MARION COUNTY BOARD OF COMMISSIONERS
WORK SESSION

Engineering Standards Update – Chapters 4, 5, 6, & 7
Minutes

Thursday, April 9, 2026, 9:30 a.m. – 11:30 a.m.
Commissioners' Boardroom
Courthouse Square, 555 Court St. NE, Suite 5231
Salem, Oregon 97301

ATTENDANCE:
Commissioners: Colm Willis, Danielle Bethell and Kevin Cameron.
Board's Office: Trevor Lane, Matt Lawyer, Toni Whilter, and Chris Eppley.
Legal Counsel: Steve Elzinga, and Andrew Mittendorf.
Public Works: Max Hepburn, Lani Radtke, Ryan Crowther, and Carl Lund.
Kittelson and Associates: Julia Knudsen

Commissioner Kevin Cameron called the meeting to order at 9:34 a.m.

1. **Welcome & Introductions**

-Commissioner Colm Willis

2. **Project Overview**

-Max Hepburn, and Julia Knudsen (Kittelson)

- Overall standards comprise 12 chapters, grouped into three bundles:
  - Bundle 1 and 3 previously reviewed:
    - Pavement design, stormwater, utilities, etc.
  - Bundle 2 covers:
    - Chapter 4 – Geometric Design:
      - Roadway cross sections.
      - Access standards.
      - Low volume.
      - Gravel roads.
    - Chapter 5 – Multimodal Design:
      - American with Disabilities Act (ADA) standard integration.
    - Chapter 6 – Traffic Engineering:
      - Signals.
      - Signs.
      - Markings.
      - Temporary traffic control.
    - Chapter 7 – Roadside Design:
      - Clear zones.
      - Roadside barriers.
      - Mailboxes.
- Project approach:
  - Phase 1 established baseline and existing practice.

    - Phase 2 has developed updated standards over past year.
    - Extensive collaboration with:
        - Technical Advisory Committee (TAC):
            - Utilities.
            - Consultants.
            - Pavement firms.
            - Planning Commission.
            - Home Builders Association.
            - Cities (Keizer, Woodburn).
            - County staff across disciplines.
        - Board work sessions on previous bundles.
        - Public comment on draft standards.
- Overarching goals:
    - Align standards with current practices, national guidance and county needs.
    - Increase clarity, transparency, and design flexibility.
    - Avoid unnecessary increase of burdens on private development:
        - Support public projects and safety.

3. Review and Discussion of Chapters 4, 5, 6, & 7

-Max Hepburn

- Chapter 4 – Geometric Design:
    - New context sensitive roadway cross sections:
        - Contexts:
            - Rural, Rural Town, Suburban.
        - Two key roads with special criteria:
            - Lancaster Drive and Cordon Road.
    - Introduction of realms in cross sections:
        - Travel way realm:
            - Vehicle lanes.
        - Transition realm:
            - Parking, bike lanes.
        - Pedestrian realm:
            - Sidewalks, buffers, ADA space.
        - Land use realm:
            - Typically, private property.
    - Cross section tables:
        - Provide ranges for lane widths, shoulders, parking, bike facilities by:
            - Functional classification:
                - Arterial, major collector, minor collector, local.
            - Context:
                - Rural / rural town / suburban.
            - Average Daily Traffic (ADT).
        - Replace older rigid one size standards with flexible ranges:
            - 10–11-foot lanes for locals, 11–12 foot for collectors/arterials.
    - Lane width policy and examples:
        - Locals:
            - 10-foot lanes acceptable for:
                - Low volume/residential streets and subdivisions.
                - Speed management.
        - Collectors are generally 11-foot minimum.
        - Developers select widths within allowed ranges:
            - Subject to cross section design and county engineer oversight.

- Coordination with capital projects:
  - County may choose upper width ranges on specific projects:
    - Where operational or safety needs justify it.
  - Short segments may match adjoining sections.
- Bike lanes and buffers:
  - Standards introduce optional 2–3-foot striped bicycle buffers:
    - On higher speed or higher volume facilities.
    - On identified bike routes or where higher bicycle use is expected.
  - Striped asphalt buffer can be combined with narrower travel lanes.
- Low volume and gravel roads:
  - American Association of State Highway and Transportation Officials (AASHTO) low volume road guidance for roads with ≤ 2,000 ADT:
    - About 70% of county network.
  - Provide design criteria for gravel roads:
    - About 10 inches aggregate base and 3 inches surface rock.
- Access standards - driveways and intersections):
  - Clarify when permits are required:
    - New access construction.
    - Substantial modifications.
    - Simple paving of existing driveway should not require permits.
  - Updated spacing standards:
    - Pull spacing tables out of 2005 Transportation System Plan (TSP) into engineering standards.
    - Reduce driveway to driveway spacing to allow reasonable secondary access opportunities.
    - Intersections spacing:
      - Adjusted by classification and context.
      - Introduce minimum distance from property line to driveway throat.
  - Driveway widths:
    - Residential and agricultural: 12–42 feet.
    - Commercial/industrial: 24–42 feet.
    - One-way drives: 12–20 feet.
    - Flare/radii details to be set in standard drawings.
- Sight distance standards:
  - Update access and intersection sight distance tables using AASHTO guide.
  - Reduce access and sight distance requirements making compliance easier.
  - Intersection sight distance increased modestly.
- Fire access and Cul De Sac design:
  - Align with fire requirements for grades, turnarounds, and geometry.
  - Grades and dimensions to support large emergency apparatus.

- Chapter 5 – Multimodal Design (ADA, Pedestrian/Bike/Transit):
  - Integration of county ADA standards directly into engineering standards:
    - Confirmed against current federal regulations and Public Right-of-Way Accessibility Guidelines (PROWAG).
    - Provide clear criteria for:
      - Curb ramps.
      - Accessible routes within right of way.
  - Design simplification via standard details:
    - Move dimensional requirements from text into standard drawings.

        - Text will reference these drawings to:
            - Make standards easier to read and apply.
            - Reduce need for often text updates when federal rules change.
    - Checklist and design exception process:
        - Update and include an ADA curb ramp checklist in appendices.
        - Define design exception process where ADA details can't be achieved:
            - Require licensed engineer involvement and county concurrence.
    - Change to curb ramp design submittals:
        - Remove requirement of every curb ramp must be detailed by engineer.
        - Allow standard details where field conditions permit.
    - Multimodal design principles:
        - Provide high level guidance for:
            - Pedestrian facilities.
            - Bicycle facilities.
            - Transit user needs.
        - Designing for all modes while balancing costs and context.
    - Transit facilities and bus turnouts:
        - Transit must coordinate with county to avoid sight and safety issues.
        - Evaluate policy and language regarding turnouts requirements.
- Chapter 6 – Traffic Engineering:
    - Scope:
        - Traffic signals.
        - Beacons.
        - Signing.
        - Pavement markings.
        - Temporary traffic control.
        - Short section on lighting.
    - Salem or Oregon Department of Transportation (ODOT) maintains signals:
        - County will apply that agency's design and operations standards.
    - New signal spacing:
        - ½ mile minimum spacing between signals to support progression.
        - Allow closer spacing only at county engineer discretion.
        - Interconnection for signals maintained by Salem to maintain operation.
    - Signing and pavement markings:
        - Manual on Uniform Traffic Control Devices (MUTCD) and ODOT for base standards.
        - Within UGBs, may apply applicable city standards for consistency.
        - Clarify business guide sign (blue signs) policy:
            - Simplify prior complex and restrictive rules.
            - Allow broader range of eligible business types while maintaining constraints to avoid sign proliferation.
    - Pavement markings:
        - Establish county preferences for materials:
        - Paint for most longitudinal markings on asphalt.
        - Thermoplastic for crosswalks, stop bars, and legends.
        - Specific guidance for markings on concrete and higher durability.
        - Consistent expectations for maintenance and developers performing striping with road work.
    - Temporary Traffic Control (TTC):
        - Oregon Temporary Traffic Control Handbook (OTTCH) for work less than 3 days.
        - For projects greater than 3 days or more complex conditions:
            - Require job specific TTC plans reviewed by county staff.

        - Clarify how TTC plans are required for closures, detours and work zones.
    - Lighting:
        - Provide general guidance that street lighting must be:
            - Coordinated with public utilities.
            - For avoiding conflict and providing appropriate illumination.
        - Does not yet define where lighting is required.
- Chapter 7 – Roadside Design - Clear Zones, Barriers, Mailboxes:
    - Clear zones and lateral offset:
        - Clarify terminology:
            - Clear zones are used for non-curbed roads.
            - Lateral offset used for curbed roads.
            - Measured distance is functionally similar.
        - 10-foot clear zone policy from 2005 TSP has been used in the past.
    - Integration of low volume road guidance:
        - For ADT ≤ 2,000:
            - Adopt AASHTO low volume standards to reduce required clear zones:
                - ADT < 400: approx. 6 ft.
                - ADT 400–2,000: approx. 7 ft.
    - Measurement rules:
        - On paved rural roads with a white edge stripe:
            - Measure clear zone from center of stripe.
            - Use part of shoulder as part of clear zone.
        - On paved roads without stripes:
            - Measure from edge of asphalt.
        - On gravel roads:
            - Measure from vegetation line / edge of gravel.
            - To reduce ambiguity:
                - Utilities encouraged to photograph conditions.
                - Stake locations at design time and submit.
    - Coordination with utilities:
        - Dedicated meetings held with PGE and others too:
            - Align on definitions.
            - Develop practices to support consistent field application.
    - New vs. existing construction:
        - For maintenance of existing lines and poles:
            - Retain 10-foot clear zone standard on non-National Highway System (NHS) roads to avoid wholesale relocation of existing facilities.
        - For new construction:
            - Move toward AASHTO compliant clear zones:
                - Scaled by ADT and speed.
            - On high volume routes standards may require larger setbacks:
                - Subject to right of way constraints.
    - Curbed roads:
        - Set 6-foot lateral offset from face of curb, regardless of ADT/speed, to:
            - Keep poles and objects out of landscape strips and vegetated facilities.
            - Place utilities at or behind the back of sidewalk where curb tight sidewalks exist.
    - Clear zone exception/mitigation hierarchy:
        - When an object must be in the clear zone, evaluate in order:

                - Remove objects if feasible.
                - Redesign to be traversable.
                - Relocate further from roadway.
                - Use breakaway design where appropriate.
                - Shield with longitudinal barrier or crash cushion.
                - If none of above feasible, delineate the object.
    - Roadside barriers:
        - Reference ODOT for guardrail and concrete barrier design, placement, and details.
    - Mailboxes:
        - Address long standing practical issues:
            - Code requires contractor for mailbox installation:
                - Is burdensome and often ignored in practice.
        - Proposed approach:
            - New mailboxes where curb/sidewalk exist:
                - Require permit.
                - ADA compliant clear width behind mailboxes of 4 feet.
            - Replacement in existing post holes in sidewalk:
                - No permit required, provided geometry does not change.
            - No curb/sidewalk:
                - Typical rural mailboxes may be done without permit:
                    - Subject to basic placement guidance.

4. Discussion

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- Design flexibility vs. safety vs. cost:
    - Recurrent theme across chapters: seeking a balance between:
        - Reducing development costs.
        - Ensuring future adaptability.
        - Maintaining and improving safety.
- Narrower lanes and speed management:
    - Benefit of 10-foot lanes on locals in reducing speeds and crossing distances.
    - Concern of pavement width reduction could limit striping options.
    - Pavement width stays same:
        - Lanes narrowed and shoulders widened by restriping:
            - Not reconstruction.
- Bike buffers and pedestrian safety:
    - Stripping only buffers versus physical elements.
    - Interest in low cost tactile/rumble elements in high-speed contexts to alert distracted drivers drifting toward bike lanes or shoulders.
    - Detailed choices about devices should be set in future standard details:
        - Not in high level chapter language
        - Ensure standards allow such options.
- Access and culvert replacements; liability concerns:
    - Clear policy direction sought and affirmed:
        - Routine culvert repairs under existing driveways should not trigger full access upgrades or driveway closures.
        - County wants to encourage repairs and proper culvert maintenance.
    - Limiting required upgrades when replacing culvert is legally defensible:
        - Where net impact is safety positive compared to failed/plugged culvert.
    - Need identified to:

        - Separate culvert regulation from access regulation in code.
        - Consider exemptions for culvert replacement from triggering full access standard compliance:
            - Maintain an avenue to address genuine safety concerns.
- Crash-based safety triggers for driveways:
    - Driveways are flagged for safety reviews when:
        - There are ≥ 2 crashes related to that driveway.
        - Within defined recent time period.
    - Process:
        - Staff perform field inspection.
        - Findings brought to board for policy direction on how to proceed.
    - Shared understanding:
        - Don't want rule forbidding driveway relocation in high-risk cases.
        - Want case by case evaluation:
            - Especially documented crash history or clear evidence of risk.
- Agricultural and rural driveways:
    - Paving existing agricultural driveways shouldn't trigger width, location changes or new permits.
    - Widening, relocation, or addition of hazardous fixed objects:
        - Remains subject to review.
- Transit operations:
    - Some corridors, buses stopping in travel lanes significantly impede traffic.
    - Understand what is required to mandate bus turnouts in some contexts.
    - Analyze implications, language, and coordination requirements with transit agencies.
- Relationships with utilities and TAC:
    - Significant improvement in relationships with utility companies:
        - Iterative TAC engagement.
        - Follow-up meetings on clear zones and measurement practices.
    - Utility input was particularly important in:
        - Refining clear zone standards and measurement definitions:
            - So, they are workable in the field.

5. Other

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- Code alignment and modernization:
    - Current engineering practice is governed by multiple:
        - Sometimes codes conflict.
        - Some dating from the 1980s.
    - New standards will require:
        - Follow-on code amendment effort to:
            - Remove contradictions.
            - Update references.
            - Reflect actual current practice and new standards.
- System Development Charges (SDCs):
    - Last comprehensively updated around 2000.
    - Recently indexed annually using construction price index.
    - Intention:
        - Reevaluate SDC methodology in light of:
            - Updated Transportation System Plan (TSP).
            - New project lists and cost estimates.
        - Consider potential SDC increases to match system needs.

        - Time spent briefing board and iterating language for policy fit.
    - Recognize team effort between:
        - Engineering.
        - Public works leadership.
        - Legal counsel.
        - TAC.
    - Board is producing more transparent and practical standards documents.

6. Next Steps

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- Standard Details Development:
    - Develop standard detail drawings to support Chapters 4 and 5 in next phase:
        - Cross sections, bike buffers, driveway flares, curb ramps, etc.
        - Targeted for later in summer.
- Code and Policy Alignment:
    - Reconcile county code with new engineering standards:
        - Access permitting and culvert work.
        - Clear zone provisions.
        - Any legacy provisions that conflict with current practice.
    - Draft and propose code amendments to:
        - Separate culvert regulations from access upgrades where appropriate.
        - Routine culvert replacement and minor work to not trigger needless driveway closures or major upgrades.
        - Reflect board policy direction on safety and liability management.
- Clear Zone and Utility Coordination:
    - Formalize agreements and documentation protocols with utilities on:
        - Measurement of gravel/vegetation lines.
        - Use of field photographs/stakes in applications.
        - Application of new clear zone and lateral offset standards.
- Bus Turnout Policy:
    - Analyze and draft proposed standards language defining:
        - When bus turnouts are required or recommended.
        - Design parameters and coordination processes with transit agencies.
    - Bring recommendations back to board for discussion and possible adoption.
- SDC Comparative Analysis:
    - Prepare a regional SDC comparison including:
        - Counties: Lane, Clackamas, Jackson, Washington, Linn, Deschutes:
            - Any other agreed comparables.
        - Cities: Salem, Keizer, Woodburn, Silverton and other relevant peers.
    - Document:
        - Current SDC rates by type.
        - Update frequency and history.
    - Use analysis to support update to county SDCs that remain competitive while funding identified TSP project needs.
- Finalize Bundle #2 and Prepare for Adoption:
    - Incorporate feedback from work session into revisions of Chapters 4–7.
    - Work with legal on final wording refinements tied to liability and enforcement.
    - Plan for:
        - Any additional work session is needed if material changes arise.
        - Subsequent formal adoption process for the standards bundle.

Adjourned – time: 11:22 a.m.
Minutes by: Mary Vityukova
Reviewed by: Gary L. White