

INDEX TO DRAWINGS	
G100	COVER SHEET
A101	FLOOR PLAN, REFLECTED CEILING PLAN, ELEVATIONS
A103	SECTIONS AND MISC DETAILS
A104	SECTIONS
A105	TOILET PLAN, INTERIOR ELEVATIONS, FINISHES, AND DOORS
E101	ELECTRICAL PLANS AND DETAILS
P101	PLUMBING PLAN AND DETAILS

THERMAL ENVELOPE (Building is not conditioned air)   
 METHOD OF COMPLIANCE: TOILET BLDG.

PRESCRIPTIVE  ENERGY COST BUDGET

ROOF/CEILING ASSEMBLY

DESCRIPTION OF ASSEMBLY 3/A104  
 U VALUE OF TOTAL ASSEMBLY U = .5  
 R VALUE OF INSULATION UNINSULATED

EXTERIOR WALLS (EACH ASSEMBLY)

DESCRIPTION OF ASSEMBLY 3/A104  
 U VALUE OF TOTAL ASSEMBLY U = .45  
 R VALUE OF INSULATION UNINSULATED

OPENINGS

U VALUE OF ASSEMBLY = N/A  
 SHADING COEFFICIENT = N/A  
 PROJECTION FACTOR = N/A  
 LOW E REQUIRED, IF APPLICABLE NA

DOOR R VALUES R=2.3

WALLS BELOW GRADE (EACH ASSEMBLY)

DESCRIPTION OF ASSEMBLY N/A  
 U-VALUE OF TOTAL ASSEMBLY N/A  
 R-VALUE OF INSULATION N/A

FLOORS OVER UNCONDITIONED SPACE (EACH ASSEMBLY)

DESCRIPTION OF ASSEMBLY N/A  
 U-VALUE OF TOTAL ASSEMBLY N/A  
 R-VALUE OF INSULATION N/A

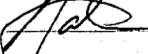
FLOORS SLAB ON GRADE

DESCRIPTION OF ASSEMBLY 3/A104  
 U-VALUE OF TOTAL ASSEMBLY .075  
 R-VALUE OF INSULATION R= 10

HORIZONTAL/VERTICAL REQUIREMENT  
 SLAB HEATED NO

DESIGNER STATEMENT:

To the best of my knowledge and belief, the design of this building is exempt from compliance with Volume X Energy Code per 100.2, exception 1.

SIGNED:   
 NAME: Hal M. Bowen  
 TITLE: Architect

BUILDING CODE SUMMARY

NAME OF PROJECT: CARY TENNIS CENTER  
 ADDRESS: 2127 LOUIS STEVENS DR  
 PROPOSED USE: TENNIS CENTER AND TOILETS  
 OWNER/CONTACT PERSON: DICK PATON 834-8620  
 JURISDICTION: TOWN OF CARY

DESIGNER: NAME LICENSE # TELEPHONE #  
 ARCHITECTURAL: HAL BOWEN 5950 (919) 821-0805  
 ELECTRICAL: ROBERT E. EGAN 16765 (919) 828-0521  
 PLUMBING: LAWRENCE MURPHY 24762 (919) 828-0521  
 MECHANICAL: \_\_\_\_\_  
 STRUCTURAL: \_\_\_\_\_  
 SPRINKLER/STANDPIPE: \_\_\_\_\_  
 FIRE ALARM: \_\_\_\_\_  
 LANDSCAPE/CIVIL: DICK PATON 272 919-231-8820

BUILDING DATA  
 OCCUPANCY: BUSINESS  
 MIXED OCCUPANCY: NO  
 CONSTRUCTION TYPE: TYPE VI (U)  
 SPRINKLERED: NO  
 FIRE DISTRICT: NO  
 BUILDING HEIGHT: 12'-0" FEET 1 STORIES  
 MEZZANINE: NO  
 HIGH RISE: NO

GROSS BUILDING AREA  
 FLOOR SQ. FT. \_\_\_\_\_

TOTAL GROSS AREA 6946.10 sq. ft.  
 AREA INCREASE: NO  
 CODE REFERENCE: \_\_\_\_\_  
 CALCULATIONS: \_\_\_\_\_

FIRE RESISTANCE RATINGS

PARTY/FINISHES	RATING	TYPE VI (U)	DETAIL #	% OPEN	UL ASSEMBLY
EXTERIOR BEARING WALLS	N/A	N/A	N/A	N/A	N/A
NORTH	0	3/A104	N/A	N/A	N/A
EAST	0	5/A104	N/A	N/A	N/A
WEST	0	5/A104	N/A	N/A	N/A
SOUTH	0	3/A104	N/A	N/A	N/A
EXTERIOR NON-BEARING WALLS	N/A	N/A	N/A	N/A	N/A
NORTH	0	3/A104	N/A	N/A	N/A
EAST	0	5/A104	N/A	N/A	N/A
WEST	0	5/A104	N/A	N/A	N/A
SOUTH	0	3/A104	N/A	N/A	N/A
INTERIOR WALLS	N/A	N/A	N/A	N/A	N/A
BEARING	0	4/A104	N/A	N/A	N/A
NON-BEARING	0	4/A104	N/A	N/A	N/A
CORRIDOR	N/A	N/A	N/A	N/A	N/A
CEILING-FLOORS ASSEMBLY	N/A	N/A	N/A	N/A	N/A
BEAMS	0	1/A104	N/A	N/A	N/A
COLUMNS	0	2/A104	N/A	N/A	N/A
CEILING-ROOF ASSEMBLY	0	3/A104	N/A	N/A	N/A
VERTICAL SHAFTS	N/A	N/A	N/A	N/A	N/A
CHASES P.E.M.	0	N/A	N/A	N/A	N/A
MIXED OCCUPANCY SEPARATIONS	N/A	N/A	N/A	N/A	N/A
TENANT SEPARATION	N/A	N/A	N/A	N/A	N/A

LIFE SAFETY SYSTEMS

EMERGENCY LIGHTING AND EXIT SIGNS: NO  
 FIRE ALARM AND SMOKE DETECTIONS SYSTEMS: NO  
 PANIC HARDWARE: NO

EXIT REQUIREMENTS

DEAD END LIMIT-MAXIMUM CONDITION: 200 FEET  
 TRAVEL DISTANCE TO EXIT-MAXIMUM CONDITION: 200/14 FEET  
 NUMBER OF EXITS: \_\_\_\_\_

TOTAL SQUARE FOOTAGE OF FLOOR 400 DIVIDED BY NET  
 SQ. FT. PER OCCUPANCY 100 = 4  
 TOTAL NUMBER OF PEOPLE ON FLOOR: NUMBER OF EXITS PROVIDED: 1  
 NUMBER OF EXITS REQUIRED: 1

DESIGN LOADS

LIVE LOAD ROOF: 20 PSF  
 WIND: ZONE 80 MPH IMP FACTOR 1  
 ASCE-7 93 EXPOSURE C  
 FLOOR: \_\_\_\_\_ PSF  
 SNOW: 15 PSF  
 LATERAL DESIGN CONTROL: EARTHQUAKE YES WIND YES  
 CALCULATED WIND BASE SHEARS (for IMFRS): Vx= 4k Vy= 4k  
 SEISMIC PERFORMANCE CATEGORY A  
 Compliance w/ Sect. 1607.3.6.1.1 Ties and Continuity? YES  
 SEISMIC PERFORMANCE CATEGORY B&C  
 Provide the following seismic Design Parameters:  
 EFFECTIVE PEAK VELOCITY-RELATED ACCELERATION Av= .075  
 PEAK ACCELERATION COEFFICIENT Aa= .05  
 SEISMIC HAZARD EXPOSURE GROUP SHEG= 1  
 SEISMIC PERFORMANCE GROUP SPC= B  
 SITE COEFFICIENT Ss= 1.0  
 BASIC STRUCTURAL SYSTEM (CHECK ONE)  
 YES BEARING WALL DUAL W/ SPECIAL MOMENT FRAME  
 BUILDING WALL DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL  
 MOMENT FRAME INVERTED PENDULUM  
 RESPONSE MODIFICATION FACTOR Rm= 3.5  
 Ry= 3.5  
 Cdx= 3  
 Cdy= 3  
 DEFLECTION AMPLIFICATION FACTOR H= 12'-0"  
 BUILDING HEIGHT LIMIT, FEET V= INSIGNIFICANT  
 SEISMIC BASE SHEAR V= INSIGNIFICANT  
 MODAL ANALYSIS PROCEDURE V1= INSIGNIFICANT  
 MODAL BASE SHEAR V= INSIGNIFICANT  
 EFL PROCEDURE BASE SHEAR V= INSIGNIFICANT  
 ARCHITECTURAL, MECH. COMPONENTS ANCHORED PER FORCE CP2 1.0  
 SOIL BEARING CAPACITY FIELD TEST 2500 PSF  
 PRESUMPTIVE PSF

PARKING SPACES

REQUIRED: N/A  
 PROVIDED: N/A  
 HANDICAP: N/A

SPECIAL APPROVAL BY DEPARTMENT OF INSURANCE OR BY LOCAL JURISDICTION

DESCRIBE BELOW: \_\_\_\_\_



I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE BUILDING CODE SUMMARY COMPLETED ABOVE IS ACCURATE FOR THE TYPE OF BUILDING AND OCCUPANCY INTENDED FOR THIS PROJECT AND THAT THESE PLANS ARE COMPLETE AND COMPLY WITH ALL APPLICABLE STATE AND LOCAL BUILDING REGULATIONS

SIGNED:  DATE: 2/15/01

Energy Code Data

Mechanical Systems, Service Systems and Equipment

Method of Compliance: Prescriptive  Energy Cost Budget   
 Thermal Zone 3  
 Exterior Design Conditions: Winter Dry Bulb 16°F, Summer Dry Bulb 92°F  
 Interior Design Conditions: Winter Dry Bulb 72°F, Summer Dry Bulb 75°F, Relative Humidity 50%  
 Building Heating Load: N/A  
 Building Cooling Load: N/A  
 Mechanical Space Conditioning System: Unitary N/A  
 Total Heating Capacity: N/A  
 Total Cooling Capacity: N/A  
 Equipment Efficiencies: N/A  
 Performance Schedule for Motors (Mechanical Systems): Minimum Full-Load Efficiency for Single-Speed Three Phase, Energy Efficient, Open Drip-Proof Motors  

Motor Horsepower	RPM	Minimum efficiency (%)	Power Factor (%)
1	1800	82	84
1.5	1800	84	85
2	1800	84	85
3	1800	86	86
5	1800	87	87
7.5	1800	88	86
10	1800	89	85
15	1800	91	85
20	1800	91	86
25	1800	91	85
30	1800	92	88

 Designer Statement: To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems, and equipment requirements of the North Carolina State Building Code. This structure is exempt from Volume X - Energy, of the NCSCB for the following reasons: Total peak energy usage for space conditioning (non), service water heating (non), and lighting 1384 W is less than 3.5 Btu/h/ft², it is allowed in Chapter 1, Section 100, Exception #2 of Volume X - Energy of the NCSCB. CALCULATION: (1384 W) x (3.413 Btu/h-W) = (4705.55 Btu/h) (4705.55 Btu/h) is less than 3.5 Btu/h/ft² x (1370.59 sq. ft.) = (4828.71 Btu/h-sq. ft.)  
 Signed: Lawrence B. Murphy, P.E.  
 Name: \_\_\_\_\_  
 Title: Mechanical Engineer

# CARY TENNIS CENTER TOILET BLDG

00-SP-01-B-A  
 APPROVED  
 2/25/01

**PATON / ZUCCHINO & ASSOCIATES, P.A.**  
 LANDSCAPE ARCHITECTURE AND LAND PLANNING  
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 Raleigh, N.C. 27603  
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 Fax: (919) 828-7088  
 www.paton-zucchino.com  
 email:pza@paton-zucchino.com

Architect:  
**CLINE DAVIS ARCHITECTS**

Architect (Shelter):  
**CHERRY HUFFMAN ARCHITECTS**

Tennis Consultant:  
**TRIANGLE TENNIS CONSULTANTS, INC.**

PME Engineer:  
**THE WOOTEN COMPANY**

Civil Engineer:  
**H.J. GILLEECE & ASSOCIATES**

Irrigation Engineer:  
**SMITH TURF & IRRIGATION**

Geotechnical Engineer:  
**ECS CONSULTANTS, INC.**

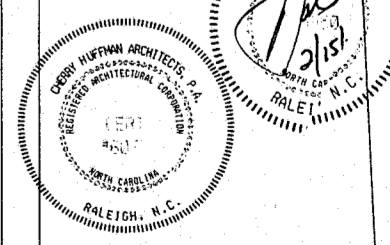
Owner:  
**TOWN OF CARY, NORTH CAROLINA**

Project:  
**CARY TENNIS CENTER**

Sheet Title:  
 Building Data

Issue Date:  
 11/11/00

Revisions:  
 2/5/01



Project Number:  
 00-SP-0 8-Acom1

Sheet Number:

G100