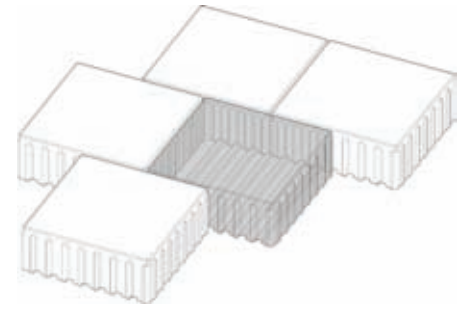




# VS 5<sup>TM</sup>



## F Street Connectivity, Anchorage, Alaska

by Tamás Deák



Downtown Anchorage embraces new interlocking paving design as part of Master Plan.

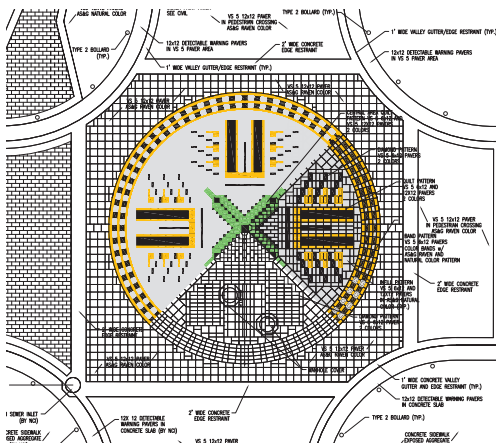


# F Street Connectivity, Anchorage, Alaska

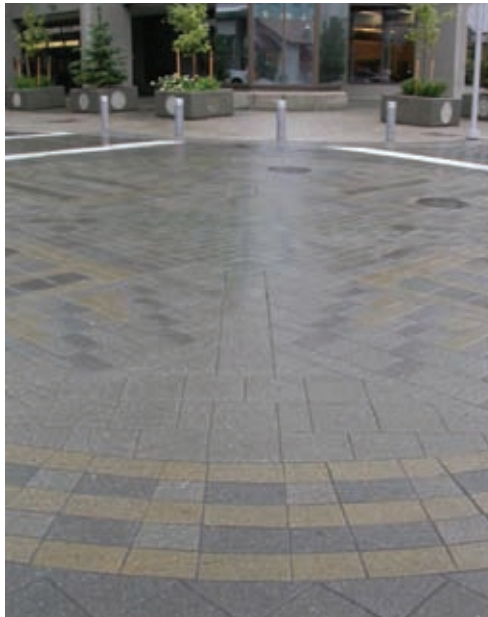


Anchorage is a diverse and growing metropolitan area located on the 61st latitude along the Northern Pacific Rim in Alaska.

Anchorage enjoyed considerable tourism and transportation industry growth during the past decade. In 2005 it set out to build a new convention center downtown to attract a larger share of the growing North American convention business. The need for an urban pedestrian corridor to link various public facilities in the heart of the city fostered the concurrent redevelopment of a one-block section F Street.



The vision for the street is captured in a design that brings pedestrian scale to a formerly car dominated street allowing it to transform into a linear urban space for public events throughout the year.



The challenges associated with paver system design and construction in a sub-arctic climate and the demand for very high surface durability due to the winter use of studded tires in Anchorage called for the selection of a system that provides high resistance for horizontal and vertical stresses



and shear resistance. The design team researched and selected VS 5 with 3 1/8" thickness as the system most reliable for the purpose since no local product was available for the intended multi-modal use.

Anchorage's distance from licensed manufacturers of the product required that the design team engage the local paver manufacturer to partner at the inception of the project.

The paver mold had to be purchased and manufactured to fit the local equipment, testing of the pavers had to be completed to meet specifications and manufacturing time had to be set aside in the plant to meet the schedule of the project prior to the award of the construction contract.

The project includes over 40,000sf of paver area, a volume never before seen in Alaska. Anchorage's building industry does not have local paver installation expertise for large urban



## F Street Connectivity, Anchorage, Alaska

projects so the design team engaged a specialty contractor from the East Coast of the U.S. who performed the work for the general contractor as a sub.



The unique nature of the installation also included the need to cross a large volume urban corridor (West 6th Avenue) that is managed by the Alaska Department of Transportation and the need to provide a snowmelt system to maintain an ice free pedestrian environment during the winter months. The design section is consistent throughout the corridor. The concentration of buried utilities paired with cost considerations resulted in a structural section used for flexible



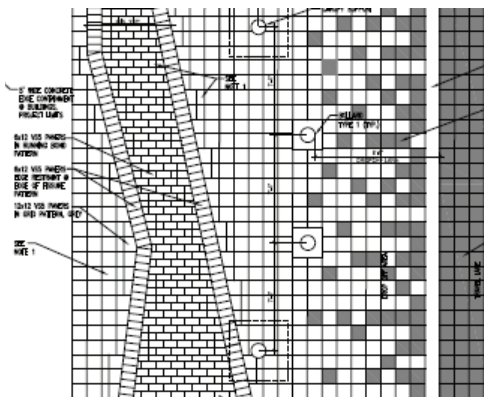
pavements (generally asphalt concrete) in Alaska.

The compacted structural fill was tightly controlled to provide sufficient gradient for the pavement system. A welded wire mesh was pinned into the fill to allow the attachment of the PEX tubing for the snowmelt system. The bedding sand was placed over the fill at tight tolerances to cover the mesh and tubing while allowing the installation of the VS 5 paver blocks.



The design of the VS 5 paver surface included unique detail elements that required skillful design and installation working with the VS 5 pavers. The intersection is designed with a pattern inspired by local Dena'ina artwork of the Upper Cook Inlet region.

The F Street project was completed in 2008 with the addition of the pedestrian canopy in July 2009. The paver system performs well in the demanding sub-arctic environment, while the new urban corridor has been embraced by the community.





## F Street Connectivity, Anchorage, Alaska

### Construction Data

#### Paver Products Used:

VS 5™ interlocking concrete paver

#### Sizes: 12"x12"x3 1/8" and 12"x6"x3 1/8"

(300x300x100/108mm and 300x150x100mm/108mm)

Colors: Interstar JO-4134 6%, JO-6817 1% (white cement), VT-2244 2% and AS&G standard colors, "Raven", "Natural"

#### Completion Date:

August 2008 full street construction

July 2009 pedestrian canopies

#### Project Area:

Approximately 42,000sf

#### Project Awards:

Hardscape North America 2008

#### Client:

Alaska Center for Convention and Trade, LLC for the Municipality of Anchorage, Alaska  
[www.muni.org](http://www.muni.org)

#### Design Team Lead:

kpb architects, Anchorage  
[www.kpbarchitects.com](http://www.kpbarchitects.com)

#### General Contractor:

Davis Constructors and Engineers, Inc.  
[www.davisconstructors.com](http://www.davisconstructors.com)

#### Paver Manufacturer:

Anchorage Sand and Gravel Co. Inc. (AS&G)  
[www.anchsand.com](http://www.anchsand.com)

#### Paver Installer:

East Penn Pavement Company  
[www.eastpennpavement.com](http://www.eastpennpavement.com)



All photographs are courtesy of Tamás Deák, principal, kpb architects

### Product Features

- Shear resistance on five sides
- Matrix allowing for a combination of different paver formats
- Ridges and grooves on the underside give the paver a strong grip on the bedding material
- High-level resistance to horizontal and vertical stresses
- Low joint ratio
- No need for time consuming fitting attempts
- Attractive appearance as its functional features are invisible when the pavement is installed
- Ideal for heavily trafficked areas
- Software available for matching curved profiles
- Mechanical installation