

**PHASE ONE PUBLIC PARKING EVALUATION  
CONCEPTUAL DESIGN REPORT  
FOR  
THE TOWN OF PETERBOROUGH, NH**

**FEBRUARY, 2001**

**S E A Consultants Inc.  
Science/Engineering/Architecture  
Concord, New Hampshire  
Cambridge, Massachusetts  
Rocky Hill, Connecticut  
Rochester, New York**

**JOB NUMBER 1999582**



February 15, 2001.

Mr. Peter Ryner, Director  
Office of Community Development  
Town of Peterborough  
One Grove Street  
Peterborough, NH 03458

RE: Phase One Public Parking Evaluation  
Conceptual Design Report  
S E A Reference No.: 1999582

Dear Peter:

The following report details our finding regarding the Phase One Public Parking Evaluation, Conceptual Design Report.

S E A Consultants has evaluated a number of downtown sites which were analyzed for increased parking opportunities. Parking areas that were considered as part of the previously completed Site Analysis included (1) the downtown and river-front parking sites, and the multiple parking lots bounded by Main Street, Grove Street, the Nubanuset River and the Contoocook River, including the Depot Street municipal lot, and (2) the former Granite Bank site, bounded by Grove Street and the Nubanuset River, including parking areas on the Guernsey Building site. The findings of the Site Analysis were described in a memorandum to the Town dated August 24, 2000, which is attached as an Appendix to this report. As a result of that analysis, two site were chosen for further study, in the Conceptual Design Phase: The Depot Street 'municipal' parking lot, and the former Granite Bank/Guernsey Building site.

Depot Street Parking Lot: The 'municipal' parking lot on Depot Street also serves the parking needs of the movie theater. The lot is bounded (and constrained) by raised walls on three sides and has a single vehicular access from Depot Street. There is pedestrian (only) access to the lot from Main Street and Grove Street. The parking is currently unstructured (i.e. no pavement markings) except for the spaces fronting the theater. As a result, vehicles often align themselves in spaces and drive aisles of substandard dimensions. Under these 'unstructured' conditions, approximately 50 parked vehicles have been observed. (including the movie theater spaces). The pavement is currently in poor condition and would require crack sealing and an asphalt overlay. No sign-age is present on-site to regulate parking duration, but it is recommended. The concepts presented remain within the current retaining walls. Two conceptual designs, including landscaping, were developed for this parking site and are included with this report, as follows:

---

10 Ferry Street, Box 7  
Suite 137  
Concord, NH 03301  
(603) 225-7000  
FAX (603) 225-0099

---

Cambridge, MA  
Rocky Hill, CT  
Rochester, NY



SEA Consultants Inc.  
Science/Engineering/Architecture

- Concept A- Right Angle Parking- 41 spaces proposed
- Concept 'B'- Diagonal /Right Angle Parking (Mixed)-41 spaces proposed.

A conceptual cost estimate for re-construction of this lot is \$19,000. Details of the construction estimate are included in the Appendix. to this report.

Former Granite Bank Site: A conceptual parking design was developed for the former Granite Bank site on Grove Street, which includes the Guernsey Building site (lower level). The site is bounded by the Nubanuset River on the south side, and the Guernsey Building (and its "green") on the north side. Access to/from the site is via two Grove Street driveways, which also provides access to the Historical Society (and its parking lot), the US Post Office (and its diagonal parking along the driveway) and the Guernsey Building's upper and lower parking lots. The site currently contains 60 parking spaces on the lower level, and an ATM drive thru structure (not in use). A conceptual parking design was developed for this site, which includes a landscaped area along the Nubanuset River, as follows:

- Concept 'A'-Former Granite Bank Site- 80 proposed parking spaces.

A conceptual cost estimate for the construction of this site is \$32,000. Details of the estimate are included in the Appendix to this report.

A photo log of each site has also been included in the Appendix to this report.

Please note the following: Base plans for these conceptual designs were developed from tax maps, aerial topography and ground 'reconnaissance' by S E A. No topographic survey or boundary survey of these properties has been performed. Each site covers more than one property, but no attempt has been made to represent the location of property lines or easements that may exist between properties.

Respectfully yours,

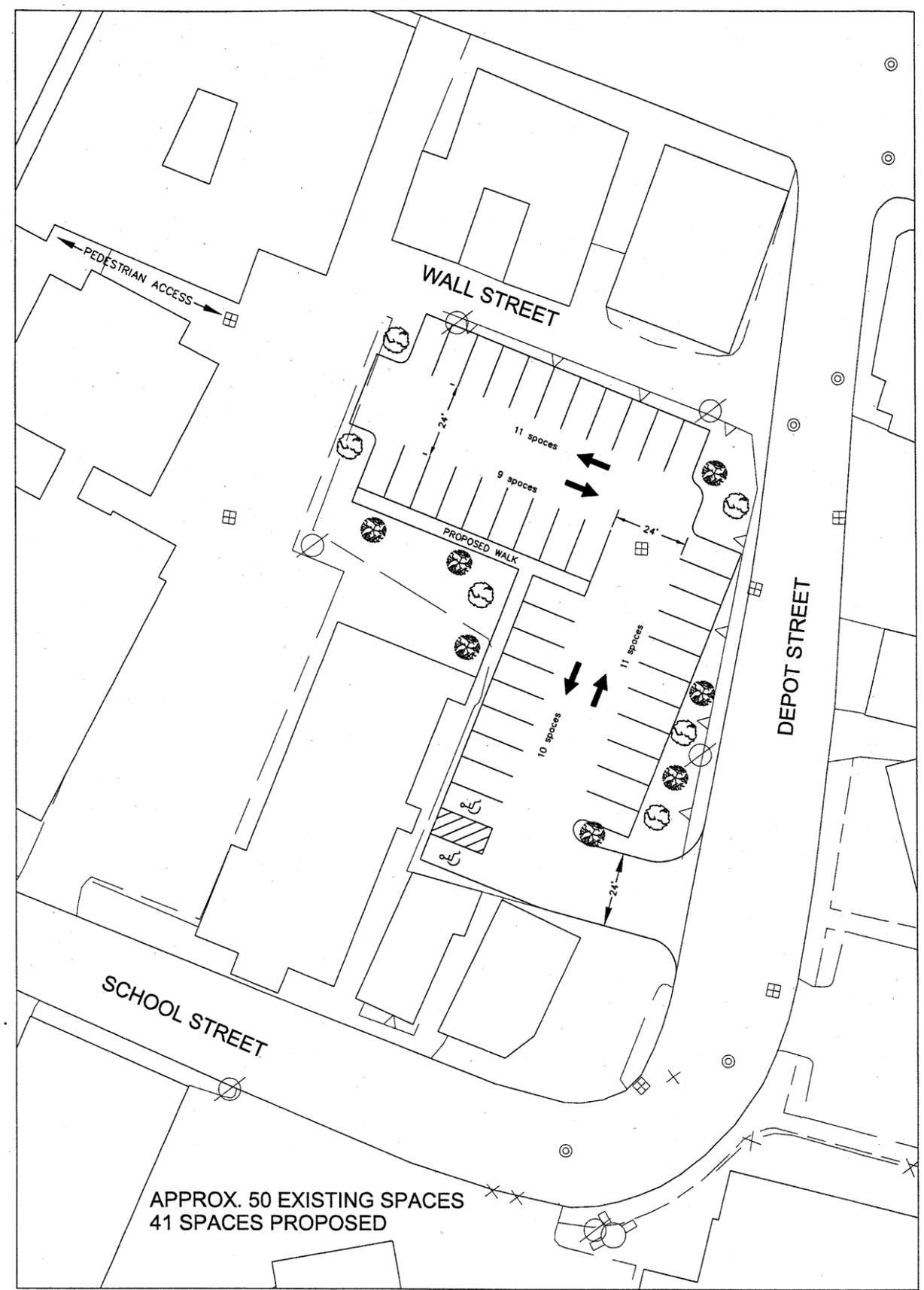
S E A CONSULTANTS INC.

A handwritten signature in black ink that reads "Daniel Levine".

Daniel Levine, PE  
Project Manager

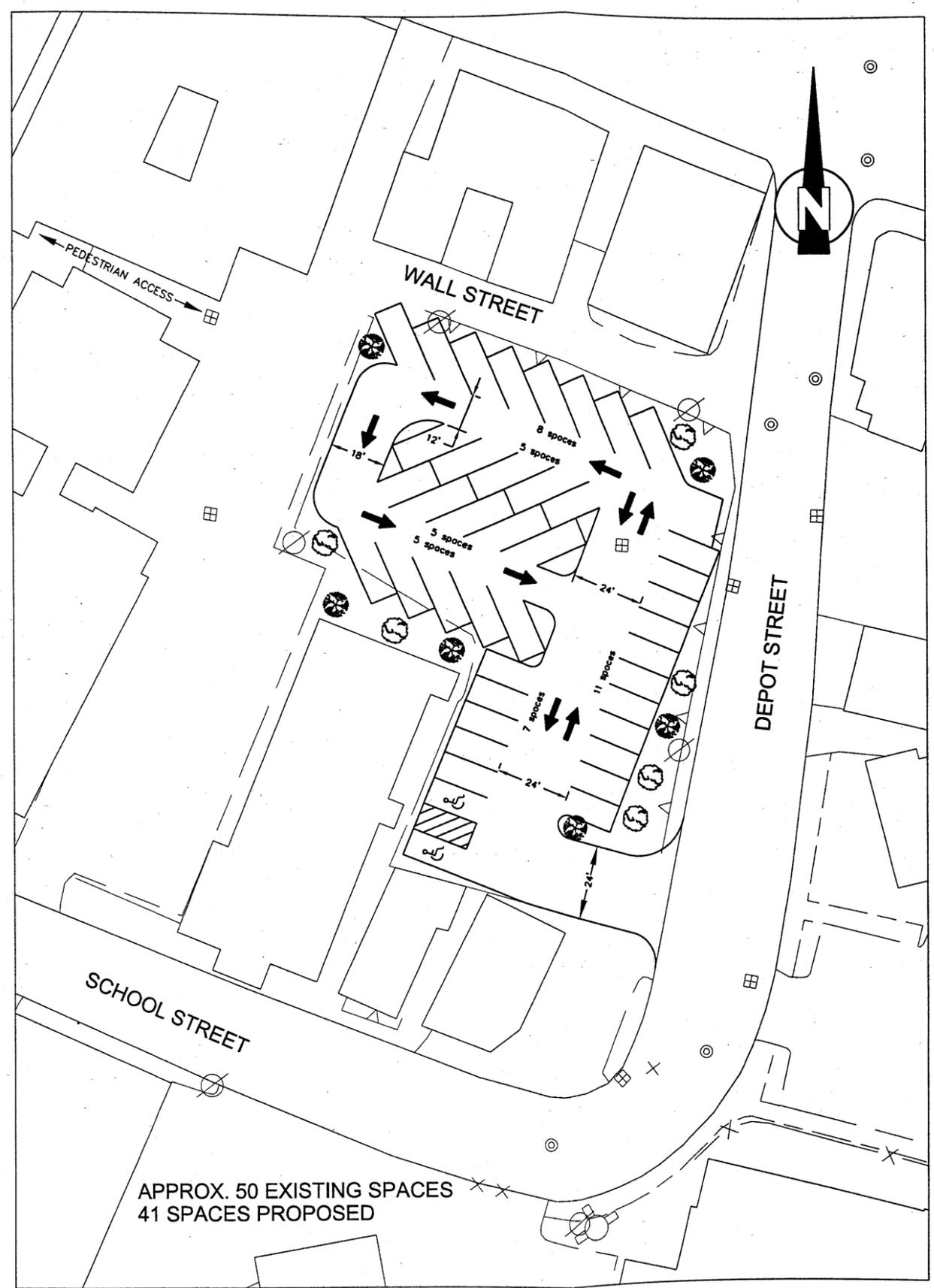
cc: file

W:\peterborough nh\99582.01\582con1d.dwg Tue Feb 13 10:29:26 2001 SEA FORMAT



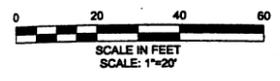
APPROX. 50 EXISTING SPACES  
41 SPACES PROPOSED

CONCEPT 'A' - DEPOT STREET LOT  
(WALLS REMAIN)



APPROX. 50 EXISTING SPACES  
41 SPACES PROPOSED

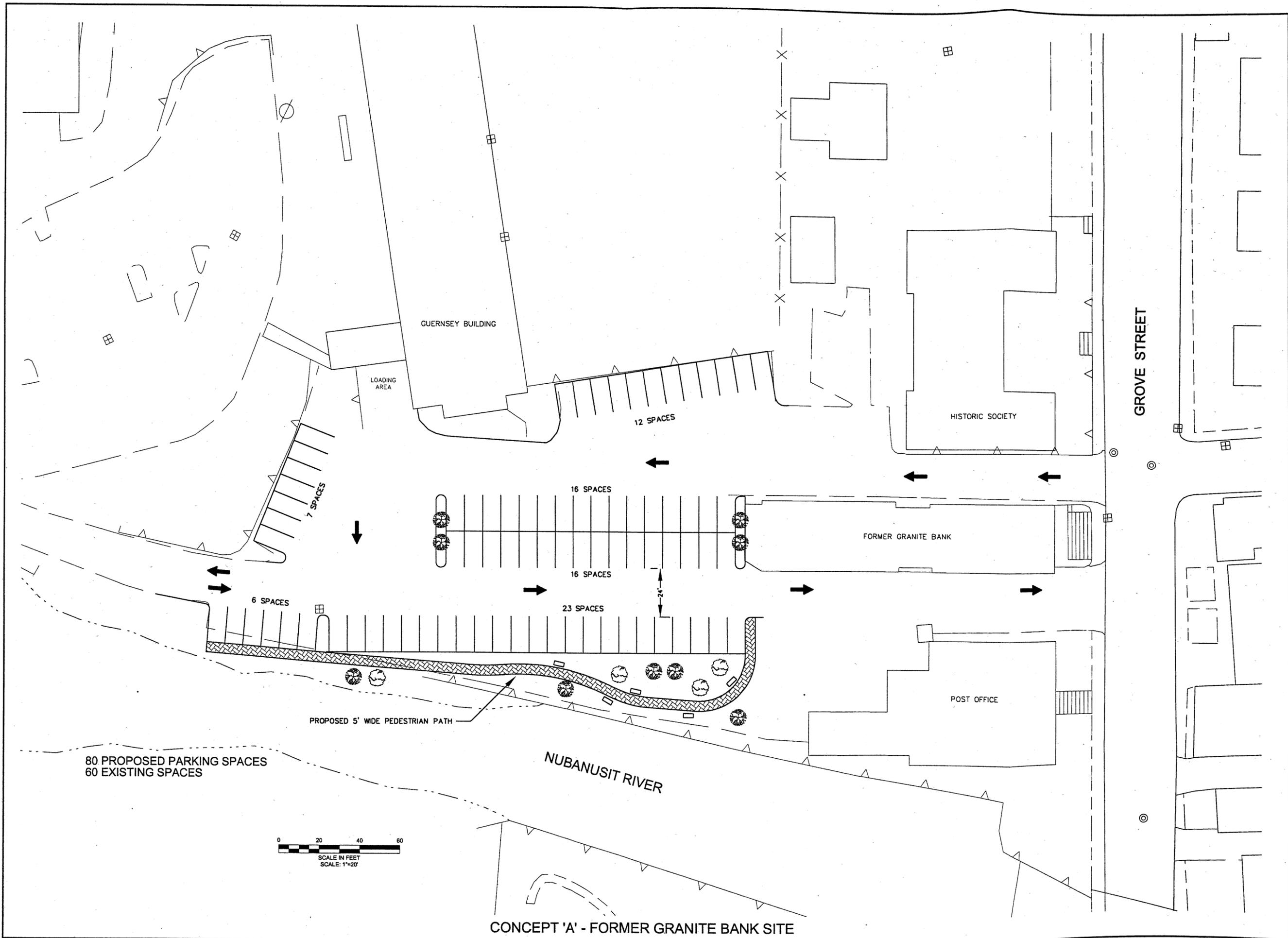
CONCEPT 'B' - DEPOT STREET LOT  
(WALLS REMAIN)



Scale	Date	Job No.	Designed by	Drawn by	Checked by	Approved by	Description	Date
1"=20'	8/00	99582.01	DUL	HAV	DUL	DUL	REVISIONS	

TOWN OF PETERBOROUGH, NEW HAMPSHIRE  
 PARKING STUDY  
 CONCEPTUAL PLANS 'A AND B'

W:\peterborough\99582.01\582con.r.dwg Tue Feb 13 10:30:52 2001 SEA FORMAT



TOWN OF PETERBOROUGH, NEW HAMPSHIRE		Scale	1"=20'
PARKING STUDY		Date	9/00
CONCEPTUAL PLAN 'A'		Job No.	9902.01
Sheet No.		Designed by	D.J.L.
		Drawn by	H.A.V.
		Checked by	D.J.L.
		Approved by	D.J.L.
		No.	
		Description	REVISIONS
		Date	
SEA S E A Consultants Inc. Science/Engineering/Architecture		CAMBRIDGE, MASSACHUSETTS ROCKY HILL, CONNECTICUT CONCORD, NEW HAMPSHIRE ROCHESTER, NEW YORK	

## **APPENDIX**

- Appendix A: Conceptual Construction Cost Estimates: Depot Street Lot; former Granite Bank Site**
- Appendix B: Site Analysis Memorandum, August 24, 2000.**
- Appendix C: Photolog of Downtown and Riverfront Parking Sites,**

ENGINEERS OPINION OF PROBABLE CONSTRUCTION COST

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
209.1	GRANULAR BACKFILL	CY	11.00	22.00	242.00
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	TON	90.00	50.00	4,500.00
413.1	HOT-POURED CRACK SEALANT	LB	300.00	0.98	294.00
608.12	2" BITUMINOUS SIDEWALK	SY	66.00	8.50	561.00
609.01	STRAIGHT GRANITE CURB	LF	144.00	14.00	2,016.00
615.xxx	TRAFFIC SIGNS	U	6.00	100.00	600.00
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	710.00	0.25	177.50
641.	LOAM	CY	42.00	20.00	840.00
646.11	TURF ESTABLISHMENT WITH MULCH	SY	350.00	3.00	1,050.00
652.09	ACER SACCHARUM SUGAR MAPLE	EA	13.00	300.00	3,900.00
692.	MOBILIZATION	U	1.00	2,500.00	2,500.00
				<b>SUB -TOTAL</b>	<b>16,681</b>
				<b>10% Contingency</b>	<b>1,668</b>
				<b>TOTAL</b>	<b>18,349</b>
				<b>SAY \$</b>	<b>19,000</b>

ENGINEERS OPINION OF PROBABLE CONSTRUCTION COST

ITEM NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
202.1	DEMOLISHING BUILDINGS SUBJECT TO PRIOR REMOVAL	U	1.00	\$5,000.00	5,000.00
304.3	CRUSHED GRAVEL (FOR WALKWAY)	CY	30.00	20.00	600.00
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	TON	210.00	50.00	10,500.00
609.01	STRAIGHT GRANITE CURB	LF	270.00	15.00	4,050.00
609.21	STRAIGHT GRANITE SLOPE CURB (ISLANDS)	LF	160.00	15.00	2,400.00
615.xxx	TRAFFIC SIGNS	U	6.00	100.00	600.00
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	1,550.00	0.25	387.50
641.	LOAM	CY	28.00	20.00	560.00
646.11	TURF ESTABLISHMENT WITH MULCH	SY	250.00	3.00	750.00
652.09	ACER SACCHARUM SUGAR MAPLE	EA	13.00	300.00	3,900.00
<b>ITEM SUB -TOTAL</b>					<b>28,748</b>
<b>10% CONTINGENCY</b>					<b>2,875</b>
<b>TOTAL</b>					<b>31,622</b>
<b>SAY \$</b>					<b>32,000</b>



# MEMORANDUM

---

**DATE:** August 24, 2000.  
**TO:** Mr. Peter Ryner, Director  
Community Development, Town of Peterborough  
**FROM:** Daniel Levine, PE  
**CC:**  
**SUBJECT:** Phase One Public Parking Evaluation  
**S E A No.:** 1999582.01A

---

In accordance with Amendment No. 1 to the Agreement for Engineering and Supplemental Services for Phase One Public Parking Evaluation, the following memorandum details our findings regarding the Task II Site Analysis.

The off-street parking sites which were analyzed were (1) the downtown river front area, and (2) the former Granite Bank area. The downtown river front area includes the parking lots bounded by Main Street, Grove Street, the Nubanuset River and the Contoocook River. Within those bounds, the Depot Street-Wall Street 'municipal' lot was also reviewed. The analysis of the former Granite Bank site, bounded by Grove Street and the Nubanuset River, include parking areas on the Guernsey Building site. A site visit was performed on August 17, at which time approximate dimensions and a photo log of each site was recorded; they are included as an attachment to this report.

## Downtown River Front Parking Areas

River Front Lots-The parking areas between Depot Street and the Contoocook River and between School, Street and the Nubanuset River are comprised of a series of interconnected parking lots serving the river front park and a variety of retail shops and restaurants along Depot Street and School Street. Vehicular access to these lots are from five driveways: one driveway from Main Street two drives from Depot Street, and two drives from School Street . There is also pedestrian walkways from Main Street and Grove Street. All the driveways operate for two-way traffic, and all appear to have sufficient width (minimum 24 feet), except perhaps the westerly School Street access. The lots themselves are clearly striped for regular size (9' x 18') and handicap (12' x 18') perpendicular parking spaces, in accordance with local zoning ordinances. (Space dimensions were randomly checked at various locations throughout the lot). Aisle widths between parking rows were 24 feet minimum, (again in accordance with the zoning requirement), except in one instance, where diagonal parking was substituted for perpendicular. In examining these lots for additional parking opportunities, we identified two areas where pavement marking would increase the number of 'structured' spaces (although vehicles were parked on these unmarked areas, on the day we observed the lots): (1) On either side of the

---

*S E A Consultants Inc. ■ 10 Ferry Street, Box 7, Suite 137 ■ Concord, NH 03301*  
*■ (603) 225-7000 tel ■*

---



# MEMORANDUM

---

northern most Depot Street access drive, unmarked areas at the rear of the Main Street buildings, and to the side of 'Roys'; we estimate 15 -20 'striped' spaces will result, (without encroaching the drive); (2) Alongside the 'Toad Stool Bookshop', the unmarked area would yield 6-8 spaces, when striped. (Note: These numbers of spaces are similar to the number of parkers currently utilizing these 'unmarked' areas). Other than these two, locations, we believe the existing paved areas have been maximized for parking numbers, and increasing the physical area of the lots does not appear feasible. A number of other observations regarding this series of lots:

1. Parking Duration- Except in a few instances, where individual retailers have placed signs, there is no uniform signage or regulations limiting parking duration. The conflict between short term (shoppers) and all-day (employee) parkers was noted to us on a number of occasions, when shop owners spoke to us during our observations.
2. There is no uniform signage on Main Street (or at any other downtown streets) directing motorists to 'municipal parking'.
3. We observed these lots to be filled to near capacity (90-95%), even during 'off peak' hours. We don't know if this is a seasonal (summer) 'peaking' of demand, or if its usage of these lots remains fairly constant throughout the year.

Depot Street-Wall Street Lot- This 'municipal' lot, between Main, Depot and Grove Streets, is accessible to vehicles only from Depot Street; pedestrian (only) access is also available from Main, School and Grove Streets. (The Grove Street pedestrian access is a narrow set of steep stairs, unmarked and well 'hidden' between buildings). The lot is shared with the movie theater. Excepting for the spaces along the theater frontage itself, this parking area has no pavement marking. 'Local practice' has vehicles aligning themselves in two rows of diagonal parking in the center of the lot, and two rows of perpendicular parking, one alongside the theater, and one parallel to Depot Street. The aisle widths remaining for circulation around the diagonal spaces appear inadequate, and do not appear to meet dimensional requirements in the zoning. The pavement condition is poor. We recommend this area be 'rehabed' including an asphalt overlay, and striped with pavement marking according to the parking dimensions in the zoning ordinance. We estimate 35-40 'marked' spaces will result, (not including those currently marked at the theater), which may be somewhat less than the actual number of parkers who currently crowd this lot.

Similar to the river front series of lots, there is no regulation or notice of allowable parking duration, and no Main Street or Depot Street signage directing vehicles to 'municipal parking'. As we observed in the case of the 'river front' parking lots, this lot was also filled to (or beyond) capacity. Private parking areas (at the rear of the Grove Street buildings), accessible from Main or Depot, had a capacity of 6-8 spaces but were also unmarked; pavement was in extremely poor condition.

---

*SEA Consultants Inc. ■ 10 Ferry Street, Box 7, Suite 137 ■ Concord, NH 03301*  
*■ (603) 225-7000 tel ■*

---



# MEMORANDUM

---

## Former Granite Bank/Guernsey Building Area:

Former Granite Bank Area- The site we observed behind the former Granite Bank extends from the river banks to the 'green' alongside the Guernsey Building, and from the rear of the bank building to the embankment below the Guernsey Building's upper level parking. It currently contains 'structured' (striped) parking along the river frontage, and along the 'green', and adjacent to some irregularly shaped islands, the ATM drive through (no longer in use), and a mailbox drive through for the benefit of the post office. The site is accessible from Phoenix Mill Lane (two-way traffic), with a one-way exit to Grove between the former bank building and the Post Office. (The post office maintains diagonal parking along this drive). There are approximately 60 'structured' spaces currently on this site, with perhaps 5-10 more utilizing unmarked areas in the vicinity of the ATM. (This does not include parking on the USPO site or the Historical Society site, whose access is similar to the bank site). With the removal of the ATM, and relocation or removal of the associated traffic islands, we see an opportunity to re-stripe the interior of the former bank site and gain perhaps 15-20 spaces. A 'clear' zone opposite the loading dock to the Guernsey Building would have to be maintained, as would access to the upper level parking.

Guernsey Building Site- The upper level parking area adjacent to the Guernsey Building is bounded by the Nubanuset River on one side, and a steep embankment (and retaining wall) parallel to Main Street, on the other. At the rear of the parking area, a steep outcropping of ledge rock limits expansion of the lot in that direction. The lot is currently striped for 70 spaces, and we see little opportunity to increase this number either through re-striping or physical expansion of the paved area. This parking lot is strictly for the benefit of business tenants in the Guernsey Building (although some may be utilizing lower level parking on the former bank site; we don't know the details of any 'cross-parking' agreements between the property owners). Direct pedestrian access to Main would be difficult due to grade differences.

## Recommendations:

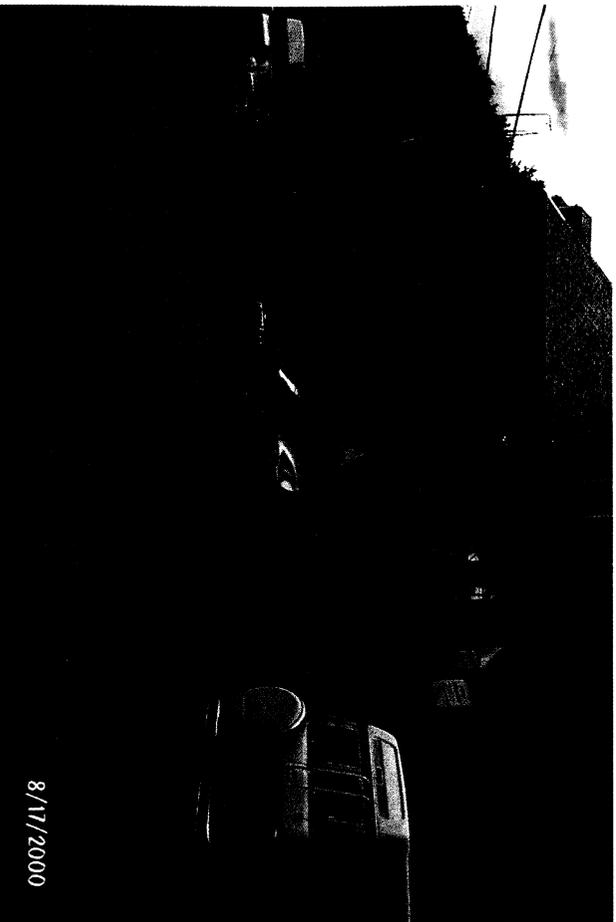
1. Produce a conceptual layout drawing of the former Granite Bank site, assuming the ATM is removed.
2. Resurface and stripe the Depot Street-Wall Street lot.
3. Stripe the areas of the 'river front' lots where additional parking areas were noted.
4. Develop a plan to regulate parking duration to satisfy short and long term needs.
5. Develop a plan for on street directional signage to 'municipal' parking lots.
6. Based on observed lot usage vs. capacity, consideration of other sites for development of downtown parking.
7. 'Compact' car space dimensions (i.e. 8' x 15') was not provided for in the zoning, or utilized in any of the lots we observed. It is a provision in many other zoning ordinances we have reviewed. We recommend the Town give this consideration in the future.

---

*SEA Consultants Inc. ■ 10 Ferry Street, Box 7, Suite 137 ■ Concord, NH 03301*  
■ (603) 225-7000 tel ■



Wall Street Lot - Main Street vehicular access to private parking (rear of Grove St. Bldgs).



Wall Street Lot – Private parking (rear of Grove Street bldgs.)



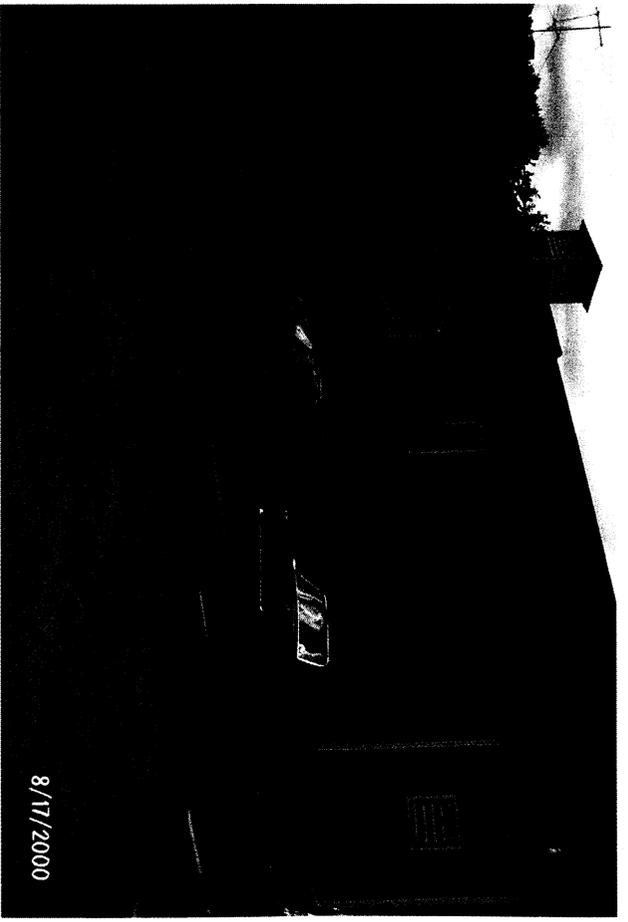
Wall Street Lot – Pedestrian access via Grove Street



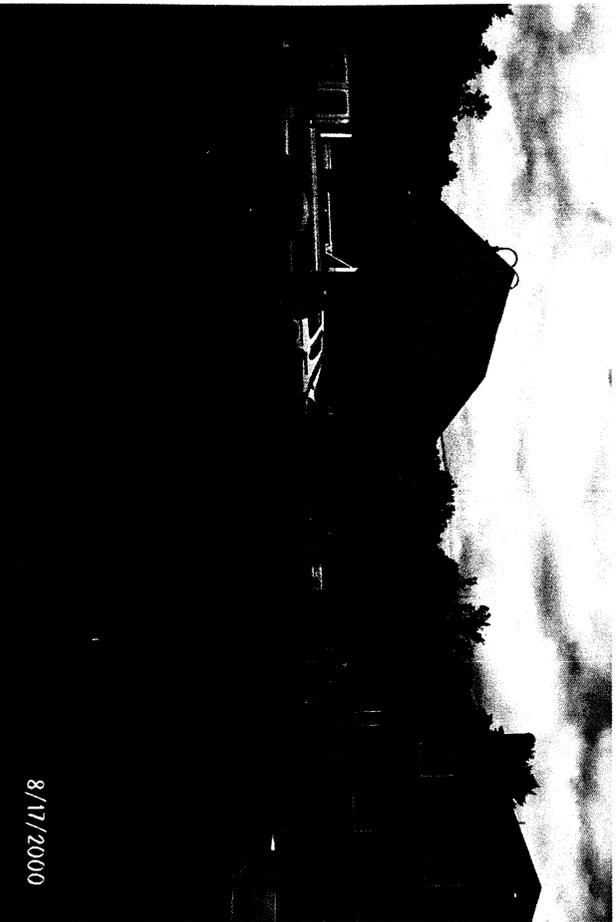
Wall Street Lot – View towards Depot Street.



Wall Street Lot – View towards Depot Street and Movie Theatre.



Wall Street Lot – Movie Theatre parking.



Riverfront Lot – Vehicular access-view towards Main Street.



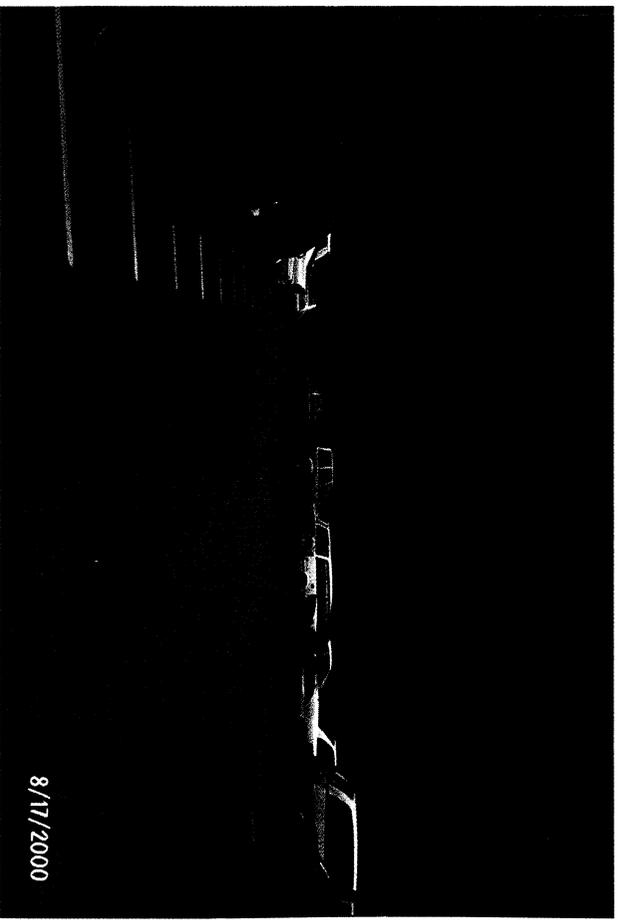
Riverfront Lot – Vehicular access-view towards Depot Street; Diner right.



Riverfront Lot – Parking along “Summerfest” wall.



Riverfront Lot – looking towards School Street (1)



Riverfront Lot – Looking towards river & park.



Riverfront Lot – Looking towards “Sharon Arts” and School Street (2)



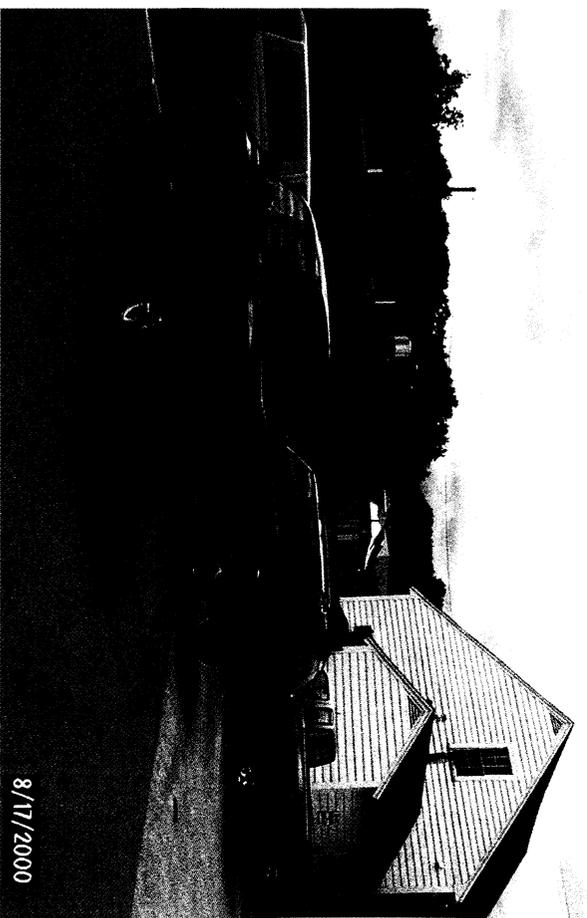
Riverfront Lot – “Alley” looking towards river and park.



Riverfront Lot – Looking towards Depot St. access; rear Diner (unstriped)



Riverfront Lot – Looking toward Depot St. access; rear buildings Main Street (unstriped).



Riverfront Lot – Depot Street access at rear of Diner (unstriped)



Former Granite Bank Lot – Post Office drive access (one way out).



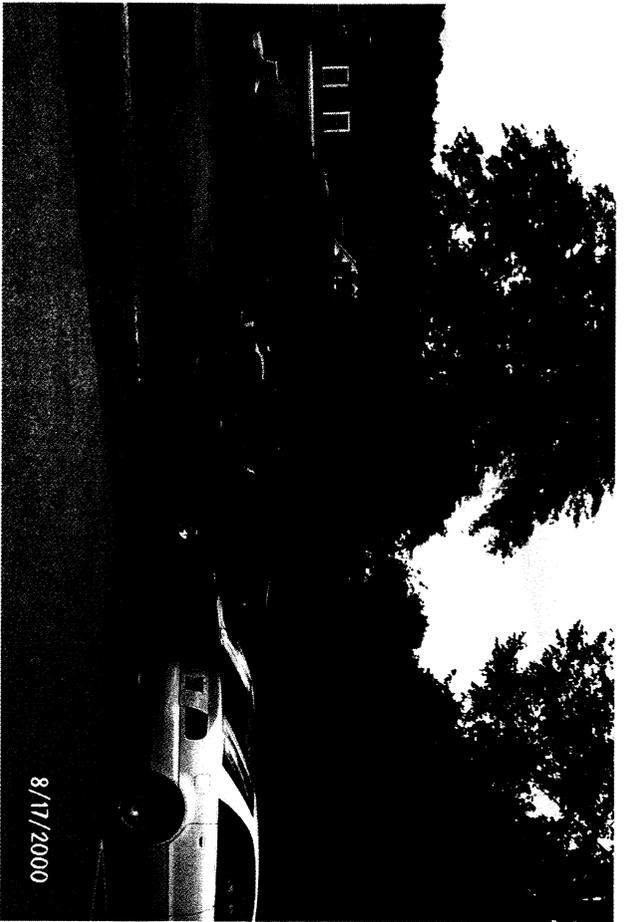
Former Granite Bank Lot – Phoenix Mill Lane Access



Former Granite Bank Lot – ATM



Rear of Post Office looking towards Grove St.



8/17/2000

Former Granite Bank Lot - Riverfront parking.



8/17/2000

Guernsey Bldg - looking towards "green".



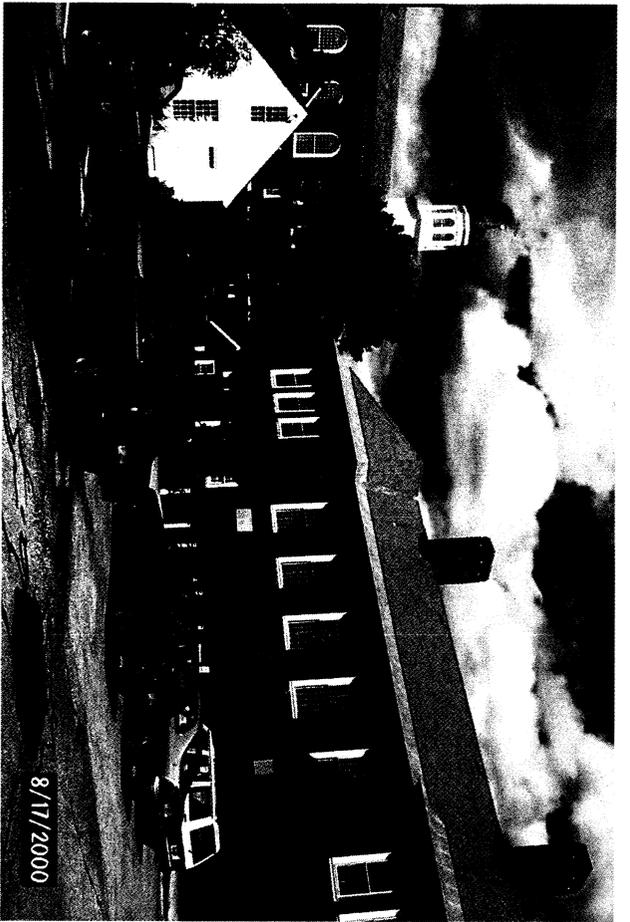
8/17/2000

Former Granite Bank Lot; ATM, looking towards Grove.



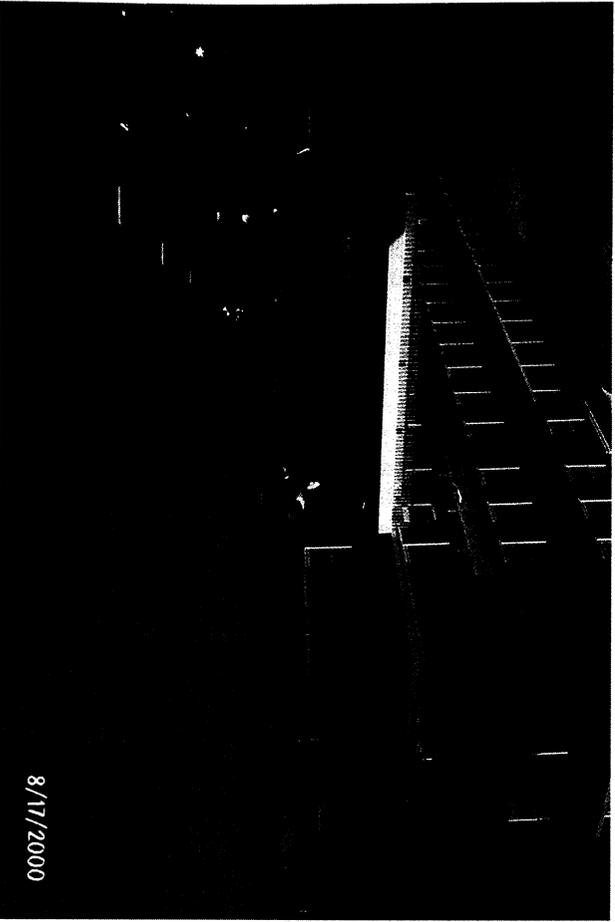
8/17/2000

Guernsey Bldg - Looking towards Main.



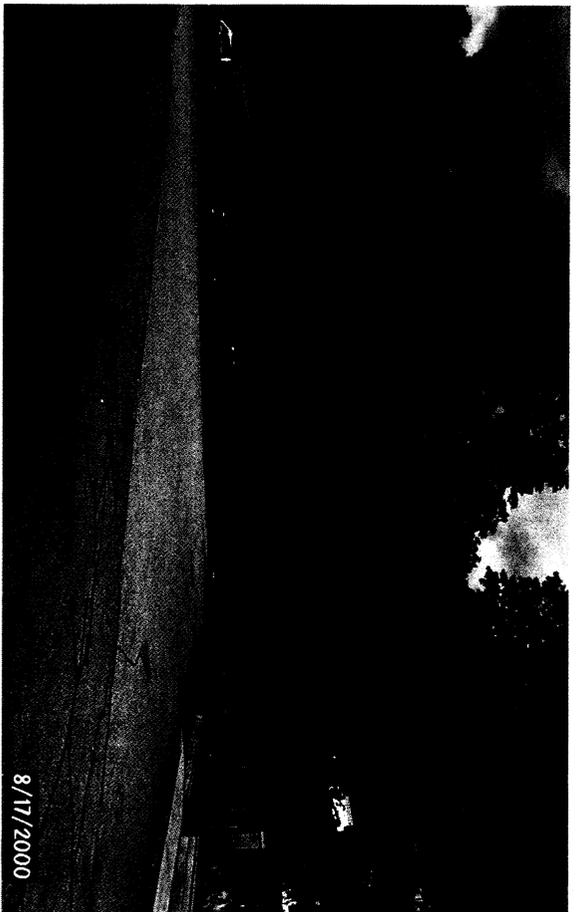
Gernsey Bldg – Historical Society Bldg & Parking.

8/17/2000



Guernsey Bldg Parking – View towards loading dock

8/17/2000



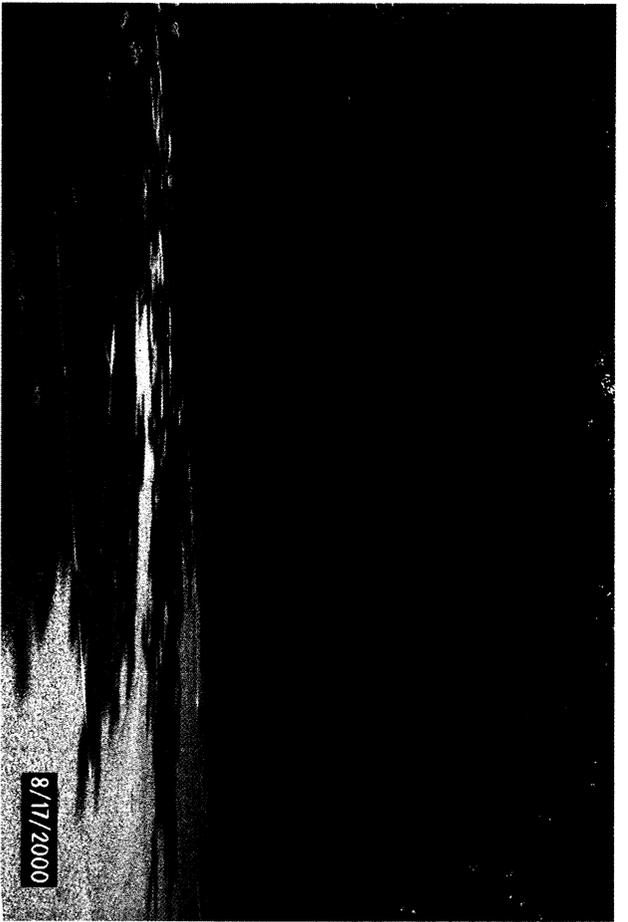
Guernsey Bldg Lot – Lower level parking, looking rear

8/17/2000

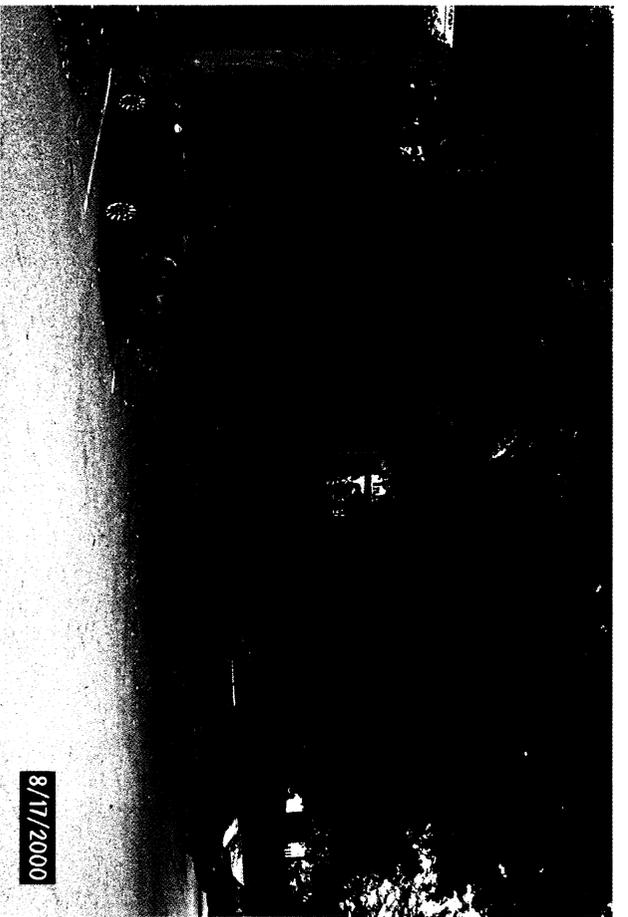


Guernsey Bldg Parking – Upper level parking.

8/17/2000



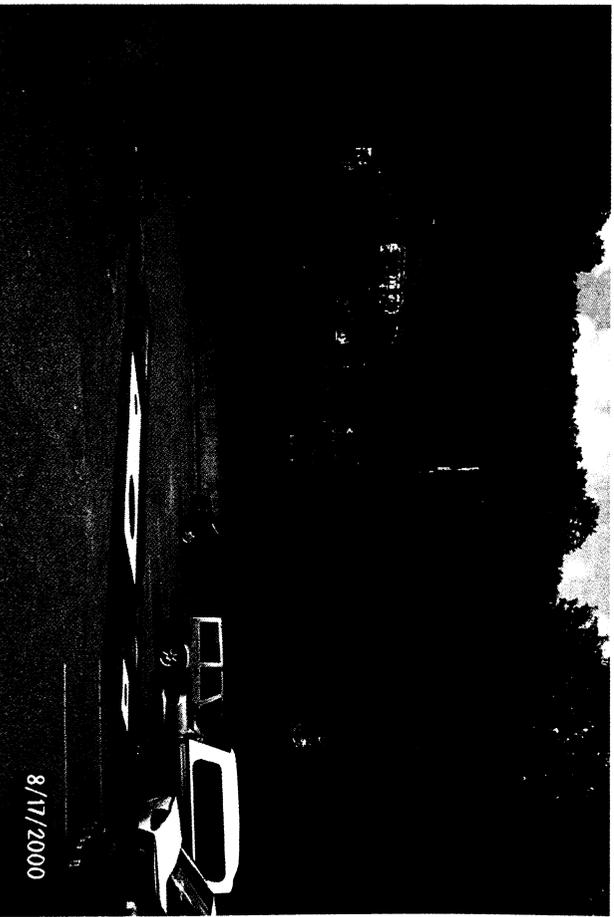
Guernsey Bldg Parking – Upper level, view to rear with stone embankment



Guernsey Bldg Parking – Upper level, steep embankment, towards Main St.



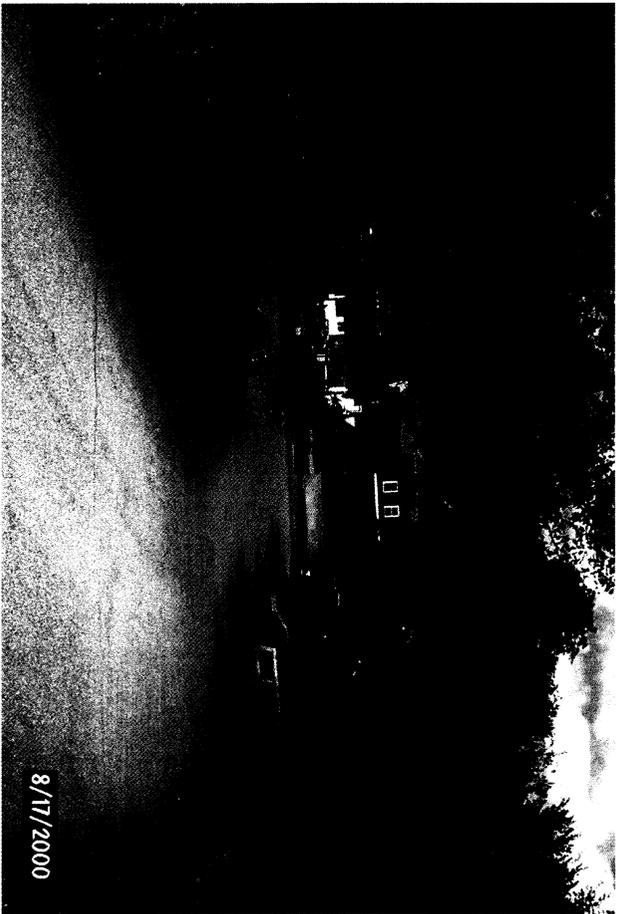
Guernsey Bldg Parking – Upper level, view towards bldg.



Guernsey Bldg Parking – Upper level, view towards Main St. with retaining wall.



Guernsey Bldg Parking – Upper level, steep embankment, view towards Main St.



Guernsey Bldg Parking – View towards Grove St., upper to lower lot.