CONTEXT-SENSITIVE SOLUTIONS (CSS) WORKSHOP
Texas Department of Transportation
South Texas Projects

Los Tomates Bridge
Brownsville, Texas

A Celebration of Texas

What does CSS mean to TxDOT?

Using transportation experience, research into local requirements, local expertise, and public involvement to ensure that a roadway addresses:

- **Local environmental needs and resources**
- **Local historical needs and resources**
- **Local urban needs and resources**

CSS and the Environment : SH 48 at Bahia Grande

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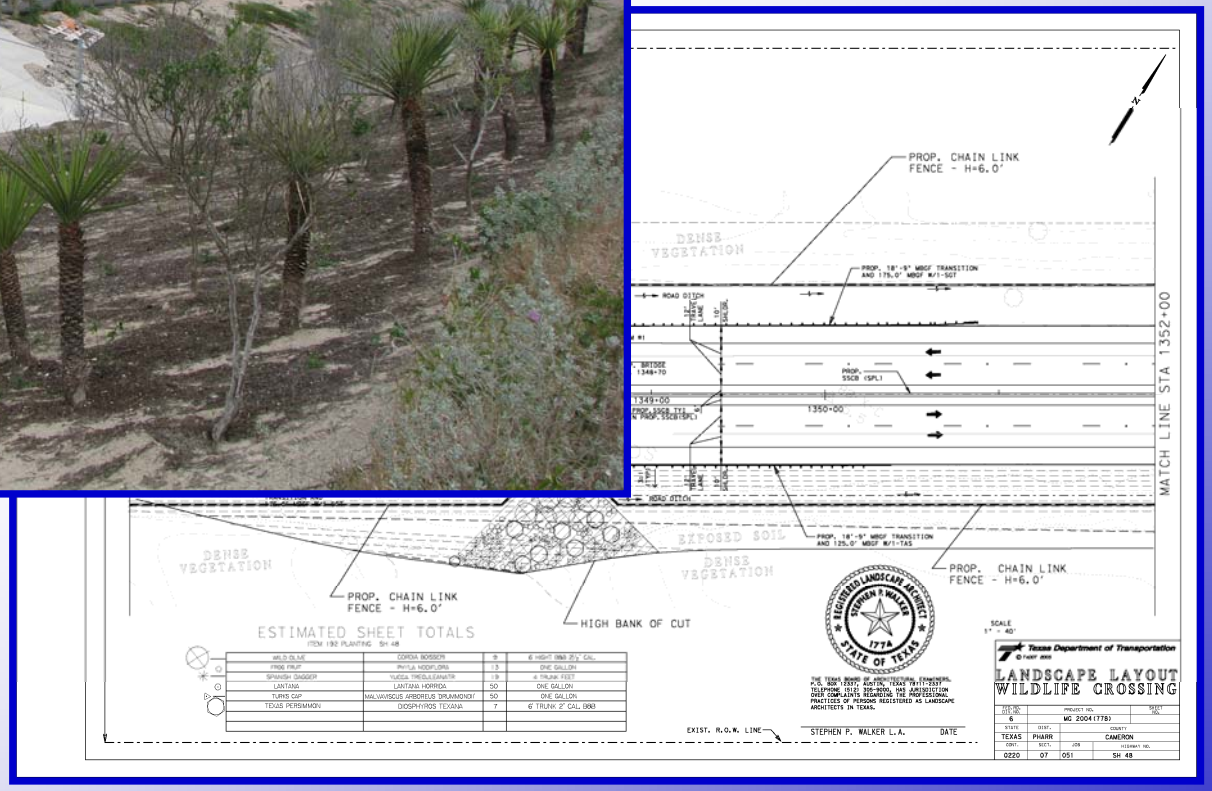


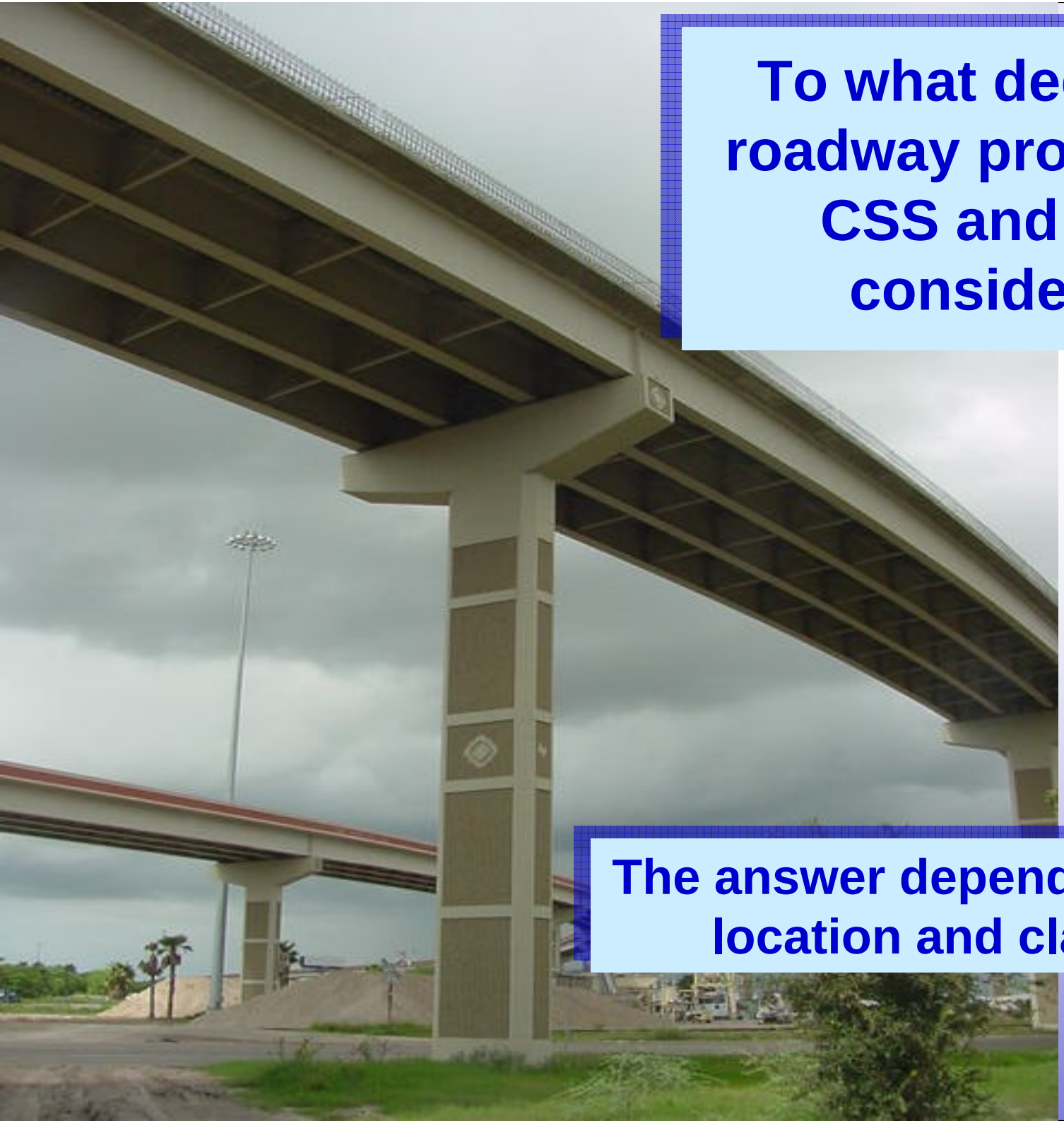
CSS and the Environment : SH 48 at Bahia Grande

CSS and Historical Preservation:
Roma Visitor's Complex

CSS and Urban Needs: Importance of CSS and aesthetics for roadway projects

US 77/83 and SH 100 Intersection in Cameron County

They enhance a roadway project beyond economic, efficiency, and safety concerns.



To what degree should roadway projects include CSS and aesthetic considerations?

US 77/83 Interchange
Harlingen, Texas

The answer depends on the project location and classification.

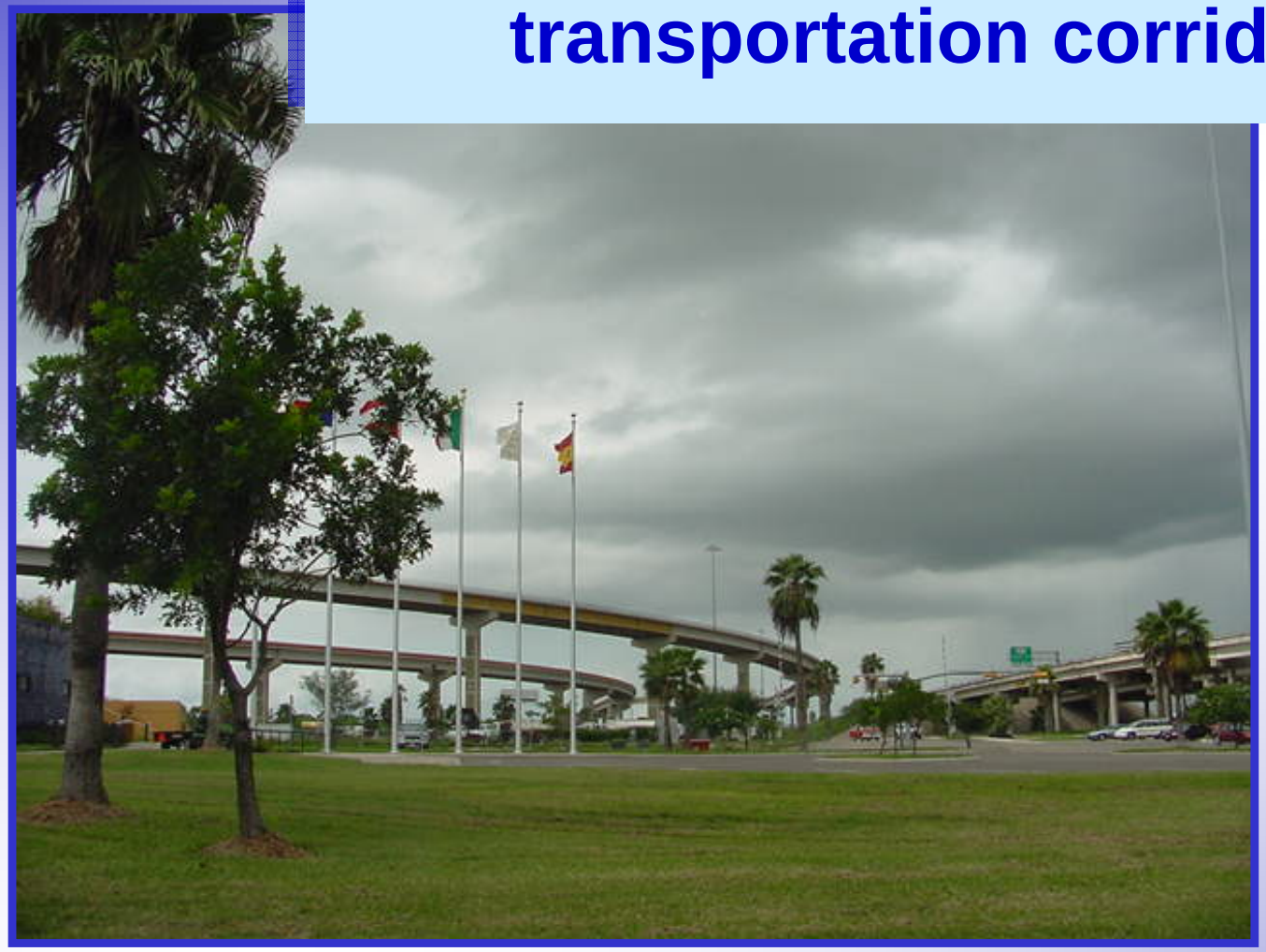
The scale of a roadway can overwhelm motorists with its size and scope.

US 83 McAllen, Texas

Aesthetic surface treatments can reduce a project to a more human scale.

US 77/83
Brownsville, Texas

How is the project viewed by those who live, work, and play along the transportation corridor system?



US 77/83 Interchange
Harlingen, Texas

The local community is usually the owner.

How the project blends into the community is important.

US 77 Cameron County, Texas

A successful transportation project requires designers to identify many design components before design work. A pre-project design conference can accomplish this.

SH 358
Corpus Christi, Texas

Establishing guidelines for color, shape, and texture sets a theme for the entire project and prevents costly changes.

US 281
Pharr, Texas

Establishing a theme early in the design process helps set priorities for important details?.

SH 358
Corpus Christi, Texas

Including these design values encourages acceptance and community pride.

Pharr district has applied CSS principles to road improvement projects for 22 years.

U.S. 281/83 Interchange, Pharr, Texas

Completed 1989

Decorative finishes and treatments

Types:

- Retaining wall finishes
- Decorative modular block walls
- Bridge columns and bridge cap treatments
- Decorative bridge rails
- Color brick pavers at intersections and medians
- Stamped concrete at rip rap
- Concrete stains
- Murals at retaining walls
- Landscape and drip irrigation applications

Ashlar Stone Texture on MSE Panel

Color Combinations with Typical Form Liners at the Pharr District (US 77)

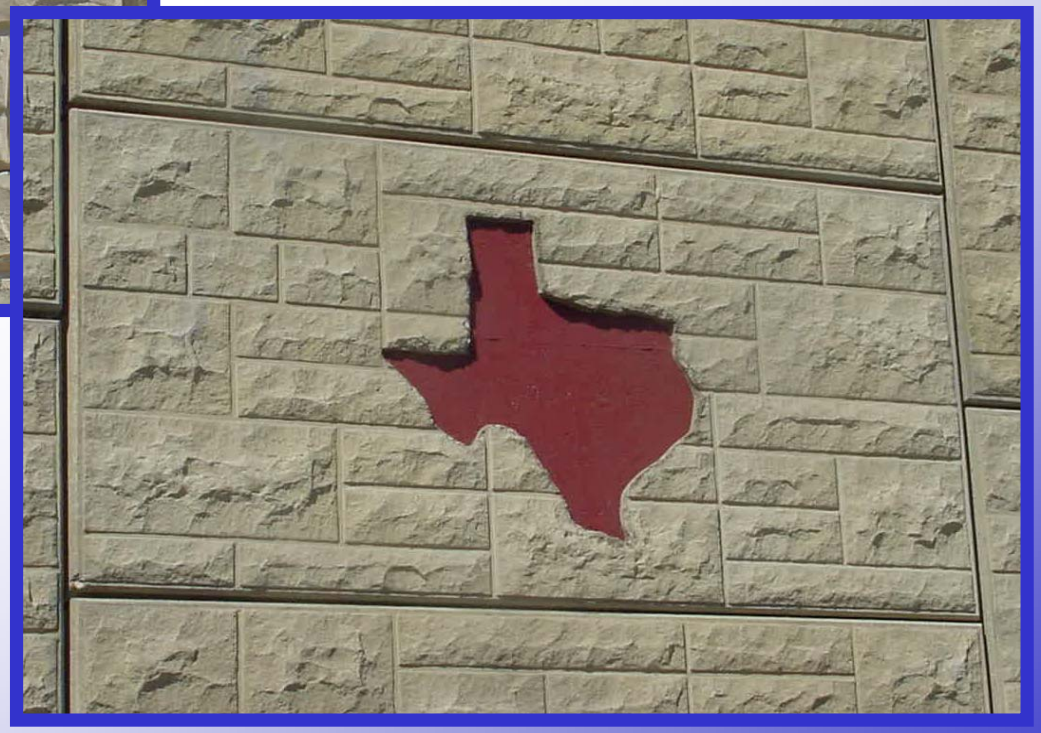
Color Combinations with Typical Form Liners at the Pharr District (US 281)

MSE Wall Detail (location?)

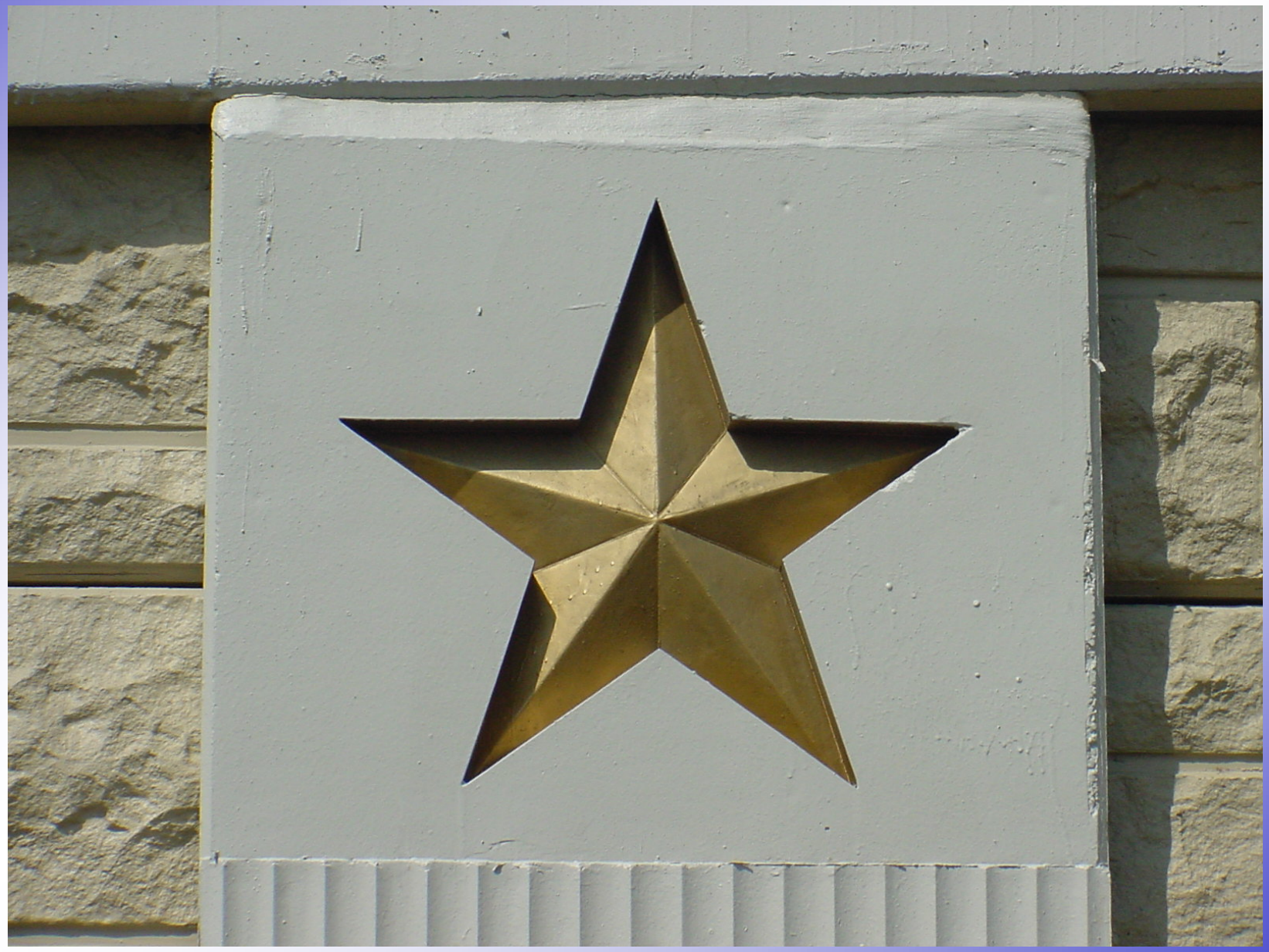
US 281 Hidalgo County

Stylized Sculptured Applications at Bridge Caps

Art Work on MSE Wall



Attached Column Cap Detail



Form Liners and MSE 3-D Art

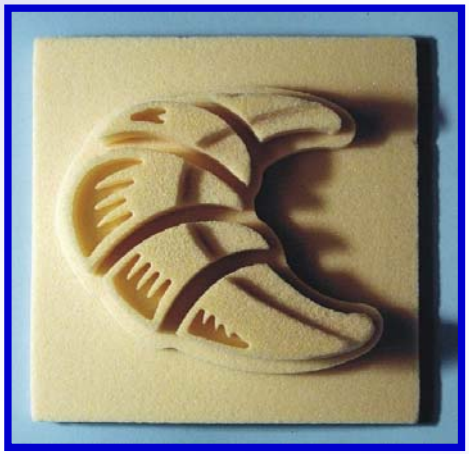
Line

Outline

Inline

Positive

Negative



Multi-Level

Stylized Sculpture

Realistic Sculpture

These examples of 3D solutions all begin with the same single line drawing using typical dimensions of "x" and “y." Altering the “z" results in very different looks.

Multi-Level Application
US 181- Portland, Texas

SH 358 & SH 286 Interchange
Corpus Christi, Texas

SH 358 & SH 286 Interchange
Corpus Christi

US 281 - Edinburg, Texas

Stylized sculpture

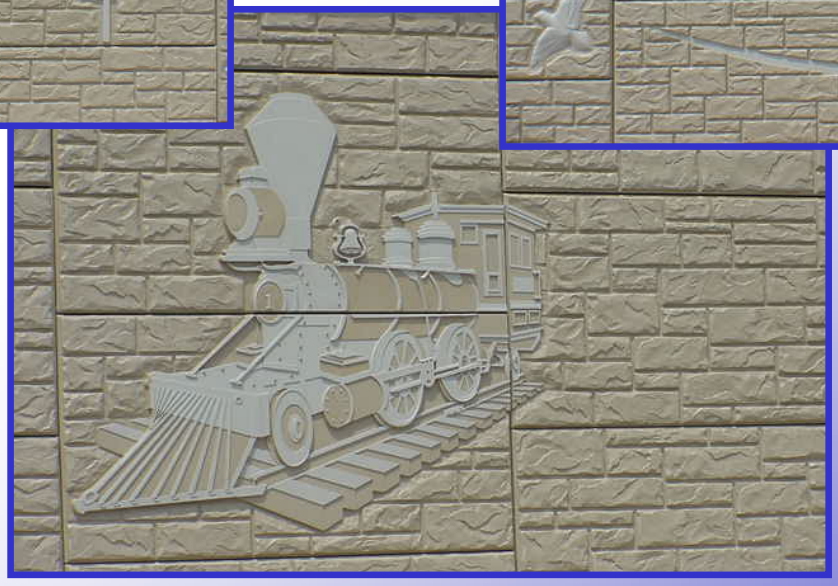
US 281 - Edinburg, Texas

Stylized sculpture

SH 100 & US 77/83 Overpass

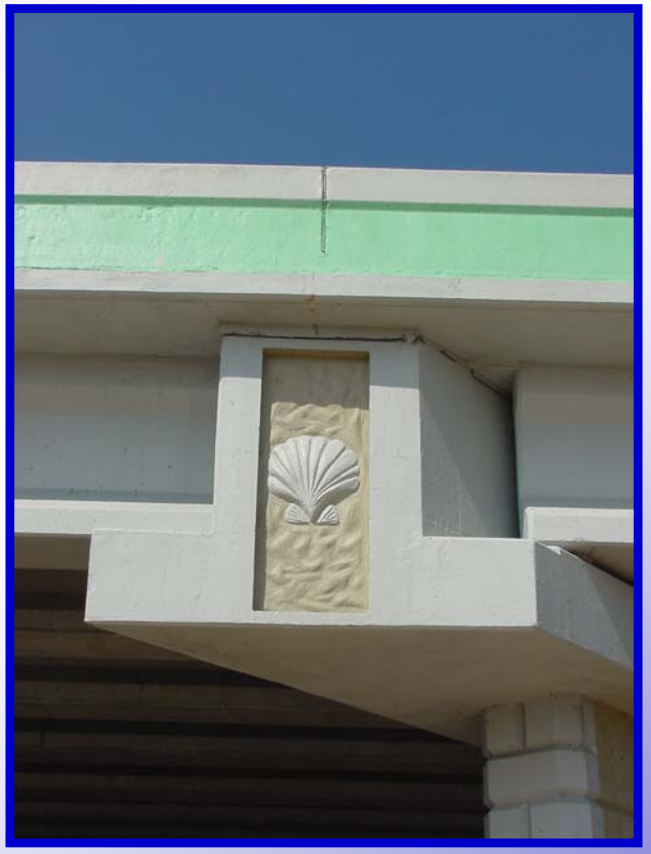
US 77/83 Brownsville, Texas

US 77/83 - Brownsville, Texas



US 77/83 - Brownsville

SH 100 & US 77/83



SH 115 & 1016 - Mc Allen

District policy on when and where to use aesthetic treatments.

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PHARR DISTRICT POLICY
COST PARTICIPATION FOR LANDSCAPE ITEMS AND AESTHETIC TREATMENTS

ITEMS		EXPRESSWAY	OTHER ROADS
DECORATIVE HARDSCAPE	Decorative bridge columns, caps and rails, decorative retaining walls, sound walls and visual screens, etc.	**100% TxDOT**	**% Share Local Entity** – if requested by the Local Entity, they are responsible for the difference in cost between the decorative treatment and what would normally be provided.
RIPRAP HEADER SLOPES, TRAFFIC ISLANDS AND TURNAROUND APRONS	Regular Concrete	**100% TxDOT**	**100% TxDOT**
	Brick Pavers or Colored Textured Concrete	**100% TxDOT** – as warranted	**% Share Local Entity** – if requested by the Local Entity, they are responsible for the difference in cost between the brick pavers or colored textured concrete and regular concrete.
RAISED MEDIANS	Wide Median Sections	**N/A**	**100% TxDOT** – for earthen/grassy median **100% Local Entity** – if more than an earthen/grassy median is requested by the Local Entity (such as regular concrete, brick pavers, colored textured concrete, etc.) they are responsible for the entire cost.
	Narrow Median Sections	**N/A**	**100% TxDOT** – for regular concrete **% Share Local Entity** – if more aesthetic treatment is requested by the Local Entity (such as brick pavers or colored textured concrete), they are responsible for the difference in cost.
SIDEWALKS	Regular Concrete	**N/A**	**100% TxDOT** – if sidewalk is warranted. **100% Local Entity** – if sidewalk is not warranted, but requested by local entity.
	Brick Pavers or Colored Textured Concrete	**N/A**	**% Share Local Entity** – if sidewalk is warranted, the Local Entity is responsible for the difference in cost between the brick pavers or colored textured concrete and regular concrete. **100% Local Entity** – if sidewalk is not warranted, but requested by local entity.
CONCRETE SURFACE FINISHES	Painting, stains, exposed aggregate, artwork, textured over sprays, etc.	**100% TxDOT**	**# 100% Local Entity**
"WELCOME TO ……" CITY HARDSCAPE & SOFTSCAPE	Modular block retaining walls and associated landscaping	**# 100% Local Entity**	**# 100% Local Entity**

District policy on when and where to use aesthetic treatments.

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