

Colorado Department of Transportation & Contractor

BOOK 3

APPLICABLE STANDARDS, DATA, AND REPORTS

US 550 / 160 Connection Design-Build Project

REQUEST FOR PROPOSAL

June 10, 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) https://www.codot.gov/library/studies/study-archives/us-550-environmental-assessment-finding-of-no-significant-impact	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) https://www.codot.gov/projects/archived-project-sites/us550-at-160/history-and-background/supplementaldeis	4/20/2015	IS
3.1.04	US 550 at US 160 South Connection Supplemental FEIS/ROD Reevaluation (May 2019) https://www.codot.gov/projects/us-550-us-160-Connection-design-build/reference-documents	5/20/2019	IS
3.1.05	Section 401 Permit		RFP N
3.1.06	Section 404 Permit	5/17/2019	S
3.1.07	Section 404 Permit – NWP Section 14	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	6/10/2019	IS
3.1.10	CDOT Categorical Exclusion Determination #128	6/10/2019	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	6/10/2019	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	6/10/19	IS
N/A	23 CFR 645 Utilities & 23 CFR 646 Railroads	6/10/19	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	6/10/19	IS
N/A	23 CFR 710.313 Design-build projects	6/10/19	IS
N/A	23 CFR 772 – Procedures for Abatement of Highway Traffic Noise and Construction Noise	6/10/19	IS
N/A	23 CFR 774 Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites	6/10/19	IS
N/A	29 CFR 1910, Federal Occupational Safety and Health Standards (Construction Industry)	6/10/19	IS
N/A	29 CFR 1910, Federal Occupational Safety and Health Standards (General Industry)	6/10/19	IS
N/A	29 CFR 1926.850, Federal Occupational Safety and Health Standards (Demolition)	6/10/19	IS
N/A	4 CCR 723-7 Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings	6/10/19	IS
N/A	49 CFR 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs	6/10/19	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	49 CFR Part 23.53I	6/10/19	IS
N/A	49 CFR Part 26 Appendix A	6/10/19	IS
N/A	AASHTO/AWS D1.5 M- D 1.5, Bridge Welding Code	6/10/19	IS
N/A	AASHTO Guide for Development of Bicycle Facilities	6/10/19	IS
N/A	AASHTO Guide Specifications for LRFD Seismic Design	6/10/19	IS
N/A	AASHTO Guide Specifications for Design and Construction of Segmental Concrete Bridges	6/10/19	IS
N/A	AASHTO Guide Specifications for Fracture Critical Non- Redundant Steel Bridge Members	6/10/19	IS
N/A	AASHTO Guide Specifications for Horizontally Curved Steel Highway Bridges	6/10/19	IS
N/A	AASHTO Guidelines for Steel Girder Bridge Analysis	6/10/19	IS
N/A	AASHTO LRFD Bridge Design Specifications	6/10/19	IS
N/A	AASHTO LRFD Bridge Construction Specifications	6/10/19	IS
N/A	AASHTO LRFD Guide Design Specifications for Bridge Temporary Works	6/10/19	IS
N/A	AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals	6/10/19	IS
N/A	AASHTO M-203 Standard Specification for Steel Strand, Uncoated Seven-Wire for Concrete Reinforcement	6/10/19	IS
N/A	AASHTO Manual for Bridge Evaluation	6/10/19	IS
N/A	AASHTO Policy on Geometric Design of Highways and Streets (2011)	6/10/19	IS
N/A	AASHTO Roadside Design Guide	6/10/19	IS
N/A	AASHTO Standard Specifications for Highway Bridges	6/10/19	IS
N/A	AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals	6/10/19	IS
N/A	AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing	6/10/19	IS
N/A	AASHTO Ware Pavement Mechanistic-Empirical Design Software, Version 2.3.1	6/10/19	IS
N/A	AASHTO/NSBA Steel Bridge Collaboration Shop Detail Drawing Review/Approval Guidelines	6/10/19	IS
N/A	American Disabilities Act Accessibility Guidelines	6/10/19	IS
N/A	American National Standard Institute (ANSI) – A300	6/10/19	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	6/10/19	IS
N/A	ANSI Z60.1, American Standard for Nursery Stock	6/10/19	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	ASCE CI/ASCE 38 Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data	6/10/19	IS
N/A	ASTM A-416 Standard Specification for Low-Relaxation, Seven-Wire Steel Strand for Prestressed Concrete	6/10/19	IS
N/A	ASTM D-523 Standard Test Method for Specular Gloss	6/10/19	IS
N/A	ASTM D-1143 Standard Test Methods for Deep Foundations Under Static Axial Compressive Load	6/10/19	IS
N/A	ASTM Standard Specification Manual	6/10/19	IS
N/A	ATSSA Quality Guidelines for Work Zone Traffic Control Devices	6/10/19	IS
N/A	ATSSA Guidelines on the Use of Positive Protection in Temporary Traffic Control Zones	6/10/19	IS
N/A	CDHPE Colorado Air Quality Control Commission Regulation No. 1	6/10/19	IS
N/A	CDOT Asbestos-Contaminated Soil Management Standard Operating Procedure (SOP)	6/10/19	IS
N/A	CDOT Black-Tailed Prairie Dog Policy	6/10/19	IS
3.4.05	CDOT Branding Standards Guidelines		RFP N
N/A	CDOT Bridge Design Manual	6/10/19	IS
N/A	CDOT Bridge Design Technical Memorandums	6/10/19	IS
N/A	CDOT Bridge Detail Manual	6/10/19	IS
N/A	CDOT Bridge Rating Manual	6/10/19	IS
N/A	CDOT Bridge Structural Worksheets	6/10/19	IS
N/A	CDOT Deck Geometry Manual	6/10/19	IS
N/A	CDOT CADD Manual	6/10/19	IS
N/A	CDOT Civil Rights Construction Contractor Compliance Manual	6/10/19	IS
N/A	CDOT Construction Manual	6/10/19	IS
N/A	CDOT Drainage Design Manual	6/10/19	IS
N/A	CDOT Design Bulletin Pipe Material Selection Policy	6/10/19	IS
N/A	CDOT Erosion Control & Stormwater Quality Guide	6/10/19	IS
N/A	CDOT Field Materials Manual	6/10/19	IS
N/A	CDOT Form 205	6/10/19	IS
N/A	CDOT Form 250	6/10/19	IS
N/A	CDOT Form 438	6/10/19	IS
N/A	CDOT Form 444	6/10/19	IS
N/A	CDOT Form 568	6/10/19	IS
N/A	CDOT Form 730	6/10/19	IS
N/A	CDOT Form 893	6/10/19	IS
N/A	CDOT Form 1415	6/10/19	IS
N/A	CDOT Form 1416	6/10/19	IS
N/A	CDOT Form 1420	6/10/19	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	CDOT Form 1432	6/10/19	IS
N/A	CDOT Functional Assessment of Colorado Wetlands (FACWet) methodology	6/10/19	IS
N/A	CDOT Geotechnical Design Manual	6/10/19	IS
N/A	CDOT Guidelines for the Use of Positive Protection in Work Zones	6/10/19	IS
N/A	CDOT Guidelines for Developing Traffic incident Management Plans for Work Zones	6/10/19	IS
N/A	CDOT Highway Maintenance Levels of Service Manual	6/10/19	IS
N/A	CDOT Laboratory Manual of Test Procedures	6/10/19	IS
N/A	CDOT Lighting Design Guide	6/10/19	IS
N/A	CDOT Materials Action Committee (MAC) Task Force Design Guide TF 2016-05	6/10/19	IS
N/A	CDOT Mechanistic-Empirical Pavement Design Manual	6/10/19	IS
N/A	CDOT MS4 Construction Program Manual	6/10/19	IS
N/A	CDOT Municipal Separate Storm Sewer (MS4) NPDES Permit	6/10/19	IS
N/A	CDOT New Development and Redevelopment (NDRD) Program Guidelines	6/10/19	IS
N/A	CDOT Noise Analysis and Abatement Guidelines	6/10/19	IS
N/A	CDOT Pipe Material Selection Policy	6/10/19	IS
N/A	CDOT Policy Directive 508.2, CDOT's Open Records Act Procedure for Engineering Contracts	6/10/19	IS
N/A	CDOT Project Development Manual	6/10/19	IS
N/A	CDOT Research Reports	6/10/19	IS
N/A	CDOT Retaining & Noise Wall Inspection & Asset Management Manual	6/10/19	IS
N/A	CDOT Retro Reflective Sheeting Materials Guide	6/10/19	IS
N/A	CDOT Revisions to Project Development Manual	6/10/19	IS
N/A	CDOT Right of Way Manual	6/10/19	IS
N/A	CDOT Roadway Design Guide	6/10/19	IS
N/A	CDOT Sign Design Manual	6/10/19	IS
N/A	CDOT Standard Plans, M & S Standards	6/10/19	IS
N/A	CDOT Standard Specifications for Road and Bridge Construction	6/10/19	IS
N/A	CDOT Supplement to Standard Highway Signs	6/10/19	IS
N/A	CDOT Survey Manual	6/10/19	IS
N/A	CDOT The Colorado Supplement to the Federal Manual on Uniform Traffic Control Devises	6/10/19	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)	6/10/19	IS
N/A	CDOT Utility Accommodation Code	6/10/19	IS
N/A	CDOT Work Zone Safety and Mobility Program	6/10/19	IS

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Doc#	Document	Date Issued	Availability
N/A	CDOT Work Zone Safety and Mobility Rule	6/10/19	IS
N/A	City of Durango Storm Drainage Design Criteria Manual	6/10/19	IS
N/A	Clean Water Act	6/10/19	IS
N/A	Colorado Office of Archaeology and Historic Preservation (OAHP) standards and 36 CFR 800.11	6/10/19	IS
N/A	Colorado Parks and Wildlife General Provisions	6/10/19	IS
N/A	Colorado Parks and Wildlife Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors	6/10/19	IS
N/A	Colorado Parks and Wildlife Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls When Conducting Prairie Dog Control	6/10/19	IS
N/A	Colorado Voluntary Clean-up Program (VCUP)	6/10/19	IS
N/A	Colorado Water Conservation Board Floodplain and Stormwater Criteria Manual	6/10/19	IS
N/A	Colorado Water Conservation Board Rules and Regulations for Regulatory Floodplains in Colorado	6/10/19	IS
N/A	CRS 9-1.5-102, Subsurface Utility	6/10/19	IS
N/A	CRS 12-25 Professions and Occupations General – Engineers, Surveyors, and Architects	6/10/19	IS
N/A	CRS 24-56-101, The Colorado Relocation Assistance and Land Acquisition Policy, et seq. as amended	6/10/19	IS
N/A	CRS 35-7-203, Release of destructive rodent pests	6/10/19	IS
N/A	CRS 37-92-602 (8) (SB 212)	6/10/19	IS
N/A	CRS 38-1-101, Colorado Eminent Domain Act	6/10/19	IS
N/A	CRS 38-1-122, Property – Real & Personal Eminent Domain, Proceedings, Requirements & Limitations, Attorney Fees	6/10/19	IS
N/A	CRS 43-1-1411 Project Specific Utility Relocation Agreements	6/10/19	IS
N/A	CRS 43-1-208, 210 and 43-3-106	6/10/19	IS
N/A	Environmental Data Resources (EDR) Regulatory Report (2016)	6/10/19	IS
N/A	EPA Storm Water Management Model (SWMM)	6/10/19	IS
N/A	FEMA National Flood Insurance Program Regulations (44 Code of Federal Regulations [CFR] Parts 59-80)	6/10/19	IS
N/A	FHWA Corrosion/Degradation of Soil Reinforcements for Mechanically Stabilized Earth Walls and Reinforced Slopes	6/10/19	IS
N/A	FHWA Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes	6/10/19	IS
N/A	FHWA Design Manual for Permanent Ground Anchor Walls	6/10/19	IS
N/A	FHWA DP-90-068 , Permanent Ground Anchors, Volume 1, Final Report	6/10/19	IS

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Doc#	Document	Date Issued	Availability
N/A	FHWA Geotechnical Engineering Circular No. 4 – Ground Anchors and Anchored Systems	6/10/19	IS
N/A	FHWA Geotechnical Engineering Circular No. 7 – Soil Nail Walls	6/10/19	IS
N/A	FHWA HI-95-038 "Geosynthetic Design and Construction Guidelines"	6/10/19	IS
N/A	FHWA Highway Traffic Noise: Analysis and Abatement Policy and Guidance	6/10/19	IS
N/A	FHWA Hydraulic Design Series No. 4, Introduction to Highway Hydraulics	6/10/19	IS
N/A	FHWA Hydraulic Design Series No. 5, Hydraulic Design of Highway Culverts	6/10/19	IS
N/A	FHWA Hydraulic Engineering Circular No. 12, Drainage of Highway Pavements	6/10/19	IS
N/A	FHWA Long-Term Pavement Performance Bind (LTPPBind Online)	6/10/19	IS
N/A	FHWA Manual for the Design & Construction Monitoring of Soil Nail Walls	6/10/19	IS
N/A	FHWA NH-00-043 Mechanically Stabilized Earth Walls and Reinforced Soil Slopes	6/10/19	IS
N/A	FHWA RD-73-93, Analysis and Design Problems in Modeling Slurry Wall Construction	6/10/19	IS
N/A	FHWA RD-80-047, Slurry Walls as an Integral Part of Underground Transportation Structures	6/10/19	IS
N/A	FHWA RD-82-046, Tiebacks, Executive Summary	6/10/19	IS
N/A	FHWA RD-82-047, Tiebacks	6/10/19	IS
N/A	FHWA RD-92-004, Drilled Shafts for Bridge Foundations	6/10/19	IS
N/A	FHWA SA-93-068, Soil Nailing Field Inspectors Manual-Soil Nail Walls	6/10/19	IS
N/A	FHWA Soil Nailing Field Inspectors Manual	6/10/19	IS
N/A	FHWA Standard Highway Signs (with supplements)	6/10/19	IS
N/A	FHWA Work Zone Operations Best Practices Guidebook	6/10/19	IS
N/A	FHWA, RD-75-114 Safety and Locational Criteria for Bicycle Facilities	6/10/19	IS
N/A	FHWA-CFL/TD-11-003, Wildlife Crossing Structure Handbook: Design and Evaluation in North America	6/10/19	IS
N/A	FHWA-RD-89-198, Soil Nailing for Stabilization of Highway Slopes and Excavations	6/10/19	IS
N/A	Guidelines for Senate Bill 40 Wildlife Certification	6/10/19	IS
N/A	HEC-11, Design of Riprap Revetment	6/10/19	IS
N/A	HEC-12-Drainage of Highway Pavements	6/10/19	IS
N/A	HEC-13, Hydraulic Design of Improved Inlets for Culverts	6/10/19	IS

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Doc#	Document	Date Issued	Availability
N/A	HEC-14, Hydraulic Design of Energy Dissipaters for Culverts and Channels	6/10/19	IS
N/A	HEC-15, Design of Roadside Channels with Flexible Linings	6/10/19	IS
N/A	HEC-18, Evaluating Scour at Bridges	6/10/19	IS
N/A	HEC-20, Stream Stability at Highways	6/10/19	IS
N/A	HEC-21, Design of Bridge Deck Drainage	6/10/19	IS
N/A	HEC-22, Urban Drainage Design Manual	6/10/19	IS
N/A	HEC-23, Bridge Scour and Stream Instability Countermeasures Experience, Selection, and Design Guidance	6/10/19	IS
N/A	HEC-24, Highway Stormwater Pumping Station Design	6/10/19	IS
N/A	International Building Code	6/10/19	IS
N/A	International Code Council (ICC), International Fire Code (IFC)Supp	6/10/19	IS
N/A	International Organization for Standardization (ISO), 9001	6/10/19	IS
N/A	International Telecommunications Union (ITU), Telecommunications Standardization Sector – Recommendations G.652.D	6/10/19	IS
N/A	LPEA Electric Service Regulations	6/10/19	IS
N/A	La Plata County Code Development Standards and Specifications	6/10/19	IS
N/A	Landslides: Investigation and Mitigation, TRB Special Report 247	6/10/19	IS
N/A	Migratory Bird Treaty Act	6/10/19	IS
N/A	MUTCD, Manual of Uniform Traffic Control Devices	6/10/19	IS
N/A	National Cooperative Highway Research Project (NCHRP) Bridge Life- Cycle Cost Analysis	6/10/19	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 12-43 Life-Cycle Cost Analysis for Bridges	6/10/19	IS
N/A	National Cooperative Highway Research Project (NCHRP) Manual for Assessing Safety Hardware (MASH)	6/10/19	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features	6/10/19	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 402, Fatigue Design of Modular Bridge Expansion Joints	6/10/19	IS
N/A	National Cooperative Highway Research Project (NCHRP) Report 672, Roundabouts: An Informal Guide, second edition	6/10/19	IS
N/A	National Electrical Manufacturing Association (NEMA) Standards and Specifications	6/10/19	IS
N/A	National Institute of Standards and Technology (NIST) Bridge LLC	6/10/19	IS
N/A	National Historic Preservation Act (NHPA)	6/10/19	IS
N/A	NFPA 1, Fire Code	6/10/19	IS
N/A	NFPA 101, Life Safety Code	6/10/19	IS
N/A	NFPA 70 National Electric Code	6/10/19	IS

Table 2 General Standards, Data, and Reports

Doc#	Document	Date Issued	Availability
N/A	NOAA Precipitation Frequency Atlas 14 of the United States, Volume 8	6/10/19	IS
N/A	National Precast Concrete Association (NPCA), Quality Control (QC) Manual	6/10/19	IS
N/A	National Transportation Communication for ITS Protocol (NTCIP 9001)	6/10/19	IS
N/A	OSHA Standard Specifications	6/10/19	IS
N/A	Resource Conservation and Recovery Act (RCRA)	6/10/19	IS
N/A	Retroreflective Sheeting Materials Guide	6/10/19	IS
N/A	Rules and Regulations of the CDOT Pertaining to Accommodating Utilities in the State Highway Rights of Way	6/10/19	IS
N/A	Rural Utilities Service (RUS), Specification for Filled Fiber Optic Cables	6/10/19	IS
3.4.06	State of Colorado, Amerco Supreme Court Case No.16SA75	6/10/19	S
N/A	State of Colorado Endangered-Threatened Species Conservation Act	6/10/19	IS
N/A	State of Colorado, State Highway Access Code	6/10/19	IS
N/A	The Colorado Supplement to the Federal Manual on Uniform Traffic Control Devices	6/10/19	IS
N/A	The Endangered Species Act	6/10/19	IS
N/A	The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended	6/10/19	IS
N/A	Telecommunications Industry Association (TIA), 598-D Optical Fiber Cable Color Coding	6/10/19	IS
N/A	Transportation Research Board (TRB) Highway Capacity Manual	6/10/19	IS
N/A	UDFCD Design of Low Tailwater Riprap Basins for Storm Sewer Pipe Outlets	6/10/19	IS
N/A	UDFCD Urban Storm Drainage Criteria Manual	6/10/19	IS
N/A	USACE Wetland Delineation Manual	6/10/19	IS