

Paving

Standard Operating Procedures



SOP-CS-114-1/ DECEMBER 2010

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ADMINISTRATIVE

A. Introduction

1. This SOP is a set of instructions or steps employees follow to complete a Paving evolution. It shall be done safely, with no adverse impact on the environment, meets compliance standards, and in a way that maximizes operational and production requirements.

B. Cancellation

1. Supersedes SOP-CS21523, dated November 2006

C. References

1. Work Area Traffic Control Handbook (WATCH), APWA, 2009
2. Best Practices

D. Objectives

1. Upon Completion the operator will be aware of the procedures to:
 - a. Conduct pre-job task verification
 - b. Pick up asphalt
 - c. Pave
 - d. Clean job site and restow equipment

E. Equipment/Personnel Required

1. 2 Collection Services Worker I/II or Lead CSW
2. Hard hat, steel-toe safety shoes, gloves, eye protection, hearing protection
3. SSIH Emulsion Oil
4. SS1H Oil Emulsion Sprayer
5. Tamping Rammer
6. Utility Compactor
7. Dump truck for spoils & hot asphalt
8. Back hoe & trailer
9. Asphalt rakes and shovels

F. Terminology

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1. NOTE is used when information is available that can assist the Operator in accomplishing his or her task. Information is advisory in nature.
2. CAUTION is used when special cautions must be taken by the Operator. Failure to following prescribed steps may cause serious bodily injury and damage equipment.
3. WARNING is used when special cautions must be taken by the Operator. Failure to follow prescribed steps will cause loss of life or limb and severely damage equipment.

G. Employee Responsibility

- Employees are responsible to follow District policies and procedures for the safe and effective operation of the District equipment.

H. Management Responsibility

- Management is responsible to provide employees adequate education and training to safely and effectively operate District equipment.

PROCEDURES

1. Paving

1.1 Pre-Job Required Actions

WARNING

Gasoline is extremely flammable and its vapors can cause an explosion if ignited. DO NOT start the engine near spilled fuel or combustible material.

Use extreme caution when filling the spare gas can. Ensure the can is filled while on the ground, away from any other objects that can cause a spark. Keep spare fuel well ventilated.

NEVER fuel the rammer while it is in the bed of a truck. Place it on a solid footing before refueling.

NEVER fuel the rammer while the engine is running or hot. Do not overfill the tank.

Always allow the engine to cool before performing maintenance. Components are very hot after use.

Step 1: Verify no parking signage is in place

- If required
- Planner/Scheduler is responsible for ensuring this is done

Step 2: Verify asphalt has been ordered

- Planner/Scheduler is responsible for ensuring this is done

Step 3: Verify saw cut or grinding has been done or scheduled

- If required

Step 4: Verify inspector has been notified

- Planner/Scheduler is responsible for ensuring this is done

Step 5: Task Complete

1.2 Paving

Step 1: Conduct equipment pre-trip inspections

Step 2: Setup traffic control

Step 3: Remove plate(s) or cutback

Step 4: Verify trench is at proper height and compaction

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- Height and compaction is determined by the City where the trench is located
- Height and compaction information is on the permit

Step 5: Oil trench and walls

- Use SS1H oil

NOTE

Repeat steps 6, 7 and 8 until asphalt is set to proper grade. Then proceed to step 9.

Step 6: Fill trench with asphalt

- 3 - 4" 1st and 2nd lifts
- Lesser amounts for final lift based on remaining depth

Step 7: Compact the lift

- Moisten the roller drums prior to rolling

Step 8: Allow to cool

- To city temperature requirements or about 240 - 250 degrees
- Check with thermometer

CAUTION

Do not use too much water to moisten the rollers. If too much water is used, it will cause the patch to check or crack.

Step 9: Roll asphalt with utility compactor

- Do edges first and work towards middle
- Do not allow the utility compactor to stop on the fresh AC

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NOTE

Rolling Temperatures:

320 to 260 degrees Fahrenheit – breakdown (largest increase in density)

260 to 240 degrees Fahrenheit – possible tender zone (if tender stay off patch).

240 to 180 degrees Fahrenheit – intermediate rolling.

180 to 150 degrees Fahrenheit – finish rolling.

Step 10: Apply oil to all edges of the patch

- This seals the old AC to the new AC

Step 11: Apply thin layer of sand to oil tack

- Prevents oil from contacting people or vehicles passing over the paving job

Step 12: Verify AC cools to a temperature between 100 – 180 degrees

- Before allowing vehicles to pass over the paving job

Step 13: Task Complete

1.3 Post-Job Required Actions

Step 1: Clean tools of excess AC, before it cools and sticks

Step 2: Re-stow all equipment

Step 3: Remove traffic control

Step 4: Remove no parking signage

Step 5: Complete and submit paper work

Step 6: Task Complete