

EXHIBIT E
PRELIMINARY TECHNICAL SPECIFICATION LISTING

WASHOE COUNTY, NEVADA
PLEASANT VALLEY INTERCEPTOR REACH 3
DETAILED DESIGN, PERMITTING AND BID PERIOD SERVICES

The following is a preliminary list of technical specifications, including front end specifications, for the construction contract documents of Construction Plan Set No. 1, COUNTY constructed, for the construction of the Pleasant Valley Interceptor Reach 3 project including the proposed Geiger Lift Station and force main. A single specification section might be listed under one or more engineering disciplines. The technical specifications for Construction Plan Set No. 2, developer constructed, will be included on the construction plan sheets.

CSI Master Format 17 Divisions	CSI Master Format 50 Divisions	Specification Title
FRONT END BID DOCUMENTS AND GENERAL CONDITIONS		
00001	00_00_01	Cover
00002	00_00_02	Table of Contents
00100	00_11_13	Advertisement for Bids
00101	00_11_17	Advertisement for Bids and Legal Notice - Procurement
00102	00_01_02	Title Page - Procurement
00200	00_21_13	Instructions to Bidders - Nevada
00410	00_41_00	Bid Form
00410	00_41_00	Bid Form - Nevada
00432	00_43_15	Bid Bond
00434	00_43_36	Proposed Subcontractors Form - Nevada
00436	00_43_35	List of Equipment Manufacturers
00451B	00_45_14.02	Construction Contractor's Qualification Requirements
00453	00_45_38	Bid Preferences - Nevada
00454	00_45_31	Bid Certification for the Payment of State and Local Taxes - Nevada
00456	00_45_19	Non-Collusion Affidavit
00458	00_45_37	Certification of Drug-Free Workplace Requirements
00510	00_51_00	Notice of Award
00520	00_52_00	Agreement - Nevada
00521A	00_52_02	Agreement Exhibit A - Owner's Consultant's Services
00521B	00_52_03	Agreement Exhibit B - Owner's Responsibilities
00521C	00_52_04	Agreement Exhibit C - Compensation Decision Guide
00521D	00_52_05	Agreement Exhibit D - Duties, Responsibilities, and Limitations of Authority of Resident Project Representative
00521E	00_52_06	Agreement Exhibit E - Notice of Acceptability of Work
00521F	00_52_07	Agreement Exhibit F - Construction Cost Limit
00521G	00_52_08	Agreement Exhibit G - Insurance
00521H	00_52_09	Agreement Exhibit H - Dispute Resolution
00521I	00_52_10	Agreement Exhibit I - Special Provisions

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00521J	00_52_11	Agreement Exhibit J - Amendment to Owner-Engineer Agreement
00522	00_52_22	Contract - Procurement
00550	00_55_00	Notice to Proceed
00608	00_54_34	Assignment of Procurement Contract
00612	00_61_14	Performance Bond - Nevada
00614	00_61_15	Payment Bond - Nevada
00620	00_62_77	Contractor's Application for Payment
00632	00_63_13	Request for Information or Interpretation (RFI)
00633	00_63_36	Field Order
00634	00_63_49	Work Change Directive
00636	00_63_63	Change Order
00700	00_72_00	General Conditions
00800	00_73_00	Supplementary Conditions - Nevada
00899	00_65_16	Certificate of Substantial Completion
01110	01_11_00	Summary of Work
01116	01_11_02	Contract Document Language
01140	01_14_00	Work Restrictions
01210	01_21_00	Allowances
01220	01_20_20	Measurement and Payment
01230	01_23_00	Alternates
01260	01_26_00	Contract Modification Procedures
01292	01_29_73	Schedule of Values
01294	01_29_77	Applications for Payment
01305	01_31_05	Project Partnering
01312	01_31_19	Project Meetings
01322	01_31_24	Web Based Construction Document Management
01324B	01_32_17	Progress Schedules and Reports - Medium Projects
01329	01_35_22	Safety Plan
01330	01_33_00	Submittal Procedures
01340	01_32_34	Photographic and Videographic Documentation
01351	01_35_14	Environmental Procedures
01353	01_35_03	Special Procedures for Locating and Verifying Concealed Existing Utilities
01354	01_35_44	Hazardous Material Procedures
01355A	01_35_45	Stormwater Pollution Prevention Construction Activities: Best Management Practices
01355B	01_35_47	Stormwater Pollution Prevention Construction Activity
01410	01_41_00	Regulatory Requirements
01424	01_42_13	Abbreviations and Acronyms
01439	01_43_39	Mockups
01450	01_45_00	Quality Control
01455A	01_45_24.12	Special Tests and Inspections
01460	01_45_17	Contractor Quality Control Plan

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01500	01_50_00	Temporary Facilities and Controls
01550	01_55_26	Traffic Control
01562	01_56_39	Temporary Tree and Plant Protection
01573	01_56_17	Erosion and Sediment Control
01601	01_60_01	Product Requirements
01610	01_81_01	Project Design Criteria
01612	01_81_02	Seismic Design Criteria
01614	01_81_04	Wind Design Criteria
01722	01_71_23	Field Engineering
01734	01_35_61	Work Within Public Right-of-Way
01738	01_35_21	Selective Alterations and Demolition
01742	01_74_20	Grease Management and Disposal
01756	01_75_17	Commissioning
01759	01_75_19	Water Leakage Test for Concrete Structures
01770	01_77_00	Closeout Procedures
01782	01_78_23	Operation and Maintenance Data
01783	01_78_36	Warranties and Bonds
CIVIL ENGINEERING		
02710	09_97_15	Pipeline Coating and Lining
09998	09_97_18	Manhole Corrosion Protective Coating
02471	31_09_13	Geotechnical Instrumentation and Monitoring
02241	31_23_22	Dewatering
02318	31_23_35	Trenching
02360	31_31_00	Soil Treatment
02260	31_50_00	Excavation Support and Protection
02448	31_62_16.17	Jacking Steel Pipe Casings
02351	31_32_18.03	Geogrid Reinforcement For Trench Bottom
02621	31_32_18.04	Stabilization Fabric
02312	31_23_24	Controlled Low Strength Material (CLSM)
02952	32_01_15	Pavement Restoration and Rehabilitation
02772	32_16_14	Concrete Curbs, Gutters, and Sidewalks
02762	32_17_23	Pavement Markings
02720	33_01_30.12	CCTV Inspection of Sewer Pipelines
15956	40_05_00.09	Piping Systems Testing
02552	33_05_11	Temporary Bypass Pumping
02600	33_05_61.01	Concrete Sanitary Sewer Manholes
02601	33_05_61.02	Precast Polymer Concrete Sanitary Sewer Manholes
15211	40_05_19.01	Ductile Iron Pipe AWWA C-151
15244	40_05_31.14	PVC Pipe AWWA C-900
15241	40_05_33.03	HDPE Pipe AWWA C-906
15247	40_05_31.16	PVC Gravity Sewer Pipe
15264	40_05_45.01	VCP ASTM C-700

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STRUCTURAL ENGINEERING		
01612	01_81_02	Seismic Design Criteria
01614	01_81_04	Wind Design Criteria
02050	31_05_15	Soils and Aggregates for Earthwork
02300	31_00_00	Earthwork
03055	03_21_17	Adhesive-Bonded Reinforcing Bars and All Thread Rods in Concrete
03071	03_63_01	Epoxies
03102	03_11_07	Concrete Formwork
03150	03_15_00	Concrete Accessories
03200	03_20_00	Concrete Reinforcing
03300	03_30_00	Cast-In-Place Concrete
03366	03_35_29	Tooled Concrete Finishing
03600	03_60_00	Grouting
03931	03_64_24	Epoxy Injection System
04055	04_05_18	Adhesive Bonding Reinforcing Bars and All Thread Rods in Masonry
04080	04_05_23	Masonry Accessories
04100	04_05_17	Mortar and Masonry Grout
04220	04_22_00	Concrete Unit Masonry
05120	05_12_00	Structural Steel
05190	05_05_24	Mechanical Anchoring and Fastening to Concrete and Masonry
05216	05_21_19	Open Web Steel Joist Framing
05310	05_31_00	Steel Decking
05500	05_50_00	Metal Fabrications
07900	07_90_00	Joint Sealants
08320	08_31_14	Floor Access Doors
09960	09_96_01	High-Performance Coatings
01455A	01_45_24.12	Special Tests and Inspections
ARCHITECTURAL		
04090	04_05_23	MASONRY ACCESSORIES
04100	04_05_17	MORTAR AND MASONRY GROUT
04220	04_22_00	CONCRETE UNIT MASONRY
07190	07_19_00	WATER REPELLANTS
07220	07_22_00	ROOF AND DECK INSULATION
07415	07_61_13	STANDING SEAL SHEET METAL ROOFING
07900	07_90_00	JOINT SEALANTS
08110	08_11_13	HOLLOW METAL DOORS AND FRAMES
08710	08_71_00	DOOR HARDWARE
09523	09_84_11	ACOUSTICAL PANELS
09960	09_96_01	HIGH PERFORMANCE COATINGS
10400	10_41_00	SIGNAGE
MECHANICAL ENGINEERING		
15082	40_05_06.55	Piping Insulation
15084	23_07_13	Ductwork Insulation

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15282	40_05_17.07	Copper Tube Seamless, ASTM B280
15732	23_81_14	Air Conditioning Units
15812	23_31_13	Metal Ducts
15820	23_33_00	Ductwork Accessories
15936	23_09_13	Instrumentation and Control Devices for HVAC
15954	23_05_93	Testing, Adjusting, and Balancing for HVAC
ELECTRICAL ENGINEERING		
16050	26_05_00	Common Work Results for Electrical
16052	26_05_02	Hazardous Classified Area Construction
16060	26_05_26	Grounding and Bonding
16075	26_05_53	Identification for Electrical Systems
16123	26_05_18	600-Volt or Less Wires and Cables
16130	26_05_33	Conduits
16133	26_05_44	Duct Banks
16134	26_05_34	Boxes
16140	26_27_26	Wiring Devices
16150	26_05_21	Low Voltage Wire Connections
16210	26_05_03	Utility Coordination
16222	26_05_09	Low Voltage Motors up to 500 Horsepower
16232	26_32_14	Single Diesel Fueled Engine Generator Above 200 KW
16245	26_32_34	Load Bank: Stationary Resistive
16262	26_29_24	Variable Frequency Drives 0.50 - 50 Horsepower
16272	26_22_14	Dry-Type Transformers
16281	26_35_26	Harmonic Filter
16285	26_43_14	Surge Protective Devices
16290	26_09_13	Electrical Power Monitoring
16305	26_05_74	Electrical System Studies
16411	26_28_17	Disconnect Switches
16412	26_28_01	Low Voltage Molded Case Circuit Breakers
16422	26_29_05	Motor Starters
16441	26_24_14	Group-Mounted Circuit Breaker Switchboards
16444	26_24_20	Low Voltage Motor Control Centers
16445	26_24_16	Panelboards
16494	26_28_14	Low Voltage Fuses
16510	26_50_10	Lighting: LED Luminaires
16670	26_41_01	Lightning Protection
16710	28_31_01	Fire Alarm and Smoke Detection System
16950	26_08_50	Field Electrical Acceptance Tests
16990	26_06_01	Conduit Schedule
CONTROL AND INSTRUMENTATION ENGINEERING		
17050	40_61_00	Common Work Results for Process Control and Instrumentation Systems
17100	40_61_15	Control Strategies

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17101	40_61_16	Specific Control Strategies
17201	40_72_76	Level Measurement: Switches
17206	40_72_13	Level Measurement: Ultrasonic
17301	40_71_79	Flow Measurement: Switches
17302	40_71_15	Flow Measurement: Magnetic Flowmeters
17401	40_73_63	Pressure/Vacuum Measurement: Diaphragm and Annular Seals
17402	40_73_64	Pressure/Vacuum Measurement: Instrument Valves
17403	40_73_36	Pressure/Vacuum Measurement: Switches
17404	40_73_13	Pressure/Vacuum Measurement: Gauges
17405	40_73_23	Pressure/Vacuum Measurement: Direct
17710	40_67_01	Control Systems: Panels, Enclosures, and Panel Components
17712	40_67_26	Control Systems: Uninterruptible Power Supplies 10 kVA and Below
17720	40_64_01	Control Systems: Programmable Logic Controllers
17721	40_64_21	Control Systems: Local Operator Interface (LOI)
17733	40_66_01	Control Systems: Network Materials and Equipment
17901	40_96_20	Schedules: Field Instruments
17903	40_96_15	Schedules: I/O List
17904	40_64_20	Schedules: Local Operator Interface
17905	40_96_23	Schedules: HMI List
17950	40_80_01	Testing, Calibration, and Commissioning
DEMOLITION		
01738	01_35_21	Selective Alterations and Demolition