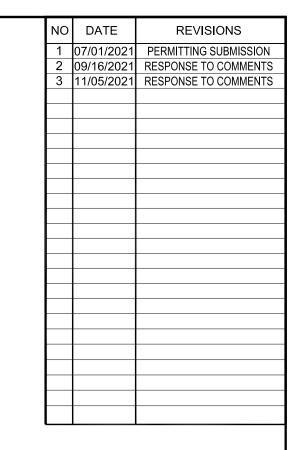
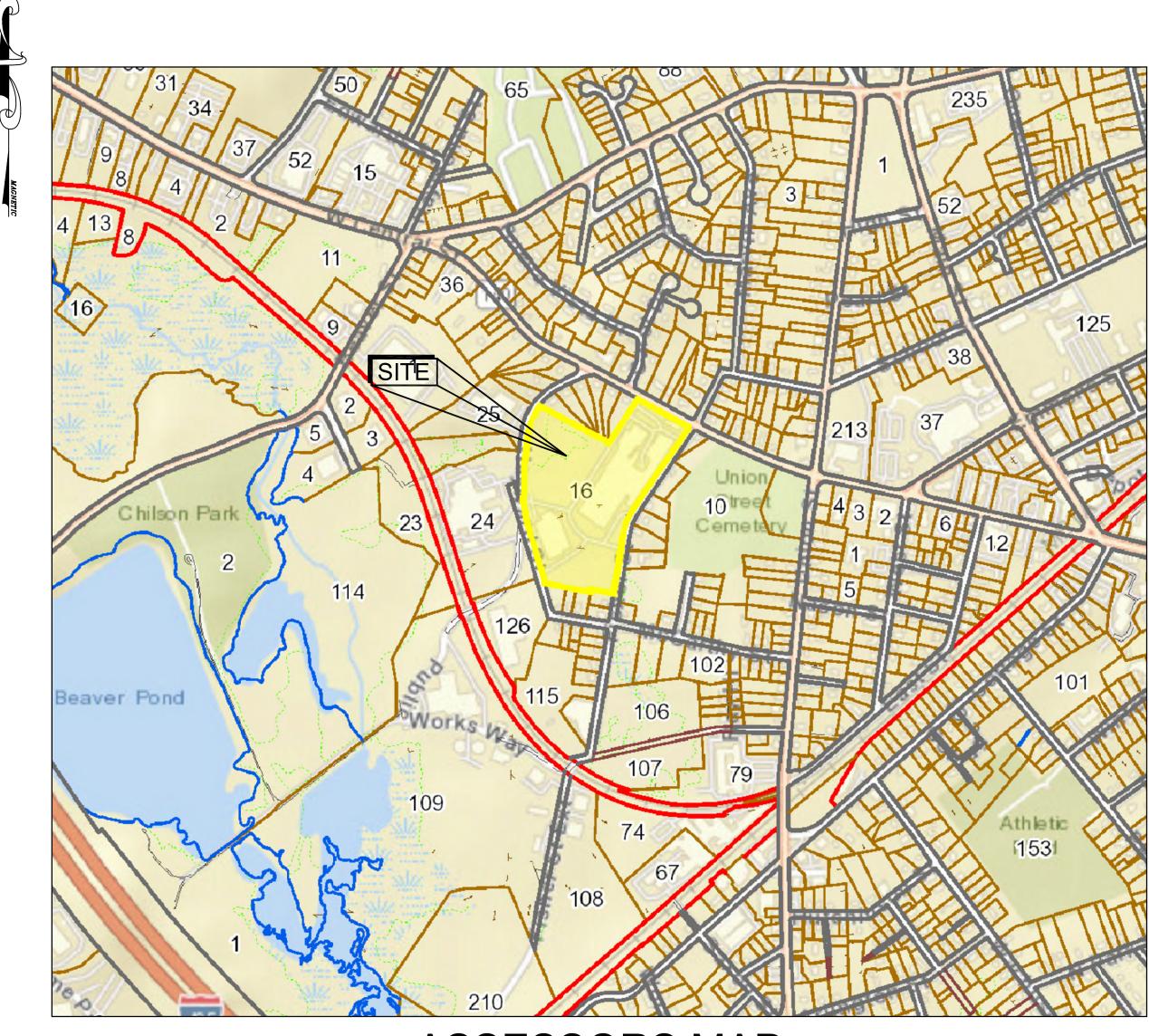
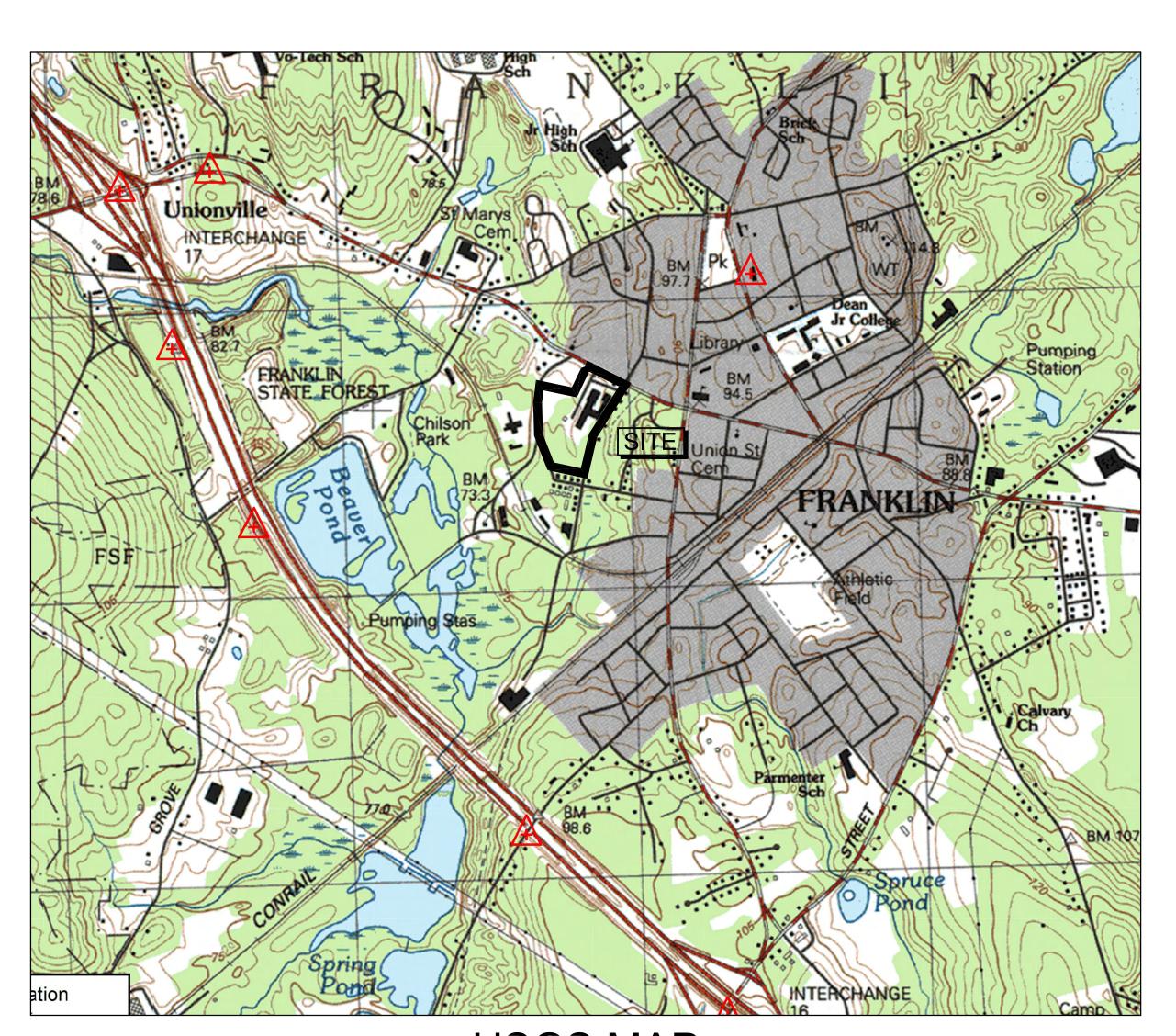
# FACTORY SQUARE

## PROPERTY REDEVELOPMENT 3, 5 & 7 FISHER STREET FRANKLIN, MASSACHUSETTS







**ASSESSORS MAP** 

SCALE: 1"= 500'±

USGS MAP

SCALE: 1"= 1,000'±

#### APPLICANT:

RICK KAPLAN 1 FISHER STREET FRANKLIN, MA 02038

#### CIVIL ENGINEER:



#### ARCHITECT:



### **JOE** THE ARCHITECT

343 Medford Street, Suite 4C Somerville, MA 02145 t: +1(617) 764-3593 e: askjoe@joethearchitect.com www.joethearchitect.com

# PROPERTY ADDRESS: 3, 5 & 7 FISHER STREET FRANKLIN, MASSACHUSETTS

#### ASSESSORS MAP/PARCEL:

PARCEL ID: 278-016-000-000

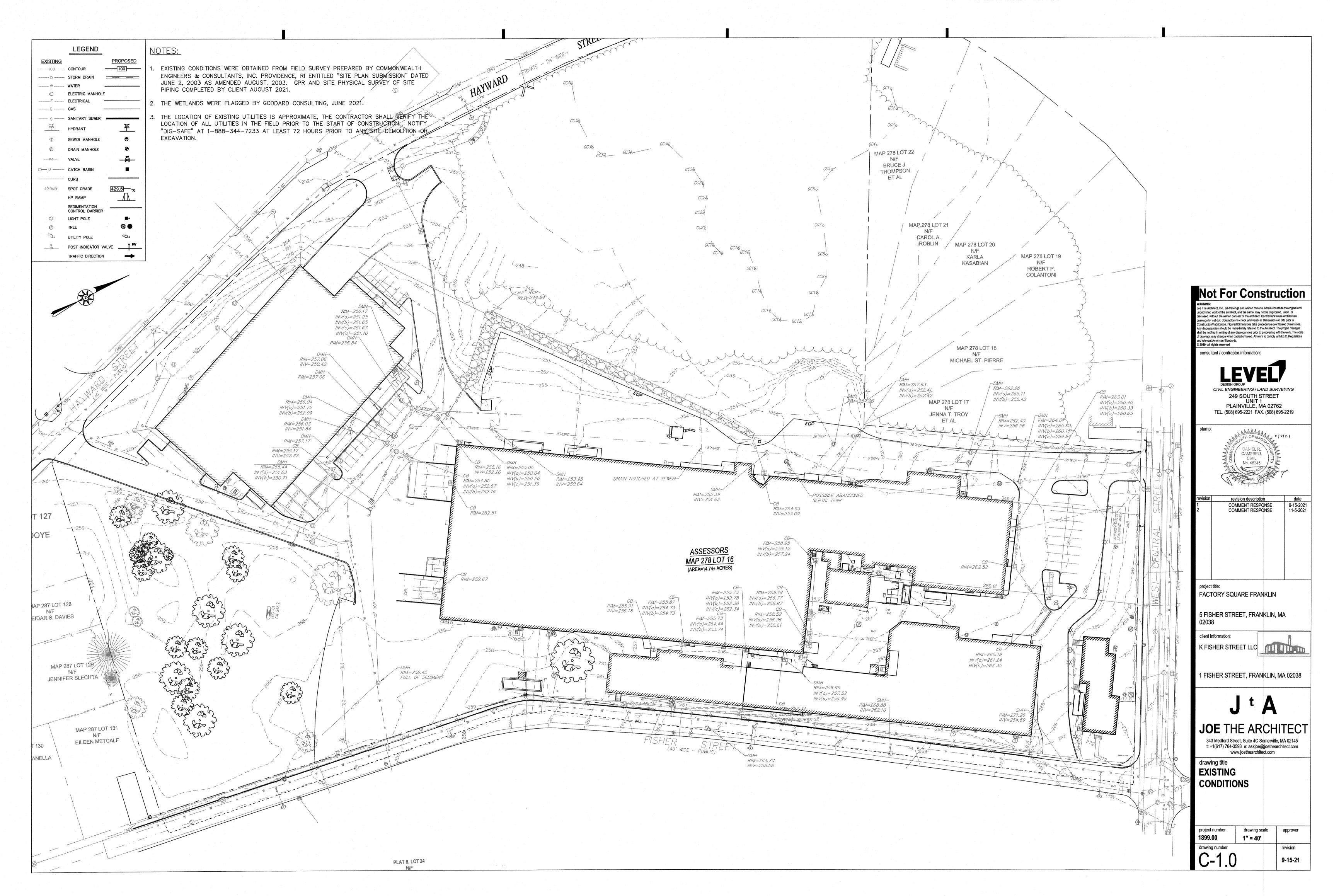
## ZONING DISTRICT: MIXED BUSINESS INNOVATION

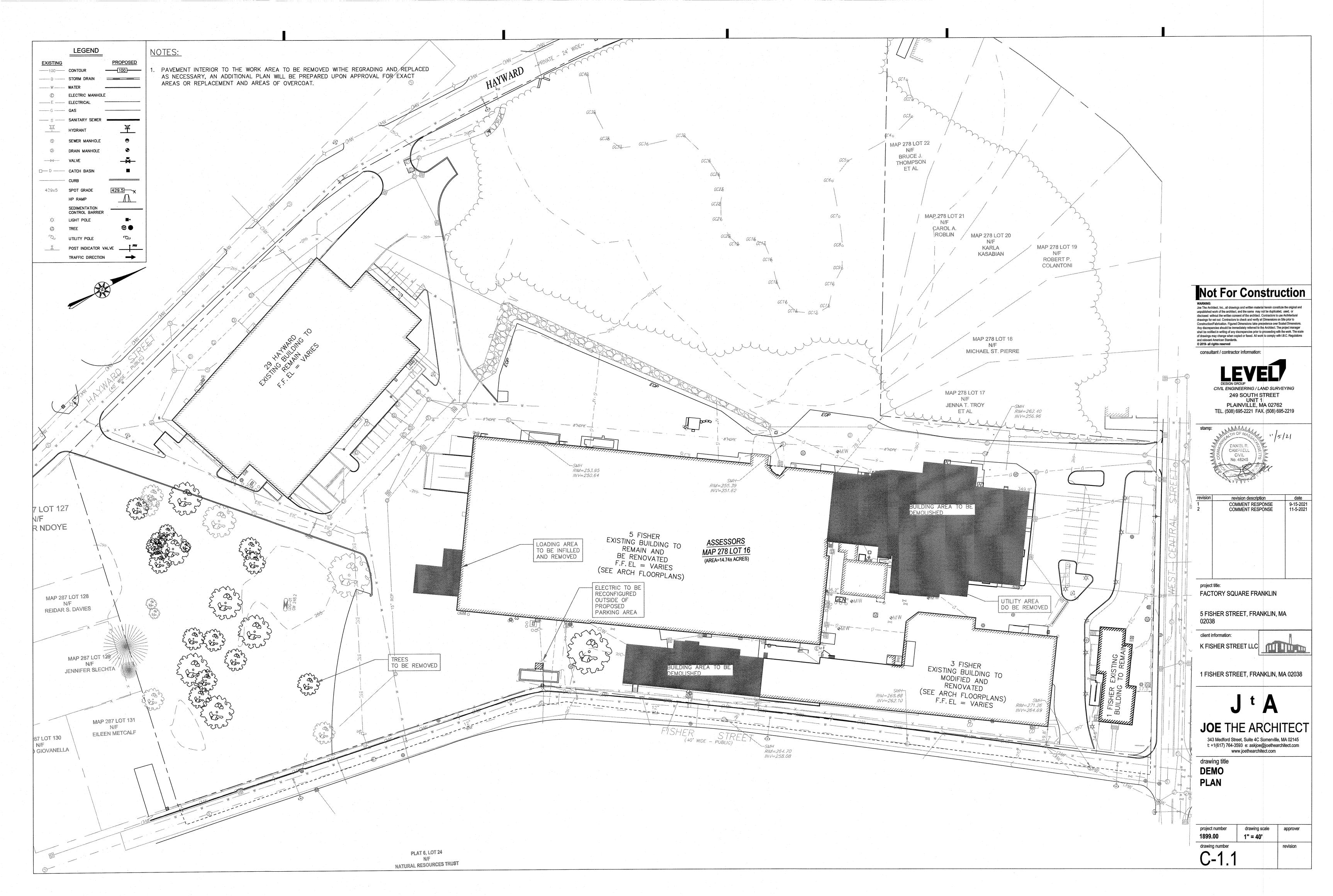
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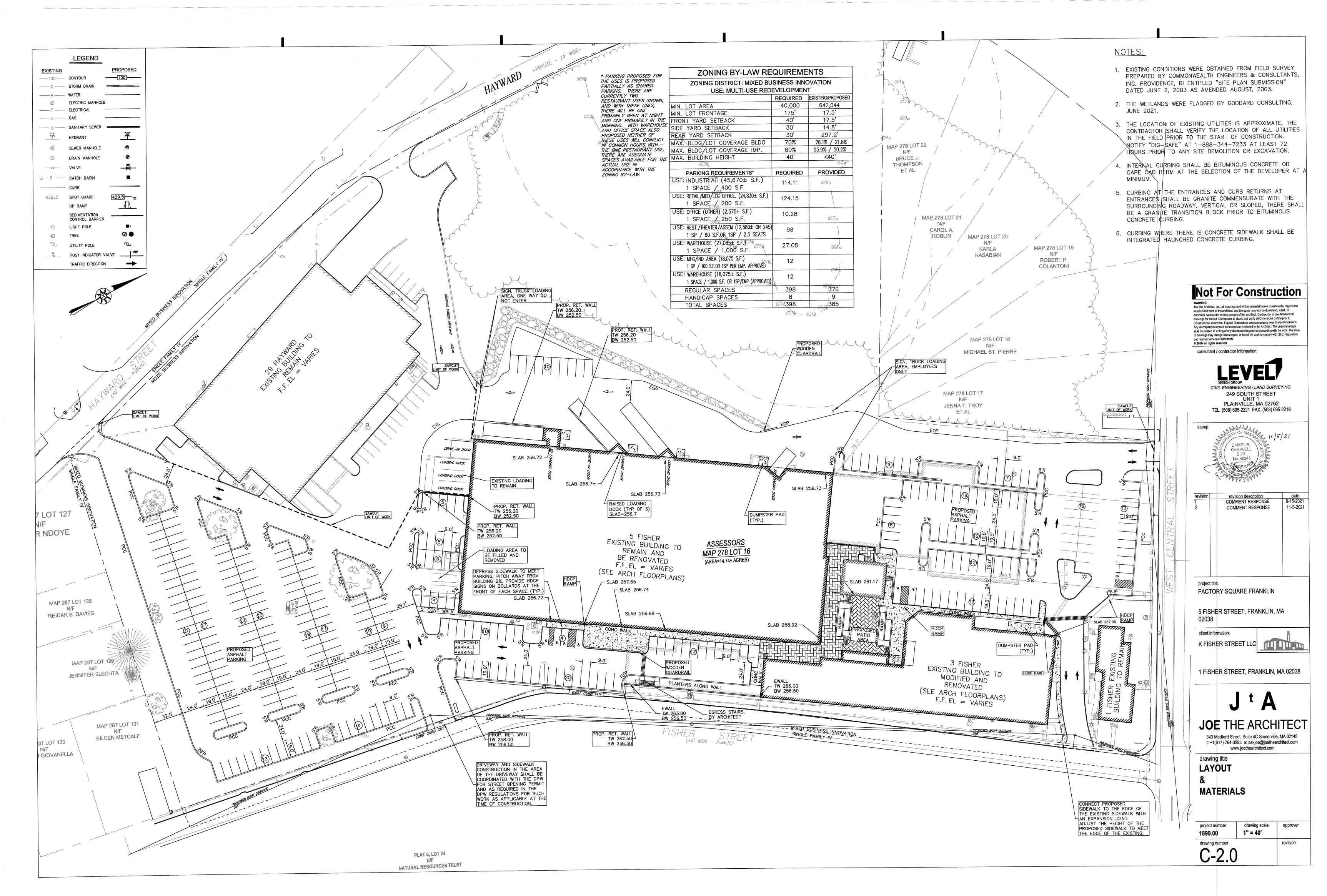
C-0.0	COVER
C-1.0	EXISTING CONDITIONS
C-2.0	LAYOUT AND MATERIALS
C-3.0	GRADING AND UTILITIES
C-3.1	EROSION CONTROL
C-4.0	TYPICAL DETAILS
C-4.1	TYPICAL DETAILS
C-4.2	TYPICAL DETAILS
_100	LANDSCAPE PLAN
C300	PHOTOMETRIC
A-SERIES	COVER
<b>4</b> 100	ILLUSTRATIVE SITE PLAN
4210-213	<b>BUILDING 3 ELEVATIONS</b>

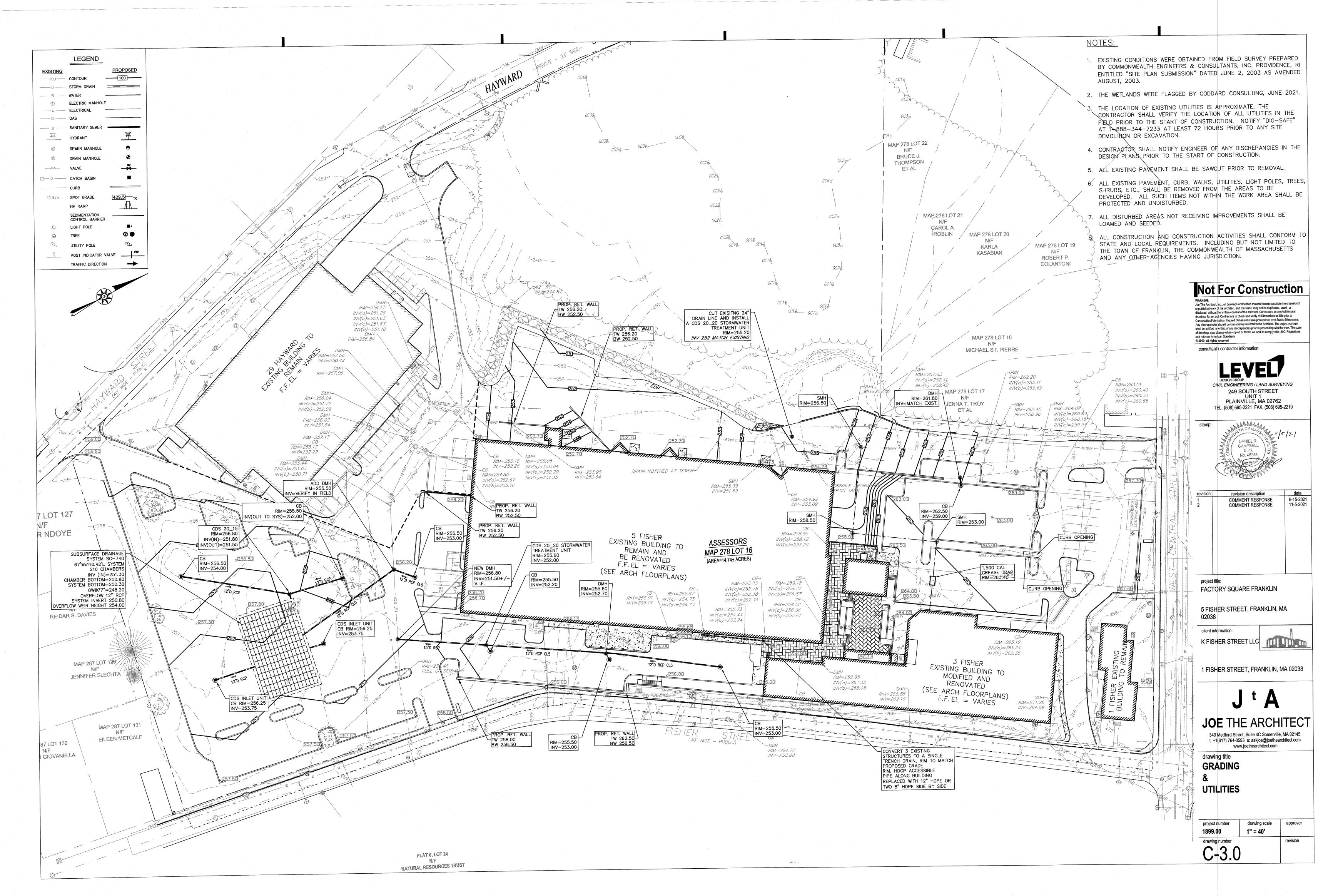
A210-213 BUILDING 3 ELEVATIONS A220-223 BUILDING 5 ELEVATIONS A230 BUILDING 7 ELEVATIONS

A300 ARCHITECTURAL RENDERINGS G-001 ZONING & CODE ANALSYIS









	LEGEND	
EXISTING		PROPOSED
100	CONTOUR -	100
O	STORM DRAIN =	
·	WATER -	
©	ELECTRIC MANHOLE ELECTRICAL	
G	GAS -	· · · · · · · · · · · · · · · · · · ·
·	SANITARY SEWER *	
**	HYDRANT	————
(S)	SEWER MANHOLE	•
<b>©</b>	DRAIN MANHOLE	•
	VALVE	<b>─₩</b>
D-D-	CATCH BASIN	
MANAGEM MENAGORITHAN MANAGEM MANAGEM PROPERTY AND	CURB	
429x5	SPOT GRADE	429.5 X
	HP RAMP	
	SEDIMENTATION CONTROL BARRIER	
$\Diamond$	LIGHT POLE	■•
8	TREE	\$ ●
Q. 1	UTILITY POLE	Q
<u></u>	POST INDICATOR VAL	VE PIV
	TRAFFIC DIRECTION	<b>→</b>

#### **EROSION CONTROL NOTES**

SILTATION CONTROL USING EROSION CONTROL FENCE WITH STRAW WATTLE, OR APPROVED EQUAL EROSION CONTROL LINE IS TO BE VISUALLY INSPECTED AFTER EVERY RAIN FALL AND REPAIRS MADE AS REQUIRED TO THE SILTATION CONTROL FENCE AND STRAW WATTLE AFTER EACH RAIN FALL. CLEANOUT OF ACCUMULATED SEDIMENT BEHIND THE WATTLE IS NECESSARY IF ½ OF THE ORIGINAL HEIGHT OF THE WATTLE APPEARS TO HAVE BEEN INUNDATED WITH SEDIMENT.

#### PRESERVE TOPSOIL

SITE OWNERS AND OPERATORS MUST PRESERVE EXISTING TOPSOIL ON THE CONSTRUCTION SITE TO THE MAXIMUM EXTENT FEASIBLE AND AS NECESSARY TO SUPPORT HEALTHY VEGETATION, PROMOTE SOIL STABILIZATION, AND INCREASE STORMWATER INFILTRATION RATES IN THE POST—CONSTRUCTION PHASE OF THE PROJECT.

#### STABILIZATION OF SOILS

UPON COMPLETION AND ACCEPTANCE OF SITE PREPARATION AND INITIAL INSTALLATION OF EROSION, RUNOFF, AND SEDIMENT CONTROLS AND TEMPORARY POLLUTION PREVENTION MEASURES, THE OPERATOR SHALL INITIATE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION PRACTICES DURING ALL PHASES OF CONSTRUCTION ON ALL DISTURBED AREAS AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. SLOPES IN EXCESS OF 3:1 SHALL HAVE 22 MONTH EROSION CONTROL FABRIC INSTALLED OVER A SLOPE MIX SEED MIX WITH TACKIFIER UNLESS OTHERWISE SPECIFIED.

ANY DISTURBED AREAS THAT WILL NOT HAVE ACTIVE CONSTRUCTION ACTIVITY OCCURRING WITHIN 14 DAYS MUST BE STABILIZED USING THE CONTROL MEASURES DEPICTED IN SITE PLANS, IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN, AND PER MANUFACTURER PRODUCT SPECIFICATIONS.

ONLY AREAS THAT CAN BE REASONABLY EXPECTED TO HAVE ACTIVE CONSTRUCTION WORK BEING PERFORMED WITHIN 14 DAYS OF DISTURBANCE WILL BE CLEARED/GRUBBED AT ANY ONE TIME. IT IS NOT ACCEPTABLE TO CLEAR AND GRUB THE ENTIRE CONSTRUCTION SITE IF PORTIONS WILL NOT BE ACTIVE WITHIN THE 14-DAY TIME FRAME. PROPER PHASING OF CLEARING AND GRUBBING ACTIVITIES SHALL INCLUDE TEMPORARY STABILIZATION TECHNIQUES FOR AREAS CLEARED AND GRUBBED THAT WILL NOT BE ACTIVE WITHIN THE 14-DAY TIME FRAME.

#### STORMWATER INLET PROTECTION

INLET PROTECTION — WILL BE UTILIZED TO PREVENT SOIL AND DEBRIS FROM ENTERING STORM DRAIN INLETS AND SHALL BE INSTALLED WITHIN BASINS DOWNSTREAM OF DISTURBANCE WITHIN 200' OF THE PROPOSED DISTURBANCE. THESE MEASURES ARE USUALLY TEMPORARY AND ARE IMPLEMENTED BEFORE A SITE IS DISTURBED.

MAINTENANCE - THE OPERATOR MUST CLEAN, OR REMOVE AND REPLACE THE INLET PROTECTION MEASURES AS SEDIMENT ACCUMULATES, THE FILTER BECOMES CLOGGED, AND/OR AS PERFORMANCE IS COMPROMISED. ACCUMULATED SEDIMENT ADJACENT TO THE INLET PROTECTION MEASURES SHOULD BE REMOVED BY THE END OF THE SAME WORK DAY IN WHICH IT IS FOUND OR BY THE END OF THE FOLLOWING WORK DAY IF REMOVAL BY THE SAME WORK DAY IS NOT FEASIBLE.

STORMWATER BASINS — ALL AREAS CONTAINING STORMWATER BASINS (ABOVE OR BELOW GROUND) SHALL BE PROTECTED THROUGHOUT CONSTRUCTION. THESE ARES ARE NOT BE USED FOR MATERIAL STOCKPILES OR FOR PARKING EQUIPMENT. SURFACE BASINS ARE TO BE ROUGH GRADED AND PROTECTED UNTIL STABILIZED AND BROUGHT ON—LINE FOR STORMWATER MANAGEMENT OF THE STABILIZED SITE.

#### CONSTRUCTION ENTRANCES

A STONE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT WHICH TIME THE EXISTING PAVEMENT IS REMOVED. THE STONE ENTRANCE IS NOT NECESSARY UNTIL SUCH TIME AS THE PAVEMENT IS REMOVED. THE ENTRANCE SHALL BE ESTABLISHED AT **ONE MAIN POINT OF ENTRY** AT THAT TIME.

CONSTRUCTION ENTRANCES SHALL BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF SEDIMENT TRACKING OFF THE PROJECT. ANY CONSTRUCTION SITE ACCESS POINT MUST EMPLOY THE CONTROL MEASURES ON THE APPROVED SITE PLANS AND IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. CONSTRUCTION ENTRANCES SHALL BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY CONSTRUCTION VEHICLES. ALL CONSTRUCTION ACCESS ROADS SHALL BE CONSTRUCTED PRIOR TO ANY ROADWAY ACCEPTING CONSTRUCTION TRAFFIC.

THE SITE OWNER AND OPERATOR MUST WILL RESTRICT VEHICLE USE TO PROPERLY DESIGNATED EXIT POINTS, USE PROPERLY DESIGNED AND CONSTRUCTED CONSTRUCTION ENTRANCES AT ALL POINTS THAT EXIT ONTO PAVED ROADS SO THAT SEDIMENT REMOVAL OCCURS PRIOR TO VEHICLE EXIT. WHEN AND WHERE NECESSARY, USE ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM VEHICLE TIRES PRIOR TO EXIT (I.E. WHEEL WASHING RACKS, RUMBLE STRIPS, AND RATTLE PLATES). WHERE SEDIMENT HAS BEEN TRACKED OUT FROM THE CONSTRUCTION SITE ONTO THE SURFACE OF OFF—SITE STREETS, OTHER PAVED AREAS, AND SIDEWALKS, THE DEPOSITED SEDIMENT MUST BE REMOVED BY THE END OF THE SAME WORK DAY IN WHICH THE TRACK OUT OCCURS. TRACK—OUT MUST BE REMOVED BY SWEEPING, SHOVELING, OR VACUUMING THESE SURFACES, OR BY USING OTHER SIMILARLY EFFECTIVE MEANS OF SEDIMENT REMOVAL.

#### STOCKPILE CONTAINMENT

SHALL BE USED ONSITE TO MINIMIZE OR ELIMINATE THE DISCHARGE OF SOIL, TOPSOIL, BASE MATERIAL OR RUBBLE, FROM ENTERING DRAINAGE SYSTEMS OR SURFACE WATERS. ALL STOCKPILES MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE, PROTECTED FROM RUN—ON WITH THE USE OF TEMPORARY SEDIMENT BARRIERS AND PROVIDED WITH COVER OR STABILIZATION TO AVOID CONTACT WITH PRECIPITATION AND WIND WHERE AND WHEN PRACTICAL. STOCK PILE MANAGEMENT CONSISTS OF PROCEDURES AND PRACTICES DESIGNED TO MINIMIZE OR ELIMINATE THE DISCHARGE OF STOCKPILED MATERIAL (SOIL, TOPSOIL, BASE MATERIAL, RUBBLE) FROM ENTERING DRAINAGE SYSTEMS OR SURFACE

FOR ANY STOCKPILES OR LAND CLEARING DEBRIS COMPOSED, IN WHOLE OR IN PART, OF SEDIMENT OR SOIL, YOU MUST COMPLY WITH THE FOLLOWING REQUIREMENTS — LOCATE PILES WITHIN THE DESIGNATED LIMITS OF DISTURBANCE OUTSIDE OF THE 100—FOOT BUFFER ZONE, PROTECT FROM CONTACT WITH STORMWATER (INCLUDING RUN—ON) USING A TEMPORARY PERIMETER SEDIMENT BARRIER; WHERE PRACTICABLE, PROVIDE COVER OR APPROPRIATE TEMPORARY VEGETATIVE OR STRUCTURAL STABILIZATION TO AVOID DIRECT CONTACT WITH PRECIPITATION OR TO MINIMIZE SEDIMENT DISCHARGE; NEVER HOSE DOWN OR SWEEP SOIL OR SEDIMENT ACCUMULATED ON PAVEMENT OR OTHER IMPERVIOUS SURFACES INTO ANY STORMWATER CONVEYANCE, STORM DRAIN INLET, OR SURFACE WATER; TO THE MAXIMUM EXTENT PRACTICABLE, CONTAIN AND SECURELY PROTECT FROM WIND.

#### TEMPORARY SEDIMENT BASINS

IF REQUIRED, ADDITIONAL TEMPORARY SEDIMENT BASINS SHALL BE CONSTRUCTED TO MITIGATE THE POTENTIAL SEDIMENT LOADING TO THE ADJACENT RESOURCE AREAS. TEMPORARY SEDIMENT BASINS ARE TO BE LOCATED OUTSIDE OF THE 50—FOOT BUFFER ZONE TO THE BORDERING VEGETATED WETLANDS AND SHALL NOT BE LOCATED IN AN AREA WHERE AN INFILTRATION BASIN IS PROPOSED. TEMPORARY SEDIMENT BASIN GRADING LOCATION SHALL BE DICTATED BY THE DESIGN ENGINEER. AT A MINIMUM THE THE VOLUME OF THE TEMPORARY SEDIMENT BASIN, AS MEASURED FROM THE BOTTOM OF THE BASE TO THE ELEVATION OF THE CREST OF THE PRINCIPAL SPILLWAY SHALL BE AT LEAST 3,600 CUBIC FEET PER ACRE OF DRAINAGE AREA. THIS 3,600 CUBIC FEET IS EQUIVALENT TO 1.0 INCH OF SEDIMENT PER ACRE OF DRAINAGE AREA. ADDITIONAL STORAGE IN THE FORM OF A PERMANENT WET POOL SHALL BE PROVIDED WHENEVER PRACTICABLE, BUT MAY NOT BE USED TO FULFILL THE TEMPORARY STORAGE VOLUME REQUIREMENT.

SEDIMENT BASINS SHALL BE CLEANED OUT WHEN THE VOLUME REMAINING AS DESCRIBED ABOVE IS REDUCED BY SEDIMENTATION TO 1,800 CUBIC FEET PER ACRE OF DRAINAGE AREA (50 PERCENT FULL). IN NO CASE SHALL THE SEDIMENT LEVEL BE PERMITTED TO BUILD UP HIGHER THAN ONE FOOT BELOW THE PRINCIPAL SPILLWAY CREST. AT THIS ELEVATION, CLEANOUT SHALL BE PERFORMED TO RESTORE THE ORIGINAL DESIGN VOLUME TO THE SEDIMENT BASIN. THE ELEVATION OF THE MAXIMUM ALLOWABLE SEDIMENT LEVEL SHALL BE DETERMINED AND SHALL BE STATED IN THE DESIGN DATA AS A DISTANCE BELOW THE TOP OF THE RISER AND BE CLEARLY MARKED ON THE RISER. NO AREA OF DETENTION SHALL BE UTILIZED FOR TEMPORARY EROSION CONTROL OR DEWATERING ACTIVITIES.

#### NOTES:

1. EXISTING CONDITIONS WERE OBTAINED FROM FIELD SURVEY PREPARED BY COMMONWEALTH ENGINEERS & CONSULTANTS, INC. PROVIDENCE, RI ENTITLED "SITE PLAN SUBMISSION" DATED JUNE 2, 2003 AS AMENDED AUGUST, 2003.

- 2. THE WETLANDS WERE FLAGGED BY GODDARD CONSULTING, JUNE
- 3. THE LOCATION OF EXISTING UTILITIES IS APPROXIMATE, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. NOTIFY "DIG-SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY SITE DEMOLITION OR EXCAVATION.

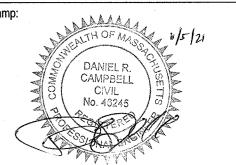
#### Not For Construction

Joe The Architect, Inc., all drawings and written material herein constitute the original and unpublished work of the architect, and the same may not be duplicated, used, or disclosed without the written consent of the architect. Contractors to use Architectural drawings for set out. Contractors to check and verify all Dimensions on Site prior to Construction/Fabrication. Figured Dimensions take precedence over Scaled Dimensions. Any discrepancies should be immediately referred to the Architect. The project manager shall be notified in writing of any discrepancies prior to proceeding with the work. The scal of drawings may change when copied or faxed. All work to comply with I.B.C. Regulations and relevant American Standards.

consultant / contractor information:



249 SOUTH STREET UNIT 1 PLAINVILLE, MA 02762 TEL. (508) 695-2221 FAX. (508) 695-2219



revision	revision description	date
1 2	COMMENT RESPONSE COMMENT RESPONSE	9-15-202 11-5-202

project title:
FACTORY SQUARE FRANKLIN

5 FISHER STREET, FRANKLIN, MA 02038

client information:

K FISHER STREET LLC

1 FISHER STREET, FRANKLIN, MA 02038

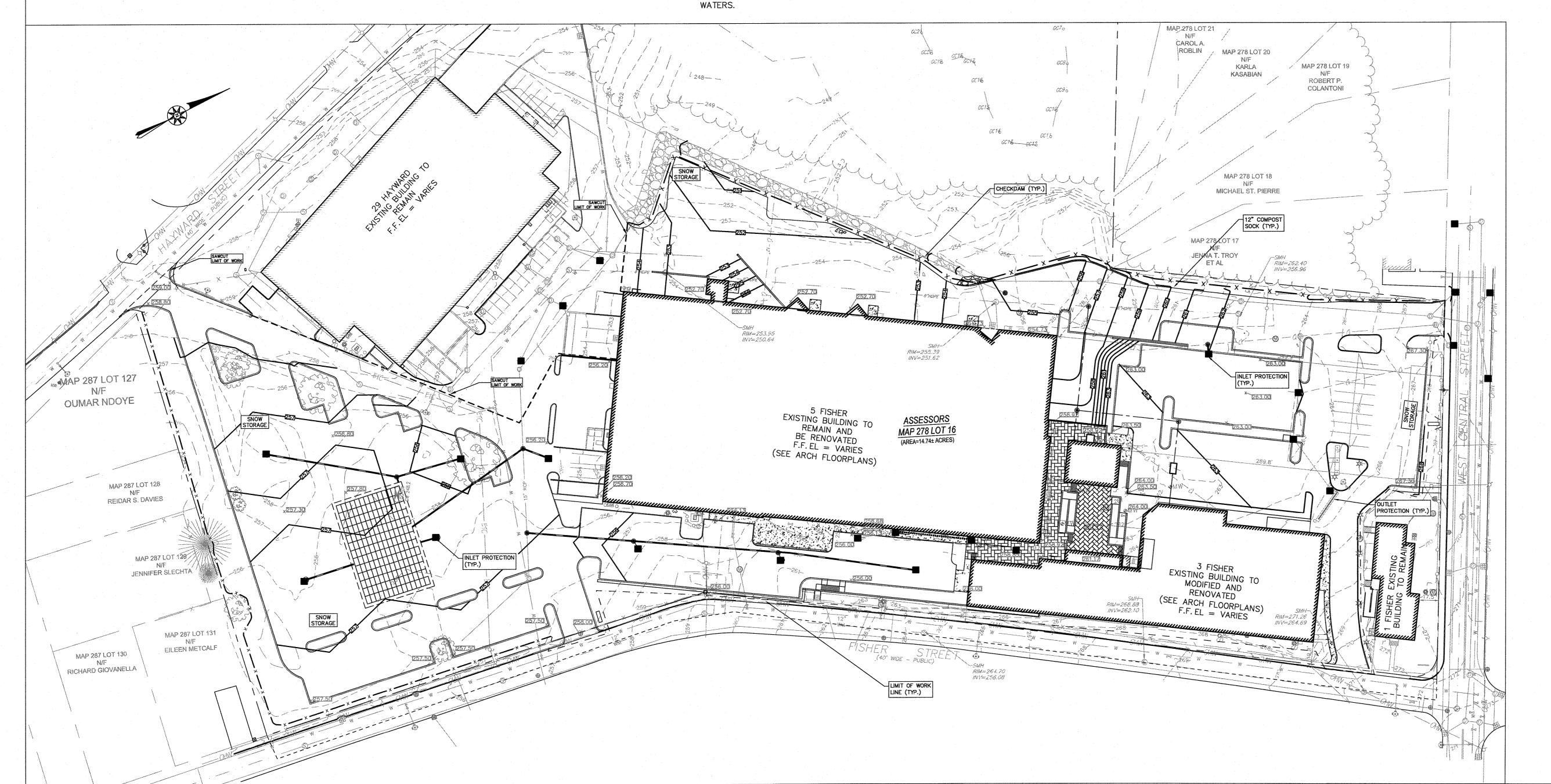
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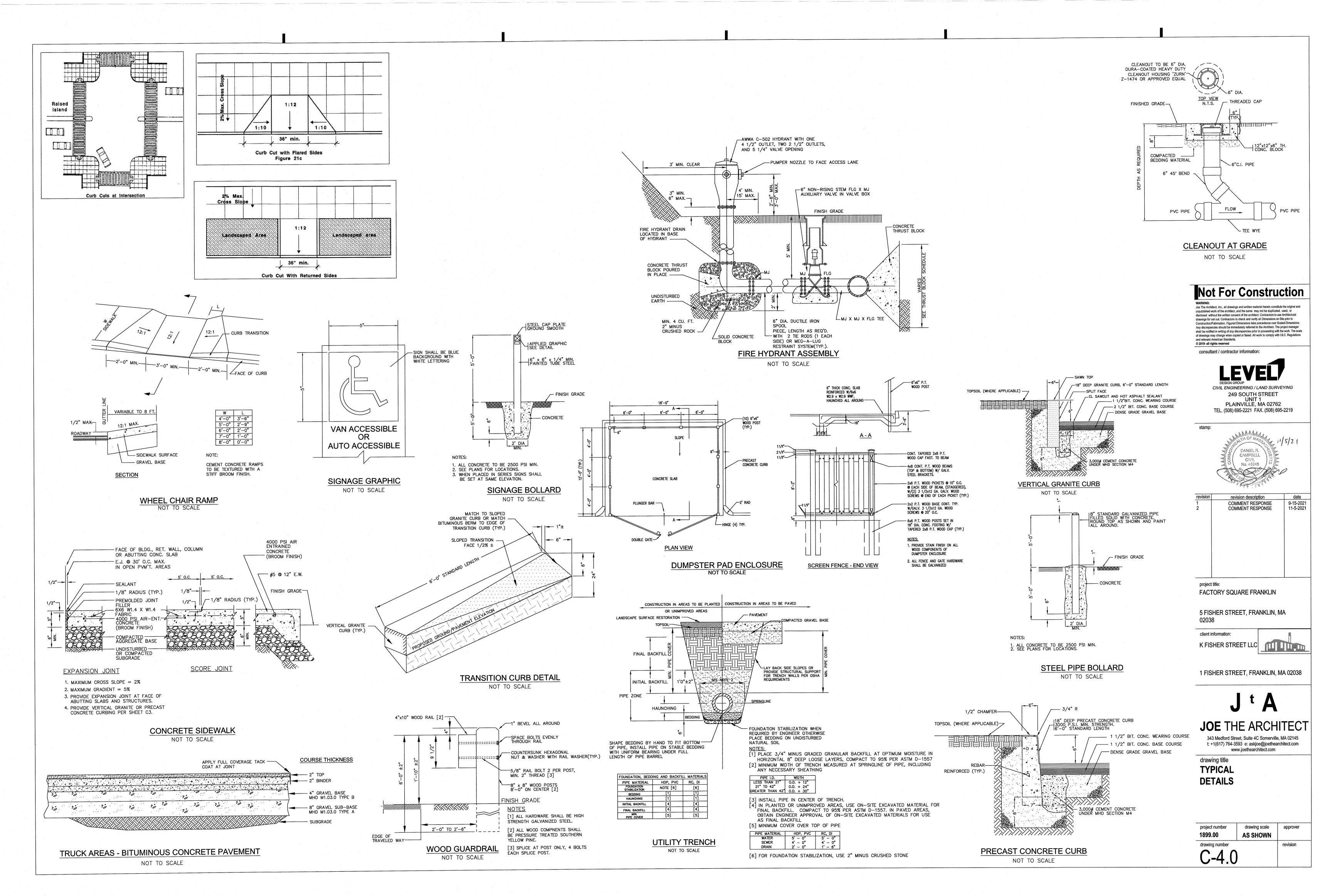
JOE THE ARCHITECT

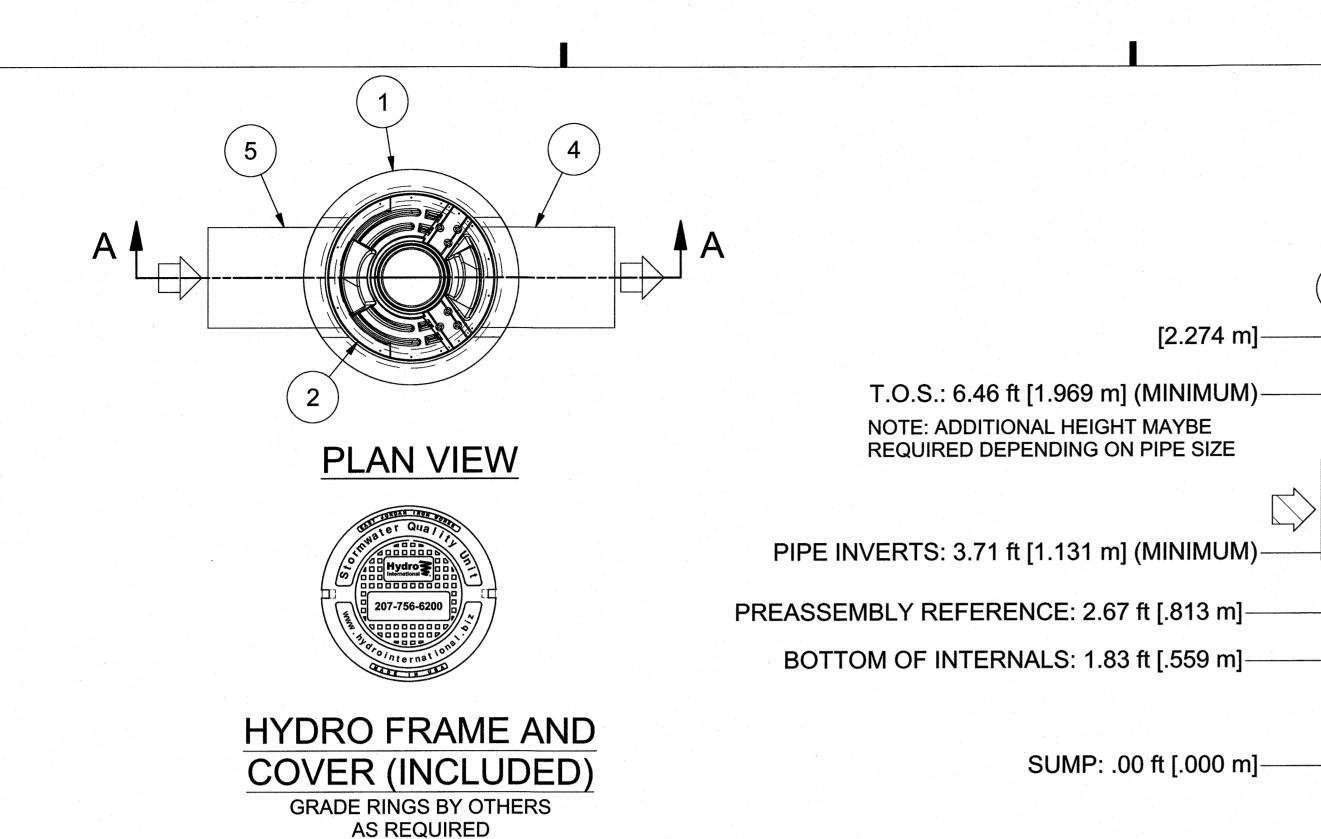
343 Medford Street, Suite 4C Somerville, MA 02145 t: +1(617) 764-3593 e: askjoe@joethearchitect.com www.joethearchitect.com

drawing title
EROSION
CONTROL
PLAN

ject number 99.00	drawing scale 1" = 50'	approver
wing number		revision







1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO

SCALE.

2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.

3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

1. STANDARD COVER MIN. WEIGHT 200 LBS.

2. TYPE-A FRAME MIN. WEIGHT 265 LBS

3. STAMPED TO READ

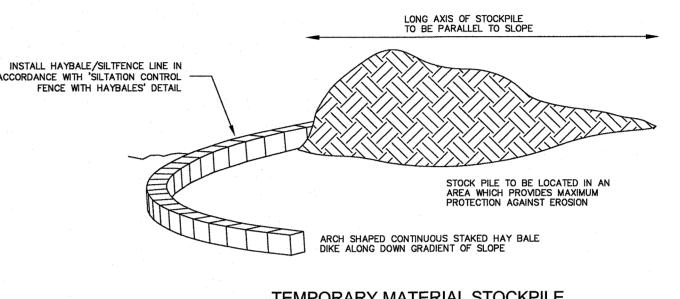
WEDGE LOOSE STRAW
INTO GAPS BETWEEN
BALES TO PREVENT
WATER FROM ESCAPING.

APPLY FULL COVERAGE TACK - COAT AT JOINT

MATERIAL-CAST IRON

'DRAIN' FOR DRAIN MANHOLE INSTILLATION

& 'SEWER' FOR SEWER MANHOLE



TEMPORARY MATERIAL STOCKPILE

SECTION A-A

SPILL WAY

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITIONS THAT WILL PREVENT

REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO

TEMPORARY CONSTRUCTION

ENTRANCE/EXIT DETAIL

NOT TO SCALE

3. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS TO AN APPROVED SEDIMENT TRAP OR

TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY

COURSE AGGREGATE

-DIVERSION RIDGE

**FLOW** 

6" MIN COURSE-

HAY BALES, SANDBAGS,

OR CONTINUOUS BERM OF EQUIVALENT HEIGHT

PUBLIC RIGHT-OF-WAY.

**COURSE THICKNESS** 

----- 4" GRAVEL BASE

----- 8" GRAVEL SUB-BASE

MHD M1.03.0 TYPE B

GRAVEL APRON



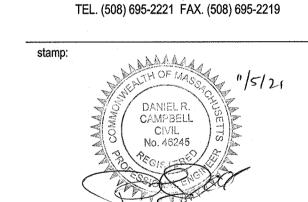
FULL WIDTH

USE HAYBALES OR OTHER APPROVED

METHODS TO CHANNELIZE RUNOFF TO

BASIN AS REQUIRED.

ACCESS RD.



**Not For Construction** 

disclosed without the written consent of the architect. Contractors to use Architectura drawings for set out. Contractors to check and verify all Dimensions on Site prior to

shall be notified in writing of any discrepancies prior to proceeding with the work. The scal

evision	revision description	date
2	COMMENT RESPONSE COMMENT RESPONSE	9-15-2021 11-5-2021
	·	

project title: **FACTORY SQUARE FRANKLIN** 

5 FISHER STREET, FRANKLIN, MA

client information: K FISHER STREET LLC

1 FISHER STREET, FRANKLIN, MA 02038

**JOE** THE ARCHITECT

343 Medford Street, Suite 4C Somerville, MA 02145 t: +1(617) 764-3593 e: askjoe@joethearchitect.com

www.joethearchitect.com drawing title

**TYPICAL DETAILS** 

project number drawing scale **AS SHOWN** 

approver

revision

1899.00 drawing number C-4

**SECTION A-A** 

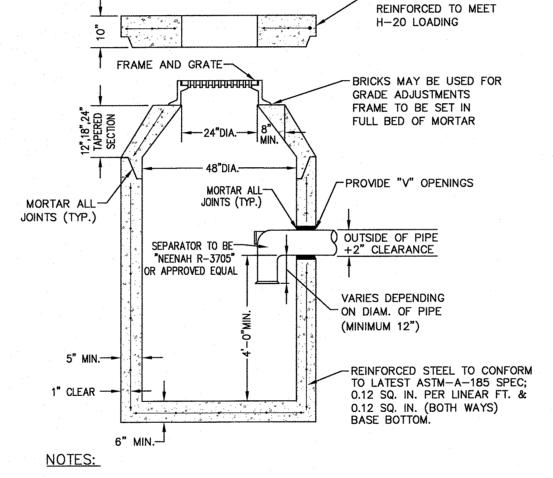
ALTERNATE TOP SLAB.

#### PRODUCT SPECIFICATION:

- 1. PEAK HYDRAULIC FLOW: 15.0 cfs (424 l/s)
- 2. MIN SEDIMENT STORAGE CAPACITY: 0.4 cu. yd. (0.3 cu. m.)
- 3. OIL STORAGE CAPACITY: 125 gal. (473 liters)
- 4. MAXIMUM INLET/OUTLET PIPE DIAMETERS: 18 in. (450 mm)
- 5. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM
- STORMWATER RUNOFF
- 6. FOR MORE PRODUCT INFORMATION INCLUDING REGULATORY ACCEPTANCES, PLEASE VISIT https://hydro-int.com/en/products/first-defense

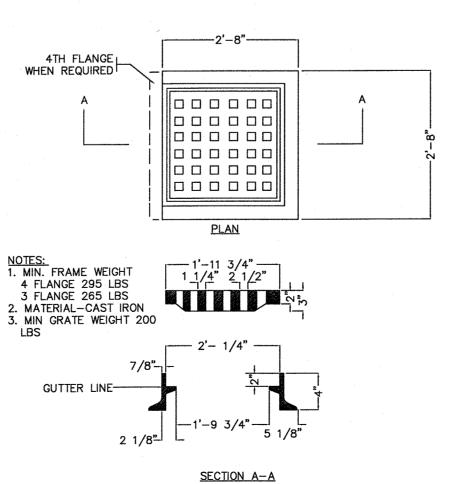
#### **GENERAL NOTES:**

- 1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
- 2. The diameter of the inlet and outlet pipes may be no more than 18".
- 3. Multiple inlet pipes possible (refer to project plan).
- 4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plan.s)
- 5. Peak flow rate and minimum height limited by available cover and pipe diameter.
- 6. Larger sediment storage capacity may be provided with a deeper sump depth.

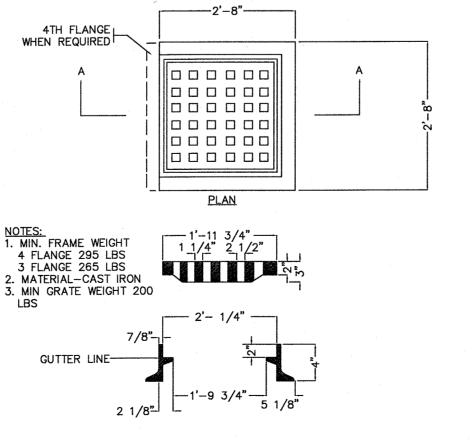


1. CONCRETE TO BE 4,000 PSI MIN. PER ASTM C-478(6.1). 2. REINFORCING TO MEET OR EXCEED H-20 LOADING REQUIREMENTS.

PRECAST CONCRETE CATCH BASIN WITH GAS AND OIL SEPARATOR NOT TO SCALE



STANDARD CATCH BASIN FRAME & GRATE NOT TO SCALE



**AUTOMOTIVE AREAS - BITUMINOUS CONCRETE PAVEMENT** NOT TO SCALE

STANDARD MANHOLE FRAME & COVER

NOT TO SCALE

**PLAN** 

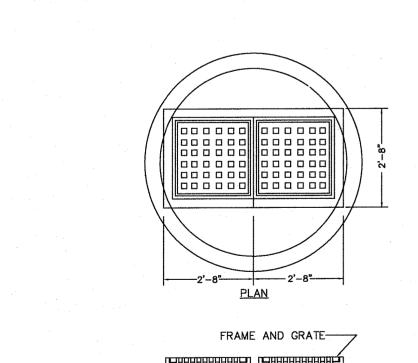
BOTTOM OF DRAINAGE WAY

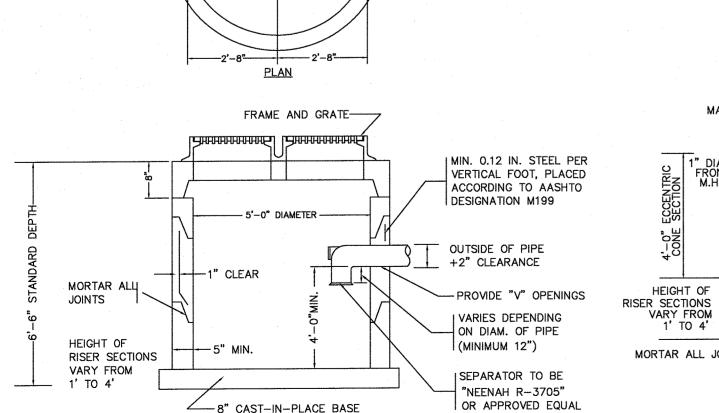
NOTE: POINTS "A" SHOULD BE HIGHER THAN POINT "B"

PLACEMENT OF STRAW BALE

**EROSION CHECK** 

NOT TO SCALE





PRECAST CONCRETE DOUBLE CATCH BASIN WITH GAS AND OIL SEPARATOR

NOT TO SCALE

PRECAST CONCRETE DRAIN MANHOLE

ISET FRAME IN FULL BED OF MORTAR

CONCRETE COLLARS.

M.H. CONE SECTION

ADJUST TO REQUIRED GRADE W/MIN. 2 OR MAX. 4

BRICK COURSES OR EQUIVALENT DIMENSION WITH REINFORCED

.PRECAST REINFORCED CONCRETE

MIN. 0.12 IN. STEEL PER

VERTICAL FOOT, PLACED

ACCORDING TO AASHTO

- PROVIDE "V" OPENINGS

FOR PIPES 18" DIAMETER AND OVER, 1" COVER

- CEMENT CONCRETE CLASS "A"

1-#3 BAR AROUND OPENINGS

PIPE OPENINGS TO BE PRECAST IN RISER SECTION

DESIGNATION M199

MANHOLE FRAME & COVER-

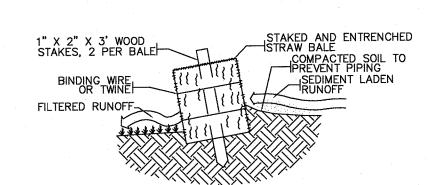
" CLEAR-

1" DIA. DROP FRONT TYPE M.H. STEPS

HEIGHT OF

1' TO 4'

MORTAR ALL JOINTS-



**CROSS-SECTION OF STRAW BALE EROSION CHECK** NOT TO SCALE

#### SC-740 STORMTECH CHAMBER SPECIFICATIONS

- 1. CHAMBERS SHALL BE STORMTECH SC-740.
- 2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
- 3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION
- 4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN
- REQUIREMENTS FOR HANDLING AND INSTALLATION:

FOR THERMOPLASTIC PIPE.

- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS. TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER
- JOINT SHALL NOT BE LESS THAN 2". TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD
- 8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS
- THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
- THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.

### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740

9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

#### SYSTEM

- 1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE". 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE
- STORMTECH RECOMMENDS 3 BACKFILL METHODS: STONESHOOTER LOCATED OFF THE CHAMBER BED
- BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2"
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE

#### NOTES FOR CONSTRUCTION EQUIPMENT

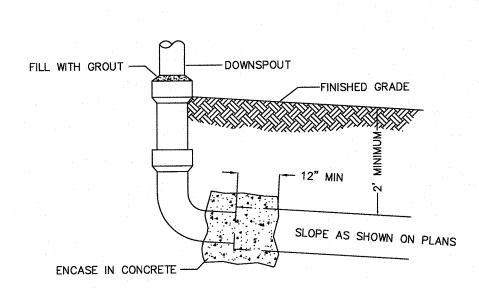
LIMITS FOR CONSTRUCTION EQUIPMENT.

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- 2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS. NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780
- CONSTRUCTION GUIDE". WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- 3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT

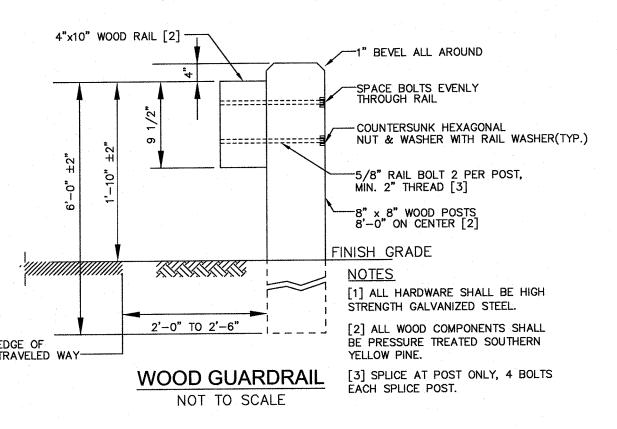
-2" X 2" X 36" WOODEN STAKES PLACED 10' O.C. — FILTREXX® SILT SOXX™ (12") OR APPROVED EQUAL BLOWN/PLACED FILTER MEDIA -AREA TO BE PROTECTED WORK AREA

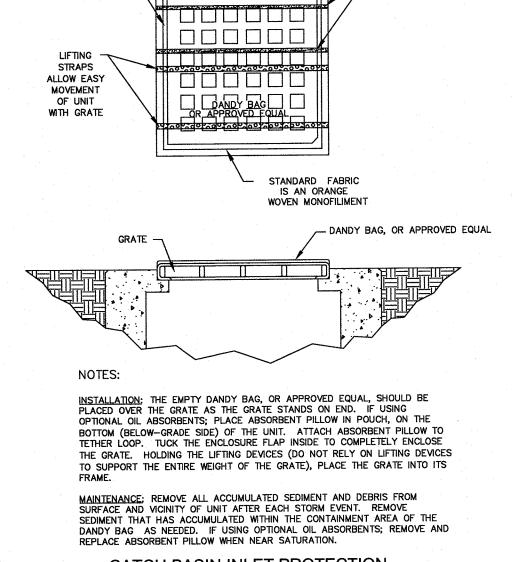
> 1. ALL MATERIAL TO MEET FILTREXX®SPECIFICATIONS.
> 2. SILT SOXX™FILL TO MEET APPLICATION REQUIREMENTS. COMPOST MATERIAL TO BE DISPERSED ON SITE. FILTREXX SILT SOXX NOT TO SCALE



DOWNSPOUT CONNECTION TO DRAINAGE OUTLET

NOT TO SCALE





FLAP FOLDS OVER

TO ENCLOSE GRATE

CATCH BASIN INLET PROTECTION NOT TO SCALE

#### ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

· · · · · · · · · · · · · · · · · · ·	MATERIAL LOCATION DESCRIPTION		AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT	
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.	
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.  MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).	
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.	
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. 2,3	

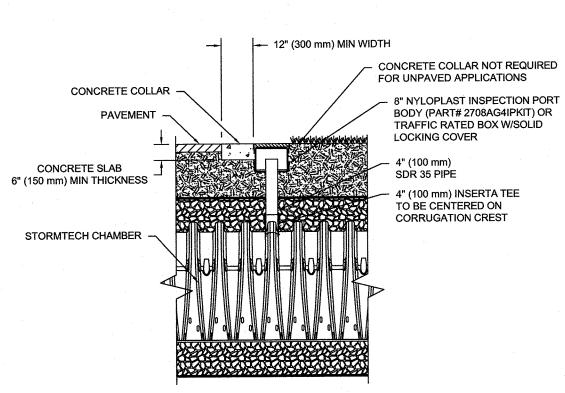
THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".

STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGNS, CONTACT STORMTECH FOR 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

> ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE ALL AROUND PAVEMENT LAYER (DESIGNED CLEAN CRUSHED, ANGULAR STONE IN A & B LAYERS BY SITE DESIGN ENGINEER) \*TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 24" (600 mm). 6" (150 mm) PERIMETER STONE (SEE NOTE 5) (450 mm) MIN\* MAX **EXCAVATION WALL** \*\*THIS CROSS SECTION DETAIL REPRESENTS (CAN BE SLOPED OR VERTICAL) MINIMUM REQUIREMENTS FOR INSTALLATION. PLEASE SEE THE LAYOUT SHEET(S) FOR PROJECT SPECIFIC REQUIREMENTS. DEPTH OF STONE TO BE DETERMINED BY SITE DESIGN ENGINEER 6" (150 mm) MIN - 51" (1295 mm) --12" (300 mm) MIN (150 mm) MIN END CAP

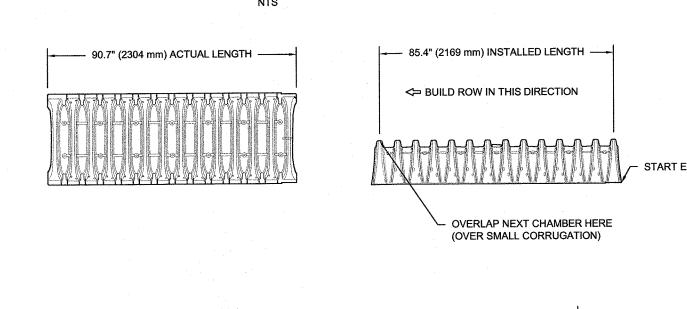
- 1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION
- 2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION
- 3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH
- CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. 4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
- TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS. TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
- TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

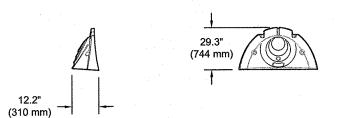
SC-740 CROSS SECTION DETAIL

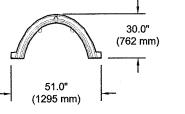


INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

#### 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)







SIZE (W X H X INSTALLED LENGTH) CHAMBER STORAGE MINIMUM INSTALLED STORAGE\*

51.0" X 30.0" X 85.4" 45.9 CUBIC FEET 74.90 CUBIC FEET (2.12 m<sup>3</sup>)

(1295 mm X 762 mm X 2170 mm)

\*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

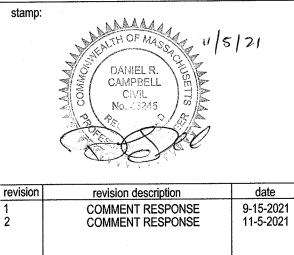
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**Not For Construction** 

consultant / contractor information:





FACTORY SQUARE FRANKLIN

5 FISHER STREET, FRANKLIN, MA

K FISHER STREET LLC

client information:

1 FISHER STREET, FRANKLIN, MA 02038



**JOE** THE ARCHITECT

343 Medford Street, Suite 4C Somerville, MA 02145 t: +1(617) 764-3593 e: askjoe@joethearchitect.com www.joethearchitect.com

drawing title **TYPICAL DETAILS** 

project number drawing scale approver **AS SHOWN** 

Scale: 1" = 40' - 0"

PLANTING NOTES:

noted to receive other treatment.

Call DIGSAFE, 1-888-344-7233, for location and marking of all

utilities prior to any excavation. Private utilities may require

additional marking and

investigation.

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1. Trees and shrubs shall be uniform, full and bushy, and well branched specimen plants. All plants to be approved by the Landscape Architect.

3. Plants to conform to the requirements established in the 'American Standards For Nursery Stock', latest edition.

shrubs, and ornamental grass locations to be depth of root ball.

4. Plant beds to receive 3-inch minimum depth of shredded bark mulch.

5. Plant materials shall be guaranteed for one year (1-year) after installation. 6. Plant materials shall be field located & approved by the Landscape Architect. 7. Plant beds at perennials to have a 6-in. min. depth of loam. Loam at trees,

8. Loam (6" minimum depth) and seed all lawn areas and disturbed areas not

9. Plant substitutions will be allowed based on best availability of nursery

PLEASE NOTE: All proposed plantings will come from the

stock, with all substitutions to be approved by the Landscape Architect.

Best Development Practices Guidebook.

2. Plants shall be balled and burlapped or container grown.

Contractor to submit bark samples for approval.

Qty.	Sym.	Botanical Name	Common Name	Size
5	AF	Acer x freemanii 'Autumn Blaze'	'Autumn Blaze' Maple	2 1/2 - 3" cal.
8	AR	Acer rubrum 'October Glory'	'October Glory' Red Maple	2.5-3" / B&B
2	BN	Betula nigra 'Heritage'	'Heritage' River Birch	12-14' ht. clmp
1	CC	Carpinus caroliniana	American Hornbeam	2 1/2 - 3" cal.
11	GB	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair	2 1/2 - 3" cal.
6	GT	Gleditsia triancanthos 'Halka'	'Halka' Honeylocust	2 1/2 - 3" cal.
5	JE	Juniperus virginiana 'Emerald Sentinel'	'Emerald Sentinel' Red Cedar	7 - 8' ht. / B+B
22	JV	Juniperus virginiana	Eastern Red Cedar	7 - 8' ht. / B+B
5	LS	Liquidambar styraciflua Slender Silouette	American Sweetgum	2 1/2 - 3" cal.
4	LW	Liquidambar styraciflua 'Ward'	Cherokee 'Ward' Sweetgum	2 1/2 - 3" cal.
4	NS	Nyssa sylvatica 'Wildfire'	'Wildfire' Tupelo	2 1/2 - 3" cal.
5	PA	Picea abies	Norway Spruce	10 - 12' height
1	PP	Picea pungens glauca	Colorado Blue Spruce	10 - 12' height
51	TO	Thuja occidentalis 'Emerald' (Smaragd)	'Emerald' (Smaragd) Arborvitae	6 - 7' height
4	QP	Quercus palustris	Pin Oak	3 - 3 1/2" cal.
26	TP	Thuja plicata 'Green Giant'	'Green Giant' Arborvitae	8-10' ht. / B&B

### PLANT LIST (SHRUBS):

Qty.	Sym.	Botanical Name	Common Name	Size
6	Ca	Comus alba 'Ivory Halo'	'Ivory Halo' Dogwood	5 gallon pot
3	Fg	Fothergilla gardenii	Dwarf Fothergilla	5 gallon pot
6	Ha	Hydrangea anomala petiolaris	Climbing Hydrangea	5 gallon pot
7	Hi	Hydrangea arbor. 'Invincibelle'	'Invincibelle' Hy drangea	5 gallon pot
24	lg	llex glabra 'Shamrock'	'Shamrock' Inkberry	7 gallon pot
24	Pd	Physocarpus opulifolius 'Diabolo'	'Diabolo' Purple Ninebark	30 - 36" height
5	Po	Physocarpus opulifolius 'Little Devil'	'Little Devil' Ninebark	24 - 30" height
9	Rp	Rhododendron 'PJM'	'PJM' Rhododendron	7 gallon pot
17	Sg	Spiraea japonica 'Gold Mound'	'Gold Mound' Spirea	18 - 24" height
24	Sj	Spiraea japonica 'Little Princess'	'Little Princess' Spirea	18 - 24" height

Qty.	Sym.	Botanical Name	Common Name	Size
24	ai	Amsonia illustris	Showy Blue-Star	1 gallon pot
90	ca	Calamagrostis x acutiflora 'Karl Foerster'	'Karl Foer.' Feather Rd. Grass	3 gallon pot
12	fg	Festuca glauca 'Boulder Blue'	'Boulder Blue' Fescue	1 gallon pot
17	hh	Hemerocallis x 'Happy Returns'	'Happy Returns' Daylily	1 gallon pot
24	Is	Liatris spicata 'Kobold'	'Kobold' Blazingstar	2 gallon pot
26	pv	Panicum virgatum 'Cloud Nine'	'Cloud Nine' Switch Grass	3 gallon pot
12	sn	Salvia nemorosa 'May Night'	'May Night' Sage	1 gallon pot

PLANT LIST (TREES):

Qty.	Sym.	Botanical Name	Common Name	Size
5	AF	Acer x freemanii 'Autumn Blaze'	'Autumn Blaze' Maple	2 1/2 - 3" cal.
8	AR	Acer rubrum 'October Glory'	'October Glory' Red Maple	2.5-3" / B&B
2	BN	Betula nigra 'Heritage'	'Heritage' River Birch	12-14' ht. clmp.
1	CC	Carpinus caroliniana	American Hornbeam	2 1/2 - 3" cal.
11	GB	Ginkgo biloba 'Fastigiata'	Fastigiate Maidenhair	2 1/2 - 3" cal.
6	GT	Gleditsia triancanthos 'Halka'	'Halka' Honeylocust	2 1/2 - 3" cal.
5	JE	Juniperus virginiana 'Emerald Sentinel'	'Emerald Sentinel' Red Cedar	7 - 8' ht. / B+B
22	JV	Juniperus virginiana	Eastern Red Cedar	7 - 8' ht. / B+B
5	LS	Liquidambar styraciflua Slender Silouette	American Sweetgum	2 1/2 - 3" cal.
4	LW	Liquidambar styraciflua 'Ward'	Cherokee 'Ward' Sweetgum	2 1/2 - 3" cal.
4	NS	Nyssa sylvatica 'Wildfire'	'Wildfire' Tupelo	2 1/2 - 3" cal.
5	PA	Picea abies	Norway Spruce	10 - 12' height
1	PP	Picea pungens glauca	Colorado Blue Spruce	10 - 12' height
51	TO	Thuja occidentalis 'Emerald' (Smaragd)	'Emerald' (Smaragd) Arborvitae	6 - 7' height
4	QP	Quercus palustris	Pin Oak	3 - 3 1/2" cal.
26	TP	Thuja plicata 'Green Giant'	'Green Giant' Arborvitae	8-10' ht. / B&B

Qty.	Sym.	Botanical Name	Common Name	Size
6	Ca	Comus alba 'Ivory Halo'	'Ivory Halo' Dogwood	5 gallon pot
3	Fg	Fothergilla gardenii	Dwarf Fothergilla	5 gallon pot
6	Ha	Hydrangea anomala petiolaris	Climbing Hydrangea	5 gallon pot
7	Hi	Hydrangea arbor. 'Invincibelle'	'Invincibelle' Hy drangea	5 gallon pot
24	lg	llex glabra 'Shamrock'	'Shamrock' Inkberry	7 gallon pot
24	Pd	Physocarpus opulifolius 'Diabolo'	'Diabolo' Purple Ninebark	30 - 36" height
5	Po	Physocarpus opulifolius 'Little Devil'	'Little Devil' Ninebark	24 - 30" height
9	Rp	Rhododendron 'PJM'	'PJM' Rhododendron	7 gallon pot
17	Sg	Spiraea japonica 'Gold Mound'	'Gold Mound' Spirea	18 - 24" height
24	Sj	Spiraea japonica 'Little Princess'	'Little Princess' Spirea	18 - 24" height

#### PLANT LIST (PERENNIALS & GRASSES):

Qty.	Sym.	Botanical Name	Common Name	Size
24	ai	Amsonia illustris	Showy Blue-Star	1 gallon pot
90	ca	Calamagrostis x acutiflora 'Karl Foerster'	'Karl Foer.' Feather Rd. Grass	3 gallon pot
12	fg	Festuca glauca 'Boulder Blue'	'Boulder Blue' Fescue	1 gallon pot
17	hh	Hemerocallis x 'Happy Returns'	'Happy Returns' Daylily	1 gallon pot
24	Is	Liatris spicata 'Kobold'	'Kobold' Blazingstar	2 gallon pot
26	pv	Panicum virgatum 'Cloud Nine'	'Cloud Nine' Switch Grass	3 gallon pot
12	sn	Salvia nemorosa 'May Night'	'May Night' Sage	1 gallon pot

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consultant / contractor information:

### **Cosmos Associates**

Landscape Architects & Site Planners 5 Longview Street Natick, MA 01760 p: 508.654.6847 www.cosmosassociates.com



 on
 revision description
 date

 REV'D. PLANTS - PEER REVIEW
 9/15/2021

 FENCE & TREE PROTECTION
 10/12/2021

FACTORY SQUARE FRANKLIN

5 FISHER STREET, FRANKLIN, MA

client information: K FISHER STREET LLC

1 FISHER STREET, FRANKLIN, MA 02038

**JOE** THE ARCHITECT

343 Medford Street, Suite 4C Somerville, MA 02145 t: +1(617) 764-3593 e: askjoe@joethearchitect.com www.joethearchitect.com

LANDSCAPE PLAN

LANDSCAPE ENLARGEMENT:

0 5 10 20

Scale: 1" = 20' - 0"

e ly 3, 2021	drawing scale  AS SHOWN	approver <b>SGC</b>
wing number		revision
1()()		

Call DIGSAFE, 1-888-344-7233, for location and marking of all utilities prior to any excavation. Private utilities may require

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additional marking and

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Cut and remove burlap, rope and / or ties, etc., from trunk and branches of tree.

Tree shall bear same relation to finish grade as it did to previous grade. Remove extra soil from

−3" minimum mulch depth with saucer. trunk flare and top of rootball. Hold back - Set tree plumb on firm soil. from trunk. Maintain same relationship to finish grade after planting, as it did at the nursery (trunk flare to be 2-3" above finished grade). Cut and remove burlap

from top 1/3 of root ball. If plastic wrap, remove entirely. If the root ball is encased in a wire basket, remove top 1/2.

- Finish grade -See plan for material. Planting soil mix:

4 parts topsoil. Mix in 2 parts soil from excavated hole

 Compacted or undisturbed subgrade. support root ball at required elevation.

1 part peat moss &

1. Flood saucer twice during the first 24-hours after planting.

2. Soak each tree twice weekly, for (3) weeks after fall planting. 3. Soak each tree twice weekly, during spring and summer planting. TYP. EVERGREEN TREE PLANTING

Scale: 1/2" = 1' - 0"

Cut and remove burlap from trunk of tree. Tree shall bear same relation to finish grade as it did to previous grade. Set tree plumb on firm soil. Maintain same relationship to finish grade after planting, as it did at the nursery. Cut and remove burlap 3" min. mulch depth from top 1/3 of root ball. with saucer. Hold If plastic wrap, remove back from trunk. entirely. If the root ball is encased in a wire basket, remove top 1/3. (Min.) Finish grade -See plan for material. Planting soil mix: 1 part peat moss & 4 parts topsoil. Mix in 2 parts soil from excavated hole. Mound soil in center of plant pit to

Never cut a leader.

support root ball at required elevation. undisturbed subgrade. 1. Soak each tree twice weekly, for (3) weeks after fall planting 2. Soak each tree twice weekly, during spring and summer planting.

3. Contractor to provide a price for staking of each individual tree. TYP. DECIDUOUS TREE PLANTING

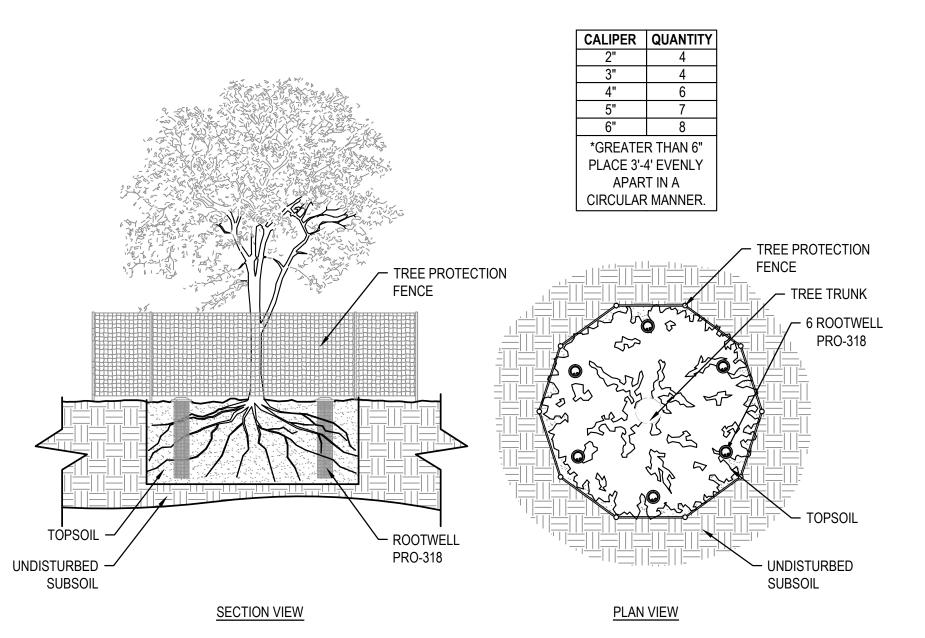
Set shrub plumb on firm soil. Maintain same relationship to finish grade after planting, as it did in the nursery. 3" min. mulch depth, with saucer. Hold back from · Finish Grade -See plan for material. Cut and remove burlap from top 1/3 of root ball. If plastic remove entirely. · Planting soil mix: 1 part peat moss & 4 parts topsoil. Existing subgrade.

1. New shrub beds to have a minimum of one foot planting soil. Shrubs to be full and bushy.

TYPICAL SHRUB PLANTING

ROOTWELL

ROOTWELL PRODUCTS INC. 2550 TELEGRAPH RD SUITE 110 BLOOMFIELD HILLS, MI 48302 PHONE: (248) 761-3805 www.rootwell.com



1. EXISTING TREES REQUIRE THE ROOTWELL TO BE PLACED APPROXIMATELY 2.5' TO 4' FROM THE TRUNK, OR ON LARGE TREES AS CLOSE AS POSSIBLE. TREE ROOTS ARE NOT AT THE DRIP LINE, BUT ARE MUCH CLOSER TO THE TRUNK WHEN TREES ARE IN

STRESS, IN DECLINE, OR IN COMPACTED SOILS. 2. USE THE QUANTITY GUIDE ABOVE AND EVENLY SPACE THE ROOTWELLS APART. ON LARGER TREES LOCATE THE ROOTWELLS IN A CIRCULAR MANNER AROUND THE TREE APPROXIMATELY 3-4' APART. PLACE THE CAP'S TOP LIP/FLANGE SO IT IS FLUSH ON THE GROUND TO ALLOW FOR MOWING CLEARANCE.

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS

FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION. 4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY

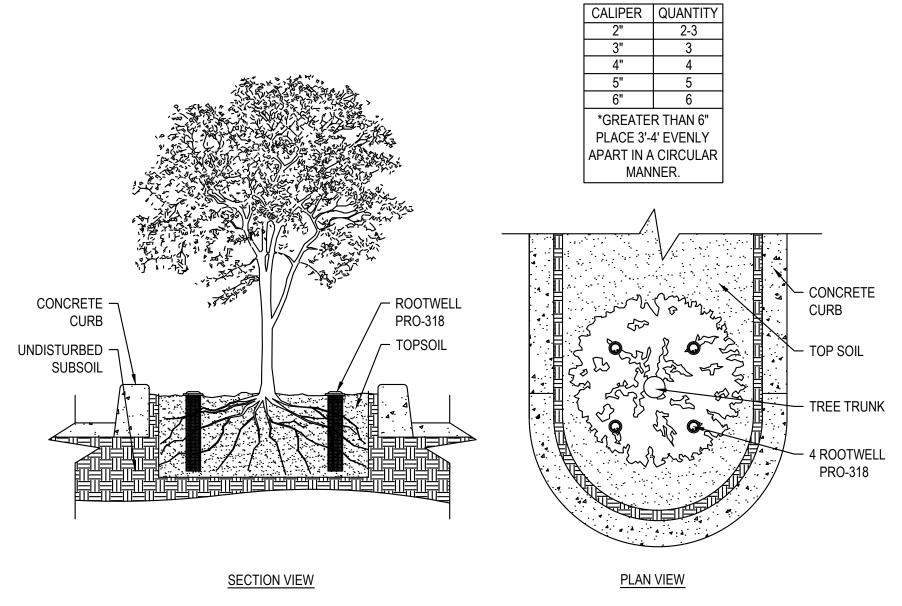
THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE. 5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/

TREE PROTECTION FOR EXISTING TREES

DURING CONSTRUCTION:

# ROOTWELL

ROOTWELL PRODUCTS INC. 2550 TELEGRAPH RD SUITE 110 BLOOMFIELD HILLS, MI 48302 PHONE: (248) 761-3805 www.rootwell.com



MANUFACTURER NOTES:

1. EXISTING TREES REQUIRE THE ROOTWELL TO BE PLACED APPROXIMATELY 2.5' TO 4' FROM THE TRUNK, OR ON LARGE TREES AS CLOSE AS POSSIBLE. TREE ROOTS ARE NOT AT THE DRIP LINE, BUT ARE MUCH CLOSER TO THE TRUNK WHEN TREES ARE IN STRESS, IN DECLINE, OR IN COMPACTED SOILS.

2. USE THE QUANTITY GUIDE ABOVE AND EVENLY SPACE THE ROOTWELLS APART. ON LARGER TREES LOCATE THE ROOTWELLS IN A CIRCULAR MANNER AROUND THE TREE APPROXIMATELY 3-4' APART. PLACE THE CAP'S TOP LIP/FLANGE SO IT IS FLUSH ON THE GROUND TO ALLOW FOR MOWING CLEARANCE.

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

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4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER

## AFTER CONSTRUCTION:

PARKING LOT APPLICATION FOR EXISTING TREES

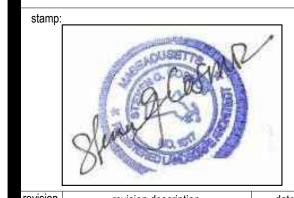
### **Not For Construction**

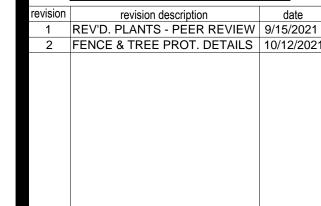
ublished work of the architect, and the same may not be duplicated, used, or sclosed without the written consent of the architect. Contractors to use Architectural wings for set out. Contractors to check and verify all Dimensions on Site prior to struction/Fabrication. Figured Dimensions take precedence over Scaled Dimension y discrepancies should be immediately referred to the Architect. The project manager f drawings may change when copied or faxed. All work to comply with I.B.C. Regulations nd relevant American Standards.

consultant / contractor information:

#### **Cosmos Associates**

Landscape Architects & Site Planners 5 Longview Street Natick, MA 01760 p: 508.654.6847 www.cosmosassociates.com





FACTORY SQUARE FRANKLIN

5 FISHER STREET, FRANKLIN, MA

client information: K FISHER STREET LLC

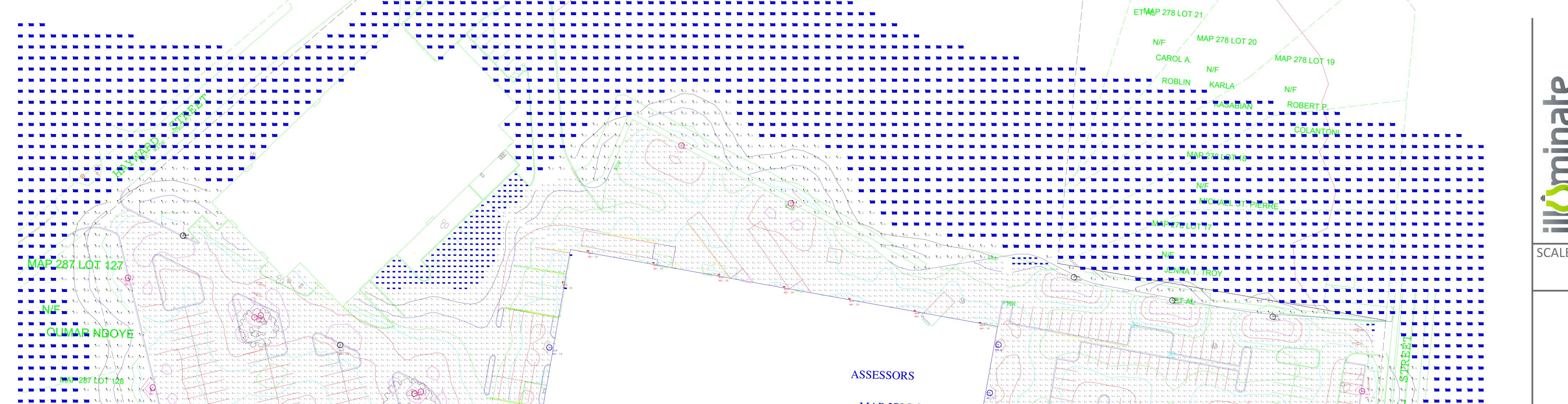
1 FISHER STREET, FRANKLIN, MA 02038

**JOE** THE ARCHITECT

343 Medford Street, Suite 4C Somerville, MA 02145 t: +1(617) 764-3593 e: askjoe@joethearchitect.com www.joethearchitect.com

LANDSCAPE DETAILS

date July 3, 2021	drawing scale AS SHOWN	approver <b>SGC</b>
drawing number		revision



Lum. Lumens

15453

4662

2370

15677

231

15453

6206

7947

MAP 278 LOT 16

(AREA=14.74± ACRES)

Calculation Summary

FRONT PARKING LOT

COURTYARD

LOADING AREA

REAR PARKING

SIDEWALK

SIDEWALK 1

SPILL LIGHT

CalcType

Illuminance

Illuminance

Illuminance

Illuminance

Illuminance

Illuminance

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LLF Description

0.900 | 99075

0.900 | 33053

0.900 URB-XXXX-26-60L-136-4K7-4W-U

0.900 URB-XXXX-26-60L-136-4K7-3-U

0.900 URB-XXXX-26-60L-136-4K7-4W-U

0.900 URB-XXXX-21-24L-55-4K7-4W-U

0.900 URB-XXXX-26-60L-136-4K7-4W-BC-U

0.900 RWL1-48L-35-4K7-4W-U

16.000 DLD-CL-MD-24-BK-TG25

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Luminaire Schedule

Qty

Label

**SL4-2** 

WL4

CL1

PL1

SL3

SP1

SL4

DL4

SL4BC

Arrangement

BACK-BACK

SINGLE

SINGLE

SINGLE

**SINGLE** 

SINGLE

SINGLE

SINGLE

SINGLE

SD 0/08 BY: Z  $\overline{\phantom{a}}$ AW 2 

Avg/Min | Max/Min

7.98

19.00

N.A.

2.54

N.A.

2.15

30.25

N.A.

N.A.

5.00

4.71

N.A.

128.00

3.19

1.90

1.89

2.54

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12.1

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and the state of the territorial territori

( ) 2.8 | 0.9 | 0.5 | 0.2 | 0.1 | 1.1 | 1.2 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.

1.5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 | 1/5 |

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