

## Colorado Department of Transportation & Contractor

# BOOK 3

## APPLICABLE STANDARDS, DATA, AND REPORTS

US 550 / 160 Connection Design-Build Project

### **REQUEST FOR PROPOSAL**

July 12, 2019

PROJECT NO.: NHPP 5501-029

SUBACCOUNT NO.: 22420

### Applicable Standards, Data, and Reports

The latest, current version of the specified standards, data, and reports at the time of the Proposal Due Date including all interim revisions and updates shall be used unless specified otherwise.

Copies of reports available at CDOT.

The Project-Specific Standards, Data, and Reports are listed by technical discipline for convenience only, and accordingly, such listing shall not be interpreted as limiting the application of such standards, data, and reports only to the specified technical disciplines if they are also applicable to other technical disciplines.

#### **Availability Legend**

IS = Industry standard, Not supplied with

RFP N = Not Yet Available

S = Included in RFP, Supplied with RFP

Date Issued: Date the Document was listed or supplied with the RFP

Table 1 Project-Specific Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
3.1	Environmental Documents		
3.1.01	US 550 EA/FONSI (December 2005) <a href="https://www.codot.gov/library/studies/study-archives/us-550-environmental-assessment-finding-of-no-significant-impact">https://www.codot.gov/library/studies/study-archives/us-550-environmental-assessment-finding-of-no-significant-impact</a>	7/27/2005	IS
3.1.02	US 550 EA/FONSI Reevaluation (May 2019) https://www.codot.gov/projects/us-550-us-160-Connection-design-build/reference-documents	5/20/2019	IS
3.1.03	US 550 at US 160 South Connection Supplemental FEIS/ROD (April 2015) <a href="https://www.codot.gov/projects/archived-project-sites/us550-at-160/history-and-background/supplementaldeis">https://www.codot.gov/projects/archived-project-sites/us550-at-160/history-and-background/supplementaldeis</a>	4/20/2015	IS
3.1.04	US 550 at US 160 South Connection Supplemental FEIS/ROD Reevaluation (May 2019) <a href="https://www.codot.gov/projects/us-550-us-160-Connection-design-build/reference-documents">https://www.codot.gov/projects/us-550-us-160-Connection-design-build/reference-documents</a>	5/20/2019	IS
3.1.05	401 Permit Waiver	6/7/2019	S
3.1.06	Section 404 Permit	5/17/2019	S
3.1.07	Section 404 Permit – NWP Section 46	5/17/2019	S

Table 1 Project-Specific Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
3.1.08	Section 404 Permit – NWP Section 14	5/17/2019	S
3.1.09	CDOT Reevaluation Form #1399	7/12/2019	IS
3.1.10	CDOT Categorical Exclusion Determination #128	7/12/2019	IS
3.2	Geotechnical		
3.2.02	Draft Geotechnical Investigation Report for Preliminary Design, US 550 New Mexico State Line – North, Milepost 2.76 to 15.24 by Yeh and Associates, Inc <u>US 550 Draft Geotechnical Investigation Report</u>	4/7/2008	IS
3.4	Other		
3.4.01	US-550/US-160 Final Connection Design Build Lane Closure Strategy Report	1/15/2019	S
3.4.02	US 550 160 Safety Assessment Report	11/1/2018	S
3.4.03	Irrigation and Landscape Standards	7/12/2019	S
3.4.04	Deer Guard Details	4/16/2018	S

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	23 CFR 637 Construction Inspection and Approval	7/12/2019	IS
N/A	23 CFR 645 Utilities & 23 CFR 646 Railroads	7/12/2019	IS
N/A	23 CFR 650 Subpart A Location and Hydraulic Design of Encroachments on Flood Plains & Subpart B Erosion and Sediment Control on Highway Construction Projects	7/12/2019	IS
N/A	23 CFR 710.313 Design-build projects	7/12/2019	IS
N/A	23 CFR 772 – Procedures for Abatement of Highway Traffic Noise and Construction Noise	7/12/2019	IS
N/A	23 CFR 774 Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites	7/12/2019	IS
N/A	29 CFR 1910, Federal Occupational Safety and Health Standards (Construction Industry)	7/12/2019	IS
N/A	29 CFR 1910, Federal Occupational Safety and Health Standards (General Industry)	7/12/2019	IS
N/A	29 CFR 1926.850, Federal Occupational Safety and Health Standards (Demolition)	7/12/2019	IS
N/A	4 CCR 723-7 Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings	7/12/2019	IS
N/A	49 CFR 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs	7/12/2019	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	49 CFR Part 23.53I	7/12/2019	IS
N/A	49 CFR Part 26 Appendix A	7/12/2019	IS
N/A	AASHTO/AWS D1.5 M- D 1.5, Bridge Welding Code	7/12/2019	IS
N/A	AASHTO Guide for Development of Bicycle Facilities	7/12/2019	IS
N/A	AASHTO Guide Specifications for LRFD Seismic Design	7/12/2019	IS
N/A	AASHTO Guide Specifications for Design and Construction of Segmental Concrete Bridges	7/12/2019	IS
N/A	AASHTO Guide Specifications for Fracture Critical Non- Redundant Steel Bridge Members	7/12/2019	IS
N/A	AASHTO Guide Specifications for Horizontally Curved Steel Highway Bridges	7/12/2019	IS
N/A	AASHTO Guidelines for Steel Girder Bridge Analysis	7/12/2019	IS
N/A	AASHTO LRFD Bridge Design Specifications	7/12/2019	IS
N/A	AASHTO LRFD Bridge Construction Specifications	7/12/2019	IS
N/A	AASHTO LRFD Guide Design Specifications for Bridge Temporary Works	7/12/2019	IS
N/A	AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals	7/12/2019	IS
N/A	AASHTO M-203 Standard Specification for Steel Strand, Uncoated Seven-Wire for Concrete Reinforcement	7/12/2019	IS
N/A	AASHTO Manual for Bridge Evaluation	7/12/2019	IS
N/A	AASHTO Policy on Geometric Design of Highways and Streets (2011)	7/12/2019	IS
N/A	AASHTO Roadside Design Guide	7/12/2019	IS
N/A	AASHTO Standard Specifications for Highway Bridges	7/12/2019	IS
N/A	AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals	7/12/2019	IS
N/A	AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing	7/12/2019	IS
N/A	AASHTO Ware Pavement Mechanistic-Empirical Design Software, Version 2.3.1	7/12/2019	IS
N/A	AASHTO/NSBA Steel Bridge Collaboration Shop Detail Drawing Review/Approval Guidelines	7/12/2019	IS
N/A	American Disabilities Act Accessibility Guidelines	7/12/2019	IS
N/A	American National Standard Institute (ANSI) – A300	7/12/2019	IS
N/A	American Society of Civil Engineers (ASCE) - C-I 38-02, Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data	7/12/2019	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	ANSI Z60.1, American Standard for Nursery Stock	7/12/2019	IS
N/A	ASCE CI/ASCE 38 Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data	7/12/2019	IS
N/A	ASTM A-416 Standard Specification for Low-Relaxation, Seven-Wire Steel Strand for Prestressed Concrete	7/12/2019	IS
N/A	ASTM D-523 Standard Test Method for Specular Gloss	7/12/2019	IS
N/A	ASTM D-1143 Standard Test Methods for Deep Foundations Under Static Axial Compressive Load	7/12/2019	IS
N/A	ASTM Standard Specification Manual	7/12/2019	IS
N/A	ATSSA Quality Guidelines for Work Zone Traffic Control Devices	7/12/2019	IS
N/A	ATSSA Guidelines on the Use of Positive Protection in Temporary Traffic Control Zones	7/12/2019	IS
N/A	CDHPE Colorado Air Quality Control Commission Regulation No. 1	7/12/2019	IS
N/A	CDOT Asbestos-Contaminated Soil Management Standard Operating Procedure (SOP)	7/12/2019	IS
N/A	CDOT Black-Tailed Prairie Dog Policy	7/12/2019	IS
3.4.05	CDOT Branding Standards Guidelines Will be provided to selected Proposer at NTP1		RFP N
N/A	CDOT Bridge Design Manual	7/12/2019	IS
N/A	CDOT Bridge Design Technical Memorandums	7/12/2019	IS
N/A	CDOT Bridge Detail Manual	7/12/2019	IS
N/A	CDOT Bridge Rating Manual	7/12/2019	IS
N/A	CDOT Bridge Structural Worksheets	7/12/2019	IS
N/A	CDOT Deck Geometry Manual	7/12/2019	IS
N/A	CDOT CADD Manual	7/12/2019	IS
N/A	CDOT Civil Rights Construction Contractor Compliance Manual	7/12/2019	IS
N/A	CDOT Construction Manual	7/12/2019	IS
N/A	CDOT Drainage Design Manual	7/12/2019	IS
N/A	CDOT Design Bulletin Pipe Material Selection Policy	7/12/2019	IS
N/A	CDOT Erosion Control & Stormwater Quality Guide	7/12/2019	IS
N/A	CDOT Field Materials Manual	7/12/2019	IS
N/A	CDOT Form 205	7/12/2019	IS
N/A	CDOT Form 250	7/12/2019	IS
N/A	CDOT Form 438	7/12/2019	IS
N/A	CDOT Form 444	7/12/2019	IS
N/A	CDOT Form 568	7/12/2019	IS
N/A	CDOT Form 730	7/12/2019	IS
N/A	CDOT Form 893	7/12/2019	IS
N/A	CDOT Form 1415	7/12/2019	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	CDOT Form 1416	7/12/2019	IS
N/A	CDOT Form 1420	7/12/2019	IS
N/A	CDOT Form 1432	7/12/2019	IS
N/A	CDOT Functional Assessment of Colorado Wetlands (FACWet) methodology	7/12/2019	IS
N/A	CDOT Geotechnical Design Manual	7/12/2019	IS
N/A	CDOT Guidelines for the Use of Positive Protection in Work Zones	7/12/2019	IS
N/A	CDOT Guidelines for Developing Traffic incident Management Plans for Work Zones	7/12/2019	IS
N/A	CDOT Highway Maintenance Levels of Service Manual	7/12/2019	IS
N/A	CDOT Laboratory Manual of Test Procedures	7/12/2019	IS
N/A	CDOT Lighting Design Guide	7/12/2019	IS
N/A	CDOT Materials Action Committee (MAC) Task Force Design Guide TF 2016-05	7/12/2019	IS
N/A	CDOT Mechanistic-Empirical Pavement Design Manual	7/12/2019	IS
N/A	CDOT MS4 Construction Program Manual	7/12/2019	IS
N/A	CDOT Municipal Separate Storm Sewer (MS4) NPDES Permit	7/12/2019	IS
N/A	CDOT New Development and Redevelopment (NDRD) Program Guidelines	7/12/2019	IS
N/A	CDOT Noise Analysis and Abatement Guidelines	7/12/2019	IS
N/A	CDOT Pipe Material Selection Policy	7/12/2019	IS
N/A	CDOT Policy Directive 508.2, CDOT's Open Records Act Procedure for Engineering Contracts	7/12/2019	IS
N/A	CDOT Project Development Manual	7/12/2019	IS
N/A	CDOT Research Reports	7/12/2019	IS
N/A	CDOT Retaining & Noise Wall Inspection & Asset Management Manual	7/12/2019	IS
N/A	CDOT Retro Reflective Sheeting Materials Guide	7/12/2019	IS
N/A	CDOT Revisions to Project Development Manual	7/12/2019	IS
N/A	CDOT Right of Way Manual	7/12/2019	IS
N/A	CDOT Roadway Design Guide	7/12/2019	IS
N/A	CDOT Sign Design Manual	7/12/2019	IS
N/A	CDOT Standard Plans, M & S Standards	7/12/2019	IS
N/A	CDOT Standard Specifications for Road and Bridge Construction	7/12/2019	IS
N/A	CDOT Supplement to Standard Highway Signs	7/12/2019	IS
N/A	CDOT Survey Manual	7/12/2019	IS
N/A	CDOT The Colorado Supplement to the Federal Manual on Uniform Traffic Control Devises	7/12/2019	IS
N/A	CDOT Transportation Guidelines to Determine Whether Acquisition of Property for a CDOT Highway Project will Serve the Public Interest (PD 1301.0)	7/12/2019	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	CDOT Utility Accommodation Code	7/12/2019	IS
N/A	CDOT Work Zone Safety and Mobility Program	7/12/2019	IS
N/A	CDOT Work Zone Safety and Mobility Rule	7/12/2019	IS
N/A	City of Durango Storm Drainage Design Criteria Manual	7/12/2019	IS
N/A	Clean Water Act	7/12/2019	IS
N/A	Colorado Office of Archaeology and Historic Preservation (OAHP) standards and 36 CFR 800.11	7/12/2019	IS
N/A	Colorado Parks and Wildlife General Provisions	7/12/2019	IS
N/A	Colorado Parks and Wildlife Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors	7/12/2019	IS
N/A	Colorado Parks and Wildlife Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls When Conducting Prairie Dog Control	7/12/2019	IS
N/A	Colorado Voluntary Clean-up Program (VCUP)	7/12/2019	IS
N/A	Colorado Water Conservation Board Floodplain and Stormwater Criteria Manual	7/12/2019	IS
N/A	Colorado Water Conservation Board Rules and Regulations for Regulatory Floodplains in Colorado	7/12/2019	IS
N/A	CRS 9-1.5-102, Subsurface Utility	7/12/2019	IS
N/A	CRS 12-25 Professions and Occupations General – Engineers, Surveyors, and Architects	7/12/2019	IS
N/A	CRS 24-56-101, The Colorado Relocation Assistance and Land Acquisition Policy, et seq. as amended	7/12/2019	IS
N/A	CRS 35-7-203, Release of destructive rodent pests	7/12/2019	IS
N/A	CRS 37-92-602 (8) (SB 212)	7/12/2019	IS
N/A	CRS 38-1-101, Colorado Eminent Domain Act	7/12/2019	IS
N/A	CRS 38-1-122, Property – Real & Personal Eminent Domain, Proceedings, Requirements & Limitations, Attorney Fees	7/12/2019	IS
N/A	CRS 43-1-1411 Project Specific Utility Relocation Agreements	7/12/2019	IS
N/A	CRS 43-1-208, 210 and 43-3-106	7/12/2019	IS
N/A	Environmental Data Resources (EDR) Regulatory Report (2016)	7/12/2019	IS
N/A	EPA Storm Water Management Model (SWMM)	7/12/2019	IS
N/A	FEMA National Flood Insurance Program Regulations (44 Code of Federal Regulations [CFR] Parts 59-80)	7/12/2019	IS
N/A	FHWA Corrosion/Degradation of Soil Reinforcements for Mechanically Stabilized Earth Walls and Reinforced Slopes	7/12/2019	IS
N/A	FHWA Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes	7/12/2019	IS
N/A	FHWA Design Manual for Permanent Ground Anchor Walls	7/12/2019	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	FHWA DP-90-068 , Permanent Ground Anchors, Volume 1, Final Report	7/12/2019	IS
N/A	FHWA Geotechnical Engineering Circular No. 4 – Ground Anchors and Anchored Systems	7/12/2019	IS
N/A	FHWA Geotechnical Engineering Circular No. 7 – Soil Nail Walls	7/12/2019	IS
N/A	FHWA HI-95-038 "Geosynthetic Design and Construction Guidelines"	7/12/2019	IS
N/A	FHWA Highway Traffic Noise: Analysis and Abatement Policy and Guidance	7/12/2019	IS
N/A	FHWA Hydraulic Design Series No. 4, Introduction to Highway Hydraulics	7/12/2019	IS
N/A	FHWA Hydraulic Design Series No. 5, Hydraulic Design of Highway Culverts	7/12/2019	IS
N/A	FHWA Hydraulic Engineering Circular No. 12, Drainage of Highway Pavements	7/12/2019	IS
N/A	FHWA Long-Term Pavement Performance Bind (LTPPBind Online)	7/12/2019	IS
N/A	FHWA Manual for the Design & Construction Monitoring of Soil Nail Walls	7/12/2019	IS
N/A	FHWA NH-00-043 Mechanically Stabilized Earth Walls and Reinforced Soil Slopes	7/12/2019	IS
N/A	FHWA RD-73-93, Analysis and Design Problems in Modeling Slurry Wall Construction	7/12/2019	IS
N/A	FHWA RD-80-047, Slurry Walls as an Integral Part of Underground Transportation Structures	7/12/2019	IS
N/A	FHWA RD-82-046, Tiebacks, Executive Summary	7/12/2019	IS
N/A	FHWA RD-82-047, Tiebacks	7/12/2019	IS
N/A	FHWA RD-92-004, Drilled Shafts for Bridge Foundations	7/12/2019	IS
N/A	FHWA SA-93-068, Soil Nailing Field Inspectors Manual-Soil Nail Walls	7/12/2019	IS
N/A	FHWA Soil Nailing Field Inspectors Manual	7/12/2019	IS
N/A	FHWA Standard Highway Signs (with supplements)	7/12/2019	IS
N/A	FHWA Work Zone Operations Best Practices Guidebook	7/12/2019	IS
N/A	FHWA, RD-75-114 Safety and Locational Criteria for Bicycle Facilities	7/12/2019	IS
N/A	FHWA-CFL/TD-11-003, Wildlife Crossing Structure Handbook: Design and Evaluation in North America	7/12/2019	IS
N/A	FHWA-RD-89-198, Soil Nailing for Stabilization of Highway Slopes and Excavations	7/12/2019	IS

#### Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	Guidelines for Senate Bill 40 Wildlife Certification	7/12/2019	IS
N/A	HEC-11, Design of Riprap Revetment	7/12/2019	IS
N/A	HEC-12-Drainage of Highway Pavements	7/12/2019	IS
N/A	HEC-13, Hydraulic Design of Improved Inlets for Culverts	7/12/2019	IS
N/A	HEC-14, Hydraulic Design of Energy Dissipaters for Culverts and Channels	7/12/2019	IS
N/A	HEC-15, Design of Roadside Channels with Flexible Linings	7/12/2019	IS
N/A	HEC-18, Evaluating Scour at Bridges	7/12/2019	IS
N/A	HEC-20, Stream Stability at Highways	7/12/2019	IS
N/A	HEC-21, Design of Bridge Deck Drainage	7/12/2019	IS
N/A	HEC-22, Urban Drainage Design Manual	7/12/2019	IS
N/A	HEC-23, Bridge Scour and Stream Instability Countermeasures Experience, Selection, and Design Guidance	7/12/2019	IS
N/A	HEC-24, Highway Stormwater Pumping Station Design	7/12/2019	IS
N/A	International Building Code	7/12/2019	IS
N/A	International Code Council (ICC), International Fire Code (IFC)Supp	7/12/2019	IS
N/A	International Organization for Standardization (ISO), 9001	7/12/2019	IS
N/A	International Telecommunications Union (ITU), Telecommunications Standardization Sector – Recommendations G.652.D	7/12/2019	IS
N/A	LPEA Electric Service Regulations	7/12/2019	IS
N/A	La Plata County Code Development Standards and Specifications	7/12/2019	IS
N/A	Landslides: Investigation and Mitigation, TRB Special Report 247	7/12/2019	IS
N/A	Migratory Bird Treaty Act	7/12/2019	IS
N/A	MUTCD, Manual of Uniform Traffic Control Devices	7/12/2019	IS
N/A	National Cooperative Highway Research Project (NCHRP) Bridge Life-Cycle Cost Analysis	7/12/2019	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 12-43 Life-Cycle Cost Analysis for Bridges	7/12/2019	IS
N/A	National Cooperative Highway Research Project (NCHRP) Manual for Assessing Safety Hardware (MASH)	7/12/2019	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features	7/12/2019	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 402, Fatigue Design of Modular Bridge Expansion Joints	7/12/2019	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 672, Roundabouts: An Informal Guide, second edition	7/12/2019	IS
N/A	National Electrical Manufacturing Association (NEMA) Standards and Specifications	7/12/2019	IS
N/A	National Institute of Standards and Technology (NIST) Bridge LLC	7/12/2019	IS
N/A	National Historic Preservation Act (NHPA)	7/12/2019	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	NFPA 1, Fire Code	7/12/2019	IS
N/A	NFPA 101, Life Safety Code	7/12/2019	IS
N/A	NFPA 70 National Electric Code	7/12/2019	IS
N/A	NOAA Precipitation Frequency Atlas 14 of the United States, Volume 8	7/12/2019	IS
N/A	National Precast Concrete Association (NPCA), Quality Control (QC) Manual	7/12/2019	IS
N/A	National Transportation Communication for ITS Protocol (NTCIP 9001)	7/12/2019	IS
N/A	OSHA Standard Specifications	7/12/2019	IS
N/A	Resource Conservation and Recovery Act (RCRA)	7/12/2019	IS
N/A	Retroreflective Sheeting Materials Guide	7/12/2019	IS
N/A	Rules and Regulations of the CDOT Pertaining to Accommodating Utilities in the State Highway Rights of Way	7/12/2019	IS
N/A	Rural Utilities Service (RUS), Specification for Filled Fiber Optic Cables	7/12/2019	IS
3.4.06	State of Colorado, Amerco Supreme Court Case No.16SA75	7/12/2019	S
N/A	State of Colorado Endangered-Threatened Species Conservation Act	7/12/2019	IS
N/A	State of Colorado, State Highway Access Code	7/12/2019	IS
N/A	The Colorado Supplement to the Federal Manual on Uniform Traffic Control Devices	7/12/2019	IS
N/A	The Endangered Species Act	7/12/2019	IS
N/A	The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended	7/12/2019	IS
N/A	Telecommunications Industry Association (TIA), 598-D Optical Fiber Cable Color Coding	7/12/2019	IS
N/A	Transportation Research Board (TRB) Highway Capacity Manual	7/12/2019	IS
N/A	UDFCD Design of Low Tailwater Riprap Basins for Storm Sewer Pipe Outlets	7/12/2019	IS
N/A	UDFCD Urban Storm Drainage Criteria Manual	7/12/2019	IS
N/A	USACE Wetland Delineation Manual	7/12/2019	IS