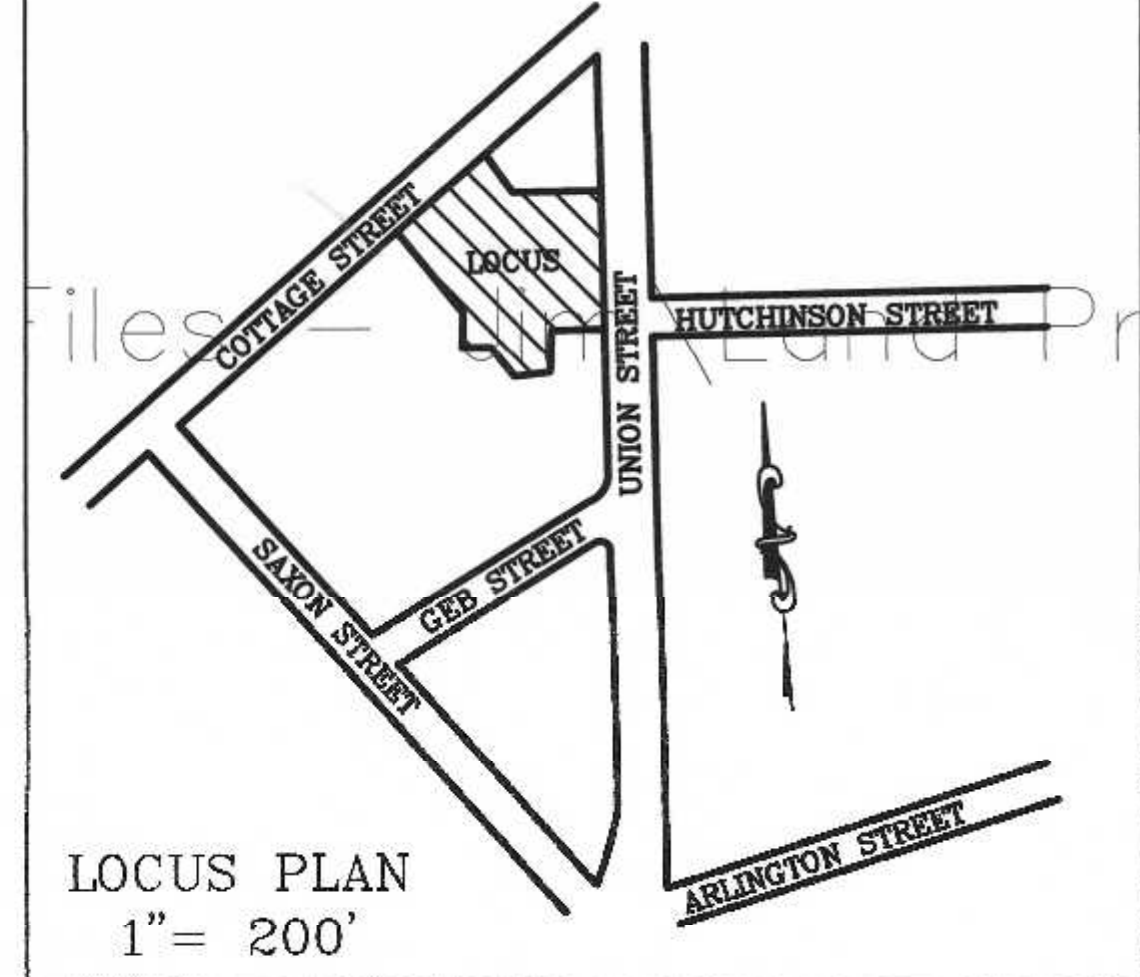
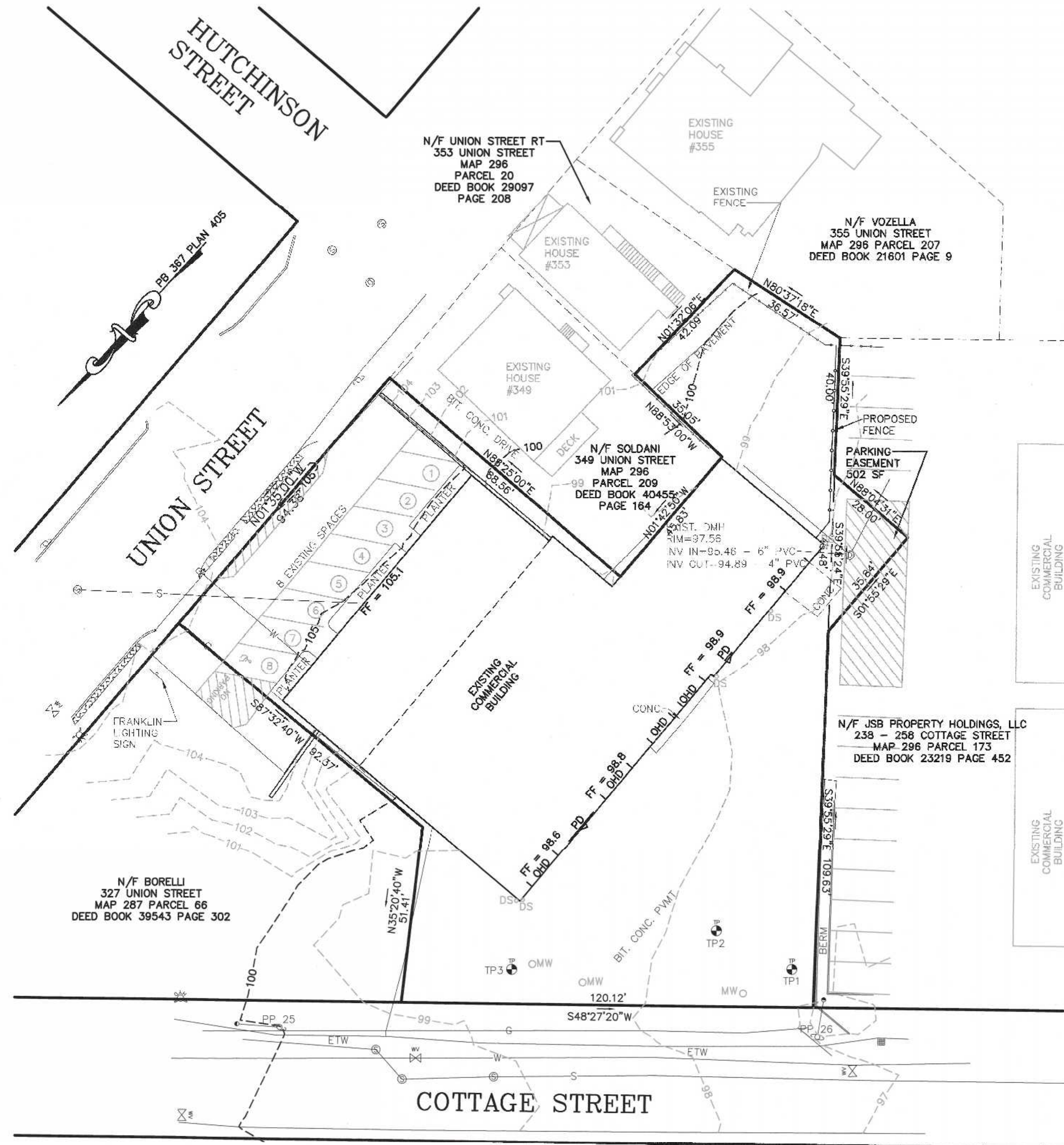


TEST PIT 1 - ELEV. = 97.04  
 0 - 43" FILL  
 43" - 76" SAND & GRAVEL  
 76" - 103" MEDIUM SAND  
 WATER OBSERVED AT 89" - 89.62

TEST PIT 2 - ELEV. = 97.56  
 0 - 86" FILL  
 86" - 101" MEDIUM SAND  
 WATER OBSERVED AT 86" - 90.39

TEST PIT 3 - ELEV. = 98.54  
 0 - 88" FILL  
 88" - 108" FINE SAND W / SILT  
 MOTTLES AT 88" ELEV. = 91.21



ASSESSOR'S REFERENCE: 287-065  
 DEED REFERENCE:  
 DEED BOOK 37165 PAGE 391  
 PLAN REFERENCES:  
 PLAN 375 of 1922 DEED BOOK 1523 PAGE 421  
 PLAN BOOK 159 PLAN 159 of 1988  
 PLAN BOOK 367 PLAN 405 of 1988  
 ZONING: COMMERCIAL 1  
 AREA - 5,000 SF  
 FRONTAGE - 50'  
 FRONT - 20'  
 SIDE - 10'  
 REAR - 15'

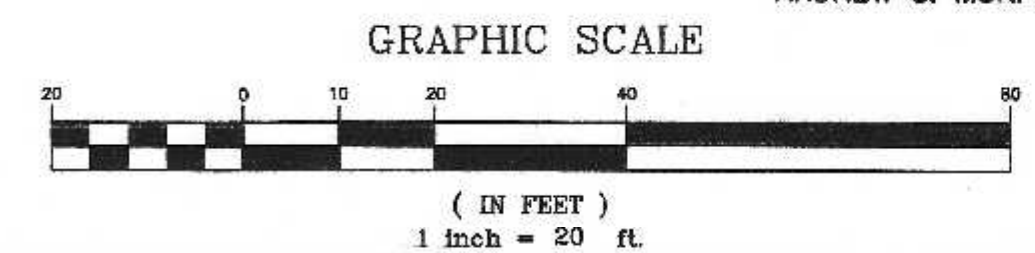
KITCHEN 408 SF	REST ROOMS 240 SF	WINE PRODUCTION 1,800 SF	WINE STORAGE 1,911 SF
SEATING AREA 1,517 SF (30 SEATS)	SALES AREA 400 SF		
WINE BARREL AREA 675 SF			

EXISTING

SITE PLAN  
 EXISTING CONDITIONS  
 341 UNION STREET  
 FRANKLIN, MASSACHUSETTS  
 PREPARED FOR  
 ROBERT VOZZELLA  
 355 UNION STREET  
 FRANKLIN, MASSACHUSETTS



*Andrew C. Murphy*  
 5-12-22  
 ANDREW C. MURPHY P.L.S. #35042

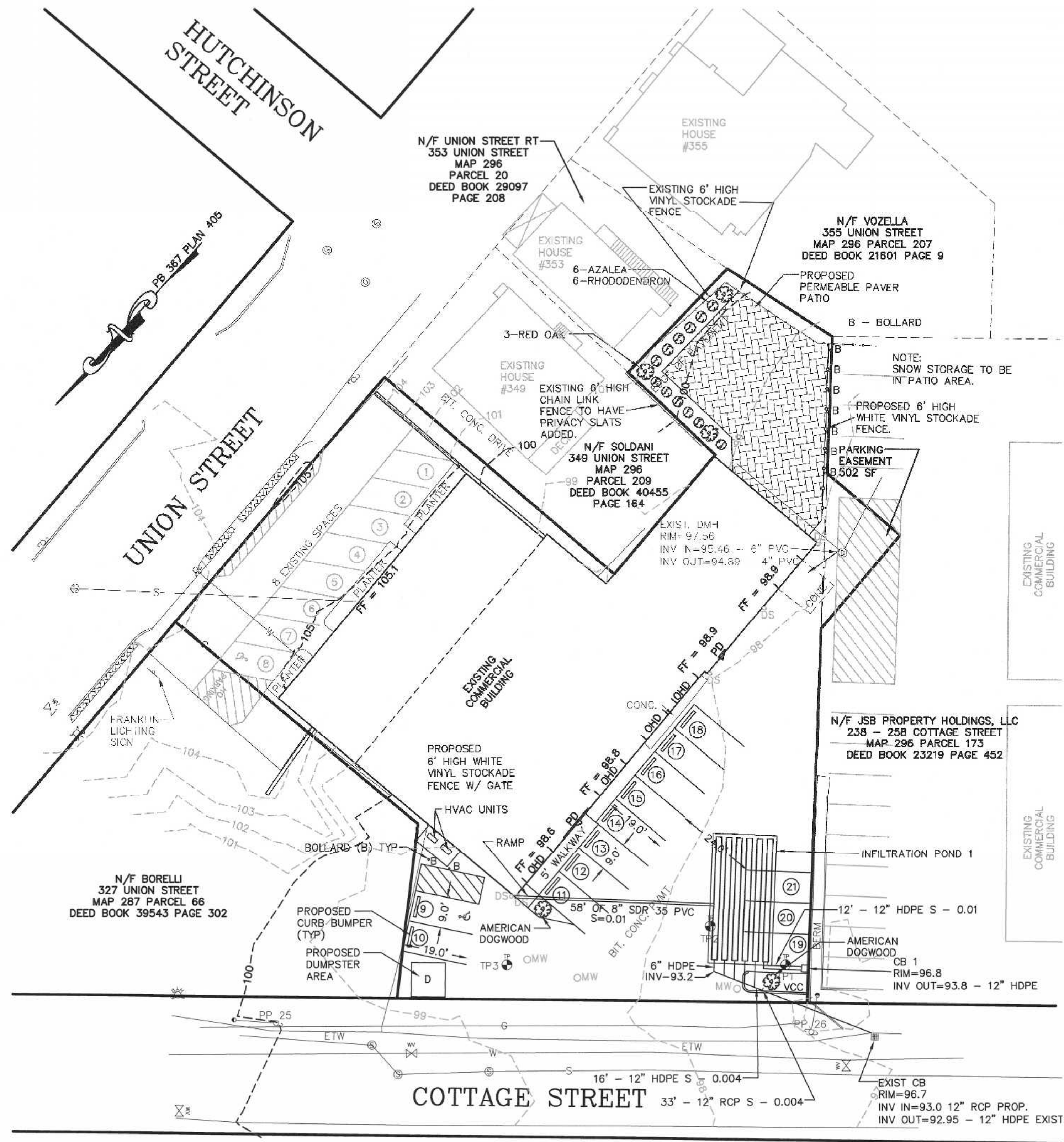


NO.	DATE	DESCRIPTION	RRG BY
1	5/11/22	REVIEW COMMENTS & STORMWATER	RRG

DATE: FEBRUARY 4, 2022 PROJECT: UC 1554  
 SCALE: 1" = 20' SHEET: 1 of 4

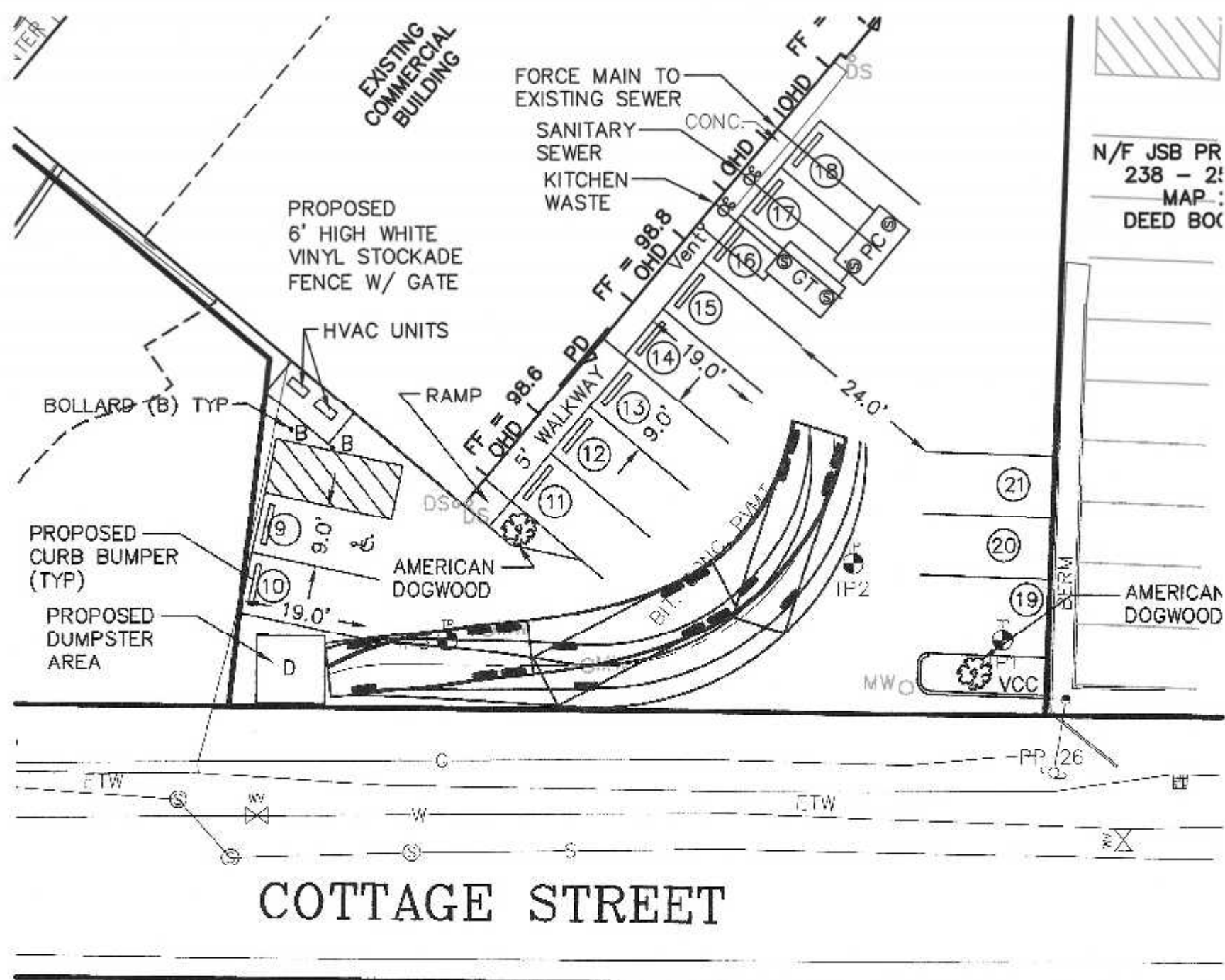
**UNITED CONSULTANTS INC.**  
 850 FRANKLIN STREET SUITE 11D  
 WRENTHAM, MASSACHUSETTS 02093  
 508-384-8560 FAX 508-384-8566





**PROPOSED**

WAIVER REQUESTED:  
 1. TO ALLOW LESS THAN 42" OF COVER OVER THE RCP DRAIN PIPE. PROPOSED CLASS V RCP.  
 2. TO ALLOW THE USE OF PVC AND HDPE PIPE FOR THE ROOF DRAIN, CB 1 TO POND 1, THE OUTLET PIPES AND MANIFOLDS.  
 3. TO ALLOW MINIMAL LIGHT SPILLAGE AS SHOWN ON THE SITE LIGHTING PLAN.



**TRASH TRUCK TURNING AREA**

NOTE:  
 EXISTING IMPERVIOUS AREA = 23,489 SQ. FT.  
 PROPOSED IMPERVIOUS AREA = 21,403 SQ. FT.

PARKING REQUIREMENTS:  
 UPPER LEVEL - 2,535 SF  
 LOWER LEVEL - 6,951 SF  
 TOTAL FLOOR AREA = 9,486 SF  
 9,486 SF / 1 SPACE / 500 SF  
 9,486 / 500 = 18.9 SPACES -> 19 SPACES  
 SPACES PROVIDED: 21 SPACES

WHEN OUTDOOR SEATING IS BEING UTILIZED THE SAME NUMBER OF INDOOR SEATS SHALL NOT BE AVAILABLE FOR USE.

PROPOSED USE: SECTION 3.13 - BREWERY, DISTILLERY OR WINERY PRODUCTION WITH TASTING ROOM.

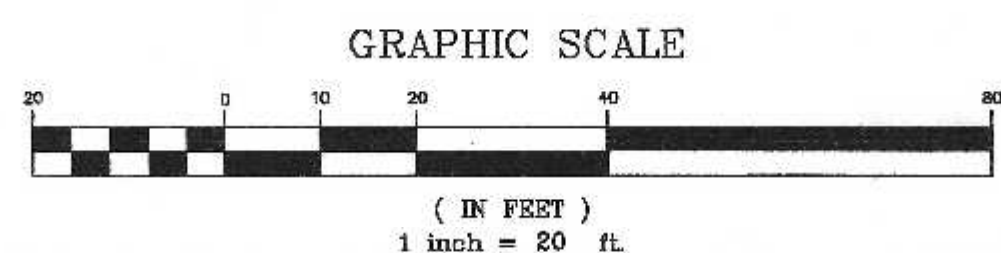
ASSESSOR'S REFERENCE: 287-065  
 DEED REFERENCE:  
 DEED BOOK 37165 PAGE 391  
 PLAN REFERENCES:  
 PLAN 375 OF 1922 DEED BOOK 1523 PAGE 421  
 PLAN BOOK 159 PLAN 159 OF 1988  
 PLAN BOOK 367 PLAN 405 OF 1988  
 ZONING: COMMERCIAL 1  
 AREA - 5,000 SF  
 FRONTAGE - 50'  
 FRONT - 20'  
 SIDE - 10'  
 REAR - 15'

STORMWATER RECHARGE:  
 IMPERVIOUS AREA = 21,403 SQ. FT. x 0.80 INCHES = 1,427 CUBIC FEET  
 STORAGE WITHIN THE INFILTRATION BASIN 1 = 566 CUBIC FEET  
 INFILTRATION DURING A 2 YEAR 24 HOUR STORM EVENT = 0.038 ACRE FEET  
 OR 1,655 CUBIC FEET  
 COMBINED INFILTRATION AND STORAGE = 2,221 CUBIC FEET

SITE PLAN  
 PROPOSED CONDITIONS  
 341 UNION STREET  
 FRANKLIN, MASSACHUSETTS  
 PREPARED FOR  
 ROBERT VOZZELLA  
 355 UNION STREET  
 FRANKLIN, MASSACHUSETTS



**UNITED CONSULTANTS INC.**  
 850 FRANKLIN STREET SUITE 11D  
 WRENTHAM, MASSACHUSETTS 02093  
 508-384-6580 FAX 508-384-6586

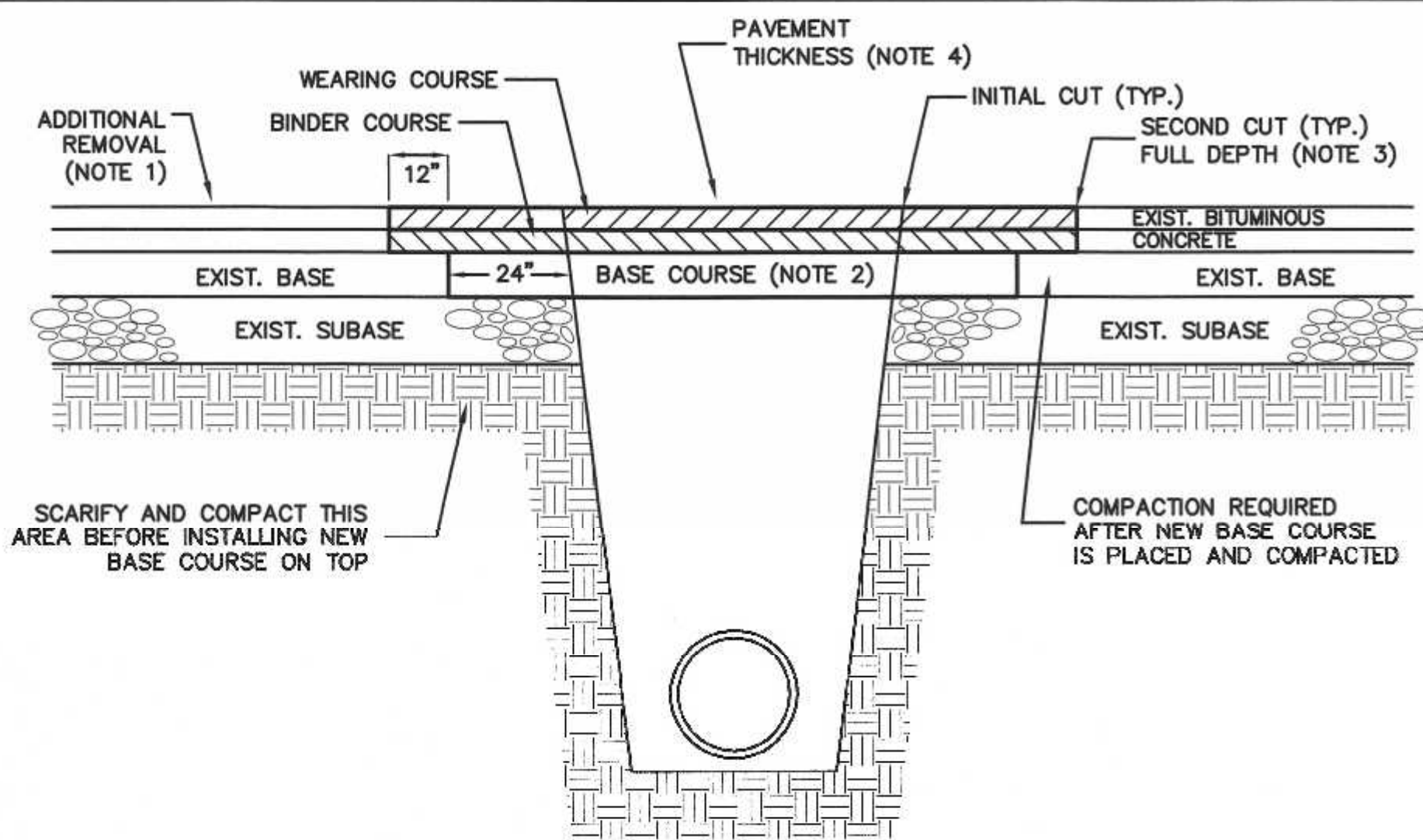


NO.	DATE	DESCRIPTION	RRG	BY
1	5/11/22	REVIEW COMMENTS & STORMWATER		

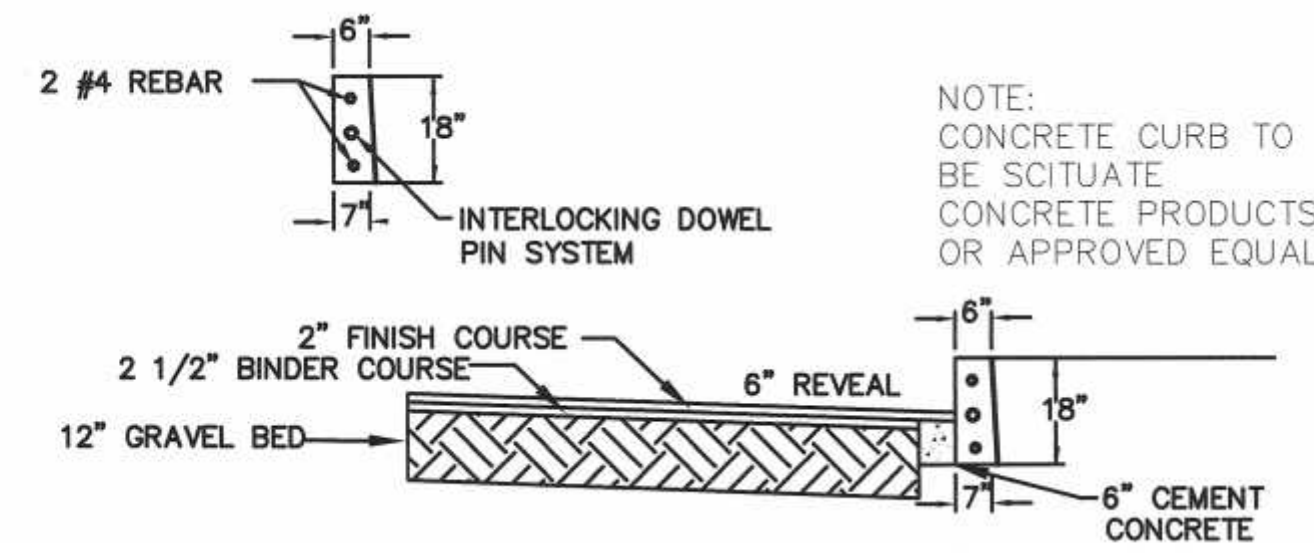
DATE	FEBRUARY 4, 2022	PROJECT	UC 1554
SCALE	1" = 20'	SHEET	2 of 4





- NOTES:
1. ADDITIONAL PAVEMENT REMOVAL - REMOVE ADDITIONAL PAVEMENT TO A PAINTED LANE STRIPE, A LIP OF A GUTTER, A CURB, AN EXISTING PAVEMENT PATCH, OR AN EDGE OF THE PAVEMENT IF SUCH STREET FEATURE IS WITHIN 2' OF THE SECOND SAWCUT.
  2. NEW BASE COURSE - PROVIDE BASE COURSE MATERIAL IN LIFTS NOT EXCEEDING 8" AFTER COMPACTION. COMPACT TO A MODIFIED PROCTOR DENSITY OF 95% OR GREATER.
  3. TACK COAT - PROVIDE FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES.
  4. NEW ASPHALT PAVEMENT - INSTALL 2" WEARING COURSE OVER 2" BINDER COURSE. COMPACT THE NEW PAVEMENT TO 96% OF LABORATORY DENSITY OR 94% OF MAXIMUM THEORETICAL DENSITY.

TRENCH PATCHING DETAIL



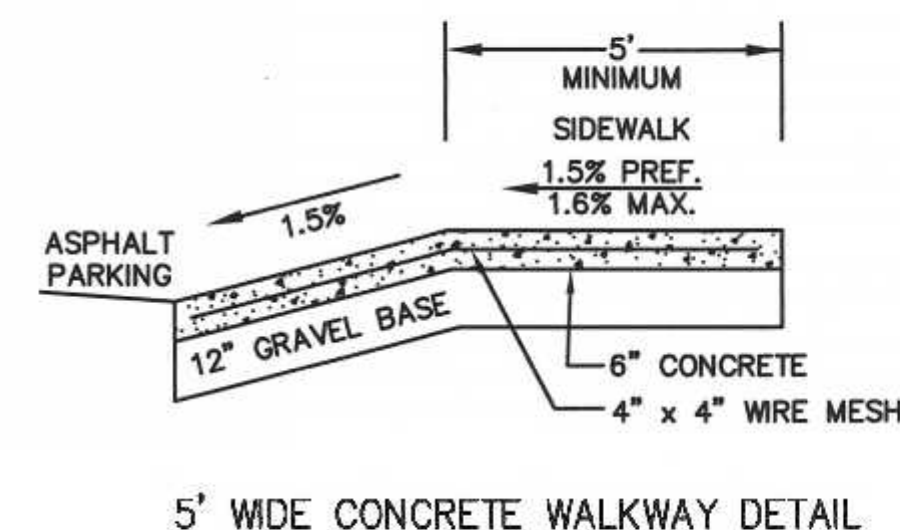
PAVEMENT AND VERTICAL CONCRETE CURBING

Fill material for drainage systems constructed in fill shall consist of select on-site or imported soil material. The fill shall be comprised of clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil shall not be used. The fill shall not contain any material larger than two inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the #4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the #4 sieve, such analyses must demonstrate that the material meets each of the following specifications:

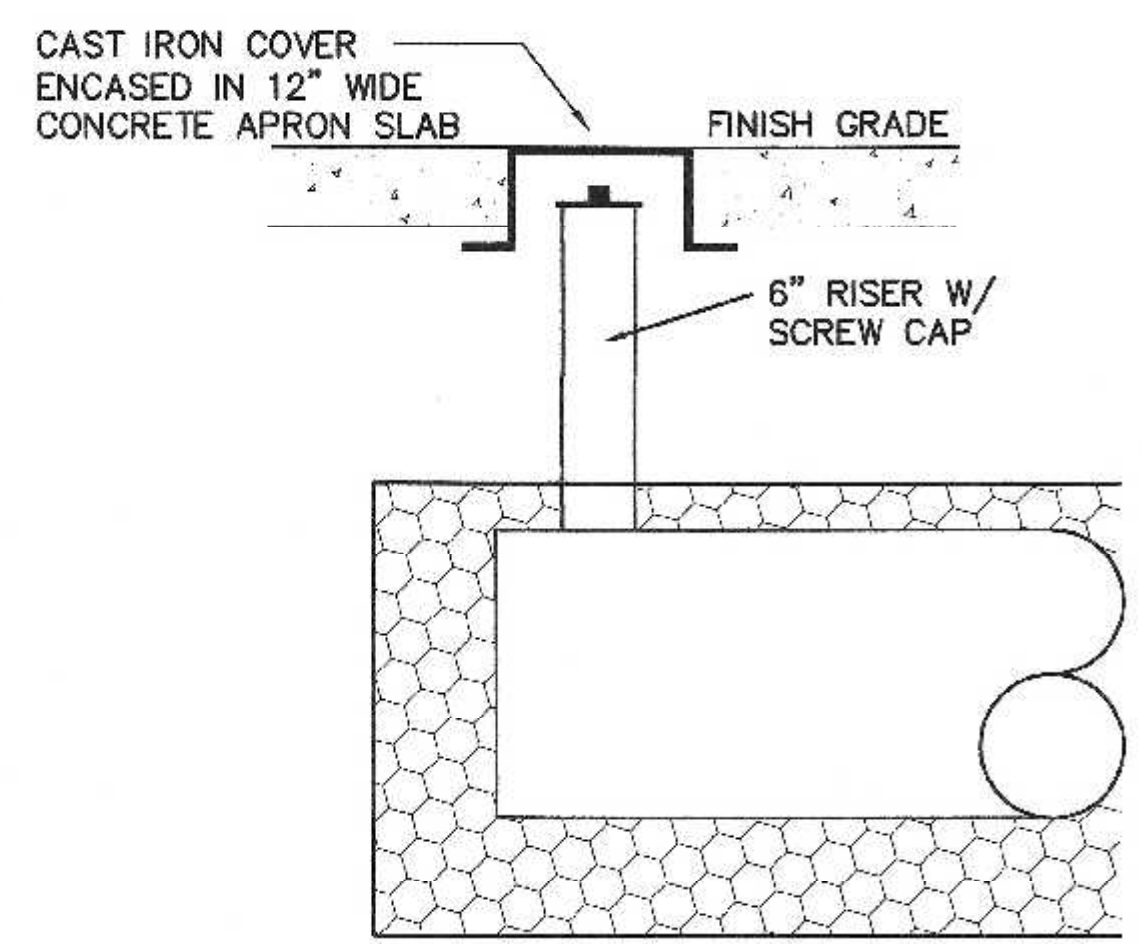
SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 mm	100%
# 50	0.30 mm	10% - 100%
#100	0.15 mm	0% - 20%
#200	0.075 mm	0% - 2%

A minimum of two representative sample shall be taken from the in-place fill and tested for compliance with the grain size distribution specification. Where fill is required to replace unsuitable or impermeable soils, the excavation of the unsuitable material shall extend a minimum of five feet laterally in all directions beyond the outer perimeter of the soil drainage systems to the depth of naturally occurring pervious material and replaced with fill. Prior to placement of the fill, the bottom surface of the excavation shall be scarified and relatively dry. Fill shall not be placed during rain or snow storms. If the water table elevation is above the elevation of the bottom of the excavation, the excavation shall be dewatered as necessary.

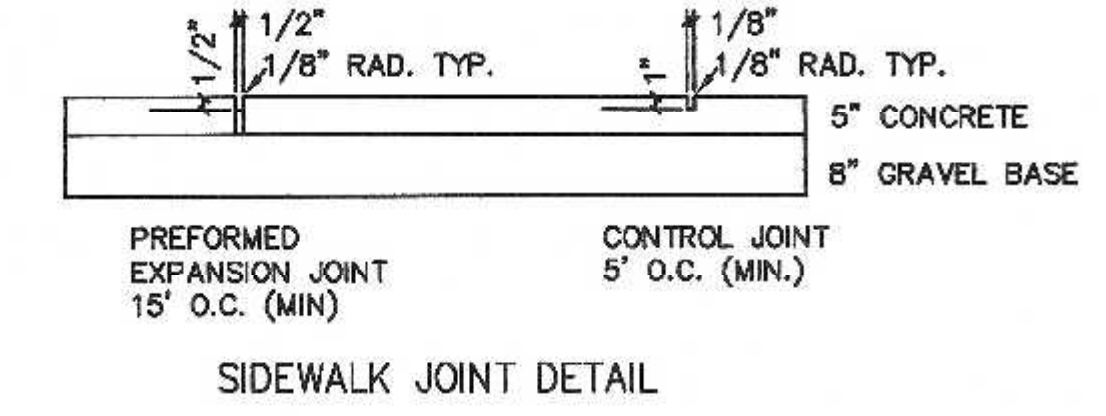
THE DESIGN ENGINEER SHALL INSPECT THE EXCAVATION OF THE SOIL INFILTRATION AREA PRIOR TO ANY FILL BEING PLACED.



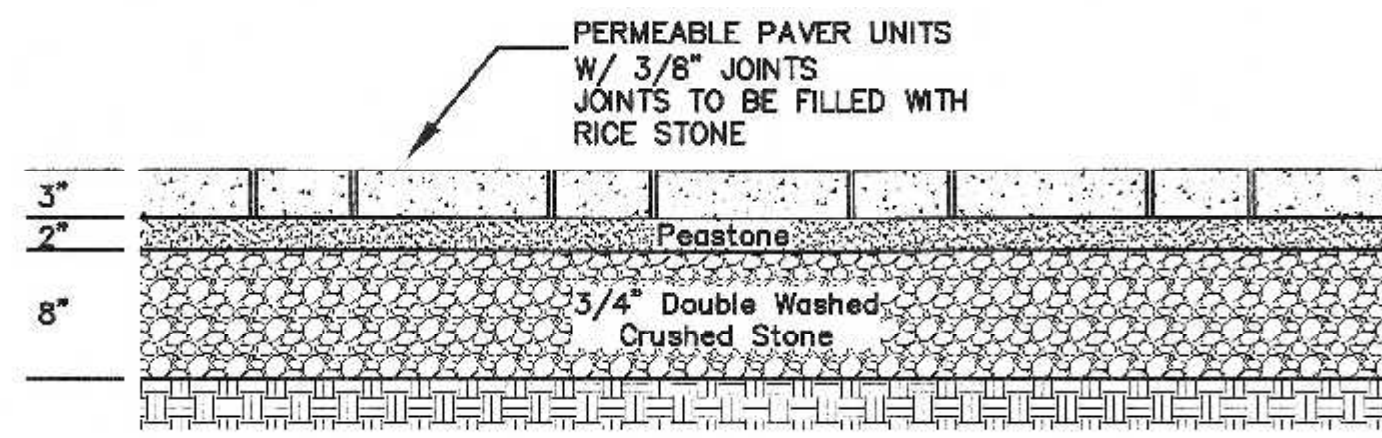
- NOTES:
1. CROSS SLOPE ON ANY RAMP, LANDING OR ACCESSIBLE ROUTE SHALL NOT EXCEED 3/16" PER FOOT.
  2. THE SIDEWALKS ARE 5' MINIMUM IN WIDTH.
  3. ALL SIDEWALKS SHALL BE 4,000 PSI CONCRETE.
  4. GRAVEL UNDER SIDEWALK TO BE M1.03.0 (TYPE B)



INSPECTION PORT DETAIL  
DRAINAGE INFILTRATION AREAS  
N.T.S.

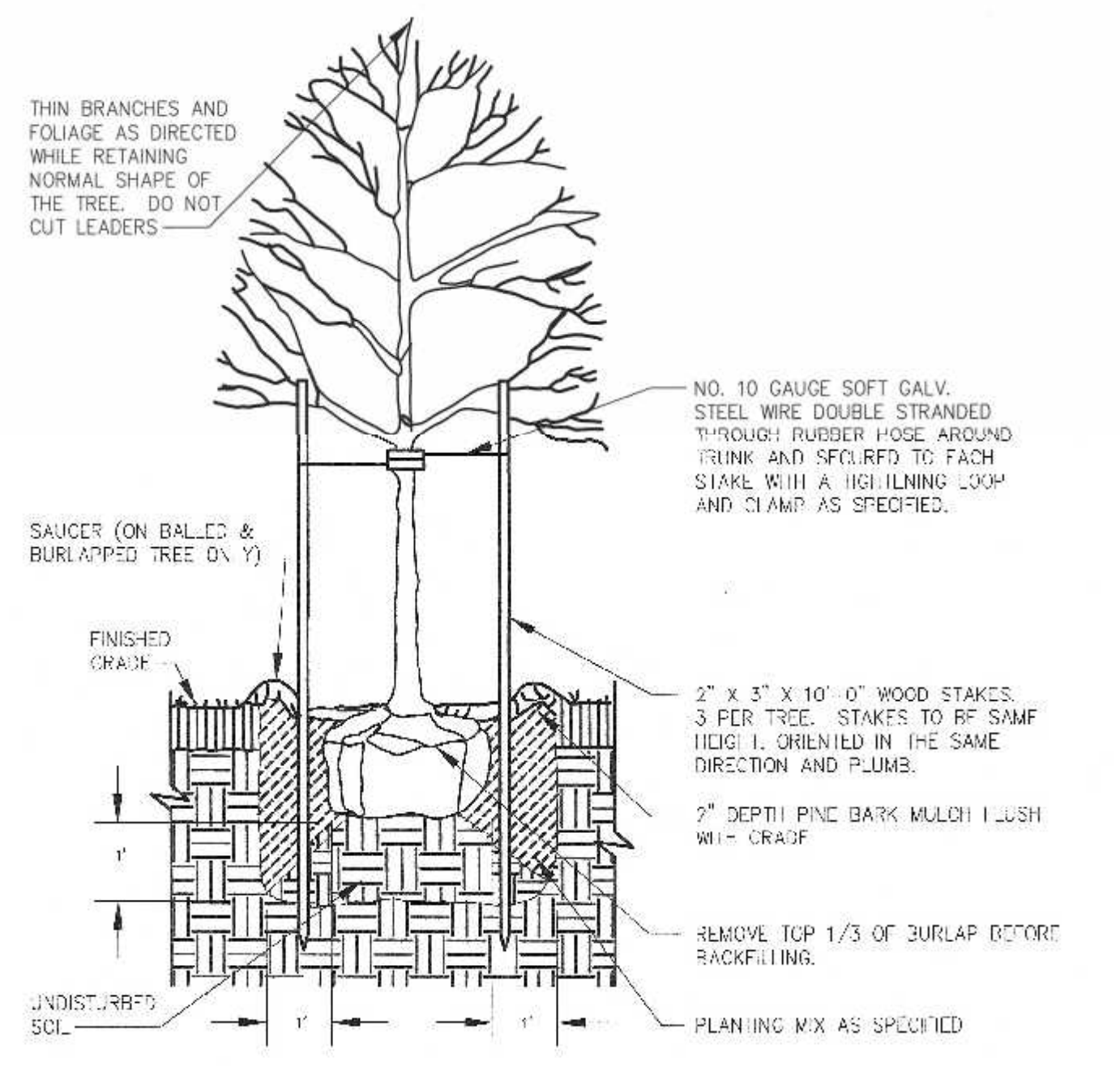


- NOTES:
1. CONTRACTOR TO CONTACT DIGSAFE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  2. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITIES ANY REPORT ANY DISCREPANCIES TO UNITED CONSULTANTS, INC.
  3. ALL WORK SHALL CONFORM TO THE TOWN OF FRANKLIN DPW STANDARDS.
  4. MAINTAIN A MINIMUM OF 10' SEPARATION FROM THE WATER SERVICE TO THE SEWER SERVICE.

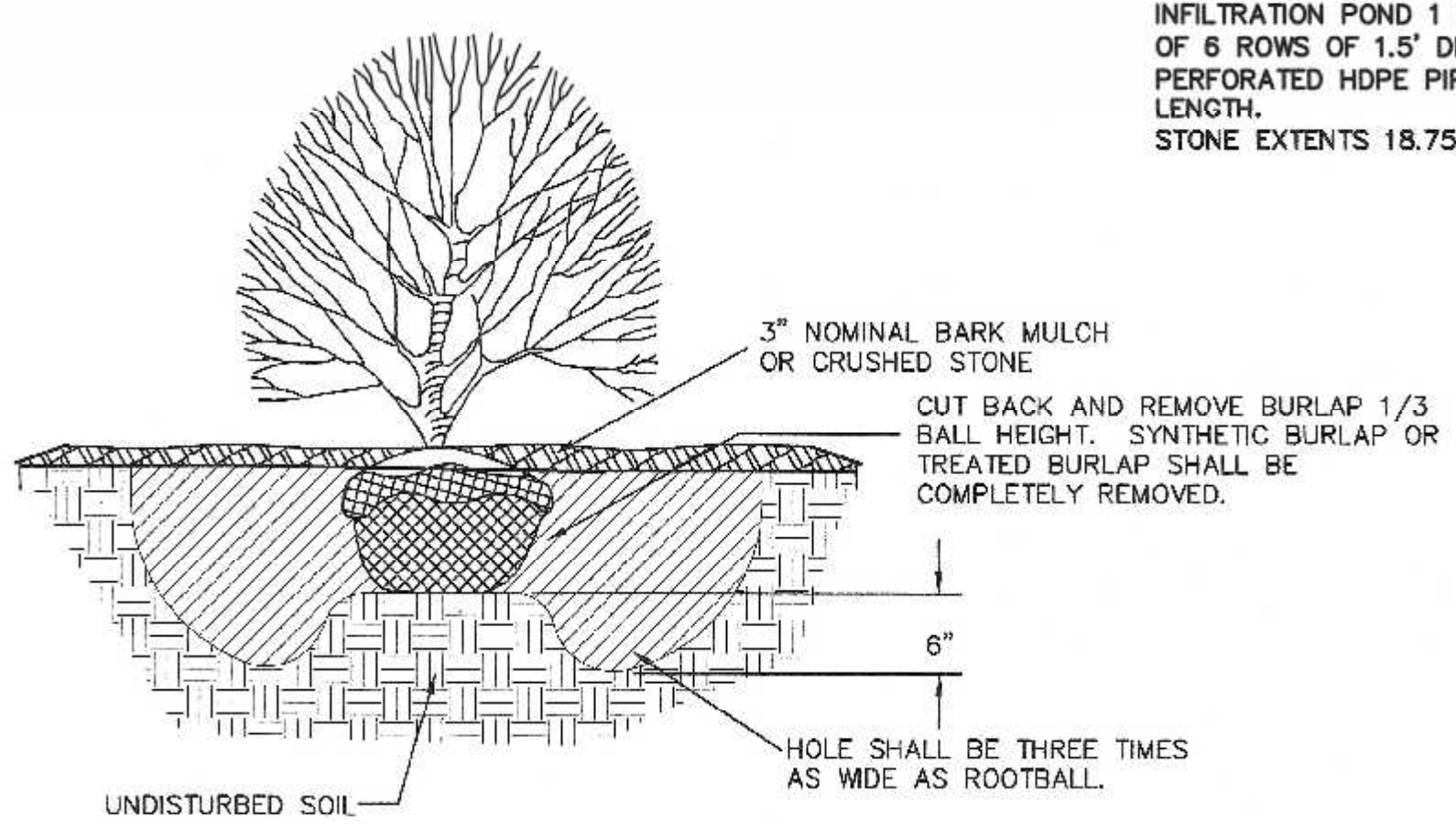


NOTE: REMOVE ALL TOP & SUBSOIL AND REPLACE WITH BANK RUN GRAVEL

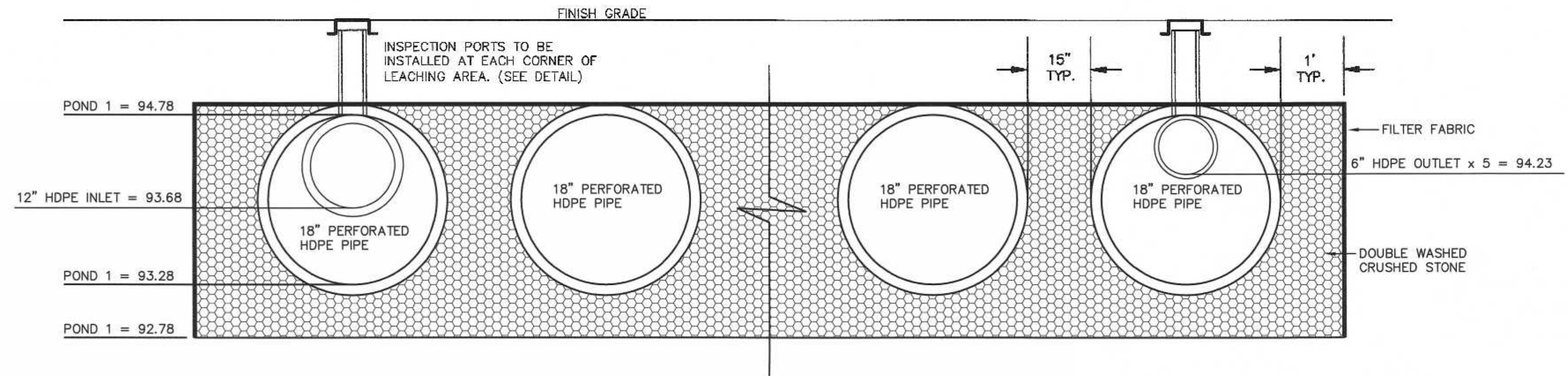
PERMEABLE PAVER PATIO DETAIL



DECIDUOUS TREE PLANTING

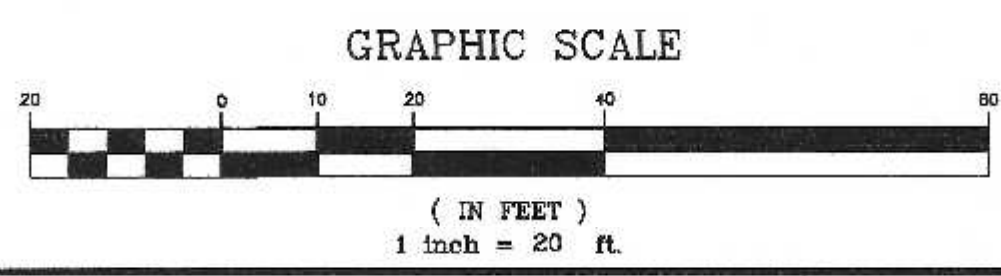


SHRUB PLANTING



DRAINAGE INFILTRATION AREAS

NOTE: INFILTRATION POND 1 CONSISTS OF 6 ROWS OF 1.5' DIAMETER PERFORATED HDPE PIPE 36' IN LENGTH. STONE EXTENTS 18.75' X 38'



SITE PLAN  
341 UNION STREET  
FRANKLIN, MASSACHUSETTS  
PREPARED FOR  
ROBERT VOZZELLA  
355 UNION STREET  
FRANKLIN, MASSACHUSETTS



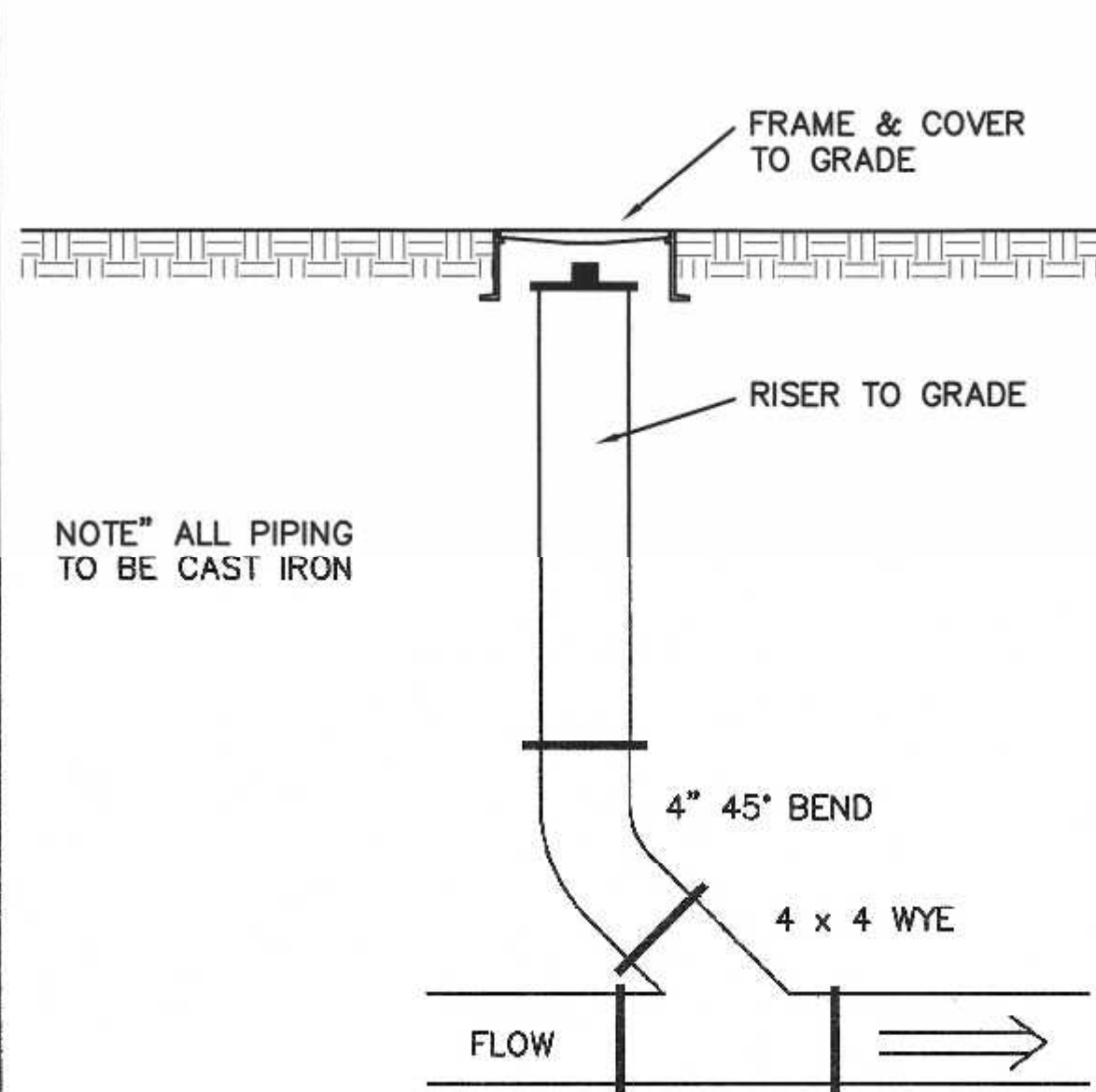
CARLOS A. QUINTAL P.E. #30812

**UNITED CONSULTANTS INC.**  
850 FRANKLIN STREET SUITE 11D  
WRENTHAM, MASSACHUSETTS 02093  
508-384-6580 FAX 508-384-6586

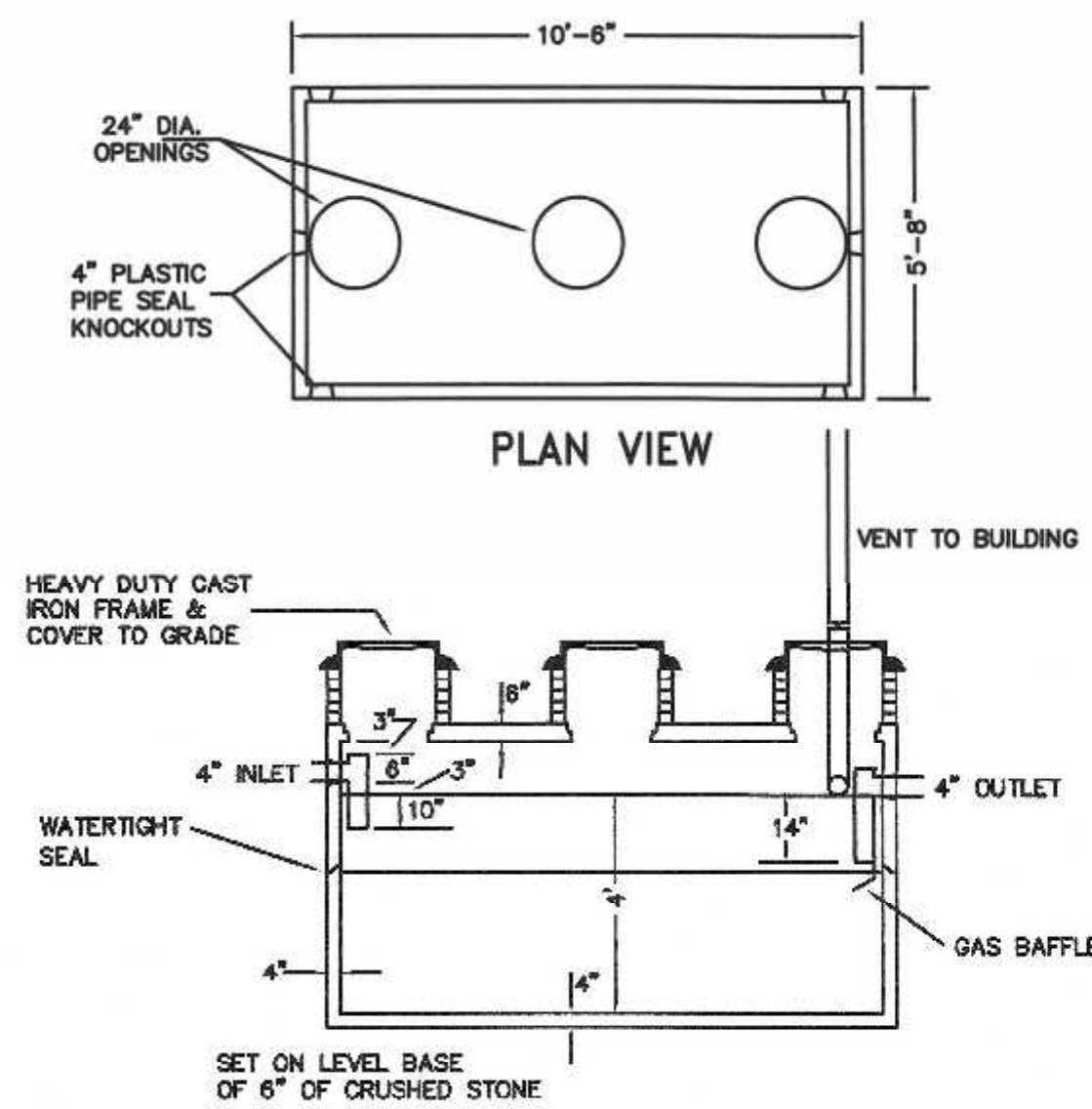
NO.	DATE	DESCRIPTION	RRG	BY
1	5/11/22	REVIEW COMMENTS & STORMWATER	RRG	

DATE: FEBRUARY 4, 2022 PROJECT: UC 1554  
SCALE: 1" = 20' SHEET: 3 of 4





SECTION VIEW  
CLEANOUT DETAIL  
N.T.S.

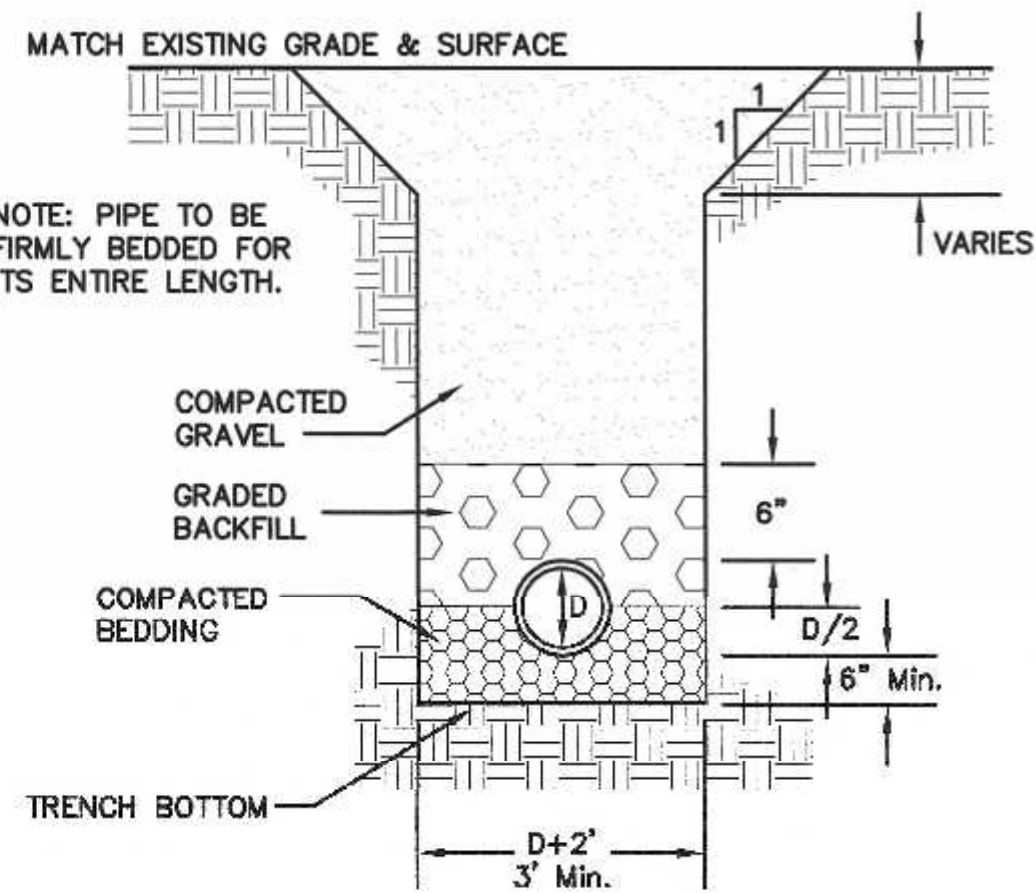
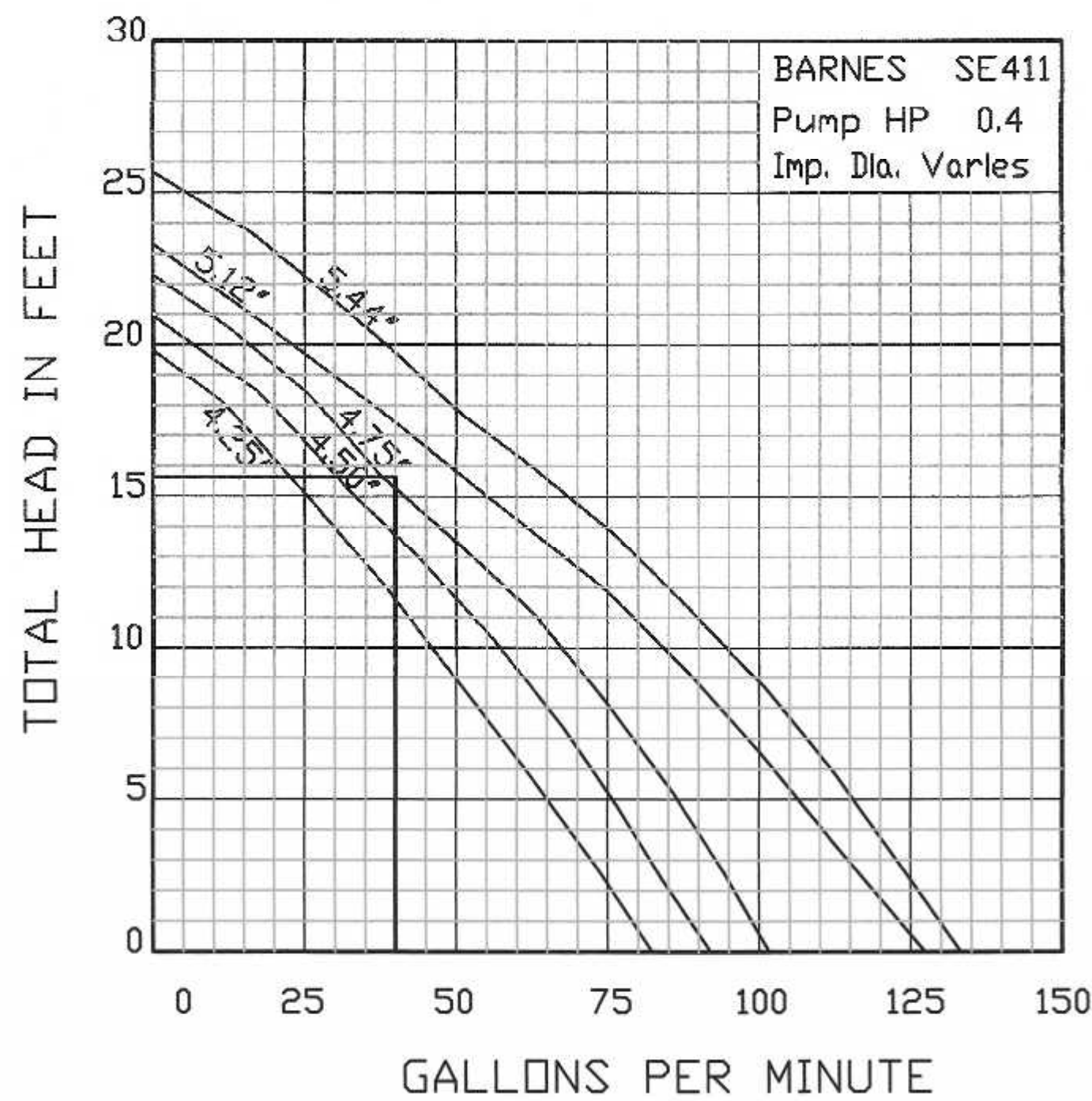


PROFILE VIEW  
1,500 GALLON GREASE TRAP  
H-20 LOADING

GREASE TRAP SIZING  
PER 310 CMR 15.203 15 GPD/SEAT  
40 SEATS x 15 GPD/SEAT = 600 GAL  
GREASE TRAP CAPACITY = 1,500 GAL

THE PUMP INSTALLATION SHALL INCLUDE A CONTROL PANEL TO BE MOUNTED WITHIN THE BUILDING, WHICH INCLUDES A MANUAL ON-OFF-AUTOMATIC ON-OFF SWITCH, A VISIBLE ALARM, AUDIBLE ALARM, AND AUDIBLE ALARM SILENCER SWITCH. THERE SHALL BE A MINIMUM OF 4 FLOAT SWITCHES IN THE PUMP CHAMBER. THE ALARM SHALL BE CONNECTED TO A SEPARATE ELECTRICAL CIRCUIT FROM THE PUMPS. THE PUMP ELECTRICAL SYSTEM SHALL BE EQUIPPED WITH A TRANSFER SWITCH TO ALLOW CONNECTION TO A PORTABLE GENERATOR. THE PUMPS SHALL BE LOCATED UNDER A MANHOLE COVER WHICH SHALL BE INSTALLED TO FINISHED GRADE AND MADE OF A MATERIAL WHICH IS EITHER LOCKABLE OR EXTRA-HEAVY WEIGHT.

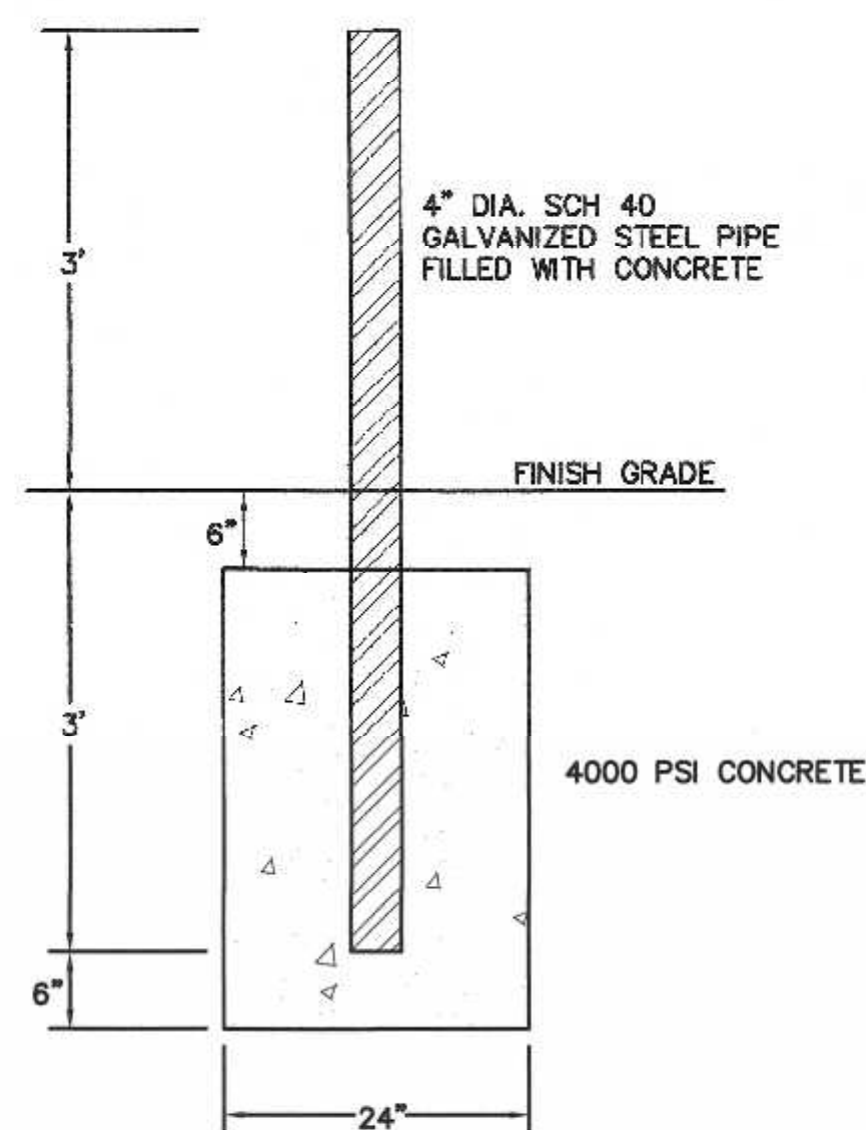
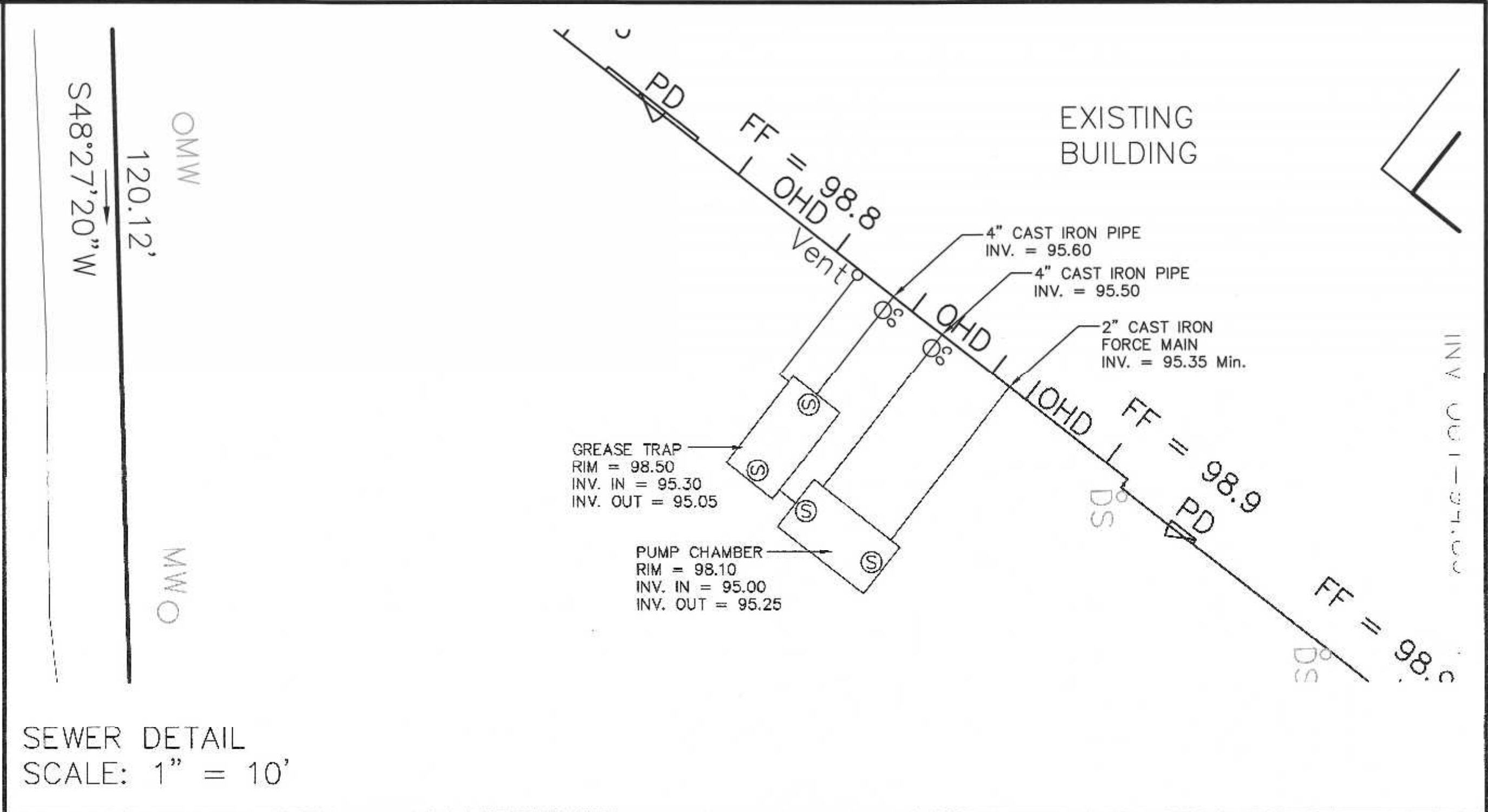
DOSE 8 TIMES DAILY  
40 SEATS x 35 GPD/SEAT = 1,400 GPD / 8 = 175 GAL/DOSE  
(175/7.48)/(6.16x12.2) = 0.31' DIST BETWEEN ON/OFF FLOAT  
STATIC HEAD = 10.0'  
H.W. ALARM ON 6" ABOVE DOSE LEVEL  
ADDITIONAL 24 HOUR STORAGE (1,400/7.48)/(6.16x12.2) = 2.49'  
FRICTION LOSS IN 85' OF 2" FM @ 40 GPM = 5.63'  
TOTAL DYNAMIC HEAD = 15.63'  
USE 2 BARNES PUMPS SE411 0.4 H.P., 5.12" IMPELLER, 2" SOLIDS PUMPS TO ALTERNATE BETWEEN CYCLES.



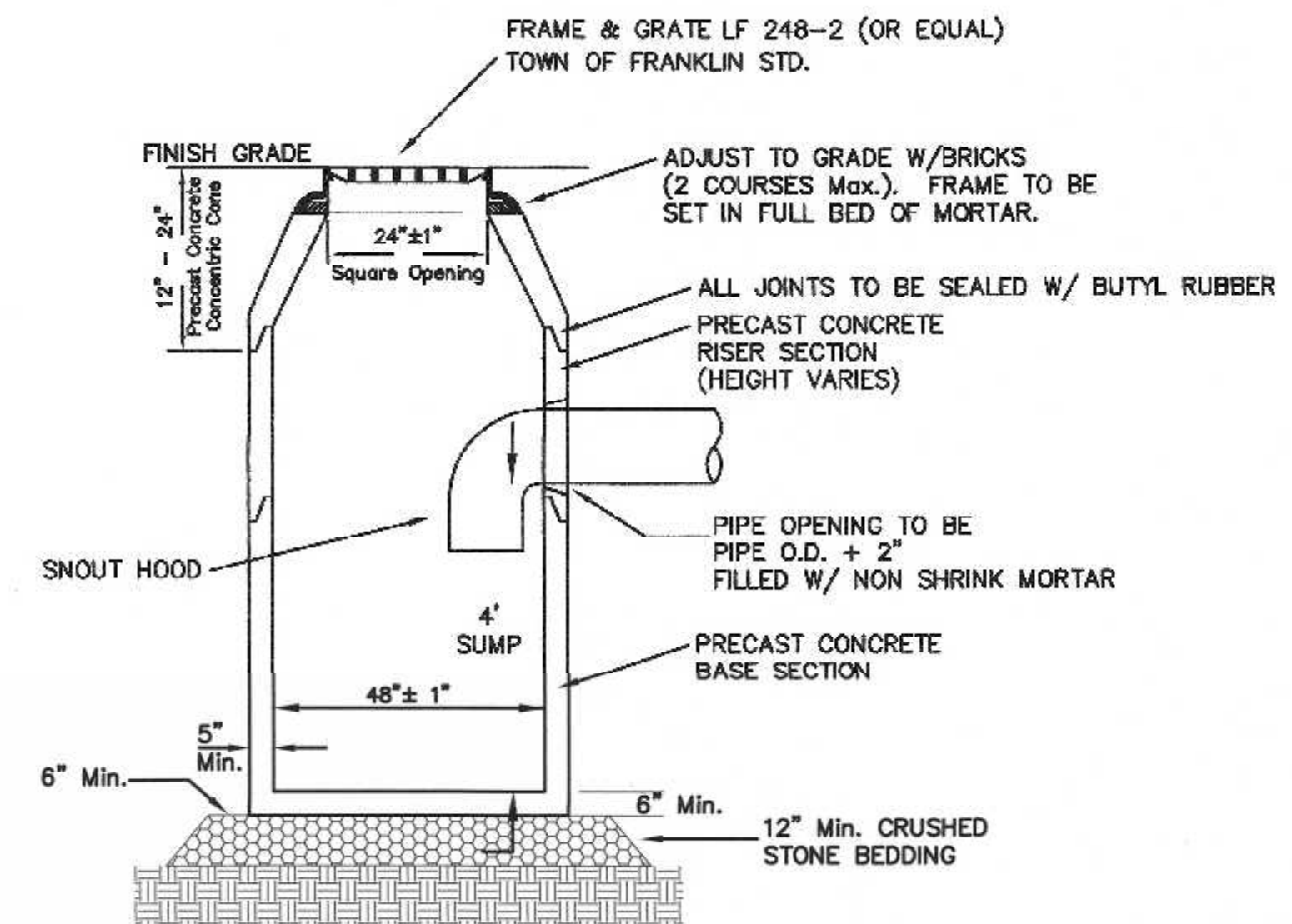
UTILITY TRENCH DETAIL

TYPE OF PIPE	SCH. 40 PVC DRAIN	C.I. SEWER
BEDDING MATERIAL	3/4" STONE	SAND
BACKFILL MATERIAL	3/4" STONE	SAND

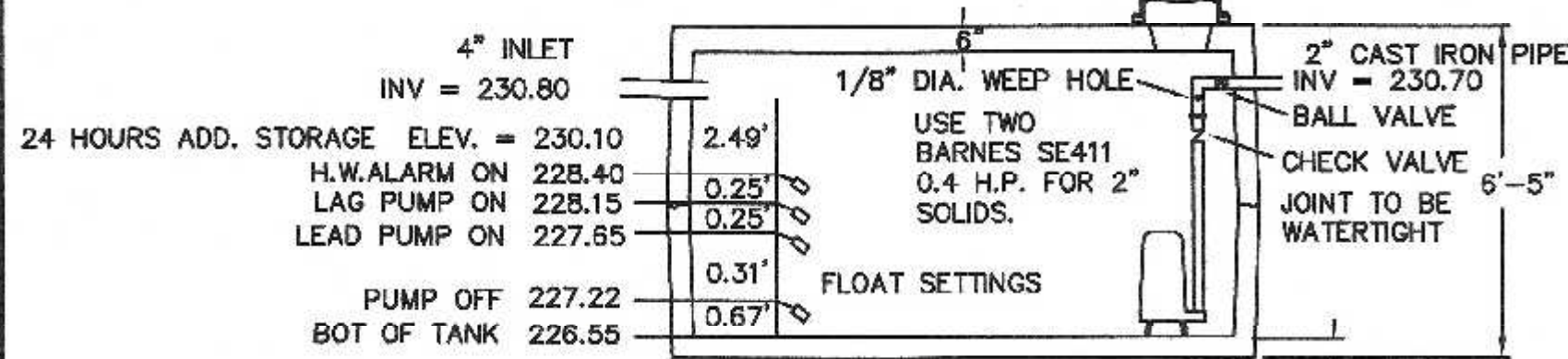
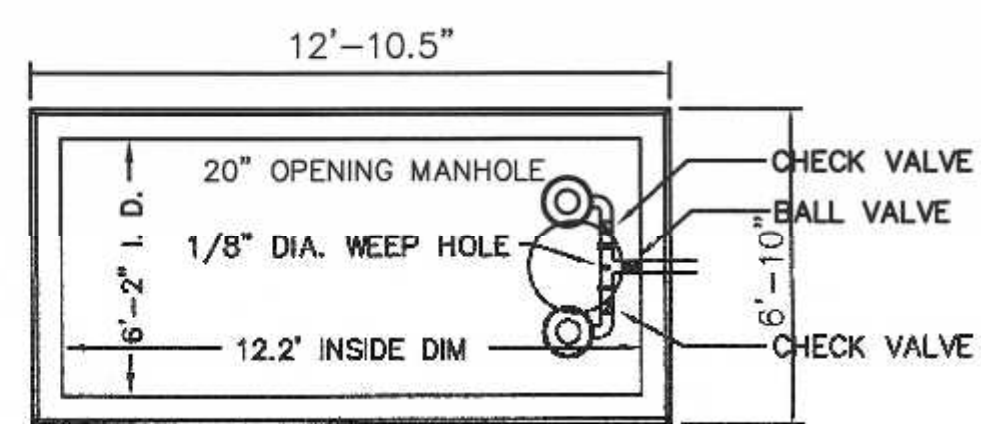
SEWER DETAIL  
SCALE: 1" = 10'



BOLLARD DETAIL

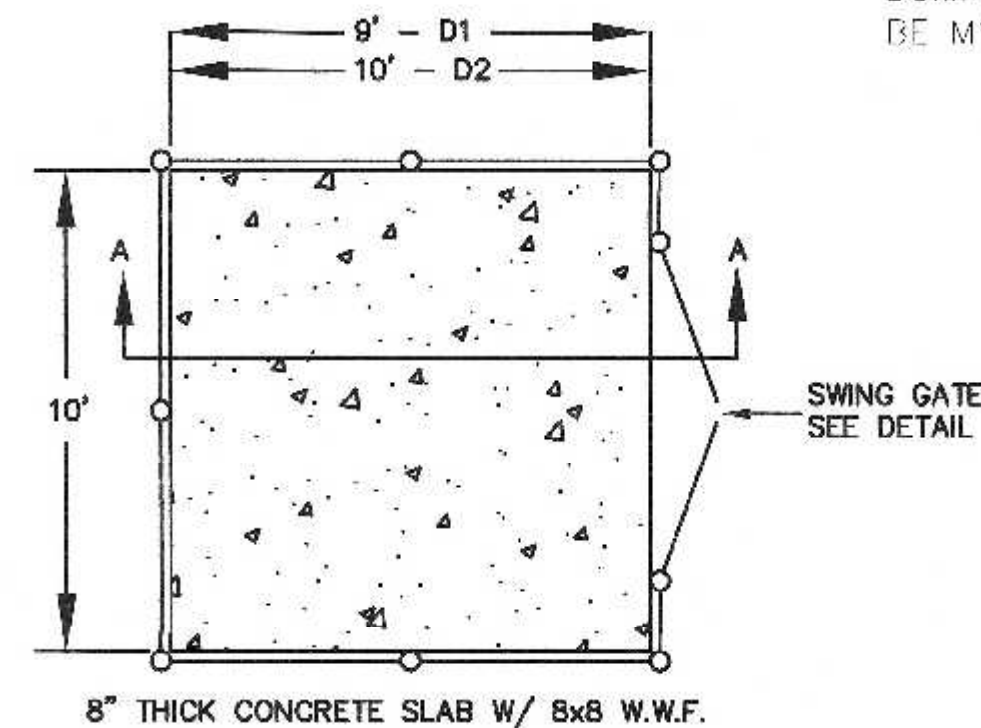


PRECAST CATCH BASIN

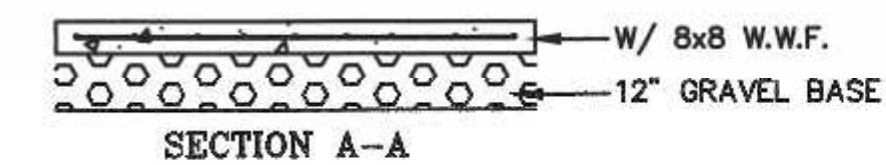


ELEVATION  
PUMP TANK  
E. F. SHEA 2,500 GALLON SEPTIC TANK  
OR EQUAL  
DESIGNED FOR H 20 LOADING

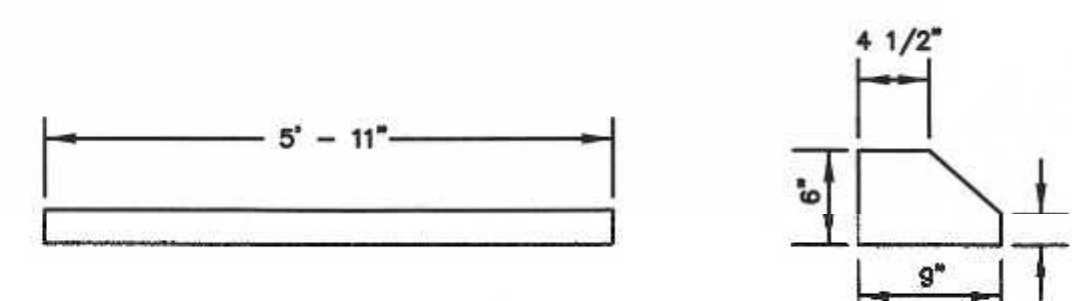
NOTE:  
GRAVEL UNDER  
DUMPSTER PAD TO  
BE M1.03.0 (TYPE B)



CONCRETE DUMPSTER PAD



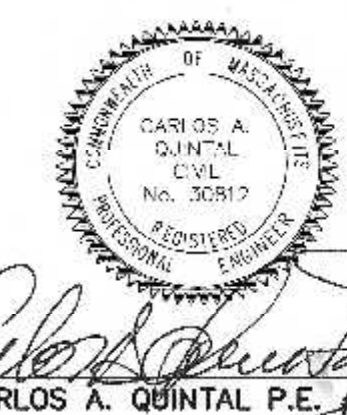
DUMPSTER AREA FENCE



BUMPER CURB DETAIL

BUMPER CURB SHALL BE E.F. SHEA  
ITEM NO. B-BBSF OR APPROVED EQUAL.

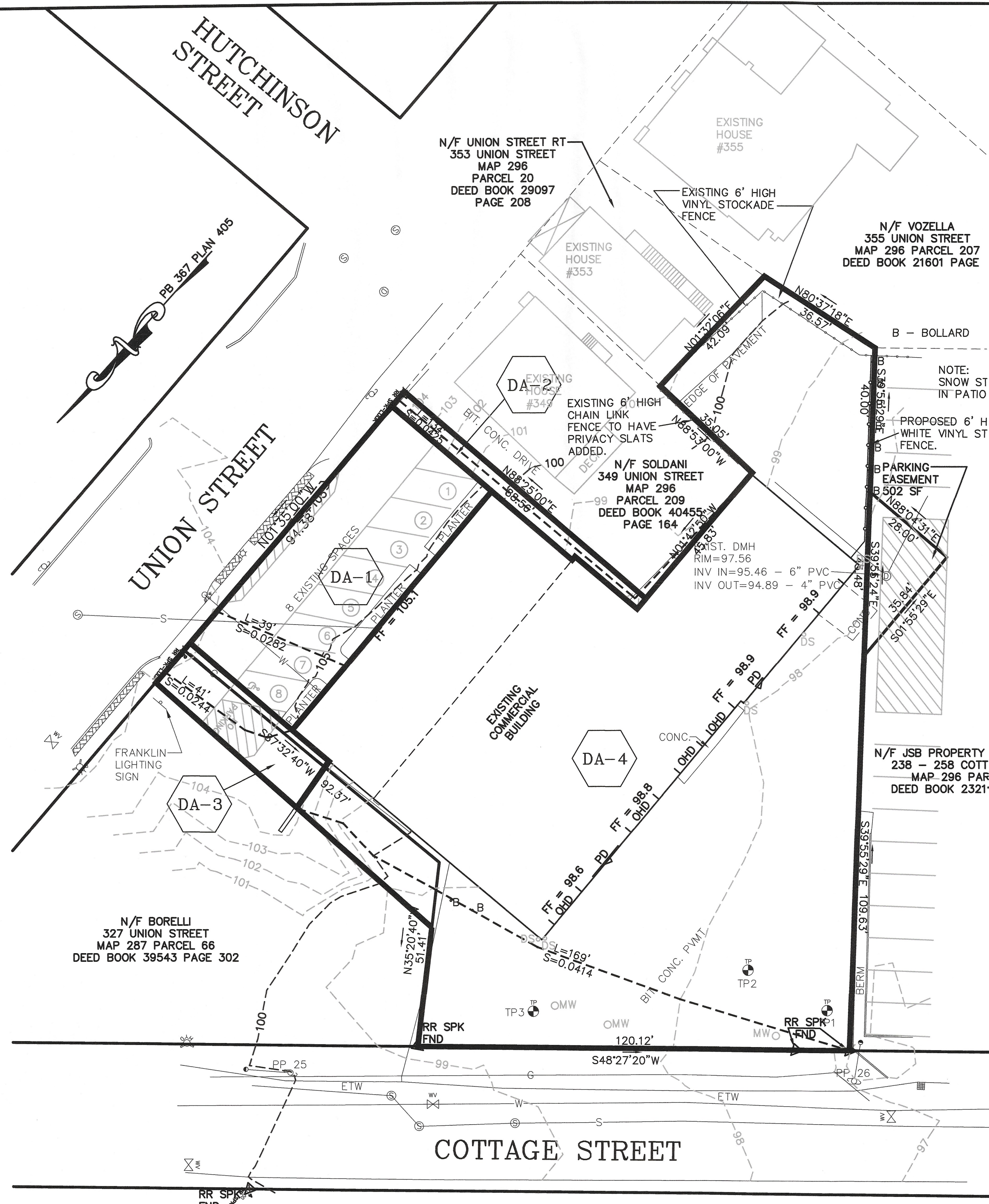
SITE PLAN  
341 UNION STREET  
FRANKLIN, MASSACHUSETTS  
PREPARED FOR  
ROBERT VOZZELLA  
355 UNION STREET  
FRANKLIN, MASSACHUSETTS



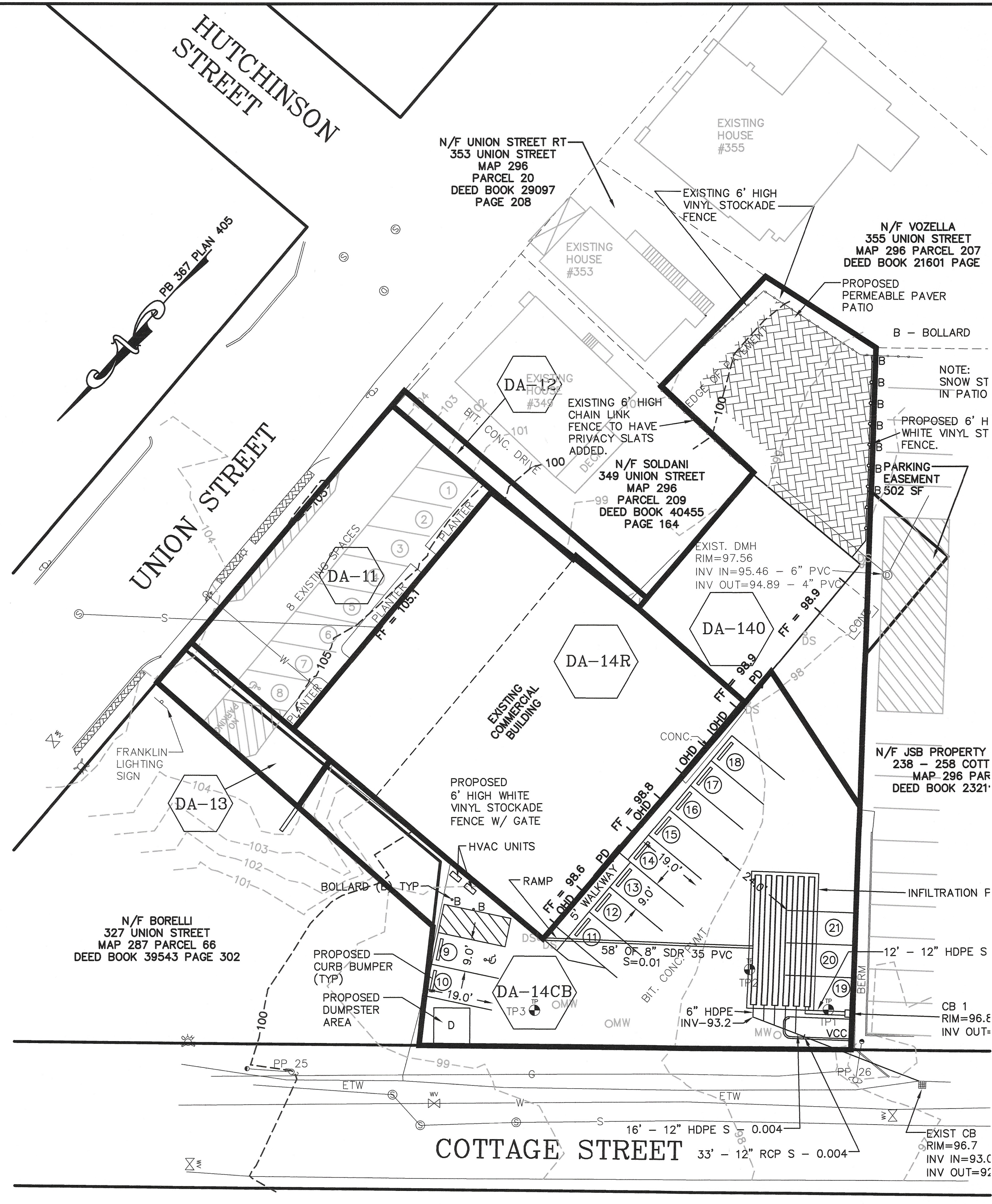
**UNITED CONSULTANTS INC.**  
850 FRANKLIN STREET SUITE 11D  
WRENTHAM, MASSACHUSETTS 02093  
508-384-6560 FAX 508-384-6566

NO.	DATE	DESCRIPTION	BY	SCALE	DATE	PROJECT	SHEET
1	5/11/22	REVIEW COMMENTS & STORMWATER	RRG	1" = 20'	FEBRUARY 4, 2022	UC 1554	4 of 4





PRE-DEVELOPMENT

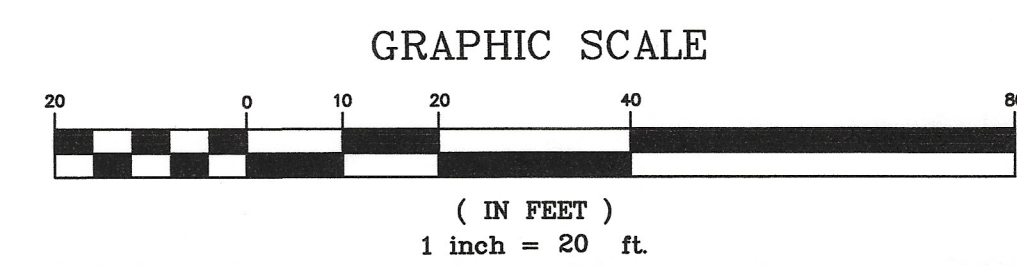


POST-DEVELOPMENT

RUNOFF AREAS  
 341 UNION STREET  
 FRANKLIN, MASSACHUSETTS  
 PREPARED FOR  
 ROBERT VOZZELLA  
 355 UNION STREET  
 FRANKLIN, MASSACHUSETTS

**UNITED CONSULTANTS INC.**

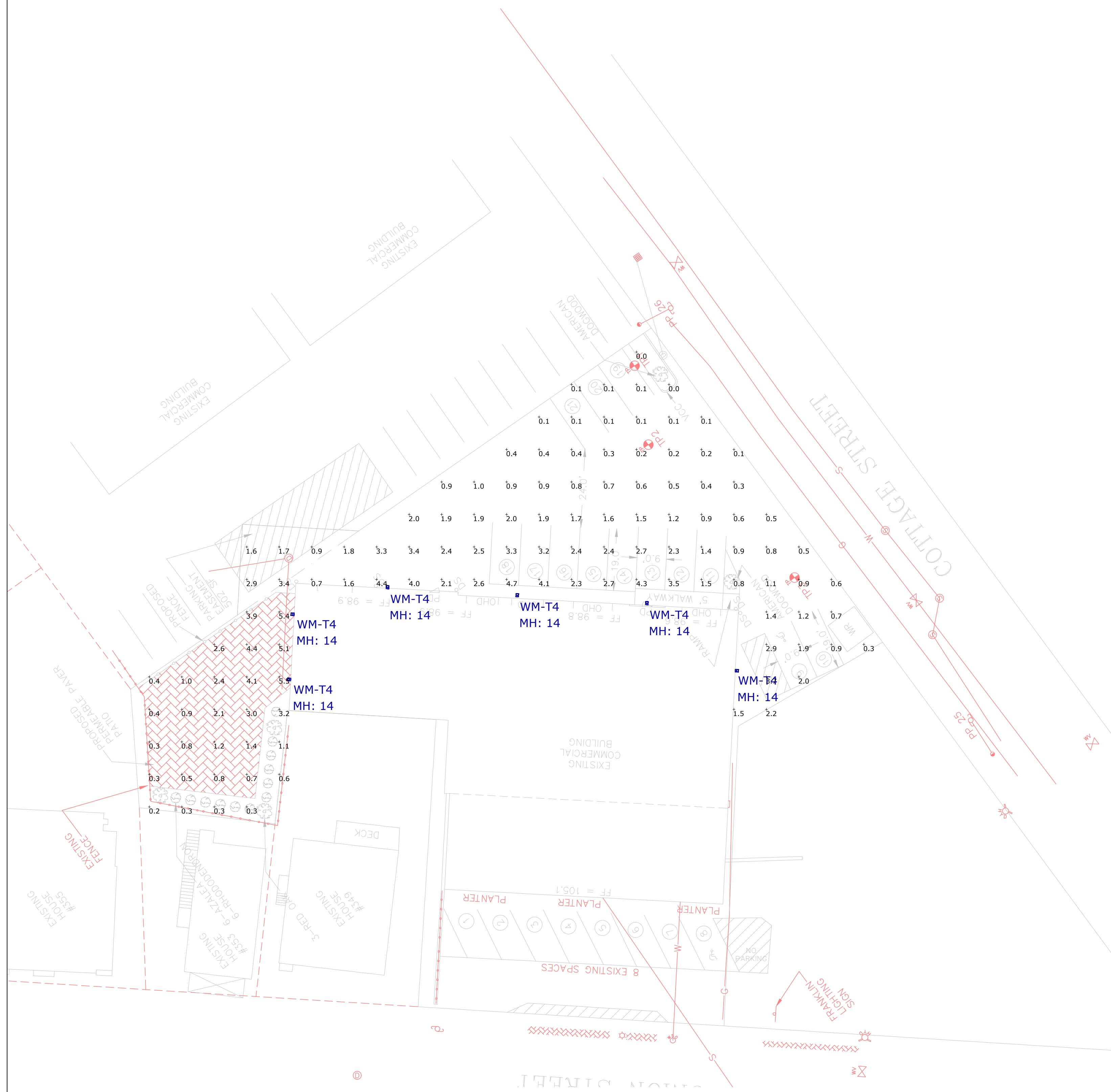
850 FRANKLIN STREET SUITE 11D  
 WRENTHAM, MASSACHUSETTS 02093  
 508-384-6580 FAX 508-384-6586



NO.	DATE	DESCRIPTION	BY
1	5/11/22	REVIEW COMMENTS & STORMWATER	RRG

DATE	FEBRUARY 4, 2022	PROJECT	UC 1554
SCALE	1" = 20'	SHEET	1 of 1





1 Site Lighting Plan  
SCALE: 1"=20'-0"

Luminaire Schedule						LLF	Fixture Wattage	Fixture Lumens
Symbol	Label	Qty	Part Number			0.900	45.25	5154
	WM-T4	6	Solais # GL1-5-4S-730-STD-0-10-0-BZ-WP					

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site Points	Illuminance	Fc	1.57	5.5	0.0	N.A.	N.A.

- NOTES:
- A. A LIGHT LOSS FACTOR OF 0.900 HAS BEEN APPLIED TO FIXTURES UNLESS OTHERWISE NOTED. REFER TO LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR AND LUMEN INFORMATION.
  - B. SEE "MH" ON LIGHTING FIXTURE TAG LOCATED ON PLAN FOR MOUNTING HEIGHT INFORMATION.
  - C. CALCULATION POINTS ARE TAKEN AT GRADE.
  - D. CALCULATION RESULTS ARE BASED ON IES STANDARDS UNLESS OTHERWISE REQUESTED.

### GridLite Wall Pack

LED WALL PACK FIXTURE

- 120 - 277 V Standard; 347 - 480 V option available
- 10 year warranty
- Chip-scale package LEDs
- 0 - 10 V dimming standard
- TGIC polyester super durable powder coating with superior gloss, color retention, and weather resistance; For marine grade finish, consult factory
- Die cast aluminum housing designed for optimal thermal performance
- Marine grade finish option available
- IDA Dark Sky listed e3000K
- IP66 rated optical and electrical chambers
- Surge Protection (ANSI C136.2-2015)
- 10kV SKA Standard; 20kV 10kA optional
- Suitable for wet locations
- Rated for operation -40°C to 40°C; For 50°C, consult factory

• Projections

TM-21 Lumen Maintenance Projection is calculated by utilizing the LED manufacturer's LM80 test data in conjunction with third party verified in-situ LED drive current and LED temperature data. All data is taken at a maximum drive current of 3500 mA and an ambient temperature of 25°C. Projected data is limited to 6 times the actual tested hours by the LED manufacturer.

Calculated	Projected
L <sub>70</sub> >50,000 hours	L <sub>70</sub> >60,000 hours
L <sub>50</sub> >100,000 hours	L <sub>50</sub> >100,000 hours
L <sub>30</sub> >400,000 hours	L <sub>30</sub> >400,000 hours

• Distribution Types

Type II Medium

Type III Medium

Type IV Short

Type V Square

### GL1 Wall Pack

LED WALL PACK FIXTURE

Item	Part No.	Qty	Color Temperature (CCT)	TYPE II MEDIUM AT 70 CRI			TYPE III MEDIUM AT 70 CRI			TYPE IV SHORT AT 70 CRI			TYPE V SQUARE AT 70 CRI		
				Lumens (Nominal)	Efficacy (lm/W)	RLS Rating	Lumens (Nominal)	Efficacy (lm/W)	RLS Rating	Lumens (Nominal)	Efficacy (lm/W)	RLS Rating	Lumens (Nominal)	Efficacy (lm/W)	RLS Rating
GL1	300mA	18	4000K / 5000K	2,272	124	2,272	124	2,068	115	2,068	115	2,216	122		
			3000K	2,178	121	2,140	120	2,062	114	2,140	120	2,138	121		
	450mA	26	4000K / 5000K	3,904	153	3,904	153	3,522	152	3,522	152	3,692	157		
			3000K	3,842	152	3,690	151	3,460	150	3,516	151	3,616	156		
	300mA	35	4000K / 5000K	4,442	171	4,422	171	4,018	168	4,018	168	4,218	173		
			3000K	4,352	168	4,228	167	4,244	169	4,446	177				
	450mA	45	4000K / 5000K	5,712	192	5,712	192	5,202	188	5,202	188	5,350	195		
			3000K	5,522	184	5,432	183	5,206	184	5,478	194				
	300mA	54	4000K / 5000K	6,800	222	6,800	222	6,420	219	6,420	219	6,745	229		
			3000K	6,706	219	6,596	218	6,422	217	6,655	226				
	450mA	66	4000K / 5000K	8,100	250	8,100	250	7,580	246	7,580	246	7,980	258		
			3000K	7,950	245	7,840	244	7,576	245	7,980	257				
300mA	77	4000K / 5000K	9,280	280	9,280	280	8,680	275	8,680	275	9,180	288			
		3000K	9,130	275	8,920	274	8,678	274	9,180	287					
450mA	99	4000K / 5000K	10,800	360	10,800	360	10,080	354	10,080	354	10,680	369			
		3000K	10,650	355	10,440	354	10,076	353	10,680	368					
1000mA	132	4000K / 5000K	14,400	480	14,400	480	13,560	472	13,560	472	14,580	495			
		3000K	14,250	475	14,040	474	13,558	471	14,580	494					

DATE:	REVISIONS	DESCRIPTION	DATE
May 12, 2022	1		
PROJECT NUMBER:	2		
DRAWN BY: AD	3		
CHECKED BY: HD	4		
APPROVED BY: HD	5		
SCALE: AS NOTED	6		
	7		