B363 - REPARING CONCRETE PAVEMENT AND CONCRETE BASE WITH PRECAST CONCRETE SLABS (As specified in OPSS 363 November 2025)

363.1 GENERAL

The work under this item consists of repair of concrete pavement or concrete base with precast concrete slabs. The work under this item includes precast concrete slab fabrication, delivery and installation.

This work is recommended by the Regional Geotechnical Section on a work project specific basis.

It is generally used as a repair when traffic impacts require an overnight or short duration repair method for concrete pavement or concrete base.

The repair of concrete pavement or concrete base with precast concrete pavement slabs is based on using either the Fort Miller Super-Slab[®] Method or the Michigan Method. The work may involve both continuous and intermittent slab repairs.

363.2 REFERENCES

- OPSS 1355 Construction Specification for Precast Concrete Materials and Production
- CDED B510-5, Removal Pavement Work
- Pavement Design Report

363.3 TENDER ITEMS

Item Code	Title	Col Type	U.O.M.	PQP
0363-0010	Precast Concrete Slab Repair	Normal	m ²	Υ

363.4 SPECIFICATIONS

The requirements for repairing concrete pavement and concrete base with precast concrete slabs are contained in OPSS 363.

The material requirements for precast concrete slabs are contained in OPSS 1355.

363.5 SPECIAL PROVISIONS - Not Used

363.6 STANDARD DRAWINGS

There are no Ontario Provincial Standard Drawings directly applicable to this type of work.

363.7 **DESIGN**

Investigation of the existing concrete pavement and concrete base structure including the existing concrete type (i.e., Joint Plain Concrete Pavement (JPCP) and/or Joint Reinforced Concrete Pavement (JRCP)), pavement joint detail, layer thicknesses and type of underlying materials should be carried out prior to the design.

When conducting concrete base repairs, the removal of the surface covering the concrete base should be as directed in the Pavement Design Report. See CDED B510-5 for more information. Repair materials are limited to those identified in the Materials section of OPSS 363.

Precast concrete slab repairs can be applied to concrete pavement or concrete base.

Precast concrete slab repairs are typically used in areas where overnight or short duration repairs are required. All precast concrete slab repair requirements of a project as recommended by the Regional Geotechnical Section are as stated in the Pavement Design Report.

Precast concrete slab repairs can be performed through either intermittent or continuous slab repairs.

Intermittent slab repair means a 2 to 4.5 m long repair of concrete pavement or concrete base carried out using a single precast concrete slab. Intermittent slab repairs can be done using the Fort Miller Super-Slab® Method or the Michigan Method, as specified in OPSS 363, at the contractor's option.

Continuous slab repair means the continuous replacement of multiple consecutive slabs of concrete pavement or concrete base with inter-connecting precast concrete slabs. Continuous slab repairs can be done using the Fort Miller Super-Slab® Method, as specified in OPSS 363, or an alternative continuous precast method with demonstrated and documented good field performance under similar conditions, such as precast, prestressed concrete that is acceptable to the Owner, at the contractor's option.

Typically 3 to 4 hours is required for proprietary patching materials and bedding grout, where applicable, to reach the minimum strength requirements for opening to traffic. These times can be longer in cold weather.

363.8 COMPUTATION

This is a Plan Quantity Payment item, with a square metre unit of measure. Quantities are based on the length by width area of repair.

363.9 DOCUMENTATION

363.9.1 Contract Drawings

Contract drawings are required with the above tender item.

The contract drawings are to show the location of each repair, including station limits and repair widths, and any other necessary details of the work.

The designer should provide pavement and base thickness and condition information from the pre-engineering investigations.

363.9.2 Quantity Sheets

Quantity sheets are required with the above tender item.

Each slab repair location is a separate row on the "Quantities Miscellaneous" sheets, showing location information such as station-to-station limits, lane, offsets, and traffic direction as required to relate the quantity to the location shown on the drawings. The quantity for each location is entered in the item column.

The column entries are totalled and transferred to the tender document.

363.9.3 Documentation Accuracy

Stations are shown to the nearest whole metre. Offsets are shown to 0.1 m accuracy. Calculated areas in square metres are recorded to the nearest 0.1 m².

363.9.4 Non-Standard Special Provisions

The contract documents must specify the permitted lane closure times to carry out the repairs. This may require a non-standard special provision.