

JK
1651
.A5
N8
1983

LEGISLATIVE RESEARCH COMMISSION

DESIGN, CONSTRUCTION, AND INSPECTION OF PUBLIC FACILITIES



REPORT TO THE
1983 GENERAL ASSEMBLY
OF NORTH CAROLINA



A LIMITED NUMBER OF COPIES OF THIS REPORT IS AVAILABLE
FOR DISTRIBUTION THROUGH THE LEGISLATIVE LIBRARY.

ROOM 2126, 2226
STATE LEGISLATIVE BUILDING
RALEIGH, NC 27611
TELEPHONE: (919) 733-7778

OR

ROOM 500
LEGISLATIVE OFFICE BUILDING
RALEIGH, NC 27611
TELEPHONE: (919) 733-9390

COVERED 

STATE OF NORTH CAROLINA
LEGISLATIVE RESEARCH COMMISSION
STATE LEGISLATIVE BUILDING
RALEIGH 27611



January 6, 1983

TO THE MEMBERS OF THE 1983 GENERAL ASSEMBLY:

The Legislative Research Commission herewith
submits the report of its Committee on Design,
Construction and Inspection of Public Facilities.

Respectfully submitted,

Liston B. Ramsey *W. Craig Lawing*
Liston B. Ramsey W. Craig Lawing
Cochairmen

LEGISLATIVE RESEARCH COMMISSION

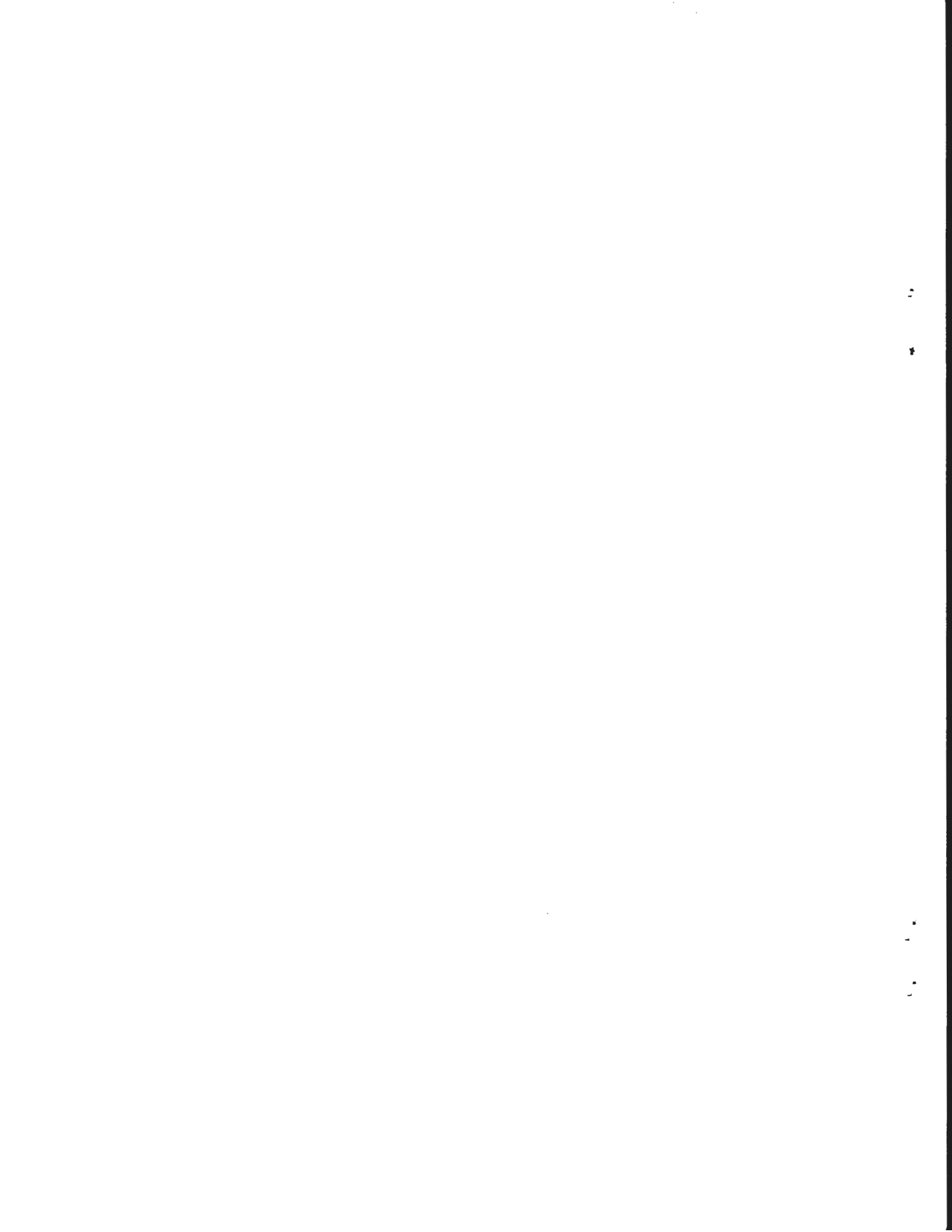
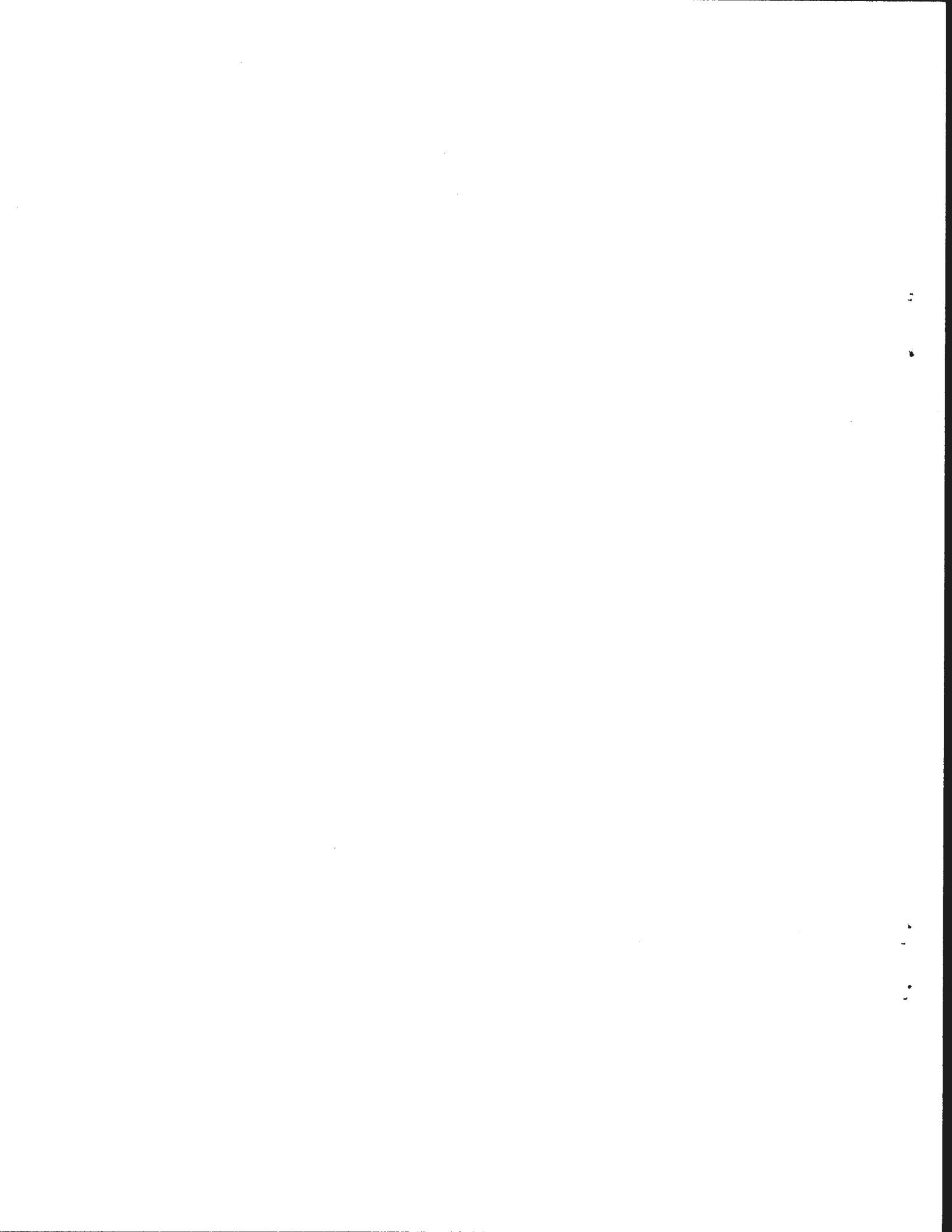


TABLE OF CONTENTS

	Page
INTRODUCTION	1
COMMITTEE PROCEEDINGS.	3
FINDINGS AND RECOMMENDATIONS	6
APPENDICES	
A. Legislative Research Commission Membership	
B. Membership of Committee on State Office Building Construction Policy/Public Facility Design, Construction and Inspection	
C. Senate Joint Resolution 143	
D. Recommended Legislation	
E. Description of Proposed State Building Division and List of Required Statutory Changes	
F. State Construction Advisory Committee Report	
G. Resolution by the North Carolina State Building Code Council	
H. Memorandum re Continuation of Legislative Study Committee	



INTRODUCTION

The Legislative Research Commission, authorized by Article 6B of Chapter 120 of the North Carolina General Statutes (G.S.), is a general-purpose legislative study group. (Appendix A contains a list of the membership of the Legislative Research Commission.)

Among the Commission's duties is to make or cause to be made, upon the direction of the Cochairmen of the Commission,

"such studies of and investigations into governmental agencies and institutions and matters of public policy as will aid the General Assembly in performing its duties in the most efficient and effective manner." /G.S. 120-30.17(1)/

The 1981 General Assembly authorized, in Resolution 61 (House Joint Resolution 1292), the Legislative Research Commission to study the "development of a policy on State office building construction" pursuant to House Joint Resolution 1090, and to "continue the study of the design, construction and inspection of public facilities" pursuant to Senate Joint Resolution 143. The Commission directed the Committee on State Office Building Construction Policy/Public Facility Design, Construction and Inspection to study both of these topics. (Appendix B contains a list of the Committee's membership.) This report covers the Committee's treatment of one of these two topics: Design, Construction and Inspection of public facilities.

The Public Facilities study is a continuation of a study committee created during the 1979 Session to study statutes governing public construction. Several recommendations from the earlier study were enacted into law during the 1981 Session but other areas required further study. The committee was empowered to "§tudy and review recent developments in the area of contracts, liability, planning procedures, claims, facilities design, construction and inspection."

COMMITTEE PROCEEDINGS

During its first three meetings (January 8, 1982; March 25, 1982; and May 4, 1982) the Committee considered and recommended three technical amendments to the General Statutes. These proposed bills are discussed in the Findings and Recommendations section (Appendix D). Representatives from the Department of Administration, the Board of Governors, and the Budget Office attended these meetings and spoke to the Committee. The Committee also approved a proposal from Secretary Patterson of the Department of Administration (Appendix H) that the Committee expand its membership and continue its study during the remainder of 1982.

The Committee had two additional meetings, on November 10, 1982 and November 22, 1982. At the first meeting the Committee heard a report from the State Construction Advisory Committee. Secretary Patterson and Ray DeBruhl, Director of the Office of State Construction presented a report from the Advisory Committee. (See Appendix F.) The following persons spoke to the Committee and endorsed the report: Phil Albano (Community Colleges), Charles Hicks (Consulting Engineers), Don Kline (Professional Engineers), Bob Roberson (American Subcontractors), Clay Taylor (American Institute of Architects), Allen Waters (Board of Governors),

Ray Moore (Building Code Council), and Carl Woods (Associated General Contractors). The report proposed that all functions relating to construction which are presently scattered in four different departments of State government be consolidated into a State Building Division. The Committee directed staff counsel to prepare a list of the statutory changes needed to create the new division.

At its last meeting, the Committee considered the "Description of Proposed State Building Division" and the list of statutory changes prepared by counsel. The Committee was addressed by the Commissioners of Labor and Insurance who spoke in opposition to the proposal (which would transfer duties presently assigned to their departments to the new division). The Committee also heard from David Smith from the Department of Agriculture who was concerned about the transfer of certain responsibilities concerning L.P. gas away from Agriculture. Larry M. Jordan of the North Carolina Oil Jobbers and Harold Johnson, an independent oil and gas distributor, also spoke in opposition to the proposed new division.

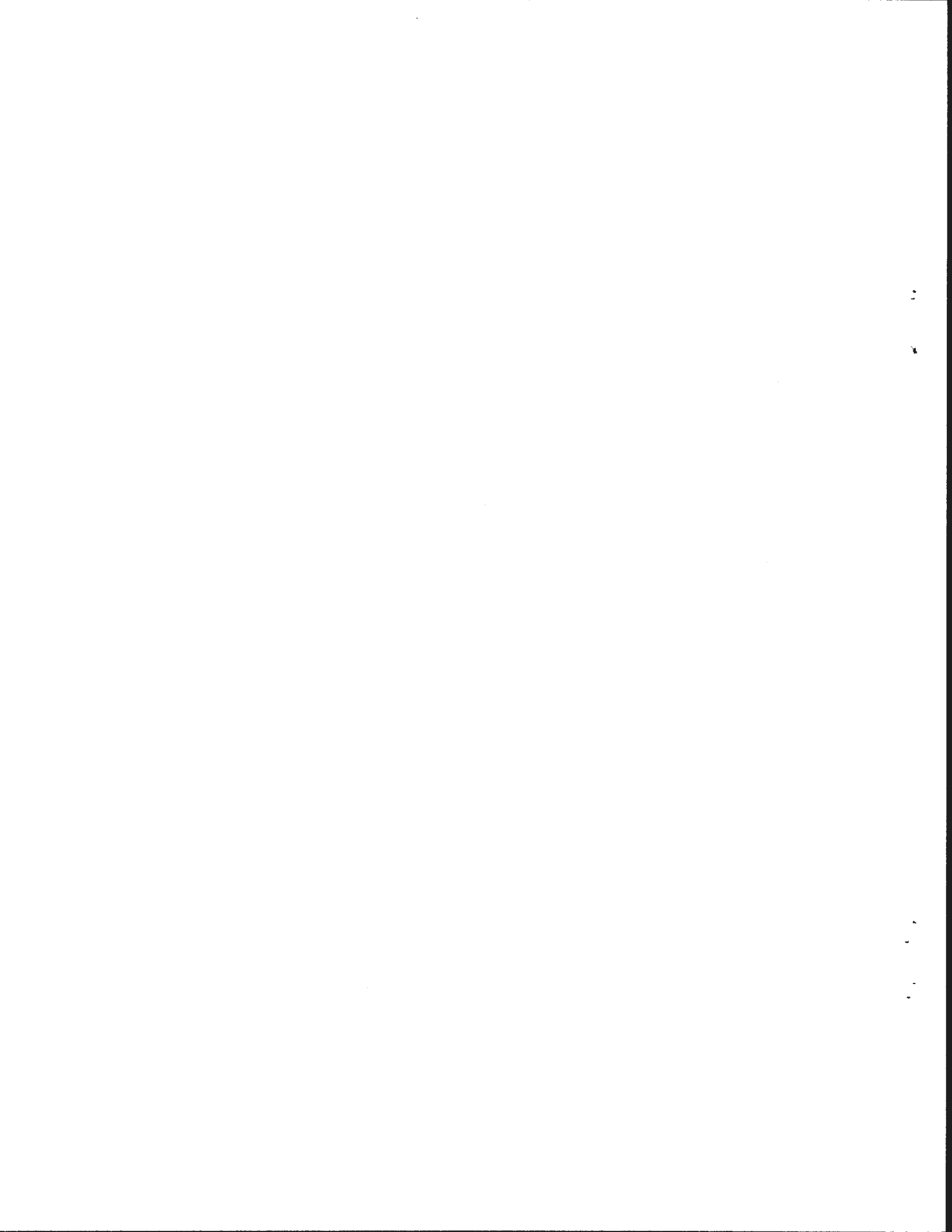
Robert Winston Kerr, American Institute of Architects, and A. J. Hamil, President of the North Carolina Chapter of AIA, endorsed the plan. The Committee heard from Ray L. Baber, Jr., Professional Engineers of North Carolina, John Morehead, Consulting Engineers Council, Bob Roberson,

American Subcontractors, and Ray Moore, Chairman of the Building Code Council. All of these speakers endorsed the proposed new division.

Following Committee discussion, the proposed new division was endorsed in concept. The Committee decided the division should be placed in the Department of Administration. Staff counsel was instructed to prepare the necessary legislation for introduction together with the final report of the Committee. Counsel was particularly instructed to meet with representatives from the Departments of Agriculture and Labor prior to drafting any legislation in an attempt to resolve any objections that those departments had with regard to the proposed new division.

Details of Committee meetings can be found in the minutes which are on file in the Legislative Library together with statements from speakers.

Staff counsel was able to resolve the Department of Agriculture's concerns about the transfer of certain L.P. gas functions to the Building Code Council and the Department no longer opposes the bill.



FINDINGS AND RECOMMENDATIONS

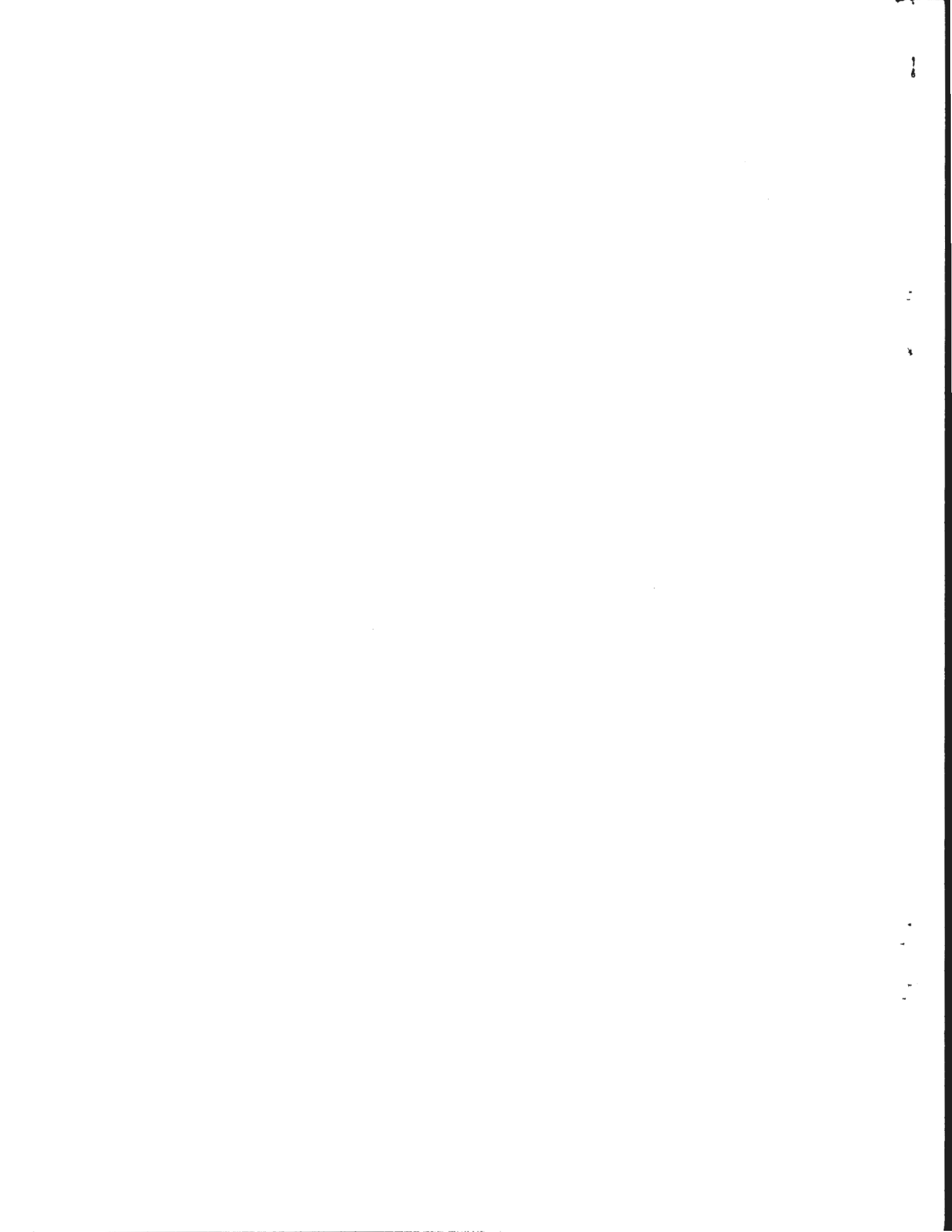
Finding and Recommendation 1: The Committee found that a floor amendment to Senate Bill 144 offered by Senator Cockerham during the 1981 Session inadvertently removed any monetary limit which would require that plans and specifications for repair of a building be prepared by a registered architect or engineer, so long as the repairs include major structural change. The Committee recommends a technical change to G.S. 133-1.1 to correct this oversight. See "A Bill to be Entitled an Act to Require that Plans Be Prepared by a Registered Architect or Engineer for Repairs in Excess of Forty-five Thousand Dollars," Appendix D.

Finding and Recommendation 2: The Committee found that refrigeration for cold storage and related work is presently treated as a separate branch of work in the State Construction Manual. The Committee recommends that G.S. 143-128 be amended accordingly. See "An Act to Clarify the Requirement of Separate Specifications for Building Contracts," Appendix D.

Finding and Recommendation 3: The Committee found that G.S. 143-129 presently contains ambiguous language and recommends that a clarifying amendment to this statute be enacted. See "An Act to Clarify the Competitive Building Statute," Appendix D.

Finding and Recommendation 4: The Committee found that at present duties relating to building design construction, and facilities management are divided among the Departments of Administration, Labor, Insurance and Agriculture; that overlap with regards to rulemaking and inspections exists; that there is a need for closer involvement between the Director of the Budget and state construction projects; that the present system for selection of design personnel does not promote accountability from the owning agencies; that the State Building Code excludes the closely related areas of elevators, certain boiler and pressure vessels, and residential and office type installations of L.P. gas; that representatives from the N. C. Chapter, American Institute of Architects; Associated General Contractors of America, Carolinas Branch; Professional Engineers of North Carolina; N. C. Association of Electrical Contractors; N. C. Association of Plumbing, Heating & Cooling Contractors; American Subcontractors Association of the Carolinas; and the Consulting Engineers Council of N. C. served on the State Construction Advisory Committee and unanimously endorsed its report; that this report recommended that a new State Building Division be created to perform all duties relating to the design, construction, and management of facilities. The Committee recommends that legislation be enacted to create such a division within the Department of

Administration. See "A Bill to Be Entitled An Act to Consolidate Functions Relating to Building Regulations, Design, Construction, and Facilities Management Within the Department of Administration," Appendix D.

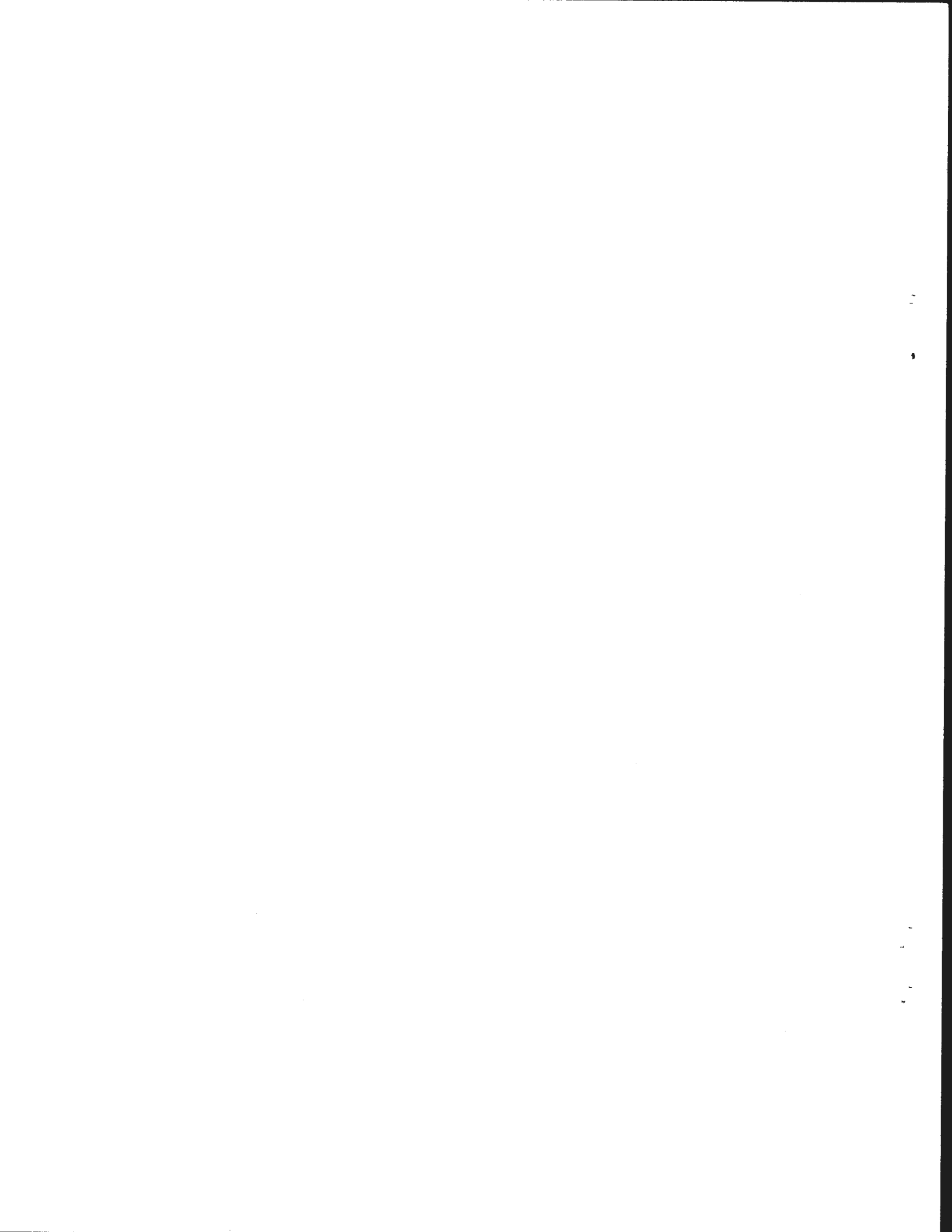


LEGISLATIVE RESEARCH COMMISSION

1981 - 1982

MEMBERSHIP LIST

	<u>Business Address</u>	<u>Telephone No.</u>
Speaker Liston B. Ramsey Co-Chairman	Walnut Creek Road Marshall, N. C. 28753	(704) 649-3961
Sen. W. Craig Lawing Co-Chairman	5521 Belhaven Blvd. Charlotte, N. C. 28216	(704) 399-6372
Rep. Chris S. Barker, Jr.	Post Office Box 988 New Bern, N. C. 28560	(919) 633-1333
Sen. Henson P. Barnes	Post Office Box 1582 Goldsboro, N. C. 27530	(919) 735-6420
Rep. John T. Church	Post Office Box 947 Henderson, N. C. 27536	(919) 492-8111
Rep. Gordon Greenwood	Box 487 Black Mountain, N. C. 28711	(704) 669-7961
Rep. John J. Hunt	Peachtree Road Lattimore, N. C. 28089	(704) 434-6853
Sen. Carolyn Mathis	Post Office Box 30035 Charlotte, N. C. 28230	(704) 379-7131
Sen. William D. Mills	Post Office Box 1238 Swansboro, N. C. 28584	(919) 326-2177
Rep. Lura S. Tally	3100 Tallywood Drive Fayetteville, N. C. 28303	(919) 484-4868
Sen. Russell Walker	Post Office Box 1831 Asheboro, N. C. 27203	(919) 625-6177
Sen. Robert W. Wynne	Post Office Box 12195 Raleigh, N. C. 27605	(919) 755-1480



MEMBERSHIP LIST
 COMMITTEE ON
 STATE OFFICE BUILDING CONSTRUCTION POLICY OF PUBLIC FACILITIES
 DESIGN, CONSTRUCTION & INSPECTION

Senator Wm. D. Mills (LRC Member)
 Box 1238
 Swansboro, N. C. 28584
 Business Phone: 919/326-2177
 Home Phone: 919/743-5226

Senate Members:

Senator Conrad R. Duncan, Co-Ch.
 Route 1, Box 282
 Stoneville, N. C. 27048
 Business Phone: 919/623-9166
 Home Phone: 919/627-1326

Senator W. Craig Lawing
 5521 Belhaven Boulevard
 Charlotte, N. C. 28216
 Business Phone: 704/399-6372
 Home Phone: 704/399-3260

Senator Robert B. Jordan, III
 P. O. Box 98
 Mt. Gilead, N. C. 27306
 Business Phone: 919/439-6121
 Home Phone: 919/439-5900

Senator Kenneth C. Royall, Jr.
 P. O. Box 8766
 Forest Hills Station
 Durham, N. C. 27707
 Business Phone: 919/489-9191
 Home Phone: 919/489-2129

Senator Walter C. Cockerham
 1108 Grecale Street
 Greensboro, N. C. 27408
 Business Phone: 919-273-4485
 Home Phone: 919/288-5844

Staff:

Mrs. Susan Frost, Staff Attorney)
 Mr. Dennis Bryan, Staff Attorney) Phone: 919/733-2578 or 2122
 Mrs. Jane Holliday - Phone: 919/733-5875 - Committee Clerk

House Members:

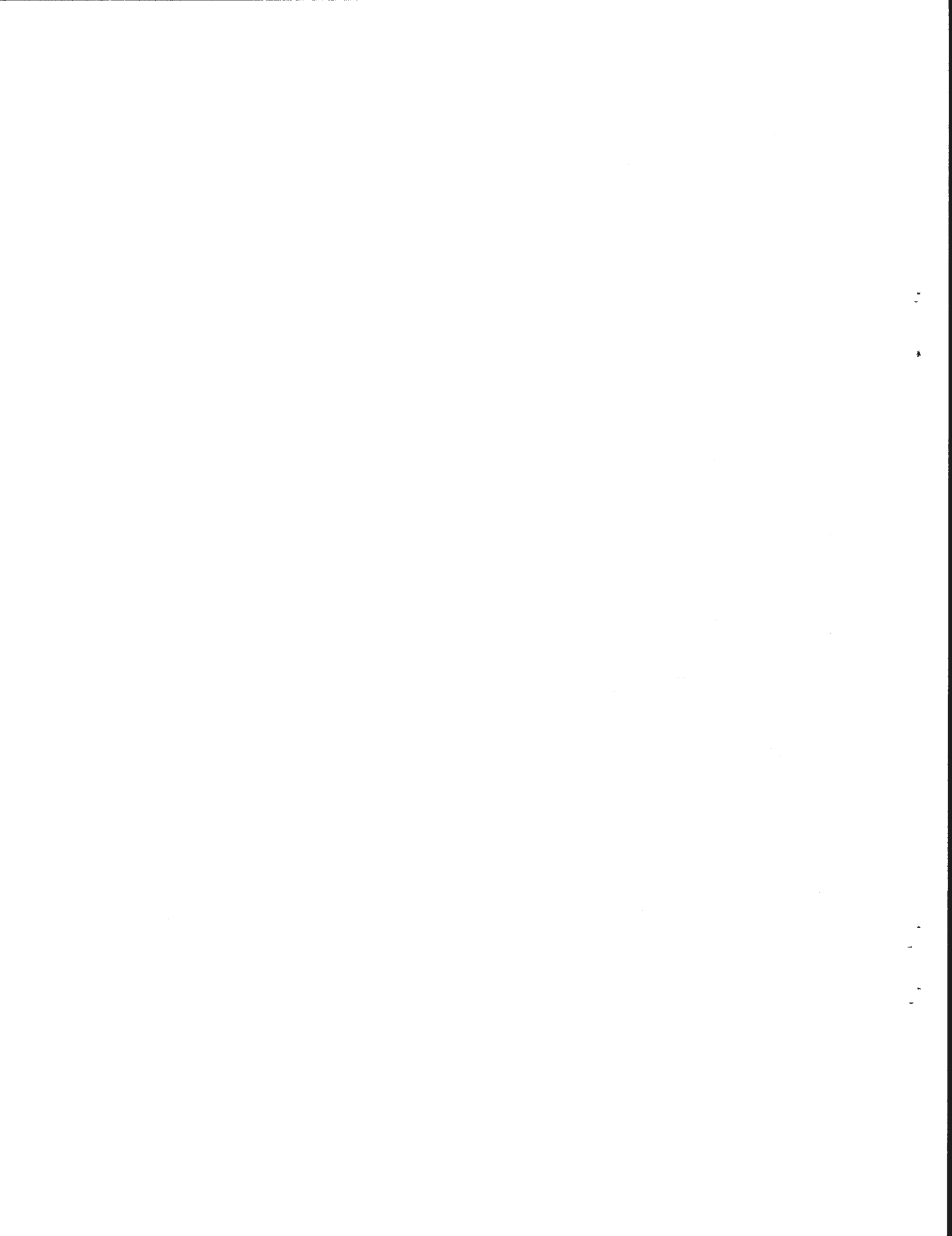
Rep. Edd Nye, Co-Ch.
 Courthouse Drive
 Elizabethtown, N. C. 28337
 Business Phone: 919/862-3679
 Home Phone: 919/862-2420

Rep. Ralph P. Edwards
 P. O. Box 16126
 Greensboro, N. C. 27406
 Business Phone: 919/854-2750
 Home Phone: 919/274-9093

Rep. John B. Gillam, III
 P. O. Box 550
 Windsor, N. C. 27983
 Business Phone: 919/794-3615
 Home Phone: 919/794-3204

Rep. Daniel T. Lilley
 P. O. Box 824
 Kinston, N. C. 28501
 Business Phone: 919/523-4309
 Home Phone: 919/523-4524

Rep. Horace Locklear
 The Professional Building
 Lumberton, N. C. 28358
 Business Phone: 919/738-7126
 Home Phone: 919/738-7693



APPENDIX C

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 1981



SENATE JOINT RESOLUTION 143

Sponsors: Senators Clarke; Daniels, Duncan, Royall, Raynor and
and Redman.

Referred to: Rules and Operation of the Senate.

February 23, 1981

1 A JOINT RESOLUTION AUTHORIZING THE LEGISLATIVE RESEARCH
2 COMMISSION TO CONTINUE TO STUDY THE DESIGN, CONSTRUCTION AND
3 INSPECTION OF PUBLIC FACILITIES.

4 Whereas, large sums of money are spent each year to
5 provide facilities for public agencies and activities; and

6 Whereas, the cost of such construction continues to
7 increase as the economy of the State expands; and

8 Whereas, new and improved methods and techniques are
9 constantly being developed both in planning procedures and in
10 construction methods; and

11 Whereas, revised and expanded inspection services may be
12 needed in the interests of safety and economy; and

13 Whereas, the 1979 Session of the General Assembly
14 authorized the Legislative Research Commission to study the
15 design, construction, and inspection of public facilities; and

16 Whereas, the Legislative Research Commission Study
17 Committee assigned to this area has proposed many needed
18 amendments to the General Statutes; and

19 Whereas, the area of public construction is subject to
20 rapid change and legislative study thereof should continue;

21

1 Now, therefore, be it resolved by the Senate, the House of
2 Representatives concurring:

3 Section 1. The Legislative Research Commission is
4 authorized to continue to study the design, construction and
5 inspection of public facilities.

6 Sec. 2. The Commission may:

7 a. Study and review recent developments in the area of
8 contracts, liability, planning procedures, claims, facilities
9 design, construction, and inspection with the aim to determine
10 whether North Carolina is taking full advantage of any new
11 developments that have merit and whether North Carolina laws
12 permit the State and its subdivisions and agencies to take full
13 advantage of these developments.

14 b. Recommend to the 1983 General Assembly changes in
15 the General Statutes deemed necessary for the State, its
16 institutions, and its subdivisions to take full advantage of any
17 of the methods and procedures for contracts, liability, planning
18 procedures, claims, facility design, construction, and inspection
19 deemed to be in the interests of safety, economy and utility.

20 Sec. 3. This act is effective upon ratification.

21
22
23
24
25
26
27
28

SENATE DRS-----RF

Short Title: Repair Plans.

(Public)

Senator Duncan.

Referred to:-----

A BILL TO BE ENTITLED
AN ACT TO REQUIRE THAT PLANS BE PREPARED BY A REGISTERED
ARCHITECT OR ENGINEER FOR REPAIRS IN EXCESS OF FORTY-FIVE
THOUSAND DOLLARS (\$45,000).

The General Assembly of North Carolina enacts:

Section 1. G.S. 133-1.1(a) is amended by adding the
following language in the sixth line between "change" and the
comma:

", or in excess of forty-five thousand dollars (\$45,000) for
the repair of public buildings where such change does include
major structural change".

Sec. 2. This act is effective upon ratification.

INTRODUCED BY:

Short Title: Separate Contracts

Referred to:

1 A BILL TO BE ENTITLED

2 AN ACT TO CLARIFY THE REQUIREMENT OF SEPARATE SPECIFICATIONS FOR

3 BUILDING CONTRACTS.

4 The General Assembly of North Carolina enacts:

5 Section 1. G.S. 143-128 is amended by rewriting the first

6 paragraph to read:

7 "§ 143-128. Separate specifications for building contracts;

8 responsible contractors.--Every officer, board, department, commission

9 or commissions charged with responsibility of preparation of specifications

10 or awarding or entering into contracts for the erection, construction,

11 alteration or repair of any buildings for the State, or for any county

12 or municipality, when the entire cost of such work shall exceed fifty

13 thousand dollars (\$50,000) must have prepared separate specifications for

14 each of the following subdivisions or branches of work to be performed:

15 (1) Heating, ventilating, air conditioning and accessories

16 (separately or combined into one conductive system) and

17 all work kindred thereto.

18 (2) Plumbing and gas fittings and accessories and all work

19 kindred thereto.

20 (3) Electrical wiring and installations and all work kindred

21 thereto.

22 (4) Refrigeration for cold storage and all work kindred

23 thereto.

24 (5) General work relating to the erection, construction,

1 alteration, or repair of any building above referred to,
2 which work is not included in the above-listed four sub-
3 divisions or branches."

4 Sec. 2. This act is effective upon ratification.

5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

INTRODUCED BY:

Short Title: Competitive Bidding

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT TO CLARIFY THE COMPETITIVE BIDDING STATUTE.
3 The General Assembly of North Carolina enacts:
4 Section 1. G.S. 143-129 is amended by rewriting the
5 first paragraph to read:
6 "No construction or repair work requiring the estimated
7 expenditure of public money in an amount equal to or more than
8 thirty thousand dollars (\$30,000) or purchase of apparatus,
9 supplies, materials, or equipment requiring an estimated ex-
10 penditure of public money in an amount equal to or more than
11 ten thousand dollars (\$10,000), except in cases of special
12 emergency involving the health and safety of the people or
13 their property, shall be performed, nor shall any contract be
14 awarded therefor, by any board or governing body of the State,
15 or of any institution of the State government, or of any county,
16 city, town, or other subdivision of the State, unless the
17 provisions of this section are complied with.

18 The provisions of this section do not apply to any change
19 order which:

- 20 (1) is directly related to a construction or repair
21 project begun pursuant to this section; and
22 (2) makes reasonable changes in the plans and
23 specifications without affecting the scope of
24 the project.

1 The provisions of this section do not apply to the pur-
2 chase of gasoline, diesel fuel, alcohol fuel, motor oil, or
3 fuel oil. Such purchases, regardless of dollar amount, shall
4 be made according to the informal bid procedure set forth in
5 G.G. 143-131."

6 Sec. 2. This act is effective upon ratification.

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

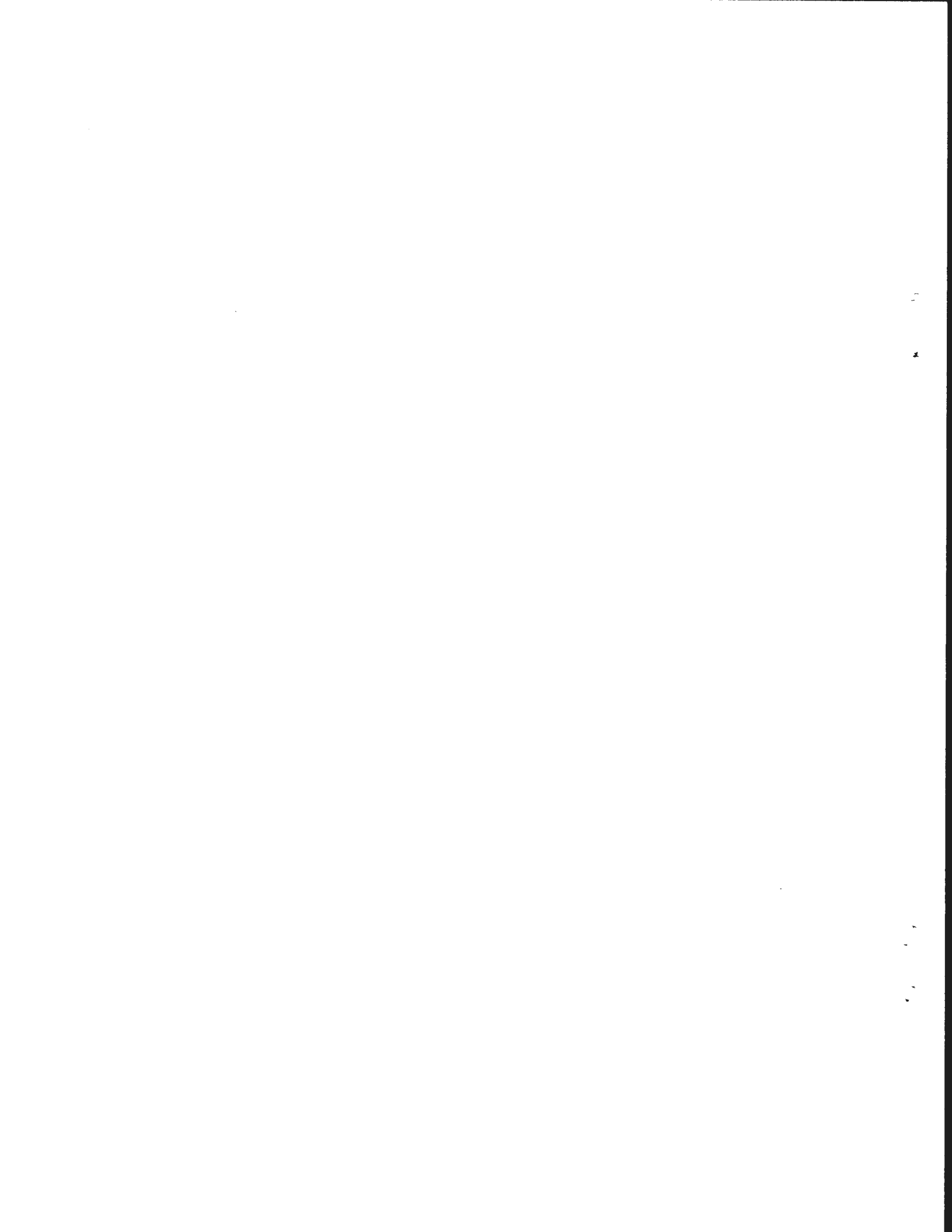
24

25

26

27

28



SENATE DRS6001

Short Title: DOA/Buildings.

(Public)

Senator Duncan.

Referred to:

A BILL TO BE ENTITLED
AN ACT TO CONSOLIDATE FUNCTIONS RELATING TO BUILDING REGULATIONS,
DESIGN, CONSTRUCTION, AND FACILITIES MANAGEMENT WITHIN THE
DEPARTMENT OF ADMINISTRATION.

The General Assembly of North Carolina enacts:

Section 1. G.S. 143-138(b) is amended in paragraph 8 thereof: (1) by inserting the following after the word "fertilizers,":

"except from the point of delivery to and including each liquified petroleum gas utilization device within a building or structure covered by the Code," and

(2) by adding the following sentence at the end of that paragraph:

"'Point of delivery' as used in this paragraph shall mean the outlet of the first stage pressure regulator."

Sec. 2. G.S. 143-138(b) is further amended by rewriting the fifth paragraph to read:

"For the information of users thereof, the Code shall include as an appendix any regulations relating to sanitation adopted by

believes pertinent."

Sec. 3. Article 5 of Chapter 119 of the General Statutes is amended by adding a new section at the end to read:

"§ 119-61. Exemption from Article.--Nothing in this Article shall be construed to apply to the design, construction, location, installation or operation of equipment or facilities covered by the North Carolina Building Code pursuant to Article 9 of Chapter 143 of the General Statutes or any law enacted in substitution therefor."

Sec. 4. Articles 7A, 14, and 15 of Chapter 95 of the General Statutes are repealed.

Sec. 5. Article 9 of Chapter 143 of the General Statutes is amended by designating the existing provisions as Part I and by adding new Parts II and III to read:

"PART II.

"Passenger Tramway Safety.

"§ 143-143.4A. Declaration of policy.--In order to safeguard life, health, property, and the welfare of this State, it shall be the policy of the State of North Carolina to protect its citizens and visitors from unnecessary mechanical hazards in the operation of ski tows, lifts, tramways and related devices to insure that reasonable design and construction are used, that accepted safety devices and sufficient personnel are provided for, and that periodic inspections and adjustments are made which are deemed essential to the safe operation of ski tows, ski lifts and passenger tramways. The primary responsibility for design,

construction, maintenance, and inspection rests with the operators of such passenger tramway devices. The State, through the Department of Administration, shall register all ski lift devices and passenger tramways and establish reasonable standards of design and operational practices, and cause to be made such inspections as may be necessary in carrying out this policy.

"§ 143-143.4B. Definitions.--Each word or term defined in this Part has the meaning indicated in this section, unless a different meaning is plainly required by the context.

(1) 'Council' means the State Building Code Council.

(2) 'Industry' means activities of all those persons in the State who own, manage, or direct the operation of passenger tramways.

(3) 'Operator' means any person, firm, corporation, or organization which owns, manages, or directs the operation of a passenger tramway. 'Operator' may apply to the State or any political subdivision or instrumentality thereof.

(4) 'Passenger tramway' means a device used to transport passengers uphill on skis, or in cars on tracks, or suspended in the air by the use of steel cables, chains or belts, or by ropes, and usually supported by trestles or towers with one or more spans. 'Passenger tramway' shall include the following devices:

- a. 'Chair lift,' a type of transportation which passengers are carried on chairs suspended in the air and attached to a moving cable, chain or link belt supported by trestles or towers with one or more spans, or similar devices;

- b. 'J bar, T bar or platter pull,' so-called and similar types of devices or means of transportation which pull skiers riding on skis by means of an attachment to a main overhead cable supported by trestles or towers with one or more spans;
- c. 'Multicar aerial passenger tramway,' a device used to transport passengers in several open or closed cars attached to, and suspended from, a moving wire rope or attached to a moving wire rope and supported on a standing wire rope, or similar device;
- d. 'Rope tow,' a type of transportation which pulls the skiers, riding on skis as the skier grasps the rope manually, or similar devices;
- e. 'Skimobile,' a device in which a passenger car running on steel or wooden tracks is attached to and pulled by a steel cable, or similar device;
- f. 'Two-car aerial passenger tramway,' a device used to transport passengers in two open or enclosed cars attached to, and suspended from, a moving wire rope or attached to a moving wire rope and supported on a standing wire rope or similar device.

(5) 'Secretary' means the Secretary of Administration.

"§ 143-143.4C. Registration required.--No passenger tramway shall be operated in this State unless it has been registered by the Secretary. On or before November 1 in each year, every operator of a passenger tramway shall apply to the Secretary on

forms prepared by said Secretary for registration of the passenger tramway which such operator owns or manages, or the operation of which he directs. The application shall contain such information as the Secretary may reasonably require in order for him to determine whether the passenger tramway sought to be registered by such operator complies with the intent of this Article and the rules and regulations promulgated by the Council as herein provided.

"§ 143-143.4D. Registration criteria and procedure.--The Secretary shall issue to the applying operator without delay a registration certificate for each passenger tramway owned, managed, or the operation of which is directed by such operator when the Secretary is satisfied:

(1) that the facts stated in the application are sufficient to enable the Secretary to fulfill his duties under this Article; and

(2) that each such passenger tramway sought to be registered complies with the rules and regulations of the Council promulgated pursuant to the provisions of this Article.

(3) In order to satisfy himself that the conditions described in subdivisions (1) and (2) of this section have been fulfilled, the Secretary may cause to be made such inspections hereinafter described as he may reasonably deem necessary.

(4) When an operator installs a passenger tramway subsequent to November 1 of any year, such operator shall file a supplemental application for registration of such passenger tramway. Upon the receipt of such supplemental application, the

Secretary shall proceed immediately to initiate proceedings leading to the registration or rejection of registration of such passenger tramway pursuant to the provisions of this Part.

(5) Each registration shall expire on October 31 next following the day of issue. Each operator shall cause the registration certificate for each passenger tramway thus registered to be displayed prominently at the place where passengers are loaded thereon.

"§ 143-143.4E. Powers and duties of the Council.--In addition to all other powers and duties conferred and imposed upon the Council by this Article, the Council shall have and exercise the power and duty to adopt reasonable rules and regulations relating to public safety in the construction, operation, and maintenance of passenger tramways. The rules and regulations authorized under this section shall conform as nearly as possible to the standards contained for mechanical engineering aerial passenger tramways safety code as adopted and used by the U.S.A. Standards Institute, B77.1-1960, with addenda B77.1(a)-1963, and B77.1(b)-1965, and as said safety code from tramways may be amended from time to time, and in the formulation of said regulations the Council may use and adopt any other safety code for tramways as issued by recognized scientific and mechanical societies. The said regulations shall not be discriminatory in their application to operators of passenger tramways, and the procedures of the Council shall be as provided in this Article.

"§ 143-143.4F. Powers and duties of the Secretary.--In addition to all other powers and duties conferred and imposed

upon the Secretary of Administration, the Secretary shall have and exercise the following powers and duties with respect to this Part:

(1) to hold hearings and take evidence in all matters relating to the exercise and performance of the powers and duties vested in the Secretary, subpoena witnesses, administer oaths, and compel the testimony of witnesses and the production of books, papers and records relevant to any inquiry;

(2) to approve, deny, revoke, and renew the registration provided for in this Part and the procedures of the Secretary with respect thereto shall be as provided in this Article with respect to the issuance of certificates or licenses;

(3) to cause the prosecution and the institution of actions for injunctions of all persons violating the provisions of this Part and to incur the necessary expenses thereof;

(4) to cause the seal of the Secretary to be affixed to all registrations issued by him, and to employ, within the funds available to him, and prescribe the duties of all such personnel as the Secretary may deem necessary in the administration of this Part.

"§ 143-143.4G. Inspections and reports.--The Secretary may cause to be made such inspections of the construction, operation, and maintenance of passenger tramways as he shall deem to be reasonably necessary. If, as the result of an inspection, it is found that a violation of the Council's rules and regulations exists, or a condition in passenger tramway construction, operation or maintenance exists, which endangers safety of the

public, an immediate report shall be made to the Secretary for appropriate investigation and order.

"§ 143-143.4H. Emergency shutdown.--When facts are presented to the Secretary tending to show that an unreasonable hazard exists in the continued operation of a passenger tramway, and after such verification of said facts as is practical under the circumstances and consistent with the public safety, the Secretary may by an emergency order require the operator of said tramway forthwith to cease using the same for the transportation of passengers. Such emergency order shall be in writing, signed by the Secretary, and notice thereof shall be served upon the operator or his agent immediately in control of said passenger tramway by a true copy of such order, with a return being made of such service and endorsed on the original order. Such emergency shutdown shall be effective for a period not to exceed 48 hours from the time of service. Immediately after the issuance of an emergency order, the Secretary shall conduct an investigation into the facts of the case and shall take such action as may be appropriate and as provided by the provisions of this Part.

"§ 143-143.4I. Orders.--If, after investigation, the Secretary finds that a violation of any of the Council's rules and regulations exists, or that there is a condition in passenger tramway construction, operation or maintenance which endangers the safety of the public, the Secretary shall forthwith issue his written order setting forth his findings, the corrective action to be taken, and fixing a reasonable time for compliance therewith. Such orders shall be served upon the operator

involved by certified mail, and shall become final, unless the operator shall seek judicial review of said order as hereinafter provided. The Secretary shall have the power to institute injunctive proceedings in any court of competent jurisdiction of the judicial district in which the passenger tramway is located for the purpose of restraining the operation of said tramway or for compelling compliance with any lawful order of the Secretary. Any appeal from an order of the Secretary shall be made in conformance with Chapter 150A of the General Statutes, as amended.

"§ 143-143.4J. Suspension of registration.--If any operator fails to comply with the lawful order of the Secretary as issued under this Part, and within the time fixed thereby, the Secretary may suspend the registration of the affected passenger tramway for such time as he may consider necessary for the protection of the safety of the public. Any operator who shall be convicted, or enter a plea of guilty or no contest, to operating a passenger tramway which has not been registered by the Secretary, or after its registration has been suspended by the Secretary, shall be guilty of a misdemeanor and shall be punished by a fine of not more than fifty dollars (\$50.00) per day for each day of the such illegal operation or by imprisonment in the discretion of the court, or both such fine and imprisonment.

"PART III.

"Boilers and Pressure Vessels.

"§ 143-143.6A. Definitions.--(a) The term 'board shall mean the North Carolina Boiler and Pressure Vessel Advisory Board;

(b) The term 'boiler' shall mean a closed vessel in which water is heated, steam is generated, steam is superheated, or any combination thereof, under pressure or vacuum for use externally to itself by the direct application of heat from the combustion of fuels, or from electricity or nuclear energy. This term 'boiler' shall also include fired units for heating or vaporizing liquids other than water where these units are separate from processing systems and are complete within themselves;

(c) The term 'inspection certificate' shall mean certification by the Secretary of Administration that a boiler or pressure vessel is in compliance with the rules and regulations adopted under this Article;

(d) The term 'inspector's commission' shall mean a written authorization by the Secretary of Administration for a person who has met the qualifications set out in his Part to conduct inspections of boilers and pressure vessels;

(e) The term 'pressure vessel' shall mean a vessel in which the pressure is obtained from an indirect source or by the application of heat from an indirect source or a direct source, other than those included within the term 'boiler'.

(f) the term 'Secretary' shall mean the Secretary of Administration.

"§ 143-143.6B.--Application of Article; exemptions.--(a) This Article shall apply to all boilers and pressure vessels constructed, used, or designed for operation in this State including all new and existing installations which are operated in connection with business buildings, institutional buildings,

industrial buildings, assembly buildings, educational buildings, public residential buildings, recreation buildings, and other public buildings. This Article shall also apply to boilers and hot water supply tanks, and heaters located in hotels, motels, tourist courts, camps, cottages, resort lodges, and similar places whenever the owner or operator advertises in any manner for transit patronage, or solicits such business for temporary abode by transit patrons.

(b) This Article shall not apply to:

- (1) Boilers and pressure vessels owned and/or operated by the federal government;
- (2) Pressure vessels used for transportation or storage of compressed gases when constructed in compliance with the specifications of the U.S. Department of Transportation and when charged with gas marked, maintained, and periodically requalified for use, as required by appropriate regulations of the U.S. Department of Transportation;
- (3) To portable boilers and pressure vessels used for agricultural purposes only or for pumping or drilling in an open field for water, gas or coal, gold, talc or other minerals and metals;
- (4) Pressure vessels used for transportation or storage of liquefied petroleum gas;
- (5) Air tanks located on vehicles licensed under the rules and regulations of other State authorities operating under rules and regulations substantially

similar to those of this State and used for carrying passengers or freight within interstate commerce;

- (6) Air tanks installed on right-of-way of railroads and used directly in the operation of trains;
- (7) Pressure vessels that do not exceed five cubic feet in volume and 250 PSIG pressure; or one and one-half cubic feet in volume and 600 PSIG pressure; or an inside diameter of six inches with no limitations on pressure;
- (8) Pressure vessels operating at a working pressure not exceeding 15 PSIG pressure;
- (9) Pressure vessels with a nominal water capacity of 120 gallons or less and containing water under pressure at ambient temperature, including those containing air, the compression of which serves as a cushion;
- (10) Boilers and pressure vessels on railroad steam locomotives that are subject to federal safety regulations.

(c) The construction and inspection requirements established by the Building Code Council shall not apply to hot water supply boilers which are directly fired with oil, gas or electricity, or hot water supply tanks heated by steam or any other indirect means, which do not exceed any of the following limitations:

- (1) Heat input of 200,000 BTU HR;
- (2) Water temperature of 200 degrees F;

(3) Nominal water capacity of 120 gallons; provided that they are equipped with ASME Code and National Board certified safety relief valves.

(d) The construction requirements established by the Building Code Council shall not apply to pressure vessels installed in this State prior to December 31, 1981, that:

(1) Are of one-piece, forged construction and have no weldments;

(2) Are constructed before January 1, 1981, and operating or could be operated, under the laws of any state that has adopted one or more sections of the ASME Code;

(3) Are transferred into this State without a change of ownership; and

(4) Are determined by the director to be constructed under standards substantially equivalent to those established by the department at the time of transfer;

provided that they are equipped with ASME Code and National Board certified safety relief valves.

"§ 143-143.6C. Powers and duties of Secretary.--The Secretary of Administration is hereby charged, directed, and empowered:

(1) To inspect boilers and pressure vessels covered under this Article;

(2) To issue inspection certificates to those boilers and pressure vessels found in compliance with this Article;

(3) To keep adequate records of the type, dimensions, age,

conditions, pressure allowed upon, location and date of the last inspection of all boilers and pressure vessels to which this Article applies;

(4) To require such periodic reports from inspectors, owners, and operators of boilers and pressure vessels as he deems appropriate in carrying out the purposes of this Article;

(5) To have free access, without notice, to any location in this State, during reasonable hours, where a boiler or pressure vessel is being built, installed, or operated for the purpose of ascertaining whether such boiler or pressure vessel is built, installed or operated in accordance with the provisions of this Article;

(6) To investigate serious accidents involving boilers and pressure vessels to determine the causes of such accident(s), and he shall have full subpoena powers in conducting said investigation;

(7) To establish reasonable fees for the inspection and issuance of inspection certificates for boilers and pressure vessels;

(8) To establish reasonable fees for the examination and certification of inspectors;

(9) To appoint qualified individuals to the Boiler and Pressure Vessel Advisory Board.

(10) To devise and administer examinations to applicants seeking a certificate of competency as inspectors of boilers and pressure vessels in this State;

(11) To issue, suspend, or revoke inspector's commission to inspectors of boilers and pressure vessels within this State.

"§ 143-143.6D. Boiler and Pressure Vessels Advisory Board created; appointment, terms, compensation and duties.--(a) There is hereby created the North Carolina Boiler and Pressure Vessels Advisory Board consisting of nine members appointed by the Secretary, of which three shall be appointed for a term of one year, three for a term of two year, one for a term of three years, one for a term of four years, and one for a term of five years. At the expiration of their respective terms of office, their successors shall be appointed for terms of five years each. Of these nine appointed members, one shall be a representative of the owners and users of steam boilers within this State, one a representative of boiler manufacturers within this State, one a representative of boilermakers within this State who has had not less than five years' practical experience as a boilermaker, one shall be a representative of the owners or users of pressure vessels within the State, one shall be a representative of the pressure vessel manufacturers within the State, one a representative of a boiler inspection and insurance company authorized to insure boilers and pressure vessels within the State, one a representative of the operating steam engineers in this State, one a contractor holding a Group I North Carolina Heating License, and one a mechanical engineer on the faculty of a recognized engineering college or a licensed professional engineer having boiler and pressure vessel experience. The Secretary shall annually designate one member to serve as

chairman.

(b) The Board shall meet at least twice annually and shall be responsible for studying and proposing rules and regulations for adoption, modification or revocation by the Building Code Council, governing the construction, installation, inspection, repair, alteration, use and operation of boilers and pressure vessels in this State. The rules and regulations so formulated shall conform as nearly as possible to the boiler code of the American Society of Mechanical Engineers and amendments and interpretations thereto made and approved by the council of the Society.

(c) The members of the Board shall serve without salary but shall be paid a subsistence and travel allowance as established in accordance with Chapter 138 of the General Statutes.

"§ 143-143.6E. Classification of inspectors; qualifications; examinations; certificates of competency; inspector's commission.--(a) There shall be three types of inspectors authorized to conduct inspections and report their findings to the Secretary under this Part:

- (1) Boiler and Pressure Vessel Inspector. Shall be a qualified individual appointed by the Secretary to assist in conducting inspections under this Part and report on the suitability of boilers and pressure vessels so inspected;
- (2) Special Inspector. Shall be a qualified individual regularly employed by an insurance company authorized to ensure in this State against injury

to person and/or property from explosions and accidents involving boilers and pressure vessels;

- (3) Owner-User Inspectors. Shall be a qualified individual employed on a full-time basis by a company operating boilers or pressure vessels for its own use and not for resale, and maintaining an established inspection program for periodic inspection of boilers and pressure vessels owned or used by that company and where such inspection program is under the supervision of one or more engineers having qualifications satisfactory to the Secretary.

(b) Inspector's Commission. Any company authorized to insure in this State against loss to person or property as a result of an explosion or accident involving boilers and pressure vessels or operating boilers and/or pressure vessels for its own use and not for resale may apply for the issuance of an inspector's commission for an individual within its employ who has a certificate of competency.

A commission authorizes an inspector to make inspections on boilers and pressure vessels and report on the suitability of said boilers and pressure vessels to the Secretary. Those inspectors holding commissions as special inspectors shall be limited to making inspections on boilers and pressure vessels insured by their employer. Owner-user inspectors shall be limited to conducting inspections on boilers and pressure vessels operated by their respective employers.

(c) Qualifications for Certificates of Competency. To be entitled to a certificate of competency as one of the inspectors listed in G.S. 143-143.6E, an individual must:

- (1) have passed an examination provided and administered by the Board; or
- (2) have passed an examination and been certified in a state having rules and regulations substantially similar to those effective within North Carolina; or
- (3) hold a certificate of competency of the National Board of Boiler and Pressure Vessel Inspectors; and
- (4) continue in the employ of the company requesting the certificate of competency from the Board.

"§ 143-143.6F. Inspections; report, certificates, fees.--(a) All boilers and pressure vessels subject to the provisions of this Article shall be inspected by an authorized inspector, as set out in G.S. 143-143.6E, at such intervals and by such methods as the Building Code Council may from time to time prescribe by regulation. In determining the frequency with which various categories of boiler and pressure vessels shall be inspected, the Council shall give due consideration to the hazard involved and need for protection of the public. Methods of inspection must provide an adequate procedure to ensure the safety of individuals likely to be injured by an explosion or accident involving a boiler or pressure vessel.

(b) Upon completion of an inspection the authorized inspector shall file a report on the suitability of the boiler or pressure

vessel inspected with the Secretary. The inspector shall attach the fee paid for the inspection to his report.

(c) Upon receipt of the inspector's report and fee, the Secretary shall determine whether or not a boiler or pressure vessel is in compliance with the rules and regulations adopted under this Article. If the Secretary determines it is in compliance he shall issue an inspection certificate authorizing use of the boiler or pressure vessel. When the Secretary determines a boiler or pressure vessel is not in compliance, he shall so notify the owner or user within 10 working days. No boiler or pressure vessel may be operated without an inspection certificate, except pressure vessels being operated under owner-user provision where administrative procedures of equal safety and competency have been approved by the Building Code Council. No more than 60 days grace period may be granted beyond the certificate expiration date.

"§ 143-143.6G. Inspection certificates required; misrepresentation as inspector.--It shall be unlawful for any person, firm, partnership, association or corporation to operate or use any boiler or pressure vessel in this State to which this Article applies without a valid inspection certificate issued by the North Carolina Department of Administration. Any person, firm, partnership, association or corporation found to be operating or using a boiler or pressure vessel without a valid inspection certificate shall be guilty of a misdemeanor and upon conviction be subject to a fine of one thousand dollars (\$1,000) or imprisonment for 30 days, or both in the discretion of the

court.

Any person who knowingly and willfully misrepresents himself as an authorized inspector in North Carolina shall be guilty of a misdemeanor and upon conviction thereof be fined up to one thousand dollars (\$1,000) or imprisoned for six months, or both in the discretion of the court.

Sec. 6. Notwithstanding Section 4 of this act, any rules promulgated pursuant to the rulemaking powers of the Commissioner of Labor and the Board of Boiler and Pressure Vessel Rules as contained in Articles 7A and 15 of Chapter 95 shall remain in effect until amended or repealed by the Building Code Council.

Sec. 7. (a) G.S. 143-137, G.S. 143-138(h), G.S. 143-151.9, G.S. 143-151.13, G.S. 160A-411, G.S. 160A-421, G.S. 160A-433, G.S. 160A-434, G.S. 160A-436, and G.S. 160A-438 are each amended by deleting the words "Commissioner of Insurance" wherever they appear and inserting in lieu thereof the words "Secretary of Administration".

(b) G.S. 143-151.9, G.S. 153A-351, G.S. 153A-361, G.S. 153A-373, G.S. 160A-411, and G.S. 160A-438 are each amended by deleting the word "Commissioner" wherever it appears and inserting in lieu thereof the words "Secretary of Administration".

(c) G.S. 143-139 is amended by deleting the words "Insurance Commissioner" and inserting in lieu thereof the words "Secretary of Administration".

(d) G.S. 143-137, G.S. 143-139, G.S. 143-141, G.S. 143-151.9,

G.S. 143-151.19, and G.S. 153A-351 are each amended by deleting the words "Department of Insurance" and inserting in lieu thereof the words "Department of Administration".

(e) G.S. 143-137, G.S. 143-139, and G.S. 143-141 are each amended by deleting the words "Division of Engineering of the".

(f) G.S. 143-151.9 and G.S. 143-151.19 are each amended by deleting the words "Division of Engineering and Building Codes in the".

(g) G.S. 143-151.27 and G.S. 143-151.28 are each amended by deleting the words "Engineering and Building Codes Division of the".

(h) G.S. 143-139 is amended by deleting the words ", by means of the Division of Engineering".

Sec. 8. Article 21 of Chapter 58 of the General Statutes is redesignated as "Insuring State Officials and Employees."

Sec. 9. G.S. 58-189, G.S. 58-190, G.S. 58-191, G.S. 58-191.1, G.S. 58-191.2, G.S. 58-192, and G.S. 58-193 are repealed.

Sec. 10. Article 9 of Chapter 143B of the General Statutes is amended by adding a new Part to read:

"Part 23.

"Insuring State Property.

"§ 143B-428.1. State Property Fire Insurance Fund.--There is hereby created a 'State Property Fire Insurance Fund' which shall be a special fund in the State treasury for the purpose of providing a reserve against loss from fire at State departments and institutions. The State Treasurer shall be the custodian of

the State Property Fire Insurance Fund and shall invest its assets in accordance with the provisions of G.S. 147-69.2 and 147-69.3. The appropriations for fire insurance premiums made for the biennium 1983-1984 or that may thereafter be made for this purpose shall be transferred to the State Property Fire Insurance Fund.

"§ 143B-428.2. Appropriations; fund to pay administrative expenses.--Upon the expiration of the existing fire insurance policies on said properties and in making appropriations for any biennium, the Secretary of administration shall file with the Office of Budget and Management his estimate of the appropriations which will be necessary in order to set up and maintain an adequate reserve to provide a fund sufficient to protect the State, its departments, institutions, and agencies from loss or damage to any of said properties up to fifty per centum (50%) of the value thereof. Appropriations made for the creating of such fire insurance reserves against property of the Department of Agriculture or the Department of Transportation or any special operating fund shall be charged against the funds of such departments.

The State Property Fire Insurance Fund is authorized and empowered to pay all the administrative expenses occasioned by the administration of this Part.

"§ 143B-428.3. Payment of losses; rules and regulations; sprinkler leakage insurance.--In case of total loss of any property of any State institution or partial loss thereof or the loss or damage of any other aforesaid state-owned property, the

Secretary of Administration is authorized, empowered and directed to determine the amount of the loss and to certify the amount of loss to the department or institution concerned, to the budget bureau and to the Governor and Council of State. The Governor and Council of State may authorize transfers from the State Property Fire Insurance Fund to the State agency having suffered a fire damage in such amounts as they may consider necessary to restore the loss sustained, and in the event there is not a sufficient sum in said State Property Fire Insurance Fund, the Governor and Council of State may supplement said fund from the Contingency and Emergency Fund.

The Secretary of Administration, with the approval of the Council of State, is authorized and empowered to adopt and promulgate all such rules and regulations as may be necessary to carry out the purpose and intent of the provisions of this Article and all such rules and regulations as may be adopted in accordance herewith shall be binding upon all the departments, bureaus, agencies and institutions of the State. The Secretary of Administration, with the approval of the Governor and Council of State, is authorized and empowered to purchase from insurers admitted to do business in North Carolina such insurance or reinsurance as may be necessary to protect the State Property Fire Insurance Fund against loss on any one building and contents in excess of not less than fifty thousand dollars (\$50,000). The premiums on such coverage shall be paid from the State Property Fire Insurance Fund hereinbefore provided.

Upon request of any State department, agency or institution,

sprinkler leakage insurance shall be provided on designated state-owned property of such department, agency or institution which is insured by the State Property Fire Insurance Fund. Premiums for such insurance coverage shall be paid by each requesting department agency or institution in accordance with rates fixed by the Secretary of Administration. Losses covered by such insurance may be paid out of the State Property Fire Insurance Fund in the same manner as fire losses. The Secretary of Administration, with the approval of the Governor and Council of State, is authorized and empowered to purchase from insurers admitted to do business in North Carolina such insurance or reinsurance as may be necessary to protect the State Property Fire Insurance Fund against loss with respect to such insurance coverage.

"§ 143B-428.4. Extended coverage insurance.--Upon request of any State department, agency or institution, extended coverage insurance and other property insurance may be provided on designated state-owned property of such department, agency or institution which is insured by the State Property Fire Insurance Fund. Premiums for such insurance coverage shall be paid by each requesting department, agency or institution in accordance with rates fixed by the Secretary of Administration. Losses covered by such insurance may be paid for out of the State Property Fire Insurance Fund in the same manner as fire losses. The Secretary of Administration with the approval of the Governor and Council of State, is authorized and empowered to purchase from insurers admitted to do business in North Carolina such insurance or

reinsurance as may be necessary to protect the State Property Fire Insurance Fund against loss with respect to such insurance coverage. The words 'extended coverage insurance,' as used in this section, means insurance against loss or damage caused by windstorm, hail, explosion, riot, riot attending a strike, civil commotion, aircraft, vehicles or smoke.

"§ 143B-428.5. Use and occupancy and business interruption insurance.--Upon request of any State department, agency or institution, use and occupancy and business interruption insurance shall be provided on state-owned property of such department, agency or institution which is insured by the State Property Fire Insurance Fund. Premiums for such insurance coverage shall be paid by each requesting department, agency, or institution in accordance with rates fixed by the Secretary of Administration. Losses covered by such insurance may be paid for out of the State Property Fire Insurance Fund in the same manner as fire losses. The Secretary of Administration, with the approval of the Governor and Council of State, is authorized and empowered to purchase from insurers admitted to do business in North Carolina such insurance or reinsurance as may be necessary to protect the State Property Fire Insurance Fund against loss with respect to such insurance coverage.

"§ 143B-428.6. Information furnished Secretary by officers in charge.--It is the duty of the different officers or boards having in their custody any property belonging to the State to inform the Secretary, giving him in detail a full description of same, and to keep him informed of any changes in such property or

its location or surroundings.

"§ 143B-428.7. Secretary to inspect State property; plans submitted.--It is the duty of the Secretary at least once in each year, or oftener, if deemed necessary, to visit, inspect, and thoroughly examine each State institution or other State property with a view to its protection from fire, as well as to the safety of its inmates or the property therein in case of fire, and call to the attention of the board or officer having the same in charge any defect noted by him or any improvement deemed necessary. No board, commission, superintendent, or other person or persons authorized and directed by law to select plans and erect buildings for the use of the State of North Carolina or any institution thereof or for the use of any county, city, or incorporated town or school district shall receive and approve of any plans until they are submitted to and approved by the Secretary of Administration of the State as to the safety of the proposed buildings from fire, as well as the protection of the inmates in case of fire.

"§ 143B-428.8. Report required of Secretary.--The Secretary of Administration must submit to the Governor a full report of his official action under this Article, with such recommendations as commend themselves to him, and it shall be embodied in or attached to the Governor's biennial report to the General Assembly."

Sec. 11. G.S. 69-4, G.S. 69-7, G.S. 69-8, G.S. 69-9, G.S. 69-10, G.S. 69-12, G.S. 69-13, G.S. 69-27, G.S. 69-28, G.S. 69-29, G.S. 69-30, G.S. 69-35, and G.S. 69-36 are amended by

deleting the words "Commission of Insurance" and inserting in lieu thereof "Secretary of Administration".

Sec. 12. G.S. 69-4, G.S. 69-13, and G.S. 69-29 are amended by deleting the word "Commissioner" and inserting in lieu thereof "Secretary".

Sec. 13 G.S. 69-37 is amended by deleting the words "Insurance Commission" and inserting in lieu thereof "Secretary of Administration".

Sec. 14. G.S. 115C-525(a)(3), G.S. 115C-525(b)(1), and G.S. 115C-525(b)(3) are amended by deleting the words "Commissioner of Insurance" and inserting in lieu thereof "Secretary of Administration".

Sec. 15. Chapter 143B of the General Statutes is amended by adding the following new sections:

"§ 143B-370.1. Fees authorized; elevators, escalators, etc.--
The North Carolina Department of Administration is hereby authorized to assess and collect the following inspection service fees for the installation and alteration of elevators, escalators, dumbwaiters other than those installed or altered in restaurants and special equipment, based on the cost of installation or alteration:

Cost of Installation or Alteration	Unit Fee
\$0 -- \$10,000	\$ 70
10,001 -- 30,000	110
30,001 -- 50,000	155
50,001 -- 80,000	195
80,001 -- 100,000	215
Over 100,000	260

The North Carolina Department of Administration is hereby authorized to assess and collect a fee of ten dollars (\$10.00) for the periodic inspection of elevators, escalators and dumbwaiters.

"§ 143B-370.2. Fees authorized; amusement devices; aerial tramways, etc.--The North Carolina Department of Administration is hereby authorized to assess and collect the following inspection service fees for annual inspections for each location within the State of amusement devices, aerial passenger tramways and inclined railroads:

Type Inspection	Unit Fee
Amusement Devices	\$ 10
Gondolas, Chairlifts and Inclined Railroads	125
J- or T-Bars	56
Rope Tows	28

"§ 143B-370.3. Assessment and collection of fees certificates of safe operation--The assessment of the fees pursuant to G.S. 143B-370.1 and G.S. 143B-370.2 shall be made against the owner or operator of such equipment and shall be collected at the time of inspection. Certificates of safe operation shall be withheld by the Department of Administration until such time as the assessed fees are collected.

"§ 143B-370.4. Disposition of fees.--All fees collected by the Department of Administration pursuant to G.S. 143B-370.1 and G.S. 143B-370.2 shall be deposited with the State Treasurer and shall be used exclusively for inspection purposes of the equipment

referenced in these sections.

"§ 143B-370.5. Inspection of erection of rides.--Inspection of erection of rides is related solely to carnivals and fairs."

Sec. 17. G.S. 143-138(g) is amended by deleting the line containing the words "Legislative Building Library . . .1" and inserting in lieu thereof "Legislative Library . . .2".

Sec. 18. G.S. 143-34 is amended by adding new subdivisions to read:

"(25) To adopt such rules as are reasonably necessary to carry out the facilities development and management responsibilities assigned to the Department, including the administration of all capital improvement projects approved by the Legislature or the Advisory Budget Commission.

(26) To adopt rules to establish standard procedures and criteria for the selection and evaluation of designers based on qualifications and experience.

(27) To adopt rules to establish a project management control system for the administration, documentation, and control of capital improvement projects from the appropriations stage through the occupancy warranty."

Sec. 19. A new section is added to Article 1 of Chapter 143 of the General Statutes to read:

"§ 143-31.1A. Advance planning and programming; notice of approved projects.--(a) The Director of the Budget shall establish by rule a system for advance planning and programming for proposed capital improvement projects. This system shall assist agencies and institutions in the development of capital

improvement requests and to provide the General assembly with information upon request.

(b) The Director of the Budget shall establish a central source for information on all capital improvement projects which have been approved by the General Assembly and/or the Advisory Budget Commission. The Director of the Budget shall publish a list of approved projects periodically."

Sec. 20. G.S. 143-139 is amended in subsection (b) by deleting the words "except those sections of the Code, the enforcement of which is specifically allocated to other agencies by subsections (c) and (d) below." and by inserting in lieu thereof "including elevators, moving stairways, and amusement devices such as merry-go-rounds, roller coasters, and ferris wheels, etc." and by repealing subsections (c) and (d).

Sec. 21. G.S. 143-151.8(3) is amended by deleting the following:

"except an employee of the State Department of Labor engaged in the administration and enforcement of those sections of the Code which pertain to boilers and elevators,".

Sec. 22. Article 7 of Chapter 129 of the General Statutes is repealed.

Sec. 23. Article 9 of Chapter 143B of the General Statutes is amended by adding a new Part to read:

"PART 24.

"State Building Commission.

"§ 143B-429.1. Commission created; membership.--There is created within the Department of Administration the State

Building Commission which is composed of the Chairman of the Building Code Council and one nominee from each of the following professional organizations who shall be appointed to two-year terms by the Governor: N.C. Chapter, American Institute of Architects; Associated General Contractors of America, Carolinas Branch; Professional Engineers of North Carolina; N. C. Association of Electrical Contractors; N. C. Association of Plumbing, Heating & Cooling Contractors; American Subcontractors Association of the Carolinas; and Consulting Engineers Council of N.C. The Secretary of Administration and the Director of the Budget shall be ex officio members. If any vacancy occurs in the membership of the Commission, the nominating authority shall nominate another person to fill the unexpired term of the vacating member.

The Commission members shall elect the chairman and vice-chairman of the Commission. The Director of the State Building Division shall serve as secretary to the Commission. The Commission may, by majority vote, remove any member of the Commission for chronic absenteeism, misfeasance, malfeasance or other good cause.

"§ 143B-429.2. Meetings of Commission; compensation.--The Commission shall meet at least four times per year, on or about January 15, April 15, July 15, October 15 and upon call of the chairman. The members shall receive no compensation for attendance at meetings, except a per diem expense reimbursement. Members of the Commission who are not officers or employees of the State shall receive reimbursement for subsistence and travel

expenses at rates set out in G.S. 138-5 from funds made available to the Commission. Members of the Commission who are officers or employees of the State shall be reimbursed for travel and subsistence at the rates set out in G.S. 138-6 from funds made available to the Commission.

"§ 143B-429.3. Powers and duties of Commission.--The State Building Commission shall:

(1) provide advice to the Department of Administration in carrying out its professional and administrative responsibilities related to the functions of building regulations, design, construction, and facilities management;

(2) provide advice to the Secretary of Administration during his rulemaking proceedings pertaining to building regulations design, construction, and facilities management;

(3) monitor the Department of Administration's procedures related to building regulations design, construction, and facilities management;

(4) provide advice and recommendations to the General Assembly, the Governor, or the Advisory Budget Commission on legislation or other construction-related matters;

(5) report its assessment of the State Building Division biennially to the General Assembly and the Governor."

Sec. 24. The State Building Commission shall study the feasibility of developing a joint-venture involving State and local government, the construction industry, and the engineering schools for their mutual benefit of applied research, professional training and development, and technical assistance.

The Commission shall report to the 1985 General Assembly on or before its convening date on the feasibility of establishing such a joint-venture.

Sec. 25. There is created within the Department of Administration a State Building Division which shall have administrative responsibilities for all functions related to building regulations, design, construction and facilities management and such other powers and duties as the Secretary of Administration shall from time to time assign to it. The Director of the State Building Division shall be appointed by and shall report directly to the Director of the Budget and the Secretary of Administration. The Director shall be a registered architect or engineer with an appropriate background in building regulations, design, construction or facilities management.

Sec. 26. Chapter 143B of the General Statutes is amended by adding a new section to read:

"§ 143B-370.10. Transfer of the Building Code Council and Code Officials Qualification Board.--(a) The Building Code Council is transferred by a Type II Transfer to the Department of Administration.

(b) The North Carolina Code Officials Qualification Board is transferred by a Type II Transfer to the Department of Administration.

(c) For the purpose of this section, 'Type II Transfer' has the same meaning as in G.S. 143A-6(b)."

Sec. 27. Any regulations adopted by the Commissioner of Insurance, where authority for adopting those regulations has

been transferred to the Secretary or Department of Administration shall remain in effect until modified or repealed by the Secretary of the Department of Administration.

Sec. 28. All positions, personnel, records, equipment, and supplies assigned to the Departments of Insurance and Labor which are used to carry out the functions transferred to the Department of Administration by this act are transferred on the effective date of this act to the Department of Administration.

Sec. 29. G.S. 14-68 is amended by deleting the words "Commissioner of Insurance" and inserting in lieu thereof "Secretary of Administration".

Sec. 30. G.S. 58-10 is repealed.

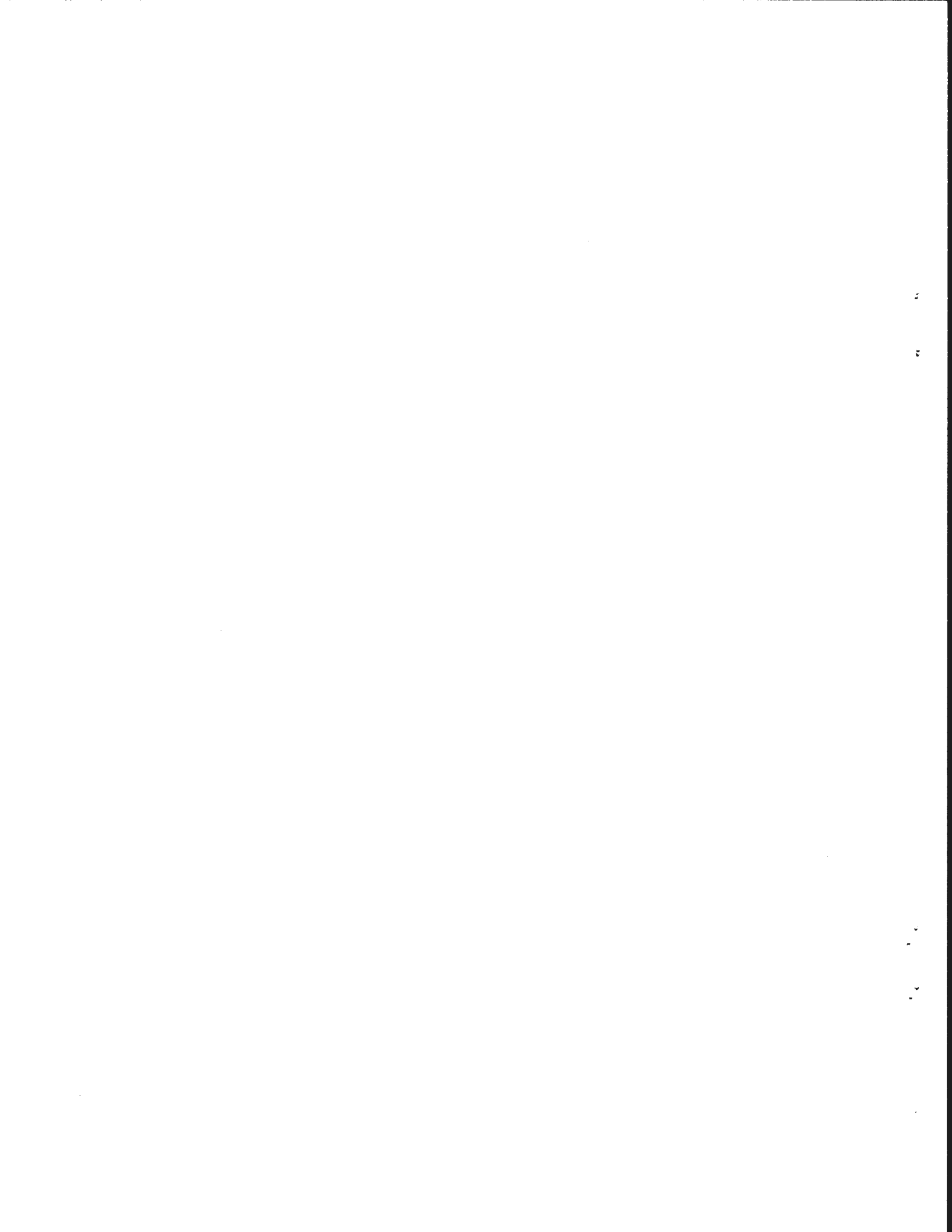
Sec. 31. G.S. 58-11 is amended in the first sentence by deleting "of arson, that of unlawful burning, or".

Sec. 32. G.S. 66-25 is amended by rewriting the third sentence of the second paragraph to read:

"One body whose evidence of safety shall be accepted by the electrical inspector for specific stocks is the Building Code Council of the State of North Carolina, if the stock in question has been submitted to the examinations and tests required by that Council, and that Council has certified that in its judgment the stock conforms to the State law, to the requirements of this Article, and to any additional requirements deemed necessary for safety in the judgment of that Council."

Sec. 33. G.S. 66-25 is further amended in the fourth paragraph by deleting the words "Insurance Commission of North Carolina" and inserting in lieu thereof "Building Code Council".

Sec. 34. This act shall become effective on July 1,
1983.



DESCRIPTION OF PROPOSED
STATE BUILDING DIVISION

THE STATE CONSTRUCTION ADVISORY COMMITTEE TOOK NO POSITION REGARDING THE PLACEMENT OF THE PROPOSED STATE BUILDING DIVISION. FOR PURPOSES OF DISCUSSION, STAFF COUNSEL HAS PLACED IT IN THE DEPARTMENT OF ADMINISTRATION.

The proposed State Building Division in the Department of Administration would be charged with coordinating all technical, financial, legal, and management functions related to the facilities development process. The Division would contain the State Construction Office, Building Regulations Office and the Facilities Management Office. It would also contain a Legal Services Section, staffed by the Attorney General's Office and a Capital Budget Section, staffed by the Office of Budget and Management.

The State Building Division would be given the responsibility for:

- (1) developing all rules, regulations and procedures necessary to carry out the functions of the State Construction Office, the Building Regulations Office and the Facilities Management Office;
- (2) developing rules, regulations and procedures for administering the bid rigging statute;
- (3) developing standard procedures and criteria, based on qualifications and experience, for the selection and evaluation of designers. The Division would be responsible for the coordination and review of the designer selection process, but the using agency would be responsible for the final selection of designers;

- (4) awarding construction contracts for all capital improvement projects. The Division may delegate to State agencies and institutions authority to award construction contracts for capital improvement projects not required by G. S. 143-129 to be publicly advertised;

The State Construction Office would be given the responsibility for:

- (1) performing all functions and responsibilities currently assigned to the Division of State Construction;
- (2) the negotiation of design fees and the preparation of the design contract;
- (3) the development and implementation of a project management control system for the administration, documentation and control of all capital improvement projects to include advanced planning and cost estimating for the appropriations process;
- (4) administering and supervising all capital improvement projects approved by the Legislature, Director of the Budget, or the Advisory Budget Commission to include:
 - (a) Plan Review and approval;
 - (b) the receipt and disposition of bids;
 - (c) monitoring of construction projects;
 - (d) administration of the contract, contract documentation and records, change order approval, inspection, and final acceptance;

The Building Regulations Office would be given responsibility for:

- (1) administering the State Building Code including:
 - (a) administrative, technical, and inspection service required by the Building Code Council;
 - (b) enforcement of the State Building Code to include the enforcement responsibilities currently provided by the Engineering and Building Code Division of the Department of Insurance, the L.P. Gas Division of the Department of Agriculture (for non-agricultural facilities), and the Boiler and Elevator Divisions of the Department of Labor;
- (2) coordinating the review, permit, and approval process involving State regulatory agencies including:
 - (a) maintaining a current file of all building regulations relating to the construction of public facilities;
 - (b) maintaining a current file of all general statutes relating to the design and construction of public facilities;
 - (c) requiring all regulatory agencies to file with the Building Regulations Office complete information relating to the review, approval and permit process including proposed changes in the rules, regulations and procedures;

- (d) monitoring of the rule-making procedures of all State regulatory agencies involved in the construction process;
 - (e) providing designers with complete information relating to their project on the reviews, approvals, and permits required and assist the designer and/or owner in the review, approval and permitting process.
- (3) assisting the Code Officials Qualification Board in carrying out its responsibilities.

The Facilities Management Office would be given the responsibility for:

- (1) performing all functions and responsibilities currently assigned to the State Property Office under G. S. 143-341(4);
- (2) performing all functions and responsibilities currently assigned to the State Property Fire Fund Division of the Department of Insurance under G. S. 58, Article 21;
- (3) developing and administering a post-occupancy evaluation, inspection and monitoring program;
- (4) developing, in cooperation with State agencies and institutions, policies and procedures for the operations and maintenance of State facilities;
- (5) developing an operations and maintenance training and development program for State agency and institution physical plant personnel;

In order to carry out these functions, the State Building Division would be delegated (through the Secretary of Administration) specific rulemaking authority.

The State Building Division would be professionally staffed and managed. The staff of the Division would be covered by the State Personnel Act and would be required to meet standards relative to professional competence. The Director of the State Building Division shall be appointed with advice from the State Building Commission, by the Secretary of the Department of Administration, with prior written approval of the Governor.

The Director of the State Building Division shall be a registered architect or engineer with an appropriate background in building regulations, building design, building construction or facilities management. The Director of the Division will have authority to appoint deputy directors, who shall be subject to the State Personnel Act, with appropriate professional training and experience to manage the State Construction Office, the Building Regulations Office and the Facilities Management Office. The Director will report directly to the Secretary of Administration and may be exempt from the State Personnel Act.

To provide guidance to the State Building Division, there would be created a State Building Commission. The Secretary of Administration shall serve as Chairperson and the Director of the State Building Division shall serve as Secretary.

The State Building Commission would be composed of the Chairman of the Building Code Council and representatives of the following professional organizations who would be nominated by those organizations and appointed by the Governor: N. C. Chapter, American Institute of

Architects; Associated General Contractors of America, Carolinas Branch; Professional Engineers of North Carolina; N. C. Association of Electrical Contractors; N. C. Association of Plumbing, Heating & Cooling Contractors; American Subcontractors Association of the Carolinas; Consulting Engineers Council of N. C.

The State Building Commission would be given the responsibility for:

- (1) providing advice to the State Building Division in carrying out its professional responsibilities;
- (2) providing advice to the State Building Division during its rulemaking proceedings;
- (3) monitoring the State Building Division's procedures;
- (4) providing advice to the Legislature, the Governor or the Advisory Budget Commission on legislation or other construction-related matters as requested;
- (5) reporting its assessment of the State Building Division bi-annually to the Legislature and the Governor.

The Building Code Council would remain an independent code-making body and administratively housed in the State Building Division. It would retain its current responsibilities and would also assume the rulemaking authority for L. P. gas regulations for non-agricultural facilities (currently in the Department of Agriculture) and boiler, pressure vessels, and elevator regulations (currently in the Department of Labor).

The North Carolina Code Officials Qualifications Board would be administratively housed in the State Building Division and would retain its current responsibilities.

(The State Building Commission would be charged with the duty of studying the feasibility of developing a joint-venture involving State and local government, the construction industry, and the engineering schools for the mutual benefit of applied research, professional training and development, and technical assistance. The Commission would be required to report to the 1985 General Assembly on the feasibility of establishing such a joint-venture.)

The Office of Management and Budget would create a Capital Budget Section assigned to assist the State Building Division. In addition, the Capital Budget Section would be assigned two specific duties:

- (1) establishment of a system for advance planning and programming utilizing professionals to assist agencies and institutions in the development of capital improvement requests and to provide the Legislature with information for use in appropriations decisions. The Director of the Budget would be given a specific grant of rule-making authority to establish guidelines for such advance planning and programming. Both the State Construction Office and outside professionals would be used to carry out these functions.

(If this proposal is adopted, the feasibility study scheme outlined in the State Office Building Construction Policy report will need to be conformed accordingly).

- (2) Establishment of a central source for information on all capital improvement projects that have been approved by the Legislature at the Advisory Budget Commission. This list should be published in the State Register (if one is established) or should be maintained by the Capital Budget Section and published periodically.

LIST OF STATUTORY CHANGES REQUIRED TO EFFECT PROPOSED
STATE BUILDING DIVISION

(1) Specific grants of rulemaking authority:

- A. The the Secretary of Administration to adopt such rules as are reasonably necessary to carry out the technical, financial, legal, and management functions of the facilities development and maintenance responsibilities assigned to the Department of Administration, including the administration of all capital improvement projects approved by the Legislature or the Advisory Budget Commission.
- B. To the Secretary of Administration to establish standard procedures and criteria for the selection and evaluation of designers based on qualifications and experience.
- C. To the Secretary of Administration to establish a project management control system for the administration, documentation, and control of capital improvement projects from the appropriations stage through the occupancy warranty.
- D. To the Director of the Budget to establish a system for advance planning and programming for proposed capital improvement projects.
- E. To the Building Code Council to establish rules governing L. P. gas for non-agricultural facilities and boilers, pressure vessels, and elevators.

(2) Building Code Council

- A. Amend G.S. 143-137(c) by deleting "Personnel of the

Division of Engineering of the Department of Insurance shall serve as a staff for the Council." and inserting in lieu: "Personnel of the Building Regulations Office of the State Building Division of the Department of Administration shall serve as a staff for the Council."

B. Amend G.S. 143-137(d) by deleting the word "Insurance" wherever it shall appear and inserting in lieu thereof "Administration".

C. Repeal Article 7 of Chapter 95 (Board of Boiler Rules and Bureau of Boiler Inspection) and Article 7A of Chapter 95 (Uniform Boiler and Pressure Vessel Act) and create anew statutory sections incorporating the provisions of these articles within Article 36 of Chapter 143 (Department of Administration) and Article 9 of Chapter 143.

D. Amend G.S. 143-138 (North Carolina State Building Code) by including pressure vessels, boilers and liquified petroleum gas installation in or on non-agricultural facilities" in the first paragraph of (b) (Contents of the Code). Further amend (b) in the sixth paragraph by deleting (1) any boiler regulations adopted by the Board of Boiler Rules," and "(2) Any elevator regulations relating to safe operation adopted by the Commissioner of Labor" and "(3) which prescribe Appendices to the Code. Further amend (b) in the eighth paragraph by rewriting the first 4 lines to read: "Nothing in this Article shall extend to or be construed as being applicable to the regulation of the design, construction, location, installation, or operation of (1) equipment for storing, handling, transporting, and utilizing liquified petroleum gases for final purposes except in or on non-

agricultural facilities or anhydrous ammonia or other liquid fertil--".

E. Amend G. S. 119-55 (Power of Board of Agriculture to Set minimum Standards; Regulation by Political Subdivisions) by rewriting the first sentence to read: "The Board shall have the power and authority to set minimum standards and promulgate rules and regulations for the design, construction, location, installation, and operation of equipment and facilities used in handling, storing, measuring, transporting, distributing, and utilizing liquified petroleum gas, except in or on non-agricultural facilities."

(3) Building Regulations Office

A. Amend G.S. 143-139 (Enforcement of Building Code) by repealing (c) (Boilers) and (d) (Elevators) and rewriting (b) to read: "(b) General Building Regulations. The Secretary of Administration shall have general supervision, through the Building Regulations Office of the State Buildings Division of the Department of Administration, of the administration and enforcement of the North Carolina State Building Code. The Secretary of Administration, by means of the Building Regulations Office, shall exercise his duties in the enforcement of the North Carolina State Building Code (including local building codes which have superseded the State Building Code in a particular political subdivision pursuant to G.S. 143-138(e)) in cooperation with local officials and local inspectors duly appointed by the governing body of

any municipality or board of county commissioners pursuant to Part 5, Article 19, Chapter 160A or Part 4, Article 18, Chapter 153A, or any other applicable statutory authority."

- B. Amend G.S. 143-141 (Appeals to Building Code Council),
(a) (Method of Appeal) by deleting "Division of Engineering of the Department of Insurance" and inserting in lieu thereof "Building Regulations Office of the State Buildings Division of the Department of Administration."
- C. Amend G.S. 153A-351(a1) by substituting the words "Secretary of Administration" for "Commissioner of Insurance" and "Secretary" for "Commissioner" wherever they appear in said subsection. Repeal G.S. 153A-351(b) (which is no longer applicable).
- D. Similar amendments of G.S. 160A-411, 160A-471, 160A-434, 160A-436, 160A-438.

(4) North Carolina Code Officials Qualifications Board

The statutory authority for this Board is located in Article 9B of Chapter 143. G.S. 143-151.8 (Definitions) (3) ("Code Enforcement") should be amended to delete the reference to Department of Labor elevator inspections. F.S. 143-151.9(a) and G.S. 143-151.19(a) to delete references to the Department of Insurance and inserting in lieu thereof the Department of Administration.

(5) Facilities Management Office

The provisions of G.S. 58-189 (State Property Fire Insurance Fund Created), G.S. 58-190 (Appropriations; Fund to Pay Administrative Expenses), and G.S. 58-191 (Extended Coverage Insurance) should

be transferred to the Department of Administration to be handled by this office.

The inspection services for elevators should be transferred to this office. Also, repeal G.S. 95-105 (Fees Authorized; Elevators, Escalators, etc.) and transfer the responsibility to assess and collect elevator inspection service fees to this office in a new statutory section.

Also, the boiler and pressure vessel inspection functions should be transferred from the Department of Labor to this office.

(6) Repeal Article 7 of Chapter 129 (North Carolina Capital Building Authority)

(7) Create the State Building Commission in Article 9 of Chapter 143B.

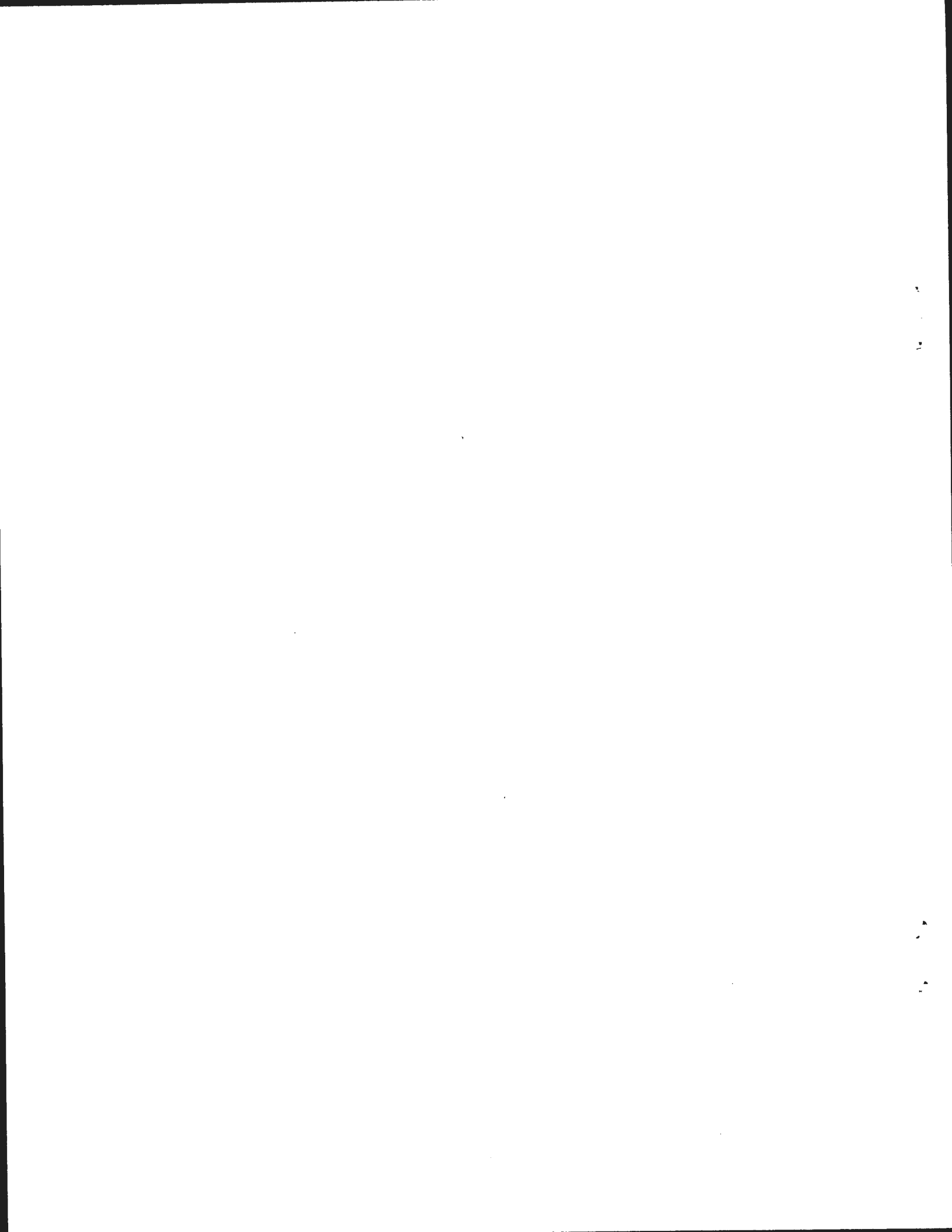
(8) Require the State Building Commission to report to the 1985 General Assembly on the feasibility of developing a joint-venture involving State and local government, the construction industry and the engineering schools for the mutual benefit of applied research, professional training and development and technical assistance.

* * * * *

Issues to be decided by the Committee:

(1) Should the proposed State Building Division be created by statute?

(2) Where should the Division be placed?



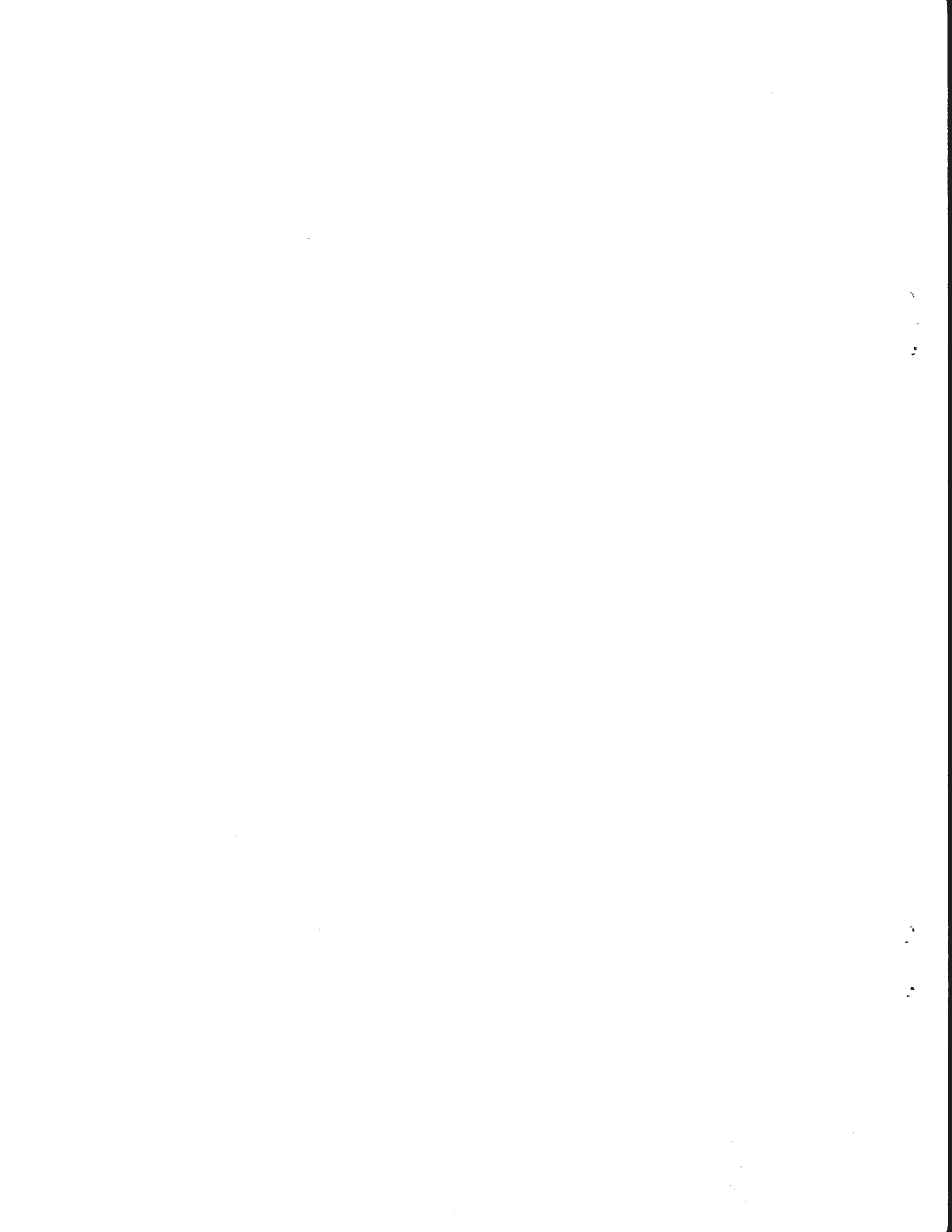
A REPORT ON

ORGANIZATION AND MANAGEMENT OF THE PUBLIC FACILITIES
CONSTRUCTION, REGULATORY AND MANAGEMENT PROCESS

submitted by the
STATE CONSTRUCTION ADVISORY COMMITTEE

to the
LEGISLATIVE RESEARCH COMMISSION STUDY COMMITTEE
ON PUBLIC FACILITY DESIGN, CONSTRUCTION AND INSPECTION

November 10, 1982



FOREWARD

The State Construction Advisory Committee wishes to express appreciation to Secretary of Administration Jane Smith Patterson for the opportunity to assist and provide input to this study designed to improve the management of the public facilities development process.

Never before has the building construction industry collectively been provided the opportunity to openly discuss the many diverse problems and issues related to the broad spectrum of the public facilities construction, regulatory and management process. The construction industry is a highly fragmented industry and the creation of the State Construction Advisory Committee provided a rare and unique opportunity for the building construction industry to join together not only in the discussion of common concerns but in building a better relationship between the public and private sectors.

This report is presented with a sincere interest in trying to create a better organizational structure for managing the State's scarce resources. Our recommendations are based on our professional and business expertise and experience in working with the present construction process.

THE STATE CONSTRUCTION ADVISORY COMMITTEE

H. Clay Taylor III, AIA, N. C. Chapter, American Institute
of Architects

C. Carl Woods, Jr., The Associated General Contractors of
America

Donald H. Kline, PE, Professional Engineers of North Carolina

Sam D. Vaughan, Jr., N. C. Association of Electrical Contractors

C. Buren Williford, N. C. Assoc. of Plumbing, Heating, Cooling
Contractors

Robert Roberson, American Subcontractors Association of the Carolinas

Charles S. Hicks, PE, Consulting Engineers Council

Phillip V. Albano, Department of Community Colleges

Allen S. Waters, PE, The University of North Carolina

Dr. Paul Zia, PE, Construction Education, N. C. State University

Ray F. DeBruhl, PE, Division of State Construction

A CHALLENGE TO CHANGE

One of the greatest challenges facing State Government today is the challenge to be responsive and responsible; responsive to the increasing demands of our technological society and responsible for the effective and efficient management of our limited and decreasing resources.

In order to meet these challenges, State Government must become creative in the application of management systems and business practices that improve services, increase productivity and decrease the total cost of government. One of the most important elements of organizational effectiveness is the creation of an environment within which people, our most important asset, can be creative and productive.

There has never been a more appropriate time for State Government to engage in self-study in every area of the "public enterprise." One area of the "public enterprise" that has been the subject of constant study and increasing concern is construction. Although there have been four independent studies in the last two years, there has never been a study undertaken to focus on the organization and management of the fragmented elements of the public facilities construction, regulatory and management process. Within the organizational structure of State Government, the building-related programs are fragmented and uncoordinated.

In the study authorized by the 1979 General Assembly, the Legislative Research Committee on Design, Construction and Inspection of Public Facilities requested the Legislative Services' Fiscal Research Division to survey State agencies in an effort to determine all State employees involved in "planning, reviewing plans, designing or overseeing construction of capital improvement projects." The Fiscal Research Division identified 135.3 equivalent full-time positions at a prorated salary of \$2,727,425 within the six largest State Departments. This involved 173 (minimum) actual positions spending some portion of their time on these functions.

In a June, 1982 report to the General Assembly, the State Office of Budget and Management identified over 40 types of reviews for capital improvement projects conducted by 17 different division-level State agencies, in addition to the Division of State Construction.

This fragmentation of the State's building-related programs and construction professionals, although it is operational, increases the cost and decreases productivity not only to the State but to the entire building construction industry.

To effectively and efficiently manage the public facilities development system requires a reorganization of the fragmented building programs in State Government.

FACILITIES DEVELOPMENT PROCESS

The facilities development process can be identified as the utilization of resources and methods - consistent with building regulations and standards - for the planning, design, construction and operation of the built-environment.

Facilities development is a complex undertaking involving a multiplicity of parties with different interests and expertise that must be properly organized and managed in order to optimize productivity. It is not the intent of this report to provide a documentation of the details involved in the planning, design, construction and operation of a facility but rather to give an abbreviated focus on those major areas of the process that should be modified as a part of the organization and management of the facilities development process.

I. PLANNING PHASE - project inception to design contract award -

A. Project Funding

It is the responsibility of the using agency to define the need for a capital improvement project, develop the program scope and prepare a cost estimate (Form OC-25). The level of sophistication and documentation of programmatic needs is usually a function of the expertise within the agency and the results vary significantly from agency to agency. Often there is not adequate information upon which to base a realistic estimate, and the request for appropriation may consist only of an estimate based on square footage.

Many of the problems associated with a project can be directly attributed to lack of planning or improper planning in the appropriation process. In many cases the program must be developed by the designer after award of a design contract and it is often discovered that the user's needs are inconsistent with the appropriation. The level of funding that is approved, based on the appropriation request, is the single most important ingredient in the capital improvement process since it is the design boundary and becomes the yardstick by which a project is measured.

There is a need to develop an advance planning program to provide funding and professional assistance for programming on all major projects. Advanced planning would define the programmatic needs and provide a proper base for a realistic cost estimate before funding is requested. It would also provide better information for making appropriations' decisions and "freeze" the project scope at the time of funding.

B. Designer Selection

The selection of qualified designers for capital improvement projects is one of the most important steps to be taken towards the successful execution of a construction project. Under the present system the Capital Building Authority (CBA) is responsible for the selection of designers for all State agencies with the exception of the University system and the Community College system where the Boards of Trustees for each institution has the responsibility for designer selection.

There does not exist any uniform criteria or procedures for the selection of designers nor is there any coordination between the CBA and the individual Boards of Trustees of the 16 universities and the 58 community colleges. Neither does there exist any method for designer evaluation or accountability for designer selection. There are documented cases where the work of a designer has been unsatisfactory due to: poor design, overextension of time, excessive changes, legal problems, etc., and in some cases a designer's contract terminated because of poor performance by one agency with the same firm being awarded a contract for design by another agency without the benefit of this information.

The selection of designers is very sensitive and should be undertaken in a very professional and objective manner in order to establish the kind of working relationship between the designer and the using agency that produces a successful project. Standard procedures should be developed for designer selection and evaluation with coordination and review and a method for holding the using agency accountable for designer selection.

II. DESIGN PHASE - design initiation to construction contract award -

A. Project Scope

It is the responsibility of the using agency to provide the designer with the project scope and program to establish the basis for the design. In many instances a project is delayed in the beginning because the agency has not adequately defined the project scope and the designer is required to spend the necessary time to define a program that is consistent with the appropriation and the user's needs.

If, as suggested above (under Planning Phase, I, A.), advanced planning and programming is instituted for major projects, this problem should be alleviated. For smaller projects, assistance could be provided through the State Construction Division to those agencies that do not have adequate in-house personnel to develop a project scope program.

B. Project Reviews

The designer is required by contract to submit plans for review by the Division of State Construction at the schematic, design development and working drawings phases according to an established time schedule, which also includes a projected date for the receipt of bids. In addition, the designer is responsible for determining what reviews are required by other regulatory agencies. There exists within the structure of State Government a maze of building regulations that involves plan and specification review and approval and permits that is uncoordinated and with no single source for documenting all agency requirements relating to the construction process.

The State Office of Budget and Management in a June, 1982 report identified over 40 types of reviews that a capital improvement project could be subjected to during the design phase. These reviews are conducted by 17 different division-level State agencies in addition to State Construction. This is in addition to Federal and local review and approval requirements. This uncoordinated and uncontrolled review process has a great impact on the time required to receive bids on the project. In an actual case, documented in the report by the State Office of Budget and Management, it took 315 working days from the date funds were available for a relatively small project until the project was ready to bid.

It is interesting to note that in 1957, the State Legislature created the Interdepartmental Building Regulation Committee with the powers and duties as follows:

"The Interdepartmental Building Regulations Committee shall have the duty of establishing procedures for the interchange of plans among interested agencies and for the transmission to the applicant of the approval or disapproval of each interested agency, to the end that no applicant shall have to submit the same plans for approval to more than one State agency, which agency shall act upon each application within a reasonable time; which time shall not exceed 30 days unless the said agency shall advise the applicant that additional time is necessary for more information."

This legislation was repealed as a part of State Government Reorganization in 1971. If it was important to coordinate building regulations in 1957, it is even more important with the maze of regulations that we currently have that they be coordinated.

It is just as costly to the State to lose a day during the design phase as it is during the construction phase. If the State is going to impose building regulations on the private sector, it has a responsibility to provide a system for documentation, coordination and communication. Failure to do so imposes unnecessary additional cost to the State for public projects but also to the owner of private projects, and also to the designer.

III. CONSTRUCTION PHASE - construction to occupancy -

A. Contract Approval

The Division of State Construction is responsible, under the Executive Budget Act, for approval of the award of construction contracts for all University projects and certain Community College projects. The Capital Building Authority is responsible for the approval of award of all other construction contracts which accounts for approximately 40% of all State projects. As staff to the CBA, the Division of State Construction evaluates all bids and recommends to the CBA, at their monthly meetings, award to the appropriate bidders. The approval process by the CBA requires more time to award construction contracts than the approval process for Universities and Community Colleges.

In order to improve efficiency, the approval for award of construction contracts on all State projects should be centralized.

B. Construction Administration

During construction the Designer is responsible for the administration and interpretation of contract documents and the Division of State Construction is responsible for monitoring the project and approving change orders. Depending on the agency and the level of construction expertise by agency personnel, there is often a conflict of decision making between the designer, the using agency and the Division of State Construction. This conflict not only creates confusion at the project level but often is the cause of delays, creates additional costs, and claims by both the contractor and the designer.

There is a need to develop a project management control system that centralizes authority and decision making at the project level from project inception to completion.

IV. OPERATIONS PHASE - occupancy to obsolescence -

A. Occupancy

The Division of State Construction is responsible for final inspection and acceptance of a completed project

for the State and the designer is required to issue a certificate of compliance prior to occupancy. The designer is also responsible for preparing as-built drawings and a final report which provides a summary of technical data for the project.

The State Property Office is responsible for including the completed project in the inventory of all State property.

The State Property Fire Fund Division is responsible for insuring the completed project and is the only State agency required by statute to inspect State buildings on an annual basis.

Once a facility has been occupied there is no procedure for feedback of information from the using agency to the State relative to any problems with the completed facility. There is a need to develop a post occupancy evaluation system that not only provides a method for accountability but also provides information for the planning of future State facilities.

B. Maintenance

It is the responsibility of the using agency to establish a maintenance program for upkeep and repair. The quality of the maintenance program varies drastically from agency to agency. Although the State bears the ultimate cost of an inadequate maintenance program, the State does not provide any assistance to agencies in developing and implementing an effective maintenance program.

The State has a planned program for managing the cost of ownership that has resulted in the funding and construction of approximately 66 million square feet of space in more than 10,000 buildings, but it does not have a planned program for managing the cost of operations for this tremendous investment.

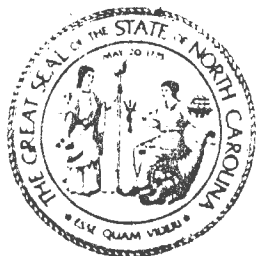
There is a need for developing an inspection and maintenance program to assist agencies in minimizing the cost of operating and maintaining facilities.

RECOMMENDATIONS

1. Establish a system for advance planning and programming utilizing professionals to assist agencies and institutions in the development of capital improvement requests and provide the Legislature better information for making appropriation decisions.
2. Establish a central source for information on all capital improvement projects that have been approved by the Legislature or the Advisory Budget Commission.
3. Establish standard procedures and criteria for the selection and evaluation of designers requiring central coordination and review with the using agency being responsible and held accountable for designer selection.
4. Develop a project management control system for administration, documentation and control of capital improvement projects from appropriations through occupancy warranty (1 year.)
5. Assign to the Building Code Council, an independent code making body, responsibility for all building code development including any responsibility currently assigned to the Department of Agriculture for L. P. gas regulations for habitable buildings and to the Department of Labor for boiler and elevator regulations.
6. Establish a building regulations office that provides for documentation of building regulations and coordination of reviews and permits for designers, and provides administrative, technical and inspection services as required by the Building Code Council, including the services currently provided by the Engineering and Building Code Division of the Department of Insurance, the L. P. Gas Division of the Department of Agriculture for habitable buildings and the Boiler and Elevator Divisions of the Department of Labor.
7. Establish a facilities management office that would be responsible for the services currently provided by the State Property Office of the Department of Administration and the State Property Fire Fund Division of the Department of Insurance and would be responsible for developing and administering a post-occupancy evaluation and monitoring system.
8. Create within the organizational structure of State Government a professionally managed and staffed "State Building" Division which would provide coordination of all technical, financial, legal and management functions related to the facilities development process. This Division would include the State Construction Office, a building regulations office and a facilities management office.

9. Establish a Building Construction Council, composed of a member from each building professional association to provide guidance to the State Building Division in developing and monitoring the Division's procedures and in carrying out the Division's professional responsibilities.
10. Develop a joint-venture between State and local government, the construction industry and the engineering schools for the mutual benefit of applied research, professional training and development, and technical assistance.





BUILDING CODE COUNCIL STATE OF NORTH CAROLINA

Staffed By
N. C. DEPARTMENT OF INSURANCE

Box 26387, Raleigh, N. C. 27611

919 733-3901

BUILDING CODE COUNCIL

Chairman:

S. RAY MOORE, President—83
Mechanical Associates, Inc.
Plumbing and Heating Contractors
Box 456
Cary, NC 27511

Vice Chairman:

KEITH R. HARROD, President—85
Davidson & Jones Construction Co.
General Contractor
Box 19067
Raleigh, NC 27619

Members:

JOHN R. ADAMS, President—87
The Adams-Bill Company
Home Builder
Box 18108
Raleigh, NC 27619

R. GLENN AGNEW, P.E.—85
Mechanical Engineers, Inc.
Mechanical Engineer
470 Hawthorne Lane
Charlotte, NC 28204

RON MALE AIA—87
Male & Associate Architects
Representative of Public
P. O. Box 31505
Raleigh, NC 27622

SAM T. SNOWDON, JR. AIA—87
Jordan, Snowdon & McVicker
Architect
P. O. Box 1705
Laurinburg, NC 28352

RALPH P. COCHRANE, P.E.—83
Electrical Contracting &
Engineering Co.
Electrical Contractor
P. O. Box 31246
Charlotte, NC 28231

W. H. GARDNER, JR., P.E.—85
W. H. Gardner & Associates
Structural Engineer
P. O. Box 8765, Forest Hills Station
Durham, NC 27707

RAY F. DEBRUHL, P.E.—87
Director
Division of State Construction
NC Department of Administration
300 N. Salisbury Street
Raleigh, NC 27611

KENNETH T. KNIGHT, P.E.—83
Electrical Engineer
P. O. Box 10371
Raleigh, NC 27605

JOHN C. RAY—85
Director of Inspections
Cumberland County
Building Inspector
Box 829
Fayetteville, NC 28301

T. C. LEMONDS, Chief—85
Fire Prevention Bureau
Fire Services
1514 North Church Street
Greensboro, NC 27405

Staff and Administrative Agency:

N. C. DEPARTMENT
OF INSURANCE

JOHN INGRAM
Commissioner

LEFE HAUSER, P.E.
Deputy Commissioner and
Secretary to Council

RESOLUTION BY THE NORTH CAROLINA STATE BUILDING CODE COUNCIL

WHEREAS, the General Assembly of 1933 created a Building Code Council as an independent body charged with the statutory responsibility to prepare, adopt, and maintain a uniform comprehensive Building Code, and

WHEREAS, according to the enabling statutes and amendments the membership of the Building Code Council, appointed by the Governor, is comprised of a registered architect, a licensed general contractor, a registered architect or general contractor specializing in residential design or construction, a registered structural engineer, a registered mechanical engineer, a registered electrical engineer, a licensed plumbing and heating contractor, a municipal or county building inspector, a representative of the public, a licensed electrical contractor, a registered engineer on the engineering staff of the State, and a member from the fire service, and

WHEREAS, G.S. 143-137 designates that personnel of the Division of Engineering of the Department of Insurance shall serve as a staff for the Building Code Council, and

WHEREAS, there exists within State government a maze of building regulations administered by three separate departments of State, involving plan and specification review, approval, and permits, each fragmented and uncoordinated with no single source for documenting all agency requirements, and

WHEREAS, a Construction Industry Advisory Committee has recommended to a Legislative Research Commission Study Committee that the building regulations be consolidated, and said recommendation has been endorsed in concept by the Legislative Research Commission Study Committee, and

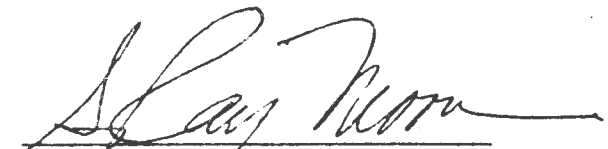
WHEREAS, for a number of years it has been the belief of the members of the Building Code Council that the present fragmentation of rules and regulations constitutes a detriment to the proper and efficient implementation of building regulations, and thereby increases the cost of construction and,

WHEREAS, G.S. 143-142 establishes that it shall be the duty of the Building Code Council to recommend to the General Assembly desirable statutory changes to simplify and improve the building laws of the State of North Carolina,

NOW, THEREFORE, the Building Code Council at its regular meeting on December 14, 1982 did unanimously resolve that the responsibility for all Building Code regulations should be assigned to the Building Code Council, including:

- Those LP gas regulations for buildings that are regulated by the Code and currently assigned to the Department of Agriculture.
- Those boiler and pressure vessel regulations for buildings that are regulated by the Code currently assigned to the Department of Labor,
- Those elevator regulations for buildings that are regulated by the Code currently assigned to the Department of Labor.

THE COUNCIL DID FURTHER RESOLVE, that the department within which the Building Code Council and the professional staff of the Building Code Council are located is not a pertinent issue provided the departmental location be a professional environment such that the Building Code Council and its professional staff are allowed to perform its obligations independent of the departmental activities.


S. Ray Moore, Chairman
NC Building Code Council

Y
B
Y
B

B
Y
B

North Carolina

Department of Administration

Howell Building Raleigh 27611 (919) 333-1231

James B. Hunt, Jr., Governor

May 3, 1982

Jane Smith Patterson, Secretary

MEMORANDUM

TO: Representative Ed Nye
Senator Conrad R. Duncan, Jr.

FROM: Jane Smith Patterson *Jane Smith Patterson*

SUBJECT: Continuation of Legislative Study Committee

We are all aware of the many issues related to the planning, design and construction of public facilities that have been the subject of much study, debate and discussion within recent years, including three current independent studies authorized by the 1981 General Assembly.

Within the past several months, the Department of Administration, through the Division of State Construction, has been studying how to improve the management of the State's capital improvement system. This effort has impressed upon me the need for a comprehensive and coordinated study of the State's building construction program. This study is needed because previous studies have been fragmented and because of the increasing concern relative to the management of the State's scarce resources.

Therefore, I would like to recommend that the Legislative Services Commission Study Committee on Public Facilities Design and State Building Construction be continued, and that the membership and scope be expanded. This study should embrace previous studies, including pending legislation and any recommendations from the current studies by the State Office of Budget and Management and the Legislative Study Committee on Arbitration and Bonding, plus other issues including, but not limited to, the following:

1. The control of the capital improvement program.
2. Capital improvements planning process.
3. Building regulations, permits and reviews.
4. Designer selection and the design process.
5. Construction monitoring and control.
6. Operations management.
7. Construction development and technical assistance.

MEMORANDUM
Page 2
May 3, 1982

The Department of Administration, through the Division of State Construction, will be glad to assist the Legislative Services Commission in this comprehensive study.

cc: J. K. Sherron
Ray F. DeBruhl