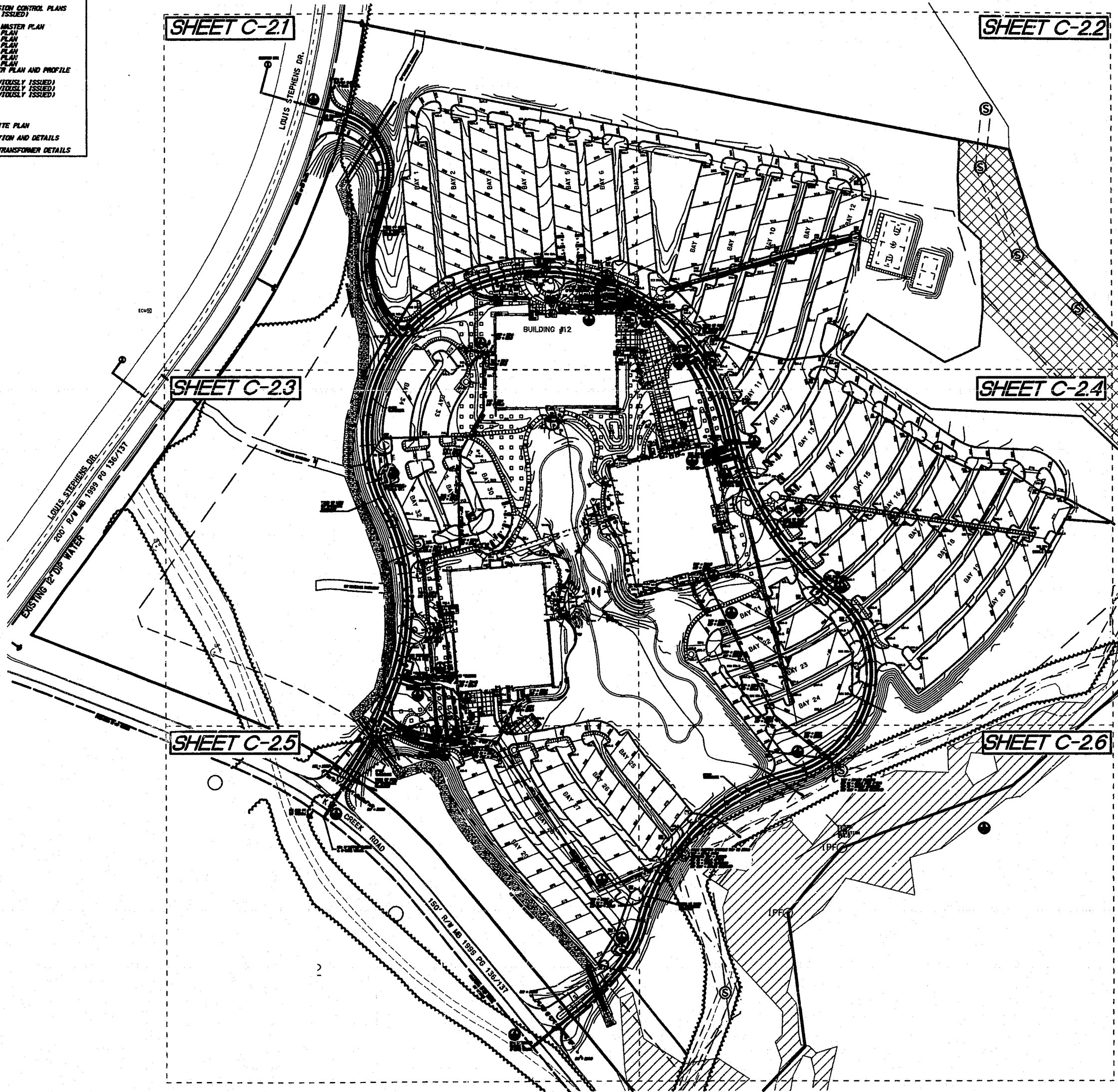


**Index for Drawing**

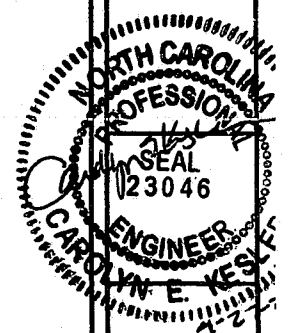
LA-1.0	(SERIES) LAYOUT PLANS (PREVIOUSLY ISSUED)
LA-2.0	(SERIES) GRADING AND STORM DRAINAGE PLANS (PREVIOUSLY ISSUED)
LA-3.0	(SERIES) PLANTING PLANS (TO BE ISSUED AT A LATER DATE)
LA-4.1	DETAILS (PREVIOUSLY ISSUED)
C-1.1	(SERIES) EROSION CONTROL PLANS (PREVIOUSLY ISSUED)
C-2.0	SITE UTILITY MASTER PLAN
C-2.1	SITE UTILITY PLAN
C-2.2	SITE UTILITY PLAN
C-2.3	SITE UTILITY PLAN
C-2.4	SITE UTILITY PLAN
C-2.5	SITE UTILITY PLAN
C-2.6	SITE UTILITY PLAN
C-2.7	SANITARY SEWER PLAN AND PROFILE
C-3.1	DETAILS (PREVIOUSLY ISSUED)
C-3.2	DETAILS (PREVIOUSLY ISSUED)
C-3.3	DETAILS (PREVIOUSLY ISSUED)
C-3.4	DETAILS (PREVIOUSLY ISSUED)
C-3.5	DETAILS (PREVIOUSLY ISSUED)
C-3.6	DETAILS (PREVIOUSLY ISSUED)
C-3.7	DETAILS (PREVIOUSLY ISSUED)
C-3.8	DETAILS (PREVIOUSLY ISSUED)
C-3.9	DETAILS (PREVIOUSLY ISSUED)
C-3.10	DETAILS (PREVIOUSLY ISSUED)
E-1.0	ELECTRICAL SITE PLAN
E-2.0	DUCTBANK SECTION AND DETAILS
E-3.0	MANHOLE AND TRANSFORMER DETAILS



**OBRIEN**  
 559 Jones Franklin Road  
 Suite 104-A  
 Raleigh, N.C. 27606  
 (919) 851-1912  
 (919) 851-9118 (FAX)

REVISIONS	BY
6-12-00 PER TOWN OF CARY COMMENTS	CEK
7-14-00 PER TOWN OF CARY COMMENTS	CEK
7-14-00 PER LANDSCAPE PLANS	CEK
7-20-00 PER TOWN OF CARY COMMENTS	CEK
8-12-00 ADD SS ENCLOSURES	CEK

**O'Brien Atkins**  
 ARCHITECTURE/ENGINEERING/INTERIOR DESIGN/LANDSCAPE ARCHITECTURE/P.L.L.C.  
 P. O. BOX 12037  
 TELEPHONE: 919.851.1900  
 FAX: 919.851.9118  
 NORTH CAROLINA 27609



- UTILITY NOTES:**
1. ALL WATER LINE & SEWER LINE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT TOWN OF CARY STANDARDS AND SPECIFICATIONS.
  2. 20 FT. EASEMENT ALONG WATER LINES SHALL BE DEDICATED TO THE TOWN OF CARY.
  3. THE CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS AND SIZES OF EXISTING PUBLIC UTILITIES PRIOR TO ANY EXCAVATIONS, GRADING OR INSTALLATION OF UNDERGROUND UTILITIES ON OR ADJACENT TO THE SITE.
  4. ALL CLEANOUTS SHALL BE OF TRAFFIC BEARING CAPACITY. ALL CLEANOUTS OUTSIDE OF ROADWAY SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE FINISHED GRADE.
  5. DESIGN OF TELEPHONE, ELECTRICAL POWER AND TELECOMMUNICATIONS TO BE DESIGNED BY OTHERS.
  6. FOR EXACT LOCATION OF FIRE HYDRANTS BEHIND BACK OF CURB, SEE DETAIL SHEET C-3.5 AND C-3.6. DO NOT SCALE LOCATION FROM PLAN VIEW.
  7. WHERE A WATER MAIN AND A SANITARY SEWER CROSS AND THE VERTICAL SEPARATION IS LESS THAN 18" DO THE WATER LINE PASSES UNDER THE SANITARY SEWER. THE ENTIRE LEG OF THE SEWER LINE SHALL BE DUCTILE IRON PIPE EQUIVALENT TO WATER MAIN STANDARDS. A TRANSITION OF PIPE MATERIAL SHALL NOT OCCUR BETWEEN MANHOLES OR SANITARY SEWER LINES EXCEPT AT RISER GROUP MANHOLES.
  8. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF 4 FT. MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED SUBGRADE.
  9. ALL SANITARY SEWER MAINS SHALL HAVE 4 FT. OF COVER FROM TOP OF PIPE TO FINISHED SUBGRADE WHEN UNDER A ROADWAY AND 3 FT. FROM TOP OF PIPE TO FINISHED GRADE WHEN OUTSIDE A ROADWAY.
  10. CONTRACTOR SHALL COORDINATE THREADS FOR FIRE PROTECTION DEVICES WITH LOCAL FIRE DEPARTMENT.
  11. RIVERT LOCATION OF ALL BUILDING CONNECTIONS SHALL BE COORDINATED WITH PLUMBERS PLANS.
  12. COORDINATE THE PROPOSED WATER LINE ALONG RIT CREEK ROAD WITH THE CONSTRUCTION OF THE RIT CREEK WATER LINE INSTALLATION.
  13. BACK FLOOR PREVENTION SYSTEMS SHALL BE LOCATED INSIDE THE BUILDINGS.
  14. RAINPOTS MUST BE INCLUDED AS PART OF MANHOLE INSTALLATION.
- PROJECTED SANITARY SEWER FLOW PER BUILDING BUILDINGS #1 AND 12**
- ADF CALCULATIONS: 200,000 sq.ft. x 0.09 gpd/sq.ft. = 18,000 gpd  
 PEAK FLOW = 18,000 gpd x 3.3 = 59,400 gpd  
 PROJECTED SANITARY SEWER FLOW PER BUILDING (BUILDING 10 - INCLUDING CAFETERIA)
- ADF CALCULATIONS: 200,000 sq.ft. x 0.09 gpd/sq.ft. = 18,000 gpd (OFFICE AREAS)  
 500 people per day x 10 gpd/person = 5,000 gpd (CAFETERIA)  
 TOTAL ADF: 23,000 gpd  
 PEAK FLOW = 23,000 gpd x 3.3 = 76,200 gpd

The Engineer does not guarantee that existing facilities such as pipelines, electrical lines, conduits, telephone cables, service connections or other facilities are shown on the Plans. It shall be the Contractor's responsibility to have utilities located by their respective owners, field mark the utility locations, and protect all such existing facilities prior to beginning construction. The Contractor is fully responsible for notifying utility owners in accordance with NC General Statute - Chapter 87, Article 8, The Underground Damage Prevention Act.

**SITE DATA:**

PARKING REQUIRED: 1958  
 PARKING PROVIDED: 2250

SOIL TYPE: SILTS & CLAYS UNDERLAIN BY PARTIALLY WEATHERED SILTSTONE & SANDSTONE.

DISTURBED AREA: 46.7 AC  
 PIN # 0736.02.580597

HOURS OF OPERATION: 8-5 M-F

FLOOR AREA RATIO: 17.95% (MEDIUM INTENSITY)

IMPERVIOUS SURFACE: 28.9%

SITE ACRAGE: 76.7AC

**APPROVED**

DATE: JUL 21, 2000

BY: [Signature] 7/24/00

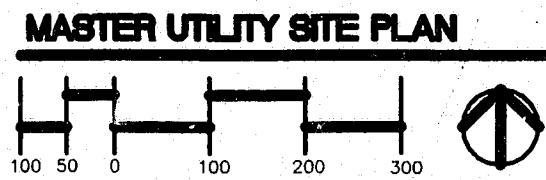
**TOWN OF CARY  
 DEVELOPMENT REVIEW GROUP**

- NOTES:**
1. A FINAL ZONING AND SITE IMPROVEMENT INSPECTION SHALL BE REQUIRED TO VERIFY SITE PLAN COMPLIANCE BE DONE BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED BY WAKE COUNTY BUILDING INSPECTIONS.
  2. DETERIORATED OR DEAD SCREENING SHALL BE REPAIRED OR REPLACED WITHIN SIX MONTHS.
  3. NO PERMANENT CONSTRUCTION CAN OCCUR WITHIN BUFFER YARDS.
  4. SEPTIC TANKS, SEPTIC TANK DRAIN LINES ARE PROHIBITED IN REQUIRED BUFFERYARDS, STORMWATER RETENTION AND DETENTION FACILITIES, STORAGE TANKS FOR ANY PURPOSE. UTILITY SUBSTATIONS AND BUILDING HOUSING UTILITY COMMODITIES OR EQUIPMENT ARE ALSO PROHIBITED IN REQUIRED BUFFERYARDS.

**SITE UTILITIES -**

TOTAL LENGTH OF 6" WATER LINE - 4767 LF (PUBLIC)  
 TOTAL NUMBER OF FIRE HYDRANTS - 9 (PUBLIC)  
 TOTAL LENGTH OF 8" WATER LINE - 176 LF (PUBLIC)  
 TOTAL LENGTH OF 8" SANITARY SEWER - 594 LF (PUBLIC)  
 TOTAL LENGTH OF 8" SANITARY SEWER - 1462 LF (PRIVATE)  
 TOTAL NUMBER OF MANHOLES - 3 (PUBLIC)  
 TOTAL NUMBER OF CLEANOUTS - 19 (PRIVATE)

- GENERAL NOTES:**
1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT TOWN OF CARY STANDARDS AND SPECIFICATIONS.
  2. PRIOR TO BEGINNING CONSTRUCTION ALL PERMITS RELATIVE TO THIS PROJECT MUST BE OBTAINED.
  3. THE ASSOCIATED OFF SITE ROAD & UTILITY IMPROVEMENTS HAVE BEEN PREVIOUSLY APPROVED.



**CISCO SYSTEMS**  
 SITE UTILITY PACKAGE  
**CISCO SYSTEMS, INC.**  
 BUILDINGS 10, 11, & 12 RESEARCH TRIANGLE PARK, N.C.

DATE	7/21/00
SCALE	AS SHOWN
DRAWN	CEK
CHECKED	CEK
TITLE	UTILITY
SHEET	C-20
OF 7 SHEETS	