

## SECTION 703 UNDERDRAIN SYSTEMS

| MATERIAL                                                                                |                                                        | REF.                           | PURP.                         | SAMPLED BY                                                                                                                                                                                   | MIN. FREQ.                         | MIN. QUANT.                          | CERT.         | SMALL QUANTITY | TYPICAL HANDLING TIME | REMARKS                                                                                                       |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------|---------------|----------------|-----------------------|---------------------------------------------------------------------------------------------------------------|
|                                                                                         |                                                        | TESTED BY                      |                               | METHOD                                                                                                                                                                                       |                                    | CONTAINER                            | DISTR.        |                |                       |                                                                                                               |
| FOR ASPHALTIC CONCRETE BASE COURSE & SURFACING SEE SECTIONS 724 AND 501 OF THIS MANUAL. |                                                        |                                |                               |                                                                                                                                                                                              |                                    |                                      |               |                |                       |                                                                                                               |
| BACKFILL                                                                                | Aggregate (Size 3)                                     | 703.02<br>1003.05<br>Dist. Lab | Accept.                       | Proj. Engr.<br>S 101                                                                                                                                                                         | 1/1000 yd³                         | 1 full sample sack                   | -----         | -----          | 4 days                | -----                                                                                                         |
|                                                                                         | Granular Material                                      | 703.02<br>1003.07<br>Dist. Lab | Accept.                       | Proj. Engr.<br>S 101                                                                                                                                                                         | 1/1000 yd³                         | 1 full sample sack                   | -----         | -----          | 4 days                | -----                                                                                                         |
| GEOCOMPOSITE<br>EDGE DRAIN                                                              |                                                        | 703.02<br>1019.02<br>Mat. Lab  | Accept.                       | Proj. Engr.<br>S 601                                                                                                                                                                         | 1/type/lot*                        | 4 lin ft                             | CA<br>7       | -----          | 11 days               | (QPL 62)<br>*Sample fittings 1 per type per shipment.                                                         |
| GEOCOMPOSITE<br>WALL DRAINS                                                             |                                                        | 703.02<br>1019.02<br>Mat. Lab  | Accept.                       | Proj. Engr.<br>S 601                                                                                                                                                                         | 1/type/lot*                        | 4 ft²                                | CA<br>7       | -----          | 11 days               | (QPL 62)<br>*Sample fittings 1 per type per shipment.                                                         |
| GEOTEXTILE<br>FABRIC                                                                    |                                                        | 703.02<br>1019.01<br>Mat. Lab  | Prelim.<br>Source<br>Approval | Dist. Lab<br>S 614                                                                                                                                                                           | 1/type/lot/<br>source/<br>shipment | 3 lin ft/roll<br>width<br>of fabric* | -----         | -----          | 10 days               | (QPL 61)<br>*Sample a minimum of 18 ft².                                                                      |
|                                                                                         |                                                        | 703.02<br>1019.01<br>Mat. Lab  | Accept.                       | Proj. Engr.<br>S 614                                                                                                                                                                         | 1/type/<br>source/<br>shipment     | 3 lin ft/roll<br>width of<br>fabric* | CD**<br>1 & 7 | 150 yd²        | 10 days               | (QPL 61)<br>*Sample a minimum of 18 ft².<br>**When not accompanied by a CD. Sample if questionable            |
| HARDWARE<br>CLOTH                                                                       | Rodent<br>Screen                                       | 703.02<br>1018.22<br>Mat. Lab  | Accept.                       | Proj. Engr.<br>S 601                                                                                                                                                                         | 1/shipment*                        | 1 screen                             | -----         | -----          | 10 days               | *Visual Inspection by Proj. Engr.<br>Sample only if questionable.                                             |
| METAL PIPE                                                                              | Perforated<br>Bituminous<br>Coated<br>Corrug.<br>Steel | 703.02<br>1007.04<br>Mat. Lab  | Accept.                       | Inspected and approved with lab no. and gage painted on outside of pipe and coupling bands by Const. Fab. Insp. prior to use. See Section 701 of this manual for Const. Fab. Insp. sampling. |                                    |                                      | CD<br>1 & 6   | -----          | 11 days               | Visual inspection by Proj. Engr.<br>CD includes gage, diameter, coupling bands, gasket material and hardware. |
|                                                                                         | Perforated<br>Corrugated<br>Aluminum                   | 703.02<br>1007.07<br>Mat. Lab  | Accept.                       | Inspected and approved with lab no. and gage painted on outside of pipe and coupling bands by Const. Fab. Insp. prior to use. See Section 701 of this manual for Const. Fab. Insp. sampling. |                                    |                                      | CD<br>1 & 6   | -----          | 11 days               | Visual inspection by Proj. Engr.<br>CD includes gage, diameter, coupling bands, gasket material and hardware. |

**SECTION 703 UNDERDRAIN SYSTEMS (Cont'd)**

| MATERIAL                                      |                            | REFERENCE                        | PURP.   | SAMPLED BY                                                                                               | MIN. FREQ.                | MIN. QUANT.               | CERT.       | SMALL QUANTITY     | TYPICAL HANDLING TIME | REMARKS                                                                                                                                                   |
|-----------------------------------------------|----------------------------|----------------------------------|---------|----------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|-------------|--------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               |                            | TESTED BY                        |         | METHOD                                                                                                   |                           | CONTAINER                 | DISTR.      |                    |                       |                                                                                                                                                           |
| PLASTIC PIPE<br>(Perforated & Non-Perforated) | ABS                        | 703.02<br>1006.08(a)<br>Mat. Lab | Accept. | Proj. Engr.<br>S 601                                                                                     | 1/type/size/<br>shipment* | 6 ft length               | CC<br>7     | 1,000 ft           | 10 days               | *Sample fittings 1 per type<br>per shipment.                                                                                                              |
|                                               | Corrugated<br>Polyethylene | 703.02<br>1006.08(b)<br>Mat. Lab | Accept. | Proj. Engr.<br>S 601                                                                                     | 1/type/size/<br>shipment* | 4 pieces -<br>5 ft length | CC<br>7     | 1,000 ft           | 10 days               | *Sample fittings 3 per type<br>per shipment.                                                                                                              |
|                                               | Polyethylene               | 703.02<br>1006.08(d)<br>Mat. Lab | Accept. | Proj. Engr.<br>S 601                                                                                     | 1/type/size/<br>shipment* | 6 ft length               | CC<br>7     | 1,000 ft           | 10 days               | *Sample fittings 1 per type<br>per shipment.                                                                                                              |
|                                               | Polyvinyl<br>Chloride      | 703.02<br>1006.08(c)<br>Mat. Lab | Accept. | Proj. Engr.<br>S 601                                                                                     | 1/type/size/<br>shipment* | 6 ft length               | CC<br>7     | 1,000 ft           | 10 days               | *Sample fittings 1 per type<br>per shipment.                                                                                                              |
| PORTLAND<br>CEMENT<br>CONCRETE                | Headwalls<br>(Class M)     | 703.03(c)(5)<br>Proj. Engr.      | Accept. | SEE SECTION 901 OF THIS MANUAL.                                                                          |                           |                           |             | 10 yd <sup>3</sup> | -----                 | -----                                                                                                                                                     |
| PRECAST<br>CONCRETE<br>HEADWALLS              |                            | 703.02<br>1016.04<br>Mat. Lab    | Accept. | Inspected, stamped and approved by Const.<br>Fab. Insp. prior to use. See Section 805 of<br>this manual. |                           |                           | CD<br>1 & 6 | -----              | -----                 | Visual inspection by Proj.<br>Engr.                                                                                                                       |
| REINFORCING<br>STEEL                          | Bars                       | 1009.01<br>Mat. Lab*             | Accept. | Proj. Engr.<br>S 501                                                                                     | 1/source**                | 48 in. length             | -----       | -----              | 10 days               | *Dist. Lab in Dist. 02.<br>**If listed on QPL 71,<br>material with a CA (Distr.<br>1) need not be sampled.<br>Sample for verification if<br>questionable. |
|                                               | Wire Fabric                | 1009.01(e)<br>Mat. Lab           | Accept. | Proj. Engr.<br>S 501                                                                                     | 1/shipment*               | 48 in. x 48 in.           | -----       | -----              | 11 days               | *Visual inspection by Proj.<br>Engr. Sample only if<br>questionable.                                                                                      |
|                                               |                            |                                  |         |                                                                                                          |                           |                           |             |                    |                       |                                                                                                                                                           |