

# UNI-GROUP U.S.A.

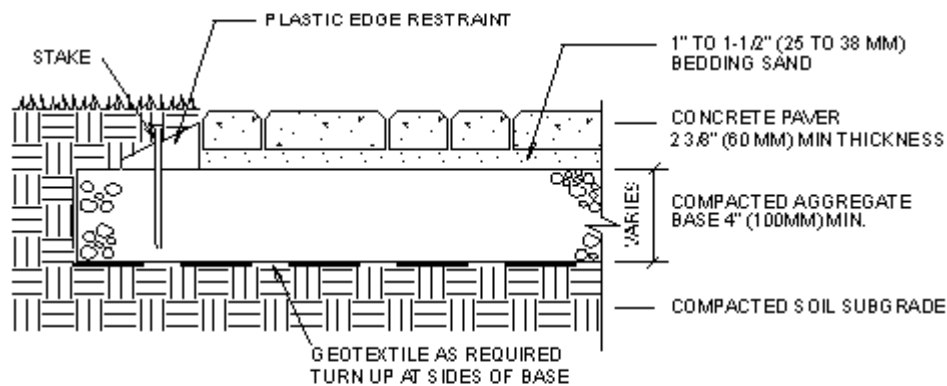
## *Interlocking Concrete Pavement Cross-Sections*

These cross-sections are provided as a guide for the design of interlocking concrete pavements. Actual design of the pavement will vary according to local regulations and standards, climate, available construction materials, design methods, soil conditions, and traffic loads. A qualified architect, landscape architect, and/or engineer should be consulted in concrete paver applications to ensure desired results.

Other cross-sections are available. If you would like to receive cross-sections as DWG files for CAD, please request these through our web site. Contact your UNI<sup>®</sup> Manufacturer or visit our web site for more information.

### PEDESTRIAN AND LIGHT-DUTY VEHICULAR APPLICATIONS

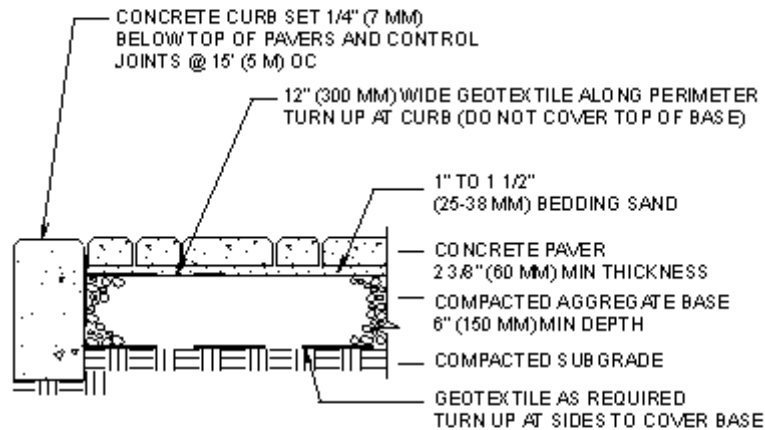
#### PATIO / WALK / DRIVEWAY WITH PLASTIC EDGE RESTRAINT



NOTE:

1. THICKNESS OF AGGREGATE BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES.
2. A MINIMUM 6" (150MM) BASE IS RECOMMENDED FOR DRIVEWAY APPLICATIONS.

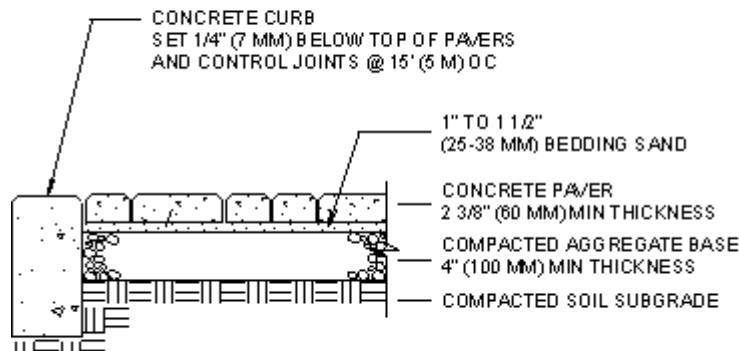
## RESIDENTIAL DRIVEWAY WITH CONCRETE EDGES



### NOTES:

1. THICKNESS OF AGGREGATE BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES.
2. CONCRETE PAVERS SHOULD BE PLACED ON A CEMENT TREATED BASE IF SOIL IS EXTREMELY WEAK OR CONSTANTLY SATURATED. PAVERS CAN BE OVERLAID ON EXISTING ASPHALT OR CONCRETE DRIVEWAYS.
3. PLASTIC, STEEL, ALUMINUM OR PRECAST CONCRETE, EDGING ALSO MAY BE USED.

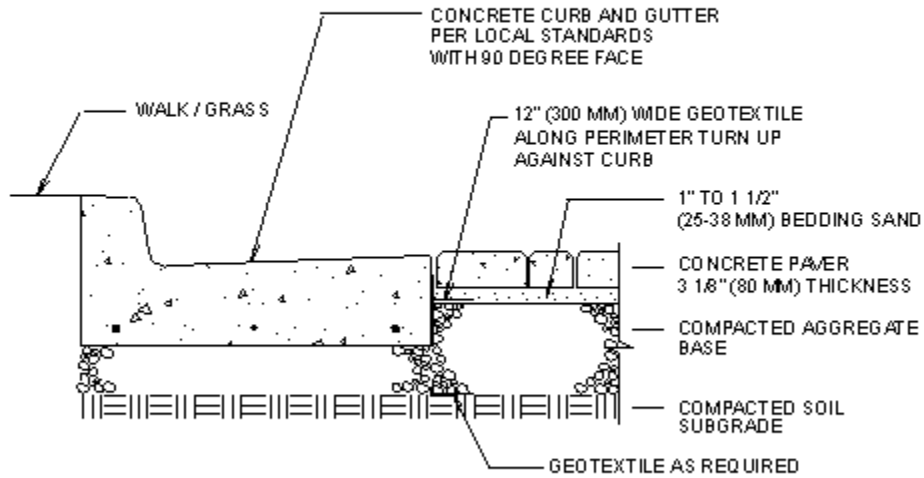
## PATIO / SIDEWALK / PLAZA ON COMPACTED AGGREGATE BASE



### NOTE:

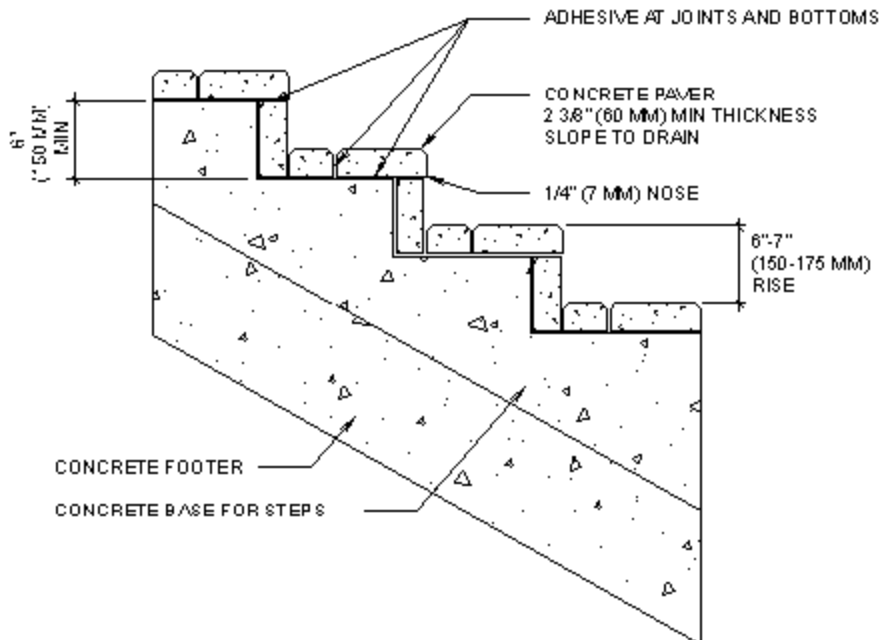
1. THICKNESS OF BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES

## CONCRETE CURB AND GUTTER WITH CONCRETE PAVERS



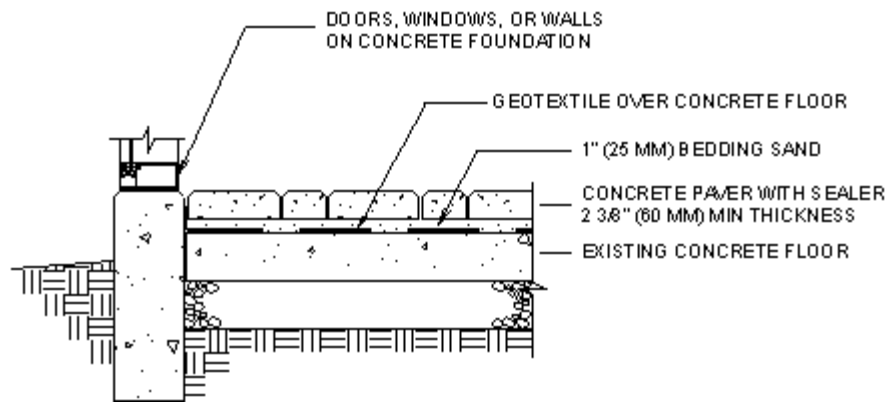
NOTE: DRAIN MAY BE NECESSARY IN SOIL SUBGRADE.

## STEPS WITH CONCRETE PAVERS



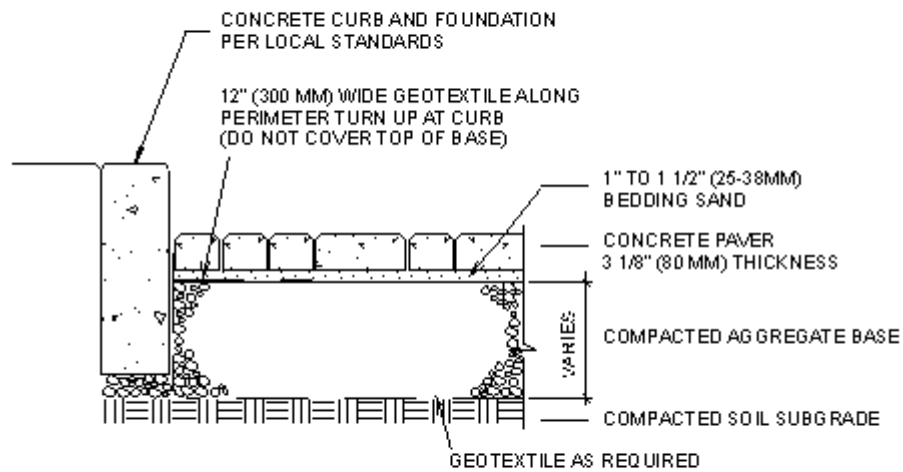
NOTE: USE OF MORTAR IS NOT RECOMMENDED EXCEPT IN NON-FREEZE-THAW AREAS.

## INTERIOR WITH CONCRETE BASE



## STREET AND PARKING APPLICATIONS

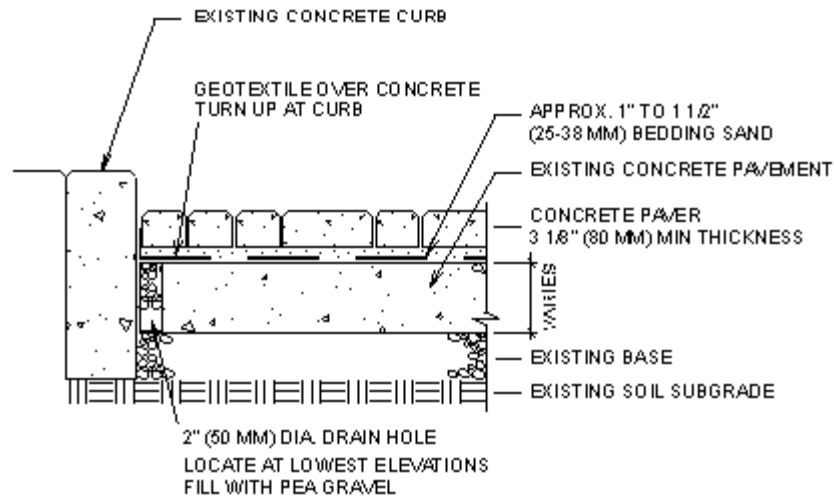
### STREET / PARKING LOT ON COMPACTED AGGREGATE BASE



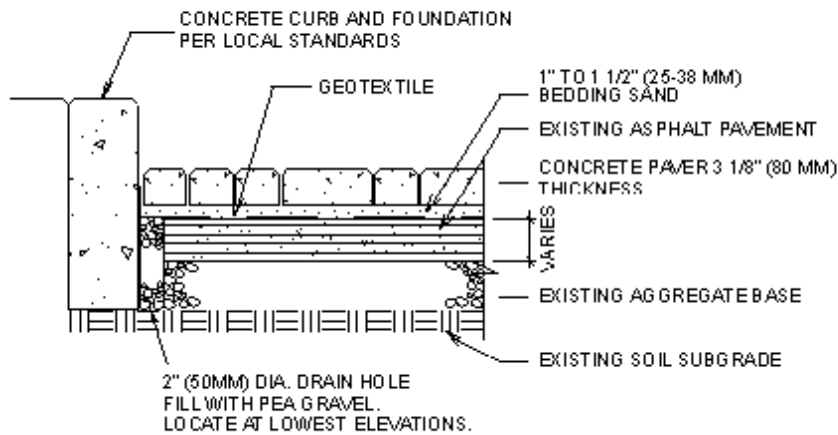
#### NOTES:

1. DRAIN MAY BE NECESSARY IN SLOW DRAINING SUBGRADE.
2. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE, AND SUBGRADE CONDITIONS. COLDER CLIMATES AND WEAK SOILS MAY REQUIRE THICKER BASES.
3. DO NOT COVER ENTIRE TOP OF AG GREGATE BASE WITH GEOTEXTILE.

## STREET / PARKING LOT OVERLAY ON EXISTING CONCRETE PAVEMENT

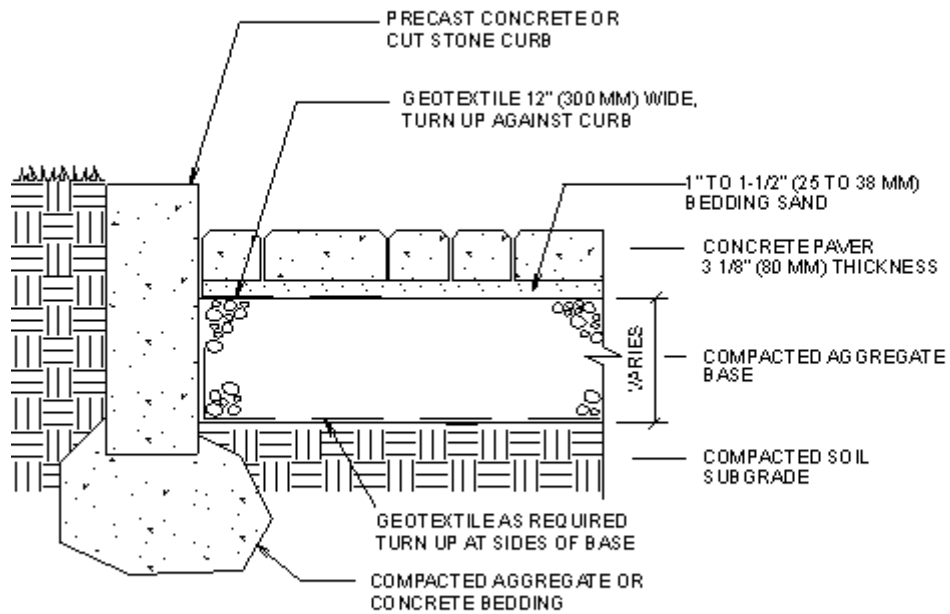


## STREET / PARKING LOT OVERLAY ON EXISTING ASPHALT PAVEMENT



NOTE: DRAIN BEDDING SAND OF EXCESS MOISTURE THROUGH PAVEMENT AT LOWEST POINTS AS SHOWN OR AT CATCH BASIN(S).

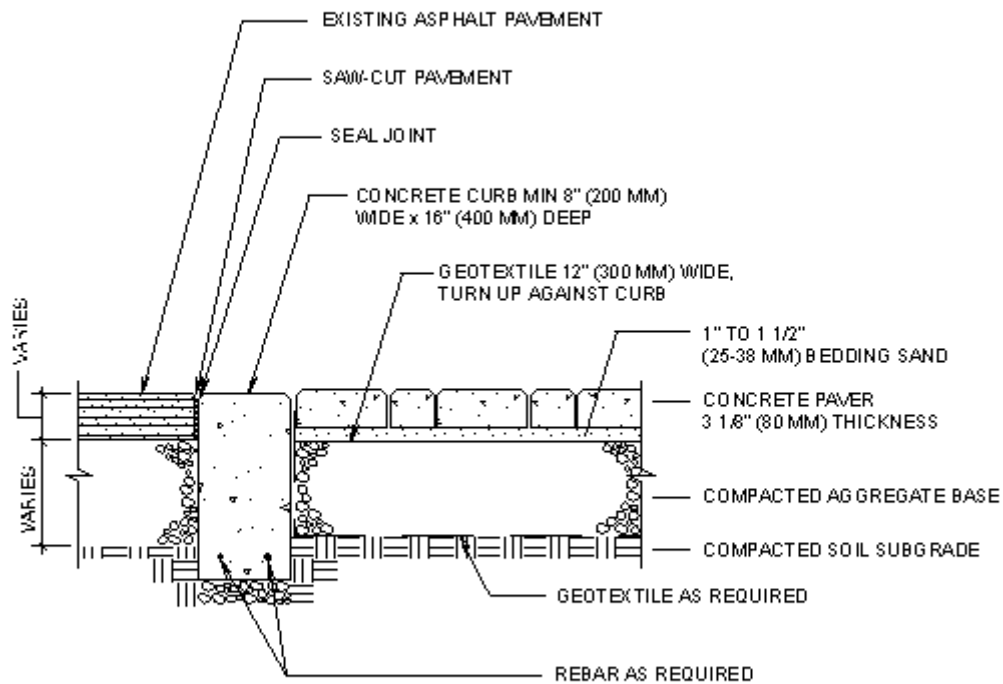
## STREET PAVEMENT WITH FULL-DEPTH PRECAST CONCRETE OR CUT STONE CURB



**NOTE:**

1. EDGE RESTRAINT SHOULD BE MINIMUM 6" (150 MM) WIDE FOR STREET APPLICATIONS.
2. EDGE RESTRAINT MAY BE EVEN WITH TOP OF CONCRETE PAVERS.
3. THICKNESS OF AGGREGATE BASE WILL VARY WITH SUBGRADE CONDITIONS AND CLIMATE. COLDER CLIMATES MAY REQUIRE THICKER BASES.

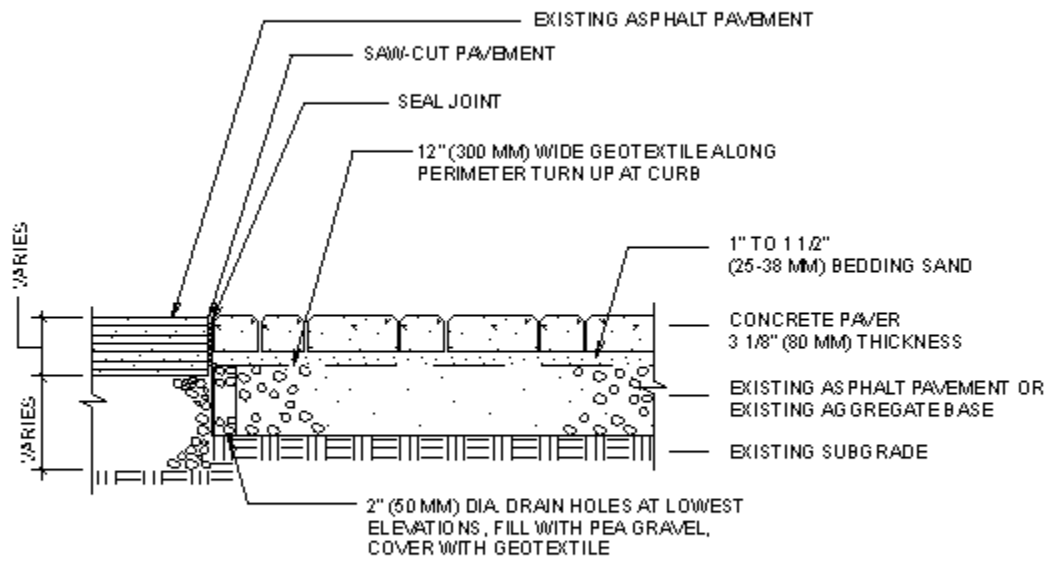
## CROSSWALK ON COMPACTED AGGREGATE BASE



**NOTE:**

1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE, AND SUBGRADE CONDITIONS.
2. CONCRETE CURBS DO NOT DEFLECT TO THE SAME DEPTH AS PAVERS OR EXISTING ASPHALT. THIS DETAIL IS NOT RECOMMENDED FOR OTHER THAN LOW VOLUME RESIDENTIAL STREETS.
3. THICKENING ASPHALT PAVEMENT ADJACENT TO CONCRETE CURB IS RECOMMENDED.

## CROSSWALK ON ASPHALT OR CEMENT TREATED BASE



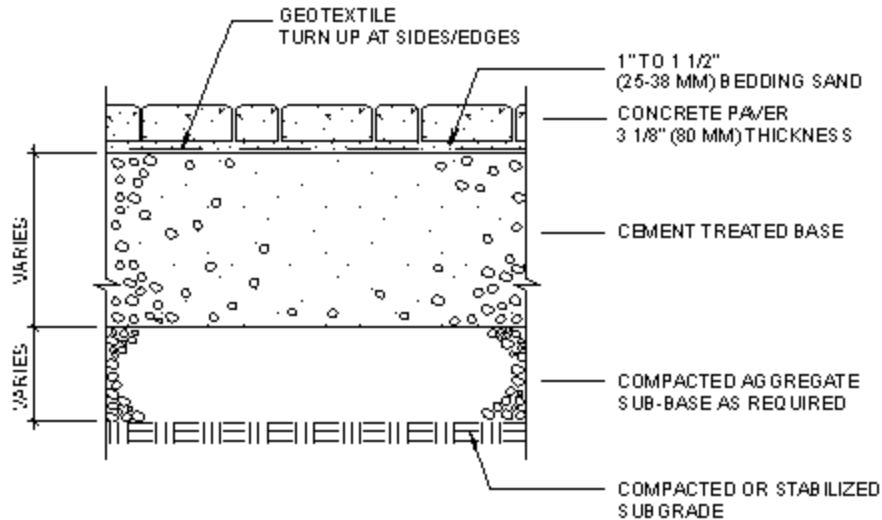
### NOTES:

1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE, AND SUBGRADE. COLDER CLIMATES AND WEAK SOIL MAY REQUIRE THICKER BASES.
2. BOTTOM ELEVATION OF EXISTING ASPHALT PAVEMENT MUST BE EVEN OR BELOW BEDDING SAND.
3. CONCRETE BEAMS AT ENDS OF PAVEMENT MAY BE NECESSARY IF ASPHALT IS SUBJECT TO RUTTING.
4. DO NOT USE DRAIN HOLES TO SUBGRADE WHEN WATER TABLE IS LESS THAN 2' (0.6 M) FROM TOP OF SUBGRADE. DRAIN TO CATCH BASINS.



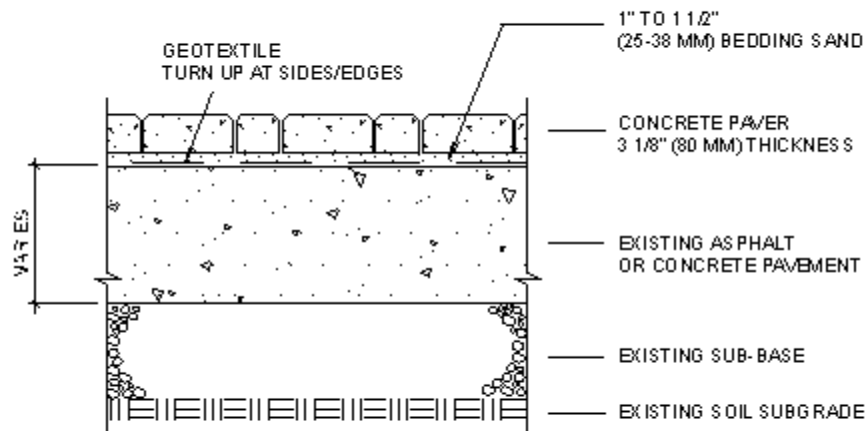
# HEAVY-DUTY AND INDUSTRIAL APPLICATIONS

## PORT / INDUSTRIAL PAVEMENT WITH CEMENT TREATED BASE



NOTE: BASE, SUB-BASE, AND SUBGRADE THICKNESS VARY WITH LOADS, SUBGRADE STRENGTH, AND CLIMATE.

## PORT / INDUSTRIAL PAVEMENT ON EXISTING ASPHALT OR CONCRETE

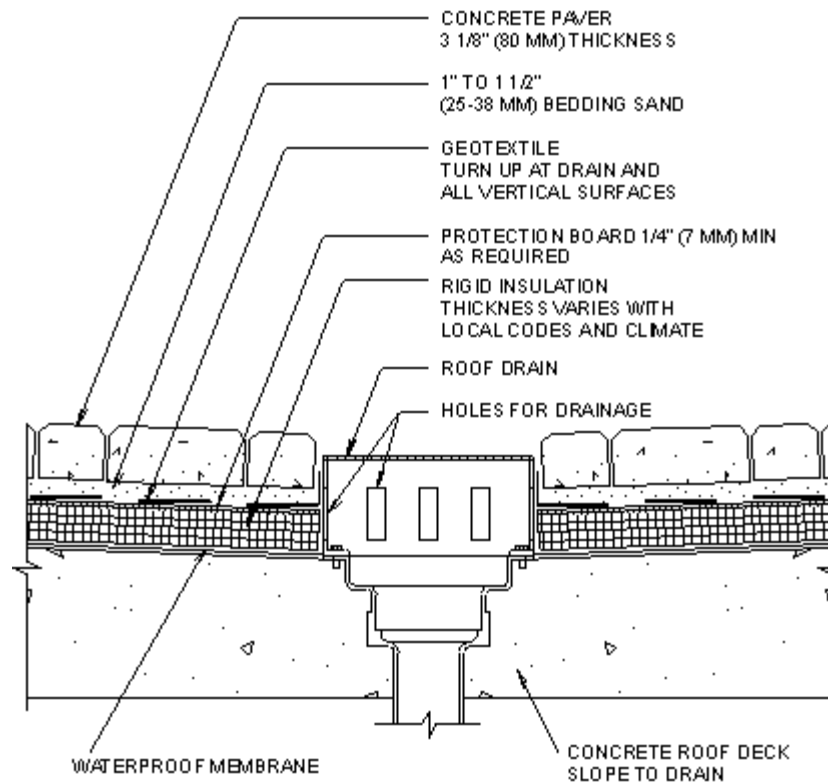


NOTE:

1. EXISTING ASPHALT OR CONCRETE PAVEMENT SHALL BE THOROUGHLY INSPECTED FOR AREAS IN NEED OF PATCHING OR REPLACEMENT. CONDUCT ALL REPAIRS AND FILL ALL CRACKS GREATER THAN 1/4" (7 MM) WIDE PRIOR TO PLACING GEO TEXTILE, SAND, AND PAVERS.
2. PROVIDE DRAINAGE OF SAND LAYER THROUGH PEAGRAVEL-FILLED WEEP HOLE(S) OR CATCH BASIN(S).

## SPECIAL APPLICATIONS & DETAILS

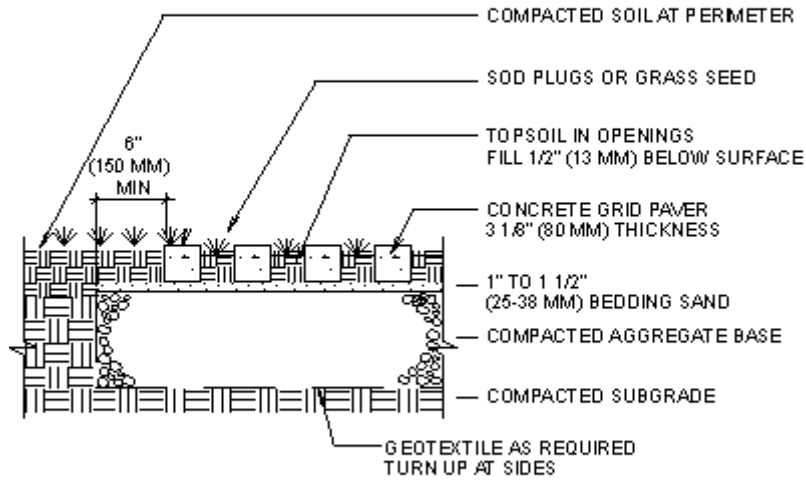
### PARKING GARAGE OVER INHABITED/ UNINHABITED SPACE - DRAIN



**NOTES:**

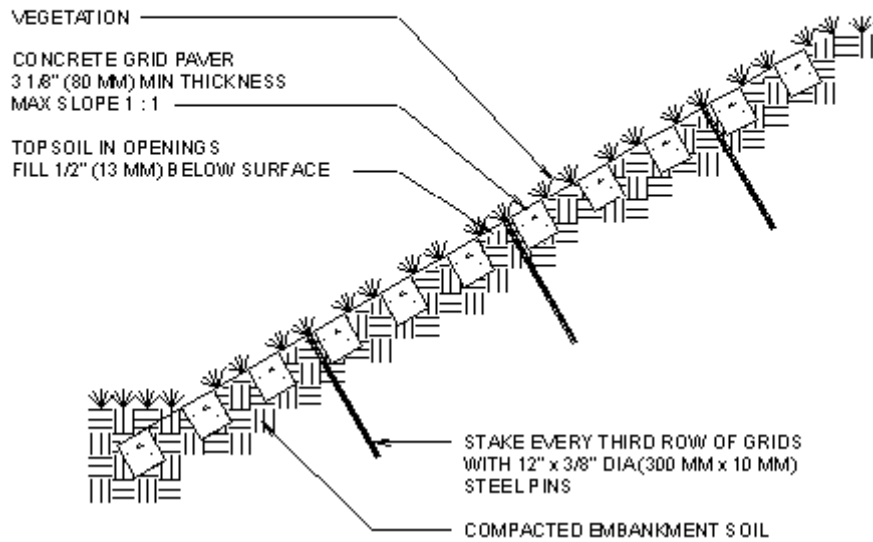
1. PROTECTION BOARD AND INSULATION MUST WITHSTAND STATIC AND DYNAMIC VEHICULAR LOADS.
2. INSULATION MAY BE EXCLUDED FOR SOME APPLICATIONS OVER UNINHABITED SPACE.

## CONCRETE GRID PAVERS-FIRELANE, DRIVEWAY & INTERMITTANT PARKING

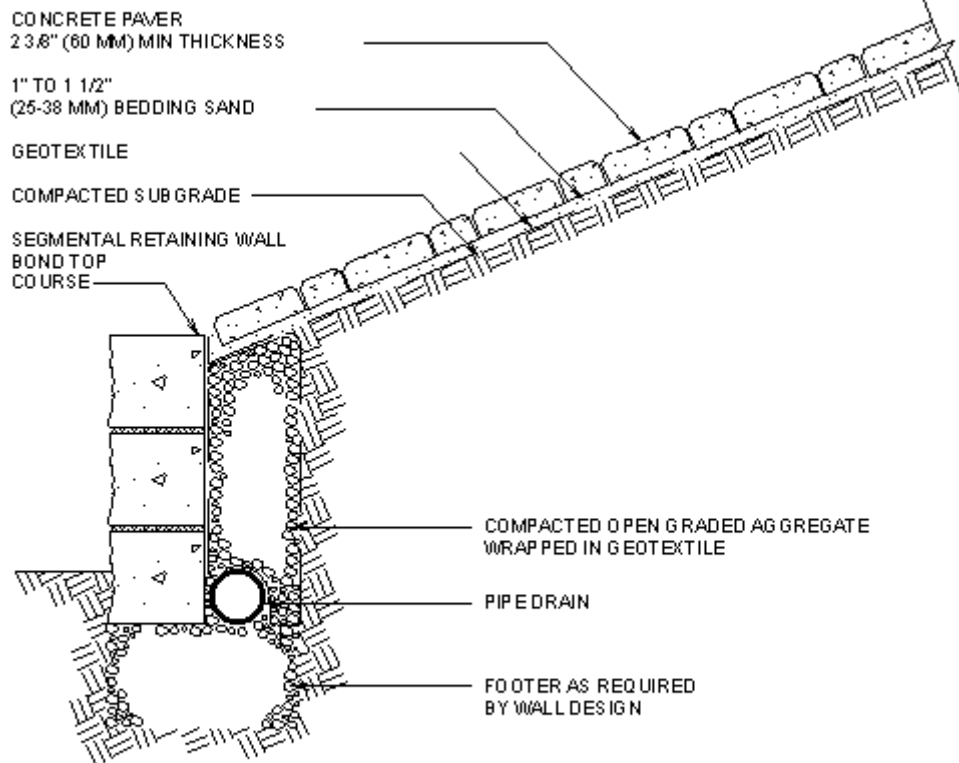


- NOTE:
1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE, AND SUBGRADE.
  2. MINIMUM BASE THICKNESS: 6" (150 MM) RESIDENTIAL DRIVEWAYS,  
8" (200MM) FIRELANES & PARKING LOTS.

## SLOPE PROTECTION CONCRETE GRIDS



## SLOPE PROTECTION CONCRETE PAVERS



**NOTE:**

1. MAXIMUM SLOPE SHOULD NOT EXCEED ANGLE OF REPOSE FOR BEDDING SAND.
2. PROVIDE EDGE RESTRAINTS ON SIDES OF INSTALLATION.
3. ENGINEERING OF THE SEGMENTAL RETAINING WALL IS REQUIRED WHEN HEIGHT EXCEEDS 4' (1.0 M).

*References: ICPI Zaphers*