



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

Phone 919.361.5000
Fax 919.361.2269
License number: C-0293, C-187

www.mcadamsco.com

CLIENT

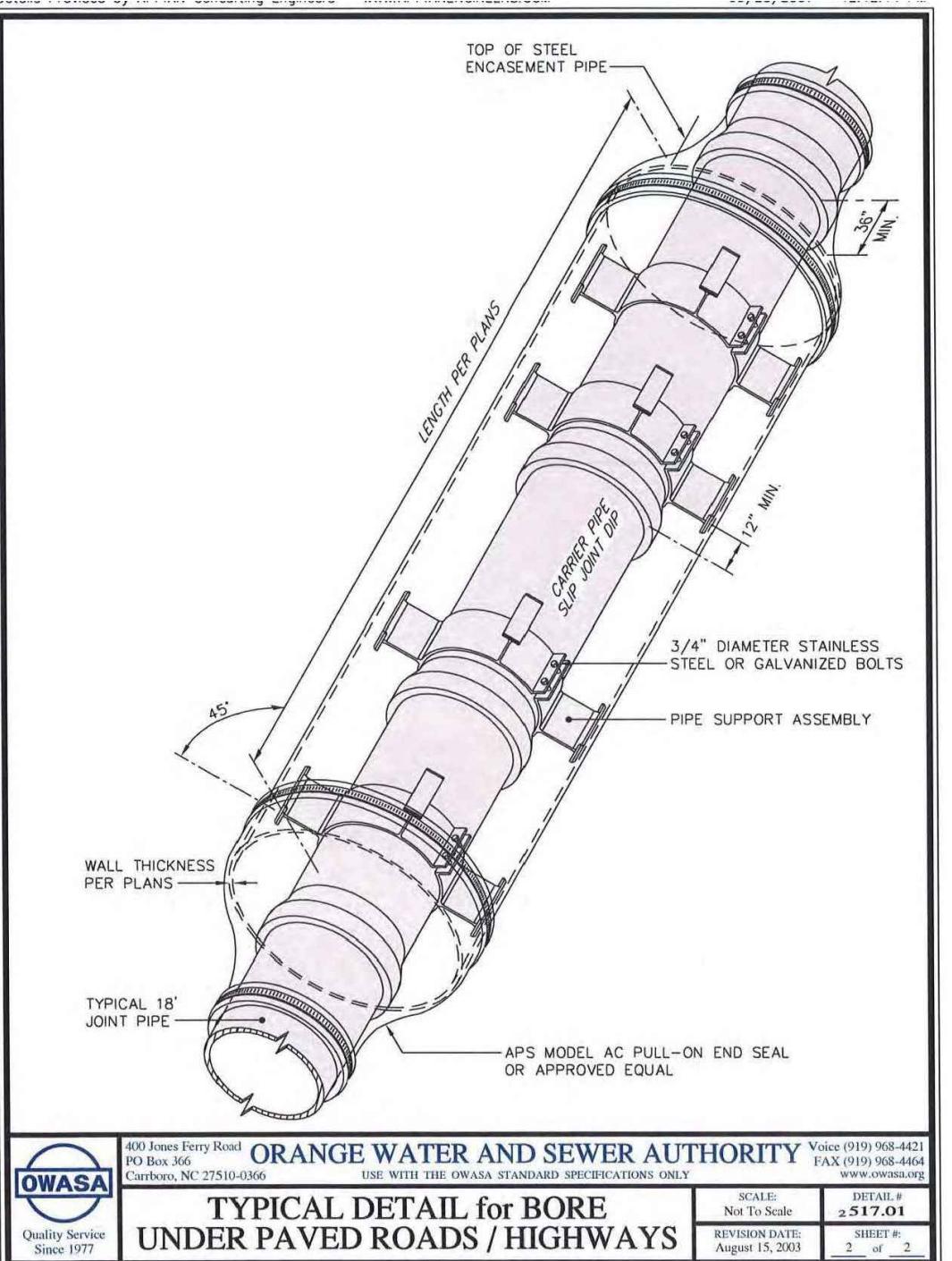
WOODFIELD INVESTMENTS
11425 HORSEMAN'S TRAIL
RALEIGH, NC 27613
PHONE: 919.535.8947

PARK APARTMENTS - PHASE II

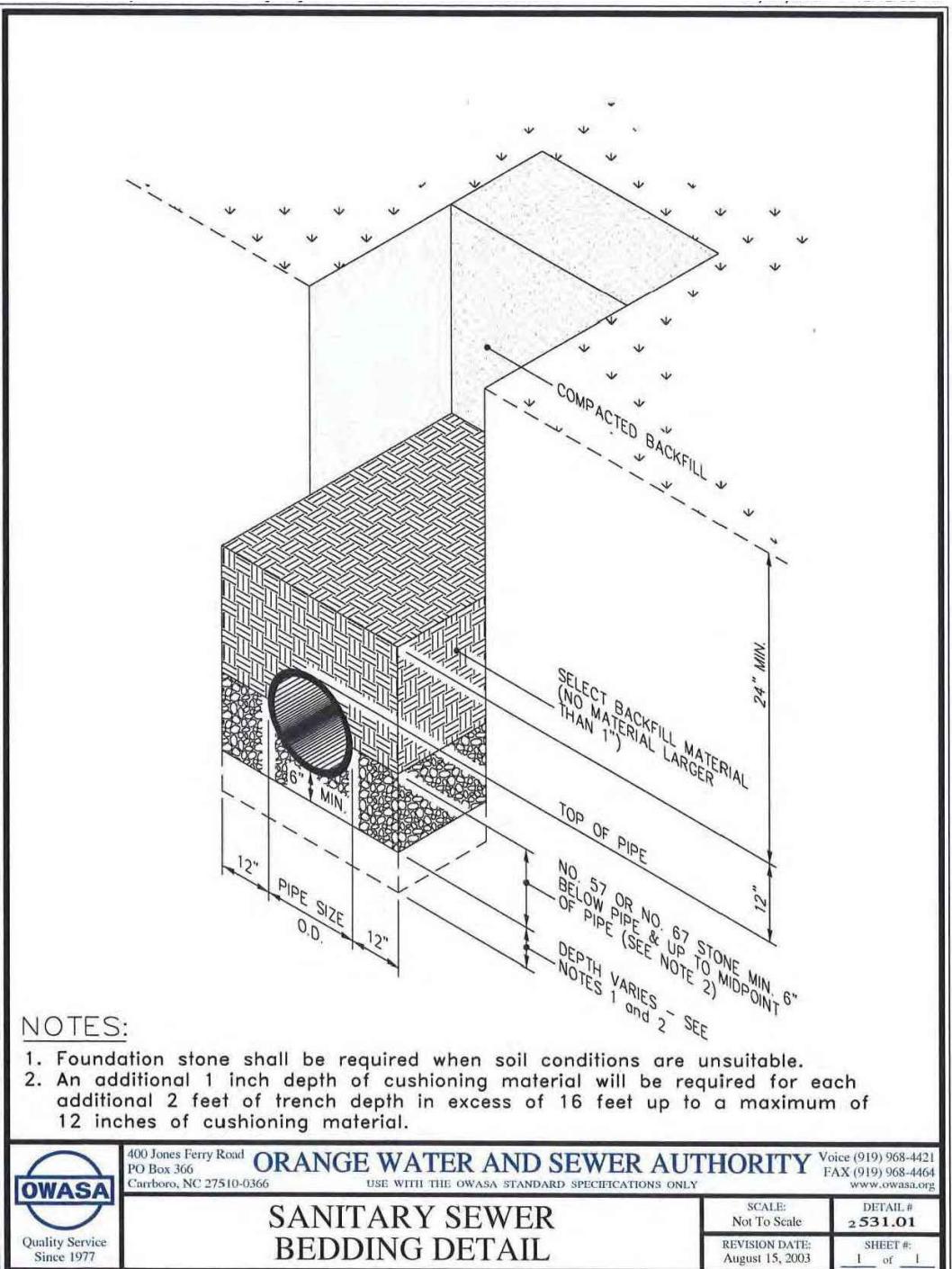
PHASE II FORM DISTRICT PERMIT

O ELLIOTT ROAD

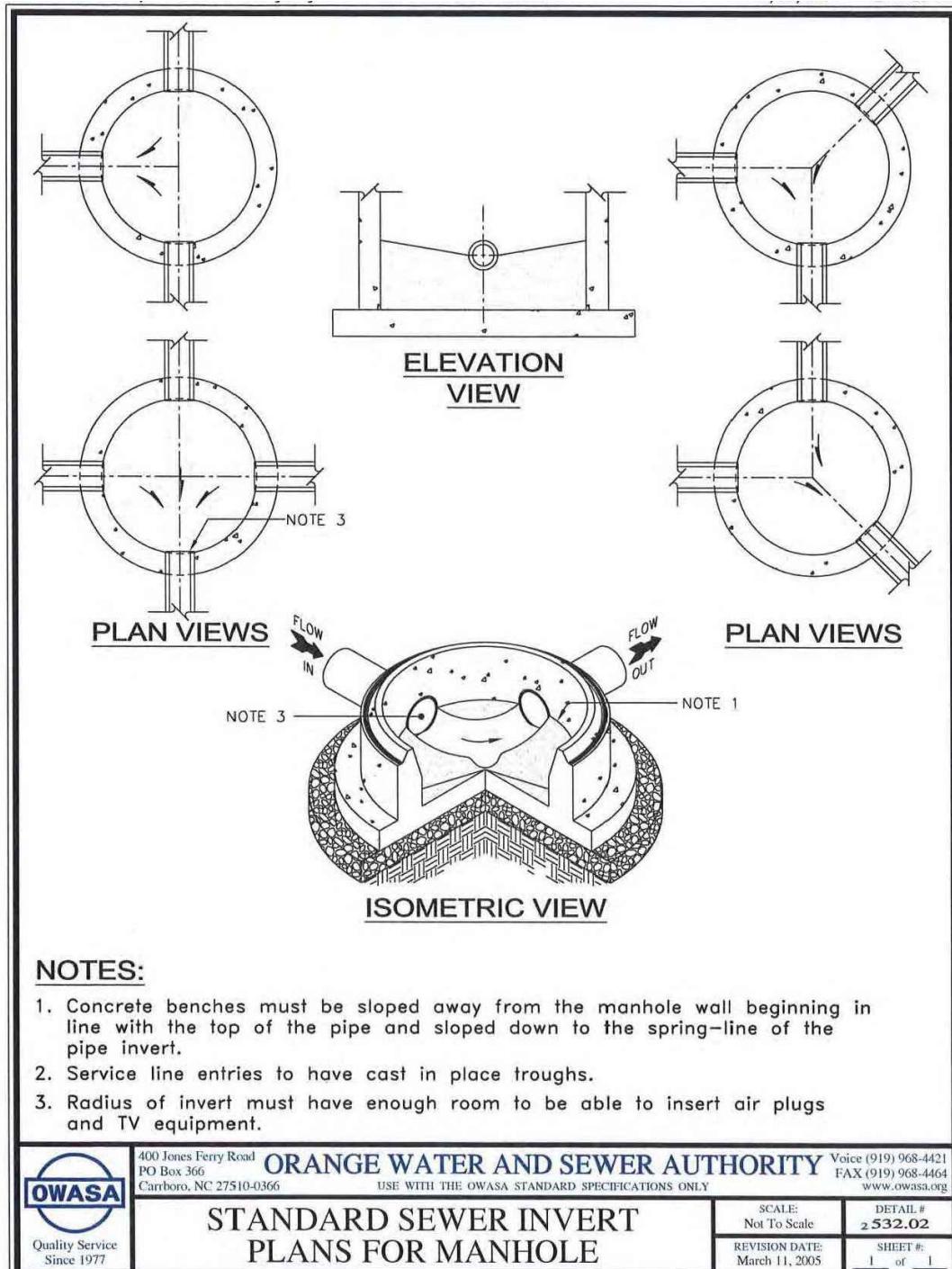
CHAPEL HILL, NORTH CAROLINA, 27517



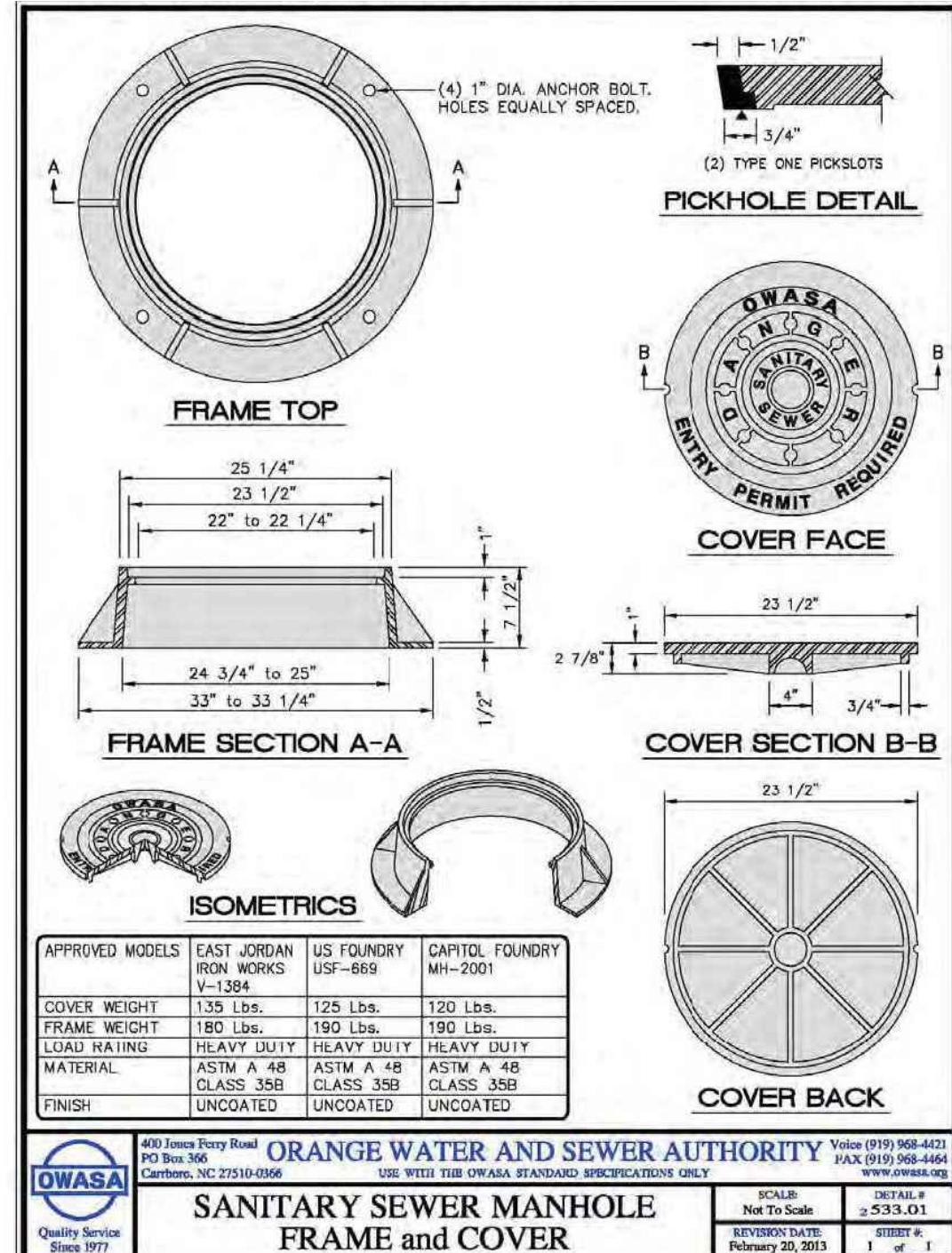
800 Jones Ferry Road ORANGE WATER AND SEWER AUTHORITY Voice (919) 968-4421
PO Box 366 FAX (919) 968-4464
Carboro, NC 27510-0366 USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY
Quality Service Since 1977



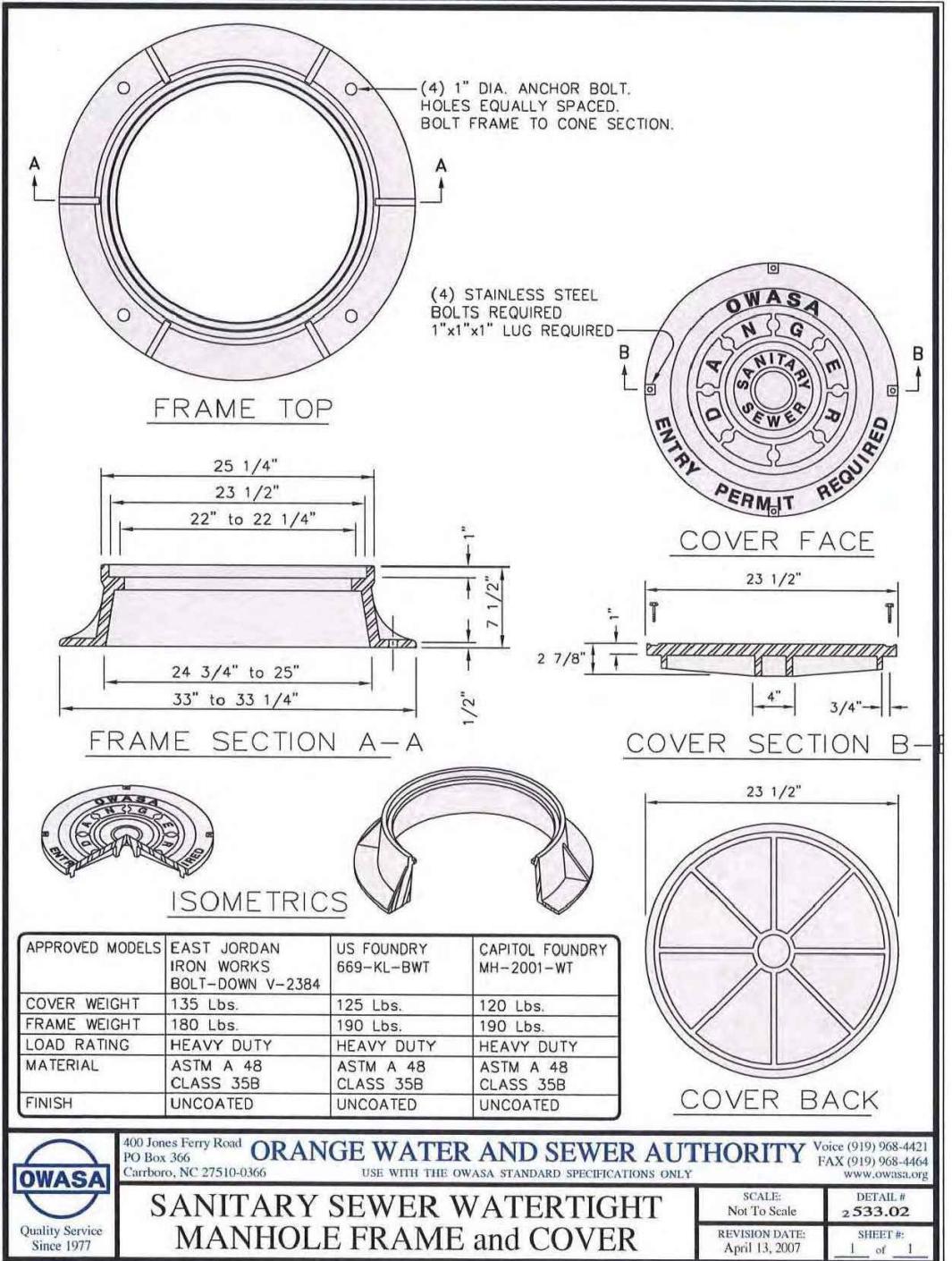
800 Jones Ferry Road ORANGE WATER AND SEWER AUTHORITY Voice (919) 968-4421
PO Box 366 FAX (919) 968-4464
Carboro, NC 27510-0366 USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY
Quality Service Since 1977



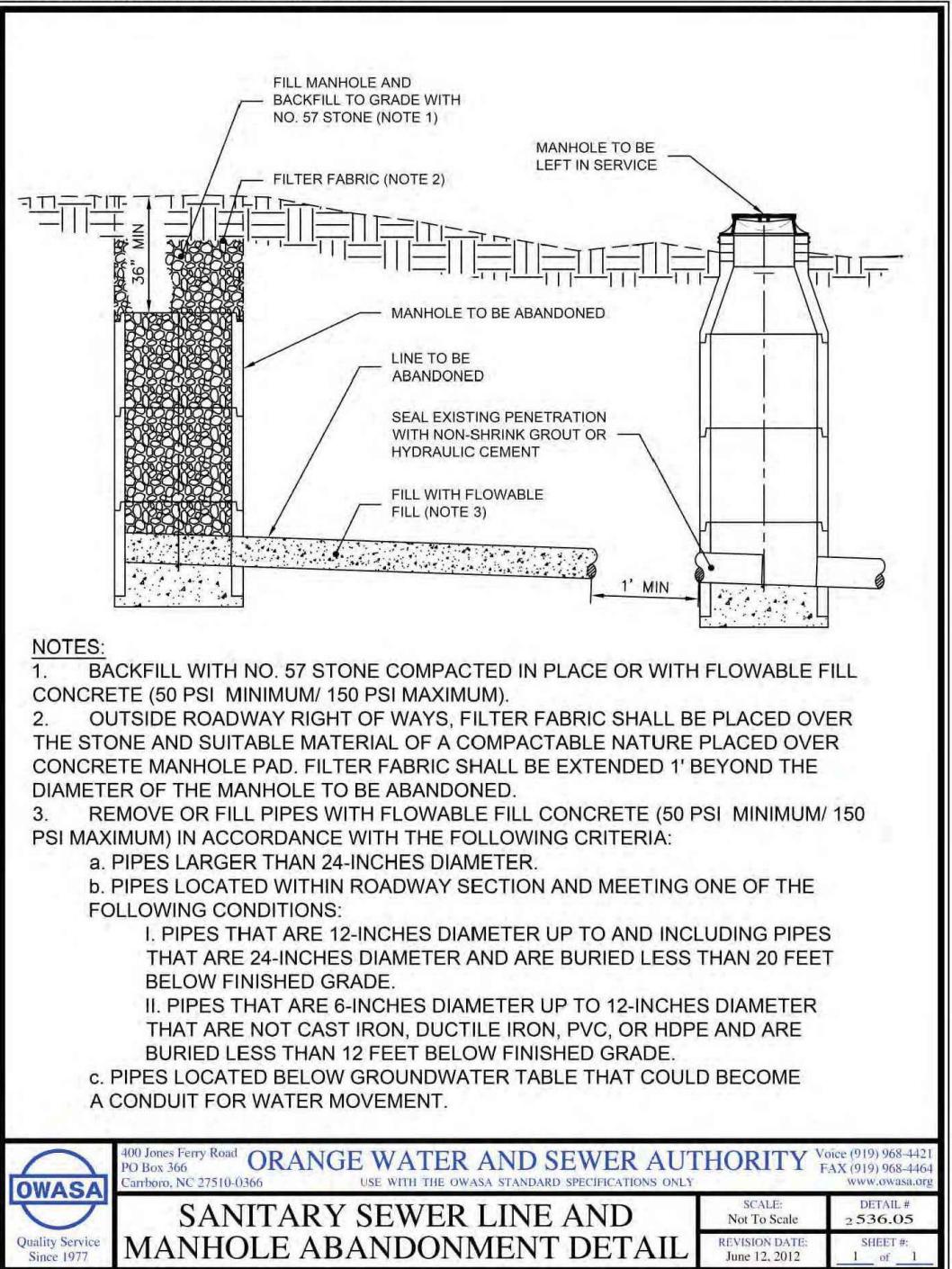
800 Jones Ferry Road ORANGE WATER AND SEWER AUTHORITY Voice (919) 968-4421
PO Box 366 FAX (919) 968-4464
Carboro, NC 27510-0366 USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY
Quality Service Since 1977



800 Jones Ferry Road ORANGE WATER AND SEWER AUTHORITY Voice (919) 968-4421
PO Box 366 FAX (919) 968-4464
Carboro, NC 27510-0366 USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY
Quality Service Since 1977



800 Jones Ferry Road ORANGE WATER AND SEWER AUTHORITY Voice (919) 968-4421
PO Box 366 FAX (919) 968-4464
Carboro, NC 27510-0366 USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY
Quality Service Since 1977



800 Jones Ferry Road ORANGE WATER AND SEWER AUTHORITY Voice (919) 968-4421
PO Box 366 FAX (919) 968-4464
Carboro, NC 27510-0366 USE WITH THE OWASA STANDARD SPECIFICATIONS ONLY
Quality Service Since 1977

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. WDF22001
FILENAME WDF22001-D1
CHECKED BY DCB
DRAWN BY SME
SCALE N/A
DATE 04.14.2023

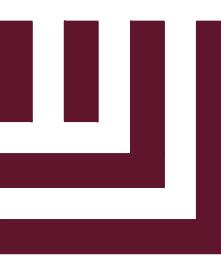
SEE SHEET CO.00 FOR ALL PROJECT, SITE,
GRADING, STORM DRAINAGE AND UTILITY
NOTES

ALL CONSTRUCTION SHALL BE IN
ACCORDANCE WITH THE CURRENT TOWN
OF CHAPEL HILL AND OWASA DESIGN AND
CONSTRUCTION STANDARDS

SHEET

OWASA DETAILS

C8.05



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

Phone 919. 361. 5000
Fax 919. 361. 2269
License number: C-0293, C-187

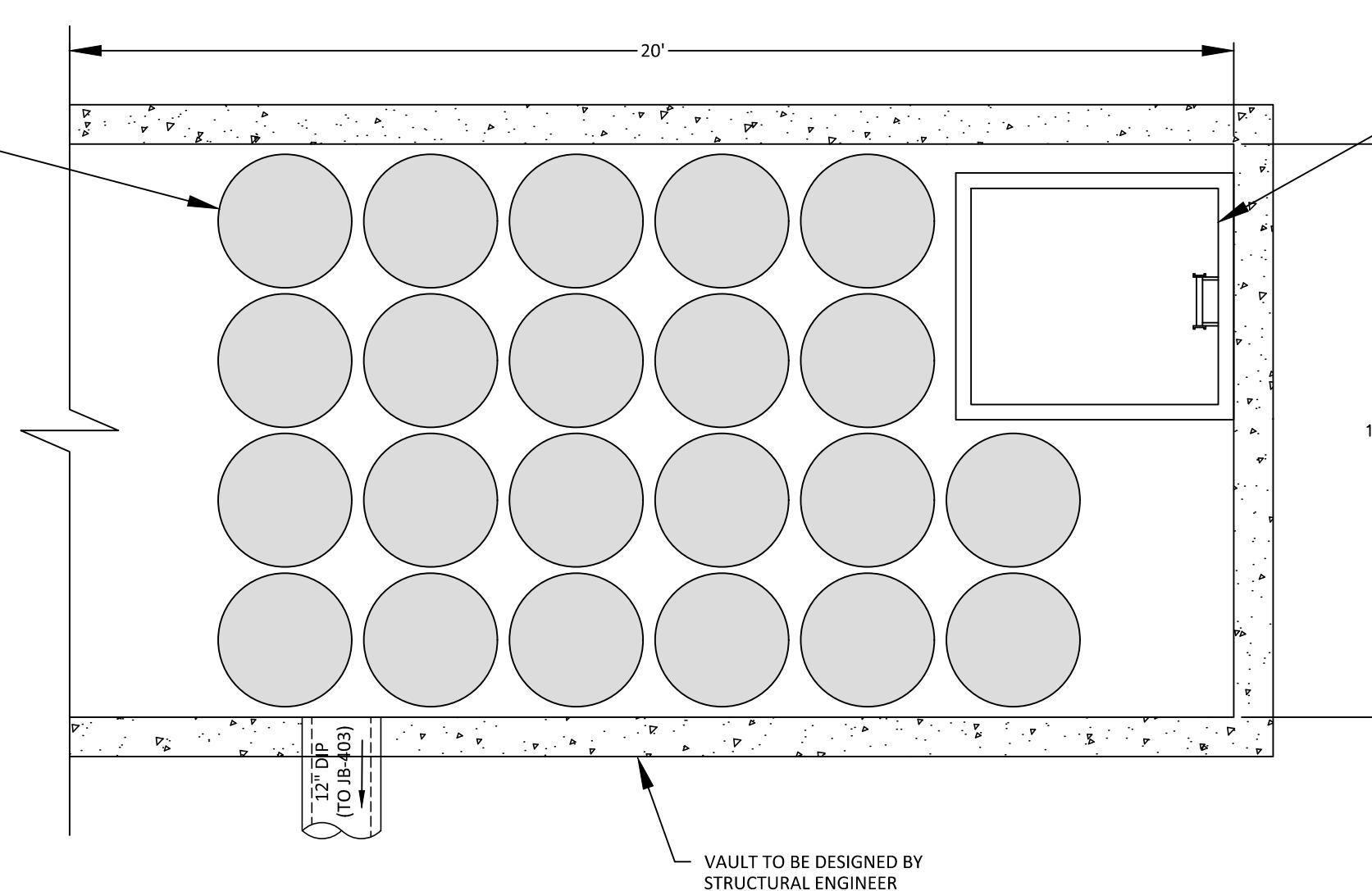
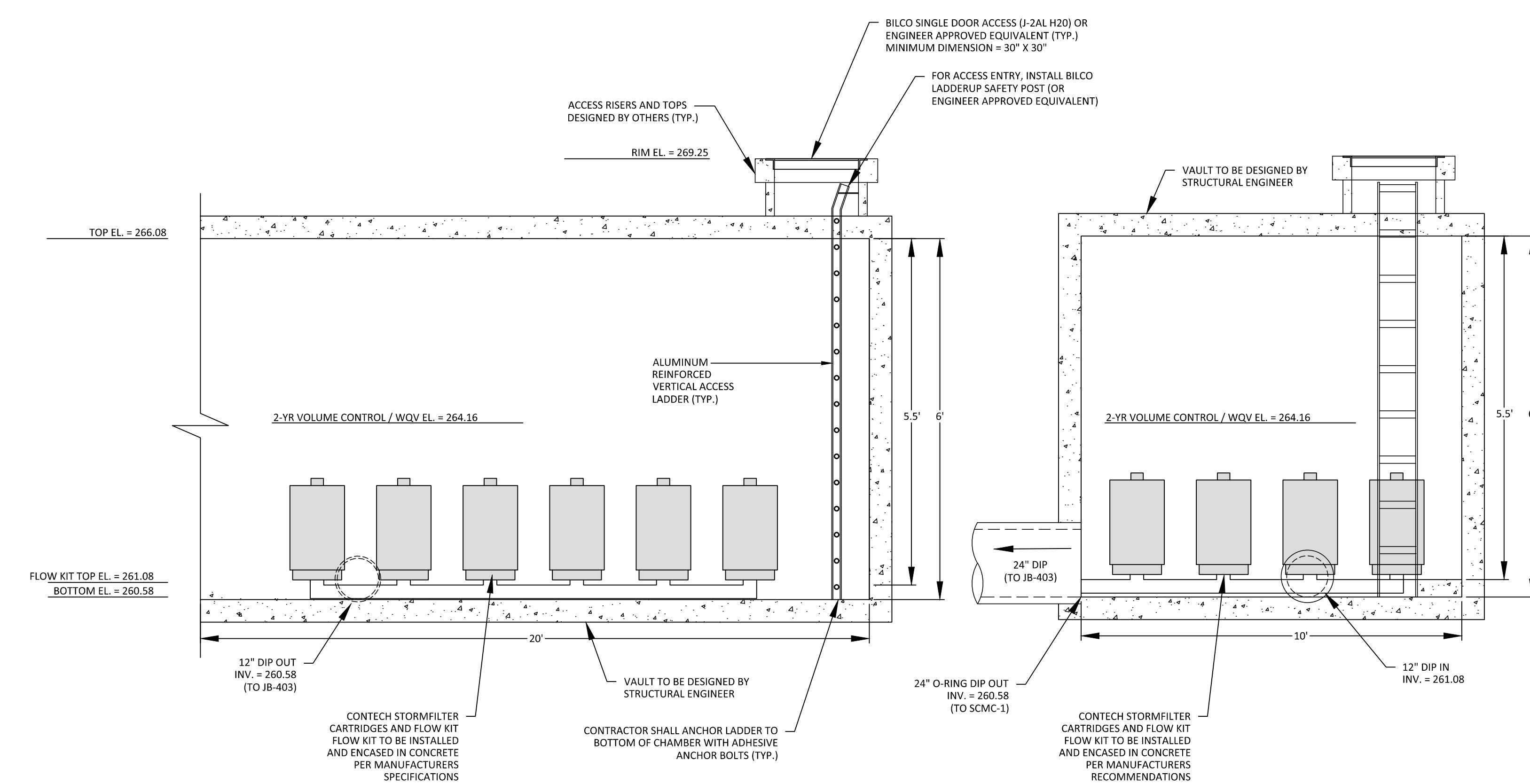
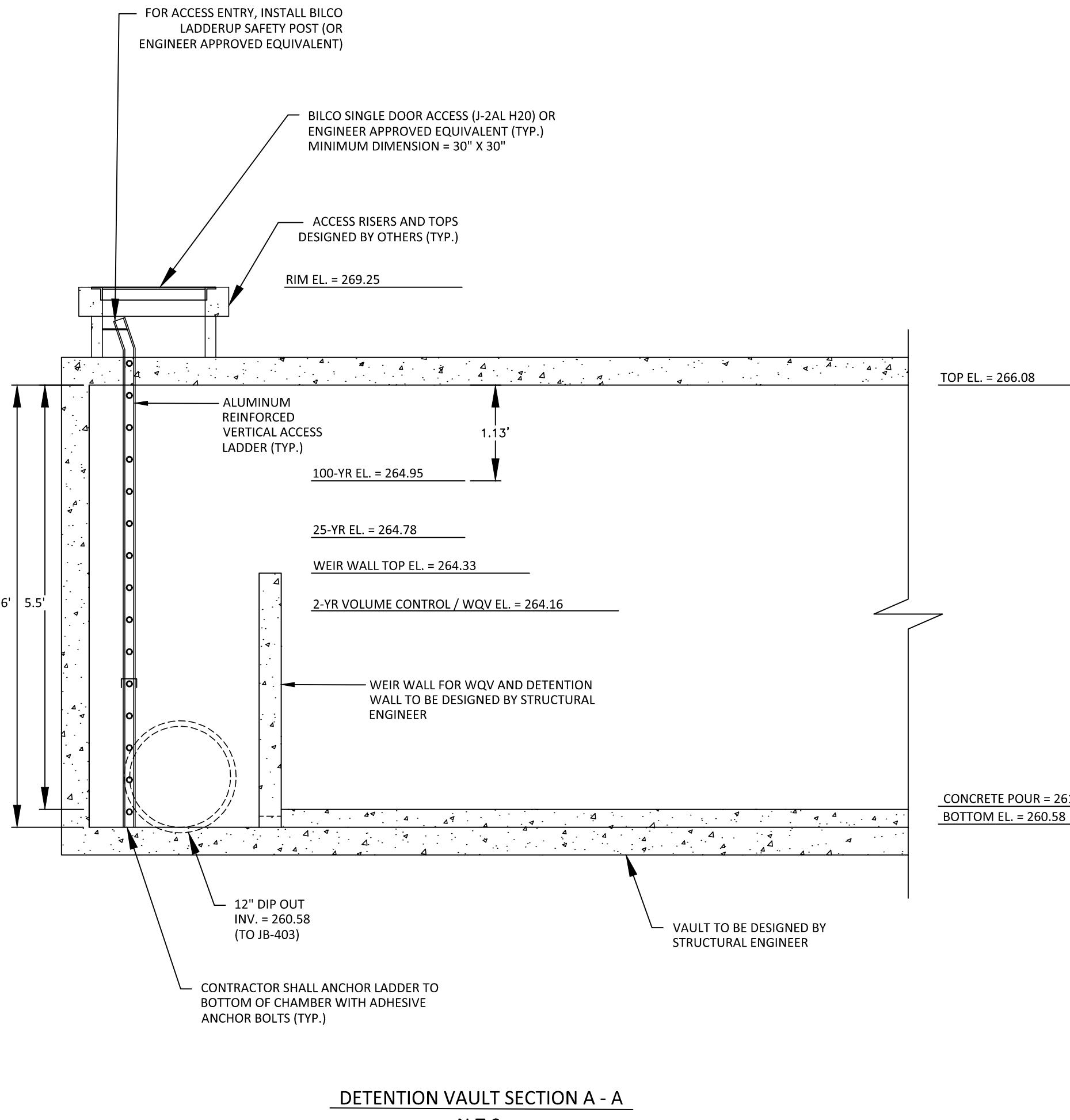
www.mcadamsco.com

CLIENT

WOODFIELD INVESTMENTS
11425 HORSEMAN'S TRAIL
RALEIGH, NC 27613
PHONE: 919. 535. 8947

PARK APARTMENTS - PHASE II
PHASE II FORM DISTRICT PERMIT
O ELLIOTT ROAD

CHAPEL HILL, NORTH CAROLINA, 27517



STORMFILTER BOX DETAILS
N.T.S.

REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. WDF22001
FILENAME WDF22001-SWC
CHECKED BY DCB
DRAWN BY MRO
SCALE N.T.S
DATE 04. 14. 2023

SHEET

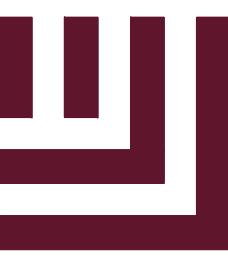
SCM 'C' DETAILS

C9.01

SEE SHEET C0.00 FOR ALL PROJECT, SITE, GRADING, STORM DRAINAGE AND UTILITY NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT TOWN OF CHAPEL HILL AND OWASA DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



McADAMS

The John R. McAdams Company, Inc.
2905 Meridian Parkway
Durham, NC 27713

phone 919.361.5000
fax 919.361.2269
license number: C-0293, C-187

www.mcadamsco.com

CLIENT

WOODFIELD INVESTMENTS
11425 HORSEMAN'S TRAIL
RALEIGH, NC 27613
PHONE: 919.535.8947

PARK APARTMENTS - PHASE II
PHASE II FORM DISTRICT PERMIT
O'ELLIOTT ROAD

CHAPEL HILL, NORTH CAROLINA, 27517



SITE LEGEND

	SIGNAGE
	YARD LIGHTS
	LIGHT POLE
	POWER POLE
	TRAFFIC DIRECTIONAL ARROW
	ACCESSIBLE PARKING STALL
	VAN ACCESSIBLE PARKING STALL
	PARKING SPACE COUNT
	ACCESSIBLE RAMPS
	TYPE A
	TYPE B
	TYPE C
	ACCESSIBLE ROUTE
	PHASE LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	LOT LINE
	EASEMENT LINE
	CENTERLINE
	HEAVY DUTY ASPHALT PAVEMENT

PLANT SCHEDULE

TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CAL	HEIGHT
	QBSW	8	Swamp White Oak	Quercus bicolor	2.5" min	8'-10' min
	UAP	7	Princeton American Elm	Ulmus americana 'Princeton'	2.5" min	8'-10' min
SHRUBS	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONT	HEIGHT
	CSSE	4	Setsugekka Camellia	Camellia sasanqua 'Setsugekka'	42"	
	IVND	9	Dwarf Yaupon	Ilex vomitoria 'Nana'	12"	

NOTE: STREET TREES PROVIDED ARE REPLACEMENT TREES FOR ALREADY EXISTING TREES THAT WILL NEED TO BE REMOVED IN ORDER FOR LOT DEVELOPMENT.

LANDSCAPE CALCULATIONS:

CANOPY REPLACEMENT CALCULATIONS		STREET TREE CALCULATIONS	
REQUIREMENT:		REQUIREMENT:	
(ONE LARGE TREE PER 500 SF OF TREE CANOPY COVERAGE DEFICIT)		ONE LARGE TREE PER 40 LF OF PROP. STREET FRONTAGE DEFICIT)	
BENNETT WAY: 384 LF		BENNETT WAY: 384 LF	
TREE CANOPY COVERAGE DEFICIT: 104,980 SF		TREES REQUIRED (PHASE II): 10 TREES	
LARGE TREES REQUIRED: (OVERALL DEVELOPMENT)		TREES PROVIDED (PHASE II): 12 TREES	
LARGE TREES PROVIDED (PHASE 1): 114 TREES		NOTES:	
LARGE TREES PROVIDED (PHASE 2): 15 TREES		1. TREES ARE ONLY PROPOSED ON THE WEST SIDE OF BENNETT WAY. TREES ON WEST SIDE OF BENNETT PROVIDED IN PHASE I.	
TREES PROVIDED IN LIEU: 81 TREES		2. 40 O.C. DIMENSION WAS ALTERED DUE TO FIRE ACCESS REQUIREMENTS PER THE TOWN OF CHAPEL HILL.	

LANDSCAPE CALCULATION NOTES:

1. SEE SHEET L8.00, LANDSCAPE PROTECTION & TREE COVERAGE PLAN, FOR SITE TREE CANOPY COVERAGE CALCULATIONS.
2. TREE CANOPY CALCULATIONS ARE SUBJECT TO CHANGE, FINAL TREE REPLACEMENT REQUIREMENT TO BE DETERMINED WITH FINAL SIGNED PLANS.
3. TREE REPLACEMENT TO BE PROVIDED VIA TREE PLANTING, RESERVE AREA, PAYMENT-IN-LIEU, OR A COMBINATION OF THOSE OPTIONS.

REVISIONS

NO. DATE

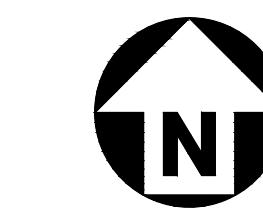
PLAN INFORMATION

PROJECT NO. WDF22001
FILENAME WDF22001-S1
CHECKED BY DCB
DRAWN BY MRO
SCALE 1"=30'
DATE 04.14.2023

SHEET

LANDSCAPE PLAN

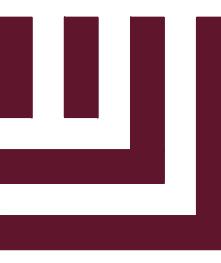
L5.00



SEE SHEET C0.00 FOR ALL PROJECT, SITE,
GRADING, STORM DRAINAGE AND UTILITY
NOTES

ALL CONSTRUCTION SHALL BE IN
ACCORDANCE WITH THE CURRENT TOWN
OF CHAPEL HILL AND OWASA DESIGN AND
CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



McADAMS

The John R. McAdams Company, Inc.

2905 Meridian Parkway

Durham, NC 27713

phone 919.361.5000

fax 919.361.2269

license number: C-0293, C-187

www.mcadamsco.com

CLIENT

WOODFIELD INVESTMENTS

11425 HORSEMAN'S TRAIL

RALEIGH, NC 27613

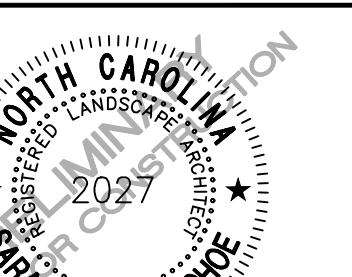
PHONE: 919.535.8947

PARK APARTMENTS - PHASE II

PHASE II FORM DISTRICT PERMIT

O ELLIOTT ROAD

CHAPEL HILL, NORTH CAROLINA, 27517



REVISIONS

NO. DATE

PLAN INFORMATION

PROJECT NO. WDF22001

FILENAME WDF22001-S1

CHECKED BY DCB

DRAWN BY MRO

SCALE 1"=30'

DATE 04. 14. 2023

SHEET

LANDSCAPE DETAILS

L5.01

PLANTING SPECIFICATIONS:

- REFERRER TO CIVIL DRAWINGS FOR NOTES AND DETAILS ON SITE GRADING AND EROSION AND SEDIMENT CONTROL. REFER TO SEEDING AND SODDING NOTES FOR TURF GRASS INSTALLATION.
- CONTRACTOR TO SUBMIT A LIST OF PLANT MATERIALS AND SOURCES FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO PURCHASE AND INSTALLATION. CONTRACTOR TO COORDINATE ANY DISCREPANCIES OR SUBSTITUTIONS WITH LANDSCAPE ARCHITECT.
- DURING DELIVERY, STORAGE AND HANDLING, CONTRACTOR TO PROTECT AND MAINTAIN PLANT LIFE UNTIL PLANTED. PROVIDE PROTECTIVE COVERING OVER ALL PLANTINGS DURING TRANSPORTATION AND PROTECT PLANTINGS FROM EXPOSURE TO DIRECT SUN, WIND OR EXTREMES IN HEAT AND COLD TEMPERATURES. IF PLANTINGS ARE DRIED MORE THAN 24 HOURS AFTER DELIVERY, STORE PLANTS IN LOCATION PROTECTED FROM SUN AND WIND AND PROVIDE ADEQUATE WATER TO THE ROOT BALL PACKAGE. PLANT MATERIAL DAMAGED AS A RESULT OF DELIVERY, STORAGE OR HANDLING WILL BE REJECTED.
- PLANTS, INCLUDING TREES, SHRUBS, GROUNDCOVERS, VINES AND ORNAMENTAL GRASSES, TO BE INSTALLED BETWEEN THE FOLLOWING DATES:

SPRING PLANTING SEASON: MARCH 15 TO JUNE 1

FALL PLANTING SEASON: 15 TO DECEMBER 1

- PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT. PLANT TREES AND SHRUBS AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING LAWNS. PROTECT LAWN AREAS TO REMAIN AND PROMPTLY REPAIR DAMAGE CAUSED BY PLANTING OPERATIONS.

- CONTRACTOR SHALL CAREFULLY EXAMINE THE CIVIL RECORD AND SURVEY DRAWINGS TO BECOME FAMILIAR WITH EXISTING UNDERGROUND CONDITIONS BEFORE DIGGING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF ALL SURFACE AND SUBSURFACE CONDITIONS, AND TO NOTIFY THE LANDSCAPE ARCHITECT OF ANY CIRCUMSTANCES THAT WOULD NEGATIVELY IMPACT UNDERGROUND CONDITIONS OR THE HEALTH OF THE PLANTINGS.

PRODUCTS

- TREE AND SHRUB MATERIAL: FURNISH NURSERY-GROWN, TYPICAL OF THEIR SPECIES OR VARIETY, WITH NORMAL GROWTH HABIT, WELL-DEVELOPED BRANCH STRUCTURE, HEALTHY FOLIAGE, AND VIGOROUS ROOT SYSTEMS IN ACCORDANCE WITH APPLICABLE REQUIREMENTS IN ANSI/ASCE 26 "AMERICAN STANDARD FOR NURSERY STOCK". PLANTS SHALL BE FREE FROM DISEASES, INSECTS, AND OTHER PESTS, EXCEPT FOR TUNNELING KNOTS, SUNSCALD INJURIES, FROST CRACKS, ABRASION OF THE BARK, PLANT DISEASES, INSECT EGGS, BORERS, FIRES, ANT, AND ALL FORMS OF INFESTATION.

- SOIL: ASTM D 5268 TOPSOIL, pH RANGE OF 5.5 TO 7, A MINIMUM OF 6 PERCENT ORGANIC MATERIAL CONTENT; FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION AND OTHER EXTRANEous MATERIALS HARMFUL TO PLANT GROWTH.

- ORGANIC AMENDMENTS:

 - ORGANIC COMPOST: WELL-COMPOSTED, STABLE AND WEED-FREE ORGANIC MATTER, pH PASSING THROUGH 3/4" SIEVE; SOLUBLE SALT CONTENT OF 5 TO 10 DECISEMERS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOxic TO PLANTINGS.
 - INORGANIC SOIL AMENDMENTS: COMMERCIAL GRADE, FREE OF TOXIC MATERIALS.

- FERTILIZER: GRANULAR OR PELLET SLOW-RELEASE FERTILIZER CONSISTING OF 50 PERCENT WATER-INSOLUBLE NITROGEN, PHOSPHORUS AND POTASSIUM IN THE COMPOSITION AS DIRECTED BY SOIL ANALYSIS TESTING.

- ORGANIC MULCH: SHREDDED HARDWOOD IN NATURAL BROWN COLOR; 3" MAXIMUM SIZE IN LONGEST DIMENSION; FREE FROM DELETERIOUS MATERIALS AND SUITABLE FOR A TOP DRESSING OF TREES AND SHRUBS.

- STAKES AND GUYS: DEEPROOT ARBORIE STAKING AND GUYING MATERIAL OR APPROVED EQUAL.

WARRANTY AND MAINTENANCE:

WARRANTY
INSTALLER SHALL REPAIR OR REPLACE ANY PLANTINGS THAT FAIL IN MATERIALS, WORKMANSHIP, OR GROWTH WITHIN ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION. FAILURES INCLUDE BUT ARE NOT LIMITED TO:

- DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE, NEGLECT OR ABUSE BY OWNER, OR INCIDENTS THAT ARE BEYOND THE CONTRACTOR'S CONTROL.
- STRUCTURAL FAILURES INCLUDING PLANTINGS FALLING OR BLOWING OVER.

PLANTS THAT DO NOT MEET THESE REQUIREMENTS SHALL BE DEFINED AS DEFECTIVE. ANY DEFECTIVE PLANTS SHALL BE REMOVED IMMEDIATELY UPON NOTIFICATION BY THE LANDSCAPE ARCHITECT AND REPLACED WITHOUT COST TO THE OWNER AS SOON AS WEATHER CONDITIONS PERMIT AND WITHIN THE SPECIFIED PLANTING PERIOD.

MAINTENANCE

INITIAL MAINTENANCE SHALL BE PROVIDED IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL SUBSTANTIAL COMPLETION. UPON SUBSTANTIAL COMPLETION, MAINTENANCE FOR ALL PLANT MATERIAL SHALL BE PROVIDED FOR ONE YEAR AT A MINIMUM AND SHALL INCLUDE:

- TREE AND SHRUB MAINTENANCE: MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, RESTORING PLANTING SAUCERS, AND RESETTING TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED TO ESTABLISH HEALTHY, Viable PLANTINGS. TREATMENT OR TREATS AS REQUIRED TO PREVENT PESTS AND DISEASE. TREES AND SHRUBS TO BE PROVIDED TO RESTORE NATURAL SHAPE TYPICAL OF THEIR SPECIES OR VARIETY IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES AND APPLICABLE REQUIREMENTS IN ANSI/ASCE 26 "AMERICAN STANDARD FOR NURSERY STOCK".
- GROUNDCOVER AND PLANT MAINTENANCE: MAINTAIN AND ESTABLISH PLANTINGS BY WATERING, WEEDING, FERTILIZING, MULCHING, AND OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, Viable PLANTINGS.
- PROTECT EXTERIOR PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRADES, AND OTHERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED PLANTINGS.

EXCAVATION, BACKFILL, AND PROTECTION OF PLANT MATERIALS

ALL EXCAVATION IN THIS CONTRACT SHALL BE UNCLASSIFIED AND IS TO INCLUDE EARTH, LOOSE ROCK, ROCK, OR

ANY COMBINATION THEREOF. IN WET OR DRY STATE, ALL REMOVED MATERIALS SHALL BE BAFFLED DWITH A 1" DIA. TUBE, KNOB, OR PLATE. THE REMOVED MATERIALS SHALL BE USED AS BACKFILL. IN THIS CASE, THE SPECIAL BACKFILL SPECIFICATIONS SHALL TAKE PRECEDENCE OVER THIS GENERAL SPECIFICATION (SEE 3.07). ALL TRENCH BACKFILL SHALL BE WATER SETTLED AND COMPACTED IN ORDER TO PREVENT SETTLING. USE ONLY THE MINIMUM AMOUNT OF WATER NECESSARY TO SETTLE DITCHES. FLOODING DITCHES WITHOUT COMPACTION WILL NOT BE PERMITTED.

ALL TRENCHES AND ADJOINING AREAS SHALL BE HAND RAKED TO FINISH GRADE. REMOVE ROCKS, EXCESS DIRT, AND DEBRIS FROM THE SITE.

PIPE INSTALLATION

- MAN LINE PIPING: PIPE SHALL BE INSTALLED IN A 4" WIDE (MINIMUM) TRENCH WITH A MINIMUM OF 18"

COVERAGE.

- LEAD LINE PIPING: ALL PVC LATERAL LINE PIPING SHALL BE SOLVENT WELD TYPE. INSTALL IN 4" WIDE (MINIMUM) TRENCH DEEP ENOUGH TO ALLOW FOR INSTALLATION OF SPRINKLER HEADS AND VALVES, BUT IN NO CASE LESS THAN 12" OF COVER FOR ROTARY AND/OR SPRAY ZONE LATRALS.

- PVC PIPE INSTALLATION ALL LUMBER, RUBBISH, AND LARGE ROCKS (OVER 2" IN DIAMETER) SHALL BE REMOVED FROM THE LINE TO PREVENT UNEVEN SETTLEMENT. PIPE SHALL HAVE A FIRM UNIFORMED BEARING FOR THE ENTIRE LENGTH OF EACH PIPE LINE TO PREVENT UNEVEN SETTLEMENT. WEDGING OR BLOCKING OF PIPE WILL NOT BE ALLOWED. DO NOT USE PVC PIPE OVER 1/2" IN DIAMETER OR 1/2" OVER LAY PVC PIPE WHERE THERE IS WATER IN THE TRENCH. NEVER LAY PVC PIPE WHEN THE TEMPERATURE IS 32 DEGREES F. OR BELOW. MAXIMUM 4 PIPES PER TRENCH, WITH 1" HORIZONTAL CLEARANCE BETWEEN PIPES.

- PVC PIPE AND FITTING ASSEMBLY

CONTRACTOR SHALL USE ONLY THE SOLVENT SUPPLIED AND RECOMMENDED BY THE MANUFACTURER OF THE PIPE. IT IS TO BE INSTALLED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS. THE PVC PIPE FITTINGS SHALL BE THOROUGHLY CLEANED OF DIRT, DUST AND MOISTURE BEFORE APPLYING SOLVENT. PVC PIPE AND FITTINGS SHALL BE CLEANED WITH PVC PRIMER OR SANDED WITH PLUMBER'S CLOTH BEFORE SOLVENT WELDING. THE CONTRACTOR SHALL MAKE SOLVENT WELDS WITH A NON-SYNTHETIC BRISTLY BRUSH. WHERE THREADED PVC CONNECTIONS ARE REQUIRED, USE THREADED PVC ADAPTERS INTO WHICH THE PIPE MAY BE WELDED. TEFLON TAPE WILL BE USED ON THREADS.

AUTOMATIC CONTROLLER

AUTOMATIC CONTROLLER SHALL BE SUPPLIED IN ACCORDANCE WITH THE MATERIALS LIST AND SHALL BE LOCATED AS SHOWN ON THE PLAN. CONTRACTOR SHALL PROVIDE SERVICE INTO THE CONTROLLERS AS PART OF THIS CONTRACT.

ELECTRIC VALVES

ELECTRIC REMOTE VALVES SHALL BE SUPPLIED IN ACCORDANCE WITH THE SPECIFICATIONS. VALVES SHALL BE INSTALLED DEEP ENOUGH SO THAT THERE WILL BE AT LEAST 10" OF COVER FOR THE VALVE SUPPLIED. SHALL BECOME PART OF THESE SPECIFICATIONS. A GREEN PLASTIC TOP SHALL BE INSTALLED ON THE VALVE BOX FLUSH WITH THE FINAL GRADE. PLACE 6" OF GRAVEL UNDER EACH VALVE BEFORE INSTALLING VALVE BOX.

HEAD INSTALLATION

IMPORTANT: BACKFILL SHALL BE SPECIALLY TAMPED UNDER THE HEAD FLANGE AND AROUND THE HEAD FOR A DISTANCE OF ONE FOOT BY A SUITABLE MEANS, AFTER TRENCH BACKFILL HAS DRIED FROM WATER SETTLING. THE PURPOSE IS TO ELIMINATE LOOSE HEADS IN THE GROUND THAT WOULD MOVE WHEN RUN OVER WITH MOOTOR VEHICLES. THERE IS A HIGH SOURCE OF DAMAGE, SO SPRINKLER HEADS SHALL BE LOCATED 4" FROM BACK OF CURB. CURB USE A FULL SWIVEL JOINT WITH SCHEDULE 40 PVC THREADED FITTINGS AND SCHEDULE 80 PVC NIPPLES. THE TOP OF THE HEAD SHALL BE NO MORE THAN 1/4" ABOVE FINISHED GRADE. ADJUST PARTIAL CIRCLE ARCS AS REQUIRED TO COMPLETE COVERAGE.

FINAL CLEANING

UPON COMPLETION OF THE WORK AND BEFORE ACCEPTANCE AND FINAL PAYMENT WILL BE MADE, THE CONTRACTOR SHALL CLEAN AND REMOVE FROM THE SITE OF THE WORK, HIS SURPLUS AND DISCARDED MATERIALS, TEMPORARY STRUCTURES AND DEBRIS OF EVERY KIND. HE SHALL LEAVE THE SITE OF THE WORK IN A NEAT AND ORDERLY CONDITION EQUAL THE SITE SHALL BE DISPOSED AT LOCATIONS SATISFACTORY TO THE REPRESENTATIVE.

SYSTEM DEMONSTRATION

STRUCTURE OWNER'S PERSONNEL IN OPERATION AND MAINTENANCE OF SYSTEM, INCLUDING ADJUSTING OF SPRINKLER HEADS. USE OPERATION AND MAINTENANCE MATERIAL AS BASIS FOR DEMONSTRATION.

IRRIGATION SPECIFICATIONS:

GENERAL

- PROVIDE A COMPLETE AND OPERATING LAWN SPRINKLER INSTALLATION AS SHOWN ON THE PLANS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING ITEMS:

 - PIPING
 - SPRINKLER HEADS
 - CONTROL SYSTEM AND CONNECTION TO ELECTRICAL SUPPLY
 - TRENCHING, INSTALLATION OF SYSTEM, CONNECTION TO WATER SOURCE, TESTING, AND BACKFILLING

GENERAL CONDITIONS SPECIFICALLY FOR LANDSCAPE IRRIGATION

- THE CONTRACTOR WILL FLAG THE LOCATION OF ALL HEADS, ELECTRIC VALVES, QUICK COUPLER VALVES, GATE VALVES, AUTOMATIC CONTROLLERS, BACKFLOW PREVENTER, ETC., PRIOR TO CONSTRUCTION FOR THE REPRESENTATIVE'S APPROVAL. THE CONTRACTOR SHALL REPORT TO THE REPRESENTATIVE ANY DEVIATIONS FROM THE IRRIGATION PLAN, SPECIFICATIONS, AND THE SITE. FAILURE TO DO SO PRIOR TO THE INSTALLATION OF THE SYSTEM WILL RESULT IN THE CONTRACTOR BEING HELD LIABLE FOR THE COST OF REWORKING THE SYSTEM.
- ALL LOCAL, MUNICIPAL AND STATE LAWS, ORDINANCES, CODES AND REGULATIONS RELATING TO THE GOVERNING OF ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND WILL BE CARRIED OUT BY THE CONTRACTOR. THE CONTRACTOR MUST HAVE A VALID LICENSE, AS ISSUED BY THE TEXAS BOARD OF IRRIGATORS, MUST CARRY SUFFICIENT INSURANCE COVERAGE, AND MUST HAVE A VALID CONTRACTOR'S LICENSE.
- ANY PERMITS NEEDED FOR CONSTRUCTION OF THE WORK INCLUDED IN THIS CONTRACT, WHICH IS REQUIRED BY ANY LEGALLY CONSTITUTED AUTHORITY HAVING JURISDICTION, SHALL BE OBTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PAY FOR ALL COSTS IN CONNECTION WITH ANY INSPECTIONS OR EXAMINATIONS REQUIRED BY THESE AUTHORITIES. THE REPRESENTATIVE WILL BE NOTIFIED WHEN THESE INSPECTIONS ARE REQUIRED. ANY NECESSARY WORK NEEDED TO BE DONE BY THE CONTRACTOR AS A RESULT OF THESE INSPECTIONS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE. COPIES OF ALL PERMITS AND INSPECTIONS REPORTS SHALL BE FORWARDED TO THE REPRESENTATIVE.

GUARANTEE AND MAINTENANCE

- MATERIAL AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REPAIR OF WORK SHALL BE DONE AT NO EXPENSE TO THE OWNER DURING THE FIRST YEAR, EXCEPT FOR REPAIRS OR REPLACEMENTS NECESSITATED BY DAMAGE OF ANY KIND NOT OF THE CONTRACTOR'S MAKING. ANY REIMBURSEMENT FOR REPAIRS MUST HAVE PRIOR APPROVAL OF THE REPRESENTATIVE.

SUBSTITUTIONS

- THE SPRINKLER SYSTEM HAS BEEN DESIGNED ACCORDING TO THE OPERATING CHARACTERISTICS OF THE SPECIFIED EQUIPMENT. THEREFORE, NO SUBSTITUTIONS OF EQUIPMENT WILL BE ALLOWED EXCEPT WITH WRITTEN APPROVAL.

PRODUCTS

POLYVINYL CHLORIDE PIPE

- POLYVINYL CHLORIDE PIPE (HEREINAFTER REFERRED TO AS PVC PIPE) SHALL HAVE BEEN MANUFACTURED IN ACCORDANCE WITH THE PRODUCT STANDARDS AS FOLLOWS: PRODUCT STANDARD PS-22-21 SHALL APPLY AND BE THE GOVERNING AUTHORITY AS APPLICABLE TO MAIN LINE PIPING AND SHALL BE SDR-21 (CLASS 200) SPECIFICATION. 2 1/2" AND SMALLER MAIN LINE AND LATERAL LINE PIPING WILL BE SOLVENT WELD JOINTS.

PIPE FITTINGS

- 2 1/2" AND SMALLER PIPE FITTINGS SHALL BE PVC SCHEDULE 40, AS MANUFACTURED BY THE LASCO COMPANY, OR EQUAL. ALL PVC FITTINGS SHALL BE OF THE SAME MATERIAL AS THE PVC PIPE SPECIFIED AND SHALL BE COMPATIBLE WITH THE PVC PIPE FURNISHED. ONLY SOLVENT RECOMMENDED BY THE MANUFACTURER OF THE PVC PIPE AND THE MANUFACTURER OF THE PVC FITTINGS SHALL BE USED.

WIRE

- ALL VALVE WIRING SHALL BE 14 GAUGE COPPER SINGLE-CONDUCTOR WIRE WITH 4/64" VINYL INSULATION AS APPROVED FOR DIRECT UNDERGROUND BURIAL IN 30 VOL AC OR LESS SERVICE BY THE NATIONAL ELECTRICAL CODE. WHERE VALVE WIRING FROM TWO OR MORE CONTROLLERS ARE IN THE SAME DITCH, WIRE ARE TO BE COLOR CODED. THIS COLOR CODING TO BE NOTED ON RECORD DRAWINGS.

EXPANSION COILS

- EXPANSION COILS, WHICH ARE TO CONSIST OF APPROXIMATELY 10 WRAPS OF WIRE AROUND 1" PIPE, WILL BE PROVIDED ON EACH PIPE APPROXIMATELY EVERY 100 FEET. WIRES ARE TO BE BUNDLED AND TAPE TOGETHER EVERY 10 FEET. PROVIDE EXPANSION COIL AT EACH ELECTRIC VALVE INSIDE THE BOX.

WIRE SPLICES

- ALL WIRE SPLICES SHALL BE MADE WITH A MECHANICAL CONNECTOR AND WATERPROOFED ACCORDING TO THE MANUFACTURER'S SPECIFICATION. THE WIRE SPLICE SHALL BE SPEAR'S "DRY SPLICE", 3M "SCOTCH LOCK", OR 3M DRY WIRE SPLICE. ALL WIRE SPLICES SHALL BE IN VALVE BOXES, AND NO DIRECTLY BURIED OR UNDERGROUND SPLICES WILL BE ACCEPTED.

EXECUTION

INSTALLATION GENERAL

- BEFORE INSTALLATION IS START



McADAMS

The John R. McAdams Company, Inc.

2905 Meridian Parkway

Durham, NC 27713

Phone 919.361.5000

fax 919.361.2269

license number: C-0293

www.mcadamsco.com

CLIENT

WOODFIELD INVESTMENTS

11425 HORSEMAN'S TRAIL

RALEIGH, NC 27613

PHONE: 919.535.8947

PARK APARTMENTS

FORM DISTRICT PERMIT

1250 EPHESEUS CHURCH ROAD

CHAPEL HILL, NORTH CAROLINA, 27517



REVISIONS

NO.	DATE
1	06.12.2020 ISSUED FOR CONSTRUCTION
2	07.02.2020 ZCP REVISION #2

PLAN INFORMATION

PROJECT NO.	WDF-17000
FILENAME	WDF17000-TC1
CHECKED BY	SRD
DRAWN BY	AMR
SCALE	1"=40'
DATE	06.12.2020

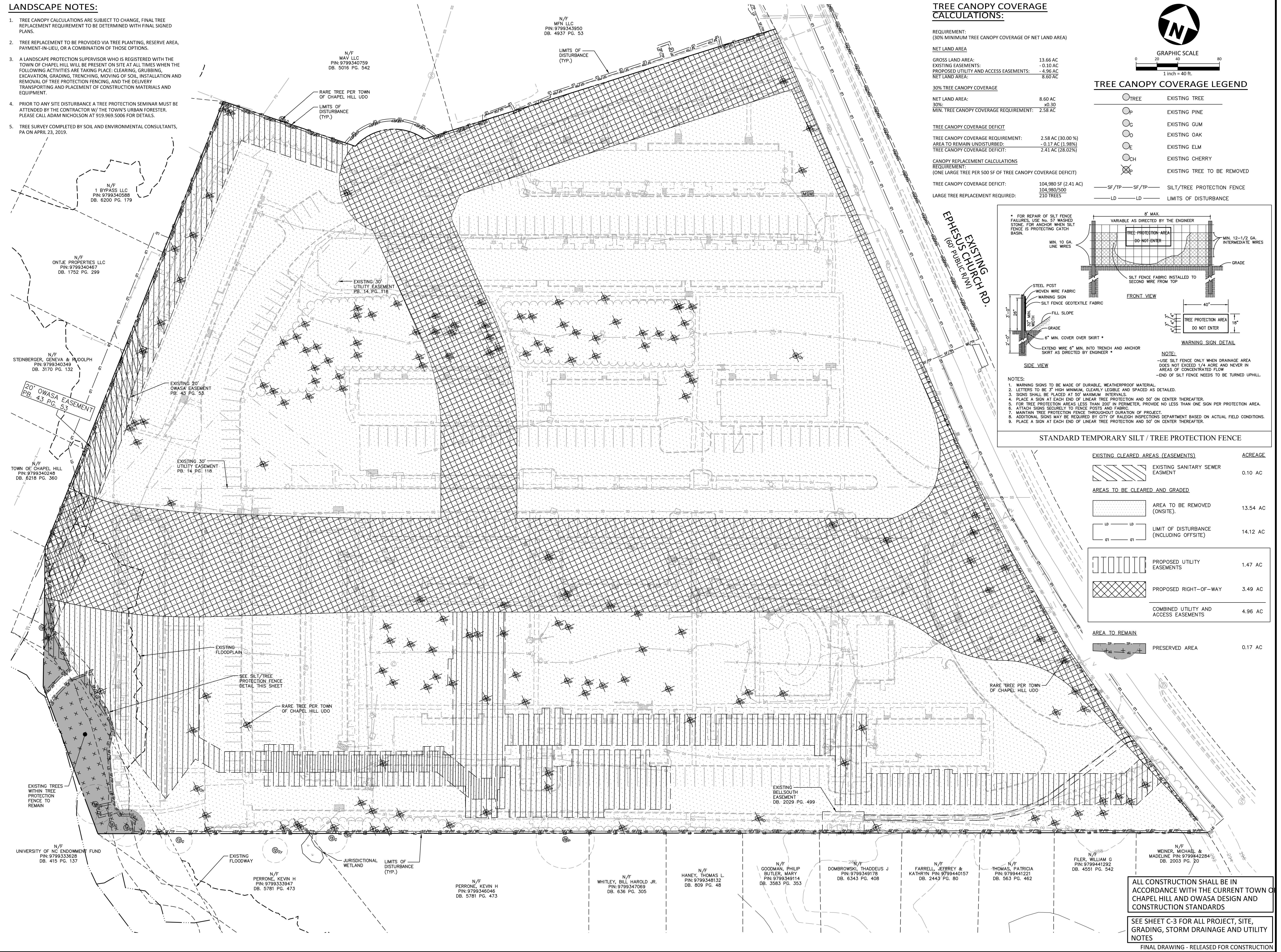
SHEET

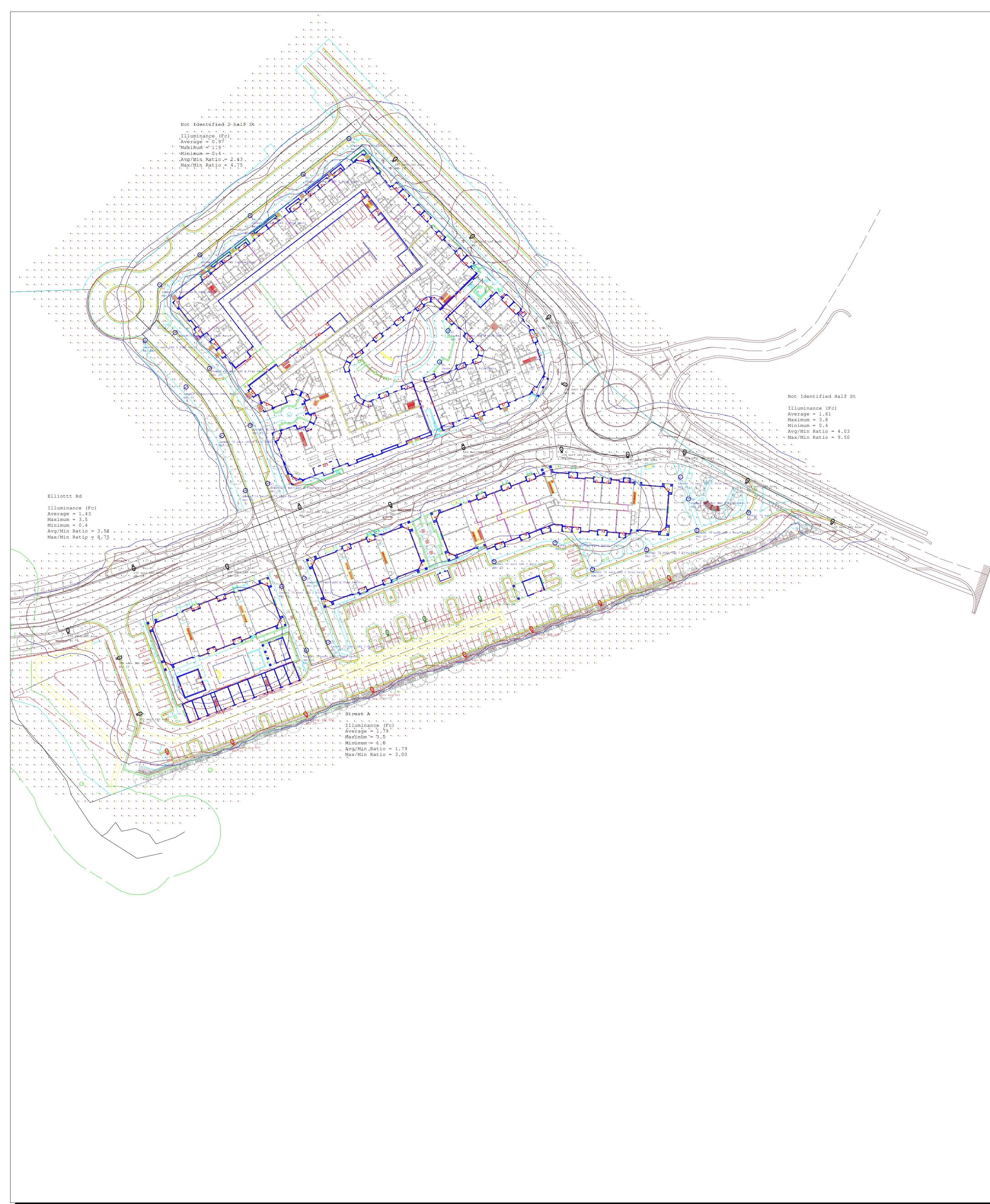
LANDSCAPE PROTECTION & TREE COVERAGE PLAN

TC-1

LANDSCAPE NOTES:

1. TREE CANOPY CALCULATIONS ARE SUBJECT TO CHANGE, FINAL TREE PLACEMENT REQUIREMENT TO BE DETERMINED WITH FINAL SIGNED PLANS.
2. TREE REPLACEMENT TO BE PROVIDED VIA TREE PLANTING, RESERVE AREA, PAYMENT-IN-LIEU, OR A COMBINATION OF THOSE OPTIONS.
3. A LANDSCAPE PROTECTION SUPERVISOR WHO IS REGISTERED WITH THE TOWN OF CHAPEL HILL WILL BE PRESENT ON SITE AT ALL TIMES WHEN THE FOLLOWING ACTIVITIES ARE TAKING PLACE: CLEARING, GRUBBING, EXCAVATION, GRADING, TRENCHING, MOVING OF SOIL, INSTALLATION AND REMOVAL OF TREE PROTECTION FENCING, AND THE DELIVERY, TRANSPORTING AND PLACEMENT OF CONSTRUCTION MATERIALS AND EQUIPMENT.
4. PRIOR TO ANY SITE DISTURBANCE A TREE PROTECTION SEMINAR MUST BE ATTENDED BY THE CONTRACTOR W/ THE TOWN'S URBAN FORESTER. PLEASE CALL ADAM NICHOLSON AT 919.969.5006 FOR DETAILS.
5. TREE SURVEY COMPLETED BY SOIL AND ENVIRONMENTAL CONSULTANTS, PA ON APRIL 23, 2019.





Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Total Lamp Lumens LLF	Description
□ -	17	150 watt LED Area	SINGLE	N.A.	0.850 ATB2 40B LED E10 XXXXX R3
○ -	27	Sanibel 70 watt LED C Pole Davit	SINGLE	N.A.	0.850 GBLF 070 4K XXXX L3
□ -	3	150 watt LED Area AB	SINGLE	N.A.	0.850 ATB2 40B LED E10 XXXXX R3
□ -	8	150 watt Area HSS	SINGLE	N.A.	0.850 ATB2 40BLEDE10 XXXXX R3 HS

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min Max/Min
site	Illuminance	Fc	0.53	3.8	0.0	N.A. N.A.
Elliott Rd	Illuminance	Fc	1.43	3.5	0.4	3.58 8.75
Not Identified 2 half St	Illuminance	Fc	0.97	1.9	0.4	2.43 4.75
Not Identified Half St	Illuminance	Fc	1.61	3.8	0.4	4.03 9.50
Street A	Illuminance	Fc	1.79	3.0	1.0	1.79 3.00



#	Date	Comments
		Revisions

Drawn By:	Tom Grantham, LC, CEM
Checked By:	
Date:	5/2/2019

Park Apartments
Chapel Hill