READING HIGH SCHOOL
Renovation & Addition
Reading, MA

SCHEMATIC DESIGN COST ESTIMATE
6-Jan-03

HF&G
ATKINS
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INTRODUCTION

This Schematic Design Cost Estimate was produced from drawings, specifications and other documentation dated December 18, 2002 prepared by Flansburgh Associates and their design team and forwarded to Atkins Hanscomb Faithful & Gould (formally known as Hanscomb Inc) on the same date. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate is based upon the measurement of quantities where possible. For the remainder, parametric measurements were used in conjunction with references from similar projects recently estimated by Atkins HF&G

BASIS FOR PRICING

This estimate reflects the fair construction value for the construction of this project and should not be construed as a prediction of low bid. Prices are based on probable local prevailing union wage construction costs at the time the estimate was prepared, however an escalation line item is included to project the current costs to the projected construction start approximately 12 months from the date of this report. Pricing assumes a procurement process with competitive bidding for every portion of the construction work, which is to mean a minimum of 4 bids including for all subcontractors and materials/equipment suppliers. If fewer bids are solicited or received, prices can be expected to be higher. **Please note that this estimate assumed**

Subcontractor's markups have been included in each line item unit price. Markups cover the cost of field overhead, home office overhead and subcontractor's profit. Subcontractor's markups typically range from 5% to 15% of the unit price depending on market conditions.

General Contractor's general conditions' cost is calculated on a percentage basis. General Contractor's overhead and fees is based on a percentage of the total direct (trade) costs plus general conditions, and covers the contractor's bond, insurance, site office overheads, building permit applications, and profit.

Unless identified otherwise, the cost of such items as shift premiums, and allowances for temporary occupancy permits, police details or street/sidewalk permits are excluded.

We have included a Design Contingency/Design Reserve percentage to cover cost increases that will occur during design elaboration or unforeseen design issues. As the design develops, the design contingency is reduced, and is eliminated at the final Construction Document estimate.

A Construction Contingency or GMP contingency is excluded from this estimate. However, in finalizing the project budget, it is recommended that the Owner should add a construction contingency to the Total Estimated Construction Cost in anticipation of change orders likely to occur during construction.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- Land acquisition, feasibility, and financing costs
- All professional fees and insurance
- Site or existing conditions surveys investigations costs, including to determine subsoil conditions
- Items identified in the design as Not In Contract (NIC)
- Owner supplied and/or installed items (e.g.. draperies, furniture and equipment)
- Tel/data, security and AV networks, equipment or software (unless identified otherwise)

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- Hazardous materials investigations and abatement
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction or occupancy phasing or off hours' work, (except as noted in this estimate)
- Owners Construction Contingency for scope changes

ITEMS THAT MAY AFFECT THIS ESTIMATE

Such items include, but are not limited to the following:

- Modifications to the scope of work subsequent to the preparation of this estimate
- Unforeseen subsurface conditions
- Incomplete or poorly coordinated final construction documents
- Special requirements for site access, off-hour work or phasing activities
- Restrictive technical specifications, excessive contract or non-competitive bid conditions
- Sole source specifications for materials or products
- Bid approvals delayed beyond the anticipated project schedule
- Market Contingency
- Remote Project Location

STATEMENT OF PROBABLE COST OF CONSTRUCTION

Atkins HF&G requests that the Owner and Architect carefully review this estimate, including all line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation, and markups to ensure that requirements have been correctly identified. If this estimate does not correspond to the Owner's budgetary objectives, Atkins HF&G strongly suggests that evaluations of other design alternatives/project procurement options should be made before proceeding further.

Atkins HF&G has prepared this estimate in accordance with generally accepted principles and practices to reflect the fair market value of the project. This estimate is made on the basis of the experience, qualifications, and the best judgment of professional consultants who are familiar with the construction industry.

However, Atkins HF&G has no control over the method of determining prices adopted by any individual general contractor, subcontractor or supplier. Atkins HF&G cannot control the cost of labor and materials, the bidding environment or other market conditions, and it is not possible to provide any guarantee that proposals, bids, or actual construction costs will not deviate from this or subsequent cost estimates.

Any requests for modifications to this document must be made to Atkins HF&G within ten (10) days of receipt. Otherwise, it will be understood that the contents are fully concurred with and accepted. Notifications of any apparent errors or omissions should be made to Atkins HF&G as soon as they are discovered.

READING HIGH SCHOOL
Renovation & Addition
Reading, MA

3-Jan-03

SCHEMATIC DESIGN COST ESTIMATE

GFA 287,924

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM	*ADDITION*	*RENOVATION*	*FIELDHOUSE*	*BRIDGE*	*SITEWORK*	*TOTAL*
A10	FOUNDATIONS	$616,376	$25,000	$89,565	$17,303		$748,244
A20	BASEMENT CONSTRUCTION	$363,990	$0	$0	$0		$363,990
B10	SUPERSTRUCTURE	$2,772,635	$143,005	$103,200	$164,028		$3,182,868
B20	EXTERIOR CLOSURE	$1,924,108	$343,670	$389,312	$219,840		$2,876,930
B30	ROOFING	$620,649	$248,831	$352,508	$52,938		$1,274,926
C10	INTERIOR CONSTRUCTION	$2,278,384	$1,152,750	$628,570	$26,800		$4,086,504
C20	STAIRCASES	$187,050	$76,395	$2,500	$21,500		$287,445
C30	INTERIOR FINISHES	$1,217,754	$893,424	$789,550	$34,165		$2,934,893
D10	CONVEYING SYSTEMS	$65,650	$20,000	$0	$0		$85,650
D20	PLUMBING	$454,700	$302,595	$388,000	$4,000		$1,149,295
D30	HVAC	$2,818,000	$2,017,300	$1,250,880	$55,275		$6,141,455
D40	FIRE PROTECTION	$427,250	$252,163	$156,360	$9,213		$844,986
D50	ELECTRICAL	$1,960,790	$1,321,332	$806,181	$29,480		$4,117,783
E10	EQUIPMENT	$515,000	$0	$171,500	$0		$686,500
E20	FURNISHINGS	$165,180	$3,106	$7,602	$0		$175,888
F10	SPECIAL CONSTRUCTION	$0	$0	$0	$0		$0
F20	SELECTIVE BUILDING DEMOLITIC	$0	$486,926	$347,356	$16,500		$850,782
G	SITE PREP/DEVELOPMENT	$0	$0	$0	$10,000	$5,352,904	$5,362,904
	TOTAL DIRECT COST (Trade Costs)	***$16,387,516***	***$7,286,497***	***$5,483,084***	***$661,042***	***$5,352,904***	***$35,171,043***
	MARK UP						
	General Conditions/Permit/Insuranc	$1,309,035	$621,789	$439,661	$14,613	$419,244	$2,804,342
	Overhead/Fee/Profit	$796,345	$355,873	$266,524	$30,404	$259,747	$1,708,893
	SUBTOTAL CONSTRUCTION COST	***$18,492,896***	***$8,264,159***	***$6,189,269***	***$706,059***	***$6,031,895***	***$39,684,278***
	POST ESTIMATE AREA REDUCTIONS						
	Area Reduction in New Bar Building (8550 sf	($769,500)					($769,500)
	Reduction in size of Mechanical Area (3000 s	($180,000)					($180,000)
	Reduction in area of existing building to be renovated (6800 sf)		($272,000)				$0 ($272,000)
	Reworked back entry (760 sf)	($38,000)					($38,000)
	REVISED SUBTOTAL CONSTRUCTION C(	***$17,505,396***	***$7,992,159***	***$6,189,269***	***$706,059***	***$6,031,895***	***$38,424,778***
	CONTINGENCIES/ESCALATION						
	Design & Pricing Contingency	in soft costs	in soft costs	in soft costs	in soft costs	in soft costs	$0
	Escalation	$369,858	$247,925	$185,678	$21,182	$180,957	$1,005,600
	Construction Contingency	excluded	excluded	excluded	excluded	excluded	excluded
	TOTAL CONSTRUCTION COST	***$17,875,254***	***$8,240,084***	***$6,374,947***	***$727,241***	***$6,212,852***	***$39,430,378***
	GFA	129,350	93,305	62,844	2,725		287,924
	$/sf	$138.19	$88.31	$101.43	$266.88	#DIV/0!	$136.95

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Atkins HFG

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Reading Memorial High School Study
Project Cost Breakdown
FAI Project Number 2204.00
October 2, 2006

Projected Capacity	1480 Students

COST OF CONSTRUCTION	Option 3		
Item	**Unit**	**S.F.**	**Cost**
Construction			
New Construction	$145	120,000	$17,400,000
Basic Renovation	$70	79,588	$5,571,160
Extensive Renovation	$90	41,471	$3,732,390
Major Renovation	$120	31,493	$3,779,160
(Total Size)		*272,552*	
Phased Construction Cost			
Temporary Facilities			
Sitework: Fields, Parking, & Landscape			$5,100,000
Site Utilities			$800,000
Building Demolition			$1,988,000
Hazardous Materials Abatement			$100,000
Design Contingency			$0
Total			**$38,470,710**
Contingencies			
Estimating Contingency (10%)			$3,847,071
Construction Contingency/ New 5%			$870,000
Construction/Rennovation 10%			$1,308,271
Owner's Contingency/1%			$384,707
A/E Services Contingency @ 5% Fee			$173,118
Total			**$6,583,167**
Design and Engineering Fees			
Architect Fee			$3,462,364
Total			**$3,462,364**
Furniture and Equipment			
Furniture Acquisition @ 1000/student			$1,480,000
Fees and Expenses			$148,000
Total			**$1,628,000**
Computer Technology: Infrastructure & Equipment			
Equipment @ 1200/student			$1,776,000
Infrastructure			$545,104
Fees and Expenses			$177,600
Total			**$2,498,704**
Additional Project Costs			
1 Surveying			$55,000
2 Geotech. Cons. + Testing			$20,000
3 Civil Engineering/Landscape			$200,000
4 Food Service			$40,000
5 Acoustics			$12,000
6 Cost Estimating			$80,000
7 Graphics			$0
8 Testing and Monitoring at Construction			$200,000
9 Bidding Printing, Adendum & Distribution			$100,000
10 Legal			$50,000
11 Reimbursable Expenses - Architect			$0
12 Construction Manager			$680,000
13 Security Consulants			$15,000
14 Environmental Testing			$10,000
15 Enviromental Impact Report			$0
18 Utility Costs			$10,000
19 Model / Rendering			$25,000
20 Traffic Consultant			$25,000
21 Asbestos Report and Monitoring Services			$65,000
22 Budget / Auditing Services			$0
23 Building Commissioning			$50,000
24 Auditorium/Studio Consultant			$25,000
Total: Additional Project Costs			**$1,662,000**

Total Project Cost	**$54,304,945**
Estimated Amount Reimbursed	$29,465,425
COST TO TOWN	**$24,839,520**

FLANSBURGH ASSOCIATES

November 22, 2002

Dr. Harry Harutunian
Superintendent
Reading Public Schools
82 Oakland Road
Reading, MA 01867

RE: Estimate of SBA Reimbursement for RMHS Project

Dear Harry:

In order to determine the maximum reimbursement by SBA for the high school project, we have calculated the maximum capacity of the project based on classroom counts and an efficiency factor of 85%. As a result of this analysis, the capacity of the proposed building, for planning purposes, is as follows: 1420 high school students and 60 RISE students. This is consistent with our presentation to the School Building Committee.

Based on these enrollments, the following calculations provide our best estimate of the available SBA reimbursement, based on Option 3. Please note that, in calculating this estimate, we are using 2002 reimbursement rates. If SBA increases square foot allowances in 2003, the state's contribution will be larger. However, in order to maintain a conservative posture, we have not assumed any increase.

Square Foot Calculation

	Enrollment	x	SF Allowance	=	Total SF
High School	1420	x	155sf	=	220,100 sf
RISE	60	x	115sf	=	6,900 sf

Plus Allowable Excess

Special Needs (HS and RISE)	6,500 sf
Remedial	3,300 sf
Community Use	2,000 sf
Technology (750 computer stations x 30 sf)	22,500 sf
TOTAL	261,300 sf

Maximum Allowable Reimbursable Construction Cost Calculation

RISE	8,400 sf	x	$173	= $1,443,200
HS	252,900 sf	x	$195	= $49,315,500

Maximum Reimbursable $50,758,700

Architecture
Master Planning
Programming
Interior Design

Principals
David S. Soleau, AIA
Alan S. Ross, AIA
Duncan P. McClelland, AIA
Sidney R. Bowen, III

Chairman
Earl R. Flansburgh, FAIA, NA

Senior Associates
Samuel Bird, AIA
Jorge M. Cruz, AIA
Rose M. Fiore, Assoc. AIA

Associates
Valerie M. Curtis
David R. DeFilippo, AIA
Vincent E.J. Dubé, AIA
James A. Higham, AIA
Peter W. Lambert
Thomas J. Mueller, AIA
Dominic I. Pedulla, Assoc. AIA
Robert E. Peirce, AIA
James B. Williams, Jr., AIA

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The renovation and addition option selected by the School Building Committee would be reimbursable at the rate of 58.05% up to the maximum amount. The following is a comparison of estimated Total Project Cost and the part of the total for which Reading would be responsible. The figures do not include interest.

Total Project Cost	SBA Reimbursement	Town of Reading Cost
$53,917,745	$29,465,425	$24,452,320

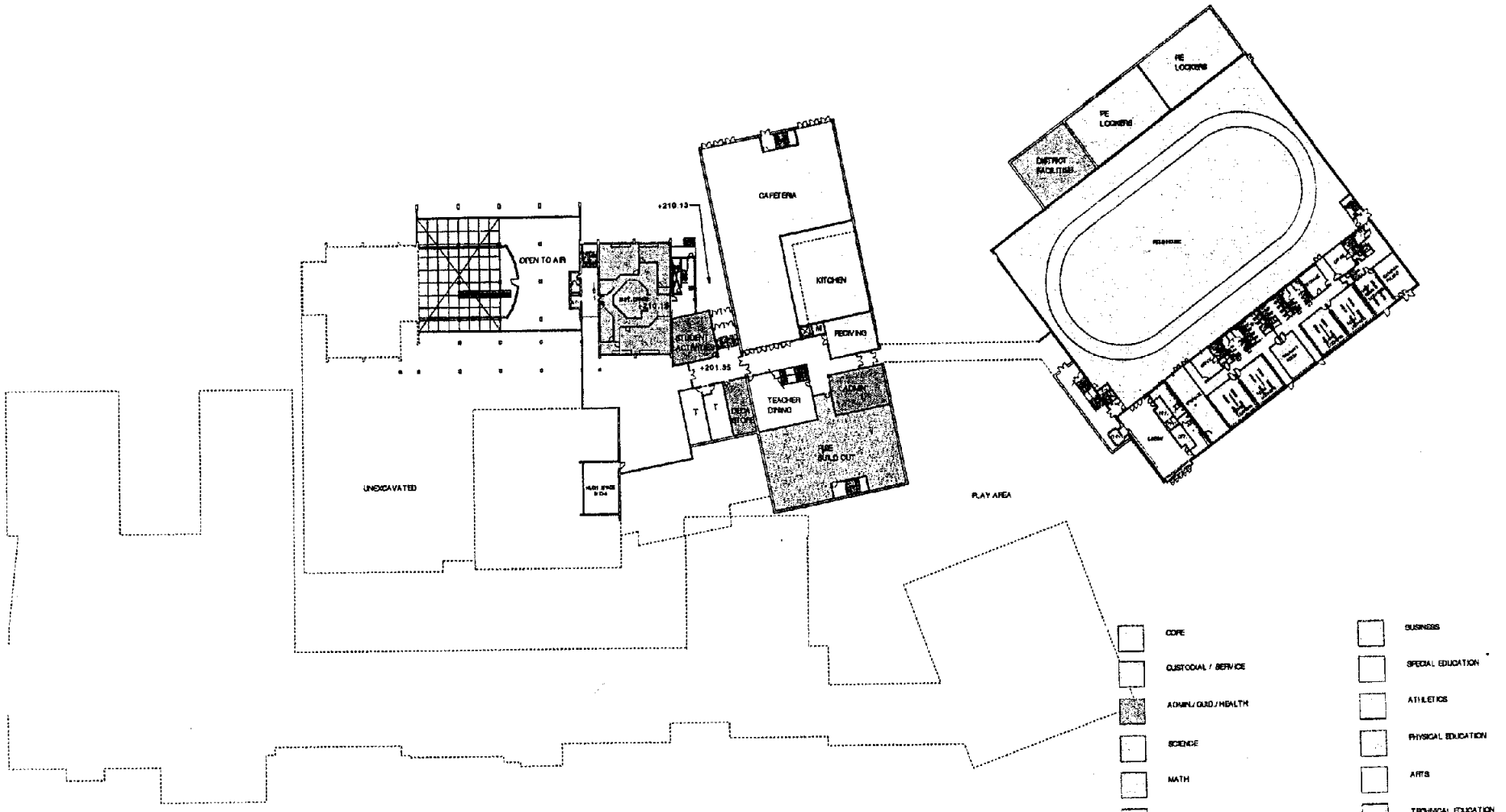
Sincerely,

FLANSBURGH ASSOCIATES, INC.

Sidney R. Bowen III
Principal

Cc Beth Klepeis, Town of Reading

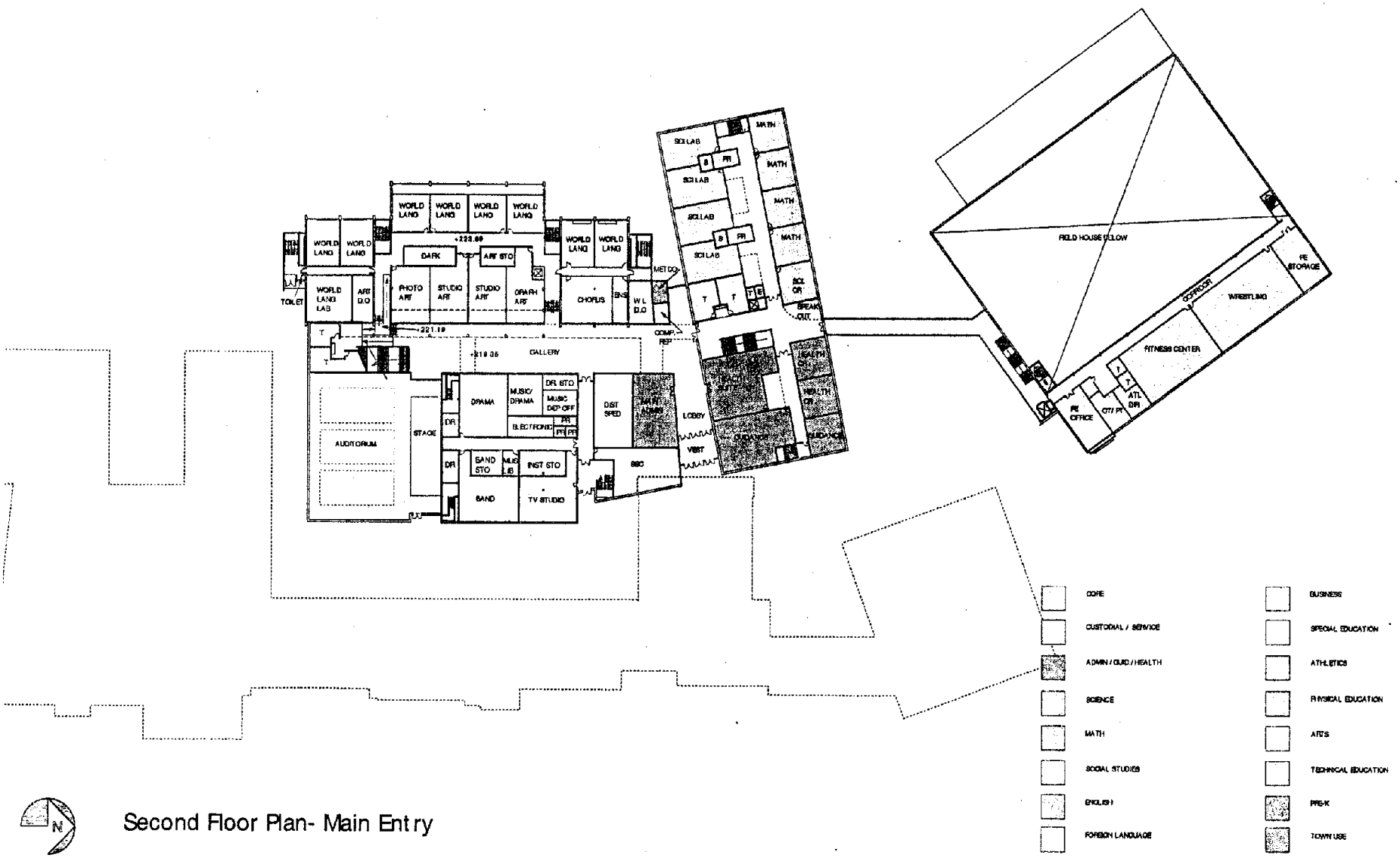
2002/112202/srb



First Floor Plan

Reading Memorial High School
Schematic Design Floor Plans
JANUARY 08, 2003

FLANSBURGH ASSOCIATES
77 North Washington Street
Boston, Massachusetts 02114



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Second Floor Plan- Main Entry

Reading Memorial High School
Schematic Design Floor Plans
JANUARY 08, 2003

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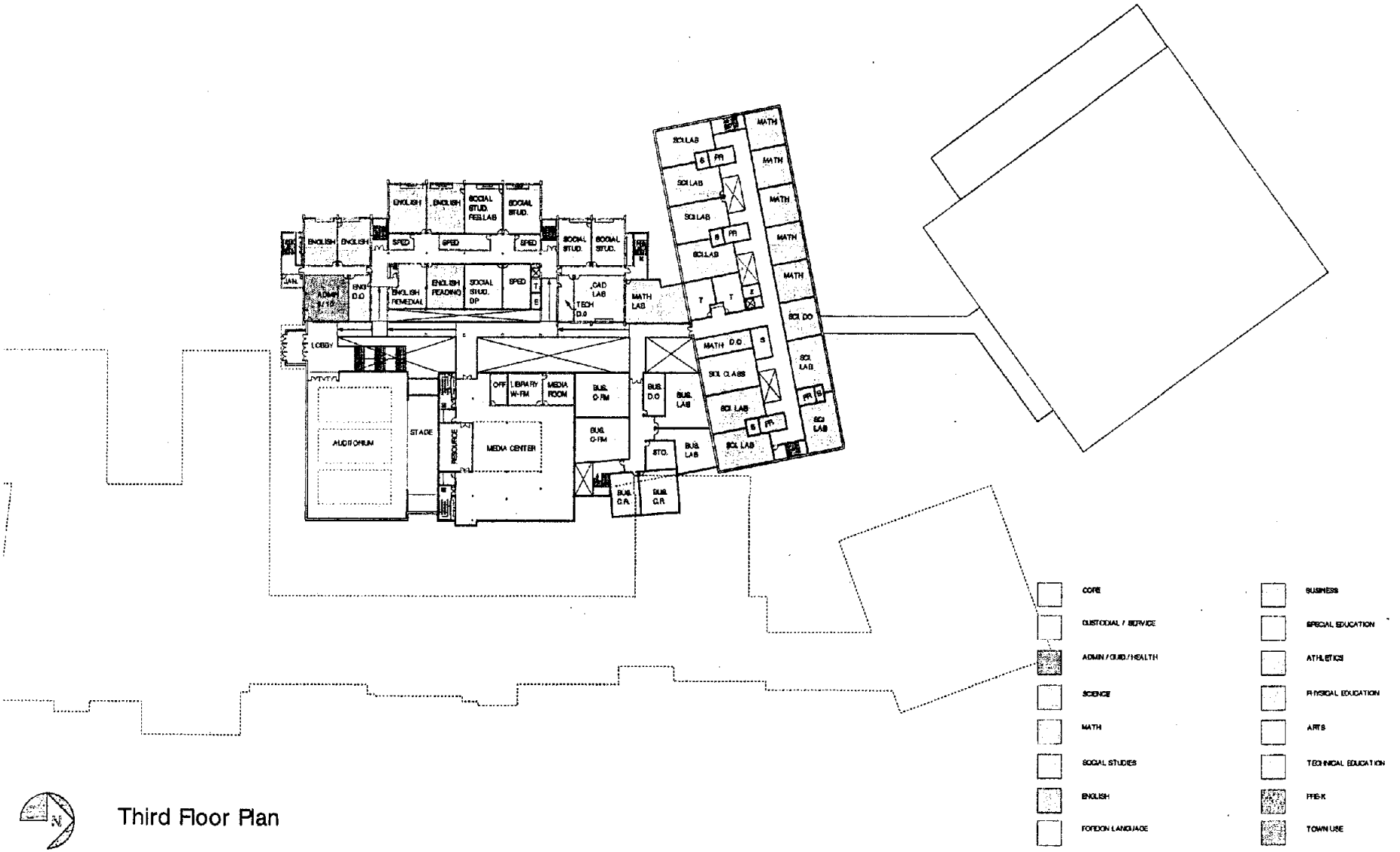
77 North Washington Street
Boston, Massachusetts 02114



Third Floor Plan

Reading Memorial High School
Schematic Design Floor Plans
JANUARY 08, 2003

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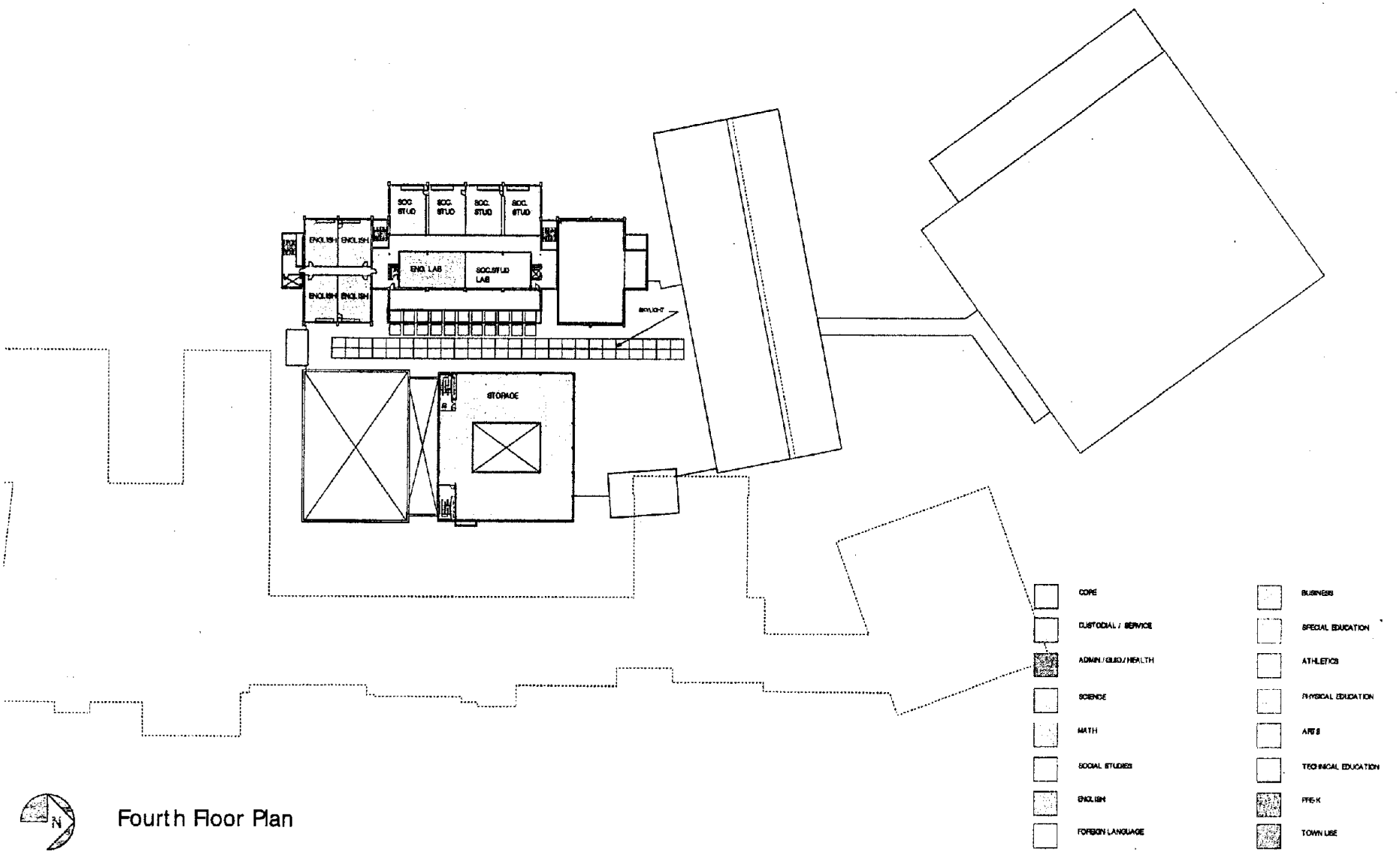
Boston, Massachusetts 02114



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Fourth Floor Plan

Reading Memorial High School
Schematic Design Floor Plans
JANUARY 08, 2003

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Boston, Massachusetts 02114