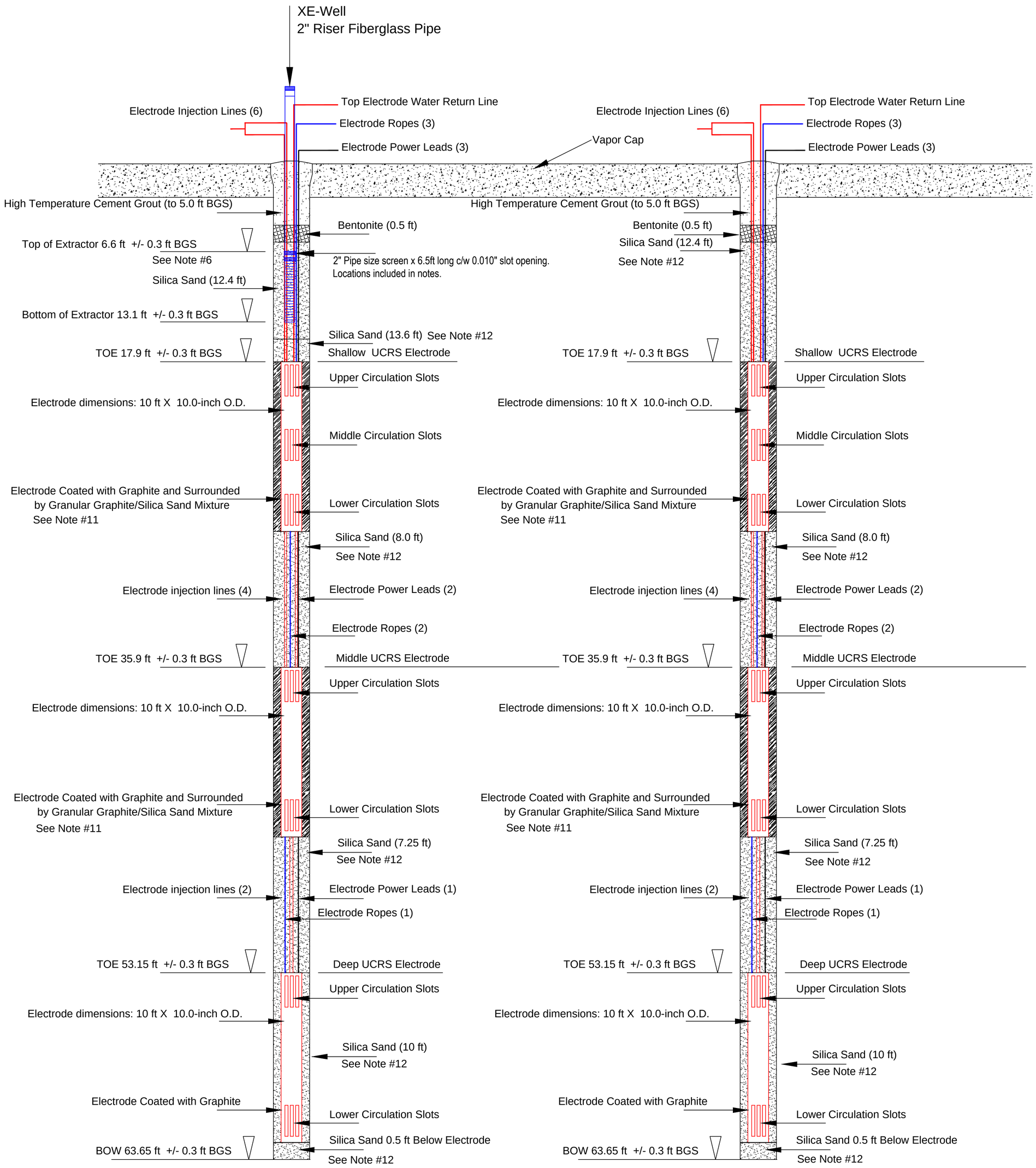
20-60 ft Electrode Well with Upper Vapor Extraction

(shown as XE### on C7DC40000C004)

20-60 ft Electrode Well

(shown as E### on C7DC40000C004)



Notes:

1) Electrode power lead for each electrode in the well is connected to its own PDS control channel.
2) Top and bottom water injection lines for each electrode are connected to a T fitting at surface from a WCS control valve.
3) Water return line to the uppermost electrode is connected to the input of the water treatment system.
4) XE Wellhead connection shown in drawing #C7DC40000C008.
5) Slot sizes on electrodes exaggerated to show feature.
6) Silica sand is #00N or equivalent.
7) Bentonite is medium chips.
8) Grout is a Portland Type 1 or Type 2 (no Bentonite flour added to grout).
9) Electrodes are connected to a rope for lowering into the hole and as an additional safety factor to prevent movement in case the sand settles within the boring. Rope is constructed of Technora material. Technora is rated for continuous operations at 250 degrees ÁC and has high resistance to organic solvents.
10) Only electrodes with XE well designation have upper vapor extraction. XE locations XE201, XE202, XE203, XE204, XE205, XE206, XE207, XE212, XE213, XE214, XE219, XE220, XE221, XE222, XE224, XE225, XE226, XE227, XE228, XE229, XE230, XE231, XE232, XE233, XE234, XE235, XE236, XE239, XE240, XE241, XE242, XE243, XE244, XE245, XE246, XE247, XE248, XE249, XE250.
11) Graphite/Sand Mixture consists of 1 50 lb bag granular graphite and 2 50 lb bags #1 Sand or equivalent.
12) Sand is #1 or equivalent.

Legend

BOW - Bottom of Well
BOE - Bottom of Electrode
TOE - Top of Electrode

REV.	DATE	DESCRIPTION	DRAWN BY	DRAFT CHK	DRG/	LEAD ENGR	QA	CONF CTRL/ NUCL SFTY	FAC MGR	PROJ ENGR
D	25/05/12	Top of Extraction, XE List	ER	CK	ER	BM				
C	24/04/12	Technical Edits	AW	WR	ER	BM				
B	05/01/12	Technical Edits	WR	ER	ER	BM				
A	30/05/11	Initial 90% Design Drawing	WR	ER	ER	BM				

DATE
PROFESSIONAL SEAL
LPE
DRAWING REVISIONS

U.S. DEPARTMENT OF ENERGY
DOE PORTSMOUTH/PADUCAH PROJECT OFFICE
PADUCAH GASEOUS DIFFUSION PLANT

LATA Environmental Services of Kentucky, LLC
managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC30-10CC40020
Paducah, Kentucky

McMillan-McGee Corp
CALGARY, ALBERTA CANADA
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DOE CONTRACT NO. DE-AC30-10CC40020

PROJECT NAME:
Paducah PGDP C-400 Remediation Project

TITLE:
C-400 Complex Detail Section View Drawing of ET-DSP Electrode Well Installations Phase IIa

CAD FILE NAME	BUILDING	PLANT	CLASS
Mc2-Paducah-ElectrodeWellDetails.DWG	C-400	PGDP	U

SCALE:	DRAWING NUMBER	REV
Not To Scale	E7DC40000C016	D