

ENGINEERING TIMES

Company Happenings:

- We are pleased to announce that Bria Gisondi has joined our ranks as our new office manager. Bria comes to us with a diverse background ideal for the position. Good luck!
- Heath Dumack, P.E. & P.L.S. has been appointed to the project committee of the Bucks County Chapter of Habitat for Humanity.

Engineering Tidbits:

- The Pennsylvania DEP has updated their NPDES application and requirements requiring advanced erosion control and stormwater guidelines for sites with 1 acre or more of disturbance.
- Pennsylvania townships are required to update their stormwater management ordinances before 2008 to comply with the new act 167 requirements.

UPPER MAKEFIELD TOWNSHIP Police get a new home!



Dumack Engineering, Inc. was pleased to have the opportunity to once again serve our local community, as we were chosen to provide the structural design for the Upper Makefield Township Police Building. This structure needed to perform a multitude of functions. This two story facility is used for office space, meeting rooms, prisoner holdings, and car parking, both indoor and covered outdoor. And as a final challenge, the entrance of the building needed to be designed to withstand the impact of a vehicle traveling at a high rate of speed, to prevent any attempted break-in or terrorist activity on the facility.

The Upper Makefield Township Police Building became an interesting combination of structural components. The main building was constructed of exterior load bearing reinforced masonry walls. The interior bearing is accounted for with the use of steel columns and beams. The second floor of the building consists of a concrete floor spanning between open web steel joists, whereas the attic and roof framing is constructed of wood trusses. To account for lateral loading a combination of masonry shear walls were combined with the added resistance of light gage metal shear walls employing the use of bracing straps.

The outdoor covered parking area presented its own challenges, as the 80 feet length of the structure was completely enclosed on three sides, as well as the roof, but entirely open on the fourth side. The combination of wood framing, steel columns, combined concrete footings and hold-down anchors, provided the stability to counter the effects of the lateral loading and uplift.

Dumack Engineering, was proud that the structural design came in well over ten percent under the allotted budget. This realized savings was able to be put towards improvements throughout the facility.

DUMACK ENGINEERING, P.C.

P.O. Box 487
677 Durham Road
Penns Park, PA 18943

Phone: 215-598-1230
Fax: 215-598-1232
Email: marketing@dumack.com

www.dumack.com

PENNS PARK OFFICE

P.O. BOX 487 – PENNS PARK, PA 18943
Tel: (215)-598-1230 Fax: (215) 598-1232

ROYERSFORD OFFICE

P.O. BOX 809 – ROYERSFORD, PA 19468
Tel / Fax: (610) 489 –9449