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An updated version of the Pavement Restoration Techniques listing is attached.

Designers should use this information when considering various alternates for pavement restoration projects.

This report provides a listing of pavement restoration techniques based on the Department's experience to date. Its purpose is to provide State of the Art information in one place with capsuled background information and the Department policy for the use of these repair procedures.

You will note a column captioned "STATUS, REMARKS, ESL." ESL stands for Estimated Service Life and has been included where appropriate. It is our best estimate of how long a repair or technique will last before requiring major work or reconstruction. FSL was included to assist designers when comparing cost of various alternates. If your experience and local conditions indicate a different service life, use the figures you feel are most appropriate.

Also under the same column, a status is given for each specification or treatment. The following definitions apply to the various status categories.

Statewide Standard - A treatment and/or specification in the Standard Specifications or a treatment and special specification allowed for general use in the Estimate Handling System.

Project Special - A treatment and special specification that is handled on a project by project basis (PIN only in the Estimate Handling System). Specification is in development and evaluation phase; parameters for use, benefits derived, cost effectiveness, construction procedures and/or other aspects may still be under consideration. Check for latest version because these specifications usually go through a revision and refinement process.

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Experimental Feature - Formal research and reporting to be conducted in accordance with "Work Plan and Reporting Guide for Experimental Features" as published by the Engineering Research and Development Bureau. May involve a combination of specifications.

The use of non-standard (Project Special or Experimental Feature) pavement restoration techniques requires submission of the specification(s) to the Final Plan Review Bureau well in advance of the PS&E submittal for the purpose of assigning by PIN to the Estimate Handling System. The submission should include a brief summary of the pavement condition and a description of how and why the specification is to be utilized. It is assumed that the designer has considered alternate treatments and has selected the appropriate combination of repair techniques based on the project scope, existing pavement condition, desired service life, level of performance, and cost. However, if it appears that the specification is not suited for the application intended, the specifications section of the Final Plan Review Bureau will contact the Region or will request assistance from the Materials Bureau, Technical Services Division.

PAVEMENT RESTORATION TECHNIQUES: 1988

(FIRST PUBLISHED IN DECEMBER 1982 AND REVISED IN MARCH 1984)

Prepared By

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PAVEMENT RESTORATION TECHNIQUES: 1988

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PAVEMENT RESTORATION TECHNIQUES: 1988

INTRODUCTION

This updates the report entitled PAVEMENT RESTORATION TECHNIQUES which was published by the Technical Services Division in December 1982 and revised in March 1984. It is a summary guide of state-of-the-art techniques and treatments used for pavement maintenance, rehabilitation and reconstruction.

Some treatments described in this report can be accomplished with standard items, while others require the use of items considered by the Department to be either experimental or project specials. It is expected that many of these non-standard items will become standard after more experience is gained with their use. In the meantime, however, the use of these items requires submission to the Final Plan Review Bureau on a project by project basis. A summary of the condition of the pavement and an explanation of why the item is required should be included.

Portland cement concrete (PCC) and asphalt concrete (AC) pavements require various treatments to maintain, rehabilitate, or reconstruct the pavement depending upon the condition of the pavement and the level of service desired. Many standard types of treatments are currently in use and many more are in various stages of development. This summary is a listing of treatments based on the Department's experience to date. The purpose of this listing is to provide a "catalog" of treatments, useful background information and policy for the use of these techniques.

The selection of proper treatment(s) by the designer to maintain or improve a pavement can be made effectively only after knowing the condition of the existing pavement. Therefore, a pavement inspection should be completed and a condition report made available to the designer for selecting the proper treatment(s) for the pavement condition.

Information presented on PCC and AC pavements includes 1) treatment (including specification numbers), 2) application, 3) remarks (including experience information and estimated service life, ESL). For PCC pavements overlaid with asphalt concrete, the pavement can be generally considered as an AC pavement. However, special considerations may have to be made.

Remarks provided in the listing are based on current statewide experience. Costs should be reviewed for each project.

Technical Services Division personnel are available to provide additional information on any listed treatment(s).

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) TREATMENTS

<u>TREATMENT</u>	<u>APPLICATION</u>	<u>STATUS, REMARKS & ESL</u>
PARTIAL DIAMOND GRINDING & TEXTURING OF CONCRETE PAVEMENT ITEM 18502.5001	Grinding confined to the faulted joint, 2 foot length ground for each 1/16" of faulting.	Project Special. Rideability is poorer than continuous diamond grinding, PCC and AC overlays and/or new pavements. ESL: 4-5 yrs. with ACME load transfer device and 1/4" recurrence of faulting.
COLD MILLING, SHAPING AND REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT ITEM 18490.5022	Provides shaping and removal of existing PCC pavement surfaces.	Statewide Standard. Equipment readily available. See EI 87-10
PRESSURE RELIEF JOINTS IN EXISTING PCC PAVEMENT ITEM 15502.4598	Use to protect bridges or prevent blowups in areas where the frequency of rigid pavement blowups is unusually and predictably high.	Statewide Standard. This item has become a standard treatment to prevent damage to structures and to stabilize pavements prior to overlaying. See EI 82-65 and EI 87-16.
The full pavement width is removed for a 5 to 6 foot length, and replaced with dense graded asphalt concrete.	Will prevent future blowups and will stabilize a pavement before other restoration such as overlaying. Place at ends of structures and at 1000' to 1500' intervals if a PCCP needs stress relief prior to overlaying.	Research is underway to determine temperatures of overlayed PCC pavements. Depending on findings, future usage of this item at the 1000' to 1500' intervals may be changed for overlayed PCC.
SURFACE PREPARATION FOR RAPID SETTING CONCRETE PAVEMENT REPAIRS ITEM 18502.0701		
FURNISH AND PLACEMENT OF RAPID SETTING CONCRETE PAVEMENT REPAIRS ITEM 18502.0702	Use for partial depth repair of spalled or deteriorated areas of PCC pavements not receiving an overlay.	Statewide Standard. See EI 87-18 ESL: 10 yrs.

PORTLAND CEMENT CONCRETE TREATMENTS (PCCP) TREATMENTS

<u>TREATMENT</u>	<u>APPLICATION</u>	<u>STATUS, REMARKS & ESL</u>
CORRUGATED POLYETHYLENE UNDERDRAIN PIPE, 4 INCH DIAMETER ITEM 605.15 etc. and ITEM 605.1501 etc.	Use to provide drainage at edge of pavement. Contact Regional Soils Engineer for assistance.	Statewide Standard. This item has become a standard treatment on new construction and on restoration. See EJ 85-51
CRUSHED STONE WEEP ITEM 17203.9902	Use to provide drainage at edge of pavement. Contact Regional Soils Engineer for assistance.	Project Special. Used on steep grades or at sags of vertical curves.
CEMENT CONCRETE FOR PAVEMENT REPAIRS ITEM 18502.6027	Use for full depth removal and replacement of concrete pavement segments when slabs cannot be closed to traffic for more than 6 hours and where the scope of the project calls for retaining the concrete surface.	Project Special. Used in Region 10 (1983 - present) & Region 11 (1985). Performance monitoring is continuing.
After removal, a calcium chloride accelerated portland cement concrete is mixed on site and placed in the prepared void.	The existing pavement is removed, steel dowels are grouted in holes drilled in the existing slabs, an expansion joint load transfer device placed where necessary and the accelerated concrete placed.	Sawcutting, excavation, load transfer devices are paid for separately. Contact Materials Bureau prior to use ESL: 15-20 yrs.
INVERTED T PAVEMENT REPAIR USING CALCIUM CHLORIDE ACCELERATED CONCRETE ITEM 10502.600201	The existing pavement is undercut, an inverted T section of reinforced accelerated concrete provides load transfer.	Project Special. Sawcutting and joint sealing are paid for separately. Four years experience in Region 10 shows good load transfer performance and durability. Performance monitoring will be continued.

(Cont'd)

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) TREATMENTS

TREATMENT

APPLICATION

STATUS, REMARKS & ESL

IF OF 1 RETROFIT LOAD
TRANSFER DEVICES FOR
TRANSVERSE JOINTS IN
PCC PAVEMENT
ITEM 18502.3402

Use to establish load transfer
at transverse joints.

This item is presently used only in Region 10.
It should not be used in other Regions where damage could
result from frost heaving. Also, before using, designers
should compare the cost of this item with ITEM 18502.6027,
ESL: 15-20 yrs.

Devices developed by the
University of Illinois are
installed in core holes and
bonded in place with polymer
concrete. Three or four are
used per joint.

Experimental Feature.
A 40% failure rate has been experienced in an experimental
contract built in 1983 on I-84 in Region 8.

A second generation device designed to prevent debonding
failure is currently being evaluated.

DOWEL RETROFIT LOAD
TRANSFER DEVICES FOR
TRANSVERSE JOINTS IN
PCC PAVEMENT
ITEM 18502.3406

Use to establish load transfer
at transverse joints.

Experimental Feature.
Performance is satisfactory on the experimental contract
built in 1983 on I-84 in Region 8. Four and eight were used
per 12 foot width of faulted joint in the experimental
contracts.

A study is underway to determine the optimum number and
distribution needed.

Standard epoxy coated dowels
are placed in sawcut slots
across joint and bonded in
place with polymer concrete.

The specification was used on I90 in 1986. Six dowels
were placed in outside lanes and four in interior lanes.

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) TREATMENTS

TREATMENT

CRACKING AND SEATING
EXISTING CONCRETE PAVEMENT
ITEM 18203.9902

APPLICATION

Use to retard transverse joint reflection cracks through an asphalt overlay.

STATUS, REMARKS & ESL

Experimental Feature.
The cost effectiveness of this item is currently being evaluated. For more information see Materials Bureau Report 87-7.
ESL: See overlay.

A pavement breaker and 50 ton roller are used to crack and seat the pavement.

Use where the PCCP is deteriorated to the point that the only other feasible alternative is reconstruction. A cracked and seated PCCP should be overlaid with a minimum of 5" of AC.

RUBBLEIZING EXISTING
PORTLAND CEMENT CONCRETE
PAVEMENT
ITEM 18502.75

A resonant frequency machine is used to rubbleize pavement to aggregate size particles.

Used in similar conditions as for cracking and sealing. Rubbleizing does not affect utilities. Rubbleized pavement requires drainage at edges; a minimum 6 inch asphalt overlay. May be used with matching crushed stone to widen a pavement.

Experimental Feature.

Experimental project constructed on Rte. 146 in Region 1. Results good after 1 year. See Materials Bureau Report 88-2

GROOVE PCC PAVEMENT
ITEM 15502.5001

Longitudinal grooving

Used to reduce wet weather hydroplaning-type accidents on tangents and curved sections having adequate microtexture

Statewide Standard.

Longitudinal grooves are less costly to construct than transverse grooves and may be placed with less traffic disruption.

ESL: Varies depending on traffic and concrete properties. Contact Materials Bureau.

TRANSVERSE GROOVING
OF PCC PAVEMENT
ITEM 18502.5002

Used to reduce wet weather hydroplaning-type accidents on tangents and curved sections having adequate microtexture.

Project Special.

Transverse grooves improve drainage on very flat sections by taking advantage of pavement cross-slope to channel water to pavement edge. May be advantageous to use in place of longitudinal grooving when contract calls for transverse grooving of structural slabs.
ESL: Contact Materials Bureau.

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) TREATMENTS

<u>TREATMENT</u>	<u>APPLICATION</u>	<u>STATUS, REMARKS & ESL</u>
RONDED PCC PAVEMENT OVERLAY ITEM 03502.07	Use for overlaying PCC pavement. (Can also be used as inlay.) Amount of existing distress such as cracking, spalling will determine service life. Contact Materials Bureau for details.	Experimental Feature. 18 lane miles of Interstate was overlaid in 1981 in Region 3. This project is being monitored for cost effectiveness. Performance is good at present. Inlays have been constructed in Regions 1 and 2. Both show good performance after six years. With preparation items included, the price for the Region 3 project was \$16.17/SY.
PARTIAL BONDED PCC OVERLAY	Used to overlay a moderately deteriorated pavement. Amount of existing distress will determine service life. Contact Materials Bureau for details.	Experimental Feature. No recent experience in NY.
UNBONDED PCC PAVEMENT OVERLAY	Used to overlay an extensively deteriorated pavement. Contact Materials Bureau for details.	Experimental Feature. No recent experience in NY. Bond breaker is used to prevent reflection cracks.
A minimum 6 inch thick mesh reinforced concrete pavement with load transfer is constructed on the existing pavement. No deliberate attempt is made to achieve bond.		
A minimum 6 inch thick mesh reinforced concrete pavement with load transfer is constructed over a bond breaker (1" thick asphalt concrete) over the existing pavement.		

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) TREATMENTS

<u>TREATMENT</u>	<u>APPLICATION</u>	<u>STATUS, REMARKS & ESL</u>
REPAIR OF SPALLED AREAS, JOINTS AND/OR CRACKS IN PORTLAND CEMENT CONCRETE PAVEMENT ITEM 18502.4466	Asphalt concrete used to repair partial depth spalls occurring at joints or in slabs prior to AC overlay. Used to achieve overlay service life.	Project Special. Used for the first time on I81 in 1985 by Region 3. Since used on additional contracts.
ASPHALT OVERLAY OVER PCCP 2 1/2 inch minimum thickness. Various Standard Items.	Used to overlay a moderately deteriorated PCC pavement.	Statewide Standard. Service life depends on conditions of pavement overlaid. If ESL is less than 8-10 yrs., reconsider other options: cracking and seating; thicker overlay; reconstruction.
A 1 1/2 inch thickness of Dense Binder and 1 inch thickness of Asphalt Top Course is placed on a patched, sealed, tack coated and leveled pavement. Truing and Leveling course thickness variable.		Patching, joint & crack sealing (633.05) and tack coat prices will depend on individual project size.
SAWING AND SEALING OF ASPHALT CONCRETE OVERLAY ITEM 18403.2502	Used for first time overlays where transverse joints are generally well defined to insure straight predictable cracks.	Statewide Standard. Overlay service life is extended as reflective cracking is controlled. Deterioration at the joint area is minimized and delayed. See EI 85-25 and EI 85-43.
Reservoirs are sawcut and sealed over existing transverse joints to control and seal reflection cracks.		
ADDITIONAL DEPTH SAWING AND SEALING BITUMINOUS CONCRETE PAVEMENT JOINTS ITEM 18502.2599	Used in second overlay over PCC pavement where first overlay has developed reflective cracks. Additional depth sawcutting acts as a control joint.	Experimental Feature. Used on I684 in Region 8 in 1986. Results good. Contact Materials Bureau.

PORTLAND CEMENT CONCRETE EMENT (PCCP) TREATMENTS

TREATMENT

APPLICATION

STATUS, REMARKS & ESL

ASPHALT OVERLAY FOR
STRUCTURAL RESTORATION OF
PCCP
Various Standard Items

Used to overlay an extensively
deteriorated pavement.

Statewide Standard.
Service life depends on existing conditions and thickness
of overlay.
ESL: 10-12 yrs.

Dense Graded asphalt
concrete mixes are placed
on a patched, sealed, tack
coated, shimmed and leveled
pavement.

Contact Soils and Materials
Bureaus for assistance in
thickness design and corrections
necessary before overlaying.

Sawing and sealing of the asphalt
concrete overlay will extend service
life if conditions are favorable for
its use.
Patching, joint & crack sealing (633.05), tack coat,
shim course, T&L prices will depend on
individual project size.

FULL DEPTH PCCP SLAB
REPLACEMENT WITH DENSE
GRADED ASPHALT CONCRETE
BASE OR BINDER AND TOP
ITEM 403.11 or 403.13 &
403.1701

An alternative to PCC replace-
ment. Structurally unsound
PCC pavement slabs are replaced
with new dense hituminous concrete
before being overlaid with AC.
Recommended for moderate to low
volume roads where the repair should
perform satisfactorily. High
volumes of trucks and cars may cause
showing, poor rideability and
maintenance problems after
several years.

Statewide Standard.
The cause of the problem must be corrected for the
treatment to be cost effective. Used in conjunction with
AC overlay.
Bumps after 5 yrs. on I81 (Region 3)
Bumps after 7 yrs. on I87 (Region 1)
Bumps after 1-2 yrs. on I1E (Region 10)
Better performance on lower volume roads.

CEMENT CONCRETE PAVEMENT,
REINFORCED, CLASS F
ITEM 502.05

Used where individual pavement
slabs have failed because of
localized weakened subbases.

Statewide Standard.
The cause of the problem must be corrected for the
treatment to be cost effective.

Structurally unsound PCCP
slabs are replaced with
new reinforced PCCP slabs.
Contact Soils and Materials
Bureaus for assistance.

Associated items such as unclassified excavation,
subbase replacement, mesh and construction and
and sealing joints must be added. Cost of these
items will vary depending on the quantities involved.
ESL: 15-20 yrs.

ASPHALT CONCRETE PAVEMENT (ACP) TREATMENTS

<u>TREATMENT</u>	<u>APPLICATION</u>	<u>STATUS, REMARKS & ESL</u>
PCCP RECONSTRUCTION STANDARD ITEMS	Use for complete replacement of existing pavement, in kind or as flexible pavement.	Service life of new pavement will be achieved.
Remove and replace entire pavement.		
AC OVERLAY - STANDARD ITEMS	Structural Single or multiple layer(s) of sufficient thickness to provide adequate increase in total pavement thickness for design traffic.	ESL: 10-12 yrs. Designer selects appropriate pavement thickness.
	Ride/Preventive maintenance Single or multiple layer(s) to restore acceptable ride, cover minor cracking, raveling, etc.	ESL: Single course 5-7 yrs. Multiple course 8-10 yrs.
	Pavement Friction ITEM 403.20, TYPE 9F TOP COURSE should be used where a greater than normal friction number is desirable.	New Spec. - ITEM 18403.2090 - TYPE 9FZ TOP COURSE installed in several locations over past 4 years, currently evaluating performance. See EI 85-33. New EI forthcoming. Contact Materials Bureau.
	Truing and Leveling Single or multiple layer(s) or various thickness needed to obtain proper grade and cross-slope (ITEM 403.21).	Wheel path ruts should be filled with a shim course (ITEM 403.15). Pavement milling (ITEM 18490.4032) may be a cost effective alternative to truing and leveling courses to achieve proper grade on cross slope.
ASPHALT CONCRETE IN-PLACE SURFACE REHABILITATION ITEM 19403.50 VIRGIN ASPHALT CONCRETE ADMIXTURE ITEM 19403.51	Recycling in place existing asphalt pavement. Self contained multi-step process of heating, scarifying, remixing, reshaping and compacting the asphalt pavement. Recycles top 1½" of existing pavement.	Experimental Features. Used on Rte. 46, Region 2, 1987. Results to date good. Item 19403.51 may be required in conjunction with Item 19403.50

ASPHALT CONCRETE PAVEMENT (ACP) TREATMENTS

TREATMENT	APPLICATION	STATUS REMARKS & ESL
COLD MIX RECYCLING OF PAVEMENTS ITEM 18490.60	Recycling and reshaping the surface of low volume roads. Must be covered with a wearing course.	Experimental Feature. Used on St. Regis Indian Reservation 1987. Results under evaluation by Materials Bureau.
AC PAVEMENT REPLACEMENT AND/OR RECONSTRUCTION	Full depth patches, replacement of short sections, complete pavement reconstruction. Multiple layers of sufficient thickness to provide adequate total pavement thickness for design traffic.	ESL: 12-14 yrs. for reconstruction.
REPAIR DEFECTIVE AC OVERLAY & PCC AT UNDERLYING PCC JOINTS ITEM 18403.88	Use to remove & repair deteriorated and unsound AC overlay and PCC in vicinity of PCC pavement joints prior to overlay. Purpose - To extend or achieve service life of overlay.	Project Special. Procedure used on Region 2 project D252145 in 1987. Being evaluated and monitored by Materials Bureau.
ASPHALT CONCRETE MIXTURES WITH MODIFIERS	Special situations.	
Synthetic Fibers	Increase in tensile strength of the asphalt concrete.	Experimental Feature. Under field test in Regions 2 and 6 to evaluate ability to reduce reflective cracks over asphalt concrete. Has not proven effective in reducing reflective cracking over Portland cement concrete pavements.
Sulfur Extended Asphalt	Asphalt cement substitute - up to 30%.	Experimental Feature. Under field test in Region 8. Good performance. Not cost effective at this time.
Verglimt ICE RETARDANT ASPHALT CONCRETE TYPE 6F TOP COURSE (HIGH FRICTION) ITEM 19403.1781	Localized sections of highway where icing conditions have caused a high number of accidents.	Proprietary Justification. See EI 86-38 for use and justification info. EI 84-49 for proprietary products.

ASPHALT CONCRETE PAVEMENT (ACP) TREATMENTS

STATUS REMARKS & ESL

APPLICATION

TREATMENT

Stability Enhancers -
Several products are
available. Consult
with the Materials
Bureau.

No experience to date.

LONGITUDINAL GROOVING
ON AC PAVEMENTS

Sections of roadways where wet
weather accidents occur due to
hydroplaning.

Experimental Feature.

Not likely to improve pavement friction numbers if the
pavement has poor micro texture.

A temporary improvement to
pavement traction when the
pavement has insufficient
macro texture.

Grooves in pavement surface will be
obliterated by traffic in warm
weather. Limited experience.

COLD MILLING OF AC
PAVEMENTS
ITEM 18490.4032

Allows partial pavement removal
to:

1. Reestablish curb reveal.
2. Reestablish overhead
clearances.
3. Eliminate raising
manholes, etc.
4. Eliminate truing and
leveling.

Statewide Standard.

Equipment readily available. Reclaimed material may be
suitable for recycling. Use of reclaimed material
in recycled mixtures is a contractors option on
selected courses.

REMOVING OLD BITUMINOUS
CONCRETE OVERLAY
ITEM 202.20

For complete removal of overlay.

Statewide Standard.
Usually removed by front end loader. Material can be
crushed for recycling.

UNCLASSIFIED EXCAVATION
AND DISPOSAL
ITEM 203.02

For complete removal of pavement.

Statewide Standard.
Contractor may choose to reclaim material for recycling.

ASPHALT CONCRETE PAVEMENT (ACP) TREATMENTS

TREATMENT

APPLICATION

STATUS REMARKS & ESL

PAVEMENT INTERLAYERS -
Fabric-placed either
over the entire pavement
surface or just the
cracks.

Said to reduce reflective cracks
through the asphalt overlay.

Experimental Feature.
No pavement interlayer system has prevented
reflective cracks in asphalt concrete overlays on
PCC pavements. The Engineering Research and
Development Bureau is testing both
Fabric and rubberized liquid asphalt
interlayers on badly thermal cracked
asphalt pavement. No results are
available as yet.

LATEX MODIFIED LIQUID ASPHALT
CEMENT - applied as a
surface treatment and
covered by a layer of clean
aggregate.

Said to increase retention on
surface treatment projects.

Experimental Feature.
Field test sections are still in the evaluation stage.
Preliminary results don't indicate improved stone
retention.

BITUMINOUS SURFACE TREATMENT
SINGLE COURSE FOR PAVEMENT
ITEM 18410.0502

Pavement surface for rural
AC roads having an AADT not
exceeding 2000 vehicles.

Project Special.
Good results depend on good design and construction
procedures.
ESL: 3-5 yrs.

A preventive maintenance
treatment consisting of
applying an emulsion to
the pavement surface
followed by the application
of 1ST size aggregate.

Not suitable for State highways in
cities, villages or hamlets under
any circumstances.

TRACK COAT
ITEM 407.0101

A diluted emulsified
asphalt cement for bonding
new asphalt concrete layers
to existing surfaces.

Any asphalt pavement with a
milled surface, all PCC pavement
surfaces, or any asphalt concrete
pavement surface receiving a
total overlay thickness less
than 2 inches.
See EI 82-42.

Statewide Standard.
The diluted emulsion is not a stable material. It
requires agitation to maintain homogeneity.
Application rates are critical.
No suitable substitute to the diluted
emulsion has been found.

Good results when handled properly.
See Construction Manual, P. 407-1.

ASPHALT CONCRETE PAVEMENT (ACP) TREATMENTS

<u>TREATMENT</u>	<u>APPLICATION</u>	<u>STATUS REMARKS & ESL</u>
CLEANING, SEALING AND FILLING JOINTS AND CRACKS ITEM 633.05	Cleaning, sealing and filling joints and cracks in the existing AC or PCC pavements prior to overlay.	Statewide Standard. Joints or cracks should not be filled to the top with liquid material in order to allow room for the expansion of the liquid when the hot overlay is placed. Maintenance is using asphalt and rubberized asphalt for crack sealing operations.
CLEANING EXISTING PAVEMENT AND/OR SHOULDERS ITEM 633.0202	Cleaning the existing pavement prior to the application of a new course. Cleaning shoulders when they are overlaid.	Statewide Standard.