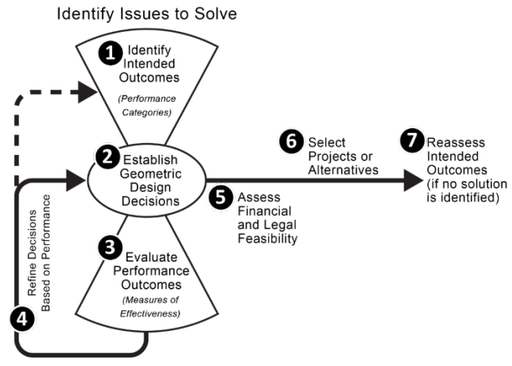
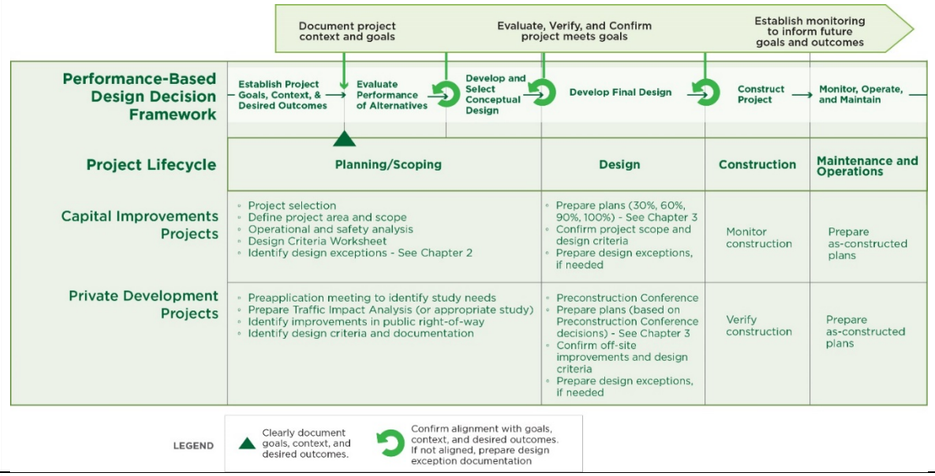
Section of New Standards	Existing Standard or Policy	Proposed Language
Introduction	None	This chapter describes the purpose and intended use of the Marion County Engineering Standards (Standards). This chapter also includes an overview of performance-based design and offers relevant resources that can support material in the Standards.
1.1 Purpose and Intended Use	1990 Standards – Section 1 Introduction: These are the Public Works Engineering Standards of Marion County. They establish the general criteria and detailed standards used for work both within public right-of- ways and dedicated easements of the county. They shall govern: A. The design of roads, streets, and appurtenances in unincorporated areas within county right-of-ways and roadways in incorporated cities under county jurisdiction. B. The design of drainage facilities, including those associated with public right-of- ways, roads, paved driveways, and parking and loading areas on private property. C. The use of public right-of-ways and drainage easements for other purposes and facilities to insure that such other uses do not adversely affect the integrity, use and maintenance of the roadway and drainage facilities. D. Where improvements to public roadways and drainage facilities are required under the authority of the Marion County Zoning Ordinance and the Marion County Subdivision and Partitioning Ordinance, such improvements shall conform to these standards. Interpretation and enforcement of these standards shall be the responsibility of the Marion County Department of Public Works. These standards shall apply to new and reconstructed facilities. Funds will not be available in the foreseeable future to bring all existing facilities up to these standards. These standards are intended as a working document to provide a common understanding for design affecting Marion County roads and public right-of-ways. As such, they will be revised and updated periodically. 2005 TSP Section 10.3.1: Policy 4 b) Within the Urban Growth Boundary of an incorporated city, Marion County Public Works will apply roadway design standards and criteria in the Transportation System Plan (TSP) adopted by that city except in cases where, in the engineering judgment of the Marion County Public Works Department, it would not be appropriate to do so. In the absence of adopted standards or a TSP by a city, Marion County Public Works will use its own engineering standards and/or judgment to determine the appropriate planning direction or standard to apply.	The Standards establish general guidance and criteria for work within and affecting public rights-of-way and easements under the jurisdiction of Marion County. Unless the County Engineer determines otherwise, or funding sources dictate otherwise, (1) projects within a City's limits may use that City's standards or the County's standards and (2) projects within an Urban Growth Boundary (UGB) but outside a City's limits may use the County's standards or the standards of the City which includes the project area in its comprehensive plan and UGB. The Standards shall apply to new and reconstructed facilities. Existing facilities will be evaluated to identify practicable opportunities to align improvements with the Standards based on available funding. Marion County Department of Public Works shall be responsible for interpreting and enforcing the Standards. The Standards shall govern: • Design for roads and appurtenances in unincorporated areas within or impacting County rights-of-way and design for roads under County jurisdiction in incorporated cities where standards are either not established or the County Engineer has determined the City standards are not appropriate. • Design for drainage facilities associated with public rights-of-way, roads, accesses (commonly called "driveways"), and impervious areas that discharge stormwater to public rights-of-way and easements under County jurisdiction. This includes design for stormwater quality treatment facilities in the County's Stormwater Management Area (Chapter 9: Stormwater). This also applies to stormwater facilities that fall outside the Stormwater Management Area (SWMA) or beyond a specific City's limits. • The use of public rights-of-way and easements benefitting the public for other purposes and facilities to ensure that such other uses do not adversely affect the integrity, use, and maintenance of the road and drainage facilities. • Where improvements to public roadways and drainage facilities are required under the authority of the Urban Zoning Code Title 16 and Rural Zone Coding Title 17. The Standards replace the Marion County Department of Public Works Engineering Standards (1990), and incorporates the Marion County Americans with Disabilities Act (ADA) Design Standards and Requirements (2021), and the Marion County Stormwater Quality Treatment Engineering Standards (2022). The Standards are intended to be a working document to provide a common understanding for design that affects Marion County roads and public rights-of-way and County easements. As such, the Standards will be revised and updated periodically. Proposed modifications will be presented to the Board of Commissioners for consideration. Additional information on the review and update process is available in the introduction pages of the Standards.

Section of New Standards	Existing Standard or Policy	Proposed Language
1.2 Performance-Based Design	1990 Standard – Section IV Roadway Design Standards The roads which are to be constructed within public right-of-ways shall be designed to conform to the following standards. Such standards for a particular road will be in accordance with the most current road classification plan as adopted by the county. 1990 Standards – Section V Drainage Standards These standards shall apply to all drainage facilities which impact a public right-of-way or easement dedicated to Marion County and within all off-street parking and loading areas as required by the Marion County Zoning Ordinance. 2021 ADA Standards – Section 1 Introduction These standards are now required for all ADA-related work within the public rights-of-way under County jurisdiction. 2022 Stormwater Quality Standards – Section 1.2 Applicability All private storm drains outside the building envelope shall be designed using these Standards, along with the Oregon Structural Code, Oregon Plumbing Code, the MCC, and/or other applicable codes as appropriate.	A performance-based design approach helps practitioners make and document planning and design decisions by: • Emphasizing outcomes as the primary measure for design effectiveness and project success. • Guiding project teams to clearly outline intended project outcomes and select performance measures that align with those outcomes. • Creating a documentation method for planning and design choices so that project teams can make informed design decisions. • Supporting risk management and tort liability with a decision-making framework that documents planning and design decisions and solutions. A performance-based approach uses a framework to help project teams evaluate design decision trade-offs. Making decisions based on roadway context and users can help verify that project outcomes align with current and future land use visions. Figure 1-1 illustrates a performance-based approach from NCHRP Report 785: Performance-Based Analysis of Geometric Design of Highways and Streets. (2) **Figure 1-1: Performance-Based Design Approach**  The performance-based approach outlined in NCHRP Report 785 has seven steps: 1. Identify intended project outcomes and performance categories. 2. Establish geometric design decisions based on intended outcomes. 3. Evaluate the design against the established performance categories. 4. Iterate and refine the design to align solutions with intended project outcomes. 5. Assess the financial and legal feasibility of alternatives. 6. Select a preferred alternative that aligns with the intended outcomes. 7. Consider reassessing intended outcomes if no acceptable solution is identified.

<table>
<tr><th>Section of New Standards</th><th>Existing Standard or Policy</th><th>Proposed Language</th></tr>
<tr><td></td><td></td><td>Figure 1-2 provides a project decision-making framework for practitioners working in Marion County. This framework creates an iterative process, one that allows design flexibility and continuous verification of intended project outcomes and that documents design decisions during each phase of the process. This framework outlines key milestones and deliverables associated with capital improvement projects and private development projects. Additional information about project documentation and deliverables is provided in Chapter 2 and Chapter 3.

Figure 1-2: Marion County Project Decision Framework
 
</td></tr>
<tr><td>1.3 Relevant Resources</td><td>None</td><td>The Standards are supported by and may be used in conjunction with resources and publications from the County, the Oregon Department of Transportation (ODOT), and national organizations. This section lists the primary County resources, which are also available on the County website. For additional resources, see Appendix A. For website information associated with the County and other resources, see Appendix B. In the event of an unintended conflict between information provided in Marion County documents, the following hierarchy shall be used:
• Marion County Engineering Standards
• Marion County Standard Details
• Marion County Standard Specifications
• Marion County Rural Transportation System Plan (and additional documents including the Marion County Comprehensive Plan and Marion County Transportation Safety Action Plan)
• Marion County Code</td></tr>
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Section of New Standards	Existing Standard or Policy	Proposed Language
1.3.1 Standard Details	None	Standard details verify consistency in projects across the County. To reduce redundancies and streamline plan preparation, the County's standard details contain both standard notes and details and are referenced from plan sets. Using the County's standard details, designers can avoid copying commonly used notes and details into every plan set. Standard details also help reduce the number of drawings in engineering plan sets and the time it takes to prepare them. County standard details are consistent with design guidance and criteria in the Standards and are referenced throughout to support content and provide additional information. In the event a discrepancy exists between the Standards and standard details, the Standards shall supersede.
1.3.2 County Code	None	The Marion County Code sets provisions and codifies Board adopted ordinances for decision-making in the County and helps address specific community issues and goals. Ordinances cover an array of topics. The topics most relevant to the Standards are Title 10: Vehicles and Traffic; Title 11: Roads and Rights-of-Way; and Title 15: Building and Construction. County land use regulations are included in Titles 16 and 17 of the Code and in the Marion County Comprehensive Land Use Plan. Title 16: Urban Zoning regulates development and land use in unincorporated areas of Marion County within the UGB. Title 17: Rural Zoning regulates development and land use in areas outside the UGB. For additional information on the County Code, visit the County website.
1.3.3 Transportation System Plan	None	The Marion County Rural Transportation System Plan (RTSP) sets a development framework for an efficient, well-balanced, and cost-effective transportation system. The plan addresses ODOT's Transportation Planning Rule, which requires the County to develop and adopt a twenty-year transportation plan. The RTSP currently covers County transportation facilities outside the UGB of incorporated cities. The RTSP also currently includes facilities in unincorporated rural communities that function as small cities. The Standards reference the RTSP to provide additional transportation planning information that may be helpful for designers and project teams.
1.3.4 Comprehensive Plan	None	The Marion County Comprehensive Plan guides development and conservation of the County's land resources. It provides the foundation for decisions concerning the physical, social, and economic development of the County. The plan is based on inventories, developmental limitations, projected needs, and the urban growth management strategy, as well as the goals and guidelines of the State of Oregon's Land Conservation and Development Commission.
1.3.5 Transportation Safety Action Plan	None	The Marion County Transportation Safety Action Plan (TSAP) is a strategic safety plan that guides the County's transportation safety investments outside of the Salem-Keizer Area Transportation Study (SKATS) boundaries. Ultimately, this plan supports the County's commitment to improving safety and reducing the risk of fatal and serious injury crashes. The plan identifies goals and strategies that can help create and maintain a safe transportation system that serves all users. The plan is focused on County-maintained

Section of New Standards	Existing Standard or Policy	Proposed Language
		roadways (including those in small cities), and it identifies projects that are eligible for State and Federal safety funding programs.
1.3.6 Standard Construction Specifications	None	Standard construction specifications include standards for construction methods and materials. The specifications are part of all County capital improvement projects (CIP) construction contracts and provide criteria for bidding, awarding, and executing contracts. Unless the County Engineer determines otherwise, or funding sources dictate otherwise, traffic signals in and adjacent to City of Salem's comprehensive plan portion of the UGB shall use the most recent version of the City of Salem Standard Construction Specifications. Traffic signals in other areas shall use ODOT's Standard Specifications. The County Engineer may determine specifications for other items.
1.4 References	None	1. Transportation Research Board (TRB). NCHRP Report 785: Performance-Based Analysis for Geometric Design of Highways and Streets. Washington, D.C., 2015.