Transportation

Geotechnical and Material Section

PRODUCTS LIST

SIGNS AND SUPPORT SYSTEM

Any product that meets the requirements of Alberta Transportation Standard Specifications for Highway Construction, <u>Specification 5.18</u> Supply of Permanent Highway Signs, Posts and Bases or Highway Maintenance Specifications, <u>Specification 54.12</u> Supply of Permanent Highway Signs; <u>Specification 54.13</u> Maintenance of Highway Signs; qualifies under this section.

STANDARD SIGNS

Aluminum for standard signs shall be a minimum of 2 mm flat sheet tension leveled, sign grade aluminum and shall conform to the requirements of ASTM B209M, "Specification for Aluminum and Aluminum-Alloy Sheet and Plate", Alloys 6061-T6 or 5052-H38.

NON-STANDARD SIGN

Extruded Aluminum panels for major signs, shall be Alcan Shape # 73247 with anodize treatment and shall conform to ASTM B221M "Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes", Alloys 6061-T6 or 6063-T5.

Plywood – Sanded one side

3/4" 100/100 or 120/120 Hi-Density

BACKING

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | <u>POTENTIAL PRODUCTS</u> |
|------------------------|----------------------------|---------------------------|
| | FiberLoc Sign System | |
| | Expiry Date: December 2012 | |
| | <u>REPORT</u> | |

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PRODUCTS LIST

REFLECTIVE SHEETING

REGULATORY/WARNING/INFORMATION SIGNS

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type III or Type IV High Intensity Retro-reflective Sheeting.

PROPRIETARY

| PROVEN PRODUCTS | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|-----------------------------|----------------|------------------------------|
| 3M (High Intensity Grade) | | NIKKALITE Ultralite Grade II |
| (3800) | | (Expiry Date: April 2012) |
| 3M High Intensity Prismatic | | |
| 3M 3930sheeting | | |
| REPORT | | |
| 6000 HP (Avery Dennison) | | |
| REPORT | | |
| Avery Dennison T7500 Series | | |
| | | |

TEMPORARY ORANGE WORK ZONE/CONSTRUCTION SIGNS

The orange portion of all signs and barricades shall be fully reflectorized using High Brightness, Retroreflective unmetalized, Prismatic Sheeting Material which incorporates durable, transparent, fluorescent pigment and meets the brightness requirements as specified in ASTM D4956 Type VIII sheeting material.

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|---|----------------|---|
| 3M Durable Fluorescent (3924S) | | |
| Avery Dennison Fluorescent Orange (w-7514) | | Avery Dennison (Omni-Cube) Fluorescent Orange T-11514 (Expiry Date: Feb 2014) |
| 3M Diamond Grade Cubed 4084 Series (DG³) | | |

All other colours shall meet or exceed the minimum requirements as specified in ASTM-D4956 Performance Requirements Type III or Type IV High Intensity Retroreflective Sheeting.

SCHOOL ZONE AND SCHOOL CROSS WALK AHEAD SIGNS

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type IX or XI Unmetalized Cube Corner Microprismatic Retroreflective Element Material.

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PRODUCTS LIST

PROPRIETARY

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | <u>POTENTIAL PRODUCTS</u> |
|---|----------------|----------------------------|
| 3M Diamond Grade Series | | |
| 3983 | | |
| (Fluorescent Yellow Green) | | |
| 3M Diamond Grade Cubed | | Avery Dennison Fluorescent |
| 4083 Series(DG ³) Fluorescent | | Yellow-Green Omni-Cube T- |
| Yellow-Green | | <u>11513</u> |
| | | (Expiry Date: Feb 2014) |

SPECIALIZED APPLICATIONS

STOP, YIELD, WRONG WAY, DO NOT ENTER SIGNS AND OVERHEAD SIGNS WITHOUT ILLUMINATION

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type IX or XI Unmetalized Cube Corner Microprismatic Retroreflective Element Material.

| PROVEN PRODUCTS | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|--------------------------------|----------------|-------------------------|
| 3M Diamond Grade (VIP) | | |
| Series (3990) | | |
| 3M Diamond Grade Cubed | | Avery Dennison T-11500 |
| 4000 Series (DG ³) | | <u>Series</u> |
| | | (Expiry Date: Feb 2014) |

WARNING SIGNS (DESIGN BULLETIN #50/2007)

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type IX or XI Unmetalized Cube Corner Microprismatic Retroreflective Element Material.

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|--------------------------------|-------------------------|-------------------------|
| 3M Vinyl Roll Up RS-33 | | |
| Fluorescent Pink | | |
| 3M Diamond Grade Cubed | Solar Flashing Beacons | |
| 4081 Series (DG ³) | (Expiry Date: Jan 2013) | |
| Fluorescent Yellow | | |
| 3M, Diamond Grade (VIP) | | Avery Dennison T-11511 |
| (3981) Fluorescent Yellow | | Fluorescent Yellow |
| | | (Expiry Date: Feb 2014) |

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PRODUCTS LIST

BASES

Any product that meets the requirements of Alberta Transportation Specification TEB 1.83 Breakaway Ground Mounted Bases Steel I-Beam Posts qualifies under this section.

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|------------------------|----------------|--------------------|
| | | |
| | | |

CLUSTER FRAMES

Any product that meets the requirements of Alberta Transportation Specification TEB 1.71A C-Cluster Frame qualifies under this section.

The Frames shall be painted with rust resistant aluminum paint or a metal primer and aluminum paint suitable to the Engineer.

SUPPORTS

BREAKAWAY STEEL

Any product that meets the requirements of Alberta Transportation Specification TEB 1.82 Breakaway Ground Mounted Bases Steel I-Beam Posts qualifies under this section.

PROPRIETARY

| <u>PROVEN PRODUCTS</u> | <u>TRIAL PRODUCTS</u> | <u>POTENTIAL PRODUCTS</u> |
|------------------------------|-----------------------|------------------------------|
| Steel "W" or "S" shapes with | | |
| breakaway slip base | | |
| | | Rib-Bak U-Channel Sign Post |
| | | <u>System</u> |
| | | (Expiry Date: February 2012) |
| | | SLIP-SAFE Supreme Rib-Bak |
| | | (Expiry Date: Sept 2014) |
| | | LAP-SPLICE Supreme Rib- |
| | | Bak U-Channel |
| | | (Expiry Date: Sept 2014) |
| | | SLIP-SAFE Supreme Rib-Bak |
| | | U-Channel 360 |
| | | (Expiry Date: Sept 2014) |

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PRODUCTS LIST

BREAKAWAY

PROPRIETARY

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|------------------------|----------------|--------------------|
| | | |

POST SUPPORT

PROPRIETARY

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | POTENTIAL PRODUCTS |
|---------------------------|----------------|--------------------|
| Break Safe Support System | | |
| | | |

WOOD POSTS

Wood posts shall be pine or spruce No. 2 or better, as per NLGA, CCA (Copper, Chromate, Arsenate) pressure treated in accordance with CSA 080. Material shall be free from wane.

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | <u>POTENTIAL PRODUCTS</u> |
|------------------------|----------------|---------------------------|
| Wood 100 mm x 100 mm | | |
| Wood 150 mm x 200 mm | | |
| Wood 100 mm x 150 mm | | |

STEEL POSTS

| <u>PROVEN PRODUCTS</u> | TRIAL PRODUCTS | <u>POTENTIAL PRODUCTS</u> |
|------------------------|----------------|----------------------------------|
| | | Steel U Posts or Flanged Channel |
| | | Steel Pipe (Schedule 40) |
| | | Square Steel Tube |
| | | Aluminum Type X |

MOUNTING HARDWARE

All bolts and hardware shall be galvanized.