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Space Needs Assessment



City of Dover
Dover, New Hampshire

AGA Project No. 07-533
12 July 2007



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Introduction

The City of Dover has retained the services of AG Architects for the purpose of preparing a Space Needs Assessment for City Departments at City Hall, the Police Station, the Library, City offices within the McConnell Center and the Cemetery Chapel Facilities and Grounds offices. The following report develops a comprehensive solution for meeting future anticipated space needs. Establishing space needs is a critical step in developing design concepts. Identifying space needs is achieved through an evaluation of City Hall Departments, an inspection of City Hall, developing projections for future needs, and preparing conceptual plans for appropriate options.



There were three basic steps taken in preparing this report. The first involved collection of data on functions for each Department. A combination of a Department Questionnaire, interviews with Department Heads, and a review of existing facilities provided a base of information for understanding City services and available space. The second step focused on providing future projections of population, its impact on City Hall, and preparing a space program to meet these future needs. The final task has been to develop two alternate concept plans that address the present and future space needs for City Hall and the Police Department. A matrix was developed to compare these two options.

A summary concludes with recommendations for resolving present space needs, meeting future anticipated needs, and meeting the needs of the City.



Data Collection Overview

A review of the organization and operations of the City of Dover municipal departments, including City Hall, Police Department, Library, Recreation and Facilities and Grounds, serves several purposes. First, it identifies the departments' needs, what programs are being provided, what are staffing levels, who is being served by each department, what special needs each department may have, and what activities or other departments are important to be adjacent or accessible to. Present staffing levels are confirmed and present needs are identified. This review is also used to identify existing space utilized by each department. The existing location and square footage is confirmed. This permits a comprehensive look at facility needs.

A variety of methods are utilized to confirm the departments' organizational and program needs. Program Evaluation Forms are provided for each department to initially complete; a sample of the form is included on pages B2-B5. These Evaluation Forms are then reviewed with each department head through an interview process. The interviews enable a more complete evaluation of program needs. This process permits us to develop a full understanding of each department and its programs, and the space needed to accommodate the program. It is also useful for evaluating what future programs or operations are anticipated or being considered.

The following pages provide a summary of the questionnaire/interview process for each department. These summaries lay the foundation for determining present and future space needs for the City. They also help establish the working relationship and critical adjacencies between departments, which is portrayed in the Adjacency/Interaction Matrix. This is useful in determining which departments should be in a facility together and, for efficiency, which departments should be located adjacent to each other.

Questionnaire

City of Dover

Space Needs Assessment

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We are requesting Staff's assistance with completing the following survey to help determine current and future space needs for the City. Please complete this questionnaire and return to Bruce Woodruff by Friday, 17 February 2007. Thank you for your assistance.

1. Name of Department/Division: _____
2. Phone Number of Department: _____
3. Name of Department Head: _____
4. Employees:
 - a. Current number of full time: _____
 - b. Current number of part time: _____
 - c. Number of full time employees anticipated by the year 2017: _____
 - d. Number of full time employees anticipated by the year 2027: _____
 - e. Number of part time employees anticipated by the year 2017: _____
 - f. Number of part time employees anticipated by the year 2027: _____
- 5A. List current major equipment (ie. copy machine), reference materials (ie. City tax maps) and storage needs (ie. office supplies) used on a daily basis:
- 5B. List current major equipment, reference materials and storage needs which are used occasionally (not on a daily basis):
- 5C. List those items which you currently intend to purchase that will increase your Department's space requirements:
 - a. In the near future:
 - b. By the year 2017:
 - c. By the year 2027:

Questionnaire

5D. What additional storage space do you need?

a. Currently:

b. By the year 2017:

c. By the year 2027:

5E. Do you have vital records requiring storage? Please provide description.

6A. Who is your current customer(s)

General Public _____ %

City Departments _____ %

Other _____ % Identify _____

6B. How many visits by residents/public do you receive on an average day?

6C. Are there times that are busier than others? Explain.

7A. List the functions/activities/duties that your Department performs:

7B. Identify functions/activities/duties that you would like to see your Department (or other Departments) perform now and in the future that are not currently being done and for whom?

8A. List the functions/activities/duties within your Department that should be adjacent to or that depend on other Departments:

8B. List the functions/activities/duties within your Department that have direct interaction with the public.

Questionnaire

8C. In order of priority (1 being the least contact, 5 being the most contact), rate the frequency of your Department's contact with other City Hall Departments.

City Council	1	2	3	4	5
City Manager Office	1	2	3	4	5
City Attorney	1	2	3	4	5
Assessing	1	2	3	4	5
Finance/Purchasing/Accounting	1	2	3	4	5
City Clerk	1	2	3	4	5
Tax Collector	1	2	3	4	5
Planning/Community Development	1	2	3	4	5
Building Inspection	1	2	3	4	5
MIS	1	2	3	4	5
CS-Facilities/Grounds - Cemetery Chapel	1	2	3	4	5
Water - Lowell Ave Treatment Plant.	1	2	3	4	5
Police (McConnell-Police Outreach)	1	2	3	4	5
Police (City Hall)	1	2	3	4	5
Library	1	2	3	4	5
Recreation	1	2	3	4	5
Human Services (Welfare)	1	2	3	4	5
School	1	2	3	4	5
Fire Department	1	2	3	4	5
CS- Public Works	1	2	3	4	5
CS-Engineering	1	2	3	4	5
CS-Fleet Services	1	2	3	4	5
CS-Utilities	1	2	3	4	5
CS-Environmental Programs	1	2	3	4	5
Economic Development	1	2	3	4	5

8D. Do you think there is a more convenient location for your Department to serve its customer(s)?
_Yes _No

If Yes, please list:

9A. Describe your Department's current space, including approximate square feet (size – length x width of office space):

9B. Describe the minimum space needs you think your Department needs to do it's job (size):

10. What percentage of your time or your staff's time is spent outside the office workspace (List employees and %)?

Questionnaire

- 11A. How often do you hold meetings with staff or the public in your Department?
- 11B. What are your conference/meeting space needs?
- 11C. Is it necessary to meet in your own Department or can you share a meeting facility with other Departments?
12. List special major equipment, functions or activities which may require a special location with your Department (ie. access to Council Chambers, access to vaults, etc.):
- 12A. Are there special security needs required for your department? Please identify.
13. What are your feelings concerning the current space you occupy? List positive aspects as well as negative:
14. In addition to your Department space needs, in what other areas or Departments do you think additional space is needed?
15. What support facilities do you think are necessary for a municipal facility (ie. Lunch/Break Room, Meeting Rooms, etc.):
16. List any other equipment/functions/activities or any other unique aspect of your Department that you feel is important to adequately address your Department's current or future needs:

City of Dover

Space Needs Assessment

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Adjacency/Interaction Matrix

	City Council	City Manager	City Attorney	Human Resources	Finance/Purchasing/Accounting	Assessing	City Clerk	Tax Collector	Water and Sewer	Planning - Planners/Office	Planning - Building Inspection	Planning - Community Development	Economic Development	MIS	Human Services (Welfare)	CS-Facilities/Grounds/Cemetery	CS-Public Works	CS-Engineering	CS-Fleet Services	CS-Utilities	CS-Environmental Programs	Water - Lowell Ave.	Recreation	Recreation - Indoor Pool	Recreation - Ice Arena	Library	Fire Department	Police Department	Police Outreach	School Department	
City Council		5.0	-	3.0	1.0	1.0	5.0	1.0	1.0	2.5	1.0	2.0	1.0	1.0	1.0	1.0	-	-	-	-	-	-	3.0	1.0	4.0	1.0	2.0	1.0	-	-	
City Manager			4.0	4.0	4.5	1.5	4.0	1.0	1.0	3.7	1.5	2.0	3.5	4.0	3.0	2.0	4.0	2.0	1.0	1.0	1.0	1.0	2.5	1.0	4.0	2.0	2.5	2.5	1.0	2.0	
City Attorney				3.0	4.0	1.0	4.0	1.5	1.0	3.3	3.0	2.0	2.5	2.0	1.5	2.0	2.0	3.0	1.0	1.0	2.0	1.0	1.5	1.0	2.0	1.0	1.5	1.0	2.0		
Human Resources					5.0	1.0	3.0	1.0	-	1.0	1.0	-	1.0	1.0	1.0	3.0	3.0	1.0	2.0	1.0	1.0	1.0	1.0	-	-	1.0	3.0	1.0	1.0	1.0	
Finance/Purchasing/Accounting						4.0	2.0	5.0	5.0	3.3	1.5	3.0	1.0	4.0	3.5	3.5	3.0	3.0	2.0	-	3.0	1.0	3.5	2.0	4.0	3.0	3.0	3.0	1.0	2.0	
Assessing							1.5	3.5	3.0	2.3	3.0	2.0	2.0	3.5	1.5	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
City Clerk								3.0	3.0	3.0	3.0	2.0	2.5	4.0	2.0	3.5	2.0	2.0	2.0	2.0	2.0	2.0	-	2.5	1.0	1.0	1.5	2.0	3.0	2.0	2.0
Tax Collector									4.0	2.3	1.5	1.0	1.0	3.0	1.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	1.0	1.0	1.5	1.5	1.0	3.0	
Water and Sewer										4.0	4.0	-	1.0	2.0	1.0	2.0	5.0	3.0	1.0	5.0	1.0	1.0	1.0	-	-	1.0	1.0	1.0	1.0	1.0	
Planning - Planners/Office											3.5	5.0	4.7	2.3	1.5	4.0	4.0	4.5	3.0	3.0	4.0	1.0	2.3	1.0	1.0	2.0	3.3	2.7	1.5	3.0	
Planning - Building Inspection												4.0	3.0	2.0	1.0	3.5	4.0	5.0	3.0	4.0	3.0	1.0	1.5	1.0	1.0	1.5	5.0	3.0	1.0	2.0	
Planning - Community Development													3.0	3.0	4.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-	-	2.0	1.0	1.0	1.0	2.0	
Economic Development														2.5	1.5	2.0	3.0	4.0	2.0	1.0	3.0	1.0	2.0	1.0	1.0	2.0	2.5	1.5	1.0	2.0	
MIS															3.5	3.5	3.0	3.0	2.0	2.0	2.0	3.0	2.5	1.0	1.0	4.5	3.5	5.0	2.0	4.0	
Human Services (Welfare)																3.0	1.0	1.0	1.0	1.0	1.0	1.0	2.5	1.0	1.0	2.0	2.5	2.0	2.0	2.0	
CS - Facilities/Grounds/Cemetery																	5.0	5.0	5.0	5.0	4.0	2.0	5.0	4.0	3.0	4.5	3.0	3.5	4.0	3.0	
CS - Public Works																		-	-	-	-	-	4.0	1.0	4.0	3.0	3.0	3.0	-	-	
CS - Engineering																			-	-	-	2.0	1.0	1.0	1.0	4.0	2.0	-	-		
CS - Fleet Services																				-	-	-	3.0	1.0	3.0	1.0	3.0	4.0	-	-	
CS - Utilities																					-	-	1.0	1.0	1.0	1.0	3.0	1.0	-	-	
CS - Environmental Programs																						-	1.0	1.0	1.0	2.0	2.0	1.0	-	-	
Water - Lowell Ave.																							1.0	1.0	1.0	1.0	1.0	1.0	-	-	
Recreation																								5.0	5.0	2.5	2.0	2.5	4.0	4.0	
Recreation - Indoor Pool																										1.0	1.0	1.0	2.0	1.0	
Recreation - Ice Arena																										1.0	1.0	1.0	1.0	2.0	
Library																											1.5	2.0	1.0	4.0	
Fire Department																											3.0	2.0	3.0		
Police Department																												5.0	3.0		
Police Outreach																													5.0		
School Department																															

- 1 Not Important
- 2 Moderately Unimportant
- 3 Average Importance
- 4 Moderately Important
- 5 Highly Important

NOTES: 1) Dashes are due to several departments not being included in surveys.
 2) There are several departments with responses from only that Department.



Population Projections

	New Hampshire	Strafford County	City of Dover
Population			
1970	737,578	70,069	20,850
1980	920,475	85,604	22,377
1990	1,109,117	104,233	25,042
2000	1,235,786	112,233	26,884
2010	1,365,000	124,488	29,310
2020	1,470,000	134,211	30,450
2030	1,565,000	142,885	31,250
Percent Change			
1970-1980	24.8%	22.1%	7.3%
1980-1990	20.5%	21.8%	11.9%
1990-2000	11.4%	7.7%	7.4%
2000-2010	10.5%	10.9%	9.0%
2010-2020	7.7%	7.8%	3.9%
2020-2030	6.5%	6.5%	2.6%

Source: U.S. Census Bureau, New Hampshire Office of Energy and Planning

Interviews with City Planning staff identified concern that the population projections from the Office of Energy and Planning are low. A private firm, Demographics, Inc., reported that the City's population in 2007 is 29,064, which is close to the population projected in 2010. The City has between 3,000 to 5,000 acres of affordably developable land. There are presently 81 residential new units planned for construction, the mill buildings have the potential for residential units being added, and the City's Waterfront project includes 188 residential units. There is a strong potential that the population could be closer to 35,000 residents by 2030. This would represent a 20% increase beyond the 2007 population of 29,064, compared to official projections of 7.5%.



Future Projections Analysis

The value of looking at future population projections for the City of Dover is to identify the potential growth of the City and to gauge the impact that growth may have on the municipal government and its staffing requirements. Our interviews with staff did not identify major changes desired in the level of service that the City provides, but did show some desired increase in staffing as projected by individual Departments. Although it is possible that future events, technology and policy decisions may alter City services, indications are that moderate growth at a pace slower than seen in past decades and a continuation of City services is expected. Current needs, particularly for work space, conference space and storage space appear to be the critical issues. Population projections for the year 2030 show a population of 31,250 residents, a potential increase of 1,940 beyond the estimated 2010 population of 29,310 residents. This is a small increase of 6.6% over 20+ years, compared with the 20% increase if the population approaches 35,000 as previously noted. Estimated staff projections for full time and part time employees included in our evaluation as suggested by Staff over the 20 year time period show an increase as follows:

Projection for Number of Employees

	2007		2017		2027	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Council	9	0	9	0	9	0
City Clerk	3	1	4	1-2	4	1-2
City Manager	2	0	2	0	2	0
Human Resources	1	0	2	0	2	0
Finance-Acct. & Purch.	3	0	4	0	5	0
Finance-Assessing	4	1	5	1	6	1
Finance-Water & Sewer	2	0	2	0	2	0
Finance-Tax Collector	2	2	2	2	2	2
Planning-Office	3	0	3	0	3	0
Planning-Planners	3	0	3	0	3	0
Planning-Inspector	4	1	5	1	7	2
Planning-Comm. Dev.	1	0*	1	0	1	0
MIS	1	1	3	1	4	2
Legal	2	0	4	2	6	2
Economic Development	1	0	2	0	2	0
Human Services (Welfare)	3	0	3?	2	3?	2
Library	9	17	10	19	12	21
Police	63	21	66	23	69	25
Recreation-McConnell Ctr	5	25	8	30	12	40
Recreation-Indoor Pool	1	2 + 18	2+18	4	2+18	4
Recreation-Ice Arena	5	20	5	20+	5	20+
Facilities and Grounds	12+9**	4	12+9**	4	12+9**	4

* 3 Part-Time in Planning Office

** Seasonal Full-Time



The number of employees within municipal governments for similar size municipalities varies significantly depending on many factors. There are no “acceptable” standards to follow, but there are some guidelines to compare with. The International City Management Association breaks down employment statistics for police for municipalities with different populations. Averages include 2.3 police per 1,000 residents, which translates to a force of 67 for the year 2010 estimated population, compared to an actual 2007 force of 63 full-time personnel plus part-time.

Identifying the number of projected employees has allowed us to provide a factor in our space program for future space requirements. The anticipated growth can therefore be accommodated in the space planning. The Program Summaries on the following pages provide a table of current square footage for each department and proposed square footage to address current and future staffing needs. Our review of the facilities found a serious lack of present space in most departments that, if properly addressed, would also meet the future growth needs.

City of Dover - City Hall Program Summary

C4

AG Architects Project No. 07-533
12 June 2007

Room Name	Current SF	Proposed SF	Comments
City Council Chambers			
Council Chambers	1,009	1,400	Accommodate 11-12 seats at front for Council Boards; provide monitors at Council dais; increase public seating at rear; improve Board presentation capabilities, improve lighting, provide AC
Council Conference Room	400	600	Meeting capacity of 20+; utilize for public mtgs.
Media Equipment Room	36	80	View Council Chambers
Emergency Operation Center Equip.	21	0	Propose remote location, either at new Fire Station or separate Police Station
Councilor/Boards Work Space	0	180	Work counter, computer, mail
City Council Chambers Subtotal	1,466	2,260	
Auditorium			
Auditorium	4,948	4,948	Large meetings; gym use: contra dancing, fencing, children's sports groups, cheerleading, violin/fiddle; improve acoustics, provide AC(?) and sun control on South, evaluate uses
Stage	726	726	Underutilized
Storage Wing - East	241	241	
Storage Wing - West	134	134	
Storage Room - West	93	93	School Department storage
Auditorium Subtotal	6,142	6,142	
City Manager			
Office-City Manager	490	490	Work desk, conference table for 10 persons, + 4 extra chairs; several meetings/day 3-8 people
Executive Assistant	228	270	Improve work desk space, shelf space, 2-4 reception chairs
Executive Toilet	22	60	
Storage	25	25	Office supplies
Conference	0	0	Share Econ. Devel. Conference Room for Exec. Assistant small meetings
City Manager Subtotal	765	845	
Legal			
Office-Attorney	257	250	Private work space, limit access for confidentiality
Office-Legal Secretary	267	250	Paralegal, performs research; office reception, 2 seats for visitors
Conference	0	200	Confidential, meetings 2-3/day, 2-4 persons
Storage	0	200	
Mast Road (40 SF)			12+ banker boxes, 2 file cabinets 1998-2001; access 6x/year
Office Storage			(6) 4-drawer file cabinets, office supplies
Legal Subtotal	524	900	
Human Resources			
Office	118	200	Add desk work space; provide reference shelves, file cabinet access; space for meetings with 3-4 persons and separate table
Storage	27	80	Presently in stairwell; locate personnel files at HR
Human Resources Subtotal	145	280	

Room Name	Current SF	Proposed SF	Comments
Finance - Accounting and Purchasing			
Director's Office	262	260	Work desk, credenza; meets with 4-5 persons
Closet(s)	41	80	Office Supplies
Secretary	174	250	Work station, 2 visitor chairs, needs work space for mailings, store auction items, 1 future secretary
Purchasing Office	149	225	Needs layout space, meets with bidders
Conference Room	0	225	Daily bid openings
Files Area	106	0	Files storage, included below
Vault Storage (Director)	94	400	Finance bonds, budgets, contracts, P/O, past bids
Storage Mast Road (?SF)	0		
Accounting Staff	241	360	2 work stations, 2 additional future
Accounting Closet	48	100	
Senior Accountant Office	156	180	Supervises accounting, works with Finance Director a lot
Senior Accountant Closet	20	40	
Accounting Staff (Cynthia)	476	200	Work station, works closely with Purchasing and Accountants, process checks
Payroll/Benefits Staff (Jean)	Included above	300	1 work station, need privacy for meetings with staff regarding benefits
Files Storage (Accounting AP) and Vault (Hall)	157	200	2 years records; AP, Mast Rd.
Accounting/Payroll Closet	16	40	Storage
Paper/Envelope Storage	66	100	Store 1 year's supply
Vault Storage (Payroll)	79	200	Payroll files
Finance-A/P Subtotal	2,085	3,160	
Finance - Assessing			
Staff Office	379	500	3 staff work stations + 1 future, intern work space, map layout space
Public Counter	140	180	Space to lay out drawings
Assessor Office	142	225	Meet with 1-2 taxpayers, GIS and printer access
Assistant Assessor Office	0	150	Needs separate office from Assessor
Public Reading Room	0	160	Public access to records, 2-3 terminals
Conference Room	0	200	Meetingw with taxpayers, hearings w/4-6 people
Vault	60	300	Warrants, old deeds, exemptions, maps, assessment records
Closet(s)	58	80	Storage, supplies
Finance-Assessing Subtotal	779	1,795	
Finance - Tax Collector			
Public Counter	242	300	Lines extend into public corridor, chair for elderly, counter to fill out paperwork, 4 work stations to collect taxes, register cars (adding license plates in future)
Staff Office	388	620	Improve 4 work stations, need private area to count money
Vault	100	250	Tax liens, State stickers, property tax books, registrations, bankruptcy filings, warrants, abatements, daily receipts, supplies
Closet	27	0	Store registrations, title applications
Conference Room	0	120	Private space to meet with upset taxpayers
Finance-Tax Collector Subtotal	757	1,290	
Finance - Water and Sewer			
Staff Office	300	300	2 work stations, file storage for W/S bills and payments
Storage	0	180	Store meter reading disks, contract out quarterly bills, print and mail monthly bills
Finance-Water and Sewer Subtotal	300	480	

Room Name	Current SF	Proposed SF	Comments
City Clerk			
City Clerk	656	900	3 staff, 4 in future; 4 desk work stations, 2 counter workstations; in-house mail distribution; drive-up window desired; recycle material
City Clerk Office	0	150	Confidential space, view to Clerk space
Supervisor of the Checklist	0	80	Occasional work space
Vault (1)	108	400	Records requiring vault protection: vital records (marriages) (others becoming electronic), Council resolutions (scanning), voter checklists (5 years), code updates, adoption records, cemetery deeds, ballots (1 month), tax liens, non-public meeting minutes, City contracts (10 years), Council minutes, union contracts, wetlands applications (5 years), burial permits
Vault (2)	114		Records requiring vault protection: records to 1880, adopted budgets, City maps and building plans; marriage intentions, election ballots (90 days), NH manuals
Storage		300	
Under Stairwell	35		
Plastic Bin	12		Election supplies in corridor
Break Room (3 SF)	0		Election file cabinets
Auditorium (81 SF)	0		Election equipment, voting machines in locked cabinets
Mast Road Trailer	0		Voting booths
Council Chambers Media Closet	0	20	Store tapes; work space to copy DVDs
Mail boxes	12	40	Presently in corridor
City Clerk Subtotal	937	1,890	
Planning - Office			
Staff Office	391	450	2 staff work stations + 1 future
Public Counter	116	180	Space to lay out drawings
Director's Office	165	225	Confidential, meet with 3-4 people, needs layout space
Vault/Storage	100	400	Maps, completed projects, library, files
Closet(s)	50	100	
Planning-Office Subtotal	822	1,355	
Planning - Planners			
Planner Office (Bruce)	138	144	Plan reviews, traffic/transportation planning and transportation improvements project manager, master planning, GIS
Planner Office (Chris)	111	144	Land use/master planning/Econ. Dev.; GIS; assists with traffic; special projects manager; site plan reviews; zoning staff liaison
Planner Office (Steve B)	100	144	Land use planning; plan reviews; open land; master plan; zoning
Printing/Supplies	0	150	Large format printer share with Assessing, office supplies
Storage		500	
Planning Office (Steve B)	105		Centralize files -- stored all over now; increasing (1) 4-drawer file cabinet per year; need files, plan storage
Planning Closet	9		
Planning Office (Chris)	114		

Room Name	Current SF	Proposed SF	Comments
Library	0	20	Central resource library, share items
Conference	0	200	Presently share Econ.Dev. (occasional conflicts), and meet at front counter 15x/day (no privacy or layout space); meetings 1-3x/day; create conference room to share with Building Inspector, large meetings 20+ utilize McConnell Center
Office Workspace	0	120	Intern work space
Committees Office	0	150	Volunteers on committees need files and work space: Conservation Commission, Open Lands, Transportation Advisory Committee, and others
Planning - Planners Subtotal	577	1,572	
Planning - Inspection			
Office-Building Inspector	360	225	Presently shared between Building Inspector, Plumbing Inspector, Electrical Inspector and Health (part-time); provide desks and layout space for plan review
Office-Plumbing, Electrical, Health	Included above	360	Work stations
Office-Future	0	200	Work and revenue are increasing; space for 1 full time and 1 part time future employees
Secretary	0	0	Share with Planning, needs to be adjacent for efficiency and controlling visitors
Storage		500	Plans kept indefinitely, paper per RSA; have drawings from 1985 on, permit applications prior; allow for future storage
Vault-Planning	54		
Files-Planning Secretary (72 SF)			
Zoning Files-Planning Office (9 SF)	0		
Auditorium Closet	32		
Planning - CD Closet	24		
Office Storage (32 SF)	32		
Conference	0	0	Conference meetings with public 2-3x/day w/3-4 people, front desk meetings 15x/day; site plans and subdivision plans duplicated w/Planning -- both need access, store adjacent to both to eliminate duplication; can share Planning Conf.
Planning-Inspection Subtotal	502	1,285	
Planning-Community Development			
Office	162	180	Coordinates CDBG funds, deals w/Public Service agencies, housing rehab, business loans; access to Planning and Assessing; meets with 1-2 clients 1-3x/day in office; file cabinet storage
Secretary	0	0	Share with Planning
Conference	0	0	Share w/Econ. Dev., 3-4 person meetings, Council Conference Room 10-20 person mtgs.
Planning-Community Dev. Subtotal	162	180	
Economic Development			
Office	130	180	Desk, credenza, shelves, 2 file cabinets, printer, computer
Assistant	0	?	Increase Economic Development activities
Closet	19	40	Storage
Conference	140	200	Share with others, meets w/2-3 persons, locate adjacent to Office, display area
Economic Development Subtotal	289	420	

Room Name	Current SF	Proposed SF	Comments
Information Technology			
Office	95	200	Possible location at McConnell Center 2 staff work stations, counter workspace to work on computers; locate closer to servers (?)
Closet	10	100	Secure; store backup tapes, computer parts and software; store laptop, projector, and DVD burner
Information Technology Subtotal	105	300	
Community Services			
Engineering Office(s)	0	?	Possible to locate Engineering at City Hall in lieu of at Public Works; increase design focus
Community Services Subtotal	0	0	
Miscellaneous			
Staff Break Room	115	400	
Staff Toilet	67	60	
Men's Toilet	288	300	First floor
Men's Janitor Closet	10	0	
Women's Toilet	257	300	First floor
Women's Janitor Closet	8	0	
Men's Toilet	173	173	Second floor
Women's Toilet	166	166	Second floor
Janitor Closet	67	150	First floor hall
Vault - School	91	91	First floor hall
Copy Room	67	180	First floor hall
School Department	2,114	0	To be vacated September 2007
Public Corridors/Stairs			
First Floor	3,550	3,550	
Second Floor	2,362	2,362	
Miscellaneous Subtotal	9,335	7,732	
Subtotal Net SF	25,692	31,886	
30% Circulation and Walls		9,566	
First Floor Total GSF	15,222		
Second Floor Total GSF	15,277		
Total Estimated Gross SF	30,499	41,452	

City of Dover - Police Station Program Summary

C9

AG Architects Project No. 07-533
12 June 2007

Room Name	Current SF	Proposed SF	Comments
Public Entry			
Entrance Lobby	255	260	Public entrance, waiting for 4-6 persons, windows to Records and Communications, bullet-proof construction
Interview Rooms	160	200	Access from Lobby for non-secure interviews, provide privacy with exterior window view, 3-4 persons, round table, phone, low key, two rooms 10'x10', allow for public fingerprinting (employment)
Toilet	0	60	Handicap access
Public Entry Subtotal	415	520	
Records			
Reception	47	50	Greet public (first contact), intimate feel, control access from a secure location
Records Office	575	1,000	Document all work; open office layout, 5 desks now, need 7-8; workstations with computers, scanners (3 minimum) adjacent to but visually separate from Reception, space for volunteers
Imaging and Printing	0	80	Copier, shredder (noise), paper storage; locate adjacent to/within Records Office
Records Room	0	400	Scanning eliminates most paper files, store remaining files. Locate adjacent to Imaging
Closet	0	100	
Supervisor Office	0	180	Provide direct visual contact with Reception and Records Office; close proximity to Communications Bureau; privacy, staff issues
Special Supply Room	0	100	Forms
Staff Toilet	25	60	
Records Subtotal	647	1,970	
Traffic Bureau			
Office, Commander	122	140	Commander meets with public
Work Office	0	100	4 part-time enforcement officers, in and out, provide (3) work counters
Storage	155	100	Store meters/equipment
Storage - Barriers	111	150	Presently in garage
Vehicle Storage		500	Presently off site at River Street/Armory; Convincer -- crash simulator, Smart Trailer; Cones, PEO Truck
Sign Work Space		200	Paint signs, service meters
Traffic Subtotal	388	1,190	
Communications Bureau - Secure			
Dispatch Center	250	450	Secure area, bullet-proof construction; view to Entry Lobby, 2 work stations (2 utilized 80%)
Staff Toilet	12	60	Provide phone hook-up, access to Dispatch
Supervisor Office	176	180	Secure area, monitor calls, supervise Dispatch
Kitchen/Break Area	27	80	Quick meals, access to Dispatch
Storage	46	45	Radio equipment
Closet	0	40	Supplies
Emergency Operation Center (EOC)	0	0	Presently in City Council Chambers, consider new location at new Fire Station(?)
Communications Subtotal	511	855	

Room Name	Current SF	Proposed SF	Comments
Information Technology			
Computer Room	232	250	Secure area (no windows), services presently combined with City Hall, increase to 4 equipment racks plus 3 racks for hub and routing, avoid plumbing above, AC critical
IT Office	196	200	2 persons; desk, shelves, filing cabinet, fire-proof file cabinet for software; work bench for computer repair
Storage Closet	0	80	Secure; parts, temporary equipment, boxes 4-6 stations
IT Training Room	0	180	
IT Subtotal	428	710	
Emergency Operation Center (EOC)			
EOC	155	0	Currently located in City Council Chambers; should be in a separate building -- consider locating at new fire station; long counter with communications equipment; radio and computer links; requires space for equipment and emergency personnel, with adjacent space for media and personnel not directly involved with the Center
EOC Subtotal	155	0	
Detectives			
Drug Task Force Office	0	0	3 persons, off-site
Commander's Office	96	225	
Detectives	530		
Special Investigators		600	5 persons, work stations
Anti-Stalking		210	2 persons
Support Staff		150	1 person
Future Staff		360	3 additional persons long term
Legal and Prosecution	224		Locate near Detectives and Records
Prosecutor Office	0	225	1 counsel
Victims' Advocate Office	0	180	1 person, private and sound control for comfort of victims
Legal Secretary	0	150	1 person
Conference Room	0	300	Consultations
Storage Closet	0	100	
Interview Rooms	191	250	Two rooms, with observation
		180	Interview with soft relaxing atmosphere for victims
Conference Room	0	150	Small conferences
Lab	193	400	
Drying Room	0	25	Dry clothes, bag and drying room
Evidence Storage			
Evidence Room 1	92	400	Gun storage, high security for narcotics, jewelry, cash
Evidence Room 2	92	300	180 SF off site pod at Eagle Storage -- security concern
Holding Room	61	120	Refrigerated samples
Property Storage		1,000	180 SF; off site pod at Eagle Storage, bulky items, bicycles, found property; locate at Police Station for efficiency

Room Name	Current SF	Proposed SF	Comments
Impound Lot/Vehicle Storage		1,800	1,200 SF off site now at Mast Rd, presently 6 vehicle capacity outdoors; require 2 vehicle indoor capacity, 8 outdoors, with secure area to process crime vehicles; locate adjacent to Police Station for efficiency and best practice
		800	Indoor spaces 2 vehicles, 1 for evidence use, 1-2 for storage Option 2 is to locate off site at Mast Rd.
Detectives Subtotal	1,479	7,925	
Booking and Holding Facility - Secure			
Finger Print Area	285	100	
Booking	included	80	
DWI Processing	included	120	Breathalyzer
Toilet	32	60	
Holding Cells			Adjacent to interview rooms and detectives, transport prisoners to County or Concord in lieu of cells, utilize County for planned operations
Men	141	80	Separate men from women, Holding
Women	120	80	
Adolescents	70	0	Juveniles will not be in Holding
Safety and Monitoring	0	200	
Booking and Holding Subtotal	648	720	
Sally Port - Secure			
Vehicle Parking	387	700	One vehicle capacity, two preferred with Drive-Through, prisoner processing, secure/bullet resistant area, direct access to booking and cells, secure devices and doors, remote from public entry; presently garage motorcycle
Sally Port Subtotal	387	700	
SRT Area			
Ready Room	0	250	SRT Briefing Room 10-12 persons; computer with mapping, multi-purpose conference room, work area w/desk(s). Utilize locker room for 10 lockers.
Equipment Storage	0	200	180 SF; presently off-site at River St., slows response time
Command Vehicle		800	Mobile Command, prefer on-site, presently 800 SF at River St.
SRT Subtotal	0	1,250	
Patrol Services			
Shift Commander	250	300	Leutenant and Sergeant per shift, 6 total; 3 desks, 1/shift; improve privacy for confidentiality; printer and copier
Consultation Room	0	100	Debrief officers in private
Report Write Up Area	100	250	4-6 work stations; store radios, mailboxes, access Department forms
Briefing/Conference Room	163	300	Adjacent to Commanders, 3-5 persons + officer(s) for briefing
Closet	100	100	Storage for jackets, uniforms, raincoats
Equipment Storage	195	250	Weapons and equipment storage vault
Evidence Drop-Off	20	100	Officer drop-off
Animal Control	24	80	Work station, writing reports, files
Patrol Services Subtotal	852	1,480	

Room Name	Current SF	Proposed SF	Comments
Administration			
Chief	300	325	Desk, service files, shelves; conference table with seating for 6, adjacent to Conference Room
Coat Closet	0	25	
Conference Room	400	600	Capacity for 20, private, display capabilities, small counter and sink, adjacent to Secretary
Storage Room	0	50	Supplies, chair storage
Executive Secretary	264	225	Work station, waiting area with 2 seats
File Room	included above	150	Store personnel files/financial info -- 7-8 file cabinets, table to review files
Supply Storage	0	50	
Division Commanders	325	360	2 commanders, separate offices, adjacent to Chief; desks, file storage, 2 guest chairs
Staff Toilet	30	100	Include shower
Administration Subtotal	1,319	1,885	
Professional Standards			
Office-Professional Standards	153	225	Testing and certification of staff, accreditation of officers, layout table with computer access
Office-Personnel/Training	0	0	
Training Storage	135	150	Storage Closet
Professional Standards Subtotal	288	375	
Gym/Locker Rooms			
Men's Locker Room/Changing	297	750	Increase to 75 full size lockers
Men's Showers, Toilets	95	200	
Women's Locker Room/Changing	111	250	Increase to 25 full size lockers
Women's Showers, Toilets	94	100	
Exercise Room	440	800	Aerobic equipment, fitness training, stretching
Rank Officer Lockers/Changing	340	400	
Gym/Locker Rooms Subtotal	1,377	2,500	
Custodial			
Janitor Closet(s)	250	200	Sink basin, mop and bucket, trash containers, supply shelving, cleaning equipment
Custodial Subtotal	250	200	
Special Programs			
Community Outreach	0	180	Presently at McConnell Center, work space for 2 officers, 2 civilians, 1 Army National Guard
Outreach Supervisor	0	120	Sergeant Office, presently at McConnell Center
Multi-Media Room	0	350	Laptop setup with projector, 8 person capacity, interface with direct feed computer interface in cruisers; interface with communications rooms; capable of creating optical media shows, sound copy area, radio program production
Multi-Purpose Room	0	1,200	Multi-purpose room, 50-60 person capacity, chairs/tables/mats, quarterly training; outside entry for other uses, hosting meetings; Option 2 to locate at City Hall
Storage Rooms	0	450	Equipment storage, presentation/PR materials; Option 2 to locate at City Hall
Kitchen	0	120	Kitchenette, storage and food prep; Option 2 to locate at City Hall
Food Storage	0	150	Food storage; Option 2 to locate at City Hall
Special Programs Subtotal	0	2,570	

Room Name	Current SF	Proposed SF	Comments
Lunch Room			
Lunch Room	0	240	Capacity 3 tables, 4 persons each; counter, cabinets, microwave, sink, refrigerator
Lunch Room Subtotal	0	240	
Delivery Area			
Delivery Room	0	50	Delivery drop-off -- UPS; adjacent to Records and Information Technology
Delivery Area Subtotal	0	50	
Mechanical			
Mechanical/Electrical Rooms	1,100	800	Presently serves City Hall and Police Station
Mechanical Subtotal	1,100	800	
Miscellaneous			
Substation -- Dover Housing Authority	0	0	450 SF off-site
Crime Scene Vehicle	0	800	14' box truck presently off site. Locate at Police Station, needs to be indoors due to chemicals
Surveillance Vehicle	0	0	Van, keep off site
Large Command Vehicle	0	0	Included with SRT Area Station
Task Force Personnel	0	0	State Agency located off site
Peacekeeper	0	800	Large car located at River St. Prefer on site for access
Horse Stables	0	0	Presently located at Cocheco St.
Teen Center Outreach	0	0	Located at McConnell Center, good location
Computer Lab			
Table Room			
Arts Room			
Offices			
Firing Range	0	0	Ideal on-site to avoid travel and overtime, presently utilize facility at Pease; mandatory 3x/year, qualify new officers, extra training, average 30x/year; SRT trains 2x/month, average 45x/year; consider County facility for Towns/Cities
Site Parking			
Police Vehicles			To be confirmed
Staff Vehicles			To be confirmed
Visitor Parking			To be confirmed
Miscellaneous Subtotal	0	1,600	
Subtotal Net SF	10,244	27,540	
30% Circulation and Walls		8,262	
Total Estimated Gross SF	15,314	35,802	

City of Dover - Library Program Summary

C14

AG Architects Project No. 07-533
12 June 2007

Room Name	Current SF	Proposed SF	Comments
Basement Level			
Children			
Storytime Room	272	500	
Storytime Closet	170	250	
Circulation Desk	133	300	
Staff Office	84	225	2 FT, 4 PT Staff
Young Children	618	1,200	
Older Children	1,565	2,500	22,000 volumes/280,000 circulation/yr, DVD's, CD's, games; Add seating, computers, reading areas
Stacks - Basement	1,326	2,500	Storage, older magazines, book storage
Book Processing	238	600	
Staff/Volunteer Office	471	600	
Toilets - Men	128	160	Improve monitoring
Toilets - Women	136	160	Improve monitoring
Toilets - HC	42	56	
Janitor Closet/Service Entry	150	150	
Mechanical	160	300	Provide central AC
Subtotal Basement Net SF	5,493	9,501	
First Floor			
Vestibule	114	114	
References; DVD's	1,066	1,100	
Circulation Desk	663	900	
Browsing	624	850	New books, books on tape/CD
Computer Access	292	900	6 computers; add 10
Stacks - 1st	1,326	2,000	
Stacks - Mezz	820	1,600	Teen area inadequate
Periodicals	1,836	3,800	Magazines, newspapers, reading area, fiction
Assistant Director Office	120	140	
Staff Room	168	300	
Subtotal First Floor Net SF	7,029	11,704	
Second Floor			
Lecture Room	1,100	1,100	80 seat capacity
Trustees Room	365	365	20 seat capacity
Trustees Closet	60	60	
Conference Room	284	284	Tutoring
Kitchenette	53	200	Use for conference rooms
Special Collections	624	1,800	Dover history and geneology; increase seating, add 2 computers, need copier, increase from 4,000 to 6,000 books, add maps
Admin. Office	189	250	
Admin. Work Area	244	350	
Gallery	513	513	
Toilet - Unisex Second Floor	48	56	
Stairs/Elevator (2 stairs, 3 floors)	1,626	1,626	542 (3) = 1,626
Subtotal Second Floor Net SF	5,106	6,604	
Subtotal Net SF	17,628	27,809	
35% Circulation and Walls		9,733	
Basement Total GSF	8,001		
First Floor Total GSF	8,325		
Second Floor Total GSF	4,507		

Total Estimated Gross SF	20,833	37,542	
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City of Dover - Facilities, Grounds and Cemetery Program Summary

C15

AG Architects Project No. 07-533
12 June 2007

Room Name	Current SF	Proposed SF	Comments
Chapel			
First Floor			
Superintendent Office	120	120	10'x12', meet w/1-2 persons, City master keys
Supervisor Office	120	120	10'x12'
Reception/Records	288	300	16'x18', cemetery info for public, sell graves, maintain cemetery, records from 1600's (need to be protected), City energy management controls
Storage - First Floor	930	930	21'x30' + 15'x20' altar, old chapel
Basement			
Cleaning Supplies	300	300	15'x20'
Work Space - Signs/Storage	1,260	1,260	Spare parts for buildings, air filters, ceiling tiles, traffic lights parts, sign storage
Subtotal Chapel GSF	3,018	3,030	
City Barn			
Basement	1,260	1,800	Storage and maintenance for mowers, store small sidewalk plow for Public Works, burial equipment (grave frost removal); need space for small trucks
First Floor			
Maintenance Staff Break room	216	300	12'x18'
Storage	1,044	1,050	Spare parts
Second Floor			
Storage	1,260	1,260	Unheated, store historical markers, Xmas lights, winter storage
Quonset Hut	900	900	20'x45', storage, excavator
Subtotal City Barn GSF	4,680	5,310	
Total Estimated Gross SF	7,698	8,340	



Space Needs Summary

The following chart summarizes the size of the existing facilities and the proposed size as identified in the Program Summaries.

	Existing Size	Proposed Size
City Hall Offices		
Lower Level	0 GSF	
First Floor	15,222 GSF	
Second Floor	<u>15,227 GSF</u>	
Total SF	30,499 GSF	41,452 GSF
Police Station		
Lower Level Police	13,159 GSF	35,802 GSF
Lower Level Mechanical	1,254 GSF	Included Above
Impound Lot	1,440 GSF	Included Above
River Street Garage	2,340 GSF	Included Above
Storage Facility (2Units)	360 GSF	Included Above
Multipurpose Room at City Hall	<u>0 GSF</u>	<u>(1,920 GSF)</u>
Total SF	18,553 GSF	33, 882 GSF
Library	20,833 GSF	37,542 GSF
Facilities: Grounds and Cemetery	7,698 GSF	8,340 GSF



Facility Evaluation

City Hall/Police Station

Site Analysis

The Dover City Hall/Police Station is located at 288 Central Avenue in downtown Dover. Built in the early 1930's as a Public Works Administration project, it is bordered on all four sides by streets, as shown in the attached site plan. City Hall occupies the first and second floors of the building, and the Police Station and Mechanical Room occupy the lower level. The site has a slight slope from the front at Central Avenue down to the rear at Locust Street. There are steps leading up to the front entrance of City Hall on Central Avenue, a ramp leading down to the elevator entrance on the Hale Street South side of the building, and the Police Station Locust Street entrance on the West facade is at grade. The raised building and sloping site permits windows on the lower level on the two sides and rear of the building.



There is parking available for the City Hall/Police Station in the following locations:

- Site parking on the rear Locust Street West side of the building: 11 + 1 HC spaces
- City Hall handicap parking on site at Elevator: 2 HC spaces
- Reserved police vehicle parking on Locust Street: 5 spaces
- Reserved Permit parking between Locust Street and Chestnut Street: 26 spaces
- Public street parking adjacent to City Hall:
 - St. Thomas Street 12 spaces
 - Hale Street 17 spaces
 - Central Avenue (short term) 5 spaces
- Public/staff parking behind Library

A bus stop and shelter for Coast and Wildcat Transit buses are located on Central Avenue directly in front of the building.

Access into the building is presently located on all four sides. The front entrance on Central Avenue accesses the first floor of City Hall. The Hale Street South side entrance accesses a stair landing mid-way between the lower level and first floor; access to City Hall on the first floor is open while access to the Police Station on the lower level is locked and accessible only by certain staff with keys. The St. Thomas Street North side entrance also accesses a stairway landing at mid-level between the lower level and first floor with similar locked access into the Police Station. There is also a secure staff entrance for Police personnel on the St. Thomas street North side of the building. Public access to the Police Station is on the Locust Street West side of the building at grade. Access to City Hall for the disabled is from a separate elevator lobby entrance on the Hale Street South side, with the entrance level fairly close to the existing Police Station level; there is no access, however, to the Police Station at this location.





History

The present City Hall building was constructed in 1933-1934 by the Work Progress Administration. A brief history of the building and its potential eligibility for listing on the National Historic Register is outlined in a memorandum by City staff, which is included in the Appendix.

Exterior Building Condition

The exterior of the existing City Hall/Police Station building is primarily a brick facade with what appears to be limestone trim and a granite base. The classical design includes four limestone columns supporting a stone pediment at the front entrance, and a large four-sided clock tower with a domed roof and weather vane. Large single pane windows with 12 over 12 divided lites covered by aluminum storm windows are located on the first and second floors, including several arched windows at the front and rear of the building. Window sills are stone, and window lintels are brick jack arches and radiused arches, and include a stone keyway at the first floor level and at prominent windows on the second floor.

The brick facade and stone trim is in good condition. The windows, which are drafty, are in the planning stages of being replaced with insulated glass units. The roof of the building is a combination of adhered singly ply membrane and ballasted single ply membrane. The age of the roof membrane is estimated to be 18-20 years old.

Interior Building Condition

The interior of City Hall retains much of the original construction and character as when it was built. The first floor and second floor corridors, vaults, stairs and auditorium appear to be essentially unchanged, including original finishes. The Police Station on the lower level, however, has undergone renovations over time and is more utilitarian in its decor. Observations on the condition of the interior include the following:

- Corridors on the first and second floors retain original stained wood wainscoting on the walls.
- Stained wood trim frames arches in the first floor corridor.
- Suite entries with large stained wood doors and frames, and original patterned glass remain in place.
- The original terrazzo floors and stairs remain in place. Minor repairs to the terrazzo is necessary where steps are broken.
- Many of the original walls are still in place. Walls are masonry construction with traditional wire lath plaster finish. This is obviously difficult to run new wiring in, as evidenced by surface wiring having been added in many places.
- The large windows allow natural light well into the suites since the suites are not very wide.
- Lighting includes several original fixtures in the main corridor, and strip fluorescent lighting that has been added throughout the building.
- The layout of the building on the first floor with the center corridor and narrow suites limits larger spaces. The second floor corridors are located to allow larger uninterrupted spaces, including the Auditorium and Council Chambers.
- Numerous vaults on the first floor and lower level impact flexibility of spaces. There are 10 concrete vaults with vault doors on the first floor, and 5 on the lower level.
- The ceiling height on the lower level is low. Ceiling heights on the first and second floors, in contrast, are very high.
- Open stairways throughout the unsprinklered building serving the second floor do not meet present Life Safety code requirements for enclosure.



Size

The City Hall/Police Station building includes three finished floors. The square footage is summarized as follows:

		<u>Existing GSF</u>
Lower Level:	Police Station	13,159
	Stairs/Elevator	901
	Mechanical	<u>1,254</u>
		15,314
First Floor:	City Hall Departments	11,066
	Stairs, Corridors and Elevator	<u>4,156</u>
		15,222
Second Floor:	City Hall Departments (including School Dept.)	6,614
	Stairs, Corridors and Elevator	2,521
	Auditorium, Stage, Backstage	<u>6,142</u>
		15,277
Total Building Gross Square Footage:		45,813 GSF

Mechanical/Plumbing Systems

A mechanical survey and report has been prepared by Yeaton Associates, Inc., dated 27 June 2007 and is included in the Appendix. Observations include the following:

- The heating system is hot water radiators served by oil-fired boilers located in the basement. New piping was run exposed on the first and second floors as part of a 2004 upgrade meant to solve heating and control issues. A direct digital control system provides controls for the heating.
- There is limited air conditioning at the second floor School Department offices. The air handling unit is located in the Clock Tower at the roof level. There are also ductless split system units serving the Police Station and window air conditioning units serving offices on the first floor. There is no central air conditioning in the building.
- Water service is provided by a 2" cold water main.
- There is no automatic sprinkler system in the building.



Electrical System

An electrical survey and report was prepared by C & M Engineering, dated 26 June 2007, and is included in the Appendix. Observations include the following:

- The electric service is provided by PSNH via overhead wires on the South side of the building. There is a single meter. Existing service is an 600 amp panel located in the lower level Mechanical Room.
- Two generators located on the Southwest corner provide back-up power to the building. The generators are fed by natural gas and were installed when natural gas use was less costly than electric rates. The exhaust stack is exhibiting rust-through. The location of the generators also impacts availability of parking spaces and causes significant noise impact on offices when running.
- There is a fire alarm system in the building with a panel located on the first floor. The panel is an analog control panel; this should be upgraded to a digital microprocessor and devices.
- Emergency lighting provided by battery units needs to be upgraded.
- There is no security system in City Hall, with the exception of the Tax Collector's office. The Tax Collector's office contains a motion detector with keypad control outside the entry door. There are also several cameras mounted in the space. The Police Station has cameras in strategic locations for monitoring security.



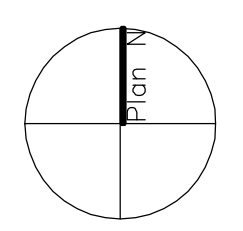
1 Site Plan
 10' 20' 30' 60' 1"=30'-0"

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Dover City Hall

Space Needs Analysis

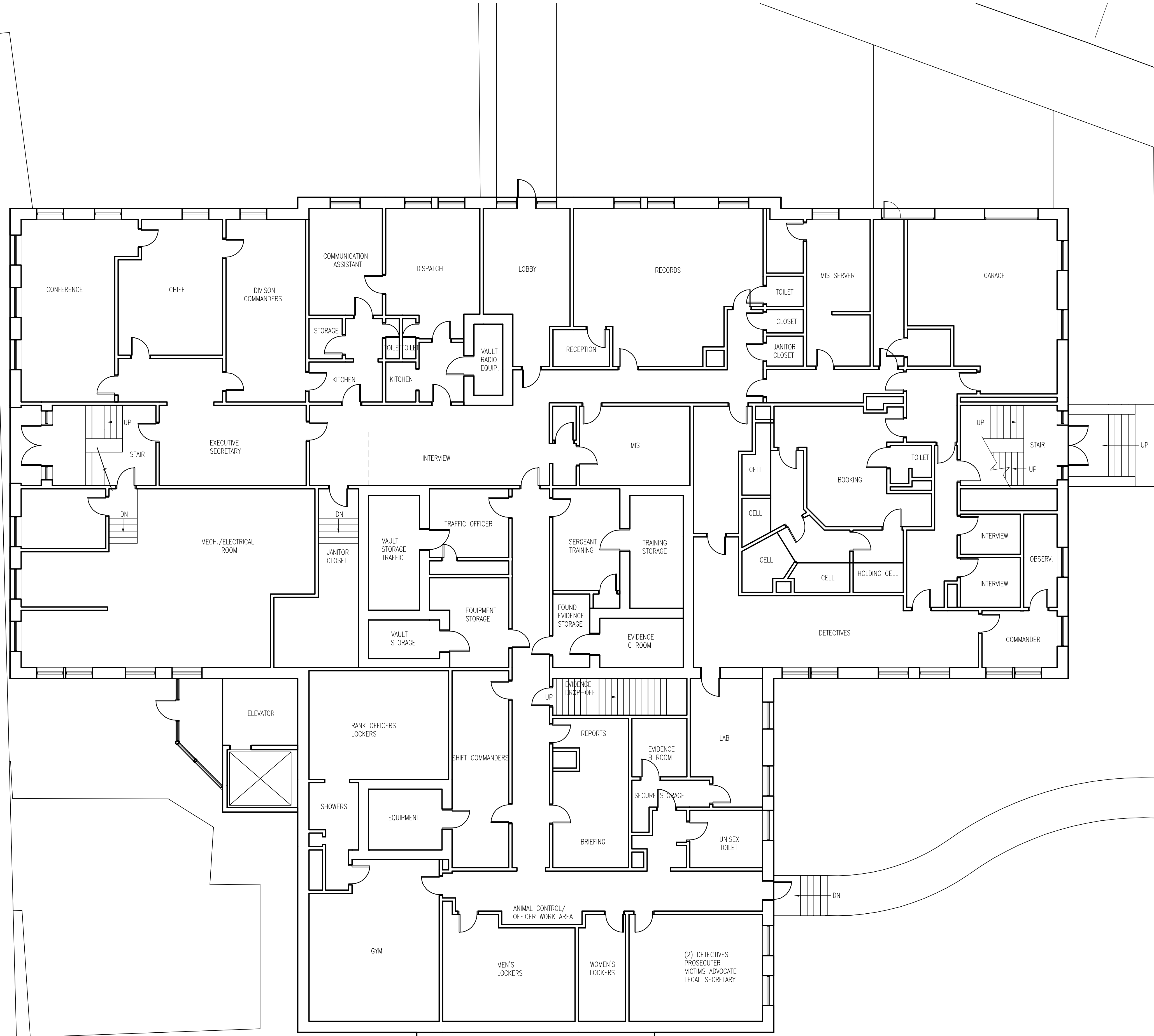
Dover, New Hampshire



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Revisions:	
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Drawn By:	DH, MC, ST
Checked By:	AG
Sheet:	1 of 4
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Sheet Title: Existing Site Plan	
Sheet Number:	

C1.1

HALE STREET



ST THOMAS STREET

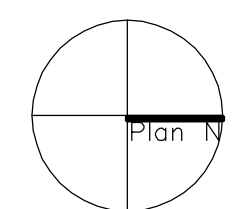
1 Existing Basement Floor Plan
 1" = 1/8" = 1'-0"

AG Architects, PC
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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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 Consultant:

Revisions:

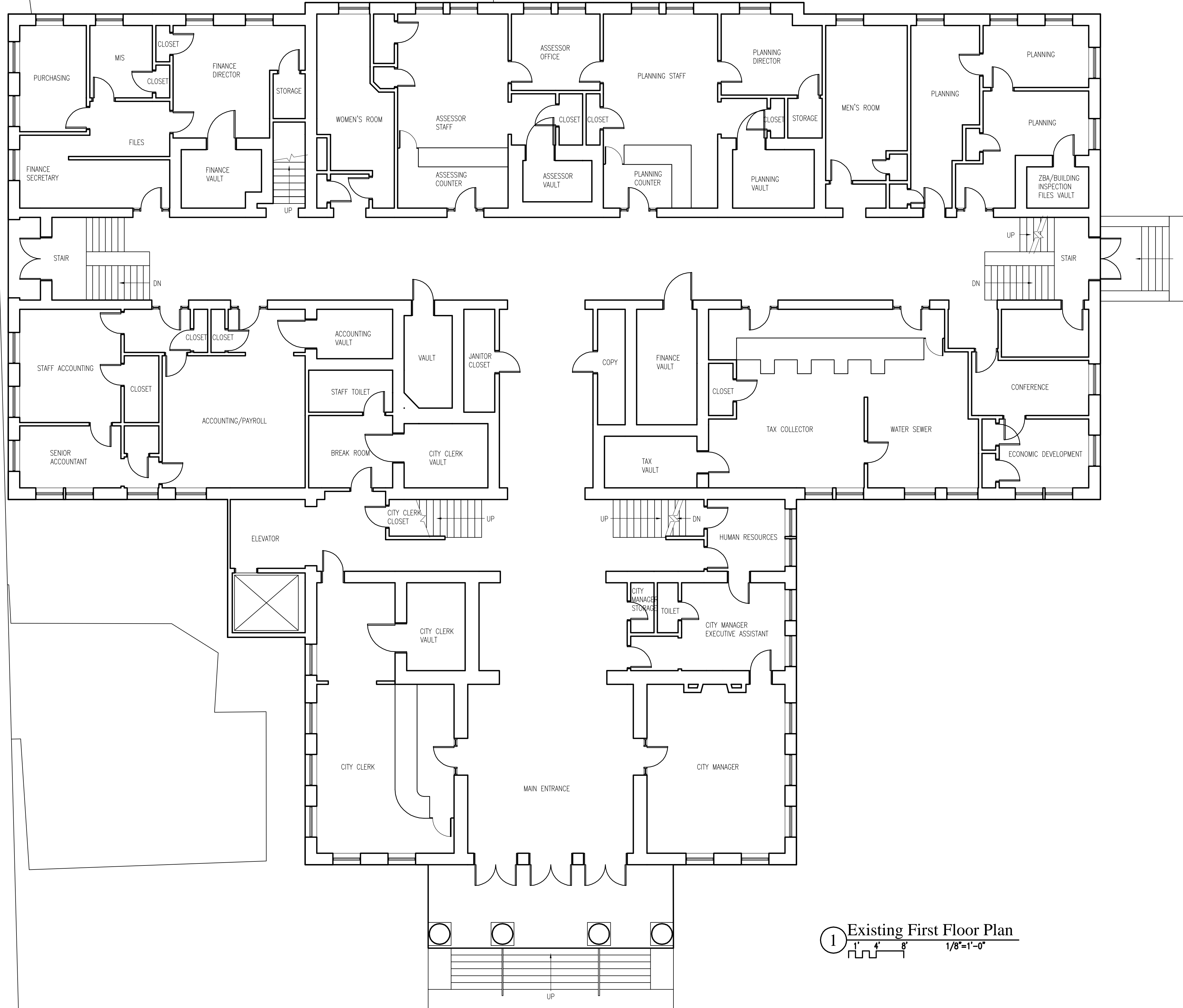
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 Sheet: 2 of 4 File: 5330-A101-01.dwg

Sheet Title:
 Existing Basement Floor Plan

Sheet Number:

A1.1

HALE STREET



① Existing First Floor Plan
 1" = 1'-0"

ST THOMAS STREET

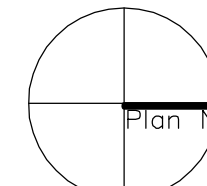


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Dover City Hall

Space Needs Analysis

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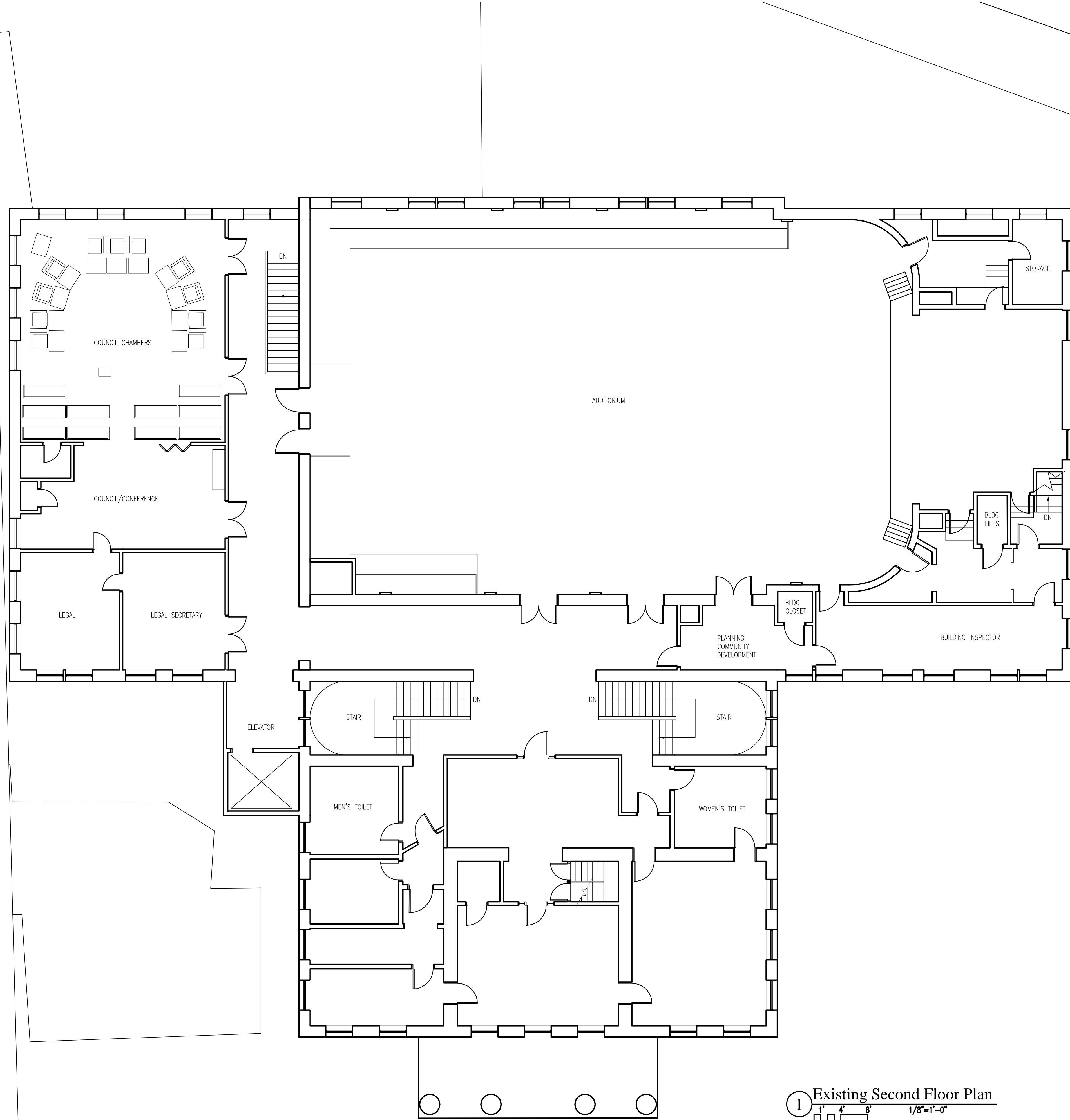
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Sheet Title:
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Sheet Number:

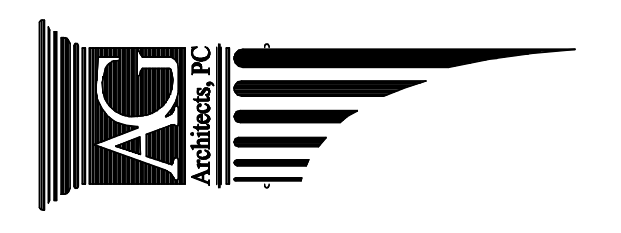
A1.2

HALE STREET



① Existing Second Floor Plan
 1" = 1'-0"

ST THOMAS STREET

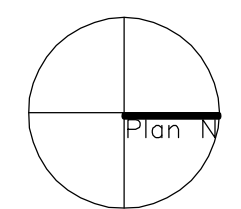


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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Sheet:	4 of 4
File:	5330-A103-01.dwg

Sheet Title:
 Existing Second Floor Plan

Sheet Number:

A1.3

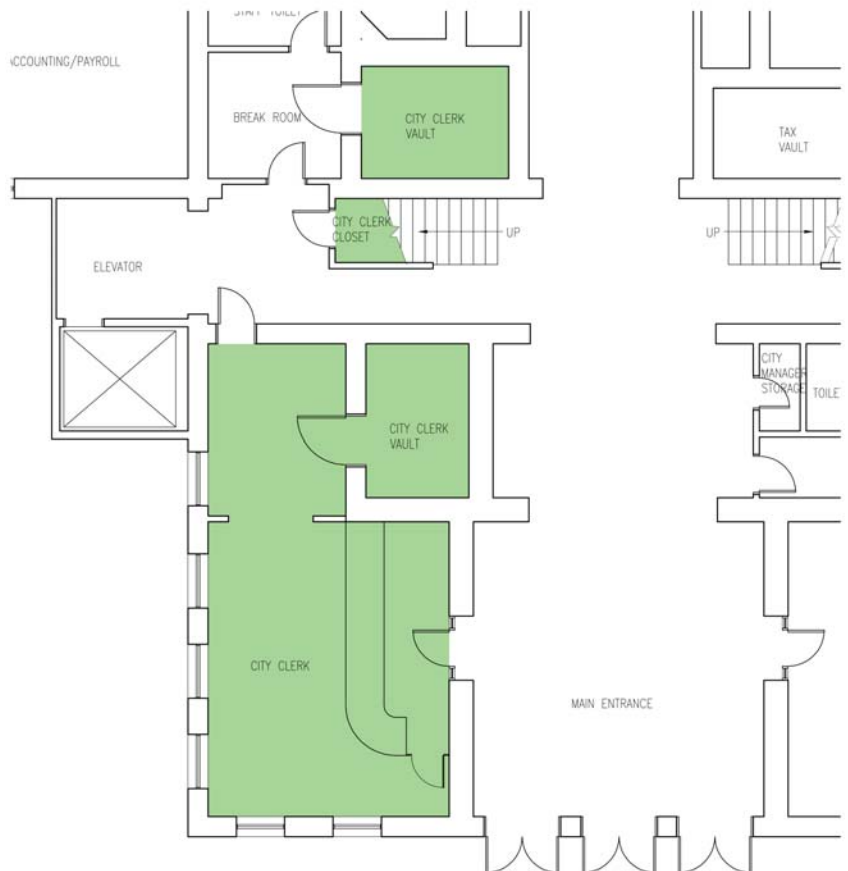


Facility Evaluation

City Clerk Vital Records

The City Clerk office is located on the first floor of City Hall, adjacent to the main front entrance to City Hall. The office consists of one large room, approximately 20'x24' with a front counter for serving the public, an office alcove 14'-3" x 11'-4" open to the main room, and a concrete vault, 11'-0" W x 8'-6" D, in one corner. There is a second concrete vault, 9'-4" W x 11'-4" D, located across the Elevator Lobby Corridor that is also used by the City Clerk for Vital Records (See partial plan below). There are other City Clerk materials stored throughout City Hall including a supply closet under a stairway, plastic storage bins containing election supplies in the Elevator Lobby, election equipment and voting machines stored in bins in the second floor auditorium and voting booths stored in a trailer at Mast Road.

The storage requirements for Vital Records involve several issues, including the amount of space required and the environmental characteristics of the storage space.





Space Requirements:

A review of the materials being stored in the two existing vaults includes the following:

- Vault 1 (11'-6" W x 8'-6" D):
 - (1) four drawer file cabinet: Council Minutes, Union Contracts, Wetlands Applications (5 years), Burial Permits.
 - (1) four drawer file cabinet: Dog Licenses, Cemetery Deeds, Comcast Contracts, City tee shirts, old code books.
 - (1) four drawer file cabinet: City Contracts.
 - (1) four drawer file cabinet: Non-Public Meeting Minutes.
 - (2) 3' metal shelf units, 2 shelves used: Voter Records, City Charter.
 - (2) 3' metal shelf units, 6 shelves: Cemetery Deeds, Council Resolutions (now being scanned), Voter Checklists (5 years), code updates, Adoption Records, Passport Acceptance Agency records, Tax Liens, zoning maps (for sale), Database of Titles.
 - (4) 3' metal shelf units, 6 shelves; (1) 3' metal shelf unit, 12 shelves; (1) 3' metal shelf unit, 8 shelves: Vital Records, Marriages (350/year), Births and Deaths.
 - (1) 3' wood shelf unit, 6 shelves: Voter Records presently stored outside vault.
- Vault 2 (9'-4" W x 11'-4" D):
 - (2) 3' metal shelf units, 6 shelves: NH Manuals, Dover Reports, City Council packets.
 - (1) 3' metal shelf unit, 3 shelves: City Council packets.
 - (1) map tube storage: City building plans, City maps.
 - (4) map tube bins (on floor).
 - (4) 3' metal shelf units, 6 shelves: Records (1880+), Adopted Budgets (through 1983), Marriage Intentions (100 years), City Council packets.
 - 6 Voting machines (on floor).
 - City souvenirs (on floor).



City Clerk Vault 1



City Clerk Vault 2

The two existing vaults are extremely crowded and fail to adequately accommodate present storage needs for Vital Records, much less capacity for future needs. In determining future needs, there are several steps recommended, as follows:

1. Review the State's minimum record keeping requirements as outlined in RSA 41:58, <http://www.gencourt.state.nh.us/RSA/HTML/III/41/41-58.htm> and the length of time to keep municipal records, RSA 33-A:3-a, at <http://www.gencourt.state.nh.us/RSA/HTML/iii/33-A/33-A-3-a.htm>. Review existing records to determine what is being kept. The State's records retention schedule provides the minimum length of time that certain records should be retained. The City should confirm which records will be kept with the City Clerk and which records are appropriately kept with other departments, and what the City's retention schedule will be for these records. There may be business, legal or fiscal reasons that the City might want to retain certain records for a longer time than the minimum recommended by the State. The increasing use of electronic records and web connection to the State's database should be reviewed to determine what records may be kept electronically rather than in traditional paper format. Records that can be destroyed after a certain period of time are likely to have a modest increase in growth, while permanent



records will continue to grow and need more storage space.

2. The proper storage of Vital Records has an impact on the space required. It is important that Vital Records, particularly those kept permanently, be housed in archival quality enclosures. This helps to create a mini-environment that reduces fluctuation in temperature and humidity, and further protects the records from dust. Permanent record archival quality boxes can be utilized, which are typically 12"x15"x10" in size. The use of boxes impacts the amount of space since the boxes will require more space than stacking items loose. Slipcovers as presently used will provide some protection, but boxes help maintain a mini-environment. The boxes can be accommodated on metal shelving that has 16" deep x 42" wide shelves, which fits 3 boxes per shelf. Assuming six shelves per 42" wide shelving unit, a total of 18 boxes or 21 LF per shelf unit is available. Drawing and map storage can be accommodated by utilizing a deeper shelf unit, usually 36" in depth.

An initial estimate for a recommended vault size assumes that the current records in the two City Clerk Vaults must be kept, and that other permanent records in other functional areas are still needed in those areas. Accommodating the existing records and allowing for future growth over the next 20 years, we estimate that the existing material requires 490 linear feet of shelving, and that 658 linear feet of shelving space total should be provided to allow for future growth.

Environment:

There are standards that are recommended for proper storage of archival records. The State of New Hampshire has "Best Practice Guidelines for Vital Records Preservation" available at http://www.SOS.NH.gov/vitalrecords/VR_pres_grants.html. The National Association of Government Archives and Records Administrators has issued a guide titled "The Selection and Development of Local Government Records Storage Facilities". The National Information Standards Organization (NISO) at <http://www.niso.org> has a publication "TR01-1995 Environmental Guidelines for the Storage of Paper Records" that addresses environmental parameters including temperature, relative humidity, exposure to light, gaseous contaminants and particulates. Critical elements include the following:

- Locate the storage area in the central core of the building and of adequate size to allow for future growth.
- Provide a 4-hour rating for protection of records.
- Provide stable temperature and humidity control, with minimal fluctuation, 24/7 year round. Optimal temperature and humidity levels in stack areas where people are excluded except for access and retrieval (vaults) are 65° (maximum) and 30-50% RH, with a maximum daily fluctuation of ± 2 degrees and $\pm 3\%$ RH.
- Ensure that space is well insulated with vapor barriers to prevent moisture migration.
- Provide a slight positive air pressure to keep dust out.
- Minimize light damage by avoiding windows and using UV light filters on fluorescent lighting.
- Use stable metal shelving that is powder-coated steel or baked enamel.
- Install a fire suppression/sprinkler system.
- Monitor the environmental controls.



The schematic design concepts prepared for the City of Dover Space Needs Assessment, as outlined in Section E, provides vault storage space within the City Clerk's suite. A combination of using an existing 8'x12' concrete vault and construction of an additional vault storage room, 13'x26' in size, will accommodate sufficient storage space with the use of mobile shelving units.

Cost Estimate:

The estimated cost of construction for a new vault is based on providing an adequate size vault to accommodate Vital Records into the future, with environmental controls designed to meet archival conditions. The costs outlined below do not include demolition costs or general infrastructure improvement such as upgraded building electrical capacity or the upgraded water service entrance for a sprinkler system. The design cost has not been identified since it would be part of the overall scope of the project.

• Vault construction, 4 hour rating	\$15,400
• Vault door, 4 hour rating	\$ 4,500
• Split system HVAC with humidity control (Stultz)	\$10,000
• Sprinkler system, preaction activation	\$ 5,450
• Lighting	\$ 800
• Monitoring and alarm systems	\$ 2,500
• Mobile shelving system	\$17,200
• Finishes: flooring, paint, ceiling	<u>\$10,200</u>
Total Estimated Cost of Construction	\$66,050

Facility Evaluation

Auditorium

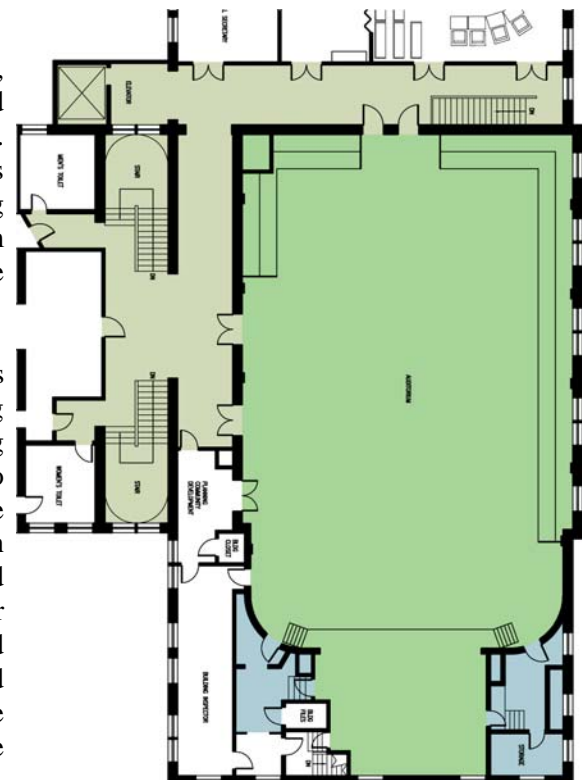
The Auditorium is a large function hall on the second floor that includes a stage and backstage/storage areas to the sides of the stage. The audience seating area is 57'-6" W x 86'-6" L and is 4,948 SF in size. The stage is 30' W x 25'-6" D. Total area for the auditorium, stage and backstage spaces is 6,142 SF. Maximum capacity for the Auditorium is listed as 719 for stage shows and 300 for dance events. Large arched windows are located on the West side of the auditorium and to the rear of the stage on the North side. Access to the auditorium is through two pairs of doors on the East side and two doors on the South side. There is also access behind the stage to an exit stair. There is a large mural painted on the corridor wall at the East side entrance doors that portrays positive historical relations between settlers and Native American Indians, that is an important feature to retain. The Planning/ Inspection Department occupies the area to the East of the stage, thereby limiting separate access to the stage for performances.



The Auditorium seating area presently has no fixed seats. There remains a two step raised platform on the sides and rear of the auditorium that in the past had fixed seating. There are still remnants of rails stored in City Hall that were part of the original fixed seating layout.

Finishes in the Auditorium include a hardwood floor (maple?), painted wood panel wainscoting, painted plaster walls and painted plaster ceiling with painted wood trim at what appears to be beams. The structure has not yet been reviewed to determine if the beams are truly structural or decorative. The ceiling is a high ceiling space, approximately 18' in height. The acoustics in the auditorium are rather poor, due in part to the proportions of the space and the hard surfaces throughout.

The Auditorium is not air conditioned, resulting in hot conditions in the Summer, and heating has been noted to be a problem during cold weather. The original design for ventilation and heating includes two large grilles, located in the ceiling that exhaust to vents on the roof, and two supply grilles located to each side of the stage, which are apparently served by an air handling unit or fan located above the backstage ceiling. Heat is provided by recessed radiators located on the West wall, with exposed piping at the floor installed with the 19__ mechanical upgrade. Lighting is provided by surface mounted fluorescent 2'x4' fixtures. There is a sound system that was added to provide speakers toward the rear of the Auditorium, with the intent of ameliorating the poor acoustics. The





sound system equipment is located in a wall mounted cabinet toward the rear of the Auditorium. There are hardly any electric outlets available in the Auditorium.

The Auditorium is used for conference and event space and is available to the public on a rental basis. During the past year it has been rented from September to May on Thursday evenings for square dancing; the lack of air conditioning makes the space unsuitable in the Summer months for this activity. Contra dancing uses the space one night per month throughout the year. Until recently, the Auditorium had also been rented by a fencing club on Sunday and Tuesday nights and by a religious group for services on Sundays. Other uses include an occasional cheerleading group, a martial arts group, ballroom dancing and special events such as inaugurations of elected or appointed officials and meetings with elected officials. Occasional political events are held there, except that Council policies limit uses, including campaign events, partly due to the disruption to City activities. Presently, a City run summer camp is using the Auditorium from 8 am to 4:30 pm for several weeks. The Auditorium has also been used in the past as a polling place for elections and worked well except that poll workers were uncomfortable with inadequate heat on a cold November day.



The Auditorium rental is handled through the City Clerk's office at rates listed in the attached Application Form.

There is concern that the Auditorium space is underutilized. Plans were developed in 1995 but never implemented to construct additional office and conference space on two levels at the rear 27 feet of the Auditorium. This would have provided additional space for City Hall use, but would have also reduced the capacity and flexibility of the Auditorium. There are a range of improvements and suggestions that would maximize the usefulness of the Auditorium for cultural, conference and event use. Recommended actions include the following:

- Flexibility for a wide range of events is critical. It is recommended that the large open Auditorium space be maintained so as not to reduce the capacity and flexibility of the room. Although sloped theater seating is great for stage or film activities, it doesn't allow for dances or fencing clubs.
- It has been noted that the raised steps around the perimeter of the room previously contained fixed seating and rails, which have both been removed. The remaining platform steps should be removed and the flooring extended to the perimeter walls. This would increase the useable area in the Auditorium.
- Remove the storage bins at the rear of the Auditorium that contain the City Clerk's election equipment, and locate in appropriate City Clerk storage space.
- The proportion, layout and exits from the space would permit installation of a moveable wall panel across the middle of the Auditorium. This would create two 43' x 57'-6" rooms that could be used simultaneously for different functions.
- Maintaining a comfortable environment within the space for large and small groups is critical. It has been noted that the lack of air conditioning keeps groups such as square dancing from using the space in the Summer, and that inadequate heat limits use in cold weather. Improvements including central air conditioning, proper ventilation to bring in fresh air, and improved heating and temperature controls are necessary for effective use of the space, especially if it can be divided into two spaces.
- The hard surfaces and the proportions of the room create a noisy environment with difficult reverberation characteristics. Different activities from stage events to dancing in the auditorium to conference/meeting space require solution(s) that will address the needs of each activity. Acoustic



problems can be resolved with the assistance of an acoustic engineer to look at modifications to finishes and improvements to the sound system. Some of the improvements noted in this list may serve a dual function; the addition of drapes at the windows may help with acoustics, sun control and temperature control all at the same time.

- Provide window treatment at the windows on the West wall to help control the heating and glare effects from the West sun.
- Provide window treatment at the windows behind the stage North wall to make the stage more useful. This would address lighting control and visibility of people on the stage.
- Improve lighting throughout the Auditorium. The general overhead lighting should provide flexibility in illumination levels for different events. Stage lighting that provides full illumination and spot illumination would be important for speaking or theater engagements.
- Consider stage improvements such as operable curtains at both the front and rear of the stage that makes the stage more useable.
- Provide access from the public corridor to the backstage area, in the area of the Building Inspector's office, to permit more flexibility in accessing the stage for speakers and theater events.
- Upgrade the fire alarm system, emergency lighting and exit signs to improve life safety to meet current standards.
- Improve electrical services with the addition of outlets that are available for different functions. This should include both wall outlets and flush floor outlets positioned at strategic locations.
- Consider the addition of overhead projector equipment and a retractable screen for film and presentation use. This might allow for a "Dover Speaker Bureau" or "Dover Art Film Festival" to take place.
- There are also promotional considerations that the City could do to promote the Auditorium rental. There is currently no marketing to the community that promotes the availability of the space. This could happen in conjunction with other City mailings, through the website and through advertising.
- Provide assistance to groups with setting up for their events, and make tables and chairs available as needed.
- Consider assisting groups, if feasible, with ticket sales through the City Clerk/Tax Collector office.

The enhanced use of the Auditorium requires physical improvements, operational improvements and promotion. The potential for an enhanced community asset and an enhanced revenue stream should be considered.



**AGREEMENT FOR USE OF MUNICIPAL BUILDING AUDITORIUM
CITY OF DOVER, NH
APPLICATION FOR AUDITORIUM RENTAL**

All organizations using the City Hall Auditorium shall be responsible for adhering to all Rules and Regulations as stated on reverse side of application. Upon the signing of the application, this is an acknowledgment that the renter has read and understands the Fees as stated below and acknowledges and accepts the Rules and Regulations.

Organization _____ Telephone _____

Name and address of authorized representative:

Date Requested: _____ Time: _____

Purpose: _____
(Dance, Reception, Lecture, Meeting, etc)

Dover Resident/Organization: _____ Non-Resident Individual or Organization: _____

We (will, will not) need _____ chairs (Maximum Available 150)

We (will, will not) use the public address system

IN CONSIDERATION OF BEING ALLOWED TO RENT THE DOVER CITY HALL AUDITORIUM, I, _____

DO HEREBY AGREE TO INDEMNIFY AND HOLD HARMLESS THE CITY OF DOVER, NH and all city agents and employees, its sponsors, officers, directors and agents, from nay and all liability for damages and/or personal injury of any kind which may arise in any way as a result of the rental of the auditorium and have read and fully understand the rules and regulations set forth by the City in this rental agreement.

Application accepted by: _____ Signature of authorized representative _____

Date of Application _____

USE OF AUDITORIUM - RATE SCHEDULE

Type of Charge	Dover Resident/Organization	Non-Resident Individual/Organization	Amount Paid: _____
WEEKDAY (Mon-Friday)	\$50.00	\$70.00	Cash/Check# _____
SATURDAY, SUNDAY, HOLIDAYS	\$250.00	\$250.00	Date Paid: _____
Maintenance Personnel (to lock and unlock bldg, cleaning, etc.)	\$35.00 per hour for a minimum of 4 hours	\$35.00 per hour for a minimum of 4 hours	Damage Deposit:
DAMAGE DEPOSIT	\$100.00	\$100.00	Pd. _____ Returned _____

**RULES AND REGULATIONS
FOR AUDITORIUM RENTAL**

1. Maximum persons permitted in assemblage shall be: Stage Show 719, Dance 300.
2. A rental check and damage deposit check are required at least one (1) week prior of rental date.
3. Person and/or organizations shall be held responsible for any damage to property that occurs. The damage deposit check will be returned by the City Clerk upon verification with maintenance personnel that damage did not occur.
4. All functions will be concluded by 10:00 p.m. during the week or the \$35.00 per hour with a minimum of the 4-hour rate for staying beyond 10:00 p.m. *will be* charged.
5. No decorations attached to walls, ceiling or stage. NO PERMANENT SECURED ITEMS OF ANY KIND. (In special circumstances City Clerk and/or City Manager, may permit decorations).
6. ABSOLUTELY No smoking, food or soft drinks are permitted in the auditorium.
7. There shall be NO intoxicating substances of any kind allowed in City Hall.
8. No changes will be made in the lighting arrangements, nor tampering with lighting controls.
9. Set up or dismantling of chairs and/or tables and equipment requiring multiple electrical outlets shall be done under supervision of City personnel ONLY.
10. DRAGGING OF TABLES, CHAIRS, ETC. ON THE AUDITORIUM FLOOR IS NOT PERMITTED.
11. There shall be NO ANIMALS allowed in the City Hall building during event.
12. Children must be under the supervision of an adult at ALL TIMES.
13. Persons and/or organizations violating these rules as stated *will forfeit* any damage deposit.

******* ANY VIOLATIONS OF THESE REGULATIONS
WILL RESULT IN IMMEDIATE SUSPENSION
OF APPLICANT'S RIGHT TO USE FACILITY *******



Facility Evaluation

Aesthetic Concerns

There are many elements within a building that work together to create an image and character that says “City Hall”. Dover is fortunate to have a classical style building that achieves this “look” and says “We are an important city!”. The proportions of the building, the size and shapes of windows and doors relative to the overall facade, the materials and the details, and special features such as the stone columns supporting the stone pediment and the traditional clock tower, are all features that contribute to this image. The two design options described in the Conceptual Designs section impact the appearance of City Hall. Issues of aesthetic concern are noted below, and are also referred to in the list of advantages and disadvantages prepared with each Option.



Exterior

- The classical symmetry of the building with its stone columns and stone pediment and T-shaped plan creates a sense of tradition for the City. Additions to the front of the building will only detract from this presence, as is done in Option A. This is also evident with the small contemporary addition that was built for the elevator tower.
- The proportions of the building relative to its height versus plan dimension is effective. The concept of adding a third floor was discussed, but the design options work without this addition. The proportions of a third floor would be rather difficult, although not impossible, due to the distance from the second floor windows to the roof parapet, and the height of the clock tower.
- Part of the presence of City Hall is created by raising the building five feet above grade at the front entrance. This provides for a more imposing presence.
- The use of brick and limestone trim provides a sense of permanence to the building. Expansion of the building with similar materials will be expensive, but necessary to maintain the image.
- The majority of windows are 12 over 12 double hung windows, and at prime locations windows have arched tops. Window replacements and additions should be done to meet historic standards, including matching grid sizes, muntin details and locating muntin profiles on the exterior.
- The green space at the front of the building provides room to present the building to the street. It is important that this area not be encroached upon. The building setback at the rear on Locust Street also allows a better presentation to the street. This would be lost if the building is expanded to the street as proposed in Option A.
- There are two monuments/plaques at the front of City Hall that are set in the middle of the lawn.

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tion





should be given to extending the brick paver walks/plaza to the monuments to make them more accessible to the public.

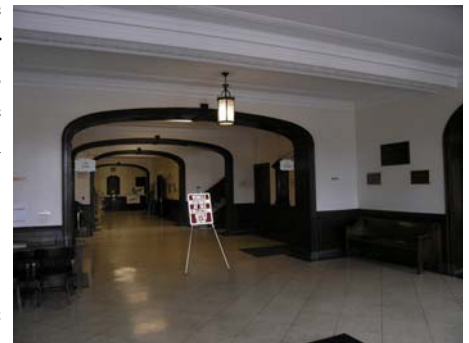
- Existing bench seating at the front entry walk are dated in appearance. These benches should be upgraded to improve the entrance to City Hall.
- The brick paver walk with stone banding along Central Avenue provides an attractive historical treatment to the sidewalk. Consider upgrading the surrounding sidewalks similarly, especially at the lower level Locust Street main entrance. This entrance would become much more important if Option B with City Hall in the lower level occurs.
- There are three flagpoles at the front of the building, which are certainly appropriate for a municipal City Hall. What needs attention is the rusty flagpole that needs a coat of paint.
- The light poles along Central Avenue are typical highway fixtures. The fixtures should be changed to a fixture more in keeping with the character and period of City Hall.
- Exterior lighting at City Hall entrances should be upgraded to fixtures that enhance and work with the architecture.
- The Police Station antenna is located on top of the roof of the City Hall/Police Station. The antenna is certainly needed for communications, but it does detract from the appearance of the building. The antenna would presumably be relocated if a new Police Station were built as proposed in Option B.
- There are numerous mechanical upgrades completed over the years that have impacted the appearance of City Hall. Items to address include the following:



- Window air conditioning units and wall mounted condenser units should be removed with the addition of central air conditioning.
- The emergency generator exhaust pipes exposed on the Southwest corner of the building all the way to the roof are starting to rust and are unsightly. The generators are also rather unattractive. Consider relocating these generators possibly to the roof. The Locust Street side of the building needs to be treated as an equal entrance in appearance.

Interior

- There is stained wood wainscot throughout the public corridors on the first and second floors. The wood creates an impression of age and quality that should be retained in all the public spaces, and even incorporated into the public parts of departments.
- The arches over the main entry corridor are trimmed in stained wood, matching the wainscot. This treatment enhances this interior appearance.
- The department entrance doors and surrounding trim is also matching stained wood, and is an important aesthetic part of the character of the space. The doors and





sidelights have a unique patterned glass that is both functional (it lets day light through to the corridors but provides privacy) and an attractive pattern.

- The floors and stairs are finished with terrazzo, which is seldom used today because of cost. The terrazzo is incredibly long lasting and speaks to the image of quality. There are some steps that require repair at broken edges.
- The City has installed historical style signs at the Department entrances, but it will be necessary to address ADA (Americans with Disabilities Act) issues. There are

numerous other miscellaneous signs, tack strips, and displays that are haphazard and that affect the appearance of the public corridors. It will be important to provide consistency in design and to limit locations where displays and signs are located.

- There are two original hanging ornamental lights at the main front corridor that add to the historical context. Then there are numerous other surface mounted strip fluorescent fixtures added throughout that should be replaced with more attractive lighting fixtures. This is true both in public corridors and in all the individual departments. An especially glaring example is the Council Chambers, where an arched ceiling is thoroughly overcome by hanging strip fluorescent fixtures.
- Another issue that has a negative impact on the appearance of City Hall is the use of surface mounted wiring. Although it is difficult to install concealed wiring after the fact, particularly with the existing masonry and plaster wall construction, this should be addressed during major renovations.
- The vaulted Council Chambers ceiling apparently used to continue through to the front of the building, but is now covered by suspended ceilings. The proposed design options would allow this feature to be restored. The Council Chambers also present highly detailed wood dentil trimwork at the ceiling that, again, speaks to the historical aspects of the building.
- A major issue to address with a significant renovation would be to relocate mechanical piping that was run exposed throughout the building, taking space and detracting from the quality of the space.



The aesthetic concerns noted above focus on elements that should be dealt with during major renovations and any time a minor change is made. It is wonderful that much of the original character remains, but there is a cumulative impact from upgrades made without concern for maintaining the integrity of the design details. The aesthetic concerns must continually be a part of the criteria used in determining solutions to problems if the character and quality of the building is to be preserved.



Conceptual Designs Design Option A

Expand/renovate existing Police Station at City Hall, and expand/renovate City Hall.

Description:

Option A examines the concept of expanding the existing City Hall building so that the building can accommodate both the Police Station and City Hall departments as outlined in the Program of Space Needs. An initial Site Plan (see attached Site Plan C-2.1A) was developed to portray how large a footprint a one-story Police Station requires. It is clear that a 33,462 SF Police Station facility does not fit on the site on one floor without utilizing adjacent City street(s). It was determined with City staff that modifying or eliminating the street(s) would not be an acceptable option. This meant that several functions of the Police Department would be located off-site, a condition that they currently have, and the Department would be located on more than one floor. The spaces that would be off-site include the following:

(200 SF)	SRT Storage
(800 SF)	SRT Mobile Command Vehicle
(500 SF)	Traffic Bureau Vehicle Storage
(200 SF)	Traffic Bureau Sign Work Space
(150 SF)	Traffic Bureau Barrier Storage
(2,600 SF)	Impound Lot/Vehicle Storage
(800 SF)	Crime Scene Vehicle
(800 SF)	Peacekeeper
<u>(1,920 SF)</u>	Multi-Purpose Room, Storage Rooms, Kitchen, Food Storage
(7,970 Net SF)	

The Police Station program of spaces with the changes noted above requires 19,570 Net SF, or approximately 25,440 Gross SF. The City Hall program requires 40,854 Gross SF. Together the facilities require an area of approximately 66,294 SF Gross.

Option A provides space for the City Hall and Police Station by expanding the building to the rear (West side), where the generators and parking lot along Locust Street are located, and by filling in the Southeast corner where the elevator lobby is situated. The expansion occurs on all three floors, and requires the generators to be located to the roof of the building (it has been suggested that one generator could be located at the McConnell Center). New construction for the Police Station is required by the Building Codes to be built to a stricter seismic requirement for potential earthquakes due to the Importance Factor required for Police Stations. This means that the new building containing the Police Station must be structurally isolated from the older City Hall building. The Police Station will utilize the entire lower level and the new space on the first floor to the rear of the building, as shown in Plans A2.1A and A2.2A. City Hall Departments will be located on the first and second floors of the building, as shown in Floor Plans A2.2A and A2.3A, and will utilize space at the rear of the Auditorium, including a mezzanine level. Expansion to a third floor was briefly considered, but this would require significant structural analysis of the building and was not necessary with the space available.



Advantages:

- Police Station adjacent to City Hall strengthens relationship with City Hall.
- Police close to Court for prisoner transport.

Disadvantages:

- Architectural character and integrity of existing City Hall is severely impacted. Visual appearance of classical building is destroyed.
- Lose the appearance of a campus with Library and McConnell Center; no public space at front entry and building shape is no longer classical.
- Insufficient site area to locate all police functions on site.
- Continued inefficiencies due to locating Police facilities off-site.
- Expansion requires use of parking lot. Lose parking spaces in downtown.
- No room for future Police or City Hall expansion.
- 3-story building tight to Locust Street and sidewalk is massive and imposing.
- Police Station entry directly on sidewalk does not allow an approach to the entrance or adequate public space.
- Major disruption inside building during construction.
- Construction of additions are more complicated and the new Police Station expansion has to be structurally isolated from old City Hall.
- There is not enough room to have the Multi-Purpose facility in the building.
- Police Station windows are directly adjacent to sidewalk; security and visual concern.
- Auditorium loses all windows on West side.
- Auditorium space is reduced to accommodate other City Hall needs.
- Generators will have to be relocated, most likely to the roof of City Hall.

Approximate Size:

	<u>Existing GSF</u>	<u>Additional GSF</u>	<u>Total GSF</u>
Lower Level	15,315	7,669	22,984
First Floor	15,222	7,678	22,900
Second Floor	15,277	7,678	22,955
Mezzanine		1,524	1,524
Off-Site Facilities			<u>10,361</u>
Total	<u>45,814 GSF</u>	<u>24,549 GSF</u>	<u>80,724 GSF</u>



Estimated Construction Time:

Option A

Police Station/City Hall

Phase 1: Construct Two Additions (Temporary impact on elevator access.) Lower Level: Police Records, Dispatch, Admin, Exercise, Officer Lockers First Floor: Police Detectives, Prosecutor, Lab, Evidence Second Floor: City Hall Accounting, Public Toilets, Staff Break Room, Council, Planning/Inspection, Human Resources	12-14 months
Phase 2: Lower Level: Temporarily move Patrol Officers to old Detective Space, M/W Lockers First Floor: Temporarily move Tax Collector to Auditorium	1 month
Phase 3: Lower Level: Police Men's Showers, M/W Lockers, Patrol Services, Special Programs, Traffic Bureau First Floor: City Hall Assessing, City Manager, IT Second Floor: City Hall Legal, Council Conference	3-4 months
Phase 4: Lower Level: Police Women's Lockers, Patrol Services First Floor: City Hall Public Toilets, Tax Collector/City Clerk	3-4 months
Phase 5: Lower Level: Police Property Storage First Floor: City Hall Conference at old City Clerk, Copy	1 month
	<hr/> 20-24 months

Estimated Construction Cost:

Police Station/City Hall Renovation/Expansion	\$15,915,000 - \$17,985,000
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Conceptual Designs

Design Option B

Relocate Police Station to new site, Renovate City Hall.

Description:

Option B considers relocating the Police Station to a new facility on a separate site, and explores the capacity of the City Hall building to accommodate City Hall functions within the existing building space. Design for the City Hall layout is presented in Drawings A2.1B, A2.2B and A2.3B. The lower level would include the Planning Department including Building Inspection, Accounting, and the Multi-Purpose Conference space. A new open stairway from the Locust Street lower level entrance provides a simple connection to the main first floor corridor for the public. The first floor contains other critical functions that interact with the public, including Assessing, a combined Tax Collector/City Clerk suite, the City Manager, Economic Development, and Conference Rooms for meetings. The second floor has the enlarged Council Chambers, new Conference space, the Legal Department, the full Auditorium, and the Staff Break Room. The program of spaces calls for 40,854 gross SF; the existing City Hall building is 45,814 gross SF. Improvements would include a new HVAC system with full air conditioning, a sprinkler system and fire alarm system. The generators could remain on site without modification, and the parking lot on the West side of the building would be available for visitors to City Hall.

This Option proposes that a new Police Station be built on a new site within the City. Total size of the facility is recommended to be 33,462 GSF, plus an outside Impound Lot and other parking needs. It will be necessary to find an appropriate site of sufficient size to accommodate all the functions of the Department so that efficiency of the Department can be improved. The new facility would include an Impound Lot and storage for specialized police vehicles such as the Mobile Command, Crime Scene, and Peacekeeper vehicles. Construction of a new Police Station could take place without impacting ongoing operations, and when the new facility is completed, the Department moves in over a very short period of time. The lower level of City Hall then becomes available to start renovations within City Hall.

Advantages:

- City Hall program fits within existing building; only interior renovation.
- Less construction disruption; build new Police Station without impacting ongoing operations, move in when finished.
- Police Station parking spaces become available for public use; adds 50 parking spaces downtown when police move.
- Police Station design is more efficient and functional.
- Maintains character and integrity of classical exterior and interior detail of City Hall.
- Creates improved public access on Locust Street at lower level with stair to first floor.

Disadvantages:

- Prisoner transport time increases, requires using a vehicle if building is not next door.
- Separate Police Station may impact interaction between Police Chief and City Manager.
- Need to find an appropriate location within the City for the Police Station.



Advantages (Continued)

- Space is available for future expansion within City Hall and for Police Station.
- All the Police Station functions can be together to create a more functional plan.
- Larger suites (Planning and Accounting) function better on lower level without central corridors.
- Phasing for City Hall renovation is simplified with use of a vacant lower level.
- Auditorium space is not needed to accommodate current City Hall needs; space remains available for programs or future expansion.
- Multi-Purpose conference facility is located on lower level.

Approximate Size:

Police Station	33,306 SF Gross
City Hall	
Lower Level	15,315 SF Gross
First Floor	15,222 SF Gross
Second Floor	<u>15,277 SF Gross</u>
Subtotal	45,814 SF Gross
Total	79,120 SF Gross

Estimated Construction Time:

Police Station	8-10 months
City Hall	
Phase 1: Lower Level	4-5 months
Planning/Inspection, Accounting	
Human Resources, IT, Multi-Purpose	
Second Floor	
Legal, Toilets	
Phase 2: First Floor	2-3 months
Assessing, City Manager	
Second Floor	
Council Chambers, Staff Break Room	
Move Tax Collector/Water and Sewer temporarily to Auditorium	
Phase 3: First Floor	4-5 months
Open/Add stair to Lower Level,	



M/W Toilets, Tax Collector/Water and Sewer/City Clerk, Economic Development	
Phase 4: First Floor	1 month
Conference at old City Clerk	
	<hr/>
	19-24 months

Estimated Construction Cost:

City Hall Renovation	\$6,850,000 - \$7,655,000
New Police Station	
Site Purchase Cost:	To be determined.
Site Improvements:	\$400,000 - \$500,000 estimated
Police Station:	(33,462 SF)(\$225-\$275 PSF) = \$7,530,000 - \$9,200,000
Total	\$14,780,000 - \$17,355,000



EXISTING GROSS SF: 15,277 SF
 NEW ADDITION GROSS SF: 16,719 SF
 TOTAL GROSS SF: 31,996 SF

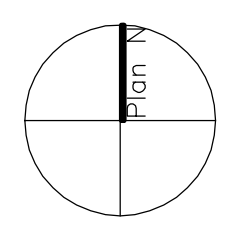
1 Option A: Site/Lower Level Floor Plan
 10' 20' 30' 60' 1"=30'-0"

AG Architects, PC
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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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 Consultant:

Revisions:

Date: 26 June 2007

Scale: 1" = 30'-0"

Drawn By: DH, MC, ST Checked By: AG

Sheet: 1 of 4 File: 5330-A201A-01.dwg

Sheet Title:
 Option A:
 Site / Lower Level Floor Plan

Sheet Number:

C2.1A



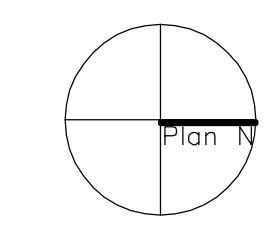
① Option A: First Floor Plan
 3/32" = 1'-0"

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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Date:	26 June 2007
Scale:	3/32" = 1'-0"
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Checked By:	AG
Sheet:	3 of 4
File:	5330-A202A-01.dwg
Sheet Title:	Option A: First Floor Plan
Sheet Number:	A2.2A

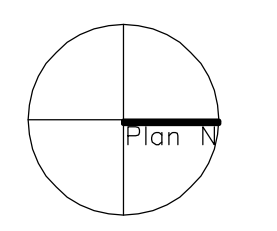


① Option A: Lower Level Floor Plan
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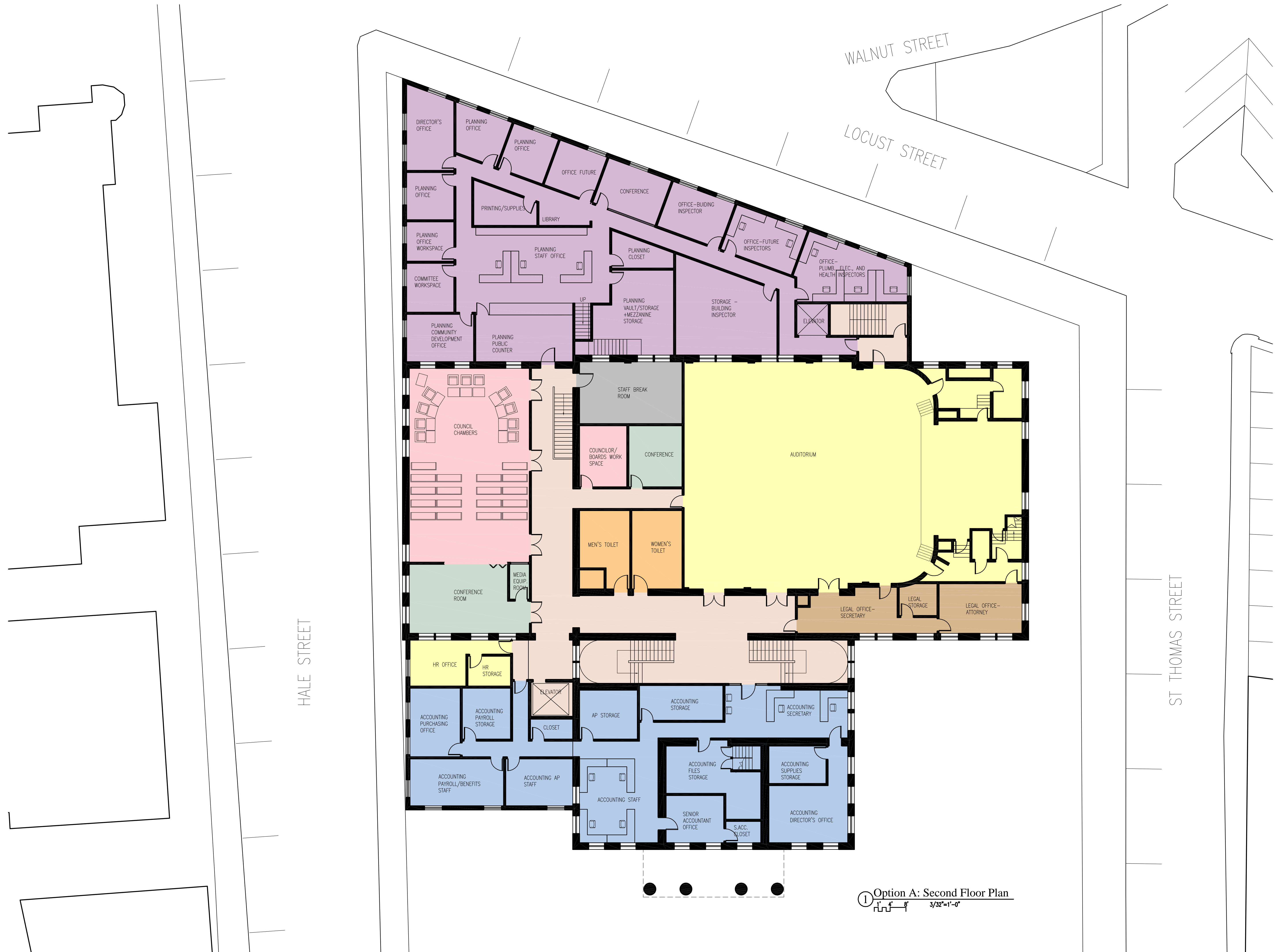
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Dover City Hall Space Needs Analysis

Dover, New Hampshire



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Date:	26 June 2007
Scale:	3/32" = 1'-0"
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Sheet:	2 of 3
File:	5330-A201A-01.dwg
Sheet Title: Option A: Lower Level Floor Plan	
Sheet Number: A2.1A	



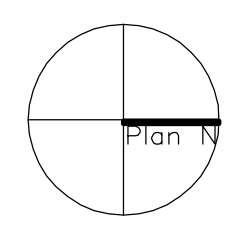
① Option A: Second Floor Plan
 1" = 3/32" = 1'-0"

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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Date: 26 June 2007
 Scale: 3/32" = 1'-0"
 Drawn By: DH, MC, ST Checked By: AG
 Sheet: 4 of 4 File: 5330-A203A-01.dwg

Sheet Title:
 Option A:
 Second Floor Plan

Sheet Number:

A2.3A



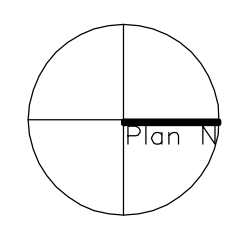
① Option B: First Floor Plan
 1" = 3/32" = 1'-0"

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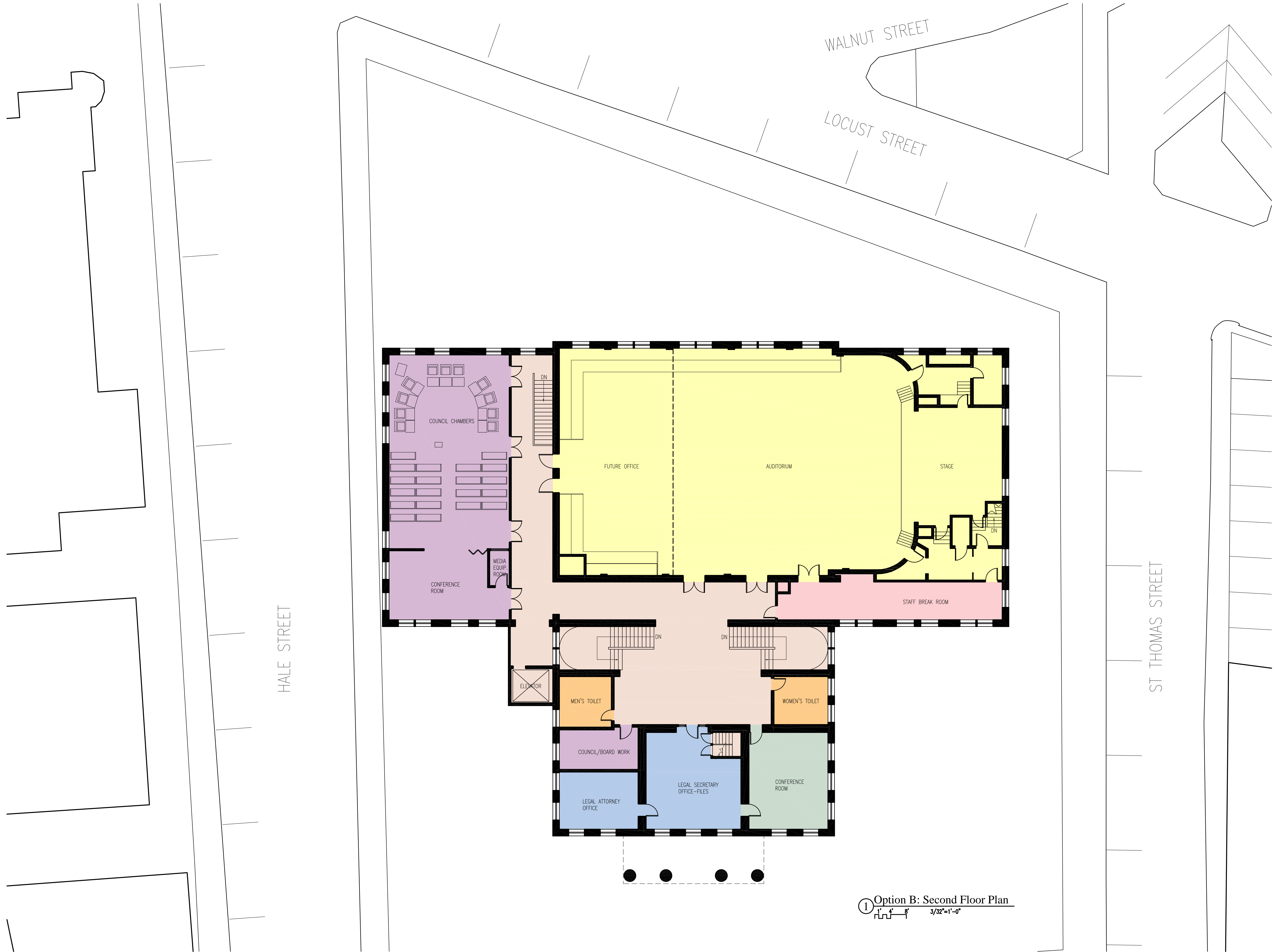
Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Scale:	3/32" = 1'-0"
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Sheet:	2 of 3
File:	5330-A202B-02.dwg
Sheet Title:	Option B: First Floor Plan
Sheet Number:	A2.2B

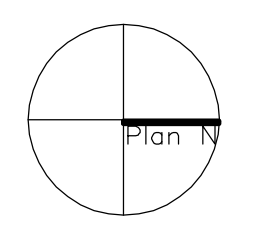


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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Scale:	3/32" = 1'-0"
Drawn By:	DH, MC, ST
Checked By:	AG
Sheet:	3 of 3
File:	5330-A203B-02.dwg

Sheet Title:
 Option B:
 Second Floor Plan

Sheet Number:

A2.3B

① Option B: Second Floor Plan
 3/32"=1'-0"



Conceptual Designs Design Option A

Expand/renovate existing Police Station at City Hall, and expand/renovate City Hall.

Description:

Option A examines the concept of expanding the existing City Hall building so that the building can accommodate both the Police Station and City Hall departments as outlined in the Program of Space Needs. An initial Site Plan (see attached Site Plan C-2.1A) was developed to portray how large a footprint a one-story Police Station requires. It is clear that a 33,462 SF Police Station facility does not fit on the site on one floor without utilizing adjacent City street(s). It was determined with City staff that modifying or eliminating the street(s) would not be an acceptable option. This meant that several functions of the Police Department would be located off-site, a condition that they currently have, and the Department would be located on more than one floor. The spaces that would be off-site include the following:

(200 SF)	SRT Storage
(800 SF)	SRT Mobile Command Vehicle
(500 SF)	Traffic Bureau Vehicle Storage
(200 SF)	Traffic Bureau Sign Work Space
(150 SF)	Traffic Bureau Barrier Storage
(2,600 SF)	Impound Lot/Vehicle Storage
(800 SF)	Crime Scene Vehicle
(800 SF)	Peacekeeper
<u>(1,920 SF)</u>	Multi-Purpose Room, Storage Rooms, Kitchen, Food Storage
(7,970 Net SF)	

The Police Station program of spaces with the changes noted above requires 19,570 Net SF, or approximately 25,440 Gross SF. The City Hall program requires 40,854 Gross SF. Together the facilities require an area of approximately 66,294 SF Gross.

Option A provides space for the City Hall and Police Station by expanding the building to the rear (West side), where the generators and parking lot along Locust Street are located, and by filling in the Southeast corner where the elevator lobby is situated. The expansion occurs on all three floors, and requires the generators to be located to the roof of the building (it has been suggested that one generator could be located at the McConnell Center). New construction for the Police Station is required by the Building Codes to be built to a stricter seismic requirement for potential earthquakes due to the Importance Factor required for Police Stations. This means that the new building containing the Police Station must be structurally isolated from the older City Hall building. The Police Station will utilize the entire lower level and the new space on the first floor to the rear of the building, as shown in Plans A2.1A and A2.2A. City Hall Departments will be located on the first and second floors of the building, as shown in Floor Plans A2.2A and A2.3A, and will utilize space at the rear of the Auditorium, including a mezzanine level. Expansion to a third floor was briefly considered, but this would require significant structural analysis of the building and was not necessary with the space available.



Advantages:

- Police Station adjacent to City Hall strengthens relationship with City Hall.
- Police close to Court for prisoner transport.

Disadvantages:

- Architectural character and integrity of existing City Hall is severely impacted. Visual appearance of classical building is destroyed.
- Lose the appearance of a campus with Library and McConnell Center; no public space at front entry and building shape is no longer classical.
- Insufficient site area to locate all police functions on site.
- Continued inefficiencies due to locating Police facilities off-site.
- Expansion requires use of parking lot. Lose parking spaces in downtown.
- No room for future Police or City Hall expansion.
- 3-story building tight to Locust Street and sidewalk is massive and imposing.
- Police Station entry directly on sidewalk does not allow an approach to the entrance or adequate public space.
- Major disruption inside building during construction.
- Construction of additions are more complicated and the new Police Station expansion has to be structurally isolated from old City Hall.
- There is not enough room to have the Multi-Purpose facility in the building.
- Police Station windows are directly adjacent to sidewalk; security and visual concern.
- Auditorium loses all windows on West side.
- Auditorium space is reduced to accommodate other City Hall needs.
- Generators will have to be relocated, most likely to the roof of City Hall.

Approximate Size:

	<u>Existing GSF</u>	<u>Additional GSF</u>	<u>Total GSF</u>
Lower Level	15,315	7,669	22,984
First Floor	15,222	7,678	22,900
Second Floor	15,277	7,678	22,955
Mezzanine		1,524	1,524
Off-Site Facilities			<u>10,361</u>
Total	<u>45,814 GSF</u>	<u>24,549 GSF</u>	<u>80,724 GSF</u>



Estimated Construction Time:

Option A

Police Station/City Hall

Phase 1: Construct Two Additions (Temporary impact on elevator access.) Lower Level: Police Records, Dispatch, Admin, Exercise, Officer Lockers First Floor: Police Detectives, Prosecutor, Lab, Evidence Second Floor: City Hall Accounting, Public Toilets, Staff Break Room, Council, Planning/Inspection, Human Resources	12-14 months
Phase 2: Lower Level: Temporarily move Patrol Officers to old Detective Space, M/W Lockers First Floor: Temporarily move Tax Collector to Auditorium	1 month
Phase 3: Lower Level: Police Men's Showers, M/W Lockers, Patrol Services, Special Programs, Traffic Bureau First Floor: City Hall Assessing, City Manager, IT Second Floor: City Hall Legal, Council Conference	3-4 months
Phase 4: Lower Level: Police Women's Lockers, Patrol Services First Floor: City Hall Public Toilets, Tax Collector/City Clerk	3-4 months
Phase 5: Lower Level: Police Property Storage First Floor: City Hall Conference at old City Clerk, Copy	1 month
	<hr/> 20-24 months

Estimated Construction Cost:

Police Station/City Hall Renovation/Expansion	\$15,915,000 - \$17,985,000
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Conceptual Designs

Design Option B

Relocate Police Station to new site, Renovate City Hall.

Description:

Option B considers relocating the Police Station to a new facility on a separate site, and explores the capacity of the City Hall building to accommodate City Hall functions within the existing building space. Design for the City Hall layout is presented in Drawings A2.1B, A2.2B and A2.3B. The lower level would include the Planning Department including Building Inspection, Accounting, and the Multi-Purpose Conference space. A new open stairway from the Locust Street lower level entrance provides a simple connection to the main first floor corridor for the public. The first floor contains other critical functions that interact with the public, including Assessing, a combined Tax Collector/City Clerk suite, the City Manager, Economic Development, and Conference Rooms for meetings. The second floor has the enlarged Council Chambers, new Conference space, the Legal Department, the full Auditorium, and the Staff Break Room. The program of spaces calls for 40,854 gross SF; the existing City Hall building is 45,814 gross SF. Improvements would include a new HVAC system with full air conditioning, a sprinkler system and fire alarm system. The generators could remain on site without modification, and the parking lot on the West side of the building would be available for visitors to City Hall.

This Option proposes that a new Police Station be built on a new site within the City. Total size of the facility is recommended to be 33,462 GSF, plus an outside Impound Lot and other parking needs. It will be necessary to find an appropriate site of sufficient size to accommodate all the functions of the Department so that efficiency of the Department can be improved. The new facility would include an Impound Lot and storage for specialized police vehicles such as the Mobile Command, Crime Scene, and Peacekeeper vehicles. Construction of a new Police Station could take place without impacting ongoing operations, and when the new facility is completed, the Department moves in over a very short period of time. The lower level of City Hall then becomes available to start renovations within City Hall.

Advantages:

- City Hall program fits within existing building; only interior renovation.
- Less construction disruption; build new Police Station without impacting ongoing operations, move in when finished.
- Police Station parking spaces become available for public use; adds 50 parking spaces downtown when police move.
- Police Station design is more efficient and functional.
- Maintains character and integrity of classical exterior and interior detail of City Hall.
- Creates improved public access on Locust Street at lower level with stair to first floor.

Disadvantages:

- Prisoner transport time increases, requires using a vehicle if building is not next door.
- Separate Police Station may impact interaction between Police Chief and City Manager.
- Need to find an appropriate location within the City for the Police Station.



Advantages (Continued)

- Space is available for future expansion within City Hall and for Police Station.
- All the Police Station functions can be together to create a more functional plan.
- Larger suites (Planning and Accounting) function better on lower level without central corridors.
- Phasing for City Hall renovation is simplified with use of a vacant lower level.
- Auditorium space is not needed to accommodate current City Hall needs; space remains available for programs or future expansion.
- Multi-Purpose conference facility is located on lower level.

Approximate Size:

Police Station	33,306 SF Gross
City Hall	
Lower Level	15,315 SF Gross
First Floor	15,222 SF Gross
Second Floor	<u>15,277 SF Gross</u>
Subtotal	45,814 SF Gross
Total	79,120 SF Gross

Estimated Construction Time:

Police Station	8-10 months
City Hall	
Phase 1: Lower Level	4-5 months
Planning/Inspection, Accounting	
Human Resources, IT, Multi-Purpose	
Second Floor	
Legal, Toilets	
Phase 2: First Floor	2-3 months
Assessing, City Manager	
Second Floor	
Council Chambers, Staff Break Room	
Move Tax Collector/Water and Sewer temporarily to Auditorium	
Phase 3: First Floor	4-5 months
Open/Add stair to Lower Level,	



M/W Toilets, Tax Collector/Water and Sewer/City Clerk, Economic Development	
Phase 4: First Floor	1 month
Conference at old City Clerk	
	<hr/>
	19-24 months

Estimated Construction Cost:

City Hall Renovation	\$6,850,000 - \$7,655,000
New Police Station	
Site Purchase Cost:	To be determined.
Site Improvements:	\$400,000 - \$500,000 estimated
Police Station:	(33,462 SF)(\$225-\$275 PSF) = \$7,530,000 - \$9,200,000
Total	\$14,780,000 - \$17,355,000

HALE STREET



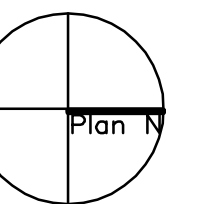
① Option B2 First Floor Plan
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ST THOMAS STREET

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Dover City Hall Space Needs Analysis

Dover, New Hampshire



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 Consultant:

Revisions:

Date: 12 July 2007

Scale: 1/8" = 1'-0"

Drawn By: ST

Checked By: AG

Sheet: 1 of 2

File: 5330-B2-A202-01.dwg

Sheet Title:

Option B2
 First Floor Plan

Sheet Number:

A2.2B2

HALE STREET



ST THOMAS STREET

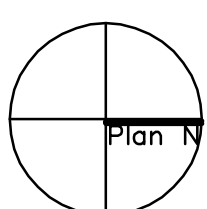
1 Option: B2 Second Floor Plan
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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Revisions:	
Date:	12 July 2007
Scale:	1/8" = 1'-0"
Drawn By:	ST
Checked By:	AG
Sheet:	2 of 2
File:	5330-B2-A203-01.dwg
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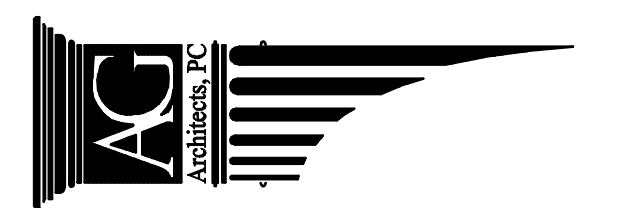
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HALE STREET

ST THOMAS STREET



1 Option C First Floor Plan
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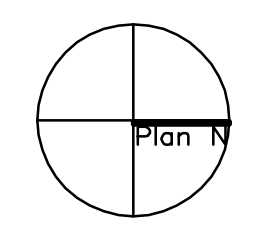


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 Fax: 603-743-3777

Dover City Hall

Space Needs Analysis

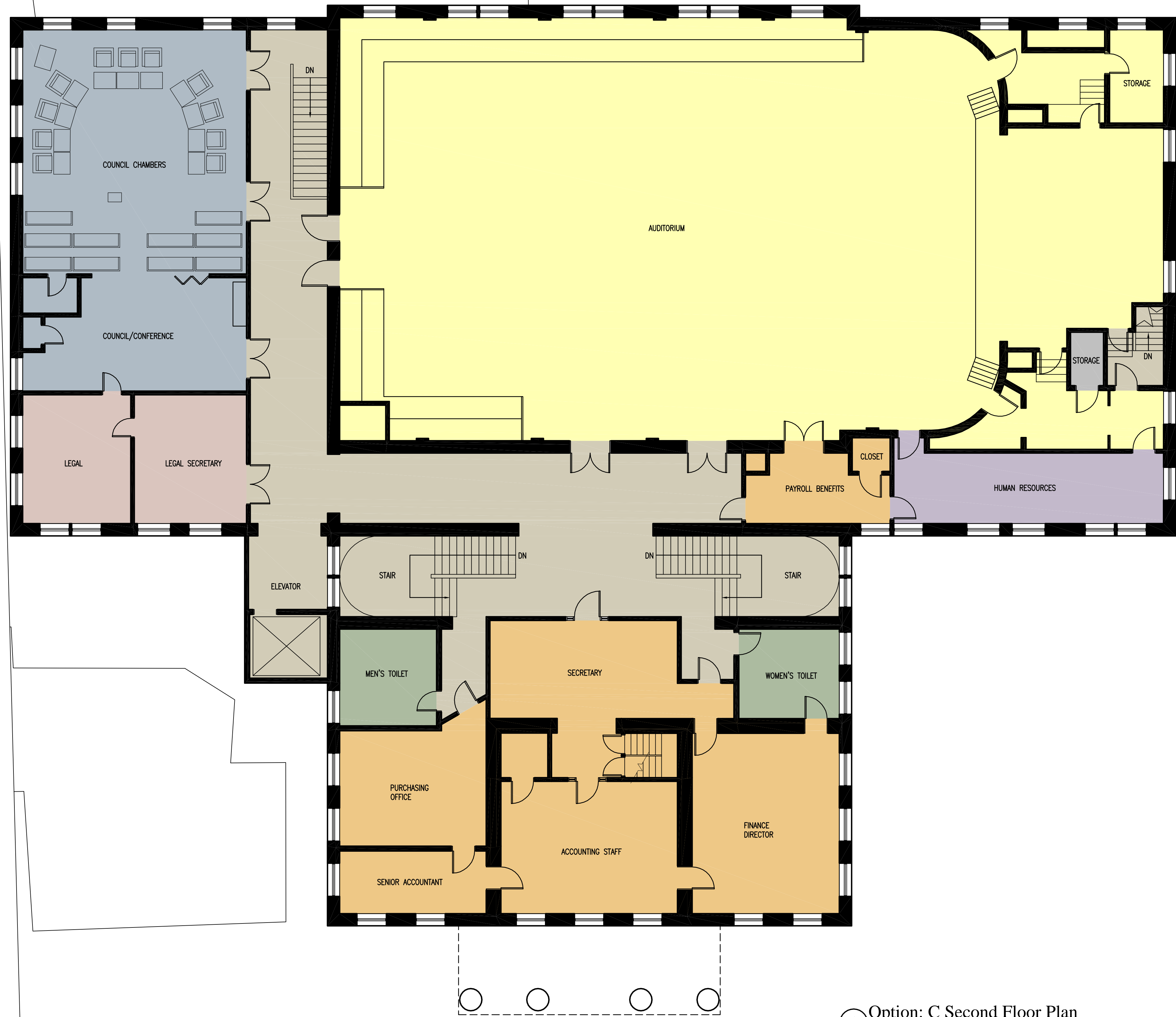
Dover, New Hampshire



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Revisions:	
Date:	12 July 2007
Scale:	1/8" = 1'-0"
Drawn By:	ST
Checked By:	AG
Sheet:	1 of 2
File:	5330-C-A202-01.dwg
Sheet Title: Option C First Floor Plan	
Sheet Number:	

A2.2C

HALE STREET



1 Option: C Second Floor Plan
 1" = 1'-0"

ST THOMAS STREET

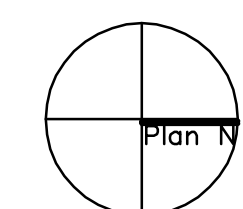


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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Sheet:	2 of 2
File:	5330-C-A203-01.dwg
Sheet Title:	Option C Second Floor Plan
Sheet Number:	

A2.3C

HALE STREET



① Option D First Floor Plan
 1" = 1'-0"

ST THOMAS STREET

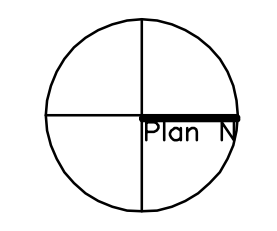


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Dover City Hall

Space Needs Analysis

Dover, New Hampshire



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Date: 12 July 2007	Checked By: AG
Scale: 1/8" = 1'-0"	File: 5330-D-A202-01.dwg
Drawn By: ST	Sheet: 1 of 1
Sheet Title: Option D First Floor Plan	
Sheet Number:	

A2.2D

HALE STREET

ST THOMAS STREET



① Option E First Floor Plan
 1" = 1'-0"

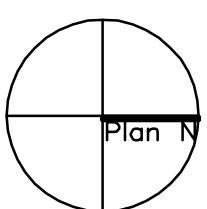


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Dover City Hall

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Sheet:	1 of 1
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Sheet Title: Option E First Floor Plan	
Sheet Number: A2.2E	



Cost Comparison

Option	Description	Item	Cost
A	Expand/Renovate City Hall and Police Station:	Construction	15,915,000 - 17,985,000
		Design	2,034,000
		Total Option A	\$17,949,000 - 20,019,000
B	New Police Station:	Construction	7,530,000 - 9,200,000
		Site Purchase Cost	To be determined
		Site Improvements	400,000 - 500,000
	Subtotal Police Station	7,930,000 - 9,700,000	
	Renovate City Hall:	City Hall Renovation	6,850,000 - 7,655,000
Design		1,555,500	
Total Option B		\$16,335,500 - 18,910,500	
B2	City Hall Reorganization, Implement Partial Option B	Construction	685,950
		Contingency	103,000
		Design	95,000
		Total Option B2	\$883,950
C	City Hall Reorganization, Minimal Wall Modifications	Construction	177,400
		Contingency	26,600
		Design	30,000
		Total Option C	\$234,000
D	City Hall Reorganization, Moderate Wall Modifications	Construction	213,300
		Contingency	32,000
		Design	38,000
		Total Option D	\$283,300
E	City Hall Reorganization, Optimum Design	Construction	325,350
		Contingency	48,800
		Design	56,000
		Total Option E	\$430,150

NOTE:

- Furniture costs are not included in costs above.
- Moving costs are not included in cost above.



Recommendation

The Space Needs Assessment for the City of Dover has been approached in a comprehensive manner. The majority of City departments were included in this analysis, with the exceptions of the Fire Department, Public Works and School Department. We have identified space needs through a series of questionnaires, interviews with staff, and a review of the existing City Hall. The existing facility has been toured to evaluate its condition and suitability for future use, as well as to confirm the amount of space available. The existing building materials and systems and their condition were reviewed by AG Architects and their mechanical and electrical consulting engineers. Growth projections for the City and region have been reviewed and the impact on staffing and potential space needs has been included. The interaction and function of City Departments has been considered and a Space Program developed to chart a course for necessary improvements.

The existing City Hall/Police Station facility is approximately 45,813 GSF in size. The Program Summaries project the need for 41,452 GSF in order to properly provide for the services required at City Hall and 35,802 GSF to meet the needs of the Police Station. The Library and Facilities, Grounds and Cemetery needs are also noted. We have developed two alternative Options for meeting the recommended space needs. Option A is based on keeping the Police Station and City Hall together and expanding the existing building to accommodate both. Option B proposes that a new Police Station be constructed off site and that City Hall expand into all three floors of the existing building. The two Options are compared in a Comparison Matrix that objectively rates each option based on criteria that were deemed important. Costs for construction have been estimated, but were not included as part of the evaluation criteria. This was done to allow us to identify the solution that best solves the problems without the significant issue of cost impacting the comparison. Option B, which is to provide a new Police Station and renovate City Hall, rates much better than Option A. There are numerous reasons for this, but key issues are the lack of space on site to adequately accommodate all functions, the impact on the character and integrity of the City Hall building, the lack of space for future expansion, and the impact of phased construction on ongoing operations. Option B is also a less costly option than Option A.

It is clear for functional, aesthetic and cost reasons that Option B is the recommended design.

STEVEN J. STANCEL
Director

MEMORANDUM

288 Central Avenue
Dover, New Hampshire 03820-4169
Tel: (603) 743-6008
Fax: (603) 743-6097

TO: Steven J. Stancel, Planning Director

FROM: Bruce W. Woodruff, City Planner

DATE: May 14, 1997

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

SUBJECT: *Dover City Hall Eligibility for National Register of Historic Places (NRHP)*

In the context of the proposed office addition to the auditorium and renovation of Council Chambers, I have been tasked with researching whether City Hall is eligible for listing on the National Historic Register. I have researched the Dover Library with regard to aspects of City Hall's history, and have studied excerpts from Gail Greenberg's, A Comprehensive Guide for Listing a Building in the National Register of Historic Places, Sausalito, CA.; Lucid Press, 1996, pp. 3-6. Additionally, I have conferred with Cathy Beaudoin, of the Library, as to her position on the eligibility of City Hall for listing. A telephone conference was also made to the current President of the Northam Colonists, Thom Hindle, on this issue. He declined to opine on the eligibility issue, but was supportive of any project that would renovate Council Chambers using original materials where possible, and that would improve on the Auditorium's acoustics and useability while retaining its architectural characteristics.

A thumbnail sketch of the City Hall's history reveals that the previous City Hall structures were more impressive in style and function, one with an opera house, yet both structures were totally destroyed by fire. The present City Hall structure was designed and constructed to be an indestructible, fireproof, utilitarian replacement for the previous buildings destroyed by fire. The building was designed by a local architect, J. Edward Richardson, and constructed by the Work Progress Administration (WPA) through the Osgood Construction Company during the years of 1933 and 1934. The building is therefore 63 years old.

Although the building was designed specifically to be as fireproof as possible by using steel, brick and gypsum block, it did have a subdued architectural theme. The Georgian style used in the design breaks through the utilitarian nature of the structure mainly in the front portico column design, and the clock tower. It must be noted that the Georgian influence is not singular in the City of Dover. Inside, there are only four spaces of special interest, those being; City Manager's Office, School Superintendent's Office, Council Chambers, and the Auditorium. All other spaces reflect basic design for function only. On the second floor, a mural wall depicting early times in Dover, painted by a local artist for the WPA is of special interest and must be preserved.

Several criteria are used to determine eligibility for listing a structure on the NRHP. They are age, special criteria, historical or architectural significance, ability to have

retained original character and integrity which serves to maintain a sense of place and time, and finally, nomination and acceptance into the registry.

Generally, a candidate structure should be at least 50 years old, however, age is not the main determining factor. City Hall is 63 years old.

The structure must have historical and/or architectural significance. In this context, historical significance would mean that City Hall would have to be associated with an important event or events that made a notable contribution to the broad patterns of American History. This does not appear to be the case.

Architecturally, the structure has a theme of Georgian architecture, but it is not overwhelming and is not singular in the area. City Hall's most notable characteristic is its method of construction and type of materials used for construction. No wooden structural components or main interior materials were used in the design other than windows, doors, and trim to ensure that the building would never be lost to fire. This could be construed to be significant in itself for consideration in listing.

It must also be ascertained if any important individual worked on the property during the period that the person attained significance. It appears that City Hall does not have that association.

Does the structure have a high artistic value? Other than the second floor mural, which is a very valuable community asset which should be preserved, there appears to be little artistic value to the property as a whole.

Does the City Hall property in and of itself yield information about the past? The answer to this is mixed, as the mural and commemorative plaques do just that, while the structure does not.

It must also be determined if the property retains its original character and integrity so as to keep its sense of place and time intact. Opinions on this will most likely differ, however, the structure's original character appears to be intact. Changes have been made to spaces and interior components that compromise the structure's original intent and integrity. These changes have been to Council Chambers most notably, and less apparently, to other office spaces. It is my opinion that as the years pass, this structure will continue to grow as a symbol of the community which will serve to give it a sense of place and time.

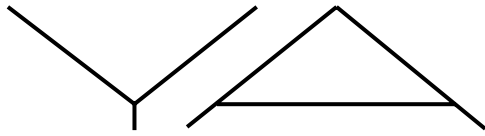
Finally, the City Hall property has not been nominated to date for consideration of listing on the NRHP.

It is my opinion, and that of Cathy Beaudoin that City Hall does not meet enough of the criteria required for eligibility for listing on the NRHP. In future, a case may be able to

be made to support the listing based on age, community sense of place and time, and community feeling.

As you are aware, there are pros and cons to designations such as these. If the property were deemed eligible and listed, strict rules for preservation, rehabilitation, restoration, and reconstruction would have to be followed. These rules, in general, serve to restrict uses of the building to historic uses only, curtail meaningful, timely expansion or addition, and add significant costs to any upgrade, maintenance, rehabilitation, or restoration projects needed.

Finally, with regard to the proposed office addition to the Auditorium and Council Chamber renovation, it should be stated that early on in the Planning process, it was recognized that preserving and duplicating both the Council Chamber's and Auditorium's architectural ambiance was a prime goal. Another prime goal in the planning and design process was to improve upon the Auditorium's functionality with regard to acoustics and overall dimensions. The proposed dimensions for the hall would more closely match those dictated for classical theater design, while retaining its appropriate sizing for all the current functions it now serves. No changes to the mural wall on the second floor shall be made. No demolition work will threaten the mural and no penetrations have been called for in the proposed plans.



YEATON ASSOCIATES, INC.
MECHANICAL ENGINEERING

66 Jackson Street • Littleton, New Hampshire 03561 • 603-444-6578 • FAX 603-444-2364

June 27, 2007
YA07014C

AG Architects, PC
634 Central Avenue
Dover, NH 03820

Attn: Art Guadano, AIA

Re: Dover City Hall Space Needs Analysis
Dover, New Hampshire

Dear Art,

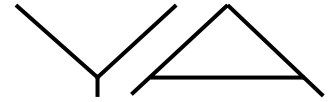
We offer the following mechanical systems assessment based on a review of architectural documents provided by you, a building walk-through to observe and assess the current condition of the existing facility, and staff input offered during our walk-thru.

The existing facility was built in 1935 and is approximately 45,000 square feet. The building houses the police station, city administration offices, city council chambers and an auditorium.

Boiler Plant

1. The entire facility is heated by means of two (2) Weil-McLain model 688 cast iron sectional boilers rated for 1358 MBH gross output each. The boilers are equipped with dual fuel fired PowerFlame burners. Each boiler has a dedicated injection pump and heating hot water is circulated throughout the building via two (2) inline, five horsepower pumps which operate as a primary/standby system. The main building pumps are run with variable frequency drives. The boilers were installed in 1988. The pumps and piping were installed within the last 3-5 years as part of a steam to water building conversion. The exact date of the conversion was not known at the time of this report. There is a code compliant combustion air assembly.





2. Domestic hot water is generated by an 80 gallon electric Bradford-White tank. The domestic water system is controlled by a code compliant tempering valve. No hot water recirculation pump was seen.
3. New Siemens direct digital controls (DDC) were installed as part of the building steam to hot water conversion. The DDC system is broken into four (4) major zones each controlled with a dedicated DDC valve. The DDC system is tied into the citywide frontend computer.
4. The boilers are fed from three (3) 330-gallon above ground oil tanks located in the boiler room. The tanks do not have a containment dike or leak detection.

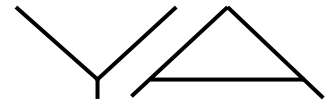


5. Insulation on the domestic hot water and heating hot water piping is new as part of the steam to hot water conversion project and in good condition. The boiler breeching insulation is failing and in poor condition.



Heating, Ventilating and Air Conditioning

1. Building heating is accomplished by original radiation terminals in offices, toilet rooms, locker rooms, council chambers and auditorium. The building is piped into 4 major zones and within each zone many rooms/areas have individual control with dedicated thermostats. The thermostats are of varying ages, but most are well worn and failing. The cast iron radiation was converted from steam to hot water and most seem to be in fair condition. Many occupants discussed zoning issues throughout the building.

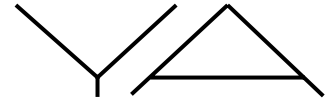


2. Building ventilation varies throughout the building. Most of the original rooftop gravity ventilators have been boarded up and outside air is primarily being introduced through infiltration through windows and doors. This method of ventilating was typical during the time of construction but no longer is acceptable by current design practices and state codes. Areas of note lacking mechanical ventilation include the council chambers, the auditorium, police station offices and conference room, and administrative offices.



3. Air conditioning systems are varied and sporadic throughout the building. The school department has a dedicated split system air handling unit with an associated condensing unit located on the roof. Both are in poor condition. The police station is primarily cooled with ductless split systems mounted on the wall. These systems are of varying ages and conditions. Most of the administrative offices have large window-type air conditioning installed during the summer months by the maintenance staff. While effective for dealing with room cooling needs, these window units are inefficient and not a good use of energy.



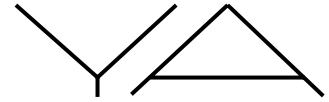


4. Toilet rooms all have dedicated exhaust fans. These fans are of various vintages but in fair to poor condition. The men's locker room in the police station has a dedicated exhaust fan, but the women's locker room does not. The workout area in the police station has no ventilation or exhaust. The exhaust systems were operating at the time of our visit, but most rooms seemed to be lacking adequate air changes to achieve a tolerable environment.

Plumbing

1. The building is served by a 2" cold water main from the municipal system. The water entrance has code compliant backflow prevention and a meter. Should the building require sprinkler service in the future, the existing 2" line will not be adequate.
2. Pipe material for hot and cold water service throughout the facility is primarily copper with soldered joints, and the systems are insulated for the most part.
3. Roof drainage and sanitary waste and vent pipe materials include bell and spigot cast iron with leaded joints, No-Hub cast iron, and some galvanized.
4. To the best of our knowledge, there are no combined storm/sewer collection networks in the building.
5. The existing plumbing fixtures are primarily original to the building and in very poor condition. The urinals have flush valves that do not meet current code mandated water conservation flows. The maintenance staff has attempted to address fixture failures and have made some toilet room modifications to address ADA compliance. Lavatories do not have ADA compliant protection for below sink piping.





Fire Protection

1. The building has no automatic sprinkler coverage.

Asbestos Abatement

1. No asbestos insulation was observed during our building walk-thru. However, no hazardous material report was available at the time of this report.

General Assessment

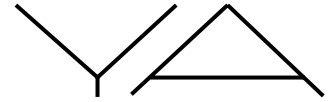
The recently renovated boiler plant is in good shape and still has many years of useful service life left. The boilers have been well maintained and the plant infrastructure (pumps, valves, etc) are virtually new. The average life span for a cast iron boiler system is 30+ years. With continued maintenance and annual upkeep, the boiler plant should perform as intended for many more years.

The air conditioning, ventilation, and plumbing systems, in general, are antiquated and either at the end of their useful life or fast approaching it. In many cases the systems do not meet current codes or standards for municipal building. The systems have served the building well, but are not adequate to take into the future. Should the city wish to renovate the building to meet current standards, significant mechanical system upgrades will be required. Below are two options (Option A and B) that outline mechanical recommendations to adequately take the city into the future.

Recommendations for Option A

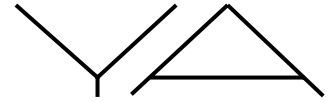
Under Option A, the existing building is fully renovated and has two additions for a total building square footage of 70,000 +/- . Under this option the police station remains within city hall and the city offices and meeting spaces are reworked to meet the current needs of the building. Refer to the architectural portion of this report for further description.

1. Although the boiler plant has recently been upgraded, the building addition will require expansion of the existing boiler plant. The two (2) existing boilers shall remain and an additional boiler of equal size (1358 MBH) shall be added. Two new 5 HP pumps shall be added to address the new additional heating hot water requirements. New breeching shall be installed to accommodate the new boiler plant and the chimney shall be inspected, cleaned and sleeved with a stainless steel liner similar to "Z-Flex".
2. The existing electric domestic hot water tank shall be replaced with an 80 gallon gas fired tank. This tank shall be vented separately from the existing chimney. A new code compliant tempering and recirculation pump shall be installed.
3. Exhaust systems shall be replaced complete. Toilet rooms shall be ducted to a new rooftop fan(s).



4. The auditorium heating, ventilating and air conditioning shall be accomplished with a dedicated packaged rooftop unit. The unit shall be controlled per an occupied/unoccupied schedule and shall employ a code compliant demand based ventilation control sequence. The unit shall be equal to a 40 Ton Trane Intellipak. Careful coordination will be required to adhere to the architectural intent of the space.
5. The council chambers heating, ventilating and air conditioning shall be accomplished with a dedicated packaged rooftop unit. The unit shall be controlled per an occupied/unoccupied schedule and shall employ a code compliant demand based ventilation control sequence. The unit shall be equal to a 12.5 Ton Trane Voyager. Careful coordination will be required to adhere to the architectural intent of the space.
6. Heating, ventilating and air conditioning for the remaining area (approximately 60,000 square feet) shall be accomplished with three (3) 55 ton packaged rooftop units equal to the Trane Intellipak. The units shall be equipped with a hot water coil, packaged cooling, variable frequency drives (VFDs) on the supply and return fan and full economizer capability. These units shall be controlled per an occupied/unoccupied schedule and shall provide code required ventilation to all spaces. Said units shall be ducted down to the occupied zones with medium pressure ductwork and sever variable air volume (VAV) terminals. The VAVs shall serve a zone and have a reheat coil piped to the boiler system for individual zone control. Due to cost, not every office will have individual control, but the zones will be designed with similar loads. Conference rooms, multi-purpose rooms, etc. will have dedicated VAVs to handle the occupant diversity. We estimate 40 zones for the current architectural layout. Close coordination with the new architecture will be required to get ductwork thru the building, allow for access to VAVs, etc.
7. New perimeter radiation shall be installed to address exterior wall and window heat loss. Baseboard, panel radiators or radiant ceiling panels shall be installed to suit the architectural needs of the space. While there was a recent hot water piping upgrade to building, most of the piping was installed exposed. As the building would be totally renovated under Option A, the piping should be incorporated into the new architecture and installed concealed. In addition, due to the expansion in building area the new piping renovation pipe size is not adequate.
8. Existing plumbing fixtures are not adequate nor code compliant and should not be taken into the future. Install new vitreous china fixture and code compliant low flow flush valves and faucets. Rework the existing underslab sanitary piping as required to pipe the new toilet room configurations. A new sanitary exit may be required from the new addition if existing pipe size and inverts are not of adequate size and depth.
9. The existing roof drain piping network is adequate and shall remain for the existing building. New roof drains and pipe network will need to be installed in the new additions. Most likely, a new storm exit will be required for the addition. Existing storm leaders may have to be reworked to accommodate new architecture. New roof drains shall be installed on the existing roof.
10. A new code compliant sprinkler system shall be installed throughout the entire facility. This will require a new water entrance from the municipal system outside the building.

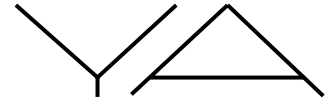
Estimated Mechanical Costs for Option A = \$3.2-3.4 million



Recommendations for Option B

Under Option B, the existing building foot print remains the same, the police station is removed from the basement and the floor plan is reworked to meet the needs of the remaining city offices and meeting spaces. Refer to the architectural portion of this report for further description.

1. As the boiler plant has recently been upgraded, this system should remain in service to serve the building into the future. The boilers should continue to maintain regular service, the breeching insulation should be replaced and some boiler piping rework may be required to accommodate any new building distribution piping. The chimney shall be inspected, cleaned and sleeved with a stainless steel liner similar to "Z-Flex".
2. The existing electric domestic hot water tank shall be replaced with an 80 gallon gas fired tank. This tank shall be vented separately from the existing chimney. A new code compliant tempering and recirculation pump shall be installed.
3. Exhaust systems shall be replaced complete. Toilet rooms shall be ducted to a new rooftop fan(s).
4. The auditorium heating, ventilating and air conditioning shall be accomplished with a dedicated packaged rooftop unit. The unit shall be controlled per an occupied/unoccupied schedule and shall employ a code compliant demand based ventilation control sequence. The unit shall be equal to a 40 Ton Trane Intellipak. Careful coordination will be required to adhere to the architectural intent of the space.
5. The council chambers heating, ventilating and air conditioning shall be accomplished with a dedicated packaged rooftop unit. The unit shall be controlled per an occupied/unoccupied schedule and shall employ a code compliant demand based ventilation control sequence. The unit shall be equal to a 12.5 Ton Trane Voyager. Careful coordination will be required to adhere to the architectural intent of the space.
6. Heating, ventilating and air conditioning for the remaining area (approximately 35,000 square feet) shall be accomplished with two (2) 40 ton packaged rooftop units equal to the Trane Intellipak. The units shall be equipped with a hot water coil, packaged cooling, variable frequency drives (VFDs) on the supply and return fan and full economizer capability. These units shall be controlled per an occupied/unoccupied schedule and shall provide code required ventilation to all spaces. Said units shall be ducted down to the occupied zones with medium pressure ductwork and serve variable air volume (VAV) terminals. The VAVs shall serve a zone and have a reheat coil piped to the boiler system for individual zone control. Due to cost, not every office will have individual control, but the zones will be designed with similar loads. Conference rooms, multi-purpose rooms, etc. will have dedicated VAVs to handle the occupant diversity. We estimate 20 zones for the current architectural layout. Close coordination with the new architecture will be required to get ductwork thru the building, allow for access to VAVs, etc.
7. New perimeter radiation shall be installed to address exterior wall and window heat loss. Baseboard, panel radiators or radiant ceiling panels shall be installed to suit the architectural needs of the space. While there was a recent hot water piping upgrade to building, most of the piping was installed exposed. As the building would be totally



renovated under Option B, the piping should be incorporated into the new architecture and installed concealed.

8. Existing plumbing fixtures are not adequate nor code compliant and should not be taken into the future. Install new vitreous china fixture and code compliant low flow flush valves and faucets. Rework the existing underslab sanitary piping as required to pipe the new toilet room configurations.
9. The existing roof drain piping network is adequate and shall remain. Storm leaders may have to be reworked to accommodate new architecture. Install new roof drains and coordinate with any new roof work.
10. A new code compliant sprinkler system shall be installed throughout the entire facility. This will require a new water entrance from the municipal system outside the building.

Estimated Mechanical Costs for Option B = \$1.8-2.0 million

Please do not hesitate to call if you have any questions regarding this report.

Respectfully,

Matthew Wilson

Matthew Wilson
Project Manager

MDW/dle

C & M ENGINEERING
CONSULTING ELECTRICAL ENGINEERS

TYLER E. CARLISLE, P.E.
DEBRA L. DerMANOOGIAN
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MANCHESTER, NH 03104
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FAX: (603) 624-9188

JUNE 26, 2007

MR. ART GUADANO
AG ARCHITECTS
634 CENTRAL AVENUE
DOVER, NH 03820

RE: DOVER CITY HALL

DEAR ART:

AS PER YOUR REQUEST WE HAVE VISITED THE ABOVE BUILDING TO REVIEW THOSE READILY OBSERVABLE EXISTING ELECTRIC SYSTEMS. THE PURPOSE OF OUR VISIT WAS TO DETERMINE THEIR SUITABILITY FOR THE PROPOSED RENOVATIONS AND/OR ADDITIONS.

IT IS OUR OPINION THAT ALL OF THE EXISTING SYSTEMS SHOULD BE REMOVED AND REPLACED WITH NEW SYSTEMS CONCURRENTLY WITH THE PROPOSED RENOVATIONS AND/OR ADDITIONS. WE HAVE ATTACHED OUR REPORT OF THE INDIVIDUAL SYSTEMS OBSERVED.

WE WOULD SUGGEST THAT THE FOLLOWING ELECTRICAL CONSTRUCTION COSTS BE ASSUMED FOR THE TWO OPTIONS:

<u>SYSTEM</u>	<u>OPTION A</u>	<u>OPTION B</u>
PRIMARY (PAD TRANSFORMER RENTAL)	\$ 12,000	\$ 12,000
ELECTRIC SERVICE	75,000	58,000
ELECTRIC DISTRIBUTION	145,000	100,000
INTERIOR LIGHTING SYSTEM	380,000	248,000
EMERGENCY LIGHTING	33,000	23,000
EXIT SIGNAGE	18,000	11,000
FIRE ALARM SYSTEM	68,000	50,000
DATA (IT) AND PHONE WIRING	65,000	45,000
GENERAL MECHANICAL WIRING	110,000	76,000
SECURITY SYSTEM WIRING	12,000	8,000
GENERAL INTERIOR WIRING	145,000	105,000

SYSTEM - CONTINUED


OPTION A

OPTION B

DEVICES AND PLATES	16,000	12,000
OPERATION & MAINTENANCE MANUALS	2,500	2,000
RECORD DRAWINGS	4,000	3,000
SURGE SUPPRESSION	10,000	8,000
OCCUPANCY SENSORS	5,000	4,000
MISCELLANEOUS, PERMITS, ETC.	10,000	8,000
TOTAL	\$ 1,110,500	\$773,000

THANK YOU FOR ALLOWING US TO PROVIDE THIS INFORMATION AND IF YOU HAVE ANY QUESTIONS PLEASE FEEL FREE TO CALL.

VERY TRULY YOURS,



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TEC/jrf

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ELECTRIC SERVICE

THE ELECTRIC SERVICE IS RATED AT 600 AMPERES 208Y/120 VOLTS. IT IS FED OVERHEAD FROM A UTILITY POLE BANK OF TRANSFORMERS LOCATED ON THE SOUTH SIDE OF HALE STREET TO A POLE ADJACENT TO THE BUILDING ON THE NORTH SIDE OF HALE STREET. IT IS METERED ON THAT POLE BY THE UTILITY WITH THE METER LOCATED ON THE CORNER OF THE BUILDING. THE SERVICE PROCEEDS OVERHEAD FROM THAT POLE TO THE BUILDING. THE SERVICE EXTENDS DOWN THE BUILDING IN METAL CONDUIT AND ENTERS THE BUILDING IN THE BASEMENT BOILER ROOM THROUGH THE REAR OF THE 600 AMPERE MAIN DISCONNECT SWITCH. THE SERVICE HAS BEEN MODIFIED SIGNIFICANTLY FROM ITS ORIGINAL INSTALLATION. THERE ARE TWO TRANSFER SWITCHES. ONE IS UTILIZED TO TRANSFER THE ENTIRE BUILDING LOAD FROM THE UTILITY COMPANY FEED TO THE GENERATOR FEED. THERE ARE TWO IDENTICAL 120 KW NATURAL GAS FIRED GENERATORS AVAILABLE TO FEED THE BUILDING. WE WERE TOLD THAT THEY WERE INSTALLED TO PROVIDE BUILDING POWER INSTEAD OF PURCHASING POWER FROM THE ELECTRIC UTILITY. THIS FUNCTION IS NO LONGER UTILIZED. THESE TWO GENERATORS FEED THE SECOND TRANSFER SWITCH. THE SYSTEM IS DESIGNED SO THAT ONLY ONE OF THE GENERATORS CAN FEED THE BUILDING AT ANY GIVEN MOMENT. THE SECOND SWITCH TRANSFERS BETWEEN THE TWO GENERATORS. BOTH GENERATORS ARE WIRED INCORRECTLY TO THIS TRANSFER SWITCH. THEY HAVE TWO CONDUCTORS PER PHASE CONNECTED TO A LUG IN THE SWITCH THAT IS ONLY LISTED FOR A SINGLE CONDUCTOR. ONE OF THE TWO GENERATORS COULD BE UTILIZED TO FEED THE LIFE SAFETY LOADS WITHIN THE BUILDING AND OTHER SELECTED NON LIFE SAFETY LOADS IF PROPERLY WIRED AND SEPARATELY TRANSFERRED. THE FUEL SUPPLY COULD REMAIN NATURAL GAS IF THE BUILDING DEPARTMENT PROVIDED A FUEL WAIVER OR THE FUEL COULD BE CHANGED TO PROPANE. IT IS UNKNOWN BY THIS WRITER AS TO WHO OWNS THE GENERATORS. THIS REPORT WILL ASSUME THAT THE CITY HAS OWNERSHIP. BOTH GENERATORS COULD BE UTILIZED IF DESIRED. THIS WOULD REQUIRE QUITE EXPENSIVE PARALLELING GEAR OR SEPARATION OF THE LOADS WITH SEPARATE TRANSFER SWITCHES WHICH THIS REPORT DOES NOT CONSIDER AS WE WERE TOLD THAT THERE IS DISCUSSION OF MOVING ONE OF THE GENERATORS TO ANOTHER BUILDING. IF OPTION A IS SELECTED THE MAJORITY OF THE CAPACITY OF ONE GENERATOR WOULD BE UTILIZED FOR THE POLICE STATION AND THERE WOULD BE LITTLE REMAINING

FOR CITY HALL USE EXCEPT FOR LIFE SAFETY. AS PREVIOUSLY NOTED THE EXISTING SERVICE HAS A CAPACITY OF 600 AMPERES. WE WOULD ESTIMATE THAT A RENOVATED CITY HALL WITH TOTAL AIR CONDITIONING WOULD REQUIRE A 1200 AMPERE SERVICE AND IF THE PROPOSED ADDITION WERE INCLUDED THE ELECTRIC SERVICE REQUIRED WOULD HAVE TO BE IN THE RANGE OF 1600 AMPERES AT 208Y/120 VOLTS. THIS WOULD REQUIRE THAT A PAD MOUNTED TRANSFORMER BE INSTALLED AT A LOCATION ON THE CITY'S PROPERTY TO FEED THE BUILDING. THE EXISTING ELECTRIC SERVICE WOULD BE COMPLETELY REMOVED AND REPLACED. WE WOULD SUGGEST ANOTHER LOCATION FOR THE ELECTRIC SERVICE SO THAT IT IS NOT LOCATED WITHIN THE BOILER ROOM. THERE IS NOT SUFFICIENT SPACE IN THE CURRENT LOCATION. A NUMBER OF THE DISTRIBUTION PANELS LOCATED THROUGHOUT THE BUILDING ARE REASONABLY NEW. THEY ARE LOAD CENTERS RATHER THAN PANELBOARDS WHICH WOULD NORMALLY BE UTILIZED TO POWER AN OFFICE BUILDING. WE WOULD RECOMMEND THE REMOVAL OF THE EXISTING DISTRIBUTION SYSTEM AND A COMPLETE NEW PROPERLY COORDINATED SYSTEM BE INSTALLED COMPATIBLE WITH THE RENOVATION AND /OR ADDITION.

FIRE ALARM SYSTEM

THE EXISTING FIRE ALARM SYSTEM HAS AN OLD MIRTONE ANALOG CONTROL PANEL. WE WOULD RECOMMEND THE REMOVAL OF THE EXISTING SYSTEM AND THE INSTALLATION OF A NEW DIGITAL MICROPROCESSOR AND DEVICES. THE PRESENT SYSTEM UTILIZES HORN/LIGHTS FOR NOTIFICATION AND WOULD NOT COMPLY WITH THE REQUIREMENTS OF ADA. IF THE AUDITORIUM HAS A CAPACITY OF 300 PEOPLE THE BUILDING WOULD REQUIRE A VOICE EVACUATION SYSTEM AND NOT JUST HORNS.

EMERGENCY LIGHTING/EXIT SIGNAGE

THE EXISTING EMERGENCY LIGHTING AND EXIT SIGNAGE IS VERY POOR. IT WOULD NOT COMPLY WITH THE REQUIREMENTS OF THE CURRENT CODE. WE WOULD RECOMMEND THE REMOVAL OF BOTH EXISTING SYSTEMS AND THEIR REPLACEMENT WITH NEW SYSTEMS CONCURRENT WITH THE PROPOSED RENOVATIONS AND/OR ADDITIONS. THE SYSTEMS COULD BE FED FROM A GENERATOR OR HAVE THEIR OWN INTERNAL BATTERY SUPPLY. ASSUMING THAT ONE OF THE GENERATORS IS AVAILABLE, WE WOULD RECOMMEND THAT POWER SOURCE.

INTERIOR BUILDING LIGHTING

THE INTERIOR LIGHTING SYSTEM HAS BEEN RELAMPED AND RE-BALLASTED SOME TIME AGO WITH T8 LAMPS. WHILE THEY ARE ENERGY SAVING VERSUS THOSE PREVIOUSLY INSTALLED, THERE ARE NEWER MORE ENERGY EFFICIENT PRODUCTS AVAILABLE. WE WOULD SUGGEST THE REMOVAL OF THE ENTIRE INTERIOR LIGHTING SYSTEM AND THE INSTALLATION OF A NEW MORE EFFICIENT SYSTEM CONCURRENT WITH THE PROPOSED ADDITIONS AND/OR RENOVATIONS.

INFORMATION TECHNOLOGY/TELEPHONE SYSTEM

THE BUILDING HAS A SYSTEM FOR THE POLICE STATION AND ANOTHER FOR CITY HALL. THE WIRING FOR BOTH SYSTEMS WOULD BE INADEQUATE AND INSUFFICIENT FOR EITHER OPTION A OR B. WE WOULD PROPOSE THE INSTALLATION OF NEW CATEGORY 6 OR 6E CABLING FOR EITHER OPTION CONCURRENT WITH THE PROPOSED RENOVATIONS AND/OR ADDITIONS. THE INSTALLATION WOULD INCLUDE WIRING AND WALL TERMINATIONS BUT NO EQUIPMENT. THE SYSTEMS WOULD BE AS DIRECTED BY THE PEOPLE RESPONSIBLE FOR EACH SYSTEM.

EXTERIOR LIGHTING

THE BUILDING HAS VERY LITTLE EXTERIOR LIGHTING AND NO ATTEMPT HAS BEEN MADE TO DETERMINE IF ANY OTHER LIGHTING OTHER THAN BUILDING MOUNTED SHOULD BE INSTALLED.