

90
S 477
1971

P U B L I C H E A R I N G

before

ASSEMBLY EDUCATION COMMITTEE

on

ASSEMBLY BILL NO. 477

(School Building Construction - Lease-Purchase Options)

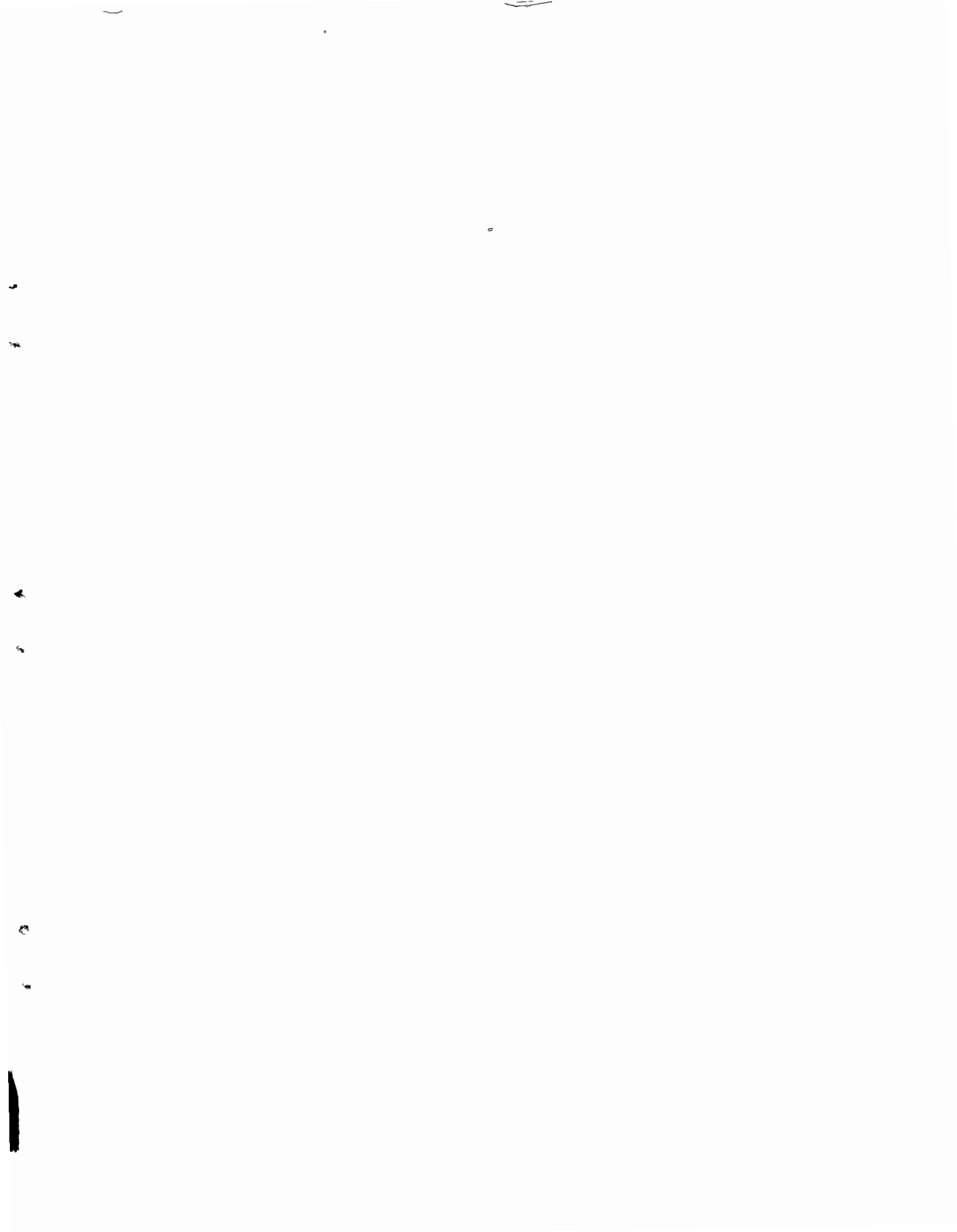
Held:
May 12, 1971
Assembly Chamber
State House
Trenton, New Jersey

COMMITTEE MEMBER PRESENT:

Assemblyman John H. Ewing (Chairman)

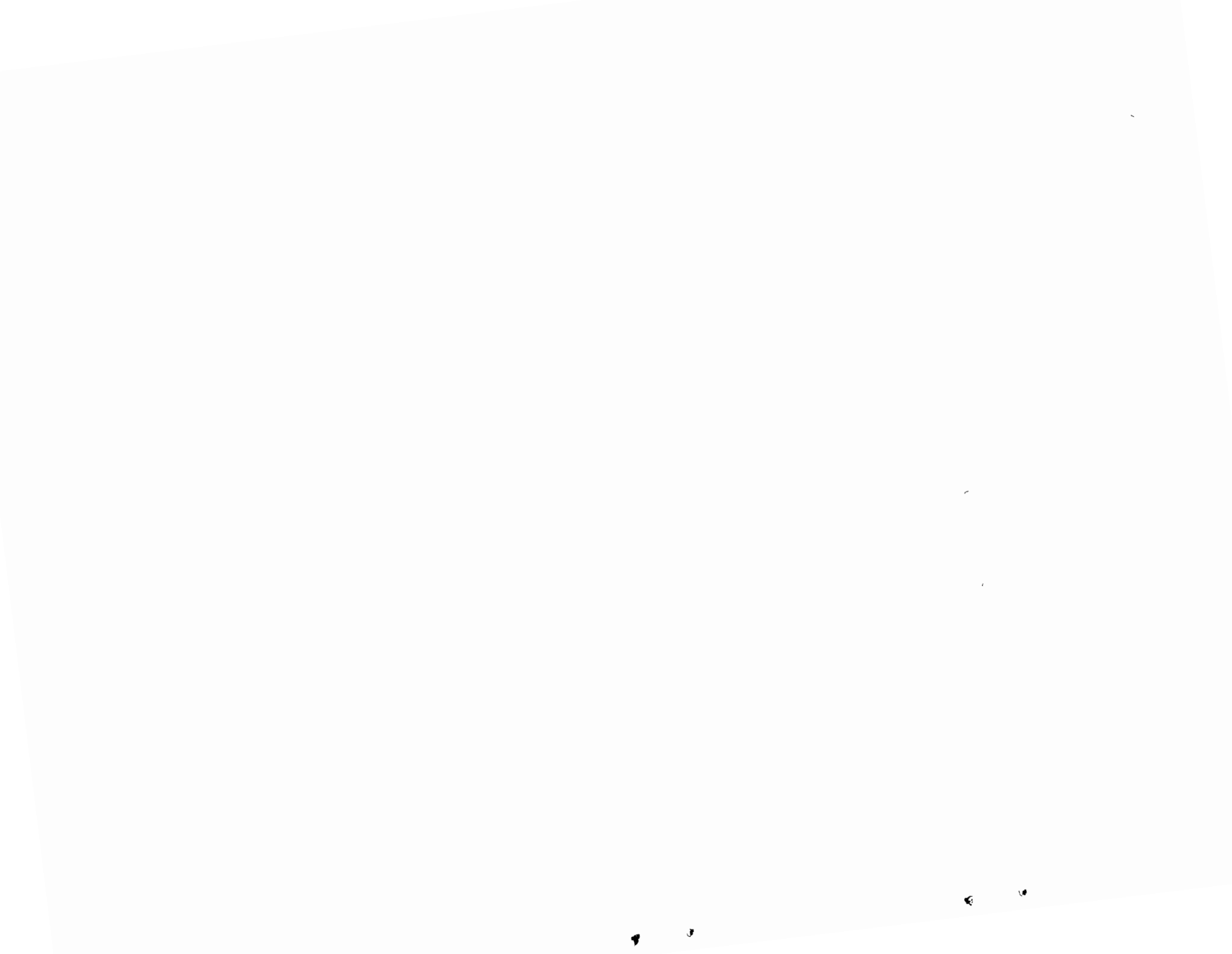
* * * * *

New Jersey State Library



I N D E X

	<u>Page</u>
Oren Thomas, Jr., Architect Thomas, Kolbe, Thomas, Poponi Cherry Hill, New Jersey	1
Robert W. Meyer, Architect Meyer & Laudadio New Brunswick, New Jersey	20
Adolph R. Scrimenti, Architect Scrimenti, Swackhamer & Perantoni Somerville, New Jersey	37
Elmer F. Corda School Business Administrator and Board Secretary	56
Harold P. Seamon Director of Special Services New Jersey School Boards Association	65
Dr. Edward A. Spare, Director Facility Planning Services Department of Education	76
Statements from:	
John Hunt Superintendent of Schools East Windsor Regional School District	107
Henry G. P. Coates, Esq. School Board Attorney East Windsor Regional School District	111



ASSEMBLY, No. 477

STATE OF NEW JERSEY

INTRODUCED JANUARY 29, 1970

By Assemblyman McDONOUGH

Referred to Committee on Education

AN ACT concerning education and amending section 18A 20-4 1 of the New Jersey Statutes

1 BE IT ENACTED *by the Senate and General Assembly of the State*
2 *of New Jersey*

1 1. Section 18A 20-4 1 of the New Jersey Statutes is amended to
2 read as follows .

3 18A 20-4 1 The board of education of any Type II school dis-
4 trict may without authority first obtained from the voters of the
5 district

6 (a) Rent, on a year-to-year basis, or for a term not to exceed 5
7 years, in case of emergency, buildings to use for school purposes ;
8 and

9 (b) Take an option not to exceed 1 year in duration, at a cost not
10 to exceed \$100.00 on the purchase of any land which the board could
11 lawfully purchase after securing the consent of the legal voters to
12 the purchase thereof, but such option may be exercised by the board
13 only after authority to purchase the property covered by such
14 option has been given at an annual or special school election[.]; and

15 (c) *In case of emergency and with the prior approval of the State*
16 *Board of Education, enter into a lease of temporary or relocatable*
17 *buildings to use for school purposes for a term not to exceed 5 years*
18 *with a provision to purchase same at the option of the local board*
19 *of education, and purchase said buildings under said lease.*

1 2. This act shall take effect immediately.

STATEMENT

Existing law authorizes a Type II board of education to enter into leases for temporary buildings in case of emergency, but it does not specifically cover options in such leases to purchase these

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted in the law.

buildings without voter approval. It would be financially advantageous if boards of education were allowed to purchase such buildings pursuant to such lease options, since 5-year rental costs are closely comparable to or exactly the same as the purchase price of these buildings, the exercise of an option to purchase after 5 years costs relatively little, and the buildings continue to be useful for much longer than 5 years.

The purpose of this bill is to eliminate doubt as to board authority in this matter by specifically empowering a Type II board to enter into currently available lease-purchase arrangements for temporary buildings without voter approval, provided the State Board of Education approves the transaction.

ASSEMBLYMAN JOHN H. EWING: Good morning, ladies and gentlemen. I am Assemblyman John H. Ewing, Chairman of the Assembly Education Committee, and today we are holding a hearing on Assembly Bill No. 477 but, as we put out in our notice, we have a much broader field to cover in order to get as much information as we can regarding construction in the primary and secondary area of public education. There is a strong feeling amongst the Legislators that the cost of school construction in the public area is way too high and they want to know the reason why it is so high, what can be done to lower these costs so that the burden is not put on the taxpayers and also so that we can still get the proper facilities so that the best possible education can be given to our children.

First, I would like to call on Mr. Oren Thomas, Architect.

O R E N T H O M A S, JR.: My name is Oren Thomas, Jr. I am the senior partner in the firm of Thomas, Kolbe, Thomas, Poconi of Cherry Hill. I am a member of the New Jersey Society of Architects of the American Institute of Architects, and a member of the New Jersey Department of Education Guide Advisory Committee for Schoolhouse Planning and Construction. Over the years of practicing architecture, I have designed more than 75 school buildings. I appreciate this opportunity to testify on school building costs.

Before we discuss reduction of costs, I think we must explore the reasons for high costs of school building construction. The factors are many but, we feel, can be charged to two principal areas.

The first of these is Educational Program. The refinements of what is taught and the kind of space to teach it in is becoming more complex. The increased allocation of programs to vocational education, sciences, business, resource materials, physical education and other specialized space is costly both per square foot and per pupil.

Number two: Job Site Labor. The net production cost for job site labor has increased at a rate fifty percent

greater than total construction costs. Federal and State prevailing wage requirements implement this unfortunate situation.

If educational programs are the largest contributing factor to school cost increases, who should prepare them?

1. If the program is prepared entirely by the casually informed voter and his elected school board representative, initial costs would certainly be lowered but the quality of education would lower to an even greater degree.

2. If the program is prepared entirely by the educator, at either the local or state level, costs and education would both rise from present standards.

3. If the program is prepared jointly by both of the above, which is now usually done, there are enough cross checks to insure good educational value. The State Department of Education recommended standards are an excellent guide in this respect. We should like to point out that the mandatory requirements of the State Guide on Schoolhouse Construction would allow costs far less than the least expensive schools now being built. This is not usually done, however, since the factor of initial cost versus operational and maintenance costs sets its own desirable minimum expenditure.

If job site labor is a large factor in increasing costs, what can be done to reduce it?

1. Prebuilt or preengineered buildings. Because of prebidding and predesign, these structures unquestionably reduce building program time. They do not decrease costs, however, even in the lower standard educational programs where they have usually been used.

2. Compulsory Building System Approach. This approach, widely used in California and Canada, has not resulted in lower building costs. It has, however, upgraded building educational standards and made buildings a better investment value.

3. Volunteer systems and subsystems. This approach, widely accepted by experienced school architects, tends to

hold cost lines and give better values. Its major deterrent is the reluctance of school board clients to accept non-conventional methods.

We should like to offer the following specific recommendations:

1. Have the State Department of Education make available to school boards case histories of school building projects with recommended cost records.
2. Widen the role of the State Department of Education in advising recommended educational programs.
3. Repeal requirements of prevailing wage determination.
4. Study the systems approach as applied in other states, particularly Florida and California.

ASSEMBLYMAN EWING: Mr. Thomas, on the bottom on page 1, there, in Section 3, you say: "This is not usually done, however, since the factor of initial cost versus operational maintenance costs sets its own desirable minimum expenditure." Well, the maintenance is an on-going factor, and don't you feel this has to be taken into consideration? You can't put up all the cheapest materials if the maintenance is --

MR. THOMAS: What we found, Mr. Chairman, is in the normal board of education's budget they will usually have approximately 10%, as an average, for debt retirement on capital expenditures. Approximately 10% of the budget is also for operational and maintenance of their physical plant. If we decrease the cost, and we are always able to do this, below that, in other words to say get a 9% debt retirement, we would probably increase the operational and maintenance by more than that 1%. And we have done this where we've had pressures to build schools, there would be a limit on the amount of bonds they could sell, and so forth, where we had to reduce this, the operational and maintenance record has been poorer so that over the 20 years period of bond indebtedness the net cost to the taxpayer was substantially higher.

ASSEMBLYMAN EWING: You don't feel that the requirements of the State are that strict or narrow in a lot of districts,

because. you know, we constantly hear from people, oh, we have to do this or we have to do that because the State requires this.

MR. THOMAS: I am very careful, Mr. Chairman, to say the mandatory requirement is there. I do agree that the State Department, because they feel the State is responsible for education of all the children in the State, is designed to bring up a certain educational standard. However, the guide, the Legislature that implements the guide, says that we can only make rulings - I'm talking about the State Department of Education now - in areas of health and safety. And they have been careful to not overstep those bounds.

It would actually be possible, under the State guide, as it is now written, to go back and build a little red schoolhouse with certain areas of ventilation and light. But for lighting, I can have a bare light bulb hanging in the room if I have enough capacity in that light bulb to do it. I can have linoleum on the floor. I can use frame construction. I can have wood double-hung windows. I can do a lot of things. In fact, I think I could build a classroom for half the cost of the least expensive today, if I wanted to do this. I would be doing a great injustice to the municipality.

ASSEMBLYMAN EWING: Why? Because my maintenance factors would be so high that the life of that building wouldn't pay. The factor of increased maintenance cost would be substantially more.

And there is some tendency that the educational values would also be less, the environmental standards and the ability of a teacher to teach. This is a thing that it's hard to draw an exact line on. Certainly every architect and every educator has a little different idea as to where that line should be drawn, but I am certain that the extremes are not good.

ASSEMBLYMAN EWING: How many schools has your firm

dealt with since you've been with the firm? And how long have you been with the firm?

MR. THOMAS: I have been involved in about 75. My father had done around 150, and the firm --

ASSEMBLYMAN EWING: Well, when you draw plans for a school district, do you come up to Trenton with them and go over them with the State Department of Education for their approval?

MR. THOMAS: Yes.

ASSEMBLYMAN EWING: And does anybody come from the Board, with you, at that time, or not?

MR. THOMAS: Usually not, although --

ASSEMBLYMAN EWING: You mean, they leave it completely in the architect's hands?

MR. THOMAS: Oh, no. The normal procedure is - we're architects, not educators, - we're given an educational program which is made up usually by the local educator, local administrator and his assistants, and the board, and they determine the educational standards that are to be in that. And then we try to design a shell around that educational program that will produce the best investment for the taxpayers.

ASSEMBLYMAN EWING: But when they are gone over by the State, is anybody present or do you just mail the plans up and wait for several months or a year to get the okay?

MR. THOMAS: No. Sometimes we bring them up and review them in person. Sometimes there are representatives of the local board.

ASSEMBLYMAN EWING: Well, what do you advise the boards that you deal with?

MR. THOMAS: Well, the first submission is a schematic drawing which is not for construction but for educational program, will that school fit the educational program. And I think that we would usually recommend that we review it, only ourselves. Most of the questions that are brought up -- or, if there were representatives from the local area, it would be from the administrative area, not the school board.

They usually don't desire to.

ASSEMBLYMAN EWING: Well, it's usually a lack of interest on their part, isn't it?

MR. THOMAS: I think most boards maybe tend to take an attitude that they are involved in budgets and costs but they leave the education to the professional that they've hired to carry that out. That's their normal attitude.

ASSEMBLYMAN EWING: It's amazing to me, the complaints you get and then the interest they don't take in it, they don't jibe. And I was so shocked in one area, in my own county, I believe, that this group told me at the first meeting they sat down with the architect and chopped \$2 million out of the budget, and it turned out that they turned over the whole project to the Superintendent and to the Architect to draw up. They've taken no interest in it whatsoever. Don't you think it would be advisable to make it mandatory that they maintain an interest in it?

MR. THOMAS: Well, we certainly review it with the Board. I have never found any difficulty in opinions of a collective agreement with the Board of Education and their administration on what should be done. I've found great differences between a board of education and the voters and in almost every case this is a lack of interest, lack of desire to be informed by the voter. They will have public hearings where they may have 5,000 voters to vote on it and it's rare to get over 100 people to a hearing. And yet, even board members who are elected with the express intent of correcting situations in a local district on cost, after they're there a while and become informed they are not so vocal in that respect.

ASSEMBLYMAN EWING: You said you serve on the State --

MR. THOMAS: Guide Advisory Commission.

ASSEMBLYMAN EWING: Is there a conflict on that or not?

MR. THOMAS: No. There are, I think, four architects from different sections of the State, civil engineers, a good many educators, some builders, and we're trying to determine

changes or interpretations of the guides. I'm certain that I have never had an issue before that Committee on any project that we've ever been involved in.

ASSEMBLYMAN EWING: Of the 75 schools you've built, how many were private and how many were public?

MR. THOMAS: Not more than five or six private.

ASSEMBLYMAN EWING: And what was the average cost of the private as compared to the public, on a square foot basis?

MR. THOMAS: They were somewhat less, it would be a small percentage. It's difficult to interpret because the programs vary. I think the private tend to have a higher program but maybe less cost per square foot.

ASSEMBLYMAN EWING: Were these privates parochial or truly private schools?

MR. THOMAS: Private parochial.

ASSEMBLYMAN EWING: Private and parochial?

MR. THOMAS: No, private. They were church --

ASSEMBLYMAN EWING: I differentiate between a private school and a church school. The church school I would call parochial, and the other the family pays the full tuition and gets no state aid.

MR. THOMAS: They had some degree of church sponsorship. They were not Catholic schools but they were other.

ASSEMBLYMAN EWING: Well, when you say a percentage or so less, what do you think the difference is in the building? Why should they be less than the public schools?

MR. THOMAS: Well, usually their program, their increase in program, they recognize that they have control over it. I'm talking about the ones I'm particularly experienced in. And as you build more space, bigger spaces, you don't have to respond to the voter, that space tends to become cheaper per square foot. In other words, if I have a classroom of 600 square foot and it costs so much per pupil per square foot if I increase that to a thousand square foot, it would tend to be a little less cost on the same standards of construction. However, our experience has been, as you say,

the parochial have not been less budget they have been more per pupil.

ASSEMBLYMAN EWING: Does the type of material they use in parochial schools ever vary very much from the --

MR. THOMAS: I would say no.

ASSEMBLYMAN EWING: Not at all?

MR. EWING: Not in my experience.

ASSEMBLYMAN EWING: What do you think of the single contract versus the multiple contract in public schools?

MR. THOMAS: I prefer the multiple contract.

ASSEMBLYMAN EWING: Why?

MR. THOMAS: Well, it makes more work on our part in the fact that we have to correlate more prime contract bids but we like the control over it, and we have frequently taken bids both ways, taken bids on separate contracts or on group contracts.

ASSEMBLYMAN EWING: Yes, but the law right now is a joke.

MR. THOMAS: No, in private work we've done it because we feel it our obligation to the client. Once we get our exhibits, plans and specifications done, it's our job to get it at the least possible cost. And we have never, even in one instance, been able to get a one contract at the same figures we have the breakdown. And I think that we get better contractors at the other level because we put the pressure on the prime contractor to competitive bid those others. He's only worried about cost and not responsibility of those other contractors or how they're going to do the job. He won't get the job unless it's the lowest cost.

ASSEMBLYMAN EWING: What type of other architectural work do you do?

MR. THOMAS: Industrial, commercial, other types of institutional.

ASSEMBLYMAN EWING: Where are you, in the Camden area?

MR. THOMAS: Yes.

ASSEMBLYMAN EWING: Well, when you deal with private enterprise, with corporations for factories or warehouses or

something else, do you do that on a multiple bid or a single bid?

MR. THOMAS: Usually multiple bid, unless the project is very small. If it's, I don't know, thirty, forty or fifty thousand bid, or less, the single bid is the best.

ASSEMBLYMAN EWING: What size contract do you go up to in your firm in the commercial work you've been doing?

MR. THOMAS: In commercial work?

ASSEMBLYMAN EWING: Yes.

MR. THOMAS: Four or five million.

ASSEMBLYMAN EWING: And you find it's better to do it multiple bid than single bid.

MR. THOMAS: Right. In fact, sometimes a private enterprise is so anxious to get the quality in the field that he will have great difficulty and he will negotiate a particular segment rather than making it competitive bids.

ASSEMBLYMAN EWING: Do you think this is true throughout the whole State of New Jersey?

MR. THOMAS: Yes, I do, if we're talking about multiple bids now.

ASSEMBLYMAN EWING: Yes. That industry goes more for multiple bids than single bids.

MR. THOMAS: The very large projects. There are probably more single bids or negotiated contracts in the smaller work.

ASSEMBLYMAN EWING: Well, why would they do it in the larger jobs if you think it would save a lot of money to do it in the multiple bid?

MR. THOMAS: Well, it's partly fiscal responsibility, maybe that they have some difficulty. Another thing, if you get in - well, take industrial work, so many times you get in mechanical work where it's hard to say where it leaves the building and where you go to the manufacture of the project. And that all has to be negotiated or worked out anyway. In some industrial work, when there's a process kind of building, it becomes almost necessary to negotiate that part of it. You're more interested in responsibility there because it could be

expensive if you took a competitive figure on kind of an unknown.

ASSEMBLYMAN EWING: Well, do you feel that the major corporations of the United States tend to multiple bids when they have a project put up for them?

MR. THOMAS: No. We've found that --

ASSEMBLYMAN EWING: I'm talking about the major corporations.

MR. THOMAS: -- some of the large corporations that we've done are interested in time, maybe more than anything else, which is a factor. They will have a schedule of time and they don't particularly care about construction cost as long as the time schedule is met.

ASSEMBLYMAN EWING: Then you are inferring that with multiple bids it takes longer to put up a project?

MR. THOMAS: I think it would tend to be that way.

ASSEMBLYMAN EWING: Well, don't you also agree that time is money?

MR. THOMAS: Well it depends on how much more time you are talking about and the kind of building. In schoolhouse construction there probably wouldn't be any time difference. If I do an electric generating station there would be a lot of time difference.

ASSEMBLYMAN EWING: That's interesting because one of the reasons for this particular bill we have before us today is because of a problem up north of here. They got this contractor to come in and put up the building and it was done, I forget in how short a time but it was incredible. It's a very fine structure. Granted, the Department of Education did some nit-picking like, they said the corridors were too narrow and finally measured them and found out they were wide enough for something of this nature.

MR. THOMAS: Well, we've done - we're refraining ourselves only to low cost now, to getting low cost.

ASSEMBLYMAN EWING: No, quality. I think for education we must have quality and low cost.

MR. THOMAS: Well, we have done some of these pre-engineered buildings where we've taken performance type bids and then gotten competitive bids on those and let contracts, and there is no question that the time interval is substantially less on those because all of the parts, all of the contract, everything is prebid and the design work is done prior to the time of receiving of the bids. And they would tend to be less, on a school project, in most cases, three or four months less. However, at the same time we've taken bids on conventional construction of like clusters of classrooms and we've found that they were not less expensive, in fact they were between five and ten percent more. Now the contractor, we don't tell him what to bid, he's determining the time and time is a great factor in his profit picture. He has the greatest desire to expedite and do it in the shortest possible time because that means he makes more money.

ASSEMBLYMAN EWING: Well, how many bids do you normally get on a job down in your area?

MR. THOMAS: I'd say about ten on general construction and probably seven or eight on the mechanical end.

ASSEMBLYMAN EWING: What percentage of your plan do you use in the next school? I mean, you know, piggyback on that you don't have to do work on.

MR. THOMAS: Well, we'd like to use a much higher percentage than we use. There are certain standards that we get. However, we've had requests where we've done repeat work for one school board and they say, "We like so-and-so school, do that again." But we find that costs vary year by year, a certain system or certain material, certain kinds, so that we constantly have to review this because what was the best and least expensive way to do things this year might not be that way next year. And many times it is. But if we don't do that, after only a few years period, we find that we're not spending money wisely in areas. And educational programs tend not too drastically, - it isn't a revolution it's kind of an evolutionary thing, but you will find that

there's a little bit more desire in this area and maybe not so much in another. So that they gradually change, in the small details, a wall section, how a roof drain is done. Those details tend to be alike but even major structural systems change.

ASSEMBLYMAN EWING: Well, do you feel building costs are high for schools in New Jersey or not? In your area.

MR. THOMAS: If you say per square foot, I would say no, in our area.

ASSEMBLYMAN EWING: What do you think about New Jersey generally?

MR. THOMAS: I'm not sure I'm qualified to make that statement. I would say that most schools are not, particularly when they're districts that are building a lot of schools they have some familiarity with what kind of schools they want and boards, administrators and architects who do that. There are just enough examples where somebody goes all the way the other way and makes the average look bad that I can't make that blanket statement.

ASSEMBLYMAN: There was a plan proposed here and the bill passed our House, it's in the Senate and I do not know what its fate will be over there, whereby the State would make up a series of set plans that would be available to various school districts and the initial work could be paid for but then, I guess the supervisory part of it would be at a much lower fee. What is your feeling if the State came up with 12 or 24 sets of plans for different size schools?

MR. THOMAS: I think if the State of New Jersey does that, spends that money to have those prepared they are going to look ridiculous. They are not going to use any big percentage of them, certainly not enough to effect that kind of saving in architectural fees. My statement a few minutes ago about the review of systems, and so forth, - it would be impossible, if I were commissioned to do one of those, to make the perfect school. If it were right then, it would be wrong in a year or so. And other states have tried this route and it has

not been successful. And I am certain that to put this plan in effect there would be some expenditures to do it. But even on this educational program alone, it just isn't possible to tell every local district exactly what they're going to do unless you furnish all the money, then they might do it. But even that way of doing it, I don't think is good. Pennsylvania takes that route a little bit; Delaware does; and if you compare their schoolbuilding costs with the higher level of government, New Jersey shows up well alongside of this. I realize that we get a lot of bond issues turned down but the local voter is not stupid; particularly when he's informed, he makes the right decision. If a local board or an architect has done something wrong, they'll reject him. And a good portion of them are turned down because the local voter is not well enough informed. And if he is well informed, he will usually make the right decision.

ASSEMBLYMAN EWING: In your firm is there a set fee for the plans and supervision of a school project? Is it on a sliding scale?

MR. THOMAS: It's on a sliding scale. It varies from six to an extreme ten, usually six to eight.

ASSEMBLYMAN EWING: Does it ever slide downward, the more the building costs the less the fee is?

MR. THOMAS: If it gets large enough. Oh, you mean a factor that if I get a lower cost they get a different fee?

ASSEMBLYMAN EWING: That, and also, you know.

MR. THOMAS: We've heard of this being done. We've never done it because we don't think it's the professional thing to do, that it places an incentive on cost to us beyond what it should be, that our own incentive is to get low cost and we don't care what happens after that initial cost, and we do care.

ASSEMBLYMAN EWING: Well, what determines this. Do you set the fee when you first talk to the board?

MR. THOMAS: Yes.

ASSEMBLYMAN EWING: Then what determines this - you say six to ten, or eight to ten?

MR. THOMAS: The size of the project.

ASSEMBLYMAN EWING: All right. What if you have a project for a million dollars, generally what would you charge?

MR. THOMAS: It would be around 7 percent.

ASSEMBLYMAN EWING: And what if it's five million dollars?

MR. THOMAS: It would be less than that. I can't remember the sliding scale exactly. It's a recommended standard.

ASSEMBLYMAN EWING: Now in your history of the buildings that you've done, have you worked closely with the boards on this or mainly with the superintendent or the administrator?

MR. THOMAS: Both. The board makes this determination. We like to work closely with the board. Both of them. It's a teamwork effort.

ASSEMBLYMAN EWING: Well, do you find this true in your area that they really work with you or do they just pass it over to the superintendent or somebody?

MR. THOMAS: Not as much as they should because they have other pressing problems. I think their general attitude is, we've hired a professional, he knows what he's going to do or what he should do, that our superintendent or administrator knows the kind of program, and we will address ourselves to matters of teacher problems, bussing and all the other things that make boards meet weekly or whenever. We would probably desire to have more participation.

ASSEMBLYMAN EWING: Now, in your recommendations you say: "Have the State Department of Education make available to school boards case histories of school building projects with recommended cost records." What is the recommended cost record?

MR. THOMAS: Well, the reason I say this, there is a danger at the local level that by word of mouth they have heard of some school some place that had an exceptionally low cost record, let's say on a pre-engineered or pre-built building, they oftentimes say they want X number of classrooms

and they heard that somebody got those and they will decide that's what they want without going into it any further. And with very casual investigation of what they got for that amount of money. And there are other extremes where they don't investigate, they don't go to the point of finding out whether schools even in their area are able to produce. In other words, both extremes are bad decisions. And I don't know what the instrument of making, particularly boards who have the purse strings, acquainted with what are good values in schools. And I don't think we look at it as how to build it cheap or how to build expensive, it's more of an attitude - and I am certain other school architects are the same - of getting value, trying to get the best value. And we go in and try to educate the board in these values but we are not sure that they believe us always as much as they should. They say that we have a motive or reason for doing that. It would be better that it came from some other body. And I would say the State Department is better to distribute that information about what other schools cost and what they get for their money.

ASSEMBLYMAN EWING: Well, on the board that you sit on, have you recommended this to the board?

MR. THOMAS: No.

ASSEMBLYMAN EWING: How long have you sat on that board?

MR. THOMAS: About a year and a half.

ASSEMBLYMAN EWING: Well, is the State Department of Education in a position to correlate this information and get it from the school districts? Do they know what the final bids are, etc.?

MR. THOMAS: Yes.

ASSEMBLYMAN EWING: They keep a record of that?

MR. THOMAS: That's right. Well, I know they have it so I assume that they keep it. And they have schematics and construction outlines, which are all submitted by the architect in his first thing, and they know the final bid and the final contract prices. Actually, Mr. Chairman, it's

the same thing that we're doing here today that I think local boards forced to delve into the problem would make better decisions.

ASSEMBLYMAN EWING: Well, how much on contact are you with your county superintendent of schools in the area that you work? How many counties do you work?

MR. THOMAS: Well, I'd say mostly in three or four, like 75% in three or four, 75% of the schools. I know the county superintendents well.

ASSEMBLYMAN EWING: Well, would they be better ones to have this information available so that when they know a board is about to go out or thinking about it they can say, here's the track record in our county so far and, if you're close to another county, the track record there?

MR. THOMAS: They would be good disseminators of that information.

ASSEMBLYMAN EWING: How much work does the county superintendent do in the planning?

MR. THOMAS: Our experience has been that he doesn't do much unless it's a new type school in a district. If a district doesn't have a high school and is about to have one, then he becomes very much involved. Or if they don't have a vocational school and then they have one, he becomes very much involved. But if it's the same kind of school that that district has had before, he probably, in most cases, isn't much involved.

ASSEMBLYMAN EWING: Now in recommendation number 2 you say: "Widen the role of the State Department of Education in advising recommended educational programs." Do you feel they ought to put up guidelines?

MR. THOMAS: Well, I am sure that they would desire this. My interpretation now is that they are careful to not really press the area much except in health and safety standards that they can't tell a local board. Now, a good portion of the guide is devoted to recommended standards but a little larger voice there by the State Department I think

would, in my personal opinion, be desirable.

ASSEMBLYMAN EWING: So there wouldn't be a proliferation of programs from one school to the other, you mean?

MR. THOMAS: To maintain a minimum educational value for all schools in the State. And I would think that the State Legislature would be interested in this so there isn't a great variance, or a great variance in minimum standards from one district to another.

But we have this case now where we'll have a district, maybe it's a poor district, and they'll say, we need to build a new school and they'll have so many classrooms and they'll build so many classrooms and that's all. And the adjacent district might have many enrichment areas beyond that. And the one district won't have the facilities to do any better and the State can't make them do it.

ASSEMBLYMAN EWING: No, but the enrichment part, does it call for a different type of room?

MR. THOMAS: Yes, in most cases.

ASSEMBLYMAN EWING: Are you thinking of something like audiovisual?

MR. THOMAS: In the average elementary school now we've found that half the total square footage is non-classroom space. In other words, if I take a standard classroom, that half of the school will not be designated to classrooms only. In the secondary school, that percentage will drop even lower. It might be a fourth, a third, it would be lower.

ASSEMBLYMAN EWING: When you say not a standard classroom, is it a flexible room or something, or can only be used for one particular function?

MR. THOMAS: Well, take the areas of elementary or remedial areas, the all-purpose rooms, all of the kinds of space which are for student use which are not a standard classroom. They might be smaller groups and they might be larger groups. And I've said that this is the principal cost of education which has improved. It isn't just a classroom or a string of classrooms, the school is a lot more

than that now. The architects didn't make that decision, the educators did and the people.

ASSEMBLYMAN EWING: You say, "Repeal requirements of prevailing wage determination." What is that?

MR. THOMAS: Well, when we do a school now we have to give to the State Department of Labor and Industry the approximate date that we're going to bid that school and they send back the hourly rates of all the trades that can possibly work on that project and we have to incorporate that in our specification and tell the contractors that shall be the least wages you will pay for any of that work. And when this went into effect we immediately got a jump. It doesn't affect all trades.

ASSEMBLYMAN EWING: When did this go into effect?

MR. THOMAS: I'm not sure. It was several years ago. Four or five. I can't remember exactly.

ASSEMBLYMAN EWING: Well, is this to protect the union people?

MR. THOMAS: I'm not certain but my understanding was that the principal people behind it were the contractors who didn't want the competition of open shop or that kind of competition. I really don't know but that's what I heard.

Recently, at the Federal level, they have the same kind of thing. With federal monies we have to do the same sort of thing. And it's my understanding that the President said that that shouldn't be anymore. He made a public statement to this effect.

ASSEMBLYMAN EWING: What was that called, the Bacon Bill?

MR. THOMAS: I can't say.

ASSEMBLYMAN EWING: That was just recently, wasn't it, the last month or so?

MR. THOMAS: Recently. In fact, what I'm saying is that the Federal Government recognizes this is a factor also.

We found, and we think it was from that, that in the mechanical trades that in one year we got a jump of at least five percent, and it might have been more, above what the

increases of values should have been in that one year, the very year that they did that.

ASSEMBLYMAN EWING: And no increase in productivity or quality.

MR. THOMAS: No. But the key to this cost, of what we have control over, is to decrease job-sight labor. We go to any means possible to try to keep reducing job-sight production.

ASSEMBLYMAN EWING: Well, is there a statute on the New Jersey books now, the requirement for the prevailing wage determination?

MR. THOMAS: There must be, yes. Yes, there is a statute, fairly recent.

ASSEMBLYMAN EWING: Well, have you ever taken off a job and figured what it would cost if this particular law was not in effect?

MR. THOMAS: I wouldn't be able to do that. The contractor - I know what they tell me. There are some kinds of trades - a million dollar school is not made up of great big contracts. Some things happen by little contracts and little people. And some of those little contractors will pay their men one wage rate when they're doing a school and another wage rate when they're doing other kind of work that they get.

ASSEMBLYMAN EWING: Well, wouldn't this type of thing go into effect with the private schools? The private schools don't require this prevailing wage, do they?

MR. THOMAS: Not to my knowledge, no.

ASSEMBLYMAN EWING: Then there should be a considerable saving.

MR. THOMAS: I said that I think there is some saving.

ASSEMBLYMAN EWING: Well, to go back to private schools again, when you bid those jobs are they multiple bids or single bids?

MR. THOMAS: Multiple, all.

ASSEMBLYMAN EWING: At the school's request or at your request?

MR. THOMAS: Ours.

ASSEMBLYMAN EWING: At your advising.

MR. THOMAS: Right. The same thing, we always say they can bid all of our standard bidding procedures, they can bid one whole bid or their own part only.

ASSEMBLYMAN EWING: And the last one: "Study the systems approach as applied in other states." What is that exactly?

MR. THOMAS: We'll have some testimony later by one of the other architects on this. If you don't mind, he can explain it better.

ASSEMBLYMAN EWING: Fine. All right. Thank you very much, Mr. Thomas.

MR. THOMAS: Thank you.

ASSEMBLYMAN EWING: Mr. Robert Meyer, Architect.

R O B E R T W. M E Y E R: My name is Robert W. Meyer. I am a partner in the firm of Meyer and Laudadio with offices in New Brunswick. I am a member of the New Jersey Society of Architects of the American Institute of Architects. I am also a member of the Committee on Schools and Educational Facilities of my professional society. I have designed school buildings of all types and sizes since 1952 and have done extensive research into the entire subject of the cost of school construction. I appreciate the opportunity to appear before this Committee to share with you the results of that research.

One of the newer methods of school construction involves the use of systems. What is Systems Construction? Where is it being used? What can it do? Is it applicable to us - in New Jersey.

The answer to these questions in summary form are a basis for quick enlightenment of the subject to stimulate thought and question. Hopefully, it will provoke interested individuals to read the many good books and articles published on the matter. We who are now studying the subject have the advantage of eight to ten years of research and development by others.

WHAT IS IT?

It is an approach to improve building technology by the integration of individual building subsystems into a coordinated building system. As time progresses new subsystems or components are being developed, but the pioneering systems of HVAC, Structural, Ceiling-Lighting, and Interior Partitions have allowed systems buildings to be erected more quickly, at lower cost than conventional building with individual approach. It is not a pre-fabricated building built off-site restricted by transportation regulations. It is a user developing criteria by performance standards effecting economy by mass buying or buying mass produced quality products. It's nature will permit flexibility for the changing patterns emerging from educational development and society change. It can be used in school houses, factories, commercial and other buildings. It is keeping up with the times in an ever-expanding technological era.

WHERE IS IT BEING USED?

It began in California by integrating 13 schools districts into a single construction agency. It is now being used in California, Florida, Georgia, Toronto, Montreal, Detroit, Boston and individual components are being used in more than 1300 North American Schools. By the end of 1970 over 200 systems schools were in use or in development in 33 states. Components have been used in a few New Jersey schools and systems schools are being developed in limited form.

I think I should digress here a moment. There is a difference between a systems school and a component that goes into a school.

WHAT CAN IT DO?

It can stimulate the creation of an environment at a cost adjustable to the tax structure. It can allow self-creation and individualism for community identification. There is now sufficient knowledge, experience and technology to enable any district to build a single school through the systems approach. More than 50 companies manufacture structural, lighting-ceiling, mechanical and demountable and portable partition subsystems. If, however, the criteria are incomplete or inaccurately described, the responses will not be satisfactory and the quality of the environment will fall short of expectation. Systems can be the means to good quality environment for people, and if a space can provide the ideal comfort for one type of occupation, it should be able to provide the same amenities for another type of occupation. We, therefore, are not building obsolescence and today's schoolhouse could become tomorrow's health facilities, social center, commercial space or what.

IS IT APPLICABLE TO US, NEW JERSEY

It is applicable by its very nature to an industrialized state and varying climate. We need heat and air-conditioning and individualism due to the many variables caused by our geological formations. Our localized tax structures can benefit by a "holding of the line" economy. On site construction costs can be held to a minimum. The systems building is applicable anywhere. Its application to New Jersey can be enhanced by revisions to existing statutes to relax the restrictive and out-moded regulations without sacrifice to health and safety.

The foundations of the systems approach is firmly established. Its future placement in building construction is a certainty. Let us use this advancement wisely, now.

Thank you, Gentlemen.

ASSEMBLYMAN EWING: Mr. Meyer, how does it actually work?

MR. MEYER: We have done it in our office. We are doing it now and we are going to do it in the future. Actually, what it is is what you've probably seen in driving up and down the highway. You take a furnace, as the lay person would say, or an air conditioning unit and you put it into one package and you put it on a roof. That's only one location; there are many others. That's the HVAC, the heating, ventilating, air conditioning part of it. The structure is another main part of it which is simply triangular shapes or other types of shapes. You can use any kind of terminology for that which any company has devised to be able to span a great distance, 30, 40 up to 60 and 80 feet. Now the structure is available when you work with the manufacturers at a very quick time element which becomes rather important.

There are systems, instead of doing individual, small components, as you might see in buildings or even remodeling in this particular building. You take and allow the ceiling system to lay within the structure itself which again helps time and cost. And integrated with the ceiling system can be the lighting system which falls all in place.

The walls, or demountable partitions or folding partitions, and the terminology is quite extensive as to the way they're referred to, are nothing more than panels made up and inserted that can be movable or they can be made up of individual materials which are assembled on the job site but which are quick assembled materials, such as using metal studs and sheet rock on the job which are easy to be taken down and can be replaced for the changing pattern which might be desired within a particular structure.

There are more of these particular components and sub-components, and so forth, being developed every day. As I have indicated, there are fifty or more companies doing this now. We have used some of this in our school construction, at the present time. As I indicated, we are going to. There has just been sent out in the mail, within the last week or two,

a book on this systems written by EFL, the Ford Foundation of Educational Facilities Lab, which is one of the basic books that I have referred to in my testimony here and which gives a little more enlightenment as to what some of the other districts are doing and what this can do, in more detailed form. Mainly Toronto and Montreal are into very big programs now, multi-million dollars. California was the baby and they have taken the steps to progress from California into Florida, Georgia, etc. So those are the pieces that go into a building which I am referring to.

ASSEMBLYMAN EWING: Is this more or less prefabrication? Is this really what it is?

MR. MEYER: Prefabrication, yes and no. The components are prefabricated but it's put together on the job site.

ASSEMBLYMAN EWING: Do you have any union jurisdiction squabbles on it because something comes in with a light plug in it?

MR. MEYER: You'll always have those. To give a blank answer, yes.

ASSEMBLYMAN EWING: Well, do you get more of them?

MR. MEYER: I would not say, with the experience that we have had, that we're having any more problems. We have our normal problems.

ASSEMBLYMAN EWING: And what do you feel the reductions in cost are for this type of system?

MR. MEYER: It's very difficult to tell right now, to give a firm answer to that, because we have not had the full benefit of doing, in numbers, buildings of this type. I can give figures for a building that I have just done and is in the process of being built right now but I don't think that's indicative of what we might be able to do. I am not saying that that is going to necessarily be the panacea for reduced school construction. I think I would like to emphasize the holding of the line economy so that it doesn't keep rising with the spiral.

But one of the difficulties here, that I think goes

hand in hand, that I think should be pointed out is the idea of what is a school made up of in labor and materials, and the idea of testimony today for cost reduction. If a building - and we feel it's pretty close to a fifty-fifty break at the present time -- I don't think we, as architects, can do anything in recommending how labor costs can come down, other than what Mr. Thomas said, this prevailing wage rate, we can go back to that again. However, as contracts are signed, and are signed every May, with increases every six months and so forth, for a period of two or three years, whatever the termination of the contract is, there is a built-in escalation there that nobody can stop, especially when we're on the prevailing wage system. So that part you cannot reduce. The only other part that you can try to reduce is to hold the line or try to keep the materials in line or having more materials brought to the job which are produced at less cost in the factory, which is certainly well known, the difference between the factory rate versus the construction rate, for the same type of person.

ASSEMBLYMAN EWING: Do you have an approximate idea as to how many schools you've worked on?

MR. MEYER: No. I've been working in different offices since 1952 when I came back to New Jersey from Ohio. And my firm now, the firm I'm presently with, is five years old and we've done about 25 schools in that period of time. But overall, it's well above 75, but I never kept count.

ASSEMBLYMAN EWING: Well, since you've been with the firm, for the schools do you do multiple bids or single bids mostly? Oh, you have to do multiple bids.

MR. MEYER: We have to do both ways.

ASSEMBLYMAN EWING: All right. What other type of construction do you do?

MR. MEYER: Well, may I elaborate on your last question for a moment. We have to, by law, do that and we have received bids both ways.

ASSEMBLYMAN EWING: Well, as I said before and I repeat again, I'll keep repeating, the law right now is a joke in

my mind and in the minds of many other people. What other type of construction do you do?

MR. MEYER: Well, I won't agree with you that the law is a joke if a systems type of construction goes in. This is the difference. It might be a joke today but if a different type of approach is used it might not be a joke tomorrow. I think this is where we would have to differentiate there.

We do do other types of work. We do commercial work which is basically restaurants. We do the small office building, which is commercial work. Presently, we have a commission for a parking deck, all of these types.

ASSEMBLYMAN EWING: Do you tend on these to do single bid or multiple bid?

MR. MEYER: Yes, I certainly do.

ASSEMBLYMAN MEYER: Which way?

MR. MEYER: Single. This is my personal opinion. If I can possibly do anything, I will push toward a single bid. I feel there's an advantage to it.

ASSEMBLYMAN EWING: From the experience you have had in New Jersey with the schools, do you feel the State guidelines, or when you come down to the State Department, are too restrictive?

MR. MEYER: In certain cases, yes. But on the whole, I would say no. I think our Society has made a recommendation that there be an appeal board. I think more will be said on this later on. That I would certainly subscribe to, that when there is a difference of opinion between a district and/or architect with the district and the Department that there should be some means of an appeal type of board to be able to resolve it, such as any variance board in any community.

ASSEMBLYMAN EWING: Well, do you feel that a lot of boards of education just hide behind - they want certain things and they get by the voters by saying that the State requires it and nobody bothers to really look into it and find out that the State doesn't actually require it?

MR. MEYER: No, I do not. The phraseology that you just spoke of is used quite often, but it's true that there

are certain things that must be done and they are required by the State. So that is made as a fact at a public meeting or hearing or whatever it may be. But I don't think, on the whole, a conscientious board hides behind this statement to try to get something which they normally would not have, just to try to get it within their district.

I approach the school construction problem probably a little bit different, or the design of the buildings maybe a little bit different or quite a bit different from other architects. I feel that I am an architect and that is my profession and my only profession. I am not an educator and I am not to tell a school district how to set up an educational program. I request, like anybody else, the doctor, the lawyer, and so forth, that you give me your program and it is my job to provide a structure at economical cost to house that program. If I have a commission in Monmouth County, I have no right to tell them what their educational program should be dictated by a building. In other words, I do not subscribe to the idea of the reverse system which says the school board tells the architect I have a million dollars now get me a building and I'll put a program in it. I'm sorry, I don't subscribe to that. I feel that if a board does a job through their superintendent, through an educational consultant, through the State Department, whoever they so choose to use, they give me the design criteria from an educational end, then it's my job to give them a building that will fit that. And I think this is the proper respect for education because it is so changing and, therefore, it is my duty to give them a building that can change with the changing educational program.

ASSEMBLYMAN EWING: Well, the question I would like to ask, and I forgot to ask Mr. Thomas, just say one thing alone, a cement block building, does it have as long a life in your mind as say a brick-faced building?

MR. MEYER: Yes.

ASSEMBLYMAN EWING: Well, is brick more expensive to use than cement block?

MR. MEYER: Generally, I would say yes. But there are exceptions to every rule. It's the idea that if you use a certain type brick or you use a cheaper brick it can be a brick building but the cost might be the same as some of the more expensive blocks. So a generalized statement of saying a block building is cheaper than a brick building might not be true because also you might be able to use brick on the outside of a metal sheet rock wall which could cause the same economy as a block building. So there are no rules of thumb. And this is where I think it is the integrity of my profession to be able to work it out for the board or for the district or whoever they are doing a school building for, to give them the facts as to the cost. And they must make the decision. Referring to one of your very early questions about maintenance, we as architects must give them the facts and the data and beyond that we can make recommendations but it is the district's responsibility to make the decision because we do not know as architects - should we be from a neighboring county - what their tax structure is and what that district can support. So I think it behooves us just to give the facts with recommendations and beyond that it's necessary for five to nine people to make the decision.

ASSEMBLYMAN EWING: Have you done any private schools, either private or parochial?

MR. MEYER: Yes, we have done a parochial school.

ASSEMBLYMAN EWING: And what do you feel about those? Did the cost come out the same as in the public schools?

MR. MEYER: No, it did not. It came out less but the requirements were a lot less. The educational program was less. The requirements with reference to health were less.

ASSEMBLYMAN EWING: When you talk about health, what do you mean?

MR. MEYER: In reference to air changes in a room; with reference to how many toilet facilities there might be in a building; with reference to the foot candles, the lighting in a building; a lot less, so proportionately the building came in less.

ASSEMBLYMAN EWING: How long has this school been in operation?

MR. MEYER: About three years now.

ASSEMBLYMAN EWING: Are they having problems with the students because of this?

MR. MEYER: I have not followed this enough, sir, to know. I should but I have not.

ASSEMBLYMAN EWING: Is the school still operating?

MR. MEYER: Yes.

ASSEMBLYMAN EWING: I mean, it hasn't been that detrimental so that they would have to close the school or anything.

MR. MEYER: No. I wouldn't say that. But there again is the fine line as to what is detrimental to health and what is not. That's why we have ecology laws because the air is detrimental to us.

And just as a simple little expanding of that, you know you can do all you want to in a school building, trying to change air, trying to do many other things, but if we don't change the air on the outside, the air that we pull in through a unit ventilator is absolutely useless.

ASSEMBLYMAN EWING: Out at Hunterdon, I went out there last year, I guess it was or two years ago, and a tremendous design job had been done there. They have the air conditioning system so it brought the air from the operating rooms and everything and it was just being spread over the whole building, so if there was a contagious child, with mumps or something like that, it would go through the whole building. It's incredible to me, the lack of forethought in that building.

MR. MEYER: One thing that just comes to mind, if I may digress just a moment, sir. We are asked, as architects, as individuals and as a society, what can we do. First of all, I think we all want to help, we want to keep the cost down. The idea of the architect increasing the cost of the schools to get a greater proportion of the fee has not made a millionaire

of any architect in the State of New Jersey. He does not receive repeat work by having high cost values. But the little things do add up. And one of the things that I might refer you to is one of the bills that has just gone through the Senate and the Assembly with reference to the handicapped children.

Now, my comment is directed toward this bill. I am not saying it's wrong; I'm saying it does increase cost because the bill now - and I have been told by the State Department of Education that it is to become effective September 1st, in the new rulings, that we now must provide toilet facilities for wheelchair patients, we must provide elevators, we must provide telephones on every floor of a building at the height of a wheelchair patient, we must provide ramps and we must provide other things. Now, I agree with these.

I can give you examples where before the existence of this statute I very, very seldom ever put a public telephone outlet on the second floor of let's say the secondary schools that I do, or any others, because it's the idea of trying to control a student in a particular area so that they don't have general use of a telephone. So you're rather restrictive where they put these. But now, when the statute says put one on the second floor, this is not a great deal of money but it does create administrative problems because you might put it there for a wheelchair patient and at its height but you cannot restrict a general student from using it. So it is there. These are just some of the little things that happen. It is a cost factor.

That bill, I think, is a very good bill for the direction that it went, but it is going to cost school boards extra money.

ASSEMBLYMAN EWING: That was taken into consideration when the bill was discussed, with the overall benefit to the poor unfortunate people. I mean, you're not handicapped so

you can't be in their position.

MR. MEYER: Right.

ASSEMBLYMAN EWING: And I hope to God you don't have somebody in your family who is handicapped. I don't either. But for the thousands of people that do, they have certainly got to be recognized. And to just slough them off because it's going to cost the people a few dollars more in that area, I would never even consider.

MR. MEYER: Right. I agree with you. I'm not denying this at all.

ASSEMBLYMAN EWING: When Mr. Spare comes up, I can ask him about the phone part but, to me, this does seem sort of silly but maybe they will have some good reasons for it. But we feel, in the Legislature, that there are other areas where money can be saved. And I don't think there is any question in my mind that there are many superintendents, or whoever the persons are who are responsible, and I think it comes into the architectural field. I've said it to other people so I will say it publicly, that these people like to show what they've built so they can get the prize of the year, or they want to show where they worked so they can show what lovely facilities they have. And my own personal feeling is that a lot simpler design, etc., could be a lot less expensive.

MR. MEYER: Well, I will not totally subscribe to the idea that simple design is less expensive than a different type of design. That would be another whole discussion period. But just to expand one bit further on that bill that was passed, there might be a little bit more flexibility in something such as that too because the idea of saying put an elevator in a school - this is fine and when we can, because of maintenance and so forth, we do put an elevator in, but many times it is put in on an alternate basis where the school board, if they do have money, can put it in and see the total benefits accrued over the years and not initially. But now this bill makes an elevator mandatory. And you know, you start at ten grand on an elevator very, very quickly. So

this has to start putting cost there.

ASSEMBLYMAN EWING: Well, you're talking about an elevator, certainly not in a one story building, are you?

MR. MEYER: No.

ASSEMBLYMAN EWING: Well, what's the average size of a two story school?

MR. MEYER: Average size?

ASSEMBLYMAN EWING: Well, you know, if you're going to go into two stories, isn't it a fairly substantial school that's going to have quite a substantial number of pupils?

MR. MEYER: Again, all the exceptions. You know, if you put it in a city, it could be a small one; if you put it out in the country, it would be a big one maybe before you went up to the two stories. I mean. I use a rule of thumb of maybe teaching stations. Over so many teaching stations and then I think it's more advantageous from a construction standpoint, cost-construction standpoint, to go to two story construction. And my breaking point is about 30 teaching stations. And, if you notice, I do differentiate a little bit from what Mr. Thomas does, and maybe he didn't mean to, but I don't like the word "classroom" anymore because I think in education we are well beyond that. We now have teaching stations. And, as he indicated, the teaching station can range anywhere from 15 to 80 to 200. So it doesn't mean that you have a lot of surplus area in a building because it does not happen to be a "classroom" of six, seven or nine hundred square feet as of years ago.

ASSEMBLYMAN EWING: What is your general feeling of having the State make up maybe a dozen or twenty-four sets of plans?

MR. MEYER: I will answer the same way as Mr. Thomas. I think it will be a waste of money. They won't be used, as indicated by the experiences of other states. And I feel that the administrative control, beyond the initial monies to develop the plans, would be absolutely astronomical. There would have to be many statutes changed because it is the

requirement in the State statutes that there either be an architect's or an engineer's seal on it. And who then becomes liable should something go wrong, if the plans are issued by the State of New Jersey? Is it the State of New Jersey? Is it the architect who happens to have his name on it? The complications and ramifications of something such as that, as I say, is another good total session of discussion.

Also when you take a set of plans and you can physically say, yes I have an egg crate of 12 classrooms on each side of a corridor, this can be done. And in one building, when you look at the plan in front of you, you will have the plumbing going to the right, in the next one you will have it going to the left, and the third and fourth will be front and back. Then who is to make the revision to these plans, not only as to plumbing but the possibility of heating and ventilating, also the possibility of the electrical distribution within it? Who does the changing? When they do do this, what is the fee structure involved? And beyond that, again back to responsibility, who is going to take the responsibility of changing someone else's plans? Would I as a firm be asked to change Mr. Scrimenti's plans? This just is not in the legal realm. It just doesn't work.

So, basically, overall, for administrating, that type of construction would be, to me, an unbearable type of red tape situation.

ASSEMBLYMAN EWING: In the school work that you've done, how much liaison work have you done with the county superintendent?

MR. MEYER: Percentagewise, below 10. Very little.

ASSEMBLYMAN EWING: And do you take your plans down to the State Department of Education to have them reviewed, to see if they're okay? Do you go down with board members?

MR. MEYER: I take them down and go through the required procedures, as everyone else does. 'It's only on occasions when there are questions that I ever take a board or board personnel down. I feel most of the leg work of

the program should be done before we come to Trenton, that there are agreements between my client and myself and/or any other consultants that they may have. The State Department of Education, although I have been in disagreement with them at times and I do not agree with taking away their code or anything else, - they have enough problems with the amount of personnel that they have at the present time and if we don't have to expand upon those, as architects, why should we.

ASSEMBLYMAN EWING: How long does it generally take to get plans okayed? What's the minimum to the maximum?

MR. MEYER: There is no set answer on that, as far as I'm concerned. The little green book that the gentleman is holding over here indicates that it takes thirty, sixty, or ninety days for different phases. But those are like everything else, those are only the time elements that have to be, I would say, basically set in any code. At times I have plans wait 8 to 12 weeks in the State Department of Education. I also have had plans there 1 and 2 weeks. It depends upon the season of the year. That has a lot to do with it. It depends upon the money market and the feeling of the taxpayers, etc.

ASSEMBLYMAN EWING: Well, I'm not talking about that; I'm talking about the time it takes the Department to okay the plans so that you can start going on them.

MR. MEYER: I think, if you are referring to the final stage, which is the final submission, the working drawings, again there is no set answer because it depends upon the size of the building. A small addition can take three days and a large high school can take three weeks. So I couldn't fault anyone to say they took longer on one job than another because it must go by the size of the job. And I also think it goes by the amount of work that the architects put into it too. They have something to do about it. If anything, I do know at times when we have large rushes, the State Department of Education needs more help.

ASSEMBLYMAN EWING: I think in this area they do need it. Unfortunately, they took it out of the budget, one additional person.

MR. MEYER: And then to go further on that one particular statement. It was taken out of the budget, they don't have the personnel, it takes longer for them due to basically not a total fault of them, which is time, and time converted on the old factor scale is money. So when we talk about school construction costs, maybe we can help, we can help from the very beginning.

ASSEMBLYMAN EWING: What do you think of the idea of a contractor being able to put up a building and lease it to a school?

MR. MEYER: I really have not researched that subject enough. I have looked into it a little bit. I would reserve judgment on that until I have more information. My first judgment is no but I do feel that the type of building systems that I'm talking about here in the testimony today - I do feel this is the coming thing. It is used and, as I say, why must a building, as I referred to in my testimony, the idea of occupations, - why is it such that you only have to design a building to have one use. A school building, to me, is not a building to be opened up at 8 o'clock in the morning and closed at 3 o'clock in the afternoon. If society is dictating that to be done, our time spent in asking about decreasing of school cost is wasted.

We must take a building and make it a community building so that it is used all the time. There are many, many examples throughout the State where this is working very well. I don't see why it can't work throughout the whole state. The idea of adult education, the idea of swimming pools, that seems to be a sore subject in many areas. Think about yourself and think about the other people that do, and participate in health programs, and you can chart a course for yourself. And the male, let's take him, he plays basketball until a certain age and he plays football to a certain age, and he does the same thing with any other sports, but ask the question what is the age limit when you stop swimming, and it's sort of the top one. So, is a swimming pool in a school district a waste of money?

It really is not when you come to think of it, but it's very difficult to sell. But there are ways of being able to do these things.

ASSEMBLYMAN EWING: Well, what is the general attitude of the Department of Education regarding your particular systems approach?

MR. MEYER: Dr. Spare is sitting behind me and at ten o'clock on Friday of this week I have an appointment with him to go over more of what I've said today with the idea of the adaptability of this to a school which is going through the procedures of being approved right now. So I feel, there was a seminar in Cherry Hill about two weeks ago in reference to this and I attended that with many other architects, and I feel, we, in New Jersey, my personal opinion, just act a little bit slower than some other people. I feel it has worked, as I said, in 33 states. I think it can work for us.

ASSEMBLYMAN EWING: Well, in the states where it's operating now, is it legislated that they have to use a system of this nature or is it just that the boards are on their toes and realize there is a potential saving?

MR. MEYER: As far as I know, it has not been legislated. It is voluntary and for the necessity of what we're talking about now. They aren't any different than we are. The cost and their taxes are the same proportional value. So it was something to try to keep up, as I said in my testimony, with the times. We just can't sit back. The Romans took bricks and put them together with mortar a long time ago. And in many cases, up until recently, we're still putting bricks together with mortar. And I think we should at least take the time and the effort to investigate this. I will not sit here and testify that this is going to be our salvation. I will say it is well worth the idea of looking into it and expanding on it to a greater degree than what we have done in the past.

ASSEMBLYMAN EWING: Have you or your Association come up with a set of recommendations regarding the new legislation dealing with the handicapped child and the requirements for

the building, such as the telephone? I would request, officially, that you let me know, either you or you make sure your Association does, if there are things, such as the telephones, etc., that may be questioned.

MR. MEYER: To answer your question, our Committee - as you noted in the beginning, I am a member, - has not met on that particular bill. I will bring it up before the Committee and we will get back to you with some type of answer or recommendation.

ASSEMBLYMAN EWING: I would appreciate it very much because, you know, there may be things in the bill that we didn't realize when the bill was going through, and I think they should be taken care of, unless the Department can come up with some really true justification for these.

MR. MEYER: I will be very happy to do that.

ASSEMBLYMAN EWING: All right. Thank you very much.

MR. MEYER: Thank you.

ASSEMBLYMAN EWING: We will hear from Mr. Adolph Scrimenti, Architect.

A D O L P H R. S C R I M E N T I: Chairman Ewing, my name is Adolph R. Scrimenti. I am the senior partner in the firm of Scrimenti, Swackhamer & Perantoni, Architects with offices in Somerville, New Jersey. I am past president of the New Jersey Society of Architects of the American Institute of Architects and a member of the Committee on Schools and Educational Facilities of my professional society. I have been involved in the planning process and the design of educational facilities since 1945. I appreciate the opportunity to appear before this Committee to present my views on school building design and construction costs.

Over the past five years, the cost of new school facilities and voter reluctance to approve new programs by referendum have escalated drastically. A sampling of the general public's attitude indicates resistance to any proposal directly related

to a tax increase. The idea that school buildings can by some means be constructed for far less than proposed by the local Board of Education and their Architect and the notion that, by defeating a referendum, all related costs (including operating costs to educate the additional students) will likewise be eliminated, is leading to false economical security.

Contrary to the public's opinion, that new school facilities being constructed in New Jersey are excessive in cost, are the actual facts. School construction costs have been maintained and in most cases reduced when related to labor and material costs and educational programs that are predominant in today's new proposals.

During the last five years, the thirty major trades have had salary and benefit increases exceeding 40% and, although productivity cannot be easily tabulated, a field visit to any construction site will indicate the general level of activity in the industry. Likewise, contracting firms engaged in public work are inherently more sophisticated in structure and related overhead. The family and specialty trade firms have either adapted to today's methods or have been absorbed. Estimating, due to the variables of labor demands and the supply of an adequate labor force, has become an elaborate, expensive game of construction intuition rather than a statistical science.

Construction materials, directly effected by the labor to produce them, have also increased in cost - Owners have been exposed to long-range maintenance problems as the quantity of their facilities increase and are prudently requiring materials that can be more easily maintained. The initial cost of better materials is a fraction of the maintenance cost of a cheap product.

Education has been rapidly changing in content and technique. New facilities must be more adaptable and resilient, capable of accommodating all types of groupings as well as evening, enrichment, recreational and summer programs. New safety requirements such as fire detection, emergency lighting, higher illumination levels and increased ventilation requirements have also increased the basic costs.

Formal education of our children started in this Country in a one-room school, with a pot belly stove for heat and paneless window sash for ventilation.

Twenty years ago we designed school buildings that required 90/100 square feet per student. Today 135/145 square feet per student is recommended.

Twenty years ago, health and safety requirements as they affect Mechanical and Electrical contracts were approximately 15/20% of the total costs of school building projects. Today they are approximately 30/45%.

The myth that architects are responsible for the increasing school costs is unfounded; in fact, the effort to reduce costs wherever possible is mandatory in providing proper services for Boards of Education. New methods and materials and the systems approach are a few of the means by which costs may be stabilized and/or reduced, but it is now necessary to provide the legislative tools to permit new approaches to be fully implemented.

Many Architects are working to find out just how far we can go in standardizing the components of a school building without stultifying the education that goes on in it. Nearly every State in the Country has learned through hard experience that you can't completely standardize on stock school plans. By the time you work out the individual needs of a given site, the utility connections, the electrical needs and the problems of orientation and exposure, not to mention the whimsies of some of the local authorities - all you can stock plan is a section of a wall - and varying educational needs wipe out the feasibility of doing that. And most important, the failure to be able to take advantage of all technological advances in all phases of building design and construction materials and techniques will not only stifle our design capabilities, but without question, add to the construction cost of the school project.

In my opinion you can only have stock school plans for use throughout a State only when you have stock educational methods, stock teachers to apply them and stock parents to send stock children to the school so that stock students may be developed.

We'll never find out how to do things better if we keep doing them the same way over and over because it seems the safest and cheapest thing to do. Any private business that followed that philosophy would go broke in a short time.

It is my recommendation that the following suggestions be seriously considered for implementation by this Committee:

1. Examine extended use of the school building in terms of longer hours of use and/or the incorporation of other municipal facilities within a given community.
2. Acquire land long before actually required - in view of constantly rising real estate costs. And make certain that the Architect for the Board of Education has been hired to examine and evaluate the property before it is purchased.
3. Plan school projects more than the usual year ahead of the need. Give the Architect time to properly study the design problem and adequately weigh comparative techniques and materials. Not only will this save a good deal of money itself, it will allow more precise preparation of plans and specifications and insure closer bidding by contractors. It will also allow contracts to be bid and awarded on an intelligent basis; prices are often driven up sharply because too many building projects are dumped on a saturated market at one time, when competition is absent.
4. Design for ultimate use. This means planning for long-range needs so that additional units may be easily and economically added, and such items as utilities and utility connections can be made without costly tearing down and rebuilding.
5. Investigate the possibility of using pre-fabricated units or components that do not retard the educational process and will result in equal competitive bidding.
6. Avoid fast-buck and universal-solution schemes. There is simply no one design, proprietary school plan, total package

scheme available competitively in the New Jersey area today which can compete, either in quality, or price, with a school building designed and built according to local needs.

7. Certain Guide (Guide for Schoolhouse Planning and Construction of the State of New Jersey Department of Education) restrictions and/or requirements that generally add to building costs should be reviewed for possible revision and/or deletion, especially in the Heating, Ventilating and Electrical criteria, as well as items such as minimum classroom sizes, etc.
8. A Board of Appeals should be appointed in the office of School Planning Services of the Division of Business and Finance of the State Department of Education. Any new material, piece of equipment, building system or component that is deemed desirable and acceptable, should be considered for use in a school building. If contrary to Guide requirements, then the Board of Appeals should have authority for review and approval, if deemed acceptable.

It is further recommended that a Committee be appointed to study Education and the Physical Plant. Include Legislators, Educators, Architects, Professional Consulting Engineers and Contractors among others, to review all of the above statements and recommendations as well as suggestions made by all who appear before this public hearing, and report their findings to the Legislature for possible implementation. We should strive to find solutions that will save money and will help, and not harm the educational process.

ASSEMBLYMAN EWING: Mr. Scrimenti, your firm has done approximately how many schools in the time you have been with it?

MR. SCRIMENTI: Mr. Chairman, I really don't know. I do know that we have been doing schools since I was released from the Army in 1945, and about 95% of our work is in the educational field, elementary, secondary and college buildings.

ASSEMBLYMAN EWING: And what about in the private area? Do you do parochial and private schools?

MR. SCRIMENTI: Parochial schools, no. In the private area we have done a number of buildings at Blair Academy but that is about all.

ASSEMBLYMAN EWING: You've done buildings for Blair?

MR. SCRIMENTI: For Blair Academy but not in classrooms, primarily gymnasiums, swimming pool, dormitory spaces, administration areas, etc., none in classrooms. They're still operating with the classrooms that they had built way back in about 1918.

ASSEMBLYMAN EWING: And the products they turn out seem to be all right, don't they?

MR. SCRIMENTI: Absolutely.

ASSEMBLYMAN EWING: Do you feel the building costs for the contracts you had for Blair are lower on a per square foot basis?

MR. SCRIMENTI: No. I would say that they are about the same as we find in our own Somerset County area. They should be cheaper in that area, but they're not because there aren't many contractors around that area, they come in from New York.

ASSEMBLYMAN EWING: In the private area, say for Blair, do you use single bid or --

MR. SCRIMENTI: Absolutely. One contract.

ASSEMBLYMAN EWING: Well again, I guess it depends on the curriculum they have but there must be a certain percentage of the plans used in one school that could be used in another school, aren't there? Certain drawings?

MR. SCRIMENTI: You mean for one school district into another school district?

ASSEMBLYMAN EWING: Yes.

MR. SCRIMENTI: I would say no, because the education and educational systems are completely different, in my opinion, from one district to another. The people are different. I would not dare recommend that a school, for instance, that we built in Somerville we build in Manville or we build in other parts of the State. The people are completely different. The system of education is different and the kids are different.

However, I can say this, if you are within a district and they desire to have, say, two or three schools that are identical, I have no objection. In fact, we have done this. Because here now the educational process is the same, the people are the same and the people who are teaching are the same so, therefore, I would have no objection to this. In fact, Bridgewater Township has done this. We designed what they call a standard school for them to be used on the elementary level from K through 4. However, they built the first one, a year later they wanted to build the second one and there were changes made on the second because, as we said earlier, things change, the system changed, education in the community itself changes. So they decided, well, we don't want this room this way, we feel we can do better if we change it. They had toilet rooms in the fourth grade, I believe it was, and when it came to the second building they didn't want them. They decided that the location of the boiler room was far better in another area on account of the fact that the terrain was different where the second school was built. The same thing applied to the third school. So, when it came to the fourth school, they scrapped everything, the fact being that they finally found that they paid us more in architectural fees to revise their drawings to comply with their new requirements than if we had started from scratch. And they have not used the standard plan for their district since. And their attitude has been that they will not do it again.

ASSEMBLYMAN EWING: Do you work in conjunction with the County Superintendent's Office at all?

MR. SCRIMENTI: Absolutely, yes, sir. I have learned through hard experience that you better work with them. Here is a man who is the county superintendent and he knows the problems of the community, and we definitely contact him while we are working on the drawings and keep him very well informed of the status of the drawings. In some cases the superintendent of schools will come to the State Department of Education when we present schematic drawings for Department of Education review.

ASSEMBLYMAN EWING: Well, when you come down with the plans to the State, do you bring somebody from the board generally, or not?

MR. SCRIMENTI: Generally, yes they do come. On occasion, they don't. The boards that we have worked with have felt the desire and expressed a desire to come along, and we think this is good because they see what the process is like and they possibly might stop objecting to certain things they have been objecting to in the past.

ASSEMBLYMAN EWING: Well, do you feel they hide behind the phrase, well the state requires such and such and that sort of thing?

MR. SCRIMENTI: Sometimes, yes. But we find that by the time we get through with the preliminary drawings most of this is unfounded. The one complaint that most of us have is we feel that, in the heating-ventilating field especially, the restrictions are much too high insofar as the guide requirements are concerned. And I have a feeling that the lighting requirements probably are so. But I would rather have an expert on lighting review and evaluate this. I think the entire guide, even though it's a fairly new one, should be reviewed and reviewed completely with the thought of economy.

ASSEMBLYMAN EWING: What is your feeling regarding the lighting requirements compared to what the person would find in the average home of a student?

MR. SCRIMENTI: I would say it's a lot better in any school constructed in the state today.

ASSEMBLYMAN EWING: Than in the student's home?

MR. SCRIMENTI: Than in the home. It's a lot better.

ASSEMBLYMAN EWING: Do these lighting requirements vary very much with the higher education buildings that you do?

MR. SCRIMENTI: No, not really. We have a little more leeway in the college buildings that we do, and I must admit that in certain areas we do use less lighting fixtures, in certain areas.

ASSEMBLYMAN EWING: In higher education buildings?

MR. SCRIMENTI: In college buildings.

ASSEMBLYMAN EWING: Therefore the lighting intensity is down a bit.

MR. SCRIMENTI: Yes, that's right.

ASSEMBLYMAN EWING: And any industrial work that you have done --

MR. SCRIMENTI: We have done a number of research buildings. That's the other 5% of our work, the research field, drug field, paint field.

ASSEMBLYMAN EWING: What are the lighting requirements there?

MR. SCRIMENTI: In some cases they are even much more strict than the schoolhouse guide, based on what they do. Naturally, a drug company, working with vaccines, as they do, in the laboratory this lighting is quite expensive. However, this is a specialty and planned for this purpose.

ASSEMBLYMAN EWING: Do you think there is much merit in the leasing of buildings to the school by a contractor putting them up?

MR. SCRIMENTI: From the experience I have had, sir, I would say no, and I would not be involved in any building of that type, insofar as being an architect is concerned. I would have nothing to do with it. I think it's nothing but problems and I think it's going to cause headaches for the districts.

ASSEMBLYMAN EWING: Why is that?

MR. SCRIMENTI: Well, the experience we have had in this leasing. First, how are you getting around the bidding laws on this, I don't know. The experience that we had was that we had a tremendous difficulty trying to resolve this insofar as the bidding laws were concerned, to the point, as you know, this was brought before the Grand Jury. As far as I'm concerned, I don't think there is much competition in the field, in the leasing. In my opinion, you really must select the person that you want to do this work, decide on a price and then let him have it, because insofar as competition is concerned, writing the specification, it would have to be a general specification which is very difficult to do. When the bids come, you really have no idea who is the low bidder on account of the fact that one may use different flooring material, different wall material, different structure, different finishes throughout the building, and it becomes a very difficult task for the architect to make a determination as to who really is the low bidder based on what the community is getting insofar as the building is concerned. I wouldn't touch it. We had one very bad experience.

ASSEMBLYMAN EWING: Is there anything in your Association that prohibits the writing of specifications so that only one manufacturer can bid on a job as far as school construction goes? I know it happens out in the public sector, you know, corporations. I was wondering if there was any requirement in your own Association.

MR. SCRIMENTI: The Association? The Association wouldn't have any requirement that would restrict you from doing this. The Association simply wants us to comply with the laws. And the law will not permit us to write any proprietary spec, or write a specification that will include only one material and not have other manufacturers come in and bid on an equal basis. I would say, number one, in my opinion this is wrong. I still believe in competition. And

I would hesitate in writing a specification or recommending to any client that they stick to one material. Even in our research buildings where the research engineers are very strict about one particular item that they want and they must have it, we still make certain that we have something in the specification that can possibly let somebody else in so that we keep competition keen.

ASSEMBLYMAN EWING: On page 3 of your testimony, next to last paragraph, you said, "New methods and materials and the systems approach are a few of the means by which costs may be stabilized and/or reduced, but it is now necessary to provide the legislative tools to permit new approaches to be fully implemented." What is that?

MR. SCRIMENTI: This is one of the items that Mr. Meyer was talking about.

ASSEMBLYMAN EWING: But what legislation?

MR. SCRIMENTI: Well, you would have to change the bidding laws to make it easier to get systems people to be bidding on work in the State. In this State, in my opinion, we're not ready for this kind of construction. The reason why we're not ready is because many companies are reluctant to come in here on account of the bidding laws that we have. It becomes a little bit more difficult and a little bit more restrictive for them. So that if we go to a true system, I think the bidding laws would have to be changed. I don't think you could have, say, five contracts. Somebody would have to study exactly how they would have to be changed. I don't know at the moment. But I do know that it is difficult for these people to come into this state with the laws as they are today.

ASSEMBLYMAN EWING: Well I hope, personally, that the State will get around to, for those districts that need it, a 12 months school year so the buildings probably would be used to a greater extent that way. I certainly think the community part definitely should be done by the local community.

MR. SCRIMENTI: That applies to colleges too. Colleges are doing this now and I fail to see why boards of education

can't open their schools 12 months a year and open them until 11 o'clock at night.

ASSEMBLYMAN EWING: And again, number 6, on page 5, - I guess you're referring to the bidding laws. You say: "There is simply no one design, proprietary school plan, total package scheme available competitively in the New Jersey area today."

MR. SCRIMENTI: That's right.

ASSEMBLYMAN EWING: But it is elsewhere.

MR. SCRIMENTI: That's right. There are many companies that do have systems that in my opinion are good, and we have investigated them. When it's time to make a determination as to how to write the spec and what other company will be eligible to be bidding, based on the specification that we write, it's almost impossible. You are almost tied down to the piece of equipment and the system that the company is selling. I have no objection to that if the architect and the board of education review this carefully and this is really what is best for that district, economically and educationally. I don't see anything wrong with it. I don't see why the law can't be changed to accommodate it.

ASSEMBLYMAN EWING: What states do you think are good models right now that can do this which we cannot do?

MR. SCRIMENTI: I really don't know. I haven't investigated this too much. I don't know what states are really successful in this. To my knowledge, the two best that I've heard of are California and Florida. California has been doing this for some time, so has Florida. And in California apparently it has proven very successful because, to my knowledge, the majority of schoolhouse buildings in California are built on that basis.

ASSEMBLYMAN EWING: Well, we'll send away to those states to get the statutes in those areas.

Have you had a meeting with the Department of Education regarding the criteria for heating, ventilating and electrical?

MR. SCRIMENTI: Our Society, the schools and Educational Facilities Committee of the New Jersey Society did have a number of meetings last year and we have written a paper on this and it was just recently submitted to the State Department of Education for their review. We had a number of comments regarding the new guide, and suggestions as to review and reevaluation. It was just recently turned into the Board of Education and I doubt that they have had enough time to really look it over as yet.

ASSEMBLYMAN EWING: Well, is there difficulty now - in number 8, on page 6, you say "Any new material, piece of equipment, building system or component that is deemed desirable and acceptable, should be considered for use in a school building." Now, does the State go down that far as to say what you can use and can't use?

MR. SCRIMENTI: Well, yes, if it doesn't comply with the requirements of the guide and other codes that the guide refers you to, you can't use it. And they're justified, at present, based on the law and rules that they have. And I think that this Board of Appeals is absolutely essential. They have them in other states. There are many new materials coming out all the time that might save money and are better. Why shouldn't the Board of Education have the privilege of at least investigating them. I think a Board of Appeals will go a long way toward resolving some of these problems.

I also feel that it's possible that if there are any questions of interpretation, insofar as the guide is concerned, maybe here's where it ought to go rather than where it does now. It is true, we have recourse now but, if there is disagreement in interpretation between the architects, the board and the Department of Education, then it goes to the Commissioner. If there is still disagreement, then it goes to the Department of Higher Education. And I don't feel I should wait that long and I don't think the district should be waiting that long. When school building costs have been going up at the rate of 1% a month, I think time is of the essence, I don't want to waste the time

doing this.

ASSEMBLYMAN EWING: Well, what background does the Commissioner have in building construction?

MR. SCRIMENTI: I can't answer that. I don't know. This is the reason why I feel the Board of Appeals is very important. And people should be on the Board of Appeals that understand education, understand architecture and engineering, as well as understand building materials.

ASSEMBLYMAN EWING: Well, in say the last five years, have you had many appeals that went up to the Commissioner?

MR. SCRIMENTI: Not that I recall on an appeal basis, no. Generally if we find that the product is not in compliance with the guide or any of the codes that they refer you to, we drop it. We haven't explored this any further. We simply turn it over to the company and say, we can't use your product, now you see what you can do with it. It takes a lot of time, Mr. Chairman, and we have enough to do to be designing the proper school plans for the Board of Education. And there are many products that are not acceptable. That's why we turn it over to the manufacturer. We feel that he's the one who is selling it so that he will do a possibly better job of convincing the people that be that they should accept it.

ASSEMBLYMAN EWING: That's the trouble in the public area, the convincing part of it is sometimes bad.

Well, right now are they adding new materials or equipment or systems to their list saying that these are not premissible?

MR. SCRIMENTI: As far as the State Board of Education is concerned?

ASSEMBLYMAN EWING: Yes.

MR. SCRIMENTI: No, not to my knowledge. I don't know. I don't think so.

ASSEMBLYMAN EWING: Well when did they last change their requirements?

MR. SCRIMENTI: I don't recall how old this new book

is. I imagine it's about two years old. I don't really remember. But, you see, we can't blame it entirely on the guide because the guide refers you to other codes. It's the other codes that I'm also objecting to.

ASSEMBLYMAN EWING: Yes, but this would be the latest updating of those codes.

MR. SCRIMENTI: That's right.

ASSEMBLYMAN EWING: Well, this is three years and maybe some of the requirements they have are fifty years old, or something.

MR. SCRIMENTI: That could be.

ASSEMBLYMAN EWING: Did your Association sit in on the revision of that?

MR. SCRIMENTI: We had members of the New Jersey Society of Architects in on it but the Association, as a group, no, but we did have individual members on it.

ASSEMBLYMAN EWING: On the Task Force that actually worked on it.

MR. SCRIMENTI: I believe so, yes.

ASSEMBLYMAN EWING: Now in this last paragraph you say, "It is further recommended that a Committee be appointed to study Education and the Physical Plant." From what point of view is this?

MR. SCRIMENTI: This includes just about everything that I said, physical plant, what goes into it, exactly what goes into it.

ASSEMBLYMAN EWING: Well, I mean, this would be to come up with new criteria?

MR. SCRIMENTI: Absolutely, yes, sir. In education, in a sense, go ahead, let's start from scratch. I mean, we've been complaining now for a long, long time about bidding laws, the Department of Education, why we're forced to do things - why don't we start from scratch and let's see if we can do it right now.

ASSEMBLYMAN EWING: Okay. Thank you very much.

MR. SCRIMENTI: Mr. Chairman, I would like to mention something very briefly about the bidding laws that we have now. You're right when you say that they are ridiculous

to the point of being idiotic. There have been so many bills presented by the Legislature, I'm sorry to say, during the past three years that it really is ridiculous. Why so many have been presented that have caused all this confusion, I really don't know. You will not have a single contract bid bill unless you satisfy the specialty contractor, such as plumbing, heating, electric, steel, etc. They don't want to lose their identity. I spent three years on a special committee back in '61 to '63 that included all other trades involved and included the Department of Education, through Dr. Westby, it included the attorneys of all of the contractors' associations, and we thought we arrived at a bill that was acceptable. The specialty contractors, as I said, don't want to lose their identity. They maintain that they are at the mercy of the general contractor, he squeezes them to the point where they are not making money.

I would suggest that you consider a bill where you have all of the specialty contractors turning in bids, all five, the five major ones turn in bids. When the bids have been received and it has been determined that the low bidders are satisfactory and you are ready to sign contracts, you then assign the specialty contractors to the general contractor and he then becomes the prime principal in charge of that project.

Now here you see, the specialty contractors feel they haven't lost their identity, they bid on a private basis, it is their figure that they are getting the job for and not some contractor pushing them, as they state, and that they are satisfied with this system.

Number two, the big problem always has been, who determines and who coordinates the work. Fallacy has been that the architect does this. This is not so. All the architect can do, based on this contract, is inspect the construction from time to time. But somebody must be at that job every day in the week coordinating the work. The

specifications sometime say, or generally say, the general contractor shall do this. But considering the fact that you have four other contractors, prime principals, with their own contractors, they tell them to go to the devil, they won't listen to them. So, we're constantly holding job meetings attempting to decide who comes to the job when to do his particular work.

In this bill I would also include the hiring of an individual that would coordinate the work between the prime contractor and the others.

Now this is a bill that this group came up with in 1963. I believe Senator Bateman, at that time Assemblyman, was one of the sponsors. Senator Maraziti was part of this and this was considered to be a great bill. And everybody agreed that it was a great bill until the very last minute, when it came time to vote the general contractors association reneged on their promise and pulled out. Why they pulled out, I don't know. Somebody told me it was probably the labor situation. I don't know. But they did pull out. And we have had absolute chaos ever since. The bill that you have now, as you said, is ridiculous because you place the specialty contractor in double jeopardy.

If I am an electrical contractor and I'm going to turn in my own bid, that's sealed, I also now have to turn in a bid to a prime contractor. I'm giving away my hand. If he has a friend who is an electrical contractor, he is going to let him know what my figure is. So I don't have a chance. Therefore, I'm not going to give my figure to a general contractor. That's why this law is ridiculous.

ASSEMBLYMAN EWING: But the number of specialty contractors, have they diminished perceptively over the last two years or so?

MR. SCRIMENTI: In certain fields, yes. We used to have a great many more people in the heating and ventilating field, especially in the area that involves duct work. I think if you were to check the subcontractors in this field,

there are very few that manufacture this material today. And this is what leads to a great many delays in school construction today. With the air conditioning, or with the air circulation that we require, if you don't have the right man doing sheetmetal work and the right man doing the heating and ventilating, you are going to have delays on it. This is generally the last thing that is done. There aren't many in the other field. It's unfortunate that we lost the father-son contracting team that really read a specification the first time and never looked at it again because they knew they had to turn out a proper building and it had to be completed to their satisfaction as well as the architect's. We really don't have that kind of an individual today.

ASSEMBLYMAN EWING: They took an interest in their job but people don't care about it anymore.

MR. SCRIMENTI: Well, maybe it's the high cost of labor that's doing this. I don't know. Maybe the contractor isn't making any money and that's why he's trying to save. I really don't know. But I do know that, as I stated, labor has gone up a great deal. And if it continues to go up, - as we started to say, we built our first school for \$13.00 a square foot in 1945; now the same kind of a school is going to cost us about \$28 to \$30.

ASSEMBLYMAN EWING: Thank you very much.

MR. SCRIMENTI: Thank you.

ASSEMBLYMAN EWING: We will recess for lunch and return here at 1:20.

(Recess for lunch)

(Afternoon session)

ASSEMBLYMAN EWING: I apologize for my late return. I was having lunch with some gentlemen who were going to testify but they had to go back.

Is there anybody here from the School Business Administrators?

Mr. Elmer F. Corda, School Business Administrator and Board Secretary.

E L M E R F. C O R D A: Mr. Chairman, I want to thank you for giving me the opportunity to appear before you in connection with this matter.

This bill is supposed to allow Boards of Education in Type II School Districts, in case of emergency, to enter into a lease purchase arrangement for temporary buildings without voter approval providing the State Board of Education approves the transaction. It is also concerned with not only one's specific type of construction and finance but also all aspects of school construction and funding.

The main problems confronting school districts in schoolhouse construction are the following:

1. Financing
2. Construction costs
3. Community involvement

These three items individually and collectively deter a local district from providing adequate facilities on a timely basis. Therefore it is accurate to assume that there is a need for change in the legislation that would provide local districts to acquire school

facilities in a more expeditious manner. Some of the changes that ought to be considered are:

1. Evidence of sound planning for any facility
2. Stronger powers granted to the State Department for strict review and evaluation of plans presented to them
3. Financial aid similar to the Emergency Building Aid fund to be granted to these districts requiring emergency facilities.
4. The permitting of the community to participate in the planning and review and an opportunity to vote on the question. If defeated by the voters it is presented to the Commissioner of Education for his review and approval.

Another thought is in the area of stock plans by the State Department. This concept could be implemented on a voluntary basis by local communities but not mandated. It is my feeling that the local district should have the right to determine the kind and quality of facility it desires for the students of that community.

Another aspect could be that those selecting the use of stock plans may construct the building with State Department approval without voters approval. Those selecting plans developed by a local architect must submit their school to referendum.

I have said, in a very short statement, many things, and I am sure that you would like to interrogate me a little further on some specifics dealing with my statement.

ASSEMBLYMAN EWING: Mr. Corda, is Willingboro in the process of building or have they been building over the last couple of years?

MR. CORDA: Willingboro has been undergoing a school-house construction program since 1958. It is presently involved in building and it has been building a school approximately one a year or one every two years. The community has grown from a rural 88 student populated community to a presently 15,000 students since 1958.

ASSEMBLYMAN EWING: In Willingboro do you use the same architect on an on-going basis all the time?

MR. CORDA: I would like to share with you Willingboro's unique kind of experience which indicates that possibly a different outlook on the method for acquiring a schoolhouse could be implemented.

As you probably know, the builder of Willingboro was Levitt & Sons. Levitt & Sons did construct seven elementary schools and a secondary school for the community at no cost. Two succeeding elementary schools were built on a lease plan, the lease being held by Levitt & Sons or, better yet, an educational foundation, the Willingboro Education Foundation which is a subsidiary of Levitt & Sons.

We have in our school district presently ten elementary schools, one under construction, one of the ten, two junior high schools and a senior high school.

The plan for leasing is working in Willingboro. Of course, the reason why it is working is because of the plan of that community. Our community is based on a park concept where a certain number of homes are built in each park. Within that park there is an elementary school. And when you build a community centered around a park concept, you know that the community is always looking for

the same kinds of facilities that the other communities are having, the other parks are having.

We started out with a 24 classroom building and we wound up with a 33 classroom building, but we had the opportunity of making the modifications in this building as we so desired as time went on. We were able to enlarge library facilities. We were able to enlarge learning resource centers or have learning resource centers. We were able to update and upgrade our building as the builder was building these parks. But the basic plan of the building remained pretty much in contact.

ASSEMBLYMAN EWING: Well, on the lease, was it approved by the voters?

MR. CORDA: Oh, yes. But there is some question about that that I would like to raise for your review.

The lease plan, under the accounting system would come under the current portion of the budget, under the 800 series, and we thought that that would be a better way of handling our debt limit, that is if it was in the current portion of the budget that it would not reflect the debt of the community. However, we were surprised when we went in for the second lease that the Division of Local Finance looked upon that leasing as part of the debt of that community. And really, when you look at it from that point of view, then you say to yourself, why lease?

ASSEMBLYMAN EWING: Do you feel that the state requirements are too restrictive?

MR. CORDA: In terms of the plans and specifications?

ASSEMBLYMAN EWING: Yes. In other words, do you feel you could get less expensive construction, less cost in the overall school building?

MR. CORDA: Our experience has been, in Willingboro, that we were able to get exceptionally good results, in terms of cost, utilizing the State Department's guide. We have had no real problems in cost because of the State Department's guide.

ASSEMBLYMAN EWING: Well, do you think the cost would have been lower, though?

MR. CORDA: If?

ASSEMBLYMAN EWING: If some of the restrictions hadn't been in their requirements?

MR. CORDA: Oh, yes, they would be lower.

ASSEMBLYMAN EWING: But you don't feel they should be relaxed?

MR. CORDA: No, I don't, because I think, if I read these guides correctly in terms of air exchange and in terms of lighting requirements and in terms of space per child, - I think, really, our State Department of Education is not looking for the utilization of that building for a period of one year or two years or three years. I think they are looking at it from a longrange kind of thing. And I think this may be a very healthy approach to planning for schools. I think that if we minimize the amount of lighting, or minimize the amount of air exchange, or minimize the concept of what is required in terms of air conditioning, I think that we might run into a serious problem if nothing happens in connection with our ecology problem and our pollution.

I think that really the things that are in the schoolhouse guide for construction are for the health and welfare of the child itself and I know that it does present a little more cost but I think the child's education is probably more important. And if we can make an environment that is more healthy or conducive to learning, then I think that individual child is entitled to that kind of consideration.

ASSEMBLYMAN EWING: Do you know of any factual evidence where some of these older buildings that we certainly have in the State of New Jersey have hurt the education of the child?

MR. CORDA: If we're talking about an instructional program that's strictly structured along the traditional aspect, where a child is stationed in one spot, in one seat, in one chair, for the duration of his time of education in

a school, then I can see where maybe it would not harm him. However, I think that in the present concept of education, where we have children moving more frequently, going to different areas of the room, where we have children working more independently, where we have educational resource materials located in different areas of the room, I think - and often times we do have from time to time more children in the classrooms than we would normally have, based on such things as team teaching, large room instruction, large classroom instruction, small classroom instruction, and I think that what is being looked upon as good education and good experiences for young people, - I think that these kinds of requirements in terms of construction could be looked upon as being a very favorable thing.

ASSEMBLYMAN EWING: In the construction in your municipality, how close a part do you play with the architect, following it through? Do you come down to the State Board with the plans and go over them?

MR. CORDA: Yes.

Mr. Chairman, I think I would like to elaborate on the system that is being followed on a local level that may be the cause for the problem in terms of construction cost.

As you probably know, a school district that's doing its job has got to come to the conclusion that it needs additional facilities not less than five years before the building is actually being used. Anything beyond that is crystalballing.

What first must be done is the establishment of facts and data that will convince not only the Board of Education and the Administration that it needs a facility, but also convince the community that it needs another facility. And oftentimes the Board of Education or the community challenges the administration in terms of their data. We wind up with utilizing approximately a whole year trying to convince either five board members to go ahead and give us the approval, or

convince the community, yes, we need a new building. So now we have four years. In that next year, by the time the Board gets the issue on the agenda for discussion, for the selection of an architect, and ultimately for the interview of architects, we find that a board now is confronted with five, six, seven and as many as ten architects to interview. Now the best that we can tell these architects when they come in is really the kind of building and approximately the number of children that's going to be in the building, and give some cursory overview of what the program would consist of.

And the next question the architect is confronted with is how much is it going to cost. The architect is forced, many times, to committing himself as to what the approximate cost for a building of this kind is going to be. And if his track record indicates that the price that he is quoting is a good price in the eyes of the Board of Education, he may have an inside track in getting the job. If his experience has been dealing with boards of education where they do want a lot of material that is maybe considered expensive but may very well reduce maintenance cost, obviously his track record is going to show that his cost per square foot for his building would be higher. He doesn't have the inside track.

Every architect makes an honest appraisal of what the building is going to cost without drawing one line. That's at the interview. He is selected, he signs a contract, and then we start talking about the building. He comes up with a schematic plan and the schematic plan is the time when he has to come up with the estimate of cost for that building.

Boy, there's a lot of work in terms of preliminary planning and final planning to actually really know, without a shadow of a doubt, what that building is going to cost and that won't give you the information until after bidding.

If that architect does not have in the bank a certain number of square footages that he could play with, because after schematic plans and during preliminary planning, and

preliminary planning doesn't occur until after the referendum, he's already placed himself on record that the estimate for the building will be X number of dollars. But during the preliminary planning and final planning, he's constantly being hit by the administration, by the community, and the State Department of Education, that certain areas of the facility need to be enlarged or additional facilities have to be included, certain storage areas have to be added. So he has got to put in new square footages, in those plans, without changing his estimate because the referendum has already been approved. So he has to have a bank of square footage in his estimate of cost.

If nothing is changed in his preliminary and final planning in terms of total square footage, and if that is placed out to bid, then he obviously will come in below his estimate because the extra square footage is not included in that building.

He has got to be a Houdini. He is a man who places his reputation on the block and if the extra square footage is inserted and the bids come over the estimate, then not only is he placed on the chopping block but the administration and the board of education is placed on the chopping block because they want to know why.

I don't know whether we can answer that intelligently, because there are a million and one reasons why that happens.

ASSEMBLYMAN EWING: In your school district do you make trips down here to the Department to go over the plans with the architect?

MR. CORDA: Yes.

ASSEMBLYMAN EWING: Do any board members come with you?

MR. CORDA: No.

ASSEMBLYMAN EWING: Why?

MR. CORDA: They're working.

ASSEMBLYMAN EWING: Well, do you think if you had meetings in the late afternoon with the Department that you could get some board members to come, or don't you think

they're interested?

MR. CORDA: When we have hearings before the State Department, Division of Local Finance, we may get a board member or two who will appear there. But I think that more importantly is in the discussion of the schematic plan level where a lot of thought has to be given, because in order to come up with a reasonable estimate for that building, we've got to know what we're talking about at the schematic level so that the preliminary planning and final planning does not present too many problems to the architect or to the administration.

ASSEMBLYMAN EWING: In your recommendation you say: "Stronger powers granted to the State Department for strict review and evaluation of plans presented to them." Stronger in what way? You mean, they can eliminate or add and say this is what you have to do?

MR. CORDA: Yes. I am thinking about the fact that what is happening up to now, in terms of the local district relationship with its community, we find ourselves selling a community a building that it may or may not accept, or we may have a strong division in our community as to whether or not the building that's being proposed is an adequate and sufficient building. Now, of course, the State Department says that is an adequate and sufficient building, but when a referendum is turned down I think that the State Department of Education has to have stronger powers that will basically convince the community that it must move in that direction or the education of that community is going to be greatly harmed.

I think that, number one, the evidence of sound planning for any facility must be one whereby the State Department has got to come out with a statement if, in fact, the community does need additional facility; it must communicate with the local district community and endorse the fact that the additional facility is in fact needed.

ASSEMBLYMAN EWING: Well, should they tell them, you

know, they have to go to a 12 months school system rather than put up a new building?

MR. CORDA: We have already gone through that discussion in Willingboro and we're on double session right now.

ASSEMBLYMAN EWING: That's not a 12 months system?

MR. CORDA: Well, that's very easy to say, to use your facilities for 12 months but it's a very impractical kind of thing. We had another situation where we had a 45-15 plan, the kids go to school 45 days and off 15 all during the year. Well, that proves to be a real public relations problem because there will be children on 15 days vacation in the winter time but will be going to school 45 days during the summer, but mother and father are on vacation in the summer time and how do you arrange that kind of thing.

ASSEMBLYMAN EWING: But it is working out in other areas of the United States, and very successfully. They have overcome those problems.

MR. CORDA: Well, there's only one area that I know of that's implementing it and they're doing away with it.

ASSEMBLYMAN EWING: Who is that? Well, I believe Atlanta is on it.

MR. CORDA: Yes, Atlanta, that's the one that's going to do away with it.

ASSEMBLYMAN EWING: There's one out in Michigan or Illinois.

MR. CORDA: We communicated with Atlanta and they're doing away with it. They're experiencing too many problems.

ASSEMBLYMAN EWING: All right. Thank you.

Dr. Harold Seamon from the New Jersey School Boards Association.

H A R O L D P. S E A M O N: Mr. Chairman, I am Harold P. Seamon, Director of Special Services for the New Jersey School Boards Association. As you know, our

Association represents the 600 local boards of education in the State of New Jersey. We appreciate the opportunity to present our views to you today. The expansion of the Committee's concerns in these public hearings to include all aspects of school building construction and funding is commendable. However, the variety and scope of issues available for consideration necessarily precludes a searching examination of each and every issue this afternoon. Additionally, we do not possess the specialized expertise of some of the architects who have testified before you today. Therefore, the testimony I present today will deal only with those issues that are of major concern to the member boards of our Association. I will refer to several specific bills of interest to local boards and also introduce some concepts that are somewhat more general in nature.

1. These hearings were prompted by the Committee's consideration of Assembly Bill Number 477, a bill entered at the request of the New Jersey School Boards Association. This legislation is based on a resolution submitted by the Union County Regional High School District No. 1 Board of Education and approved by our Association's delegate assembly in December of 1969. This bill would permit boards of education to enter into lease-purchase arrangements for temporary or relocatable facilities to use for school purposes for a term of not more than 5 years. Under existing law, Type II school districts are authorized to enter into leases for temporary buildings in case of emergency, but the statutes do not specifically cover options in such leases to purchase these buildings without voter approval. We have found that 5 year rental costs approximate the purchase price of these structures.

A-477 is a reasonable measure because boards of education now leasing temporary buildings pay so much in rental for the five-year period that a subsequent purchase under the option would cost very little; yet existing laws prohibit a Type II board from acquiring real property without the approval of the voters. It would be advantageous for school districts to enter into such lease-purchase arrangements for they could well derive added usefulness from these facilities. This flexibility will be particularly helpful to school districts in a time of high construction costs and fluctuating enrollments. The bill specifically calls for the State Board of Education to approve such transactions and we believe this requirement of prior approval provides adequate safeguards for the expenditure of public funds and for adequate physical planning. We urge your support of this bill.

2. S-182 was signed by the Governor on March 8 and is now Chapter 42 of the Laws of 1971. This act requires boards of education to include facilities for the physically handicapped in every public building. Included in new facilities must be one principal entrance with ramp access; toilet facilities and drinking fountains to accommodate wheelchairs on each floor; elevators for wheelchairs in all multistory buildings; a working area for the physically handicapped in all laboratory and shop facilities; and one public telephone at a height accessible to wheelchair pupils in each building.

The New Jersey School Boards Association strongly supports the intent of this law but respectfully requests that an amendment be added that would ease the requirement of having these expensive facilities in each and every building. Many districts have a large number of separate school

buildings; for example, a district might have 16 elementary schools, 4 junior high schools, and 2 senior high schools. We would suggest that the intent of this law and, first and foremost, the needs of the children, would be served if each physically handicapped child were enabled to attend classes in a building equipped with such facilities. However, this would mean that only one or perhaps two buildings at each grade level would have to meet such requirements. Such an amendment would reduce the added burden upon the local taxpayer as he supports the construction of new facilities.

3. S-182 mandated costs to local districts without providing the necessary funds. In this regard, we would again raise a problem of major concern to local boards of education. State mandates in the area of school construction, as well as in all other areas, place demands upon the fiscal resources of the local school district that result more and more frequently in rejection by the voters of budgets and bond issues. This year, 186 of 528 budgets, or 35.2%, were defeated. The most recent figures on bond issues show that in the 46 of 113 elections, or approximately 40%, the bond issue failed to gain voter approval. We urge that mandated requirements be accompanied by appropriations that would enable the district to maintain a tax rate that will be tolerated by the local property owner.

Mr. Chairman, I would like to interject at this point, on point 4 we wanted to include in the record Assembly Bill 838 which permitted Type 2 boards to take an option at a cost not to exceed fair market value of such option on the purchase of any land. This bill has been passed by both houses of the Legislature and is now awaiting the Governor's approval, or action by the Governor. We would like to thank the Assembly and the Senate for the support of this and would like to again ask for your support for the record.

5. Enactment of S-712 would assist local boards as they seek to ascertain whether real estate contemplated for school purposes is suitable for school construction. At the present time, there is no statutory authority for the board to make surveys, test borings or the like without the consent of the owner of the property. In some cases consent has not been forthcoming. S-712 would authorize local boards to make these necessary tests with or without consent of the owner of the property.

6. The New Jersey School Boards Association has recommended to the Bureau of Facility Planning Services of the State Department of Education that immediate attention be given to the escalating costs of school building construction. We recommend that a state-wide meeting of architects, educators, bonding agencies, bonding attorneys, school board members and contractors be called to study the problem in depth. We believe that through cooperative effort, cost saving ideas could be developed that would not reduce the safety or the functional aspects of school building construction. These ideas, where appropriate, could be included in State regulations and rules governing school construction.

7. Similarly, we would strongly urge that every effort be made to strengthen the role of the State Department of Education in the area of research on building construction. They are making every effort to assist local districts with information and services but they are hampered by

less than adequate funding that limits the personnel that can be assigned to this important task. Continuing research and evaluation would enable the development of the most functional buildings at the lowest costs. We feel that costs of providing these services would be more than offset by the savings that would result.

8. The New Jersey School Boards Association supports all efforts to disseminate facility construction information to school districts. Several recommendations of the Governor's Management Commission report dealt with methods for reducing construction costs. The following recommendations applied directly to school districts:

- A) Develop, publish and maintain State standards and specifications for both new construction and alteration and repair projects.
- B) Require greater use of common designs and building system techniques.

In relation to these two points, I should like to call your attention to Assembly Bill 58, a bill requiring the Commissioner of Education to have prepared standard building plans and specifications of various types and sizes suitable for use by school districts. The Legislative Committee of New Jersey School Boards Association opposes this bill. They believe that local site requirements and esthetic considerations make such a bill impractical. Research indicates that it often costs more to alter a plan to fit a site

or a program than to prepare new plans. Many recent studies demonstrate the importance of physical environment in student achievement.

The other recommendations applicable to school districts would appear to have validity and are worthy of consideration. That is:

- C) Establishment of a value engineering and design analysis function in the proposed Bureau of Design Engineering.
- D) Provide a revolving planning fund.
- E) Study the establishment of a state building authority.
- F) Establish a mandatory single-bid law for major construction and provide means for utilization of building systems construction. We believe single contract bidding would reduce costs and improve coordination.

9. The New Jersey School Boards Association is concerned about the financial crises facing communities and school districts throughout the State. These jurisdictions are badly in need of improvements and must cope with fiscal considerations that either bar them from raising money or cost them high interest rates they can ill afford. Older core-city areas, emergency-aid school districts, and rural areas are particularly hard hit.

One of the most common and economical ways to raise funds for large capital projects is to float municipal or school bond issues. The bond

market is highly competitive and these poorer cities and school districts have the lowest credit ratings. When they borrow they must pay the highest interest and accordingly their bonds carry the highest price. In competition with school districts and communities with excellent credit ratings, these cities and emergency-aid school districts must float high-priced bonds that are, in effect, "non-marketable." Yet these are the very communities that are most in need of funds. A State sponsored School-Municipal Bond Bank would assist such jurisdictions.

The New Jersey School Boards Association strongly supports legislation that would create a School-Municipal Bond Bank established by the State of New Jersey to buy the bonds or notes of any such municipality, county, or school district, with such low credit ratings that they are unable to sell bonds on the open market. S-858, which establishes the New Jersey Municipal Bond Finance Agency Law would fulfill this need.

The Bank would be self-sustaining and would deal only in tax-exempt revenue bonds. The Association believes that local authorities should not be included in the Bond Bank since they are usually self-sustaining and would require a disproportionate percentage of the revenues of the Bank.

The Bank would seek to save our core cities, hard pressed rural areas and school districts from further financial deterioration by providing a ready market for their bonds. The New Jersey School-Municipal Bond

Bank would buy the bonds or notes of those municipalities, counties and school districts that cannot sell in a competitive market. Thus, the Bank could save whoever issued the bonds hundreds of thousands of dollars over the life of the issue, in most cases 30 years.

The Bank's most important function would be to provide money when and where it is most needed. As a result, these municipalities and school districts would have funds to make necessary capital improvements that help to increase the fiscal value of the community and to contribute to a higher credit rating. Eventually, this would assist in leading these jurisdictions back into the open bond market. Hopefully, the Bank would spur low-credit districts eventually to become independent of it.

10. I should like to also call to your attention Senate Bill 267, an act that establishes a State School Building Authority for the purpose of assisting local school districts in providing adequate public school buildings, furnishings, equipment and related facilities. Such an authority would provide a measure of assistance and an alternative method to school districts for the provision of public school buildings. The authority would finance and oversee the construction of public school facilities. Districts would then lease the facilities from the authority. This mechanism would enable districts to build schools when needed rather than after several years of double sessions and severe overcrowding. I will not go into the details of this proposal today, but will suggest that the concept is deserving of serious attention and study.

Thank you.

ASSEMBLYMAN EWING: From your look at the whole matter, do you feel that the State requirements are too restrictive?

DR. SEAMON: Mr. Ewing, I have been trying to answer that question as you have asked it earlier today. I have not had enough direct experience with boards of education to really get a true reading on that.

ASSEMBLYMAN EWING: Well, do you get many complaints from the boards?

DR. SEAMON: I have not received any complaints and it has not been a problem that's been discussed with me at the office. I would assume that it rises when boards run into problems where they feel the requirements would cost them additional money. But I think, again, it's a problem of education that the boards review more closely the guides and see the reasons behind this and some of these objections would begin to fade away. But it has not been a serious problem to my knowledge.

ASSEMBLYMAN EWING: On your idea regarding the special features that have to be put in for the handicapped child, do you feel the cost of putting these in would be considerably less if they were kept to only a few schools in each district? And then what about your transportation costs for getting the handicapped to those schools that had these and the idea that those children would not be associating with children from their own particular areas that they knew?

DR. SEAMON: That is a problem that we would have to consider and we did not want to be too restrictive and just say the one building. That's why I added the phrase, or even more at each grade level would meet those requirements. But our concern was that in a district with a large number of small elementary schools that perhaps to require these facilities in each and every school building, where if past experience were examined you might find that such a handicapped child did not attend that school in perhaps ten

years. You know perhaps some readings could be made and more centrally located schools could be equipped with these facilities. Transportation itself would not be a problem. The problem you raise, about taking the child away from his neighborhood might be a legitimate one. But we feel that this bill should be examined closely to consider that kind of problem.

It is my experience in a junior high school, for eight years as a teacher and administrator, of about between 900 and 1,000 pupils - the enrollment fluctuated - I cannot recall a wheelchair pupil during that eight years and I would suggest that this would be worth examining.

ASSEMBLYMAN EWING: It's also interesting to note that in your interpretation you interpret the bill for the handicapped that there would be only one public telephone in the whole building at a height accessible to a wheelchair. In the bill it has to be on every floor.

DR. SEAMON: I have a copy of the bill.

ASSEMBLYMAN EWING: You interpret it the same way that we do.

DR. SEAMON: I just took that wording directly from the bill. I didn't see that each floor had to include it. Essentially on each floor it only called for the toilet facilities.

ASSEMBLYMAN EWING: I would like to say that we in the Assembly Education Committee are very cognizant of the fact of mandating costs. However, we felt so strongly about these special facilities, etc. for the handicapped child that we feel that it is a burden that should be shared by the people in the district and it is not one that we should provide the money for at all. And we did not feel badly about mandating these particular costs which we gathered might be - and here again through the best judgment we could get maybe 1% of the total building cost - the building cost would be increased by about 1% with these additional facilities. I don't know if the architects feel that way

about that or not or if they ever came up with a figure.

Do any of you gentlemen have any idea as to the ramps, the elevator, etc?

MR. THOMAS: Well, on a new building it would be almost insignificant but on the adaptation to the older building it could be very substantial.

ASSEMBLYMAN EWING: You don't have to bring the older buildings up to this.

MR. SCRIMENTI: Mr. Chairman, as far as the bill is concerned there is only one area in this bill that there might be some objection to as far as money is concerned which is the question of a science shop. But insofar as the remainder is concerned, the drinking fountain lowered is no problem, the telephone lowered, no problem, the ramp required to get into the building can be done in an aesthetic manner and may not cost more money. Many architects, most architects have been doing this for many years. The extra space involved for these facilities would not amount to too much. There is just this one exception and that is the one requiring laboratory and shop facilities in one area which might be an item but other than that I don't think so.

ASSEMBLYMAN EWING: Thank you very much.

DR. SEAMON: Thank you.

ASSEMBLYMAN EWING: Are there any other individuals who wish to be heard before we hear from Mr. Spare from the Department? (No response)

Dr. Edward A. Spare, Director, Facility Planning Services, State Department of Education.

E D W A R D A. S P A R E: Mr. Chairman, I have no prepared statement. I just assumed that I would answer any questions you had and if you wanted me to comment on any of the things that have happened, I would be very happy to.

ASSEMBLYMAN EWING: Well, the first question then, on the Guide for Schoolhouse Planning, dated 1969, is this a

complete compendium of everything or are there other --

DR. SPARE: No. It lists everything in there that's required by statute or by State Board regulation, and in addition has a series of recommendations which are not mandatory at all.

ASSEMBLYMAN EWING: But this does not refer back to any other requirements or anything?

DR. SPARE: Except it does indicate at certain places, if you get the electric code or plumbing code, it refers to either a national standard for it and the Department of Education did not establish any standard, they merely adopted a national code of fire safety prevention or plumbing or certain codes like ASHRAE and BOCA, certain sections, which are national standards. We didn't make up any of our own. In most cases where there are modifications, they've been reductions in the requirements from national standards, not exceeding them.

ASSEMBLYMAN EWING: Well, who made this up in 1969, what body?

DR. SPARE: This was the result of a two and a half year study. I can't claim any of the credit for it. It's supposedly a very nice document. At the beginning of the book, on page V, there is the New Jersey Schoolbuilding Guide Advisory Committee and these are the people who are responsible for the construction of this, which was based on a previous guide of 1967 and 1964, etc. It has been an evolutionary thing, it hasn't been a complete change, it is just constant modification, some additions, some deletions. And, as you can see, it's a generous sprinkling of architects, engineers, superintendents of schools, school board members, a couple college presidents were on, - at that time the Department was still involved in the college construction program. - fire chiefs, business, business manager, board secretaries, to get an overall reaction as to what the particular areas of concern were and then to compromise where necessary.

Actually, certain things in there - we did have mention of one this morning, the question of changing legislative requirements for the mechanical systems for materials. On the first page of the Guide, item 1.5d, it specifically says, "No responsibility is assumed by the State Board of Education for the structural features of the building, the efficiency of the mechanical system, the grade of materials or the quality of fixtures installed." There is no requirement on this. All they specify is the performance, such as you must provide 50 foot candles of light. They don't say what kind of a fixture to use. They can use any kind in the world that will produce that. The same with the ventilation. So this, again, is up to the architect or engineer as to what he thinks is available.

ASSEMBLYMAN EWING: Well, do you feel that many boards do hide behind, oh, the State requires this or that when actually it doesn't?

DR. SPARE: I think - again this is a matter, percentage-wise, I suppose it's small, but it seems exaggerated in our viewpoint because we certainly will get a call once a week or every other week in which somebody will say, we have to do something like this because the State Board mandates it, the Department mandates it, and there is no such mandate. Now, where the information comes from, we don't know. Whether it's the board hiding behind it, whether it's the recommendation of somebody who believes this is desirable and wants to shove the responsibility on the State, but you know, just as the Legislature is blamed for a lot of things, we are too, that never actually occur.

ASSEMBLYMAN EWING: Well, on this first page, General Information, it says in 1.7, "It is framed especially to present a convenient outline of all applicable mandatory provisions." An outline, in my mind, is not a complete thing.

DR. SPARE: Well, it's not complete in that there are constant references. It will refer to a State law and

the entire law may not be printed in here, or to some other source.

ASSEMBLYMAN EWING: Well, how long would it take to redo this, by somebody in your office, to include the laws, not make it an outline? I mean, for a layman like myself to be able to go through it properly instead of having to go back to reference books and back and forth.

DR. SPARE: I think that the size of it would be - and the architects can tell you better than I could, but I would say that you would at least increase this five-fold in size. And it's questionable whether it isn't too lengthy now as a source of reference because the architects work with it and the engineers. They are familiar with these other codes and they have the books for it. Some of them are complete sets of volumes which you would have to refer to. And I think the reproduction would lose a lot this way.

ASSEMBLYMAN EWING: I see. Well, in any of those areas, do you have complaints from the architects, that maybe they should be revised?

DR. SPARE: I think this is continual. I don't think there is any high degree of complaint. But with any publication or any piece of information put out, you can see the weaknesses as soon as it's published. We try to change these. For instance, we've had complaints from architects and engineers that the requirements for the ventilation were too high. We made a thorough check of it. The Guide Advisory Committee just completed a recommendation for a downward revision which would reduce the cost. We hope to have this before the State Board of Education at the June meeting to see if they will approve the reduced requirements in ventilation.

ASSEMBLYMAN EWING: Well, when did you start going into this reduced requirement for ventilation? This year, last year, five years ago?

DR. SPARE: I would say probably about six or eight

months ago. That's how long we studied the situation and investigated it.

ASSEMBLYMAN EWING: And the State Board has to approve that.

DR. SPARE: Yes. Because they had to approve this whole guide, as it stands, to make it enforceable.

Also on S-182, the physically handicapped, we have also sent to the Commissioner and State Board an amplification of those six items in the legislation because we know that clarification is needed in what the requirements would be. For instance, the ramp. It says a ramp at the principal entrance, but what kind of a grade should it have. We went to the American Standards Association for the physically handicapped to see what they would recommend and then we're incorporating this is our recommendation that the grade should not be more than one foot in twelve. These are some of the things that we had to explore and we again, according to our interpretation, that is our Bureau, we believe the State Board of Education will have to approve this clarification of the different items, as to how high a telephone should be or a drinking fountain, because it's not specified in the legislation. And this will be a guide to the persons who are involved in planning so that they will know how high it should be.

ASSEMBLYMAN EWING: Well, were you advised that Senate 182 was being developed and were you consulted on it or not?

DR. SPARE: Yes. I attended, I believe, two short conference sessions with some of the sponsors of the legislation, together with many representatives from the Red Cross and other associations involved in the handicapped, and the determination was made generally as to how or what were the most important items that would keep the cost down to a minimum and still achieve some of these things.

ASSEMBLYMAN EWING: But the details of it are better done by administrative procedure, would you say, in the

Department rather than putting them in the bill?

DR. SPARE: I think just the clarification of what they mean. There would be a lot of question, let's say, for a drinking fountain at a suitable height for a wheelchair. Well, there may be a lot of differences between the architects, the school administrators and board members as to how high that should be. So we went directly to the American Standards Association's recommendation because they are involved in this directly. It's not a detailed sheet of explanation.

ASSEMBLYMAN EWING: Well, do you feel there is a way to cut the costs in school construction or don't you feel they can be cut?

DR. SPARE: I think there's a possibility of it being cut. I don't agree with some of the testimony that the systems approach is going to be the answer. I spent some time last October visiting schools in California - not at State expense, incidentally, it was at my own expense - to see about their open space rules and their systems construction. Of course, the original SCSD program started in California. They had so many problems with it - actually, there were two other states that built buildings under that system before California moved in on it, but we have never seen any indication of a reduced cost. I think it achieves a lot of things. It achieves a lot of flexibility in the building. I think it allows for a lot of things, open space that we couldn't have had because of utilities being placed in such dimensions in the building that it would restrict in some way the educational opportunities. But I don't see it as a reduction yet. It has possibilities.

There are a lot of these things. As you know, we had this workshop on systems and preengineered structures. The thing that we seem to be able to justify so far is that these systems and preengineering will allow a saving of time from the time the plan is initiated until it's occupied. But again, if you're going out to bid on these things, once the bid is

firmed, if it takes six months or a year longer than was anticipated, it still doesn't cost the district any more in construction cost because it is a firm cost originally. So that isn't where the saving would be.

But one thing that I think is missing, and I'm not proposing this for empire building and it doesn't necessarily have to be in our Bureau, although we would like it, is the fact that there is no State approach to any research as to how this can be done, how can we save money. There is no personnel, no time allowance for this to be strictly a study group to try to explore this topic. We depend upon the Foundations, the associations, such as the Society of Architects, Engineers, such as the Council of Educational Facilities Planners, and other groups like this to do the research. I think it has been neglected a great deal. There isn't any money. It's purly some voluntary committee doing it.

ASSEMBLYMAN EWING: Well, are other states doing this?

DR. SPARE: Not to my knowledge. I don't know of anyone who is studying it.

ASSEMBLYMAN EWING: Well, is there such an association, of the title you hold or something similar to it, other individuals from the other 49 states?

DR. SPARE: The major association is the Council of Educational Facilities Planners. They do a tremendous job but any research that is done is done strictly on a voluntary basis of the Committee, which is part time. It's like, I've just been appointed to a committee of six persons, three representing that organization, in which we have to develop a plan for a model state agency for the opration of the Bureau of Facility Planning to see how it can be improved. Well, I am having three days of orientation at the headquarters at Ohio State University, but the six man committee is going to do this all on their own time and then make a report. And this is only one phase. They do research in economies the same way. And when you have a committee of

a half dozen people who are going to meet three or four times a year and working independently and making a report a year later, I question the validity of how, you know, efficient such a study is when you consider the research that goes in for cancer or heart work. Staffs are working all the time in order to accomplish anything. I think maybe even a one or two year study by the State, not necessarily for schools but just a committee, a permanent committee for a couple of years of staff that would study how savings can be effected in construction may produce something a lot better than this diversification of effort and funds.

ASSEMBLYMAN EWING: I gathered earlier this morning that the information regarding school districts, what they pay for a final building, etc., is held by your office, you get that information?

DR. SPARE: Basically that's true. Unfortunately, it is not an accurate reflection. What happens is, the law requires that they file the contracts with us, the major contracts, within ten days after they have signed. They file the contracts but these are the five basic contracts only. There are many other things like equipment that goes in later, even kitchen equipment, closets for storage, different things, carpeting may go in later on, bleachers may come in, even chairs in an auditorium. The land is not involved in that cost. The architectural fees are not in there, the legal fees. Change orders are constantly increasing cost. We never know what the final cost is. There is no actual record. We had hoped at one time to try to develop this but we seem to have difficulty even getting them to file the contracts which the law requires them to file.

ASSEMBLYMAN EWING: Well, what do you do with the information you do get?

DR. SPARE: We have that on file and that's available. We compile for use in our own department a list of what the square foot cost is of each project during the past fiscal year

and we, from that, judge or work out what the average square foot cost is throughout the State for public schools. We are now trying to break it down into regions to find out what would be suitable regions because there is a variation of cost depending on the area of the State. And it's not good to reflect a cost of say \$26.00 a square foot when it may be 20% less in South Jersey and 40% higher in North Jersey.

ASSEMBLYMAN EWING: Well the information you do get, do you disseminate this to the county superintendents so that they have it on file there?

DR. SPARE: No. We keep it available for anyone who wants to look at it but there are a lot of other problems because you're comparing apples and oranges, unfortunately.

ASSEMBLYMAN EWING: You're what?

DR. SPARE: There isn't any comparable basis that the facts that are submitted are square foot cost, the total cost of a project. And people will look at it and say, what is the per pupil cost? One school is costing \$3,000 per pupil, another one is \$5,000. Why is that? Well, the difference is that one of them was a complete building. It had corridor lockers in it, it had floor finishes in it, it had bleachers in the gymnasium and seats in the auditorium, so that when we look at it we don't know how much of this -- when they look at a figure they don't know whether one is a complete building, whether one is minimum construction or the most economical kind, whereas others, as the architects have mentioned, were looking toward reduced maintenance in the future. They may have terrazzo corridors because 20 years later they may be exactly the same as they were when they were installed; whereas, they may have an asphalt tile corridor which every three or four years needs pieces of it replaced. So the cost of one building may be substantially more than another.

ASSEMBLYMAN EWING: But don't you think the County Superintendent could pick up a phone and call some other area and say, "I see, George, you built a building last year and your costs were way down, what are you doing?" or your costs were way up, or something. I don't see, if you're getting the information from the people in the State, why it is not disseminated back to the county superintendents so that those who are interested in doing a job in their county will keep abreast of what the building climates are and keep in touch with the board. And I also don't see why you permit some boards to turn in, as you say, a complete building cost, including the bleachers and --

DR. SPARE: No one does that.

ASSEMBLYMAN EWING: Well, you just said some might run to \$5,000 per pupil and others \$3,000, and the \$5,000 because it had lockers in the hall and the bleachers and things of this nature.

DR. SPARE: But if you look at a sheet which fairly lists the different projects, the schools that were built, the square foot cost, it will have the total cost, it will have the square foot cost, it will have the number of square feet in that building, and then you look at one which is \$27.00 a square foot, another one \$22.00 a square foot, and you say, look, this one was built cheaper, why can't we do that one. But you don't know what went into that building, it's not on that sheet, and nobody knows except by looking at the exact plan of what was put in there, what kind of lighting was put in, what kind of a ventilating system, was it air conditioned or wasn't it. So they are looking at a figure and they see the next door neighbor got it for \$18.00 a square foot and this architect is telling us \$27.00 a square foot, we don't want this architect. And that's not true. This architect could probably build it for \$18.00 a square foot if he built the same kind of building that the other man built. There is no genius, I mean, in getting bids. The bids come in and the man knows the low bidder is

the one who gets it, by law. So the design has an effect. There is no question about it. But there is such a difference in what they provide in there. One district may build a school building which is nothing but classrooms and corridors; the classrooms are a 9 foot 6 minimum height, the corridors are 8 foot in height, and his square foot cost is something. Another district, besides supplying for the same number of children, we'll say, will supply the classrooms and corridors but he will have a library which, instead of a 9 foot 6 ceiling will have a 14 foot ceiling.

ASSEMBLYMAN EWING: Yes, but couldn't some of these facts be found out by making a phone call. The superintendent looking at it says the XYZ district, I'll give them a ring and see what they did, and he would find out these facts.

DR. SPARE: Well, it sounds like the right way to do it. Unfortunately, we tried to track down a few districts where they had an exceptionally low cost to find out what it was, and we can't get the information from them. Either the man who had the information is no longer there or they can't find it or they don't want to reveal it, whatever it is, and there's nothing in the law which mandates them to supply this.

ASSEMBLYMAN EWING: Do you need that? Would it be a help to you?

DR. SPARE: It sure would be to have the total cost of the project when it's completed, to have that filed with the State, itemizing the costs of the different items in there which would then reflect what the school district is getting for its money and then there could be a comparison, a reasonable comparison.

ASSEMBLYMAN EWING: Well, have you ever made a request that something like that be mandated?

DR. SPARE: No. We're still trying to get the districts to do what the law now requires them to do, which we have difficulty in, such as the one which requires the filing of reports on the performance of contractors. When I took over five years ago as Director of the Bureau, we were getting

returns of less than 2% on what was required by law. We've been sending out letters with each plan approval. We refer to the citation in the law and say that it's mandatory that they comply. We follow up with letters when they don't comply. Over a period of years we've worked it up to 10, 20 and now we're up to somewhere around 35 or 40% return, which is still horrible.

ASSEMBLYMAN EWING: Well why this lack of cooperation? Do they feel it's too much administration for them to do?

DR. SPARE: First of all, we had a problem in which they were afraid of libel suits, and then we had a save-harmless act by the Legislature, which is about two years ago or three years ago which protected the boards. They were afraid to report because they were afraid that contractors on an unfavorable report would sue them. Then the school districts would assign this to the architect after that and say, you file it. Well, the architect said that, in essence, the save-harmless legislation does not protect me, it only protects the school boards, so they didn't want to file it. Now I believe, I don't know, you gentlemen can tell me, I think there is legislation introduced to provide that for the architect as well?

MR. SCRIMENTI: Not yet.

DR. SPARE: Not yet but you're working on it.

MR. SCRIMENTI: Not yet, Mr. Chairman. An amendment to this bill that Dr. Spare is talking about was proposed which included that the architects be held harmless. This was rejected and only the Board of Education was held harmless. On that basis I'm advised, don't fill out the form because it seems clear that if the board of education is held harmless and the architect will not be held harmless they can sue our pants off. And this is why we are not doing it. We are saying, if you want information on the contract on this project, you refer to the minutes of the meetings that we had every two weeks and that will tell you who caused delays. However, if the architects are held harmless, as the

boards of education are, we would fill out those forms.

ASSEMBLYMAN EWING: Do you know what chapter that is that held the boards harmless?

DR. SPARE: No, offhand I don't, but I could check that.

ASSEMBLYMAN EWING: Do you feel some benefit could be derived by having the total cost of everything and making this available?

DR. SPARE: The total cost would certainly help.

ASSEMBLYMAN EWING: And then would you disseminate that back to county superintendents or not?

DR. SPARE: Well, the county superintendents - there was mention here and there is a difference of opinion on the involvement of county superintendents. I think the architects are not quite aware of the full involvement of the county superintendents. So far as I know, almost every plan that is ever presented to Trenton for approval has been reviewed by a county superintendent. But he works not with the architect, he works with the local administrator and with our office. As a matter of fact, we had two calls this morning from county superintendents alerting us about plans that were coming in which they thought were horrible and they wanted to sit down and talk with us before we made any decision on them.

The County Superintendents are constantly requesting the services of our Bureau to sit down with local boards when they are planning something, to get involved and to assist them in the early stages. Unfortunately, one of the problems is that in some districts they go ahead on their own before the County Superintendent even knows that they are planning a school building, and he doesn't know about it until we notify him because when a plan is received by our district he automatically gets a form which acknowledges the receipt of that plan and that's when he usually gets involved with the district. Sometimes, of course, the plans have been crystalized so far that he can't do anything about it if he

thinks they could be improved upon.

But again, to get back to that performance reporting on contractors, when we follow up, after a series of letters we make personal calls to the district and say the law requires that you file these, - now, on the performance of the contractors they say, well, how do we file, we don't know, the architect is the one who worked with them, we don't know how they performed. Well, as Mr. Scrimenti just said, I mean, many times they're on the records of the minutes where the architect has complained. We don't seem to be able to get that voluntarily. It becomes almost, you know, a method of extracting it through torture or some other way. I don't know how you do it.

ASSEMBLYMAN EWING: Well, do you feel the county superintendent should be notified when a district is starting to plan?

DR. SPARE: I think that's most important.

ASSEMBLYMAN EWING: I would think so but --

DR. SPARE: Yes. We always advise school districts when we have conferences or workshops or anything, we always tell them this is the starting point, because he can contact the State Department of Education for the resource people that they may want, if they want any, to help them in the planning process.

ASSEMBLYMAN EWING: Now, in talking to the gentlemen from East Windsor at lunchtime, the geodesic dome and things, and the way they went about doing their job down there, - is this broad knowledge now throughout the State as to how they operated on that particular project?

DR. SPARE: Well, I don't think that was new. I mean, it's been around for years, it just has never been used in New Jersey. The same thing with systems. I think the architects have been aware of systems building for years. I mean, if they saw tremendous advantages to it, I am sure they would utilize it, as Mr. Meyer believes it has a lot of potential and he's utilizing it. Now the results, as he

continues, to see whether it achieves what he hopes it will, is another thing which we have to wait till the future to find out.

In some of the systems approaches - and it happens that I'm going down, next week, to spend the week in the State of Florida to look at the NOVA systems installation and discuss with the people in Tallahassee, in the State Department of Education, their reaction to what they have achieved, because a lot of things get a lot of publicity and advertising but when you check into them they are not always - only the good points are put forward, you have to find out what the deficiencies are for yourself. And this the Commissioner asked me to do because of his involvement. The majority of the cost, incidentally, is coming from the Ford Foundation, EFL, and not from the State.

ASSEMBLYMAN EWING: Yes, but you say what East Windsor has done or the general method they used in getting it done has not been used in the State but elsewhere. But I think it has brought to the people's attention in the State that it might alert them to look further.

DR. SPARE: The question is whether that is everything that's it claimed to be. We're primarily talking about a quality building at a reduced cost. I'm not sure that the geodesic dome has done more than any other type of construction would have done. If you go in and look at the building and examine it, I mean, you have to evaluate the caliber and quality of the construction against some other type of construction. You could have built it cheaper, I'm certain, if you wanted to. You could have built it more expensively too, still using the geodesic dome. That's only one form of covering over the roof. Right now they are exploring a lot of things. The EFL, the Educational Facilities Laboratory, is right now very much interested in inflated structures. We've had those around for a number of years in the country, the nylon type of covering inflated air supported. And recently DuPont has done a lot of teflon

type of covering. In the World Fair in Tokyo the American building there, the United States building, was a partially air supported glass fiber roofing which presents a different type of potential. And all of these are things which, unfortunately, no one to my knowledge is exploring outside of some of the foundations and some associations who are doing it on a very limited basis. I don't think anyone has really cracked down on how we can build buildings more inexpensively. Of course, the problem of labor is always something that I don't think, as a State Department of Education, we're able to do much about.

ASSEMBLYMAN EWING: What is your feeling on the statute about the prevailing wage?

DR. SPARE: Well, I think I would have to say I have mixed feelings with it. Certainly it achieves some things which I think basically the purpose of it was to prevent people from being forced to work at slave labor in bad times, when the economy is bad and they need a job and they're willing to work for less than what a union price would be or whatever the established fee is in that particular field.

However, as mentioned before, with the constant upward swing in wage rates for the mechanical trades and other unions in the construction field, the generally prevailing wage seems to almost parallel what the unions are requiring. So it may be that everytime we get that cycle again the prevailing wage will go up. And certainly in certain areas of the State it's almost impossible to do anything that's non-union, even if they wanted to. So it does control the price.

ASSEMBLYMAN EWING: What is the first step when a school district does plan a new school? Do they send you schematic drawings first?

DR. SPARE: That's the first stage that we're involved in, unless in some cases - and we have an increasing number of those - school districts, when they're starting they will

call the county superintendent or our office and say, we're planning a building, can we have a planning conference just to sit down and generally discuss what steps we should take.

We also have a number of architects who, when they are hired to do a job, recommend to the board, first, let's sit down with the State Department of Education, the Facilities Planning Bureau or the county superintendent or persons involved and have a round table discussion as to what we should be alerted to, what are the things that we should be doing, how can we do the job better, and this has been increasing. We're getting more requests in advance of anything. But technically and still in the majority of cases, the first time we ever know that the school district is doing anything is when they submit the schematic plan to us.

ASSEMBLYMAN EWING: At that time there is not too much money involved in the schematic planning, or is there?

DR. SPARE: They have established the cost. Part of the submission of the schematic plan is the cost estimate, what the whole project will cost.

ASSEMBLYMAN EWING: But I mean, the time and money that they have involved in it is not that tremendous, is it?

DR. SPARE: No.

ASSEMBLYMAN EWING: Then when you get schematic plans, sometimes do you say no, this is ridiculous on the overall maintenance problem, etc.?

DR. SPARE: No, because at that stage we don't know what materials are going to be used. All we're talking about now --

ASSEMBLYMAN EWING: Well, I'm thinking more - I don't know whether I'm using the right words or not but more of the campus style, where they have different buildings and corridors connecting them, etc.

DR. SPARE: Well, yes, we examine the plan to see if there is an excess amount of space used for circulation

that could better be used for educational purposes, or if there are any wasteful ideas. I mean there are certain things that over the years - many years ago they used to always design an auditorium with dressing rooms in the back, one for boys and one for girls, with toilet facilities and sinks and everything, and over a period of years we constantly would try to discourage them from doing any such thing because they would use them a half dozen times a year at most. At the end of a year or two, they would temporarily use them for storage and then they got so filled they didn't want to use the stuff. So all this expensive construction really became a storage room, with air conditioning and ventilation in it, and we would say for dressing rooms you could very well use one of the classrooms across the corridor, and toilet facilities are designed to be placed near the auditorium anyhow.

ASSEMBLYMAN EWING: But they can still go ahead and do what they want to.

DR. SPARE: Oh, yes, they can do whatever they want. But generally they will listen to you. And I say this, the administration, generally, of school districts are very receptive to anything that they think makes sense. And the architects have been increasingly helping us in the battle because they fight at the local level, despite the fact that probably their relationship is jeopardized by saying that "we think this is the wrong thing to do, now you can check with the State Department but we believe that this should be this way instead." And it helps. I think we're getting better schools, we're getting less waste space in schools than we used to have. Actually, we figure there was a time, not too many years ago, when they would figure out the total number of instructional areas they would need and the square footage and they'd get that all totaled up, with the offices and everything they needed, and then they would add 40% which would include toilet rooms, storage and

circulation corridors. The architects have worked it out now that it's closer to about 25%, in some places 20%, and some of them where they go to open space they've eliminated almost all of the corridors and this square footage is now being used for educational purposes.

ASSEMBLYMAN EWING: When you say open space, do you mean outdoors?

DR. SPARE: No, a building such as the geodesic dome one on which Dr. Hunt was going to testify. There are no corridors inside except the minimum ones coming into the lobby and stairwell. There are no walls inside. People move back and forth. So all the space is used for the children and the educational program. You don't have corridors going from one place to another.

ASSEMBLYMAN EWING: Do you ever go to the extent of writing, you representing the State, saying the plan that has been proposed to us is such that we feel there ought to be changes made?

DR. SPARE: Yes.

ASSEMBLYMAN EWING: Do you write to the boards themselves or do you do it through the architects?

DR. SPARE: No. Well the letter is directed to the architect, he is the man submitting the plan, but the carbon copy of that same letter goes to the superintendent of schools, to the board secretary of that district, and to the county superintendent of schools. So they are all aware of our comments on it.

ASSEMBLYMAN EWING: Right. Who establishes the criteria for the safety and health of the child?

DR. SPARE: Well, that's in the Guide. You mean so far as the building is concerned?

ASSEMBLYMAN EWING: Yes. In other words, how much air, etc.

DR. SPARE: Well that, again, is an evolutionary process from earlier guides in which it's modified in terms of modern days because ten years ago the guide had

no specifications for air conditioning. Anyone who air conditioned a building did it on his own. So today they specify what they should have. So this changes it. The guide in 1967 had nothing about the open space concept so in there it now has a provision, minimum in nature but it still states something about it.

ASSEMBLYMAN EWING: Yes, but what I don't understand, as I gather we have many, many very old buildings in the State and they are still educating children. Do you have concrete facts to show that children coming out of those old, old buildings are not educated to the level they should be because they are not getting the light and the air, etc. that are now in the minimum standards?

DR. SPARE: No. I don't think anyone could validate that and it may not be true at all. But I think some of these things are almost empirical from our own experiences. For instance, we feel that we can work on a hot day better in an air conditioned office than if we're perspiring and felt uncomfortable. And whether children can learn better under this situation, or not, is questionable, but it seems to make sense. The same thing with the light level. If you try to read by a poor lamp, you may learn as much - the kid may learn as much until he's 20 or 25 years of age but then it may affect his eyesight thereafter. These are some of the things. And some of the things with health in it is the fact that a child must be within 120 foot of some way of getting out of the building. Now, who established that originally, I don't know. Maybe 150 feet would be just as good, or maybe it should be 80 feet instead. But someplace a cutoff was established by persons who were involved in national standards which said for safety things these things should be done. And the same thing - the guide says you cannot have a deadend corridor where somebody would in an emergency rush down to the end and find that the corridor has no way out and then he has to retrace his steps in maybe smoke or fire in order to get out. These are some

of the things which a private school in the State of New Jersey does not have to adhere to these standards of the State. They may have such things which you may be able to construct cheaper because you don't have as many doors getting out and you don't have the fireproof stairwells that are required, if it's a multistory building. Some of these are things that are involved in the safety.

The same thing, for instance, with toilet rooms. The guide requires an impervious floor of some kind so that you don't have odors permeating or soaking into the cement floor. Now a private school doesn't have to do that if it doesn't want to. And you can do it cheaper. You don't have to have mechanical ventilation exhausting in the toilet rooms or bringing fresh air in. You can save money if you don't have that.

So it is possible to build a school, a private school or a nonpublic school in New Jersey, at reduced rates if you want to make these sacrifices, if you think they're sacrifices. I think, though, that most of the private schools do try to follow regulations in many cases, or as close as possible.

ASSEMBLYMAN EWING: Well, the standards that have been set up in New Jersey, in the book here, how do they compare with other states?

DR. SPARE: Well, I think generally, as far as I have been able to gather at the national sessions, our code is considered about the best. At one time we had, I think, seven different universities that were using this in their graduate courses in school plant planning as the text or as a model of it. And the other things that we developed - we developed two years ago, last year, a school capacity bulletin which enabled districts to figure out what the capacity of their building is based on the different rooms that they have, and so forth, and the size of them. And we had two states that requested permission to reprint it exactly as it is and use it for their own state department standards. And

actually, we had a call yesterday from the State of Florida which wanted information of this kind and they contacted the New York State Department of Education and they said we were the only state in the country that had this.

ASSEMBLYMAN EWING: The capacity?

DR. SPARE: Yes. And this helps in the planning of a building.

ASSEMBLYMAN EWING: Do you have any requirements or do you make sure in going over the plans that the specifications are not geared for only one manufacturer to bid on an item or a system or something?

DR. SPARE: Yes, the guide review men are very particular about that.

ASSEMBLYMAN EWING: How big a staff do you actually have over there?

DR. SPARE: Well, we have diversification of three different operations. We have four educational consultants who are of the advisory nature without any authority, but they are reviewing the plans and telling them that this could be done better, or that, and so forth and so on, and trying by persuasion to get them to do what we believe is the better thing, if they see something is wrong.

We have four architectural review men who review plans to see that they comply with the guide. That's at the preliminary and final stages. They are not involved in the educational adequacy. The educational approval has been granted first at the schematic level. And then we have a man who is involved in the classification of contractors which is also part of our Bureau operation. Then we have an assistant director and an architectural supervisor and secretarial staff, with a total staff of 20 including the Director.

ASSEMBLYMAN EWING: Well, what was this one position in the budget? There was another person you wanted, wasn't there?

DR. SPARE: We have a problem in reviewing the plans, the final plans particularly, when they're getting them ready to go out for bid, in which there had been delays, undue delays at times, because of the pressure of the number of plans coming in at one time. There is no even distribution, you know, over the year. Sometimes you get a lot at one time and what happens is, a plan comes in and it may have been four or five or six weeks, or at one time, seven or eight years ago back, we were at a stage where it was twelve weeks before a reviewer would even pick up a plan to look at it. And with four men doing it, if you get a large high school, a man may work two or three weeks on one single plan because he has to check every specification of hardware, width of corridors, ceiling height, the type of fixture, whether it provides the lighting requirements, and the ventilation and other things of this nature.

Now we had at one time seventeen final plans come in on one day. This suddenly jams you up. So we had calculated - at different times we had men working overtime and we pay them of course, according to State rules, time and a half for that work plus for their evening meal, and the men don't want to do it because it is close work and they are working a full day on it and it's very tiring to work two or three nights overtime on this thing. We had calculated that we could save - again, as Mr. Scrimenti mentioned, if you're talking about a 1% escalation in cost per month, for each month that we got the plans out sooner we would be able to save the district 1% of the total cost of the project, and we felt that with one additional plan reviewer we would have a better control of this situation. And on our documentation we estimated that we could save at least three-quarters of a million to one-half million a year to the local taxpayer at a cost of \$15,000 to the State. But, as you know, it was knocked out of the budget.

ASSEMBLYMAN EWING: Well, I think it probably wasn't presented properly to the Appropriations Committee or the

people and nobody really fought for it. Because if you could document the saving, it seems incredible. That's why we were so annoyed on the floor of this House that the bill for having prepared plans made up, the fiscal note was around \$2 million, yet the Assembly approved that but the other people had cut out the \$15,000.

DR. SPARE: Never question the wisdom of a legislator.

ASSEMBLYMAN EWING: What is your general feeling on the leasing situation?

DR. SPARE: I think it has a lot of potential. I think we have a lot of bugs in it because, as mentioned previously in other testimony, we would have to change, I think, some related laws to it because, under the way it exists now, first of all, there's no competitive bidding. I'm certain that maybe some of these schools that they contract for under leasing might be able to be obtained at less cost with competitive bidding. Another thing is that we have no way of inspecting these buildings because most of them we've had have been built at the factory, brought in on trailers and just assembled. We can't get into the wall to see whether the wiring is according to the plan which we approved, whether the utilities - if they specify copper piping, whether it has copper piping. There is no way of checking these things. And I think that presents a problem.

ASSEMBLYMAN EWING: Excuse me, just a minute, for interrupting. Lease buildings they also build without having them prefabricated, don't they?

DR. SPARE: We've had a few of those, yes, and those have been inspected with the exception of one, which you may be aware of, which was a little bit of a problem. It may be an excellent building but we have no way of knowing. Only time will tell whether it will stand up, whether they're going to have problems with the wiring or plumbing or other things.

But leasing has a lot of potential. But I think with

A-477, it may present a problem because, as I think Mr. Corda indicated today, he was questioning the fact that when you lease - and he puts the annual cost in his 800 account as part of the operational cost, and he questions the decision of the Division of Local Finance which said that this must be, in essence, estimated in their capital responsibility of debt payment because actually the system has to pay for it whether it's a lease or whether it's a capital project. And the ability of a district to pay for it should be part of the consideration. If they get too far into debt, because the law allows them to, we may have some problems. And under A-477, I don't see any provision for that because they need no approval except maybe - what it says, approval of State Department of Education, that might mean the approval of plans. I'm not quite certain what it means. But it doesn't allow for local finance in there.

But, of course, as far as leasing is concerned, you know the same building they're purchasing now under a bonding issue could just as well be leased. I mean, they could have it approved that way for leasing, in payment that way, the same way. Actually, we had one school district which just a few months ago went through a referendum to buy and to bond for a school which they really intend to acquire through five years of leasing. But what they are doing under the amended laws, they don't have to sell their bonds for five years. So they are going to get temporary financing from a local bank and pay it out in five annual installments and they'll never have to sell their bonds. So, in essence, they are leasing. There are all kinds of ingenious methods for doing this.

ASSEMBLYMAN EWING: But then the taxpayers of that community are paying for a school in five years time.

DR. SPARE: Right. This is the same thing as the short-term leasing. The tax impact, as we mentioned before, is much greater. And right now - I haven't heard any of

the citizens objecting but I would think they would. I think I would if I were involved in a district that did it.

ASSEMBLYMAN EWING: Well, if you planned to live there the rest of your life, you wouldn't because it's going to cost the community less, I would imagine.

DR. SPARE: If I were a little younger.

ASSEMBLYMAN EWING: Yes, but up in Parsippany-Troy that's the one I was talking about. I think it's Parsippany-Troy.

DR. SPARE: Hopatcong.

ASSEMBLYMAN EWING: Hopatcong. There they put up the building and didn't have any purchase agreement on it. Right?

DR. SPARE: They had a lease.

ASSEMBLYMAN EWING: A lease of five years but nothing to do about the purchase.

DR. SPARE: No. But we've told them in the past and I think they can overcome that easily enough, I think, if their board attorney would phrase the contract in such a way that at the end of the five years it would be donated to the school board as a gift instead of having to purchase it for \$1.00. Then the school board just has to pass a resolution accepting the gift.

ASSEMBLYMAN EWING: Yes, but they still circumvented the voters though.

DR. SPARE: Yes. And then again, there was no prevailing wage involved there.

ASSEMBLYMAN EWING: And that's why they got it for so much less.

DR. SPARE: Well, actually, the cost wasn't. That's the amazing thing.

ASSEMBLYMAN EWING: It wasn't?

DR. SPARE: No. Of course, they've argued the point with us but I don't see any material reduction, really.

ASSEMBLYMAN EWING: Well certainly the time element was there.

DR. SPARE: Right. Actually, that same school district came in yesterday. We had a conference and a very amicable discussion. They want to put up a new building and they said they wanted to be sure that they followed the laws completely. And I think as a result of our workshop in Cherry Hill they found out the same thing was done by two other districts, what they did, following all the required procedures, plans approved and everything involved, and the time element of construction was approximately the same. So it can be done that way just as well.

ASSEMBLYMAN EWING: Well, isn't it a fact they are building another school already, aren't they, that isn't ready yet?

DR. SPARE: Yes. They're having some problems. They started with that in 1965 and it's not finished yet. So this one didn't work out so well.

ASSEMBLYMAN EWING: Well, do you get many boards coming down and arguing about certain requirements that they do not feel are necessary?

DR. SPARE: No, we don't. We have situations where there have been honest differences of opinion in interpretation of part of the guide and we've always seemed to be able to resolve it. I don't know of any situation - of course, I think Mr. Scrimenti testified -- of course, he made it easier for us because whenever he ran into conflict he just said, okay, I won't do it the other way, instead of appealing it. Of course, if he had, maybe we would have made changes in the guide as a result, if we find out we're wrong, because we are modifying it constantly through the Guide Advisory Committee.

ASSEMBLYMAN EWING: What do you think of this idea of a board of appeals? It has come up several times today.

DR. SPARE: Well, the idea, per se, seems to be excellent except under the Administrative Procedures Act you have an appeal situation now and I don't know whether a board of appeals would work any quicker just because it

has that title. And the recommendation of what the composition of that board of appeals should be is almost identical to what our Guide Advisory Committee is now. And when there is an appeal, we present it to them and ask for an opinion before we move farther with it. So I think the procedure is there already.

ASSEMBLYMAN EWING: How often does the advisory group meet?

DR. SPARE: Technically we're supposed to meet four times a year. They've been eager beavers and they've been meeting about once a month and the subcommittees are meeting every couple of weeks. And whenever an emergency comes up, they are more than willing to meet. I don't think that's a problem. Of course, maybe an established board of appeals which would have a regular, for instance, monthly meeting, such as the State Board of Education, or a weekly meeting like the Division of Local Finance has, would certainly expedite any complaint. And I think that is where the advantage would be. But as far as I have been able to see, I have never run into any problems that we couldn't resolve right in the Bureau, with some very few exceptions.

ASSEMBLYMAN EWING: Is it a very strict procedure, before the plans are okayed, that allowances are made for expansion of various facilities?

DR. SPARE: That we fund?

ASSEMBLYMAN EWING: That expansion is allowed - I mean, that they make provisions for expansion of various facilities such as the library or such as --

DR. SPARE: We recommend it constantly. They don't always follow it but we always try to tell them, don't box yourself in with anything that may have to be changed in the future, such as core facilities such as a library or cafeteria or something which is put in the center of a building and surrounded by other things so that it can't be expanded. This is not really a problem because most of the architects are aware of this. Of course, where a

local district insists on a certain arrangement, of course the architect satisfies his client despite the fact that he believes it to be wrong or that we argue against it. But we have no control or authority to make them change it.

ASSEMBLYMAN EWING: What do you think of the School Board's idea for the handicapped child being located only in certain buildings rather than have them incorporated in every building?

DR. SPARE: Well, I think this is a controversial area. But talk about a student who breaks his leg who is going to be in a cast for six weeks, are you going to then transfer him to another school because of that? As Mr. Scrimenti mentioned, I think the only problem of cost is an elevator in a multi-story building and then I would say that the great majority of the multi-story buildings that have been built in recent years have an elevator anyhow. Because, for movement of equipment and supplies and other things, it's a tremendous saving of personnel time and effort.

ASSEMBLYMAN EWING: Undoubtedly if they didn't, they would make it a negotiating item. You know, they don't want to step more than one foot out of the way.

Then your feeling is that generally the handicapped should be provided for in any of the buildings that are put up.

DR. SPARE: I think so. I think the cost involved, as Mr. Thomas said and Mr. Scrimenti, is so minimal when you're planning a building - and this isn't retroactive to existing buildings. And how many buildings does a school normally build? There aren't many Willingboros, I mean, that are constantly building. I know Mr. Corda has a problem.

ASSEMBLYMAN EWING: Do you have any feelings on the single contract or the multiple contract? Let me ask one question. Were you an architect before or in construction?

DR. SPARE: No. I have been an educator all my life but previous to coming with the State, 15 years ago, in this capacity, I was on the faculty at Rutgers University in the Division of Field Studies and Research in which we did facilities planning studies on contract for school districts. So I was also involved in the same kind of work. I'm strictly involved in the educational end of it, although I have to say I've absorbed a lot over the years in different fields through the help of architects and engineers and construction men. And we have a few men in our office who have actually been in the construction fields themselves.

On the multiple and single bid I, for years, always maintained that I thought the multiple bidding would be the most economical but, in face of all the opposition I've been getting in different State agencies, who are saying that the single overall is cheaper, - on our last comment on the bill we said that in essence we were willing to go either way. But, as mentioned here earlier, someone said we don't have a person who is in general charge of the total construction. But it was recommended that it be assigned to the general contractor. Well, I am sure if he's going to have that responsibility, he's going to want some more money or a percentage of the total for supervision alone. So I don't see it as a reduction.

ASSEMBLYMAN EWING: Well, if you don't have the multiple bids and then assign them to the general contractor, he goes out and gets the bids himself.

DR. SPARE: Yes, if it worked out that way. I think the problem of the identity of the individual mechanical trade person will represent a problem for years. It's only if you get the firms like McShane or McCloskey who have all their own trades working for them on a permanent basis. These would be probably the only people who would be bidding, I would think, until this other situation straightened out. So maybe we'd be creating a

monopoly for a temporary period. Although, in the long run, I think the only way is to find out.

Now about six months ago I got a call from the President of the Delaware State Board of Education where they have single overall contract only and their costs there were running about 30% more than in New Jersey. They wanted to get information. They wanted to switch to the multiple contract. So I don't know whether it's just a local situation. Some people down there had informally asserted to me, whether true or not, that it became a sort of rotation in which contractors would take turns. Of course, that's hearsay.

ASSEMBLYMAN EWING: Thank you very much.

DR. SPARE: Thank you for hearing me

ASSEMBLYMAN EWING: Are there any other individuals who wish to make a statement? (No response)

Well, thank you very much for attending.

We will close the hearing.

(Hearing concluded)

EAST WINDSOR REGIONAL SCHOOL DISTRICT

HIGHTSTOWN, NEW JERSEY 08520

Telephone 448-4840
Area Code 609

A STATEMENT PREPARED FOR THE PUBLIC HEARING OF THE ASSEMBLY COMMITTEE ON EDUCATION ON ASSEMBLY BILL NO. 477

I am John Hunt, Superintendent of Schools in the East Windsor Regional School District in East Windsor, New Jersey. With me today is Mr. Henry G. P. Coates, Attorney at Law, member of the firm of Turp, Coates, Essl and Driggers, and Board Attorney to the East Windsor Regional School District.

We appreciate the opportunity to present our thinking on the proposed legislation concerning certain aspects of school building construction, leasing and funding. We come before this committee to share with the committee our experiences in regard to the current applicable law and to present some suggestions concerning Assembly Bill 477. I shall take a few minutes to relate our experiences in the law as it exists, and then Mr. Coates will speak to the proposed legislation.

Let me begin by locating and describing for the committee very quickly the East Windsor Regional School District. The district is located here in Mercer County in the northeast corner, approximately half way between Freehold and Princeton. It is a K through 12 district of 4200 students serving five municipalities in three counties. The 12,000 residents of the Township of East Windsor and the 6,000 residents of the Borough of Hightstown are the owners, so to speak, of the district, and we receive by contract a total of about 400 students from the municipalities of Cranbury, Monroe and Roosevelt.

In less than a decade, the enrollment in the East Windsor School District has quadrupled, and in less than the next decade it is expected to quadruple again. East Windsor has one of the highest rates of growth in the State. Under construction in the district is the first planned unit development in New Jersey, Twin Rivers; this alone will add upwards of 10,000 people to the district during the next three years. It is now nearing the half-way point in completion. The equalized value per child in the district is about \$28,000. per child, slightly below the State average and holding. Through the end of 1969 the school district had been laboring to its fullest to construct school facilities which kept its capacities up with the burgeoning growth. To do this, the district consumed all of its bonding limit. With the advent of the planned unit development, the district found itself in a situation where it was in need of additional school capacities almost immediately and yet was beyond its debt limit. In addition, the State had already ~~the~~ provided the school district with assistance through its Emergency State Building Aid Program. The community therefore had a problem which can simply be stated. The school district needed more building capacity and yet had no money with which to build, and no time to wait. Without entering into the innumerable discussions, planning problems, etc., involved, suffice it to say that essentially a solution was found which accomplished the occupancy of a school building for 300-360 students, grades 3-5, in November of 1970. The Board of Education, the municipal Planning Board and the developer began their discussions in October of 1969, reached agreement in April of 1970, construction began immediately, and within six months the students were attending school in their building, the Ethel McKnight School.

The agreement reached called for the developer to build a building designed by the Board's Architect, approved by the State Department of Education's Facilities and Planning Service. It was further stipulated that

the funds to construct the building would be borrowed by the developer and that the Board would lease the building at a rate which essentially covered the interest charges on the funds borrowed by the builder. In addition, the agreement called for the Board's Auditor to audit the books of the developer to ascertain the exact amounts expended on the building and to insure prices which were arrived at through a process as nearly approximating public bid taking as possible in a private sector. With all these prerequisites accomplished, the Board entered into a one-year agreement with the developer expressing an intent if possible to continue the agreement one year at a time for a maximum of five years if necessary and ultimately to buy the building through bond referendum. The Board went to the public after receiving the approval from the Department of Community Affairs with the ²⁻¹⁰⁻⁵⁷ question in March ~~to accumulate further debt~~ for the purposes of purchasing this building. The community approved the bond referendum by a substantial margin on March 30, and we are now in the process of selling the bonds so that, at the end of the first year of leasing, the Board will buy the building.

As the committee can see, there are any number of essential ingredients involved in the solution in this particular case; first and foremost essential ingredient was a Board of Education which was facing forward and determined to maintain the high caliber of education provided in the district in the face of rapid growth. Secondly, an essential ingredient was a municipal Planning Board which stood together with the Board of Education in the general intent to insure the overall quality and caliber of the community in the years to come for all of its citizens. An essential ingredient, and one on which we rely heavily, was the assistance and advice throughout ~~the vast stages~~ of the State Department of Education's Facilities and Planning Services. In addition, an ingredient of essential nature is a developer

who realizes that he accrues a community-wide responsibility in any community which grants approval for his construction proposals. And also I should add that it is necessary to have an architect for the Board who sees his purpose clearly as getting his client the very most building for the very least dollar in the shortest amount of time. It was also a very necessary ingredient that there were financial and banking organizations within the community who perceived their commitment to the community and their need to assist and to join in helping the community achieve its perceived needs. And finally, an Attorney for the Board who approaches the law from the principle that the laws were written by and for the assistance of the governed, and I am indeed pleased to say that I have had the honor of associating with Mr. Henry Coates, East Windsor Regional Board Attorney, throughout this work. I am pleased to present to this committee Mr. Henry G. P. Coates who will speak to the specific legislation, Assembly Bill 477, which is before this committee. Following Mr. Coates words, we would be delighted to attempt to answer any questions which your committee might have.

LAW OFFICES

TURP, COATES, ESSL AND DRIGGERS

169 SOUTH MAIN STREET

HIGHTSTOWN, NEW JERSEY 08520

JAMES S TURP (RETIRED)
HENRY G P COATES
KARL G ESSL (448-0035)
DONALD S DRIGGERS

TELEPHONE 448-0016
AREA CODE 609

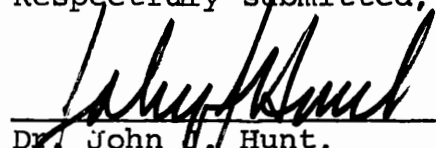
May 12, 1971

TO THE COMMITTEE ON EDUCATION:

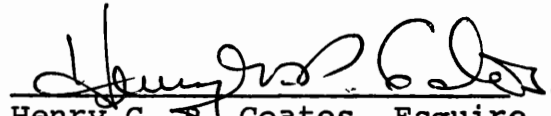
The following language is suggested for consideration in lieu of the proposed language of sub-paragraph (c) of Assembly Bill No. 477, introduced January 29, 1970 by Assemblyman McDonough, and referred to the Committee on Education:

(c) May lease, in case of emergency, a building or structure for use for school purposes whether or not such building or structure is located on district-owned land; provided that the building, or structure, and site, as the case may be, have been approved by the State Department of Education; and provided that the lease shall not extend beyond five years. Said lease may contain a provision to purchase the building or structure, if it is re-locatable, or to purchase the site with the building thereon, at the option of the local Board of Education, subject to approval of the Division of Finance of the Department of Community Affairs, if required by law. An emergency is defined as existing when a school district exceeds its debt limit, or when the operating student capacities, as established by the District, are, or within the next two years, are projected to be, exceeded in practice by more than twenty per cent.

Respectfully submitted,



Dr. John J. Hunt,
Superintendent, East Windsor
Regional School District



Henry G. P. Coates, Esquire,
School Board Attorney, East
Windsor Regional School District

