

BIOREACTOR 4 SHOWN. BIOREACTOR 2 AND BIOREACTOR 3 ARE SIMILAR MIRROR IMAGES. DIFFUSER COUNTS, LAYOUTS, DROPS, SUPPORTS AND OTHER ITEMS MATCH IN SIZE, QUANTITY, AND ARRANGMENT.

NOTE:

1. THE AERATION EQUIPMENT CONFIGURATION FOR DIFFUSERS, DROPS, HEADERS AND LATERAL PIPING IN BIOREACTOR NO. 4 IS ALSO TYPICAL FOR BIOREACTORS NOS. 1-3, MIRROR IMAGED AS REQUIRED.



NO. DATE REV. BY DESCRIPTION REVISIONS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW
CHECKED B. MAYERS
APPROVED B. MAYERS

DESIGN
DESIGN D. LOWE
DRAWN S. RIGGS

SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 4D
WEST JORDAN, UTAH

MECHANICAL
BIOREACTOR NO. 4 AIR
DIFFUSER SYSTEM PLAN

DRAWING NO.
16M-12
SHEET 1 OF 3

DATE: AUGUST 2007
PROJECT NUMBER 177-06-02

0 8' 16' 32'
1/16"=1'-0"



BIOREACTOR NO. 4

TYPICAL PIPE DESIGNATION

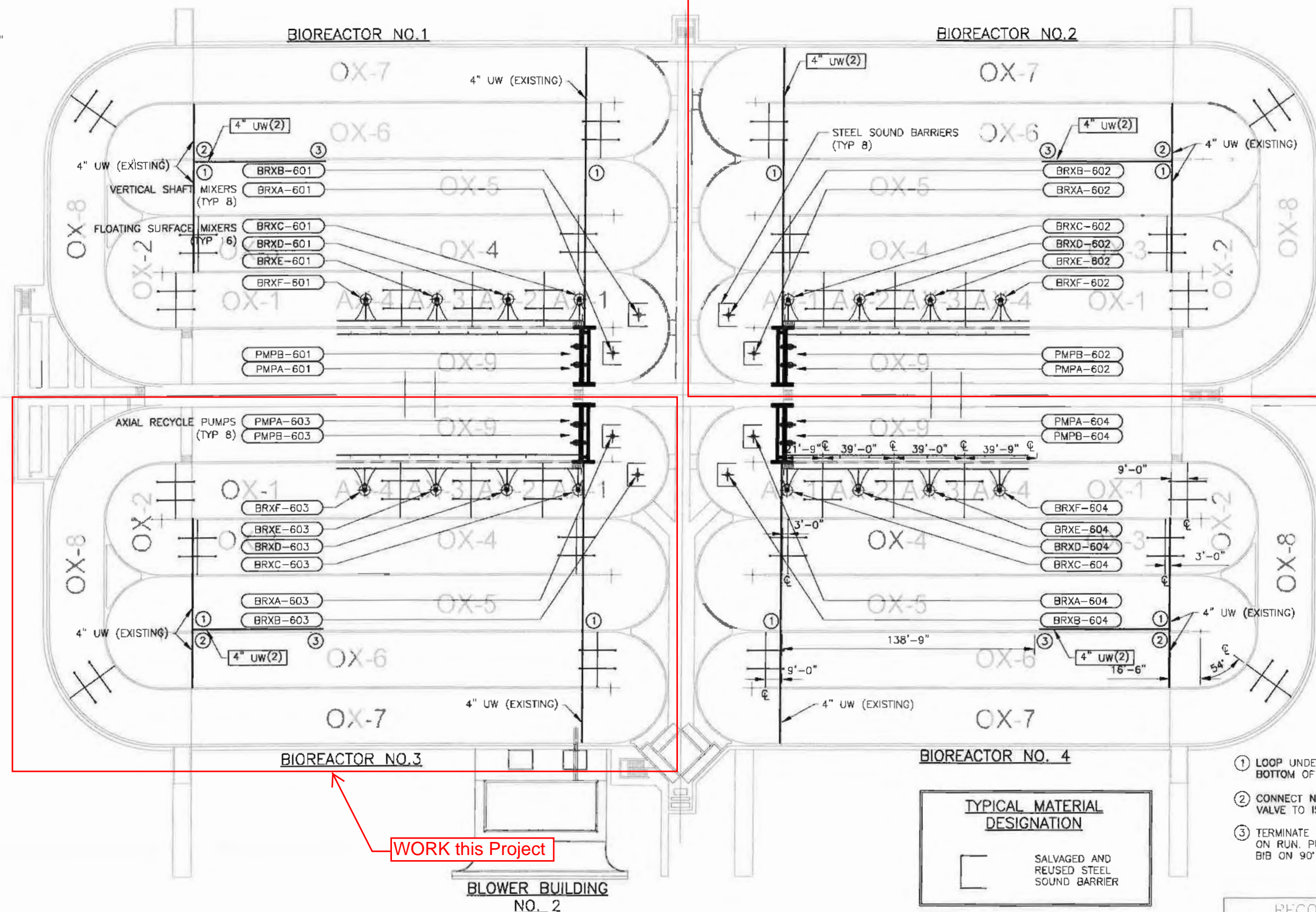
PIPE DIAMETER
8" A (15)
MATERIAL GROUP NUMBER
FLUID ABBREVIATION
A = AIR
S = CARBON STEEL
15 = TYPE 304 SST

AIR DIFFUSER LEGEND

NdeN AIR DIFFUSER
BioP AIR DIFFUSER (TO BE INSTALLED AT FUTURE DATE)
COARSE BUBBLE DIFFUSER (TO BE INSTALLED AT FUTURE DATE)



SCALE: 1" = 30'-0"



- ① LOOP UNDER STAIR. PROVIDE DRAIN ON BOTTOM OF LOOP. PAINT.
- ② CONNECT NEW PIPE AT LOOP. ADD 4" BALL VALVE TO ISOLATE NEW PIPE. PAINT.
- ③ TERMINATE NEW PIPE WITH TEE. PUT PLUG ON RUN. PUT RISER, BALL VALVE AND HUBB BIB ON 90° OUTLET IN VERTICAL. PAINT.

RECORD DRAWINGS

Revisions Drawn by: S. RIGGS Date: August 2011
THESE RECORD DRAWINGS HAVE BEEN PROVIDED IN PART ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MATERIAL OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

Bowen Collins & Associates, Inc.
CONSULTING ENGINEERS

REVISIONS	
NO.	DATE

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW
DESIGNED BY: B. MATERS
APPROVED BY: B. MATERS

DESIGN
DESIGNED BY: D. LOWE
DRAWN BY: S. RIGGS

MECHANICAL
BIOREACTOR
MECHANICAL EQUIPMENT
PLAN

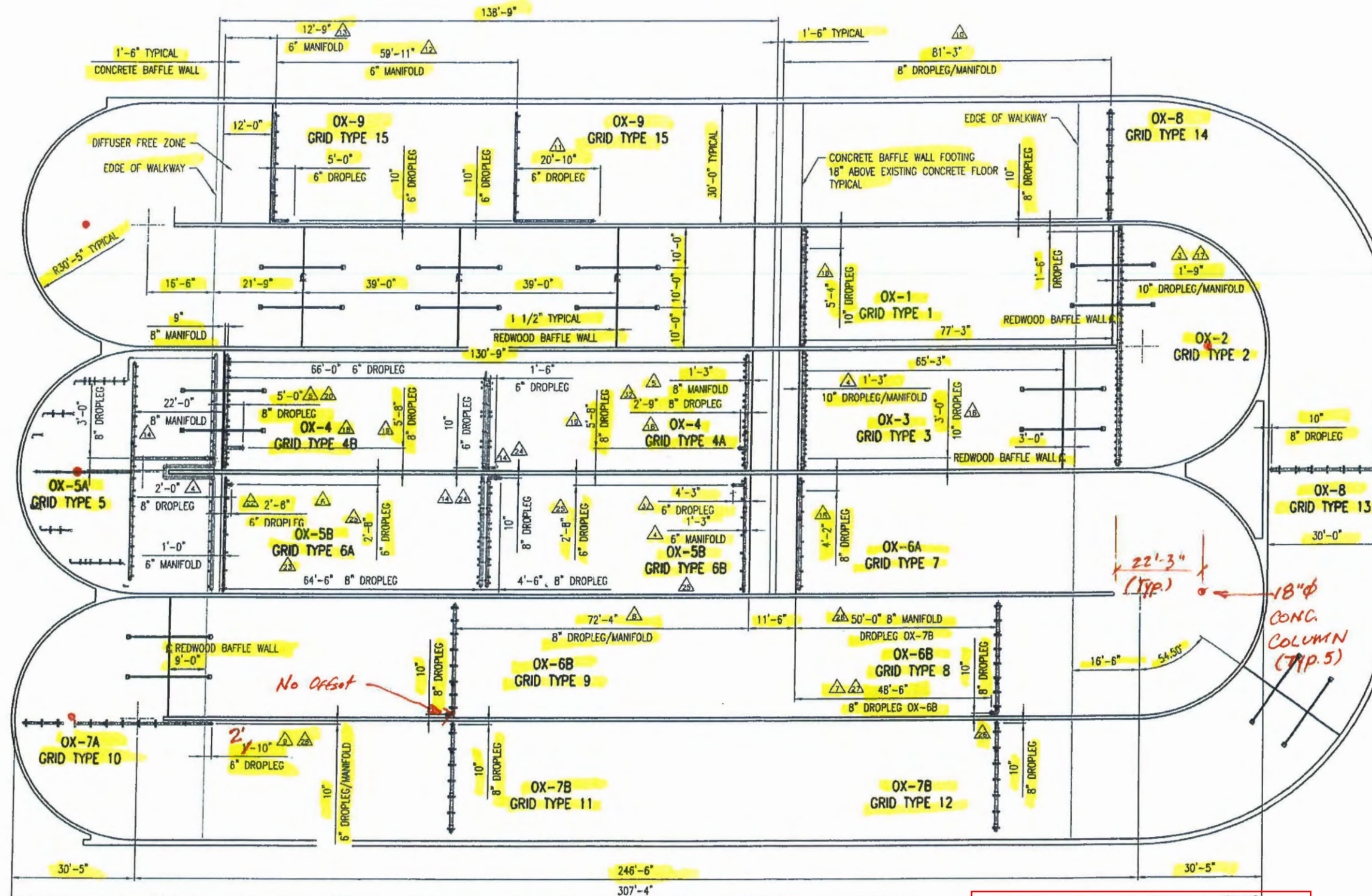
PROJECT NUMBER: 177-06-02
DATE: JANUARY 2008

DRAWING NO. 16M-2
SHEET 1 OF 1

4/2/2008

BIOREACTOR 4 SHOWN. BIOREACTOR 2 AND BIOREACTOR 3 ARE SIMILAR MIRROR IMAGES. DIFFUSER COUNTS, LAYOUTS, DROPS, SUPPORTS AND OTHER ITEMS MATCH IN SIZE, QUANTITY, AND ARRANGMENT. NOTE LOCATION OF ZONE AERATION HEADERS, REDWOOD BAFFLE WALLS, CONCRETE BAFFLE WALLS AND AERATION ZONES.

AL ONLY NOT FOR CONSTRUCTION



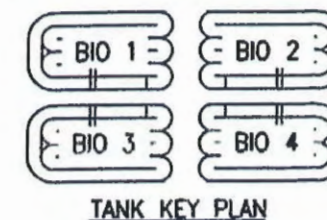
33	3-21-08	REVISIONS APPROVED	DRE
32	3-20-08	ADDED DROPLEG DIMENSION FOR FEED PIPE	MC
31	3-20-08	ADDED BANK CALLOUT	MC
30	3-20-08	ADDED TANK KEY PLAN	MC
29	3-20-08	DM WAS 81'-3"	MC
28	3-20-08	DM WAS 1'-8"	MC
27	3-20-08	DM WAS 42'-7"	MC
26	3-20-08	REMOVED FEED PIPE	MC
25	3-20-08	DM WAS 3'-0"	MC
24	3-20-08	REMOVED BIO P DROPLEG LOCATIONS	MC
23	3-20-08	WAS OX-50 GRID TYPE 8	MC
22	3-20-08	WAS 3'-2 8/16" 8" DROPLEG	MC
21	3-20-08	REPLACED OX-5A MANIFOLD AND DROPLEG	MC
20	3-20-08	DM WAS 3'-3"	MC
19	3-20-08	DM WAS 2'-8"	MC
18	3-20-08	WAS OX-4 GRID TYPE 4	MC
17	3-20-08	DM WAS 3'-1 1/2"	MC
16	3-20-08	DM WAS 3'-0"	MC
15	3-20-08	REVISIONS APPROVED	DRE
14	3-11-08	ADDED BIO P DROPLEG LOCATIONS	MC
13	12-18-07	DM WAS 13'-6"	MC
12	12-18-07	DM WAS 58'-0"	MC
11	12-18-07	DM WAS 15'-0"	MC
10	12-18-07	DM WAS 81'-0"	MC
9	12-18-07	DM WAS 10"	MC
8	12-18-07	DM WAS 70'-0"	MC
7	12-18-07	DM WAS 20'-0"	MC
6	12-18-07	DM WAS 2'-0"	MC
5	12-18-07	DM WAS 8"	MC
4	12-18-07	DM WAS 1'-3"	MC
3	12-18-07	DM WAS 1'-8"	MC
2	12-18-07	WAS SOUTH JORDAN	MC
1	12-18-07	ADDED SHEETS	MC
NO.	DATE	REVISION	BY

SOUTH VALLEY WATER RECLAMATION FACILITY		
WEST JORDAN UTAH		
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE REPRODUCED, COPIED OR DUPLICATED WITHOUT PERMISSION OF SANITAIRE.		
BIOREACTOR 1-4 STRUCTURAL, DROPLEGS & MANIFOLDS KEY PLAN		
ITT Corporation		
SANITAIRE® BROWN DEER, WISCONSIN 53223 ABJ®		
DRAWN BY: MRL	DATE: 12-4-07	DESIGN: NEW/REV
CHKD BY: MTR	DATE: 12-12-07	STD.
APPROV BY: DE	DATE: 12-13-07	SHEET: 2 OF 40
JOB: 07-67425		
S-2		

BIOREACTOR 4 SHOWN

BIOREACTOR 1 & 4
2 REQUIRED AS SHOWN

BIOREACTOR 2 & 3
2 REQUIRED MIRROR IMAGE
PLAN VIEW 2



TANK KEY PLAN

BIOREACTOR 4 SHOWN. BIOREACTOR 2 AND BIOREACTOR 3 ARE SIMILAR MIRROR IMAGES. DIFFUSER COUNTS, LAYOUTS, DROPS, SUPPORTS AND OTHER ITEMS MATCH IN SIZE, QUANTITY, AND ARRANGMENT. THIS NOTE WILL NO LONGER BE REPEATED BUT APPLIES TO ALL ITT CORPORATION DRAWINGS. THIS DRAWING SHOWS DENSITY OF DIFFUSERS IN THE AERATION ZONES.

IN BIOREACTOR 3 ONLY REMOVE EDPM MEMBRANE DIFFUSERS, O-RINGS, AND PVC RETAINER RINGS. ZONES OX-1 & OX-3 WILL NOT HAVE DIFFUSERS REPLACED. CONTRACTOR SHALL TURN OVER EXTRA PVC RETAINER RINGS TO OWNER.

REDUCE NUMBER OF DIFFUSERS IN ZONE OX-4, SEE SHEETS S-10 & S-12. REPLACE EXISTING DIFFUSERS AS REQUIRED IN OX-4.

REPLACE ALL DIFFUSERS IN OX-9

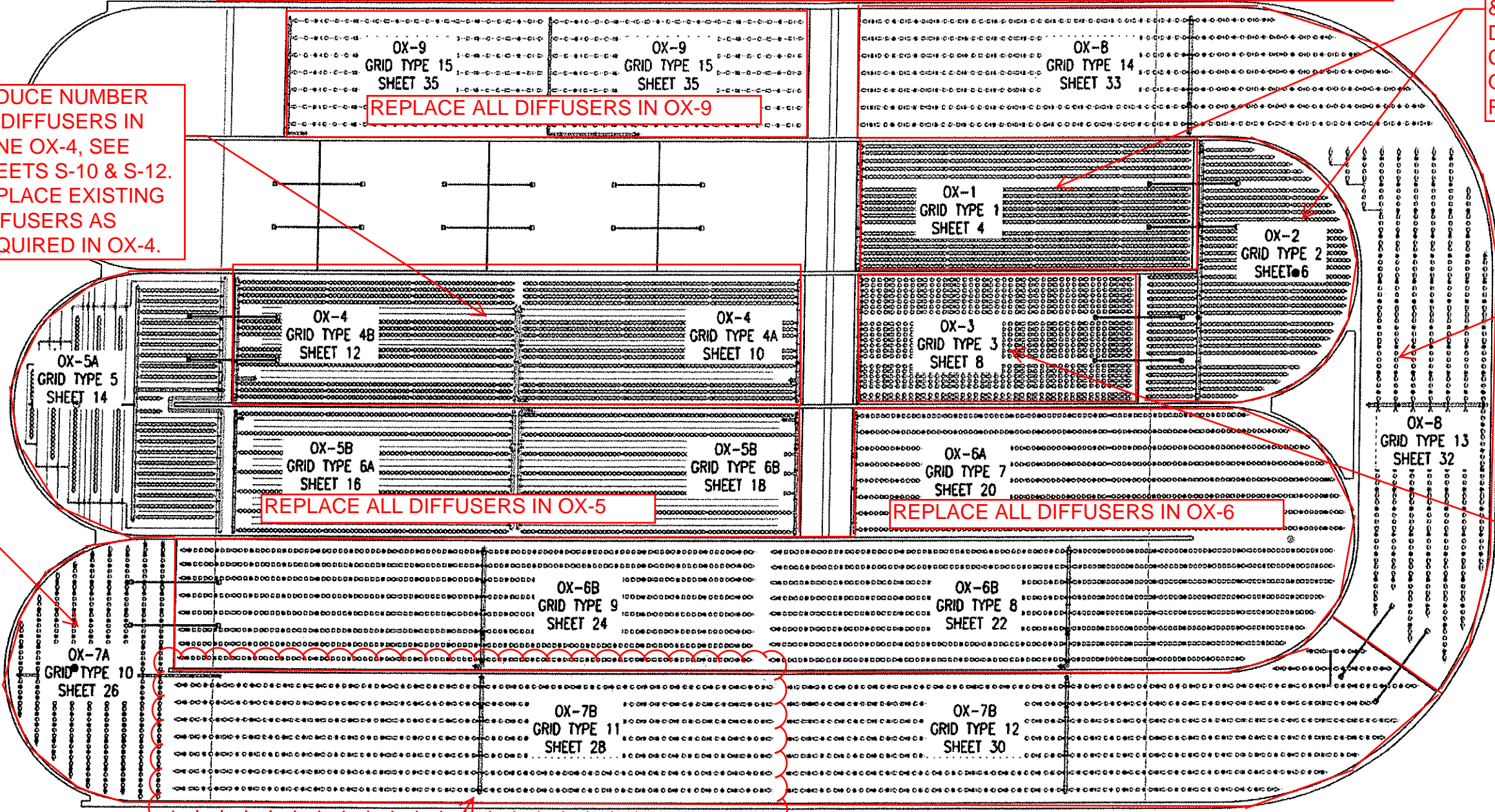
REPLACE ALL DIFFUSERS IN OX-8

REPLACE ALL DIFFUSERS IN OX-5

REPLACE ALL DIFFUSERS IN OX-6

REPLACE EXISTING DIFFUSERS IN OX-3

REPLACE ALL EXISTING DIFFUSERS IN OX-7. INCREASE NUMBER OF DIFFUSERS IN ZONE OX-7, SEE SHEETS S-26, S-28 & S-30



BIOREACTOR 4 SHOWN

IN BIOREACTOR 2 ONLY ON THIS GRID IN OX-7 INSTALL ONLY SSI AERATION INC. 9" EPDM/TEFLON COATED MEMBRANES

BIOREACTOR 1 & 4
2 REQUIRED AS SHOWN
BIOREACTOR 2 & 3
2 REQUIRED MIRROR IMAGE
PLAN VIEW 2

VIEW, SECTION OR
DETAIL NUMBER
2/3
SHEET NUMBER ON WHICH
VIEW, SECTION OR DETAIL
IS FOUND

5	2-21-06	REVISIONS APPROVED	DEC
4	2-19-06	REPLACED ALL DROPS WITH CURRENT LAYOUT	DEC
3	1-4-06	REVISIONS APPROVED	DEC
2	11-19-05	REDESIGN	DEC
1	11-19-05	WAS SOUTH JORDAN	DEC
1	12-19-07	ADDED SHEETS	DEC
NO.	DATE	REVISION	BY

SOUTH VALLEY
WATER RECLAMATION FACILITY

WEST JORDAN
UTAH

BIOREACTOR 1-4
AERATION GRIDS
KEY PLAN

ITT Corporation

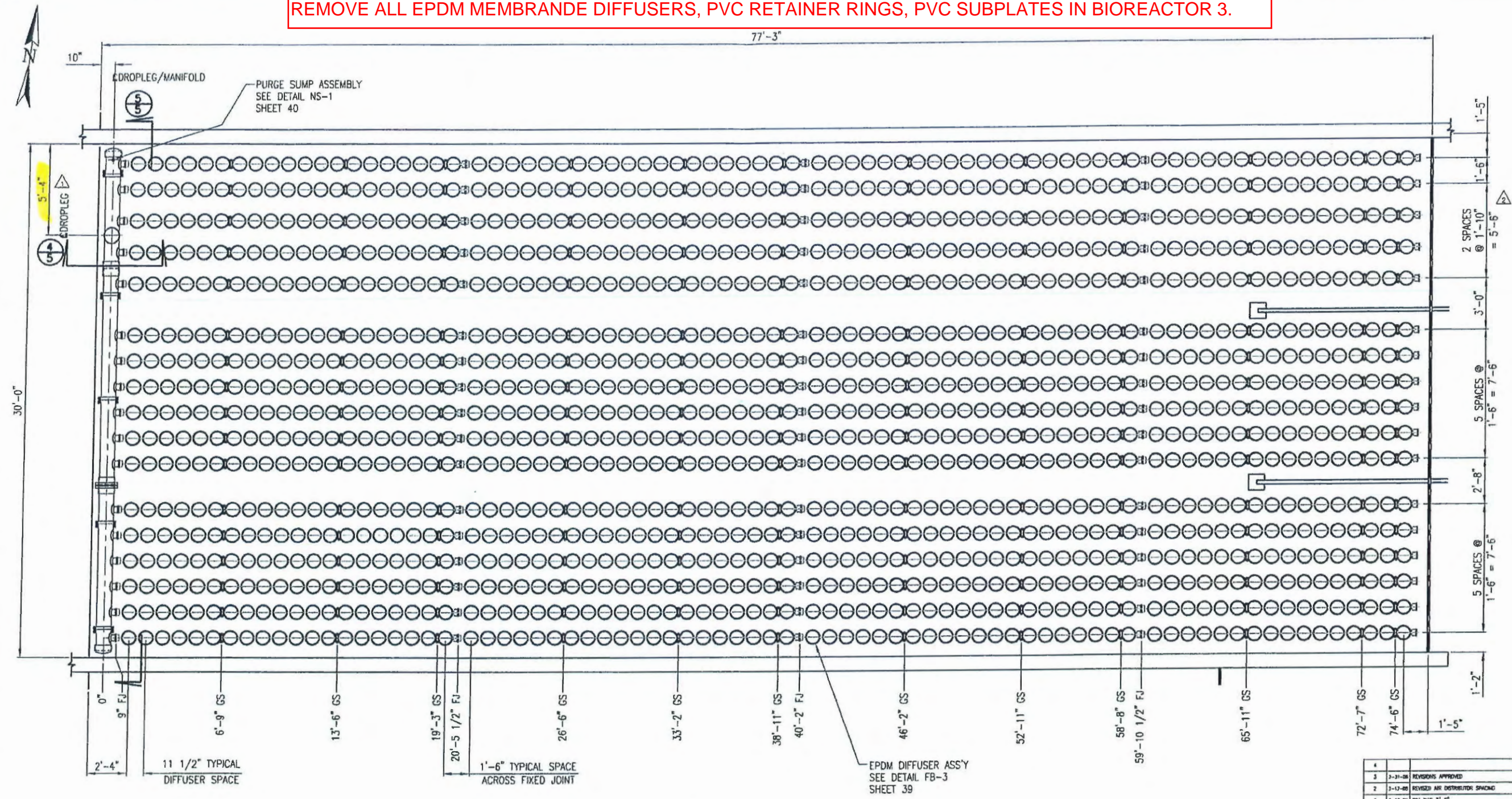
SANITARE® BROWN BEER, WISCONSIN 53223 ABJ®

DRAWN BY	DATE	12-6-07	EDUC.	MCN/EDC	NO	07-67425	3
CHECK BY	DATE	12-12-07	EDC				40
APPROVED BY	DATE	12-19-07	JULI D.	REV. D	DEC	S-3	

4/2/2008

FOR THIS GRID:
REMOVE AND REPLACE ALL EPDM MEMBRANE DIFFUSERS IN BIOREACTOR 2.
REMOVE ALL EPDM MEMBRANE DIFFUSERS, PVC RETAINER RINGS, PVC SUBPLATES IN BIOREACTOR 3.

VAL ONLY NOT FOR CONSTRUCTION



GRID TYPE '1'

4 - TANK(S)
1 - GRID(S) PER TANK
17 - AIR DISTRIBUTORS PER GRID
76 - DIFFUSERS PER AIR DISTRIBUTOR
1292 - DIFFUSERS PER GRID
5168 - TOTAL DIFFUSERS INSTALLED
FOR THIS GRID TYPE

OX-1
GRID TYPE 1
PLAN VIEW 3

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

LEGEND

FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39

GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22B
SHEET 37

4	3-21-08	REVISIONS APPROVED	DOE
3	3-17-08	REVISED AIR DISTRIBUTOR SPACING	MC
2	3-17-08	DN WAS 3'-6"	MC
1	3-17-08	NO. DATE	REVISION BY

SOUTH VALLEY
WATER RECLAMATION FACILITY
WEST JORDAN
UTAH

AERATION GRID OX-1
GRID TYPE 1
PLAN VIEW

ITT Corporation

SANITAIRE® BROWN DEER, WISCONSIN 53223 ABJ

DRAWN BY: MC DATE: 12-18-07 DESIG: MDM REV: 07-67425

CHECKED BY: MTR DATE: 1-3-08 STD: S-4

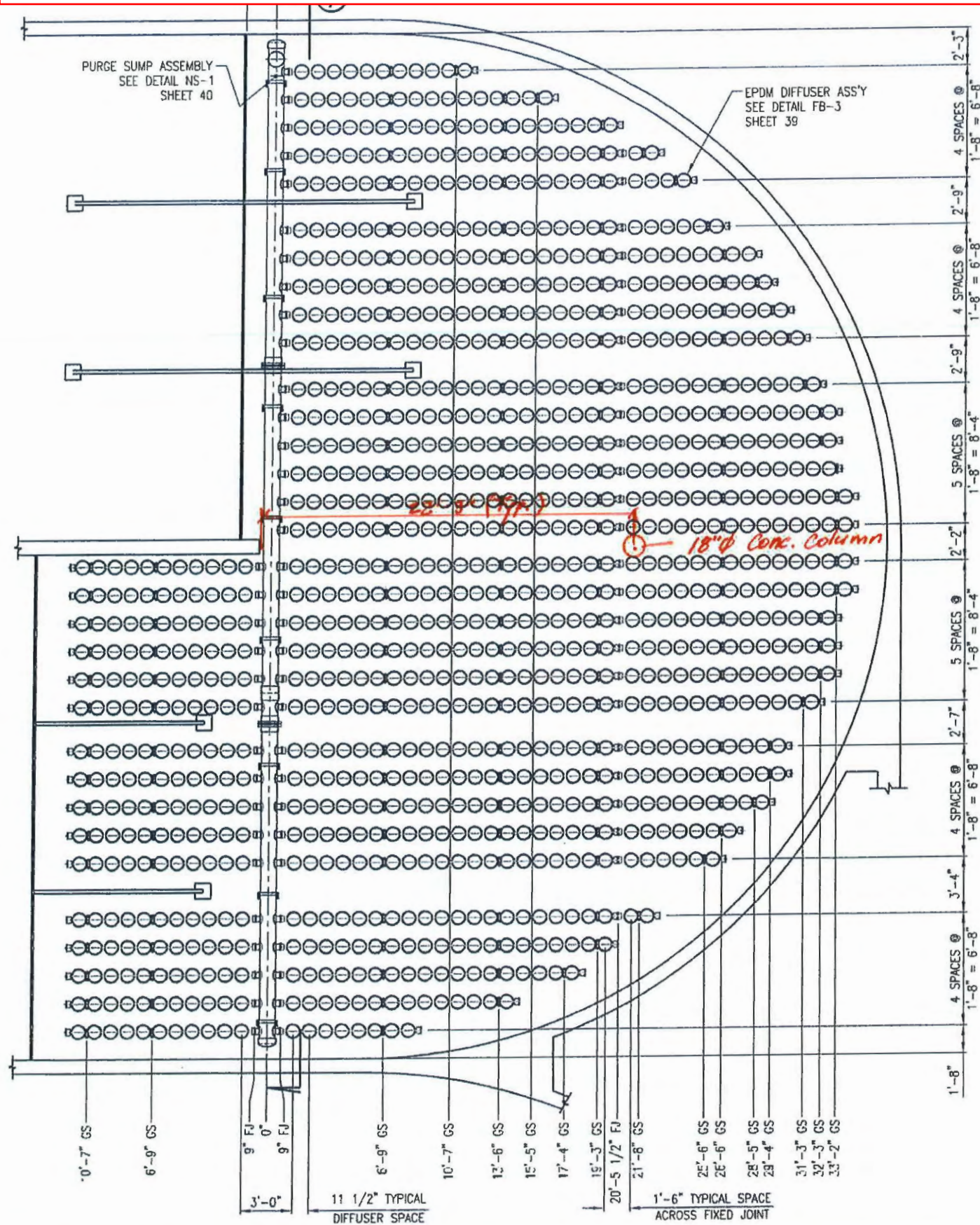
APPROVED BY: DOE DATE: 1-4-08 SIZE: D REV: B

4 OF 40

4/2/2008

FOR THIS GRID:
REMOVE AND REPLACE ALL EPDM MEMBRANE DIFFUSERS IN BIOREACTOR 2.
REMOVE ALL EPDM MEMBRANE DIFFUSERS, PVC RETAINER RINGS, PVC SUBPLATES IN BIOREACTOR 3.

APPROVAL ONLY NOT FOR CONSTRUCTION



GRID TYPE '2'

4 - TANK(S)
1 - GRID(S) PER TANK
32 - AIR DISTRIBUTORS PER GRID
VARIES - DIFFUSERS PER AIR DISTRIBUTOR
1035 - DIFFUSERS PER GRID
4140 - TOTAL DIFFUSERS INSTALLED
FOR THIS GRID TYPE

LEGEND

FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39

GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

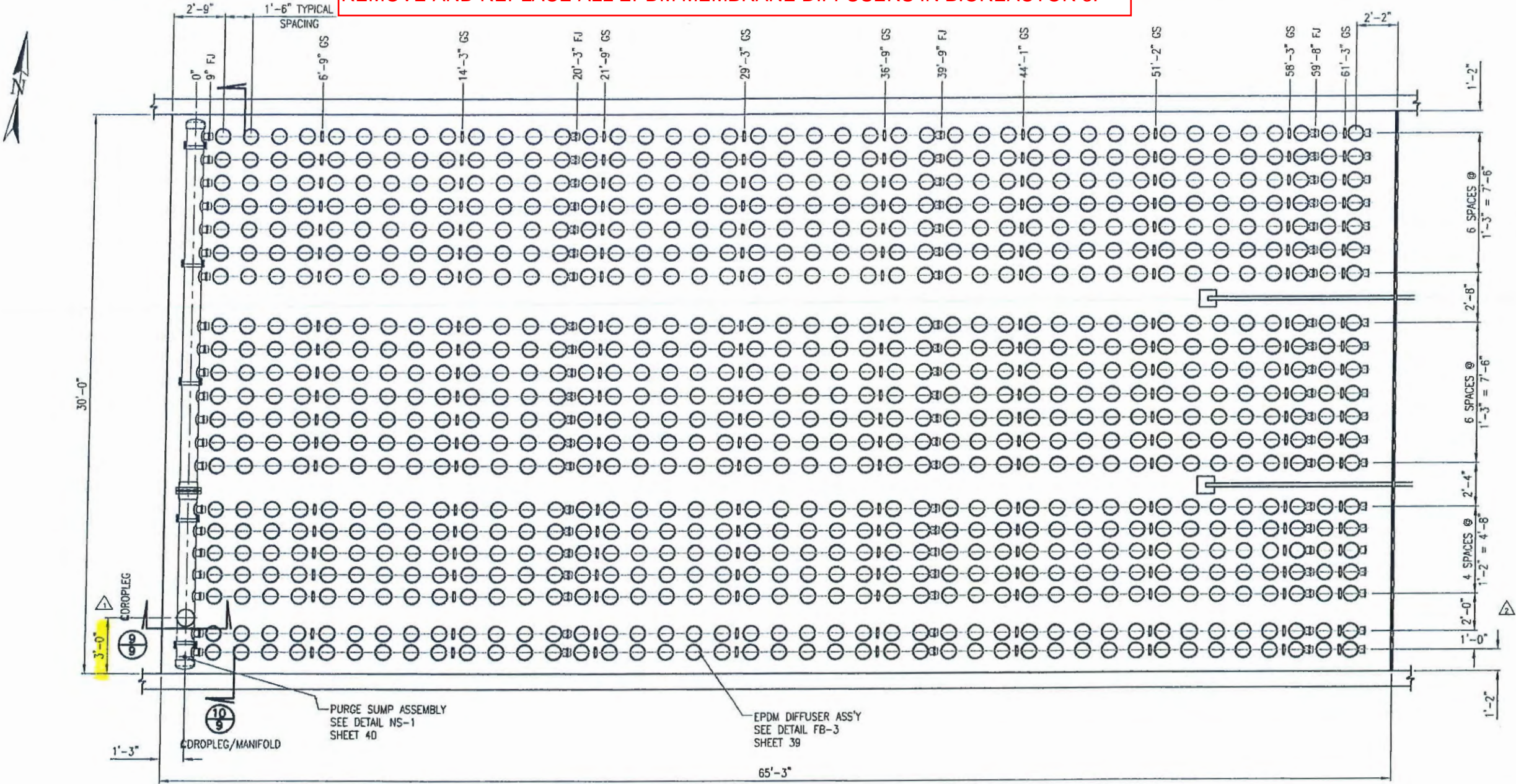
FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22B
SHEET 37

OX-2
GRID TYPE 2
PLAN VIEW (6)

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

4			
3			
2			
1			
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY			
WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE REPRODUCED, USED OR COPIED WITHOUT PERMISSION OF SANITAIRE.			
AERATION GRID OX-2 GRID TYPE 2 PLAN VIEW			
ITT Corporation			
SANITAIRE® BROWN DEER, WISCONSIN 53223			
DRAWN BY	AC	DATE 12-18-07	EQUP. MCM
CHD BY	MTW	DATE 1-3-08	STD.
APPROV BY	ONE	DATE 1-4-08	SIZE D
		REV. B	FIG. S-6
		JOB 07-6742S	
		SHEET 6 OF 40	

FOR THIS GRID:
REMOVE AND REPLACE ALL EPDM MEMBRANE DIFFUSERS IN BIOREACTOR 2.
REMOVE AND REPLACE ALL EPDM MEMBRANE DIFFUSERS IN BIOREACTOR 3.



OX-3
GRID TYPE 3
PLAN VIEW (B)

GRID TYPE '3'

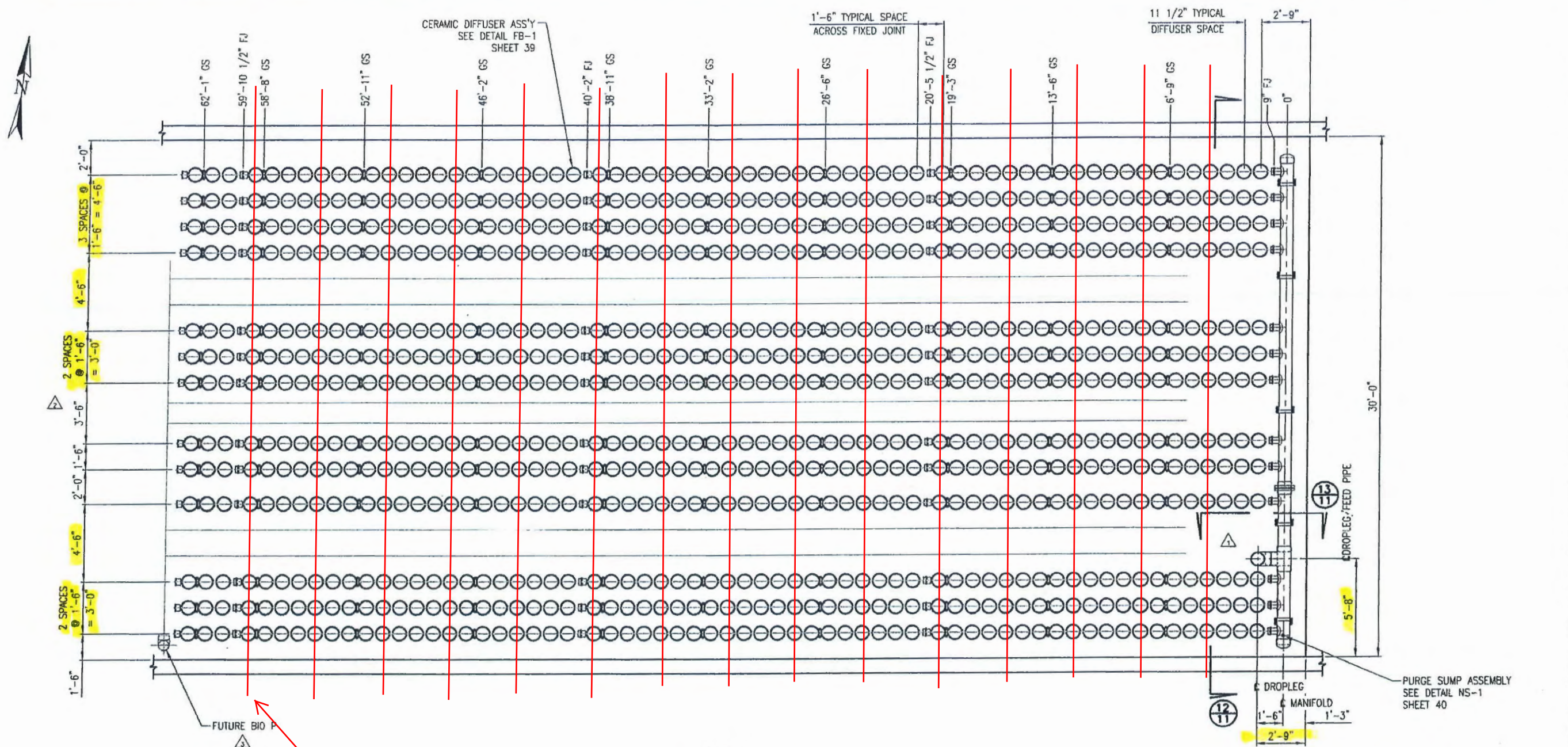
- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 21 - AIR DISTRIBUTORS PER GRID
- 42 - DIFFUSERS PER AIR DISTRIBUTOR
- 882 - DIFFUSERS PER GRID
- 3528 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE

- (2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
- (2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

LEGEND

- FJ- FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
- GS- GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38
- FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22B
SHEET 37

4			
3	3-31-08	REVISED APPROVED	DRE
2	2-15-08	REVISED AIR DISTRIBUTOR SPACING	MC
1	3-18-08	DW WAS 3'-0"	MC
NO.	DATE	REASON	BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIR® AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE REPRODUCED, COPIED OR EXPLAINED WITHOUT PERMISSION BY SANITAIR®.			
AERATION GRID OX-3 GRID TYPE 3 PLAN VIEW			
ITT Corporation			
SANITAIR® BROWN DEER, WISCONSIN 53223			
DRAWN BY	MC	DATE 12-18-07	EDUP. MEN
CHECK BY	MC	DATE 1-3-08	STD.
APPROV BY	DRE	DATE 1-4-08	SITE D REV. B
JOB 07-67425			MC 8 OF 40
S-8			



OX-4
GRID TYPE 4A
PLAN VIEW 11

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

LEGEND

GRID TYPE '4A'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 13 - AIR DISTRIBUTORS PER GRID
- 63 - DIFFUSERS PER AIR DISTRIBUTOR
- 819 - DIFFUSERS PER GRID
- 3276 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE

FOR THIS GRID:
1) REMOVE 195 CERAMIC DIFFUSERS AND ASSOCIATED O-RINGS AND PVC RETAINER RINGS. INSTALL NEOPRENE PLUGS IN ORIFICE HOLES AND LEAVE DIFFUSER HOLDERS EMPTY AS INDICATED BY RED LINES. FINAL EPDM MEMBRANE DIFFUSER COUNT IN THIS GRID IS 624. TYPICAL BOTH BIOREACTORS.
2) PROVIDE AND INSTALL EPDM MEMBRANE DIFFUSERS WITH PVC SUBPLATES TO REPLACE ALL OTHER EXIST CERAMIC DIFFUSERS. TYPICAL BOTH BIOREACTORS.

4	2-21-08	REVISIONS APPROVED	DRE
3	2-20-08	ADDED FUTURE BIO P	MC
2	2-20-08	REVISED AIR DISTRIBUTOR SPACING FOR BIO P	MC
1	2-20-08	ADDED FEED PIPE	MC
NO.	DATE	REVISION	BY

SOUTH VALLEY
WATER RECLAMATION FACILITY

WEST JORDAN
UTAH

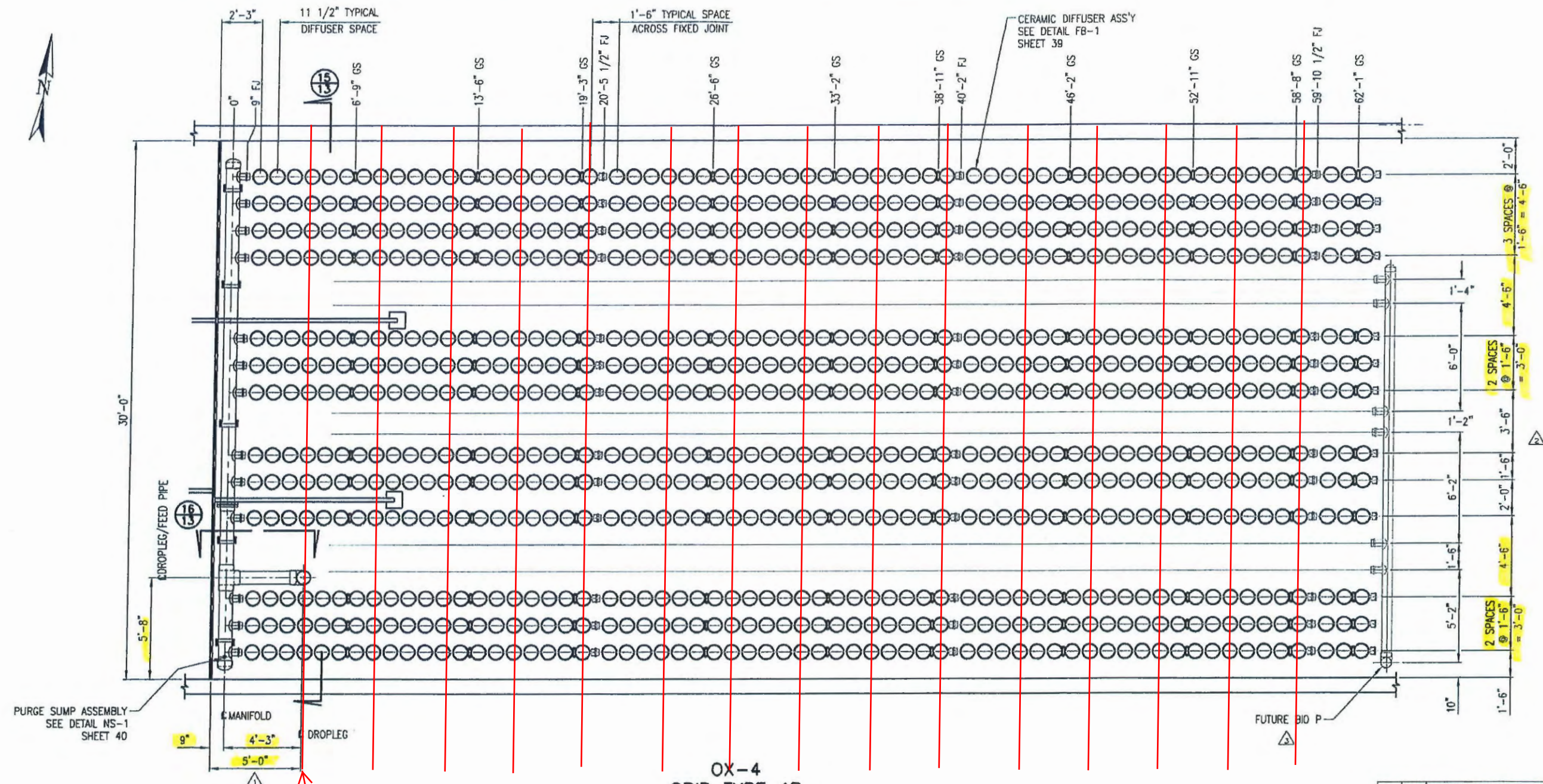
IS THE PROPERTY OF BAHNSON AND IS SUBMITTED IN CONFIDENCE. IT IS
EXCLUDED, USED OR DUPLICATED WITHOUT PERMISSION OF BAHNSON.

AERATION GRID OX-4
GRID TYPE 4A
PLAN VIEW

ITT Corporation

FAIRE® BROWN DEER, WISCONSIN 53223 ABJ

DESIGNED BY	MC	DATE	12-18-07	SCALE	CD	JOB	07-67425	SHEET	10
CHECKED BY	MC	DATE	1-3-08	SCALE	CD	JOB	07-67425	SHEET	10
APPROVED BY	MC	DATE	1-4-08	SCALE	CD	JOB	07-67425	SHEET	10



GRID TYPE '4B

4 - TANK(S)
1 - GRID(S) PER TANK
13 - AIR DISTRIBUTORS PER GRID
63 - DIFFUSERS PER AIR DISTRIBUTOR
819 - DIFFUSERS PER GRID
3276 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE

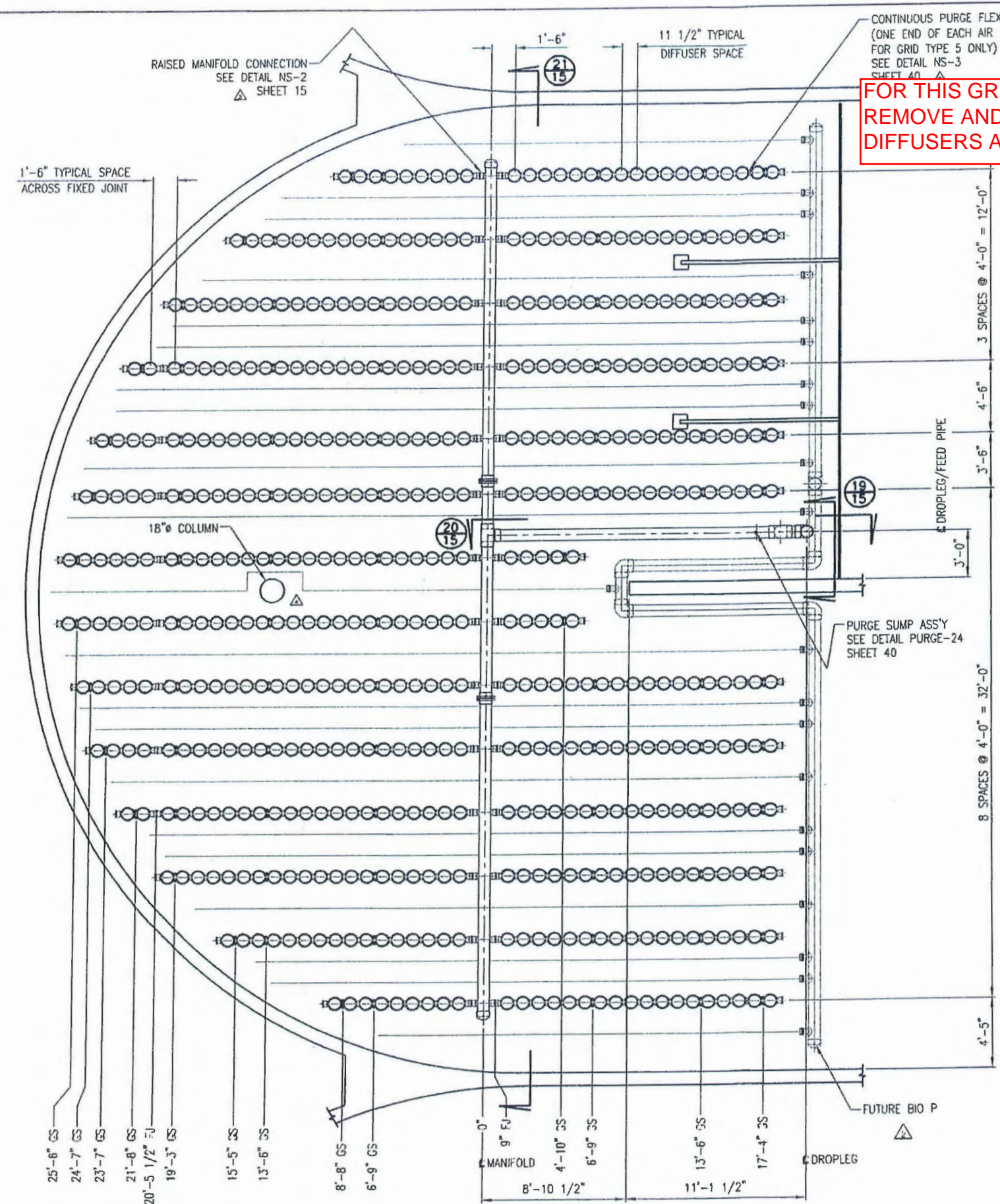
FOR THIS GRID:

- 1) REMOVE 195 CERAMIC DIFFUSERS AND ASSOCIATED O-RINGS AND PVC RETAINER RINGS. INSTALL NEOPRENE PLUGS IN ORIFICE HOLES AND LEAVE DIFFUSER HOLDERS EMPTY AS INDICATED BY RED LINES. FINAL EPDM MEMBRANE DIFFUSER COUNT IN THIS GRID IS 624. TYPICAL BOTH BIOREACTORS.
- 2) PROVIDE AND INSTALL EPDM MEMBRANE DIFFUSERS WITH PVC SUBPLATES TO REPLACE ALL OTHER EXIST CERAMIC DIFFUSERS. TYPICAL BOTH BIOREACTORS.

4	3-31-08	REVISIONS APPROVED	MC
3	3-30-08	ADDED FUTURE BIO P	MC
2	3-20-08	REVISED AIR DISTRIBUTOR SPACING FOR BIO P	MC
1	3-20-08	DM WAS 5'-5"	MC
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH			
THE DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, USED OR REPRODUCED WITHOUT PERMISSION OF SANITAIRE.			
AERATION GRID OX-4 GRID TYPE 4B PLAN VIEW			
ITT Corporation			
SANITAIRE® BROWN DEER, WISCONSIN 53223 ADJ			
DRAWN BY	MC	DATE 12-18-07	EQUP. COR. JWB 07-6742S
CHECK BY	MTR	DATE 1-3-08	STD.
APPROVED BY	DOC	DATE 1-4-08	SIZE D REV. B DWS S-12
			12 OF 40

4/25/2008

FOR APPROVAL ONLY NOT FOR CONSTRUCTION



FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

GRID TYPE '5'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 14 - AIR DISTRIBUTORS PER GRID
- VARIES - DIFFUSERS PER AIR DISTRIBUTOR
- 510 - DIFFUSERS PER GRID
- 2040 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE

LEGEND

- FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
- GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

SUBMITTAL REVIEW

☒ NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED

☐ REJECTED - RESUBMIT ☐ REVISE AND RESUBMIT

Submission of information by the contractor is evidence that it reviewed and understands the intent and specific requirements of the construction documents, and that it verified that satisfactory conditions do or will exist for proper installation and use of the proposed product. Corrections or comments made on submittals do not relieve the contractor from compliance with requirements of the construction documents. Engineer's review is only for general conformance to the design concept and general compliance with the construction documents. Contractor is responsible for clearances, quantities, and dimensions that shall be confirmed and coordinated at the job site, fabrication processes, construction methods and conditions, coordination of trades, safety, and satisfactory performance of the work.

BOWEN, COLLINS & ASSOCIATES

By: *[Signature]* Date: 05/02/08

OX-5A
GRID TYPE 5
PLAN VIEW

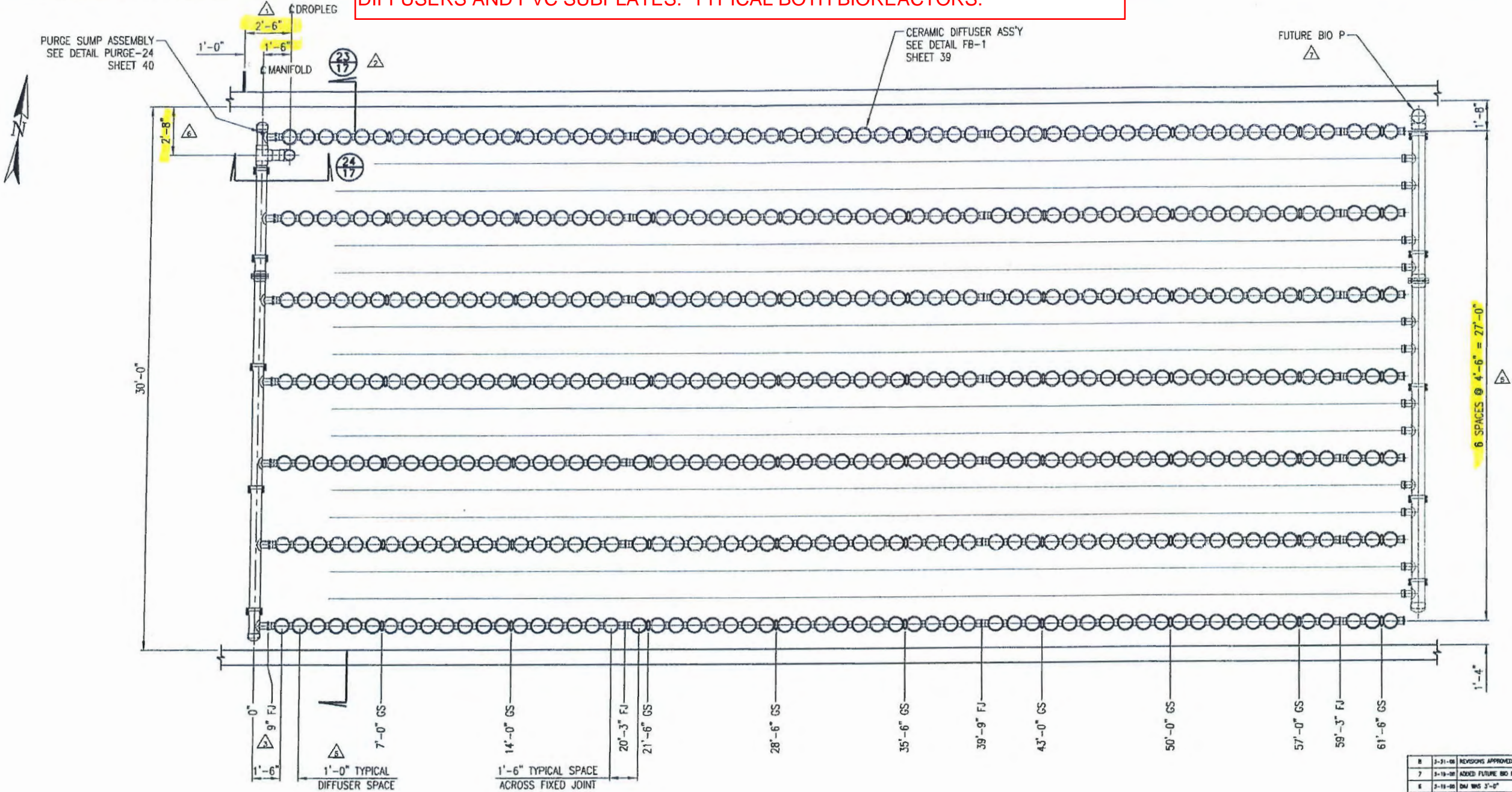
- (2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
- (2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

8	4-20-08	REVISIONS APPROVED	DNC
6	4-24-08	UPDATED GRID INFORMATION FOR NEW LAYOUT	MC
7	4-24-08	REVISED GRID LAYOUT	MC
6	4-24-08	ADDED CONTINUOUS PURGE - FLEXCAP DIFFUSER	MC
5	4-24-08	ADDED RAISED MANIFOLD	MC
4	4-24-08	ADDED COLUMN	MC
3	3-31-08	REVISIONS APPROVED	DNC
2	3-26-08	ADDED FUTURE BIO P	MC
1	3-20-08	REVISED GRID TO ALLOW FOR FUTURE BIO P	MC
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, USED OR REPRODUCED WITHOUT PERMISSION OF SANITAIRE.			
AERATION GRID OX-5A GRID TYPE 5 PLAN VIEW			
ITT Corporation			
SANITAIRE® BROWN DEER, WISCONSIN 53223			
OWN BY	MC	DATE 12-18-07	EQAPP. CER
CHG BY	WTE	DATE 1-3-08	STD.
APPR BY	DOE	DATE 4-4-08	SIZE D REV. D
JOB 07-6742S			14
S-14			OF 40

4/2/2008

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

FOR APPROVAL ONLY NOT FOR CONSTRUCTION



△ GRID TYPE '6A'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 7 - AIR DISTRIBUTORS PER GRID
- 60 - DIFFUSERS PER AIR DISTRIBUTOR
- 420 - DIFFUSERS PER GRID
- 1680 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE

OX-5B
GRID TYPE 6A
PLAN VIEW 22

- (2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
- (2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

LEGEND

FJ- FIXED JOINT
SEE DETAIL FB-10A
SHEET 39

GS- GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

FOR TYPICAL AIR DISTRIBUTOR DETAIL,
SEE DETAIL FB-22C
SHEET 37

NO	DATE	REVISION	BY
8	2-21-08	REVISIONS APPROVED	DR
7	2-19-08	ADDED FUTURE BIO P	MC
6	2-19-08	DN WAS 3'-0"	MC
5	2-19-08	CHANGED AIR DISTRIBUTOR SPACING & DIFFUSER SPACING	MC
4	2-19-08	CHANGED GRID INFORMATION	MC
3	2-19-08	CHANGED DIMENSIONS FOR NEW DIFFUSER LAYOUT	MC
2	2-19-08	ADDED SECTION CALLOUT	MC
1	2-19-08	DN WAS 3'-5 1/16"	MC

SOUTH VALLEY
WATER RECLAMATION FACILITY
WEST JORDAN
UTAH

THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, LOANED OR REPRODUCED WITHOUT PERMISSION BY SANITAIRE.

AERATION GRID OX-5B
GRID TYPE 6A
PLAN VIEW

IT Corporation

DOWN BY	MC	DATE	12-18-07	EQUIP.	DR	JOB	07-6742S	SHEET	16
CHD BY	MTC	DATE	1-2-08	STD.					
APPROV BY	DR	DATE	1-4-08	SIZE	D	REV.	B	CHK.	S-16

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

Technical drawing of a wastewater treatment system layout, likely a biological nutrient removal (BNR) system. The drawing shows a plan view of the system with various components and dimensions.

Key Components and Dimensions:

- Diffuser Lines:** Multiple parallel lines of circular diffusers are shown. Dimensions for these lines include:
 - 61'-6" GS
 - 59'-3" FJ
 - 57'-0" GS
 - 50'-0" GS
 - 43'-0" GS
 - 39'-9" FJ
 - 35'-6" GS
 - 28'-6" GS
 - 21'-6" GS
 - 20'-3" FJ
 - 14'-0" GS
 - 7'-0" GS
 - 9'-0" FJ
 - 1'-6" GS
- Manifold:** A vertical manifold is located on the right side of the drawing.
- Drop Leg:** A vertical drop leg is located near the manifold.
- Purge Sump Assembly:** Located at the bottom right, with a dimension of 1'-6" across the fixed joint.
- Dimensions:**
 - Overall width: 30'-0"
 - Overall length: 27'-0" (6 SPACES @ 4'-6" = 27'-0")
 - Spacing between diffuser lines: 1'-6" TYPICAL SPACE ACROSS FIXED JOINT
 - Spacing between diffuser lines: 1'-0" TYPICAL DIFFUSER SPACE
 - Manifold dimensions: 3'-0" and 1'-3"
 - Drop leg dimensions: 2'-6" and 1'-6"
- Labels:**
 - FUTURE BIO P
 - CERAMIC DIFFUSER ASS'Y SEE DETAIL FB-1 SHEET 39
 - PURGE SUMP ASSEMBLY SEE DETAIL PURGE-24 SHEET 40
- Revisions:**

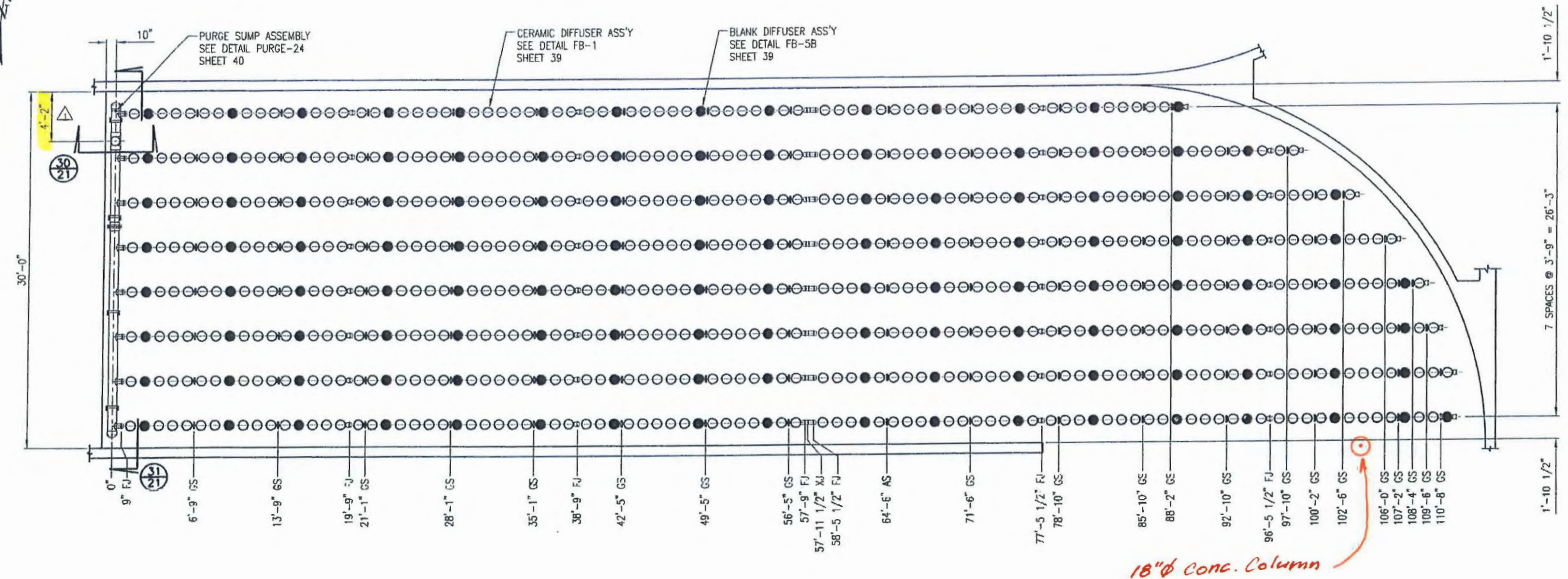
NO.	DATE	REVISIONS
7	3-21-06	REVISIONS APPROVED
6	3-18-05	ADDED FUTURE BIO P
5	3-18-05	REV. WRT. 5'-0"

SANITAIRE		BROWN DEER, WISCONSIN 53223		ABJ	
DRWN BY	MC	DATE 12-18-87	EQUIP.	CCR	JOB 07-6742S
EMD BY	WTR	DATE 1-3-88	STD.		
APPRD BY	DOE	DATE 1-4-88	SIZE	D	REV. B
				OWS	S-18

4/2/2008

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

FOR APPROVAL ONLY NOT FOR CONSTRUCTION



OX-6A
GRID TYPE 7
PLAN VIEW (29)

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

GRID TYPE '7'

4 - TANK(S)
1 - GRID(S) PER TANK
8 - AIR DISTRIBUTORS PER GRID
VARIES - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
700 - DIFFUSER HOLDERS PER GRID
VARIES - DIFFUSERS PER AIR DISTRIBUTOR
570 - DIFFUSERS INSTALLED PER GRID
2280 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
130 - TOTAL BLANKS INSTALLED PER GRID
520 - TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

LEGEND

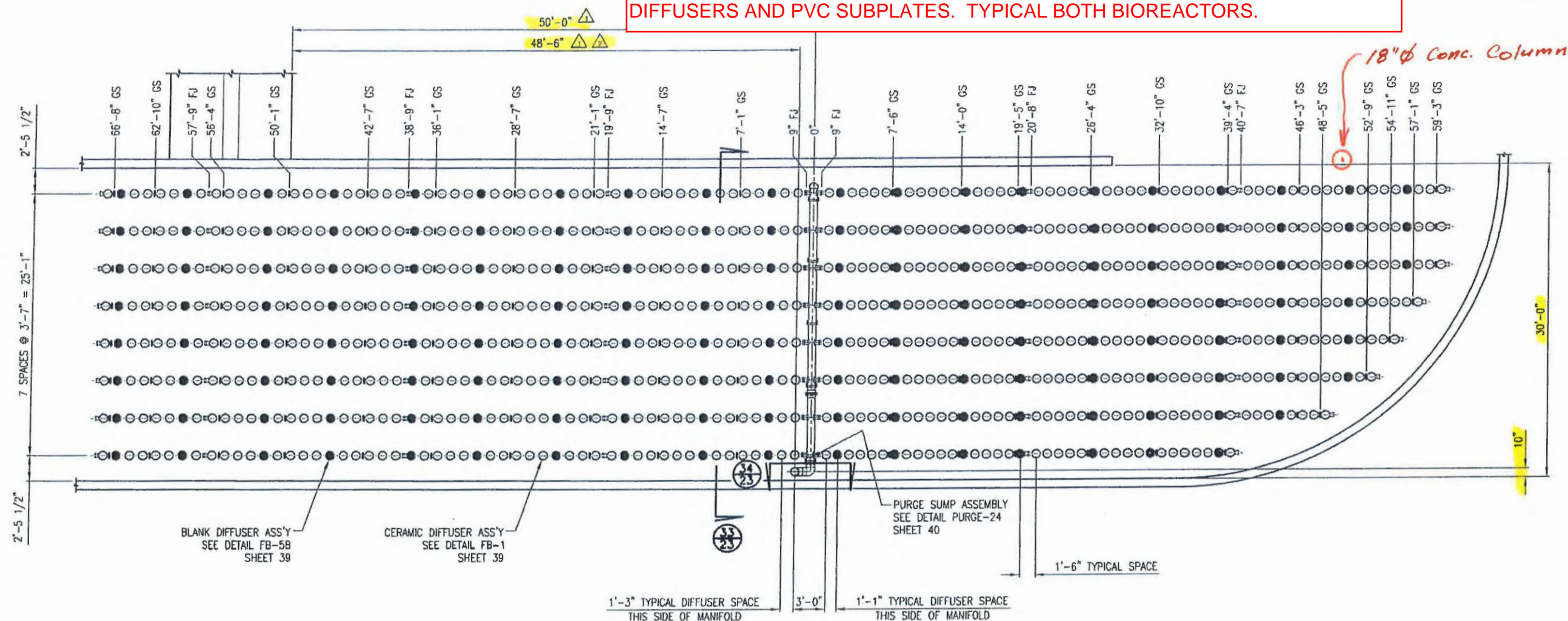
FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
XJ - EXPANSION JOINT
SEE DETAIL FB-11A
SHEET 39
GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38
AS - ANCHOR SUPPORT
SEE DETAIL SUP-4A
SHEET 38
FOR TYPICAL AIR DISTRIBUTOR SECTION
SEE DETAIL FB-22D
SHEET 37

4			
3			
2	3-31-08	REVISIONS APPROVED	DEC
1	3-18-08	REVISED BY 3-5"	MC
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY			
WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS LOANED TO THE CLIENT. IT IS NOT TO BE REPRODUCED, COPIED OR OTHERWISE USED WITHOUT PERMISSION OF SANITAIRE.			
AERATION GRID OX-6A GRID TYPE 7 PLAN VIEW			
ITT Corporation			
SANITAIRE® BROWN DEER, WISCONSIN 53223			
DRAWN BY	MC	DATE 12-10-07	EQUP. CDR
CHECKED BY	MTR	DATE 1-3-08	STD.
APPROVED BY	ONE	DATE 1-4-08	SIZE D REV. B
JOB 07-6742S			20
S-20			40

4/2/2008

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

NOT FOR CONSTRUCTION



OX-6B
GRID TYPE 8
PLAN VIEW 32

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

GRID TYPE '8'

4 - TANK(S)
1 - GRID(S) PER TANK
8 - AIR DISTRIBUTORS PER GRID
VARIES - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
816 - DIFFUSER HOLDERS PER GRID
VARIES - DIFFUSERS PER AIR DISTRIBUTOR
664 - DIFFUSERS INSTALLED PER GRID
2656 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
152 - TOTAL BLANKS INSTALLED PER GRID
608 - TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

LEGEND

FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39

GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37


4			
3	2-21-08	REVISIONS APPROVED	DRE
2	2-18-08	DM WAS 42'-7"	MC
1	2-18-08	ADDED DIMENSION	MC
NO.	DATE	REVISION	BY


SOUTH VALLEY
WATER RECLAMATION FACILITY

WEST JORDAN
UTAH

THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, USED OR REPRODUCED WITHOUT PERMISSION OF SANITAIRE.

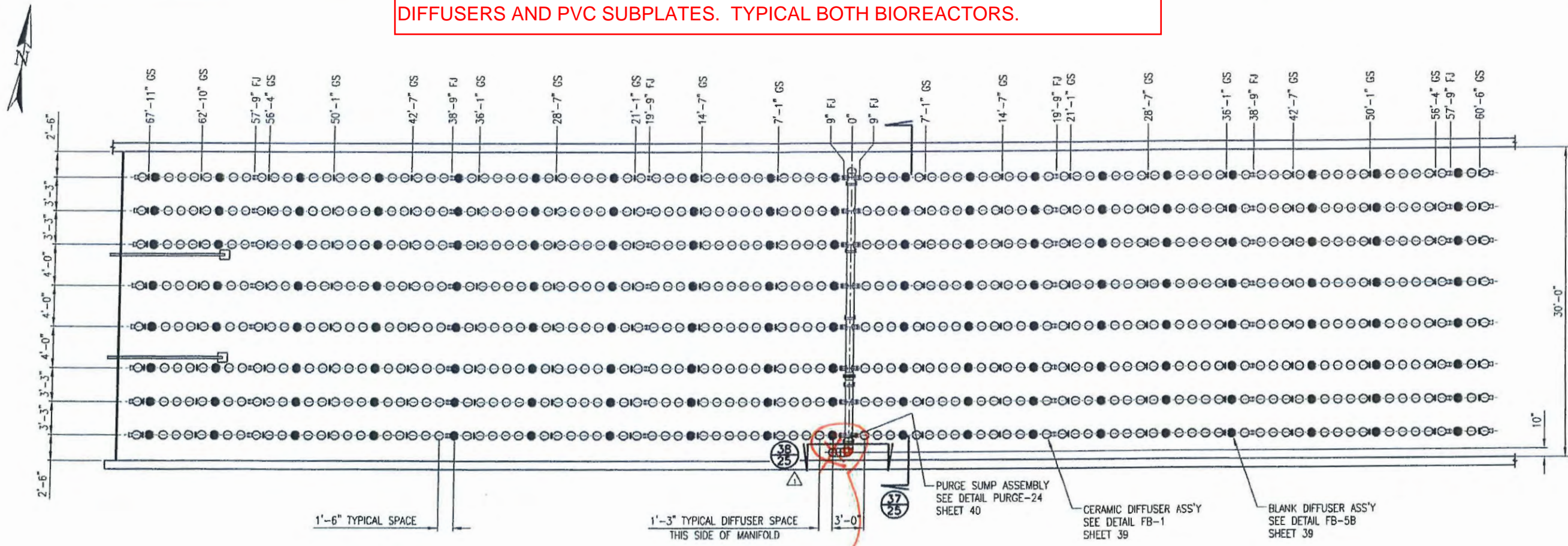
AERATION GRID OX-6B
GRID TYPE 8
PLAN VIEW

 **ITT Corporation**

 **SANITAIRE®** BROWN DEER, WISCONSIN 53223 **ADJ®**

DRAWN BY	MC	DATE	12-18-07	EQUIP.	CCR	JOB	07-6742S	SHEET	22
CHECKED BY	MTR	DATE	1-3-08	SCALE	1"=10'	DATE	1-3-08	DATE	1-3-08
APPROVED BY	DRE	DATE	1-1-08	SHEET	D	REVISION	B	DATE	1-1-08

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.



OX-6B
GRID TYPE 9
PLAN VIEW (36)
(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

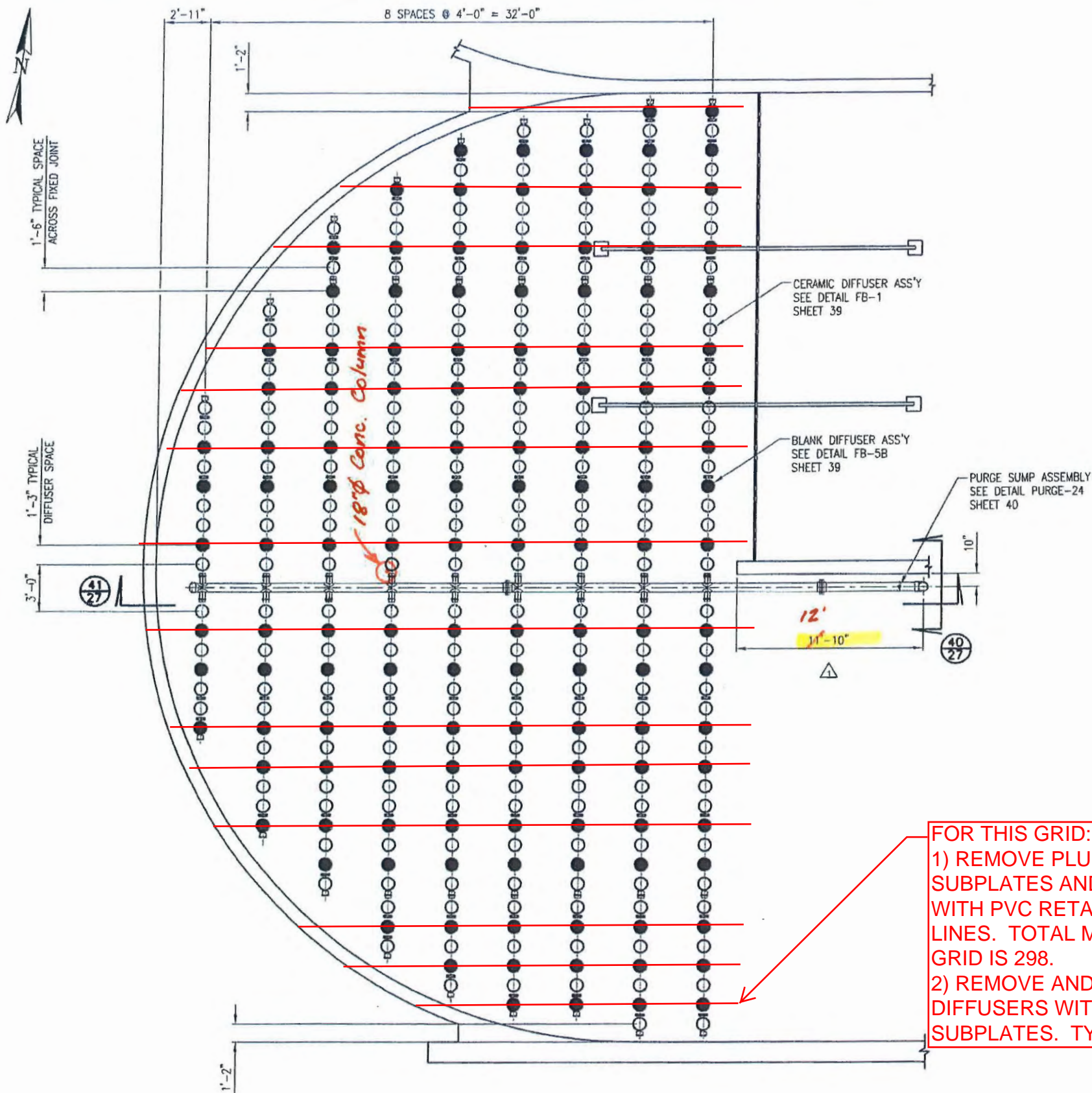
GRID TYPE '9'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 8 - AIR DISTRIBUTORS PER GRID
- 102 - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
- 816 - DIFFUSER HOLDERS PER GRID
- 83 - DIFFUSERS PER AIR DISTRIBUTOR
- 664 - DIFFUSERS INSTALLED PER GRID
- 2656 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
- 152 - TOTAL BLANKS INSTALLED PER GRID
- 608 - TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

LEGEND

- FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
- GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38
- FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

4			
3			
2	3-31-08	REVISIONS APPROVED	ONE
1	3-18-08	ADDED FEED PIP AND SECTION CALLOUT	MC
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY			
WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, USED OR REPRODUCED WITHOUT PERMISSION OF SANITAIRE.			
AERATION GRID OX-6B GRID TYPE 9 PLAN VIEW			
ITT Corporation			
SANITAIRE® BROWN DEER, WISCONSIN 53223 ABJ			
DRAWN BY	MC	DATE 12-18-07	GROUP
CHECKED BY	MC	DATE 1-3-08	STD
APPROVED BY	ONE	DATE 1-4-08	REV. B
JOB 07-6742S			24
SHEET S-24			OF 40



GRID TYPE '10'

- 4 -TANK(S)
- 1-GRID(S) PER TANK
- 9-AIR DISTRIBUTORS PER GRID
- VARIES-DIFFUSER HOLDERS PER AIR DISTRIBUTOR
- 335-DIFFUSER HOLDERS PER GRID
- VARIES-DIFFUSERS PER AIR DISTRIBUTOR
- 200-DIFFUSERS INSTALLED PER GRID
- 800-TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
- 135-TOTAL BLANKS INSTALLED PER GRID
- 540-TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

LEGEND

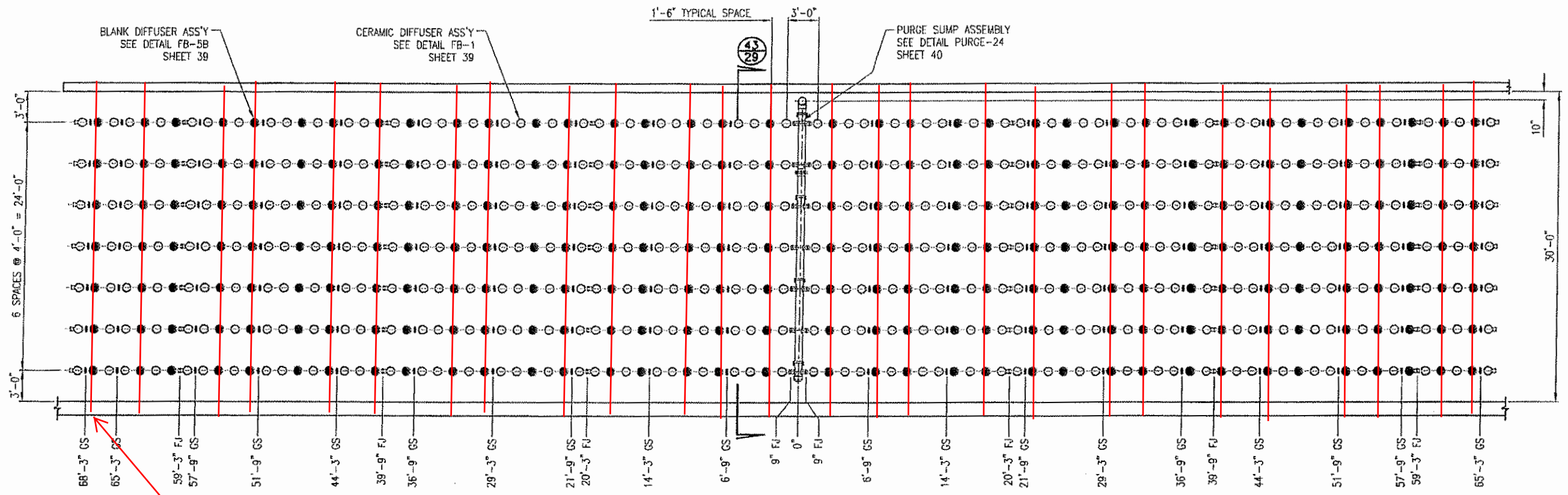
- FJ- FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
- GS- GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38
- FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

FOR THIS GRID:
1) REMOVE PLUGS IN ORIFICES, INSTALL PVC SUBPLATES AND ADD 98 EPDM MEMBRANE DIFFUSERS WITH PVC RETAINER RINGS WHERE INDICATED BY RED LINES. TOTAL MEMBRANE DIFFUSER COUNT IN THIS GRID IS 298.
2) REMOVE AND REPLACE ALL OTHER CERAMIC DIFFUSERS WITH EPDM MEMBRANE DIFFUSER AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

GRID TYPE 10
PLAN VIEW 39

- (2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
- (2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

4				
3				
2	2-31-00	REVISIONS APPROVED		DIC
1	2-18-00	DAI WAS 11'-8 1/2"		MC
REV.	DATE	REVISION		BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH				
AERATION GRID OX-7A GRID TYPE 10 PLAN VIEW				
ITT Corporation				
SANITAIRE® BROWN DEER, WISCONSIN 53223 ADJ®				
DRAWN BY	MC	DATE 12-18-07	CDR	07-6742S
CHECKED BY	MTB	DATE 1-3-08	STD	
APPROVED BY	DIC	DATE 1-4-08	SIZE D	REV. B
				26 OF 40



OX-7B
GRID TYPE 11
PLAN VIEW (42)

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

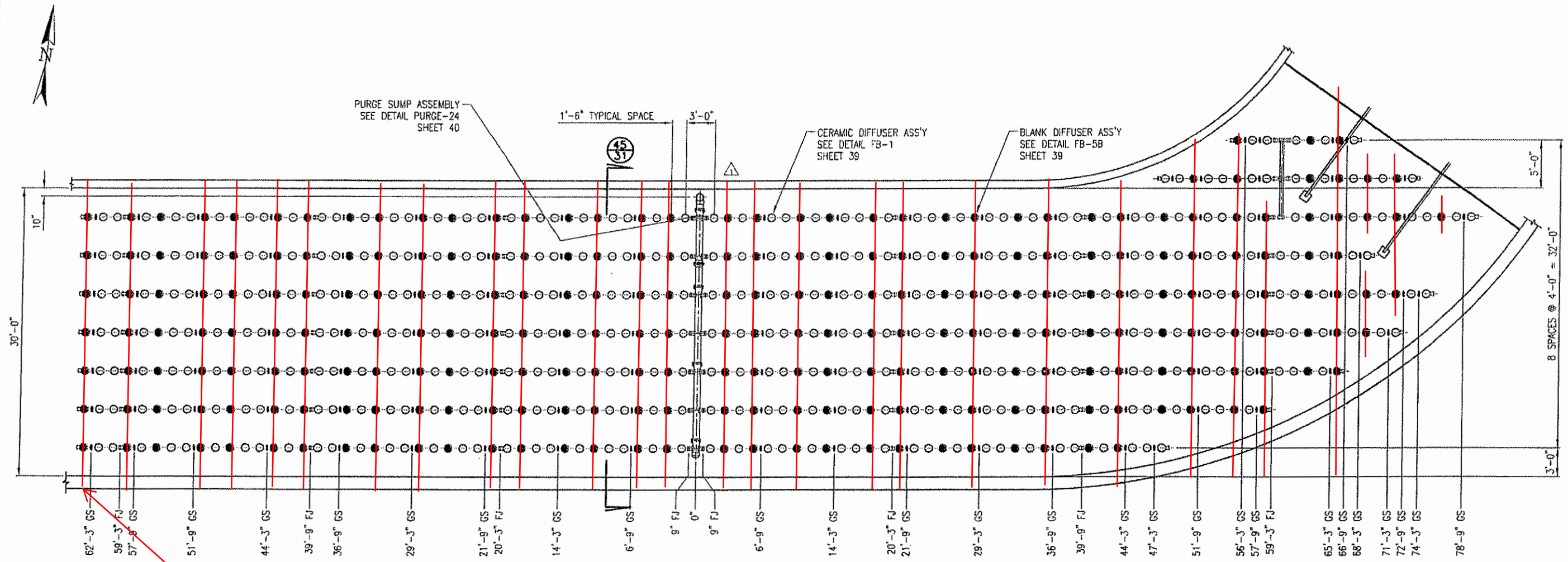
FOR THIS GRID:

- 1) FOR BIOREACTOR 2: REMOVE AND REPLACE EXIST SSI EPDM/TEFLON MEMBRANE DIFFUSERS WITH NEW SSI EPDM/TEFLON DIFFUSERS. THERE ARE 378 EXISTING SSI DIFFUSERS IN THIS GRID. REMOVE PLUGS FROM EMPTY DIFFUSER HOLDERS, INSTALL PVC SUBPLATES AND ADD 182 SSI EPDM/TEFLON MEMBRANE DIFFUSERS WITH PVC RETAINER RINGS AND PVC SUBPLATES WHERE INDICATED BY RED LINES. FINAL MEMBRANE DIFFUSER COUNT IN THIS GRID IS 560.
- 2) FOR BIOREACTOR 3: REMOVE AND REPLACE CERAMIC DIFFUSERS WITH EPDM MEMBRANE DIFFUSER AND PVC SUBPLATES. REMOVE PLUGS FROM EMPTY DIFFUSER HOLDERS, INSTALL PVC SUBPLATES AND ADD 182 EPDM MEMBRANE DIFFUSERS WITH PVC RETAINER RINGS WHERE INDICATED BY RED LINES. FINAL MEMBRANE DIFFUSER COUNT IN THIS GRID IS 560.

GRID TYPE '11'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 7 - AIR DISTRIBUTORS PER GRID
- 90 - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
- 630 - DIFFUSER HOLDERS PER GRID
- 54 - DIFFUSERS PER AIR DISTRIBUTOR
- 378 - DIFFUSERS INSTALLED PER GRID
- 1512 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
- 252 - TOTAL BLANKS INSTALLED PER GRID
- 1008 - TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

DATE		DESIGN		BY	
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH					
THIS IS THE PROPERTY OF BANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION OF BANITAIRE.					
AERATION GRID OX-7B GRID TYPE 11 PLAN VIEW					
ITT Corporation					
BANITAIRE [®] BROWN, DEER, WISCONSIN 53223 ABJ [®]					
DESIGN BY	MD	DATE	12-18-07	CDR	07-6742S
CHG BY	MD	DATE	1-3-08	SR	07-6742S
APPROV BY	MD	DATE	1-4-08	SR	07-6742S
SHEET 37					OF 40



OX-7B
GRID TYPE 12
PLAN VIEW (44)

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

GRID TYPE '12'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 7 - AIR DISTRIBUTORS PER GRID
- VARIES - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
- 630 - DIFFUSER HOLDERS PER GRID
- VARIES - DIFFUSERS PER AIR DISTRIBUTOR
- 378 - DIFFUSERS INSTALLED PER GRID
- 1512 - TOTAL DIFFUSERS INSTALLED FOR THIS
- 252 - TOTAL BLANKS INSTALLED PER GRID
- 1008 - TOTAL BLANKS INSTALLED FOR THIS GRID

FOR THIS GRID:
1) REMOVE PLUGS FROM DIFFUSER HOLDERS, INSTALL PVC SUBPLATES AND ADD 183 (91 LEFT SIDE, 92 RIGHT SIDE) EPDM MEMBRANE DIFFUSERS WITH PVC RETAINER RINGS WHERE INDICATED BY RED LINES. TOTAL MEMBRANE DIFFUSER COUNT IN THIS GRID IS 561.
2) REMOVE AND REPLACE ALL OTHER CERAMIC DIFFUSERS WITH EPDM MEMBRANE DIFFUSER AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

LEGEND

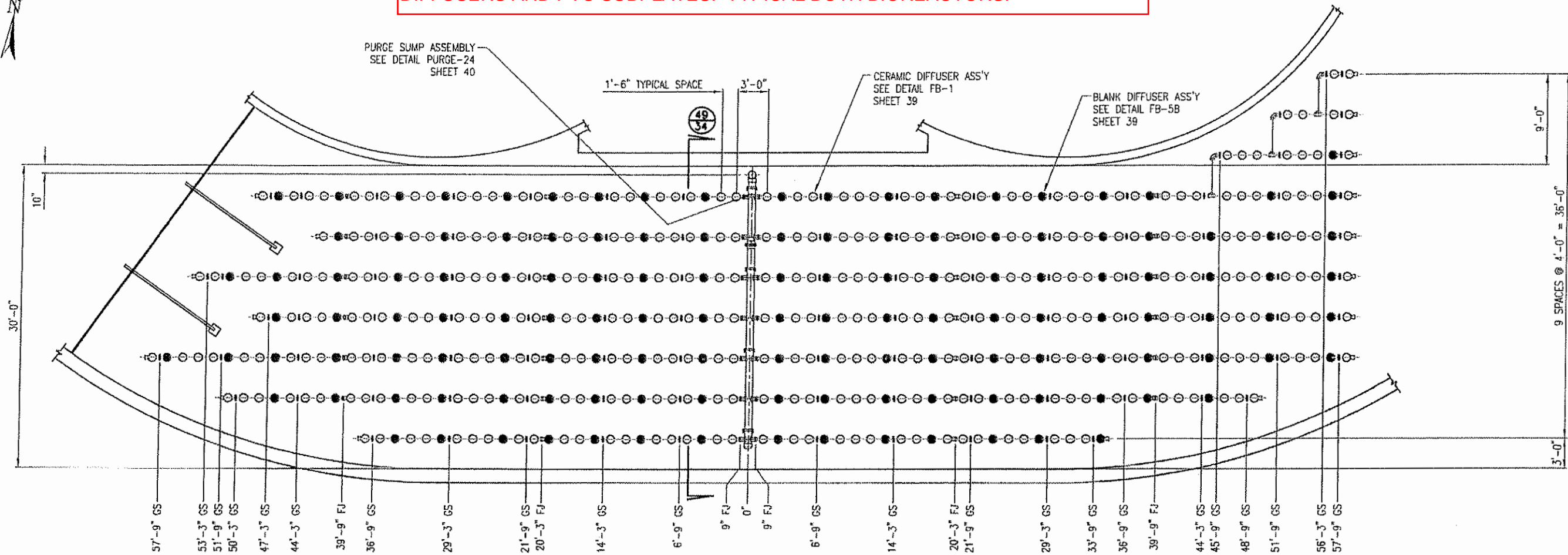
FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39

GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

4			
3			
2	2-11-06	REVISIONS APPROVED	DEC
1	2-18-06	REMOVED FIXED JOINT AND SECTION ELLIPTICAL	MC
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH AERATION GRID OX-7B GRID TYPE 12 PLAN VIEW ITT Corporation SANITAIRE® BROWN DEER, WISCONSIN 53223 ADJ® OWN BY: MC DATE: 12-18-07 ELLIPTICAL: DEC APP: 07-67425 30 CHD BY: MTR DATE: 1-3-08 ELLIPTICAL: DEC APP: S-30 40 APPROVED BY: DEC DATE: 1-4-08 ELLIPTICAL: DEC APP: S-30 40			

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.



OX-8
GRID TYPE 13
PLAN VIEW 47

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

GRID TYPE '13'

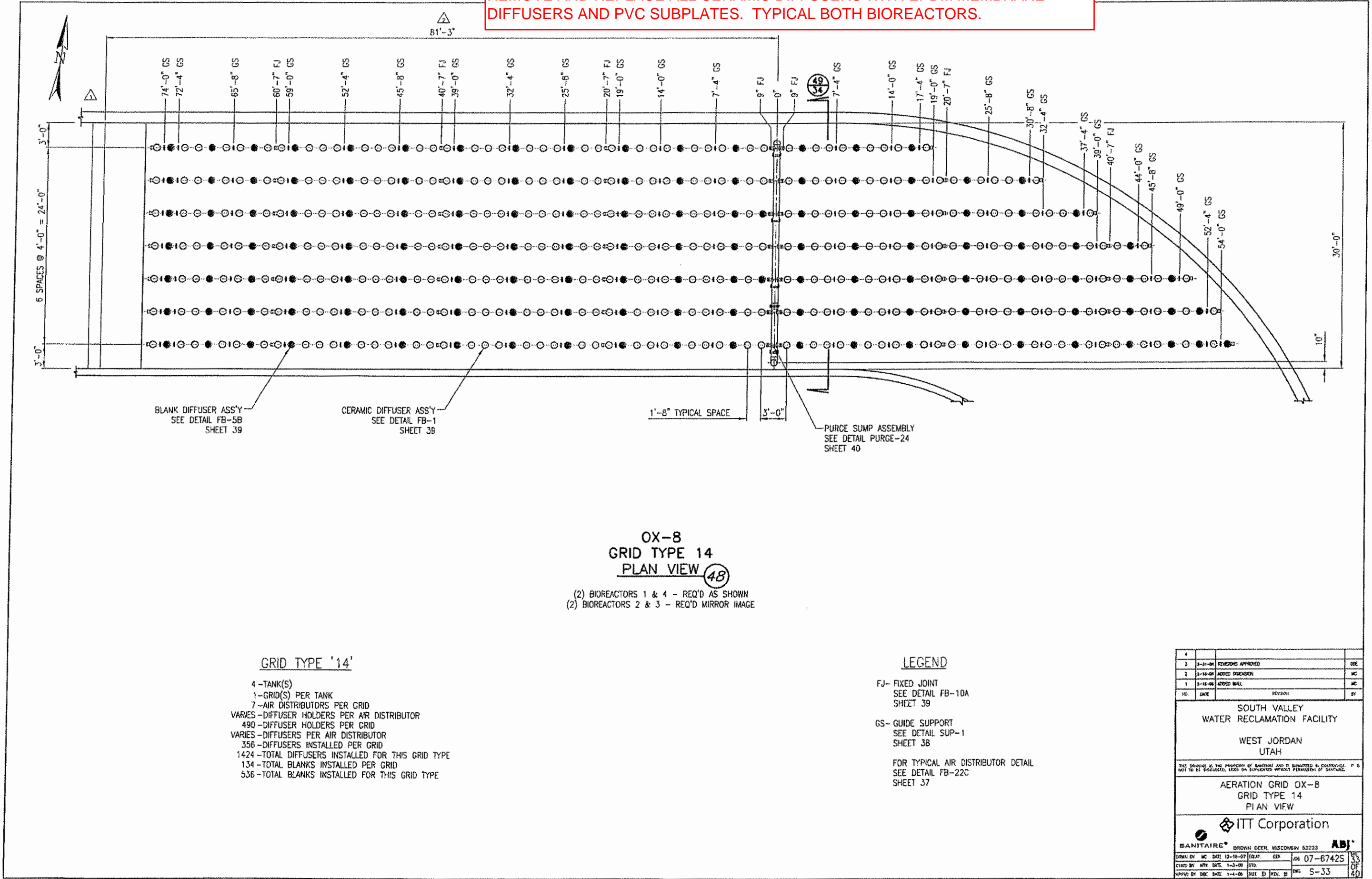
- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 7 - AIR DISTRIBUTORS PER GRID
- VARIES - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
- 490 - DIFFUSER HOLDERS PER GRID
- VARIES - DIFFUSERS PER AIR DISTRIBUTOR
- 356 - DIFFUSERS INSTALLED PER GRID
- 1424 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
- 134 - TOTAL BLANKS INSTALLED PER GRID
- 536 - TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

LEGEND

- FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
- GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38
- FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

4			
3			
2			
1			
NO	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY			
WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIR® AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, USED, OR REPRODUCED WITHOUT PERMISSION OF SANITAIR®.			
AERATION GRID OX-8 GRID TYPE 13 PLAN VIEW			
ITT Corporation			
SANITAIR® BROWN DEER, WISCONSIN 53223 ABJ			
DRAWN BY	MC	DATE 12-18-07	ISSUED
DESIGNED BY	MTN	DATE 1-3-08	STD.
APPROVED BY	ENC	DATE 1-4-08	REV. B
NO. 07-6742S		SHEET 32	
SHEET 32		OF 40	

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.



OX-8
GRID TYPE 14
PLAN VIEW (48)

(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

GRID TYPE '14'

- 4 - TANK(S)
- 1 - GRID(S) PER TANK
- 7 - AIR DISTRIBUTORS PER GRID
- VARIES - DIFFUSER HOLDERS PER AIR DISTRIBUTOR
- 490 - DIFFUSER HOLDERS PER GRID
- VARIES - DIFFUSERS PER AIR DISTRIBUTOR
- 356 - DIFFUSERS INSTALLED PER GRID
- 1424 - TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
- 134 - TOTAL BLANKS INSTALLED PER GRID
- 536 - TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

LEGEND

FJ - FIXED JOINT
SEE DETAIL FB-10A
SHEET 39

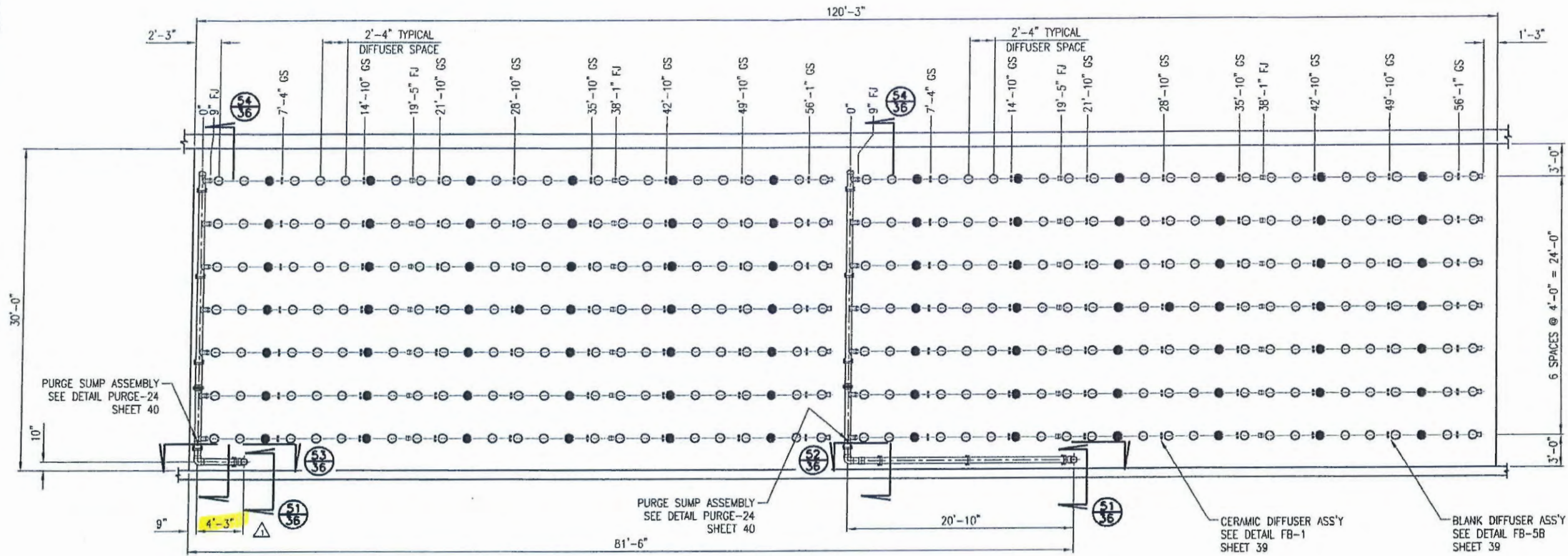
GS - GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38

FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

4				
3	3-21-08	REVISIONS APPROVED		DEC
2	3-13-08	ADDED DIMENSION		MC
1	3-18-08	ADDED WALL		MC
NO.	DATE	REVISION		BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH				
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS SUBMITTED IN CONFIDENCE. IT IS NOT TO BE DISCLOSED, COPIED OR REPRODUCED WITHOUT PERMISSION OF SANITAIRE.				
AERATION GRID OX-8 GRID TYPE 14 PLAN VIEW				
ITT Corporation				
SANITAIRE® BROWN DEER, WISCONSIN 53223 ADJ*				
DRAWN BY	MC	DATE	12-10-07	EQD
CHECKED BY	MTS	DATE	1-3-08	STU
APPROVED BY	DEC	DATE	1-4-08	REV. B
JOB 07-6742S				33
S-33				40

FOR THIS GRID:
REMOVE AND REPLACE ALL CERAMIC DIFFUSERS WITH EPDM MEMBRANE
DIFFUSERS AND PVC SUBPLATES. TYPICAL BOTH BIOREACTORS.

APPROVAL ONLY NOT FOR CONSTRUCTION



OX-9
GRID TYPE 15
PLAN VIEW 50
(2) BIOREACTORS 1 & 4 - REQ'D AS SHOWN
(2) BIOREACTORS 2 & 3 - REQ'D MIRROR IMAGE

- △ GRID TYPE '15'
- 4 -TANK(S)
 - 2 -GRID(S) PER TANK
 - 7 -AIR DISTRIBUTORS PER GRID
 - 25 -DIFFUSER HOLDERS PER AIR DISTRIBUTOR
 - 175 -DIFFUSER HOLDERS PER GRID
 - VARIABLES -DIFFUSERS PER AIR DISTRIBUTOR
 - 132 -DIFFUSERS INSTALLED PER GRID
 - 1056 -TOTAL DIFFUSERS INSTALLED FOR THIS GRID TYPE
 - 43 -TOTAL BLANKS INSTALLED PER GRID
 - 344 -TOTAL BLANKS INSTALLED FOR THIS GRID TYPE

- LEGEND
- FJ- FIXED JOINT
SEE DETAIL FB-10A
SHEET 39
 - GS- GUIDE SUPPORT
SEE DETAIL SUP-1
SHEET 38
 - FOR TYPICAL AIR DISTRIBUTOR DETAIL
SEE DETAIL FB-22C
SHEET 37

1	3-31-08	REVISIONS APPROVED	DSE
2	3-31-08	REVISED GRID INFORMATION	MC
3	3-31-08	GRID TYPE 15 REDRAWN	MC
4	3-31-08	GRID WAS 5'-8"	MC
NO.	DATE	REVISION	BY
SOUTH VALLEY WATER RECLAMATION FACILITY WEST JORDAN UTAH			
THIS DRAWING IS THE PROPERTY OF SANITAIRE AND IS LOANED TO YOU IN CONFIDENCE. IT IS NOT TO BE REPRODUCED, COPIED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION OF SANITAIRE.			
AERATION GRID OX-9 GRID TYPE 15 PLAN VIEW			
ITT Corporation			
SANITAIRE® BROWN DEER, WISCONSIN 53223			
DRAWN BY	MC	DATE 12-18-07	EQP. DSR
CHKD BY	MC	DATE 1-3-08	STD.
APP'D BY	DSE	DATE 1-4-08	SIZE D REV. B
JAL 07-6742S		S-35	
OF 40			