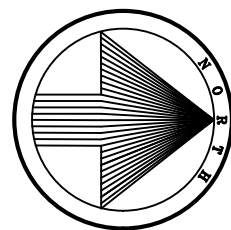
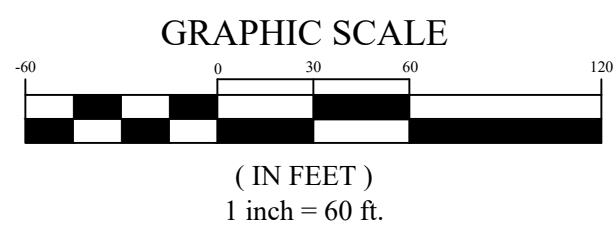


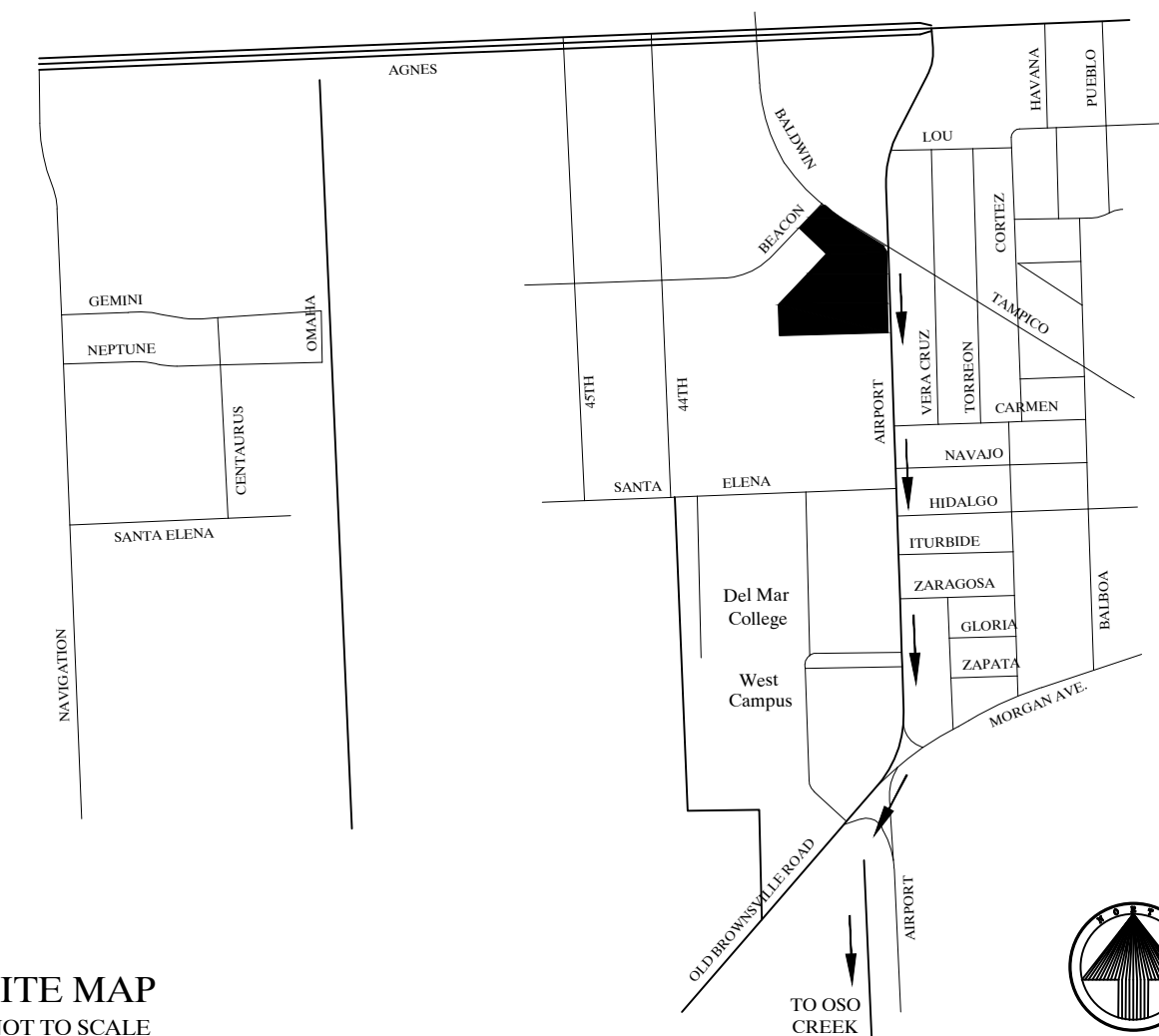
**Brister Surveying**  
 5506 Cain Drive  
 Corpus Christi, Texas 78411  
 Office: 361-850-1800  
 Fax: 361-850-1802  
 bristersurveying@corpus.twebe.com  
 Firm Registration No. 10072800

**COAST LIFE ENGINEERING**  
 TEXAS REGISTERED ENGINEERING FIRM F-24814  
 WWW.COASTLIFEENGINEERING.COM  
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# STORM WATER QUALITY MANAGEMENT PLAN OF DRISCOLL INDUSTRIAL TRACTS BLOCK 1, LOTS 3 - 5

- LEGEND:**
- = EXISTING FLOW ARROW
  - = PROPOSED FLOW ARROW
  - = EXISTING STORM INLET
  - = EXISTING STORM MANHOLE
  - = EXISTING STORM PIPE
  - = EXISTING PIPE SIZE AND TYPE
  - = EXISTING CONTOUR AND ELEVATION
  - = DRAINAGE BOUNDARY
  - = TOP OF POND



**SITE MAP**  
NOT TO SCALE

**NOTES:**

1. THE RECEIVING WATER FOR THE STORM WATER RUNOFF FROM THIS PROPERTY IS THE OSO CREEK. THE TCEQ HAS NOT CLASSIFIED THE AQUATIC LIFE USE FOR THE OSO CREEK, BUT IT IS RECOGNIZED AS AN ENVIRONMENTALLY SENSITIVE AREA. THE OSO CREEK FLOWS DIRECTLY INTO THE OSO BAY. THE TCEQ HAS CLASSIFIED THE AQUATIC LIFE USE FOR THE OSO BAY AS "EXCEPTIONAL" AND "OYSTER WATERS" AND CATEGORIZED THE RECEIVING WATER AS "CONTACT RECREATION" USE.
2. BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 48355C 0505 G, WHICH BEARS AN EFFECTIVE DATE OF OCTOBER 13, 2022.
3. THE TOTAL PLATTED AREA IS 6.709 ACRES.
4. RAINFALL INTENSITIES USED FOR THE RATIONAL METHOD CALCULATIONS WERE DERIVED FROM NOAA ATLAS 14 FOR THIS PROJECT SITE'S LOCATION.
5. THE RUNOFF COEFFICIENTS (C) USED FOR THE RATIONAL METHOD CALCULATIONS WERE DERIVED FROM THE CITY OF CORPUS CHRISTI'S INFRASTRUCTURE DESIGN MANUAL. A VALUE OF C=0.40 IS ASSUMED FOR THE EXISTING CONDITIONS OF (PASTURE, TYPE B SOIL, 1% <S<3.5%). A VALUE OF C=0.65 IS ASSUMED FOR THE PROPOSED CONDITIONS OF (LIGHT INDUSTRIAL, 1% <S<3.5%).
6. TIME OF CONCENTRATION CALCULATIONS WERE DERIVED FROM THE SCS TR-55 METHOD WITH A MINIMUM TIME OF 10-MINUTES FOR SHEET FLOW.
7. DETENTION POND CALCULATIONS WERE PERFORMED USING THE MODIFIED RATIONAL METHOD IN THE HYDRAFLOW HYDROGRAPHS EXTENSION OF AUTODESK CIVIL 3D.
8. DETENTION PONDS SHOWN HEREON ARE PRELIMINARY IN NATURE. ACTUAL LOCATIONS AND ORIENTATIONS WILL BE DETERMINED AT TIME OF SITE DEVELOPMENT.

**Rational Method Calculations (Q = C x I x A)**

| Site Conditions | Area in Acres (Ac.) | Runoff Coefficient (C) | Time of Conc. in Minutes (Tc) | Flowrate Q in CFS (5-YR) | Flowrate Q in CFS (25-YR) | Flowrate Q in CFS (100-YR) |
|-----------------|---------------------|------------------------|-------------------------------|--------------------------|---------------------------|----------------------------|
| Existing        | 6.709               | 0.40                   | 30                            | 10.68                    | 14.71                     | 18.44                      |
| Proposed        | 6.709               | 0.65                   | 15                            | 24.55                    | 34.01                     | 42.82                      |
| Delta Q         | -                   | -                      | -                             | 13.87                    | 19.31                     | 24.39                      |

**Rainfall Intensity Values**

| Tc (min.) | Intensity I5 (in/hr) | Intensity I25 (in/hr) | Intensity I100 (in/hr) |
|-----------|----------------------|-----------------------|------------------------|
| 5         | 8.42                 | 11.70                 | 14.80                  |
| 10        | 6.71                 | 9.35                  | 11.80                  |
| 15        | 5.63                 | 7.80                  | 9.82                   |
| 30        | 3.98                 | 5.48                  | 6.87                   |
| 60        | 2.63                 | 3.66                  | 4.62                   |

**Detention Storage Volumes**

| Storm Period (Years) | Q Target Release (CFS) | Required Volume (Cu. Ft.) |
|----------------------|------------------------|---------------------------|
| 5                    | 10.68                  | 17,550                    |
| 25                   | 14.71                  | 24,450                    |
| 100                  | 18.44                  | 31,000                    |



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY SCOTT A. EVERS, P.E. TEXAS REG. NO. 123126 ON (12/05/2024)

