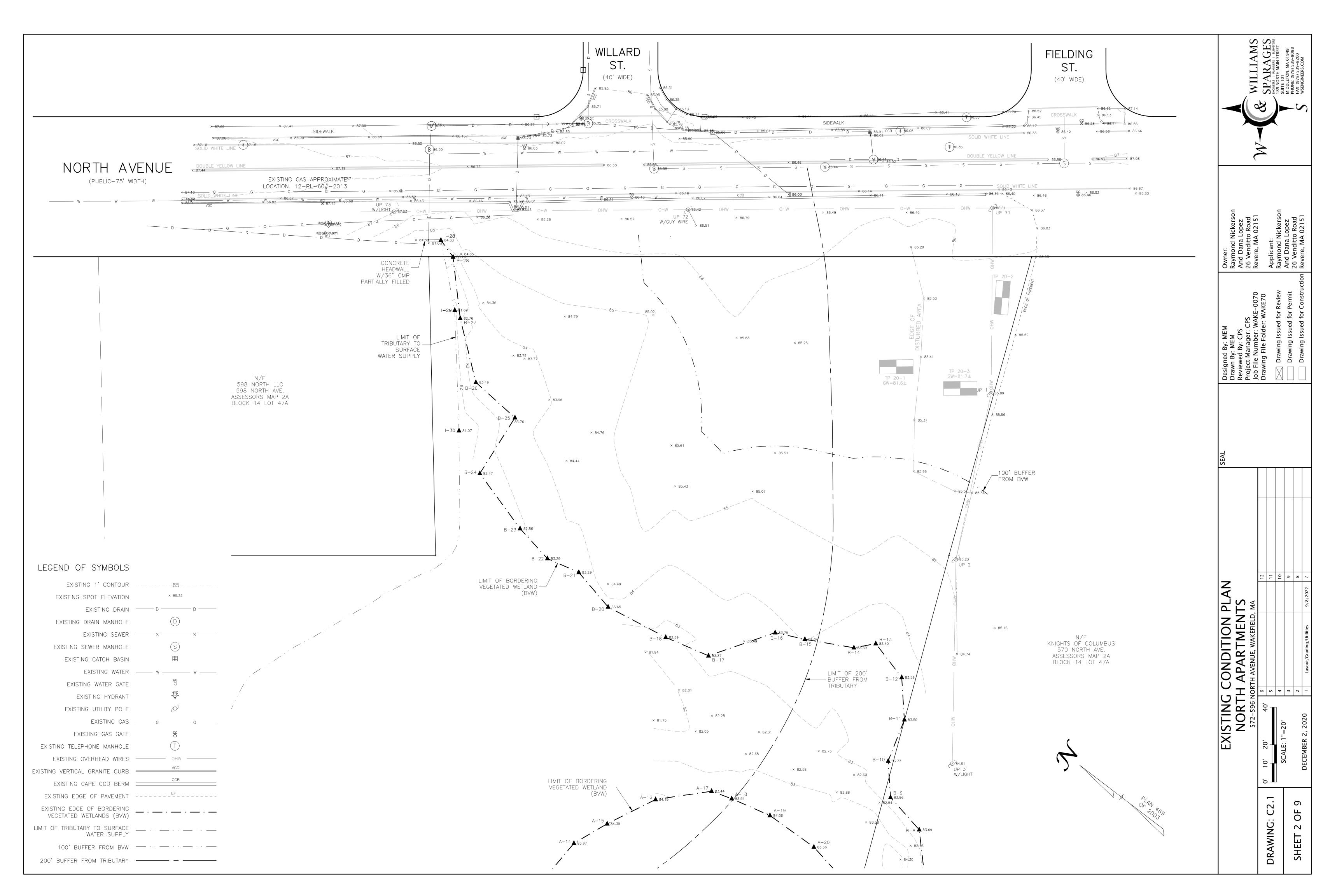
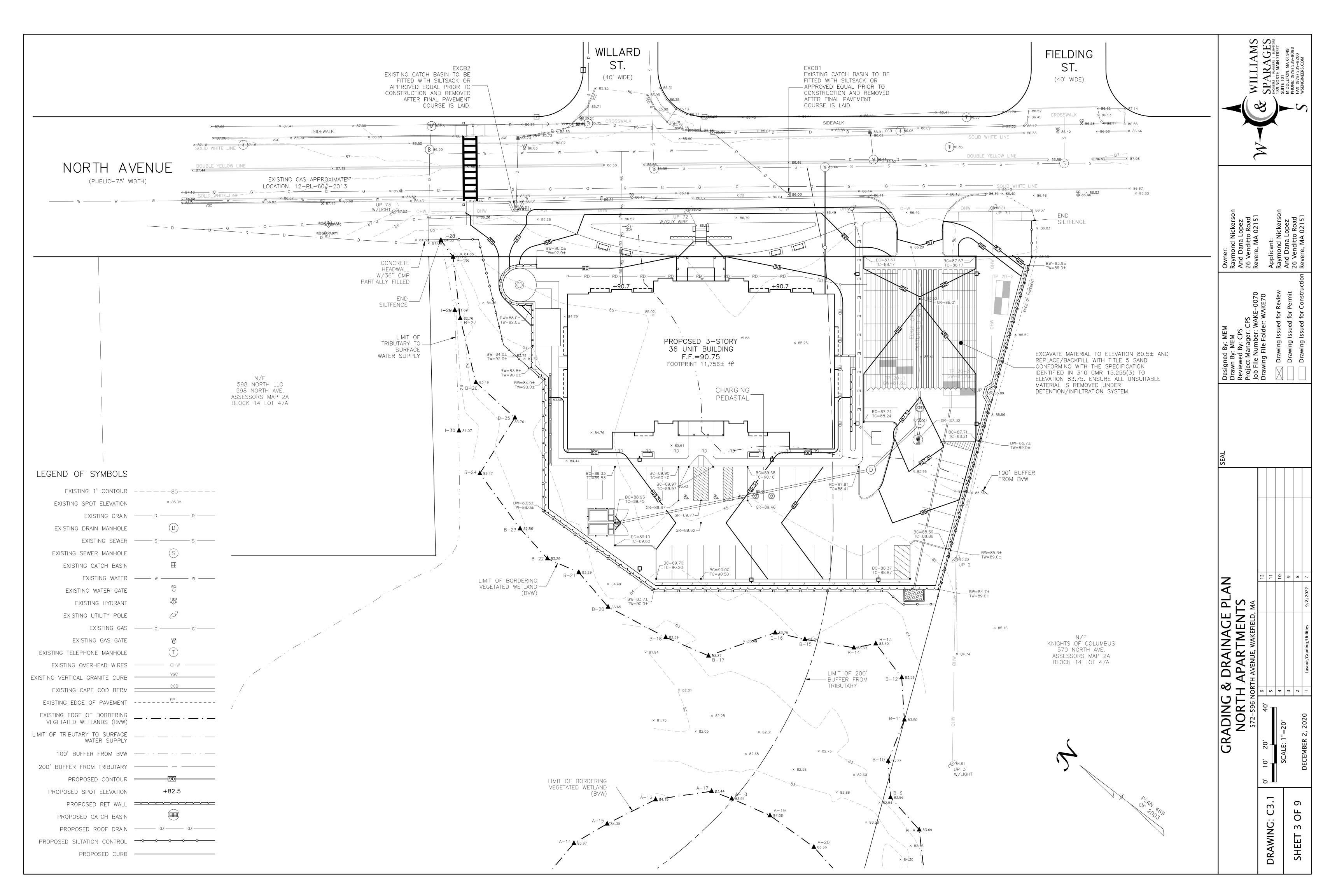
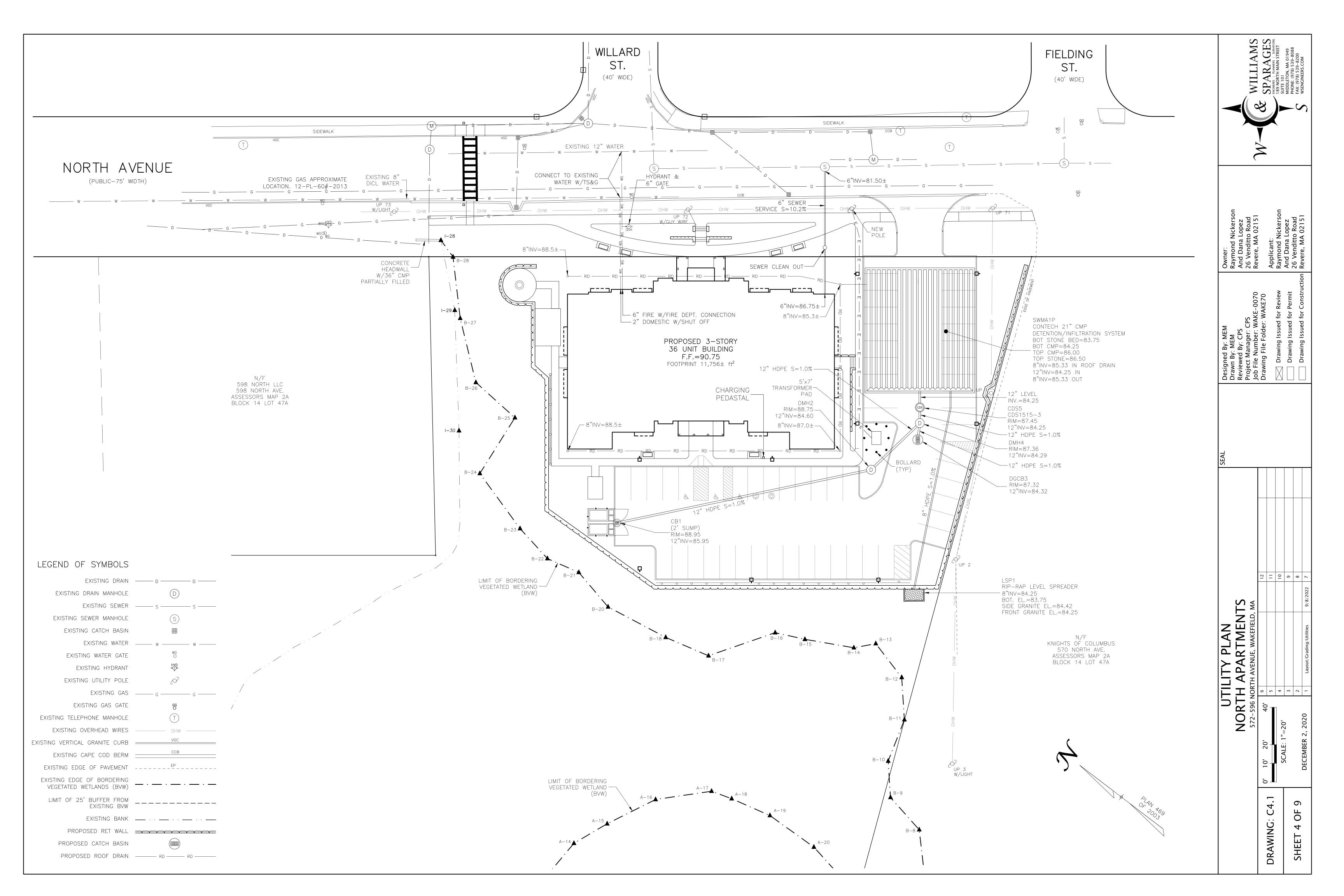
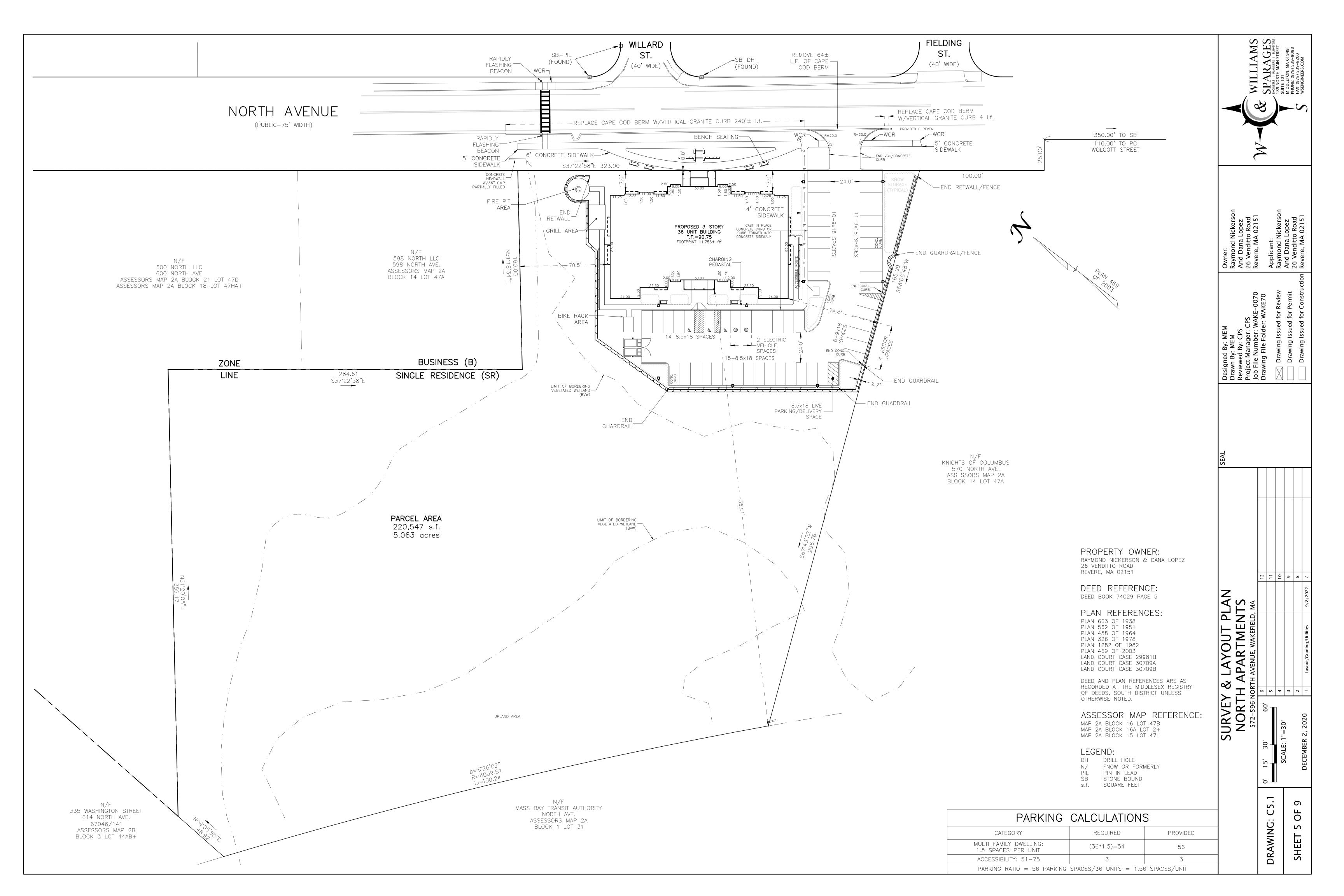
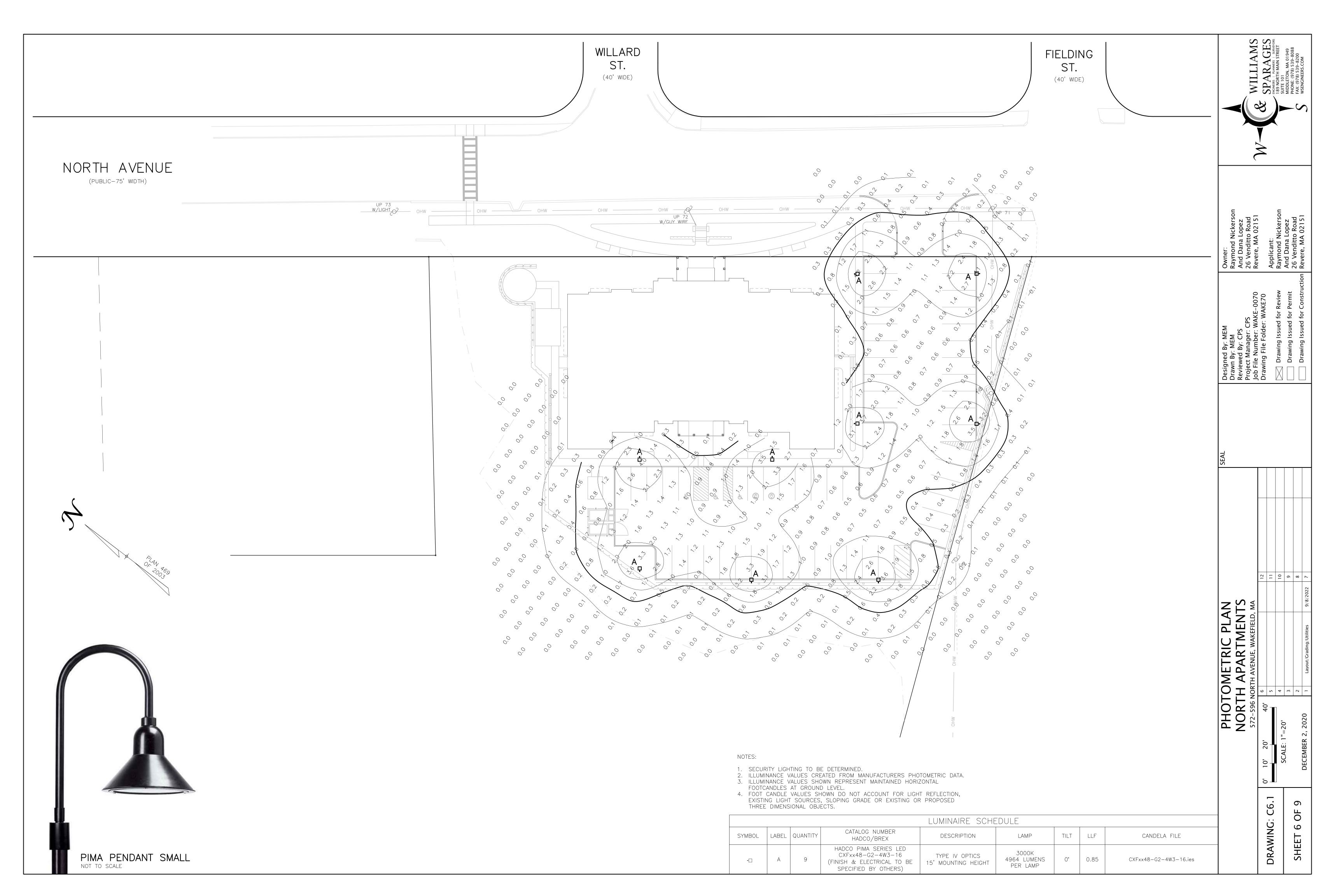
2 C2.1 EXISTING	ON PLAN  G CONDITION PLAN  G & DRAINAGE PLAN		20	LAKE QUANNAPOWITT		LAKE QUANNAPOWITT	WILLIAMS SPARAGES  ENGINEES   PLANNES   SURVEYORS 189 NORTH MAIN STRET SUITE 101 MIDDLETON, MA 01949 MIDDLETON, MA 01949 MIDDLETON, MA 01949 FAX: (978) 539-8088 FAX: (978) 539-8008 WSENGINEERS.COM
5 C5.1 SURVEY	& LAYOUT PLAN		LIN	CENEDAL D-		_	
7 C7.1 CONSTR	METRIC PLAN RUCTION DETAILS PLAN			LIMITED (GR)	SINGLE		
	CUCTION DETAILS PLAN			LIMITED BUSINESS	ESIDE		
ZONING TABLE SINGLE F					RES (SR)		
DIMENSIONAL CONTROL  MINIMUM LOT AREA	REQUIRED/ALLOWED  12,000 ft <sup>2</sup>	PROPOSED  220,547 ft <sup>2</sup>					
MAXIMUM DENSITY FRONTAGE & WIDTH	100 ft.	 323.00 ft.	\				
FLOOR AREA RATIO							
MINIMUM FRONT SETBACK MINIMUM SIDE SETBACK	20 ft. 15 ft.	0 ft. 70.5 ft.					rrson ad 151 rrson 22 ad 151
MINIMUM REAR SETBACK  MAXIMUM NUMBER OF STORIES	25 ft. 3	353.1 ft.	QUANNAPOWIT	LAKESIDE OFFICE PARK			nd Nickerso ana Lopez ditto Road MA 02151 ant: nd Nickerso ana Lopez ditto Road
MAXIMUM HEIGHT	35 ft.	< 37 ft.		ARD ARD		A D	1 – (0 – , (0 – (0 – ,
MAXIMUM BUILDING COVERAGE MINIMUM OPEN AREA	40%	5.3% 87%	PARKWA			ORE	Owner Raymo And Do 26 Ven Revere Applica Raymo And Do 26 Ven Revere
DISTANCE BETWEEN BUILDINGS  ZONING TABLE MULTIPLE	T RESIDENCE MR-1	NA 2		$\overline{\mathbf{x}}$		SHOW THE PROPERTY OF THE PROPE	ıction
DIMENSIONAL CONTROL	REQUIRED/ALLOWED						0070 E70 eview ermit onstru
MINIMUM LOT AREA  MAXIMUM DENSITY	60,000 ft <sup>2</sup>	220,547 ft <sup>2</sup>					SAAKE-C WAK   for R
FRONTAGE & WIDTH	180 ft.	323.00 ft.					MEM MEM JPS er: CF er: W/ older: Issued
FLOOR AREA RATIO MINIMUM FRONT SETBACK	30 ft. <sup>3</sup>	9.1 ft.					1 By: MEM 1 By: CF 1 anage: 1
MINIMUM SIDE SETBACK MINIMUM REAR SETBACK	30 ft. <sup>3</sup>	68.4 ft. 353.1 ft.		NORTH AVENUE			signed wn By: iewed ject Mage File N wing F Draw
MAXIMUM NUMBER OF STORIES  MAXIMUM HEIGHT	5 50 ft.	3 < 37 ft.					Des Dray Revi Proj Job Dray
MAXIMUM BUILDING COVERAGE	35% 4	5.3%		/ #600 #598			
MINIMUM OPEN AREA  DISTANCE BETWEEN BUILDINGS	30% 50 <sup>5</sup>	87% NA					
	NG SEPARATION BETWEEN B R ZONING DISTRICTS. ADDIT TRUCTURES, OTHER THAN F HE SR AND SSR ZONING DI	IONALLY, ALL ENCES, TO BE ISTRICTS MUST		BUSINESS (B)  SINGLE RESIDENCE	WICO. WITCO.	IS MOII	AL
ON ANY ABUTTING PARCEL. TH REDUCTION OF ANY SETBACK I REQUIREMENTS.  2. SEE § 190-31 FOR COMPLETI ATTACHED DWELLINGS.  3. OR HEIGHT OF BUILDING, WHICE	REQUIREMENTS BUT MAY IN	PERMIT THE CREASE THOSE		以 以 以 以 上 O C U S	KNIGHTS OF COLUMBUS		SE
4. COVERED PARKING GARAGES S COVERAGE, EXCEPT THAT BUILI SHALL NOT EXCEED 70%. 5. OR HEIGHT OF TALLER BUILDIN	SHALL NOT COUNT AS PART DING COVERAGE INCLUDING NG, WHICHEVER IS GREATER.	OF BUILDING PARKING GARAGES . (SEE § 190–31		NOZ BIJ LOCUS			
FOR REQUIREMENTS FOR INDIV PROJECT NOTES:  1. EXISTING TOPOGRAPHIC INFOR INSTRUMENT SURVEY PERFORI IN OCTOBER 2020.  2. ALL ELEVATIONS SHOWN ARE	RMATION IS THE RESULT OF MED BY WILLIAMS & SPARA	AN ACTUAL GES, LLC CONDUCTED			/ MBTA COMMUTER RAIL - / MBTA CHILL LINE / HAVERHILL LINE		
DATUM OF 1988 (NAVD88). 3. UTILITIES SHOWN ARE THE RE PERFORMED BY WILLIAMS & S REPRESENTATION OR WARRANT LOCATION OF THE SUBSURFACE	ESULT OF AN ACTUAL INSTR SPARAGES, LLC AND FROM TEE IS MADE AS TO THE AC CE UTILITIES DEPICTED OR I	UMENT SURVEY VARIOUS PLANS. NO CCURACY OF THE NOT DEPICTED AND		B PO.			12 11 11 10 9 9 8 8/2022 7
SHOULD BE CONSIDERED APP CONSTRUCTION.  4. ALL UTILITIES SHALL BE VERII TO THE START OF CONSTRUC REPRESENTATIVE IF EXISTING THE PLAN THAT WILL PREVEN	FIED IN THE FIELD BY THE CTION AND SHALL NOTIFY TH CONDITIONS DIFFER FROM TO THE PROPOSED WORK FE	CONTRACTOR PRIOR IE OWNER'S THOSE SHOWN ON ROM BEING		DEE RO			PLAN TMENTS WAKEFIELD, MA
COMPLETED AS INTENDED.  5. IF DURING CONSTRUCTION A UTILITY AND PROPOSED WORK REPRESENTATIVE IN WRITING F  6. CONTRACTOR TO CALL DIGSAF TICKET AND/OR VERIFY TICKE	K THE CONTRACTOR SHALL FOR RESOLUTION OF THE C FE PRIOR TO CONSTRUCTION	NOTIFY THE OWNER'S ONFLICT. I (811), TO UPDATE		Z-Z- 			PARTIA AVENUE, WA Layout/Grading/L
FROM THE DATE OF ISSUE. B INDEFINITELY, PROVIDED THAT WORK IS CONTINUOUS. 7. THE PROPOSED WATER CONN DESIGNED IN ACCORDANCE WI	BEYOND THIS POINT, TICKETS 1) THE MARKS ARE MAINT, ECTION SIZE, TYPE & LOCA	S ARE VALID  AINED, AND 2) THE  TION ARE TO BE	POLIT				LOCAT NORTH A 572-596 NORTH A 572-596 NORTH A 572-596 1
8. THE CONTRACTOR SHALL VER ARCHITECTURAL SPECIFICATION 9. THE APPLICANT SHALL COORE TO ENSURE PROPER DOMESTI 10. VERIFY ROOF DRAIN LOCATION	NS PRIOR TO THE START OF DINATE WITH THE WAKEFIELD IC AND FIRE FLOWS PRIOR NS WITH ARCHITECTURAL PL	F CONSTRUCTION. WATER DEPARTMENT TO BUILDING PERMIT. ANS.	128/95				NOF NOF 572-5 0' 20 1"=100' R 2, 2020
11. THE CONTRACTOR IS RESPON PROPERTIES FROM DAMAGE IN 12. THE FOUNDATION PERIMETER WITH 780 CMR 5405 (THE M 13. PROPERTY DOES NOT LIE WIT OR ZONE AE) AS SHOWN ON	N RELATION TO ALL PROPOS DRAIN SHALL BE INSTALLED IASSACHUSETTS STATE BUILD THIN A SPECIAL FLOOD HAZA	SED IS SITE WORK.  IN ACCORDANCE  DING CODE).  ARD AREA (ZONE A					50' 10 SCALE: DECEMBE
25017C0314E, EFFECTIVE DAT 14. PORTION OF PROPERTY LIES SUPPLY (ZONE A).	TE: JUNE 4, 2010.		5				C1.1
			0, 2003 o				AWING:
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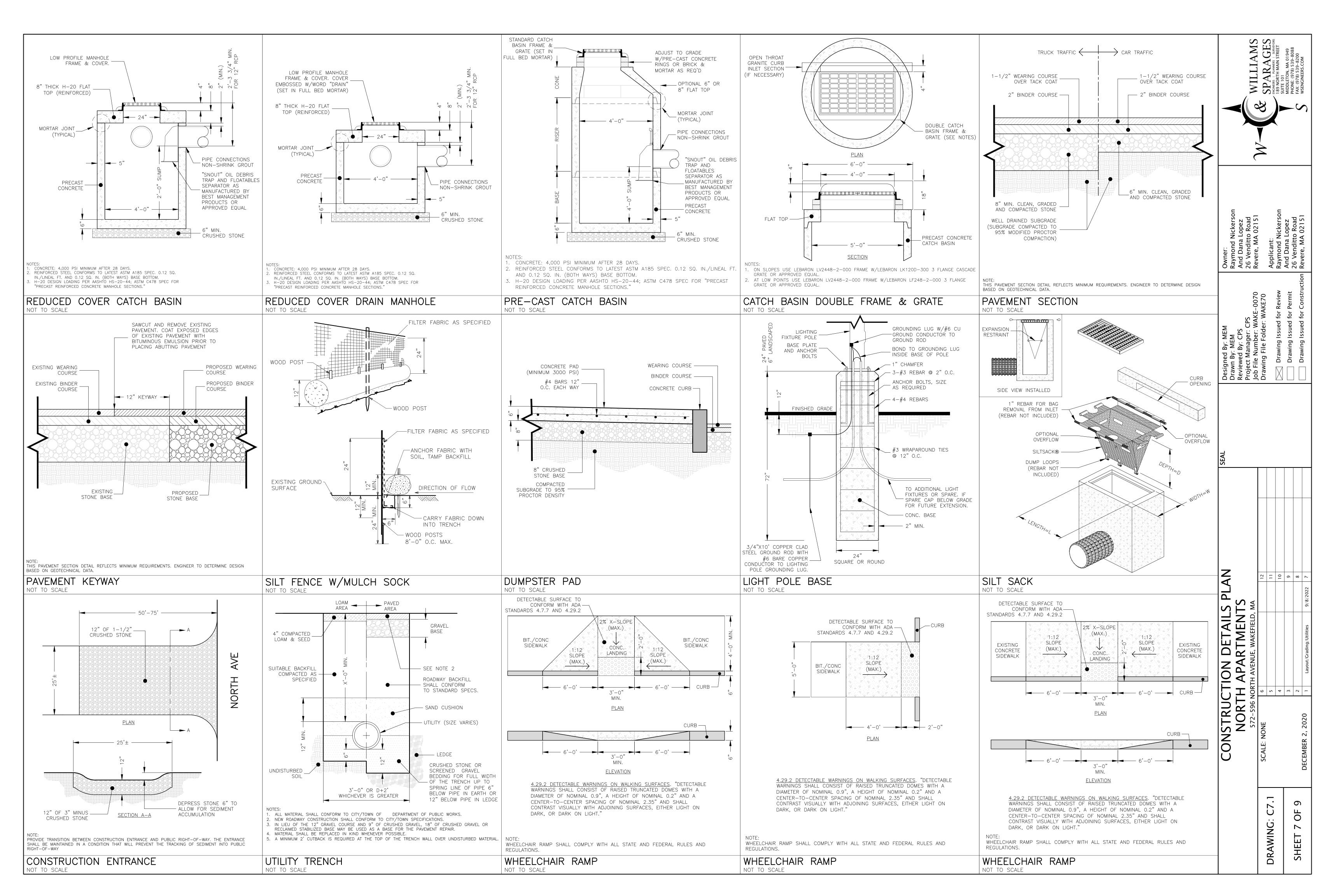


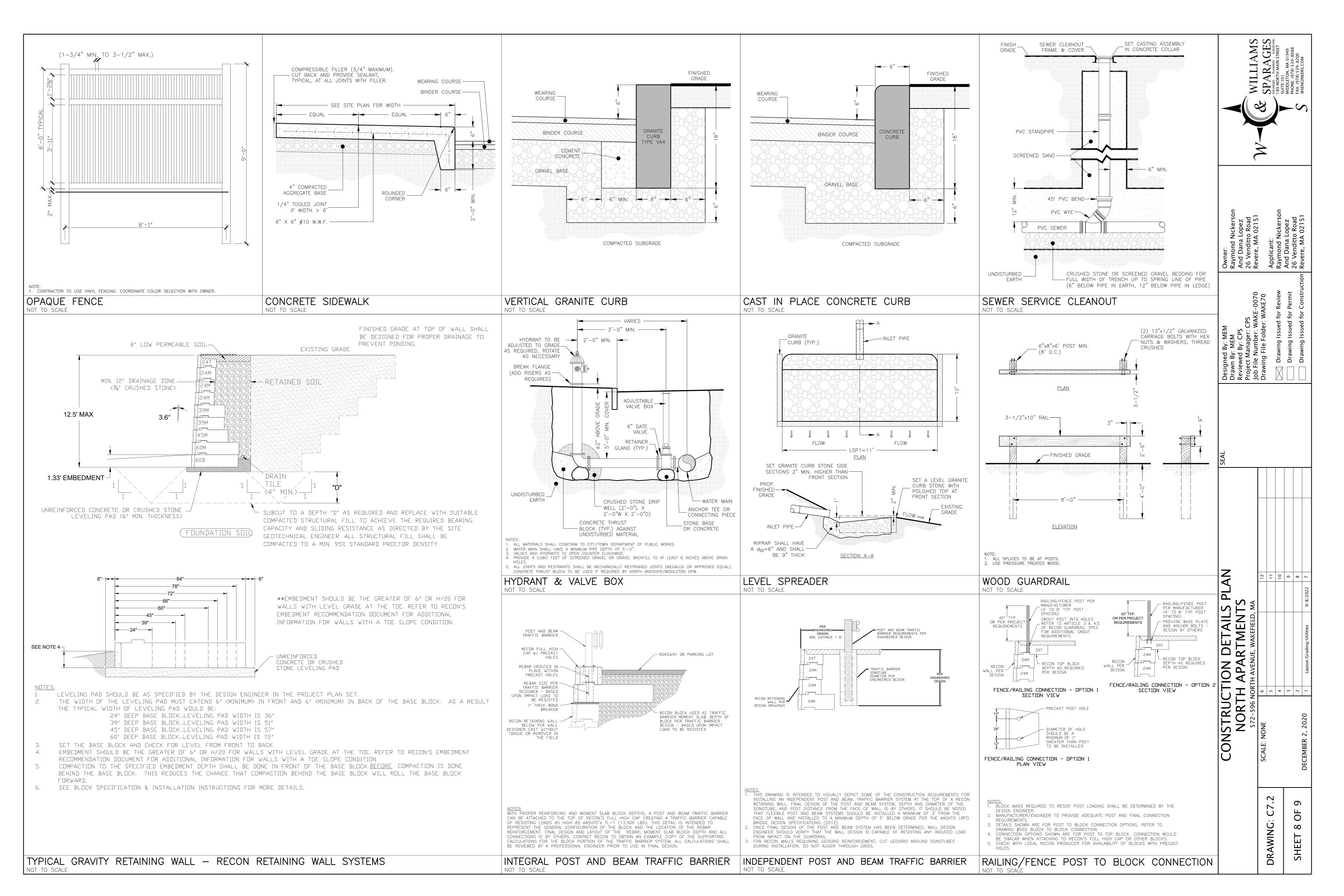


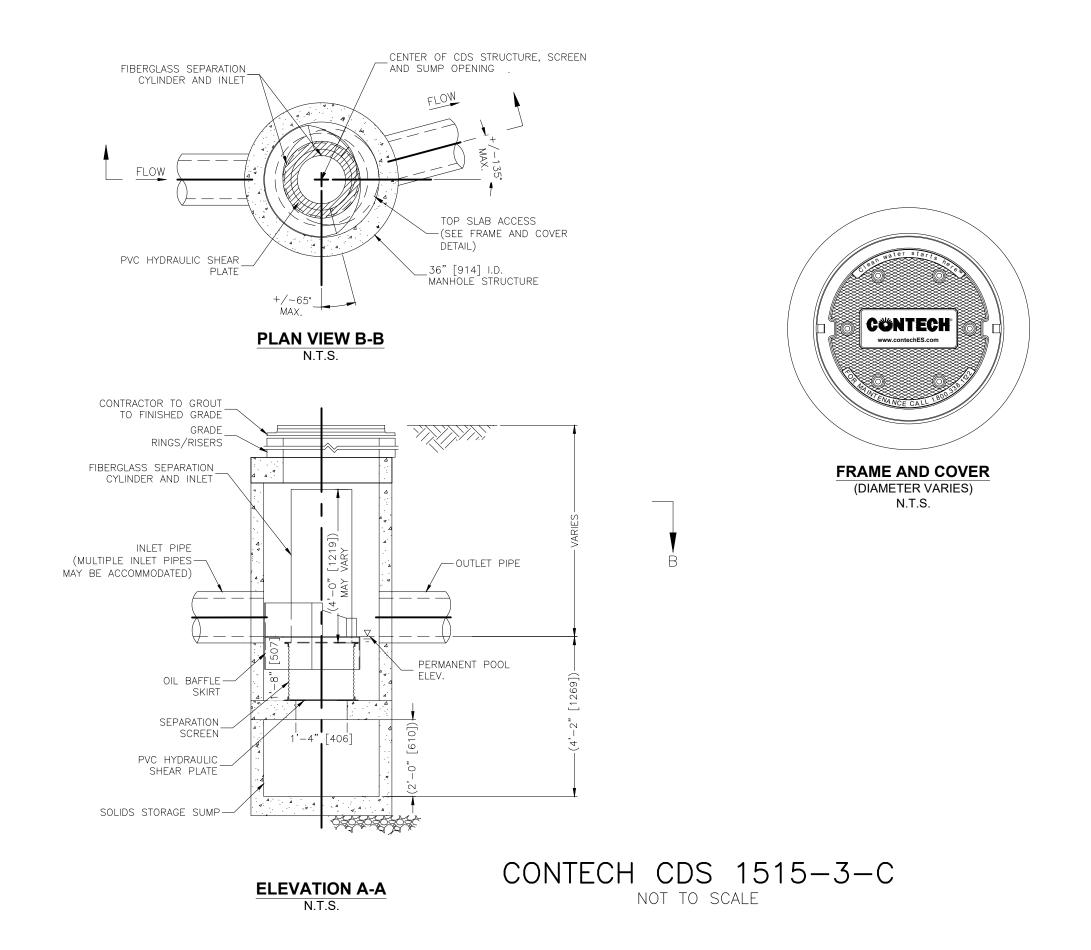












. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.

REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

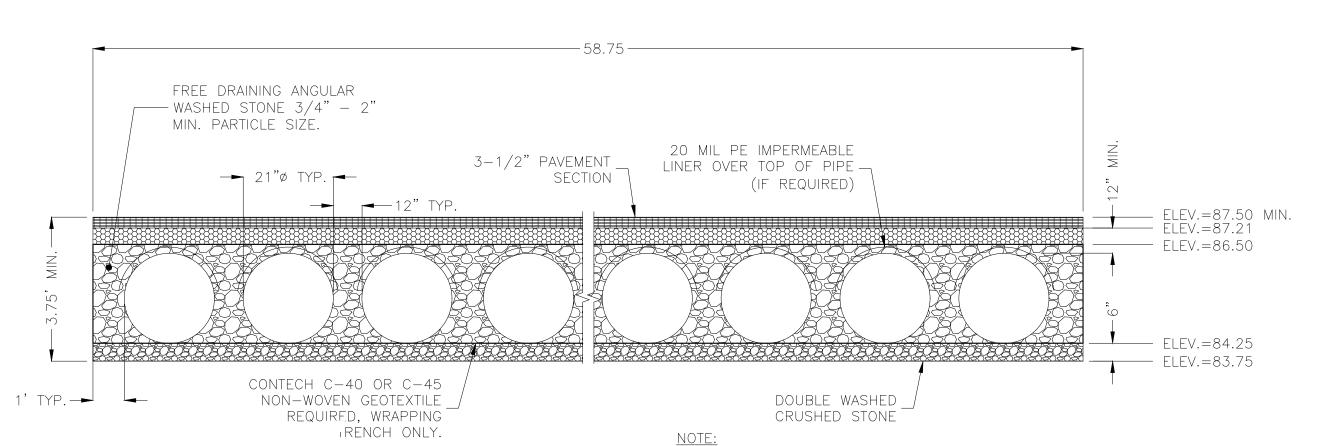
- 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR
- CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com 3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION
- CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT 4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE
- CONTECH LOGO. 5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER.
- 6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR

## INSTALLATION NOTES

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN
- CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET
- THE CDS MANHOLE STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.

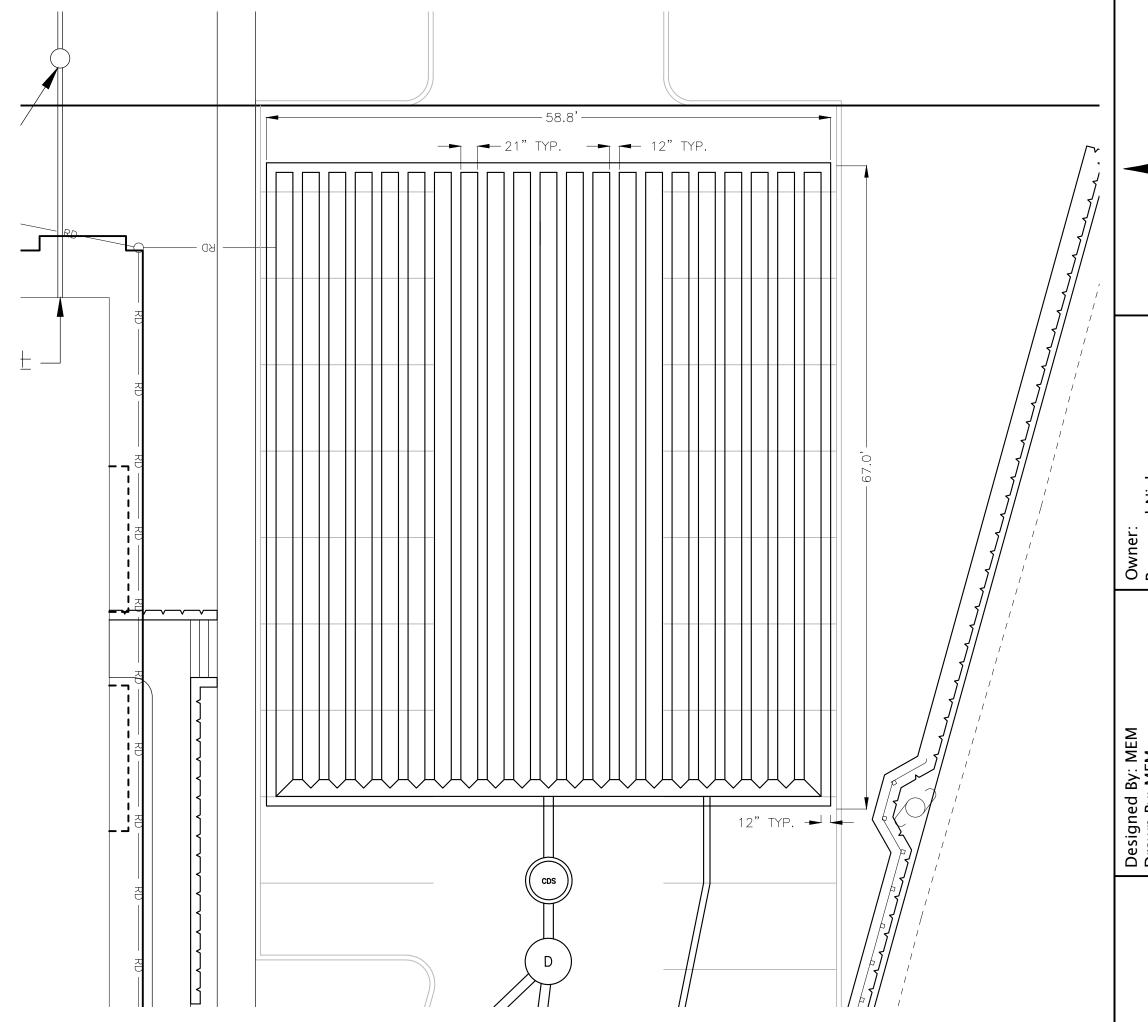
  CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.

  CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO
- FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



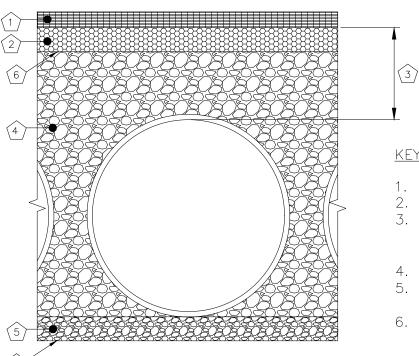
TYPICAL CONTECH CMP DETENTION SYSTEM SECTION NOT TO SCALE

1. IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.



PLAN VIEW

SCALE: 1"=10'



1. RIGID OR FLEXIBLE PAVEMENT 2. GRANULAR ROAD BASE

3. 12" MIN. FOR DIAMETERS THROUGH 96" 18" MIN. FOR DIAMETERS FROM 102" AND LARGER MEASURED TO TOP OF RIGID OR BOTTOM OF FLEXIBLE

4. FREE DRAINING ANGULAR WASHED STONE 3/4" - 2" MIN. PARTICLE SIZE. 5. GRANULAR BEDDING, ROUGHLY SHAPED TO FIT THE BOTTOM OF PIPE, 4"- 6" IN DEPTH.

6. CONTECH C-40 OR C-45 NON-WOVEN GEOTEXTILE REQUIRED, WRAPPING TRENCH ONLY.

## FOUNDATION/BEDDING PREPARATION

PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION PREPARATION IS COMPLETE, THE 4 INCHES OF A WELL-GRADED GRANULAR MATERIAL SHALL BE PLACED AS THE

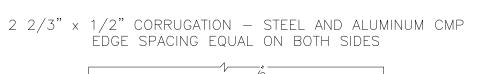
## **BACKFILL**

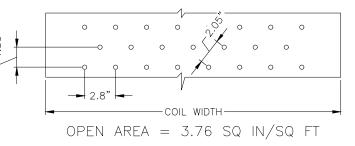
THE BACKFILL MATERIAL SHALL BE FREE-DRAINING ANGULAR WASHED STONE 3/4" - 2" PARTICLE SIZE. MATERIAL SHALL BE PLACED IN 8"-10" MAXIMUM LIFTS. MATERIAL SHALL BE WORKED INTO THE PIPE HAUNCHES BY MEANS OF SHOVEL-SLICING, RODDING, AIR-TAMPER, VIBRATORY ROD, OR OTHER EFFECTIVE METHODS COMPACTION IS CONSIDERED ADEQUATE WHEN NO FURTHER YIELDING OF THE MATERIAL IS OBSERVED UNDER THE COMPACTOR, OR UNDER FOOT, AND THE PROJECT ENGINEER OR HIS REPRESENTATIVE IS SATISFIED WITH THE LEVEL OF COMPACTION. INADEQUATE COMPACTION CAN LEAD TO EXCESSIVE DEFLECTIONS WITHIN THE SYSTEM AND SETTLEMENT OF THE SOILS OVER THE SYSTEM. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO-LIFT DIFFERENTIAL BETWEEN THE SIDES OF ANY PIPE IN THE SYSTEM AT ALL TIMES DURING THE BACKFILL PROCESS. BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON ANY PIPES IN THE SYSTEM.

EQUIPMENT USED TO PLACE AND COMPACT THE BACKFILL SHALL BE OF A SIZE AND TYPE SO AS NOT TO DISTORT, DAMAGE, OR DISPLACE THE PIPE. ATTENTION MUST BE GIVEN TO PROVIDING ADEQUATE MINIMUM COVER FOR SUCH EQUIPMENT, AND MAINTAINING BALANCED LOADING ON ALL PIPES IN THE SYSTEM, DURING ALL SUCH OPERATIONS.

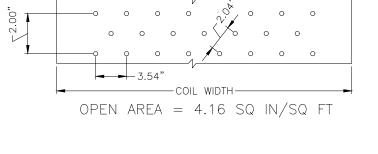
OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS. REFER TO TYPICAL BACKFILL DETAIL FOR MATERIAL

> BACKFILL NOT TO SCALE





3" x 1" CORRUGATION - STEEL AND ALUMINUM CMP (COIL PROVIDED FROM CONTECH LANTANA, FL PLANT) 0,000



5" x 1" CORRUGATION — STEEL ONLY

EDGE SPACING EQUAL ON BOTH SIDES 0 0 0 0 0 0 0 0 0 —9@2.711" = 24.399"<del>-----</del> ∠<sub>2.711"</sub> OPEN AREA = 3.33 SQ IN/SQ FT

- 1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS. 2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE. 3. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING
- TOLERANCES. 4. ALL HOLES Ø3/8".

PERFORATION NOT TO SCALE

N V 1 0 9 8 7 DETAIL! CONSTRUCT
NORTH
572-596 NO 6 DRAWING: 6 SHEET