<u>WATER LEGEND</u>						
DESCRIPTION	EXISTING	PROPOSED				
WATER MAIN		IO"W				
SINGLE SERVICE LATERAL						
DOUBLE SERVICE LATERAL	>	>				
VALVE AND BOX	\otimes	•				
FIRE HYDRANT W/VALVE & BOX	×-¢-	••				
POST HYDRANT	Ĥ)				
REDUCER	\Box					
BACKFLOW PREVENTOR						
CROSS		I				
TEE						
90° BEND - HORIZONTAL						
45° BEND - HORIZONTAL	/	× 1				
22-½° BEND - HORIZONTAL	/	/				
I-¼° BEND - HORIZONTAL	/	1				
BEND - VERTICAL						
САР						

ENERAL NOTES (APPLY TO	ALL CIVIL WORK)			
FIELD VERIFY ALL EXIST CONSTRUCTION.	ING CONDITIONS AND	DIMENSIONS PRIO	OR TO THE BEGINNING	OF DEMOLITION AND/OR

- 2. CONTRACTOR SHALL PHYSICALLY VERIFY PLAN LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF DEMOLITION AND/OR CONSTRUCTION VIA THE USE OF TEST PITS OR SOFT DIGS.
- 3. PROTECT ALL EXISTING UTILITIES AND CONSTRUCTION TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES. 4. ALL EXISTING SURFACES TO REMAIN OR NEW WORK, THAT IS DAMAGED DURING DEMOLITION OR
- CONSTRUCTION ACTIVITIES SHALL BE REPAIRED TO MATCH EXISTING ADJACENT SURFACES. 5. BEFORE YOU DIG, STOP. CALL THE NC ONE-CALL CENTER AT 811 AND COORDINATE LOCATION OF PUBLIC
- UTILITIES. 6. NO SOIL DISTURBANCE OR COMPACTION, STOCK PILING OF SOIL OR OTHER CONSTRUCTION MATERIALS, VEHICULAR TRAFFIC, OR PARKING OR STORAGE OF HEAVY EQUIPMENT ARE ALLOWED WITHIN THE CRITICAL
- ROOT ZONE OF PROTECTED TREES. NO WORK SHALL BEGIN UNTIL TREE PROTECTION BARRICADES HAVE BEEN INSTALLED. BARRICADES TO REMAIN UNTIL AFTER ALL DEVELOPMENT ACTIVITIES ARE COMPLETED. 7. STORM DRAINAGE STRUCTURES AND SANITARY SEWER MANHOLE COORDINATES ARE LOCATED AT CENTER OF GRATE OR MANHOLE. ALL LINEAR FOOTAGE OF ALL UTILITY PIPES SHOWN ARE APPROXIMATE. ACTUAL
- INSTALLED QUANTITIES MAY VARY. PIPE LENGTHS PROVIDED ARE HORIZONTAL MEASUREMENTS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTHS THAT TERMINATE WITH A FLARED END SECTION INCLUDE THE LENGTH OF THE FLARED END SECTION. 8. CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES
- ON OR ADJACENT TO THE WORK SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES, DRAINAGE GRATES, VALVE BOXES, VAULT LIDS, ETC. AS REQUIRED TO MATCH FINISHED GRADES, AGENTS INSTALLING ALL OTHER UTILITIES SHALL BE RESPONSIBLE FOR MATCHING FINISH GRADE WITH ANY NEW SURFACE STRUCTURE OR SURFACE ACCESS SERVING THEIR INSTALLED FACILITIES.
- 9. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT COVERED UNDER THESE CIVIL PLANS (ELECTRIC, TELEPHONE, GAS, STEAM, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED. ALL PLANNED AND EXISTING UTILITIES ROUTINGS AND DEPTHS SHALL BE COORDINATED PRIOR TO ANY INSTALLATIONS.
- IO. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDOT, NCDEQ, AND LOCAL STANDARDS. WHEN SPECIFICATIONS ARE IN CONFLICT, THE STRICTER SPECIFICATION SHALL BE HELD.
- . RIM ELEVATIONS GIVEN ON THESE PLANS ARE APPROXIMATE AND ARE FOR INFORMATIONAL PURPOSES ONLY, ACTUAL RIM ELEVATIONS SHALL BE ADJUSTED BY CONTRACTOR TO MATCH FIELD CONDITIONS. THE TOP 12" OF ALL NEW CONCRETE STRUCTURES SHALL BE BRICK CONSTRUCTION OR OBTAINED WITH PRECAST GRADE RINGS TO ALLOW FOR ADJUSTMENT AS NECESSARY. STRUCTURES SHALL BE ADJUSTABLE +/- 12" FROM THE RIM ELEVATION PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- 12. ALL SHORING SHALL BE IN ACCORDANCE WITH OSHA TRENCHING STANDARDS, PART 1926 SUBPART P, AS AMENDED. 13. ALL LANE OR ROAD CLOSURES THAT ARE REQUIRED SHALL FOLLOW THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR TRAFFIC CONTROL MEASURES (MUTCD).
- EROSION CONTROL NOTES: . THE GRADING CONTRACTOR SHALL USE WHATEVER MEASURES ARE REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING BEYOND THE DENUDED LIMITS SHOWN ON THE PLANS. CONTRACTOR SHALL COMPLY WITH ALL LOCAL. STATE AND FEDERAL EROSION SEDIMENT AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND NOT BEFORE ALL AREAS DRAINING TO THESE FACILITIES ARE SUFFICIENTLY STABILIZED. CONTRACTOR SHALL FINE GRADE AND STABILIZE ALL AREAS WHERE TEMPORARY EROSION CONTROL MEASURES WERE REMOVED AND REMAIN VIGILANT IN CARE AND MONITORING UNTIL ALL
- AREAS ARE FULLY STABILIZED. 2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NC EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, US DEPARTMENT OF AGRICULTURE, AND ALL LOCAL STANDARDS. WHEN SPECIFICATIONS ARE IN CONFLICT, THE STRICTER SPECIFICATION SHALL BE HELD.
- 3. LOCATE ANY STOCKPILED TOPSOIL OR SUBSOIL WITHIN THE DENUDED LIMITS AND ABOVE THE SEDIMENT BASINS. FOR SMALL DISTURBED AREAS WITHOUT A SETTLING BASIN, ALL DISTURBANCES AND STOCKPILES SHALL BE WITHIN THE PERIMETER SILT FENCE.
- 4. REFER TO SHEET C3.I FOR GRADING AND STORM DRAINAGE INFORMATION.
- 5. INLET PROTECTION IS REQUIRED FOR ALL INLETS LOCATED WITHIN THE WORKING AREA AND ANY INLETS DIRECTLY DOWNSTREAM WHICH COULD BE IMPACTED 6. INLET PROTECTION IS REQUIRED FOR ALL PHASES OF THE PROJECT AND UNTIL THE DISTURBED AREA IS FULLY STABILIZED.
- 7. THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO PREVENT TRACKING OF MUD/SOIL ONTO ADJACENT ROADWAYS. ANY MUD/SOIL TRACKED ONTO ROADWAYS SHALL BE CLEANED DAILY. CONSTRUCTION ENTRANCES SHALL BE MONITORED DAILY AND REDRESSED PERIODICALLY AS NEEDED. 8. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL CONSTRUCTION ACTIVITY REQUIREMENTS
- OUTLINED IN THE CURRENT NCDEQ GENERAL PERMIT NCG 010000. ALL MONITORING, SELF-INSPECTIONS, RECORD KEEPING, AND CORRECTIVE ACTIONS MUST BE FOLLOWED AS DIRECTED. 9. ALL UTILITY AND STORM DRAINAGE EXCAVATIONS ARE TO BE CLOSED AT THE END OF EACH DAY.
- IO. AIRBORNE DUST SEDIMENTATION MUST BE CONTROLLED ONSITE. ALL DISTURBED AREAS ARE TO BE STABILIZED PER THE NCDEQ STABILIZATION SCHEDULE. ALL AREAS OF TRAFFIC AND DISTURBED AREAS THAT HAVE NOT YET BEEN STABILIZED WITH A STAND OF GRASS OR MULCH, MUST BE WATERED DOWN AS NEEDED DURING DRY PERIODS TO PREVENT AIRBORNE DUST MIGRATION OFF-SITE. STOCK PILES THAT ARE NOT STABILIZED SHOULD BE COVERED. WATERING EFFORTS PREVENT DUST FOR A SHORT PERIOD OF TIME AND SHOULD BE APPLIED DAILY IF NOT MULTIPLE TIMES A DAY DEPENDING ON DURATION OF DRY PERIOD AND WIND CONDITIONS.
- GRADING AND DRAINAGE NOTES CONTRACTOR SHALL TAKE CARE TO MAKE SMOOTH FLOWING TRANSITIONS AT NEW AND EXISTING ASPHALT TIES. SLOPE BETWEEN FIXED SPOT ELEVATIONS SHALL BE CONSTANT UNLESS OTHERWISE SPECIFIED.
- 2. ALL MATERIAL TYPES OF ALL PROPOSED STORM DRAINAGE PIPE SHALL BE PROPERLY BEDDED .
- 3. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES TO TOP OF PAVEMENT OR TOP OF SOIL

- SUBBASE ELEVATION.
- 5. ALL NEW PAVEMENT AREAS SHALL HAVE POSITIVE DRAINAGE SUCH THAT ALL RUNOFF WILL DRAIN ACROSS

- OWNER IF SHOWN ORIENTATIONS ARE NOT OBTAINED.

- AND VERTICALLY SPACED AS REQUIRED.
- OF PROJECT
- DEMOLITION NOTES
- CONFERENCE.
- CONTRACTOR
- DEMOLITION OF THOSE ITEMS.
- I. ALL EXPANSION JOINTS ARE TO BE SEALED. REFER TO SPECIFICATIONS.
- 4. IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
- STAKING
- REMOVED AND REINSTALLED AT NO ADDITIONAL COST TO THE OWNER.
- 7. MAXIMUM ELEVATION CHANGE AT HANDICAP ACCESSIBLE DOORS SHALL NOT EXCEED $rac{1}{4}"$ VERTICAL OR $rac{1}{2}"$ BEVELED AT 1:2. 8. NO PAVEMENT STRIPING SHALL OCCUR UNTIL AFTER PAVING HAS CURED 30 DAYS.
- CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- UTILITY NOTES

- 4. NEW EARTHWORK SHALL BE BLENDED SMOOTHLY TO TIE INTO EXISTING GRADE
- PAVEMENT TO NEW OR EXISTING DRAINAGE FEATURES OR SHEET FLOW OVERLAND.
- BASINS AND MANHOLES. REFER TO DETAIL B2/C2.3.
- THAN 6" ON LANDSCAPE PLANS, FOLLOW LANDSCAPE PLANS.

- NOTED AS OPTIONAL, CONTRACTOR MUST PROVIDE THE MATERIAL CALLED OUT ON THE PLANS

- PARAPETS, CAPS, SEAT WALL AND SCREEN WALL SECTIONS. 15. ALL SPOT ELEVATIONS SHOWN WITHIN PAVED AREAS AND ALONG CURBS REPRESENT TOP OF PAVEMENT (TP) OR BOTTOM OF CURB (BC) UNLESS OTHERWISE INDICATED
- PRIOR TO ANY DEMOLITION OR CLEARING ACTIVITY, ALL PROPOSED EROSION CONTROL MEASURES ARE TO
- 2. CONTRACTOR SHALL SUPPLY DESIGNER A SITE LOGISTICS PLAN THAT LOCATES ALL FENCED IN AREAS, GATE ACCESSES, SIGNAGE, ETC. PRIOR TO DEMOLITION.
- 3. ALL REMOVED MATERIAL, UNLESS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE
- 5. ALL PAVEMENT CUTS SHALL BE MADE BY SAW CUT.
- PERMITTED LANDFILL OR ANOTHER PERMITTED SITE. <u>LAYOUT NOTES</u>

- 3. ALL CURB RADII SHALL BE 2'-6" UNLESS OTHERWISE NOTED.

DRAINAGE LEGEND								
DESCRIPTION	EXISTING	PROPOSED						
PIPE	_ · _ · _ · _ · _ · _ · _ · _							
DITCH		── ► · · · ─ ──						
CONTROL STRUCTURE (CS)								
DITCH INLET (DI)								
GRATE INLET (GI)		E						
HOODED INLET (HI)	OR	OR 📑						
JUNCTION BOX (JB)	\bigcirc							
MANHOLE (SDMH)	0	۲						
ROLL CURB INLET (RC)								
ROOF INLET (RI)	\bigcirc							
VALLEY INLET (VI)								
YARD INLET (YI)	8	8						
BEVELED END SECTION (BES)	Ы							
END SECTION (ES)	А							
FLARED END SECTION (FES)	А							
II-¼° BEND - HORIZONTAL	/	/						
22-½° BEND - HORIZONTAL	/	/						
45° BEND - HORIZONTAL	/	1						
90° BEND - HORIZONTAL								
CLEANOUT	Он	•						
PLUG								

	<u>ABBREVIATIONS</u>									
DBL	DOUBLE		FM	FORCE MAIN (SANITARY SEWER)		ос	ON CENTER		SS	SANITARY SEWER
вот	воттом		FP	FINISH PAD		PC	POINT OF CURVE		тс	TOP OF CURB
СВ	CATCH BASIN		FR	FRAME		РН	POST HYDRANT		TE	TOP ELEVATION
CI	CURB INLET		GI	GRATE INLET		PT	POINT OF TANGENT		TG	TOP OF GUTTER
C0	CLEAN OUT		GV	GATE VALVE		PVC	POLYVINYL CHLORIDE		ТР	TOP OF PAVEMENT
СРР	CORRUGATED PLASTIC PIPE		HDPE	HIGH DENSITY POLYETHYLENE		RCP	REINFORCED CONCRETE PIPE		τw	TOP OF WALK
DBL	DOUBLE		HD	HOOD ELEVATION		RC	ROLL CURB INLET		ТҮР	TYPICAL
DI	DITCH INLET		н	HOODED INLET		RCP	REINFORCED CONCRETE PIPE		VI	VALLEY INLET
DIP	DUCTILE IRON PIPE		INV	INVERT ELEVATION		RI	ROOF INLET		w	WATER
EL	ELEVATION		JB	JUNCTION BOX		RJP	RESTRAINED JOINT PIPE		W/	WITH
ES	END SECTION		LF	LINEAR FEET		R/W	RIGHT-OF-WAY		wv	WATER VALVE
FES	FLARED END SECTION		МАХ	MAXIMUM		SD	STORM DRAINAGE		YI	YARD INLET
FG	FINISH GRADE		MIN	MINIMUM		SDMH	STORM DRAINAGE MANHOLE			
FH	FIRE HYDRANT		мн	MANHOLE		SF	SQUARE FEET			

	<u>sewer lege</u>	<u>ND</u>
DESCRIPTION	EXISTING	
GRAVITY PIPE	\$\$	
MANHOLE	\bigcirc	
CLEANOUT	⊖H	

OTHER UTILITIES LEGENE									
DESCRIPTION	EXISTING								
NATURAL GAS	UGG UGG								
TELEPHONE	ОНТ ОНТ								
UNDERGROUND TELEPHONE	UTL UTL								
ELECTRICITY	OHP OHP								
UNDERGROUND ELECTRICITY	UGP UGP								

GENERAL NOTES

IN PLANTING/GRASS AREAS. REFER TO PAVEMENT CROSS SECTION DETAILS TO ESTABLISH CORRECT

6. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR BUILDING AND RETAINING WALL FOUNDATION DRAIN LOCATIONS, PIPE SIZES, AND MATERIALS. REFER TO CIVIL PLANS FOR EXTENSION OF FOUNDATION DRAIN LINES FROM WALL TO OUTFALL LOCATION. ALL FOUNDATION DRAIN LINES WHICH CONNECT TO THE PROPOSED STORMWATER SYSTEM RATHER THAN DISCHARGING TO GRADE SHALL HAVE A BACKWATER VALVE AT THE TIE-IN LOCATION. A TERMINAL TYPE BACKWATER VALVE SHALL BE INSTALLED AT CATCH

7. ANY PROPOSED GRASSED (SEEDED OR SODDED), MULCHED OR PLANTING AREA SHALL BE LEFT 6" BELOW FINISHED GRADES SHOWN. THE FINAL 6" IN ALL DISTURBED AREAS SHALL BE A 6" LAYER OF TOPSOIL. BEFORE PLACING THE TOPSOIL, THE TOP 6" OF THE SUBGRADE SHALL BE UNCOMPACTED WITH ALL STONE AND CONSTRUCTION DEBRIS REMOVED. WORK THE FIRST 3" OF TOPSOIL INTO THE TOP 3" OF LOOSENED SUBGRADE BEFORE SPREADING THE FINAL 3" OF TOPSOIL. IF TOPSOIL SECTION IS INDICATED AS GREATER

8. ALL DRAINAGE STRUCTURES SHALL BE GROUTED TO THE INVERT OF THE OUTFLOW PIPE TO ELIMINATE ANY SUMP CONDITION. ALL PIPE PENETRATIONS SHALL BE FLUSH WITH THE STRUCTURE WALL AND GROUTED. 9. DRAINAGE STRUCTURE ORIENTATION SHALL BE AS SHOWN ON THE DRAWINGS. GRATES ARE TYPICALLY SHOWN SET SQUARE TO THE ADJACENT WALK EDGE, BUILDING FACE, OR CURBLINE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING THE DRAINAGE STRUCTURE AT NO ADDITIONAL COST TO THE

IO. ALL ROOF LEADERS TO BE EITHER SCH. 40 PVC, SMOOTH WALL HDPE, OR DUCTILE IRON PIPE. ALL ROOF LEADERS SHALL HAVE A 1% MINIMUM SLOPE AND MAINTAIN A 24" MIN. COVER (18" MIN. IN NON-VEHICULAR AREAS WITH SCH. 80 PVC OR DUCTILE IRON, AND 48" MIN. FOR PVC WITHIN VEHICULAR AREAS). REFER TO DETAIL AI/C2.3 FOR CLEANOUTS. ALL ROOF LEADERS SHALL CONNECT TO MAIN LINES WITH WYE FITTINGS STORM DRAINAGE PIPING: IF NOTED AS OPTIONAL, THE CONTRACTOR MAY PROVIDE EITHER CLASS III RCP OR SMOOTH WALL HDPE. INSTALL HDPE AS PER MANUFACTURER'S RECOMMENDATIONS. BEDDING SHALL BE INSTALLED FOR ALL STORM DRAINAGE PIPE. ALL PIPE DEEPER THAN IO' SHALL BE CLASS III RCP. IF NOT

12. ALL SLOPES 3:1 AND GREATER AND ALL GRASSED CHANNELS AND SWALES SHALL BE STABILIZED WITH TEMPORARY EROSION CONTROL SYNTHETIC LINER. FOR INSTALLATION, ADDITIONALLY, A 6" DIAMETER STRAW WATTLE SHALL BE STAKED ALONG THE CONTOUR OF THE SLOPE BEGINNING AT THE TOP OF SLOPE

13. DRAINAGE GRATES ARE TO BE PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL PREVENT CONCRETE SPLASH, PAINT, OR OTHER DAMAGE FROM OCCURRING OR RESTORE/REPLACE AT COMPLETION

14. TW AND BW ELEVATIONS PROVIDED REFER ONLY TO THE GRADE ELEVATION AT THE WALL. REFER TO ARCH. AND STRUCT. PLANS OR SEGMENTAL WALL SHOP DRAWINGS FOR TOTAL WALL HEIGHT ABOVE GRADE FOR

BE INSTALLED, CLEARING OR DEMOING ONLY AS NECESSARY TO INSTALL THE DEVICES. IF REQUIRED BY AN ASSOCIATED EROSION CONTROL PERMIT BY NCDEQ OR THE LOCAL AUTHORITY. SET UP AN ON-SITE PRECONSTRUCTION CONFERENCE WITH THE EROSION CONTROL INSPECTOR FROM THE OFFICE REQUIRING THE

4. COORDINATE WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR

6. ALL BORROW OR WASTE SOIL BROUGHT INTO OR TAKEN FROM SITE SHALL BE TAKEN FROM OR TO A

2. ALL DIMENSIONS ARE TO FACE OF CURB OR TO FINISHED FACE OF BUILDING UNLESS OTHERWISE NOTED.

5. ANY BUILDING DIMENSIONS SHOWN ARE NOMINAL. CONSULT ARCHITECTURAL PLANS BEFORE ACTUAL FIELD

6. ALL SIDEWALKS, RAMPS AND ACCESSIBLE ROUTES SHALL HAVE A 1.5% MAXIMUM CROSS SLOPE. IN NO INSTANCE SHALL THE CROSS SLOPE EXCEED 2.0%. WORK WITH EXCESSIVE CROSS SLOPES SHALL BE

9. ALL HANDICAP PARKING SPACES AND ACCESS AISLES SHALL MAINTAIN A MAXIMUM SLOPE OF 1/4" PER I' IN ANY DIRECTION PER THE NC ACCESSIBILITY CODE. CONTRACTOR IS RESPONSIBLE FOR ACHIEVING POSITIVE DRAINAGE. FLAT AREAS OR AREAS OF EXCESSIVE SLOPE SHALL BE REMOVED AND REPLACED BY THE

I. ALL WATER AND SEWER WORK TO BE PERFORMED IN ACCORDANCE WITH NC DEQ AND LOCAL UTILITY

. REQUIRED WATER/SEWER SEPARATION: IO' LATERAL, UNLESS BOTTOM OF WATER MAIN >18" ABOVE TOP OF SEWER IN A SEPARATE TRENCH. WHEN THESE SEPARATIONS CANNOT BE MAINTAINED OR WHEN THE SEWER IS ABOVE THE WATER MAIN, BOTH THE WATER AND SEWER LINES SHALL BE CONSTRUCTED OF FERROUS MATERIALS WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A MINIMUM LATERAL DISTANCE OF IO FT ON EACH SIDE OF THE CROSSING.

PROVIDER'S STANDARDS AND SPECIFICATIONS.

- REQUIRED SEWER SEPARATION WITH OTHER UTILITIES: SEWER BELOW UTILITY: 24" CLEAR WITH STONE BEDDING FROM 6" BELOW SEWER TO 12" ABOVE SEWER, SEWER ABOVE UTILITY: 12" CLEAR, CLEARANCES MEASURED AS NOTED FOR WATER CONFLICTS. WHEN THESE SEPARATIONS CANNOT BE MAINTAINED, THE SEWER LINE SHALL BE CONSTRUCTED OF FERROUS MATERIAL WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A MINIMUM LATERAL DISTANCE OF 10 FT ON EACH SIDE OF THE CROSSING.
- 4. THERE SHALL BE NO TAPS, PIPING, BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS, OR OTHER WATER-USING APPURTENANCES CONNECTED ON THE SUPPLY SIDE OF ANY BACKFLOW PREVENTERS
- 5. EACH NEW BPA IS REQUIRED TO BE TESTED BY A CERTIFIED TESTER IN ACCORDANCE WITH THE LOCAL AUTHORITY PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
- 6. REFER TO LANDSCAPE PLANS FOR ALL PROPOSED SCREENING OF ABOVE GROUND BACKFLOW PREVENTERS ALL SANITARY SEWER LATERALS SHALL MAINTAIN A MIN. COVER OF 36" WITH CLEANOUTS AT 75' MAX. SPACING. MAINTAIN A MINIMUM SLOPE = I.O%. CLEANOUTS IN PAVED AREAS SHALL BE TRAFFIC BEARING CLEANOUTS. CLEANOUTS WITHIN UNIT PAVER AREAS SHALL HAVE BRASS CAPS. SEE DETAIL AI/C2.3.
- 8. ALL SANITARY SEWER PIPE SHALL BE BEDDED IN ACCORDANCE WITH DETAIL A2/C2.3. 9. ALL SEWER SERVICE LINES EXTENDED TO BUILDINGS SHALL TERMINATE WITH A CLEANOUT 5' FROM THE FACE OF THE BUILDING. THE PLUMBING CONTRACTOR SHALL MAKE THE CONNECTIONS.
- IO. DASHED WATER AND SEWER LINES REPRESENT LINES AND CONNECTIONS TO BE INSTALLED BY THE PLUMBING CONTRACTOR.
- ALL BENDS AND INTERSECTIONS IN WATER LINES SHALL HAVE CONCRETE BLOCKING. 12. ALL NEW UNDERGROUND UTILITY LINES INCLUDING LAWN IRRIGATION LINES, THAT ARE LOCATED OUTSIDE OF THE BUILDING FOOTPRINT ARE REQUIRED TO HAVE A CONTINUOUS WARNING TAPE INSTALLED IN THE BACKFILL DIRECTLY OVER THE UTILITY LINE 6" TO 24" BELOW FINISHED GRADE AND 6" BELOW SUBGRADE UNDER PAVEMENT SECTIONS. REFER TO SPECIFICATIONS DIVISION 31 FOR WARNING TAPE REQUIREMENTS. BOTH METALIC AND NON-METALIC PIPES, OTHER THAN GAS LINES, SHALL BE IDENTIFIED BY DETECTABLE MAGNETIC TYPE WARNING TAPE, MIN. 2" WIDE, WITH LETTERING TO IDENTIFY BURIED LINE BELOW. 2018 NC GAS CODE, SECTION 404.17.3 TRACER: AN INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR SHALL BE INSTALLED ADJACENT TO UNDERGROUND NONMETALLIC PIPING. ACCESS SHALL BE PROVIDED TO THE TRACER WIRE OR THE TRACER WIRE SHALL TERMINATE ABOVEGROUND AT THE END OF THE NONMETALLIC PIPING. THE TRACER WIRE SIZE SHALL NOT BE LESS THAN ISAWG AND THE INSULATION
- TYPE SUITABLE FOR DIRECT BURY. 13. ALL VALVE BOXES WITHIN YARD AREAS SHALL BE FLUSH WITH FINISHED GRADE AND PROTECTED WITH A PRECAST CONCRETE DONUT OR A FORMED CONCRETE PAD.
- 14. ALL UNDERGROUND UTILITIES, INCLUDING IRRIGATION AND METALIC PIPE SHALL HAVE TRACER WIRE INSTALLED CONTINUOUSLY ALONG THE TOP OF THE PIPE TAPED AT IO' MAXIMUM INTERVALS. TRACER WIRE SHALL BE BROUGHT UP AT ALL VAULTS, MANHOLES, VALVE BOXES, FIRE HYDRANTS, FREE STANDING FDC'S, ETC. AS SHOWN IN DETAIL BI/C2.3.
- 2018 NC PLUMBING CODE SECTION 306.2.4 TRACER WIRE. (190312 ITEM B-12): 306.2.4 TRACER WIRE. FOR PLASTIC SEWER PIPING, AN INSULATED COPPER TRACER WIRE OR OTHER APPROVED CONDUCTOR SHALL BE INSTALLED ADJACENT TO AND OVER THE FULL LENGTH OF THE PIPING. ACCESS SHALL BE PROVIDED TO THE TRACER WIRE OR THE TRACER WIRE SHALL TERMINATE AT THE CLEANOUT BETWEEN THE BUILDING DRAIN AND BUILDING SEWER. THE TRACER WIRE SIZE SHALL BE NOT LESS THAN 14 AWG AND THE INSULATION TYPE SHALL BE LISTED FOR DIRECT BURIAL.
- 15. ALL NEW WATER VALVES SHALL BE CLOCKWISE TO CLOSE. 16. THE MINIMUM BURIAL DEPTH FOR ALL NEW WATER AND SEWER LINES SHOWN ON THIS SHEET SHALL BE THREE FEET. PVC LINES BENEATH VEHICULAR DRIVES, ROADS, PARKING, ETC. SHALL HAVE A MINIMUM BURIAL DEPTH OF 4'.

PAVEMENT MARKING AND SIGNAGE NOTES

- I. ALL PROPOSED SIGNS SHOWN ON THESE PLANS ARE TO BE INSTALLED BY THE CONTRACTOR. 2. ALL EXISTING SIGNS AND PAVEMENT MARKINGS REMOVED DURING PROJECT DEMOLITION, OR FOR REASONS OF CONFLICT. REGARDLESS OF INCLUSION ON SURVEY OR THIS PLAN, ARE TO BE REINSTALLED TO PREVIOUS LAYOUT OR IN A CLOSE ALTERNATE LOCATION AS COORDINATED WITH THE CAMPUS WITH NEW
- SIGN POSTS AND MOUNTING HARDWARE. 3. ALL NEW SIGNS SHALL HAVE HIGH INTENSITY PRISMATIC SHEETING THAT MEETS THE MINIMUM RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST EDITION OF THE MUTCD (2009).
- 4. ALL SIGNS SHALL BE INSTALLED WITH NEW POSTS AND HARDWARE.
- 5. THE LATERAL OFFSET OF ALL ROADWAY SIGNS FROM FACE OF CURB TO THE EDGE OF THE SIGN SHALL BE BETWEEN 2' AND 5' (USE 3' UNLESS OBSTRUCTED). FOR AREAS WHERE THERE IS A SIDEWALK ADJACENT TO THE CURB, SET THE POST CLOSE TO THE CURB, PROVIDING A I' LATERAL OFFSET FROM FACE OF CURB TO EDGE OF SIGN.
- 6. ALL PAVEMENT MARKINGS SHALL CONFORM TO ALL CURRENT MUTCD STANDARDS.
- 7. ALL PAVEMENT MARKINGS SHALL BE TWO COATS OF PAINT. ADDITIONALLY, ANY PROPOSED CROSS WALK OR STOP BAR MARINGS SHALL BE REFLECTORIZED WITH GLASS BEADS TO CONFORM TO MUTCD PAVEMENT MARKING STDS.
- 8. CONTRACTOR SHALL MILL ANY EXISTING MARKING SHOWN TO BE REMOVED WHERE THE PAVEMENT SURFACE WILL BE LEFT INTACT. EXISTING MARKINGS IN CONFLICT WITH PROPOSED MARKINGS SHALL ALSO BE MILLED.
- 9. CONTRACTOR SHALL TIE PROPOSED MARKINGS TO EXISTING MARKINGS AT PROJECT LIMITS. IO. ANY PROPOSED WHITE PAVEMENT MARKINGS ON CONCRETE SHALL BE SHADOWED WITH BLACK MARKINGS, PROVIDING A 2" SHADOW MARGIN ON EACH SIDE OF THE WHITE MARKING.

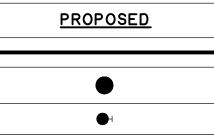
TOWN OF BELMONT GENERAL NOTES:

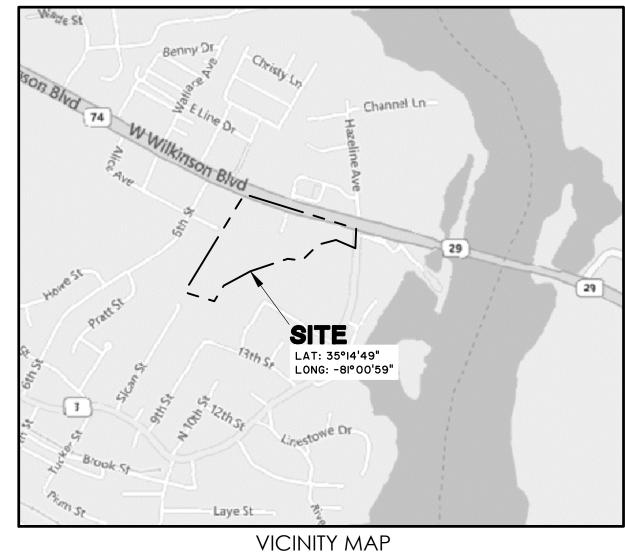
- WORK WEEKS.
- WILL BE REJECTED.
- PROFESSIONAL SHALL PROVIDE THE FOLLOWING MATERIALS WITH HIS REQUEST FOR THIS MEETING:
- "APPROVED" (4 COPIES).
- AND FULL CONTACT INFORMATION INCLUDING ADDRESSES, 24-HOUR CELL PHONE NUMBERS, EMAIL ADDRESSES, ETC. (3 COPIES)

- LOCATION OF:
- c. PUMP STATION AND FORCE MAIN.

- RE-RECORDED.
- CITY INSPECTOR AS VERIFICATION THAT SPECIFIED COMPACTION IS ACHIEVED.

13. NO VERTICAL BUILDING CONSTRUCTION MAY PROCEED UNTIL THE WATER MAINS AND FIRE HYDRANTS ARE INSTALLED AND APPROVED FOR OPERATION BY THE NCDENR PUBLIC WATER SUPPLY DIVISION. THIS PROCESS REQUIRES COMPLETE INSTALLATION. PRESSURE TESTING OF THE WATER MAIN, DISINFECTION, ACCEPTABLE BACTERIOLOGICAL TEST RESULTS, CERTIFICATION BY THE DESIGN PROFESSIONAL, APPLICANT CERTIFICATION, AND SUBMITTAL TO THE NCDENR PUBLIC WATER SUPPLY SECTION FOR AUTHORITY TO OPERATE APPROVAL. THE CONSTRUCTION OF THE WATER MAIN MAY BE THE CRITICAL PATH ITEM FOR STARTING BUILDING CONSTRUCTION.





SCALE: 1" = 1000'



THE CITY OF BELMONT WILL PROVIDE PART TIME INSPECTION SERVICES FOR IMPROVEMENTS THAT ARE TO BECOME PUBLICLY MAINTAINED. THE DESIGN PROFESSIONAL AND CONTRACTOR SHALL PROVIDE ADEQUATE NOTIFICATION AND COORDINATION IT ENSURE ALL IMPROVEMENTS ARE INSPECTED DURING CONSTRUCTION. REGULAR WORKING HOURS ARE DEFINED AS 8 HOURS PER DAY BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM, MONDAY THROUGH FRIDAY, EXCLUDING CITY OF BELMONT HOLIDAYS. IF THE CONTRACTORINTENDS TO WORK OTHER THAN REGULAR WORKING HOURS. HE SHALL SUBMIT A WRITTEN REQUEST TO THE CITY INSPECTOR NOT LESS THAN 48 HOURS PRIOR TO ANY PROPOSED WEEKEND WORK OR SCHEDULED EXTENDED

CONTRACTOR SHALL REIMBURSE THE CITY OF BELMONT FOR ADDITIONAL INSPECTION COSTS INCURRED AS A RESULT OF OVERTIME WORK IN EXCESS OF THE REGULAR WORKING HOURS STIPULATED IN NOTE 2. OVERTIME COSTS FOR CITY PERSONNEL SHALL BE \$75 PER HOUR. CONSTRUCTION MATERIALS AND METHODS SHALL BE GOVERNED BY THE CURRENT CITY OF BELMONT LAND DEVELOPMENT STANDARDS MANUAL AND THE DESIGN PROFESSIONAL'S WRITTEN SPECIFICATIONS.REQUEST FOR ANY VARIANCES TO THESE STANDARDS SHALL BE SUBMITTED TO AND REVIEWED BY DESIGN PROFESSIONAL. DESIGN PROFESSIONAL SHALL THEN MAKE FORMAL SUBMITTALS TO THE CITY FOROFFICIAL APPROVAL. CONSTRUCTION WHICH DOES NOT CONFORM TO THE LAND DEVELOPMENT STANDARDS MANUAL

SHOP DRAWINGS AND MATERIAL SPECIFICATION SHEETS SHALL BE SUBMITTED TO THE DESIGN PROFESSIONAL FOR APPROVAL CONTRACTOR SHALL AFFIX A STAMP TO FACH SHOP DRAWING OR MATERIALS SPECIFICATION SHEET STATING THAT HE APPROVES THE ITEM AS MEETING THE DESIGN PROFESSIONAL'S SPECIFICATIONS. THE STAMP SHALL INCLUDE CONTRACTOR'S NAME, LANGUAGE REGARDING CONTRACTOR'S APPROVAL, AND IT MUST BE SIGNED AND DATED BY THE CONTRACTOR. THE DESIGN PROFESSIONAL WILL REVIEW AND APPROVE THESE DOCUMENTS PRIOR TO SUBMITTAL TO THE CITY FOR FINAL ACCEPTANCE.THE DESIGN PROFESSIONAL SHALL AFFIX HIS COMPANY'S STAMP AND SIGN EACH SUBMITTAL ITEM. CITY, AFTER REVIEW, WILL ISSUE FINAL MATERIAL AND EQUIPMENT APPROVAL.

UPON FINAL APPROVAL OF THE PLANS BY THE CITY OF BELMONT, GASTON NATURAL RESOURCES DEPARTMENT. NCDENR DIVISION OF WATER QUALITY, NCDENR PUBLIC WATER SUPPLY DIVISION, AND NCDOT AS APPLICABLE. THE DESIGN PROFESSIONAL SHALL SUBMIT COPIES OF ALL PERMITS ISSUED TO THE BELMONT CITY ENGINEER. AFTER RECEIPT AND VERIFICATION OF THESE APPROVALS, THE DESIGN PROFESSIONAL AND DEVELOPER MAY REQUEST A PRECONSTRUCTION MEETING WITH CITY STAFF. THIS MEETING IS MANDATORY AND MUST BE ARRANGED THROUGH THE PUBLIC WORKS DIRECTOR. IN ATTENDANCE AT THE MEETING SHALL BE THE DEVELOPER. THE GENERAL CONTRACTOR, PRIMARY SUBCONTRACTORS, AND THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL PROVIDE THE FOLLOWING MATERIALS WITH HIS REQUEST FOR THIS MEETING:SUBCONTRACTORS, AND THE DESIGN PROFESSIONAL. THE DESIGN

a. ALL APPLICABLE PERMIT APPROVALS (3 COPIES). b. FINAL CONSTRUCTION PLANS AND SPECIFICATIONS, CLEARLY NOTED AS "RELEASED FOR CONSTRUCTION" (3 FULL SIZED COPIES AND ONE HALF SIZE COPY). SHOP DRAWING SUBMITTALS FOR ALL MATERIALS TO BE INCORPORATED INTO THE PUBLIC IMPROVEMENTS.

THE SHOP DRAWINGS SHALL HAVE BEEN REVIEWED BY THE DESIGN PROFESSIONAL AND STAMPED AS d. LIST OF ALL PARTIES INVOLVED WITH THE DESIGN AND CONSTRUCTION OF THE PROJECT, INCLUDING THE DEVELOPER AND PROJECT OWNER, LIST SHALL INCLUDE AUTHORIZED REPRESENTATIVE FOR EACH ENTITY

CONTRACTOR MUST OBTAIN A GRADING PERMIT FROM THE BELMONT PLANNING DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. THE CITY WILL NOT ISSUE THIS PERMIT UNTIL ALL OFF-SITE EASEMENTS HAVE BEEN OBTAINED AND RECORDED, ALL OTHER PERMITS HAVE BEEN OBTAINED WITH COPIES DELIVERED TO THE CITY ENGINEER, AND A PRECONSTRUCTION MEETING HELD. BEGINNING WORK ON THE SITE PRIOR TO THE ISSUANCE OF THE GRADING PERMIT WILL SUBJECT THE CONTRACTOR TO FINES AND OTHER REMEDIES PRESCRIBED IN BELMONT AND GASTON COUNTY ORDINANCES AND CODES. RECORD DRAWINGS MUST BE PROVIDED IN PAPER AND DIGITAL FORMAT (AUTOCAD AND ADOBE PDF) PRIOR

TO ACCEPTANCE OF THE WATER. SANITARY SEWER, AND DRAINAGE SYSTEMS FOR MAINTENANCE BY THE CITY. THE RECORD DRAWINGS FOR THIS PROJECT MUST INCLUDE SPECIFIC INFORMATION REGARDING THE a. WATER MAINS, WATER SERVICE TAPS ON THE MAIN, VALVES, AND FIRE HYDRANTS.

b. SANITARY SEWERS, MANHOLES, SEWER SERVICE TAPS ON THE SEWER.

d. STORM SEWERS, MANHOLES, CATCH BASINS, SUBSURFACE DRAINS.

e. DETENTION AND WATER QUALITY FACILITIES INCLUDING FIELD VERIFICATION OF BASIN VOLUMES. f. ALL EXISTING BURIED UTILITIES ENCOUNTERED DURING CONSTRUCTION.

q. ROCK IF ENCOUNTERED DURING CONSTRUCTION.

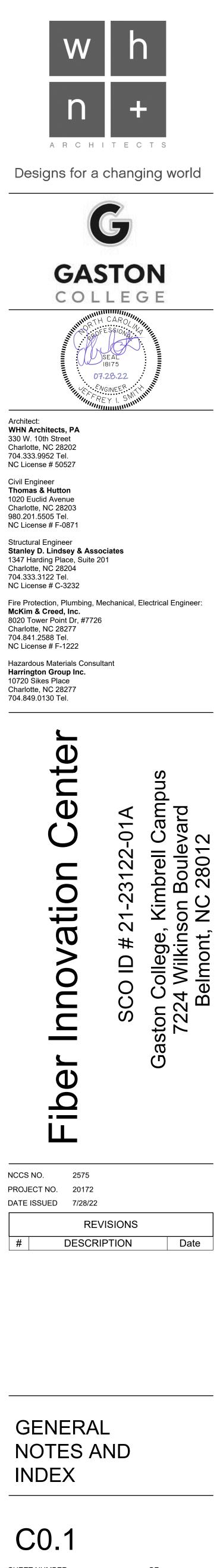
9. UTILITY EASEMENTS HAVE BEEN EXECUTED AND RECORDED. IF THE LOCATIONS OF WATER AND SEWER FACILITIES ARE CHANGED DURING CONSTRUCTION, THE EASEMENT DOCUMENTS SHALL BE UPDATED AND

CONSTRUCTION FOR THE PLACEMENT AND COMPACTION OF FILL DIRT SHALL BE CONTROLLED AND TESTED BY A CERTIFIED GEOTECHNICAL ENGINEER. THE CITY OF BELMONT ASSUMES NO LIABILITY OR RESPONSIBILITY REGARDING THE FILLING OF THE LOTS. FILLS IN RIGHTS OF WAY WILL BE MONITORED BY THE CITY INSPECTOR. THE DESIGN PROFESSIONAL SHALL SUBMIT COMPACTION TESTING RESULTS TO THE

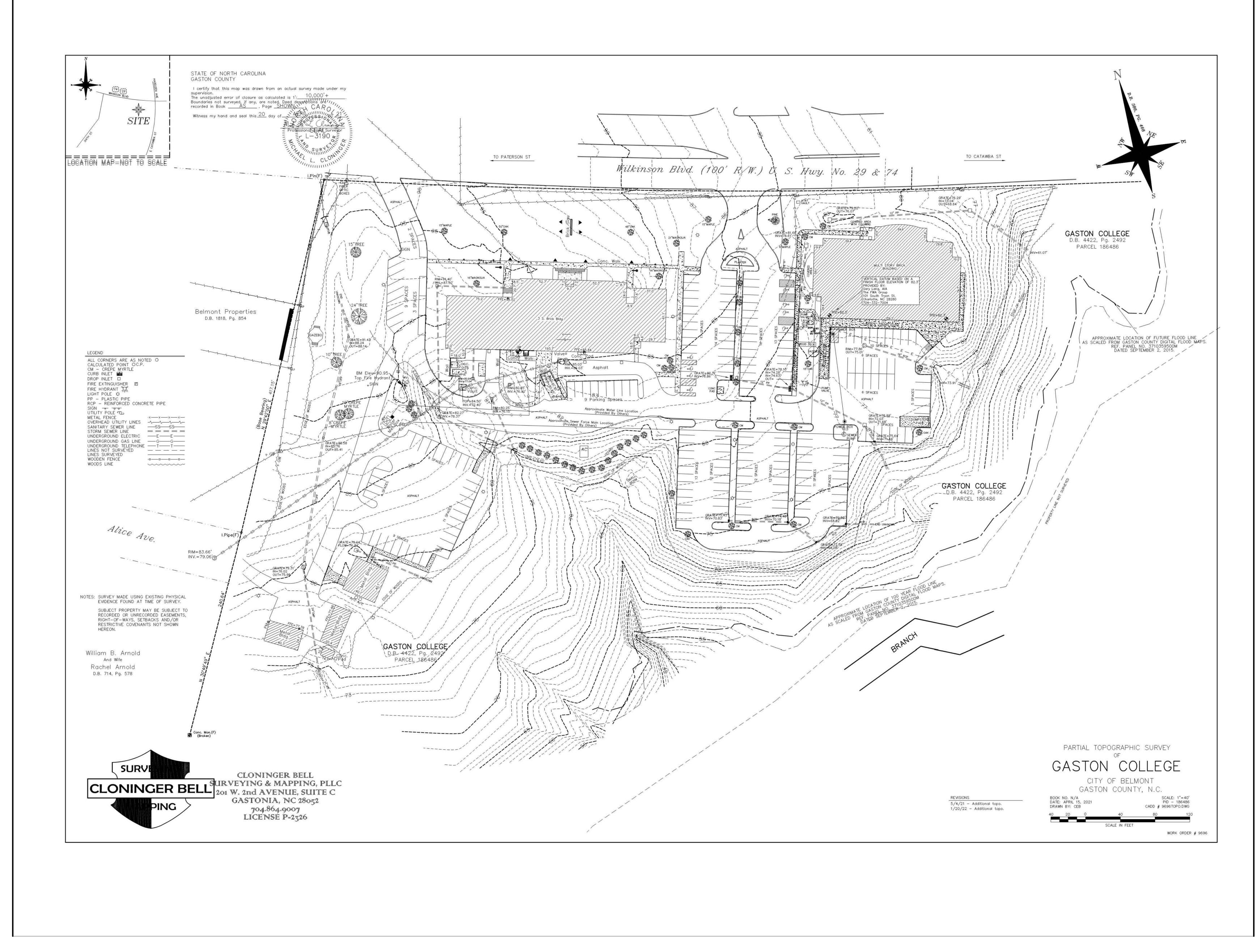
IL ANY SPRINGS DISCOVERED DURING CONSTRUCTION OF THE IMPROVEMENTS MUST BE ACCOMMODATED BY THE EXTENSION OF THE STORM DRAINAGE SYSTEM TO PREVENT WATER FROM FLOWING OVER PUBLIC SIDEWALKS, CURBS, AND PAVEMENTS. THESE EXTENSIONS SHALL BE INCLUDED ON THE RECORD DRAWINGS.

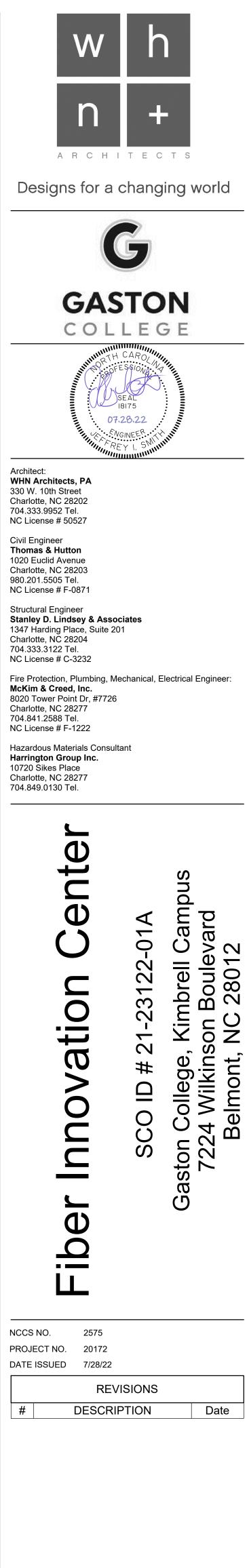
12. NO TREES MAY BE REMOVED FROM THE SITE WITHOUT FIRST IDENTIFYING TREES TO REMAIN IN THE FIELD WITH YELLOW FLAGGING. TREE PROTECTION FENCING IS REQUIRED BY CITY CODE. THE CITY OF BELMONT DOES NOT GUARANTEE WATER VOLUME AND WATER DISTRIBUTION SYSTEMPRESSURE.

- 14. WATER AND SEWER SYSTEMS CANNOT BE ACTIVATED UNTIL FINAL APPROVAL FROM NCDENR IS OBTAINED AND NCDENR APPROVAL LETTERS ARE RECEIVED BY THE CITY. THE PROJECT DESIGN PROFESSIONAL SHALL PROVIDE THE NECESSARY SERVICES REQUIRED IN ORDER FOR HIM TO MAKE THE CERTIFICATIONS NECESSARY FOR SUCH FINAL APPROVALS. IF A DIFFERENT ENGINEER WILL BE RETAINED BY THE DEVELOPER FOR CONSTRUCTION PHASE SERVICES, THE DEVELOPER SHALL NOTIFY THE CITY OF BELMONT IN WRITING OF SUCH CHANGE IN DESIGN PROFESSIONAL
- 15. CLEARANCES BETWEEN SEWER, WATER, AND STORM PIPES HAVE BEEN CHECKED IN DETAIL BY THE DESIGN PROFESSIONAL. FIELD CHANGES FOR CROSSING CONFLICTS MUST BE SUBMITTED WITH REVISED PLANS BY THE DESIGN PROFESSIONAL AND MUST BE APPROVED BY THE CITY PRIOR TO ANY CONSTRUCTION MODIFICATIONS.
- 16. THE MINIMUM PAVEMENT CROSS-SECTION SHALL BE 8 INCHES OF ABC STONE BASE OR 5" TYPE B25.0B, 2 INCHES OF TYPE S9 5B OR TYPE SE9 5A ASPHALT INTERMEDIATE COURSE, AND I-1/2 INCHES OF TYPE SF9.5A ASPHALT SURFACE COURSE. THE FINAL SURFACE COURSE SHALL NOT BE INSTALLED UNTIL 50 PERCENT OF THE LOTS ON A STREET HAVE RECEIVED A CERTIFICATE OF OCCUPANCY FOR A PRINCIPAL STRUCTURE OR ONE YEAR AFTER THE COMPLETION OF THE BASE AND INTERMEDIATE COURSES. FINAL SURFACE COURSE SHALL NOT BE PLACED UNTIL THE STREET HAS BEEN INSPECTED BY THE CITY INSPECTOR AND ALL BASE AND INTERMEDIATE ASPHALT COURSES HAVE BEEN REPAIRED AND ARE DEEM IN GOOD CONDITION BY THE CITY.
- 17. ALL PUBLICLY MAINTAINED STORM INLETS, CATCH BASINS, AND MANHOLES SHALL BE PRECAST CONCRETE CONSTRUCTION. BRICK OR BLOCK STRUCTURES ARE UNACCEPTABLE. 18. WATER SERVICE LINES AND SEWER SERVICES ARE NOT PERMITTED UNDER DRIVEWAYS. PAIRED SEWER
- SERVICES SHARING THE SAME TRENCH FOR ADJACENT LOTS ARE NOT PERMITTED. THE SAME APPLIES TO WATER SERVICES. SERVICES SHALL BE LOCATED IN THE MIDDLE OF THE LOT FRONTAGE TO AVOID DRIVEWAYS. IF THIS DOES NOT WORK WITH THE PROPOSED BUILDING PLANS, THEN SEWER SERVICES SHOULD BE AT THE LOW CORNER OF THE LOT FRONTAGE.
- 19. THE CITY DOES NOT ASSUME THE RESPONSIBILITY FOR REPLACEMENT OF PAVEMENTS, CONCRETE WALKS AND CURBING, OR LANDSCAPING IF REMOVAL OF THESE ITEMS IS REQUIRED TO REPAIR WATER AND SEWER FACILITIES IN UTILITY EASEMENTS. 20. THE CITY RESERVES THE RIGHT TO DELETE ANY TREES THAT MAY CONFLICT WITH ADEQUATE VEHICULAR
- SIGHT DISTANCES. 21. THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL IMPROVEMENTS, WARRANTY PERIOD DOES NOT BEGIN UNTIL THE IMPROVEMENTS HAVE BEEN INSPECTED AND ACCEPTED BY THE CITY IN ACCORDANCE WITH CURRENT CITY ACCEPTANCE POLICY. A TWO YEAR WARRANTY IS REQUIRED FOR TREES AND PLANT MATERIALS.



SHEET NUMBER



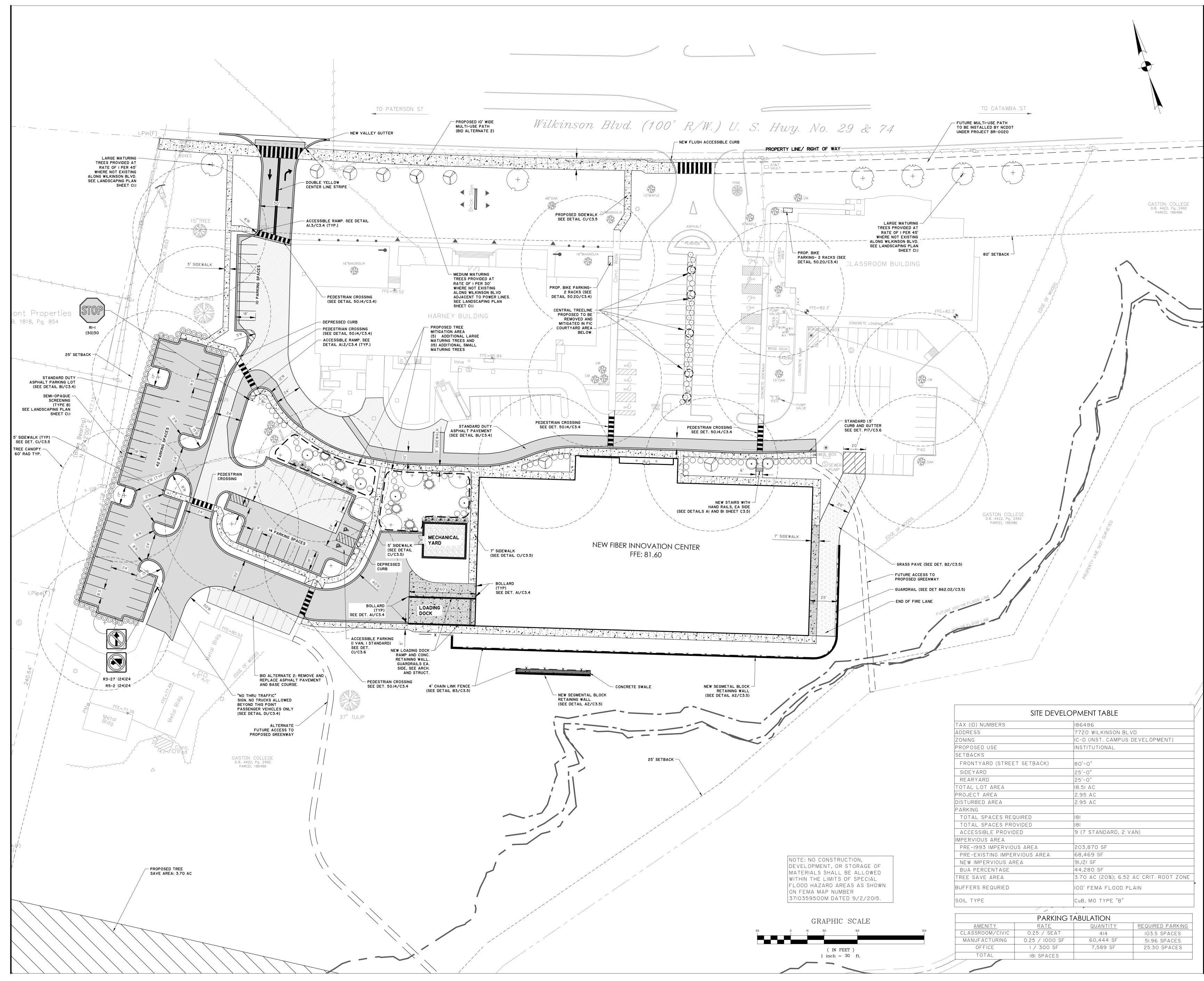


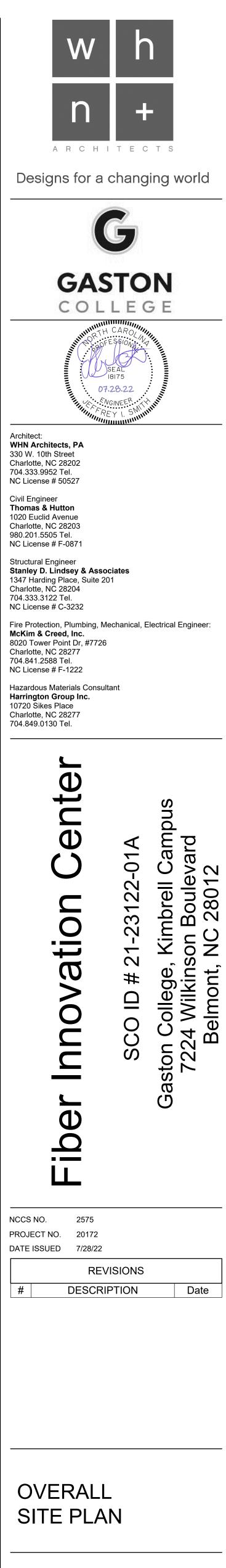
EXISTING CONDITIONS

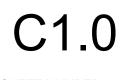


SHEET NUMBER

OF

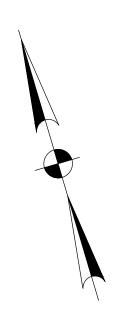




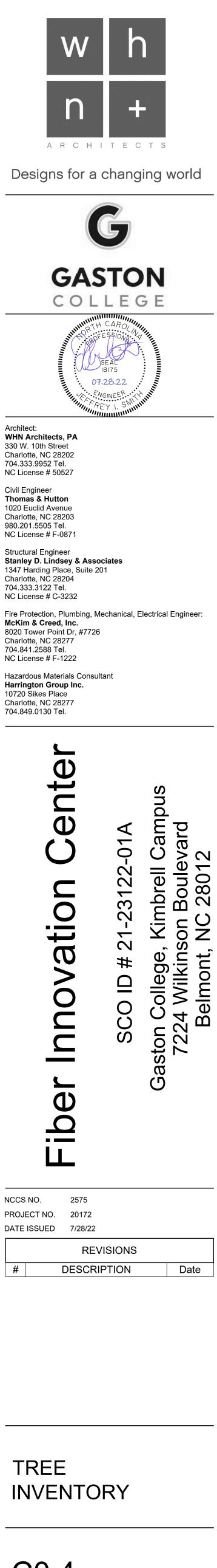


OF



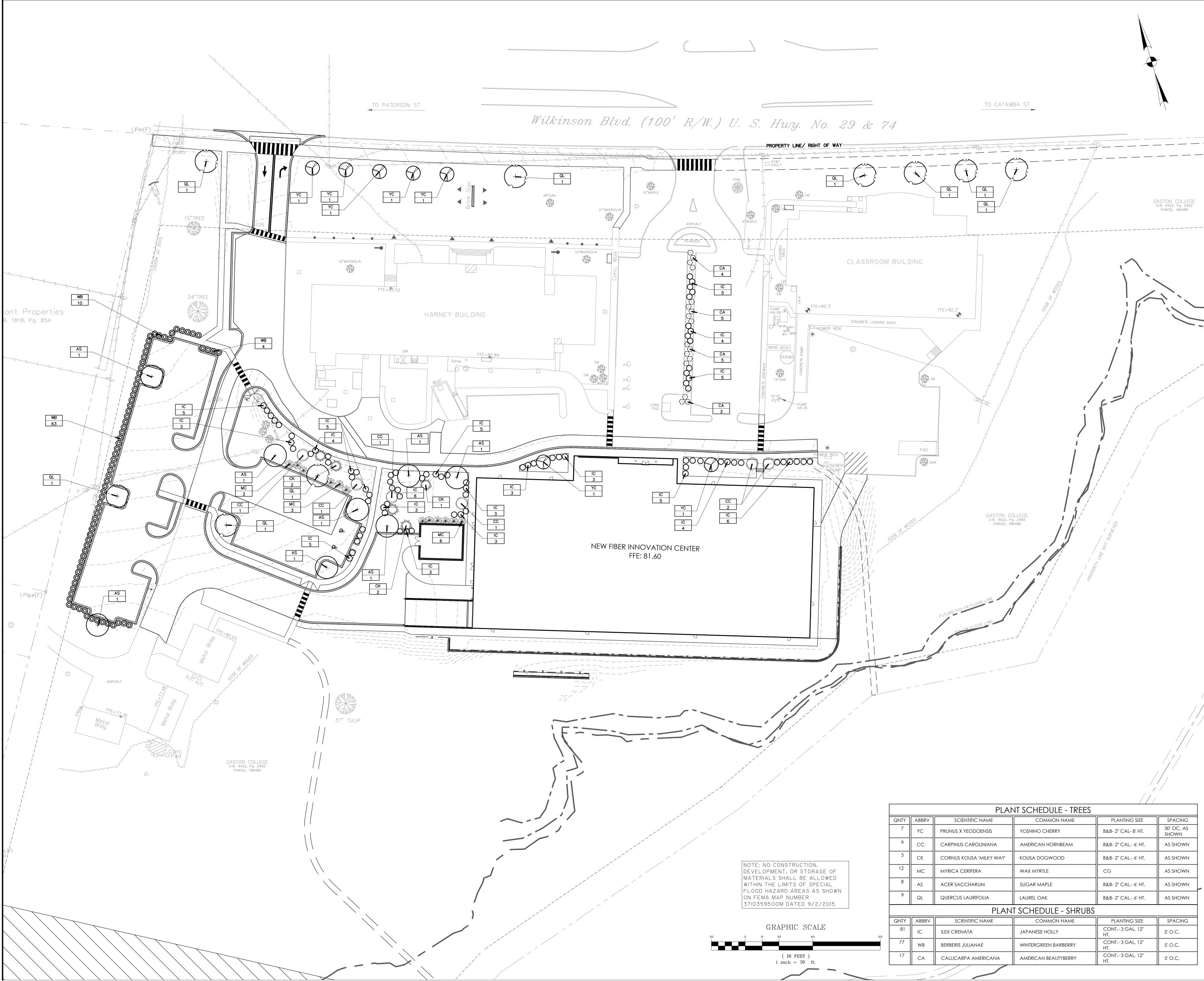


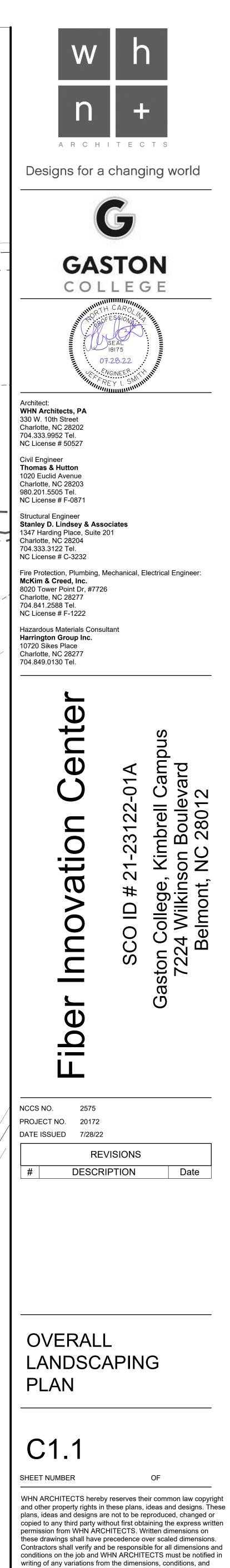
./	- 15				Condition	Canopy	Height	Overhead	Location	Within	Location	Dbh			Heritage	Root		Tree Save
	Tree ID 80	Common Name Hackberry	Scientific Name Celtis occidentalis	Age Class Mature	Class Fair	Radius 15	Class Large	Lines No	Open	Tree Save Yes	Good	Height 4.5	1	16	No	804.25	1	Area (sf) 804.25
	83 85	Mulberry-White Tupelo-Black	Morus alba Nyssa sylvatica	Semi-mature Mature	Good Fair	8 15	Large Large	No	Open Open	Yes Yes	Good	4.5	1	12 24	No No	452.39 1809.56		452.39 2714.34
	86 87 88	Elm Sycamore-American Ash-Green	Ulmus sp Platanus occidentalis Fraxinus pennsylvanica	Mature Mature Semi-mature	Fair Fair Good	20 15 10	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	20 21 15	No No No	1256.64 1385.44 706.86	1.5 1.5 1	1884.96 2078.16 706.86
	90 91		Liquidambar styraciflua Fagus grandifolia	Mature Semi-mature	Fair Good	10 10 10	Large	No	Open Open	Yes	Good	4.5	1 1	30 10	No	2827.43 314.16		4241.15 314.16
	92 93	Sycamore-American Ash-Green	Platanus occidentalis Fraxinus pennsylvanica	Mature	Fair Good	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	24 11	No No	1809.56 380.13	1.5 1	2714.34 380.13
	94 97	Ash-Green Ash-Green	Fraxinus pennsylvanica Fraxinus pennsylvanica	Mature Semi-mature	Good Fair	15 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1 1	19 13	No No	1134.11 530.93	1.5 1	1701.17 530.93
	98 99	Hackberry Ash-Green	Celtis occidentalis Fraxinus pennsylvanica	Semi-mature Semi-mature	Fair Good	15 8	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1 1	17 13	No No	907.92 530.93	1.5 1	1361.88 530.93
	100	Ash-Green Beech-American	Fraxinus pennsylvanica Fagus grandifolia	Mature	Good	10 15	Large Large	No No	Open Open	Yes Yes	Good Good	4.5	1	15 16	No No	706.86	1	706.86 804.25
	104 105 106	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua Liquidambar styraciflua	Mature Semi-mature Mature	Fair Fair Fair	15 15 15	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1	18 17 25	No No No	1017.88 907.92 1963.50	1	1526.81 907.92 2945.24
	100 108 109	Beech-American Tuliptree	Fagus grandifolia Liriodendron tulipifera	Mature	Good	20 20	Large Large	No	Open Open	Yes	Good	4.5	1	23 24	No No	1661.90 1809.56	1.5	2492.85 2714.34
	110 111	Sweetgum-Common Beech-American	Liquidambar styraciflua Fagus grandifolia	Mature Mature	Fair Good	15 25	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	23 30	No No	1661.90 2827.43	1.5 1.5	2492.85 4241.15
	112 113		Quercus alba Oxydendrum arboreum	Mature Semi-mature	Good Fair	30 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	33 13	No No	3421.19 530.93	1.5 1	5131.79 530.93
	114 115	Oak-White Oak-White	Quercus alba Quercus alba	Mature Mature	Fair Good	15 15	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	22 37	No Yes	1520.53 4300.84		2280.80 6451.26
	116 117 118	Sourwood Tupelo-Black Oak-White	Oxydendrum arboreum Nyssa sylvatica Quercus alba	Semi-mature Semi-mature Mature	Fair Fair Good	10 10 30	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	12 13 37	No No Yes	452.39 530.93 4300.84	1 1 1.5	452.39 530.93 6451.26
	118 119 120	Tuliptree	Liriodendron tulipifera Liriodendron tulipifera	Mature	Good	25 25	Large Large	No	Open Open	Yes	Good	4.5	2	24 34	No	1809.56 3631.68	1.5	2714.34 5447.52
	121 122	Tupelo-Black Tuliptree	Nyssa sylvatica Liriodendron tulipifera	Mature Mature	Fair Fair	20 15	Large Large	No	Open Open	Yes Yes	Good Good	4.5 4.5	1	19 20	No No	1134.11 1256.64	1.5 1.5	1701.17 1884.96
	123 124	Pine-Slash Sweetgum-Common	Pinus elliottii Liquidambar styraciflua	Mature Mature	Fair Fair	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	22 18	No No	1520.53 1017.88	1.5 1.5	2280.80 1526.81
	125 126	Beech-American Tuliptree	Fagus grandifolia Liriodendron tulipifera	Semi-mature Mature	Fair Good	10 20	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	11 32	No No	380.13 3216.99		380.13 4825.49
	128 129	Ash-Green Ash-Green	Fraxinus pennsylvanica Fraxinus pennsylvanica	Semi-mature	Good Fair	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5	1	12 11	No No	452.39 380.13	1	452.39 380.13
	130 131 132	Ash-Green Ash-Green Poplar-Eastern	Fraxinus pennsylvanica Fraxinus pennsylvanica Populus deltoides	Semi-mature Mature Mature	Fair Good Good	10 15 25	Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	11 17 33	No No No	380.13 907.92 3421.19	1 1 1.5	380.13 907.92 5131.79
	132 133 134	Ash-Green Beech-American	Fraxinus pennsylvanica Fagus grandifolia	Mature	Good Fair	20 30	Large Large Large	No	Open Open	Yes	Good	4.5	1 1	20 48	No	1256.64 7238.23	1.5	1884.96 10857.34
	135 136	Tuliptree Sycamore-American	Liriodendron tulipifera Platanus occidentalis	Mature Mature	Fair Fair	15 15	Large Large	No	Open Open	Yes Yes	Good Good	4.5	1	22 26	No No	1520.53 2123.72	1.5 1.5	2280.80 3185.57
	137 138	Ash-Green Ash-Green	Fraxinus pennsylvanica Fraxinus pennsylvanica	Semi-mature Semi-mature	Good Good	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	13 12	No No	530.93 452.39	1 1	530.93 452.39
	140 141	Sycamore-American Sycamore-American	Platanus occidentalis Platanus occidentalis	Mature Mature	Fair Fair	15 15	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	20 25	No No	1256.64 1963.50	1.5	1884.96 2945.24
	142 143	Sycamore-American Ash-Green	Platanus occidentalis Fraxinus pennsylvanica	Mature Semi-mature	Good Fair	25 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5	1	34 14	No No	3631.68 615.75	1.5 1	5447.52 615.75
	144 145 147	Ash-Green Oak-White Beech-American	Fraxinus pennsylvanica Quercus alba Fagus grandifolia	Semi-mature Mature Semi-mature	Fair Fair Good	10 25 15	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	14 24 15	No No No	615.75 1809.56 706.86	1 1.5 1	615.75 2714.34 706.86
_ `	148 149	Ash-Green Beech-American	Fraxinus pennsylvanica Fagus grandifolia	Mature Semi-mature	Fair Fair	15 15 10	Large	No	Open Open	Yes	Good	4.5	1 1	24 13	No	1809.56 530.93		2714.34 530.93
	150 151	Beech-American Ash-Green	Fagus grandifolia Fraxinus pennsylvanica	Semi-mature Mature	Good Fair	10 25	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	12 31	No No	452.39 3019.07	1 1.5	452.39 4528.61
	153 154	Beech-American Beech-American	Fagus grandifolia Fagus grandifolia	Mature Semi-mature	Good Good	20 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	21 11	No No	1385.44 380.13	1	2078.16 380.13
	155 156	Pine-Pond Beech-American	Pinus serotina Fagus grandifolia	Mature Semi-mature	Good Good	10 10	Large	No No	Open Open	Yes Yes	Good Good	4.5	1	13 10	No No	530.93 314.16	1	530.93 314.16
ave	157 160 161	Beech-American Beech-American Oak-White	Fagus grandifolia Fagus grandifolia Quercus alba	Semi-mature Semi-mature Semi-mature	Good Fair Fair	10 10 15	Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1	12 12 15	No No No	452.39 452.39 706.86	1 1 1	452.39 452.39 706.86
sf) 00 00	161 162 163	Tuliptree Oak-White	Liriodendron tulipifera Quercus alba	Mature Semi-mature	Good	15 15 10	Large Large Large	No	Open Open	Yes	Good	4.5	1 1	25 13	No	1963.50 530.93	_	2945.24 530.93
1.17 0.80	164 165	Oak-Southern Red Oak-White	Quercus falcata Quercus alba	Mature Mature	Fair Good	20 20	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	26 23	No No	2123.72 1661.90		3185.57 2492.85
). 13 00	166 167	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua	Mature Mature	Good Good	15 15	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	24 23	No No	1809.56 1661.90	1.5	2714.34 2492.85
00).13	168 169				Fair Fair	15 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	26 16	No No	2123.72 804.25	1	3185.57 804.25
00	170 171 172	Oak-Water	Liquidambar styraciflua Quercus nigra Liquidambar styraciflua	Semi-mature	Good Fair Good	15 15 10	Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	17 17 16	No No No	907.92 907.92 804.25	1 1 1	907.92 907.92 804.25
2.39 6.72 2.39	172 173 174	Beech-American	Fagus grandifolia Liquidambar styraciflua	Semi-mature	Good	10 10 15	Large Large Large	No	Open Open	Yes	Good	4.5	1 1 1	10 15 17	No	706.86 907.92	1 1 1	706.86
8.16 1.17	175 176		Liquidambar styraciflua Liriodendron tulipifera	Mature Semi-mature	Good Fair	15 10	Large Large	No	Open Open	Yes	Good Good	4.5	1	29 12	No	2642.08 452.39		3963.12 452.39
00 1.15	177 178		Liquidambar styraciflua Liquidambar styraciflua		Fair Fair	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	14 16	No No	615.75 804.25	1 1	615.75 804.25
l. 16).93	179 181	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua	Semi-mature	Fair Fair	8	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	10 15	No No	314.16 706.86	1	0.00 706.86
1.25).13	182 183	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua	Semi-mature	Good	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5	1	16 16	No No	804.25 804.25	1	804.25 804.25
5.81 2.39 5.81	184 185 186	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua Liquidambar styraciflua	Semi-mature	Fair Good Good	10 6 8	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	10 13 13	No No No	314.16 530.93 530.93	1 1 1	314.16 530.93 530.93
5.86 1.17	180 187 188		Liquidambar styraciflua Quercus alba		Fair Good	10 10	Large Large	No	Open Open	Yes	Good	4.5	1	15 15 19	No	706.86 1134.11	1 1.5	706.86
1.88 4.34	189 191		Liquidambar styraciflua Fraxinus pennsylvanica	Mature Mature	Fair Fair	10 10 30	Large Large	No No	Open Open	Yes	Good Good Good	4.5 4.5 4.5	1 1	18 35	No No	1017.88 3848.45	1.5	1526.81 5772.68
1.25).93	192 193	Sweetgum-Common Oak-White	Liquidambar styraciflua Quercus alba	Semi-mature Semi-mature	Fair Fair	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	13 10	No No	530.93 314.16	1	530.93 314.16
8.16 00	194 195	Beech-American	Liquidambar styraciflua Fagus grandifolia	Mature Semi-mature	Good Fair	15 8	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	26 10	No No	2123.72 314.16	1	3185.57 314.16
00 4.96 6.81	196 197 199	Sweetgum-Common Ash-Green Oak-White	Liquidambar styraciflua Fraxinus pennsylvanica Quercus alba	Semi-mature	Fair Fair Fair	10 10 20	Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	16 11 20	No No No	804.25 380.13 1256.64	1 1 1.5	804.25 380.13 1884.96
5.75	199 201 202	Oak-White Tuliptree Hickory-Shagbark	Quercus alba Liriodendron tulipifera Carya ovata	Mature Mature Semi-mature	Fair Fair Good	20 20 10	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	20 36 15	No Yes No	1256.64 4071.50 706.86		1884.96 6107.26 706.86
7.92 2.39	203 205	Sweetgum-Common		Semi-mature	Good Good	8 10	Large Large	No No	Open Open	Yes	Good Good	4.5 4.5	1 1	14 14	No No	615.75 615.75	1 1	615.75 615.75
0.13 5.75	206 207	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua	Semi-mature	Fair Fair	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	13 15	No No	530.93 706.86	1 1	530.93 706.86
00 00 2.39	208 209	Ash-Green	Liquidambar styraciflua Fraxinus pennsylvanica		Fair Fair	10 8	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	18 10	No No	1017.88 314.16		1526.81 0.00
2.39 2.39 3.12	210 211 212		Liriodendron tulipifera Liquidambar styraciflua Liquidambar styraciflua	Semi-mature	Good Good Fair	10 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5 4.5	1	12 18 10	No No	452.39 1017.88 314.16	~ ~ ~	452.39 1526.81 314.16
2.39 4.11	212 213 214	Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua Liquidambar styraciflua	Mature	Fair Good Good	10 15 10	Large Large Large	No No No	Open Open Open	Yes Yes Yes	Good Good Good	4.5 4.5 4.5	1 1 1	10 20 15	No No No	314.16 1256.64 706.86	1 1.5 1	314.16 1884.96 706.86
8.16 4.25	214 217 218	Maple-Red	Acer rubrum Liquidambar styraciflua	Mature	Good Fair	10 15 6	Large Large	No	Open Open	Yes	Good Good Good	4.5 4.5 4.5	1 1	15 16 10	No No	804.25 314.16	1 1 1	804.25 314.16
7.92	219 220		Liquidambar styraciflua Fraxinus pennsylvanica	Semi-mature	Fair Good	8 10	Large Large	No No	Open Open	Yes	Good Good Good	4.5 4.5 4.5	1 1	10 14 13	No No	615.75 530.93	1 1	615.75 530.93
00 00 00	221 222	Sweetgum-Common Sweetgum-Common	Liquidambar styraciflua Liquidambar styraciflua	Mature Semi-mature	Good Good	15 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	21 17	No No	1385.44 907.92	1	2078.16 907.92
00	223 225	Tuliptree Tuliptree	Liriodendron tulipifera Liriodendron tulipifera	Mature Semi-mature	Good Fair	20 10	Large Large	No No	Open Open	Yes Yes	Good Good	4.5 4.5	1	24 17	No No	1809.56 907.92	1	2714.34 907.92
00	226	Tuliptree	Liriodendron tulipifera	Mature	Fair	15	Large	No	Open	Yes	Good	4.5	1	20	No	1256.64	sf	1884.96 284,219.89 6.52
00	HERIT	AGE TREES OU	TSIDE LIMITS OF	F TREE SA	VE ARE	EA (TSA)										ac	۷.۵۷
00	Tree ID	Common Name	Scientific Name	Age Class	Condition Class	Canopy Radius	Height Class	Overhead Lines	Location Type	Within Tree Save	Location Value	Dbh Height	Steme	Dbb 1	Heritage Tree	Root Zone		Tree Save Area (sf)
00 00 5.86	227 228	Tuliptree Oak-White	Liriodendron tulipifera Quercus alba	Mature Mature	Good Fair	25 30	Large Large	No	Open Open	No No	Good Good	4.5 4.5	1 1	37 41	Yes Yes	4300.84 5281.02	0	0.00 0.00
00 3.16	229 230	Tuliptree Tuliptree	Liriodendron tulipifera Liriodendron tulipifera	Mature Mature	Poor Good	20 20	Large Large	No No	Open Open	No No	Good Good	4.5 4.5	1 1	37 36	Yes Yes	4300.84 4071.50	0	0.00 0.00
7.92 3.12	230 231	Poplar-Eastern-	Populus deltoides	Mature Mature	Poor-	35	Large	No-	Open- Open-	No	Good	4.5	1	55	Yes	9503.32 4071.50		0.00





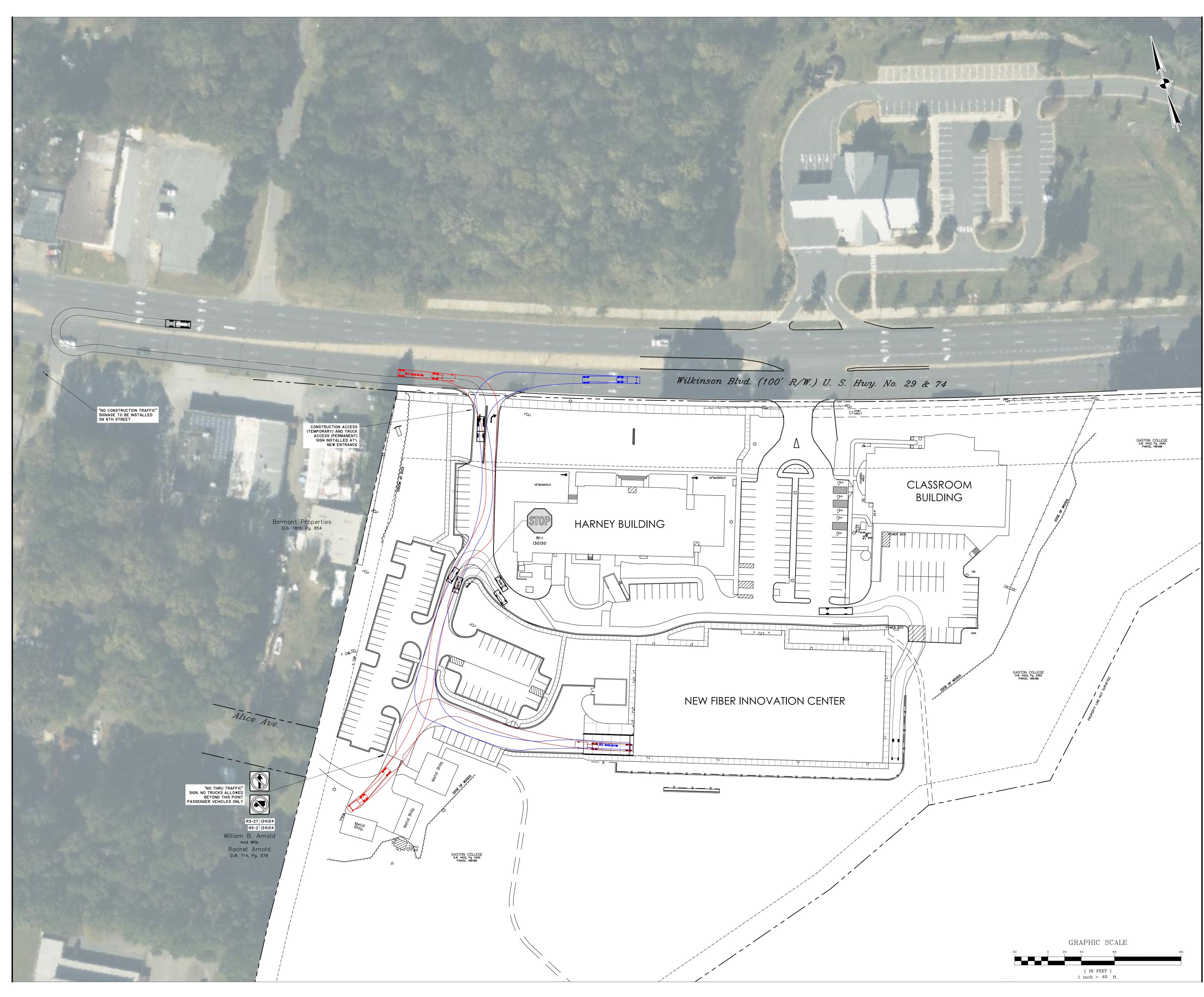
OF

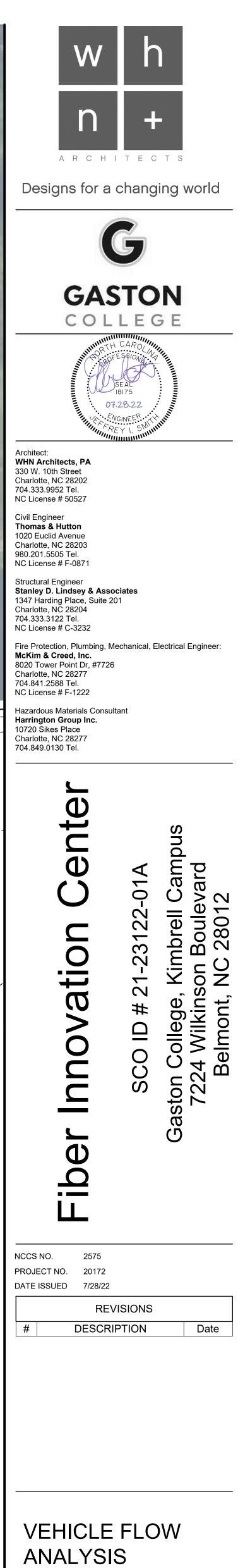




specifications on these drawings.

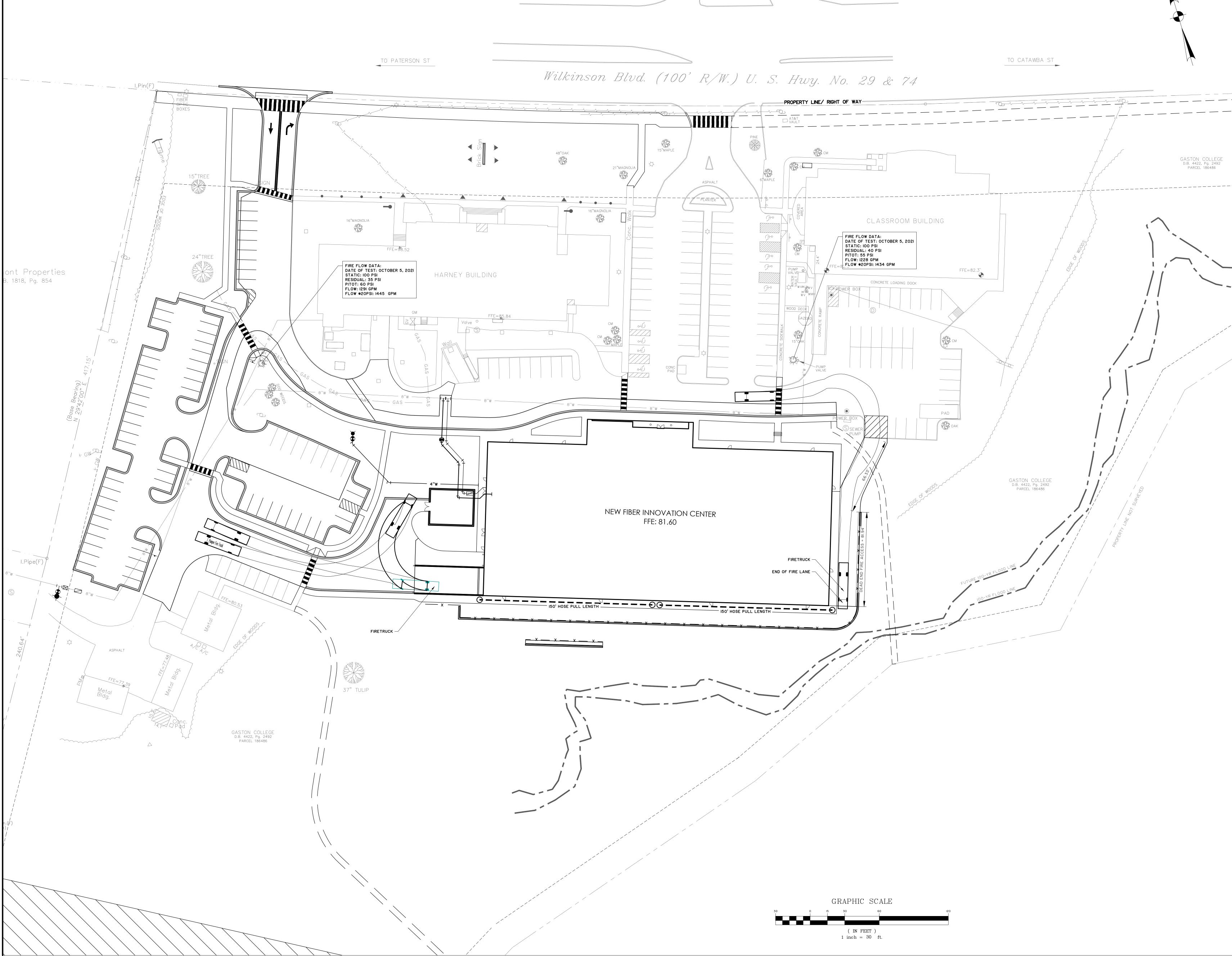




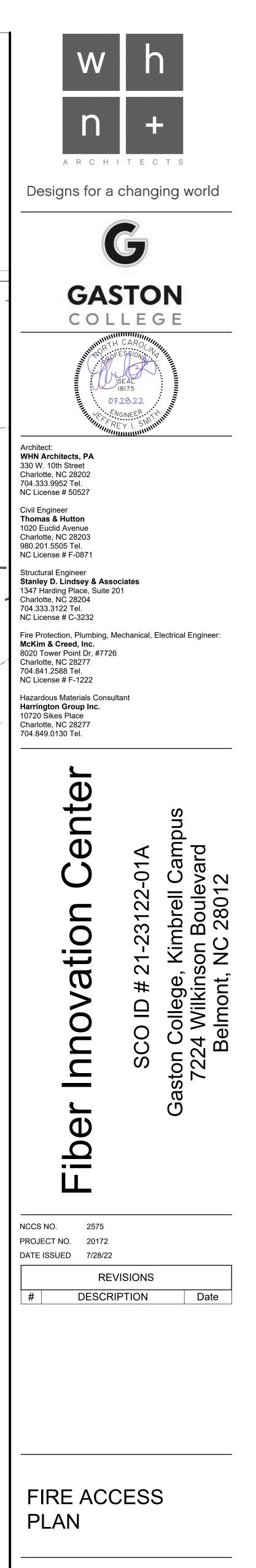


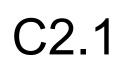


OF

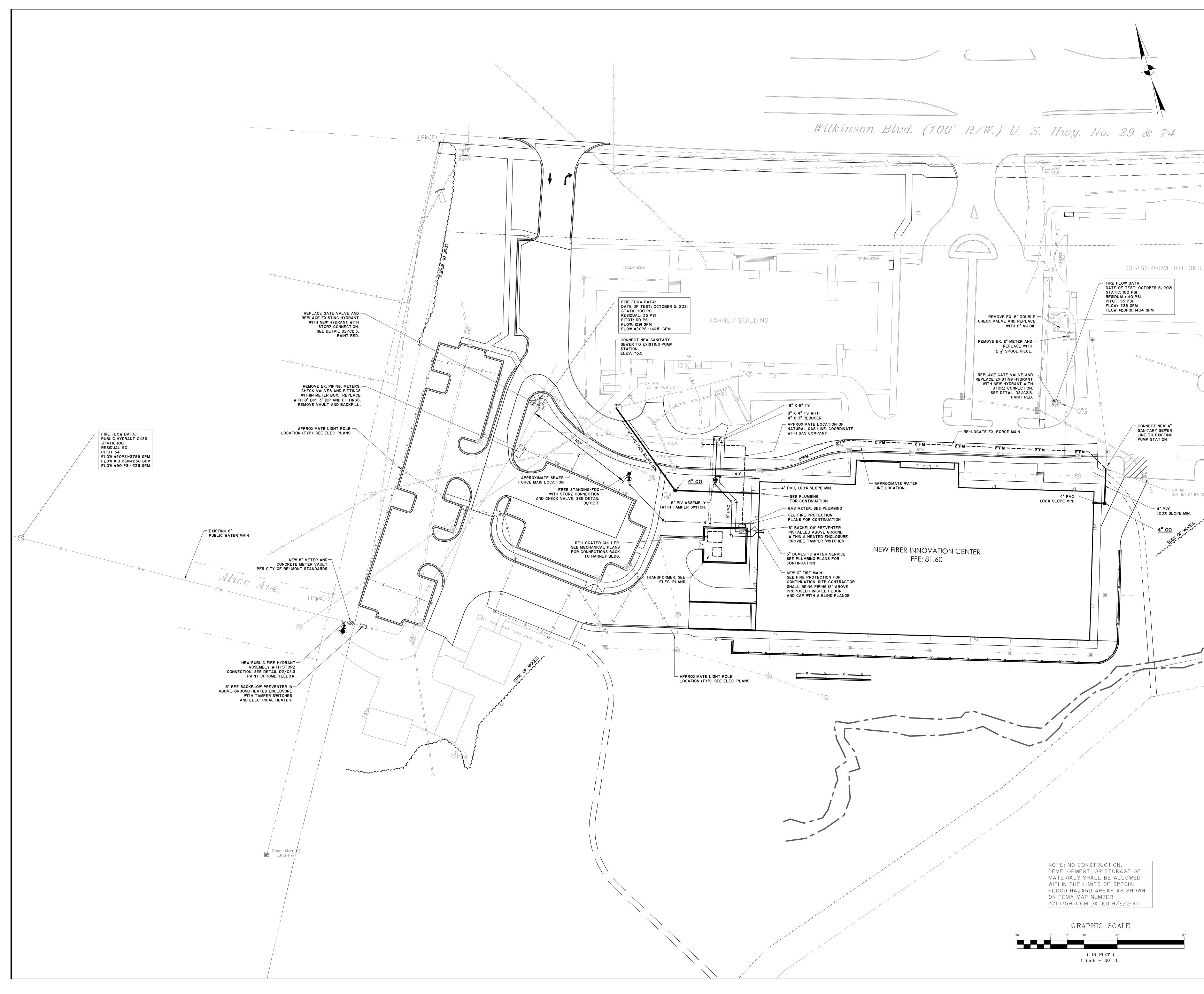


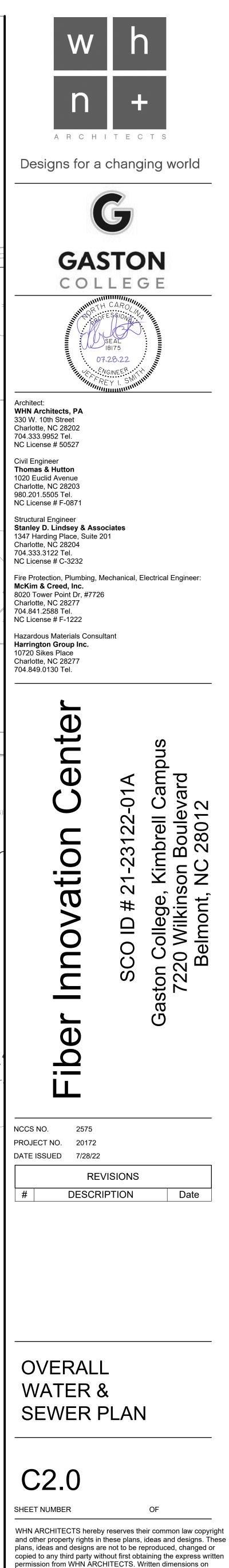
	GRAPHIC	SCALE	
15	30	60	











plans, ideas and designs are not to be reproduced, changed or copied to any third party without first obtaining the express written permission from WHN ARCHITECTS. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and WHN ARCHITECTS must be notified in writing of any variations from the dimensions, conditions, and specifications on these drawings.

