



**Engineering & Public Works Department**

404 E. Washington St.  
Brownsville, Texas 78520  
Telephone: (956) 547-6810

### Bulkhead / Retaining Wall Application

#### I. Applicant Information / Información del Contratista

Contractor's Name / Nombre del Contratista:		Date / Fecha:
Company Name / Nombre de la Compañía:		
Contractor's Address / Dirección del Contratista:		
City / Ciudad:	State / Estado:	Zip / Código Postal:
E-mail / Correo Electrónico:	Preferred Contact Method /	
Phone Number / Numero Telefónico:	<input type="checkbox"/> Mail <input type="checkbox"/> Email <input type="checkbox"/> Phone	

#### II. Property Information / Información de la Propiedad

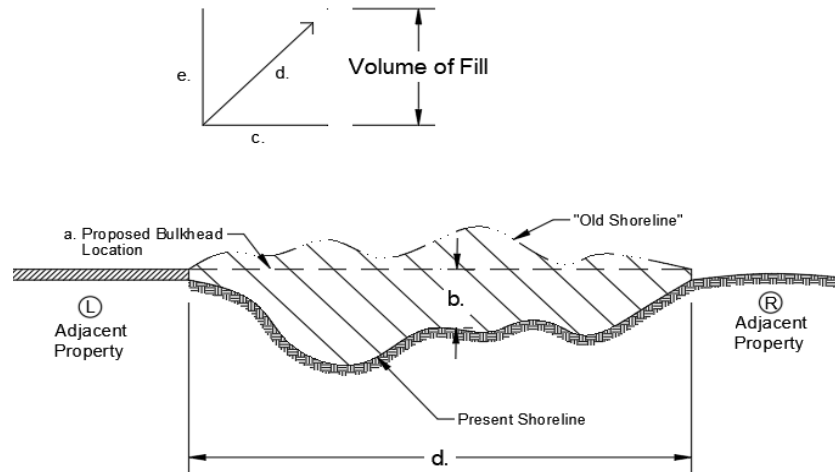
Owner / Nombre del Propietario, Tenant / Inquilino, Business / Negocio:		
Phone Number / Numero Telefónico:		
Subdivision / Subdivisión:	Lot / Lote:	Block / Bloque:
Area / Área de Pies Cuadrados	Property Tax ID / Identificación del impuesto: _____ - _____ - _____ - _____	

#### III. Required Supporting Documentation / Información del Anuncio

- Scaled Map of proposed Bulkhead placement.
- Bulkhead location relative to present bank line and neighboring properties.
- Linear Distance of fill area (ft./m.) from present bank (fill area width)
- Linear Distance of fill (ft./m.) along edge of water / Resaca (*Bulkhead Length*)
- Average Depth of height of fill (ft./m.)
- Average amount of fill per linear foot of bulkhead length (yd<sup>3</sup>/ lft)  
*[Calculation CANNOT exceed 3 yd<sup>3</sup>/lft as per COB Engineering Requirements]*

**\*\*Applications will be prepared and sent via preferred method no later than 48 after submission\*\***

#### IV. Design Example / Información del Anuncio



#### V. Sample Calculations / Información del Anuncio

lf:     b = 5 ft. (wide / out)  
           c = 100 ft. (long)  
           d = 4 ft. (deep / high)  
 $a \times b \times d = \text{Volume (ft}^3 / \text{cu ft.)}$   
 $100 \text{ ft.} \times 5 \text{ ft.} \times 4 \text{ ft.} = 2000 \text{ ft}^3$

Unit Conversion  
 $\frac{\text{ft}^3}{74} = \text{yd}^3$

$$\frac{2000 \text{ ft}^3}{74} = 74 \text{ yd}^3$$

Unit Conversion II  
 $\frac{\text{yd}^3}{100 \text{ ft}} = \frac{\text{yd}^3}{\text{lf}}$

$$\frac{74 \text{ yd}^3}{100 \text{ ft}} = .74 \frac{\text{yd}^3}{\text{lf}} < 3 \frac{\text{yd}^3}{\text{lf}} \quad \checkmark$$

lf:     b = 15 ft. (wide / out)  
           c = 100 ft. (long)  
           d = 6 ft. (deep / high)  
 $a \times b \times d = \text{Volume (ft}^3 / \text{cu ft.)}$   
 $100 \text{ ft.} \times 15 \text{ ft.} \times 6 \text{ ft.} = 9000 \text{ ft}^3$

Unit Conversion  
 $\frac{\text{ft}^3}{74} = \text{yd}^3$

$$\frac{9000 \text{ ft}^3}{74} = 333 \text{ yd}^3$$

Unit Conversion II  
 $\frac{\text{yd}^3}{100 \text{ ft}} = \frac{\text{yd}^3}{\text{lf}}$

$$\frac{333 \text{ yd}^3}{100 \text{ ft}} = 3.33 \frac{\text{yd}^3}{\text{lf}} > 3 \frac{\text{yd}^3}{\text{lf}} \quad \times$$

#### VI. Bulkhead Construction Design/ Sólo Para Uso Oficial

##### I. Bulkhead Construction Design

- Listed Bulkhead Construction Material: \_\_\_\_\_
- Listed Bulkhead Fill Material: \_\_\_\_\_
- Cross Sectional detail of Stabilization Mechanism, (i.e. anchoring)

**\*\*Note: At no time shall construction debris or rubbish be placed in Resaca/ Waterway\*\***

#### VII. Bulkhead Application Approval (to be completed by COB Departments)

##### A. Engineering & Public Works Department

Engineering Review (404 E Washington St. Brownsville, TX)

Signature: \_\_\_\_\_  
 Name: \_\_\_\_\_ Date: \_\_\_\_\_

Environmental Review (6035 Jaime Zapata. Brownsville, TX)

Signature: \_\_\_\_\_  
 Name: \_\_\_\_\_ Date: \_\_\_\_\_

##### B. Building Permits Department

Building Review (1034 E. Levee St., 2nd Floor. Brownsville, TX)

Signature: \_\_\_\_\_  
 Name: \_\_\_\_\_ Date: \_\_\_\_\_