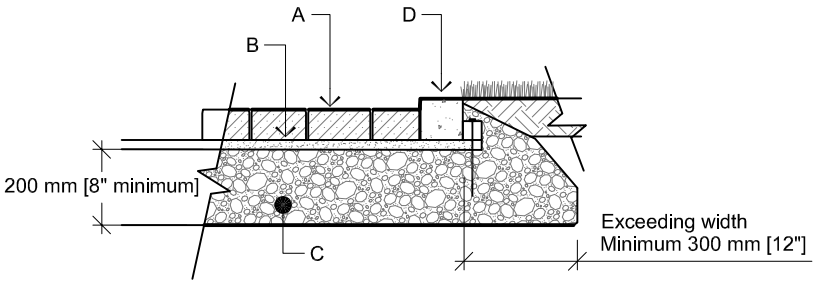
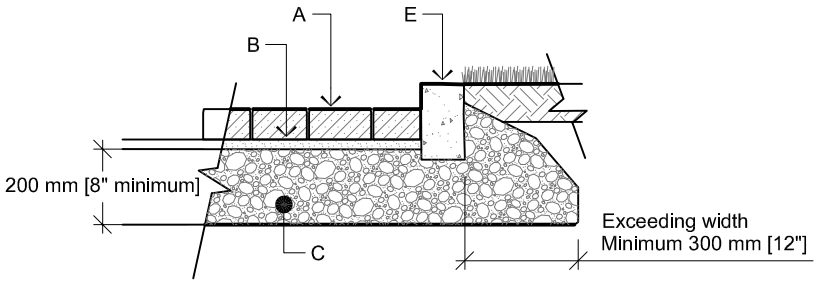
CELTIK AND CELTIK MEGA CURB

PAVERS AND CELTIK CURB



PAVERS AND CELTIK MEGA CURB



A CONCRETE PAVERS

B LAYING BED 25 MM

C COMPACTED GRANULAR FOUNDATION 0-20 MM
(0-¾")

D CELTIK CURB

E CELTIK MEGA CURB

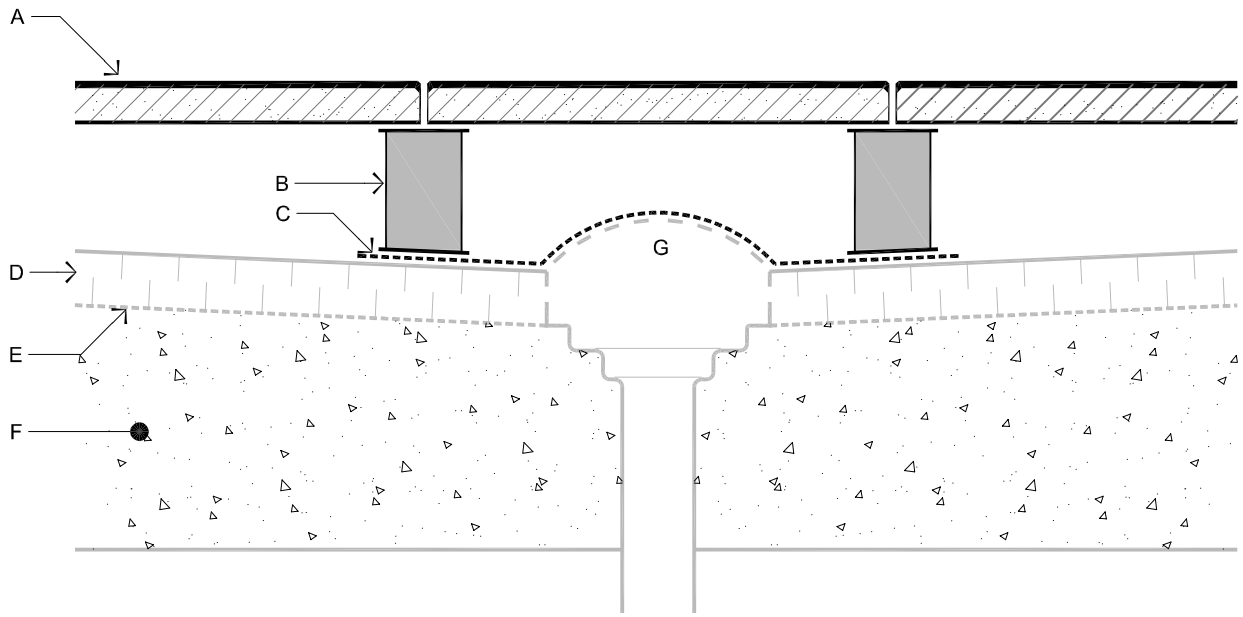
CROSS SECTION - PAVERS AND PRECAST CONCRETE CURBS
CELTIK CURB AND CELTIK MEGA CURB

Scale 1=20

June 22, 2010

B01E

ROOF DECK SLABS



A PRECAST CONCRETE SLABS 50 mm (2")

B ADJUSTABLE PEDESTAL

C GEOTEXTILE

D RIGID INSULATION

E WATERPROOFING MEMBRANE

F BUILDING STRUCTURE

G BUILDING DRAINAGE SYSTEM

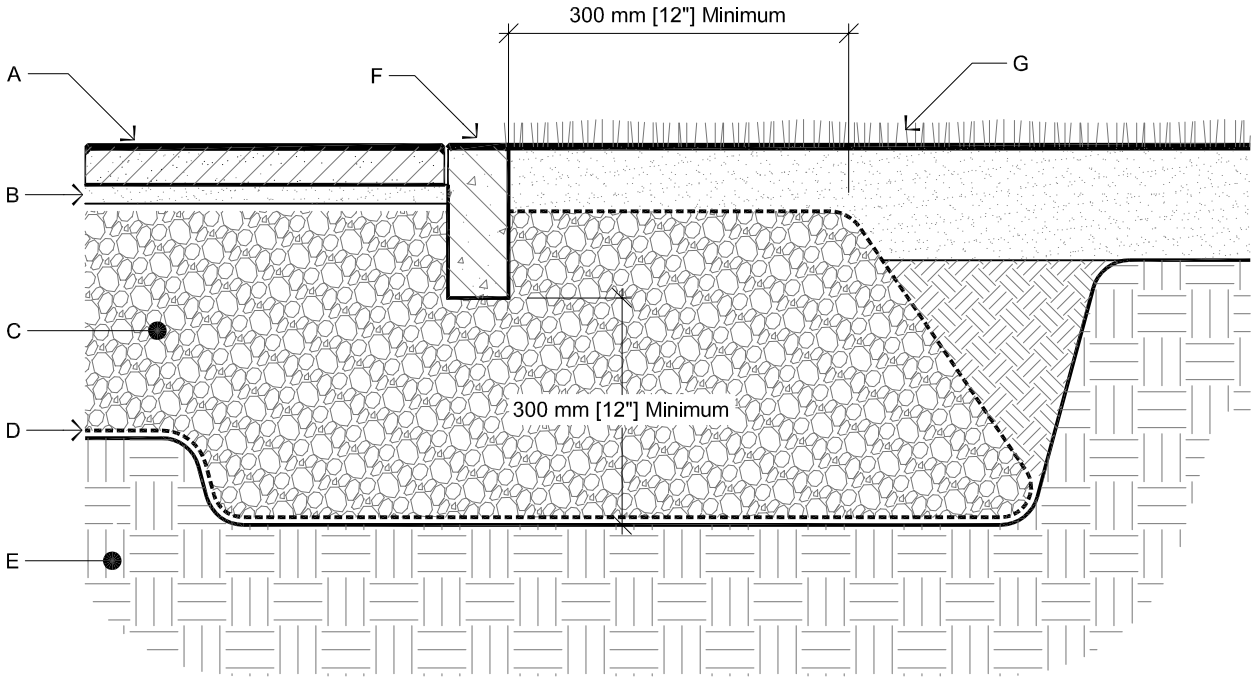
CROSS SECTION - PRECAST CONCRETE SLABS
ROOF DECK SLAB ON PEDESTAL

Scale 1=10

June 22, 2010

D01E

SLABS



A PRECAST CONCRETE SLAB 43 to 50 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION 0-20 mm (0-3/4")

D GEOTEXTILE

E EXISTING SOIL

F PRECAST CONCRETE CURB

G PLANTING AREA

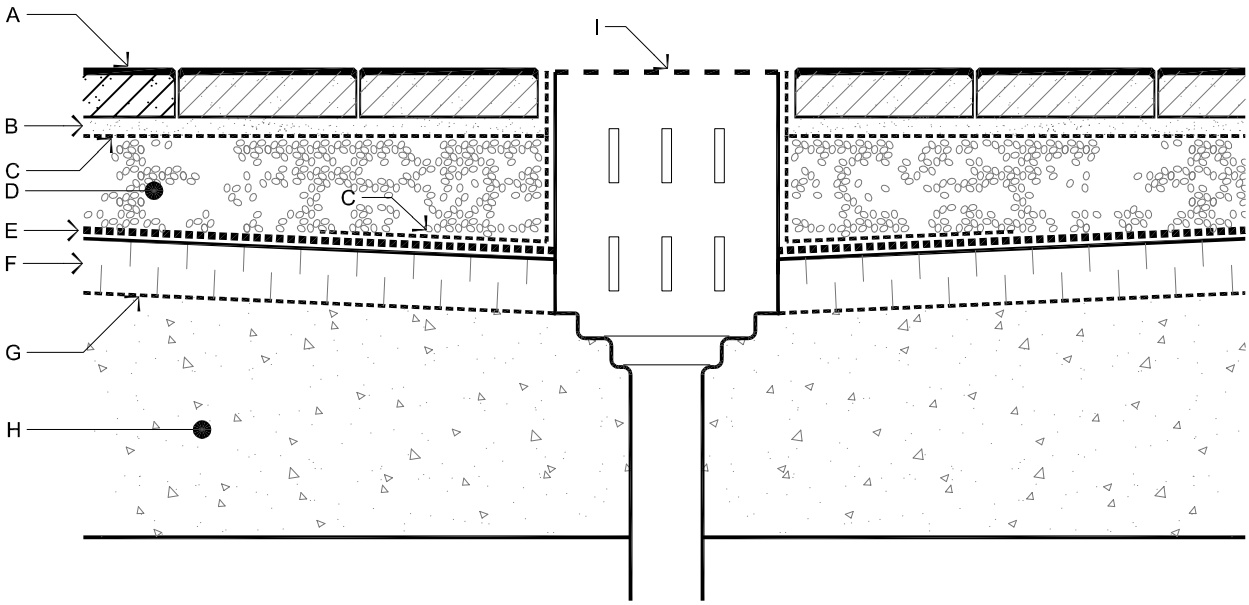
CROSS SECTION - PRECAST CONCRETE SLABS PEDESTRIAN APPLICATION

Scale 1=10

June 22, 2010

D02E

ROOF DECK SLABS



A CONCRETE SLABS 43 TO 50 mm

B LAYING BED 25 mm

C GEOTEXTILE

D GRANULAR FOUNDATION, SINGLE-SIZE AGGREGATES 6 mm

E DRAINAGE MEMBRANE

F RIGID INSULATION

G WATERPROOFING MEMBRANE

H BUILDING STRUCTURE

I BUILDING DRAINAGE SYSTEM

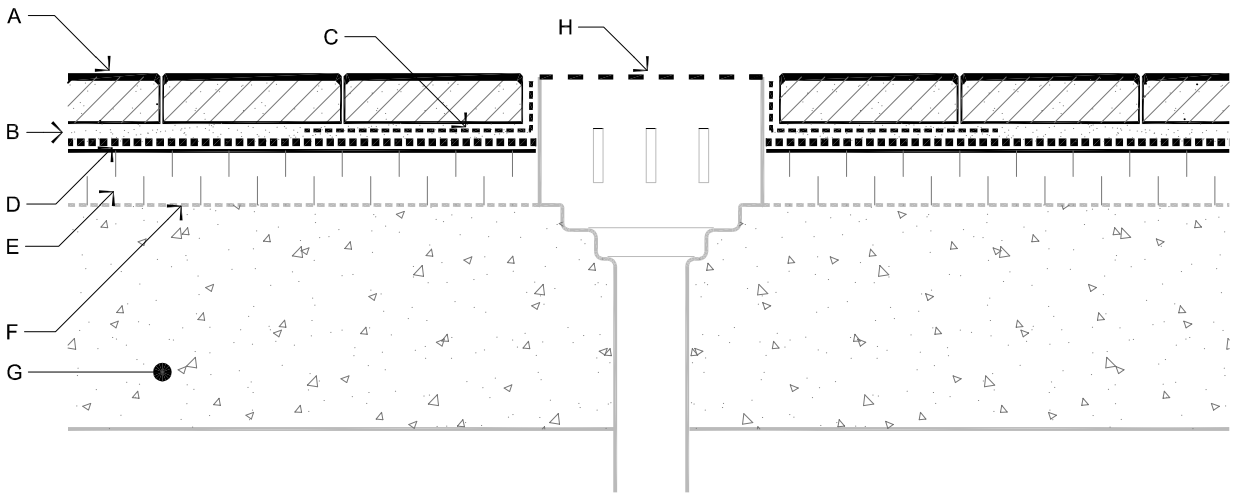
CROSS SECTION - PRECAST CONCRETE SLABS
ROOF DECK SLABS ON GRANULAR FOUNDATION

Scale 1=10

June 22, 2010

D03E

ROOF DECK SLABS



A PRECAST CONCRETE SLABS 43 TO 50 mm

B LAYING BED 25 mm

C GEOTEXTILE

D DRAINAGE MEMBRANE

E RIGID INSULATION

F WATERPROOFING MEMBRANE

G BUILDING STRUCTURE

H BUILDING DRAINAGE SYSTEM

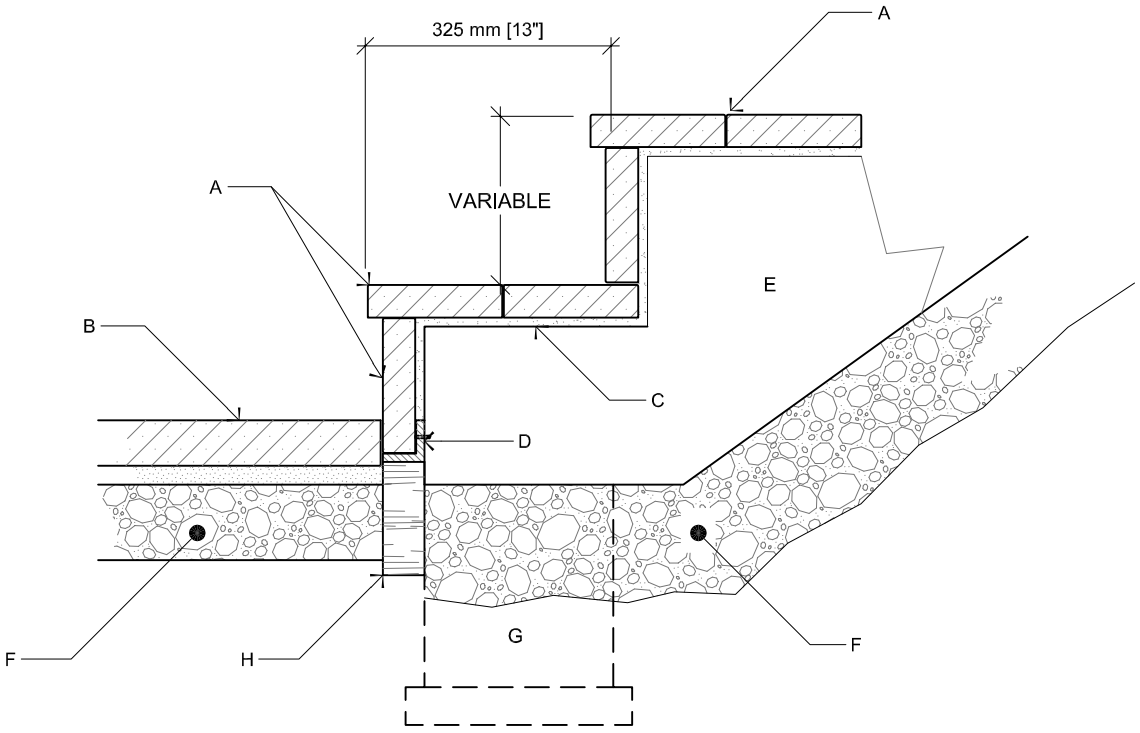
CROSS SECTION - PRECAST CONCRETE SLABS
ROOF DECK SLABS ON STRUCTURAL BUILDING SLAB

Scale 1=10

June 22, 2010

D04E

PARVIS PAVERS
INSTALLED ON CONCRETE STAIRS



A PARVIS PAVER (43 X 180 X VARIABLE, 3 SIZES) ON MORTAR WITH TIGHT JOINTS

B PAVERS ON SETTING BED

C ADHESIVE OR MORTAR 12 mm THICK (± ½")

D STEEL ANGLE FASTENED TO CONCRETE WITH ANCHORS

E CONCRETE STAIRWAY

F COMPACTED GRANULAR BASE 0-20 mm (0-¾")

G CONCRETE PIER (FOOTING UNDER FROSTLINE)

H RIGID INSULATION

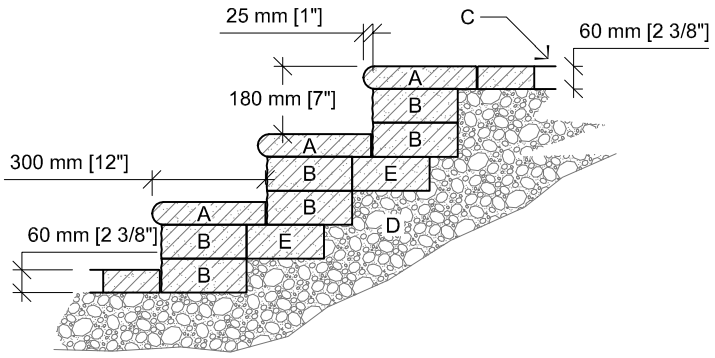
CROSS SECTION - PARVIS PAVER INSTALLED ON CONCRETE STAIRS Scale 1=10

June 22, 2010

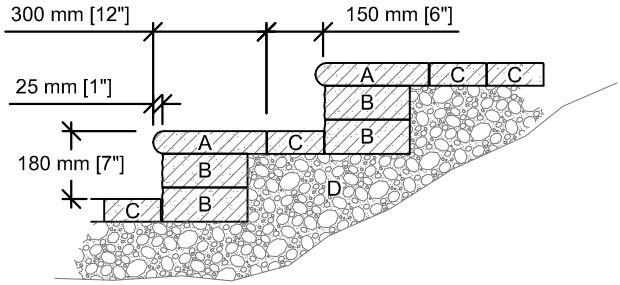
E01E

MARINA PAVERS
STEP INSTALLATIONS

OPTION 1



OPTION 2



A MARINA PAVERS 60 mm X 300 mm X 150 mm
(2 3/8" X 11 13/16" X 5 15/16")

B CELTIK WALL 90 (4 SIZES)
90 mm X 225 mm X VARIABLE
(3 9/16" X 8 7/8" X VARIABLE)
NOTE: ALL ELEMENT MUST BE GLUED TOGETHER
WITH THE PERMACON PERMAPRO ADHESIVE

C PAVERS 60 mm

E CONCRETE BLOCK 10 cm X 20 cm X 40 cm (4" X 8" X 16")
OR CELTIK WALL 90

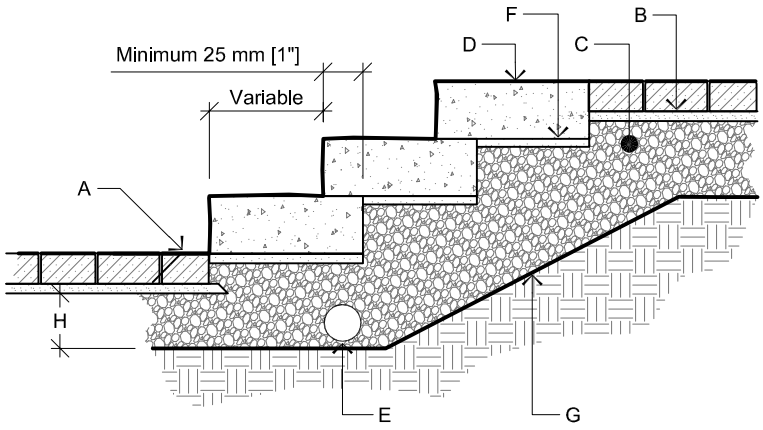
D COMPACTED GRANULAR BASE 0-20 mm (0-¾")

CROSS SECTION - MARINA PAVERS : STEP INSTALLATION FOR STAIRS Scale 1=20

June 22, 2010

E02E

ESPLANADE OR HEMMINGFORD STEPS
STEP INSTALLATION



A CONCRETE PAVERS

B LAYING BED 25 mm

C COMPACTED GRANULAR BASE 0-20 mm (0-¾")

D HEMMINGFORD OR ESPLANADE STEP

E PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

F LAYING BED (IF NECESSARY) 12 mm (½") MAXIMUM MUST BE COMPACTED

G GEOTEXTILE

H COMPACTED GRANULAR BASE 0-20 mm (0-¾") DEPTH ACCORDING TO SOIL TYPE

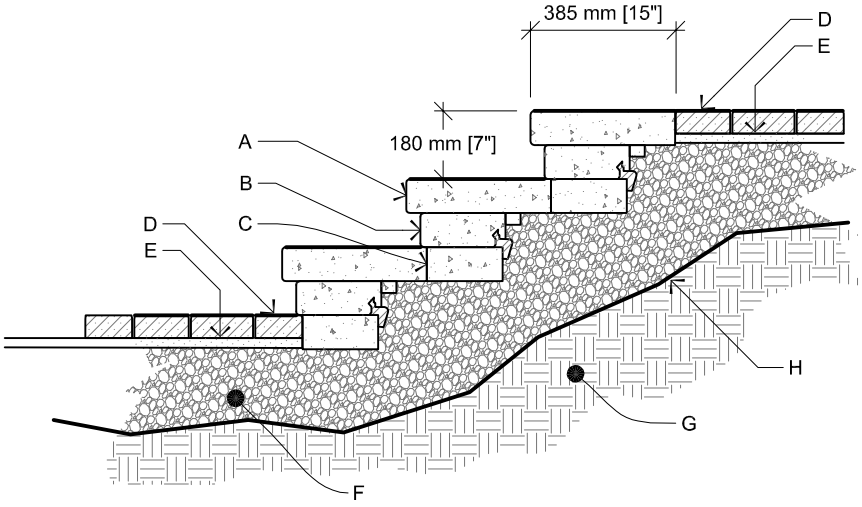
CROSS SECTION - ESPLANADE OR HEMMINGFORD STEP
STEP INSTALLATION

Scale 1=20

June 22, 2010

E03E

CELTIK 15 INCH MODULAR STEP SYSTEM
STEP INSTALLATION



A 385 mm (15") CELTIK STEP MODULE

B 225 mm (8 7/8") CELTIK RISER

C SOLID CONCRETE BLOCK 10 X 20 X 40 cm

D CONCRETE PAVERS 60 OR 80 mm

E LAYING BED 25 mm (1")

F COMPACTED GRANULAR BASE 0-20 mm (0-¾")
300 mm (12") MINIMUM DEPTH

G EXISTING SOIL

H GEOTEXTILE

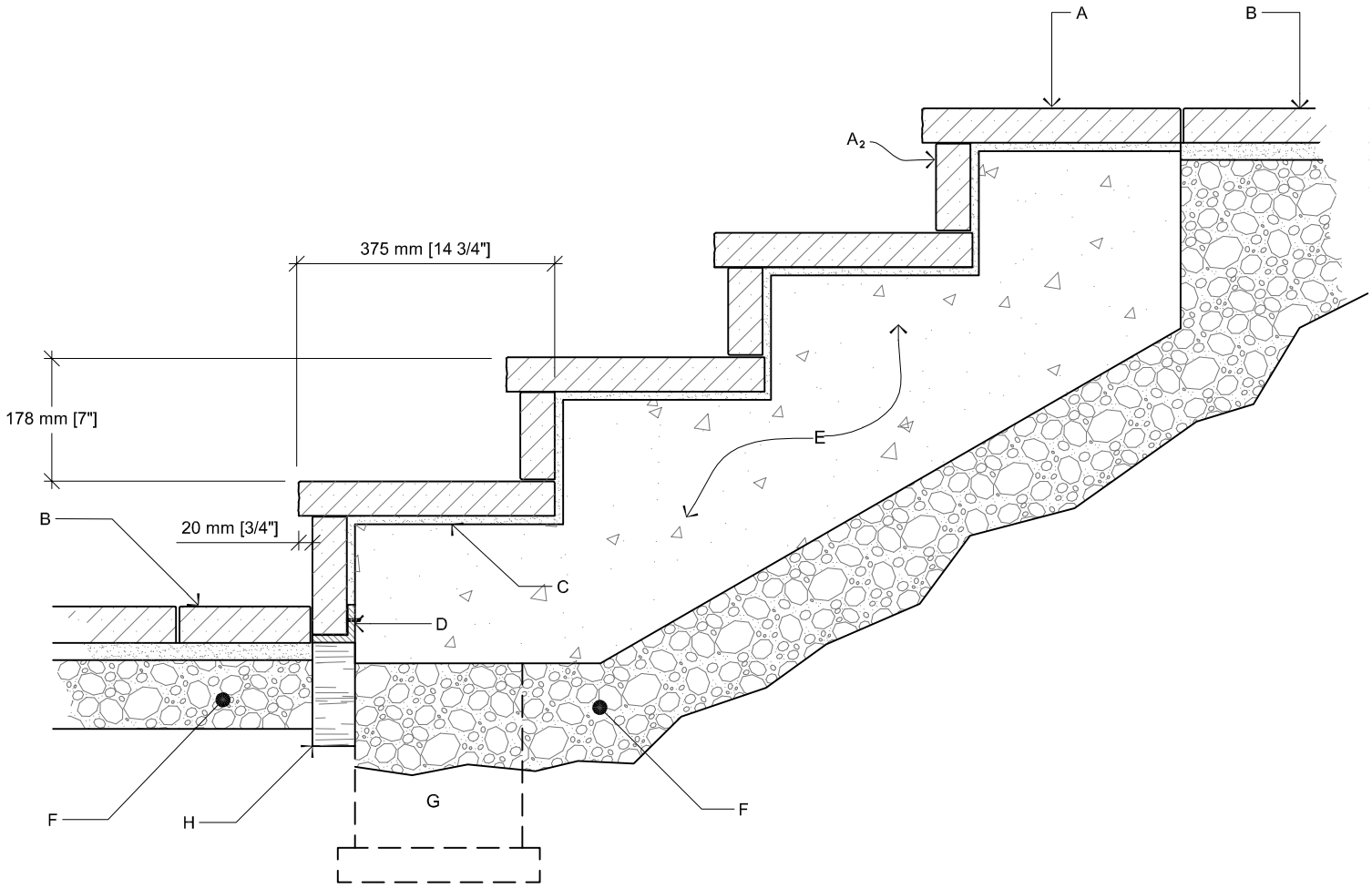
CROSS SECTION - CELTIK 15 INCH MODULAR STEP SYSTEM

Scale 1=20

June 22, 2010

E04E

STAIRS COVERING WITH MONDRIAN SLAB AND MONDRIAN CAPPING MODULE



A SPLIT MONDRIAN CAPPING MODULE

A_2 SAWN MONDRIAN CAPPING MODULE

B MONDRIAN SLAB (3 SIZES) ON 25 mm (1") LAYING BED

C 12 mm (½") MORTAR OR CONCRETE ADHESIVE

D STEEL IRON ANGLE FIXED AT THE CONCRETE SLAB WITH ANCHORINGS

E CONCRETE STAIRS

F COMPACTED GRANULAR BASE 0-20 mm (0-¾")

G CONCRETE SONOTUBE (SAFE FROM FREEZING)

H RIGID INSULATION

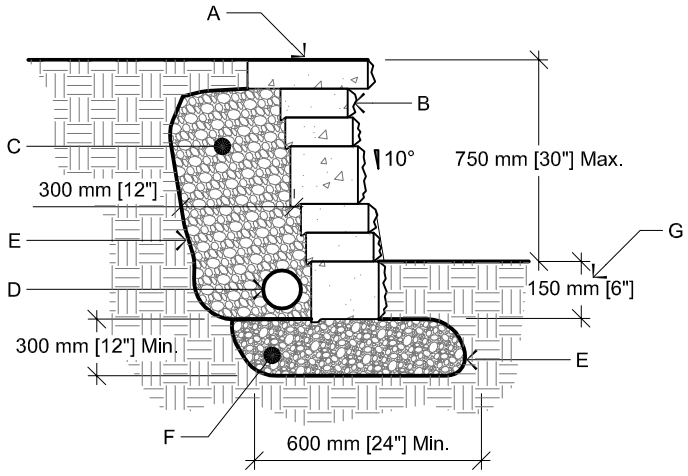
CROSS SECTION - STAIRS COVERING

Scale 1=10

June 22, 2010

E05E

GRAVITY WALLS: LAFAYETTE



A LAFAYETTE CAPPING MODULE

B LAFAYETTE WALL MODULES

C SINGLE-SIZED AGGREGATE 20 mm (3/4")

D PERFORATED DRAIN 100 mm Ø CONNECTED TO SERVICES

E GEOTEXTILE

F COMPACTED GRANULAR BASE 0-20 MM (0-¾") 300 MM (12") MINIMUM DEPTH

G MINIMUM BURIED: 150 mm (6")

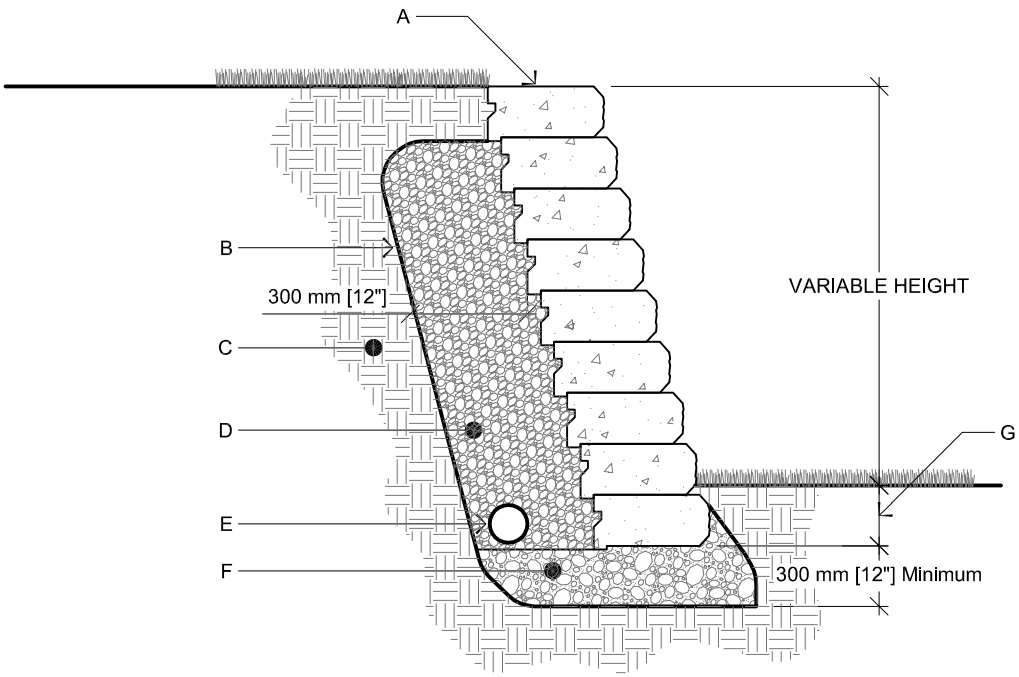
CROSS SECTION - GRAVITY WALL - LAFAYETTE

Scale 1=20

June 22, 2010

MG01E

GRAVITY WALLS
UNIVERSAL SLOPE BLOCK AND SPLIT FACE UNIVERSAL SLOPE BLOCK



A UNIVERSAL SLOPE MODULE

B GEOTEXTILE

C EXISTING SOIL

D SINGLE-SIZE AGGREGATES 20 mm (¾")

E PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

F COMPACTED GRANULAR BASE 0-20 mm (0-¾") 300 mm (12") MINIMUM DEPTH

G MINIMUM BURIED: 150 mm (6")

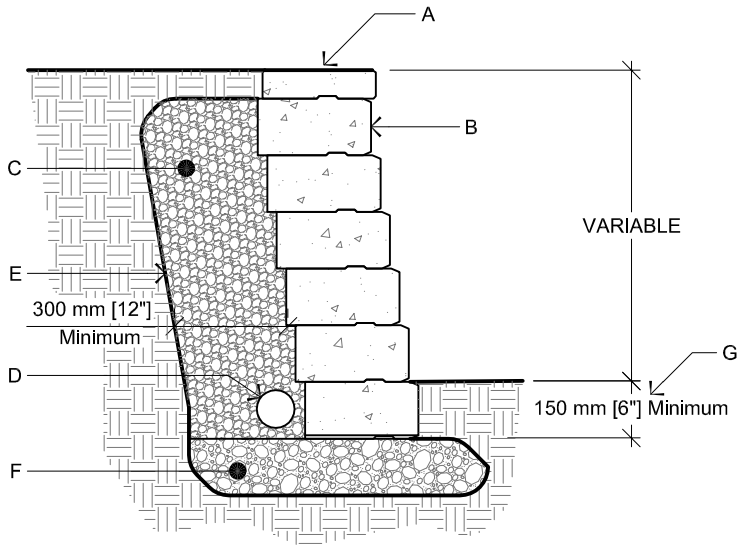
CROSS SECTION - GRAVITY WALL UNIVERSAL SLOPE BLOCK AND SPLIT FACE UNIVERSAL SLOPE BLOCK

Scale 1=20

June 22, 2010

MG02E

GRAVITY WALLS
TERRABLOCK II



A TERRABLOCK II CAPPING MODULE

B TERRABLOCK II WALL MODULES

C SINGLE-SIZE AGGREGATES 20 mm (¾")

D PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

E GEOTEXTILE

F COMPACTED GRANULAR BASE 0-20 mm (0-¾")
300 mm (12") MINIMUM DEPTH

G MINIMUM BURIED: 150 mm (6")

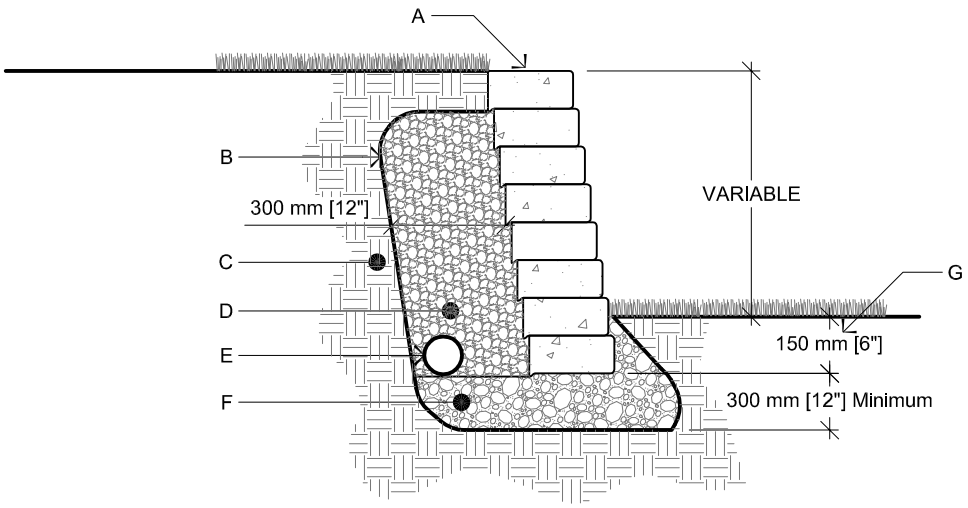
CROSS SECTION - GRAVITY WALL - TERRABLOCK II

Scale 1=20

June 22, 2010

MG03E

GRAVITY WALLS
OLD FORGE WALL



A OLD FORGE WALL MODULES

B GEOTEXTILE

C EXISTING SOIL

D SINGLE-SIZE AGGREGATES 20 mm (¾")

E PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

F COMPACTED GRANULAR BASE 0-20 mm (0-¾") 300 mm (12") MINIMUM DEPTH

G MINIMUM BURIED: 150 mm (6")

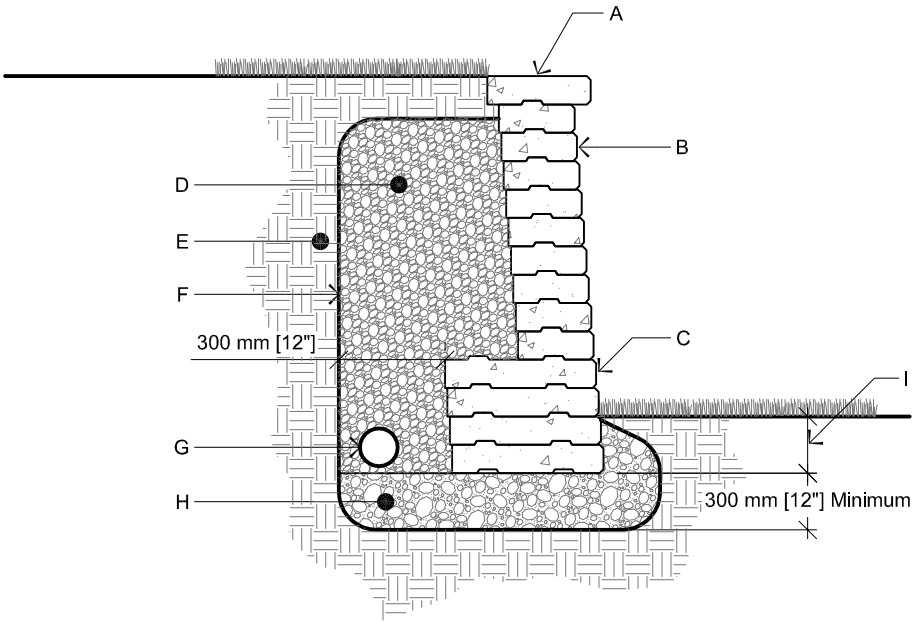
CROSS SECTION - GRAVITY WALL - OLD FORGE WALL

Scale 1=20

June 22, 2010

MG04E

GRAVITY WALLS
PISA SYSTEM (INSTALLATION METHOD A)



A PISA CAPPING MODULE

B REGULAR 200 mm (8") MODULE

C REGULAR 400 mm (16") MODULE

D SINGLE-SIZE AGGREGATES 20 mm (¾")

E EXISTING SOIL

F GEOTEXTILE

G PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

H COMPACTED GRANULAR BASE 0-20 mm (0-¾") 300 mm (12") MINIMUM DEPTH

I MINIMUM BURIED: 150 mm (6")

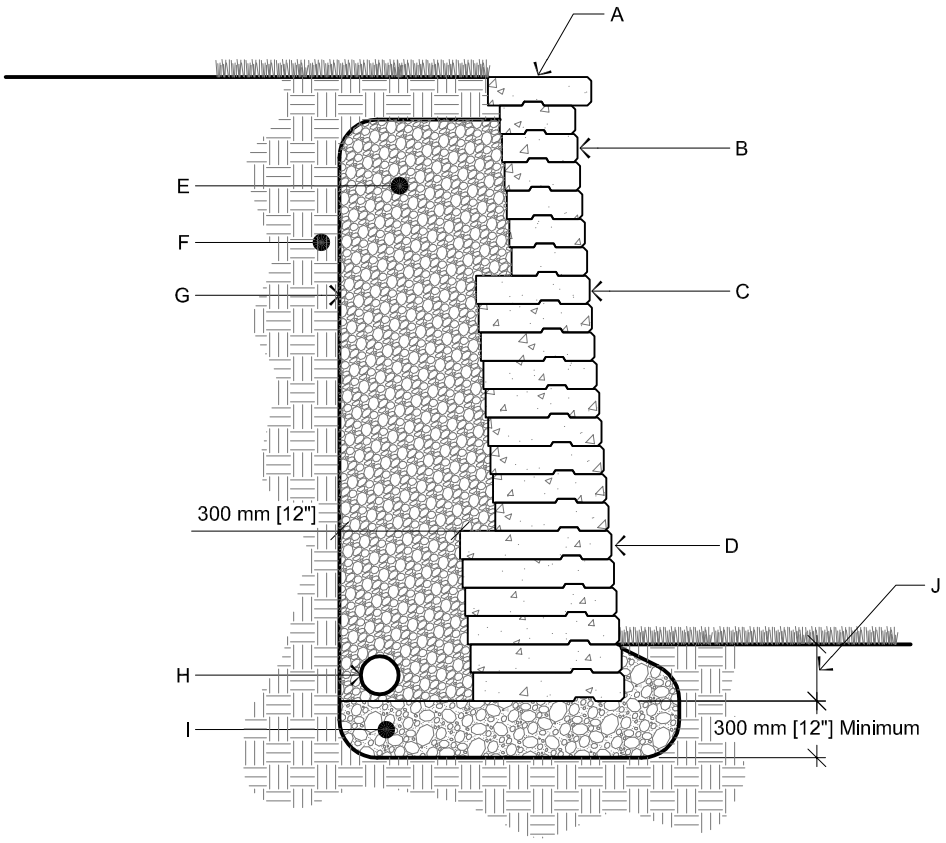
CROSS SECTION - GRAVITY WALL - PISA SYSTEM
INSTALLATION METHOD A

Scale 1=20

June 22, 2010

MG05AE

GRAVITY WALLS
PISA SYSTEM (INSTALLATION METHOD B)



A PISA CAPPING MODULE

B REGULAR 200 mm (8") MODULE

C REGULAR 300 mm (12") MODULE

D REGULAR 380 mm (15") MODULE

E SINGLE-SIZE AGGREGATES 20 mm (¾")

F EXISTING SOIL

G GEOTEXTILE

H PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

I COMPACTED GRANULAR BASE 0-20 mm (0-¾") 300 mm (12") MINIMUM DEPTH

J MINIMUM BURIED: 150 mm (6")

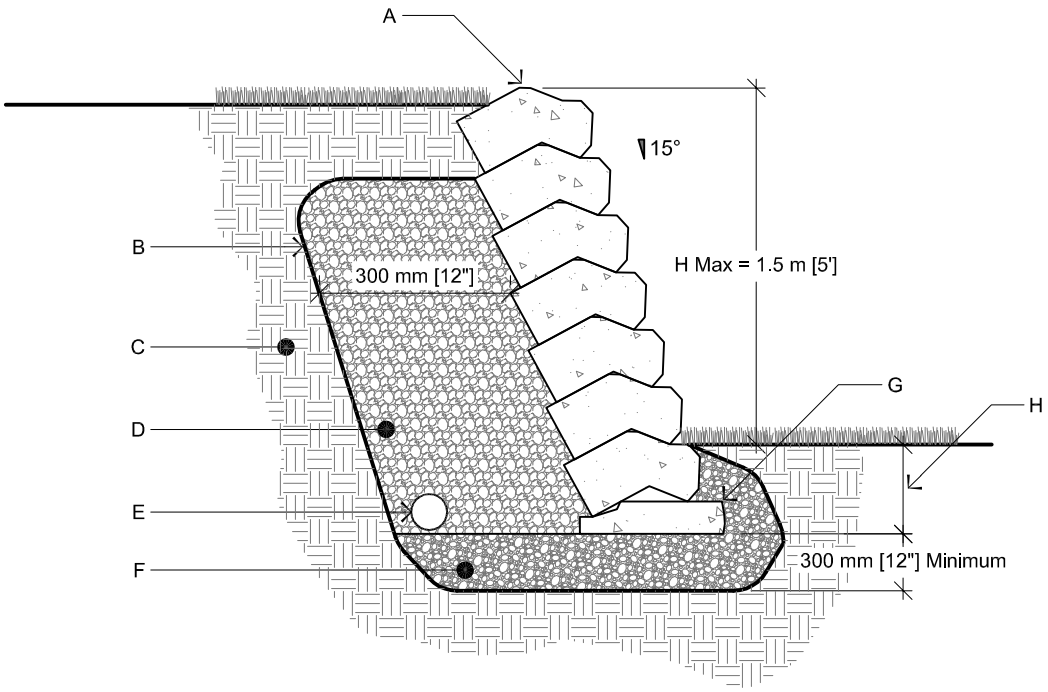
CROSS SECTION - GRAVITY WALL - PISA SYSTEM
INSTALLATION METHOD B

Scale 1=20

June 22, 2010

MG05BE

GRAVITY WALL : UNISLOPE I



A UNISLOPE WALL MODULE

B GEOTEXTILE

C EXISTING SOIL

D SINGLE-SIZE AGGREGATES 20 mm (¾")

E PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

F COMPACTED GRANULAR BASE 0-20 mm (0-¾")

G UNISLOPE FOUNDATION SLAB

H MINIMUM BURIED: 150 mm (6"))

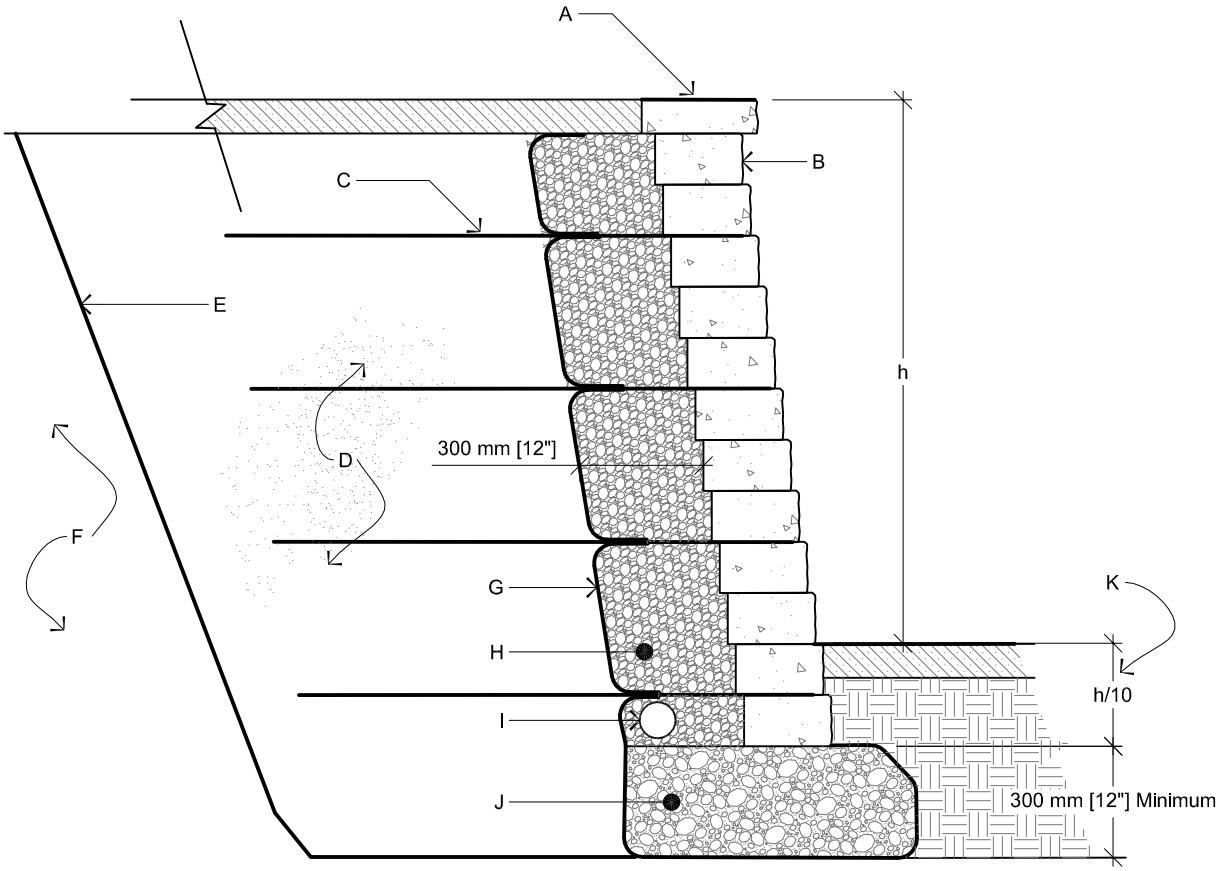
CROSS SECTION - GRAVITY WALL - UNISLOPE I

Scale 1=20

June 22, 2010

MG06E

REINFORCED RETAINING WALLS
KEYSTONE SYSTEM



A CAPPING MODULE: KEYSTONE SYSTEM

B WALL MODULE: KEYSTONE SYSTEM

C TYPICAL GEOGRID (SEE PERMACON TECHNICAL SERVICES)

D COMPACTED REINFORCED ZONE

E EXCAVATION SLOPE

F EXISTING SOIL

G GEOTEXTILE

H SINGLE-SIZE AGGREGATES 20 mm (¾")

I PERFORATED DRAIN 100 mm (4") Ø CONNECTED TO SERVICES

J COMPACTED GRANULAR BASE 0-20 mm (0-¾")

K MINIMUM BURIED, LARGEST: 200 mm (8") OR h/10

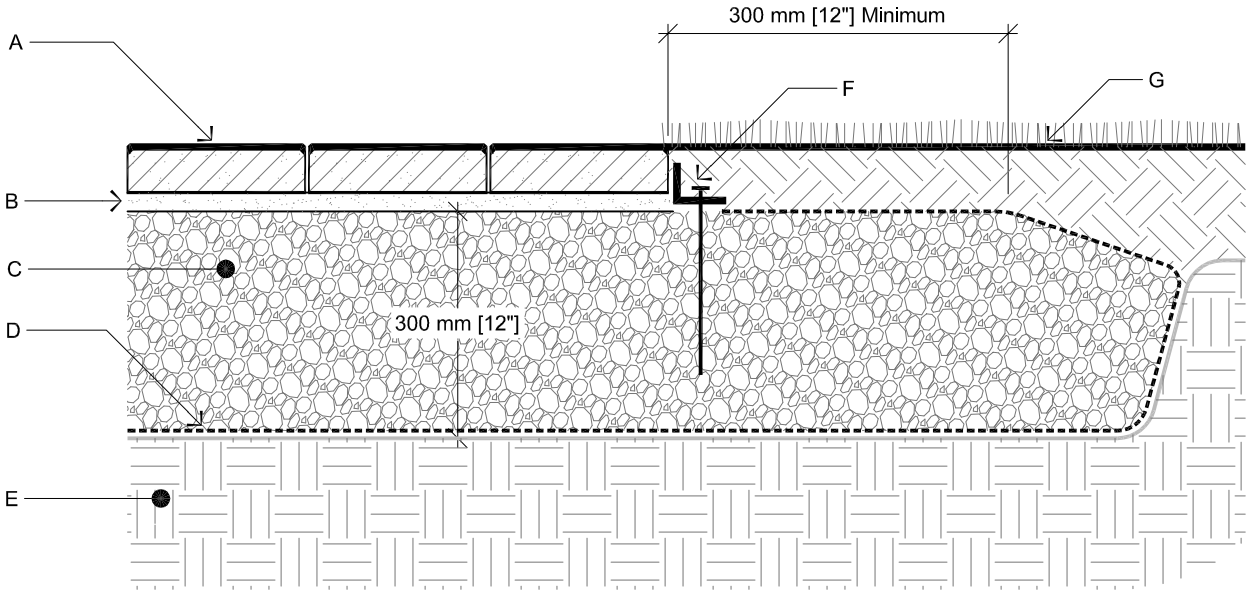
CROSS SECTION - REINFORCED RETAINING WALL

Scale 1=20

June 22, 2010

MR01E

LIGHT TRAFFIC OR PEDESTRIAN PAVERS



A CONCRETE PAVERS 60 mm or 80 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION (0-20 mm)

D GEOTEXTILE

E EXISTING SOIL

F PERMAPRO PAVING EDGE

G GRASS

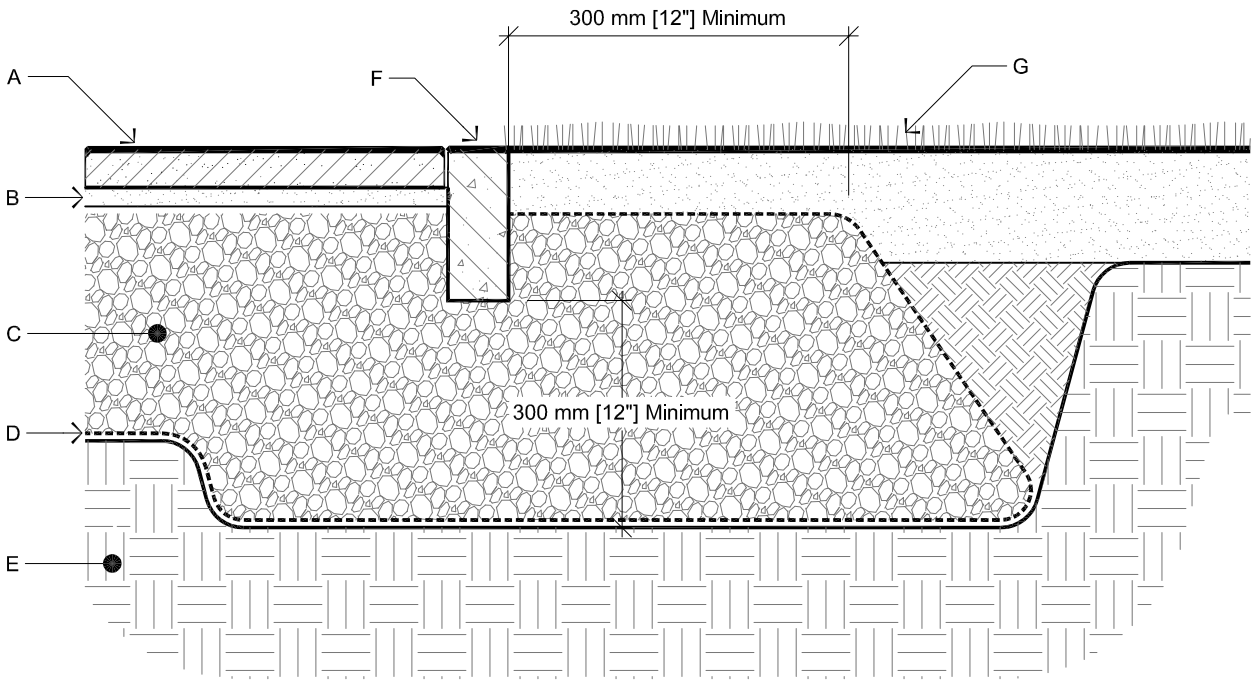
CROSS SECTION - PRECAST CONCRETE PAVERS AND PLASTIC EDGE
LIGHT TRAFFIC OR PEDESTRIAN

Scale 1=10

June 22, 2010

P01E

LIGHT TRAFFIC OR PEDESTRIAN PAVERS



A CONCRETE PAVERS 60 to 80 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION (0-20 mm)

D GEOTEXTILE

E EXISTING SOIL

F PRECAST CONCRETE CURB

G GRASS

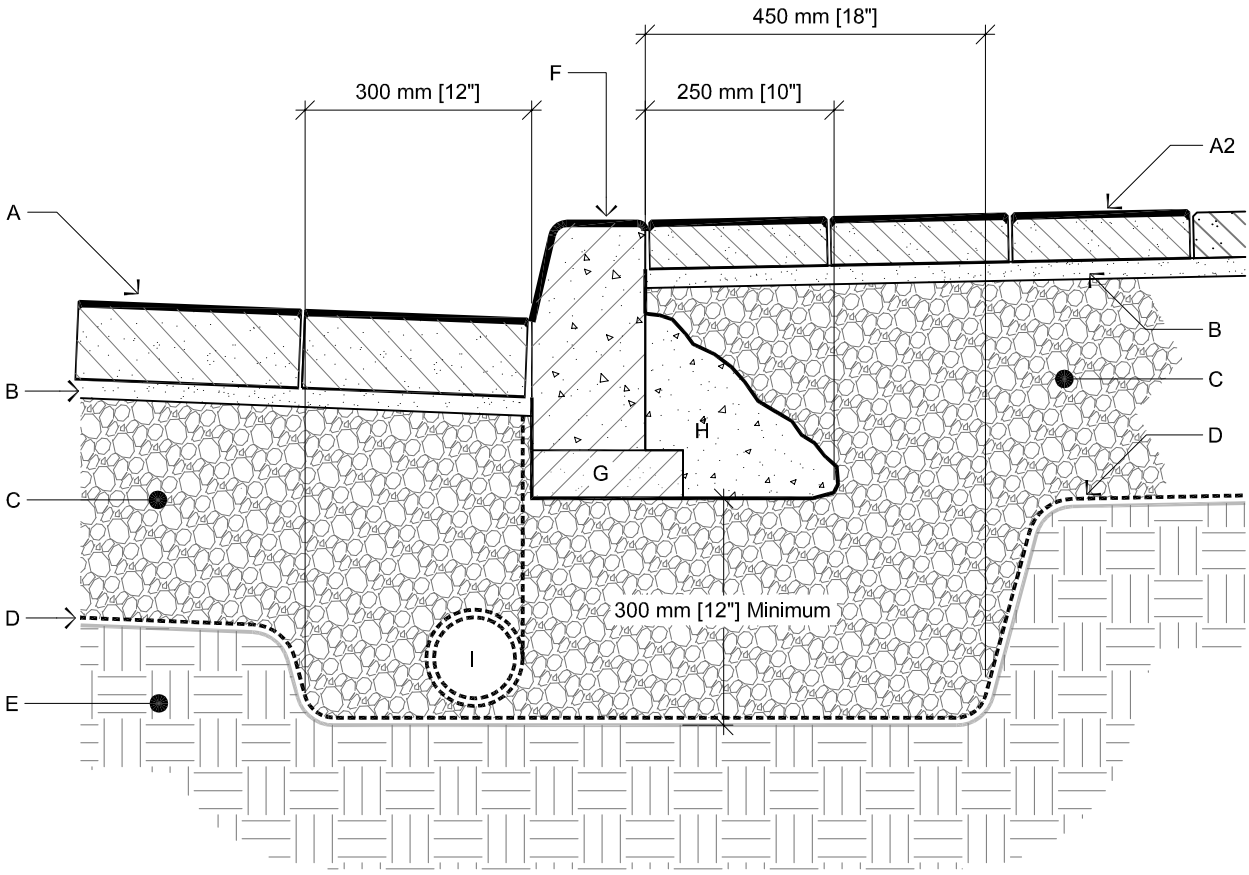
CROSS SECTION - PRECAST CONCRETE PAVERS AND CURBS
LIGHT TRAFFIC OR PEDESTRIAN

Scale 1=10

June 22, 2010

P03E

HEAVY TRAFFIC PAVERS



A CONCRETE PAVERS 100 mm

A2 CONCRETE PAVERS 80 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION (0-20 mm)

D GEOTEXTILE

E EXISTING SOIL

F PRECAST CONCRETE STREET CURB

G BACKUP BRICKS

H LEAN-MIX CONCRETE 32 MPa

I PRECAST DRAINAGE SYSTEM

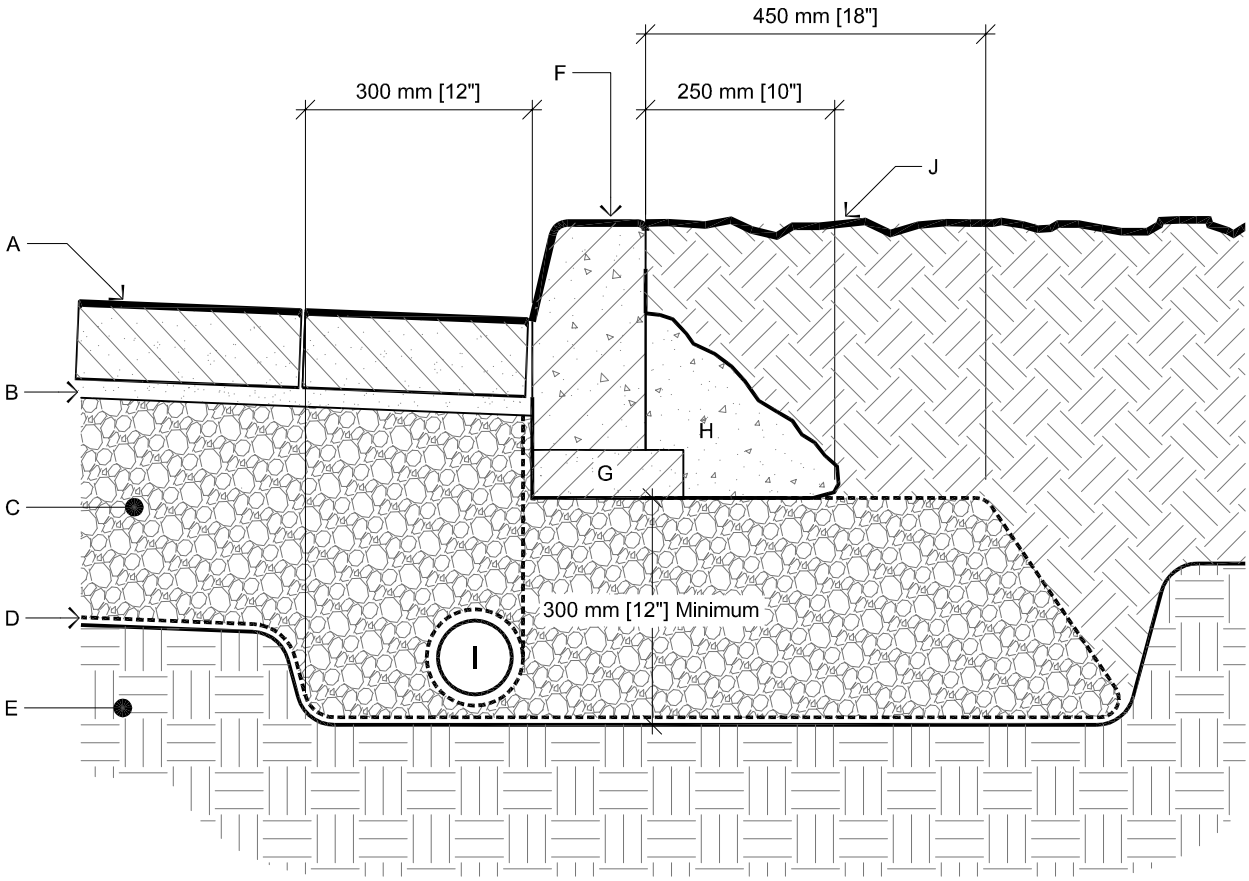
CROSS SECTION - PRECAST CONCRETE PAVERS AND STREET CURB
ROADWAY AND SIDEWALK - HEAVY TRAFFIC

Scale 1=10

June 22, 2010

P04E

HEAVY TRAFFIC PAVERS



A CONCRETE PAVERS 100 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION (0-20 mm)

D GEOTEXTILE

E EXISTING SOIL

F PRECAST CONCRETE STREET CURB

G BACKUP BRICKS

H LEAN-MIX CONCRETE 32 MPa

I PRECAST DRAINAGE SYSTEM

J PLANTING AREA

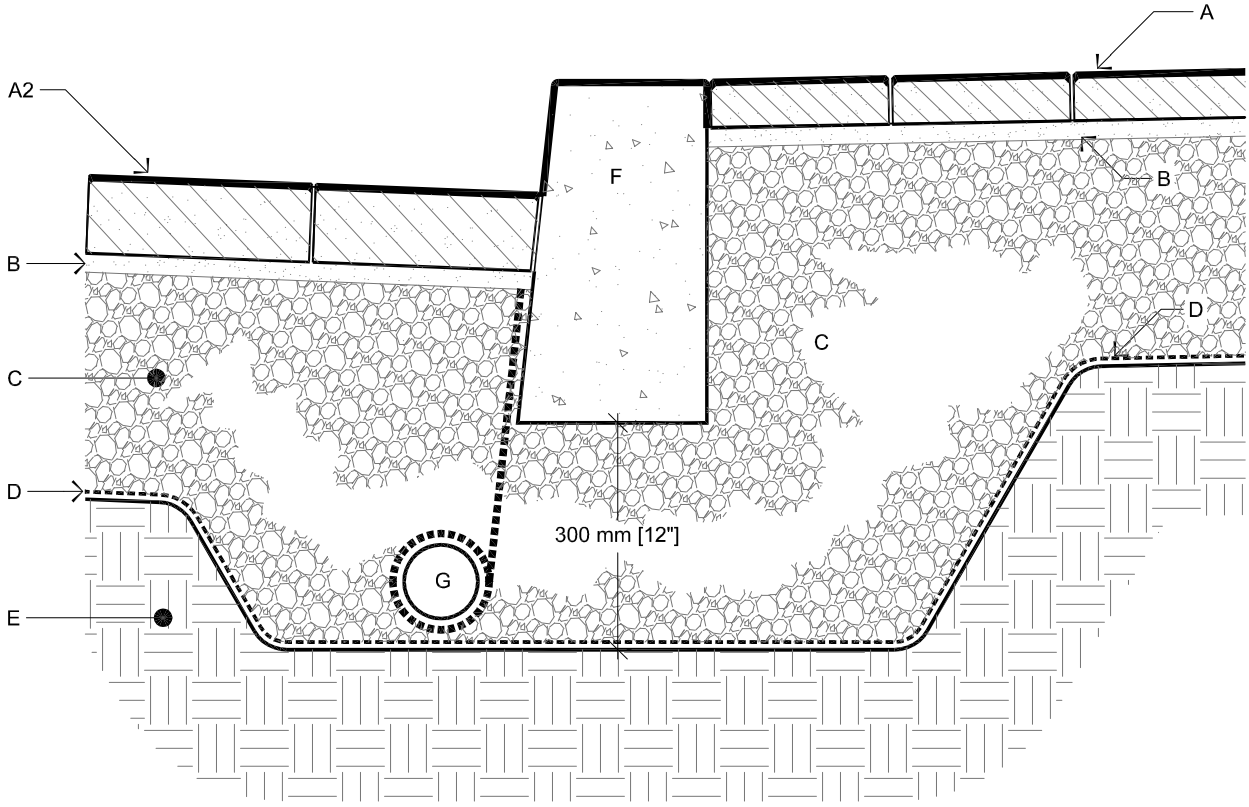
CROSS SECTION - PRECAST CONCRETE PAVERS AND STREET CURB
ROADWAY - HEAVY TRAFFIC

Scale 1=10

June 22, 2010

P05E

HEAVY TRAFFIC PAVERS



A CONCRETE PAVERS 80 mm
A2 CONCRETE PAVERS 100 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION (0-20 mm)

D GEOTEXTILE

E EXISTING SOIL

F CAST IN PLACE CONCRETE CURB

G PRECAST DRAINAGE SYSTEM

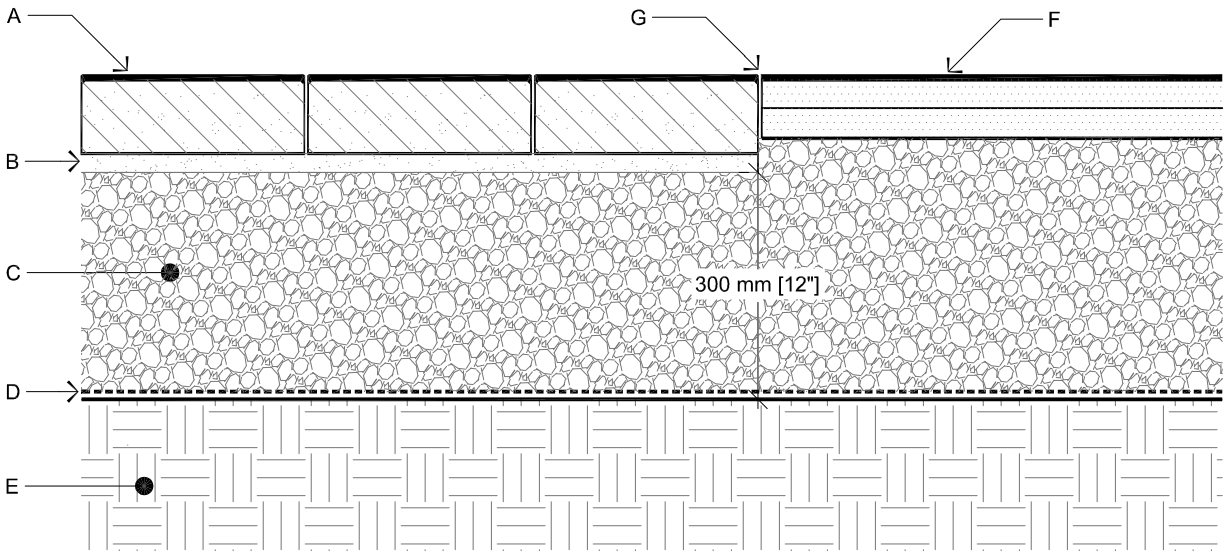
CROSS SECTION - PRECAST CONCRETE PAVERS AND STREET CURB
ROADWAY AND SIDEWALK - HEAVY TRAFFIC

Scale 1=10

June 22, 2010

P06E

HEAVY TRAFFIC PAVERS



A CONCRETE PAVERS 100 mm

B LAYING BED 25 mm

C COMPACTED GRANULAR FOUNDATION (0-20 mm)

D GEOTEXTILE

E EXISTING SOIL

F ASPHALT

G IN ORDER TO OBTAIN A STRAIT LINEAR JOINT, CUT THE SLATE WITH THE HELP OF A SAW PRIOR TO THE INSTALLATION OF THE CONCRETE PAVERS.

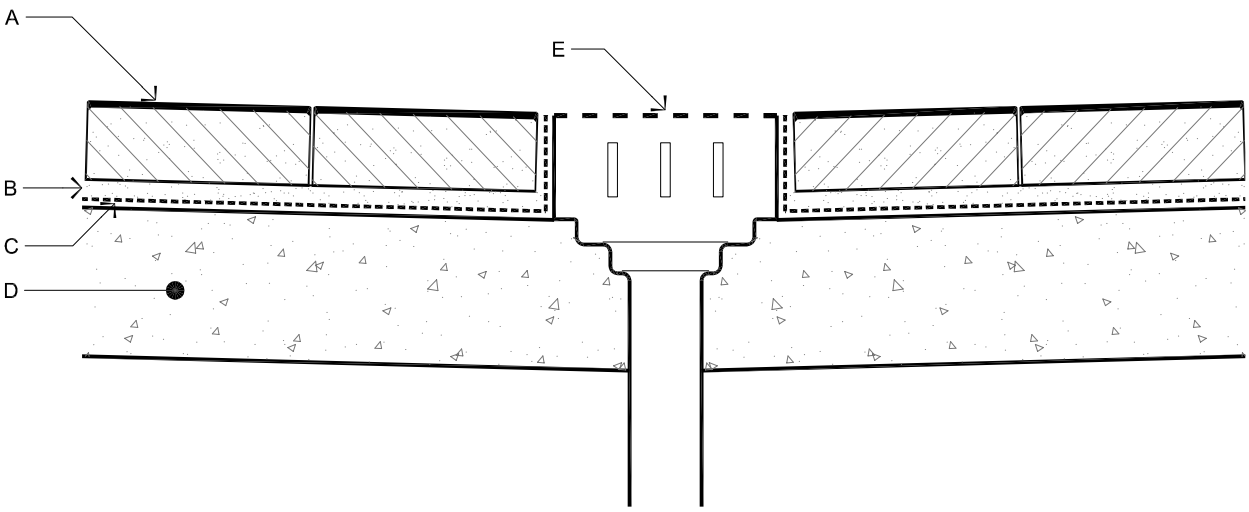
CROSS SECTION - PRECAST CONCRETE PAVERS WITH ASPHALT TRANSITION
ROADWAY - HEAVY TRAFFIC

Scale 1=10

June 22, 2010

P07E

LIGHT TRAFFIC OR PEDESTRIAN PAVERS



A CONCRETE PAVERS 60 OR 80 mm

B LAYING BED 25 mm

C GEOTEXTILE

D STRUCTURAL REINFORCED SLAB

E DRAIN

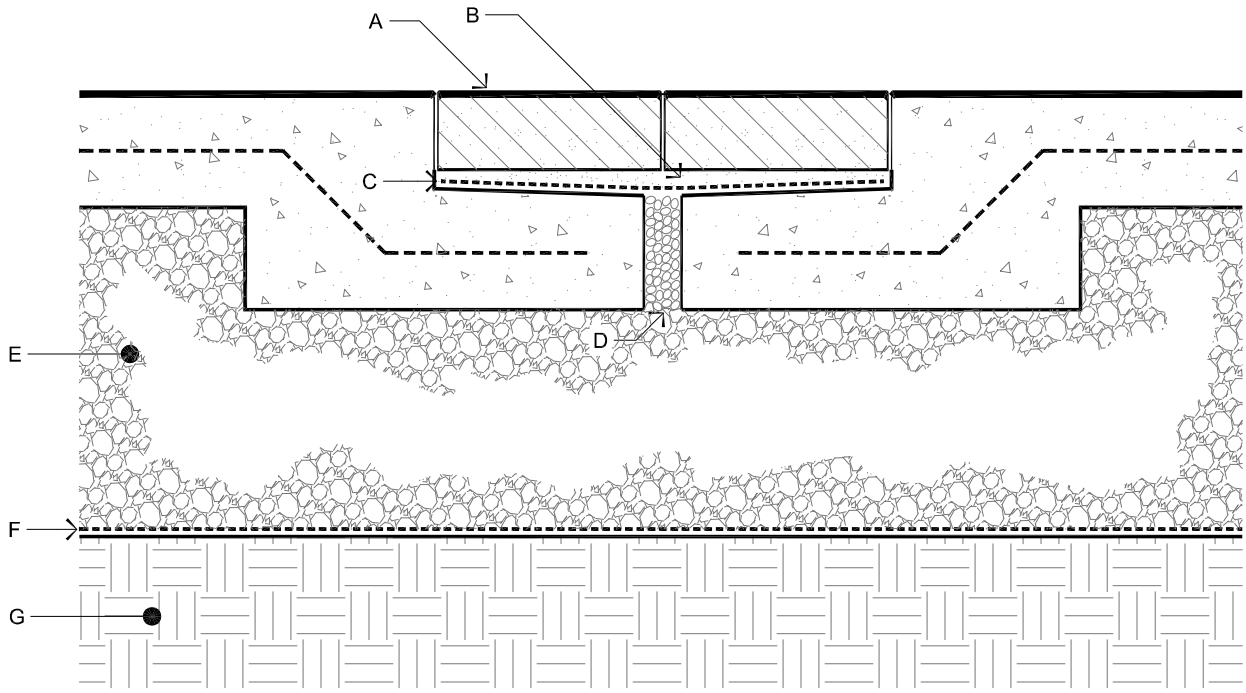
CROSS SECTION - PRECAST CONCRETE PAVERS ON STRUCTURAL CONCRETE SLAB
LIGHT TRAFFIC OR PEDESTRIAN

Scale 1=10

June 22, 2010

P08E

LIGHT TRAFFIC OR PEDESTRIAN PAVERS



A CONCRETE PAVERS 80 OR 100 mm

B LAYING BED 25 mm

C GEOTEXTILE

D PVC DRAINAGE PIPE 75 mm Ø WITH SINGLE-SIZE AGGREGATES 10 mm

E COMPACTED GRANULAR FOUNDATION (0-20 mm)

F GEOTEXTILE

G EXISTING SOIL

CROSS SECTION - PRECAST CONCRETE PAVERS ON STRUCTURAL CONCRETE SLAB - LIGHT TRAFFIC OR PEDESTRIAN

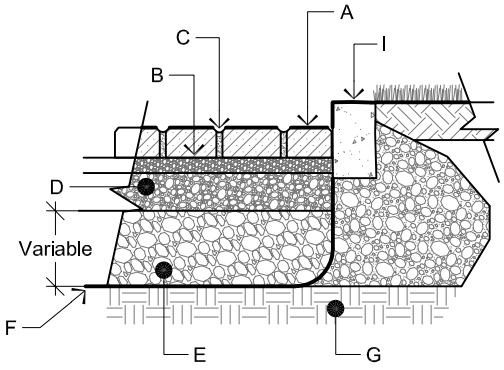
Scale 1=10

June 22, 2010

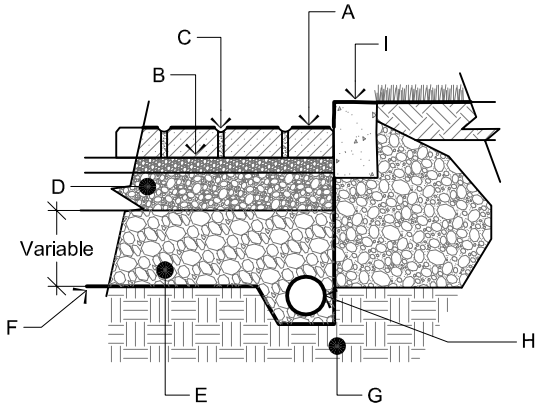
P09E

PERMEABLE PAVERS

TYPICAL CROSS SECTION SUBTERRA PAVERS
FULL INFILTRATION



TYPICAL CROSS SECTION SUBTERRA PAVERS
PARTIAL INFILTRATION



A SUBTERRA PAVERS

B LAYING BED 40 to 50 mm (1 ½ to 2") SINGLE-SIZED AGGREGATES 6 mm (¼")

C JOINT OPENING FILLING MATERIAL SINGLE-SIZED AGGREGATES 6 mm (¼")

D UPPER FOUNDATION 100 mm (4") SINGLE-SIZED AGGREGATES 12 mm (½")

E SUBBASE SINGLE-SIZED AGGREGATES 50 mm (2")

F GEOTEXTILE (OPTIONAL)

G SOIL SUBGRADE, ZERO SLOPE

H PERFORATED DRAIN PIPE SPACED AND SLOPED TO DRAIN WATER TO STORM SEWER SYSTEM OR RETENTION BASIN

I CONCRETE CURB

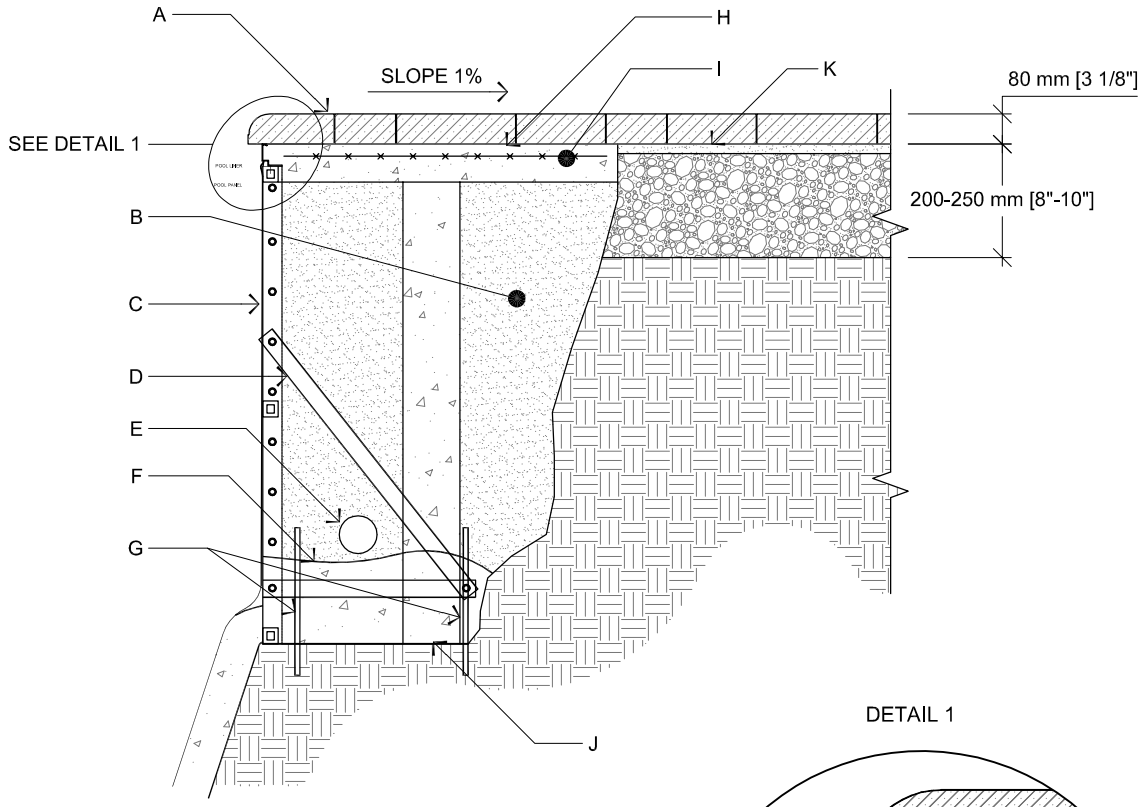
CROSS SECTION - SUBTERRA PAVERS
LIGHT TRAFFIC OR PEDESTRIAN - PERMEABLE APPLICATION

Scale 1=20

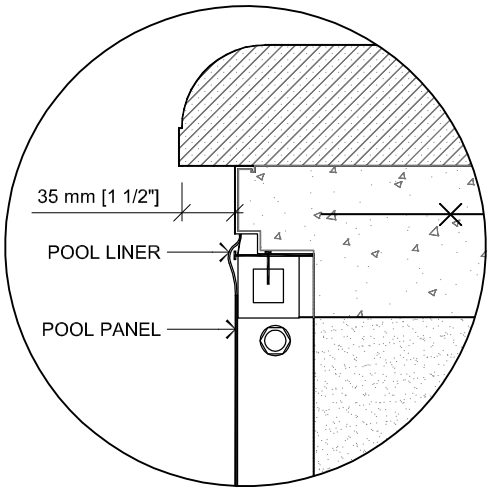
June 22, 2010

P13E

AQUASTYL PAVERS



DETAIL 1



A AQUASTYL (BORDER) AND PAVERS 80 mm (3 ⅛ ") PERMAPRO ADHESIVE OR MORTAR UNDER FIRST ROW

B SAND

C POOL PANEL

D REINFORCEMENT BARS

E PERFORATED DRAIN 100 mm (4")

F CONCRETE FOOTING 200 mm X 200 mm (8" X 8")

G METAL ROD 10 mm (3/8")

H CONCRETE DECK 1 m (± 39") WIDE X 100 mm (4") THICK

I WIRE MESH 150 mm X 150 mm (6" X 6") X 9 ML GAGE

J CONCRETE PILASTER (SONOTUBE) 150 mm (6") Ø

K BEDDING COURSE 25 mm (1")

CROSS SECTION - AQUASTYL PAVER - POOL COPING

Scale 1=20

June 22, 2010

P14E