

# COMMUNITY TRANSPERTATION FUND SUBDIVISION ENTRANCE SIGN 2017 - 2019 CTF PROJECT #T201709504

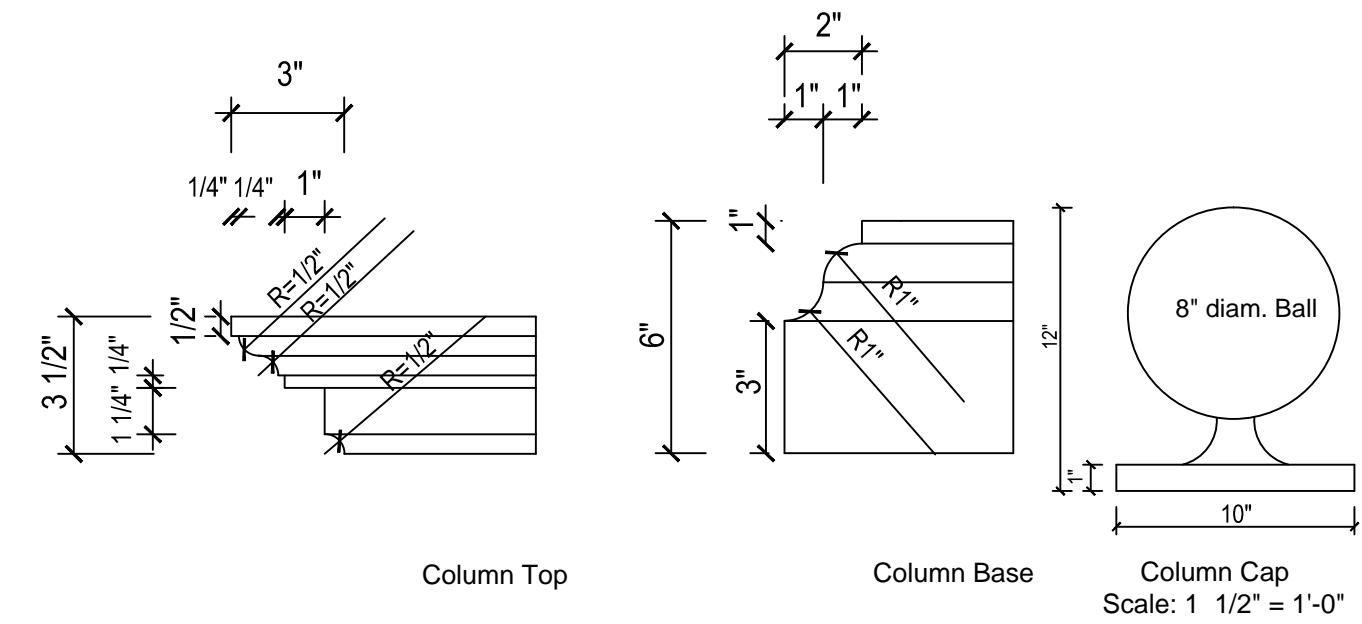
- SHEET 1: Option 1 - The Delaware
- SHEET 2: Option 2 - The Village Inn
- SHEET 3: Option 3- The Blue Hen
- SHEET 4: Option 4 - The Brandywine
- SHEET 5: Option 5 - The Lewes
- SHEET 6: Option 6 - The Odessa
- SHEET 7: Option 7 - The Magnolia
- SHEET 8: Option 8 - The Bethany

STATEMENT OF ACCURACY  
I, MATTHEW SPONG, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD LANDSCAPE ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

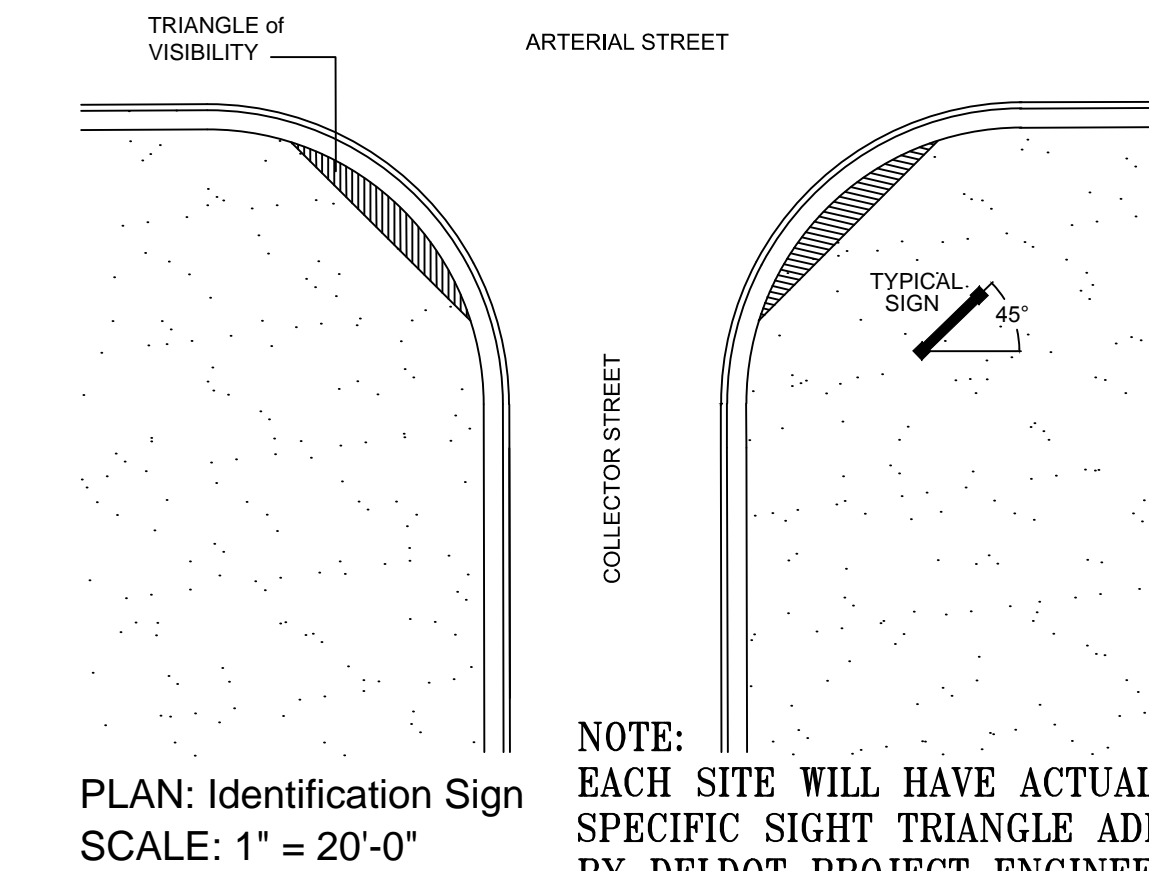
DATE MATTHEW T. SPONG #126-E

PROJECT #: 0563    COMM #: 1209    DATE: 10/07/09 Drawn: CDC    Designed By: CDC/MTS    Checked By: MTS REVISION: 3.5.10 - 95% Complete 4.30.10 - 100% DelDOT Comments of 4.9.10 6.15.10 - 100% Galvanized Post 7.31.13 - rev. cold galv. specs per DelDOT 3.20.2017 General updates, add Option 7 & Cover Sheet	COMMUNITY TRANSPERTATION FUND SUBDIVISION ENTRANCE SIGN 2017 - 2019 CTF PROJECT #T201709504	COVER	 LANDSCAPE ARCHITECTURAL SERVICES, L.L.C. <small>LAND, SITE &amp; PARK PLANNING • WETLANDS SCIENCES</small> <small>Matthew T. Spong, R.L.A., A.S.L.A.    P.O. Box 293    Dover, Delaware 19903 Trisha Sawicki, A.S.L.A.    Phone: 302-284-4578    Fax: 302-284-0301 Email: lasmail@las-llc.net    Web: las-llc.net</small>	LANDSCAPE ARCHITECTURAL SERVICES, L.L.C. IS NOT RESPONSIBLE FOR ANY MODIFICATION MADE TO THIS PLAN AND/OR CAD FILE WITHOUT ITS WRITTEN AUTHORIZATION.	SHEET # C
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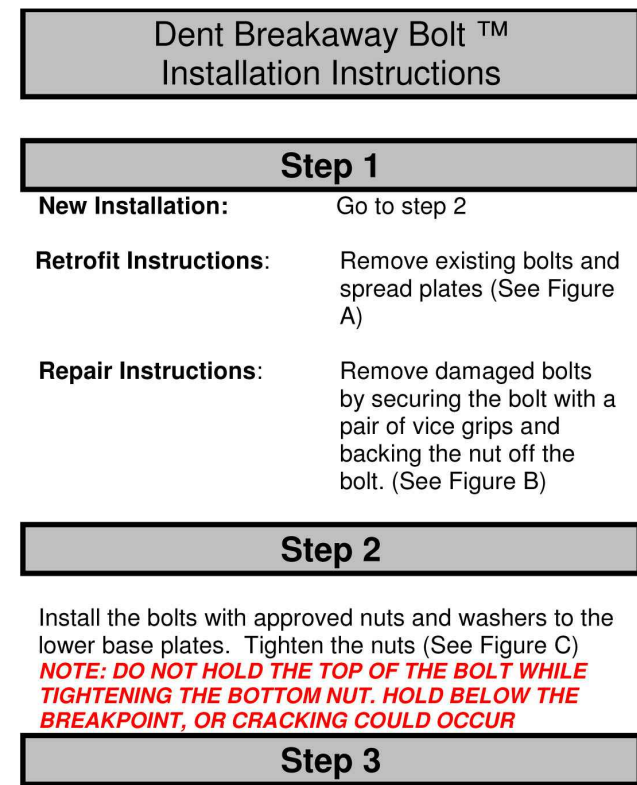




DETAIL ELEVATIONS: Column  
SCALE: 3" = 1'-0"



NOTE: EACH SITE WILL HAVE ACTUAL SITE SPECIFIC SIGHT TRIANGLE ADDED BY DELDOT PROJECT ENGINEER PRIOR TO CONSTRUCTION.



If the keeper plate is damaged, it is not necessary to replace it. The bolts should be wrench tightened to prevent the nuts from working loose. There are no torque requirements.

(All bolts must be in place before final tightening)

- Special Notes:**
- Approved nuts and washers are required
  - Be sure to tighten nuts evenly in a diagonal pattern, on sides of the flange so that the two plates remain horizontal to each other.
  - In the case of any discrepancies or defects, the engineer and manufacturer must be notified immediately
  - Both plates must be clean and flat to prevent stretching of the bolt from the uneven section causing cracking

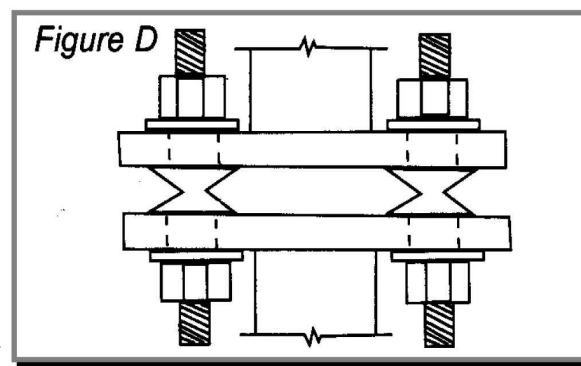
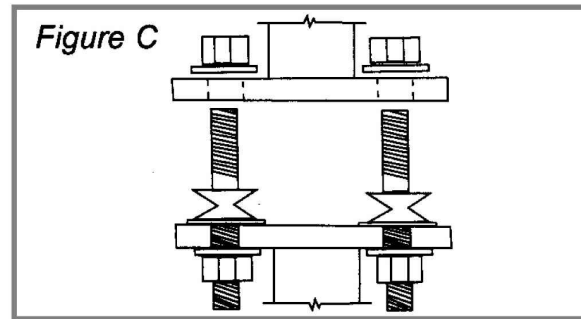
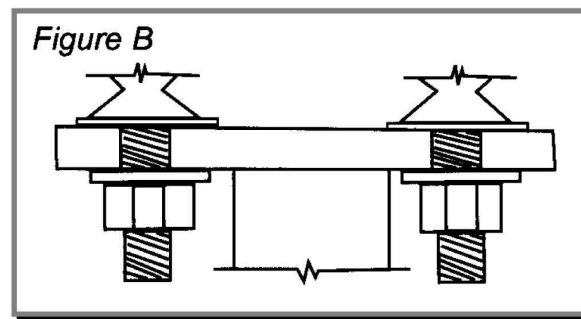
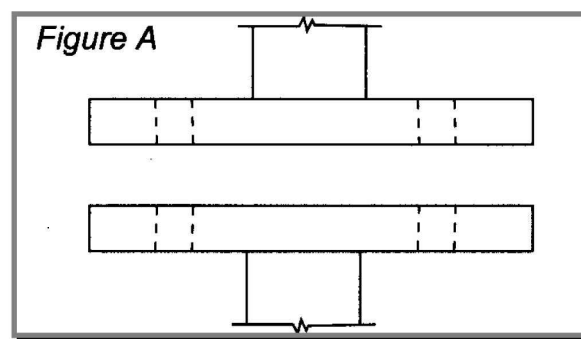
**INFORMATION**

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Schnecksville, PA 18078  
Attn: Michael Fetter  
610-769-0661 Office  
678-457-3166 Cell  
610-769-0664 Fax

NOTE: DENT BREAKAWAY BOLTS TO BE DESIGNED TO RESIST THE WIND LOADS PROVIDED ON THIS DRAWING WITHOUT FAILURE. ALL BREAKAWAY CHARACTERISTICS OF THE BOLT SYSTEM HAVE NOT BEEN ADDRESSED AND SHALL BE DESIGNED BY THE MANUFACTURER.

#### Helps Save Ground Anchor & Post!



#### PROJECT NOTES:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL FOR ALL MATERIALS & INSTALLATION TECHNIQUES TO DELDOT PROJECT ENGINEER PRIOR TO START OF CONSTRUCTION.

ANY TEMPORARY TRAFFIC CONTROL THAT IS REQUIRED FOR THE INSTALLATION OF THIS SIGN SHALL CONFORM TO THE REQUIREMENTS OF PART 6 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD), INCLUDING ALL REVISIONS THAT HAVE BEEN APPROVED AT THE START OF CONSTRUCTION.

#### FOAM CORE SIGN SPECIFICATIONS

- FOAM CORE SIGN STRUCTURE SHALL BE CAPABLE OF SUSTAINING A STATIC LOAD OF 80 LBS PER SQUARE FOOT (80PSF)
- MANUFACTURER: FABRICATED UNITS SHALL BE FABRICATED BY PEACHTREE CITY FOAM CRAFT, 4215 INDEPENDENCE DR SCHNECKVILLE, PA PHONE: 610-769-0661 www.foamcraft.info/monumentsign (OR APPROVED EQUAL)
- EXPANDED POLYSTYRENE CORE, (EPS): ASTM C 578 TYPE 1, RIGID CELLULAR THERMAL INSTALLATION FORMED BY EXPANSION OF POLYSTYRENE RESIN BEADS OR GRANULES IN A CLOSED CELL, COMPLYING WITH THE FOLLOWING PROPERTIES:
  - AGE IN BLOCK FORM (PRIOR TO CUFFING) BY AIR-DRYING FOR MINIMUM OF 4 WEEKS OR APPROVED METHODS PRODUCING EQUIVALENT RESULTS.
  - BOARD DENSITY: MIN DENSITY OF 1.15 LB/CU.FT. ASTM D303. DENSITY RANGE 1.15 - 1.34 ASTM 1622
  - COMPRESSION STRENGTH 10% DEFORMATION 13-18 PSI ASTM D1621
  - TENSILE STRENGTH: 18-22 PSI ASTM D1623
  - FLEXURAL STRENGTH: 30-38 PSI ASTM C203
  - WATER ABSORPTION BY TOTAL IMMERSION: LESS THAN 4% ASTM C272
  - THERMAL EXPANSION: 0.0000035 IN/IN ASTM D696
  - OXYGEN INDEX: 24% MIN VOLUME ASTM C578
  - TEMITE RESISTANCE: PASSED ASTM D3345
  - CARPENTER ANT RESISTANCE: PASSED ASTM D3345
- POLY-ARMOR @ 60 MILS 1 LB EXPANDED POLYSTYRENE
  - IMPACT RESISTANCE: Ø77" F = 500 IN-LBS Ø32" F = 350 IN-LBS ASTM G14 Ø77" F = 400% Ø32" F = 155% ASTM D412
  - ELONGATION: Ø77" F = 3000 PSI Ø32" F = 2200 PSI ASTM D412
  - TENSILE STRENGTH: Ø77" F = 250 PLI Ø32" F = 150 PLI ASTM D624
  - TEAR STRENGTH: Ø77" F = PASS Ø32" F = PASS ASTM D522
  - FIRE RETARDANT: Ø77" F = PASS Ø32" F = PASS ASTM E84
- ACRYLIC: TEXTURES FINISH "MASTER WALL BRAND" OR APPROVED EQUAL
- COLORS SHALL BE SELECTED FROM MFG'S STANDARD COLOR CHART.
- WARRANTY: 5-YEAR WARRANTY ON MATERIALS USED FOR SIGN FABRICATION
- FABRICATION: FABRICATE SIGNS TO DIMENSIONS, PROFILES AND TEXTURES SHOWN ON THE DRAWINGS
- INSTALL SIGNS PLUMB AND LEVEL
- FOOTINGS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SUITABILITY OF SUBSOIL FOR THE PROPOSED STRUCTURE AND MAKE NECESSARY ALLOWANCES IF SUBSOIL IS NOT SUITABLE.
- CONCRETE SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" LATEST EDITION. FOOTINGS SHALL ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
- STEEL PIPE - TYPE I: ASTM F 1083, STANDARD WEIGHT SCHEDULE 40; MINIMUM YIELD STRENGTH OF 25,000 PSI (170 MPA); SIZES AS INDICATED. HOT DIPPED GALVANIZED WITH MINIMUM AVERAGE 1.8 OZ/FT<sup>2</sup> (550G/M<sup>2</sup>) OF COATED SURFACE AREA.
- ALL REINFORCING BARS AND OTHER STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM-A307.
- THE 3 1/2" DIAM MOUNTING POST SHALL BE HOT DIPPED GALVANIZED. THE CAP PLATE AND STUDS MAY BE WELDED ONTO THE POST AFTER HOT DIPPED PPROCESS AND THEN COLD GALVANIZED. WELDS, PLATES, STUDS AND REPAIR OF ANY DAMAGED HOT DIPPED GALVANIZING ON THE POST SHALL BE PREPARED AND COATED ACCORDING TO ASTM A 780.

#### FOUNDATION

- PRESUMPTIVE BEARING CAPACITY: 2000 PSF
- CONTRACTOR, AT HIS EXPENSE, SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN DELAWARE, TO VERIFY THE SUITABILITY OF THE SUBGRADE FOR THE PROPOSED FOUNDATION SYSTEM.
- FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.
- ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE LIMIT OF THE STRUCTURE. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR STRUCTURE SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.
- COMPACTED STRUCTURAL FILL FOR STRUCTURE SUPPORT APPROVED FOR USE INCLUDE:

GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.

A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.
- COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.
- THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.
- ALL SUBGRADES AND UNDERCUTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. SOILS EXPOSED AT THE BASES OF ALL APPROVED FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHOULD BE PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS.

#### GENERAL CONDITION NOTES

- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LOCATE AND ALLOW FOR EXISTING UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "MISS UTILITIES" OF DELMARVA TO LOCATE EXISTING UTILITIES IN THE FIELD. TELEPHONE: 811. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DONE TO THE UTILITIES DUE TO HIS OR HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPETENTLY REPAIRED AT THE CONTRACTORS OWN EXPENSE.
- ALL CONSTRUCTION SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THESE DRAWINGS DO NOT I INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- DUE TO POSSIBLE REPRODUCTION AND MEDIUM DISTORTIONS, SCALED DIMENSIONS ARE NOT TO BE TAKEN FROM THESE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND VERIFY ALL GRADES AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND MAKE THE PROPER ADJUSTMENTS TO THE PLANS AND DETAILS IF SITE CONDITIONS DO NOT ALLOW THE 'STANDARD' ENTRANCE SIGN TO BE USED.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO INITIATION OF CONSTRUCTION AND CONSTRUCT SIGNS IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES.
- ALL CONSTRUCTION LAYOUT SHALL BE PROVIDED BY A DELAWARE PROFESSIONAL LAND SURVEYOR.
- ALL ± DIMENSIONS ARE CHECK DIMENSIONS.
- THE CONTRACTOR IS REQUIRED TO EXAMINE THE SITE OF THE WORK, PLANS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS FOR THE WORK CONTEMPLATED AND IT WILL BE ASSUMED THAT HE HAS FAMILIARIZED AND SATISFIED HIMSELF AS TO THE CHARACTER, QUALITY AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED AND AS TO THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, NOTES AND CONTRACT DOCUMENTS. HE MUST BE PREPARED TO EXECUTE A FINISHED JOB IN EVERY WAY WITHOUT ANY EXTRA CHARGE WHATSOEVER.
- THE COMMUNITY IDENTIFICATION SIGN MUST BE LOCATED WITHIN A PUBLIC RIGHT-OF-WAY, A ROAD RIGHT-OF-WAY (IF APPROVED BY DELDOT), OR PROPERTY DEDICATED TO PUBLIC USE. THE COMMUNITY ASSOCIATION MUST OBTAIN REQUIRED DEDICATION PRIOR TO START OF SIGN CONSTRUCTION.
- SIGN ORDINANCES VARY FROM MUNICIPALITY TO MUNICIPALITY. ACCORDINGLY, ALL SIGNS MUST BE APPROVED BY ALL JURISDICTIONAL APPROVAL AGENCIES PRIOR TO THE START OF CONSTRUCTION.

#### DESIGN LOADS

- BUILDING CODE: INTERNATIONAL BUILDING CODE (2015 EDITION).
- WIND LOADING IS BASED ON THE FOLLOWING:

BASIC WIND SPEED	120 MPH
EXPOSURE CATEGORY	C
IMPORTANCE FACTOR	1.0
DESIGN WIND PRESSURE	35 PSF

#### CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).
  - CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

FOOTINGS:	3000 PSI
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ALL CONC. TO BE NORMAL WEIGHT UNLESS NOTED OTHERWISE. ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (6 ±1)% PER ASTM C260. MAXIMUM WATER/CEMENT RATIO = 0.50 FOR 3000 PSI CONC. MAXIMUM SLUMP = 4"
  - CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

DEFORMED BARS	ASTM A615, GRADE 60
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  - CONCRETE PROTECTION FOR REINFORCEMENT (UNLESS NOTED OTHERWISE):

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3 IN.
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  - CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- STRUCTURAL STEEL**
- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
  - STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

ROUND PIPE:	ASTM A53, TYPE E OR S
STEEL BARS, ANGLES & PLATES:	ASTM A36, U.N.O.
ANCHOR BOLTS:	ASTM A307
  - ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL BE E70XX.
  - GALVANIZE: ASTM A123 FOR SHAPES AND ASSEMBLIES, ASTM A153 FOR FASTENERS. USE GALVANIZED FASTENERS WHEN CONNECTING GALVANIZED MEMBERS.
  - ANCHOR BOLT AND BASE PLATE DESIGN TO BE BY DENT BREAKAWAY BOLT MANUF.

#### STATEMENT OF ACCURACY

I, MATTHEW SPONG, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD LANDSCAPE ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DATE: MATTHEW T. SPONG #126-E

PROJECT #: 0563	COMM #: 1209	DATE: 10/07/09
Drawn: CDC	Designed By: CDC/MTS	Checked By: MTS
REVISION: 3.5.10 - 95% Complete		
4.30.10 - 100% DelDOT Comments of 4.9.10		
6.15.10 - 100% Galvanized Post		
7.31.13 - rev. cold galv. specs per DelDOT		
3.20.2017 General updates, add Option 7 & Cover Sheet		

COMMUNITY TRANSPERTATION FUND  
SUBDIVISION ENTRANCE SIGN 2017 - 2019  
CTF PROJECT #T201709504

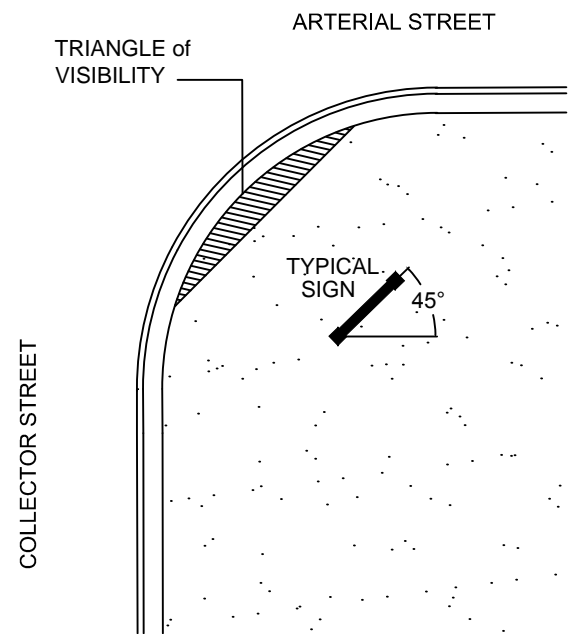
OPTION 1: THE DELAWARE  
CONSTRUCTION DETAILS, SPECIFICATIONS and NOTES



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SHEET #  
1 of 8





PLAN: Identification Signs

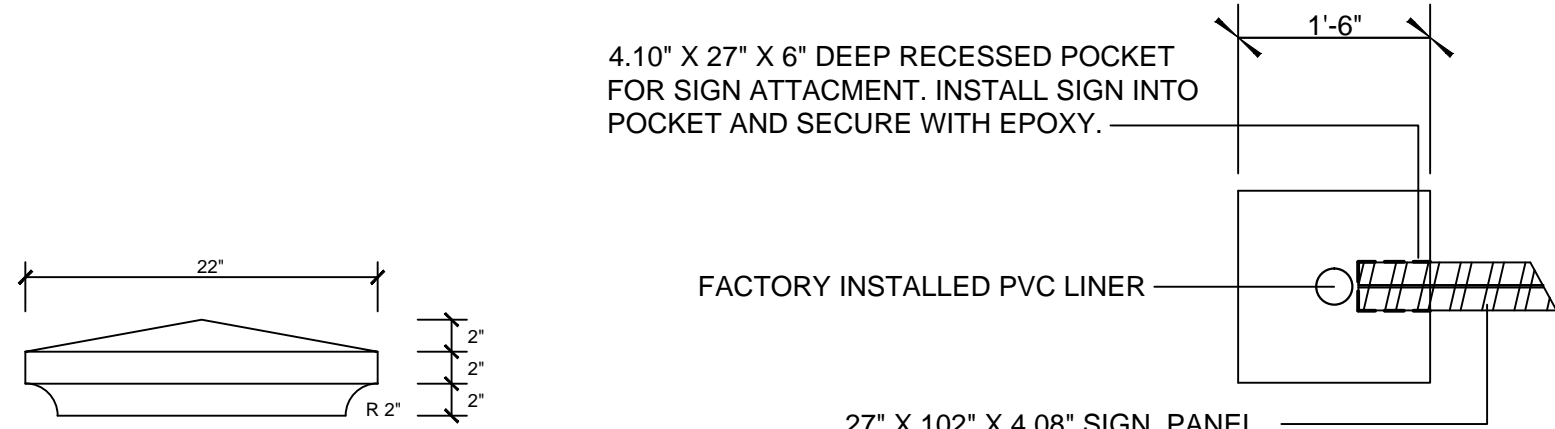
NOTE: SCALE: 1" = 20'-0"

EACH SITE WILL HAVE ACTUAL SITE SPECIFIC SIGHT TRIANGLE ADDED BY DELDOT PROJECT ENGINEER PRIOR TO CONSTRUCTION.

PROJECT NOTES:

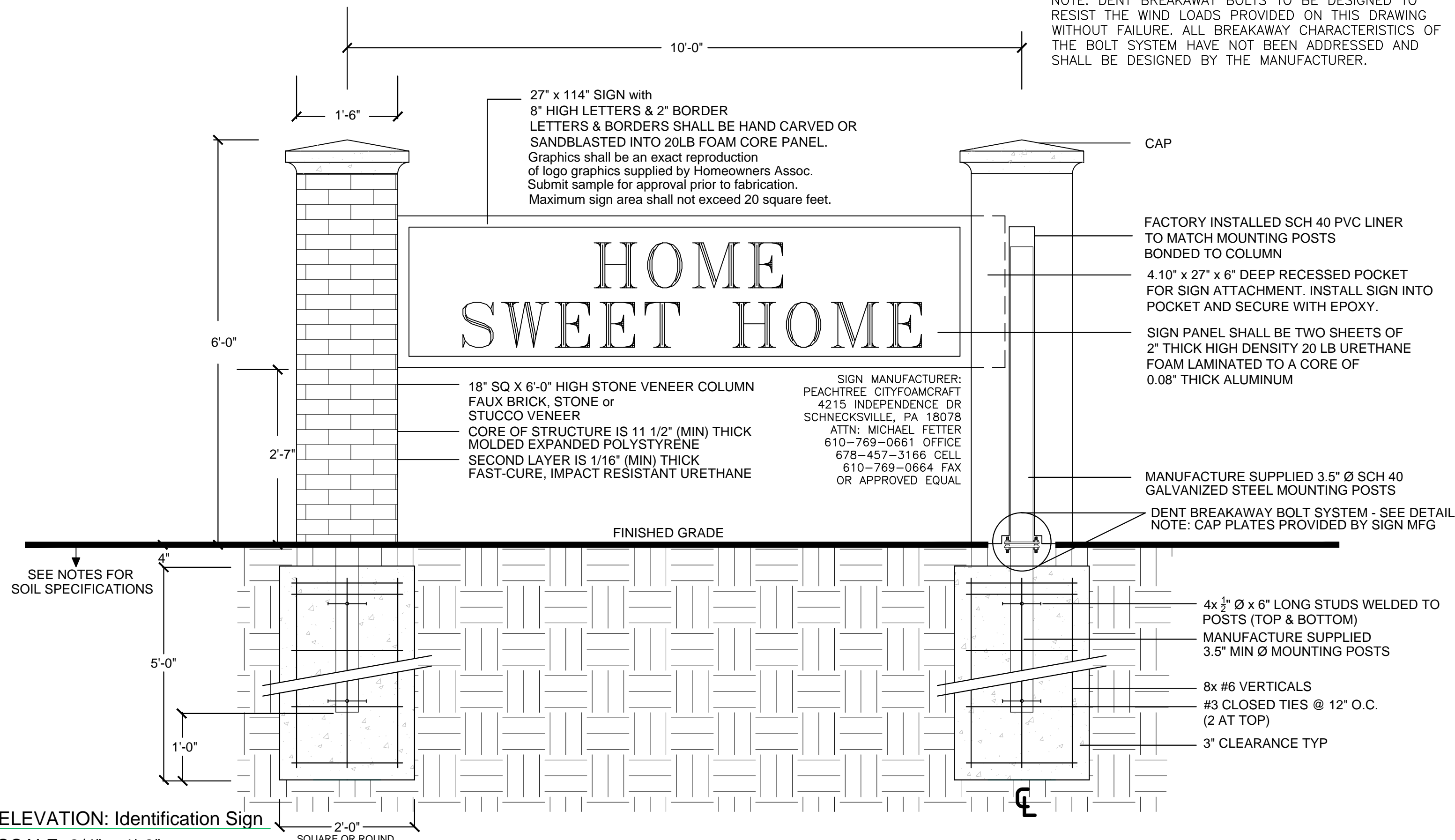
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ANY TEMPORARY TRAFFIC CONTROL THAT IS REQUIRED FOR THE INSTALLATION OF THIS SIGN SHALL CONFORM TO THE REQUIREMENTS OF PART 6 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD), INCLUDING ALL REVISIONS THAT HAVE BEEN APPROVED AT THE START OF CONSTRUCTION.



ELEVATION: Column Cap

SCALE: 1" = 1'-0"



ELEVATION: Identification Sign

SCALE: 3/4" = 1'-0"

Dent Breakaway Bolt™ Installation Instructions

Step 1

New Installation: Go to step 2

Retrofit Instructions: Remove existing bolts and spread plates (See Figure A)

Repair Instructions: Remove damaged bolts by securing the bolt with a pair of vice grips and backing the nut off the bolt. (See Figure B)

Step 2

Install the bolts with approved nuts and washers to the lower base plates. Tighten the nuts (See Figure C) NOTE: DO NOT HOLD THE TOP OF THE BOLT WHILE TIGHTENING THE BOTTOM NUT. HOLD BELOW THE BREAKPOINT, OR CRACKING COULD OCCUR

Step 3

Lower the sign structure plate onto the top portion of the bolts and install upper washer and nuts. (See Figure D)

If the keeper plate is damaged, it is not necessary to replace it. The bolts should be wrench tightened to prevent the nuts from working loose. There are no torque requirements.

(All bolts must be in place before final tightening)

Special Notes:

- Approved nuts and washers are required
- Be sure to tighten nuts evenly in a diagonal pattern, on sides of the flange so that the two plates remain horizontal to each other.
- In the case of any discrepancies or defects, the engineer and manufacturer must be notified immediately
- Both plates must be clean and flat to prevent stretching of the bolt from the uneven section causing cracking

INFORMATION

DENT BREAKAWAY IND. INC.  
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610-769-0661 Office  
678-457-3166 Cell  
610-769-0664 Fax

DENT BREAKAWAY BOLT LOAD REQ'S  
TOTAL SHEAR LOAD: 750 LBS  
MOMENT LOAD: 2.5 FT-KIPS  
3.5" MIN DIAMETER POST

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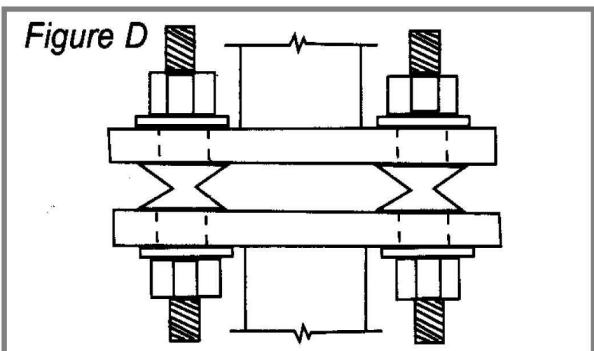
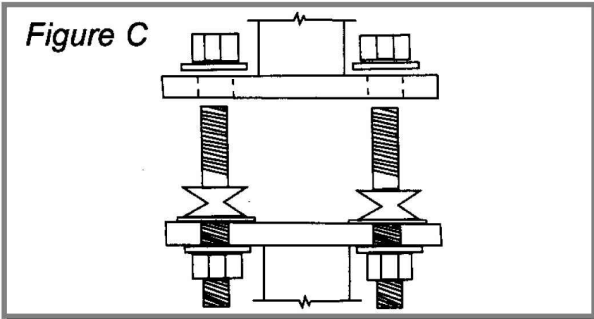
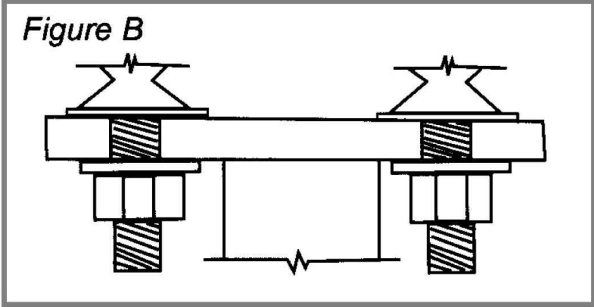
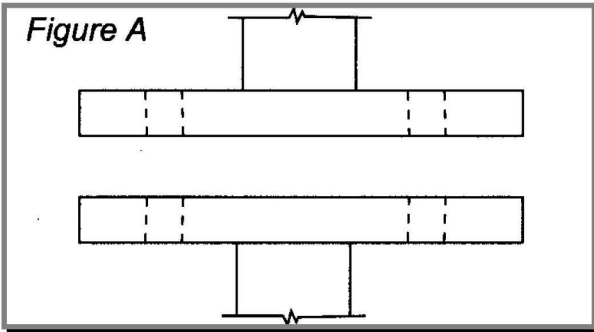
FACTORY INSTALLED SCH 40 PVC LINER TO MATCH MOUNTING POSTS BONDED TO COLUMN  
4.10" x 27" x 6" DEEP RECESSED POCKET FOR SIGN ATTACHMENT. INSTALL SIGN INTO POCKET AND SECURE WITH EPOXY.  
SIGN PANEL SHALL BE TWO SHEETS OF 2" THICK HIGH DENSITY 20 LB URETHANE FOAM LAMINATED TO A CORE OF 0.08" THICK ALUMINUM

MANUFACTURE SUPPLIED 3.5" Ø SCH 40 GALVANIZED STEEL MOUNTING POSTS  
DENT BREAKAWAY BOLT SYSTEM - SEE DETAIL  
NOTE: CAP PLATES PROVIDED BY SIGN MFG

4x 3/4" Ø x 6" LONG STUDS WELDED TO POSTS (TOP & BOTTOM)  
MANUFACTURE SUPPLIED 3.5" MIN Ø MOUNTING POSTS

8x #6 VERTICALS  
#3 CLOSED TIES @ 12" O.C. (2 AT TOP)  
3" CLEARANCE TYP

Helps Save Ground Anchor & Post!



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  - FIRE RETARDANT: @77° F = PASS @32° F = PASS ASTM E84
- ACRYLIC: TEXTURES FINISH "MASTER WALL BRAND" OR APPROVED EQUAL
- COLORS SHALL BE SELECTED FROM MFG'S STANDARD COLOR CHART.
- WARRANTY: 5-YEAR WARRANTY ON MATERIALS USED FOR SIGN FABRICATION
- FABRICATION: FABRICATE SIGNS TO DIMENSIONS, PROFILES AND TEXTURES SHOWN ON THE DRAWINGS
- INSTALL SIGNS PLUMB AND LEVEL
- FOOTINGS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SUITABILITY OF SUBSOIL FOR THE PROPOSED STRUCTURE AND MAKE NECESSARY ALLOWANCES IF SUBSOIL IS NOT SUITABLE.
- CONCRETE SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE ACI 'SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS' LATEST EDITION. FOOTINGS SHALL ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
- STEEL PIPE - TYPE I: ASTM F 1083, STANDARD WEIGHT SCHEDULE 40; MINIMUM YIELD STRENGTH OF 25,000 PSI (170 MPA); SIZES AS INDICATED. HOT DIPPED GALVANIZED WITH MINIMUM AVERAGE 1.8 OZ/FT² (550G/M²) OF COATED SURFACE AREA.
- ALL REINFORCING BARS AND OTHER STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM-A307.
- THE 3/4" DIAM MOUNTING POST SHALL BE HOT DIPPED GALVANIZED. THE CAP PLATE AND STUDS MAY BE WELDED ONTO THE POST AFTER HOT DIPPED PROCESS AND THEN COLD GALVANIZED. WELDS, PLATES, STUDS AND REPAIR OF ANY DAMAGED HOT DIPPED GALVANIZING ON THE POST SHALL BE PREPARED AND COATED ACCORDING TO ASTM A 780.

FOUNDATION

- PRESUMPTIVE BEARING CAPACITY: 2000 PSF
- CONTRACTOR, AT HIS EXPENSE, SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN DELAWARE, TO VERIFY THE SUITABILITY OF THE SUBGRADE FOR THE PROPOSED FOUNDATION SYSTEM.
- FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.
- ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE LIMIT OF THE STRUCTURE. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR STRUCTURE SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.
- COMPACTED STRUCTURAL FILL FOR STRUCTURE SUPPORT APPROVED FOR USE INCLUDE:
  - GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.
  - A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.
- COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.

GENERAL CONDITION NOTES

- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LOCATE AND ALLOW FOR EXISTING UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT 'MISS UTILITIES' OF DELMARVA TO LOCATE EXISTING UTILITIES IN THE FIELD. TELEPHONE: 811. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DONE TO THE UTILITIES DUE TO HIS OR HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPETENTLY REPAIRED AT THE CONTRACTORS OWN EXPENSE.
- ALL CONSTRUCTION SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- DUE TO POSSIBLE REPRODUCTION AND MEDIUM DISTORTIONS, SCALED DIMENSIONS ARE NOT TO BE TAKEN FROM THESE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND VERIFY ALL GRADES AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND MAKE THE PROPER ADJUSTMENTS TO THE PLANS AND DETAILS IF SITE CONDITIONS DO NOT ALLOW THE 'STANDARD' ENTRANCE SIGN TO BE USED.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO INITIATION OF CONSTRUCTION AND CONSTRUCT SIGNS IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES.
- ALL CONSTRUCTION LAYOUT SHALL BE PROVIDED BY A DELAWARE PROFESSIONAL LAND SURVEYOR.
- ALL ± DIMENSIONS ARE CHECK DIMENSIONS.
- THE CONTRACTOR IS REQUIRED TO EXAMINE THE SITE OF THE WORK, PLANS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS FOR THE WORK CONTEMPLATED AND IT WILL BE ASSUMED THAT HE HAS FAMILIARIZED AND SATISFIED HIMSELF AS TO THE CHARACTER, QUALITY AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED AND AS TO THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, NOTES AND CONTRACT DOCUMENTS. HE MUST BE PREPARED TO EXECUTE A FINISHED JOB IN EVERY WAY WITHOUT ANY EXTRA CHARGE WHATSOEVER.
- THE COMMUNITY IDENTIFICATION SIGN MUST BE LOCATED WITHIN A PUBLIC RIGHT-OF-WAY, A ROAD RIGHT-OF-WAY (IF APPROVED BY DELDOT), OR PROPERTY DEDICATED TO PUBLIC USE. THE COMMUNITY ASSOCIATION MUST OBTAIN REQUIRED DEDICATION PRIOR TO START OF SIGN CONSTRUCTION.
- SIGN ORDINANCES VARY FROM MUNICIPALITY TO MUNICIPALITY. ACCORDINGLY, ALL SIGNS MUST BE APPROVED BY ALL JURISDICTIONAL APPROVAL AGENCIES PRIOR TO THE START OF CONSTRUCTION.

DESIGN LOADS

- BUILDING CODE: INTERNATIONAL BUILDING CODE (2015 EDITION).
- WIND LOADING IS BASED ON THE FOLLOWING:

BASIC WIND SPEED	120 MPH
EXPOSURE CATEGORY	C
IMPORTANCE FACTOR	1.0
DESIGN WIND PRESSURE	40 PSF

CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).
- CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

FOOTINGS:	3000 PSI
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ALL CONC. TO BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.  
ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (6 ±1)% PER ASTM C260.  
MAXIMUM WATER/CEMENT RATIO = 0.50 FOR 3000 PSI CONC.  
MAXIMUM SLUMP = 4"
- CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

DEFORMED BARS	ASTM A615, GRADE 60
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- CONCRETE PROTECTION FOR REINFORCEMENT (UNLESS NOTED OTHERWISE):

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3 IN.
---	-------
- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

STRUCTURAL STEEL	
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- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

ROUND PIPE:	ASTM A53, TYPE E OR S
STEEL BARS, ANGLES & PLATES:	ASTM A36, U.N.O.
ANCHOR BOLTS:	ASTM A307
- ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION.  
ELECTRODES SHALL BE E70XX.
- GALVANIZE: ASTM A123 FOR SHAPES AND ASSEMBLIES, ASTM A153 FOR FASTENERS.  
USE GALVANIZED FASTENERS WHEN CONNECTING GALVANIZED MEMBERS.
- ANCHOR BOLT AND BASE PLATE DESIGN TO BE BY DENT BREAKAWAY BOLT MANUF.

STATEMENT OF ACCURACY

I, MATTHEW SPONG, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD LANDSCAPE ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DATE MATTHEW T. SPONG #126-E

PROJECT #: 0563	COMM #: 1209	DATE: 10/07/09
Drawn: CDC Designed By: CDC/MTS Checked By: MTS		
REVISION: 3.5.10 - 95% Complete		
4.30.10 - 100% DelDOT Comments of 4.9.10		
6.15.10 - 100% Galvanized Post		
7.31.13 - rev. cold galv. specs per DelDOT		
3.20.2017 General updates, add Option 7 & Cover Sheet		

COMMUNITY TRANSPERTATION FUND  
SUBDIVISION ENTRANCE SIGN 2017 - 2019  
CTF PROJECT #T201709504

OPTION 2: THE VILLAGE INN  
CONSTRUCTION DETAILS, SPECIFICATIONS and NOTES



Matthew T. Spong, R.L.A., A.S.L.A.  
Trisha Sawicki, A.S.L.A.

P.O. Box 293, Dover, Delaware 19903  
Phone: 302-284-4578 Fax: 302-284-0301  
Email: lasmail@las-llc.net Web: las-llc.net

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MADE TO THIS PLAN AND/OR CAD FILE  
WITHOUT ITS WRITTEN AUTHORIZATION.

SHEET #  
2 of 8



FAUX BRICK, STONE or STUCCO VENEER ACRYLIC FINISH

CORE OF STRUCTURE IS 11 1/2" (MIN) THICK MOLDED EXPANDED POLYSTYRENE

SECOND LAYER IS 1/16" (MIN) THICK FAST-CURE, IMPACT RESISTANT URETHANE

HAND CARVED OR SANDBLASTED LETTERS ON 6" RADIUS SIGN WITH 10" HIGH LETTERS AND 1 1/2" BORDER GRAPHICS SHALL BE AN EXACT REPRODUCTION OF LOGO SUPPLIED BY HOME OWNERS ASSOC. PROVIDE SAMPLE OF GRAPHIC PRIOR TO FABRICATING SIGN. MAXIMUM SIGN GRAPHICS AREA SHALL NOT EXCEED 20 SQ. FT. INSTALL SIGN PLUMB AND LEVEL

FACTORY INSTALLED SCH 40 PVC LINER TO MATCH MOUNTING POSTS BONDED TO COLUMN

MANUFACTURE SUPPLIED 3" MIN Ø SCH 40 GALVANIZED STEEL MOUNTING POSTS

SIGN MANUFACTURER:  
PEACHTREE CITY FOAMCRAFT  
4215 INDEPENDENCE DR  
SCHNECKSVILLE, PA 18078  
ATTN: MICHAEL FETTER  
610-769-0661 OFFICE  
678-457-3166 CELL  
610-769-0664 FAX  
OR APPROVED EQUAL

DENT BREAKAWAY BOLT SYSTEM - SEE DETAIL  
NOTE: CAP PLATES PROVIDED BY SIGN MFG

4x 1/2" Ø x 6" LONG STUDS WELDED TO POSTS (TOP & BOTTOM)  
MANUFACTURE SUPPLIED 3" MIN Ø MOUNTING POSTS  
8x #6 VERTICALS

#3 CLOSED TIES @ 12" O.C.  
(2 AT TOP)  
3" CLEARANCE TYP

ELEVATION: Identification Sign  
3/4" = 1'-0"

Dent Breakaway Bolt™  
Installation Instructions

**Step 1**  
New Installation: Go to step 2  
Retrofit Instructions: Remove existing bolts and spread plates (See Figure A)  
Repair Instructions: Remove damaged bolts by securing the bolt with a pair of vice grips and backing the nut off the bolt. (See Figure B)

**Step 2**  
Install the bolts with approved nuts and washers to the lower base plates. Tighten the nuts (See Figure C)  
**NOTE: DO NOT HOLD THE TOP OF THE BOLT WHILE TIGHTENING THE BOTTOM NUT. HOLD BELOW THE BREAKPOINT, OR CRACKING COULD OCCUR**

**Step 3**  
Lower the sign structure plate onto the top portion of the bolts and install upper washer and nuts. (See Figure D)

If the keeper plate is damaged, it is not necessary to replace it. The bolts should be wrench tightened to prevent the nuts from working loose. There are no torque requirements.

(All bolts must be in place before final tightening)

**Special Notes:**  
A. Approved nuts and washers are required  
B. Be sure to tighten nuts evenly in a diagonal pattern, on sides of the flange so that the two plates remain horizontal to each other.  
C. In the case of any discrepancies or defects, the engineer and manufacturer must be notified immediately  
D. Both plates must be clean and flat to prevent stretching of the bolt from the uneven section causing cracking

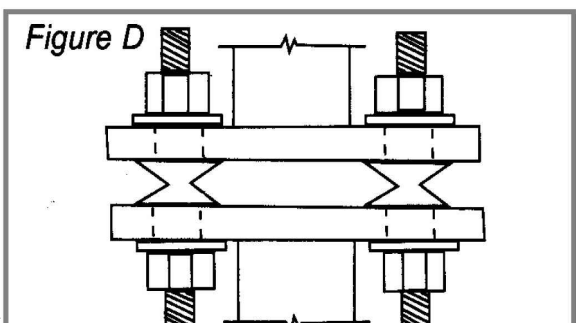
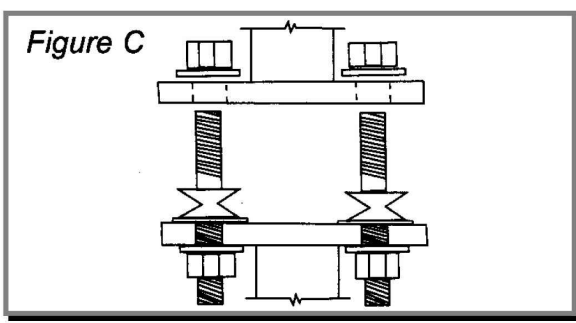
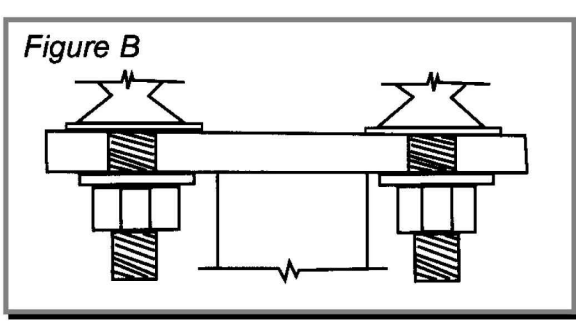
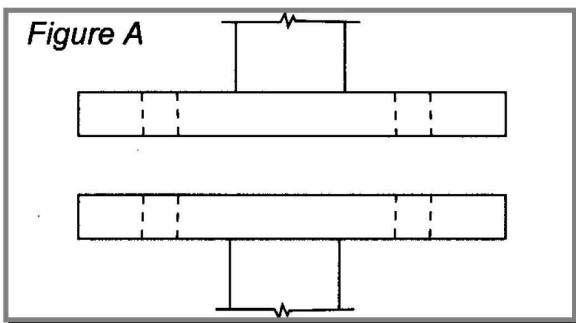
**INFORMATION**

DENT BREAKAWAY IND. INC.  
CLIFFORD DENT, INVENTOR  
PO BOX 6007  
FARMINGTON, NM 87499  
FAX: (413) 383-0681  
Cell: (505) 486-0476  
Email: info@dentbreakaway.com  
OR APPROVED EQUAL

DENT BREAKAWAY BOLT DETAIL  
SCALE: NTS

PROJECT #: 0563	COMM #: 1209	DATE: 10/07/09
Drawn: CDC	Designed By: CDC/MTS	Checked By: MTS
REVISION: 3.5.10 - 95% Complete		
4.30.10 - 100% DelDOT Comments of 4.9.10		
6.15.10 - 100% Galvanized Post		
7.31.13 - rev. cold galv. specs per DelDOT		
3.20.2017 General updates, add Option 7 & Cover Sheet		

Helps Save Ground Anchor & Post!



DENT BREAKAWAY BOLT #6878 5/8"  
MIN. WIND LOAD REQ.  
TOTAL SHEAR LOAD: 1100 LBS  
MOMENT LOAD: 2.0 FT-KIPS  
3" MIN DIAMETER POST

PLAN: Identification Sign  
SCALE: 1" = 20'-0"

COMMUNITY TRANSPERTATION FUND  
SUBDIVISION ENTRANCE SIGN 2017 - 2019  
CTF PROJECT #T201709504

DETAIL ELEVATION: Caps & Insets  
1 1/2" = 1'-0"

OPTION 3: THE BLUE HEN  
CONSTRUCTION DETAILS, SPECIFICATIONS and NOTES

**las** LANDSCAPE ARCHITECTURAL SERVICES, L.L.C.  
LAND, SITE & PARK PLANNING • WETLANDS SCIENCES  
Matthew T. Spong, R.L.A., A.S.L.A.  
Trisha Sawicki, A.S.L.A.  
P.O. Box 293, Dover, Delaware 19903  
Phone: 302-284-4578 Fax: 302-284-0301  
Email: lasmail@las-llc.net Web: las-llc.net

FOAM CORE SIGN SPECIFICATIONS

1. FOAM CORE SIGN STRUCTURE SHALL BE CAPABLE OF SUSTAINING A STATIC LOAD OF 80 LBS PER SQUARE FOOT (80PSF)
2. MANUFACTURER: FABRICATED UNITS SHALL BE FABRICATED BY PEACHTREE CITY FOAM CRAFT, 4215 INDEPENDENCE DR SCHNECKSVILLE, PA  
PHONE: 610-769-0661 www.foamcraft.info/monumentsign (OR APPROVED EQUAL)
3. EXPANDED POLYSTYRENE CORE, (EPS): ASTM C 578 TYPE 1, RIGID CELLULAR THERMAL INSTALLATION FORMED BY EXPANSION OF POLYSTYRENE RESIN BEADS OR GRANULES IN A CLOSED CELL, COMPLYING WITH THE FOLLOWING PROPERTIES:
  - A. AGE IN BLOCK FORM (PRIOR TO CUFFING) BY AIR-DRYING FOR MINIMUM OF 4 WEEKS OR APPROVED METHODS PRODUCING EQUIVALENT RESULTS.
  - B. BOARD DENSITY: MIN DENSITY OF 1.15 LB/CU.FT. ASTM D303.
  - C. COMPRESSION STRENGTH 10% DEFORMATION 13-18 PSI ASTM D1621.
  - D. TENSILE STRENGTH: 18-22 PSI ASTM D1623.
  - E. FLEXURAL STRENGTH: 30-38 PSI ASTM C203.
  - F. WATER ABSORPTION BY TOTAL IMMERSION: LESS THAN 4% ASTM C272.
  - G. THERMAL EXPANSION: 0.000035 IN/IN ASTM D696
  - H. OXYGEN INDEX: 24% MIN VOLUME ASTM C578.
  - I. TEMITE RESISTANCE: PASSED ASTM D3345.
  - J. CARPENTER ANT RESISTANCE: PASSED ASTM D3345.

4. POLY-ARMOR @ 60 MILS 1 LB EXPANDED POLYSTYRENE  
A. IMPACT RESISTANCE: @77° F = 500 IN-LBS  
@32° F = 350 IN-LBS ASTM G14  
B. ELONGATION: @77° F = 400%  
@32° F = 155% ASTM D412  
C. TENSILE STRENGTH: @77° F = 3000 PSI  
@32° F = 2200 PSI ASTM D412  
D. TEAR STRENGTH: @77° F = 250 PLI  
@32° F = 150 PLI ASTM D624  
E. FLEXIBILITY: @77° F = PASS  
@32° F = PASS ASTM D522  
F. FIRE RETARDANT: @77° F = PASS  
@32° F = PASS ASTM E84
5. ACRYLIC: TEXTURES FINISH "MASTER WALL BRAND" OR APPROVED EQUAL
6. COLORS SHALL BE SELECTED FROM MFG'S STANDARD COLOR CHART
7. WARRANTY: 5-YEAR WARRANTY ON MATERIALS USED FOR SIGN FABRICATION
8. FABRICATION: FABRICATE SIGNS TO DIMENSIONS, PROFILES AND TEXTURES SHOWN ON THE DRAWINGS
9. INSTALL SIGNS PLUMB AND LEVEL
10. FOOTINGS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SUITABILITY OF SUBSOIL FOR THE PROPOSED STRUCTURE AND MAKE NECESSARY ALLOWANCES IF SUBSOIL IS NOT SUITABLE.
11. CONCRETE SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE ACI SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS' LATEST EDITION. FOOTINGS SHALL ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
12. STEEL PIPE - TYPE I: ASTM F 1083, STANDARD WEIGHT SCHEDULE 40; MINIMUM YIELD STRENGTH OF 25,000 PSI (170 MPA); SIZES AS INDICATED. HOT DIPPED GALVANIZED WITH MINIMUM AVERAGE 1.8 OZ/FT² (550G/M²) OF COATED SURFACE AREA.
13. ALL REINFORCING BARS AND OTHER STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM-A307.
14. THE 3 1/2" DIAM MOUNTING POST SHALL BE HOT DIPPED GALVANIZED. THE CAP PLATE AND STUDS MAY BE WELDED ONTO THE POST AFTER HOT DIPPED PPROCESS AND THEN COLD GALVANIZED. WELDS, PLATES, STUDS AND REPAIR OF ANY DAMAGED HOT DIPPED GALVANIZING ON THE POST SHALL BE PREPARED AND COATED ACCORDING TO ASTM A 780.

- FOUNDATION**
1. PRESUMPTIVE BEARING CAPACITY: 2000 PSF
  2. CONTRACTOR, AT HIS EXPENSE, SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN DELAWARE, TO VERIFY THE SUITABILITY OF THE SUBGRADE FOR THE PROPOSED FOUNDATION SYSTEM.
  3. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.
  4. ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE LIMIT OF THE STRUCTURE. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR STRUCTURE SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
  5. AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.
  6. COMPACTED STRUCTURAL FILL FOR STRUCTURE SUPPORT APPROVED FOR USE INCLUDE:  
GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.  
A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.
  7. COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.
  8. THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.
  9. ALL SUBGRADES AND UNDERCUTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. SOILS EXPOSED AT THE BASES OF ALL APPROVED FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHOULD BE PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS.

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MADE TO THIS PLAN AND/OR CAD FILE  
WITHOUT ITS WRITTEN AUTHORIZATION.

SHEET #

3 of 8

GENERAL CONDITION NOTES

1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LOCATE AND ALLOW FOR EXISTING UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "MISS UTILITIES" OF DELMARVA TO LOCATE EXISTING UTILITIES IN THE FIELD. TELEPHONE: 811. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DONE TO THE UTILITIES DUE TO HIS OR HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPETENTLY REPAIRED AT THE CONTRACTORS OWN EXPENSE.
2. ALL CONSTRUCTION SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
3. DUE TO POSSIBLE REPRODUCTION AND MEDIUM DISTORTIONS, SCALED DIMENSIONS ARE NOT TO BE TAKEN FROM THESE DRAWINGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND VERIFY ALL GRADES AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND MAKE THE PROPER ADJUSTMENTS TO THE PLANS AND DETAILS IF SITE CONDITIONS DO NOT ALLOW THE "STANDARD" ENTRANCE SIGN TO BE USED.
5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO INITIATION OF CONSTRUCTION AND CONSTRUCT SIGNS IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES.
6. ALL CONSTRUCTION LAYOUT SHALL BE PROVIDED BY A DELAWARE PROFESSIONAL LAND SURVEYOR.
7. ALL ± DIMENSIONS ARE CHECK DIMENSIONS.
8. THE CONTRACTOR IS REQUIRED TO EXAMINE THE SITE OF THE WORK, PLANS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS FOR THE WORK CONTEMPLATED AND IT WILL BE ASSUMED THAT HE HAS FAMILIARIZED AND SATISFIED HIMSELF AS TO THE CHARACTER, QUALITY AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED AND AS TO THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, NOTES AND CONTRACT DOCUMENTS. HE MUST BE PREPARED TO EXECUTE A FINISHED JOB IN EVERY WAY WITHOUT ANY EXTRA CHARGE WHATSOEVER.
9. THE COMMUNITY IDENTIFICATION SIGN MUST BE LOCATED WITHIN A PUBLIC RIGHT-OF-WAY, A ROAD RIGHT-OF-WAY (IF APPROVED BY DELDOT), OR PROPERTY DEDICATED TO PUBLIC USE. THE COMMUNITY ASSOCIATION MUST OBTAIN REQUIRED DEDICATION PRIOR TO START OF SIGN CONSTRUCTION.
10. SIGN ORDINANCES VARY FROM MUNICIPALITY TO MUNICIPALITY. ACCORDINGLY, ALL SIGNS MUST BE APPROVED BY ALL JURISDICTIONAL APPROVAL AGENCIES PRIOR TO THE START OF CONSTRUCTION.

DESIGN LOADS

1. BUILDING CODE: INTERNATIONAL BUILDING CODE (2015 EDITION).
2. WIND LOADING IS BASED ON THE FOLLOWING:  
BASIC WIND SPEED 120 MPH  
EXPOSURE CATEGORY C  
IMPORTANCE FACTOR 1.0  
DESIGN WIND PRESSURE 35 PSF

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).
2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:  
FOOTINGS: 3000 PSI  
ALL CONC. TO BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.  
ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (6 ±1)% PER ASTM C260.  
MAXIMUM WATER/CEMENT RATIO = 0.50 FOR 3000 PSI CONC.  
MAXIMUM SLUMP = 4"
3. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:  
DEFORMED BARS ASTM A615, GRADE 60  
MAXIMUM SLUMP = 4"
4. CONCRETE PROTECTION FOR REINFORCEMENT (UNLESS NOTED OTHERWISE):  
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 IN.  
5. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
6. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
7. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:  
ROUND PIPE: ASTM A53, TYPE E OR S  
STEEL BARS, ANGLES & PLATES: ASTM A36, U.N.O.  
ANCHOR BOLTS: ASTM A307
8. ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION.  
ELECTRODES SHALL BE E70XX.
9. GALVANIZE: ASTM A123 FOR SHAPES AND ASSEMBLIES, ASTM A153 FOR FASTENERS.  
USE GALVANIZED FASTENERS WHEN CONNECTING GALVANIZED MEMBERS.
10. ANCHOR BOLT AND BASE PLATE DESIGN TO BE BY DENT BREAKAWAY BOLT MANUF.

PROJECT NOTES:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL FOR ALL MATERIALS & INSTALLATION TECHNIQUES TO DELDOT PROJECT ENGINEER PRIOR TO START OF CONSTRUCTION.

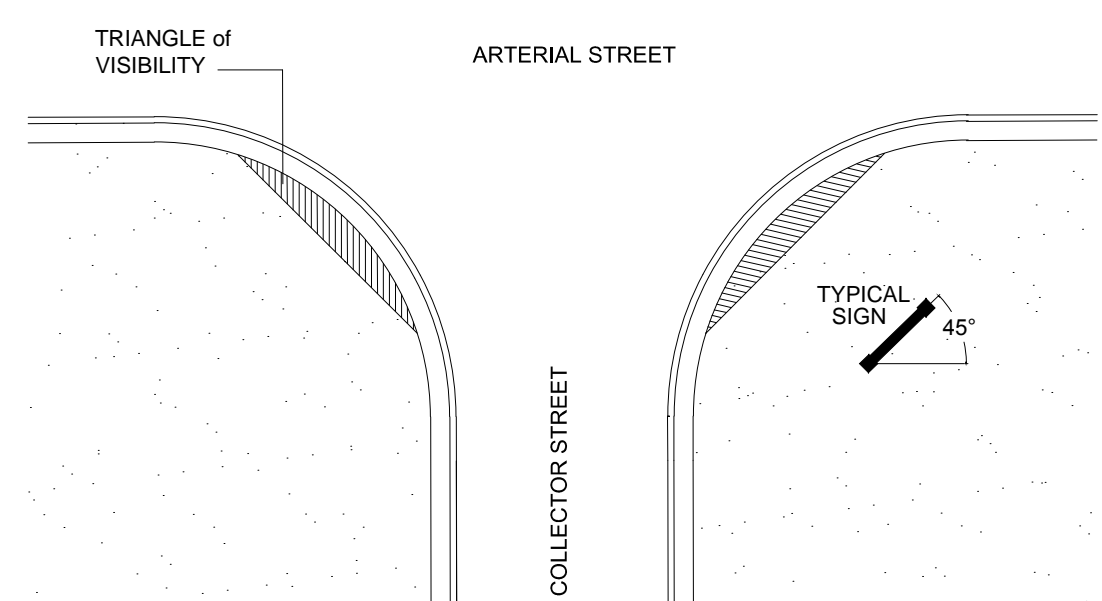
ANY TEMPORARY TRAFFIC CONTROL THAT IS REQUIRED FOR THE INSTALLATION OF THIS SIGN SHALL CONFORM TO THE REQUIREMENTS OF PART 6 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD), INCLUDING ALL REVISIONS THAT HAVE BEEN APPROVED AT THE START OF CONSTRUCTION.

STATEMENT OF ACCURACY:

I, MATTHEW SPONG, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD LANDSCAPE ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DATE MATTHEW T. SPONG#126-E

NOTE: DENT BREAKAWAY BOLTS TO BE DESIGNED TO RESIST THE WIND LOADS PROVIDED ON THIS DRAWING WITHOUT FAILURE. ALL BREAKAWAY CHARACTERISTICS OF THE BOLT SYSTEM HAVE NOT BEEN ADDRESSED AND SHALL BE DESIGNED BY THE MANUFACTURER.



EACH PANEL  
INSET 1/4"

DETAIL ELEVATION: Caps & Insets  
1 1/2" = 1'-0"



7'-4"

6'-8"

1'-3"

6"

2'-0"

6"

HOME SWEET HOME

SIGN MANUFACTURER:  
PEACHTREE CITY FOAMCRAFT  
4215 INDEPENDENCE DR  
SCHNECKSVILLE, PA 18078  
ATTN: MICHAEL FETTER  
610-769-0661 OFFICE  
678-457-3166 CELL  
610-769-0664 FAX  
OR APPROVED EQUAL

Aluminum Brackets  
See Detail Plan

Finished Grade

SEE NOTES FOR  
SOIL SPECIFICATIONS

4x #4 x 8" LONG DRILLED THRU  
POSTS (TOP & BOTTOM)

10x #6 VERTICALS

#3 CLOSED TIES @ 12" O.C.  
(2 AT TOP)

3" CLEARANCE TYP

PLAN: Sign Panel Attachment  
SCALE: 3/4" = 1'-0"

1. FOAM CORE SIGN STRUCTURE SHALL BE CAPABLE OF SUSTAINING A STATIC LOAD OF 80 LBS PER SQUARE FOOT (80PSF)
2. MANUFACTURER: FABRICATED UNITS SHALL BE FABRICATED BY PEACHTREE CITY FOAM CRAFT, 4215 INDEPENDENCE DR SCHNECKVILLE, PA  
PHONE: 610-769-0661 [www.foamcraft.info/monumentsign](http://www.foamcraft.info/monumentsign)  
(OR APPROVED EQUAL)
3. EXPANDED POLYSTYRENE CORE, (EPS): ASTM C 578 TYPE 1, RIGID CELLULAR THERMAL INSTALLATION FORMED BY EXPANSION OF POLYSTYRENE RESIN BEADS OR GRANULES IN A CLOSED CELL, COMPLYING WITH THE FOLLOWING PROPERTIES:
  - A. AGE IN BLOCK FORM (PRIOR TO CUFFING) BY AIR-DRYING FOR MINIMUM OF 4 WEEKS OR APPROVED METHODS PRODUCING EQUIVALENT RESULTS.
  - B. BOARD DENSITY: MIN DENSITY OF 1.15 LB/CU.FT. ASTM D303. DENSITY RANGE 1.15 - 1.34 ASTM 1622
  - C. COMPRESSION STRENGTH 10% DEFORMATION 13-18 PSI ASTM D1621.
  - D. TENSILE STRENGTH: 18-22 PSI ASTM D1623.
  - E. FLEXURAL STRENGTH: 30-38 PSI ASTM C203.
  - F. WATER ABSORPTION BY TOTAL IMMERSION: LESS THAN 4% ASTM C272
  - G. THERMAL EXPANSION: 0.0000035 IN/IN ASTM D696
  - H. OXYGEN INDEX: 24% MIN VOLUME ASTM C578.
  - I. TEMPERE RESISTANCE: PASSED ASTM D3345.
  - J. CARPENTER ANT RESISTANCE: PASSED ASTM D3345.

NOTE:  
EACH SITE WILL HAVE ACTUAL SITE SPECIFIC SIGHT  
TRIANGLE ADDED BY DELDOT PROJECT ENGINEER  
PRIOR TO CONSTRUCTION.

### 3. Install sign plumb & level

5. ACRYLIC: TEXTURES FINISH "MASTER WALL BRAND" OR APPROVED EQUAL
6. COLORS SHALL BE SELECTED FROM MFG'S STANDARD COLOR CHART.
7. WARRANTY: 5-YEAR WARRANTY ON MATERIALS USED FOR SIGN FABRICATION
8. FABRICATION: FABRICATE SIGNS TO DIMENSIONS, PROFILES AND TEXTURES SHOWN ON THE DRAWINGS
9. INSTALL SIGNS PLUMB AND LEVEL.
10. FOOTINGS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SUITABILITY OF SUBSOIL FOR THE PROPOSED STRUCTURE AND MAKE NECESSARY ALLOWANCES IF SUBSOIL IS NOT SUITABLE.
11. CONCRETE SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE ACI 308 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" LATEST EDITION. FOOTINGS SHALL ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
12. STEEL PIPE - TYPE I: ASTM F 1083, STANDARD WEIGHT SCHEDULE 40; MINIMUM YIELD STRENGTH OF 25,000 PSI (170 MPA); SIZES AS INDICATED. HOT DIPPED GALVANIZED WITH MINIMUM AVERAGE 1.8 OZ/FT<sup>2</sup> (550G/M<sup>2</sup>) OF COATED SURFACE AREA.
13. ALL REINFORCING BARS AND OTHER STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM-A307.

PROJECT #: 0563	COMM #: 1209	DATE: 10/07/09
Drawn: CDC Designed By: CDC/MTS Checked By: MTS		
REVISION: 3.5.10 - 95% Complete		
4.30.10 - 100% DeIDOT Comments of 4.9.10		
6.15.10 - 100% Galvanized Post		
7.31.13 - rev. cold galv. specs per DeIDOT		
3.20.2017 General updates, add Option 7 & Cover Sheet		

## OPTION 4: THE BRANDYWINE

### CONSTRUCTION DETAILS, SPECIFICATIONS and NOTES

1. PRESUMPTIVE BEARING CAPACITY: 2000 PSF
2. CONTRACTOR, AT HIS EXPENSE, SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN DELAWARE, TO VERIFY THE SUITABILITY OF THE SUBGRADE FOR THE PROPOSED FOUNDATION SYSTEM.
3. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.
4. ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE LIMIT OF THE STRUCTURE. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR STRUCTURE SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
5. AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.
6. COMPACTED STRUCTURAL FILL FOR STRUCTURE SUPPORT APPROVED FOR USE INCLUDE:
  - GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS).
  - FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.
  - A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.
7. COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.
8. THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.
9. ALL SUBGRADES AND UNDERCUTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. SOILS EXPOSED AT THE BASES OF ALL APPROVED FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHOULD BE PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS.

ANY TEMPORARY TRAFFIC CONTROL THAT IS REQUIRED FOR THE INSTALLATION OF THIS SIGN SHALL CONFORM TO THE REQUIREMENTS OF PART 6 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD), INCLUDING ALL REVISIONS THAT HAVE BEEN APPROVED AT THE START OF CONSTRUCTION.

I, MATTHEW SPONG, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD LANDSCAPE ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DATE MATTHEW T. SPONG #126-F

**LANDSCAPE  
ARCHITECTURAL  
SERVICES, L.L.C.**

LAND, SITE & PARK PLANNING • WETLAND SCIENCES

Matthew T. Spong, R.L.A., A.S.L.A.  
Trisha Sawicki, A.S.L.A.

P.O. Box 293 Dover, Delaware 19901  
Phone: 302-284-4578 Fax: 302-284-4579  
Email: lasmail@las-llc.net Web: las-llc.net

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WITHOUT ITS WRITTEN AUTHORIZATION.

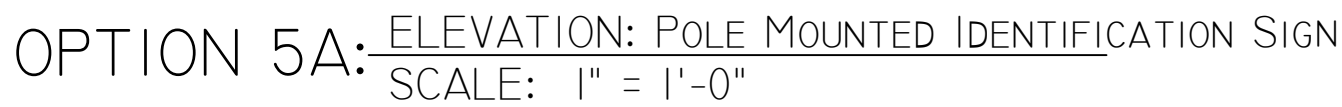
SHEET #

4 of 8



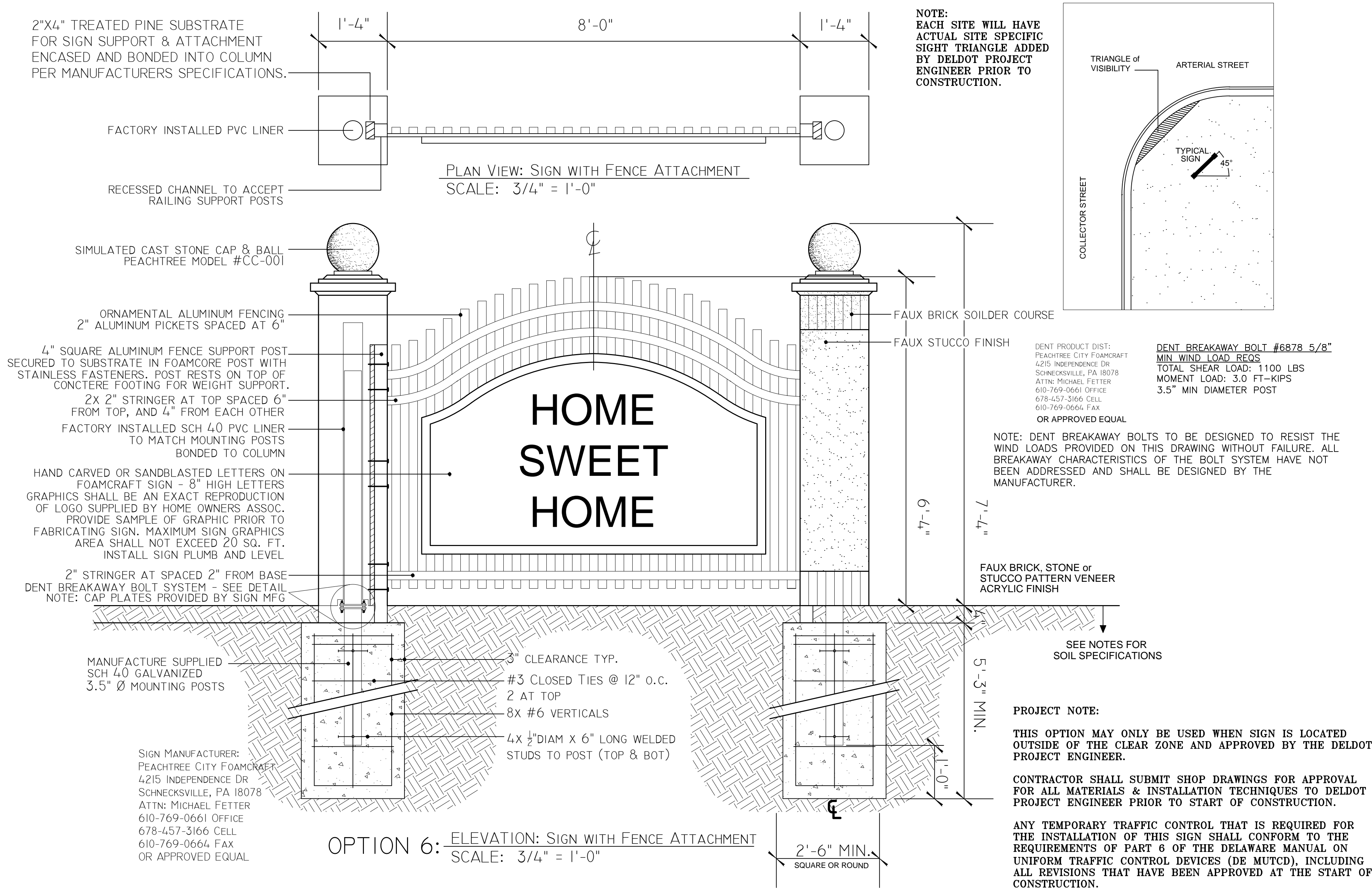






6 of 8





FOR ORNAMENTAL ALUMINUM FENCING & GATE NOTES

FENCE SHALL BE STORRS COMMERCIAL GRADE (SC) BRONZE COLOR. MFG. AND ACCESSORIES MANUFACTURED BY:

SPECIAL: P.O. BOX 6308, 129 LEEDER DRIVE HAMDEN, CT 06517 PHONE: 1-800-243-6256 OR APPROVED EQUAL  
DIST: MERCHANT METAL - HYATTSVILLE, MARYLAND PHONE: 1-301-779-8300 ATTN: BOB CONROY  
PICKETS: .75" X .75" X 0.50 WALL  
STRINGERS: 1.625" X 1.000" X 1.625" SIDEWALLS 0.090 TOPWALL 0.065  
POSTS: 2.5" X 2.5" X 0.075 WALL  
GATE POSTS: 4" X 4" X 0.125" WALL OR APPROVED EQUAL

ACCESSORIES:

PROVIDE ALL ACCESSORIES REQUIRED INCLUDING WALL CONNECTOR HINGES. WALL CONNECTORS FOR ATTACHING FENCE SECTIONS TO STONE COLUMNS. 4 CONNECTORS REQUIRED AT EACH CONNECTION. CONNECTORS SHALL BE COMMERCIAL WALL MOUNT MODEL #100-220 AT 90° CONNECTIONS COMMERCIAL SWIVEL MOUNT MODEL #100-331 AT OTHER CONNECTIONS SET GATES & FENCES PLUMB & LEVEL EXCEPT AS NOTED FOR GRADE CHANGE.

MATERIALS:

A. ALUMINUM EXTRUSION SHALL BE MADE OF 6063-T-5 IN ACCORDANCE WITH ASTM B221  
B. FASTENERS: ALL SCREWS SHALL BE 302 STAINLESS SELF-DRILLING HEADS. ALL SCREWS SHALL BE PAINTED TO MATCH FENCE FINISH.  
C. ALUMINUM CASTINGS SHALL BE USED FOR ALL POST CAPS, FINIALS, ETC. HINGES & LATCHES SHALL BE FABRICATED FROM ALUMINUM EXTRUSIONS WITH STAINLESS STEEL SPRINGS.  
D. FINISH SHALL BE COATED WITH "POLYCOLOR" PREMIUM HIGH SOLIDS ACRYLIC COATING WHICH EXCEEDS AAMA 603.8 APPLIED ELECTROSTATICALLY AT 375 DEGREES F - BLACK FINISH.  
E. INSTALL IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS.  
F. SUBMIT MANUFACTURE'S LITERATURE & SHOP DRAWINGS TO PROJECT ENGINEER FOR APPROVAL PRIOR TO INITIATION OF CONSTRUCTION.

EXECUTION:

PREPARATION: PREPARE THE GRADE AND REMOVE SURFACE IRREGULARITIES, IF ANY, WHICH MAY CAUSE INTERFERENCE WITH THE INSTALLATION OF ALUMINUM FENCE.

INSTALLATION:

A. SET FENCE POSTS AT 8'-0" ON CENTER MAXIMUM. SET GATE POSTS FOR GATE OPENINGS SPECIFIED IN THE CONSTRUCTION DRAWINGS.  
B. INSERT STRINGERS ENDS INTO PREPUNCHED POSTS AND FASTEN WITH TEK SCREWS.  
C. CENTER AND ALIGN POSTS. PLACE CONCRETE AROUND POSTS, AND VIBRATE TO TAMP FOR CONSOLIDATION. RECHECK VERTICAL AND TOP ALIGNMENT OF POSTS, AND MAKE NECESSARY CORRECTIONS.  
D. INSTALL GATES PLUMB, LEVEL AND SECURE FOR FULL OPENING WITHOUT INTERFERENCE. FOR DOUBLE GATES, INSTALL DROP ROD. ADJUST ALL HARDWARE FOR SMOOTH OPERATION.

CLEANING:

CONTRACTOR SHALL CLEAN JOB SITE OF EXCESS MATERIALS; POST HOLE EXCAVATIONS SHALL BE SCATTERED UNIFORMLY AWAY FROM POST. CLEAN ALUMINUM FENCE WITH MILD HOUSEHOLD DETERGENT AND CLEAN WATER, RINSE WELL. MORTAR SHOULD BE REMOVED FROM EXPOSED POST USING 10% SOLUTION OF MURIATIC ACID FOLLOWED IMMEDIATELY BY SEVERAL RINSES WITH CLEAN WATER.

GENERAL CONDITION NOTES

1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LOCATE AND ALLOW FOR EXISTING UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "MISS UTILITIES" OF DELMARVA TO LOCATE EXISTING UTILITIES IN THE FIELD. TELEPHONE: 811. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DONE TO THE UTILITIES DUE TO HIS OR HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPETENTLY REPAIRED AT THE CONTRACTORS OWN EXPENSE.

2. ALL CONSTRUCTION SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.

3. DUE TO POSSIBLE REPRODUCTION AND MEDIUM DISTORTIONS, SCALED DIMENSIONS ARE NOT TO BE TAKEN FROM THESE DRAWINGS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND VERIFY ALL GRADES AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND MAKE THE PROPER ADJUSTMENTS TO THE PLANS AND DETAILS IF SITE CONDITIONS DO NOT ALLOW THE "STANDARD" ENTRANCE SIGN TO BE USED.

5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO INITIATION OF CONSTRUCTION AND CONSTRUCT SIGNS IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES.

6. ALL CONSTRUCTION LAYOUT SHALL BE PROVIDED BY A DELAWARE PROFESSIONAL LAND SURVEYOR.

7. ALL ± DIMENSIONS ARE CHECK DIMENSIONS.

8. THE CONTRACTOR IS REQUIRED TO EXAMINE THE SITE OF THE WORK, PLANS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS FOR THE WORK CONTEMPLATED AND IT WILL BE ASSUMED THAT HE HAS FAMILIARIZED AND SATISFIED HIMSELF AS TO THE CHARACTER, QUALITY AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED AND AS TO THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, NOTES AND CONTRACT DOCUMENTS. HE MUST BE PREPARED TO EXECUTE A FINISHED JOB IN EVERY WAY WITHOUT ANY EXTRA CHARGE WHATSOEVER.

9. THE COMMUNITY IDENTIFICATION SIGN MUST BE LOCATED WITHIN A PUBLIC RIGHT-OF-WAY, A ROAD RIGHT-OF-WAY (IF APPROVED BY DELDOT), OR PROPERTY DEDICATED TO PUBLIC USE. THE COMMUNITY ASSOCIATION MUST OBTAIN REQUIRED DEDICATION PRIOR TO START OF SIGN CONSTRUCTION.

10. SIGN ORDINANCES VARY FROM MUNICIPALITY TO MUNICIPALITY. ACCORDINGLY, ALL SIGNS MUST BE APPROVED BY ALL JURISDICTIONAL APPROVAL AGENCIES PRIOR TO THE START OF CONSTRUCTION.

PROJECT NOTE:

THIS OPTION MAY ONLY BE USED WHEN SIGN IS LOCATED OUTSIDE OF THE CLEAR ZONE AND APPROVED BY THE DELDOT PROJECT ENGINEER.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL FOR ALL MATERIALS & INSTALLATION TECHNIQUES TO DELDOT PROJECT ENGINEER PRIOR TO START OF CONSTRUCTION.

ANY TEMPORARY TRAFFIC CONTROL THAT IS REQUIRED FOR THE INSTALLATION OF THIS SIGN SHALL CONFORM TO THE REQUIREMENTS OF PART 6 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD), INCLUDING ALL REVISIONS THAT HAVE BEEN APPROVED AT THE START OF CONSTRUCTION.

3. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS: DEFORMED BARS ASTM A615, GRADE 60

4. CONCRETE PROTECTION FOR REINFORCEMENT (UNLESS NOTED OTHERWISE): CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 IN.

5. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND. STRUCTURAL STEEL

1. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.

2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS: ROUND PIPE: ASTM A53, TYPE E OR S STEEL BARS, ANGLES & PLATES: ASTM A36, U.N.O. ANCHOR BOLTS: ASTM A307

3. ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL BE E70XX.

4. GALVANIZE: ASTM A123 FOR SHAPES AND ASSEMBLIES, ASTM A153 FOR FASTENERS. USE GALVANIZED FASTENERS WHEN CONNECTING GALVANIZED MEMBERS.

5. ANCHOR BOLT AND BASE PLATE DESIGN TO BE BY DENT BREAKAWAY BOLT MANUF.

DESIGN LOADS

1. BUILDING CODE: INTERNATIONAL BUILDING CODE (2015 EDITION).

2. WIND LOADING IS BASED ON THE FOLLOWING:  
BASIC WIND SPEED 120 MPH  
EXPOSURE CATEGORY C  
IMPORTANCE FACTOR 1.0  
DESIGN WIND PRESSURE 35 PSF

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).

2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

FOOTINGS: 3000 PSI

ALL CONC. TO BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.

ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (6 ±1)% PER ASTM C260.

MAXIMUM WATER/CEMENT RATIO = 0.50 FOR 3000 PSI CONC.

MAXIMUM SLUMP = 4"

FOUNDATION

1. PRESUMPTIVE BEARING CAPACITY: 2000 PSF

2. CONTRACTOR, AT HIS EXPENSE, SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN DELAWARE, TO VERIFY THE SUITABILITY OF THE SUBGRADE FOR THE PROPOSED FOUNDATION SYSTEM.

3. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.

4. ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE LIMIT OF THE STRUCTURE. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR STRUCTURE SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.

5. AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.

6. COMPACTED STRUCTURAL FILL FOR STRUCTURE SUPPORT APPROVED FOR USE INCLUDE:

GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.

A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.

7. COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.

FOAM CORE SIGN SPECIFICATIONS

1. FOAM CORE SIGN STRUCTURE SHALL BE CAPABLE OF SUSTAINING A STATIC LOAD OF 80 LBS PER SQUARE FOOT (80PSF)

2. MANUFACTURER: FABRICATED UNITS SHALL BE FABRICATED BY PEACHTREE CITY FOAM CRAFT, 4215 INDEPENDENCE DR SCHNECKSVILLE, PA PHONE: 610-769-0661 [www.foamcraft.info/monumentsign](http://www.foamcraft.info/monumentsign) (OR APPROVED EQUAL)

3. EXPANDED POLYSTYRENE CORE, (EPS): ASTM C 578 TYPE 1, RIGID CELLULAR THERMAL INSTALLATION FORMED BY EXPANSION OF POLYSTYRENE RESIN BEADS OR GRANULES IN A CLOSED CELL, COMPLYING WITH THE FOLLOWING PROPERTIES:

A. AGE IN BLOCK FORM (PRIOR TO CUFFING) BY AIR-DRYING FOR MINIMUM OF 4 WEEKS OR APPROVED METHODS PRODUCING EQUIVALENT RESULTS.

B. BOARD DENSITY: MIN DENSITY OF 1.15 LB/CU.FT. ASTM D303.

DENSITY RANGE 1.15 - 1.34 ASTM 1622

C. COMPRESSION STRENGTH 10% DEFORMATION 13-18 PSI ASTM D1621.

D. TENSILE STRENGTH: 18-22 PSI ASTM D1623.

E. FLEXURAL STRENGTH: 30-38 PSI ASTM C203.

F. WATER ABSORPTION BY TOTAL IMMERSION: LESS THAN 4% ASTM C272

G. THERMAL EXPANSION: 0.000035 IN/IN ASTM D696

H. OXYGEN INDEX: 24% MIN VOLUME ASTM C578.

I. TEMITE RESISTANCE: PASSED ASTM D3345

J. CARPENTER ANT RESISTANCE: PASSED ASTM D3345.

4. POLY-ARMOR @ 60 MILS 1 LB EXPANDED POLYSTYRENE

A. IMPACT RESISTANCE: @77° F = 500 IN-LBS

@32° F = 500 IN-LBS ASTM G14

B. ELONGATION: @77° F = 400%

@32° F = 155% ASTM D412

C. TENSILE STRENGTH: @77° F = 3000 PSI

@32° F = 2200 PSI ASTM D412

D. TEAR STRENGTH: @77° F = 250 PLI

@32° F = 150 PLI ASTM D624

E. FLEXIBILITY: @77° F = PASS

@32° F = PASS ASTM D522

F. FIRE RETARDANT: @77° F = PASS

@32° F = PASS ASTM E84

5. ACRYLIC: TEXTURES FINISH "MASTER WALL BRAND" OR APPROVED EQUAL

6. COLORS SHALL BE SELECTED FROM MFG'S STANDARD COLOR CHART.

7. WARRANTY: 5-YEAR WARRANTY ON MATERIALS USED FOR SIGN FABRICATION

8. FABRICATION: FABRICATE SIGNS TO DIMENSIONS, PROFILES AND TEXTURES SHOWN ON THE DRAWINGS

9. INSTALL SIGNS PLUMB AND LEVEL.

10. FOOTINGS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SUITABILITY OF SUBSOIL FOR THE PROPOSED STRUCTURE AND MAKE NECESSARY ALLOWANCES IF SUBSOIL IS NOT SUITABLE.

11. CONCRETE SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" LATEST EDITION. FOOTINGS SHALL ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.

12. STEEL PIPE - TYPE I: ASTM F 1083, STANDARD WEIGHT SCHEDULE 40; MINIMUM YIELD STRENGTH OF 25,000 PSI (170 MPa); SIZES AS INDICATED. HOT DIPPED GALVANIZED WITH MINIMUM AVERAGE 1.8 OZ/FT<sup>2</sup> (550G/M<sup>2</sup>) OF COATED SURFACE AREA.

13. ALL REINFORCING BARS AND OTHER STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM-A307.

14. THE 3 1/2" DIAM MOUNTING POST SHALL BE HOT DIPPED GALVANIZED. THE CAP PLATE AND STUDS MAY BE WELDED ONTO THE POST AFTER HOT DIPPED PPROCESS AND THEN COLD GALVANIZED. WELDS, PLATES, STUDS AND REPAIR OF ANY DAMAGED HOT DIPPED GALVANIZING ON THE POST SHALL BE PREPARED AND COATED ACCORDING TO ASTM A 780.

STATEMENT OF ACCURACY

I, MATTHEW SPONG, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF REPRESENTS GOOD LANDSCAPE ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DATE MATTHEW T. SPONG #126-E

PROJECT #: 0563	COMM #: 1209	DATE: 10/07/09
Drawn: CDC Designed By: CDC/MTS Checked By: MTS		
REVISION: 3.5.10 - 95% Complete		
4.30.10 - 100% DelDOT Comments of 4.9.10		
6.15.10 - 100% Galvanized Post		
7.31.13 - rev. cold galv. specs per DelDOT		
3.20.2017 General updates, add Option 7 & Cover Sheet		

COMMUNITY TRANSPERTATION FUND  
SUBDIVISION ENTRANCE SIGN 2017 - 2019  
CTF PROJECT #T201709504

OPTION 7: THE MAGNOLIA  
CONSTRUCTION DETAILS, SPECIFICATIONS and NOTES

**las** LANDSCAPE ARCHITECTURAL SERVICES, L.L.C.

LAND, SITE & PARK PLANNING • WETLANDS SCIENCES

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Trisha Sawicki, A.S.L.A. Phone: 302-284-4578 Fax: 302-284-0301  
Email: [lasmail@las-llc.net](mailto:lasmail@las-llc.net) Web: [las-llc.net](http://las-llc.net)

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MADE TO THIS PLAN AND/OR CAD FILE  
WITHOUT ITS WRITTEN AUTHORIZATION.

SHEET #  
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GENERAL CONDITION NOTES

- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO LOCATE AND ALLOW FOR EXISTING UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT 'MISS UTILITIES' OF DELMARVA TO LOCATE EXISTING UTILITIES IN THE FIELD. TELEPHONE: 811. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE DONE TO THE UTILITIES DUE TO HIS OR HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPETENTLY REPAIRED AT THE CONTRACTORS OWN EXPENSE.
- ALL CONSTRUCTION SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- DUE TO POSSIBLE REPRODUCTION AND MEDIUM DISTORTIONS, SCALED DIMENSIONS ARE NOT TO BE TAKEN FROM THESE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND VERIFY ALL GRADES AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION AND MAKE THE PROPER ADJUSTMENTS TO THE PLANS AND DETAILS IF SITE CONDITIONS DO NOT ALLOW THE 'STANDARD' ENTRANCE SIGN TO BE USED.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO INITIATION OF CONSTRUCTION AND CONSTRUCT SIGNS IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES.
- ALL CONSTRUCTION LAYOUT SHALL BE PROVIDED BY A DELAWARE PROFESSIONAL LAND SURVEYOR.
- ALL ± DIMENSIONS ARE CHECK DIMENSIONS.
- THE CONTRACTOR IS REQUIRED TO EXAMINE THE SITE OF THE WORK , PLANS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS FOR THE WORK CONTEMPLATED AND IT WILL BE ASSUMED THAT HE HAS FAMILIARIZED AND SATISFIED HIMSELF AS TO THE CHARACTER, QUALITY AND QUANTITIES OF WORK TO BE PERFORMED AND MATERIALS TO BE FURNISHED AND AS TO THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS, NOTES AND CONTRACT DOCUMENTS. HE MUST BE PREPARED TO EXECUTE A FINISHED JOB IN EVERY WAY WITHOUT ANY EXTRA CHARGE WHATSOEVER.
- THE COMMUNITY IDENTIFICATION SIGN MUST BE LOCATED WITHIN A PUBLIC RIGHT-OF-WAY, A ROAD RIGHT-OF-WAY (IF APPROVED BY DELDOT), OR PROPERTY DEDICATED TO PUBLIC USE. THE COMMUNITY ASSOCIATION MUST OBTAIN REQUIRED DEDICATION PRIOR TO START OF SIGN CONSTRUCTION.
- SIGN ORDINANCES VARY FROM MUNICIPALITY TO MUNICIPALITY. ACCORDINGLY, ALL SIGNS MUST BE APPROVED BY ALL JURISDICTIONAL APPROVAL AGENCIES PRIOR TO THE START OF CONSTRUCTION.

DESIGN LOADS

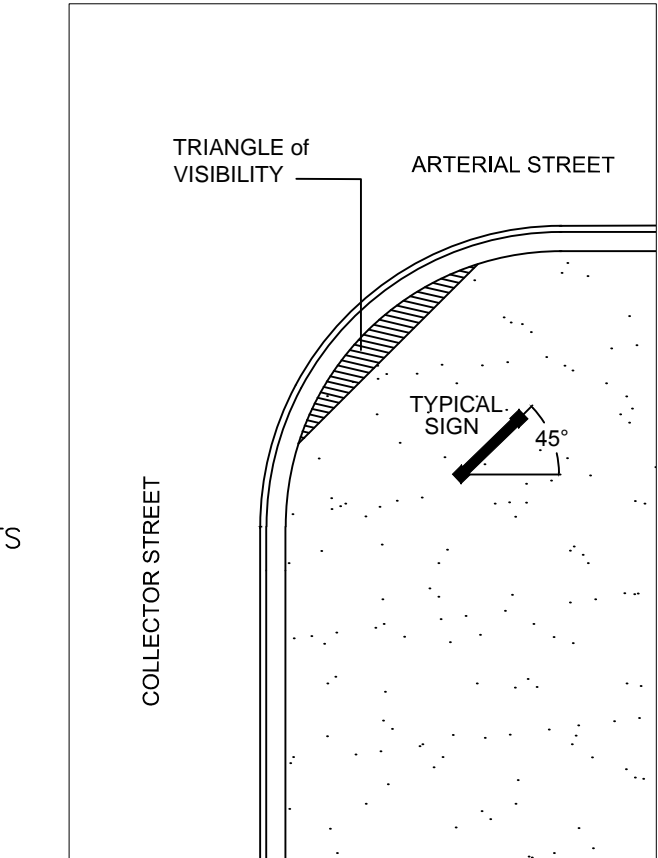
- BUILDING CODE: INTERNATIONAL BUILDING CODE (2015 EDITION).
- WIND LOADING IS BASED ON THE FOLLOWING:

BASIC WIND SPEED	120 MPH
EXPOSURE CATEGORY	C
IMPORTANCE FACTOR	1.0
DESIGN WIND PRESSURE	40 PSF

PROJECT NOTES:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL FOR ALL MATERIALS & INSTALLATION TECHNIQUES TO DELDOT PROJECT ENGINEER PRIOR TO START OF CONSTRUCTION.

ANY TEMPORARY TRAFFIC CONTROL THAT IS REQUIRED FOR THE INSTALLATION OF THIS SIGN SHALL CONFORM TO THE REQUIREMENTS OF PART 6 OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD), INCLUDING ALL REVISIONS THAT HAVE BEEN APPROVED AT THE START OF CONSTRUCTION.



NOTE:  
EACH SITE WILL HAVE ACTUAL SITE SPECIFIC  
SIGHT TRIANGLE ADDED BY DELDOT PROJECT  
ENGINEER PRIOR TO CONSTRUCTION.

FOUNDATION

- PRESUMPTIVE BEARING CAPACITY: 2000 PSF
- CONTRACTOR, AT HIS EXPENSE, SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN DELAWARE, TO VERIFY THE SUITABILITY OF THE SUBGRADE FOR THE PROPOSED FOUNDATION SYSTEM.
- FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.
- ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE LIMIT OF THE STRUCTURE. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR STRUCTURE SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.
- COMPACTED STRUCTURAL FILL FOR STRUCTURE SUPPORT APPROVED FOR USE INCLUDE:

GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.

A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.
- COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.
- THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.
- ALL SUBGRADES AND UNDERCUTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. SOILS EXPOSED AT THE BASES OF ALL APPROVED FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHOULD BE PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS.

Dent Breakaway Bolt™  
Installation Instructions

- Step 1**
- New Installation:** Go to step 2
- Retrofit Instructions:** Remove existing bolts and spread plates (See Figure A)
- Repair Instructions:** Remove damaged bolts by securing the bolt with a pair of vice grips and backing the nut off the bolt. (See Figure B)

- Step 2**
- Install the bolts with approved nuts and washers to the lower base plates. Tighten the nuts (See Figure C)
- NOTE: DO NOT HOLD THE TOP OF THE BOLT WHILE TIGHTENING THE BOTTOM NUT. HOLD BELOW THE BREAKPOINT, OR CRACKING COULD OCCUR.**
- Step 3**
- Lower the sign structure plate onto the top portion of the bolts and install upper washer and nuts. (See Figure D)

If the keeper plate is damaged, it is not necessary to replace it. The bolts should be wrench tightened to prevent the nuts from working loose. There are no torque requirements.

**(All bolts must be in place before final tightening)**

- Special Notes:**
- Approved nuts and washers are required
  - Be sure to tighten nuts evenly in a diagonal pattern, on sides of the flange so that the two plates remain horizontal to each other.
  - In the case of any discrepancies or defects, the engineer and manufacturer must be notified immediately
  - Both plates must be clean and flat to prevent stretching of the bolt from the uneven section causing cracking

**INFORMATION**

DENT BREAKAWAY BOLT™, INC.  
CLIFFORD DENT, INVENTOR  
PO BOX 6007  
FARMINGTON, NM 87499  
FAX: (413) 383-0861  
Cell: (505) 486-0476  
Email: [info@dentbreakaway.com](mailto:info@dentbreakaway.com)

NOTE: DENT BREAKAWAY BOLTS TO BE DESIGNED TO RESIST THE WIND LOADS PROVIDED ON THIS DRAWING WITHOUT FAILURE. ALL BREAKAWAY CHARACTERISTICS OF THE BOLT SYSTEM HAVE NOT BEEN ADDRESSED AND SHALL BE DESIGNED BY THE MANUFACTURER.

DENT PRODUCT DIST:  
Peachtree City Foamcraft  
4215 Independence Dr  
Schnecksville, PA 18078  
Attn: Michael Fetter  
610-769-0661 Office  
678-457-3166 Cell  
610-769-0664 Fax  
OR APPROVED EQUAL

DENT BREAKAWAY BOLT #6878 5/8"  
MIN WIND LOAD REQ'S  
TOTAL SHEAR LOAD: 600 LBS  
MOMENT LOAD: 3.6 FT-KIPS  
3.5" MIN DIAMETER POST

FOAM CORE SIGN SPECIFICATIONS

- FOAM CORE SIGN STRUCTURE SHALL BE CAPABLE OF SUSTAINING A STATIC LOAD OF 80 LBS PER SQUARE FOOT (80PSF)
- MANUFACTURER: FABRICATED UNITS SHALL BE FABRICATED BY PEACHTREE CITY FOAM CRAFT, 4215 INDEPENDENCE DR SCHNECKVILLE, PA PHONE: 610-769-0661 [www.foamcraft.info/monumentsign](http://www.foamcraft.info/monumentsign) (OR APPROVED EQUAL)
- EXPANDED POLYSTYRENE CORE, (EPS): ASTM C 578 TYPE 1, RIGID CELLULAR THERMAL INSTALLATION FORMED BY EXPANSION OF POLYSTYRENE RESIN BEADS OR GRANULES IN A CLOSED CELL, COMPLYING WITH THE FOLLOWING PROPERTIES:
  - AGE IN BLOCK FORM (PRIOR TO CUFFING) BY AIR-DRYING FOR MINIMUM OF 4 WEEKS OR APPROVED METHODS PRODUCING EQUIVALENT RESULTS.
  - BOARD DENSITY: MIN DENSITY OF 1.15 LB/CU.FT. ASTM D303. DENSITY RANGE 1.15 – 1.34 ASTM 1622
  - COMPRESSION STRENGTH 10% DEFORMATION 13–18 PSI ASTM D1621.
  - TENSILE STRENGTH: 18–22 PSI ASTM D1623.
  - FLEXURAL STRENGTH: 30–38 PSI ASTM C203.
  - WATER ABSORPTION BY TOTAL IMMERSION: LESS THAN 4% ASTM C272
  - THERMAL EXPANSION: 0.0000035 IN/IN ASTM D696
  - OXYGEN INDEX: 24% MIN VOLUME ASTM C578.
  - TEMITE RESISTANCE: PASSED ASTM D3345.
  - CARPENTER ANT RESISTANCE: PASSED ASTM D3345.
- POLY-ARMOR @ 60 MILS 1 LB EXPANDED POLYSTYRENE
  - IMPACT RESISTANCE: @77° F = 500 IN-LBS @32° F = 350 IN-LBS ASTM G14
  - ELONGATION: @77° F = 400% @32° F = 155% ASTM D412
  - TENSILE STRENGTH: @77° F = 3000 PSI @32° F = 2200 PSI ASTM D412
  - TEAR STRENGTH: @77° F = 250 PLI @32° F = 150 PLI ASTM D624
  - FLEXIBILITY: @77° F = PASS @32° F = PASS ASTM D522
  - FIRE RETARDANT: @77° F = PASS @32° F = PASS ASTM E84

- ACRYLIC: TEXTURES FINISH "MASTER WALL BRAND" OR APPROVED EQUAL
- COLORS SHALL BE SELECTED FROM MFG'S STANDARD COLOR CHART.
- WARRANTY: 5-YEAR WARRANTY ON MATERIALS USED FOR SIGN FABRICATION
- FABRICATION: FABRICATE SIGNS TO DIMENSIONS, PROFILES AND TEXTURES SHOWN ON THE DRAWINGS
- INSTALL SIGNS PLUMB AND LEVEL.
- FOOTINGS HAVE BEEN DESIGNED BASED ON AN ASSUMED SOIL BEARING CAPACITY OF 2,000 PSF. CONTRACTOR SHALL VERIFY SUITABILITY OF SUBSOIL FOR THE PROPOSED STRUCTURE AND MAKE NECESSARY ALLOWANCES IF SUBSOIL IS NOT SUITABLE.
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STATEMENT OF ACCURACY  
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DATE \_\_\_\_\_ MATTHEW T. SPONG #126-E

PROJECT #: 0563	COMM #: 1209	DATE: 10/07/09
Drawn: CDC Designed By: CDC/MTS Checked By: MTS		
REVISION: 3.5.10 - 95% Complete		
4.30.10 - 100% DelDOT Comments of 4.9.10		
6.15.10 - 100% Galvanized Post		
7.31.13 - rev. cold galv. specs per DelDOT		
3.20.2017 General updates, add Option 7 & Cover Sheet		

COMMUNITY TRANSPERTATION FUND  
SUBDIVISION ENTRANCE SIGN 2017 - 2019  
CTF PROJECT #T201709504

OPTION 8: THE BETHANY  
CONSTRUCTION DETAILS, SPECIFICATIONS AND NOTES

**LAS** LANDSCAPE  
ARCHITECTURAL  
SERVICES, L.L.C.  
LAND, SITE & PARK PLANNING • WETLANDS SCIENCES  
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