

1	TABLE OF CONTENTS MEP BIDDERS	(Rev 8/2022)	
2			
3	Division Project No. 19K2K		
4			
5	DIVISION 01 - MEP BIDDING REQUIREMENTS		Pages Thru
6	TITLE PAGE		1
7	TABLE OF CONTENTS		TC-7
8			
9	MEP BIDDING REQUIREMENTS		
10	MEP Invitation to Bid		A-2
11	MEP Instructions to Bidders		B-11
12	Bid Form – Mechanical, Electrical, Plumbing, and Fire Protection (MEP)		C-6
13	Sealed Bid Envelope Label		1
14	Mechanical Electrical Plumbing and Fire Protection (MEP) Bid Bond Form (DOA-4189)		1
15	Designation of Confidential and Proprietary Information Form (DOA-3027)		1
16			
17	DIVISION 01		
18	General Requirements		GR-20
19	01 11 00 Summary of Work		01 11 00-1
20	01 33 00 Electronic Submittal Procedures		01 33 00-6
21	01 74 19 Construction Waste Management		01 74 19-4
22	01 91 01 Commissioning Process		01 91 01-4
23			
24	APPENDIX #1 – GENERAL PRIME CONTRACTOR (GPC) BIDDING AND CONTRACT		
25	DOCUMENTS		
26	Form A - Affidavit of Compliance – MBE / DVB Provisions (DOA-4266)		2
27	Request for Submittal Approval (DOA-4523)		1
28	Request for Subcontractors Approval (DOA-4225)		1
29			
30	CONTRACT FORMS		
31	Performance Bond Form (DOA-4188)		2
32	Payment Bond Form (DOA-4187)		2
33	Contract Form (DOA-4504)		2
34			
35	CONDITIONS OF THE CONTRACT		
36	Index to General Conditions		1
37	General Conditions of the General Prime Contractor Contract (DOA-4193P)		34
38	Supplementary General Conditions		SGC-1
39	Submittal Log		SL-5
40			
41		VOLUME II	
42			
43			
44	DIVISION 02 – EXISTING CONDITIONS		
45	02 41 13 Demolition		02 41 13-5
46			
47	DIVISION 03 - CONCRETE		
48	Section Title		
49	03 30 00 Cast-In-Place Concrete		03 30 00-20
50	03 41 00 Precast Structural Concrete		03 41 00-10
51	03 41 13 Precast Hollow Core Plans		03 41 13-10
52	03 62 00 Non-Shrink Grouting		03 62 00-2
53			
54	DIVISION 04 - MASONRY		
55	Section Title		
56	04 08 00 Commissioning of Masonry		04 08 00-7
57	04 20 00 Unit Masonry		04 20 00-18

1	DIVISION 05 - METALS		
2	Section	Title	
3	05 05 23	Metal Fastenings	05 05 23-2
4	05 50 00	Metal Fabrications	05 50 00-4
5	05 51 33	Ladders	05 51 33-3
6			
7	DIVISION 06 – WOOD, PLASTICS AND COMPOSITES		
8	Section	Title	
9	06 10 00	Rough Carpentry	06 10 00-4
10	06 10 53.01	Miscellaneous Rough Carpentry – Roofing	06 10 53.01-2
11	06 17 53	Shop Fabricated Wood Trusses	06 17 53-3
12	06 22 10	Simulated Wood Plastic Trim	06 22 10-3
13	06 41 00	Architectural Wood Casework	06 41 00-4
14	06 61 16	Solid Surface Fabrications	06 61 16-3
15			
16	DIVISION 07 - THERMAL AND MOISTURE PROTECTION		
17	Section	Title	
18	07 08 00	Commissioning of Thermal and Moisture Protection	07 08 00-15
19	07 13 00	Sheet Waterproofing	07 13 00-2
20	07 14 00	Fluid Applied Waterproofing	07 14 00-4
21	07 21 13	Board Insulation	07 21 13-3
22	07 21 16	Blanket Insulation	07 21 16-2
23	07 21 26	Blown Fiberglass Insulation	07 21 26-2
24	07 27 13	Plastic Sheet Membrane Air/Vapor Retarder	07 27 13-2
25	07 27 26	Fluid-Applied Membrand Air Vapor Retarder	07 27 26-9
26	07 31 24	Granular Coated Steel Shingle	07 31 24-14
27	07 46 18	Preformed Metal Soffit and Fascia	07 46 18-3
28	07 53 23	Ethylene-Propylene-Diene-Monomer Roofing	07 53 23-14
29	07 63 00	Sheet Metal Roofing Specialties	07 63 00-6
30	07 71 24	Seamless Gutters and Downspouts	07 71 24-3
31	07 72 33	Roof Hatches	07 72 33-3
32	07 92 00	Joint Sealants	07 92 00-6
33			
34	DIVISION 08 - OPENINGS		
35	Section	Title	
36	08 08 00	Commissioning of Exterior Building Envelope	08 08 00-8
37	08 12 13	Hollow Metal Frames	08 12 13-4
38	08 13 13	Standard Hollow Metal Doors	08 13 13-3
39	08 16 00	Fiberglass Reinforced Polyester Door And Frame System	08 16 00-5
40	08 31 00	Access Doors	08 31 00-3
41	08 34 59	Vault Doors	08 34 59-3
42	08 43 13	Aluminum Framed Window Wall Systems	08 43 13-9
43	08 51 13	Aluminum Windows	08 51 13-8
44	08 71 00	Door Hardware	08 71 00-5
45	08 81 00	Glass Glazing	08 81 00-5
46			
47	DIVISION 09 - FINISHES		
48	Section	Title	
49	09 29 00	Gypsum Board	09 29 00-3
50	09 96 00	High Performance Coatings	09 96 00-18
51			
52	DIVISION 10 - SPECIALTIES		
53	Section	Title	
54	10 14 00	Signage	10 14 00-2
55	10 14 69	Warning Signs	10 14 69-2
56	10 28 13	Washroom Accessories	10 28 13-3
57	10 44 16	Fire Extinguishers	10 44 16-2

1	DIVISION 11 – EQUIPMENT		
2	Section	Title	
3	11 16 20	Key Vaults	11 16 20-1
4			
5	DIVISION 22 - PLUMBING		
6	Section	Title	
7	22 05 00	Common Work Results for Plumbing	22 05 00-9
8	22 05 13	Common Motor Requirements for Plumbing	22 05 13-3
9	22 05 14	Plumbing Specialties	22 05 14-3
10	22 05 15	Piping Specialties	22 05 15-3
11	22 05 23	General Duty Valves for Plumbing Piping	22 05 23-4
12	22 05 29	Hangers and Supports for Plumbing Piping and Equipment	22 05 29-4
13	22 07 00	Plumbing Insulation	22 07 00-5
14	22 08 00	Commissioning of Plumbing	22 08 00-39
15	22 10 13	Facility Fuel Piping	22 10 13-6
16	22 11 00	Facility Water Distribution	22 11 00-8
17	22 13 00	Facility Sanitary Sewerage	22 13 00-5
18	22 30 00	Plumbing Equipment	22 30 00-3
19	22 42 00	Commercial Plumbing Fixtures	22 42 00-4
20			
21	DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING		
22	Section	Title	
23	23 05 00	Common Work Results for HVAC	23 05 00-5
24	23 05 13	Common Motor Requirements for HVAC Equipment	23 05 13-2
25	23 05 29	Hangers and Supports for HVAC Piping and Equipment	23 05 29-5
26	23 05 48	Vibration and Seismic Controls for HVAC Piping and Equipment	23 05 48-4
27	23 05 93	Testing, Adjusting and Balancing for HVAC	23 05 93-4
28	23 07 00	HVAC Insulation	23 07 00-8
29	23 08 00	Commissioning of HVAC	23 08 00-74
30	23 09 14	Pneumatic and Electric Controls	23 09 14-6
31	23 09 93	Sequence of Operation for HVAC Controls	23 09 93-8
32	23 31 00	HVAC Ducts and Casings	23 31 00-7
33	23 33 00	Air Duct Accessories	23 33 00-4
34	23 34 00	HVAC Fans	23 34 00-4
35	23 37 13	Diffusers, Registers and Grilles	23 37 13-2
36	23 51 00	Breechings, Chimneys and Stacks	23 51 00-2
37	23 55 00	Fuel Fired Heaters	23 55 00-2
38			
39	VOLUME III		
40			
41	DIVISION 26 - ELECTRICAL		
42	Section	Title	
43	26 05 00	Common Work Results for Electrical	26 05 00-7
44	26 05 02	Electrical Demolition for Remodeling	26 05 02-2
45	26 05 04	Cleaning, Inspection and Testing of Electrical Equipment	26 05 04-4
46	26 05 19	Low-Voltage Electrical Power Conductors and Cables	26 05 19-5
47	26 05 23	Control-Voltage Electrical Power Cables	26 05 23-3
48	26 05 26	Grounding and Bonding for Electrical Systems	26 05 26-5
49	26 05 29	Hangers and Supports for Electrical Systems	26 05 29-4
50	26 05 33	Raceway and Boxes for Electrical Systems	26 05 33-10
51	26 05 43	Underground Ducts and Raceways for Electrical Systems	26 05 43-4
52	26 05 44	Manholes	26 05 44-4
53	26 05 53	Identification for Electrical Systems	26 05 53-3
54	26 05 73	Short Circuit/Coordination Study and Arc Flash Risk Assessment	26 05 73-5
55	26 08 00	Commissioning of Electrical	26 08 00-52
56	26 22 00	Low-Voltage Transformers	26 22 00-2
57	26 24 16	Panelboards	26 24 16-4

1	26 24 19	Motor Control Centers	26 24 19-6
2	26 27 02	Equipment Wiring Systems	26 27 02-3
3	26 27 13	Electricity Metering	26 27 13-3
4	26 27 26	Wiring Devices	26 27 26-4
5	26 27 28	Disconnect Switches	26 27 28-2
6	26 29 00	Low Voltage Controllers	26 29 00-3
7	26 29 23	Adjustable Frequency Controllers	26 29 23-9
8	26 43 13	Surge Protective Devices for Low-Voltage Electrical Power Circuits	26 43 13-3
9	26 51 13	Lighting Fixtures, Lamps, and Ballasts	26 51 13-7
10	26 90 00	Process Instrumentation	26 90 00-19
11	26 90 10	Control Panel Construction	26 90 10-8
12	26 90 11	Control Panel Components	29 90 11-21
13	26 90 20	Instrumentation Devices	26 90 20-10
14	26 90 30	Programmable Logic Controllers	26 90 30-7
15	26 90 31	Humane-Machine Interface Equipment	26 90 31-4
16	26 90 50	SCADA System Hardware	26 90 50-4
17	26 90 51	SCADA System Hardware	26 90 51-16
18	26 90 60	Ethernet Networking Equipment	26 90 60-6
19			
20		DIVISION 27 - COMMUNICATIONS	
21	Section	Title	
22	27 05 53	Identification for Communication Systems	27 05 53-5
23	27 08 00	Commissioning of Communications	27 08 00-20
24	27 10 00	Structured Cabling	27 10 00-23
25	27 11 00	Communications Room Equipment Fittings	27 11 00-4
26	27 16 19	Communications Patch Cords, Station Cords and Cross-Connect Wire	27 16 19-3
27			
28		DIVISION 30 – COMMON WORK RESULTS FOR ALL EXTERIOR WORK	
29	Section	Title	
30	30 05 00	Common Work Results for Exterior Work	30 05 00-4
31			
32		DIVISION 31 - EARTHWORK	
33	Section	Title	
34	31 10 00	Site Clearing	31 10 00-2
35	31 13 16	Selective Tree and Shrub Protection and Trimming	31 13 16-8
36	31 20 00	Earthmoving	31 20 00-5
37	31 22 16.15	Roadway Subgrade Preparation	31 22 16.15-4
38	31 23 16.13	Trenching	31 23 16.13-8
39	31 23 16.16	Structural Excavation for Minor Structures	31 23 16.16-4
40	31 23 16.26	Rock Removal	31 23 16.26-5
41	31 23 19	Dewatering	31 23 19-3
42	31 23 23.14	Granular Fill	31 23 23.14-2
43	31 25 00	Erosion Control	31 25 00-5
44			
45		DIVISION 32 – EXTERIOR IMPROVEMENTS	
46	Section	Title	
47	32 11 23.33	Dense Graded Base	32 11 23.33-4
48	32 12 16.13	Plant Mix Asphalt Paving	32 12 16.13-2
49	32 13 10	Concrete Sidewalk and Driveways	32 13 10-3
50	32 16 13	Concrete Curb and Gutter	32 16 13-3
51	32 91 13	Soil Preparation	32 91 13-3
52	32 92 00	Plants	32 92 00-10
53	32 92 19	Seeding	32 92 19-3
54			
55		DIVISION 33 – UTILITIES	
56	Section	Title	
57	33 05 16.13	Precast Concrete Utility Structures	33 05 16.13-3

1	33 05 23.16	Utility Pipe Jacking	33 05 23.16-4
2	33 05 26.13	Locator Tape	33 05 26.13-1
3	33 05 26.16	Tracer Wire	33 05 26.16-2
4	33 08 00	Commissioning of Utilities	33 08 00-42
5	33 11 00	Water Utility Distribution Piping	33 11 00-14
6	33 21 13.10	Rock Walled Well Construction	33 21 13.10-10
7	33 30 00	Sanitary Sewerage Utilities	33 30 00-10
8	33 32 16.14	Submersible Grinder Pump Lift Station	33 32 16.14-7
9	33 40 00	Storm Drainage Utilities	33 40 00-10
10			
11	DIVISION 40 – PROCESS INTEGRATION		
12	Section	Title	
13	40 23 23	Process Piping, Valves and Specialties	40 23 23-8
14			
15	DIVISION 44 – WATERWORKS		
16	Section	Title	
17	44 42 56.10	Vertical Turbine Pump	44 42 56.10-7
18	44 43 13.26	Horizontal Pressure Filter System	44 43 13.26-10
19	44 44 16.20	Liquid Chlorination System	44 44 16.20-5
20	44 44 40.10	Liquid Phosphate System	44 44 40.10-4
21			
22	DRAWINGS - Bound Separately		
23	Title		Sheets Thru
24	00-GENERAL SHEETS		
25	TITLE SHEET		00-T001
26	SHEET INDEX		00-G001
27	GENERAL NOTES & DESIGNATOR LEGEND		00-G002
28	LEGEND, SYMBOLS & ABBREVIATIONS		00-G003
29	ELECTRICAL SYMBOLS & ABBREVIATIONS		00-G004
30	PROCESS FLOW SCHEMATIC		00-G005
31	05-SITE PLANS		
32	OVERALL SITE PLAN		05-C101
33	WELL 3 SITE PLAN		05-C102
34	WELL 4 SITE PLAN		05-C103
35	WATER TREATMENT PLANT SITE PLAN		05-C104
36	WATER TREATMENT PLANT EROSION CONTROL PLAN		05-C105
37	WATER TREATMENT PLANT UTILITY PLAN		05-C106
38	RAW WATER MAIN PLAN & PROFILE		05-C201
39	RAW WATER MAIN PLAN & PROFILE		05-C202
40	RAW WATER MAIN PLAN & PROFILE		05-C203
41	FINISHED WATER MAIN PLAN & PROFILE		05-C204
42	WATER TREATMENT PLANT UTILITY PROFILES		05-C205
43	EROSION CONTROL DETAILS		05-C501
44	WATER MAIN DETAILS		05-C502
45	SITE DETAILS		05-C503
46	SITE DETAILS		05-C504
47	SITE DETAILS		05-C505
48	OVERALL ELECTRICAL SITE PLAN		05-E101
49	WELL NO.3 AND NO.4 SITE ELECTRICAL PLAN		05-E102
50	WATER TREATMENT PLANT SITE ELECTRICAL PLAN		05-E103
51	06-PROCESS INSTRUMENTATIONS		
52	P&ID NO.1 WELL NO.3		06-E101
53	P&ID NO.2 WELL NO.4		06-E102
54	P&ID NO.3 FILTER SYSTEM		06-E103
55	P&ID NO.4 HMO AND BLOWER SYSTEMS		06-E104
56	P&ID NO.5 BACKWASH TANKS		06-E105
57	P&ID NO.6 MISC SYSTEMS		06-E106

1	SCADA NETWORK DIAGRAM	06-E107
2	07-ONE-LINE DIAGRAMS	
3	WTP OVERALL ONE-LINE	07-E101
4	WELL NO.3 AND NO.4 OVERALL ONE-LINE	07-E102
5	10 - CENTRAL GENERATING PLANT	
6	CGP BASEMENT ELECTRICAL PLAN	10-E101
7	CGP CONTROL ROOM ELECTRICAL PLAN	10-E102
8	CGP LOWER MEZZANINE ELECTRICAL PLAN	10-E103
9	20 - WATER TREATMENT FACILITY	
10	FOUNDATION PLAN	20-S101
11	LOWER ROOF FRAMING PLAN	20-S102
12	UPPER CEILING FRAMING PLAN	20-S103
13	UPPER ROOF FRAMING PLAN	20-S104
14	BUILDING SECTIONS	20-S301
15	FLOOR PLAN	20-A101
16	LOWER ROOF PLAN	20-A102
17	UPPER ROOF PLAN	20-A103
18	EXTERIOR BUILDING ELEVATIONS	20-A201
19	INTERIOR ELEVATIONS	20-A202
20	BUILDING SECTIONS	20-A301
21	WALL SECTIONS	20-A302
22	ARCHITECTURAL SCHEDULES & GENERAL DETAILS	20-A601
23	PROCESS MECHANICAL FLOOR PLAN	20-D101
24	PROCESS MECHANICAL DETAILS	20-D501
25	PROCESS MECHANICAL DETAILS	20-D502
26	PROCESS MECHANICAL DETAILS	20-D503
27	PROCESS MECHANICAL DETAILS	20-D504
28	PROCESS MECHANICAL DETAILS	20-D505
29	PRESSURE FILTER DETAILS	20-D506
30	HMO SKID DETAILS	20-D507
31	HMO CHEMICAL FEED SYSTEM DETAILS	20-D508
32	HMO CHEMICAL SOLUTION TANK DETAILS	20-D509
33	CHEMICAL FEED DETAILS	20-D510
34	AIRWASH BLOWER DETAILS	20-D511
35	BACKWASH DETENTION TANK DETAILS	20-D512
36	PROCESS MECHANICAL ISOMETRIC	20-D901
37	PLUMBING FLOOR PLAN - SANITARY & VENT	20-P101
38	PLUMBING FLOOR PLAN - DOMESTIC WATER	20-P102
39	PLUMBING FLOOR PLAN - STORMWATER & GAS	20-P103
40	PLUMBING ISOMETRICS	20-P901
41	HVAC FLOOR PLAN	20-M101
42	ELECTRICAL PLAN	20-E101
43	PROCESS ELECTRICAL PLAN	20-E102
44	ENLARGED CHEMICAL ROOM PROCESS ELECTRICAL PLAN	20-E103
45	LIGHTING PLAN	20-E104
46	22 - SEWER METERING BUILDING	
47	ROOF FRAMING PLAN	22-S101
48	FLOOR PLAN	22-A101
49	EXTERIOR BUILDING ELEVATIONS	22-A201
50	BUILDING AND WALL SECTIONS	22-A301
51	SCHEDULES	22-A601
52	PROCESS MECHANICAL DETAILS	22-D101
53	HVAC FLOOR PLANS	22-M101
54	ELECTRICAL PLAN	22-E101
55	30 - WELLHOUSE #3	
56	PROCESS MECHANICAL FLOOR PLAN	30-D101
57	CHEMICAL FEED DETAILS	30-D501
58	HVAC REMOVAL PLAN	30-MR101
59	HVAC REMOVAL DETAILS	30-MR501

1	HVAC FLOOR PLAN	30-M101
2	ELECTRICAL PLAN	30-E101
3	40 - WELLHOUSE #4	
4	PROCESS MECHANICAL FLOOR PLAN	40-D101
5	CHEMICAL FEED DETAILS	40-D501
6	HVAC REMOVAL PLAN	40-MR101
7	HVAC FLOOR PLAN	40-M101
8	ELECTRICAL PLAN	40-E101
9	60 - FUTURE WELLHOUSE #6	
10	WELL CONSTRUCTION DETAIL	60-G501
11	99 - SCHEDULES AND DETAILS	
12	STRUCTURAL NOTES AND DESIGN LOADINGS	99-S001
13	STRUCTURAL DETAILS	99-S501
14	STRUCTURAL DETAILS	99-S502
15	STRUCTURAL DETAILS	99-S503
16	STRUCTURAL SCHEDULES	99-S601
17	ARCHITECTURAL DETAILS	99-A501
18	ARCHITECTURAL DETAILS	99-A502
19	ARCHITECTURAL DETAILS	99-A503
20	ARCHITECTURAL DETAILS	99-A504
21	ARCHITECTURAL DETAILS	99-A505
22	ARCHITECTURAL DETAILS	99-A506
23	ARCHITECTURAL DETAILS	99-A507
24	PLUMBING DETAILS	99-P501
25	PLUMBING SCHEDULES AND GENERAL NOTES	99-P601
26	HVAC GENERAL NOTES AND DETAILS	99-M501
27	HVAC SCHEDULES	99-M601
28	HVAC SCHEDULES	99-M602
29	ELECTRICAL DETAILS	99-E501
30	ELECTRICAL DETAILS	99-E502
31	ELECTRICAL DETAILS	99-E503
32	ELECTRICAL DETAILS	99-E504
33	FIXTURE AND FEEDER SCHEDULE	99-E601
34	PANEL SCHEDULES	99-E602
35	WIRING SCHEDULES	99-E603
36	WIRING SCHEDULES	99-E604
37	PLC IO SCHEDULES	99-E605
38	PLC IO SCHEDULES	99-E606
39	PLC IO SCHEDULES	99-E607
40	AFD AND MOTOR STARTER IO SCHEDULES	99-E608
41		
42		
43		
44	***	