

DEATH BY 1000 CUTS

Implementing New Pavement Restoration Standards

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NWPMA Conference

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WE KEEP PORTLAND MOVING.



PBOT
PORTLAND BUREAU OF TRANSPORTATION

Agenda

- **What Problems Are We Trying To Solve**
- **Where Can We Have Positive Impact**
- **What Standards Do We Keep**
- **What We Changed.....And Why**
- **Steps Taken To Implement the Changes**
- **Perceptions and Reality**
- **Questions**

What are the Issues?



What are the Issues?

- Infill, Redevelopment of All Kinds



What are the Issues?

- Increased New or Expanded Services and Utilities



What are the Issues?

- Over 200,000 LF of Utility Cuts Permitted Last Year



What are the Issues?

- Over 1,000 Stand-Alone Patching Permits



What are the Issues?

Portland has a high volume of “Short” Blocks (200’ Long)

– These short blocks translate into lots of pavement

For example:

- Portland **145 SQ MILES** and 4800 lane miles of roadways
- Seattle **142 SQ MILES** and ~4000 lane miles of roadways

What Were We After



DURABLE PATCH



CLARITY ON WHAT IS EXPECTED



CONSISTENT OUTCOMES

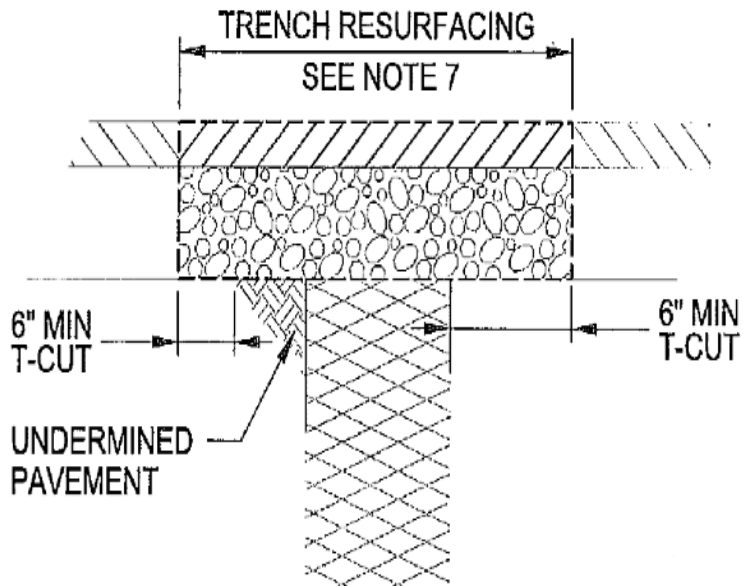
Where to Focus

- **Importance on Busy Streets versus Local (Residential)**
 - **Lane Lines Determine Wheel Paths and Loading**
 - **Highest Value Assets**
 - **Most Expensive and Most Disruptive to Repair**
 - **Greater Liability**


Where to Focus

- Updated All Pavement Restoration Standards:
 - Asphalt, Concrete, and Asphalt over Concrete (Composite)
- Involved Multiple Stakeholders:
 - Design
 - Permitting
 - Maintenance
 - Inspection
 - Development
 - Utilities

Standards Still Apply



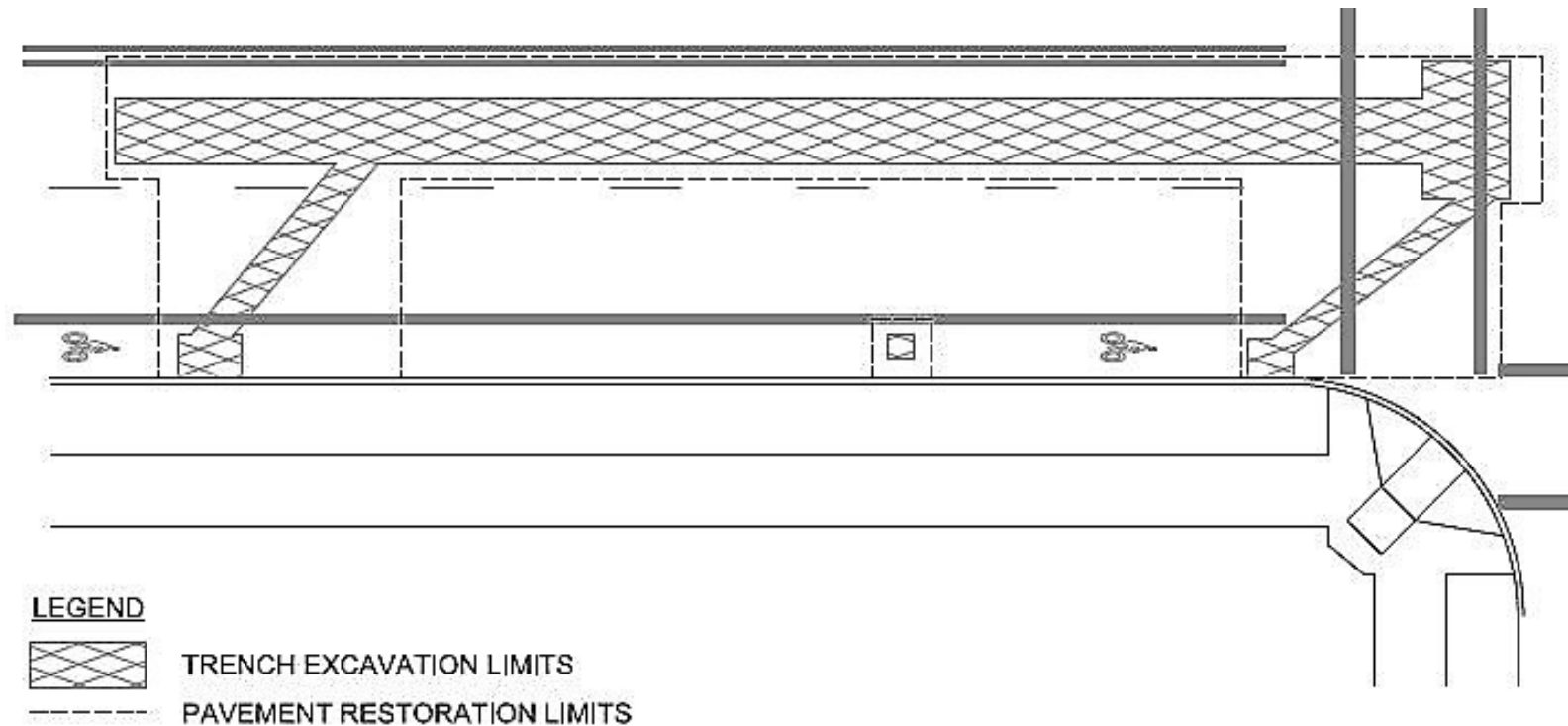
LEGEND

-  TRENCH EXCAVATION LIMITS
-  PAVEMENT RESTORATION LIMITS

- Still Require a T-Cut
- Match Existing - General Rule
- Set Max and Min Depths
- Approved Mix Designs
- Compaction Requirements

New Standards - All Streets

All Restoration is Perpendicular or Parallel to the direction of travel



No Patch Seams Along Wheel Path



Full Width Restoration In Bike Lanes



Full Width Restoration in Marked Crosswalks



Parallel and Perpendicular

- No Diagonal Patches
- No Jigsaw Puzzle Pieces



New Standards - Busy Streets

- Can Grind and Inlay to Restore the “Lane”



The Roll Out

- Several Workshops and Internal Meetings
- Consistency
- 4 Stages of Change:
 - Shock
 - Defensive
 - Acknowledgement
 - Adaptation

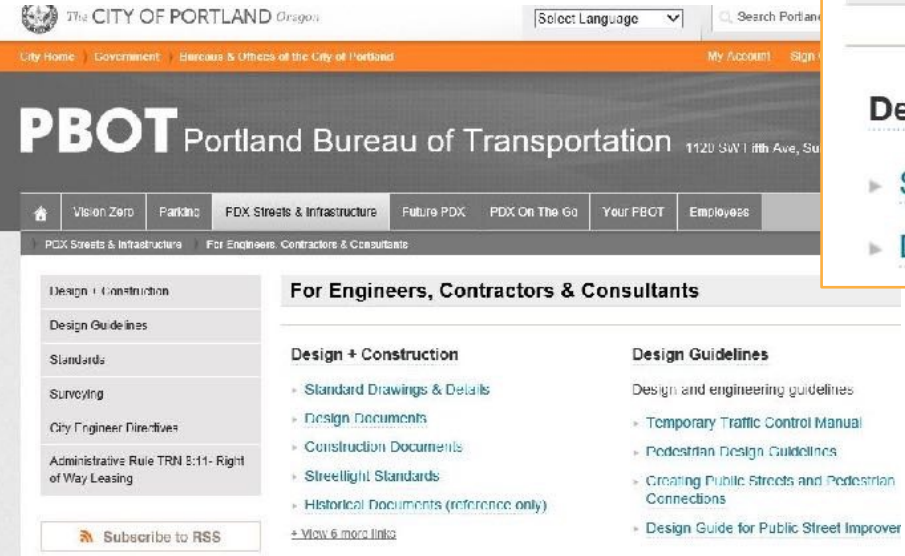
The Roll Out

- Explain the Why
- Training
- Engineering Judgement and Discretion
- Grandfathered Active Projects

Perception and Reality

- It's Going to Blow My Budget!
- Will this Trigger ADA?
- You Just Turned My Utility Project Into a Street Project!
- This Will Put Inspectors on the Defensive!

Questions



For Engineers, Contractors & Consultants

Design + Construction

- ▶ [Standard Drawings & Details](#)
- ▶ [Design Documents](#)

Design Guidelines

- Design and engineering guidelines
- ▶ [Temporary Traffic Control Manual](#)

- portlandoregon.gov/transportation
- PBOTUtilityPermits@portlandoregon.gov