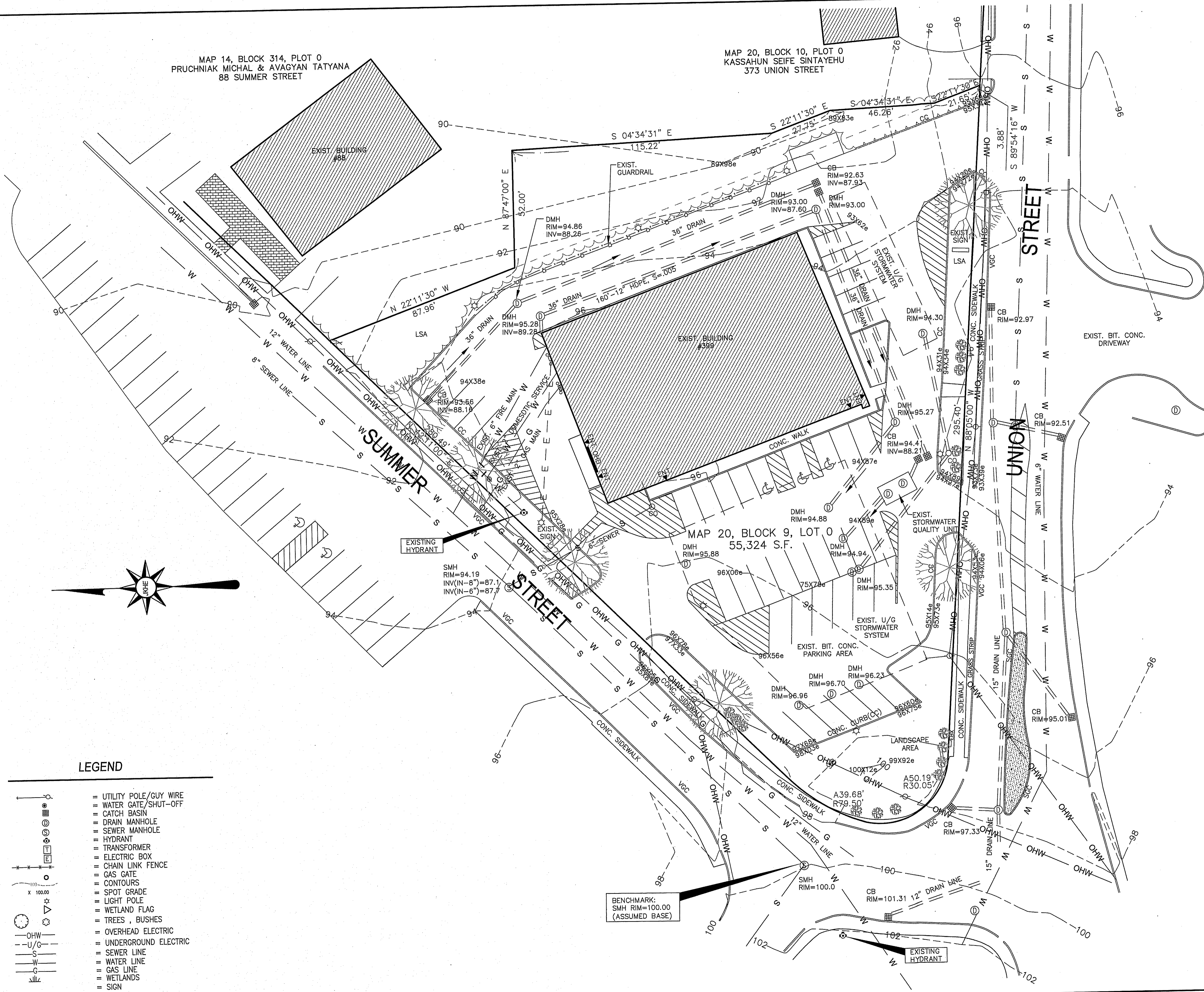




MAP 14, BLOCK 314, PLOT 0  
 PRUCHNIAK MICHAL & AVAGYAN TATYANA  
 88 SUMMER STREET

MAP 20, BLOCK 10, PLOT 0  
 KASSAHUN SEIFE SINTAYEHU  
 373 UNION STREET



**GENERAL NOTES :**

ASSESSORS MAP : 20 BLOCK: 9 LOT: 0  
 LOCUS DEED REFERENCE : BOOK 32052, PAGE 0194  
 PLAN REFERENCE : PLAN NO 36312003

ZONING : INDUSTRIAL

APPLICANT :  
 RETAIL ASHLAND LLC  
 858 WASHINGTON STREET  
 DEDHAM, MA. 02026

OWNER :  
 RETAIL ASHLAND LLC  
 858 WASHINGTON STREET  
 DEDHAM, MA. 02026

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Assessors Map: 20 Block: 9 Lot: 0  
 399 Union Street, Ashland, Massachusetts

PREPARED FOR

**RETAIL ASHLAND, LLC**

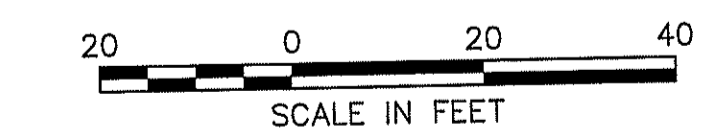
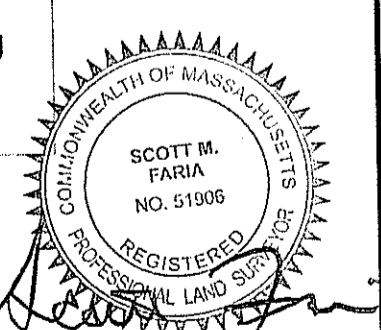
TITLE

**EXISTING CONDITIONS PLAN**

**J.K. HOLMGREN ENGINEERING, INC.**

Registered Professional Engineers and Land Surveyors  
 1024 Pearl Street, Brockton, MA. 02301  
 Phone - (508) 583-2595 Fax - (508)-588-7518  
 Email : sfaria@jkholmgren.com

**JKE J.K. Holmgren Engineering**  
 Registered Professional  
 Engineers & Land Surveyors



SCALE: 1" = 20'

DATE: 06/01/2022

NO.	BY	DATE	REMARKS
2	SSR	5.16.22	WITH SURVEY
1	JG	3.23.22	SIDEWALK AND CARS ADDITION

**C-2**

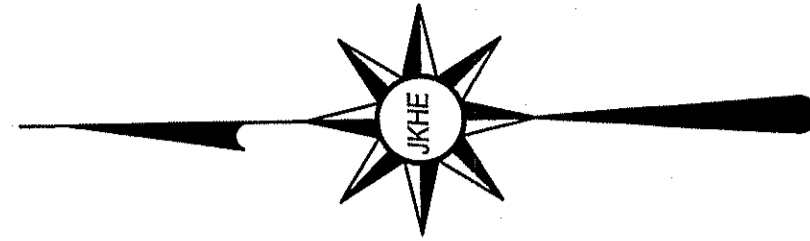
DRAWING NUMBER

H:\2020\2020-078 Salvatore Capital, 399 Union St., Ashland\SURVEY\WORKSHEET\2020-078C5.dwg  
 2020-078

**LEGEND**

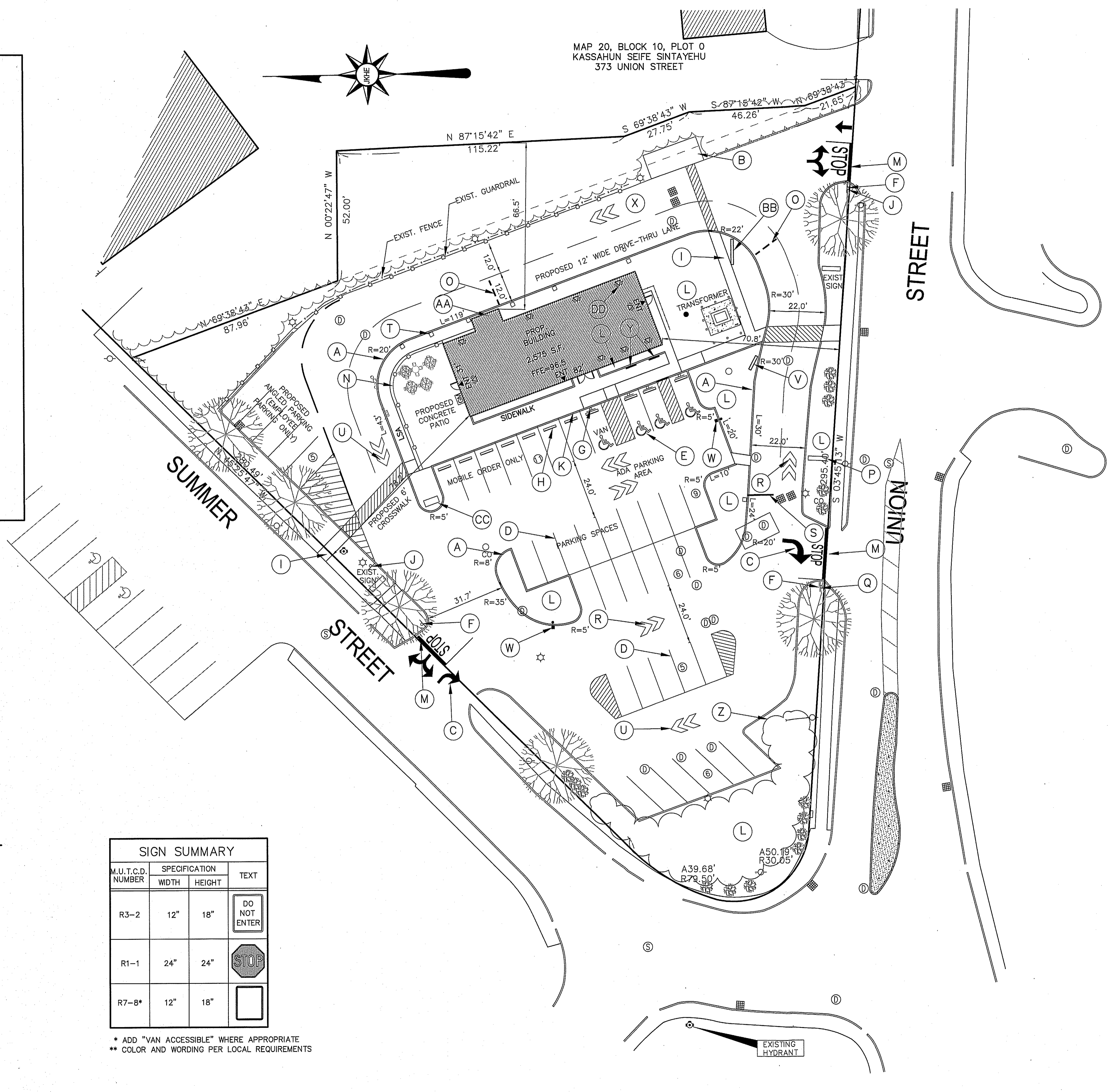
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- = TEST PIT

MAP 20, BLOCK 10, PLOT 0  
KASSAHUN SEIFE SINTAYEHU  
373 UNION STREET



**SITE LEGEND**

- (A) PRECAST CONCRETE CURB
- (B) TRASH ENCLOSURE AREA (SEE ARCH. PLANS)
- (C) TRAFFIC FLOW ARROWS (SEE DETAILS)
- (D) 6" WIDE LINE STRIPE
- (E) ACCESSIBLE PARKING SYMBOL
- (F) STOP SIGN (RS-8)
- (G) ACCESSIBLE PARKING SIGN
- (H) CONC. WHEEL STOPS (SEE DETAIL)
- (I) 5' WIDE CONCRETE WALK
- (J) DO NOT ENTER SIGN
- (K) MONOLITHIC CONCRETE SIDEWALK & CURB
- (L) LANDSCAPED ISLAND
- (M) 12" STOP BAR
- (N) DECORATIVE FENCE
- (O) VEHICLE DETECTOR LOOP
- (P) IDENTIFICATION SIGN (SEE ARCH. PLANS)
- (Q) RIGHT TURN ONLY SIGN
- (R) ENTRY PAVEMENT ARROW (GREEN)
- (S) CLEARANCE BAR
- (T) NON-ILLUMINATED BOLLARD
- (U) EXIT PAVEMENT ARROW (WHITE)
- (V) DRIVE THRU PRE-MENU BOARD
- (W) SITE LIGHT POLES
- (X) BYPASS LANE (12' WIDE)
- (Y) BIKE RACKS
- (Z) SNOW STORAGE AREA
- (AA) PICK UP WINDOW W/ CANOPY
- (AB) DT 5' PANEL MENU BOARD
- (AC) FREE STANDING
- (AD) SIGN- DT THANK YOU/ EXIT ONLY
- (AE) BUILDING SCONCE (SEE ARCH PLANS)



**GENERAL NOTES :**

ASSESSORS MAP : 20 BLOCK: 9 LOT : 0  
LOCUS DEED REFERENCE : BOOK 32052, PAGE 0194  
PLAN REFERENCE : PLAN NO 36312003

ZONING : INDUSTRIAL

APPLICANT : RETAIL ASHLAND LLC  
858 WASHINGTON STREET  
DEDHAM, MA. 02026  
OWNER : RETAIL ASHLAND LLC  
858 WASHINGTON STREET  
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**ZONING TABLE**

ZONE: I (INDUSTRIAL)		
PROPOSED USE: RESTAURANT / DRIVE-THRU		
	REQUIRED	PROVIDED
MIN. LOT AREA	30,000	55,504 S.F.
FRONTAGE	150'	>150'
FRONT SETBACK	40'	70.8'
SIDE SETBACK	30'	78.2'
REAR SETBACK	30'	64.9'
MAX. BLDG. HEIGHT(STORIES)	2 STORIES	1 STORY
MAX. % BLDG. LOT COVERAGE	N/A	39%
MIN. OPEN SPACE(GREEN SPACE)	N/A	17%
PARKING SCHEDULE:		
REST. : 1 SPACE PER 4 SEATS	46/4= 12 SPACES	
PATIO. : 1 SPACE PER 4 SEATS	28/4= 7 SPACES	
TOTAL PARKING	19 SPACES	42 SPACES

Assessors Map: 20 Block: 9 Lot: 0  
399 Union Street, Ashland, Massachusetts

PREPARED FOR

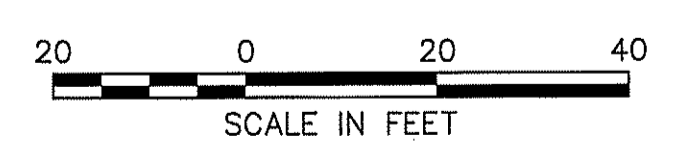
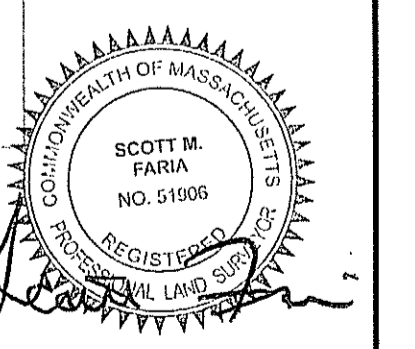
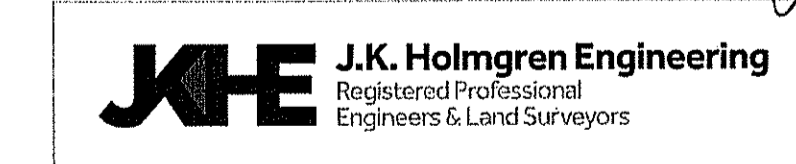
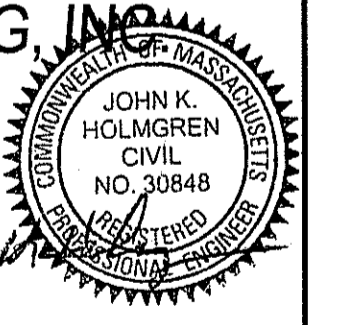
**RETAIL ASHLAND, LLC**

TITLE

**LAYOUT & MATERIALS PLAN**

**J.K. HOLMGREN ENGINEERING, INC.**

Registered Professional Engineers and Land Surveyors  
1024 Pearl Street, Brockton, MA. 02301  
Phone - (508) 583-2595 Fax - (508)-588-7518  
Email : sfaria@jkholmgren.com



SCALE: 1" = 20' DATE: 06/01/2022

NO.	BY	DATE	REMARKS
2	SSR	5.16.22	WITH SURVEY
1	JG	3.23.22	SIDEWALK AND CARS ADDITION

**C-3**  
DRAWING NUMBER

H:\2020\2020-078 Salvatore Capital, 399 Union St., Ashland\CIVIL\DESIGN\2020-078SP0.dwg  
2020-078

**LEGEND**

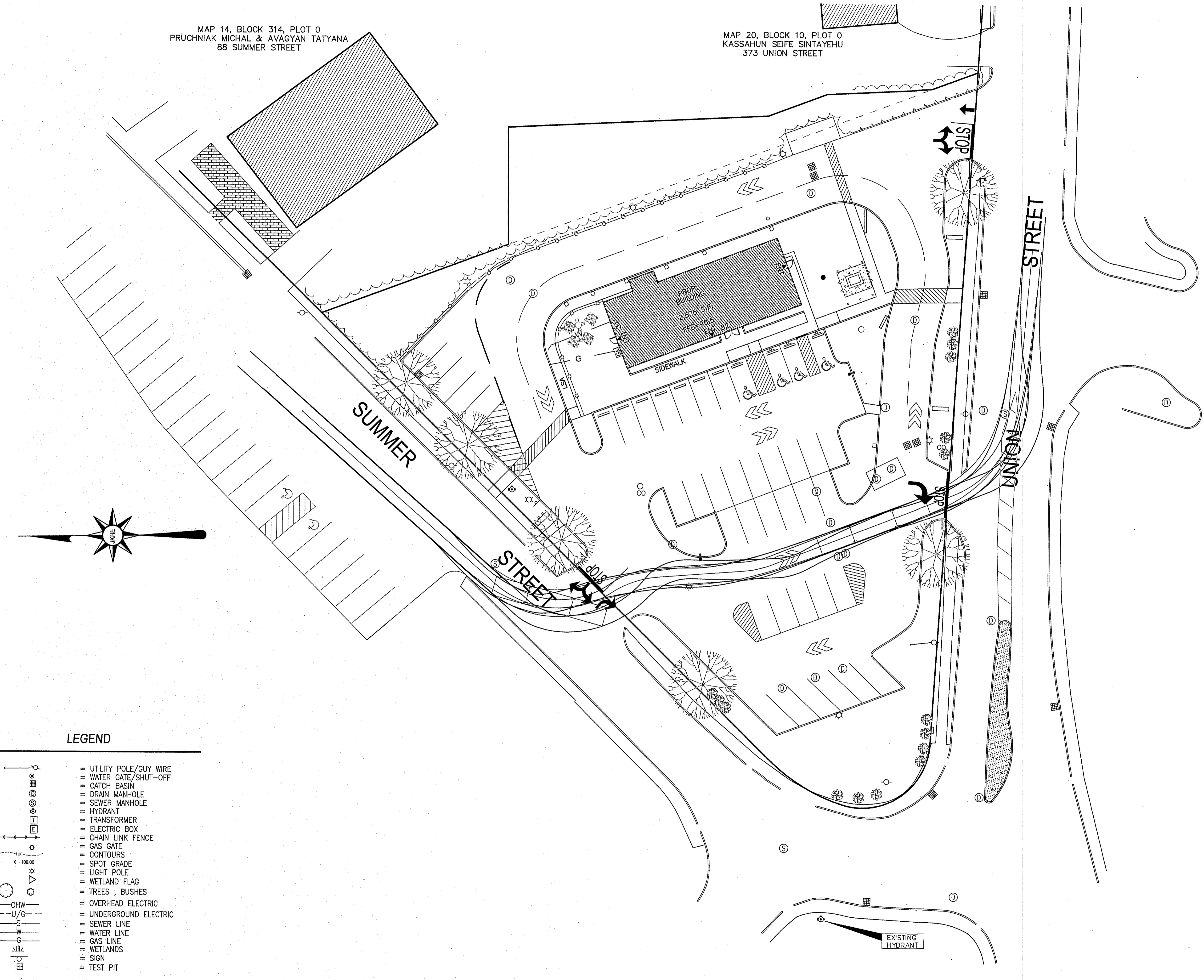
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SIGN SUMMARY			
M.U.T.C.D. NUMBER	SPECIFICATION	TEXT	
WIDTH	HEIGHT		
R3-2	12"	18"	DO NOT ENTER
R1-1	24"	24"	STOP
R7-8*	12"	18"	

\* ADD "VAN ACCESSIBLE" WHERE APPROPRIATE  
\*\* COLOR AND WORDING PER LOCAL REQUIREMENTS

MAP 14, BLOCK 314, PLOT 0  
 PRUCHNIAK MICHAL & AVAGYAN TATYANA  
 88 SUMMER STREET

MAP 20, BLOCK 10, PLOT 0  
 KASSAHUN SEIFE SINTAYEHU  
 373 UNION STREET



**GENERAL NOTES :**

ASSESSORS MAP : 20 BLOCK: 9 LOT : 0

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 PLAN REFERENCE : PLAN NO 36312003

ZONING : INDUSTRIAL

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 DEDHAM, MA. 02026

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 RETAIL ASHLAND LLC  
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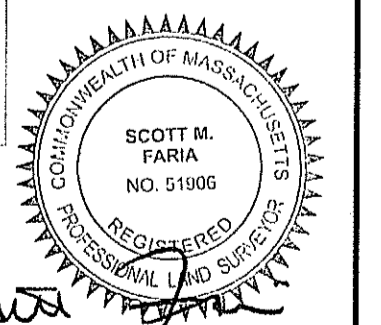
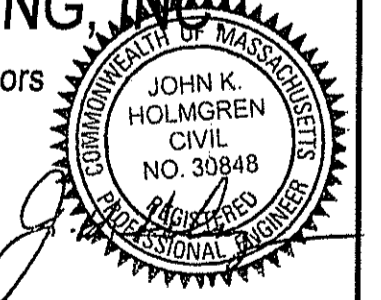
Assessors Map: 20 Block: 9 Lot: 0  
 399 Union Street, Ashland, Massachusetts

PREPARED FOR  
**RETAIL ASHLAND, LLC**

TITLE  
**FIRE TRUCK TURN PLAN**

**J.K. HOLMGREN ENGINEERING, INC.**

Registered Professional Engineers and Land Surveyors  
 1024 Pearl Street, Brockton, MA. 02301  
 Phone - (508) 583-2595 Fax - (508)-588-7518  
 Email : sfaria@jkholmgren.com



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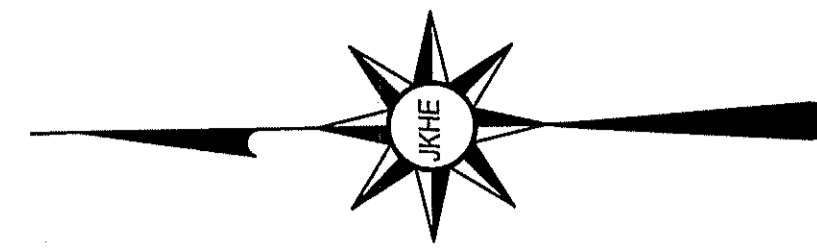
**C-3A**  
 DRAWING NUMBER

**LEGEND**

- UTILITY POLE/GUY WIRE
- WATER GATE/SHUT-OFF
- CATCH BASIN
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- HYDRANT
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88 SUMMER STREET

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KASSAHUN SEIFE SINTAYEHU  
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LOCUS DEED REFERENCE : BOOK 32052, PAGE 0194  
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ZONING : INDUSTRIAL

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DEDHAM, MA. 02026

OWNER :  
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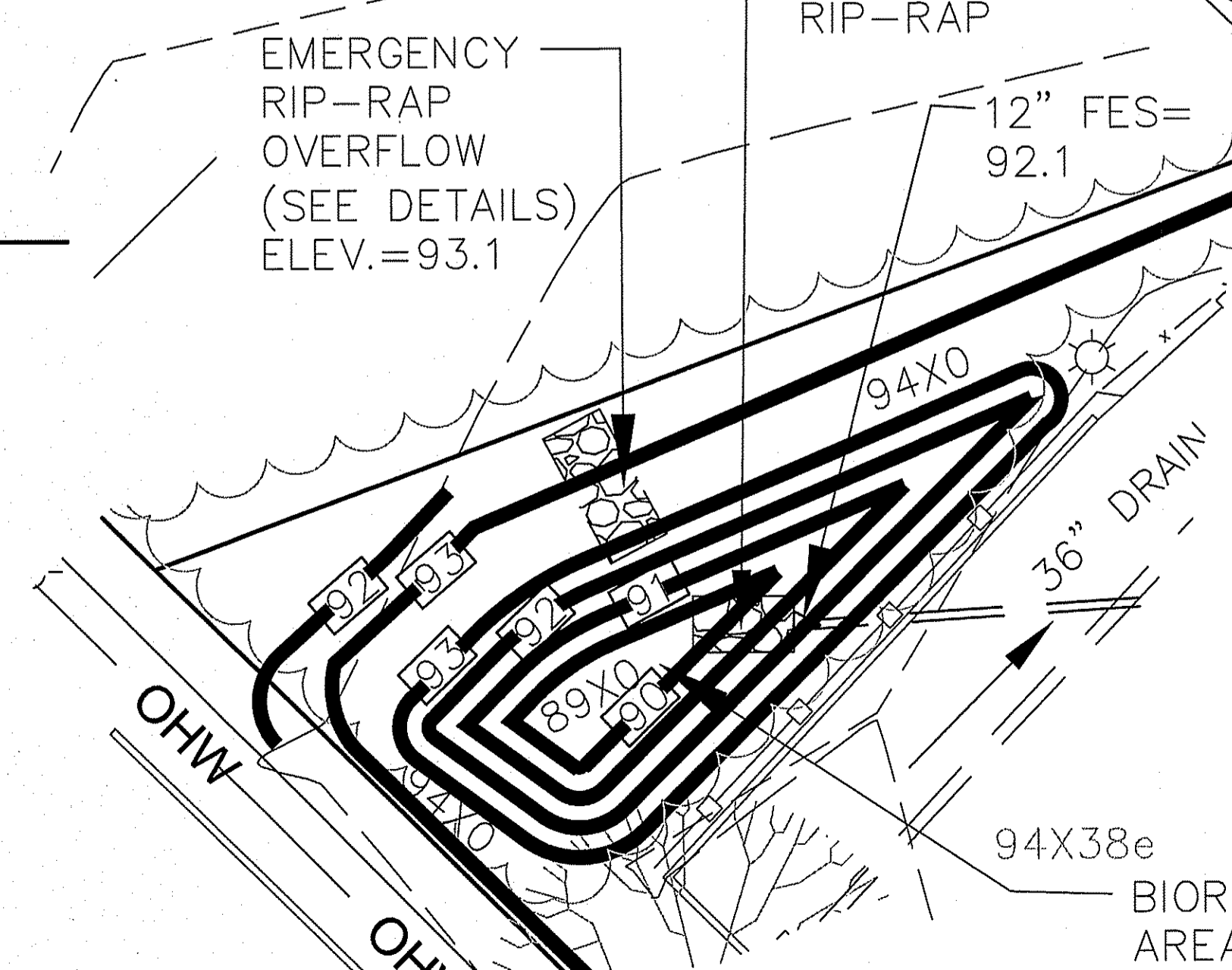
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**GRADING AND DRAINAGE NOTES:**

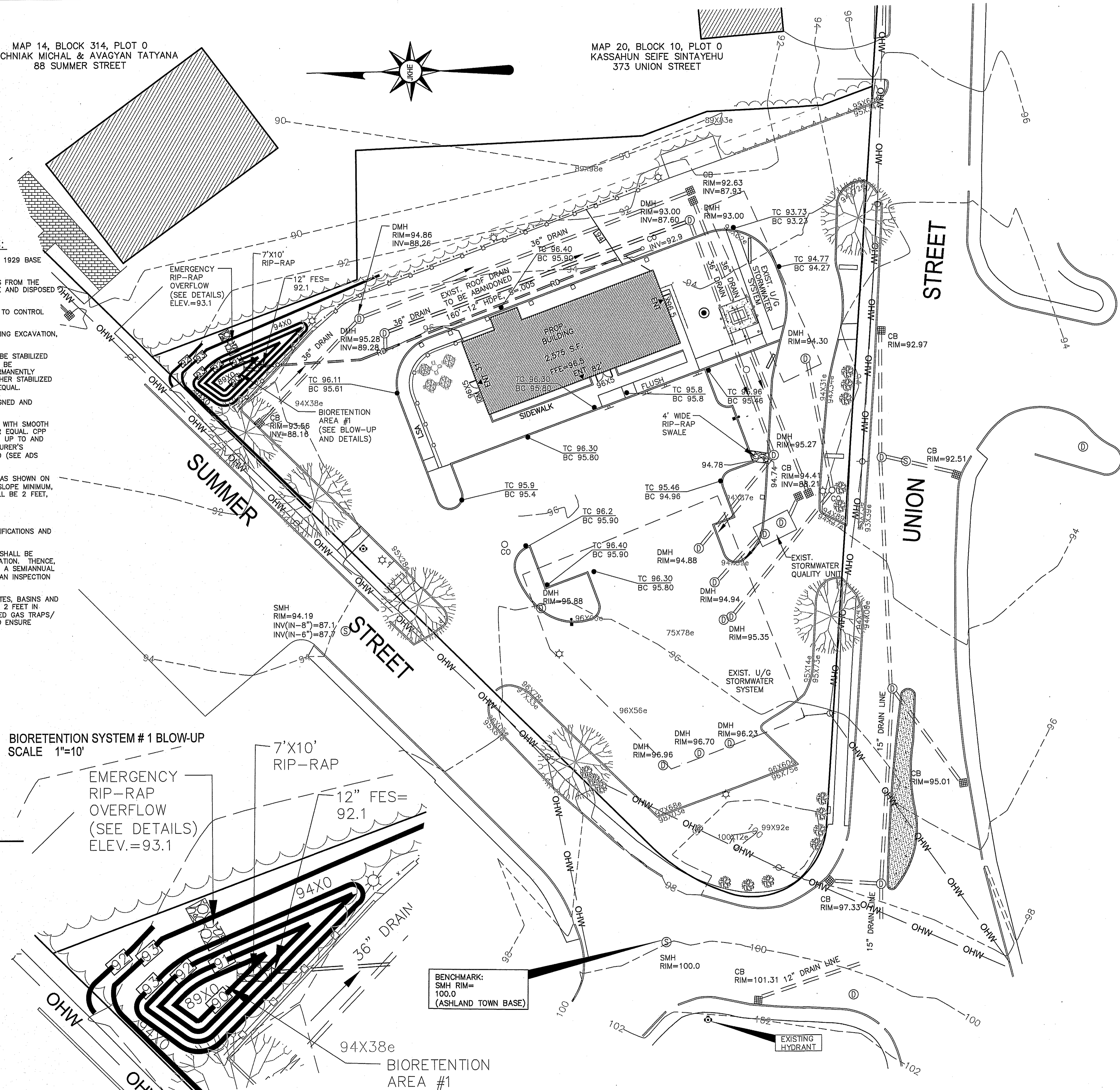
1. THE PROJECT ELEVATIONS ARE BASED ON THE NGVD OF 1929 BASE VERTICAL DATUM.
2. DEMOLITION DEBRIS, EXCESS AND UNSUITABLE MATERIALS FROM THE DEMOLITION OPERATION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER BY THE CONTRACTOR.
3. DISTURBED AREAS SHALL BE PROTECTED AT ALL TIMES TO CONTROL SEDIMENT TRANSPORT BEYOND THE LIMIT OF WORK.
4. DISTURBED AREAS SHALL BE TREATED WITH WATER DURING EXCAVATION, OR APPROVED ALTERNATIVE, TO CONTROL THE DUST.
5. ALL DISTURBED AREAS NOT OTHERWISE TREATED SHALL BE STABILIZED WITH 4" LOAM, SEED, & MULCH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AREAS UNTIL VEGETATION HAS BEEN PERMANENTLY ESTABLISHED. SLOPES IN EXCESS OF 3:1 SHALL BE FURTHER STABILIZED WITH EROSION CONTROL BLANKETS (ECB) OF CURLEX OR EQUAL.
6. ALL DRAINAGE STRUCTURES AND PIPING SHALL BE DESIGNED AND INSTALLED FOR H-20 LOADING.
7. CPP - HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR WALL TO MEET ADS N-12 PIPE SPECIFICATION OR EQUAL. CPP PIPE USE SHALL BE ALLOWED AS NOTED, WITH A DIAMETER UP TO AND INCLUDING 24". BACKFILLING CPP MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS AND SPECIAL CARE MUST BE EXERCISED (SEE ADS PRODUCT NOTE 3.115).
8. ROOF DOWNSPOUTS SHALL BE TIED INTO ROOF DRAINS AS SHOWN ON PLAN. ROOF DRAINS TO BE AT LEAST 4" CPP AT 1.00% SLOPE MINIMUM, UNLESS OTHERWISE NOTED. MINIMUM TYPICAL COVER SHALL BE 2 FEET, U.O.N.
11. ALL RCP PIPE TO MEET CLASS IV SPECIFICATIONS.
12. ALL PIPE INSTALLATIONS SHALL FOLLOW PROJECT SPECIFICATIONS AND PIPE MANUFACTURER RECOMMENDATIONS.
13. INSPECTION AND MAINTENANCE, AS OUTLINED HEREIN, SHALL BE PERFORMED FOUR TIMES WITHIN THE FIRST YEAR OF OPERATION. THENCE, INSPECTIONS AND MAINTENANCE SHALL BE CONDUCTED ON A SEMIANNUAL BASIS (2 TIMES A YR.) AND AFTER ALL LARGE STORMS. AN INSPECTION REPORT SHALL BE MAINTAINED.
14. ACCUMULATED DEBRIS IN CATCH BASINS, TRENCH GRATES, BASINS AND LEACHING BASINS SHALL BE REMOVED BEFORE IT EXCEEDS 2 FEET IN DEPTH AND DISPOSED OF PROPERLY. BROKEN OR DAMAGED GAS TRAPS/ HOODS SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO ENSURE ADEQUATE FUNCTION.

**BIORETENTION SYSTEM #1 BLOW-UP SCALE 1"=10'**



**LEGEND**

- = UTILITY POLE/GUY WIRE
- = WATER GATE/SHUT-OFF
- = CATCH BASIN
- = DRAIN MANHOLE
- = SEWER MANHOLE
- = HYDRANT
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Assessors Map: 20 Block: 9 Lot: 0  
399 Union Street, Ashland, Massachusetts

PREPARED FOR

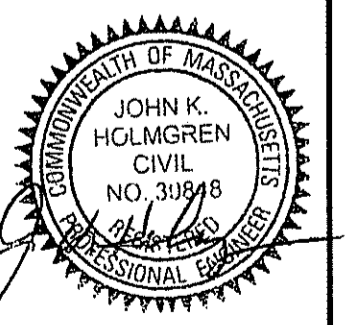
**RETAIL ASHLAND, LLC**

TITLE

**GRADING & DRAINAGE PLAN**

**J.K. HOLMGREN ENGINEERING, INC.**

Registered Professional Engineers and Land Surveyors  
1024 Pearl Street, Brockton, MA. 02301  
Phone - (508) 583-2595 Fax - (608)-588-7518  
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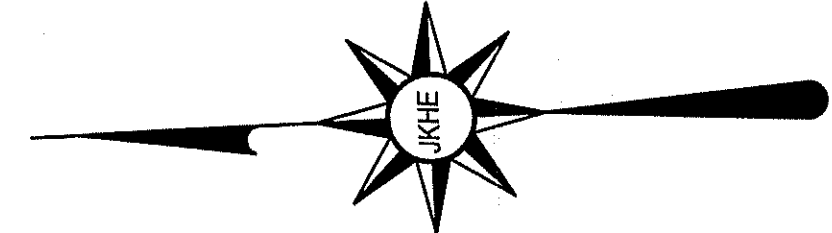
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**C-4**  
DRAWING NUMBER

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2020-078

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**UTILITY NOTES:**

1. 12" MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN ALL UTILITY CROSSINGS.
2. A MINIMUM 10' HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SEWER LINES. WHERE WATER LINES CROSS SEWER LINES, THE SEWER LINE SHALL BE LOCATED WITH A MINIMUM VERTICAL CLEARANCE OF 18" BELOW THE WATER LINE. THE SEWER LINE JOINTS SHALL BE LOCATED EQUIDISTANT AND AS FAR AWAY FROM THE WATER LINE AS POSSIBLE. WHEN IT IS IMPOSSIBLE TO ACHIEVE AWAY FROM THE WATER LINE SEPARATION AS STIPULATED ABOVE, BOTH THE HORIZONTAL AND/OR VERTICAL SEPARATION SHALL BE CONSTRUCTED WITH MECHANICAL JOINT CEMENT-LINED DUCTILE IRON PIPE FOR ONE FULL 20' PIPE LENGTH OR ANOTHER EQUIVALENT THAT IS WATERTIGHT AND STRUCTURALLY SOUND. THE JOINTS FOR BOTH PIPES SHALL BE LOCATED AS FAR AWAY FROM THE CROSSING AS POSSIBLE. BOTH PIPES SHOULD BE PRESSURE TESTED TO 150 PSI TO ENSURE THAT THEY ARE WATERTIGHT.
3. SEWER BUILDING CONNECTIONS SHALL BE 6" MIN. SDR 35 PVC, U.O.N., AT A SLOPE OF 1% MINIMUM FROM MAINLINE TO BUILDING UNIT WITH A CLEAN OUT SET AT A DISTANCE OF 10' (U.O.N.) OFF EACH UNIT FOUNDATION.
4. TYPICAL COVER OVER WATER LINE SHALL BE 5', IF LESS THAN 4' OF COVER IS PROVIDED, INSULATE WATER LINE AGAINST FREEZING.
5. GAS, ELECTRIC, DATA/COM IS SHOWN SCHEMATICALLY HEREON. THESE UTILITIES SHALL BE INSTALLED WITH A MINIMUM COVER OF 3 FEET U.O.N. OR OTHERWISE DIRECTED BY THE CONTROLLING UTILITY COMPANY. CONTRACTOR SHALL COORDINATE FINAL LAYOUT WITH APPLICABLE UTILITY COMPANY.
6. ALL COMMERCIAL LIGHTING SHALL DIRECT ALL LIGHT SO AS TO KEEP ALL LIGHTING WITHIN SUBJECT LOT.
7. ALL UTILITY CUTS THROUGH EXISTING CONCRETE OR BITUMINOUS CONCRETE PAVED SURFACES SHALL BE SAW CUT. BACK FILLING OF TRENCH SHALL INCLUDE 12" IN DEPTH FLOWABLE FILL TO BE THE BASE COURSE OF THE SURFACE TREATMENT. THE SURFACE TREATMENT SHALL THEN BE REPLACED IN KIND. IF THE BITUMINOUS CONCRETE SURFACE IS WITHIN THE ROADWAY THE BITUMINOUS CONCRETE TOP COURSE SHALL BE FINISHED WITH INFRARED TREATMENT TO BLEND EXISTING & NEWLY PAVED SURFACES.

**LEGEND**

- = UTILITY POLE/GUY WIRE
- = WATER GATE/SHUT-OFF
- = CATCH BASIN
- = DRAIN MANHOLE
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**GENERAL NOTES:**

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LOCUS DEED REFERENCE : BOOK 32052, PAGE 0194  
PLAN REFERENCE : PLAN NO 36312003

ZONING : INDUSTRIAL

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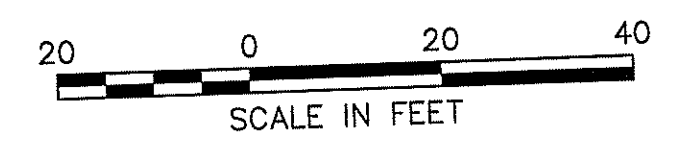
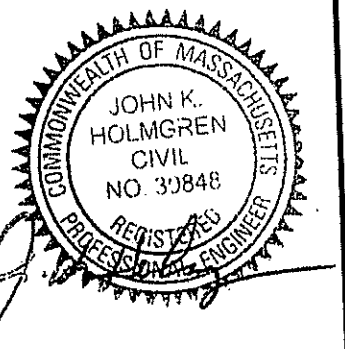
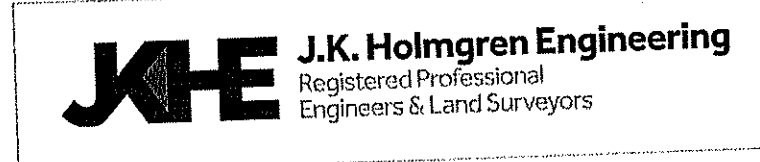
THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE THE START OF ANY WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE THE UTILITIES EXACTLY. THE CONTRACTOR MUST SHALL PRESERVE ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CALL "DIG SAFE" (AT 1-888-363-SAFE) AND THE TOWN OF EASTON UTILITY DIVISION AT LEAST 72 HOURS TO MARK APPROPRIATE UTILITIES BEFORE THE START OF CONSTRUCTION.

Assessors Map: 20 Block: 9 Lot: 0  
399 Union Street, Ashland, Massachusetts

PREPARED FOR  
**RETAIL ASHLAND, LLC**

**UTILITY PLAN**

**J.K. HOLMGREN ENGINEERING, INC.**  
Registered Professional Engineers and Land Surveyors  
1024 Pearl Street, Brockton, MA. 02301  
Phone - (508) 583-2595 Fax - (508)-588-7518  
Email : sfaria@jkholmengren.com



SCALE: 1" = 20'

NO.	BY	DATE	REMARKS
2	SSR	5.18.22	WITH SURVEY
1	JG	3.23.22	SIDEWALK AND CARS ADDITION

DATE: 06/01/2022

**C-5**  
DRAWING NUMBER

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2020-078

**CONSTRUCTION SEQUENCE**

1. INSTALL SILT SOCKS AND SILT FENCING TO ESTABLISH THE LIMIT OF WORK AS SHOWN ON PLAN.
2. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE AREA AS SHOWN ON DETAIL #610.
3. DISCHARGES FROM DEWATERING OF EXCAVATIONS SHALL NOT BE DIVERTED DIRECTLY INTO ANY WETLANDS OR EXISTING STORM DRAINS WITHOUT PRETREATMENT VIA SETTLING BASINS.
4. INSTALL HAY BALES CHECK DAMS ALONG CENTER OF SWALES AT 100' O.C., AS NECESSARY.
5. CLEAR AND GRUB SITE WITHIN THE LIMIT OF WORK.
6. CONSTRUCT SWM BASIN TO BE USED AS SEDIMENT TRAP. INSTALL LOW FLOW PERFORATED PIPE WITH FILTER FABRIC AND STONE. DO NOT INSTALL LOW FLOW ORIFICE CAP UNTIL SITE IS FULLY STABILIZED.
7. ESTABLISH ROUGH SUB GRADES FOR PARKING LOT AND BUILDING PLATFORM.
8. PERFORM BUILDING AND SITE CONSTRUCTION.
9. INSPECT AND MAINTAIN EROSION CONTROL MEASURES AFTER RAINFALL EVENTS AND A MINIMUM OF ONCE PER WEEK.
10. REMOVE SEDIMENT BUILDUP AT EROSION CONTROL DEVICES AS NEEDED. REDISTRIBUTE MATERIAL OVER SITE IN CONFORMANCE WITH EARTHWORK SPECIFICATIONS.
11. AS DRAINAGE STRUCTURES ARE INSTALLED, INSTALL FILTER FABRIC AND HAY BALES AROUND NEW STRUCTURES IN ACCORDANCE WITH DETAIL #607 AND MAINTAIN THEM UNTIL PAVEMENT IS IN PLACE AND VEGETATION IS ESTABLISHED. ALL OUTFALLS SHALL BE IMMEDIATELY STABILIZED WITH STONE PROTECTION AS REQUIRED.
12. ALL CUT AND FILL SLOPES SHALL BE TEMPORARILY STABILIZED WITH TOP SOIL, SEED AND MULCH OR CURLEX AS REQUIRED IF CONSTRUCTION ACTIVITY CEASES ON SAID SLOPES FOR A PERIOD OF SEVEN DAYS OR GREATER. ALL SLOPES SHALL BE PERMANENTLY STABILIZED AS REQUIRED IMMEDIATELY UPON COMPLETION OF FINAL GRADING.
13. COMPLETE FINISH GRADING AND STABILIZATION OF SITE. PLACE FINAL PAVING COURSE.
14. REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES, DRAIN MANHOLES, PIPES AFTER COMPLETION OF CONSTRUCTION. REMOVE AND REGRADE TEMPORARY BERMS, SWALES, CHECK DAMS, ETC. STABILIZE DISTURBED AREAS.
15. CLEAN OUT ALL SEDIMENT FROM SWM BASIN AND OUTLET STRUCTURES. REGRADE TO CONTOURS PER DESIGN. STABILIZE ALL SLOPES AS REQUIRED. REPLACE FILTER FABRIC AND CLEAN STONE AROUND LOW FLOW OUTLET PIPE. INSTALL LOW FLOW ORIFICE CAP PER DETAIL.
16. REMOVE SILT SOCKS & SILT FENCE UPON ESTABLISHMENT OF PERMANENT GROUND COVER. STABILIZE ALL AREAS WHERE SILT SOCKS WERE REMOVED.

**NOTES**

1. MAINTAIN A STOCKPILE OF SILT SOCKS, 100 FEET OF SILT FENCE AND 3 CUBIC YARDS OF RIP-RAP ON SITE AT ALL TIMES UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
2. STUMPS FROM THE CLEARING OPERATION SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
3. DISTURBED AREAS SHALL BE PROTECTED AT ALL TIMES TO CONTROL SEDIMENT TRANSPORT BEYOND THE LIMIT OF WORK.
4. DISTURBED AREAS SHALL BE TREATED WITH WATER DURING EXCAVATION, OR APPROVED ALTERNATIVE, TO CONTROL THE DUST.

LANDSCAPE SCHEDULE					
SYMBOL NAME	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
ARAF	3	ACER RUBRUM 'AUTUMN FLAME'	AUTUMN FLAME RED MAPLE	2-2 1/2" CAL.	B & B
HBA	16	HOSTA 'BOLD RIBBONS'	BOLD RIBBONS HOSTA	-	CONTAINER
IGC	12	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	15-18" HT.	CONTAINER
MC	10	MOLINIA CAERULEA 'VARIEGATA'	VAR. PURPLE MOOR GRASS	-	#2 POT
PA	10	PENNISETUM ALOPECUROIDES	DWARF FOUNTAIN GRASS	-	#2 POT
SBG	18	SPIRAEA X BUMALDA 'GOLDFLAME'	GOLD FLAME SPIREA	12-15" HT.	CONTAINER
TH	17	TAXUS MEDIA 'HICKSI'	HICKS YEW	30-36" HT.	CONTAINER

**LANDSCAPE NOTES:**

1. CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS AND EQUIPMENT IN ORDER TO COMPLETE THE WORK.
2. ALL SEEDED AND / OR SOD AREAS SHALL RECEIVE 6" OF LOAM OR TOPSOIL.
3. ALL MULCH AREAS SHALL RECEIVE A 3" LAYER OF DOUBLE SHREDDED HARDWOOD MULCH.
4. PLANTING SOIL MIX SHALL CONSIST OF 1/3 SPHAGNUM PEAT MOSS AND 2/3 FERTILE FIELD LOAM BY VOLUME.
5. ALL PLANTINGS AT DRIVEWAY ENTRANCES WILL BE MAINTAINED TO A HEIGHT OF THREE FEET OR LESS AS TO NOT OBSCURE TRAFFIC VISIBILITY.
6. ALL PLANT MATERIAL SHALL CONFORM TO THE LATEST VERSION OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).
7. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING GROWING SEASON.
8. REFERENCE IS MADE TO THE "MULCH LAW", THE REVISED REGULATION, 527 CMR 1 - 10.14-10.4. PROHIBITS THE NEW APPLICATION OF MULCH WITHIN 18 INCHES AROUND COMBUSTIBLE EXTERIORS OF BUILDINGS, SUCH AS WOOD OR VINYL BUT NOT BRICK OR CONCRETE. AN 18" STRIP OF 1 1/2" - 2 1/2" STONE SHALL BE PLACED AT A DEPTH OF 6" AROUND EXISTING WOOD AND VINYL BUILDINGS.

**SEEDING SPECIFICATIONS:**

TEMPORARY SEEDING: SEED MIXTURE: RYEGRASS	APPLICATION RATE: 1 LB/1000 SF
PERMANENT SEEDING IN LANDSCAPED AREAS: SEED MIXTURE: PERENNIAL RYEGRASS CREEPING RED FESCUE REDTOP	APPLICATION RATE: 85 LBS/1000 SF 52 LBS/1000 SF 7 LBS/1000 SF
PERMANENT SEEDING IN SLOPED AREAS: SEED MIXTURE: PERENNIAL RYEGRASS CREEPING RED FESCUE REDTOP ALSEE CLOVER BIRDFOOT TREFOL	APPLICATION RATE: 30 LBS/1000 SF 25 LBS/1000 SF 5 LBS/1000 SF 5 LBS/1000 SF 5 LBS/1000 SF

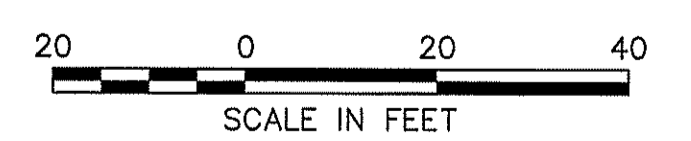
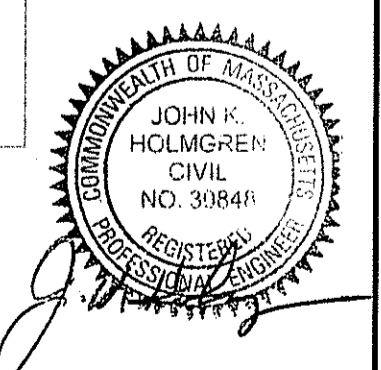
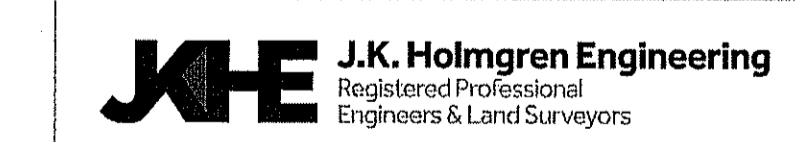
Assessors Map: 20 Block: 9 Lot: 0  
399 Union Street, Ashland, Massachusetts

**RETAIL ASHLAND, LLC**

**LANDSCAPE DEVELOPMENT & EROSION CONTROL PLAN**

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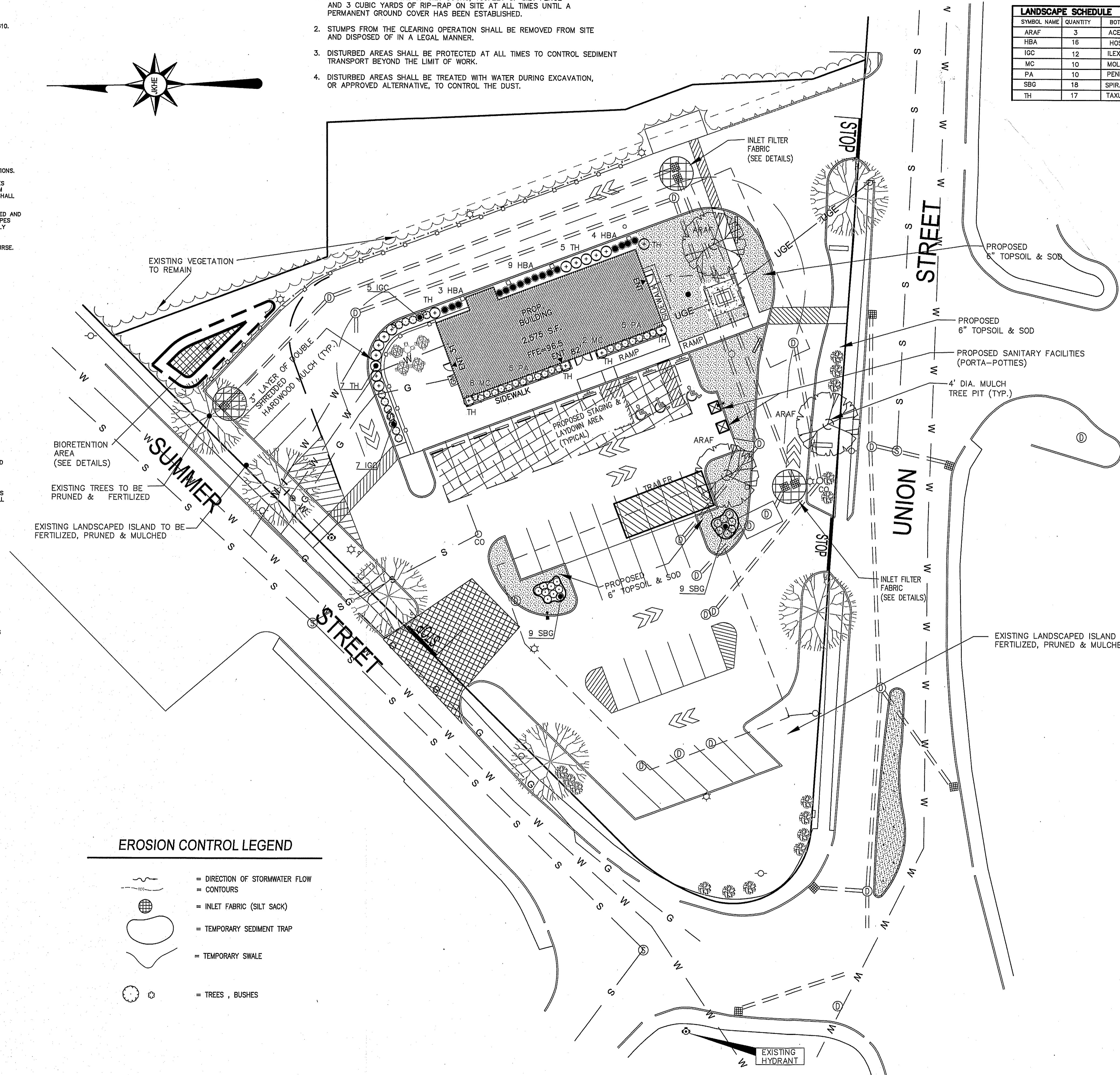
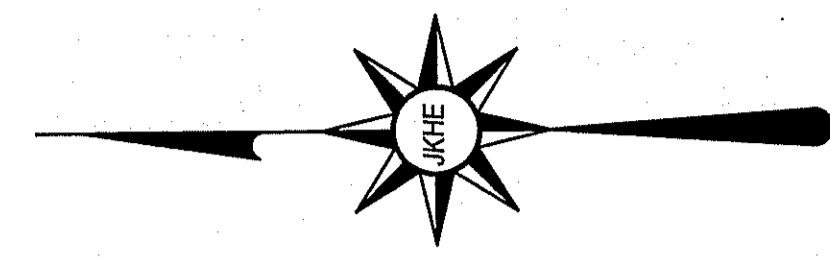


SCALE: 1" = 20' DATE: 06/01/2022

NO.	BY	DATE	REMARKS
2	SSR	5.16.22	WITH SURVEY
1	JG	3.23.22	SIDEWALK AND CARS ADDITION

**C-6**  
DRAWING NUMBER

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2020-078



**OPERATION/MAINTENANCE PLAN**

THIS OPERATION AND MAINTENANCE PLAN SHALL BE PERFORMED BY THE GENERAL CONTRACTOR DURING CONSTRUCTION OPERATIONS AND BY THE OWNER ONCE THE FACILITIES ARE COMPLETED AND PUT INTO OPERATION.

PERSONNEL ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT SHALL BE INFORMED THAT THE MAINTENANCE OF SILTATION CONTROLS TAKES PRECEDENCE OVER NORMAL CONSTRUCTION ACTIVITIES. ADJACENT PROPERTIES AND STREETS SHALL BE PROTECTED FROM EROSION OR SILTATION CONDITIONS.

INSPECTION AND MAINTENANCE, AS OUTLINED HEREIN, SHALL BE PERFORMED FOUR TIMES WITHIN THE FIRST YEAR OF OPERATION. THENCE, INSPECTIONS AND MAINTENANCE SHALL BE CONDUCTED ON A SEMIANNUAL BASIS (2 TIMES A YR.) AND AFTER ALL LARGE STORMS. AN INSPECTION REPORT SHALL BE MAINTAINED.

ACCUMULATED DEBRIS IN CATCH BASINS, WATER QUALITY INLETS, OIL/WATER SEPARATORS AND LEACHING BASINS SHALL BE REMOVED BEFORE IT EXCEEDS 2 FEET IN DEPTH AND DISPOSED OF PROPERLY. BROKEN OR DAMAGED GAS TRAPS/ HOODS SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO ENSURE ADEQUATE FUNCTION.

A VISUAL INSPECTION SHALL BE MADE AT ALL ACCESS MANHOLES, CATCH BASINS, WATER QUALITY INLETS, OIL/WATER SEPARATORS, LEACHING BASINS, PIPES AND DRAINAGE CHANNELS FOR THE ENTIRE STORM DRAINAGE SYSTEM. THE GENERAL CONDITION OF THESE STRUCTURES SHOULD BE REVIEWED AND ACCUMULATED DEBRIS SHALL BE REMOVED. THE CONDITION OF ALL OUTLETS SHALL BE NOTED AND A DESCRIPTION OF THE DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE REPORT. DELETERIOUS MATERIALS SHALL BE REMOVED FROM THESE STRUCTURES AND THE DRAINAGE CHANNELS IN ORDER FOR THE SYSTEM TO FUNCTION PROPERLY.

ALL OUTLETS, DRAINING CHANNELS, AND SLOPES SHALL BE KEPT STABILIZED. ANY EROSION SHALL BE REPAIRED IMMEDIATELY.

ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE SWM BASIN BEFORE IT EXCEEDS 1' IN DEPTH, OR AT LEAST ONCE EVERY 5 YEARS. THE LOW FLOW OUTLET SHALL BE CLEANED AND INSPECTED FOR PROPER FUNCTIONING. ALL DEBRIS OR DELETERIOUS MATERIAL SHALL BE REMOVED FROM OUTLET STRUCTURE AND OUT FALL PLUNGE POOL. BASIN SLOPES SHALL BE MAINTAINED WITH A GRASS STAND OF AT LEAST 3". GRASS SHALL BE MOVED AT LEAST TWICE A YEAR AND CLIPPINGS SHALL NOT BE LEFT IN BASIN. ANY TREES OR OTHER WOODY VEGETATION GROWING IN EMBANKMENTS OR NEAR CONTROL STRUCTURE SHALL BE REMOVED.

THE FOLLOWING MINIMUM INFORMATION SHALL BE RECORDED:  
 \* DATE OF INSPECTION  
 \* GENERAL CONDITION OF THE ENTIRE SYSTEM  
 \* CORRECTIVE MAINTENANCE ACTIONS TAKEN TO ENSURE ADEQUATE FUNCTION AND WHEN PERFORMED.  
 \* A COPY OF THESE INSPECTION REPORTS SHALL BE FURNISHED TO THE APPROPRIATE AGENCY UPON REQUEST.

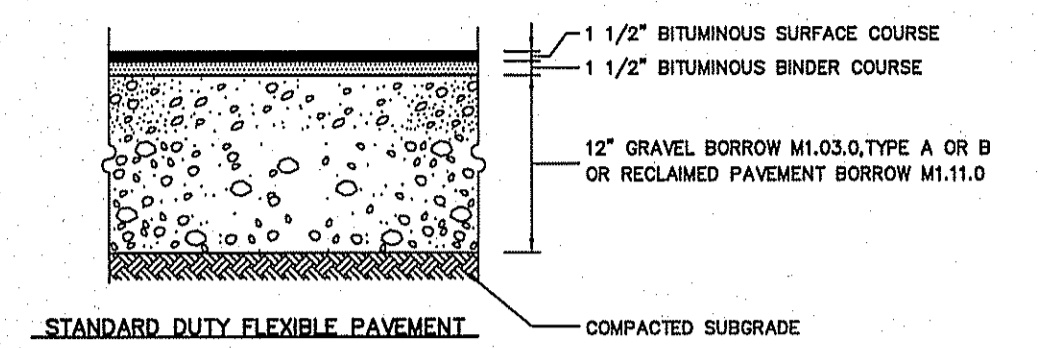
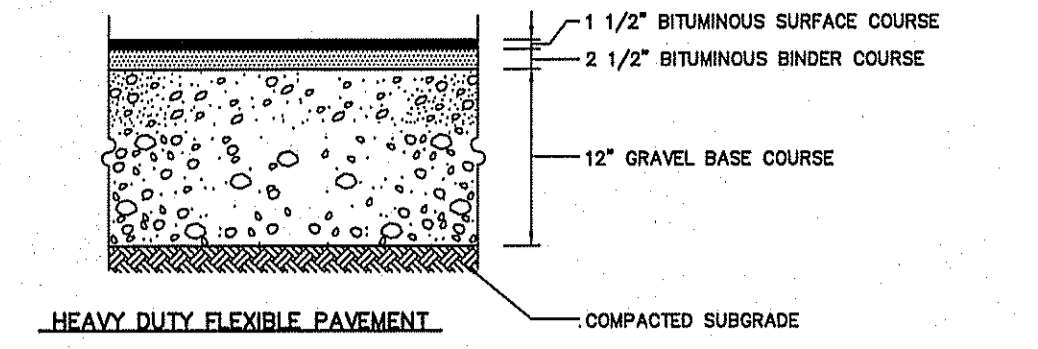
**LEGEND**

- = UTILITY POLE/GUY WIRE
- = WATER GATE/SHUT-OFF
- ⊕ = CATCH BASIN
- ⊕ = DRAIN MANHOLE
- ⊕ = SEWER MANHOLE
- ⊕ = HYDRANT
- ⊕ = TRANSFORMER
- ⊕ = ELECTRIC BOX
- = CHAIN LINK FENCE
- = GAS GATE
- = CONTOURS
- = SPOT GRADE
- = LIGHT POLE
- = WETLAND FLAG
- = TREES, BUSHES
- = OVERHEAD ELECTRIC
- = UNDERGROUND ELECTRIC
- = SEWER LINE
- = WATER LINE
- = GAS LINE
- = WETLANDS
- = SIGN
- = TEST PIT

**EROSION CONTROL LEGEND**

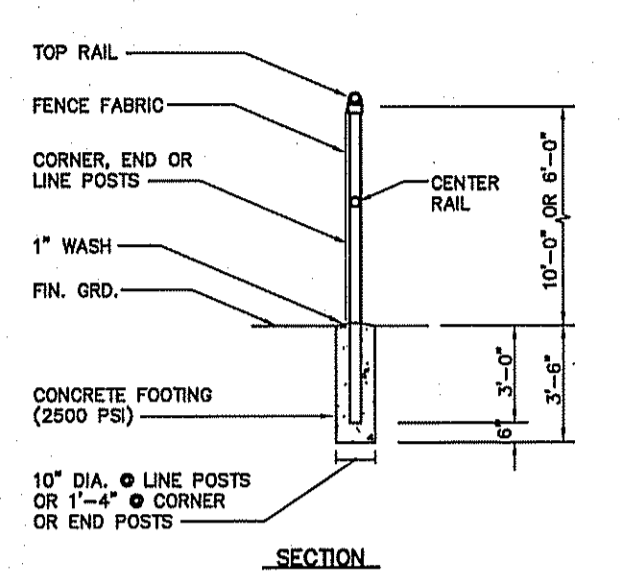
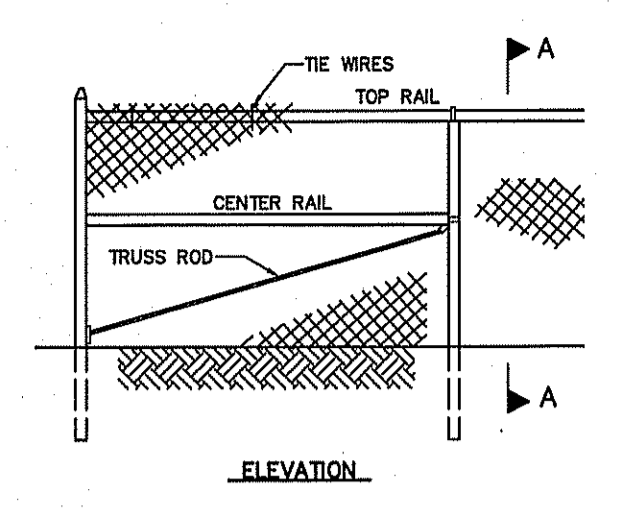
- = DIRECTION OF STORMWATER FLOW
- = CONTOURS
- ⊕ = INLET FABRIC (SILT SACK)
- ⊕ = TEMPORARY SEDIMENT TRAP
- = TEMPORARY SWALE
- ⊕ = TREES, BUSHES





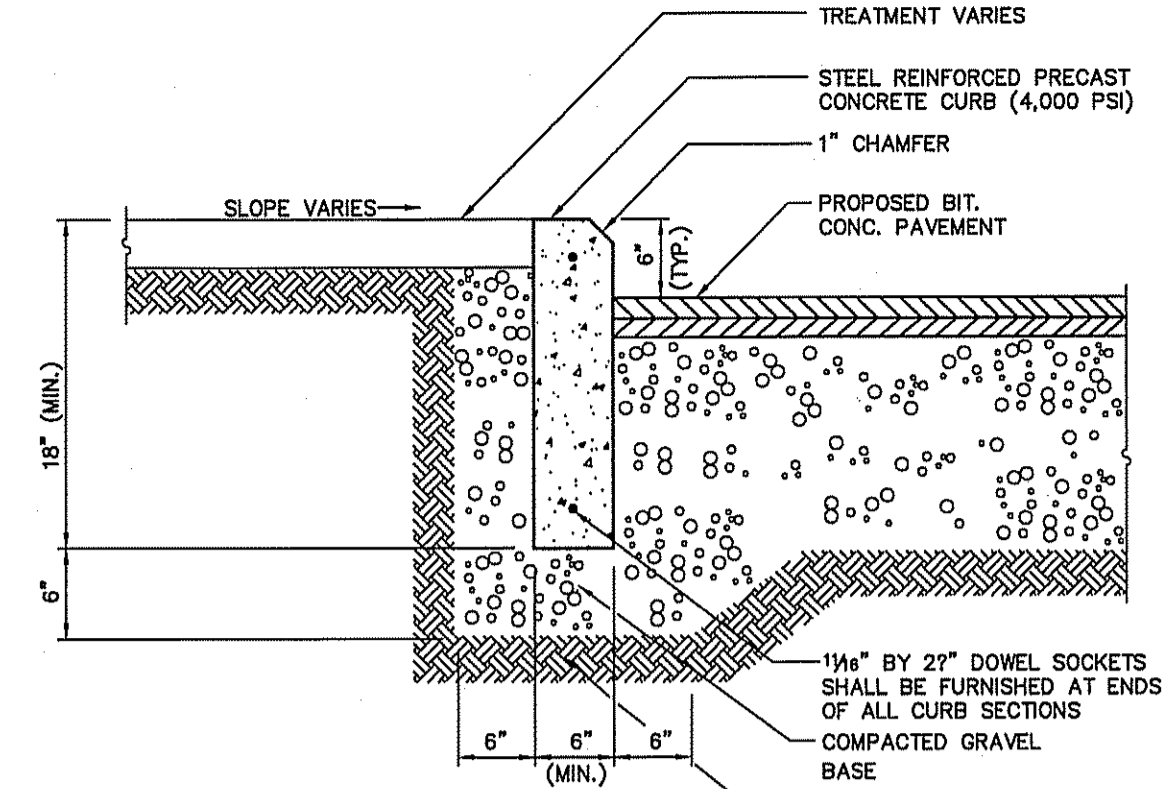
- COMPOSITION AND COMPACTION ACCEPTANCE TESTS**
- OBTAIN SAMPLES FROM PLANT TO INDICATE CONFORMANCE WITH M3.11.09
  - PAVEMENT DENSITY AS OUTLINED IN M3.11.09
  - ALL SAMPLES TO BE TAKEN IN ACCORDANCE WITH AASHTO T230
  - MATERIALS SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED IN SECTION M3.11.00 DIVISION III, MATERIALS AND THE FOLLOWING SUBSECTIONS
    - MINERAL AGGREGATE : M3.11.04 BITUMINOUS MATERIALS : M3.11.06
    - MINERAL FILLER : M3.11.05 COMPOSITION OF BASE COURSE : M3.11.02
  - THE BITUMINOUS CONCRETE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH RELEVANT SECTIONS/PROVISIONS OF SECTION 400 FOR CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1
  - CLASS I BITUMINOUS PAVEMENT, TYPE I-1 REQUIRED THE SAME TESTING AS BASE COURSE AND SHALL HAVE A MINIMUM OF 90% COMPACTION. TESTING TO BE COMPLETED BY METHODS OUTLINED IN M3.11.00

C-110 BITUMINOUS CONCRETE PAVEMENT SECTIONS N.T.S. DETAIL

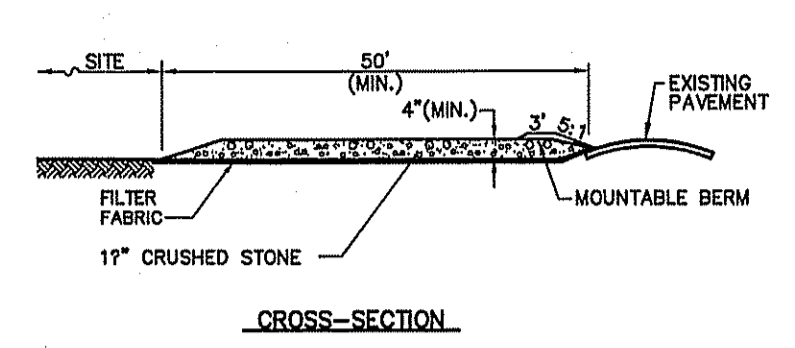
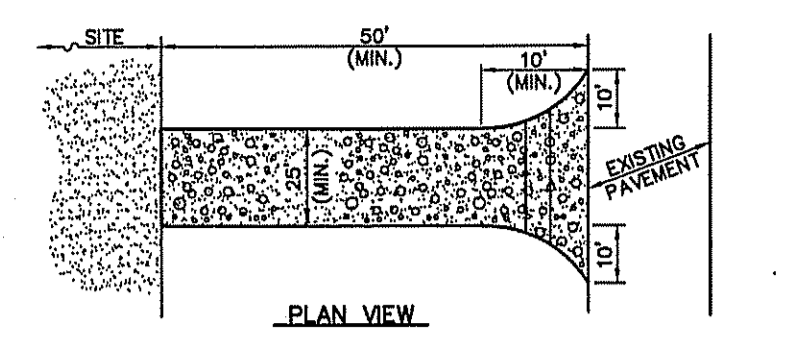


- NOTES**
- PULL POSTS SHALL BE SPACED AT INTERVALS NOT EXCEEDING 500 FEET.
  - END, GATE AND CORNER POSTS SHALL BE BRACED TO ADJACENT LINE POSTS. (MORE THAN 30 CHANGE IN DIRECTION CONSTITUTES A CORNER)
  - FABRIC SHALL BE 0.140" WIRE, WOVEN INTO APPROXIMATELY 2" DIAMOND MESH.
  - ZINC-COATED STEEL FABRIC BASE METAL SHALL BE COATED WITH PRIME WESTERN SPECTER OR COVAL.
  - ALUMINUM COATED STEEL FABRIC BASE METAL SHALL BE COATED WITH ALUMINUM ALLOY.
  - FENCE POSTS AND RAILS SHALL RECEIVE THE SAME COATING AND TREATMENT AS THE FENCE FABRIC (DESCRIBED ABOVE).
  - SEE SPECIFICATIONS FOR POST DIMENSIONS.

C-905 CHAIN LINK FENCE DETAIL N.T.S.

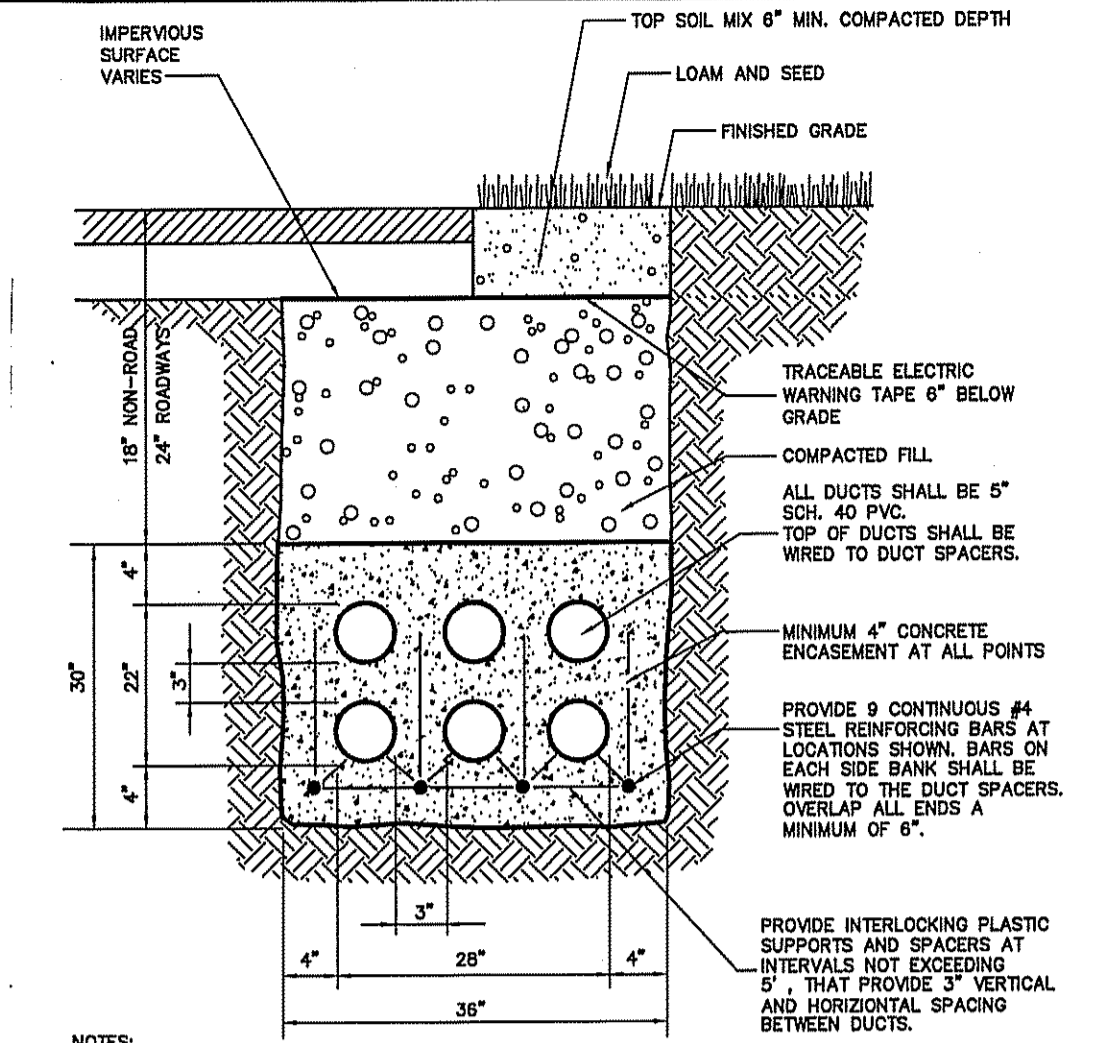


C-412 PRECAST CONCRETE CURB (PCC) DETAIL N.T.S.



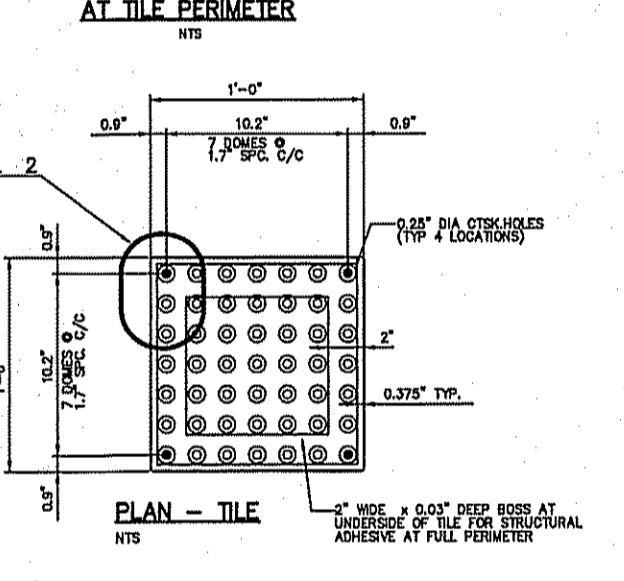
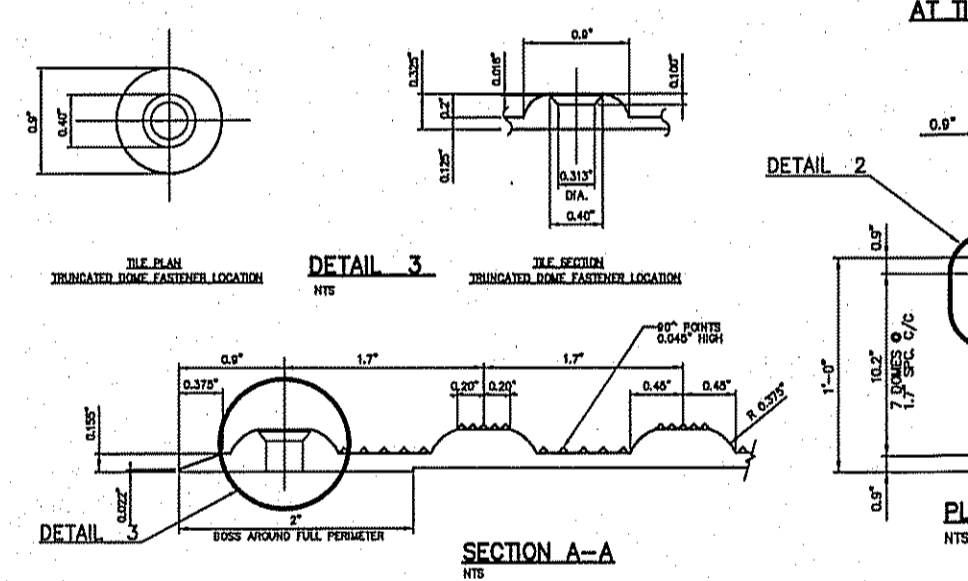
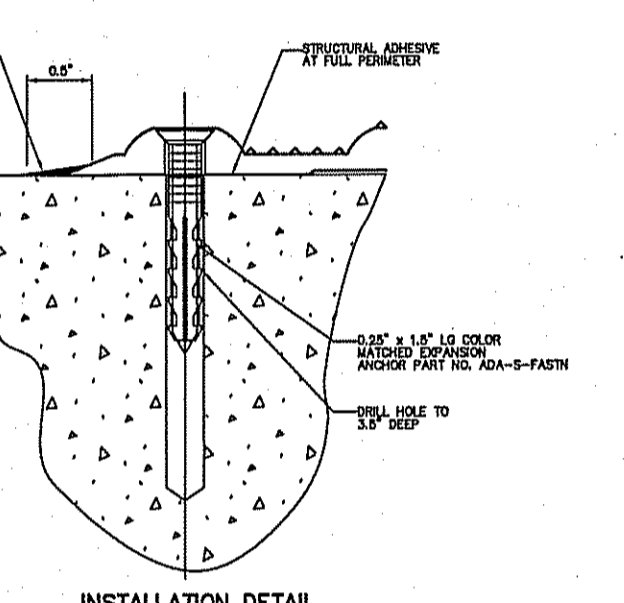
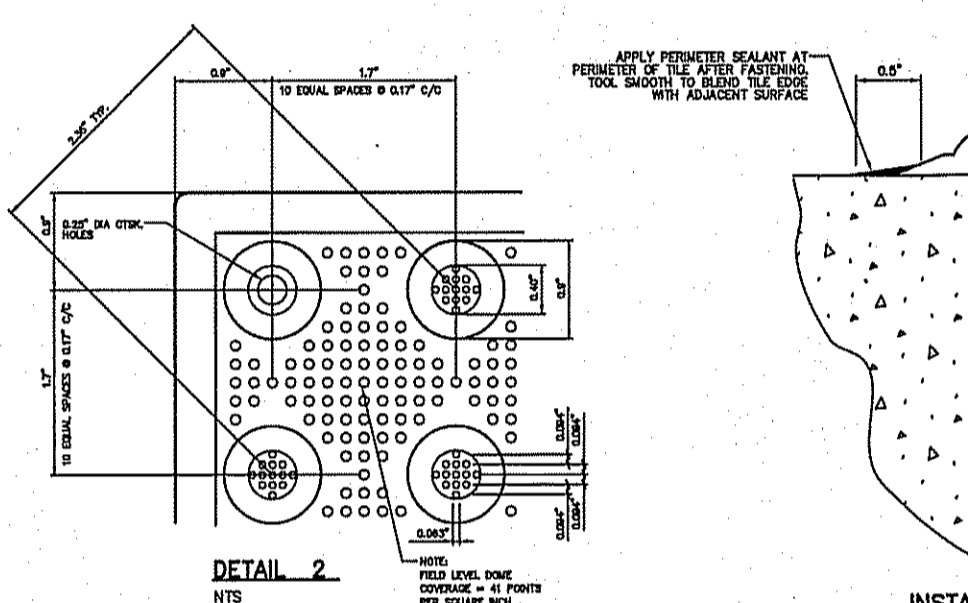
- NOTES**
- ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BEST MANAGEMENT PRACTICES SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.

C-609 STABILIZED CONSTRUCTION EXIT DETAIL N.T.S.

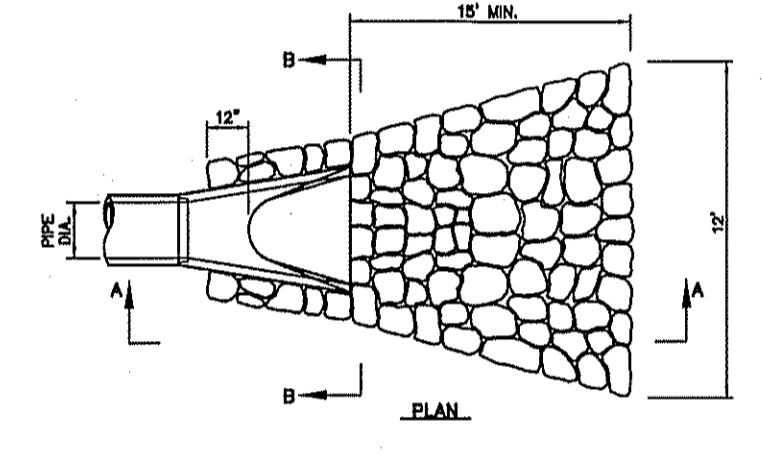


- NOTES**
- 4000 PSI CONCRETE FILL AROUND DUCTS.
  - CONCRETE MAY BE POURED DIRECTLY INTO OPEN TRENCH WITHOUT FORMWORK.
  - DUCT SPACERS TO BE USED AT 5'-0" CENTERS BETWEEN DUCTS.

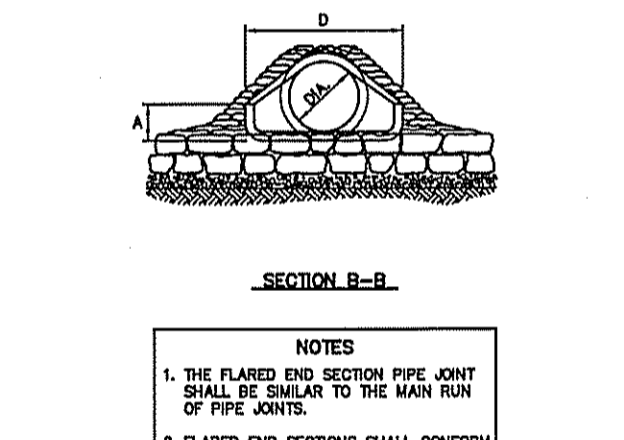
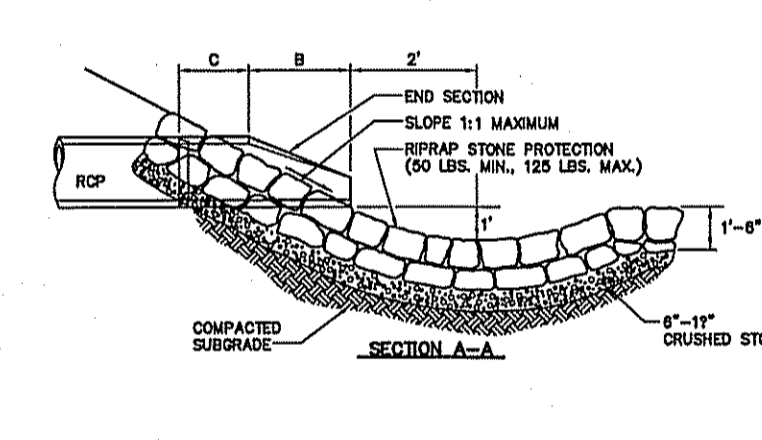
C-447 UTILITY DUCT BANK DETAIL N.T.S.



C-446 HANDICAPPED TACTILE WARNING TILE SURFACE DETAIL N.T.S.

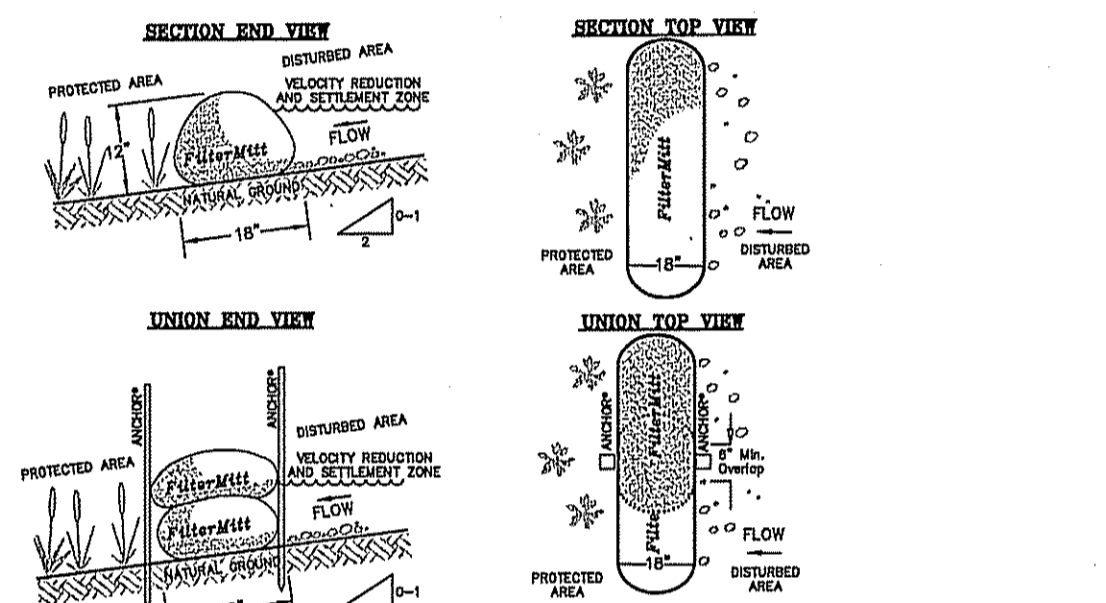
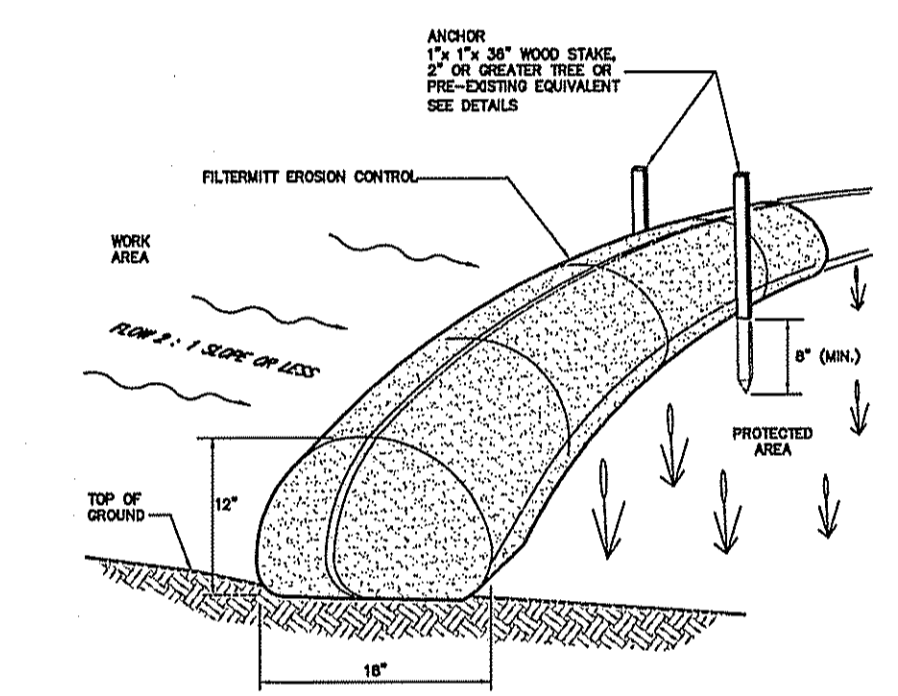


PIPE DIA.	A	B	C	D	E	R
12"	4"	2'-0"	4'-0"	2'-0"	2"	8"
18"	6"	2'-3"	3'-10"	2'-4"	2 1/2"	11"
24"	8"	2'-3"	3'-10"	3'-0"	2 1/2"	12"
30"	12"	4'-0"	1'-7"	0'-0"	3 1/2"	14"
36"	15"	0'-3"	2'-10"	0'-0"	4"	20"
42"	21"	0'-3"	2'-11"	0'-0"	4 1/2"	22"
48"	24"	0'-0"	2'-2"	7'-0"	5"	22"
54"	27"	0'-0"	2'-11"	7'-0"	5 1/2"	24"
60"	30"	0'-0"	3'-3"	0'-0"	6"	24"



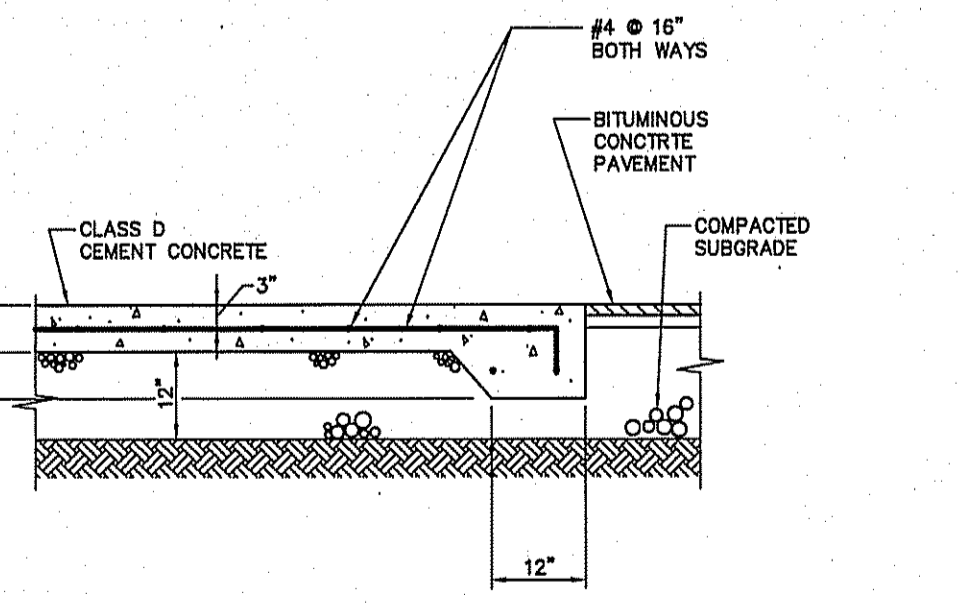
- NOTES**
- THE FLARED END SECTION PIPE JOINT SHALL BE SIMILAR TO THE MAIN RUN OF PIPE JOINTS.
  - FLARED END SECTIONS SHALL CONFORM AS SHOWN IN THE TABLE OR AS APPROVED BY THE ENGINEER.

C-114 FLARED END SECTION W/STONE PROTECTION DETAIL N.T.S.

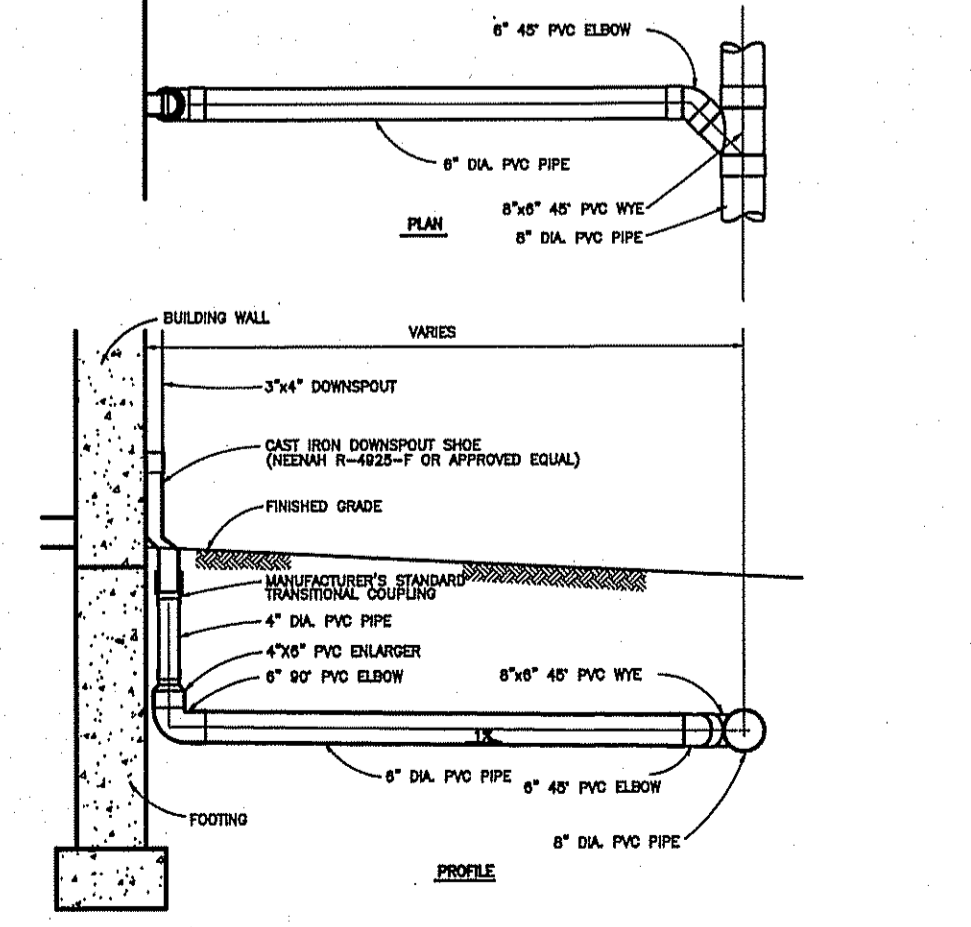


- Filtermitt COMPONENTS**
- DESIGNER CHOOSE 100% organic based, FILLER INGREDIENT: Fiberblend Akadik
  - 1/4" x 1/4" x 1/4" JUNE STAKE
  - 2" OR GREATER TREE OR OTHER PRE-CRETING, EQUIVALENT, ANCHORED OBJECT.
- Filtermitt INSTALLATION**
- With the correct technology and equipment, sections can be constructed on site in lengths from 1' to 100'. Sections can also be delivered to the site in lengths from 1' to 5'. The flexibility of Filtermitt allows it to conform to any contour or terrain while holding a height and slope of 12" high by 15" wide. Where sections meet, there should be an overlap of 6" or greater. Both sides should be anchored (see notes, tree, etc.) to stabilize the union.

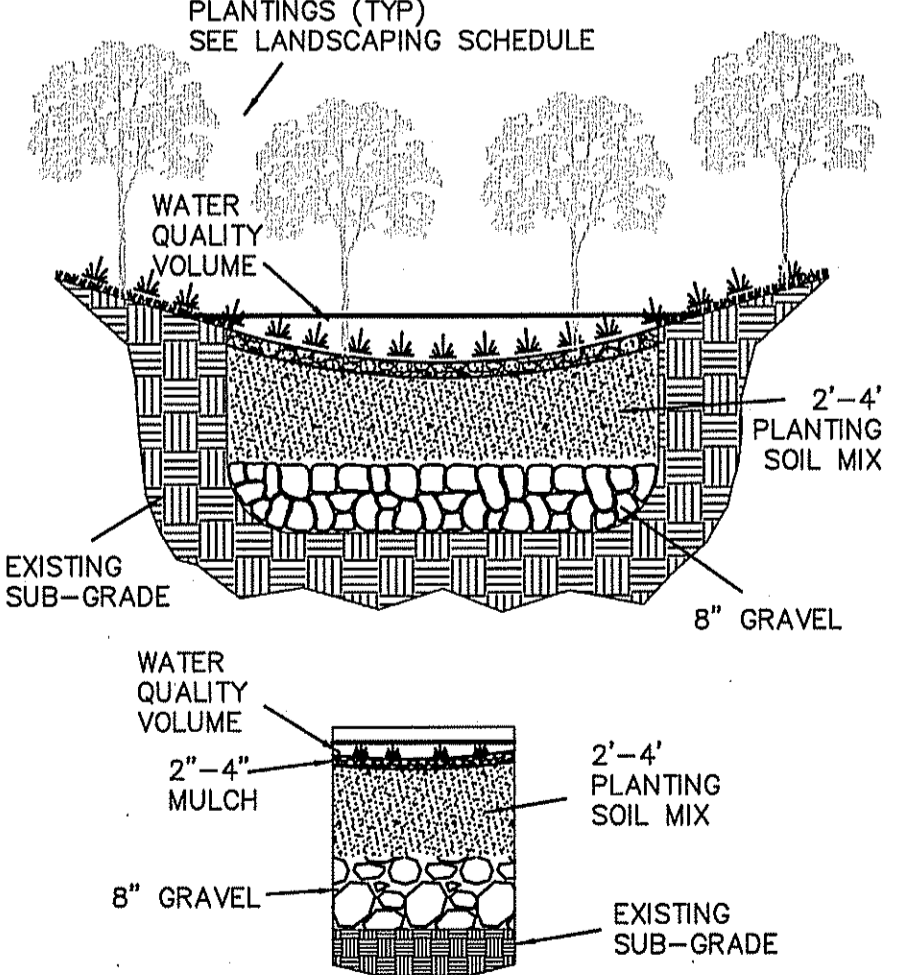
C-200 FILTERMITT EROSION CONTROL DETAIL N.T.S.



C-444 DUMPSTER PAD DETAIL N.T.S.



C-115 ROOF DRAIN DETAIL N.T.S.



- NOTES**
- PLANTING SOIL MIX SHALL CONSIST OF 40% SAND, 20-30% TOPSOIL AND 30-40% COMPOST.
  - SAND SHALL BE GRAVELLY SAND THAT MEETS ASTM D 42.

C-201 BIORETENTION BASIN DETAIL N.T.S.

**JKE J.K. Holmgren Engineering**  
Registered Professional Engineers & Land Surveyors

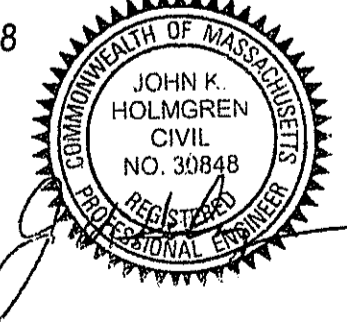
Assessors Map: 20 Block: 9 Plot: 0  
399 Union Street, Ashland, Massachusetts

PREPARED FOR  
**RETAIL ASHLAND, LLC**

TITLE  
**DETAIL SHEET**

**J.K. HOLMGREN ENGINEERING, INC.**  
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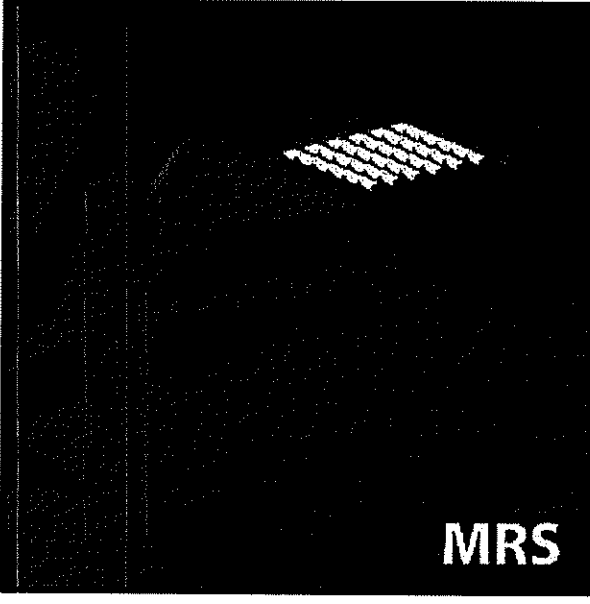
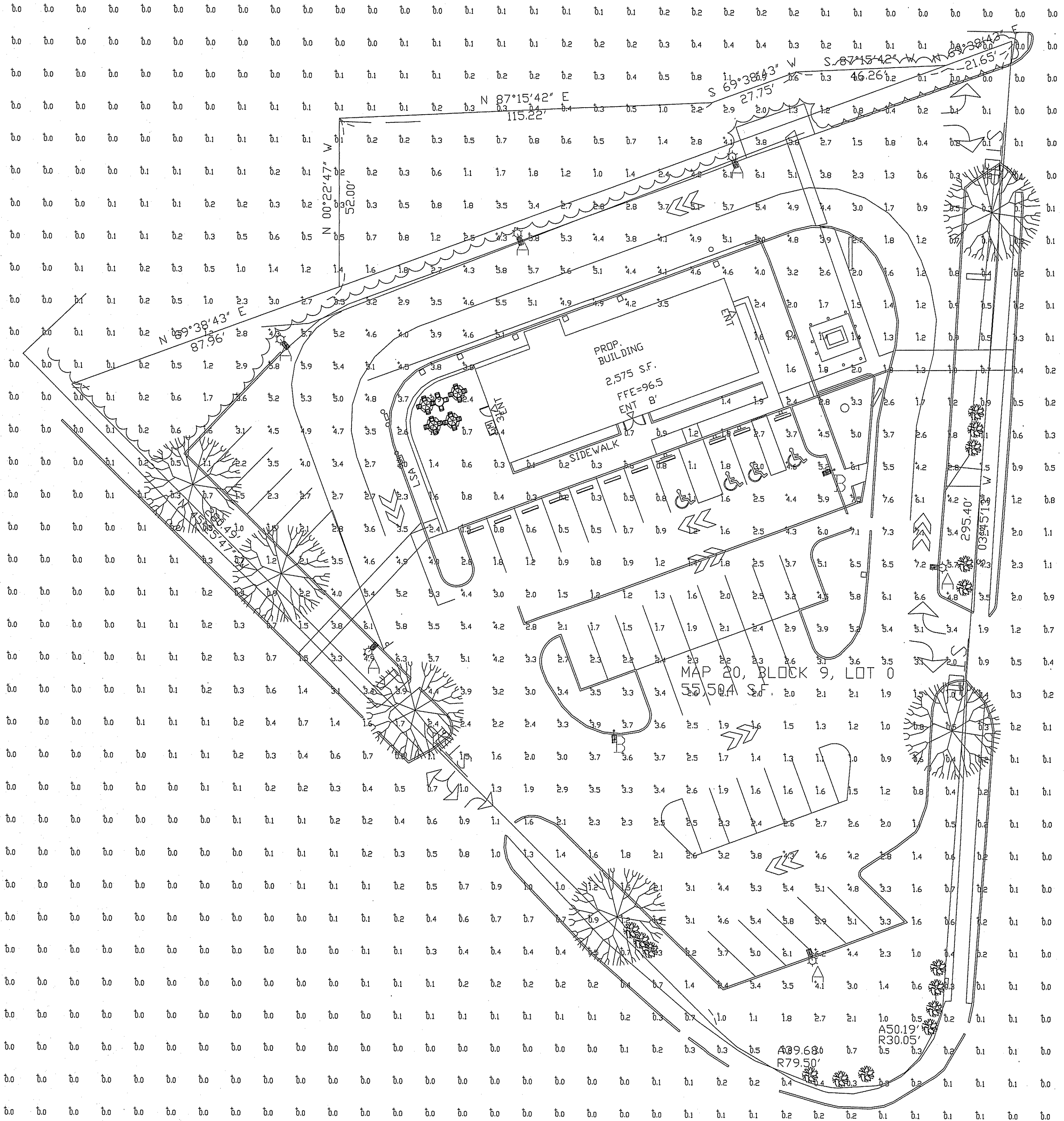
DATE: 06/01/2022

**C-8**  
DRAWING NUMBER

NO.	BY	DATE	REMARKS

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2020-078





**PHOTOMETRIC EVALUATION  
NOT FOR CONSTRUCTION**

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CALCULATION POINTS @ GRADE	Illuminance	Fc	1.33	7.6	0.0	N.A.	N.A.
PARKING & DRIVING SUMMARY	Illuminance	Fc	3.04	7.6	0.1	30.40	76.00

Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Description	LLD	LDD	LLF	Arr. Lum. Lumens	Arr. Watts	
—	6	A	SINGLE	MRS-LED-21L-SIL-FT-50-70CRI-SINGLE-20' POLE+2' BASE	1000	1000	1000	20025	165	
—	2	B	SINGLE	MRS-LED-21L-SIL-5W-50-70CRI-SINGLE-20' POLE+2' BASE	1000	1000	1000	19973	165	

Total Project Watts  
Total Watts = 1320



LIGHTING PROPOSAL LD-156172  
STARBUCKS

BY:SAKHRO DATE:6/29/22 REV: SHEET 1 OF 1  
SCALE: 1"=20' 0 20