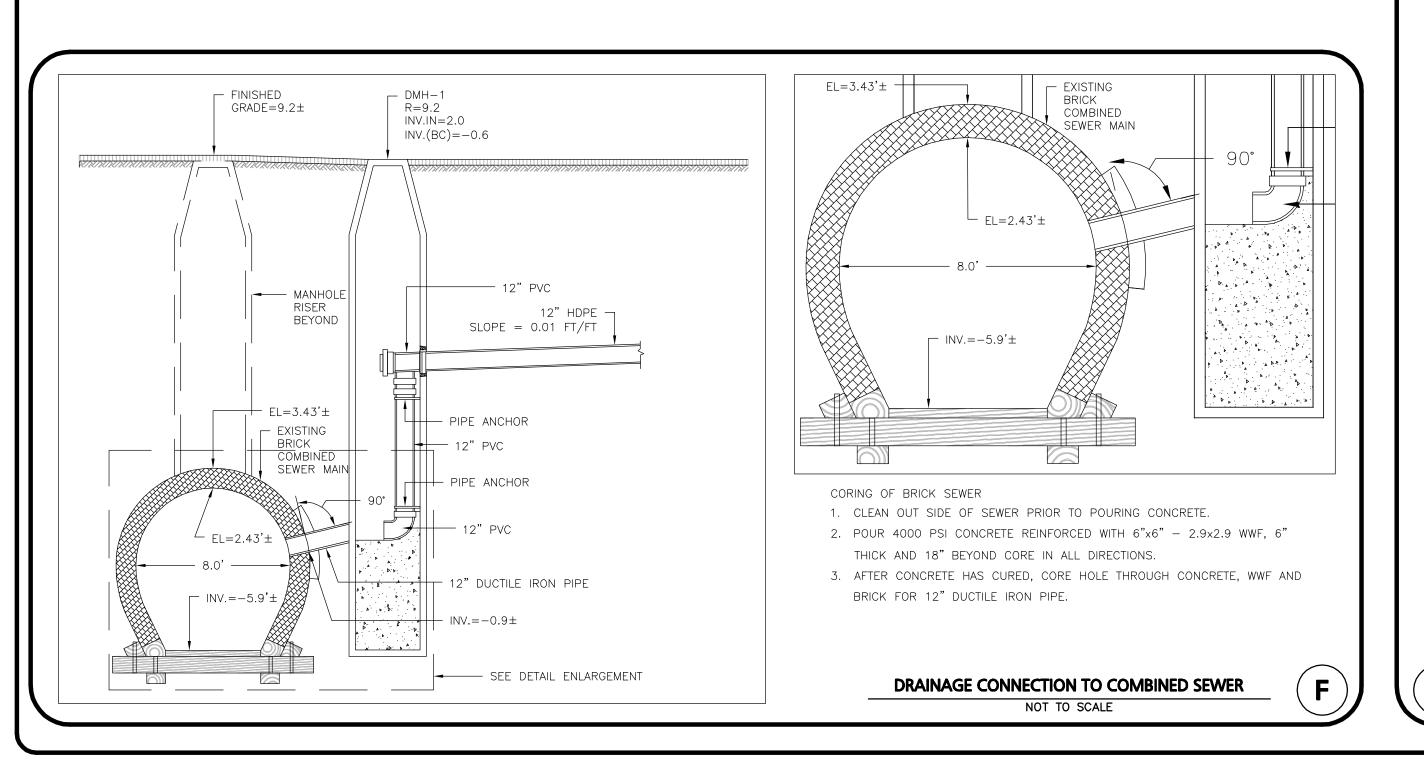


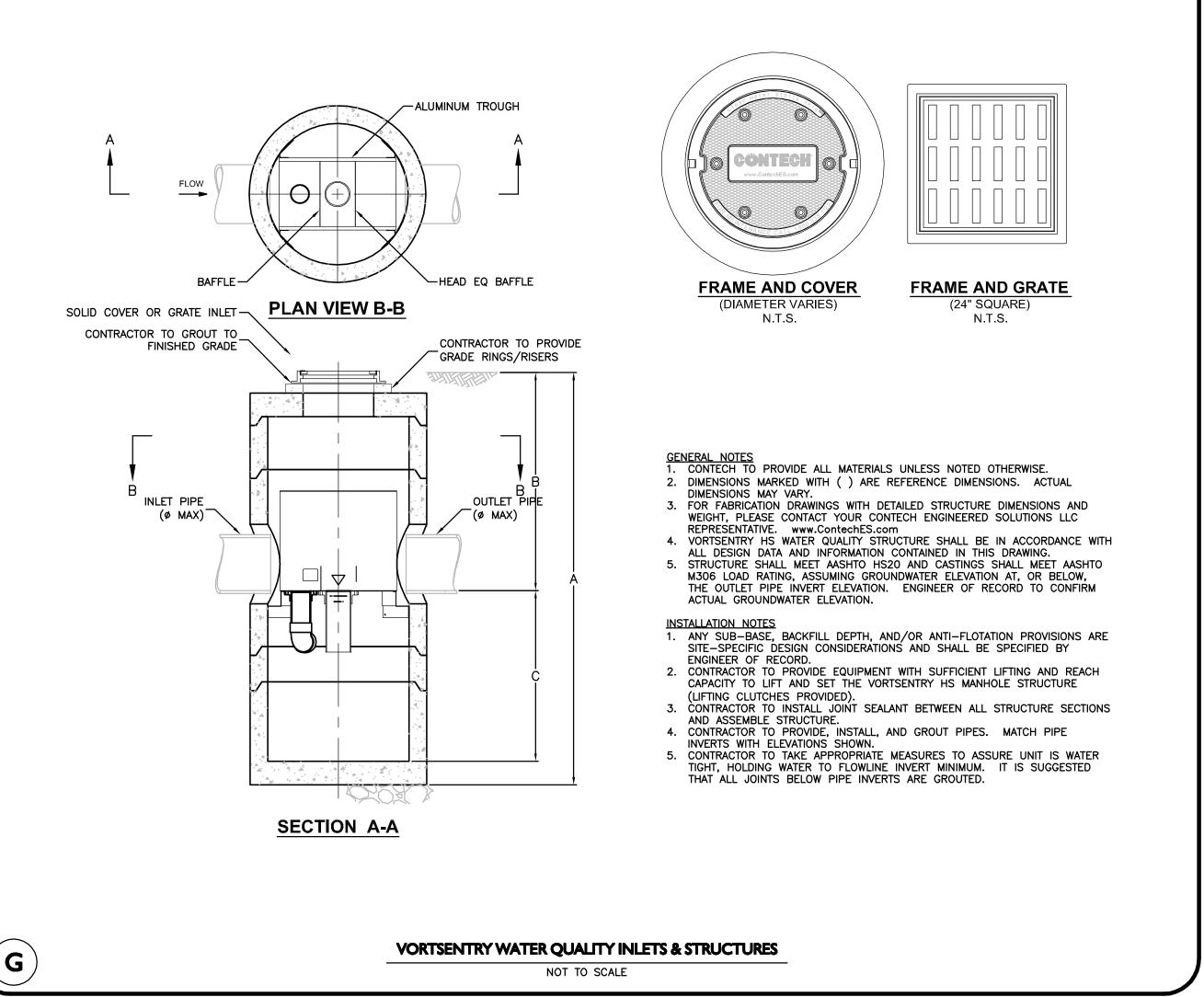


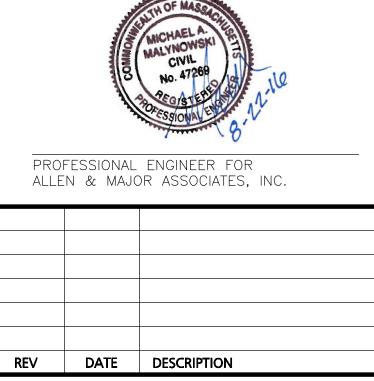












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120 ROOM EXTENDED STAY HOTEL **263 MONSIGNOR O'BRIEN HIGHWAY** CAMBRIDGE, MA

> 1 McGRATH HIGHWAY SOMERVILLE, MA

PROJECT NO. 1362-16 DATE: 08-22-16 AS SHOWN DWG.: 1362-16ARtail SM | CHECKED BY: DESIGNED BY

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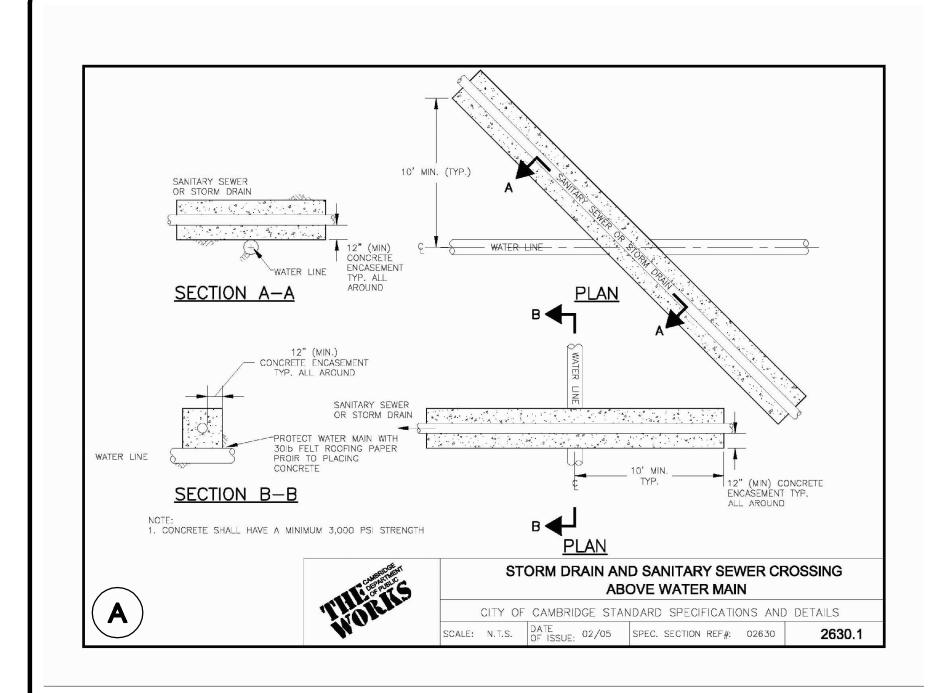
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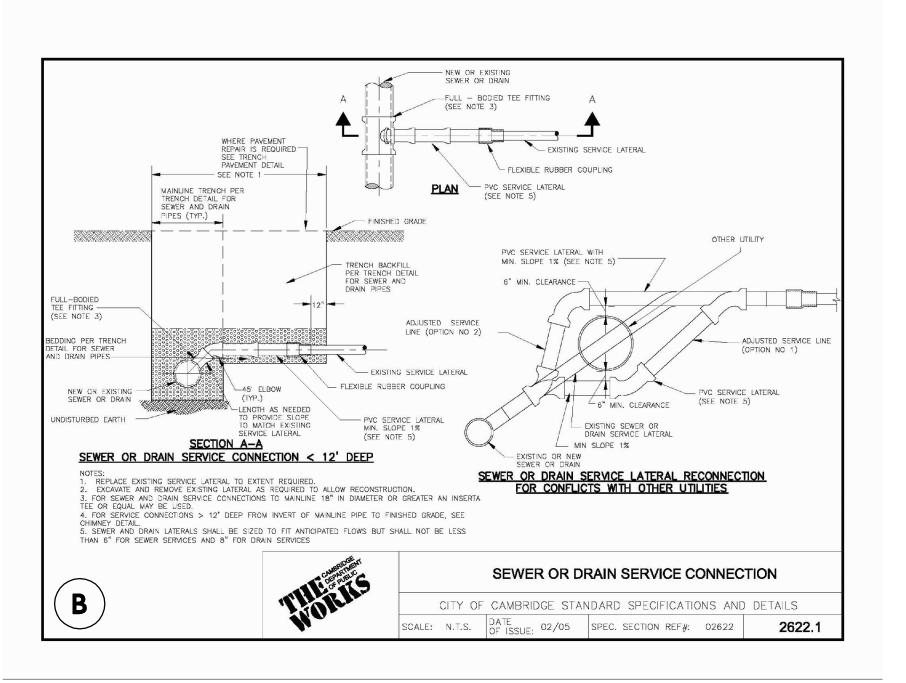
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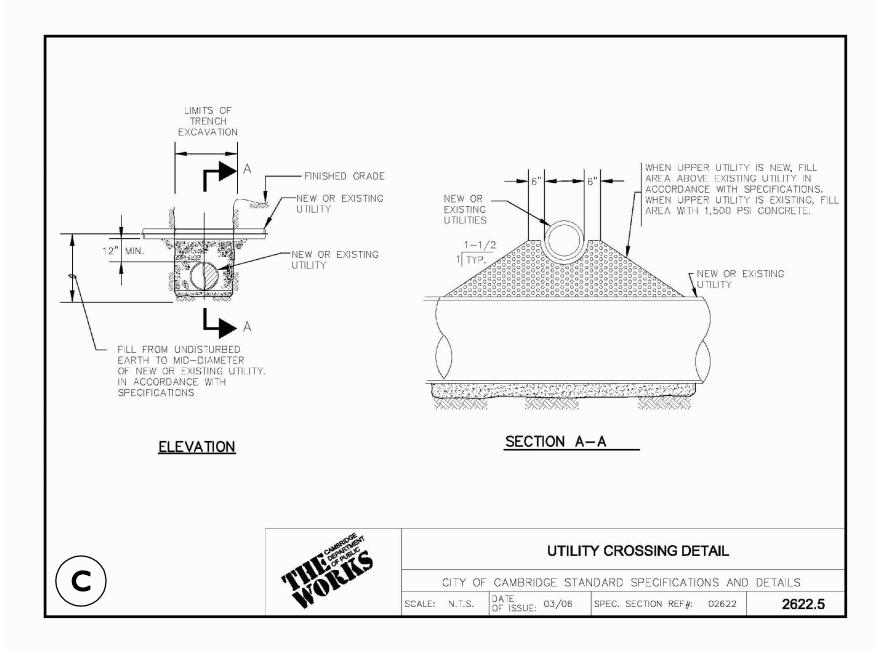
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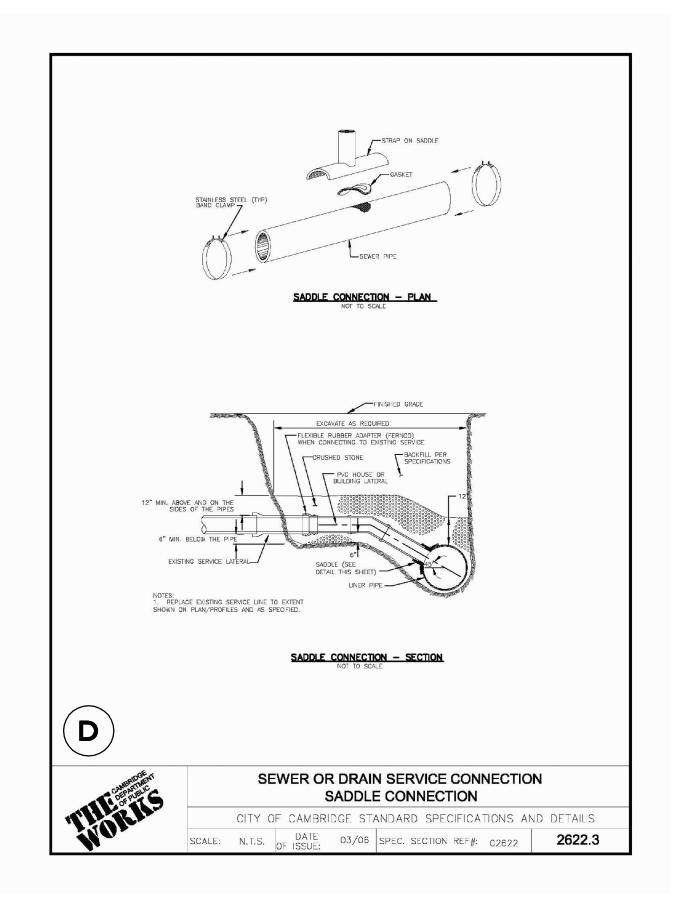
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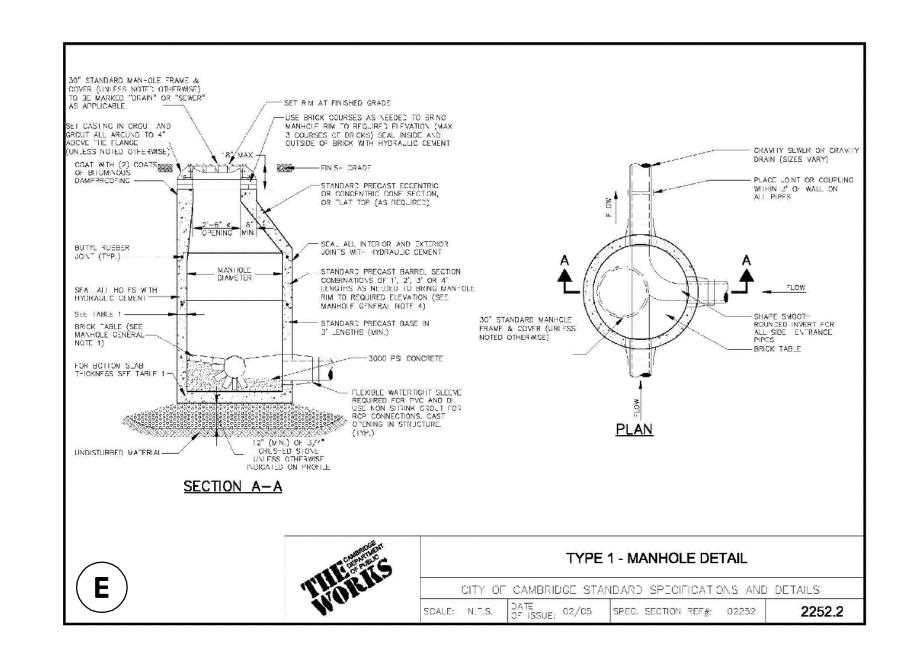
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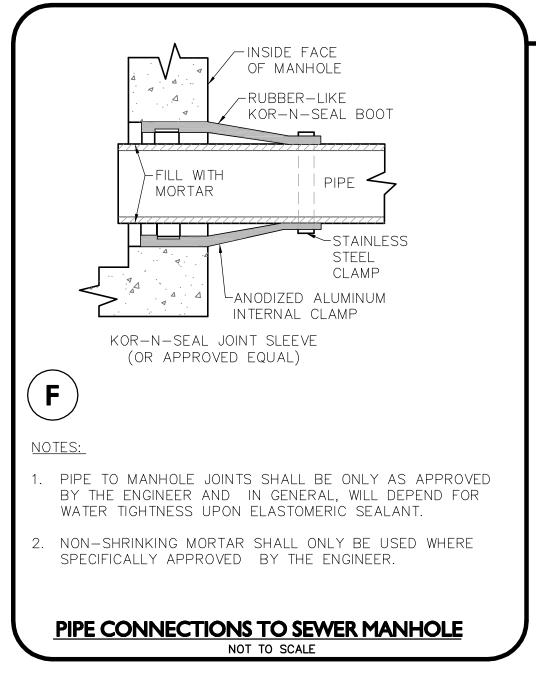


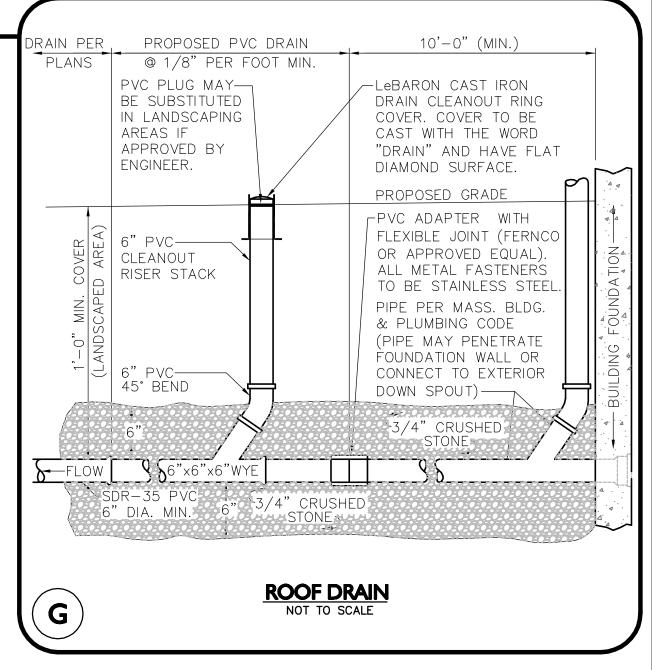


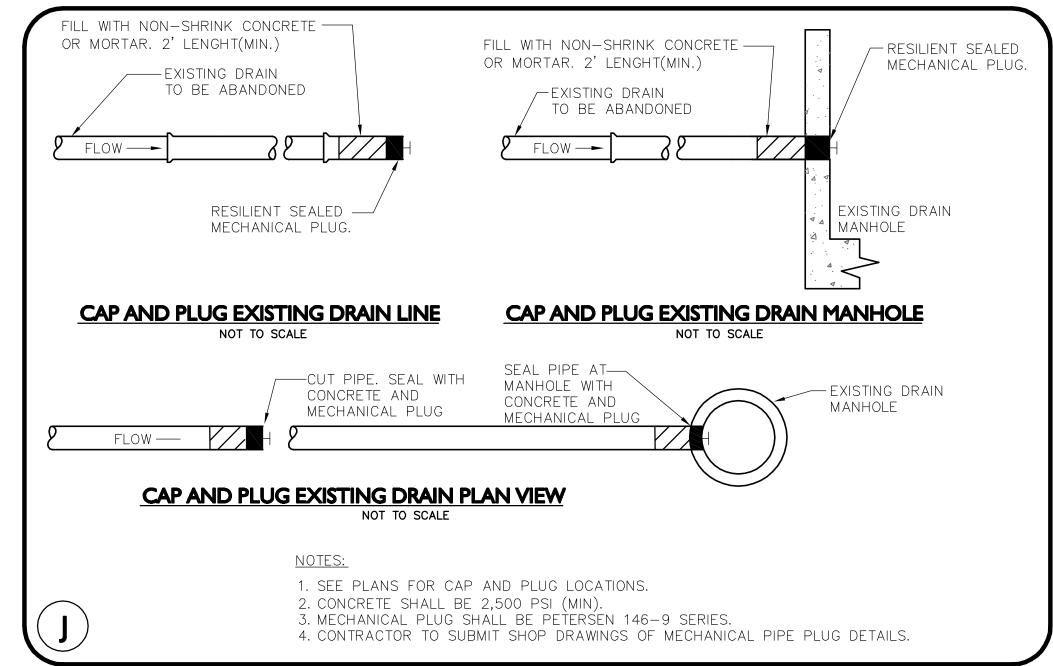


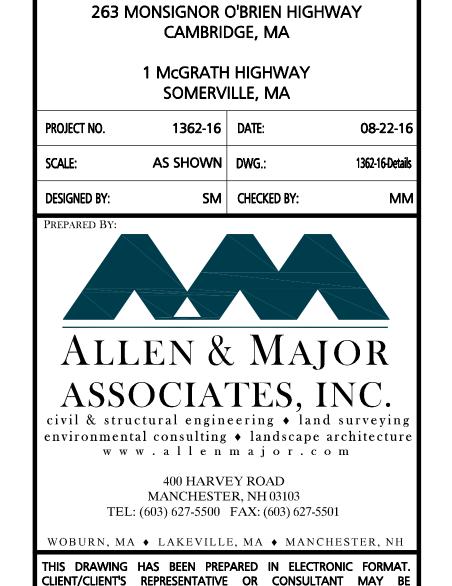












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120 ROOM EXTENDED STAY HOTEL

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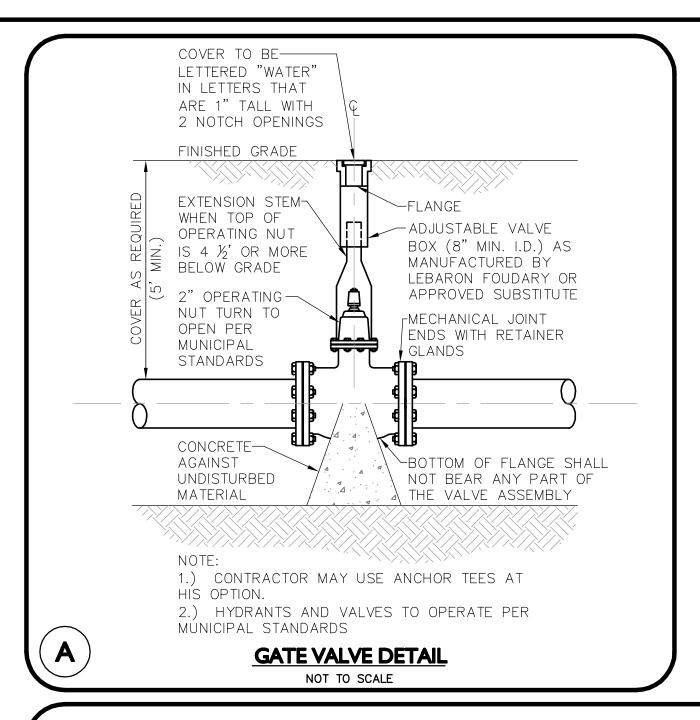
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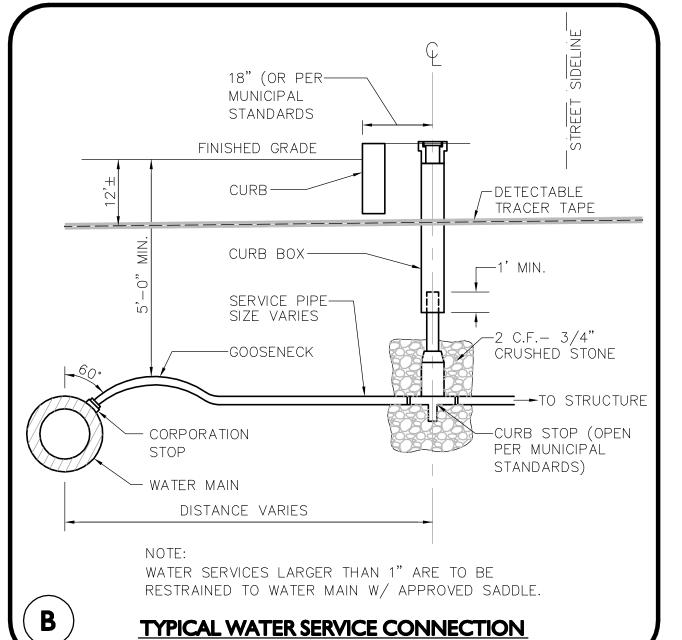
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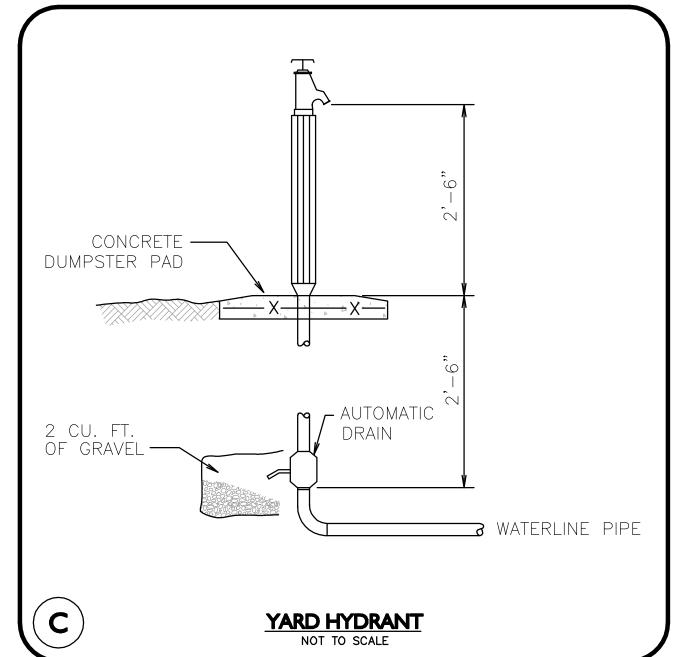
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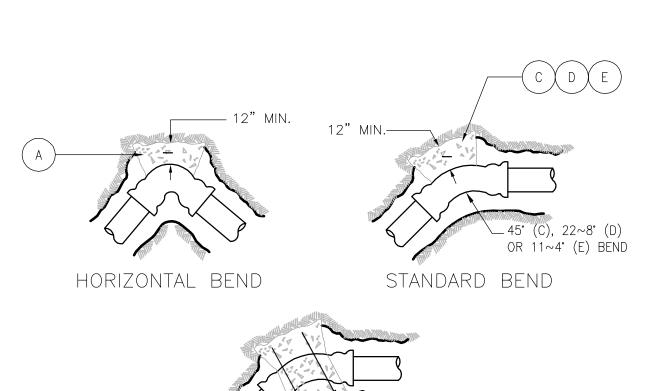
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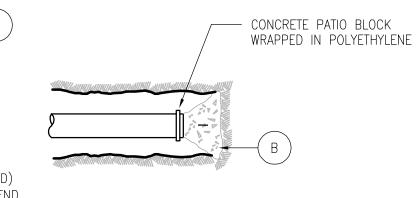




VERTICAL BEND - SECTION

VOLUME OF CONCRETE

TO BE DETERMINED BY ENGINEER



THRUST BLOCK SCHEDULE

SQUARE FEET OF CONCRETE THRUST

BLOCKING BEARING ON UNDISTURBED MATERIAL

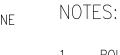
PIPE SIZE

FEST PRESSURE TO BE 200 PSI MINIMUM AT

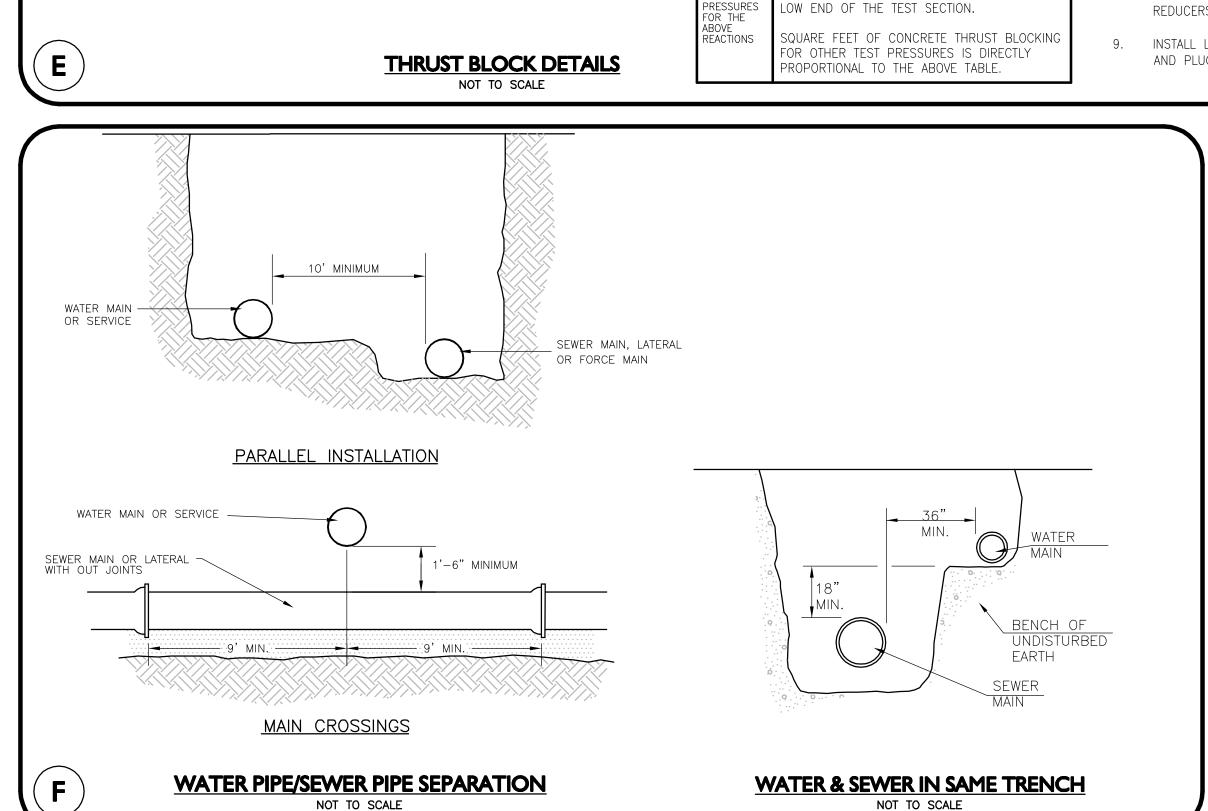
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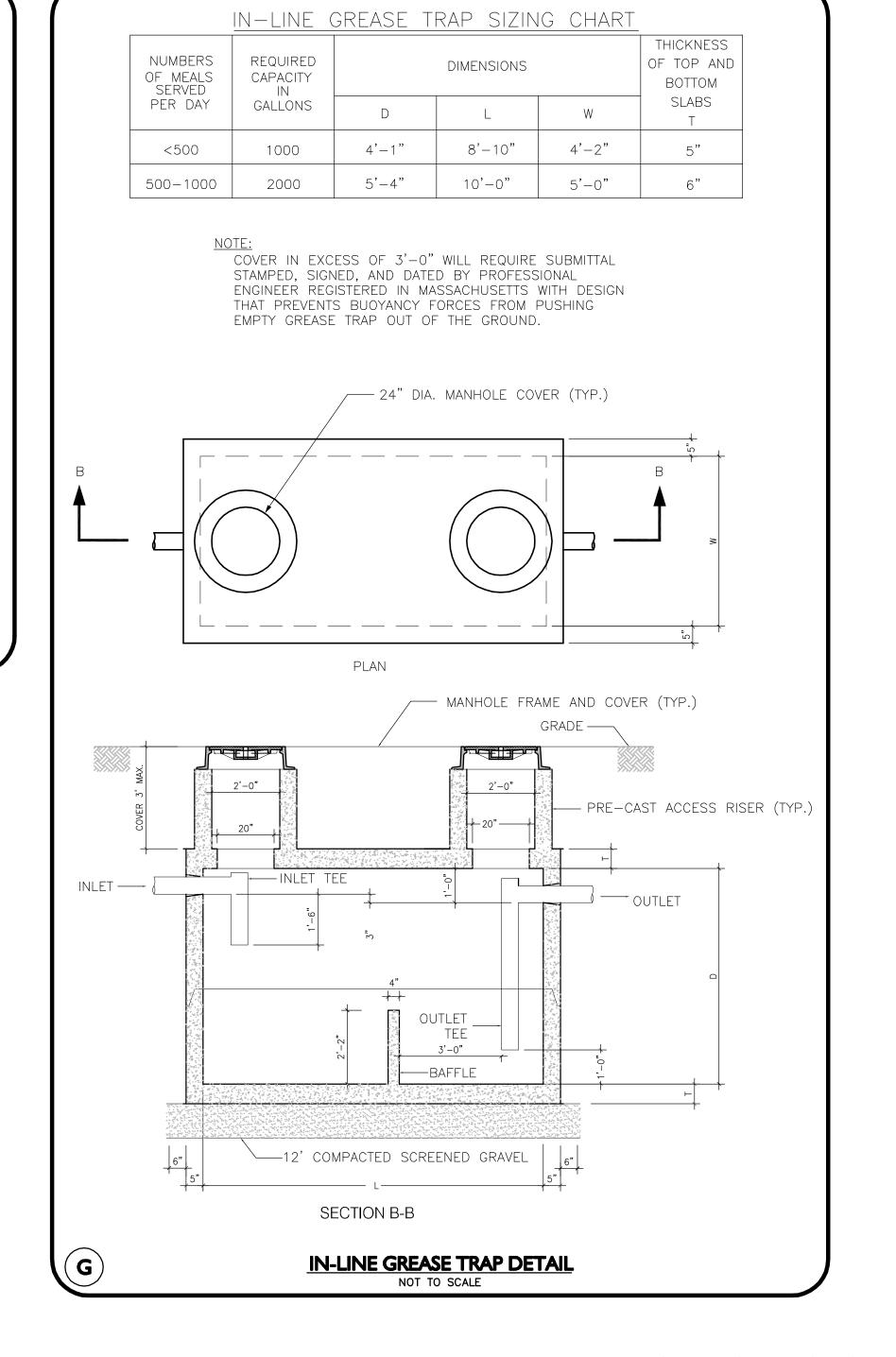
3.01

PIPE & CAP



- 1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH SHALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
- 2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
- 3. PLACE CONCRETE PATIO BLOCKS IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.
- 4. REQUIREMENTS OF THE ABOVE TABLE PRESUME MINIMUM SOIL BEARING OF 1 TON PER SQUARE FOOT AND MAY BE VARIED BY THE ENGINEER TO MEET OTHER CONDITIONS ENCOUNTERED.
- 5. RETAINER GLANDS ARE REQUIRED FOR ALL MECHANICAL JOINTS. THESE GLANDS DO NOT REDUCE THE REQUIREMENTS FOR THRUST RESTRAINT.
- 6. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE OR BUILDING PAPER PRIOR TO INSTALLATION OF CONCRETE RESTRAINT.
- 7. THREADED RODS SHALL BE ANSI A242 FY50 PIPE RESTRAINT NUTS TO MATCH AWWA C111. THREADED RODS AND NUTS TO GE FIELD COATED WITH BITUMINOUS PAINT.
- 8. THRUST RESTRAINT IS REQUIRED FOR ALL TEES, BENDS, REDUCERS, CAPS PLUGS, OR CROSSES.
- INSTALL LIFT HOOKS INTO THRUST BLOCKS AT END CAPS AND PLUGS.

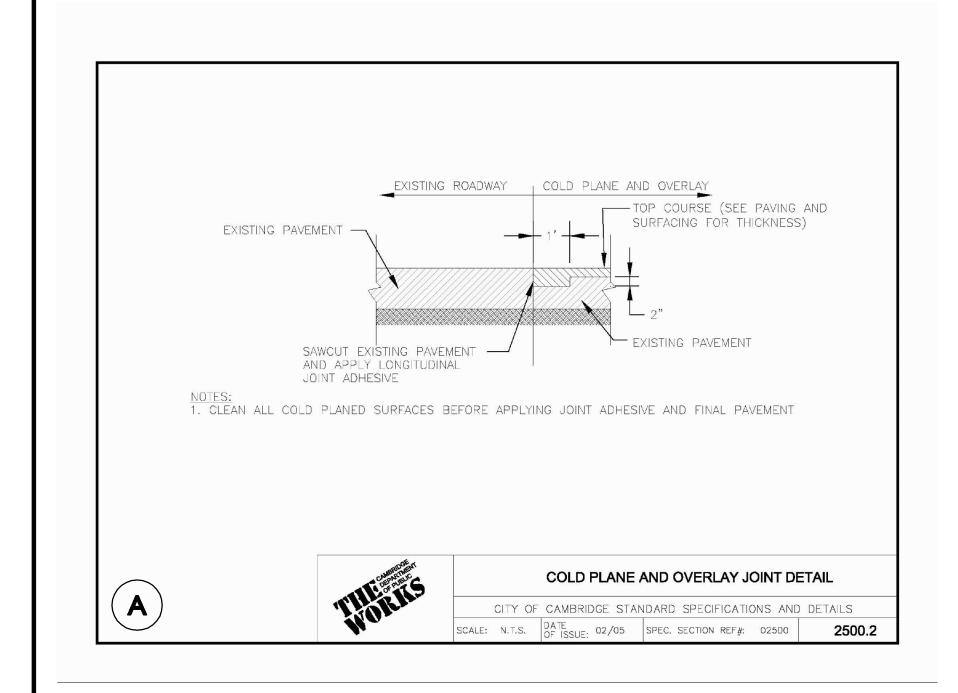


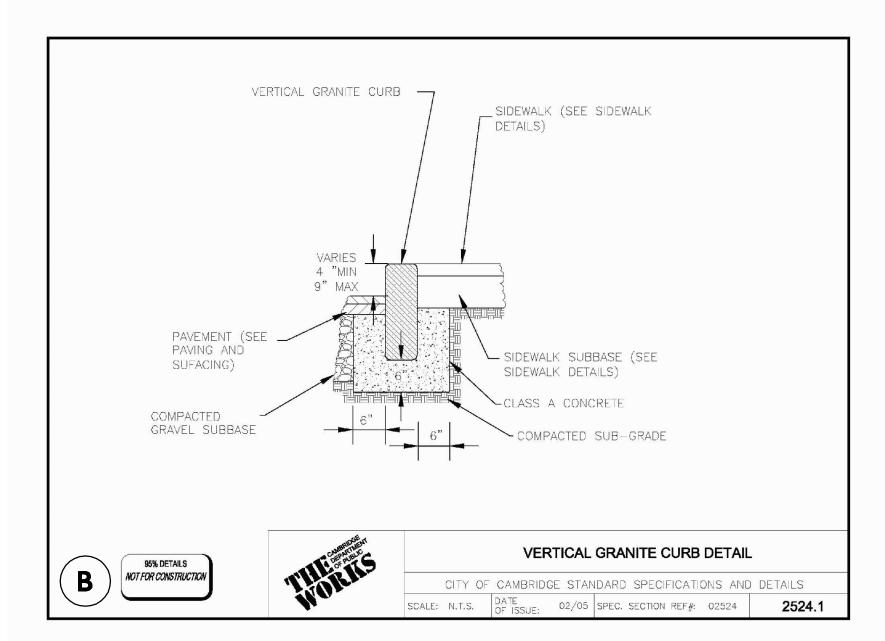


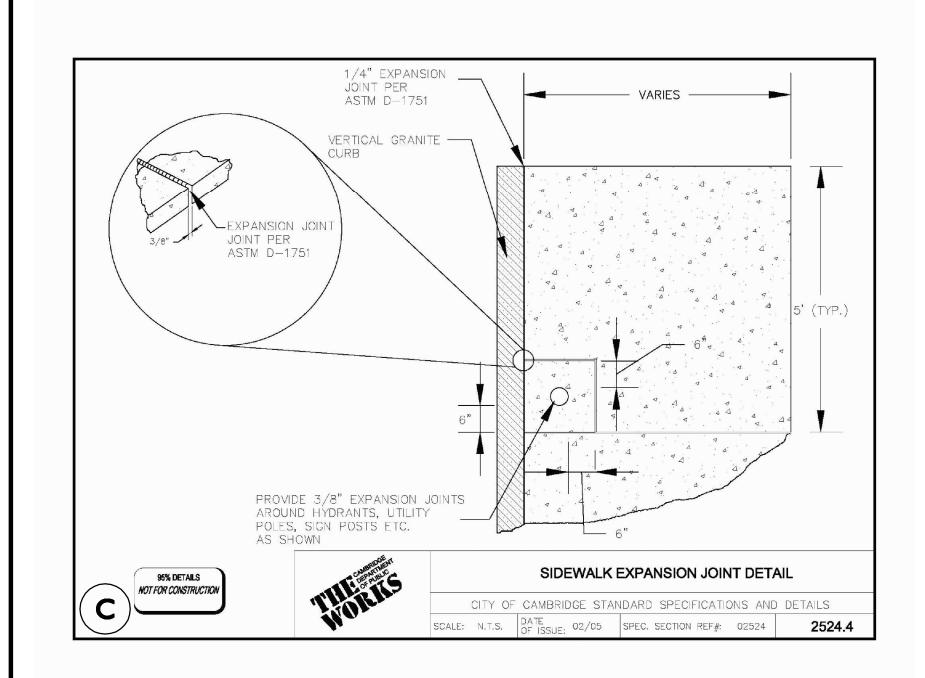


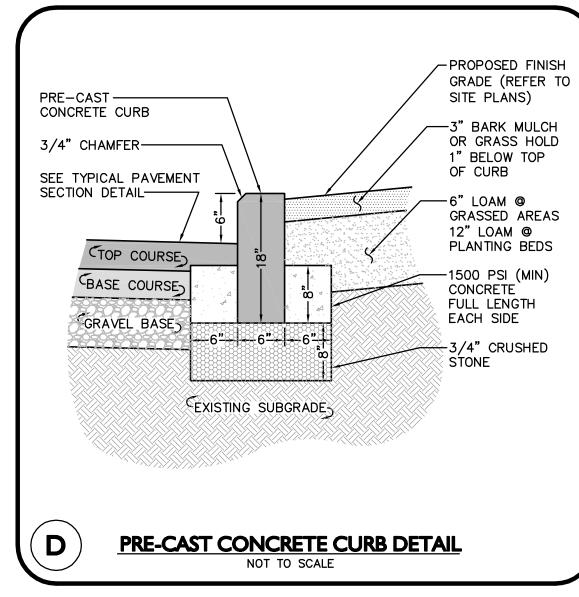
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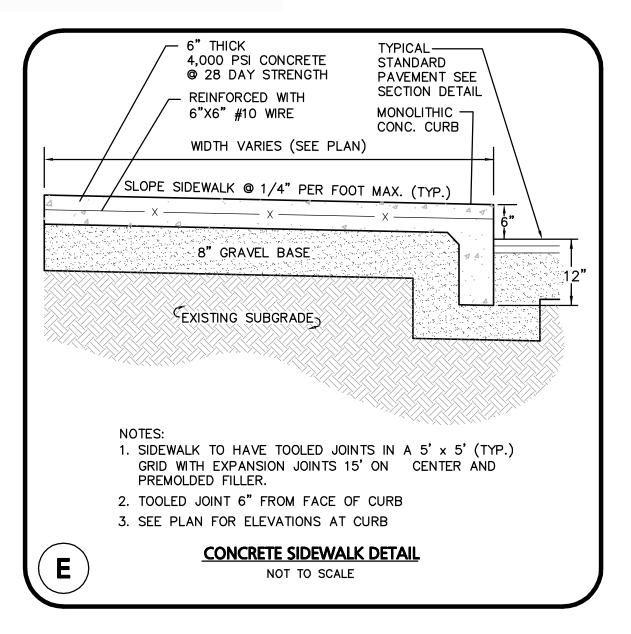
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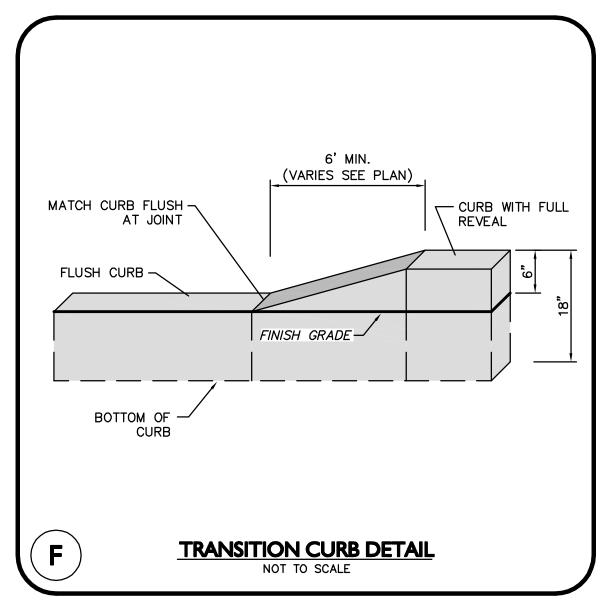


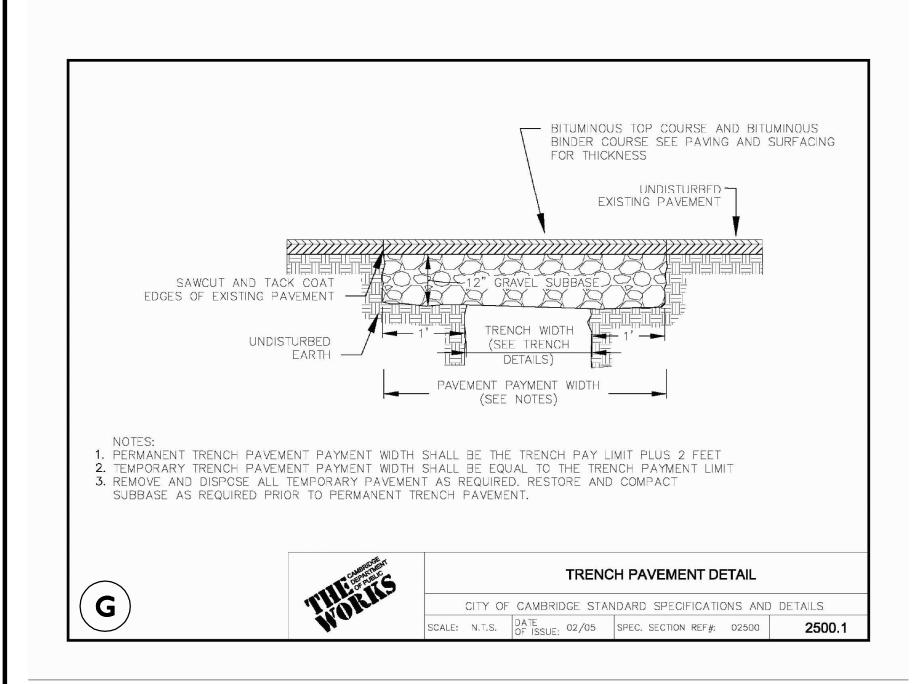


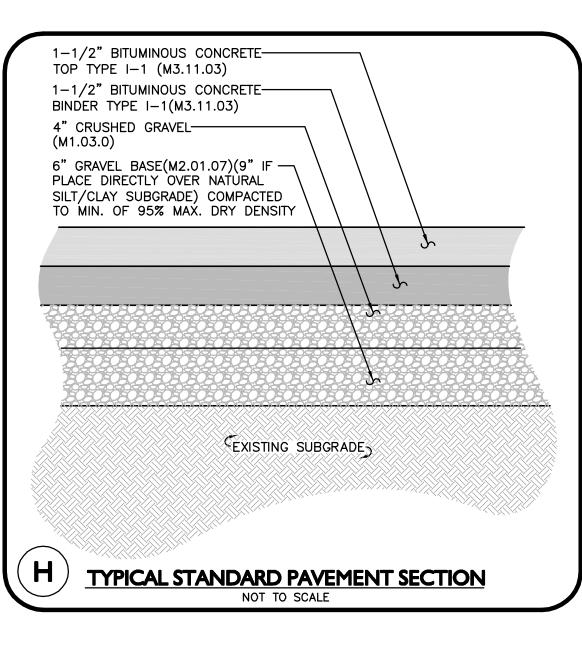


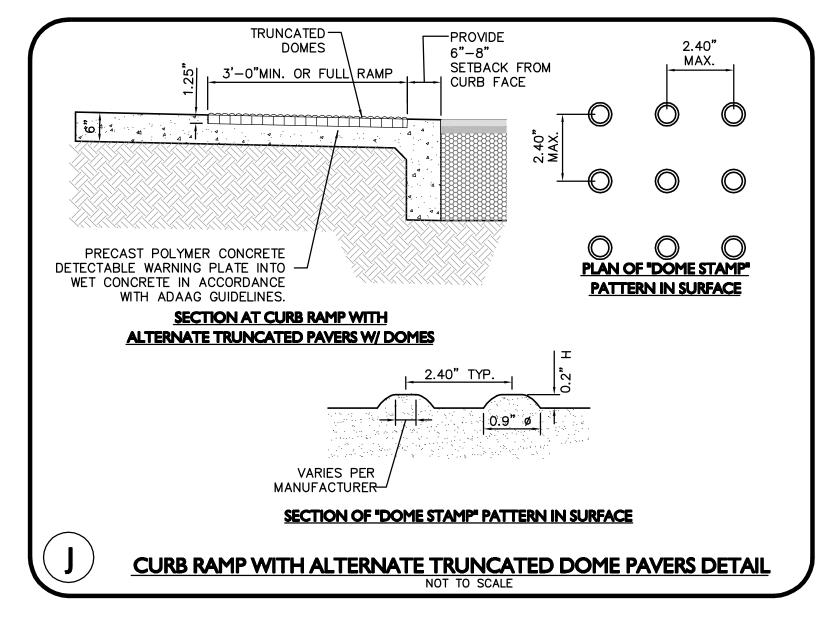


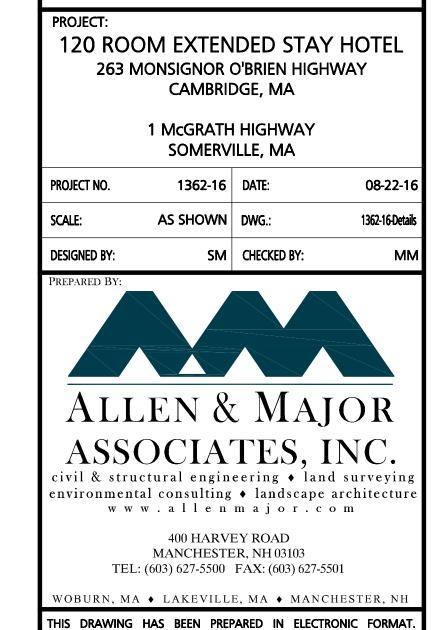












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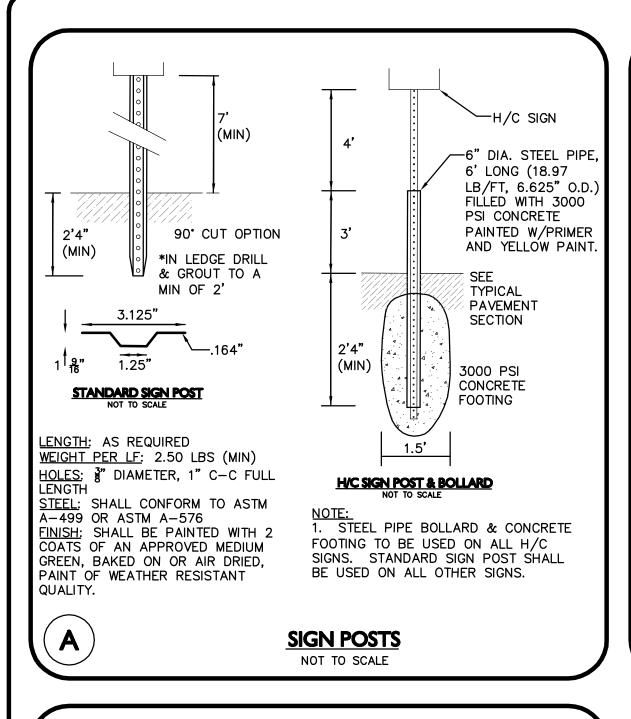
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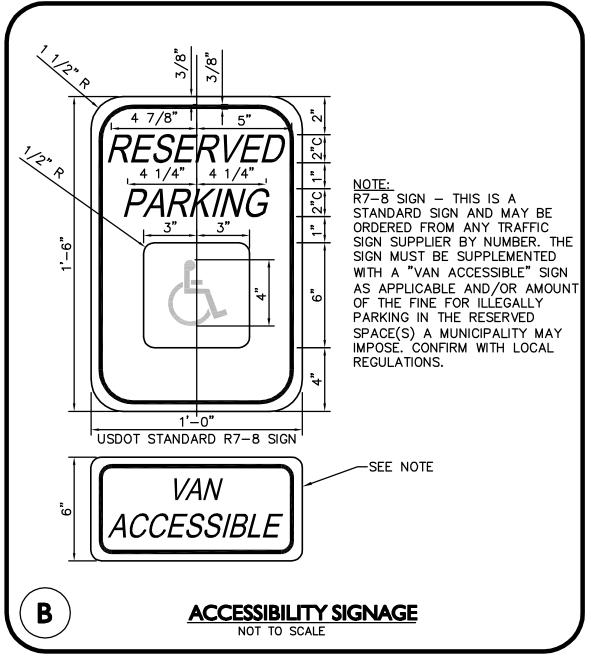
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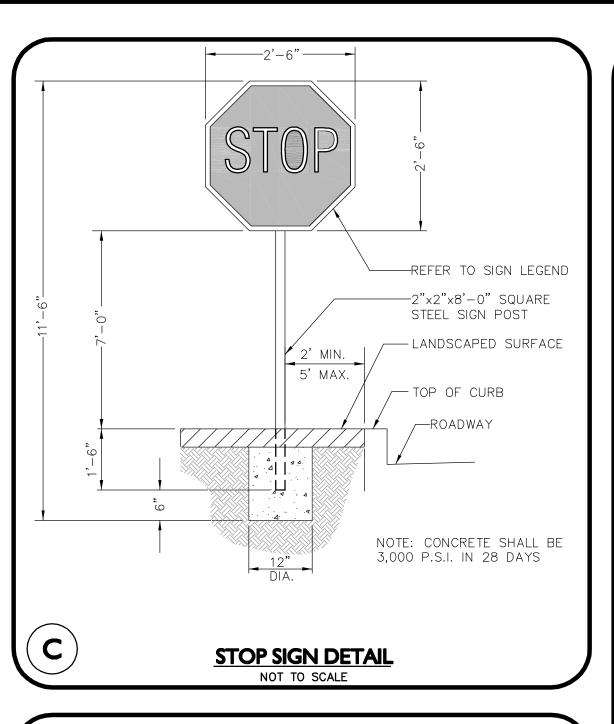
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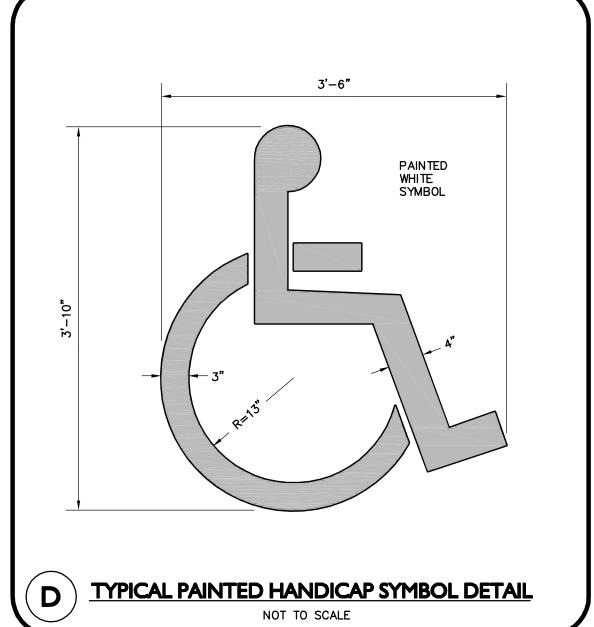
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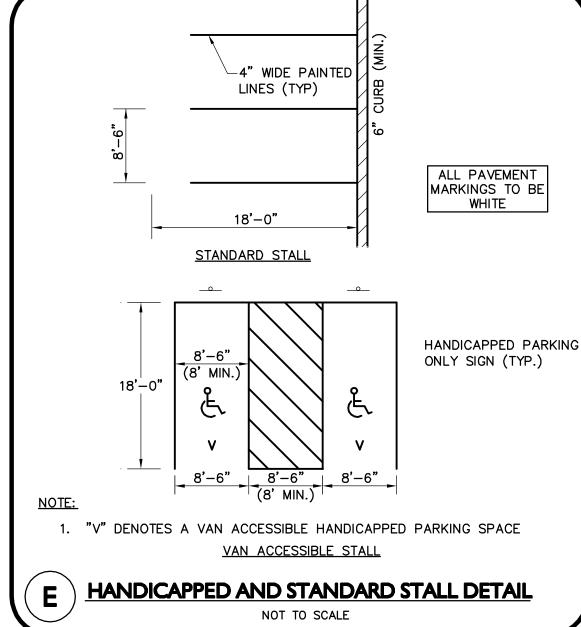
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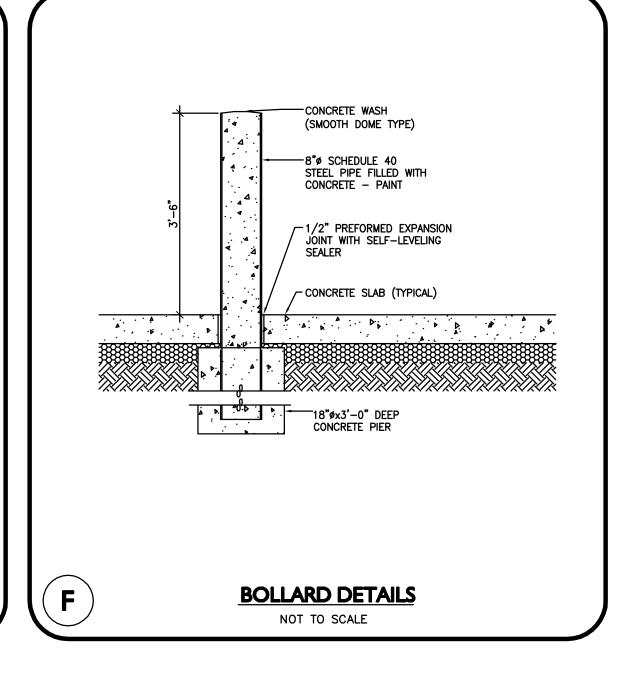


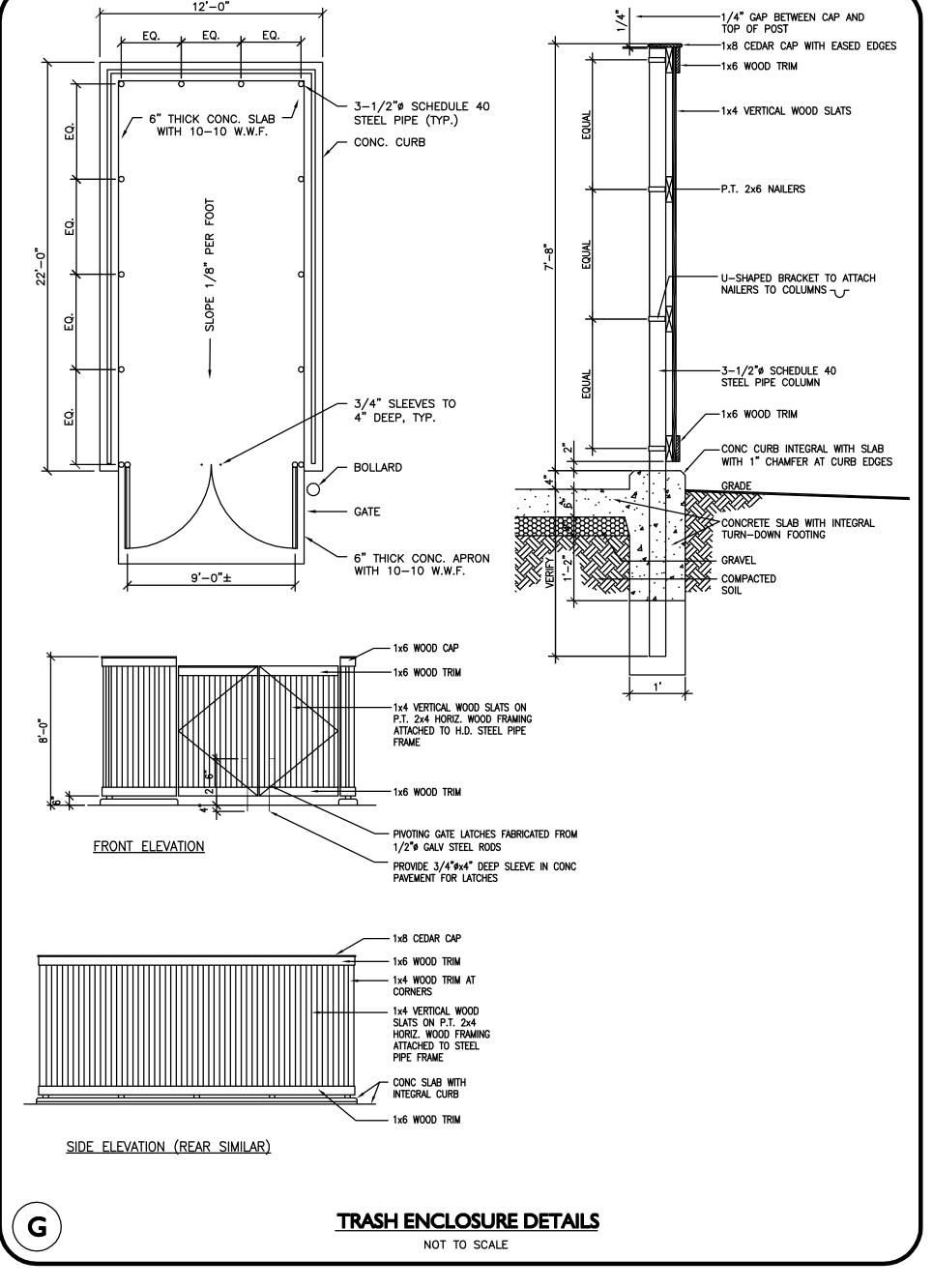


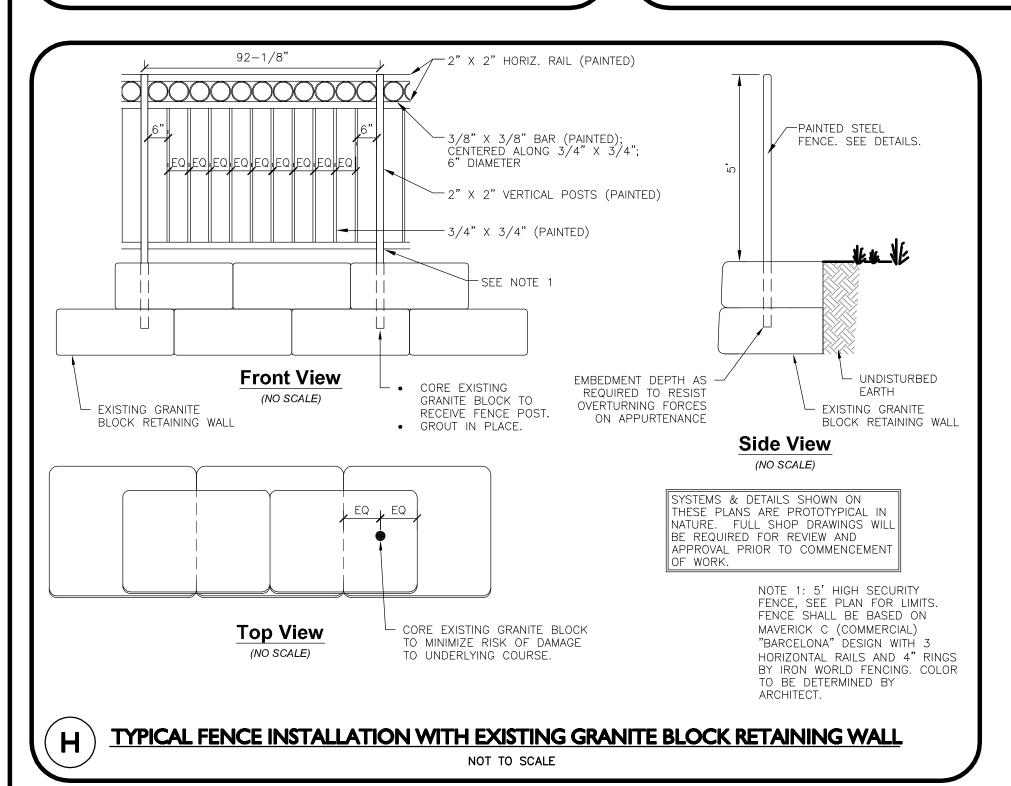


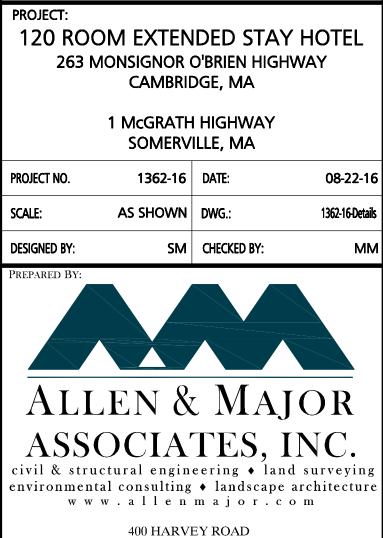












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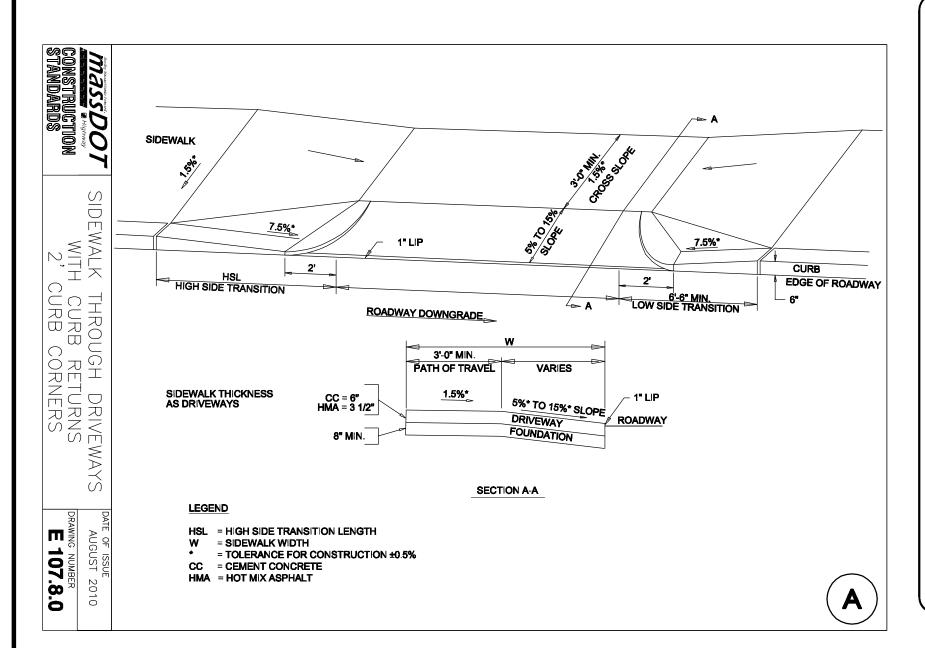
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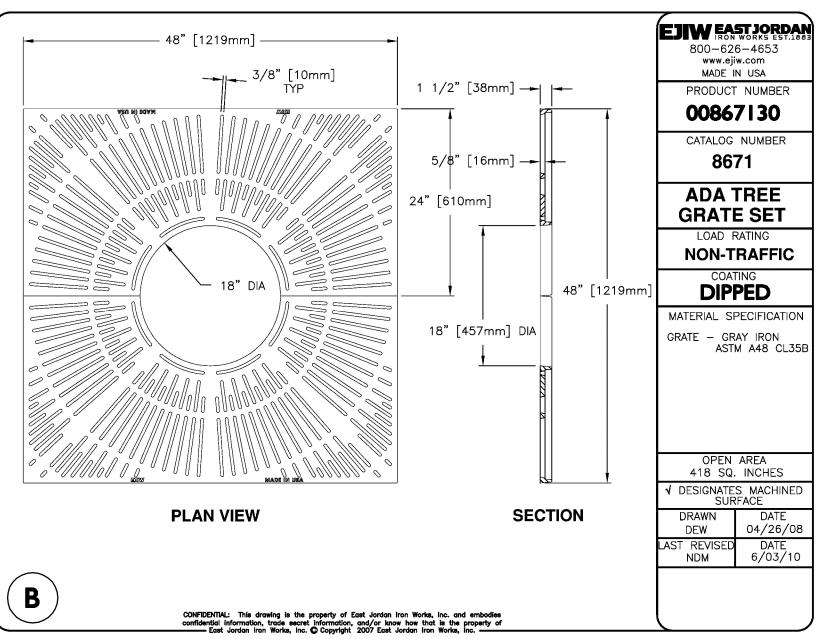
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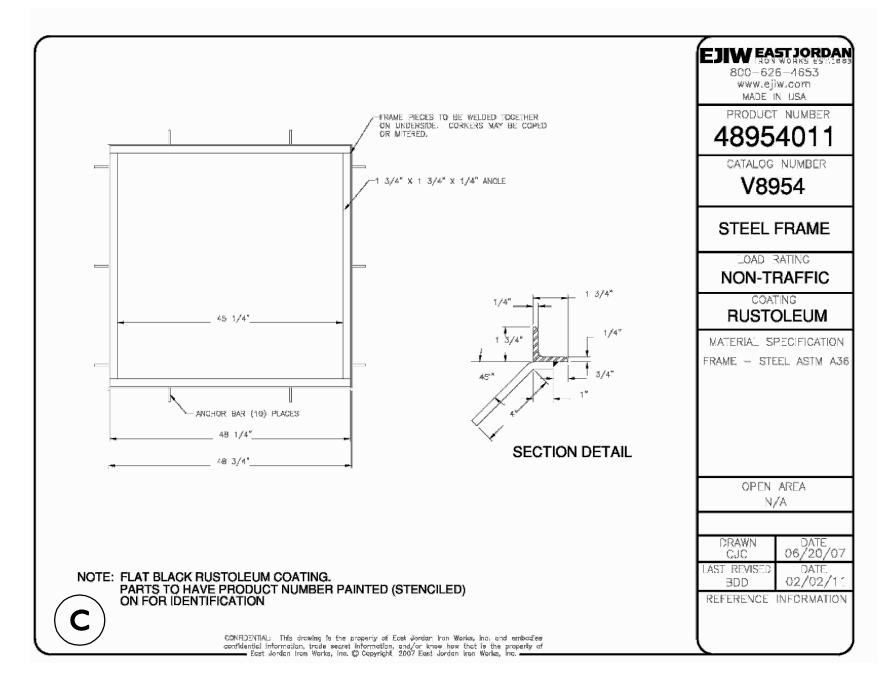
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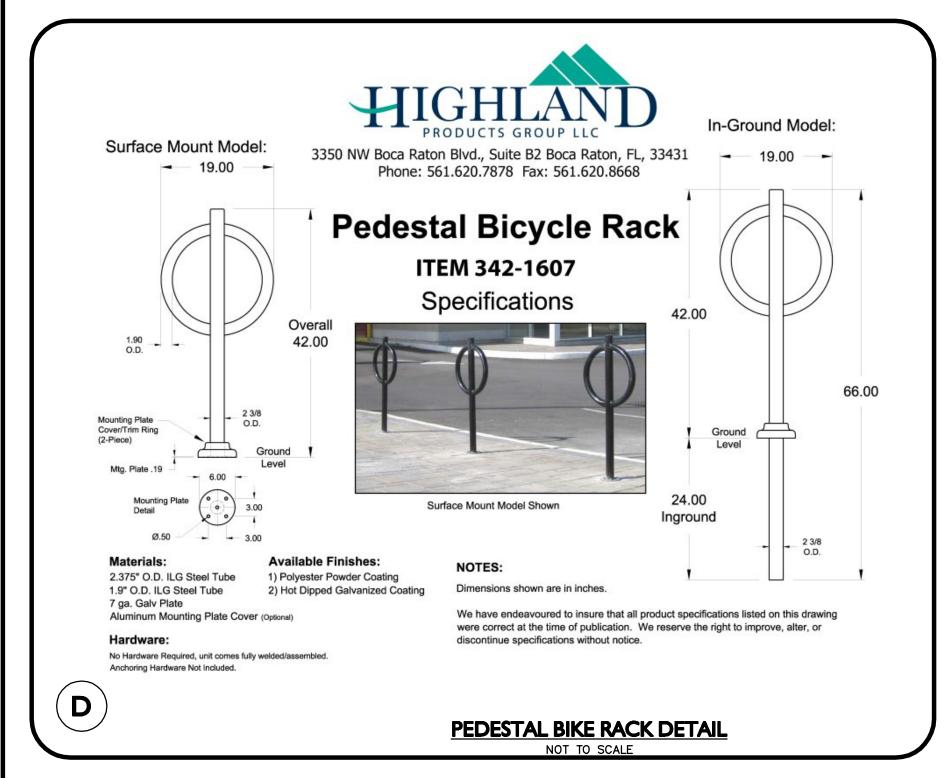
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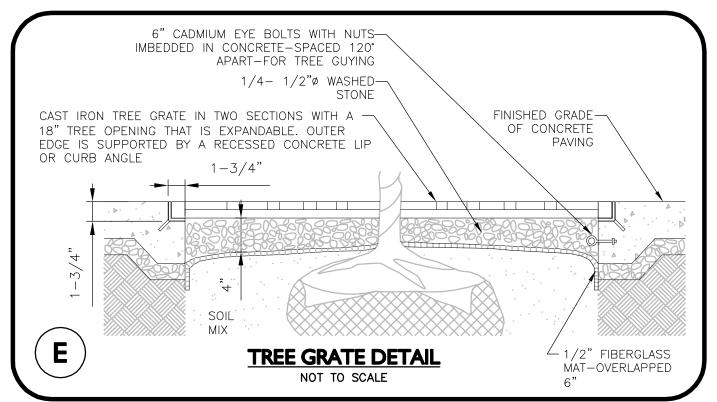
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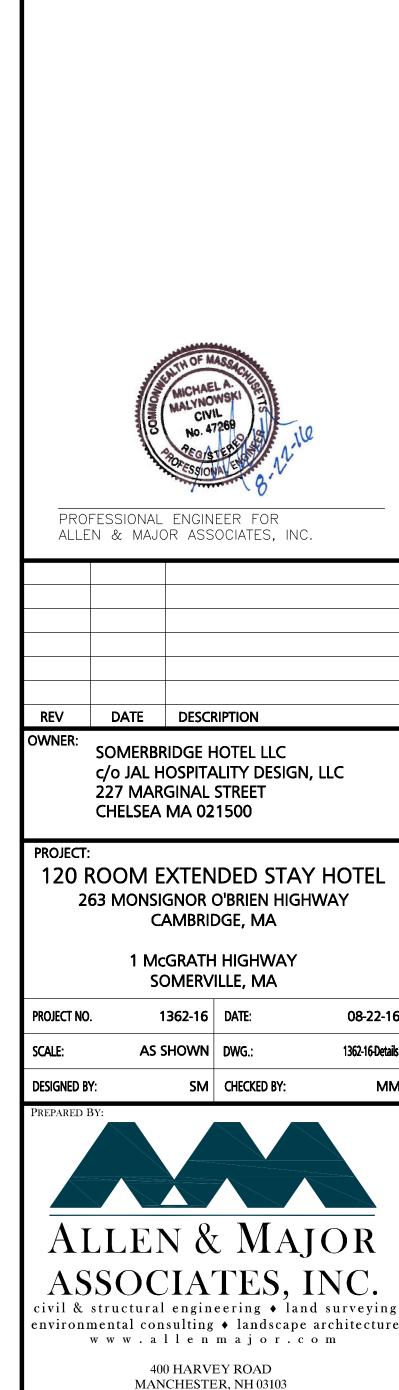












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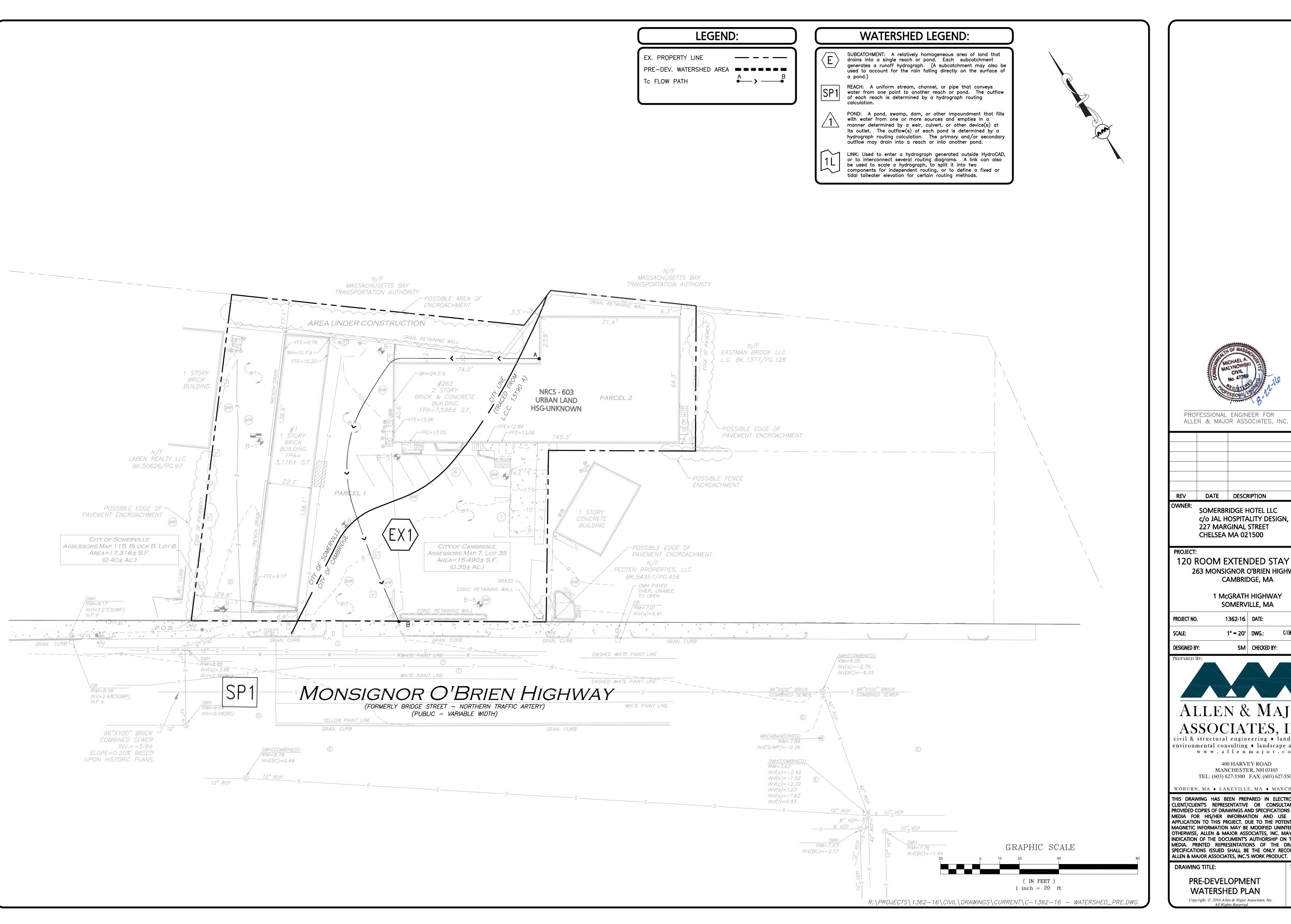
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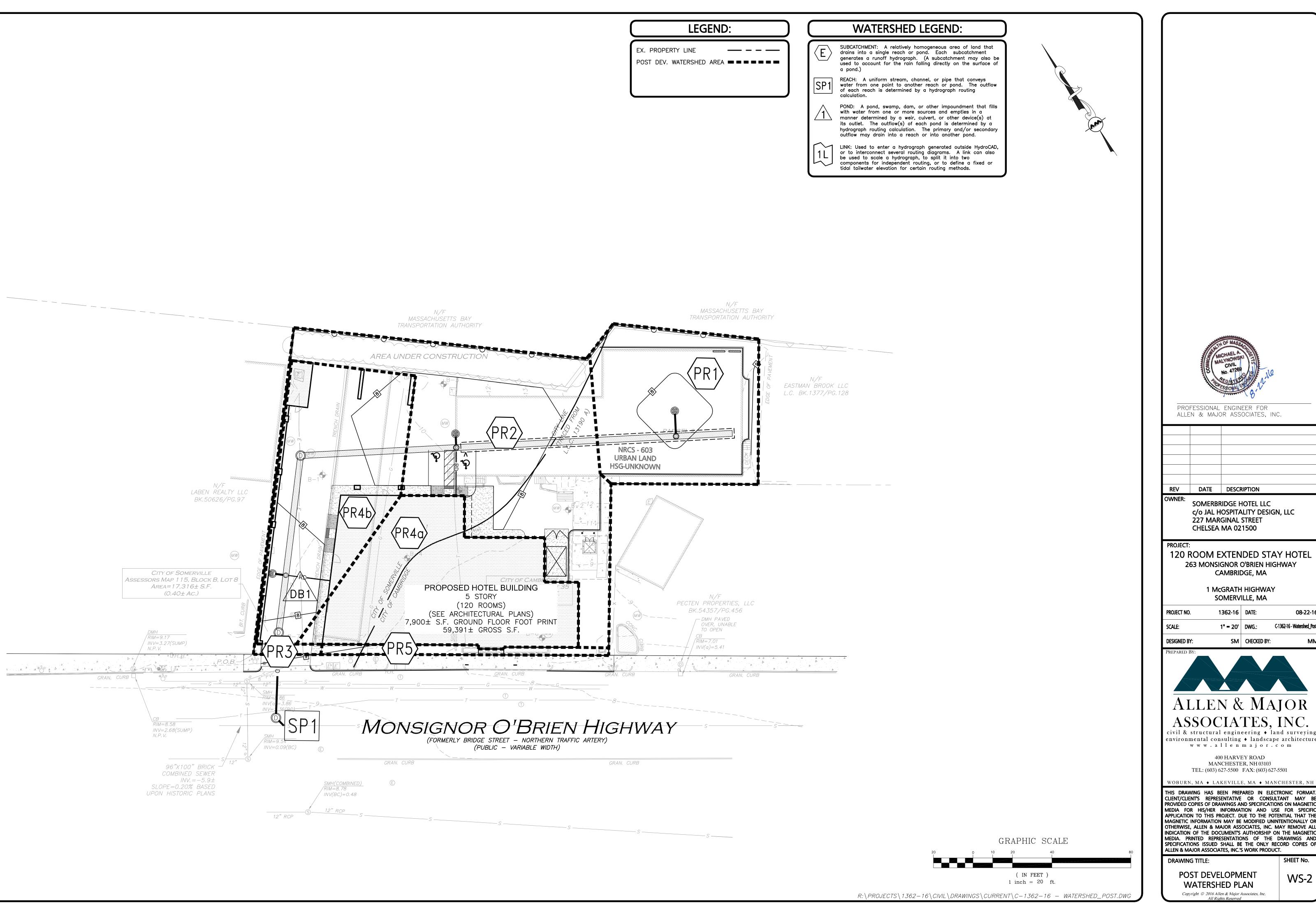
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