

**UTILITY PLAN NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH OWASA AND THE TOWN OF CHAPEL HILL STANDARDS AND SPECIFICATIONS.
- ALL UTILITIES SHALL BE PLACED UNDERGROUND UNLESS OTHERWISE INDICATED ON THE PLANS.
- NO OVERHEAD OBSTRUCTION OR UTILITY WIRES SHALL INTERFERE WITH SERVICE VEHICLE ACCESS OR OPERATION.
- THE LOCATION OF THE EXISTING UTILITIES SHOWN SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES (PRIVATE AND PUBLIC) AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.
- MAINTAIN EXISTING UTILITY SERVICES UNTIL NEW UTILITY LINES ARE READY TO BE PLACED INTO SERVICE. COORDINATE TEMPORARY DISCONNECTION WITH APPROPRIATE PROVIDER(S) AND MINIMIZE DISCONNECTION DURATION WHILE PLACING NEW LINES INTO SERVICE.
- ALL UTILITIES SHALL BE INSTALLED OUTSIDE OF TREE PROTECTION AREAS TO AVOID DAMAGE TO TREE ROOTS DURING INSTALLATION.
- ALL SEWER PIPING (INCLUDING SERVICE LINES) WITHIN OWASA EASEMENTS OR PUBLIC RIGHTS-OF-WAY SHALL BE DUCTILE IRON. ALL PVC SEWER PIPING SHALL BE SCH. 40.
- SITWORK CONTRACTOR SHALL EXTEND FIRE LINES INTO RISER ROOMS, TURN LINES UP WITH 90° BENDS & TERMINATE LINES WITH FLANGES SET 1' ABOVE FINISHED FLOOR ELEVATION. COORDINATE WITH FIRE PROTECTION, PLUMBING & STRUCTURAL DESIGNS.
- SITE CONTRACTOR TO COORDINATE CONDUIT INSTALLATION DIRECTLY WITH ALL UTILITY SERVICE PROVIDERS AND IRRIGATION INSTALLATION CONTRACTOR.
- PRIVATE FIRE MAINS THAT FEED THE SPRINKLER SYSTEM SHALL BE INSTALLED PER NFPA 24. THE LINE SHALL BE FLUSHED PER NFPA 24 AND WITNESSED BY A FIRE INSPECTOR FROM THE CHAPEL HILL FIRE DEPARTMENT PRIOR TO COVERING THE LINE.
- NO POOL BACKWASH WATER ALLOWED TO DISCHARGE INTO STORM SEWER NETWORK. POOL FILTER BACKWASH TO DISCHARGE TO SAN. SEWER.
- DEWATERING OF THE POOL WATER INTO STORM SEWER NETWORK IS NOT ALLOWED UNLESS DE-CHLORINATED.
- SALT WATER POOL DISCHARGE IS PROHIBITED TO THE STORM SEWER NETWORK.
- HVAC CONDENSATE AND FLOOR DRAINS UNDER A ROOF SHALL NOT BE DISCHARGED INTO STORM SEWER NETWORK. HVAC CONDENSATE AND FLOOR DRAINS UNDER ROOF SHALL DISCHARGE TO SAN. SEWER.
- DISCHARGE FROM THE HYDRAULIC ELEVATOR SUMP SHALL NOT BE CONNECTED TO THE STORM SEWER NETWORK.
- ALL EXISTING SEWER MANHOLES, WHERE NEW MAINS ARE TO CONNECT, WILL LIKELY NEED TO BE REPLACED. CONDITION SHALL BE EVALUATED BY THE OWASA INSPECTOR.
- ALL ELEVATOR SUMPS WHICH DRAIN TO SAN. SEWER MUST BE FITTED WITH AN OIL/WATER SEPARATOR. IN ALL INSTANCES, USE OIL MINDER BY STANCOR OR AN OWASA APPROVED EQUAL.
- WATER & SEWER:
  - OWASA CONTACT: NICK PARKER - (919) 537-4201
  - MINIMUM UTILITY VERTICAL SEPARATION DISTANCES:
    - SANITARY SEWER MAINS AND STORM SEWER - 24"
    - SANITARY SEWER MAINS AND WATER - 18"
    - STORM SEWER AND WATER - 18"
  - EXISTING WATER AND SEWER SERVICES AND CLEANOUTS TO BE REMOVED SHALL BE ABANDONED IN ACCORDANCE WITH OWASA REQUIREMENTS.
- ELECTRICAL:
  - DUKE ENERGY CONTACT: SHANE SMITH - (919) 687-3385
  - DUKE ENERGY TRANSMISSION CONTACT: JERCHO BELCHER - (800) 452-2777
- GAS:
  - DOMINION GAS CONTACT: PAYTON THOMPSON - (919) 819-9822
- TELECOM:
  - AT&T (BELLSOUTH) CONTACT: SCOTT NUNNELLY - (919) 967-1300
  - TIME WARNER CABLE CONTACT: TONY JORDAN - (919) 573-7077

**PLAN KEY NOTES**

- 6" GATE VALVE & VALVE BOX
- 8" GATE VALVE & VALVE BOX
- 12" GATE VALVE & VALVE BOX
- 6" DUCTILE IRON DOMESTIC/FIRE LINE (TYP.)
- 8" DUCTILE IRON DOMESTIC/FIRE LINE (TYP.)
- 12" DUCTILE IRON WATER MAIN (TYP.)
- 12" x 6" TEE
- 8" x 6" TEE
- 8" x 6" TEE
- TAPPING SLEEVE AND VALVE ASSEMBLY
- FIRE HYDRANT
- THRUST BLOCKING - INSTALL AT ALL TEES, TAPS & BENDS AS REQUIRED
- VERTICAL BEND, RODDING & BLOCKING (IF REQUIRED - TYP.)
- DOGHOUSE SANITARY SEWER MANHOLE
- PRECAST CONCRETE SANITARY SEWER MANHOLE
- 8" DUCTILE IRON SEWER MAIN (TYP.)
- 12" DUCTILE IRON SEWER MAIN (TYP.)
- 6" DI SEWER SERVICE AT 1.0% MIN.
- 8" DI SEWER SERVICE AT 1.0% MIN.
- PAVEMENT PATCH
- DUKE ELECTRIC SERVICE (COORD. FINAL LOCATION WITH DUKE - TYP.)
- GAS MAIN (COORD. FINAL LOCATION WITH DOMINION - TYP.)
- SANITARY SEWER MANHOLE COVER GRADE ADJUSTMENT
- BLOW-OFF ASSEMBLY
- WATER LINE ABANDONMENT

**ORANGE WATER AND SEWER AUTHORITY CLOSE-OUT DOCUMENTATION CHECK-LIST**

- IN ADDITION TO A FINAL INSPECTION APPROVED BY THE OWASA CONSTRUCTION INSPECTOR, THE FOLLOWING DOCUMENTS MUST BE RECEIVED AND APPROVED BY OWASA BEFORE ACCEPTANCE OF THE PROJECT AND THE SETTING OF METERS. THE FOLLOWING SHALL BE SUBMITTED AS A COMPLETE PACKAGE TO THE OWASA ENGINEERING ASSOCIATE FOR THIRD PARTY REVIEW. PARTIAL SUBMITTALS ARE CONSIDERED INCOMPLETE. ALL INCOMPLETE SUBMITTALS WILL BE RETURNED.
- ENGINEER'S CERTIFICATION FOR DEH PUBLIC WATER SUPPLY SECTION PERMITTED WATER EXTENSION - SUBMIT ORIGINAL DOCUMENT TO OWASA FOR SUBMITTAL TO NCDENR. RECEIPT OF THE DEH PUBLIC WATER SUPPLY SECTION FINAL APPROVAL LETTER IS REQUIRED BEFORE THE PERMITTED WATER SYSTEM IS PLACED INTO SERVICE. STATE REQUIREMENT NO EXCEPTIONS.
  - ENGINEER'S CERTIFICATION FOR DWG PERMITTED SEWER EXTENSION - ENGINEER MUST USE THE CERTIFICATION FORM ATTACHED TO THE SEWER PERMIT FROM NCDENR. RECORD DRAWINGS ARE REQUIRED TO BE SUBMITTED TO NCDENR ALONG WITH THE CERTIFICATION OF COMPLETION AS A PART OF THE SUPPORTING DOCUMENTATION. BOTH DOCUMENTS MUST BE SEALED BY ENGINEERS FROM THE SAME ORGANIZATION. SUBMIT ORIGINAL DOCUMENT TO OWASA ALONG WITH THE SUPPORTING DOCUMENTATION REQUIRED BY DWG. THE PERMITTED SEWER SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL THE ENGINEER'S CERTIFICATION AND SUPPORTING DOCUMENTATION HAVE BEEN SUBMITTED BY OWASA TO DWG. STATE REQUIREMENT NO EXCEPTIONS.
  - ASSET LETTER - SUBMIT ORIGINAL DOCUMENT ON OWASA STANDARD FORM.
  - LETTER OF DEDICATION - SUBMIT ORIGINAL DOCUMENT ON OWASA STANDARD FORM.
  - RECORD DRAWINGS - CONSTRUCTION DRAWINGS SHALL BE MODIFIED TO REFLECT ACTUAL FIELD INSTALLATIONS. ALL DEH PUBLIC WATER SUPPLY SECTION PERMITTED EXTENSIONS AND DWG PERMITTED EXTENSIONS SHALL BE SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NORTH CAROLINA. SUBMIT THREE COPIES OF THE RECORD DRAWING FOR REVIEW BY THE OWASA ENGINEERING STAFF.
  - DIGITAL SUBMISSIONS - WATER FEATURE DATABASE (MS ACCESS), MANHOLE DATASHEET DATABASE (MS ACCESS), AND RECORD DRAWING (AUTOCAD DWG FORMAT). CONTACT THE OWASA ENGINEERING TECHNICIANS FOR INFORMATION CONCERNING THIS SUBMITTAL.

**STRUCTURE TABLE**

STR. ID	RIM ELEV. (FT)	STRUCTURE TYPE
EX SSMH	284.14	PIPE END
PIPE END #7A	291.54	PIPE END
SSMH #1	289.40	SSMH
SSMH #2	292.40	SSMH
SSMH #3	296.70	DH SSMH
SSMH #4	297.90	SSMH
SSMH #5	302.88	SSMH
SSMH #6	303.67	DH SSMH
SSMH #7B	302.50	SSMH

**PIPE TABLE**

US STR	DS STR	DIAMETER (IN)	MATERIAL	US INV. ELEV. (FT)	DS INV. ELEV. (FT)	LENGTH (FT)	SLOPE (FT/FT)
PIPE END #7A	SSMH #5	12	DI	290.40	289.95	46	0.0098
SSMH #1	EX SSMH	12	DI	283.80	283.00	62	0.0130
SSMH #2	SSMH #1	12	DI	286.20	284.00	190	0.0116
SSMH #3	SSMH #2	12	DI	287.40	286.40	87	0.0115
SSMH #4	SSMH #3	12	DI	288.00	287.60	44	0.0090
SSMH #5	SSMH #4	12	DI	289.75	288.20	180	0.0086
SSMH #6	SSMH #5	12	DI	293.00	291.20	40	0.0452
SSMH #7B	PIPE END #7A	8	DI	292.60	290.40	226	0.0098

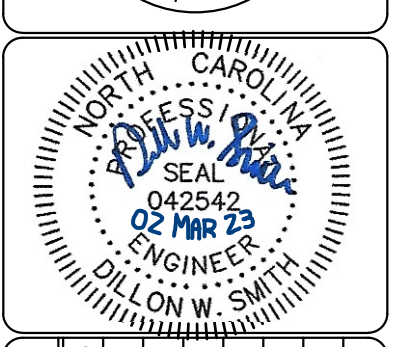
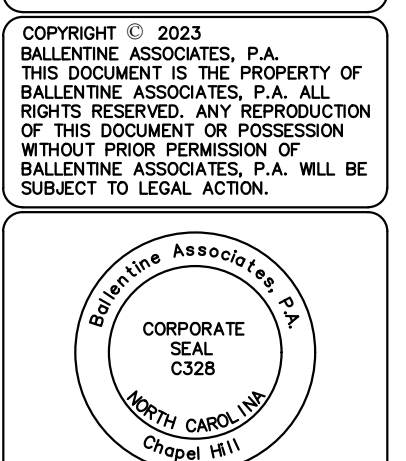
**DRAWING LEGEND**

SYMBOL/ABBREVIATION	EXISTING	PROPOSED	DESCRIPTION
---	---	---	PROPERTY LINE
---	---	---	RIGHT-OF-WAY LINE
---	---	---	ADJOINER PROPERTY LINE
---	---	---	EASEMENT LINE
---	---	---	FENCE LINE
---	---	---	STORM DRAIN LINE
---	---	---	WATER LINE
---	---	---	SANITARY SEWER LINE
---	---	---	UNDERGROUND ELECTRIC LINE
---	---	---	OVERHEAD ELECTRIC LINE
---	---	---	GAS LINE
---	---	---	TELEPHONE LINE
---	---	---	FIBER OPTIC LINE
---	---	---	TREE LINE
---	---	---	RETAINING WALL
---	---	---	EXISTING IRON PIPE
---	---	---	MAIL BOX
---	---	---	BOLLARD
---	---	---	BORE HOLE
---	---	---	CATCH BASIN
---	---	---	DROP INLET
---	---	---	JUNCTION BOX
---	---	---	WATER METER
---	---	---	WATER VALVE
---	---	---	FIRE HYDRANT
---	---	---	FIRE DEPARTMENT CONNECTION
---	---	---	BACKFLOW PREVENTER
---	---	---	BLOW OFF VALVE
---	---	---	45° - BEND PIPE
---	---	---	90° - BEND PIPE
---	---	---	TEE - BEND PIPE
---	---	---	SANITARY SEWER MANHOLE
---	---	---	SANITARY SEWER CLEANOUT
---	---	---	POWER POLE
---	---	---	LIGHT POLE
---	---	---	ELECTRIC BOX
---	---	---	ELECTRIC TRANSFORMER
---	---	---	HVAC UNIT
---	---	---	GAS METER
---	---	---	TELEPHONE PEDESTAL
---	---	---	TELEPHONE VAULT
---	---	---	TELEPHONE MANHOLE
---	---	---	FIBER OPTIC MARKER

**UTILITY PLAN - PHASE 1**

(GRAPHIC SCALE IN FEET)  
1 inch = 30ft.

**REVISION DRAWING NOT FOR CONSTRUCTION**



DATE: 02 MAR 23

REVISIONS

NO.	DATE	DESCRIPTION
1	02 MAR 23	PER DACP REVIEW COMMENTS

OWNER INFORMATION  
GLEN LENNOX LEGACY APARTMENTS  
117 EDENBURGH SOUTH DRIVE  
CARY, NC 27511  
OWNERS REPRESENTATIVE:  
WHITNEY ST. CHARLES  
(919) 388-5774  
FAX (919) 000-0000  
EMAIL: whstcharles@ballentine.com

DATE: 21 SEP 22

ISSUED  
DACP SUBMITTAL #1  
DACP SUBMITTAL #2

**GLEN LENNOX SOUTH INFRASTRUCTURE**  
CHAPEL HILL, NC

**DACP DRAWINGS**

JOB #: 107013.92  
DATE: 21 SEP 22  
SCALE: AS NOTED  
DRAWN BY: D.W.S.  
REVIEWED BY: G.J.R.

**SHEET C1101**