GENERAL NOTES

1. REFER TO BC-776M FOR MATERIAL NOTES.
2. CONSTRUCTION SPECIFICATIONS ARE REQUIRED:
   PROVIDE MATERIALS AND FABRICATION IN ACCORDANCE WITH THE CURRENT VERSION OF
   THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408,
   PROVIDE SPECIFICATIONS FOR THE PRECAST CONCRETE PANELS ARE DESIGNED FOR A WIND PRESSURE OF 28 PSF.
3. DESIGN PANEL HEIGHT IS TO BE THE ACTUAL PANEL HEIGHT ROUNDED UP TO
   THE NEXT HIGHEST INCREMENT OF WALL HEIGHT SHOWN ON THE DESIGN TABLES.
4. THE DESIGN POST SPACING (CENTER TO CENTER OF POST) IS TO BE THE ACTUAL
   POST SPACING ROUNDED UP TO THE NEXT HIGHEST INCREMENT OF POST SPACING
   SHOWN ON THE DESIGN TABLES.
5. PANEL HEIGHTS ARE PERMITTED TO BE ANY DIMENSION REQUIRED, BUT ARE NOT
   PERMITTED TO BE LESS THAN 6" OR GREATER THAN 2'-0".
6. HORIZONTAL PANEL JOINTS:
   PROVIDE STACKED PANELS WHEN THE WALL HEIGHT EXCEEDS 9'-0".
7. GROUND MOUNTED SOUND BARRIER WALLS MUST BE PROTECTED BY CONCRETE BARRIERS UNLESS
   THE WALL IS LOCATED BEYOND THE HORIZONTAL CLEAR ZONE OR IF THE BOTTOM OF PANELS
   IS NOT PERMITTED TO BE LESS THAN 6" OR GREATER THAN 2'-0".
8. PROVIDE EPOXY COATED OR GALVANIZED REINFORCEMENT BARS IN THE PANELS
   ARE A MINIMUM OF 5'-0" ABOVE THE EDGE OF PAVEMENT.
9. PROVIDE UNIFORM STEPS.
10. DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.
11. REINFORCEMENT IN SOME SECTIONS IS NOT SHOWN FOR CLARITY.
12. FOR ADDITIONAL INFORMATION REFER TO BC-776M.

MATERIAL NOTES

1. REFER TO BC-776M FOR MATERIAL NOTES.

DESIGN TABLE NOTES

1. DESIGN LOADS SHOWN FOR THE PRECAST CONCRETE PANELS ARE DEVELOPED
   FOR A WIND PRESSURE OF 28 PSF. USE THE INFORMATION SHOWN IN THE
   TABLES FOR ALL PRECAST PanelS.
2. DESIGN PANEL HEIGHT IS TO BE THE ACTUAL PANEL HEIGHT ROUNDED UP TO
   THE NEXT HIGHEST INCREMENT OF POST SPACING SHOWN ON THE DESIGN TABLES.
3. THE DESIGN POST SPACING CENTER TO CENTER OF POST IS TO BE THE ACTUAL
   POST SPACING ROUNDED UP TO THE NEXT HIGHEST INCREMENT OF POST SPACING
   SHOWN ON THE DESIGN TABLES.
4. THE DESIGN WALL HEIGHT IS TO BE THE ACTUAL WALL HEIGHT ROUNDED UP TO
   THE NEXT HIGHEST INCREMENT OF WALL HEIGHT SHOWN ON THE DESIGN TABLES.
5. PANEL HEIGHTS ARE PERMITTED TO BE ANY DIMENSION REQUIRED, BUT ARE NOT
   PERMITTED TO BE LESS THAN 6" OR GREATER THAN 2'-0".
6. PROVIDE EPOXY COATED OR GALVANIZED REINFORCEMENT BARS IN THE PANELS
   ARE A MINIMUM OF 5'-0" ABOVE THE EDGE OF PAVEMENT.
7. GROUND MOUNTED SOUND BARRIER WALLS MUST BE PROTECTED BY CONCRETE BARRIERS UNLESS
   THE WALL IS LOCATED BEYOND THE HORIZONTAL CLEAR ZONE OR IF THE BOTTOM OF PANELS
   IS NOT PERMITTED TO BE LESS THAN 6" OR GREATER THAN 2'-0".
8. PROVIDE UNIFORM STEPS.
9. DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68 DEGREES F.
10. REINFORCEMENT IN SOME SECTIONS IS NOT SHOWN FOR CLARITY.
11. FOR ADDITIONAL INFORMATION REFER TO BC-776M.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

STANDARD
GROUND MOUNTED SOUND BARRIERS
PRECAST CONCRETE PANELS

GENERAL NOTES - 1
NOTES TO DESIGNER

1. PREPARE CONTRACT DRAWINGS IN ACCORDANCE WITH THE DESIGN MANUAL, PART 4 AND THESE GUIDELINES.

2. THE FOLLOWING NOTE MUST BE PLACED ON THE CONTRACT DRAWINGS TO ELIMINATE THE STRUCTURE OF THE DEPARTMENT OF TRANSPORTATION INDICATING THAT THE DESIGN PLANS MUST BE REVIEWED AND ACCEPTED BY THE DISTRICT ENVIRONMENTAL MANAGER INDICATING THAT THE DESIGN PLANS MUST BE REVIEWED AND ACCEPTED BY THE DISTRICT ENVIRONMENTAL MANAGER.

3. DETERMINE HEIGHT ZONE AND WIND PRESSURE REQUIRED FOR WALL DESIGN AND INDICATE ON CONTRACT DRAWINGS.

4. DETERMINE OR DETERMINE REINFORCEMENT BAR SCHEDULES IN ACCORDANCE WITH THE DESIGN MANUAL, PART 4 AND THESE GUIDELINES.

5. SPECIFY IF THE REINFORCEMENT BARS ARE UNCOATED, EPOXY COATED OR GALVANIZED.

6. SPECIFY IF THE REINFORCEMENT BARS ARE UNCOATED, EPOXY COATED OR GALVANIZED.

7. PROVIDE A CONSTANT POST spacing FOR THE ENTIRE LENGTH OF THE WALL. THE CONSTANT POST spacing AND THE CORRESPONDING PANELS MUST BE DESIGNED USING THE DESIGN PARAMETERS INDICATED ON THE DESIGN PLANS.

8. GROUND MOUNTED SOUND WALLS MUST BE PROTECTED BY CONCRETE BARRIER UNTIL THE WALL IS COVERED OR THE STRUCTURAL COMPONENTS OF THE WALL ARE PROTECTED WITH ARCHITECTURAL SURFACE TREATMENTS.

9. PROVIDE COMPLETE DETAILS AND DESIGN, IF REQUIRED, WHERE A GROUND MOUNTED SOUND BARRIER IS CONNECTED TO A STRUCTURE MOUNTED SOUND BARRIER. REFER TO THE DISTRICT ENVIRONMENTAL MANAGER INDICATING THAT THE DESIGN PLANS MUST BE REVIEWED AND ACCEPTED BY THE DISTRICT ENVIRONMENTAL MANAGER.

10. THE FOLLOWING INFORMATION MUST BE SHOWN ON THE CONTRACT DRAWINGS: SHOW:

- SHEET 2 OF 6
- GENERAL NOTES - 2
-vrier, May 2015
- apr. 29, 2016
- COMMONWEALTH OF PENNSYLVANIA
- DEPARTMENT OF TRANSPORTATION
- BUREAU OF PROJECT DELIVERY
- STANDARD
- GROUND MOUNTED SOUND BARRIERS
- PRECAST CONCRETE PANELS
- GENERAL NOTES - 2
GROUND MOUNTED SOUND BARRIER ELEVATION

LEVEL PANEL

LEVEL OR SLOPED TOP PANEL

OPTIONAL SLOPED BOTTOM PANEL ELEVATION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

STANDARD
GROUND MOUNTED SOUND BARRIERS
PRECAST CONCRETE PANELS
GEOMETRY AND LAYOUT - 1

NOTES:
1. FOR ADDITIONAL INFORMATION REFER TO NOTES ON SHEETS 1 AND 2.
2. WALL HEIGHT IS DEFINED AS FOLLOWS:
   - POST WITH BASE PLATE: H = HEIGHT FROM TOP OF POST/CAISSON TO TOP OF WALL
   - POST WITHOUT BASE PLATE: H = HEIGHT FROM TOP OF POST/CAISSON TO TOP OF WALL
3. PANEL EMBEDMENT MAY NEED TO BE INCREASED TO ACCOMMODATE BASE PLATES AND ANCHOR BOLT PROJECTIONS.

LEGEND:
GRADE GROUND TO DRAIN WATER AWAY FROM THE WALL. FILL DEPTH ON EACH SIDE OF WALL TO BE WITHIN 1'-0" DIFFERENCE.

SECTION A-A
SECTION B-B
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<th>Post Size</th>
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<th>WWF 6x6-W20xW8</th>
<th>WWF 6x6-W20xW4</th>
<th>WWF 4x6-W8xW4</th>
<th>WWF 4x6-W8xW8</th>
<th>WWF 6x4-W8xW12</th>
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</tr>
</tbody>
</table>

**NOTES:**
1. For additional information refer to notes on sheets 2 and 3.
2. If stacked panels are required refer to detail D on sheet 4 of BC-776M.
3. Designed to specify the welded wire fabric reinforcement, including the area of steel, and the minimum number of lifting inserts required for all panel sizes as required on the contract drawings. Information is permitted to be in table form similar to the tables shown.

**LEGEND:**
- **H:** Spacing of horizontal bars
- **V:** Spacing of vertical bars
- **S:** Panel length may need adjusted to accommodate angled and corner posts