

FREEMAN FRENCH FREEMAN, INC.



COURT STREET PARKING FACILITY

**SCHEMATIC DESIGN
& COST ESTIMATE**

**PREPARED FOR THE STATE OF VERMONT
DEPARTMENT OF BUILDINGS
AND GENERAL SERVICES.**

**JANUARY 23, 2001
PROJECT NUMBER A0044**

Executive summary:

1. This study proposes a three level parking structure that begins one level below Court Street and rises 1 level above Court Street.
2. The Geotechnical report has identified significant additional costs associated with building below the flood plain.
3. Because of the parking structure's location in a flood plain, the lowest level of the structure has been lifted 18 inches above the flood plain to both reduce construction costs and simplify compliance with local and national flood proofing regulations.
4. The 235 car parking structure has been designed to accommodate future expansion to the East that could more than double its vehicle capacity. The structure has also been sized to handle a future three level vertical expansion.
5. The structural system supporting the garage is a structural steel frame with pre-cast concrete decks and spandrels.
6. Artistic adornment has been holistically applied to the entire building rather than to any one specific portion. This approach will elevate the entire aesthetic of the project while maximizing the potential of essential building materials.
7. Further artistic direction has supported building an intentionally beautiful above grade building rather than spending exponentially more resources to bury and hid the garage below grade / flood plain.
8. The Traffic Impact Study reveals that the construction of the proposed new parking structure will not create undue congestion or unsafe conditions with respect to the highways.
9. The Traffic Impact Study has identified the intersection of State Street / Taylor Street / Governor Davis Avenue as an intersection currently warranting a traffic signal. The level of service at this intersection in either build or no build scenarios does not change unless additional turn lanes are added.
10. A summery of base cost options is provided below:

CONSTRUCTION
 COMBINATION
 WORKSHEET

Description	Gross SF	# of Cars	Item Cost	Cost/sf	Cost/car
Shallow Garage Base Cost "A"	77,900	235	\$4,294,857	\$55.13	\$18,276
Additional Tunnel Costs "B"	1200	235	\$213,314	\$177.76	\$908
Additional Architectural Treatments "C"	77,900	235	\$404,103	\$5.19	\$1,720
Shallow Garage with Tunnel included ("A"+"B")	77,900	235	\$4,508,170	\$57.87	\$19,183.70
Shallow Garage with Architectural Treatments incl. ("A"+"B"+"C")	77,900	235	\$4,698,960	\$60.32	\$19,995.57
Shallow Garage with Tunnel & Arch. Treat. Incl. ("A"+"B"+"C")	77,900	235	\$4,912,274	\$63.06	\$20,903.29

Architecture:

Overview:

The State of Vermont Department of Buildings and General Services retained the services of Freeman French Freeman, Inc. to conduct preliminary planning, schematic design, and cost estimates for a new parking structure (approximately 200 cars) on the site of an existing on grade State owned parking lot at the intersection of Court Street and Governor Davis Avenue in downtown Montpelier, VT.

The design limits of this study are defined by the property boundary of the existing State lot, however, the schematic design created by this study has been configured to accommodate future expansions both to the East and above upper levels.

An add option is available to include a tunnel connection to the neighboring Pavillion Building. The stair tower which provides access to this tunnel is to be heated with an elevator access.

An add option is also available to substantially increase the artistic / aesthetic / architectural treatments of the buildings finishes should the project be constructed, as this report recommends, above the flood plain.

Over the course of this study:

- Site property boundaries and utility / infrastructure lines were surveyed, verified, and accurately located.
- Geotechnical, soils, and foundation systems were investigated and assessed.
- Structural framing systems were analyzed for maximum integrity and efficiency.
- Expansion capabilities of the design were enabled.
- Traffic impact was studied, and assessed.
- Artistic opportunities were identified and incorporated into architectural schematics.
- Numerous plan, elevation and ramp configurations were considered prior to arriving at the architectural schematic drawings that follow.

Expansion to the East:

In the event that the State acquires adjacent land to the East and behind the Vermont Mutual Insurance Company building, the attached schematic design has been both structured and aligned for future expansion Eastward. Precise investigation of such land not currently owned by the State is outside the scope of this study and reserved for future study.

Expansion Upward:

Another requirement for the schematic design is that it is configured to support future expansion on upper levels, in specific to allow for office and commercial space on & above upper level structural bay parallel to Court Street (per Capital District Master Plan 2000 prepared by Gossens-Bachman, Inc..

During the course of this study the State clarified that the garage should be capable of a full build-over across all structural bays. This study has schematically engineered it's foundations and structural frame to support a full build-over to a maximum of three additional levels.

In order for future office / commercial buildings to be constructed along and accessible from Court Street, the necessarily sloped parking deck would have to be leveled and Mechanical/Electrical/Plumbing (MEP) infrastructure penetrations located.

The schematic strategy for this project structures the steel columns in such a fashion that when future build-over specifics are available, the pre-cast parking deck is removable and replaceable with a level building slab and accurate MEP accommodations. This strategy provides the most flexibility for future building development along Court Street.

At such time that a future build-over is designed, this schematic study has located vehicle and pedestrian entrances and stair towers so they may be integrated into / encompassed by such design.

Although, public comment has suggested that the entire project, future buildings and Eastward expansion be designed all together, such design is beyond the scope of this study.

Schematic Plan:

The parking structure per the current schematic design is three levels and approximately 170 feet (East-West) by 180 feet (North-South). It's lowest level is at grade (approximately ten feet below Court Street) and it's roof deck is two stories higher (approximately ten feet above court street). The main vehicle entrance is located at the structures North-East corner (eventually central to the entire deck assuming future expansions are completed), and pedestrian entrances are located at all four corners.

Typical dimensions are as follows:

1. Floor to floor height: 10'-0"
2. Ramp slope is 5%
3. Parking space dimensions are 8'6" by 19'-0" per Montpelier Zoning Regulations.
4. Drive lane is 22'-0"

5. H.C. Parking is provided at the Court Street level adjacent to the Northwest stair tower.
6. Top of roof level light poles: +/- 12'-0" above deck.

The materials composing the garage include a painted structural steel frame with pre-cast concrete spandrels and details of brick, metal and glass. For further information of material make up please reference the artists recommendations for architectural treatments as well as the construction cost estimate.

Flood Plain:

Because the site is located within the 100 year flood plain of the Winooksi River, any option which builds below the flood plain adds significant expense due to strict Federal and local regulations mandating "dry flood-proofing".

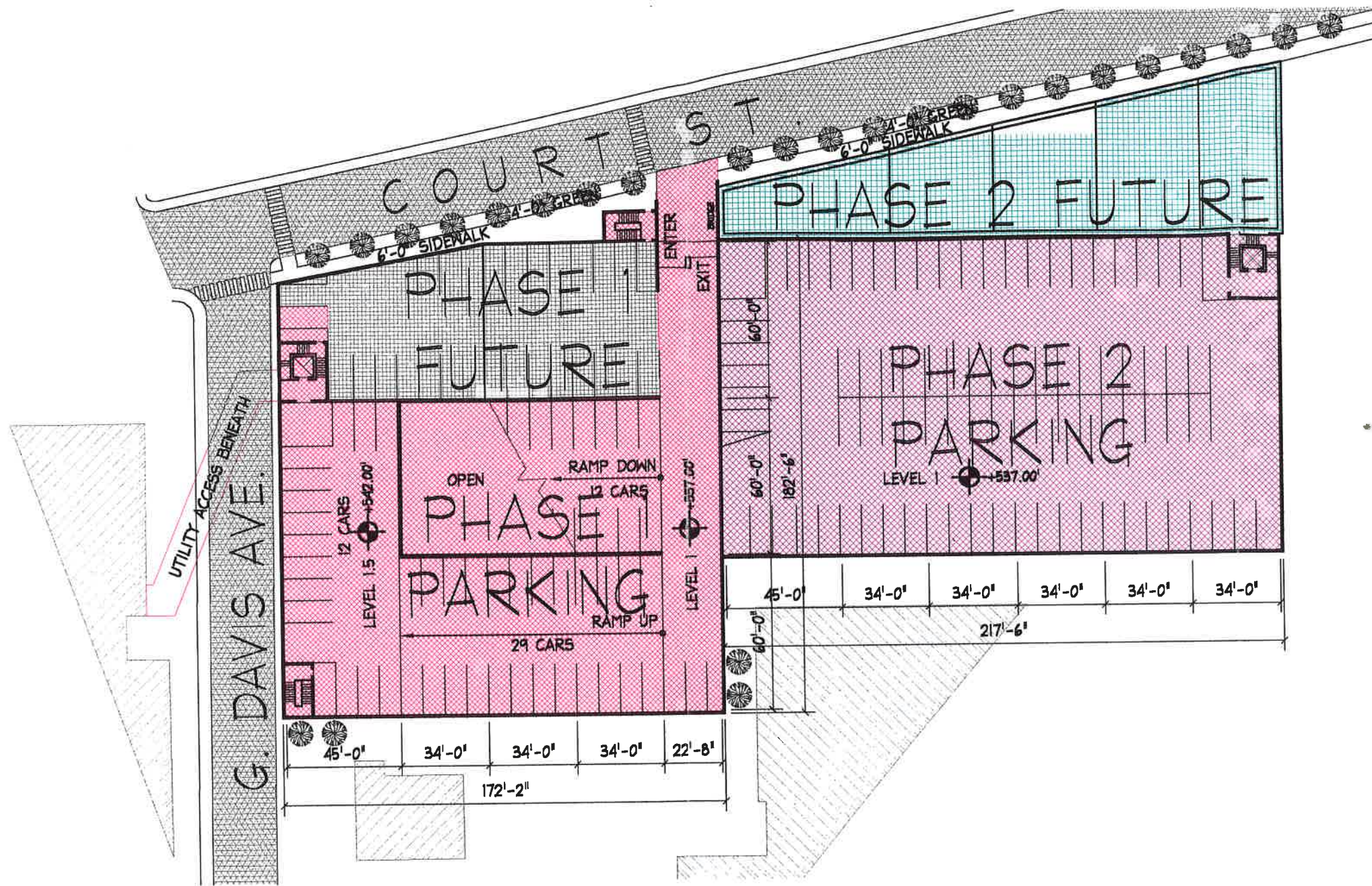
Dry flood-proofing is essentially waterproof construction, and waterproof construction mixed with a flood event results in a building that wants to float. Therefore either, construction below the flood plain must be avoided (the recommendation of this report), or substantial measures must be undertaken to arrest flotation.

The geotechnical report by Knight Consulting Engineers analyzes the different foundation systems required and the components and costs associated with each. For reasons of both aesthetics and costs associated with building below the flood plain, the advisory board has recommended that this project pursue a scheme which builds above the flood plain.

Art Integration / Architectural Treatments:

The State Council on the Arts contracted with Local artists Elizabeth Billings and Andrea Wasserman to enhance the artistic and aesthetic character of the architecture. The premise of artist involvement on this project varies from the status quo in that the artwork medium is the construction materials themselves.

The artist's role in this project is as collaborator with the architect, to participate as a team member to "design into" the architecture a level of artistic detail too often subordinated by other project priorities. Such priorities typically begin with the building's programmatic function(s) and a given budget. Integral artist involvement has allow the artists to participate in defining the "medium" of materials creating the architecture, and therefore communicate artistic expression in the "language" of that medium, thus creating art which is integral, not applied, to architecture. For further information on artist impact please reference the artists recommendations for architectural treatments as well as the construction cost estimate.



FUTURE EXPANSION KEYPLAN
 SCALE: 1"=50'-0"

COURT STREET PARKING FACILITY

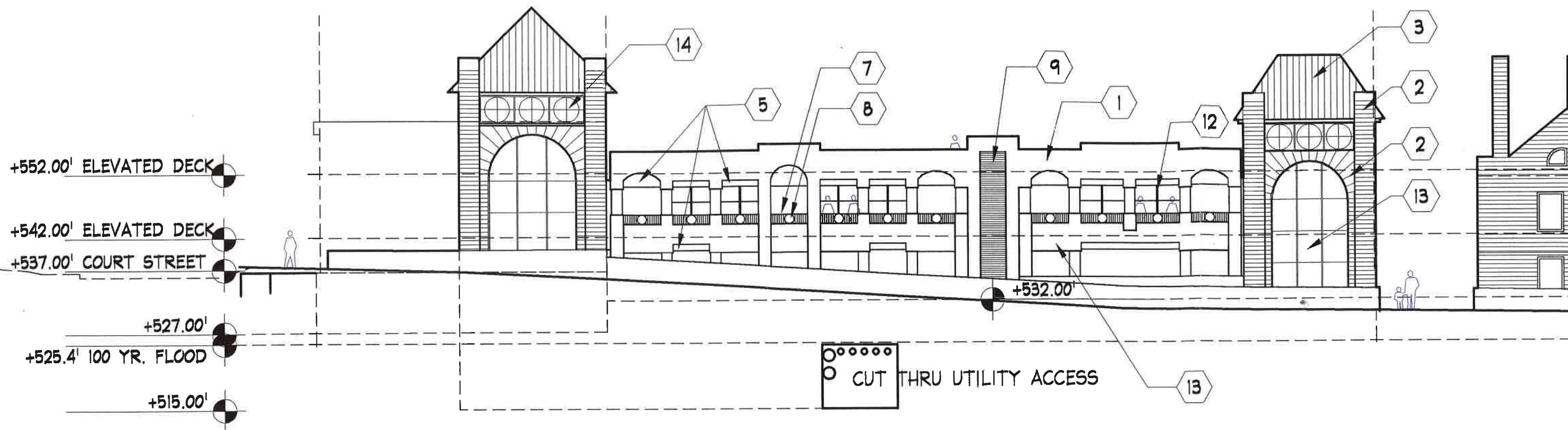
COURT STREET AND GOVERNER DAVIS AVENUE
 MONTPELIER VERMONT

PROJECT A0044
01/23/01

Freeman French Freeman, Inc.
 81 Maple Street, P. O. Box 306
 Burlington, Vermont 05402
 Ph: (802)864-6844 Fax: (802)860-1815



+582.00' T.O. FUTURE ASSUMPTION



10'-0" F.F. SPLIT LEVEL 5% HELIX RAMP (G.DAVIS ELEVATION)

- | | |
|-----------------------------|-----------------------|
| 1 PRECAST CONCRETE | 8 SCULPTED METAL WORK |
| 2 BRICK/MASONRY | 9 PLANTED VINE WALL |
| 3 STANDING STEAM ROOF | 10 DECK LIGHTING |
| 4 SCULPTURE NICHE | 11 SIGNAGE |
| 5 LINTLE MASONRY OF PRECAST | 12 ALUMINUM MULLION |
| 6 PRECAST CONCRETE FIRIEZE | 13 STOREFRONT GLAZING |
| 7 METAL WORK RAILING | 14 CLERESTORY GLAZING |

ELEVATION - G. DAVIS AVE. - SHALLOW FOUNDATION OPTION

SCALE: 1/16" = 1'- 0"

COURT STREET PARKING FACILTY

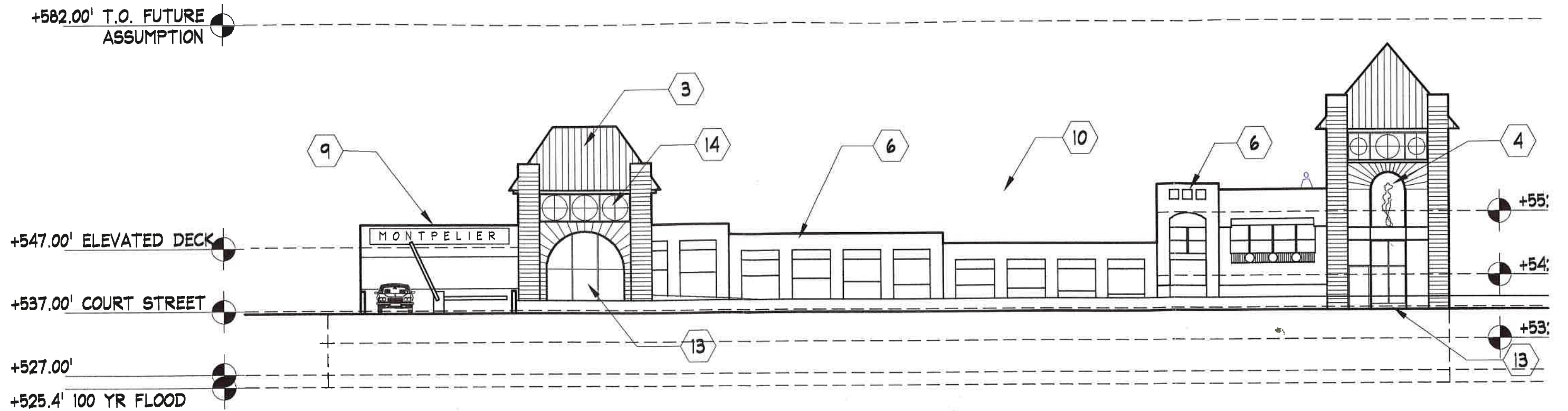
**COURT STREET AND GOVENOR DAVIS AVENUE
MONTPELIER VERMONT**

PROJECT A0044

01/23/01

Freeman French Freeman, Inc.
81 Maple Street, P. O. Box 306
Burlington, Vermont 05402
Ph: (802)864-6844 Fax: (802)860-1815





10'-0" F.F. SPLIT LEVEL 5% HELIX RAMP (COURT STREET ELEV.)

- | | |
|-----------------------------|-----------------------|
| 1 PRECAST CONCRETE | 8 SCULPTED METAL WORK |
| 2 BRICK/MASONRY | 9 PLANTED VINE WALL |
| 3 STANDING STEAM ROOF | 10 DECK LIGHTING |
| 4 SCULPTURE NICHE | 11 SIGNAGE |
| 5 LITTLE MASONRY OF PRECAST | 12 ALUMINUM MULLION |
| 6 PRECAST CONCRETE FIRIEZE | 13 STOREFRONT GLAZING |
| 7 METAL WORK RAILING | 14 CLERESTORY GLAZING |

ELEVATION - COURT STREET - SHALLOW FOUNDATION OPTION

SCALE: 1/16" = 1'- 0"

COURT STREET PARKING FACILITY

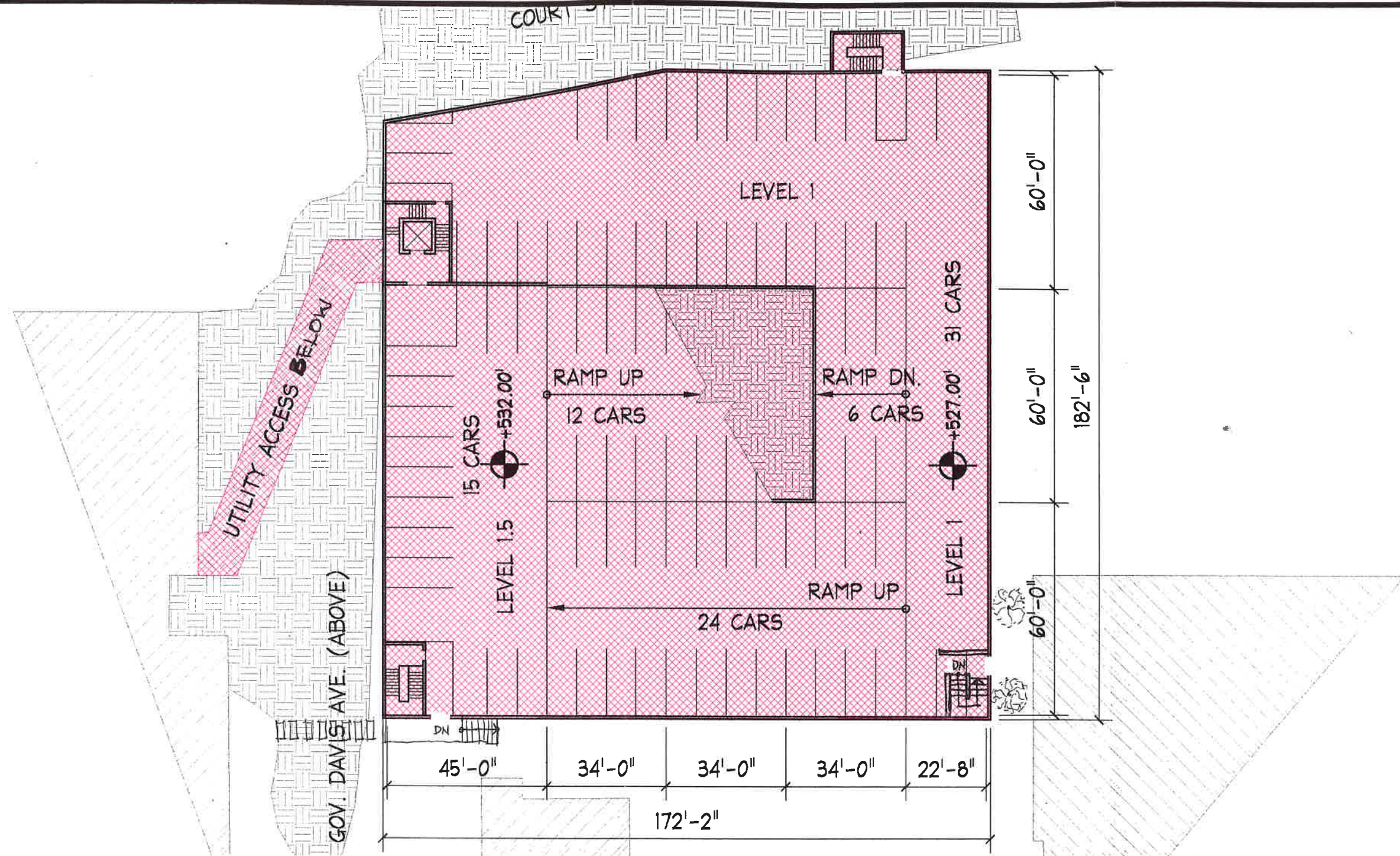
COURT STREET AND GOVENOR DAVIS AVENUE
MONTPELIER VERMONT

PROJECT A0044

01/23/01

Freeman French Freeman, Inc.
81 Maple Street, P. O. Box 306
Burlington, Vermont 05402
Ph: (802)864-6844 Fax: (802)860-1815





LEVEL ONE - ON GRADE

SCALE: 1/32" = 1'-0"

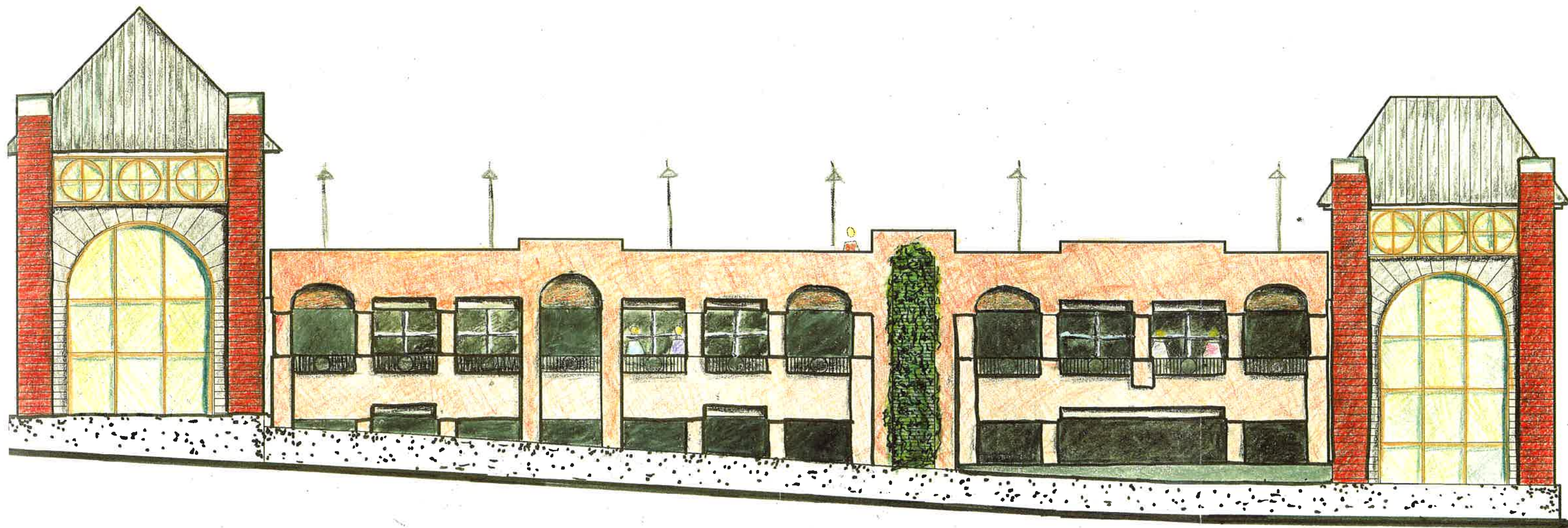
**COURT STREET PARKING FACILITY
COURT STREET AND GOVERNER DAVIS AVENUE**

MONTPELIER VERMONT

**PROJECT A0044
01/23/01**

Freeman French Freeman, Inc.
81 Maple Street, P. O. Box 306
Burlington, Vermont 05402
Ph: (802)864-6844 Fax: (802)860-1815





Governor Davis Avenue - Material Rendering
SO NOT SCALE

COURT STREET PARKING FACILITY

COURT STREET AND GOVENOR DAVIS AVENUE
MONTPELIER VERMONT

PROJECT A0044

01/23/01

Freeman French Freeman, Inc.
81 Maple Street, P. O. Box 306
Burlington, Vermont 05402
Ph: (802)864-6844 Fax: (802)860-1815





**ARTISTIC RENDERING
APPROXIMATING VIEW LOOKING NORTH
ON GOVERNOR DAVIS AVENUE**

**COURT STREET PARKING FACILITY
SCHEMATIC DESIGN STUDY
FREEMAN FRENCH FREEMAN, INC
01/23/01**