<table>
<thead>
<tr>
<th>DRAWING NUMBER</th>
<th>DRAWING NAME</th>
<th>MOST RECENT REVISION DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET0604NT_TLIII</td>
<td>24&quot; Concrete Block, Transition 24&quot; (Unidirectional)</td>
<td>3/21/2012</td>
</tr>
<tr>
<td>ET0604_TLIII</td>
<td>Concrete Block Transition, 24 Inch</td>
<td>4/8/2008</td>
</tr>
<tr>
<td>ET0603_TLIII</td>
<td>Jersey/F Shape Barrier Trans Assy</td>
<td>4/8/2008</td>
</tr>
<tr>
<td>ET0633_TLIII</td>
<td>Variable Width Barrier Trans Assy</td>
<td>12/17/2012</td>
</tr>
<tr>
<td>ET0616_TLIII</td>
<td>30&quot; Straight Conc. Trans. Assy.</td>
<td>10/22/2013</td>
</tr>
<tr>
<td>ET0637_TLIII</td>
<td>36-44&quot; Conc Trans End Shoe Assy</td>
<td>1/12/2014</td>
</tr>
<tr>
<td>ET0639_TLIII</td>
<td>46/48&quot; Conc Trans End Shoe Assy</td>
<td>1/27/2014</td>
</tr>
<tr>
<td>ET0642_TLIII</td>
<td>50&quot;+ Conc Trans End Shoe Assy</td>
<td>9/14/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-60</td>
<td>60&quot; Conc Trans End Shoe Assy</td>
<td>9/16/2014</td>
</tr>
<tr>
<td>ET0607_TLIII</td>
<td>Thrie Beam Gore Trans Assy to 60&quot; Wide Barrier</td>
<td>9/29/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-69</td>
<td>69&quot; Conc Trans End Shoe Assy</td>
<td>9/16/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-69</td>
<td>Thrie Beam Gore Trans Assy to 69&quot; Wide Barrier</td>
<td>9/29/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-90</td>
<td>90&quot; Conc Trans End Shoe Assy</td>
<td>9/16/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-90</td>
<td>Thrie Beam Gore Trans Assy to 90&quot; Wide Barrier</td>
<td>9/29/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-96</td>
<td>96&quot; Conc Trans End Shoe Assy</td>
<td>9/16/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-96</td>
<td>Thrie Beam Gore Trans Assy to 96&quot; Wide Barrier</td>
<td>9/29/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-120</td>
<td>120&quot; Conc Trans End Shoe Assy</td>
<td>9/16/2014</td>
</tr>
<tr>
<td>ET0642_TLIII-120</td>
<td>Thrie Beam Gore Trans Assy to 120&quot; Wide Barrier</td>
<td>9/29/2014</td>
</tr>
<tr>
<td>ET0605_TLIII</td>
<td>Single-Sided Thrie/W Beam Trans Assy</td>
<td>8/24/2008</td>
</tr>
<tr>
<td>ET0605_TLIII</td>
<td>Double-Sided Thrie/W Beam Trans Assy</td>
<td>8/20/2008</td>
</tr>
<tr>
<td>ET0635_TLIII</td>
<td>Offset Conc. Trans Assy</td>
<td>1/12/2014</td>
</tr>
<tr>
<td>ET0650_TLIII</td>
<td>Spanner Transition To Wide Block</td>
<td>4/2/2013</td>
</tr>
</tbody>
</table>
*** This Design is for Unidirectional Traffic Only ***

**LEVEL III PLAN VIEW**

- SMART CUSHION - TEST LEVEL III
  - SC100CM

- CONCRETE FOUNDATION

- 24" BLOCK CONCRETE BARRIER

- 260\(\frac{3}{4}\) [6610] SYSTEM LENGTH TO BARRIER

- 276 [7011] CONCRETE PAD LENGTH

**LEVEL III ELEVATION**

- SMART CUSHION - TEST LEVEL III
  - SC100CM

- CONCRETE FOUNDATION

- 24" BLOCK CONCRETE BARRIER

- 260\(\frac{3}{4}\) [6610] OVERALL LENGTH OF SMART CUSHION

- CUSHION UP AGAINST CONCRETE BARRIER

- SQUARE OR MITER CORNER
Parts List:

01 – Transition 24” Concrete Block Right & Left #9433

Concrete Block, 24 Inch Transition
ET-06-04
One or Both Sides as Required

24” Block Concrete Barrier

Square or Miter Corner

260 3/4 [6610] System Length to Barrier

276 [7011] Concrete Pad Length

CONCRETE FOUNDATION

SMART CUSHION – TEST LEVEL III
SC100GM

33 1/2 [854] End Cushion to End Trans.

LEVEL III PLAN VIEW

Concrete Block, 24 Inch Transition
ET-06-04
One or Both Sides as Required

24” Block Concrete Barrier

Cushion Up Against Concrete Barrier

CUSHION FOUNDATION

260 3/4 [6610] Overall Length of Smart Cushion

LEVEL III ELEVATION

48 [1219]
Parts List:
01 - Transition Jersey Barrier Right #9431
01 - Transition Jersey Barrier Left #9432

LEVEL III PLAN VIEW

LEVEL III ELEVATION

CUSHION UP AGAINST CONCRETE BARRIER

CONCRETE FOUNDATION
Parts List:
01 - Transition Single Slope Median Barrier - Right #9490
01 - Transition Single Slope Median Barrier - Left #9491

LEVEL III PLAN VIEW

LEVEL III ELEVATION

260 1/2 [6610] SYSTEM LENGTH TO BARRIER
276 [7010] CONCRETE PAD LENGTH

36 [914] CONCRETE FOUNDATION
260 1/2 [6610] OVERALL LENGTH OF SMART CUSHION

24" TO 26 5/16" BASE
ET-06-28 (01)

48 [1219]

6 [152]

SMART CUSHION - TEST LEVEL III
SC100GM

SINGLE SLOPE BARRIER TRANS.
SINGLE SLOPE CONCRETE BARRIER

66 [1676] END OF CUSHION
TO END OF TRANSITION

BARRIER AGAINST BACK OF CUSHION
SMART CUSHION - TEST LEVEL III
SC100GM
CONCRETE FOUNDATION

288 3/4 [734] SYSTEM LENGTH TO BARRIER
304 3/8 [773] CONCRETE PAD LENGTH

VARIABLE WIDTH BARRIER TRANS.
ET-06-29 (LEFT)
01

LEAD 1000LGM
CONCRETE FOUNDATION

260 1/2 [6610] OVERALL LENGTH OF SMART CUSHION

VARIABLE WIDTH BARRIER TRANS.
ET-06-29 (RIGHT)
02

STANDARD CONCRETE BARRIER
30"-38" WIDE BASE
12"-22" WIDE AT 32" ELEV.

ITEMS 3 AND 4 WITH MOUNTING HARDWARE
REQUIRED FOR BARRIERS WITH BASE
WIDTH OF 34" OR GREATER

SMART CUSHION - TEST LEVEL III
SC100GM

32 1/2 [815]

6 [152]

CONCRETE FOUNDATION

66 3/4 [1700] OVERALL LENGTH OF SMART CUSHION

LEVEL III ELEVATION

LEVEL III PLAN VIEW
Parts List:
Two-Sided Full Assembly #9459
01 - Transition 30" Concrete Straight Connection #9463

CONCRETE FOUNDATION

SMART CUSHION - TEST LEVEL III
SCH100CM

30" STRAIGHT CONC TRANS ASSY
ET-06-16 (01)

DROP-IN ANCHOR
#9507
12 PLCS

30" WIDE CONCRETE BARRIER

LEVEL III PLAN VIEW

295 3/16 [7488] SYSTEM LENGTH TO BARRIER

311 [7899] CONCRETE PAD LENGTH

35 [889] ADDITIONAL PAD LENGTH

LEVEL III ELEVATION

SMART CUSHION - TEST LEVEL III
SCH100CM

30" STRAIGHT CONC TRANS ASSY
ET-06-16 (01)

30" WIDE CONCRETE BARRIER

CONCRETE FOUNDATION

260 1/2 [6610] OVERALL LENGTH OF SMART CUSHION

50 [1269] END CUSHION TO END TRANSITION
Parts List:
1. Two-Sided Full Assembly #9461
2. Transition 30” Concrete Outside Connection #9465
3. Transition Concrete Spanner Brace #9469
4. Transition Concrete #1 Tapered Spanner Brace #9470

CONCRETE FOUNDATION

SMART CUSHION - TEST LEVEL III
SC100GM

30” FLARED CONC TRANS ASSY
ET-06-15

LEVEL III PLAN VIEW

311 [7900] SYSTEM LENGTH TO BARRIER

326\(\frac{3}{4}\) [8299] CONCRETE PAD LENGTH

LEVEL III ELEVATION

286\(\frac{3}{4}\) [6610] OVERALL LENGTH OF SMART CUSHION

71\(\frac{3}{8}\) [1818] END OF CUSHION TO END OF TRANSITION

30” WIDE CONCRETE BARRIER

50\(\frac{7}{16}\) [1291] ADDITIONAL PAD LENGTH
Parts List:
Two-Sided Full Assembly #9460
01 - Transition 36" Concrete Straight Connection #9464
02 - Transition Concrete Spanner Brace #9469
03 - Transition Concrete #1 Tapered Spanner Brace #9470

Level III Plan View

36" Straight Conc Trans Assy
ET-06-17J 01

36" Wide Concrete Barrier

Level III Elevation

Concrete Foundation

Smart Cushion - Test Level III
SCI100GM

Level III Plan View

309\frac{7}{8} {7871} \text{ System Length to Barrier}

325\frac{5}{8} {8271} \text{ Concrete Pad Length}

49\frac{7}{8} {1261} \text{ Additional Pad Length}

Level III Elevation

Concrete Foundation

260\frac{3}{4} {6610} \text{ Overall Length of Smart Cushion}

64\frac{3}{8} {1641} \text{ End of Cushion to End of Transition}
Parts List:
Two-Sided Full Assembly #9462

01 - Transition 36" Concrete Outside Connection #9466
02 - Transition Concrete Spanner Brace #9469
03 - Transition Concrete #1 Tapered Spanner Brace #9470
04 - Transition Concrete #2 Tapered Spanner Brace #9471

LEVEL III PLAN VIEW

36" FLARED CONC TRANS ASSY ET-06-14

LEVEL III ELEVATION

36" FLARED CONC TRANS ASSY ET-06-14
### LEVEL III PLAN VIEW

- **Concrete Foundation**: 48 [219]
- **Smart Cushion - Test Level III**: 36-44" Conc Trans W/End Shoe Panel ET-06-38 (of)
- **Steel Post**: See Table
- **Length 'A'**: See Table
- **Concrete Pad Length**: 36-44" Wide Concrete Barrier

### LEVEL III ELEVATION

- **Concrete Foundation**: 33½ [851]
- **Smart Cushion - Test Level III**: 36-44" Conc Trans W/End Shoe Panel ET-06-38 (of)
- **Steel Post**: See Table
- **Length 'A'**: See Table
- **Concrete Pad Length**: 36-44" Wide Concrete Barrier

---

<table>
<thead>
<tr>
<th>Barrier Width</th>
<th>Assembly Part No.</th>
<th>Panel Part No (Item 01)</th>
<th>Steel Post Part No (Item 02)</th>
<th>Length 'A'</th>
<th>End Cushion to End Transition</th>
<th>System Length to Barrier</th>
<th>Concrete Pad (Length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 [19]</td>
<td>9558</td>
<td>254620</td>
<td>9547</td>
<td>254652</td>
<td>25669</td>
<td>275291</td>
<td>42 [182]</td>
</tr>
<tr>
<td>38 [20]</td>
<td>9559</td>
<td>254621</td>
<td>9548</td>
<td>254653</td>
<td>25669</td>
<td>275291</td>
<td>48 1/2 [122]</td>
</tr>
<tr>
<td>40 [21]</td>
<td>9560</td>
<td>254622</td>
<td>9549</td>
<td>254654</td>
<td>25669</td>
<td>275291</td>
<td>54 3/4 [139]</td>
</tr>
<tr>
<td>42 [22]</td>
<td>9561</td>
<td>254623</td>
<td>9550</td>
<td>254655</td>
<td>25669</td>
<td>275291</td>
<td>60 [152]</td>
</tr>
<tr>
<td>44 [23]</td>
<td>9562</td>
<td>254624</td>
<td>9551</td>
<td>254656</td>
<td>25669</td>
<td>275291</td>
<td>66 1/4 [168]</td>
</tr>
</tbody>
</table>

---

**Dimensions**

- Overall Length of Smart Cushion: 260½ [6610]
- End Cushion to End Transition: See Table
Concrete Note:
4000 psi at 6" (Reinforced) or 8" (Unreinforced) Thickness

Parts List:
01 = Panel (right) WAP 9554 / JOE 254659
01 = Panel (left) WAP 9555 / JOE 254660
02 = End Shoe WAP 9556 / JOE 254670
03 = Steel Post WAP 9569 / JOE 275291
04 = Short Tapered Post WAP 9472 / JOE 275292
05 = Wide Tapered Post WAP 9556 / JOE 254691

GUARDRAIL NOT INCLUDED IN ASSEMBLY

LEVEL III PLAN VIEW

LEVEL II ELEVATION
Concrete Note:
4000 psi at 8" (Reinforced) or 8" (Unreinforced) Thickness

***SPICE BOLTS, LEG BRACES, AND GUARDRAIL BY OTHERS.***

Guardrail termination - you must add the guardrail overlap length and terminate per state regulations.

Parts List:
Full Assembly Items 01, 02, 03, 04, 05 & hardware - #9475
01 - Transition Thrse 10 Degree Flare Right #9467
02 - Transition Thrse 10 Degree Flare Left #9468
03 - Transition Concrete Spanner Brace #9445
04 - Transition Core Tapered #1 Spanner Brace #9472
05 - Transition Core Tapered #2 Spanner Brace #9473
Concrete Note: 4000 psi at 6” (Reinforced) or 8” (Unreinforced) Thickness

***SPLICE BOLTS, LEG BRACES, AND GUARDRAIL BY OTHERS.***

Guardrail termination - you must add the guardrail overlap length and terminate per state regulations.

Parts List:
- Full Assembly (items 01, 02, 03, 04, 05 & hardware) - #9475
  - 01 - Transition Thrie 10 Degree Flare Right #9467
  - 01 - Transition Thrie 10 Degree Flare Left #9468
  - 02 - Transition Concrete Spanner Brace #9465
  - 03 - Transition Concrete #1 Tapered Spanner Brace #9470
  - 04 - Transition Core Tapered #1 Spanner Brace #9472
  - 05 - Transition Core Tapered #2 Spanner Brace #9473
Concrete Notes:
4000 psi at 8" (Reinforced) or 8" (Unreinforced) Thickness

LEG BRACES AND GUARDRAIL NOT INCLUDED IN ASSEMBLY

LEVEL III PLAN VIEW

LEVEL III ELEVATION
Concrete Note:
4000 psi at 6” (Reinforced) or 8” (Unreinforced) Thickness

***SPICE BOLTS, LEG BRACES, AND GUARDRAIL BY OTHERS.***

Guardrail termination — you must add the guardrail overlap length and terminate per state regulations.

Parts List:
Full Assembly (items 01, 02, 03, 04, 05 & hardware) — #9475
01 — Transition Thrice 10 Degree Flare Right #9467
01 — Transition Thrice 10 Degree Flare Left #9468
02 — Transition Concrete Spanner Brace #9465
03 — Transition Concrete #1 Tapered Spanner Brace #9470
04 — Transition Core Tapered #1 Spanner Brace #9472
05 — Transition Core Tapered #2 Spanner Brace #9473

LEVEL III PLAN VIEW

LEVEL III ELEVATION
Concrete Note:
4000 psi at 6” (Reinforced) or 8” (Unreinforced) Thickness

***SPlice BOLTS, LEG BRACES, AND GUARDRAIL BY OTHERS.***

Guardrail termination - you must add the guardrail overlap length and terminate per state regulations.

Parts List:
Full Assembly (items 01, 02, 03, 04, 05 & hardware) - #9475
01 – Transition Thrie 10 Degree Flare Right #9467
01 – Transition Thrie 10 Degree Flare Left #9468
02 – Transition Concrete Spanner Brace #9465
03 – Transition Concrete #1 Tapered Spanner Brace #9470
04 – Transition Core Tapered #1 Spanner Brace #9472
05 – Transition Core Tapered #2 Spanner Brace #9473

LEVEL III PLAN VIEW

LEVEL III ELEVATION
Concrete Note:
4000 psi at 6" (Reinforced) or 8" (unreinforced) Thickness

Parts List:
Assembly WAP 9553 / JOE 254958
01 = Panel (right) WAP 9554 / JOE 254959
01 = Panel (left) WAP 9555 / JOE 254960
02 = End Shoe WAP 9556 / JOE 254630
03 = Steel Post WAP 9558 / JOE 275291
04 = Short Tapered Post WAP 9472 / JOE 275292
05 = Wide Tapered Post WAP 9556 / JOE 254691

LEG: BRACES AND GUARDRAIL NOT INCLUDED IN ASSEMBLY.
Concrete Note:
4000 psi at 6" (Reinforced) or 8" (Unreinforced) Thickness

+++SPICE BOLTS, LEG BRACES, AND GUARDRAIL BY OTHERS.+++  

Guardrail termination -- you must add the guardrail overlap length and terminate per state regulations.

Parts List:
01 -- Transition Thrie 10 Degree Flare Right #9467
02 -- Transition Thrie 10 Degree Flare Left #9468
03 -- Transition Concrete Spanner Brace #9465
04 -- Transition Core Tapered #1 Spanner Brace #9470
05 -- Transition Core Tapered #2 Spanner Brace #9473
THIS DESIGN IS FOR BIDIRECTIONAL TRAFFIC PATTERNS
POST SPACING AND NESTED GUARDRAIL PER SPEC.

**Parts List:**
01 - Transition Thrive & W Beam - Right #9437
01 - Transition Thrive & W Beam - Left #9438
ALL CONNECTION BOLTS TO BLOCKOUTS BY OTHERS

**Level II Plan View:**
- Concrete Foundation
- Smart Cushion - Test Level III
- 250 [810] System Length
- 330 [840] System Length to STD THRE BEAM SPICE.
- 236 [720] Concrete Pad Length

**Level II Elevation:**
- Concrete Foundation
- Smart Cushion - Test Level III
- 236 [810] Overall Length of Smart Cushion

**Notes:**
- Posts 1-8: PB013 with the two optional holes, 7/8" length, 44 3/4" embossment.
- Posts 9-12: PB0013.
- OVERLAP none such that exposed edges do not cause snagging with incoming traffic.
- Blockouts for posts 1 & 2: PB0013 (two per post), or use similar to Part 15 (figure 7) in original design.

**Level II Plan View:**
- Standard TH RE BEAM SPICE
- Start of Standard W-Beam Guardrail
- Start of Standard W-Beam Guardrail

**Level II Elevation:**
- Nested (2) thrre beam rails: PTM402 (12 gauge)
- Blockouts for posts 3 - 6: PB012
- Blockouts for post 10: PB001, Trim 3/" from top and bottom of blockout.

**All Connection Bolts to Blockouts by Others**
****THIS DESIGN IS FOR BIDIRECTIONAL TRAFFIC PATTERNS, POST SPACING AND NESTED GUARDRAIL PER SPEC.*****

<table>
<thead>
<tr>
<th>Parts List:</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 - Transition Thrie &amp; W Beam - Right #9437</td>
</tr>
<tr>
<td>01 - Transition Thrie &amp; W Beam - Left #5438</td>
</tr>
<tr>
<td>ALL CONNECTION BOLTS TO BLOCKOUTS BY OTHERS</td>
</tr>
</tbody>
</table>

LEVEL III PLAN VIEW

LEVEL III ELEVATION

ALL CONNECTION BOLTS TO BLOCKOUTS BY OTHERS
CAUTION **** THIS DESIGN IS NOT FOR BIDIRECTIONAL TRAFFIC.
USE ONLY FOR ONCOMING TRAFFIC PATTERNS.

***ALL POSTS, BLOCKOUTS AND CONNECTION BOLTS BY OTHERS***

Parts List:
01 - Transition W Beam - Right # 9511
01 - Transition W Beam - Left # 9512

Level III Plan View

Level III Elevation

CAD

CONCRETE FOUNDATION

SMART CUSHION - TEST LEVEL III SC1008GM

3 Spaces at 18.75" = 56.25"
[1423mm]

260\(\frac{1}{2}\) [6610] SYSTEM LENGTH

33\(\frac{3}{4}\) [845] OVERALL LENGTH OF SMART CUSHION

POSTS 1-4: PDE03 with the two optional holes, 78" length, 44 3/4" embedment

Overlap rails such that exposed edges do not cause snagging with incoming traffic

Start of standard W-Beam Guardrail

Blockouts for posts 1 & 2:
P0B01 (two per post, each side), P0B01 or use similar to Part 15
(figure 7) in original design.
CAUTION **** THIS DESIGN IS NOT FOR BIDIRECTIONAL TRAFFIC. USE ONLY FOR ONCOMING TRAFFIC PATTERNS.

***ALL POSTS, BLOCKOUTS AND CONNECTION BOLTS BY OTHERS***

Parts List:
01 = Transition W Beam - Right # 9513
01 = Transition W Beam - Left # 9514

Smart Cushion - Test Level III
SC1000GM

Concrete Foundation

260\frac{1}{2} [6610] System Length

32\frac{1}{2} [851] Overall Length of Smart Cushion

33\frac{1}{2} [845] Smart Cushion - Test Level III
SC1000GM

Concrete Foundation

Blockouts for posts 1 &2: PB801 (two per post, each side), or use similar to Part 15 (figure 7) in original design.

All Posts, Blockouts, & Connection Bolts by Others

Standard W-Beam Splice, typical both sides

Overlap rails such that exposed edges do not cause snagging with incoming traffic

Start of standard W-Beam Guardrail

260\frac{1}{2} [6610] [7010] Concrete Pad Length

781 [1993] End of Cushion

781 [1993] End of Transition

3 Spaces at 18.75" = 56.25"

16 [406]

[1429mm]

48 [1219]

[610] Posts 1-4: PDE03 with the two optional holes, 78" length, 44 3/4" embedment
Parts List:
01 - Spanner Transition to Wide Block Right & Left #9537

LEVEL III PLAN VIEW

LEVEL III ELEVATION