

CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS WATER POLLUTION CONTROL FACILITY RECORD DRAWINGS DECEMBER, 2012

OWNER

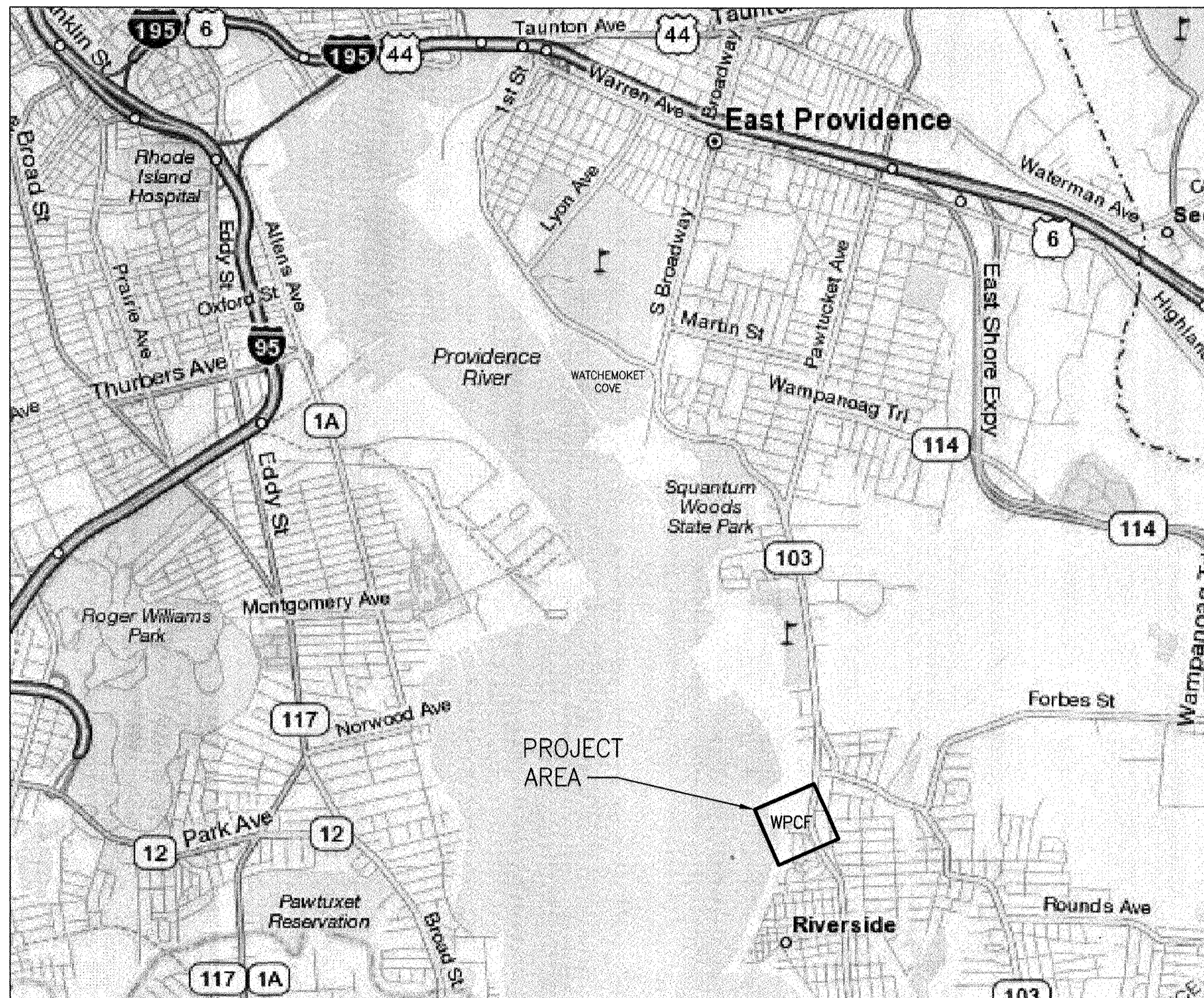
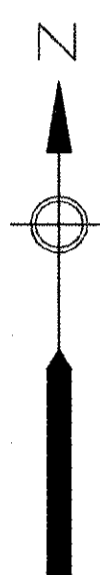
CITY OF EAST PROVIDENCE
DEPARTMENT OF PUBLIC WORKS
145 TAUNTON AVENUE
EAST PROVIDENCE, RI 02914

OPERATOR

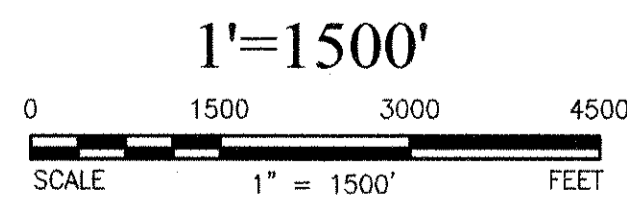
UNITED WATER ENVIRONMENTAL SERVICES, INC.
1 CREST AVENUE
EAST PROVIDENCE, RI 02915

DESIGN BUILDER

AECOM
701 EDGEWATER DRIVE
WAKEFIELD, MA 01880



LOCATION PLAN



ONLY INCLUDES DRAWINGS RELEVANT
TO THE AERATION SYSTEM

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NO.	DATE	MADE BY	CHECKED BY	REVISIONS
1	12/20/12			REVISED FOR RECORD DRAWING

AECOM USA, INC.
701 EDGEWATER DRIVE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

SCOTT K. THIBAUT
REGISTERED PROFESSIONAL ENGINEER
CIVIL/CHEMICAL
No. [Signature]

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

COVER SHEET

GENERAL

PROJECT NO:	60148648
CAD DWG FILE:	00 G-101
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	JANUARY 2013
SCALE:	AS NOTED

00 G-101

PATH: FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\DR-2\SHEETS\00 G-101.DWG
LAST UPDATE: Wednesday, October 17, 2012 12:28:07 PM
PLOT DATE: Monday, January 07, 2013 11:45:59 PM
ANSI D - 17-Oct-12

INDEX OF DRAWINGS

GENERAL

- 00 G-101 COVER SHEET
- 00 G-102 INDEX OF DRAWINGS I
- 00 G-103 INDEX OF DRAWINGS II
- 00 G-104 BUILDING DESIGNATION INDEX
- 00 G-106 WPCF KEY PLAN

CIVIL

- 00 C-001 LEGEND, ABBREVIATIONS & GENERAL NOTES
- 00 CD-101 WPCF EXISTING CONDITIONS & DEMOLITION PLAN
- 00 C-101 WPCF EROSION & SEDIMENT CONTROL PLAN
- 00 C-102 WPCF PAVING & MISCELLANEOUS IMPROVEMENTS PLAN
- 00 C-103 WPCF SITE & OUTSIDE PIPING PLAN
- 21 CD-101 HEADWORKS BUILDING EXISTING CONDITIONS AND DEMOLITION PLAN
- 21 C-101 HEADWORKS BUILDING SITE AND OUTSIDE PIPING PLAN
- 23 C-101 AERATION PIPING PLAN AND PROFILE
- 41 C-102 ADA LIFT SITE PLAN
- 45 C-101 SECONDARY EFFLUENT PIPE PLAN AND PROFILE
- 99 C-004 DETAILS IV
- 99 C-005 DETAILS V

ARCHITECTURAL

- 00 A-001 LEGEND, ABBREVIATIONS & GENERAL NOTES
- 21 A-101 HEADWORKS BUILDING GRADE LEVEL PLAN
- 21 A-102 HEADWORKS BUILDING ROOF PLAN
- 21 A-201 HEADWORKS BUILDING EXTERIOR ELEVATIONS
- 21 A-301 HEADWORKS BUILDING WALL SECTIONS
- 21 A-501 HEADWORKS BUILDING DETAILS
- 23 A-102 OPERATIONS BUILDING PLAN AT EL. 18.0'
- 23 A-103 OPERATIONS BUILDING ROOF PLAN & DETAILS
- 23 A-201 OPERATIONS BUILDING EXTERIOR ELEVATIONS
- 32 A-101 RAS PUMPING STATION ROOF PLAN AND DETAILS
- 41 A-101 ADMINISTRATION BUILDING PLANS
- 41 A-102 ADMINISTRATION BUILDING ROOF PLAN
- 41 A-201 ADMINISTRATION BUILDING EXTERIOR ELEVATIONS
- 41 A-301 ADMINISTRATION BUILDING WALL SECTIONS
- 41 A-401 ADMINISTRATION BUILDING ENLARGED PLANS AND INTERIOR ELEVATIONS
- 41 A-402 ADMINISTRATION BUILDING ENLARGED REFLECTED CEILING PLAN
- 41 A-501 ADMINISTRATION BUILDING DETAILS
- 42 A-101 RAW SEWAGE INFLUENT PUMP STATION FLOOR PLANS
- 42 A-102 RAW SEWAGE INFLUENT PUMP STATION ROOF PLANS
- 42 A-201 RAW SEWAGE INFLUENT PUMP STATION EXTERIOR ELEVATIONS
- 43 AD-101 SLUDGE DIGESTER BUILDING DEMOLITION PLAN AND ELEVATION
- 43 A-101 SLUDGE DIGESTER BUILDING PLANS, ELEVATION AND SECTION
- 99 A-501 TYPICAL LOW-SLOPE ROOF DETAILS
- 99 A-601 DOOR SCHEDULE & DETAILS
- 99 A-602 WINDOW & LOUVER SCHEDULES
- 99 A-603 FINISH SCHEDULE & PARTITION TYPES
- 99 A-701 DOOR DETAILS I
- 99 A-702 DOOR DETAILS II
- 99 A-703 DOOR DETAILS III
- 99 A-704 WINDOW DETAILS
- 99 A-705 LOUVER DETAILS I
- 99 A-706 LOUVER DETAILS II
- 99 A-801 MISCELLANEOUS METALS DETAILS I
- 99 A-802 MISCELLANEOUS METALS DETAILS II
- 99 A-803 METAL STAIR & RAILING DETAILS

STRUCTURAL

- 00 S-001 STRUCTURAL NOTES AND ABBREVIATIONS
- 00 S-002 STRUCTURAL NOTES II
- 21 S-101 HEADWORKS BUILDING FOUNDATION PLAN
- 21 S-102 HEADWORKS BUILDING GRADE LEVEL PLAN
- 21 S-103 HEADWORKS BUILDING ROOF PLAN
- 21 S-104 HEADWORKS BUILDING ENLARGED COVER PLAN
- 21 S-301 HEADWORKS BUILDING SECTIONS AND DETAILS
- 21 S-302 HEADWORKS BUILDING SECTIONS AND DETAILS II
- 22 S-301 PRIMARY SETTLING TANKS 1, 2, 3, & 4 MODIFICATIONS - SECTION I
- 23 S-101 OPERATIONS BUILDING PLANS
- 23 S-301 OPERATIONS BUILDING SECTIONS & DETAILS
- 31 SD-101 AERATION TANKS - DEMOLITION PLAN
- 31 S-101 AERATION TANKS - NEW CONSTRUCTION
- 32 S-101 RAS PUMP STATION ROOF PLAN AND SECTIONS
- 41 S-101 ADMINISTRATION BUILDING PLANS
- 41 S-301 ADMINISTRATION BUILDING SECTIONS AND DETAILS
- 43 S-101 SLUDGE DIGESTER BUILDING PLAN @ EL. 21.50' & SECTIONS
- 45 S-101 EXISTING SECONDARY CLARIFIER NO.1 & NO.2 PLANS & SECTIONS
- 46 SD-101 CHLORINE CONTACT TANKS DEMOLITION PLAN
- 46 S-101 CHLORINE CONTACT TANKS PLAN
- 99 S-501 STRUCTURAL STANDARD DETAILS I
- 99 S-502 STRUCTURAL STANDARD DETAILS II
- 99 S-503 STRUCTURAL STANDARD DETAILS III
- 99 S-504 STRUCTURAL STANDARD DETAILS IV
- 99 S-505 STRUCTURAL STANDARD DETAILS V
- 99 S-506 STRUCTURAL STANDARD DETAILS VI

MECHANICAL

- 00 D-001 PROCESS LEGEND
- 00 D-002 PROCESS ABBREVIATIONS AND GENERAL NOTES
- 00 D-003 PROCESS SCHEDULES I
- 00 D-004 PROCESS SCHEDULES II
- 00 D-005 PROCESS SCHEDULES III
- 00 D-007 HYDRAULIC PROFILE
- 00 D-008 PROCESS FLOW DIAGRAM I
- 00 D-009 PROCESS FLOW DIAGRAM II
- 21 DD-101 HEADWORKS BUILDING - DEMOLITION PLAN
- 21 D-101 HEADWORKS BUILDING - MODIFICATIONS PLAN
- 21 D-102 HEADWORKS BUILDING - ODOR CONTROL PLAN
- 21 D-301 HEADWORKS BUILDING - SECTIONS
- 22 DD-101 PRIMARY SETTLING TANKS 1 & 2 DEMOLITION - PLAN
- 22 DD-102 PRIMARY SETTLING TANKS 3 & 4 DEMOLITION - PLAN
- 22 DD-301 PRIMARY SETTLING TANKS 1 & 2 DEMOLITION - SECTIONS I
- 22 DD-302 PRIMARY SETTLING TANKS 3 & 4 DEMOLITION - SECTIONS II
- 22 DD-303 PRIMARY SETTLING TANKS 1, 2, 3 & 4 DEMOLITION - SECTIONS II
- 22 D-101 PRIMARY SETTLING TANKS 1 & 2 MODIFICATIONS - LOWER PLAN
- 22 D-102 PRIMARY SETTLING TANKS 1 & 2 MODIFICATIONS - UPPER PLAN I
- 22 D-103 PRIMARY SETTLING TANKS 1 & 2 MODIFICATIONS - UPPER PLAN II
- 22 D-104 PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - LOWER PLAN I
- 22 D-105 PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - LOWER PLAN II
- 22 D-106 PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - UPPER PLAN I
- 22 D-107 PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - UPPER PLAN II
- 22 D-108 PRIMARY SCUM PUMP STATION
- 22 D-301 PRIMARY SETTLING TANKS 1 & 2 MODIFICATIONS - SECTIONS I
- 22 D-302 PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - SECTIONS I
- 22 D-303 PRIMARY SETTLING TANKS 1, 2, 3 & 4 MODIFICATIONS - SECTIONS II
- 23 D-101 OPERATIONS BUILDING - DEMOLITION PLAN AT EL. 18.00'
- 23 D-102 OPERATIONS BUILDING - MODIFICATIONS PLAN AT EL. 3.00'
- 23 D-103 OPERATIONS BUILDING - MODIFICATIONS PLAN AT EL. 18.00'
- 23 D-301 OPERATIONS BUILDING - SECTIONS I
- 31 DD-101 AERATION TANKS - DEMOLITION PLAN
- 31 D-101 AERATION TANK NO.1 - MODIFICATIONS LOWER PLAN
- 31 D-102 AERATION TANK NO.2 - MODIFICATIONS LOWER PLAN
- 31 D-103 AERATION TANK NO.1 - MODIFICATIONS UPPER PLAN
- 31 D-104 AERATION TANK NO.2 - MODIFICATIONS UPPER PLAN
- 31 D-301 AERATION TANKS - SECTIONS
- 32 DD-101 RAS PUMP STATION - DEMOLITION PLAN
- 32 D-101 RAS PUMP STATION - MODIFICATIONS LOWER PLAN
- 32 D-102 RAS PUMP STATION - MODIFICATIONS UPPER PLAN
- 32 D-301 RAS PUMP STATION - MODIFICATIONS SECTIONS
- 33 DD-101 PRIMARY FLOW SPLITTING STRUCTURE - DEMOLITION PLANS AND SECTION
- 33 D-101 PRIMARY FLOW SPLITTING STRUCTURE - MODIFICATION PLANS AND SECTION
- 45 D-101 EXISTING SECONDARY CLARIFIERS NO. 1 & NO. 2 - MODIFICATIONS
- 46 D-101 MISCELLANEOUS STRUCTURES
- 99 D-001 DETAILS I
- 99 D-002 DETAILS II
- 99 D-003 TANK DETAILS III

HVAC

- 00 M-001 LEGEND, ABBREVIATIONS & GENERAL NOTES
- 00 M-002 SCHEDULES I
- 00 M-003 SCHEDULES II
- 00 M-004 SCHEDULES III
- 00 M-005 SCHEDULES IV
- 00 M-006 SEQUENCES OF OPERATION I
- 00 M-007 SEQUENCES OF OPERATION II
- 00 M-008 SEQUENCES OF OPERATION III
- 00 M-009 SYSTEM RESPONSIBILITY SCHEDULES I
- 00 M-010 SYSTEM RESPONSIBILITY SCHEDULES II
- 21 M-101 HEADWORKS BUILDING PLAN
- 21 M-102 HEADWORKS BUILDING PIPING - PLAN
- 23 MD-101 OPERATIONS BUILDING - PLAN AT EL. 35.0' & MEZZANINE - DEMOLITION
- 23 MD-102 OPERATIONS BUILDING - PLAN AT EL. 18.0' - DEMOLITION
- 23 M-101 OPERATIONS BUILDING - PLAN AT EL. 3.0' & 11.83'
- 23 M-102 OPERATIONS BUILDING - PLAN AT EL. 18.0'
- 23 M-103 OPERATIONS BUILDING - PLAN AT EL. 35.0' & MEZZANINE
- 23 M-301 OPERATIONS BUILDING SECTION
- 32 M-101 RAS PUMP STATION - LOWER LEVEL - PLAN
- 32 M-102 RAS PUMP STATION - UPPER LEVEL - PLAN
- 41 M-101 ADMINISTRATION BUILDING - FIRST & SECOND FLOOR PLANS
- 41 M-102 ADMINISTRATION BUILDING - PART PLAN
- 42 MD-101 RAW SEWAGE INFLUENT PUMP STATION - DEMOLITION
- 42 M-101 RAW SEWAGE INFLUENT PUMP STATION - LOWER LEVEL
- 42 M-102 RAW SEWAGE INFLUENT PUMP STATION - UPPER LEVEL
- 42 M-103 RAW SEWAGE INFLUENT PUMP STATION - PENTHOUSE & ROOF - PLAN
- 43 MD-101 SLUDGE DIGESTER BUILDING - DEMOLITION
- 43 M-101 SLUDGE DIGESTER BUILDING - PLAN
- 44 M-101 MASTER BACKFLOW PREVENTER VAULT
- 99 M-001 DETAILS I
- 99 M-002 DETAILS II
- 99 M-003 DETAILS III

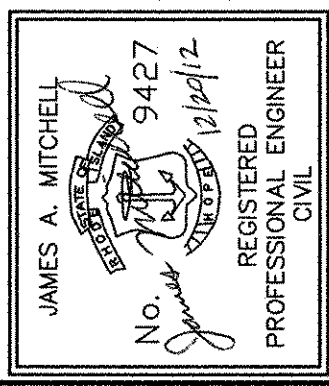
PLUMBING

- 00 P-001 SCHEDULES, NOTES, LEGEND & ABBREVIATIONS
- 21 P-101 HEADWORKS BUILDING GRADE LEVEL PLAN
- 23 PD-101 OPERATIONS BUILDING PLAN AT EL. 18.0' - DEMOLITION
- 41 PD-102 ADMINISTRATION BUILDING PART PLAN - DEMOLITION
- 41 P-101 ADMINISTRATION BUILDING FIRST & SECOND FLOOR PLANS
- 41 P-102 ADMINISTRATION BUILDING PART PLAN
- 44 P-101 MASTER BACKFLOW PREVENTER VAULT
- 99 P-001 DETAILS

INSTRUMENTATION

- 00 DI-001 INSTRUMENTATION LEGEND AND GENERAL NOTES
- 00 DI-601 FIBER OPTIC CABLE ROUTING FOR PLANT SCADA SYSTEM
- I-BD1A WASTEWATER TREATMENT PLANT SCADA SYSTEM NETWORK ARCHITECTURE
- I-BD2A WASTEWATER PUMP STATIONS SCADA SYSTEM NETWORK ARCHITECTURE
- 21 DI-601 HEADWORKS BUILDING SCREENS P&ID
- 21 DI-602 HEADWORKS BUILDING WASH PRESS P&ID
- 21 DI-603 HEADWORKS BUILDING GRIT CHAMBER P&ID
- 21 DI-604 HEADWORKS BUILDING GRIT CLASSIFIER P&ID
- 21 DI-605 HEADWORKS BUILDING ODOR CONTROL P&ID

ACOM USA, INC.
70 EDgewater Drive
Roseland, NJ 07068
PHONE (973) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

INDEX OF DRAWINGS I

GENERAL

PROJECT NO:	60148648
CAD DWG FILE:	00 G-102
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER, 2012
SCALE:	AS NOTED

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

00 G-102

PATH: \\ENRAME_P\60148648 - EAST PROVIDENCE DP-2\DRP-2\SHEETS\00 G-102.DWG
LAST UPDATE: Friday, December 21, 2012 9:24:52 AM
PLOT DATE: Friday, December 21, 2012 9:25:20 AM
ANSI D - 21-Dec-12

INDEX OF DRAWINGS

INSTRUMENTATION (CONT.)

21 DI-606	HEADWORKS BUILDING MISCELLANEOUS P&ID
21 DI-607	HEADWORKS BUILDING ELECTRICAL SIGNALS P&ID
21 DI-608	HEADWORKS BUILDING CAUSTIC SODA SYSTEM P&ID
21 DI-609	HEADWORKS BUILDING HVAC SIGNALS P&ID
22 DI-601	PRIMARY SETTLING TANKS PROCESS & INSTRUMENTATION DIAGRAM
22 DI-602	PRIMARY SETTLING TANKS PRIMARY SLUDGE PUMPS P&ID
22 DI-603	PRIMARY SETTLING TANKS NEW SCUM PUMPS P&ID
22 DI-604	PRIMARY SETTLING TANKS EXISTING SCUM PUMP P&ID
22 DI-605	PRIMARY SETTLING TANKS CESS POOL PUMP CONTROL P&ID
23 DI-601	OPERATIONS BUILDING BLOWERS P&ID
23 DI-602	OPERATIONS BUILDING EXISTING BELT FILTER PRESS P&ID
23 DI-603	OPERATIONS BUILDING DEWATERING PRESS P&ID
23 DI-604	OPERATIONS BUILDING SLUDGE CONVEYORS P&ID
23 DI-605	OPERATIONS BUILDING POLYMER SYSTEM P&ID
23 DI-606	OPERATIONS BUILDING ODOR CONTROL SYSTEM P&ID
23 DI-607	OPERATIONS BUILDING SODIUM HYPOCHLORITE SYSTEM
23 DI-608	OPERATIONS BUILDING SODIUM BISULFATE SYSTEM P&ID
23 DI-609	OPERATIONS BUILDING SUMP PUMP P&ID
23 DI-610	OPERATIONS BUILDING PLANT WATER PUMPS P&ID
23 DI-611	OPERATIONS BUILDING ELECTRICAL SIGNALS P&ID
31 DI-601	PRIMARY EFFLUENT SPLITTER BOX P&ID
31 DI-602	AERATION TANK NO. 1 P&ID
31 DI-603	AERATION TANK NO. 2 P&ID
31 DI-604	AERATION TANK NO. 1 AND 2 DO CONTROL P&ID
31 DI-605	AERATION TANK NO. 3 P&ID
31 DI-606	AERATION TANK NO. 4 P&ID
31 DI-607	AERATION TANKS NO. 3 & 4 DO CONTROL P&ID
31 DI-608	AERATION TANKS SLUDGE SYSTEM
31 DI-609	AERATION TANKS MISCELLANEOUS P&ID
32 DI-601	RAS PUMP STATION RETURN SLUDGE PUMPS P&ID
32 DI-602	RAS PUMP STATION WAS PUMPS P&ID
32 DI-603	RAS PUMP STATION SLUDGE THICKENING P&ID
32 DI-604	RAS PUMP STATION EXISTING THICKENING P&ID
32 DI-605	RAS PUMP STATION THICKENED SLUDGE TRANSFER P&ID
32 DI-606	RAS PUMP STATION SCUM SYSTEM P&ID
32 DI-607	RAS PUMP STATION POLYMER SYSTEM P&ID
32 DI-608	RAS PUMP STATION BUILDING SUMP-FILTRATE P&ID
32 DI-609	RAS PUMP STATION MISCELLANEOUS P&ID
41 DI-601	GENERATOR SCADA SIGNALS
42 DI-601	RAW SEWAGE PUMP STATION PUMP CONTROL P&ID
42 DI-602	RAW SEWAGE PUMP STATION MISCELLANEOUS P&ID
43 DI-601	SLUDGE DIGESTER BUILDING SLUDGE HOLDING TANK P&ID
43 DI-602	SLUDGE DIGESTER BUILDING SLUDGE FEED PUMPS P&ID
43 DI-603	SLUDGE DIGESTER BUILDING MISCELLANEOUS
45 DI-601	SECONDARY CLARIFIER P&ID
46 DI-601	CHLORINE CONTACT TANKS P&ID
99 DI-501	GAS MONITORING & VENTILATION STATION
99 DI-502	CHEMICAL FILL & TRANSFER STATION

ELECTRICAL

00 E-001	SYMBOLS, LEGEND AND GENERAL NOTES
00 E-101	WWTP ELECTRICAL SITE PLAN
00 E-102	WWTP PARTIAL SITE PLAN AND DUCTBANK SECTIONS
00 E-601	WWTP EXISTING ONE-LINE DIAGRAM DEMOLITION
00 E-602	WWTP NEW ONE-LINE DIAGRAM
00 E-603	CONDUIT AND WIRE SCHEDULES
00 E-604	SCHEDULES I
00 E-605	SCHEDULES II
00 E-606	FIRE ALARM SYSTEM SCHEDULES AND RISER DIAGRAMS
00 E-607	SYSTEM RISER DIAGRAMS
21 E-101	HEADWORKS BUILDING POWER PLAN
21 E-102	HEADWORKS BUILDING ODOR CONTROL POWER PLAN
21 E-601	HEADWORKS BUILDING 21-MCC-1 SINGLE-LINE DIAGRAM
21 E-602	HEADWORKS BUILDING SCHEDULES
21 E-603	HEADWORKS BUILDING RISER DIAGRAMS
21 E-604	HEADWORKS BUILDING WIRING DIAGRAMS
21 E-605	HEADWORKS BUILDING REPLACEMENT MOTOR DATA SHEETS
22 E-101	PRIMARY SETTLING TANKS 1 & 2 UPPER LEVEL PLAN I
22 E-102	PRIMARY SETTLING TANKS 1 & 2 UPPER LEVEL PLAN II
22 E-103	PRIMARY SETTLING TANKS 3 & 4 UPPER LEVEL PLAN I
22 E-104	PRIMARY SETTLING TANKS 3 & 4 UPPER LEVEL PLAN II
22 E-601	PRIMARY SETTLING TANKS RISER DIAGRAM
23 ED-101	OPERATIONS BUILDING AT EL. 3.0' DEMOLITION PLAN
23 ED-102	OPERATIONS BUILDING AT EL. 18.0' DEMOLITION PLAN
23 E-101	OPERATIONS BUILDING AT EL. 3.0' MODIFICATIONS PLAN
23 E-102	OPERATIONS BUILDING AT EL. 18.0' MODIFICATIONS PLAN
23 E-103	OPERATIONS BUILDING ROOF MODIFICATIONS PLAN
23 E-601	OPERATIONS BUILDING SINGLE LINE DIAGRAMS AND ELEVATIONS
23 E-602	OPERATIONS BUILDING SCHEDULES

ELECTRICAL (CONT.)

23 E-603	OPERATIONS BUILDING SYSTEM RISER DIAGRAM
23 E-604	OPERATIONS BUILDING WIRING DIAGRAMS
31 ED-101	WEST AND EAST AERATION BUILDING AT EL. 14.0' DEMOLITION PLAN
31 E-101	AERATION TANKS NO.1 & NO.2 POWER PLANT
31 E-102	WEST AND EAST AERATION BUILDING AT EL. 14.0' MODIFICATIONS PLAN
31 E-103	WEST AERATION BUILDING LOWER LEVEL MODIFICATIONS PLAN
31 E-601	AERATION TANKS PANELBOARD SCHEDULES I
31 E-602	AERATION TANKS PANELBOARD SCHEDULES II
31 E-603	AERATION TANKS RISER DIAGRAMS
31 E-604	AERATION TANKS WIRING DIAGRAMS
32 ED-101	RAS PUMP STATION UPPER LEVEL DEMOLITION
32 E-101	RAS PUMP STATION LOWER LEVEL MODIFICATIONS
32 E-102	RAS PUMP STATION UPPER LEVEL MODIFICATIONS
32 E-601	RAS PUMP STATION - 32-MCC-1 SCHEDULE & ELEVATION
32 E-602	RAS PUMP STATION PANELBOARD SCHEDULES
32 E-603	RAS PUMP STATION RISER DIAGRAMS
32 E-604	RAS PUMP STATION WIRING DIAGRAMS I
32 E-605	RAS PUMP STATION WIRING DIAGRAMS II
33 E-101	PRIMARY FLOW SPLITTER STRUCTURE POWER PLAN
41 ED-101	ADMINISTRATION BUILDING - GROUND FLOOR DEMOLITION PLAN
41 E-101	ADMINISTRATION BUILDING POWER PLAN I
41 E-102	ADMINISTRATION BUILDING POWER PLAN II
41 E-601	ADMINISTRATION BUILDING SCHEDULES AND RISER DIAGRAMS
42 ED-101	RAW SEWAGE INFLUENT PUMP STATION DEMOLITION PLAN
42 E-101	RAW SEWAGE INFLUENT PUMP STATION POWER PLANS
42 E-601	RAW SEWAGE INFLUENT PUMP STATION SCHEDULES
42 E-602	RAW SEWAGE INFLUENT PUMP STATION RISER DIAGRAM
42 E-603	RAW SEWAGE INFLUENT PUMP STATION WIRING DIAGRAMS
43 E-101	SLUDGE DIGESTER BUILDING MODIFICATIONS PLANS
43 E-601	SLUDGE DIGESTER BUILDING SCHEDULES AND WIRING DIAGRAMS
44 E-101	MASTER BACKFLOW PREVENTER VAULT POWER PLAN
46 E-101	CHLORINE CONTACT TANKS POWER PLAN
99 E-101	DETAILS I
99 E-102	DETAILS II

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RSD) DP-2\SHEETS\00 G-103.DWG
 LAST UPDATE: Wednesday, December 12, 2012 6:42:21 AM
 PLOT DATE: Wednesday, December 12, 2012 6:57:38 AM
 ANSI D - 12-Dec-12

AECOM AECOM USA, INC. 701 EDGEWATER DRIVE WILMINGTON, DE 19804 PHONE (781) 246-5000	REVISIONS 1 12/11/12 DATE MARK	REVISOR CB ZB MADE BY CHECKED	DESCRIPTION
	RECORD DRAWINGS		
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 INDEX OF DRAWINGS II GENERAL			
PROJECT NO: 60148648 CAD DWG FILE: 00 G-103 DESIGNED BY: J. MITCHELL DRAWN BY: W. BALETSA DEPT CHECK: C. BENZIGER PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED			
00 G-103			

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

DESIGNATION	STRUCTURE
(11)	WATCHMOKET PUMP STATION
(12)	BOYDEN BOULEVARD PUMP STATION
(13)	INDUSTRIAL WAY PUMP STATION
(14)	FULLER AVENUE PUMP STATION
(15)	STONEGATE APARTMENTS PUMP STATION
(16)	BIKE PATH FORCE MAIN
(17)	MISCELLANEOUS SEWERS AND FORCE MAINS
(21)	HEADWORKS BUILDING
(22)	PRIMARY SETTLING TANKS
(23)	OPERATIONS BUILDING: - BLOWERS - AIR PIPING - PLANT WIDE ELECTRICAL SWITCHBOARDS - TRANSFORMER & EMERGENCY GENERATOR - BELT FILTER PRESS DEMO & FOURNIER PRESS - FLOCCULATOR & POLYMER FEED SYSTEM - SLUDGE CONVEYOR IN GARAGE
(31)	AERATION TANKS AND FLOW SPLITTING STRUCTURE
(32)	RAS PUMP STATION
(33)	PRIMARY FLOW SPLITTING STRUCTURE

DESIGNATION	STRUCTURE
(41)	ADMINISTRATION BUILDING
(42)	RAW SEWAGE INFLUENT PUMP STATION
(43)	SLUDGE DIGESTER BUILDING
(44)	BACKFLOW PREVENTER VAULT
(45)	FINAL CLARIFIERS
(46)	CHLORINE CONTACT CHAMBER
(47)	OUTFALL
(51)	DEXTER AVENUE PUMP STATION
(52)	FRANCIS AVENUE PUMP STATION
(53)	SILVER STREET PUMP STATION
(54)	ROCKAWAY PUMP STATION
(55)	ARGYLE PUMP STATION
(56)	ROUNDS AVENUE PUMP STATION
(61)	WWTP CONTROL ROOM RENOVATIONS
(62)	REMOTE PUMP STATIONS SCADA

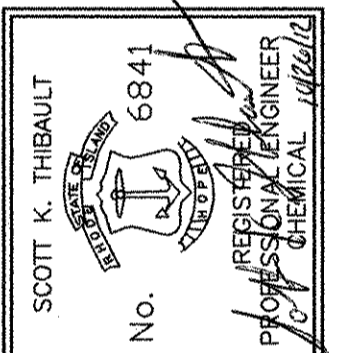
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO: 60148648
 CAD DWG FILE: 00 G-104
 DESIGNED BY: J. MITCHELL
 DRAWN BY: W. BALETSA
 DEPT CHECK: C. BENZIGER
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

00 G-104

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
BUILDING DESIGNATION INDEX
 GENERAL

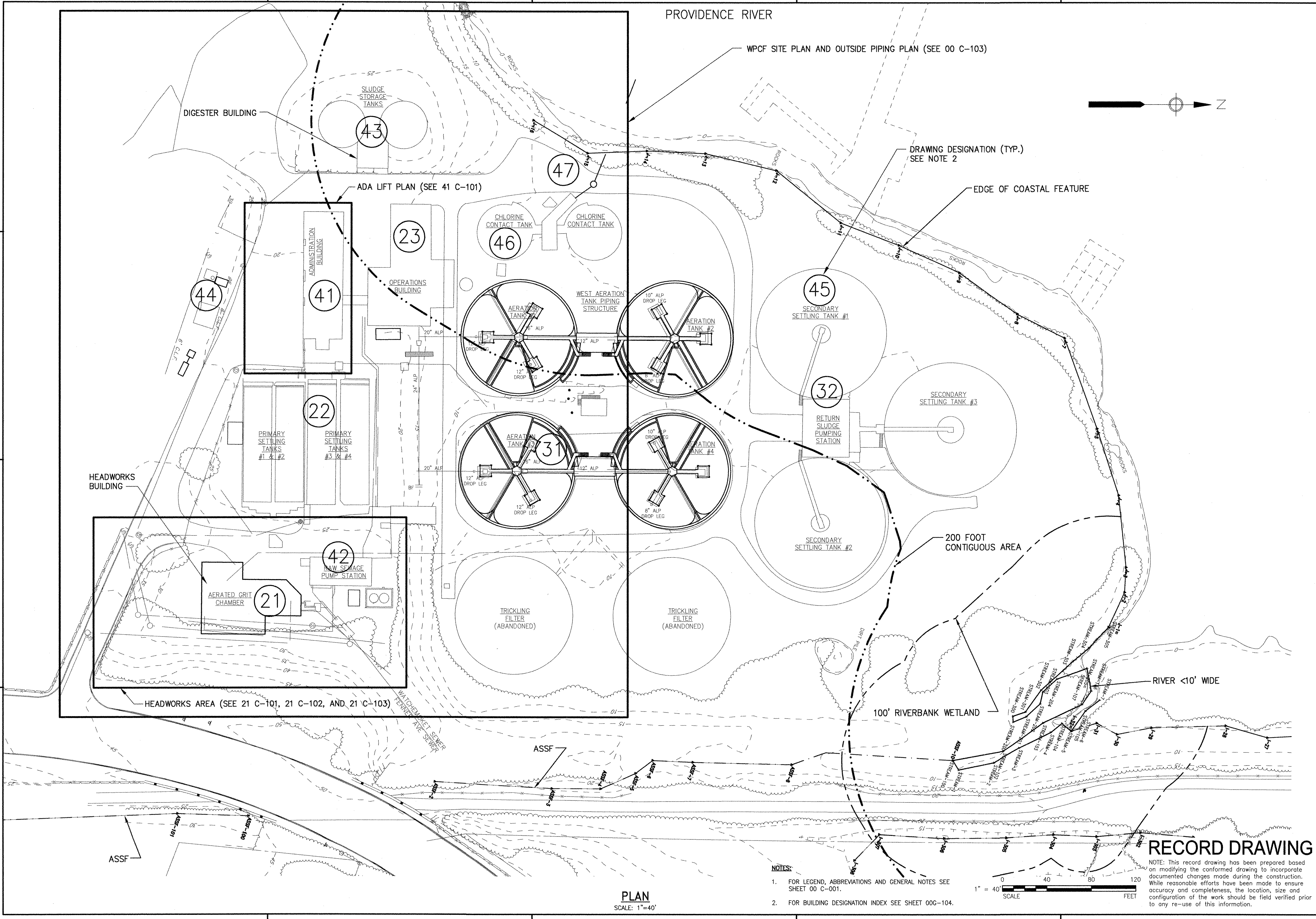


AECOM
 AECOM USA, INC.
 100 WEST WASHINGTON STREET
 WASHINGTON, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

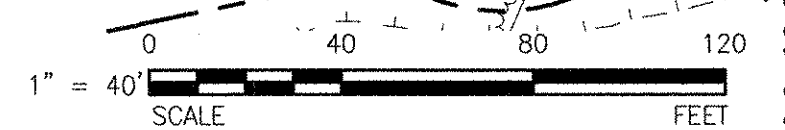
MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO) COMMON SHEETS\00 C-106.DWG
 LAST UPDATE: Thursday, October 04, 2012 7:39:12 AM
 ANSI D - 4-Oct-12



PLAN
 SCALE: 1"=40'

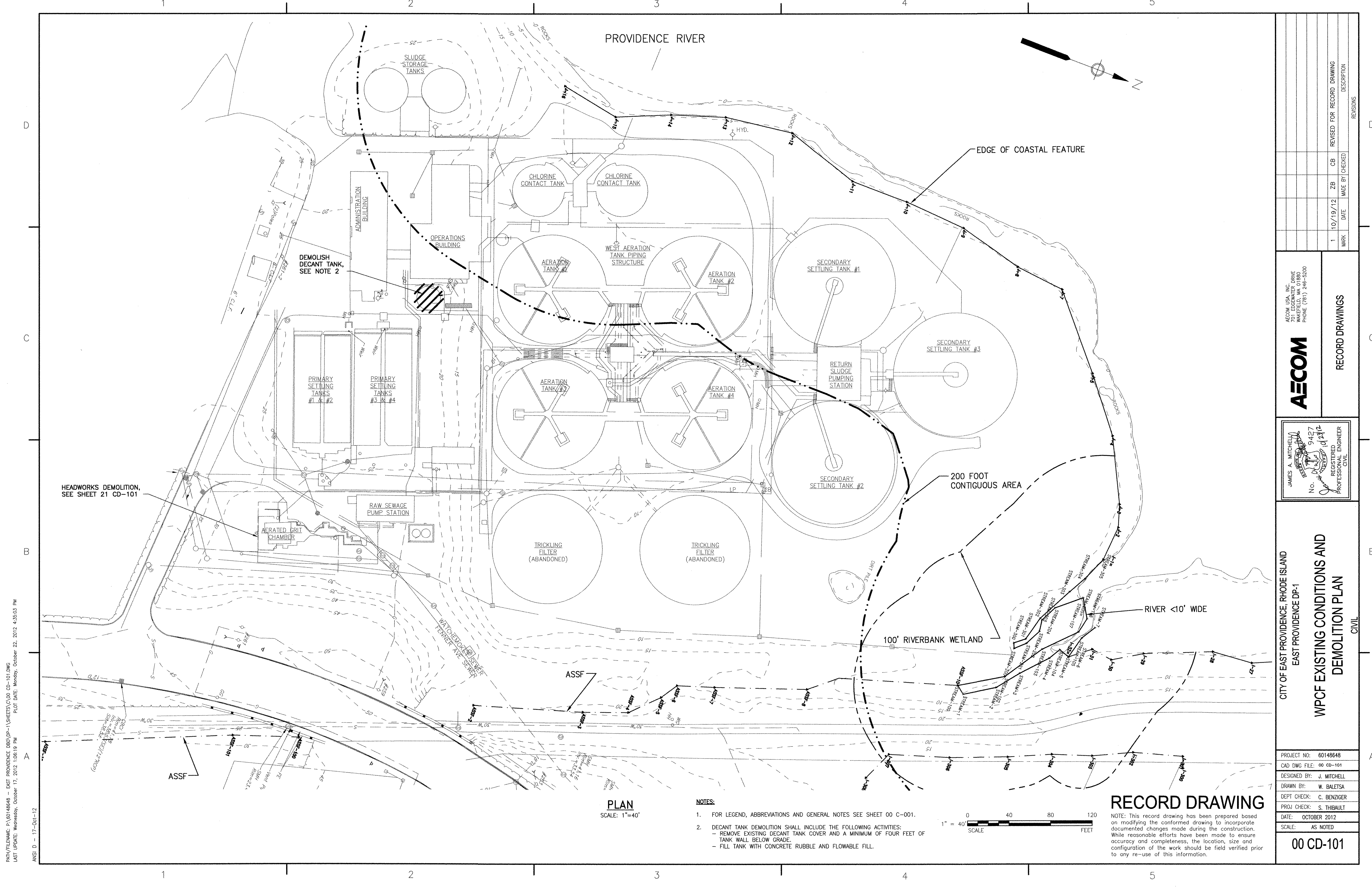
- NOTES:**
- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.
 - FOR BUILDING DESIGNATION INDEX SEE SHEET 00G-104.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

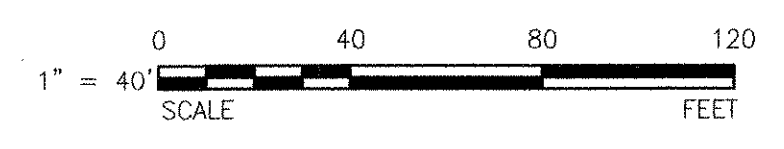
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td>ZB</td> <td>CB</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION	1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING
NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION							
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING							
<p>PROJECT NO: 60148648 CAD DWG FILE: 00 C-106 DESIGNED BY: J. MITCHELL DRAWN BY: W. BALETSA DEPT CHECK: C. BENZIGER PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>											
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS WPCF KEY PLAN GENERAL</p>											
<p>AECOM RECORD DRAWINGS</p>											
<p>SCOTT K. THIBAUT No. 6841 REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF RHODE ISLAND</p>											



PLAN
SCALE: 1"=40'

NOTES:

- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.
- DECANT TANK DEMOLITION SHALL INCLUDE THE FOLLOWING ACTIVITIES:
 - REMOVE EXISTING DECANT TANK COVER AND A MINIMUM OF FOUR FEET OF TANK WALL BELOW GRADE.
 - FILL TANK WITH CONCRETE RUBBLE AND FLOWABLE FILL.



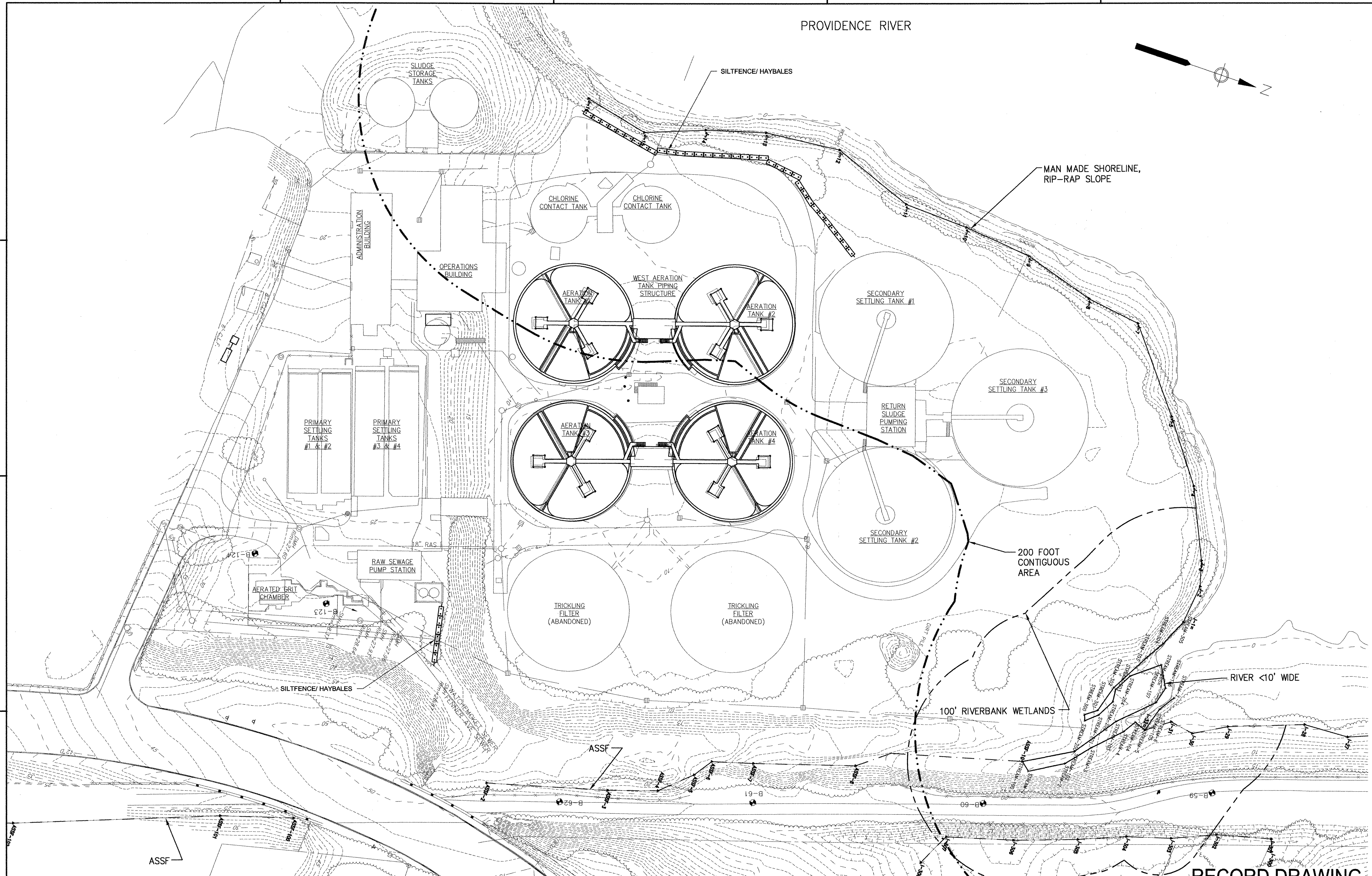
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

P:\17\17-04\17-04-12\17-04-12-01\17-04-12-01-01.DWG
 LAST UPDATE: Wednesday, October 17, 2012 1:08:19 PM
 PLOT DATE: Monday, October 22, 2012 4:35:03 PM
 ANSI D - 17-04-12

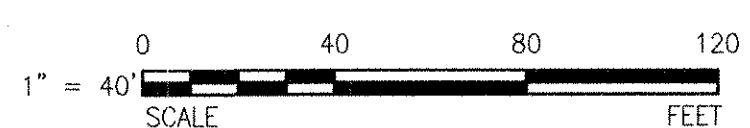
<p>AECOM</p> <p>AECOM USA, INC. 701 EDgewater Drive Folsom, CA 95630 PHONE (781) 246-5000</p>		<p>RECORD DRAWINGS</p>											
<p>JAMES A. MITCHELL REGISTERED PROFESSIONAL ENGINEER CIVIL No. 9427 Exp. 12/31/12</p>		<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td>ZB</td> <td>CB</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MADE BY	CHECKED	DESCRIPTION	1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING
MARK	DATE	MADE BY	CHECKED	DESCRIPTION									
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING									
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-1</p> <p>WPCF EXISTING CONDITIONS AND DEMOLITION PLAN</p> <p style="text-align: right;">CIVIL</p>													
<p>PROJECT NO: 60148648 CAD DWG FILE: 00 CD-101</p>		<p>DESIGNED BY: J. MITCHELL DRAWN BY: W. BALETSA DEPT CHECK: C. BENZIGER PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>											
<p>00 CD-101</p>													

ANSI: D - 22-Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-1\SHEETS\00 C-101.DWG
 LAST UPDATE: Monday, October 22, 2012 4:34:49 PM
 PLOT DATE: Wednesday, October 24, 2012 6:51:54 AM



PLAN
 SCALE: 1"=40'

- NOTES:**
- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 100 WASHINGTON ST., SUITE 1000
 WAKEFIELD, MA 01880
 PHONE (781) 246-5000

JAMES A. MITCHELL
 9427
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-1

WPCF EROSION AND SEDIMENT CONTROL PLAN

CIVIL

PROJECT NO:	60148648
CAD DWG FILE:	00 C-101
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 C-101

1

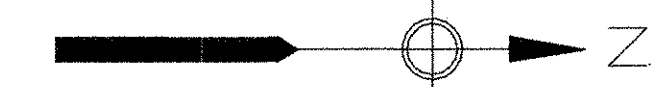
2

3

4

5

PROVIDENCE RIVER



UPPER PARKING LOT LIMITS SHOWN ARE APPROXIMATE

DIGESTER BUILDING

SLUDGE STORAGE TANKS

FLASH MIXER SEE NOTE 3.

OUTFALL BRICK MANHOLE SEE NOTE 2.

AERATION TANK LEAK REPAIR SEE NOTE 8

ADA CHAIR LIFT

MASTER METER VAULT AND NEW BACKFLOW PREVENTER VAULT

ADMINISTRATION BUILDING

OPERATIONS BUILDING

CHLORINE CONTACT TANK

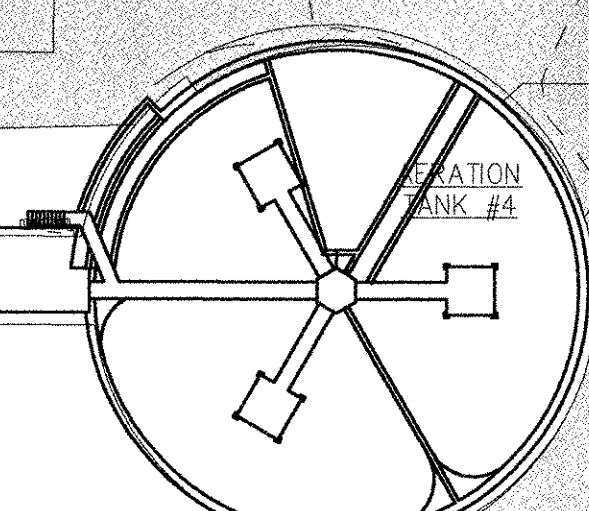
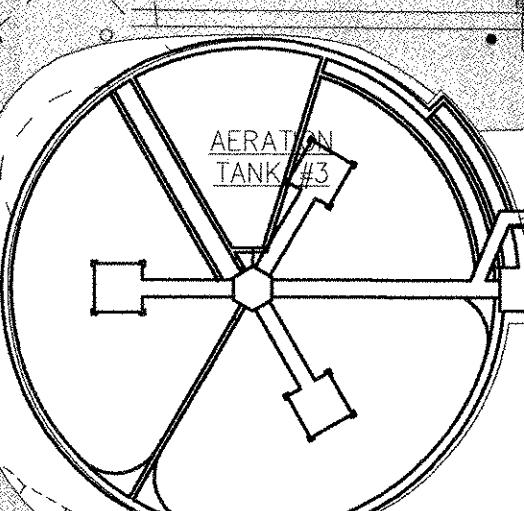
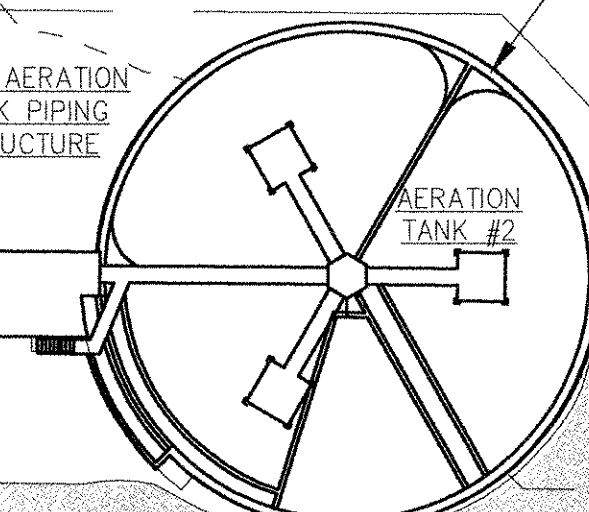
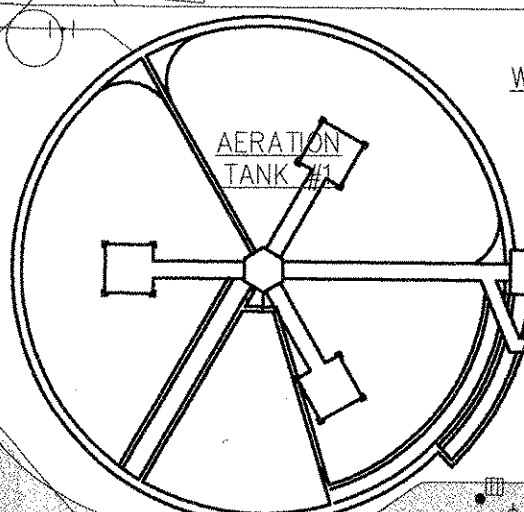
CHLORINE CONTACT TANK

SECONDARY CLARIFIER MODIFICATIONS. SEE NOTES 5, 6, AND 7.

SITE PAVEMENT OVERLAY SEE NOTES 9 AND 10.

PRIMARY SETTLING TANKS #1 & #2

PRIMARY SETTLING TANKS #3 & #4



SECONDARY SETTLING TANK #1

SECONDARY SETTLING TANK #3

SECONDARY SETTLING TANK #2

RAW SEWAGE PUMP STATION

AERATED GRIT CHAMBER

TRICKLING FILTER (ABANDONED)

TRICKLING FILTER (ABANDONED)

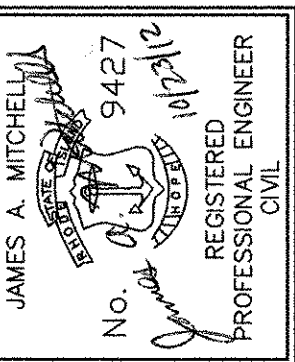
SODIUM HYPOCHLORITE TANKS SEE NOTE 3

SAW CUT LINE FOR MATCHING OVERLAY PAVEMENT TO EXISTING PAVEMENT SEE DETAIL

NOTES:

- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.
- THE AREA AROUND THE EXISTING BRICK OUTFALL MANHOLE IS TO BE EXCAVATED TO A DEPTH OF FOUR FEET AND THE MANHOLE INSPECTED. THE MANHOLE IS TO BE ENCASED IN CONCRETE AND A NEW FRAME AND COVER PROVIDED. THE EXCAVATION IS TO BE BACKFILLED WITH GRAVEL IN PREPARATION FOR NEW PAVEMENT.
- EXISTING FLASH MIXER AND SUPPORTS AT THE DISINFECTION CHEMICAL MIXING TANK TO BE REMOVED AND REPLACED WITH STAINLESS STEEL MIXER AND SUPPORTS, AS SPECIFIED.
- WITHIN THE EXISTING CONTAINMENT AREA, THE EXISTING SODIUM HYPOCHLORITE STORAGE TANK NO. 2 IS TO BE REMOVED AND REPLACED WITH A NEW STORAGE TANK, AS SPECIFIED. NEW TANK TO BE CONNECTED TO EXISTING HYPOCHLORITE PIPING AND CHEMICAL FILL STATION.
- WITHIN THE SECONDARY CLARIFIERS 1 AND 2, INSTALL NEW FRP Baffles AND MOUNTING HARDWARE, AND REPLACE EXISTING SCUM COLLECTION BEACHES.
- FOR ALL THREE SECONDARY CLARIFIERS, PREPARE SURFACES AND PAINT SECONDARY CLARIFIER DRIVE EQUIPMENT AND WALKWAYS, AS SPECIFIED.
- FOR SECONDARY CLARIFIERS 1 AND 2, REPAIR LEAKS AT LOCATIONS AND JOINTS ALONG THE CLARIFIER EFFLUENT LAUNDERS, AS DIRECTED BY THE ENGINEER.
- FOR ALL FOUR AERATION TANKS, REPAIR ALL ACTIVE LEAKS ALONG THE PERIMETER, AS IDENTIFIED AND DIRECTED THROUGH SITE INVESTIGATIONS BY THE ENGINEER, WITH A HYDROPHOBIC INJECTION GROUT, AS SPECIFIED. INACTIVE LEAKS OR CRACKS ARE NOT TO BE TOUCHED.
- FOLLOWING COMPLETION OF THE WPCF CONSTRUCTION ACTIVITIES, POTHOLES AND MAJOR PAVEMENT CRACKS TO BE REPAIRED AND A 1-1/2 INCH ASPHALT OVERLAY TO BE INSTALLED OVER ENTIRE SITE PAVEMENT, AS INDICATED BY SHADED AREA ON DRAWING.
- ALL CATCH BASINS, MANHOLES, WATER GATES AND OTHER STRUCTURES SHALL BE ADJUSTED AS NECESSARY TO MATCH THE NEW PAVEMENT ELEVATIONS.

AECOM USA, INC.
701 EDgewater Drive
Folsom, CA 95630
PHONE (916) 246-5000



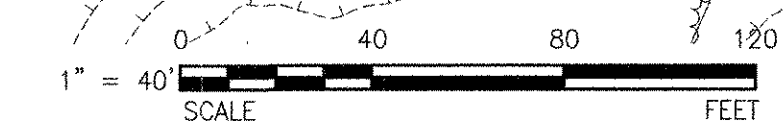
CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-1

WPCF PAVING AND MISCELLANEOUS IMPROVEMENTS PLAN
CIVIL

PROJECT NO:	60148648
CAD DWG FILE:	00 C-102
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 C-102

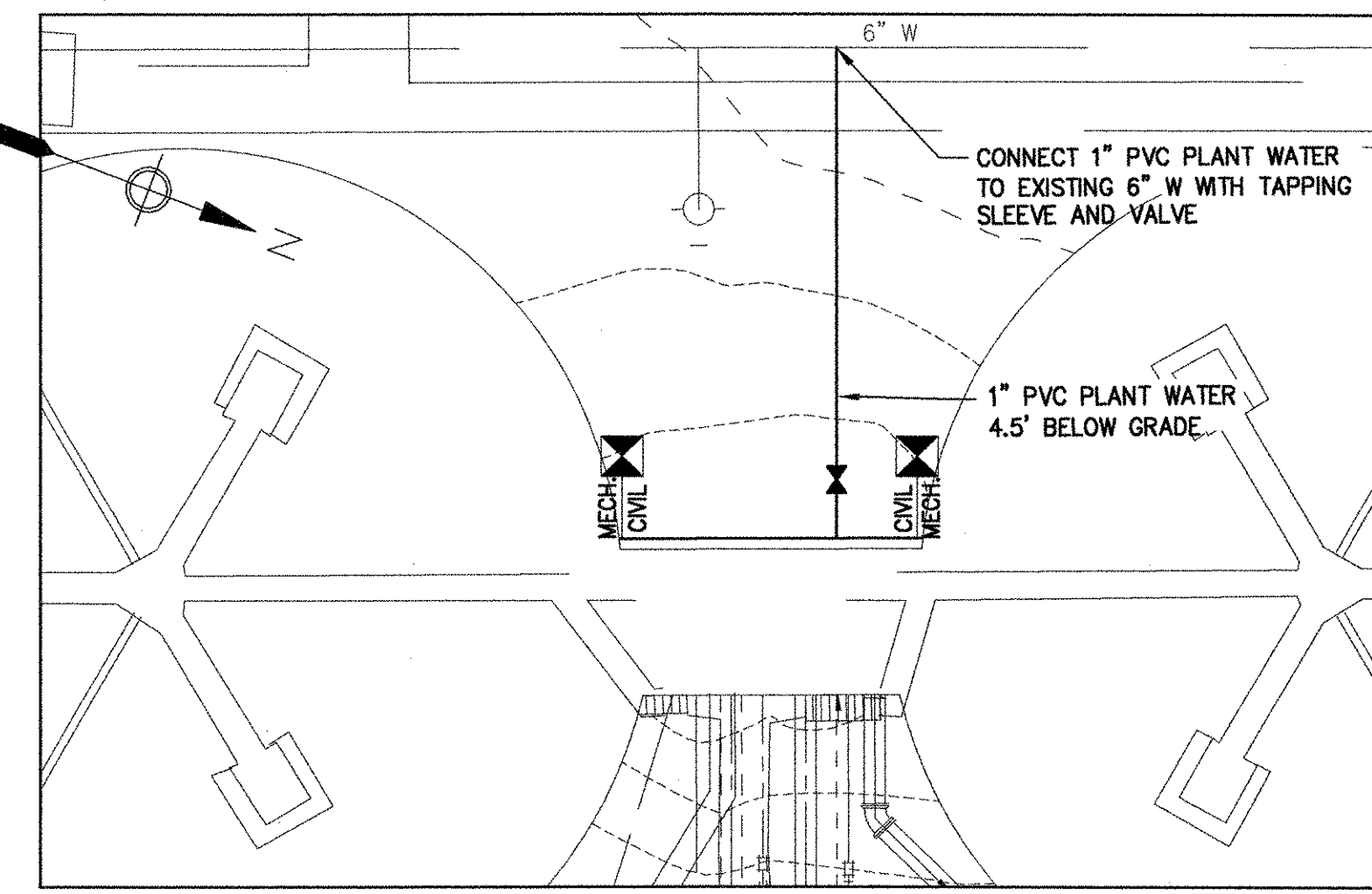
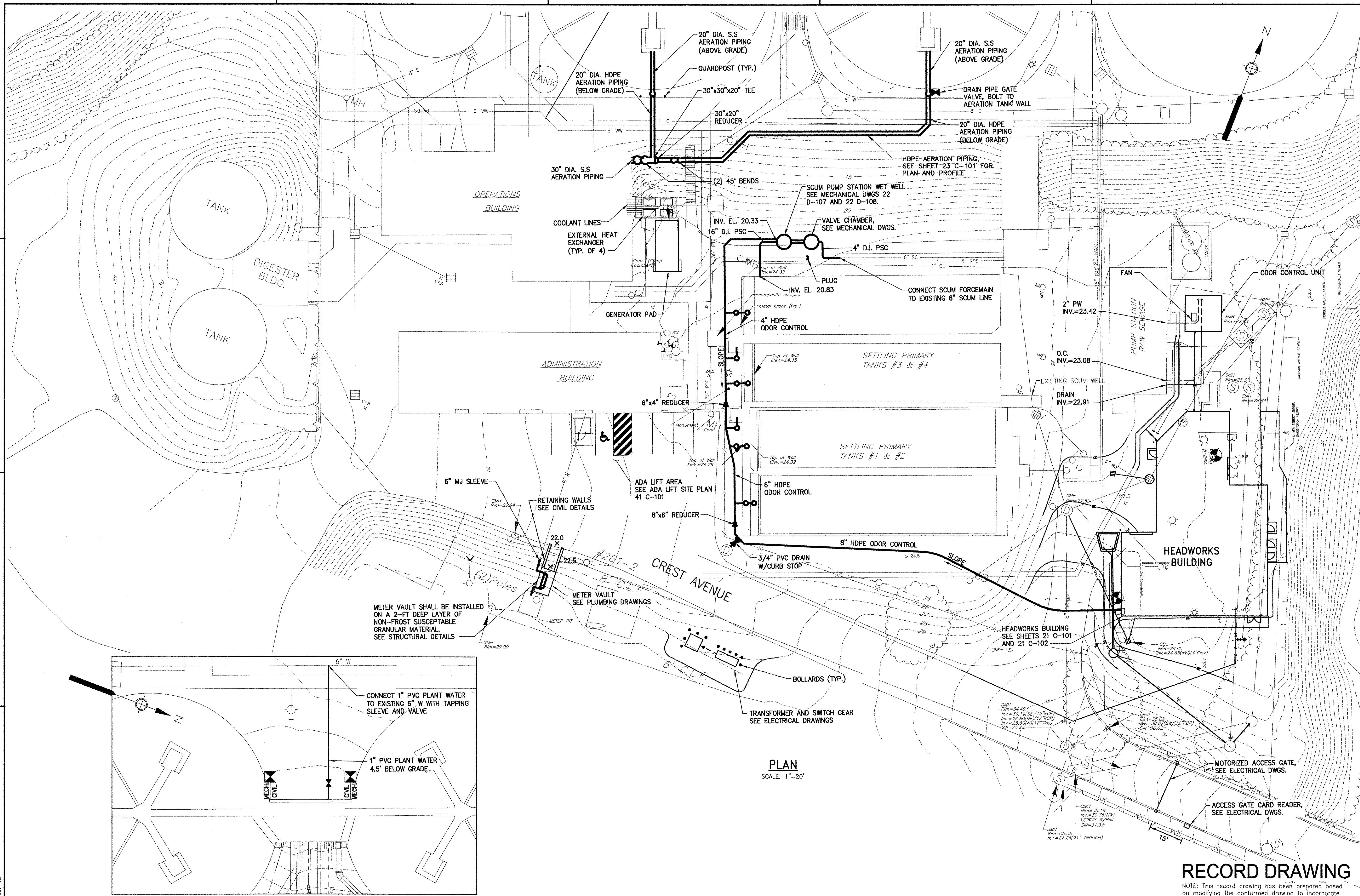
PLAN
SCALE: 1"=40'



RECORD DRAWING
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

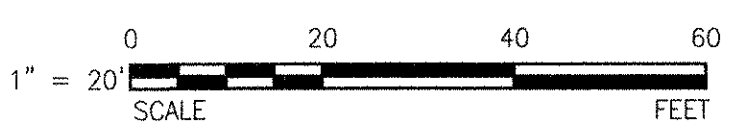
PATH:\FILENAME: P:\60148648 - EAST PROVIDENCE (DB)\DP-1\SHEETS\00 C-102.DWG
LAST UPDATE: Thursday, October 04, 2012 7:42:28 AM
PLOT DATE: Monday, October 22, 2012 4:34:12 PM
ANSI D - 4-Oct-12

PATH/FILENAME: P:\0148848 - EAST PROVIDENCE (RD) DP-1\SHEETS\00 C-103.DWG
 LAST UPDATE: Wednesday, October 17, 2012 1:16:29 PM
 PLOT DATE: Monday, October 22, 2012 4:33:42 PM
 ANSI D - 17-Oct-12



PLAN
 SCALE: 1"=20'

- NOTES:**
- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

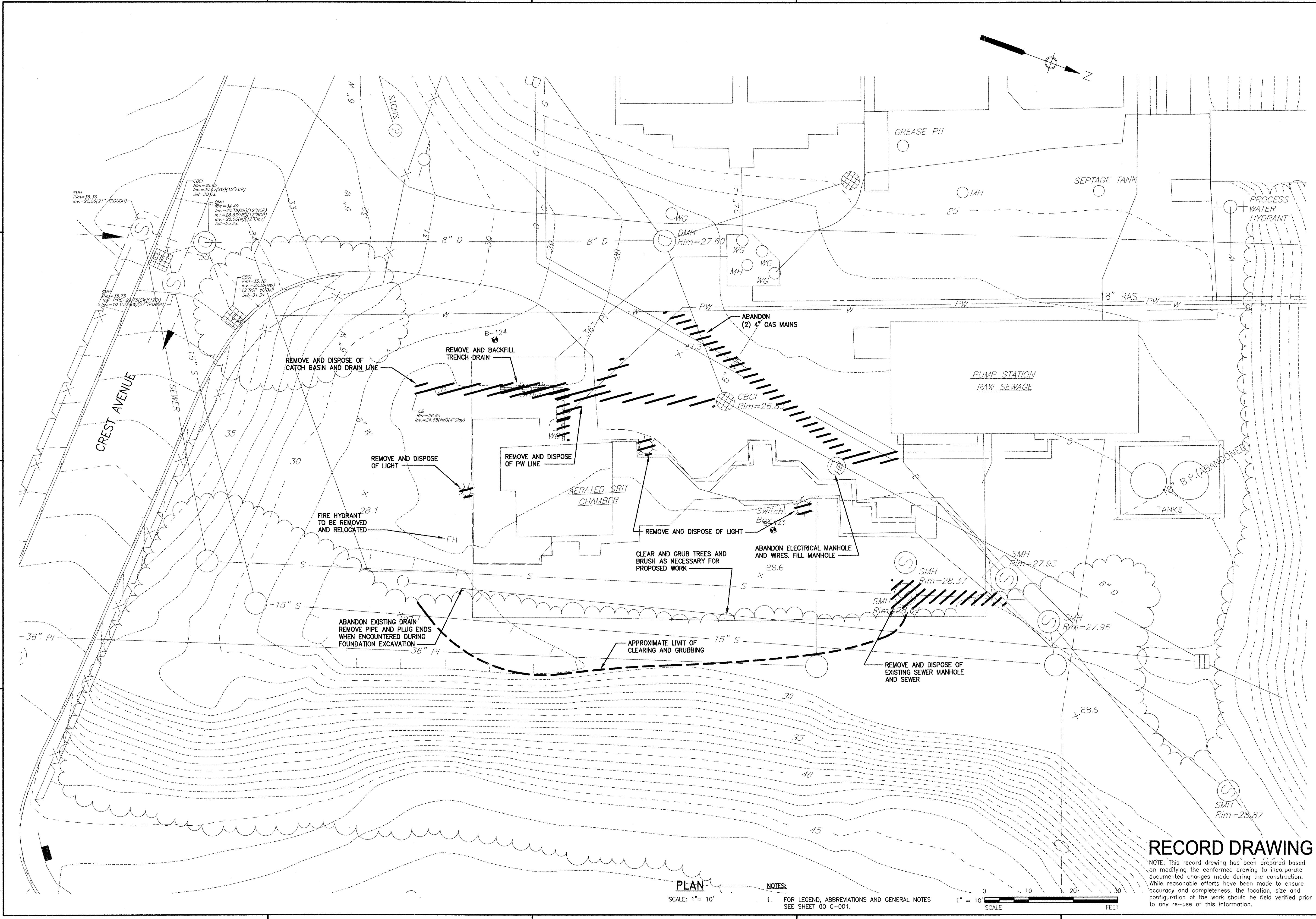
AECOM AECOM USA, INC. 701 EDgewater Drive Littleton, CO 80120 PHONE (918) 246-5000		REVISIONS MARK DATE MADE BY CHECKED BY DESCRIPTION
RECORD DRAWINGS		1 10/18/12 ZB CB 10/18/12 ZB CB 10/18/12 ZB CB 10/18/12 ZB CB
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-1		PROJECT NO: 60148848 CAD DWG FILE: 00 C-103 DESIGNED BY: J. MITCHELL DRAWN BY: W. BALETSA DEPT CHECK: C. BENZIGER PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED
WPCF SITE AND OUTSIDE PIPING PLAN		00 C-103

1
2
3
4
5

D
C
B
A

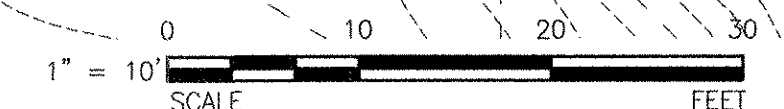
ANSI D - 4-Oct-12

PATH/FILENAME: P:\6048848 - EAST PROVIDENCE DBA\DP-2\SHEETS\21 CD-101.DWG
 LAST UPDATE: Thursday, October 04, 2012 7:45:27 AM
 PLOT DATE: Monday, October 22, 2012 4:14:37 PM



PLAN
SCALE: 1" = 10'

NOTES:
1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.

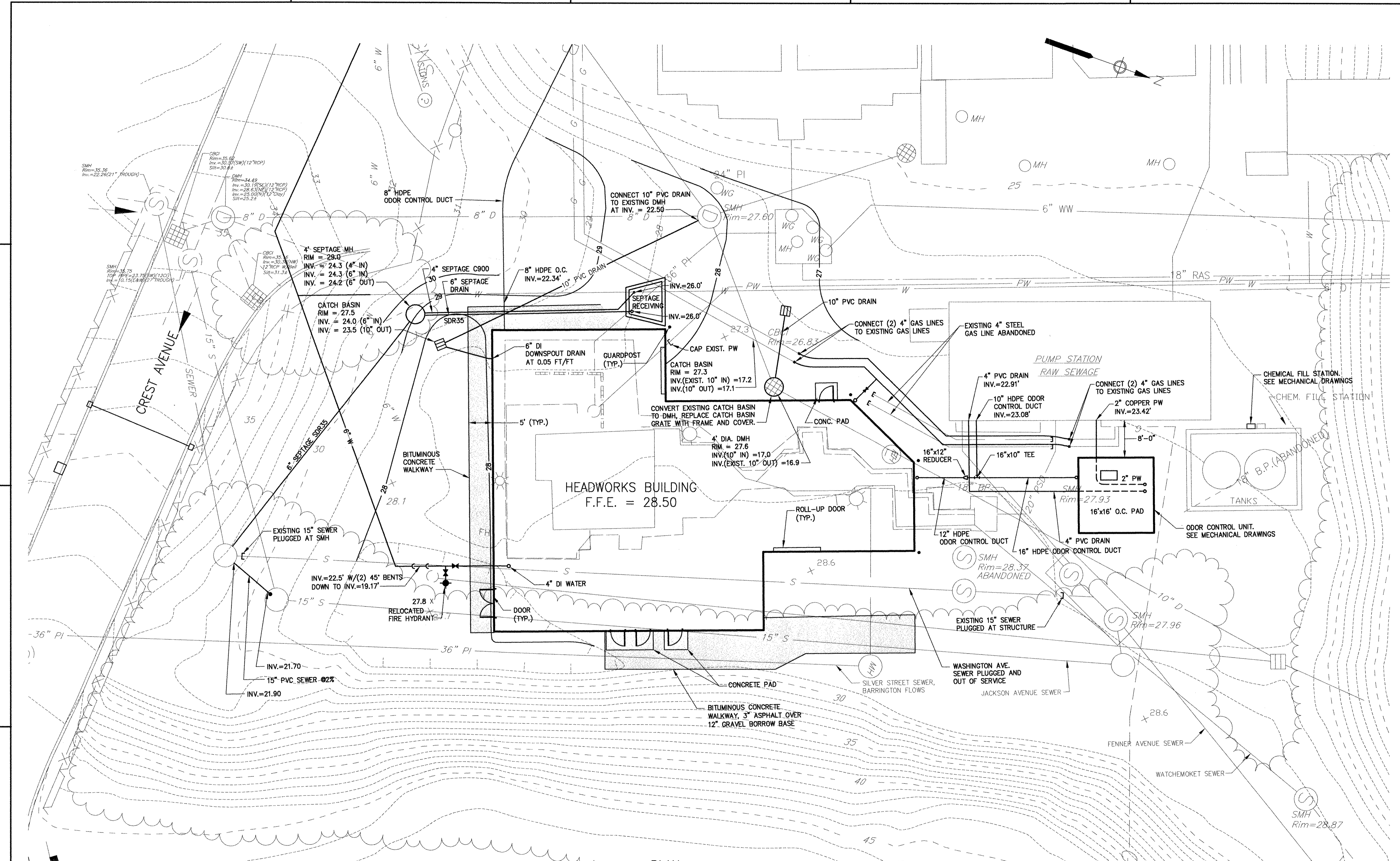


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM AECOM USA, INC. DRIVE WAKEFIELD, MA 01880 PHONE (781) 246-5200		RECORD DRAWINGS											
		<table border="1"> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>10/19/12</td> <td>ZB</td> <td>CB</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </table>		MARK	DATE	MADE BY	CHECKED	DESCRIPTION	1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING
MARK	DATE	MADE BY	CHECKED	DESCRIPTION									
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING									
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 HEADWORKS BUILDING EXISTING CONDITIONS AND DEMOLITION PLAN CIVIL													
PROJECT NO: 60148648		CAD DWG FILE: 21 CD-101											
DESIGNED BY: J. MITCHELL		DRAWN BY: W. BALETSA											
DEPT CHECK: C. BENZIGER		PROJ CHECK: S. THIBAUT											
DATE: OCTOBER 2012		SCALE: AS NOTED											
21 CD-101													

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\C21 C-101.DWG
 LAST UPDATE: Friday, October 05, 2012 1:11:26 PM
 PLOT DATE: Monday, October 22, 2012 4:14:00 PM



PLAN
 SCALE: 1" = 10'

- NOTES:**
- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.
 - REPLACE EXISTING 15" WASHINGTON AVE. SEWER UNDER HEADWORKS BUILDING WITH CONCRETE ENCASED 15" DI SEWER, MATCH EXISTING INVERTS AND SLOPE. BYPASS ALL FLOWS DURING PIPE REPLACEMENT.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
1	10/19/12 DATE
CB	MADE BY
ZB	CHECKED
REVISOR	DESCRIPTION
REVISOR	DESCRIPTION

RECORD DRAWINGS

AECOM
 AECOM USA, INC.
 ONE DOWNSIDE DRIVE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

JAMES A. MITCHELL
 No. 9427
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

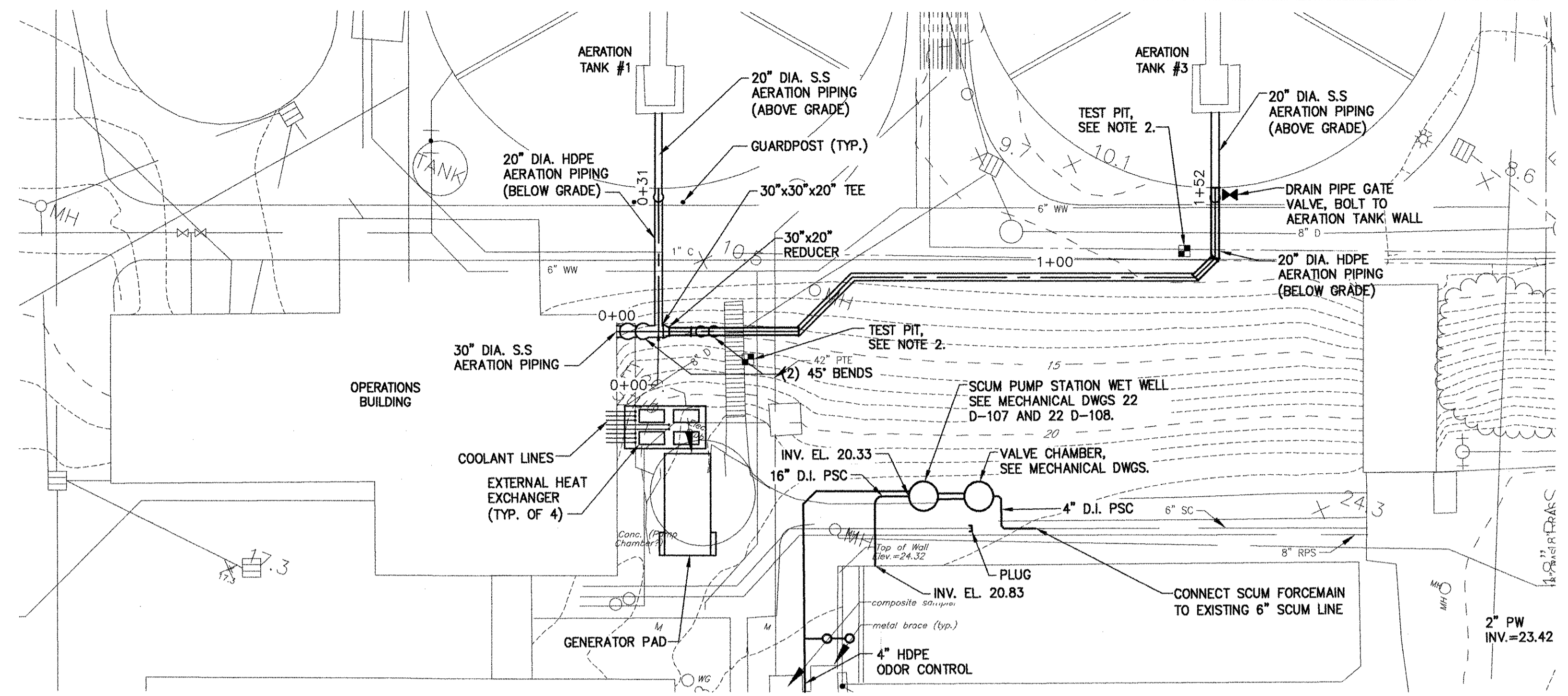
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

HEADWORKS BUILDING SITE AND OUTSIDE PIPING PLAN

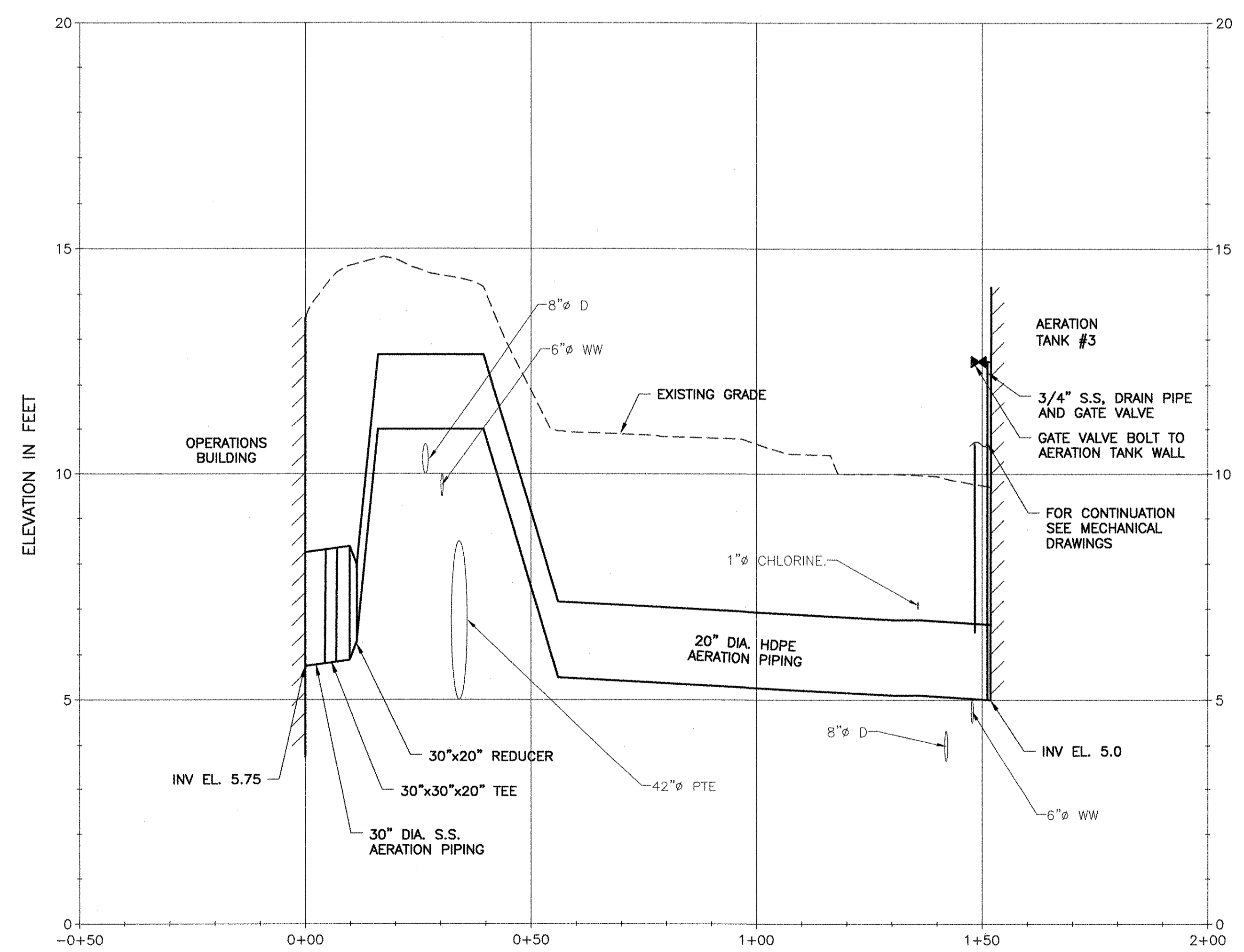
PROJECT NO: 60148648
 CAD DWG FILE: 21 C-101
 DESIGNED BY: J. MITCHELL
 DRAWN BY: W. BALETSA
 DEPT CHECK: C. BENZIGER
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

21 C-101

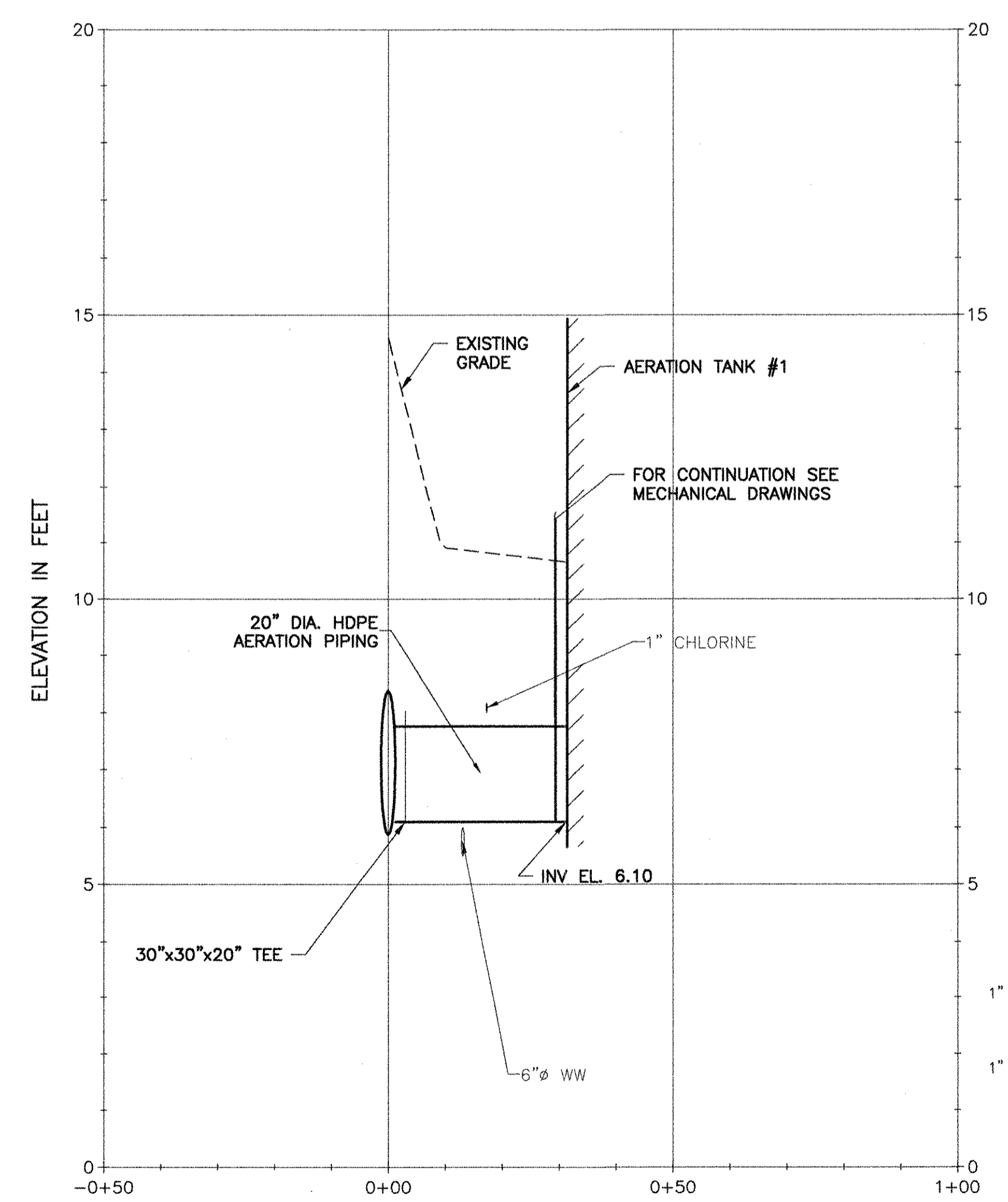
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RD0) DP-2\2\SHEETS\23 C-101.DWG
 LAST UPDATE: Wednesday, December 12, 2012 8:55:54 AM
 PLOT DATE: Wednesday, December 12, 2012 6:56:16 AM
 ANSI D - 12-Dec-12



PLAN
 SCALE: 1"=20'



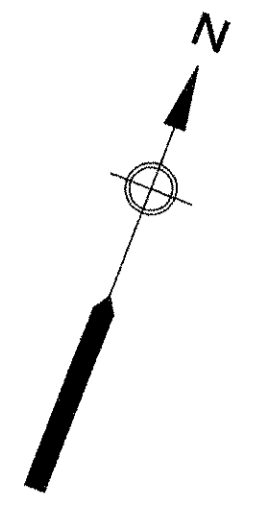
PROFILES
 SCALE: HORZ. 1"= 20'
 VERT. 1"= 2'



- NOTES:**
- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.
 - CONTRACTOR SHALL VERIFY EXISTING UTILITY LOCATIONS WITH TEST PITS PRIOR TO PIPE INSTALLATION.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	12/11/12	ZB	CB	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 701 EDGEWATER DRIVE
 WASHINGTON, DC 20001
 PHONE (703) 246-8200

JAMES A. MITCHELL
 No. 9427
 12/11/12
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

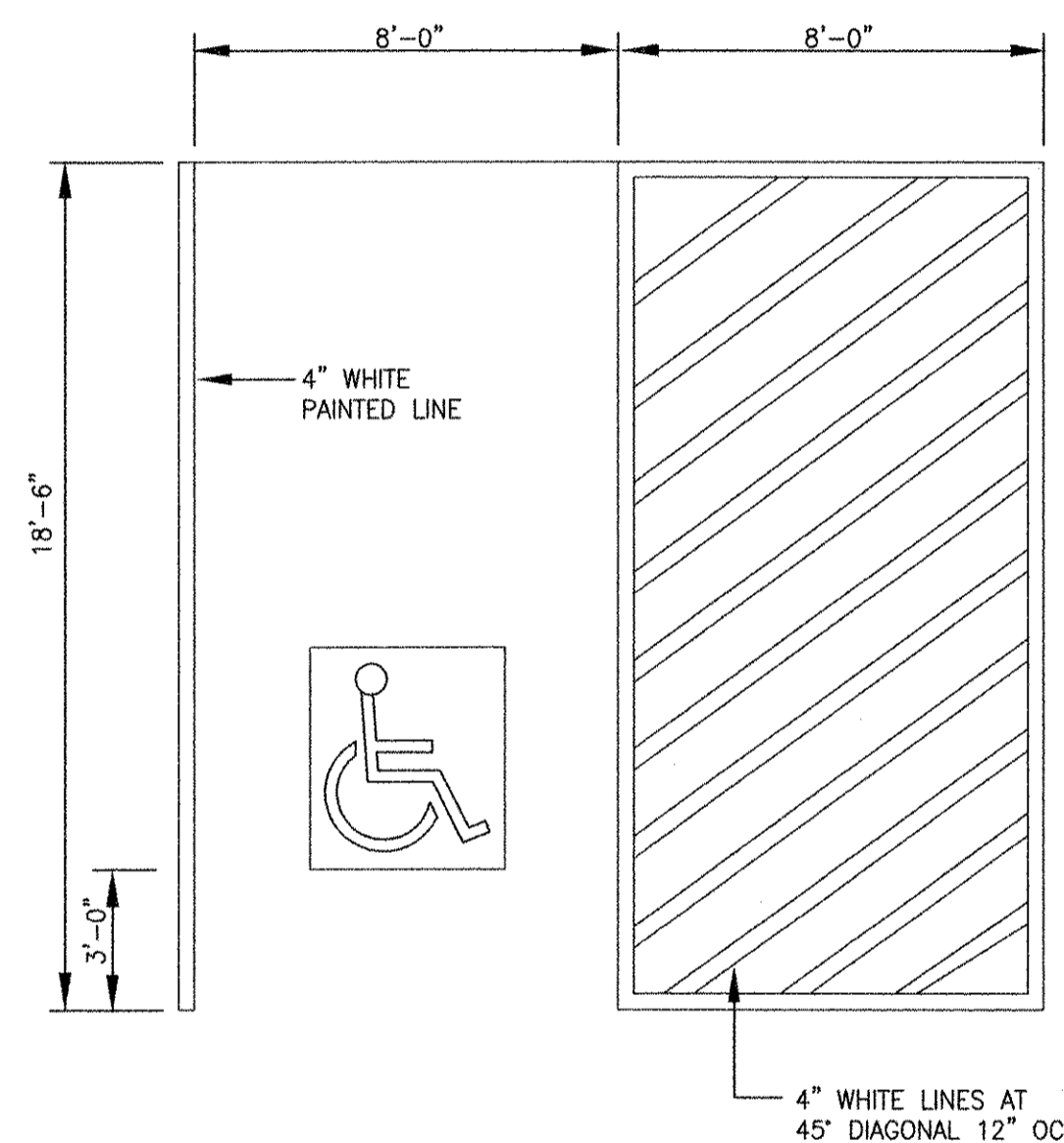
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
AERATION PIPING PLAN AND PROFILE
 CIVIL

PROJECT NO:	60148648
CAD DWG FILE:	23 C-101
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

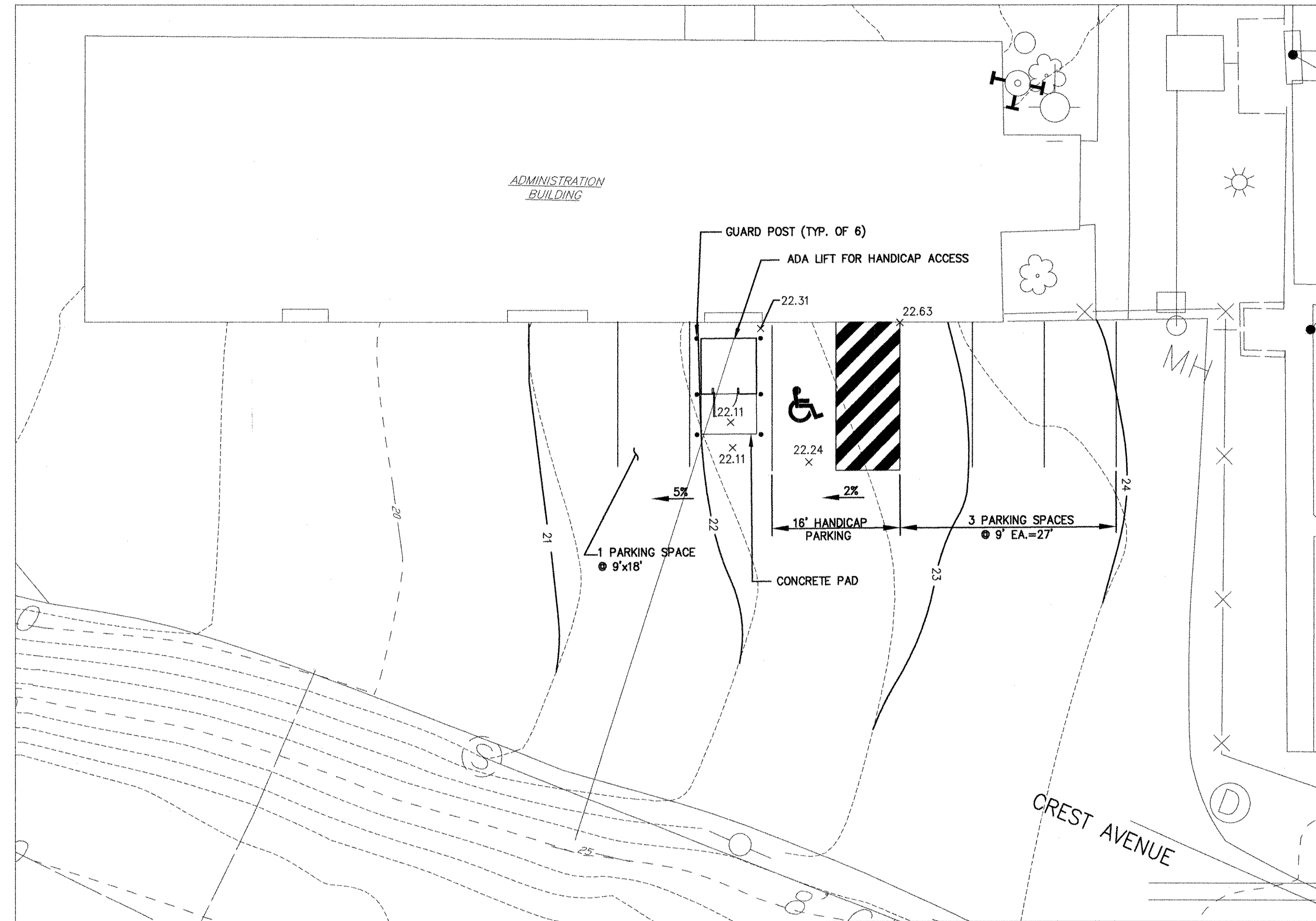
23 C-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RSD)\DP-4\1\41 C-102.DWG
 LAST UPDATE: Monday, October 22, 2012 4:26:32 PM
 PLOT DATE: Monday, October 22, 2012 4:32:53 PM

ANSI D - 22-Oct-12



**HANDICAP SPACE
 PAVEMENT MARKING**
 NOT TO SCALE



PLAN
 SCALE: 1"=10'

NOTES:

- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.

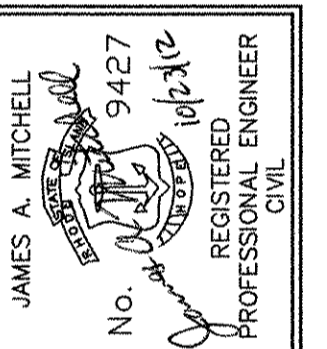


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC.
 100 WASHINGTON STREET
 WAREHOUSES, MA 01980
 PHONE (781) 246-5200

AECOM



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

ADA LIFT SITE PLAN

CIVIL

PROJECT NO:	60148648
CAD DWG FILE:	41 C-102
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 C-102

RECORD DRAWINGS

MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING

REVISIONS

D

C

B

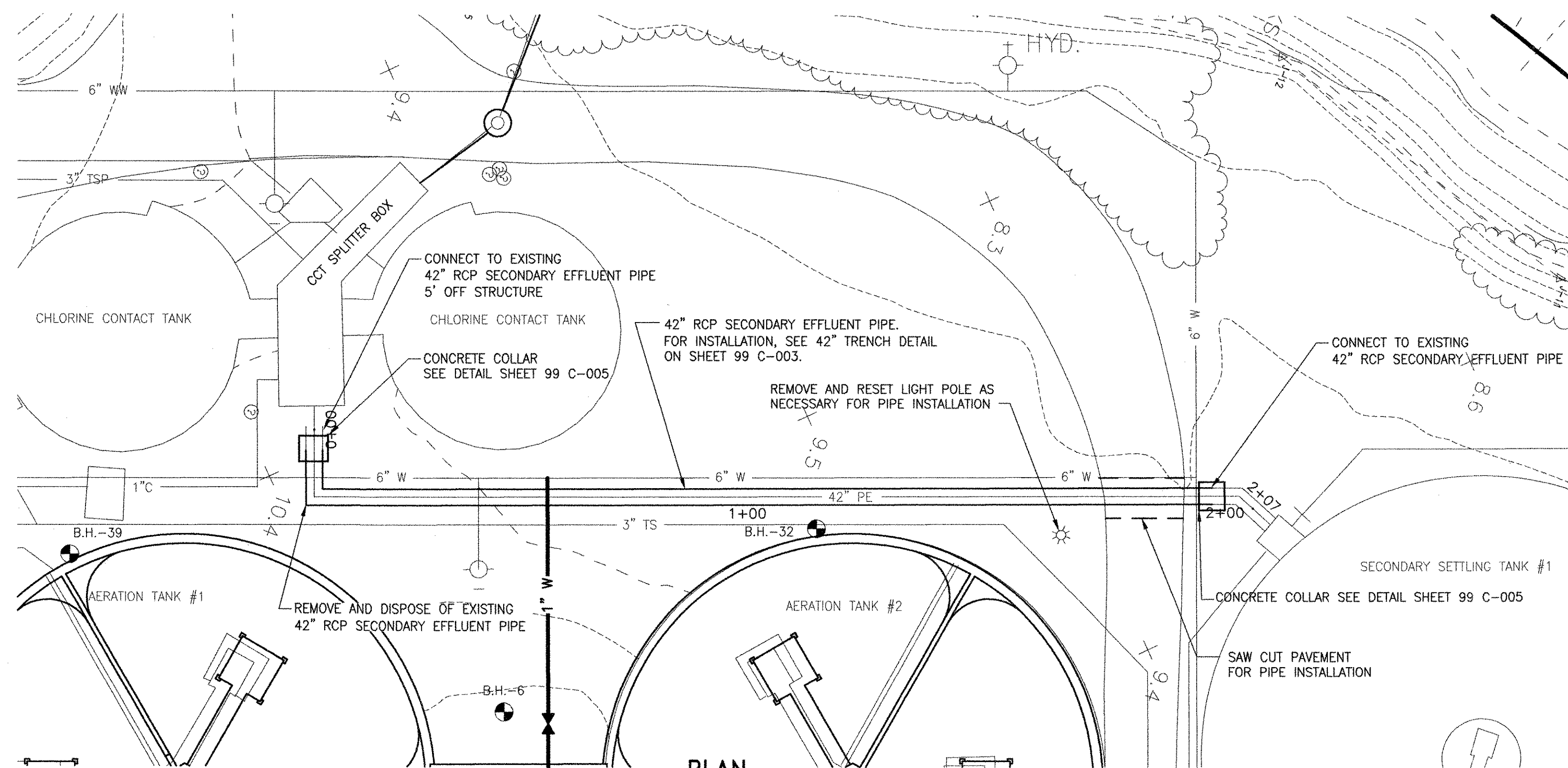
A

D

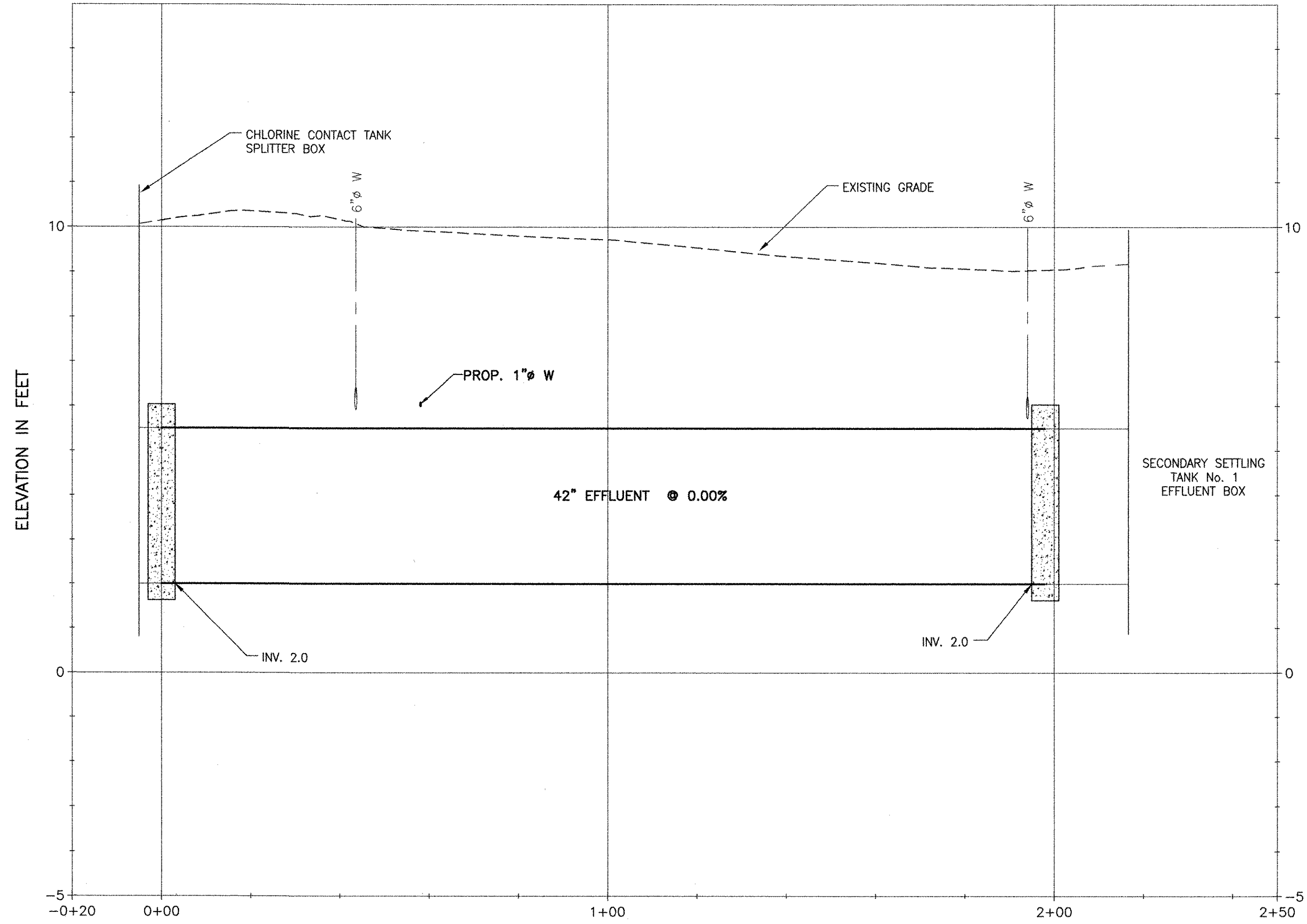
C

B

A

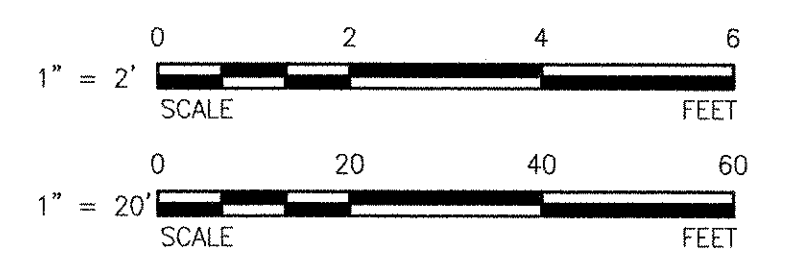


PLAN
SCALE: 1"=20'



PROFILES
SCALE: HORIZ. 1"= 20'
VERT. 1"= 2'

- NOTES:**
- FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEET 00 C-001.
 - PAVEMENT SHALL BE RESTORED PER CITY PAVED STREETS DETAIL ON SHEET 99 C-002.
 - ALL LANDSCAPED AREAS SHALL BE REVEGETATED WITH 4" OF LOAM AND SEED.
 - CONTRACTOR SHALL BYPASS ALL PIPE FLOWS IN ACCORDANCE WITH SPECIFICATIONS.
 - LOCATIONS OF EXISTING PIPING ARE FROM THE BEST INFORMATION AVAILABLE. EXACT LOCATIONS AND COMPLETENESS ARE NOT GUARANTEED. ELEVATION AND DIRECTION OF NEW YARD PIPING ARE SHOWN FOR THE PURPOSE OF INDICATING THE BASIC PARAMETERS USED DURING DESIGN. THE CONTRACTOR SHALL ALSO MAKE ALL REQUIRED FIELD MEASUREMENTS TO VERIFY EXISTING AND CONTRACT INTERFACE DIMENSIONS, LOCATIONS, AND OTHER CONDITIONS. FINAL LOCATIONS OF PIPES WILL BE DETERMINED IN THE FIELD. ANY CHANGES WILL BE APPROVED BY THE ENGINEER/OWNER.
 - ALL PIPES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. NO SAGS OR CRESTS IN PIPING WILL BE PERMITTED.
 - THE CONTRACTOR SHALL ERECT EROSION CONTROL CHECKS PRIOR TO COMMENCING ANY EXCAVATION OR STORAGE OF BACKFILL MATERIAL ON-SITE. REFER TO DETAILS.
 - LOCATION AND ELEVATIONS OF ALL EXISTING SITE FEATURES, UTILITIES PROPOSED WORK ARE BASED ON THE BEST AVAILABLE INFORMATION. EXACT LOCATION AND COMPLETENESS IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SUCH LOCATIONS AT THE SITE PRIOR TO CONSTRUCTION, AND PROTECT ALL UTILITIES.
 - CONSTRUCTION DEWATERING IS TO BE TREATED AND DISCHARGED ACCORDING TO THE REQUIREMENTS SPECIFIED.
 - ALL ROADWAYS SHALL BE GRADED 1/4" PER FOOT UNLESS OTHERWISE INDICATED IN SPOT ELEVATIONS.
 - ELEVATIONS ARE BASED ON M.H.W. DATUM.

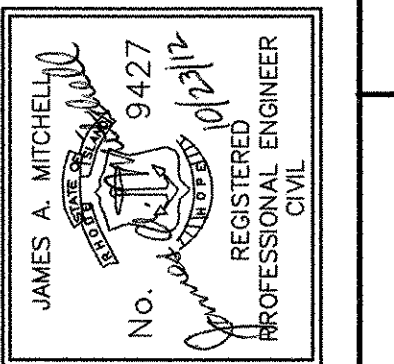


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED BY	REVISIONS
1	10/19/12	ZB	CB	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. ONE WALKER STREET WILMINGTON, MA 01890
 PHONE (781) 246-5200

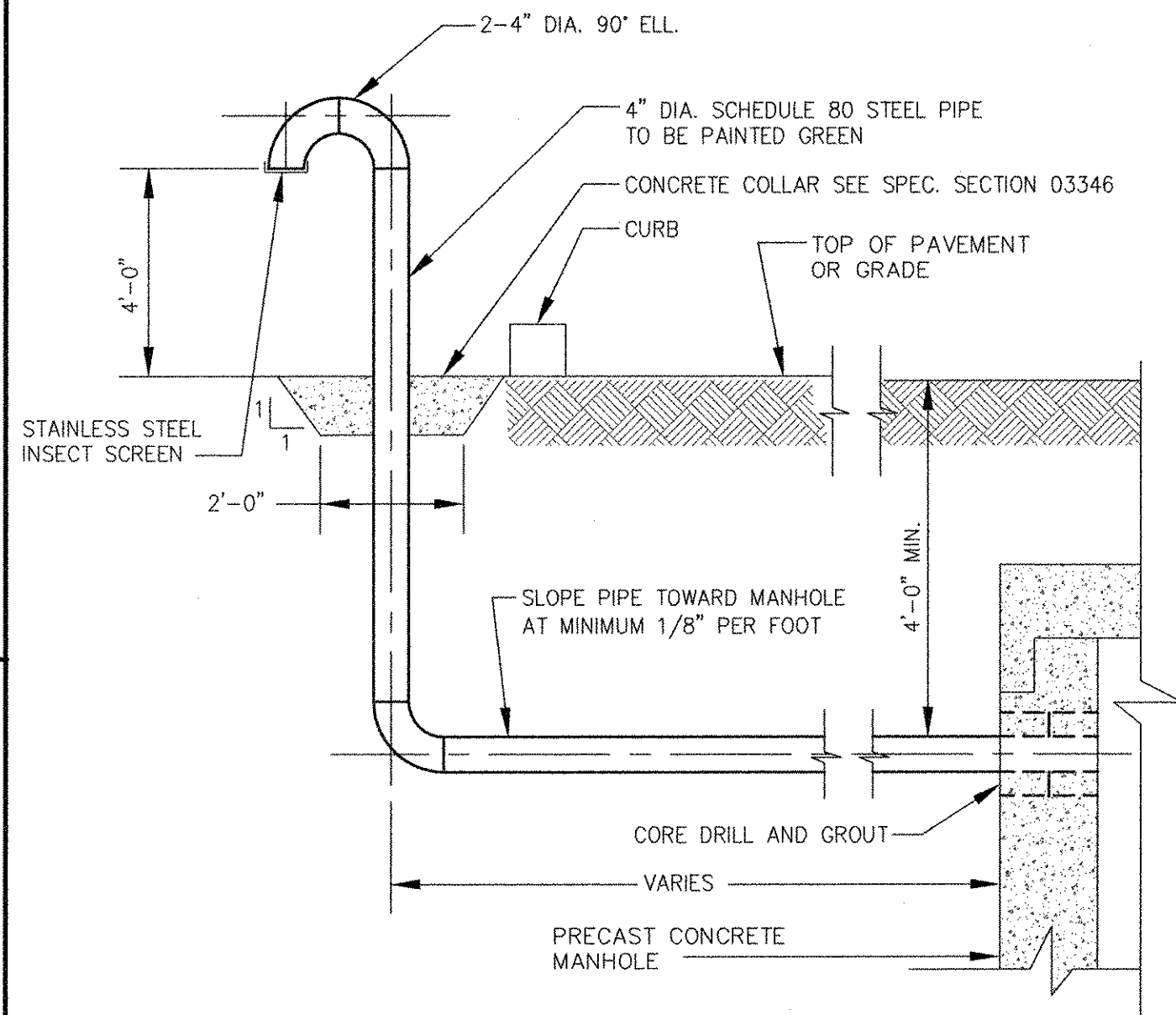


CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
SECONDARY EFFLUENT PIPE PLAN AND PROFILE
 CIVIL

PROJECT NO:	60148648
CAD DWG FILE:	45 C-101
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

45 C-101

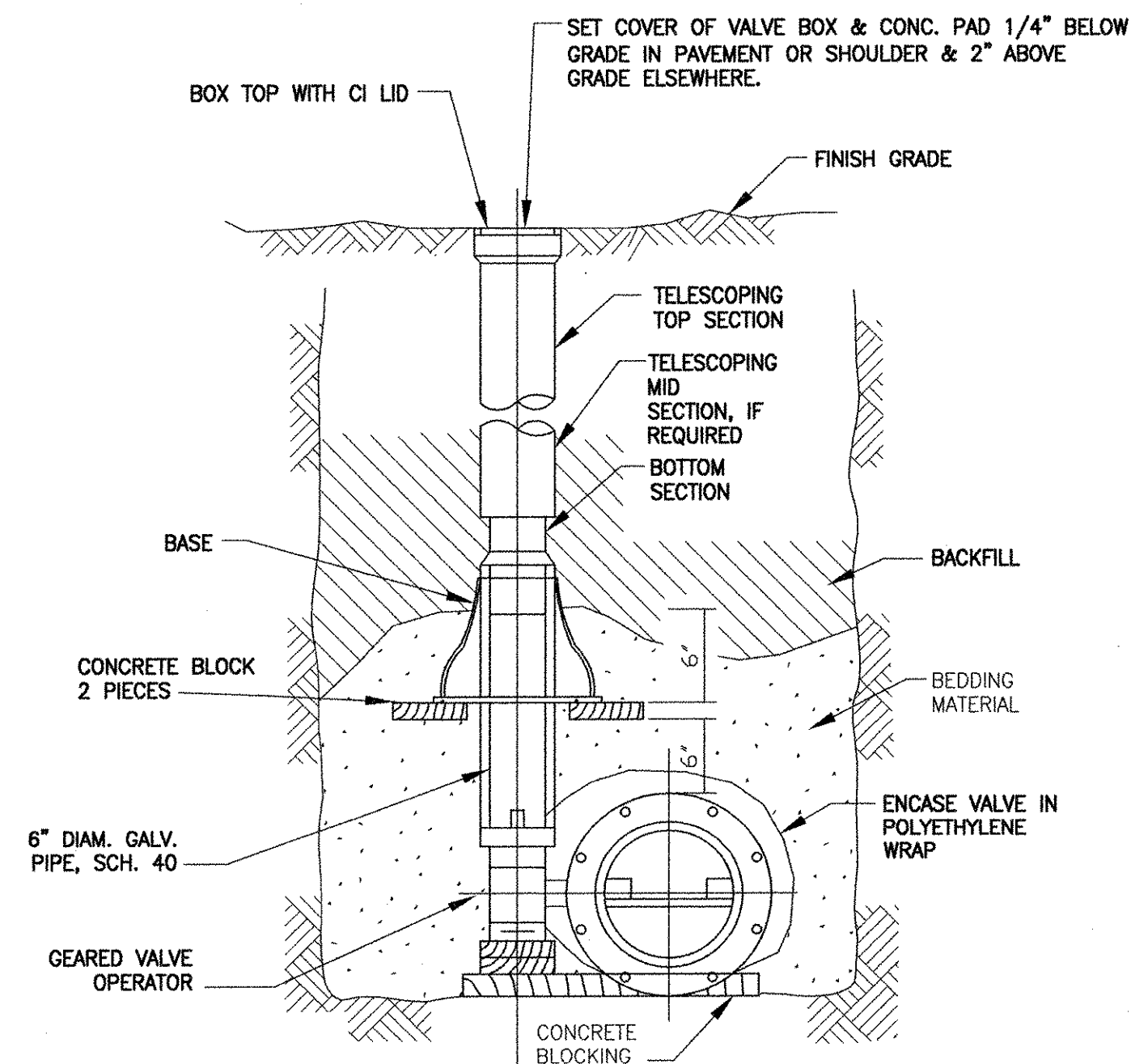
PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\45 C-101.DWG
 LAST UPDATE: Wednesday, October 03, 2012 3:45:26 PM
 PLOT DATE: Monday, October 22, 2012 4:11:59 PM
 ANSI D = 3-Oct-12



NOTES:

1. REFER TO VALVE MANHOLE DETAIL ON THIS SHEET.
2. IN CROSS-COUNTRY AREAS, THE VENT MAY BE PLACED ADJACENT TO MANHOLE.
3. IN PAVED AREAS, THE VENT SHALL BE LOCATED ADJACENT TO NEAREST UTILITY POLE OR FIXED STRUCTURE. ADD FITTINGS OR BENDS AS NEEDED.
4. REPAIR PAVEMENT, CURBING, SIDEWALKS OR OTHER DISTURBED AREAS AT NO ADDITIONAL COST.

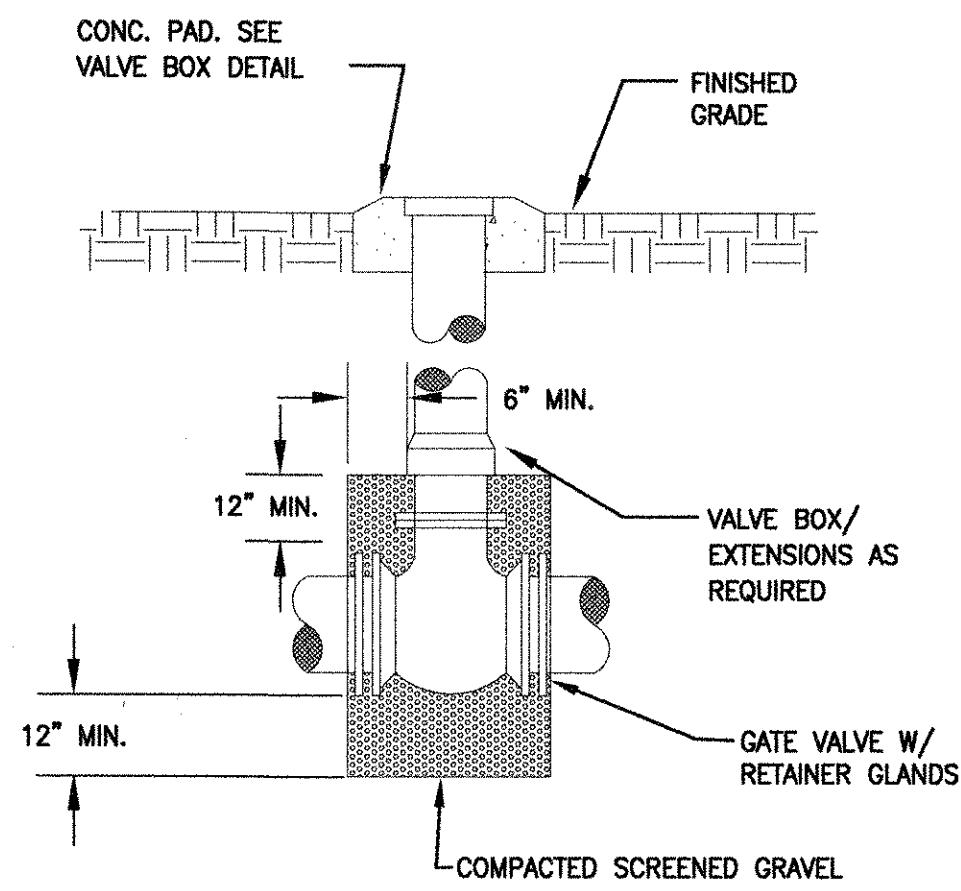
VENTED MANHOLE CONNECTION
NOT TO SCALE



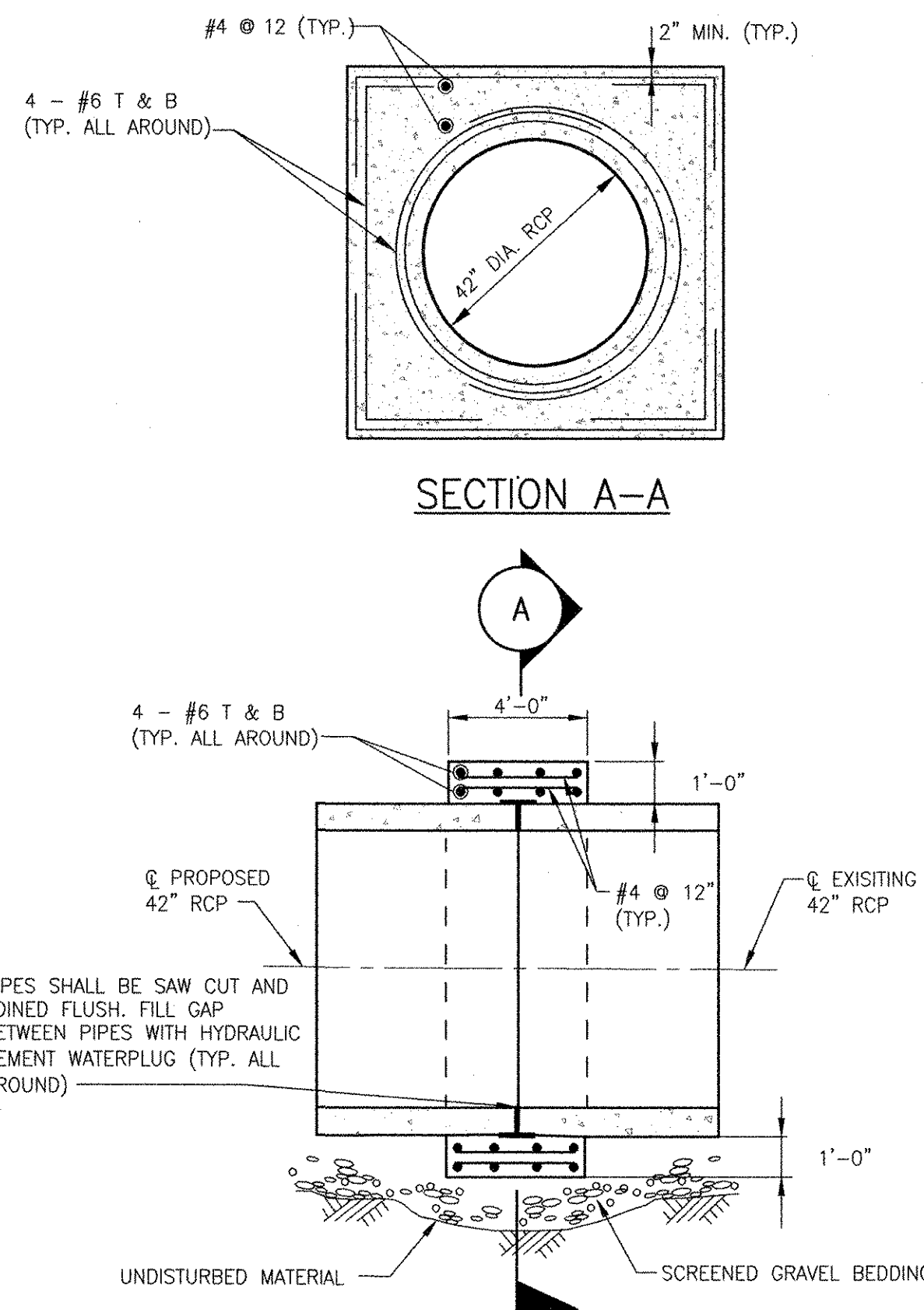
BURIED BUTTERFLY VALVE DETAIL
NOT TO SCALE

NOTES:

1. PROVIDE EXTENSION ROD W/2\"/>



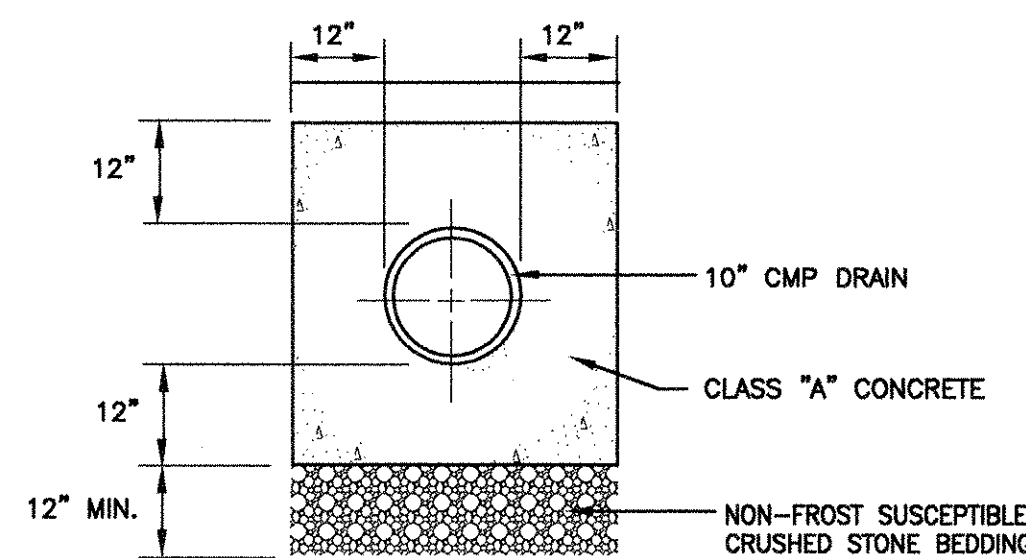
GATE VALVE INSTALLATION DETAIL
NOT TO SCALE



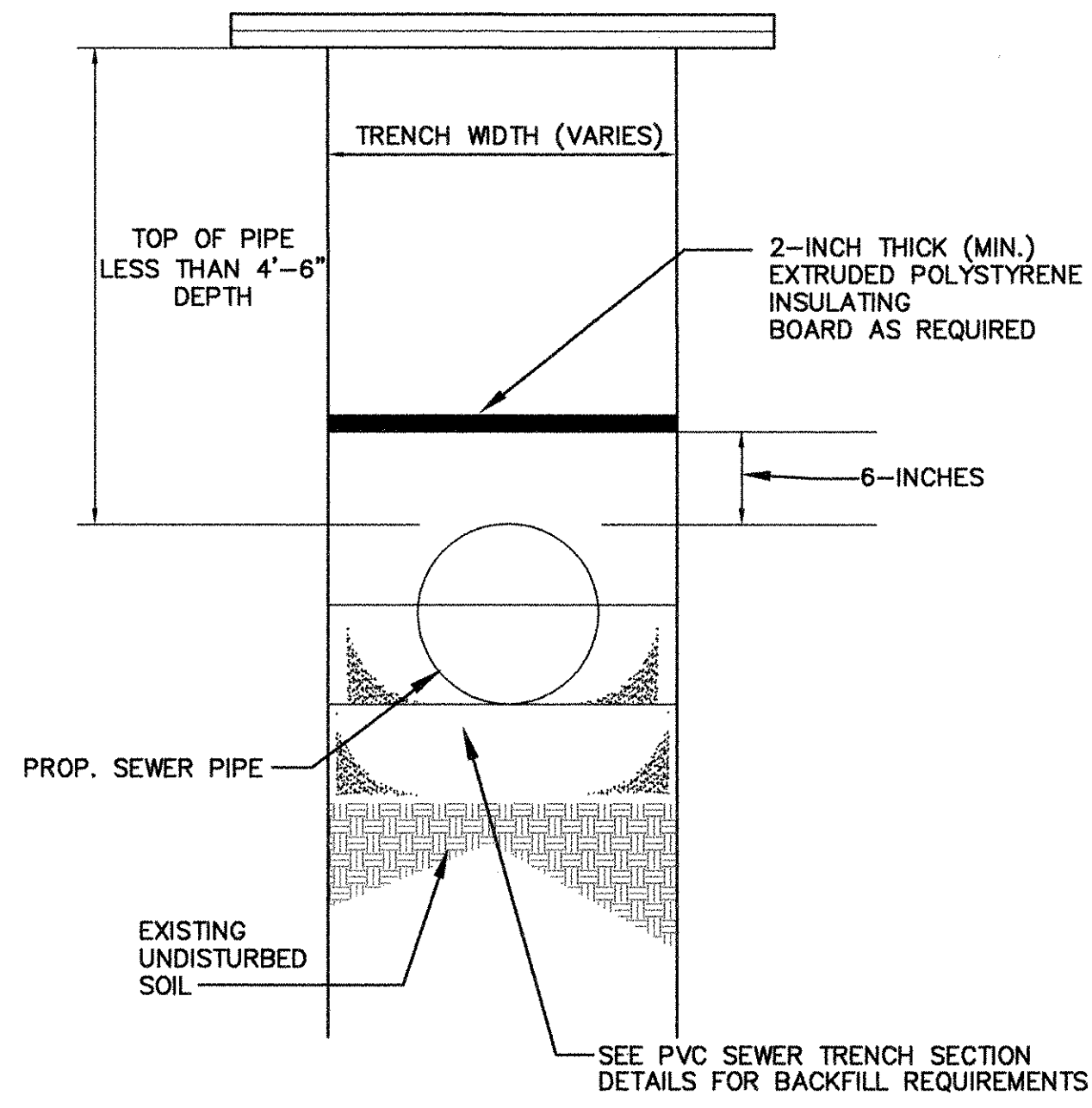
PROFILE SECTION 42\"/>

CONCRETE NOTES:

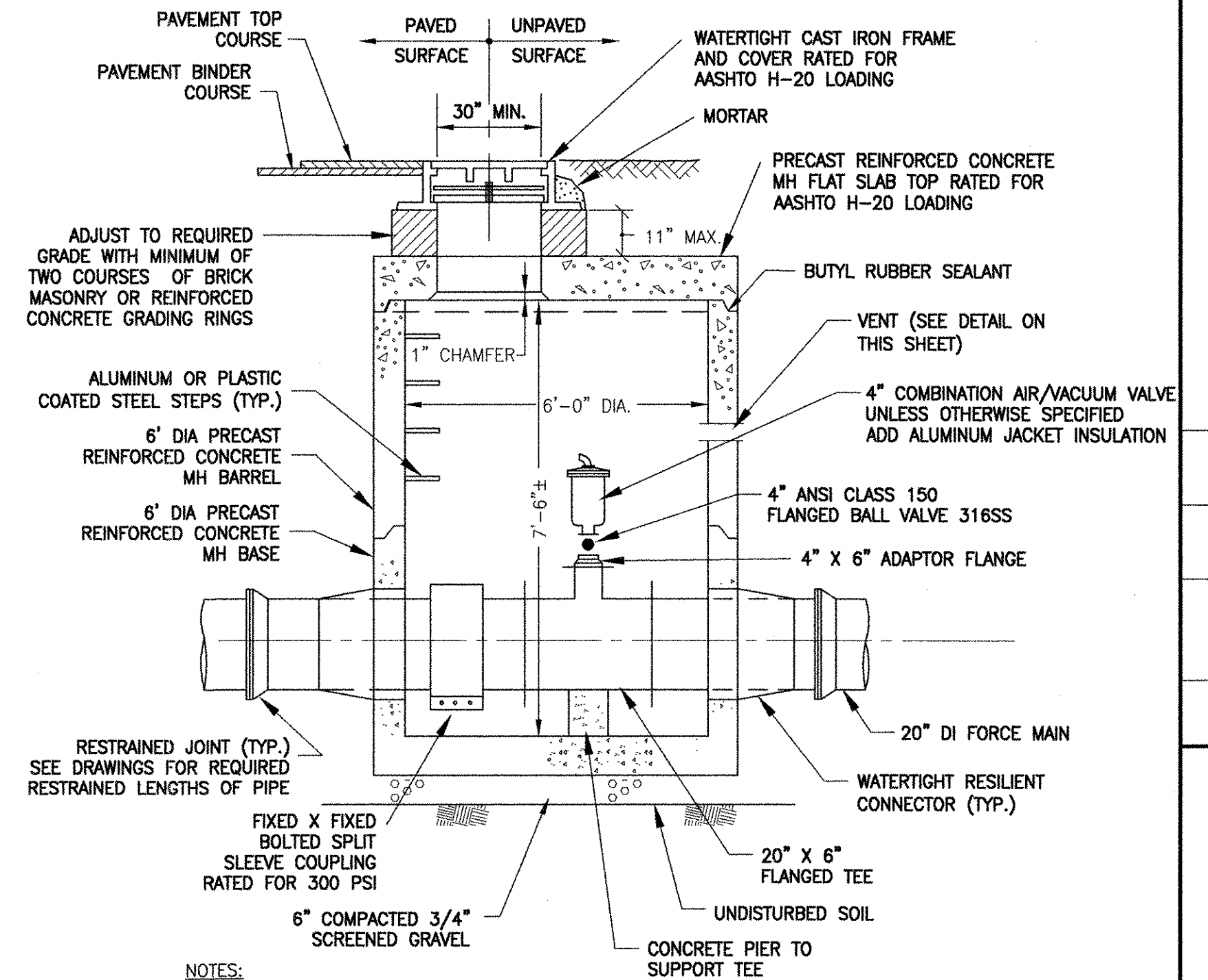
1. CONCRETE WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301) AND THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)
2. USE NORMAL WEIGHT CAST-IN-PLACE CONCRETE WITH ASTM C 150, TYPE II CEMENT FOR ALL CONCRETE WORK.
3. PROVIDE CONCRETE HAVING A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND A MAXIMUM WATER-CEMENT RATIO OF 0.45 UNLESS OTHERWISE INDICATED OR SPECIFIED.
4. AIR-ENTRAIN ALL CONCRETE.
5. REINFORCING BARS SHALL CONFORM TO ASTM A 615, GRADE-60.



CMP DRAIN CONCRETE ENCASEMENT DETAIL
NOT TO SCALE



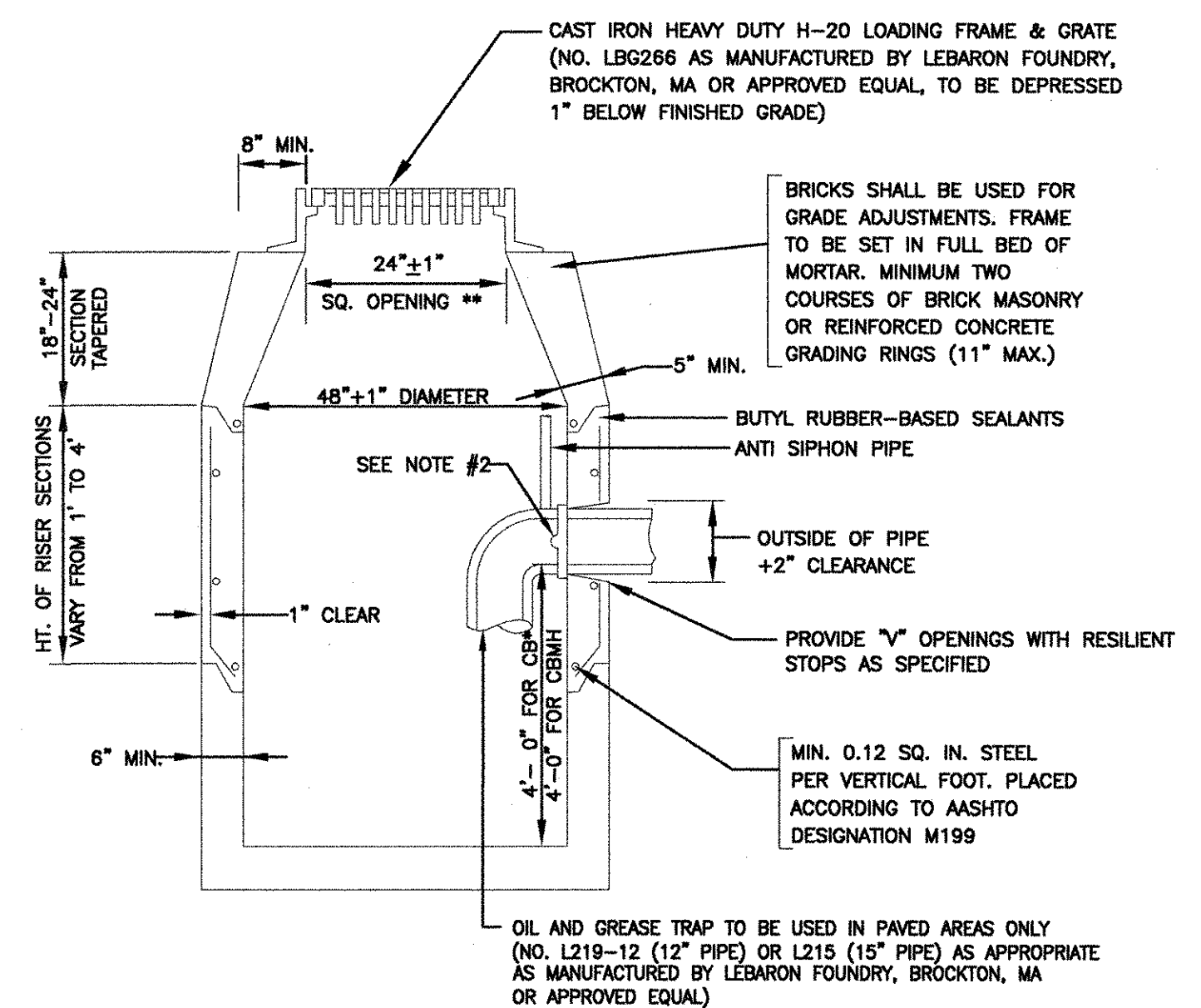
INSULATED SEWER PIPE DETAIL
NOT TO SCALE



NOTES:

1. CONTRACTOR TO DEFLECT PIPE AND INSTALL AT 2-3 FEET GREATER DEPTH AT MANHOLE LOCATIONS TO ALLOW FOR CLEARANCE FOR MAINTENANCE OF VALVES INSIDE MANHOLE.

COMBINATION AIR/VACUUM VALVE AND AIR RELEASE VALVE MANHOLE
NOT TO SCALE



NOTES:

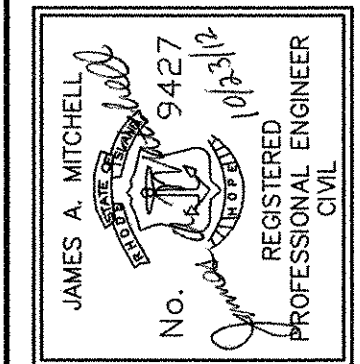
1. BASE AND JOINT DETAILS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02431.
2. FACE OF PIPE FLUSH OR NOT TO PROJECT MORE THAN 4\"/>

PRECAST CONCRETE CATCHBASIN AND CATCHBASIN MANHOLE WITH OIL AND GREASE TRAP
NOT TO SCALE

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC.
ONE WAVERLY DRIVE
WAKEFIELD, MA 01880
PHONE (781) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

CIVIL DETAILS V
CIVIL

PROJECT NO:	60148648
CAD DWG FILE:	99 C-005
DESIGNED BY:	J. MITCHELL
DRAWN BY:	W. BALETSA
DEPT CHECK:	C. BENZIGER
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 C-005

PATH/FILENAME: F:\0148648 - EAST PROVIDENCE DBO\COMMON SHEETS\C399_C-005.DWG
PLOT DATE: Monday, October 22, 2012 4:21:36 PM
LAST UPDATE: Monday, October 01, 2012 3:40:17 PM
ANSI D - 1-10-12

DIMENSIONING

I. A. DIMENSIONS AND "WORK POINTS" GIVEN ON DRAWING SHALL BE FIELD VERIFIED BY THE CONTRACTOR...

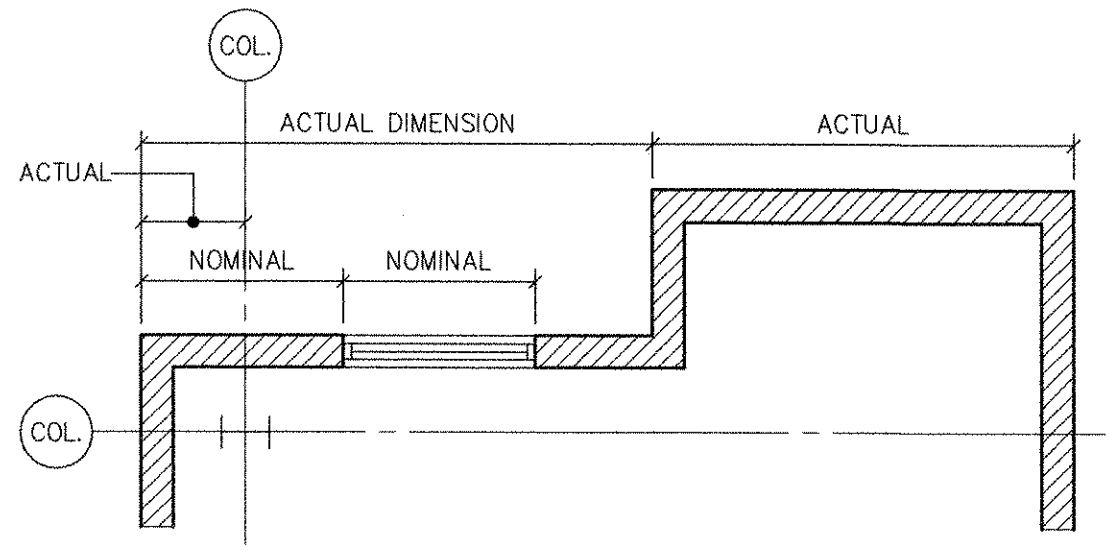
B. MASONRY DIMENSIONS, INCLUDING BRICK MASONRY AND CONCRETE MASONRY UNIT (CMU), ARE CALLED OUT AS NOMINAL UNLESS OTHERWISE NOTED...

C. DIMENSIONS FROM THE STRUCTURAL COLUMN LINE TO THE EXTERIOR FACE OF WALL ARE CALLED OUT AS ACTUAL...

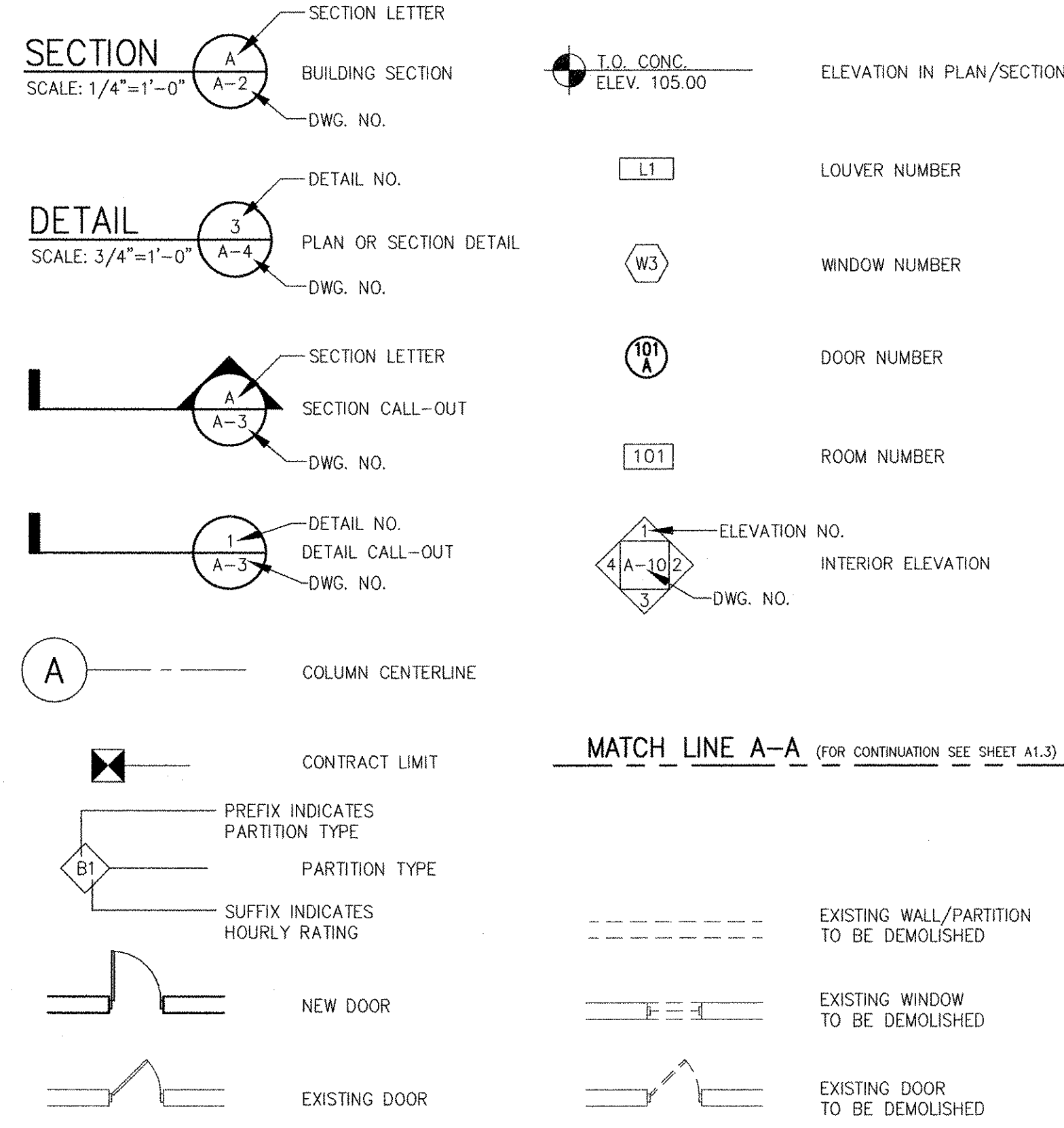
D. ALL DIMENSIONS REQUIRED TO ACCURATELY COORDINATE AND SEQUENCE THE WORK SHALL BE FIELD VERIFIED PRIOR TO THE FABRICATION OF ANY WORK.

II. WHERE THE EXTENT OF A MATERIAL OR FINISH IS INDICATED BY ARROWS ON AN ELEVATION, IT IS INTENDED THAT THE MATERIAL OR FINISH CONTINUE UNINTERRUPTED UNTIL A CHANGE OF MATERIAL IS CALLED OUT...

III. THE CONTRACT DOCUMENTS DESCRIBE THE TECHNICAL REQUIREMENTS AND FINISHED APPEARANCE OF THIS PROJECT WITHOUT DESCRIBING ALL OF THE CONDITIONS OR REQUIREMENTS WHICH ARE NECESSARY TO PROVIDE COMPLETE BUILDING SYSTEMS AND ASSEMBLIES...



SYMBOLS



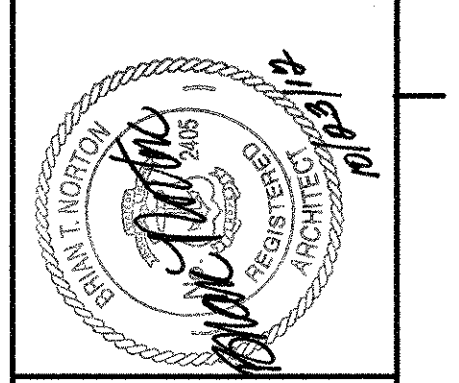
LEGEND

Table listing materials and finishes with corresponding hatching patterns: BATT INSULATION, CONCRETE MASONRY UNIT, RIGID INSULATION, METAL GRATING, PLASTER CEILING (IN PLAN), CONCRETE, METAL PLATE, EARTH, PRECAST CONCRETE, METAL, ROUGH WOOD, FINISH WOOD, PLYWOOD, COMPRESSIBLE FILLER.

ABBREVIATIONS

Large table of abbreviations and their meanings, including terms like AIR CONDITIONING, CONSTRUCTION, EXTERIOR, HOOK, NOMINAL, ROOM, and UNLESS NOTED OTHERWISE.

REVISIONS table with columns for MARK, DATE, MADE BY, CHECKED, and DESCRIPTION.



CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS LEGEND, ABBREVIATIONS AND GENERAL NOTES ARCHITECTURAL

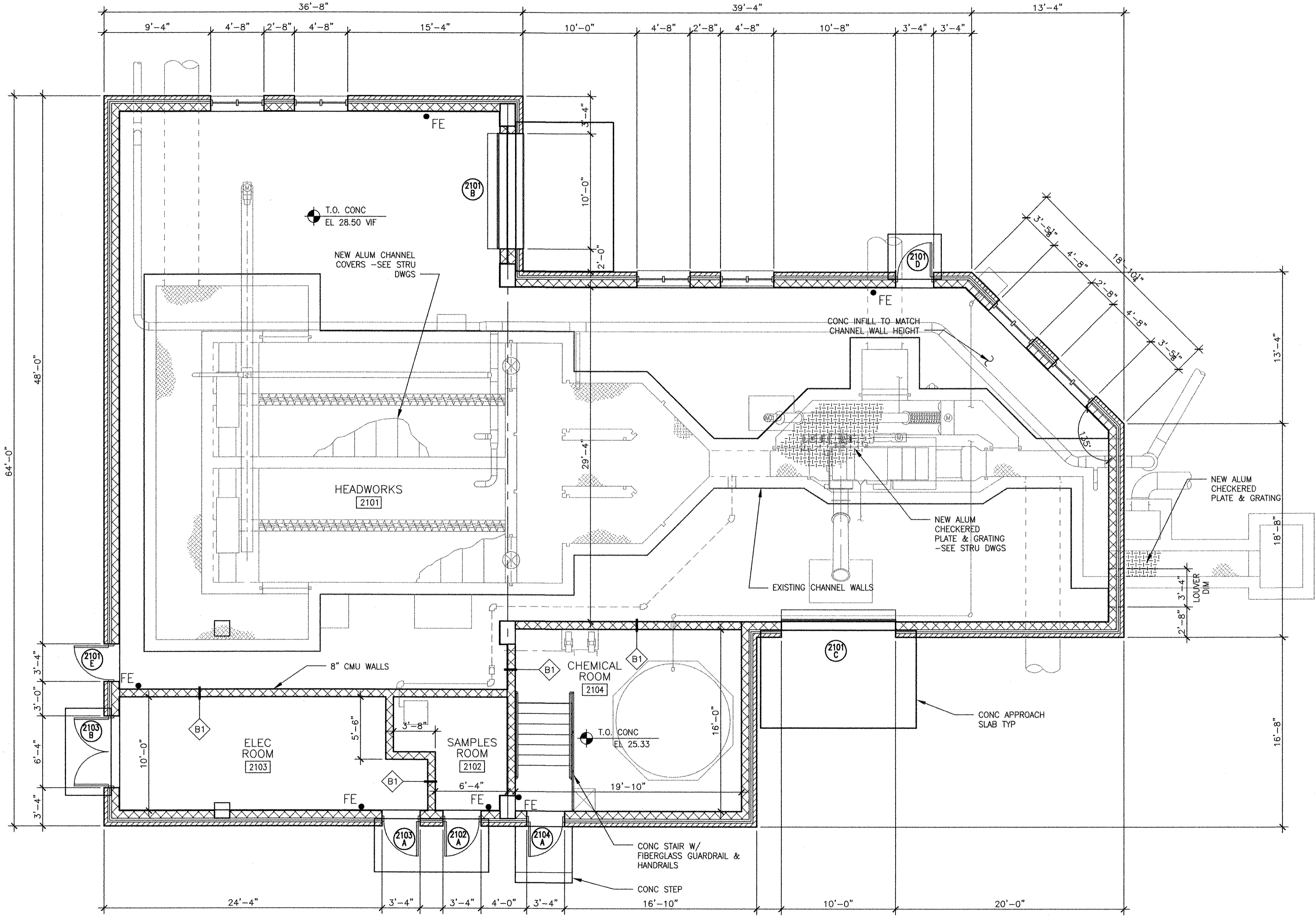
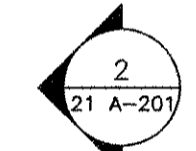
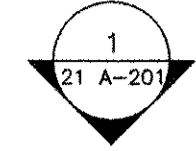
Table with project information: PROJECT NO: 60148648, CAD DWG FILE: 00 A-001, DESIGNED BY: M. MACEACHERN, DRAWN BY: M. MACEACHERN, DEPT CHECK: B. NORTON, PROJ CHECK: S. THIBAUT, DATE: OCTOBER 2012, SCALE: AS NOTED.

00 A-001

Vertical text on the left margin: PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (B0)\COMMON\00\00 A-001.DWG, LAST UPDATE: Tuesday, October 23, 2012 10:27:59 AM, ANSI D - 23-Oct-12.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



GRADE LEVEL PLAN
3/16" = 1'-0"

HEADWORKS
BUILDING CODE INFORMATION

APPLICABLE CODES

BUILDING CODE: 2006 IBC (RHODE ISLAND STATE BUILDING CODE)
FIRE/LIFE SAFETY CODE: NFPA 1, 2003 (RHODE ISLAND UNIFORM FIRE CODE)
ACCESSIBILITY CODE: ADAAG (RHODE ISLAND STATE BUILDING CODE), UFAS, ANSI A117-1
ENERGY CODE: IECC 2006 (RHODE ISLAND STATE ENERGY CODE)

BUILDING REVIEW

- USE CLASSIFICATION: GROUP F-1 (SECTION 306.2)
- CONSTRUCTION CLASSIFICATION: IIB (TABLE 503)
- BUILDING HEIGHTS AND AREAS:
 - ALLOWABLE STORIES: 2
 - ACTUAL STORIES: 1
 - ALLOWABLE HEIGHT: 55 FT
 - ACTUAL BUILDING HEIGHT: 17'-0" FT
 - ALLOWABLE AREA: 15,500 SF
 - ACTUAL BUILDING AREA: 3,893 SF
- FIRE RESISTANCE RATING REQUIREMENTS: (TABLE 601)
 - STRUCTURAL FRAME: 0 HRS
 - EXTERIOR BEARING WALLS: 0 HRS
 - INTERIOR BEARING WALL: 0 HR
 - EXTERIOR NON-BEARING WALLS: 0 HRS
 - INTERIOR NON-BEARING WALLS: 0 HRS
 - FLOOR CONSTRUCTION: 0 HRS
 - ROOF CONSTRUCTION: 0 HRS
- FIRE SUPPRESSION SPRINKLERING:
 - SPRINKLERED AT CHEMICAL ROOM
- EGRESS REQUIREMENTS:
 - A. OCCUPANCY LOAD CALCULATIONS: (TABLE 1004.1.1)
 - EQUIPMENT ROOM: 3,893 SF x 300 GSF/OCCUPANT = 13 OCCUPANTS ACTUAL = 0
 - B. EXIT CAPACITY: REQUIRED WIDTH (TABLE 1005.1 - 0.2 INCHES/OCCUPANT)
 - 13 OCCUPANTS x 0.2 INCHES = 2.6 INCHES
 - C. MINIMUM NUMBER OF EXITS REQUIRED: (TABLE 1015.1 & 1019.1)
 - NUMBER REQUIRED: 1
 - NUMBER PROVIDED: 6
 - D. EXIT ACCESS TRAVEL DISTANCE: (TABLE 1016.1)
 - MAXIMUM ALLOWABLE TRAVEL DISTANCE: 200 FT
 - MAXIMUM TRAVEL DISTANCE PROVIDED: 25 FT
 - FIRE SEPARATIONS: 1 HOUR AT ELECTRICAL AND CHEMICAL ROOMS

CHEMICALS

CAUSTIC SODA 5,500 GALS

ENERGY CONSERVATION CODE ANALYSIS

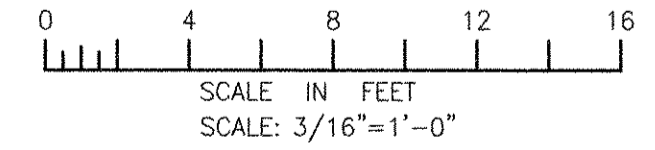
APPLICABLE CODE

2006 INTERNATIONAL ENERGY CONSERVATION CODE

- CLIMATE ZONE: 5
- BUILDING ENVELOPE REQUIREMENTS - OPAQUE ASSEMBLIES
 - ROOFS (ATTIC): R-20_{ci}
 - WALLS, ABOVE GRADE: R-7.6_{ci}
 - WALLS, BELOW GRADE: NR
 - SLAB ON GRADE FLOORS: NR
 - OPAQUE DOORS:
 - SWINGING: U-0.70
 - ROLL-UP OR SLIDING: U-1.45
- BUILDING ENVELOPE REQUIREMENTS - VERTICAL FENESTRATION
 - METAL FRAMED WINDOWS/DOORS: U-0.55

NOTES:

- SEE ELEVATIONS FOR LOUVER LOCATIONS.
- EXTERIOR DIMENSIONS ARE TO BRICK VENEER.



RECORD DRAWING

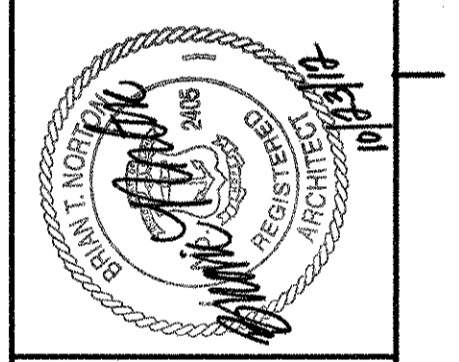
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION	REVISIONS
3	10/19/12	HG	MM	REVISED FOR RECORD DRAWING	
2	4/04/11	MRM	BTN	ELIMINATED PARAPET	
1	3/21/11	MRM	BTN	CHANGED ROOF TO CONC. PLANK	

AECOM USA, INC.
100 WASHINGTON STREET
WALTON, MASSACHUSETTS 01971
PHONE (781) 246-5200



RECORD DRAWINGS

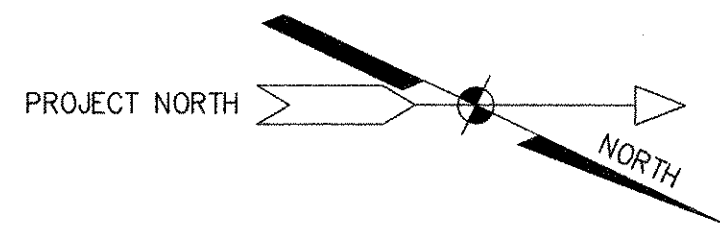


CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

HEADWORKS BUILDING
GRADE LEVEL PLAN
ARCHITECTURAL

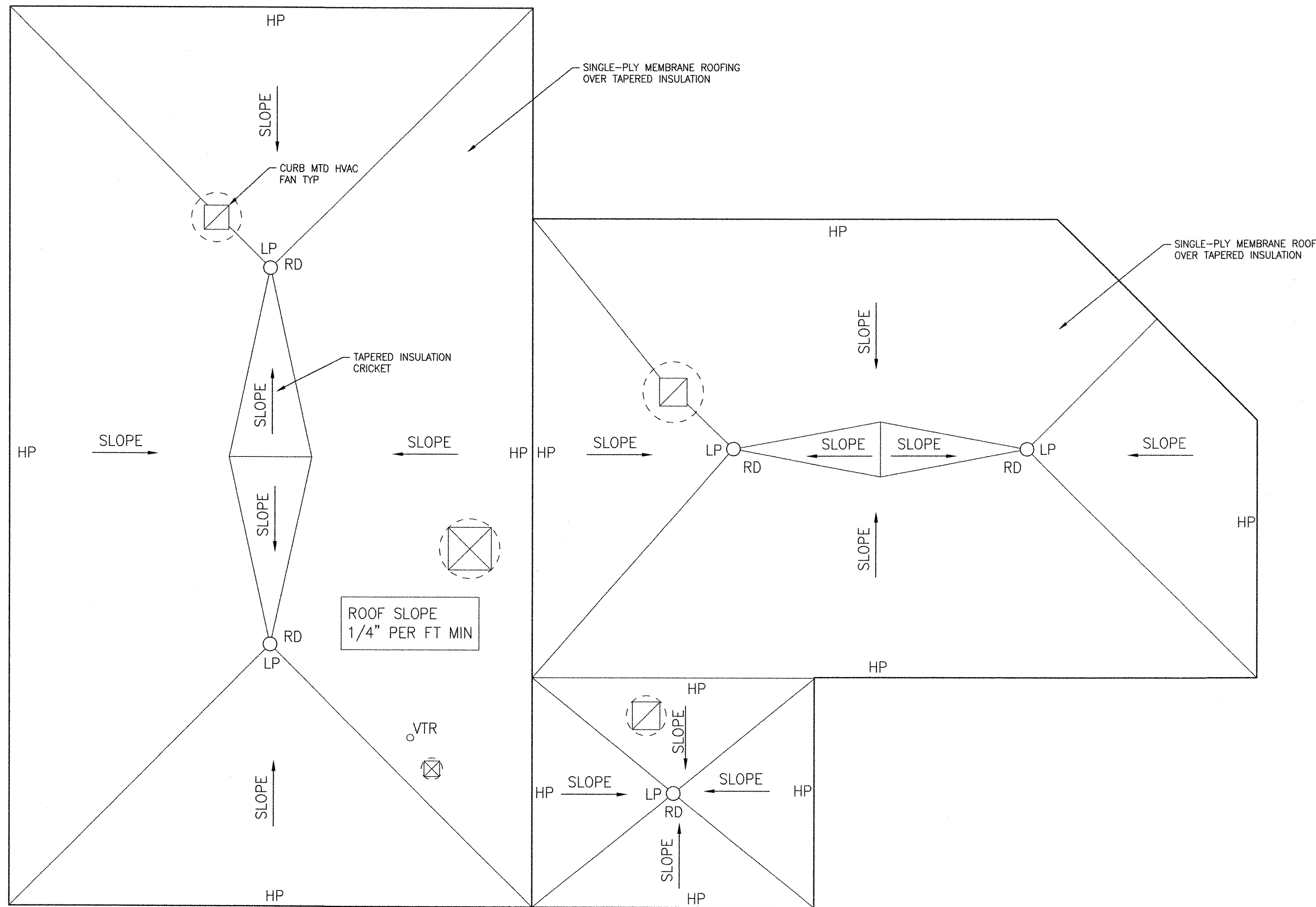
PROJECT NO:	60148648
CAD DWG FILE:	21 A-101
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 A-101

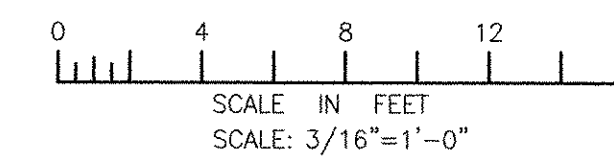


NOTES:

- SEE 99 A-501 FOR TYPICAL LOW-SLOPE ROOF DETAILS.
- PROVIDE 3 1/2" AVERAGE THICKNESS TAPERED INSULATION (R=20 MINIMUM).



HEADWORKS ROOF PLAN
3/16" = 1'-0"



RECORD DRAWING

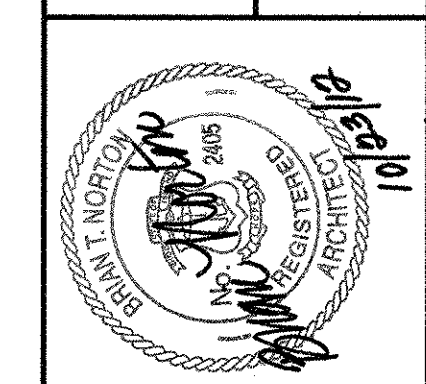
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION	REVISIONS
3	10/19/12	MM	HG	REVISED FOR RECORD DRAWING	
2	4/04/11	MRM	BTN	ELIMINATED PARAPET	
1	3/21/11	MRM	BTN	CHANGED ROOF TO CONC. PLANK	

AECOM USA, INC.
100 BOYLSTON STREET
FLOOR 10
BOSTON, MA 02116
PHONE (781) 246-5300

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

HEADWORKS BUILDING
ROOF PLAN

ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	21 A-102
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 A-102

PATH: \\F:\NAME: P:\60148648 - EAST PROVIDENCE DP-2\DP-2\SHEETS\A\21 A-102.DWG
LAST UPDATE: Monday, October 01, 2012 9:44:42 AM
PLOT DATE: Tuesday, October 23, 2012 10:45:37 AM
ANSI D - 1 - Oct-12

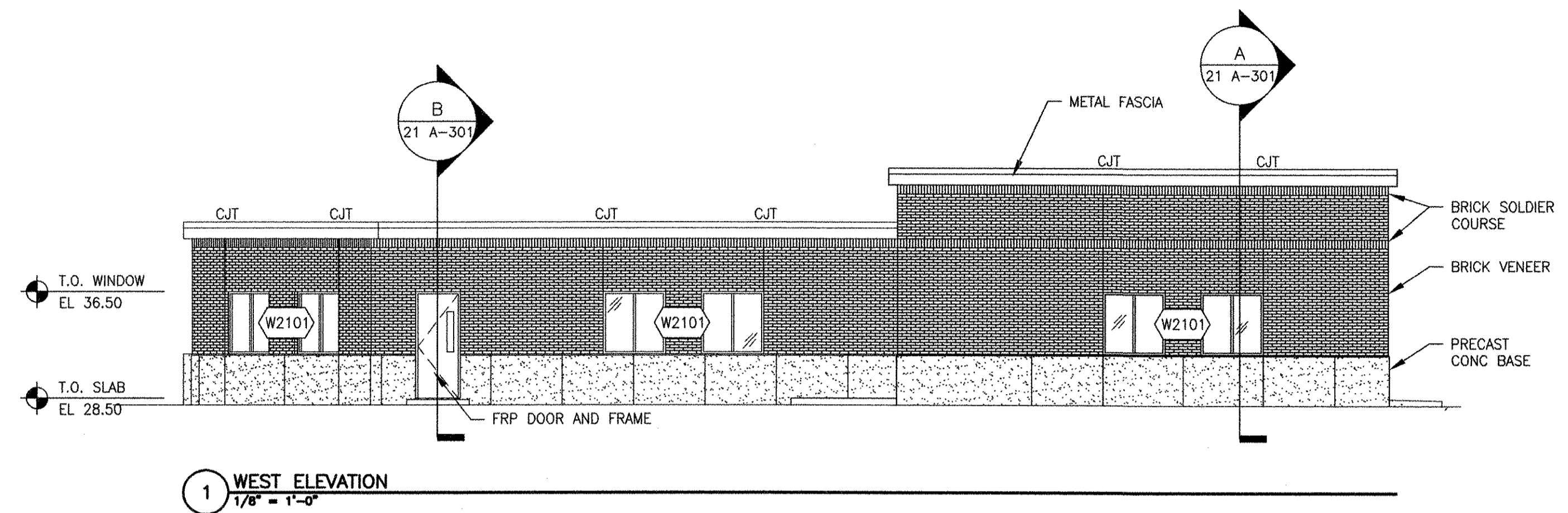
1

2

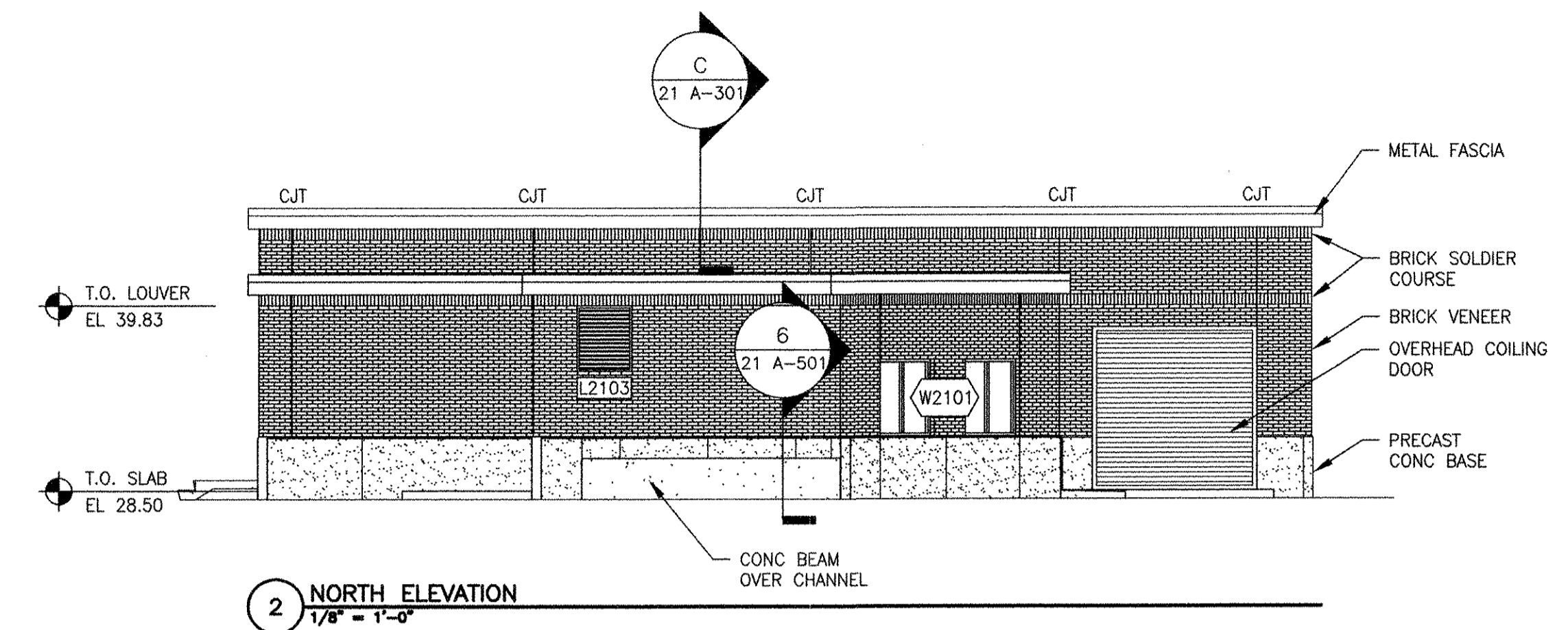
3

4

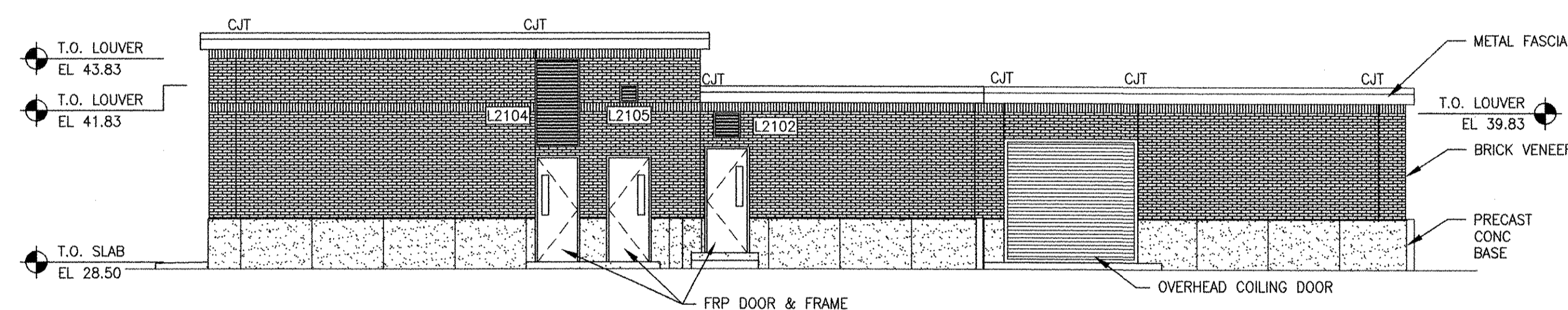
5



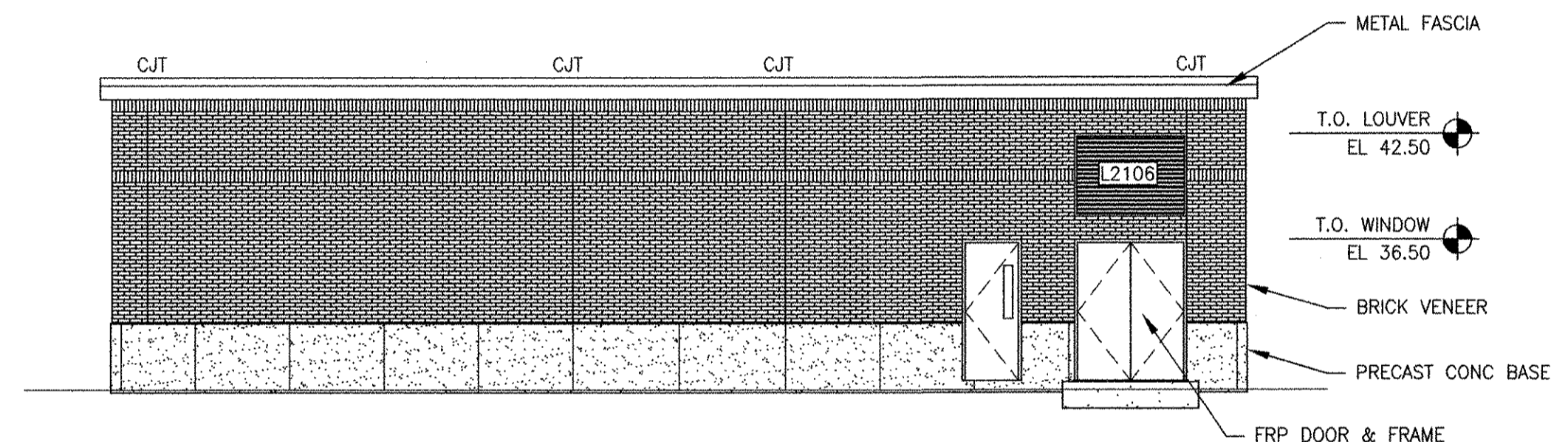
1 WEST ELEVATION
1/8" = 1'-0"



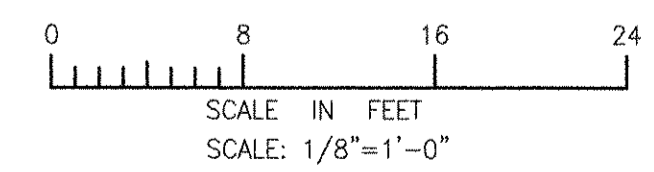
2 NORTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



4 SOUTH ELEVATION
1/8" = 1'-0"



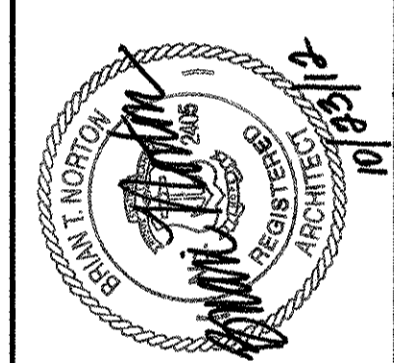
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	HG	MM	REVISED FOR RECORD DRAWING
2	4/04/11	MRM	BTN	ELIMINATED PARAPET
1	3/21/11	MRM	BTN	CHANGED ROOF TO CONC. PLANK

AECOM
 AECOM USA, INC.
 100 WATER STREET
 SUITE 2000
 PROVIDENCE, RI 02903
 PHONE (781) 246-5200

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING
EXTERIOR ELEVATIONS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	21 A-201
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 A-201

ANSI D - 9 - Oct - 12
 PATH: F:\ENRME_P\60148648 - EAST PROVIDENCE DP-2\DRP-2\SHEETS\A\21 A-201.DWG
 LAST UPDATE: Tuesday, October 09, 2012 10:02:12 AM
 PLOT DATE: Tuesday, October 23, 2012 10:45:42 AM

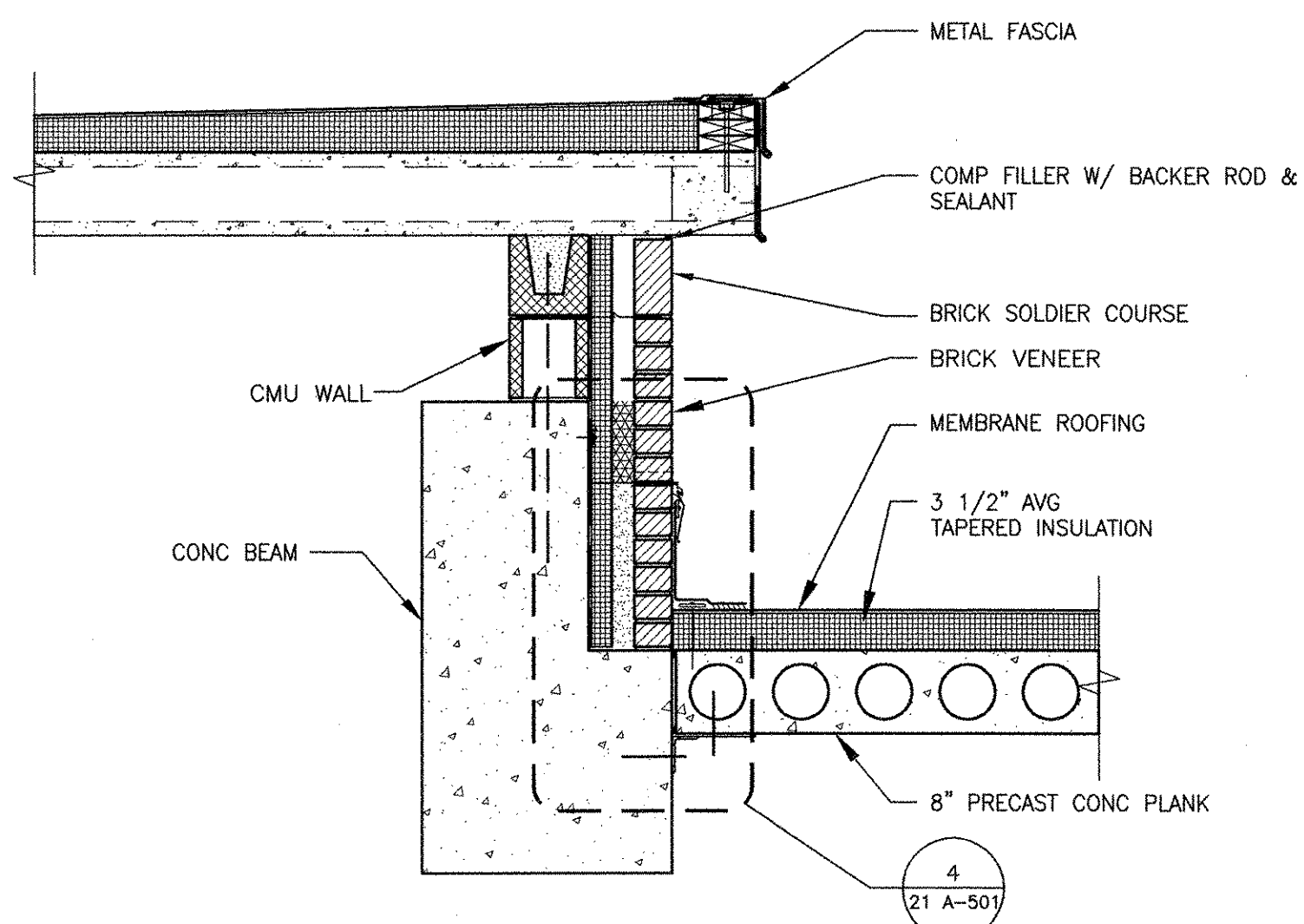
1

2

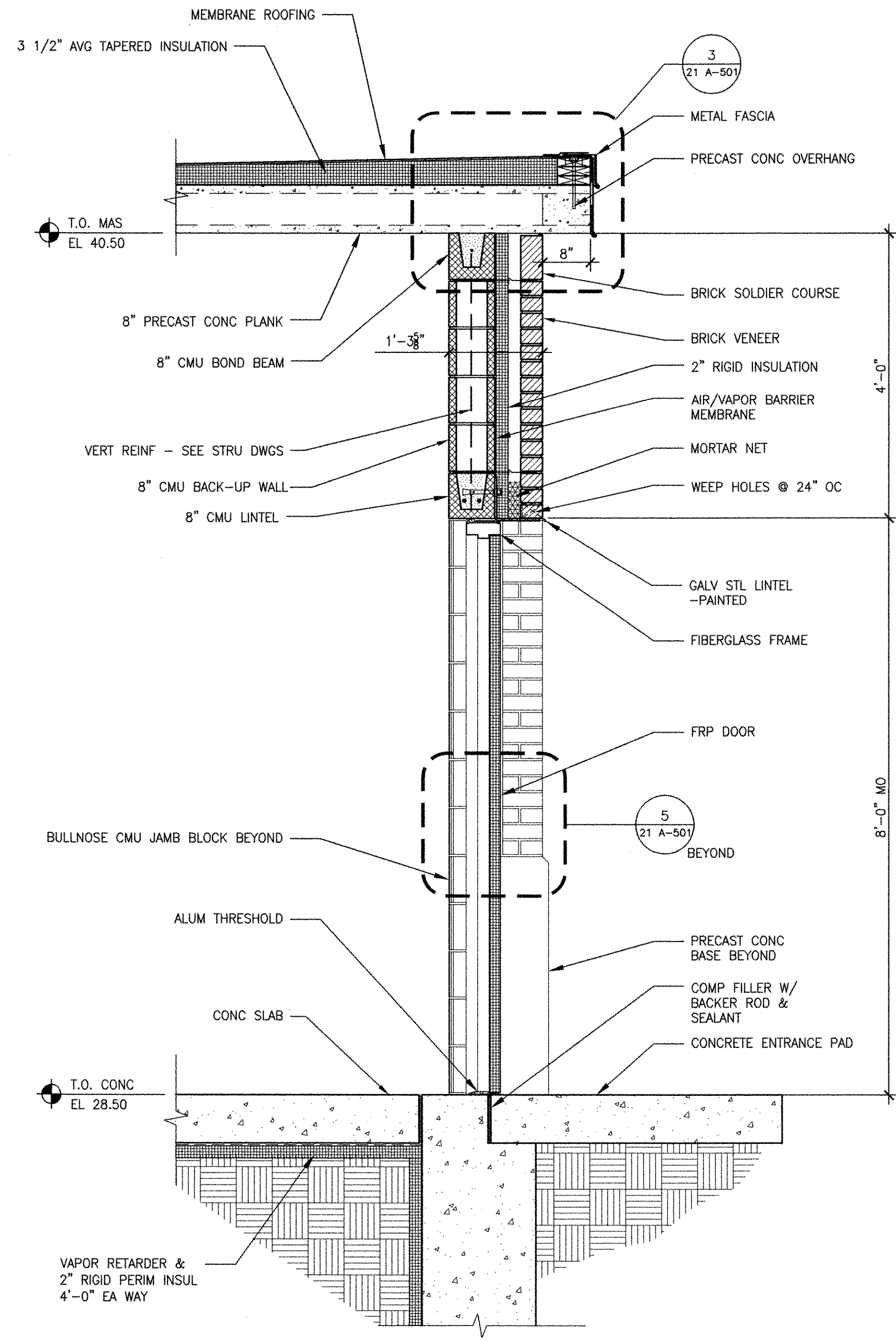
3

4

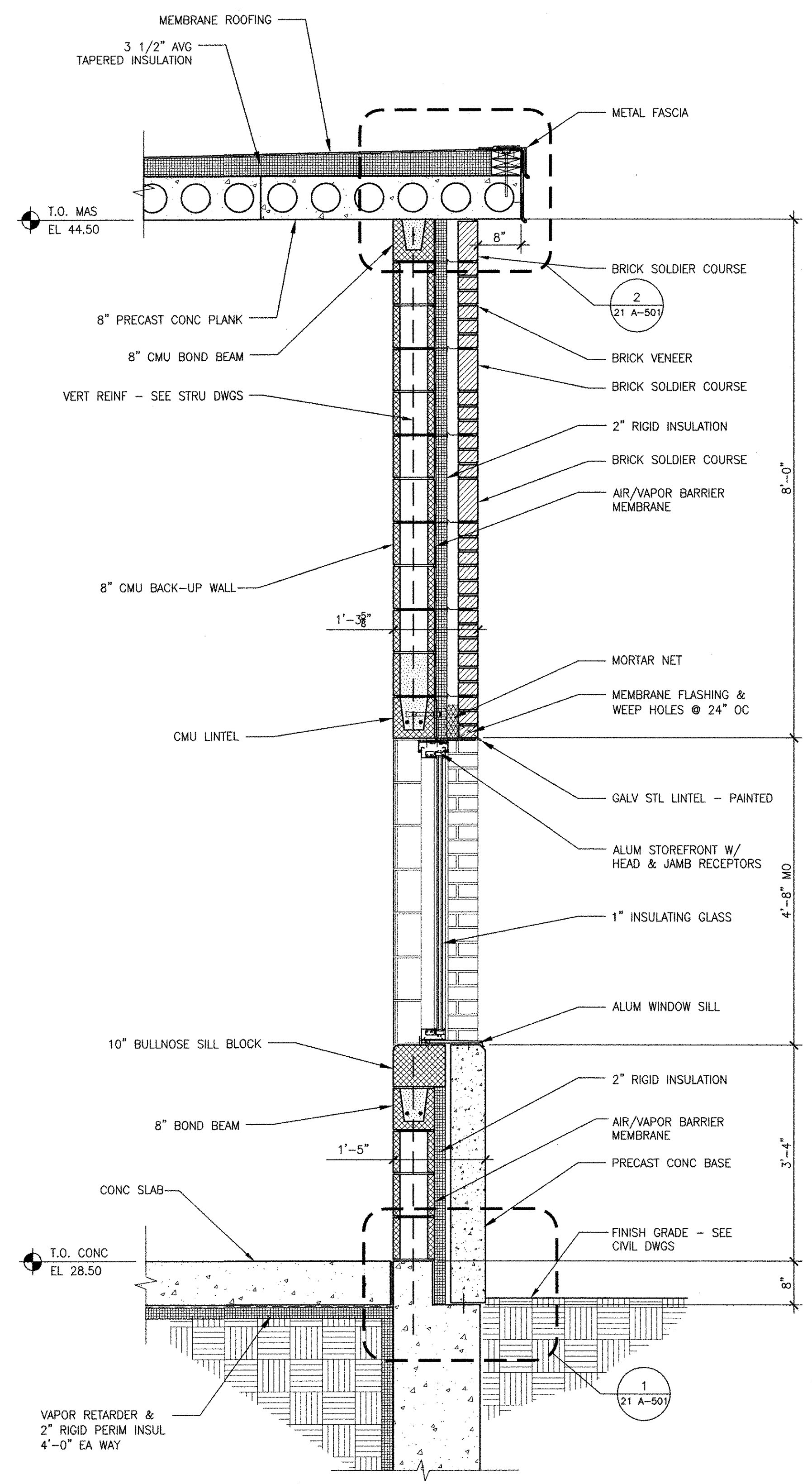
5



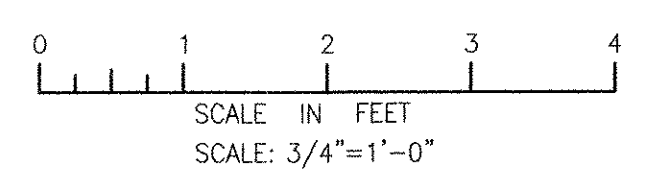
C WALL SECTION C
 21 A-201 3/4" = 1'-0"



B WALL SECTION B
 21 A-201 3/4" = 1'-0"



A WALL SECTION A
 21 A-201 3/4" = 1'-0"



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

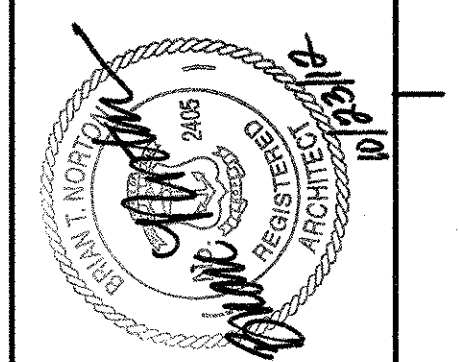
MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	HG	MM	REVISED FOR RECORD DRAWING
2	4/04/11	MRM	BTN	ELIMINATED PARAPET
1	3/21/11	MRM	BTN	CHANGED ROOF TO CONC. PLANK

AECOM USA, INC.
 100 WASHINGTON STREET
 WAREHOUSES, MA 01880
 PHONE (781) 246-5200

AECOM

REGISTERED ARCHITECT
 STATE OF MASSACHUSETTS
 REG. NO. 12515

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

**HEADWORKS BUILDING
 WALL SECTIONS**

ARCHITECTURAL

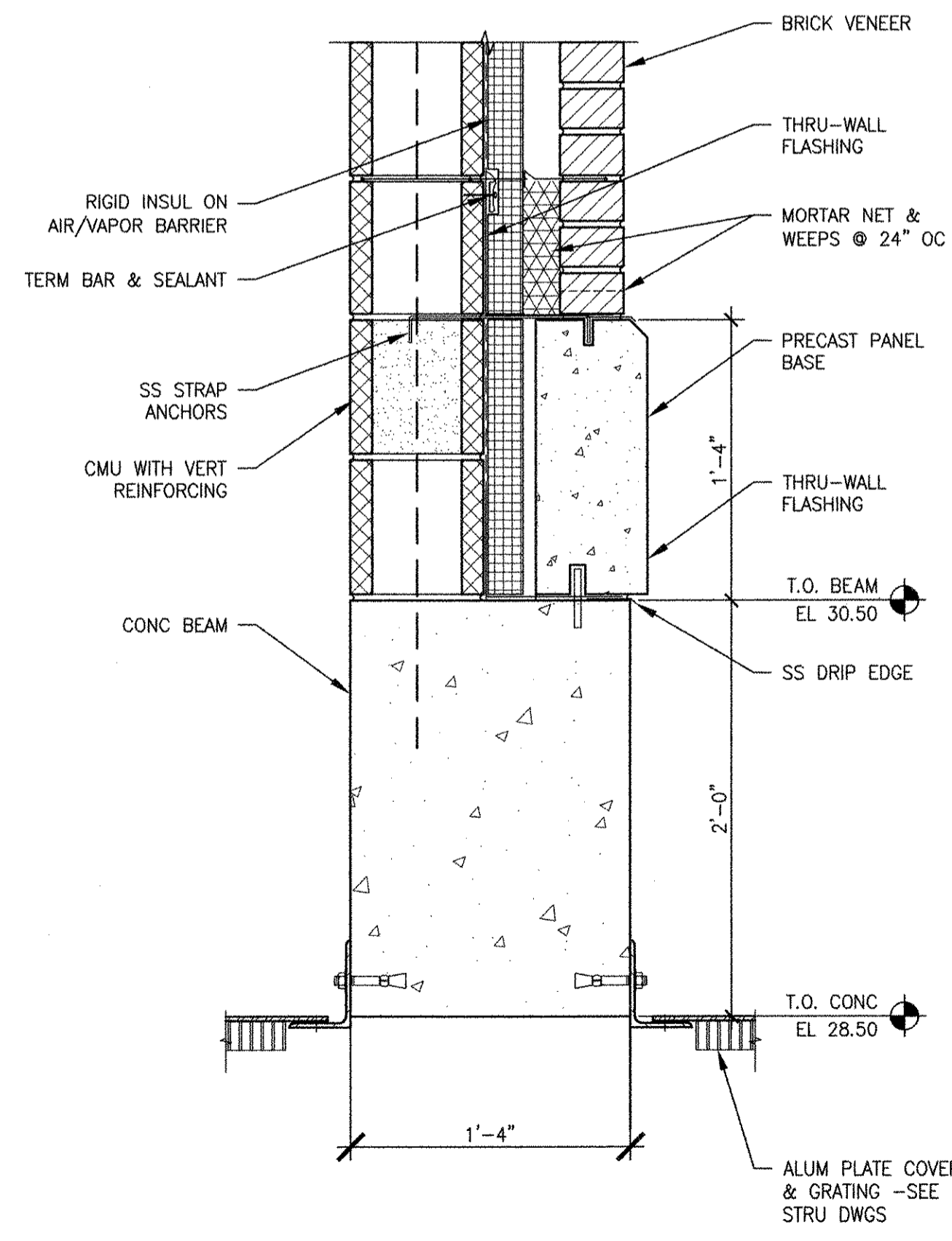
PROJECT NO:	60148648
CAD DWG FILE:	21 A-301
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 A-301

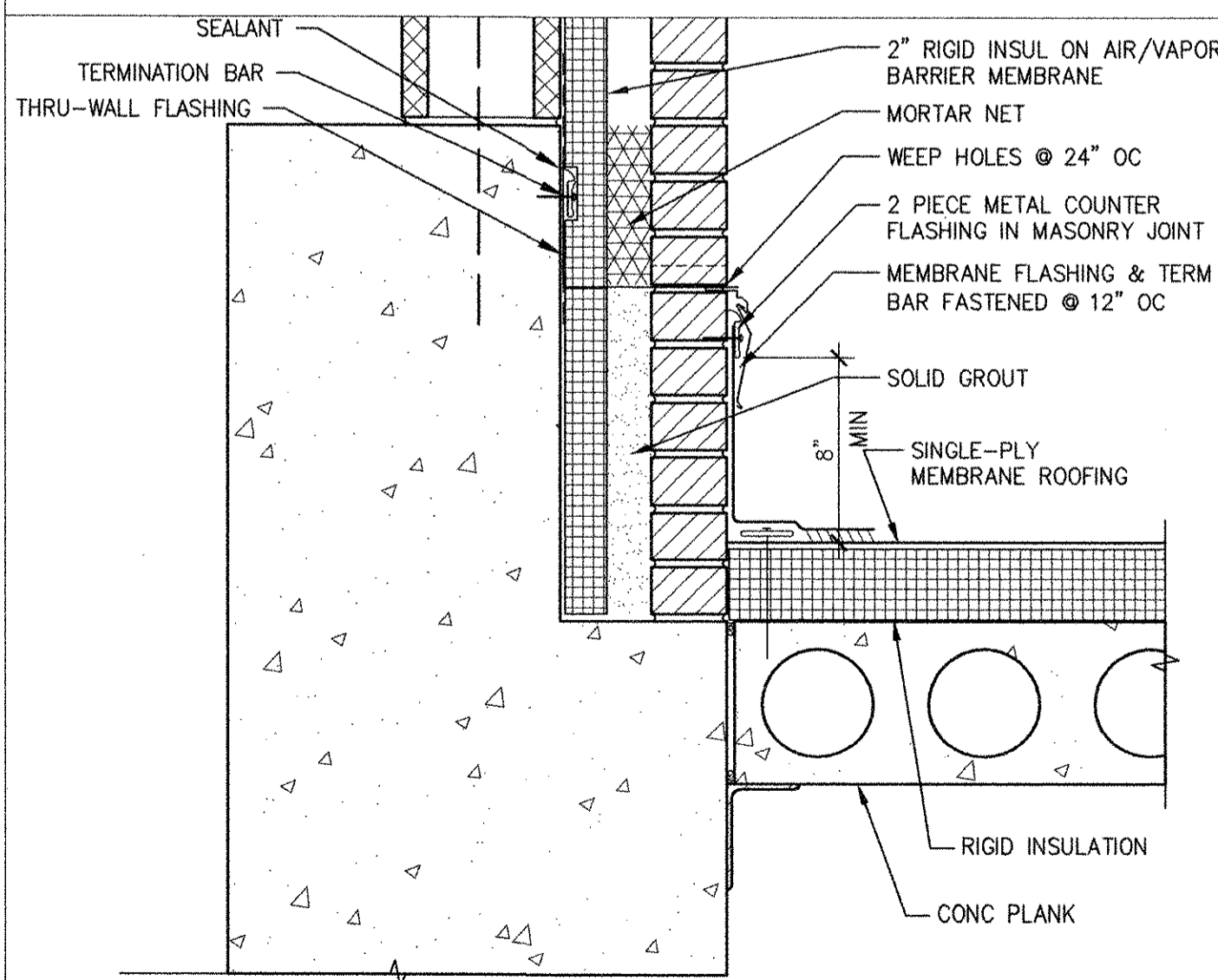
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BOD)\DP-2\SHEETS\A 21 A-301.DWG
 LAST UPDATE: Monday, October 01, 2012 9:52:37 AM
 PLOT DATE: Tuesday, October 23, 2012 10:45:46 AM
 ANSI D - 1-10-12

PATH: \\F:\NAME: P:\60148648 - EAST PROVIDENCE DSD\DP-A\SHEETS\A21 A-501.DWG
 LAST UPDATE: Tuesday, October 08, 2012 10:03:05 AM
 PLOT DATE: Tuesday, October 23, 2012 10:45:52 AM

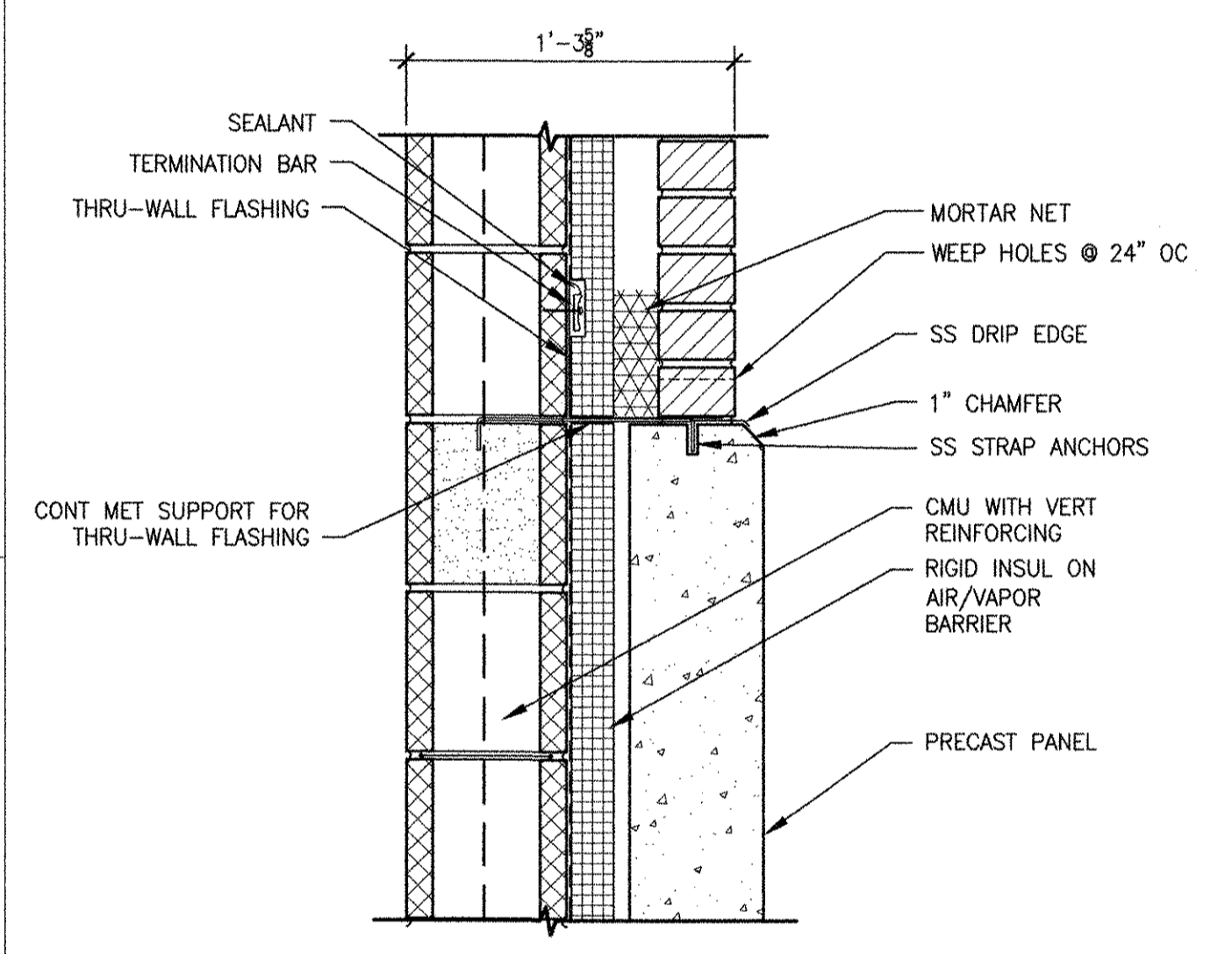
ANSI D - 9-Oct-12



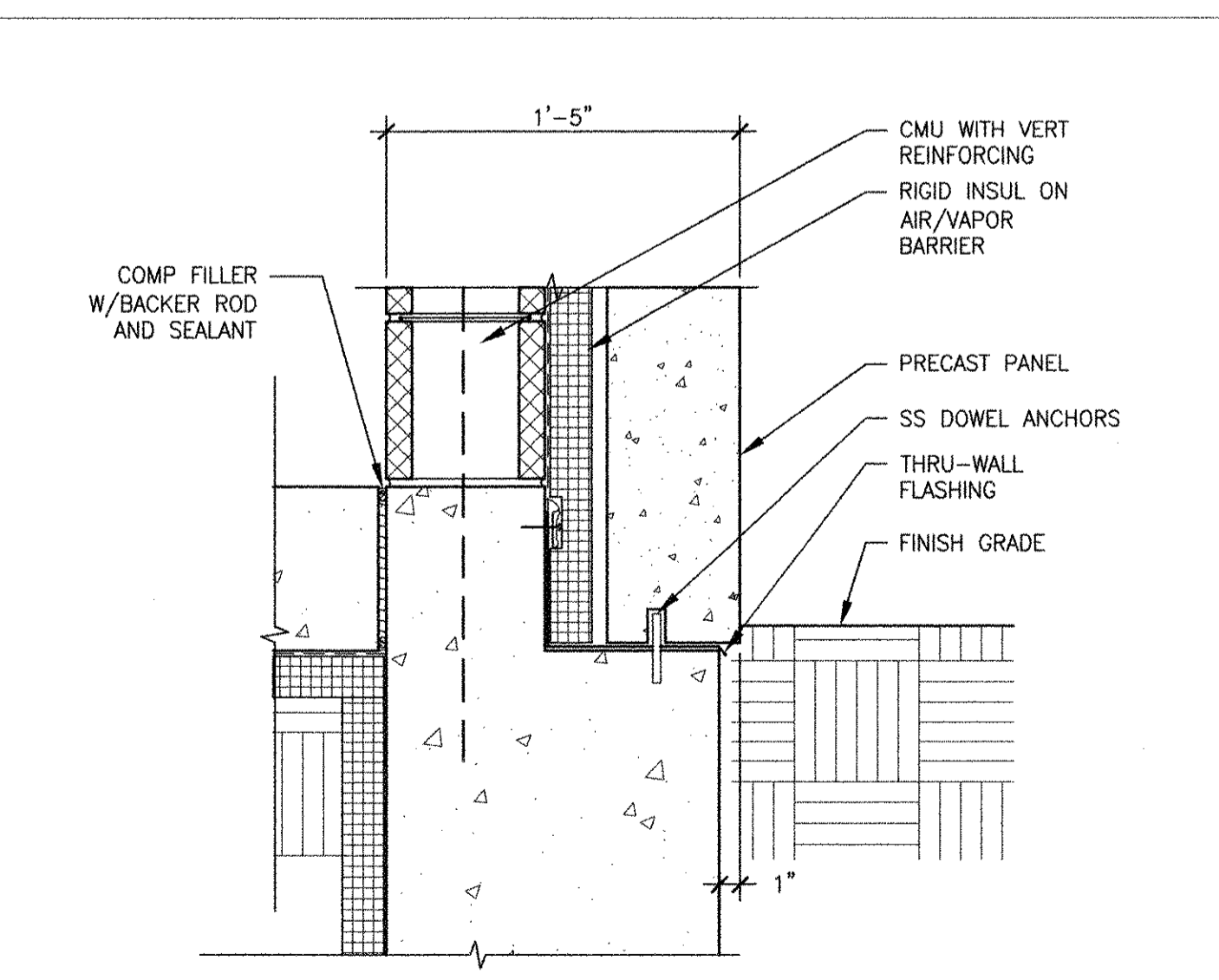
6 DETAIL 6
 21 A-20/1 1/2" = 1'-0"



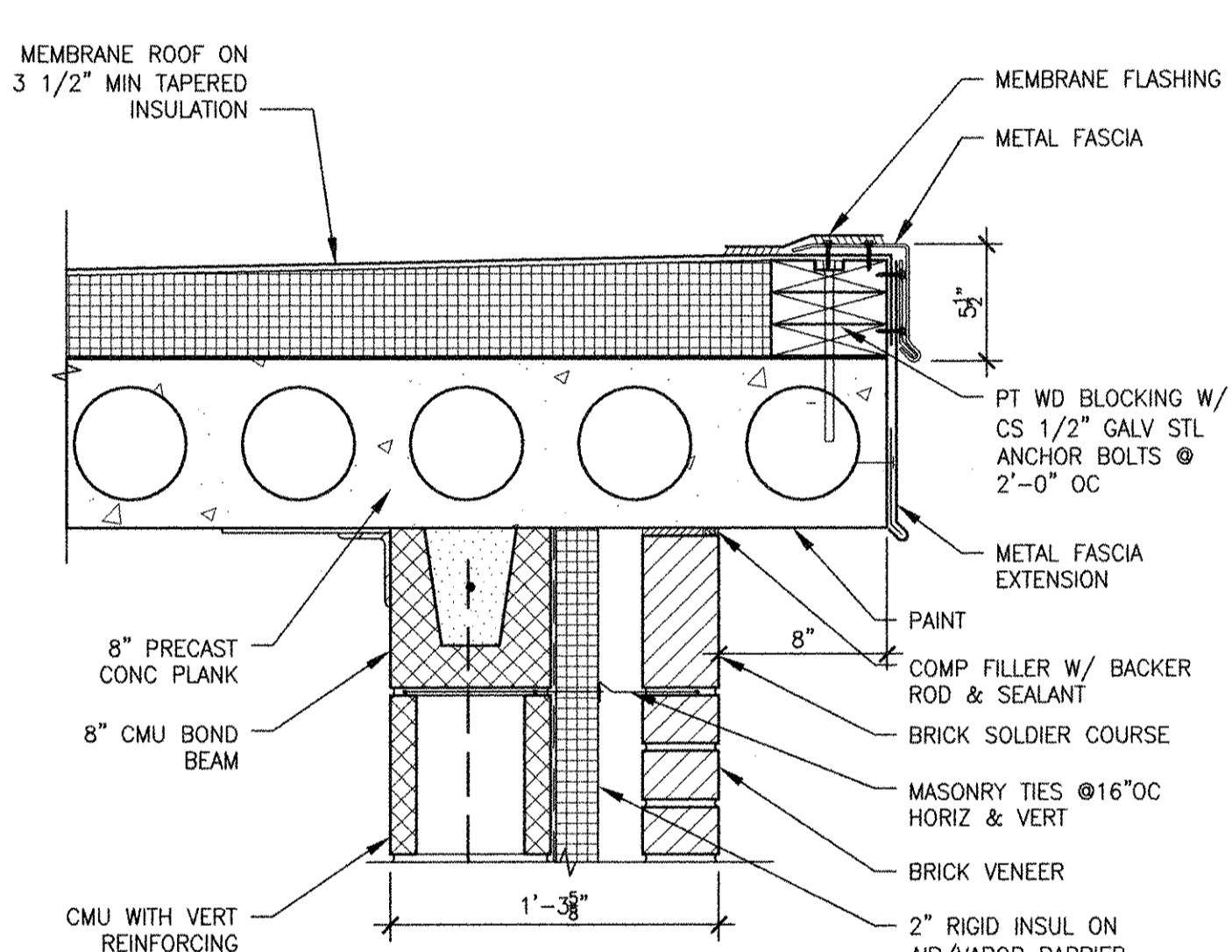
4 DETAIL 4
 21 A-30/1 1/2" = 1'-0"



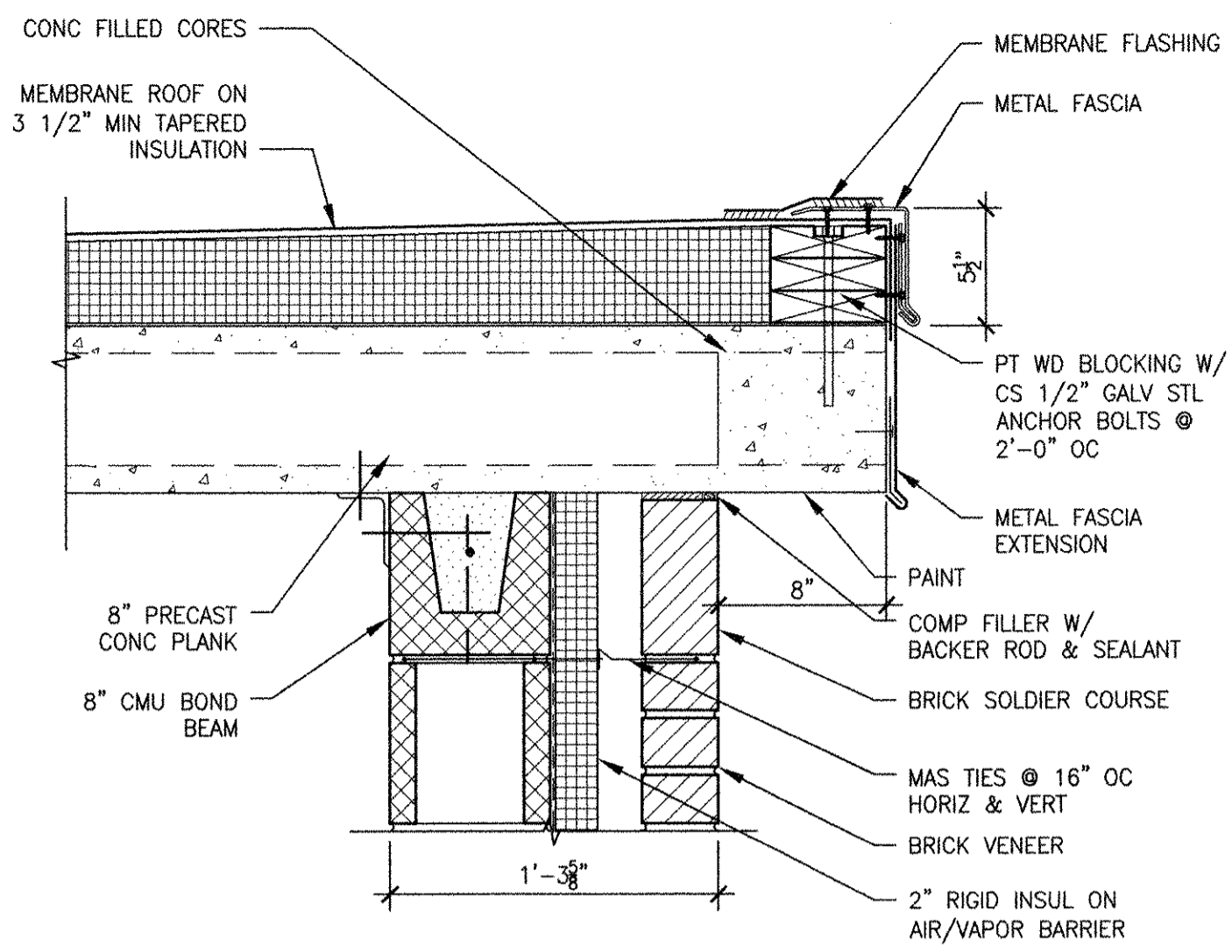
5 DETAIL 5
 21 A-50/1 1/2" = 1'-0"



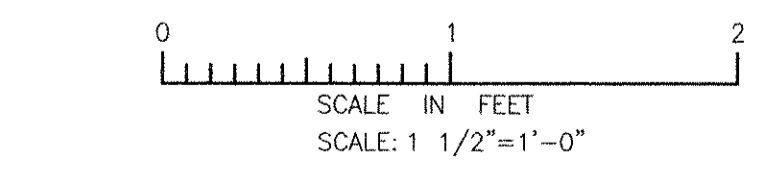
1 DETAIL 1
 21 A-30/1 1/2" = 1'-0"



2 DETAIL 2
 21 A-30/1 1/2" = 1'-0"



3 DETAIL 3
 21 A-30/1 1/2" = 1'-0"



RECORD DRAWING

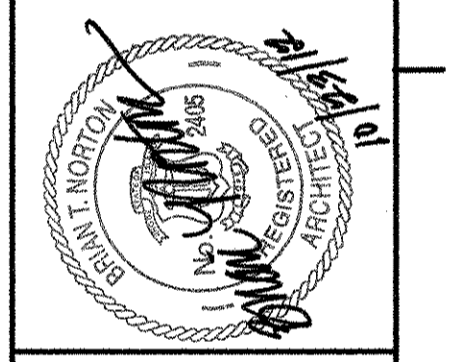
NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING
 DETAILS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	21 A-501
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	K. COLLINS
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

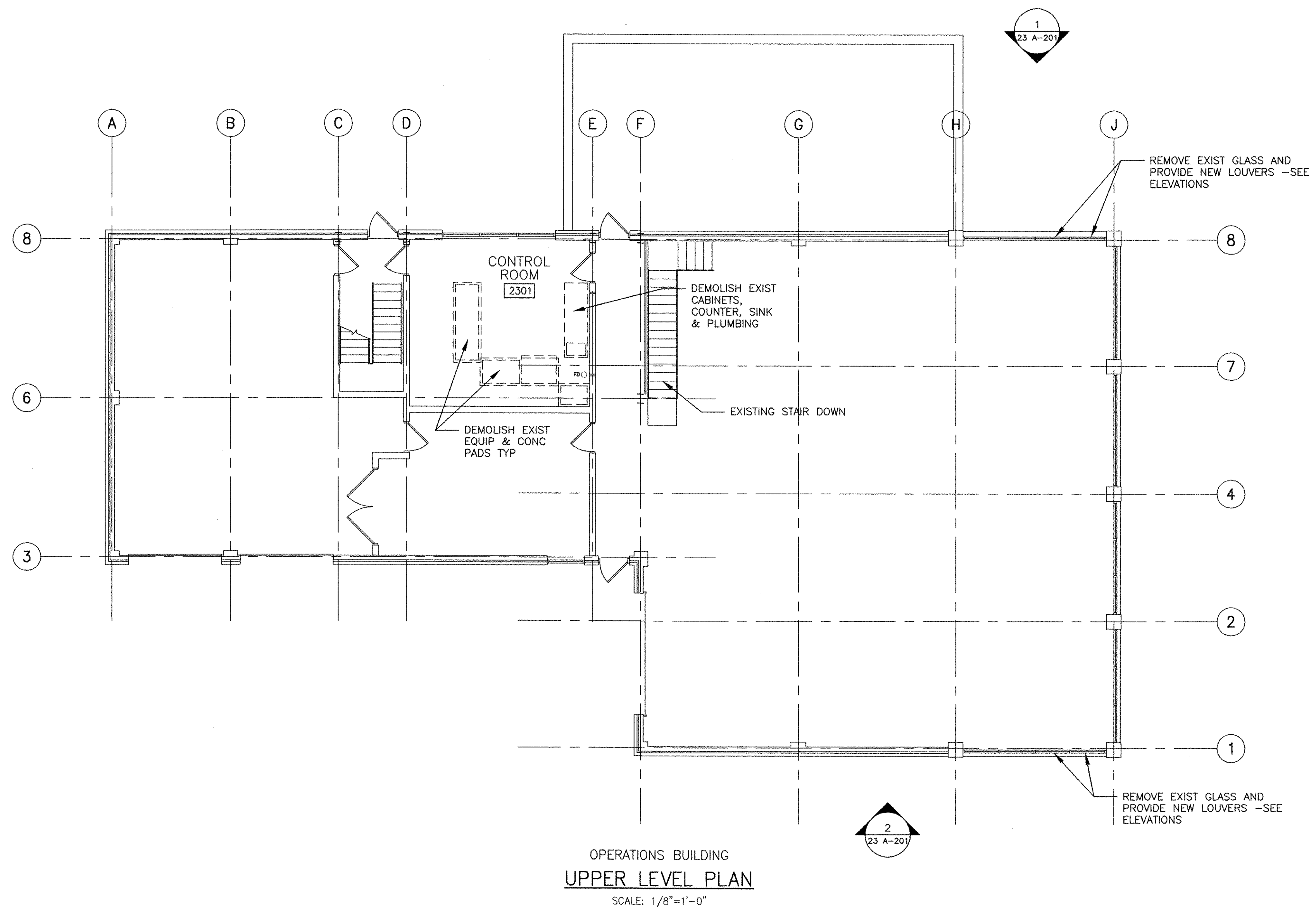
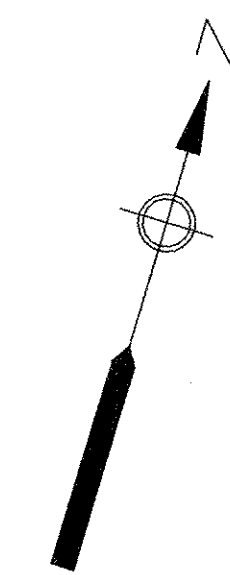
21 A-501

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WATER STREET
 WASHINGTON, DC 20004
 PHONE (781) 246-5500

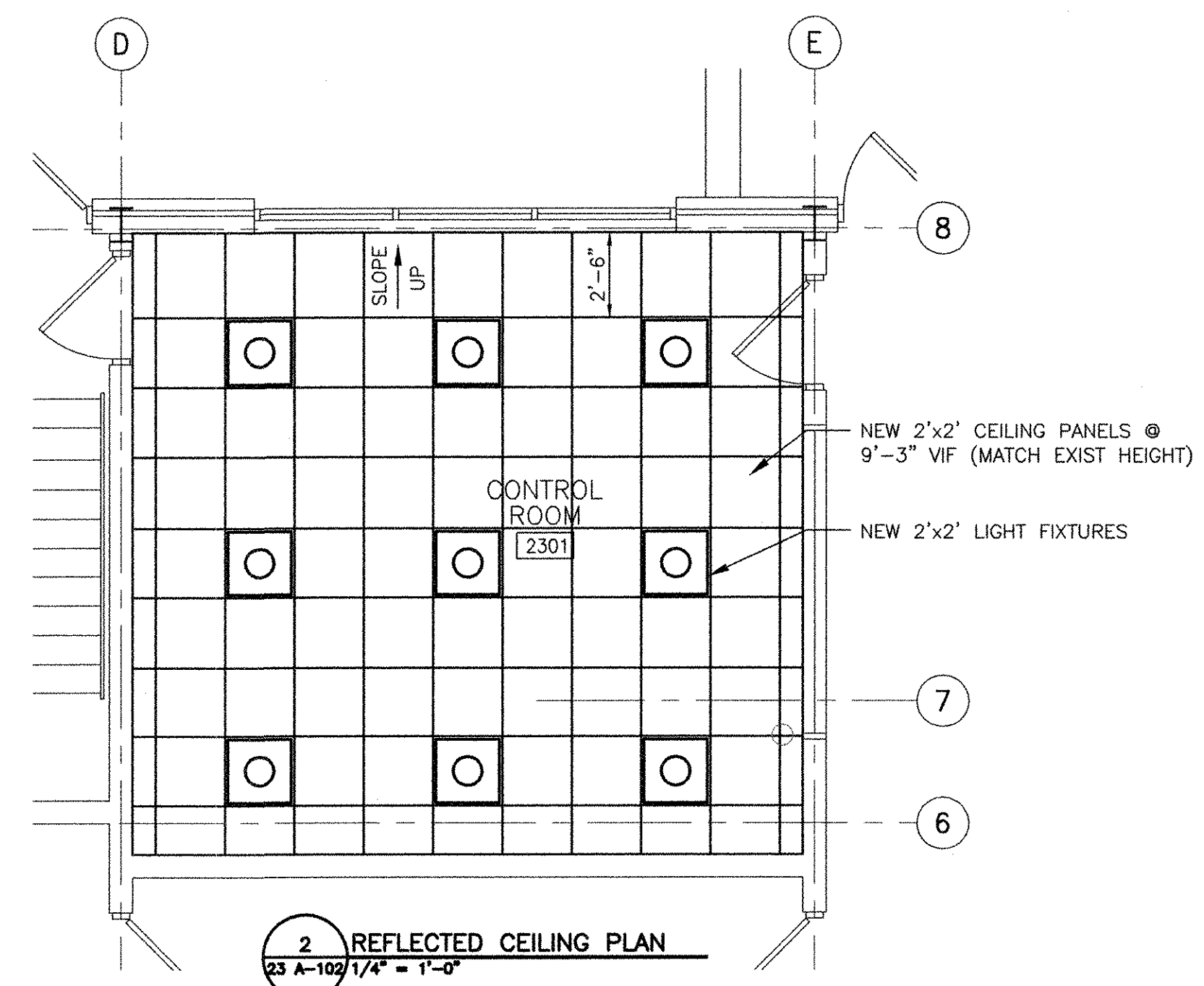


MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	HG	MM	REVISED FOR RECORD DRAWING
2	4/04/11	MRM	BTN	ELIMINATED PARAPET
1	3/21/11	MRM	BTN	CHANGED ROOF TO CONC. PLANK

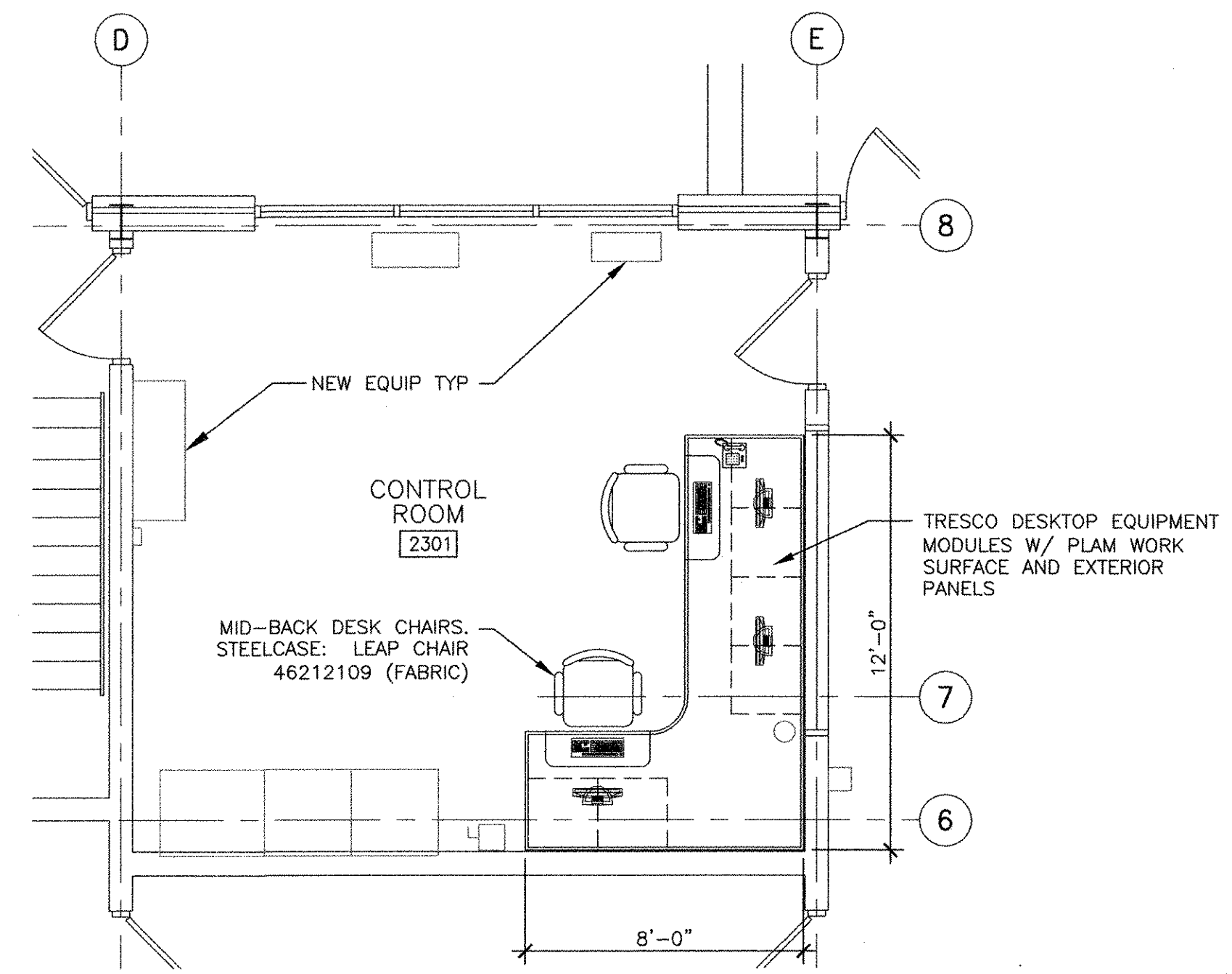
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\A\23 A-102.DWG
 LAST UPDATE: Monday, October 01, 2012 2:09:21 PM
 PLOT DATE: Tuesday, October 23, 2012 10:45:58 AM
 ANSI D - 1-Oct-12



OPERATIONS BUILDING
 UPPER LEVEL PLAN
 SCALE: 1/8"=1'-0"



2 REFLECTED CEILING PLAN
 23 A-102 1/4" = 1'-0"



1 ENLARGED CONTROL ROOM PLAN
 23 A-102 1/4" = 1'-0"

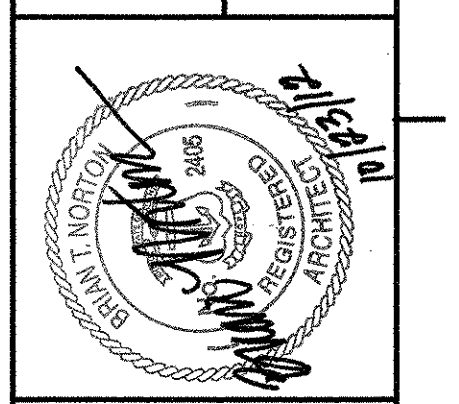
CONTROL ROOM NOTES:

1. DEMOLISH EXISTING EQUIPMENT, CONCRETE HOUSE KEEPING PADS AND VCT IN CONTROL ROOM. PATCH CONCRETE FLOORS TO PROVIDE A SMOOTH AND LEVEL SURFACE FOR NEW VCT FLOORING.
2. REMOVE EXISTING CEILING TILES AND SUSPENSION SYSTEM.
3. PROVIDE NEW VCT AND CEILING SYSTEM. SEE PLANS 1 AND 2 THIS SHEET.
4. PATCH, PREP AND PAINT CMU WALLS.
5. PREP AND PAINT EXISTING DOORS AND FRAMES.
6. RE-CAULK PERIMETER OF EXTERIOR WINDOW.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MM	MM	REVISED FOR RECORD DRAWING

RECORD DRAWINGS

AECOM USA, INC.
 100 WASHINGTON DRIVE
 FORT BELLEVILLE, ILLINOIS
 PHONE (781) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
 OPERATIONS BUILDING
 PLAN AT EL. 18.0
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	23 A-102
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 A-102

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

1

2

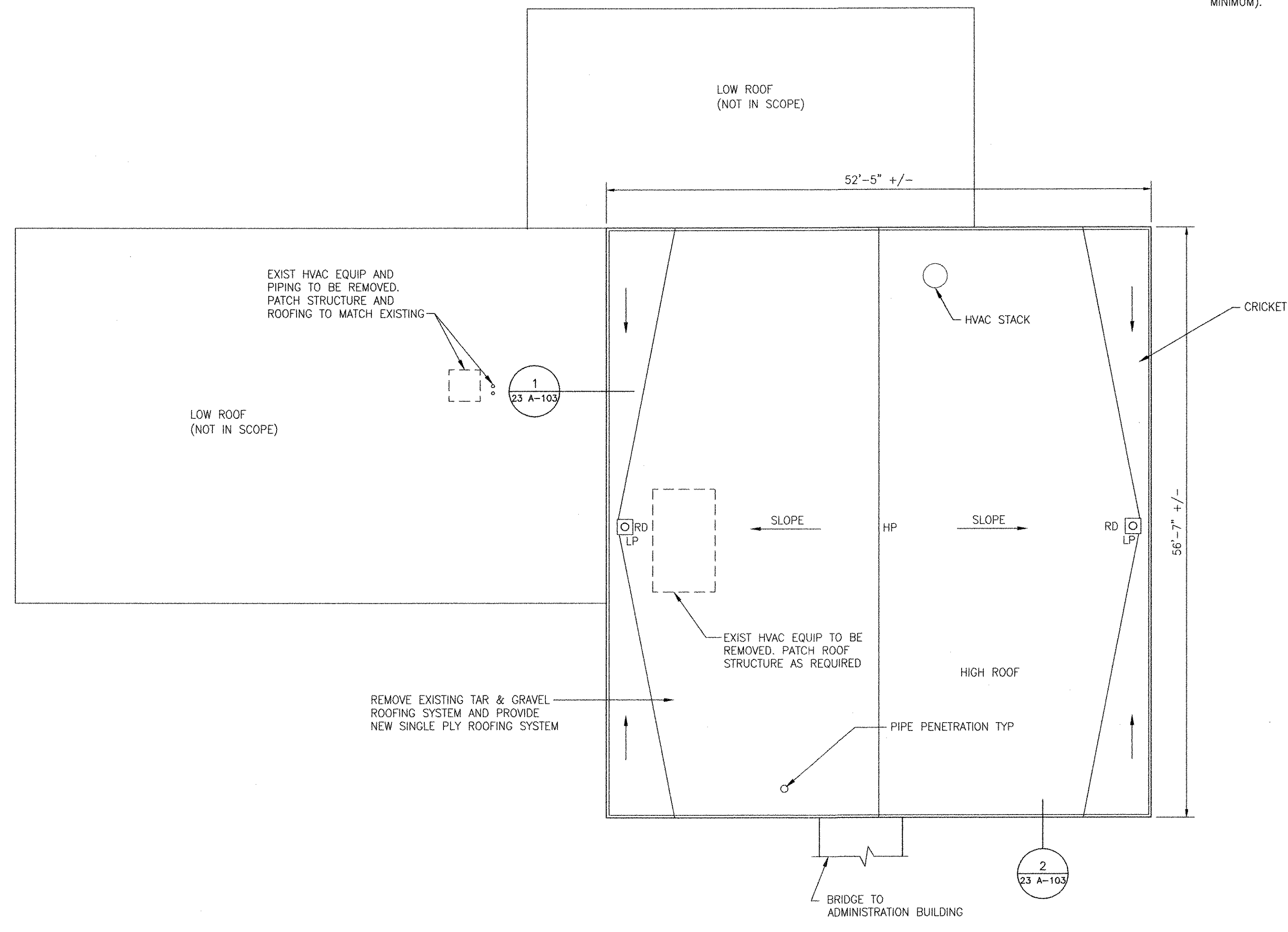
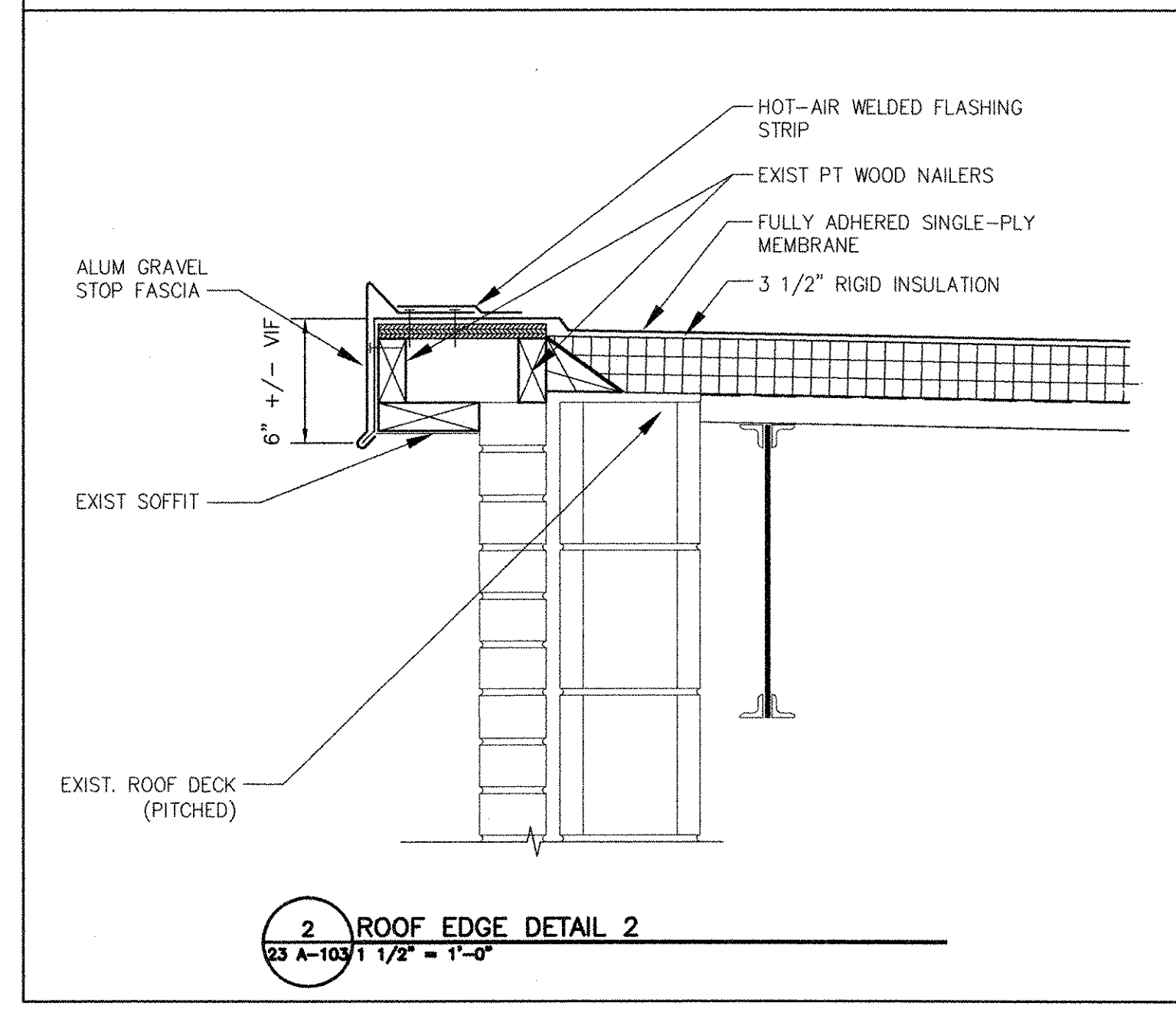
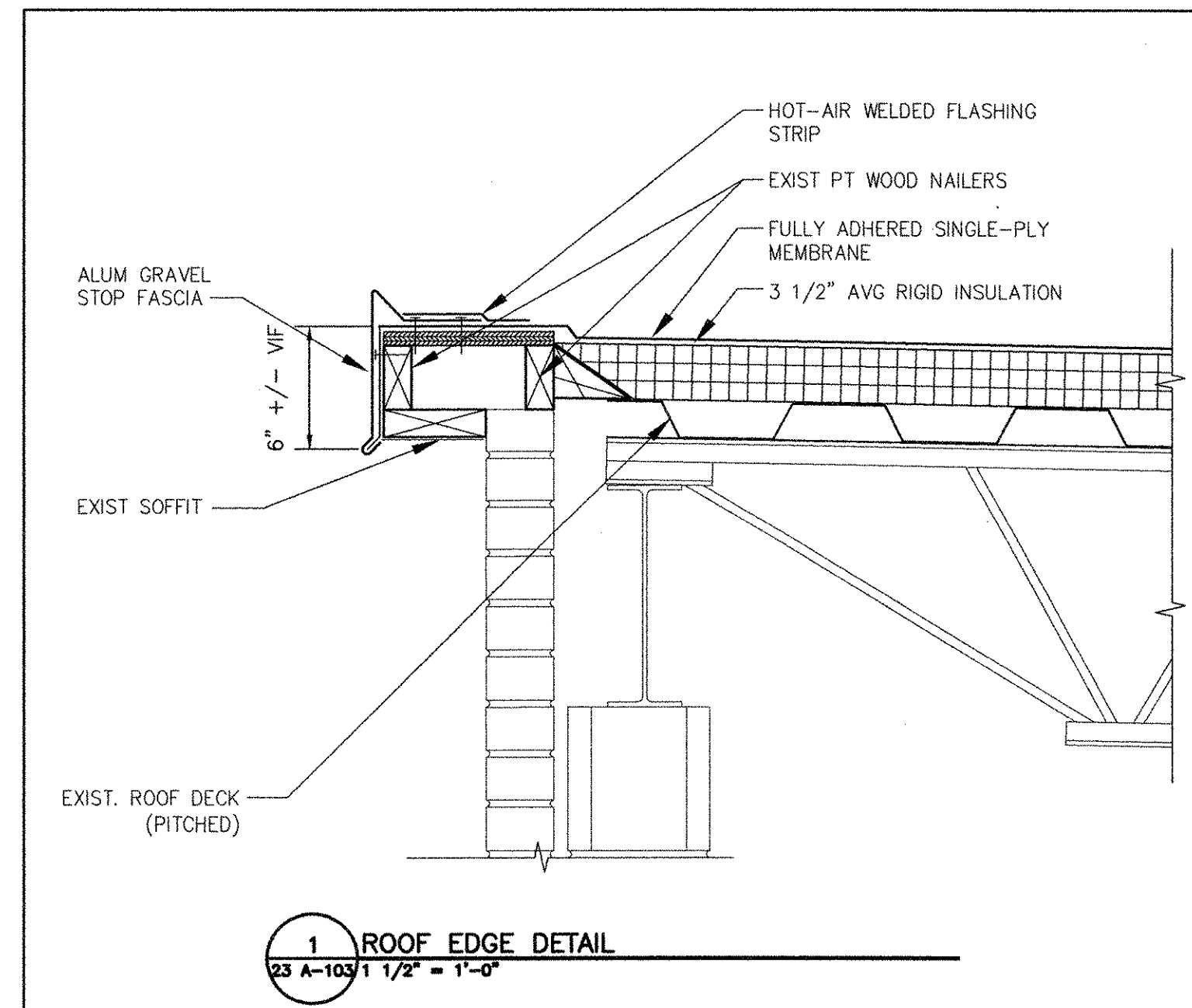
3

4

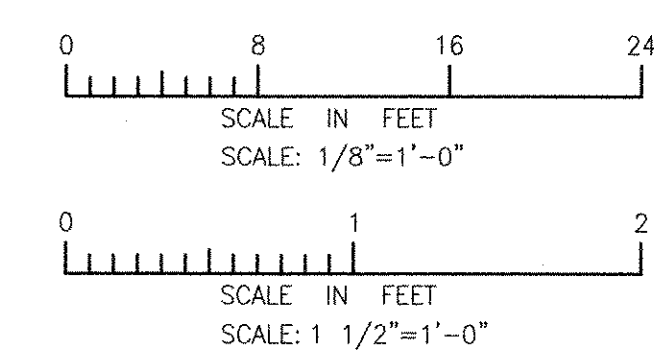
5

NOTES:

- 1. SEE 99 A-501 FOR TYPICAL LOW-SLOPE ROOF DETAILS.
- 2. EXISTING ROOF STRUCTURE IS PITCHED. PROVIDE 3 1/2" AVERAGE THICKNESS RIGID INSULATION (R-20 MINIMUM).



OPERATIONS BUILDING
ROOF PLAN
SCALE: 1/8"=1'-0"



RECORD DRAWING

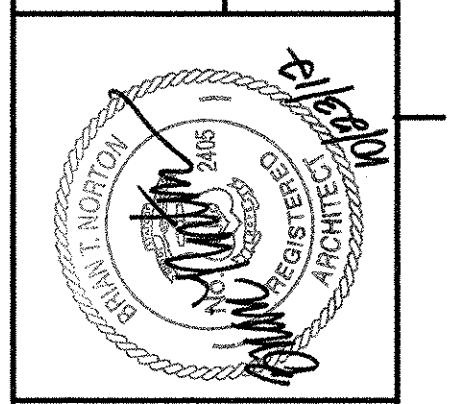
NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM USA, INC.
700 BROADWAY DRIVE
FLOOR 2000
NEW YORK, NY 10004
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

**OPERATIONS BUILDING
ROOF PLAN & DETAILS**

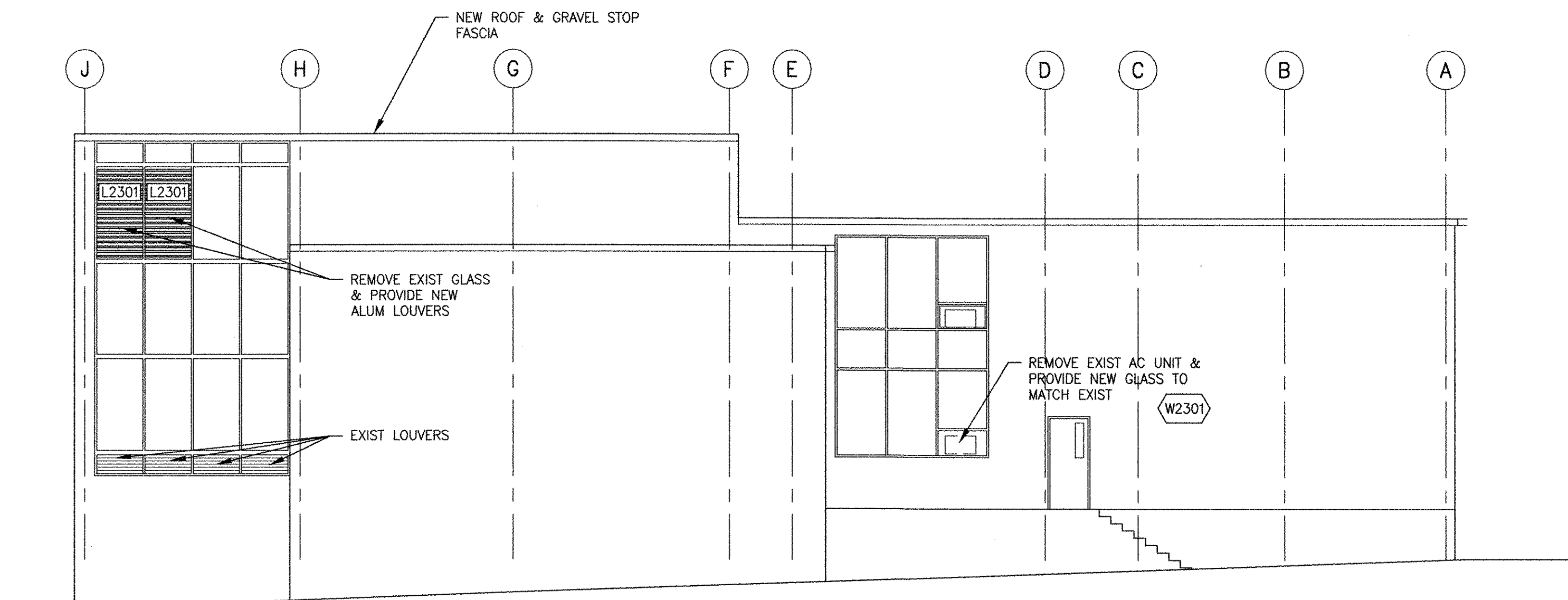
ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	23 A-103
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ. CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

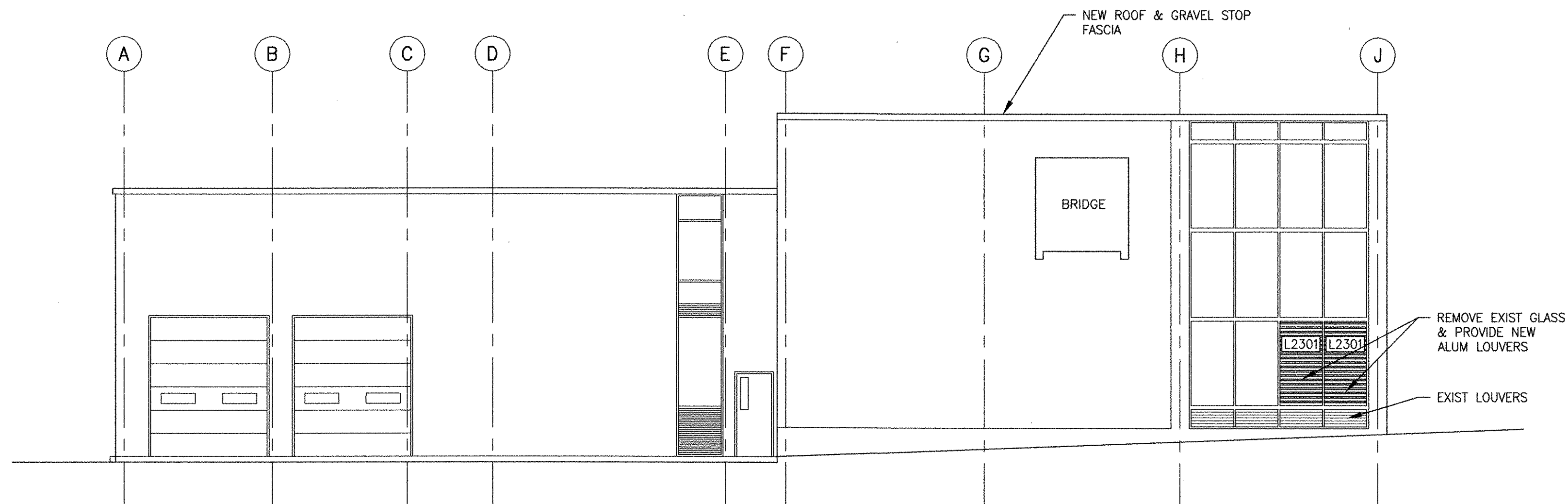
23 A-103

PATH: F:\60148648 - EAST PROVIDENCE (DP-2)\SHEETS\A\23 A-103.DWG
LAST UPDATE: Monday, October 01, 2012 9:58:59 AM
PLOT DATE: Tuesday, October 23, 2012 10:46:02 AM
ANSI D - 1-10-12

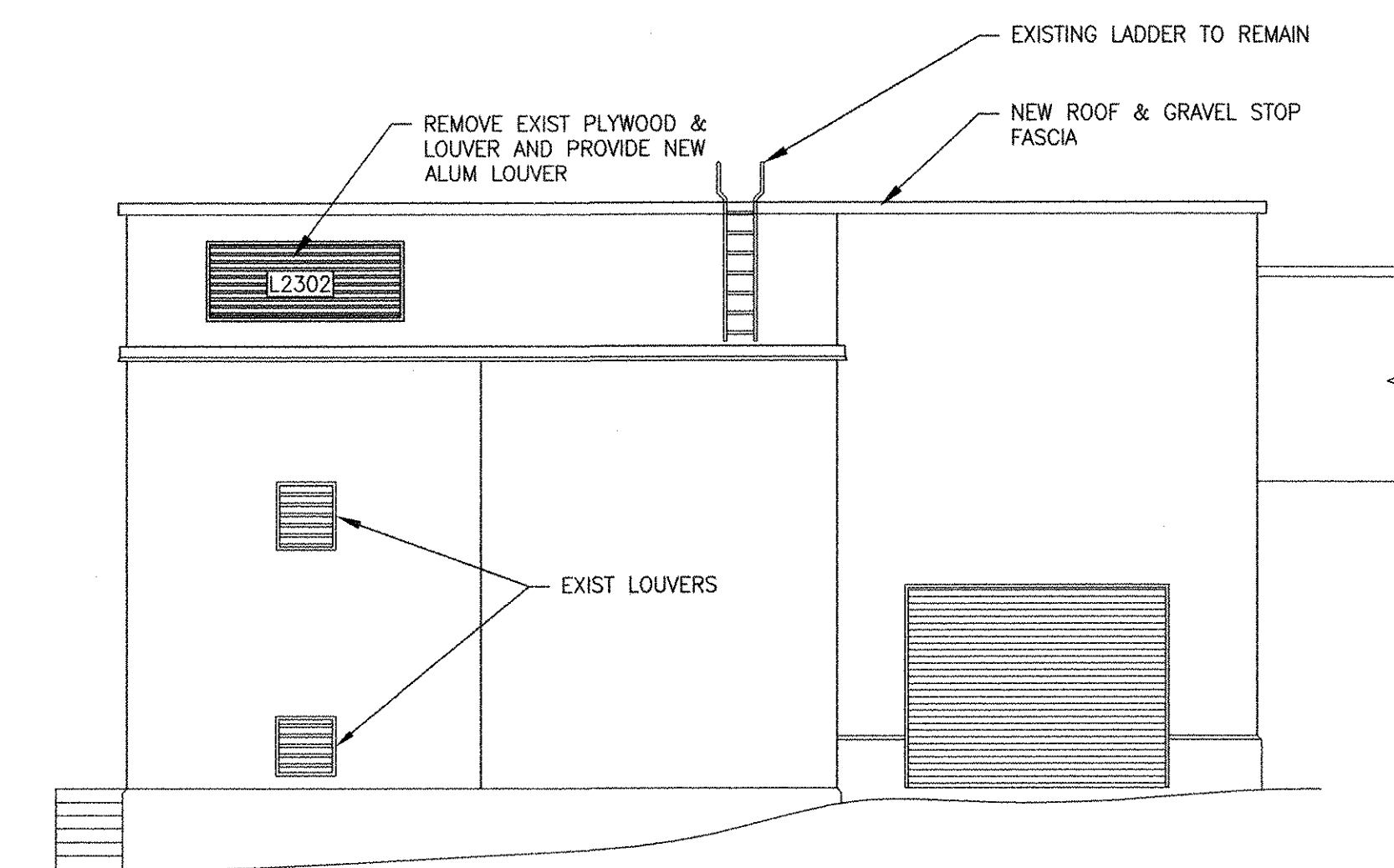
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEB\DP-2\SHEETS\A\23 A-201.DWG
 LAST UPDATE: Monday, October 01, 2012 9:55:36 AM
 PLOT DATE: Tuesday, October 23, 2012 10:46:05 AM
 ANSI D - 1-10-12



1 NORTH ELEVATION
 1/2 A-102 1/8" = 1'-0"



2 SOUTH ELEVATION
 2/3 A-102 1/8" = 1'-0"



3 WEST ELEVATION
 2/3 A-102 1/8" = 1'-0"

RECORD DRAWING

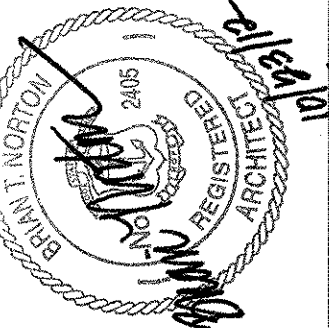
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
	DATE: 10/19/12
	MADE BY: HG
	CHECKED BY: MM

AECOM USA, INC.
 LEWIS AND CLARK
 WAREHOUSING CENTER
 WASHINGTON, DC 20004
 PHONE (781) 246-5200



RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

OPERATIONS BUILDING
 EXTERIOR ELEVATIONS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	23 A-201
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	K. COLLINS
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 A-201

1

2

3

4

5

D

C

B

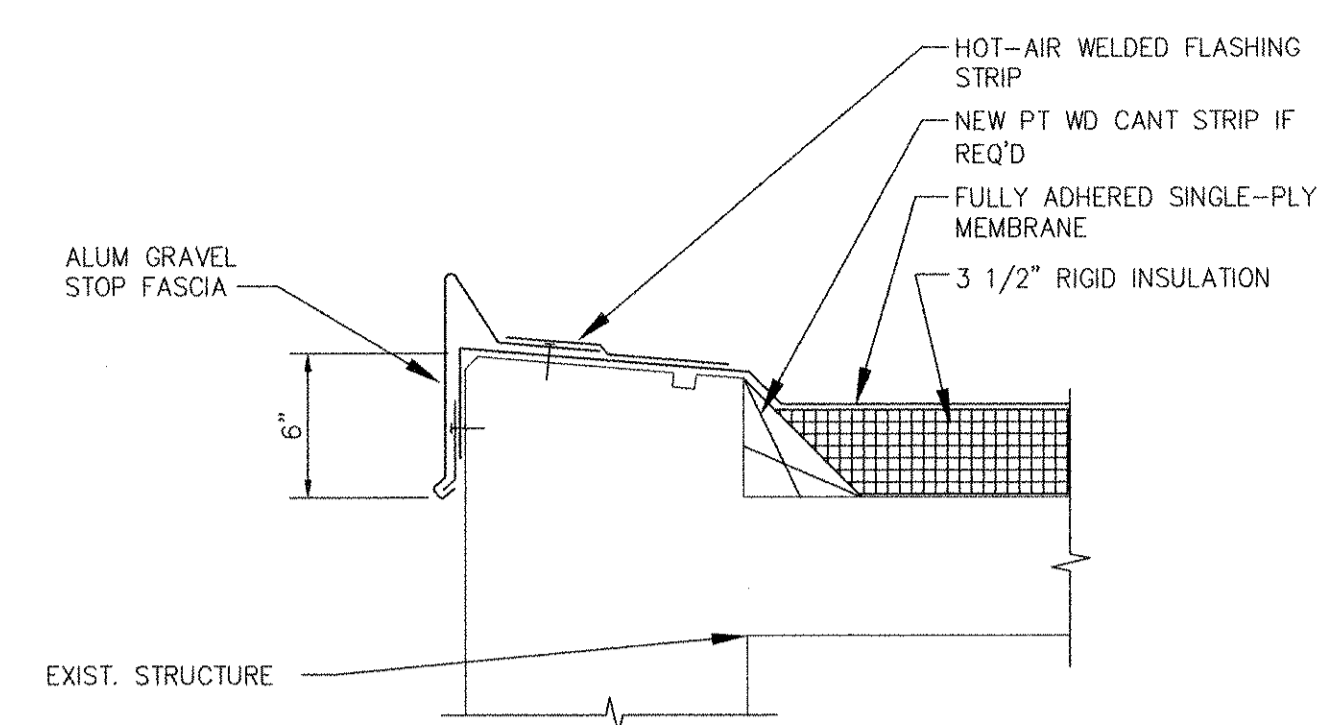
A

D

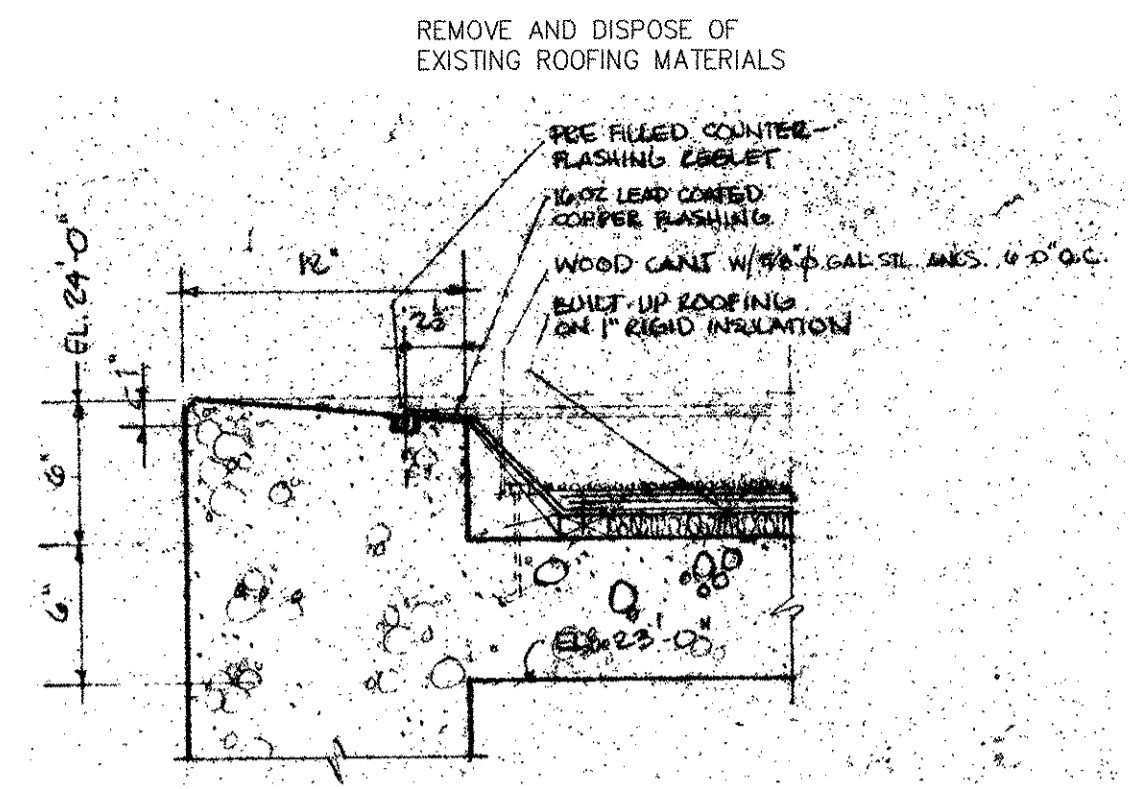
C

B

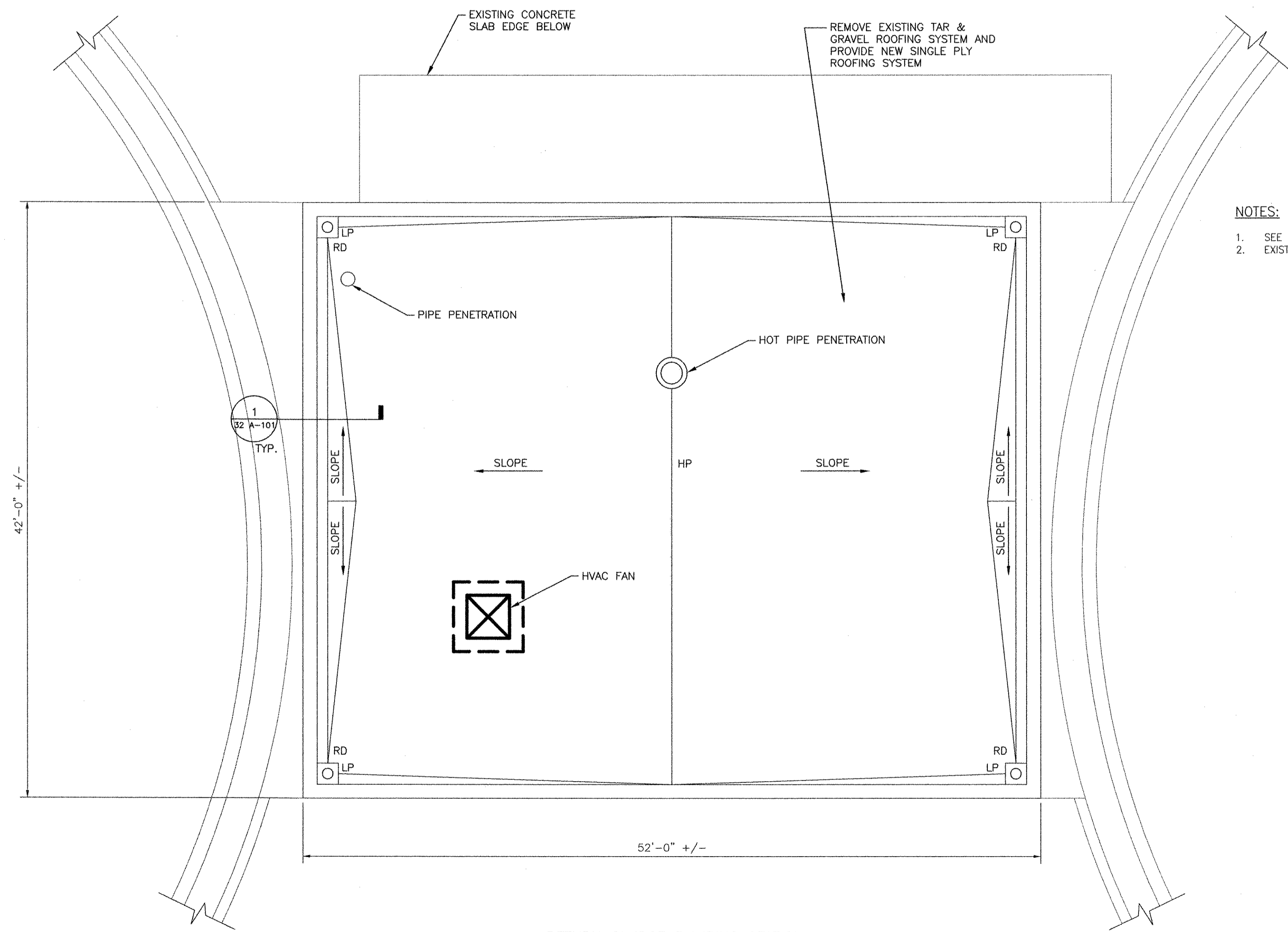
A



1 ROOF EDGE DETAIL
32 A-101 1/2" = 1'-0"



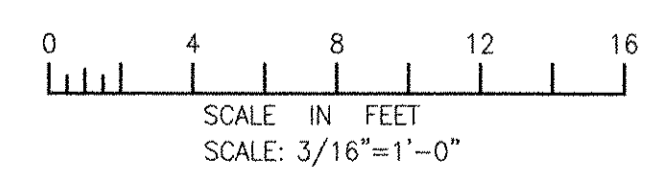
2 EXISTING ROOF EDGE DETAIL
32 A-101 1/2" = 1'-0"



RETURN SLUDGE PUMPING STATION
ROOF PLAN
SCALE: 3/16"=1'-0"

NOTES:

- 1. SEE 99 A-501 FOR TYPICAL LOW-SLOPE ROOF DETAILS.
- 2. EXISTING ROOF STRUCTURE IS PITCHED. PROVIDE 3 1/2" RIGID INSULATION.

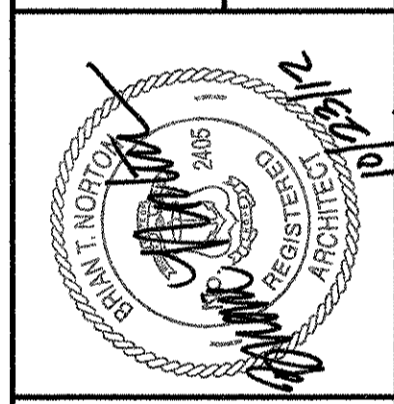


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	HG	MM	REVISIONS FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 250 WATER STREET
 SUITE 2000
 PROVIDENCE, RI 02903
 PHONE (781) 246-5200

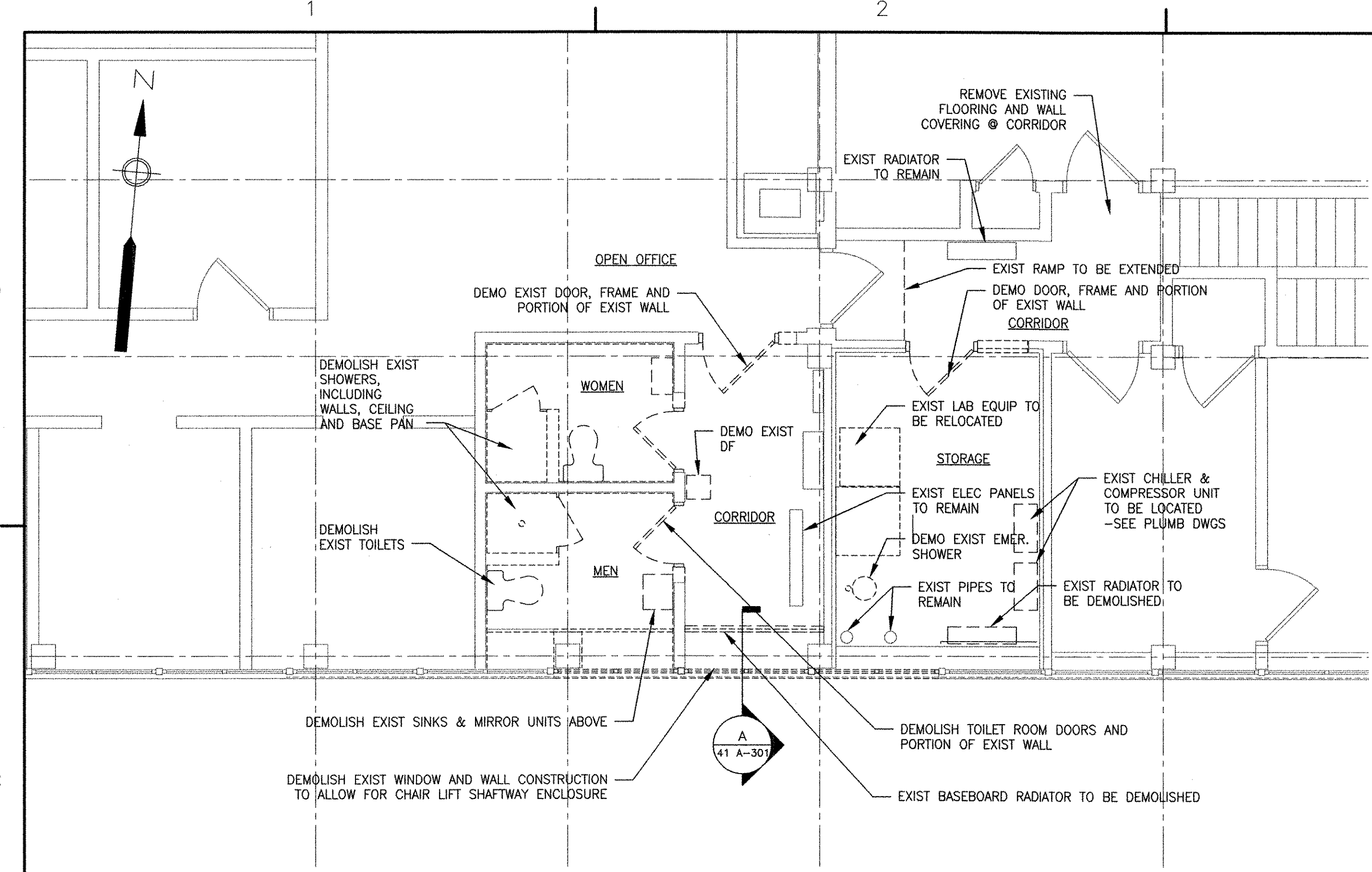


CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
**RAS PUMPING STATION
 ROOF PLAN AND DETAILS**
 ARCHITECTURAL

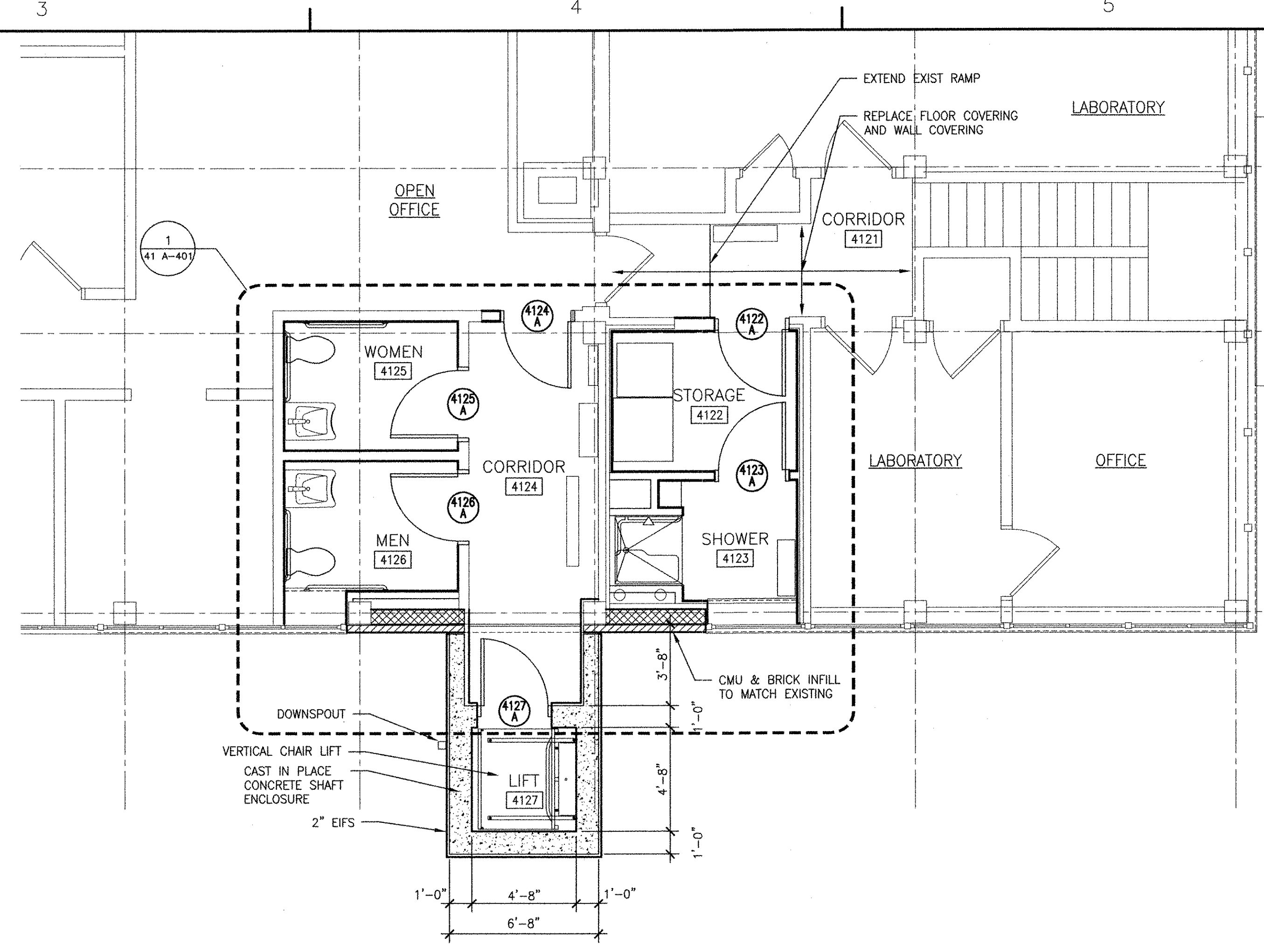
PROJECT NO:	60148648
CAD DWG FILE:	32 A-101
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	J. TOMAZ
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 A-101

PATH/FILENAME: E:\60148648 - EAST PROVIDENCE RAS DP-4\32 A-101.DWG
 LAST UPDATE: Tuesday, October 23, 2012 10:41:14 AM
 PLOT DATE: Tuesday, October 23, 2012 10:42:55 AM
 ANSI D - 23-Oct-12



UPPER LEVEL DEMOLITION PLAN
1/4" = 1'-0"



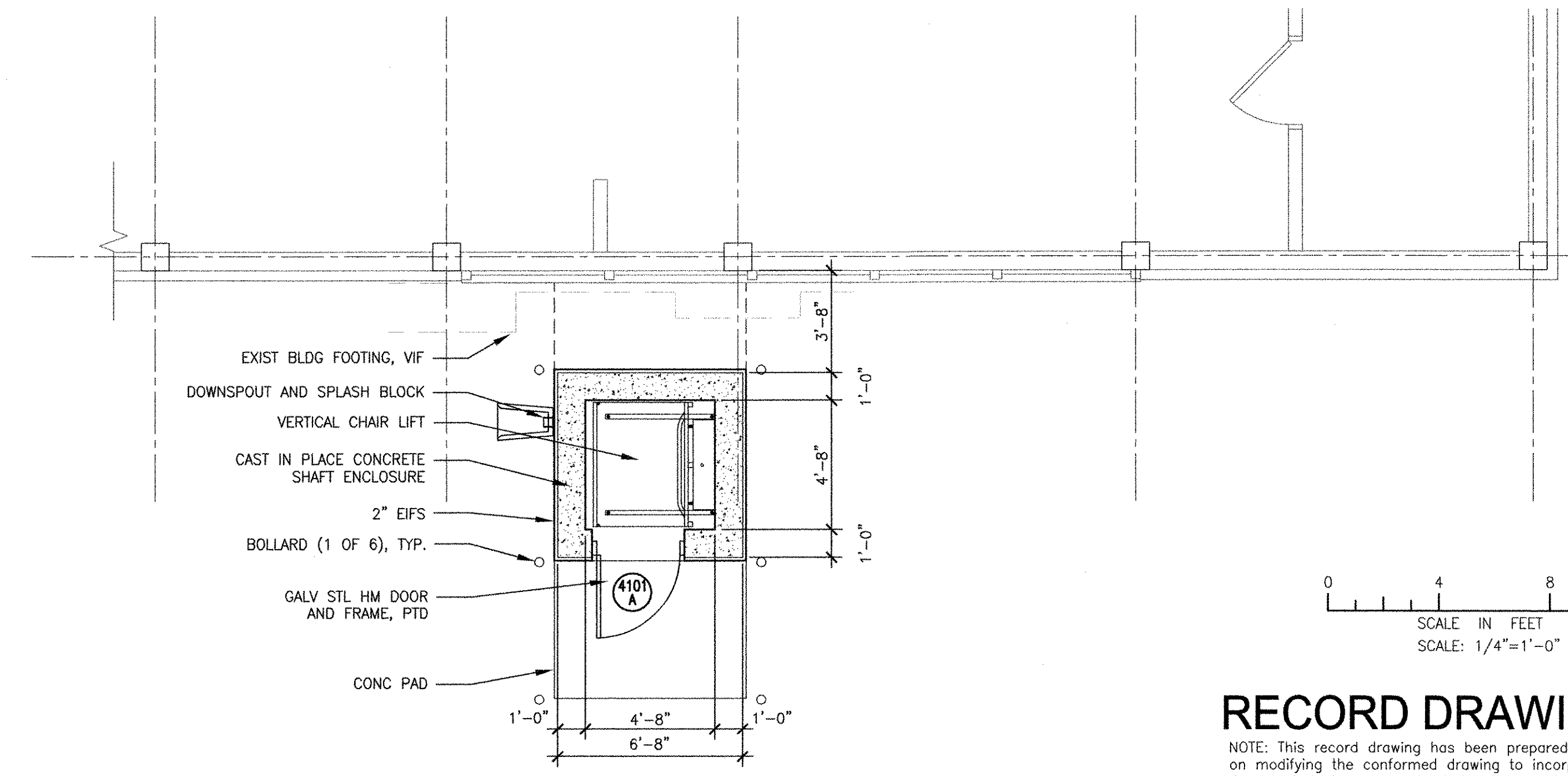
UPPER LEVEL PLAN
1/4" = 1'-0"

DEMOLITION NOTES:

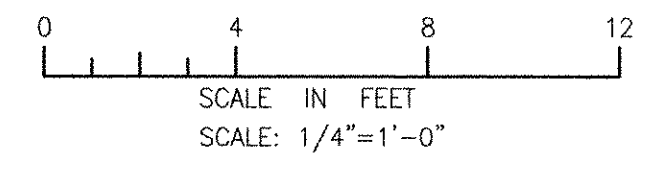
1. DEMOLISH EXISTING CERAMIC TILE AND DRYWALL TO STUDS AT TOILET ROOMS. DEMOLISH EXISTING CEILING SYSTEM AT TOILET ROOMS AND STORAGE ROOM. VERIFY EXISTING WALL STUD TYPE.
2. REMOVE EXIST ELEC HAND DRYER AT MEN'S ROOM AND SAVE FOR RELOCATION.
3. REMOVE EXISTING FABRIC WALL COVERING AT TOILET ROOM CORRIDOR AND PREPARE WALL SURFACES FOR PAINT.

CONSTRUCTION NOTES:

1. PROVIDE VERTICAL BLINDS AT MENS AND SHOWER ROOM WINDOWS.



GRADE LEVEL PLAN
1/4" = 1'-0"



RECORD DRAWING

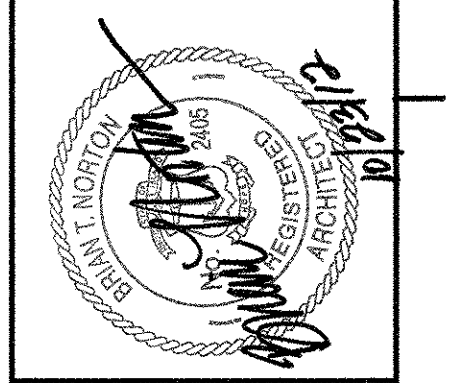
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM

AECOM USA, INC.
100 WASHINGTON STREET
WALLEY, MA 01981
PHONE (781) 246-5300

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**ADMINISTRATION BUILDING
PLANS**

ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	41 A-101
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	K. COLLINS
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

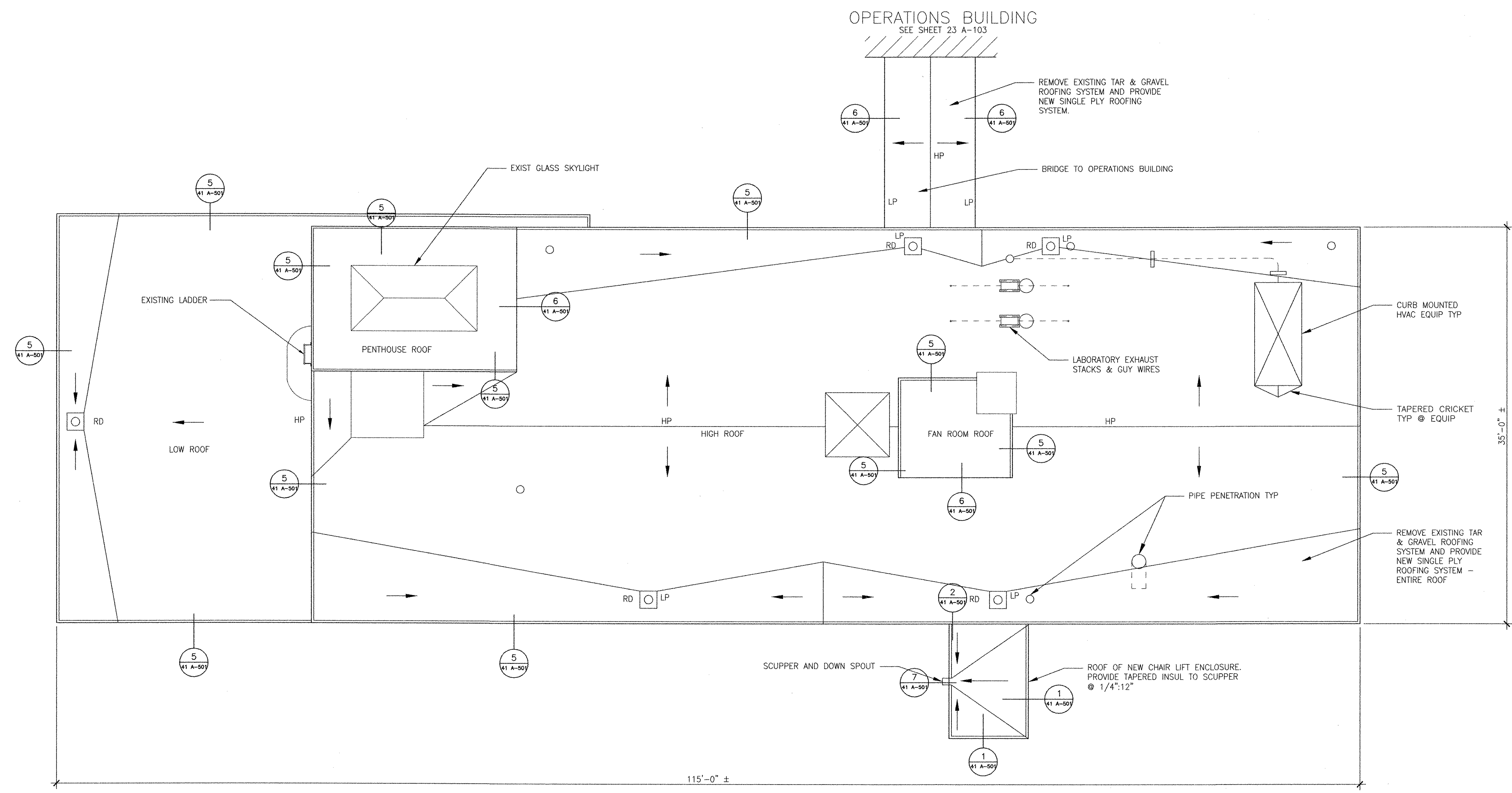
41 A-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP04\41 A-101.DWG
 LAST UPDATE: Monday, October 01, 2012 10:02:54 AM
 PLOT DATE: Tuesday, October 23, 2012 10:53:00 AM
 ANSI D - 11-Oct-12

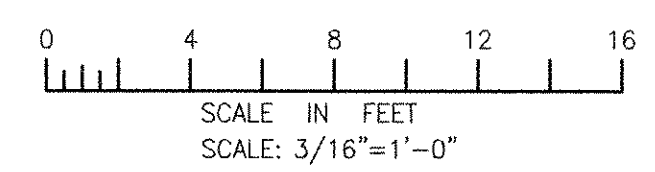
1 2 3 4 5



- NOTES:**
- SEE 99 A-501 FOR TYPICAL LOW-SLOPE ROOF DETAILS.
 - PROVIDE 3 1/2" AVERAGE THICKNESS TAPERED INSULATION (R-20 MINIMUM).
 - PROVIDE NEW ROOF DRAIN STRAINERS.



ROOF PLAN
3/16" = 1'-0"



RECORD DRAWING

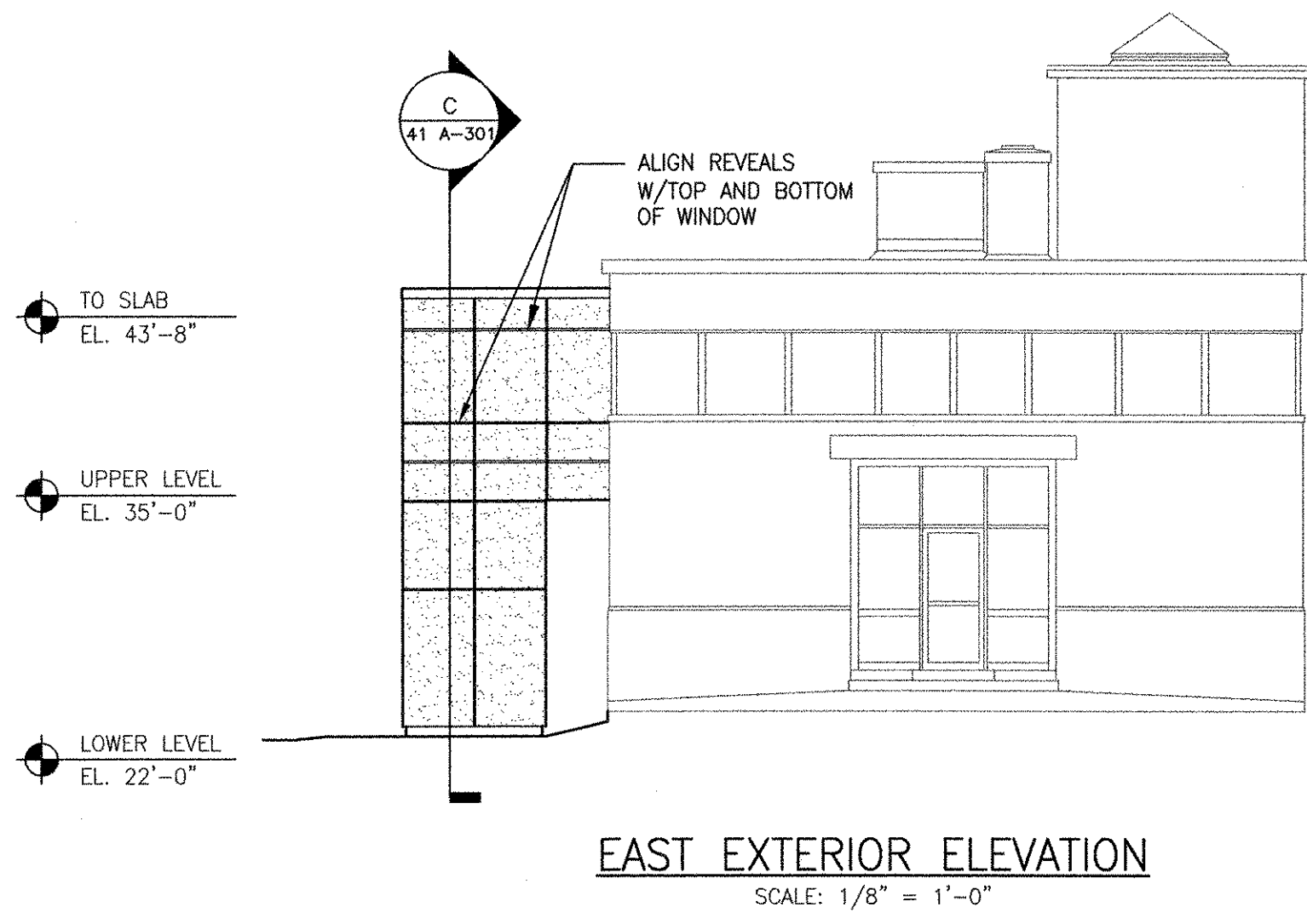
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH: P:\60148648 - EAST PROVIDENCE DSD\DP-A\SHEETS\A41 A-102.DWG
 LAST UPDATE: Monday, October 01, 2012 10:04:11 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:04 AM
 ANSI D - 1- Oct-12

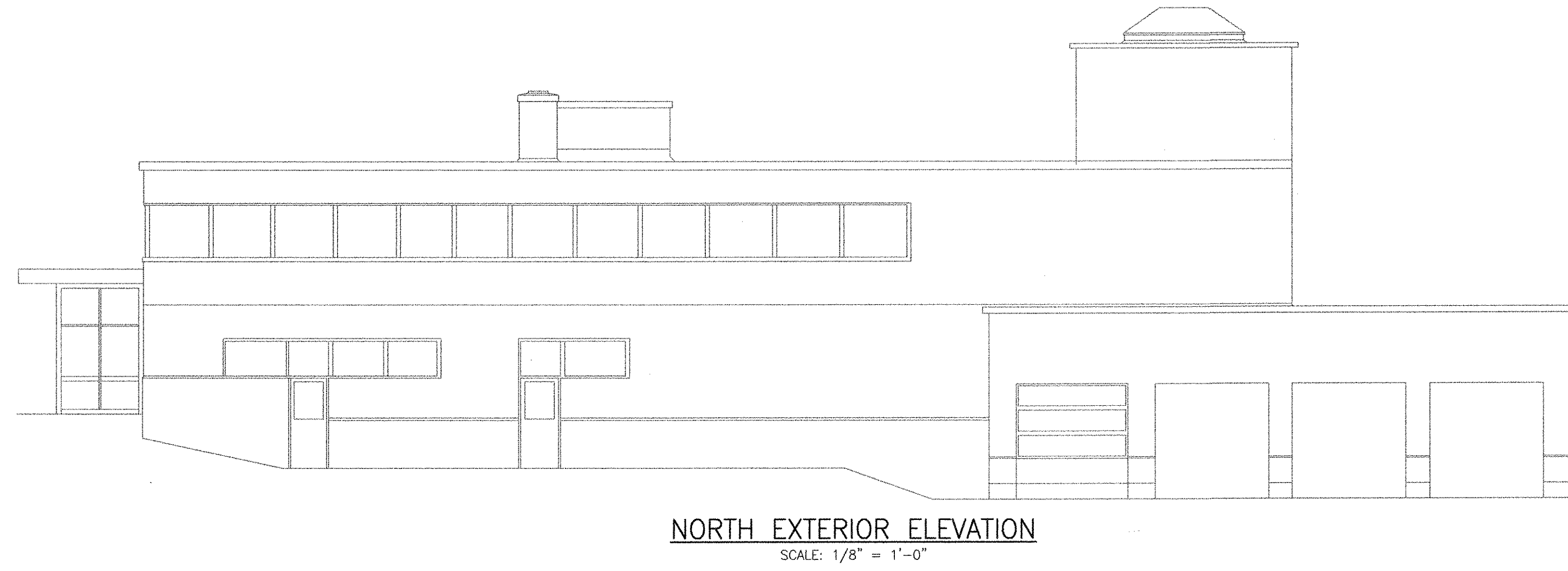
		AECOM USA, INC. 100 WATER STREET WALTHAM, MA 02451 PHONE (781) 246-5200	
RECORD DRAWINGS		REVISED FOR RECORD DRAWING	
MARK	DATE	MM	DESCRIPTION
1	10/19/12	MM	MADE BY CHECKED
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4 ADMINISTRATION BUILDING ROOF PLAN ARCHITECTURAL			
PROJECT NO: 60148648 CAD DWG FILE: 41 A-102		DESIGNED BY: M. MACEACHERN DRAWN BY: M. MACEACHERN DEPT CHECK: B. NORTON PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED	
41 A-102			

NOTES:

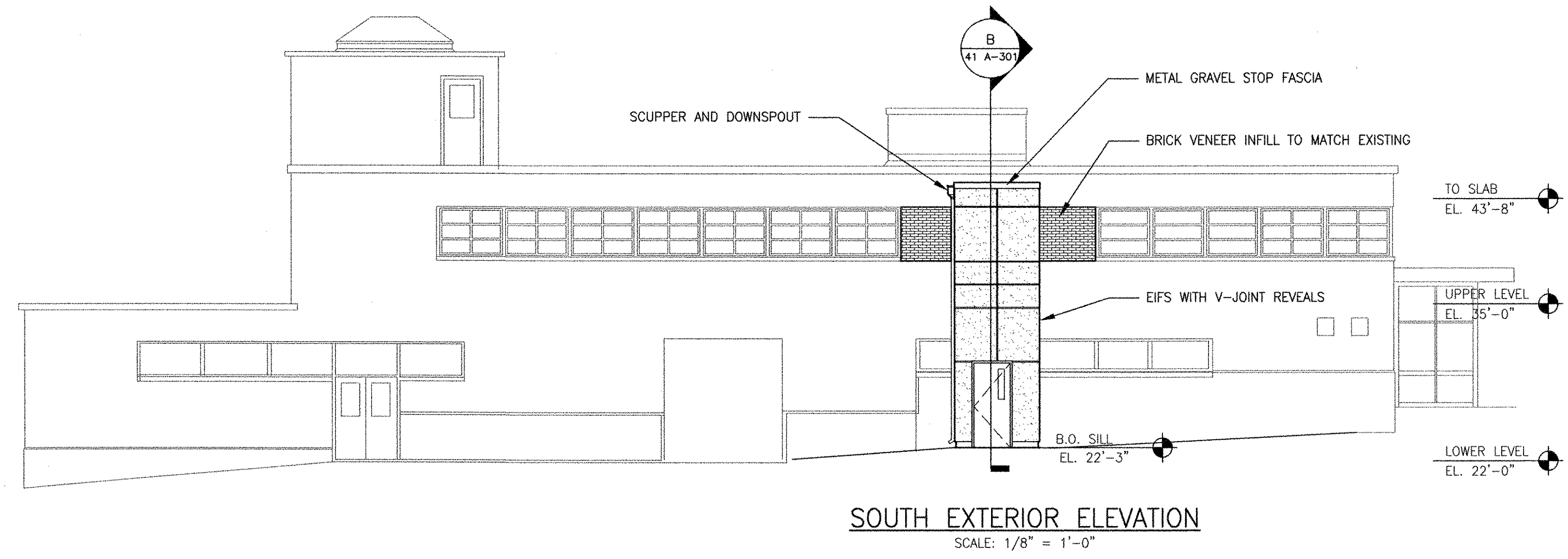
- 1. REPAIR AND REPLACE 50 SQUARE FEET OF BRICK VENEER (APPROXIMATELY 350 BRICKS & MORTAR JOINTS) WITH NEW BRICK AND MORTAR TO MATCH EXISTING. LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.



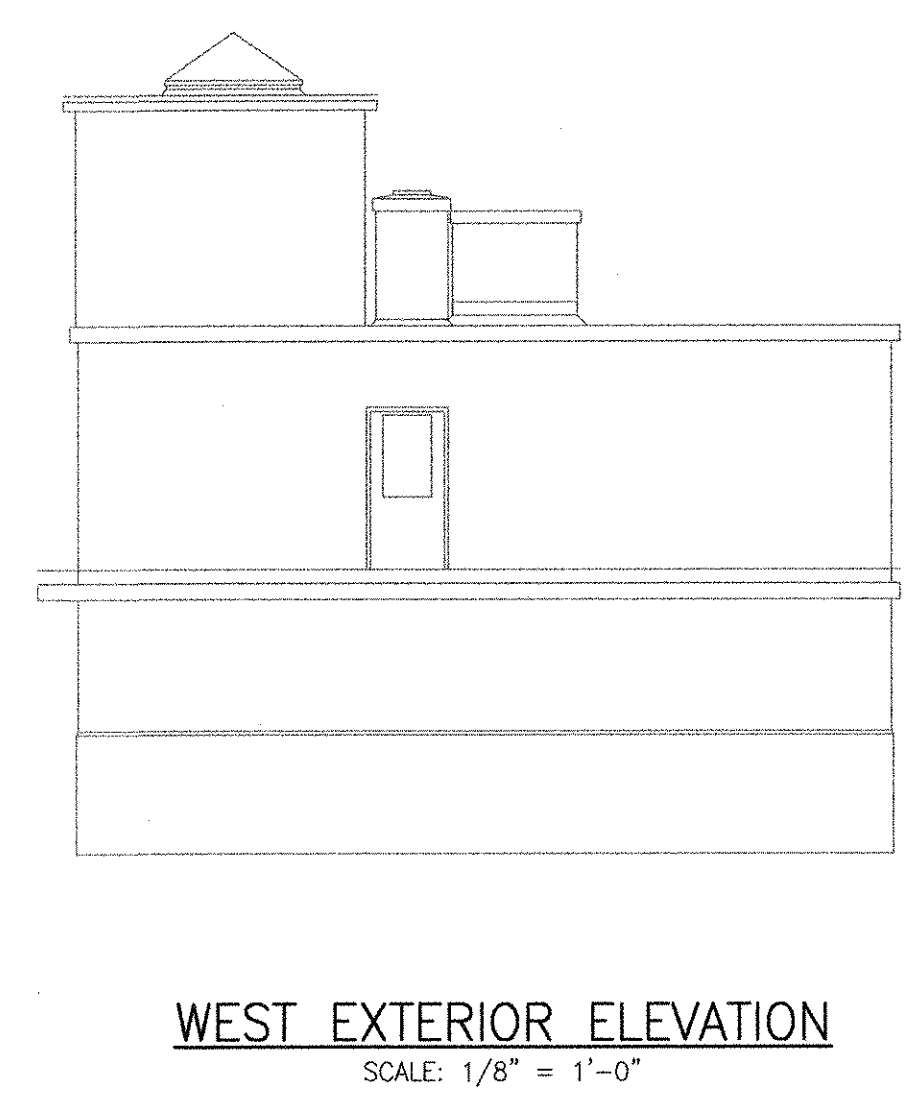
EAST EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"



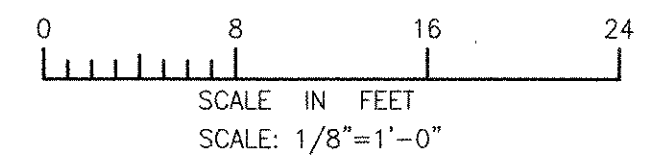
NORTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"



SOUTH EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"



WEST EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

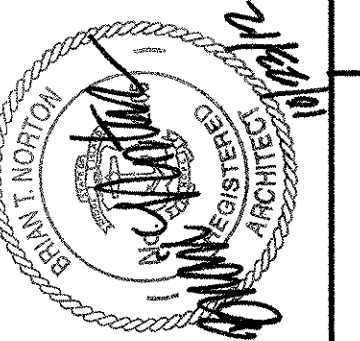


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	MM	MM	REVISIONS FOR RECORD DRAWING	DESCRIPTION
1	10/19/12					

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 700 WILLOWATER DRIVE
 FOSTER CITY, CA 94404
 PHONE (781) 246-5200



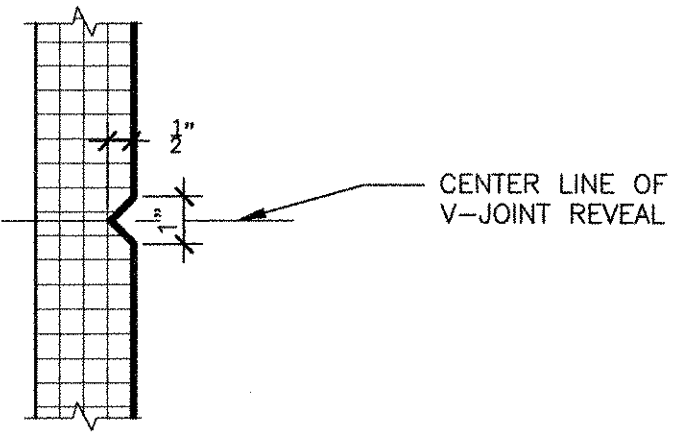
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
ADMINISTRATION BUILDING
EXTERIOR ELEVATIONS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	41 A-201
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	K. COLLINS
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

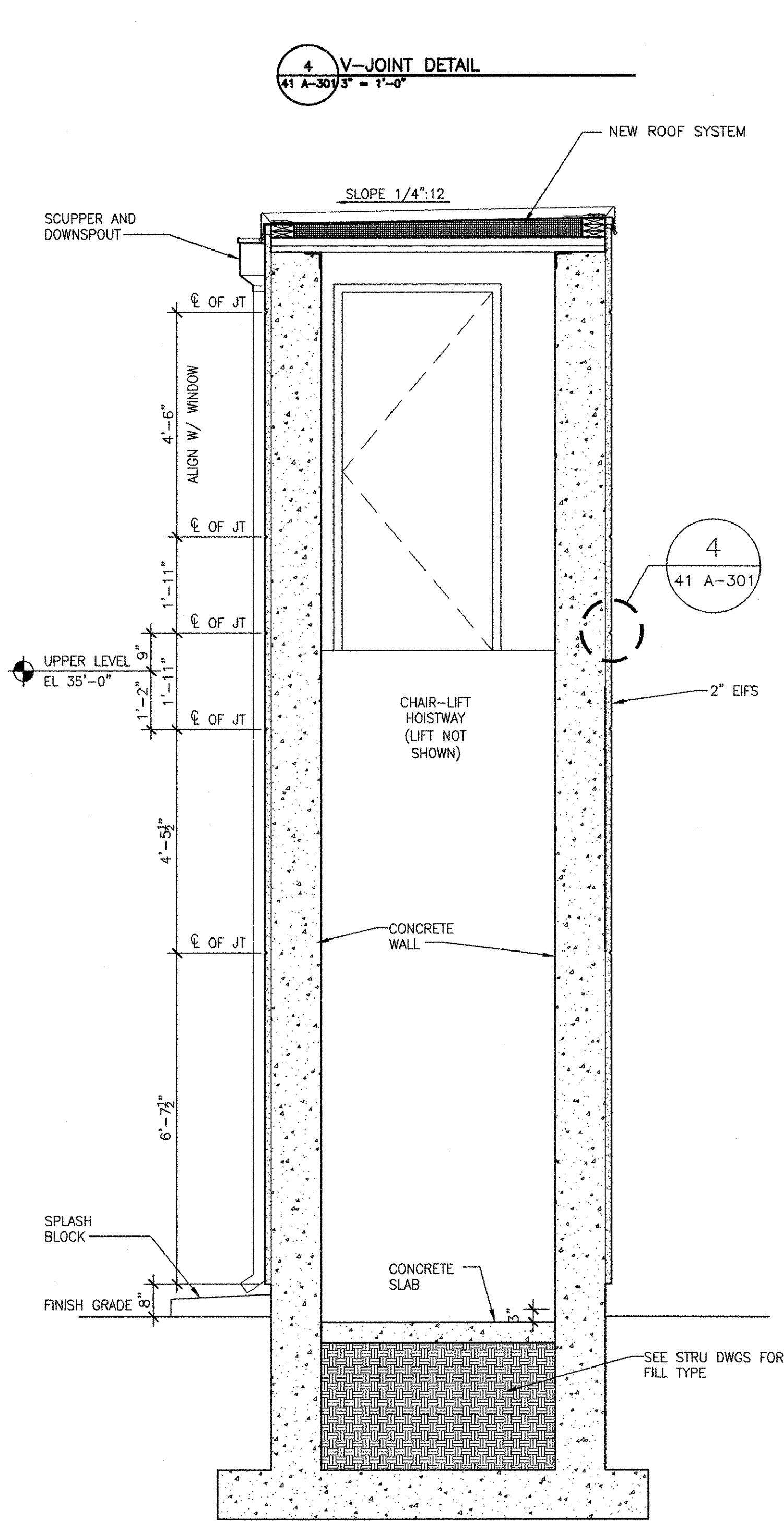
41 A-201

PTH/FILENAME: P:\60148648 - EAST PROVIDENCE (DP)\DP-4\41 A-201.DWG
 PLOT DATE: Monday, October 01, 2012 10:04:46 AM
 PLOT DATE: Tuesday, October 23, 2012 10:53:07 AM
 ANSI D - 1-10-12

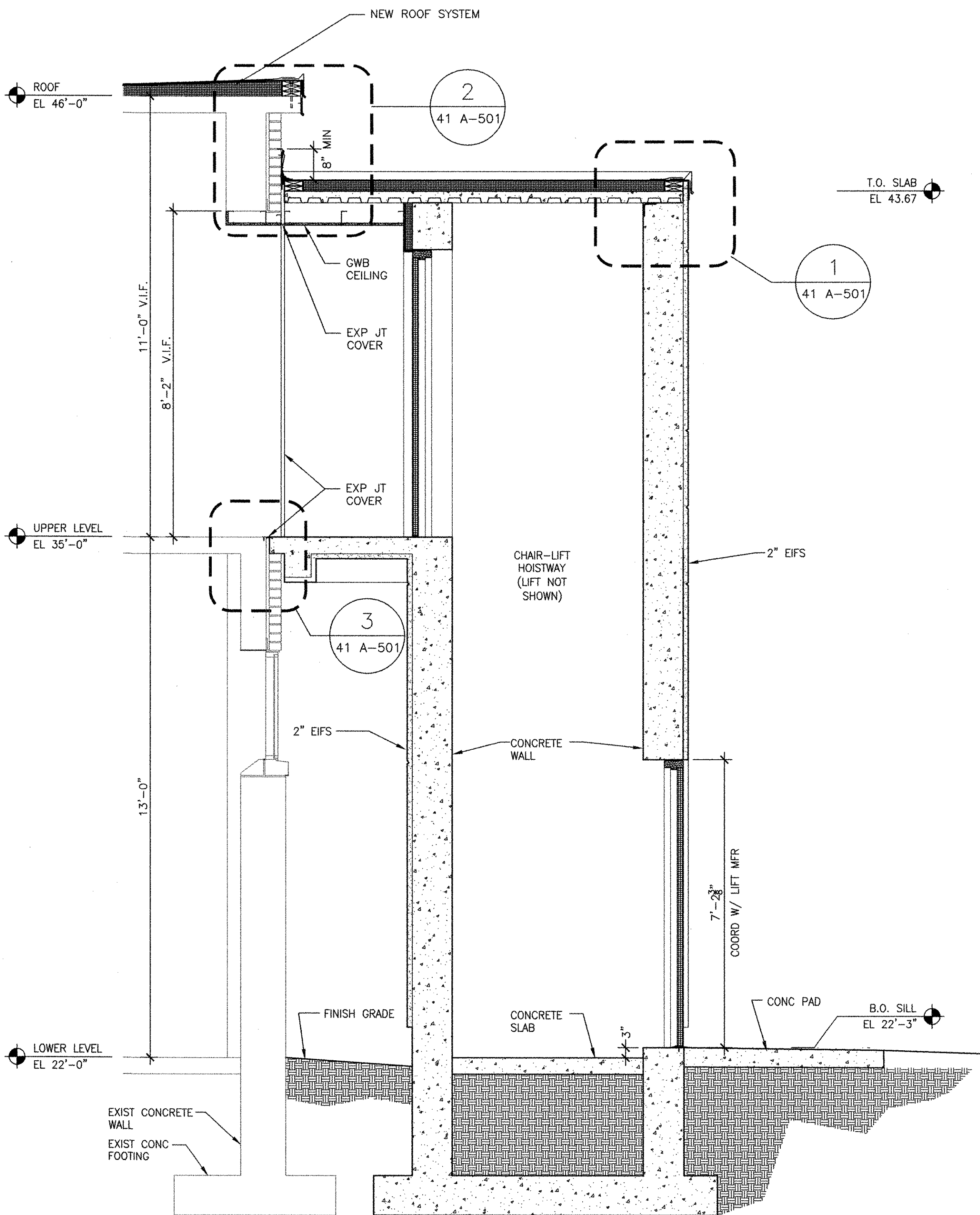
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (R0)\DWG\41 A-301.DWG
 LAST UPDATE: Monday, October 01, 2012 10:08:26 AM
 PLOT DATE: Tuesday, October 23, 2012 10:53:12 AM
 ANSI D - 1-10-12



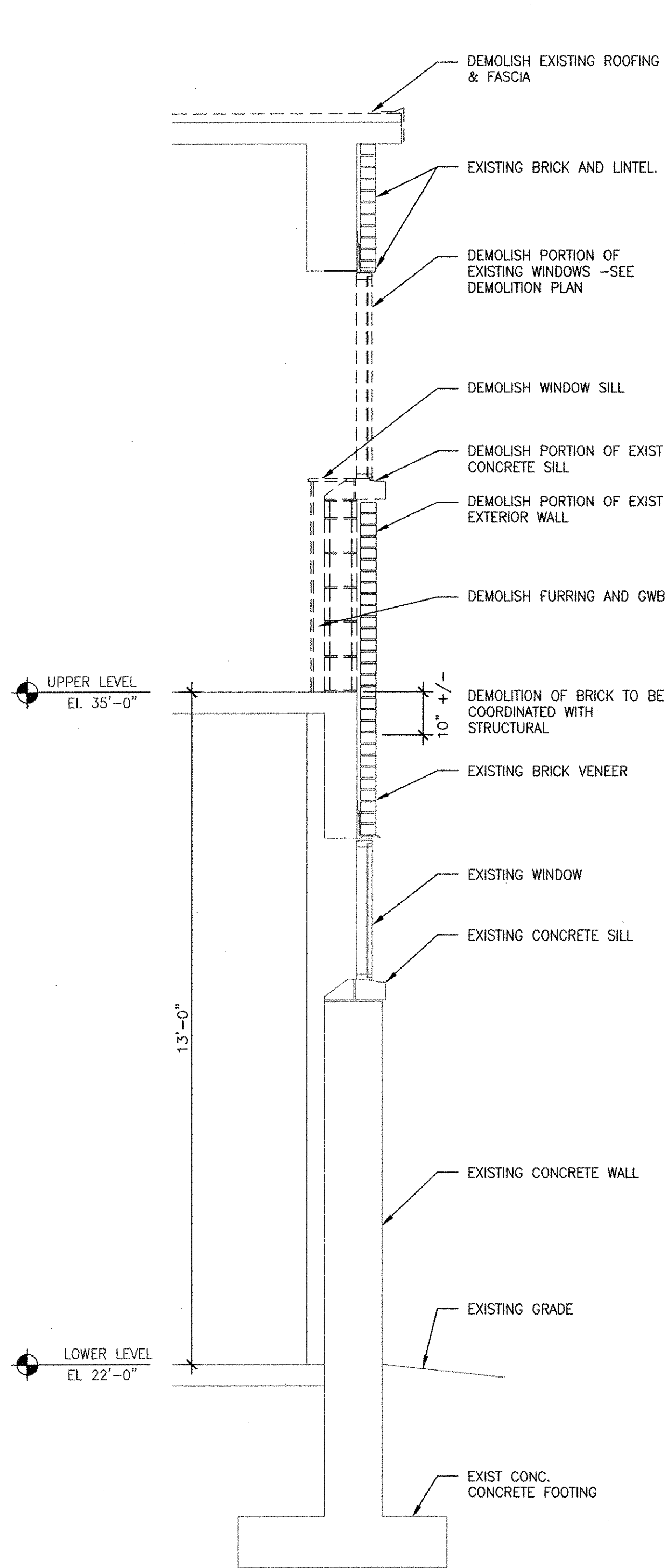
4 V-JOINT DETAIL
41 A-301 3/4" = 1'-0"



C WALL SECTION C
41 A-301 1/2" = 1'-0"



B WALL SECTION B
41 A-301 1/2" = 1'-0"



A DEMO WALL SECTION A
41 A-101 1/2" = 1'-0"

RECORD DRAWING

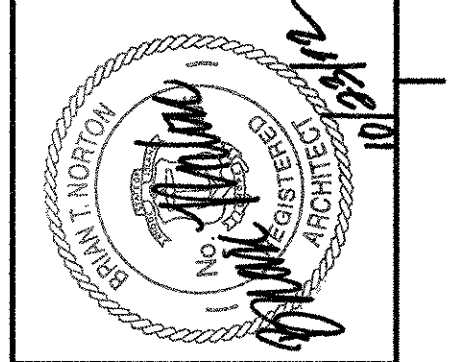
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MM	MM	REVISED FOR RECORD DRAWING

AECOM USA, INC.
 701 EDGEWATER DRIVE
 FORT WORTH, TEXAS 76102
 PHONE (781) 246-8200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
ADMINISTRATION BUILDING
WALL SECTIONS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	41 A-301
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	K. COLLINS
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 A-301

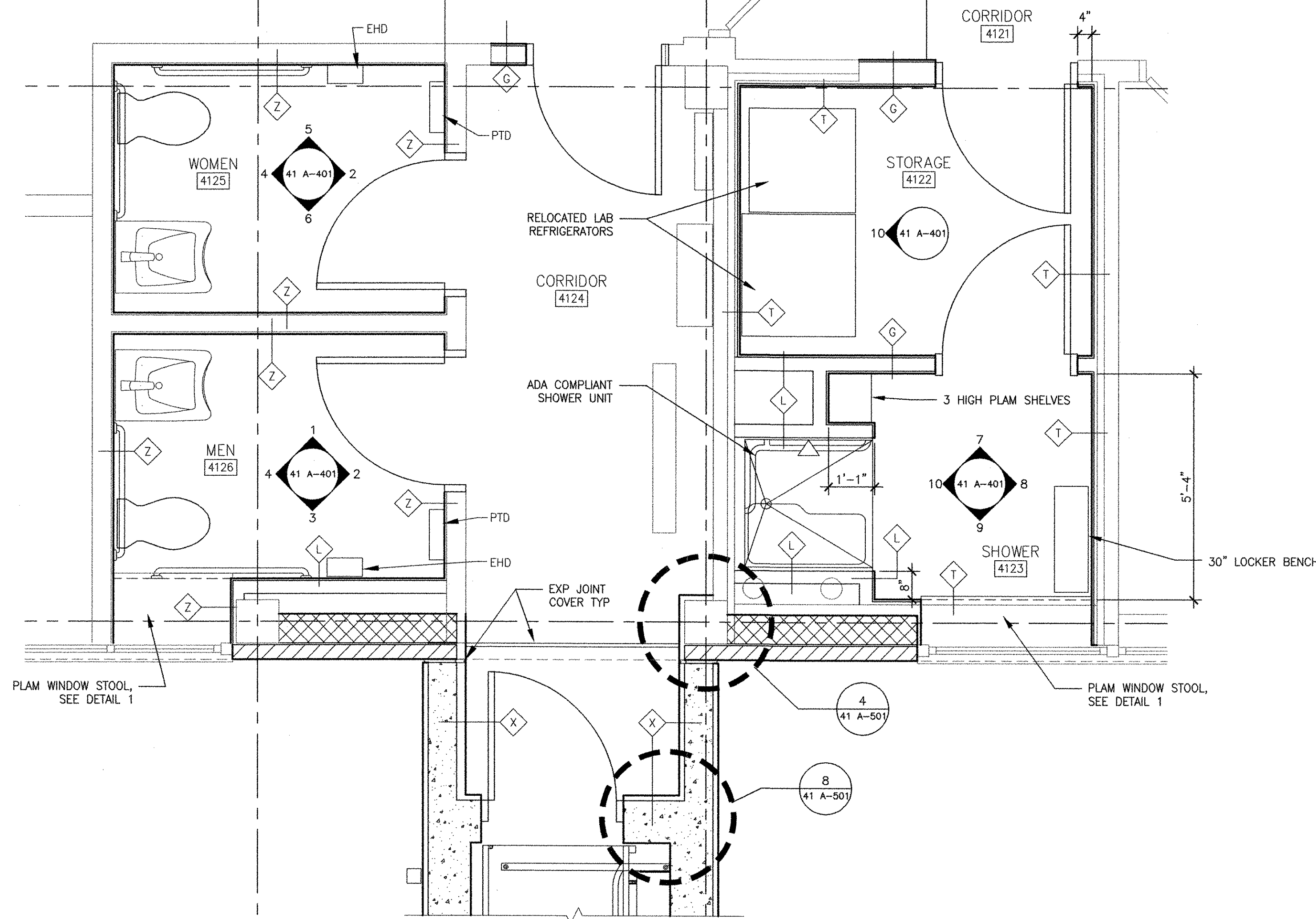
1

2

3

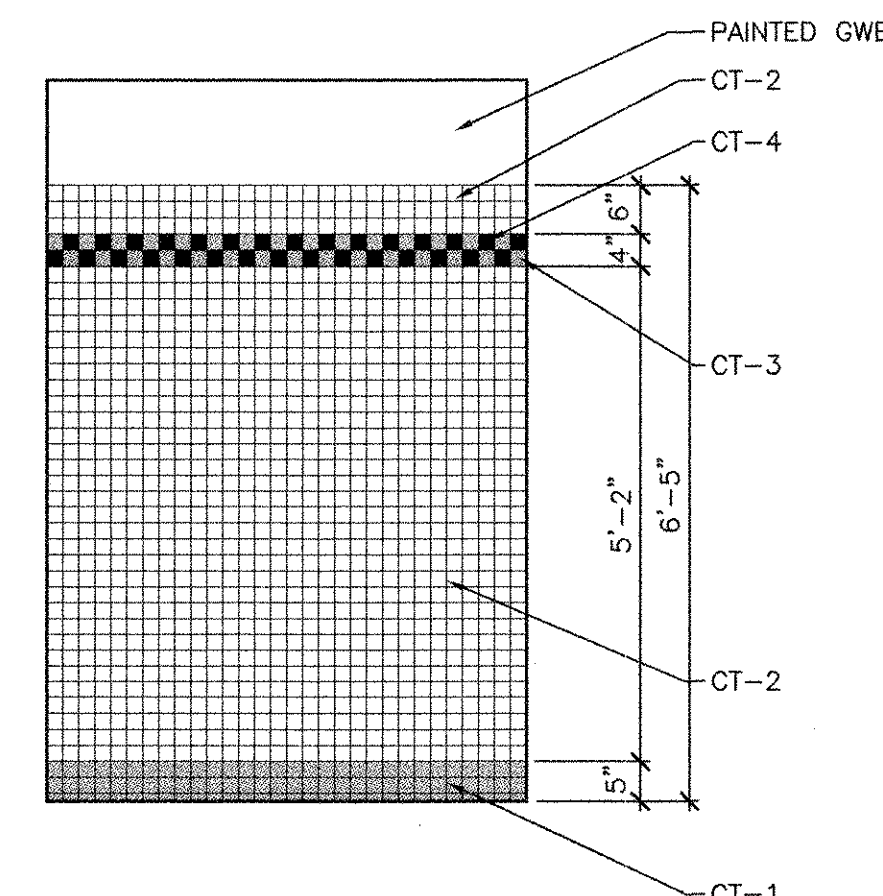
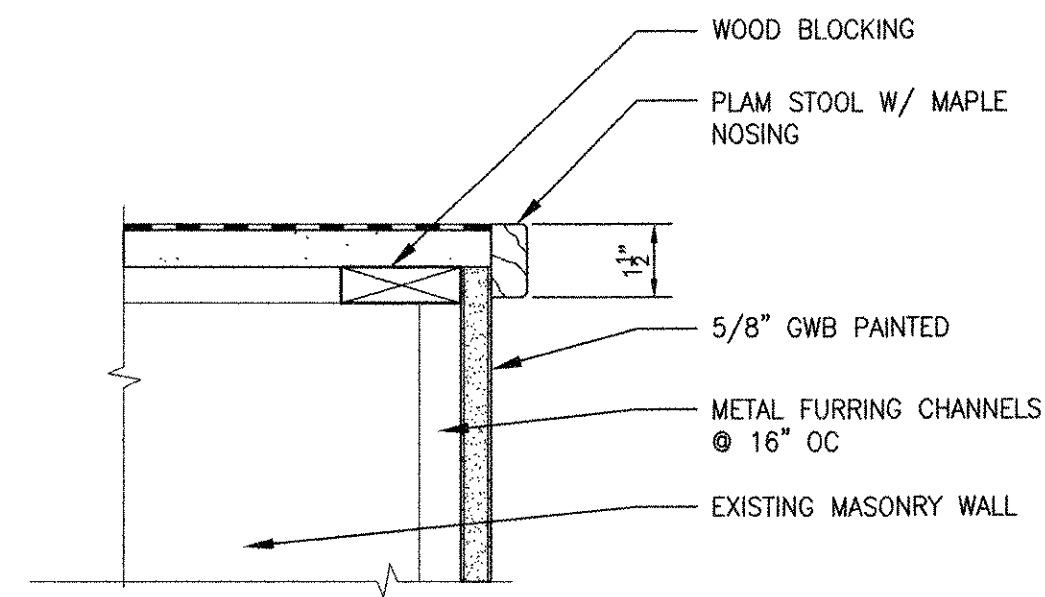
4

5

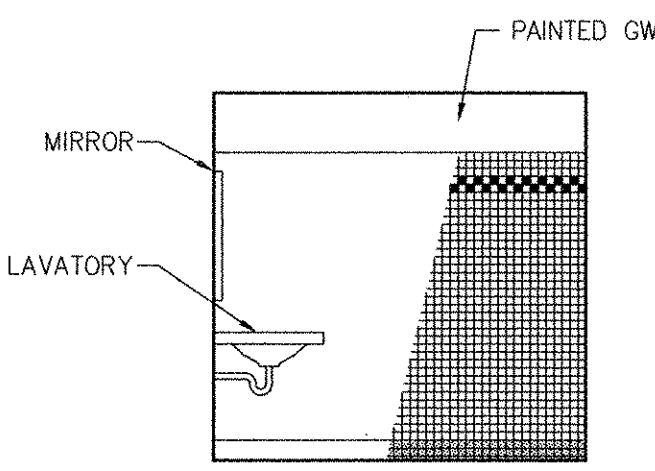


1 ENLARGED PLAN
41 A-401 1/2" = 1'-0"

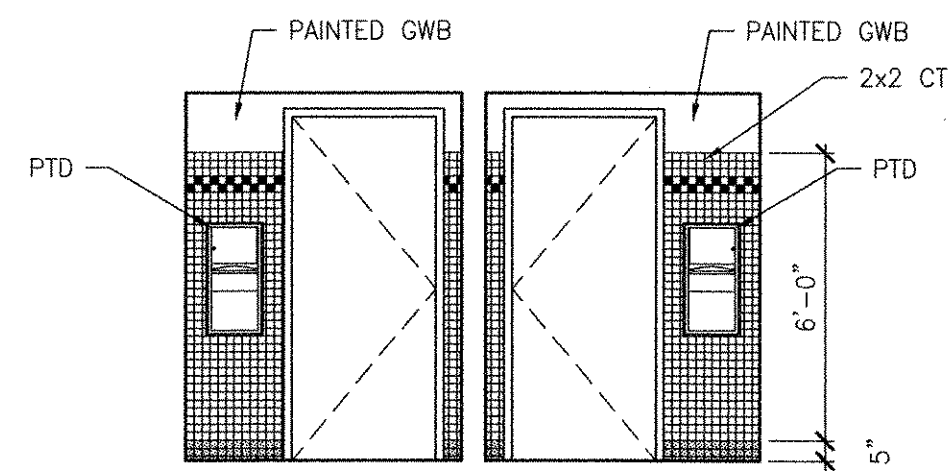
1 DETAIL
41 A-401 5" = 1'-0"



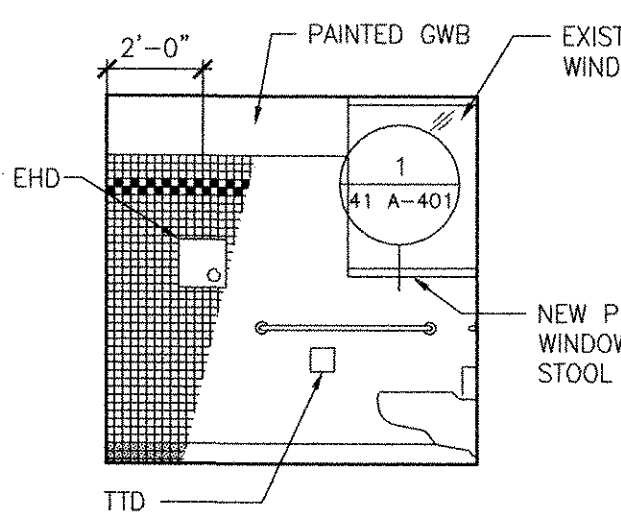
CERAMIC TILE ELEVATION
SCALE: 1/2" = 1'-0"



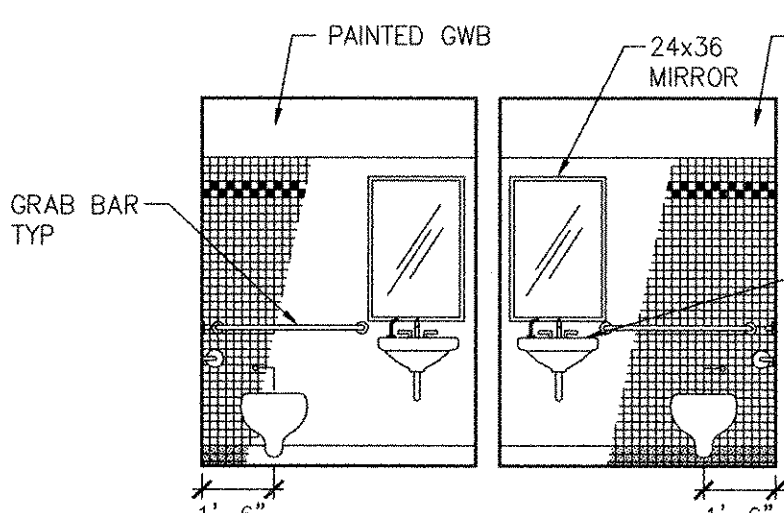
1 INTERIOR ELEVATION 1
41 A-401 1/4" = 1'-0"



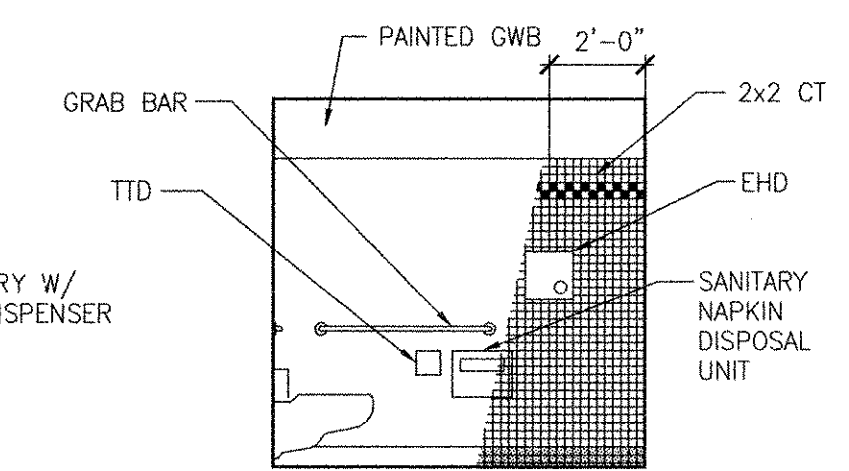
2 INTERIOR ELEVATION 2
41 A-401 1/4" = 1'-0"



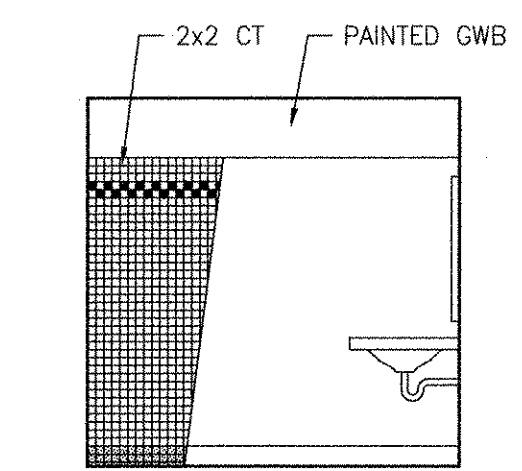
3 INTERIOR ELEVATION 3
41 A-401 1/4" = 1'-0"



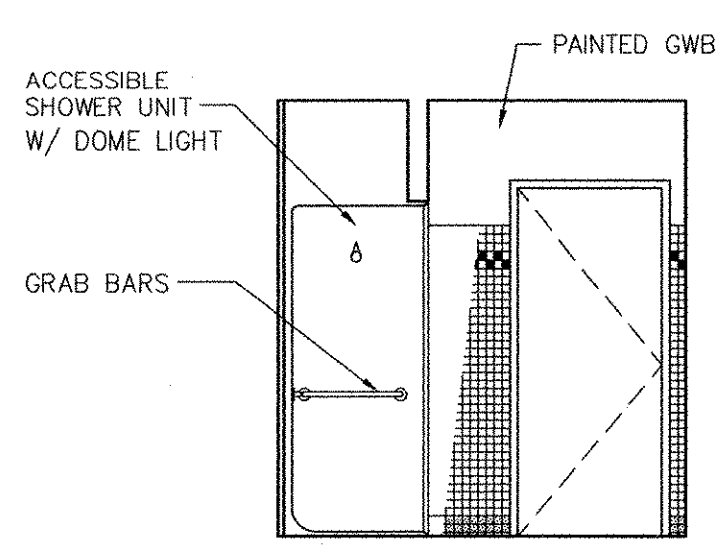
4 INTERIOR ELEVATION 4
41 A-401 1/4" = 1'-0"



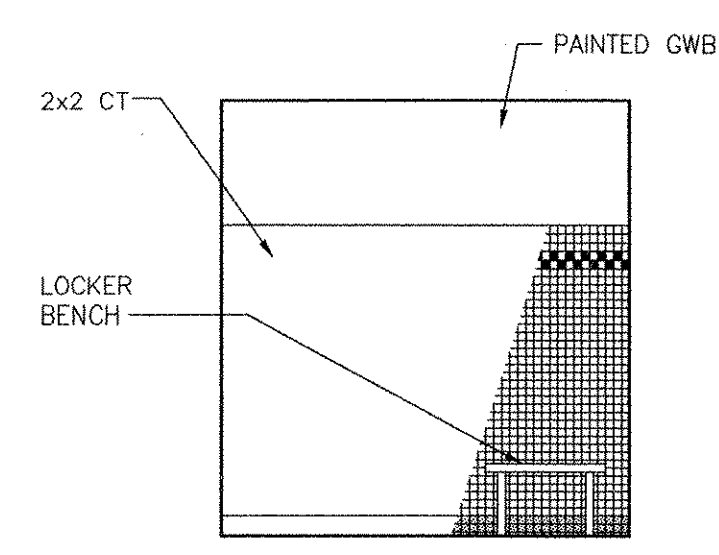
5 INTERIOR ELEVATION 5
41 A-401 1/4" = 1'-0"



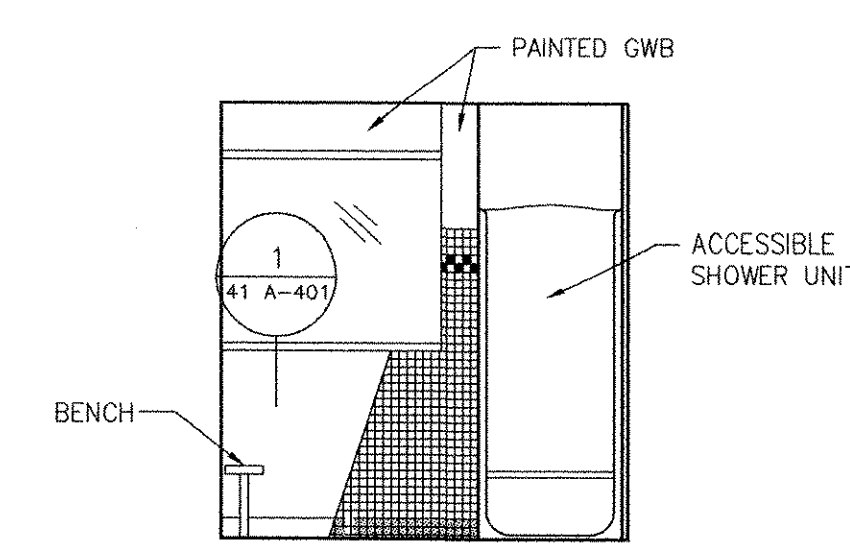
6 INTERIOR ELEVATION 6
41 A-401 1/4" = 1'-0"



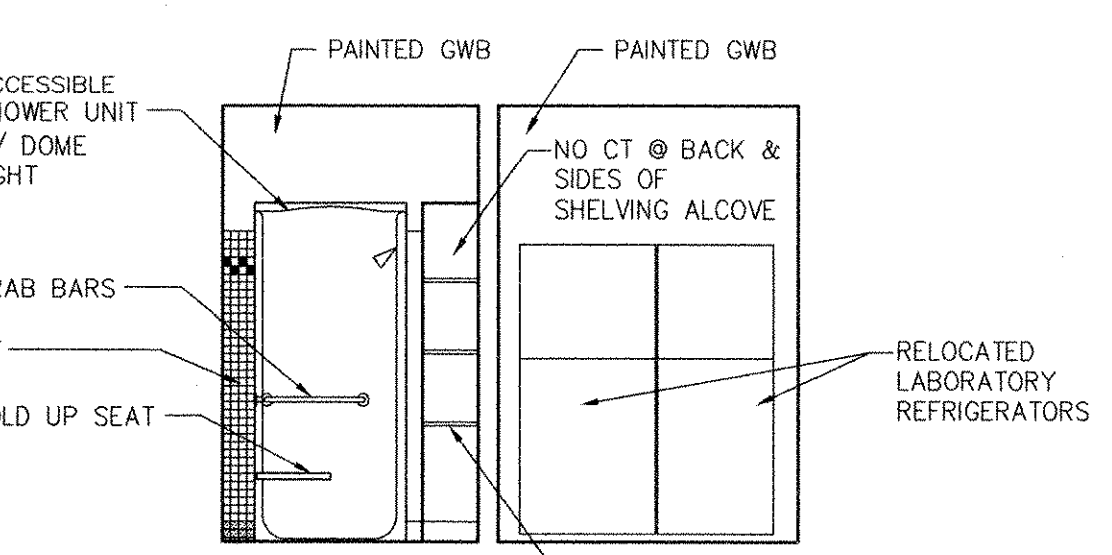
7 INTERIOR ELEVATION 7
41 A-401 1/4" = 1'-0"



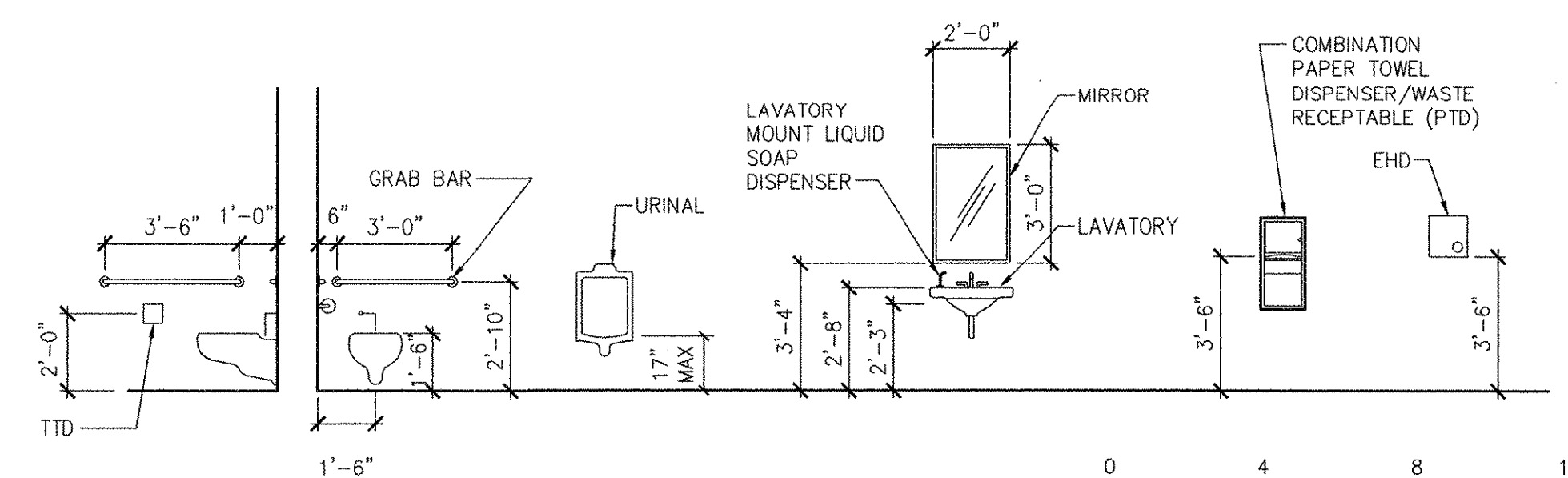
8 INTERIOR ELEVATION 8
41 A-401 1/4" = 1'-0"



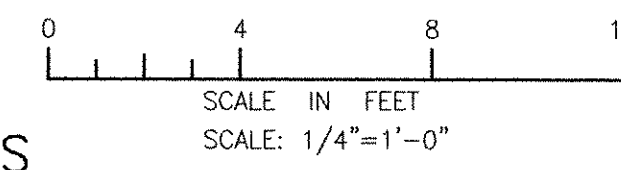
9 INTERIOR ELEVATION 9
41 A-401 1/4" = 1'-0"



10 INTERIOR ELEVATION 10
41 A-401 1/4" = 1'-0"



TYPICAL TOILET ROOM ADA ACCESSIBLE FIXTURE HEIGHTS
SCALE: 1/4" = 1'-0"



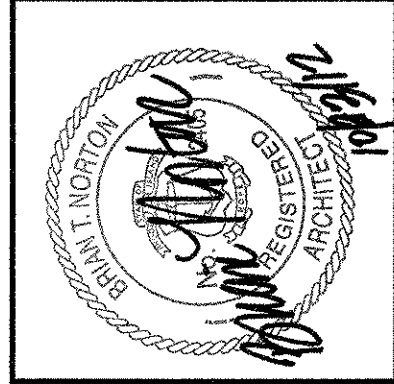
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH: P:\60148648 - EAST PROVIDENCE DRD\OP-A\SHEETS\41 A-401.DWG
 LAST UPDATE: Monday, October 01, 2012 10:07:27 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:21 AM
 ANSI D - 1 - Oct-12

MARK	DATE	MM	MM	REVISIONS
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS
AECOM USA, INC.
700 BROADWAY DRIVE
FOURTH FLOOR
PHOENIX, AZ 85004
PHONE (781) 248-5200



ADMINISTRATION BUILDING ENLARGED PLANS AND INTERIOR ELEVATIONS
 ARCHITECTURAL
 CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

PROJECT NO:	60148648
CAD DWG FILE:	41 A-401
DESIGNED BY:	M. MACCEACHERN
DRAWN BY:	H. GARCIA
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 A-401

1

2

3

4

5






D

C

B

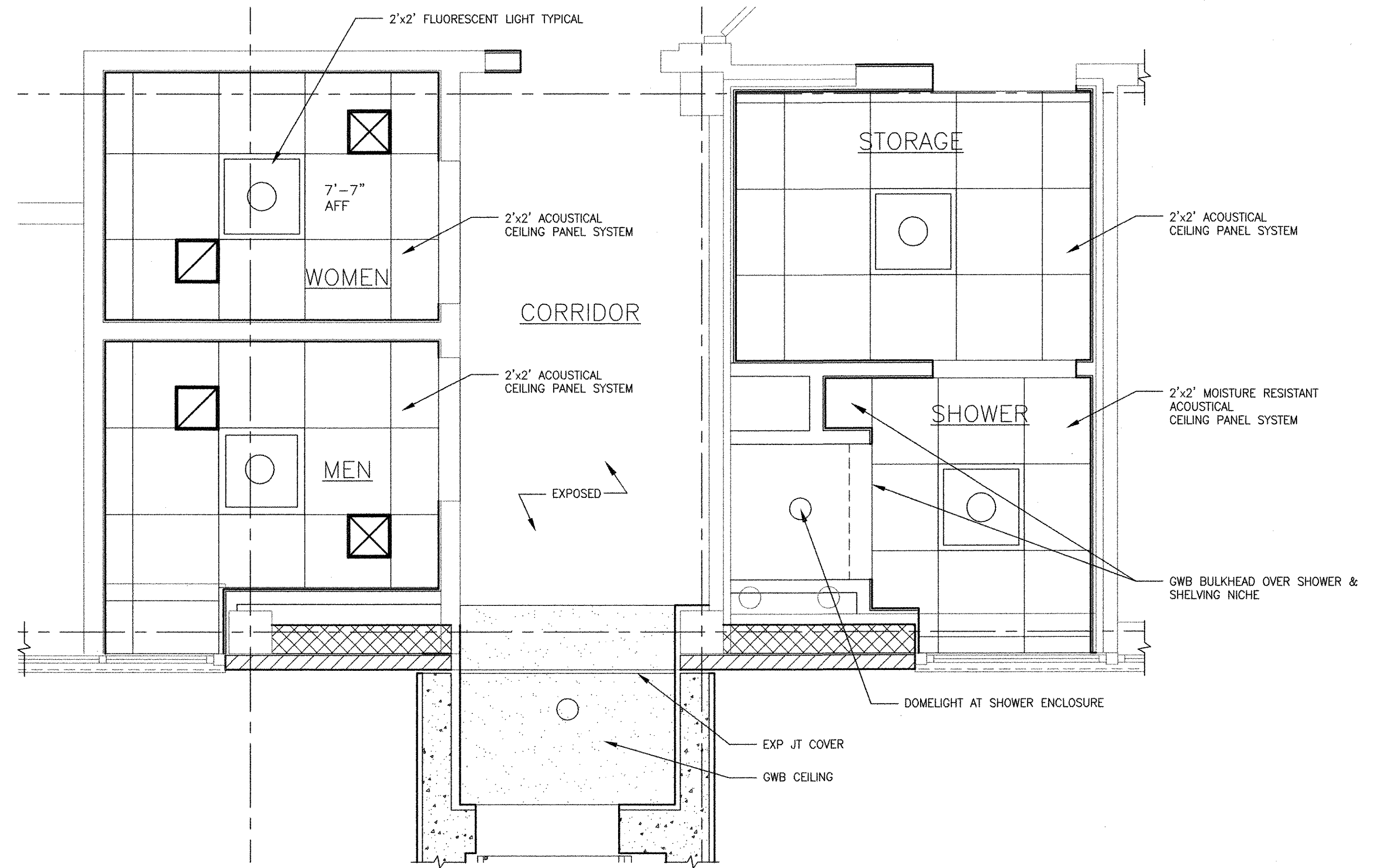
A

REFLECTED CEILING PLAN LEGEND

-  2'x2' ACOUSTICAL CEILING PANEL SYSTEM
-  2'x2' RECESSED FLUORESCENT LIGHT FIXTURES
-  RETURN HVAC DIFFUSER
-  SUPPLY HVAC DIFFUSER
-  RECESS CAN DOWN LIGHT

REFLECTED CEILING PLAN NOTES:

1. PROVIDE MOISTURE RESISTANT CEILING PANELS @ SHOWER ROOM.
2. MATCH EXISTING CEILING HEIGHTS.



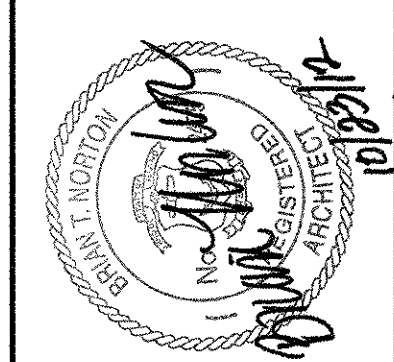
REFLECTED CEILING PART PLAN

SCALE: 1/2" = 1'-0"

PATH: F:\PROJECTS\60148648 - EAST PROVIDENCE FBO\DP-4\SHETS\A-41 A-402.DWG
 LAST UPDATE: Monday, October 01, 2012 10:08:08 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:24 AM
 ANSI D - 1-10-12

MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WATER STREET
 WILMINGTON, DE
 19801
 PHONE (302) 445-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
ADMINISTRATION BUILDING
ENLARGED REFLECTED CEILING PLAN
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	41 A-402
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	J. TOMAZ
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 A-402

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

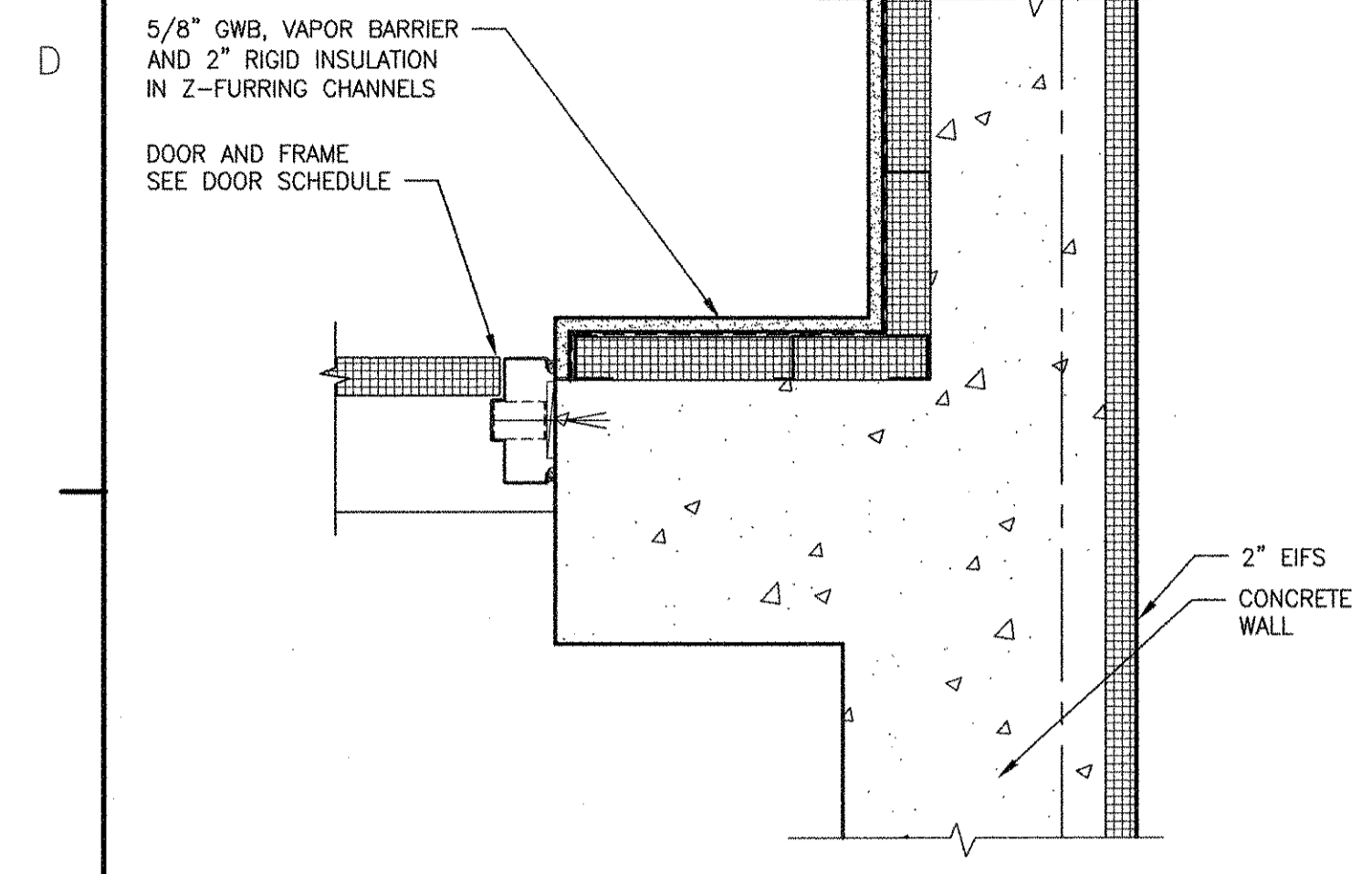
1

2

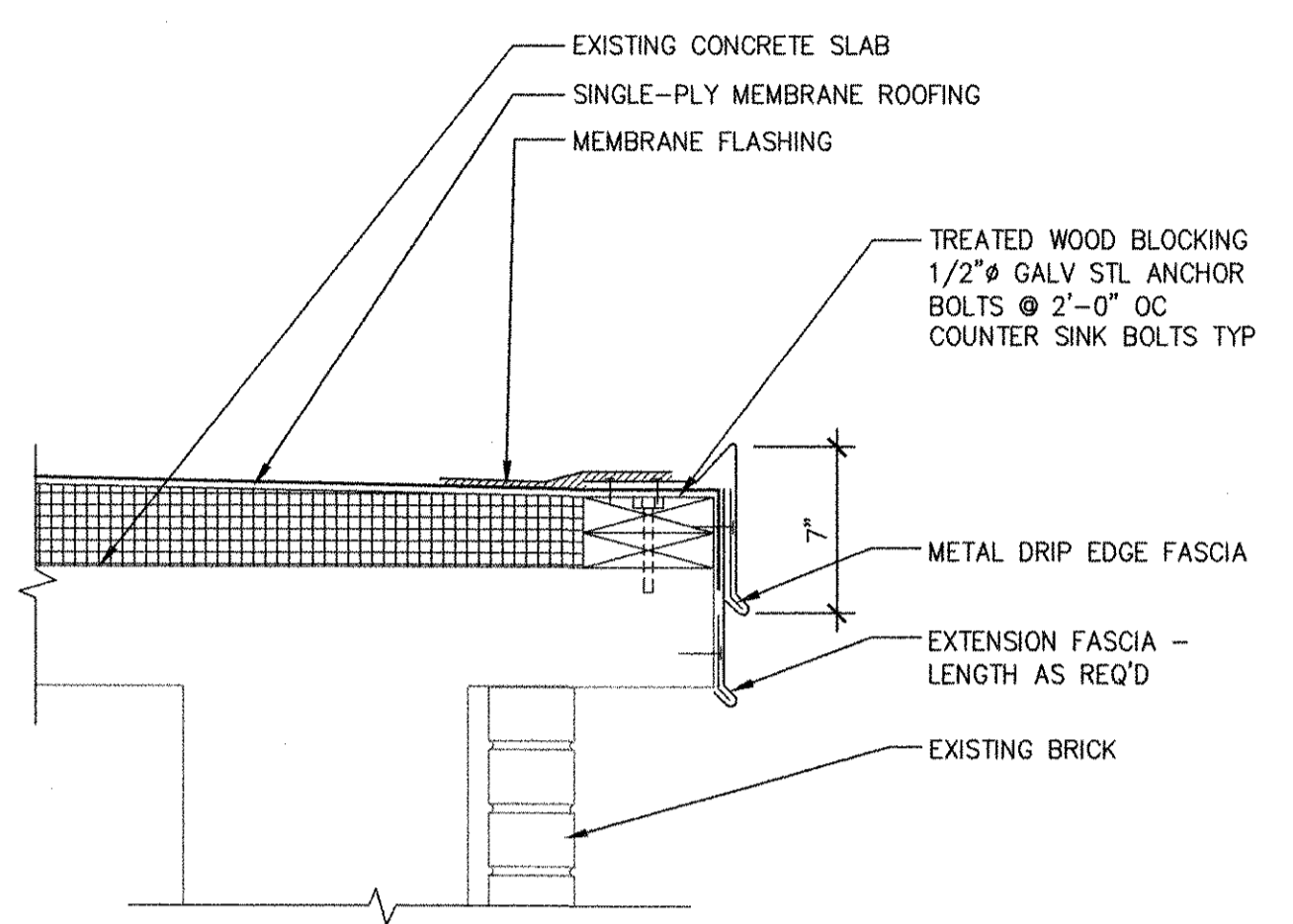
3

4

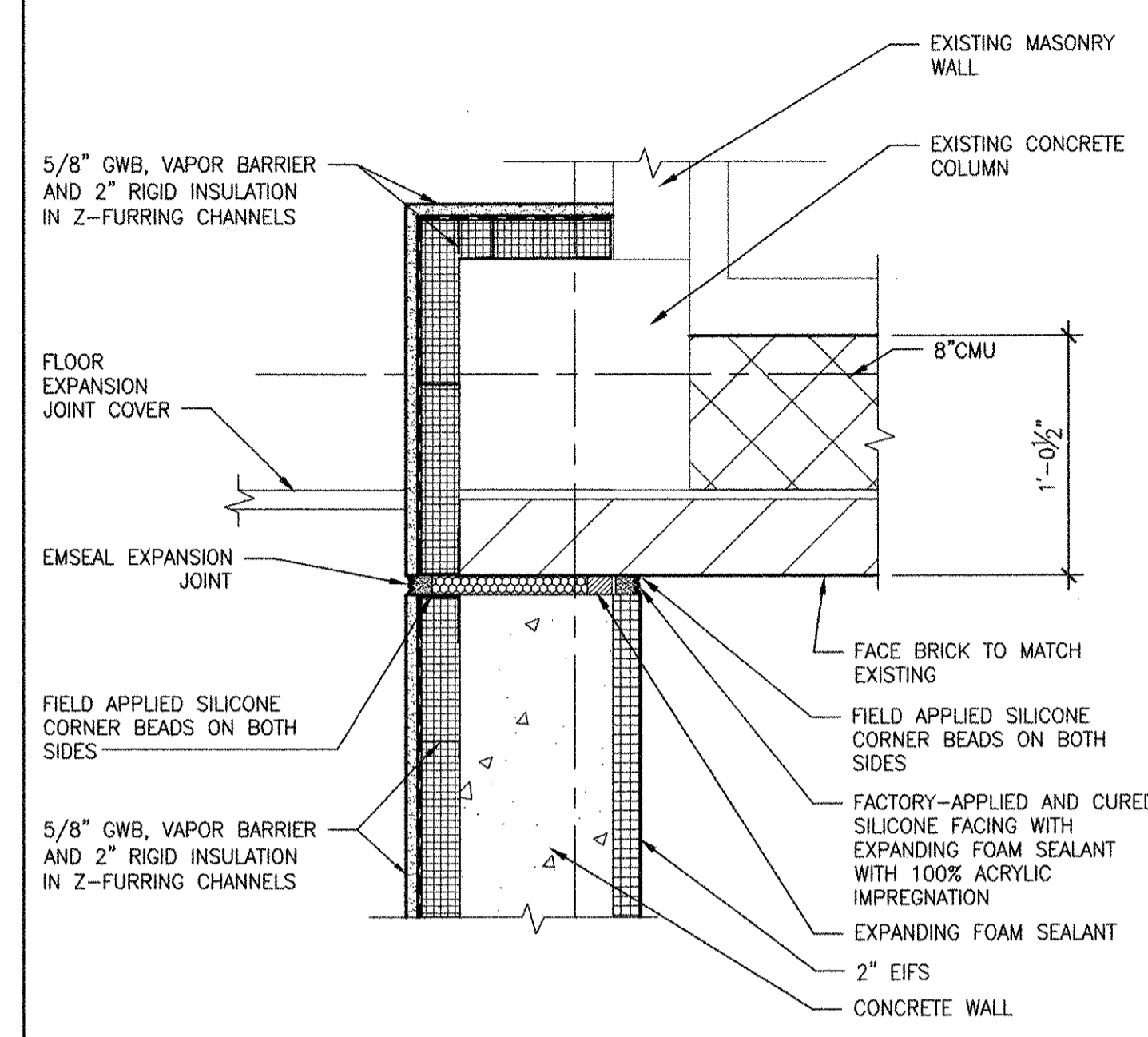
5



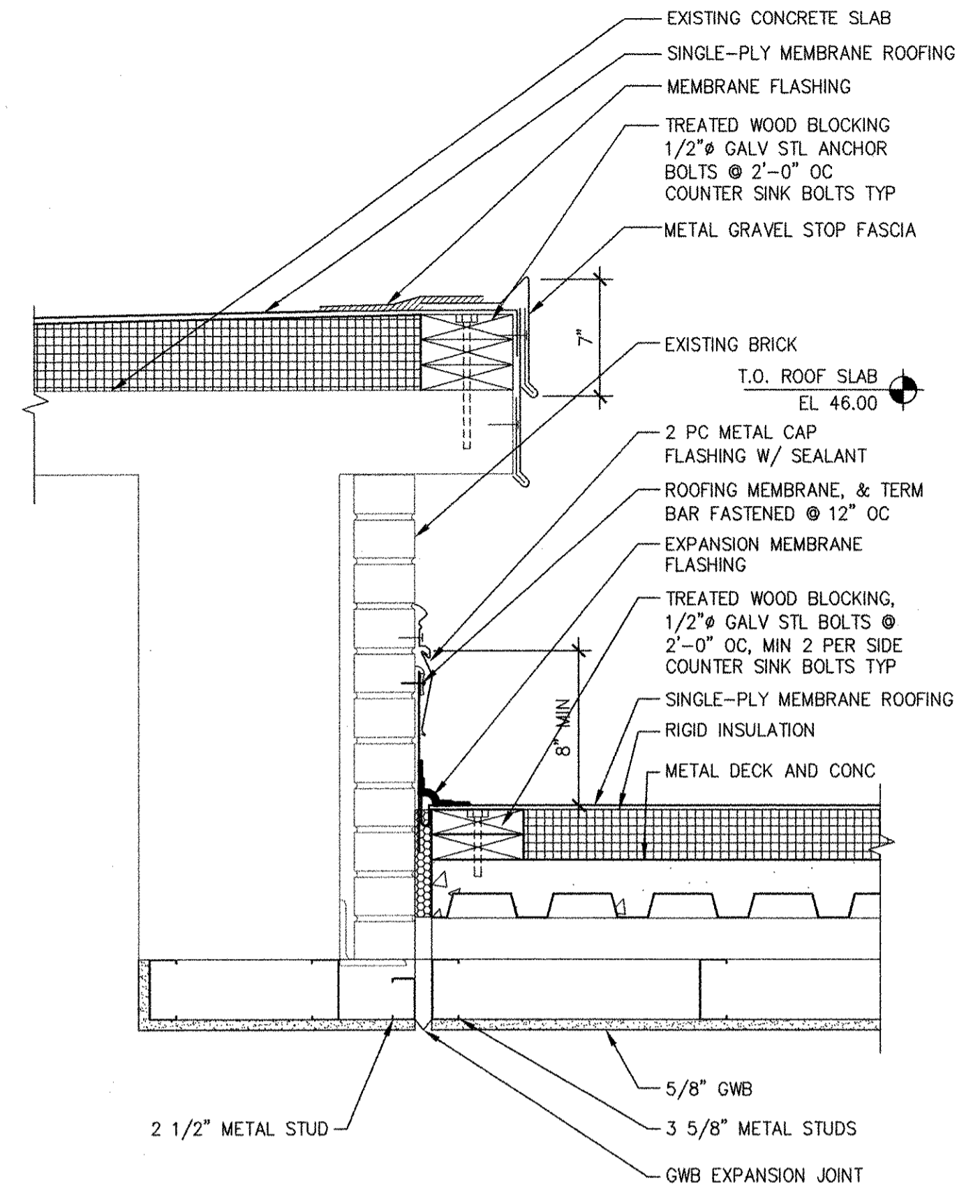
8 DETAIL 8
41 A-40/1 1/2" = 1'-0"



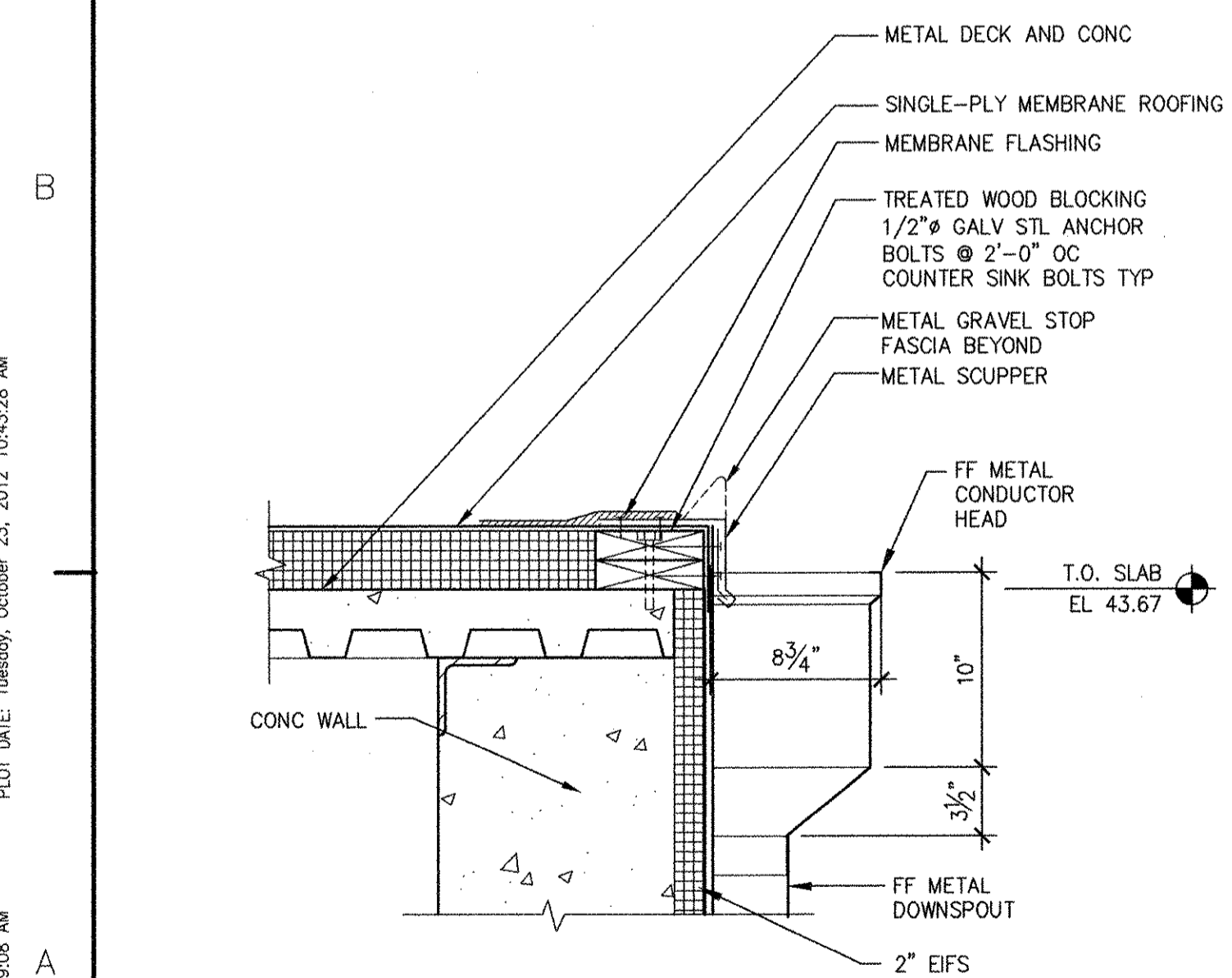
6 DETAIL 6
41 A-30/1 1/2" = 1'-0"



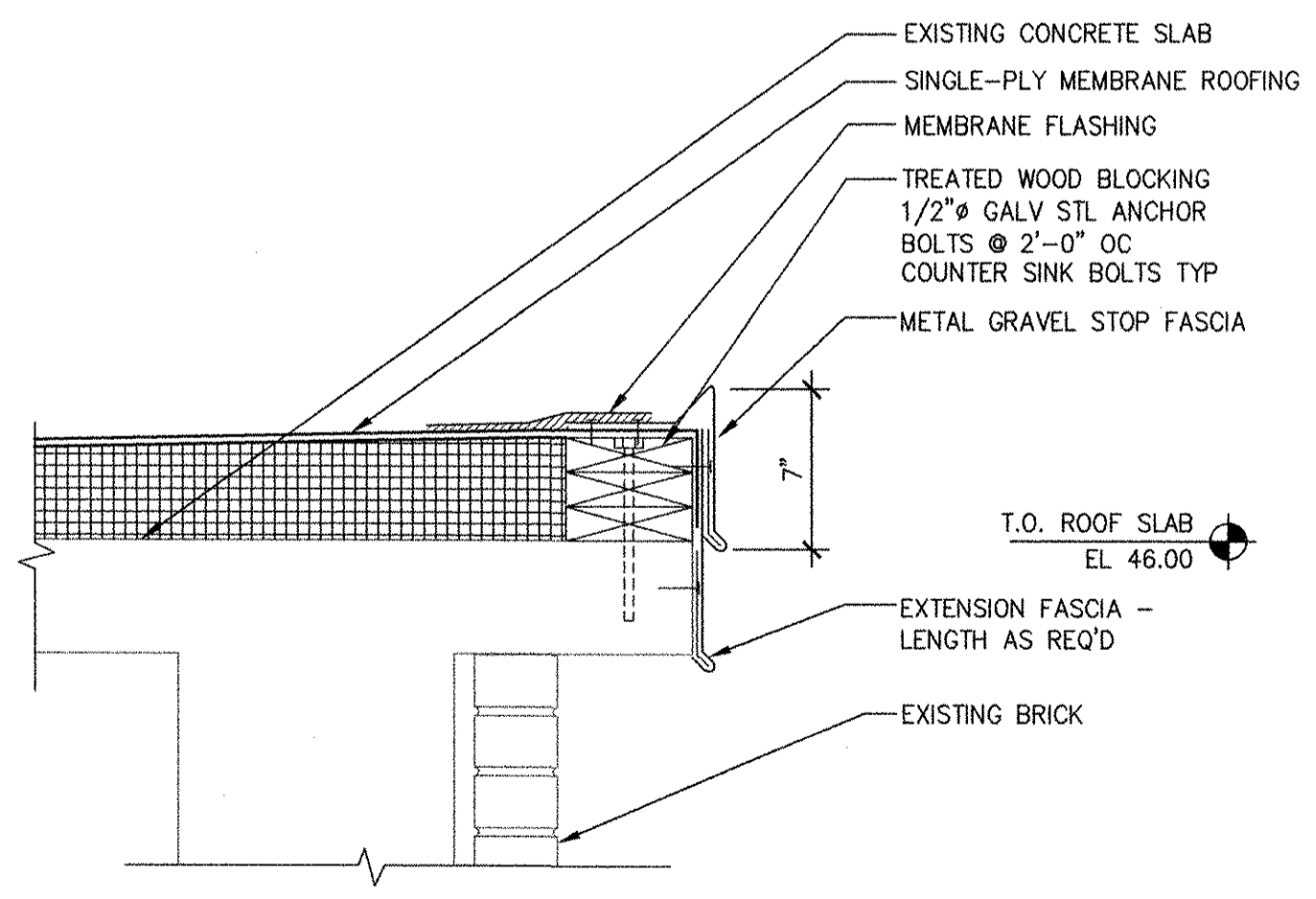
4 DETAIL 4
41 A-40/1 1/2" = 1'-0"



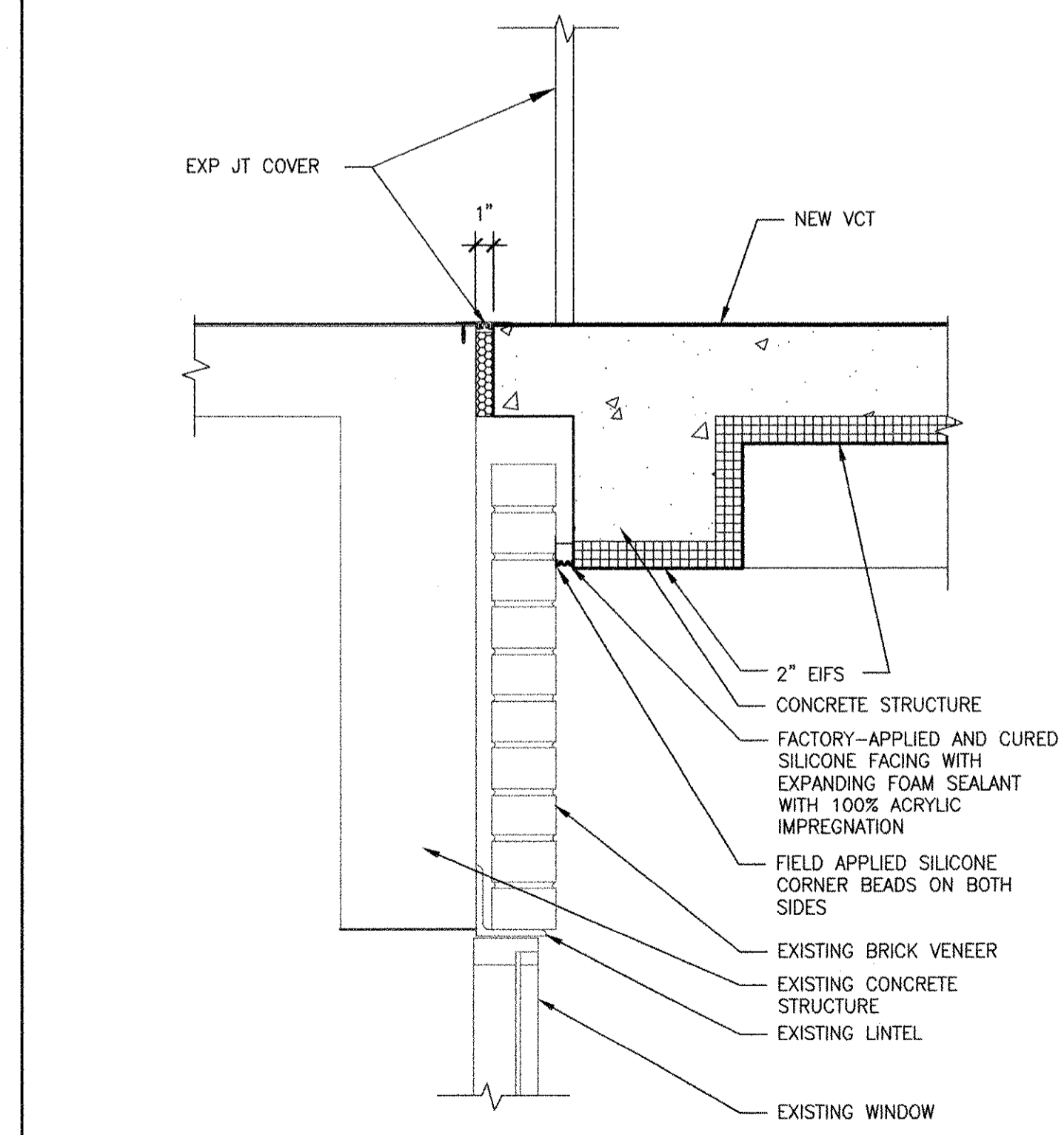
2 DETAIL 2
41 A-30/1 1/2" = 1'-0"



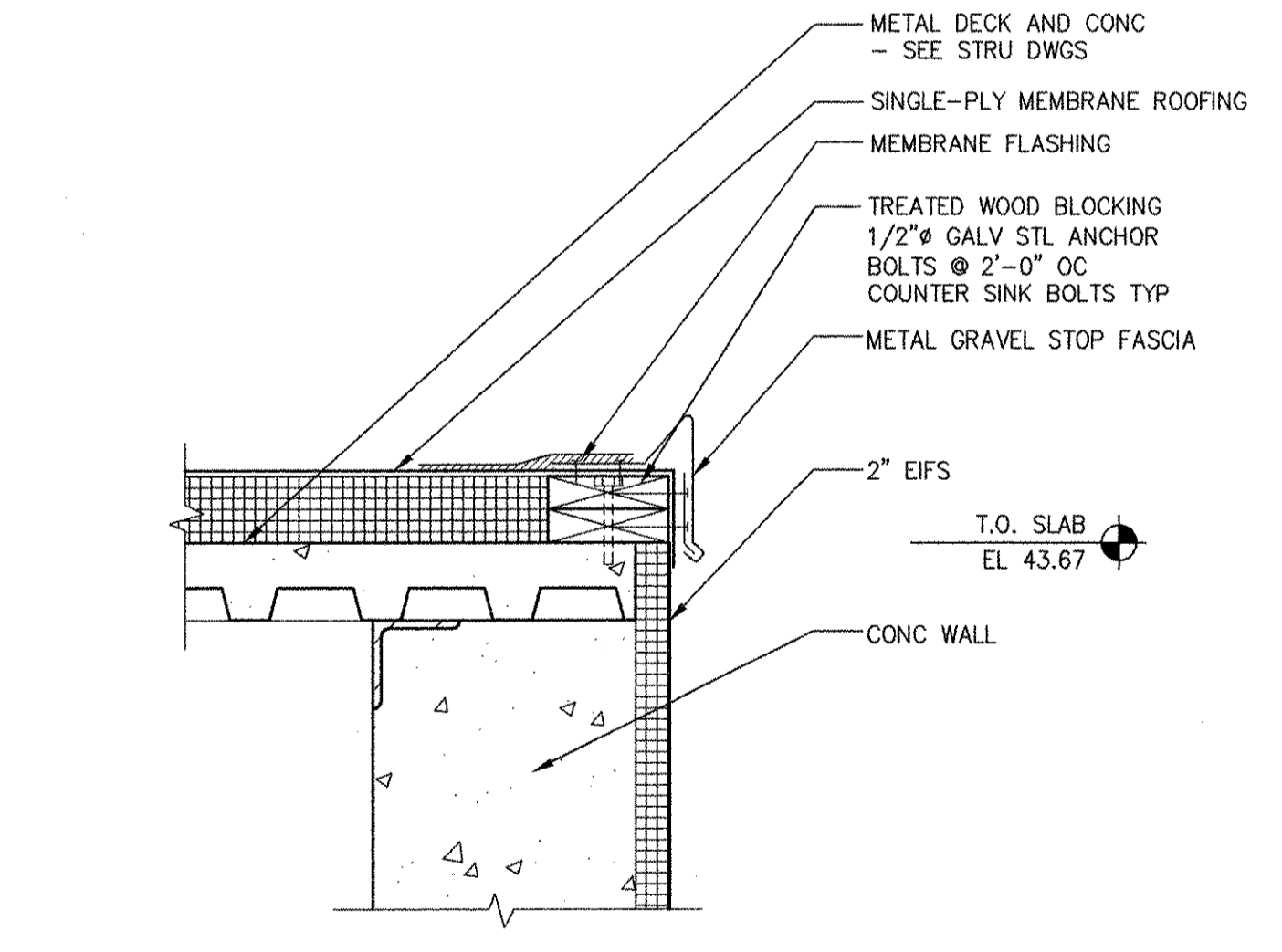
7 DETAIL 7
41 A-30/1 1/2" = 1'-0"



5 DETAIL 5
41 A-30/1 1/2" = 1'-0"



3 DETAIL 3
41 A-30/1 1/2" = 1'-0"

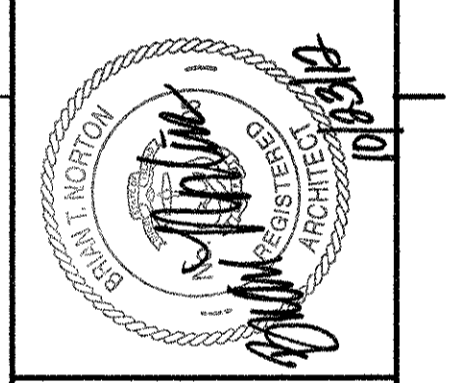


1 DETAIL 1
41 A-30/1 1/2" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	MM	HG	REVISIONS
1	10/19/12					REVISED FOR RECORD DRAWING



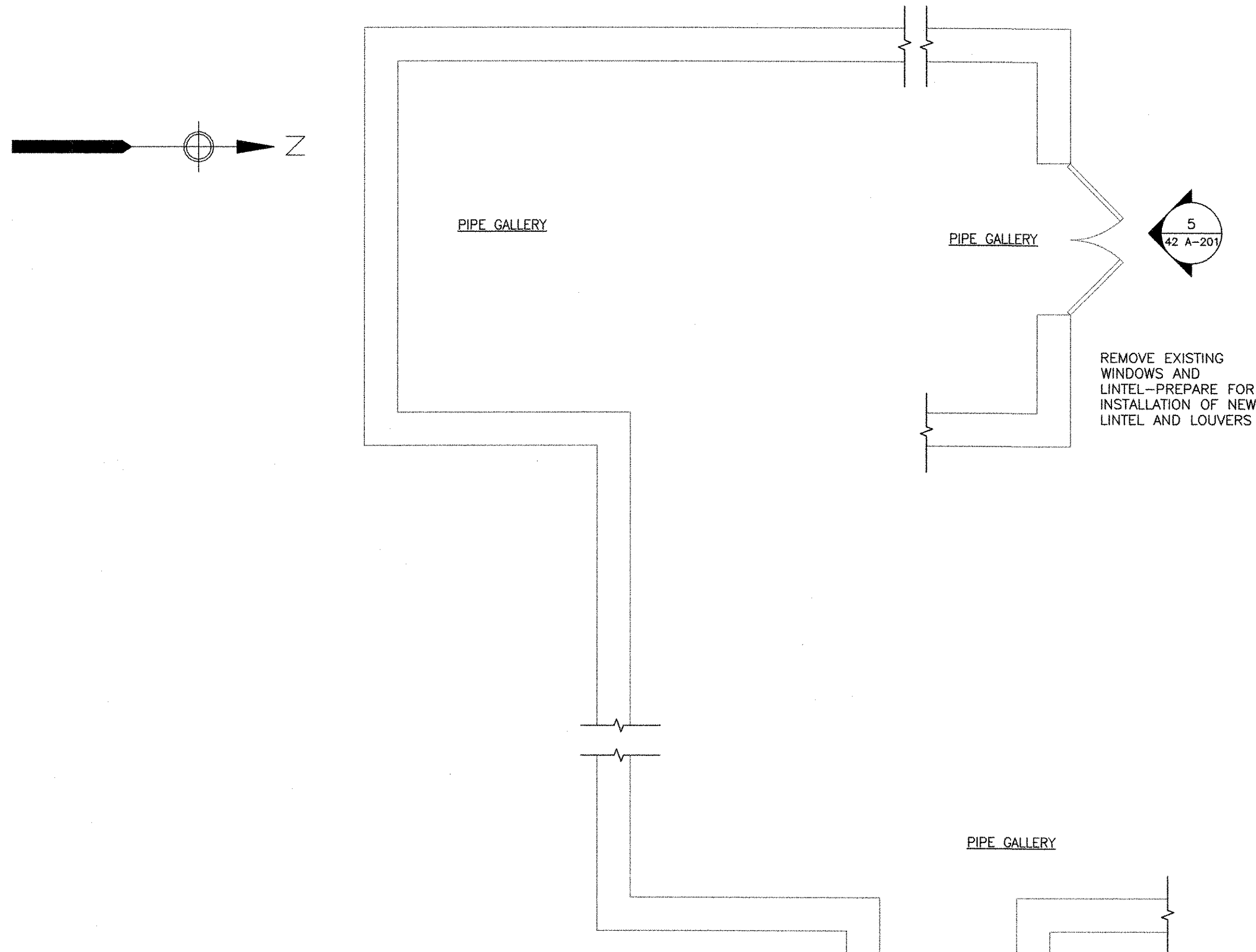
CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
ADMINISTRATION BUILDING
DETAILS
ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	41 A-501
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

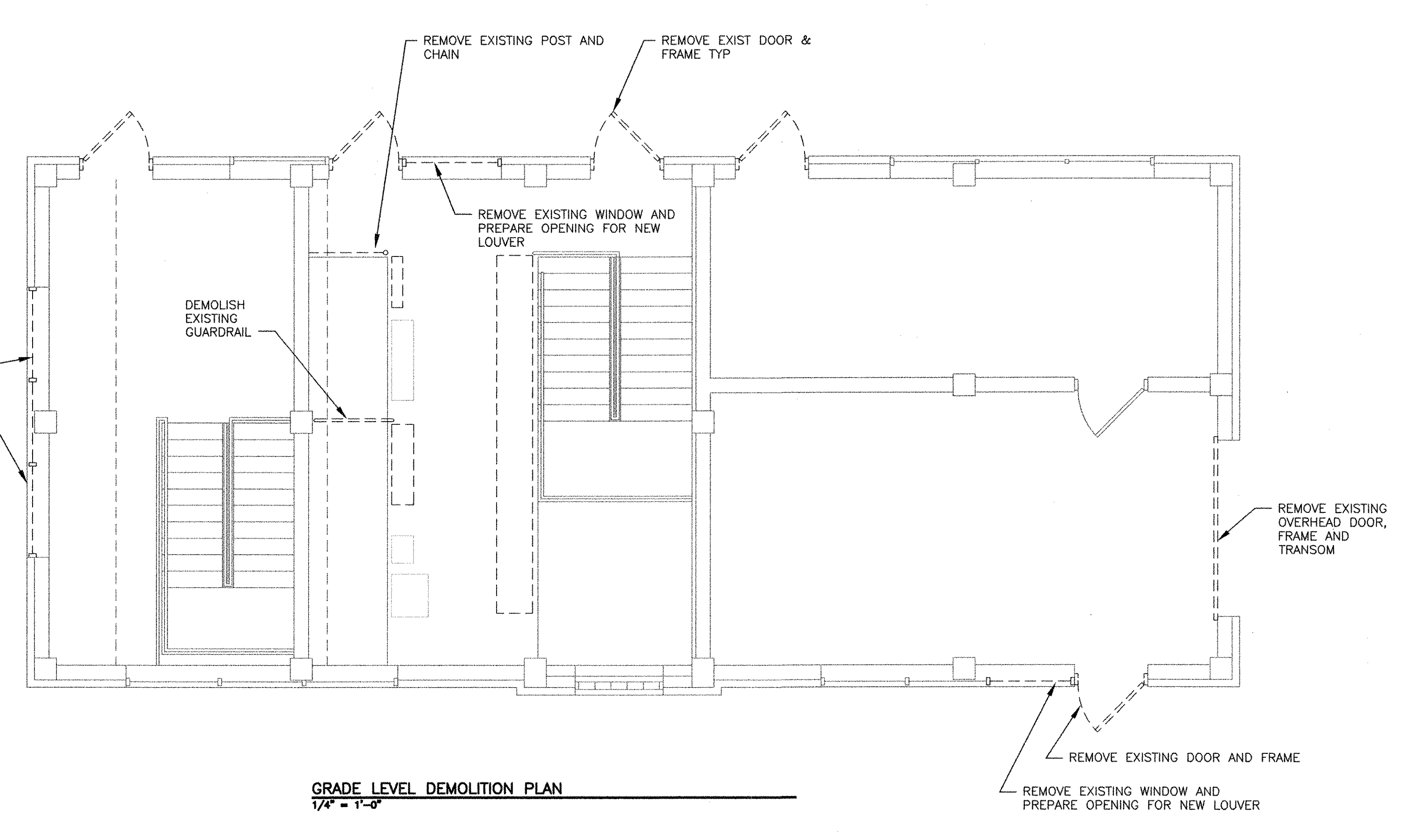
41 A-501

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RHO) DP-4\SHEETS\A-1 A-501.DWG
 LAST UPDATE: Monday, October 01, 2012 10:09:08 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:28 AM
 ANSI: D - 1-10-12

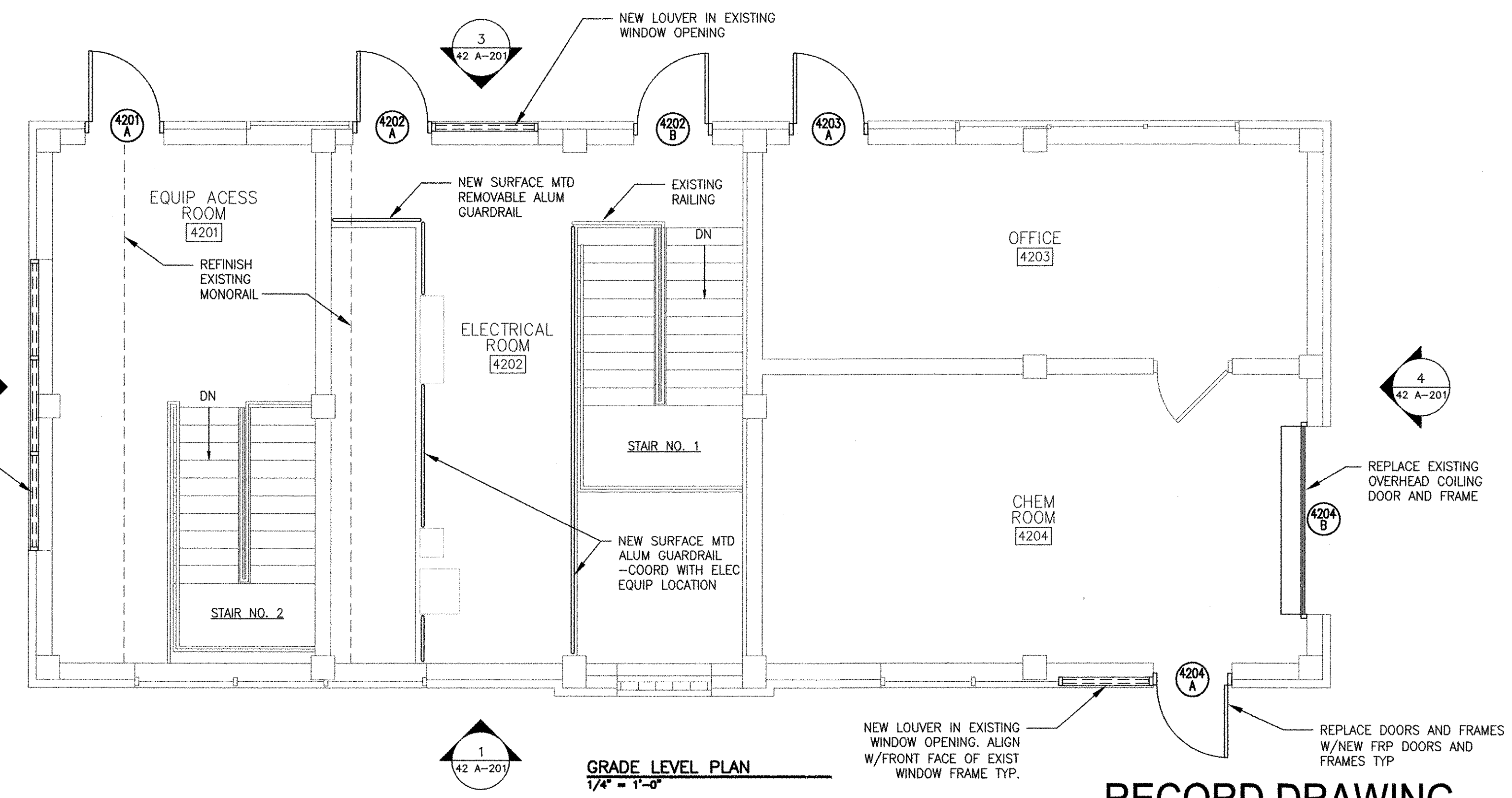
ANSI D - 1-10-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\A42 A-101.DWG
 LAST UPDATE: Monday, October 01, 2012 10:10:40 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:33 AM



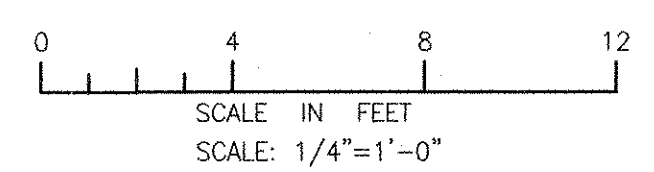
LOWER LEVEL PLAN
 1/4" = 1'-0"



GRADE LEVEL DEMOLITION PLAN
 1/4" = 1'-0"



GRADE LEVEL PLAN
 1/4" = 1'-0"



RECORD DRAWING

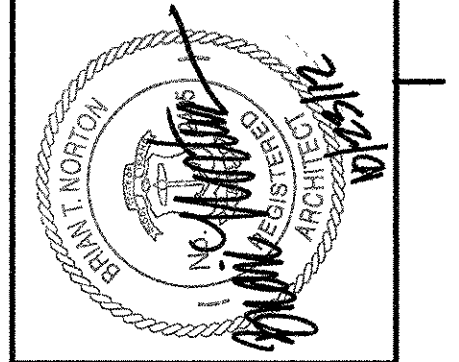
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	DESCRIPTION
1	10/19/12	MM	REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 100 WATER STREET
 WILMINGTON, MA 01890
 PHONE (781) 246-5300



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

RAW SEWAGE INFLUENT PUMP STATION FLOOR PLANS

ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	42 A-101
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	H. GARCIA
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

42 A-101

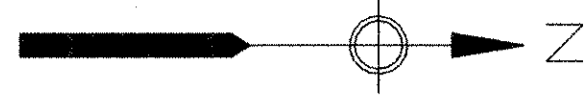
1

2

3

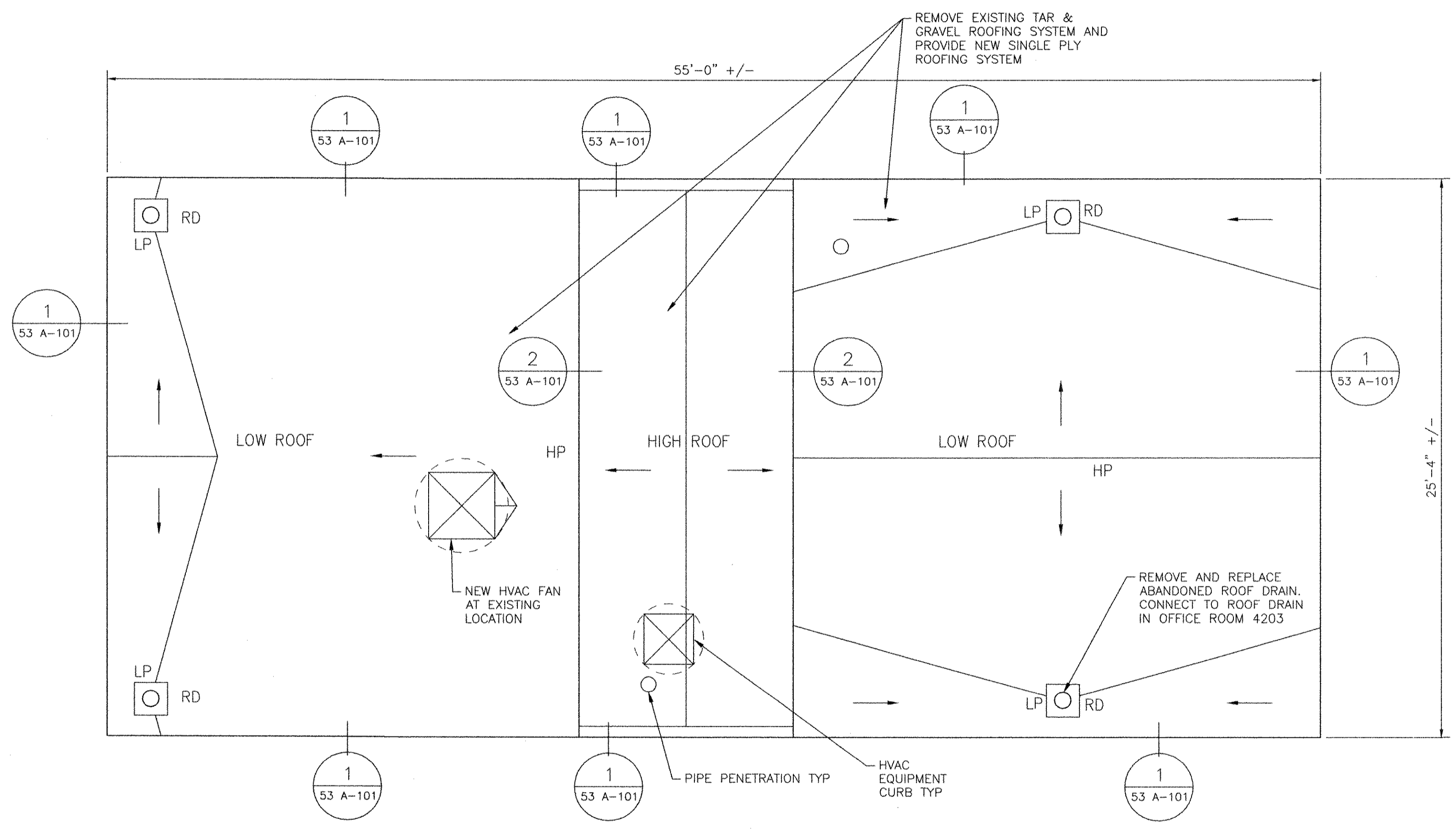
4

5

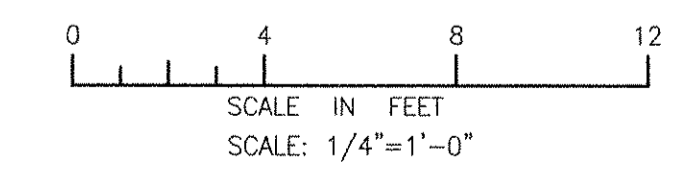


NOTES:

- 1. SEE 99 A-501 FOR TYPICAL LOW-SLOPE ROOF DETAILS.
- 2. PROVIDE 3 1/2" AVERAGE THICKNESS TAPERED INSULATION (R-20 MINIMUM).
- 3. PROVIDE NEW ROOF DRAIN STRAINERS.



ROOF PLAN
1/4" = 1'-0"



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (B6)\DP-4\SHEETS\A42 A-102.DWG
 LAST UPDATE: Tuesday, October 09, 2012 10:13:44 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:37 AM
 ANSI D - 9-Oct-12

AECOM	AECOM USA, INC. 100 WATER STREET WASHINGTON, DC 20004 PHONE (781) 246-5200	RECORD DRAWINGS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 10%;">BY</th> <th style="width: 10%;">CHECKED</th> <th style="width: 10%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">10/19/12</td> <td style="text-align: center;">MM</td> <td style="text-align: center;">HG</td> <td style="text-align: center;">REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>	NO.	DATE	BY	CHECKED	DESCRIPTION	1	10/19/12	MM	HG	REVISED FOR RECORD DRAWING
NO.	DATE	BY	CHECKED	DESCRIPTION									
1	10/19/12	MM	HG	REVISED FOR RECORD DRAWING									
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4		RAW SEWAGE INFLUENT PUMP STATION ROOF PLAN ARCHITECTURAL											
PROJECT NO: 60148648 CAD DWG FILE: 42 A-102		DESIGNED BY: M. MACEACHERN DRAWN BY: K. COLLINS DEPT CHECK: B. NORTON PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED											
42 A-102													

1

2

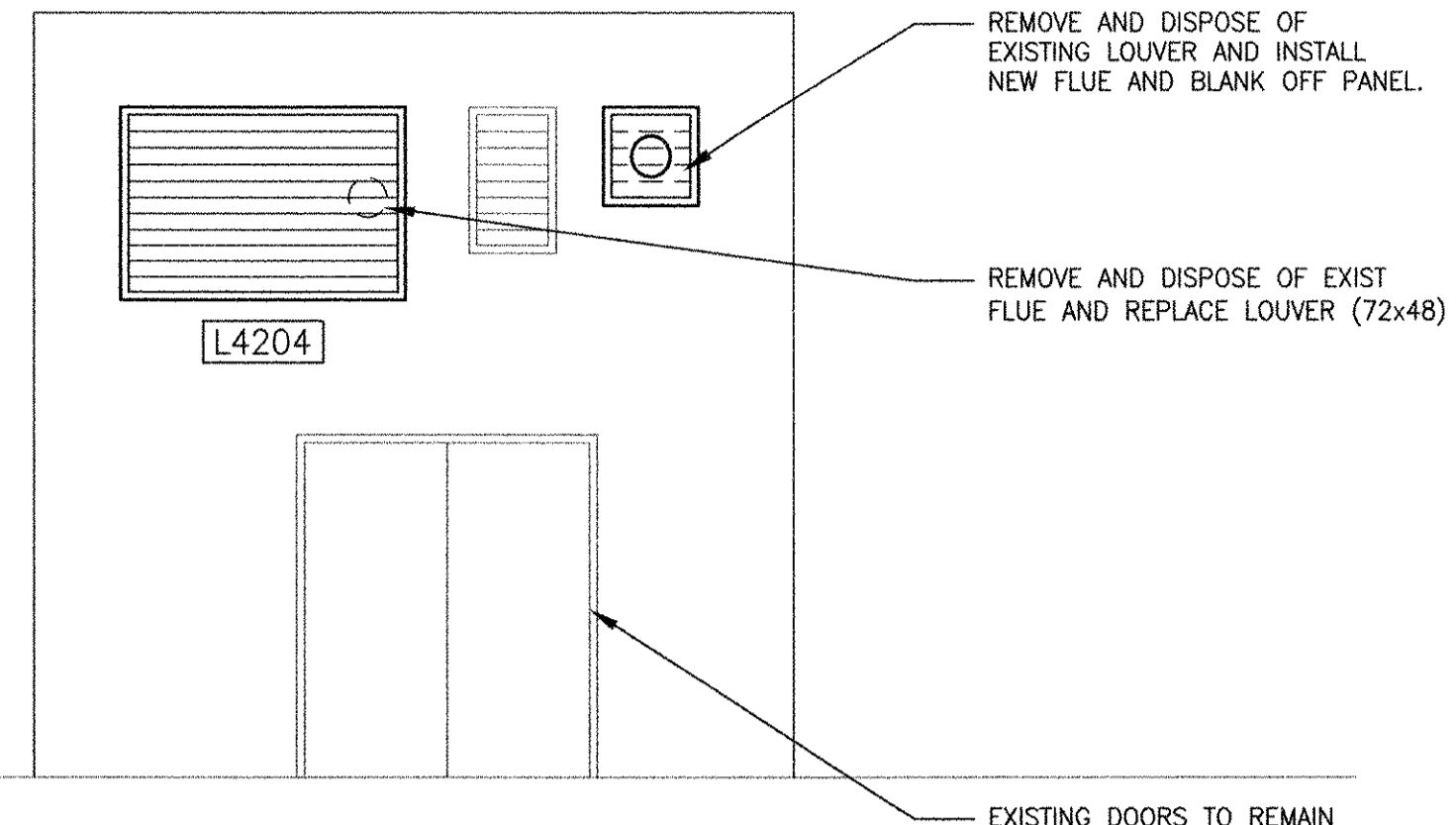
3

4

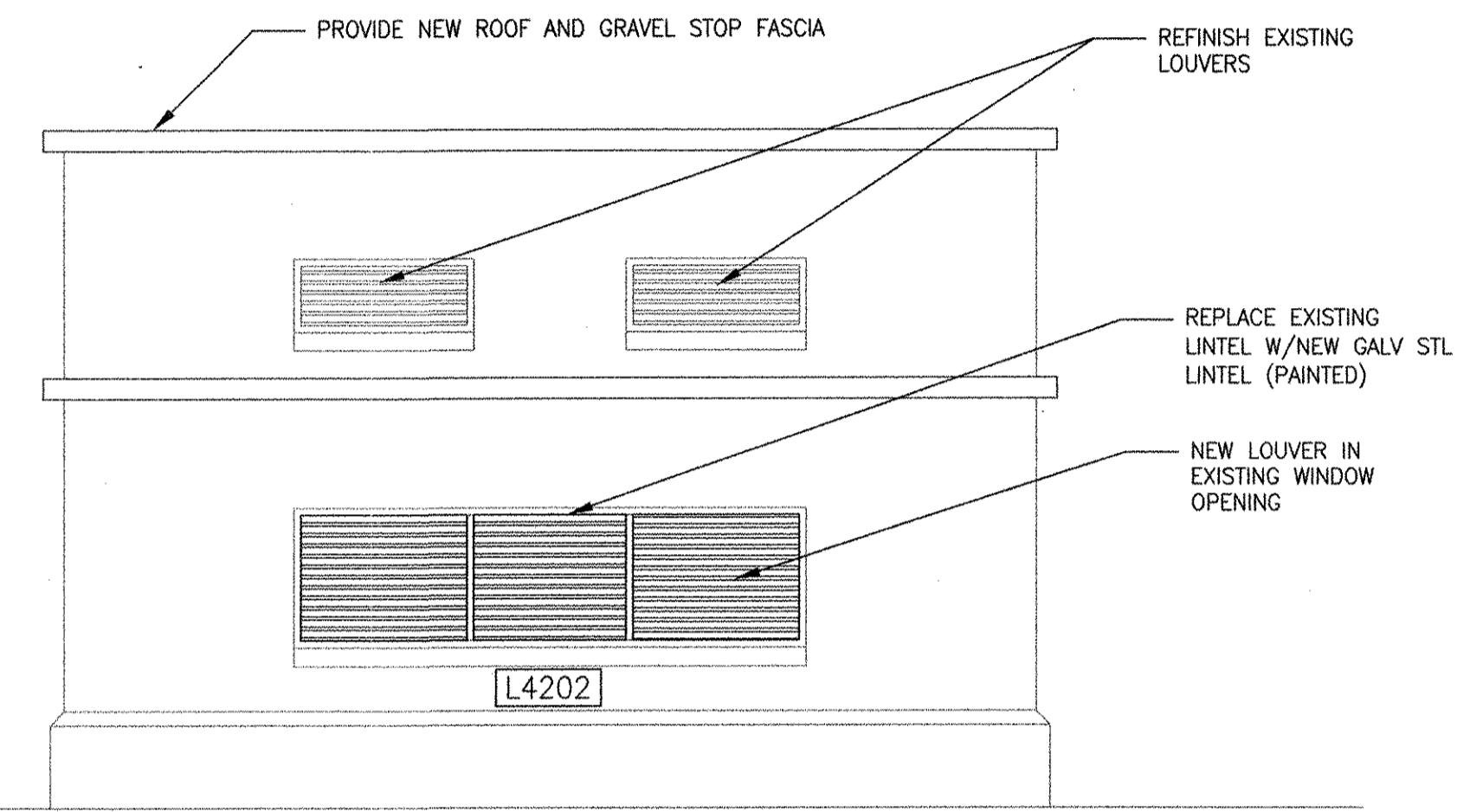
5

NOTES:

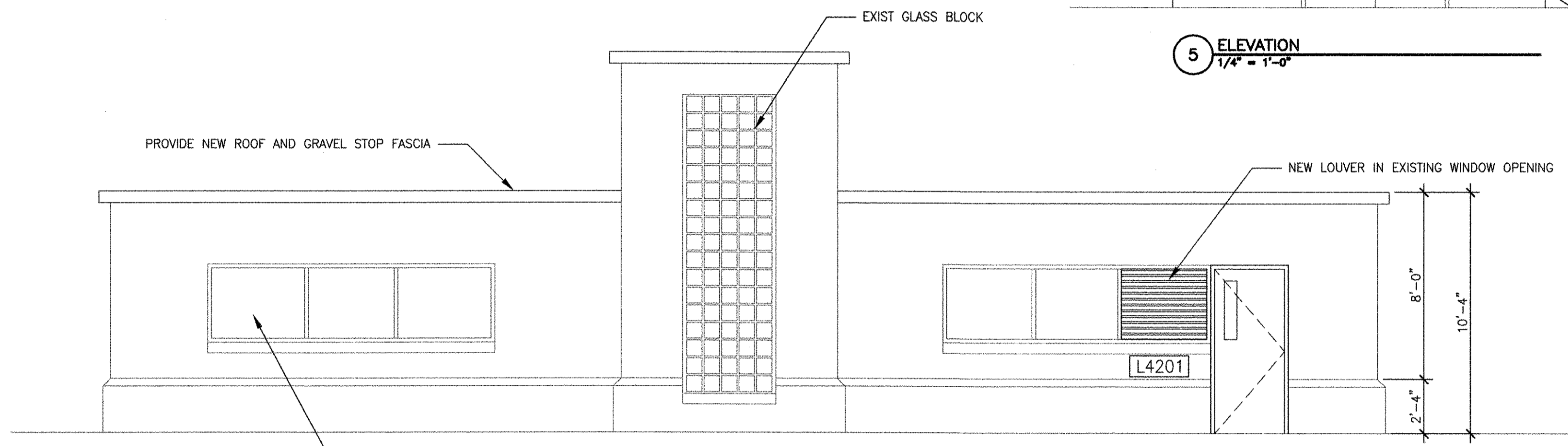
- 1. REPAIR OR REPLACE 16 S.F. OF BRICK VENEER TO MATCH EXISTING. LOCATIONS TO BE DETERMINED IN FIELD BY ENGINEER.



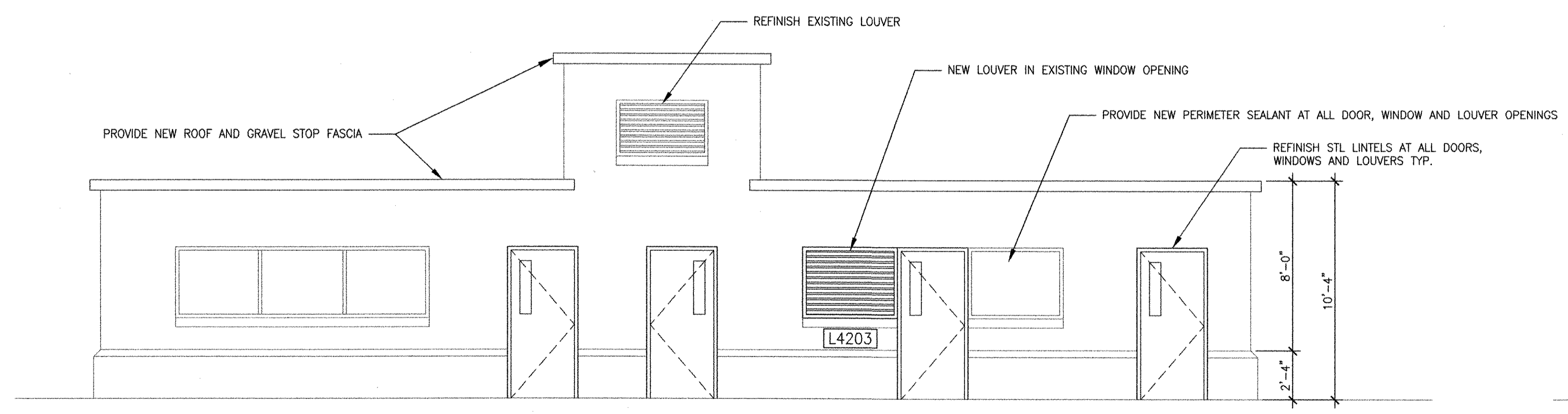
5 ELEVATION
1/4" = 1'-0"



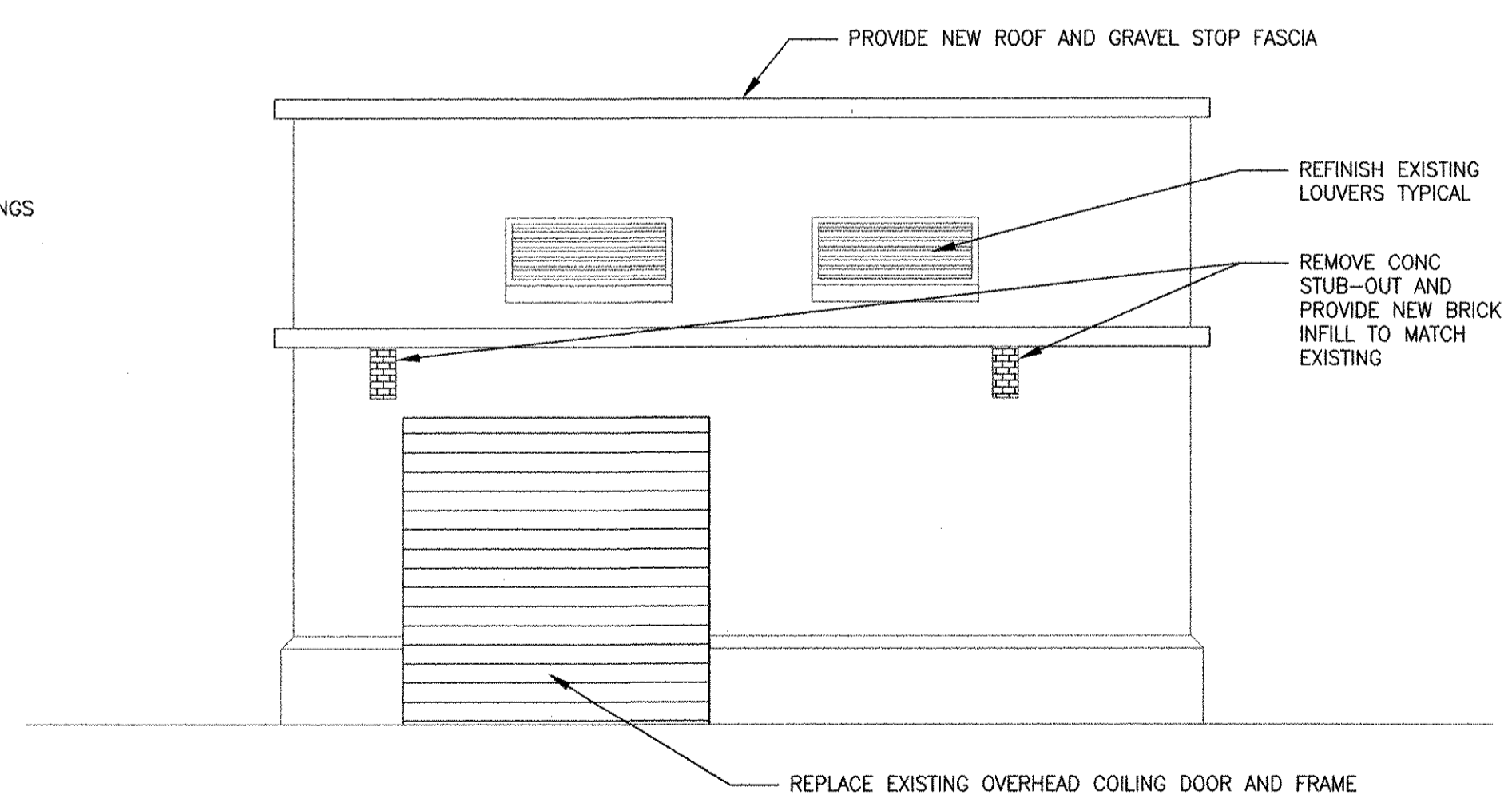
2 SOUTH ELEVATION
1/4" = 1'-0"



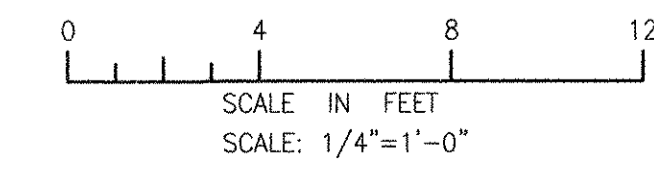
1 EAST ELEVATION
1/4" = 1'-0"



3 WEST ELEVATION
1/4" = 1'-0"



4 NORTH ELEVATION
1/4" = 1'-0"



RECORD DRAWING

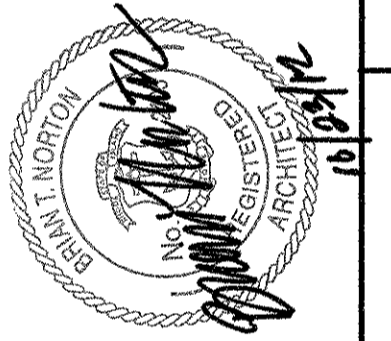
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM USA, INC.
NEW YORK OFFICE
110 WEST 30TH STREET
NEW YORK, NY 10018
PHONE (212) 246-5200



RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
RAW SEWAGE INFLUENT PUMP STATION
EXTERIOR ELEVATIONS
ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	42 A-201
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	K. COLLINS
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAULT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

42 A-201

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RSD)\P\A\SHEETS\A42 A-201.DWG
 LAST UPDATE: Monday, October 01, 2012 10:12:16 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:40 AM
 ANSI D - 1-10-12

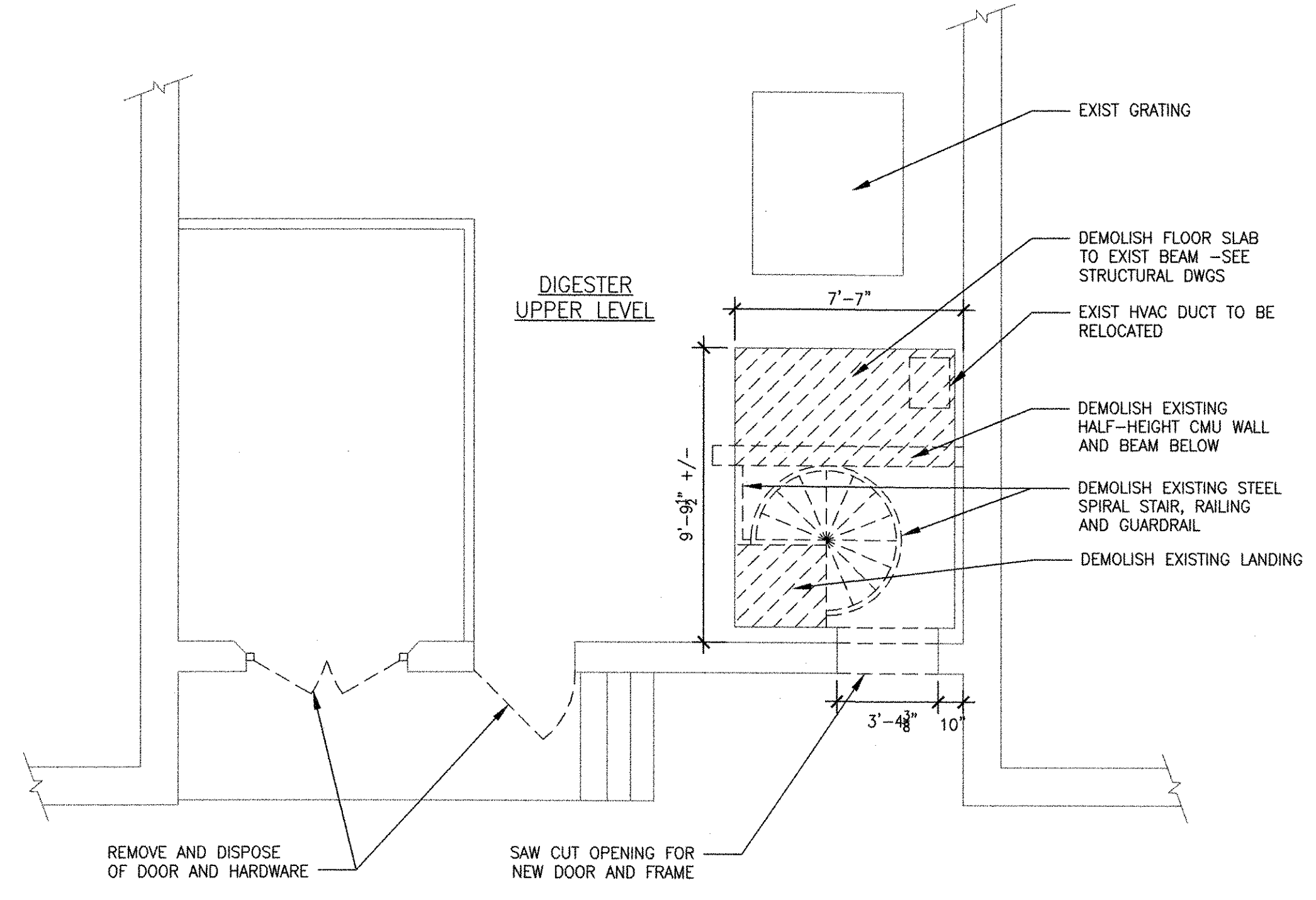
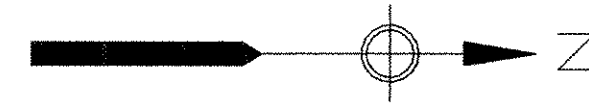
1

2

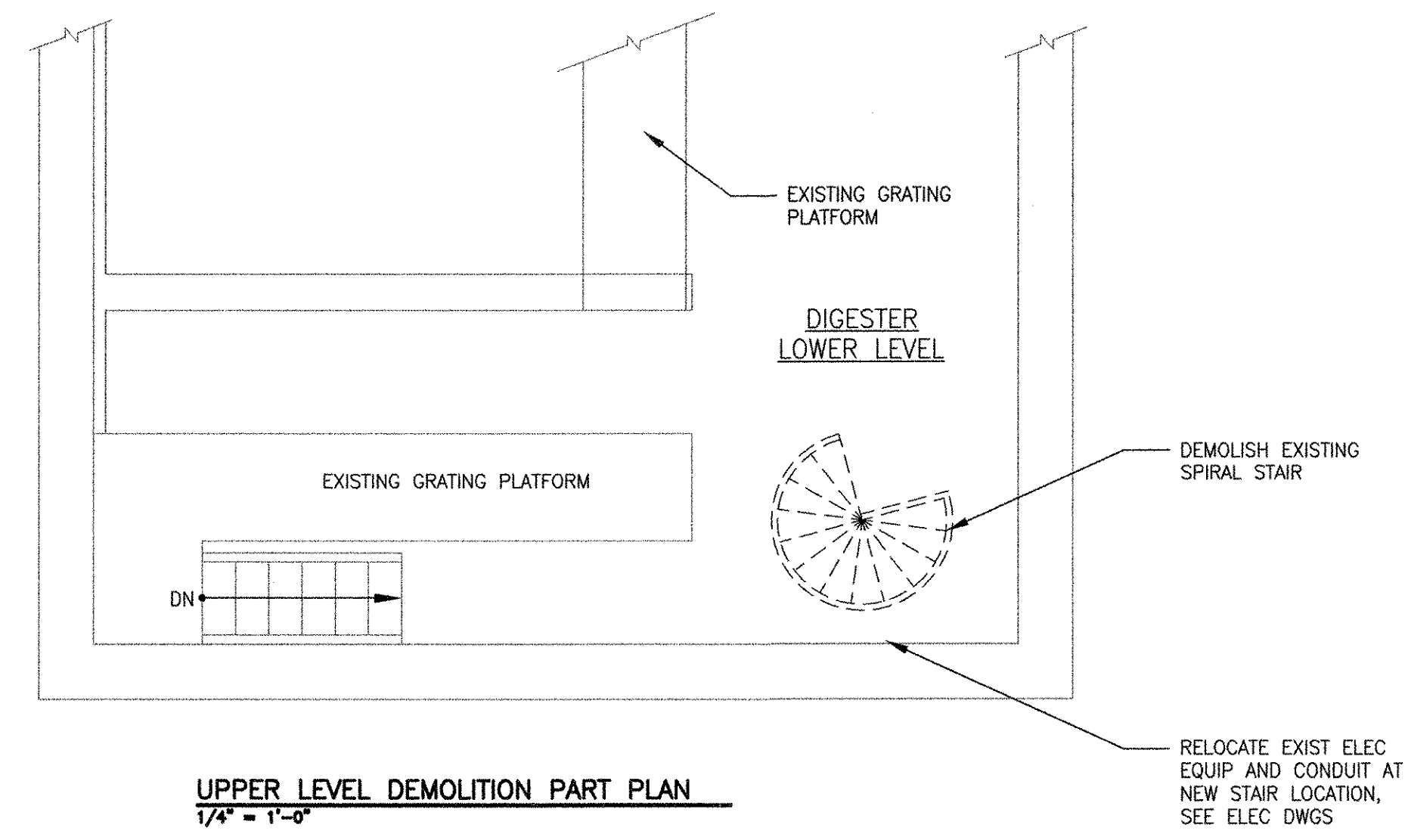
3

4

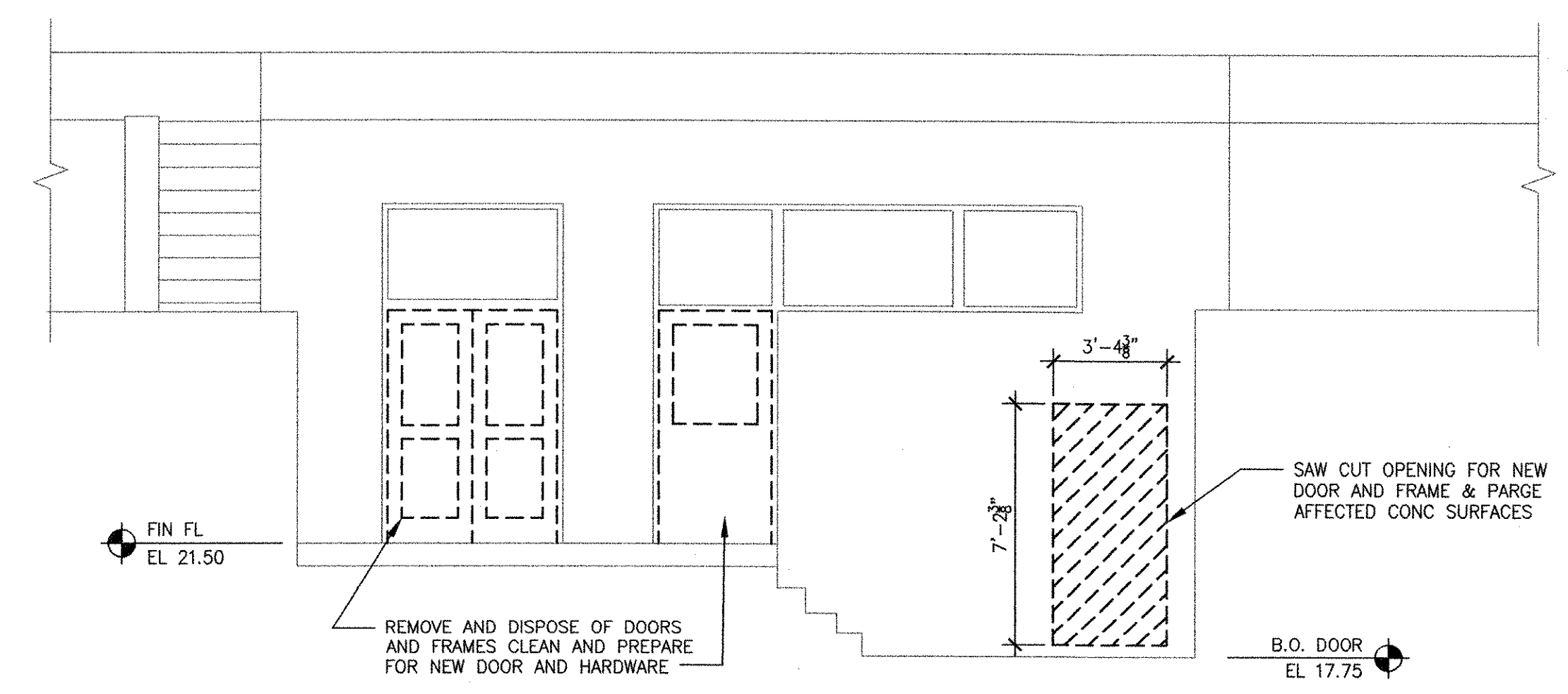
5



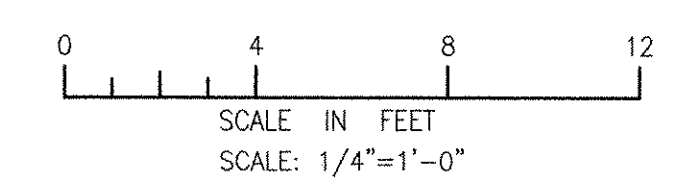
UPPER LEVEL DEMOLITION PART PLAN
1/4" = 1'-0"



UPPER LEVEL DEMOLITION PART PLAN
1/4" = 1'-0"



EXTERIOR DEMOLITION ELEVATION
1/4" = 1'-0"



RECORD DRAWING

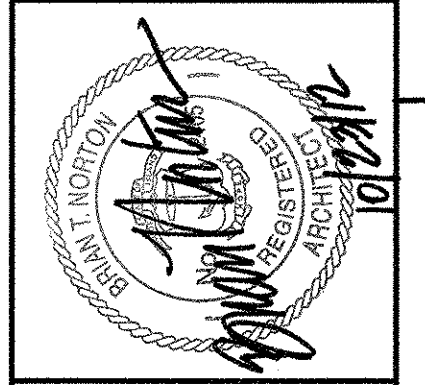
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	HG	MM	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
100 WASHINGTON STREET
WILMINGTON, DE 19801
PHONE (781) 246-5300

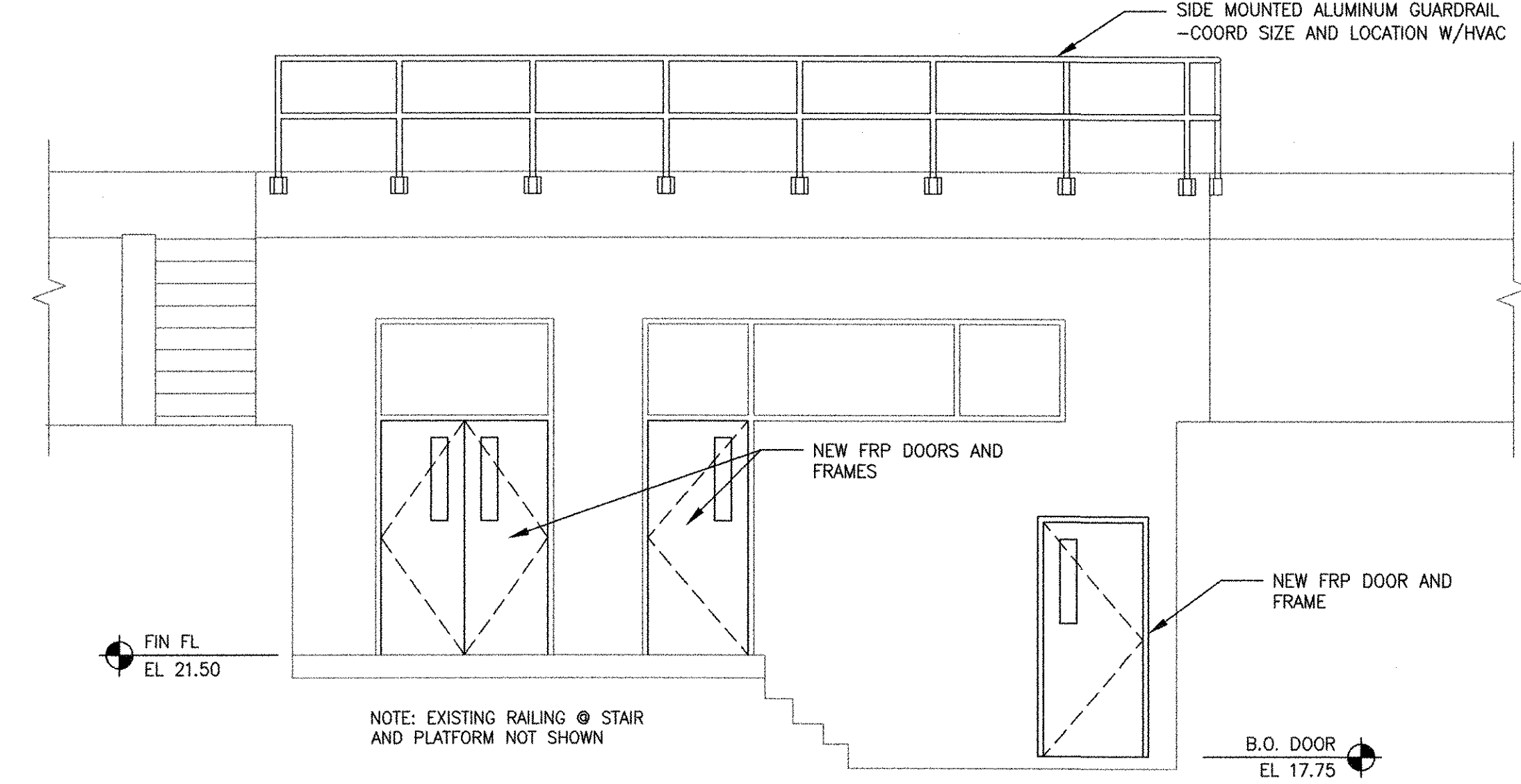
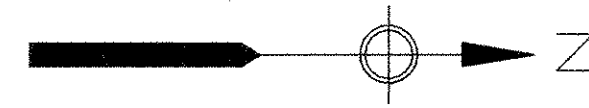


CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
**SLUDGE DIGESTER BUILDING
DEMOLITION PLANS AND
ELEVATION**
ARCHITECTURAL

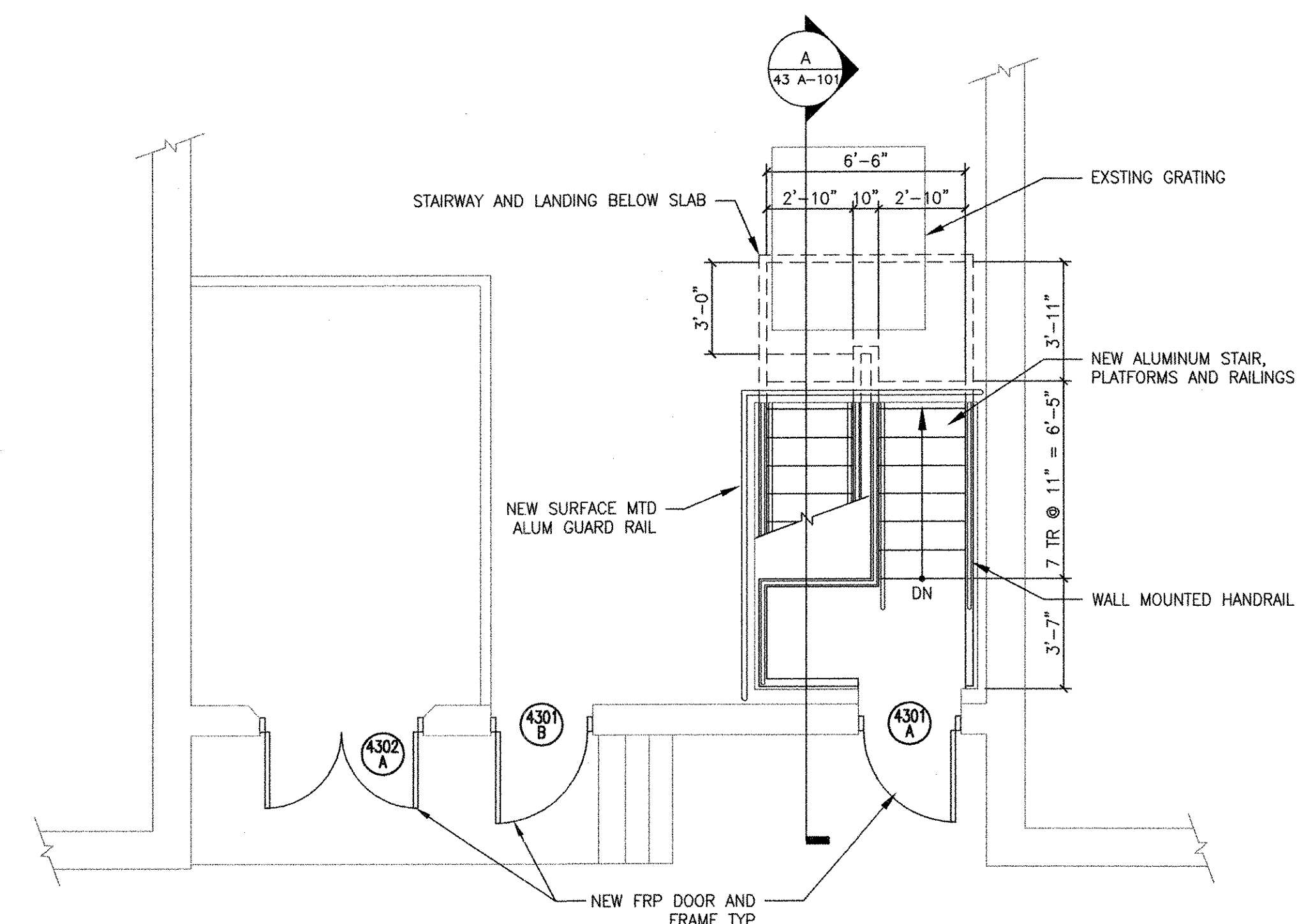
PROJECT NO:	60148648
CAD DWG FILE:	43 AD-101
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	H. GARCIA
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

43 AD-101

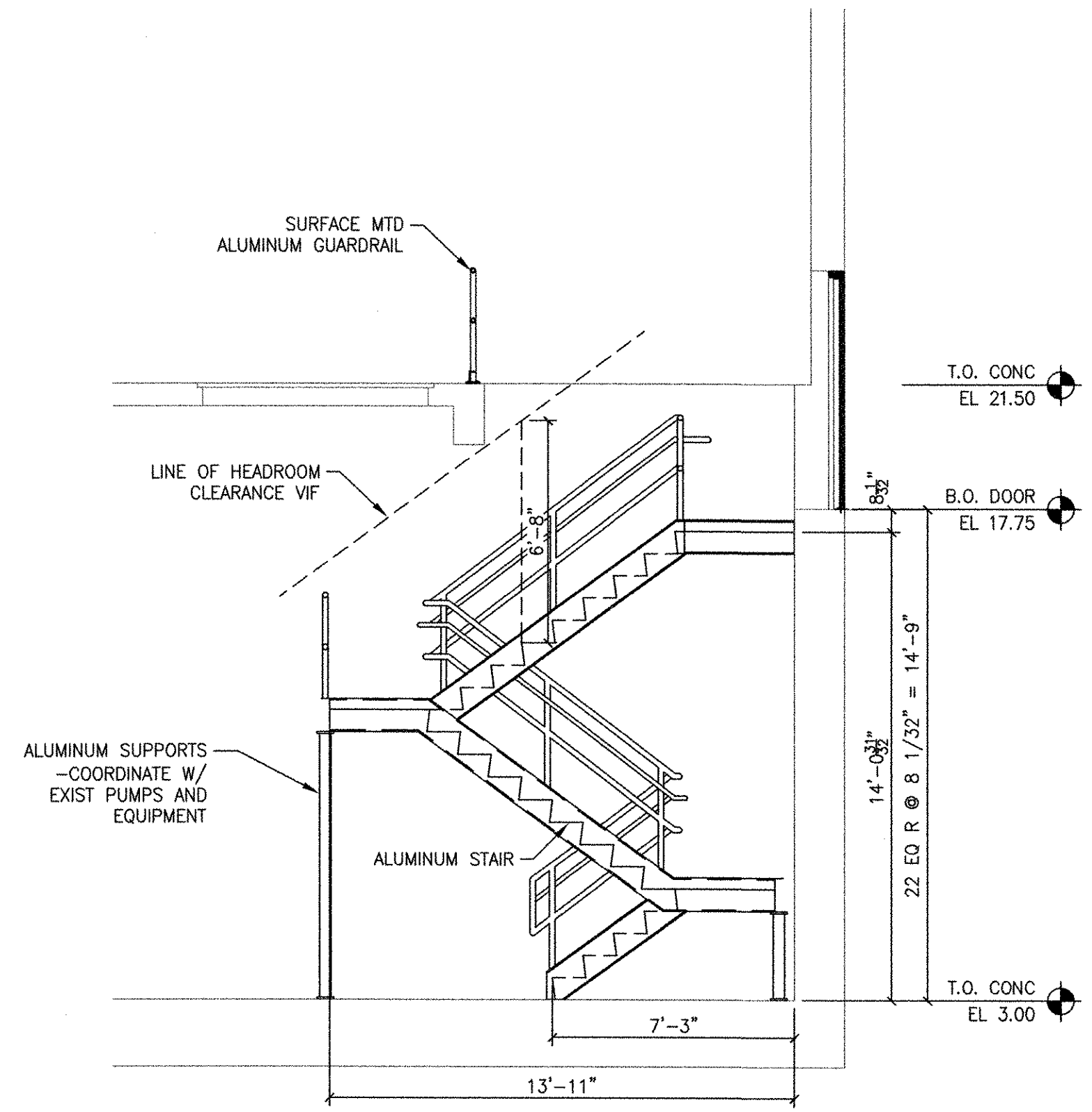
PATH: P:\60148648 - EAST PROVIDENCE DP-4\DWG\43 AD-101.DWG
 LAST UPDATE: Monday, October 01, 2012 10:12:49 AM
 PLOT DATE: Tuesday, October 23, 2012 10:43:44 AM
 ANSI D - 1-10-12



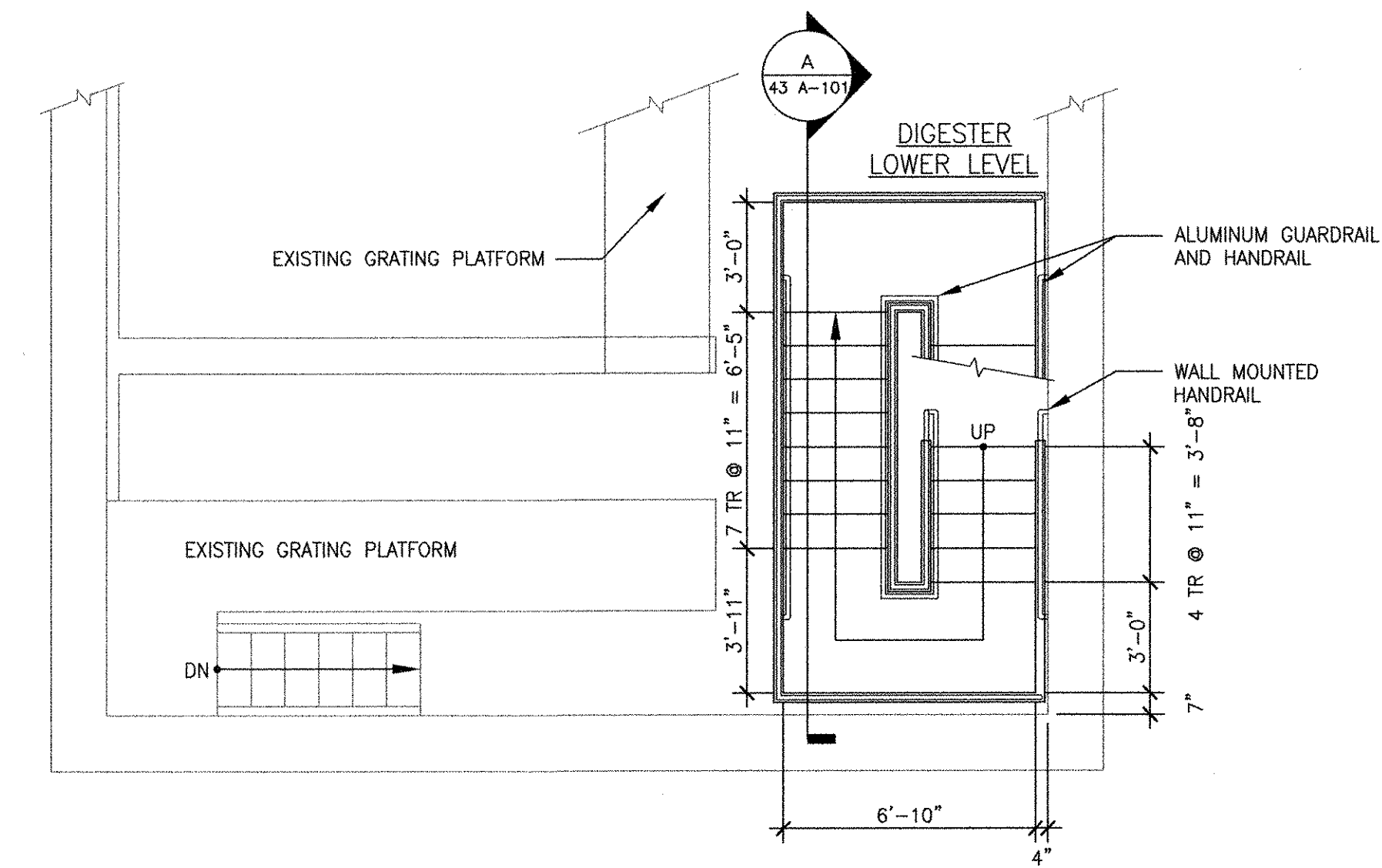
EXTERIOR ELEVATION
1/4" = 1'-0"



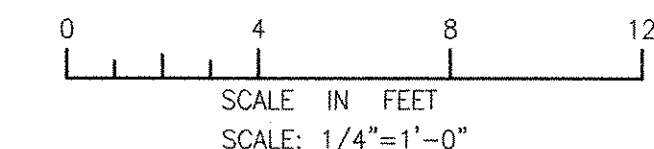
GRADE LEVEL PART PLAN
1/4" = 1'-0"



A STAIR SECTION
43 A-101 1/4" = 1'-0"



LOWER LEVEL PART PLAN
1/4" = 1'-0"



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

- NOTES:**
- SEE SHEETS 99 A-802 AND 99 A-803 FOR TYPICAL STAIR AND RAILING DETAILS.
 - PATCH EXISTING ROOF TO ACCOMMODATE HVAC IMPROVEMENTS.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (R0)\01-4\SHEETS\A\43 A-101.DWG
 PLOT DATE: Tuesday, October 23, 2012 10:43:51 AM
 LAST UPDATE: Monday, October 01, 2012 1:08:32 PM
 ANSI D - 1-10-12

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
10/19/12	DATE
MM	MADE BY / CHECKED
HG	

AECOM
RECORD DRAWINGS

AECOM USA, INC.
NEWELL CENTER
WAKEFIELD, MASSACHUSETTS
PHONE (781) 246-5200

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

SLUDGE DIGESTER BUILDING PART PLANS, ELEVATION AND SECTION
ARCHITECTURAL

PROJECT NO: 60148648
 CAD DWG FILE: 43 A-101
 DESIGNED BY: M. MACEACHERN
 DRAWN BY: H. GARCIA
 DEPT CHECK: B. NORTON
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

43 A-101

D

C

B

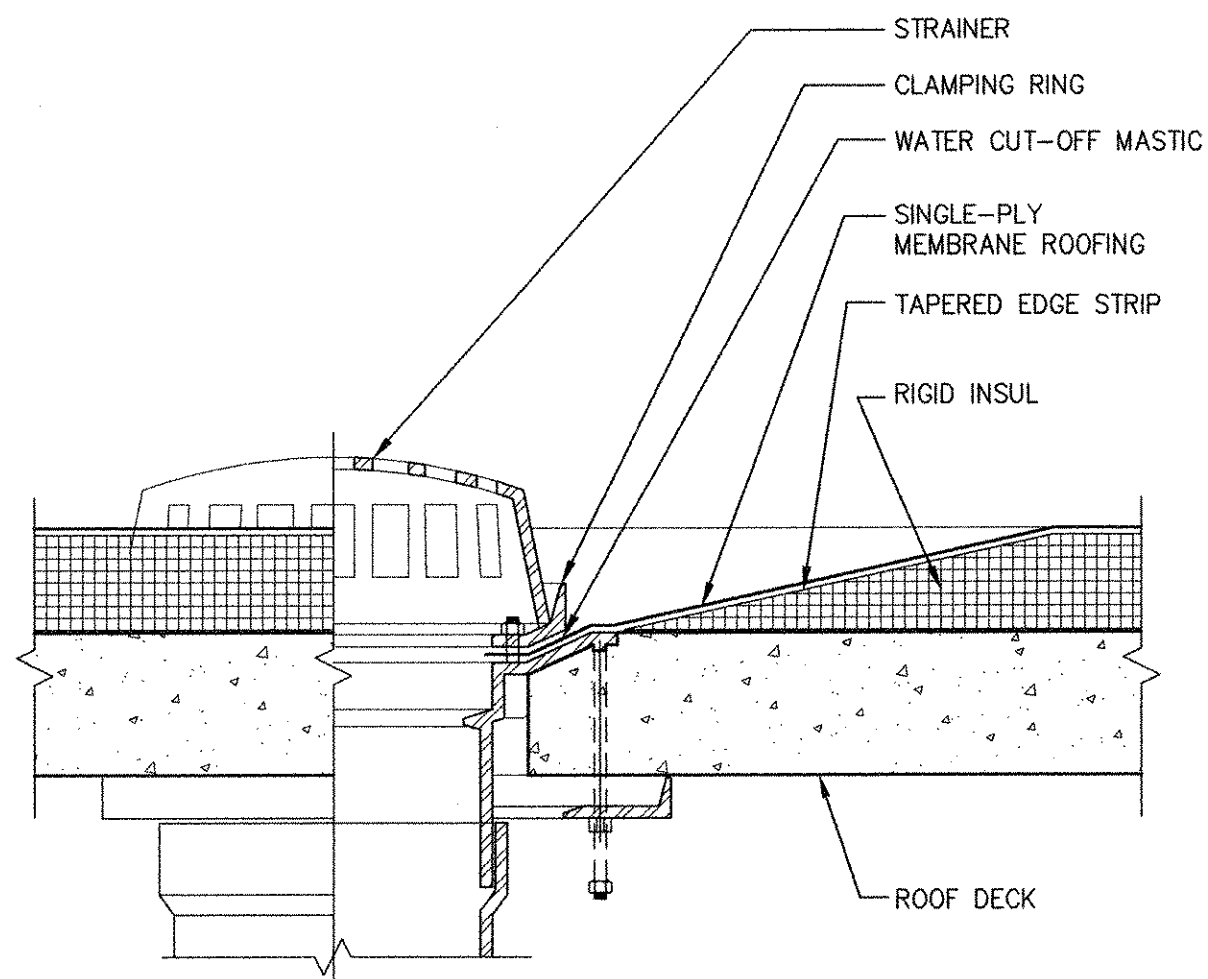
A

D

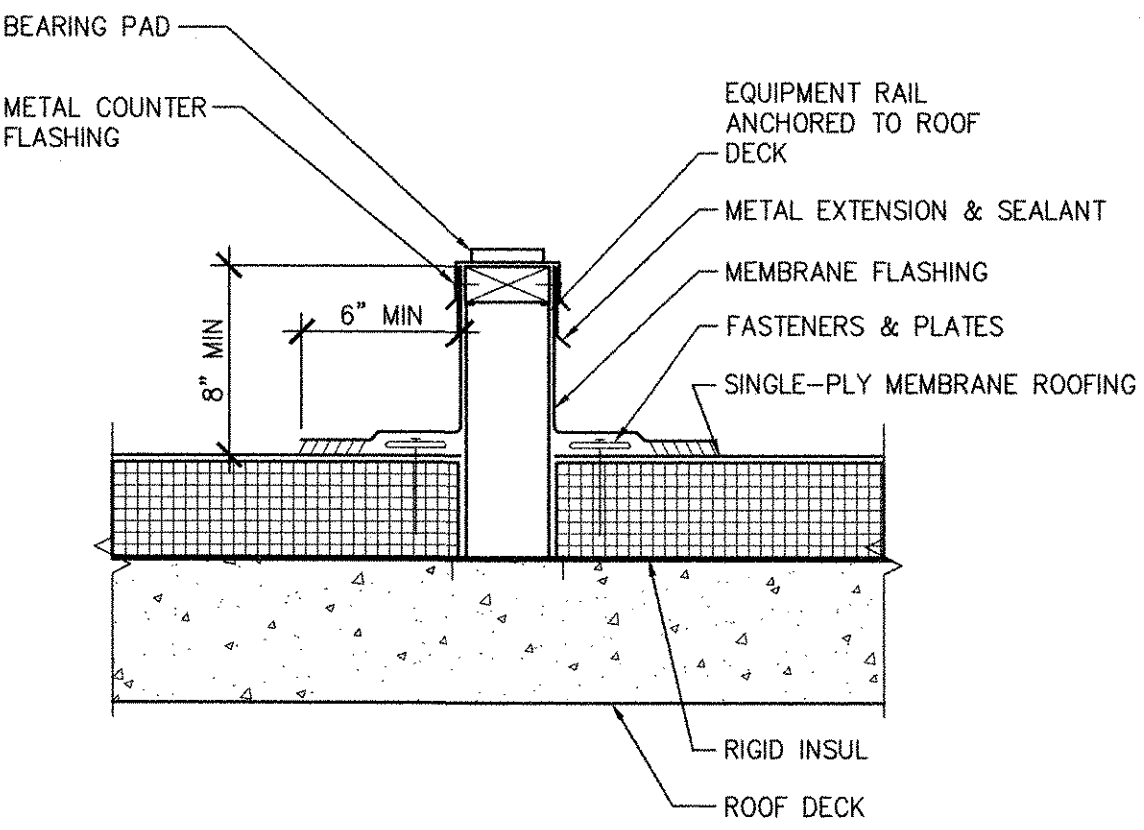
C

B

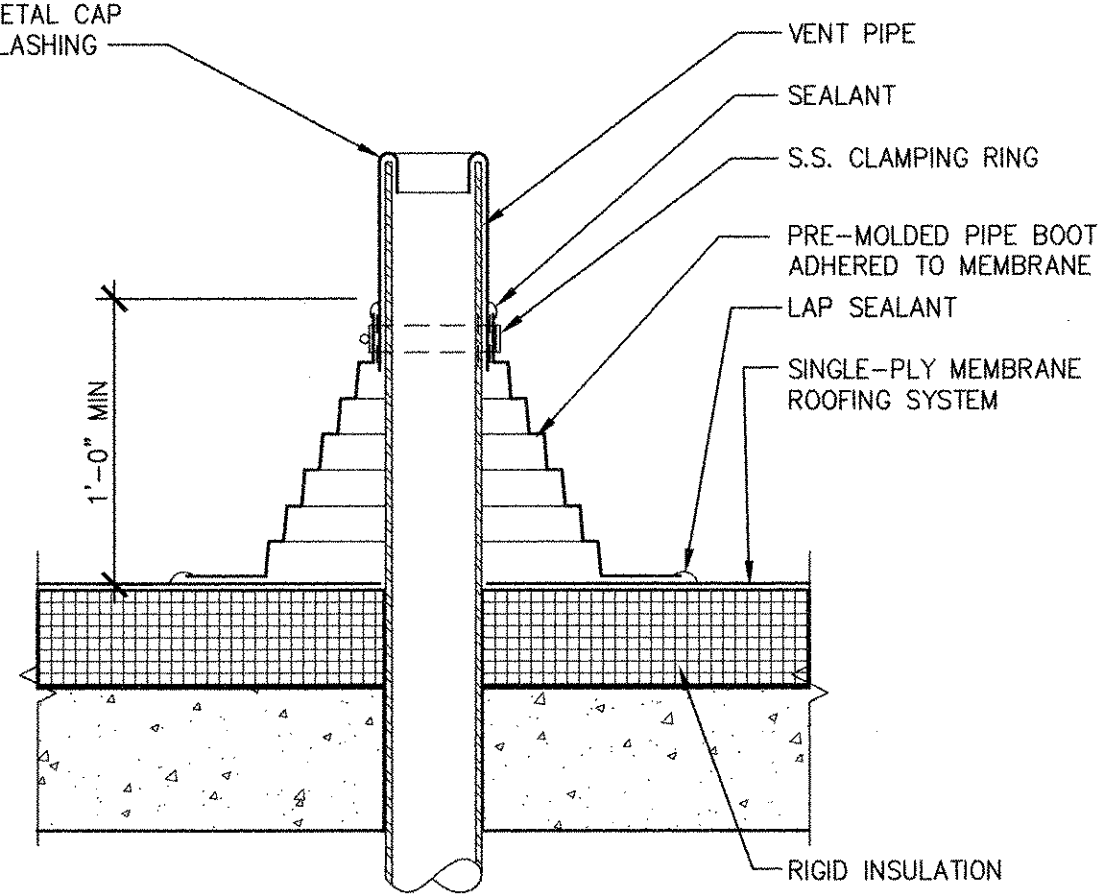
A



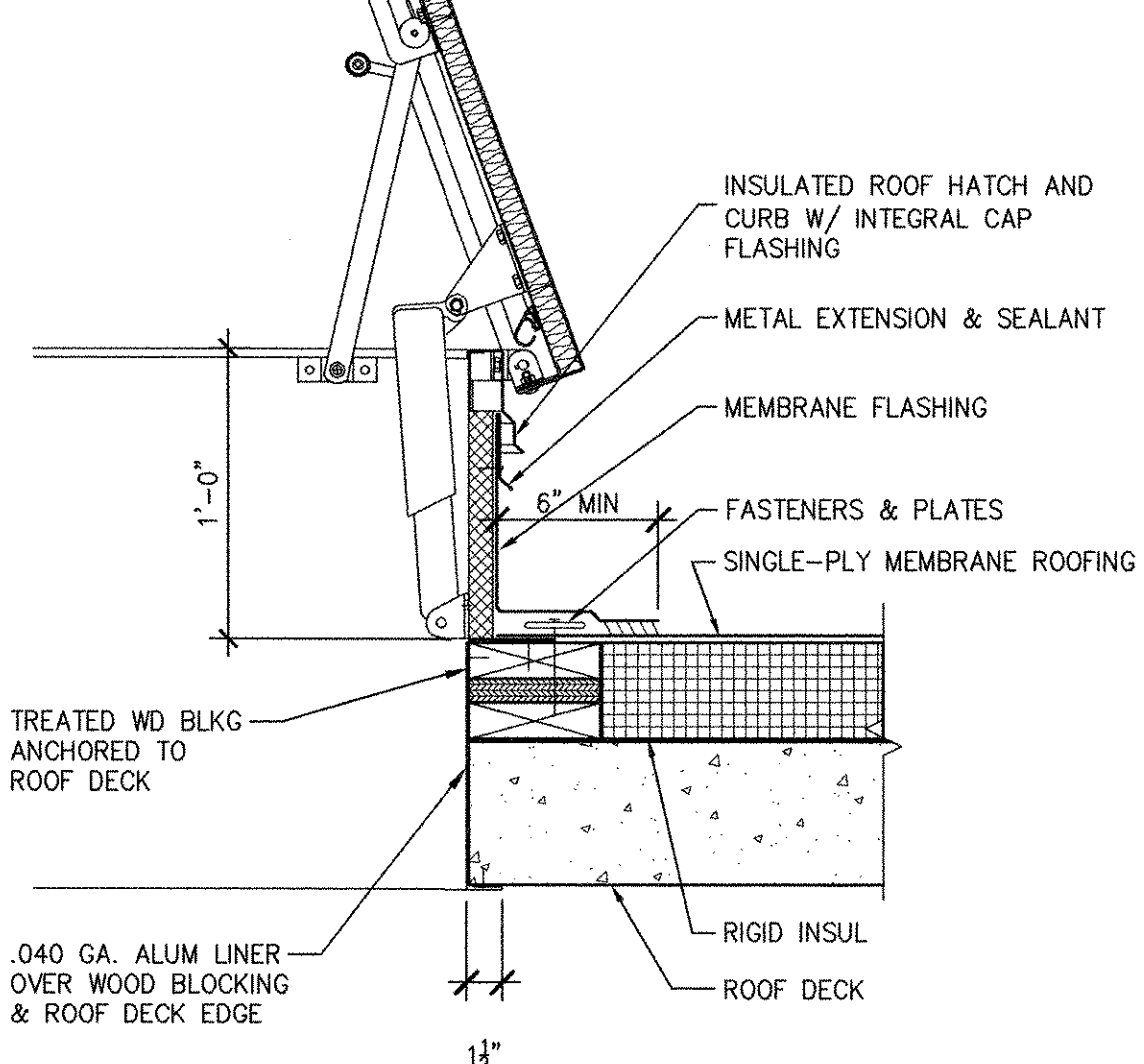
ROOF DRAIN DETAIL
SCALE: 1 1/2"=1'-0"



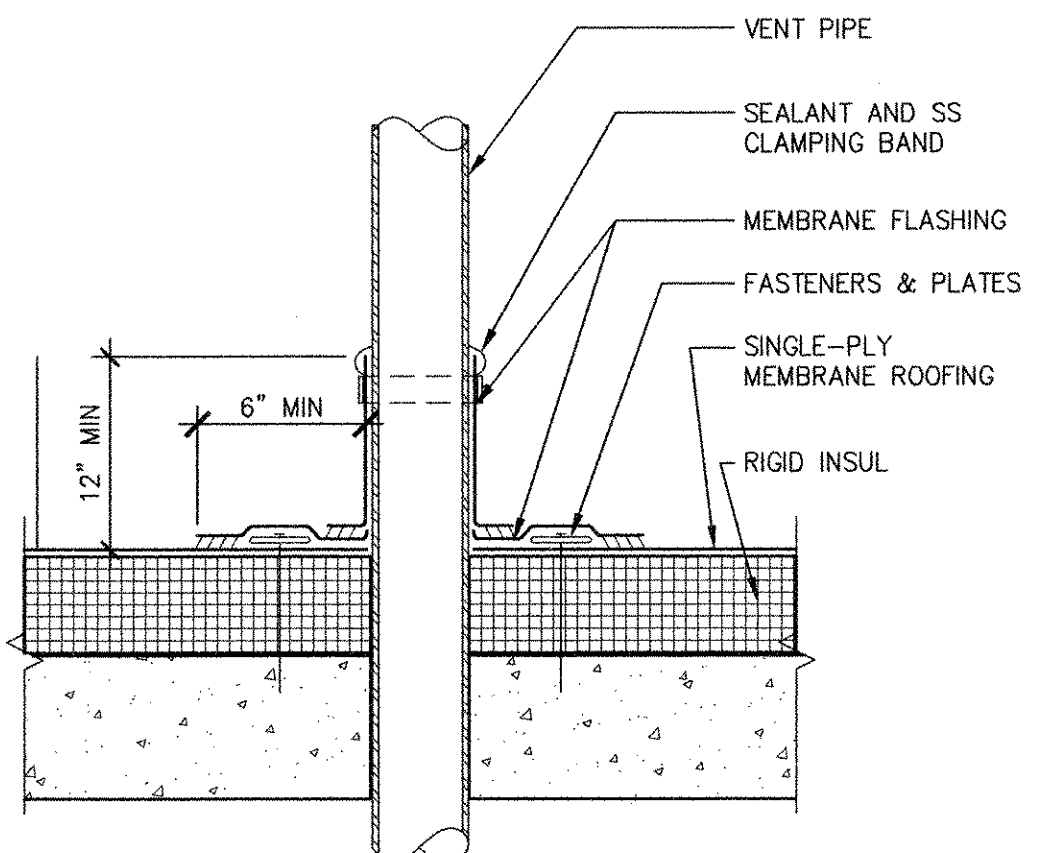
EQUIPMENT RAIL DETAIL
SCALE: 1 1/2"=1'-0"



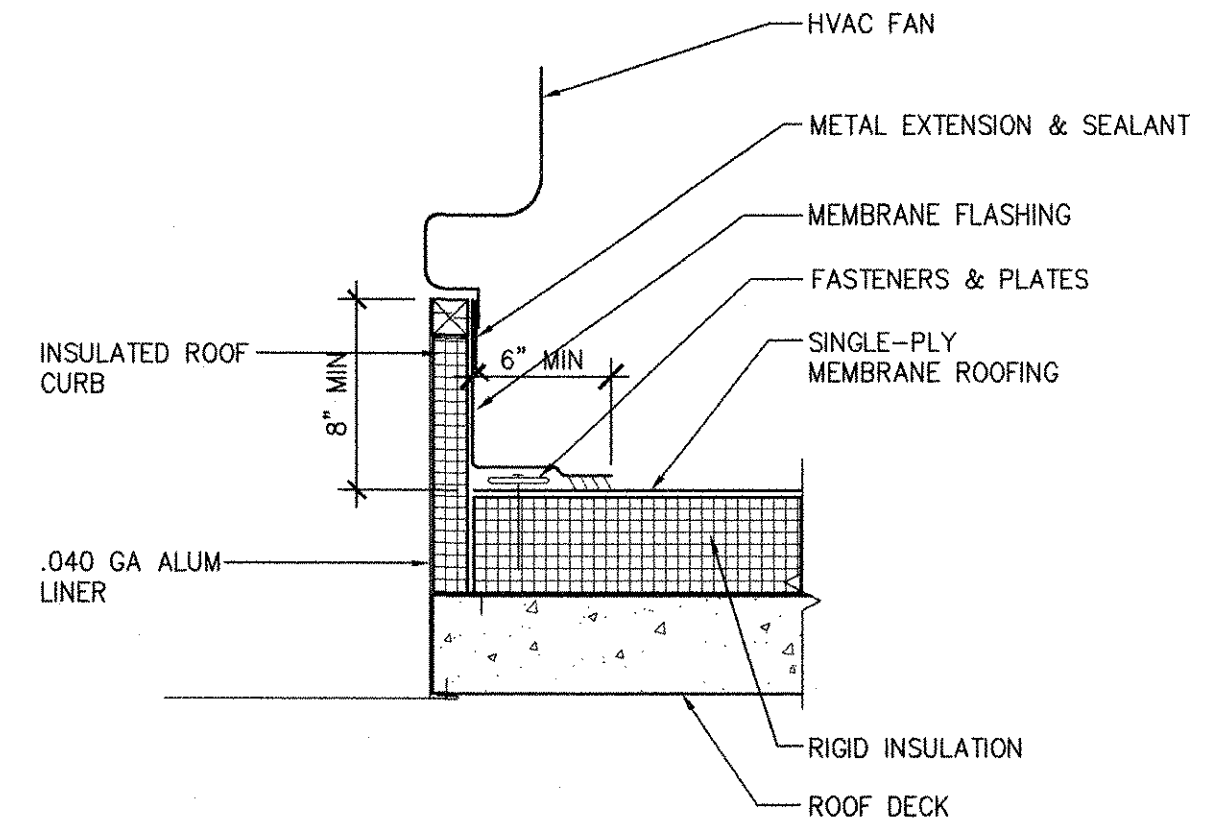
PRE-MOLDED PIPE FLASHING DETAIL
SCALE: 1 1/2"=1'-0"



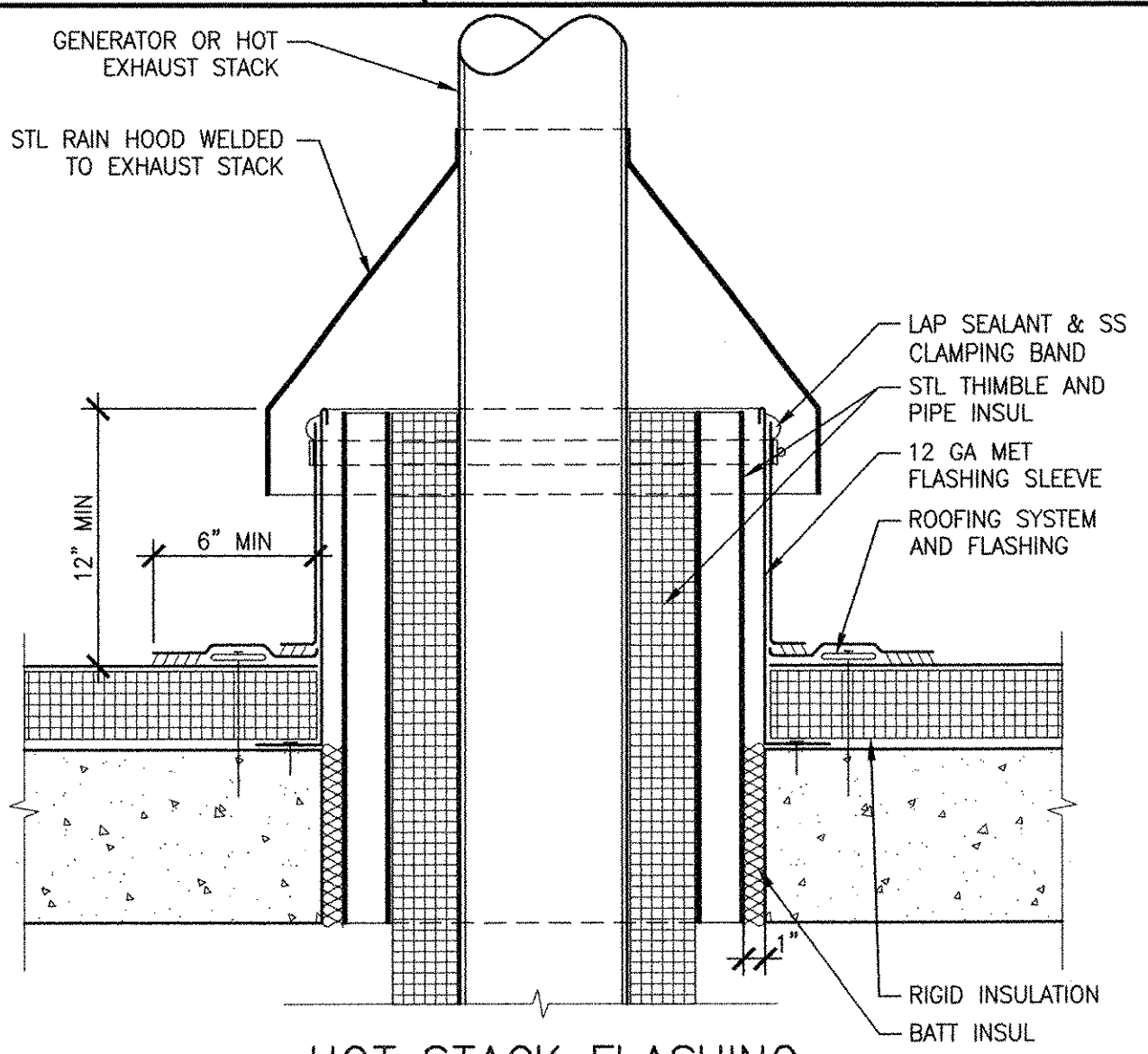
ROOF HATCH DETAIL
SCALE: 1 1/2"=1'-0"



FIELD FABRICATED PIPE FLASHING DETAIL
SCALE: 1 1/2"=1'-0"



FAN CURB DETAIL
SCALE: 1 1/2"=1'-0"

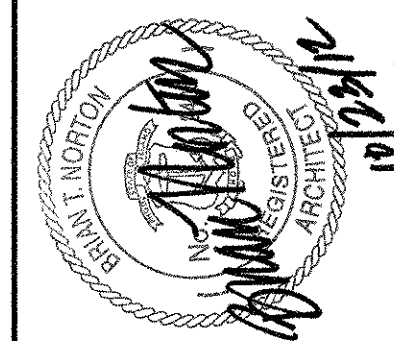


HOT STACK FLASHING DETAIL
SCALE: 1 1/2"=1'-0"

P:\17\FILENAME - EAST PROVIDENCE DES\COMMON SHEETS\A\99 A-501.DWG
 LAST UPDATE: Tuesday, October 09, 2012 10:52:29 AM
 PLOT DATE: Tuesday, October 23, 2012 10:28:33 AM
 ANSI D - 9-06-12

AECOM USA, INC.
 701 EDgewater Drive
 Suite 2000
 Phone (781) 246-8200

AECOM
 RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
TYPICAL LOW-SLOPE ROOF DETAILS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-501
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	H. GARCIA
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1 1/2" = 1'-0"

99 A-501

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

WPS & BBPS DOOR SCHEDULE

DOOR NO	ROOM NAME	SIZE		DOOR			GLASS TYPE	FRAME			DETAIL			FIRE RATING	HDWR GROUP	NOTES
		WIDTH	HEIGHT	TYPE	MTL	FINISH		TYPE	MTL	FINISH	HEAD	JAMB	SILL			
1102A	STAIR	3'-0"	7'-2"	F	FRP	FF	---	1	FRP	FF	DH-1	DJ-1	DS-1	1 HOUR	165	---
1103A	WET WELL	3'-0"	7'-2"	F	FRP	FF	---	1	FRP	FF	DH-2	DJ-2	DS-2	---	30	5
1104A	WORKSHOP	3'-0"	7'-10"	2 PANEL	ALUM	FF	---	1	ALUM	FF	DH-4	DJ-4	DS-4	---	10	---
1105A	TOILET	3'-0"	7'-2"	F	HM	P-2	---	1	PM	P-2	DH-3	DJ-3	DS-1	---	110	---
1106A	ELEC/CONTROL ROOM	6'-0"	7'-10"	2 PANEL	ALUM	FF	---	1A	ALUM	FF	DH-4	DJ-4	DS-4	---	70	---
1106B	ELEC/CONTROL ROOM	3'-0"	7'-2"	F	HM	P-2	---	1	PM	P-2	DH-3	DJ-3	DS-1	---	105	---
1107A	STAIR	3'-0"	7'-10"	2 PANEL	ALUM	FF	---	1	ALUM	FF	DH-4	DJ-4	DS-4	1 HOUR	30	---
1108A	STORAGE ROOM	6'-0"	7'-10"	2 PANEL	ALUM	FF	---	2	ALUM	FF	DH-5	DJ-5	DS-4	---	60	---
1108B	STORAGE ROOM	3'-0"	7'-2"	F	HM	P-2	---	1	PM	P-2	DH-3	DJ-3	DS-1	1 HOUR	165	---
1201A	ELECTRICAL ROOM	6'-0"	7'-10"	2 PANEL	ALUM	FF	---	1A	ALUM	FF	DH-6	DJ-6	DS-4	---	70	---

HEADWORKS DOOR SCHEDULE

DOOR NO	ROOM NAME	SIZE		DOOR			GLASS TYPE	FRAME			DETAIL			FIRE RATING	HDWR GROUP	NOTES
		WIDTH	HEIGHT	TYPE	MTL	FINISH		TYPE	MTL	FINISH	HEAD	JAMB	SILL			
2101B	HEADWORKS	10'-0"	10'-0"	OHC	STL	FF	---	OH	STL	FF	DH-7	DJ-7A&B	DS-7	---	10	---
2101C	HEADWORKS	10'-0"	11'-0"	OHC	STL	FF	---	OH	STL	FF	DH-7	DJ-7A&B	DS-7	---	200	---
2101D	HEADWORKS	3'-0"	7'-10"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-8	DJ-8A&B	DS-4	---	10	---
2101E	HEADWORKS	3'-0"	7'-10"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-8	DJ-8A&B	DS-4	---	10	10
2102A	SAMPLES ROOM	3'-0"	7'-10"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-8	DJ-8A&B	DS-4	---	10	---
2103A	ELEC ROOM	3'-0"	7'-10"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-8	DJ-8A&B	DS-4	---	30	---
2103B	ELEC ROOM	6'-0"	7'-10"	F	FRP	FF	---	1A	FRP	FF	DH-8	DJ-8A&B	DS-4	---	70	---
2104A	CHEMICAL ROOM	3'-0"	7'-10"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-8	DJ-8A&B	DS-4	---	10	---

ADMIN, RSIPS AND DIGESTER BLDG DOOR SCHEDULE

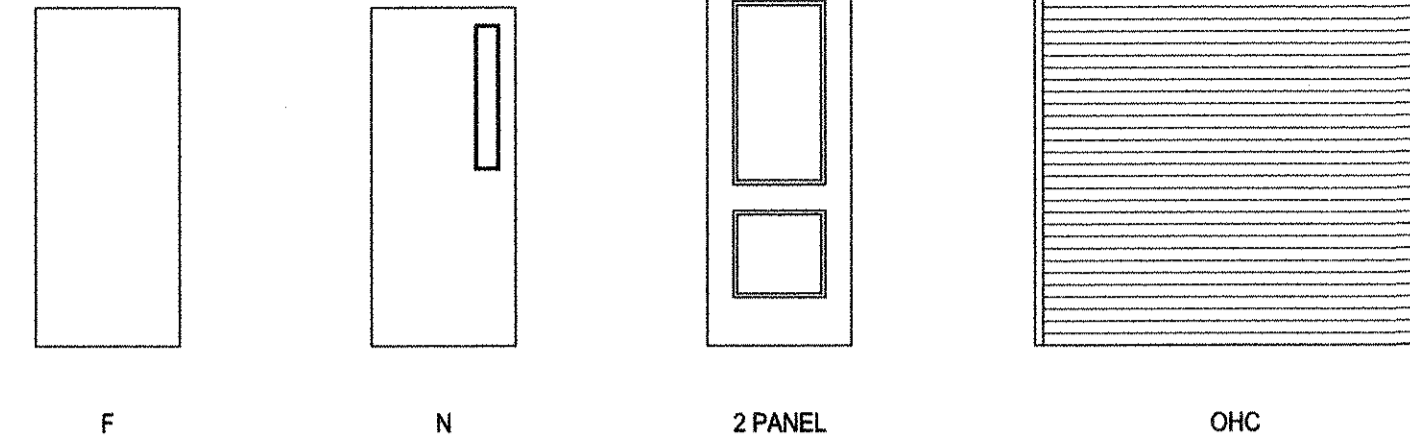
DOOR NO	ROOM NAME	SIZE		DOOR			GLASS TYPE	FRAME			DETAIL			FIRE RATING	HDWR GROUP	NOTES
		WIDTH	HEIGHT	TYPE	MTL	FINISH		TYPE	MTL	FINISH	HEAD	JAMB	SILL			
4101A	LIFT	3'-0"	7'-0"	N	HM	P	TYPE 3	1	PM	P	---	---	---	1.5 HOURS	---	1
4122A	STORAGE	3'-0"	7'-0"	F	WD	STA	---	1	PM	P	DH-9	DJ-9	DS-1	---	105	---
4123A	SHOWER	3'-0"	7'-0"	F	WD	STA	---	1	PM	P	DH-9	DJ-9	DS-3	---	110	---
4124A	CORRIDOR	3'-0"	7'-0"	F	WD	STA	---	1	PM	P	DH-9	DJ-9	DS-1	---	100	---
4125A	WOMEN	3'-0"	7'-0"	F	WD	STA	---	1	PM	P	DH-9	DJ-9	DS-3	---	110	---
4126A	MEN	3'-0"	7'-0"	F	WD	STA	---	1	PM	P	DH-9	DJ-9	DS-3	---	110	---
4127A	LIFT	3'-0"	7'-0"	N	HM	P	TYPE 3	1	PM	P	---	---	---	1.5 HOURS	---	1
4201A	EQUIP ACCESS ROOM	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10	DS-4	---	10	4
4202A	ELEC ROOM	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10 &11	DS-4	---	10	4
4202B	ELEC ROOM	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10	DS-4	---	10	4
4203A	OFFICE	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10	DS-4	---	10	4
4204A	CHEM ROOM	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10 &11	DS-4	---	10	4
4204B	CHEM ROOM	8'-0"	7'-10"	OHC	STL	FF	---	OH	STL	FF	DH-12	DJ-12	DS-12	---	200	3
4301A	ROOM	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10	DS-4	---	10	4
4301B	ROOM	3'-0"	7'-0"	N	FRP	FF	TYPE 4	1	FRP	FF	DH-10	DJ-10	DS-4	---	10	4
4302A	ROOM	5'-0"	7'-0"	N	FRP	FF	TYPE 4	1A	FRP	FF	DH-10	DJ-10	DS-4	---	10	4

MASTER BACKFLOW PREVENTER VAULT

DOOR NO	ROOM NAME	SIZE		DOOR			GLASS TYPE	FRAME			DETAIL			FIRE RATING	HDWR GROUP	NOTES
		WIDTH	HEIGHT	TYPE	MTL	FINISH		TYPE	MTL	FINISH	HEAD	JAMB	SILL			
4401A	VAULT	3'-0"	6'-10"	F	HM	P	---	1	PM	P	---	---	---	---	110	---

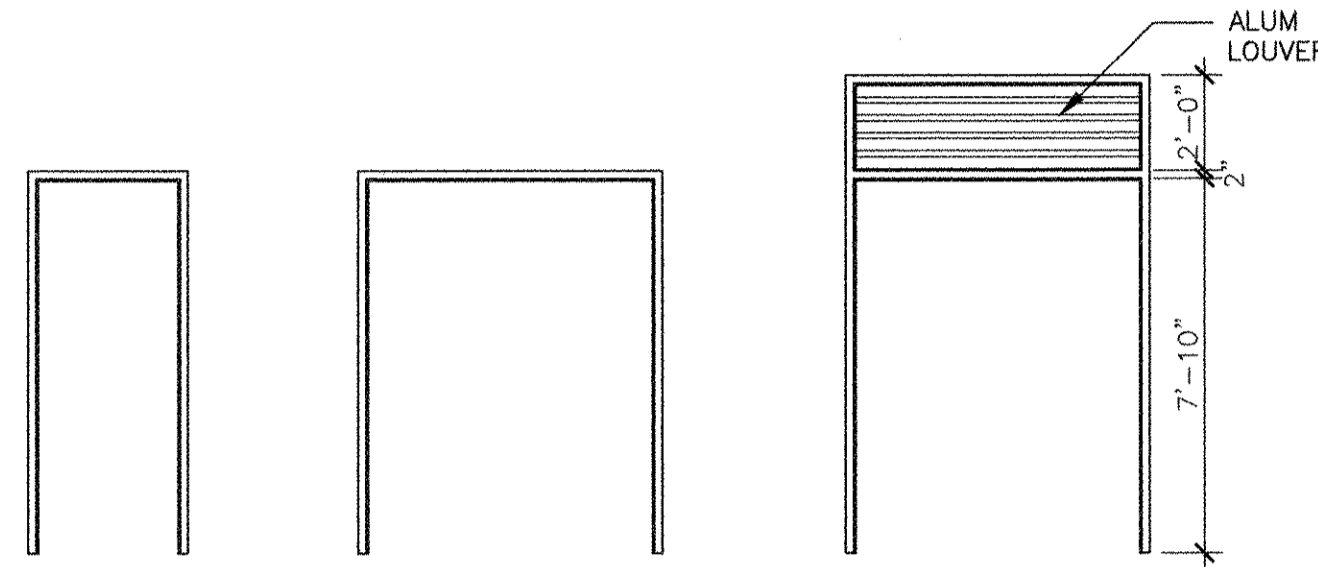
NOTES:

- DOORS AND HARDWARE BY VERTICAL WHEELCHAIR LIFT MANUFACTURER.
- ALL PRESSED METAL FRAMES IN MASONRY TO BE FILLED SOLID WITH GROUT.
- VERIFY DIMENSIONS OF EXISTING OVERHEAD DOOR OPENING FOR NEW OVERHEAD DOOR IN FIELD.
- VERIFY EXISTING CONCRETE AND MASONRY DIMENSIONS IN FIELD.
- OMIT RAIN DRIP IN HARDWARE GROUP.



DOOR TYPES

SCALE: 1/4" = 1'-0"



FRAME TYPES

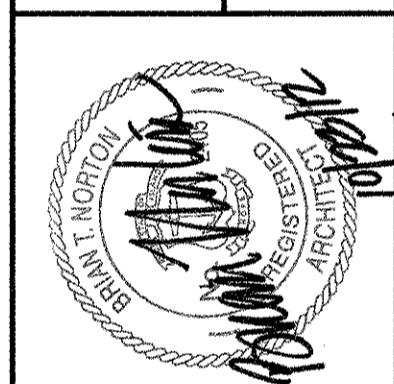
SCALE: 1/4" = 1'-0"

NO.	DATE	BY	CHKD	DESCRIPTION
1	10/19/12	MM	HG	REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
100 WATERLOO STREET
WALTHAM, MA 01981
PHONE (781) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND

DOOR SCHEDULE & DETAILS

ARCHITECTURAL

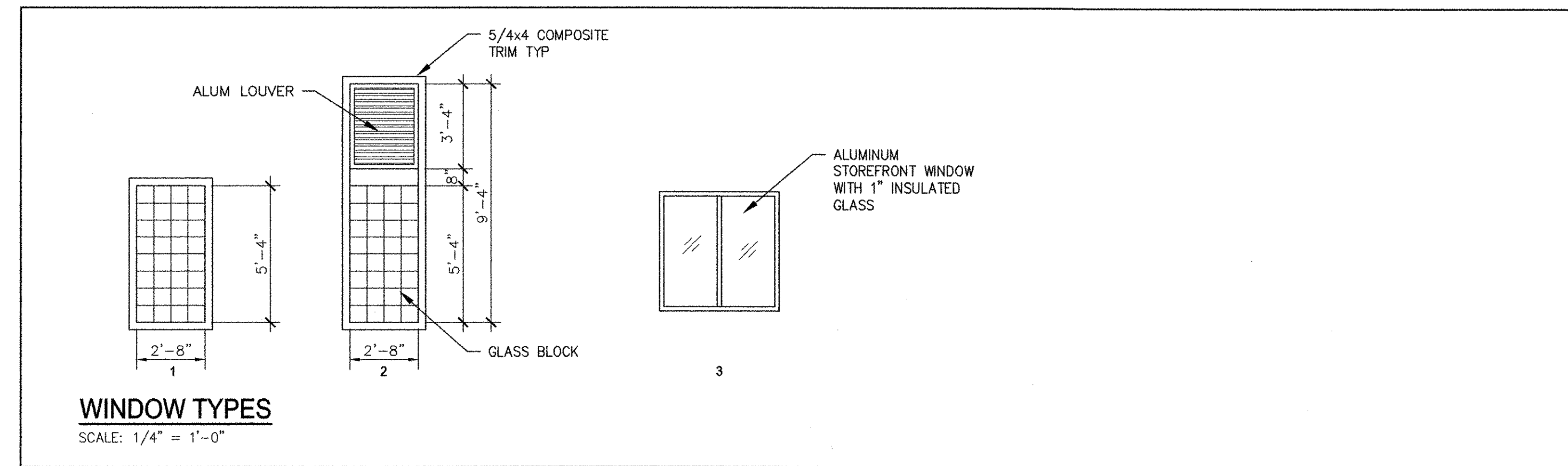
PROJECT NO:	60148648
CAD DWG FILE:	99 A-601
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	
SCALE:	
99 A-601	

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 9 - Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DB) COMMON SHEETS\A 99 A-601.DWG
LAST UPDATE: Tuesday, October 09, 2012 10:31:38 AM
PLOT DATE: Tuesday, October 23, 2012 10:28:40 AM



LOUVER SCHEDULE									
BLDG	LOUVER NUMBER	OPENING		DETAIL			NOTES		
		WIDTH	HEIGHT	HEAD	JAMB	SILL			
WATCHMOKET PS	L1101	3'-4"	1'-4"	LH-2	LJ-2	LS-2	-		
	L1102	6'-0"	1'-10"	DH-5	LJ-1	DS-5	-		
	L1103	2'-0"	2'-0"	LH-6	LJ-6	LS-6	-		
	L1104	2'-8"	1'-4"	LH-2	LJ-2	LS-2	-		
	L1105	2'-8"	3'-4"	LH-	LJ-1	WH-3	-		
	L1106	2'-8"	3'-4"	LH-	LJ-1	WH-3	-		
	L1107	2'-8"	3'-4"	LH-	LJ-1	WH-3	-		
	L1108	2'-0"	2'-0"	LH-6	LJ-6	LS-6	-		
	L1109	2'-0" DIA	2'-0" DIA	LH-	LJ-	LS-	-		
	L1110	3'-4"	1'-4"	LH-2	LJ-2	LS-2	-		
HEADWORKS	-	-	-	-	-	-	-		
	L2102	2'-0"	2'-0"	LH-2	LJ-2	LS-2	-		
	L2103	3'-4"	4'-0"	LH-2	LJ-2	LS-2	-		
	L2104	3'-4"	6'-8"	LH-2	LJ-2	LS-2	-		
	L2105	1'-4"	1'-4"	LH-2	LJ-2	LS-2	-		
	L2106	6'-4"	4'-8"	LH-2	LJ-2	LS-2	-		
OPERATIONS	L2301	3'-8"	7'-3"	LH-3	LJ-3	LS-3	1		
	L2302	9'-10"	4'-0"	LH-4	LJ-4	LS-5	2		
RSIPS	L4201	3'-8"	3'-0"	LH-4	LJ-3 SIM	LS-4	2		
	L4202	12'-0"	3'-0"	LH-4	LJ-3 SIM	LS-4	2		
	L4203	4'-6"	3'-0"	LH-4	LJ-3 SIM	LS-4	2		
	L4204	6'-0"	4'-0"	LH-4	LJ-3 SIM	LS-4	2		
ROCKWAY PS	L5401	3'-5"	7'-6"	LH-4	LJ-4	LS-4 SIM	2		

NOTE:
1. VERIFY IN FIELD EXISTING WINDOW DIMENSIONS AND WINDOW SYSTEM FOR LOUVER INSTALLATION.
2. VERIFY IN FIELD EXISTING OPENING DIMENSION TO ACCOMMODATE LOUVER.

WINDOW SCHEDULE									
BLDG	WINDOW NUMBER	TYPE	OPENING		GLASS TYPE	DETAIL			NOTES
			WIDTH	HEIGHT		HEAD	JAMB	SILL	
WCPS	1101	1	2'-8"	5'-4"	GLB	WH-1	WJ-1	WS-1	-
	1102	2	2'-8"	5'-4"	GLB	WH-3	WJ-1	WS-1	-
HEADWORKS	2101	3	4'-8"	4'-8"	1	WH-2	WJ-2	WS-2	-
OPERATIONS BUILDING	2301	-	3'-10"	2'-0"	NOTE 2	VIF	VIF	VIF	1

NOTE:
1. VERIFY IN FIELD EXISTING WINDOW FRAME OPENING AND GLAZING SYSTEM. INSTALL GLASS IN EXISTING FRAME.
2. GLASS TYPE TO MATCH EXISTING.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (R0)\COMMON SHEETS\A99 A-602.DWG
LAST UPDATE: Tuesday, October 09, 2012 10:59:15 AM
PLOT DATE: Tuesday, October 23, 2012 10:28:52 AM
ANSI D - 9-Oct-12

RECORD DRAWINGS

AECOM
AECOM USA, INC.
WALDESWATER DRIVE
PHOENIX, AZ 85008
PHONE (781) 246-6200

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

WINDOW & LOUVER SCHEDULES
ARCHITECTURAL

PROJECT NO: 60148648
CAD DWG FILE: 99 A-602
DESIGNED BY: M. MACEACHERN
DRAWN BY: H. GARCIA
DEPT CHECK: B. NORTON
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

99 A-602

WPS & BBPS FINISH SCHEDULE												
BLDG	ROOM	FLOOR		BASE		WALLS		CEILING			NOTES	
		NO	NAME	FINISH	COLOR	FINISH	COLOR	FINISH	COLOR	FINISH		COLOR
WPS	1101	GRINDER ROOM	LQH	---	---	---	---	---	---	---	---	---
	1102	STAIR	EFC	EFC-1	---	---	P	P-1	---	---	---	---
	1103	WET WELL	LQH	---	---	---	---	---	---	---	---	---
	1104	WORKSHOP	EFC	EFC-1	---	---	P	P-1	P	WHITE	---	---
	1105	TOILET	FAF	TBS	FAF	TBS	P	P-1	ACP	WHITE	8'-6"	---
	1106	ELEC/CONTROL ROOM	EFC	EFC-1	---	---	P	P-1	P	WHITE	---	---
	1107	STAIR	EFC	EFC-1	---	---	P	P-1	P	WHITE	---	---
BBPS	1108	STORAGE ROOM	EFC	EFC-1	---	---	P	P-1	P	WHITE	---	---
	1201	ELECTRICAL ROOM	EFC	EFC-1	---	---	P	P-1	P	WHITE	---	---

HEADWORKS & OPS BLDG FINISH SCHEDULE												
BLDG	ROOM	FLOOR		BASE		WALLS		CEILING			NOTES	
		NO	NAME	FINISH	COLOR	FINISH	COLOR	FINISH	COLOR	FINISH		COLOR
HEADWORKS	2101	HEADWORKS	LQH	---	---	P	P-1	---	---	---	---	---
	2102	SAMPLES ROOM	EFC	EFC-1	---	---	P	P-1	---	---	---	---
	2103	ELEC ROOM	EFC	EFC-1	---	---	P	P-1	---	---	---	---
	2104	CHEMICAL ROOM	EFC	EFC-1	---	---	P	P-1	---	---	---	---
OPERATIONS BLDG	2301	CONTROL ROOM	VCT	ADM-1	---	---	P	P-1	ACP	WHITE	9'-3"	1

ADMIN BLDG FINISH SCHEDULE												
BLDG	ROOM	FLOOR		BASE		WALLS		CEILING			NOTES	
		NO	NAME	FINISH	COLOR	FINISH	COLOR	FINISH	COLOR	FINISH		COLOR
ADMIN BLDG	4101	LIFT	---	---	---	---	---	---	---	---	---	---
	4121	CORRIDOR	CPT	TBS	RB	TBS	FWC	TBS	---	---	---	2
	4122	STORAGE	VCT	VCT-1	RB	RB-1	P	P-1	ACP	WHITE	7'-11"	1
	4123	SHOWER	CT	CT-1	CT	CT-1	CT/P	CT-2,3,4/P-1	ACP	WHITE	7'-11"	1,3
	4124	CORRIDOR	VCT	VCT-1	RB	RB-1	P	P-1	---	---	---	---
	4125	WOMEN	CT	CT-1	CT	CT-1	CT/P	CT-2,3,4/P-1	ACP	WHITE	7'-11"	1,3
	4126	MEN	CT	CT-1	CT	CT-1	CT/P	CT-2,3,4/P-1	ACP	WHITE	7'-11"	1,3
	4127	LIFT	---	---	---	---	---	---	---	---	---	---

FINISH SCHEDULE NOTES

1. MATCH EXISTING CEILING HEIGHT.
2. MATCH EXISTING CARPET, WALL COVERING AND RESILIENT BASE.
3. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISHES INFORMATION.

GENERAL NOTES

1. FOR ABBREVIATIONS, SEE SHEET DO A-001.
2. BASE PAINTED 8" HIGH EXCEPT AT CONTAINMENT AREAS. FOR CONTAINMENT AREAS, SEE SPECIFICATIONS.
3. ALL BEAMS SHALL MATCH THE FINISH OF THE CEILING.
4. ALL COLUMNS SHALL MATCH THE FINISH OF ADJACENT WALLS.
5. ALL ELECTRICAL CONDUITS AND NON-CODED PIPING AND DUCTS TO MATCH FINISH OF WALL AND/OR CEILING SURFACES.
6. CODE PAINTED AND MARKED PIPING SHALL BE FINISHED IN ACCORDANCE WITH SPECIFICATIONS.
7. ALL INTERIOR CONCRETE AND MASONRY SURFACES TO RECEIVE PAINT FINISH TO BE GLOSS AND ALL GWB SURFACES TO RECEIVE PAINT FINISH TO BE EGGSHELL.
8. THE NAME OF MANUFACTURERS OF MATERIALS SHOWN BELOW ARE USED TO ESTABLISH THE MINIMUM TYPE OF FINISH AND COLOR ONLY. SIMILAR AND EQUAL PRODUCTS BY OTHER MANUFACTURERS ARE ACCEPTABLE UPON APPROVAL.

EXTERIOR FINISHES

1. BRICK VENEER - TO MATCH ADJACENT EXISTING (FOR PUMP STATIONS SEE SPECIFIC SCHEDULES)
2. EIFS - WASHED KHAKI Q3BR
3. DOWNSPOUTS AND ROOF TRIM - WASHED KHAKI Q3BR
4. DOORS - TO MATCH EXISTING BRONZE ANODIZED WINDOW FRAMES
5. ALUMINUM LOUVERS AND FRAMES - TO MATCH EXISTING BRONZE ANODIZED WINDOW FRAMES
6. GALVANIZED STEEL LINTELS - TO MATCH EXISTING BRONZE ANODIZED WINDOW FRAMES
7. STEEL GUARD POSTS - YELLOW W/BLACK STRIPES
8. GALVANIZED STEEL ANGLES @ DOCK BUMPERS - SAFETY YELLOW

EXTERIOR SEALANT COLORS

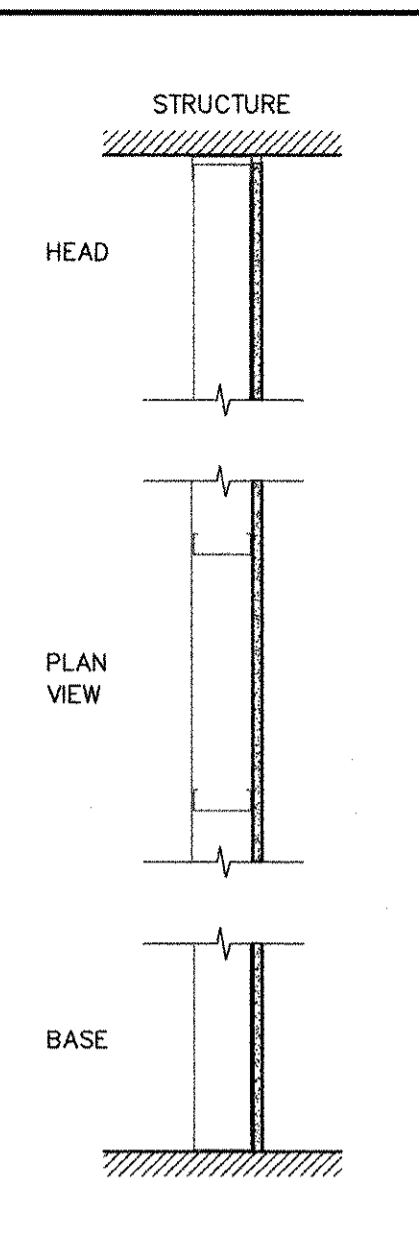
1. BRICK TO DOOR, WINDOW AND LOUVER FRAMES - MATCH COLOR OF BRICK
2. BRICK TO METAL PANEL - MATCH COLOR OF PANEL
3. BRICK TO BRICK - MATCH BRICK

INTERIOR FINISHES

1. PAINT (P) - "TNEMEC" COATINGS BY TNEMEC COMPANY INC.
P-1: Coliseum 79BR
P-2: Danali 82BR
2. EPOXY FLOOR COATING (EFC) - TNEMEC-GLAZE 280 BY TNEMEC COMPANY INC. - EFC-1: Danali 82BR
3. FLUID APPLIED FLOORING (FAF) - "TERRACOLOR" BY DEX-O-TEX
FAF-1: TBS
4. VINYL COMPOSITE TILE (VCT) - ARMSTRONG
VCT-1: 51811 Antique White
5. RESILIENT BASE (RB) - KENCOVE FLOOR, INC.
RB-1: Toupe KC-22
6. CERAMIC TILE (CT) - AMERICAN OLEANS
CT-1: Doe A55
CT-2: Almond Frost A24
CT-3: Cinnabar A42
CT-4: Dark Aspen A02
7. PROTECTIVE COATING (PC) - SEE SPECIFICATION SECTION 09800.
PC-1: TBS
8. FABRIC WALL COVERING (FWC) - MATCH EXISTING.
9. CARPET (CPT) - MATCH EXISTING.

INTERIOR SEALANT COLORS

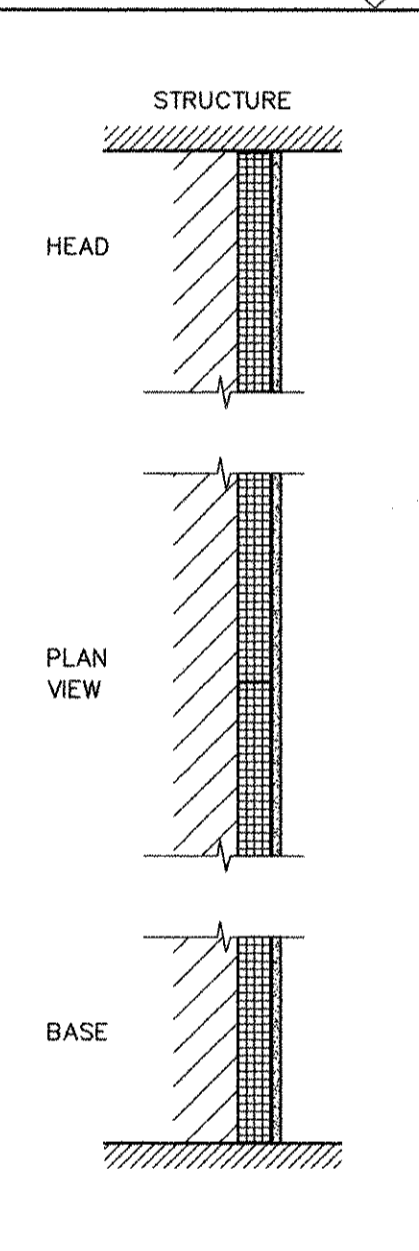
7. CMU TO CMU OR CONCRETE WALLS/BEAMS: MATCH COLOR OF ADJACENT PAINT FINISH
8. CMU TO DOOR, WINDOW AND LOUVER FRAMES: MATCH COLOR OF CMU
9. CMU TO STEEL CEILING/BELM - MATCH COLOR OF WALL



DESCRIPTION
GWB INSTALLATION
- 1 LAYER 5/8" REGULAR GYPSUM WALL BOARD
- EXISTING STUD SYSTEM - VIF

REMARKS

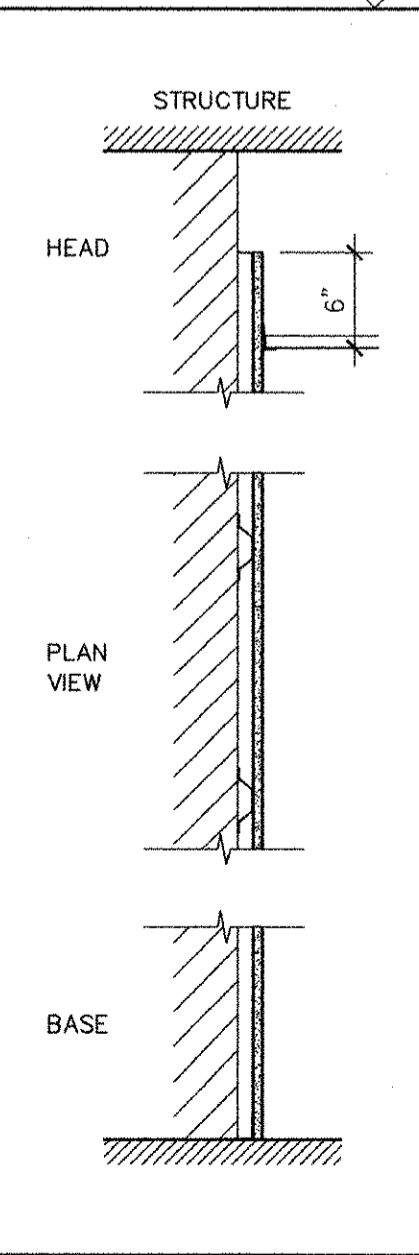
PARTITION TYPE Z



DESCRIPTION
FURRED INTERIOR WALL
- BACK-UP WALL
- 2" METAL "Z" FURRING CHANNELS @ 24" OC
- METAL ANGLE RUNNER TOP & BOTTOM
- 2" RIGID INSULATION
- VAPOR BARRIER
- 5/8" GYPSUM WALLBOARD TO STRUCTURE ABOVE

REMARKS

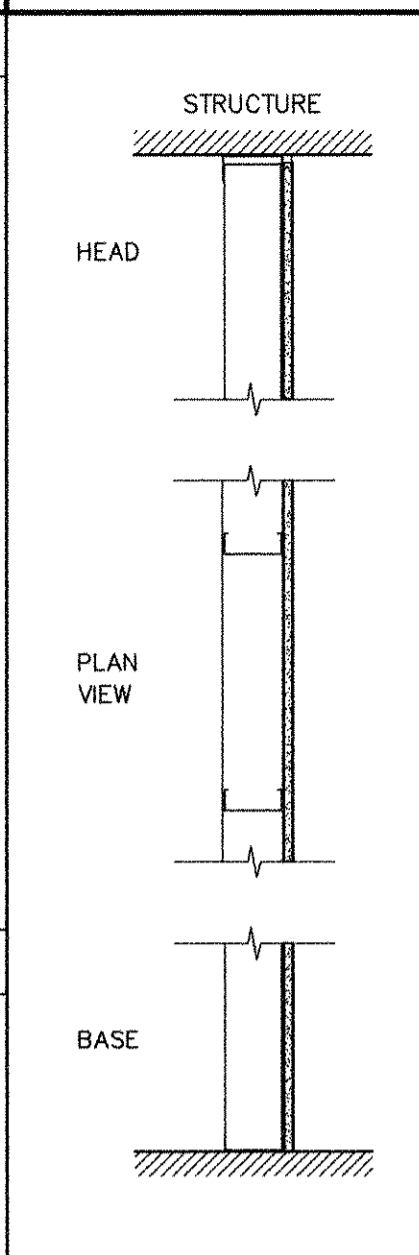
PARTITION TYPE X



DESCRIPTION
FURRED INTERIOR WALL
- BACK-UP WALL
- 7/8" METAL FURRING CHANNELS @ 16" OC
- METAL ANGLE RUNNER TOP & BOTTOM
- 5/8" GYPSUM WALLBOARD TO 6" ABOVE CEILING

REMARKS

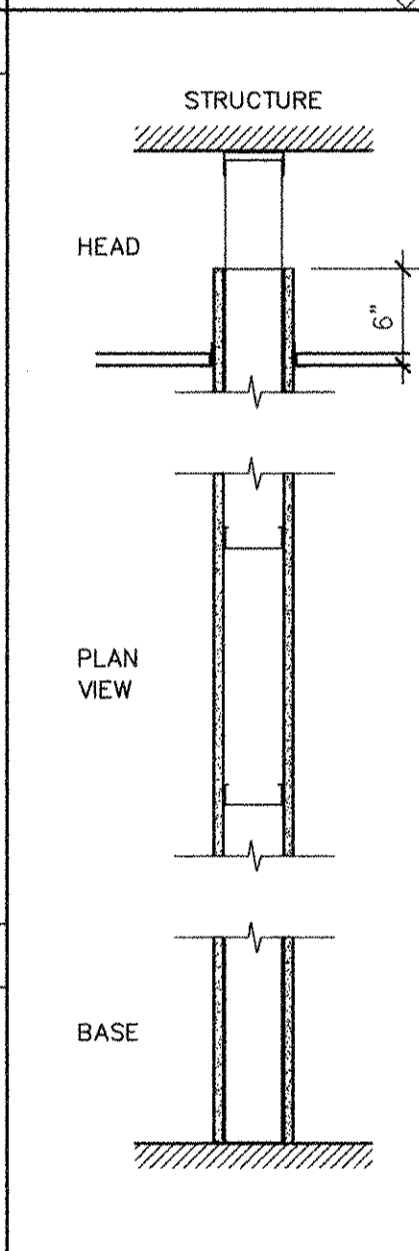
PARTITION TYPE T



DESCRIPTION
PILASTER & CHASE PARTITION
- 1 LAYER 5/8" REGULAR GYPSUM WALL BOARD
- 3-5/8" 20 ga METAL STUDS @ 16" OC
- CHANNEL RECEPTOR AT HEAD
- SEALANT AT PERIMETER

REMARKS
- HORIZONTAL BRIDGING AT 8'-0" O.C.

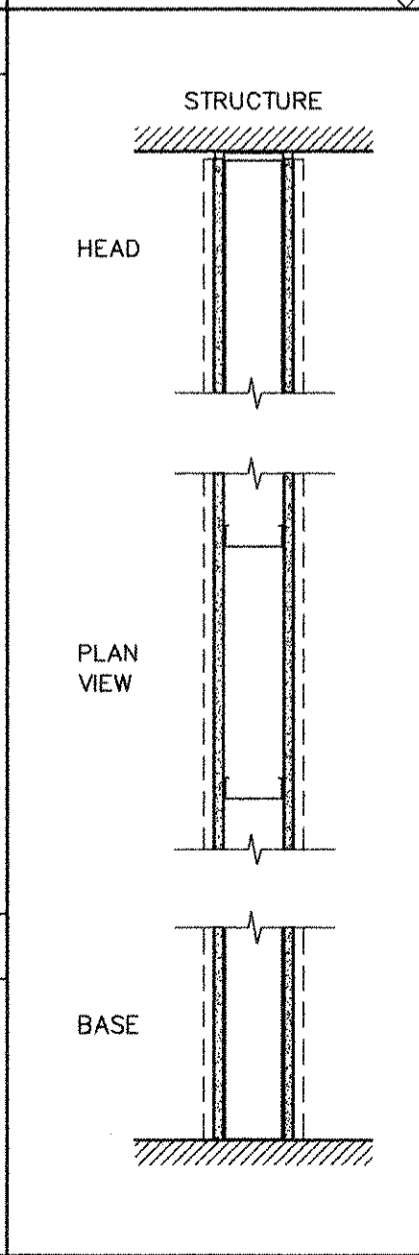
PARTITION TYPE L



DESCRIPTION
METAL STUD PARTITION
- 5/8" GYPSUM WALLBOARD BOTH SIDES TO 6" ABOVE CEILING
- 3-5/8" 20 GA METAL STUDS 16" OC
- CHANNEL RECEPTOR AT HEAD

REMARKS
- HORIZONTAL BRIDGING AT 8'-0" O.C.

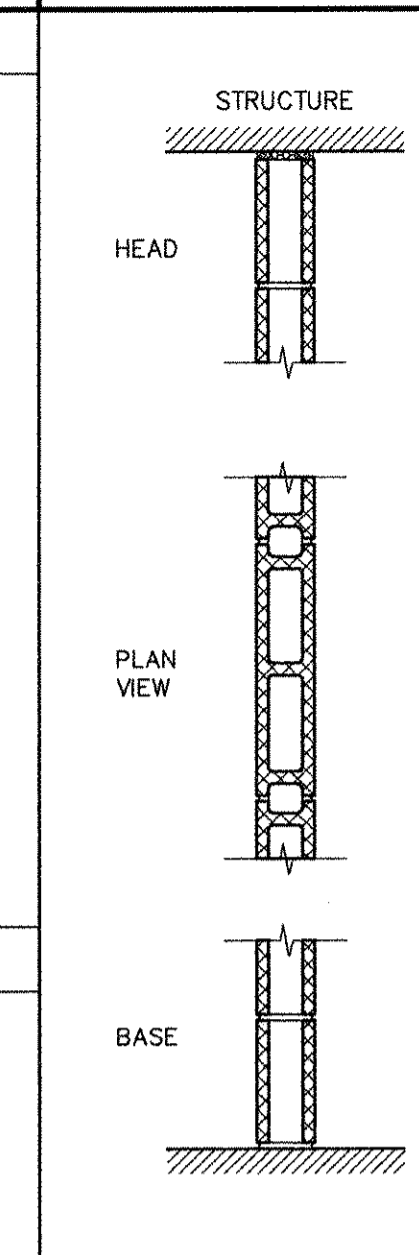
PARTITION TYPE J



DESCRIPTION
METAL STUD PARTITION
- 1 LAYER 5/8" REGULAR GYPSUM WALL BOARD
- 3-5/8" 20 ga METAL STUDS @ 16" OC
- 1 LAYER 5/8" REGULAR GYPSUM WALL BOARD
- SEAL PERIMETER
- SEALANT AT HEAD

REMARKS
- HORIZONTAL BRIDGING AT 8'-0" O.C.
- VERIFY EXISTING STUD SIZE

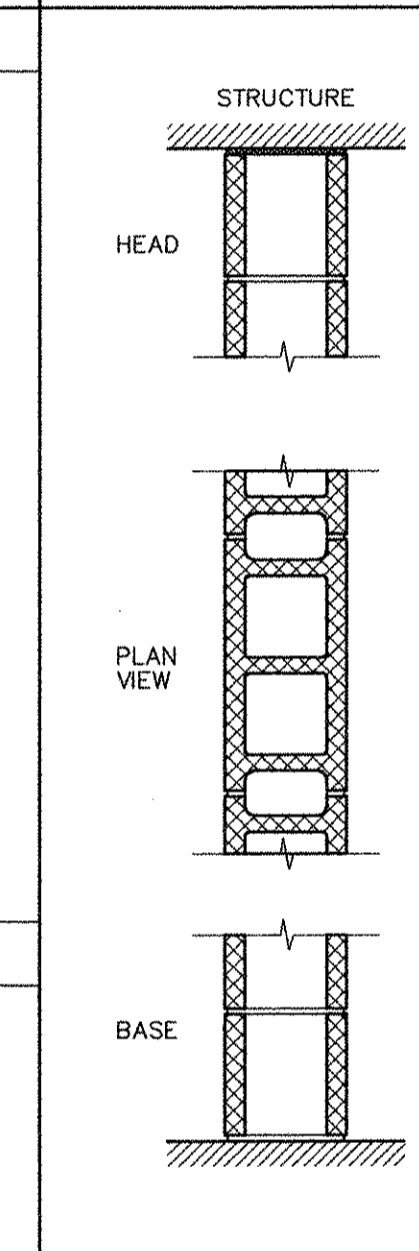
PARTITION TYPE G, G1, G2



DESCRIPTION
4" CMU PARTITION
- 4" CONCRETE MASONRY UNITS
- SEALANT PERIMETER

REMARKS
- SEE STRUCTURAL DRAWINGS FOR REINFORCING

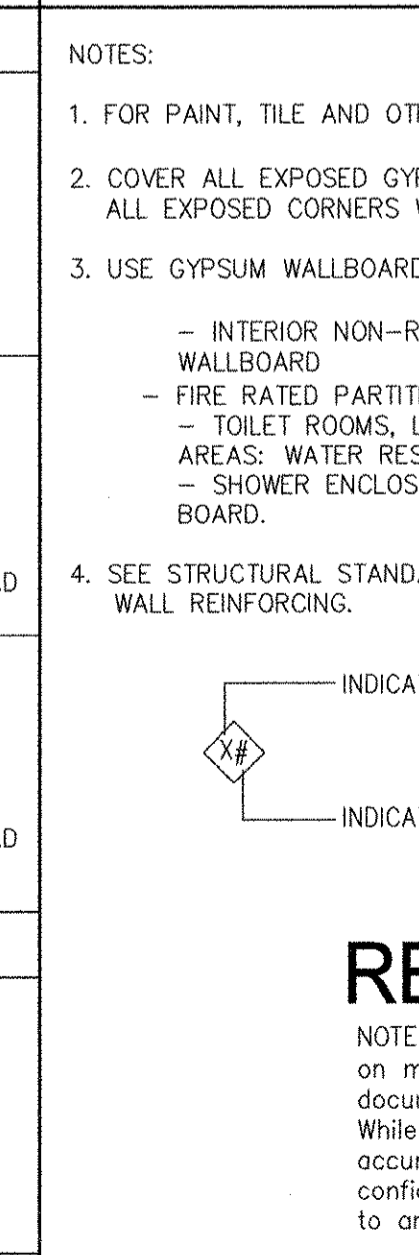
PARTITION TYPE D



DESCRIPTION
8" CMU PARTITION
- 8" CONCRETE MASONRY UNITS
- SEALANT PERIMETER

REMARKS
- SEE STRUCTURAL DRAWINGS FOR REINFORCING

PARTITION TYPE B, B1, B2, B3



NOTES:

1. FOR PAINT, TILE AND OTHER FINISHES, REFER TO FINISH SCHEDULE.
2. COVER ALL EXPOSED GYPSUM WALLBOARD EDGES WITH "J" BEAD AND ALL EXPOSED CORNERS WITH CORNER BEADS.
3. USE GYPSUM WALLBOARD AS FOLLOWS UNLESS OTHERWISE NOTED:
- INTERIOR NON-RATED PARTITIONS, FURRING, ETC.: 5/8" GYPSUM WALLBOARD
- FIRE RATED PARTITIONS: TYPE "X" GYPSUM WALLBOARD
- TOILET ROOMS, LOCKER ROOMS, KITCHENS AND OTHER MOIST AREAS: WATER RESISTANT GYPSUM WALLBOARD.
- SHOWER ENCLOSURES WITH CERAMIC TILE: CEMENT BACKER BOARD.
4. SEE STRUCTURAL STANDARD DETAILS FOR ADDITIONAL MASONRY WALL REINFORCING.

INDICATES PARTITION TYPE

INDICATES FIRE RATING WHEN APPLICABLE

RECORD DRAWING

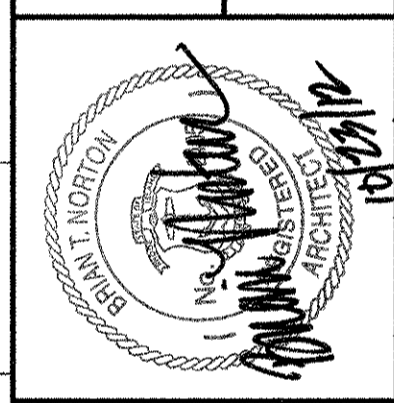
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NO	DATE	MARK	MADE BY	DESCRIPTION
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM USA, INC.
100 WATER DRIVE
WALTON, MA 01885
PHONE: (978) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

FINISH SCHEDULE & PARTITION TYPES

ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-603
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 A-603

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (R0)\COMMON\99A-03.dwg
LAST UPDATE: Monday, October 01, 2012 9:23:50 AM
ANSI D - 1-10-12

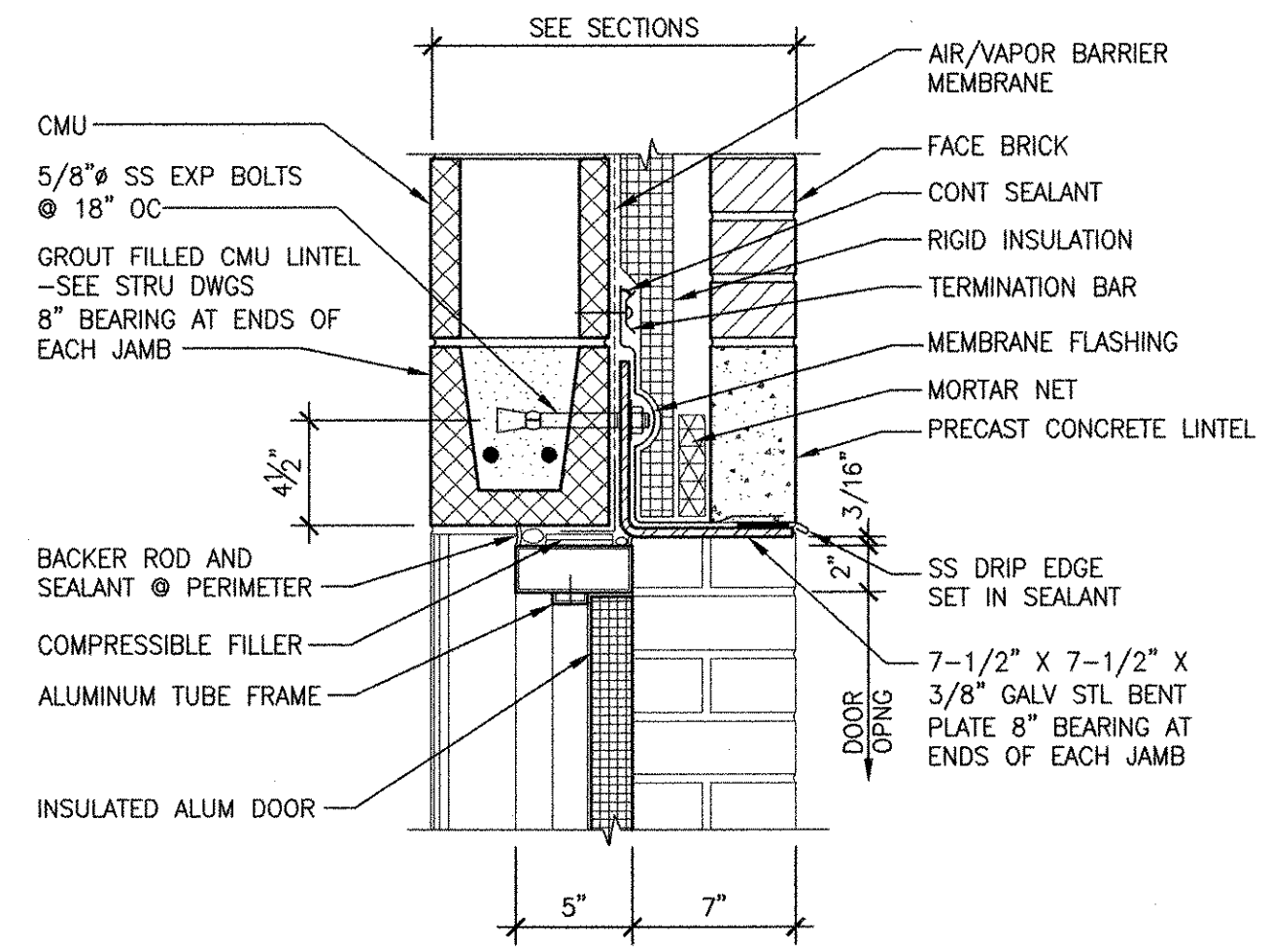
1

2

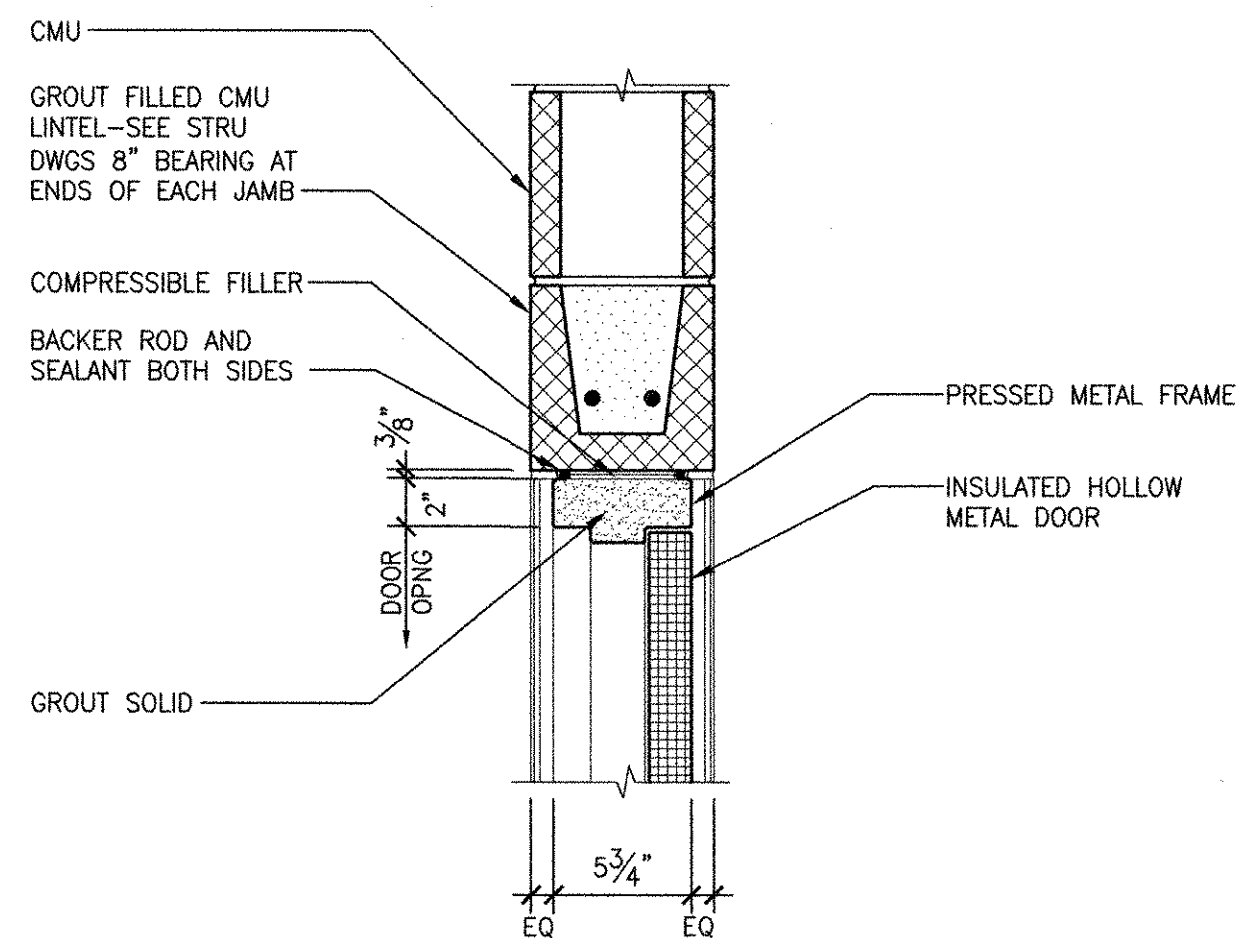
3

4

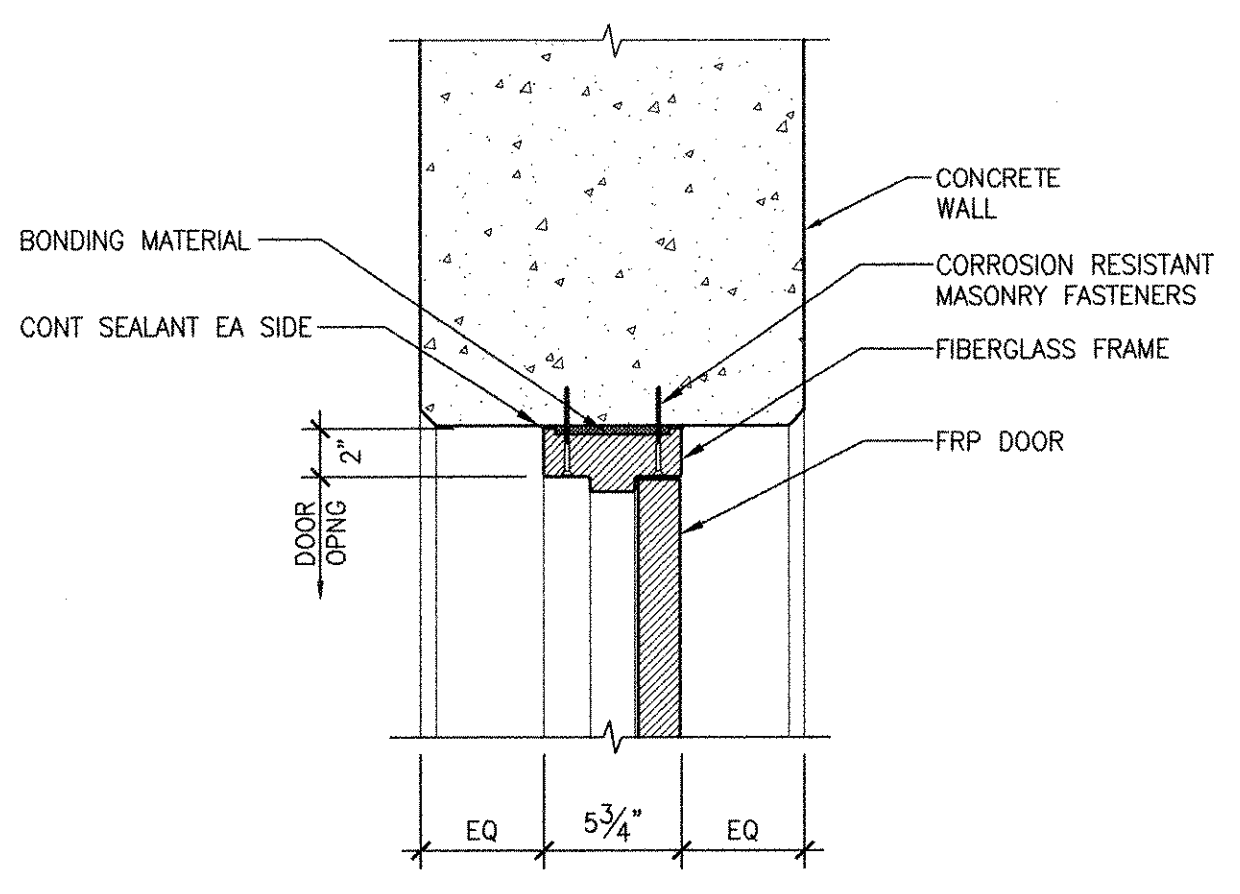
5



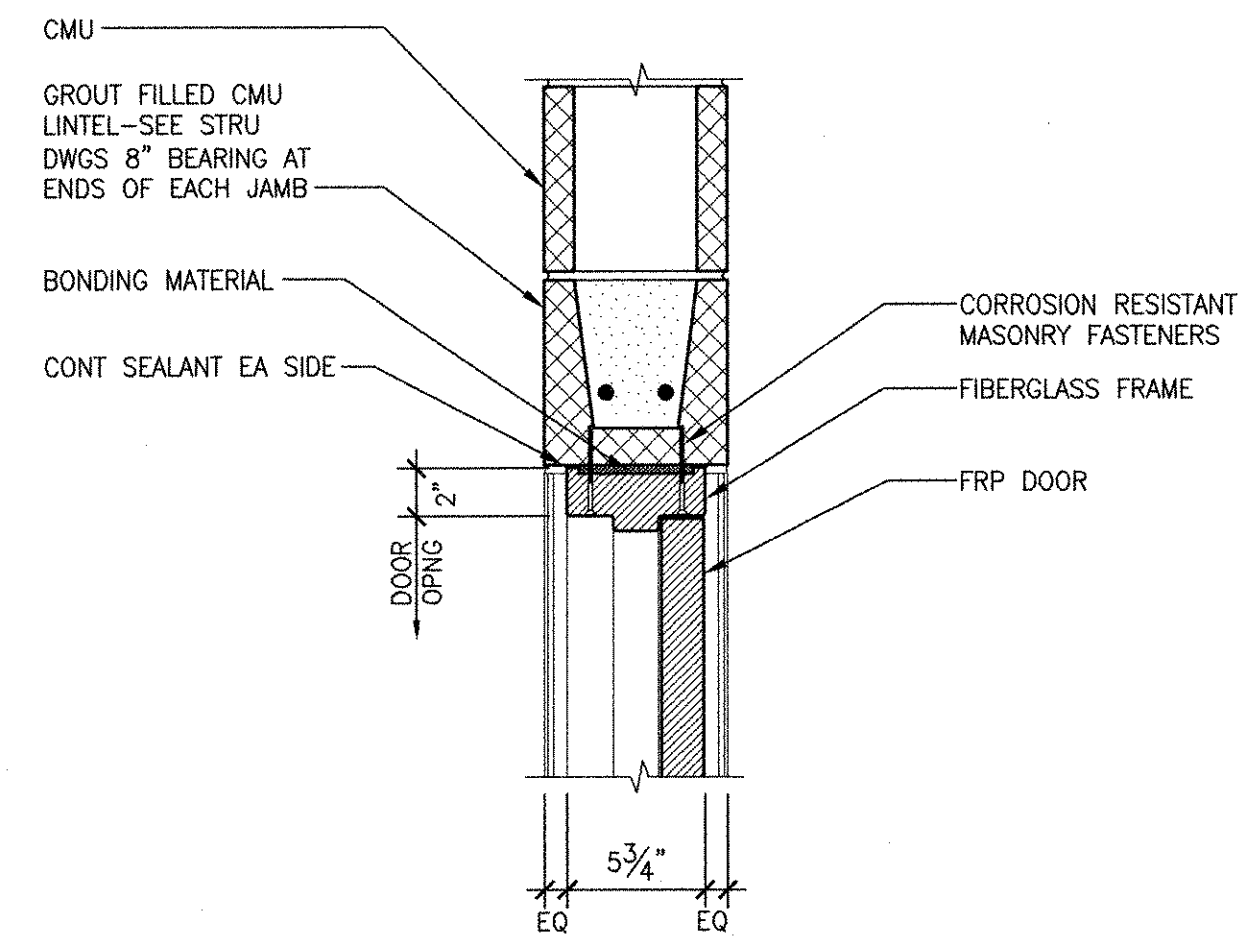
DH-4



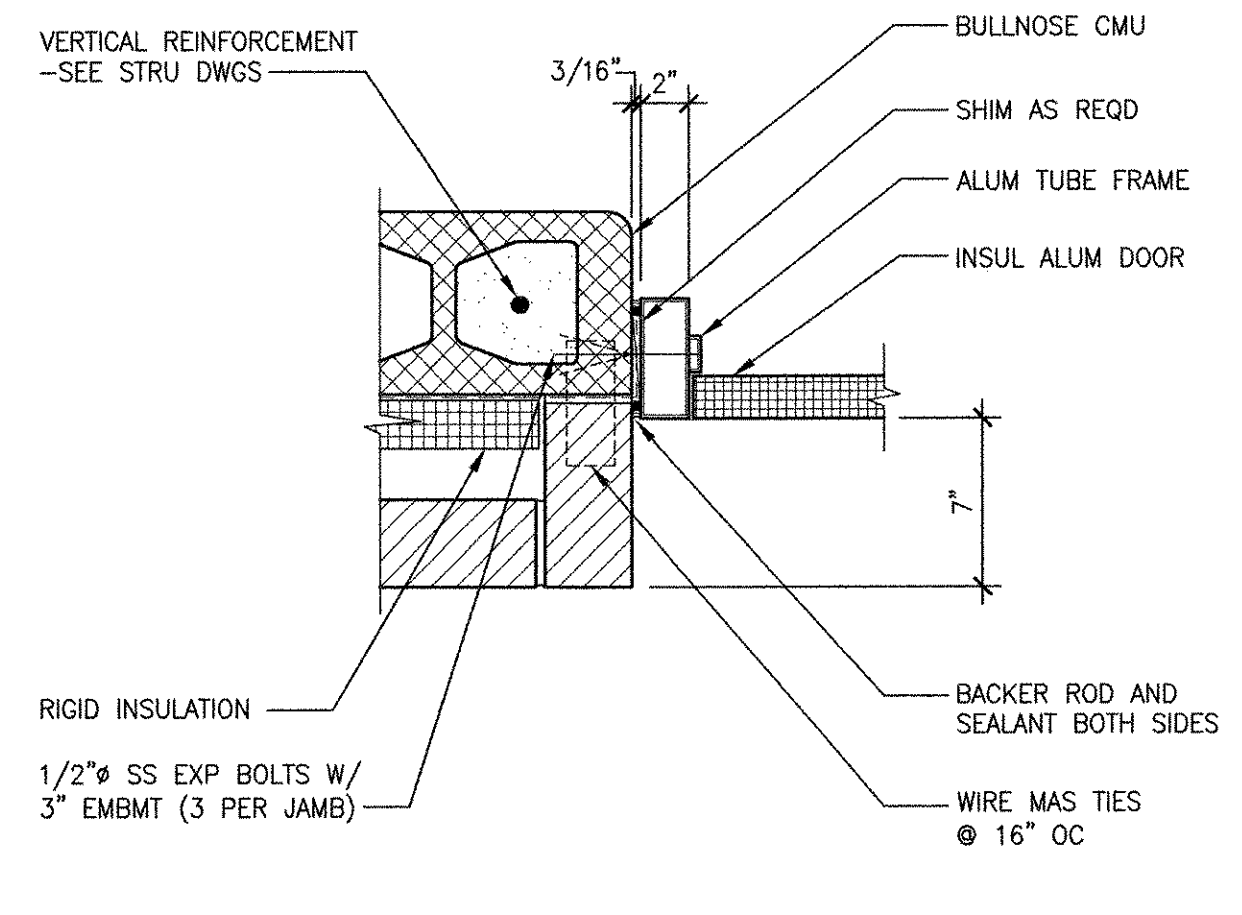
DH-3



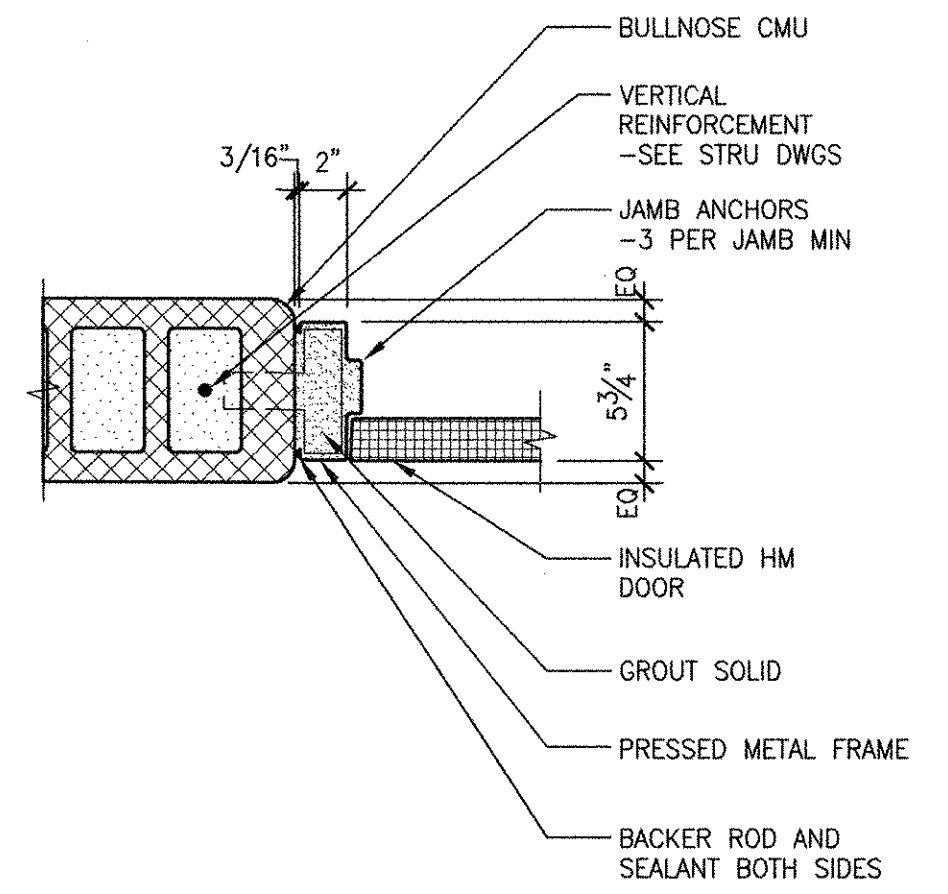
DH-2



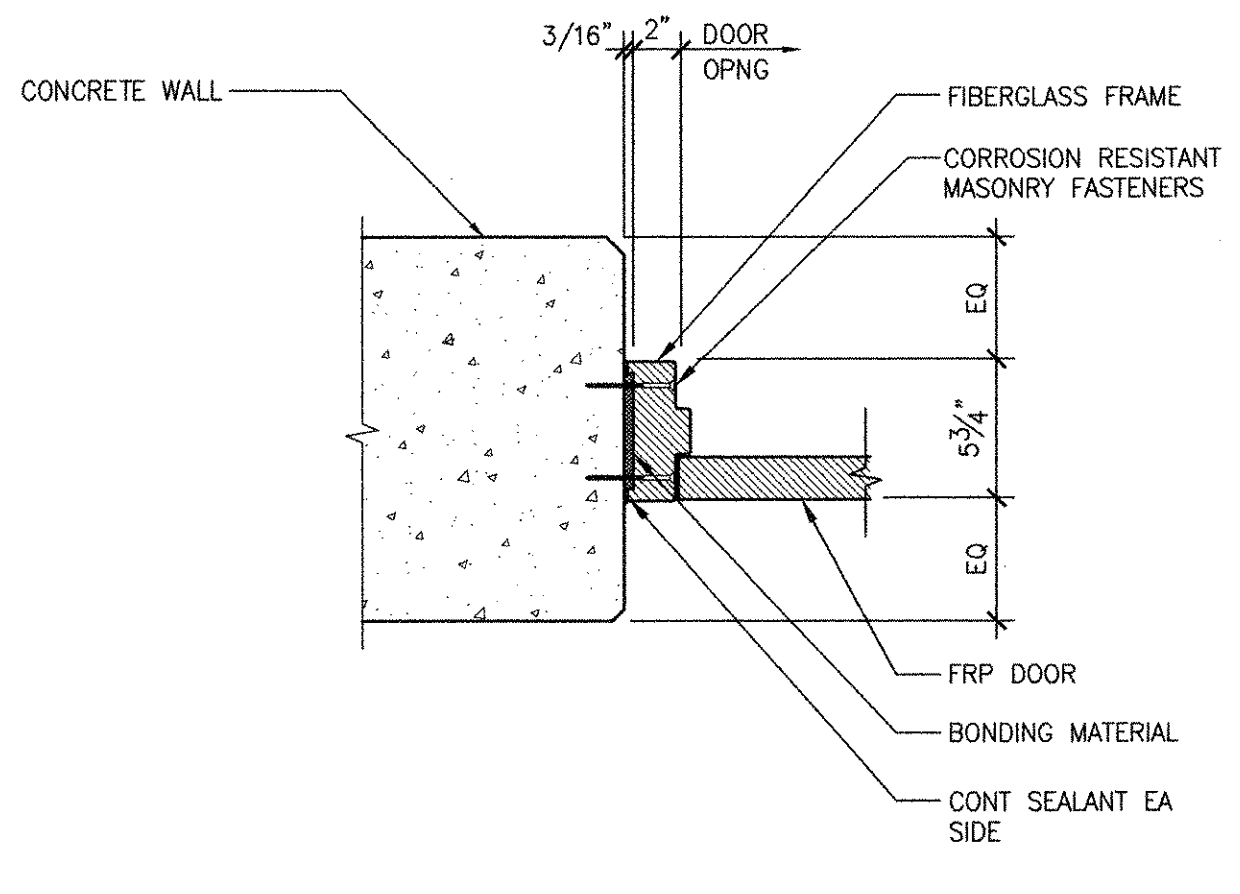
DH-1



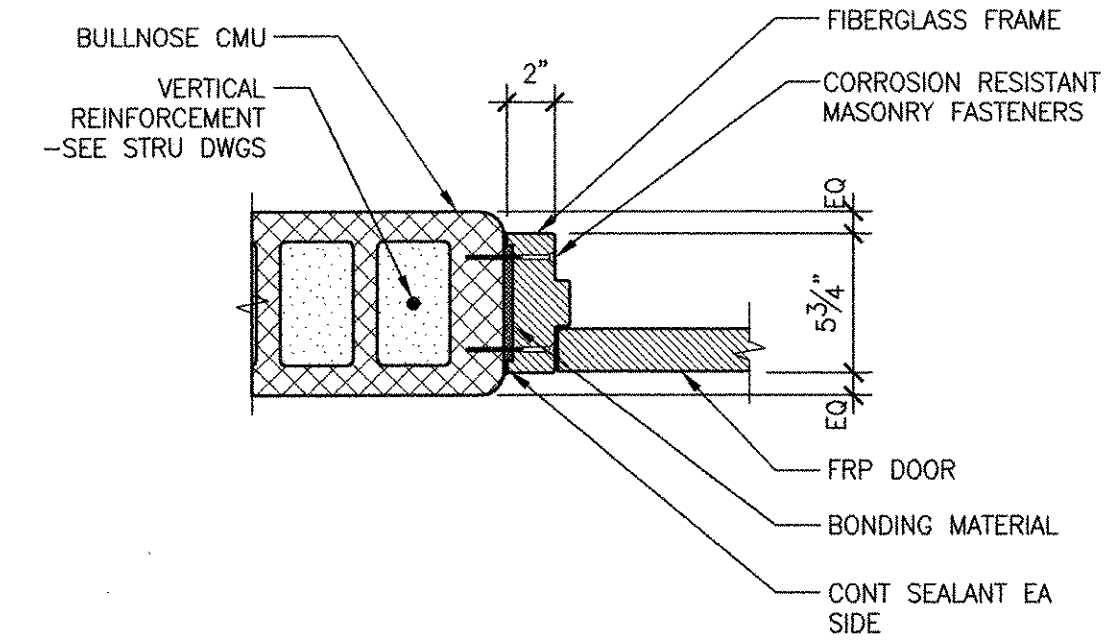
DJ-4



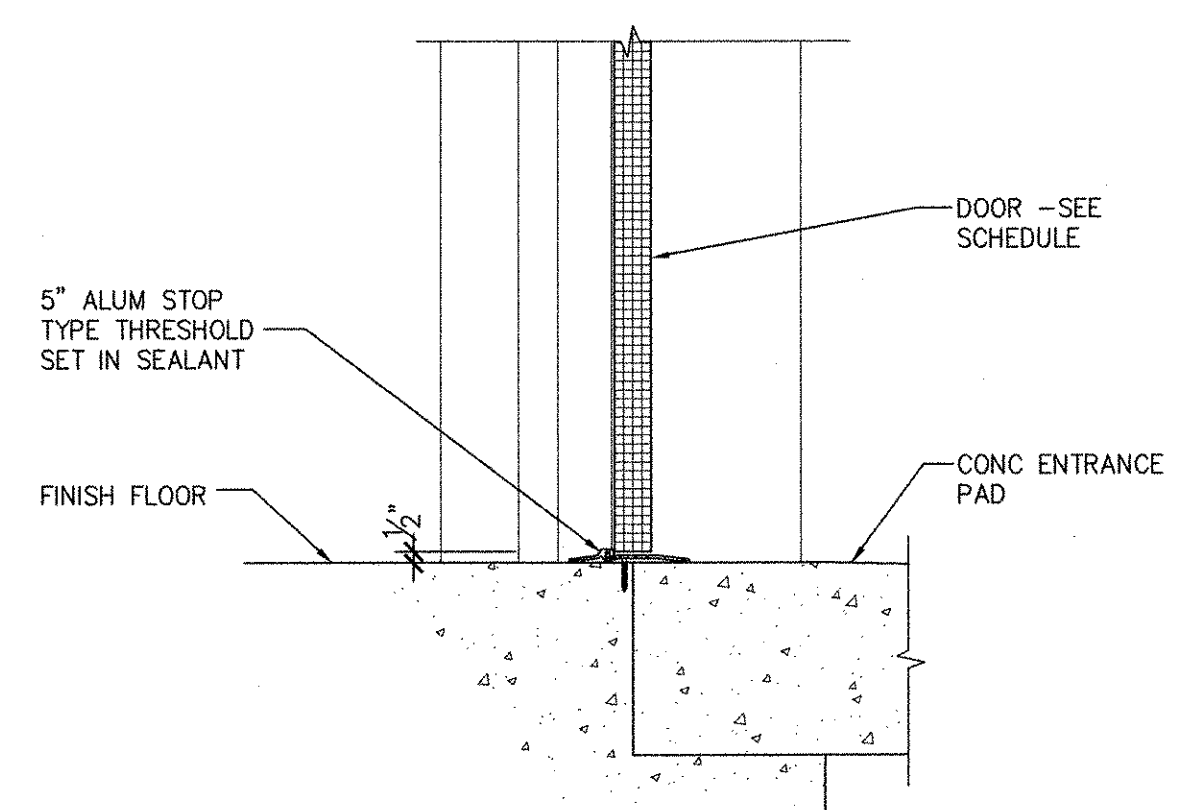
DJ-3



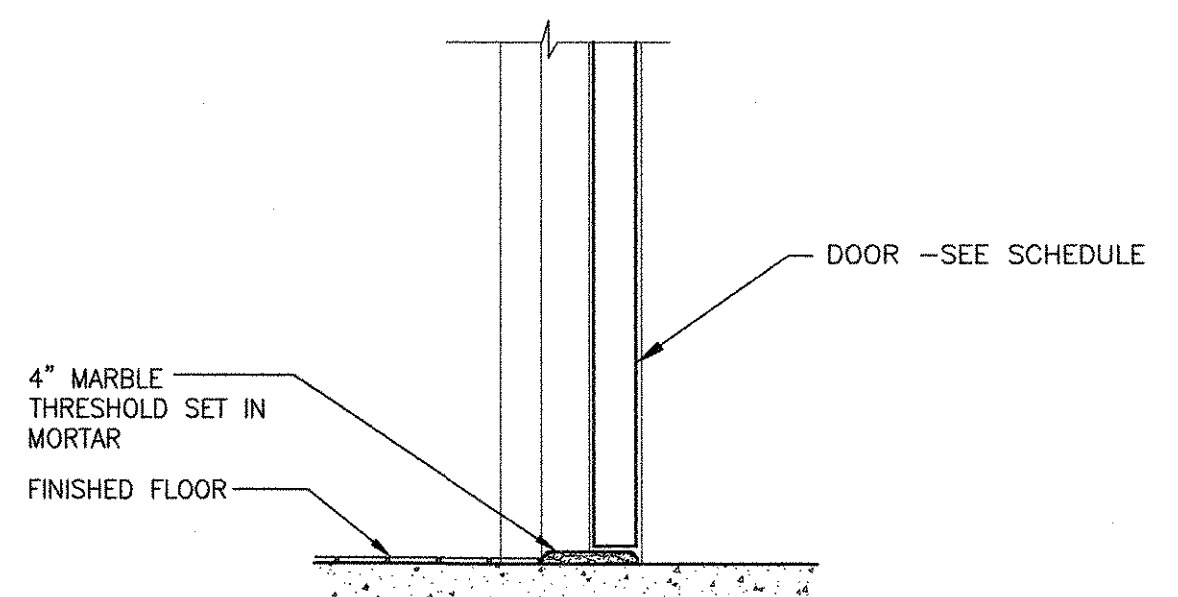
DJ-2



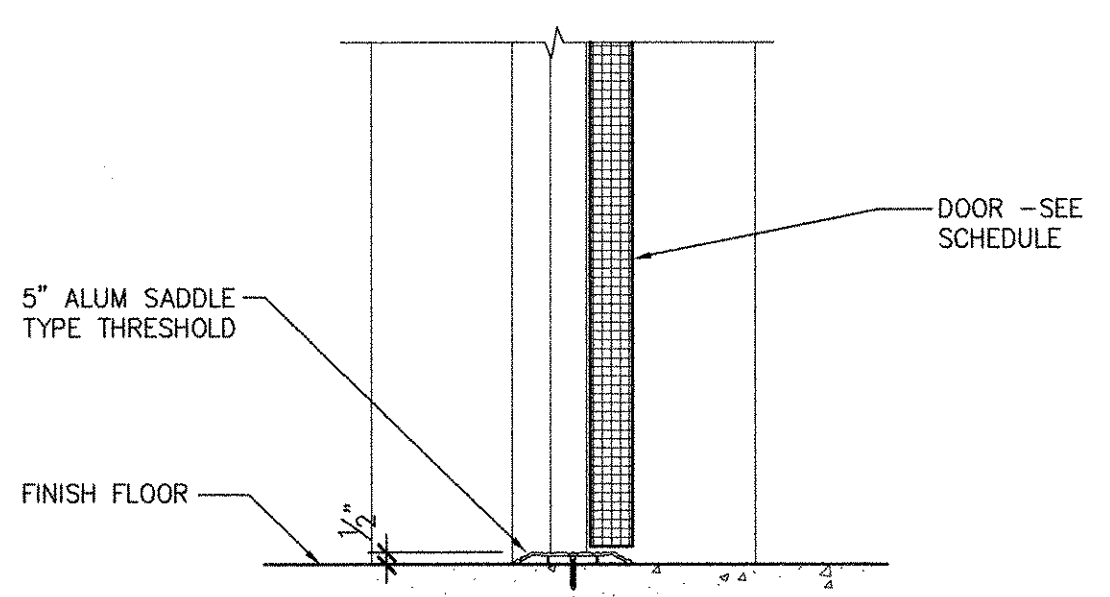
DJ-1



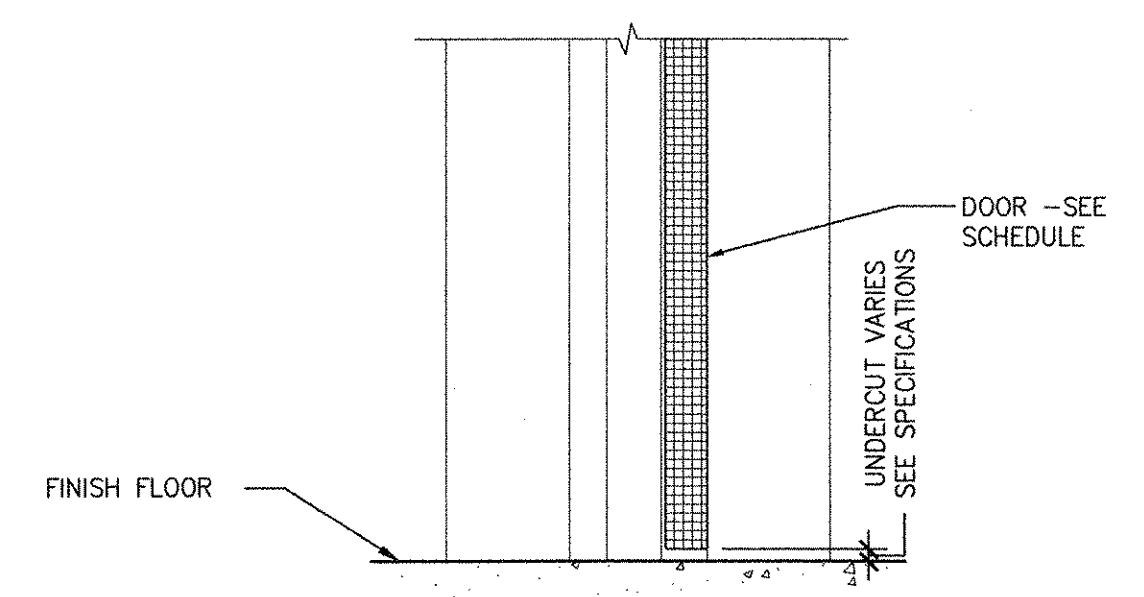
DS-4



DS-3



DS-2



DS-1

ANSI: D - 1 - Oct-12

FILENAME: P:\60148648 - EAST PROVIDENCE (RD)\COMMON SHEETS\A09 A-701.DWG

LAST UPDATE: Monday, October 01, 2012 9:25:08 AM

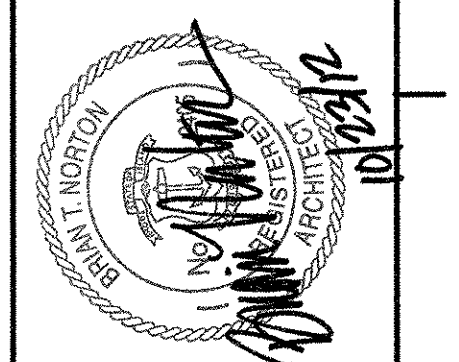
PLOT DATE: Tuesday, October 23, 2012 10:29:04 AM

NO.	DATE	BY	CHKD	DESCRIPTION
1	10/19/12	MM	MM	REVISED FOR RECORD DRAWING

AECOM USA, INC.
 100 WASHINGTON ST., SUITE 2000
 WILMINGTON, MA 01890
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

DOOR DETAILS I

ARCHITECTURAL

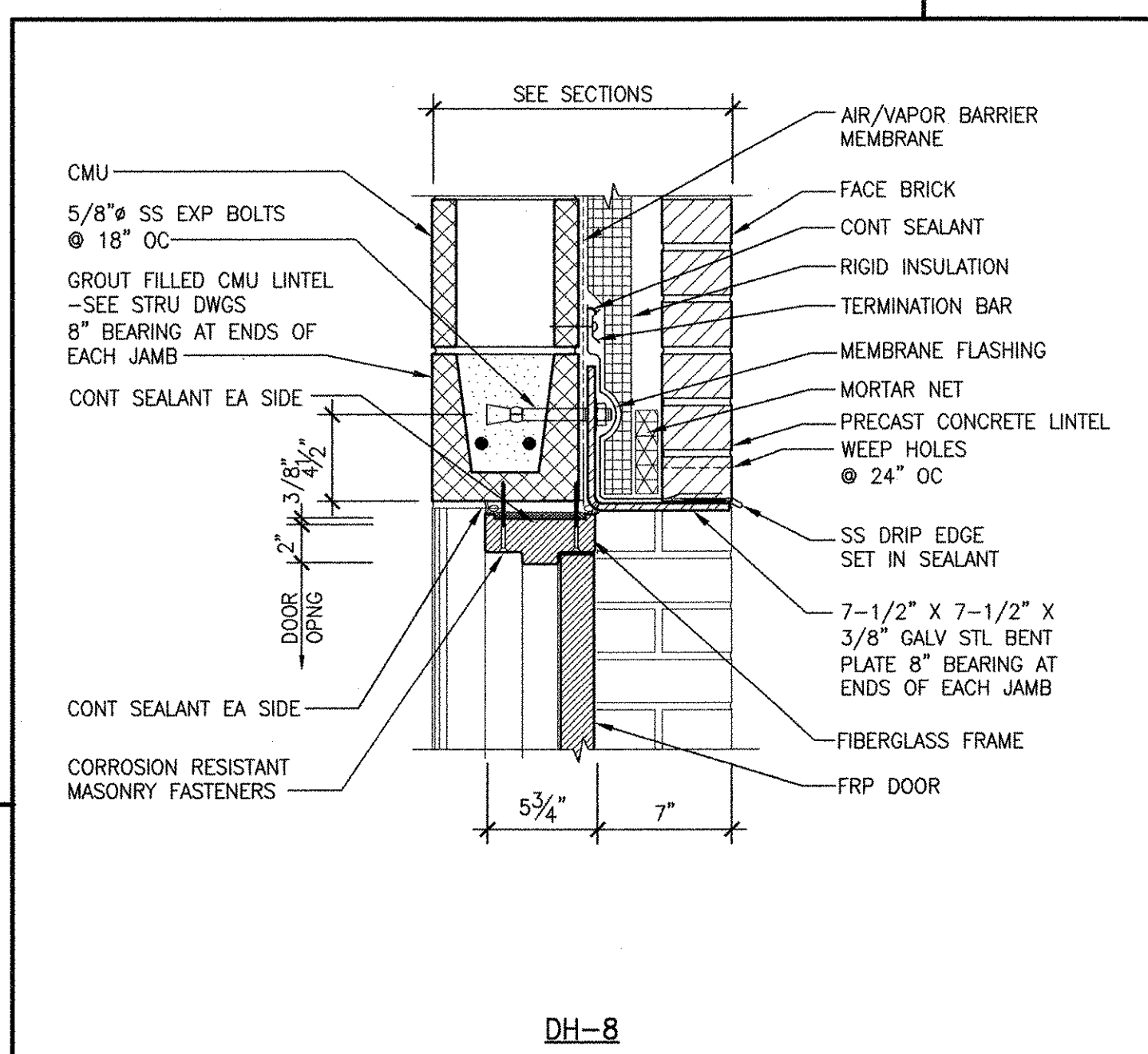
PROJECT NO:	60148648
CAD DWG FILE:	99 A-701
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1 1/2" = 1'-0"

RECORD DRAWING

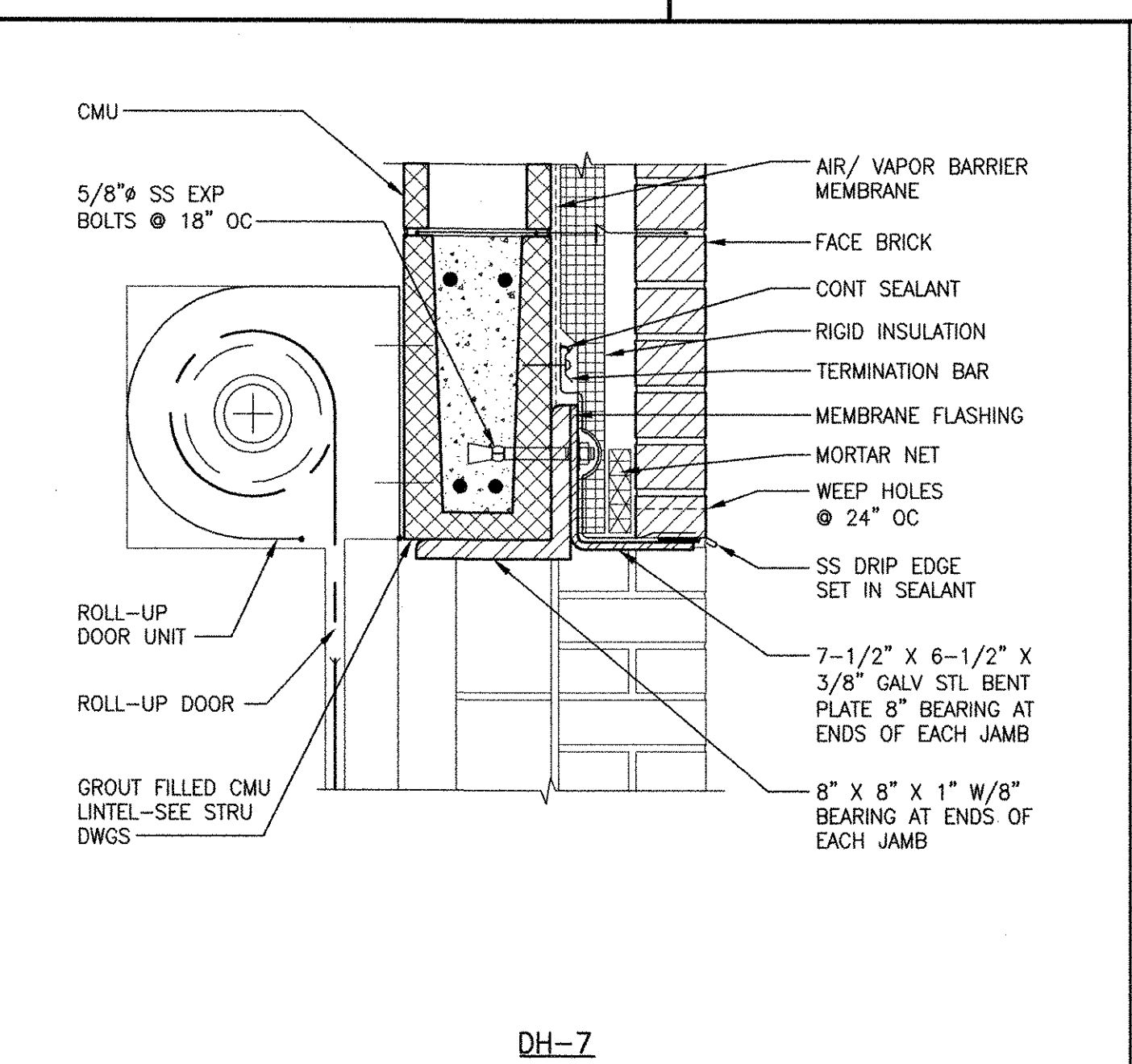
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

99 A-701

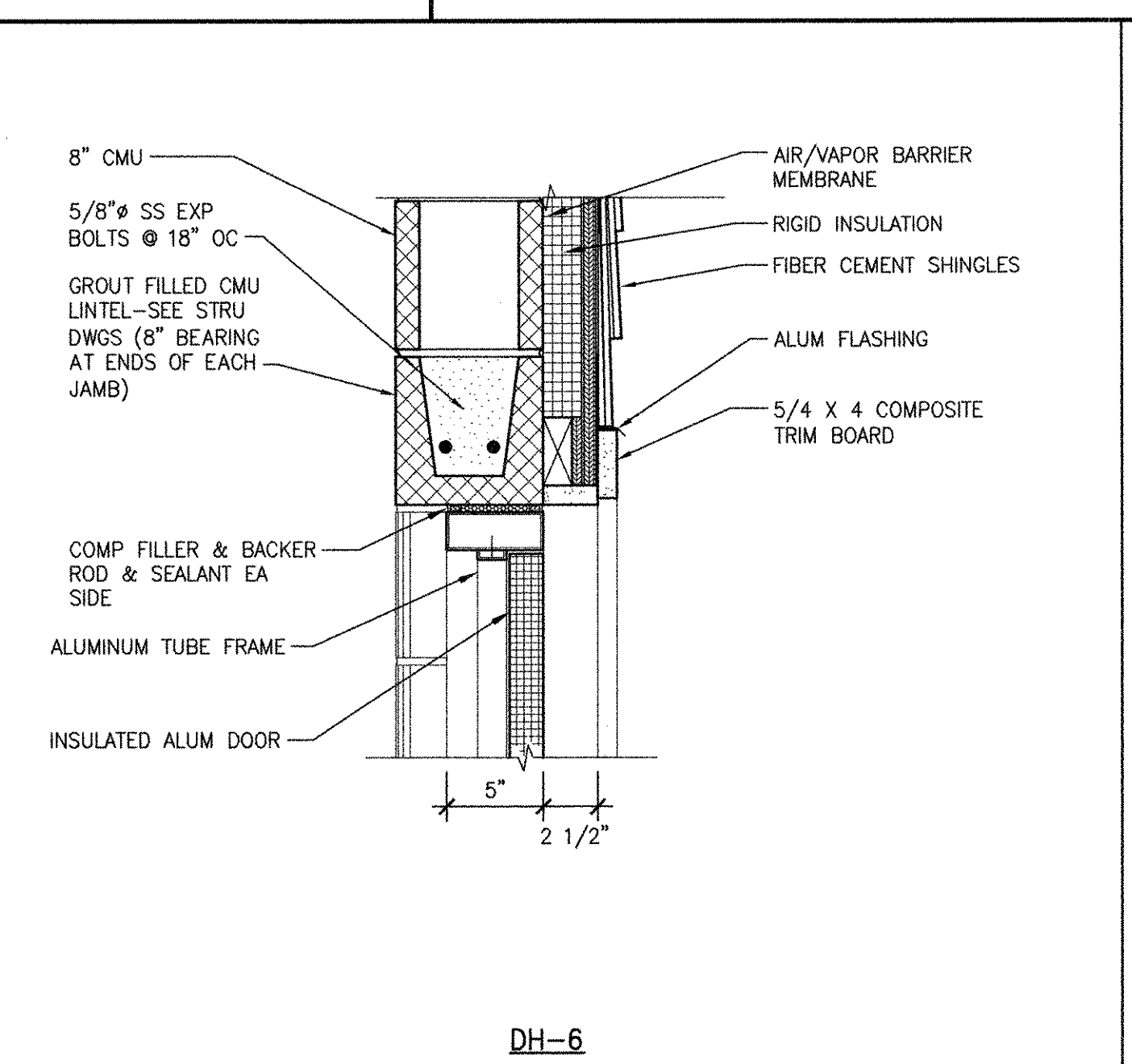
PATH/FILENAME: E:\60148648 - EAST PROVIDENCE (RD)\COMMON\SHETS\A\99 A-702.DWG
 LAST UPDATE: Monday, October 01, 2012 12:35:50 PM
 PLOT DATE: Tuesday, October 23, 2012 10:29:08 AM
 ANSI D - 1-10-12



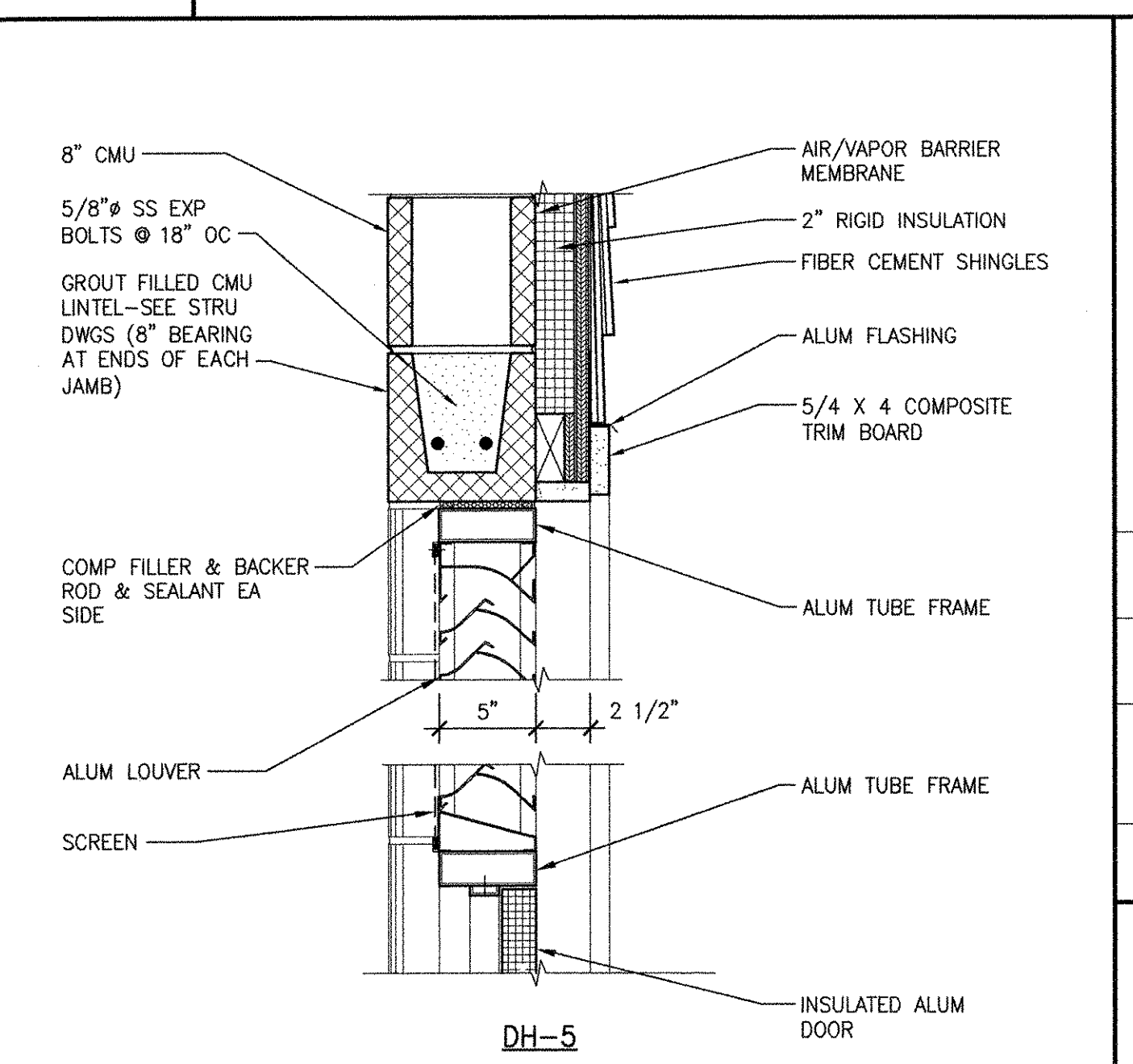
DH-8



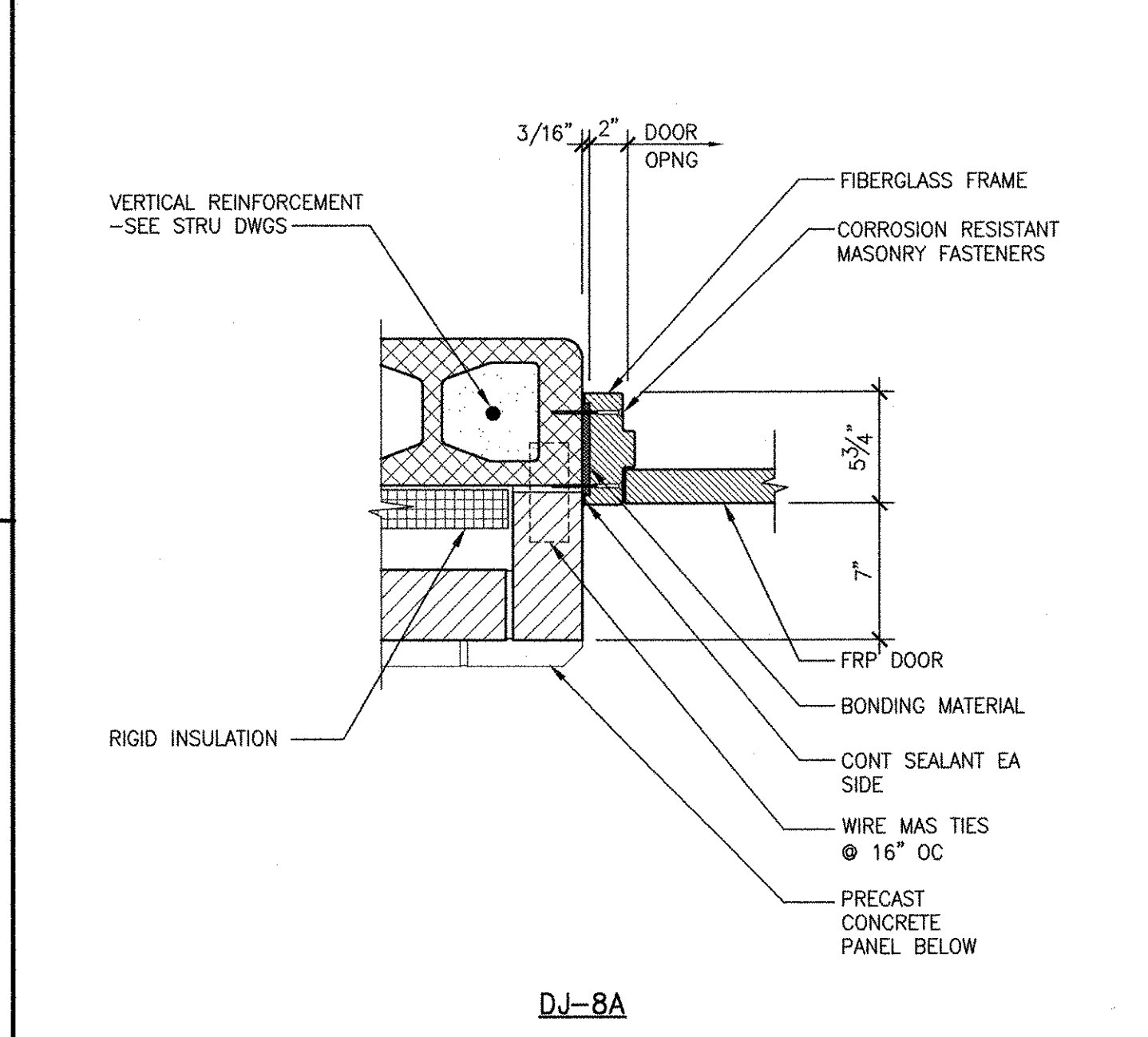
DH-7



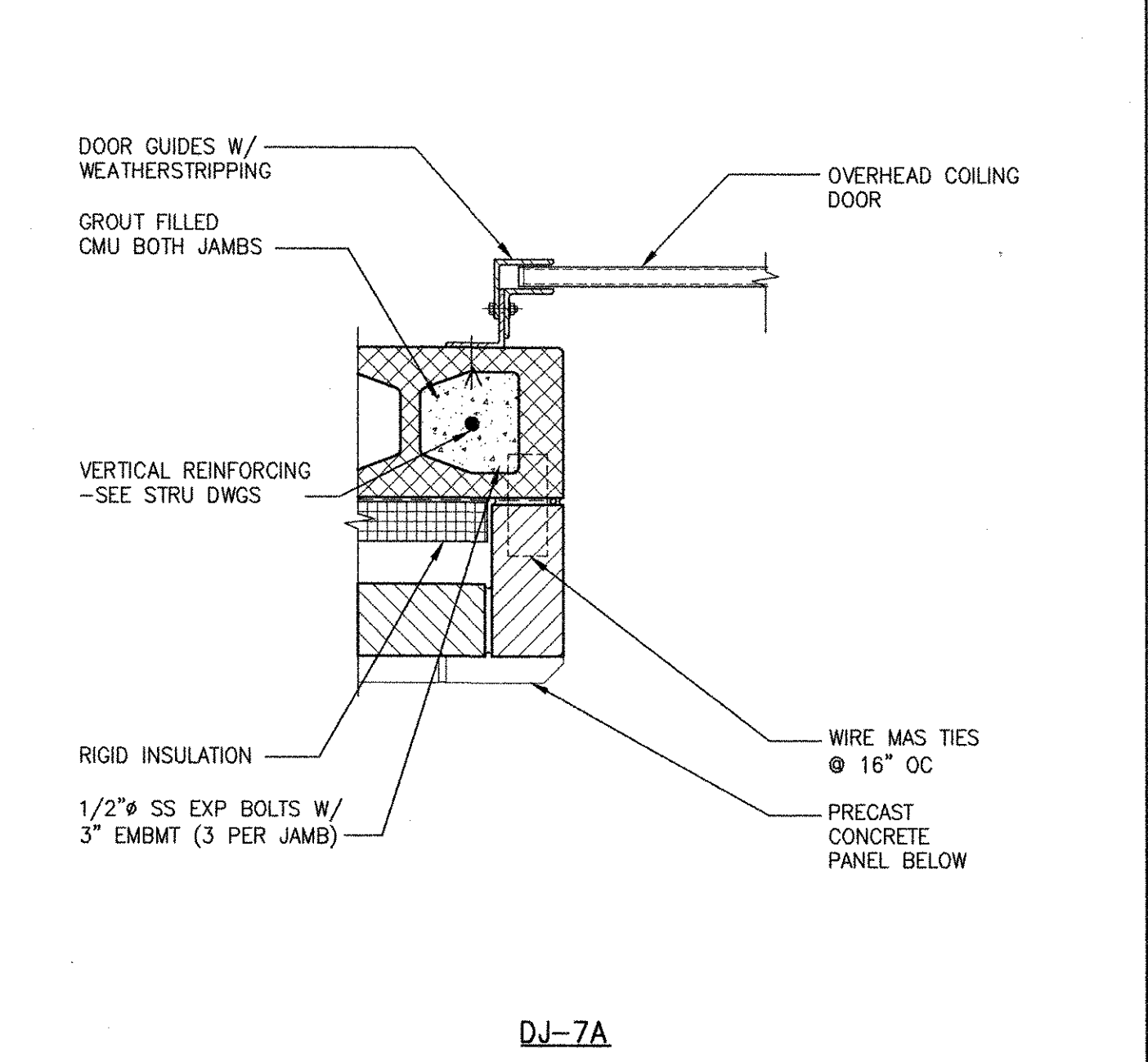
DH-6



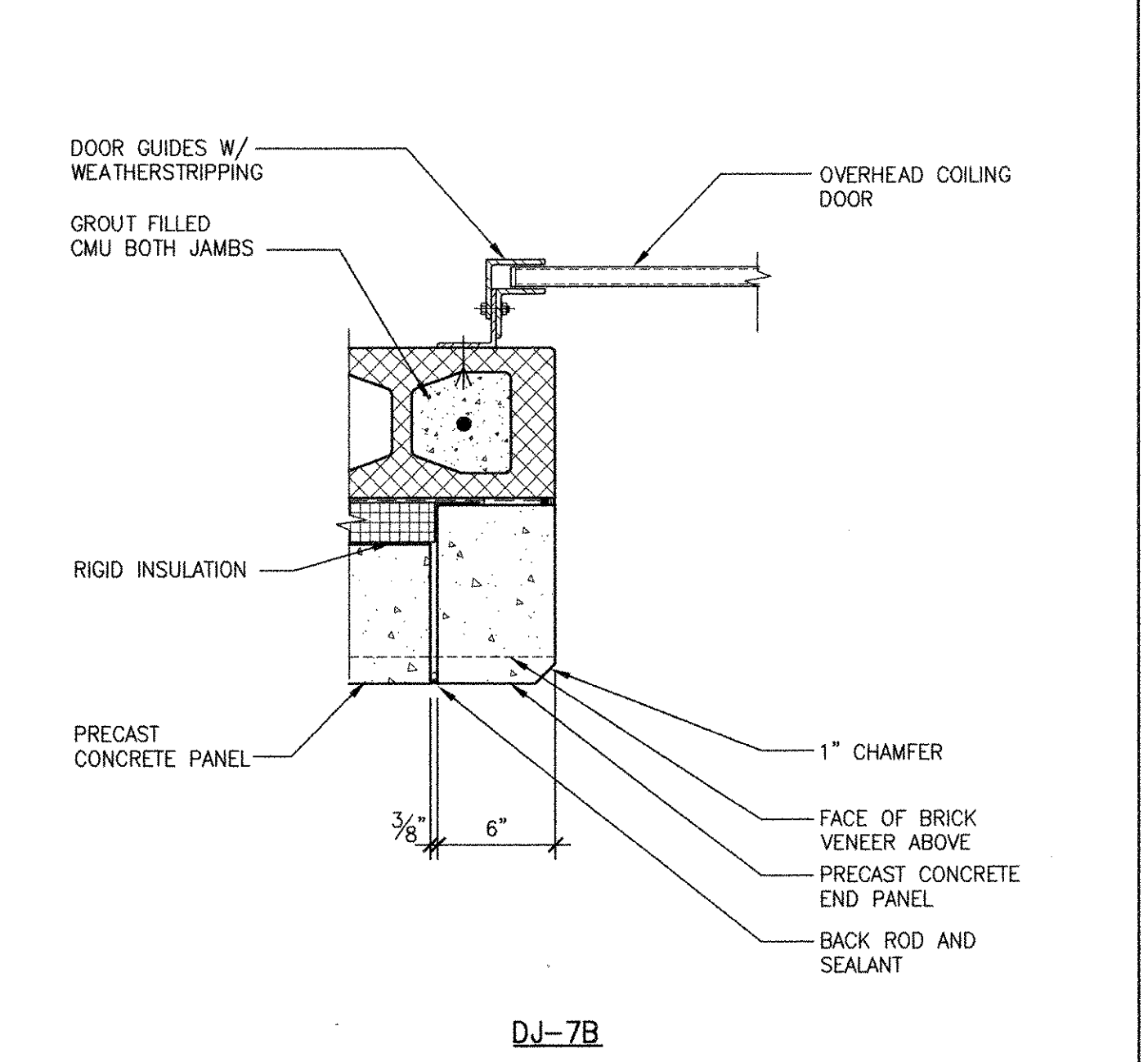
DH-5



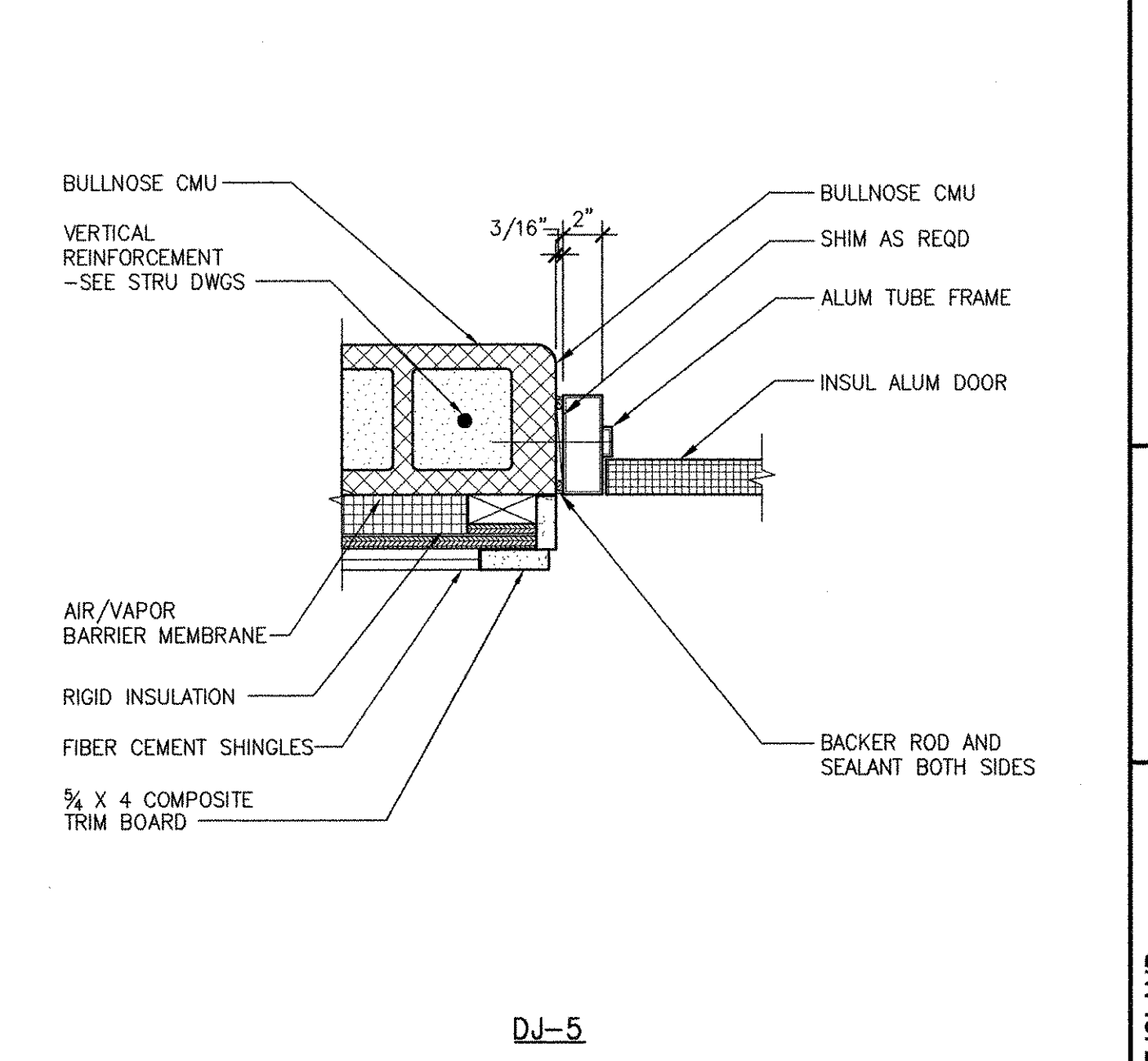
DJ-8A



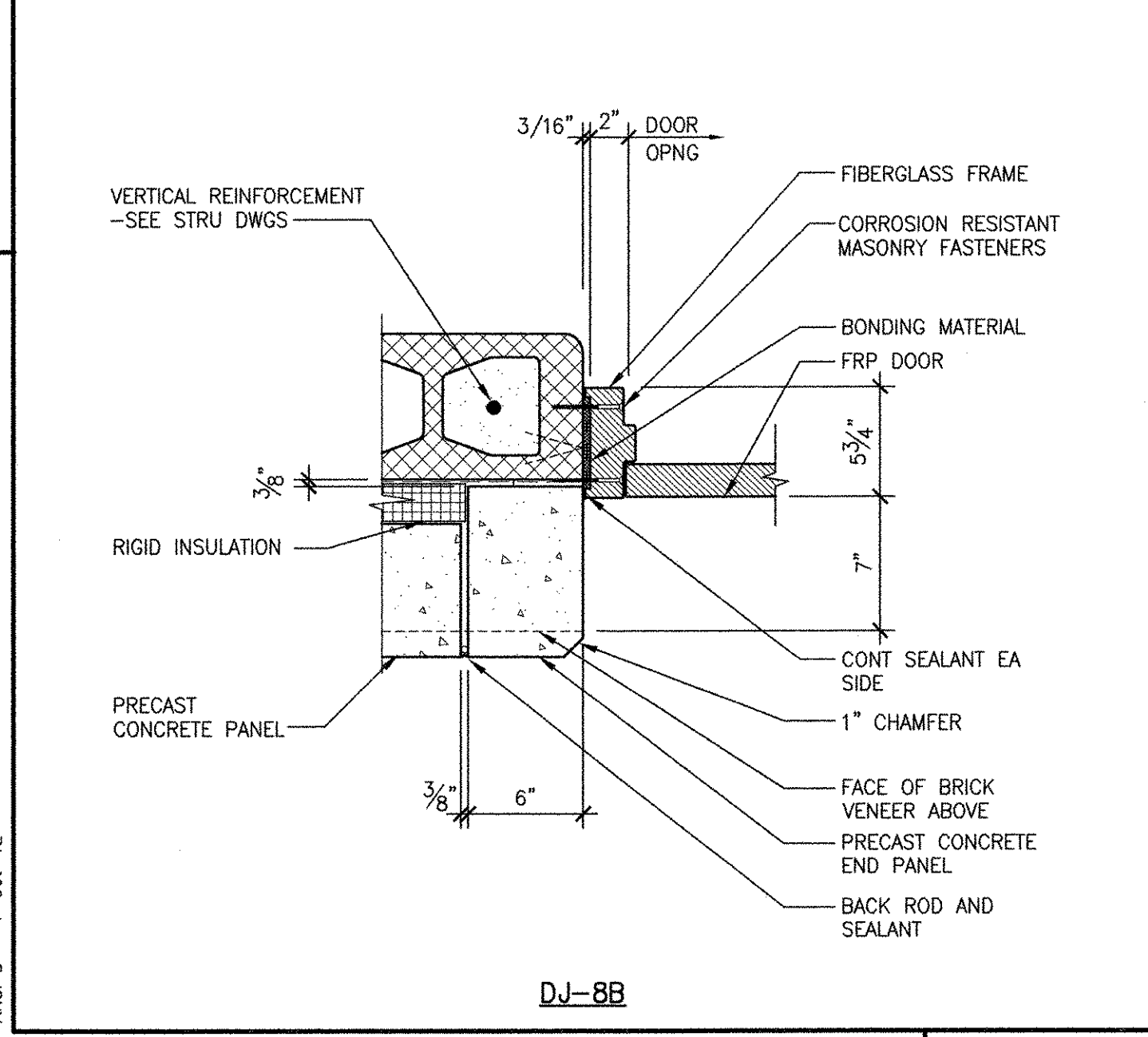
DJ-7A



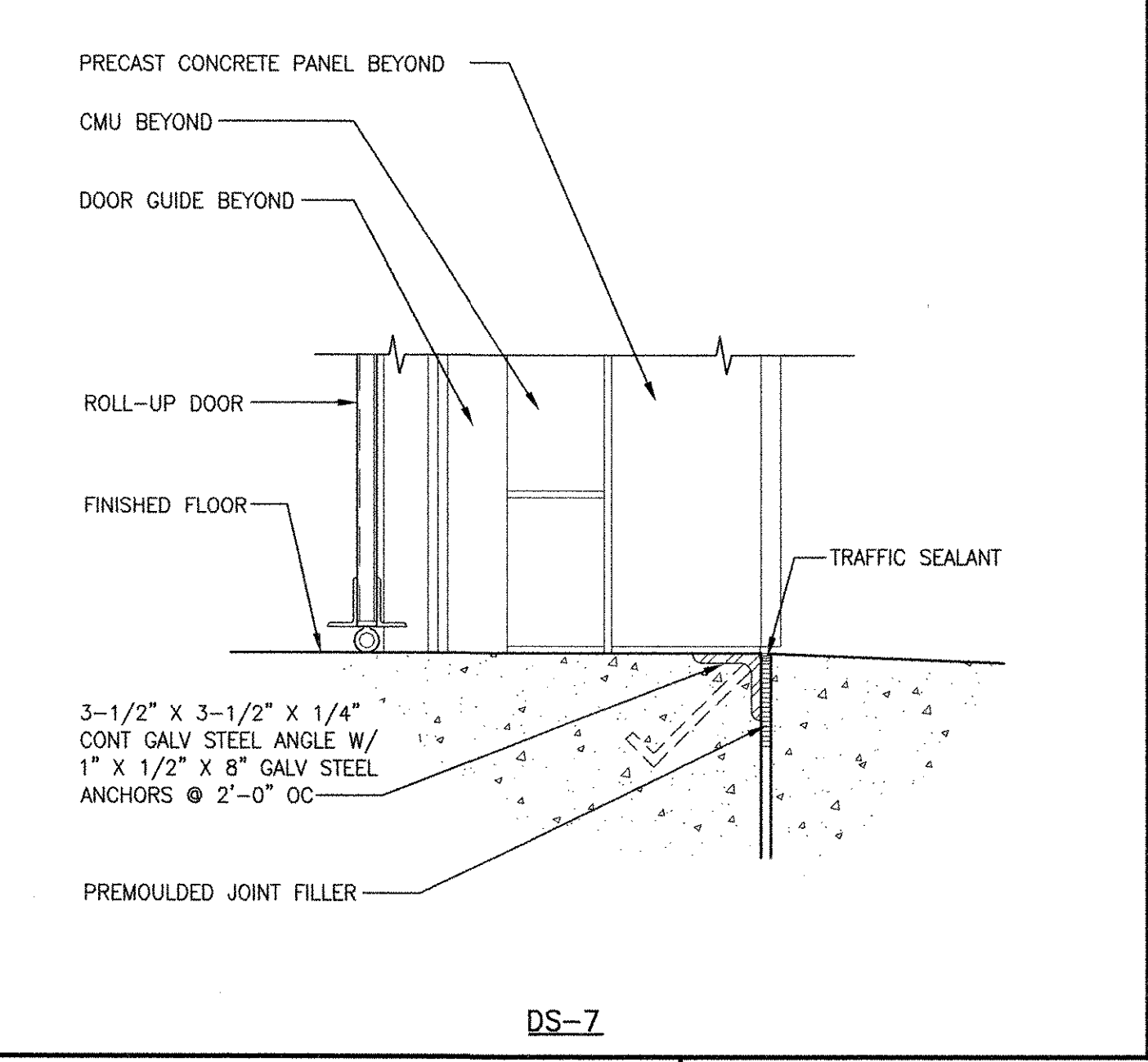
DJ-7B



DJ-5



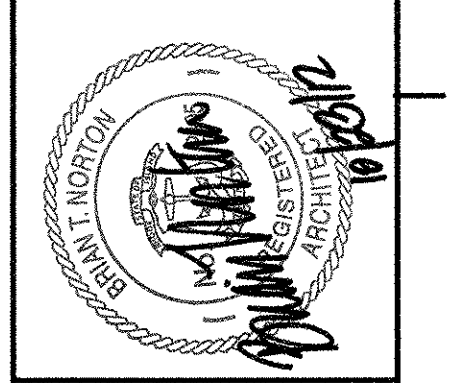
DJ-8B



DS-7

REVISIONS	DESCRIPTION
1	REVIS FOR RECORD DRAWING

AECOM USA, INC.
 100 WATER STREET
 WALTHAM, MA 02451
 PHONE (781) 246-5200
AECOM
 RECORD DRAWINGS

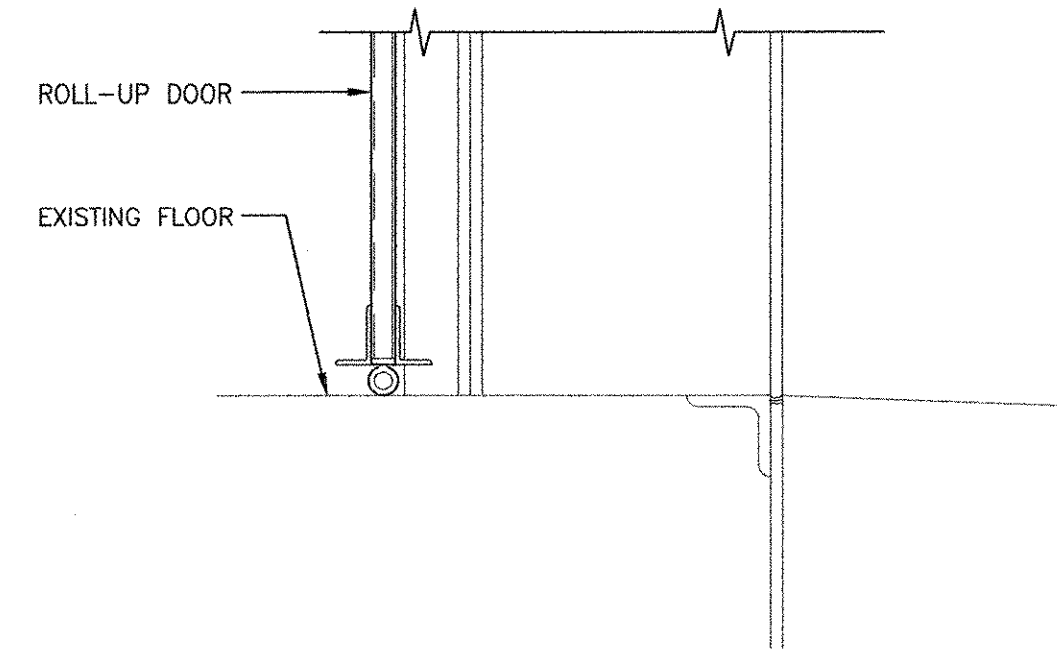


CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
DOOR DETAILS II
 ARCHITECTURAL

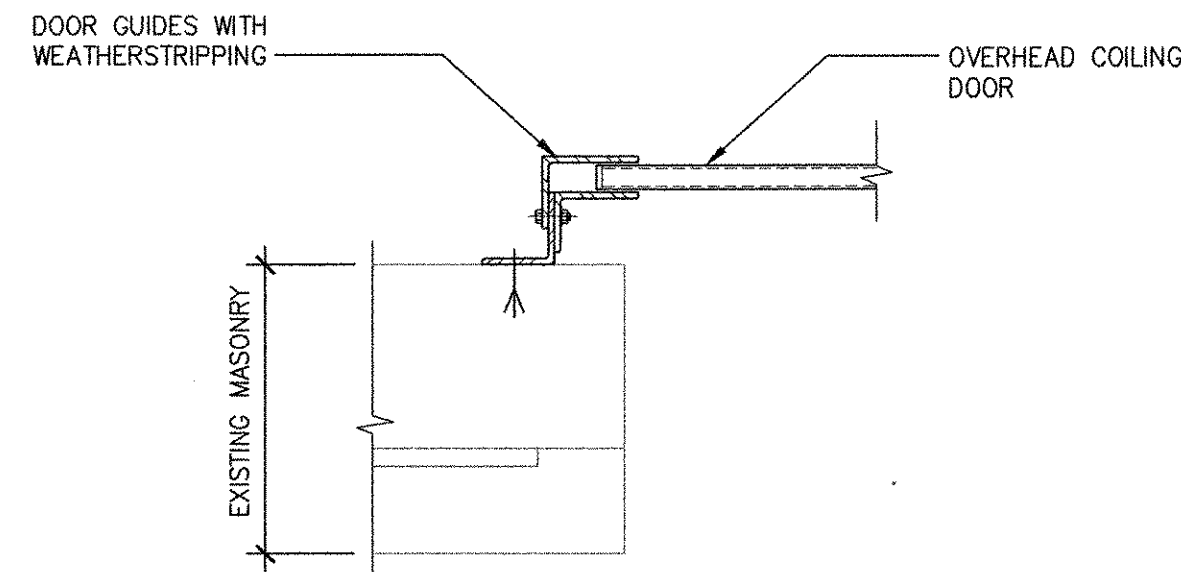
PROJECT NO:	60148648
CAD DWG FILE:	99 A-702
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1 1/2" = 1'-0"
99 A-702	

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

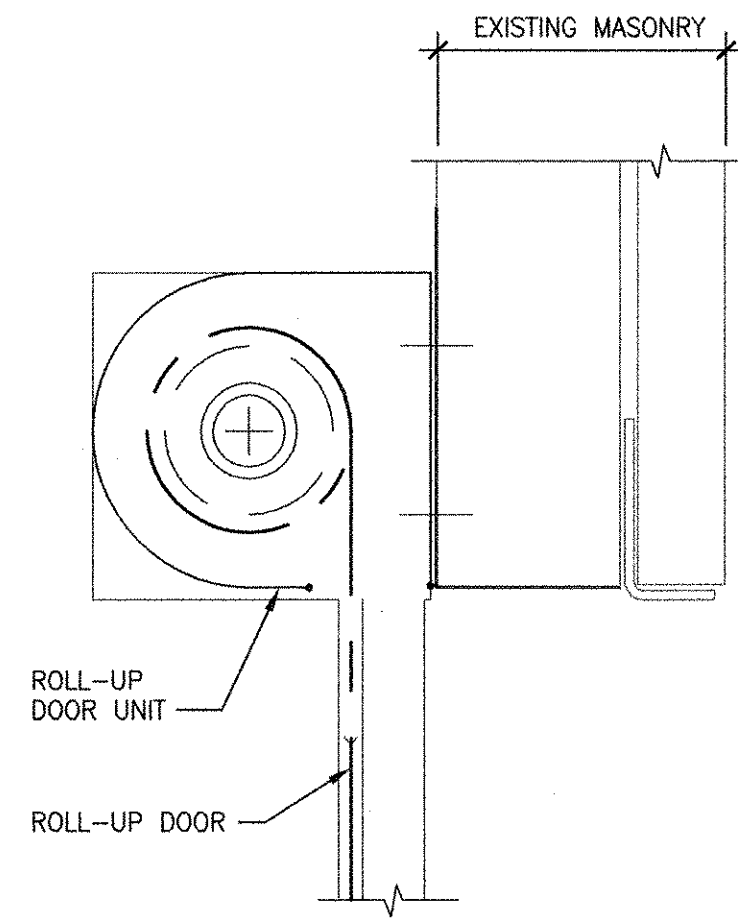
PATH: F:\PROJECTS\60148648 - EAST PROVIDENCE DSO\COMMON SHEETS\A99 A-703.DWG
 LAST UPDATE: Monday, October 01, 2012 9:26:40 AM
 PLOT DATE: Tuesday, October 23, 2012 10:29:12 AM
 ANSI D - 1-10 Oct-12



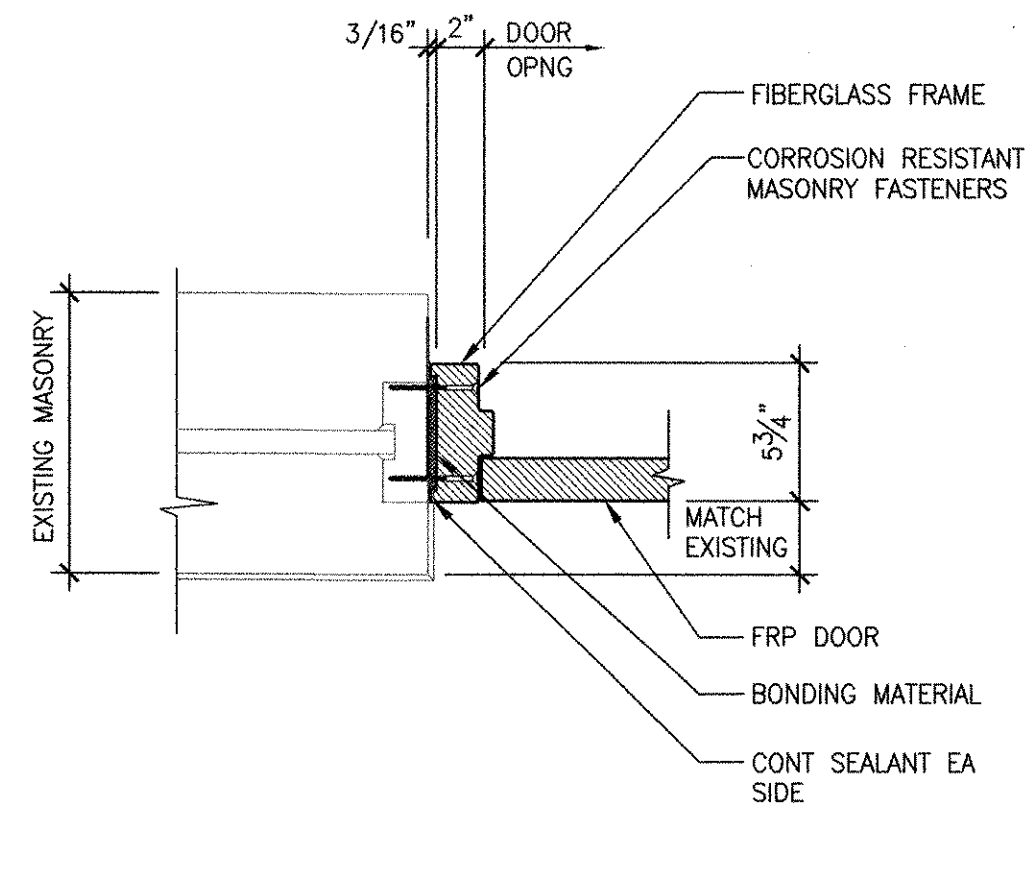
DS-12



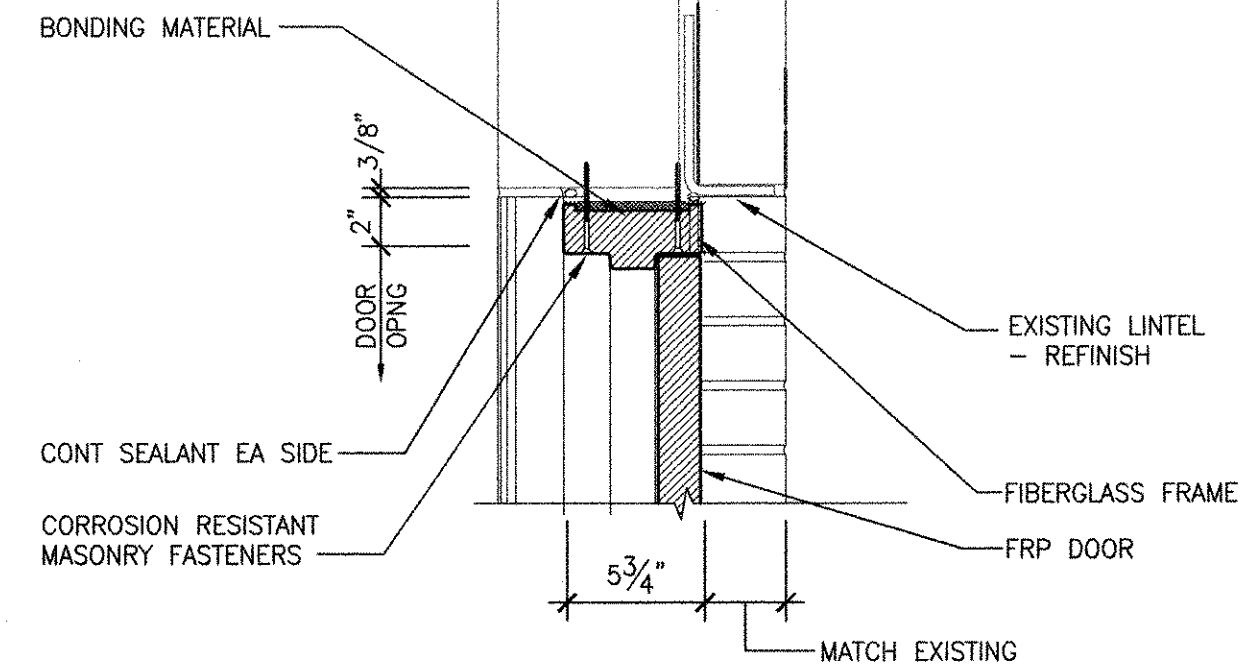
DJ-12



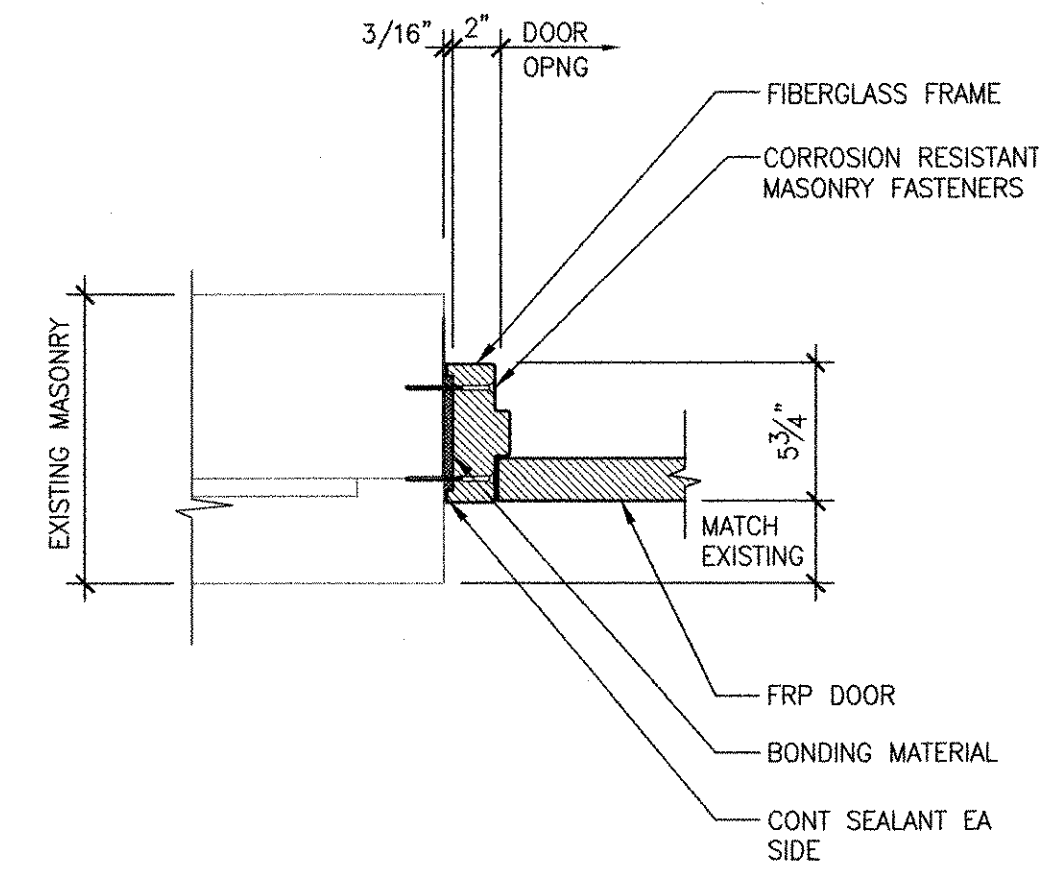
DH-12



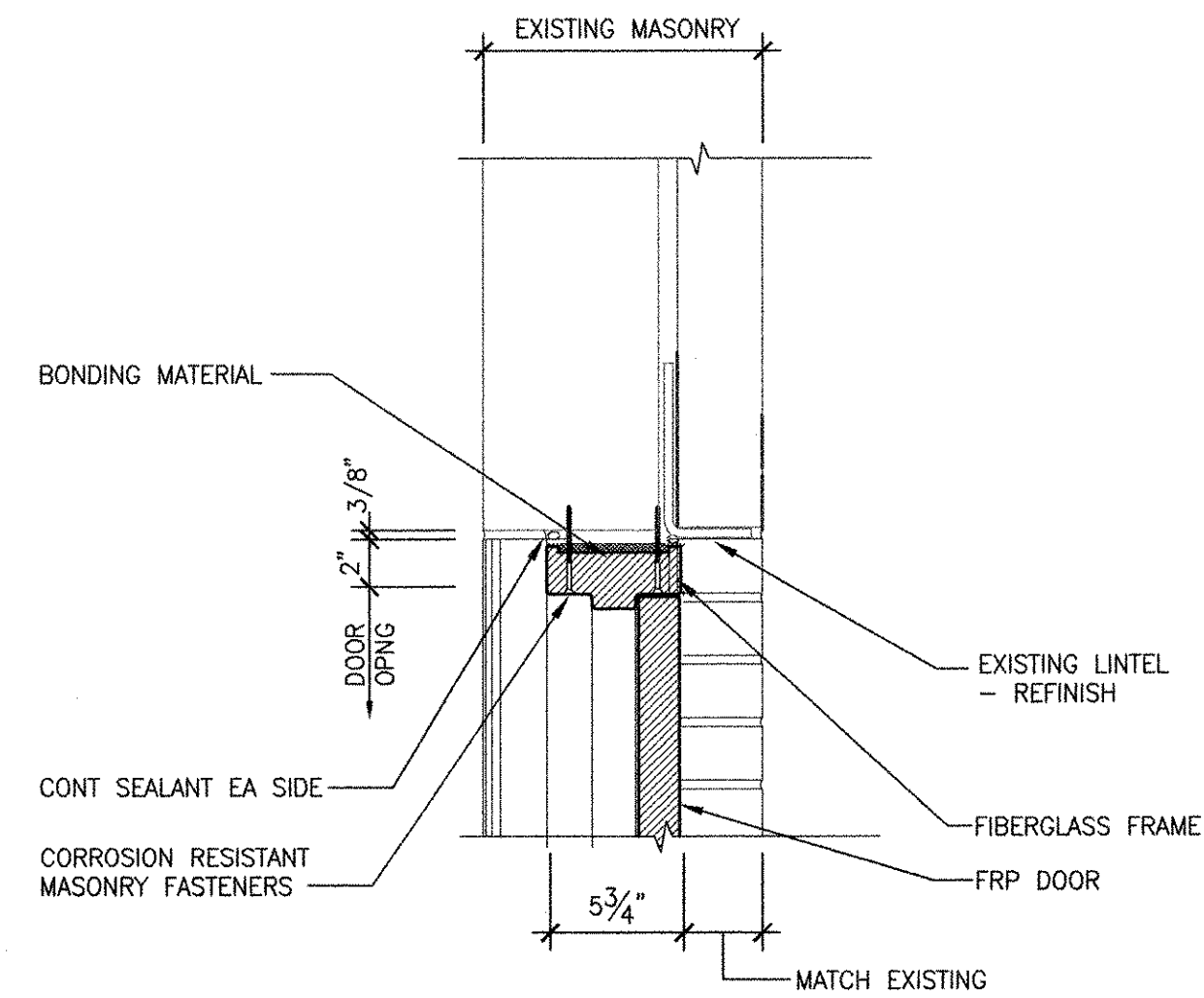
DJ-11



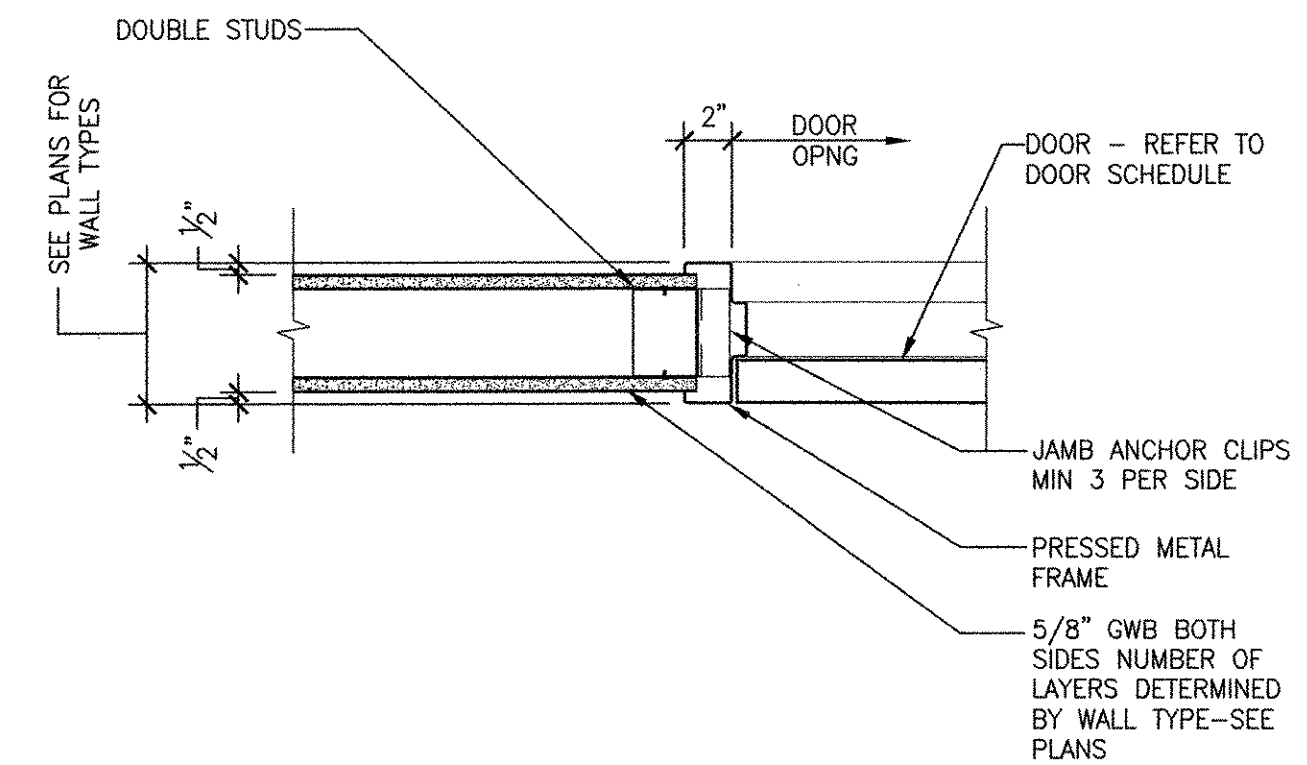
DH-10



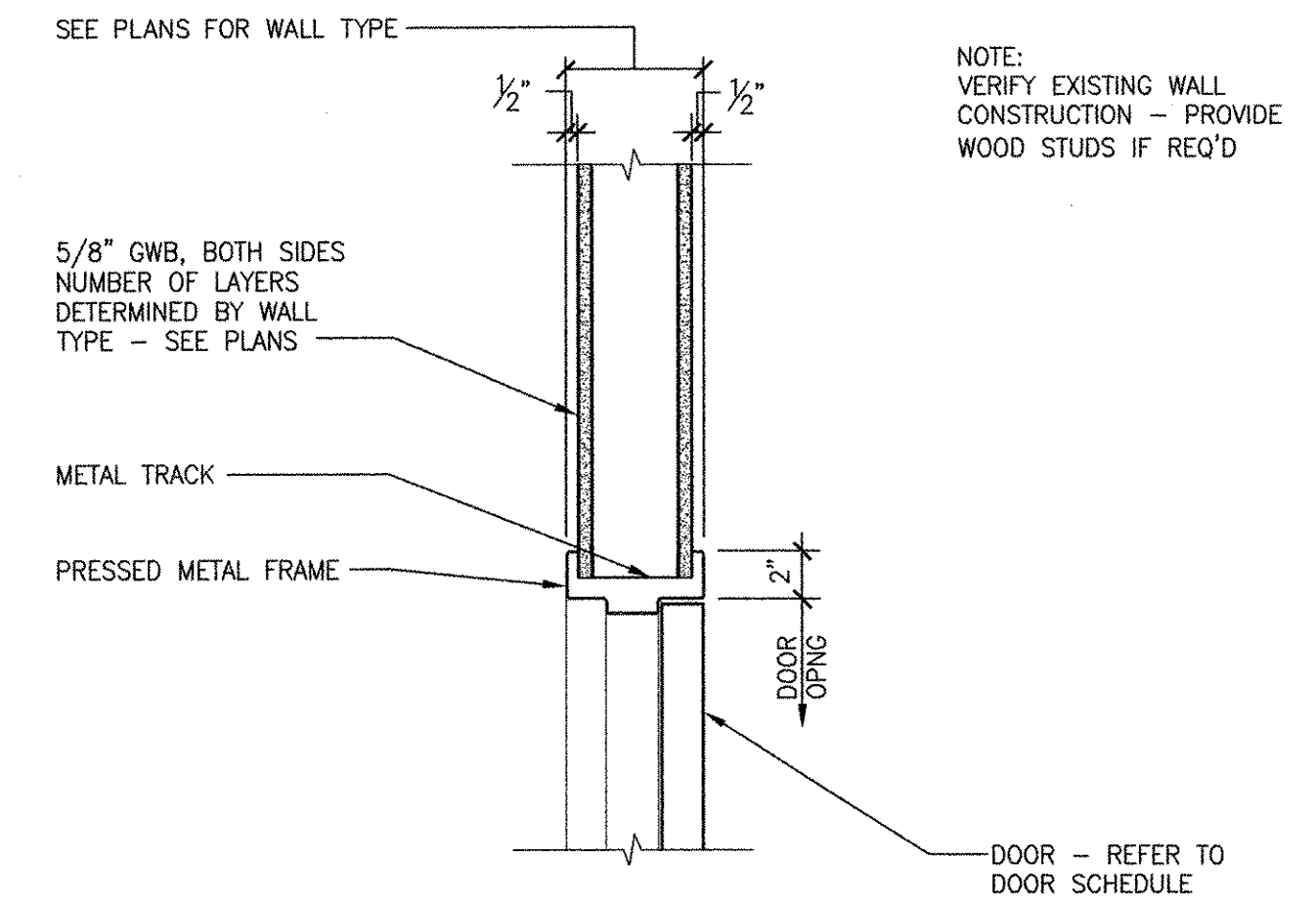
DJ-10



DH-9



DJ-9



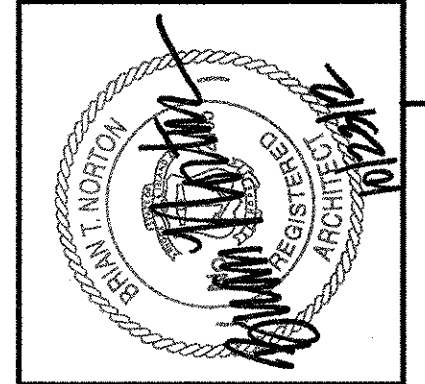
NOTE: VERIFY EXISTING WALL CONSTRUCTION - PROVIDE WOOD STUDS IF REQ'D

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MM	MM	REVISED FOR RECORD DRAWING

AECOM USA, INC.
 100 WATER STREET
 BOSTON, MA 02109
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
DOOR DETAILS III
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-703
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1 1/2" = 1'-0"

99 A-703

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

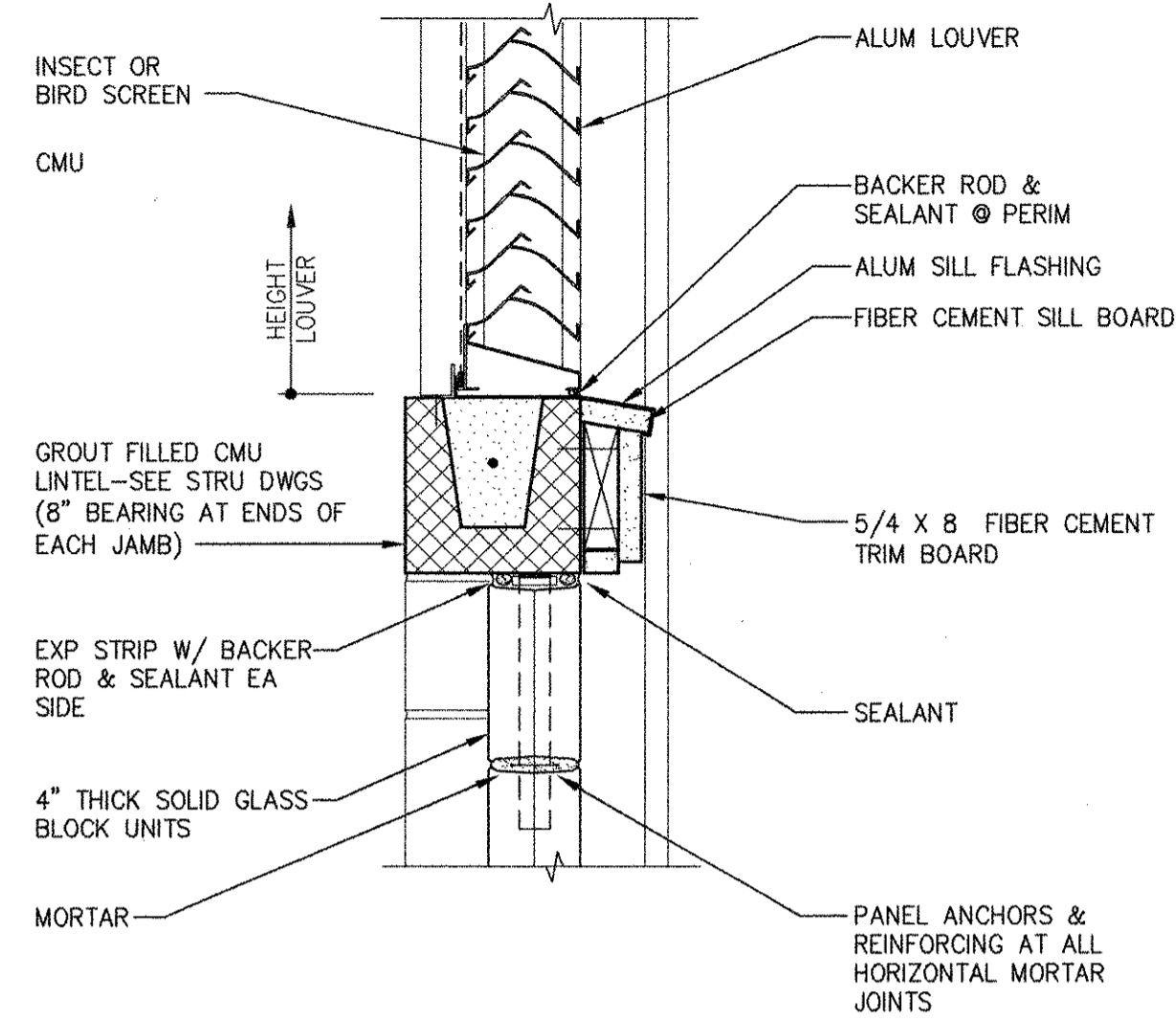
1

2

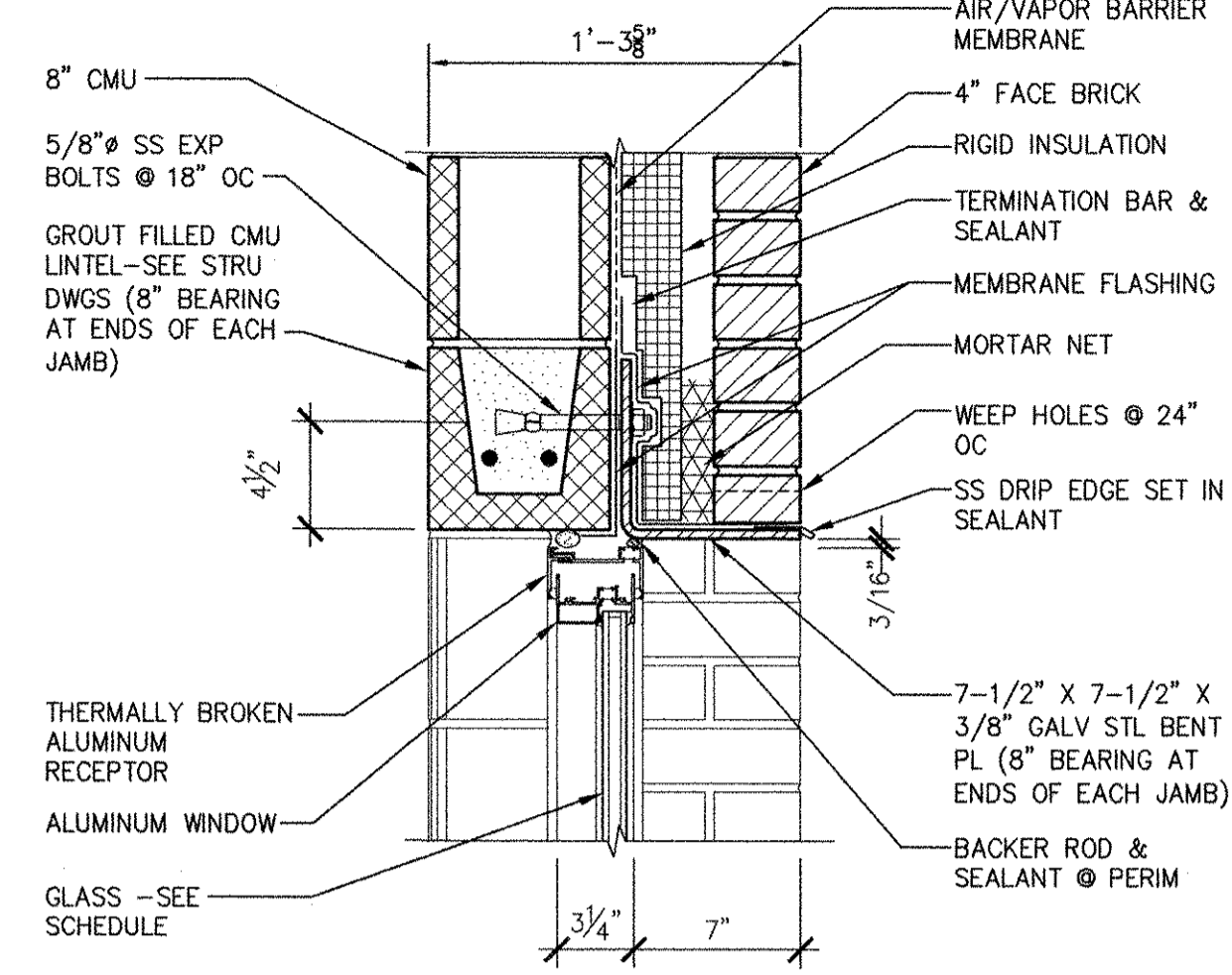
3

4

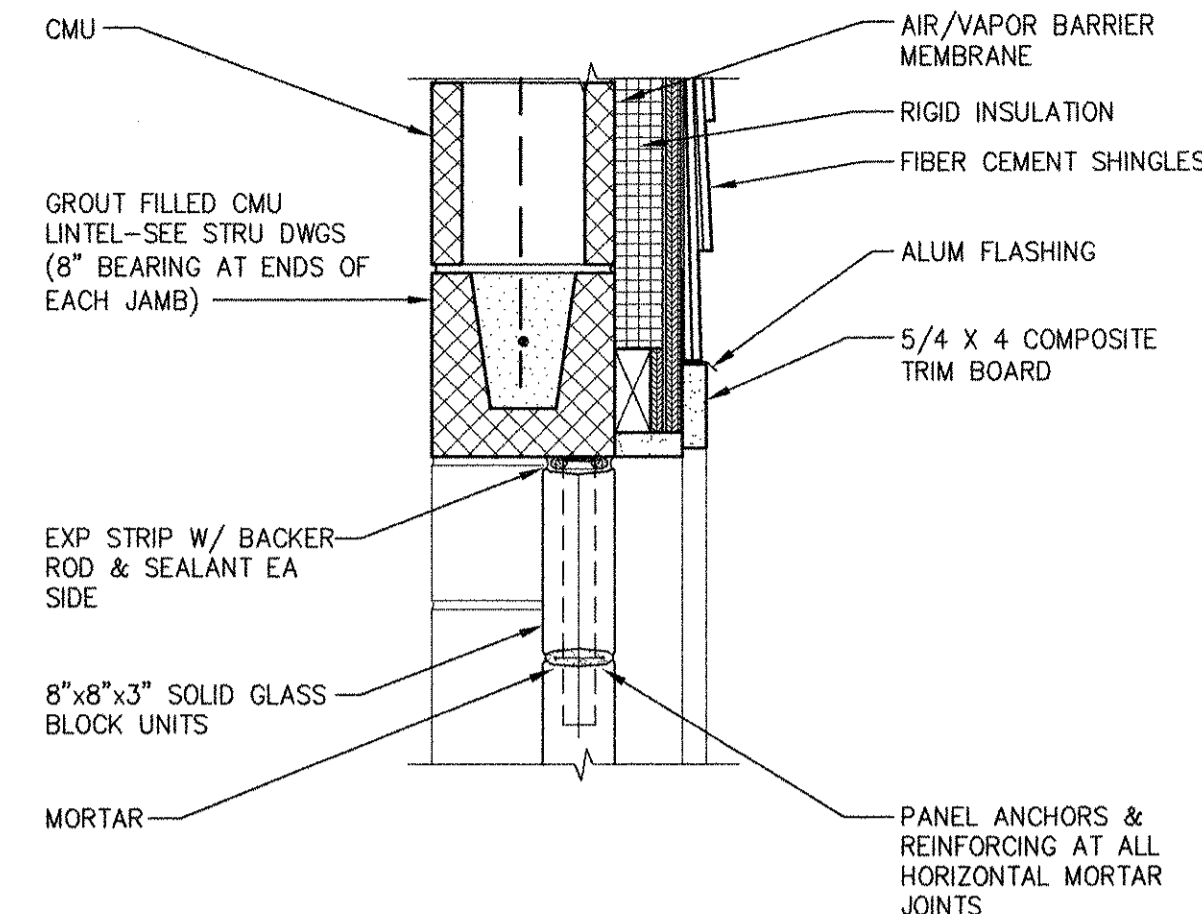
5



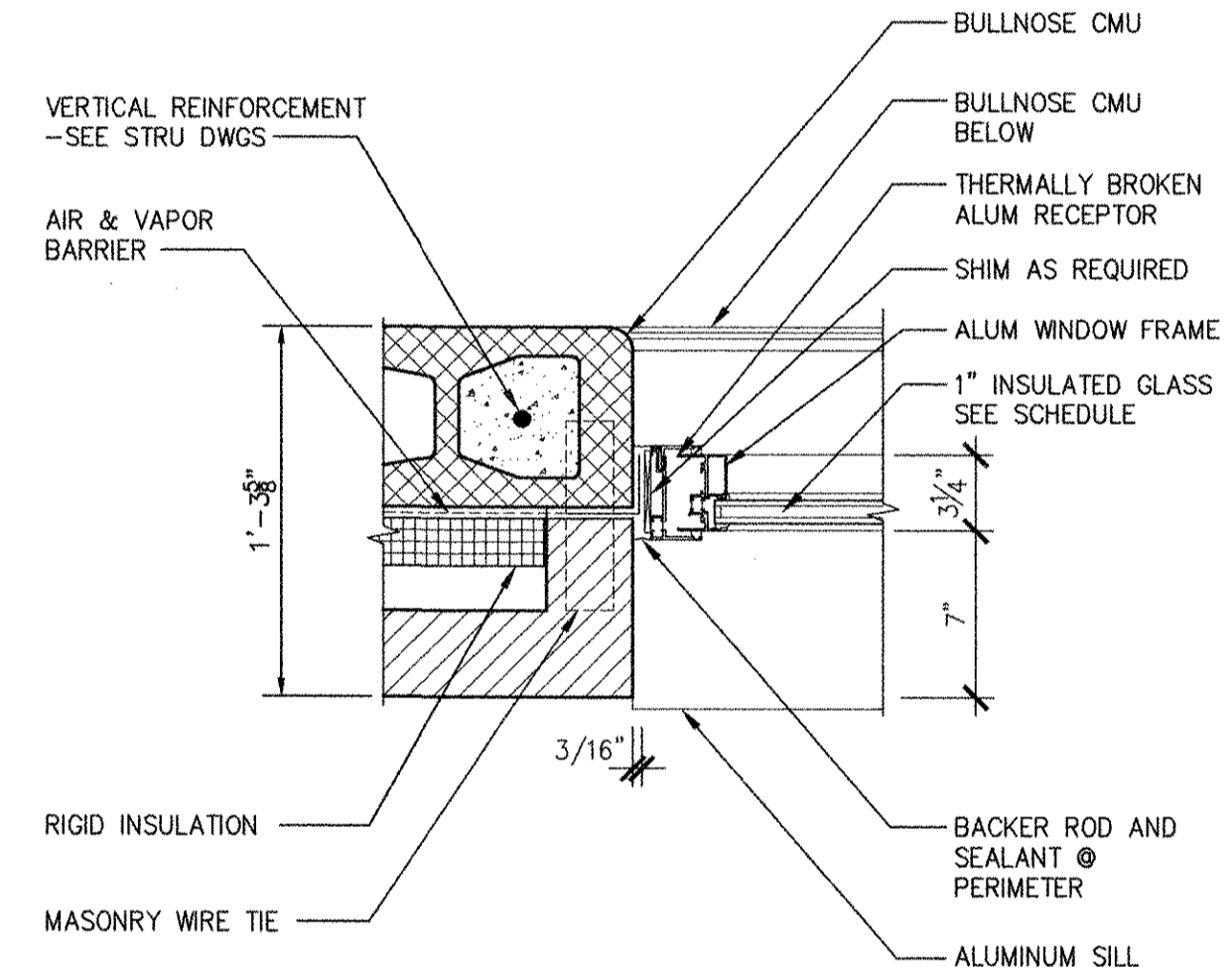
WH-3



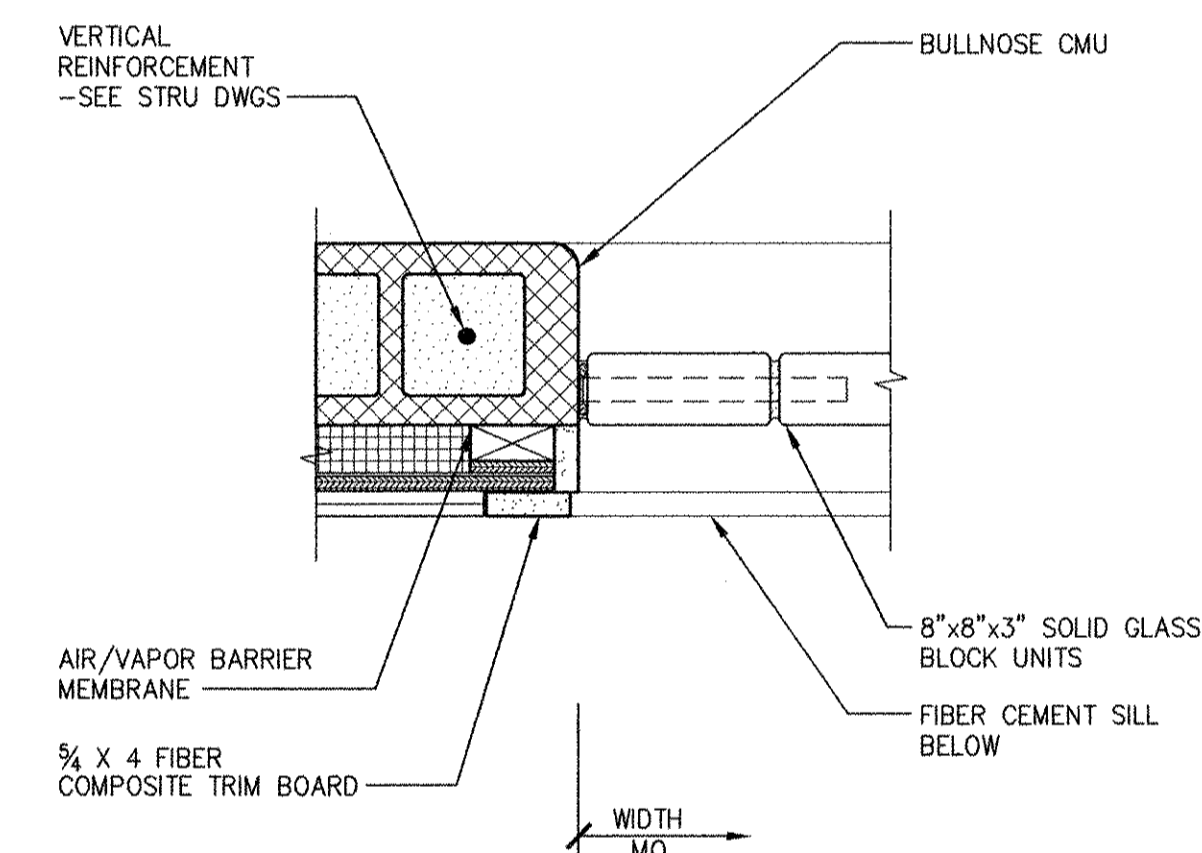
WH-2



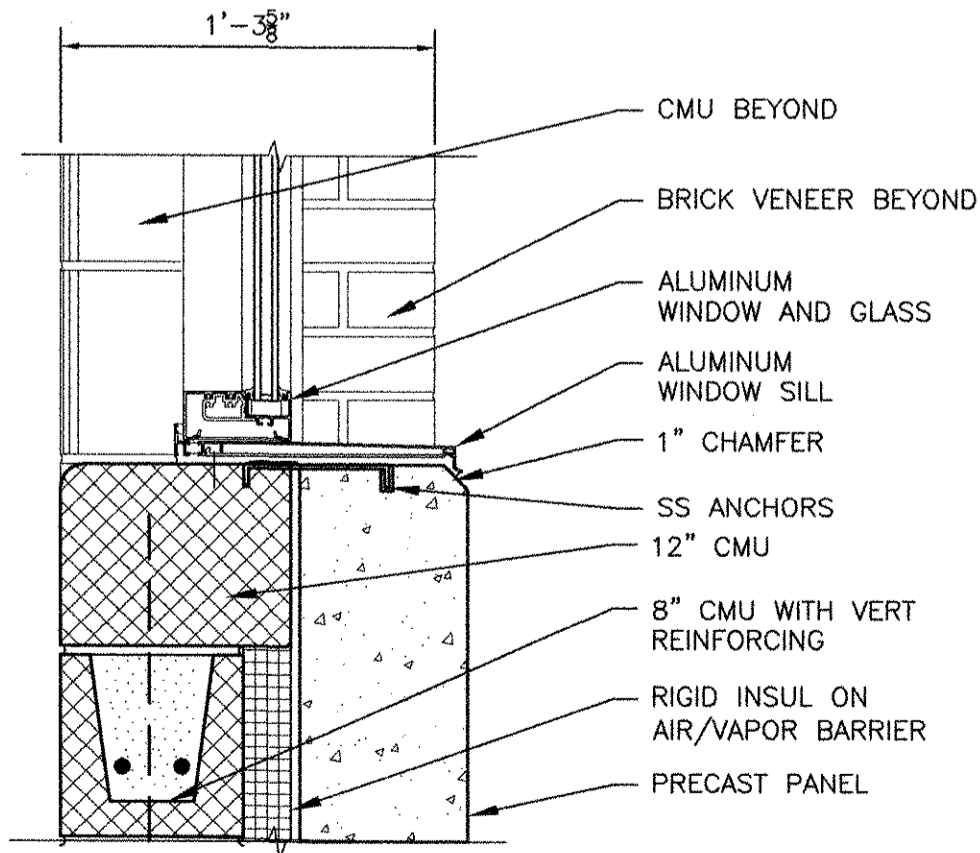
WH-1



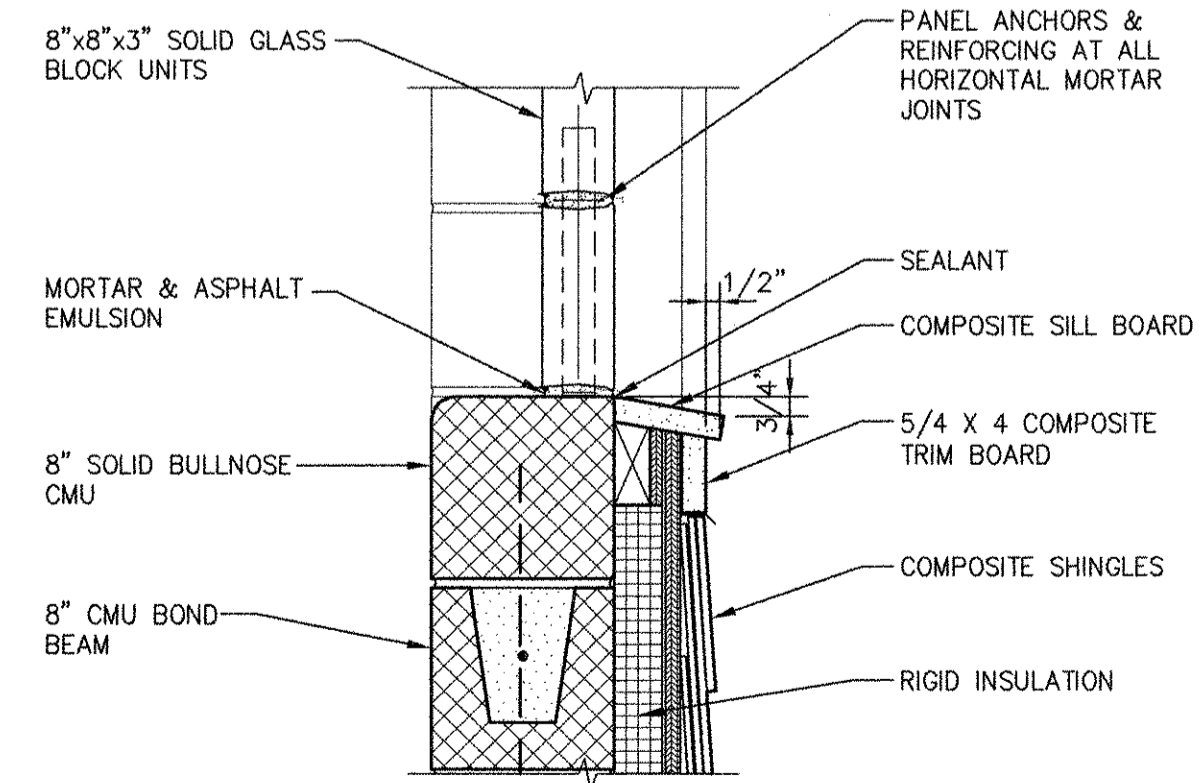
WJ-2



WJ-1



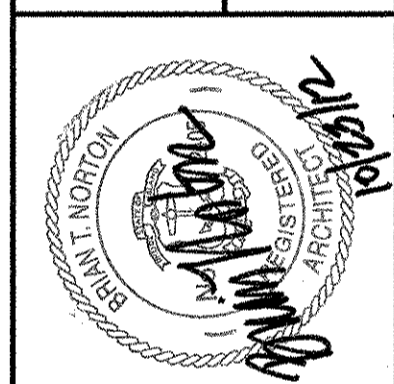
WS-2



WS-1

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 701 EDEWATER DRIVE
 PROVIDENCE, RI 02909
 PHONE (815) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
WINDOW DETAILS
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-704
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1 1/2" = 1'-0"

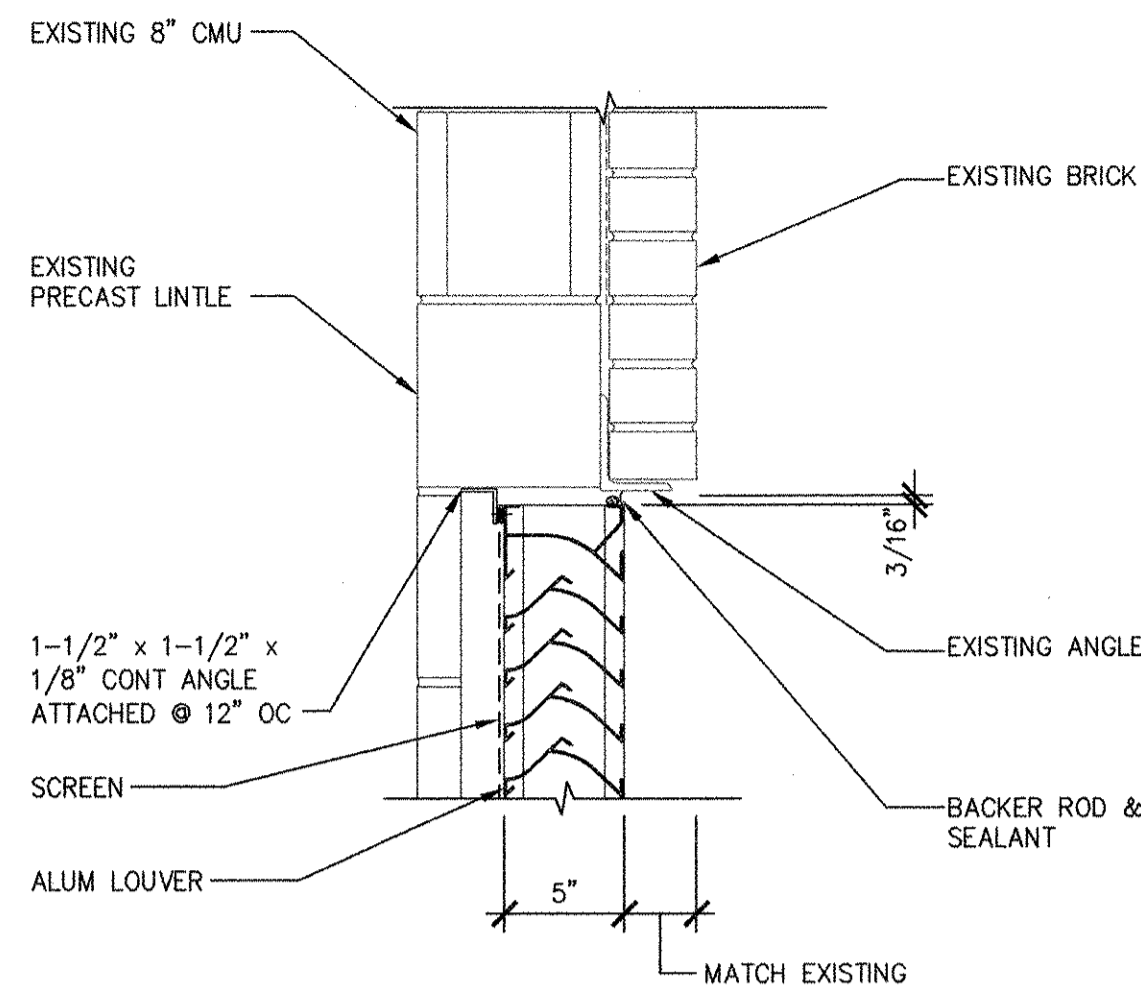
99 A-704

RECORD DRAWING

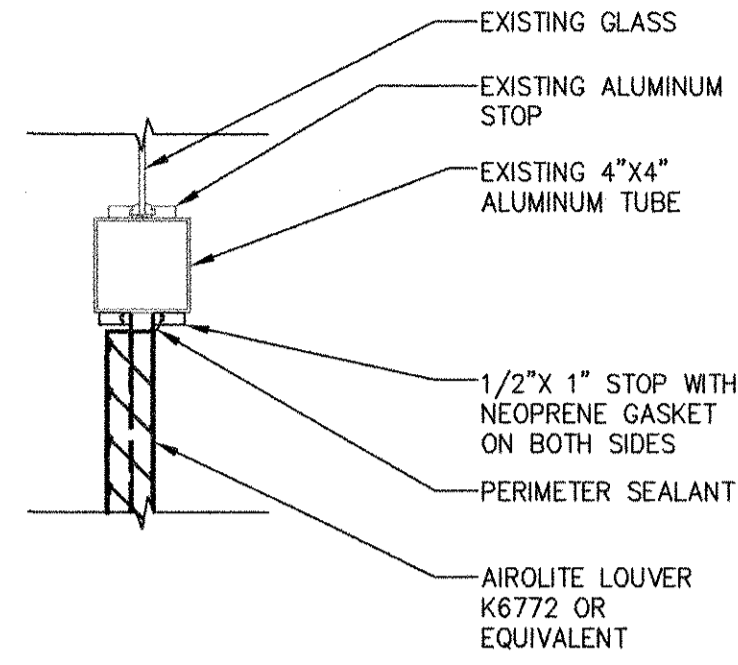
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 9 - Oct-12
 PATH: F:\60148648 - EAST PROVIDENCE (DBA)\COMMON SHEETS\A 99 A-704.DWG
 LAST UPDATE: Tuesday, October 09, 2012 10:33:33 AM
 PLOT DATE: Tuesday, October 23, 2012 10:29:15 AM

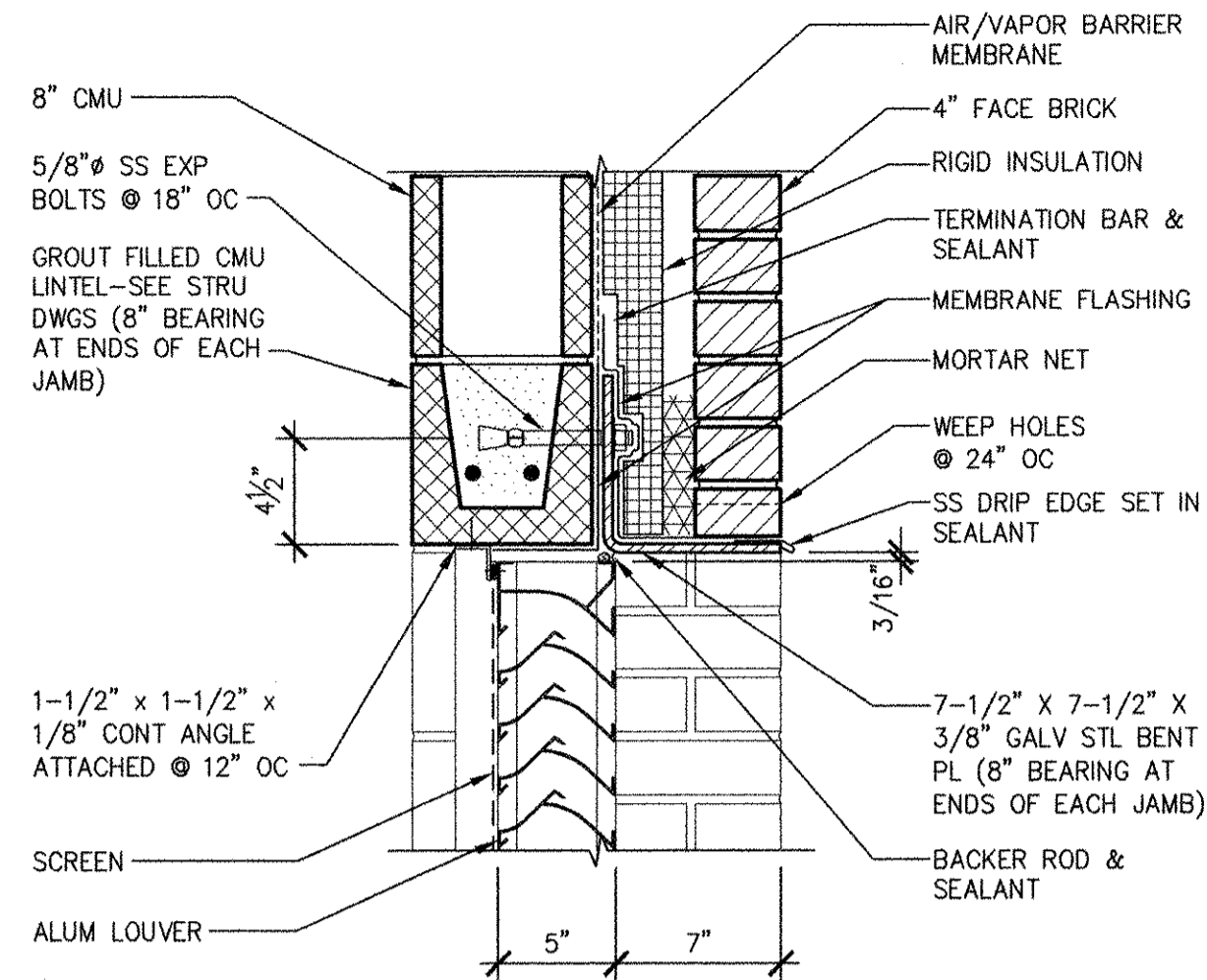
PATH: \\F:\AECOM\PROJECTS\60148648 - EAST PROVIDENCE (RHO)\COMMON\SHETS\A-705.DWG
 PLOT DATE: Tuesday, October 23, 2012 10:28:18 AM
 LAST UPDATE: Monday, October 01, 2012 9:35:33 AM
 ANSI D - 1-10-12



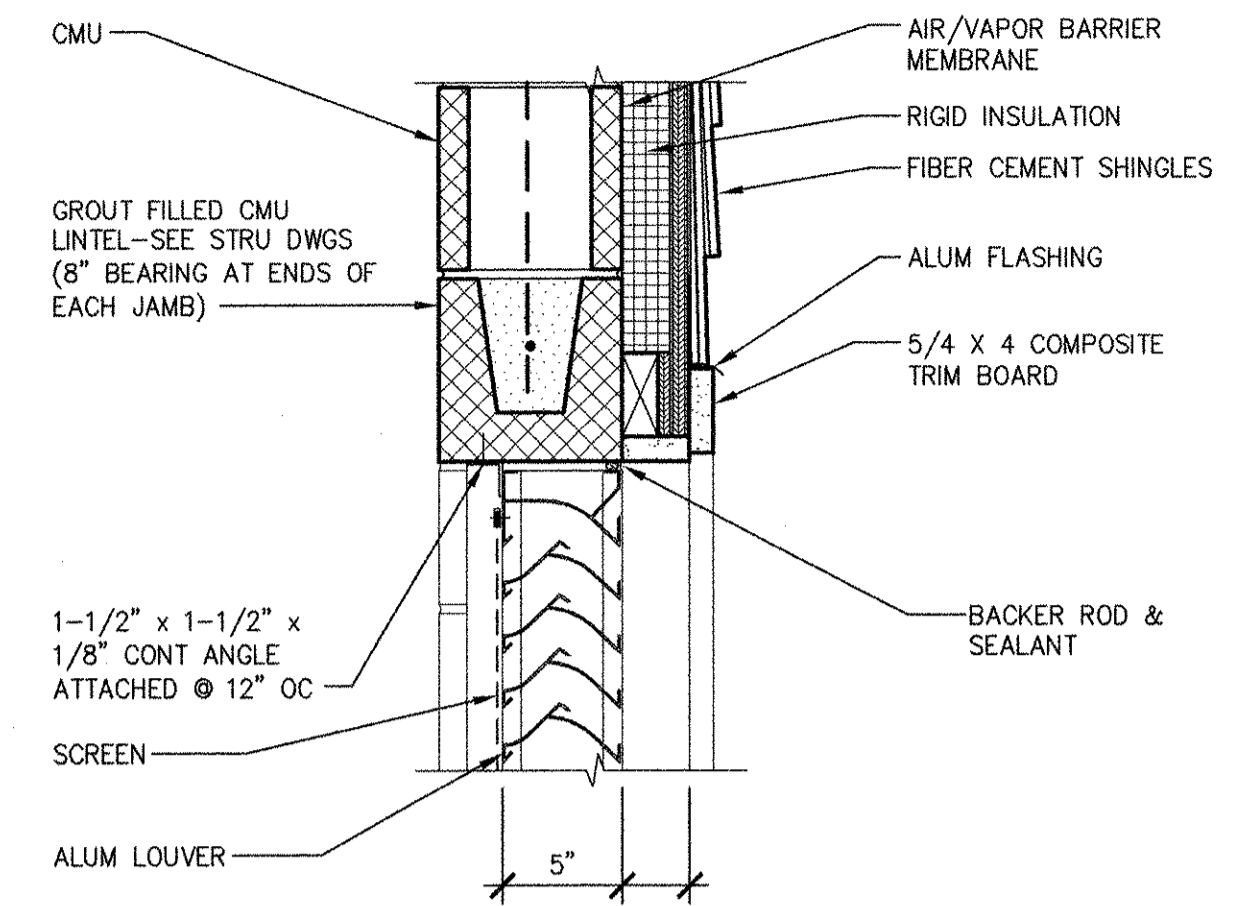
LH-4



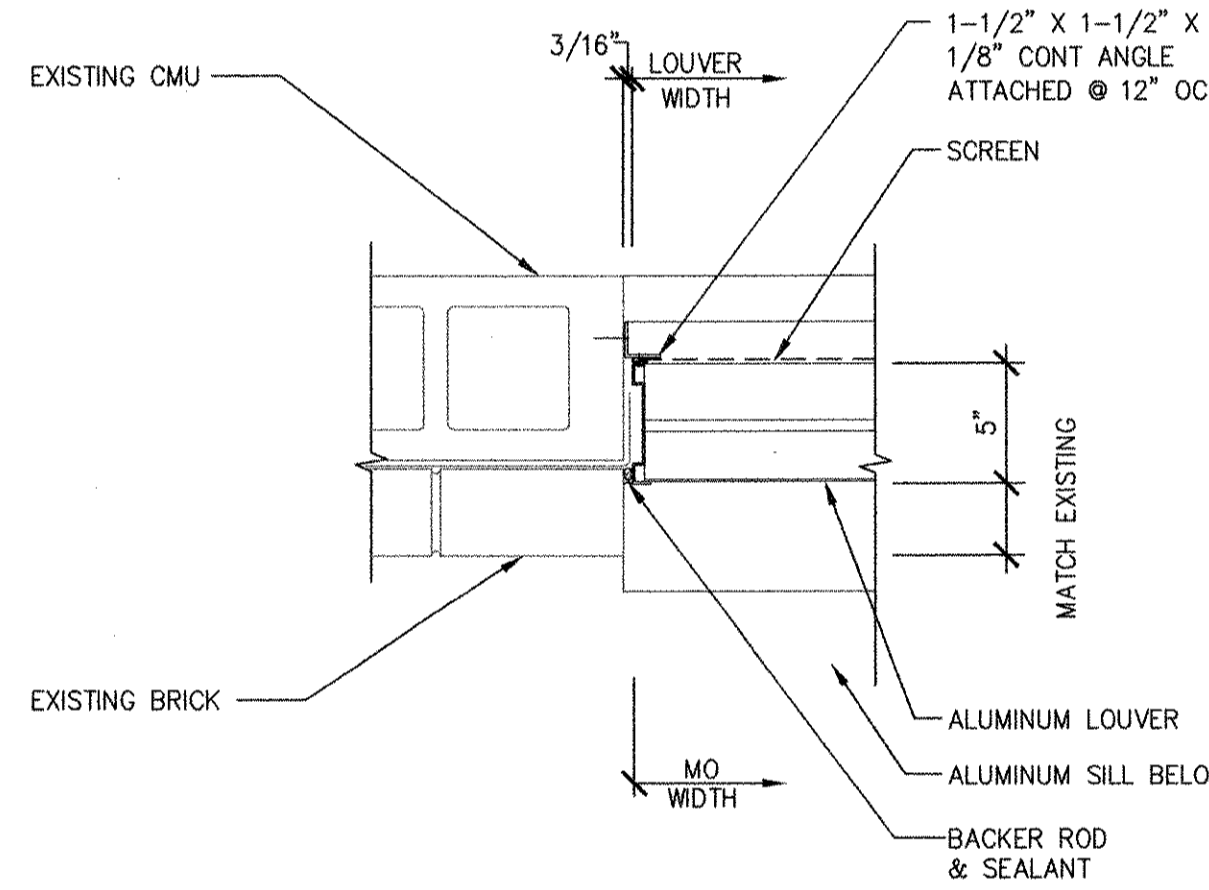
LH-3



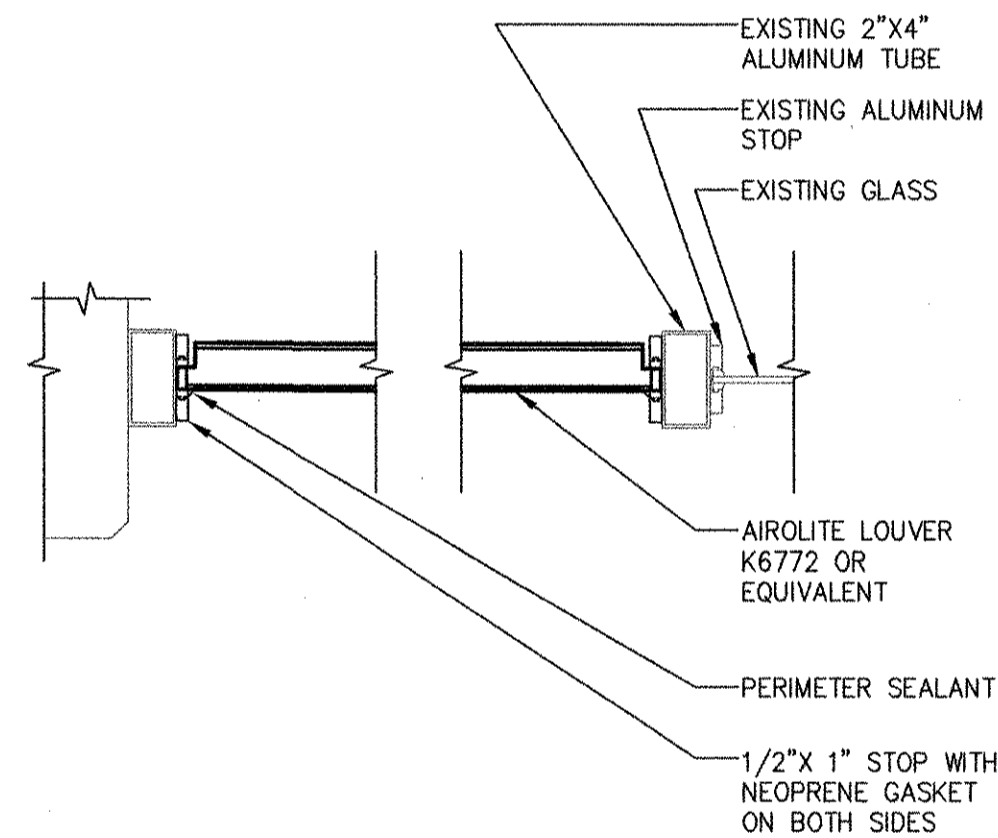
LH-2



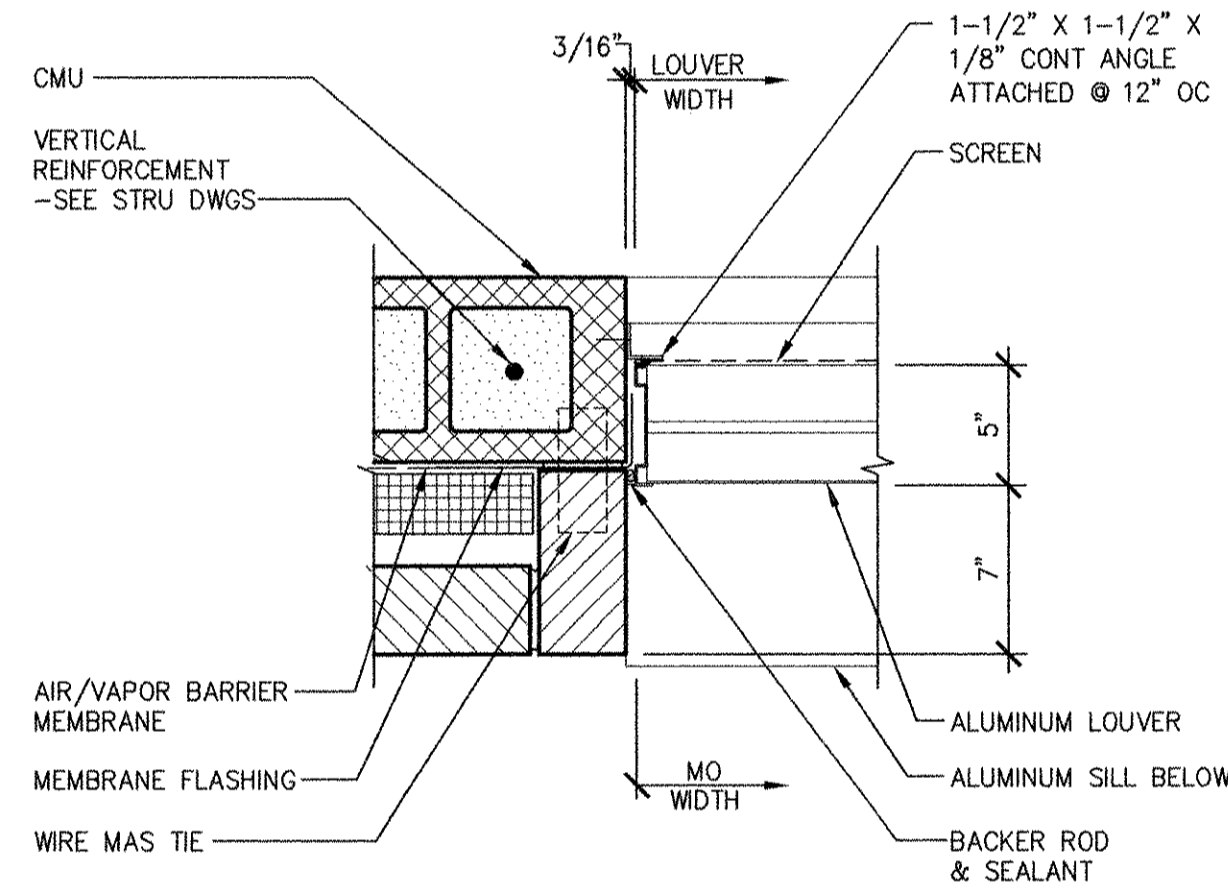
LH-1



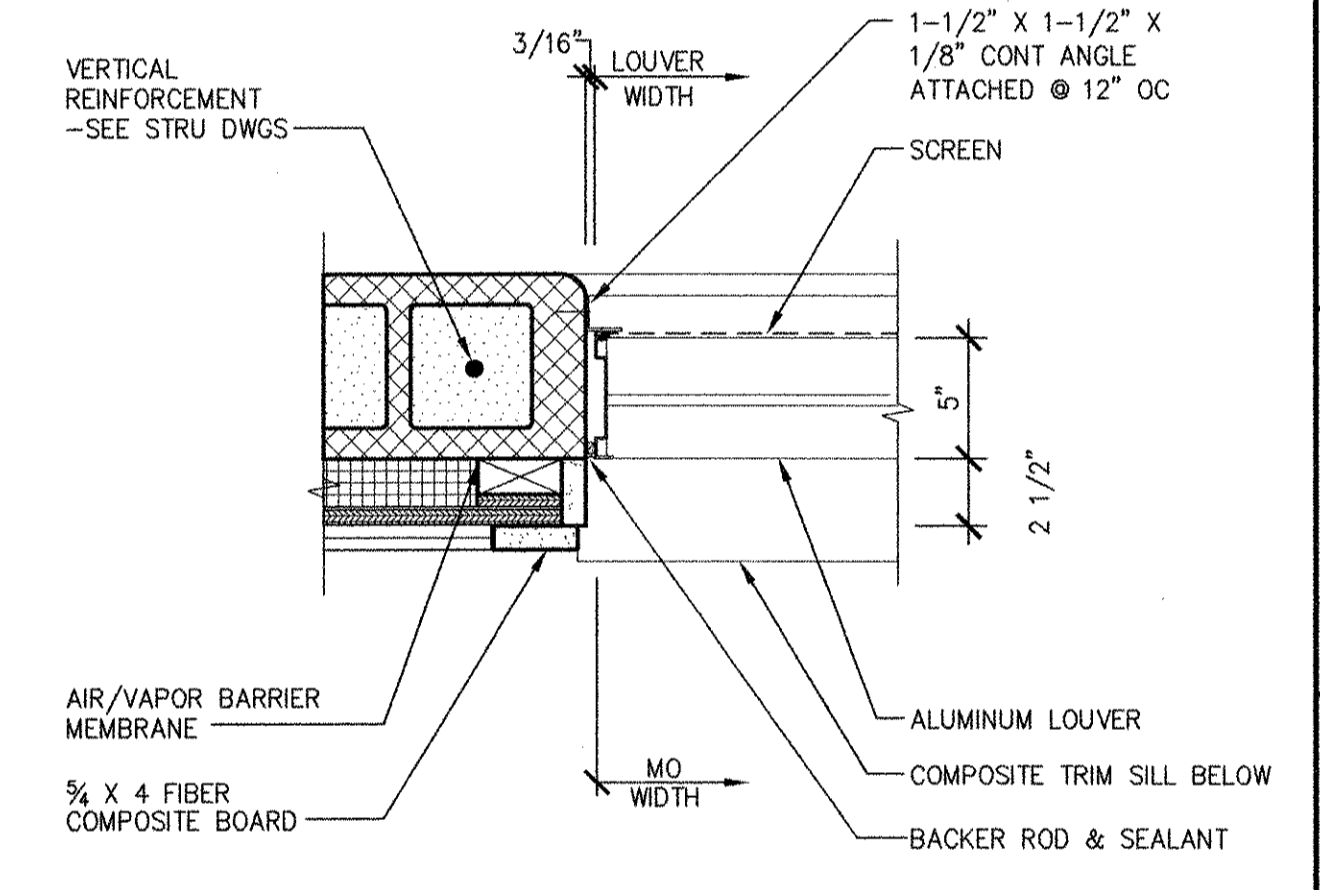
LJ-4



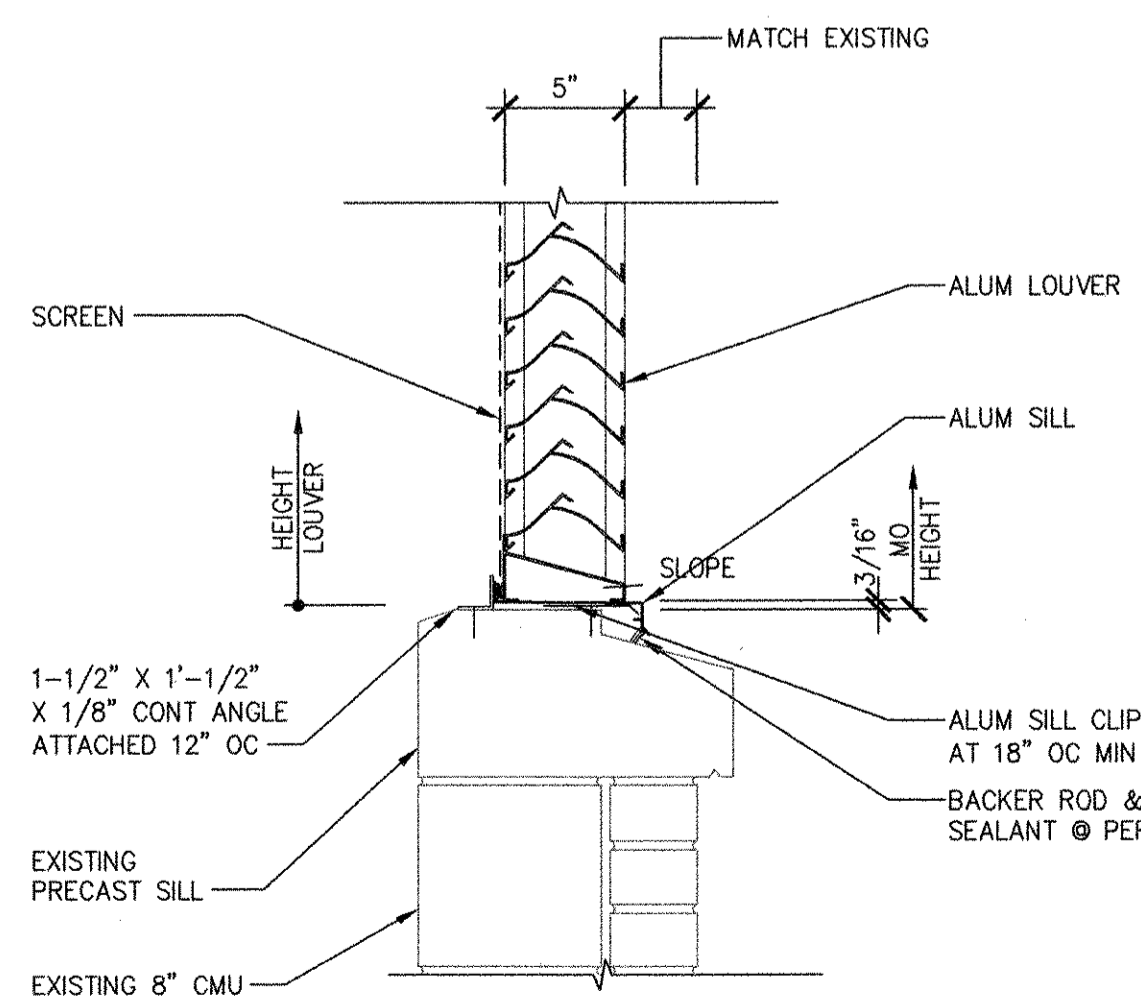
LJ-3



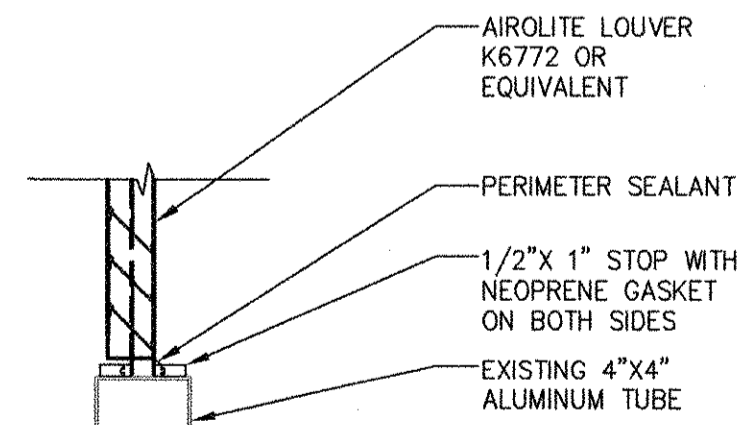
LJ-2



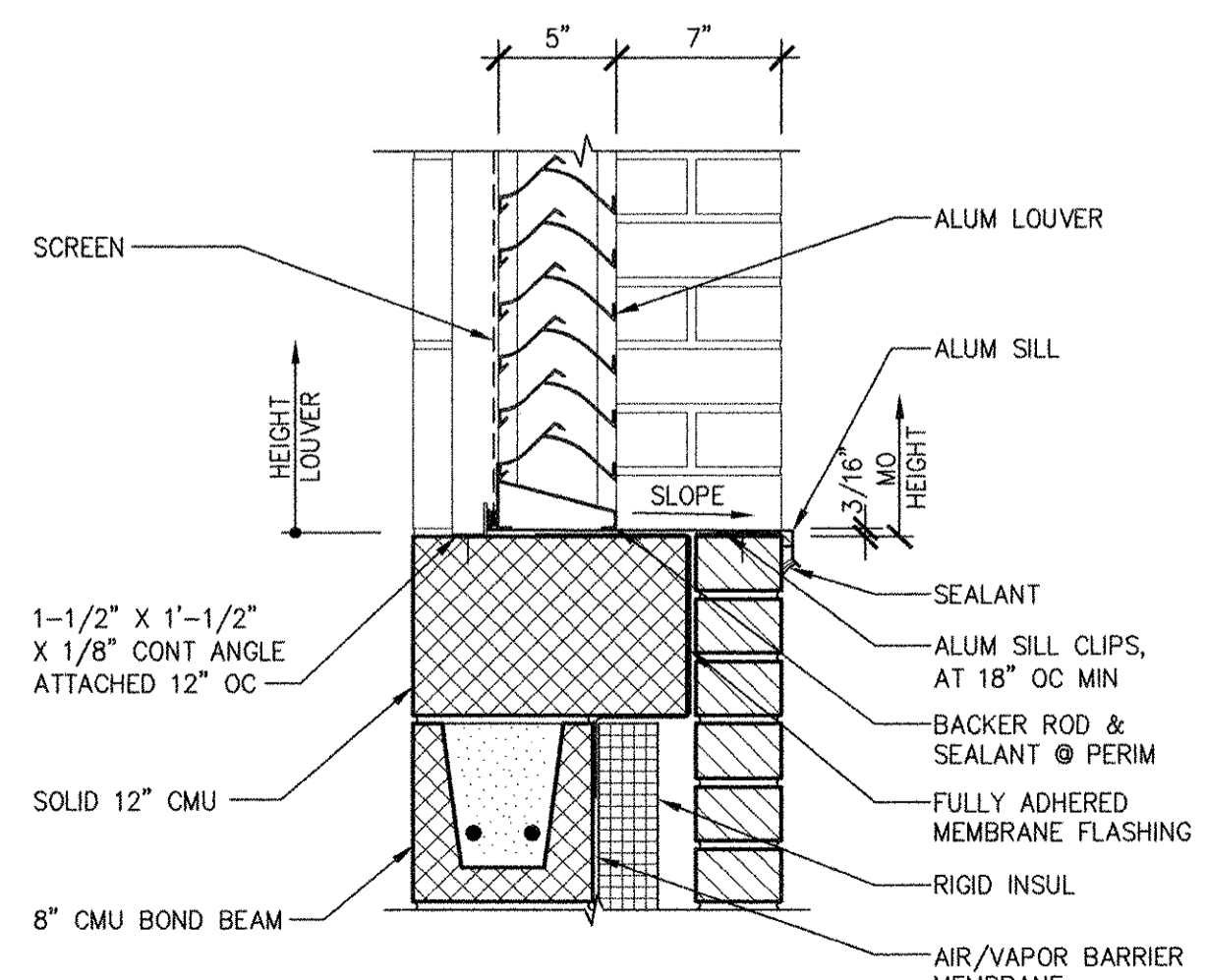
LJ-1



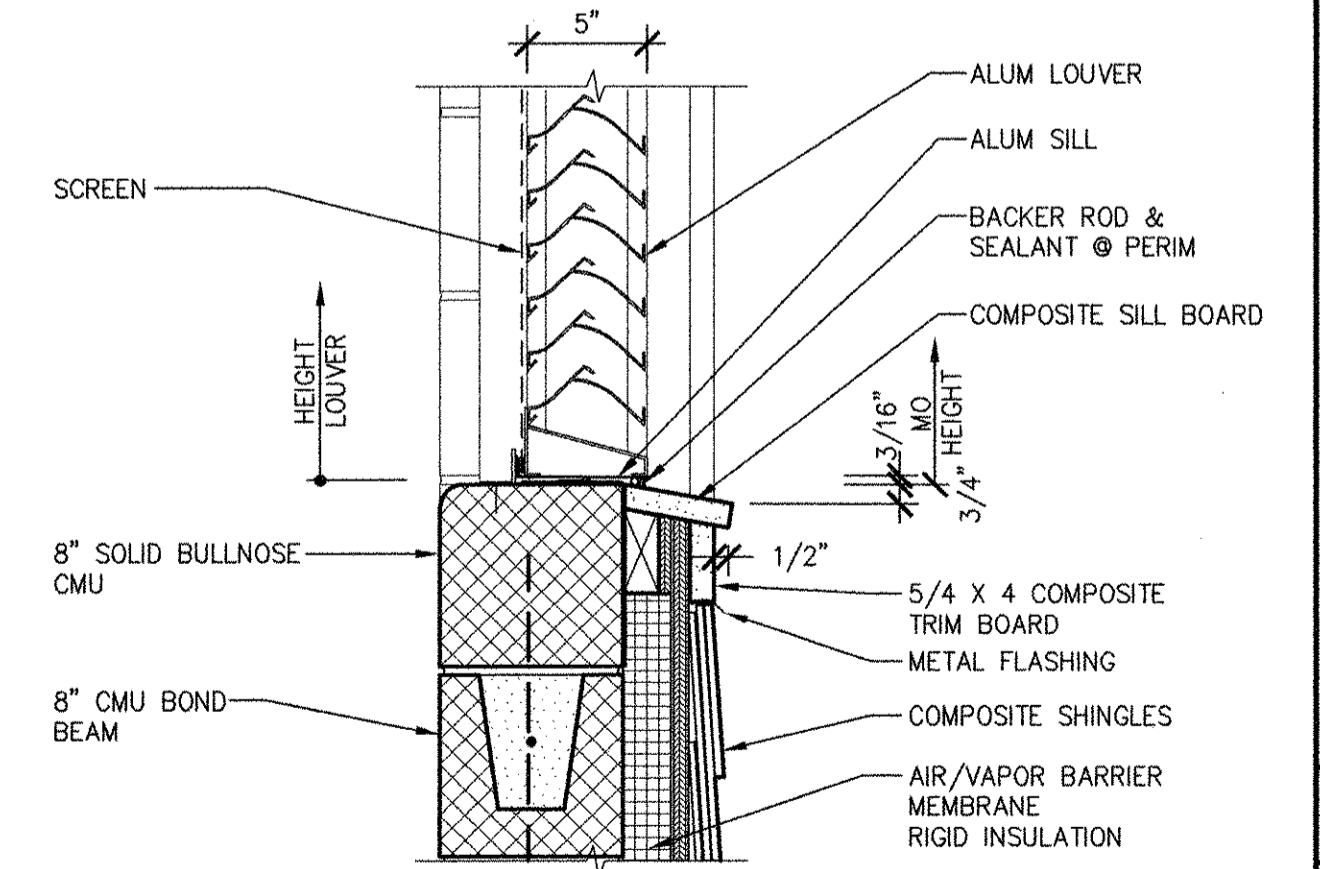
LS-4



LS-3



LS-2

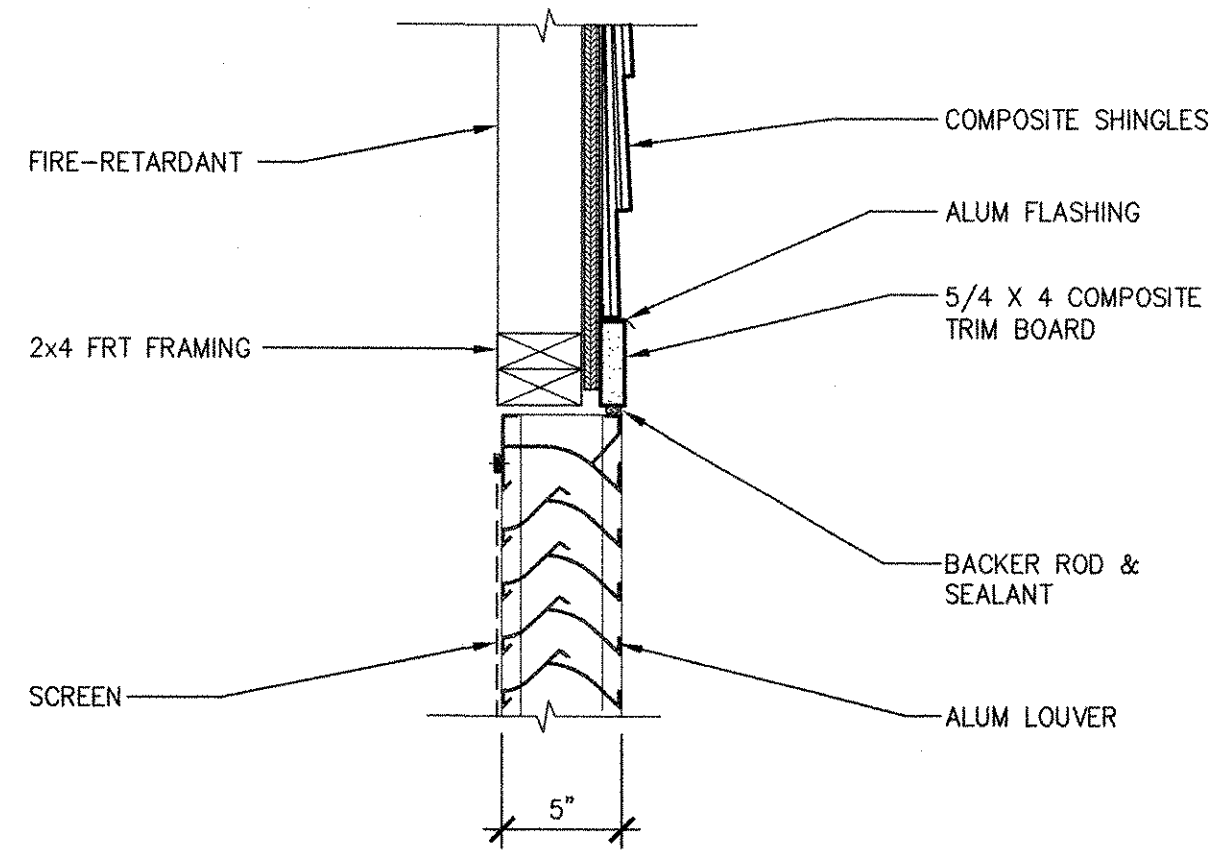


LS-1

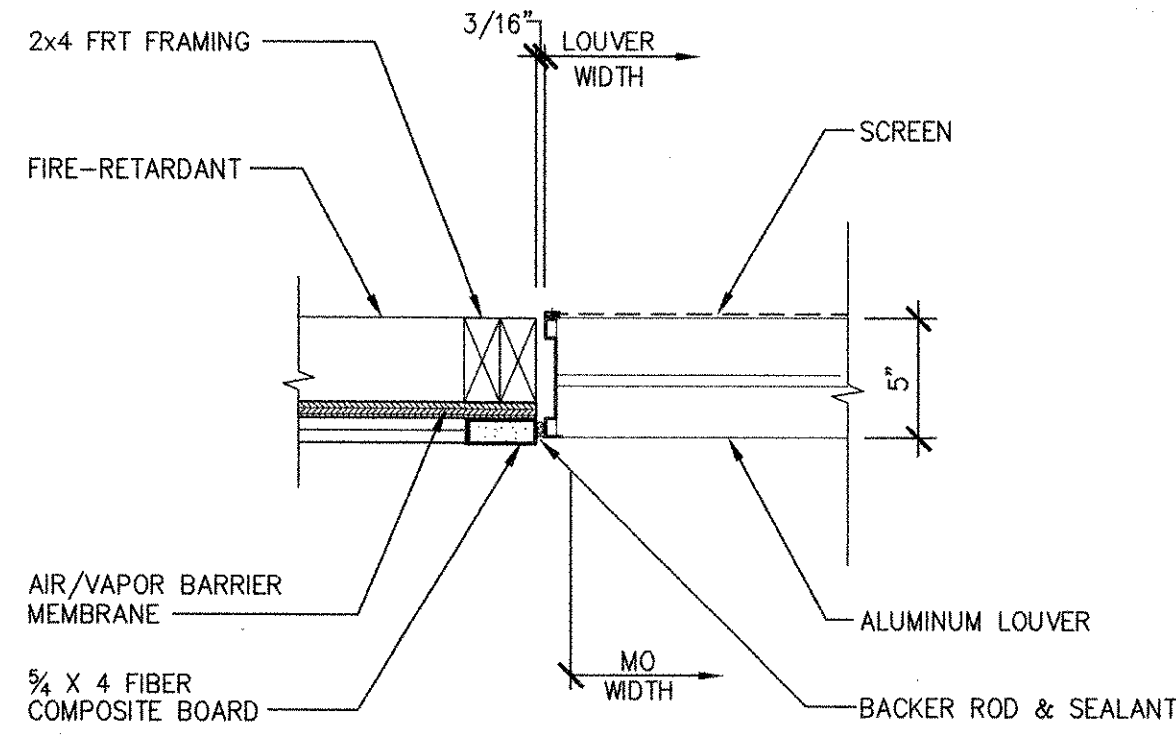
RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

		RECORD DRAWINGS									
CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS LOUVER DETAILS I ARCHITECTURAL											
PROJECT NO: 60148648 CAD DWG FILE: 99 A-705 DESIGNED BY: M. MACEACHERN DRAWN BY: M. MACEACHERN DEPT CHECK: B. NORTON PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: 1 1/2" = 1'-0"	REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>10/19/12</td> <td>MM</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </table>	NO.	DATE	BY	DESCRIPTION	1	10/19/12	MM	REVISED FOR RECORD DRAWING	AECOM USA, INC. 701 EDGEWATER DRIVE WILMINGTON, MA 01897 PHONE (781) 246-5500	
NO.	DATE	BY	DESCRIPTION								
1	10/19/12	MM	REVISED FOR RECORD DRAWING								

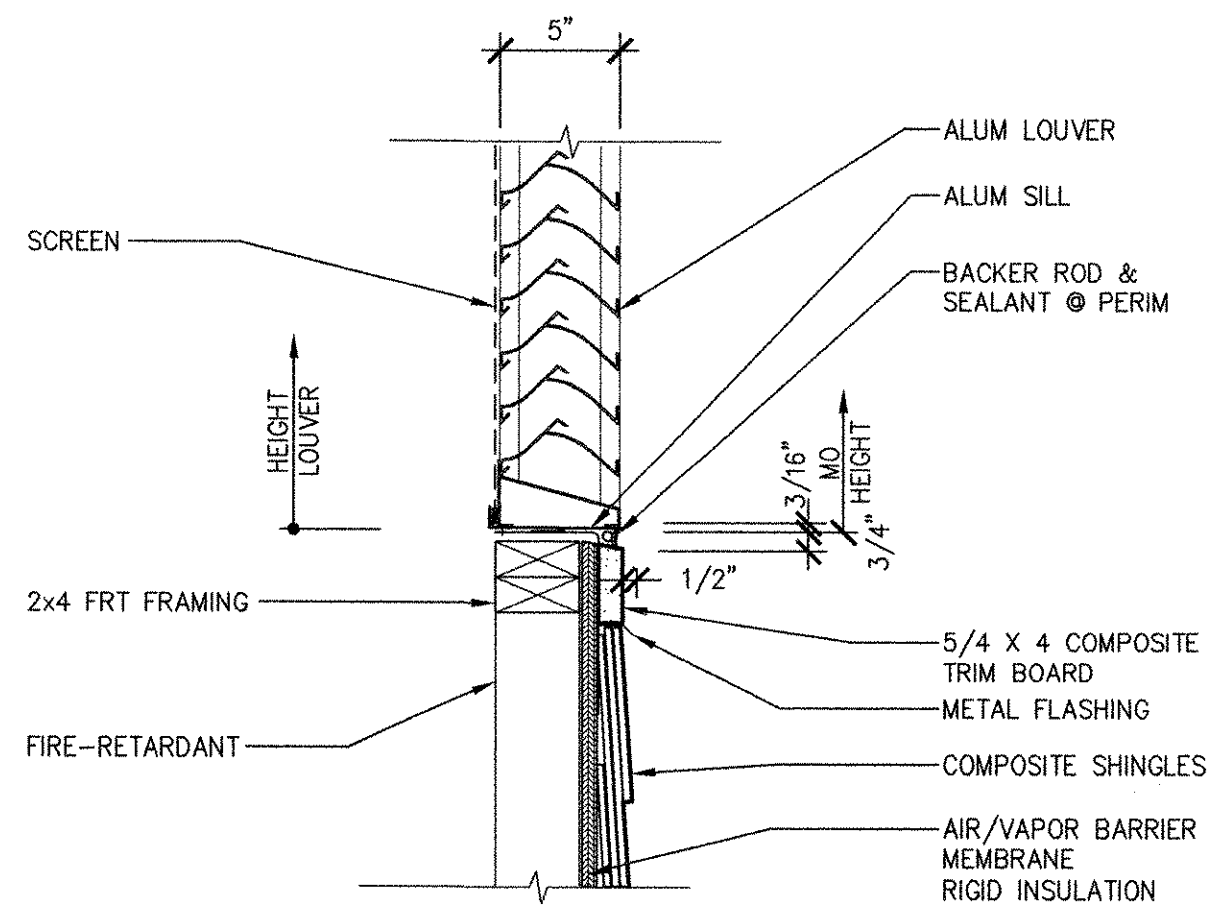
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DRG\COMMON SHEETS\A99 A-706.rwg
 LAST UPDATE: Tuesday, October 09, 2012 10:26:16 AM
 PLOT DATE: Tuesday, October 23, 2012 10:29:21 AM
 ANSI D - 9-Oct-12



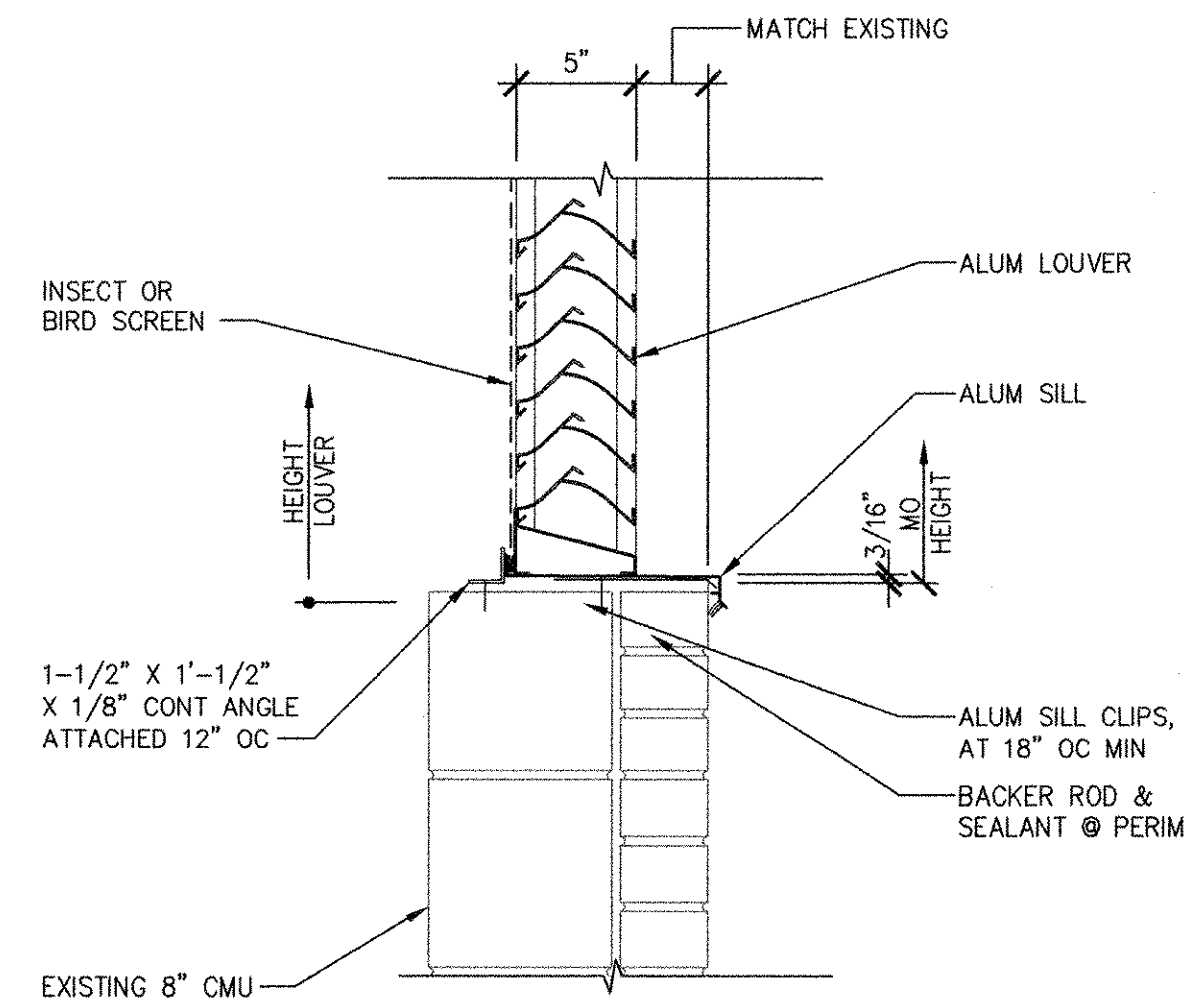
LH-6



LJ-6



LS-6



LS-5

LH-1

LJ-1

LS-1

LH-5

LJ-5

LS-5

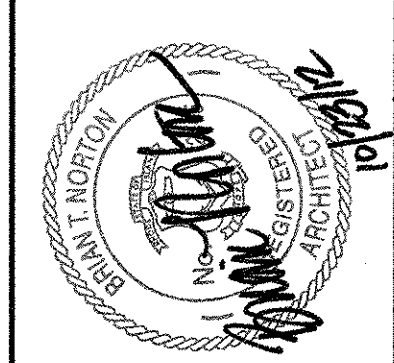
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MM	HG	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WATER STREET
 WILMINGTON, MA 01890
 PHONE (781) 246-5200

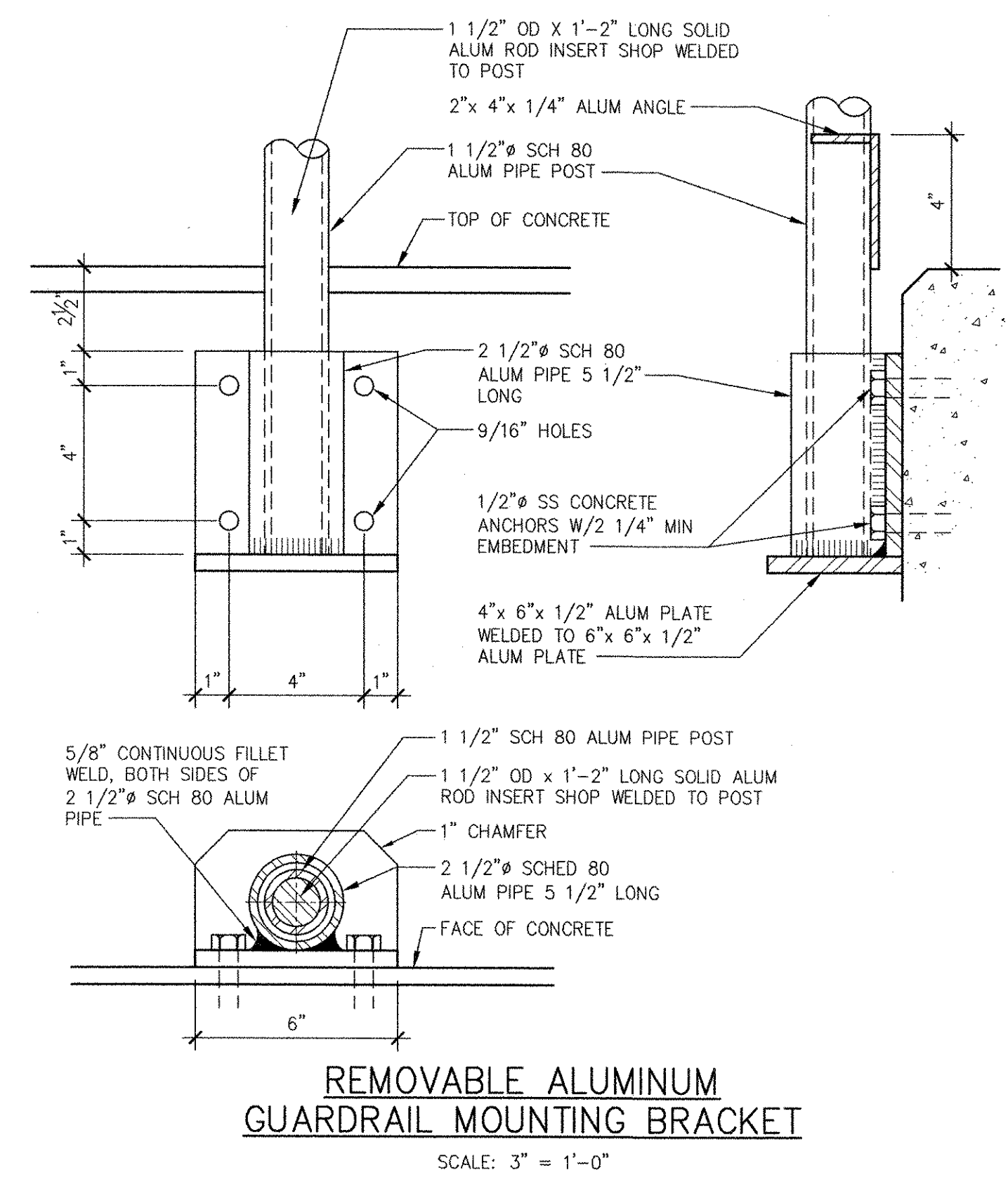
RECORD DRAWINGS



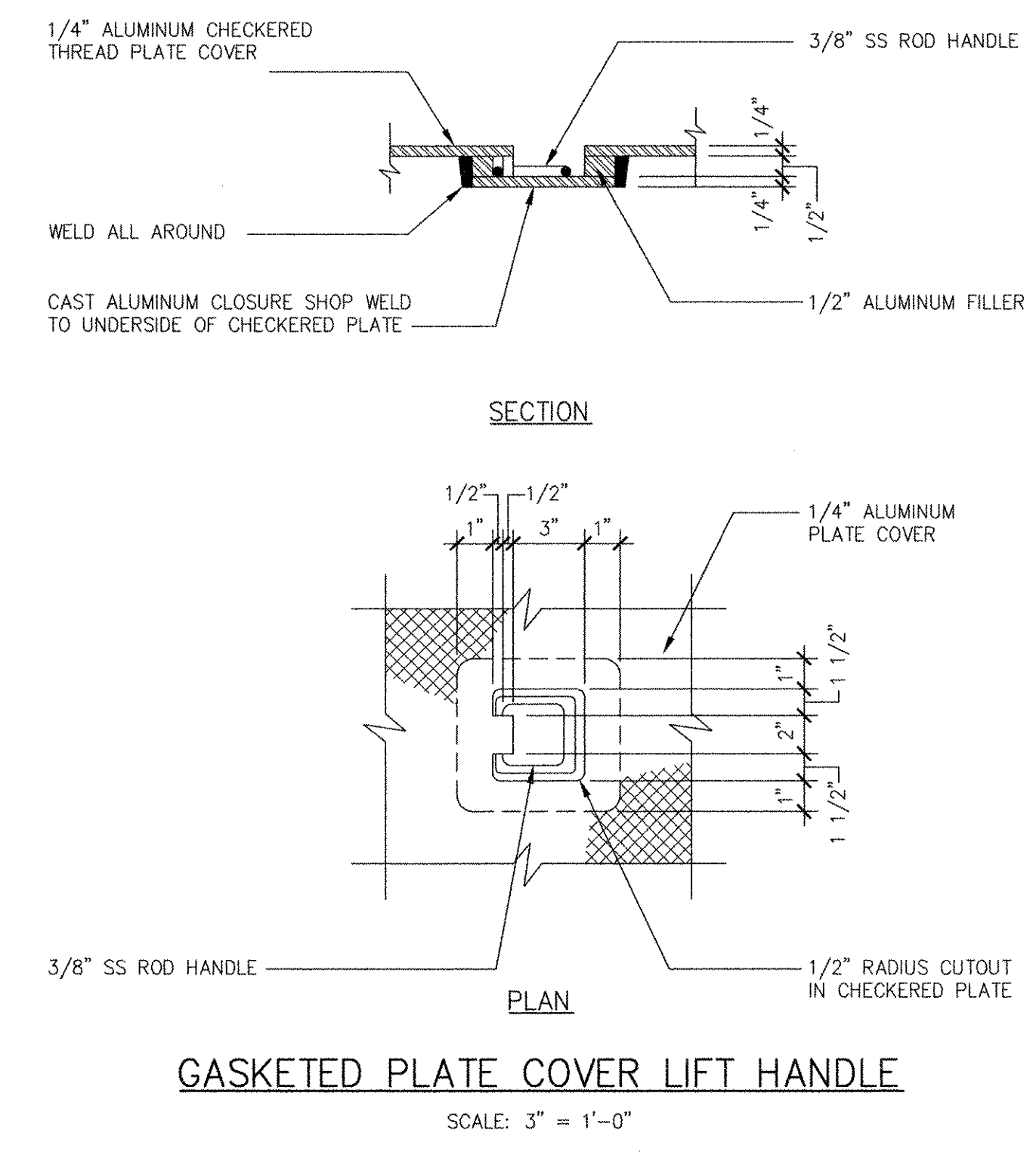
CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
LOUVER DETAILS II
 ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-706
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1 1/2" = 1'-0"

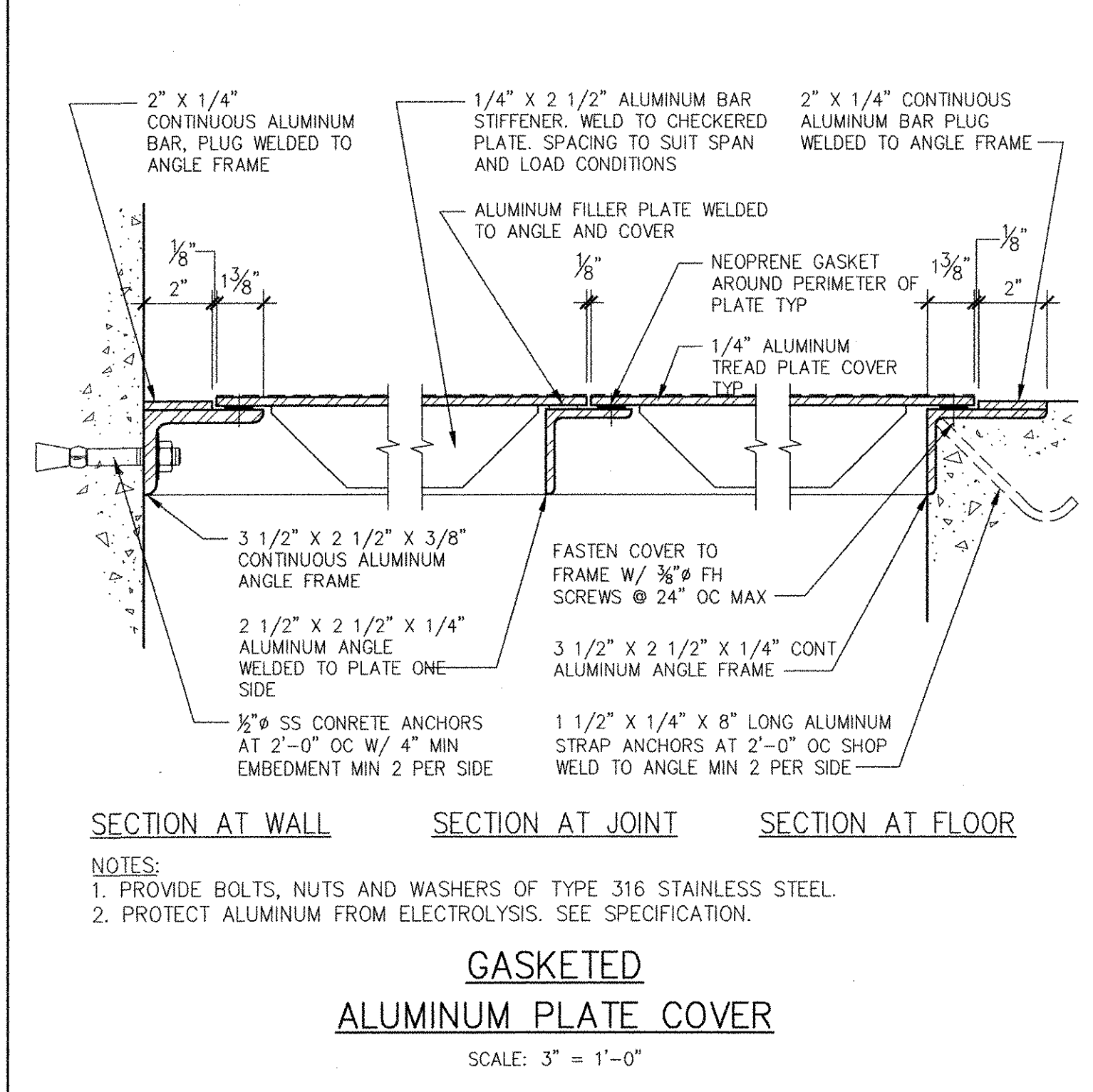
99 A-706



REMOVABLE ALUMINUM GUARDRAIL MOUNTING BRACKET
SCALE: 3" = 1'-0"

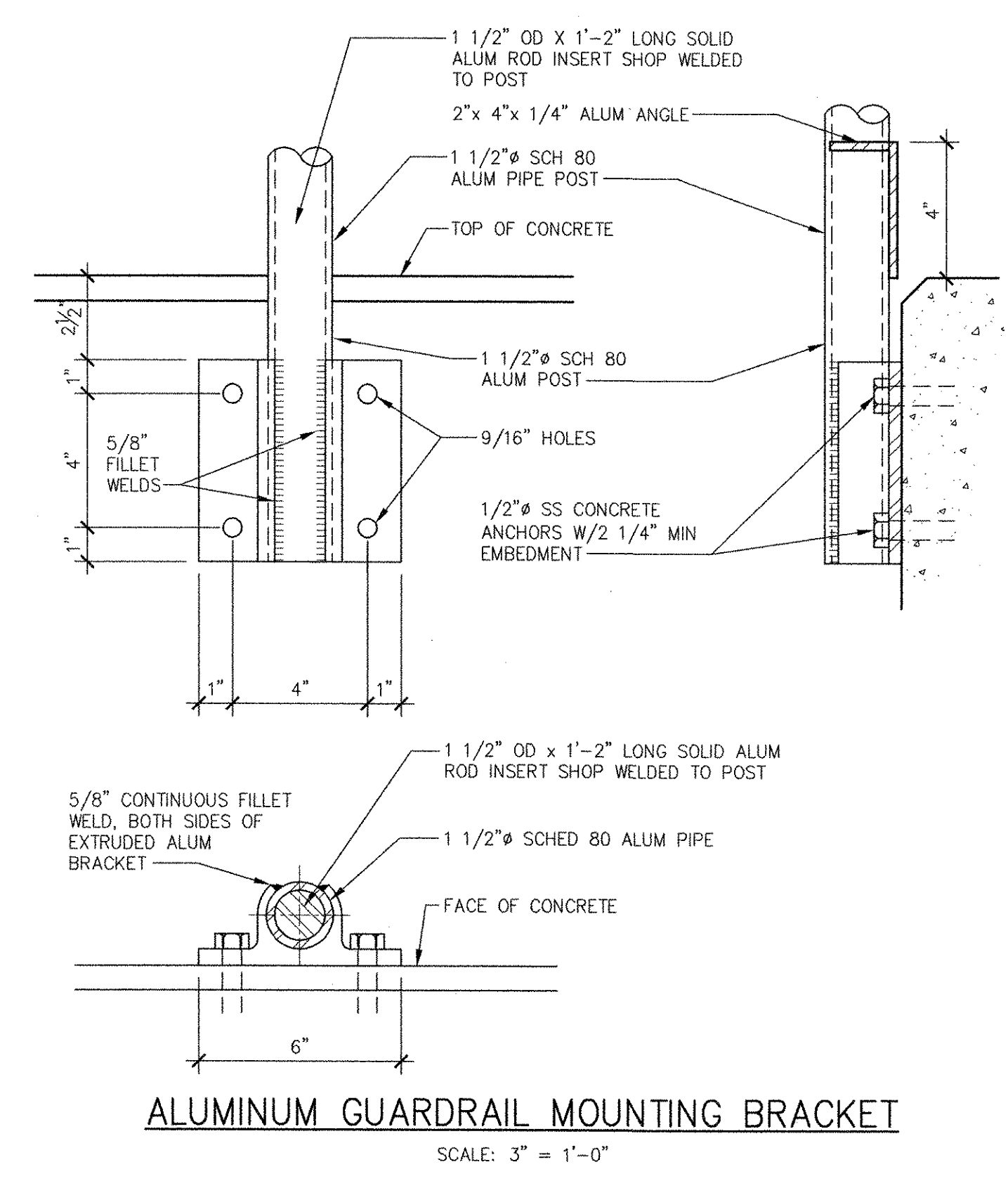


GASKETED PLATE COVER LIFT HANDLE
SCALE: 3" = 1'-0"

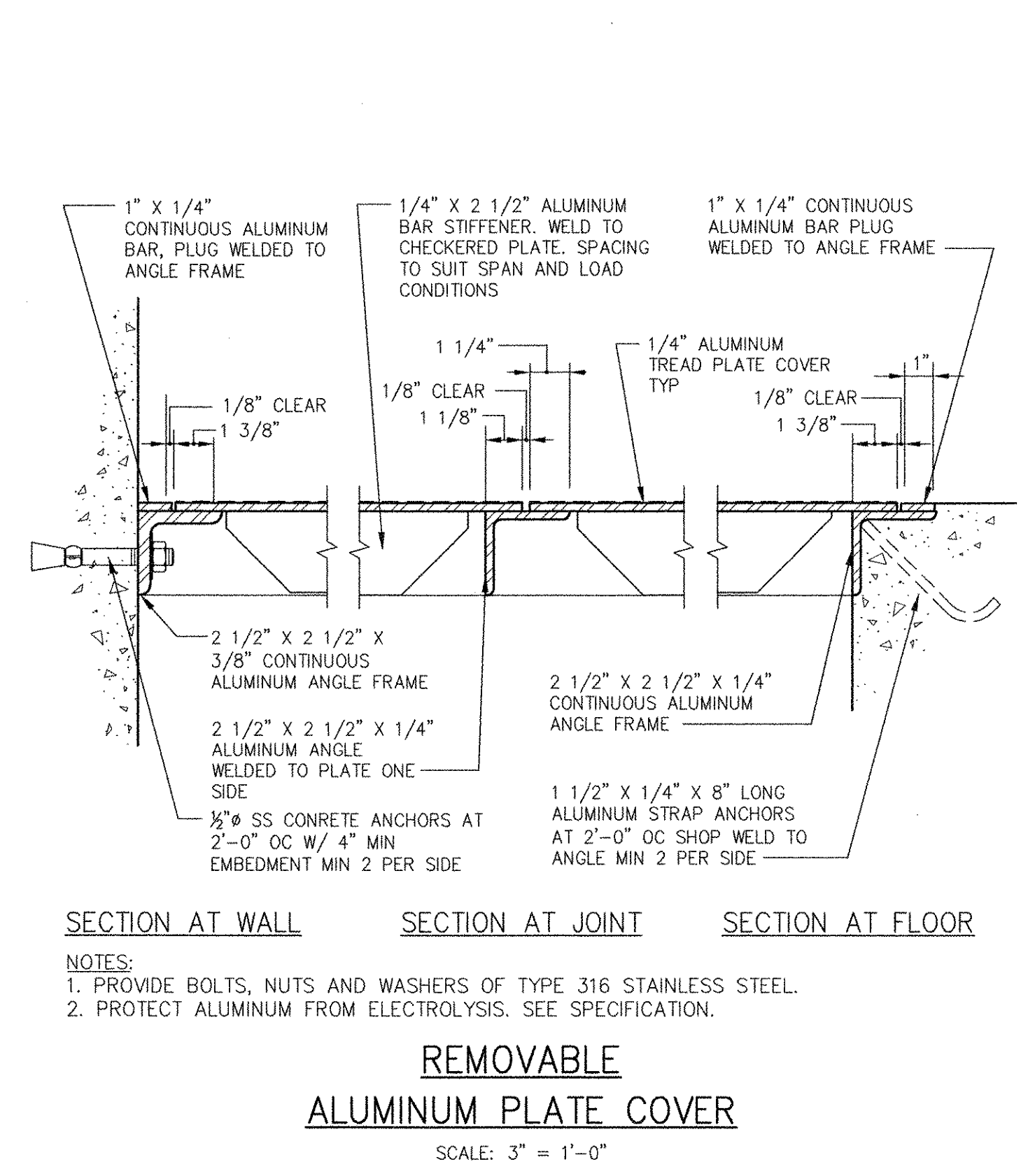


GASKETED ALUMINUM PLATE COVER
SCALE: 3" = 1'-0"

NOTES:
1. PROVIDE BOLTS, NUTS AND WASHERS OF TYPE 316 STAINLESS STEEL.
2. PROTECT ALUMINUM FROM ELECTROLYSIS. SEE SPECIFICATION.

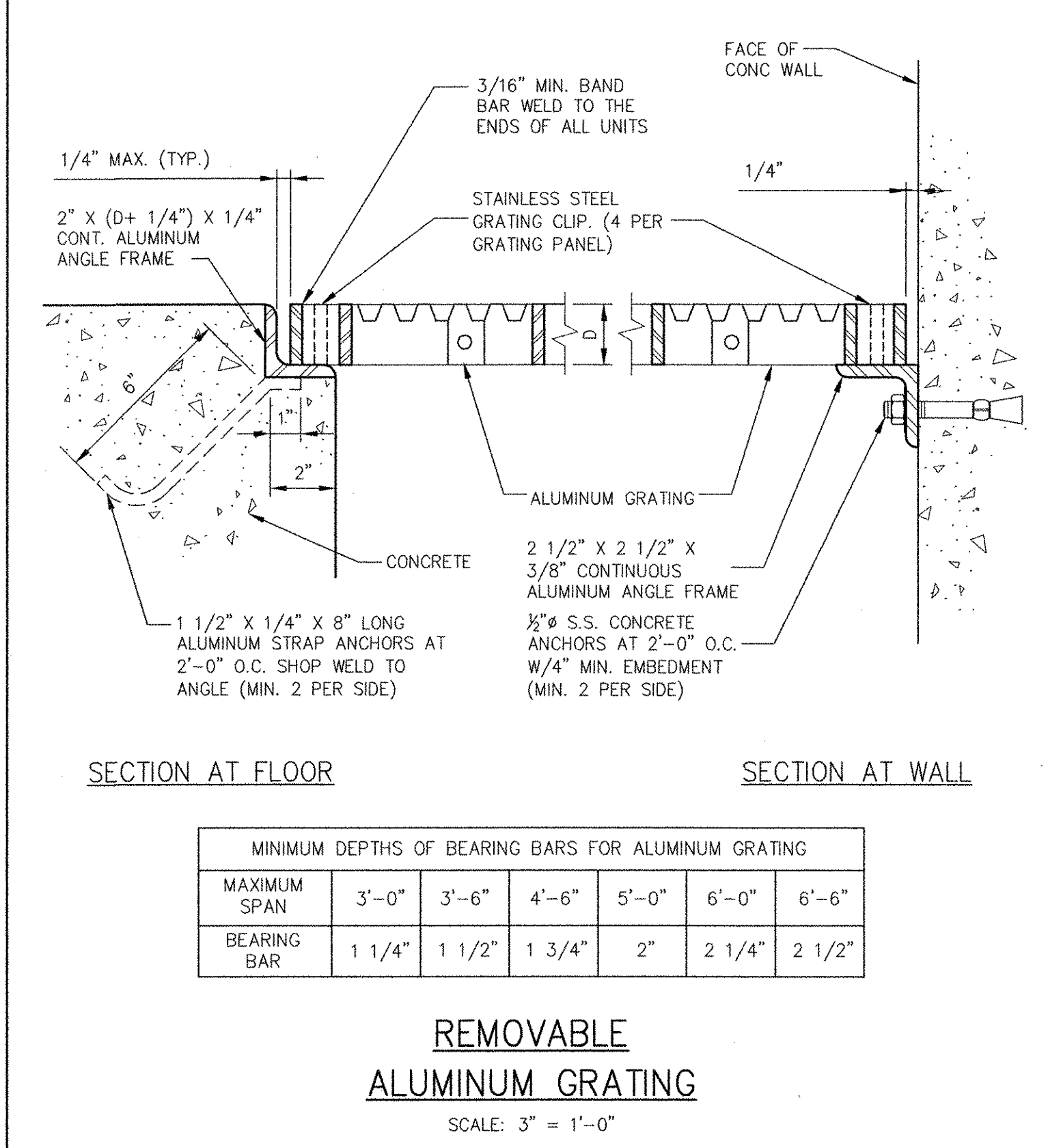


ALUMINUM GUARDRAIL MOUNTING BRACKET
SCALE: 3" = 1'-0"



REMOVABLE ALUMINUM PLATE COVER
SCALE: 3" = 1'-0"

NOTES:
1. PROVIDE BOLTS, NUTS AND WASHERS OF TYPE 316 STAINLESS STEEL.
2. PROTECT ALUMINUM FROM ELECTROLYSIS. SEE SPECIFICATION.



MINIMUM DEPTHS OF BEARING BARS FOR ALUMINUM GRATING						
MAXIMUM SPAN	3'-0"	3'-6"	4'-6"	5'-0"	6'-0"	6'-6"
BEARING BAR	1 1/4"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"

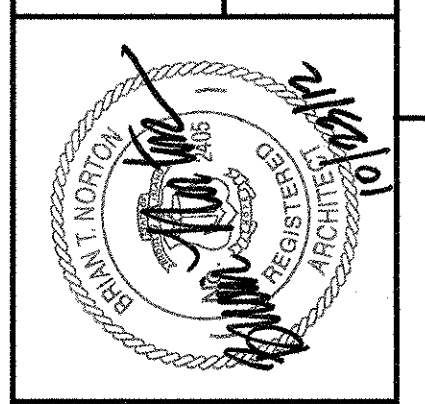
REMOVABLE ALUMINUM GRATING
SCALE: 3" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

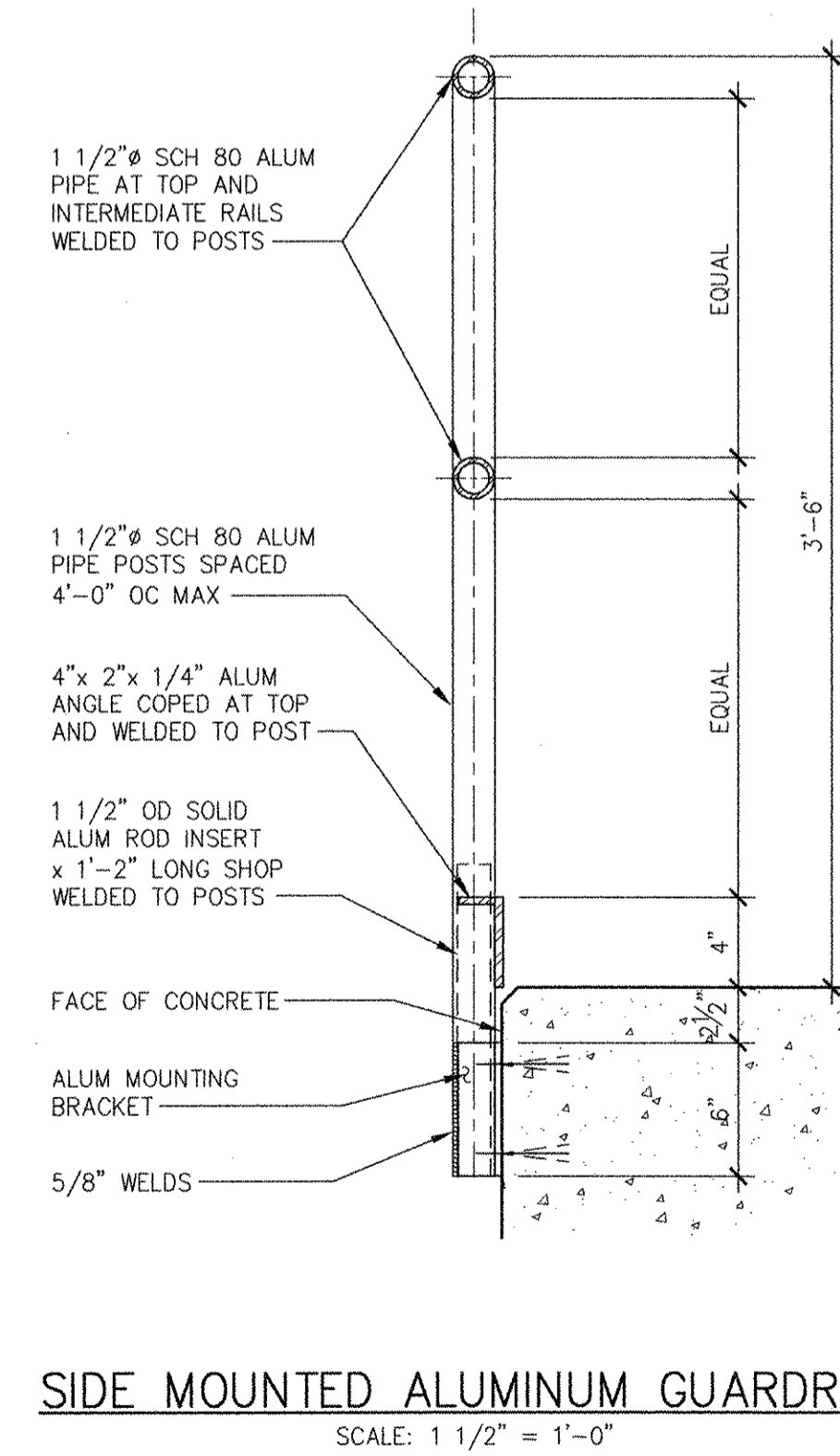
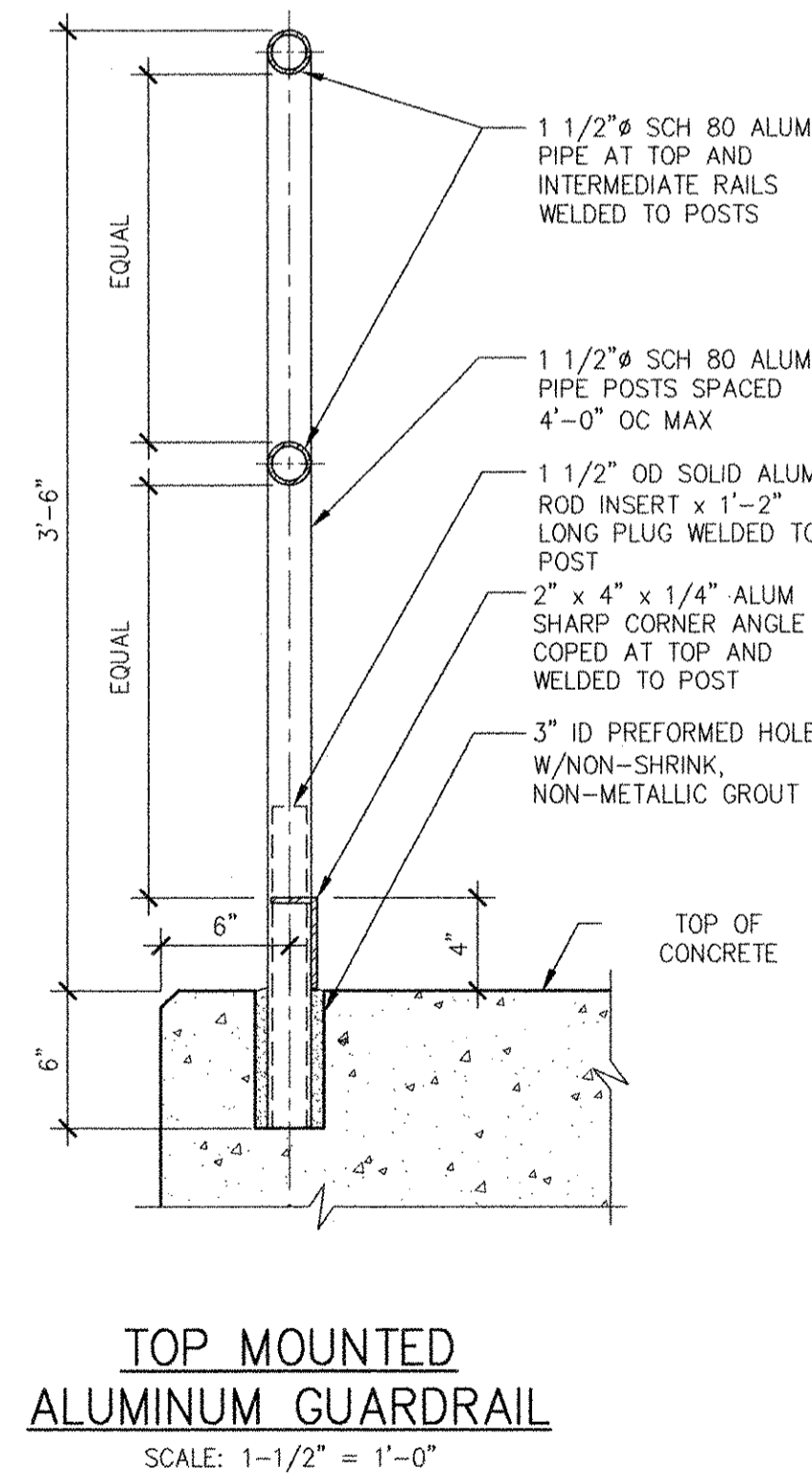
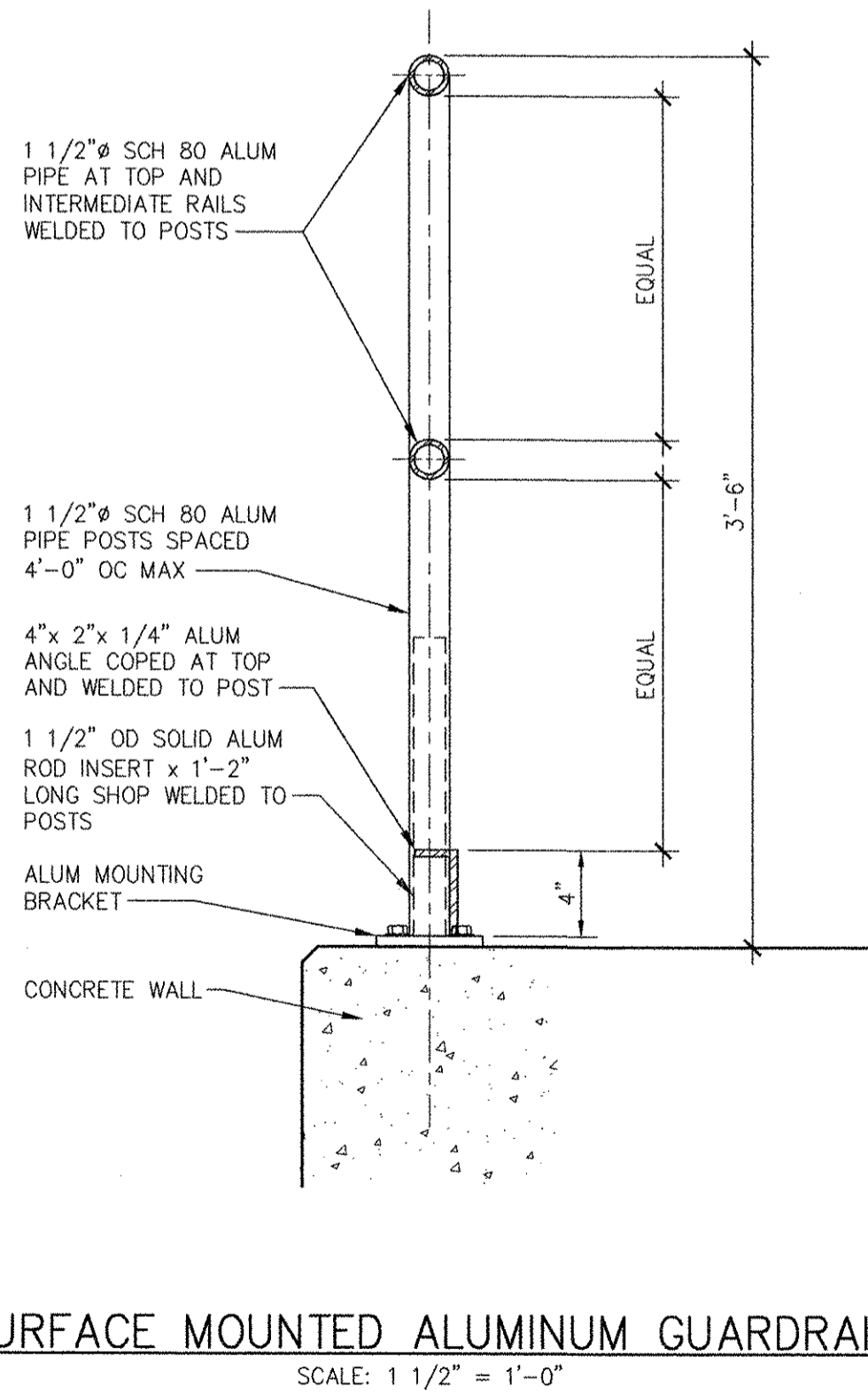
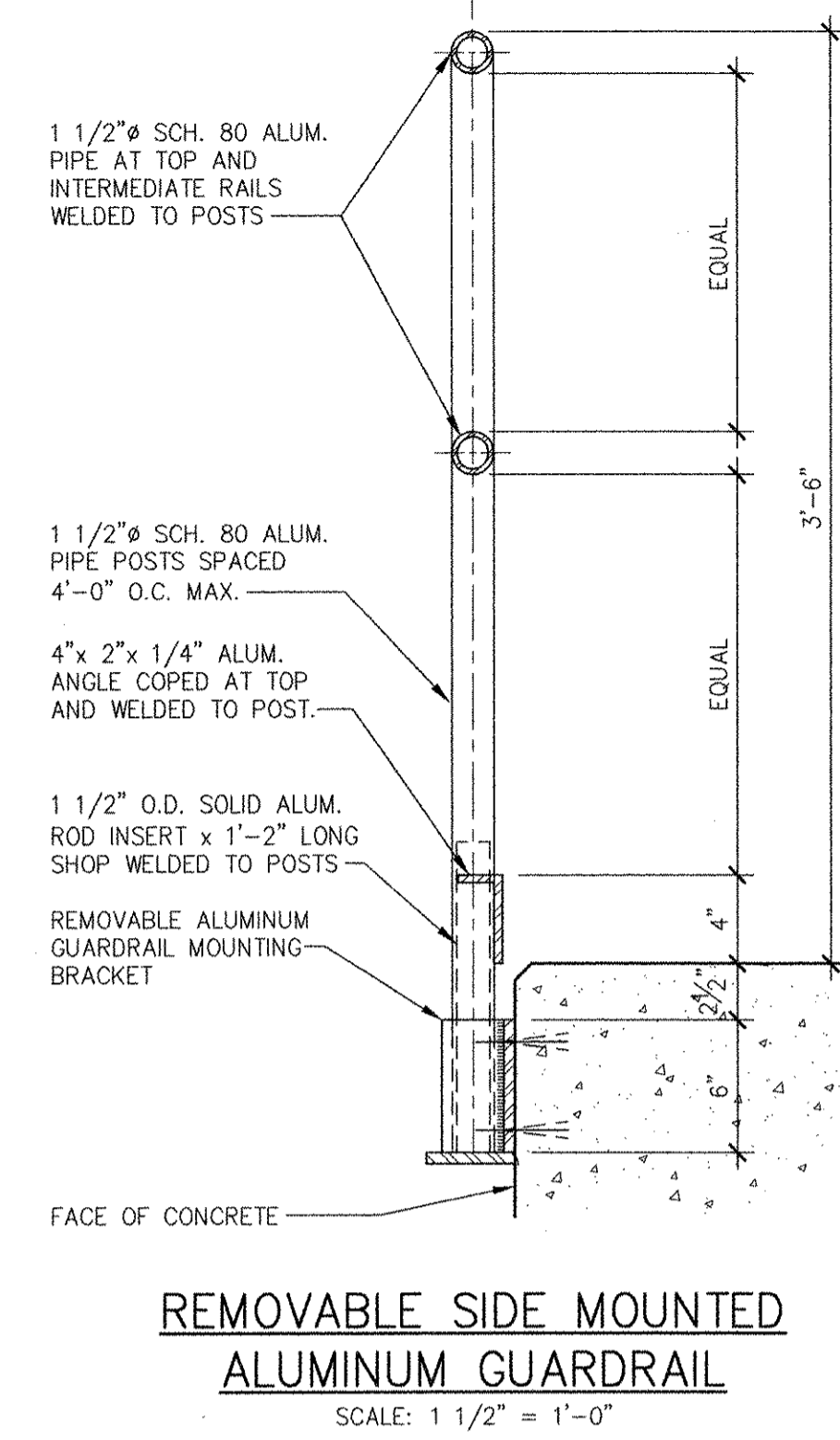
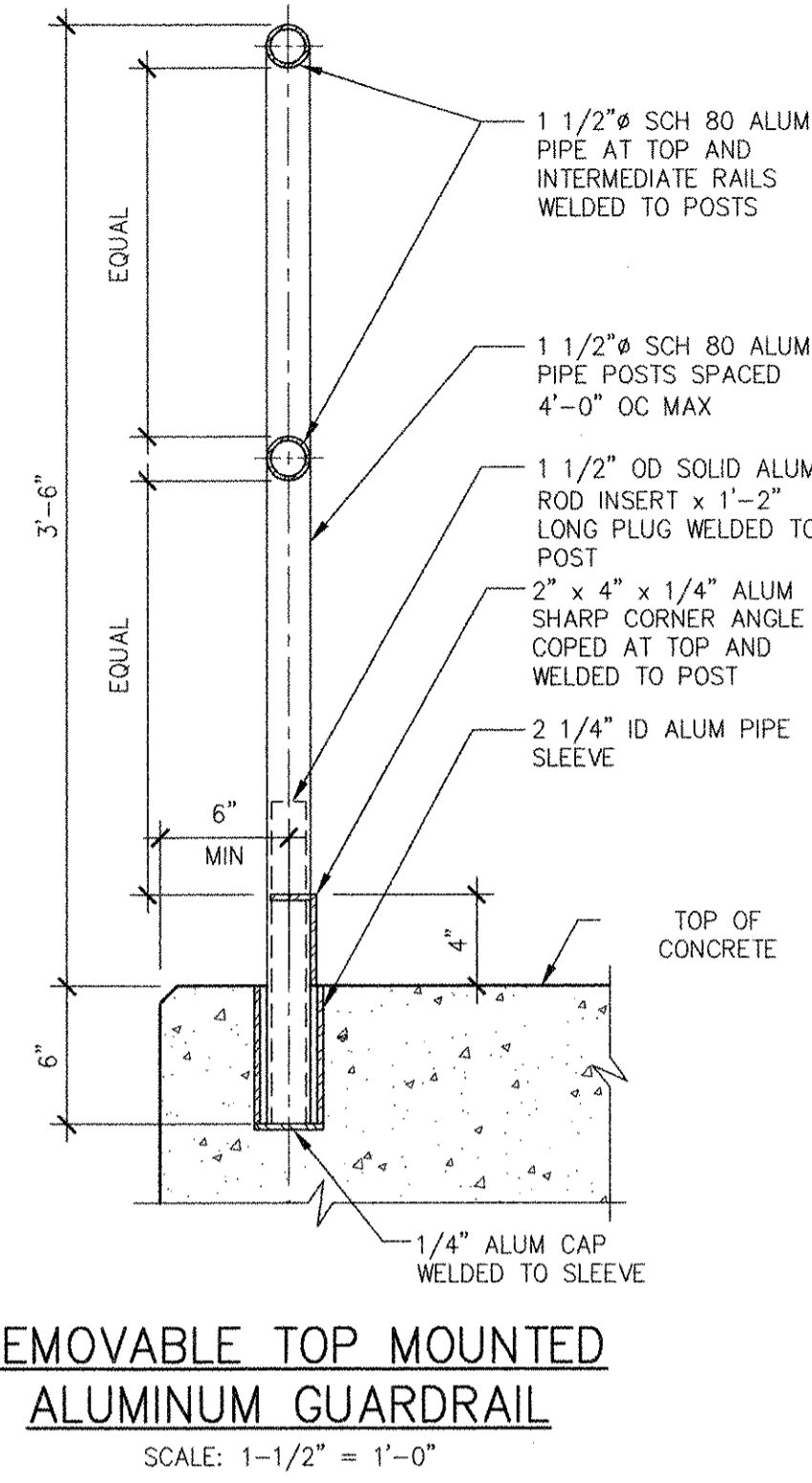
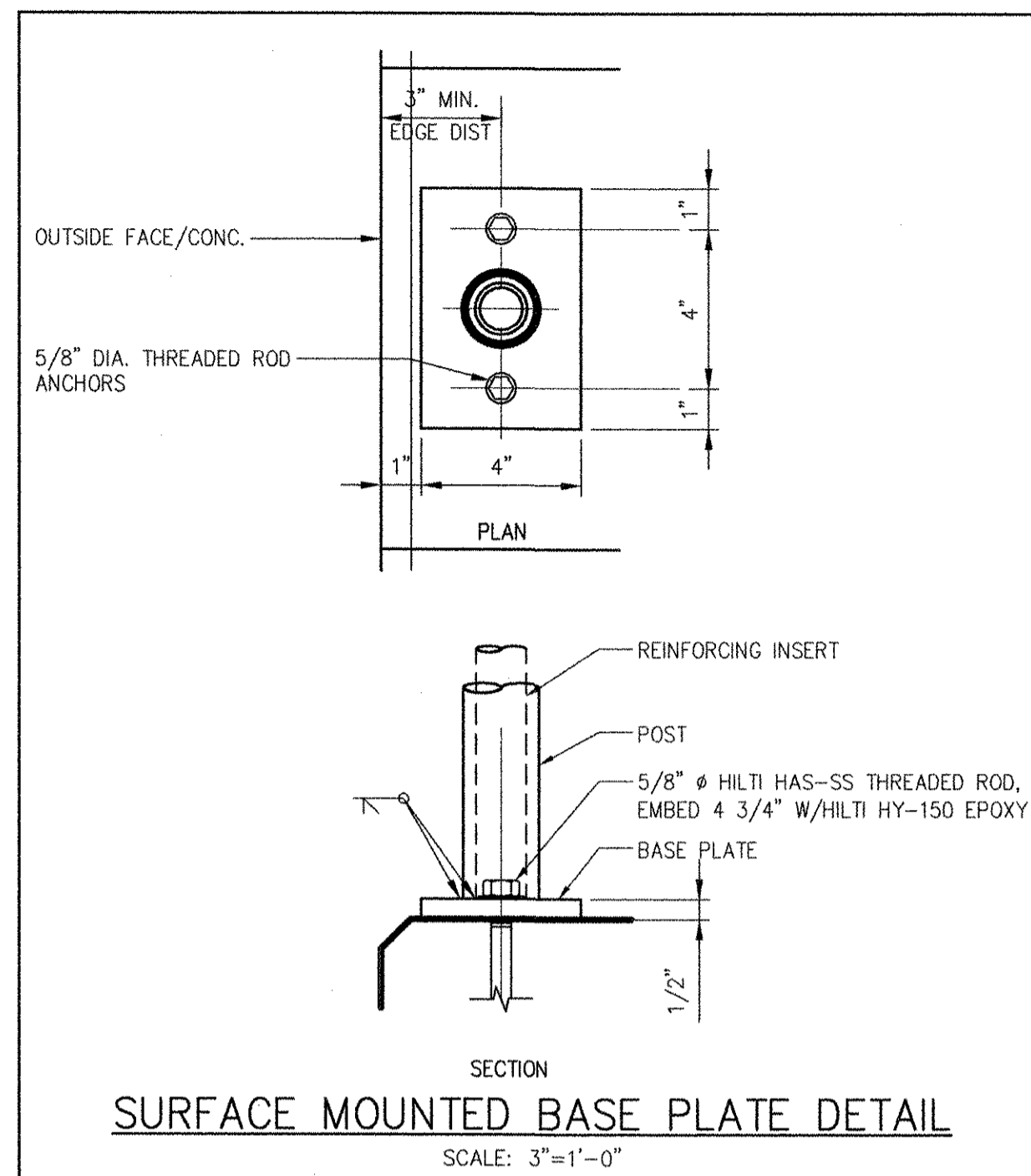
AECOM
RECORD DRAWINGS
AECOM USA, INC.
100 DEWEY DRIVE
WILMINGTON, DE 19800
PHONE (781) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS
MISCELLANEOUS METALS DETAILS I
ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-801
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	3" = 1'-0"
99 A-801	

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DE)\COMMON SHEETS\A-801.dwg
LAST UPDATE: Monday, October 01, 2012 9:35:34 AM
PLOT DATE: Tuesday, October 23, 2012 10:29:24 AM
ANSI D - 1-10-12

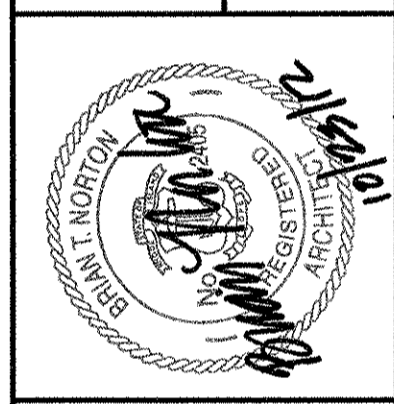


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	HG	MM	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 701 WILLOW DRIVE
 SUITE 200
 PROVIDENCE, RI 02909
 PHONE (781) 246-6300

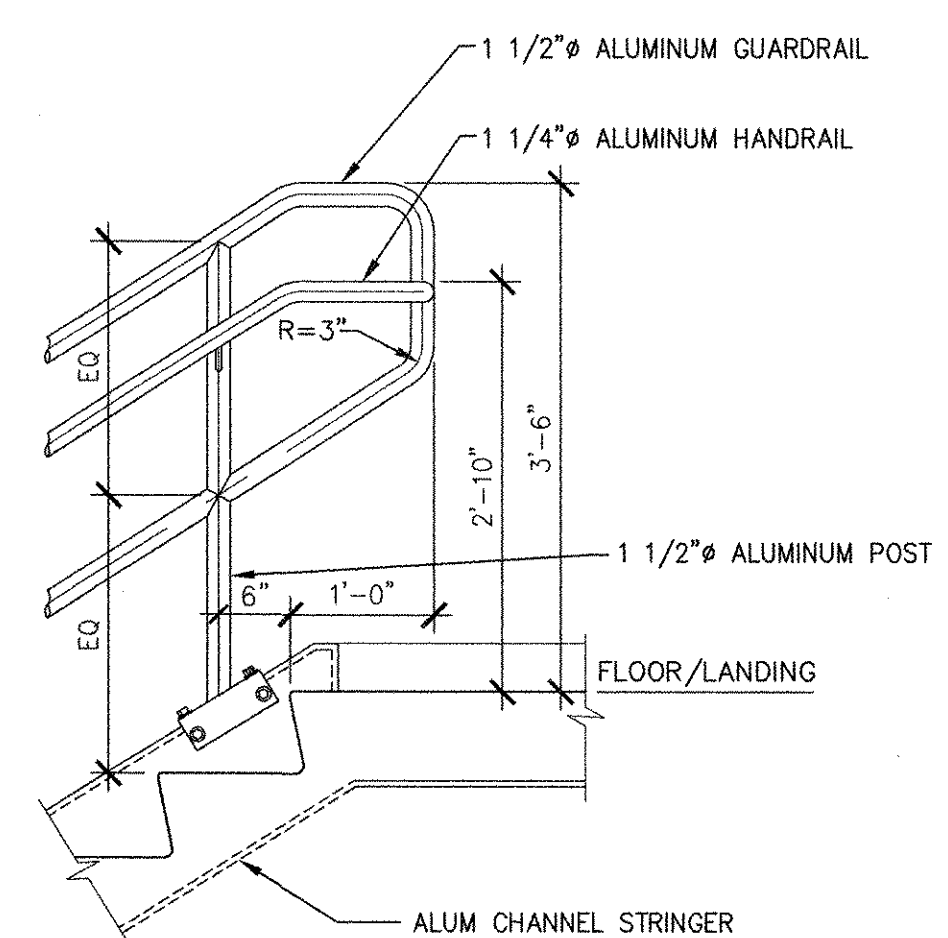


CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
MISCELLANEOUS METALS DETAILS II
 ARCHITECTURAL

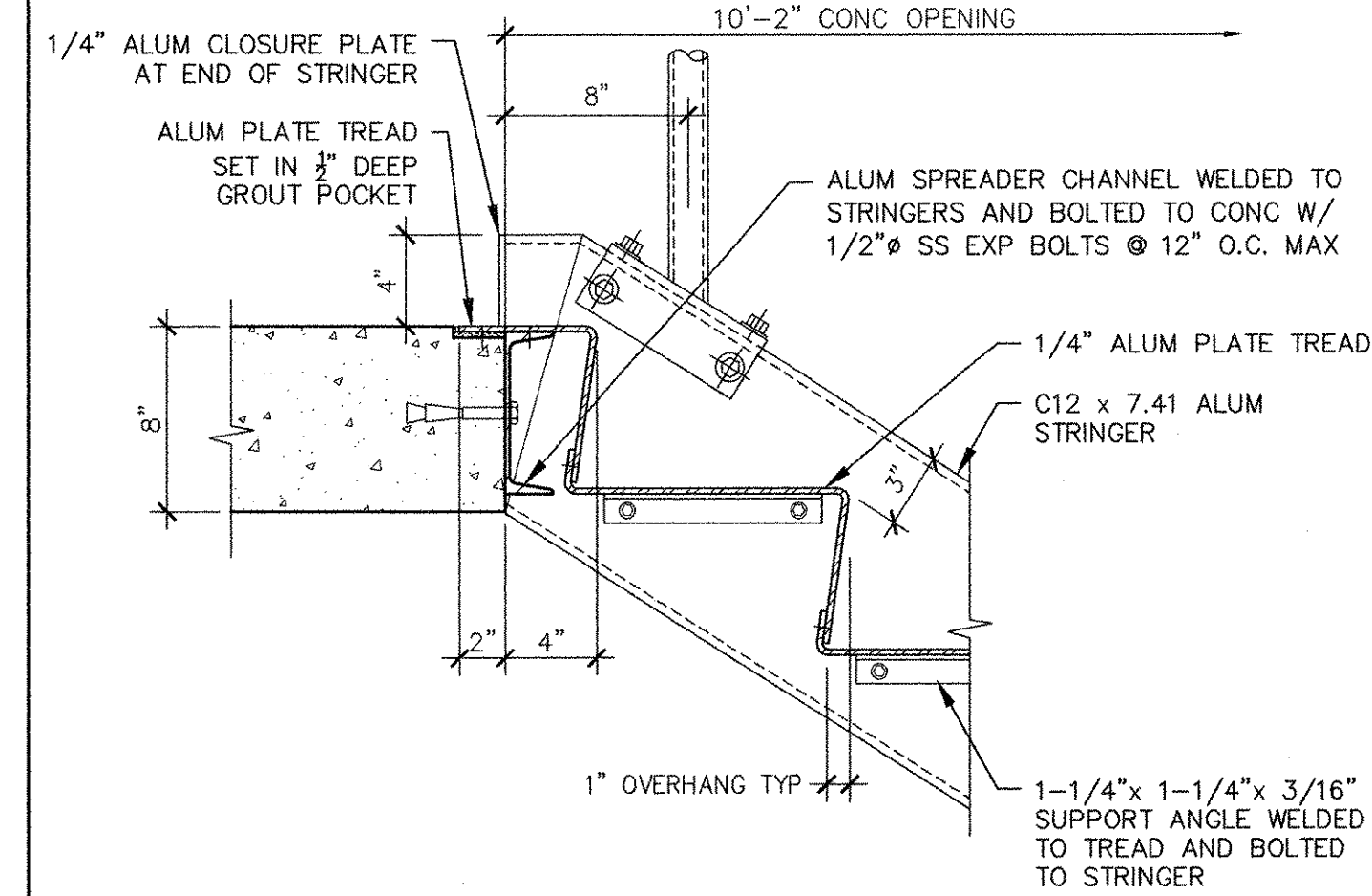
PROJECT NO:	60148648
CAD DWG FILE:	99 A-802
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 A-802

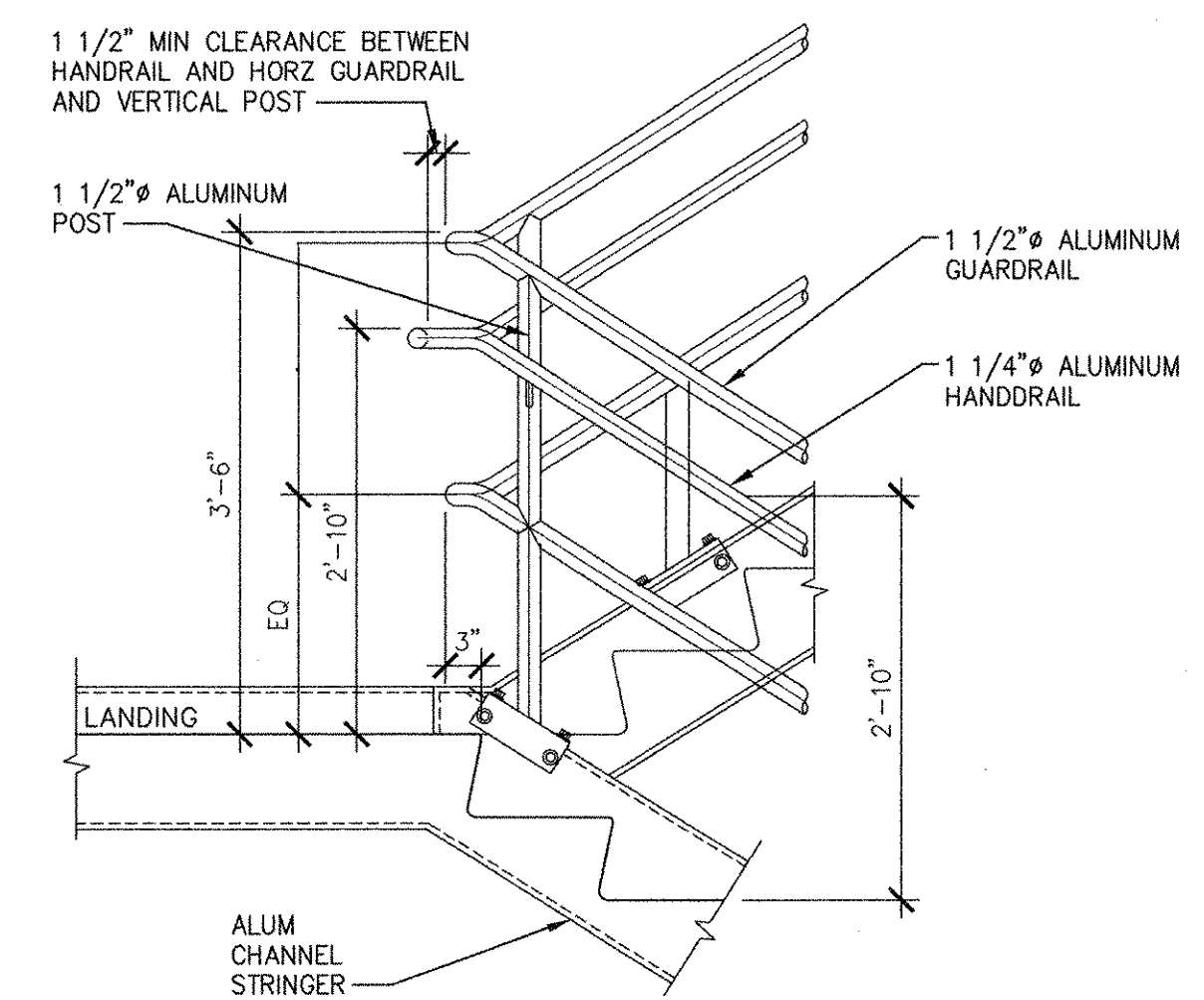
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RIS)\COMMON\SHEETS\A-802.DWG
 LAST UPDATE: Monday, October 01, 2012 8:37:51 AM
 PLOT DATE: Tuesday, October 23, 2012 10:29:27 AM
 ANSI D - 1-10-12



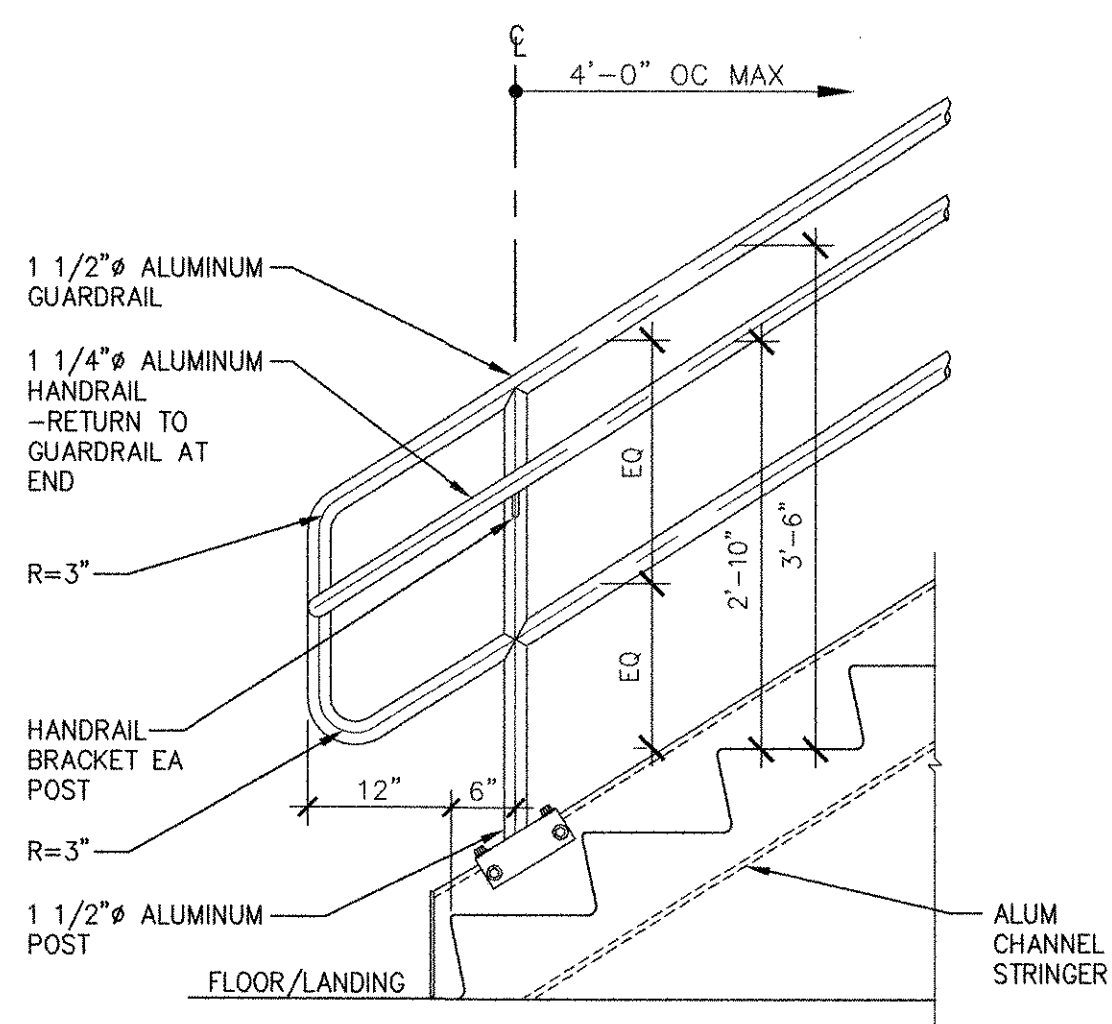
TYPICAL ALUM GUARDRAIL AND HANDRAIL AT TOP OF ALUM STAIR ELEVATION
SCALE: 3/4"=1'-0"



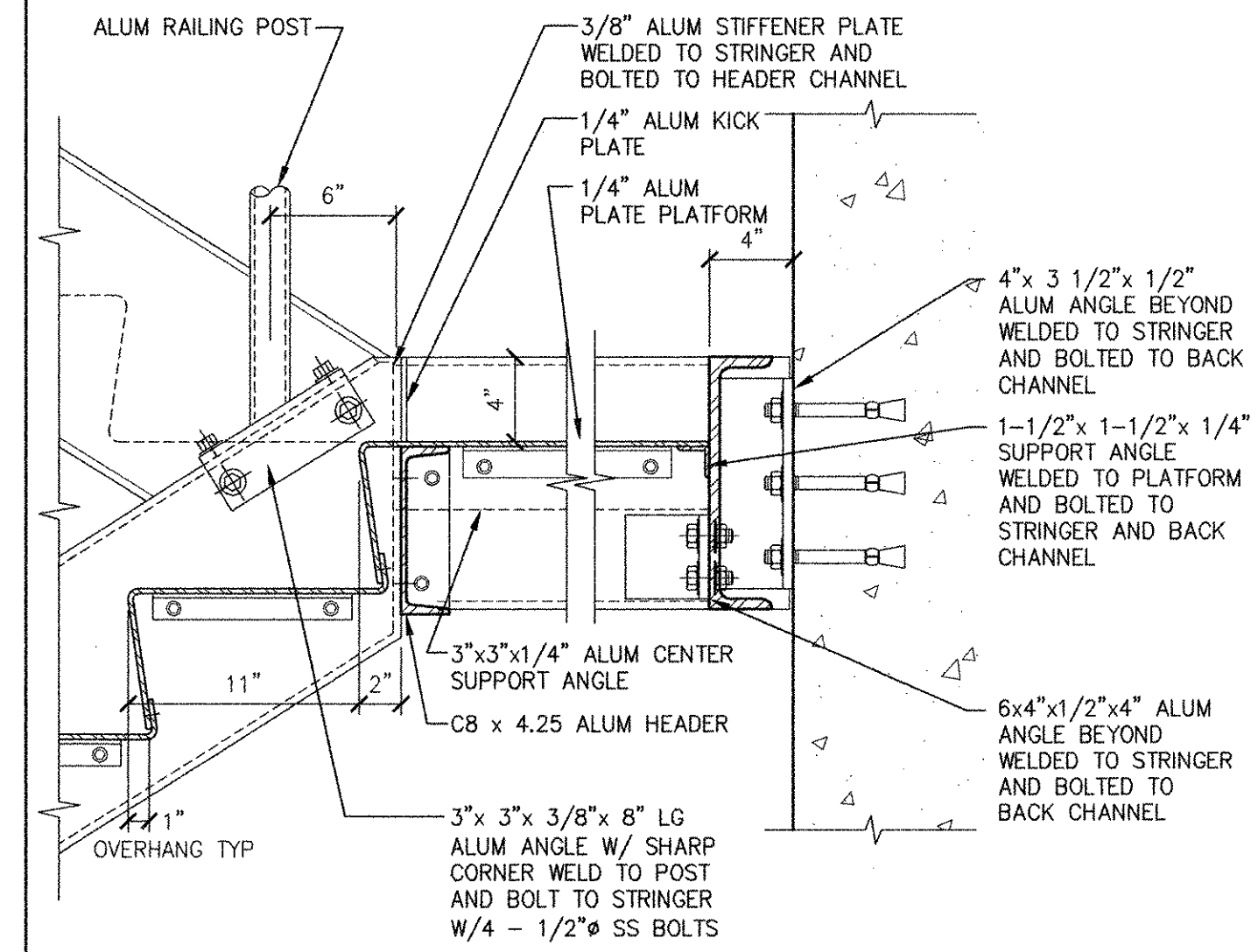
ALUMINUM PLATE STAIR TOP DETAIL AT CONCRETE LANDING
SCALE: 1 1/2" = 1'-0"



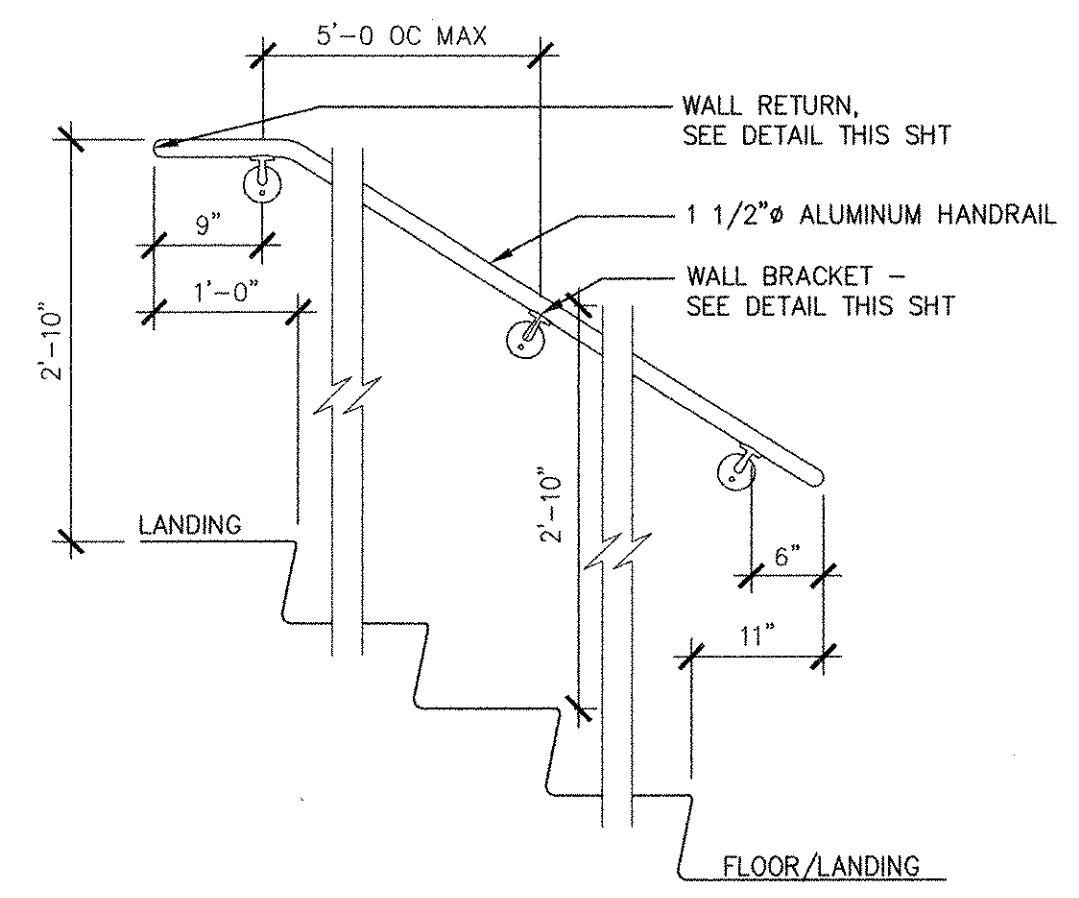
TYPICAL ALUM GUARDRAIL AND HANDRAIL AT ALUM STAIR LANDING ELEVATION
SCALE: 3/4"=1'-0"



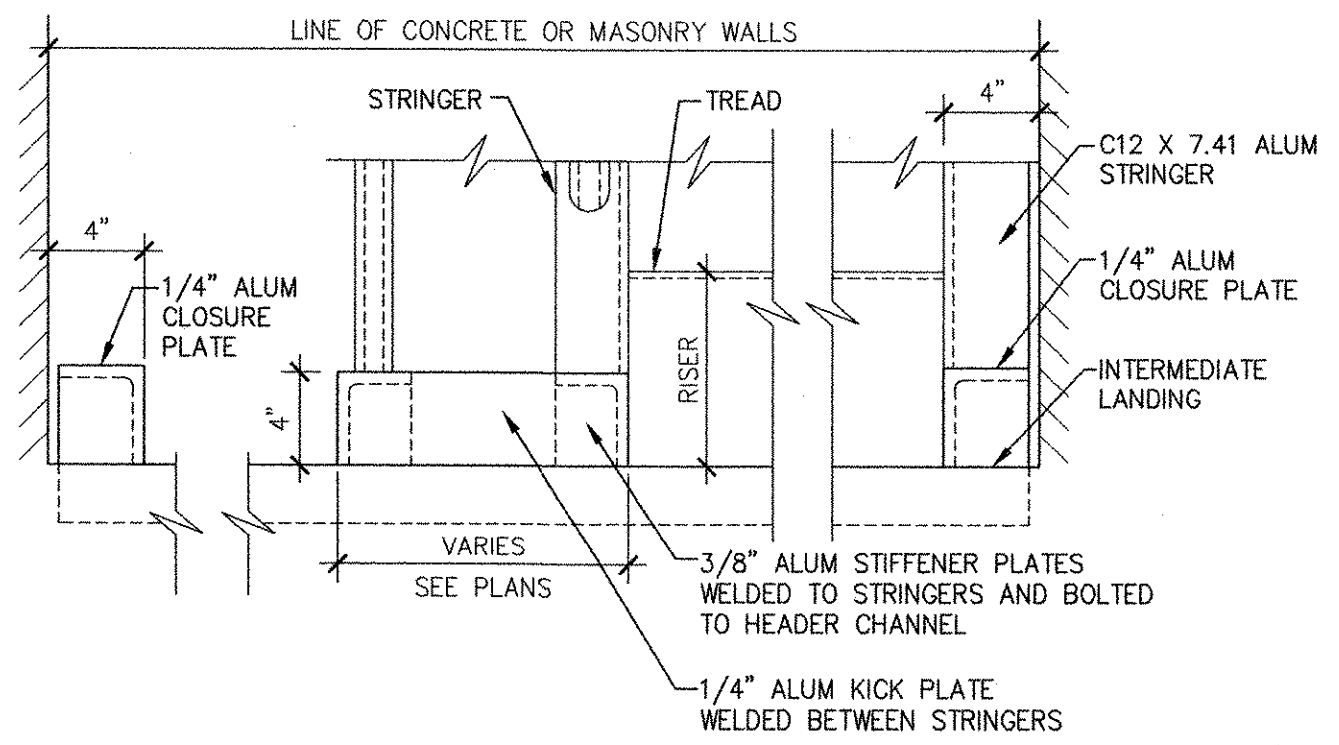
TYPICAL ALUM GUARDRAIL AND HANDRAIL AT BOTTOM OF ALUM STAIR ELEVATION
SCALE: 3/4"=1'-0"



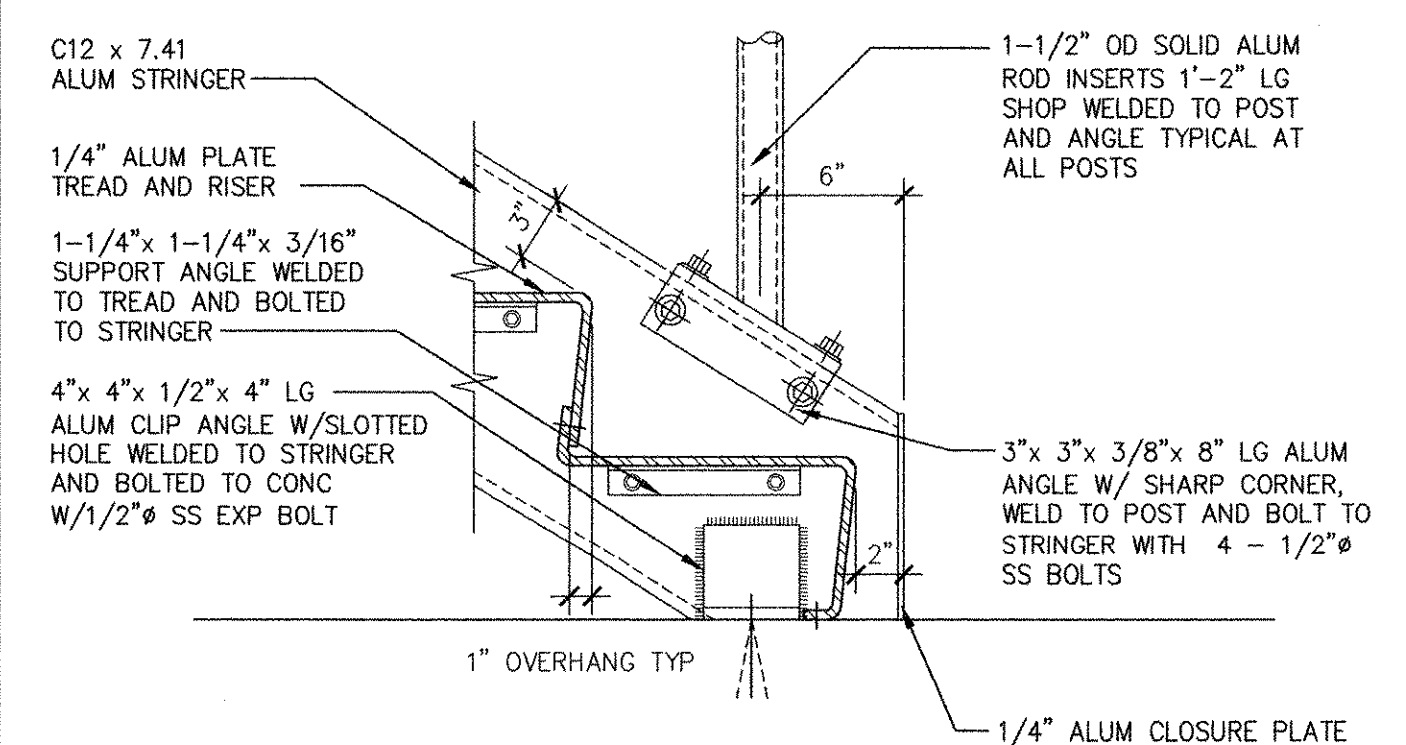
ALUMINUM PLATE STAIR AT INTERMEDIATE METAL LANDING DETAIL
SCALE: 1 1/2" = 1'-0"



TYPICAL WALL MOUNTED ALUM HANDRAIL ELEVATION
SCALE: 3/4"=1'-0"



ALUMINUM PLATE STAIR DETAIL AT INTERMEDIATE LANDING
SCALE: 1 1/2" = 1'-0"



ALUMINUM PLATE STAIR BOTTOM DETAIL AT CONCRETE LANDING
SCALE: 1 1/2" = 1'-0"

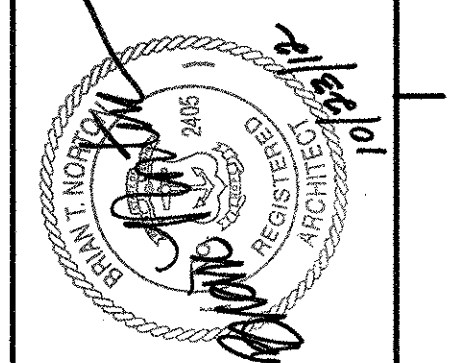
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RSD)\COMMON SHEETS\A\99 A-803.RWG
 LAST UPDATE: Tuesday, October 09, 2012 10:45:14 AM
 PLOT DATE: Tuesday, October 23, 2012 10:29:30 AM
 ANSI D - 9-Oct-12

MARK	DATE	HG	MM	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM

RECORD DRAWINGS

AECOM USA, INC.
100 WATER STREET
FOURTH FLOOR
PROVIDENCE, RI 02903
PHONE (401) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

METAL STAIR & RAILING DETAILS

ARCHITECTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 A-803
DESIGNED BY:	M. MACEACHERN
DRAWN BY:	M. MACEACHERN
DEPT CHECK:	B. NORTON
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 A-803

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ALUMINIUM

- STRUCTURAL ALUMINIUM TO CONFORM TO ALLOY 6061-T6. DETAIL AND FABRICATE IN CONFORMANCE WITH THE LATEST ALUMINIUM ASSOCIATION SPECIFICATIONS FOR STRUCTURES OF ALUMINIUM.
- DETAILING, FABRICATION AND ERECTION OF STRUCTURAL ALUMINIUM SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.
- WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE, AWS D1.2.
- WELDING SHALL BE BY THE METAL INERT GAS (MIG) OR THE TUNGSTEN INERT GAS (TIG) PROCESS USING 5356 FILLER ALLOY.
- FIELD WELDING OF STRUCTURAL MEMBERS IS NOT PERMITTED UNLESS SPECIFICALLY INDICATED.
- SHOP CONNECTIONS MAY BE BOLTED OR WELDED UNLESS THE CONNECTION METHOD IS INDICATED.
- FIELD CONNECTIONS SHALL BE BOLTED UNLESS WELDING IS INDICATED.
- PROVIDE ASTM F593 TYPE 316 STAINLESS STEEL BOLTS FOR BOLTED CONNECTIONS. PROVIDE DRILLED HOLES 1/16" LARGER THAN THE BOLT DIAMETER UNLESS OTHERWISE INDICATED. PROVIDE ASTM F594 STAINLESS STEEL NUTS WITH STAINLESS STEEL WASHERS IN BOTH OUTER PLIES.
- SIMPLY SUPPORTED BEAM-TO-COLUMN AND BEAM-TO-BEAM CONNECTIONS SHALL BE MADE WITH DOUBLE ANGLES IN CONFORMANCE WITH THE AISC MANUAL UNLESS OTHERWISE INDICATED.
- DETAIL BRACING MEMBERS TO AVOID ECCENTRIC CONNECTIONS.
- PROVIDE TEMPORARY BRACING AND STAYS DURING ERECTION TO RESIST VERTICAL AND LATERAL LOADS UNTIL MEMBERS ARE PERMANENTLY FASTENED.
- PAINT ALUMINIUM IN CONTACT WITH CONCRETE WITH ASPHALTIC PAINT OR PROVIDE SHEET NEOPRENE BARRIER.
- PROVIDE DISSIMILAR METAL PROTECTION AT LOCATIONS WHERE DISSIMILAR METALS ARE IN CONTACT. PROTECT WITH A MINIMUM 4-MIL DRY THICKNESS COAT OF ZINC CHROMATE PRIMER ON THE ALUMINIUM SURFACES AND A MINIMUM 2-MIL DRY THICKNESS COAT OF ALL-METAL PRIMER FOLLOWED BY ONE COAT OF MINIMUM 3-MIL DRY THICKNESS ALUMINIUM PAINT TO THE DISSIMILAR METAL.
- USE NON-SHRINK, NON-METALLIC GROUT AS INDICATED AND SPECIFIED UNDER BASE AND BEARING PLATES.
- PROVIDE ALUMINIUM RAILING WHERE INDICATED.
- PROVIDED MOUNTINGS FOR REMOVABLE ALUMINIUM RAILING AROUND OPENINGS WHERE INDICATED, COMPLETE WITH CAPS.

STRUCTURAL STEEL

- W SHAPES SHALL CONFORM TO ASTM A 992 UNLESS OTHERWISE INDICATED OR SPECIFIED.
- C, M, S AND HP SHAPES SHALL CONFORM TO ASTM A 572, GRADE 50, UNLESS OTHERWISE INDICATED OR SPECIFIED.
- ANGLES, PLATES AND BARS SHALL CONFORM TO ASTM A 36.
- ROUND, SQUARE AND RECTANGULAR STRUCTURAL TUBE MEMBERS (HSS) SHALL CONFORM TO ASTM A 500, GRADE B.
- STEEL PIPE SHALL CONFORM TO ASTM A 53, GRADE B.
- DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.
- WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE, AWS D1.1. USE E70XX WELDING ELECTRODES.
- FIELD WELDING OF STRUCTURAL MEMBERS IS NOT PERMITTED UNLESS SPECIFICALLY INDICATED.
- SHOP CONNECTIONS MAY BE BOLTED OR WELDED UNLESS THE CONNECTION METHOD IS INDICATED.
- FIELD CONNECTIONS SHALL BE BOLTED UNLESS WELDING IS INDICATED.
- PROVIDE 3/4" DIAMETER ASTM A 325X HIGH STRENGTH BOLTS FOR BOLTED CONNECTIONS. PROVIDE 13/16" DIAMETER HOLES UNLESS OTHERWISE INDICATED. PROVIDE ONE HARDENED WASHER UNDER THE ELEMENT TURNED IN TIGHTENING. PROVIDE PLATE WASHERS IN BOTH OUTER PLIES WHEN OVERSIZE OR SLOTTED HOLES ARE INDICATED.
- TIGHTEN HIGH STRENGTH BOLTS TO THE SNUG-TIGHT CONDITION IN ACCORDANCE WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A 325 OR A 490 BOLTS.
- SIMPLY SUPPORTED BEAM-TO-COLUMN AND BEAM-TO-BEAM CONNECTIONS SHALL BE MADE WITH DOUBLE ANGLES IN CONFORMANCE WITH THE AISC MANUAL UNLESS OTHERWISE INDICATED.
- PROVIDE MAXIMUM NUMBER OF BOLTS POSSIBLE FOR THE PARTICULAR MEMBER DEPTH IN ACCORDANCE WITH THE AISC MANUAL.
- USE NON-SHRINK, NON-METALLIC GROUT UNDER BASE AND BEARING PLATES.
- SHEAR STUDS SHALL CONFORM TO ASTM A 108. INSTALL IN ACCORDANCE WITH AWS D1.1.
- PROVIDE 1/8" LEVELING PLATES THE SAME SIZE AS THE BASE PLATES FOR STRUCTURAL STEEL COLUMNS.
- PROVIDE F 1554 ANCHOR RODS FOR ANCHORAGE TO CONCRETE AND MASONRY AS INDICATED. FURNISH AND INSTALL ONE WASHER AND ONE HEAVY HEX NUT WITH ASTM F 1554 ANCHOR RODS UNLESS OTHERWISE INDICATED.
- PROVIDE HOT-DIP GALVANIZING IN CONFORMANCE WITH ASTM A 123, GRADE 100 TO ALL STEEL INDICATED OR SPECIFIED TO BE GALVANIZED.
- PROVIDE HOT-DIP GALVANIZING, IN CONFORMANCE WITH ASTM A 153, TO ALL BOLTS, NUTS AND WASHERS THAT WILL BE USED WITH GALVANIZED STEEL.

STEEL DECK

- PROVIDE STEEL DECK DESIGNED IN CONFORMANCE WITH THE DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS PUBLISHED BY THE STEEL DECK INSTITUTE.
- DETAILING, FABRICATION AND ERECTION OF STEEL DECK SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.
- FIBER STRESS IN BENDING SHALL NOT EXCEED 20,000 PSI UNDER COMBINED DEAD AND LIVE LOAD.
- PROVIDE WELDING WASHERS AT ALL WELDMENTS FOR DECKING LESS THAN 22 GAGE (0.028 INCHES).
- WELD DECK AT SUPPORTS WITH 3/4" DIAMETER PUDDLE WELDS SPACED NOT TO EXCEED 12". PROVIDE A MINIMUM OF THREE WELDS PER WIDTH OF UNIT. PENETRATE ALL LAYERS OF DECKING WITH WELD MATERIAL AT END LAPS.
- FASTEN SIDE LAPS OF ADJACENT UNITS BETWEEN SUPPORTS WITH 1" LONG WELDS, BUTTON PUNCHING OR MECHANICAL FASTENERS SPACED AS INDICATED ON THE STEEL DECK WELDING PATTERN DETAIL.
- PROVIDE ADDITIONAL WELDS AS INDICATED, SPECIFIED OR REQUIRED.
- PROVIDE RIDGE AND VALLEY PLATES, CANT STRIPS, SUMP PANS, CLOSURES AND OTHER ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.

STEEL JOISTS

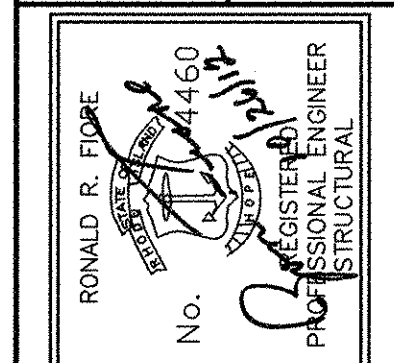
- PROVIDE JOISTS DESIGNED IN CONFORMANCE WITH THE STEEL JOIST INSTITUTE. JOISTS SHALL BE LABELED "APPROVED BY THE STEEL JOIST INSTITUTE".
- DETAILING, FABRICATION AND ERECTION OF STEEL JOISTS SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS.
- PROVIDE MINIMUM JOIST BEARING OF 4" ON MASONRY AND 3" ON STEEL BEAMS. JOIST BEARING TO PROJECT 1" MINIMUM BEYOND SUPPORTING STEEL BEAM WEBS UNLESS OTHERWISE INDICATED.
- WELD JOIST END BEARINGS TO STEEL BEAMS. BOLT JOIST ENDS TO COLUMNS AT TOP AND BOTTOM CHORDS.
- PROVIDE JOIST END ANCHORS WHEN BEARING ON MASONRY WALLS.
- PROVIDE JOIST BRIDGING OF SIZE AND SPACING IN CONFORMANCE WITH THE STEEL JOIST INSTITUTE UNLESS OTHERWISE INDICATED.
- ANCHOR END JOISTS TO WALLS OR BEAMS AT TOP AND BOTTOM CHORDS WITH LATERAL ANCHORS AT ENDS OF BRIDGING LINES.
- PROVIDE BOTTOM CHORD CEILING EXTENSIONS FOR JOISTS BOLTED TO COLUMNS.

P:\HW\PROJECTS\60148648 - EAST PROVIDENCE (RSG)\COMMON\SHEETS\100 S-002.DWG
 LAST UPDATE: Monday, October 01, 2012 11:35:49 AM
 PLOT DATE: Tuesday, October 23, 2012 8:52:34 AM
 ANSI D - 1-10-12

MARK	DATE	AC	RF	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM
 AECOM USA, INC.
 701 EDGEWATER DRIVE
 WILMINGTON, MA 01890
 PHONE (781) 246-5000

RECORD DRAWINGS



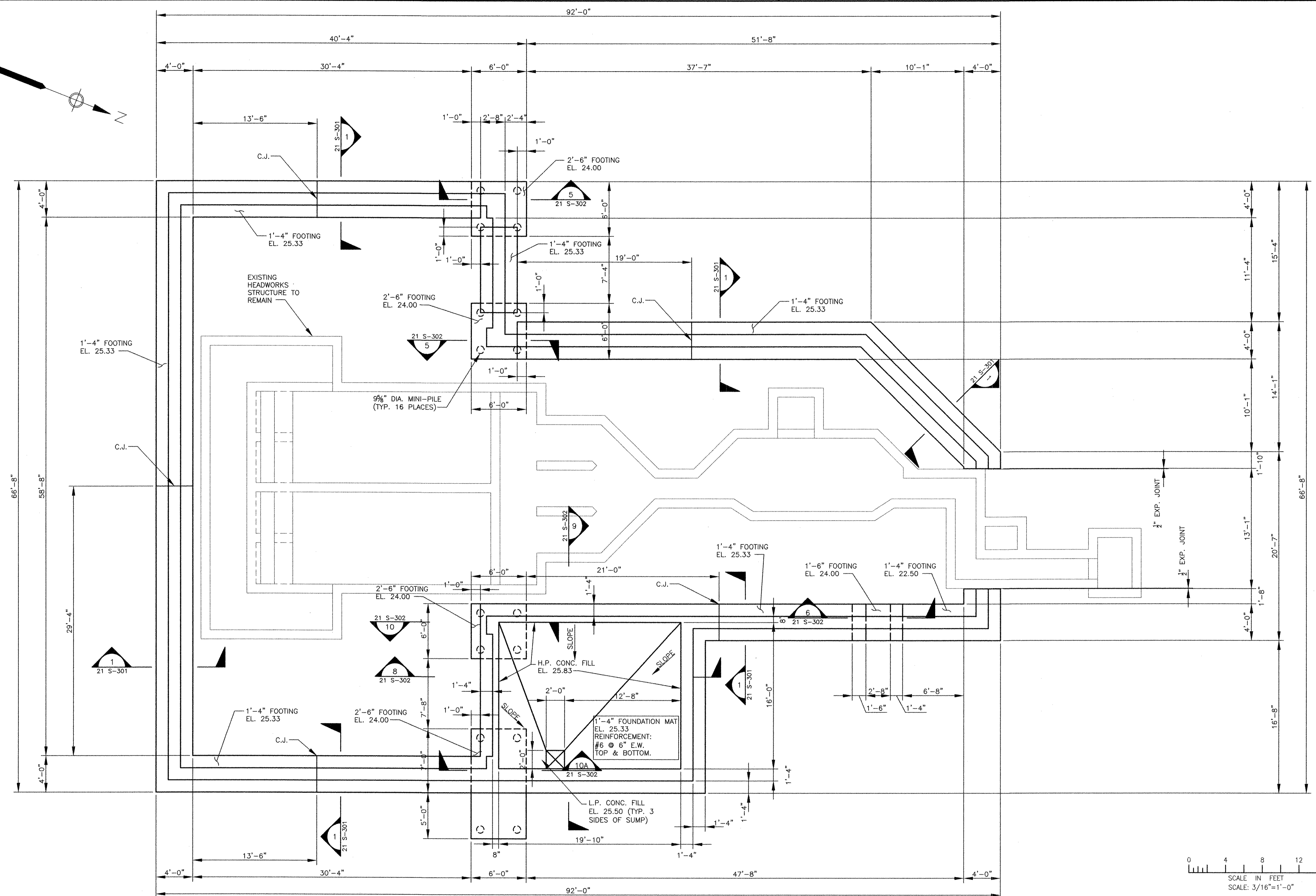
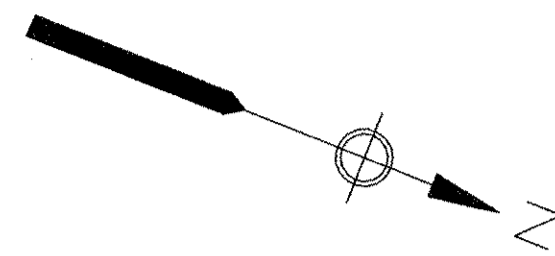
CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
STRUCTURAL NOTES II
 STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	00 S-002
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

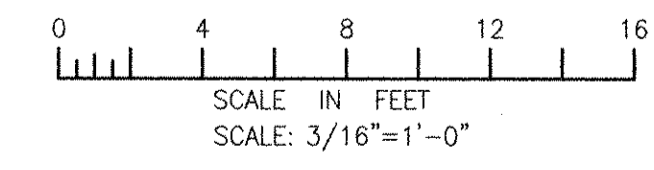
00 S-002

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH: \\P:\60148648 - EAST PROVIDENCE (BPO)\P-2\SHEETS\21 S-101.DWG
 LAST UPDATE: Monday, October 01, 2012 12:10:45 PM
 PLOT DATE: Tuesday, October 23, 2012 8:52:39 AM
 ANSI D - 1-10-12



FOUNDATION PLAN
 SCALE: 3/16" = 1'-0"
 NOTE: FOUNDATION DESIGN BASED ON A NET BEARING PRESSURE OF 2500 PSF



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
2	4/4/11	AC	RF	ELIMINATED PARAPET
1	3/21/11	AC	RF	CHANGED ROOF TO CONCRETE PLANK

AECOM USA, INC.
 701 EDDY AVE. DRIVE
 FORT COLLINS, CO 80501
 PHONE (970) 246-5000

AECOM

RECORD DRAWINGS
 STRUCTURAL

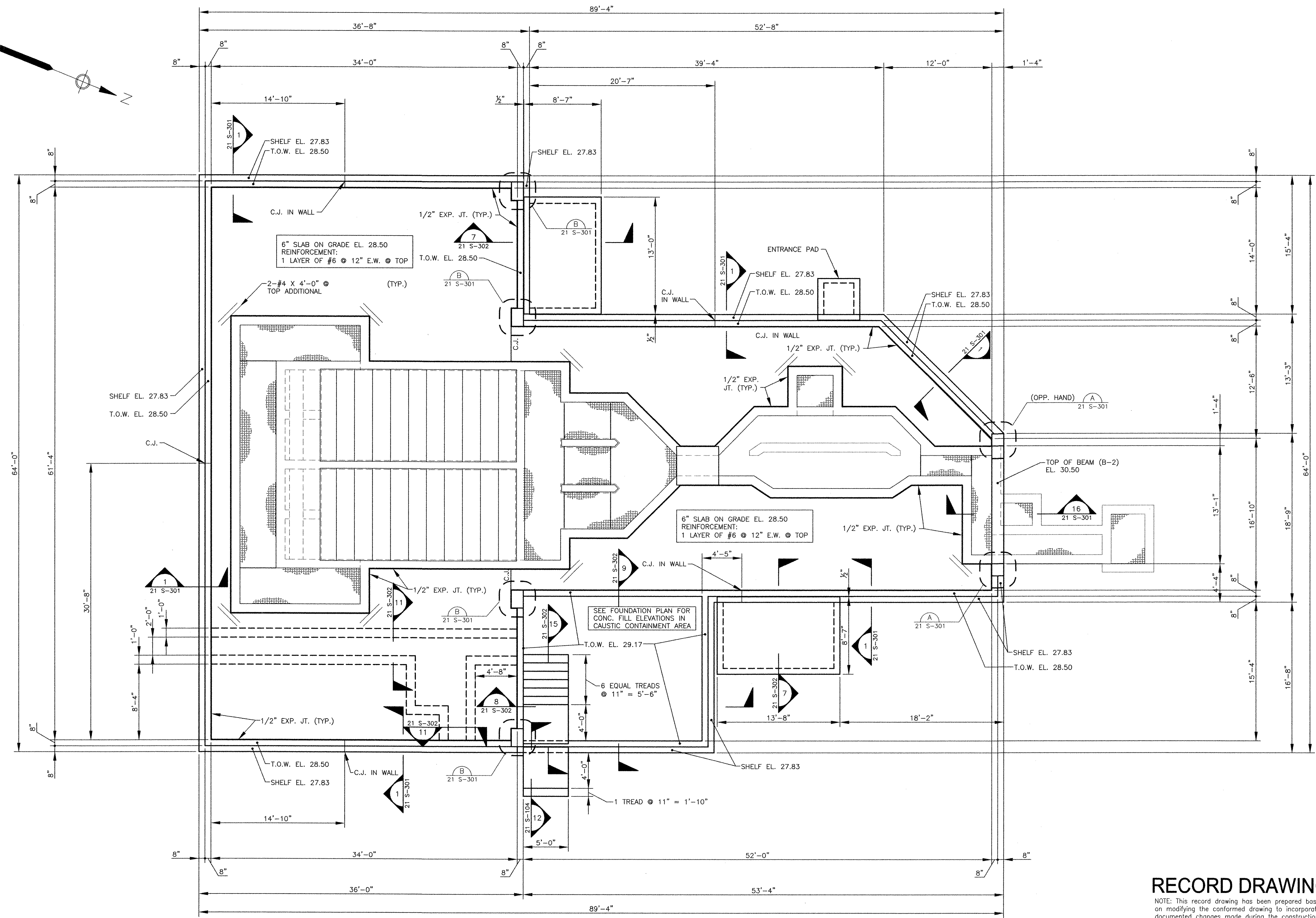
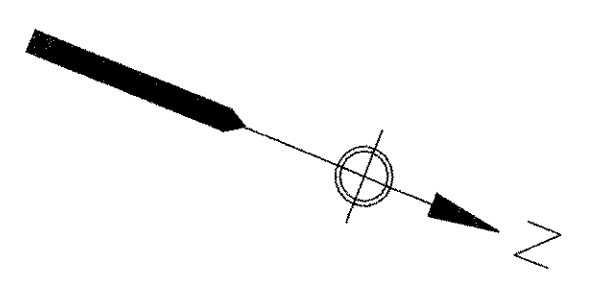
RONALD R. FIFE
 No. 1460
 REGISTERED PROFESSIONAL ENGINEER
 STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING
FOUNDATION PLAN
 STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	21 S-101
DESIGNED BY:	J. WELCH
DRAWN BY:	J. GENTILE
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 S-101

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE (RD)\DP-A\SHEETS\21 S-102.DWG
 LAST UPDATE: Monday, October 01, 2012 12:20:00 PM
 PLOT DATE: Tuesday, October 23, 2012 8:52:41 AM
 ANSI D - 1-0c1-12



GRADE LEVEL PLAN
 SCALE: 3/16" = 1'-0"
 DESIGN LIVE LOAD 250 PSF
 GRATING DESIGN LIVE LOAD = 100 PSF

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. 701 EDgewater Drive Phone (781) 246-5200		AECOM RECORD DRAWINGS																				
RONALD R. FIORE No. 450 REGISTERED PROFESSIONAL ENGINEER STRUCTURAL																						
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 HEADWORKS BUILDING GRADE LEVEL PLAN STRUCTURAL																						
PROJECT NO: 60148648 CAD DWG FILE: 21 S-102 DESIGNED BY: J. WELCH DRAWN BY: J. GENTILE DEPT CHECK: R. FIORE PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED	REVISIONS <table border="1"> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> <tr> <td>3</td> <td>10/19/12</td> <td>AC</td> <td>RF</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>2</td> <td>4/4/11</td> <td>AC</td> <td>RF</td> <td>ELIMINATED PARAPET</td> </tr> <tr> <td>1</td> <td>3/21/11</td> <td>AC</td> <td>RF</td> <td>CHANGED ROOF TO CONCRETE PLANK</td> </tr> </table>	MARK	DATE	MADE BY	CHECKED	DESCRIPTION	3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING	2	4/4/11	AC	RF	ELIMINATED PARAPET	1	3/21/11	AC	RF	CHANGED ROOF TO CONCRETE PLANK	21 S-102
MARK	DATE	MADE BY	CHECKED	DESCRIPTION																		
3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING																		
2	4/4/11	AC	RF	ELIMINATED PARAPET																		
1	3/21/11	AC	RF	CHANGED ROOF TO CONCRETE PLANK																		

PLOT FILENAME: P:\0148648 - EAST PROVIDENCE DB00\DP-2\21S-103.DWG
 LAST UPDATE: Monday, October 01, 2012 12:28:56 PM
 PLOT DATE: Tuesday, October 23, 2012 8:52:46 AM
 ANSI D - 1-0ct-12

BEAM SCHEDULE

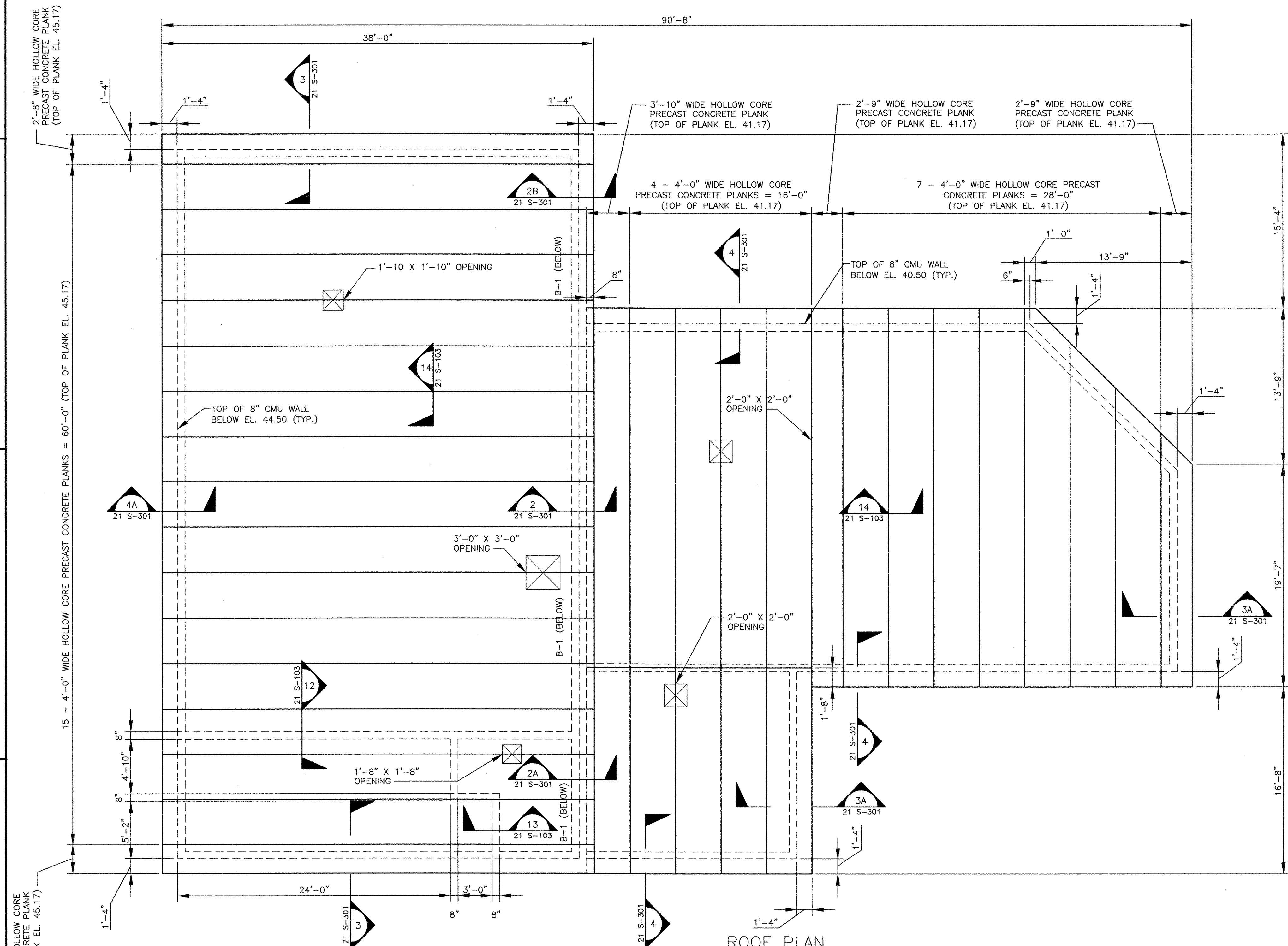
MARK	SIZE WIDTH X DEPTH	REINFORCEMENT					STIRRUPS			REMARKS
		CONT.	ADD.	ADD. LEFT	CONT.	ADD. RIGHT	TYPE	SIZE	SPACING EACH END	
B-1	16 X 44	4-#7	-	-	4-#7	-	#4	1 @ 2, 1 @ 8, BAL @ 16		
B-2	16 X 24	3-#6	-	-	3-#6	-	#4	1 @ 2, BAL @ 10	BEAM ON SHEET 21 S-102	

BEAM MARK IS SHOWN ON LEFT END OF BEAM IN PLAN.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
2	4/4/11	AC	RF	ELIMINATED PARAPET
1	3/21/11	AC	RF	CHANGED ROOF TO CONCRETE PLANK

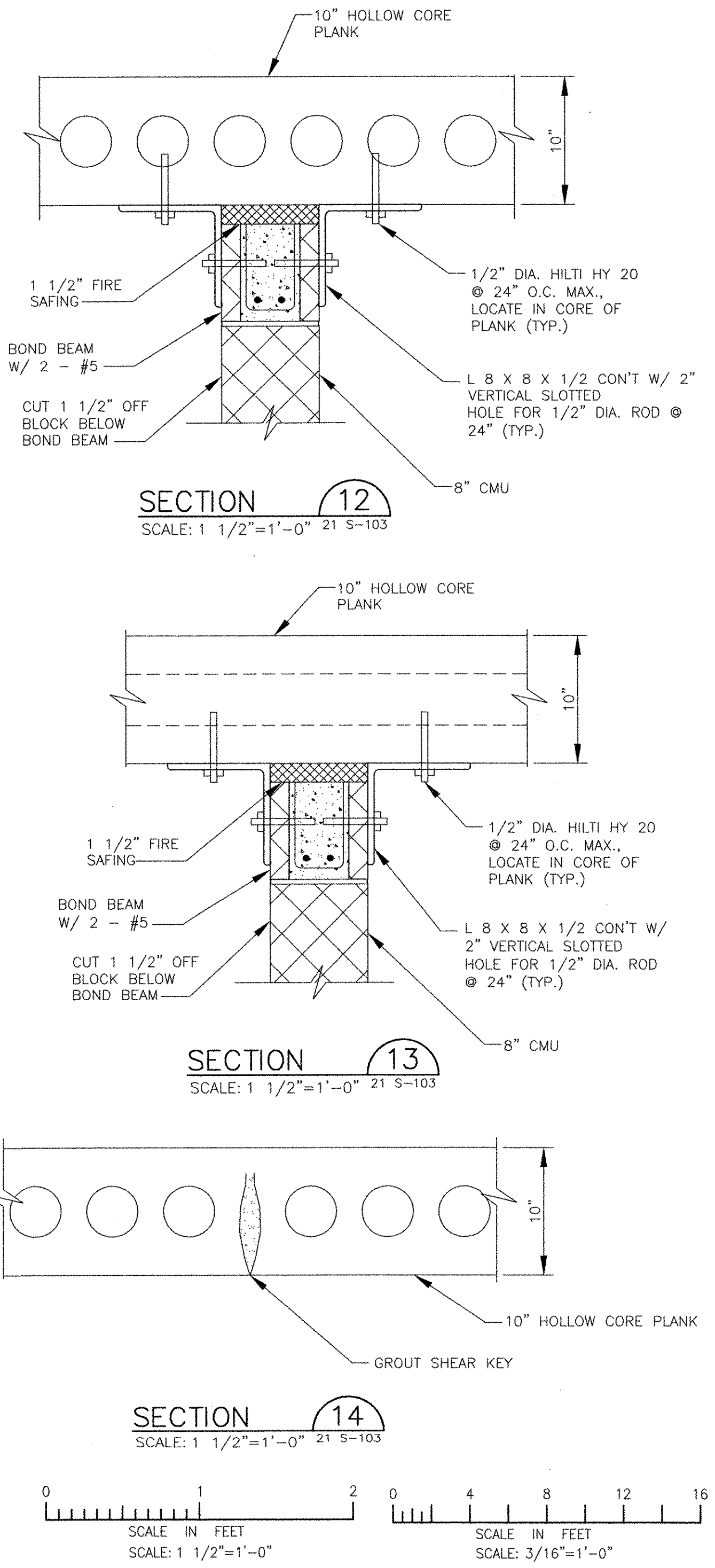
AECOM
 RECORD DRAWINGS
 RONALD R. FIORE
 PROFESSIONAL ENGINEER
 No. 0000000000
 CITY OF EAST PROVIDENCE, RHODE ISLAND

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING
ROOF PLAN
 STRUCTURAL
 PROJECT NO: 60148648
 CAD DWG FILE: 21 S-103
 DESIGNED BY: J. WELCH
 DRAWN BY: J. GENTILE
 DEPT CHECK: R. FIORE
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED
21 S-103



ROOF PLAN

SCALE: 3/16" = 1'-0"
 NOTE: DESIGN ROOF LOAD: 20 PSF ROOF LIVE LOAD + 15 PSF COLLATERAL LIVE LOAD
 UPLIFT WIND: -26 PSF
 REFER TO TOP OF 8" CMU BEARING WALLS TO DETERMINE TOP OF PLANK ELEVATIONS



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

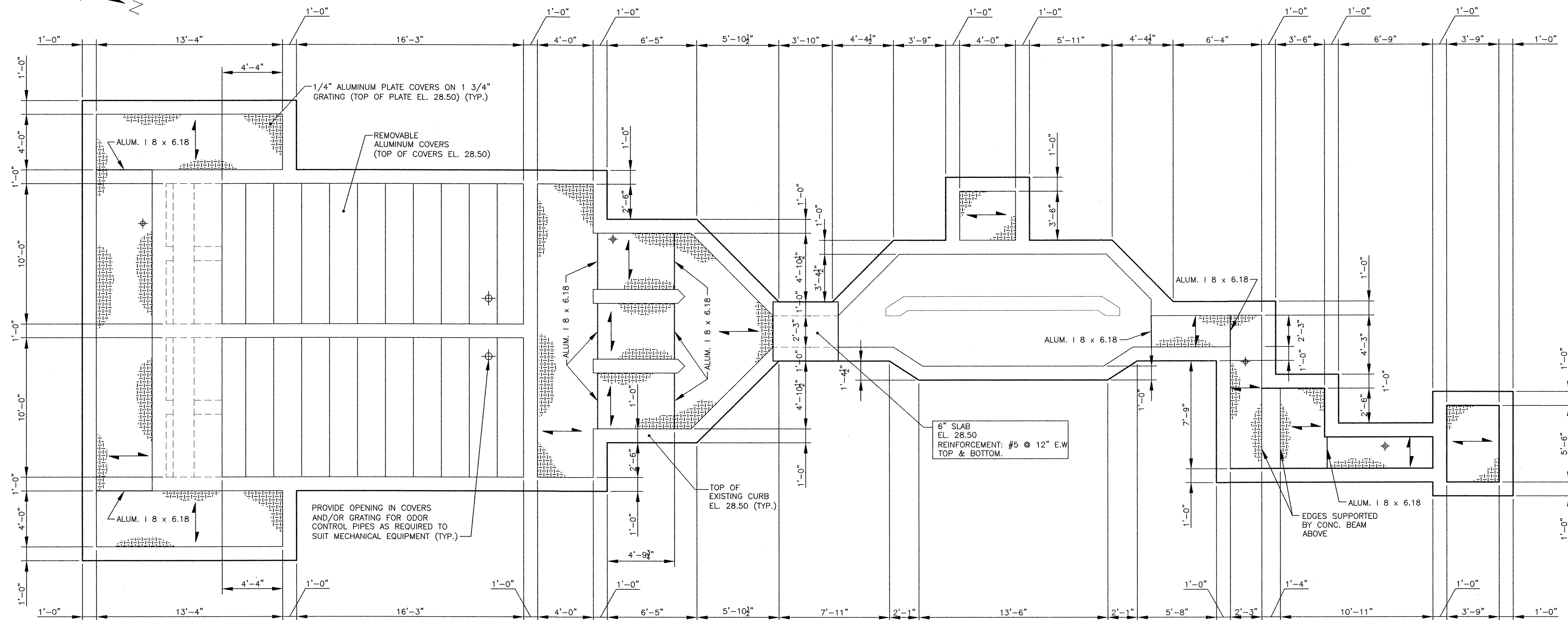
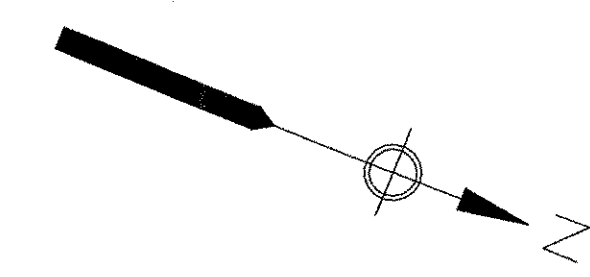
1

2

3

4

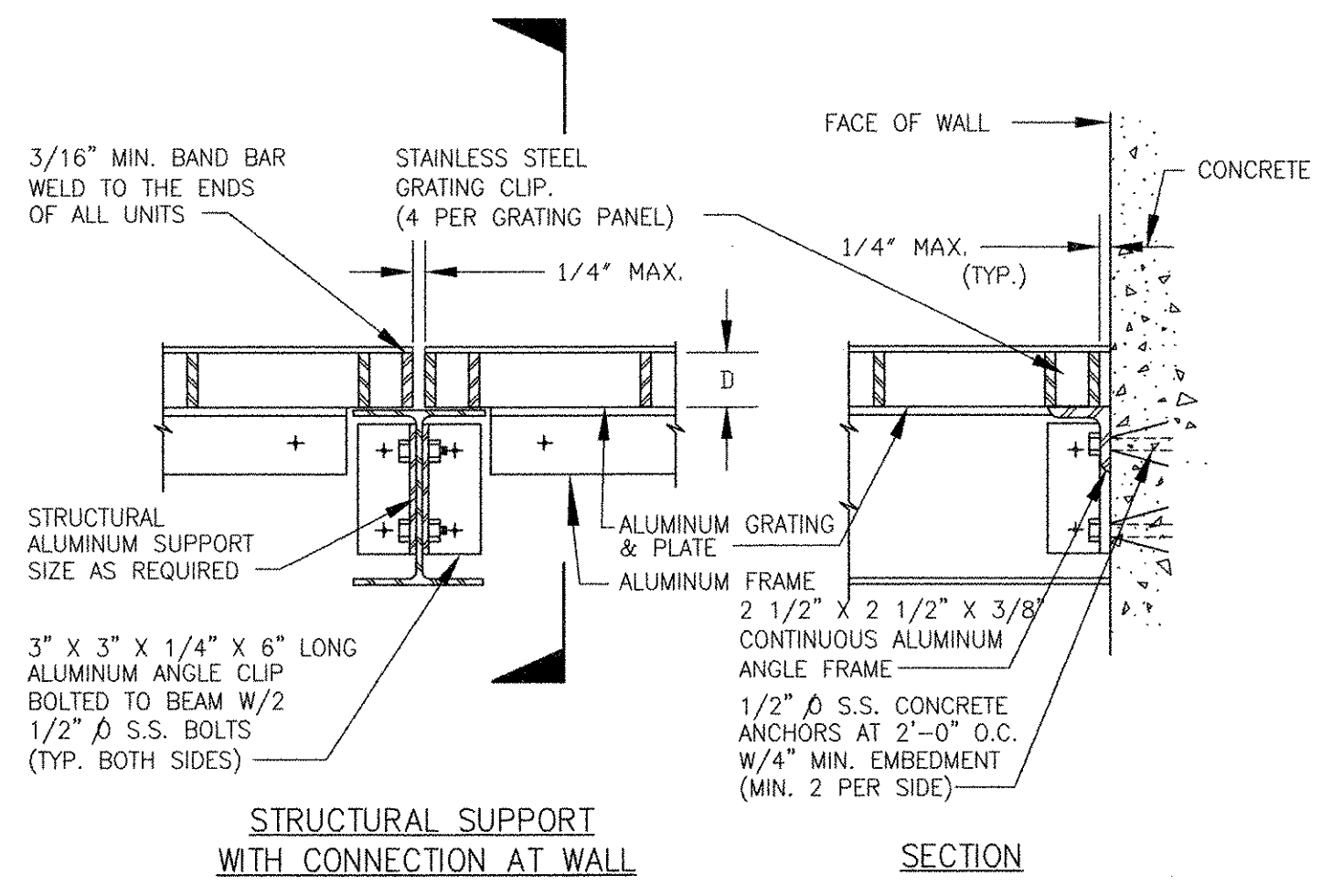
5



ENLARGED COVER PLAN

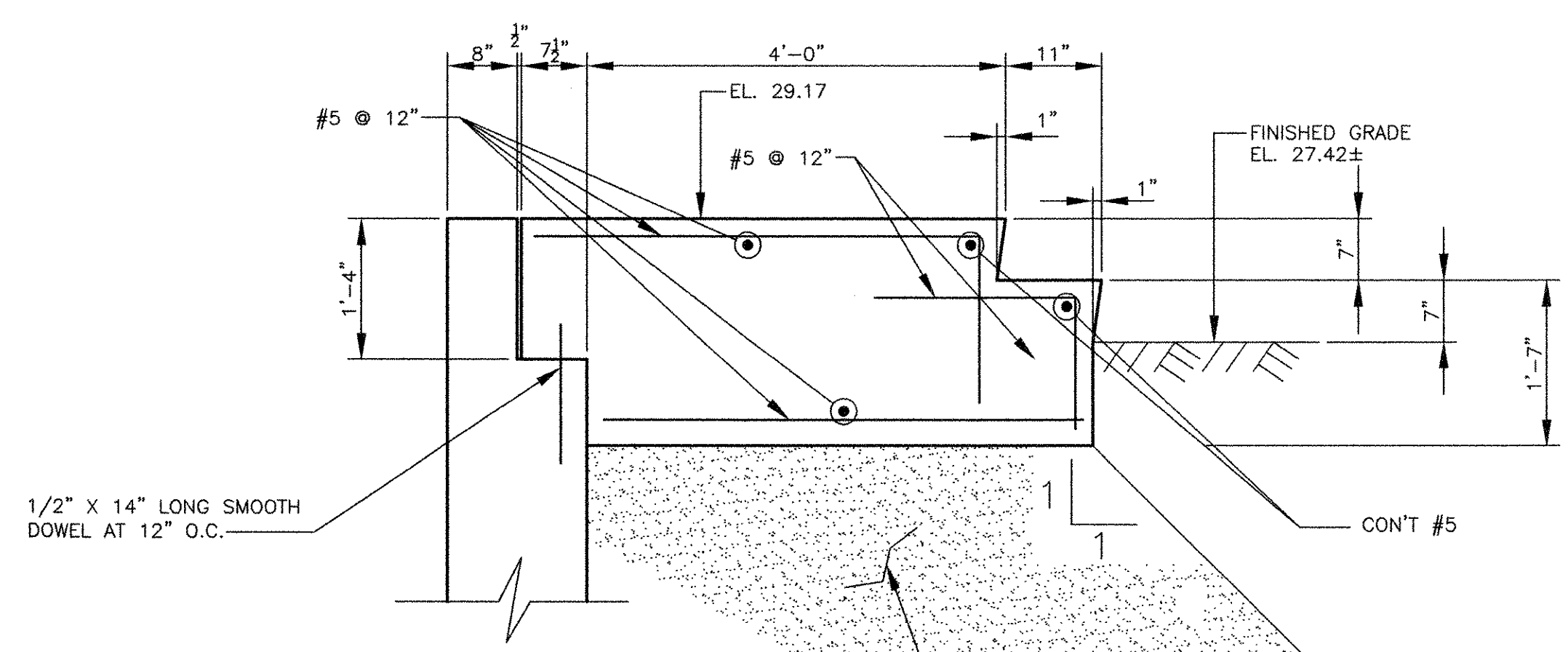
SCALE: 1/4" = 1'-0"
GRATING DESIGN LIVE LOAD = 100 PSF

- NOTES: 1. CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS BEFORE FABRICATING GRATING, PLATE COVERS AND SUPPORT BEAMS
- 2. PROVIDE OPENINGS WITH NEOPRENE CLOSURE AT GATES AND ODOR CONTROL DUCT PENETRATIONS.



ALUMINUM GRATING & PLATE WITH STRUCTURAL SUPPORT

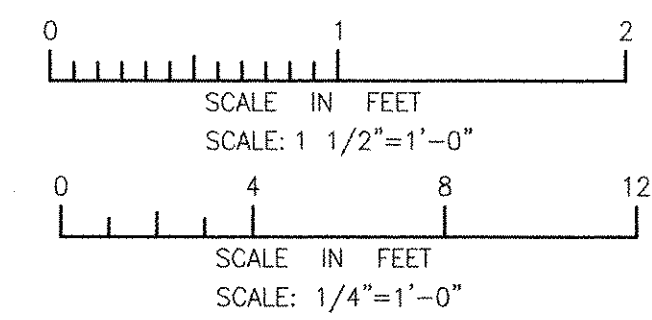
NTS
5-3.10.2 (REV. 01-17-99)



SECTION 12

SCALE: 3/4" = 1'-0"
21 5-102

PROVIDE 4'-0" IN SIX 8" LAYERS OF FREE DRAINING, NON-FROST SUSCEPTIBLE GRAVEL BACKFILL HAVING NOT MORE THAN 5% BY WEIGHT PASSING NO. 200 SIEVE. COMPACT EACH LAYER TO 95% OF MAXIMUM DENSITY



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
2	4/4/11	AC	RF	ELIMINATED PARAPET
1	3/21/11	AC	RF	CHANGED ROOF TO CONCRETE PLANK

AECOM
RECORD DRAWINGS

AECOM USA, INC.
701 EDGEWATER DRIVE
PROVIDENCE, RI 02909
PHONE (401) 246-5200

RONALD R. FIORE
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL
No. 000000000

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

**HEADWORKS BUILDING
ENLARGED COVER PLAN**

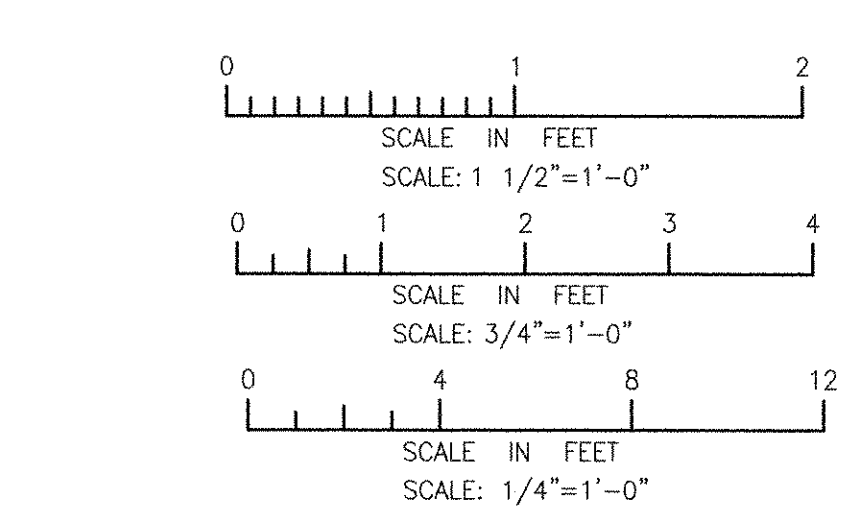
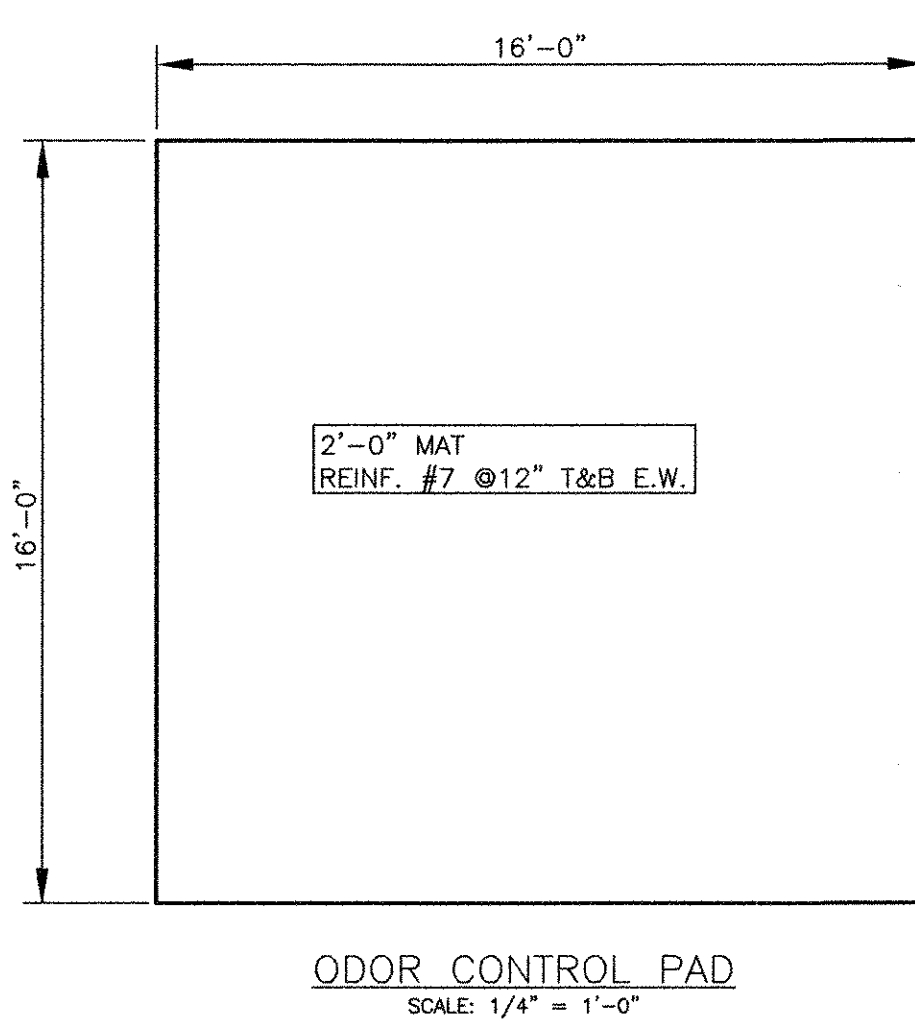
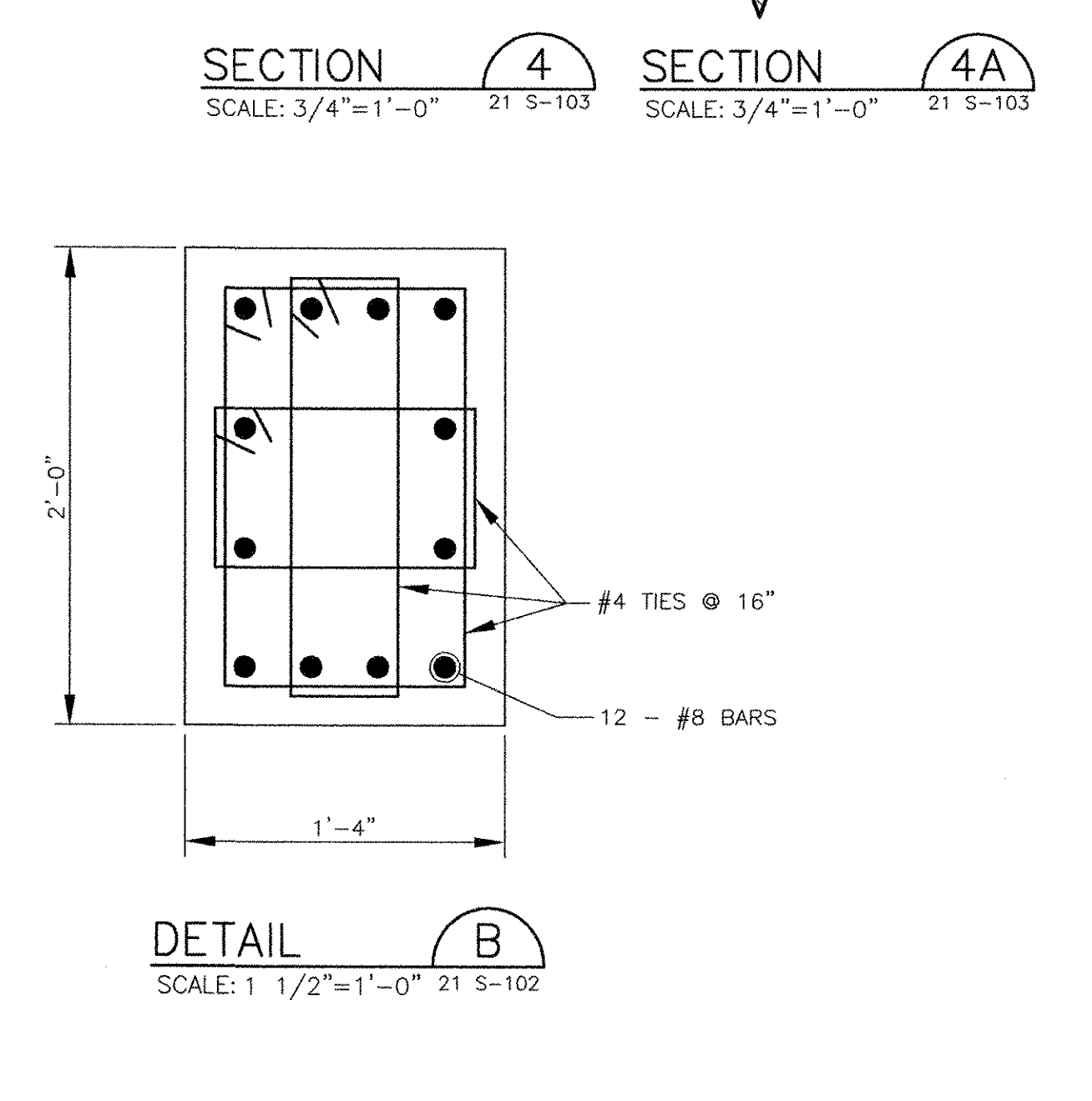
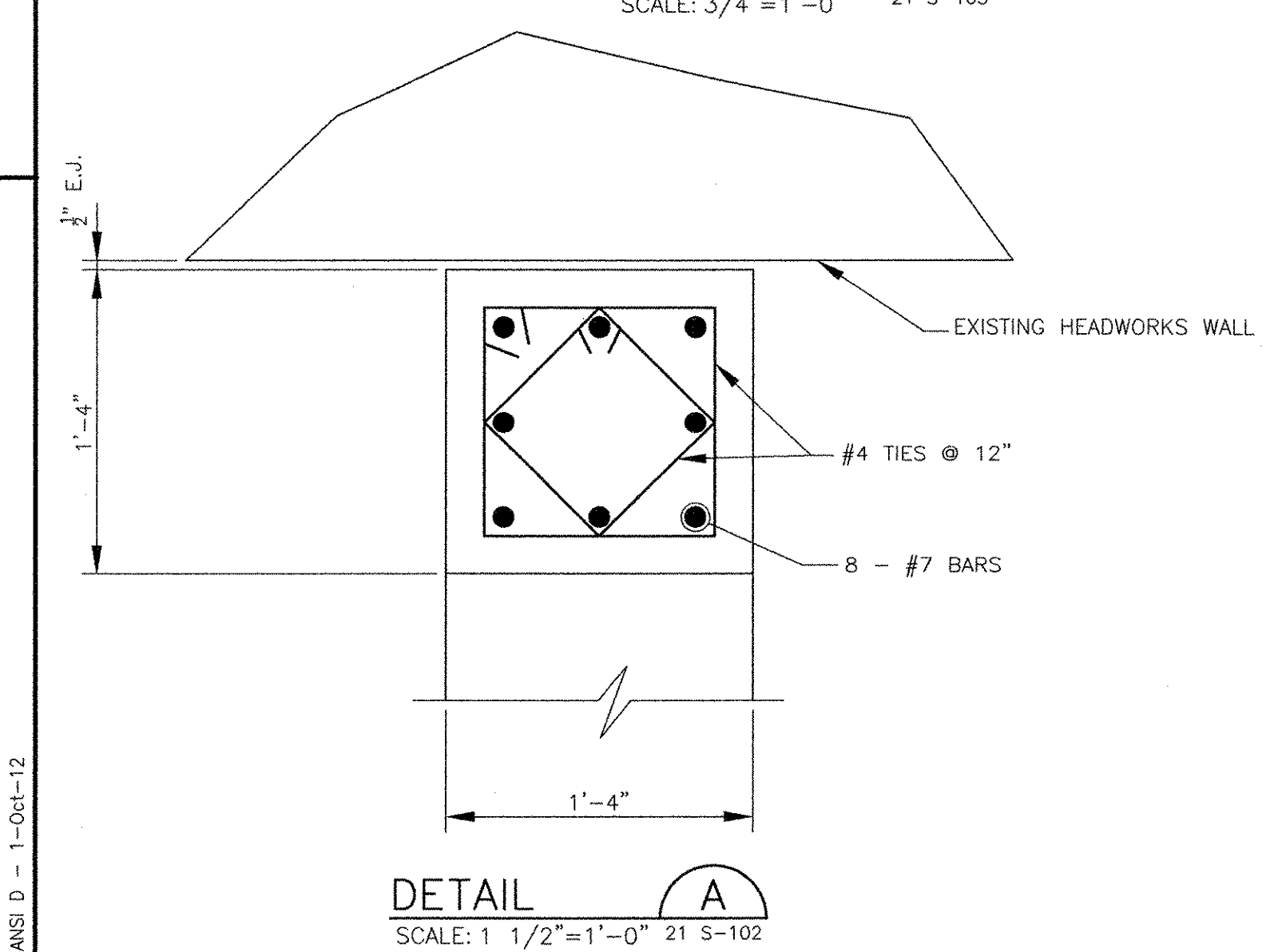
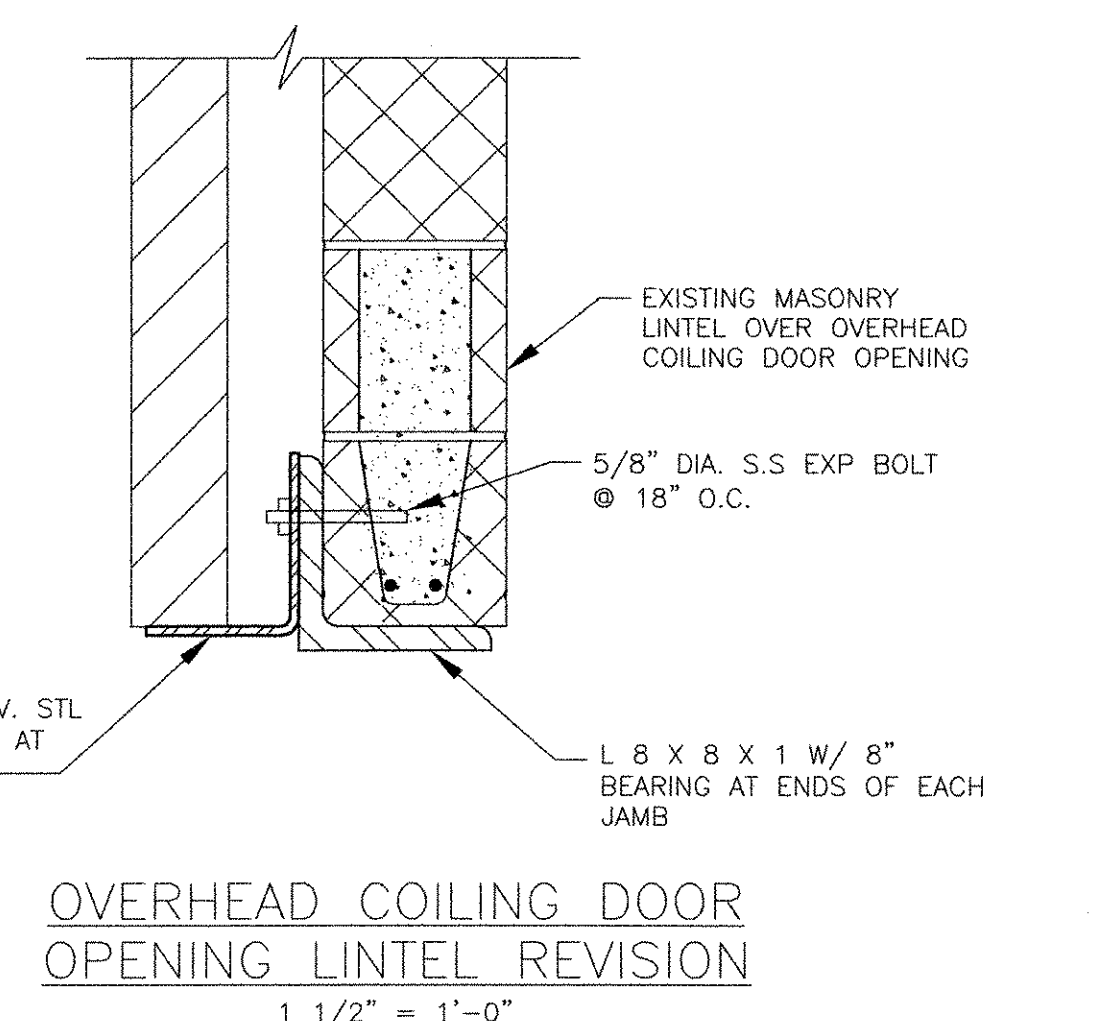
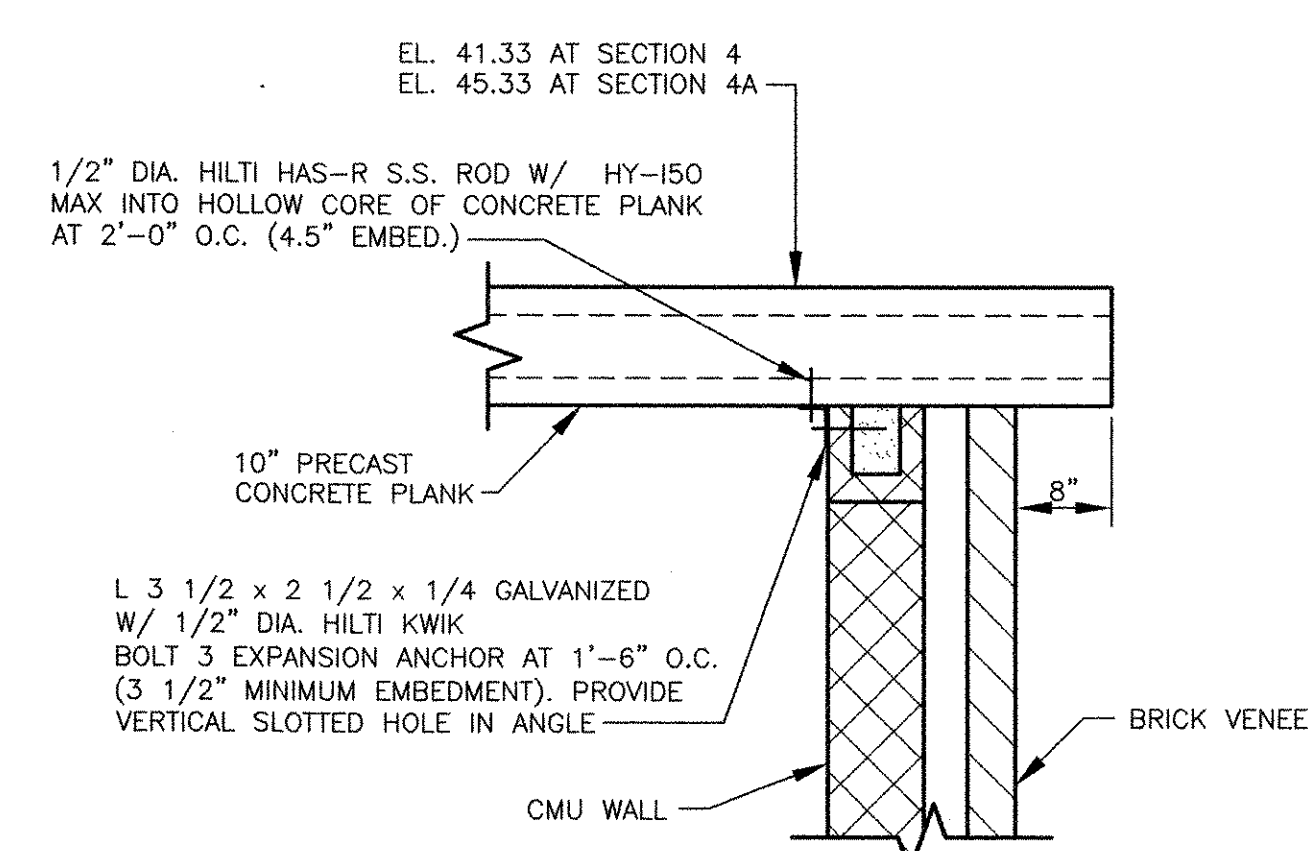
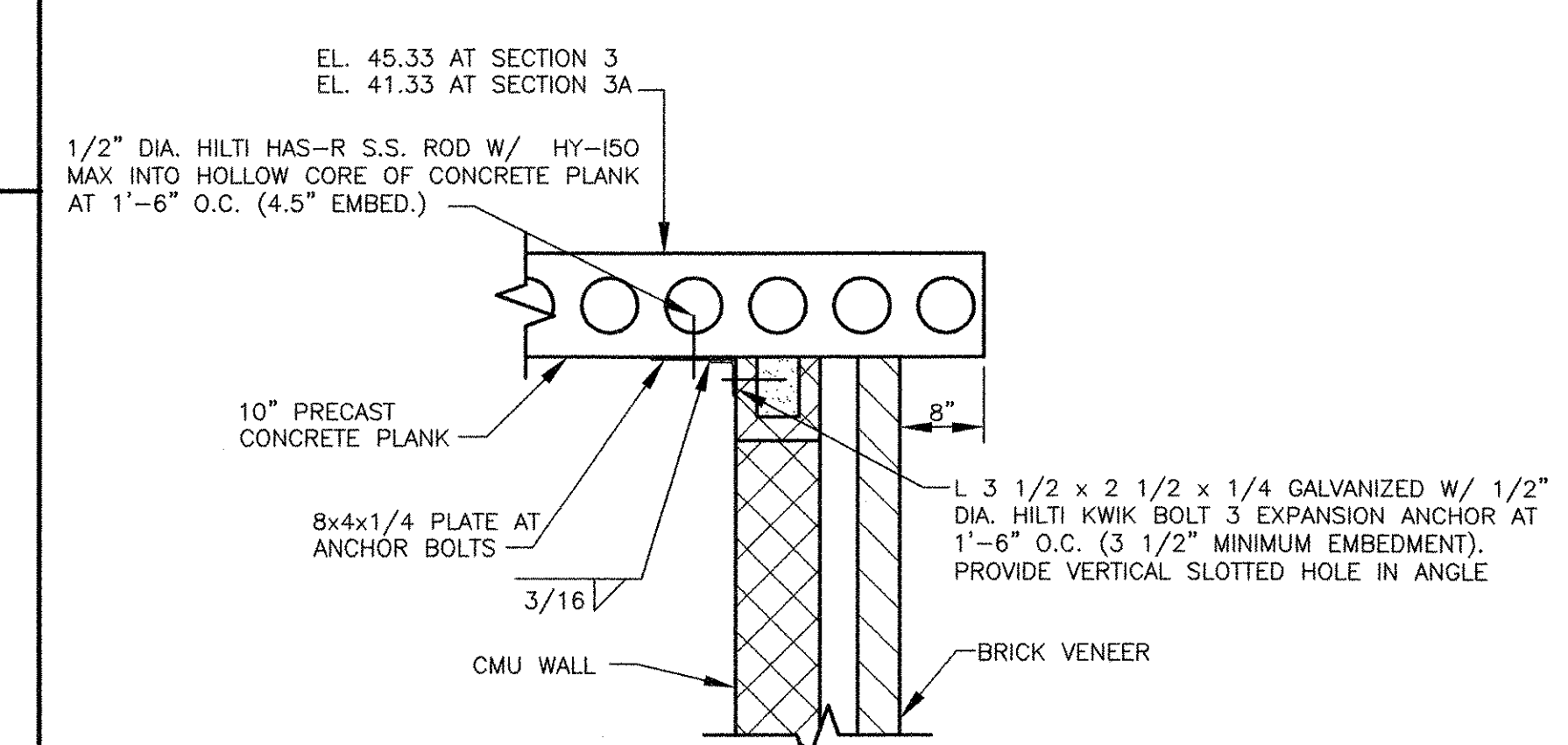
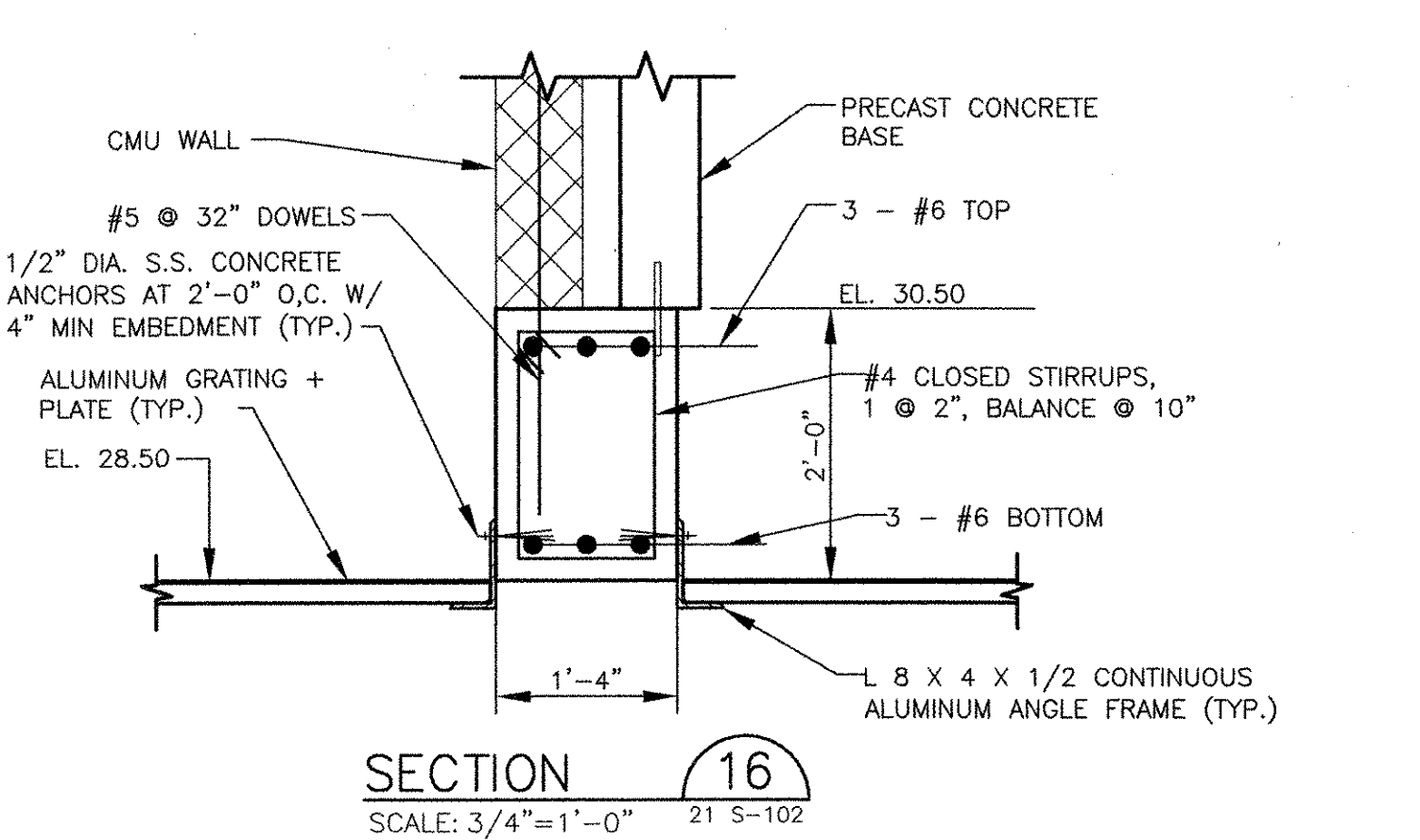
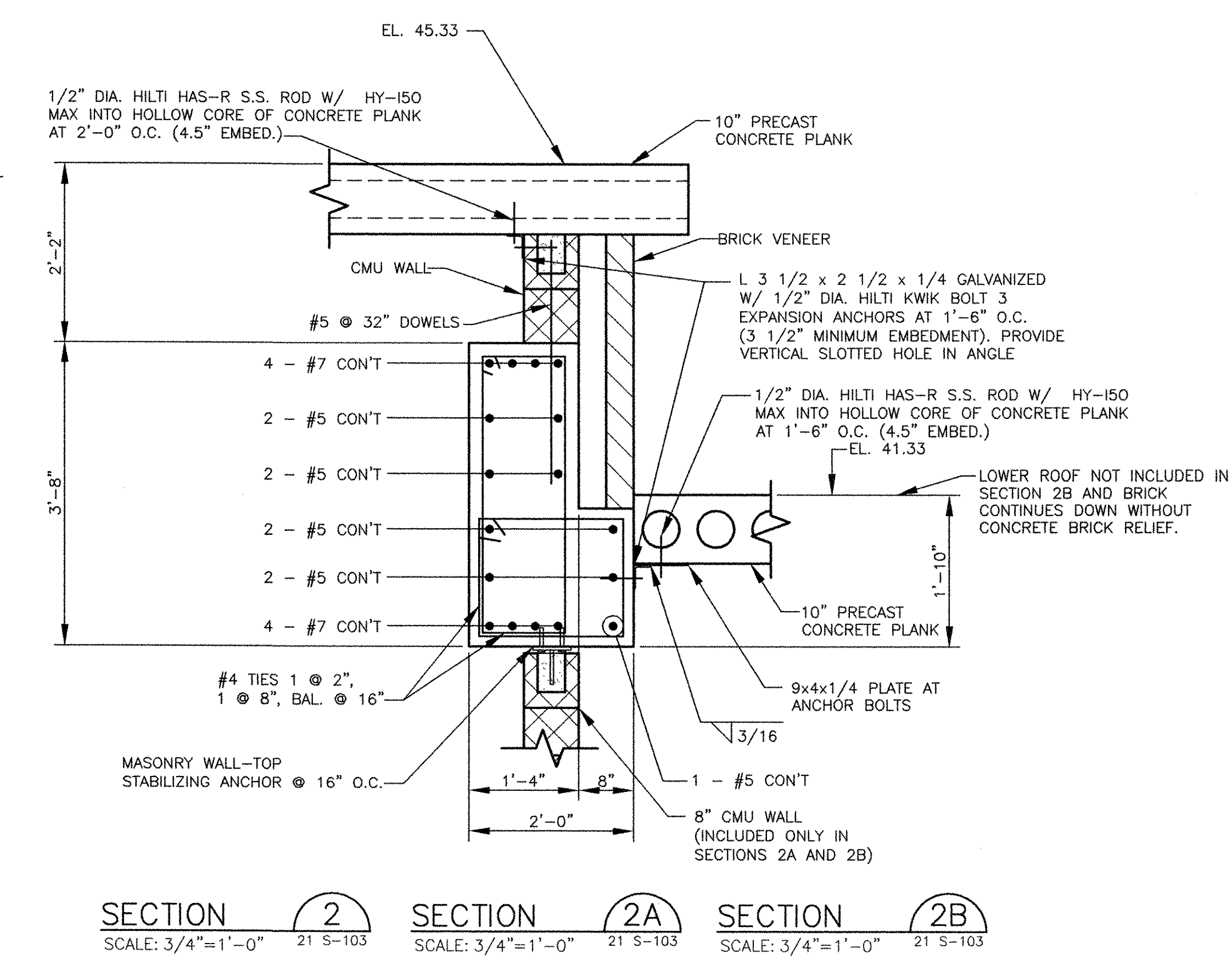
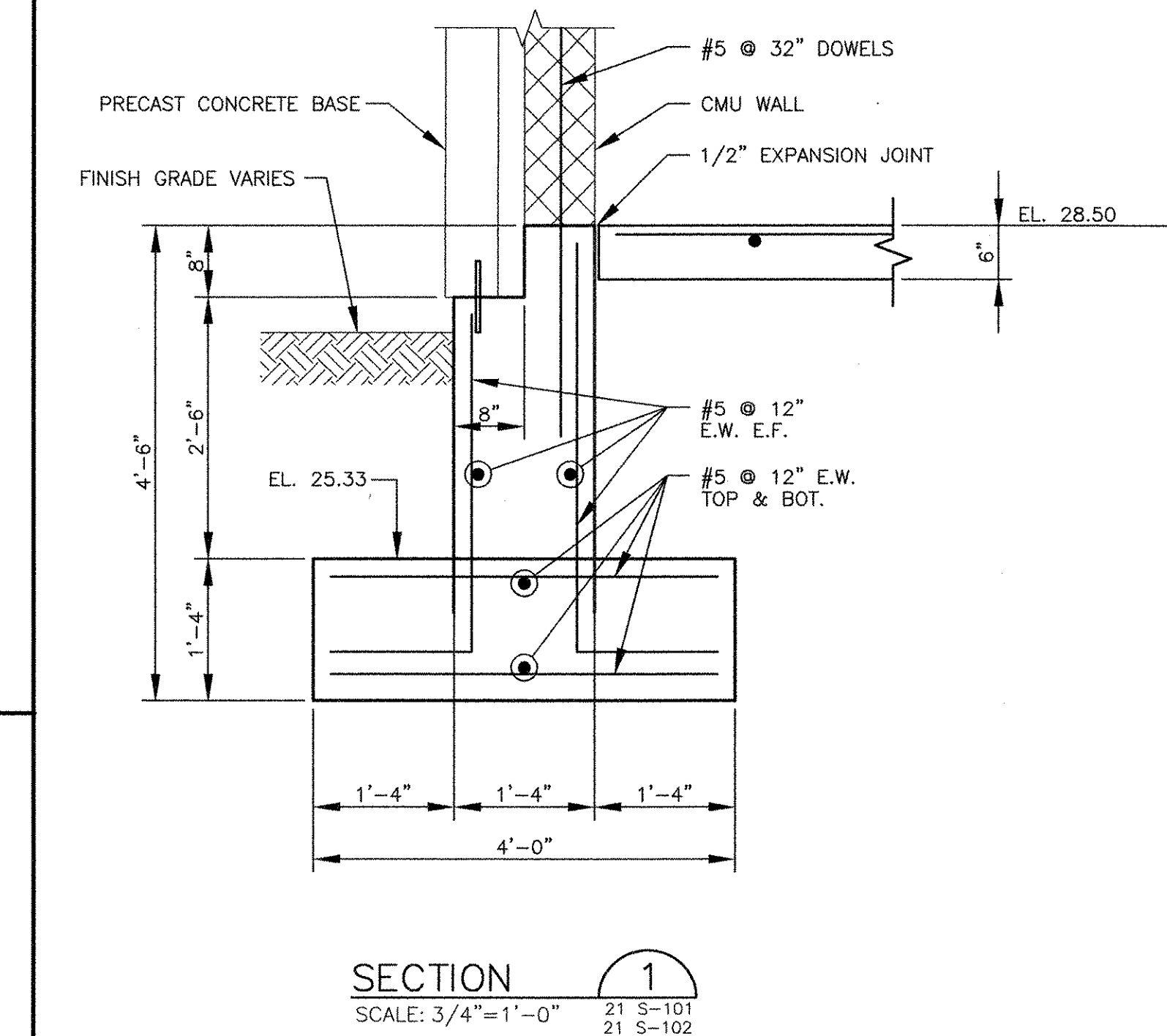
STRUCTURAL

PROJECT NO: 60148648
CAD DWG FILE: 21 5-104
DESIGNED BY: J. WELCH
DRAWN BY: J. GENTILE
DEPT CHECK: R. FIORE
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

21 S-104

PRN/FIL/NAME: P:\0148648 - EAST PROVIDENCE (RSD)\DP-2\SHETS\21 S-104.DWG
LAST UPDATE: Monday, October 01, 2012 12:25:47 PM
PLOT DATE: Tuesday, October 23, 2012 8:52:45 AM
ANSI D - 1-10-12

PATH/FILENAME: P:\1\148648 - EAST PROVIDENCE (D0) DP-3\SHEETS\21 S-301.DWG
LAST UPDATE: Monday, October 01, 2012 2:38:57 PM
ANSI D - 1-0ct-12



AECOM
AECOM USA, INC.
701 EDgewater Drive
Burlingame, CA 94010-5000
Phone: (916) 246-5000

RECORD DRAWINGS

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
2	4/4/11	AC	RF	ELIMINATED PARAPET
1	3/21/11	AC	RF	ROOF TO CONCRETE PLANK & ADDED OC

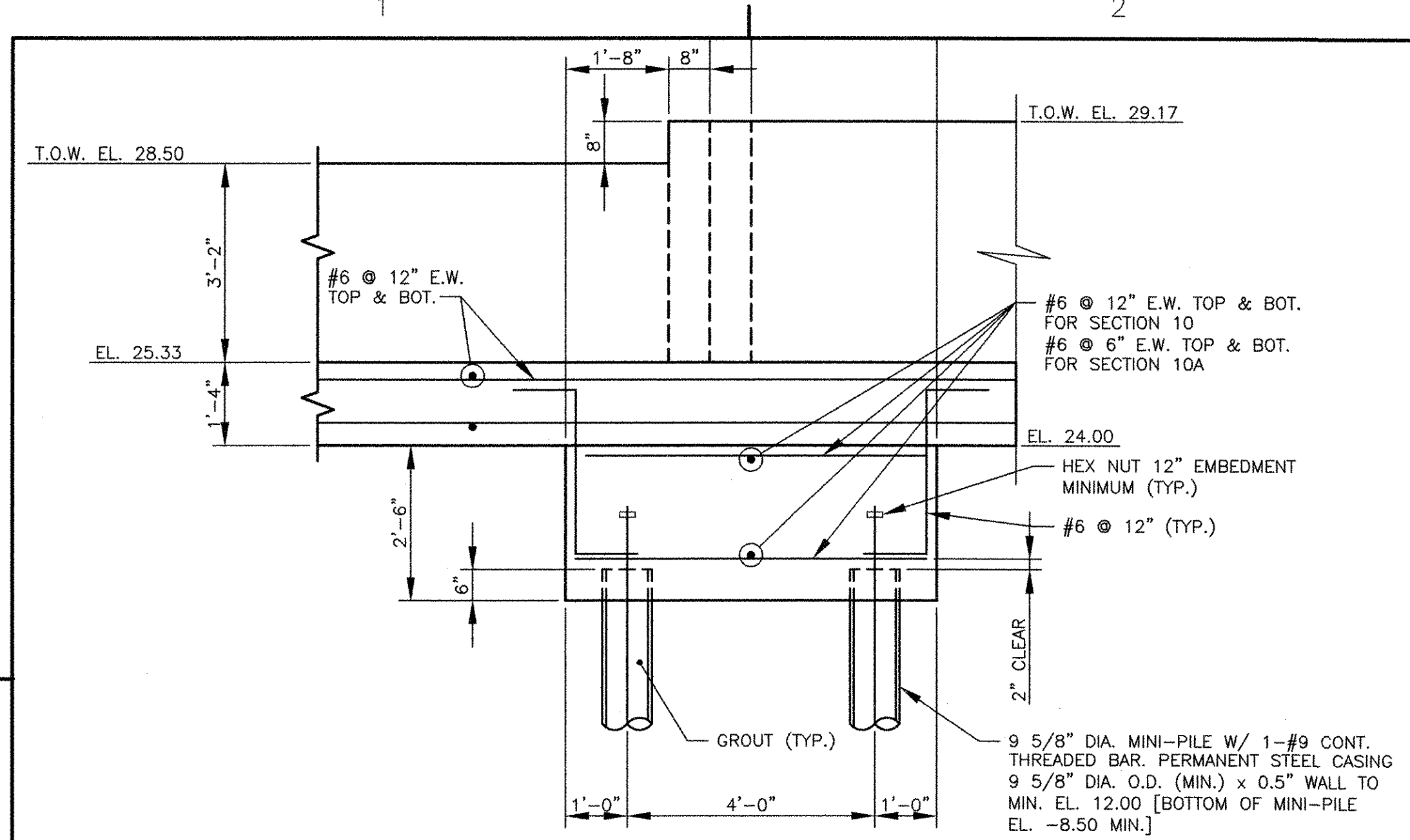
RECORD DRAWING
NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
HEADWORKS BUILDING
SECTIONS AND DETAILS
STRUCTURAL

PROJECT NO: 60148648
CAD DWG FILE: 21 S-301
DESIGNED BY: J. WELCH
DRAWN BY: J. GENTILE
DEPT CHECK: R. FIORE
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

21 S-301

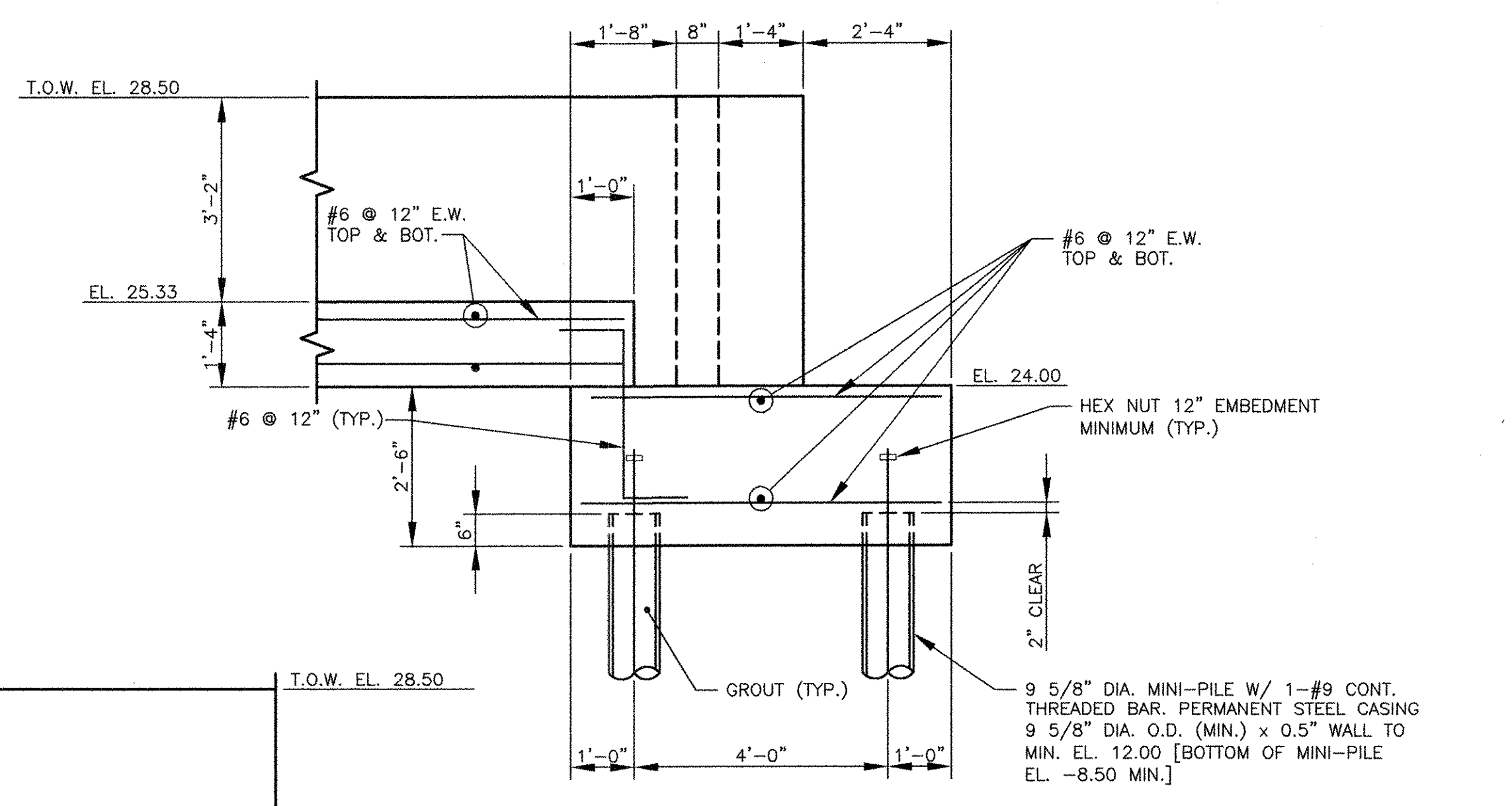
P:\17\FILENAME: P:\60148648 - EAST PROVIDENCE (BRO)\DP-3\SHEETS\21 S-302.DWG
 LAST UPDATE: Monday, October 01, 2012 12:47:29 PM
 PLOT DATE: Tuesday, October 23, 2012 8:52:55 AM
 ANSI D - 1-0c1-12



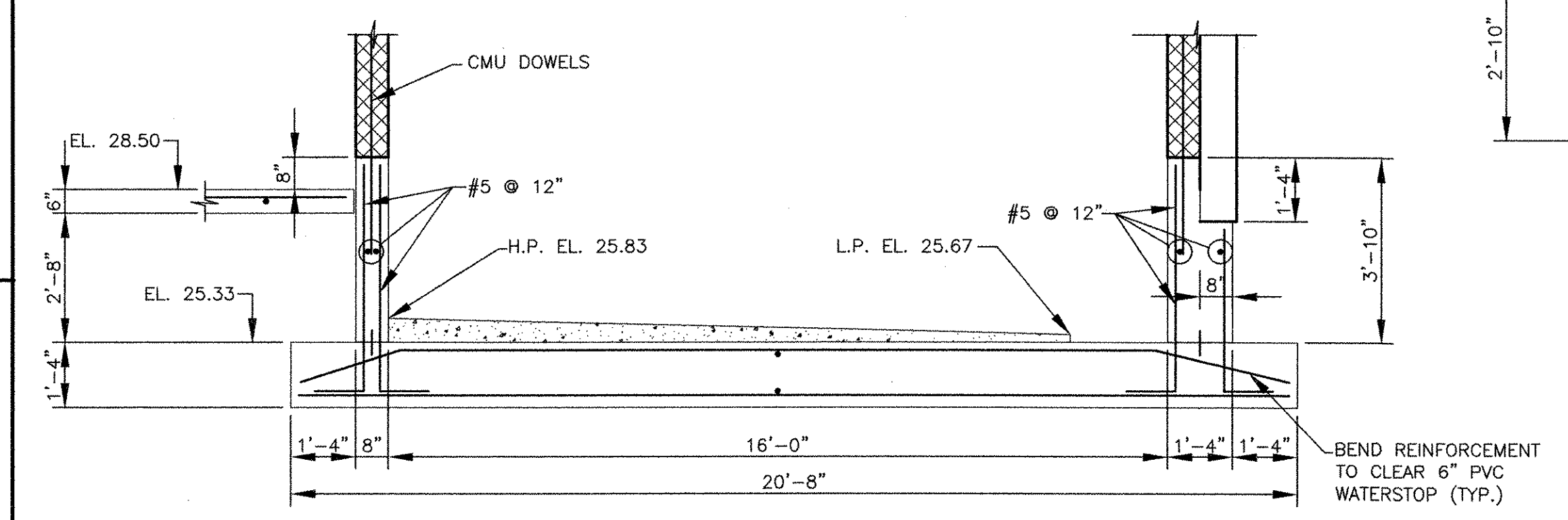
SECTION 10 SCALE: 1/2\"/>

MINI-PILE NOTES

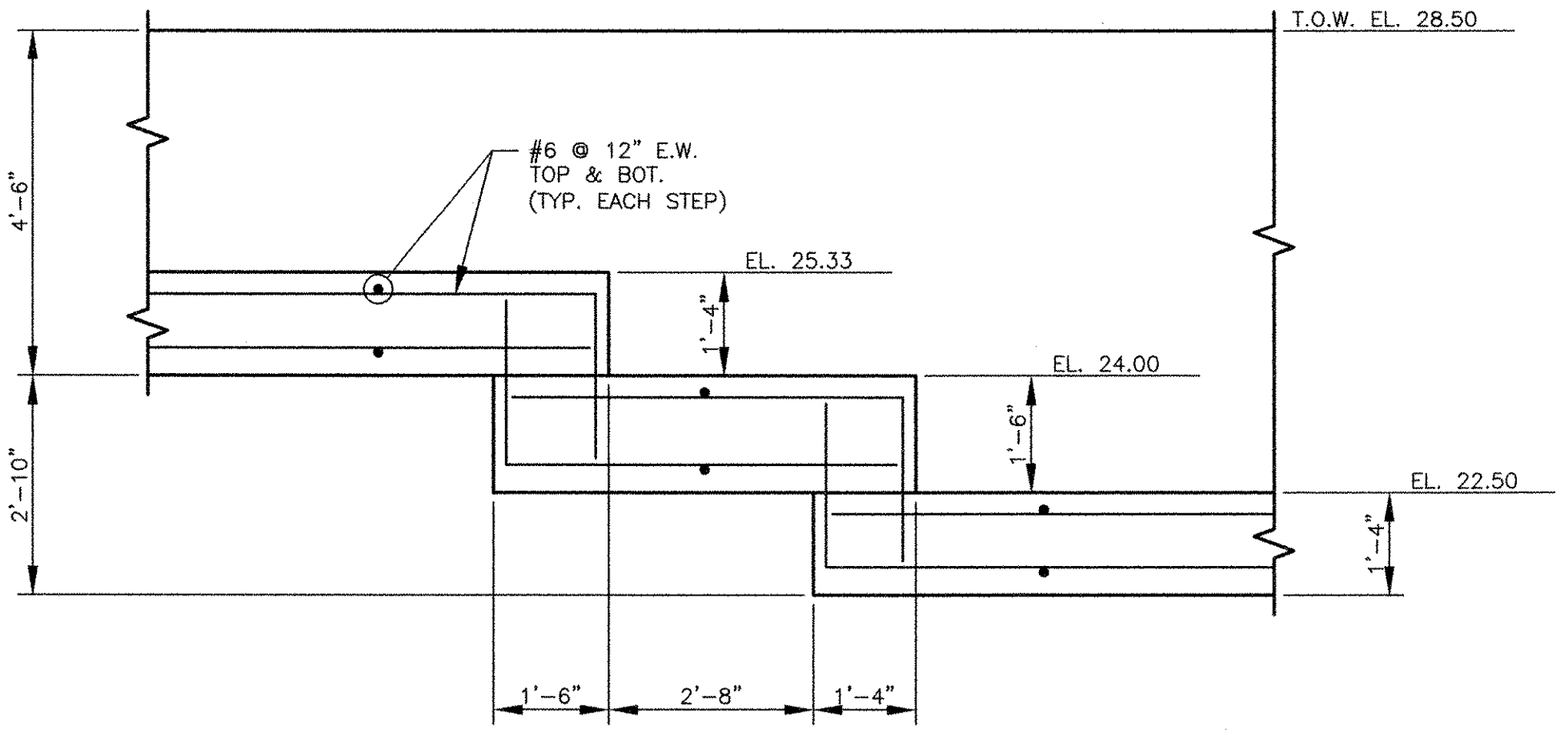
- DESIGN IN ACCORDANCE WITH 2009 IBC.
- PILE SHALL BE 24 TON ALLOWABLE WORKING LOAD IN COMPRESSION AND AN ULTIMATE CAPACITY IN COMPRESSION OF 48 TON.
- ALLOWABLE LATERAL CAPACITY OF PILES SHALL BE 5 TON; ULTIMATE LATERAL CAPACITY SHALL BE 10 TON.
- THE PILES SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO THE FOLLOWING REQUIREMENTS:
 CONCRETE GROUT: $f_c = 5000$ PSI
 ALLOWABLE COMPRESSIVE STRESS: $0.33 f_c'$
 REINFORCEMENT STEEL: $f_y = 75$ PSI [ASTM A615]
 STEEL CASING MINIMUM YIELD STRENGTH: $f_y = 80$ PSI [ASTM A252 GRADE]
 ALLOWABLE COMPRESSIVE STRESS: $0.4 f_y$
- PILE SHALL BE MINIMUM 30'-6\"/>
- THE UPPER 10'-0\"/>
- CONTRACTOR TO VERIFY LOCATIONS FOR WASHINGTON AVE SEWER, JACKSON AVE SEWER, SILVER STREET SEWER, AND OTHER UTILITIES PRIOR TO PILE INSTALLATION.



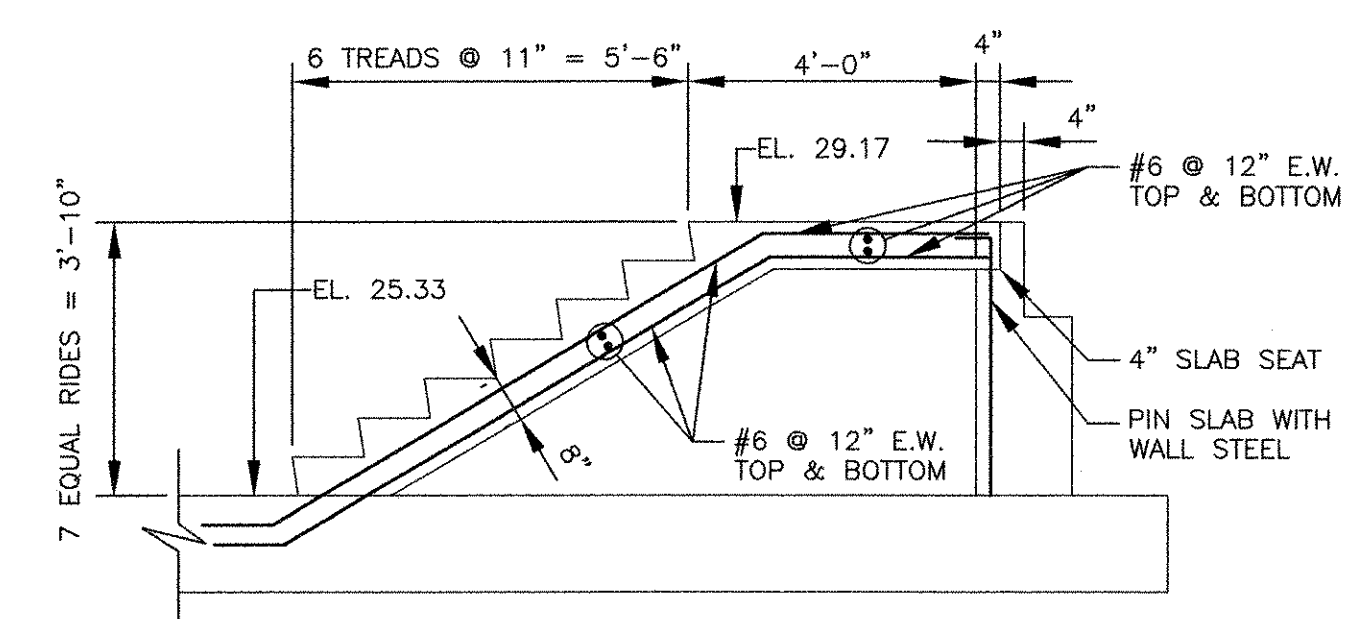
SECTION 5 SCALE: 1/2\"/>



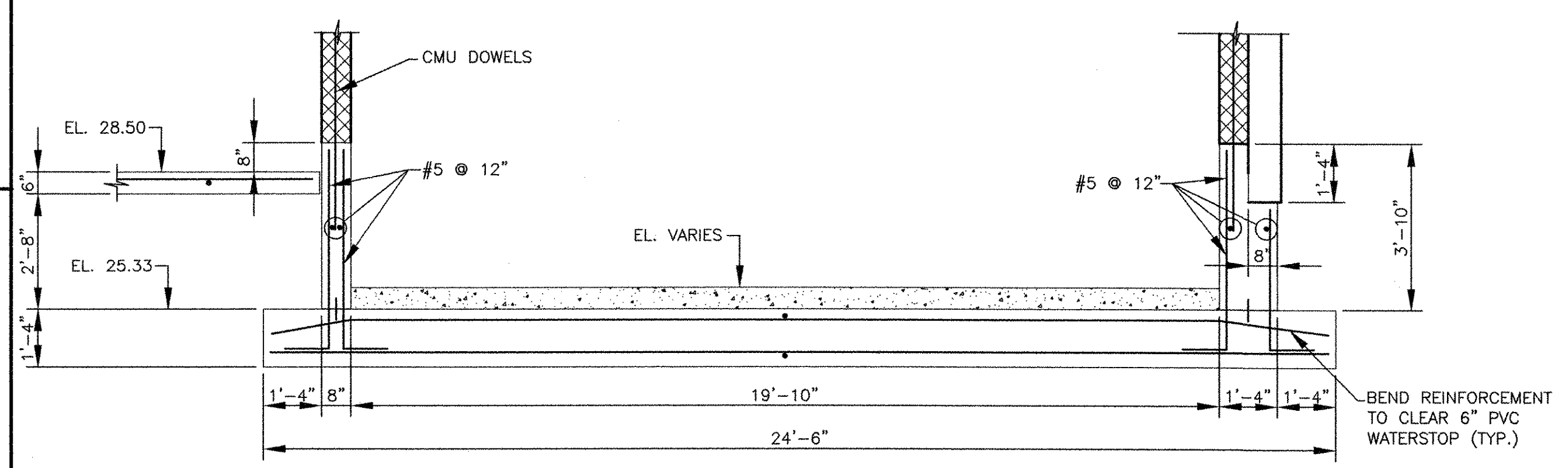
SECTION 9 SCALE: 3/8\"/>



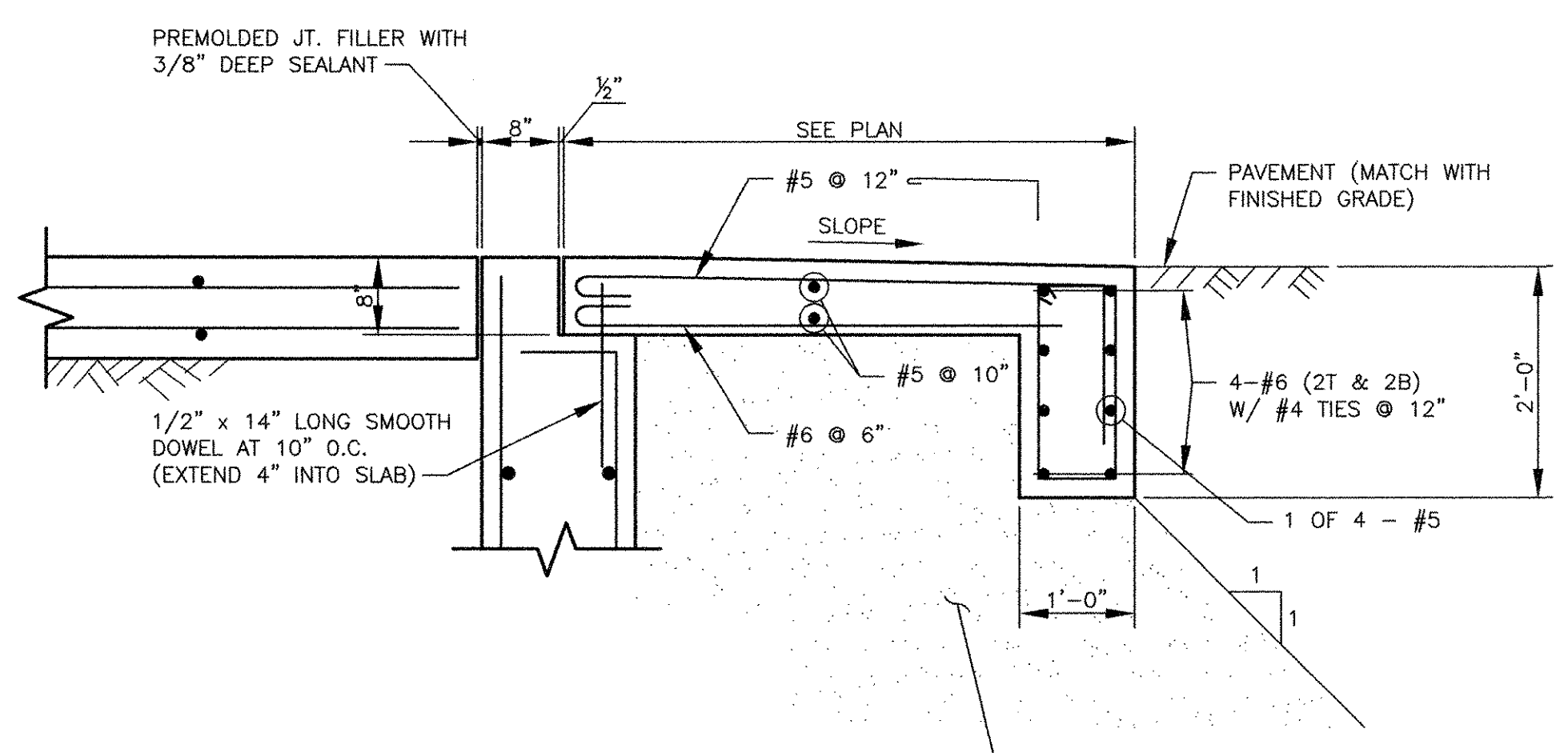
SECTION 6 SCALE: 1/2\"/>



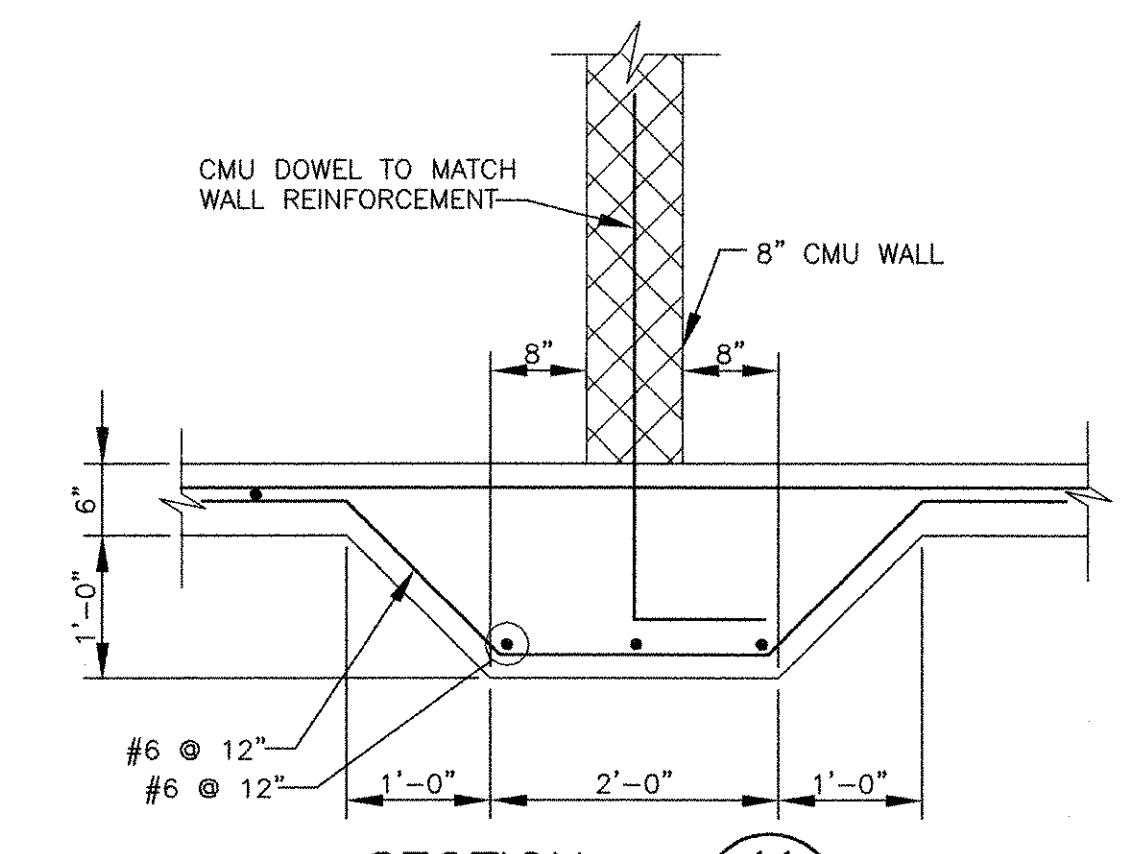
SECTION 15 SCALE: 3/8\"/>



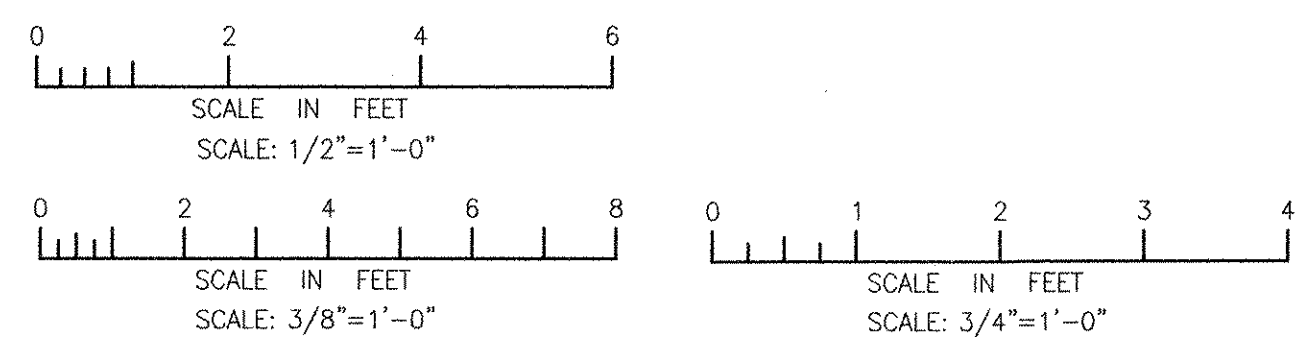
SECTION 8 SCALE: 3/8\"/>



SECTION 7 SCALE: 3/4\"/>



SECTION 11 SCALE: 3/4\"/>



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. 701 EDGEWATER DRIVE FARMINGTON, CT 06030 PHONE (860) 246-8200		REVISIONS	
NO.	DATE	MADE BY / CHECKED	DESCRIPTION
3	10/19/12	AC RF	REVISED FOR RECORD DRAWING
2	4/4/11	AC RF	ELIMINATED PARAPET
1	3/21/11	AC RF	CHANGED ROOF TO CONCRETE PLANK

AECOM

RECORD DRAWINGS

RONALD R. FIORE
Professional Engineer
No. 000000000
Professional Structural

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

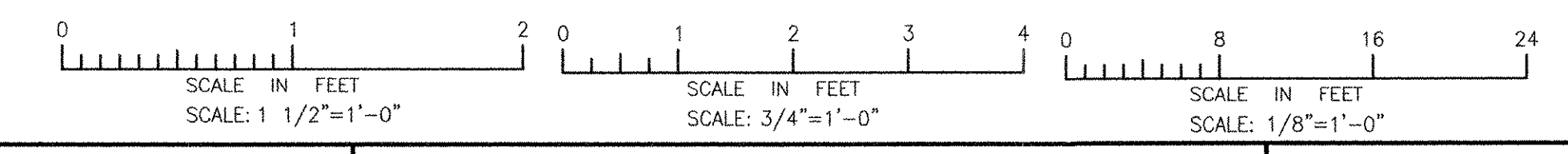
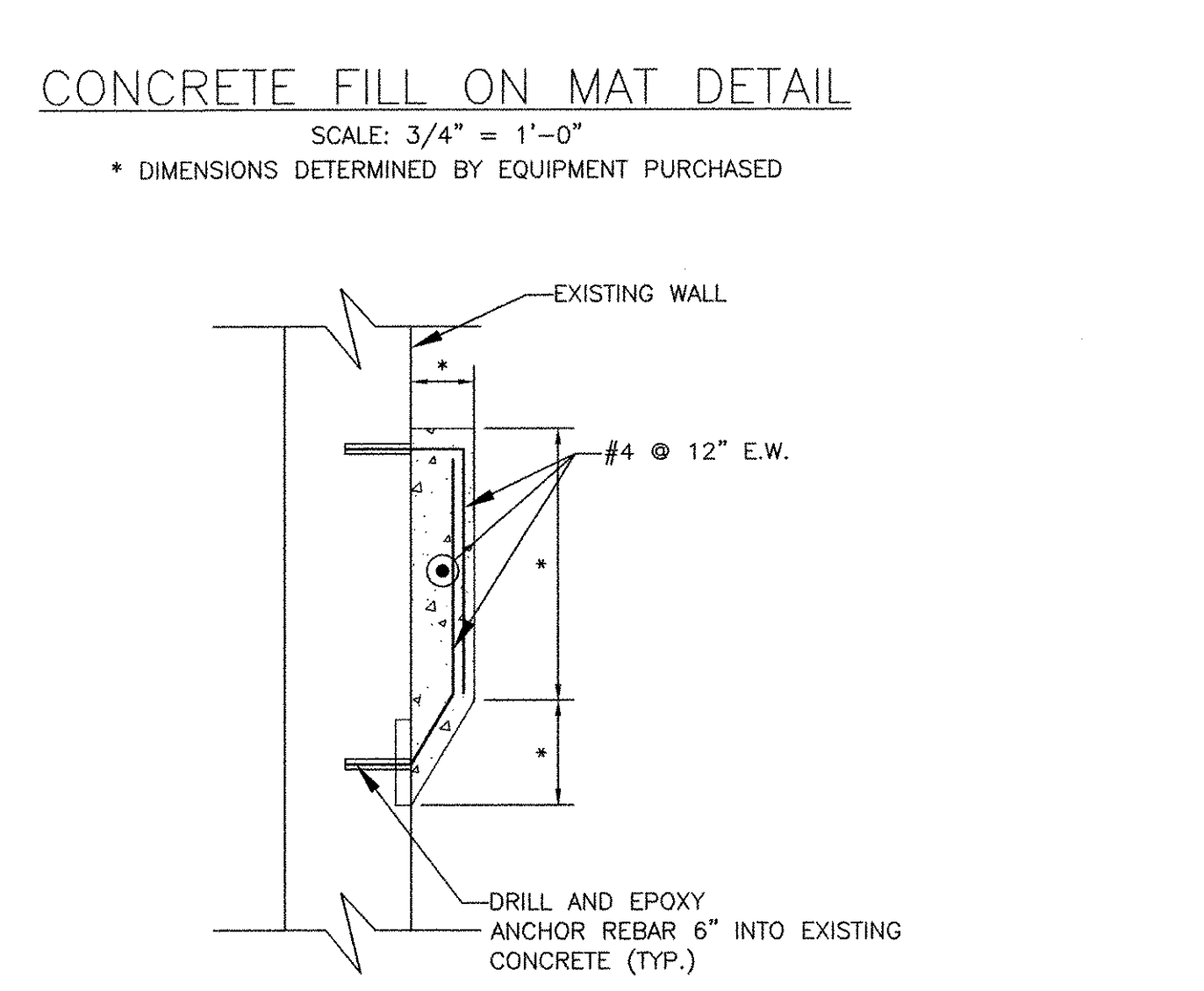
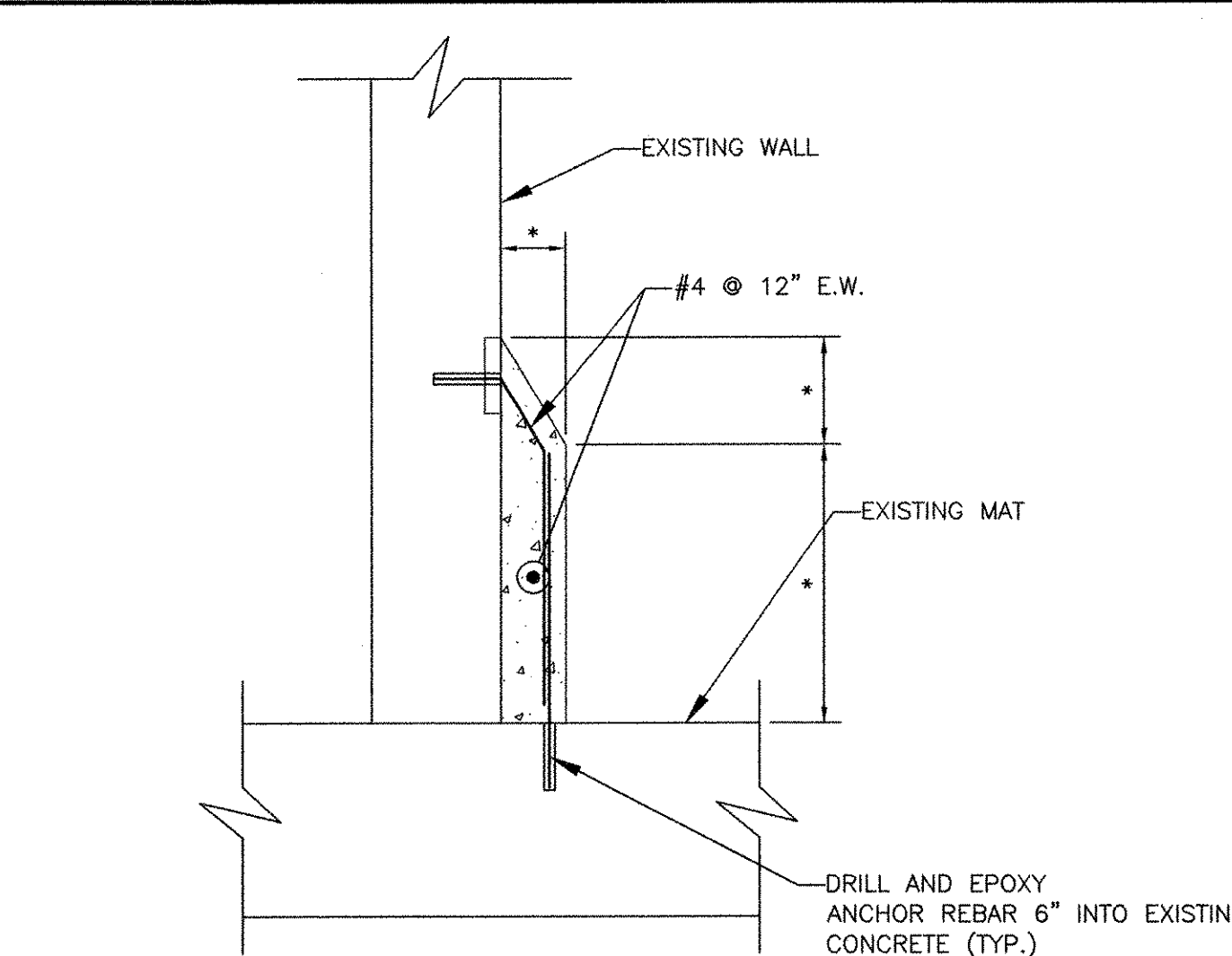
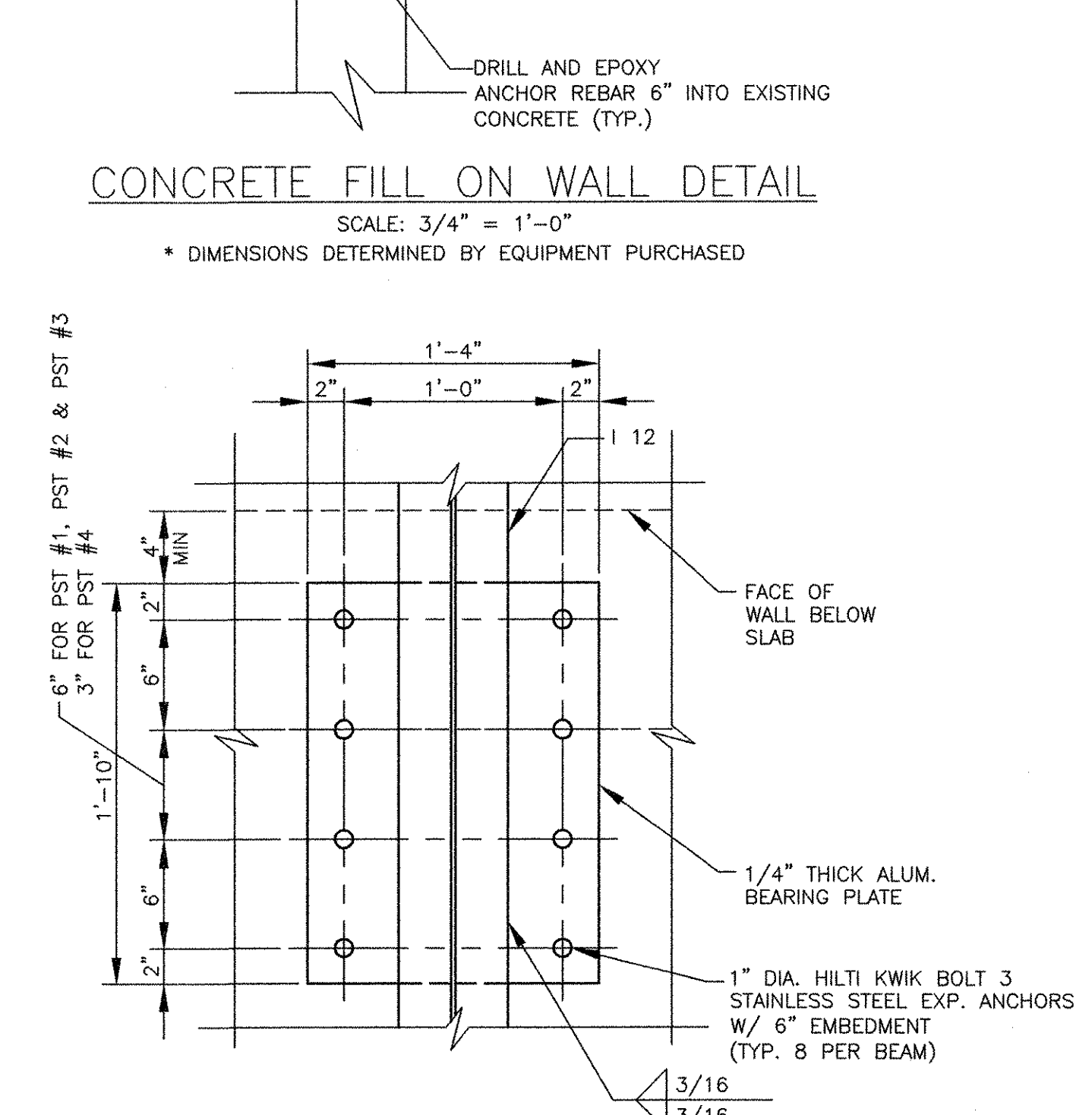
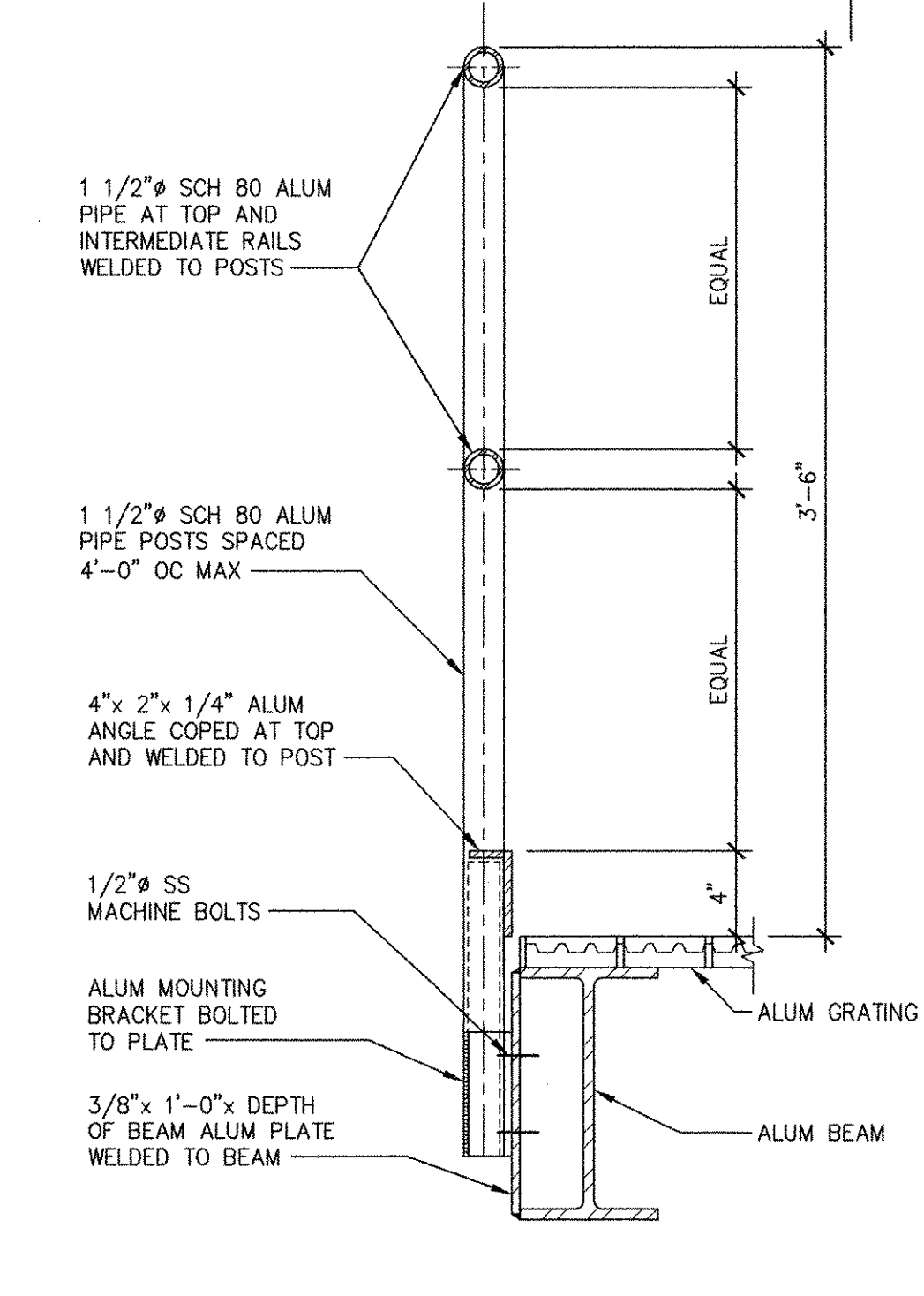
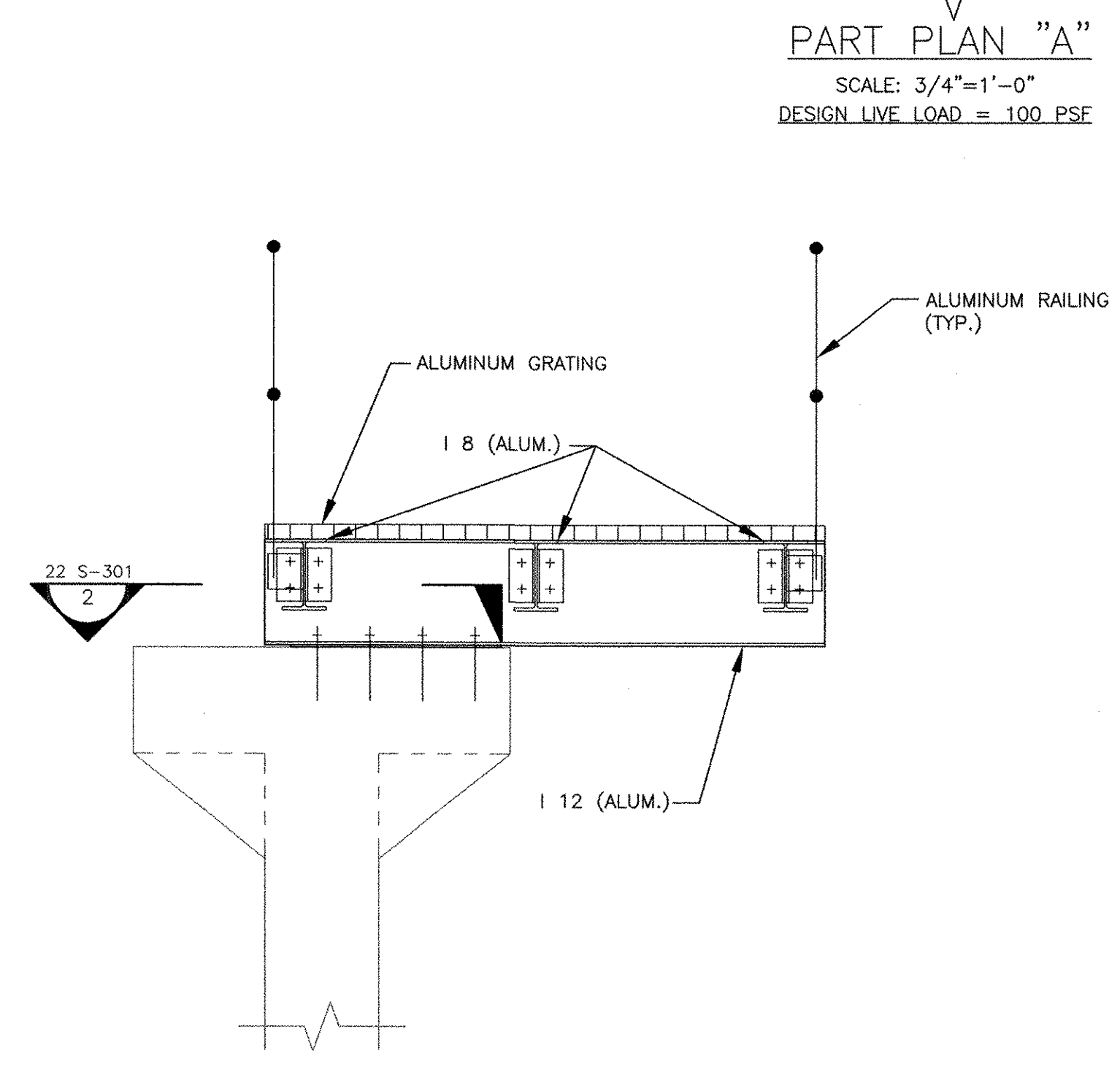
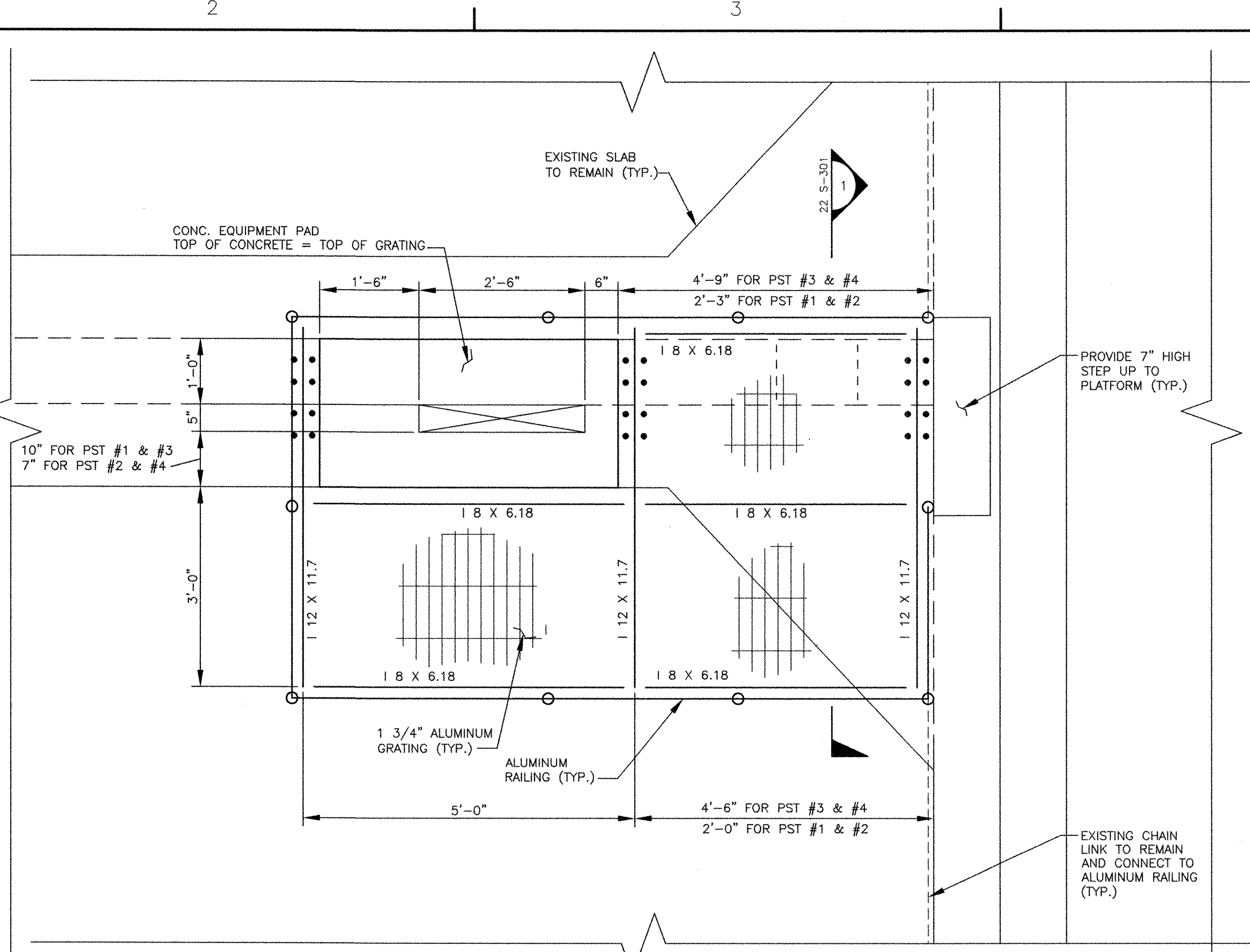
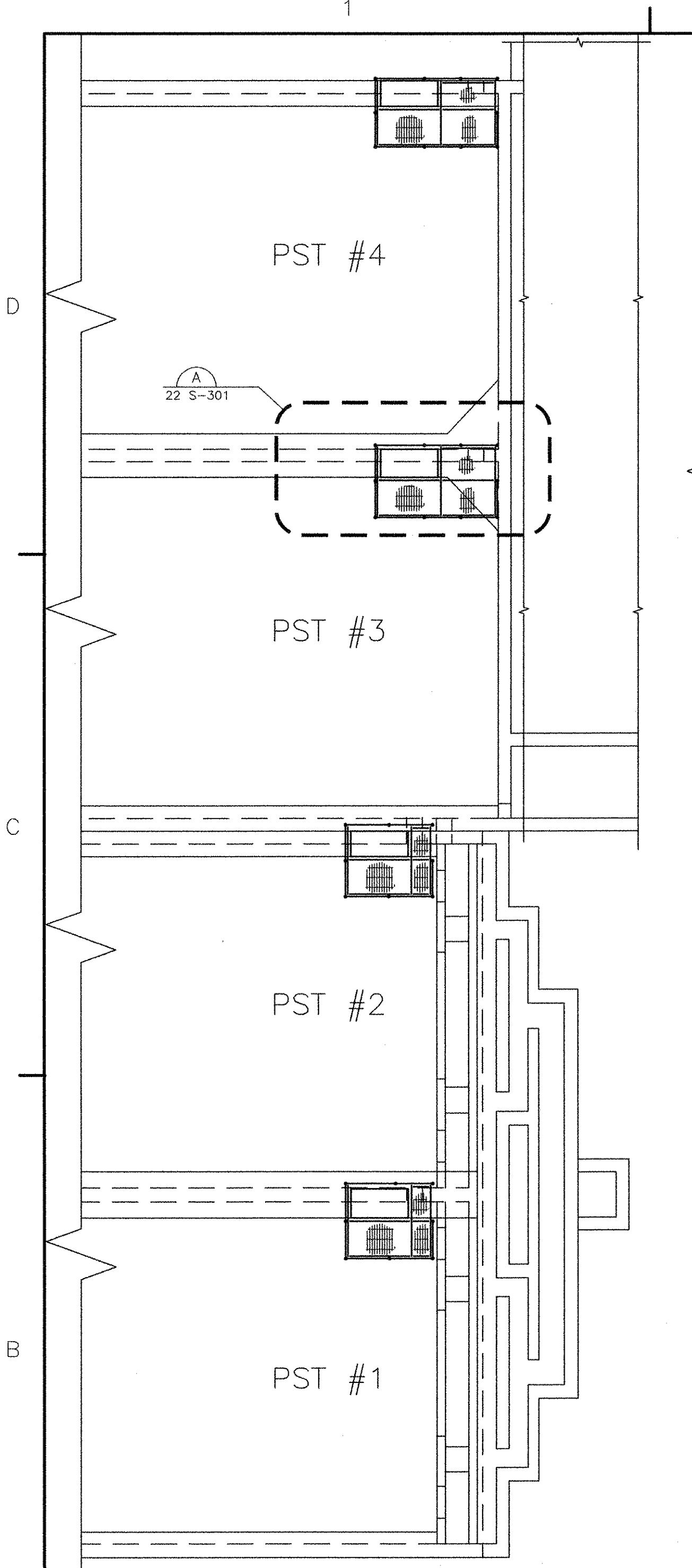
HEADWORKS BUILDING
SECTIONS AND DETAILS II

STRUCTURAL

PROJECT NO: 60148648
CAD DWG FILE: 21 S-302
DESIGNED BY: J. WELCH
DRAWN BY: J. GENTILE
DEPT CHECK: R. FIORE
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

21 S-302

PATH: F:\PROJECTS\60148648 - EAST PROVIDENCE BOD\DWG\2\SHEETS\22 S-301.DWG
 LAST UPDATE: Monday, October 01, 2012 12:49:58 PM
 FLOT DATE: Tuesday, October 23, 2012 9:52:58 AM
 ANSI D - 1-10-12



MARK	DATE	MADE BY	CHECKED	DESCRIPTION	REVISIONS
2	10/19/12	AC	JM	REVISED FOR RECORD DRAWING	
1	6/17/11	AC	JM	REVISED PLATFORM DIMENSIONS	

AECOM USA, INC.
 701 EDEWATER DRIVE
 PROVIDENCE, RI 02909
 PHONE (881) 246-5000

AECOM

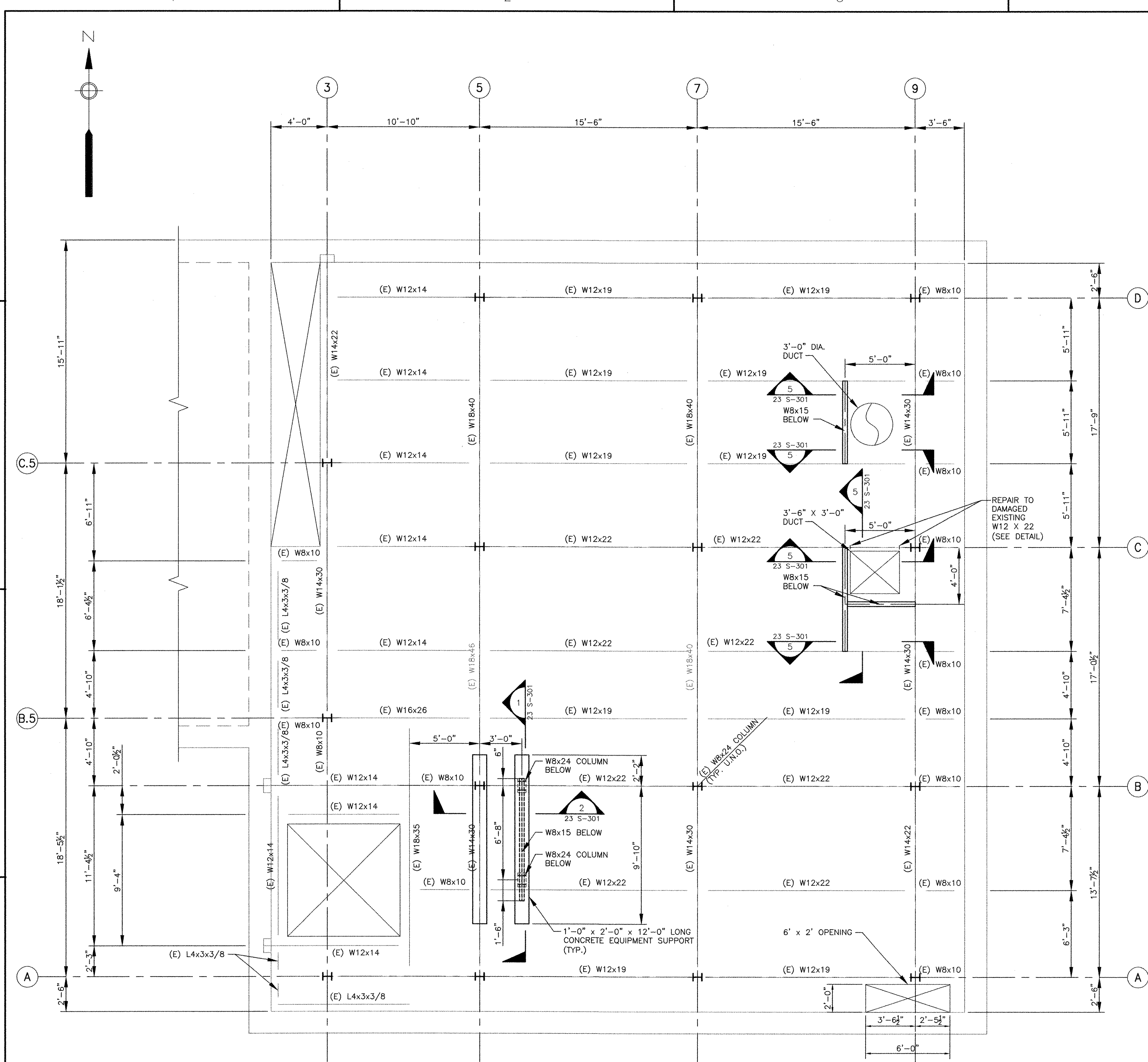
RONALD R. FIORE
 PROFESSIONAL ENGINEER
 No. 00000000
 STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS 1, 2, 3 & 4
MODIFICATIONS - SECTIONS 1
 STRUCTURAL

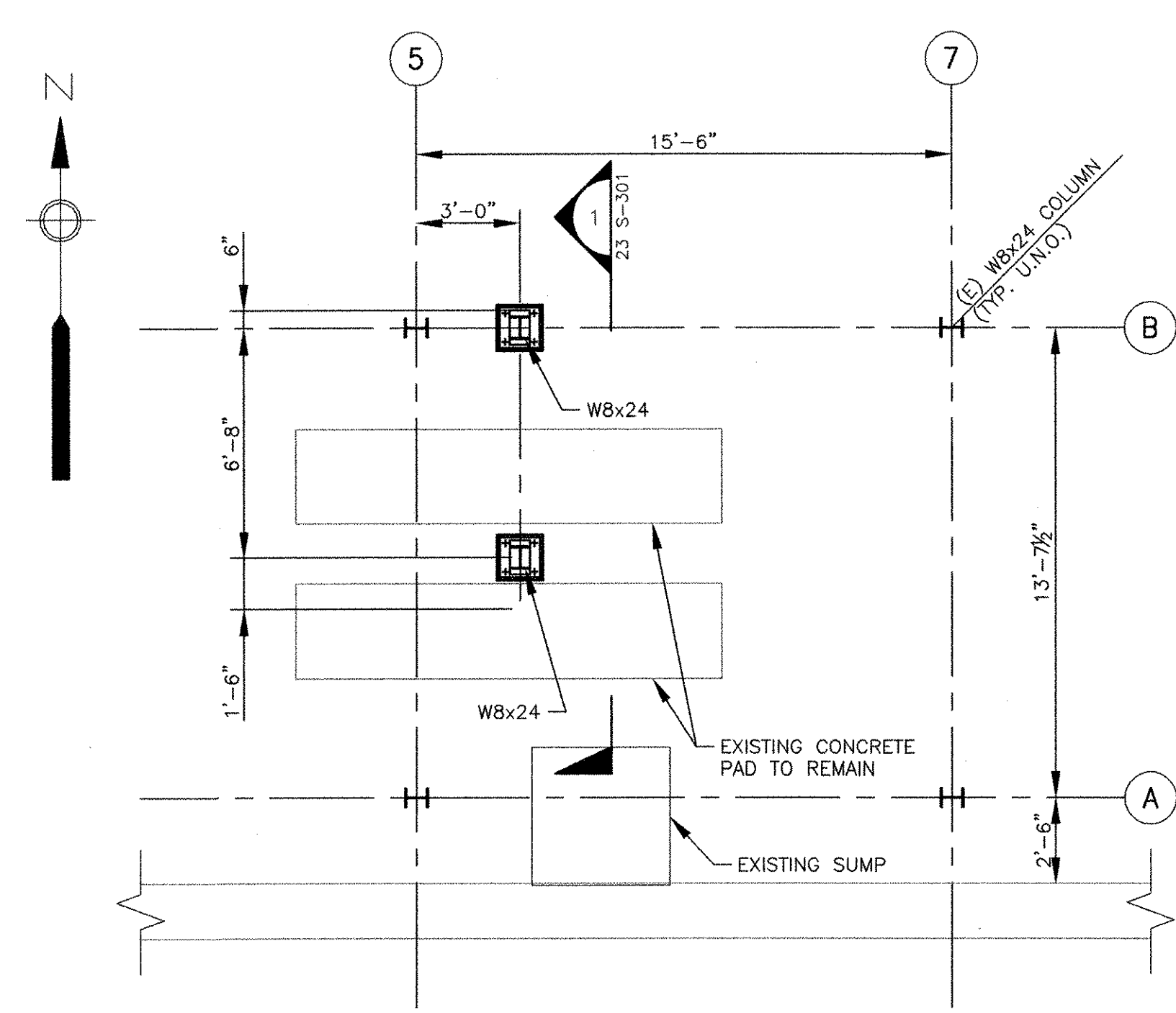
PROJECT NO:	60148648
CAD DWG FILE:	22 S-301
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED
22 S-301	

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

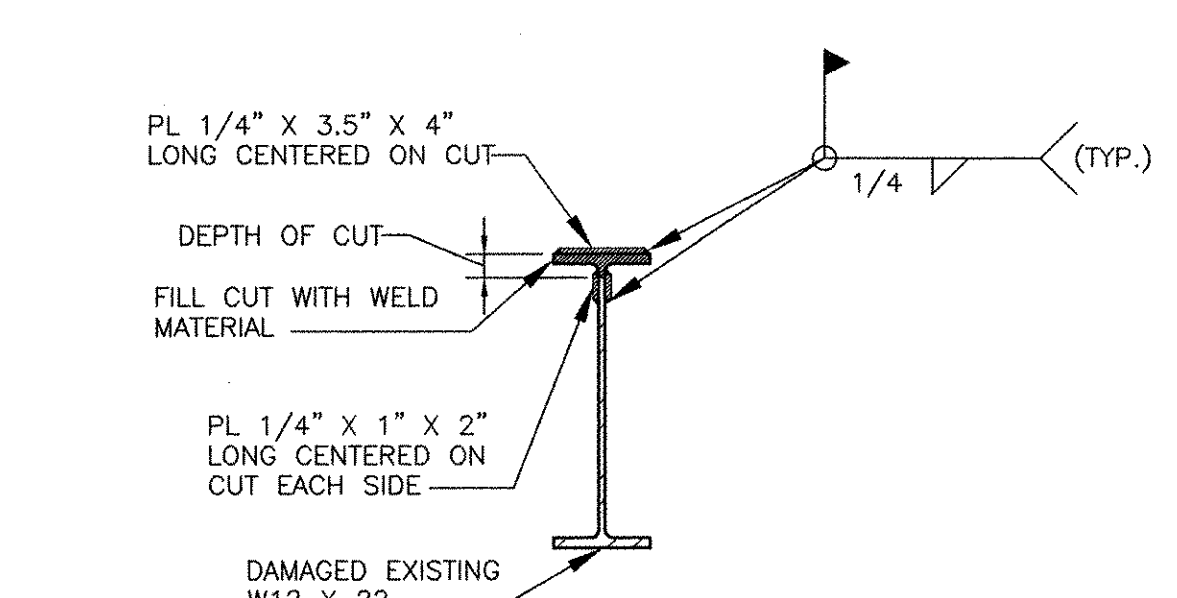
PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DRB\DP-2\SHEETS\33 S-101.DWG
 LAST UPDATE: Monday, October 01, 2012 1:49:53 PM
 PLOT DATE: Tuesday, October 23, 2012 8:53:01 AM
 ANSI D - 1-0ct-12



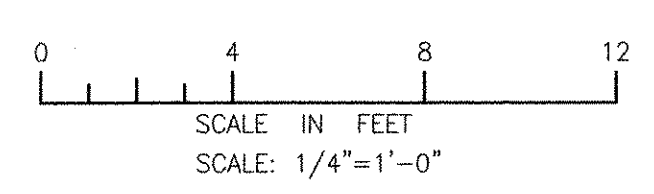
UPPER PLAN EL. 18.00
 SCALE: 1/4" = 1'-0"
 DESIGN LIVE LOAD = 150 PSF + EQUIPMENT LOADS
 (E) = EXISTING STEEL
 * INDICATES DIMENSIONS TO BE COORDINATED WITH EQUIPMENT PURCHASED



LOWER AT PLAN EL. 3.00
 SCALE: 1/4" = 1'-0"



REPAIR TO DAMAGED EXISTING W12 X 22
 SCALE: 1 1/2" = 1'-0"



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM		RECORD DRAWINGS	
AECOM USA, INC. 701 EDgewater Drive Littleton, CO 80120 PHONE (781) 246-5200		REVISIONS MARK DATE MADE BY CHECKED DESCRIPTION	

1	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
---	----------	----	----	----------------------------

CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 OPERATIONS BUILDING PLANS STRUCTURAL	
PROJECT NO: 60148648 CAD DWG FILE: 23 S-101 DESIGNED BY: J. WELCH DRAWN BY: J. GENTILE DEPT CHECK: R. FIORE PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED	
23 S-101	

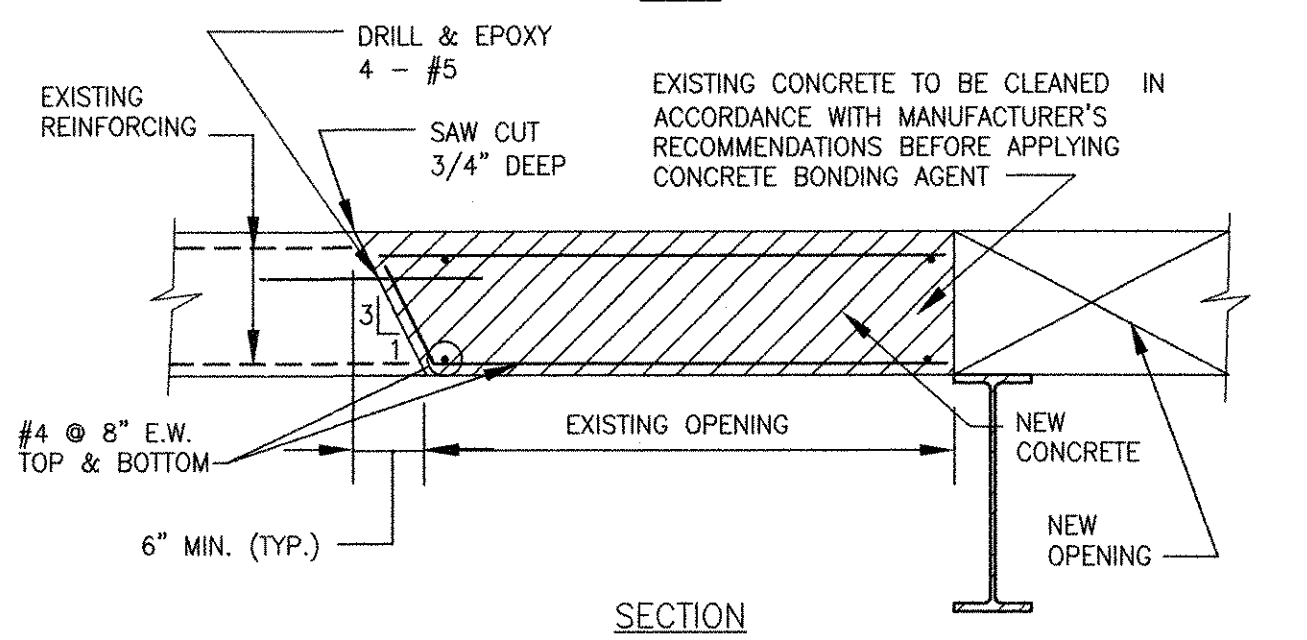
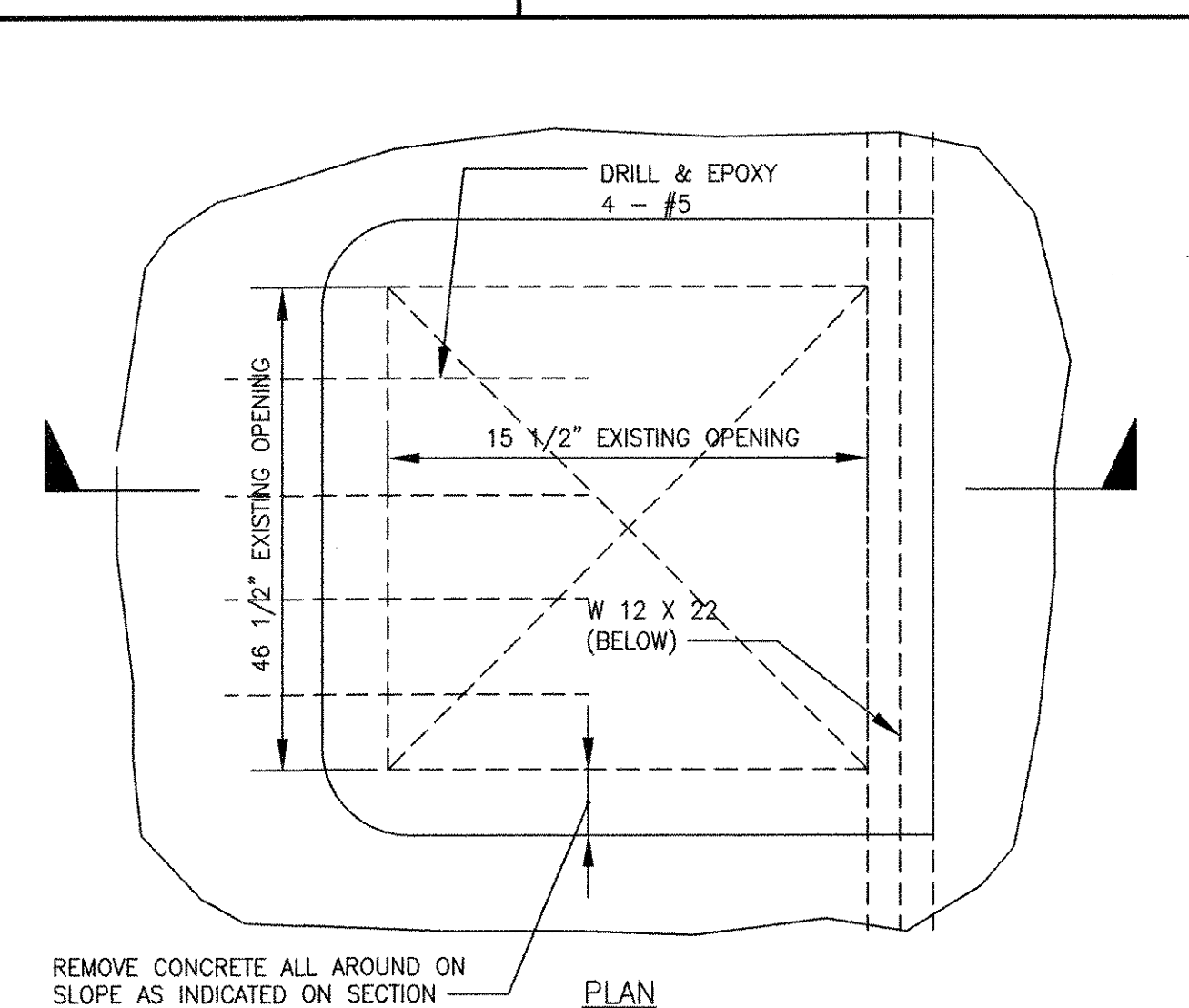
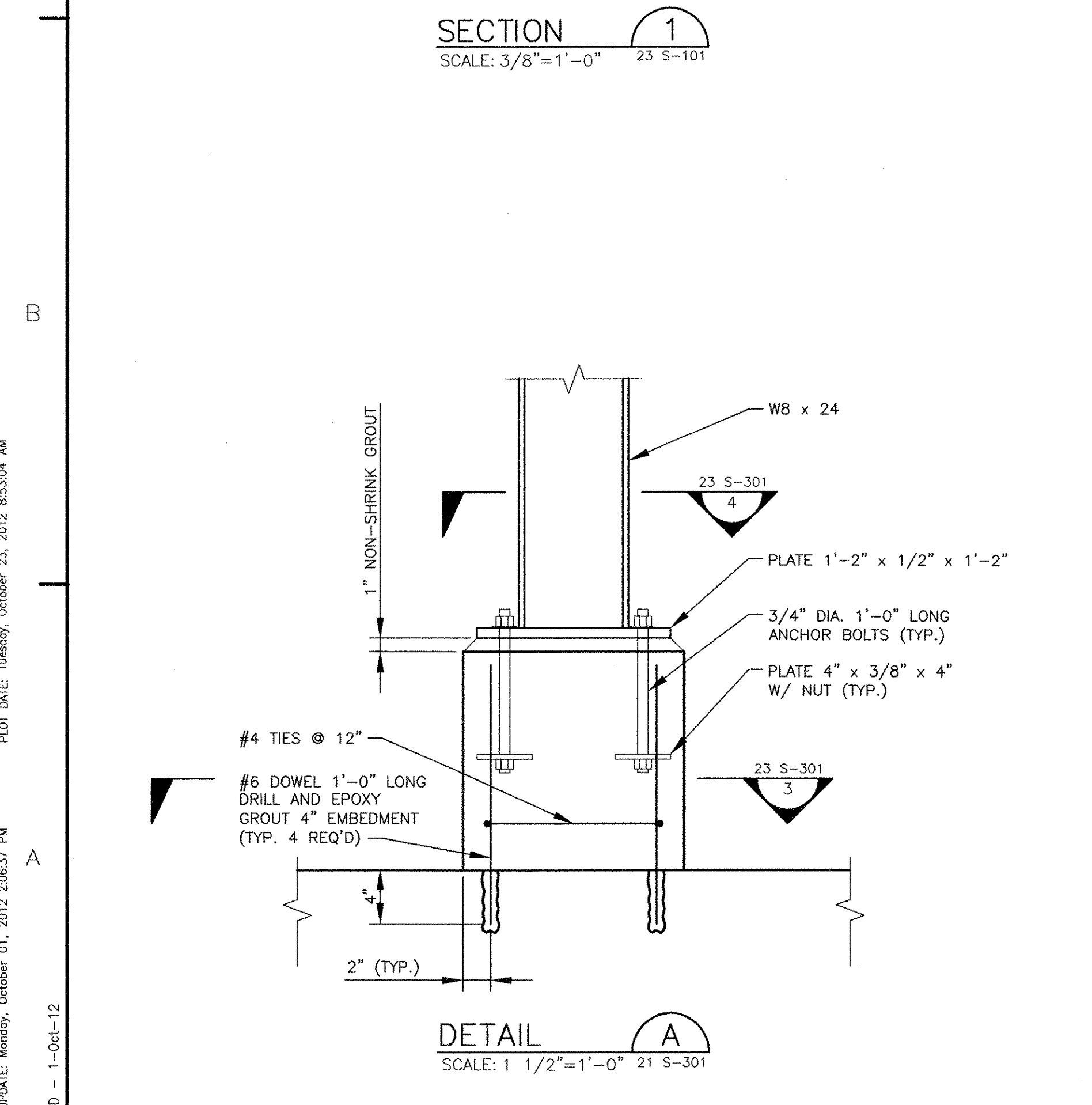
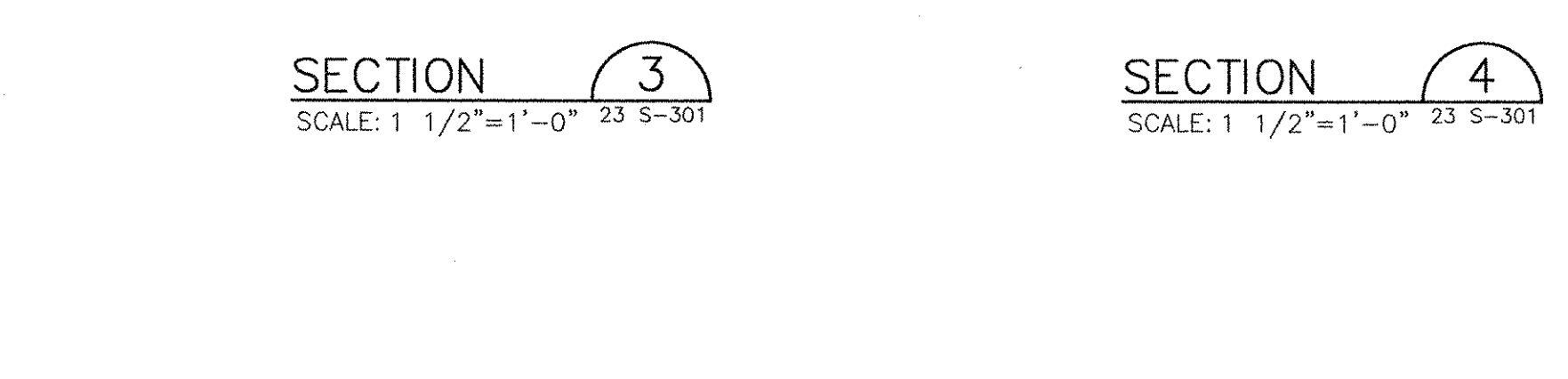
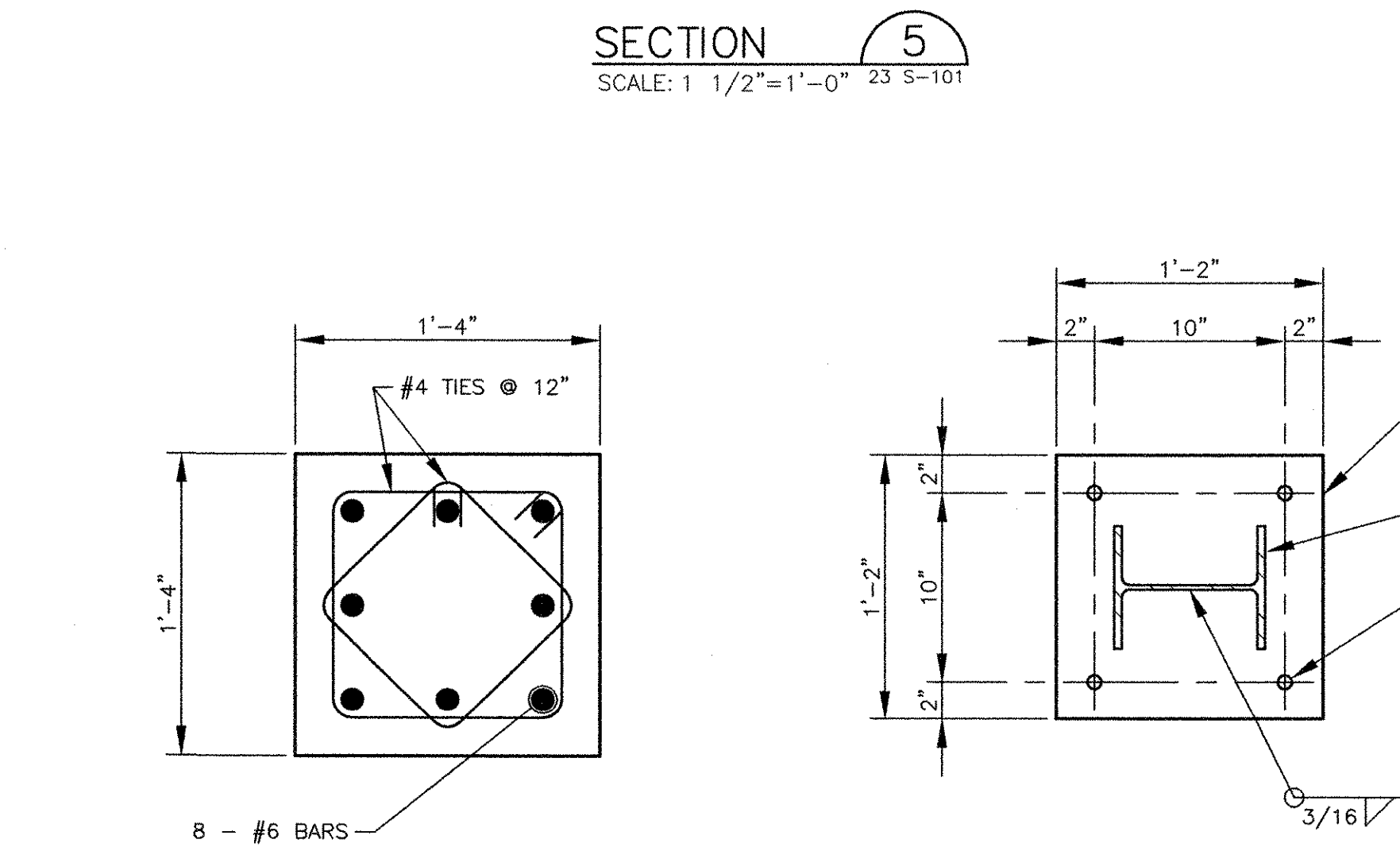
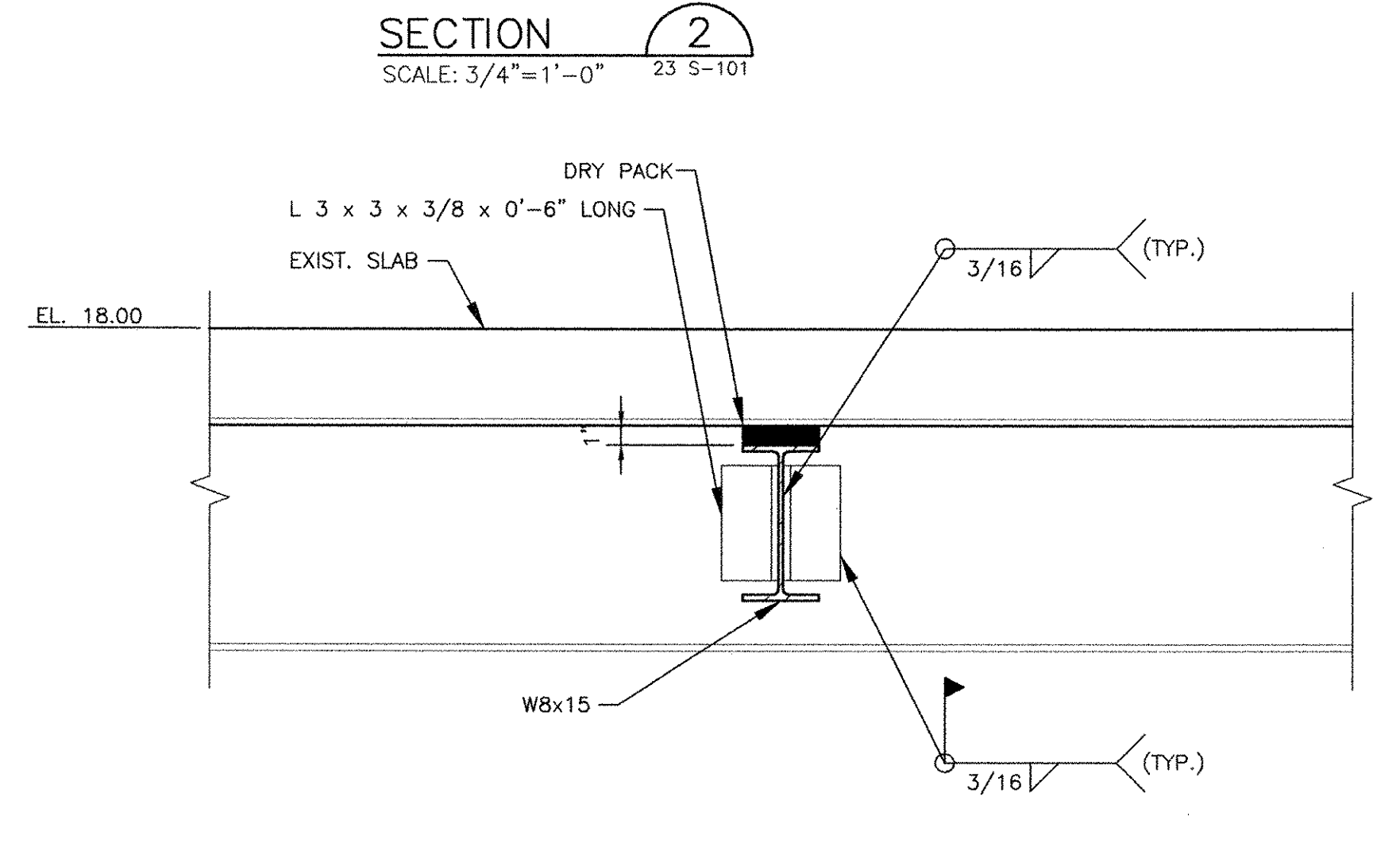
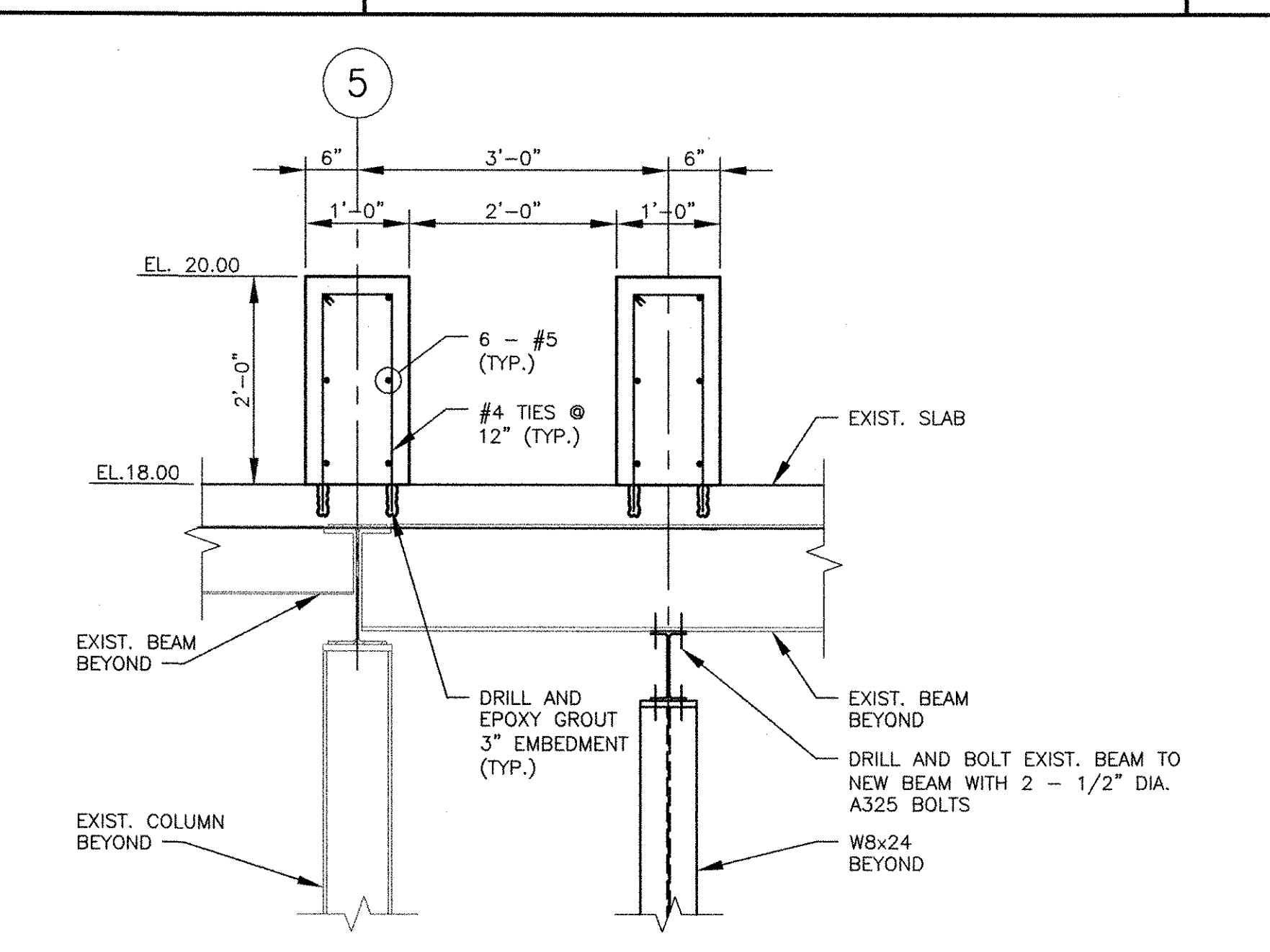
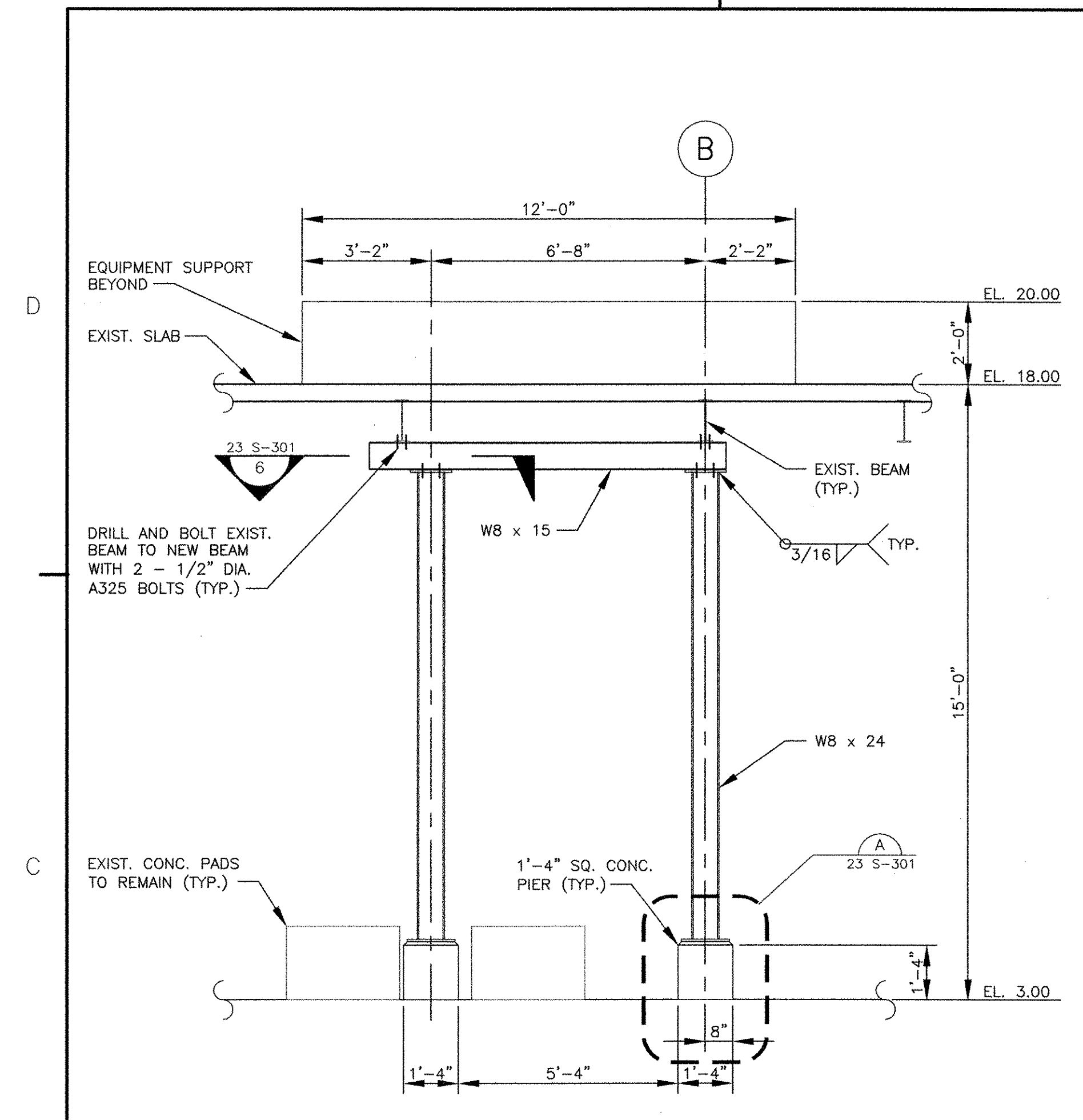
1

2

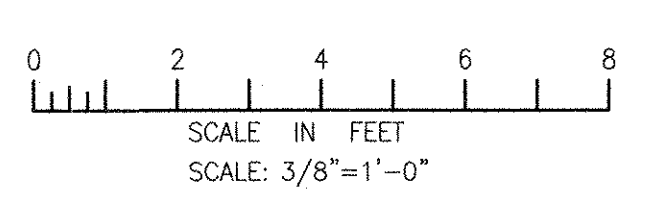
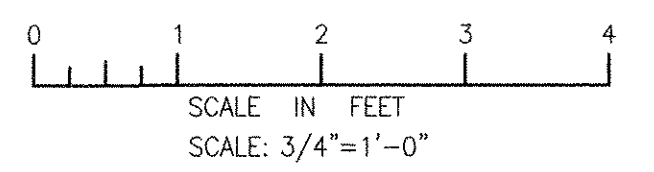
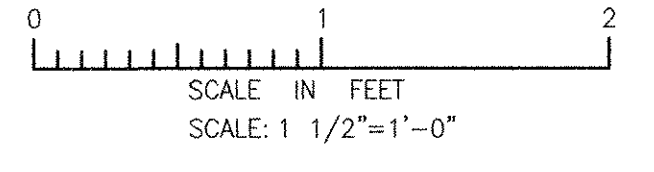
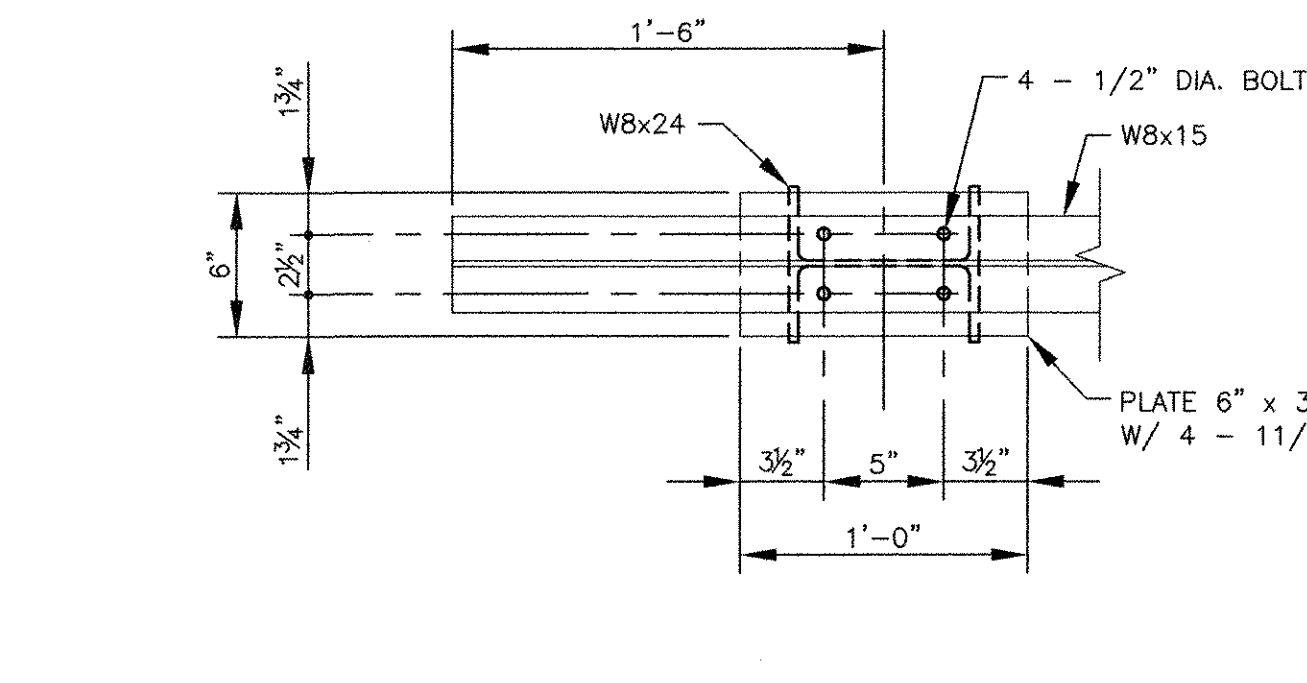
3

4

5



OPERATIONS BUILDING FLOOR OPENING CLOSURE
NTS



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	AC	RF	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS
AECOM USA, INC.
701 EDGEWATER DRIVE
FARMINGTON, CT 06030
PHONE (861) 246-5200

RONALD R. FIORE
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL
No. 000000000

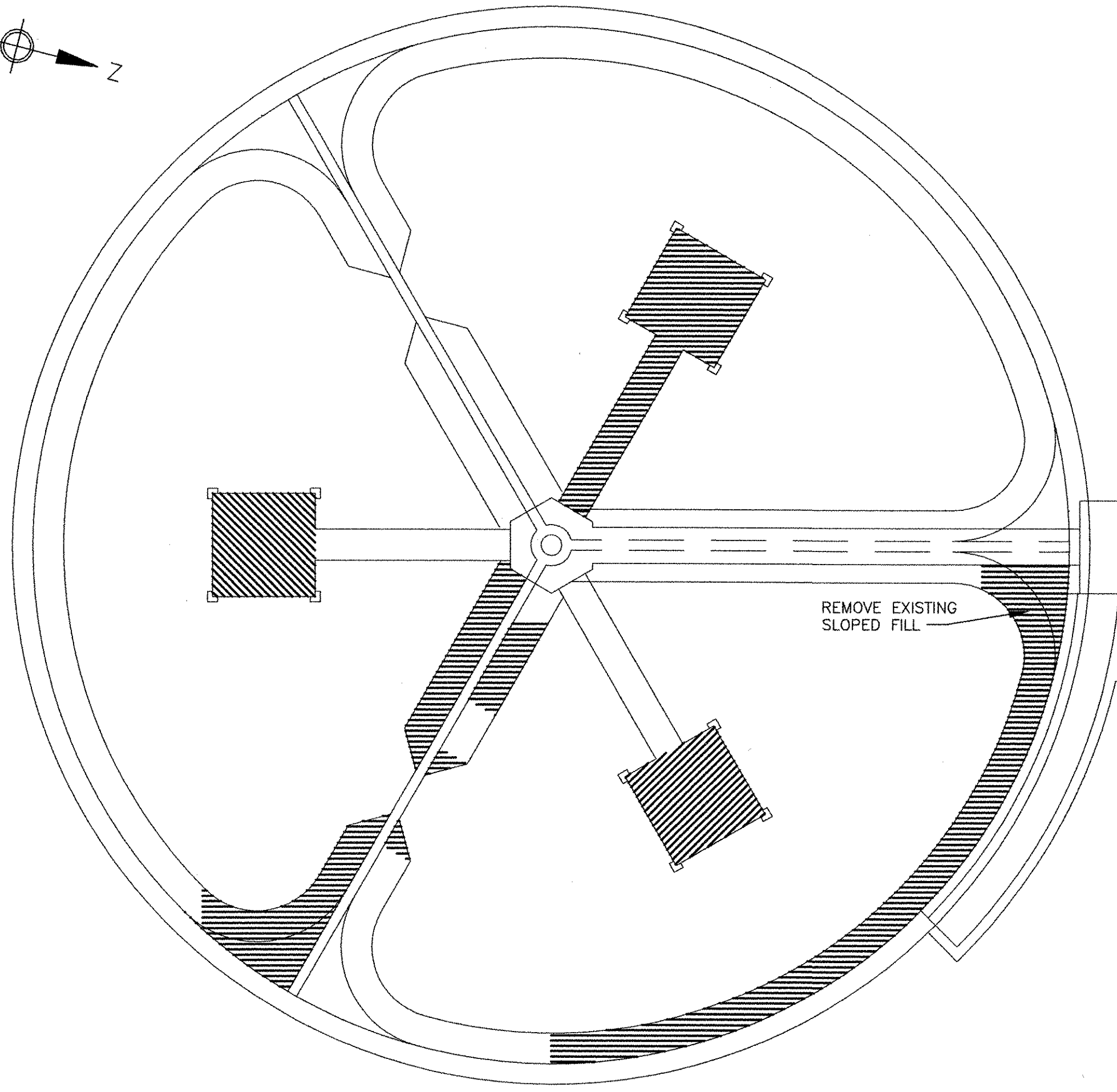
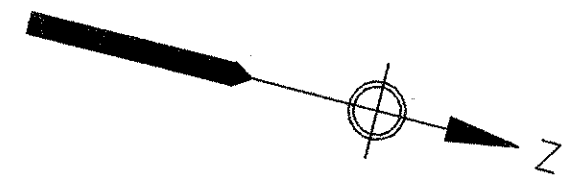
CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
OPERATIONS BUILDING SECTIONS & DETAILS
STRUCTURAL

PROJECT NO: 60148648
CAD DWG FILE: 23 S-301
DESIGNED BY: J. WELCH
DRAWN BY: J. GENTILE
DEPT CHECK: R. FIORE
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

23 S-301

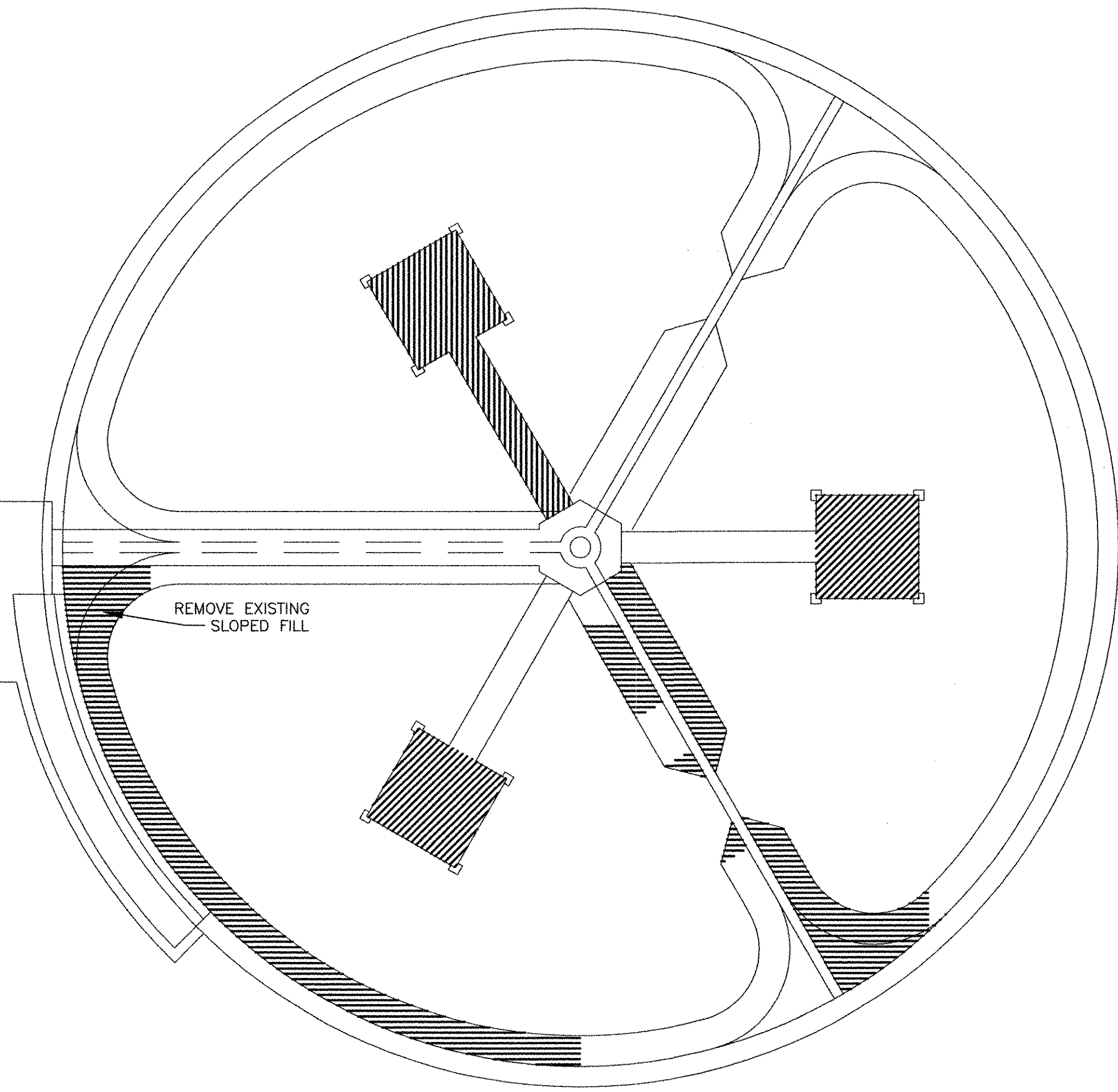
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DCA)\DP-2\SECTIONS\23 S-301.DWG
LAST UPDATE: Monday, October 01, 2012 2:06:37 PM
ANSI D - 1-10-12

1 2 3 4 5

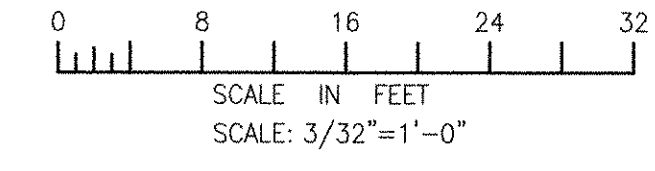


EXISTING AERATION TANKS
DEMOLITION PLAN
TANK #1

NOTES:
1. TANK #2 IS MIRROR IMAGE OF TANK #1.
2. TANKS #3 AND #4 SIMILAR.



EXISTING AERATION TANKS
DEMOLITION PLAN
TANK #2



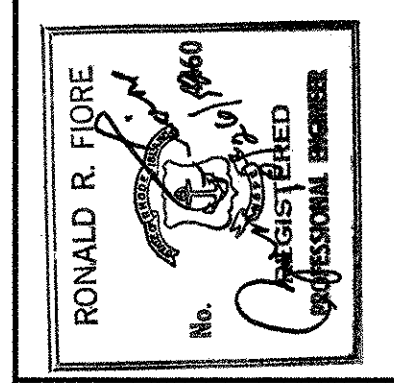
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	REVISIONS
2	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
1	11/1/2010	0	0	ADDENDUM 1

AECOM
AECOM USA, INC.
701 EDGEWATER DRIVE
FARMINGTON, CT 06030
PHONE (781) 246-6200

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3

AERATION TANKS - DEMOLITION PLAN

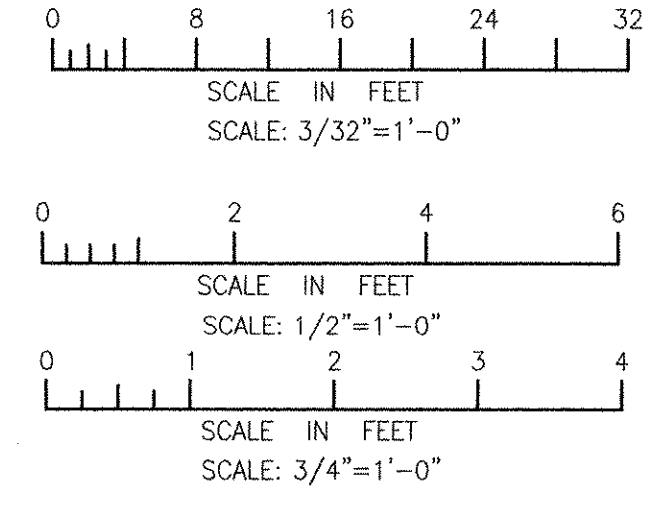
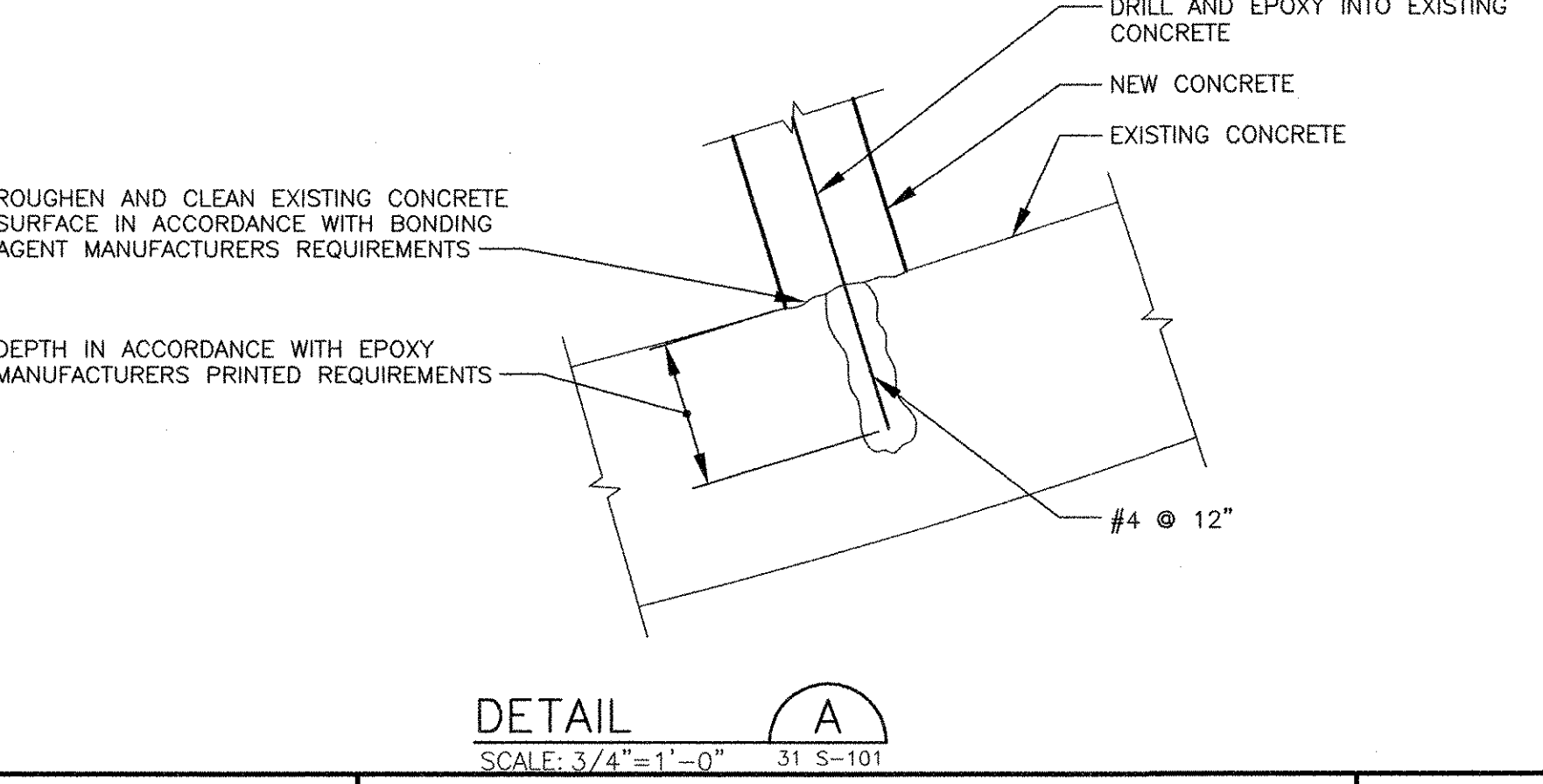
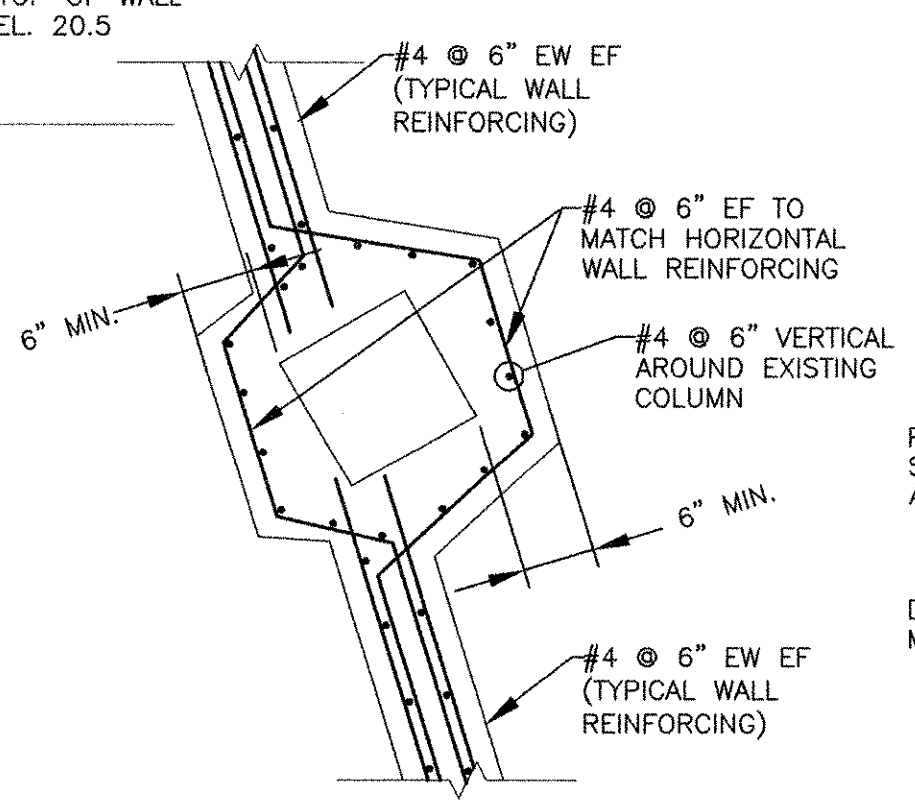
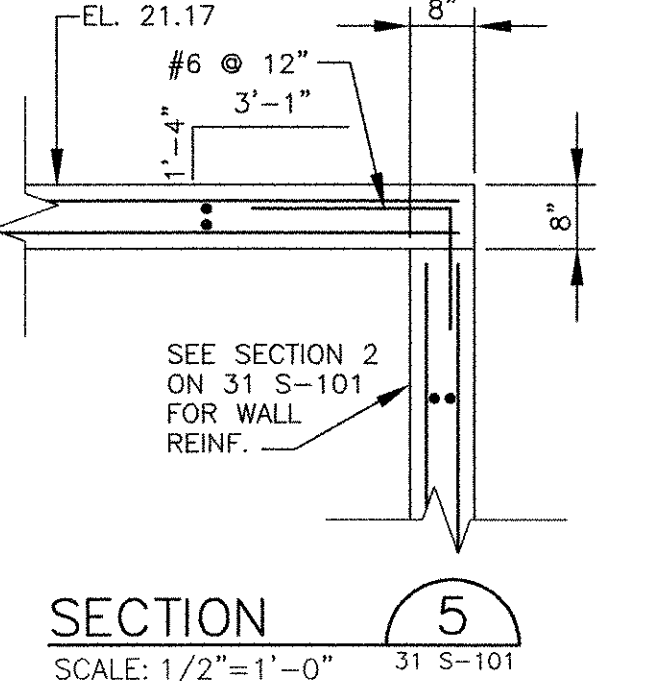
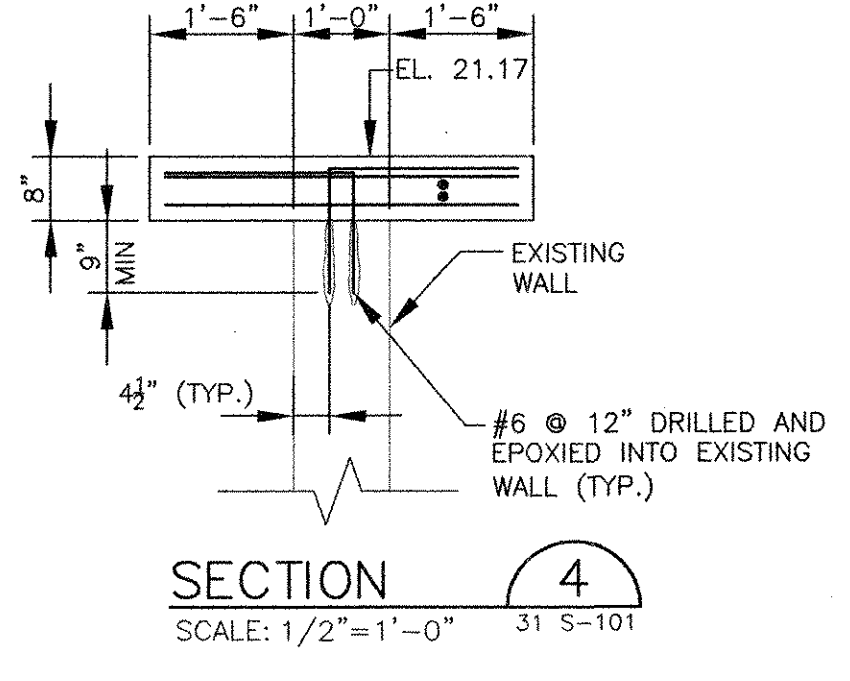
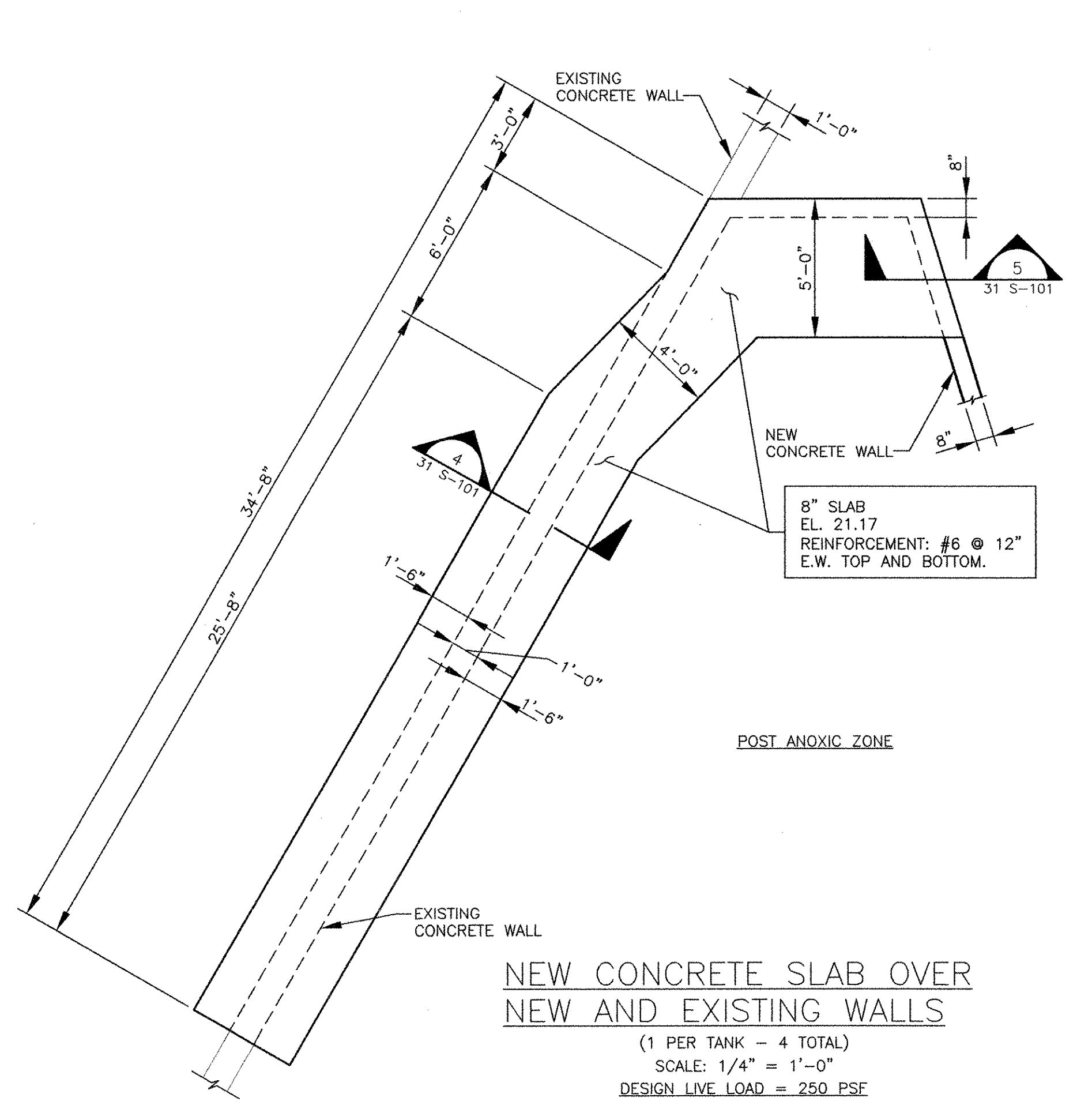
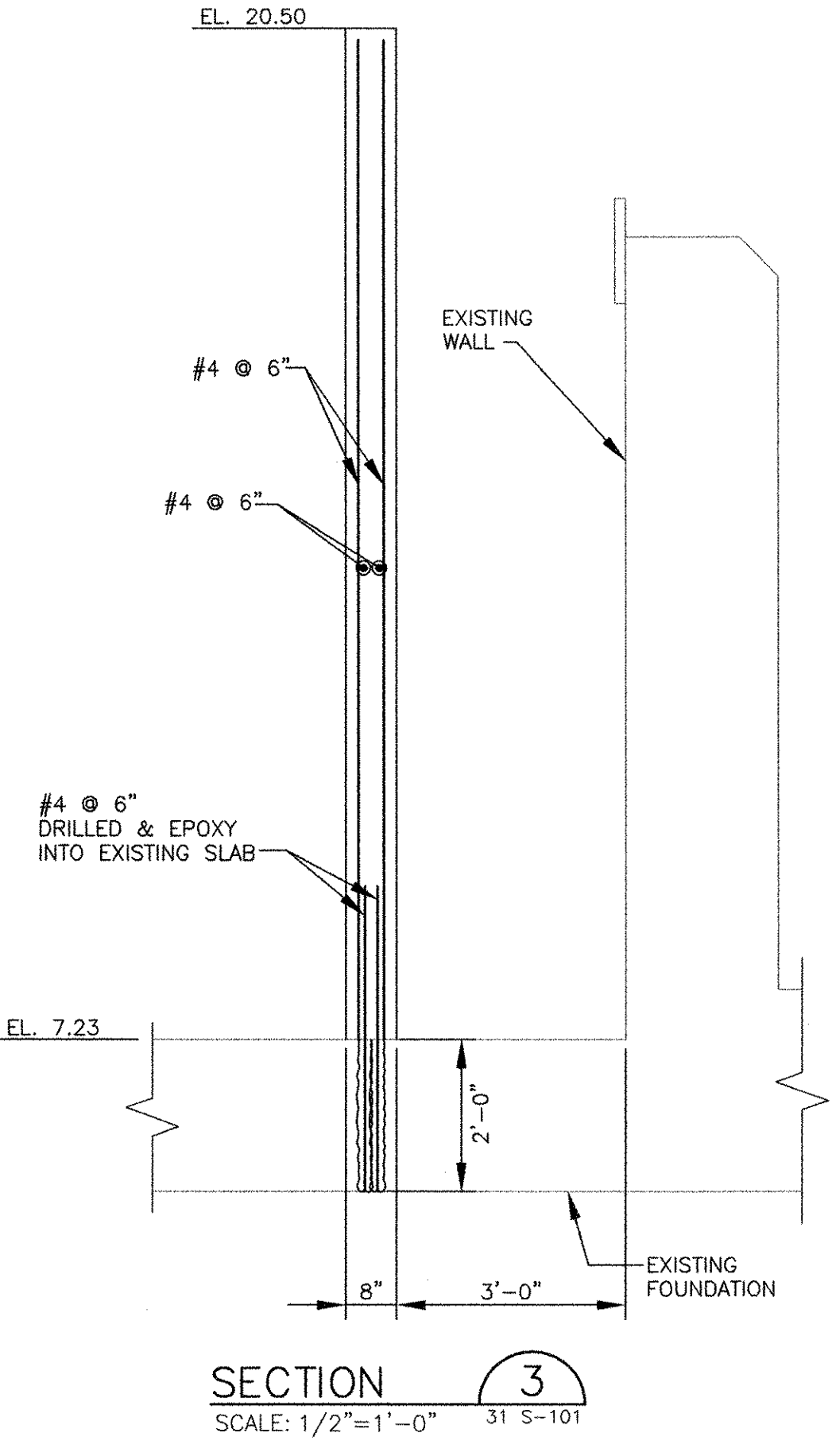
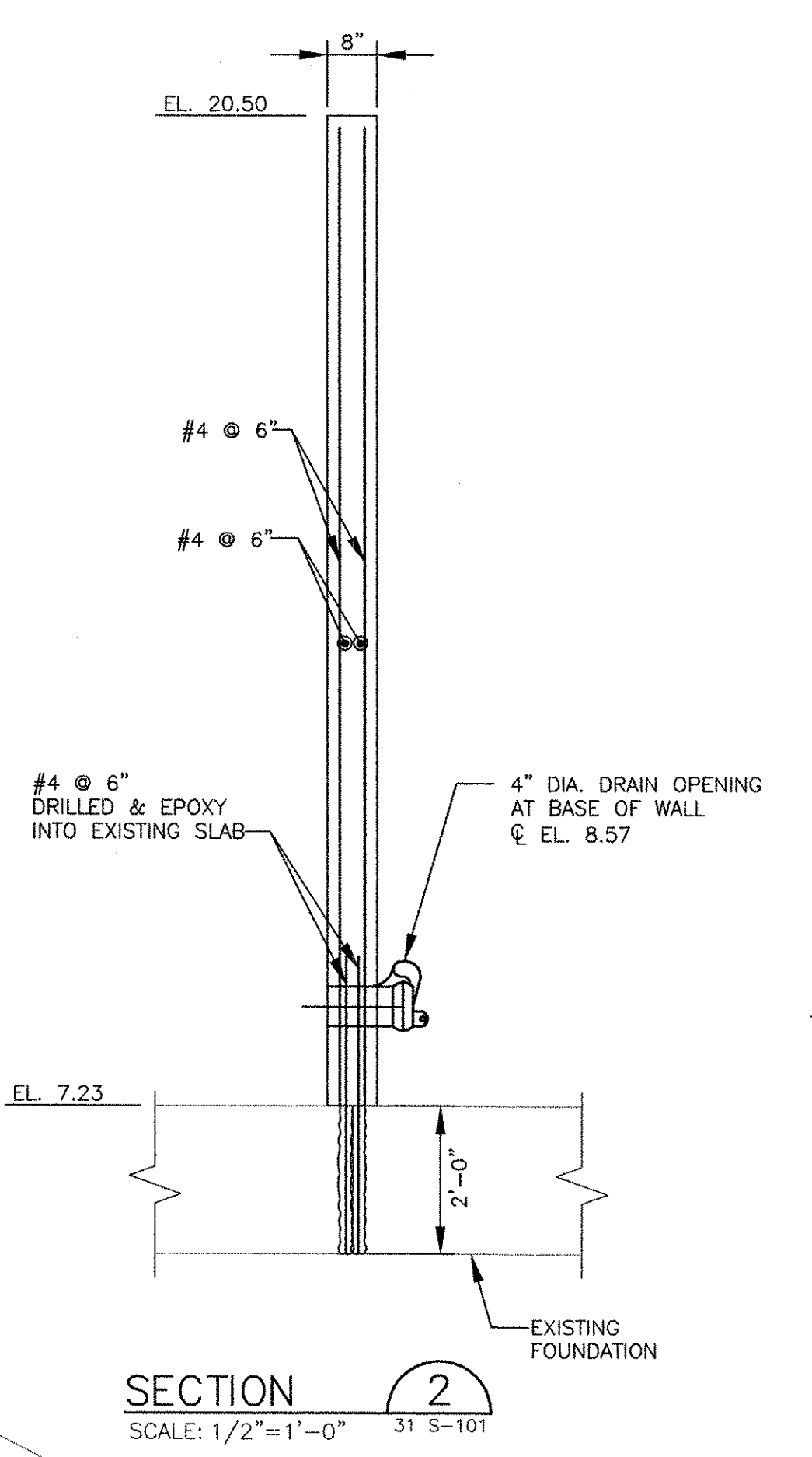
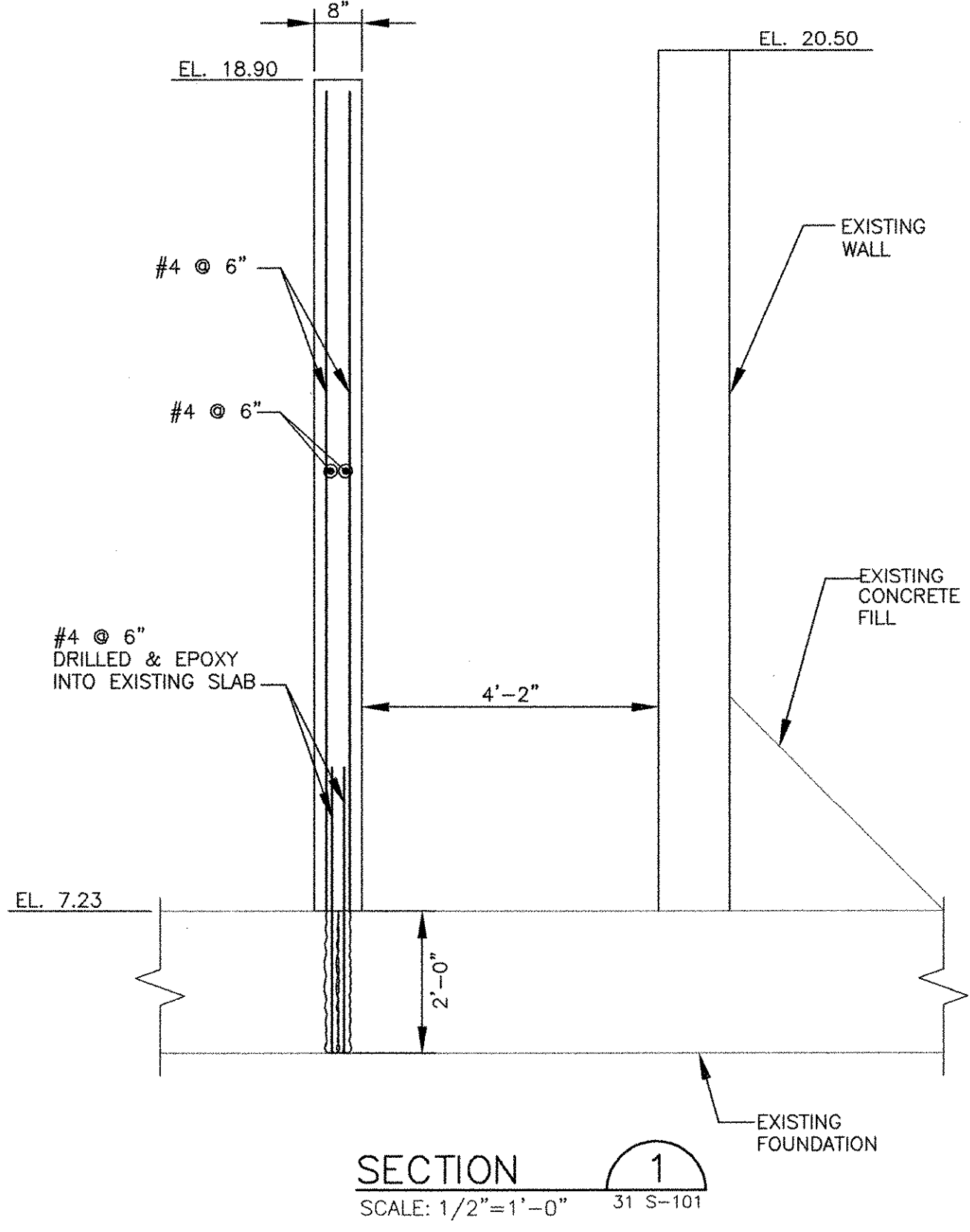
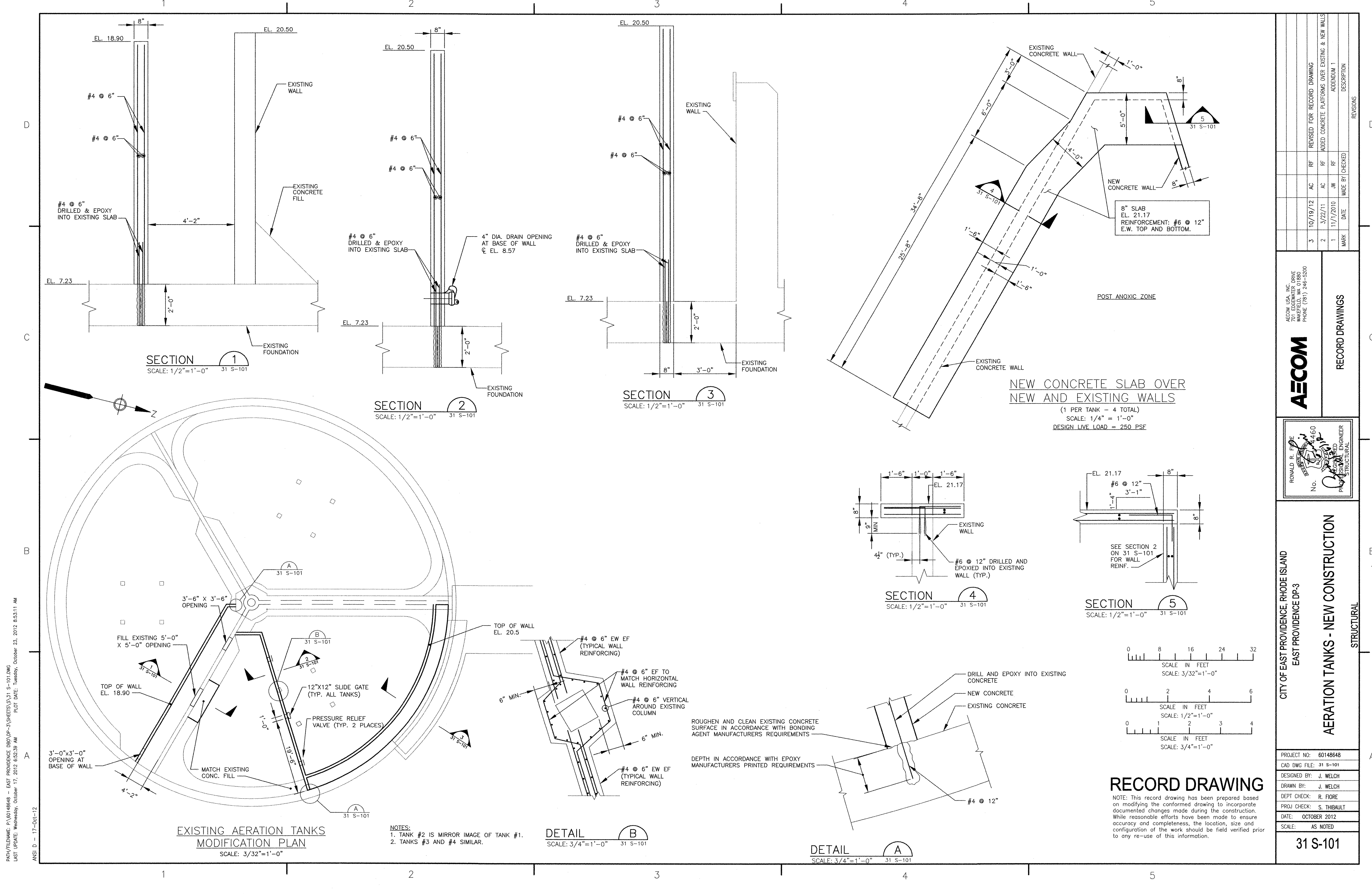
STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	31 SD-101
DESIGNED BY:	J. WELCH
DRAWN BY:	J. WELCH
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 SD-101

PATH: F:\60148648 - EAST PROVIDENCE DP-3\SHEETS\31 SD-101.DWG
LAST UPDATE: Wednesday, October 17, 2012 8:53:29 AM
ANSI D - 17-Oct-12

1 2 3 4 5

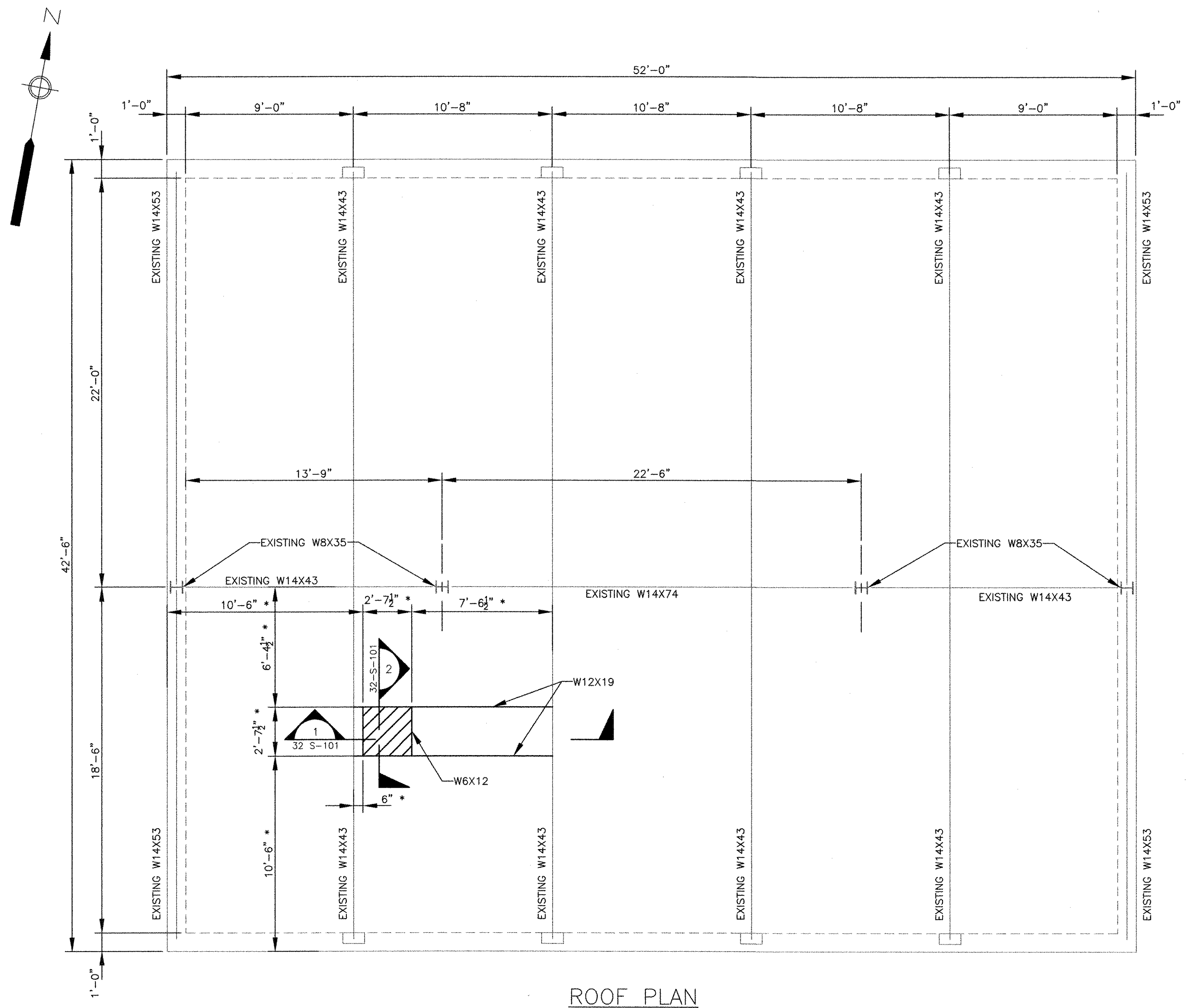


NOTES:
 1. TANK #2 IS MIRROR IMAGE OF TANK #1.
 2. TANKS #3 AND #4 SIMILAR.

P:\17\17-06-12 - EAST PROVIDENCE DDG DP-3\SHEETS\31 S-101.DWG
 LAST UPDATE: Wednesday, October 17, 2012 6:52:29 AM
 FLOT DATE: Tuesday, October 23, 2012 8:53:11 AM
 ANSI D - 17-06-12

		RECORD DRAWINGS																					
AECOM USA, INC. 701 EDgewater Drive Irvine, CA 92618 PHONE (949) 246-5000		REVISIONS <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>10/19/12</td> <td>AC</td> <td>RF</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>2</td> <td>3/22/11</td> <td>AC</td> <td>RF</td> <td>ADDED CONCRETE PLATFORMS OVER EXISTING & NEW WALLS</td> </tr> <tr> <td>1</td> <td>11/1/2010</td> <td>JM</td> <td>RF</td> <td>ADDENDUM 1</td> </tr> </tbody> </table>		MARK	DATE	MADE BY	CHECKED	DESCRIPTION	3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING	2	3/22/11	AC	RF	ADDED CONCRETE PLATFORMS OVER EXISTING & NEW WALLS	1	11/1/2010	JM	RF	ADDENDUM 1
MARK	DATE	MADE BY	CHECKED	DESCRIPTION																			
3	10/19/12	AC	RF	REVISED FOR RECORD DRAWING																			
2	3/22/11	AC	RF	ADDED CONCRETE PLATFORMS OVER EXISTING & NEW WALLS																			
1	11/1/2010	JM	RF	ADDENDUM 1																			
		AERATION TANKS - NEW CONSTRUCTION STRUCTURAL																					
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3		PROJECT NO: 60148648 CAD DWG FILE: 31 S-101 DESIGNED BY: J. WELCH DRAWN BY: J. WELCH DEPT CHECK: R. FIORE PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED																					
RECORD DRAWING NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.		31 S-101																					

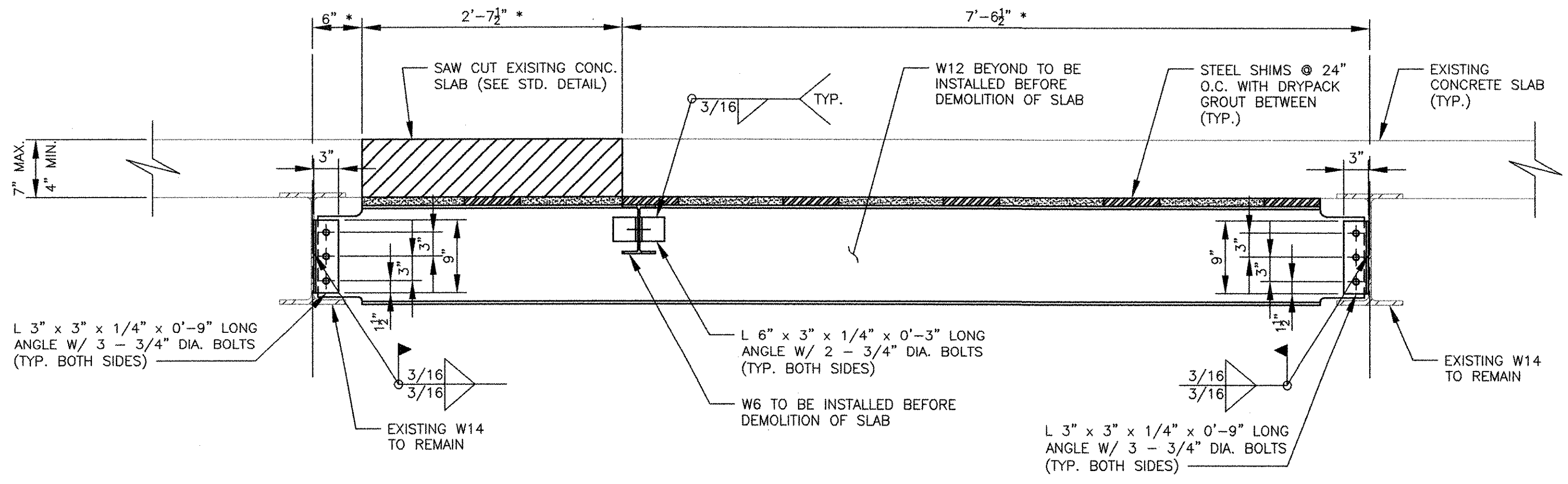
P151/FILENAME: P:\01\18648 - EAST PROVIDENCE (BDO)\P151\32 S-101.DWG
 LAST UPDATE: Monday, October 01, 2012 2:14:01 PM
 PLOT DATE: Tuesday, October 23, 2012 8:53:14 AM
 ANS I D - 1-10-12



ROOF PLAN

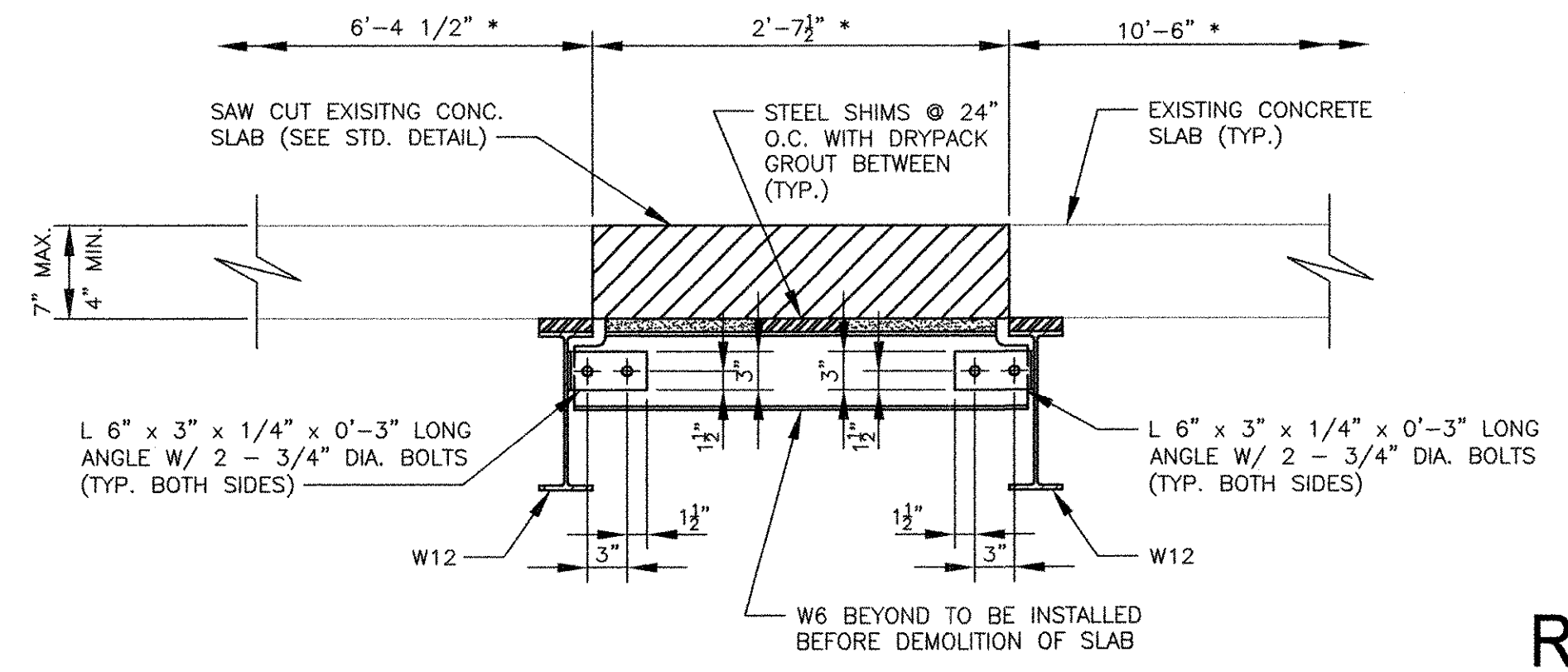
SCALE: 1/4" = 1'-0"

* COORDINATE OPENING SIZE WITH EQUIPMENT PURCHASED



SECTION 1
 SCALE: 1" = 1'-0"

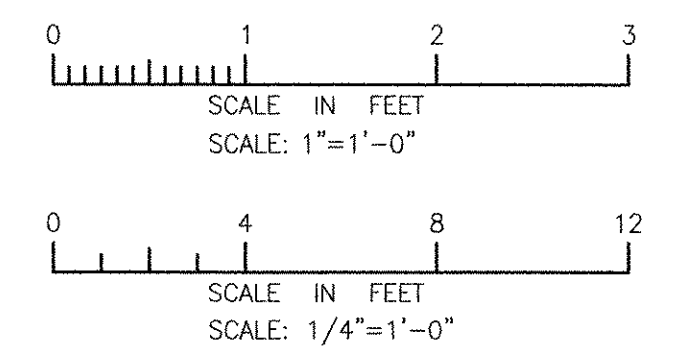
* COORDINATE OPENING SIZE WITH EQUIPMENT PURCHASED



SECTION 2
 SCALE: 1" = 1'-0"

* COORDINATE OPENING SIZE WITH EQUIPMENT PURCHASED

NOTE: INSTALL NEW STEEL MEMBERS AND SHIM AND DRYPACK BEFORE CUTTING NEW OPENING



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
DATE	10/19/12
MADE BY	AC
RF	RF

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 701 EDGEWATER DRIVE
 PHOENIX, AZ 85020
 PHONE (781) 246-5200

PROFESSIONAL ENGINEER
 RONALD R. FIORE
 No. 0000000000
 REGISTERED PROFESSIONAL ENGINEER
 STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

**RAS PUMP STATION ROOF
 PLAN AND SECTIONS**
 STRUCTURAL

PROJECT NO: 60148648
 CAD DWG FILE: 32 S-101
 DESIGNED BY: A. CATALANO
 DRAWN BY: A. CATALANO
 DEPT CHECK: R. FIORE
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

32 S-101

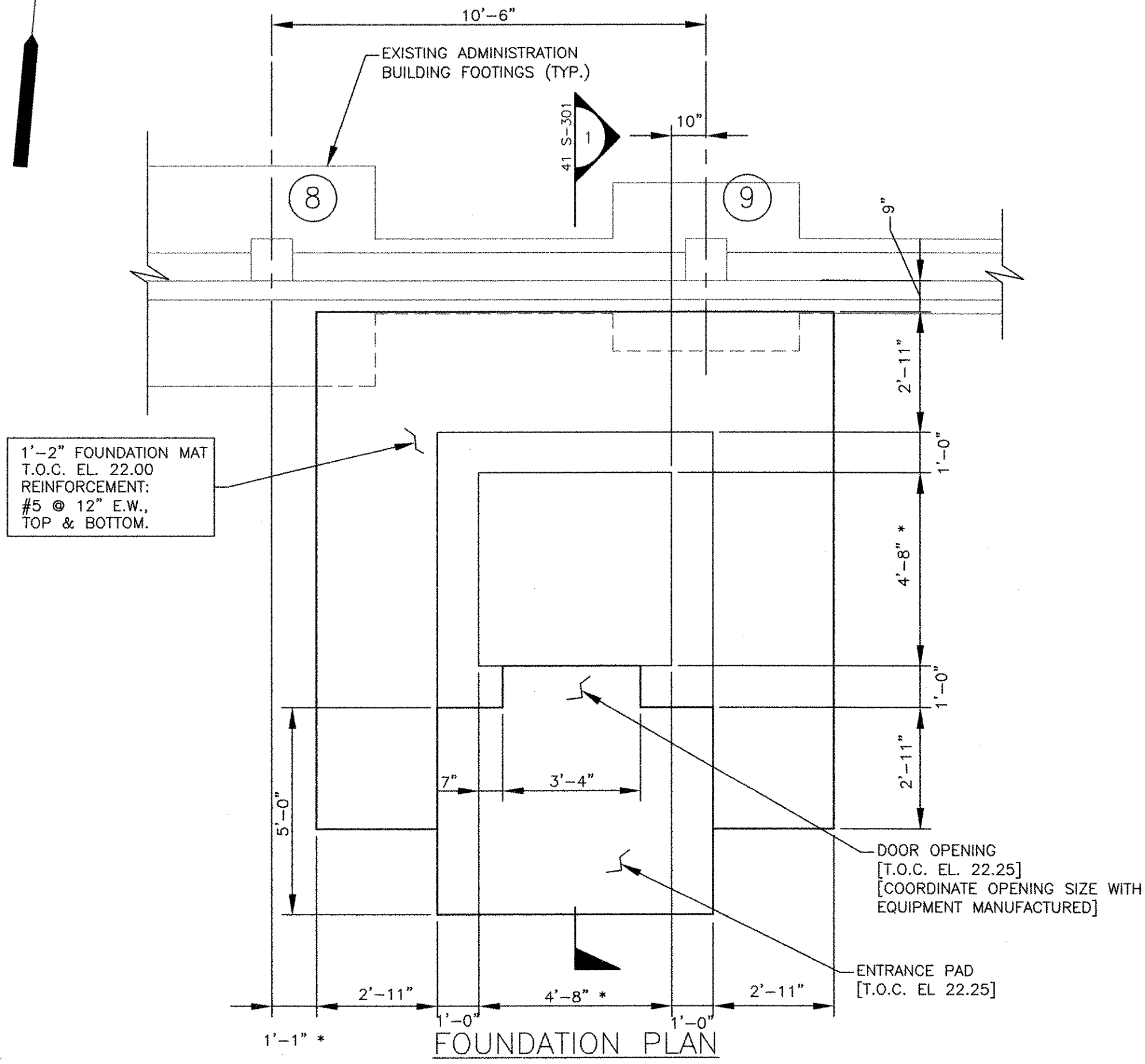
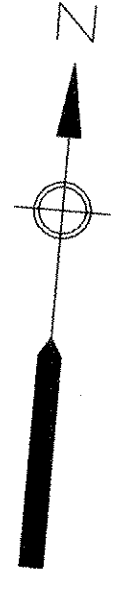
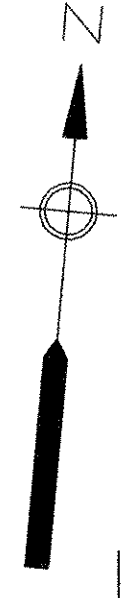
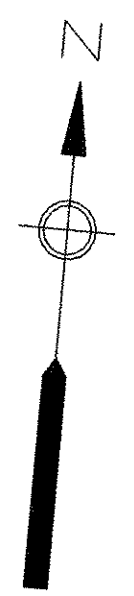
1

2

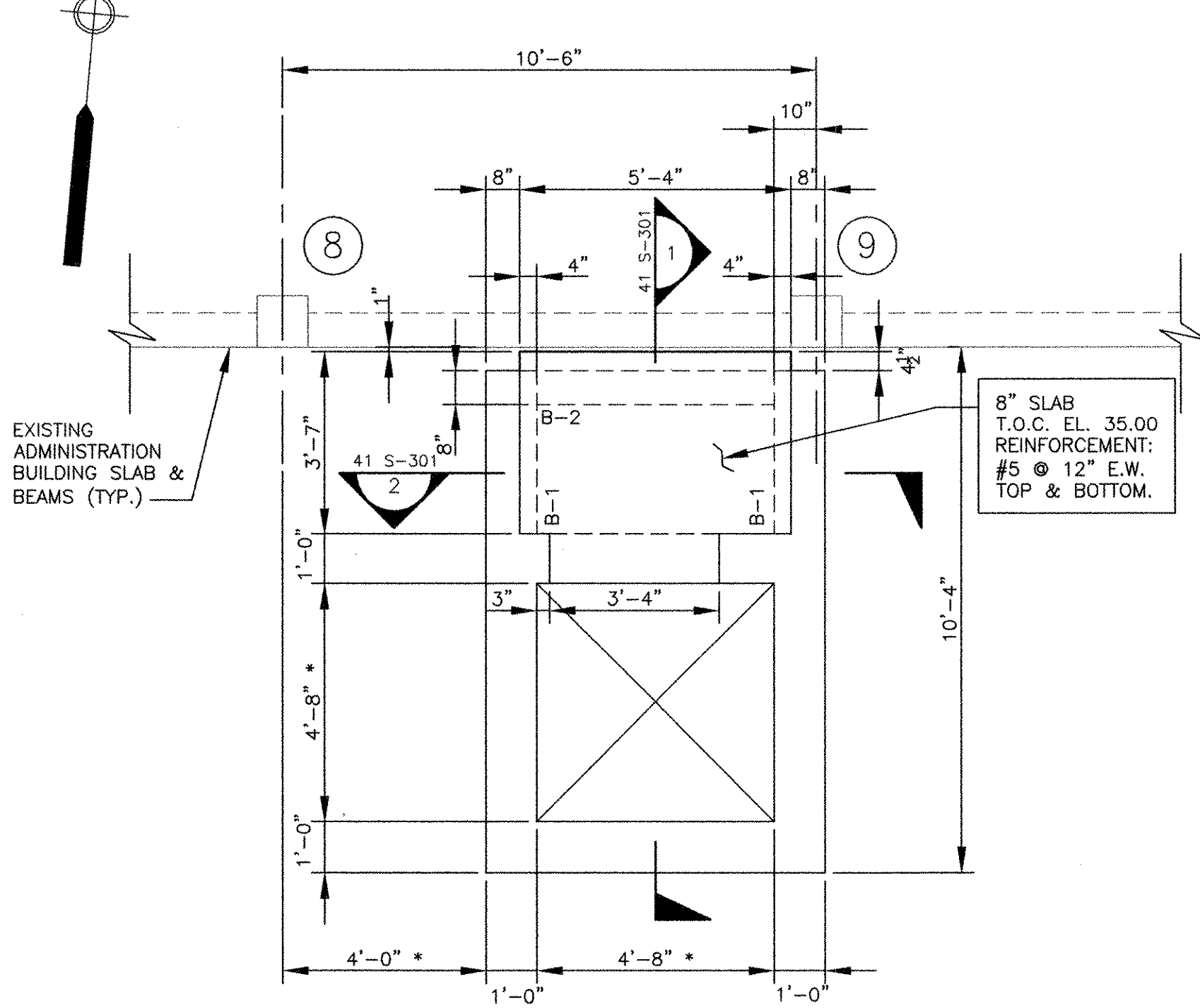
3

4

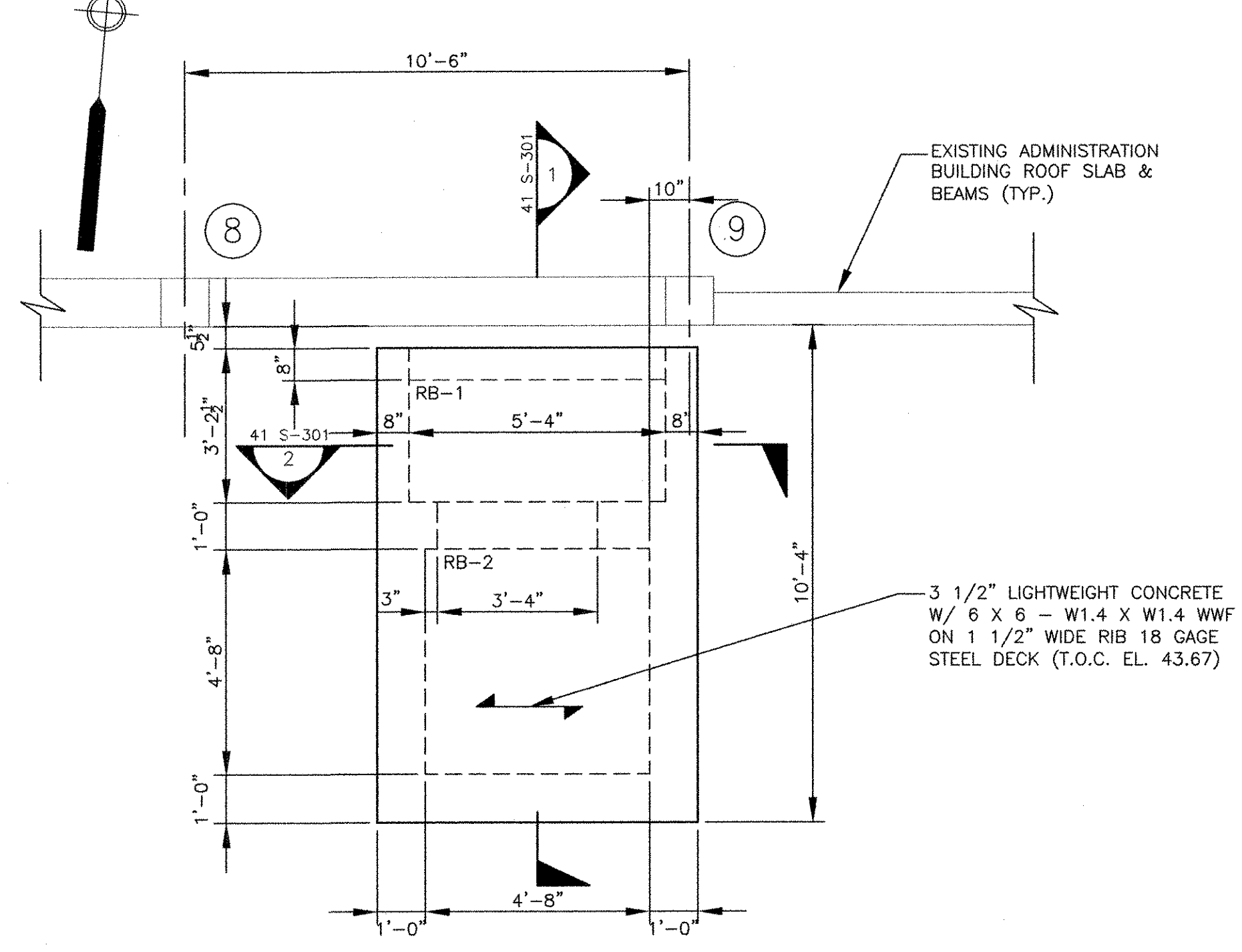
5



SCALE: 3/8" = 1'-0"
 NOTE: FOUNDATION DESIGN BASED ON A GROSS BEARING PRESSURE OF 800 PSF
 * DIMENSIONS TO SUIT EQUIPMENT (HOLD TOP RIGHT CORNER)

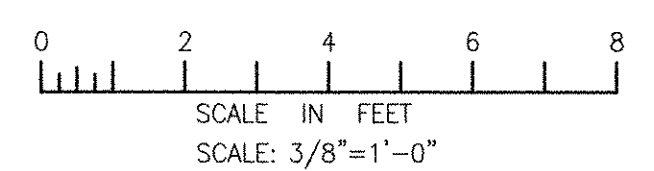


UPPER LEVEL PLAN
 SCALE: 3/8" = 1'-0"
 DESIGN LIVE LOAD = 250 PSF



ROOF LEVEL PLAN
 SCALE: 3/8" = 1'-0"
 DESIGN LIVE LOAD = 35 PSF ROOF LIVE LOAD + 15 PSF COLLATERAL LIVE LOAD

BEAM SCHEDULE										BEAM MARK IS SHOWN ON LEFT END OF BEAM IN PLAN.
MARK	SIZE WIDTH X DEPTH	REINFORCEMENT				STIRRUPS			REMARKS	
		BOTTOM		TOP		TYPE	SIZE	SPACING EACH END		
CONT.	ADD.	ADD. LEFT	CONT. RIGHT	CONT.	ADD. RIGHT					
RB-1	8 X 14	2-#5	-	-	2-#5	-	□	# 4	1 @ 2, BAL @ 5	
RB-2	12 X 14	2-#5	-	-	2-#5	-	□	# 4	1 @ 2, BAL @ 5	
B-1	12 X 18	2-#7	-	-	3-#7	-	□	# 4	1 @ 2, BAL @ 7	
B-2	8 X 14	2-#5	-	-	2-#5	-	□	# 4	1 @ 2, BAL @ 5	



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
1	5/18/11	AC	RF	REVISED FOUNDATION MAT.

AECOM
 AECOM USA, INC.
 701 EDEWATER DRIVE
 PROVIDENCE, RI 02909
 PHONE (401) 246-3000

PROFESSIONAL ENGINEER
 RONALD B. FIORE
 No. [Signature]
 REGISTERED PROFESSIONAL ENGINEER
 STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

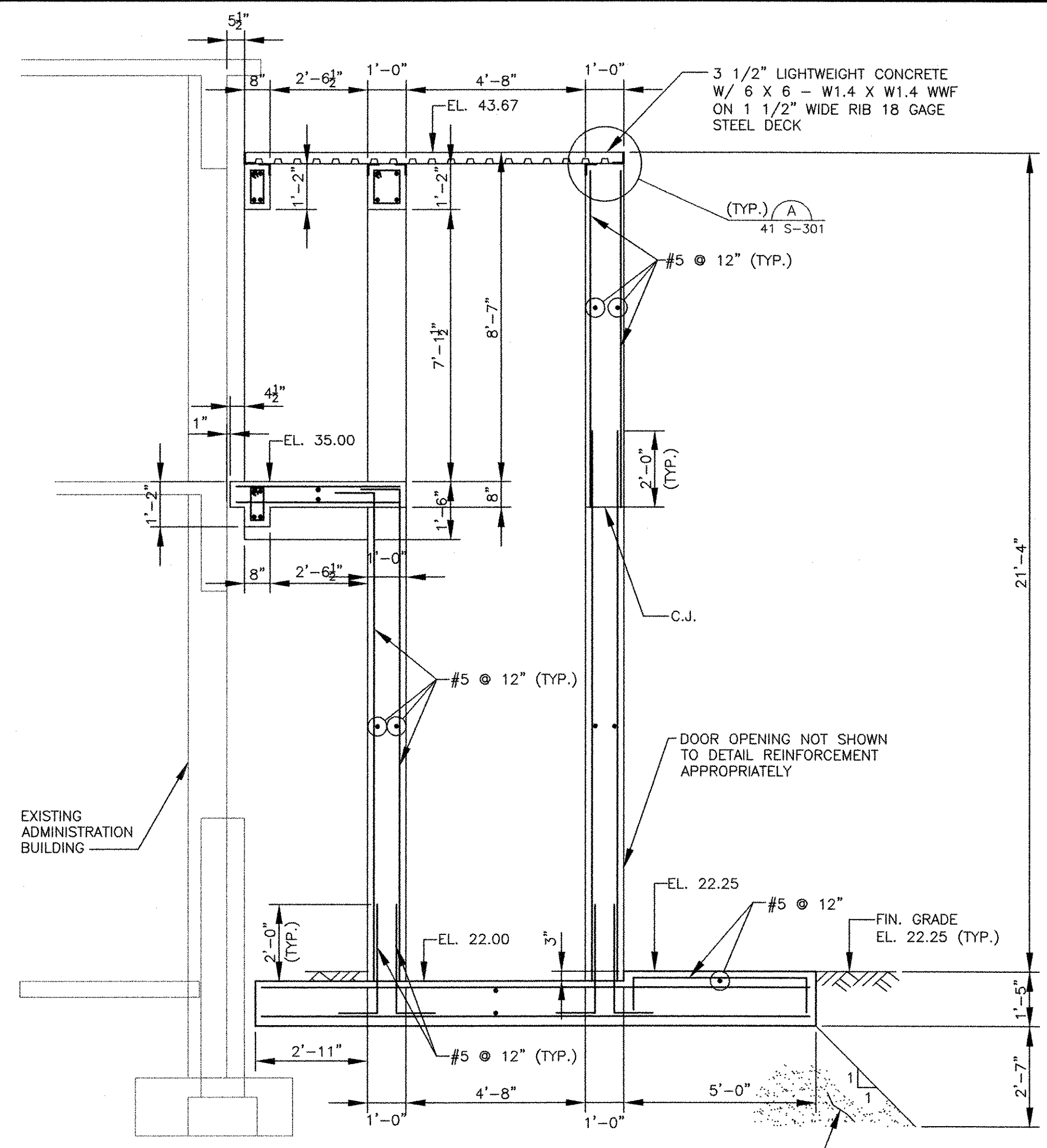
ADMINISTRATION BUILDING PLANS
 STRUCTURAL

PROJECT NO: 60148648
 CAD DWG FILE: 41 S-101
 DESIGNED BY: A. CATALANO
 DRAWN BY: A. CATALANO
 DEPT CHECK: R. FIORE
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

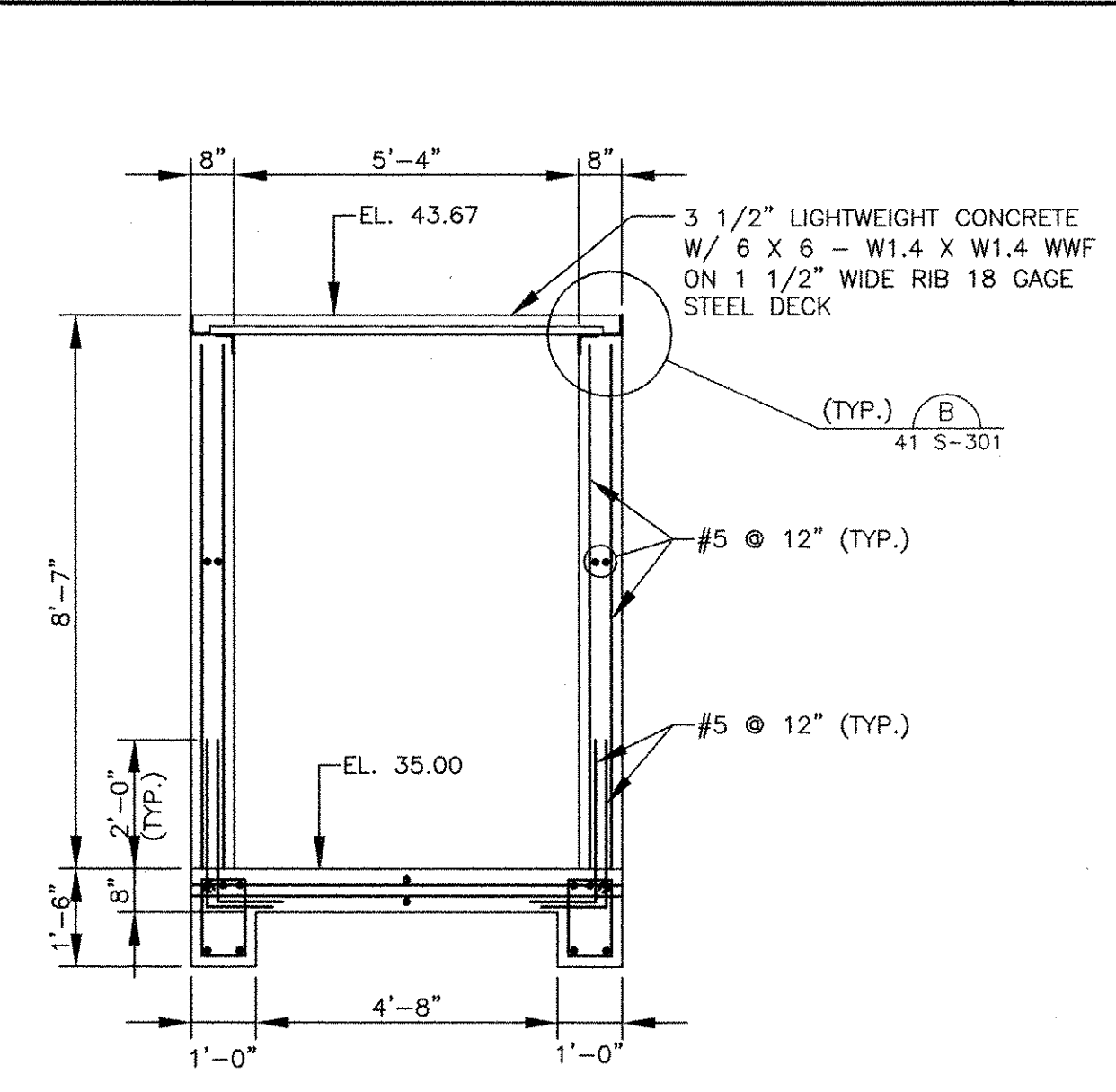
41 S-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BDO)\DP-4\SHEETS\41 S-101.DWG
 LAST UPDATE: Monday, October 01, 2012 2:15:05 PM
 PLOT DATE: Tuesday, October 23, 2012 8:53:17 AM
 ANSI D - 1-OCT-12

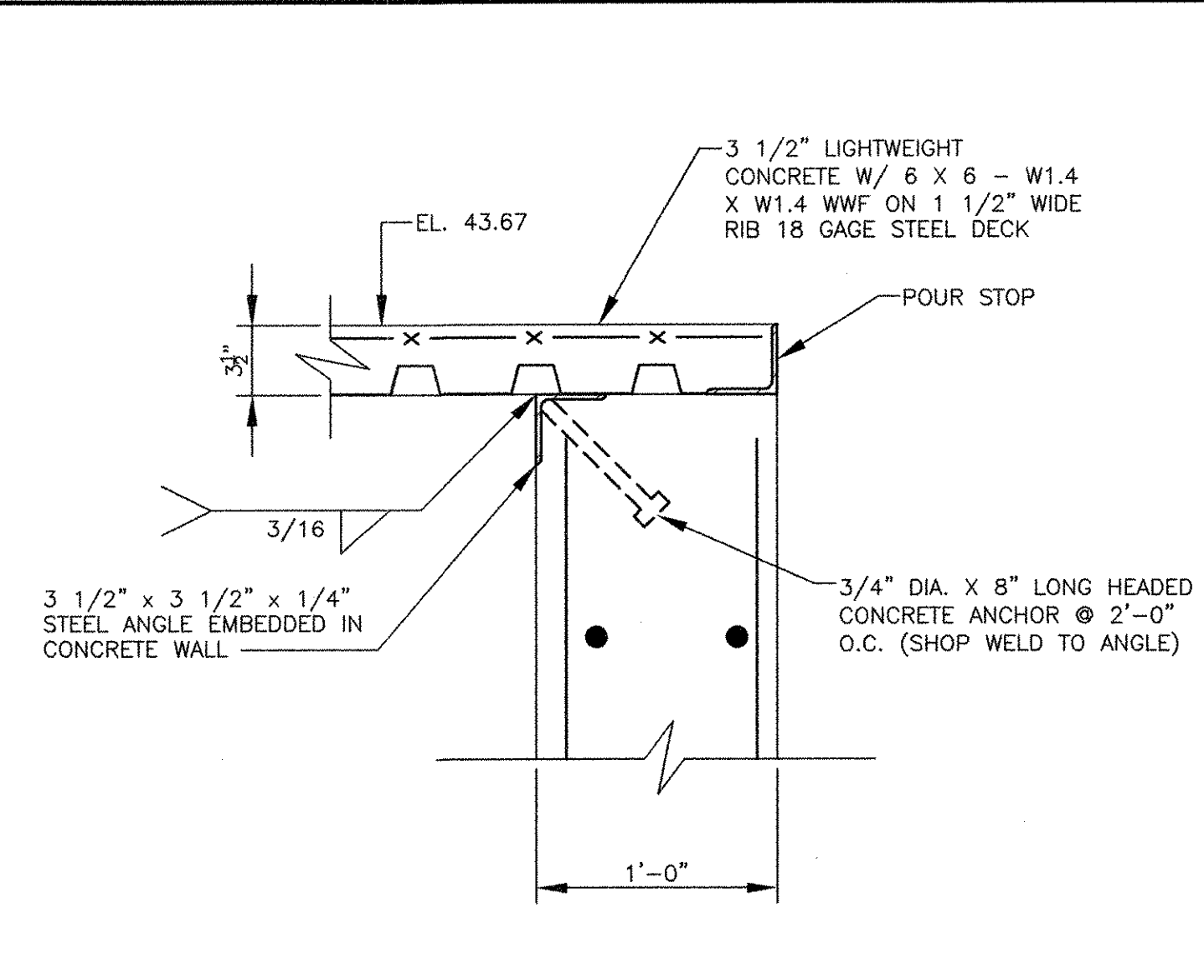
PATV\FLEAME_P\60148648 - EAST PROVIDENCE (BO)DP-4\SHEETS\41 S-301.DWG
 LAST UPDATE: Monday, October 01, 2012 2:15:52 PM
 PLOT DATE: Tuesday, October 23, 2012 8:53:20 AM
 ANSI D - 1-10-12



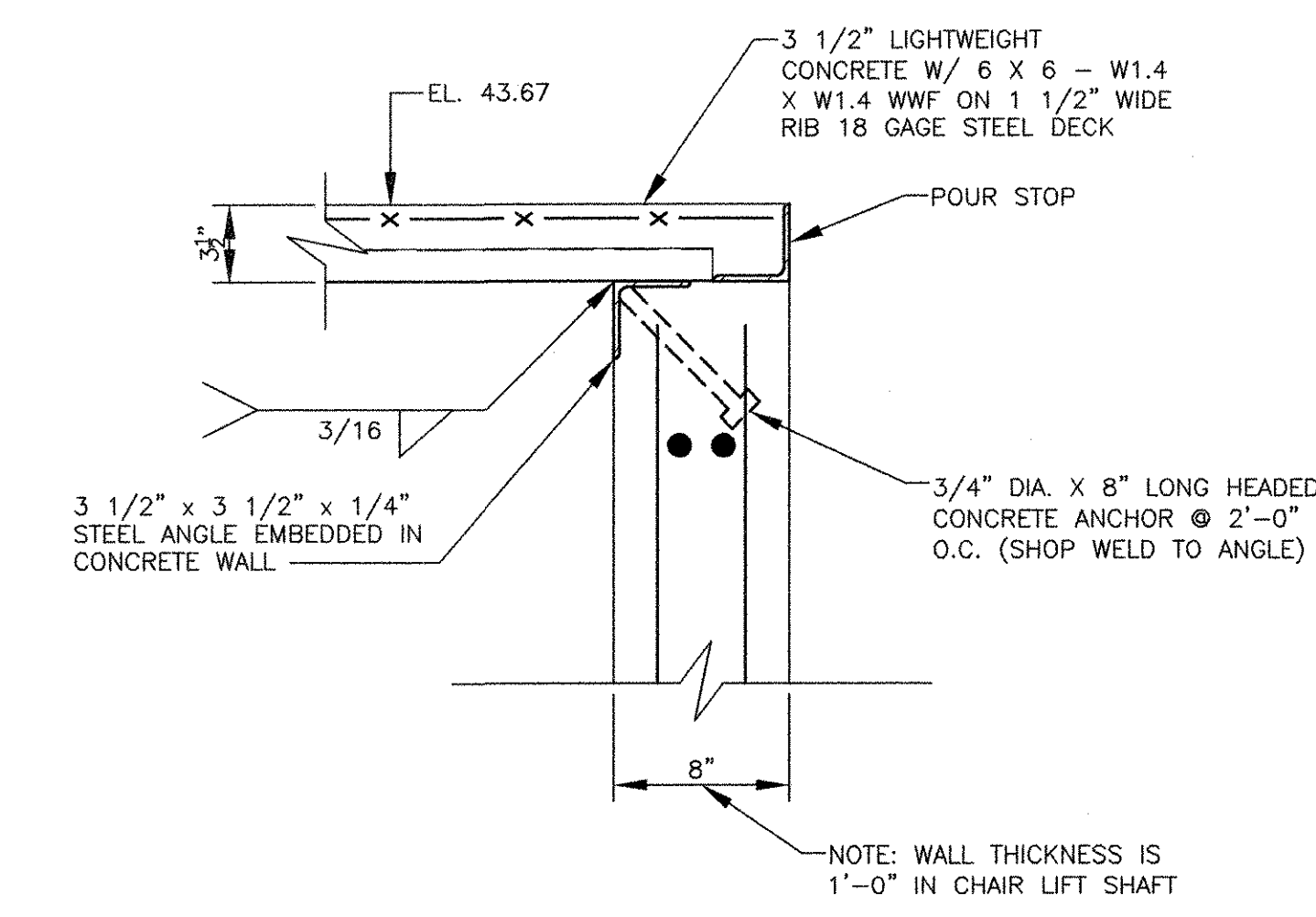
SECTION 1
 SCALE: 3/8"=1'-0" 41 S-101



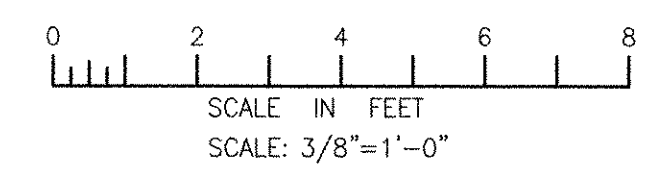
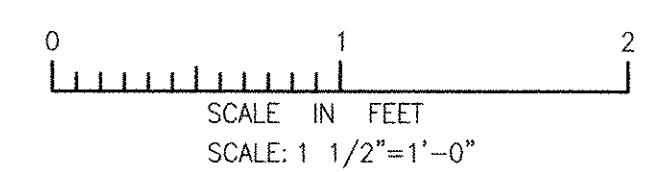
SECTION 2
 SCALE: 3/8"=1'-0" 41 S-101



DETAIL A
 SCALE: 1 1/2" = 1'-0" 41 S-301



DETAIL B
 SCALE: 1 1/2" = 1'-0" 41 S-301



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION	REVISIONS
1	10/19/12	AC	RF	REVISED FOR RECORD DRAWING	
1	5/18/11	AC	RF	REVISED FOUNDATION MAT.	

AECOM USA, INC.
 701 EDGEWATER DRIVE
 FARMINGTON, CT 06030
 PHONE (781) 246-5000

AECOM

RONALD R. FIORE
 No. 0000000000
 REGISTERED PROFESSIONAL ENGINEER
 STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
ADMINISTRATIVE BUILDING
SECTIONS AND DETAILS
 STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	41 S-301
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 S-301

1

2

3

4

5

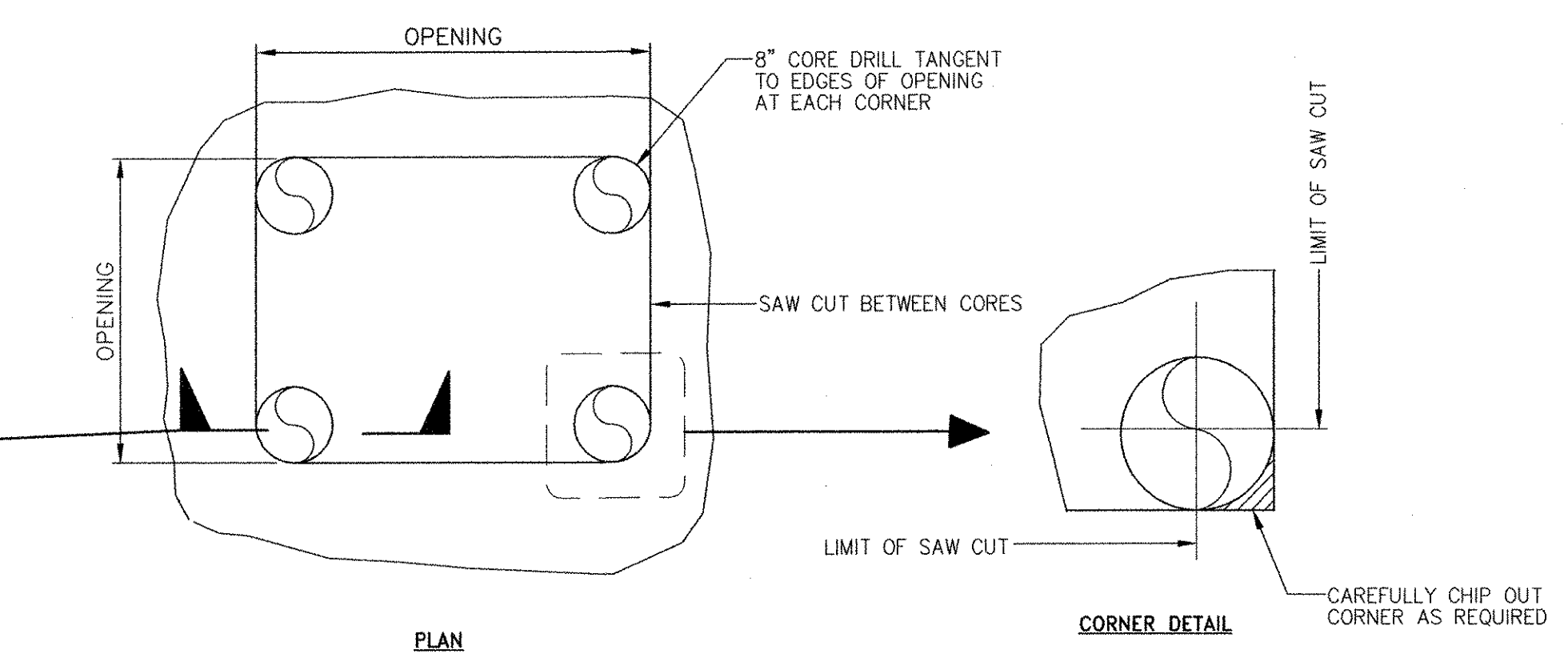
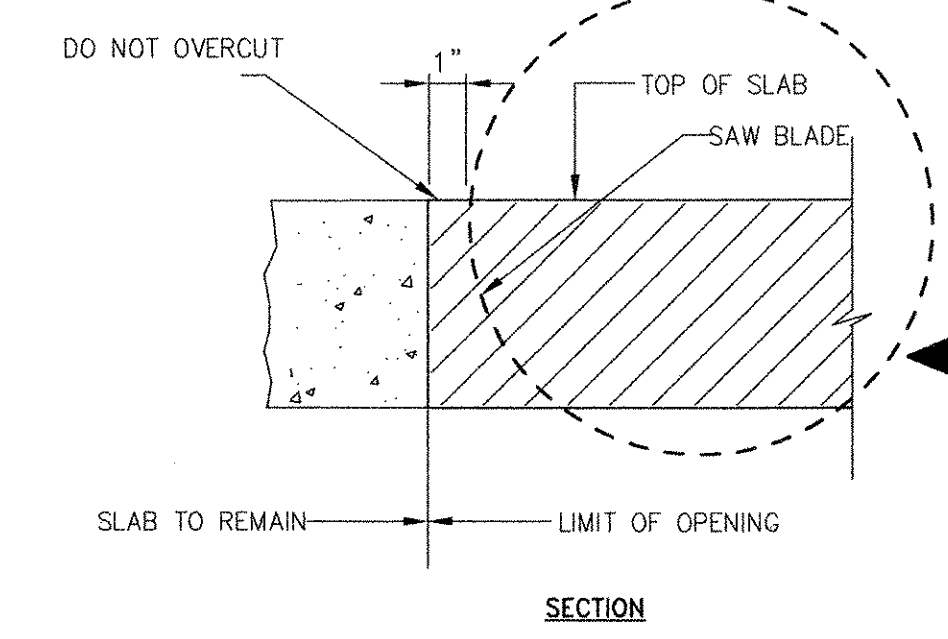


EXISTING FLOOR SLAB @ EL. 21.50

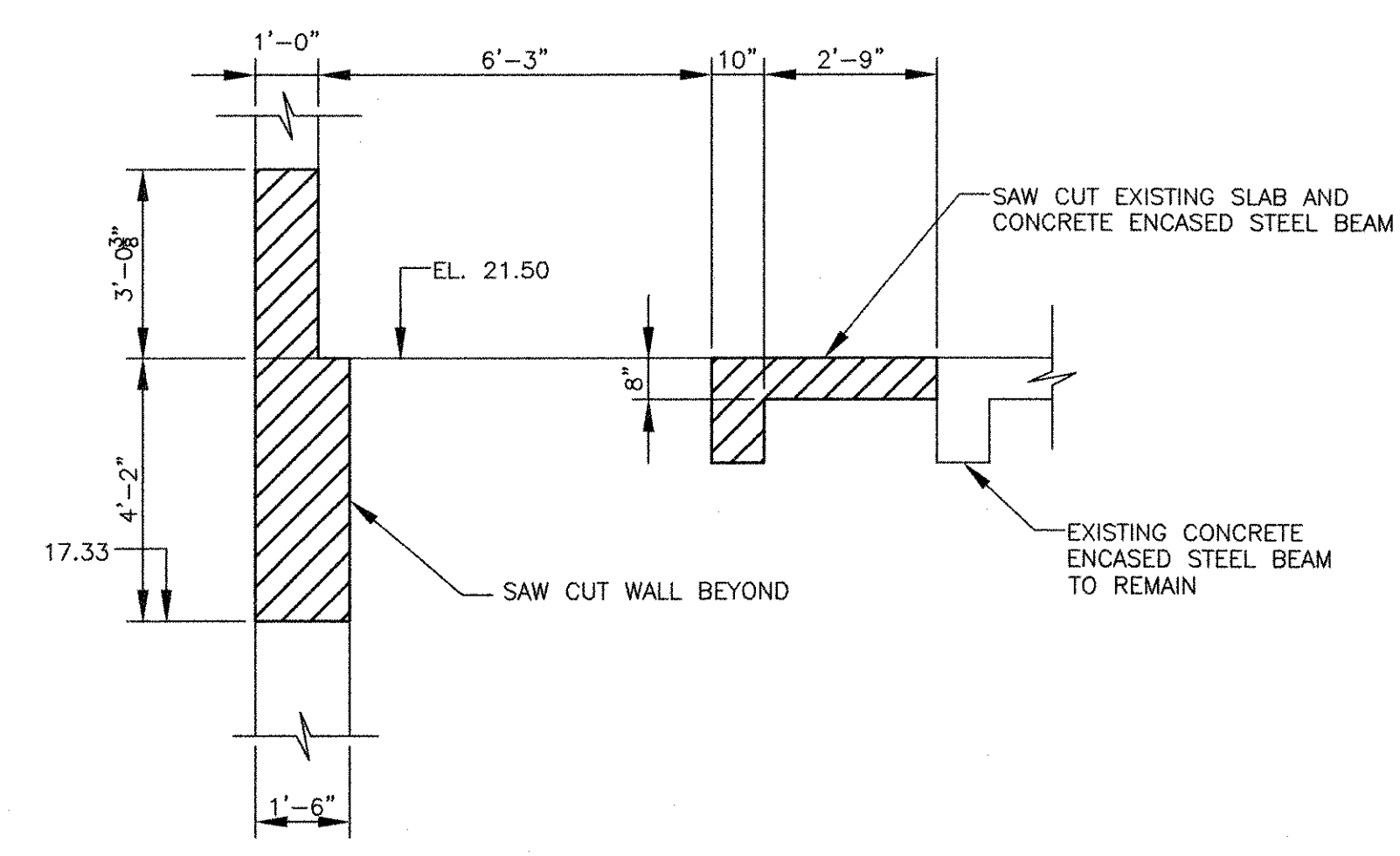
SAW CUT WALL (WALL VARIES FROM 1'-0" TO 1'-6")

SAW CUT 8" SLAB AND CONCRETE ENCASED STEEL BEAM

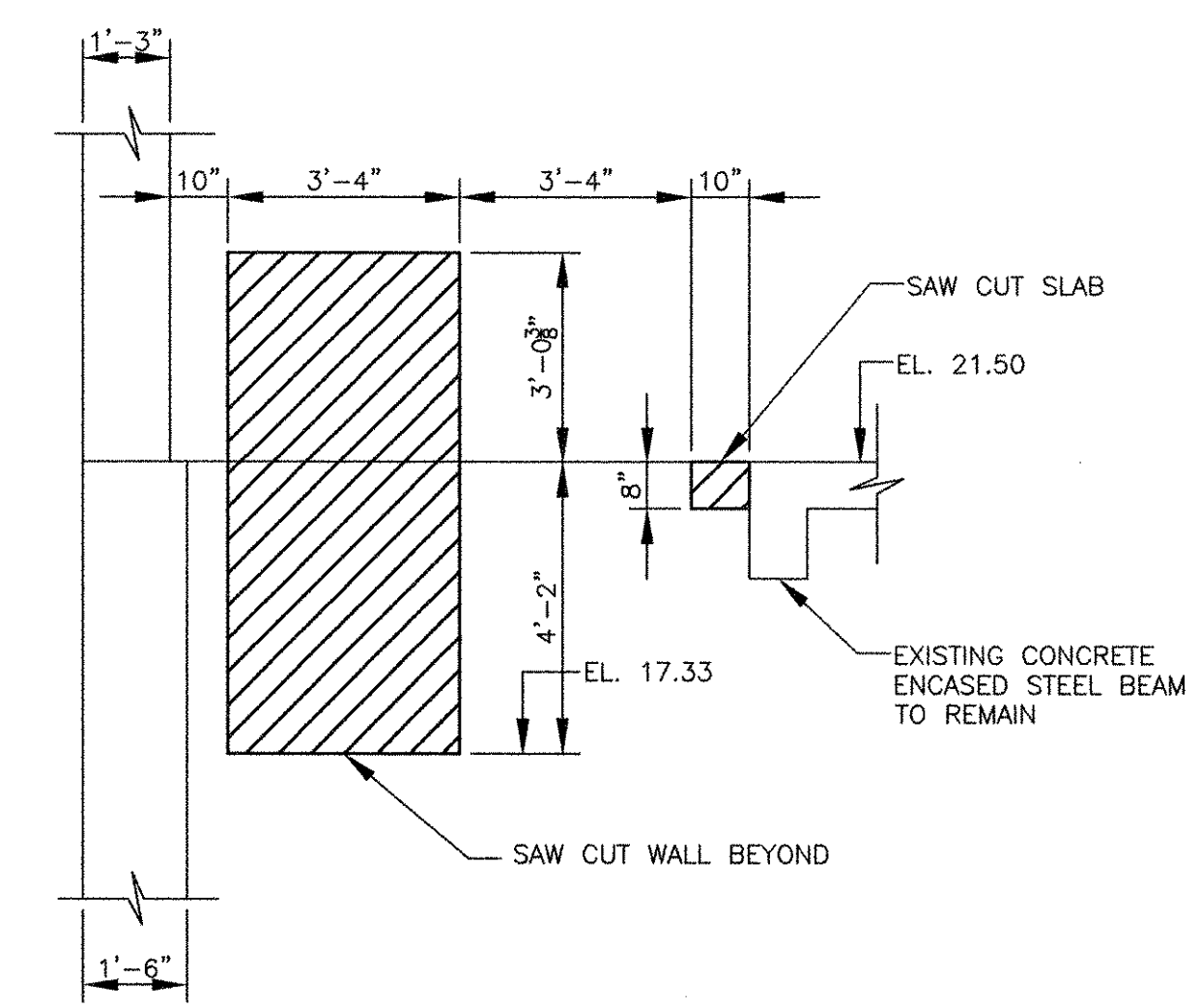
DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



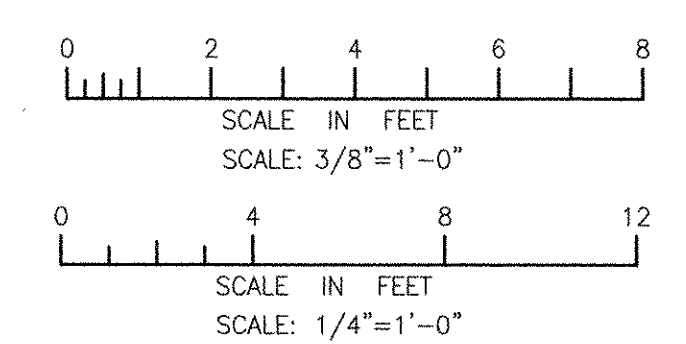
RECTANGULAR OPENING IN EXISTING SLAB
NTS



SECTION 1
SCALE: 3/8" = 1'-0" 43 SD-101



SECTION 2
SCALE: 3/8" = 1'-0" 43 SD-101



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	AC	RF	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM
AECOM USA, INC.
701 EDGEWATER DRIVE
PHOENIX, AZ 85020
PHONE (602) 246-5000

RECORD DRAWINGS

RONALD R. FIORE
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL
No. [Signature]

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
**SLUDGE DIGESTER BUILDING
PLAN @ EL. 21.50 & SECTIONS**
STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	43 S-101
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

43 S-101

PNV\FLENAME: P:\60148648 - EAST PROVIDENCE (DP-4)\SHEETS\43 S-101.DWG
LAST UPDATE: Monday, October 01, 2012 2:16:32 PM
PLOT DATE: Tuesday, October 23, 2012 8:53:22 AM
ANSI D - 1-0ct-12

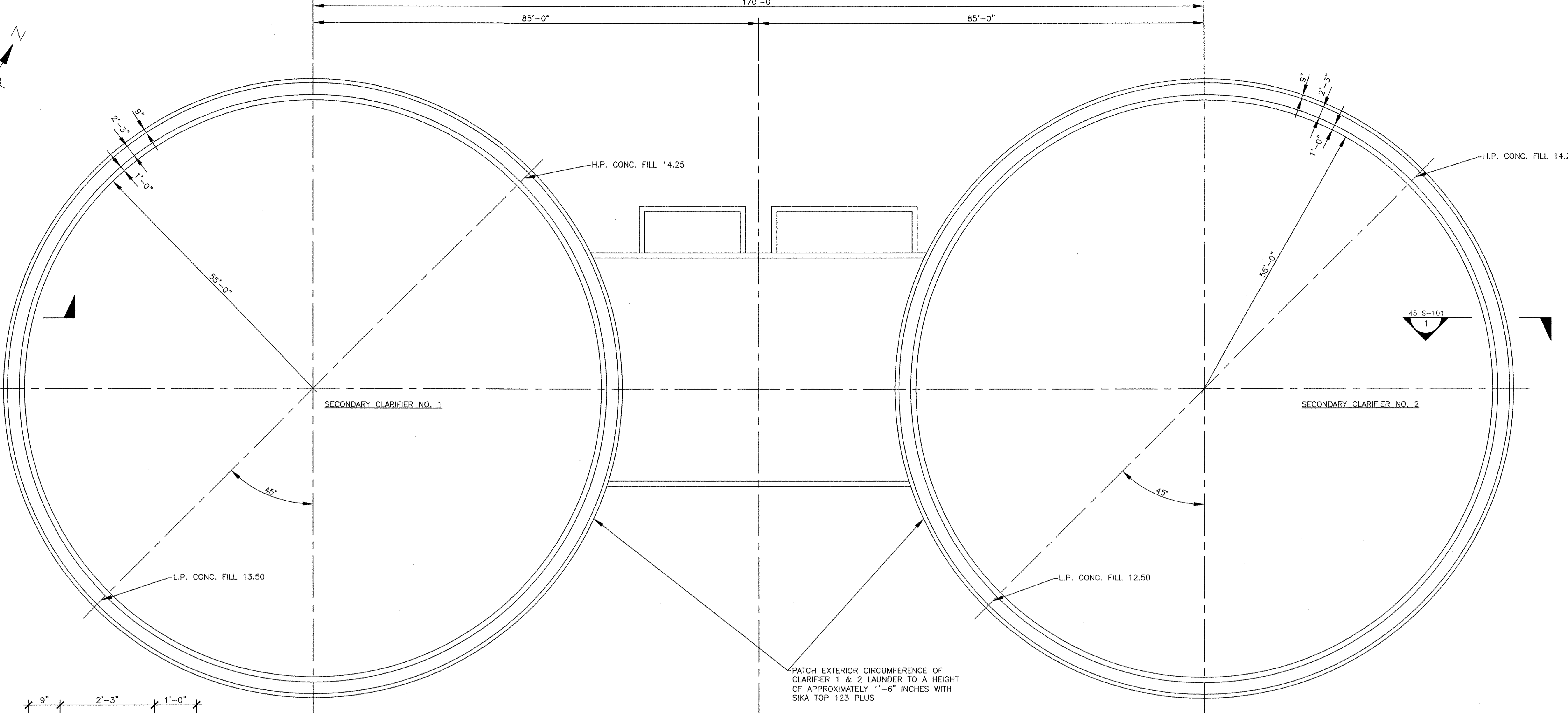
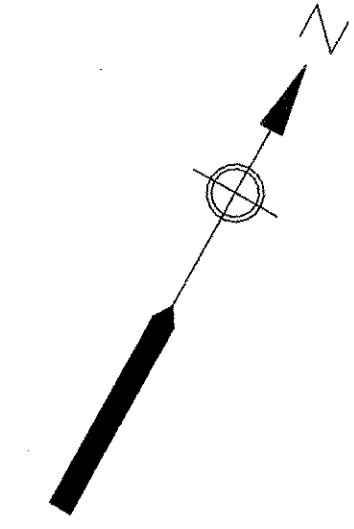
1

2

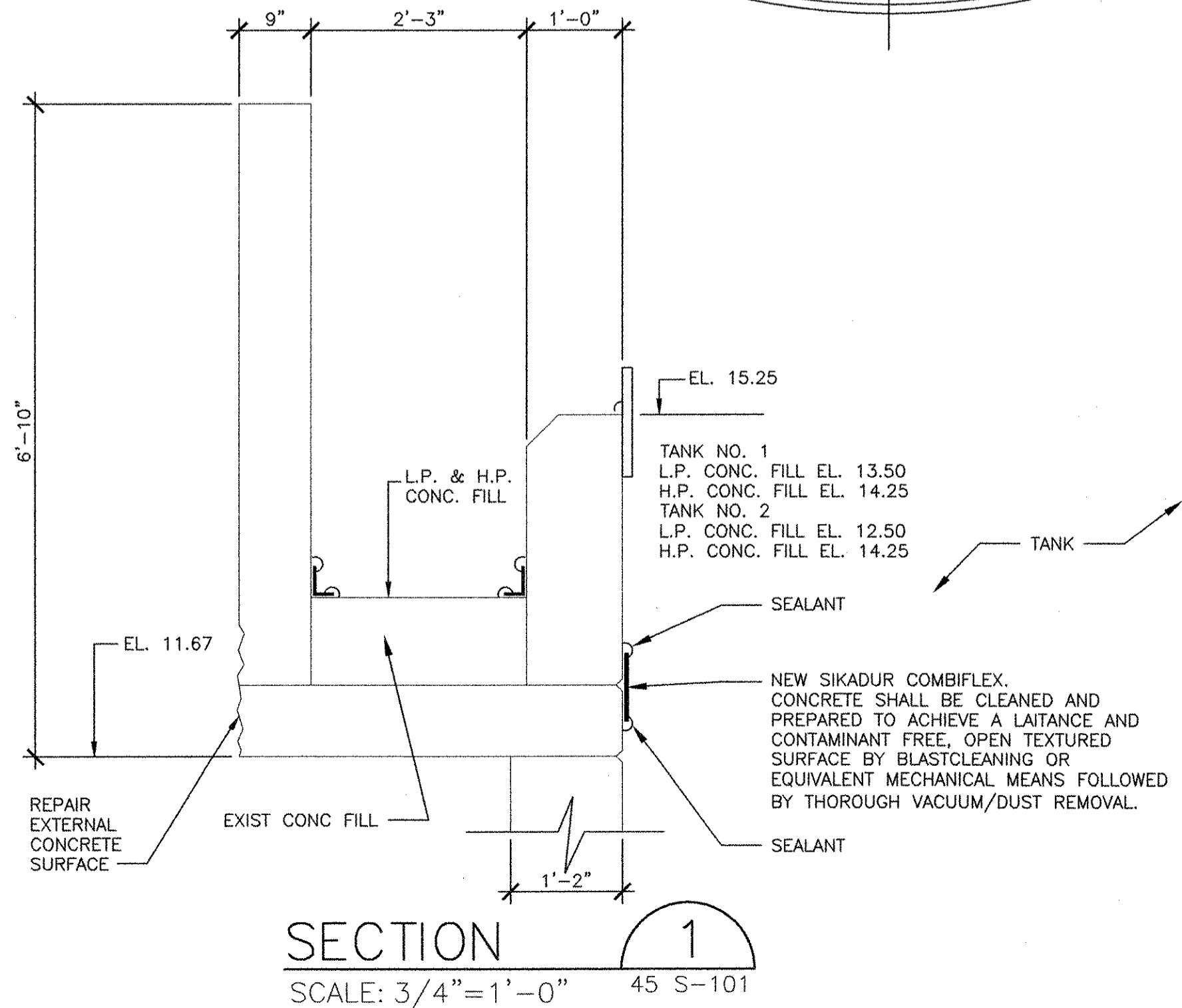
3

4

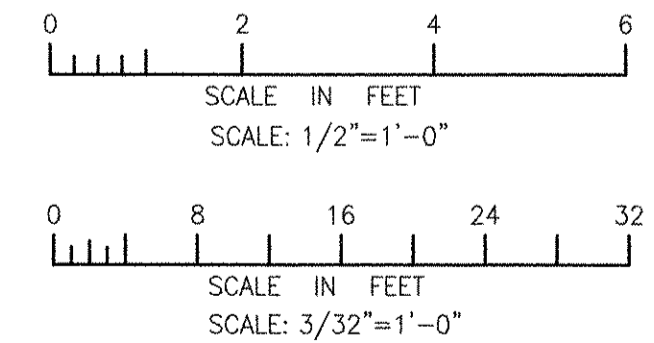
5



EXISTING SECONDARY CLARIFIERS NO. 1 & NO. 2 PLAN
SCALE: 3/32" = 1'-0"



SECTION 1
SCALE: 3/4" = 1'-0"
45 S-101



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	10/19/12 AC RF REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS

AECOM USA, INC.
701 EDEWATER DRIVE
PROVIDENCE, RI 02909
PHONE (781) 246-5200

RONALD R. FIORE
No. [Signature]
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

EXISTING SECONDARY CLARIFIERS NO. 1 & NO. 2 PLANS & SECTIONS

STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	45 S-101
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

45 S-101

PRTY/FILENAME: P:\60148648 - EAST PROVIDENCE DP-4\SHEETS\45 S-101.DWG
LAST UPDATE: Wednesday, October 17, 2012 8:57:35 AM
PLOT DATE: Tuesday, October 23, 2012 8:53:25 AM
ANSI D - 17-04-12

1

2

3

4

5

D

C

B

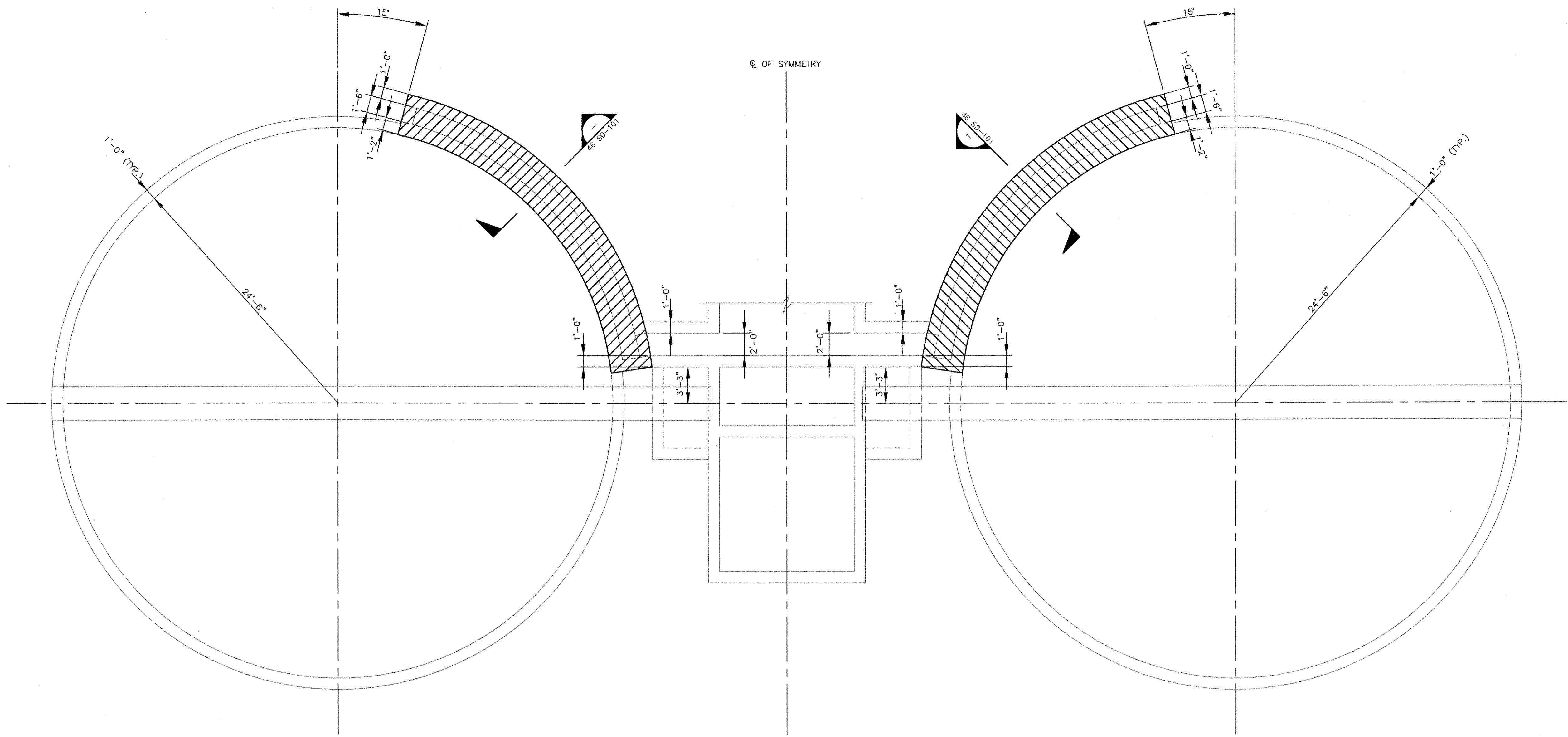
A

D

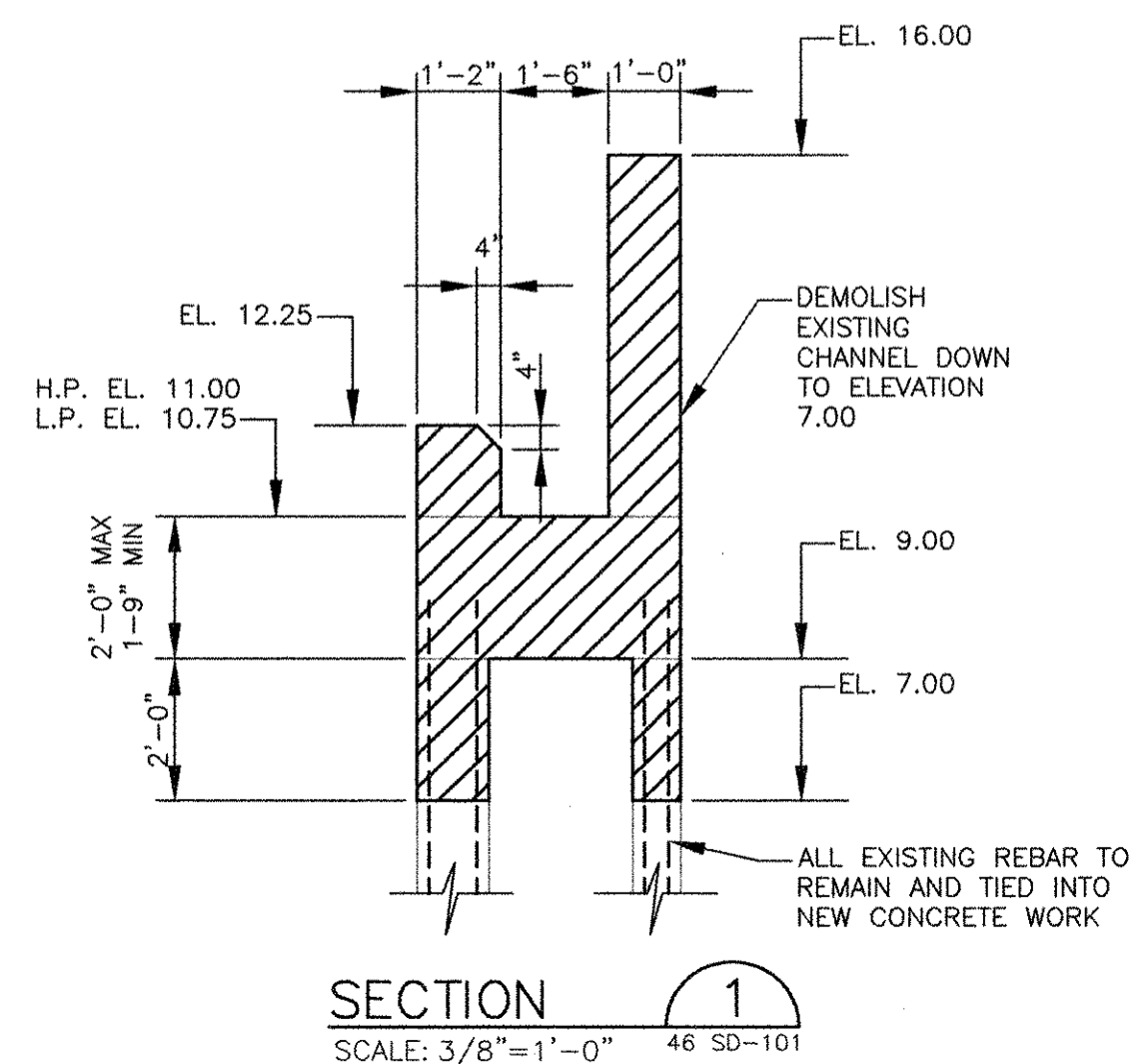
C

B

A



DEMOLITION PLAN
SCALE: 3/16" = 1'-0"



SECTION 1
SCALE: 3/8" = 1'-0"

MARK	DATE	MADE BY	CHECKED	AC	RF	REVISIONS	DESCRIPTION
1	10/19/12	AC	RF				REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS

AECOM USA, INC.
701 EDgewater Drive
Folsom, CA 95630
PHONE (916) 246-5000

RONALD R. FIORE
No. 60
Professional Engineer
STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
CHLORINE CONTACT TANKS
DEMOLITION PLAN
STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	46 SD-101
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

46 SD-101

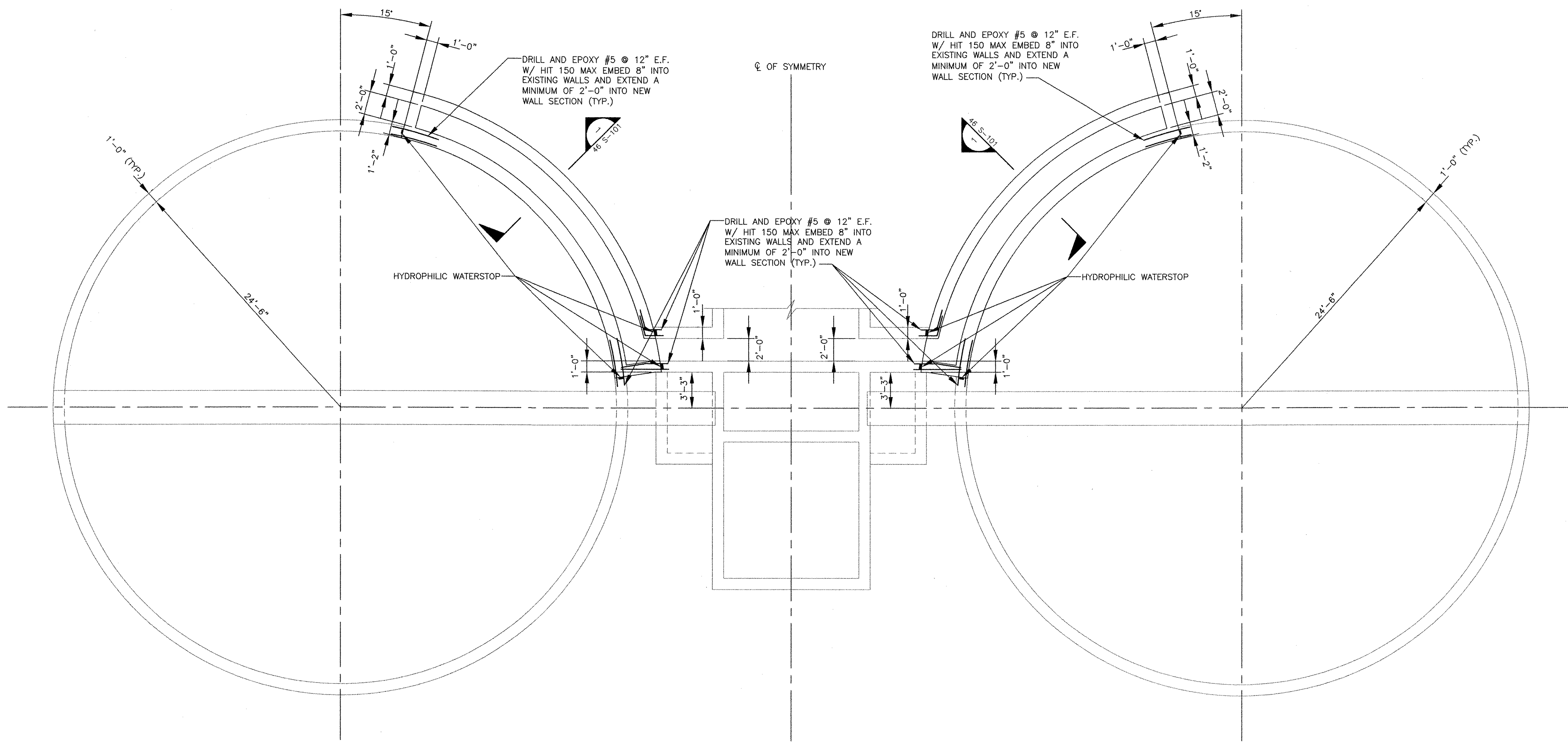
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-4\SHEETS\46 SD-101.DWG
LAST UPDATE: Monday, October 01, 2012 2:22:26 PM
PLOT DATE: Tuesday, October 23, 2012 8:52:27 AM
ANSI D - 1-Oct-12

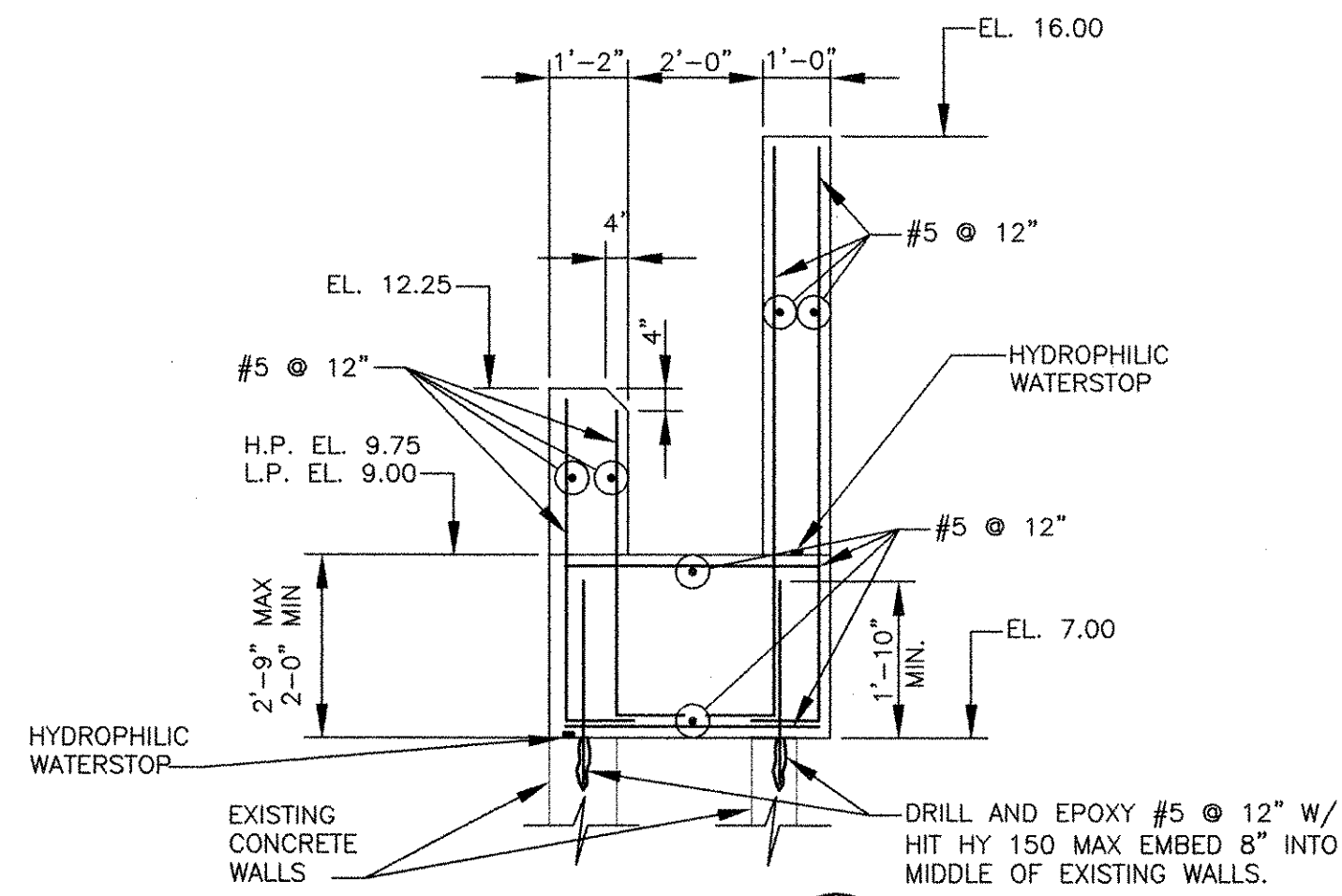
P:\1\1\48648 - EAST PROVIDENCE DGA\DP-4\1\SHEETS\1\48 S-101.DWG
 LAST UPDATE: Monday, October 01, 2012 2:27:18 PM
 PLOT DATE: Tuesday, October 23, 2012 9:53:29 AM

ANSI D - 1-Oct-12



PLAN

SCALE: 3/16" = 1'-0"



SECTION 1

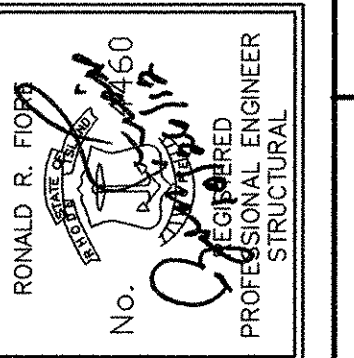
SCALE: 3/8" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	46 S-101
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
CHLORINE CONTACT TANKS
PLAN
 STRUCTURAL



AECOM USA, INC.
 701 EDgewater Drive
 PHONE (781) 246-5000



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	AC	RF	REVISED FOR RECORD DRAWING
1	8/1/11	AC	RF	ADDED WS, REBAR, AND EPOXY.

46 S-101

MEMBER	EXPOSURE CONDITIONS				
	AIR	WEATHER	AIR OVER LIQUID	EARTH OR STONE	LIQUIDS
FOOTINGS AND FOUNDATION MATS	2"	2"	-	2" * 3" •	2"
PILE CAPS ■	2"	2"	-	2" * 3" •	2"
WALLS	2"	2"	2"	2"	2"
JOISTS, BEAM STIRRUPS AND COLUMN TIES	1 1/2"	2"	2"	2" * 3" •	2"
FRAMED SLABS-EACH FACE	1"	2"	2"	2" ▲	2"
SLABS ON GROUND	1"	2"	-	2" ▲	2"

- * TOP FACE AND SIDES
- BOTTOM FACE
- ▲ WHEN PLACED ON SAND-GRAVEL, WELL DRAINED COMPACTED FILL
- BOTTOM COVER IS INDICATED ON DRAWINGS

BAR SIZE	f'c = 4,000 psi		fy = 60,000 psi	
	BASIC TENSION DEVELOPMENT	TOP BAR DEVELOPMENT	COMPRESSION DEVELOPMENT	STANDARD HOOK DEVELOPMENT
# 3 (10)	1'-2"	1'-6"	8"	7"
# 4 (13)	1'-7"	2'-1"	9"	9"
# 5 (16)	2'-0"	2'-7"	1'-0"	1'-0"
# 6 (19)	2'-4"	3'-1"	1'-2"	1'-2"
# 7 (22)	3'-6"	4'-6"	1'-5"	1'-5"
# 8 (25)	3'-11"	5'-2"	1'-7"	1'-7"
# 9 (29)	4'-6"	5'-10"	1'-9"	1'-9"
# 10 (32)	5'-0"	6'-6"	2'-0"	2'-0"
# 11 (36)	5'-7"	7'-3"	2'-3"	2'-3"

TABULATED VALUES ARE FOR UNCOATED BARS AND NORMAL WEIGHT CONCRETE. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 12" OF CONCRETE IS PLACED BELOW THE BAR.

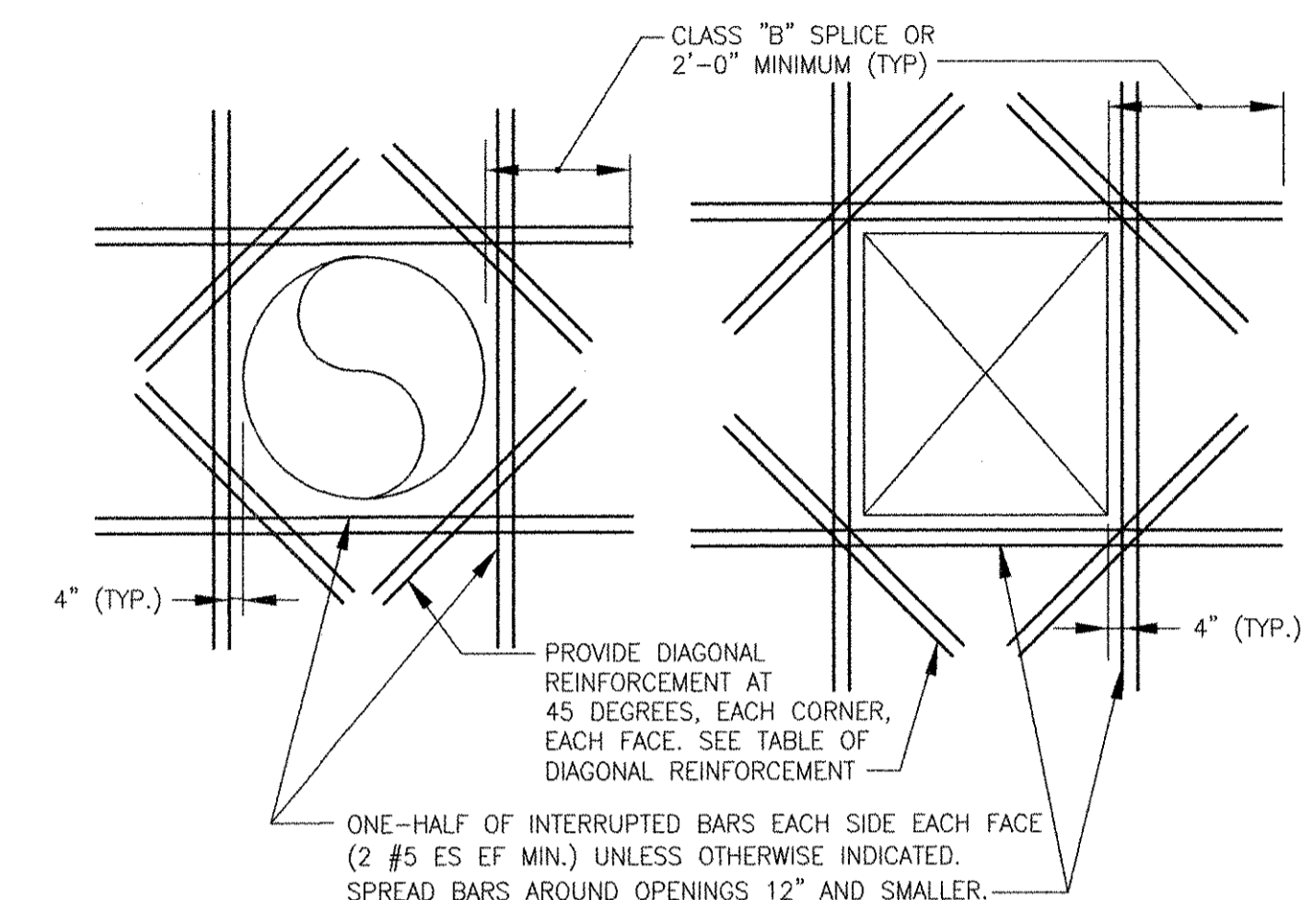
TABULATED VALUES ARE FOR BARS WHICH HAVE AT LEAST ONE BAR DIAMETER OF CLEAR CONCRETE COVER AND ARE SPACED AT LEAST TWO BAR DIAMETERS; OR HAVE AT LEAST ONE BAR DIAMETER OF CLEAR CONCRETE COVER, ARE SPACED AT LEAST ONE BAR DIAMETER AND ARE ENCLOSED BY STIRRUPS OR TIES. SPLICE LENGTHS FOR BARS NOT CONFORMING TO EITHER OF THESE CONDITIONS SHALL BE INCREASED 50%.

BAR SIZE	REINFORCING BAR SPLICES PER ACI 318		
	f'c = 4,000 psi		fy = 60,000 psi
	CLASS "B" SPLICE	COMPRESSION SPLICE	COMPRESSION SPLICE
# 3 (10)	2'-0"	1'-6"	1'-0"
# 4 (13)	2'-8"	2'-1"	1'-3"
# 5 (16)	3'-4"	2'-7"	1'-7"
# 6 (19)	4'-0"	3'-1"	1'-11"
# 7 (22)	5'-10"	4'-6"	2'-2"
# 8 (25)	6'-8"	5'-2"	2'-6"
# 9 (29)	7'-6"	5'-10"	2'-10"
# 10 (32)	8'-6"	6'-6"	3'-2"
# 11 (36)	9'-5"	7'-3"	3'-6"

TABULATED VALUES ARE FOR UNCOATED BARS AND NORMAL WEIGHT CONCRETE. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 12" OF CONCRETE IS PLACED BELOW THE BAR.

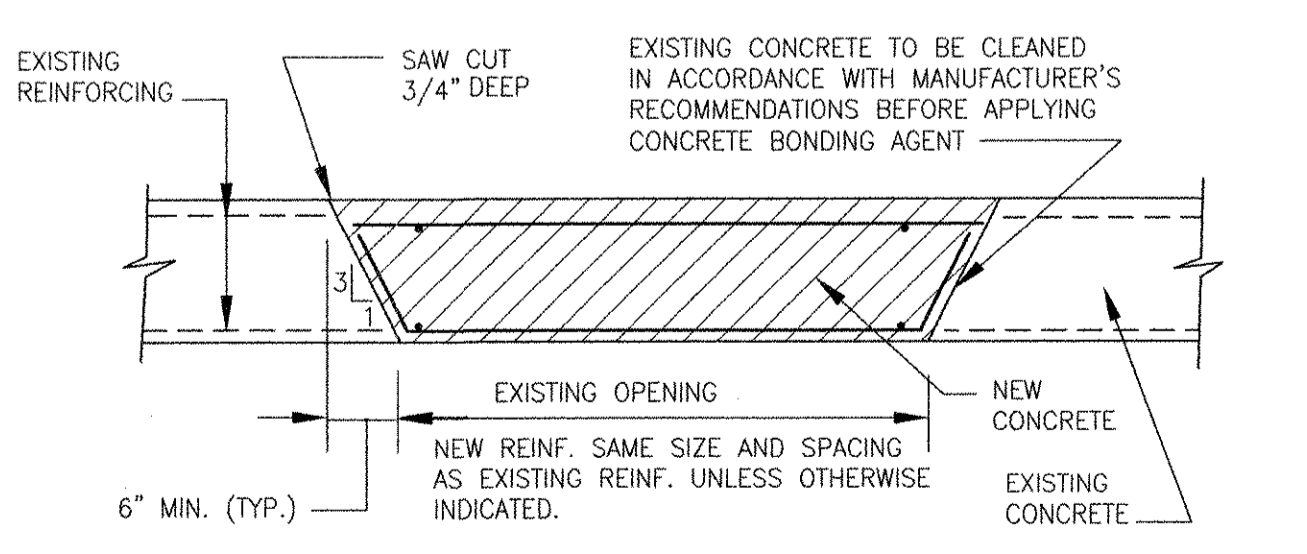
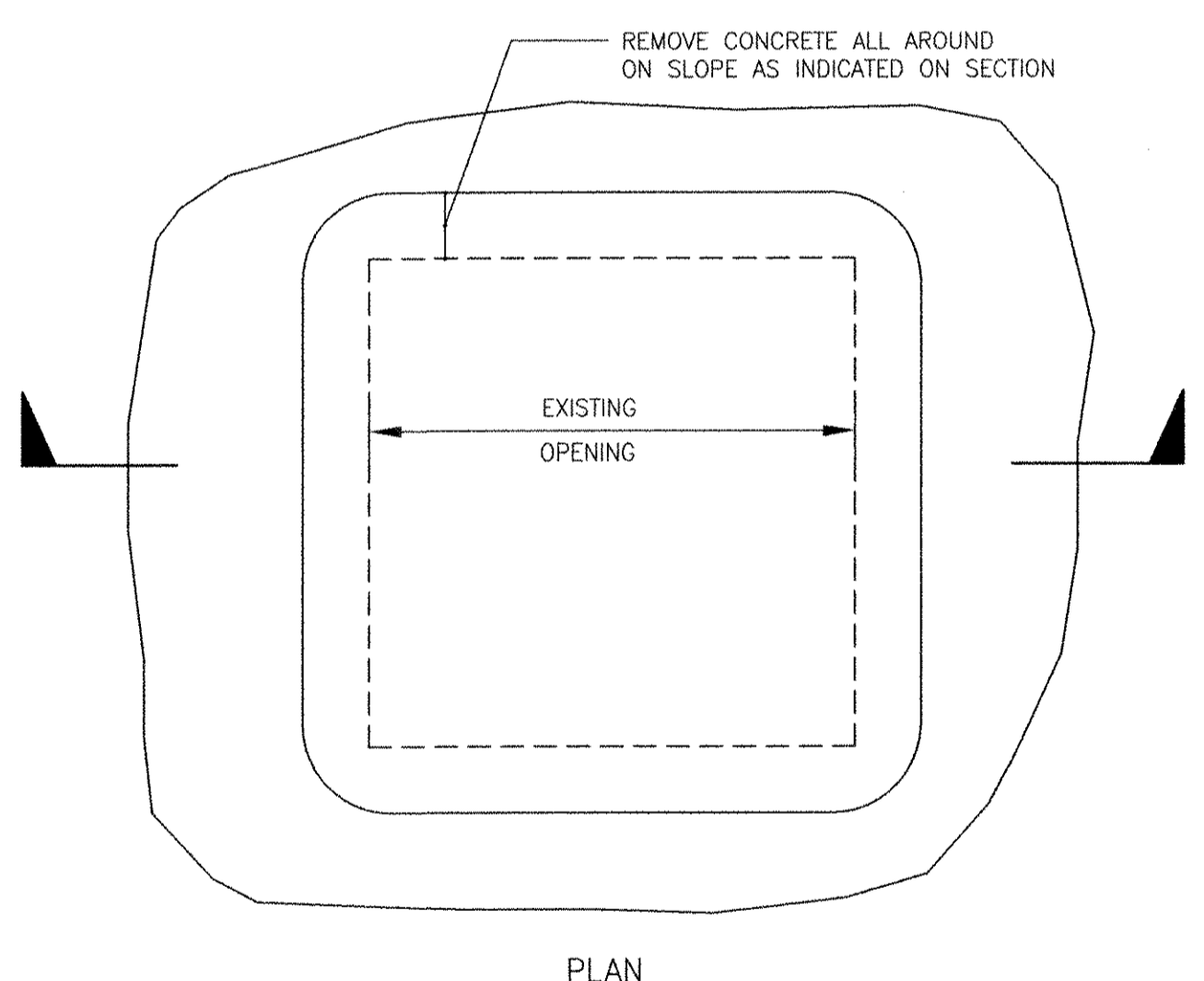
TABULATED VALUES ARE FOR BARS WHICH HAVE AT LEAST ONE BAR DIAMETER OF CLEAR CONCRETE COVER AND ARE SPACED AT LEAST TWO BAR DIAMETERS; OR HAVE AT LEAST ONE BAR DIAMETER OF CLEAR CONCRETE COVER, ARE SPACED AT LEAST ONE BAR DIAMETER AND ARE ENCLOSED BY STIRRUPS OR TIES. SPLICE LENGTHS FOR BARS NOT CONFORMING TO EITHER OF THESE CONDITIONS SHALL BE INCREASED 50%.

MEMBER THICKNESS IN INCHES	TABLE OF DIAGONAL REINFORCEMENT				
	LESS THAN 24	24 TO 36	36 TO 48	48 TO 60	60 AND LARGER
LESS THAN 16	NONE	NONE	NONE	NONE	NONE
16 TO 32	NONE	2-#6 X 4'-0"	2-#6 X 4'-0"	2-#7 X 4'-6"	2-#7 X 4'-6"
32 TO 48	NONE	2-#6 X 4'-0"	2-#7 X 4'-6"	2-#7 X 4'-6"	2-#8 X 5'-0"
48 TO 60	NONE	2-#7 X 4'-6"	2-#7 X 4'-6"	2-#8 X 5'-0"	2-#8 X 5'-0"
60 AND LARGER	NONE	2-#7 X 4'-6"	2-#8 X 5'-0"	2-#8 X 5'-0"	2-#9 X 6'-0"



ADDITIONAL REINFORCEMENT FOR ROUND AND RECTANGULAR OPENINGS

NTS
3-3.23.1 (REV. 08-08-97)



FLOOR OPENING CLOSURE

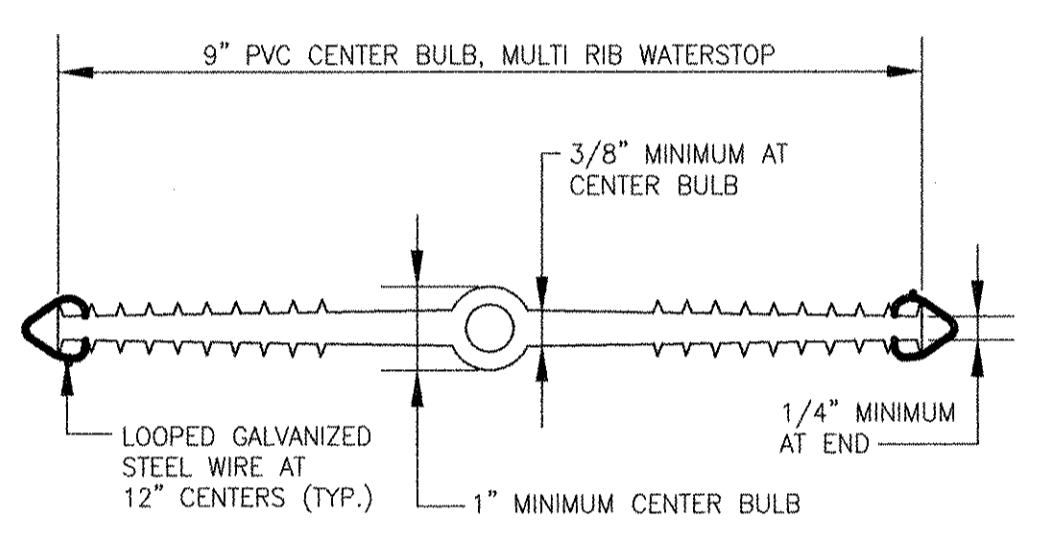
NTS
3-3.29.1 (REV. 09-05-97)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

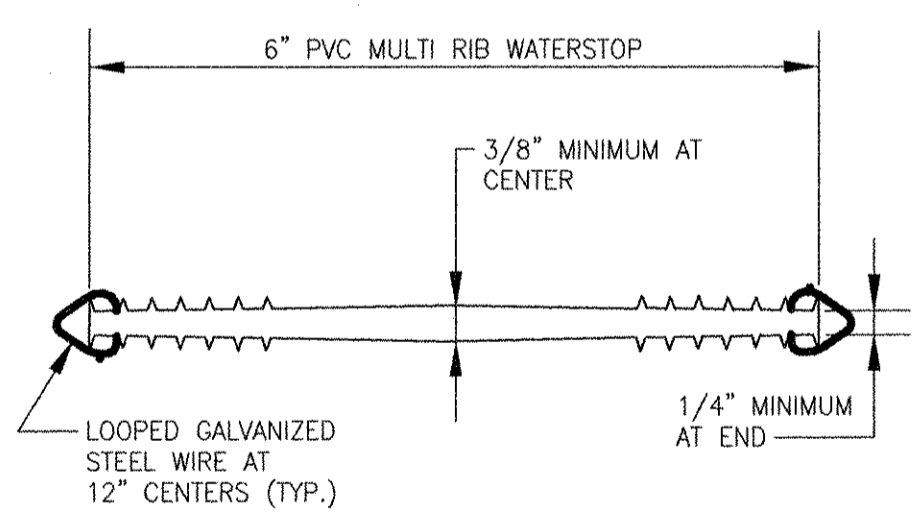
CONCRETE COVER FOR CAST-IN-PLACE CONCRETE OVER REINFORCEMENT

NTS
3-3.1 (REV. 03-08-95)



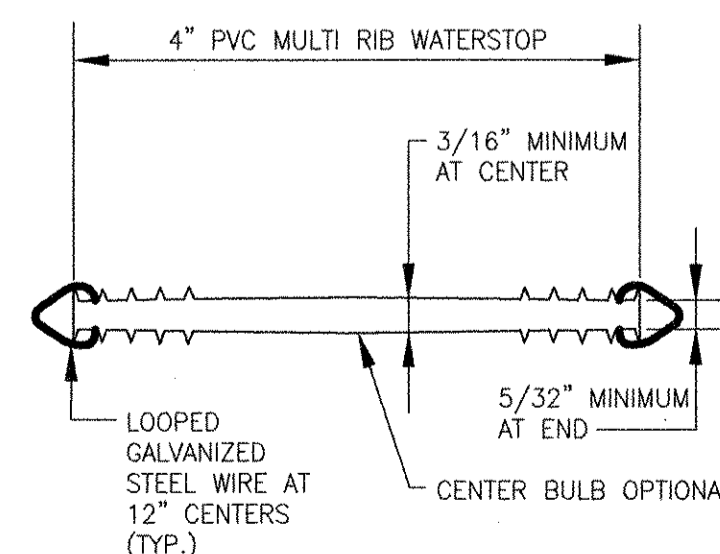
NINE INCH WATERSTOP

NTS
3-3.25.1 (REV. 05-29-97)



SIX INCH WATERSTOP

NTS
3-3.25.2 (REV. 09-09-97)

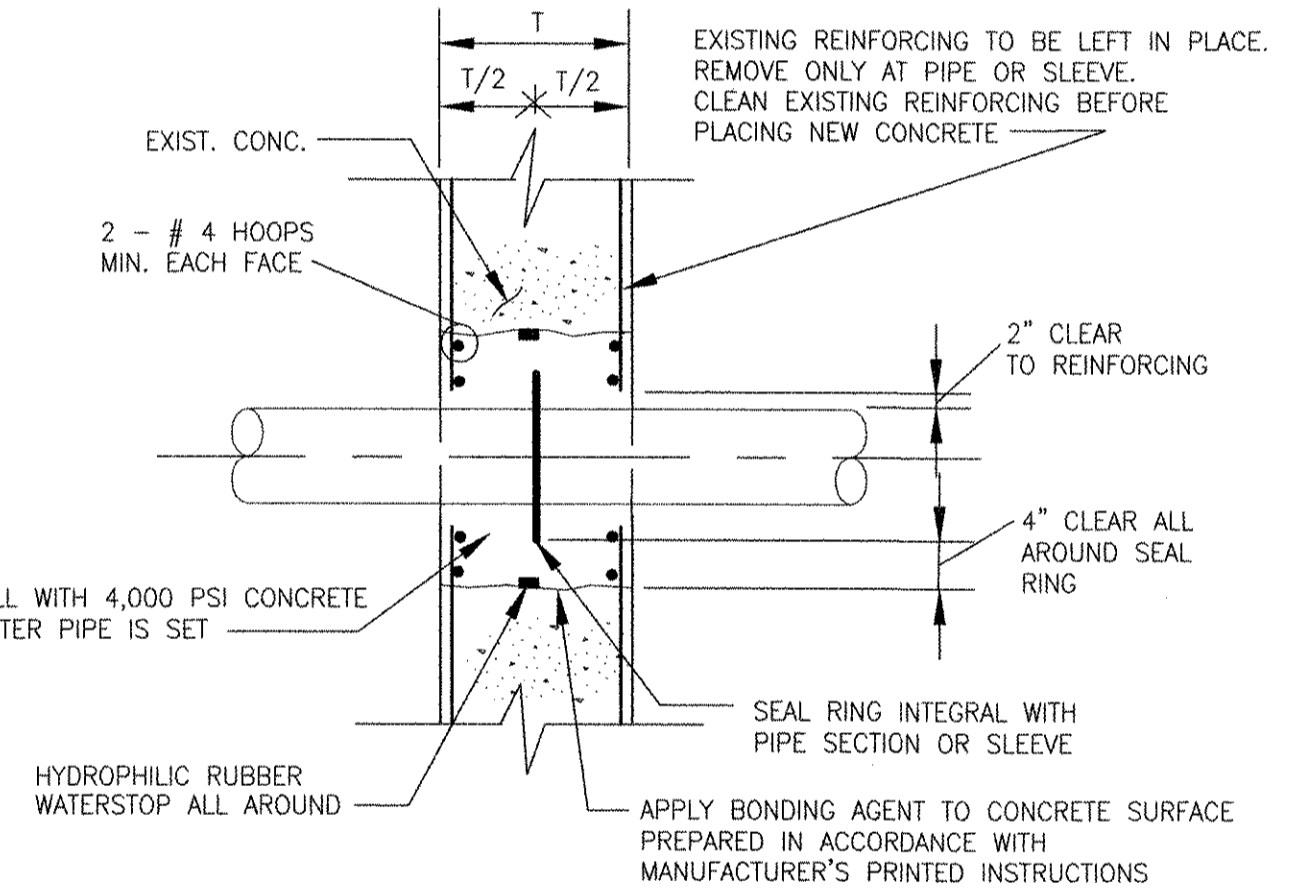


FOUR INCH WATERSTOP

NTS
3-3.25.3 (REV. 08-06-97)

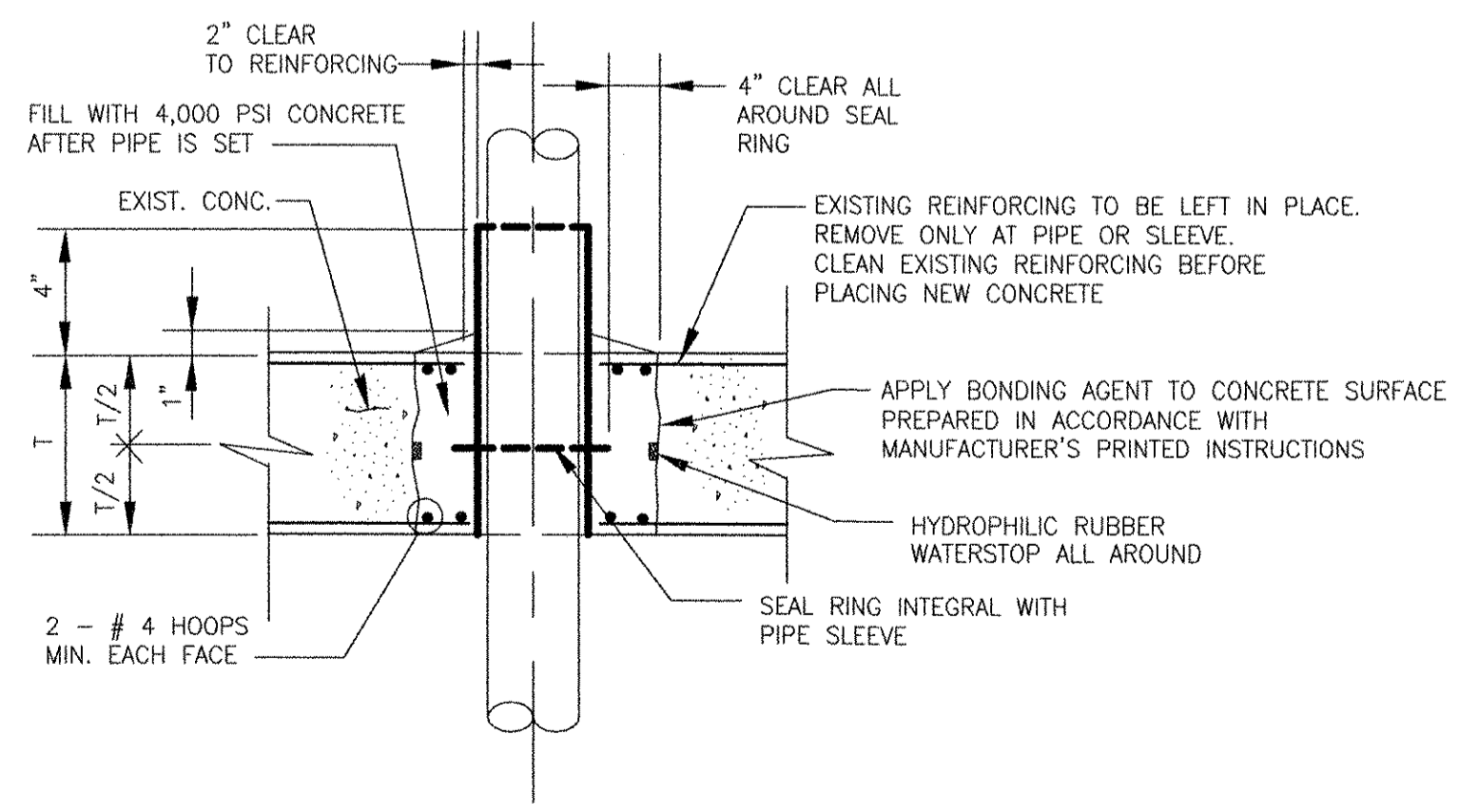
REINFORCING BAR DEVELOPMENT

(f'c = 4,000 psi & fy = 60,000 psi)
NTS
3-3.2 (REV. 11-26-02)



PIPE PENETRATION CLOSURE AT EXISTING WALL

NTS
3-3.39 (REV. 03-20-00)

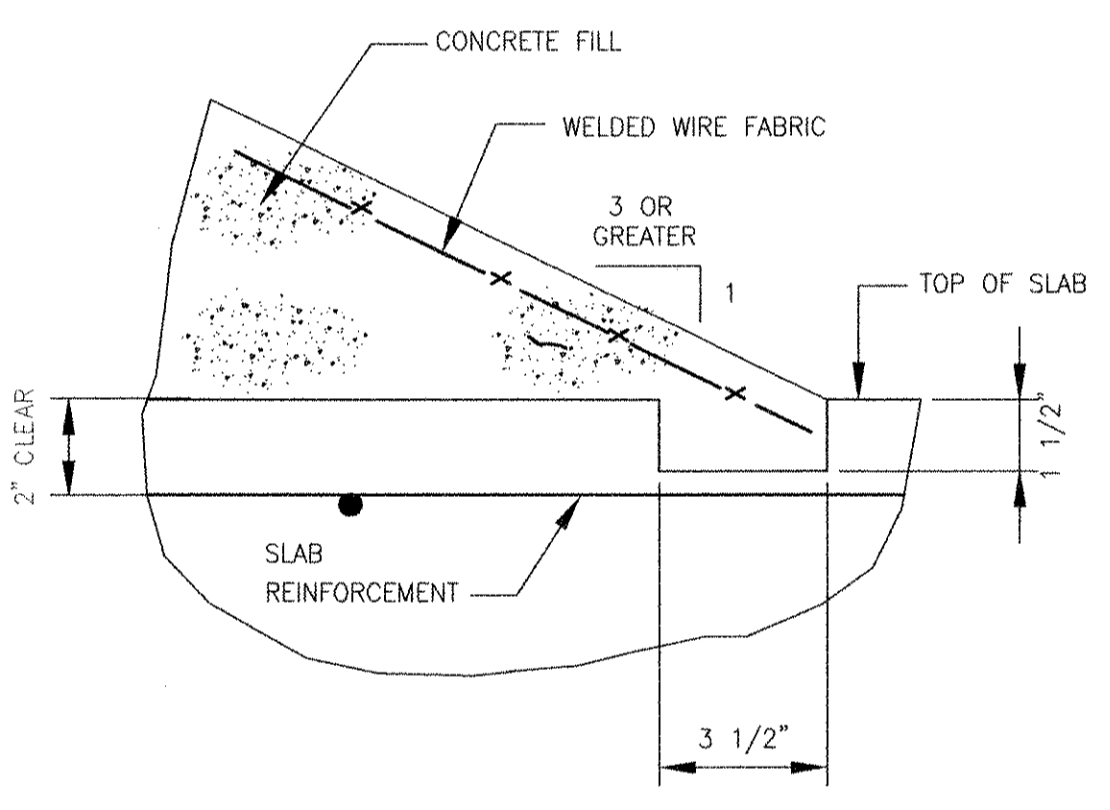


PIPE PENETRATION CLOSURE AT EXISTING FLOOR

NTS
3-3.40 (REV. 07-29-98)

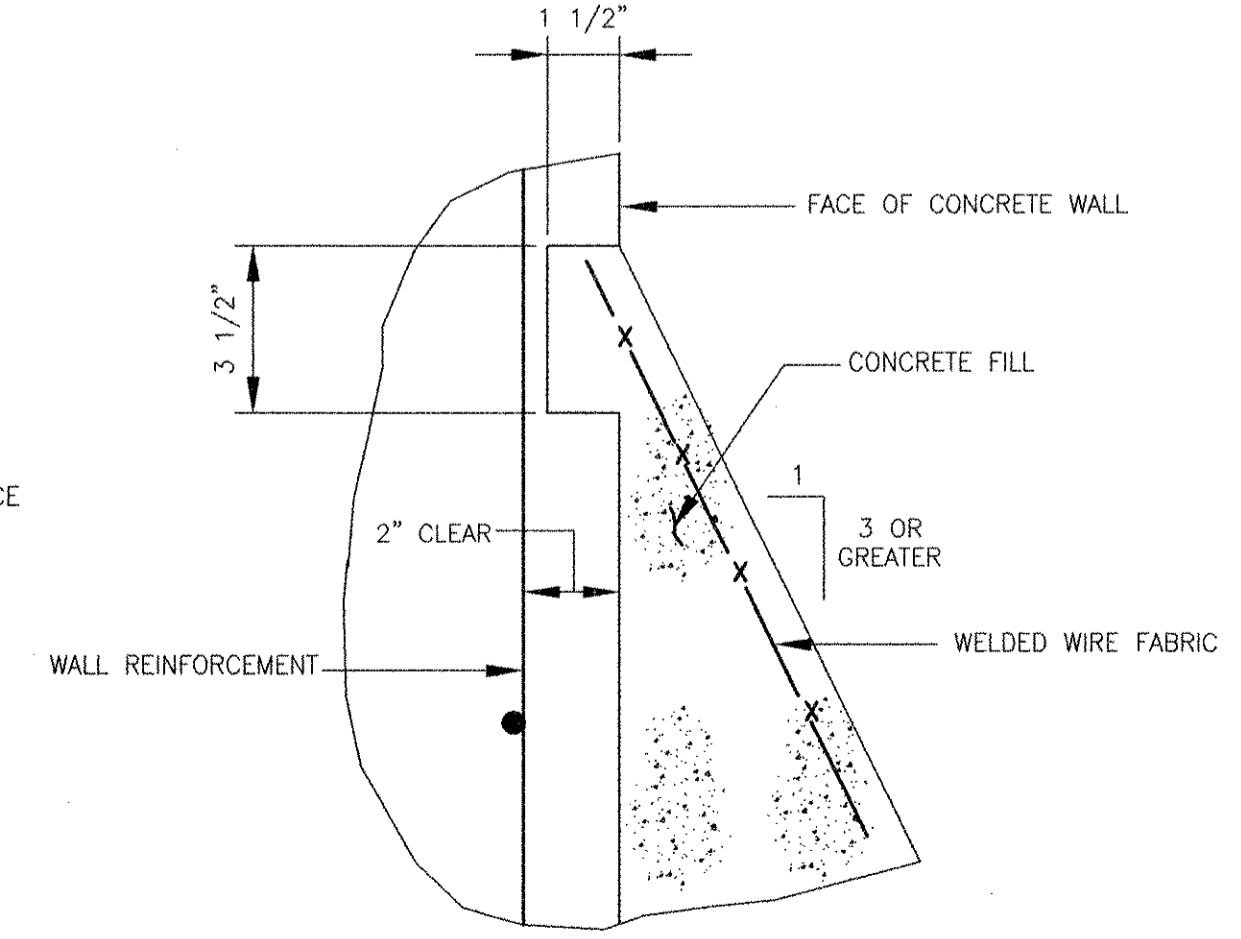
REINFORCING BAR SPLICES

(f'c = 4,000 psi & fy = 60,000 psi)
NTS
3-3.3 (REV. 11-15-02)



FLOOR KEY FOR SLOPED CONCRETE FILL (REQUIRED FOR 1:3 SLOPE OR LESS)

NTS
3-3.34.1 (REV. 02-15-00)



WALL KEY FOR SLOPED CONCRETE FILL (REQUIRED FOR 1:3 SLOPE OR GREATER)

NTS
3-3.34.2 (REV. 02-15-00)

P:\PROJECTS\98\9801\COMMON SHEETS\98 S-501.DWG
 LAST UPDATE: Monday, October 01, 2012 11:38:37 AM
 PLOT DATE: Tuesday, October 23, 2012 8:53:31 AM
 ANSI D - 1-10-12

AECOM

RECORD DRAWINGS

STRUCTURAL STANDARD DETAILS I

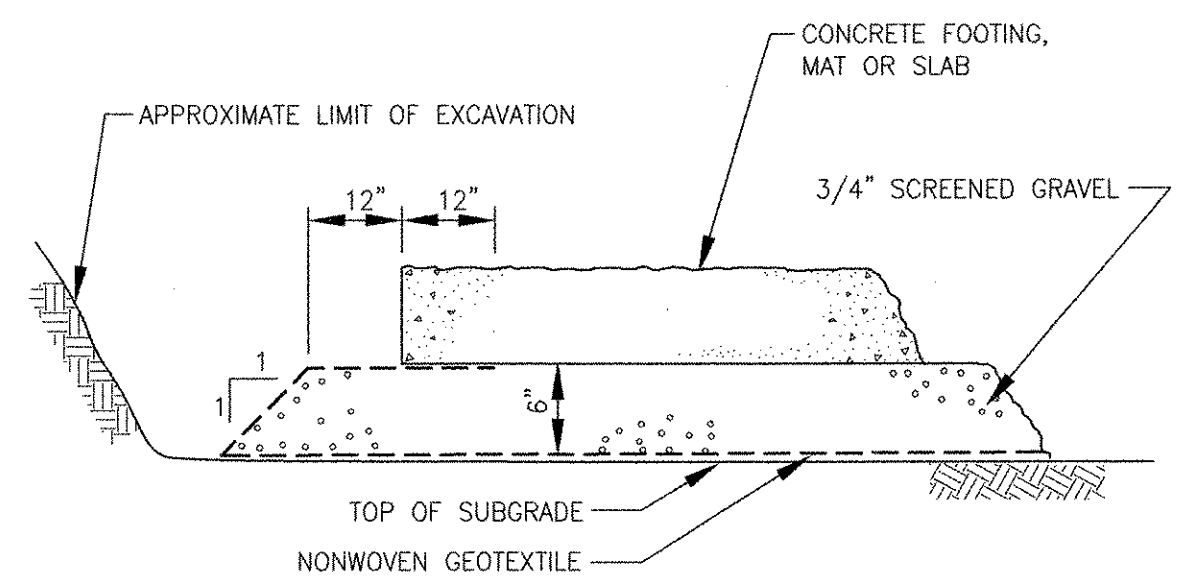
STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

PROJECT NO: 60148646
 CAD DWG FILE: 99 S-501
 DESIGNED BY: A. CATALANO
 DRAWN BY: A. CATALANO
 DEPT CHECK: R. FIORE
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

99 S-501

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	AC	RF	REVISED FOR RECORD DRAWING



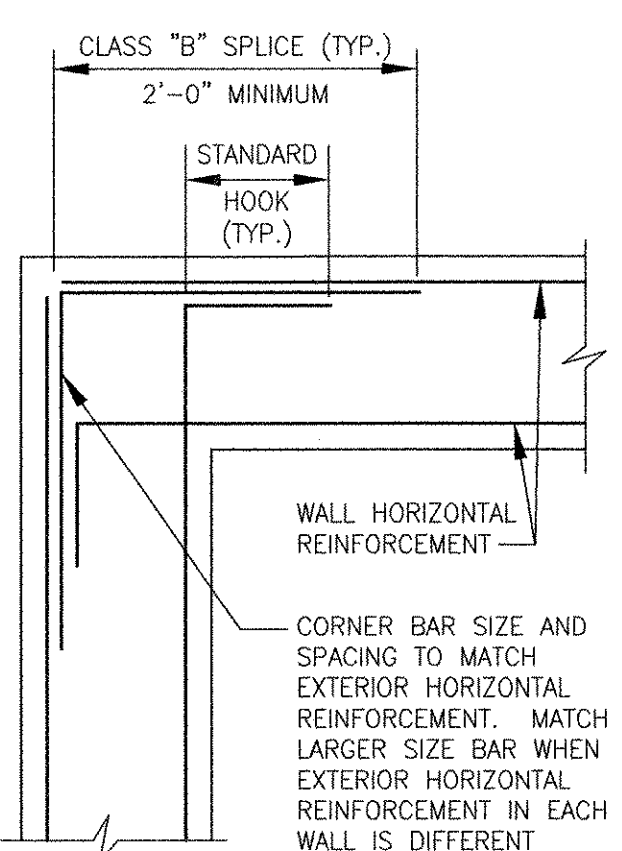
GRADATION REQUIREMENTS

SIEVE SIZE	PERCENTAGE BY WEIGHT PASSING
1"	100
3/4"	90 - 100
3/8"	20 - 55
#4	0 - 10
#8	0 - 5

NOTE: CONFORM TO GEOTEXTILE SPECIFICATIONS.

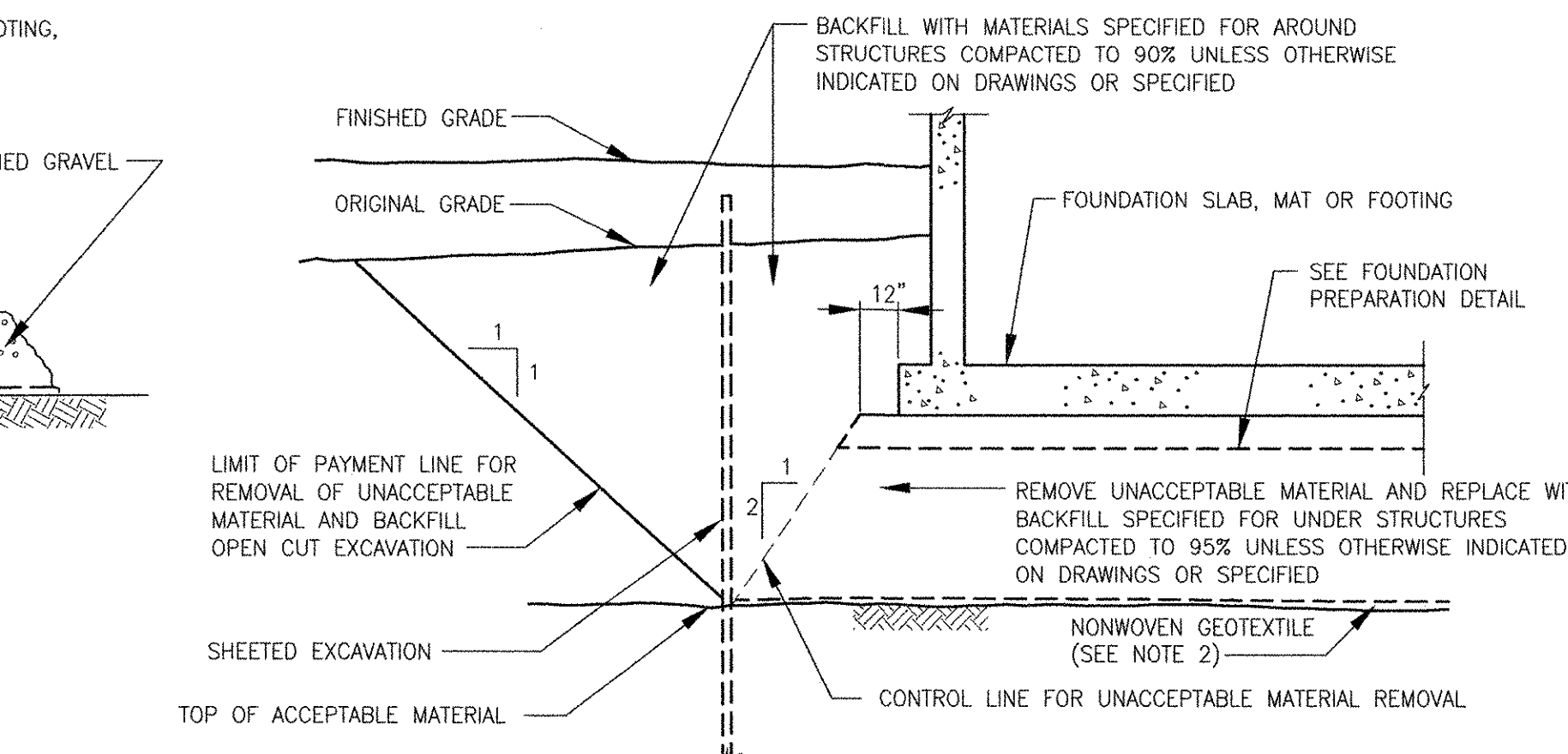
FOUNDATION PREPARATION WITH GEOTEXTILE

NOT TO SCALE
2-9.1.3 (REV. 9-3-98)



WALL CORNER REINFORCEMENT

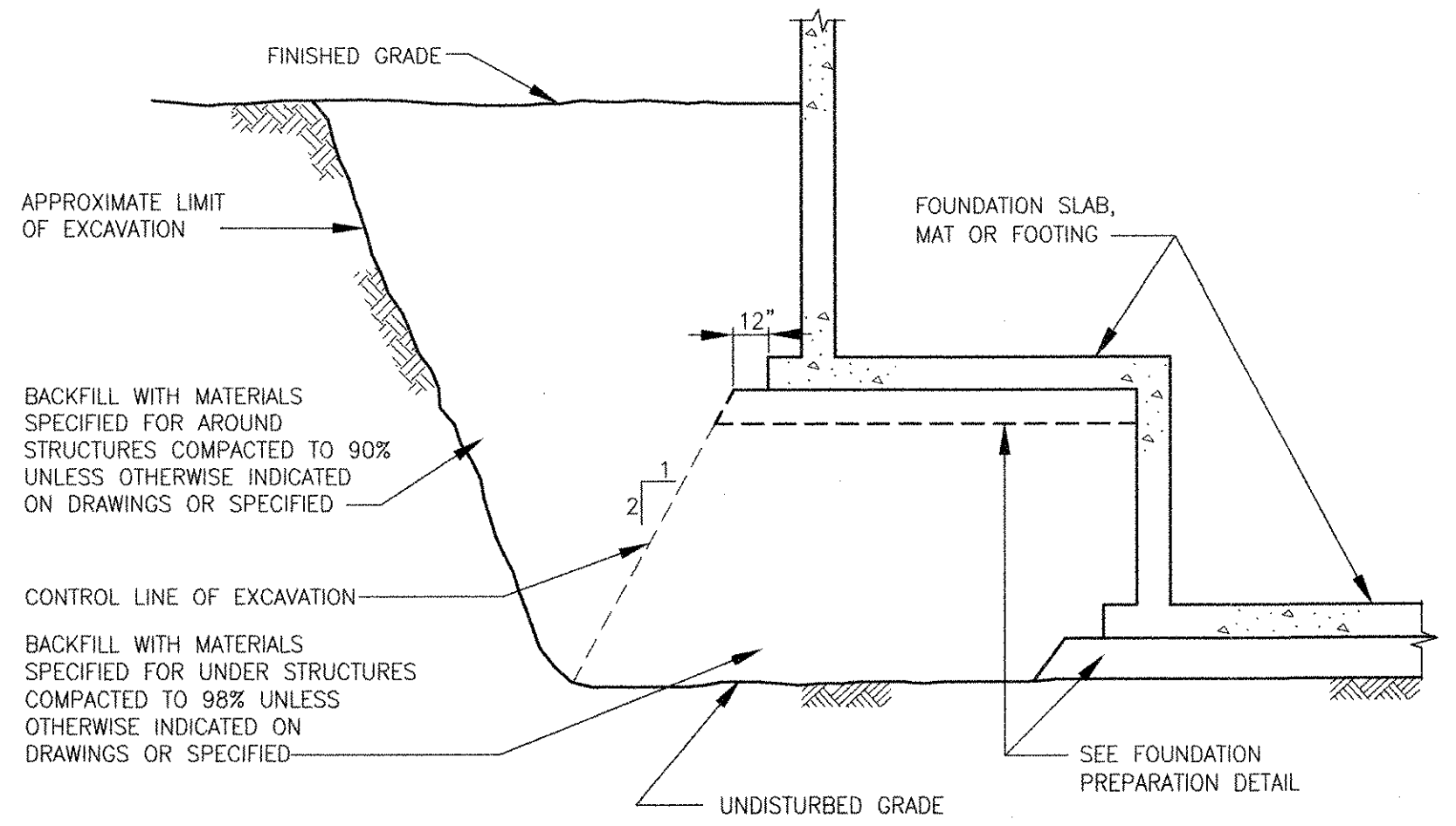
NTS
3-3.8.1 (REV. 08-06-97)



REMOVAL OF UNACCEPTABLE MATERIAL FROM BENEATH STRUCTURES

NOT TO SCALE
2-9.3.2 (REV. 9-3-98)

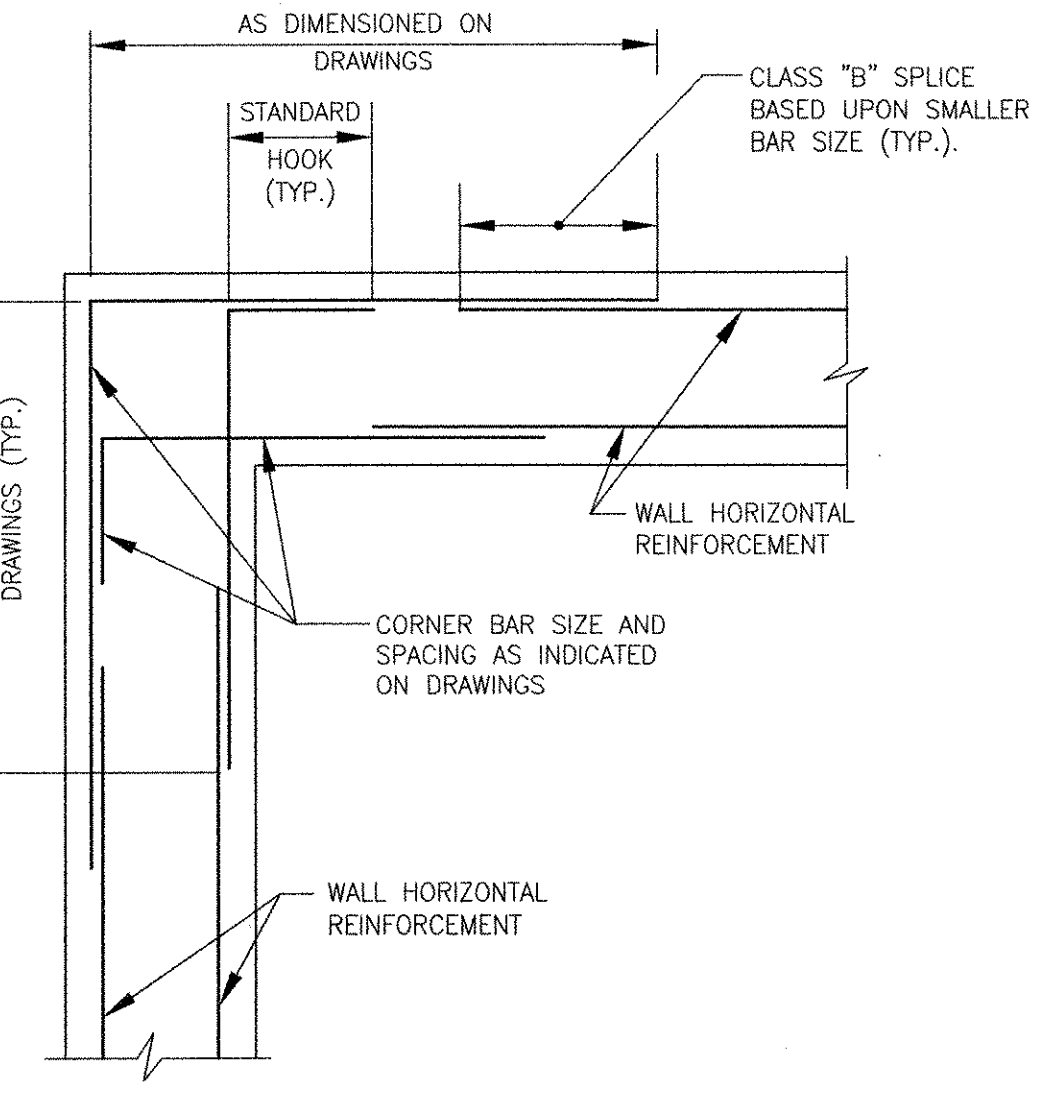
- NOTES:
- PERCENT COMPACTION IS THE RATIO OF FIELD DRY DENSITY DETERMINED BY ASTM D-1556 TO MAXIMUM DRY DENSITY DETERMINED BY ASTM D-1557 MULTIPLIED BY 100.
 - NONWOVEN GEOTEXTILE SHALL BE PLACED AT UNDISTURBED SUBGRADE WHEN SCREENED GRAVEL OR CRUSHED STONE IS USED AS BACKFILL BENEATH STRUCTURES.



BACKFILL AROUND AND BENEATH STRUCTURES

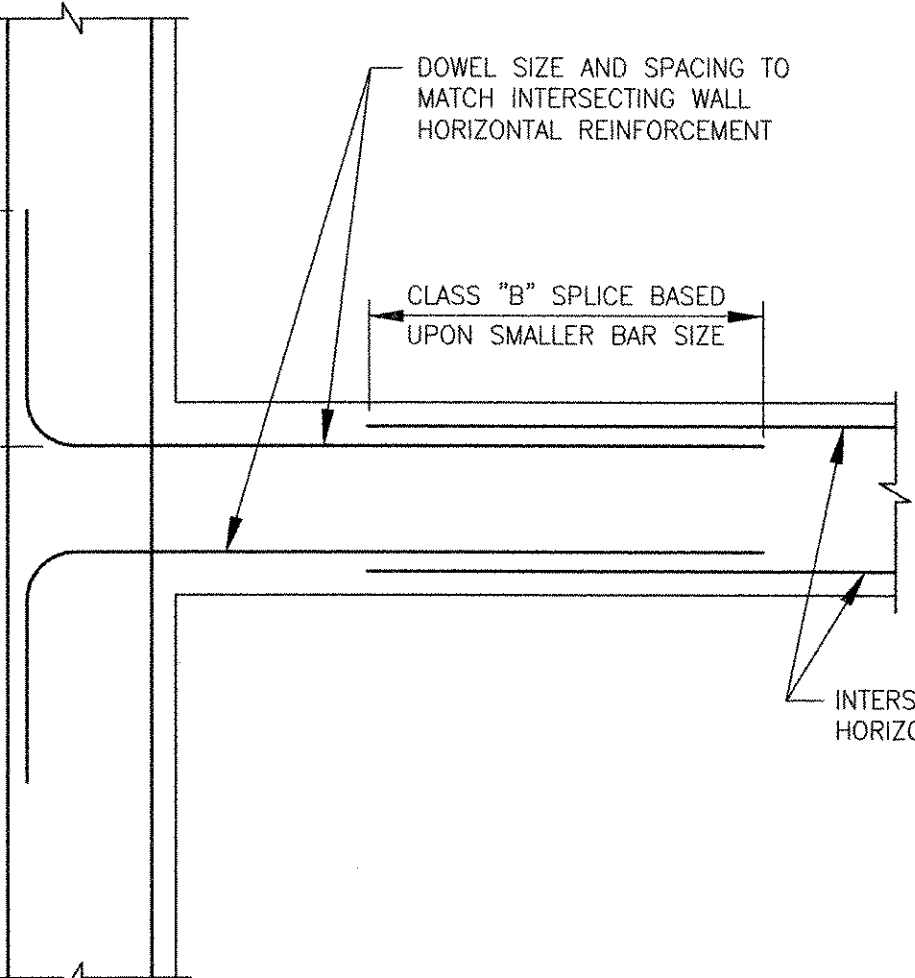
NOT TO SCALE
2-9.3.3 (REV. 9-3-98)

NOTE: PERCENT COMPACTION IS THE RATIO OF FIELD DRY DENSITY DETERMINED BY ASTM D-1556 TO MAXIMUM DRY DENSITY DETERMINED BY ASTM D-1557 MULTIPLIED BY 100.



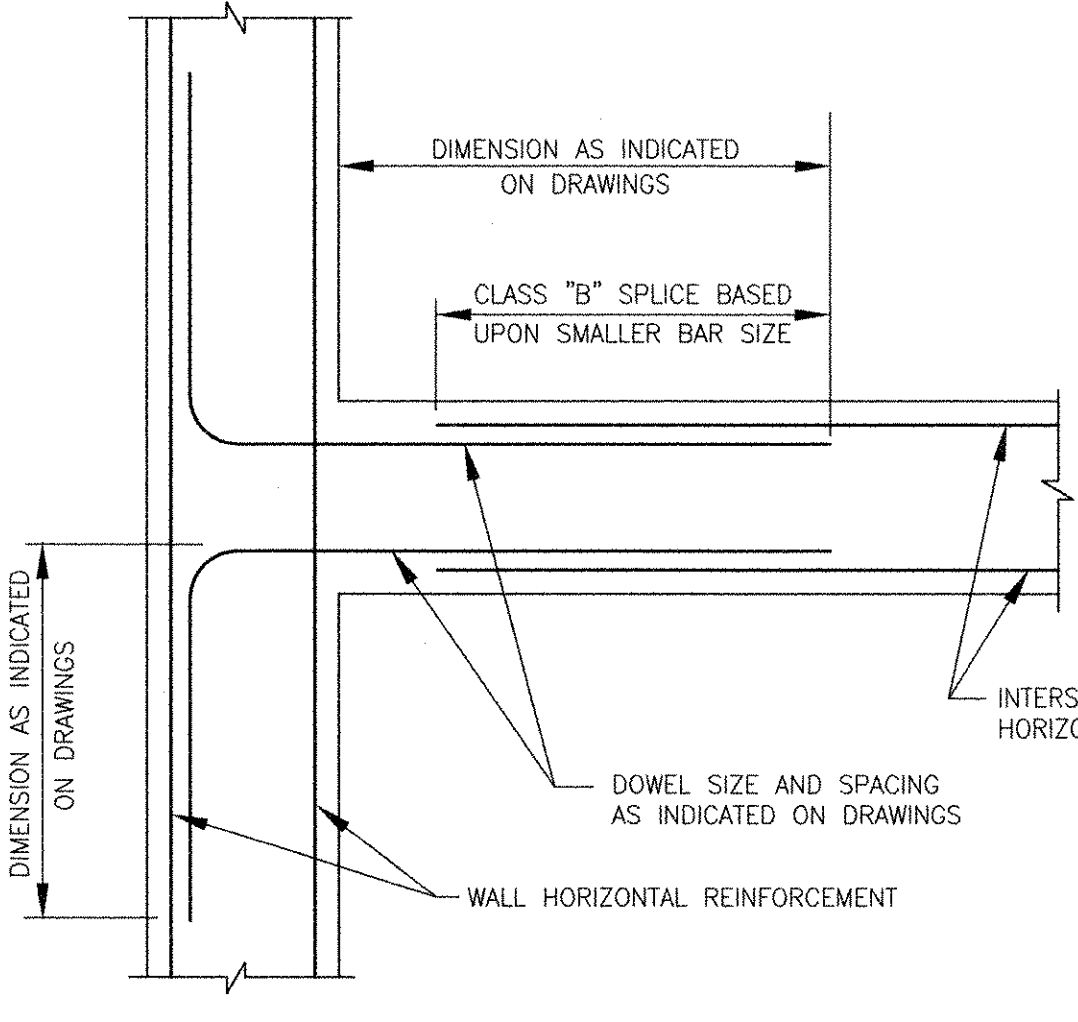
WALL CORNER WITH ADDITIONAL CORNER BARS

NTS
3-3.8.2 (REV. 08-06-97)



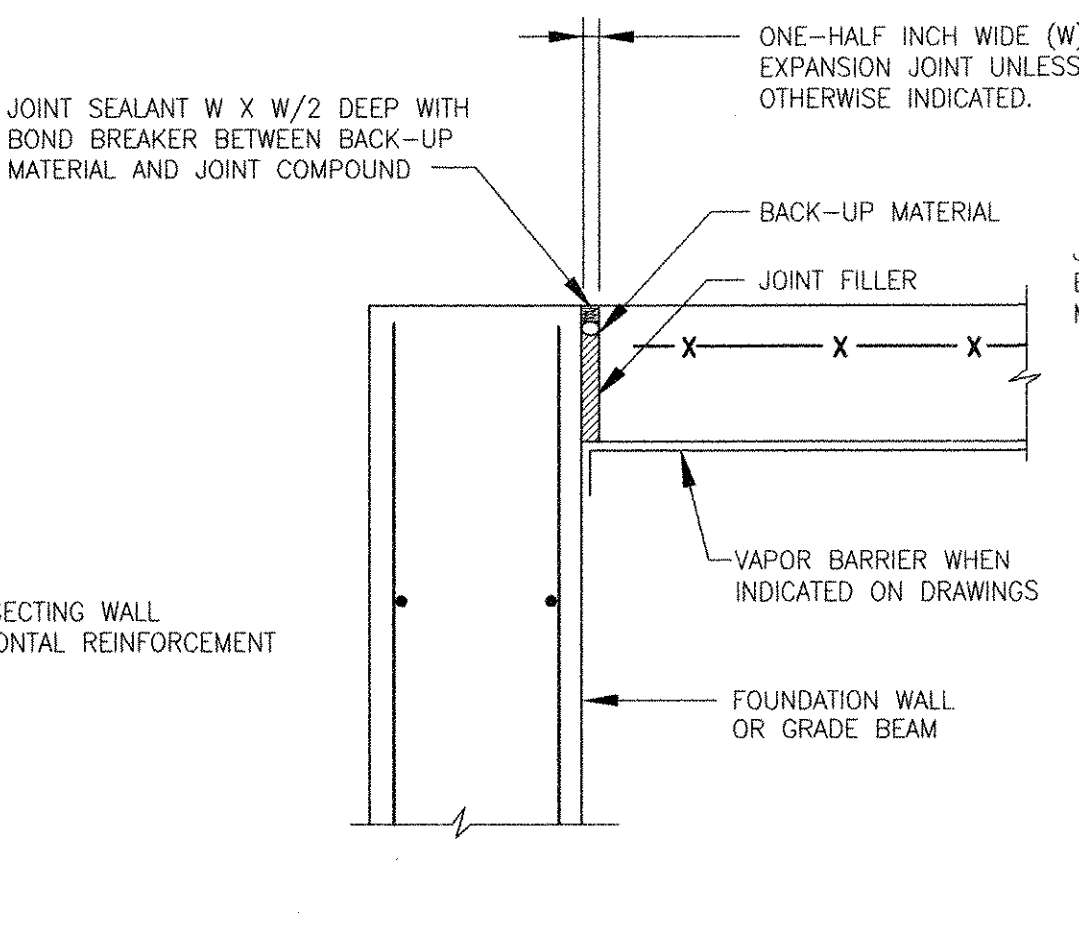
INTERSECTION OF TWO WALLS WITHOUT CONSTRUCTION JOINT

NTS
3-3.6.1 (REV. 07-27-97)



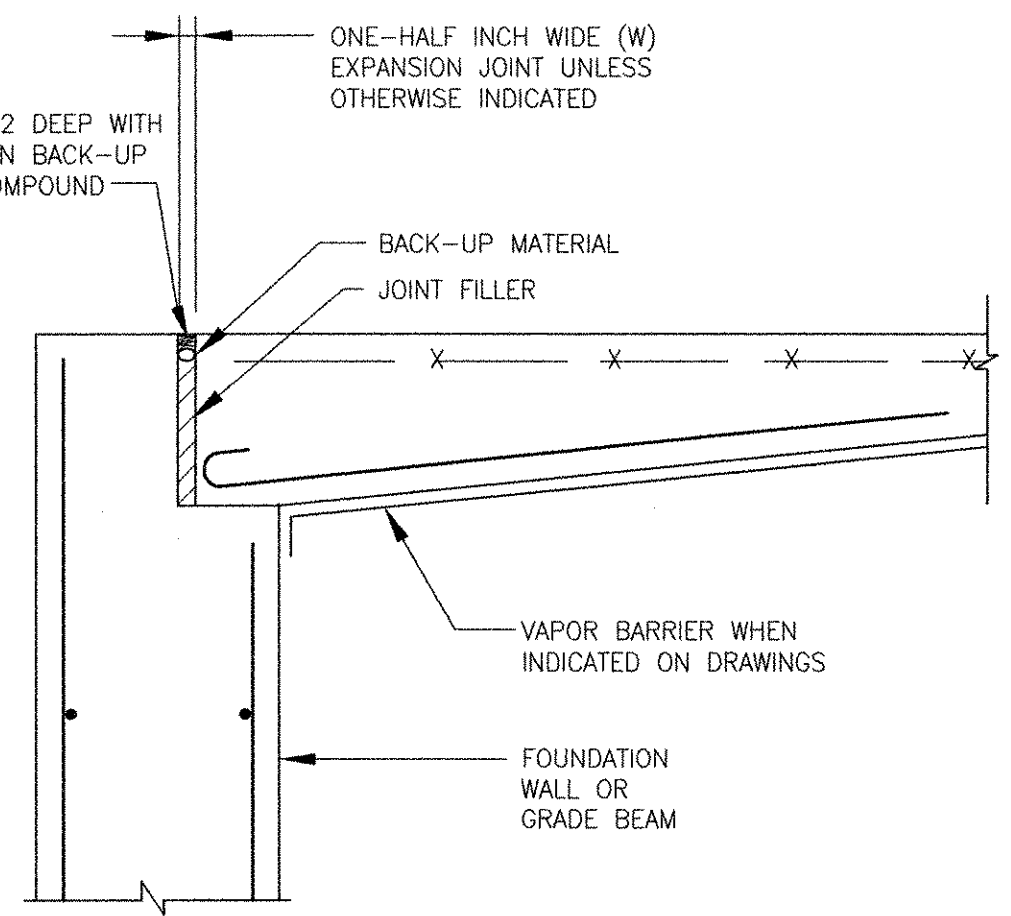
INTERSECTION OF TWO WALLS WITH ADDITIONAL CORNER BARS

NTS
3-3.6.4 (REV. 08-07-97)



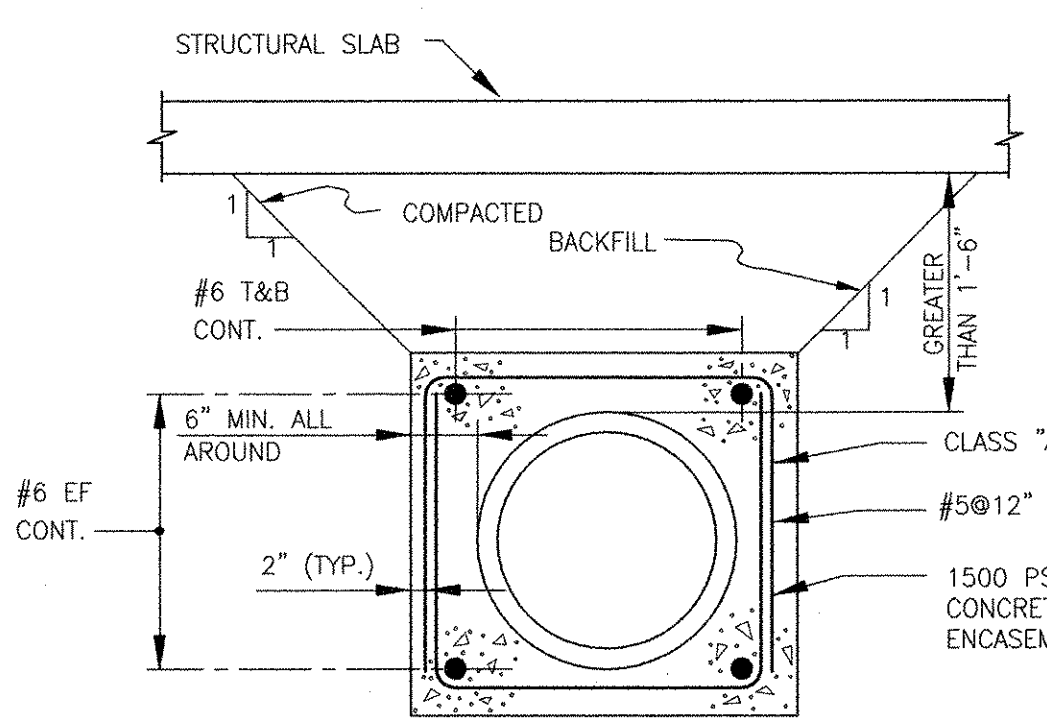
PERIMETER EXPANSION JOINT IN SLAB ON GRADE

NTS
3-3.12.1 (REV. 05-29-97)



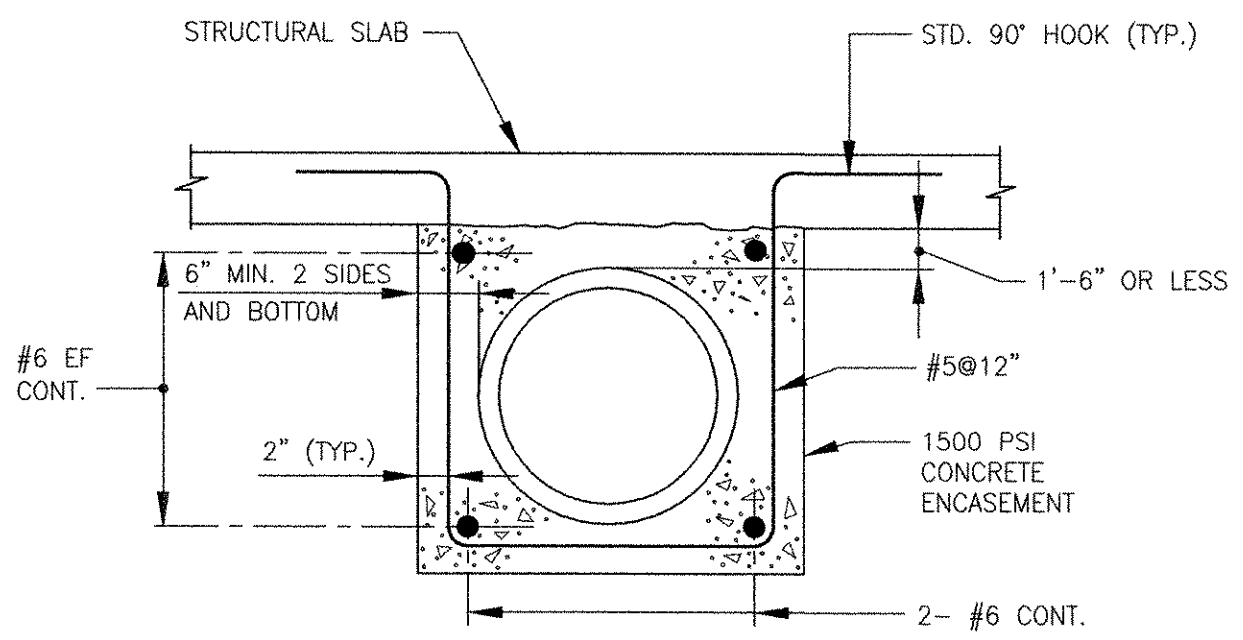
PERIMETER EXPANSION JOINT IN SLAB ON GRADE AT DOORWAY

NTS
3-3.12.2 (REV. 07-27-97)



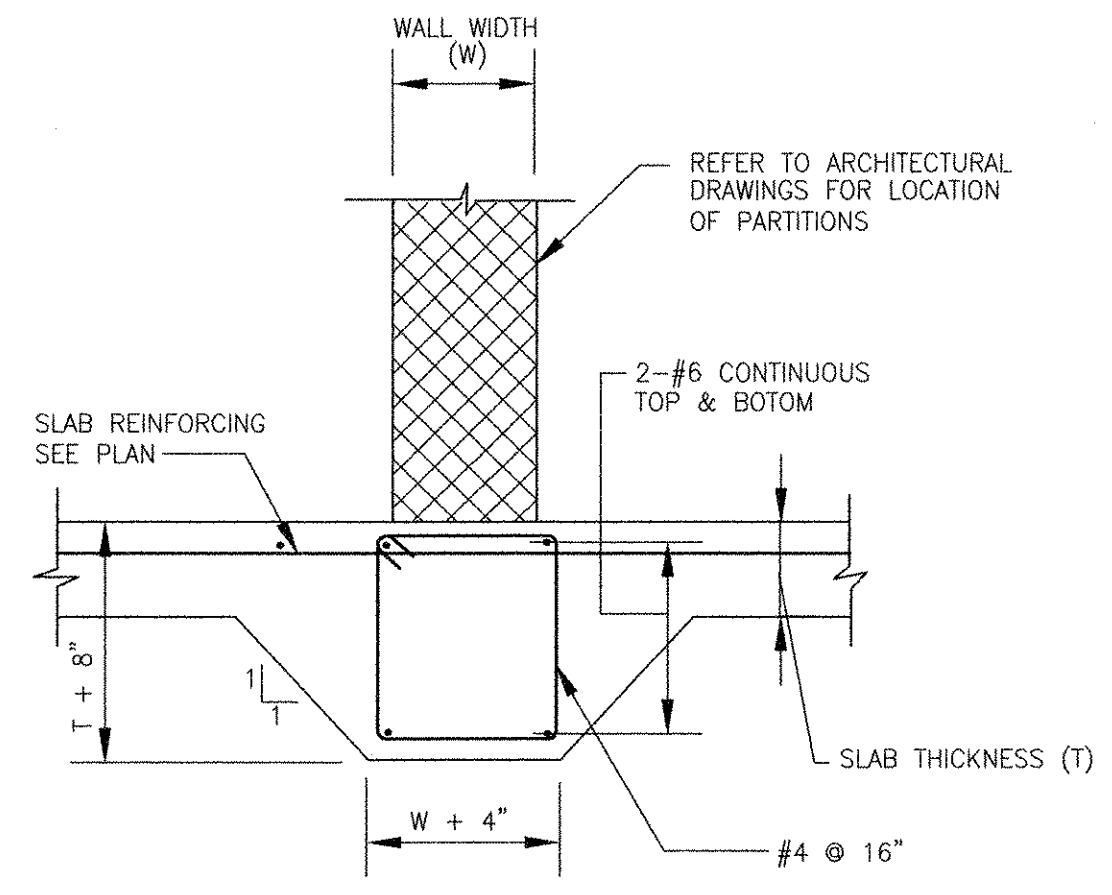
ENCASEMENT FOR PIPES DEEPER THAN 1'-6" BELOW SLAB

NTS
3-3.30.2 (REV. 03-09-98)



ENCASEMENT FOR PIPE 1'-6" OR LESS BELOW SLAB

NTS
3-3.30.1 (REV. 06-07-97)



BEAM IN SLAB ON GRADE BELOW MASONRY WALL

NTS
3-3.22.1 (REV. 08-12-97)

MARK	DATE	MADE BY	CHECKED BY	REVISIONS
1	10/19/12	AC	RF	REVISED FOR RECORD DRAWING

AECOM USA, INC.
701 EDgewater Drive
Folsom, CA 95630
PHONE (916) 246-6000

AECOM

RECORD DRAWINGS

RONALD R. FIORE
No. 0000000000
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

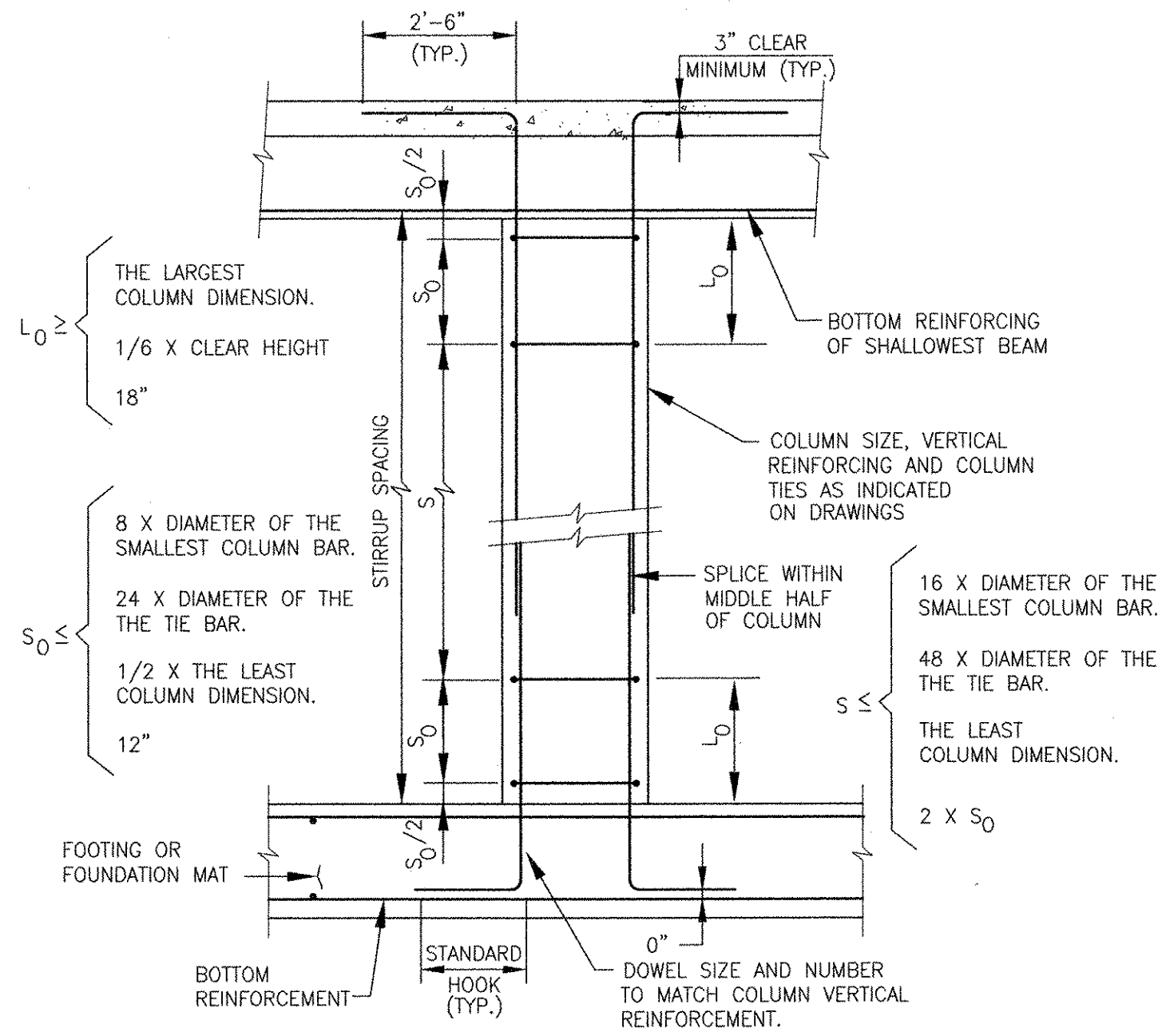
STRUCTURAL STANDARD DETAILS II

STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 S-502
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

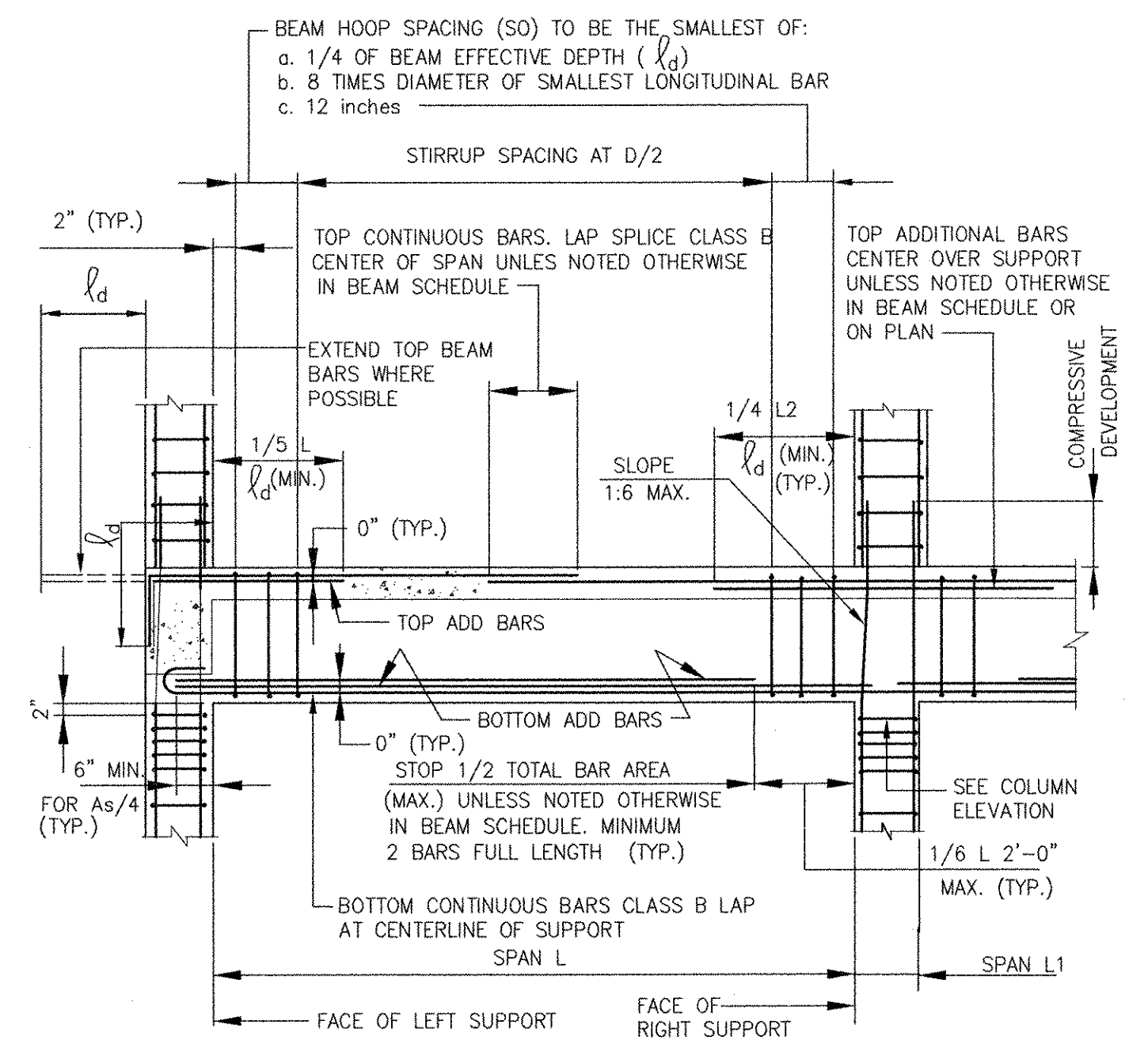
99 S-502

PATH: \\P:\ENR\60148648 - EAST PROVIDENCE (RSD)\COMMON SHEETS\99 S-502.DWG
LAST UPDATE: Monday, October 01, 2012 11:39:01 AM
PLOT DATE: Tuesday, October 23, 2012 8:53:33 AM
ANSI D - 1 - Oct-12



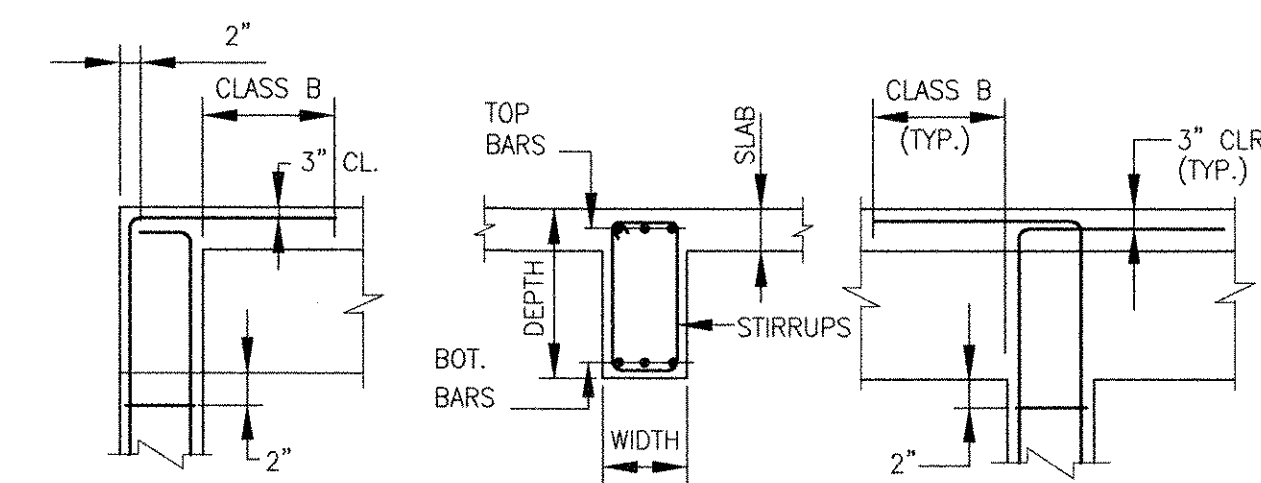
ONE-STORY COLUMN ELEVATION

(MODERATE SEISMIC RISK) NTS 3-3.16.3.1 (REV. 03-08-00)



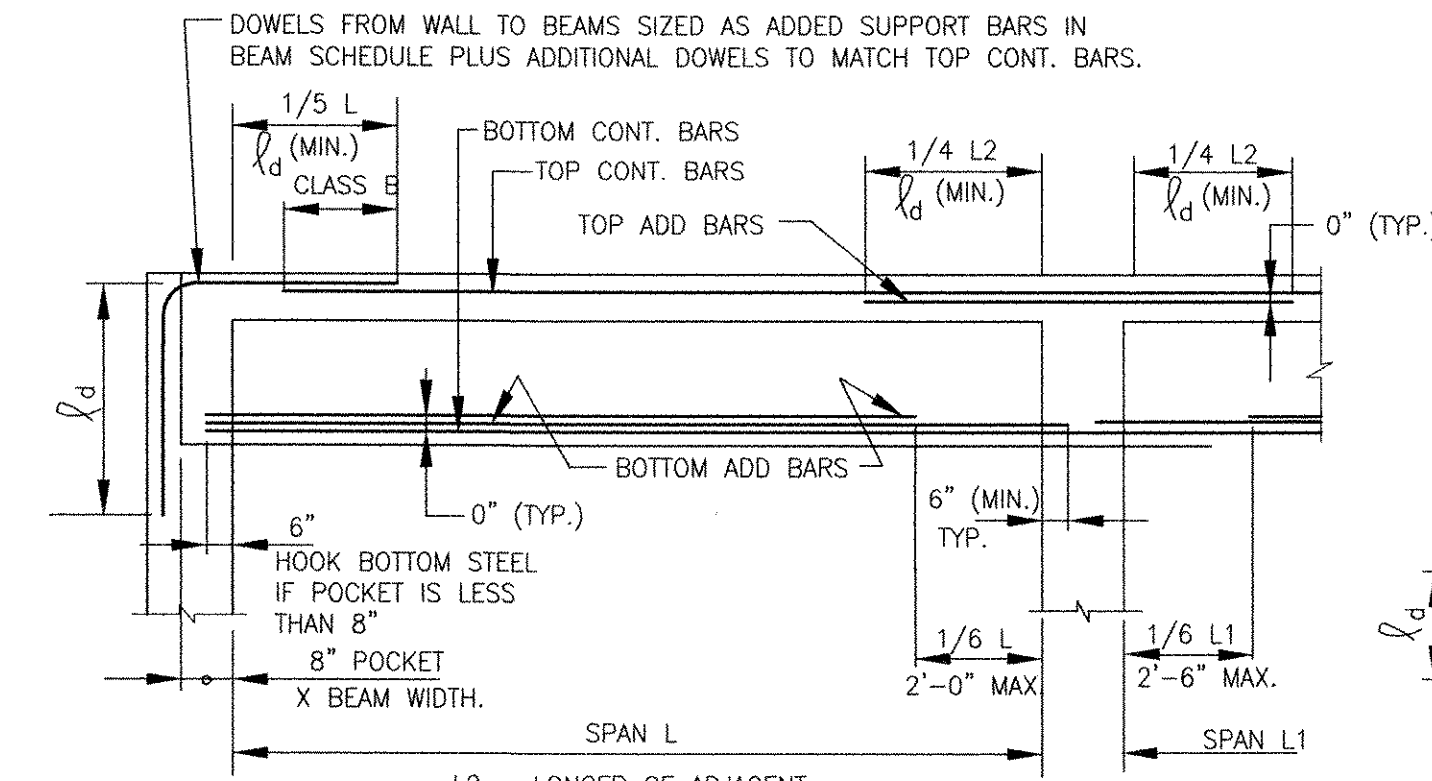
BEAM AND COLUMN JOINTS

NTS 3-3.17.1 (REV. 07-22-98)



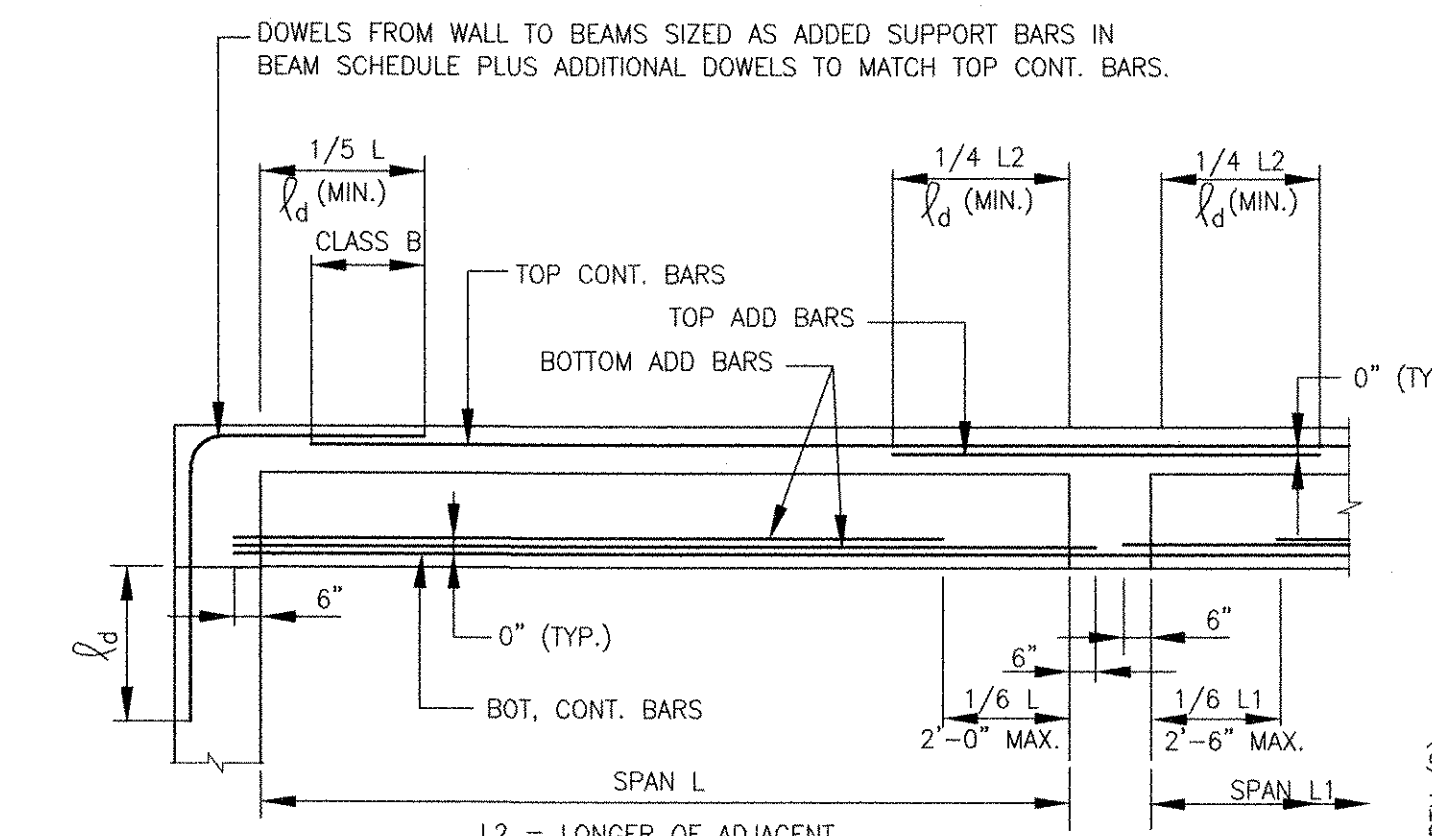
BEAM AND COLUMN DETAILS

NTS 3-3.17.1.1 (REV. 07-22-98)



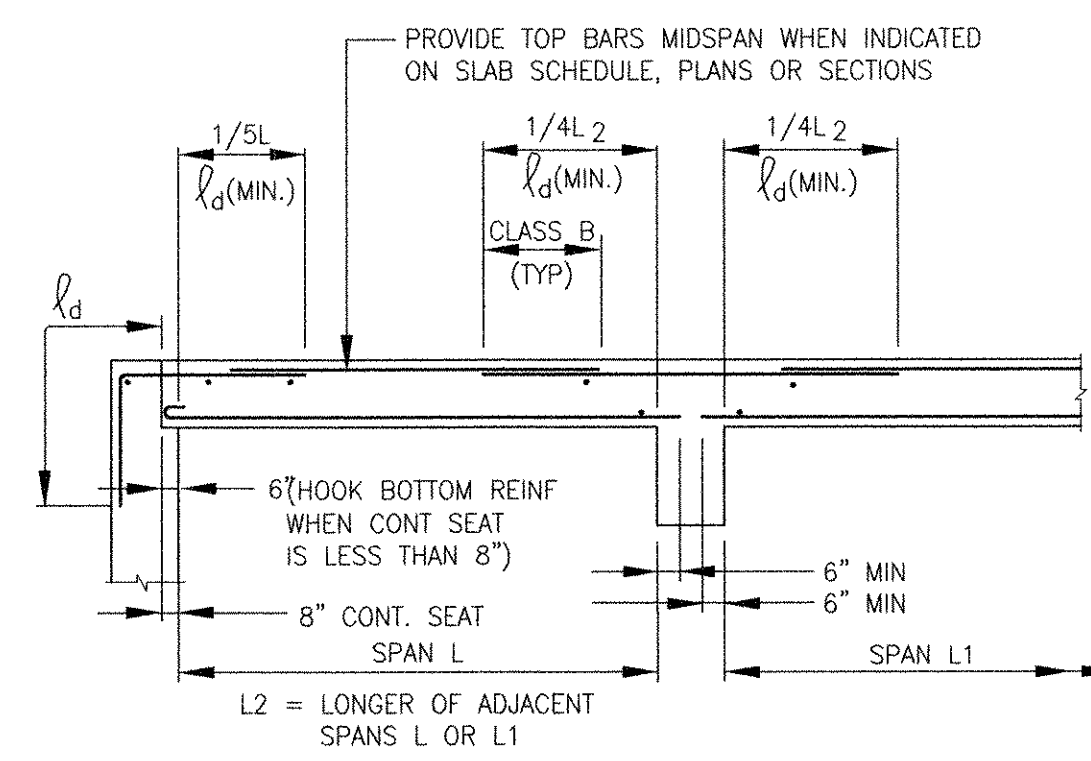
BEAM SET INTO WALL POCKET

NTS 3-3.17.2 (REV. 11-06-00)



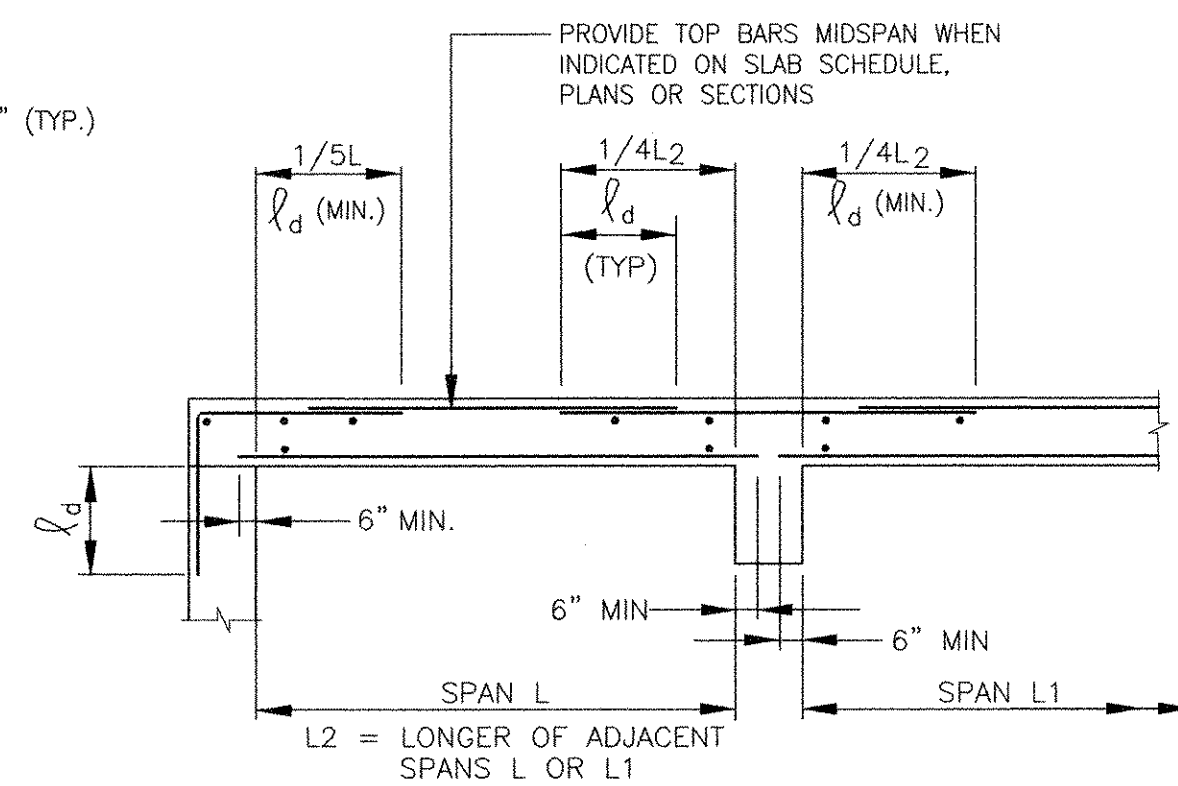
BEAM OVER WALL

NTS 3-3.17.3 (REV. 11-06-00)



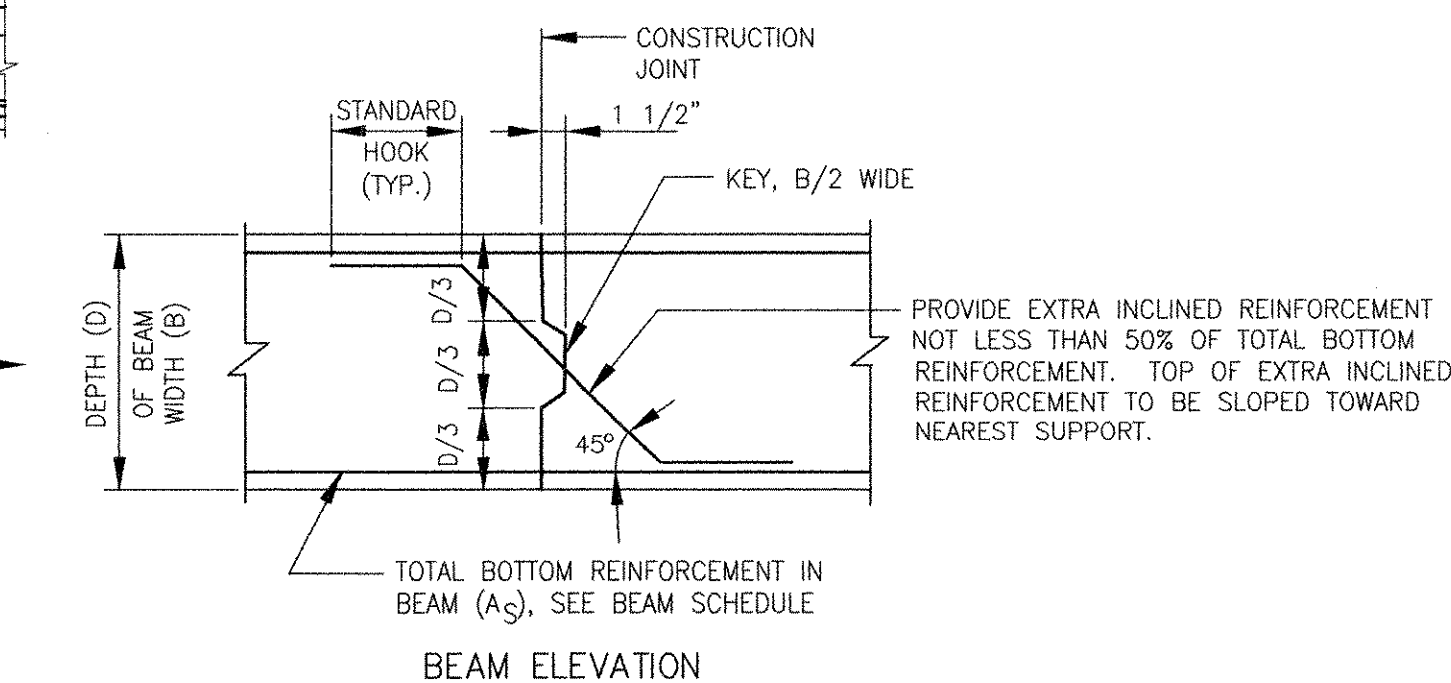
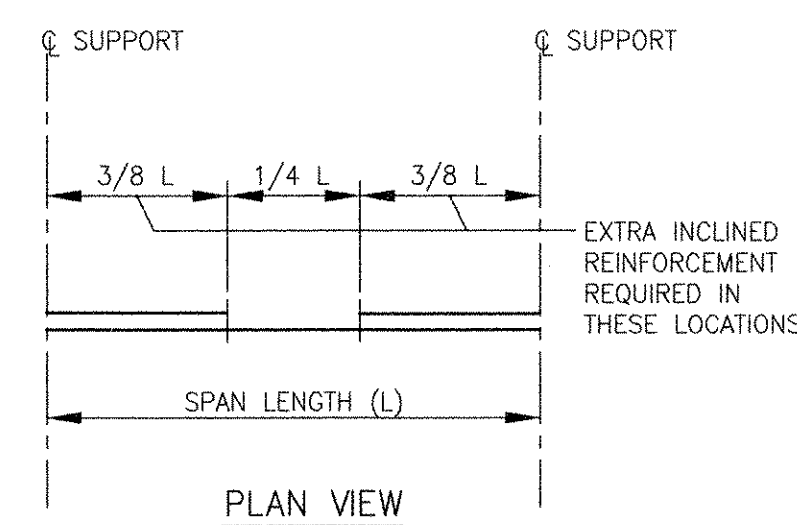
SLAB SET INTO WALL POCKET

NTS 3-3.18.1 (REV. 11-06-00)



SLAB OVER WALL

NTS 3-3.18.2 (REV. 11-06-00)



CONSTRUCTION JOINT IN BEAM

NTS 3-3.20.1 (REV. 06-06-97)

MARK	DATE	AC	RF	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM USA, INC.
701 EDEWATER DRIVE
FARMINGTON, CT 06030
PHONE (810) 246-5200

AECOM

RECORD DRAWINGS

RONALD R. FIORE
REGISTERED PROFESSIONAL ENGINEER
No. 4560
STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

STRUCTURAL STANDARD DETAILS III

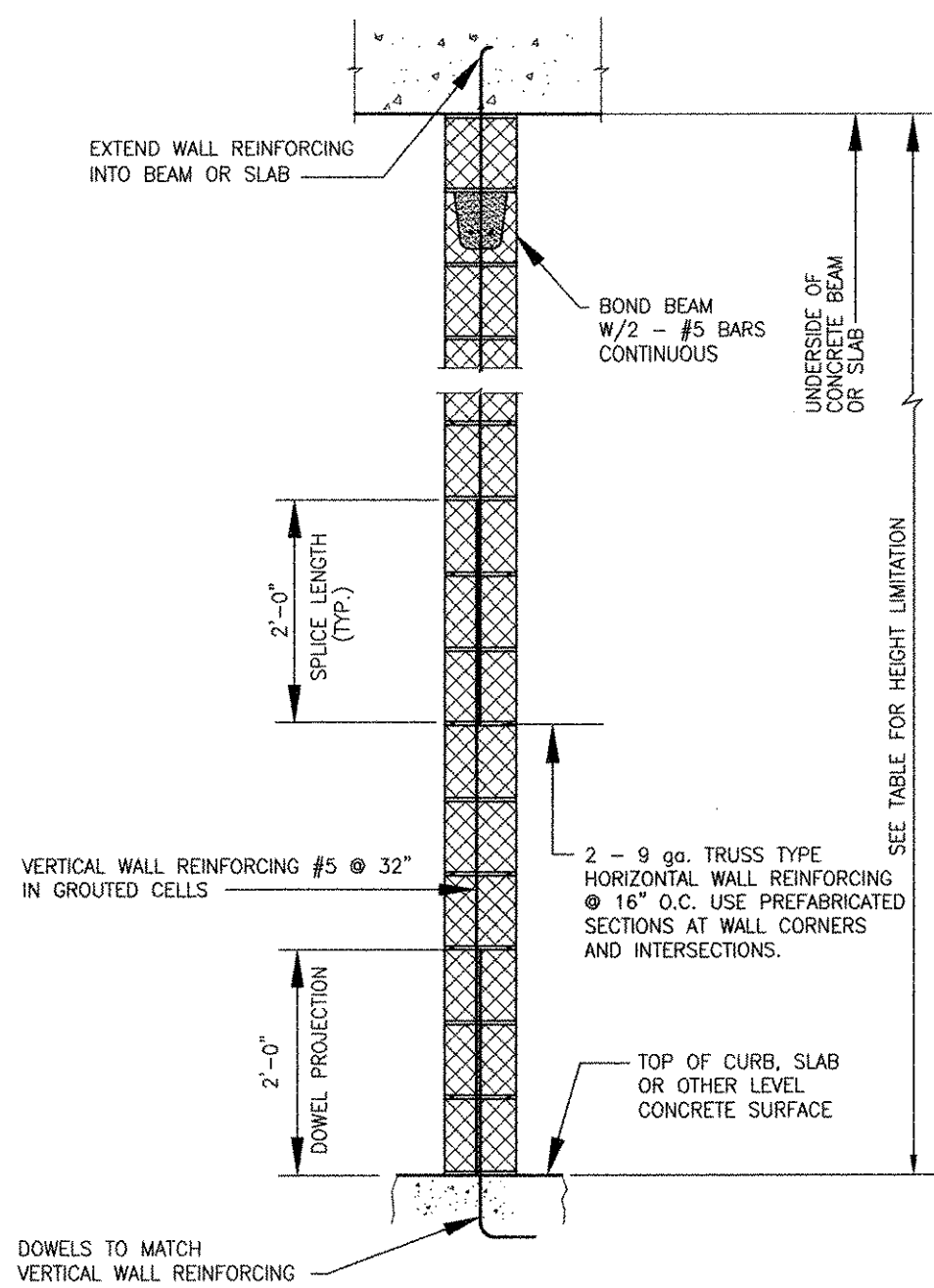
STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 S-503
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

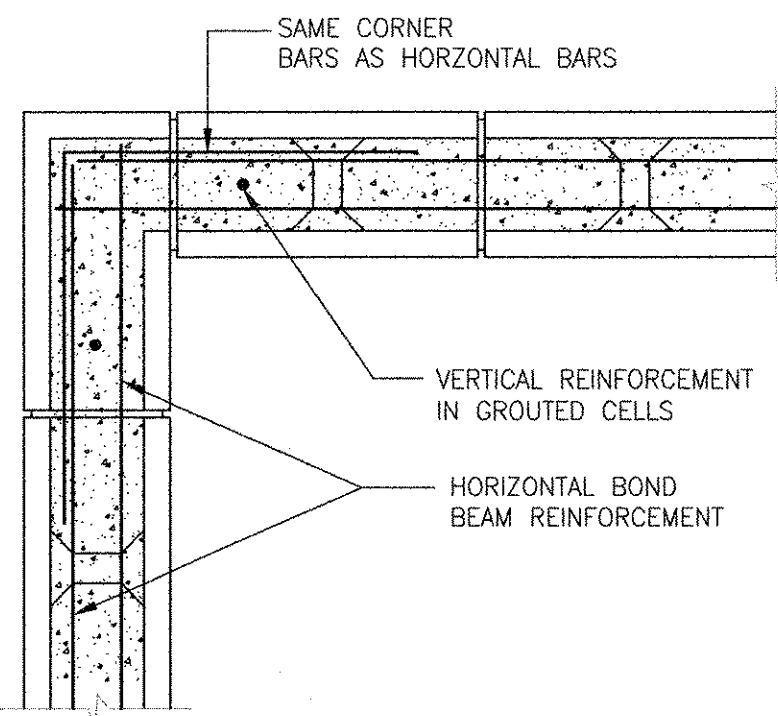
99 S-503

RECORD DRAWING

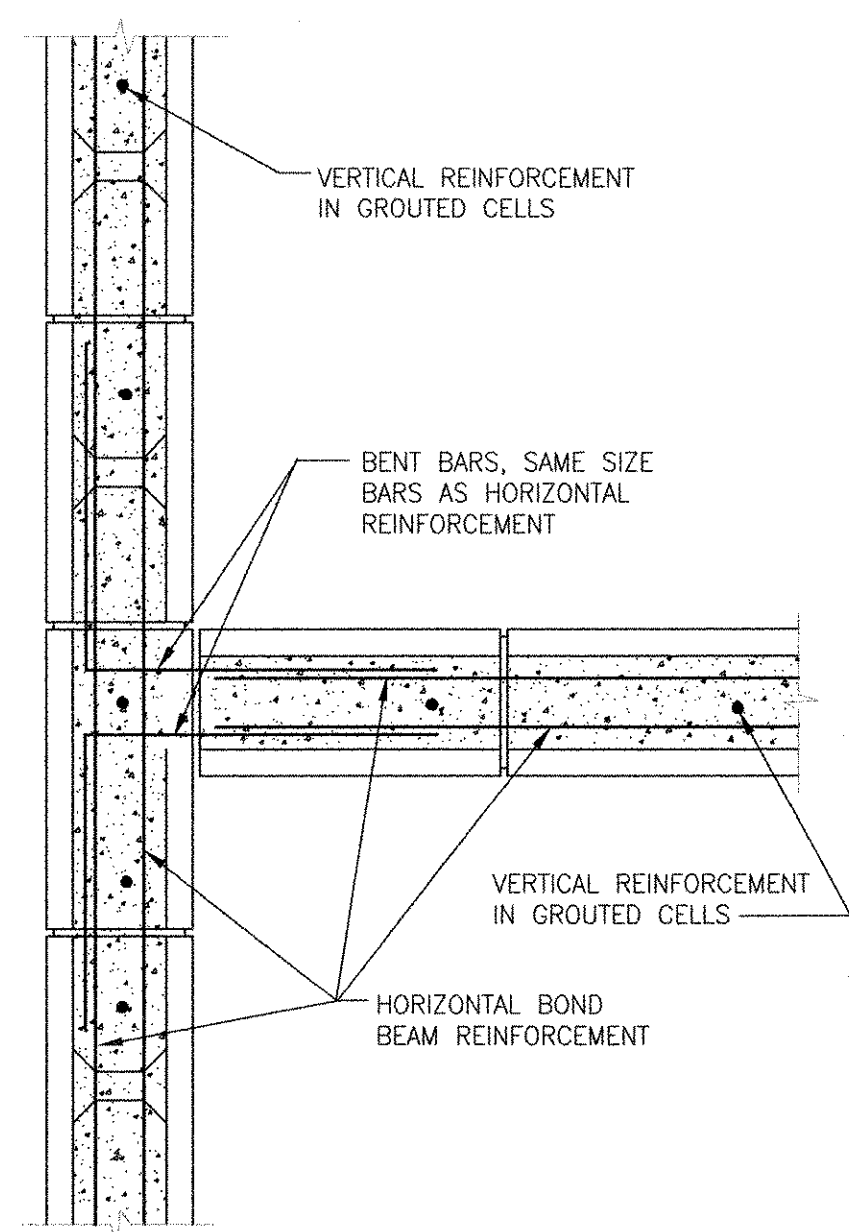
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



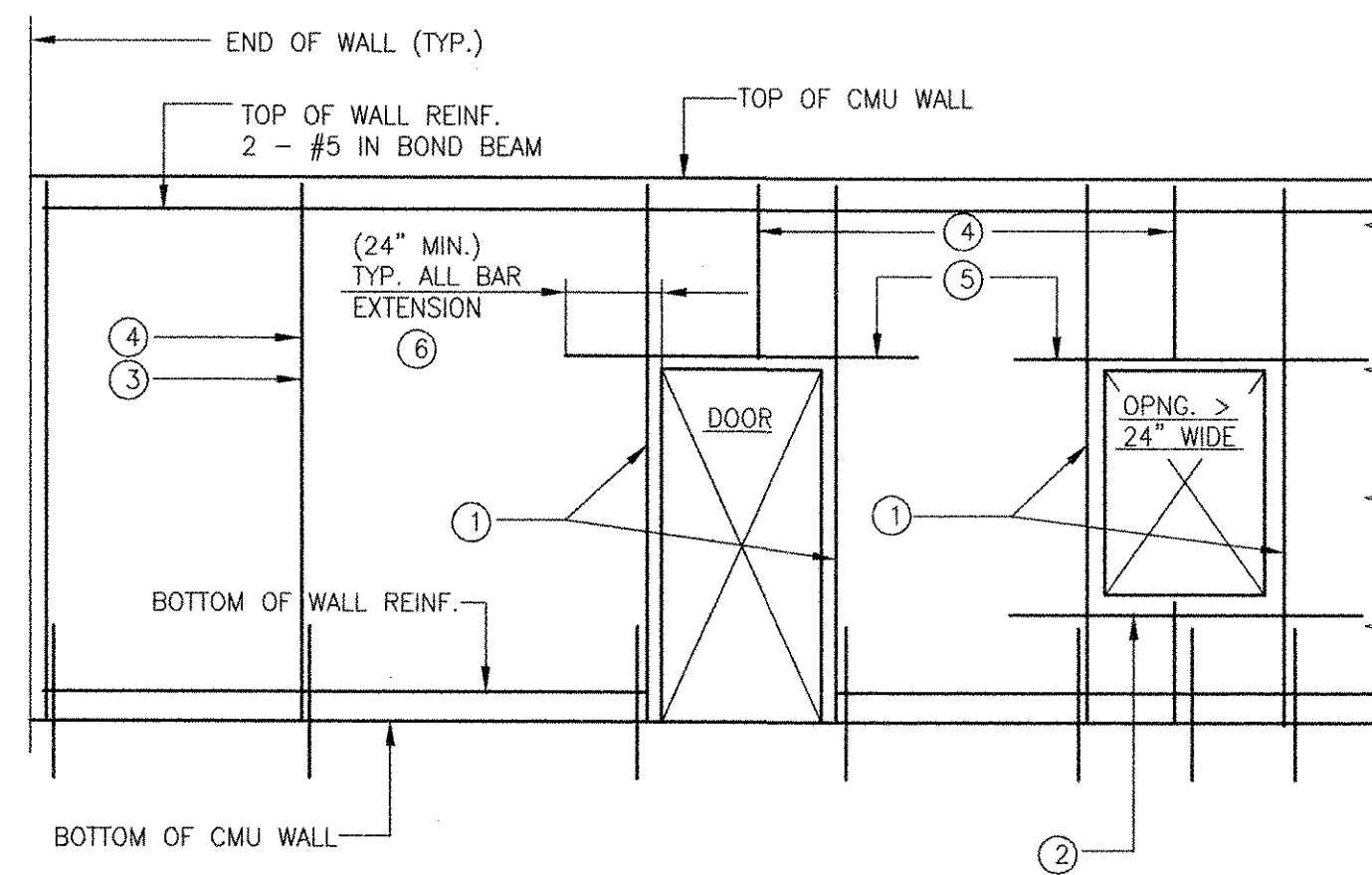
MASONRY BEARING WALL
NTS
4-3.6 (REV. 06-18-98)



BOND BEAM CORNER DETAIL
NTS

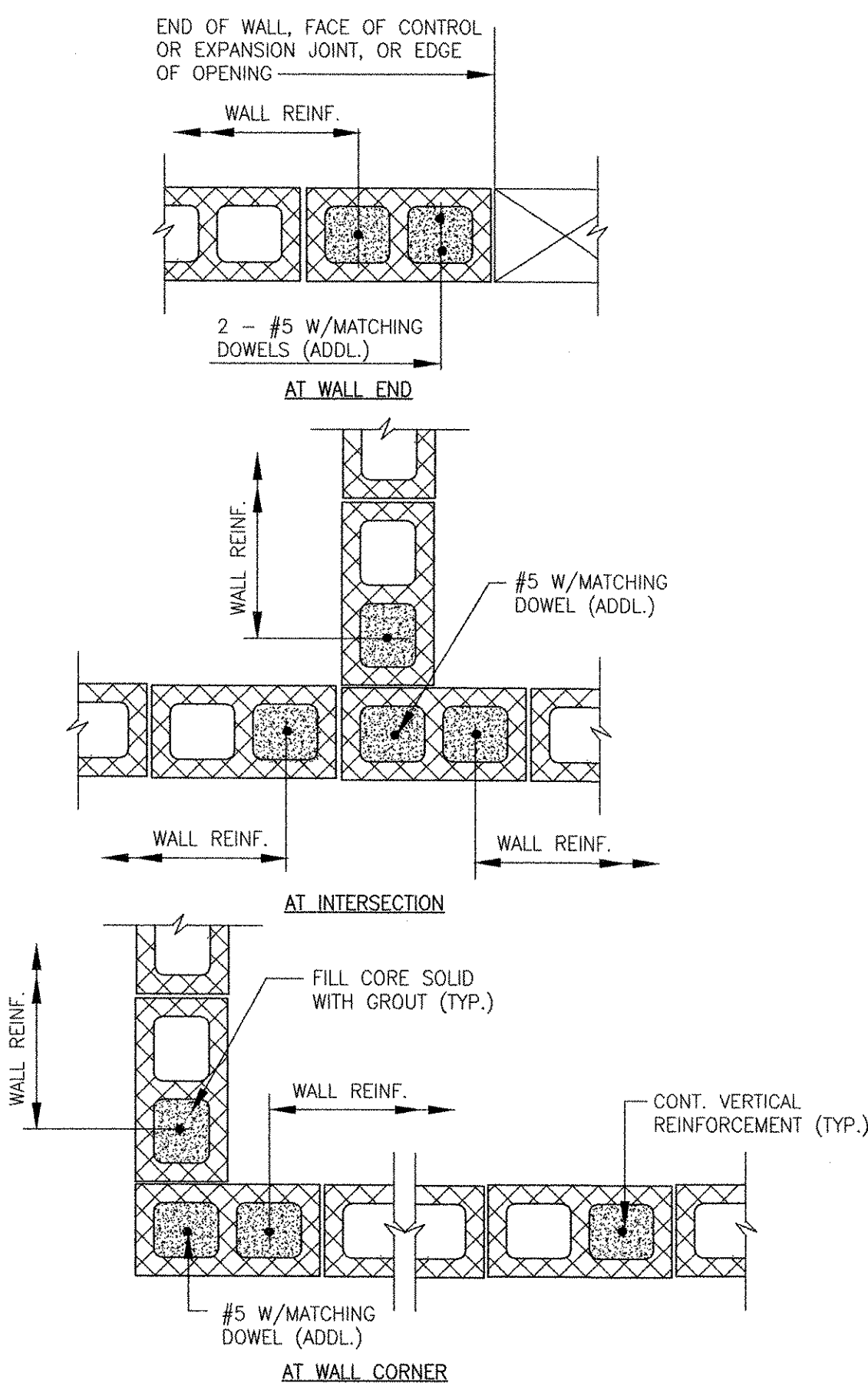


BOND BEAM INTERSECTION
NTS



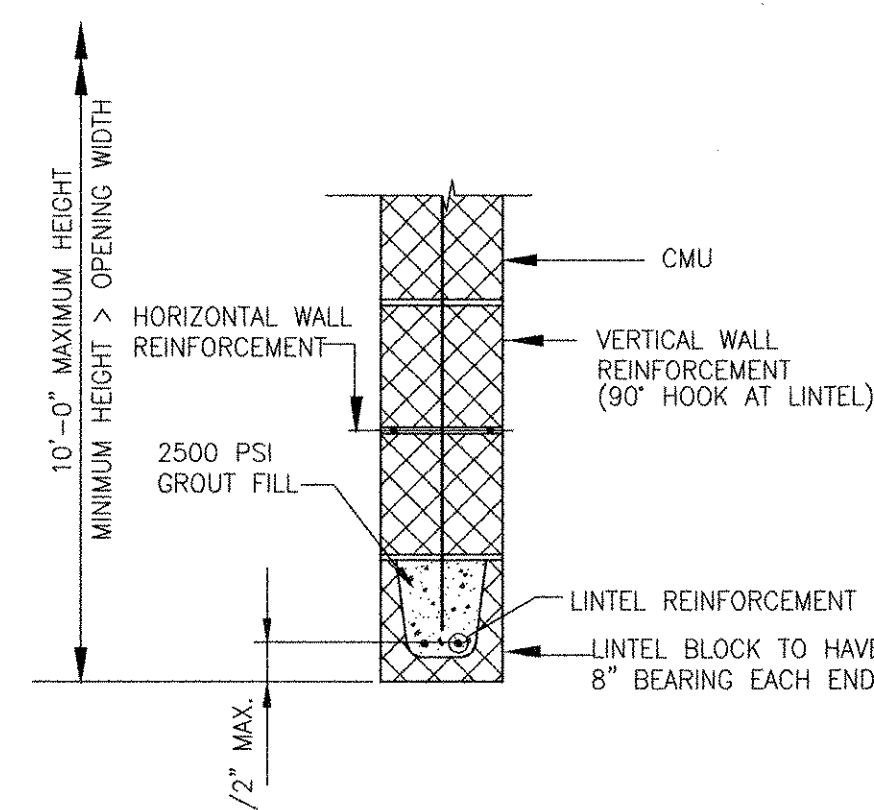
- LEGEND**
- SEE TYPICAL 8" CMU WALL OPENING DETAIL ON THIS SHEET.
 - SILL BARS, 2 - #5 IN BOND BEAM
 - SEE TYPICAL 8" CMU WALL REINFORCING DETAIL ON THIS SHEET.
 - BETWEEN BARS SHOWN, PROVIDE TYPICAL WALL REINFORCING PER TYPICAL 8" CMU WALL REINFORCING DETAIL THIS DRAWING.
 - SEE TYPICAL 8" CMU LINTEL DETAIL ON THIS SHEET.
 - IF FULL LENGTH IS NOT AVAILABLE, EXTEND AS FAR AS POSSIBLE. HOOK 90° THEN EXTEND BEYOND BEND. REMAINDER OF LENGTH REQUIRED NOT LESS THAN 12".

TYPICAL 8" CMU WALL ELEVATION
NTS



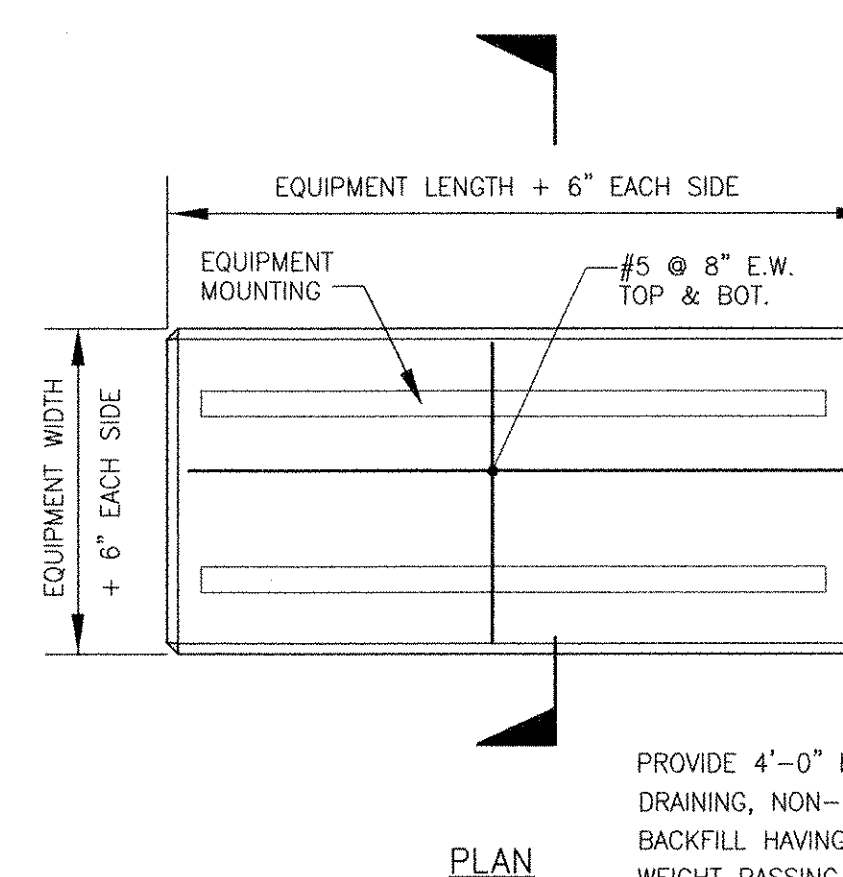
VERTICAL REINFORCEMENT FOR MASONRY WALL
NTS

MASONRY LINTELS			
WALL THICKNESS	MAXIMUM WALL HEIGHT	LINTEL BLOCK SIZE (W X H)	LINTEL REINF.
8" CMU	6'-4"	8" X 8"	2 - #5
	8'-4"	8" X 16"	2 - #5
	10'-0"	8" X 16"	2 - #5

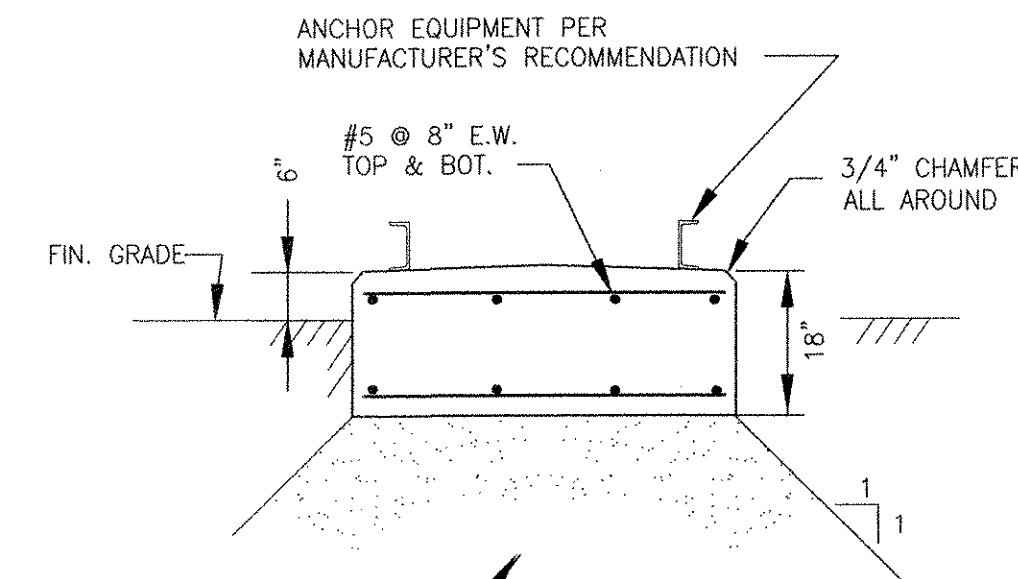


MASONRY LINTEL
NTS
4-3.8 (REV. 07-07-98)

- CMU LINTEL NOTES:**
- PROVIDE 6" MINIMUM BEARING AT EACH SIDE OF CLEAR SPAN.
 - FULLY GROUT CMU OVER DEPTH "8" TO ENDS OF BEARING.



PLAN

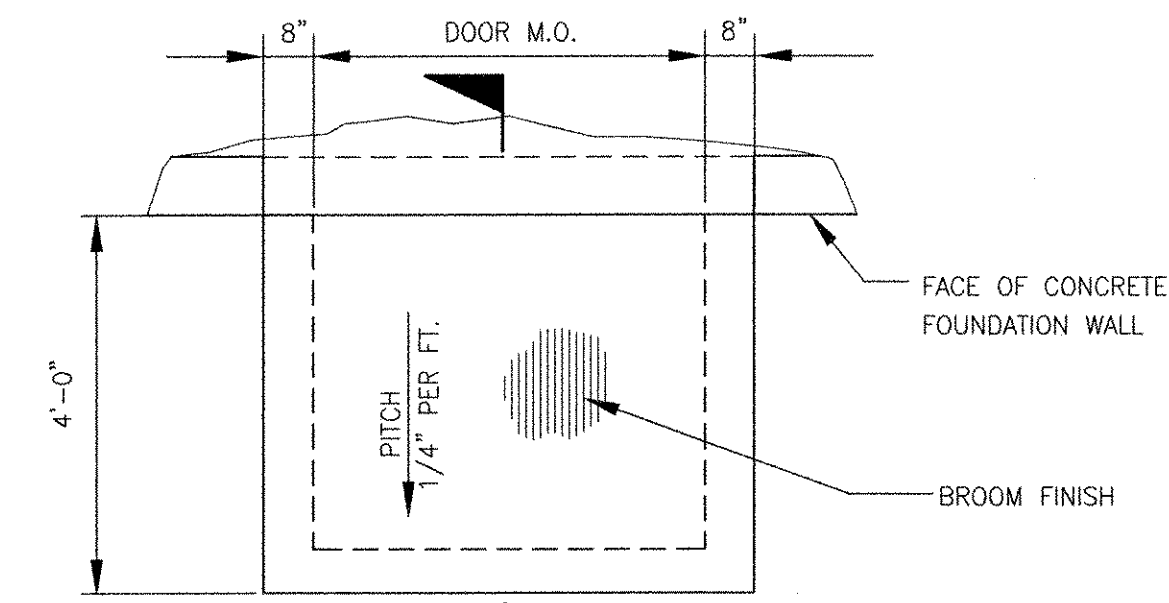


SECTION

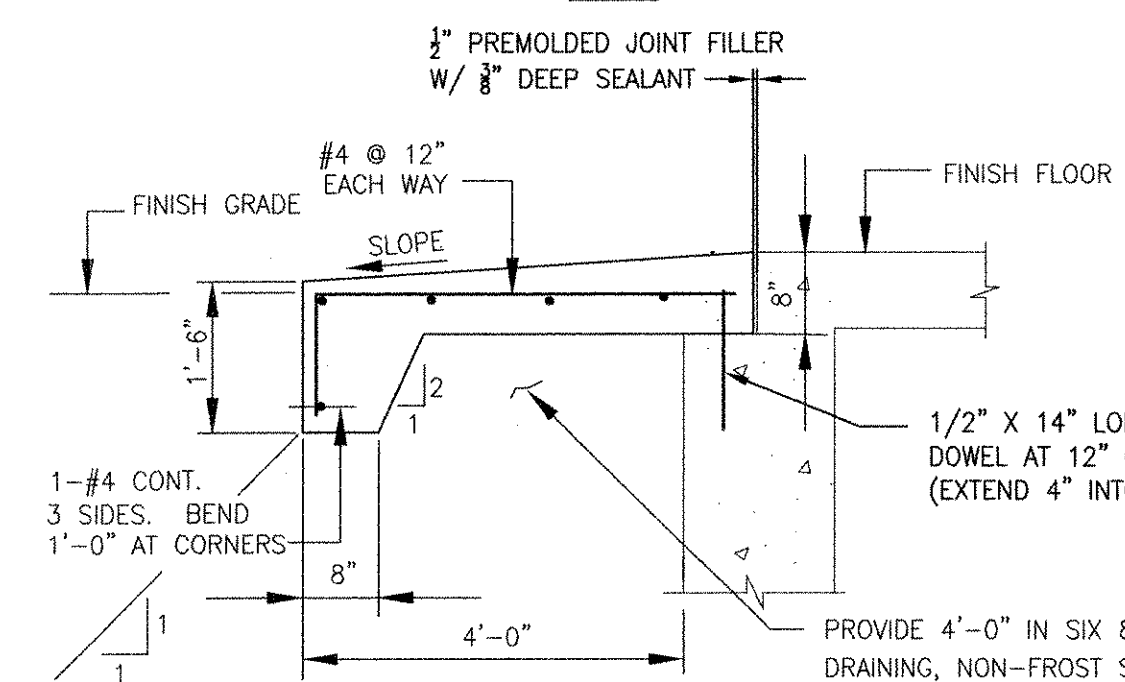
PROVIDE 4'-0" IN SIX 8" LAYERS OF FREE DRAINING, NON-FROST SUSCEPTIBLE GRAVEL BACKFILL HAVING NOT MORE THAN 5% BY WEIGHT PASSING NO.200 SIEVE. COMPACT EACH LAYER TO 95% OF MAXIMUM DENSITY.

EXTERIOR EQUIPMENT PAD

NTS
3-3.41.4 (REV. 09-11-00)



PLAN



SECTION

CONCRETE ENTRANCE PAD

NTS
3-3.41.1 (REV. 09-24-01)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	AC	RF	REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS

AECOM USA, INC.
701 EDEWATER DRIVE
PROVIDENCE, RI 02909
PHONE (818) 246-5200

RONALD R. FIORE
REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL
No. 00000000

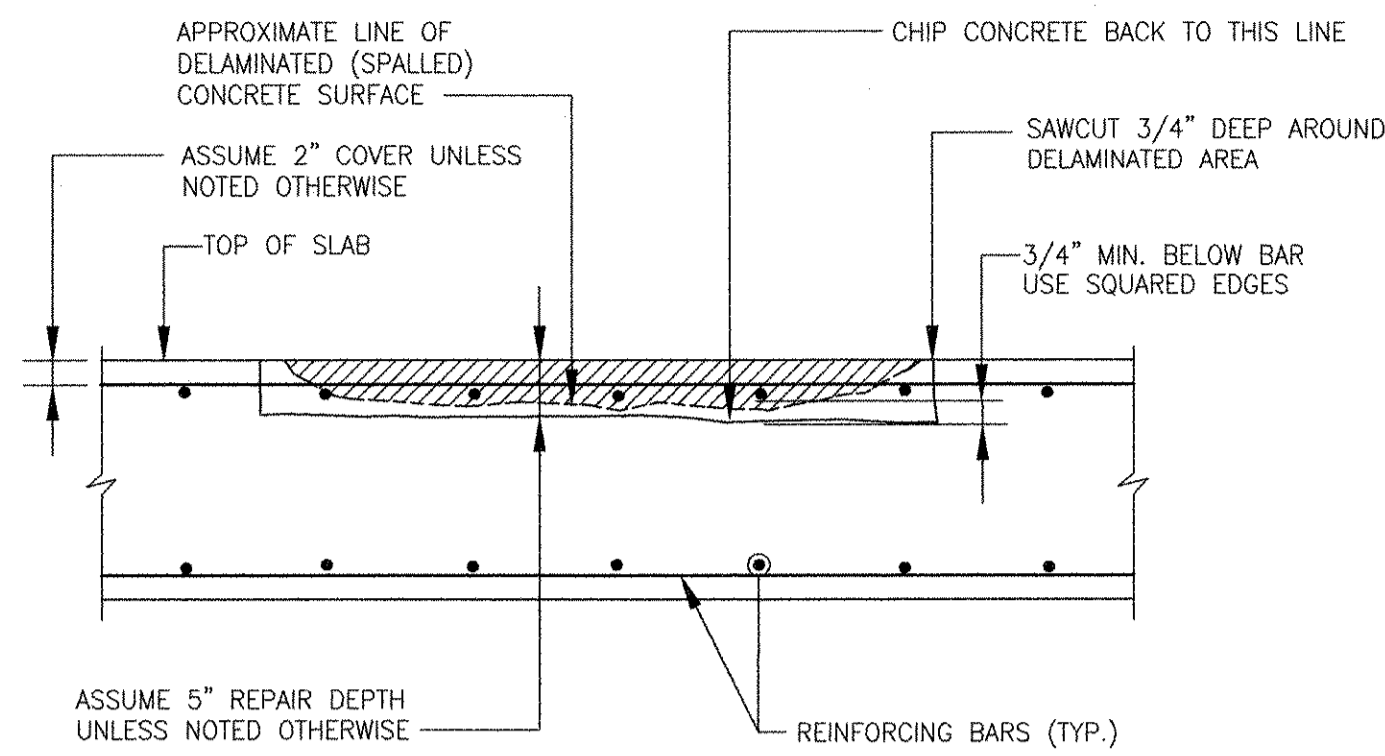
CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

STRUCTURAL STANDARD DETAILS IV
STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 S-504
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 S-504

PATH: F:\PROJECTS\99-504\COMMON SHEETS\99 S-504.DWG
LAST UPDATE: Monday, October 01, 2012 11:46:16 AM
ANSI D - 1-10-12

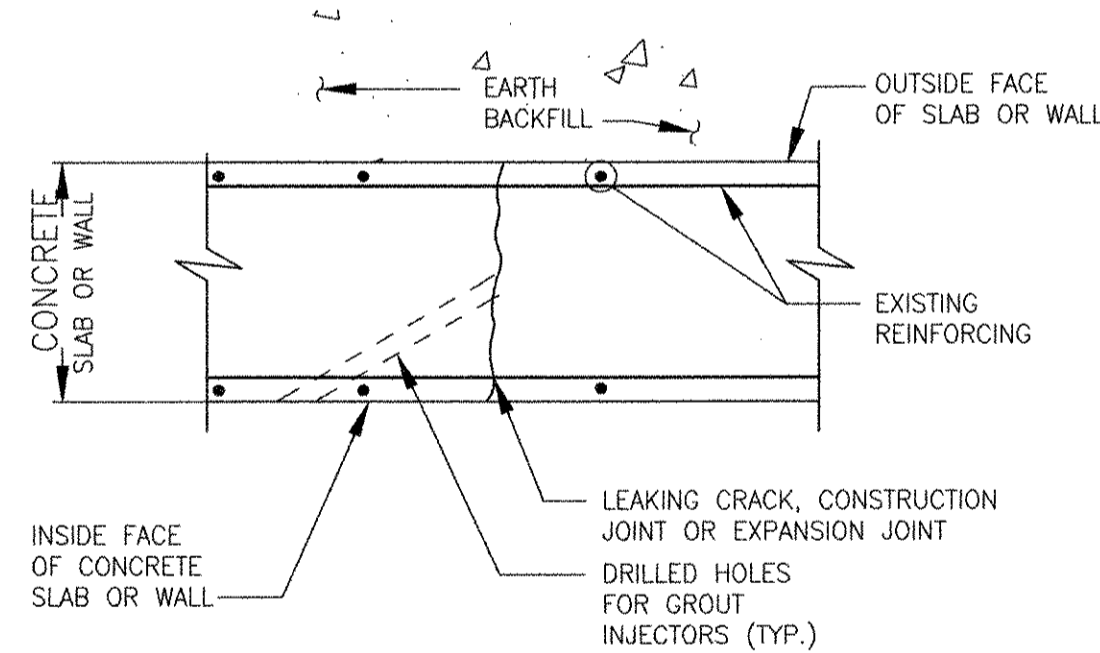


REPAIR PROCEDURE:

1. NO REPAIRS SHALL COMMENCE UNTIL CONCRETE SLAB AND BEAMS HAVE BEEN FULLY SHORED.
2. SAW-CUT 3/4" DEEP AROUND DELAMINATED AREA .
3. REMOVE LOOSE OR HOLLOW SOUNDING CONCRETE BY CHIPPING TO OBTAIN A MINIMUM SURFACE PROFILE OF ± 1/8".
4. REMOVE ALL DIRT AND DUST BY AIR BLASTING.
5. WHERE REINFORCING BAR IS ENCOUNTERED, THE CONCRETE ALL AROUND THE BARS (BOTH TOP LAYERS OF STEEL) SHALL BE CHIPPED OUT TO A DEPTH WHERE THE BARS CAN BE COVERED WITH AT LEAST 3/4" OF POLYMER MODIFIED REPAIR MORTAR.
6. CLEAN REINFORCING STEEL AND CONCRETE FOR INSPECTION BY SANDBLASTING.
7. REINFORCING BARS THAT HAVE BEEN REDUCED IN AREA MORE THAN 25% DUE TO CORROSION SHALL BE SPLICED WITH A NEW REINFORCING BAR AT THE PROPER DEPTH.
8. SANDBLAST REINFORCING BARS TO WHITE METAL FINISH.
9. COAT EXISTING AND NEW REINFORCING BARS AND CONCRETE WITH A BONDING AND ANTI-CORROSION AGENT.
10. INSTALL POLYMER MODIFIED MORTAR TO RESTORE SURFACE TO ORIGINAL LINE.

REPAIR TO DELAMINATION AT TOP SURFACE OF STRUCTURAL SLAB

NTS
3-3.60.1 (REV. 07-27-06)

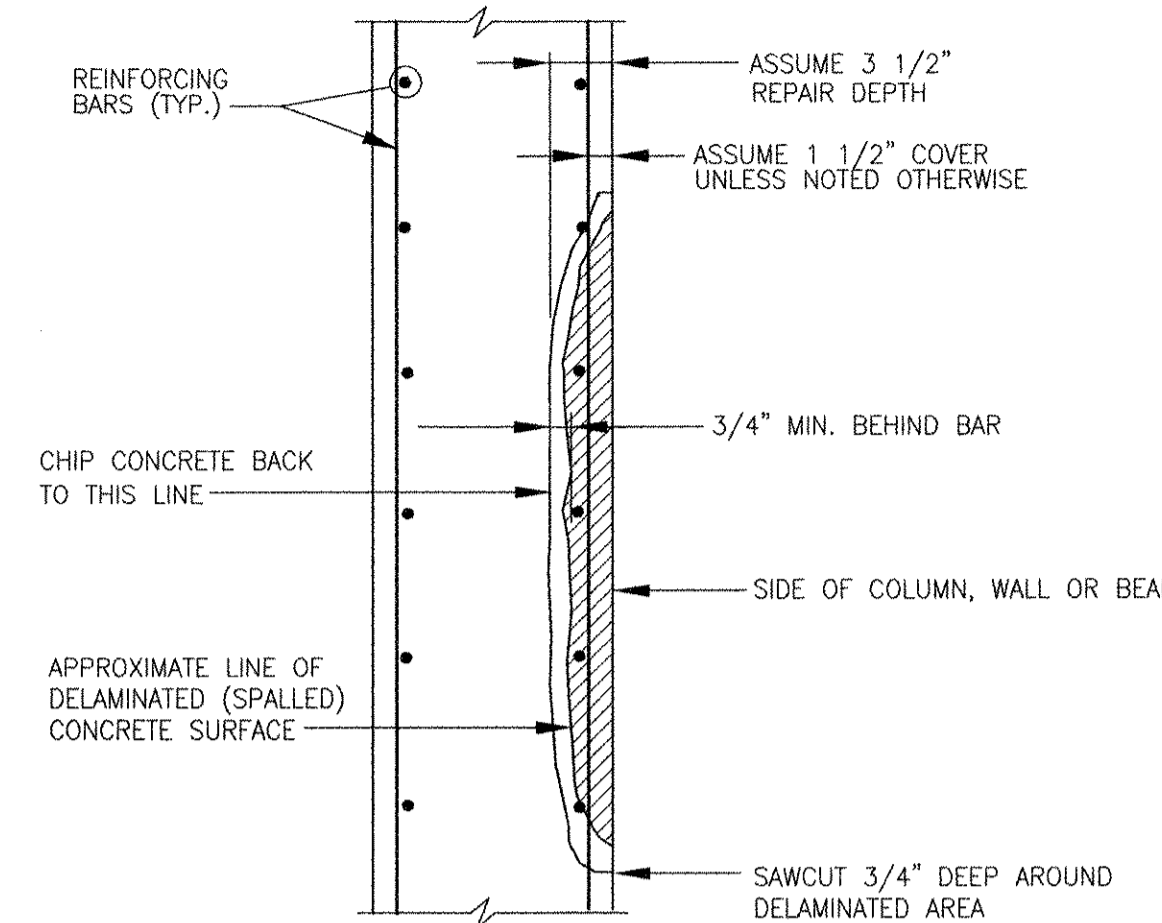


REPAIR PROCEDURE:

1. NO REPAIRS SHALL COMMENCE UNTIL CONCRETE SLAB AND BEAMS HAVE BEEN FULLY SHORED.
2. SAW-CUT 3/4" DEEP AROUND DELAMINATED AREA .
3. REMOVE LOOSE OR HOLLOW SOUNDING CONCRETE BY CHIPPING TO OBTAIN A MINIMUM SURFACE PROFILE OF ± 1/8".
4. REMOVE ALL DIRT AND DUST BY AIR BLASTING.
5. WHERE REINFORCING BAR IS ENCOUNTERED, THE CONCRETE ALL AROUND THE BARS (BOTH TOP LAYERS OF STEEL) SHALL BE CHIPPED OUT TO A DEPTH WHERE THE BARS CAN BE COVERED WITH AT LEAST 3/4" OF POLYMER MODIFIED REPAIR MORTAR.
6. CLEAN REINFORCING STEEL AND CONCRETE FOR INSPECTION BY SANDBLASTING.
7. REINFORCING BARS THAT HAVE BEEN REDUCED IN AREA MORE THAN 25% DUE TO CORROSION SHALL BE SPLICED WITH A NEW REINFORCING BAR AT THE PROPER DEPTH.
8. SANDBLAST REINFORCING BARS TO WHITE METAL FINISH.
9. COAT EXISTING AND NEW REINFORCING BARS AND CONCRETE WITH A BONDING AND ANTI-CORROSION AGENT.
10. INSTALL POLYMER MODIFIED MORTAR TO RESTORE SURFACE TO ORIGINAL LINE.

REPAIR TO DELAMINATION AT BEAM SOFFITS

NTS
3-3.60.4 (REV. 03-20-98)

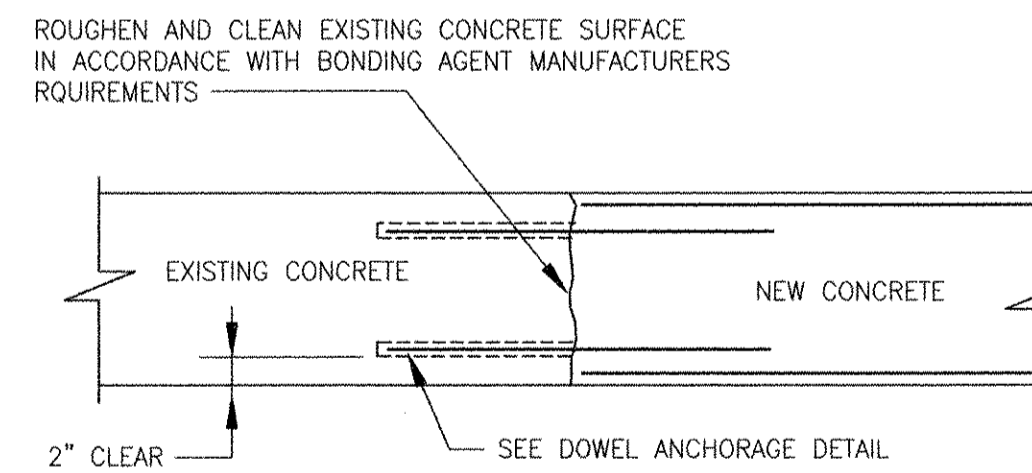


REPAIR PROCEDURE:

1. NO REPAIRS SHALL COMMENCE UNTIL CONCRETE SLAB AND BEAMS HAVE BEEN FULLY SHORED.
2. SAW-CUT 3/4" DEEP AROUND DELAMINATED AREA .
3. REMOVE LOOSE OR HOLLOW SOUNDING CONCRETE BY CHIPPING TO OBTAIN A MINIMUM SURFACE PROFILE OF ± 1/8".
4. REMOVE ALL DIRT AND DUST BY AIR BLASTING.
5. WHERE REINFORCING BAR IS ENCOUNTERED, THE CONCRETE ALL AROUND THE BARS (BOTH TOP LAYERS OF STEEL) SHALL BE CHIPPED OUT TO A DEPTH WHERE THE BARS CAN BE COVERED WITH AT LEAST 3/4" OF POLYMER MODIFIED REPAIR MORTAR.
6. CLEAN REINFORCING STEEL AND CONCRETE FOR INSPECTION BY SANDBLASTING.
7. REINFORCING BARS THAT HAVE BEEN REDUCED IN AREA MORE THAN 25% DUE TO CORROSION SHALL BE SPLICED WITH A NEW REINFORCING BAR AT THE PROPER DEPTH.
8. SANDBLAST REINFORCING BARS TO WHITE METAL FINISH.
9. COAT EXISTING AND NEW REINFORCING BARS AND CONCRETE WITH A BONDING AND ANTI-CORROSION AGENT.
10. INSTALL POLYMER MODIFIED MORTAR TO RESTORE SURFACE TO ORIGINAL LINE.

REPAIR TO DELAMINATION AT COLUMN, WALL OR BEAM SIDE

NTS
3-3.60.3 (REV. 03-20-98)

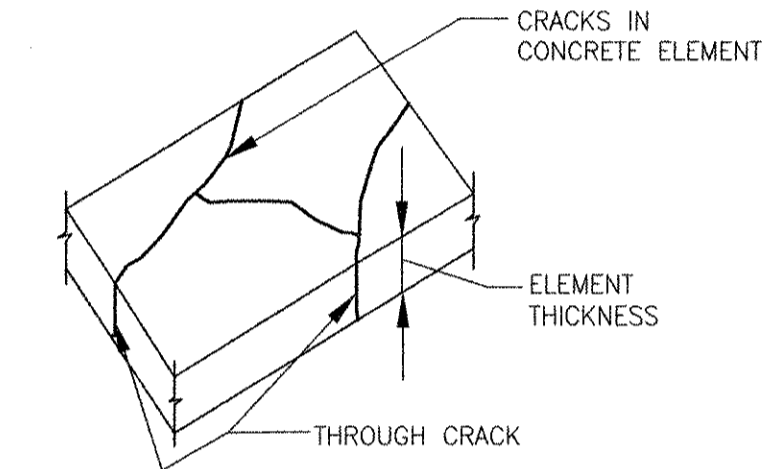


BONDING NEW CONCRETE TO EXISTING CONCRETE

NTS
3-3.24.2 (REV. 07-27-97)

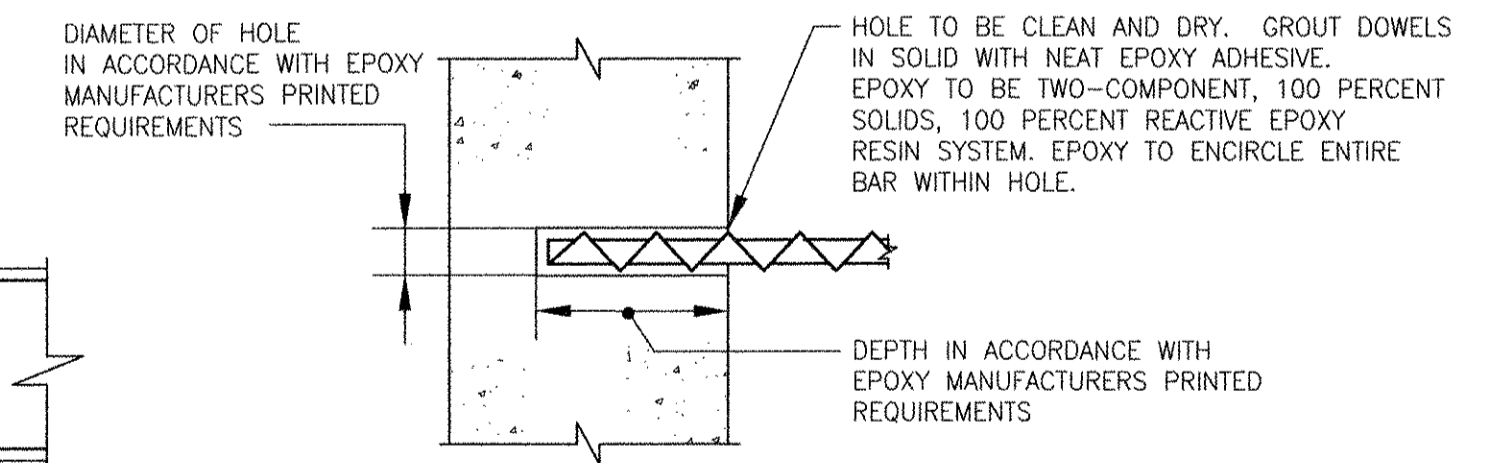
EPOXY CRACK INJECTION PROCEDURE:

1. CLEAN SURFACES ADJACENT TO CRACKS OF DIRT, DUST, GREASE, OIL EFFLORESCENCE OR OTHER FOREIGN MATTER DETRIMENTAL TO APPLICATION OF EPOXY SURFACE SEAL SYSTEM.
2. SEAL CRACKS TO BE INJECTED WITH SURFACE SEAL MATERIAL. SEAL BOTH SURFACES OF THROUGH CRACKS.
3. SURFACE SEAL MATERIAL SHALL BE A SUITABLE HOT-MELT TYPE THERMAL SETTING SEAL OR QUICK SETTING EPOXY RESIN.
4. PROVIDE ENTRY PORTS IN SURFACE SEALS SPACED NOT GREATER THAN CRACK DEPTH CENTER TO CENTER. PROVIDE ADDITIONAL ENTRY PORTS SPACED AS REQUIRED TO COMPLETELY FILL CRACKS WITH EPOXY.
5. EPOXY INJECTION MATERIAL SHALL BE A TWO COMPONENT 100% SOLIDS, 100% REACTIVE ADHESIVE SYSTEM WITH NO DILUTENTS, WETTING AGENTS OR VOLATILE SOLVENTS.
6. INJECT EPOXY UNDER CONSTANT PRESSURE IN ACCORDANCE WITH PROCEDURES RECOMMENDED BY MANUFACTURER. OBTAIN 100 PERCENT PENETRATION OF CRACKS WITHOUT INCLUSION OF AIR POCKETS OR VOIDS IN EPOXY.
7. BEGIN INJECTION OF EPOXY AT FIRST ENTRY PORT AND CONTINUE UNTIL APPEARANCE OF EPOXY AT ENTRY PORT DIRECTLY ADJACENT TO ENTRY PORT BEING INJECTED.
8. DISCONTINUE INJECTION ON ENTRY PORT WHEN EPOXY TRAVEL IS EVIDENT AT ADJACENT PORT. SEAL PORT AND TRANSFER EPOXY INJECTION TO NEXT ADJACENT PORT.
9. PERFORM EPOXY INJECTION CONTINUOUSLY UNTIL CRACKS ARE COMPLETELY FILLED.
10. CURE EPOXY FOR SUFFICIENT TIME TO ALLOW REMOVAL OF SURFACE SEAL WITHOUT DRAINING OR RUNBACK OF EPOXY MATERIAL FROM CRACKS.
11. REMOVE SURFACE SEALS AND CLEAN CONCRETE SURFACES.



EPOXY INJECTION OF CRACKS IN REINFORCED CONCRETE ELEMENT

NTS
3-3.61.1 (REV. 03-20-98)



DOWEL ANCHORAGE INTO EXISTING CONCRETE

NTS
3-3.24.1 (REV. 05-19-98)

CHEMICAL GROUTING OF LEAKING WALL CRACKS, CONSTRUCTION JOINTS OR EXPANSION JOINTS

NTS
3-3.62.1 (REV. 03-20-98)

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (REV)COMMON\SHETS\SUB 5-505.DWG
LAST UPDATE: Monday, October 01, 2012 11:46:49 AM
PLOT DATE: Tuesday, October 23, 2012 8:53:40 AM
ANSI D - 1-10-12

MARK	DATE	AC	RF	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS
AECOM USA, INC.
701 EDgewater Drive
Folsom, CA 95630
PHONE (916) 246-5800

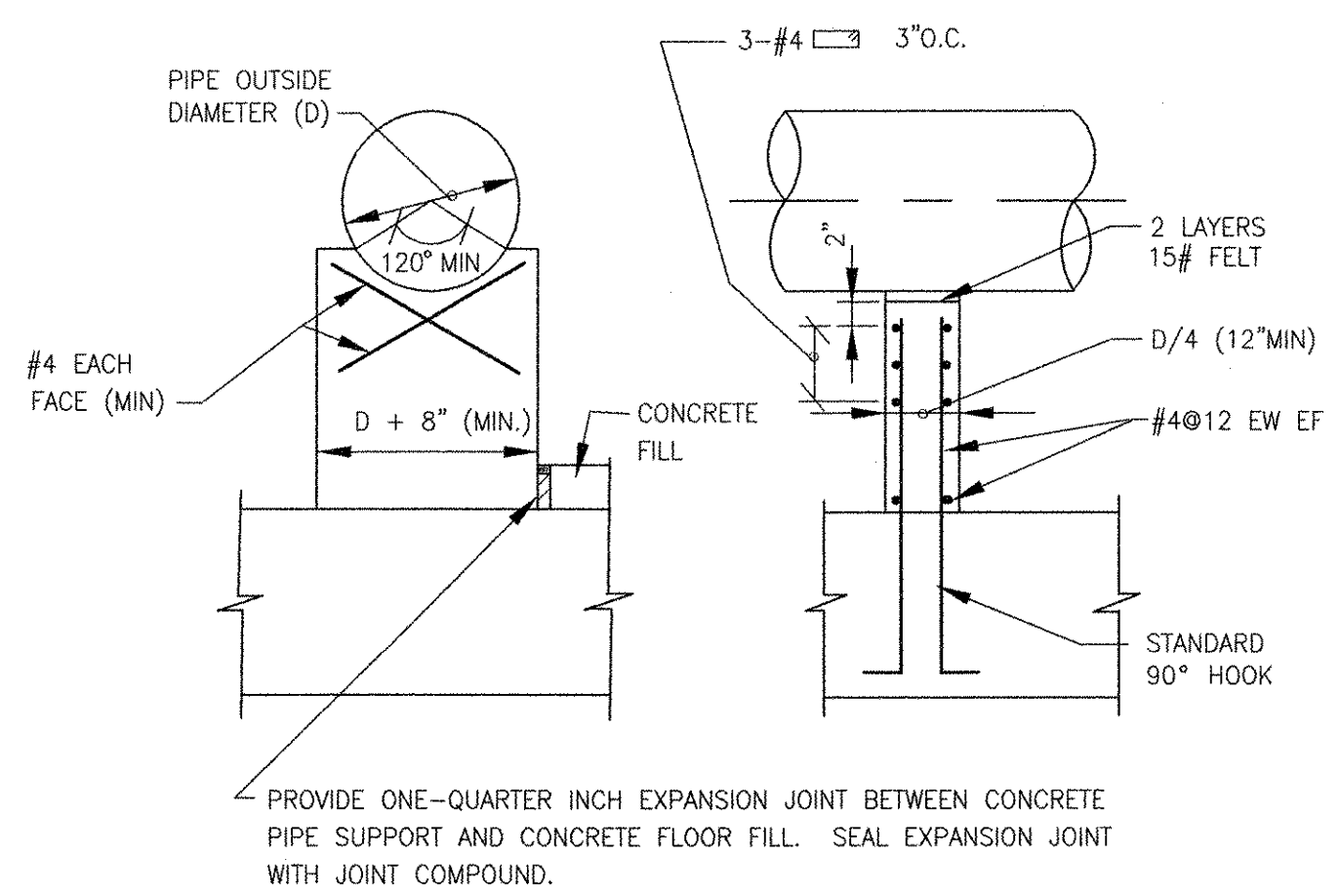
RONALD R. FIORE
Professional Engineer
No. 10000
Structural

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS
STRUCTURAL STANDARD DETAILS V
STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 S-505
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

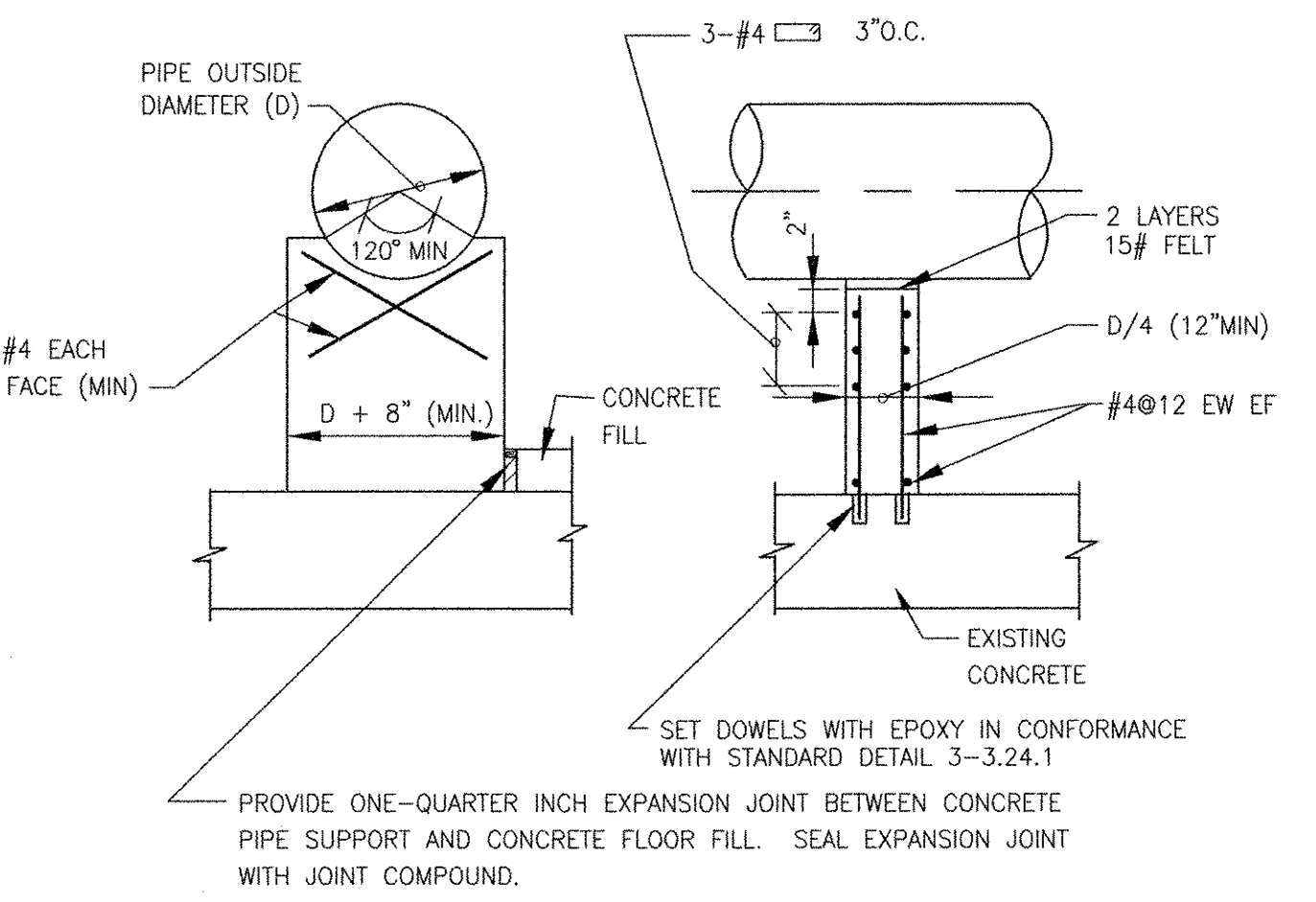
99 S-505

PROJECT: 60148648 - EAST PROVIDENCE (DB) COMMON SHEETS (S) 99 S-506 NINE
LAST UPDATE: Monday, October 01, 2012 11:41:12 AM
PLOT DATE: Tuesday, October 23, 2012 8:53:42 AM
ANSI D - 1-10-12



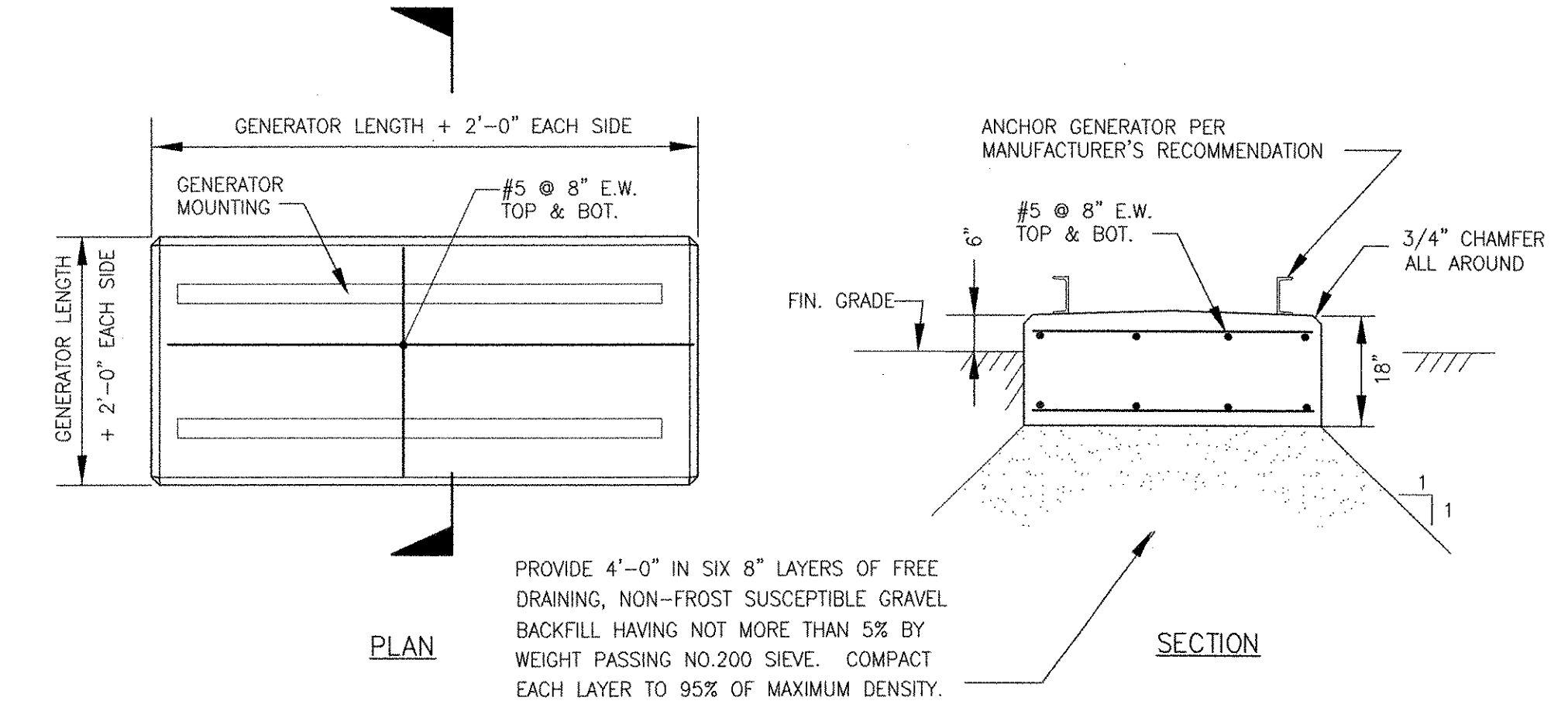
CONCRETE PIPE SUPPORTS FOR NEW CONSTRUCTION

NTS
3-3.28.1 (REV. 08-06-97)



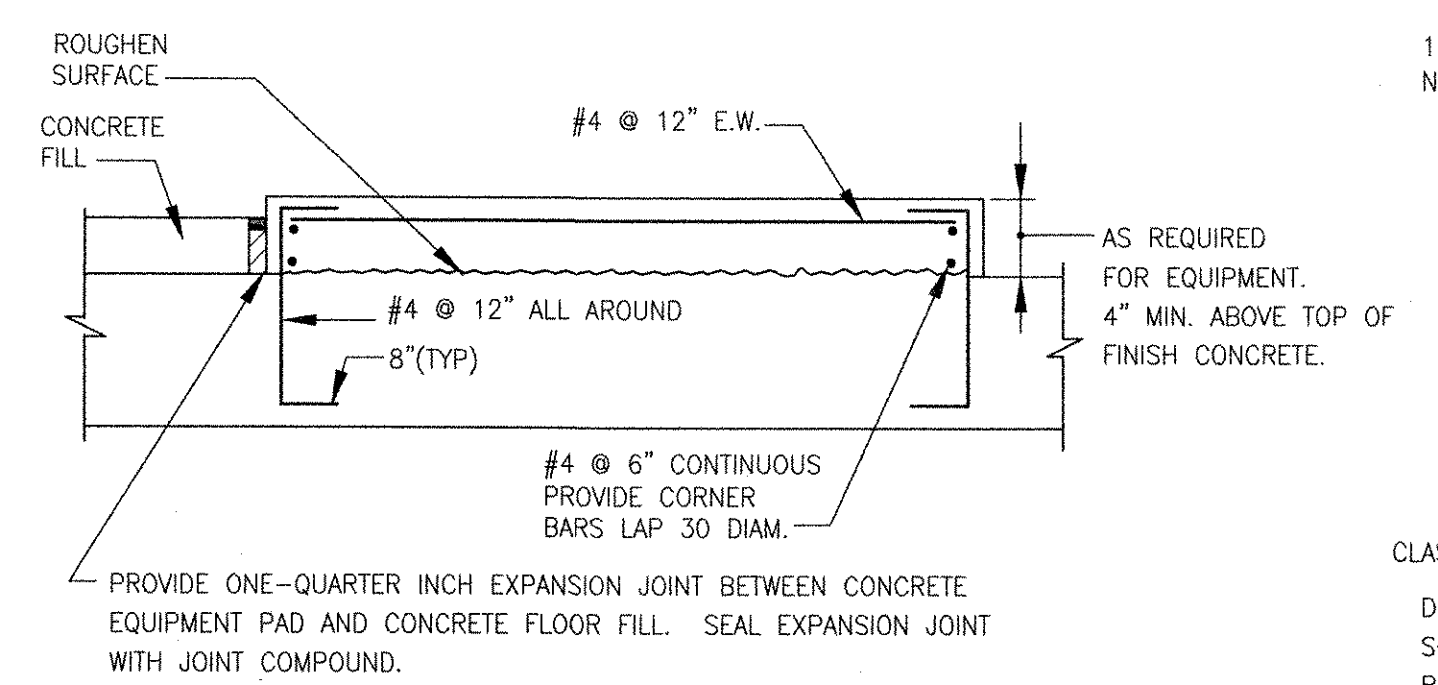
CONCRETE PIPE SUPPORT FOR EXISTING CONSTRUCTION

NTS
3-3.28.1.1 (REV. 08-06-97)



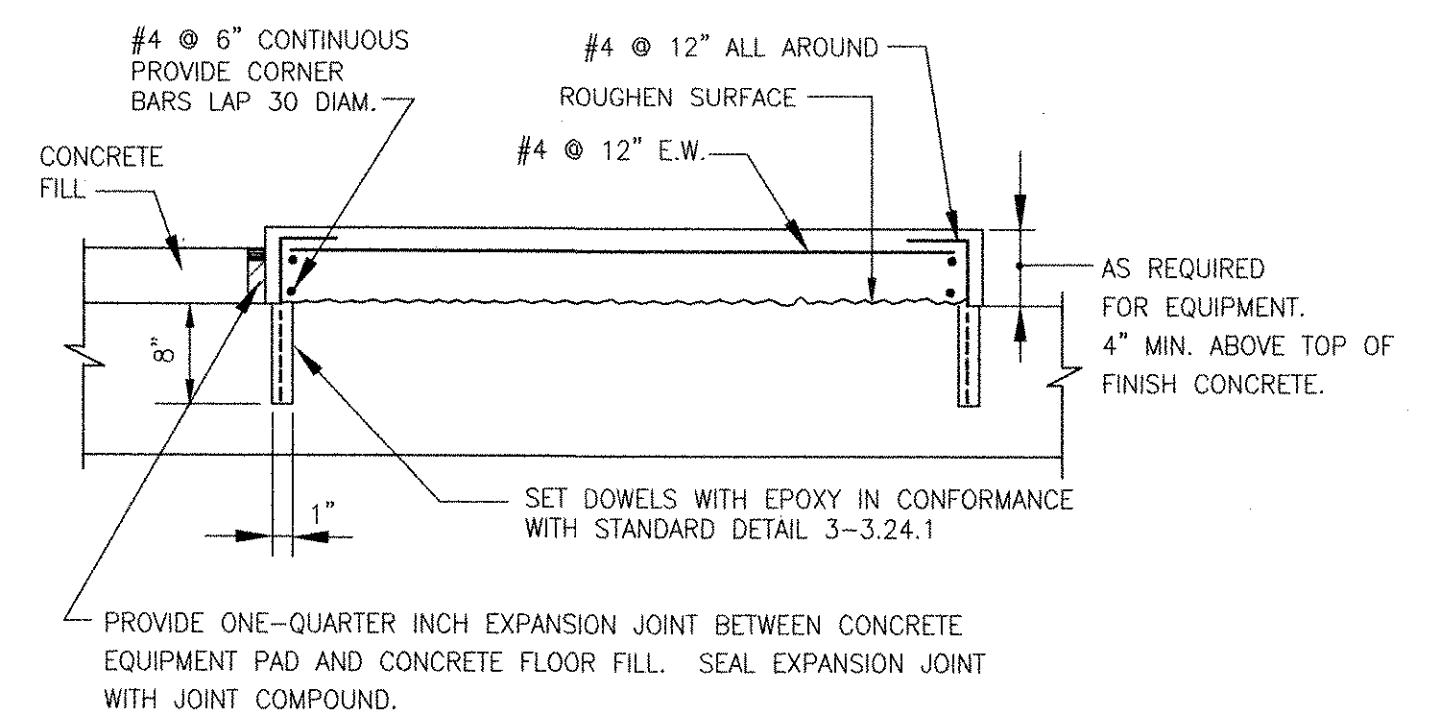
GENERATOR PAD

NTS
3-3.41.4 (REV. 09-11-00)



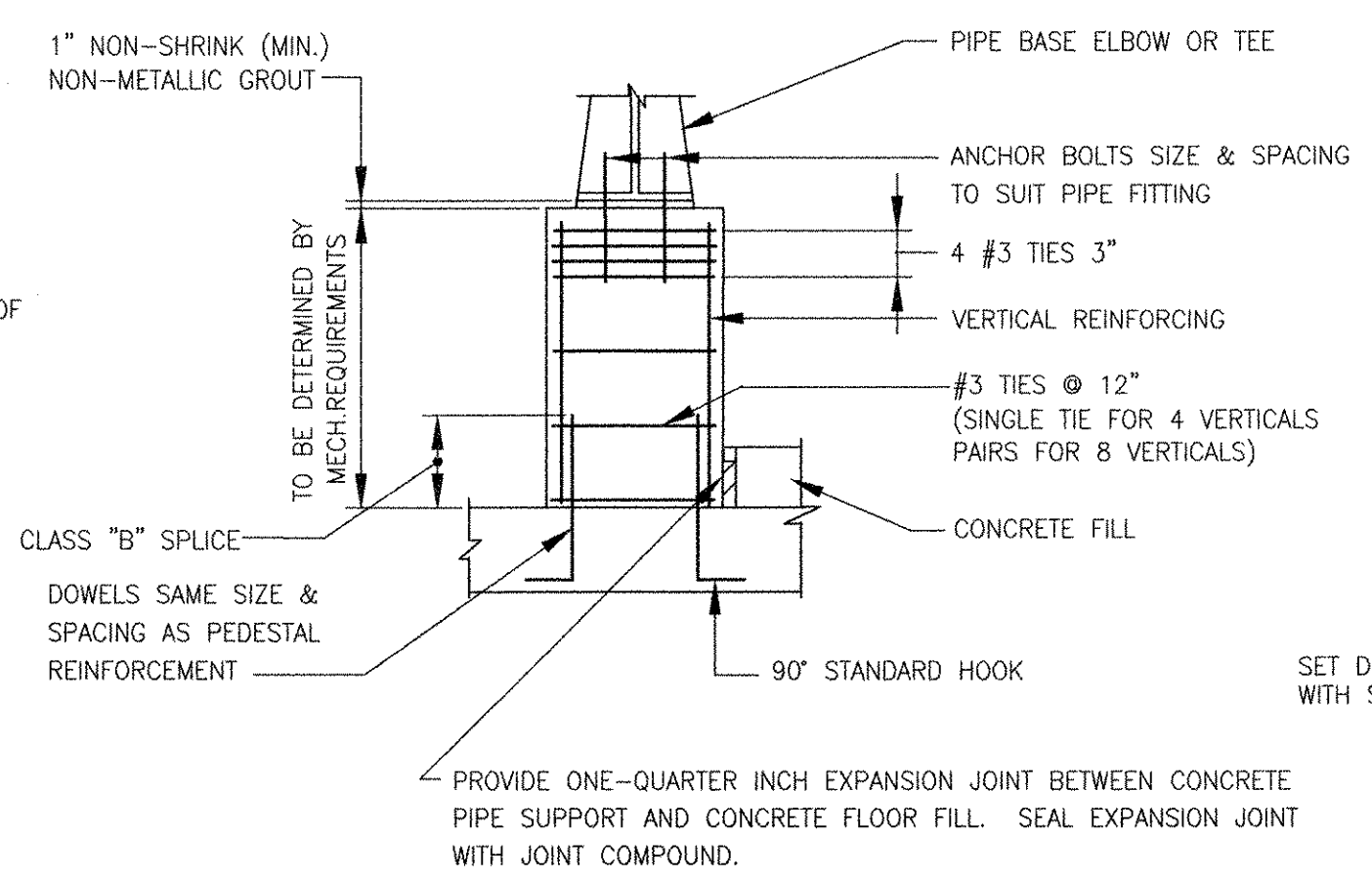
CONCRETE EQUIPMENT PAD FOR NEW CONSTRUCTION

NTS
3-3.28.2 (REV. 03-25-98)



CONCRETE EQUIPMENT PADS FOR EXISTING CONSTRUCTION

NTS
3-3.28.2.1 (REV. 03-25-98)

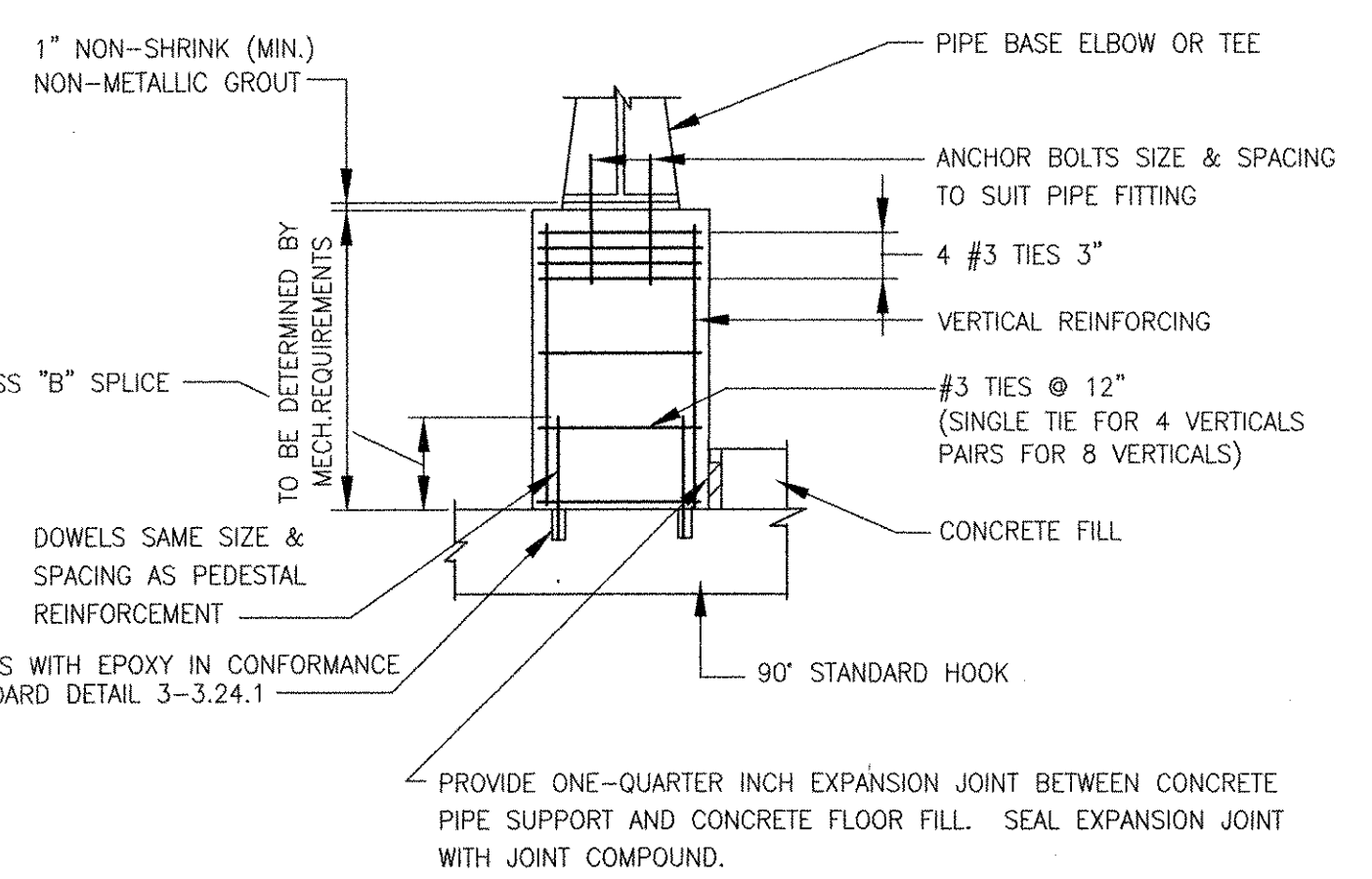


SUPPORTED PIPE SIZE INCHES	ANCHOR BOLT CIRCLE INCHES	MINIMUM PEDESTAL SIZE INCHES	MINIMUM VERTICAL REINFORCEMENT
2	3.50	12X12	4#6
3	3.88	12X12	4#6
4	4.75	12X12	4#6
6	5.50	16X16	4#8
8	7.50	16X16	4#8
10	7.50	16X16	4#8
12	9.50	18X18	4#9
14	9.50	18X18	4#9
16	9.50	18X18	4#9
18	11.75	18X18	4#9
20	11.75	18X18	4#9
24	11.75	18X18	4#9
30	14.25	22X22	8#7
36	17.00	25X25	8#8
42	21.25	30X30	8#10
48	22.75	30X30	8#10

PEDESTAL SIZE BASED UPON TABULATED BOLT CIRCLE. PEDESTAL SIZE SHALL BE NOT LESS THAN 6 INCHES LARGER THAN THE ACTUAL BOLT CIRCLE.

CONCRETE PIPE BASE SUPPORT FOR NEW CONSTRUCTION

NTS
3-3.28.3 (REV. 03-09-98)



SUPPORTED PIPE SIZE INCHES	ANCHOR BOLT CIRCLE INCHES	MINIMUM PEDESTAL SIZE INCHES	MINIMUM VERTICAL REINFORCEMENT
2	3.50	12X12	4#6
3	3.88	12X12	4#6
4	4.75	12X12	4#6
6	5.50	16X16	4#8
8	7.50	16X16	4#8
10	7.50	16X16	4#8
12	9.50	18X18	4#9
14	9.50	18X18	4#9
16	9.50	18X18	4#9
18	11.75	18X18	4#9
20	11.75	18X18	4#9
24	11.75	18X18	4#9
30	14.25	22X22	8#7
36	17.00	25X25	8#8
42	21.25	30X30	8#10
48	22.75	30X30	8#10

PEDESTAL SIZE BASED UPON TABULATED BOLT CIRCLE. PEDESTAL SIZE SHALL BE NOT LESS THAN 6 INCHES LARGER THAN THE ACTUAL BOLT CIRCLE.

CONCRETE PIPE BASE SUPPORT FOR EXISTING CONSTRUCTION

NTS
3-3.28.3.1 (REV. 03-09-98)

MARK	DATE	AC	RF	REVISED FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

RECORD DRAWINGS

AECOM USA, INC.
701 EDGEWATER DRIVE
PHOENIX, AZ 85020
PHONE: (781) 246-6200

RONALD R. FIORE
No. [Signature]
PROFESSIONAL ENGINEER
STRUCTURAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

STRUCTURAL STANDARD DETAILS VI

STRUCTURAL

PROJECT NO:	60148648
CAD DWG FILE:	99 S-506
DESIGNED BY:	A. CATALANO
DRAWN BY:	A. CATALANO
DEPT CHECK:	R. FIORE
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 S-506

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

DWG. ABBREV.	ITEM	SYMBOL
GAV	GATE VALVE	
KGV	KNIFE VALVE	
PLV	PLUG VALVE	
	3-WAY PLUG VALVE	
BFV	BUTTERFLY VALVE	
	BALL VALVE	
	3-WAY BALL VALVE	
CHK	CHECK VALVE	
	COMBINED FUNCTION VALVE	
	WAFER CHECK VALVE	
	SPLIT DISC CHECK VALVE	
	BALL CHECK VALVE	
H.G.	HOSE GATE	
	GLOBE VALVE	
	PINCH VALVE	
	NEEDLE VALVE	
	ANGLE VALVE	
	RELIEF VALVE	
	PRESSURE REGULATING VALVE	
	PRESSURE REDUCING VALVE	
	BACK PRESSURE VALVE	
	APERTURE VALVE	
	MULTI ORIFICE VALVE	
	DUCK BILL CHECK VALVE	
	CONE VALVE	
	SPECTACLE FLANGE	
	UNION	
	FLAP VALVE *	
	MUD VALVE *	
	TELESCOPING VALVE *	
	INSECT SCREEN	

*FLOW DIAGRAM ONLY

DWG. ABBREV.	ITEM	SYMBOL
	QUICK DISCONNECT COUPLING	
	FLEXIBLE HOSE	
	PULSATION DAMPENER	
	CALIBRATION STANDPIPE (COLUMN)	
	STATIC MIXER	
SG	SLIDE GATE	
SL	STOP LOG	
W	WEIR	
VD	VOLUME DAMPER	
	EXISTING PIPE & FACILITIES	
	PROPOSED PIPE & FACILITIES	
	PIPE: 6" & SMALLER	
	PIPE: 8" & LARGER	
	FLANGE	
BF	BLIND FLANGE	
	WELDED	
PO	PUSH ON JOINT	
	GROOVED COUPLING (PIPE 6" & SMALLER)	
	GROOVED COUPLING (PIPE 8" & LARGER)	
	SLEEVE COUPLING	
	RESTRAINED SLEEVE COUPLING	
	FLANGE ADAPTER	
	RESTRAINED FLANGE ADAPTER	
	EXPANSION JOINT W/CONTROL RODS	

DWG. ABBREV.	ITEM	SYMBOL
	BOLTED SPLIT SLEEVE COUPLING (PIPE 6" & SMALLER)	
	BOLTED SPLIT SLEEVE COUPLING (PIPE 8" & LARGER)	
	EXPANSION JOINT W/CONTROL RODS	
	CONCENTRIC REDUCER	
	ECCENTRIC REDUCER FLAT ON TOP	
	ECCENTRIC REDUCER FLAT ON BOTTOM	
	WYE STRAINER	
	INSULATION (PIPE 6" & SMALLER)	
	INSULATION (PIPE 8" & LARGER)	
	EXISTING PIPE TO BE REMOVED	
FE	FLOW RATE CONTROLLER	
FE	VENTURI FLOW METER	
FE	MAGNETIC FLOW METER	
	ORIFICE PLATE	
	ROTAMETER	
G	GAUGE	
	RUPTURE DISC	
WS	WATER SURFACE	
	DIRECTION OF FLOW	
	END CAP	
	PITCH PIPE DOWN IN DIRECTION OF ARROW	
	LIMITS OF WORK (TRADE, CONTRACT, ETC.)	
	POINT OF CONNECTION NEW WORK TO EXISTING WORK	
	LIMITS (MATERIAL, FURNISHED BY, ETC.)	
	SAMPLE TO LAB	
	CHEMICAL DIFFUSER AT PIPE	
	CHANNEL *	

*FLOW DIAGRAM ONLY

DWG. ABBREV.	ITEM	SYMBOL
ACTUATORS		
	MOTOR OPERATED	
	SOLENOID OPERATED	
	DIAPHRAGM	
	CYLINDER - HYDRAULIC	
	CYLINDER - PNEUMATIC	
	ELECTRO - HYDRAULIC	
	EQUIPMENT MOTOR	
WALL CASTINGS		
FLG x PO	FLANGE AND PUSH ON JOINT	
PO x PO	PUSH ON JOINT AND PUSH ON JOINT	
PO x PE	PUSH ON JOINT AND PLAIN END	
FLG x FLG	FLANGE AND FLANGE	
FLG x PE	FLANGE AND PLAIN END	
EQUIPMENT		
	POSITIVE DISPLACEMENT BLOWER *	
	CENTRIFUGAL BLOWER *	
	AXIAL FLOW PUMP *	
	VERTICAL WET PIT PUMP *	
	VERTICAL TURBINE CAN PUMP *	
	CENTRIFUGAL PUMP *	
	SUBMERSIBLE CENTRIFUGAL PUMP *	

*FLOW DIAGRAM ONLY

DWG. ABBREV.	ITEM	SYMBOL
EQUIPMENT		
	DIAPHRAGM PUMP *	
	HOSE OR TUBING PUMP *	
	METERING PUMP *	
	PLUNGER PUMP *	
	ROTARY LOBE PUMP *	
	PROGRESSIVE CAVITY PUMP *	
	GRINDER *	
	SCREW CONVEYOR *	
	HYDRO CYCLONE *	
	MECHANICALLY CLEANED SCREEN *	
	STATIC INTAKE SCREEN *	
	INLINE STRAINER *	
	DUPLIX BASKET STRAINER *	
	SUBMERSIBLE MIXER *	
	MIXER *	

*FLOW DIAGRAM ONLY

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DEW\COMMON\SHEETS\DWG 0-001.DWG
 LAST UPDATE: Tuesday, October 23, 2012 2:08:29 PM
 PLOT DATE: Tuesday, October 23, 2012 2:09:36 PM
 ANSI D - 23-Oct-12

AECOM
 AECOM USA, INC.
 101 EDEWATER DRIVE
 WILMINGTON, MA 01897
 PHONE (781) 248-5200

CHRISTOPHER F. GALLAGHER
 No. 2537
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

PROJECT NO: 60148648
 CAD DWG FILE: 00 D-001
 DESIGNED BY: ----
 DRAWN BY: ----
 DEPT CHECK: ----
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

00 D-001

RECORD DRAWINGS

PROCESS LEGEND
MECHANICAL PROCESS

REVISIONS

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	JM	REVISED FOR RECORD DRAWING

GENERAL NOTES:

- 1. EQUIPMENT AND SYSTEMS DIMENSIONS, LOCATIONS AND PIPING SYSTEM LAYOUTS ARE BASED ON EQUIPMENT SELECTED BY THE ENGINEER...
2. THE CONTRACTOR SHALL MAKE ALL REQUIRED FIELD MEASUREMENTS TO VERIFY EXISTING AND CONTRACT INTERFACE DIMENSIONS, LOCATIONS, AND OTHER CONDITIONS.
3. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR COVER PLATES, HATCHES, GRATING, AND RAILING DETAILS.
4. ALL PIPING UNDER CONCRETE SLABS OR STRUCTURES SHALL BE ENCASED IN CONCRETE, UNLESS OTHERWISE NOTED, REFER TO STRUCTURAL DRAWINGS.
5. ALL PIPING ENCASED IN CONCRETE SHALL HAVE PUSH-ON JOINTS AT ALL STRUCTURAL EXPANSION JOINTS.
6. PROVIDE EXPANSION JOINTS WITH CONTROL RODS FOR ALL EXPOSED PIPING CROSSING STRUCTURAL EXPANSION JOINTS.
7. ALL DIMENSIONS LOCATING EQUIPMENT ARE FROM FINISHED WALL SURFACES OR COLUMN CENTERLINES.
8. REFER TO INSTRUMENTATION DRAWINGS FOR INSTRUMENTATION AND CONTROL SYSTEMS. INSTRUMENT LOCATIONS ARE INDICATED ON MECHANICAL-PROCESS DRAWINGS IN APPROXIMATE LOCATION ONLY.
9. FOR CONTINUATION OF PIPING OUTSIDE STRUCTURES, SEE CIVIL DRAWINGS.
10. WALL AND FLOOR SLEEVES SHALL BE LARGE ENOUGH TO ACCOMMODATE FLANGES IF REQUIRED. FLOOR SLEEVES SHALL PROJECT AT LEAST 4-IN. ABOVE FINISHED FLOOR UNLESS OTHERWISE SHOWN, REFER TO DETAILS. IF SLEEVES ARE TO BE SEALED, PROVIDE GROOVED COUPLING PIPING CONNECTION TO FACILITATE INSTALLATION AND REMOVAL OF PIPING.
11. PROVIDE WALL CASTINGS WITH WATERSTOP FOR ALL BURIED AND SUBMERGED PIPELINES AND FOR PIPING LOCATED WITHIN 2 FT. OF MAXIMUM WATER SURFACE. WALL CASTINGS 4-IN AND LARGER - DUCTILE IRON, 3-IN AND SMALLER - SCH. 40 316L STAINLESS STEEL.
12. ALL PIPE PENETRATIONS THROUGH INTERIOR AND EXTERIOR WALLS AND FLOORS SHALL BE SEALED WATERTIGHT. ROOF PENETRATIONS SHALL BE SEALED IN ACCORDANCE WITH ARCHITECTURAL DETAILS.
13. SLEEVE OR GROOVED COUPLINGS MAY BE USED WHERE NECESSARY, AND AS APPROVED, TO FACILITATE PIPING INSTALLATION.
14. FOR FLANGED SYSTEMS PROVIDE FLEXIBLE CONNECTORS WHERE NECESSARY, AND AS APPROVED TO FACILITATE PIPING INSTALLATION AND VALVE AND EQUIPMENT REMOVAL.
15. ALL FLEXIBLE CONNECTORS, INCLUDING EXPANSION JOINTS AND SLEEVE COUPLINGS SHALL BE RESTRAINED AS INDICATED OR AS REQUIRED FOR EXPANSION AND FOR FLEXIBILITY.
16. PROVIDE ALL LIQUID PIPING 24" AND SMALLER WITH 3/4" LOW POINT DRAINS AND 3/4" HIGH POINT VENTS. PROVIDE ALL LIQUID PIPING 30" AND LARGER WITH 1 1/2" LOW POINT DRAINS AND 1 1/2" HIGH POINT VENTS. DRAINS AND VENTS TO INCLUDE BALL VALVE AND CAP, UNLESS OTHERWISE SPECIFIED OR INDICATED.
17. ALL HOSE GATES SHALL BE CLEARLY LABELED INDICATING TYPE OF SERVICE (W2, W3, ETC.). SEE SPECIFICATIONS.
18. SMALL PIPING (SAMPLE, W3, ETC.) IS SHOWN DIAGRAMMATICALLY: FIELD-ROUTING SUBJECT TO APPROVAL OF THE ENGINEER. SMALL PIPE ROUTING MUST NOT INTERFERE WITH ACCESS TO OR OPERATION OF ANY OTHER PIPE, VALVE, OR EQUIPMENT.
19. PORTIONS OF NON-PROCESS PIPING (PLUMBING, HVAC, CIVIL) ARE SHOWN FOR CLARITY OF DESIGN ONLY: REFER TO APPROPRIATE DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
20. CONTRACTOR SHALL PROTECT ALL EQUIPMENT, PIPING, AND VALVES FROM DAMAGE DURING DEMOLITION. ALL REPAIRS TO DAMAGED EQUIPMENT, PIPE, AND VALVES SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST.
21. BASE ELBOWS AND PIPE BRACES ARE SHOWN FOR PURPOSES OF ILLUSTRATION ONLY.
22. PROVIDE WALL MOUNTED SIGNS, IN ACCORDANCE WITH SPECIFIED ARCHITECTURAL REQUIREMENTS FOR ALL EXTERIOR WALL PENETRATIONS, INDICATING PIPE ORIGIN OR DESTINATION AND PIPE LABEL.
23. FOR PUMP VENT, DRAIN, PRESSURE GAUGE, VALVING AND PIPING SEE DETAILS.
24. PROVIDE CONCRETE PADS FOR ALL FLOOR MOUNTED PROCESS EQUIPMENT, REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
25. VENTS AND DRAINS:
A. INSTALL VENT AND DRAIN PIPING AND VALVES SO THERE IS NO INTERFERENCE WITH ACCESS TO OR OPERATION OF ANY EQUIPMENT, VALVES, PIPING OR PANELS.
B. PROVIDE ISOLATION VALVES FOR ALL VENTS AND DRAINS AS SPECIFIED AND INDICATED.
C. LOCATE VALVES SO THAT THEY ARE ACCESSIBLE AND OPERABLE.
D. PIPE ALL VENTS AND DRAINS SLOPED TO DRAIN TO THE NEAREST GUTTER, SUMP, TRENCH OR DRAIN OR AS INDICATED.
E. WHERE PIPING RUNS ACROSS A FLOOR, INSTALL 2 INCHES MAXIMUM ABOVE FLOOR.
26. ALL PIPE PENETRATIONS INTO THE FOLLOWING AREAS SHALL BE SEALED GASTIGHT:
A. WETWELLS

MECHANICAL PROCESS EQUIPMENT ABBREVIATIONS

Table with 3 columns: Abbreviation, Equipment Name, Abbreviation. Includes items like AIR COMPRESSOR (AC), INJECTION MIXER (IMIX), ACCUMULATOR (INJ), etc.

MECHANICAL PROCESS GENERAL ABBREVIATIONS

Table with 2 columns: Abbreviation, General Term. Includes items like ACTUAL CUBIC FEET PER MINUTE (ACFM), ABOVE FINISHED FLOOR (AFF), ANCHOR (ANCH), etc.

MECHANICAL PROCESS PIPING ABBREVIATIONS

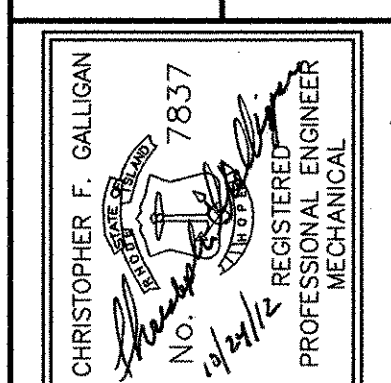
SEE PROCESS PIPE SCHEDULE

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

Table with columns: REVISIONS, DATE, MADE BY, CHECKED BY, DESCRIPTION. Includes entries for 10/19/12 and 10/19/12.

AECOM RECORD DRAWINGS logo and contact information for AECOM USA, INC.



CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS PROCESS ABBREVIATIONS AND GENERAL NOTES MECHANICAL PROCESS

Table with project details: PROJECT NO: 60148648, CAD DWG FILE: 00 D-002, DESIGNED BY: ----, DRAWN BY: ----, DEPT CHECK: ----, PROJ CHECK: S. THIBAUT, DATE: OCTOBER 2012, SCALE: AS NOTED.

00 D-002

ANSI D - 5 - Oct-12
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\00 D-002.DWG
LAST UPDATE: Friday, October 05, 2012 10:28:40 AM
ELOT DATE: Tuesday, October 23, 2012 2:09:40 PM

PROCESS PIPING SCHEDULE

LEGEND	SYSTEM DESIGN CONDITIONS					PIPING				INSULATION		VALVING			TEST REQUIREMENTS				SPEC. SECTION	REMARKS		
	SYSTEM	TEMP. (DEG. F)		PRESSURE (PSI)		MATERIAL	DIAMETER RANGE	SCH/CLASS	LINING/COATING	JOINT TYPE	TYPE	THICKNESS (INS.)	BLOCK	CHECK	THROTTLING	PRESSURE (PSI)	MEDIUM	TEST DURATION (MIN.)			LEAKAGE ALLOWANCE (SEE NOTES)	
		OPER.	MAX.	WORK	MAX.																	
ALP	AIR LOW PRESSURE	100	200	10	20	ABOVE GRADE: TYPE 304L STAINLESS STEEL BURIED: HDPE	ALL	SEE SPEC.	---	WELDED/FLANGED	FIBERGLASS	2	BUTTERFLY	SPLIT DISC	BUTTERFLY	20	AIR	60	ZERO	15066	SEE NOTE 8 & 11	
CD	CHEMICAL DRAIN	---	---	---	---	SAME AS SYSTEM	ALL	SCH. 80	---	SOLVENT WELDED/FLANGED	---	---	BALL DIAPHRAGM	---	---	---	---	60	ZERO	15370		
CV	CHEMICAL VENTS					SAME AS SYSTEM	ALL	SCH. 80	---	SOLVENT WELDED/FLANGED	---	---	---	---	---	---	---	---	---	15370		
D	DRAIN	60	80	---	---	SAME AS SERVICE PVC	4" & LARGER 3" & SMALLER	SEE SPEC. SCH. 80	---	SAME AS SERVICE SOLVENT WELDED/FLANGED	---	---	PLUG BALL	---	---	NOTE 4	WATER	60	ZERO	15370	SEE NOTE 4	
EFF	EFFLUENT	60	80	2	5	DUCTILE IRON	ALL	SEE SPEC.	CEMENT	FLANGED/GROOVED BURIED: PUSH-ON	---	---	BUTTERFLY	---	---	20	WATER	60	ZERO	02615	SEE NOTE 12	
FE	FINAL EFFLUENT	60	80	2	5	DUCTILE IRON	ALL	SEE SPEC.	CEMENT	FLANGED/GROOVED BURIED: PUSH-ON	---	---	BUTTERFLY	---	---	20	WATER	60	ZERO	02615	SEE NOTE 12	
FIL	FILTRATE	60	80	20	50	EXPOSED: PVC	ALL	SCH. 80	---	SOLVENT WELDED/FLANGED BURIED: PUSH-ON	---	---	PLUG	---	---	75	WATER	60	ZERO	15370		
CS	CAUSTIC SODA	60	80	30	50	PVC HOSE	ALL ALL	SCH. 80 SEE SPEC.	---	SOLVENT WELDED/FLANGED SEE SPEC.	FIBERGLASS	1	DIAPHRAGM	BALL	---	150	WATER	60	ZERO	15370	SEE NOTE 9	
MC	SUPPLEMENTAL CARBON	60	80	30	50	PVC/TUBING	ALL	SCH. 80	---	SOLVENT WELDED/FLANGED	---	---	BALL	BALL	---	60	WATER	60	ZERO	15370	SEE NOTE 6	
OV	OVERFLOW	SEE NOTE 4				SAME AS SERVICE	---	SAME AS SERVICE	---	SAME AS SERVICE	---	---	---	---	---	---	WATER	60	ZERO	SAME AS SERVICE	SEE NOTE 3 & 12	
OC	ODOR CONTROL	60	80	0.4	1.0	ABOVE GRADE: FRP BELOW GRADE: HDPE	---	SEE SPEC.	---	FLANGED/BUTT WELDED BURIED: HEAT FUSED	---	---	---	BUTTERFLY DAMPER	---	30" W.C.	AIR	60	ZERO	15855		
PD	PLANT DRAIN	60	80	---	---	DUCTILE IRON	ALL	SEE SPEC.	CEMENT	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	PLUG	---	---	---	WATER	60	ZERO	02615	SEE NOTE 12	
POL	POLYMER	60	80	30	50	PVC	ALL	SCH. 80	---	SOLVENT WELDED/FLANGED	---	---	BALL	BALL	---	60	WATER	60	ZERO	15370	SEE NOTE 6	
PSC	PRIMARY SCUM	60	80	100	150	DUCTILE IRON	ALL	SEE SPEC.	GLASS	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	PLUG	BALL	---	150	WATER	60	ZERO	02615 02623	SEE NOTE 12	
REC	RECYCLE	60	80	15	25	DUCTILE IRON	ALL	SEE SPEC.	CEMENT	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	PLUG	---	---	60	WATER	60	ZERO	02615	SEE NOTE 12	
RAS	RETURN ACTIVATED SLUDGE	60	80	15	30	DUCTILE IRON	ALL	SEE SPEC.	CEMENT	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	PLUG	RUBBER FLAPPER	---	60	WATER	60	ZERO	02615	SEE NOTE 12	
RWW	RAW WASTEWATER	60	80	24	40	DUCTILE IRON BURIED: PVC	ALL	SEE SPEC. DR18	CEMENT	FLANGED/GROOVED PUSH-ON	---	---	PLUG	RUBBER FLAPPER	---	80	WATER	60	ZERO	02614 02623	SEE NOTE 12	
SCR	SCREENINGS	60	80	65	90	TYPE 316L S.S.	ALL	SCH. 10	---	FLANGED / WELDED	---	---	---	---	---	SEE NOTE 14		NONE	15066			
SE	SECONARY EFFLUENT	60	80	---	---	DUCTILE IRON	ALL	SEE SPEC.	CEMENT	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	---	---	---	10	WATER	60	ZERO	02615	SEE NOTE 12	
SH	SODIUM HYPOCHLORITE	60	80	30	50	PVC	ALL	SCH. 80	---	SOLVENT WELDED/FLANGED	---	---	BALL	BALL	---	60	WATER	60	ZERO	15370	SEE NOTE 6	
TSL	THICKENED SLUDGE	60	80	15	30	DUCTILE IRON PVC	4" AND LARGER 3" AND SMALLER	SEE SPEC. SCH. 80	CEMENT	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	PLUG	RUBBER FLAPPER	---	60	WATER	60	ZERO	02615	SEE NOTE 12	
W2	SERVICE WATER	60	80	82	164	DUCTILE IRON PVC	4" AND LARGER 3" AND SMALLER	SEE SPEC. SCH. 80	CEMENT	FLANGED/GROOVED SOLVENT WELDED/FLANGED	FIBERGLASS	2	GATE	RUBBER FLAPPER	---	200	WATER	60	ZERO	02615 02623		
W3	PLANT WATER	60	80	82	164	DUCTILE IRON PVC	4" AND LARGER 3" AND SMALLER	SEE SPEC. SCH. 80	CEMENT	FLANGED/GROOVED SOLVENT WELDED/FLANGED	FIBERGLASS	2	GATE	RUBBER FLAPPER	---	200	WATER	60	ZERO	02615 02623		
WAS	WASTE ACTIVATED SLUDGE	60	80	10	20	DUCTILE IRON BURIED: PVC	ALL	SEE SPEC. DR18	CEMENT	EXPOSED: FLANGED/GROOVED BURIED: PUSH-ON	---	---	PLUG	RUBBER FLAPPER	---	50	WATER	60	ZERO	02615	SEE NOTE 12	
V	VENT	SEE NOTE 4	SEE NOTE 4	SEE NOTE 4	SEE NOTE 4	DUCTILE IRON PVC	4" AND LARGER 3" AND SMALLER	---	SCH. 80	CEMENT	FLANGED/GROOVED SOLVENT WELDED/FLANGED	---	---	PLUG BALL	---	---	SEE NOTE 4	WATER	60	ZERO	02615 02623	SEE NOTE 4

PROCESS PIPING NOTES:

- PIPING SCHEDULE ABOVE REFERS TO MECHANICAL PROCESS PIPING ONLY. REFER TO OTHER DISCIPLINES FOR ANY NON-PROCESS PIPING SHOWN AS BACKGROUND INFORMATION ON THE MECHANICAL DRAWINGS AND FOR CONTINUATION OF PIPING BEYOND MECHANICAL DISCIPLINE LIMITS OF WORK.
- TEST VENTS AND DRAINS TO SAME PRESSURE AS SYSTEM.
- FOR OPEN VENTS, FILL VENT WITH WATER AND TEST FOR LEAKS.
- SAME AS SYSTEM.
- USE TYPE 316L S.S. PIPE FOR DRAINS FROM DUCTILE IRON SERVICE FOR DRAINS 3" AND SMALLER.
- PROVIDE FLANGES AT EQUIPMENT, VALVES AND AS INDICATED ON THE DRAWINGS.

PROCESS PIPING NOTES CONTINUED:

- ALL PIPING THAT IS NOT BURIED SHALL BE CONSIDERED EXPOSED.
- PROVIDE INSULATION AND PROTECTIVE INSULATION JACKET AS SPECIFIED FOR ALL EXTERIOR INSULATED PIPING AND FOR ALL INTERIOR INSULATED PIPING 6"-6" OR LOWER TO THE FLOOR.
- HEAT TRACE AND INSULATE WITH 2 INCHES (OR AS INDICATED) OF INSULATION AND JACKET AS SPECIFIED FOR ALL EXTERIOR EXPOSED PIPING TO 5 FEET BELOW GRADE AS SPECIFIED IN 15370.
- NOT USED
- INSULATE WHERE INDICATED FOR PERSONNEL PROTECTION.
- FOR BURIED DUCTILE IRON PROVIDE RESTRAINED JOINT PIPE AND MJ FITTINGS.

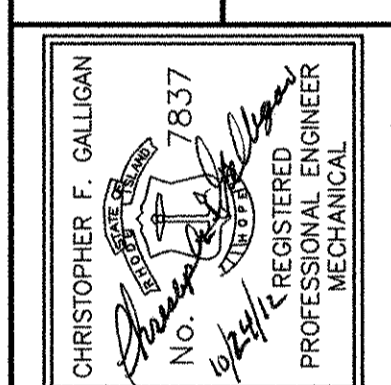
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	DESCRIPTION
JM	MADE BY CHECKED
SAC	DATE
10/19/12	1
MARK	DATE

RECORD DRAWINGS

AECOM
AECOM U.S.A., INC.
100 WASHINGTON ST., SUITE 2000
WAKEFIELD, MA 01880
PHONE (781) 246-5200



PROCESS SCHEDULES I

MECHANICAL PROCESS

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

PROJECT NO: 60148648
PROCESS SCHEDULES
CAD DWG FILE: SCHEDULES
DESIGNED BY: ----
DRAWN BY: ----
DEPT CHECK: ----
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

00 D-003

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DBA) COMMON SHEETS\00 D-003 PROCESS SCHEDULES.DWG
 LAST UPDATE: Friday, October 05, 2012 10:28:53 AM
 PLOT DATE: Tuesday, October 23, 2012 2:08:42 PM
 ANSI D - 5-Oct-12

PROCESS PUMP SCHEDULE

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	TYPE	RATING POINT				MIN. SUCTION/DISCHARGE SIZE (IN.)	PUMP RPM MAX.	SEAL TYPE	MOTOR DATA			DRIVE TYPE	SPEC. SECTION	BASIS OF DESIGN	REMARKS
					CAPACITY (GPM)	HEAD (FEET)	MIN. EFF. % (NOTE 5)	SHUTOFF HEAD FT.				HP	RPM (MAX.)	ENCL. TYPE				
11-RWW.P-1 THRU 11-RWW.P-3	3	RAW WASTEWATER PUMP	WATCHEMOKET COVE PUMP STATION	SOLIDS HANDLING SUBMERSIBLE	3500	150	70.5	225	10/10	1785	TANDEM MECHANICAL	200	1800	X-PROOF SUBMERSIBLE	CLOSE-COUPLED	11304	ABS AFP 2501	SEE NOTES
12-RWW.P-1 THRU 12-RWW.P-3	3	RAW WASTEWATER PUMP	BOYDEN BLVD. PUMP STATION	SUBMERSIBLE CHOPPER PUMP	1600	65	---	115	6/6	1800	TANDEM MECHANICAL	50	1800	X-PROOF SUBMERSIBLE	CLOSE-COUPLED	11306	VAUGHAN SE6U	
31-AT-REC. P-1, 2, 3 & 4	4	INTERNAL RECYCLE PUMP	AERATION TANK	SUBMERSIBLE PROPELLER PUMP	5000	3	70	5	20	900	TANDEM MECHANICAL	7.5	900	SUBMERSIBLE	CLOSE-COUPLED	11313	KSB	SUPPLIED BY IFAS VENDOR
32-FIL.P-1 & 32-FIL.P-2	2	FILTRATE SUMP PUMP	RAS PUMP STATION	SOLIDS HANDLING SUBMERSIBLE	200	20	70	38	3/3	1800	TANDEM MECHANICAL	1.5	1800	SUBMERSIBLE	CLOSE COUPLED	11304	HYDROMATIC	
32-TSLP-2	1	THICKENED SLUDGE PUMP	RAS PUMP STATION	ROTARY LOBE	50	16	---	---	4/4	200	MECHANICAL	5	1800	TEFC	GEAR	11312	BORGER	
32-RSLP-4	1	RETURN SLUDGE PUMP	RAS PUMP STATION	END SUCTION CENTRIFUGAL	2700	32	59	84	10/10	885	SPLIT MECHANICAL	50	900	TEFC	DIRECT	11303	FAIRBANKS MORSE	SEE NOTES

NOTES:

- RAW WASTEWATER PUMPS:
 1. VARIABLE FREQUENCY DRIVE
 2. SECONDARY OPERATING POINT #1: 5000 GPM AT 109 FEET AT FULL SPEED
 3. MINIMUM SPEED OPERATING POINT: 1100 GPM AT 125 FEET
 4. SOLIDS HANDLING CAPABILITY: 3 INCH MINIMUM NON-DEFORMABLE SPHERE
 5. WIRE TO WATER EFFICIENCY

- RETURN SLUDGE PUMP:
 1. VARIABLE FREQUENCY DRIVE
 2. SECONDARY OPERATING POINT: 3300 GPM AT 19 FEET AT FULL SPEED
 3. MINIMUM SPEED OPERATING POINT: 1000 GPM AT 6.5 FEET
 4. SOLIDS HANDLING CAPABILITY: 6 INCH SPHERE

COLLECTIONS SYSTEM PUMPS:
 FOR COLLECTION SYSTEM PUMP STATIONS AT DEXTER ROAD, FRANCIS AVENUE, INDUSTRIAL WAY, FULLER AVENUE AND STONEGATE APT. SEE PUMP SCHEDULE ON LAYOUT DRAWINGS.

CHEMICAL METERING PUMP SCHEDULE

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	RATING POINT				PUMP TYPE	MOTOR DATA			DRIVE TYPE	SPEC. SECTION	BASIS OF DESIGN MANUFACTURER	SERVICE CONDITIONS (CHEMICAL DATA)	REMARKS		
				MAX. CAPACITY (GPH)	MIN. CAPACITY (GPH)	HEAD (PSI)	MAX. PUMP SPEED		HP	VA	VOLTAGE							
21-CS.MP-1 & 2	2	CAUSTIC SODA METERING PUMPS	HEADWORKS ADDITION	60	4	30	---	40	PERISTATIC	0.5	---	120	1800	TEFC	INTEGRAL VFD	11351	BLUE WHITE A4	50% CAUSTIC 1.54 S.G. ---
31-C.MP-1, 2, 3 & 4	4	CARBON SOURCE METERING PUMPS	AERATION TANK NO. 1, 2, 3 & 4	10	1	30	100	---	PERISTATIC	0.5	---	120	1800	TEFC	INTEGRAL VFD	11351	LMI 6771-265	CRUDE GLYCERIN 1.22 S.G. WITH PLUG

SLIDE GATE SCHEDULE

TAG NO.	NUMBER OF UNITS	LOCATION	GATE SIZE W(IN.) x H(IN.)	GATE TYPE	CONFIGURATION	HEAD TYPE	HEAD (MAX. WATER TO GATE ϕ) (FT.)	DESIGN HEAD (FT.)	OPERATING LEVEL TO GATE INVERT (FT.)	FRAME TYPE	THIMBLE TYPE	CLOSURE TYPE	OPERATOR TYPE	MOTOR DATA			SPEC. SECTION	REMARKS
														HP	RPM (MAX.)	ENCL. TYPE		
11-RWW.SG-1	1	WATCHEMOKET PUMP STATION	42 x 84	PREFABRICATED	SELF CONTAINED	SEATING	3.0	5	7	EMBEDDED	---	FLUSH	GEARED	---	---	---	15103	---
11-RWW.SG-2	1	WATCHEMOKET PUMP STATION	36 x 72	CAST	STANDARD	UN-SEATING	5.0	30	23	FLAT	E	FLUSH	ELECTRIC	1/2	1800	NEMA 6	15102	MODULATING
11-RWW.SG-3	1	WATCHEMOKET PUMP STATION	60 x 24	PREFABRICATED	SELF CONTAINED	SEATING	2.0	5	4.5	EMBEDDED	---	FLUSH	GEARED	---	---	---	15102	---
31-AT.SG-1, 2, 3 & 4	4	AERATION TANKS	12 X 12	CAST	STANDARD	SEATING	11	11	14.5	FLAT	F	FLUSH	HANDWHEEL	---	---	---	15102	---

BLOWER AND COMPRESSOR SCHEDULE

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	TYPE	CAPACITY (SCFM)	PRESSURE (PSIG)	INLET LOSSES IN H ₂ O	INLET TEMP. (DEG. F)	BAROMETRIC PRESSURE (PSIA)	BLOWER SPEED (RPM)	MINIMUM SUCTION/DISCHARGE (INCHES)	MOTOR DATA			DRIVE TYPE	SPEC. SECTION	REMARKS
												HP	RPM (MAX.)	ENCL. TYPE			
23-ALP.BLW-1, 2, 3 & 4	4	AERATION BLOWER	OPERATIONS BUILDING	BLOWER	5,800	7.0	---	100	14.4	---	14	250	---	---	DIRECT W/VFD	11375	

HOIST SCHEDULE (SECTION 14300)

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	TYPE/CLASS	HOIST DATA			TROLLEY SPEED (FPM)	BOTTOM OF BEAM TO OPER. FLOOR (FEET)	MOTOR DATA				CONTROLS	REMARKS
					CAPACITY (TONS)	LIFT (FEET)	SPEED (FPM)			HOIST HP	TROLLEY HP	RPM (MAX.)	ENCL. TYPE		
21 HST-1	1	JIB CRANE	HEADWORKS	JIB/A	.75	30	---	---	---	---	---	---	---	---	PROVIDE TERN MODEL 5124M1 GAL PORTABLE JIB CRANE OR EQUAL. PROVIDE SUPPORT BASE AS INDICATED

STOP LOG SCHEDULE

TAG NO.	NUMBER REQUIRED	LOCATION	CHANNEL WIDTH (IN.)	CHANNEL (GROOVE) DEPTH (IN.)	TOTAL NUMBER OF SECTIONS	SECTION HEIGHT (FT)	HEAD TYPE	MAX. HEAD (FT)	SPEC. SECTION	REMARKS
11-RWW.SL-1, 2 & 3	3	WATCHEMOKET PUMP STATION	36	90	4	1.50	SEATING	6	15108	-

STOP LOG NOTES:

- MAXIMUM HEAD TO CENTERLINE OF BOTTOM STOP LOG
- PROVIDE GROOVES TO EXTEND FROM OPERATING LEVEL TO CHANNEL INVERT.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NO.	DATE	MARK	DESCRIPTION
2	12/11/12	JM	REVISOR FOR RECORD DRAWING
1	11/01/10	MB	ADDENDUM 1

RECORD DRAWINGS

AECOM

ACOM USA, INC. 1000 WASHINGTON STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200

CHRISTOPHER F. GALLIGAN REGISTERED PROFESSIONAL ENGINEER MECHANICAL

7837

CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS

PROCESS SCHEDULES II

MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	00 D-004
DESIGNED BY:	---
DRAWN BY:	---
DEPT CHECK:	---
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 D-004

PATH: \\F:\60148648 - EAST PROVIDENCE DBA\COMMON\SHETS\00 D-004.DWG
 LAST UPDATE: Wednesday, December 12, 2012 8:59:34 AM
 PLOT DATE: Wednesday, December 12, 2012 8:59:02 AM
 ANSI D - 12-Dec-12

MIXING EQUIPMENT SCHEDULE

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	TYPE	VESSEL/TANK DATA					IMPELLER DIAMETER (INCHES)	NUMBER OF IMPELLERS	MIXER SPEED (RPM)	MOTOR DATA			DRIVE TYPE	SPEC. SECTION NUMBER	REMARKS
					VOLUME (GAL.)	DEPTH (FEET)	SIDEWATER DEPTH (FEET)	DIA. OR LxW (FEET)	CENTERLINE MIXER TO TANK INVERT (INCHES)				HP	RPM (MAX.)	ENCL. TYPE			
31-AT.MIX-1 THRU 4, 31-AT.MIX-13 THRU 16	8	PRE-ANOXIC TANK MIXER	AERATION TANKS	SUBMERSIBLE	118,000	13.25	12.25	---	24	11.5	1	855	4.0	855	SUB	DIRECT	11339	FLYGT SUPPLIED BY IFAS VENDOR
31-AT.MIX-5 THRU 12	8	POST-ANOXIC TANK MIXER	AERATION TANKS	SUBMERSIBLE	79,000	13.25	11.00	---	16	11.50	1	855	4.0	855	SUB	DIRECT	11339	FLYGT SUPPLIED BY IFAS VENDOR
46-CCT.MIX-1	1	CHLORINE CONTACT FLASH MIXER	CHLORINE CONTACT MIXING CHAMBER	TOP ENTRY	11,700	15.33	11.00	12 X 12	34 & 84	46	2	100	20.0	1800	TEFC	GEAR	11338	REPLACE EXISTING MIXER AND SUPPORTS

CONVEYOR SCHEDULE

TAG NO.	NUMBER OF UNITS	NAME	LOCATION	TYPE	CONVEYOR DATA							MOTOR DATA			DRIVE TYPE	SPEC. SECTION	REMARKS
					MATERIAL CONVEYED	LOADING (LBS./HR.)	DIA. OR WIDTH (IN.)	CONVEYOR ABOVE FLOOR (IN.)	CONVEYOR SPEED (RPM)	CONVEYOR SETTINGS	CONVEYOR DISCHARGE	HP	RPM (MAX.)	ENCL. TYPE			
23-SL.CNV-2	1	SLUDGE CONVEYOR	SLUDGE TRUCK BAY	SHAFTLESS SCREW	SLUDGE	1500	10%	24	20	FLOOR SUPPORTED	FOUR	1	1800	TEFC	GEAR	14549	SUPPLIED BY ROTARY SLUDGE PRESS VENDOR

ODOR CONTROL FAN SCHEDULE

TAG NO.	NUMBER OF UNITS	LOCATION	TYPE	RATING		HP	DRIVE TYPE	ENCL. TYPE	ELECTRICAL DATA VOLT/PH/HZ	REMARKS
				SCFM	IN. H ₂ O					
11-OC.F-1	1	WATCHEMOKET PUMP STATION	CENTRIFUGAL	6,200	8	15	V-BELT	TEFC	460/3/60	FRP CONSTRUCTION
21-OC.F-1	1	HEADWORKS	CENTRIFUGAL	2,300	4	3	V-BELT	TEFC	460/3/60	FRP CONSTRUCTION

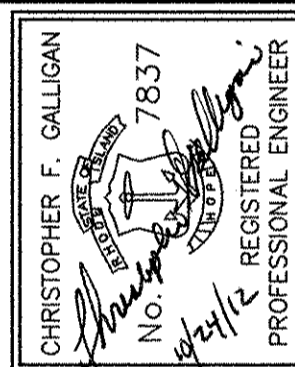
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200



RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
PROCESS SCHEDULES III
 MECHANICAL PROCESS

PROJECT NO: 60148648
 CAD DWG FILE: 00 D-005
 DESIGNED BY: ----
 DRAWN BY: ----
 DEPT CHECK: ----
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

00 D-005

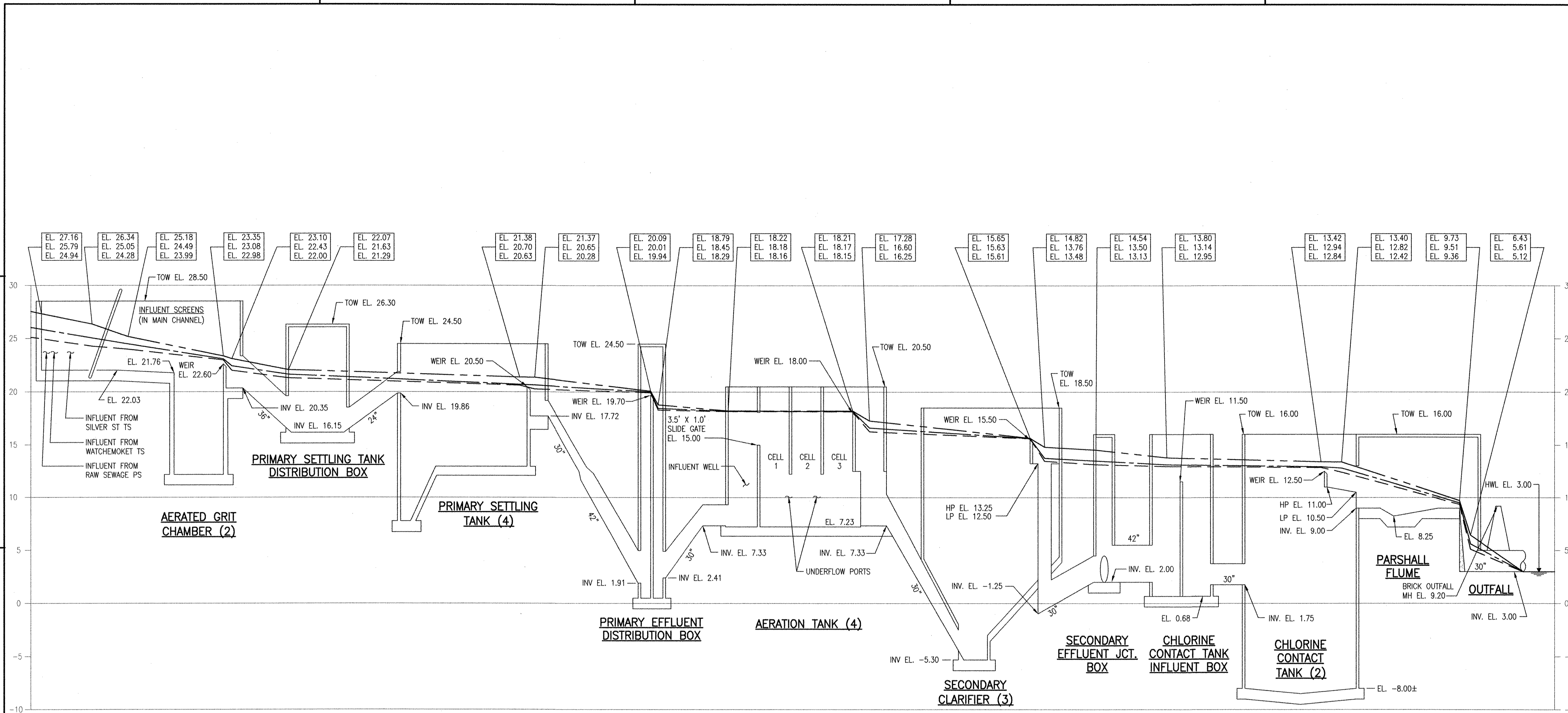
PATH: \\P:\PROJECTS\60148648 - EAST PROVIDENCE DERIVATION\COMMON SHEETS\00 D-005.DWG
 LAST UPDATE: Wednesday, October 17, 2012 10:03:45 AM
 PLOT DATE: Tuesday, October 23, 2012 2:09:48 PM
 ANSI D - 17-Oct-12

D

C

B

A



EXISTING HYDRAULIC PROFILE

SCALE: VERTICAL 1"=5'
SCALE: HORIZ. NONE

LEGEND

- 21.2 MGD (EXISTING PEAK HOUR)
- 14.6 MGD (EXISTING MAX DAY)
- 10.4 MGD (EXISTING MAX MONTH, AVERAGE DAY)

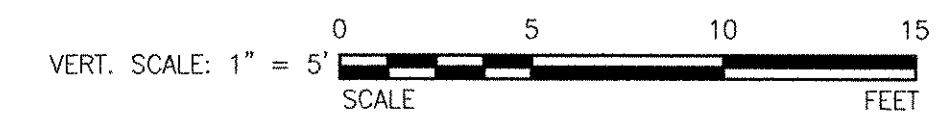
NOTES:

1. BOX SHOWS HYDRAULIC GRADELINE ELEVATIONS REPRESENTING:
 - PEAK HOUR
 - MAX DAY
 - MAX MONTH
2. RAS RECYCLE IS 7.8 MGD (MAX).
3. RAS RECYCLED TO AERATION TANK (CAN ALSO BE DIRECTED TO PRIMARY EFFLUENT DISTRIBUTION BOX).
4. PROFILE SHOWN BASED ON MEAN HIGH WATER LEVEL OF PROVIDENCE RIVER OF 3.0 FT.

UNIT DESCRIPTION	TOTAL	NO. IN SERVICE
SCREEN CHANNEL*	2	2
GRIT TANK	2	2
PRIMARY SETTLING TANK	4	4
AERATION TANK	4	4
SECONDARY CLARIFIER	3	3
CHLORINE CONTACT TANK	2	2

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	SAC	JM	REVISED FOR RECORD DRAWING

AECOM
AECOM USA, INC.
100 WASHINGTON ST
WALTHAM, MA 02454
PHONE (781) 246-5200

RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
No. 7837
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

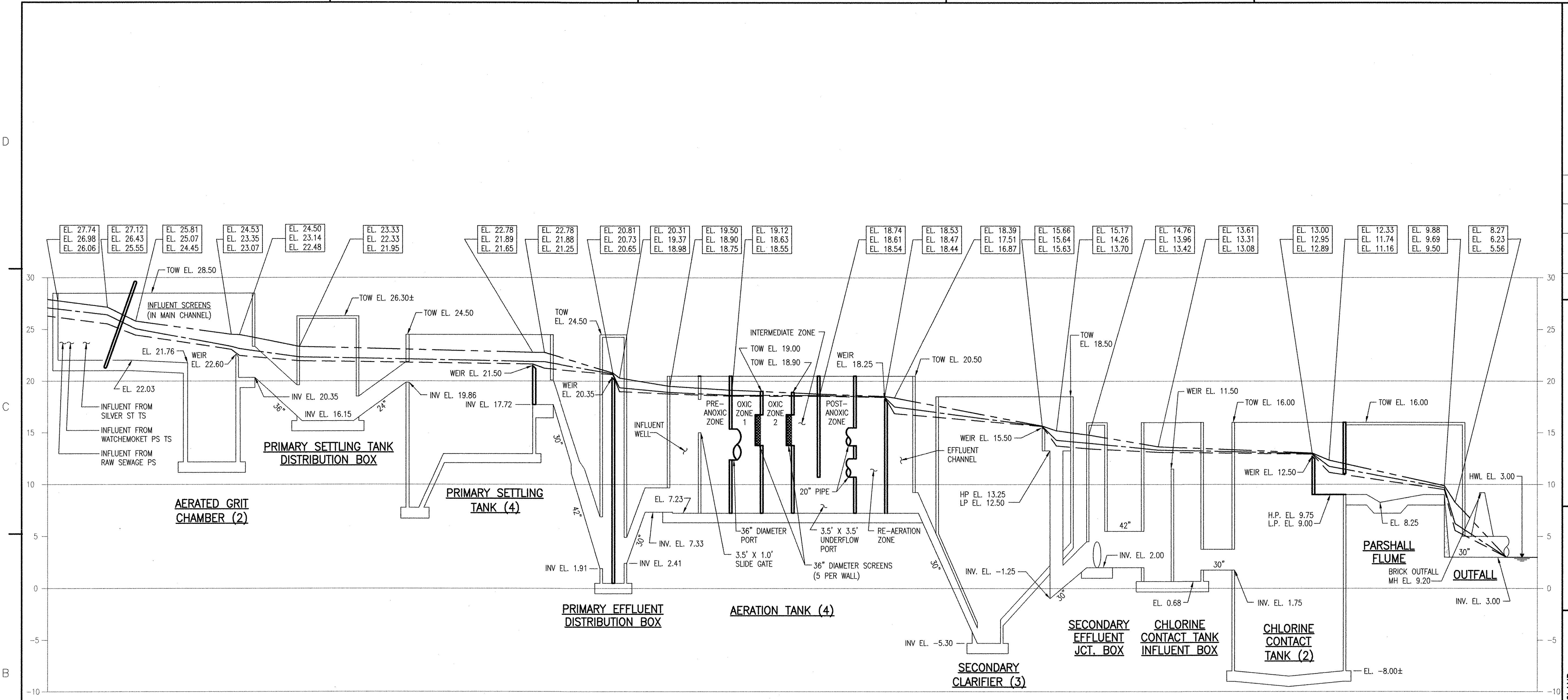
EXISTING HYDRAULIC PROFILE
MECHANICAL PROCESS

PROJECT NO: 60148648
CAD DWG FILE: 00 D-006
DESIGNED BY: -----
DRAWN BY: -----
DEPT CHECK: -----
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

00 D-006

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE WWS\COMMON SHEETS\00 D-006.DWG
LAST UPDATE: Friday, October 05, 2012 10:32:55 AM
PLOT DATE: Tuesday, October 23, 2012 2:09:51 PM
ANSI D - 5-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (REV)\COMMON SHEETS\DWG D-007.DWG
 LAST UPDATE: Friday, October 05, 2012 10:35:48 AM
 PLOT DATE: Tuesday, October 23, 2012 2:09:54 PM



HYDRAULIC PROFILE
 SCALE: VERTICAL 1"=5'
 SCALE: HORIZ. NONE

LEGEND

- 26.4 MGD (PEAK HOUR)
- 19.9 MGD (MAX DAY)
- 14.2 MGD (MAX MONTH, AVERAGE DAY)

NOTES:

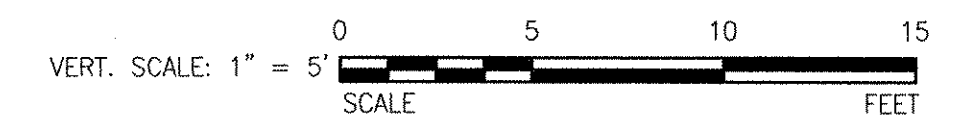
1. BOX SHOWS HYDRAULIC GRADELINE ELEVATIONS REPRESENTING:
 - PEAK HOUR
 - MAX DAY
 - MAX MONTH
2. UPGRADES SHOWN IN BOLD.
3. RAS RECYCLED TO PRE-ANOXIC ZONE OF AERATION TANK (CAN ALSO BE DIRECTED TO PRIMARY EFFLUENT DISTRIBUTION BOX).
4. RAS RECYCLE IS 11.1 MGD (FIRM CAPACITY WITH 20% OF RAS FLOW DIRECTED TO PRIMARY EFFLUENT DISTRIBUTION BOX).
5. INTERNAL RECYCLE EQUAL TO 2Q (MAX MONTH).
6. PROFILE SHOWN BASED ON MEAN HIGH WATER LEVEL OF PROVIDENCE RIVER OF 3.0 FT.

UNIT DESCRIPTION	TOTAL	NO. IN SERVICE
SCREEN CHANNEL*	2	2
GRIT TANK	2	2
PRIMARY SETTLING TANK	4	4
AERATION TANK	4	4
SECONDARY CLARIFIER	3	3
CHLORINE CONTACT TANK	2	2

* MAIN SCREEN CHANNEL RECEIVES 60% OF FLOW AT PEAK HOUR, 80% OF FLOW AT MAXIMUM DAY AND 100% AT MAXIMUM MONTH.

RECORD DRAWING

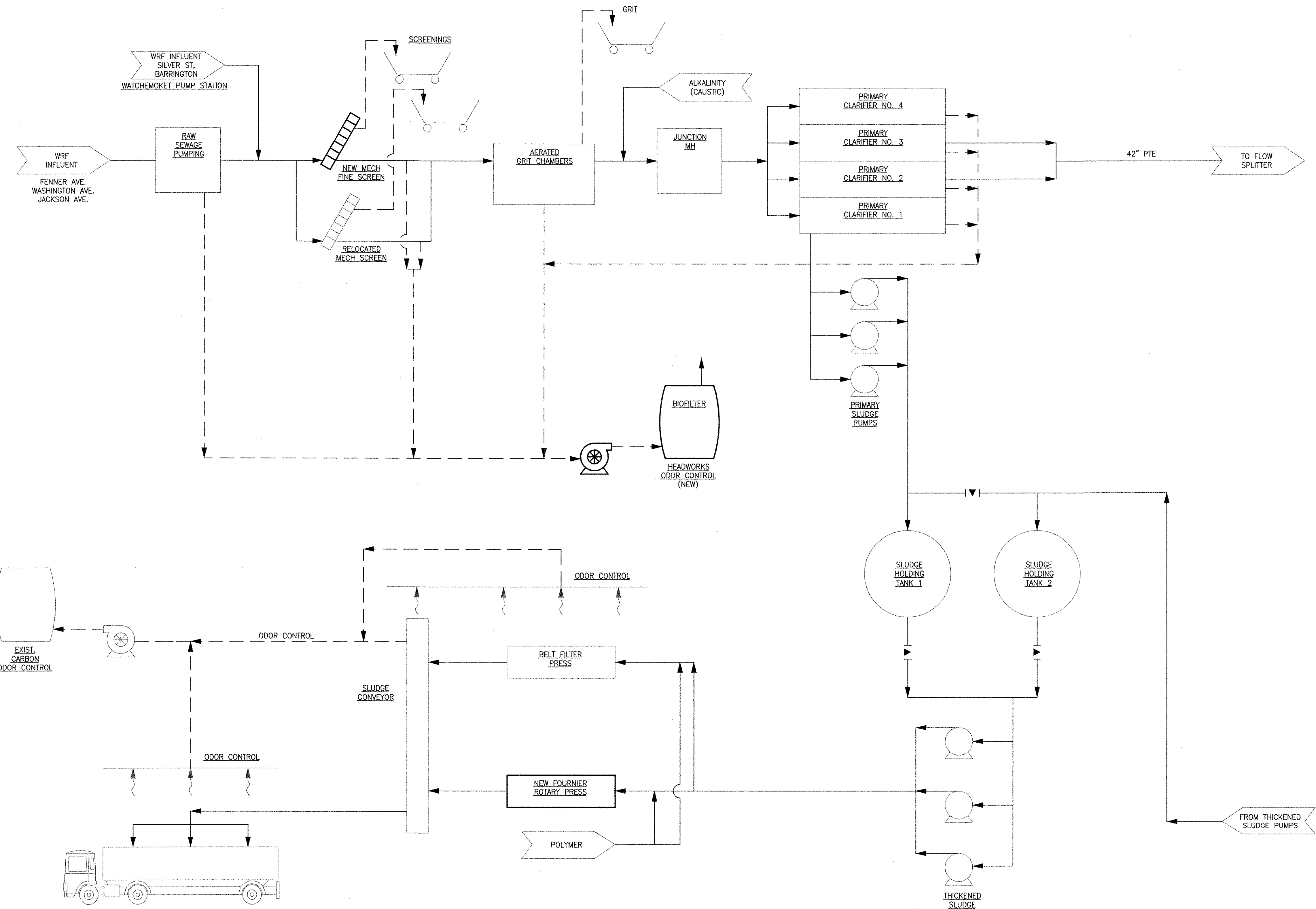
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



<p>AECOM</p> <p>AECOM USA, INC. 100 WATER STREET WASHINGTON, DC 20037 PHONE (781) 246-5200</p>	<p>RECORD DRAWINGS</p>	<p>HYDRAULIC PROFILE</p> <p>MECHANICAL PROCESS</p>	<p>CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>10/19/12</td> <td>SAC</td> <td>CFG</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>1</td> <td>11/01/10</td> <td>MDB</td> <td>CFG</td> <td>ADDENDUM 1</td> </tr> <tr> <td>MARK</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	NO.	DATE	MADE BY	CHECKED	DESCRIPTION	2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING	1	11/01/10	MDB	CFG	ADDENDUM 1	MARK				
NO.	DATE	MADE BY	CHECKED	DESCRIPTION																				
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING																				
1	11/01/10	MDB	CFG	ADDENDUM 1																				
MARK																								
<p>PROJECT NO: 60148648 CAD DWG FILE: 00 D-007 DESIGNED BY: ----- DRAWN BY: ----- DEPT CHECK: ----- PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>				<p>00 D-007</p>																				

1 2 3 4 5

D
C
B
A



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 5 - Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO COMMONSHEETS\00 D-008.DWG
 LAST UPDATE: Friday, October 05, 2012 10:35:41 AM
 PLOT DATE: Tuesday, October 23, 2012 2:09:56 PM

REVISIONS		DESCRIPTION
1	10/19/12	MARK
		DATE
		MADE BY
		CHECKED
		CFG
		SAC
		REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

PROCESS FLOW DIAGRAM I
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	00 D-008
DESIGNED BY:	S. THIBAUT
DRAWN BY:	M. WASHINGTON
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 D-008

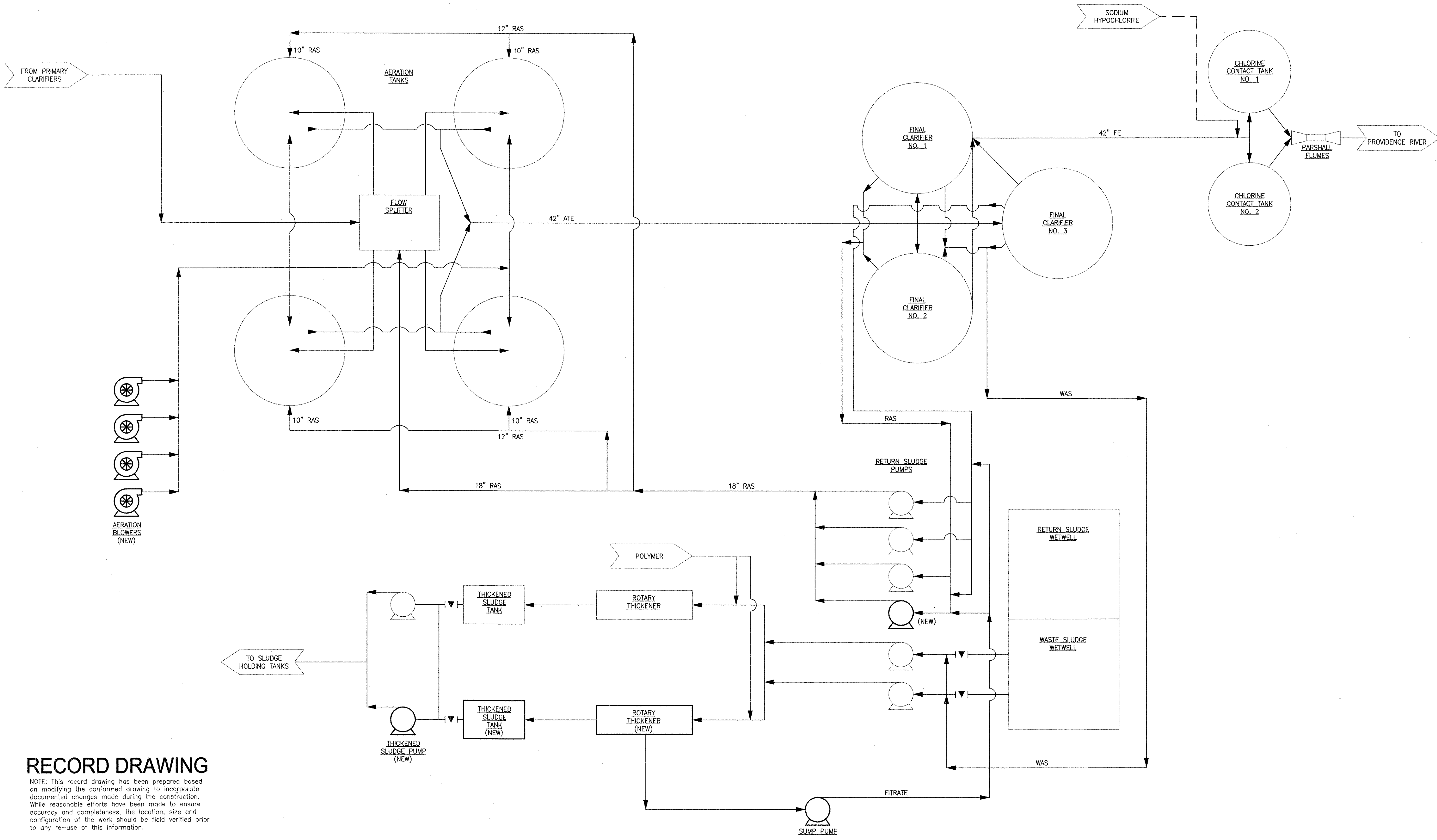
1 2 3 4 5

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMONSHEETS\00 D-009.DWG
 LAST UPDATE: Friday, October 05, 2012 10:36:05 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:00 PM

ANSI D - 5 - Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING

DATE	10/19/12
MADE BY	CFG
CHECKED BY	SAC

AECOM
 AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5300

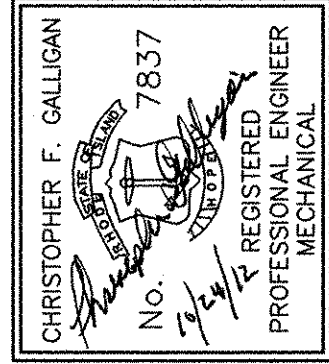
RECORD DRAWINGS

PROCESS FLOW DIAGRAM II
 MECHANICAL PROCESS

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

PROJECT NO: 60148648
 CAD DWG FILE: 00 D-009
 DESIGNED BY: S. THIBAUT
 DRAWN BY: M. WASHINGTON
 DEPT CHECK: C. GALLIGAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

00 D-009

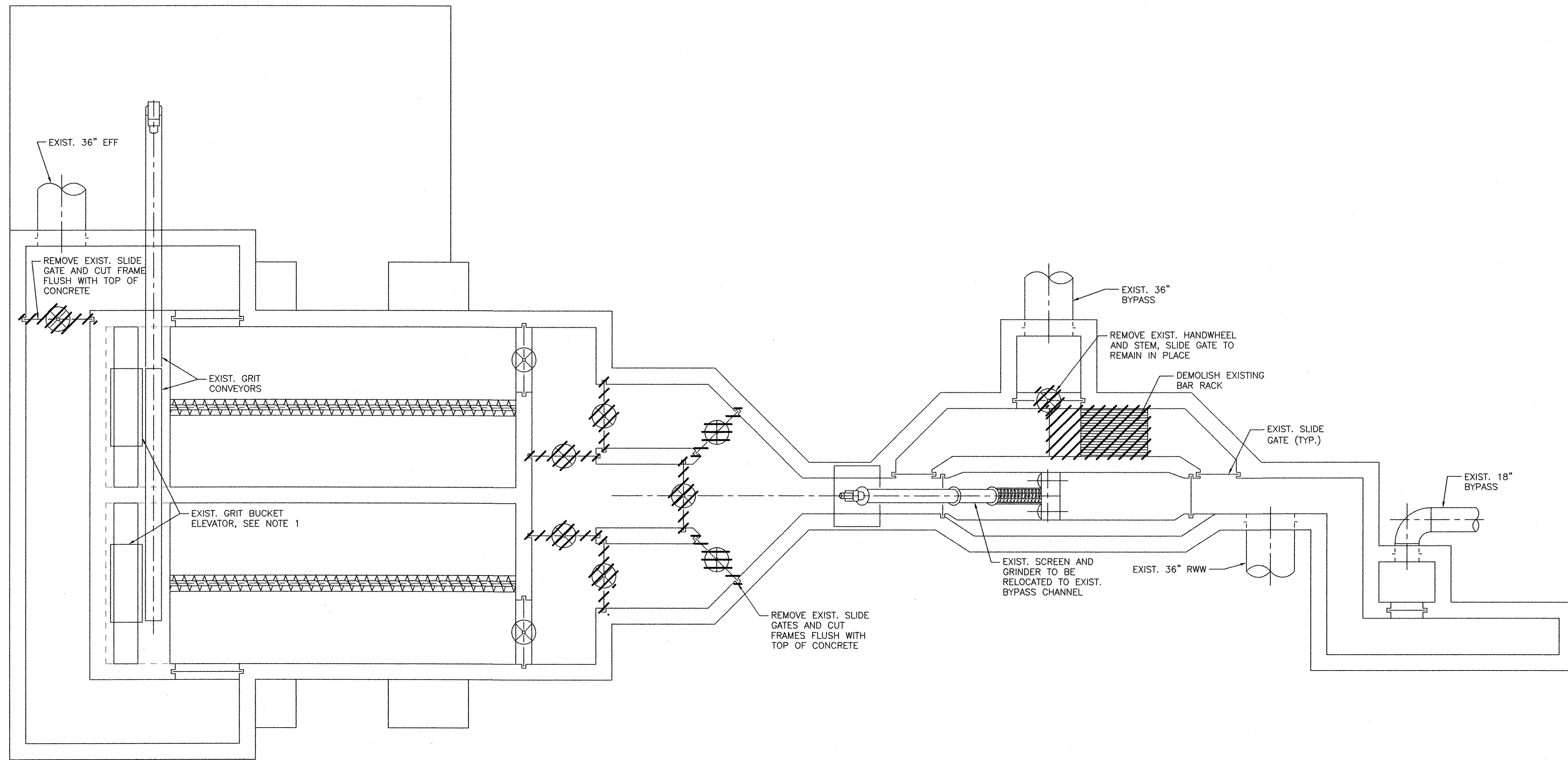
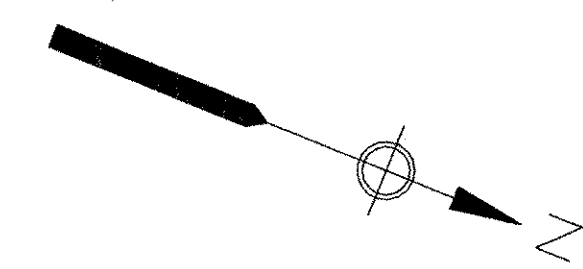


PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO)\DP-2\SHEETS\0121 DD-101.DWG
 LAST UPDATE: Friday, October 05, 2012 10:46:59 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:04 PM

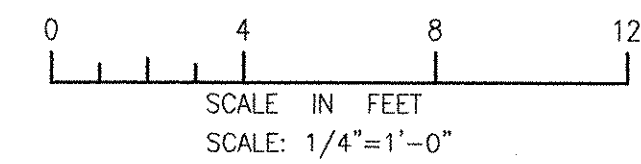
ANSI D - 5-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



- NOTES:**
1. REPLACE EXISTING STEEL FRAMES FOR THE (2) GRIT ELEVATORS.
 2. EXISTING INFLUENT SAMPLER TO BE RELOCATED TO NEW SAMPLE ROOM.



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

HEADWORKS BUILDING - DEMOLITION PLAN

MECHANICAL PROCESS

PROJECT NO: 60148648
 CAD DWG FILE: 21 DD-101
 DESIGNED BY: C. GALLIGAN
 DRAWN BY: S.A. COTE
 DEPT CHECK: K. RACAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

21 DD-101

AECOM USA, INC.
 100 WASHINGTON ST.
 WAREHOUSES 1000
 PHONE (781) 246-5300

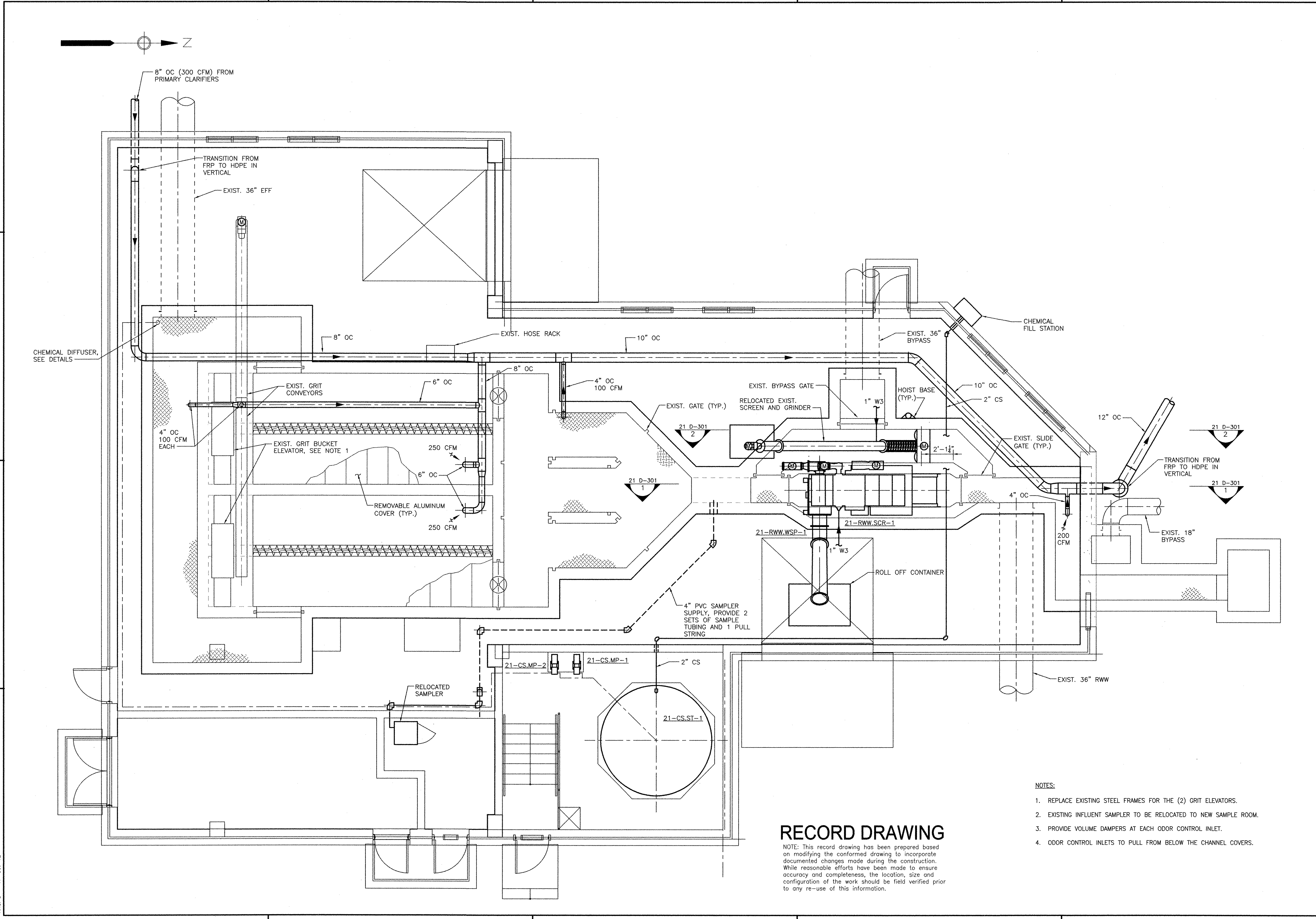


RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION
1	10/18/12				REVISED FOR RECORD DRAWING

ANSI D - 17 - Oct - 12
 PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DP-2\SHEETS\0121 D-101.DWG
 LAST UPDATE: Wednesday, October 17, 2012 10:12:46 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:09 PM



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NOTES:

1. REPLACE EXISTING STEEL FRAMES FOR THE (2) GRIT ELEVATORS.
2. EXISTING INFLUENT SAMPLER TO BE RELOCATED TO NEW SAMPLE ROOM.
3. PROVIDE VOLUME DAMPERS AT EACH ODOR CONTROL INLET.
4. ODOR CONTROL INLETS TO PULL FROM BELOW THE CHANNEL COVERS.

<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2</p>		<p>AECOM</p> <p>RECORD DRAWINGS</p>													
<p>PROJECT NO: 60148648 CAD DWG FILE: 21 D-101</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>SAC</th> <th>CFG</th> <th>REVISOR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION	1	10/19/12				REVISED FOR RECORD DRAWING
MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION										
1	10/19/12				REVISED FOR RECORD DRAWING										
<p>DESIGNED BY: C. GALLIGAN DRAWN BY: S.A. COTE DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT</p>		<p>REGISTERED PROFESSIONAL ENGINEER MECHANICAL No. 7637</p>													
<p>DATE: OCTOBER 2012 SCALE: AS NOTED</p>		<p>21 D-101</p>													

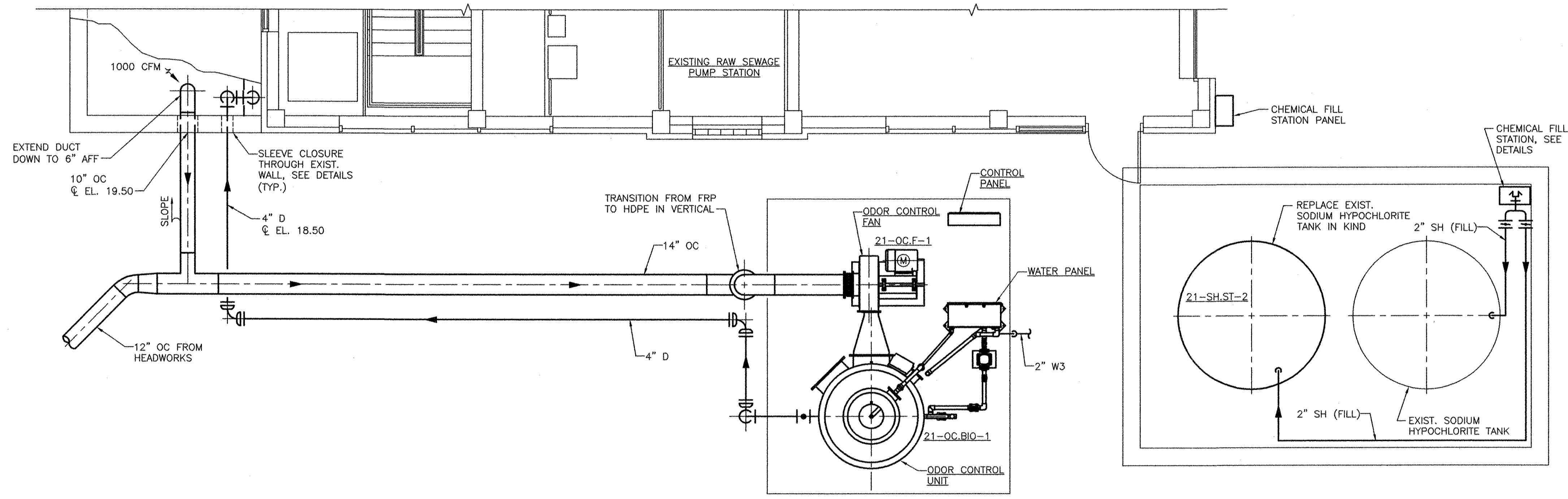
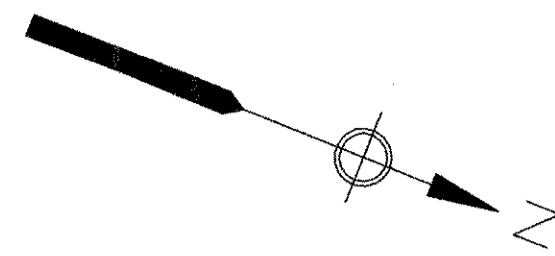
1

2

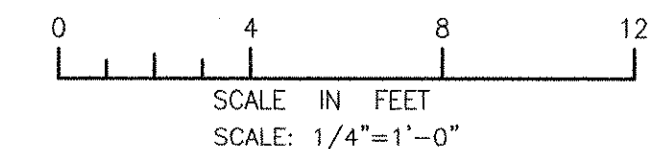
3

4

5



NOTES:
CONNECT NEW SODIUM HYPOCHLORITE TANK CONNECTIONS TO EXISTING PIPING

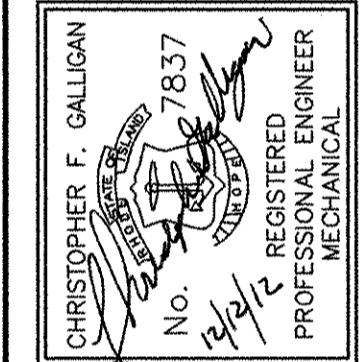


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHETS\01 D-102.DWG
 LAST UPDATE: Tuesday, October 23, 2012 10:29:36 AM
 PLOT DATE: Wednesday, December 12, 2012 9:06:21 AM
 ANSI D - 23-OCT-12

AECOM USA, INC.
 100 WASHINGTON DRIVE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING - ODOR CONTROL PLAN
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	21 d-102
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	S.A. COTE
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

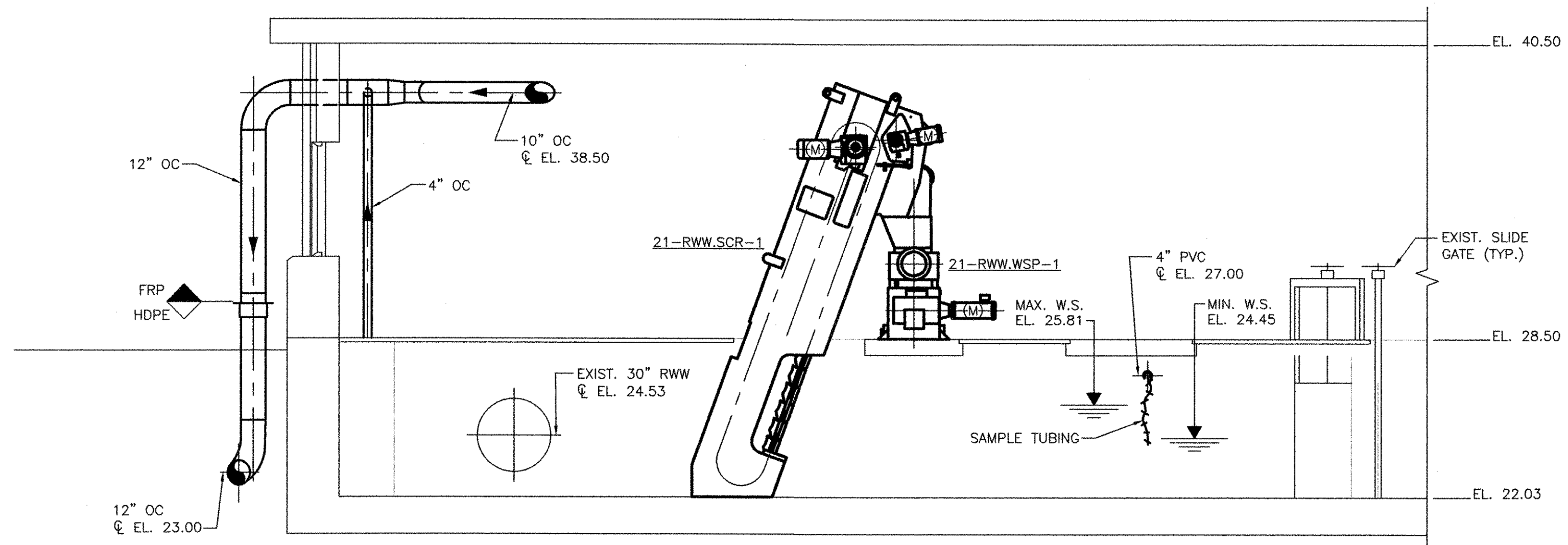
21 D-102

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	12/11/12	SAC	CFG	REVISED FOR RECORD DRAWING

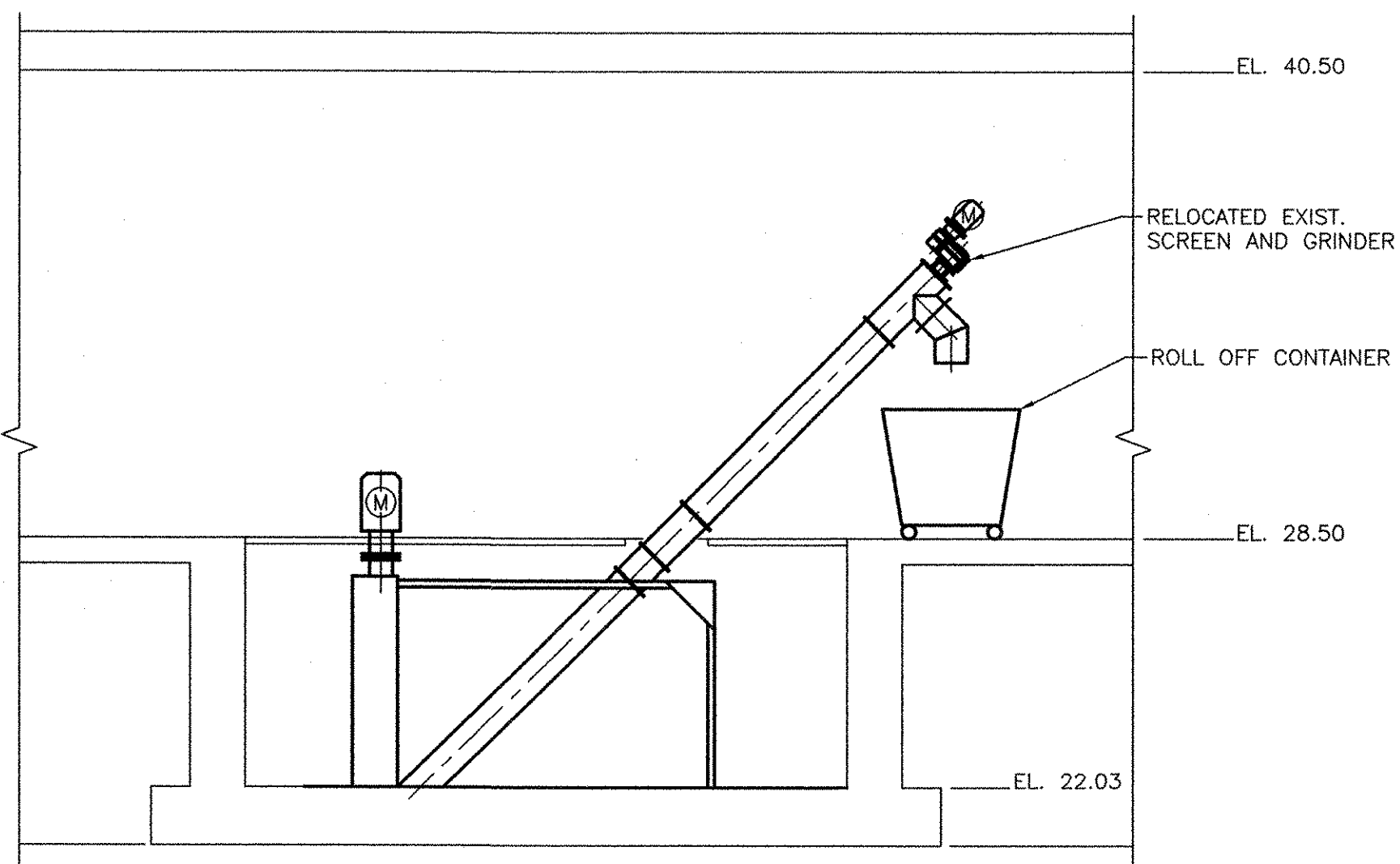
RECORD DRAWINGS

1 2 3 4 5

D
C
B
A



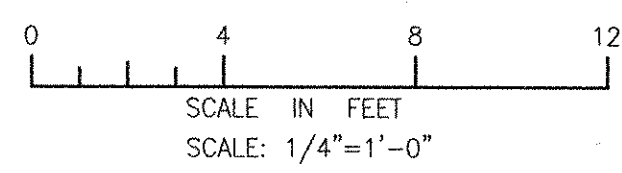
SECTION 1
SCALE: 1/4"=1'-0" 21 D-101



SECTION 2
SCALE: 1/4"=1'-0" 21 D-101

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

AECOM
AECOM USA, INC.
100 WASHINGTON STREET
WALTON, MA 01885
PHONE (781) 246-5200

RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
No. 7837
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

HEADWORKS BUILDING - SECTIONS
MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	21-D-301-HEADWORKS-SECTIONS
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	S.A. COTE
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 D-301

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\SHEETS\21 D-301 HEADWORKS - SECTIONS.DWG
LAST UPDATE: Friday, October 05, 2012 10:56:35 AM
ANSI D - 5 - Oct-12

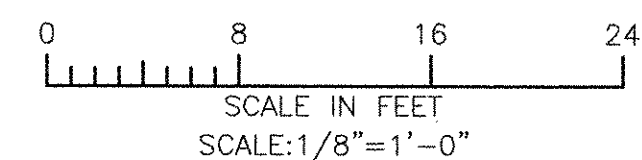
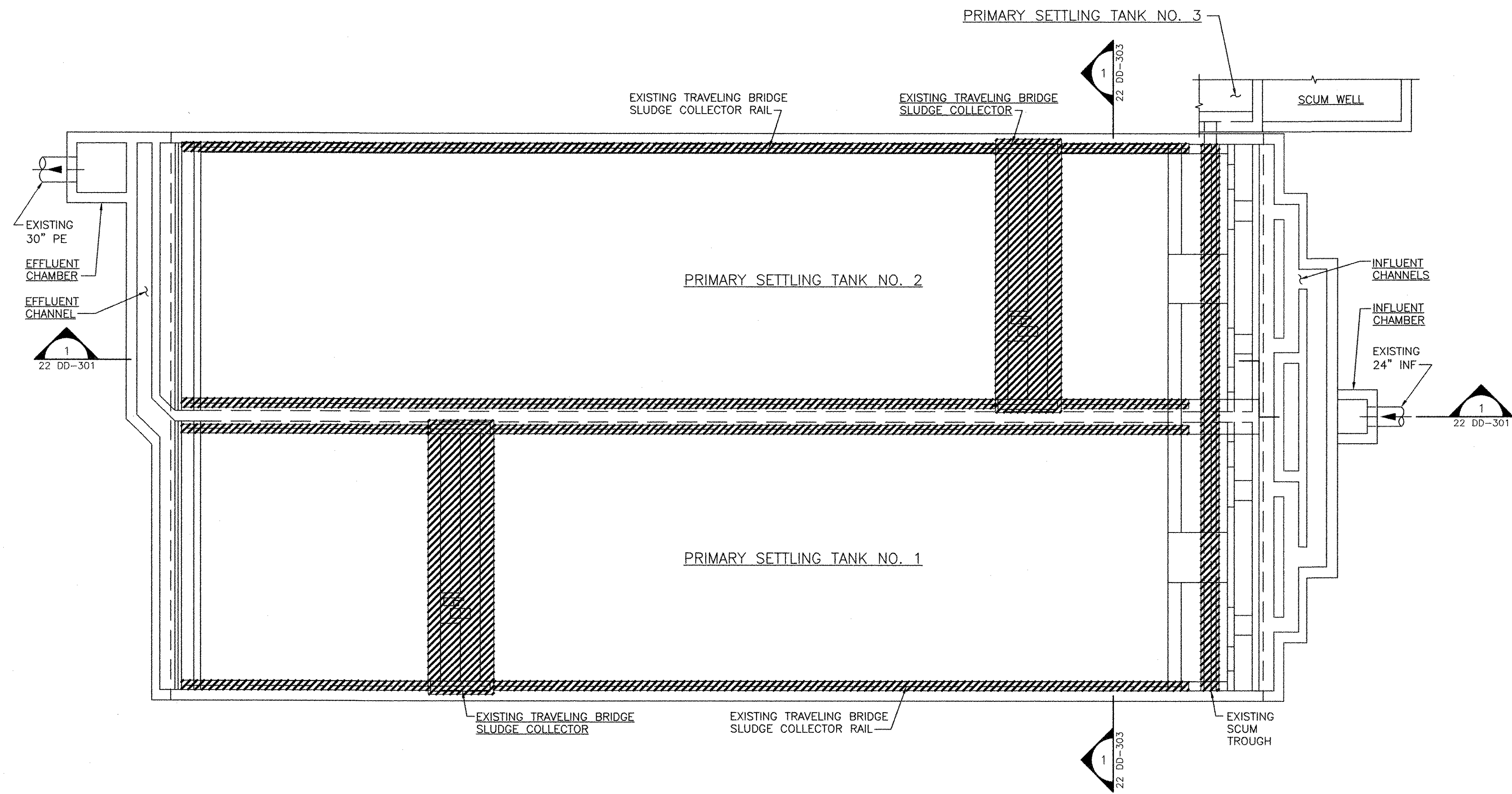
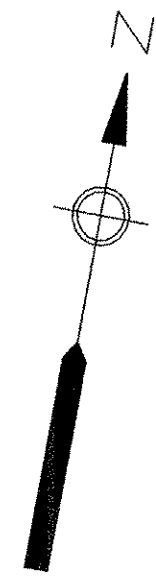
1 2 3 4 5

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO)\DP-2\SHEETS\0122 DD-101.DWG
 LAST UPDATE: Friday, October 05, 2012 10:56:49 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:21 PM

ANSI D - 5-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WATER STREET
 WASHINGTON, D.C. 20004
 PHONE (781) 246-5200

RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

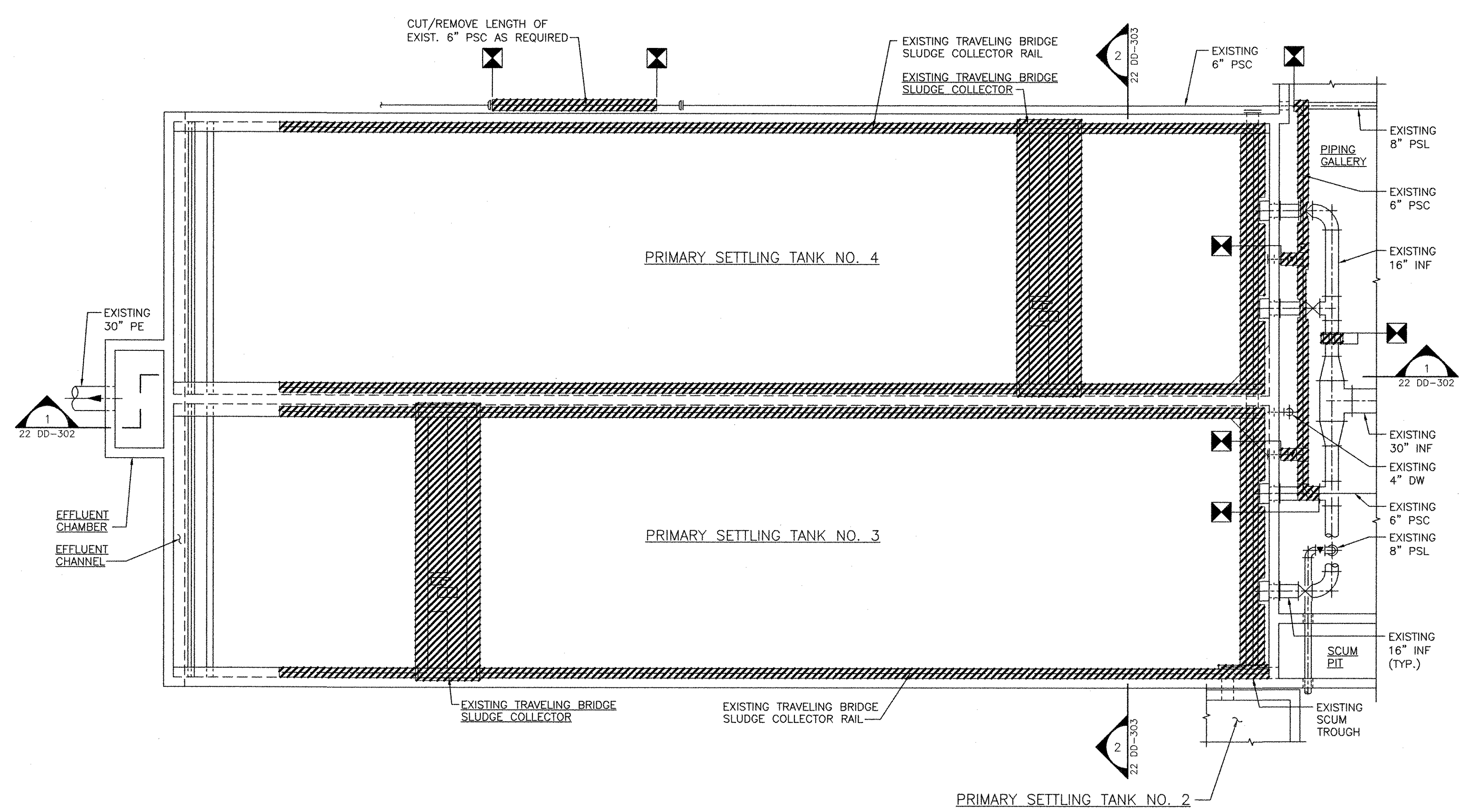
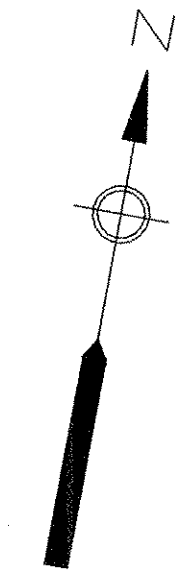
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 1 & 2
 DEMOLITION - PLAN**
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	22 DD-101
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	M. BENSON
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 DD-101

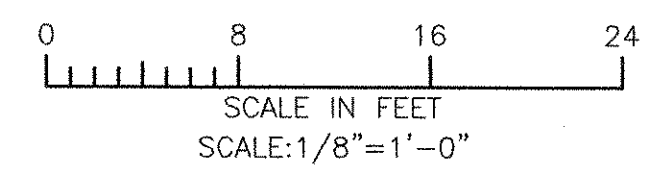
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEW(OP=2)\SHEETS\022 DD-102.DWG
 LAST UPDATE: Friday, October 05, 2012 10:57:49 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:24 PM

ANSI D - 5-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

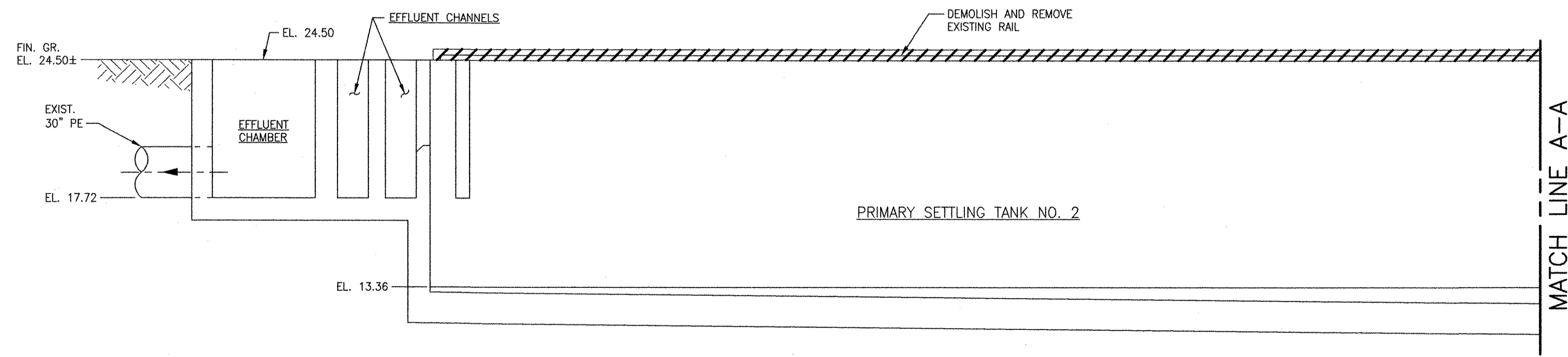


<p>REVISIONS</p> <table border="1"> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>10/19/12</td> <td>SAC</td> <td>CFG</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </table>		MARK	DATE	MADE BY	CHECKED	DESCRIPTION	1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING
MARK	DATE	MADE BY	CHECKED	DESCRIPTION							
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING							
<p>AECOM AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 248-5200</p>											
<p>RECORD DRAWINGS</p>											
<p>CHRISTOPHER F. GALLIGAN No. 7837 10/12 REGISTERED PROFESSIONAL ENGINEER MECHANICAL</p>											
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 PRIMARY SETTLING TANKS 3 & 4 DEMOLITION - PLAN MECHANICAL PROCESS</p>											
<p>PROJECT NO: 60148648 CAD DWG FILE: 22 DD-102 DESIGNED BY: C. GALLIGAN DRAWN BY: M. BENSON DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>											
<p>22 DD-102</p>											

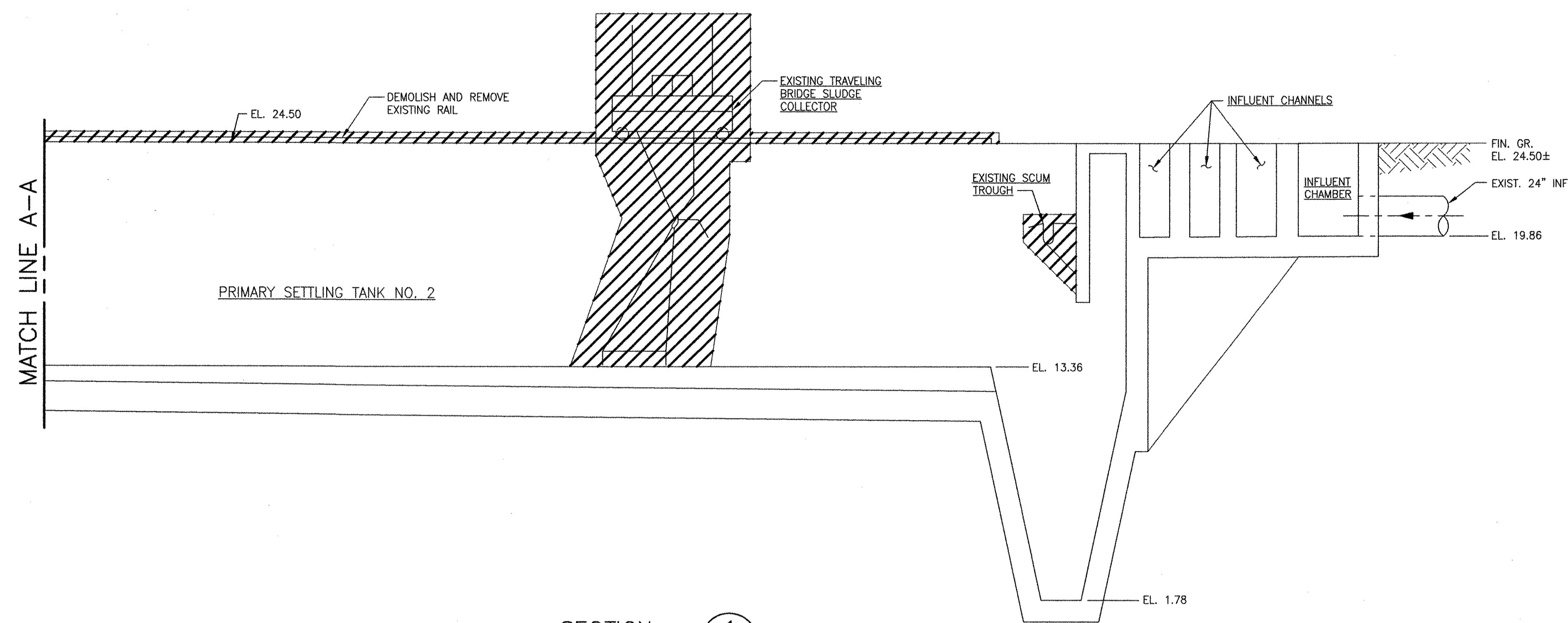
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO)\DP-2\SHEETS\02 DD-301.DWG
 LAST UPDATE: Friday, October 05, 2012 10:56:04 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:27 PM
 ANSI: D - 5 - Oct-12

RECORD DRAWING

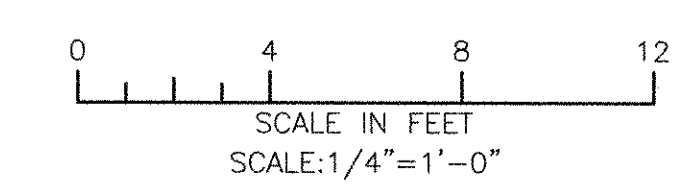
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



SECTION 1
 SCALE: 1/4"=1'-0" 22 DD-101



SECTION 1
 SCALE: 1/4"=1'-0" 22 DD-101



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 1 & 2
 DEMOLITION - SECTIONS I**
 MECHANICAL PROCESS

PROJECT NO: 60148648
 CAD DWG FILE: 22 DD-301
 DESIGNED BY: C. GALLIGAN
 DRAWN BY: M. BENSON
 DEPT CHECK: K. RACAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

22 DD-301

AECOM USA, INC.
 100 WATER STREET
 PROVIDENCE, RI 02903
 PHONE (781) 246-5200



CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

RECORD DRAWINGS

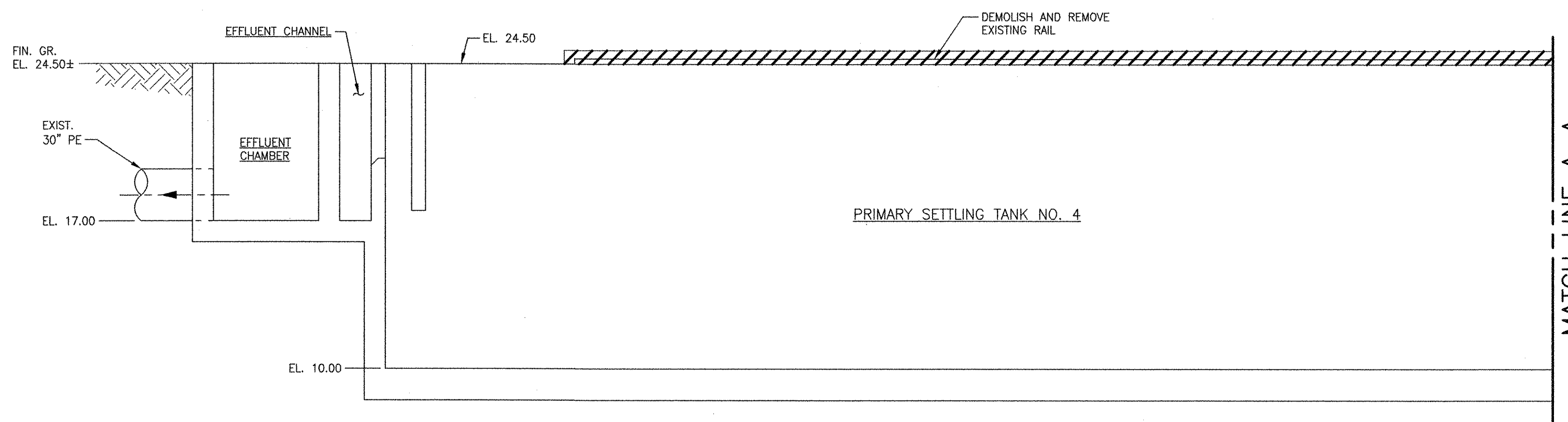
MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION
1	10/19/12	MADE BY	CHECKED		REVISED FOR RECORD DRAWING

PATH: F:\60148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\02 DD-302.DWG
 LAST UPDATE: Friday, October 05, 2012 10:56:21 AM
 PLOT DATE: Tuesday, October 23, 2012 2:00:31 PM

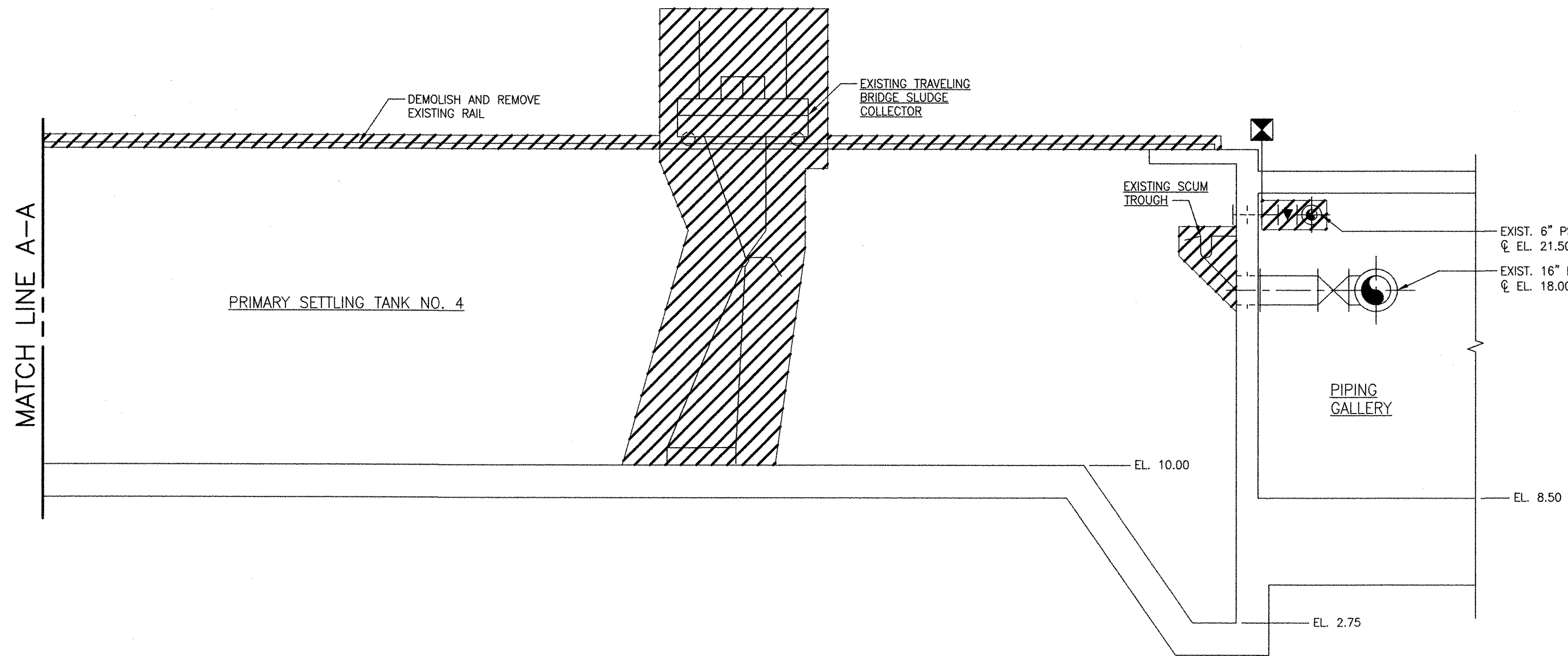
ANSI D - 5 - Oct-12

RECORD DRAWING

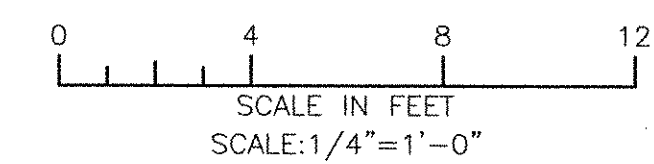
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



SECTION 1
 SCALE: 1/4"=1'-0" 22 D-102



SECTION 1
 SCALE: 1/4"=1'-0" 22 D-102



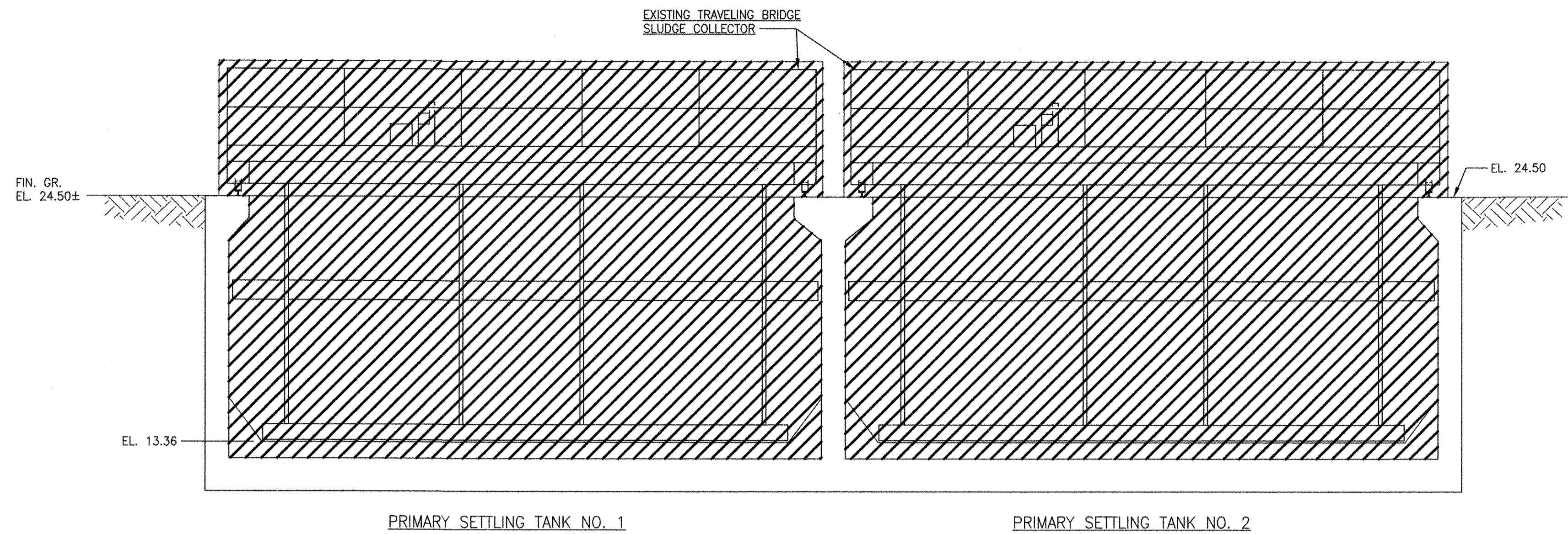
<p>PROJECT NO: 60148648 CAD DWG FILE: 22 DD-302</p>	
<p>DESIGNED BY: C. GALLIGAN DRAWN BY: M. BENSON DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>	
<p>22 DD-302</p>	
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 PRIMARY SETTLING TANKS 3 & 4 DEMOLITION - SECTIONS 1 MECHANICAL PROCESS</p>	
<p>AECOM AECOM USA, INC. 100 WATER STREET PROVIDENCE, RI 02903 PHONE (781) 246-5200</p>	
<p>RECORD DRAWINGS</p>	
<p>10/18/12 DATE</p>	<p>1 MARK</p>
<p>SAC</p>	<p>CFG</p>
<p>MADE BY</p>	<p>CHECKED</p>
<p>REVISIONS</p>	<p>DESCRIPTION</p>

P:\160148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\022 DD-303.DWG
 LAST UPDATE: Friday, October 05, 2012 10:58:40 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:34 PM

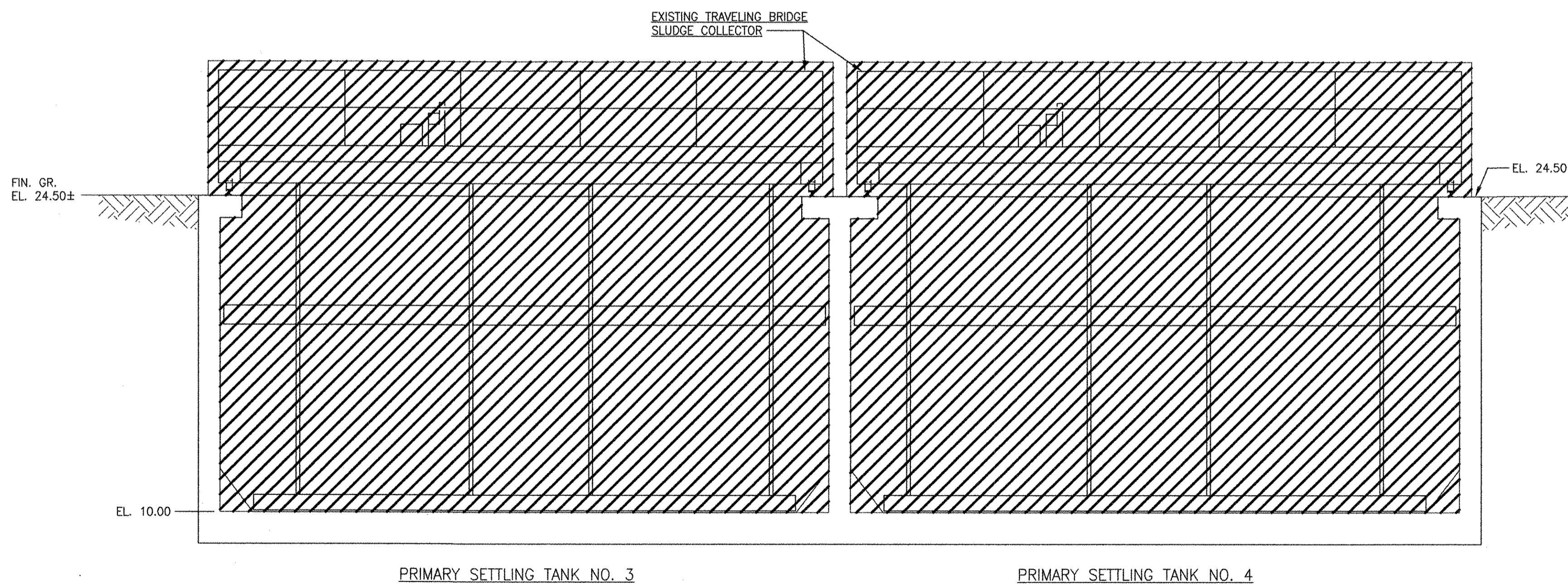
ANSI D - 5 - Oct-12

RECORD DRAWING

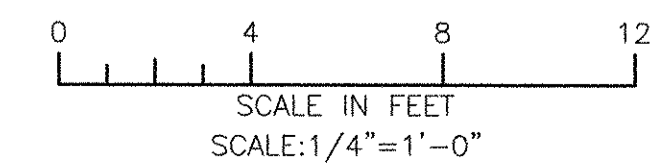
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



SECTION 1
 SCALE: 1/4"=1'-0" 22 DD-101



SECTION 2
 SCALE: 1/4"=1'-0" 22 D-102



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS

AECOM USA, INC.
 100 DENVER DRIVE
 WILMINGTON, MA 01890
 PHONE (781) 246-5200

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 1, 2, 3 & 4
 DEMOLITION - SECTIONS II**
 MECHANICAL PROCESS

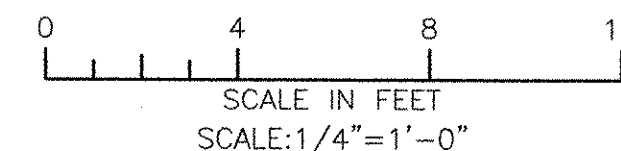
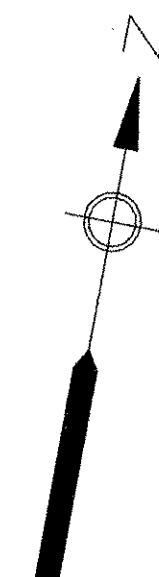
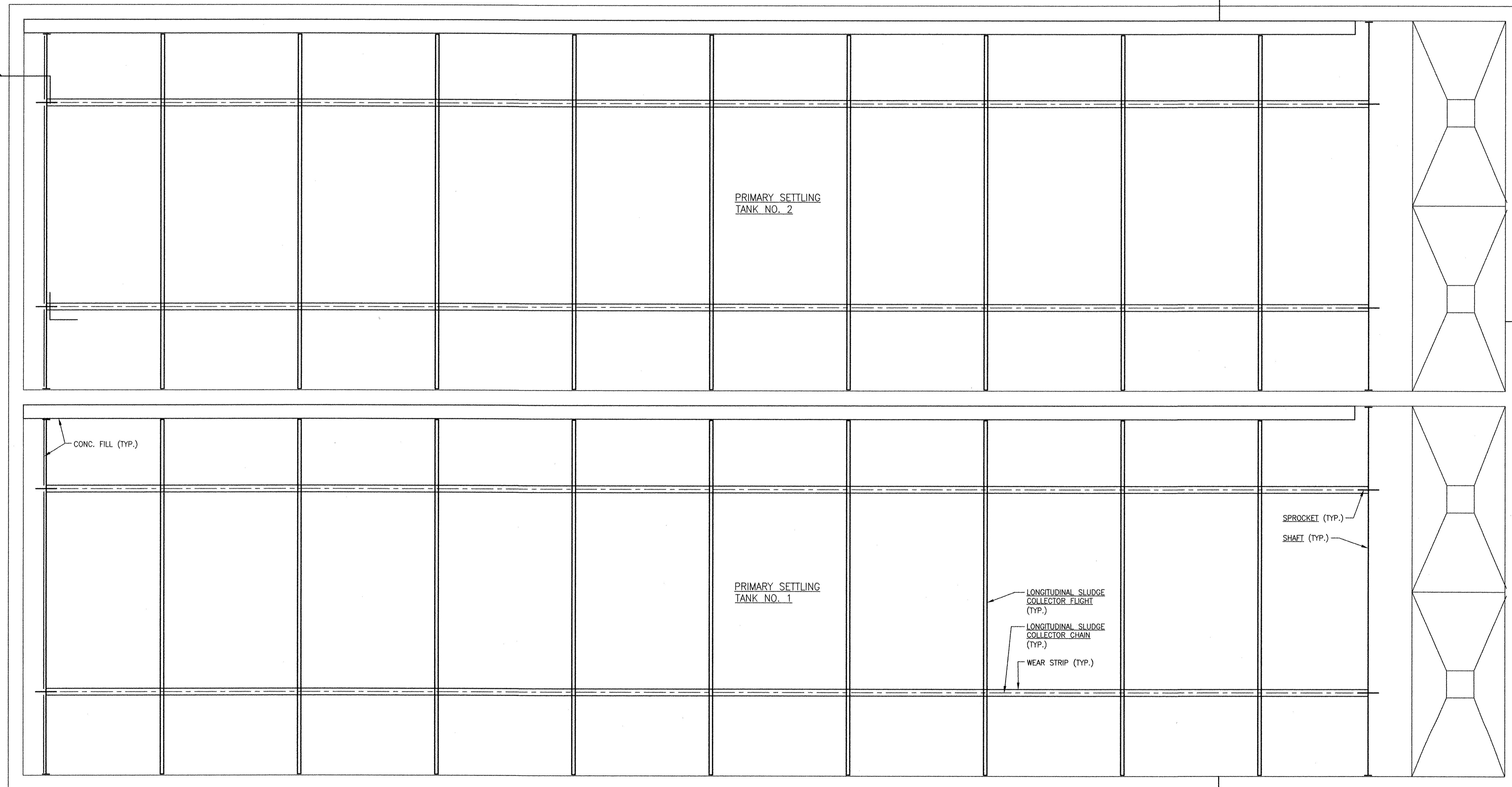
PROJECT NO: 60148648
 CAD DWG FILE: 22 DD-303
 DESIGNED BY: C. GALLIGAN
 DRAWN BY: M. BENSON
 DEPT CHECK: K. RACAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

22 DD-303

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\022 D-101.DWG
LAST UPDATE: Friday, October 05, 2012 10:59:14 AM
ANSI D = 5-Oct-12

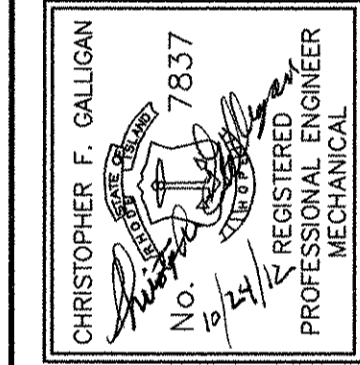
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PROJECT NO:	60148648
CAD DWG FILE:	22 D-101
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	M. BENSON
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS 1 & 2
MODIFICATIONS - LOWER PLAN
MECHANICAL PROCESS



AECOM
AECOM USA, INC.
700 WATER STREET
WILMINGTON, MA 01890
PHONE (781) 246-5200

RECORD DRAWINGS

MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

22 D-101

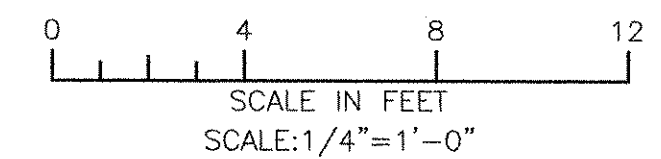
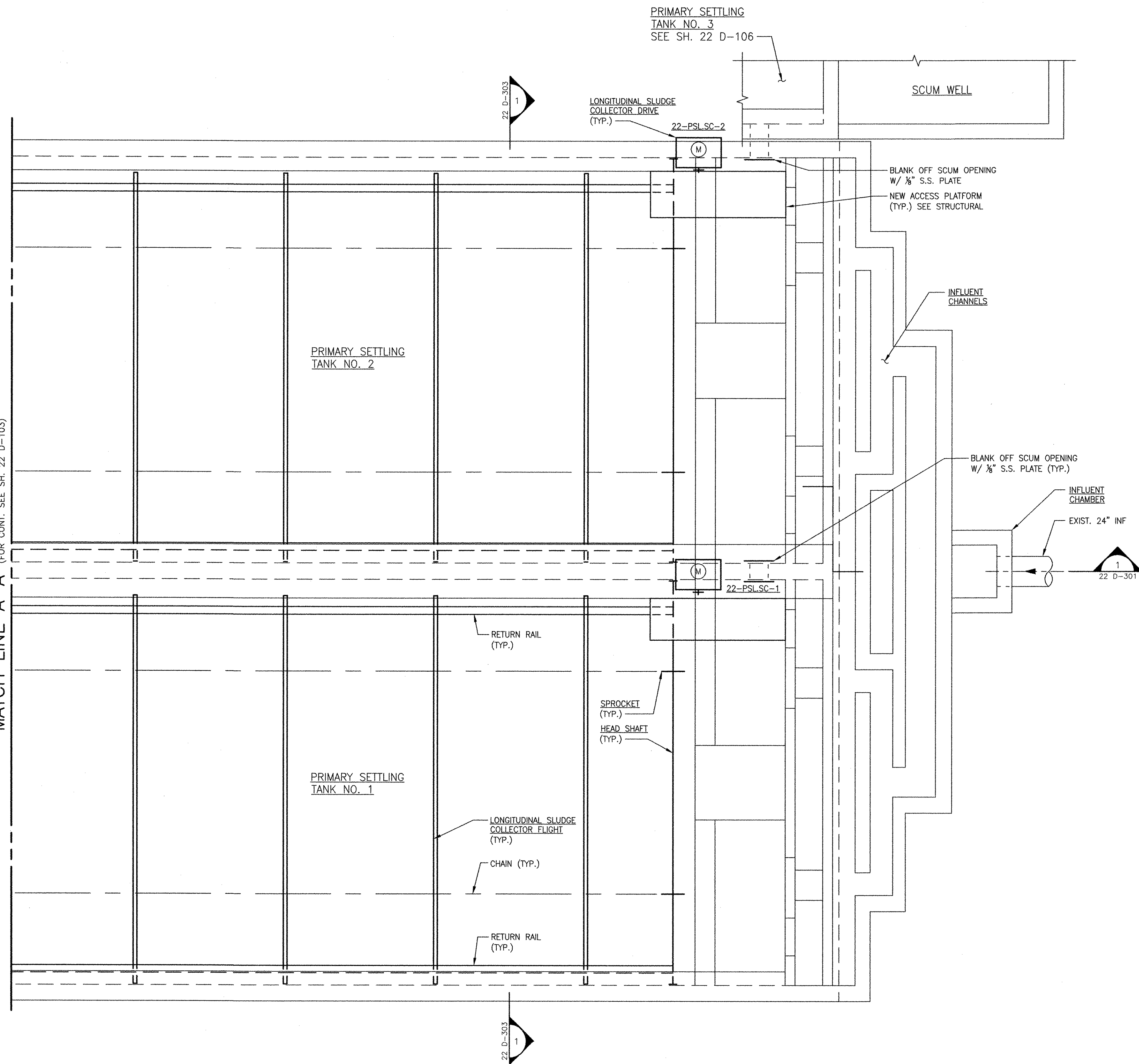
PATH/FILENAME: P:\6048648 - EAST PROVIDENCE (BO)\DP-2\SHEETS\022 D-102.DWG
LAST UPDATE: Friday, October 05, 2012 10:56:38 AM
PLOT DATE: Tuesday, October 23, 2012 2:10:41 PM

ANSI D - 5-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MATCH LINE A-A (FOR CONT. SEE SH. 22 D-103)



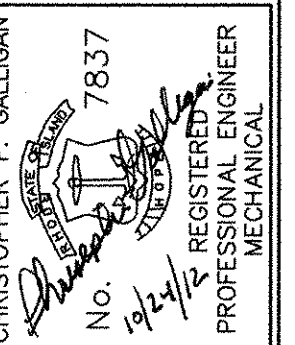
PROJECT NO: 60148648
CAD DWG FILE: 22 D-102
DESIGNED BY: C. GALLIGAN
DRAWN BY: M. BENSON
DEPT CHECK: K. RACAN
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

22 D-102

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

PRIMARY SETTLING TANKS 1 & 2 MODIFICATIONS - UPPER PLAN I

MECHANICAL PROCESS



AECOM
AECOM USA, INC.
WATER/SEWER/DRWG
W/PROJECT NO. 7837
PHONE (781) 246-3200

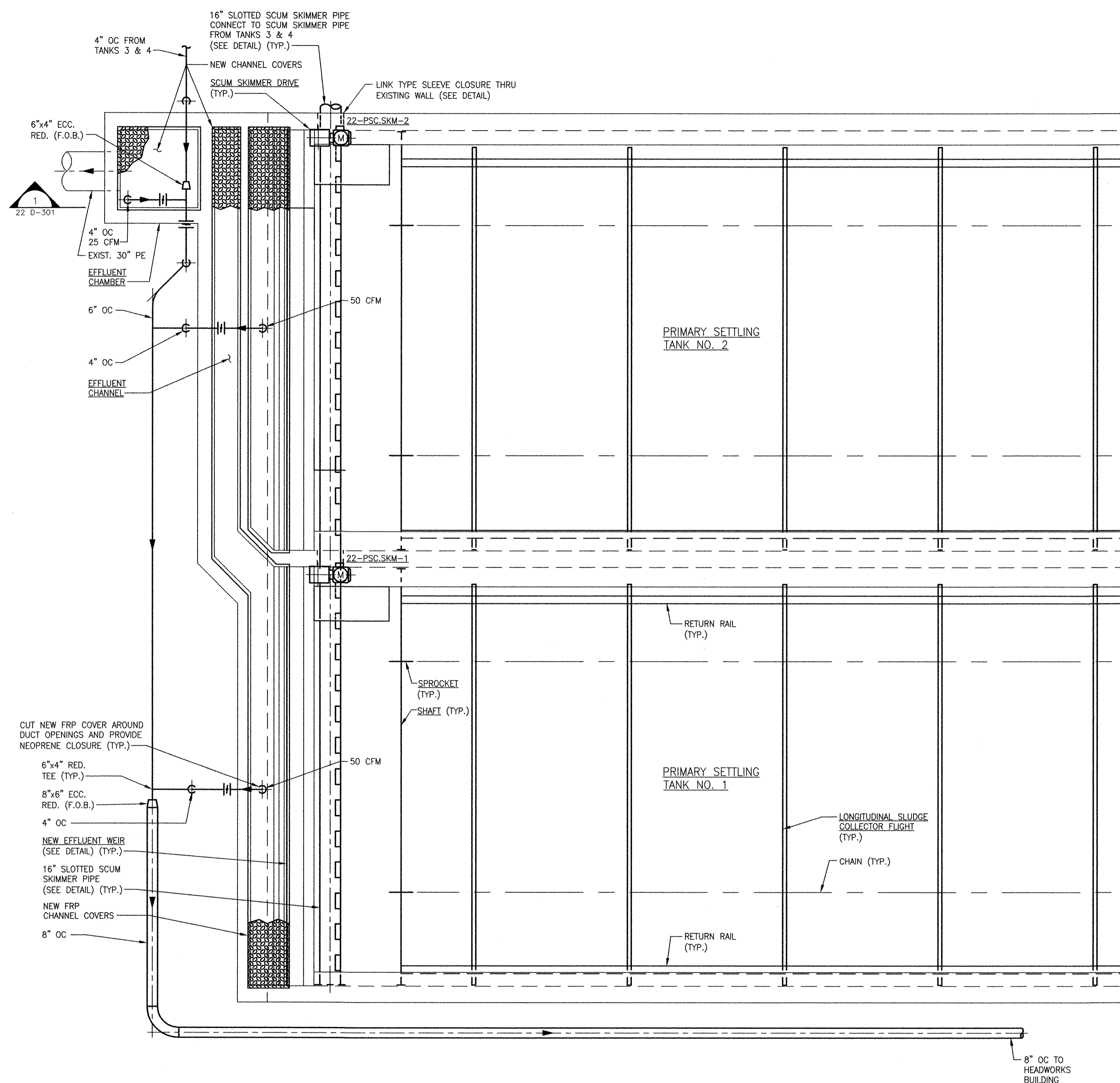
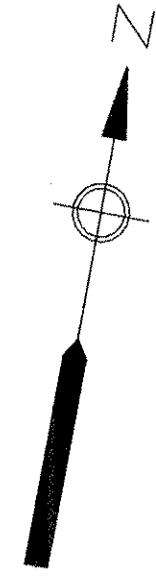
RECORD DRAWINGS

MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

REVISIONS

1 2 3 4 5

D C B A

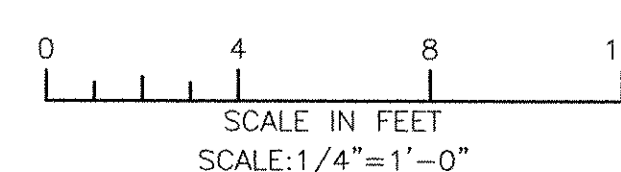


MATCH LINE A-A (FOR CONT. SEE SH. 22 D-102)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

- NOTES:
- FOR CONTINUATION OF OUTSIDE PIPING SEE CIVIL DRAWINGS.



		RECORD DRAWINGS													
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 PRIMARY SETTLING TANKS 1 & 2 MODIFICATIONS - UPPER PLAN II MECHANICAL PROCESS		PROJECT NO: 60148648 CAD DWG FILE: 22 D-103 DESIGNED BY: C. GALLIGAN DRAWN BY: M. BENSON DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED													
		REVISIONS <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>SAC</th> <th>CFG</th> <th>REVISOR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td>MADE BY</td> <td>CHECKED</td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION	1	10/19/12	MADE BY	CHECKED		REVISED FOR RECORD DRAWING
MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION										
1	10/19/12	MADE BY	CHECKED		REVISED FOR RECORD DRAWING										

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\DRG\DP-2\SHEETS\0122 D-103.DWG
 LAST UPDATE: Friday, October 05, 2012 10:59:57 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:45 PM
 ANSI D - 5 - Oct-12

1 2 3 4 5

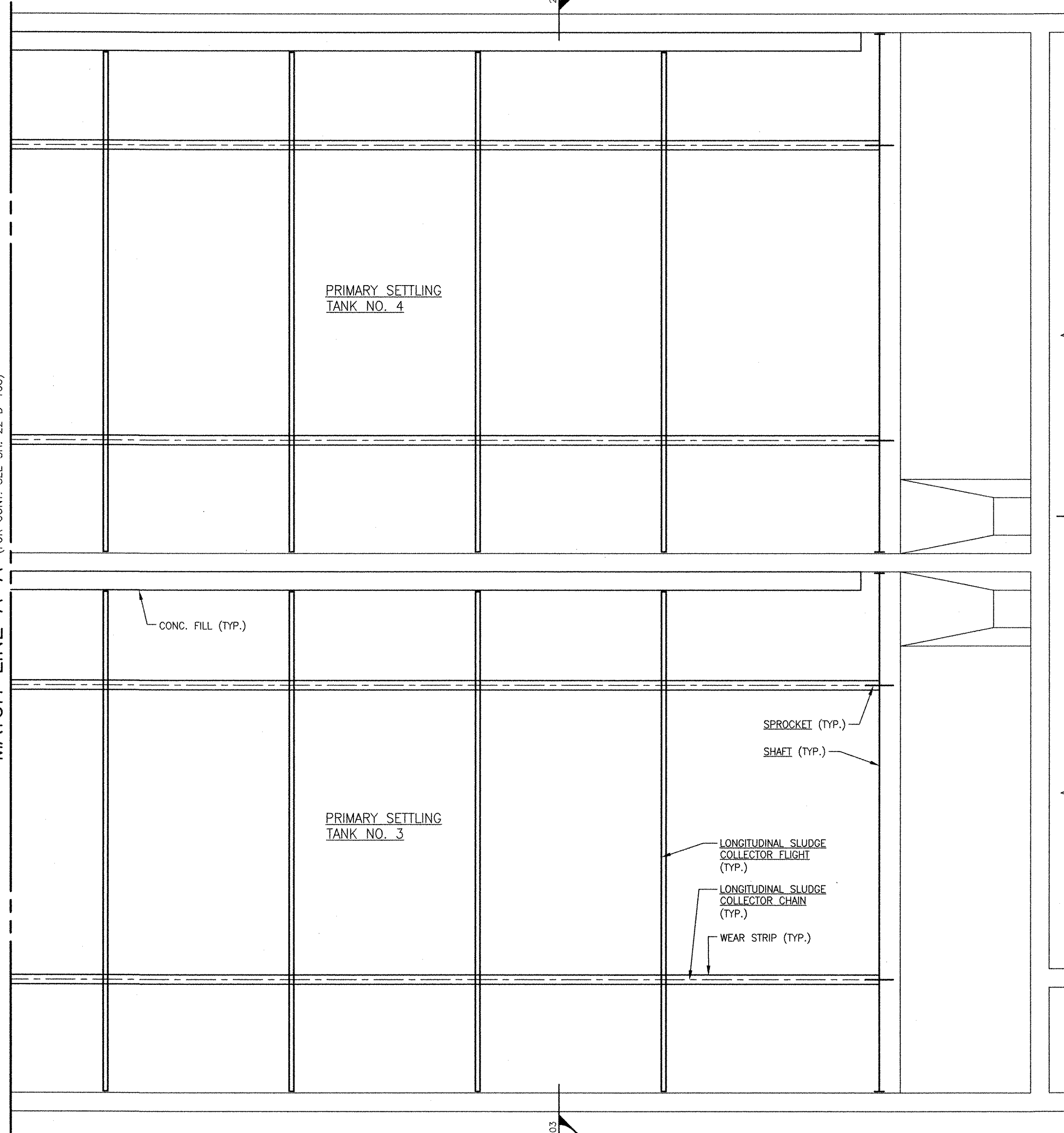
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO)\DP-2\SHEETS\01\22 D-104.DWG
 LAST UPDATE: Friday, October 05, 2012 11:02:12 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:49 PM

ANSI D - 5-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

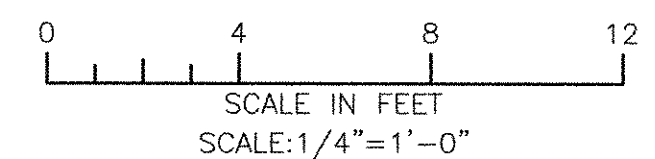
MATCH LINE A-A (FOR CONT. SEE SH. 22 D-105)



1
22 D-302

22 D-303

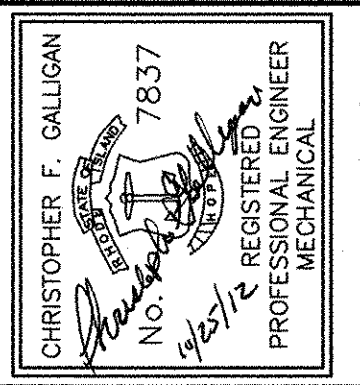
22 D-303



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 3 & 4
 MODIFICATIONS - LOWER PLAN I**
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	22 D-104
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	M. BENSON
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 D-104



AECOM
 AECOM USA, INC.
 100 WASHINGTON ST., SUITE 2000
 WAREHOUSES, MA 01890
 PHONE (781) 246-5200

RECORD DRAWINGS

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

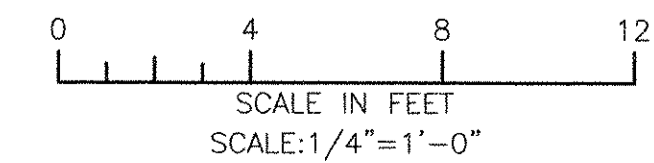
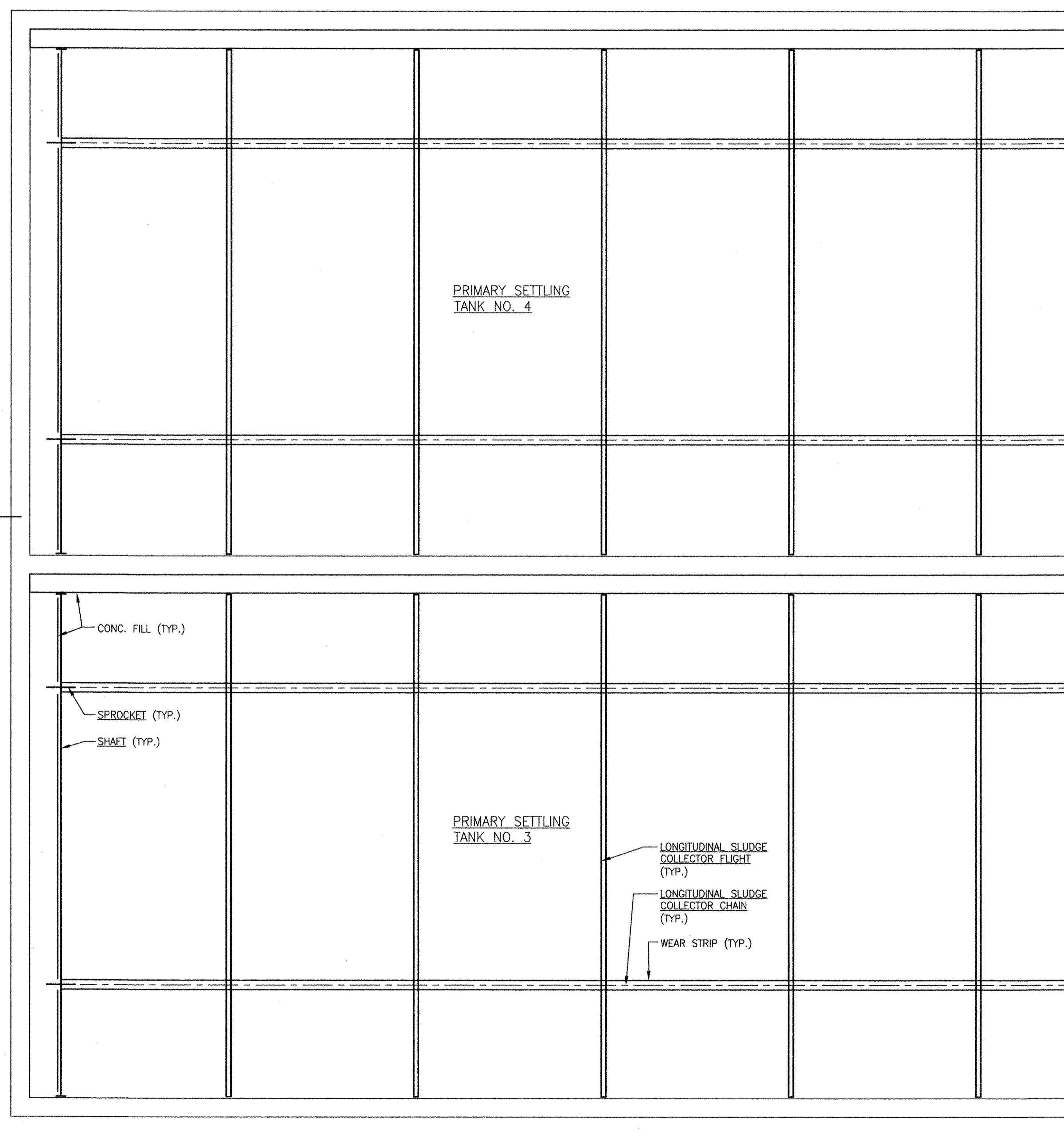
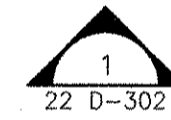
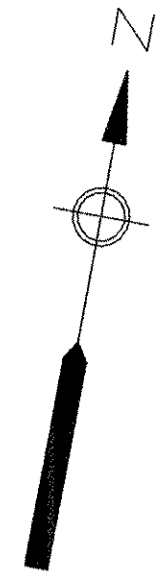
REVISIONS

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO) DP-2 (SHEETS)\D22-D-105.DWG
 LAST UPDATE: Friday, October 05, 2012 11:02:30 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:52 PM

ANSI D - 5 - Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - LOWER PLAN II

MECHANICAL PROCESS

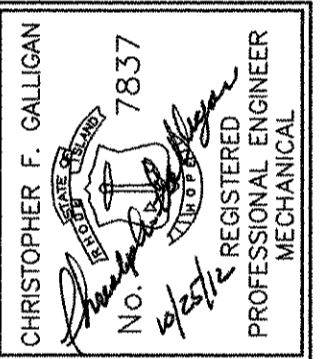
PROJECT NO:	60148648
CAD DWG FILE:	22 D-105
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	M. BENSON
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 D-105

AECOM USA, INC.
 100 WATERLOO STREET
 WASHINGTON, DC 20004
 PHONE (781) 246-5200



RECORD DRAWINGS



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

D

D

D

C

C

B

B

A

A

1

2

3

4

5

1

2

3

4

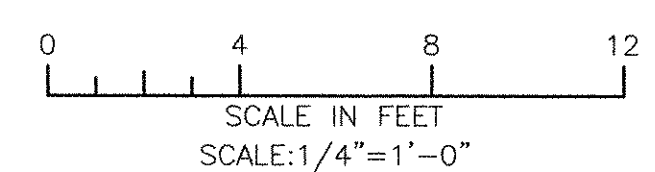
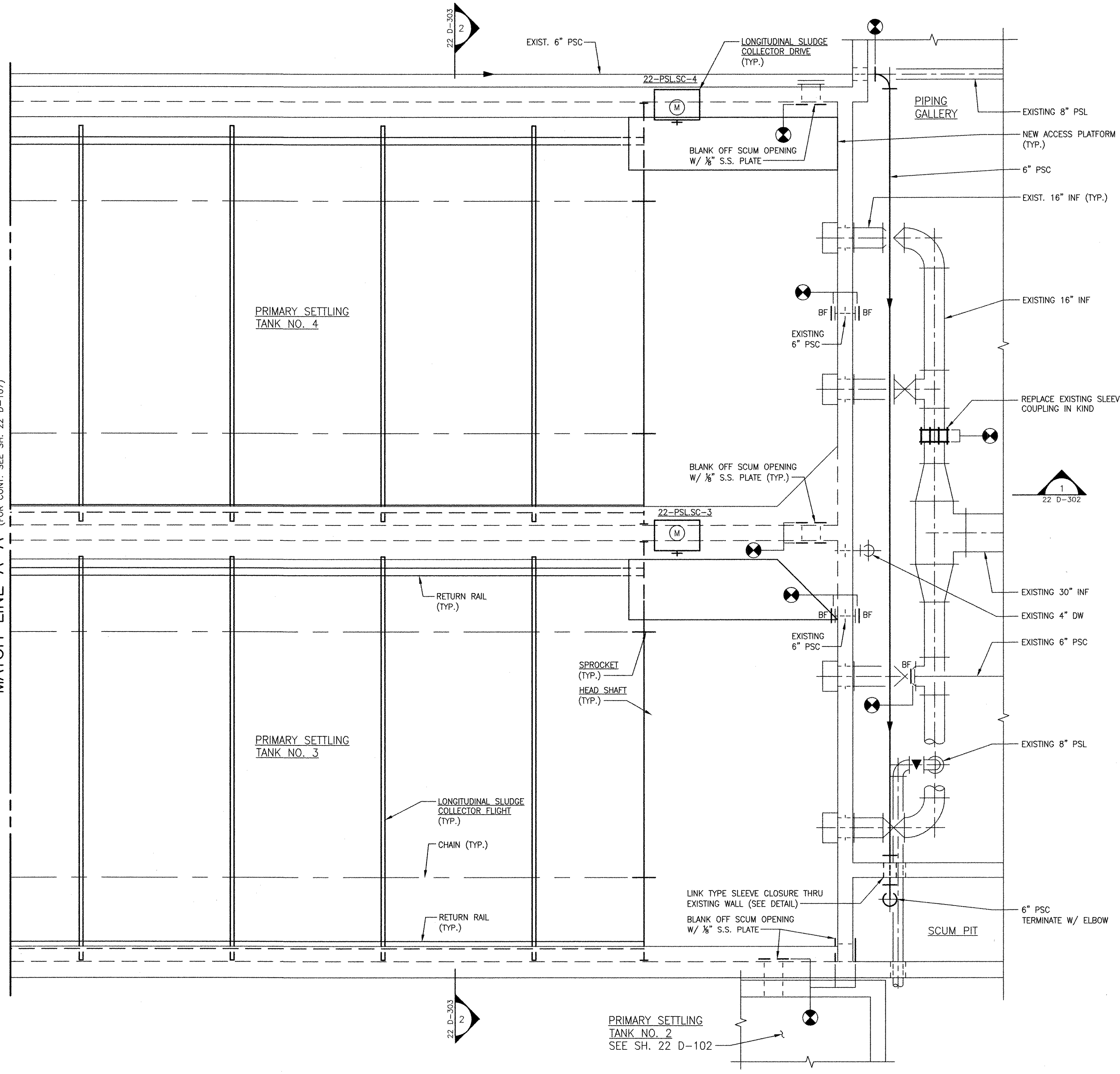
5

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (R0)\DP-2\SHEETS\022 D-106.DWG
 LAST UPDATE: Friday, October 05, 2012 11:02:50 AM
 PLOT DATE: Tuesday, October 23, 2012 2:00:55 PM
 ANSI: D - 5-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MATCH LINE A-A (FOR CONT. SEE SH. 22 D-107)



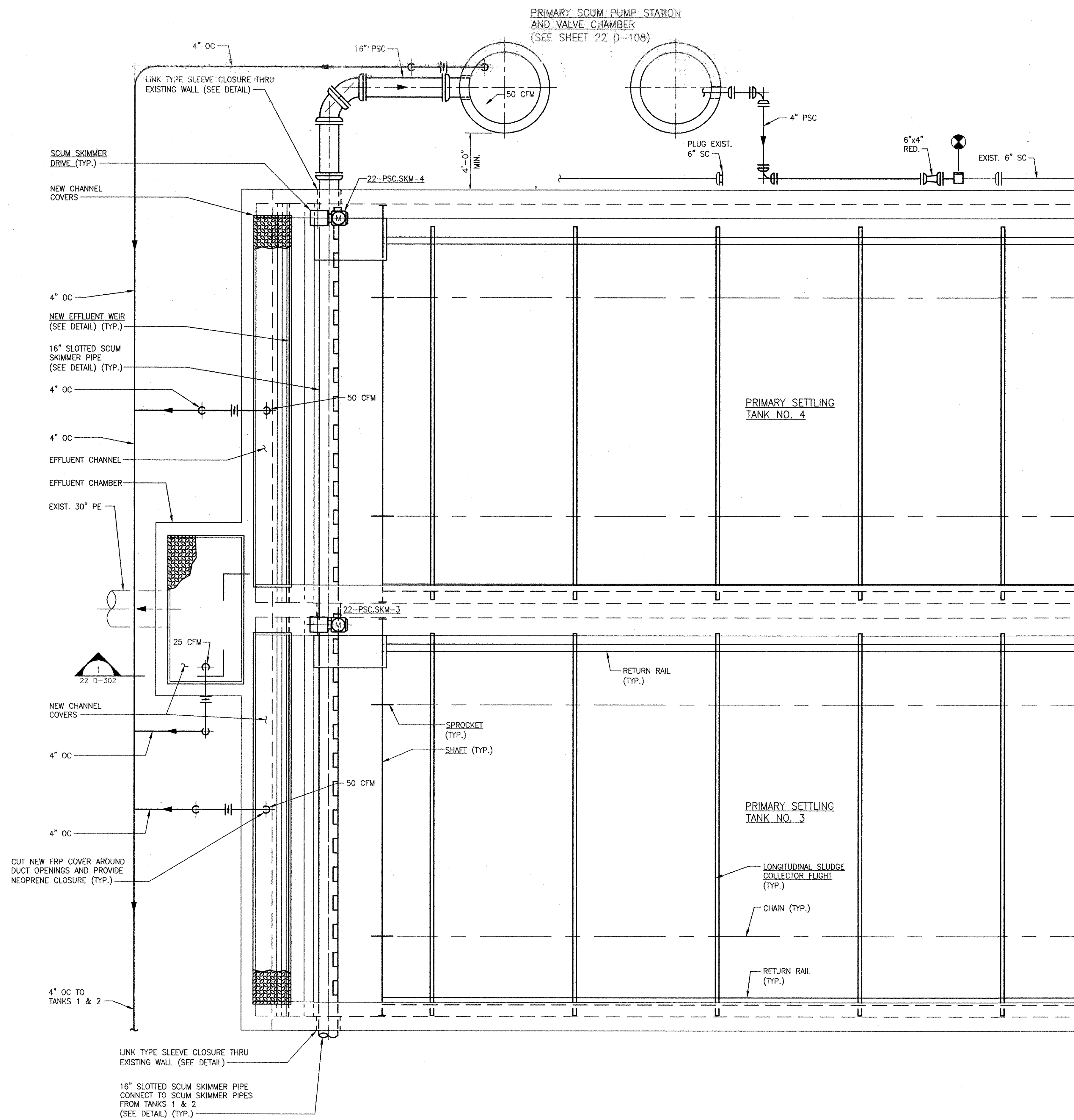
AECOM <small>AECOM USA, INC. ONE LEWIS AND CLARK MARKETPLACE, SUITE 200 WASHINGTON, DC 20004 PHONE (781) 246-5200</small>		RECORD DRAWINGS																
<small>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2</small>		<small>CHRISTOPHER F. GALLIGAN No. 7837 REGISTERED PROFESSIONAL ENGINEER MECHANICAL</small>																
PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - UPPER PLAN I MECHANICAL PROCESS																		
PROJECT NO:	60148648																	
CAD DWG FILE:	22 D-106																	
DESIGNED BY:	C. GALLIGAN																	
DRAWN BY:	M. BENSON																	
DEPT CHECK:	K. RACAN																	
PROJ CHECK:	S. THIBAUT																	
DATE:	OCTOBER 2012																	
SCALE:	AS NOTED																	
22 D-106		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <th>MARK</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td></td> <td>MADE BY CHECKED</td> </tr> <tr> <td></td> <td>SAC</td> </tr> <tr> <td></td> <td>CFG</td> </tr> <tr> <td></td> <td>DATE</td> </tr> <tr> <td></td> <td>10/19/12</td> </tr> </tbody> </table>	REVISIONS		MARK	DESCRIPTION	1	REVISED FOR RECORD DRAWING		MADE BY CHECKED		SAC		CFG		DATE		10/19/12
REVISIONS																		
MARK	DESCRIPTION																	
1	REVISED FOR RECORD DRAWING																	
	MADE BY CHECKED																	
	SAC																	
	CFG																	
	DATE																	
	10/19/12																	

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (RSD)\DP-2\SHEETS\022 D-107.DWG
 LAST UPDATE: Friday, October 05, 2012 11:03:14 AM
 PLOT DATE: Tuesday, October 23, 2012 2:10:59 PM

ANSI D - 5 - Oct-12

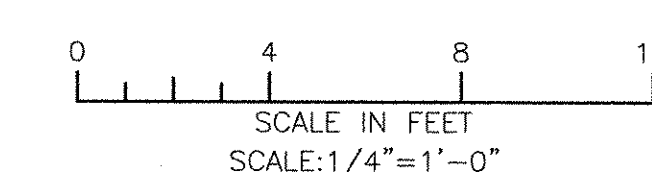
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



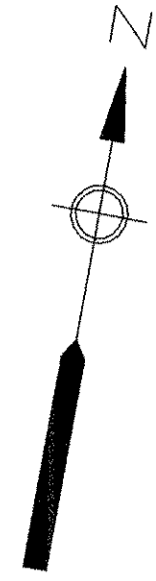
MATCH LINE A-A (FOR CONT. SEE SH. 22 D-106)

- NOTES:**
- FOR CONTINUATION OF OUTSIDE PIPING SEE CIVIL DRAWINGS.

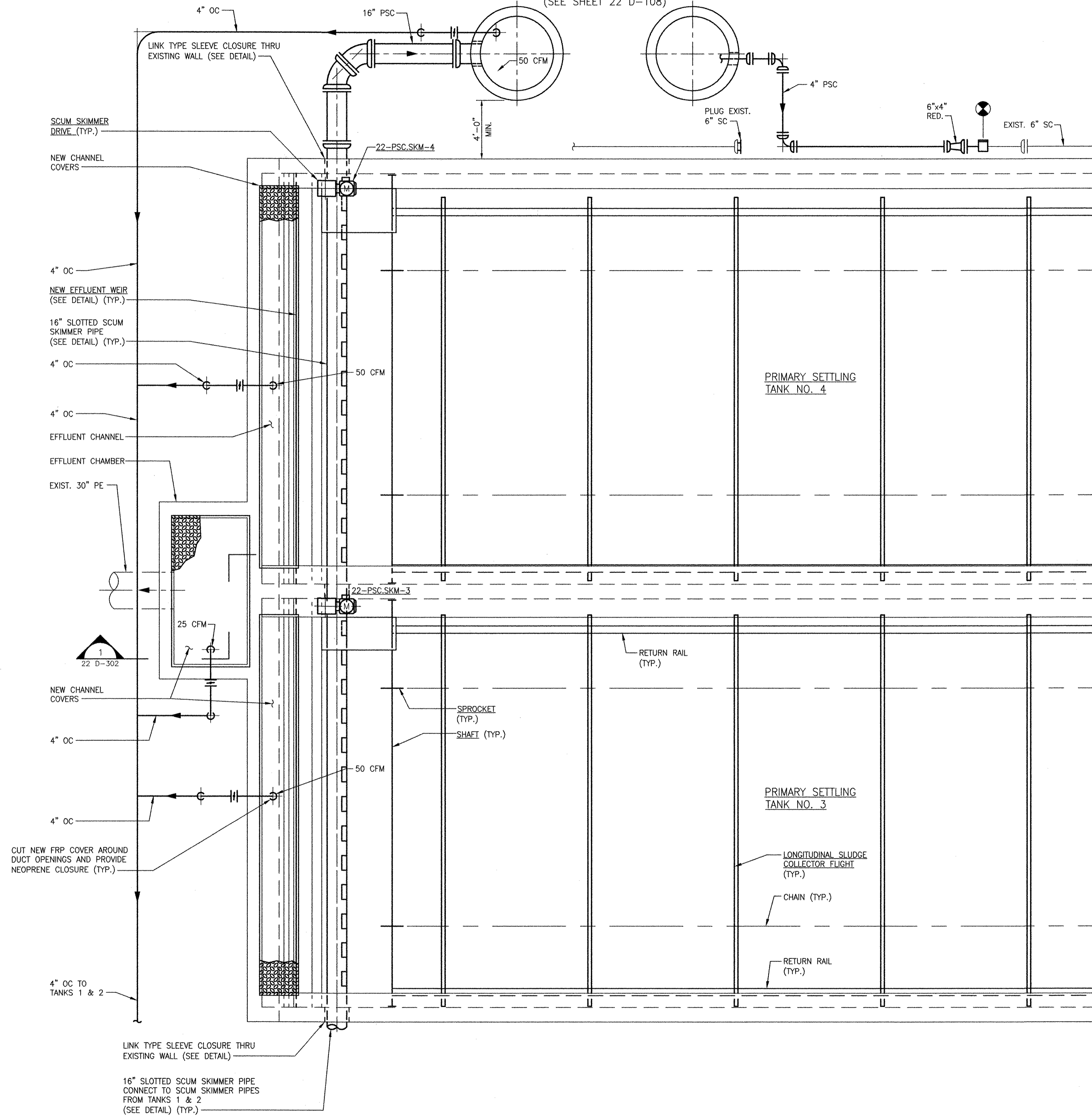


<p>PROJECT NO: 60148648 CAD DWG FILE: 22 D-107 DESIGNED BY: C. GALLIGAN DRAWN BY: M. BENSON DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>		<p>REVISIONS</p> <table border="1"> <tr> <th>MARK</th> <th>DATE</th> <th>SAC</th> <th>CFG</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </table>	MARK	DATE	SAC	CFG	DESCRIPTION	1	10/19/12			REVISED FOR RECORD DRAWING
MARK	DATE	SAC	CFG	DESCRIPTION								
1	10/19/12			REVISED FOR RECORD DRAWING								
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2</p>		<p>RECORD DRAWINGS</p>										
<p>PRIMARY SETTLING TANKS 3 & 4 MODIFICATIONS - UPPER PLAN II MECHANICAL PROCESS</p>		<p>AECOM AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200</p>										
<p>CHRISTOPHER F. GALLIGAN No. 7837 REGISTERED PROFESSIONAL ENGINEER MECHANICAL</p>												
<p>22 D-107</p>												

1 2 3 4 5



PRIMARY SCUM PUMP STATION AND VALVE CHAMBER (SEE SHEET 22 D-108)



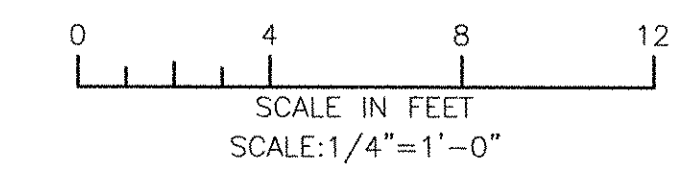
MATCH LINE A-A (FOR CONT. SEE SH. 22 D-106)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 5-Oct-12
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\SHEETS\22 D-107.DWG
LAST UPDATE: Friday, October 05, 2012 11:03:14 AM
PLOT DATE: Tuesday, October 23, 2012 2:10:59 PM

NOTES:
1. FOR CONTINUATION OF OUTSIDE PIPING SEE CIVIL DRAWINGS.



REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
DATE	10/19/12
MADE BY	SAC
CHECKED BY	CFG

AECOM USA, INC.
100 WATERLOO STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

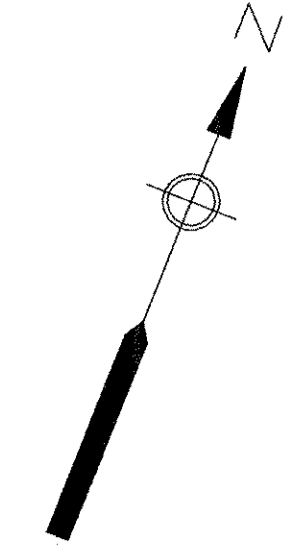
**PRIMARY SETTLING TANKS 3 & 4
MODIFICATIONS - UPPER PLAN II**

MECHANICAL PROCESS

PROJECT NO: 60148648
CAD DWG FILE: 22 D-107
DESIGNED BY: C. GALLIGAN
DRAWN BY: M. BENSON
DEPT CHECK: K. RACAN
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

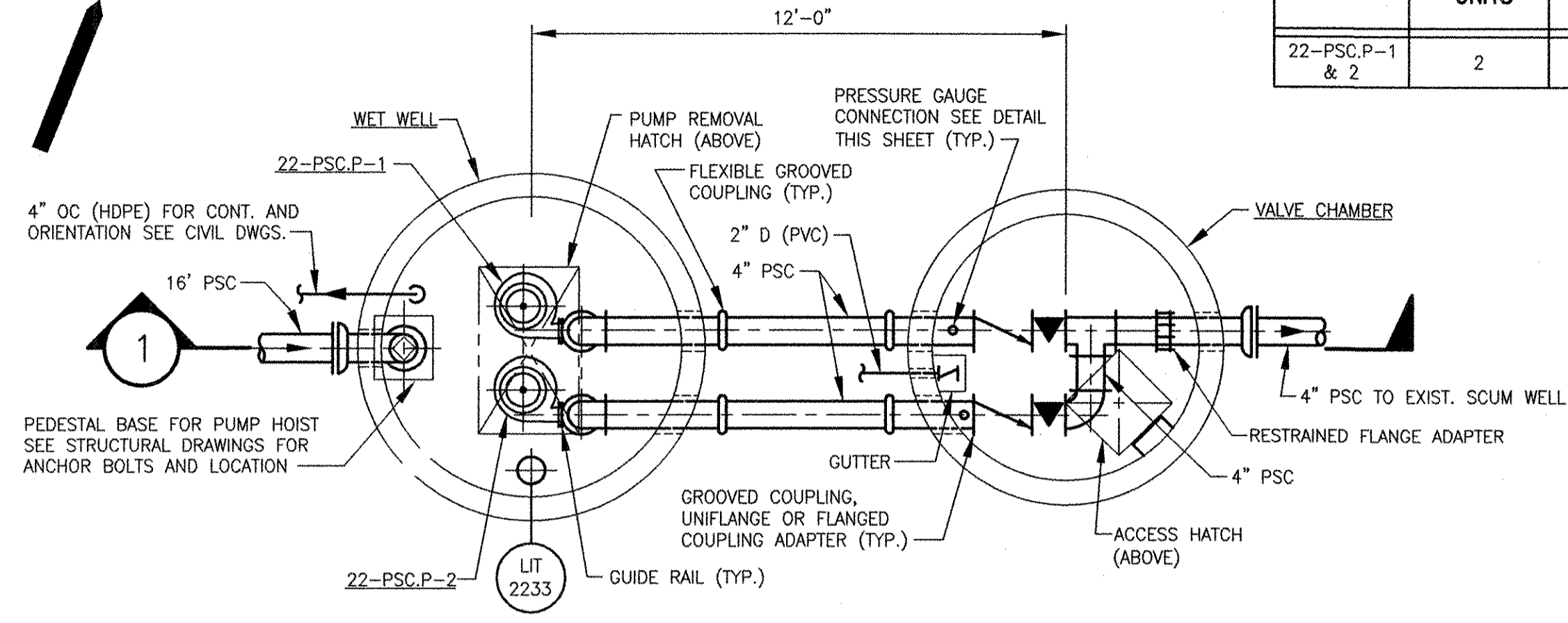
22 D-107

1 2 3 4 5



PROCESS PUMP SCHEDULE																	
TAG NO.	NUMBER OF UNITS	LOCATION	TYPE	RATING POINT				MIN. SUCTION/DISCHARGE SIZE (IN.)	PUMP RPM MAX.	SEAL TYPE	MOTOR DATA			DRIVE TYPE	SPEC. SECTION	BASIS OF DESIGN	REMARKS
				CAPACITY (GPM)	HEAD (FEET)	MIN. EFF. %	SHUTOFF HEAD FT.				HP	RPM (MAX.)	ENCL. TYPE				
22-PSC.P-1 & 2	2	PRIMARY SCUM PUMP STATION	SUBMERSIBLE SOLIDS HANDLING	300	10	62	21	4/4	1150	TANDEM MECHANICAL	3	1200	X-PROOF SUBMERS.	CLOSE COUPLED	11304	---	---

NOTES:
 1. CONSTANT SPEED
 2. SOLIDS HANDLING CAPABILITY: 3-INCH MINIMUM

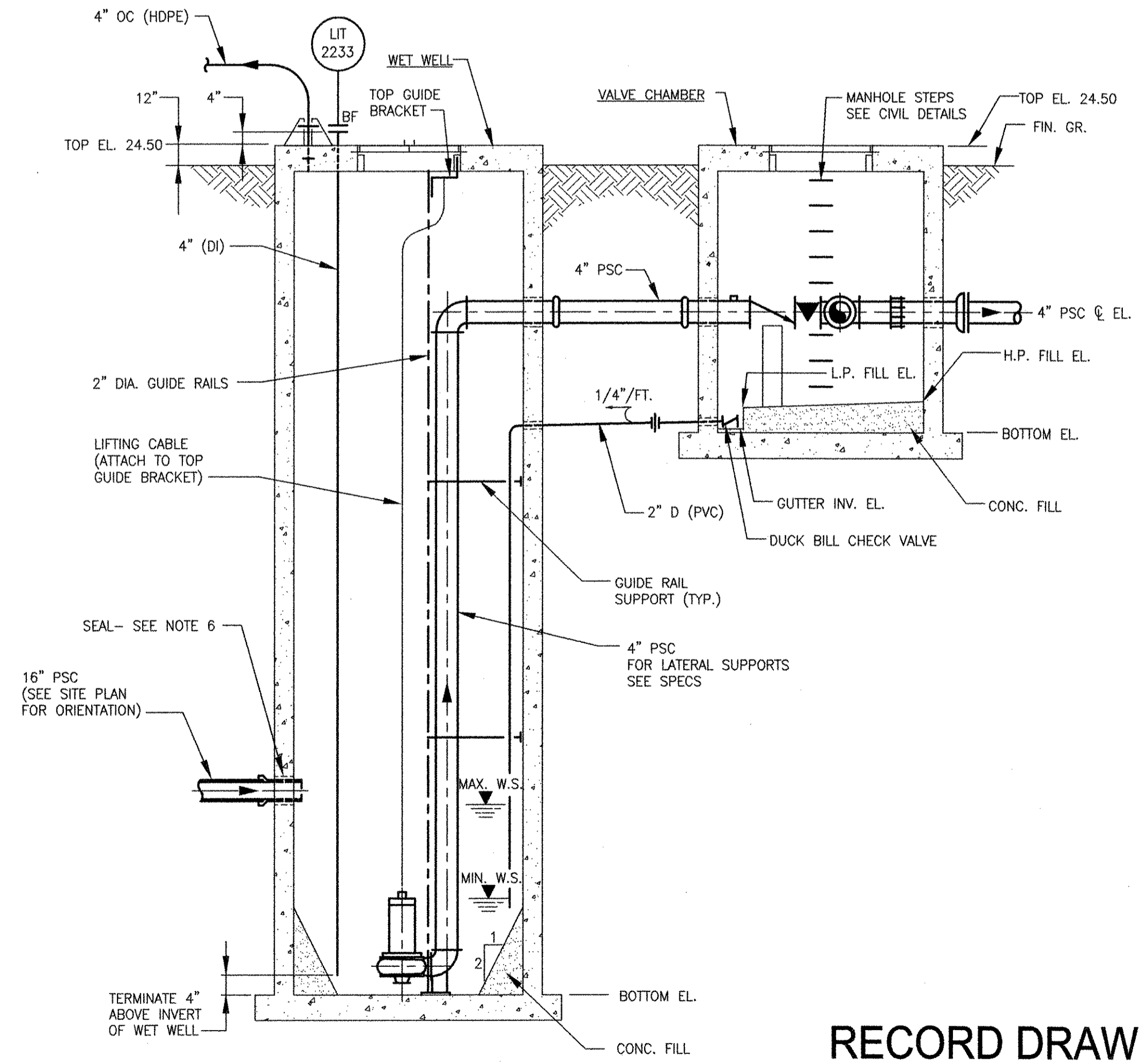


PLAN
N.T.S.

WET WELL SCHEDULE								
INSIDE DIA.	BOTTOM ELEVATION	HATCH DIMENSIONS (L X W)	MAX. W.S. ELEVATION	MIN. W.S. ELEVATION	GRADE ELEVATION	INFLUENT PIPE DIAMETER	INFLUENT PIPE INV. EL.	REMARKS
6'-0"	12.75	48x30"	19.33	15.33	23.50	16"	20.33	

WET WELL OPERATING LEVELS							REMARKS
HIGH W.L. ALARM EL.	LAG PUMP START EL.	LEAD PUMP START EL.	LAG PUMP STOP EL.	LEAD PUMP STOP EL.	LOW W.L. ALARM EL.		
19.83	19.83	19.33	15.83	15.83	15.33		

VALVE CHAMBER SCHEDULE								
INSIDE DIAMETER	BOTTOM ELEVATION	H.P. FILL ELEVATION	L.P. FILL ELEVATION	GUTTER INV. EL.	HATCH DIMS. (L X W)	FORCEMAIN DIAMETER	FORCEMAIN Q. EL.	REMARKS
6'-0"	19.08	19.58	19.38	19.28	30"x30"	4"	20.50	



SECTION
SCALE: N.T.S.

RECORD DRAWING

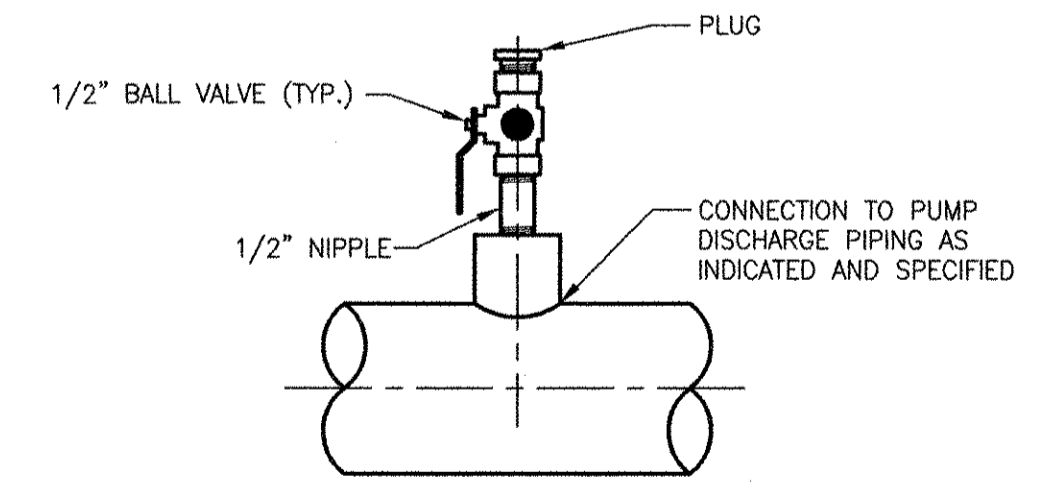
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

SYMBOLS AND LEGEND

- CHECK VALVE
- PLUG VALVE
- RESTRAINED FLANGE ADAPTER
- RESTRAINED PUSH-ON JOINT
- GROOVED COUPLING
- TRANSITION COUPLING
- UNION
- BLIND FLANGE
- SLOPE
- DRAIN
- DUCTILE IRON
- FORCE MAIN
- PRESSURE INDICATOR
- PRIMARY SCUM
- POLYVINYLCHLORIDE

GENERAL NOTES

- PROVIDE SUPPORTS FOR GUIDE RAILS AT 10'-0" MAX. SPACING, SUPPORTS TO BE 316 STAINLESS STEEL WITH 316 STAINLESS STEEL HARDWARE.
- INVERT EL. OF 2" DRAIN IN VALVE CHAMBER TO BE 2" ABOVE GUTTER INVERT EL.
- MINIMUM PUMP REMOVAL HATCH DIMENSIONS SHOWN. ENLARGE TO SUIT EQUIPMENT FURNISHED.
- PRESSURE GAUGE CONNECTION TO BE AS SHOWN.
- PIPE PENETRATIONS TO BE FIELD CUT AND LOCATED 12" MIN. FROM JOINTS IN WET WELL AND IN VALVE CHAMBER.
- SEAL ALL PIPE PENETRATIONS WITH LINK-TYPE ANNULAR SEAL.
- MAKE ALL FORCE MAIN PENETRATIONS IN WET WELL GAS TIGHT.



PRESSURE GAUGE CONNECTION
N.T.S.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\DP-2\SHEETS\022 D-108.DWG
 LAST UPDATE: Friday, October 05, 2012 11:03:48 AM
 FLOT DATE: Tuesday, October 23, 2012 2:11:01 PM
 ANSI D - 5 - Oct-12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

RECORD DRAWINGS

PROJECT NO: 60148648
 CAD DWG FILE: 22 D-108

MECHANICAL PROCESS

DESIGNED BY: C. GALLIGAN
 DRAWN BY: M. BENSON
 DEPT CHECK: K. RACAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

1
 10/19/12
 DATE
 MARK

REVISIONS
 DESCRIPTION
 MADE BY
 CHECKED
 SAC
 CFM
 REVISED FOR RECORD DRAWING

PRIMARY SCUM PUMP STATION

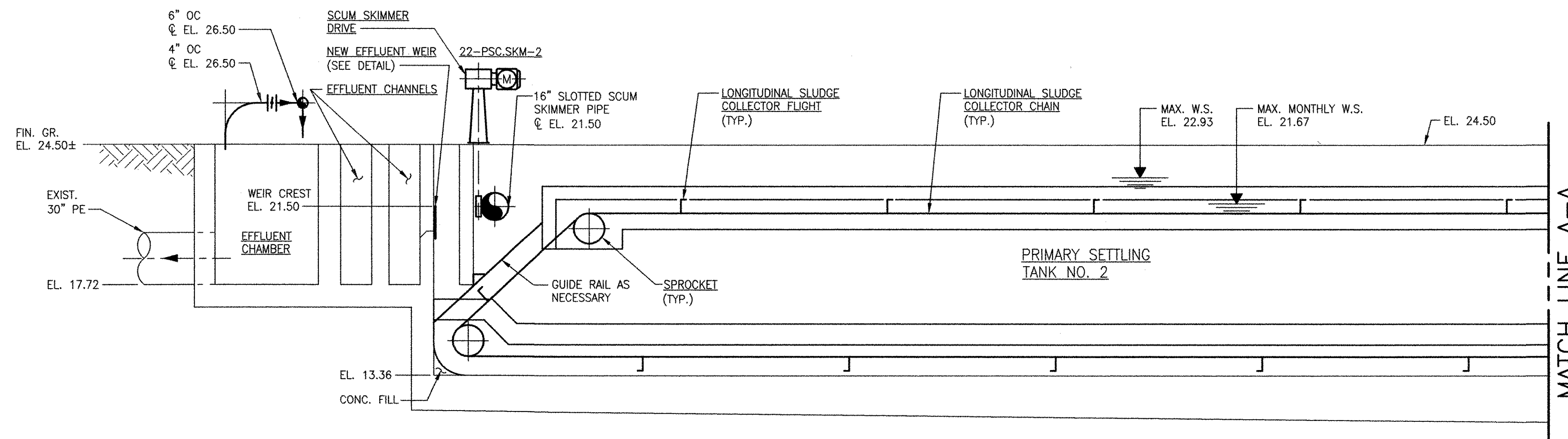
22 D-108

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DBD)\VP-A\SHEETS\022-D-301.DWG
 LAST UPDATE: Friday, October 05, 2012 11:04:16 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:05 PM

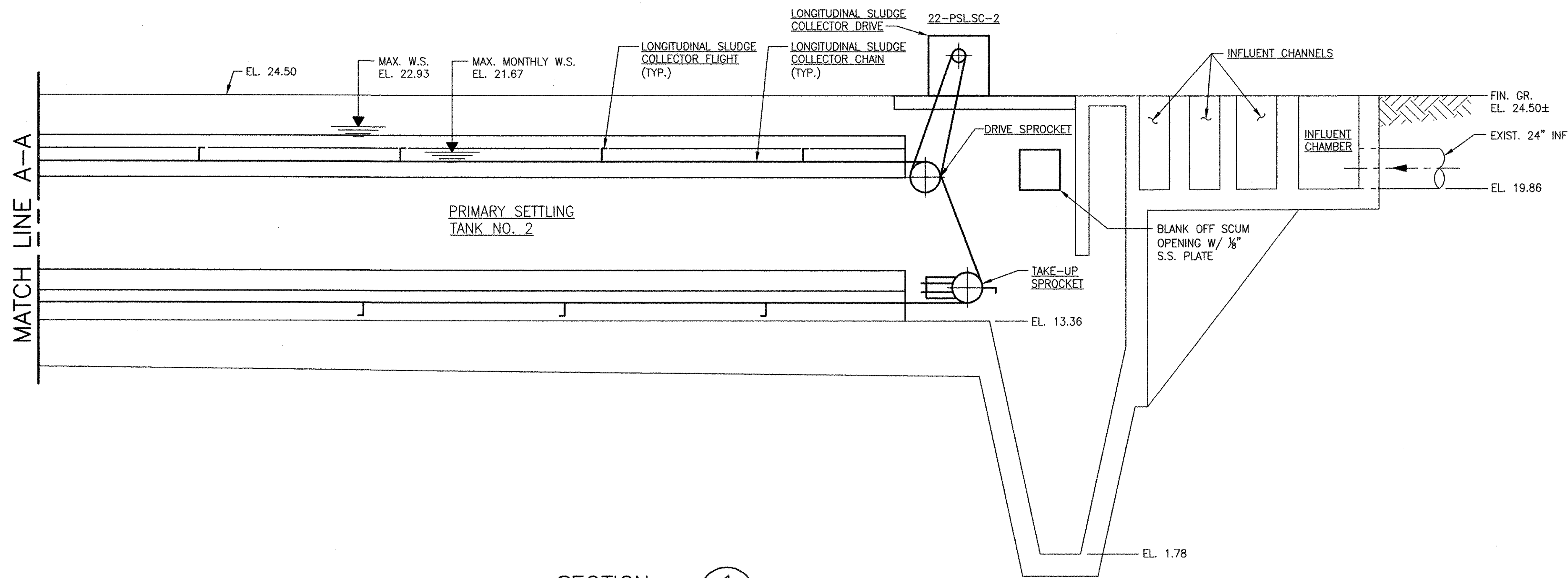
ANSI D - 5-Oct-12

RECORD DRAWING

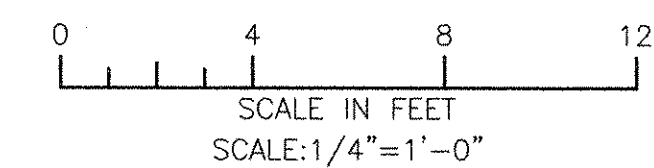
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



SECTION 1
 SCALE: 1/4"=1'-0"
 22 D-101
 22 D-102
 22 D-103



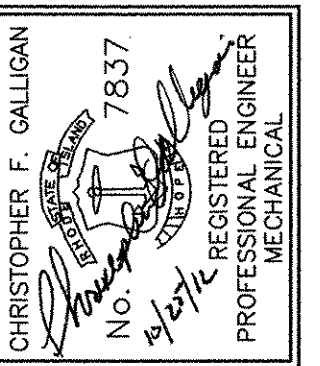
SECTION 1
 SCALE: 1/4"=1'-0"
 22 D-101
 22 D-102
 22 D-103



AECOM USA, INC.
 700 EDGEMOOR DRIVE
 WILMINGTON, OHIO
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS 1 & 2
MODIFICATIONS - SECTIONS I
 MECHANICAL PROCESS

PROJECT NO: 60148648
 CAD DWG FILE: 22 D-301
 DESIGNED BY: C. GALLIGAN
 DRAWN BY: M. BENSON
 DEPT CHECK: K. RACAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

22 D-301

D

D

C

B

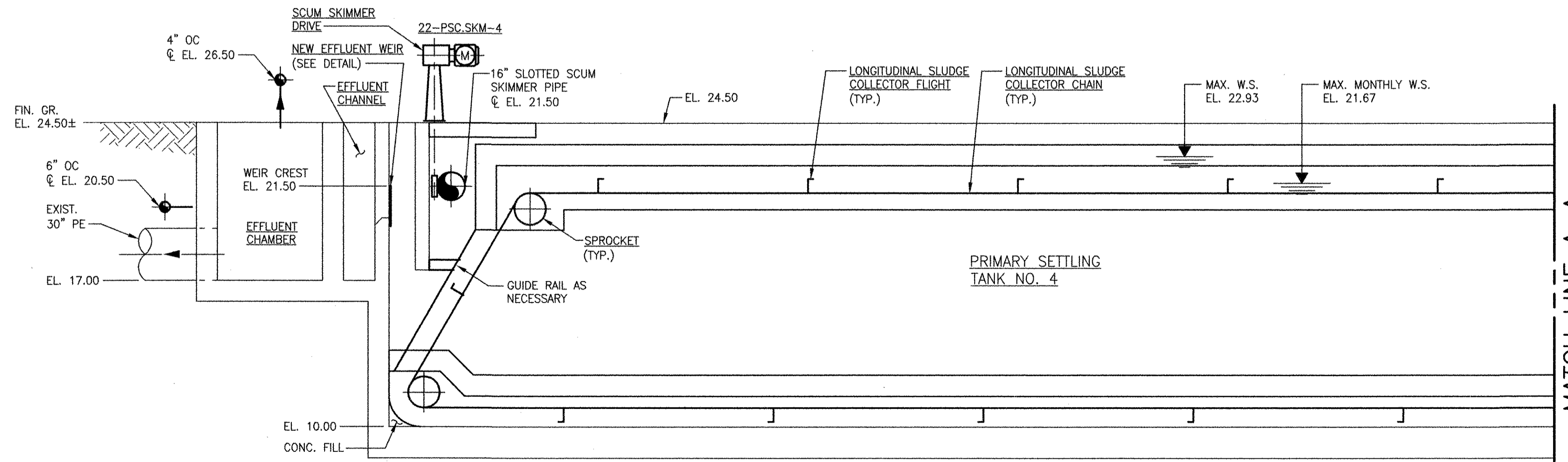
A

PATH: \\F:\ENR\60148648 - EAST PROVIDENCE (RSD)\DP-2\SHETS\022_D-302.DWG
 PLOT DATE: Tuesday, October 23, 2012 2:11:08 PM
 LAST UPDATE: Friday, October 05, 2012 11:04:42 AM

ANSI D - 5-Oct-12

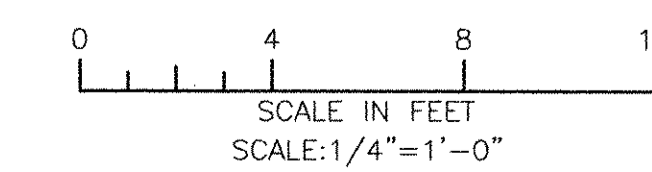
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



SECTION 1
 SCALE: 1/4"=1'-0"

SECTION 1
 SCALE: 1/4"=1'-0"



MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 700 EDGEMOOR DRIVE
 WILMINGTON, DE 19804
 PHONE (302) 446-5200

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS 3 & 4
MODIFICATIONS - SECTIONS I
 MECHANICAL PROCESS

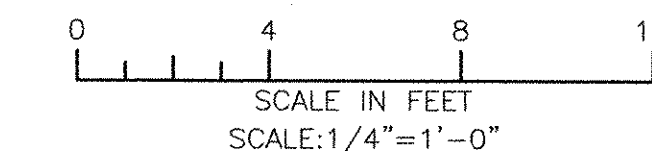
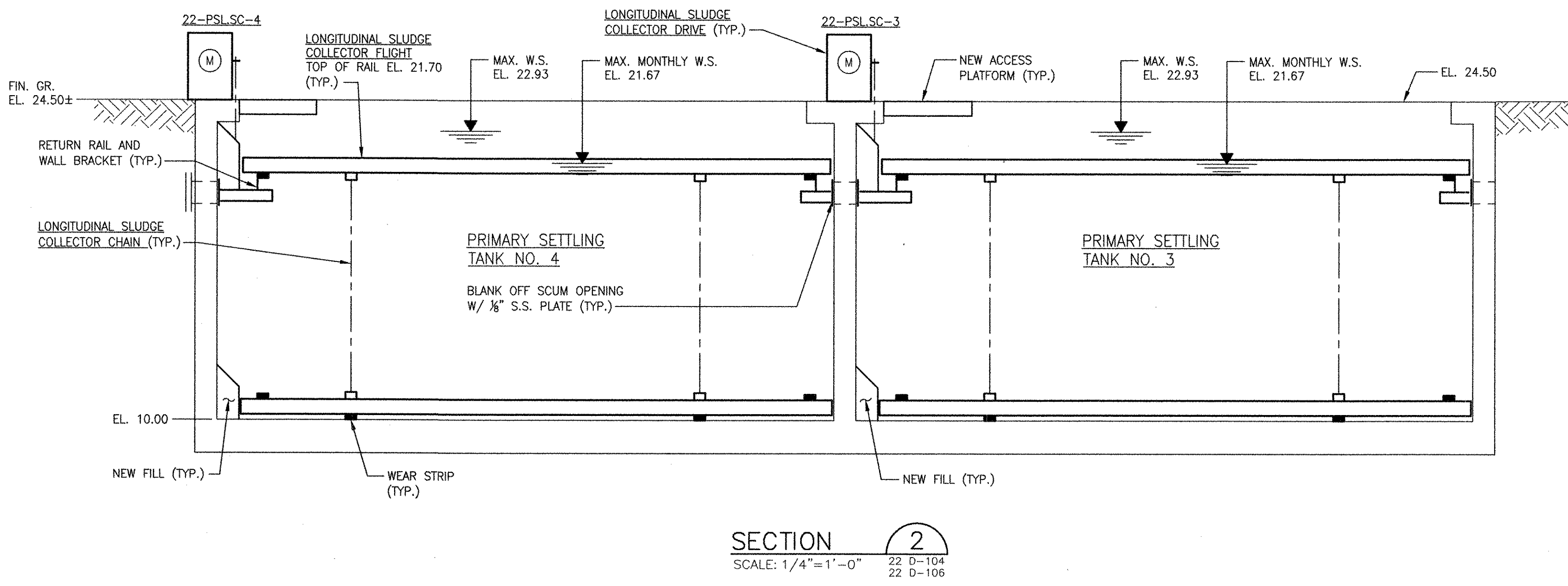
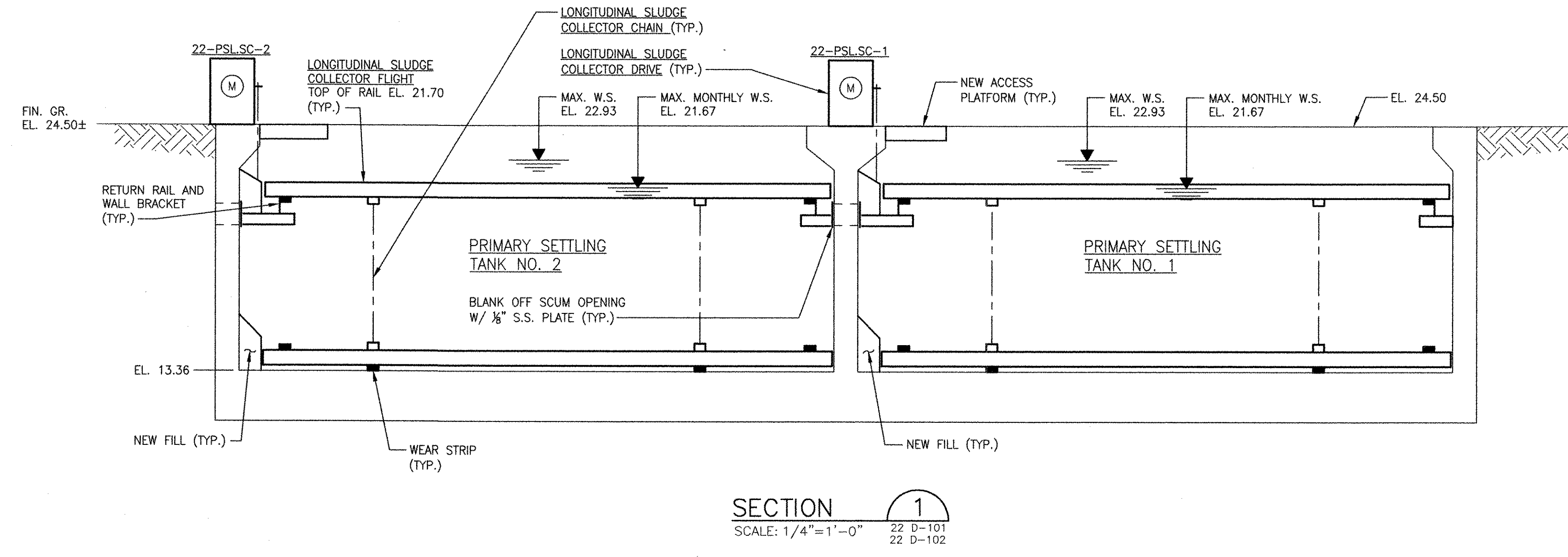
PROJECT NO:	60148648
CAD DWG FILE:	22 D-302
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	M. BENSON
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 D-302

PATH: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\22 D-303.DWG
 LAST UPDATE: Friday, October 05, 2012 11:05:18 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:12 PM
 ANSI D - 5 - Oct-12

RECORD DRAWING

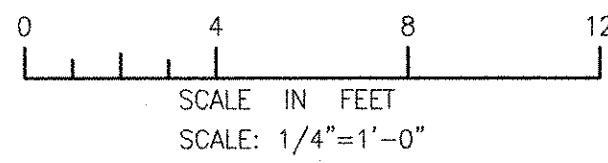
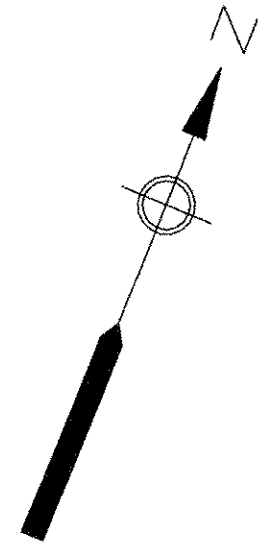
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



AECOM		RECORD DRAWINGS	
AECOM USA, INC. 701 EDGEWATER DRIVE WILMINGTON, DE 19804 PHONE (781) 246-5000		CHRYSTOPHER E. GALLIGAN No. 7837 REGISTERED PROFESSIONAL ENGINEER MECHANICAL	
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 PRIMARY SETTLING TANKS 1, 2, 3 & 4 MODIFICATIONS - SECTIONS II MECHANICAL PROCESS			
PROJECT NO: 60148648 CAD DWG FILE: 22 D-303		DESIGNED BY: C. GALLIGAN DRAWN BY: M. BENSON DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED	
10/19/12 DATE		1 MARK	
SAC MADE BY		CFG CHECKED	
REVISIONS		REVISIONS	
10/19/12 DATE		1 MARK	
SAC MADE BY		CFG CHECKED	
REVISIONS		REVISIONS	
22 D-303			

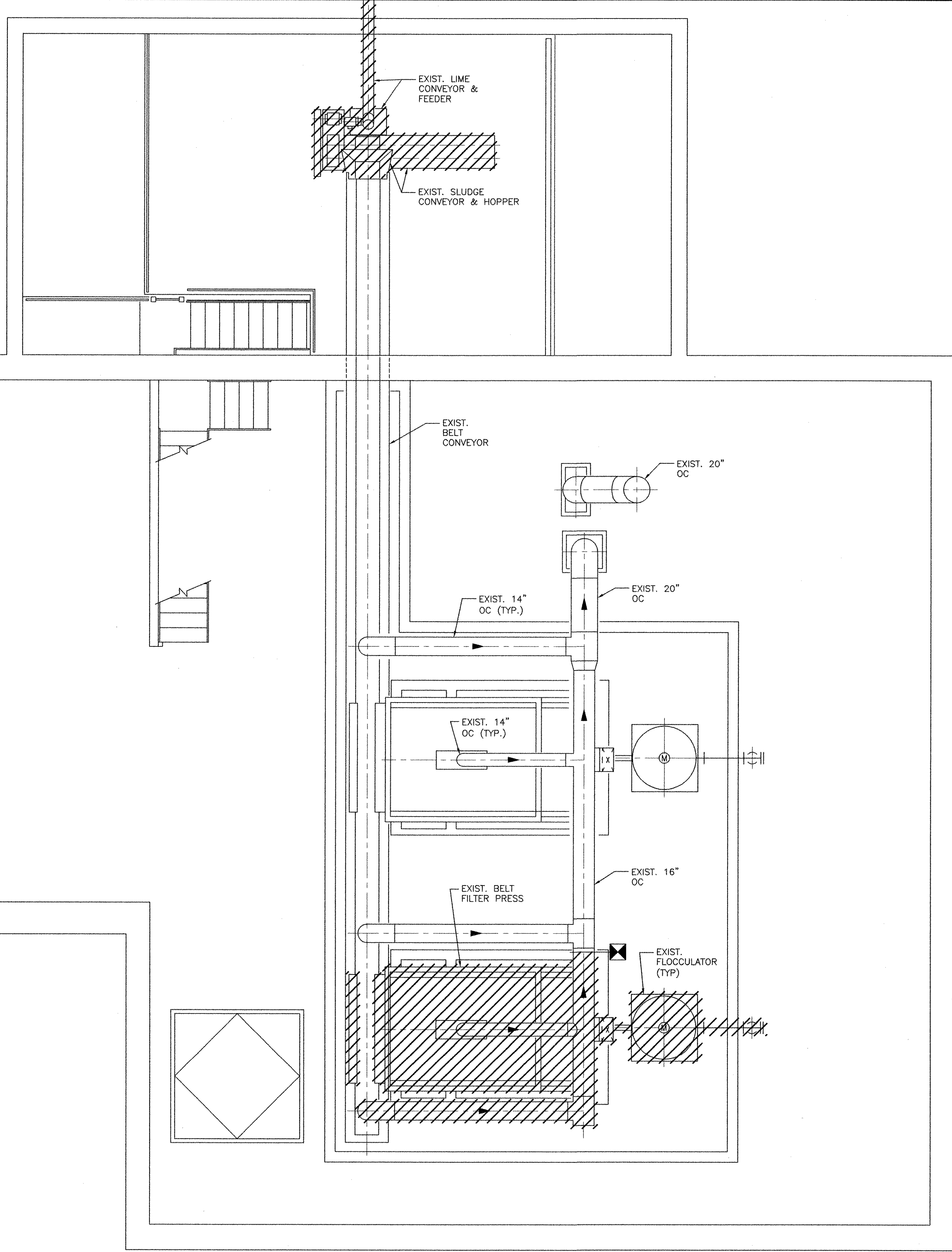
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBD\DP-2\SHEETS\03_DD-101.DWG
 LAST UPDATE: Friday, October 05, 2012 11:06:26 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:15 PM

ANSI D - 5-0c1-12



RECORD DRAWING

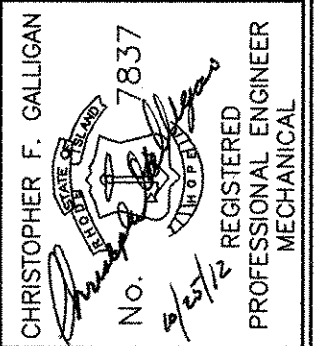
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



AECOM USA, INC.
 700 BOWEN DRIVE
 SUITE 100
 PHOENIX, AZ 85004
 PHONE (781) 248-5200



RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

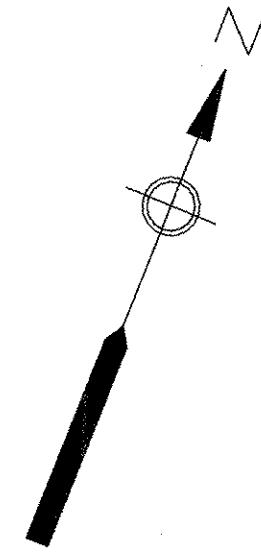
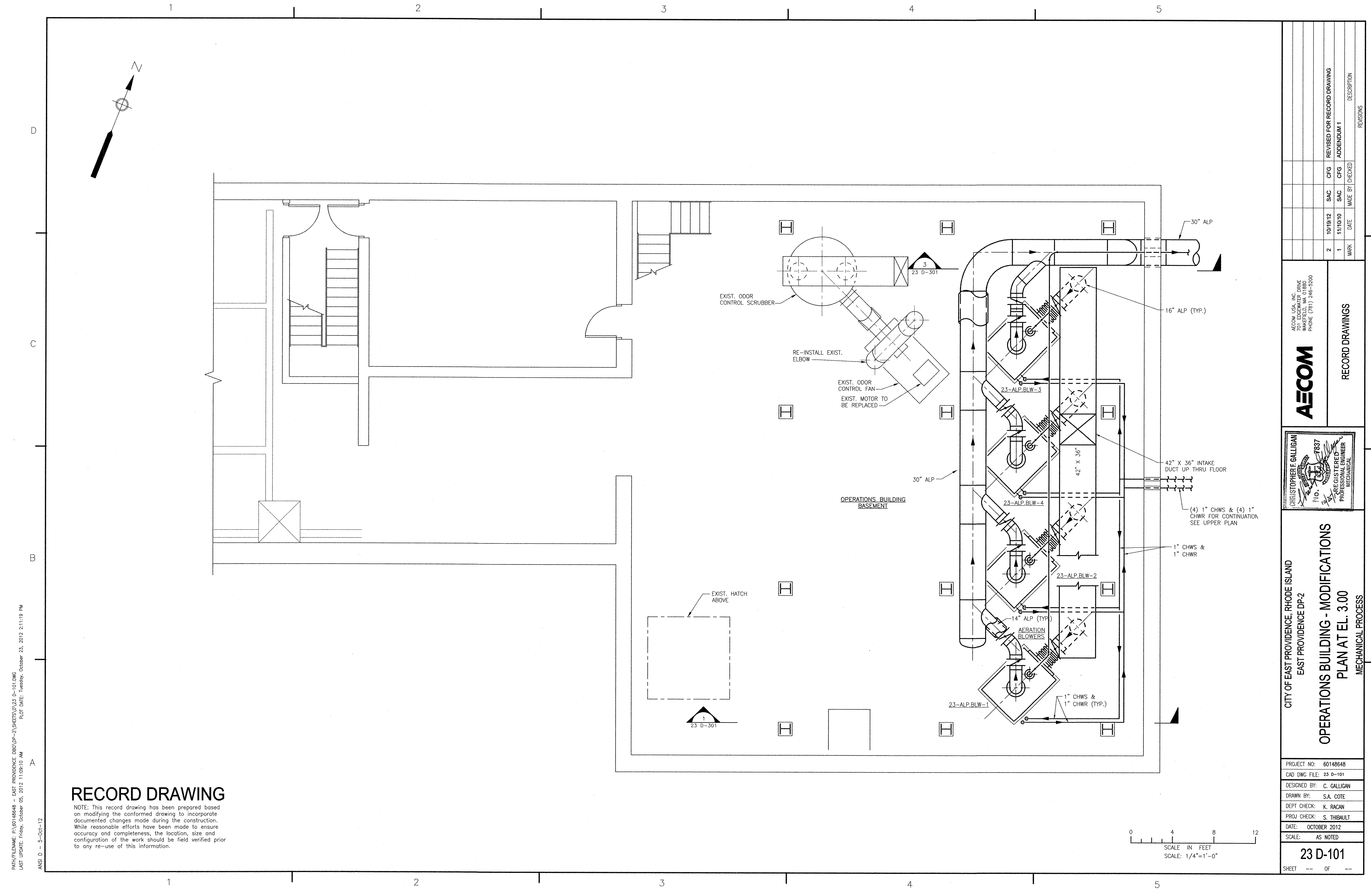
OPERATIONS BUILDING - DEMOLITION PLAN AT EL. 18.00

MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	23 DD-101
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	S.A. COTE
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

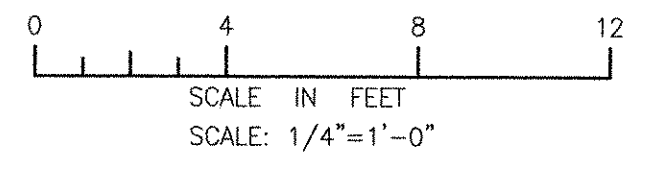
23 DD-101

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH: \\F:\ENR\PA\60148648 - EAST PROVIDENCE DB\0\VP-2\SEETS\0\23 D-101.DWG
 LAST UPDATE: Friday, October 05, 2012 11:09:10 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:19 PM
 ANSI D - 5-Oct-12

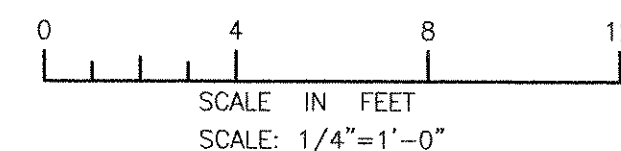
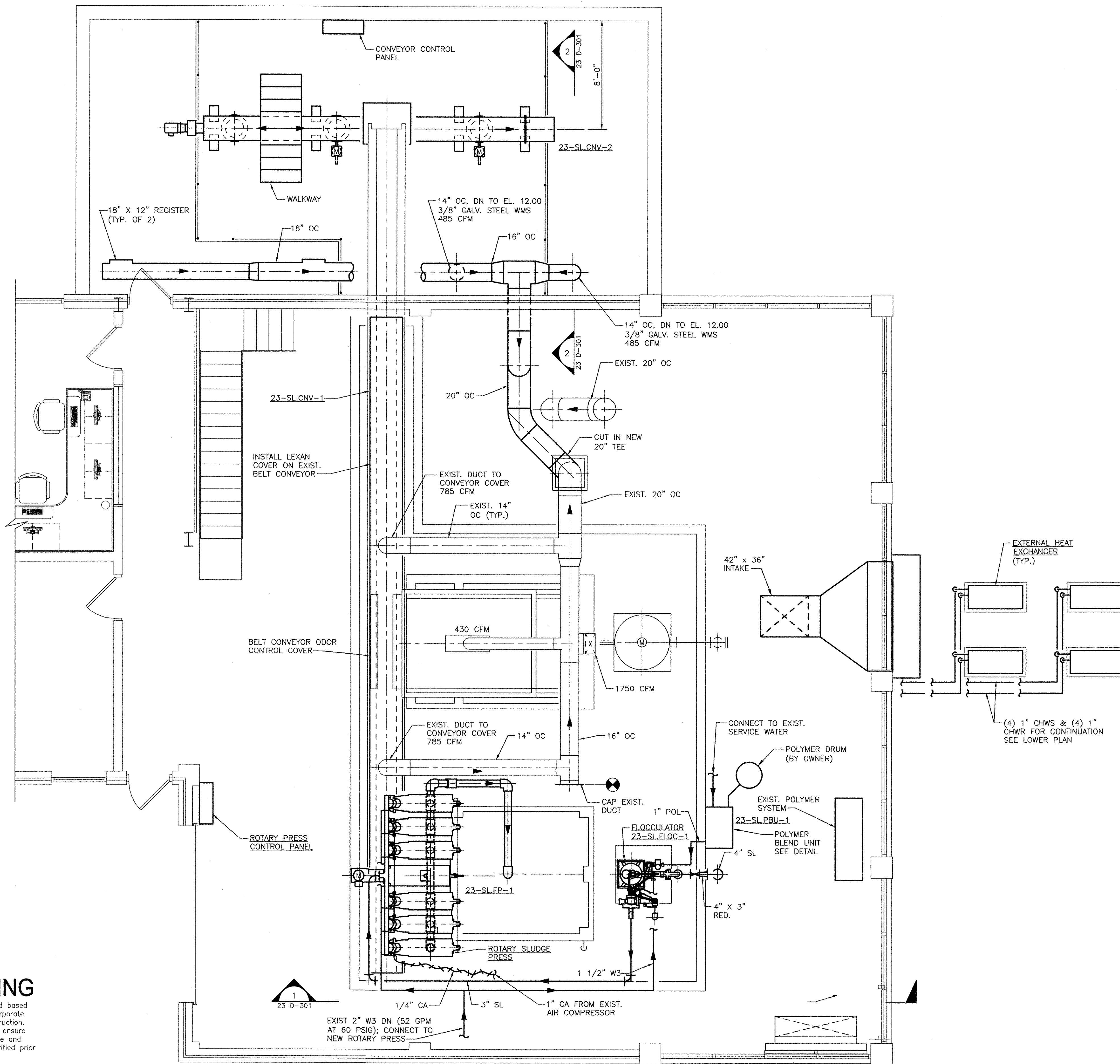
		REVISIONS NO. DATE MADE BY CHECKED BY DESCRIPTION		
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING
1	11/10/10	SAC	CFG	ADDENDUM 1
MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2		OPERATIONS BUILDING - MODIFICATIONS PLAN AT EL. 3.00 MECHANICAL PROCESS		
PROJECT NO: 60148648 CAD DWG FILE: 23 D-101		DESIGNED BY: C. GALLIGAN DRAWN BY: S.A. COTE DEPT CHECK: K. RACAN PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED		
23 D-101 SHEET -- OF --				

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DWG\23-D-102.DWG
 LAST UPDATE: Friday, October 05, 2012 11:08:19 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:23 PM

ANSI D - 5-Oct-12

RECORD DRAWING

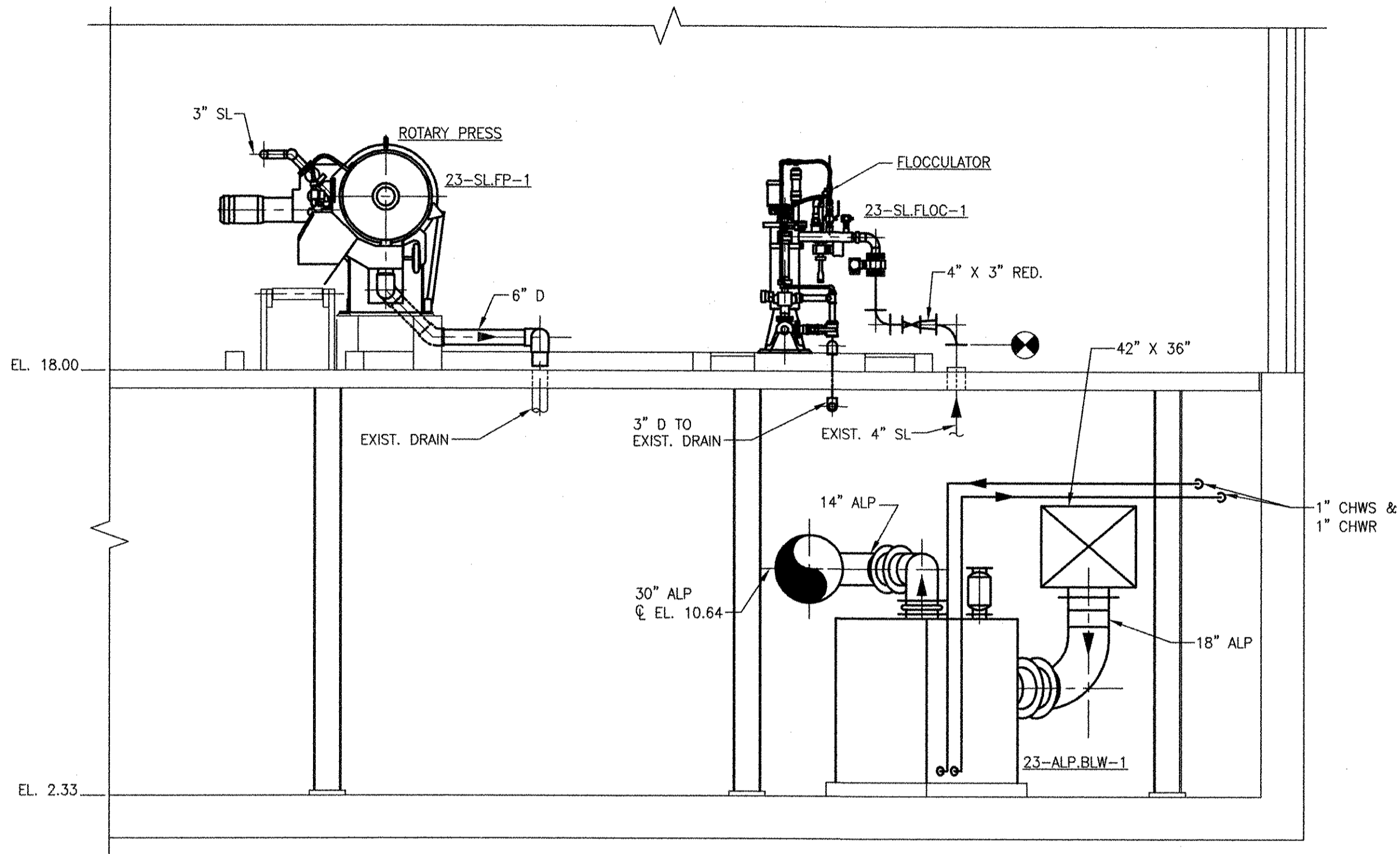
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



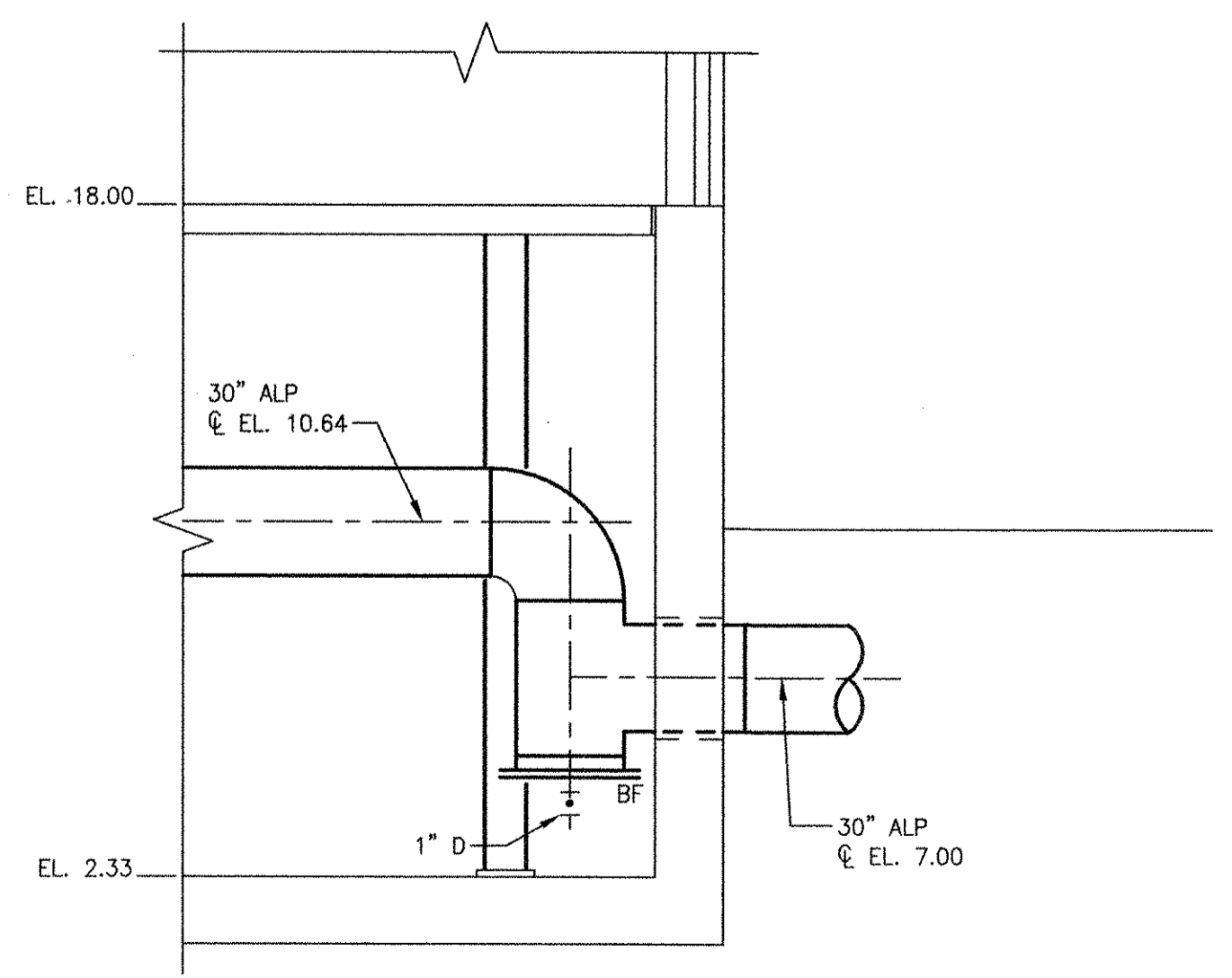
<p>PROJECT NO: 60148648 CAD DWG FILE: 23 D-102 DESIGNED BY: ----- DRAWN BY: ----- DEPT CHECK: ----- PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>		<p>AECOM RECORD DRAWINGS</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td>2</td> <td>10/19/12</td> <td>SAC</td> </tr> <tr> <td>1</td> <td>11/10/10</td> <td>SAC</td> </tr> <tr> <td></td> <td></td> <td>MADE BY (CHECKED)</td> </tr> <tr> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td></td> <td></td> <td>ADDENDUM 1</td> </tr> </table>	NO.	DATE	DESCRIPTION	2	10/19/12	SAC	1	11/10/10	SAC			MADE BY (CHECKED)			REVISED FOR RECORD DRAWING			ADDENDUM 1
NO.	DATE			DESCRIPTION																	
2	10/19/12	SAC																			
1	11/10/10	SAC																			
		MADE BY (CHECKED)																			
		REVISED FOR RECORD DRAWING																			
		ADDENDUM 1																			
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2</p> <p>OPERATIONS BUILDING - MODIFICATIONS PLAN AT EL. 18.00 MECHANICAL PROCESS</p>		<p>AECOM USA, INC. 100 WASHINGTON STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200</p>																			

23 D-102

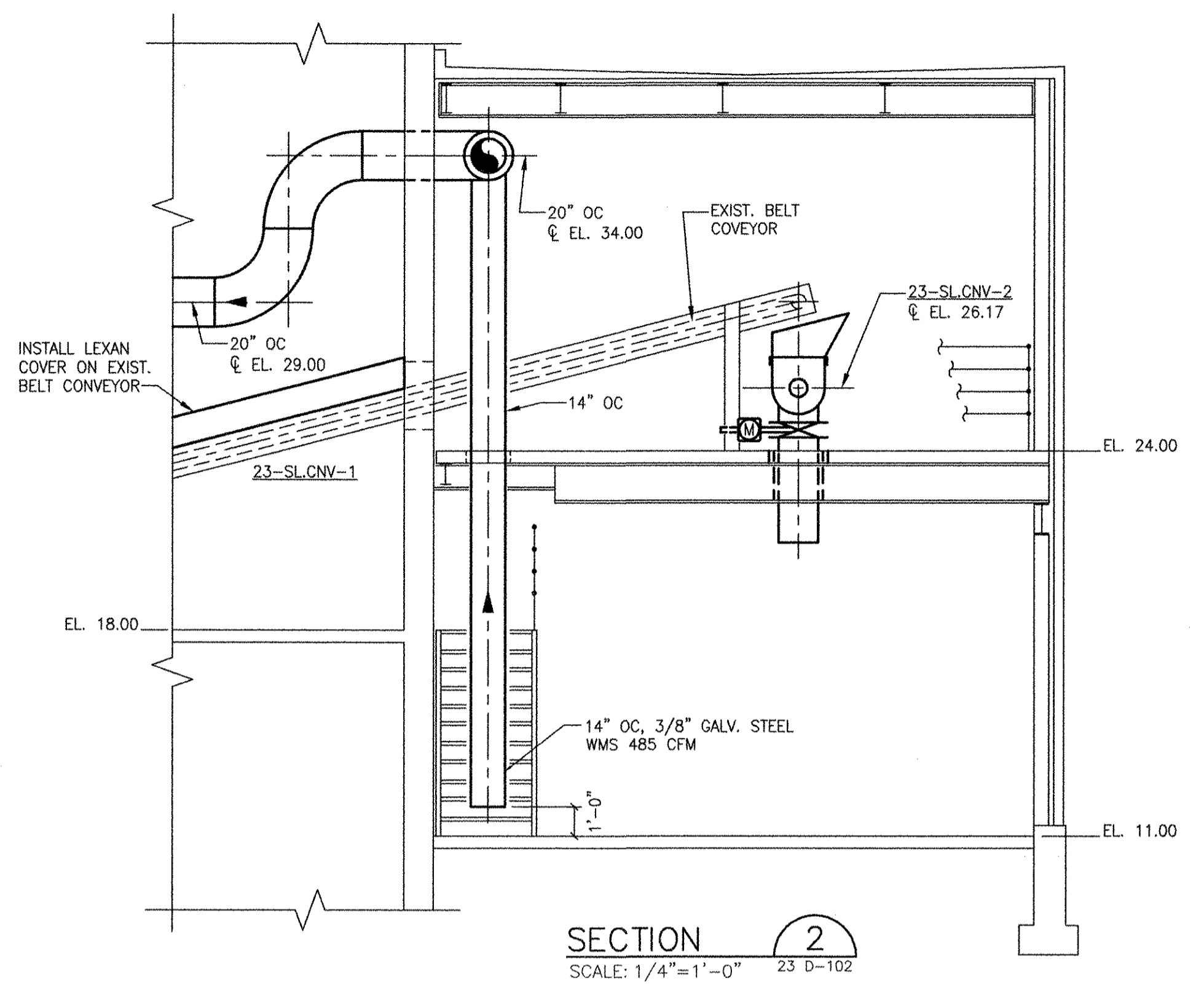
1 2 3 4 5



SECTION 1
SCALE: 1/4"=1'-0"
23 D-101
23 D-102



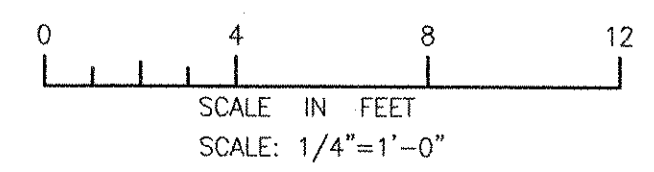
SECTION 3
SCALE: 1/4"=1'-0"
23 D-101
23 D-102



SECTION 2
SCALE: 1/4"=1'-0"
23 D-102

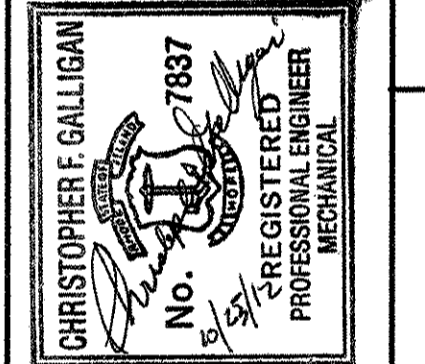
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS
AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

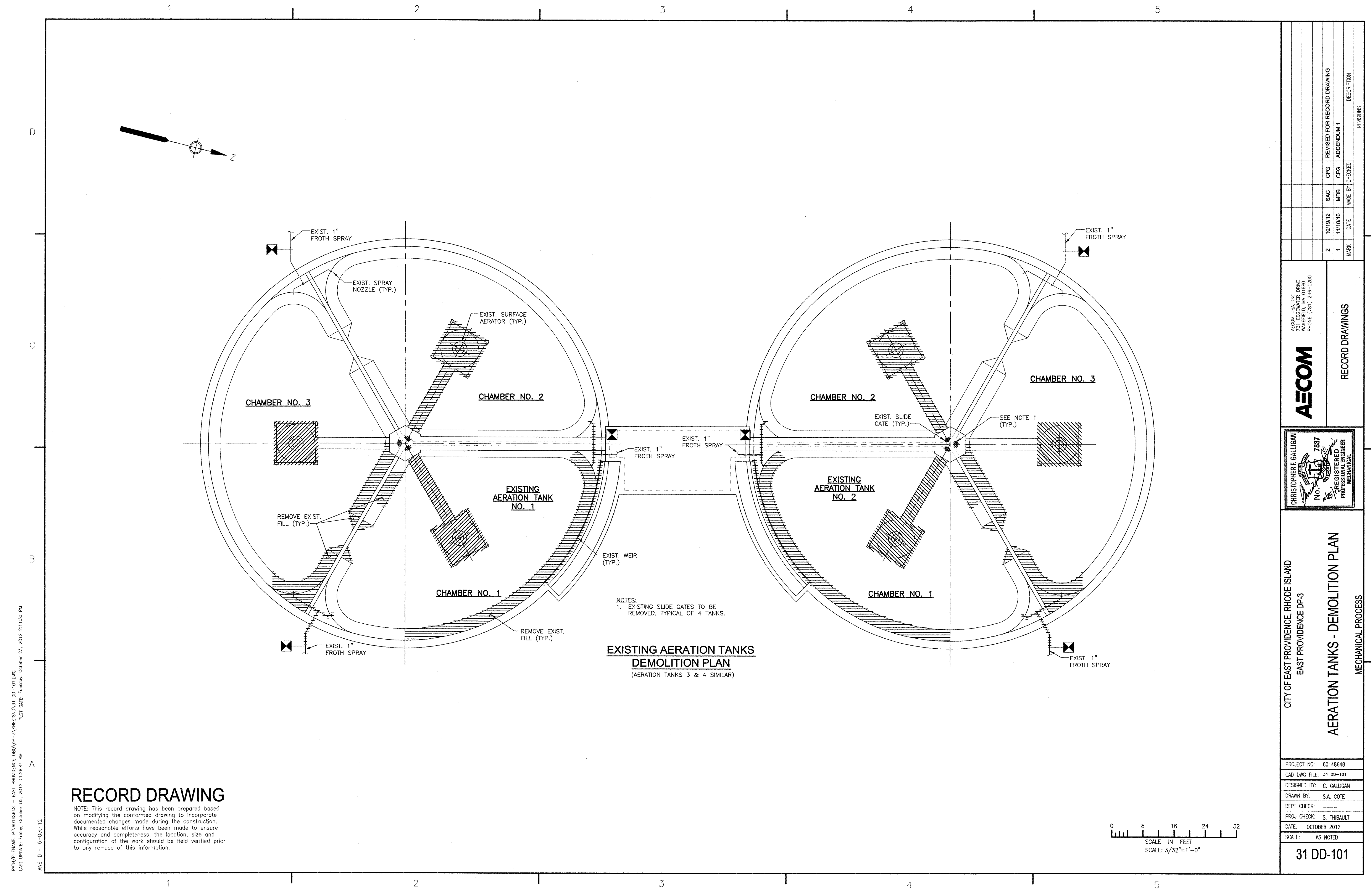


CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
OPERATIONS BUILDING - SECTIONS I
MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	23 D-301
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	S.A. COTE
DEPT CHECK:	K. RACAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 D-301

PATH: \\FLENAME\PA\60148648 - EAST PROVIDENCE DP-2\DR\23 D-301.DWG
 LAST UPDATE: Friday, October 05, 2012 11:09:01 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:27 PM
 ANS D - 5-Oct-12

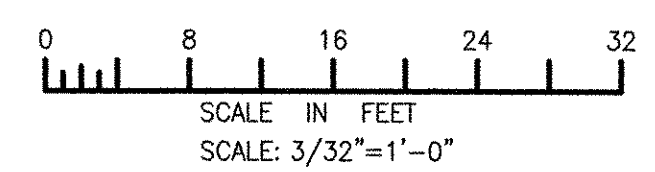


**EXISTING AERATION TANKS
DEMOLITION PLAN**
(AERATION TANKS 3 & 4 SIMILAR)

NOTES:
1. EXISTING SLIDE GATES TO BE REMOVED, TYPICAL OF 4 TANKS.

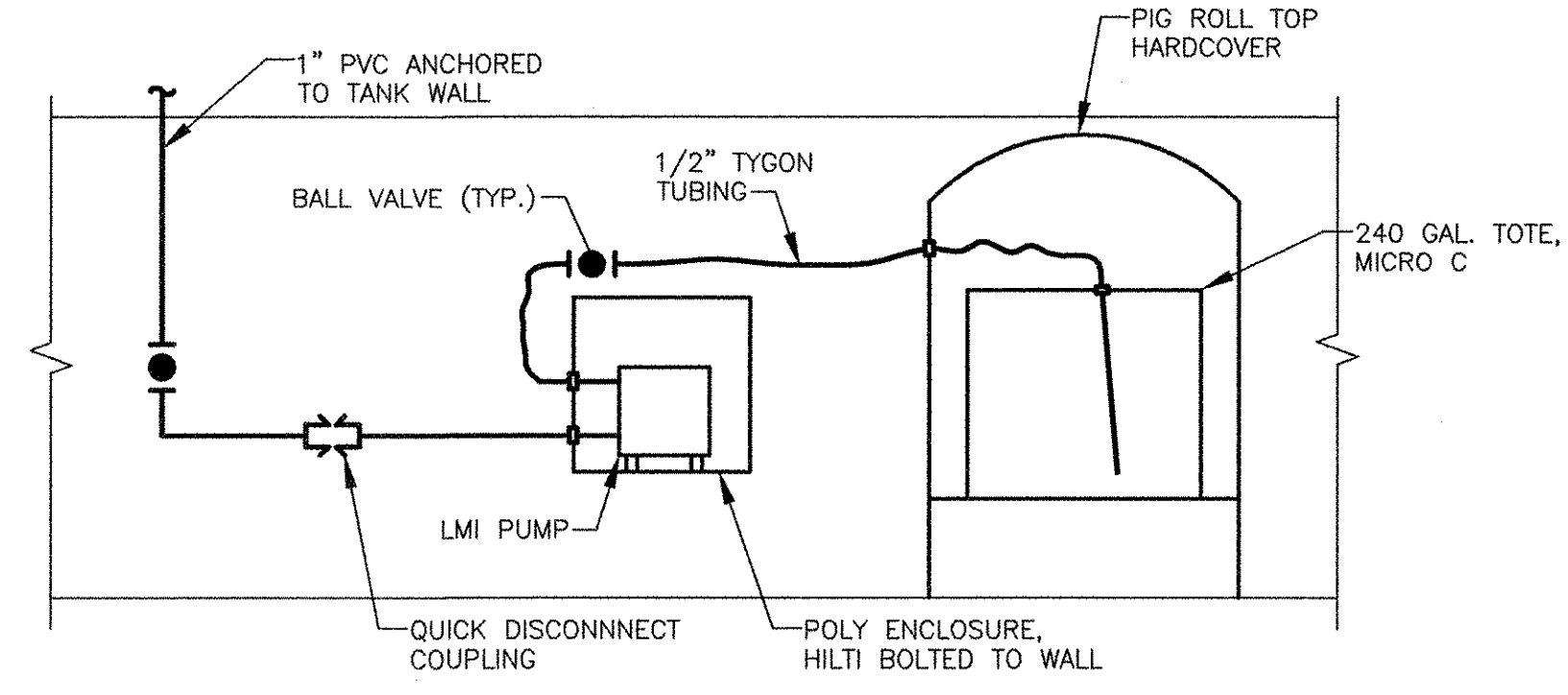
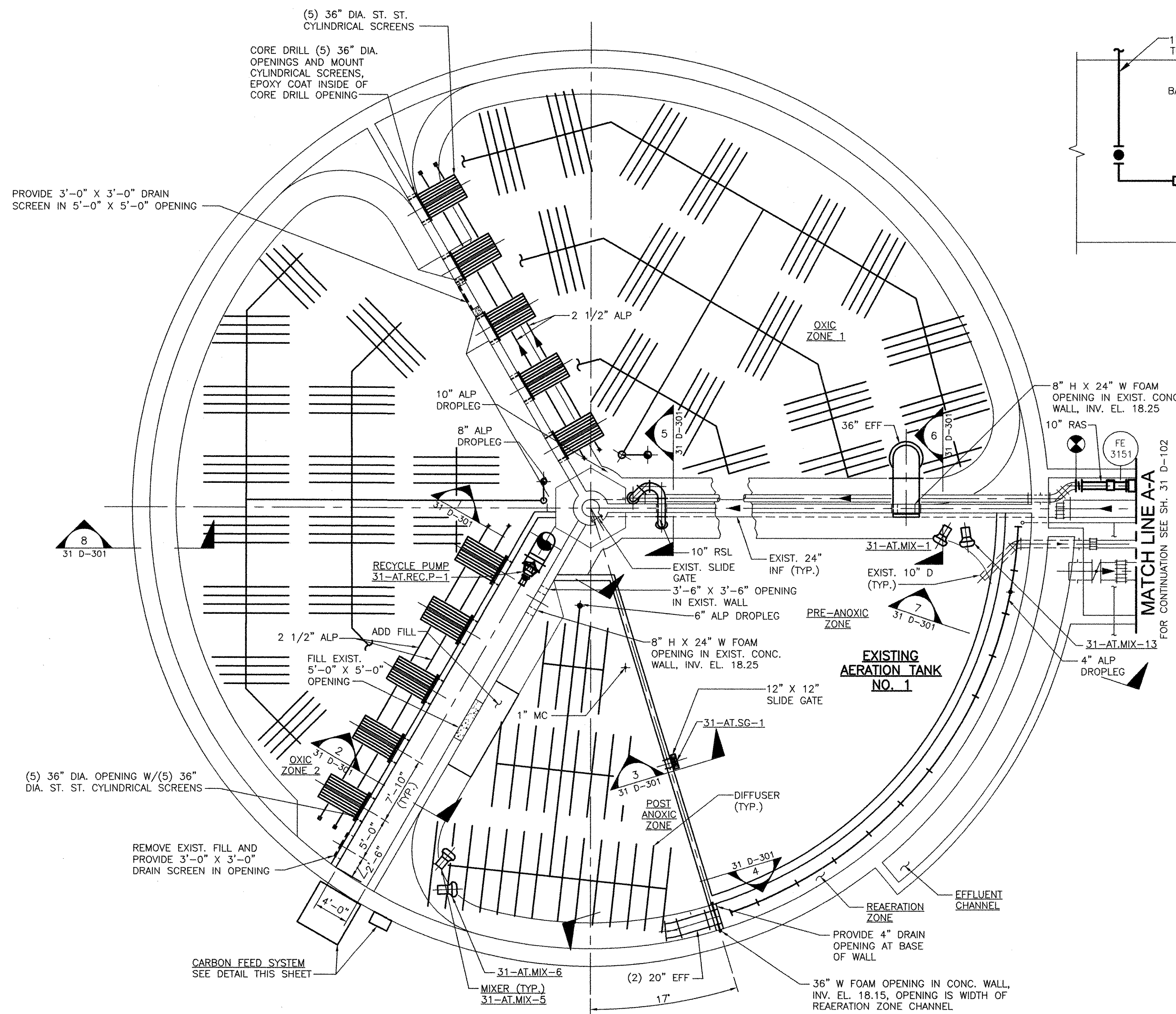
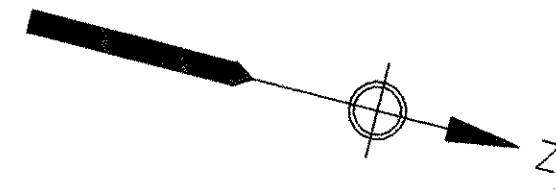
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



<p>PROJECT NO: 60148648 CAD DWG FILE: 31 00-101 DESIGNED BY: C. GALLIGAN DRAWN BY: S.A. COTE DEPT CHECK: --- PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>		<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED BY</th> <th>DESCRIPTION</th> </tr> <tr> <td>2</td> <td>10/19/12</td> <td>SAC</td> <td>CFG</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>1</td> <td>11/10/10</td> <td>MDB</td> <td>CFG</td> <td>ADDENDUM 1</td> </tr> <tr> <td>MARK</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION	2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING	1	11/10/10	MDB	CFG	ADDENDUM 1	MARK				
NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION																			
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING																			
1	11/10/10	MDB	CFG	ADDENDUM 1																			
MARK																							
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3</p>		<p>AECOM AECOM USA, INC. 100 WASHINGTON STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200</p>																					
<p>AERATION TANKS - DEMOLITION PLAN</p>		<p>RECORD DRAWINGS</p>																					
<p>MECHANICAL PROCESS</p>		<p>REGISTERED PROFESSIONAL ENGINEER MECHANICAL NO. 7837 CHRISTOPHER F. GALLIGAN</p>																					

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DB)\DP-3\3\SHEETS\031 00-101.DWG
 LAST UPDATE: Friday, October 05, 2012 11:26:44 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:30 PM
 ANS D - 5-Oct-12

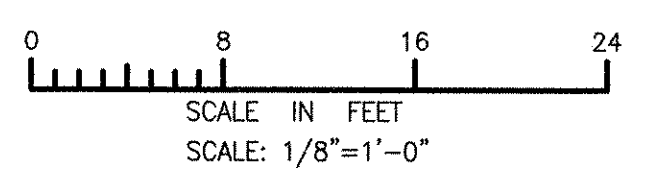


CARBON FEED SCHEMATIC
NTS

**EXISTING AERATION TANK NO. 1
MODIFICATIONS LOWER PLAN**
(AERATION TANK 3 SIMILAR)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING
1	11/10/10	MDB	CFG	ADDENDUM 1
MARK				

AECOM
RECORD DRAWINGS
AECOM USA, INC. OFFICE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

CHRISTOPHER F. GALLIGAN
No. 7837
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

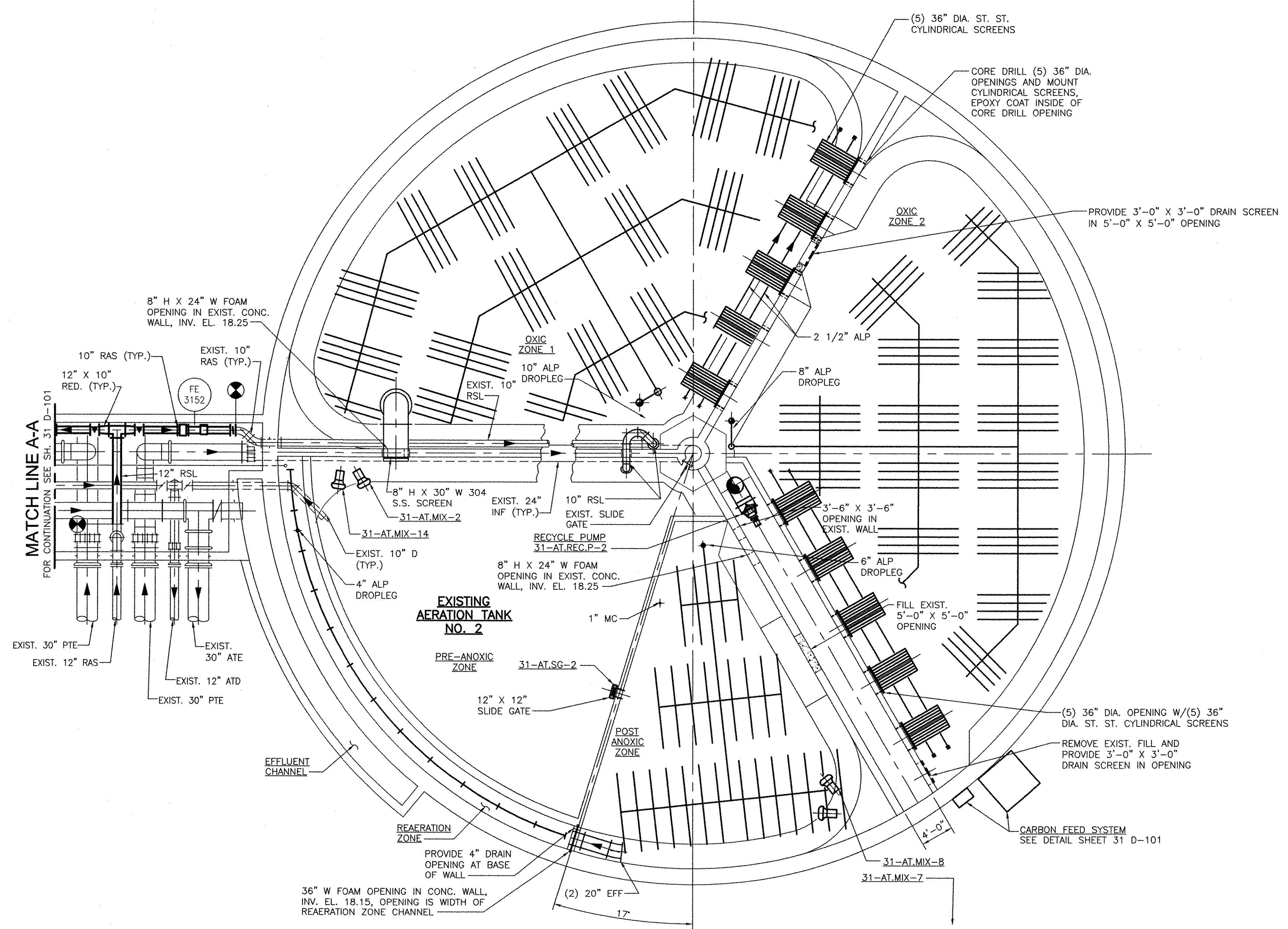
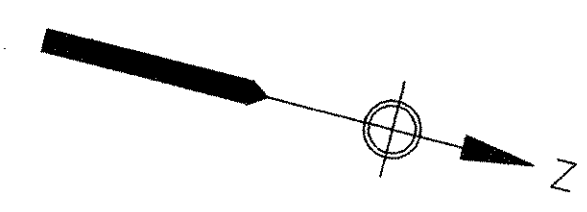
CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3
**AERATION TANK NO. 1 - MODIFICATIONS
LOWER PLAN**
MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	31 D-101
DESIGNED BY:	C. GALLIGAN
DRAWN BY:	S.A. COTE
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 D-101

PATH: \\FILENAME\F\60148648 - EAST PROVIDENCE DBO\OP-3\SHEETS\31 D-101.DWG
 LAST UPDATE: Wednesday, October 17, 2012 10:18:30 AM PLOT DATE: Tuesday, October 23, 2012 2:11:34 PM
 ANS D - 17-Oct-12

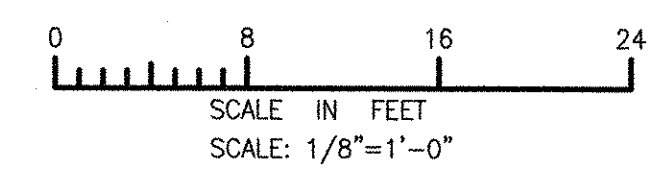
1 2 3 4 5



**EXISTING AERATION TANK NO. 2
MODIFICATIONS LOWER PLAN**
(AERATION TANK 4 SIMILAR)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\VP-3\SHEETS\031 D-102.DWG
LAST UPDATE: Wednesday, October 17, 2012 10:18:44 AM
ANSI D - 17-Oct-12

1 2 3 4 5

REVISIONS	
NO.	DESCRIPTION
2	REVISED FOR RECORD DRAWING
1	ADDENDUM 1
MARK	DATE
MADE BY	CHECKED
SAC	CFG
MDR	CFG

AECOM

AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
No. 7837
REGISTERED PROFESSIONAL MECHANICAL ENGINEER

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3

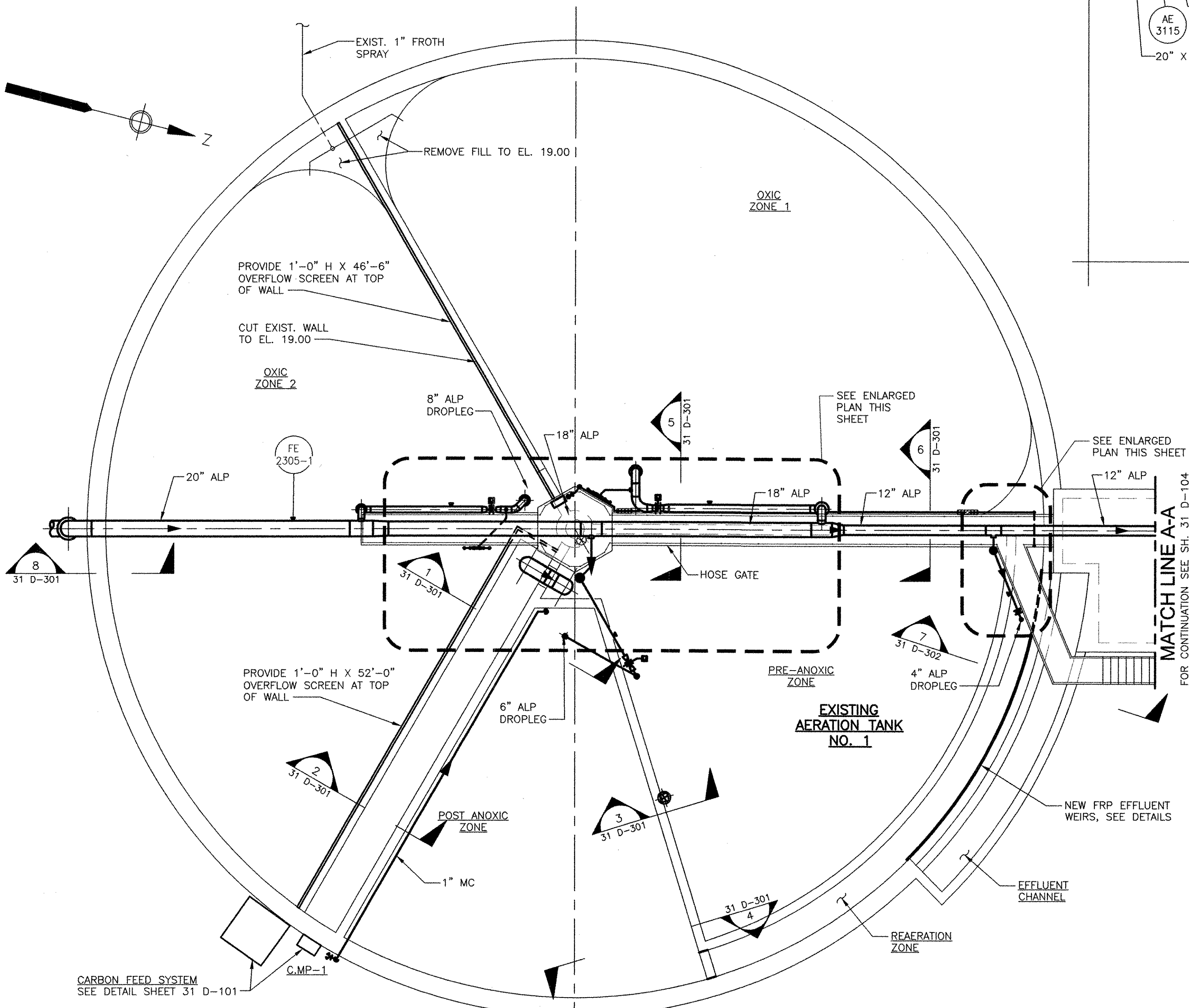
**AERATION TANK NO. 2 - MODIFICATIONS
LOWER PLAN**

MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	31 D-102
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 D-102

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\UP-3\SHEETS\031 D-103.DWG
 LAST UPDATE: Tuesday, October 23, 2012 1:51:41 PM
 PLOT DATE: Tuesday, October 23, 2012 2:11:43 PM
 ANSI D - 23-Oct-12

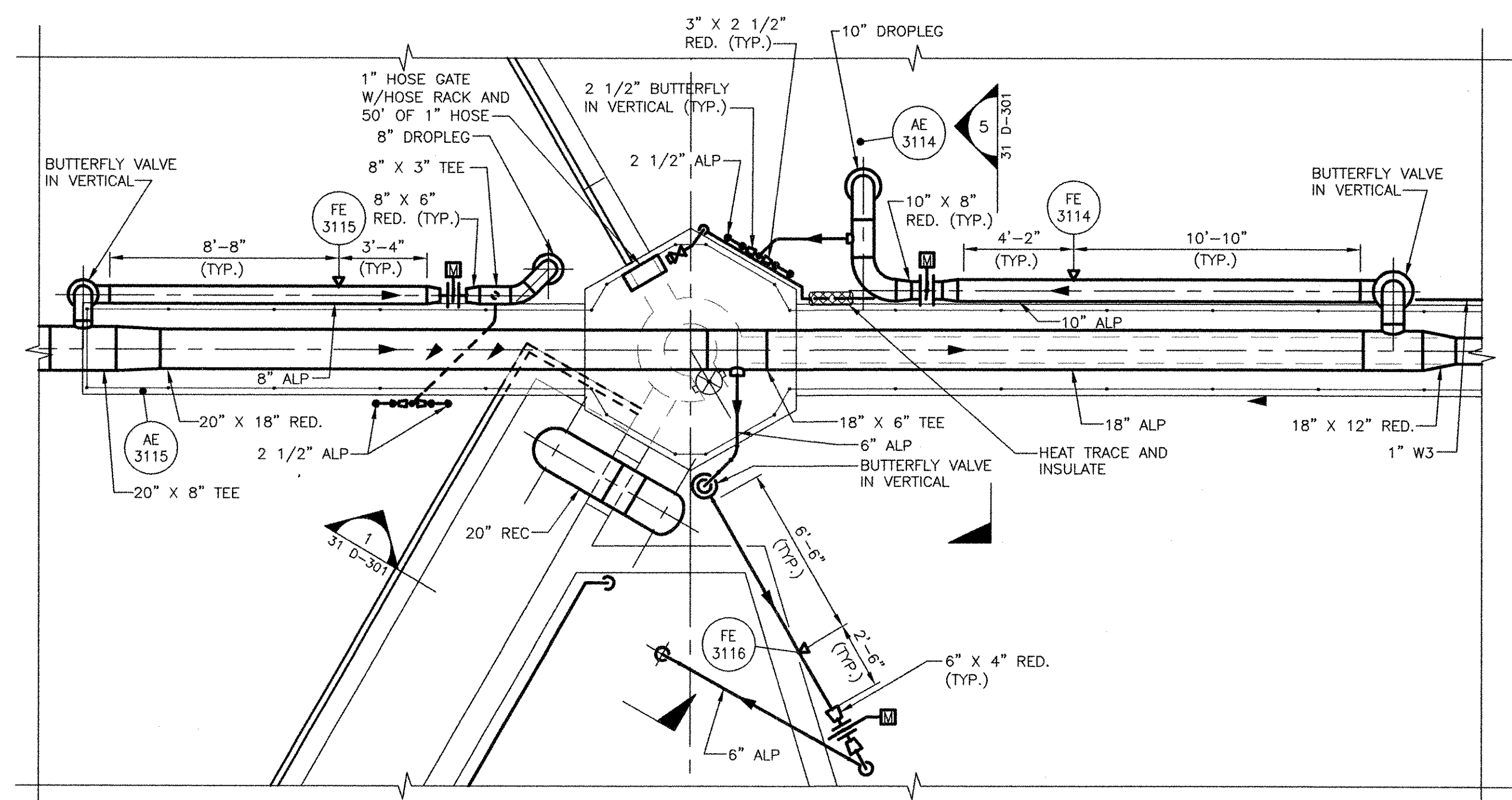


RECORD DRAWING

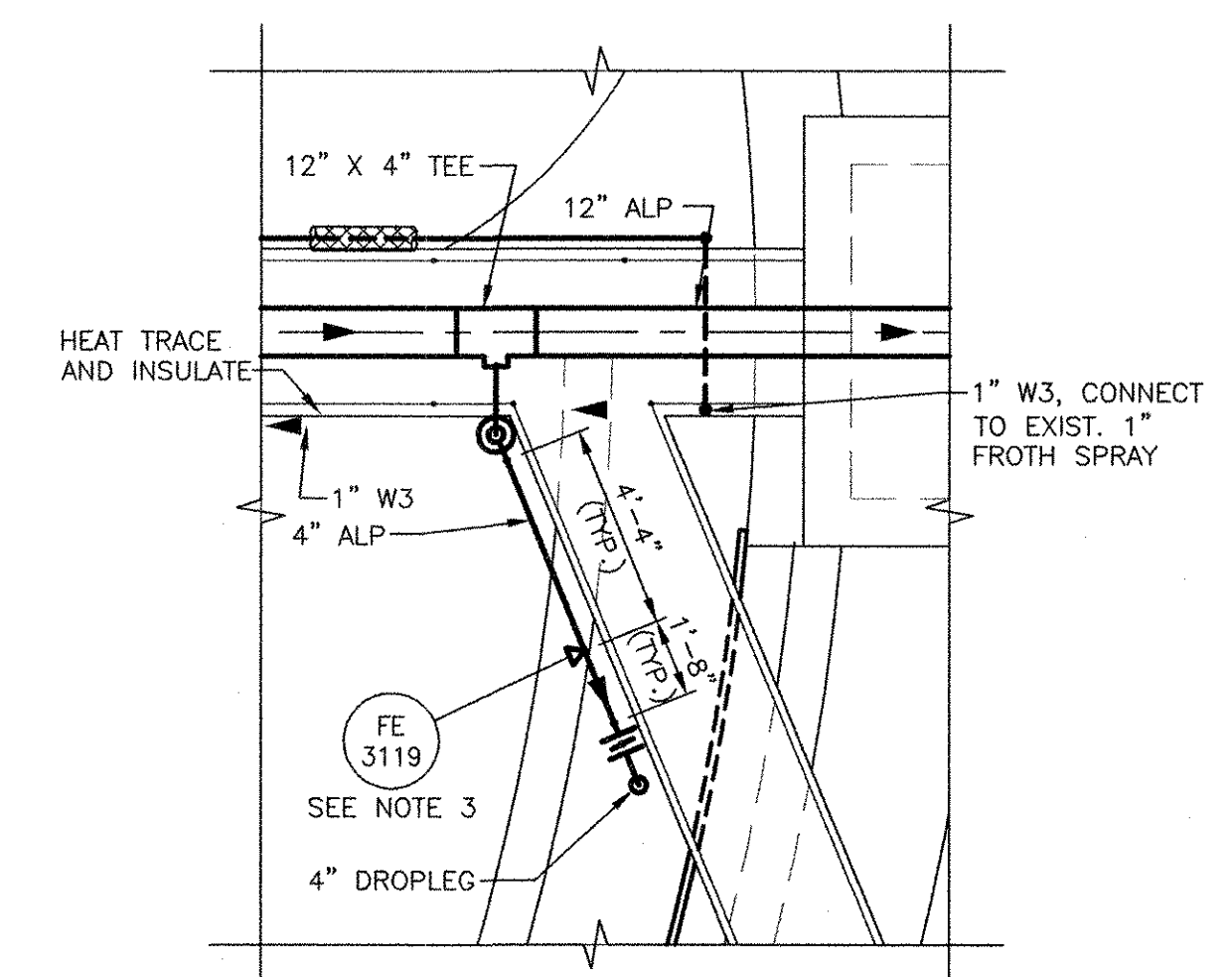
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

**EXISTING AERATION TANKS NO. 1
 MODIFICATIONS UPPER PLAN**

SCALE: 1/8"=1'-0"
 (AERATION TANK NO. 3 SIMILAR)

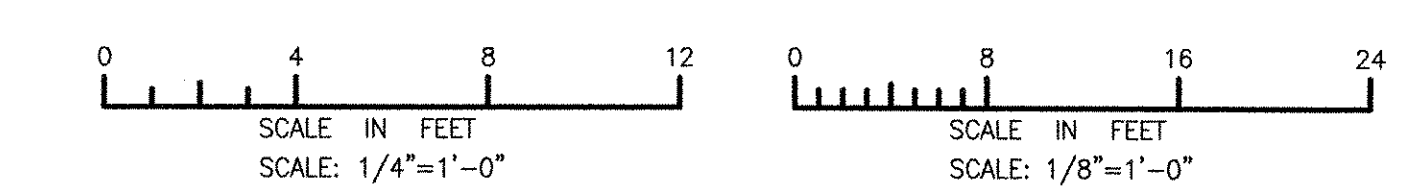


PART PLAN
 SCALE: 1/4"=1'-0"



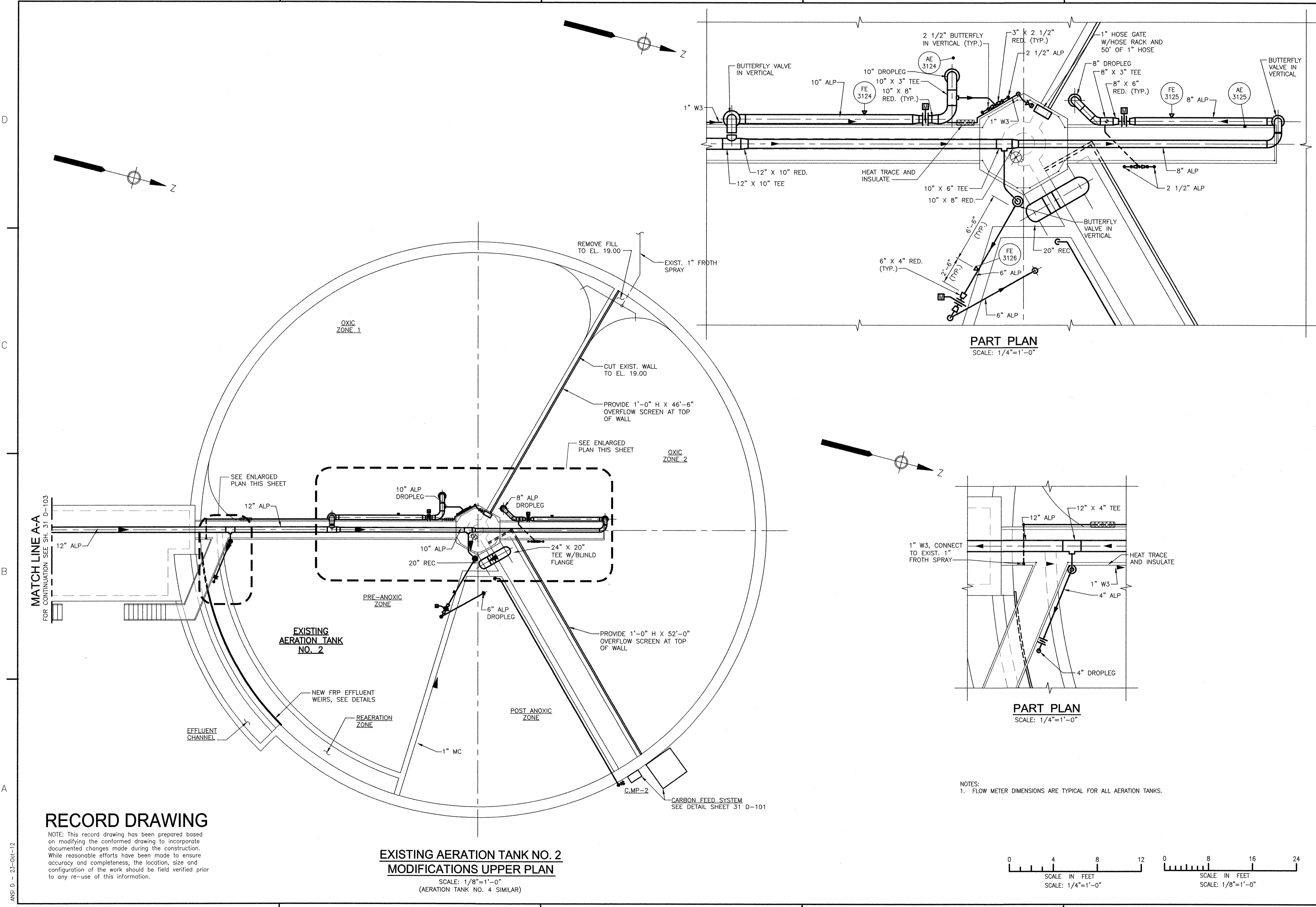
PART PLAN
 SCALE: 1/4"=1'-0"

- NOTES:
 1. FLOW METER DIMENSIONS ARE TYPICAL FOR ALL AERATION TANKS.
 2. NOT USED.
 3. FLOW METER FOR TANK NO. 1 ONLY.



		RECORD DRAWINGS																
<p>PROJECT NO: 60148648 CAD DWG FILE: 31 D-103 DESIGNED BY: C. GALLIGAN DRAWN BY: S.A. COTE DEPT CHECK: ---- PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>																		
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3</p>		<p>AERATION TANK NO. 1 - MODIFICATIONS UPPER PLAN MECHANICAL PROCESS</p>																
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>10/19/12</td> <td>SAC</td> <td>CFG</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>1</td> <td>11/10/10</td> <td>SAC</td> <td>CFG</td> <td>APPENDUM 1</td> </tr> </tbody> </table>		NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION	2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING	1	11/10/10	SAC	CFG	APPENDUM 1	<p>REGISTERED PROFESSIONAL ENGINEER MECHANICAL No. 7637 CHRISTOPHER F. GALLIGAN</p>	
NO.	DATE	MADE BY	CHECKED BY	DESCRIPTION														
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING														
1	11/10/10	SAC	CFG	APPENDUM 1														

ANSI D - 23-Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\31 D-104.DWG
 LAST UPDATE: Tuesday, October 23, 2012 1:50:54 PM
 PLOT DATE: Tuesday, October 23, 2012 2:11:47 PM



RECORD DRAWING

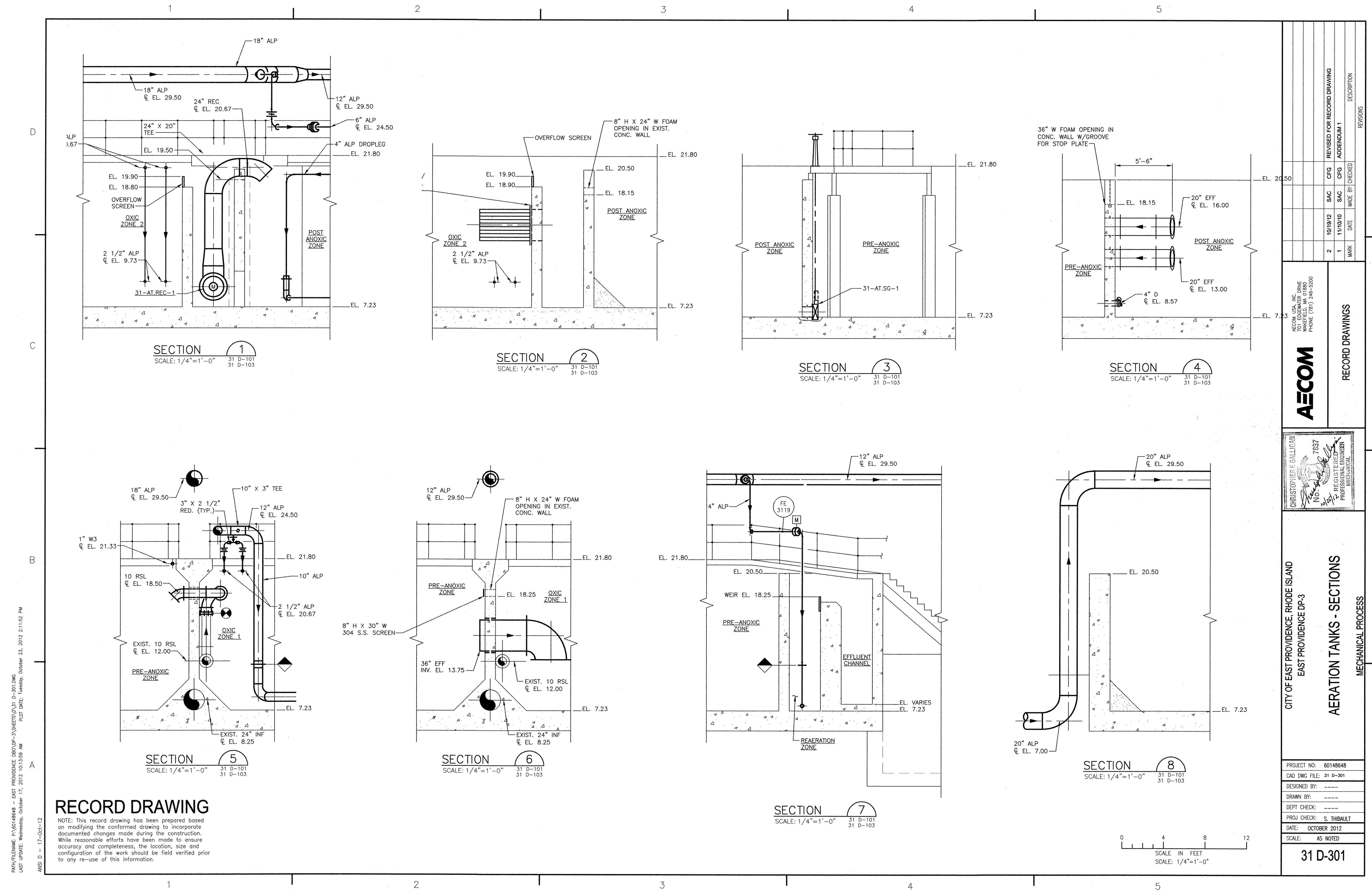
NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

**EXISTING AERATION TANK NO. 2
 MODIFICATIONS UPPER PLAN**
 SCALE: 1/8"=1'-0"
 (AERATION TANK NO. 4 SIMILAR)

NOTES:
 1. FLOW METER DIMENSIONS ARE TYPICAL FOR ALL AERATION TANKS.



<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> <tr> <td>2</td> <td>10/19/12</td> <td>SAC</td> <td>CFG</td> <td>REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>1</td> <td>11/10/10</td> <td>SAC</td> <td>CFG</td> <td>ADDENDUM 1</td> </tr> <tr> <td>MARK</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		NO.	DATE	MADE BY	CHECKED	DESCRIPTION	2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING	1	11/10/10	SAC	CFG	ADDENDUM 1	MARK				
NO.	DATE	MADE BY	CHECKED	DESCRIPTION																	
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING																	
1	11/10/10	SAC	CFG	ADDENDUM 1																	
MARK																					
<p>AECOM USA, INC. ONE WAVERFIELD WAY 01980 WAREHOUSES, MA 01980 PHONE (781) 246-5200</p> <p>AECOM</p> <p>RECORD DRAWINGS</p>																					
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3</p> <p>AERATION TANK NO. 2 - MODIFICATIONS UPPER PLAN MECHANICAL PROCESS</p>																					
<p>PROJECT NO: 60148648 CAD DWG FILE: 31 D-104 DESIGNED BY: _____ DRAWN BY: _____ DEPT CHECK: _____ PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>																					
<p>93077 CHRISTOPHER F. GALLIGAN REGISTERED PROFESSIONAL MECHANICAL ENGINEER</p>																					
<p>31 D-104</p>																					



SECTION 1
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

SECTION 2
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

SECTION 3
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

SECTION 4
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

SECTION 5
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

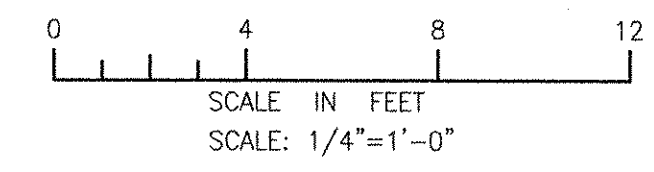
SECTION 6
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

SECTION 7
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

SECTION 8
SCALE: 1/4"=1'-0"
31 D-101
31 D-103

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>10/19/12</td> <td>SAC CFG REVISED FOR RECORD DRAWING</td> </tr> <tr> <td>1</td> <td>11/10/10</td> <td>SAC CFG ADDENDUM 1</td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION	2	10/19/12	SAC CFG REVISED FOR RECORD DRAWING	1	11/10/10	SAC CFG ADDENDUM 1
NO.	DATE	DESCRIPTION								
2	10/19/12	SAC CFG REVISED FOR RECORD DRAWING								
1	11/10/10	SAC CFG ADDENDUM 1								
<p>MADE BY CHECKED</p>										
<p>MARK</p>										
<p>DATE</p>										
<p>NO. 10101</p>										
<p>REGISTERED PROFESSIONAL ENGINEER</p>										
<p>MECHANICAL</p>										
<p>7837</p>										
<p>CHRISTOPHER P. GALLICIAN</p>										
<p>AECOM USA, INC. (DBE) WAKEFIELD, MASSACHUSETTS 01880 PHONE (781) 246-5200</p>										
<p>AECOM</p>										
<p>RECORD DRAWINGS</p>										
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3</p>										
<p>AERATION TANKS - SECTIONS</p>										
<p>MECHANICAL PROCESS</p>										
<p>PROJECT NO: 60148648</p>										
<p>CAD DWG FILE: 31 D-301</p>										
<p>DESIGNED BY: ----</p>										
<p>DRAWN BY: ----</p>										
<p>DEPT CHECK: ----</p>										
<p>PROJ CHECK: S. THIBAUT</p>										
<p>DATE: OCTOBER 2012</p>										
<p>SCALE: AS NOTED</p>										
<p>31 D-301</p>										

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\031 D-301.DWG
 LAST UPDATE: Wednesday, October 17, 2012 10:13:59 AM
 PLOT DATE: Tuesday, October 23, 2012 2:11:52 PM
 ANSI D - 17-Oct-12

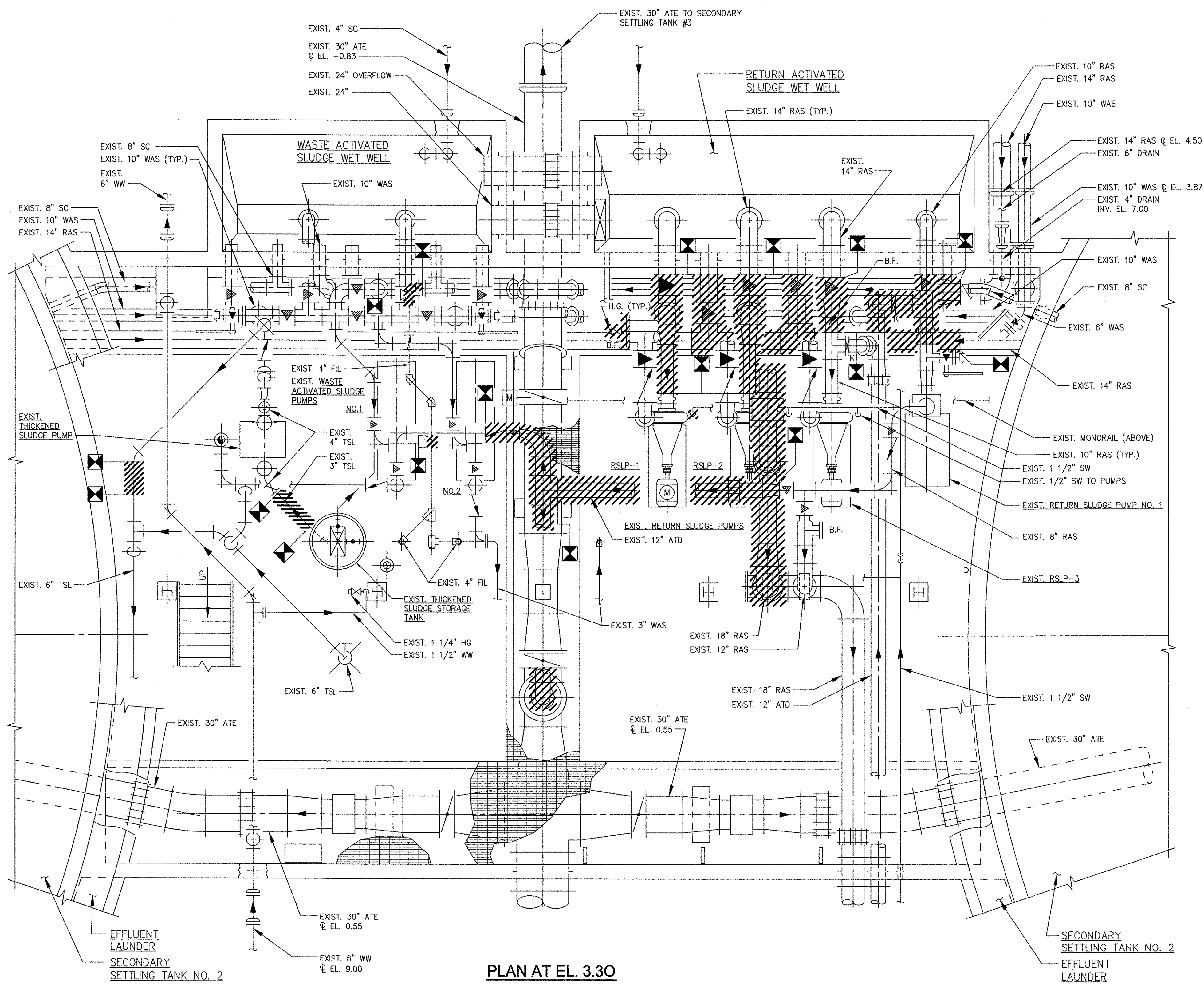
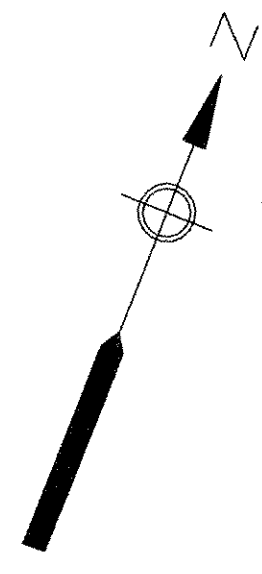
1

2

3

4

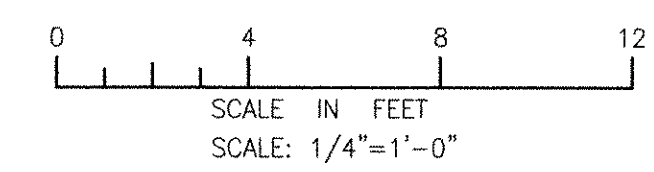
5



PLAN AT EL. 3.30

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\DP-3\SHEETS\032 DD-101.DWG
 PLOT DATE: Friday, October 26, 2012 1:09:52 PM
 LAST UPDATE: Thursday, October 11, 2012 3:44:27 PM
 ANSI D - 11-Oct-12

REVISIONS		DESCRIPTION
2	10/19/12	SAC CFG REVISED FOR RECORD DRAWING
1	11/10/10	SAC CFG ADDENDUM 1
MARK	DATE	MADE BY (CHECKED)

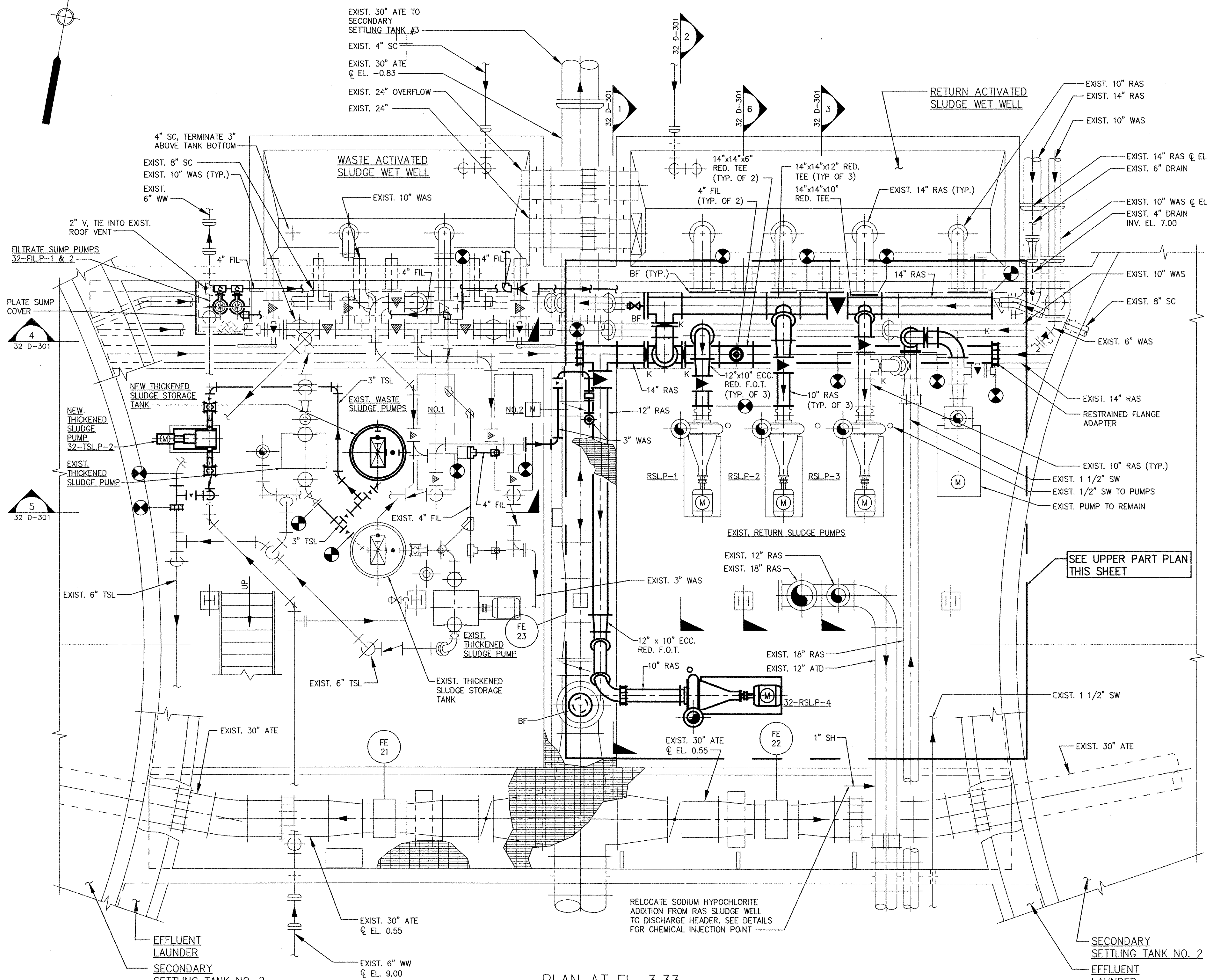
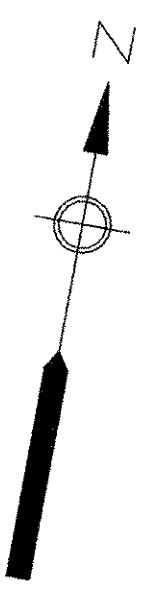
AECOM USA, INC.
 NEW YORK OFFICE
 WASHINGTON, D.C. 20005
 PHONE (781) 246-5200
AECOM
 RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

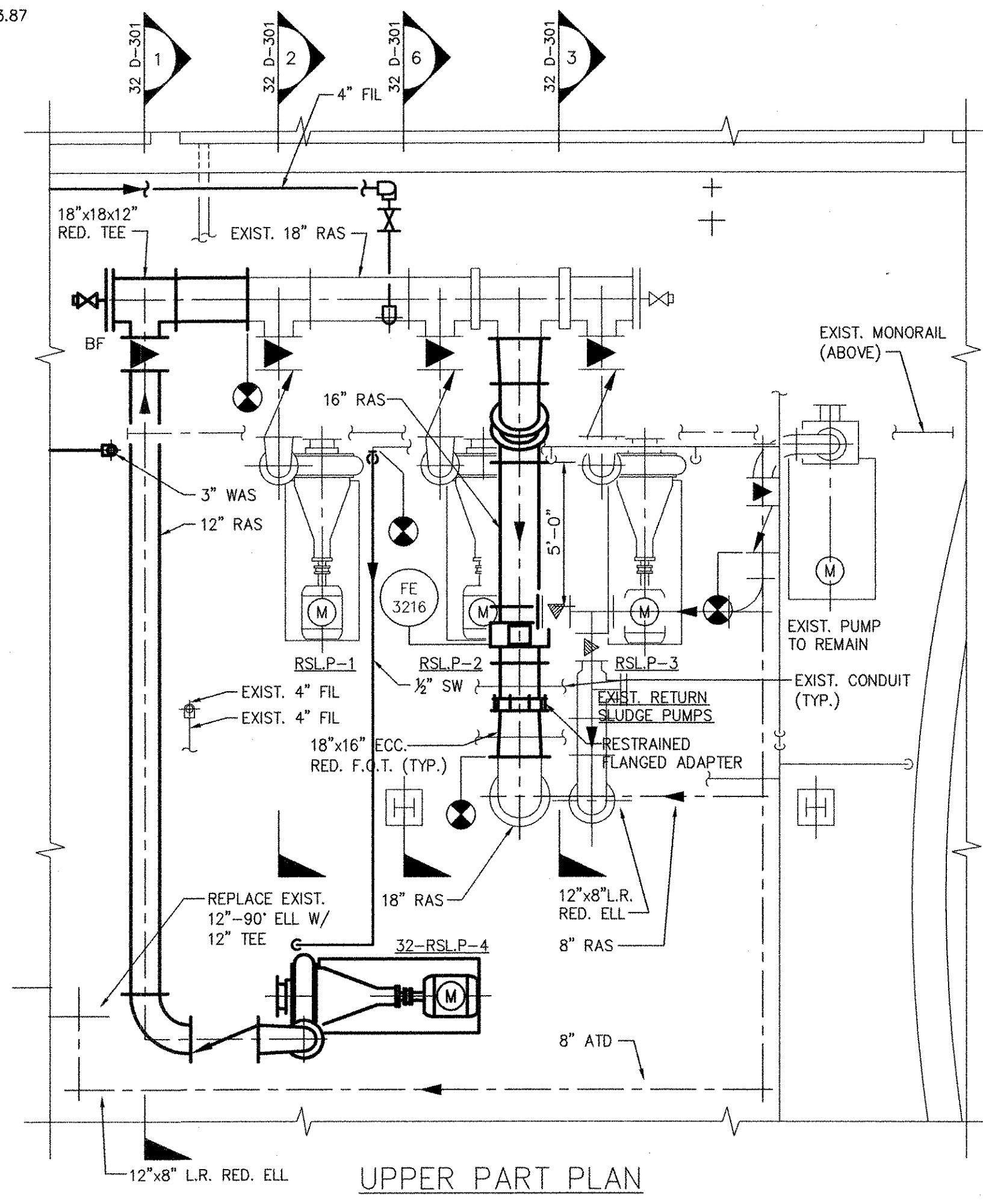
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
RAS PUMP STATION - DEMOLITION PLAN
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	32 00-101
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DD-101



PLAN AT EL. 3.33

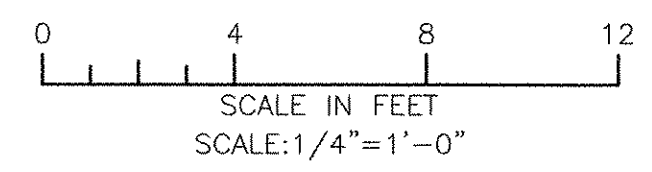


UPPER PART PLAN

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 8 - Oct - 12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\32 D-101.DWG
 LAST UPDATE: Monday, October 08, 2012 2:18:12 PM
 PLOT DATE: Friday, October 26, 2012 1:09:55 PM



REVISIONS	
MARK	DESCRIPTION
2	10/19/12 SAC CFM REVISED FOR RECORD DRAWING
1	11/10/10 MBB CFM ADDENDUM 1

AECOM
 AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5500

CHRISTOPHER F. GALLIGAN
 N.C. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
RAS PUMP STATION - MODIFICATIONS
LOWER PLAN
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	32 D-101
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ. CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

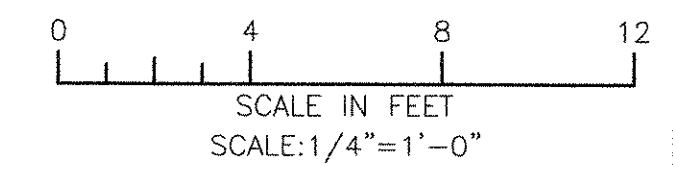
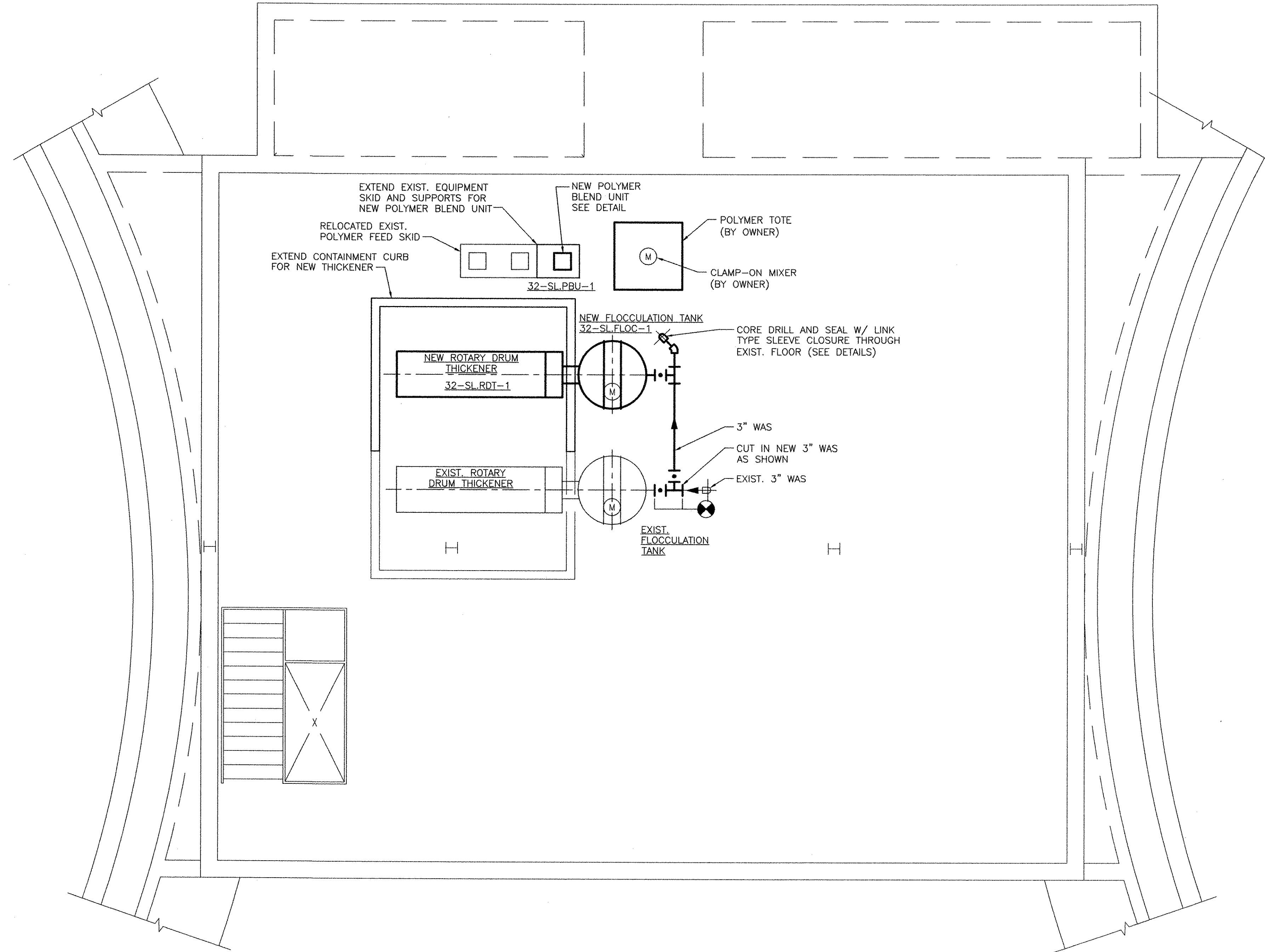
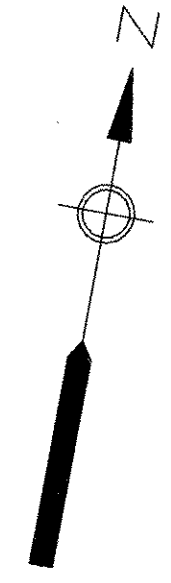
32 D-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\OP-3\SHEETS\032 D-102.DWG
 LAST UPDATE: Monday, October 08, 2012 2:19:33 PM
 PLOT DATE: Friday, October 26, 2012 1:09:59 PM

ANSI D - 8-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING
1	11/10/10	SAC	CFG	ADDENDUM 1
		MARK		

AECOM USA, INC.
 100 WATER STREET
 WAKEFIELD, MA 01880
 PHONE (781) 248-5200

AECOM

RECORD DRAWINGS

CHRISTOPHER F. GALLIGAN
 No. 7837
 REGISTERED ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

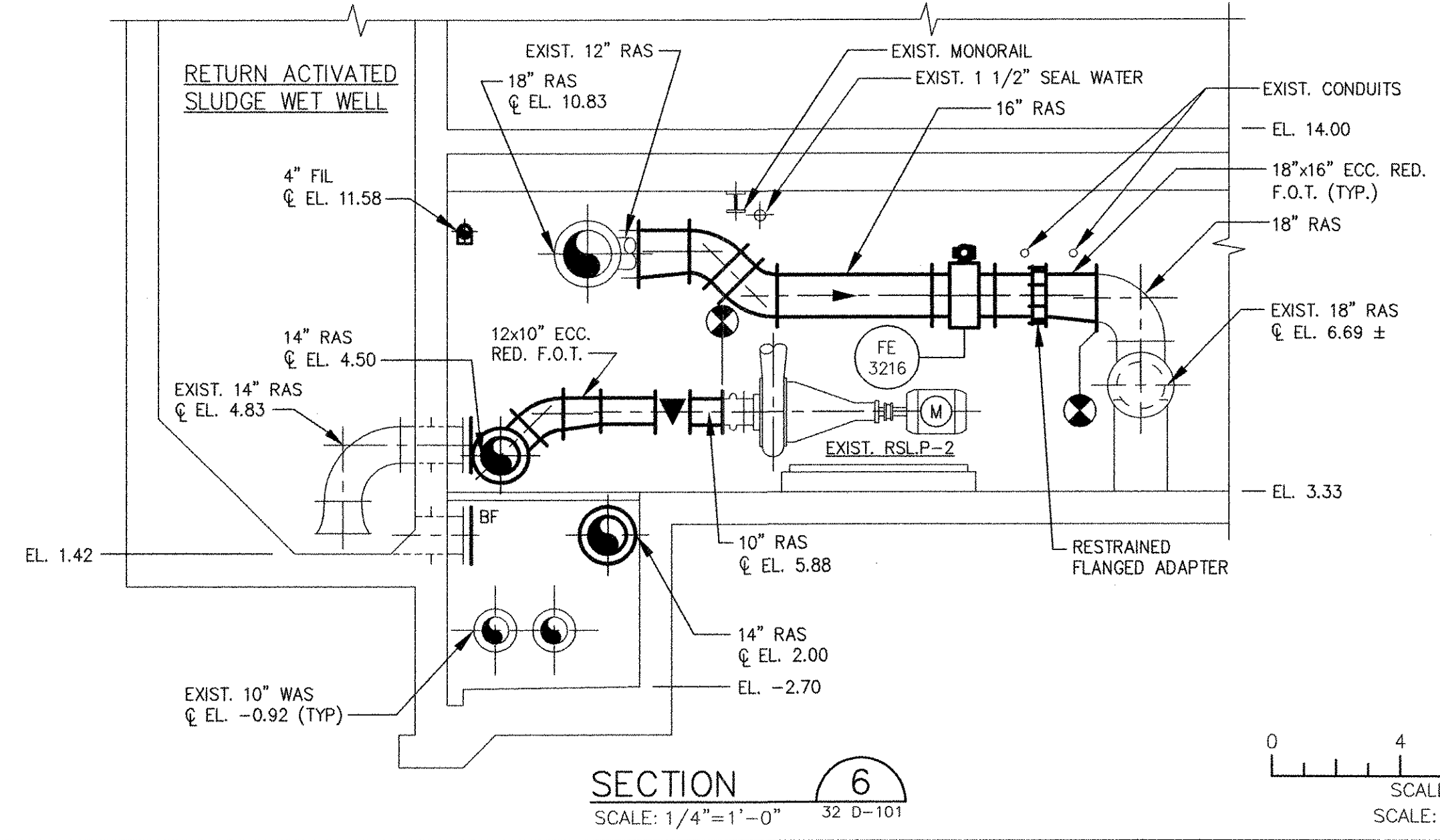
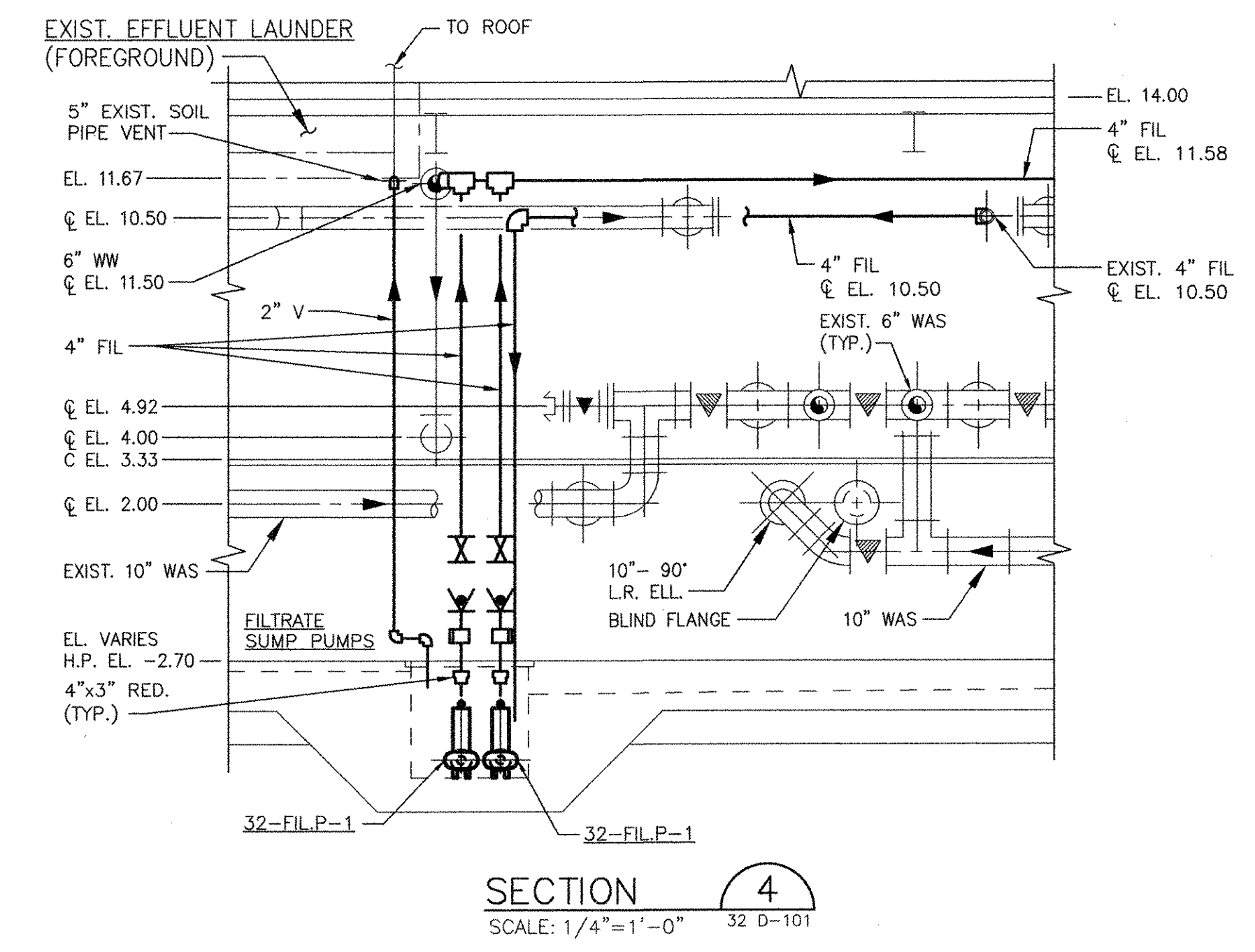
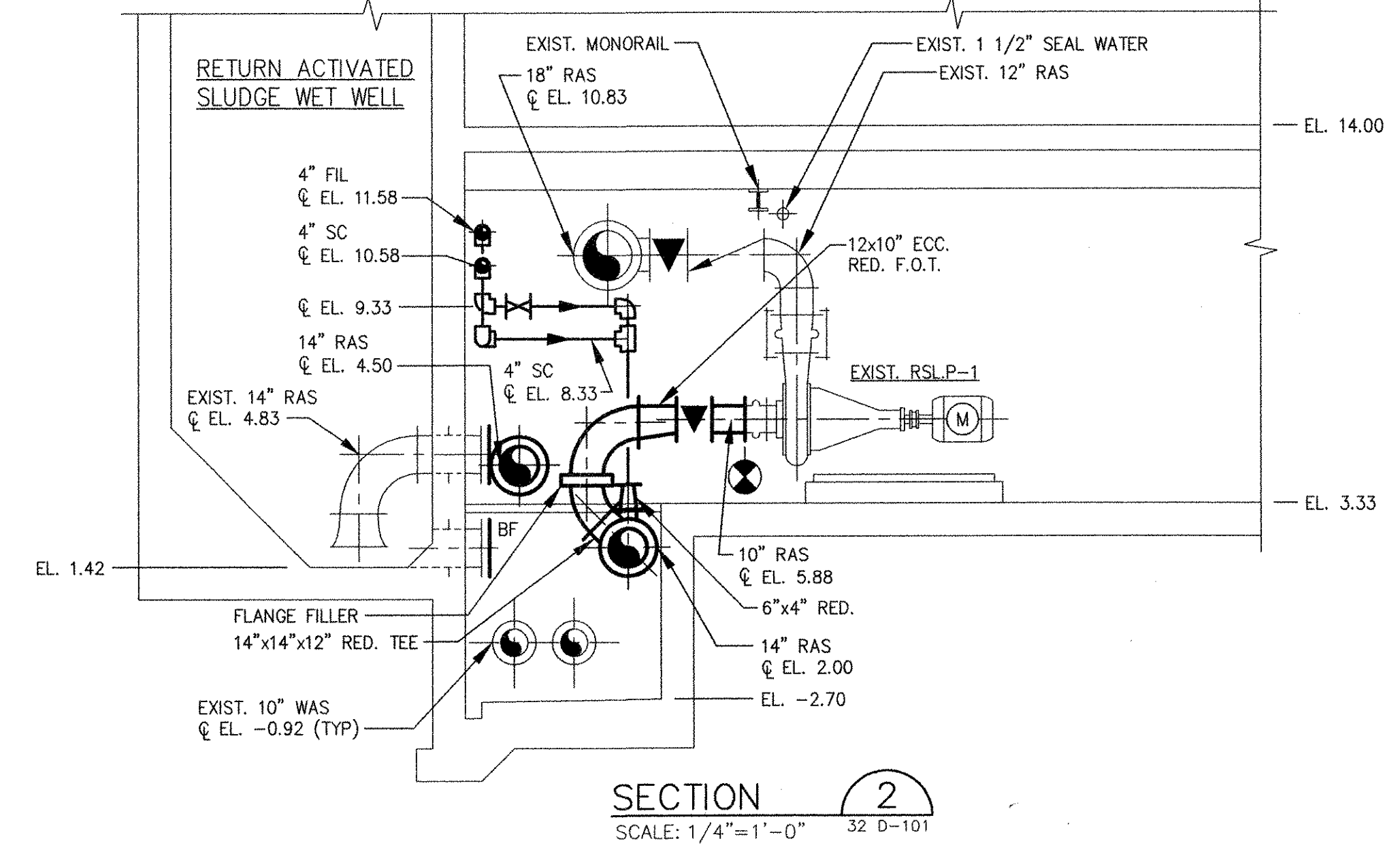
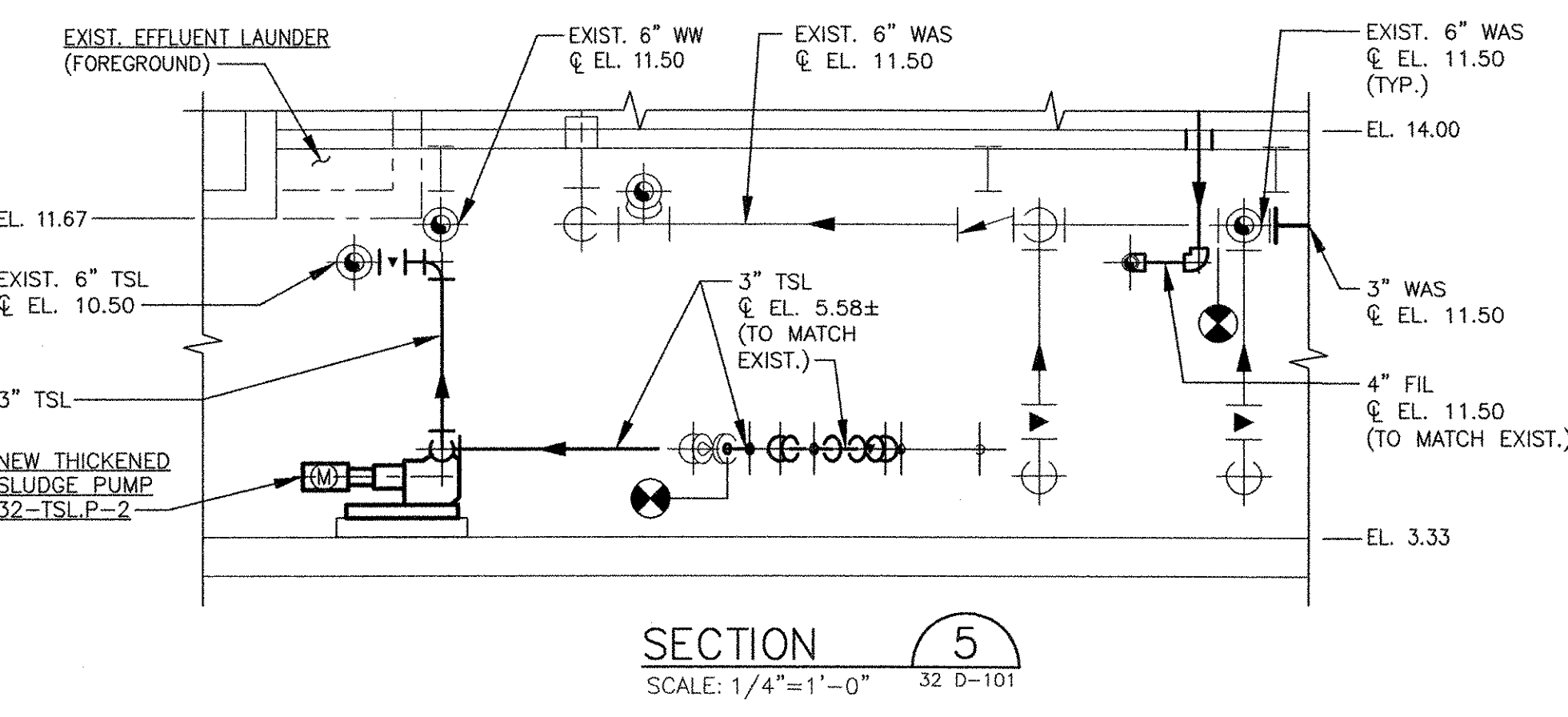
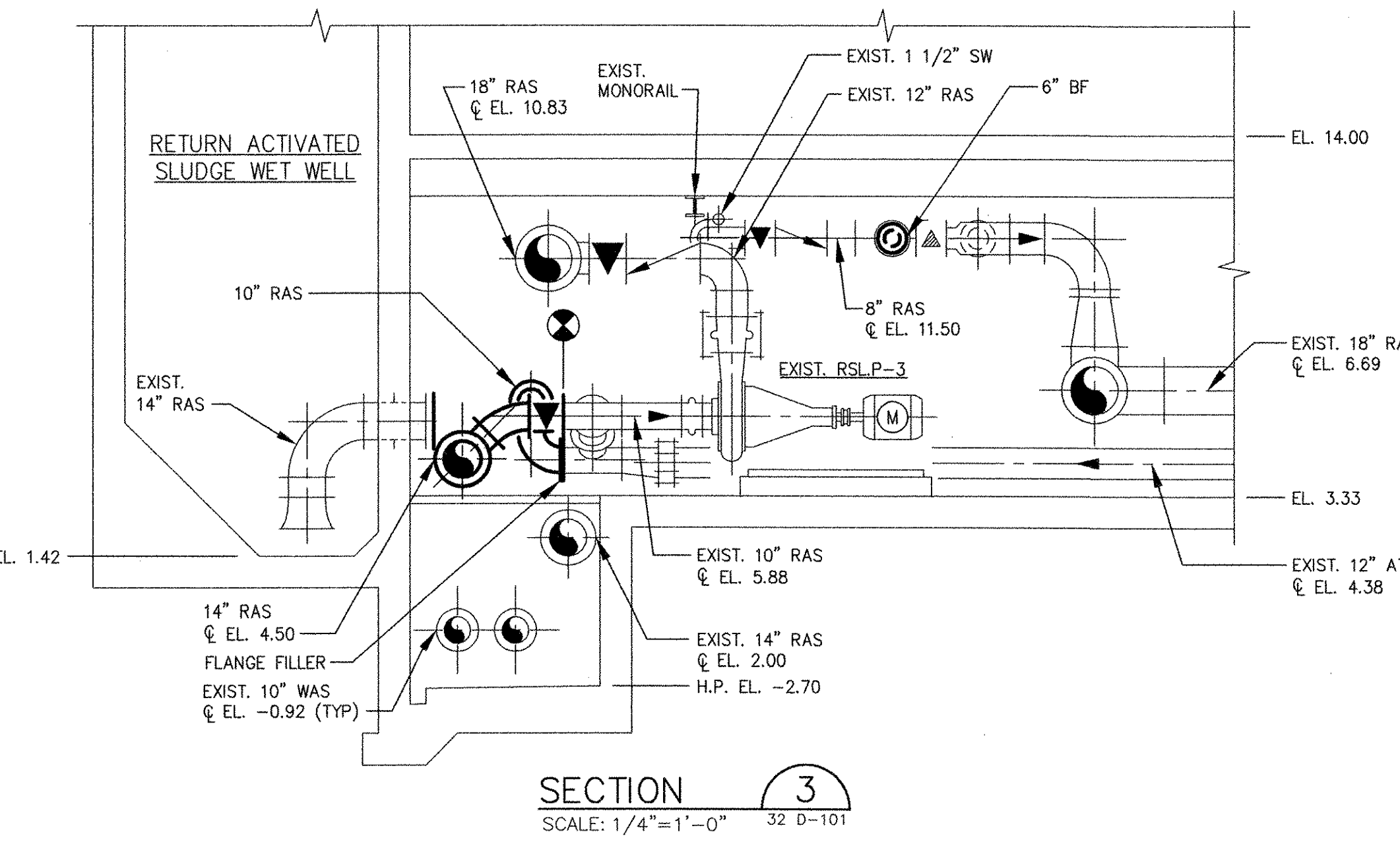
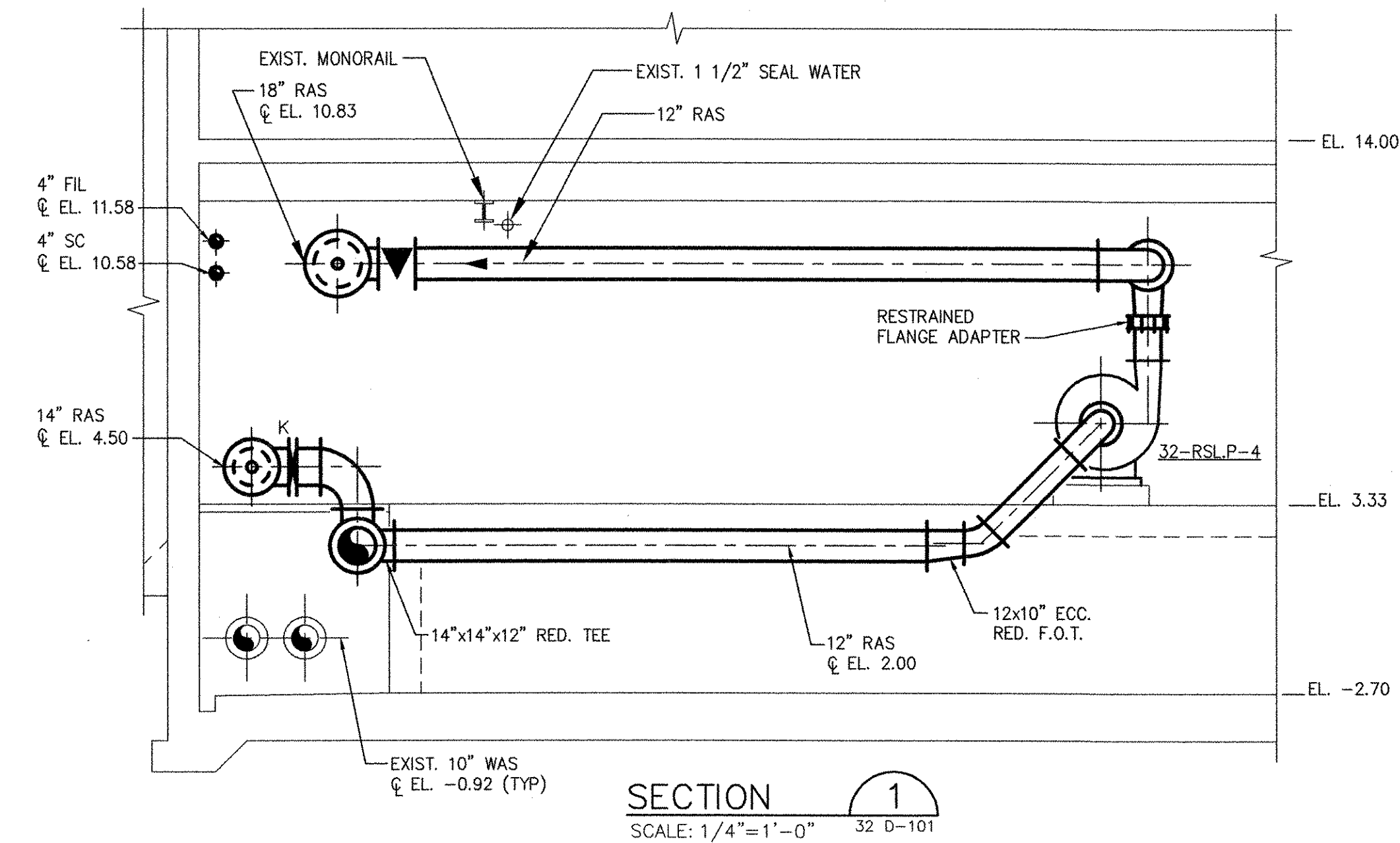
**RAS PUMP STATION - MODIFICATIONS
 UPPER PLAN**

MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	32 D-102
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

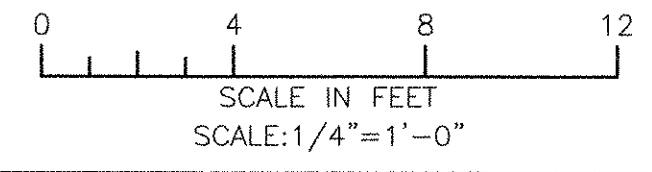
32 D-102

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\32 D-301.DWG
 PLOT DATE: Friday, October 26, 2012 11:00:06 PM
 LAST UPDATE: Monday, October 08, 2012 2:19:59 PM
 ANSI D - 8-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	BY	CHKD.	DESCRIPTION
2	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING
1	11/10/10	SAC	CFG	ADDENDUM 1
		MARK		DATE

AECOM USA, INC.
 ONE WASHINGTON ST.
 WAREHOUSES, MA 01880
 PHONE (781) 246-5200

AECOM

CHRISTOPHER F. GALLIGAN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 7837

RECORD DRAWINGS

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
RAS PUMP STATION - MODIFICATIONS
SECTIONS
 MECHANICAL PROCESS

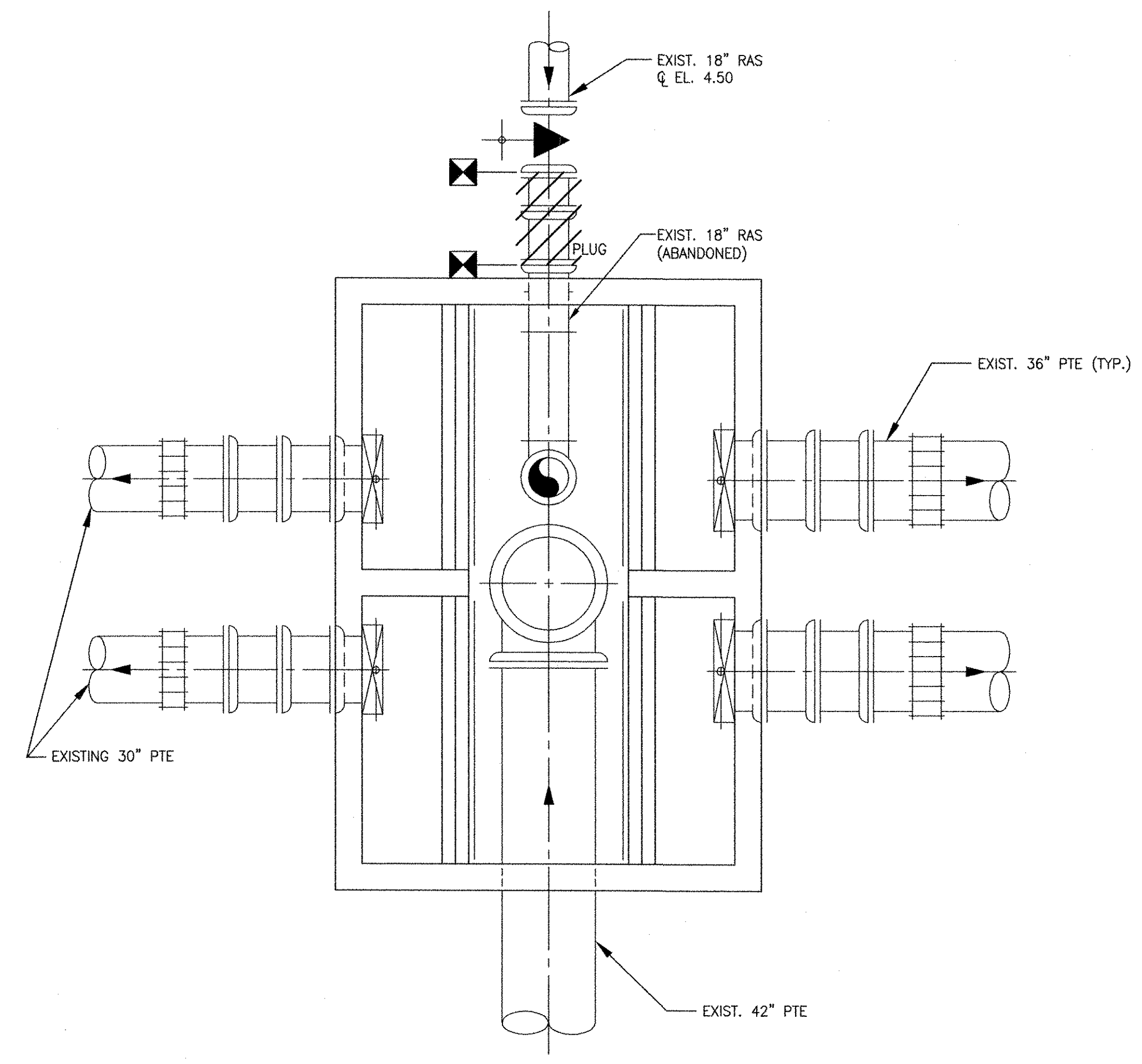
PROJECT NO:	60148648
CAD DWG FILE:	32 D-301
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 D-301

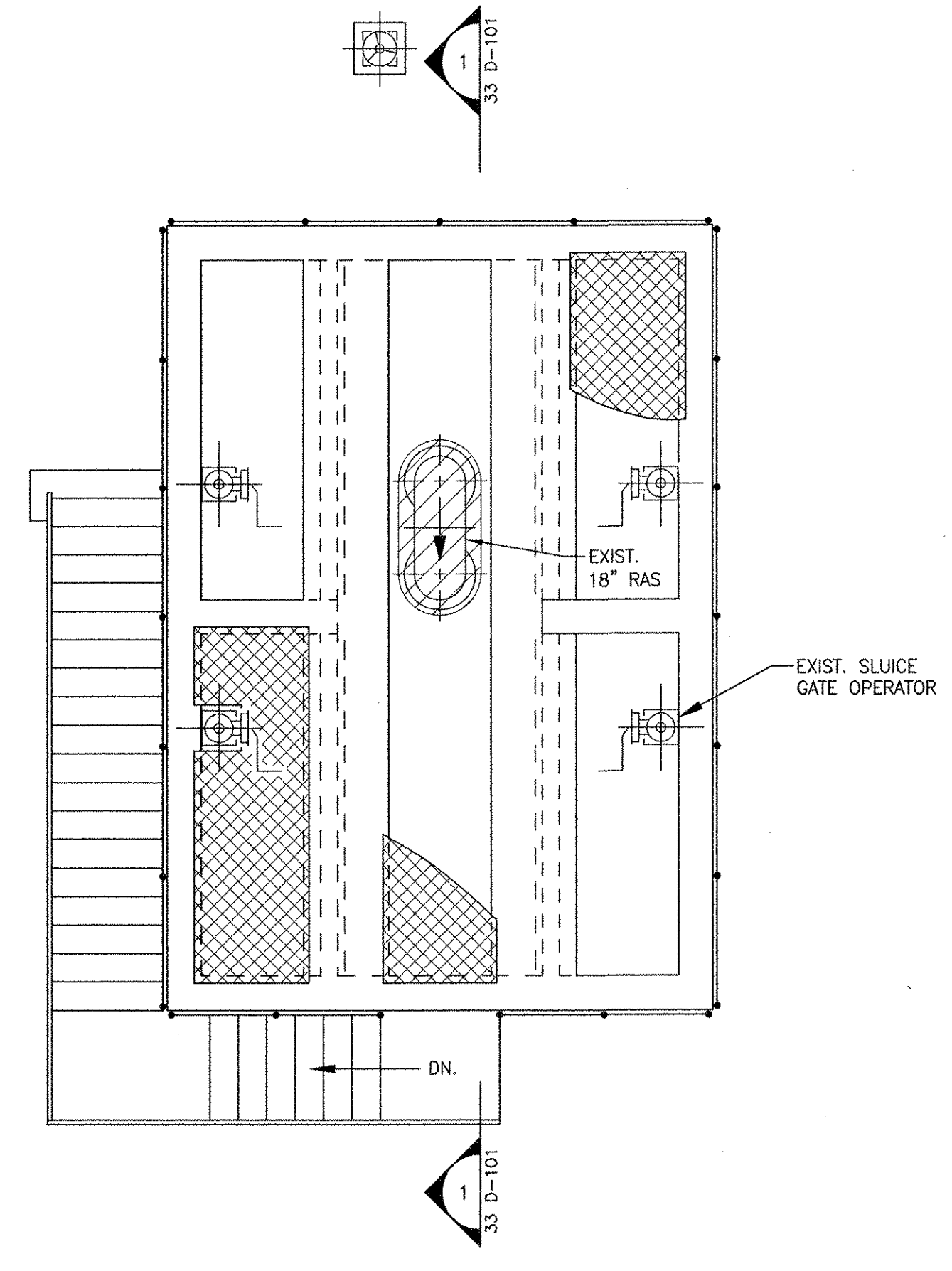
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\33 DD-101.DWG
 LAST UPDATE: Monday, October 08, 2012 2:29:25 PM
 PLOT DATE: Friday, October 26, 2012 2:11:38 PM
 ANSI D = 8-Oct-12

RECORD DRAWING

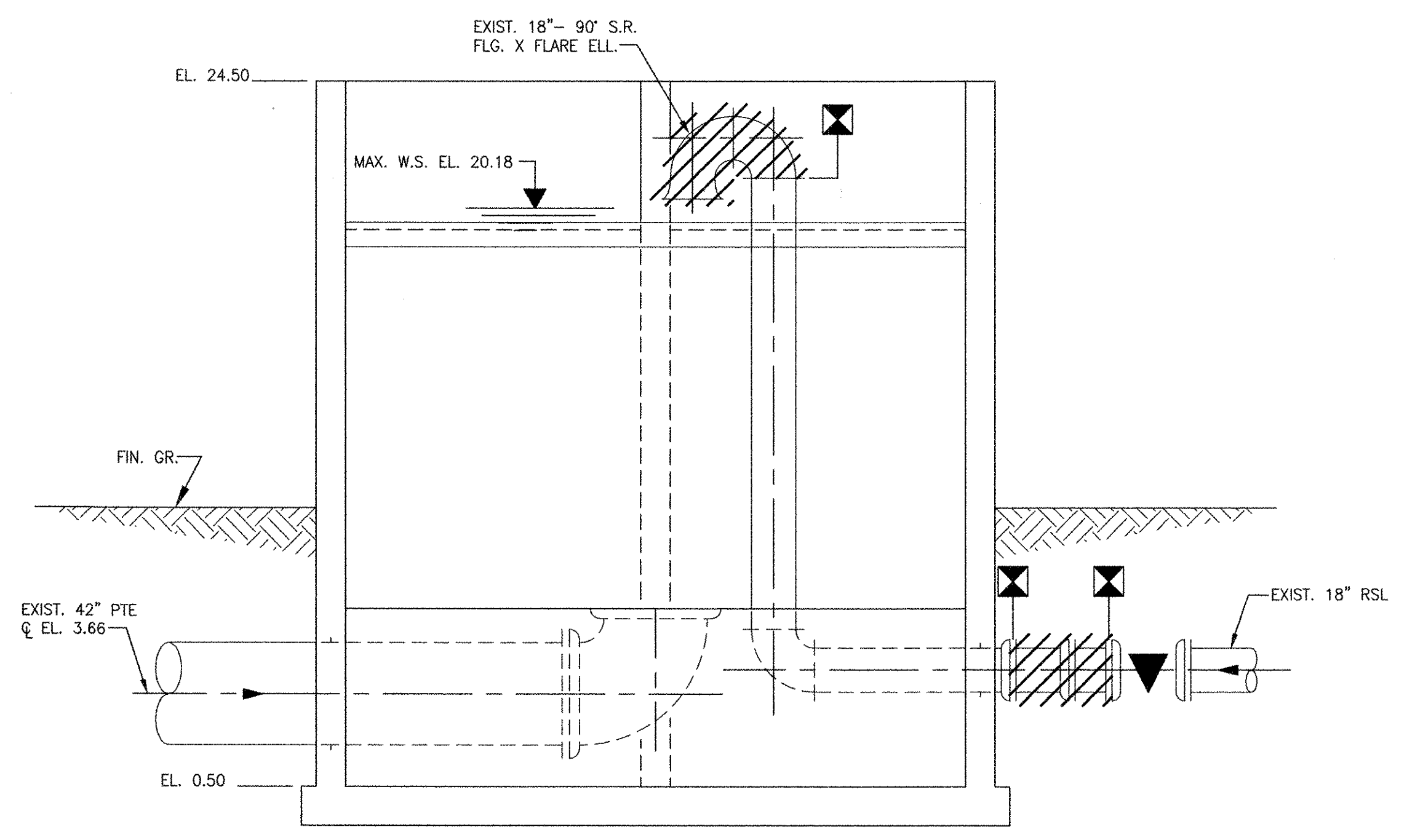
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



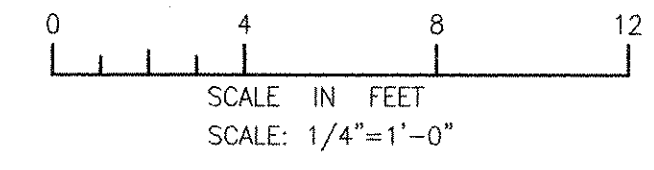
BOTTOM DEMOLITION PLAN



TOP DEMOLITION PLAN



DEMOLITION SECTION
 SCALE: 1/4"=1'-0" 33 D-101



MARK	DATE	SAC	CFG	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

CHRISTOPHER F. GALLIGAN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 1837

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**PRIMARY FLOW SPLITTING STRUCTURE -
 DEMOLITION PLANS AND SECTION**
 MECHANICAL PROCESS

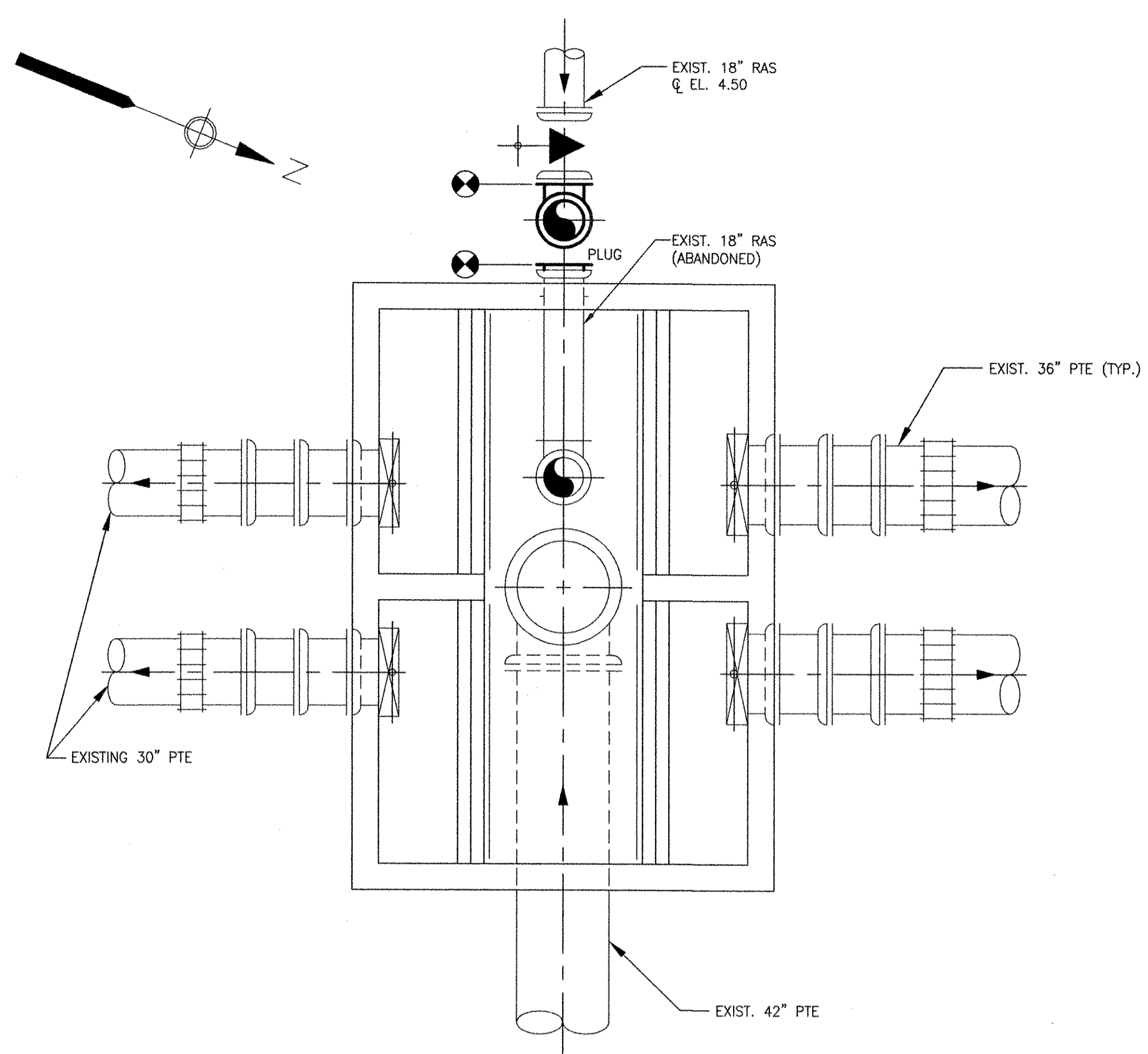
PROJECT NO:	60148648
CAD DWG FILE:	33 DD-101
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

33 DD-101

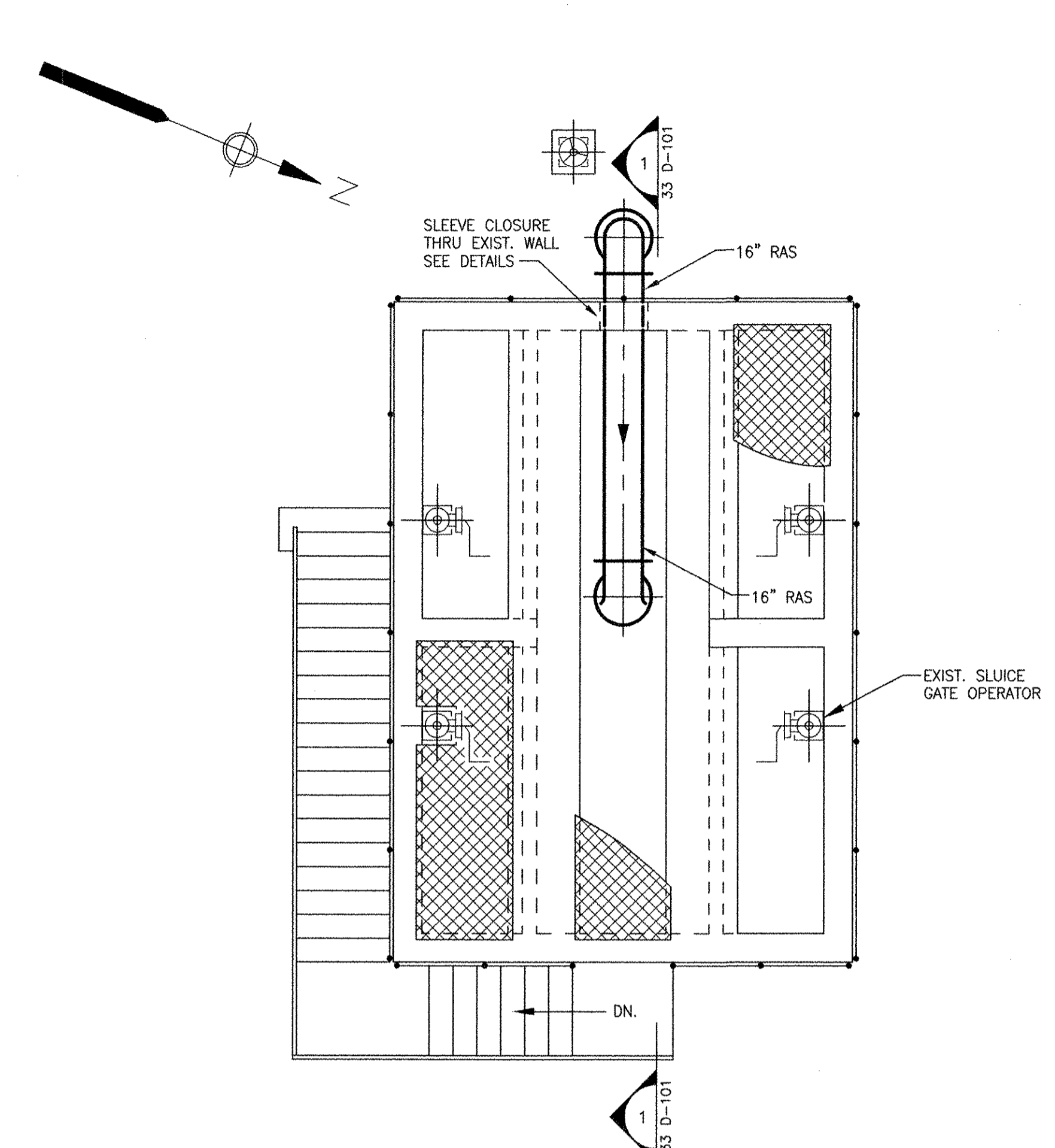
ANSI D - 8 - Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\33 D-101.DWG
 LAST UPDATE: Monday, October 08, 2012 2:20:57 PM
 PLOT DATE: Tuesday, October 23, 2012 2:12:21 PM

RECORD DRAWING

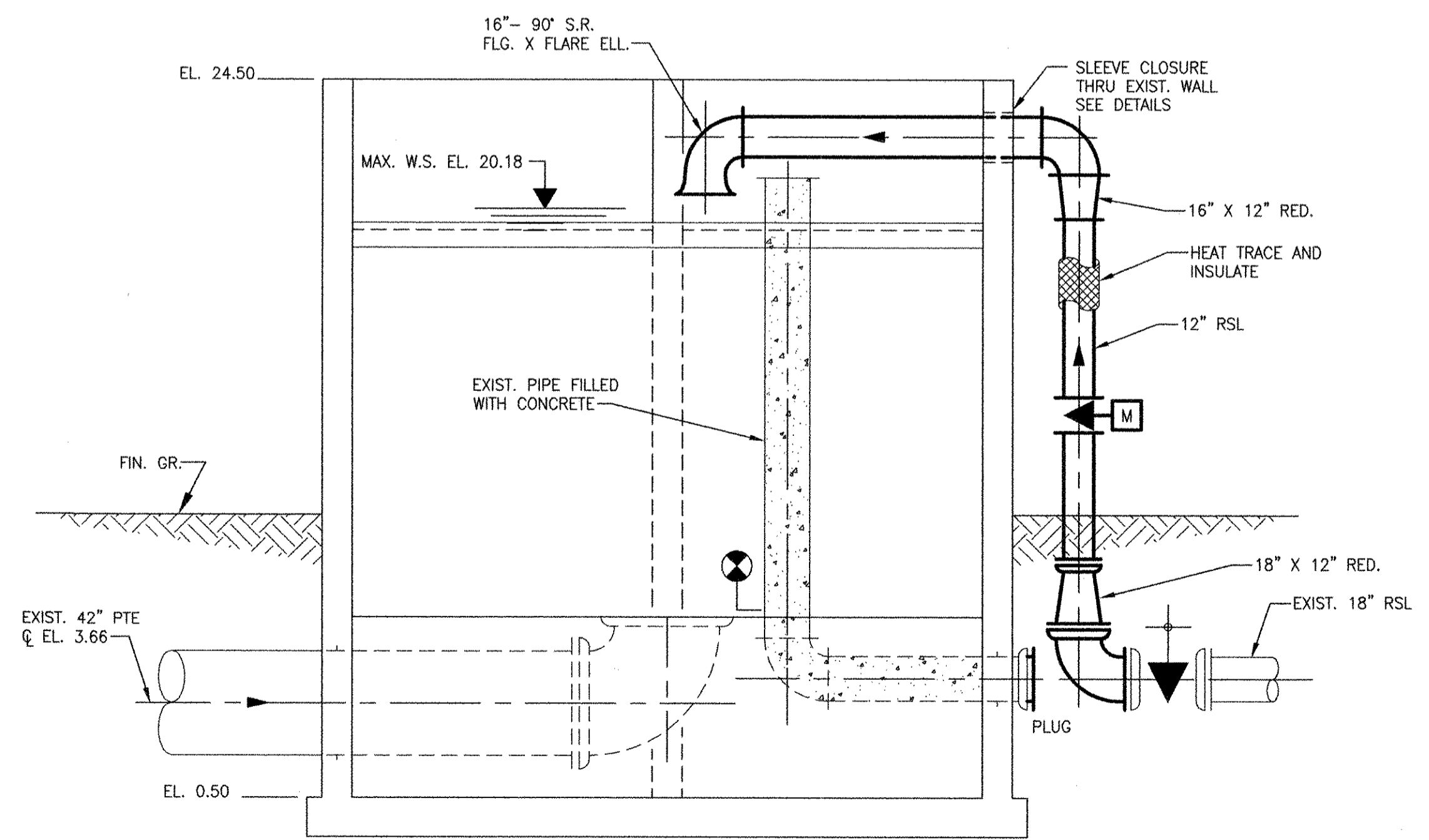
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



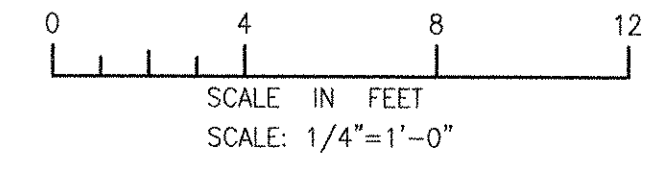
BOTTOM PLAN



TOP PLAN



SECTION 1
 SCALE: 1/4"=1'-0" 33 D-101



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 STATE STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5000

RECORD DRAWINGS

CHRISTOPHER F. GALLICAN
 No. 7837
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

PRIMARY FLOW SPLITTING STRUCTURE MODIFICATION PLANS AND SECTION

MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	33 D-101
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

33 D-101

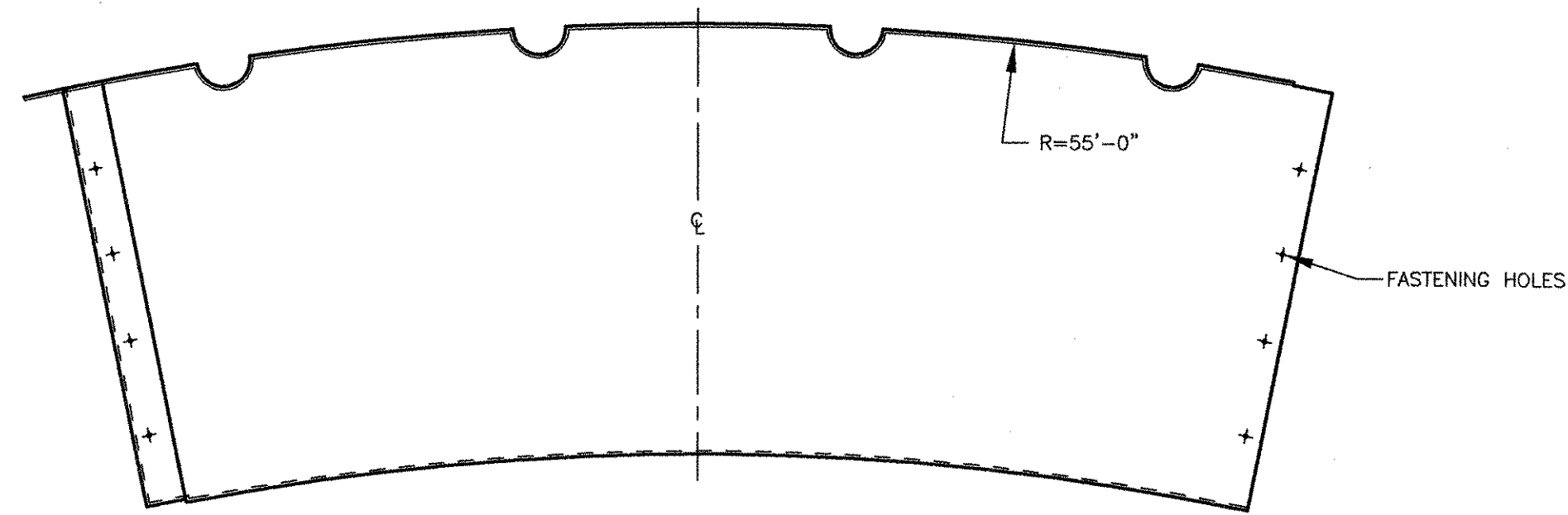
1

2

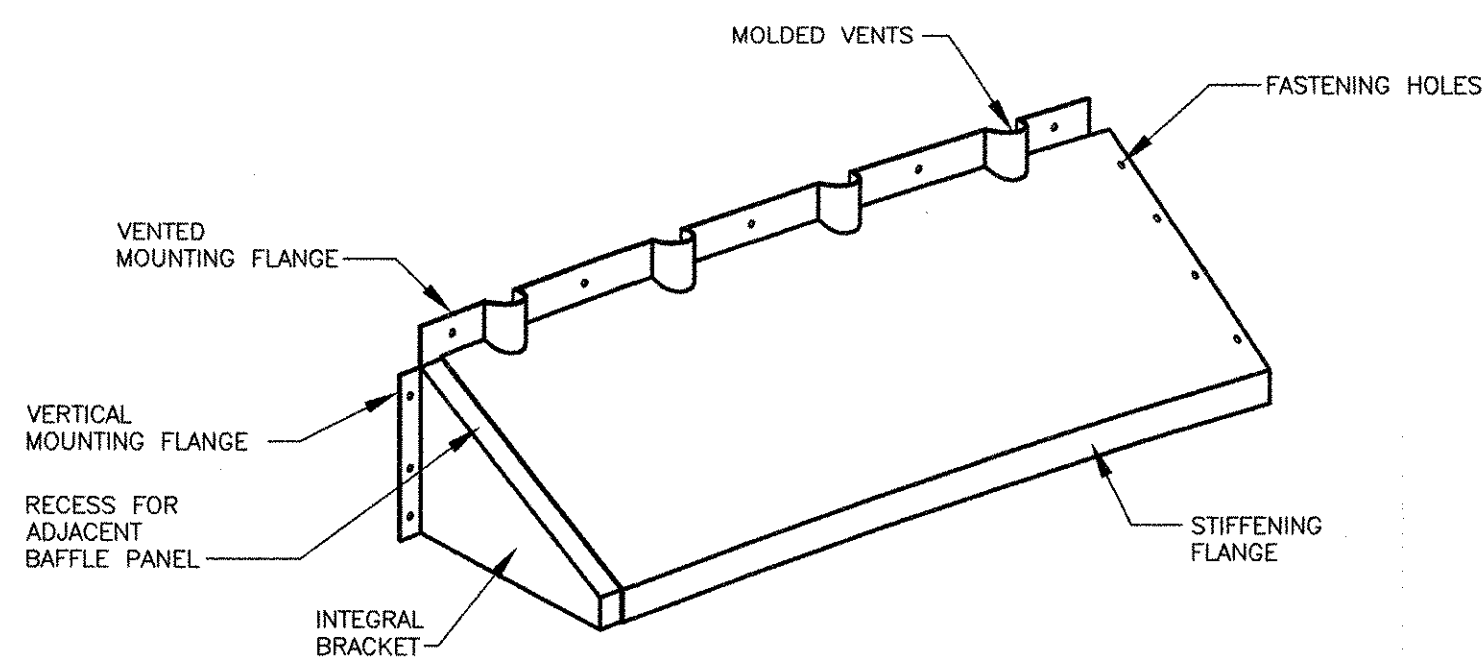
3

4

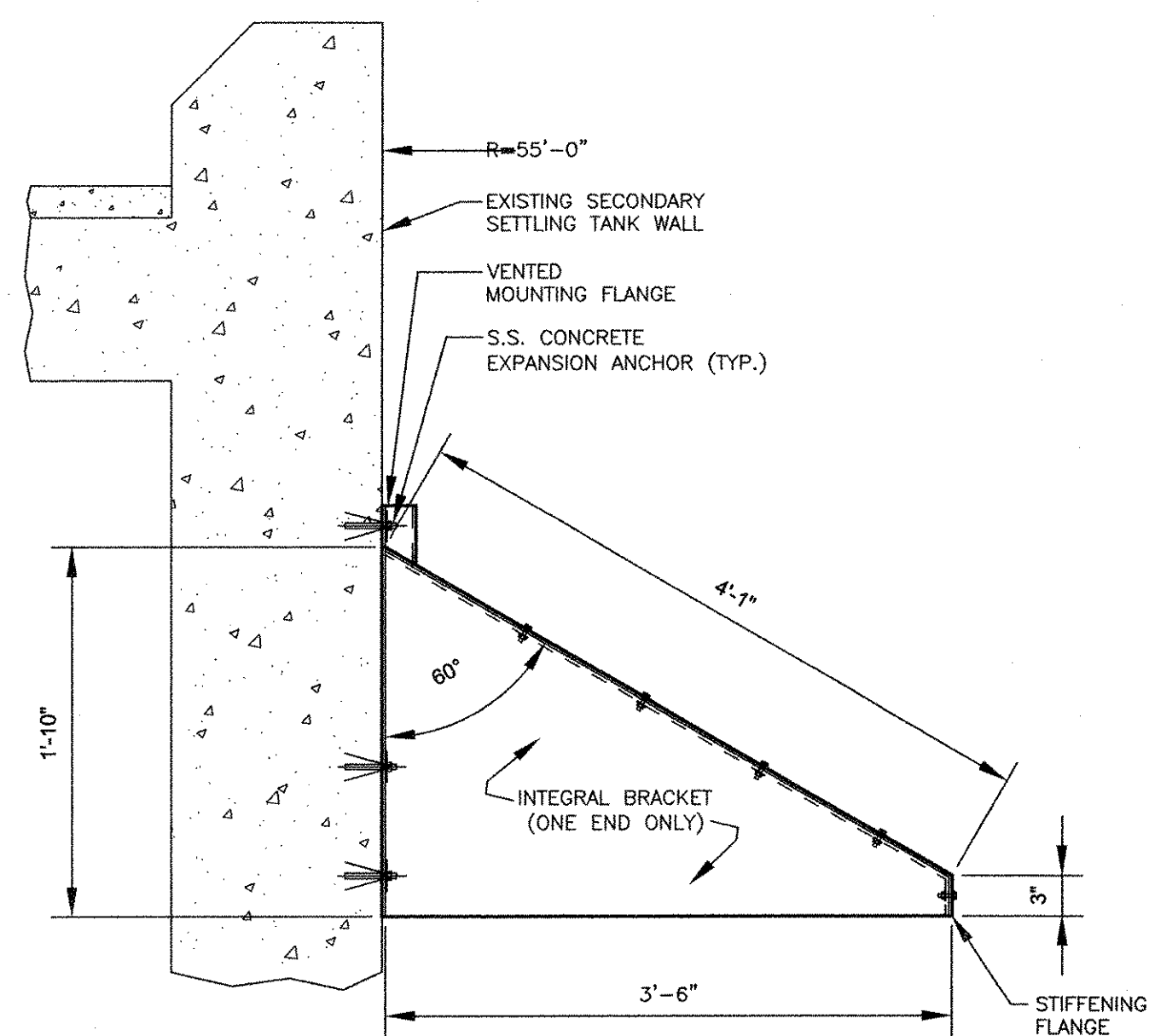
5



TOP VIEW



PERSPECTIVE VIEW



END VIEW

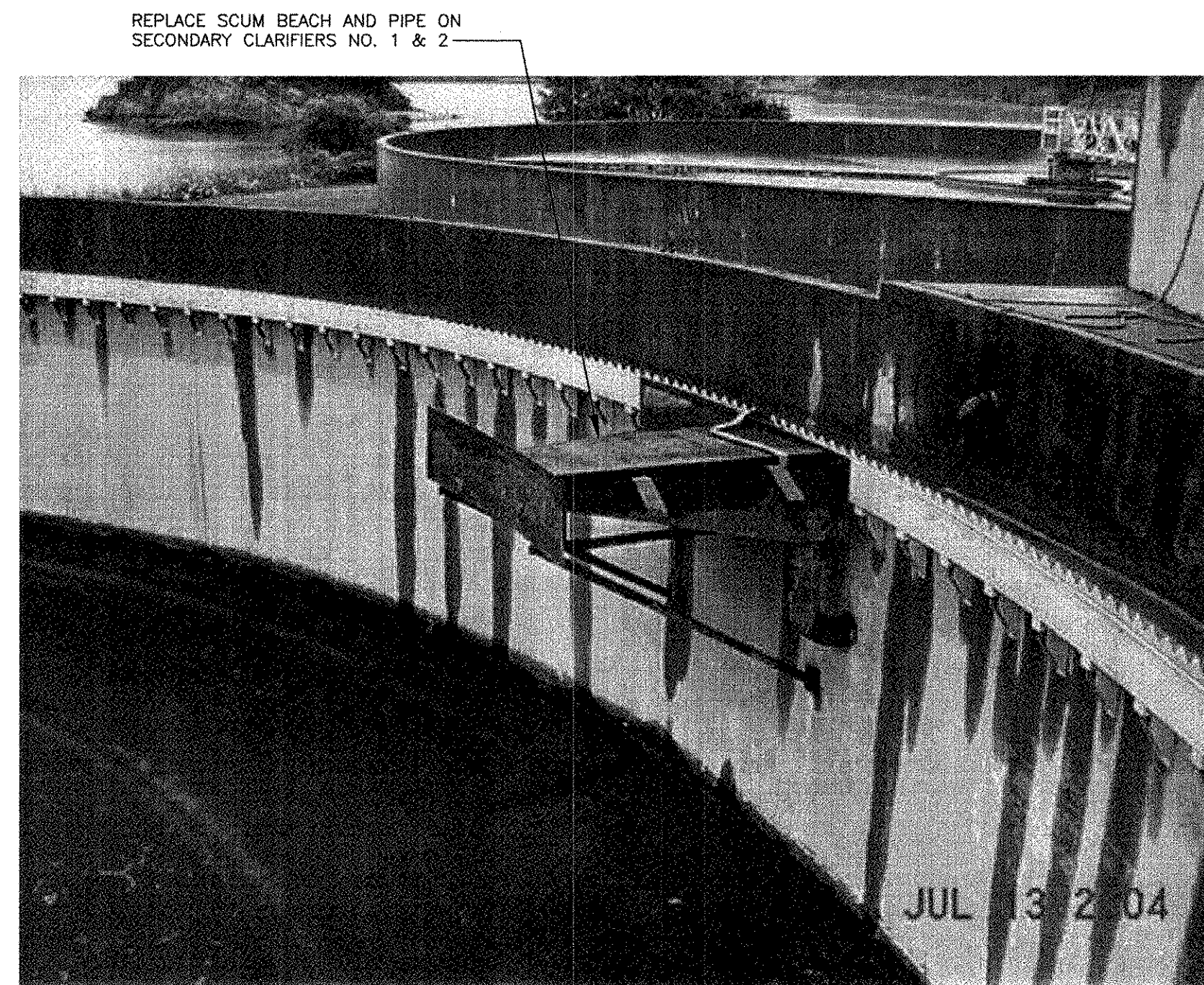
NOTES:

- 1. INSTALL NEW DENSITY CURRENT (STAMFORD) BAFFLE AS INDICATED IN TWO (2) 110'-0" DIAMETER SECONDARY CLARIFIER NO. 1 AND NO. 2.

SECONDARY CLARIFIER DENSITY CURRENT
BAFFLE DETAIL
(NOT TO SCALE)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



SCUM BEACH REPLACEMENT

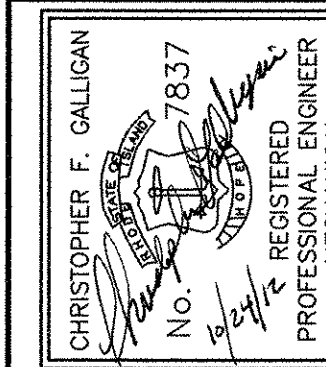
(NOT TO SCALE)

PATH: \\FLENAME.P\60148648 - EAST PROVIDENCE DR\DP-4\SHEETS\045 D-101.DWG
 LAST UPDATE: Monday, October 08, 2012 2:23:08 PM
 PLOT DATE: Tuesday, October 23, 2012 2:12:25 PM
 ANSI D - 8-Oct-12

ACOM USA, INC.
 100 W. MAIN ST.
 WAREFIELD, MA 01886
 PHONE (781) 246-5200



RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

EXISTING SECONDARY CLARIFIERS NO. 1
 & NO. 2 - MODIFICATIONS
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	45 D-101
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

45 D-101

SHEET -- OF --

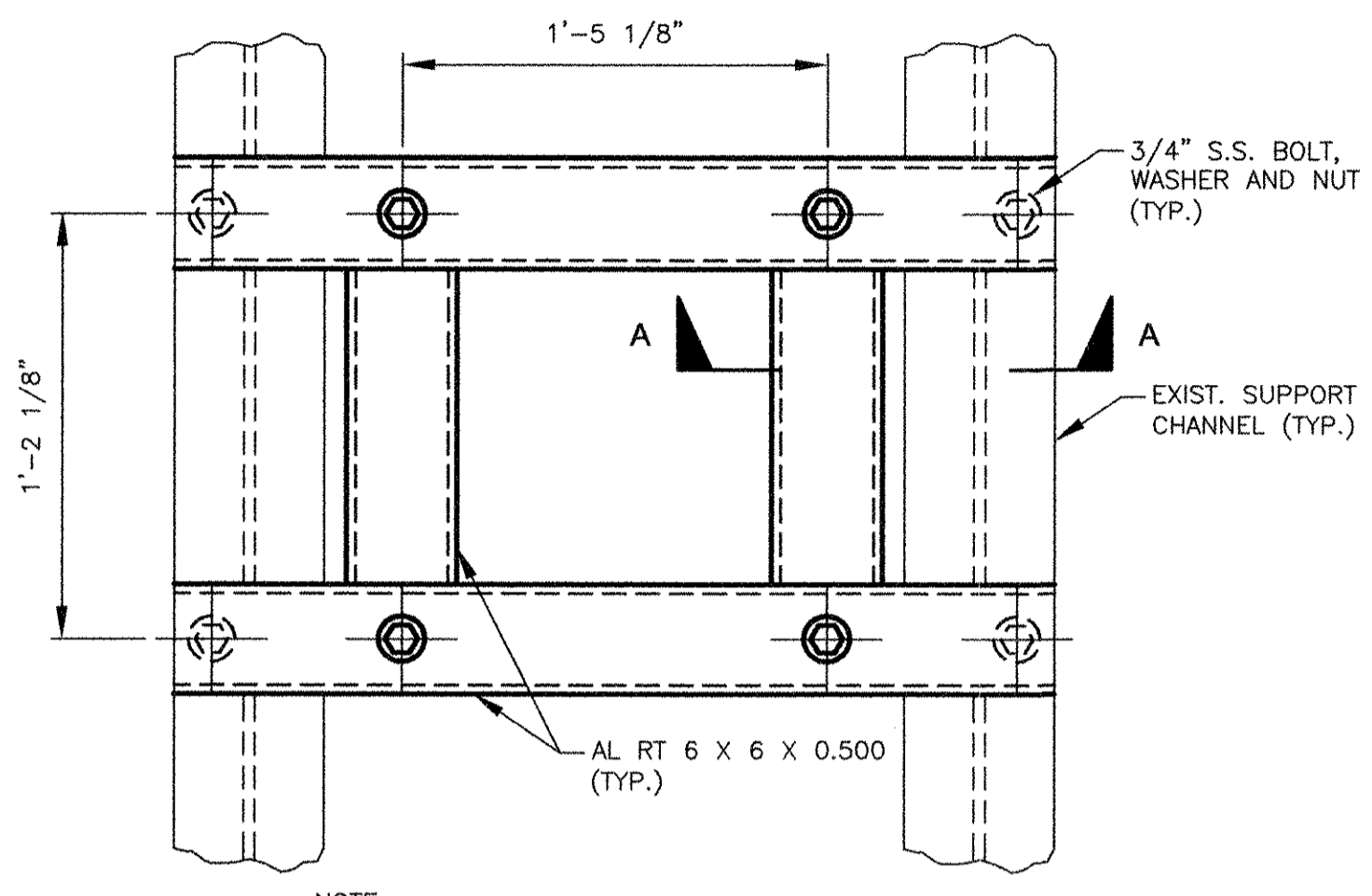
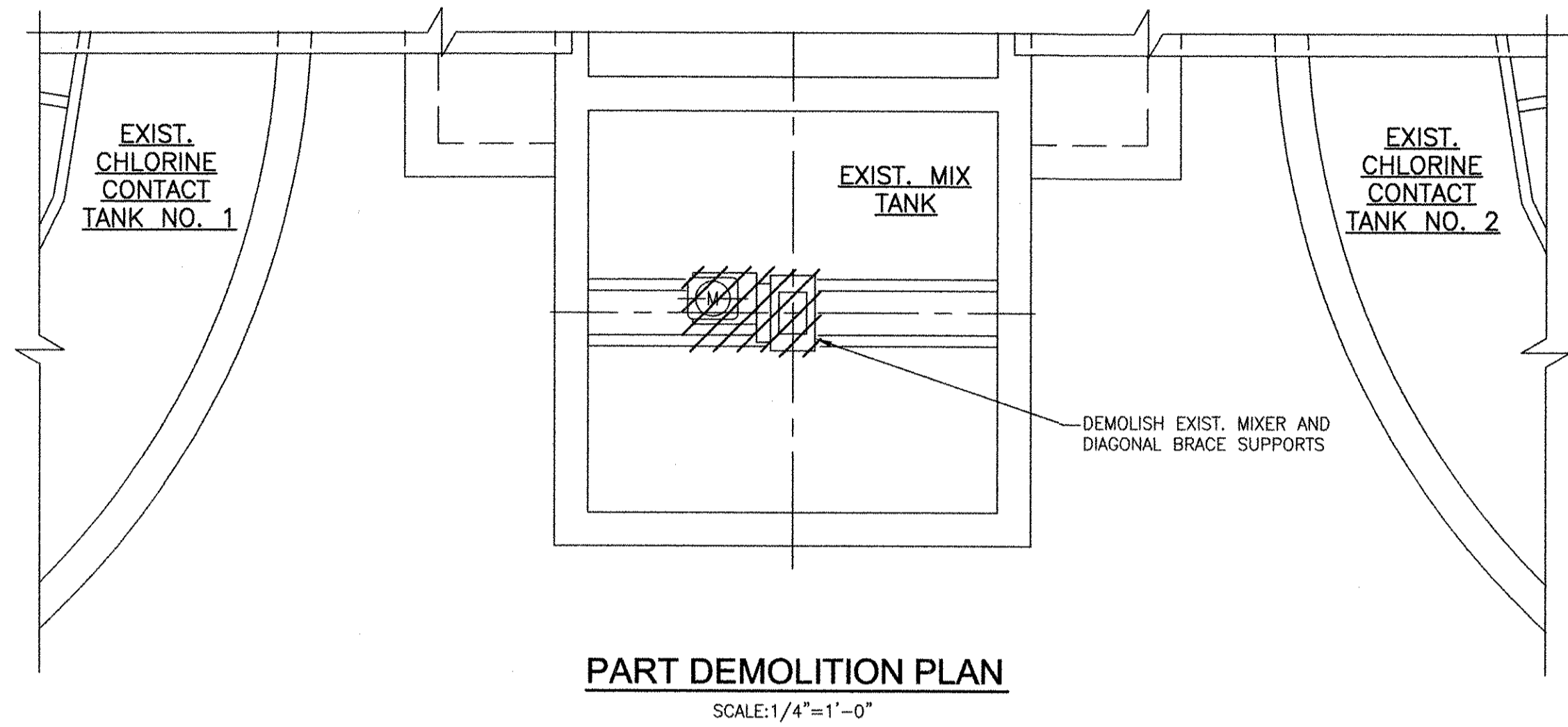
1

2

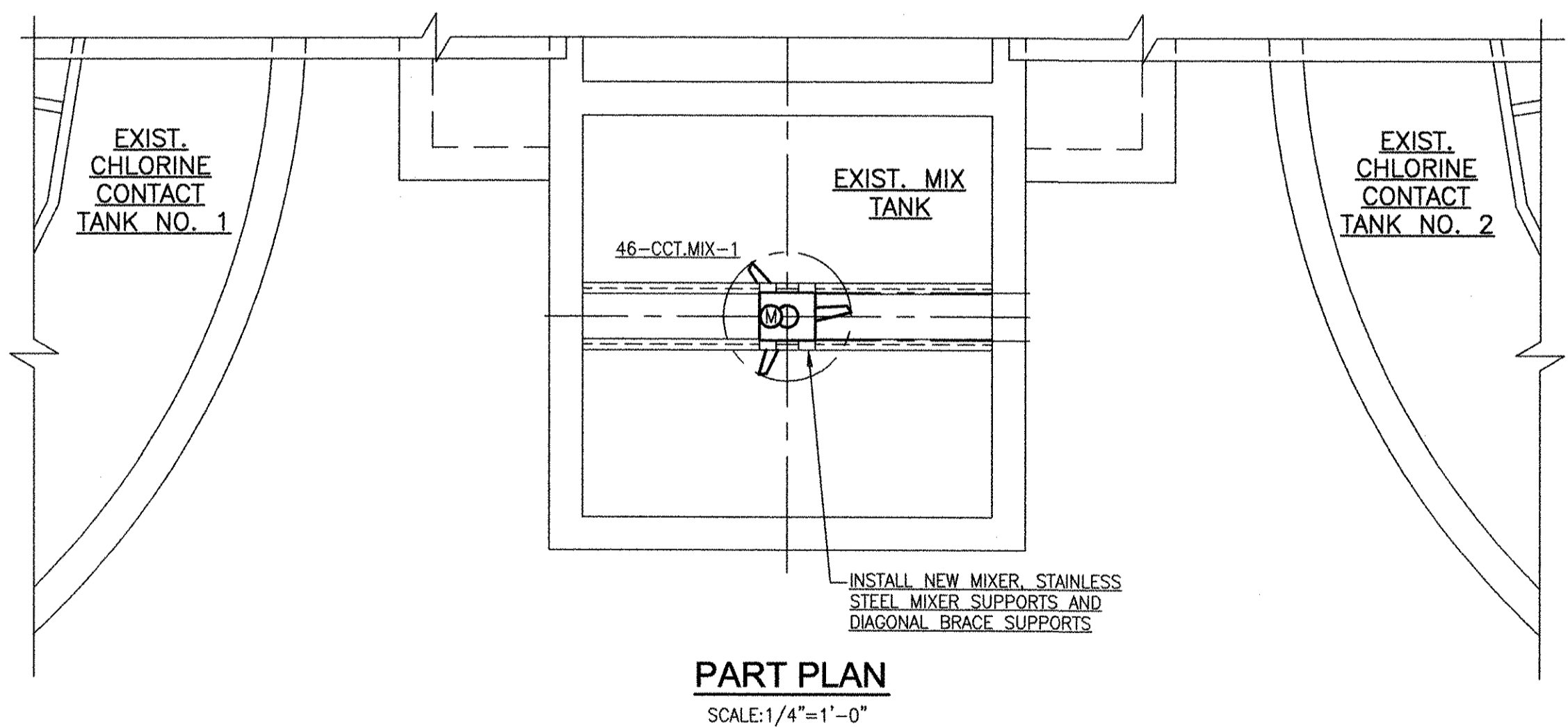
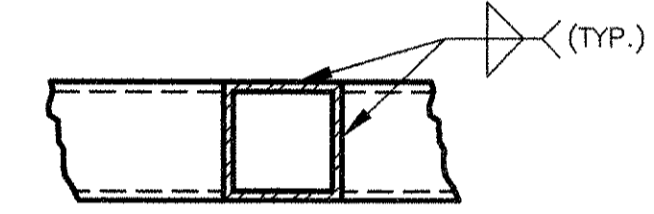
3

4

5



NOTE:
PROVIDE 1/2" DRAIN/WEEP HOLES IN ALL MEMBERS

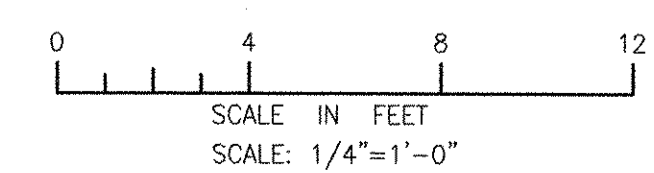


SECTION A-A
MIXER SUPPORT DETAIL
NTS

CHLORINE CONTACT MIX TANK MODIFICATIONS

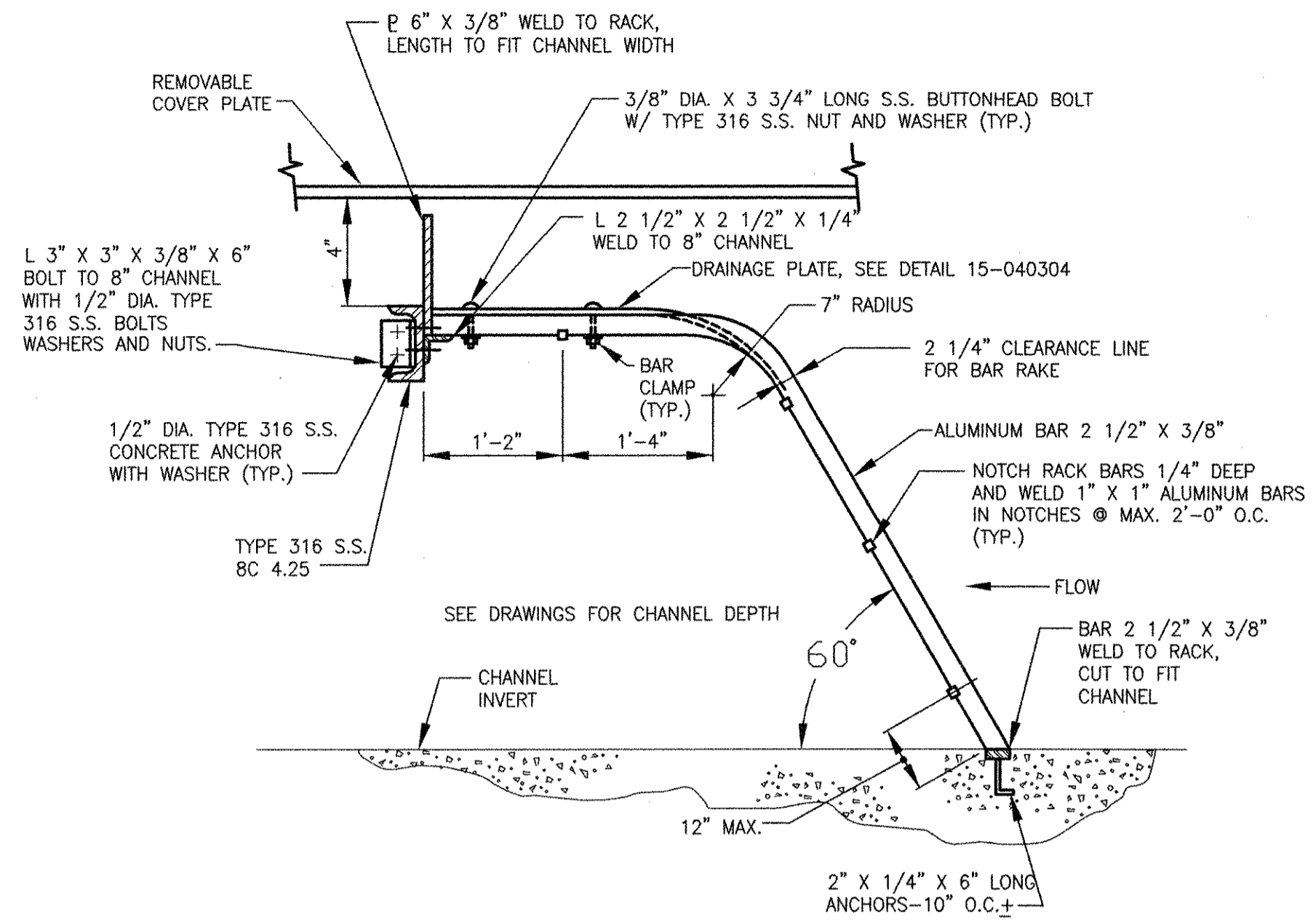
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

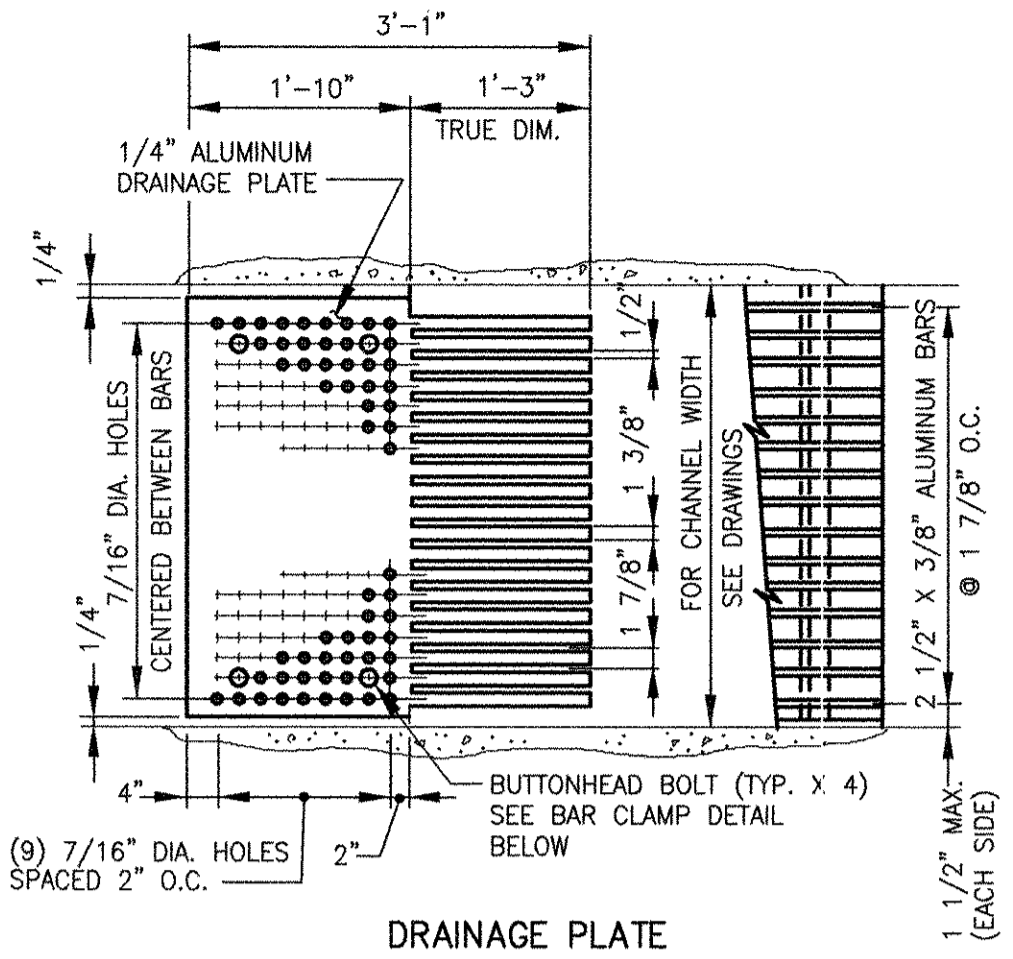


<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/18/12</td> <td>SAC</td> <td>CFG</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MADE BY	CHECKED	DESCRIPTION	1	10/18/12	SAC	CFG	REVISED FOR RECORD DRAWING
MARK	DATE	MADE BY	CHECKED	DESCRIPTION							
1	10/18/12	SAC	CFG	REVISED FOR RECORD DRAWING							
<p>AECOM</p> <p>AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 246-5000</p>											
<p>RECORD DRAWINGS</p>											
<p>CHRISTOPHER F. GALLICAN No. 7837 REGISTERED ENGINEER MECHANICAL</p>											
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4</p>											
<p>MISCELLANEOUS STRUCTURES MECHANICAL PROCESS</p>											
<p>PROJECT NO: 60148648 CAD DWG FILE: 46 D-101 DESIGNED BY: ---- DRAWN BY: ---- DEPT CHECK: ---- PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>											
<p>46 D-101</p>											

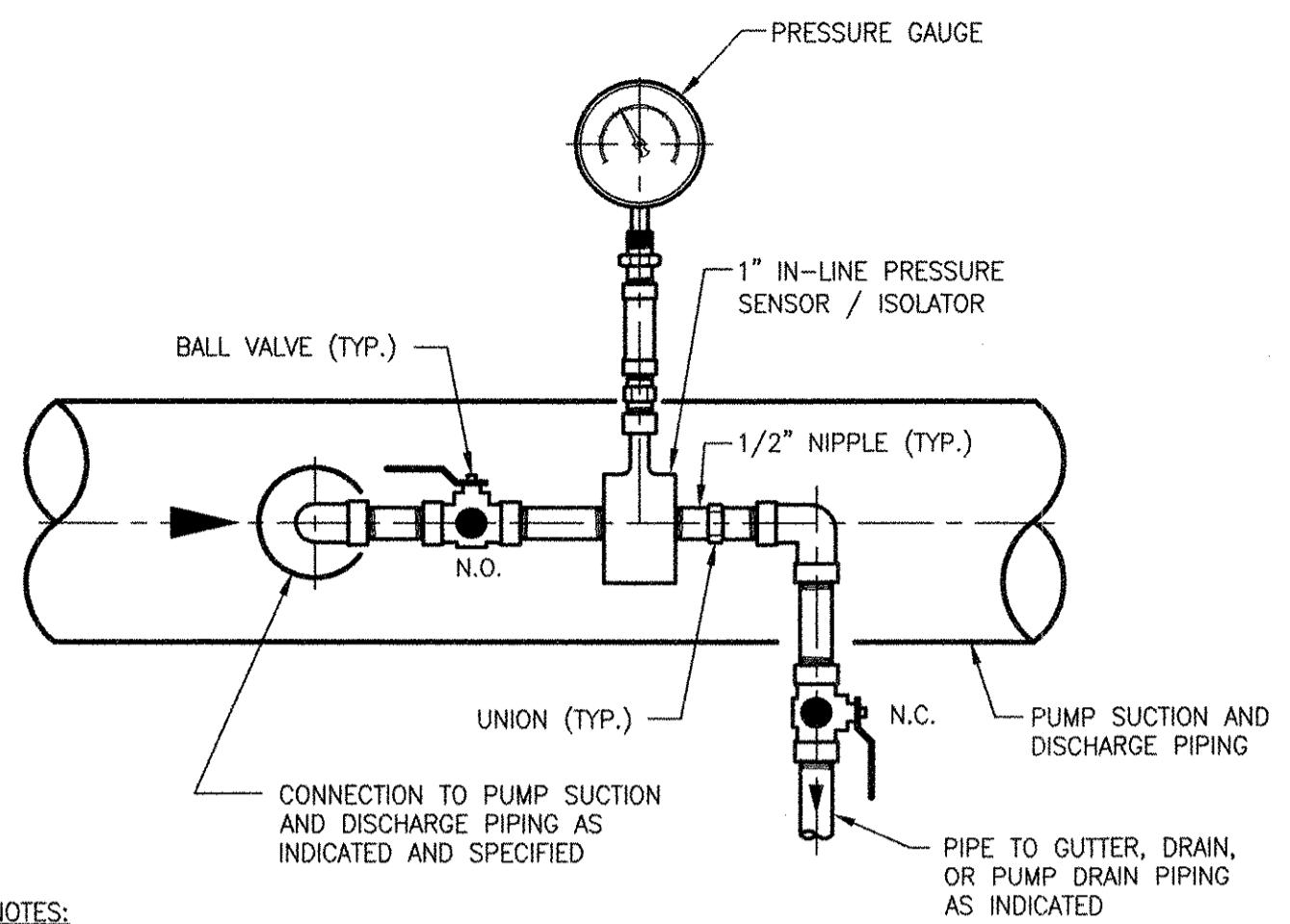
PATH: F:\60148648 - EAST PROVIDENCE DP-4\DWG\DP-4\SHEETS\046 D-101.DWG
LAST UPDATE: Thursday, October 11, 2012 4:30:35 PM
ANSI D - 11-OCT-12



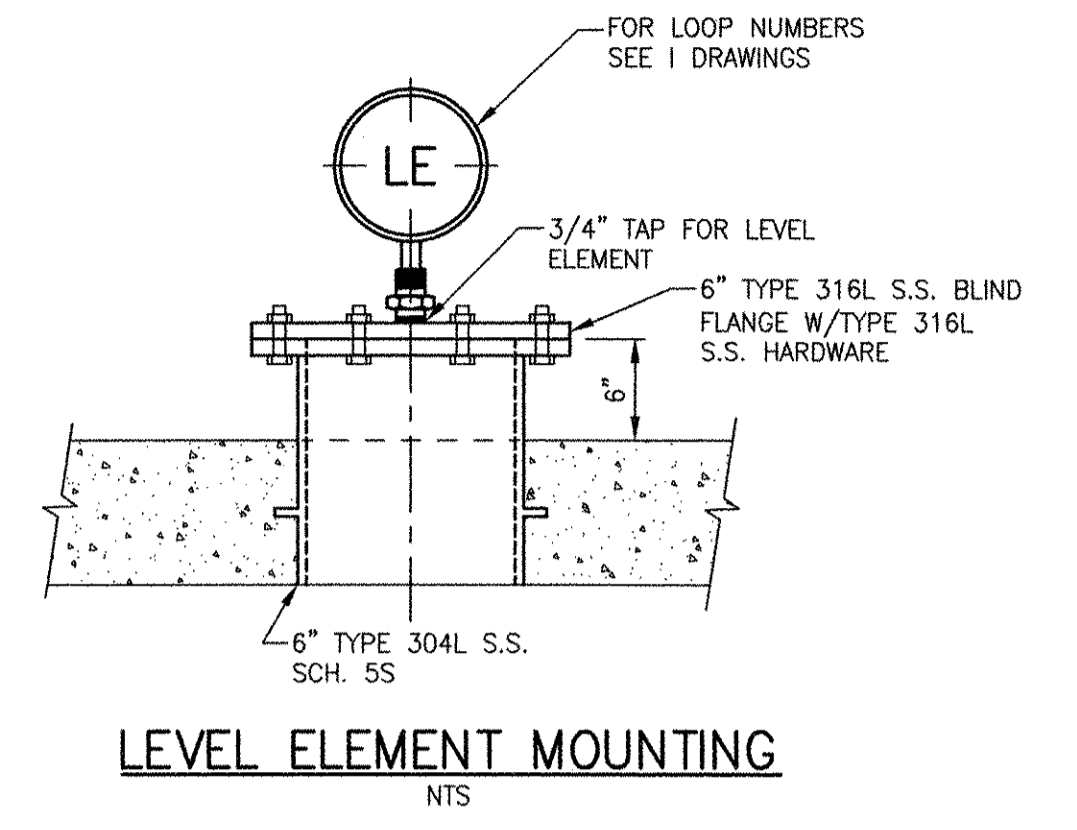
BAR RACK
NTS



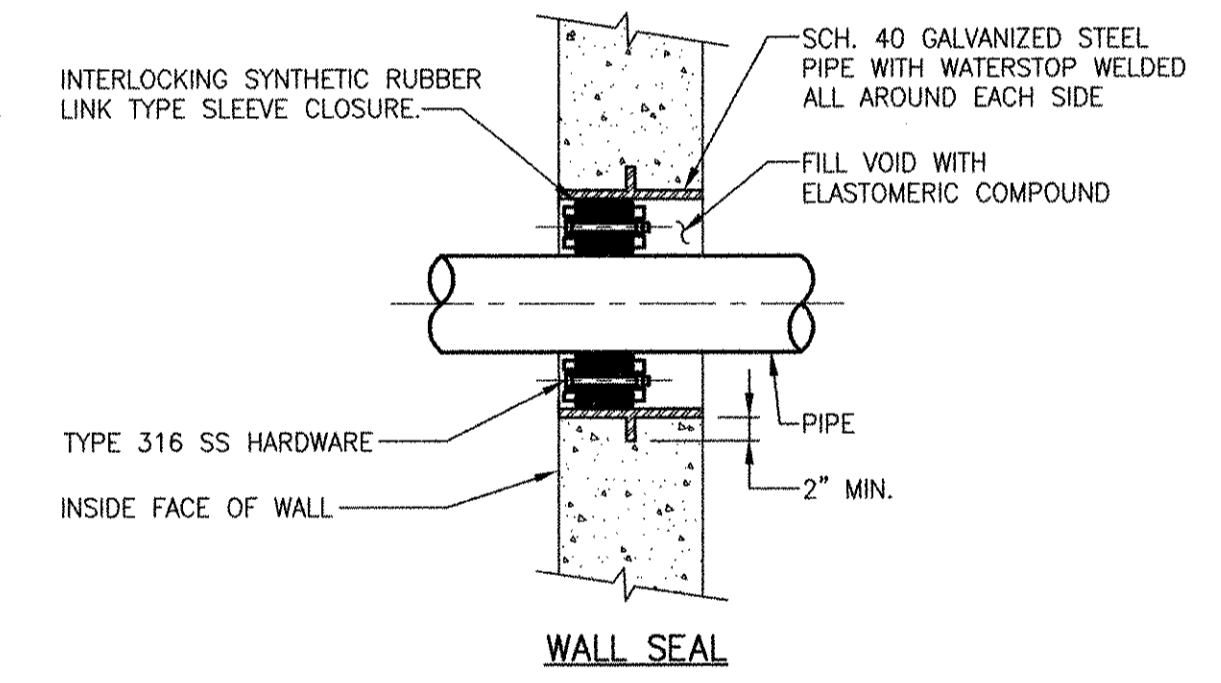
DRAINAGE PLATE AND BAR CLAMP
NTS



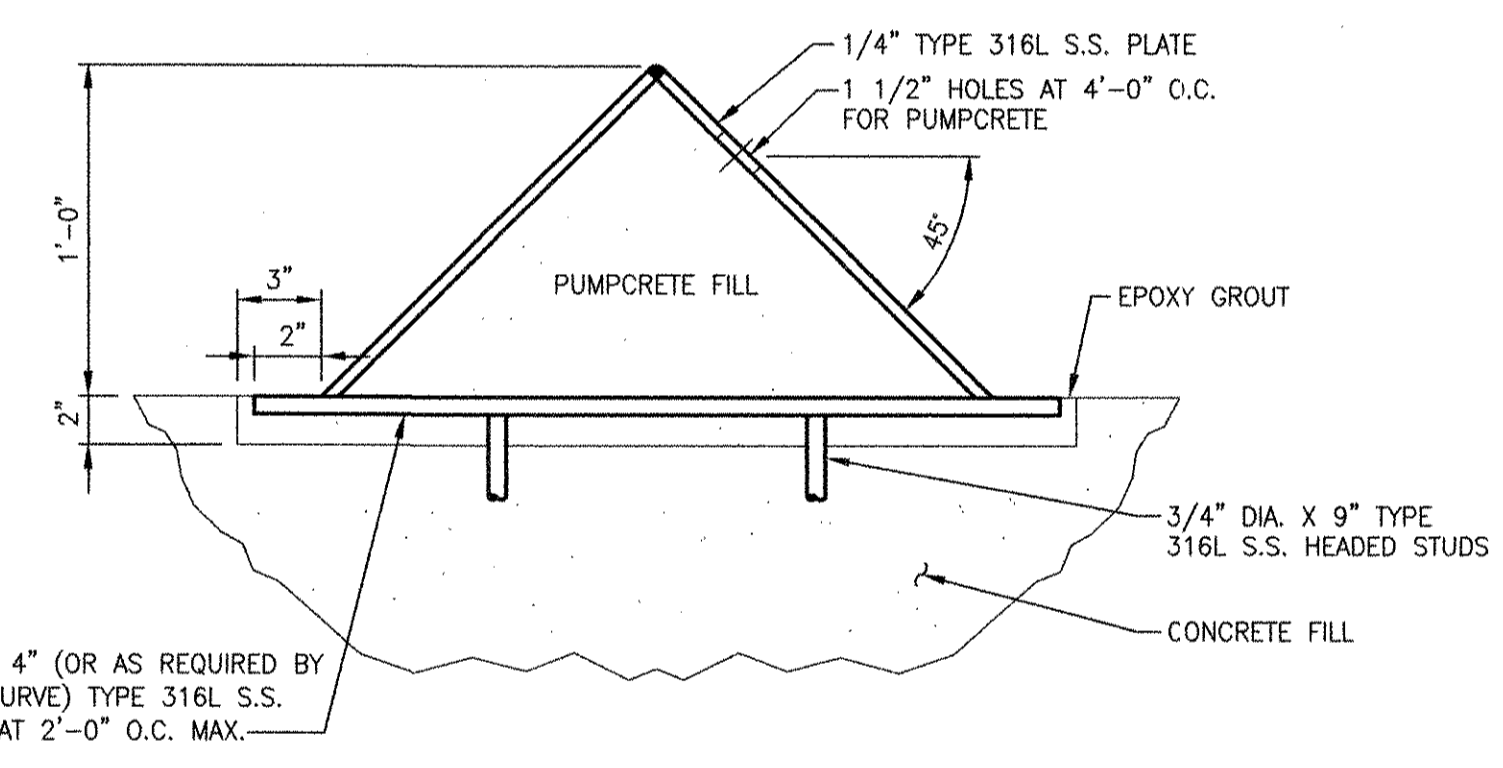
TYPE I PRESSURE GAUGE/ INSTRUMENT ASSEMBLY
NTS



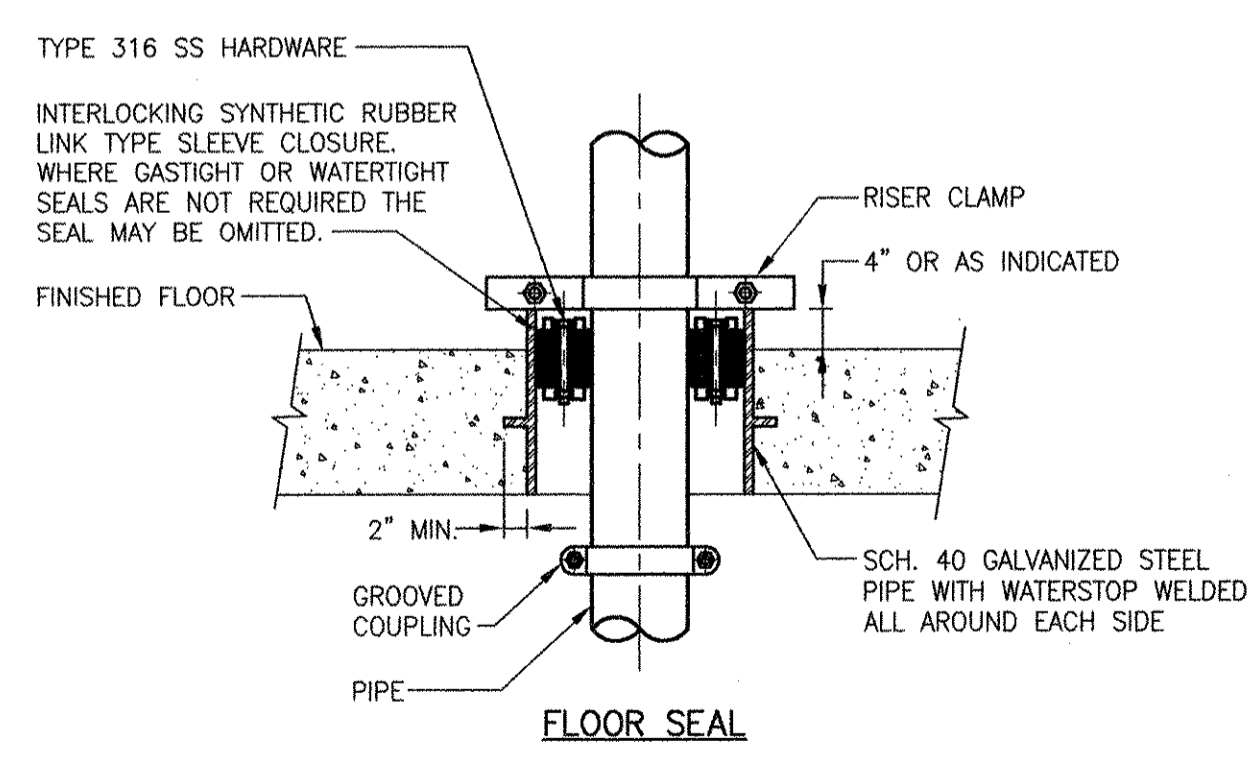
LEVEL ELEMENT MOUNTING
NTS



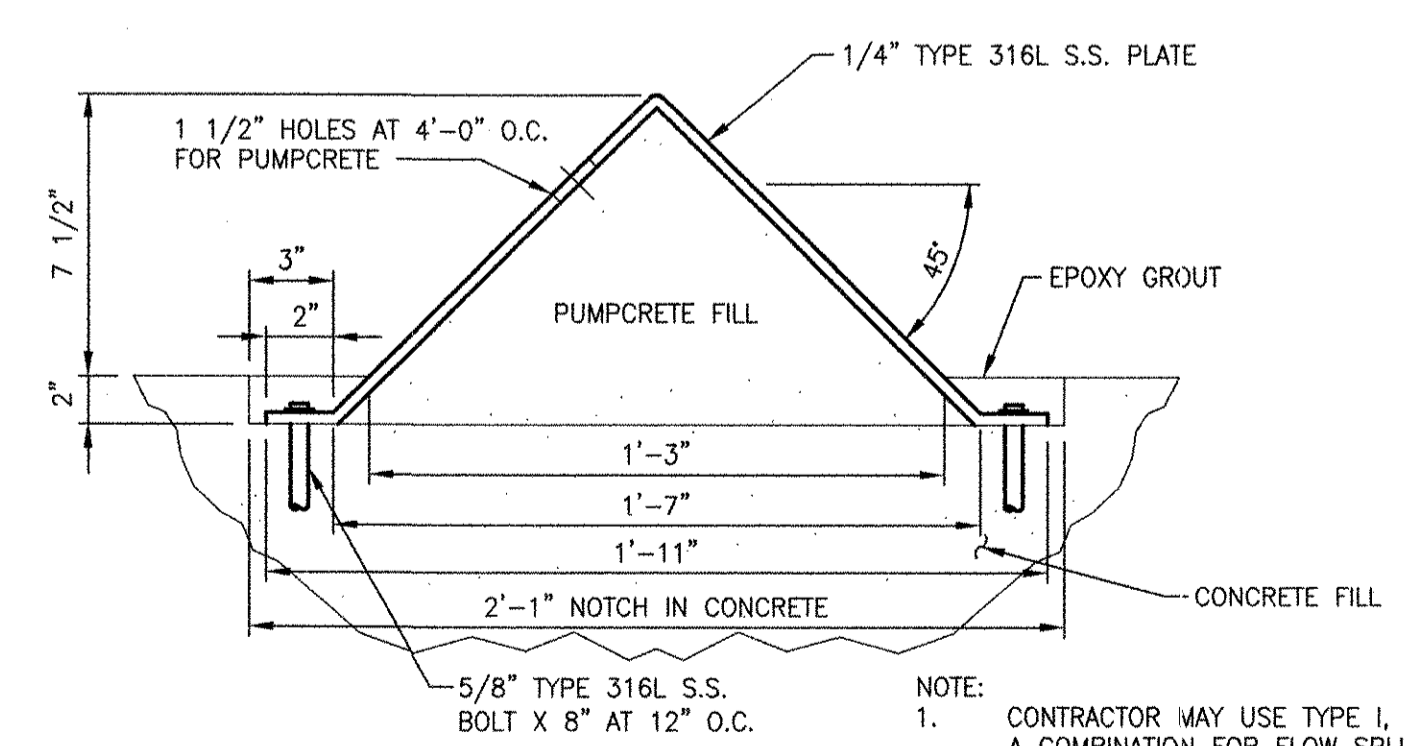
WALL SEAL



TYPE I



FLOOR SEAL

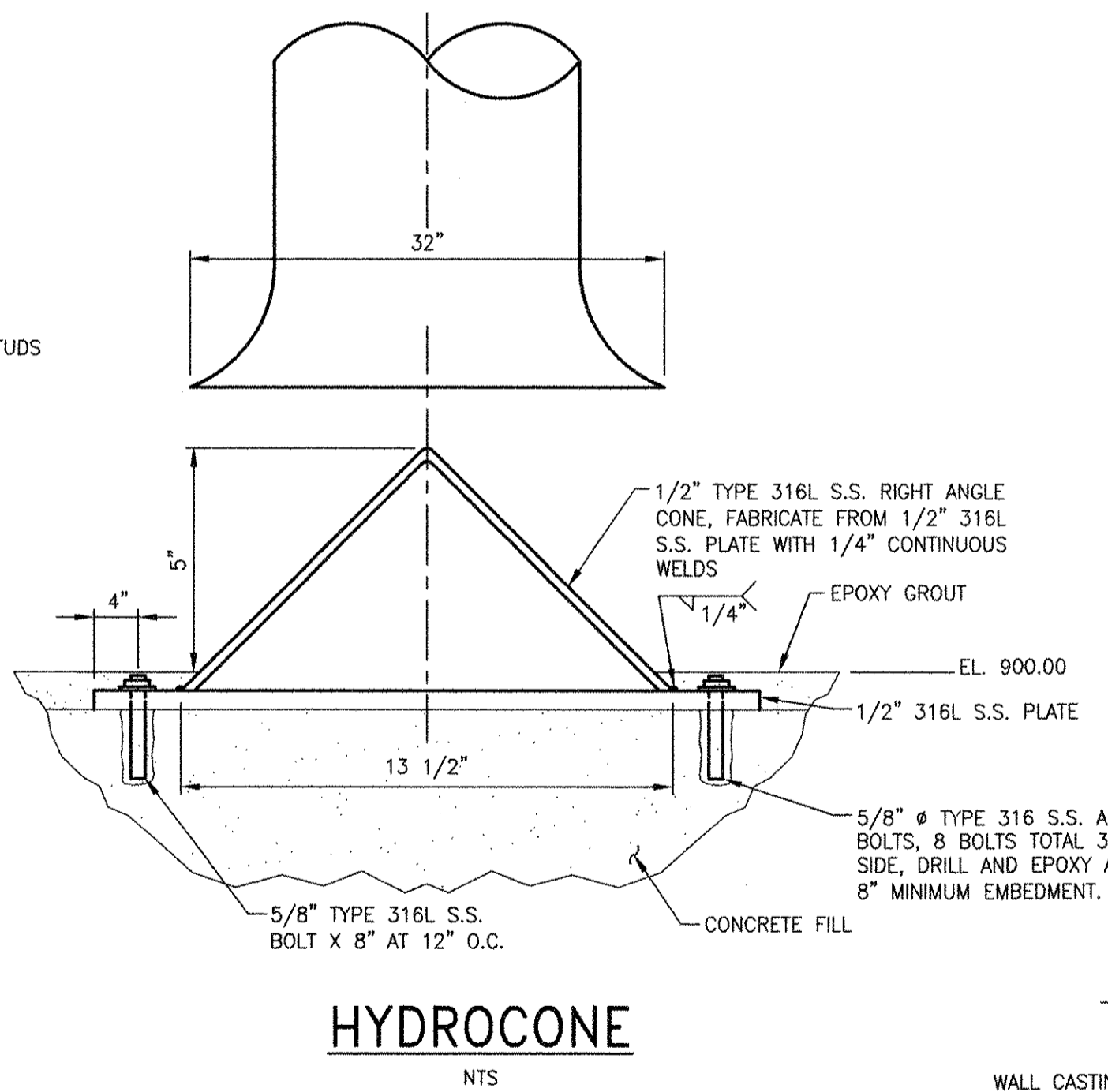


TYPE II

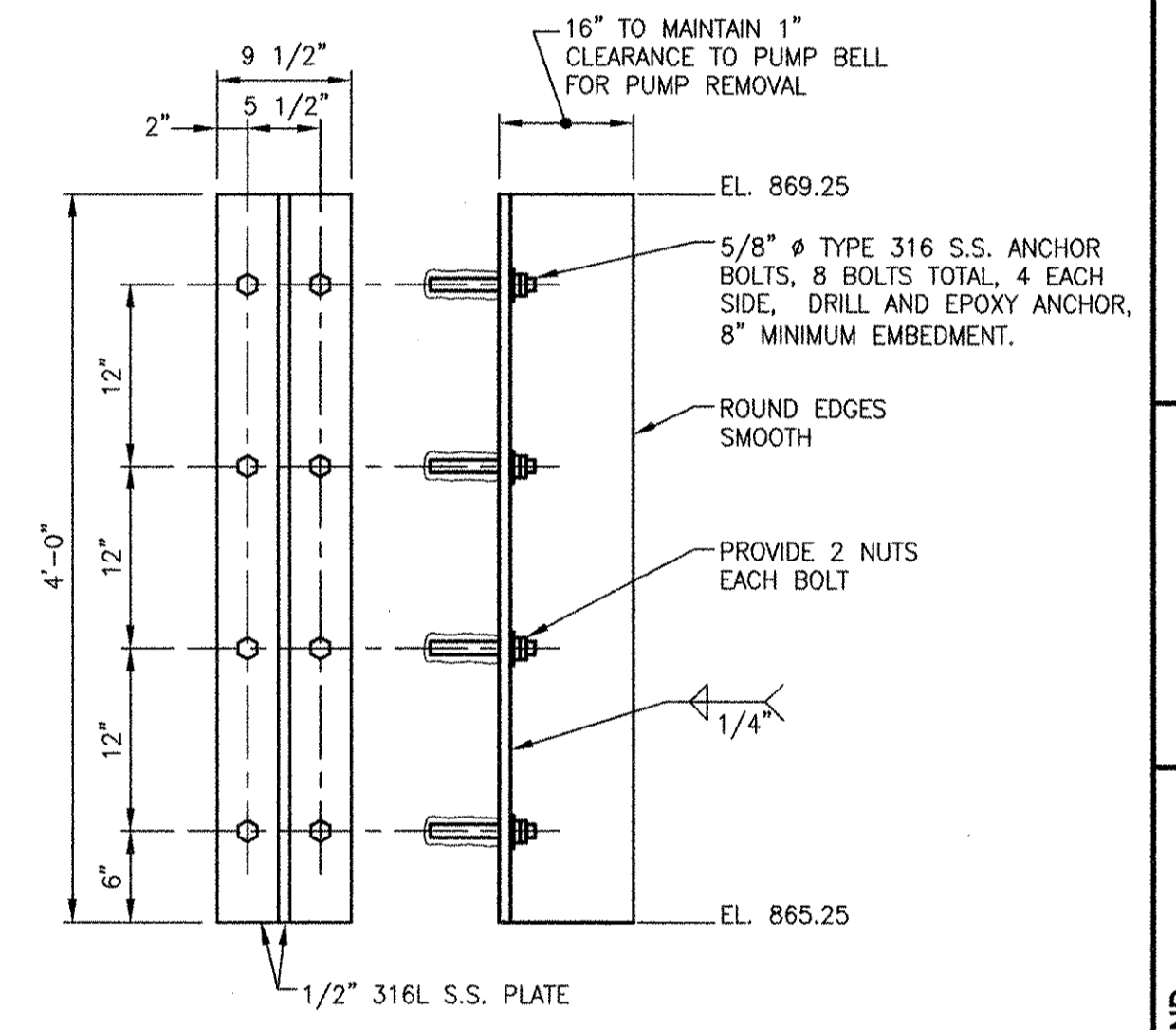
LINK TYPE WALL AND FLOOR SLEEVE CLOSURE
NTS

RECORD DRAWING

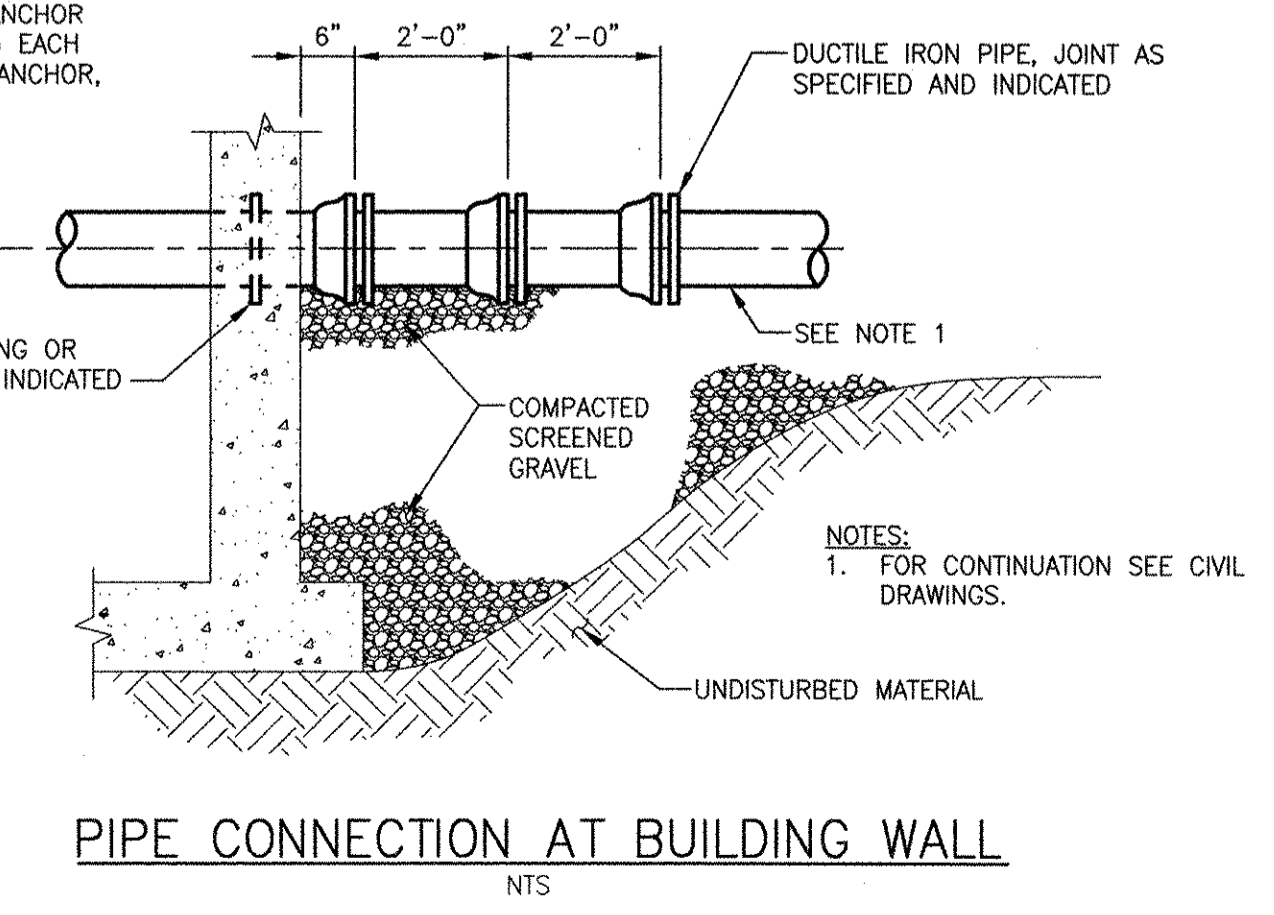
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



HYDROCONE
NTS



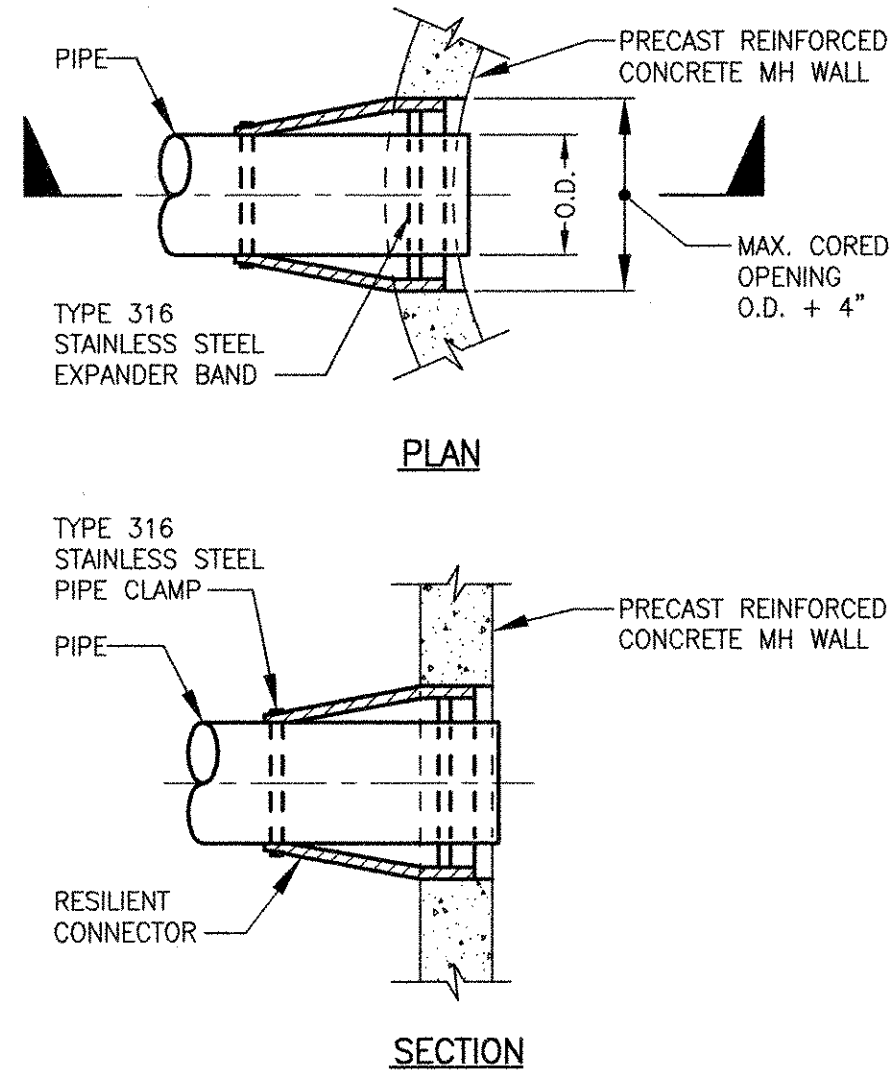
ANTI-ROTATION BAFFLE
NTS



PIPE CONNECTION AT BUILDING WALL
NTS

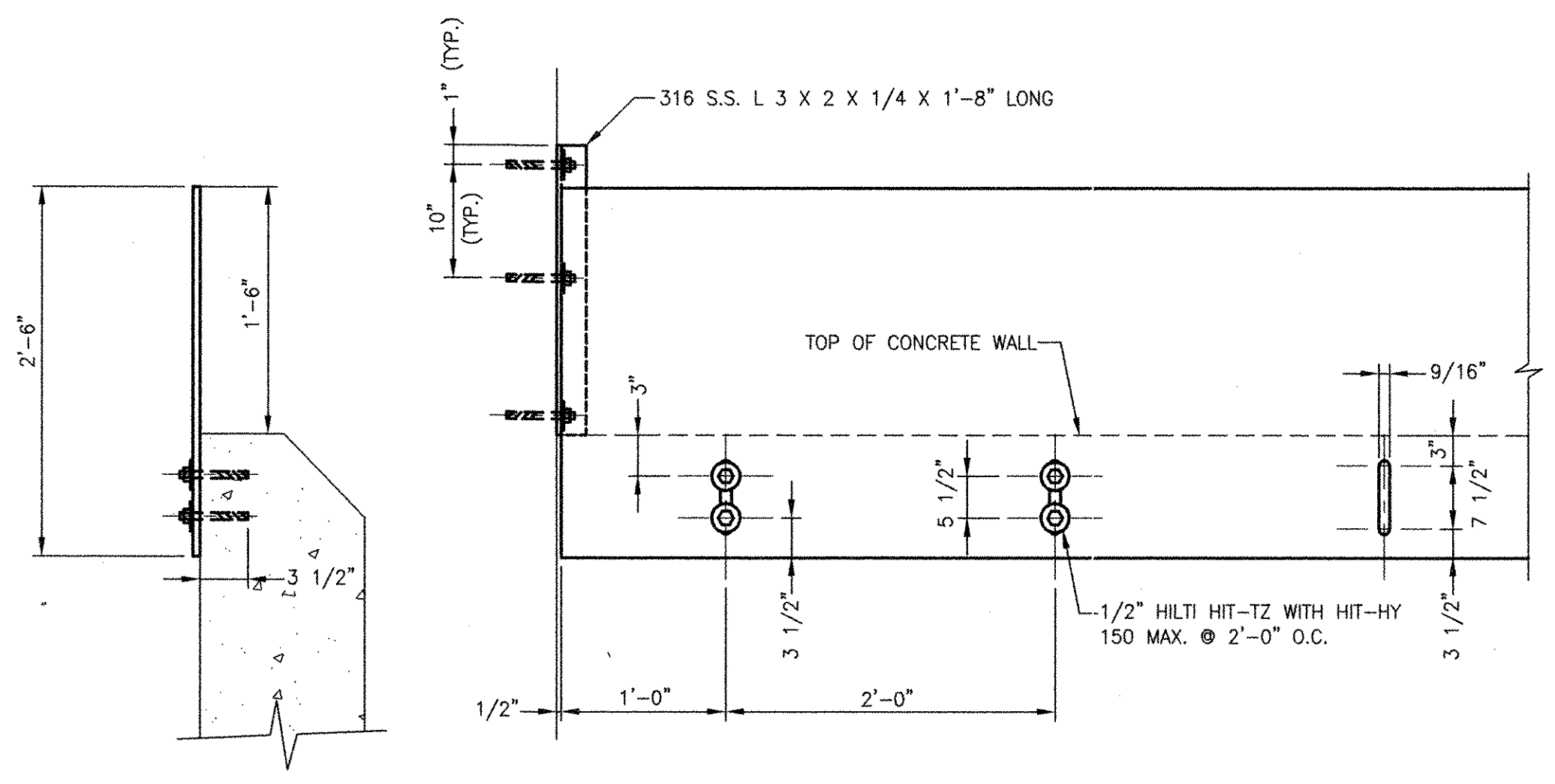
REVISIONS		<p>RECORD DRAWINGS</p> <p>NTS</p>
NO.	DATE	
1	10/19/12	
DATE	10/19/12	
MARK	1	
DESCRIPTION	CFG	<p>RECORD DRAWINGS</p> <p>NTS</p>
MADE BY	SAC	
CHECKED	10/19/12	
DATE	10/19/12	
MARK	1	
<p>PROJECT NO: 60148648</p> <p>CAD DWG FILE: 1</p> <p>DESIGNED BY: ---</p> <p>DRAWN BY: ---</p> <p>DEPT CHECK: ---</p> <p>PROJ CHECK: S. THIBAUT</p> <p>DATE: OCTOBER 2012</p> <p>SCALE: AS NOTED</p>		
<p>99 D-001</p>		

PATR/FILENAME: P:\60148648 - EAST PROVIDENCE DBA COMMON SHEETS\99 D-001 DETAILS LOW
 LAST UPDATE: Tuesday, October 09, 2012 9:51:12 AM
 PLOT DATE: Tuesday, October 23, 2012 2:12:45 PM
 ANS D - 9-Oct-12



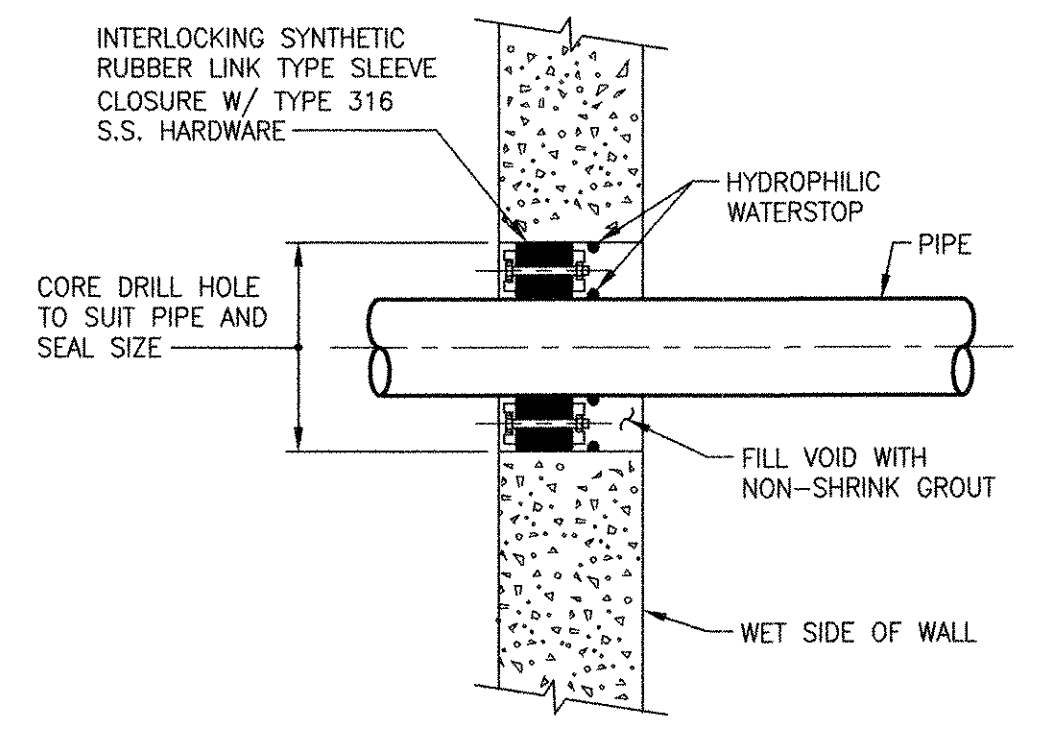
WATERTIGHT RESILIENT CONNECTOR TYPE THRU PRECAST MANHOLE

NTS



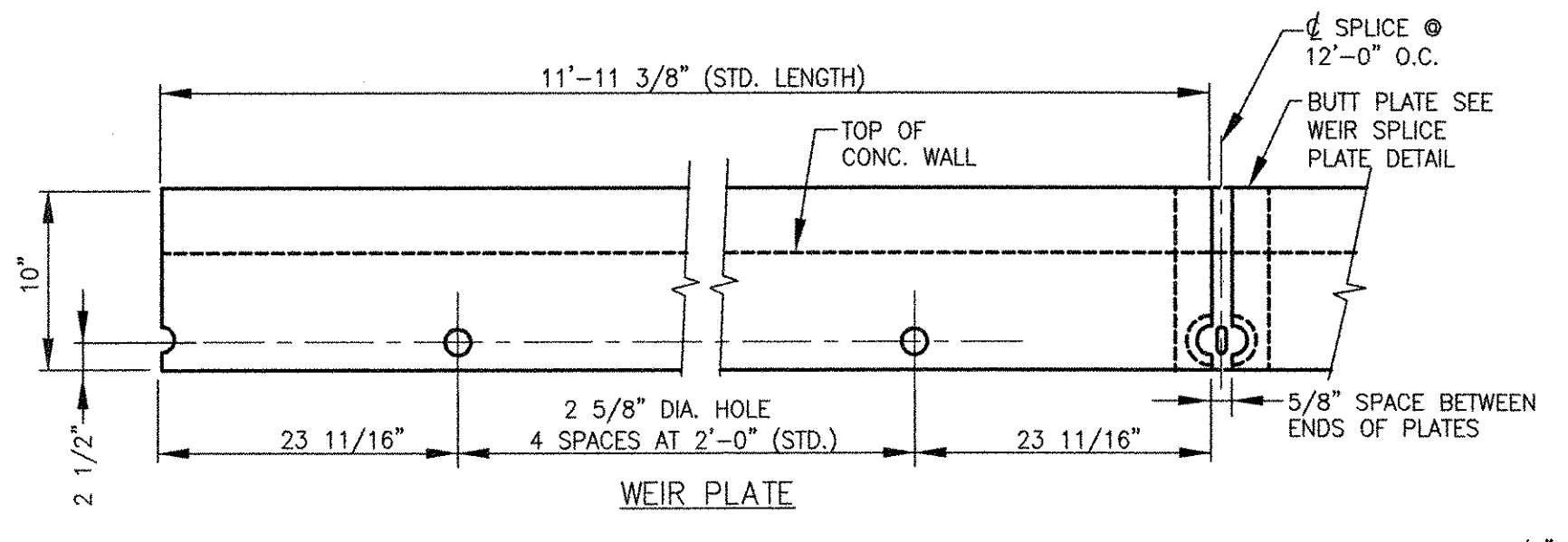
PRIMARY SETTLING TANK WEIR PLATE

NTS

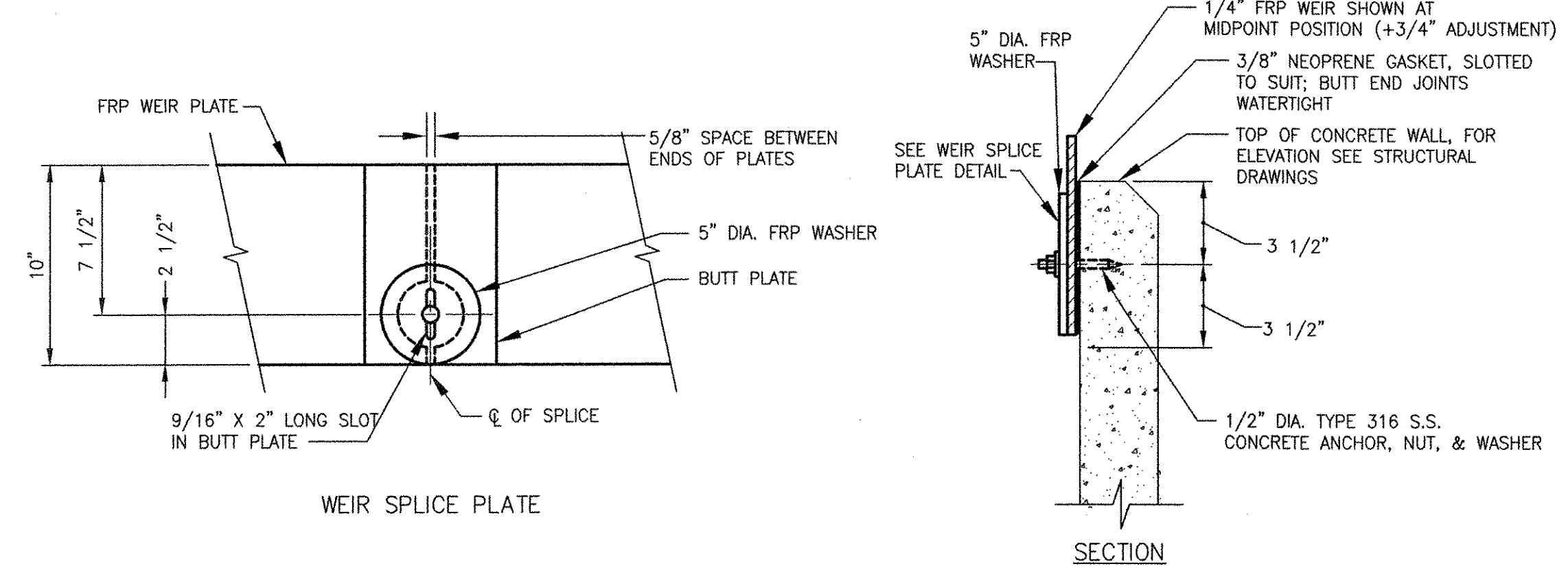


LINK TYPE SLEEVE CLOSURE THRU EXISTING WALL

NTS

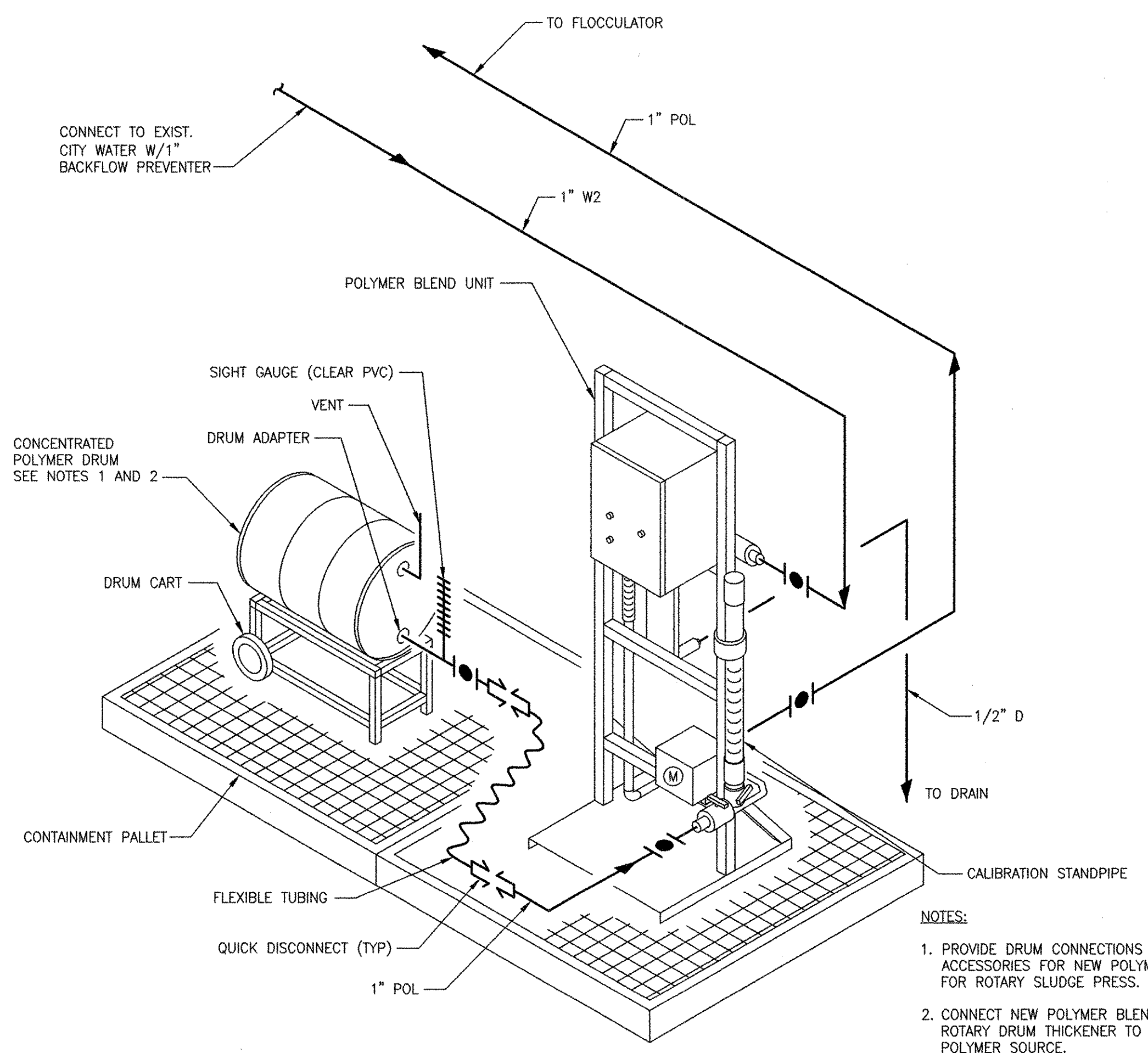


WEIR PLATE



FRP CIRCULAR TANK WEIR PLATE

NTS



POLYMER BLEND UNIT

NTS

- NOTES:**
1. PROVIDE DRUM CONNECTIONS AND ACCESSORIES FOR NEW POLYMER BLEND UNIT FOR ROTARY SLUDGE PRESS.
 2. CONNECT NEW POLYMER BLEND UNIT FOR THE ROTARY DRUM THICKENER TO EXISTING POLYMER SOURCE.

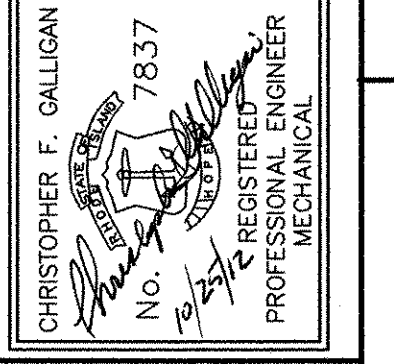
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH: \\FLENAM1\F\60148648 - EAST PROVIDENCE DBA\COMMON SHEETS\099 D-002.DWG
 LAST UPDATE: Friday, October 05, 2012 10:37:09 AM
 PLOT DATE: Tuesday, October 23, 2012 2:12:49 PM
 ANSI D - 5 - Oct-12

NO.	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	SAC	CFG	REVISED FOR RECORD DRAWING
				DESCRIPTION

AECOM
 AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200



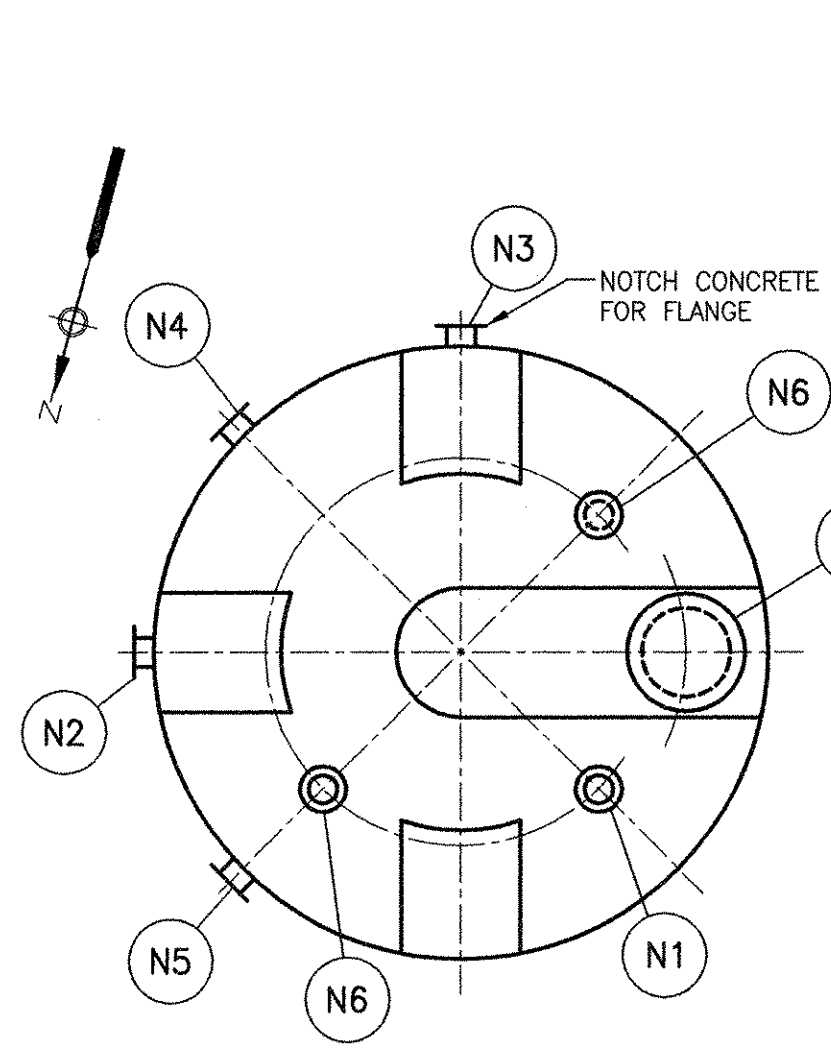
CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

DETAILS II
MECHANICAL PROCESS

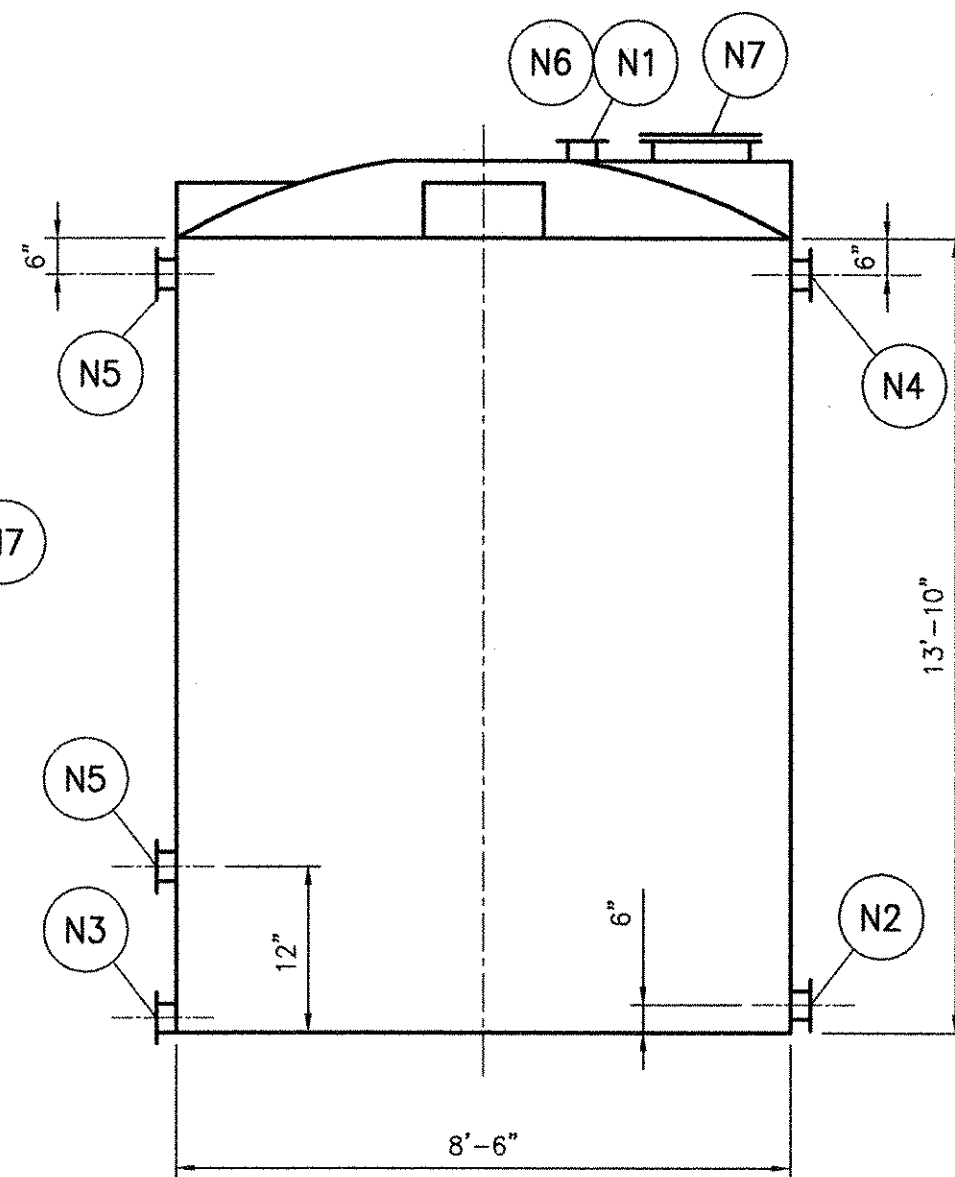
PROJECT NO:	60148648
CAD DWG FILE:	99 D-002
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 D-002

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\1099 D-003.DWG
 LAST UPDATE: Friday, October 05, 2012 10:37:36 AM
 PLOT DATE: Tuesday, October 23, 2012 2:12:52 PM
 ANSI D - 5-Oct-12



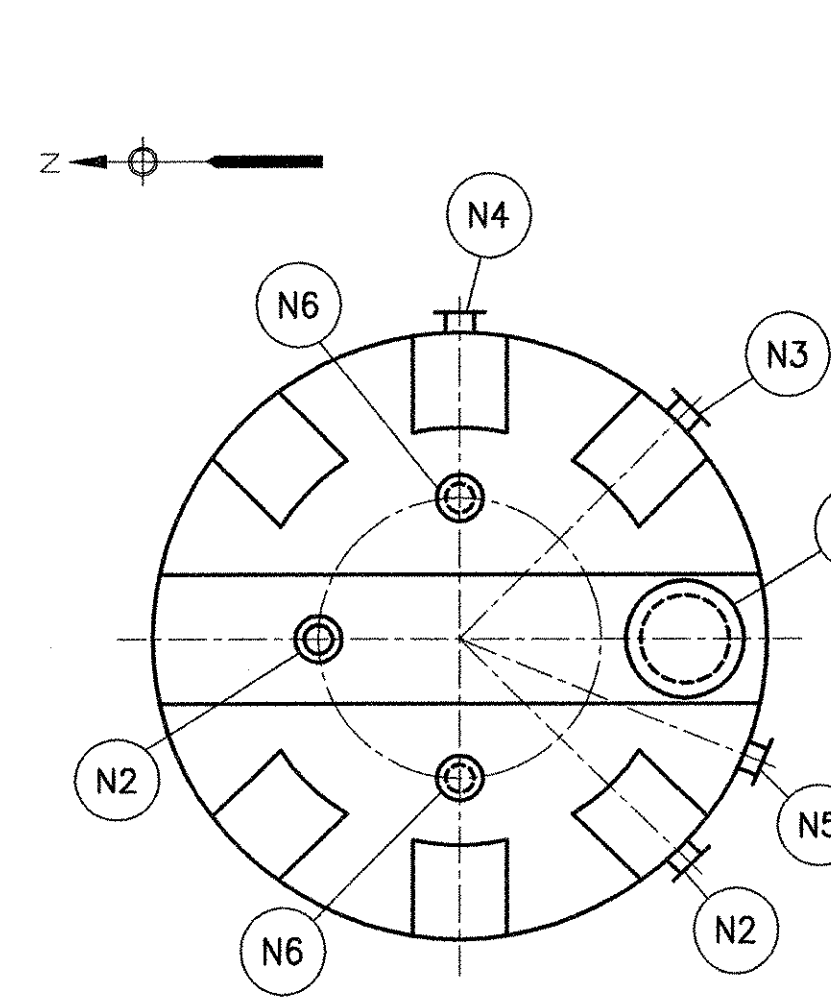
PLAN



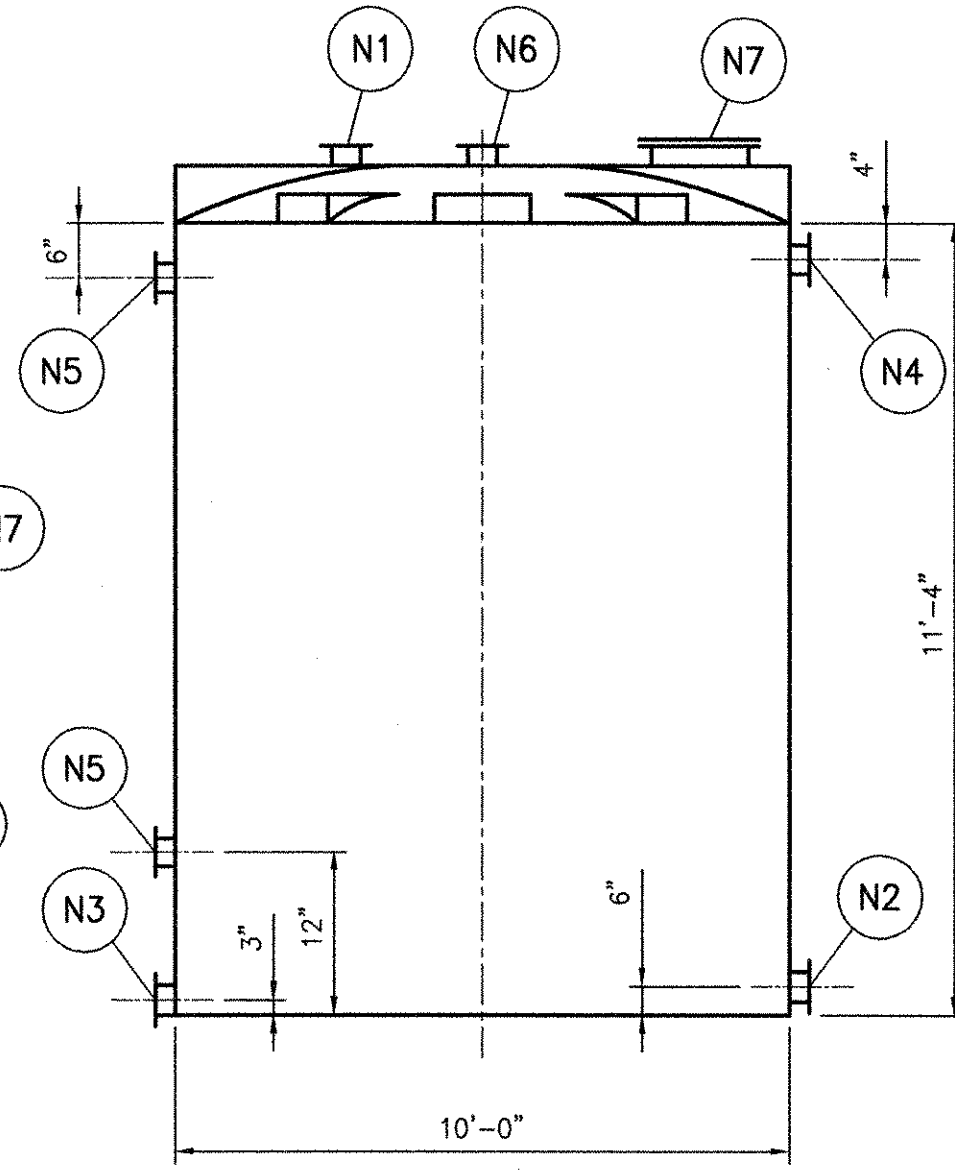
ELEVATION

CONT. IDENT.	SIZE	SERVICE	REMARKS	NO. REQ'D.	TANK DATA			
N1	2"	INLET		1	NO.	ITEM	21-SH.ST-2	
N2	2"	OUTLET		1		REQUIRED	1	
N3	2"	DRAIN		1	DESIGN		13'-0"	
N4	3"	OVERFLOW		1	PRESS	OPERATING	12'-6"	
N5	1"	SIGHT GAUGE		1	TEST		13'-0"	
N6	4"	INSTRUMENT	BLIND FLANGE	1	TEMP.	DESIGN	---	
N7	18"	ACCESS		1	OPERATING		OUTDOOR-120(-20)	
					SHELL	INSIDE (DIAM./WIDTH)	8'-6"	
						LENGTH/HEIGHT	13'-10"	
						THICKNESS	SEE SPEC.	
						CORR. ALLOW INCL.	---	
					HEAD(S)	TYPE	DOME	
						MIN. THICKNESS	SEE SPEC.	
					CONN'S	MANHOLE RATING	---	
						MANHOLE DAWT OR HINGE	THREADED	
						NOZZLE RATING	125 LB	
						CONSTRUCTION	ANSI	
					MATERIALS	SHELL AND HEADS	CROSS-LINKED POLY	
						PARTITIONS/WEIRS	---	
						OTHER INTERNALS	POLY	
						INTERNAL BOLTING	TITANIUM	
						EXTERNAL BOLTING	TITANIUM	
						EXTERNAL GASKETS	EPDM	
						SUPPORTS	POLY	
					DESIGN & CONSTR.	M & E SPECIFICATION	11354	
						PAINTING	NONE	
						INSULATION	NONE	
						SHIPMENT	---	
						SPECIFIC GRAVITY	1.2	
						TANK CAPACITY (NOMINAL)	4400	
					REVISIONS			
					NO.	DATE	DESCRIPTION	BY

SODIUM HYPOCHLORITE STORAGE TANK (21-SH.ST-2)



PLAN



ELEVATION

CONT. IDENT.	SIZE	SERVICE	REMARKS	NO. REQ'D.	TANK DATA			
N1	2"	INLET		1	NO.	ITEM	21-CS.ST-1	
N2	2"	OUTLET		1		REQUIRED	1	
N3	2"	DRAIN		1	DESIGN		11'-4"	
N4	3"	OVERFLOW		1	PRESS	OPERATING	10'-8"	
N5	1"	SIGHT GAUGE		2	TEST		11'-4"	
N6	4"	INSTRUMENT	BLIND FLANGE	2	TEMP.	DESIGN	100° F	
N7	18"	ACCESS		1	OPERATING		50° - 80° F	
N8				1	SHELL	INSIDE (DIAM./WIDTH)	10'-0"	
						LENGTH/HEIGHT	11'-4"	
						THICKNESS	SEE SPEC.	
						CORR. ALLOW INCL.	---	
					HEAD(S)	TYPE	DOME	
						MIN. THICKNESS	SEE SPEC.	
					CONN'S	MANHOLE RATING	---	
						MANHOLE DAWT OR HINGE	THREADED	
						NOZZLE RATING	125 LB	
						CONSTRUCTION	ANSI	
					MATERIALS	SHELL AND HEADS	CROSS-LINKED POLY	
						PARTITIONS/WEIRS	---	
						OTHER INTERNALS	POLY	
						INTERNAL BOLTING	316 STAINLESS STEEL	
						EXTERNAL BOLTING	316 STAINLESS STEEL	
						EXTERNAL GASKETS	EPDM	
						SUPPORTS	POLY	
					DESIGN & CONSTR.	M & E SPECIFICATION	11354	
						PAINTING	NONE	
						INSULATION	NONE	
						SHIPMENT	---	
						SPECIFIC GRAVITY	1.6	
						TANK CAPACITY (NOMINAL)	6000	
					REVISIONS			
					NO.	DATE	DESCRIPTION	BY

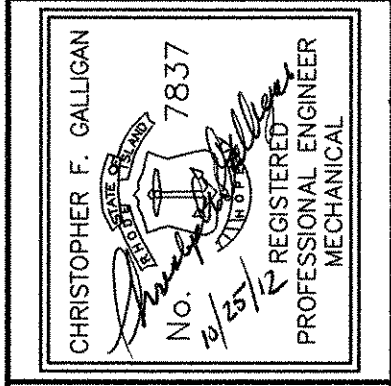
CAUSTIC SODA STORAGE TANK (21-CS.ST-1)

NO.	DATE	DESCRIPTION	BY
1	10/19/12	MADE BY	MARK
		SAC	DATE
		CFG	10/19/12
		MADE BY	MARK
		CHECKED	10/19/12
		DESCRIPTION	REVISIONS

ACOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

TANK DETAILS
 MECHANICAL PROCESS

PROJECT NO:	60148648
CAD DWG FILE:	99 D-003
DESIGNED BY:	---
DRAWN BY:	---
DEPT CHECK:	---
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED
99 D-003	

RECORD DRAWING

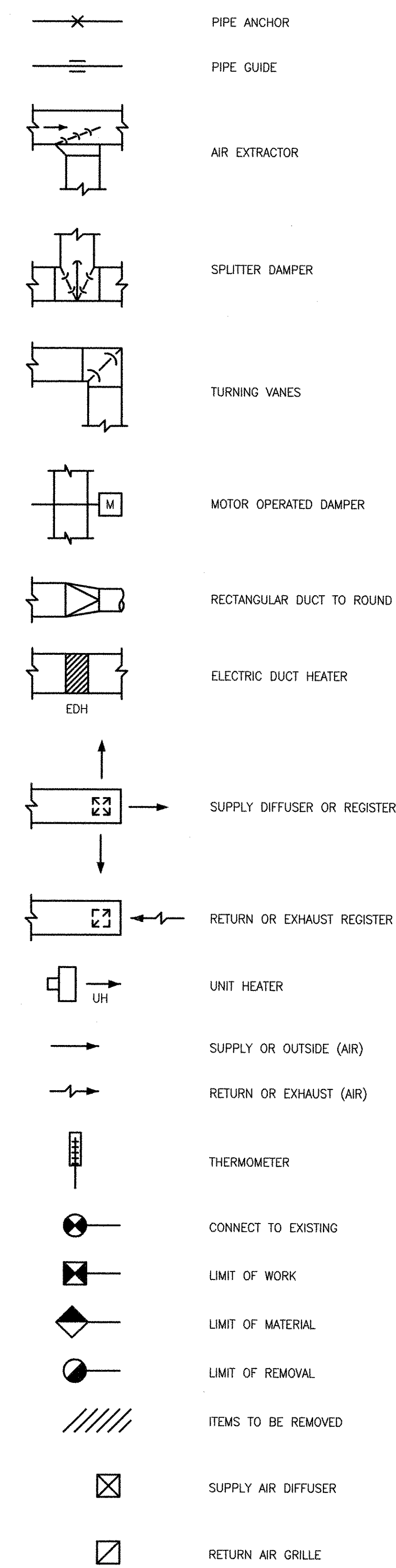
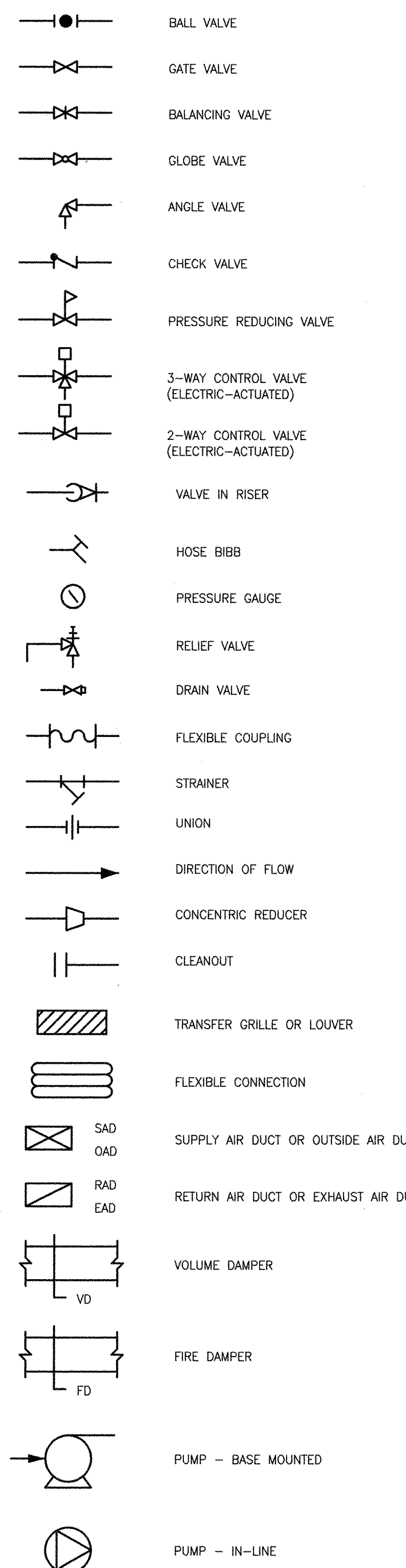
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON\03\M-001.DWG
 LAST UPDATE: Friday, October 26, 2012 2:47:02 PM
 PLOT DATE: Friday, October 26, 2012 2:50:59 PM
 ANSI D - 26-Oct-12

LEGEND

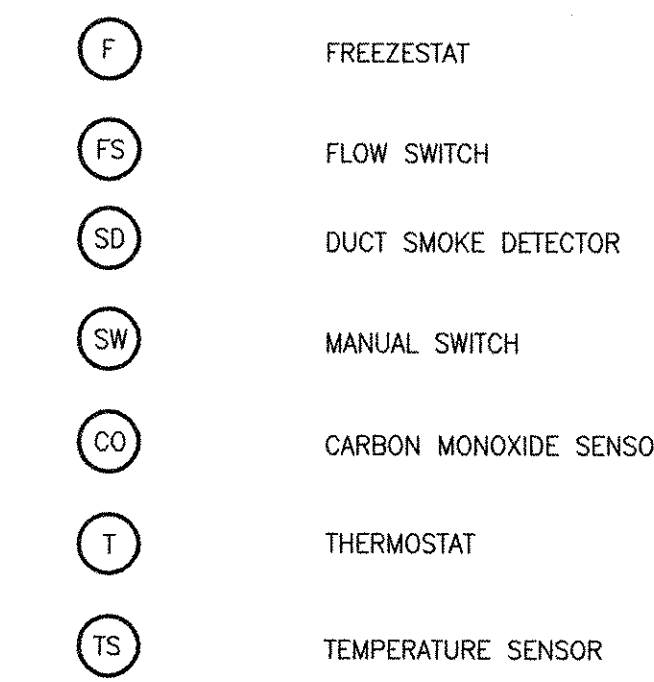
ABBREVIATIONS

GENERAL NOTES



BUILDING KEY

CODE	BUILDING
11	WATCHMOKET PUMP STATION
12	BOYDEN BLVD PUMP STATION
21	HEADWORKS BUILDING
23	OPERATIONS BUILDING
32	RAS PUMP STATION
41	ADMINISTRATION BUILDING
42	RAW SEWAGE INFLUENT PUMP STATION
43	SLUDGE DIGESTER BUILDING
44	MASTER BACKFLOW PREVENTER VAULT
53	SILVER STREET PUMP STATION
54	ROCKWAY PUMP STATION
55	ARGYLE AVENUE PUMP STATION
56	ROUNDS AVENUE PUMP STATION



AC	AIR CONDITIONER	HP	HORSEPOWER
AD	ACCESS DOOR	HR	HOUR
AF	AIR FOIL FAN	H&V	HEATING AND VENTILATING
AFF	ABOVE FINISHED FLOOR	HW	HOT WATER
AHU	AIR HANDLING UNIT	HWR	HEATING HOT WATER RETURN
AS	AIR SEPARATOR	HWS	HEATING HOT WATER SUPPLY
ATC	AUTOMATIC TEMPERATURE CONTROLS	IN WG	INCH WATER GAUGE
BC	BACKWARD CURVE FAN	KW	KILOWATT
BDD	BACK DRAFT DAMPER	L	LOUVER
BLR	BOILER	LAT	LEAVING AIR TEMPERATURE
BOD	BOTTOM OF DUCT	LB	POUND
BTU	BRITISH THERMAL UNIT	LD	LOUVERED DOOR / LEAK DETECTOR
BV	BALANCING VALVE	LLSV	LIQUID LINE SOLENOID VALVE
CC	COOLING COIL	LPS	LOW PRESSURE STEAM
CFM	CUBIC FEET PER MINUTE	LRA	LOCKED ROTOR AMPS
CO	CLEANOUT	MAX	MAXIMUM
CP	CIRCULATING PUMP	MBH	THOUSAND BRITISH THERMAL UNIT
CR	CONDENSATE RETURN (STEAM)	MFR	MANUFACTURER
CUH	CABINET UNIT HEATER	MD	MOTOR OPERATED DAMPER
CW	COLD WATER	MIN	MINIMUM
D	DRAIN	NC	NORMALLY CLOSED
DAC	DUCTLESS AIR CONDITIONING UNIT	NIC	NOT IN CONTRACT
DB	DRY BULB	NO	NORMALLY OPEN
DEG	DEGREE	NTS	NOT TO SCALE
DF	DESTRATIFICATION FAN	OA	OUTSIDE AIR
DH	DEHUMIDIFIER	ODP	OPEN DRIP-PROOF
DN	DOWN	OV	FUEL OVERFLOW
EA	EXHAUST AIR	P	PUMP
EAT	ENTERING AIR TEMPERATURE	PD	PRESSURE DROP
EBB	ELECTRIC BASEBOARD	PH	PHASE
ECH	ELECTRIC CABINET HEATER	RA	RETURN AIR
EDH	ELECTRIC DUCT HEATER	RAF	RETURN AIR FAN
EF	EXHAUST FAN	RAR	RETURN AIR REGISTER
EFF	EFFICIENCY	RG	RETURN GRILLE
EG	EXHAUST GRILLE	RGL	REFRIGERANT LIQUID LINE
EL	ELEVATION	RGS	REFRIGERANT SUCTION LINE
ELE	ELECTRIC	RPBFP	REDUCED PRESSURE BACK FLOW PREVENTER
ER	EXHAUST REGISTER	RPM	REVOLUTIONS PER MINUTE
ESP	EXTERNAL STATIC PRESSURE	SA	SUPPLY AIR
ET	EXPANSION TANK	SAD	SUPPLY AIR DIFFUSER
EUH	ELECTRIC UNIT HEATER	SAG	SUPPLY AIR GRILLE
EWT	ENTERING WATER TEMPERATURE	SAR	SUPPLY AIR REGISTER
EXH	EXHAUST	SD	SUCTION DIFFUSER / DUCT SMOKE DETECTOR
EXIST	EXISTING	SF	SUPPLY FAN
EXP	EXPLOSION PROOF	SP	STATIC PRESSURE
FAI	FRESH AIR INTAKE	SS/SST	STAINLESS STEEL
FC	FLEXIBLE CONNECTION	SW	WALL SWITCH
FC	FORWARD CURVE FAN	T	THERMOSTAT
FD	FIRE DAMPER	TE	TOTALLY ENCLOSED
FF	FINISHED FLOOR	TEFC	TOTALLY ENCLOSED, FAN COOLED
FLA	FULL LOAD AMPS	TG	TRANSFER GRILLE
FOR	FUEL OIL RETURN	TK	TANK
FOS	FUEL OIL SUPPLY	TOD	TOP OF DUCT
FOV	FUEL OIL VENT	TS	TEMPERATURE SENSOR
FPM	FEET PER MINUTE	TSP	TOTAL STATIC PRESSURE
FS	FLOW SWITCH	UH	UNIT HEATER
FT	FOOT	V	VOLT
FTR	FIN TUBE RADIATOR	VD	VOLUME DAMPER
GC	GENERAL CONTRACTOR	VTR	VENT THRU ROOF
GPM	GALLONS PER MINUTE	W	WATT
GUH	GAS FIRED UNIT HEATER	WB	WET BULB
HC	HEATING COIL	WG	WATER GAUGE
HD	HOOD	WMS	WIRE MESH SCREEN

- INSTALL ALL WORK IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES AND REGULATIONS.
- INSULATE AND COVER ALL VALVES AND FITTINGS WITH PREFORMED FITTING COVERS.
- PROVIDE AIRTIGHT ACCESS DOORS TO ALLOW FOR INSPECTION OF FIRE DAMPERS, CONTROL DAMPERS, INSTRUMENTATION, DETECTORS, FILTERS AND COILS FOR DUCTWORK NOT LESS THAN 6 INCHES BY 6 INCHES.
- PROVIDE DAMPERS OF THE SAME MATERIALS AS THE DUCT SYSTEM WHERE THEY ARE INSTALLED. PROVIDE ALL DAMPERS WITH A POSITION INDICATOR THAT CAN BE EASILY SEEN FROM THE OPERATING LEVEL.
- FIRE DAMPERS SHALL BE PROVIDED IN DUCTWORK AT FIRE RATED WALLS. PROVIDE FIRE DAMPERS AND CONNECTING DUCTWORK IN ACCORDANCE WITH NFPA 90A AND LOCAL CODES.
- INSULATE ALL INTAKE AND EXHAUST AIR DUCTS AND AIR CONDITIONED SUPPLY AIR DUCTS AS SPECIFIED.
- PROVIDE ALL EXHAUST LOUVERS WITH 1/2 INCH BIRDSCREEN. PROVIDE ALL INTAKE LOUVERS WITH INSECT SCREEN.
- COORDINATE WITH ARCHITECTURAL DRAWING FOR OUTSIDE AIR INTAKE AND EXHAUST LOUVER ELEVATION, ROOF AND WALL OPENINGS (SIZE & LOCATION).
- ALL RELIEF VALVES WILL BE HARD PIPED TO A FLOOR DRAIN.
- PROVIDE ALL LOW POINTS IN PIPING SYSTEM WITH 3/4 INCH DRAINS AND ALL HIGH POINTS WITH 3/4 INCH VALVED MANUAL VENTS.
- CAPACITIES OF EQUIPMENT ARE BASED ON OPERATION OF 30 PERCENT PROPYLENE GLYCOL SOLUTION AS INDICATED IN THE EQUIPMENT SCHEDULES.
- ALL PIPES PENETRATING THROUGH FIRE RATED WALLS SHALL BE SEALED TO ENSURE THE FIRE RATING IS MAINTAINED.
- PROVIDE ALL COOLING COILS W/ CONDENSATE DRIP PANS AND PIPING. INSULATE PAN & PIPING AS SPECIFIED. CONDENSATE PIPE SIZES SHALL BE ONE INCH FOR UP TO 5 TONS OF COOLING, AND 1 1/4 INCH FOR 5 TO 30 TONS OF COOLING. TERMINATE CONDENSATE PIPE AT NEAREST DRAIN OR AS INDICATED.
- BLANK OFF UNUSED LOUVER AREA W/ INSULATED ALUMINUM PANELS WHERE LOUVER AREA IS LARGER THAN INTAKE OR EXHAUST AIR DUCT CONNECTION.
- ALL ROTATING EQUIPMENT SHALL HAVE FLEXIBLE PIPE OR DUCT CONNECTIONS AND APPROVED VIBRATION ISOLATORS.
- PROVIDE ALL NECESSARY PIPING, EQUIPMENT AND SUPPORTS ETC. NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT NECESSARY TO PROVIDE COMPLETE AND WORKABLE SYSTEMS.
- PROVIDE COVERING TO ALL OPEN ENDS OF DUCTWORK TO PREVENT DUST, DIRT AND DEBRIS FROM ENTERING DURING CONSTRUCTION.
- ALL SUPPLY AIR DIFFUSERS (SAD) ARE 4-WAY BLOW UNLESS OTHERWISE NOTED. SAD SELECTION BASED ON TITUS MODEL TDC. OFFICE AREA CEILING RETURN AIR GRILLES (RG) ARE BASED ON TITUS MODEL PAR. NECK SIZES SHALL BE AS INDICATED ON THE DRAWINGS. SUPPLY AIR REGISTERS (SAR) ARE BASED ON TITUS 300FS. RETURN AIR REGISTERS (RAR), EXHAUST AIR REGISTERS (ER), EXHAUST GRILLES (EG) AND TRANSFER GRILLES (TG) ARE BASED ON TITUS 350FL.
- PROVIDE VOLUME DAMPERS AT ALL SUPPLY, RETURN AND EXHAUST AIR REGISTERS.
- ALL EQUIPMENT SHALL BE LOCATED TO PROVIDE PROPER ACCESS FOR INSPECTION, MAINTENANCE AND SERVICE.
- HVAC EQUIPMENT DIMENSIONS, LOCATIONS, DUCTWORK, AND PIPING SYSTEM LAYOUTS ARE BASED ON EQUIPMENT SELECTED BY THE ENGINEER. IF THE CONTRACTOR PROPOSES TO FURNISH EQUIPMENT THAT REQUIRES AN ARRANGEMENT OR SPACE DIFFERING FROM THAT INDICATED ON THE DRAWINGS OR SPECIFIED, THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER FOR APPROVAL, DETAILED HVAC, ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, INSTRUMENTATION, AND ELECTRICAL DRAWINGS AND EQUIPMENT LISTS SHOWING ALL NECESSARY CHANGES AND EMBODYING ALL FEATURES OF THE EQUIPMENT HE PROPOSES TO FURNISH. THIS INFORMATION SHALL INCLUDE BUT NOT BE LIMITED TO PLANS, SECTIONS, DETAILS, AND SCHEMATICS OF ALL APPURTENANCES REQUIRED. THE CONTRACTOR SHALL ASSUME THE COST OF, AND THE RESPONSIBILITY FOR SATISFACTORILY ACCOMPLISHING ALL THE NECESSARY CHANGES CORRESPONDING TO THE DIMENSIONS AND CHARACTERISTICS OF THE EQUIPMENT SUBMITTED AND APPROVED BY THE ENGINEER. REFER TO SPECIFICATIONS FOR FURTHER DETAILS.

AECOM USA, INC. ONE WASHINGTON AVENUE WAKEFIELD, MA 01878 PHONE (781) 246-5200
AECOM
 ALAN J. GREEN REGISTERED PROFESSIONAL ENGINEER MECHANICAL
 No. 052025
 10-24-12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
**LEGEND, ABBREVIATIONS
 & GENERAL NOTES**
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	00 M-001
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
00 M-001	

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS		DESCRIPTION
1	10/19/12	AC BS AC
MARK	DATE	MADE BY (CHECKED)

FAN SCHEDULE

TAG NO.	BUILDING	SERVES	TYPE	CFM	EXT STATIC (IN. W.G.)	RPM	DRIVE	MIN. FAN DIAMETER (IN)	ELECTRICAL DATA				MAX SONES	SELECTION BASED ON MFR/ MODEL
									HP	MOTOR ENCLOSURE	VOLTS	PH		
11-SF-1	WATCHEMOKET P.S.	SCREENINGS RM.- UPPER	TUBULAR INLINE CENTRIFUGAL	840	0.75	2067	BELT	10	1/2	EXPLOSIONPROOF	460	3	12	COOK/ 100-TCNB
11-SF-2	WATCHEMOKET P.S.	SCREENINGS RM.- LOWER	TUBULAR INLINE CENTRIFUGAL	2,500	0.75	1027	BELT	18	3/4	EXPLOSIONPROOF	460	3	14.5	COOK/ 180-TCNB
11-SF-3	WATCHEMOKET P.S.	WET WELL	TUBULAR INLINE CENTRIFUGAL	2,670	0.375	881	BELT	18	1/2	EXPLOSIONPROOF	460	3	12	COOK/ 180-TCNB
11-EF-1	WATCHEMOKET P.S.	WORKSHOP	SQUARE INLINE CENTRIFUGAL	350	0.5	2251	BELT	10	1/4	ODP	115	1	16.3	COOK/ 70 SQN-B
11-EF-2	WATCHEMOKET P.S.	TOILET ROOM	INLINE	100	0.375	974	DIRECT	7.63	.72 WATTS	ODP	115	1	3	COOK/ GC-162
21-SF-1	HEADWORKS	HEADWORKS	MIXED FLOW INLINE	4,500	1.25	1551	BELT	16.5	2	EXPLOSIONPROOF	460	3	80 dB	COOK 165 QMX
21-SF-2	HEADWORKS	HEADWORKS	MIXED FLOW INLINE	4,500	1.25	1551	BELT	16.5	2	EXPLOSIONPROOF	460	3	80 dB	COOK 165 QMX
21-SF-3	HEADWORKS	CHEMICAL RM	CENTRIFUGAL SQUARE INLINE	500	0.5	1669	BELT	10	1/4	TEFC	115	1	10	COOK 80 SQN-B
21-EF-1	HEADWORKS	HEADWORKS	ROOF MTD MIXED FLOW EXHAUST	3,400	0.75	1466	BELT	15	1	EXPLOSIONPROOF	460	3	78 dB	COOK 150 QMKE
21-EF-2	HEADWORKS	HEADWORKS	ROOF MTD MIXED FLOW EXHAUST	4,600	0.75	1173	BELT	18	1.5	EXPLOSIONPROOF	460	3	78 dB	COOK 180-QMKE
21-EF-3	HEADWORKS	ELECTRICAL RM	WALL PROPELLER	4,700	0.25	578	BELT	30	3/4	TEFC	460	3	14	COOK 30 XLW
21-EF-4	HEADWORKS	ELECTRICAL RM	WALL PROPELLER	4,700	0.25	578	BELT	30	3/4	TEFC	460	3	14	COOK 30 XLW
21-EF-5	HEADWORKS	SAMPLES	INLINE	150	0.5	1210	DIRECT	7.63	2.3 AMPS	ODP	115	1	5	COOK GC-180
21-EF-6	HEADWORKS	CHEMICAL RM	CENTRIFUGAL ROOF UP BLAST	500	0.5	952	BELT	15	1/4	TEFC	115	1	5	COOK 150 ACRU-HP
23-EF-1	OPERATIONS	BLOWER ROOM	MIXED FLOW INLINE	11,750	0.5	--	BELT	--	5	TEFC	460	3		COOK 225 QMX
32-SF-1	RAS PUMP STATION	RAS PUMP STATION	ROOF HOODED PROPELLER	5,400	0.5	1268	BELT	24	1.5	TEFC	460	3	27	COOK 24-HES
41-EF-1	ADMINISTRATION	2ND FLOOR SHOWER ROOM	CEILING FAN/ LIGHT	75	0.05	--	DIRECT	--	240 WATTS		115	1	--	NUTONE 668RP
41-EF-2	ADMINISTRATION	WELDING FUME HOOD	UTILITY CENTRIFUGAL	800	2.5	--	DIRECT	--	1		460	3	--	CARMON CMD-9
42-SF-1	RAW SEWAGE PS	GALLERY	WALL PROPELLER- SUPPLY	3,000	0.375	975	BELT	24	1/2	ODP	460	3	18	COOK 24 XMWHS
42-SF-2	RAW SEWAGE PS	DRY WELL	SQUARE INLINE CENTRIFUGAL	1,600	0.4	1048	BELT	15	1/3	ODP	115	1	10	COOK 150 SQNB
42-EF-1	RAW SEWAGE PS	WET WELL	ROOF MTD MIXED FLOW EXHAUST	2,500	0.75	1228	BELT	15	1	EXPLOSIONPROOF	460	3	75 LWA	COOK 150 QMKE
43-EF-1	DIGESTER BLDG	DIGESTER BLDG	CENTRIF UPBLAST ROOF EXH	2,600	1	1,141	BELT	17	3/4	TEFC	460	3	16	COOK 165-ACRUB
53-EF-2	SILVER ST	DRY WELL	CENTRIFUGAL ROOF EXH	1,200 / 600	0.75	1515	BELT	12	1/2	ODP	460	3	11	COOK 120-ACEB
53-EF-4	SILVER ST	VFD AREA/ PUMP ROOM	CENTRIFUGAL ROOF EXH	5,500	0.6	911	BELT	22.5	2	TEFC	460	3	17	COOK 225-ACEB
54-EF-1	ROCKWAY	DRY WELL	CENTRIFUGAL ROOF EXH	1,600/ 800	0.75	1386	BELT	13.5	1/2	ODP	460	3	13	COOK 135-ACEB
54-EF-3	ROCKWAY	MOTOR ROOM	CENTRIFUGAL ROOF EXH	6,000	0.375	570	BELT	27	1	TEFC	460	3	11	COOK 270 ACEB
55-EF-1	ARGYLE	DRY WELL	INLINE EXHAUST	300	0.4	--	DIRECT	--	122 WATTS	TE	115	1	--	FANTECH FR-200
56-EF-1	ROUNDS	DRY WELL	INLINE EXHAUST	300	0.4	--	DIRECT	--	122 WATTS	TE	115	1	--	FANTECH FR-200

- NOTES:
1. ROOF EXHAUST FANS SHALL INCLUDE ROOF CURB, HINGED BASE KIT & EXTENDED LUBE LINES. ROOF EXHAUST FANS SHALL INCLUDE DAMPER LOCATED IN THE ROOF CURB UNLESS OTHERWISE INDICATED
 2. 11-SF-1, 2 & 3; 21-SF-1 & 2; 42-EF-1 SHALL BE ALL ALUMINUM CONSTRUCTION, AMCA "A".
 3. FANS 11-SF-1, 2 & 3; 21-SF-1 & 2 SHALL HAVE FACTORY APPLIED BAKED EPOXY CORROSION RESISTANT COATING. FANS 21-EF-1 & 2; 32-EF-1; 42-EF-1; & 43-EF-1 SHALL HAVE FACTORY APPLIED BAKED EPOXY POWDER COATING WITH UV INHIBITOR.
 4. PROVIDE SPEED CONTROLLER FOR ALL DIRECT DRIVE FANS, EXCEPT 41-EF-1 & 2.
 5. 23-EF-1 PROVIDE MOTOR COVER/ BELT GUARD, MOUNTING RAILS & SPRING ISOLATORS FOR VERTICAL FLOOR MOUNTING.
 6. 53-EF-2 AND 54-EF-1 PROVIDE TWO SPEED, TWO WINDINGS MOTORS FOR FULL SPEED AND HALF SPEED OPERATION.

ELECTRIC UNIT HEATER SCHEDULE

TAG NO.	BUILDING	LOCATION	TYPE	CAPACITY (KW)	TEMP. RISE	ELECTRICAL			MAX MTG HT (FT)	SELECTION BASED ON MFR/ MODEL
						VOLT	PH	ENCL		
11-EUH-1	WATCHEMOKET PS	WORKSHOP	CORROSION RESISTANT- HORIZ.	2.6	21	208	1	TE	8	CHROMALOX/ LUH-02-81
11-EUH-2	WATCHEMOKET PS	ELECTRICAL ROOM	HORIZONTAL	10	37	480	3	TE	9	CHROMALOX/ LUH-05-43
11-EUH-3	WATCHEMOKET PS	SCREENINGS- UPPER	EXPLOSIONPROOF-HORIZ.	7.5	27	480	3	EXP	8	CHROMALOX/ CXH-A-07-43
11-EUH-4	WATCHEMOKET PS	SCREENINGS- LOWER	EXPLOSIONPROOF-HORIZ.	7.5	27	480	3	EXP	8	CHROMALOX/ CXH-A-07-43
11-CONV-1	WATCHEMOKET PS	STAIR	CONVECTION HEATER EXPLOSIONPROOF	3.6	--	480	3	EXP	2	CHROMALOX/ CVEP-36-43
12-EUH-1	BOYDEN PUMP STATION	ELECTRICAL ROOM	HORIZONTAL	5	42	480	3	TE	8	CHROMALOX/ LUH-05-43
21-EUH-1	HEADWORKS	ELECTRICAL ROOM	HORIZONTAL	5	42	480	3	TE	8	CHROMALOX/ LUH-05-43
23-EUH-1	OPERATIONS	CONTROL ROOM	HORIZONTAL	7.5	28	480	3	TE	7	CHROMALOX/ LUH-07-43
32-EUH-1	RETURN SLUDGE PS	RAS LOWER LEVEL	CORROSION RESISTANT- HORIZ.	30	37	480	3	TE	7	CHROMALOX/ HD3D-3000
32-EUH-5	RETURN SLUDGE PS	RAS UPPER LEVEL	CORROSION RESISTANT- HORIZ.	35	43	480	3	TE	7	CHROMALOX/ HD3D-3500
42-EUH-1	RAW SEWAGE PS	CHEMICAL ROOM	CORROSION RESISTANT- HORIZ.	15	32	480	3	TE	7	CHROMALOX/ HD3D-1500
44-EUH-1	BK FLOW PREVENTER VAULT	BACK FLOW PREVENTER VAULT	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
53-EUH-2	SILVER ST. PS	VFD AREA	HORIZONTAL	10	37	480	3	TE	8	CHROMALOX/ LUH-05-43
54-EUH-1	ROCKWAY	EL. -7.00	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
54-EUH-2	ROCKWAY	EL. -7.00	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
54-EUH-3	ROCKWAY	EL. 4.50	CORROSION RESISTANT- HORIZ.	7.5	37	480	3	TE	7	CHROMALOX/ HD3D-750
54-EUH-4	ROCKWAY	EL. 4.50	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
54-EUH-5	ROCKWAY	EL. 16.00	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
54-EUH-6	ROCKWAY	EL. 16.00	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
54-EUH-7	ROCKWAY	EL. 16.00	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500
54-EUH-8	ROCKWAY	EL. 16.00	CORROSION RESISTANT- HORIZ.	5	40	480	3	TE	7	CHROMALOX/ HD3D-500

- NOTES:
1. ALL UNIT HEATERS SHALL INCLUDE WALL MOUNTED INDUSTRIAL GRADE THERMOSTAT. 23-EUH-1, 32-EUH-1, 42-EUH-1, 44-EUH-1 & 54-EUH-1,2,3 & 4 SHALL HAVE INTEGRAL THERMOSTATS.
 2. ALL UNIT HEATERS SHALL BE UL LISTED. PROVIDE SWIVEL WALL MOUNTING BRACKETS. ALL HEATERS ARE HORIZONTAL UNLESS INDICATED OTHERWISE.
 3. (54-EUH-1 THROUGH 8) SHALL INCLUDE DISCONNECT SWITCHES.
 4. (11-CONV-1) WALL MOUNTED CONVECTION HEATER WITH BUILT IN THERMOSTAT (40 - 90F). UNIT SHALL BE UL LISTED EXPLOSIONPROOF FOR CLASS 1, DIV. 1, GROUP D ENVIRONMENT.

HOODS

TAG NO.	BUILDING	SERVES	CFM	THROAT AREA (FT2)	FACE AREA (FT2)	DUCTED	SERVICE	MAX. FACE VELOCITY (FPM)	MAX. THROAT VELOCITY (FPM)	MAX P.D. (IN. W.G.)	BASED ON
											MFR / MODEL
21-HD-1	HEADWORKS	SAMPLE ROOM	150	0.39	1.38	NO	SUPPLY	200	400	0.05	COOK/ 8 PR
21-HD-2	HEADWORKS	HEADWORKS 21-SF-1	4,500	5.16	10.77	YES	SUPPLY	420	875	0.1	COOK/ 30 PR
53-HD-1	SILVER ST.	VFD AREA	5,500	7.50	15.00	NO	SUPPLY	370	733	0.12	COOK/ 30X36 GI

- NOTES:
1. PROVIDE ALUMINUM HOOD AND ROOF CURB, INSECT SCREEN & ANTI CONDENSATE COATING.
 2. HOOD SHALL HAVE HINGED BASE OPTION.
 3. ROOF CURB SHALL HAVE DAMPER TRAY.

ELECTRIC BASEBOARD SCHEDULE

TAG NO.	BUILDING	AREA	ELECTRICAL			LENGTH INCHES	HEIGHT INCHES	DEPTH INCHES	BASED ON
			WATTS	VOLTS	PHASE				MFR / MODEL
11-EBB-1	WATCHEMOKET PS	TOILET ROOM	500	208	1	24.3	7.5	2.5	CHROMALOX/ CCAS-8B205-21-68

- NOTES:
1. PROVIDE LOW PROFILE SLOPE TOP CONVECTION HEATER, BOTTOM INLET.
 2. INCLUDE END CAPS, BUILT IN ADJUSTABLE THERMOSTAT AND DISCONNECT SWITCH.

PROJECT NO:	60148648
CAD DWG FILE:	00 M-002
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

00 M-002

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

SCHEDULES I

HVAC

AECOM USA, INC.
100 WATER STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200



RECORD DRAWINGS

MARK	DATE	BY	AC	DESCRIPTION
1	10/19/12	BS		REVISED FOR RECORD DRAWINGS

AIR CONDITIONING UNIT SCHEDULE

TAG NO.	BUILDING	TYPE	AIR HANDLING DATA										DX COOLING COIL DATA						MAX FILTER FACE VEL FT/MIN	FILTER MIN. EFFIC.	ELECTRICAL		SELECTION BASED ON MFR / MODEL		
			TOTAL		MIN OA		SP (IN WG)		FAN						NOMINAL COOLING (MBH)		EAT (°F)				VOLTS	PH			
			CFM	CFM	CFM	CFM	ESP	TSP	RPM	TYPE	DRIVE	MTR ENCL.	HP	TONS	TOTAL	SENSIBLE	DB	WB						DB	WB
11-AC-1	WATCHEMOKET PS	SPLIT DX	3,000	200	0.6				CENT	BELT	ODP	2	7.5 TONS	90	84.2	87	71	61.6	61.6	R-410A	300	30%	480	3	TRANE TWE-090D4

- NOTES:
- AIR CONDITIONING UNITS SHALL INCLUDE MIXING BOX, FILTER, COOLING COIL, ACCESS & FAN SECTION. NO HEAT.
 - 11-AC-1 PROVIDE ENTHALPY ECONOMIZER & ROOM WALL MOUNTED MICROPROCESSOR BASED CONTROLS TO CONTROL AND MONITOR ALL UNIT FUNCTIONS.
 - SELECT UNITS WITH FILTERS AT MID LIFE.
 - INTERLOCK 11-AC-1 WITH 11-ACCU-1.
 - HOT GAS BYPASS

AIR COOLED CONDENSING UNIT SCHEDULE

UNIT NO.	BUILDING	LOCATION	INTERLOCK	CAPACITY NOMINAL (TONS)	CAPACITY (MBH)	AMBIENT DEG(°F)	EER	ELECTRICAL DATA										SELECTION BASED ON MFR / MODEL				
								VOLTS		PH		COMPRESSORS				CONDENSER FAN(S)				UNIT AMPS		
								QTY.	RLA (EA)	LRA (EA)	QTY.	DIAM (IN)	HP(EA)	FLA (EA)	LRA (EA)	MCA	MAX FUSE					
11-ACCU-1	WATCHEMOKET PS	GRADE	11-AC-1	7.5	90	95		480	3	2	12.9	100	1	26	0.5	1.6	3.6	17.7	25	TRANE/ TTA-090D4		

- NOTES:
- COMPRESSOR START ASSIST CAPACITOR AND RELAY, CRANKCASE HEATER, CYCLE PROTECTION, FILTER DRYER AND LOW AMBIENT CONTROLLER.
 - WINTER START CONTROL, EVAP. FREEZE PROTECTION, LOW PRESSURE SWITCH AND TIME DELAY RELAY.

DUCTLESS AIR CONDITIONING UNIT SCHEDULE

TAG NO.	BUILDING	SERVES	COOLING (MBH)	FAN CFM	INDOOR UNIT				OUTDOOR UNIT						BASED ON MFR / MODEL		
					ELECTRICAL DATA				ELECTRICAL DATA								
					VOLTAGE	PHASE	FAN FLA	MCA	TAG NO.	VOLTAGE	PHASE	FAN FLA	MCA	COMPRESSOR		MOCP	
12-DAC-1	BOYDEN PS	ELECTRICAL ROOM	24.0	775 HIGH SPEED	208	1	0.36	1	12-DACCU-1	208	1	0.75	18	12 RLA	14 LRA	30 AMP	MITSUBISHI/ PKA-A24KA & PUY-A24NHA3
12-DAC-2	BOYDEN PS	ELECTRICAL ROOM	24.0	775 HIGH SPEED	208	1	0.36	1	12-DACCU-2	208	1	0.75	18	12 RLA	14 LRA	30 AMP	MITSUBISHI/ PKA-A24KA & PUY-A24NHA3
23-DAC-1	OPERATIONS	CONTROL ROOM	34.2	920 HIGH SPEED	208	1	0.57	1	23-DACCU-1	208	1	0.75	25	12 RLA	17.5 LRA	40 AMP	MITSUBISHI/ PKA-A36KA & PUY-A36NHA3
23-DAC-2	OPERATIONS	CONTROL ROOM	34.2	920 HIGH SPEED	208	1	0.57	1	23-DACCU-2	208	1	0.75	25	12 RLA	17.5 LRA	40 AMP	MITSUBISHI/ PKA-A36KA & PUY-A36NHA3

- NOTES:
- PROVIDE WITH REFRIGERANT TUBING SETS, WALL MOUNTED THERMOSTAT (WIRED REMOTE), CRANKCASE HEATER AND LOW AMBIENT CONTROLS DOWN TO 0 DEG F.
 - DAC INDOOR UNIT SHALL BE THE HIGH WALL MOUNTED FAN COIL TYPE, SIMILAR TO MITSUBISHI- MR SLIM MODEL PKA
 - DACCU OUTDOOR UNIT SHALL BE HORIZONTAL DISCHARGE CONDENSING UNIT SIMILAR TO MITSUBISHI MODEL PUY.
 - R-410A REFRIGERANT

ELECTRIC DUCT HEATER SCHEDULE

TAG NO.	BUILDING	LOCATION	CAPACITY (KW)	CFM	ELECTRICAL		DUCT DIMENSIONS (INSIDE)		PRESSURE DROP-MAX IN WC	NO. OF HEATING STAGES	CONTROL CIRCUIT VOLTAGE	SELECTION BASED ON MFR / MODEL
					VOLT	PH	W	H				
					11-EDH-1	WATCHEMOKET PS	SCREENINGS- UPPER	15				
11-EDH-2	WATCHEMOKET PS	SCREENINGS- LOWER	35	2,500	480	3	42	21	0.18	MODULATING	24	INDEECO ULTRASAFE EXPLOSIONPROOF

- NOTES:
- HEATERS 11-EDH-1 & 2 CUSTOM HEATER MUST BE EXPLOSIONPROOF CLASS 1, DIV 1, GROUP D.
 - ALL HEATERS SHALL INCLUDE THERMAL CUT OUTS, AIR FLOW SWITCH, CONTACTORS, FUSES AND CONTROL CIRCUIT TRANSFORMER. PROVIDE ELECTRONIC DUCT THERMOSTAT TO CONTROL HEATER.
 - ALL HEATERS SHALL BE PROVIDED WITH SCR CONTROL.

GAS FIRED AIR HANDLING UNIT SCHEDULE

TAG NO.	BUILDING	LOCATION	TYPE	FUEL	AIR HANDLING DATA						HEATING SECTION				ELECTRICAL		SELECTION BASED ON MFR / MODEL			
					CFM		SP (IN WG)		SUPPLY FAN		INPUT MBH	OUTPUT MBH	EAT (°F)	LAT (°F)	VOLTS	PH				
					TOTAL	MIN OA	ESP	TSP	RPM	TYPE								MTR ENCL.	HP	
43-AHU-1	DIGESTER	ON ROOF	CONSTANT VOLUME	NATURAL GAS	2,600	2,600	0.75	1.13	1023	FC	TEFC	1.5	200	162	0	55	460	3	2" PLEATED	REZNOR RDH-200

- NOTES:
- PROVIDE 100% OUTSIDE AIR SCREENED INLET HOOD WITH RAIN BAFFLES. 2 POSITION OA DAMPER.
 - PROVIDE ELECTRONIC MODULATION WITH 25% TO 100% TURNDOWN; REZNOR CONTROL OPTION DG6 WITH FX06 CONTROLLER. REMOTE PANEL WITH BLOWER, BURNER, FILTER LIGHTS; MOUNT COMMAND MODULE ON PANEL.
 - 409 STAINLESS STEEL HEAT EXCHANGER. MULTI-TRY DIRECT SPARK IGNITION W/ 100% LOCKOUT, FIRESTAT, AIR FLOW SWITCH AND GAS PRESSURE SAFETY SWITCHES. PRESSURE SWITCH TO CONFIRM VENTER FLOW.
 - POWER VENTED. PROVIDE VENT VERTICAL EXTENSION KIT.
 - DOUBLE WALL INSULATED CABINET WITH SOLID LINER. INSULATED ROOF CURB. DOWNTURN PLENUM. VIBRATION ISOLATORS
 - AVAILABLE INLET GAS PRESSURE IS 5 IN WC MINIMUM, 14 IN WC MAX; UNIT HIGHER MINIMUM AND LOWER MAXIMUM INLET GAS PRESSURES SHALL NOT BE PERMITTED.
 - FLUSH MOUNTED FACTORY INSTALLED DISCONNECT- LOCKABLE & NON-FUSED. 120V 60I OUTLET POWERED SEPARATELY.

MARK	DATE	MADE BY	AC	BS	REVISIONS
1	10/19/12				REVISED FOR RECORD DRAWINGS

RECORD DRAWINGS

AECOM USA, INC. OFFICE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
No. 06279

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS
SCHEDULES II
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	00 M-003
DESIGNED BY:	A. CASAMANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
00 M-003	

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\W00 M-003.DWG
PLOT DATE: Friday, October 26, 2012 2:51:05 PM
LAST UPDATE: Wednesday, October 24, 2012 11:52:41 AM
ANSI D - 24-Oct-12

HEATING & VENTILATING UNIT SCHEDULE

TAG NO.	MANUFACTURER MODEL NO.	LOCATION	TYPE	OUTDOOR AIR CFM	SUPPLY FAN DATA							STEAM HEATING COIL DATA		AIR FILTER DATA			REMARKS	
					CFM	TSP (IN.WG)	DRIVE	HP	VOLT	PHASE	WHEEL SIZE (IN.)	TAG NO.	PERFORMANCE	MERV	THICK (IN.)	MAX. FACE VELOCITY (FPM)		TYPE
23-SA.HV-4	TRANE M SERIES SIZE 14	OPERATIONS BUILDING BELT FILTER PRESS ROOM	100 PCT MAKE-UP AIR HEATING ONLY HORIZONTAL DRAW-THRU INDOOR UNIT	7000	7000	1.50	BELT	5	460	3	18	HC-1	SEE SEPARATE SCHEDULE	8	2	350	THROWAWAY	①②③④
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	THROWAWAY	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	THROWAWAY	

- ① ANGLE FILTER SECTION ② PLENUM/ACCESS SECTION ③ AIRFOIL BLADE SUPPLY FAN ④ HORIZONTAL MOUNTED DISCHARGE PLENUM WITH 60" X 36" FACTORY CUT OPENING

STEAM BOILER FEED UNIT SCHEDULE

TAG NO.	MANUFACTURER MODEL NO.	LOCATION	TYPE	CAPACITY (LBS/HR)	PUMP DATA		MOTOR DATA (QTY-2)				RECEIVER DATA		REMARKS
					GPM	DISCHARGE (PSIG)	HP	VOLT	PHASE	RPM	TYPE	CAPACITY (GALS)	
23-CR.BFU-1	SHIPCO DMC-20	OPERATIONS BUILDING BOILER ROOM	DUPLEX FLOOR MOUNT	1608	9	20	1/3	115	1	3500	CAST IRON	80	①②③④⑤

- ① GAUGE GLASS ② INLET STRAINER ③ MAKE-UP FLOAT/SOLENOID VALVE ④ ELECTRICAL CONTROL PANEL ⑤ BRONZE FITTED PUMPS

STEAM HEATING COIL SCHEDULE

TAG NO.	MANUFACTURER MODEL NO.	LOCATION	TYPE	OUTPUT (MBH)	NO. ROWS	STEAM DATA		AIR DATA					REMARKS
						LBS/HR	PRESSURE (PSIG)	CFM	MAX. FACE VELOCITY (FPM)	MAX. APD (IN.WG.)	EAT (°F)	LAT (°F)	
23-LPS.HC-1	-	OPERATIONS BUILDING 23-SA.HV-4	HV UNIT	378	1	394	5	7000	650	0.25	0	50	

STEAM TRAP SCHEDULE

TAG NO.	MANUFACTURER MODEL NO.	LOCATION	TYPE	SERVICE	SIZE (IN)	CAPACITY (LB/HR)	SEAT RATING (PSI)	MINIMUM DIFFERENTIAL PRESSURE (PSI)	REMARKS
23-LPS.T-1	HOFFMAN FTO15L-4	OPERATIONS BUILDING	FLOAT & THERMOSTATIC	23-HV-4	1"	378	15	0.25	
23-LPS.T-2	HOFFMAN B0020A-3	OPERATIONS BUILDING	INVERTED BUCKET	DRIP	3/4"	---	20	2	①②

- ① DUE TO ELEVATION CHANGES, PROVIDE DRIP TRAPS AT BASE OF MAIN STEAM LINE RISERS. LOCATION IN FIELD SHALL BE DETERMINED BY CONTRACTOR.
 ② DUE TO LONG PIPE RUNS, PROVIDE DRIP LEGS W/ STEAM TRAPS AT INTERVALS OF NO MORE THAN 100 FEET IN STEAM LINES THAT ARE MORE THAN 200 FEET LONG. IN STEAM LINES THAT ARE SHORTER THAN 200 FEET AND LONGER THAN 100 FEET, PROVIDE A DRIP LEG W/ STEAM TRAP NEAR THE MIDDLE OF THE PIPE RUN. LOCATION IN FIELD SHALL BE DETERMINED BY CONTRACTOR.

ELECTRIC WALL HEATER

TAG NO.	MANUFACTURER MODEL NO.*	BUILDING	LOCATION	CFM	MTG. HT. (FT.) **	ELECTRICAL DATA					REMARKS
						KW	STAGES	AMPS	VOLTS	PHASE	
41-EWH-1	BERKO FRA1812	ADMINISTRATION BUILDING	2ND FLOOR SHOWER ROOM	-	0.5	1.8	1	15	120	1	①②

* SELECTION BASED ON BERKO; BERKO, ELECTROMODE OR CHROMALOX ARE ACCEPTABLE MANUFACTURERS.
 ** MOUNTING HEIGHT IS TO BOTTOM OF UNIT FROM FINISHED FLOOR

- ① POWER DISCONNECT SWITCH MOUNTED INTERNAL TO UNIT
 ② INTEGRAL THERMOSTAT

HOT WATER FIN TUBE RADIATION SCHEDULE

TAG NO.	MANUFACTURER MODEL NUMBER OR EQUAL	BUILDING	LOCATION	BTUH PER FT.	EWT (°F)	LWT (°F)	PIPE SIZE (IN)	FIN SIZE (IN)	ACTIVE LENGTH	TIERS	REMARKS
41-FTR-1	SLANT FIN 15.75E	ADMINISTRATION BUILDING	2ND FLOOR TOILET ROOMS	480	180	160	3/4	2 5/8 x 2 1/8	1'-6"	1	① ENCLOSURE LENGTH = 4'-0"
41-FTR-2	SLANT FIN 15.75E	ADMINISTRATION BUILDING	2ND FLOOR TOILET ROOMS	480	180	160	3/4	2 5/8 x 2 1/8	7'-9"	1	① ENCLOSURE LENGTH = 7'-9" (WALL TO WALL)

- ① ENCLOSURES TO INCLUDE DAMPER, HINGED VALVE COVER AND ALL OTHER REQUIRED ACCESSORIES

REVISIONS	DESCRIPTION
1	10/19/12

RECORD DRAWINGS

AECOM

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

10/19/12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
 SCHEDULES III
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	00 M-004
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
00 M-004	

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

BOILER SCHEDULE									
TAG NO.	TYPE	FUEL	BURNER INPUT MBH	GROSS OUTPUT MBH	EFFICIENCY	AIR CONN. IN.	FLUE DIAM CONN. IN.	ELECTRICAL V / PH / HZ	SELECTION BASED ON MFR / MODEL
BLR-1	CONDENSING STAINLESS STEEL	NATURAL GAS	800	752	94%	4	6	120/1/60	LOCHINVAR/ KBN801

- NOTES:
- HEATING FLUID IS 40 PERCENT PROPYLENE GLYCOL.
 - FULLY MODULATING BOILERS WITH OUTSIDE AIR TEMPERATURE RESET.
 - 120V CONTROLS.
 - BLR-1 SHALL BE A HIGH EFFICIENCY CONDENSING BOILER & MUST COMPLY WITH ASME CSD-1A.

HYDRONIC DUCT HEATING COILS																
TAG NO.	BLDG	LOCATION	TOTAL (MBH)	CFM	AIR SIDE				WATER SIDE				COIL DATA			
					FACE AREA TOTAL SF	EAT (°F)	LAT (°F)	P.D. (IN. W.G.)	GPM	EWT (°F)	LWT (°F)	PD (FT)	MIN ROWS DEEP	NO. COILS	FINNED SIZE IN X IN	MFR/ MODEL
21-HC-1	HEADWORKS	HEADWORKS	268	4500	6.00	0	55	0.26	28.8	180	160	1.4	2	1	32X27	TRANE/D5WB27
21-HC-2	HEADWORKS	HEADWORKS	268	4500	6.00	0	55	0.26	28.8	180	160	1.4	2	1	32X27	TRANE/D5WB27
21-HC-3	HEADWORKS	CHEMICAL ROOM	40.6	500	1.00	0	75	0.14	4.37	189	160	2.87	2	1	12X12	TRANE DP2B12

- NOTES: ALL COILS SHALL BE PROVIDED WITH SAME END CONNECTIONS. ALL COILS SHALL BE DUCT MOUNTED. HEATING FLUID IS 40% PROPYLENE GLYCOL.


PUMP SCHEDULE													
TAG NO.	BUILDING	LOCATION	TYPE	SERVICE	GPM	HEAD (FT)	PUMP RPM	IMPELLER IN	MIN EFF %	MOTOR ENCLOSURE	MOTOR HP	ELECTRICAL VOLT / PH / HZ	BASED ON MFR/ MODEL
21-CP-1	HEADWORKS	BOILER ROOM	INLINE	HEATING	80	50	1750	7	55.1	ODP	3	460 / 3 / 60	B&G SERIES 80 2x2x7
21-CP-2	HEADWORKS	BOILER ROOM	INLINE	HEATING-STAND BY	80	50	1750	7	55.1	ODP	3	460 / 3 / 60	B&G SERIES 80 2x2x7
21-BP-1	HEADWORKS	BOILER ROOM	INLINE	BLR-1 (CIRC PUMP)	51	18	1750	5	-	ODP	1/2	120/1/60	B&G SERIES 60-1.25x5.25

- NOTES: 1. FLUID IS BUILDING HEATING HOT WATER WITH 40% PROPYLENE GLYCOL.

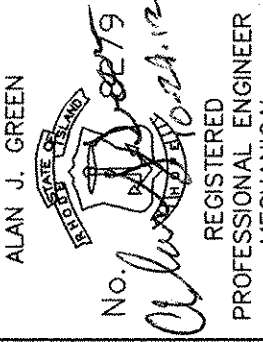
HYDRONIC UNIT HEATER SCHEDULE													
TAG NO.	BUILDING	LOCATION	TYPE	CAPACITY (MBH)	EWT (°F)	LWT (°F)	GPM	PRESS DROP (FT)	ELECTRICAL			SELECTION BASED ON MFR / MODEL	
									HP	VOLT	PH ENCL.		
21-UH-1	HEADWORKS	HEADWORKS	HYDRONIC- HORIZONTAL	44.8	180	160	5.3	0.23	1/20	115	1	EXP	TRANE UHS-72
21-UH-2	HEADWORKS	HEADWORKS	HYDRONIC- HORIZONTAL	44.8	180	160	5.3	0.23	1/20	115	1	EXP	TRANE UHS-72
21-UH-3	HEADWORKS	HEADWORKS	HYDRONIC- HORIZONTAL	44.8	180	160	5.3	0.23	1/20	115	1	EXP	TRANE UHS-72
21-UH-4	HEADWORKS	CHEMICAL AREA	HYDRONIC- HORIZONTAL	22.3	180	160	2.7	0.09	25 WATTS	115	1	TE	TRANE UHS-36
21-UH-5	HEADWORKS	BOILER ROOM	HYDRONIC- HORIZONTAL	14.9	180	160	1.8	0.014	16 WATTS	115	1	TE	TRANE UHS-24

- NOTES:
- HEATING FLUID IS 40 PERCENT PROPYLENE GLYCOL. PERFORMANCE DATA INDICATED IN THE SCHEDULE IS FOR HOT WATER, NOT CORRECTED FOR GLYCOL.
 - UNIT HEATER MOUNTING HEIGHT SHALL BE 7.5' AFF UNLESS OTHERWISE INDICATED.
 - UNIT HEATERS 21-UH-1, 2, 3 & 4 SHALL BE CORROSION RESISTANT WITH EPOXY COATING. UNIT HEATERS 21-UH-1, 2 & 3 SHALL ALSO BE EXPLOSIONPROOF.

NO.	DATE	MADE BY	AC	REVISIONS
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS



 AECOM USA, INC. ONE WASHINGTON ST. WASHINGTON, MA 01890
 PHONE (781) 246-5200
RECORD DRAWINGS



 ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
SCHEDULES IV
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	00 M-005
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
00 M-005	

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

SEQUENCES OF OPERATION FOR CONTROLS:

A. ELECTRIC UNIT HEATERS: (EUH & EWH)

- EACH ELECTRIC UNIT HEATER SHALL BE CONTROLLED BY A THERMOSTAT AS SHOWN, ON A DROP IN SPACE TEMPERATURE BELOW THE THERMOSTAT SET POINT (ADJUSTABLE), THE UNIT FAN SHALL START AND THE ELECTRIC HEATING COIL SHALL BE ENERGIZED. WHEN THE SPACE TEMPERATURE IS ABOVE THE THERMOSTAT SET POINT, THE HEATER SHALL BE DEACTIVATED AND THE FAN SHALL STOP.
- THE THERMOSTAT SET POINT FOR THE UNIT HEATERS SHALL BE 55 DEGREES F (ADJUSTABLE) IN ALL AREAS EXCEPT AS LISTED BELOW.

BLDG	HEATER	SET POINT
WATCHEMOKET	11-EUH-4	45 DEG F
OPERATIONS	23-EUH-1	65 DEG F
ADMINISTRATION	41-EWH-1	72 DEG F
BACFLOW PREVENTER VAULT	44-EUH-1	40 DEG F

B. ELECTRIC BASEBOARD HEATERS: (11-EBB-1)

- ELECTRIC BASEBOARD HEATERS SHALL BE STAND ALONE, CONTROLLED BY AN INTEGRAL THERMOSTAT. UPON A CALL FOR HEATING THE ELECTRIC BASEBOARD HEATER SHALL BE ENERGIZED TO MAINTAIN THE SPACE THERMOSTAT SET POINT.

C. DUCTLESS AIR CONDITIONING UNITS / CONDENSING UNIT: (12-DAC-1 & 2 AND 12-DACCU-1 & 2) (23-DAC-1 & 2 AND DACCU-1 & 2)

- DUCTLESS SPLIT SYSTEMS SHALL BE PROVIDED WITH CONTROLS FROM THE MANUFACTURER.
- WHEN SPACE TEMPERATURE IS ABOVE THE ROOM THERMOSTAT SET POINT (ADJUSTABLE), THE INDOOR AIR HANDLING UNIT AND OUTDOOR CONDENSING UNIT WILL BE ACTIVATED TO MAINTAIN SPACE TEMPERATURE.

BLDG	SYSTEM	SET POINT
BOYDEN	12-DAC-1 & 2	85 DEG F (ADJ)
OPERATIONS	23-DAC-1 & 2	75 DEG F (ADJ)

**D. AIR CONDITIONING UNIT WITH ECONOMIZER
WATCHEMOKET PUMP STATION ELECTRICAL ROOM (11-AC-1 & 11-ACCU-1)**

THE SEQUENCE IS REVERSIBLE UNLESS OTHERWISE NOTED.

- UPON START UP OF THE AIR CONDITIONING UNIT, THE OUTDOOR AIR INTAKE 11-MD-3A AND RETURN AIR 11-MD-3B SHALL BE POSITIONED TO THE MINIMUM OUTDOOR AIR POSITION AND THE EXHAUST AIR DAMPER 11-MD-2 SHALL CLOSE.
- WHEN THE SPACE TEMPERATURE IS BELOW 55 DEGREES F (ADJUSTABLE), THE CONDENSING UNIT SHALL BE LOCKED OUT.
- WHEN THE SPACE TEMPERATURE IS ABOVE 85 DEGREES F (ADJUSTABLE), THE CONDENSING UNIT SHALL BE ENERGIZED AND OPERATE STAGES OF DX COOLING TO MAINTAIN THE "NORMAL" SPACE TEMPERATURE.
- ECONOMIZER: WHEN THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE REQUIRED SPACE TEMPERATURE AND COOLING IS REQUIRED, ECONOMIZER COOLING SHALL BE ENABLED. THE UNIT'S OUTDOOR AIR INTAKE, RETURN AIR DAMPERS AND WALL MOUNTED EXHAUST AIR DAMPERS SHALL BE POSITIONED TO PRODUCE A MIXED AIR TEMPERATURE OF 55 DEGREES (ADJUSTABLE).
- WHEN THE DUCT SMOKE DETECTOR SENSES SMOKE, THE CONTROLLER SHALL CLOSE THE OUTDOOR AIR DAMPER, SHUT DOWN THE FAN AND TRANSMIT AN ALARM SIGNAL TO THE THE PLANT SCADA SYSTEM. IN ADDITION, WHEN THE DUCT SMOKE DETECTOR SENSES SMOKE A SIGNAL SHALL ALSO BE SENT TO THE FIRE ALARM PANEL.
- WHEN THE SPACE TEMPERATURE IS ABOVE 100 DEGREES F (ADJUSTABLE) OR BELOW 45 DEGREES F (ADJUSTABLE), AN ALARM SIGNAL WILL BE TRANSMITTED TO THE THE PLANT SCADA SYSTEM.

**E. ROOF MOUNTED GAS FIRED AIR HANDLING UNIT AND SINGLE SPEED EXHAUST FAN:
FORMER DIGESTER BUILDING (43-AHU-1) (43-EF- 1)**

- THE AIR HANDLING UNIT AND EXHAUST FAN SHALL RUN CONTINUOUSLY. NFPA 820 REQUIRES ALL SPACES WITHIN THE FORMER DIGESTER BUILDING TO BE VENTILATED CONTINUOUSLY AT A MINIMUM 6 ACH IN ORDER FOR THE SPACES TO BE ELECTRICALLY "UNCLASSIFIED".
- DIFFERENTIAL PRESSURE SWITCHES SHALL ENSURE THAT THE ROOFTOP UNITS 43-AHU-1 AND FAN 43-EF-1 ARE OPERATING CONTINUOUSLY. UPON A SIGNAL FROM EITHER FLOW SWITCH INDICATING NO FLOW, AN ALARM SHALL BE TRANSMITTED TO THE PLANT SCADA SYSTEM,
- THE SEQUENCE IS REVERSIBLE UNLESS OTHERWISE NOTED.
- STARTUP AND NORMAL OPERATION: UPON START UP, THE AIR HANDLING UNIT 43-AHU-1 AND EXHAUST FAN 43-EF-1 SHALL START, AND 43-AHU-1'S OA MOTOR OPERATED DAMPERS SHALL OPEN.
- GAS HEATING SECTION: THE ROOFTOP UNIT CONTROLS OF HEATING WILL BE PROVIDED FROM THE MANUFACTURER. WHEN THE OUTSIDE AIR TEMPERATURE IS 60 DEGREES F OR LOWER, THE AIR HANDLING UNIT'S HEATING SECTION SHALL BE ENABLED. THE DUCT MOUNTED TEMPERATURE SENSOR ACTING THROUGH THE CONTROLLER, SHALL MODULATE STAGES OF GAS TO MAINTAIN SUPPLY DUCT TEMPERATURE SET POINT OF 55 DEGREES F (ADJUSTABLE).
- SAFETIES: WHEN THE SUPPLY DUCT MOUNTED TEMPERATURE SENSOR SENSES A TEMPERATURE BELOW 38 DEGREES F (ADJUSTABLE) OR THE DIFFERENTIAL PRESSURE SWITCH SENSES A LOSS OF AIR FLOW, (BOTH, AFTER START UP FLOWS HAVE BEEN ESTABLISHED) OR THE DUCT SMOKE DETECTOR SENSES SMOKE; THE CONTROLLER SHALL SHUT DOWN THE AIR HANDLING UNIT'S GAS HEATING SECTION AND SUPPLY FAN AND CLOSE THE OUTDOOR AIR DAMPER, SHUT DOWN THE ASSOCIATED EXHAUST FAN AND TRANSMIT A TROUBLE ALARM SIGNAL TO THE PLANT SCADA.

BLDG	EQUIP NO.	OA DAMPER	SET POINT
DIGESTER	43-AHU-1	43-MD-1	55 DEG F (ADJ)
DIGESTER	43-EF-1	---	---

F. SINGLE SPEED EXHAUST FAN WITH OA DAMPER AND THERMOSTATS

- THE EXHAUST FANS SHALL BE ELECTRICALLY INTERLOCKED WITH THEIR ASSOCIATED OUTSIDE AIR INTAKE DAMPER(S) AS INDICATED IN THE TABLE.
- WHEN THE SPACE TEMPERATURE IS ABOVE THE ROOM THERMOSTAT SET POINT (ADJUSTABLE), THE MOTOR OPERATED OUTSIDE AIR DAMPER SHALL OPEN AND THE EXHAUST FAN SHALL RUN.
- WHEN THE SPACE TEMPERATURE IS BELOW THE ROOM THERMOSTAT SET POINT THE EXHAUST FAN SHALL STOP AND THE OUTSIDE AIR DAMPERS SHALL CLOSE.

BLDG	FAN	OA DAMPER	SET POINT
HEADWORKS	21-EF-3	21-MD-3	80 DEG F (ADJ)
HEADWORKS	21-EF-4	21-MD-3	85 DEG F (ADJ)
HEADWORKS	21-EF-5	21-MD-4	75 DEG F (ADJ)
SILVER ST	53-EF-4	53-MD-2	80 DEG F (ADJ)
ROCKWAY	54-EF-3	54-MD-2	80 DEG F (ADJ)

NOTE:

- HEADWORKS BLDG OA DAMPER (21-MD-3) SHALL OPEN FOR 21-EF-3 AND/OR 21-EF-4.
- SILVER ST. 53-EF-4 SHALL BE ACTIVATED BY EITHER THE THERMOSTAT LOCATED IN THE VFD AREA OR THE MOTOR ROOM.

**G. SINGLE SPEED EXHAUST FANS WITH SWITCH & OA DAMPERS:
WATCHEMOKET PUMP STATION- WORKSHOP (11-EF-1)**

- WHEN THE SWITCH IS ACTIVATED, THE MOTOR OPERATED OA DAMPER SHALL OPEN AND THE EXHAUST FAN SHALL RUN AND WHEN THE SWITCH IS OFF THE EXHAUST FAN SHALL STOP AND THE OA DAMPER SHALL CLOSE.

BLDG	FAN	OA DAMPER
WATCHEMOKET	11-EF-1	11-MD-1

**H. SINGLE SPEED FANS WITH SWITCH
WATCHEMOKET PUMP STATION- TOILET ROOM (11-EF-2)**

- WHEN THE SWITCH IS ACTIVATED THE FAN SHALL RUN AND WHEN THE SWITCH IS OFF THE FAN SHALL STOP.

BLDG	FAN	LOCATION
WATCHEMOKET	11-EF-2	TOILET ROOM

**I. SINGLE SPEED SUPPLY FANS WITH ELECTRIC DUCT HEATING COILS INTERLOCKED WITH THE ODOR CONTROL SYSTEM
(WATCHEMOKET PUMP STATION 11-SF-1, 2 & 3 AND 11-EDH-1 & 2)**

- THE SYSTEM'S SUPPLY AIR IS PROVIDED BY 11-SF-1, 2 AND 3 AND EXHAUSTED BY THE ODOR CONTROL SYSTEM FAN (11-OCF-1). THE SUPPLY FANS 11-SF-1, 2 & 3 SHALL BE INTERLOCKED WITH THE ODOR CONTROL SYSTEM.
- (11-SF-1 AND 11-SF-2) SHALL BE ELECTRICALLY INTERLOCKED WITH THEIR ASSOCIATED OA MOTOR OPERATED DAMPER, 11-MD-4 AND 11-MD-5 RESPECTIVELY. WHEN THE FAN RECEIVES A SIGNAL TO START THE MOTOR OPERATED OA DAMPER SHALL OPEN AND SUPPLY FAN SHALL START.
- A "HAND-OFF-AUTO" WALL SWITCH SHALL CONTROL EACH FAN. WHEN THE WALL SWITCH IS IN THE HAND POSITION THE MOTOR OPERATED DAMPER SHALL OPEN AND THE SUPPLY FAN SHALL RUN. WHEN THE SWITCH IS IN THE OFF POSITION THE FAN SHALL BE OFF AND ITS ASSOCIATED MOTOR OPERATED DAMPER SHALL CLOSE.
- AUTO: UPON START UP OR UPON RECEIVING A SIGNAL FROM THE ODOR CONTROL SYSTEM AS DESCRIBED ABOVE THE OA MOTOR OPERATED OA DAMPERS SHALL OPEN AND SUPPLY FANS 11-SF-1, 2 & 3 SHALL START.
- THE ELECTRIC DUCT HEATING COILS SHALL BE CONTROLLED BY A DUCT TEMPERATURE SENSOR. THE ELECTRIC DUCT HEATING COILS SHALL MODULATE TO MAINTAIN DUCT TEMPERATURE SET POINT.
- THE CONTROLLER SHALL TRANSMIT AN ALARM SIGNAL (AFTER START UP FLOWS HAVE BEEN ESTABLISHED) TO THE SCADA WHEN:
 - THE ROOM TEMPERATURE SENSOR SENSES A TEMPERATURE BELOW 38 DEGREES F (ADJUSTABLE)
 - WHEN 11-SF-1 OR 11-SF-2 ARE CALLED TO RUN AND THE DIFFERENTIAL PRESSURE SWITCH SENSES A LOSS OF AIR FLOW.
 - WHEN THE DUCT SMOKE DETECTOR SENSES SMOKE THE CONTROLLER SHALL STOP THE THREE SUPPLY FANS AND SEND A SIGNAL TO THE PLANT PROCESS CONTROL (PLC) TO STOP ODOR CONTROL FAN 11-OCF-1.

FAN	OA DAMPER	DUCT HEATER	DUCT SET POINT	ROOM SET POINT
11-SF-1	11-MD-4	11-EDH-1	55 DEG (ADJ)	50 DEG (ADJ)
11-SF-2	11-MD-5	11-EDH-2	45 DEG (ADJ)	40 DEG (ADJ)
11-SF-3	NONE	NONE	---	---

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NO.	DATE	MADE BY	AC	REVISIONS
1	10/19/12	BS		REVISED FOR RECORD DRAWINGS

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAREHOUSES, MA 01980
 PHONE (781) 246-5200

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 02279

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
SEQUENCES OF OPERATION I
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	00 M-006
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
00 M-006	

SEQUENCES OF OPERATION FOR CONTROLS (CONT):

J. SINGLE SPEED SUPPLY AND EXHAUST FANS WITH HYDRONIC DUCT HEATING COIL INTERLOCKED WITH THE ODOR CONTROL SYSTEM: (HEADWORKS BUILDING 21-SF-2 AND 21-HC-2 AND 21-EF-1)

- 1. THE SYSTEM IS SUPPLIED BY 21-SF-2 AND EXHAUSTED BY 21-EF-1 AND THE ODOR CONTROL SYSTEM FAN (21-OCF-1). THE SUPPLY FAN 21-SF-2 SHALL BE INTERLOCKED WITH 21-EF-1 AND THE ODOR CONTROL SYSTEM (21-OCF-1).
2. 21-SF-2 SHALL BE ELECTRICALLY INTERLOCKED WITH ITS ASSOCIATED MOTOR OPERATED DAMPER. WHEN THE FAN RECEIVES A SIGNAL TO START, THE MOTOR OPERATED DAMPER SHALL OPEN AND SUPPLY AND EXHAUST FANS SHALL START.
3. A "HAND-OFF-AUTO" WALL SWITCH SHALL CONTROL EACH FAN. WHEN THE WALL SWITCH IS IN THE HAND POSITION THE MOTOR OPERATED DAMPER SHALL OPEN AND THE FAN SHALL RUN. WHEN THE SWITCH IS IN THE OFF POSITION THE FAN SHALL BE OFF AND ITS ASSOCIATED MOTOR OPERATED DAMPER SHALL CLOSE.
4. AUTO: UPON START UP OR UPON RECEIVING A SIGNAL FROM THE ODOR CONTROL SYSTEM AS DESCRIBED ABOVE, THE OA MOTOR OPERATED DAMPER SHALL OPEN AND THE SUPPLY AND EXHAUST FANS SHALL START.
5. THE HYDRONIC DUCT HEATING COIL SHALL BE CONTROLLED BY A DUCT TEMPERATURE SENSOR. THE HYDRONIC DUCT HEATING COIL'S CONTROL VALVE SHALL MODULATE TO MAINTAIN DUCT TEMPERATURE SET POINT.
6. THE CONTROLLER SHALL TRANSMIT AN ALARM SIGNAL (AFTER START UP FLOWS HAVE BEEN ESTABLISHED) TO THE PLANT SCADA AND STOP 21-SF-2, 21-EF-1 AND 21-OCF-1 WHEN:
a. THE DUCT MOUNTED TEMPERATURE SENSORS SENSES A TEMPERATURE BELOW 38 DEGREES F (ADJUSTABLE)
b. THE ROOM ALARM TEMPERATURE SENSOR SENSES A TEMPERATURE BELOW 38 DEGREES F (ADJUSTABLE)
c. WHEN 21-SF-2 OR 21-EF-1 ARE CALLED TO RUN AND THE DIFFERENTIAL PRESSURE SWITCH SENSES A LOSS OF AIR FLOW.
d. WHEN THE DUCT SMOKE DETECTOR SENSES SMOKE THE CONTROLLER SHALL STOP THE SUPPLY AND EXHAUST FANS AND STOP ODOR CONTROL FAN 21-OCF-1.

Table with 5 columns: FAN, OA DAMPER, DUCT HEATER, DUCT SET POINT, ROOM ALARM SET POINT. Values include 21-SF-2, 21-MD-2, 21-HC-2, 55 DEG (ADJ), 38 DEG (ADJ).

K. SUPPLY FAN AND EXHAUST FANS WITH OA AND EA DAMPERS: RAS PUMP STATION (32-SF-1 & 32-EF-1 & 32-EF-2)

- 1. THE SUPPLY FAN 32-SF-1 AND EXHAUST FAN 32-EF-2 SHALL RUN CONTINUOUSLY FOR BOTH NORMAL AND WINTER MODES. THE SEQUENCE IS REVERSIBLE UNLESS OTHERWISE NOTED. NFPA 820 REQUIRES THE BUILDING TO BE VENTILATED CONTINUOUSLY AT A MINIMUM 6 AIR CHANGES PER HOUR IN ORDER FOR THE SPACE TO BE ELECTRICALLY "UNCLASSIFIED".
2. DIFFERENTIAL PRESSURE SWITCHES SHALL ENSURE THAT FANS 32-SF-1 AND 32-EF-2 ARE OPERATING CONTINUOUSLY. UPON A SIGNAL FROM EITHER FLOW SWITCH INDICATING NO FLOW, AN ALARM SHALL BE TRANSMITTED TO THE PLANT SCADA SYSTEM & SCADA SHALL ACTIVATE A LOCAL VISUAL & AUDIBLE ALARM (SEE DWG 32 DI-609).
3. A TWO POSITION MANUAL WALL SWITCH LABELED "NORMAL--WINTER" LOCATED AT THE ENTRANCE SHALL CONTROL THE SYSTEM. OPERATION OF THE WINTER MODE IS INTENDED TO CONSERVE HEAT WHEN THE OUTSIDE TEMPERATURE IS 55 DEGREES F OR LOWER.
4. NORMAL OPERATION: UPON START UP, THE WALL MOUNTED MOTOR OPERATED OUTSIDE AIR DAMPERS 32-MD-1 & 2 SHALL OPEN AND 32-SF-1'S ASSOCIATED DAMPER 32-MD-3 SHALL OPEN AND THE SUPPLY FAN 32-SF-1 AND EXHAUST FANS 32-EF-1 AND 32-EF-2 SHALL START. WINTER OPERATION DAMPER 32-MD-3 SHALL BE CLOSED.

Table with 3 columns: EQUIP. NO., EQUIP. STATUS, DAMPER STATUS. Values include 32-SF-1 RUN, 32-MD-3 (OA) OPEN, 32-EF-1 RUN, 32-MD-1 & 2 (OA) OPEN, 32-EF-2 RUN, 32-MD-1 & 2 (OA) OPEN.

WINTER OPERATION DAMPER 32-MD-4 (EA) CLOSED

- 5. WINTER OPERATION: FOR WINTER MODE THE OPERATOR PLACES THE SWITCH LABELED "NORMAL--WINTER" TO THE WINTER POSITION. EXHAUST FAN 32-EF-1 SHALL STOP AND MOTOR OPERATED DAMPER 32-MD-4 ON THE EXHAUST DUCT TO 32-EF-2 SHALL OPEN AND OA MOTOR OPERATED DAMPERS 32-MD-1 & 2 SHALL CLOSE.

Table with 3 columns: EQUIP. NO., EQUIP. STATUS, DAMPER STATUS. Values include 32-SF-1 RUN, 32-MD-3 (OA) OPEN, 32-EF-1 STOP, 32-MD-1 & 2 (OA) CLOSED, 32-EF-2 RUN, 32-MD-1 & 2 (OA) CLOSED.

WINTER OPERATION DAMPER 32-MD-4 (EA) OPEN

- 6. SAFETIES: WHEN THE DUCT SMOKE DETECTOR SENSES SMOKE OR THE DIFFERENTIAL PRESSURE SWITCH SENSES A LOSS OF AIR FLOW, (AFTER START UP FLOWS HAVE BEEN ESTABLISHED) THE CONTROLLER SHALL SHUT DOWN ALL FANS AND CLOSE THE OUTDOOR AIR DAMPERS, AND TRANSMIT A TROUBLE ALARM SIGNAL TO THE PLANT SCADA SYSTEM.

L. TWO SPEED EXHAUST FAN: (SILVER ST. 53-EF-2; ROCKWAY 54-EF-1)

- 1. THE EXHAUST FAN(S) SHALL RUN CONTINUOUSLY. THE SEQUENCE IS REVERSIBLE UNLESS OTHERWISE NOTED. NFPA 820 REQUIRES THE SPACE TO BE VENTILATED CONTINUOUSLY AT A MINIMUM 6 AIR CHANGES PER HOUR IN ORDER FOR THE SPACE TO BE ELECTRICALLY "UNCLASSIFIED". IN THE WINTER THE VENTILATION RATE MAY BE REDUCED TO 3 AIR CHANGES PER HOUR ONLY WHEN THE CONDITIONS IDENTIFIED BELOW UNDER WINTER OPERATION--UNOCCUPIED ARE ALL MET.
2. DIFFERENTIAL PRESSURE SWITCHES SHALL ENSURE THAT FANS 53-EF-2 AND 54-EF-1 ARE OPERATING CONTINUOUSLY. UPON A SIGNAL FROM EITHER FLOW SWITCH INDICATING NO FLOW, AN ALARM SHALL BE TRANSMITTED TO THE PLANT SCADA SYSTEM AND A LOCAL VISUAL AND AUDIBLE ALARM SHALL BE ACTIVATED AT THE ASSOCIATED BUILDING.
3. STARTUP AND NORMAL OPERATION: UPON START UP, THE MOTOR OPERATED OUTSIDE AIR DAMPERS SHALL OPEN AND THE EXHAUST FAN SHALL START. NORMAL OPERATION THE TWO SPEED EXHAUST FAN SHALL RUN AT FULL SPEED.

Table with 4 columns: BLDG, EQUIP. NO., EQUIP. STATUS, DAMPER STATUS. Values include SILVER ST 53-EF-2 RUN- FULL SPEED 53-MD-1 (OA) OPEN, ROCKWAY 54-EF-1 RUN- FULL SPEED 54-MD-3 (RA) OPEN, 54-MD-1 (OA) OPEN.

4. WINTER OPERATION--UNOCCUPIED: THE EXHAUST FAN MAY OPERATE AT SLOW SPEED ONLY IF THE ALL OF FOLLOWING CONDITIONS ARE MET OTHERWISE THE SYSTEM SHALL RUN AS DESCRIBED FOR NORMAL OPERATION.

- a. WHEN THE OUTSIDE AIR TEMPERATURE IS 50 DEGREES F (NOT ADJUSTABLE) OR LOWER.
b. WHEN THE SPACE IS NOT OCCUPIED; THE TWO POSITION SWITCH LOCATED AT THE ENTRANCE DOOR, LABELED "OCCUPIED---UNOCCUPIED", SHALL BE SET TO THE UNOCCUPIED POSITION
c. THE COMBUSTIBLE GAS DETECTOR SET TO FUNCTION AT 10 PERCENT OF THE LOWER EXPLOSIVE LIMIT IS NOT ACTIVATED.

Table with 4 columns: BLDG, EQUIP. NO., EQUIP. STATUS, DAMPER STATUS. Values include SILVER ST 53-EF-2 RUN- SLOW SPEED 53-MD-1 (OA) OPEN, ROCKWAY 54-EF-1 RUN- SLOW SPEED 54-MD-3 (RA) CLOSED, 54-MD-1 (OA) OPEN.

- 5. SAFETIES: WHEN THE ROOM TEMPERATURE SENSOR SENSES A TEMPERATURE BELOW 38 DEGREES F (ADJUSTABLE), OR THE DIFFERENTIAL PRESSURE SWITCH SENSES A LOSS OF AIR FLOW, (AFTER START UP FLOWS HAVE BEEN ESTABLISHED) THE CONTROLLER SHALL SHUT DOWN THE EXHAUST FAN AND CLOSE THE OUTDOOR AIR DAMPERS, AND TRANSMIT AN ALARM SIGNAL TO THE PLANT SCADA.

M. SINGLE SPEED SUPPLY AND EXHAUST FAN WITH HYDRONIC DUCT HEATING COIL (CHEMICAL ROOM 21-SF-3, 21-HC-3 AND 21-EF-6) (HEADWORKS BUILDING 21-SF-1, 21-HC-1 AND 21-EF-2)

- 1. HEADWORKS (21-SF-1 AND 21-EF-2) AND CHEMICAL ROOM (21-SF-3 AND 21-EF-6) SHALL EACH BE ELECTRICALLY INTERLOCKED WITH THEIR ASSOCIATED MOTOR OPERATED OA DAMPER. WHEN THE FAN RECEIVES A SIGNAL TO START THE MOTOR OPERATED DAMPER SHALL OPEN AND THE ASSOCIATED SUPPLY AND EXHAUST FANS SHALL START.
2. A "HAND-OFF-AUTO" WALL SWITCH SHALL CONTROL EACH FAN. WHEN THE WALL SWITCH IS IN THE HAND POSITION THE MOTOR OPERATED DAMPER SHALL OPEN AND THE FAN SHALL RUN. WHEN THE SWITCH IS IN THE OFF POSITION THE FAN SHALL BE OFF AND ITS ASSOCIATED MOTOR OPERATED DAMPER SHALL CLOSE.
3. AUTO: UPON START UP OR UPON RECEIVING A SIGNAL FROM THE SCADA SYSTEM, THE MOTOR OPERATED DAMPER SHALL OPEN AND THE ASSOCIATED SUPPLY AND EXHAUST FANS SHALL START.
4. THE HYDRONIC DUCT HEATING COIL SHALL BE CONTROLLED BY A DUCT TEMPERATURE SENSOR. THE HYDRONIC DUCT HEATING COIL CONTROL VALVE SHALL MODULATE TO MAINTAIN DUCT TEMPERATURE SET POINT.
5. THE CONTROLLER SHALL TRANSMIT AN ALARM SIGNAL (AFTER START UP FLOWS HAVE BEEN ESTABLISHED) TO THE PLANT SCADA WHEN:
a. THE DUCT MOUNTED TEMPERATURE SENSORS SENSES A TEMPERATURE BELOW 38 DEGREES F (ADJUSTABLE),
b. THE ROOM ALARM TEMPERATURE SENSOR SENSES A TEMPERATURE BELOW THE ROOM ALARM SET POINT (ADJUSTABLE).
c. WHEN 21-SF-1 OR 21-EF-2 ARE CALLED TO RUN AND THE DIFFERENTIAL PRESSURE SWITCH SENSES A LOSS OF AIR FLOW, STOP BOTH FANS.
d. WHEN THE 21-SF-1 DUCT SMOKE DETECTOR SENSES SMOKE THE CONTROLLER SHALL STOP THE SUPPLY AND EXHAUST FANS AND SEND A SIGNAL TO THE PLANT SCADA.

Table with 6 columns: BLDG, FAN, OA DAMPER, DUCT HEATER, DUCT SET POINT, ROOM ALARM SET POINT. Values include HEADWORKS 21-SF-1 21-MD-1 21-HC-1 55 DEG (ADJ) 38 DEG (ADJ), HEADWORKS 21-EF-2 --- --- --- ---, HEADWORKS 21-SF-3 21-MD-5 21-HC-3 70 DEG (ADJ) 55 DEG (ADJ), HEADWORKS 21-EF-6 --- --- --- ---.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

Right margin containing: AECOM logo, RECORD DRAWINGS, PROJECT NO: 60148648, CAD DWG FILE: 00 M-007, DESIGNED BY: A. CASAVANT, DRAWN BY: B. SANTOSUOSSO, DEPT CHECK: C. GALLIGAN, PROJ CHECK: S. THIBAUT, DATE: OCTOBER 2012, SCALE: NONE, 00 M-007, and a table of REVISIONS.

Vertical text on the left margin: PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\00 M-007.DWG, LAST UPDATE: Wednesday, October 24, 2012 11:48:59 AM, ANSI D - 24-Oct-12

HVAC SYSTEM RESPONSIBILITY SCHEDULE

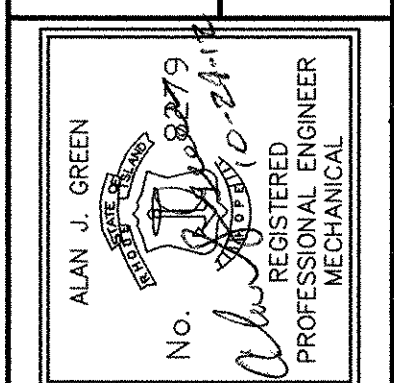
BUILDING	Item	Contractor Responsibility			Notes
		HVAC	Electrical	System Integrator	
11 - Watchemoket PS					
	- HVAC Equipment:				
	- All equipment including electric duct heaters except as indicated below	X			
	- Electric Unit Heaters EUH, CONV & EBB with associated thermostats		X		
	- HVAC Instrumentation: all except duct smoke detectors	X			
	- Duct Smoke Detectors		X		
	- HVAC Control Logic- Programming			X	Except control of AC unit shall be by the HVAC contracotr.
	- HVAC Control Conduit/Wire (all except as noted)		X		
	- AC Unit Controls (Logic and associated conduit/wire)	X			HVAC contractor responsible for all control logic and the associated conduit/wire. Power to be provided by the electrical contractor.
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
12 - Boyden PS					
	- HVAC Equipment:				
	- AC Units with wired thermostat option provided by manufacturer.	X			
	- Electric Unit Heater with associated thermostat		X		
	- HVAC Control Logic for AC units from equipment manufacturer	X			
	- HVAC Control Conduit/Wire for AC units including thermostats	X			
	- HVAC Control Conduit/Wire (Thermostats) for electric unit heater		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
21 - Headworks					
	- HVAC Equipment:				
	- All equipment except electric unit heaters	X			
	- Electric Unit Heaters with associated thermostats		X		
	- HVAC Instrumentation: all except duct smoke detectors	X			
	- Duct Smoke Detector		X		
	- HVAC Control Logic- Programming (All except as noted below)			X	
	- HVAC Control Logic- Programming for boiler, pumps, heating hot water system and coil control valves)	X			
	- HVAC Control Conduit/Wire (All except as noted below)		X		
	- HVAC Control Conduit/Wire (boiler, heating hot water system and coil control valves, not including unit heaters)	X			
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
23 - Operations Building					
	HVAC Equipment:				
	- Fans, Dampers	X			
	- Steam boiler feed unit	X			
	- AC Units with wired thermostat option provided by manufacturer.	X			
	- Heating and ventilating unit with steam coil including discharge air temperature controller & control valve.	X			
	- Electric Unit Heaters with associated Thermostats		X		
	- HVAC Instrumentation: all except duct smoke detectors	X			
	- Duct Smoke Detector		X		
	- HVAC Controls Logic- Programming/ controls	X			
	- HVAC Control Logic for AC units from equipment manufacturer	X			
	- HVAC Control Conduit/Wire for AC units including thermostats	X			
	- HVAC Control Conduit/Wire (steam boiler, boiler feed unit)	X			
	- HVAC Control Conduit/Wire for heating and ventilating unit 23-HV-1, including discharge air temperature controller and steam coil control valve.	X			
	- HVAC Control Wiring (23-EF-1 and it's associated Thermostats, Dampers, End Switches, etc.)		X		
	- HVAC Control Wiring (23-HV-1 and it's associated Freezestat, Dampers and End Switches, etc.)		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
32 - RAS Pump Station					
	- HVAC Equipment:				
	- All equipment except electric unit heaters	X			
	- Electric Unit Heaters with associated thermostats		X		
	- HVAC Instrumentation: all except duct smoke detectors	X			
	- Duct Smoke Detector		X		
	- HVAC Control Logic- Controls		X		
	- HVAC Control Conduit/Wire- all		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
41 - Administration Building					
	- HVAC Equipment:				
	- All equipment except electric heaters	X			
	- Electric Wall Heater with integral thermostat		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
42 - Raw Sewage PS					
	- HVAC Equipment:				
	- All equipment except electric unit heaters	X			
	- Electric Unit Heaters with associated thermostats		X		
	- HVAC Instrumentation: All except duct smoke detectors	X			
	- Duct Smoke Detector		X		
	- HVAC Control Logic		X		
	- HVAC Control Conduit/Wire - all		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		

MARK	DATE	MADE BY	CHECKED	AC	REVISIONS
1	10/19/12	B5			REVISED FOR RECORD DRAWINGS

AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

SYSTEM RESPONSIBILITY SCHEDULE I

HVAC

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	00 M-009
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

00 M-009

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\WV00 M-009.DWG
 LAST UPDATE: Wednesday, October 24, 2012 11:45:28 AM
 PLOT DATE: Friday, October 26, 2012 2:51:22 PM
 ANSI D - 24-Oct-12

HVAC SYSTEM RESPONSIBILITY SCHEDULE

BUILDING	Item	Contractor Responsibility			Notes
		HVAC	Electrical	System Integrator	
43 - Digester Building					
	- HVAC Equipment: All	X			
	- HVAC Instrumentation: All except duct smoke detectors	X			
	- AHU control panel & controls as specified in 15806 & equipment schedule	X			
	- Duct Smoke Detector		X		
	- HVAC Control Logic- Programming			X	Air Handling Unit controls to be provided by the HVAC contractor.
	- HVAC Control Logic- Controls for the air handling unit	X			
	- HVAC Control Conduit/Wire- all		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
44- Master Back Flow Prevention Vault					
	- HVAC Equipment:				
	- Electric Unit Heaters with integral thermostat		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
53 - Silver Street PS					
	- HVAC Equipment:				
	- All equipment except electric unit heaters	X			
	- Electric Unit Heaters with associated Thermostats.		X		
	- HVAC Instrumentation:				
	- All, including flow switches, thermostats, temperature sensors & outdoor temperature switches	X			
	- "Occupied- Unoccupied" Switch		X		
	- Combustible gas detector			X	
	- HVAC Control Logic- Programming			X	
	- HVAC Control Conduit/Wire- All		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
54 - Rockway PS					
	- HVAC Equipment:				
	- All equipment except electric unit heaters	X			
	- Electric Unit Heaters with associated Thermostats.		X		
	- HVAC Instrumentation:				
	- Flow Switches, thermostats, temperature sensors & outdoor temperature switches	X			
	- "Occupied- Unoccupied" Switch		X		
	- Combustible gas detector			X	
	- HVAC Control Logic- Programming			X	
	- HVAC Control Conduit/Wire- All		X		
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
55 - Argyle PS					
	- HVAC Equipment:				
	- Fan	X			
	- HVAC Instrumentation : flow switch	X			
	- HVAC Control Logic- Programming			X	
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		
56 - Rounds PS					
	- HVAC Equipment:				
	- Fan	X			
	- HVAC Instrumentation : flow switch	X			
	- HVAC Control Logic- Programming			X	
	- Power to HVAC Equipment (Conduit/Wire, Starters, etc.)		X		

NOTES:

- HVAC contractor shall furnish and install:
 All HVAC instrumentation shown on the Drawings, schedules or described in the sequences of operation or specified to be included with equipment in spec 15806, (except duct smoke detectors which are to be provided by the Electrical Contractor).
 Dampers and actuators
 HVAC control valves and actuators
 Electric duct heaters and associated instrumentation and control.
 Install duct mounted smoke detectors provided and wired by electrical contractor.
- Electrical contractor shall furnish all:
 Duct mounted smoke detectors
- Electrical contractor shall furnish and install all:
 Electric unit heaters, electric wall heater, electric wall mounted convection heater, electric base board heaters and associated thermostats

RECORD DRAWING

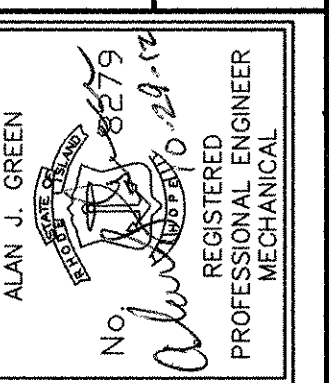
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	AC	REVISIONS
1	10/19/12	BS		REVISED FOR RECORD DRAWINGS

AECOM USA, INC.
 100 EAST MAIN STREET
 WAREFIELD, MA 01860
 PHONE (781) 246-5200



RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

SYSTEM RESPONSIBILITY SCHEDULE II

HVAC

PROJECT NO:	60148648
CAD DWG FILE:	00 M-010
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

00 M-010

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\00 M-010.DWG
 LAST UPDATE: Wednesday, October 24, 2012 11:25:31 AM
 PLOT DATE: Friday, October 26, 2012 2:51:25 PM
 ANSI D - 24-Oct-12

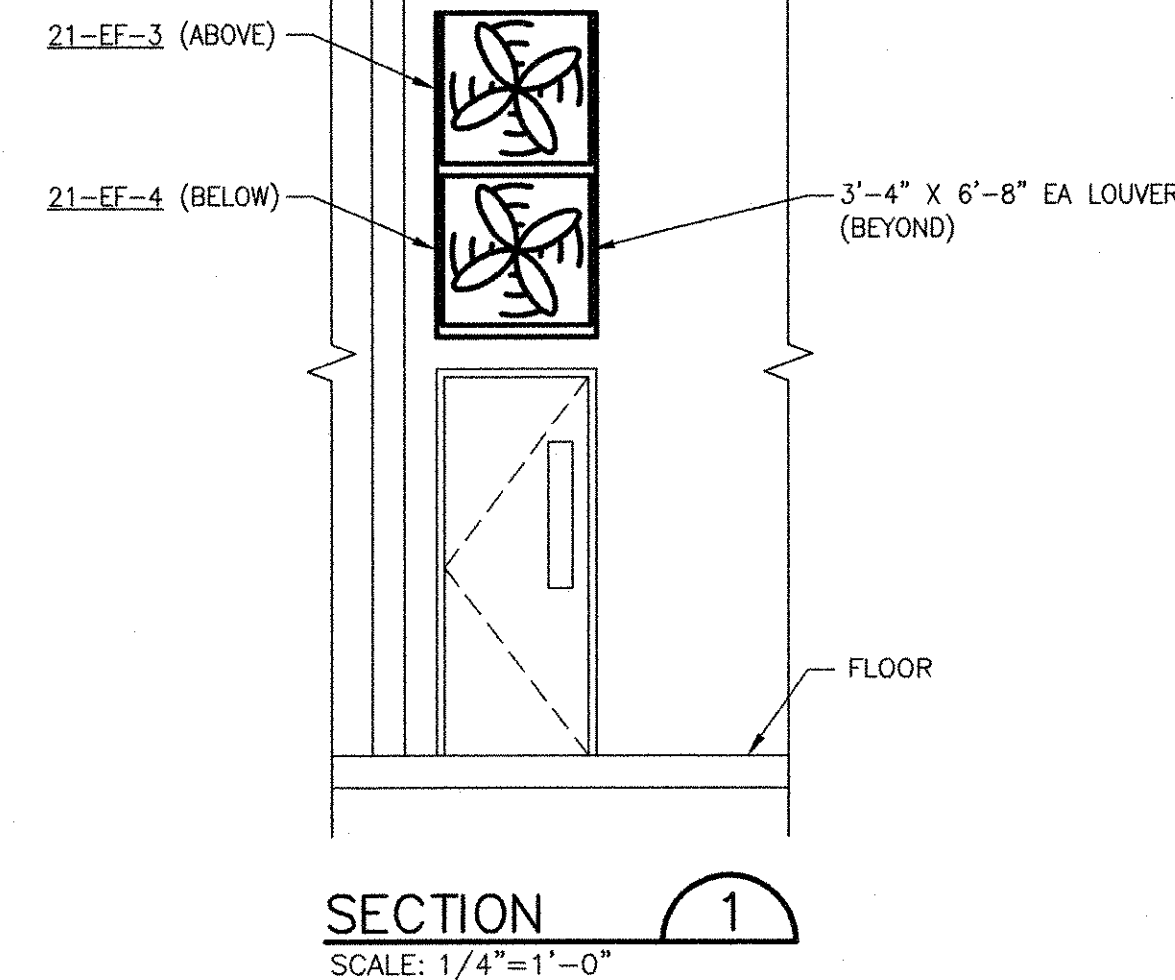
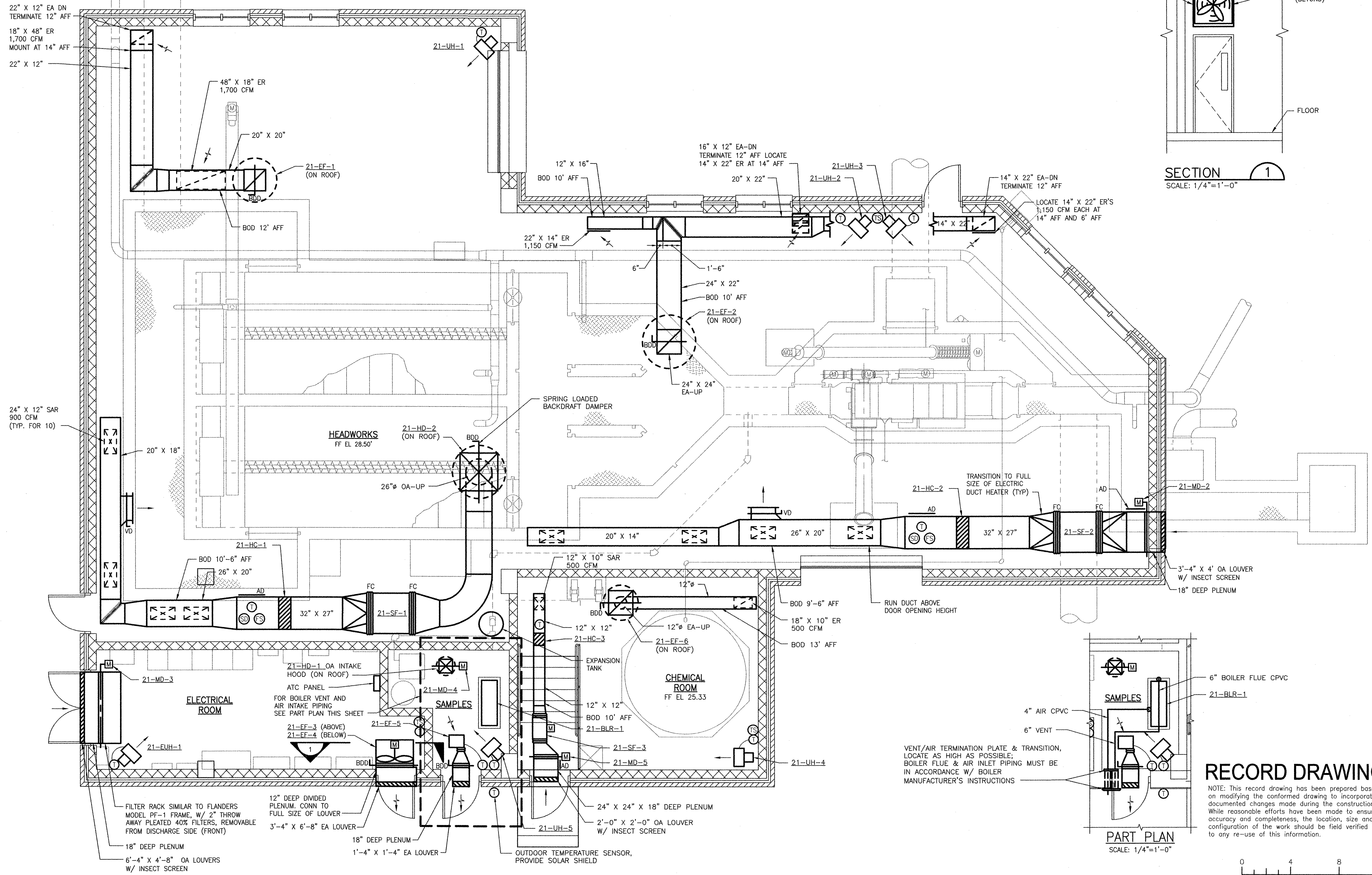
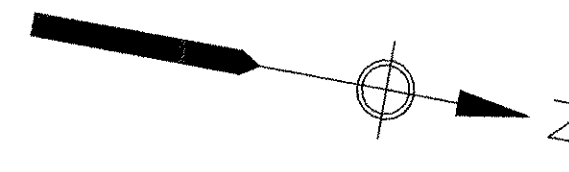
1

2

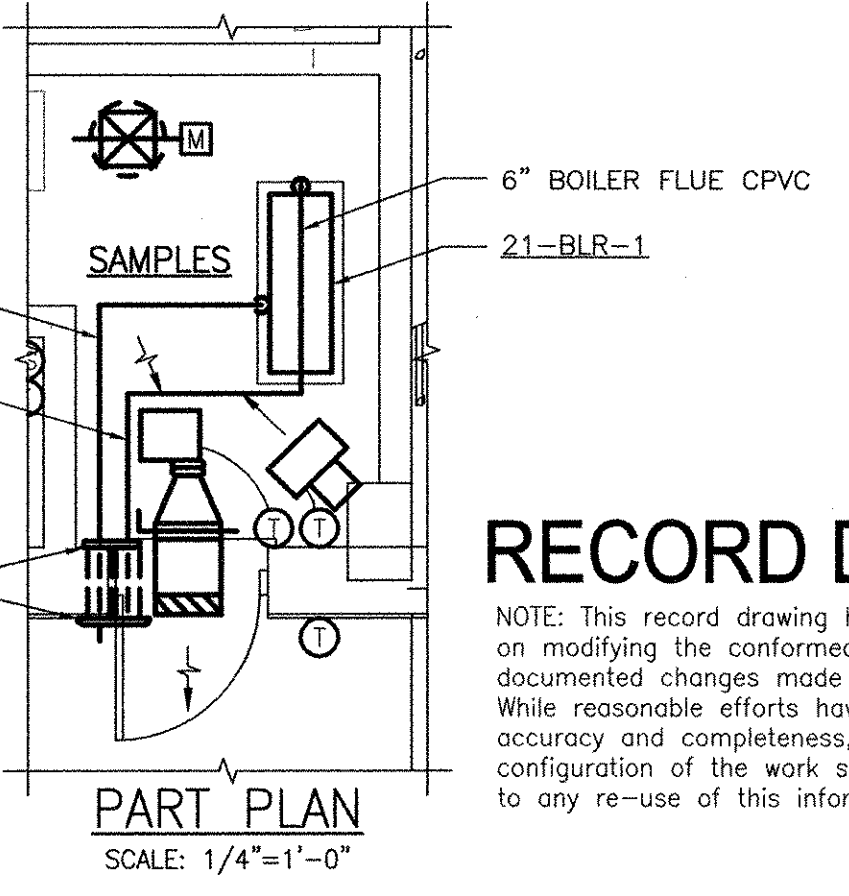
3

4

5



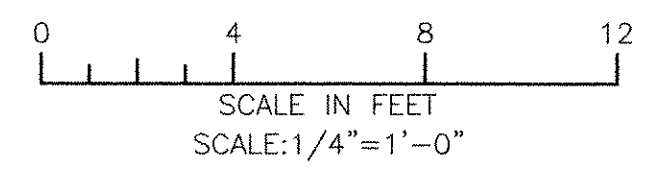
SECTION 1
SCALE: 1/4"=1'-0"



PART PLAN
SCALE: 1/4"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS
2	4/4/11	BS	AC	ELIMINATED PARAPET
1	3/21/11	BS	AC	FANS MOVED DUE TO CHANGE TO CONCRETE ROOF

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 ONE WAKEFIELD WAY, 01880 WAKEFIELD, MA
 PHONE (781) 246-5200

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 0106279
 State of Massachusetts

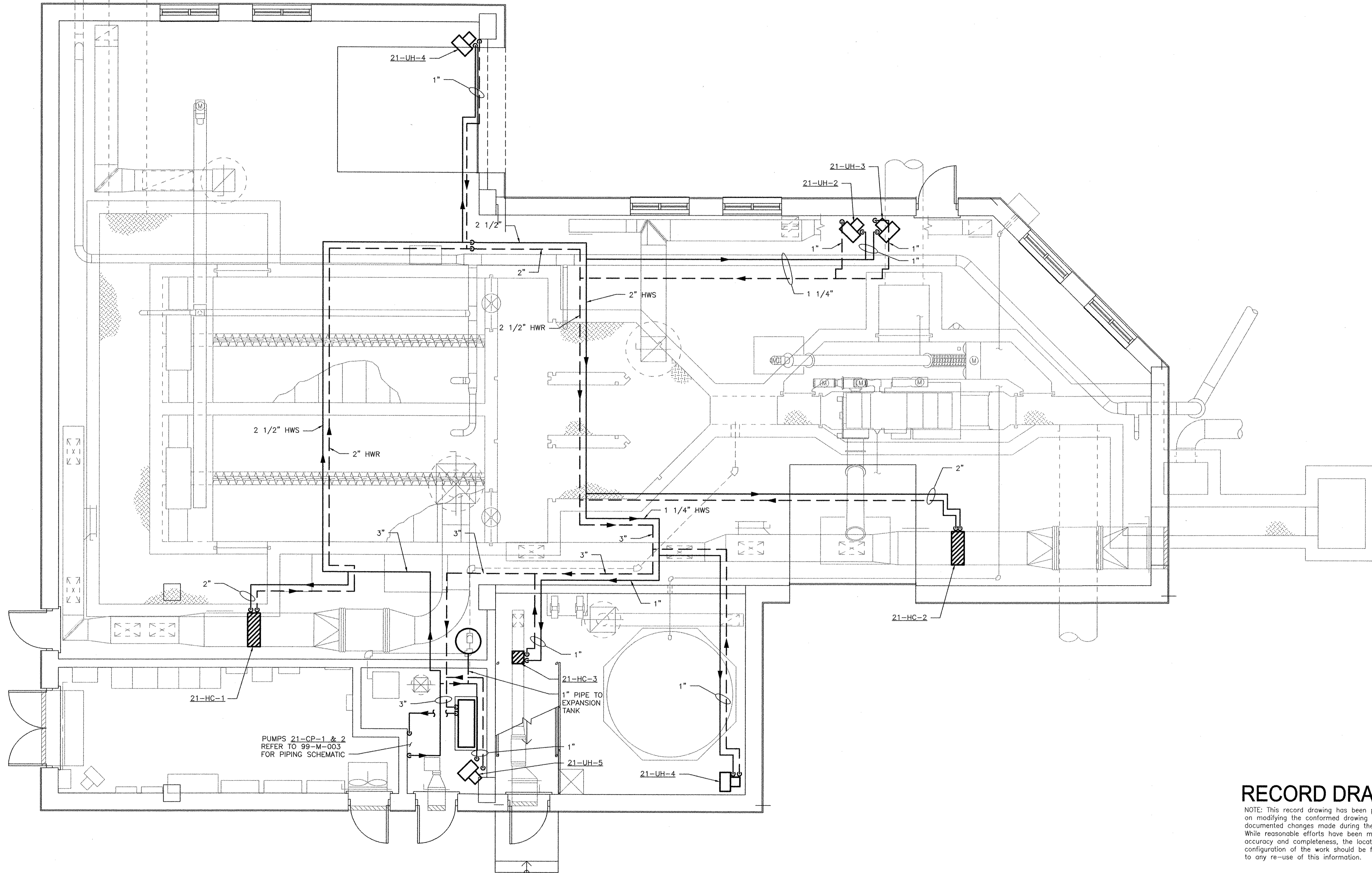
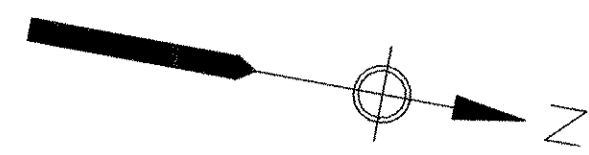
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING
 PLAN
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	21 M-101
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
21 M-101	

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\21-SHEETS\M-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:07:05 PM
 PLOT DATE: Friday, October 26, 2012 2:51:38 PM
 ANSI D - 24-Oct-12

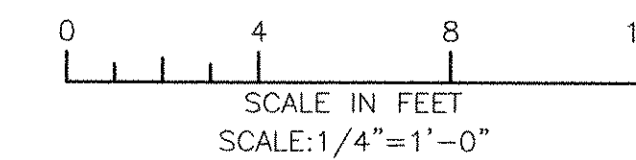
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBD\QP-A\SHEETS\M-102.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:06:40 PM
 PLOT DATE: Friday, October 26, 2012 2:51:47 PM

ANSI D - 24-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	AC	BS	REVISIONS
1	10/19/12				REVISED FOR RECORD DRAWINGS

AECOM USA, INC. ONE
 WAKEFIELD MA 01880
 PHONE (781) 246-5200
RECORD DRAWINGS

ALAN J. GREEN
 No. 00000000000000000000
 REGISTERED ENGINEER
 PROFESSIONAL MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING PIPING - PLAN
 HVAC

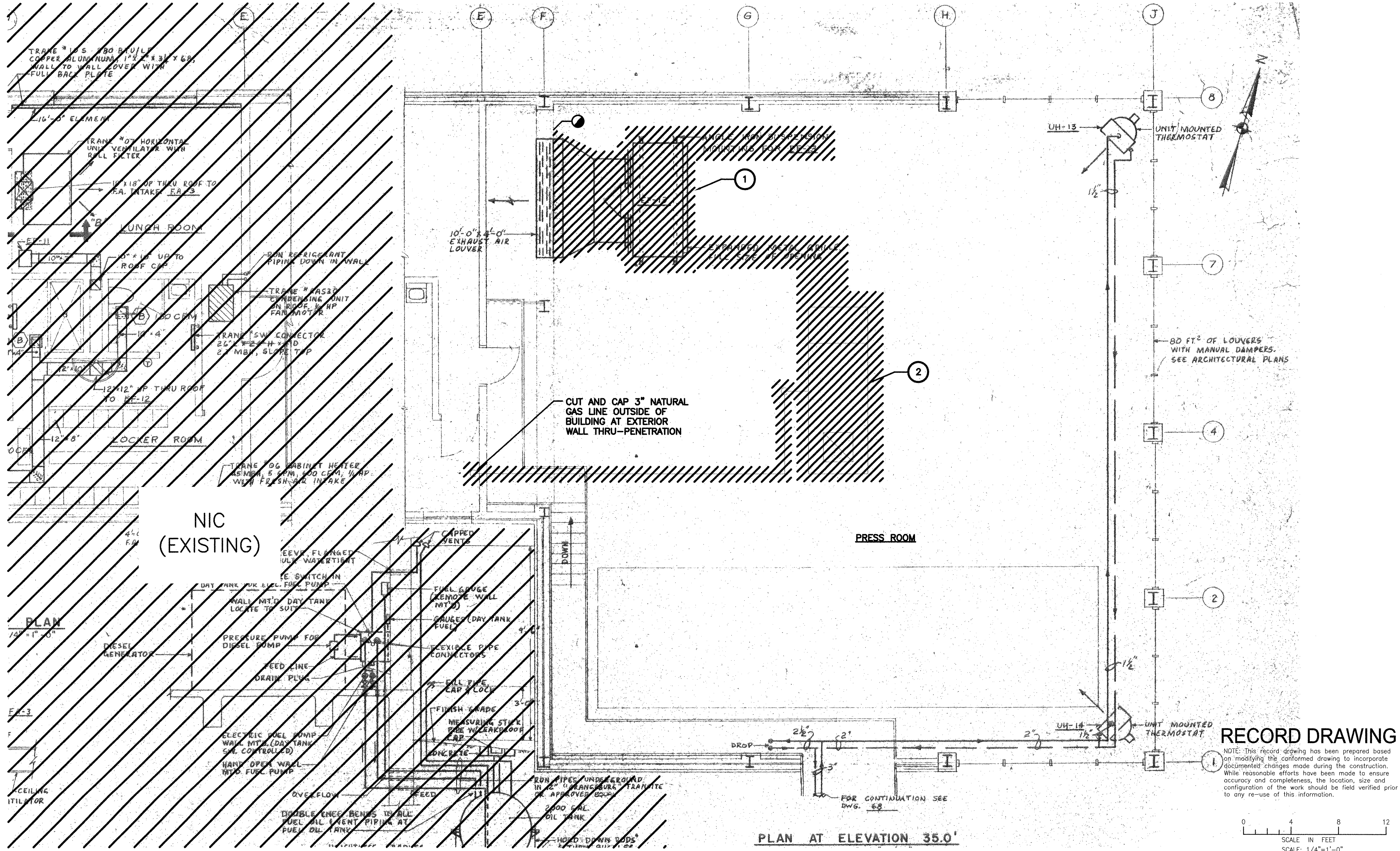
PROJECT NO:	60148648
CAD DWG FILE:	21 M-102
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
21 M-102	

NOTES:

1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.

KEY NOTES:

- ① REMOVE EXISTING CEILING SUSPENDED EXHAUST FAN, DUCTWORK, CONTROLS, HANGERS AND SUPPORTS. EXISTING LOUVER OPENING MODIFICATIONS BY GC.
- ② DISCONNECT NATURAL GAS AND REMOVE EXISTING ROOFTOP GAS MAKE-UP AIR UNIT, CURB, DUCTWORK, CONTROLS, AND SUPPORTS. REMOVE GAS PIPING AND SUPPORTS BACK TO PENETRATION THROUGH BUILDING EXTERIOR WALL. COORDINATE REMOVAL WORK WITH NEW ROOFING.



MARK	DATE	MADE BY	CHECKED	AC	BS	DESCRIPTION
1	10/19/12	BS	AC			REVISED FOR RECORD DRAWINGS

AECOM

RECORD DRAWINGS

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

AECOM USA, INC. OFFICE
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
OPERATIONS BUILDING
PLAN AT EL. 35.0' & MEZZ - DEMOLITION

PROJECT NO: 60148648
CAD DWG FILE: 23 MD-101
DESIGNED BY: A. GREEN
DRAWN BY: B. SANTOSUOSSO
DEPT CHECK: C. GALLIGAN
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: 1/4"=1'-0"

23 MD-101

ANSI D - 24-Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE BLDG\DP-2\SHEETS\W23 MD-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 1:58:19 AM
 PLOT DATE: Friday, October 26, 2012 2:51:52 PM

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

SCALE IN FEET
SCALE: 1/4"=1'-0"

PLAN AT ELEVATION 35.0'

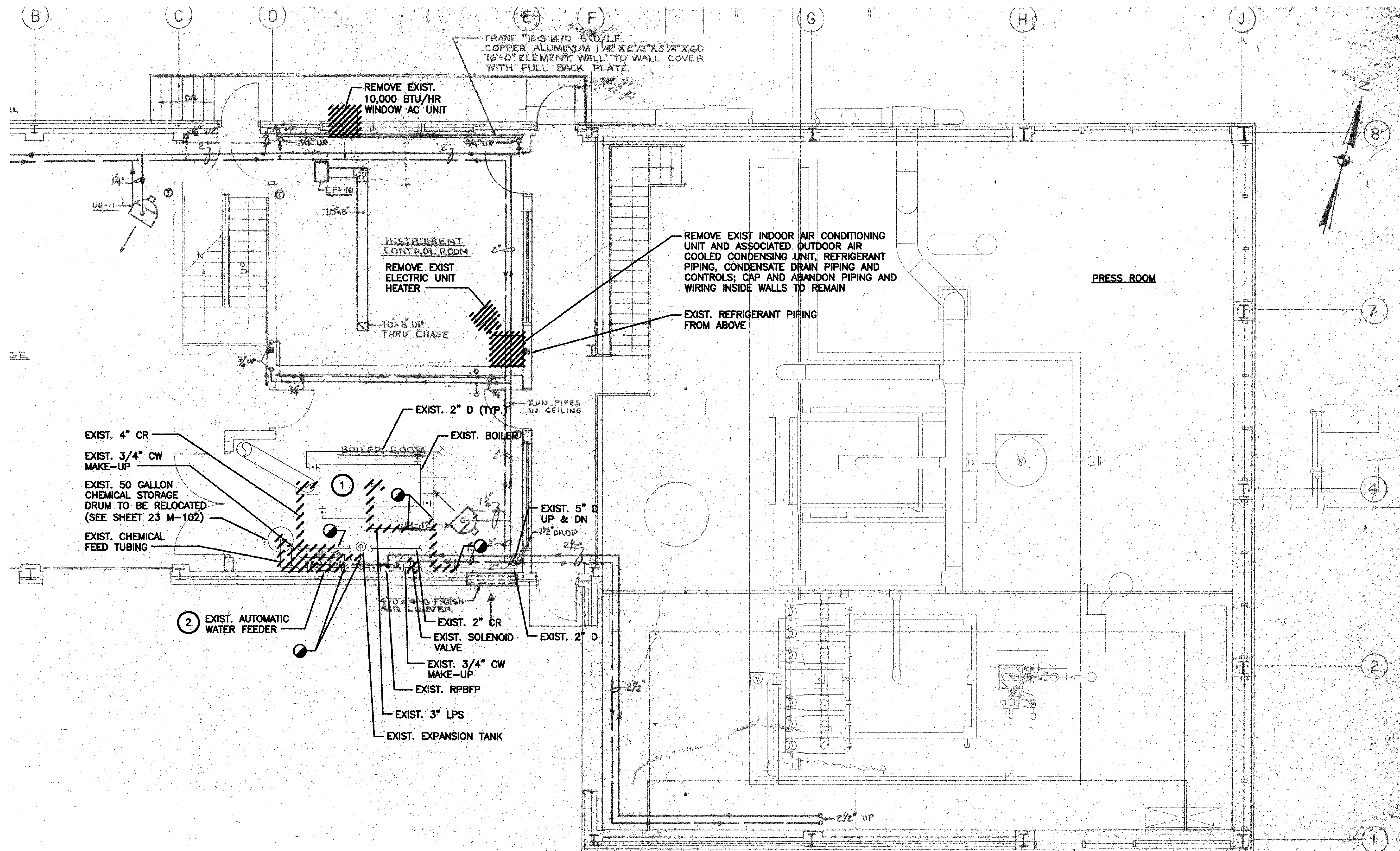
NOTES:

1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.

KEY NOTES:

1 EXISTING BOILER, BREECHING AND CHIMNEY TO REMAIN. EXISTING BOILER CONTROLS TO REMAIN EXCEPT AS NOTED HEREIN BELOW. REMOVE EXISTING LOW PRESSURE STEAM (LPS), CONDENSATE RETURN (CR) AND DRAIN (D) PIPING TO LIMITS INDICATED. REMOVE EXISTING WATER LEVEL CONTROLS. CUT AND CAP COLD WATER MAKE-UP DOWNSTREAM OF EXPANSION TANK.

2 REMOVE EXISTING AUTOMATIC WATER FEEDER, BYPASS PIPING, AND SOLENOID VALVE IN CW MAKE-UP LINE. REMOVE EXISTING CHEMICAL FEED TUBING AND PIPING. CHEMICAL STORAGE DRUM TO BE RELOCATED.



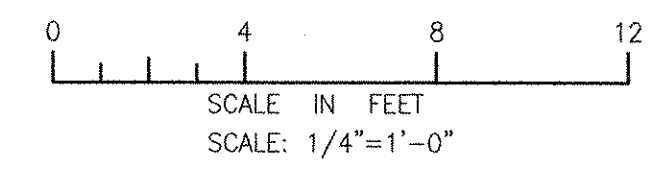
EXIST. 4" CR
 EXIST. 3/4" CW MAKE-UP
 EXIST. 50 GALLON CHEMICAL STORAGE DRUM TO BE RELOCATED (SEE SHEET 23 M-102)
 EXIST. CHEMICAL FEED TUBING
 2 EXIST. AUTOMATIC WATER FEEDER
 4" TO 4" FRESH AIR DRYER
 EXIST. 2" CR
 EXIST. SOLENOID VALVE
 EXIST. 3/4" CW MAKE-UP
 EXIST. RPBFP
 EXIST. 3" LPS
 EXIST. EXPANSION TANK
 EXIST. 2" D (TYP.)
 EXIST. BOILER
 EXIST. 5" D UP & DN 1/2" DROP
 EXIST. 2" D
 TRANE 12S 1470 BTU/LP COPPER ALUMINUM 1/4" X 2 1/2" X 5 1/4" X 60 12'-0" ELEMENT WALL TO WALL COVER WITH FULL BACK PLATE

REMOVE EXIST. INDOOR AIR CONDITIONING UNIT AND ASSOCIATED OUTDOOR AIR COOLED CONDENSING UNIT, REFRIGERANT PIPING, CONDENSATE DRAIN PIPING AND CONTROLS; CAP AND ABANDON PIPING AND WIRING INSIDE WALLS TO REMAIN
 EXIST. REFRIGERANT PIPING FROM ABOVE

PRESS ROOM

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWINGS
10/19/12	DATE
BS	MADE BY
AC	CHECKED

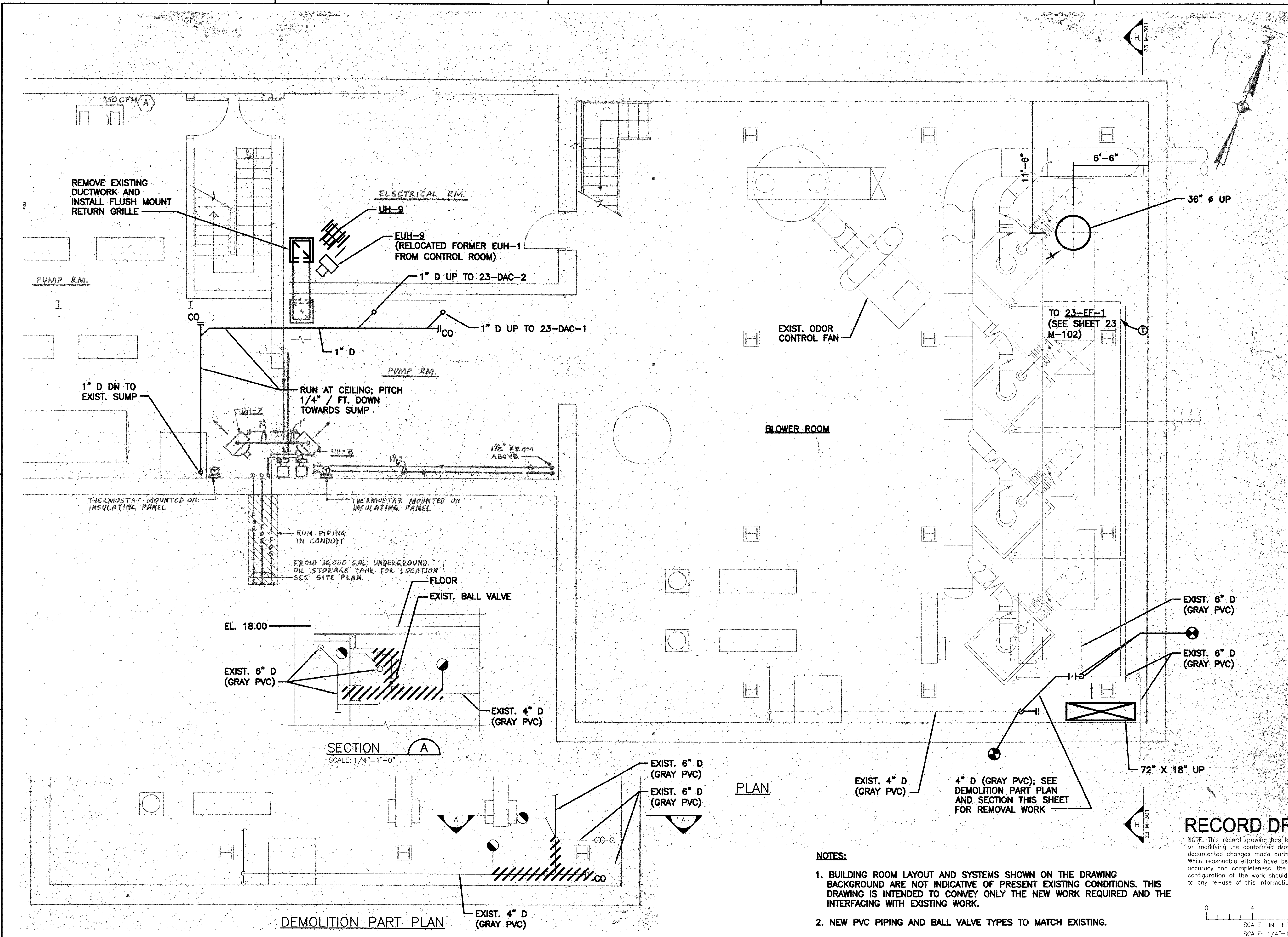
AECOM
 RECORD DRAWINGS
 AECOM USA, INC. ONE WASHINGTON STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200
 ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 102912

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
 OPERATIONS BUILDING
 PLAN AT EL. 18.0' - DEMOLITION
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	23 MD-102
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
23 MD-102	

PATH: F:\60148648 - EAST PROVIDENCE DP-2\23 MD-102.DWG
 LAST UPDATE: Wednesday, October 24, 2012 11:58:01 AM
 PLOT DATE: Friday, October 26, 2012 2:51:58 PM
 ANSI D - 24-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\DP-2\SHEETS\23 M-101.DWG
 PLOT DATE: Friday, October 26, 2012 2:52:06 PM
 LAST UPDATE: Wednesday, October 24, 2012 12:05:56 PM
 ANS D - 24-Oct-12



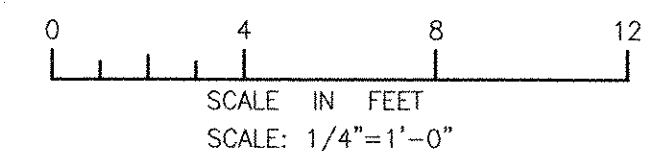
PLAN

SECTION A-A
SCALE: 1/4"=1'-0"

DEMOLITION PART PLAN

NOTES:

1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.
2. NEW PVC PIPING AND BALL VALVE TYPES TO MATCH EXISTING.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. DRIVE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200
 ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 012410

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING
PLAN AT EL. 3.0' & 11.83'
 HVAC

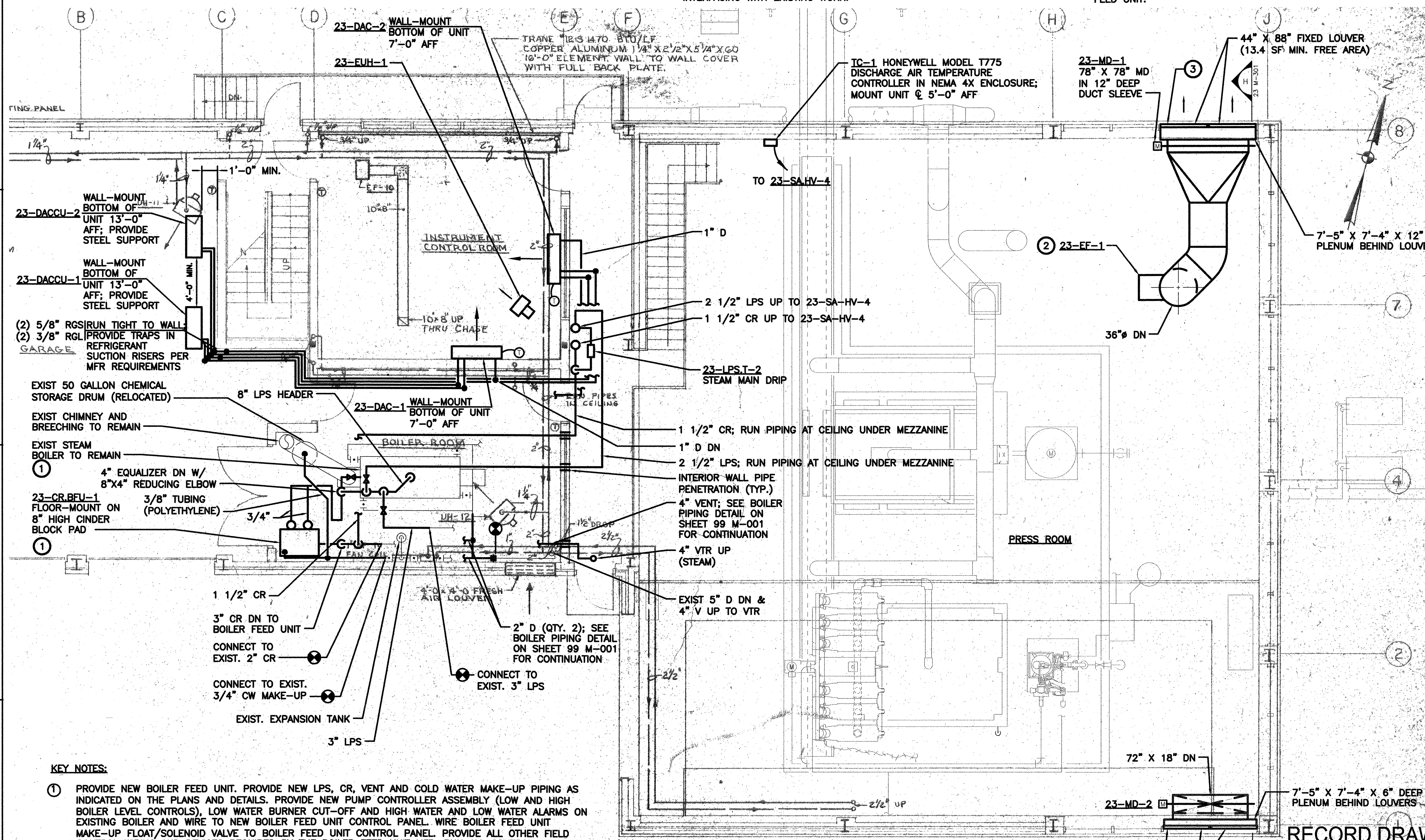
PROJECT NO:	60148648
CAD DWG FILE:	23 M-101
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

23 M-101

NOTES:

1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.

2. PITCH ALL CONDENSATE RETURN (CR) PIPING AND STEAM (LPS) PIPING MIN. 1/2" PER 10-FOOT RUN; PITCH DOWN ALL PIPING TOWARDS BOILER AND BOILER FEED UNIT.

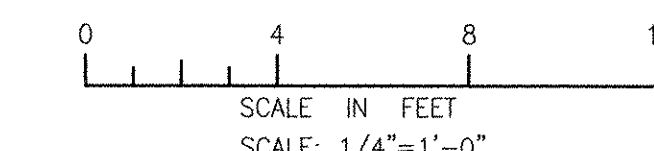


KEY NOTES:

- ① PROVIDE NEW BOILER FEED UNIT. PROVIDE NEW LPS, CR, VENT AND COLD WATER MAKE-UP PIPING AS INDICATED ON THE PLANS AND DETAILS. PROVIDE NEW PUMP CONTROLLER ASSEMBLY (LOW AND HIGH BOILER LEVEL CONTROLS), LOW WATER BURNER CUT-OFF AND HIGH WATER AND LOW WATER ALARMS ON EXISTING BOILER AND WIRE TO NEW BOILER FEED UNIT CONTROL PANEL. WIRE BOILER FEED UNIT MAKE-UP FLOAT/SOLENOID VALVE TO BOILER FEED UNIT CONTROL PANEL. PROVIDE ALL OTHER FIELD CONTROL WIRING AND DEVICES REQUIRED BY THE BOILER FEED UNIT MFR. RUN ALL CONTROL WIRING IN CONDUIT.
- ② PROVIDE NEW EXHAUST FAN, HANGERS AND SUPPORTS. PROVIDE NEW DUCTWORK AS SHOWN AND CONNECT TO NEW LOUVERS; INSULATE PORTIONS OF MAKE-UP AIR DUCTWORK NOT LOCATED IN BASEMENT. PROVIDE REVERSE ACTING ROOM THERMOSTAT (SEE SHEET 23 M-101) WIRED TO EXHAUST FAN MOTOR STARTER. PROVIDE OUTDOOR AIR MOTOR-OPERATED DAMPER AND EXHAUST AIR MOTOR-OPERATED DAMPER BOTH WIRED TO EXHAUST FAN MOTOR STARTER. RUN ALL CONTROL WIRING IN CONDUIT.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	AC	DESCRIPTION
1	10/19/12	BS	AC		REVISED FOR RECORD DRAWINGS

AECOM

RECORD DRAWINGS

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
OPERATIONS BUILDING
PLAN AT EL. 18.0'
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	23 M-102
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
23 M-102	

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\23 SHEETS\M-102.DWG
 PLOT DATE: Friday, October 26, 2012 2:52:13 PM
 LAST UPDATE: Wednesday, October 24, 2012 12:05:19 PM
 ANSI D - 24-Oct-12

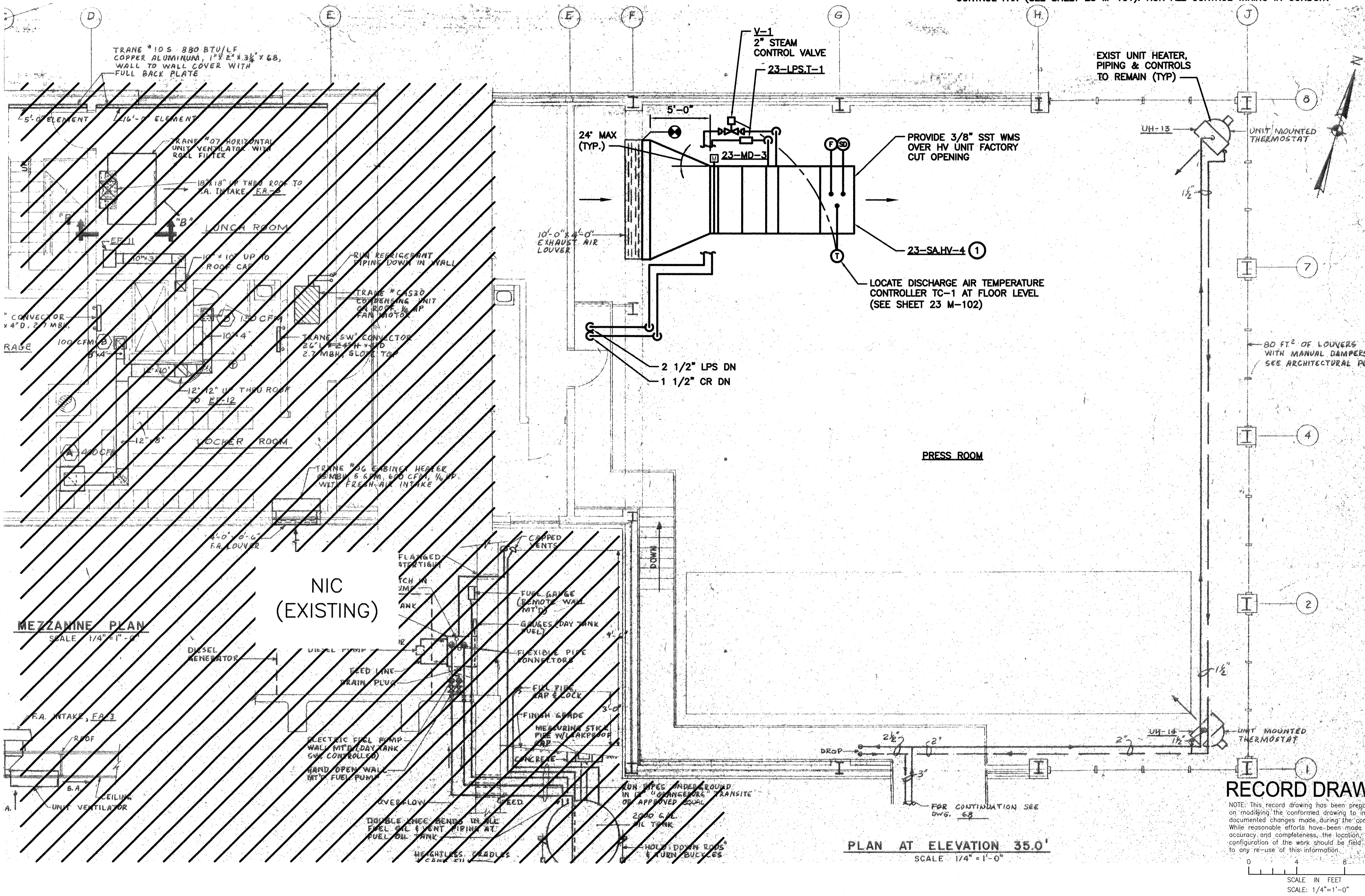
ANSI D - 24 - Oct-12
 PATH: FILENAME: P:\60148648 - EAST PROVIDENCE DEP\DP-2\3 SHEETS\23 M-103.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:04:37 PM
 PLOT DATE: Friday, October 26, 2012 2:52:20 PM

NOTES:

- BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.

KEY NOTES:

- PROVIDE NEW CEILING SUSPENDED HEATING & VENTILATING UNIT, HANGERS AND SUPPORTS. PROVIDE NEW DUCTWORK AS SHOWN AND CONNECT TO LOUVER; INSULATE DUCTWORK. PROVIDE DISCHARGE AIR TEMPERATURE SENSOR WIRED TO STEAM CONTROL VALVE; PROVIDE OUTDOOR AIR MOTOR-OPERATED DAMPER WIRED TO SUPPLY FAN MOTOR STARTER; INTERLOCK SUPPLY FAN MOTOR STARTER WITH EXISTING ODOR CONTROL FAN (SEE SHEET 23 M-101). RUN ALL CONTROL WIRING IN CONDUIT.



REVISIONS	AC	BS	AC	DESCRIPTION
1	10/19/12	DATE	MADE BY	CHECKED

AECOM

RECORD DRAWINGS

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING
 PLAN AT EL. 35.0' & MEZZANINE

PROJECT NO: 60148648
 CAD DWG FILE: 23 M-103
 DESIGNED BY: A. GREEN
 DRAWN BY: B. SANTOSUSSO
 DEPT CHECK: C. GALLIGAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: 1/4" = 1'-0"

RECORD DRAWING

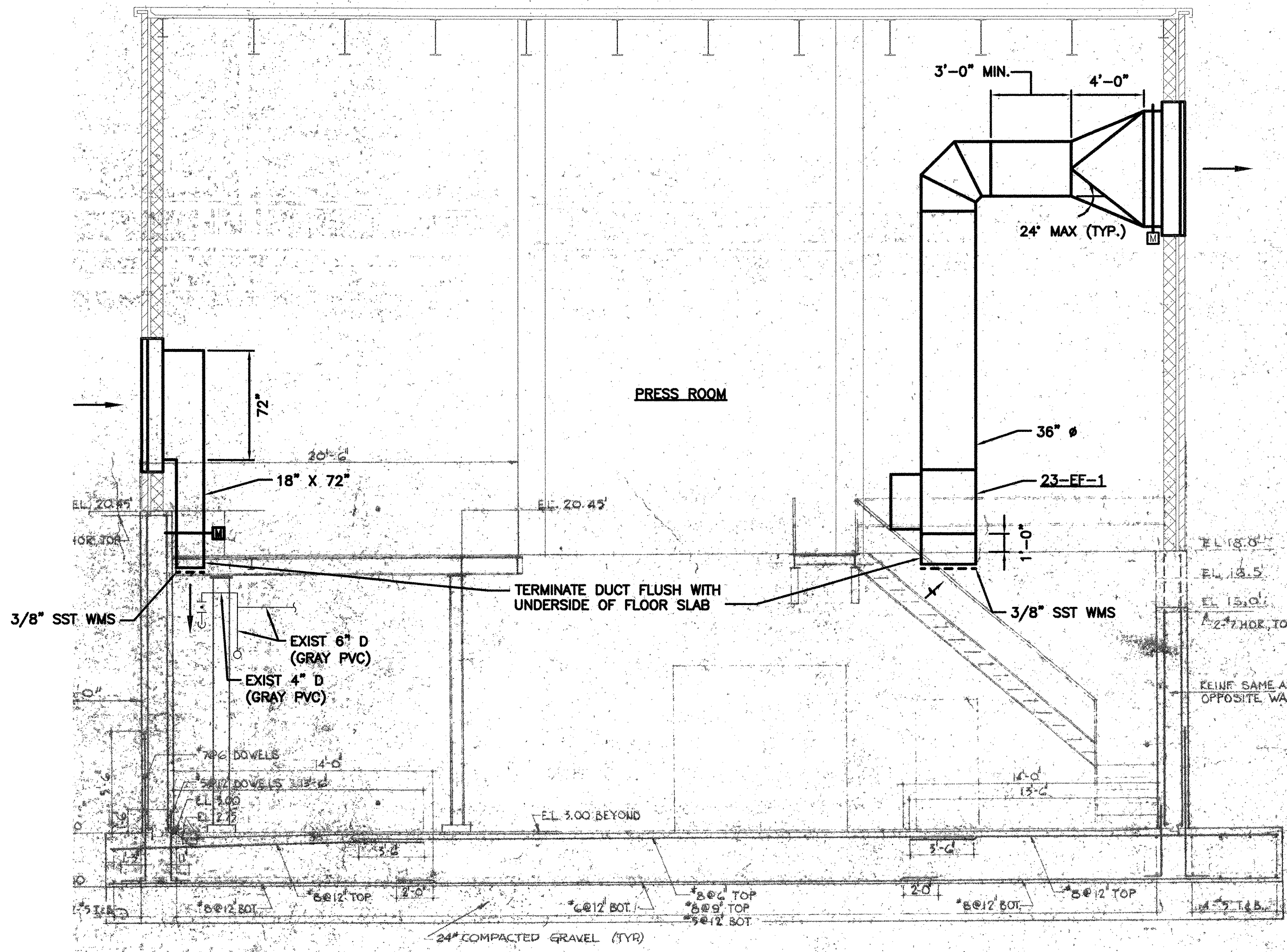
NOTE: This record drawing has been prepared based on 'modifying' the 'conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field-verified prior to any re-use of this information.

0 4 8 12
 SCALE IN FEET
 SCALE: 1/4" = 1'-0"

23 M-103

NOTES:

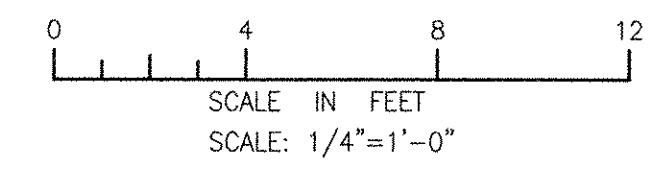
- 1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.
- 2. SEE SHEETS 23 M-101 AND 23 M-102 FOR PLANS.



SECTION H-H
SCALE: 1/4" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	AC	BS	REVISOR	DESCRIPTION
1	10/19/12						

AECOM
AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

RECORD DRAWINGS

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
No. 10-2112

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
OPERATIONS BUILDING
SECTION
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	23 M-301
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
23 M-301	

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\23 SHEETS\23 M-301.DWG
LAST UPDATE: Wednesday, October 24, 2012 12:04:16 PM
PLOT DATE: Friday, October 26, 2012 2:52:25 PM
ANSI D - 24-Oct-12

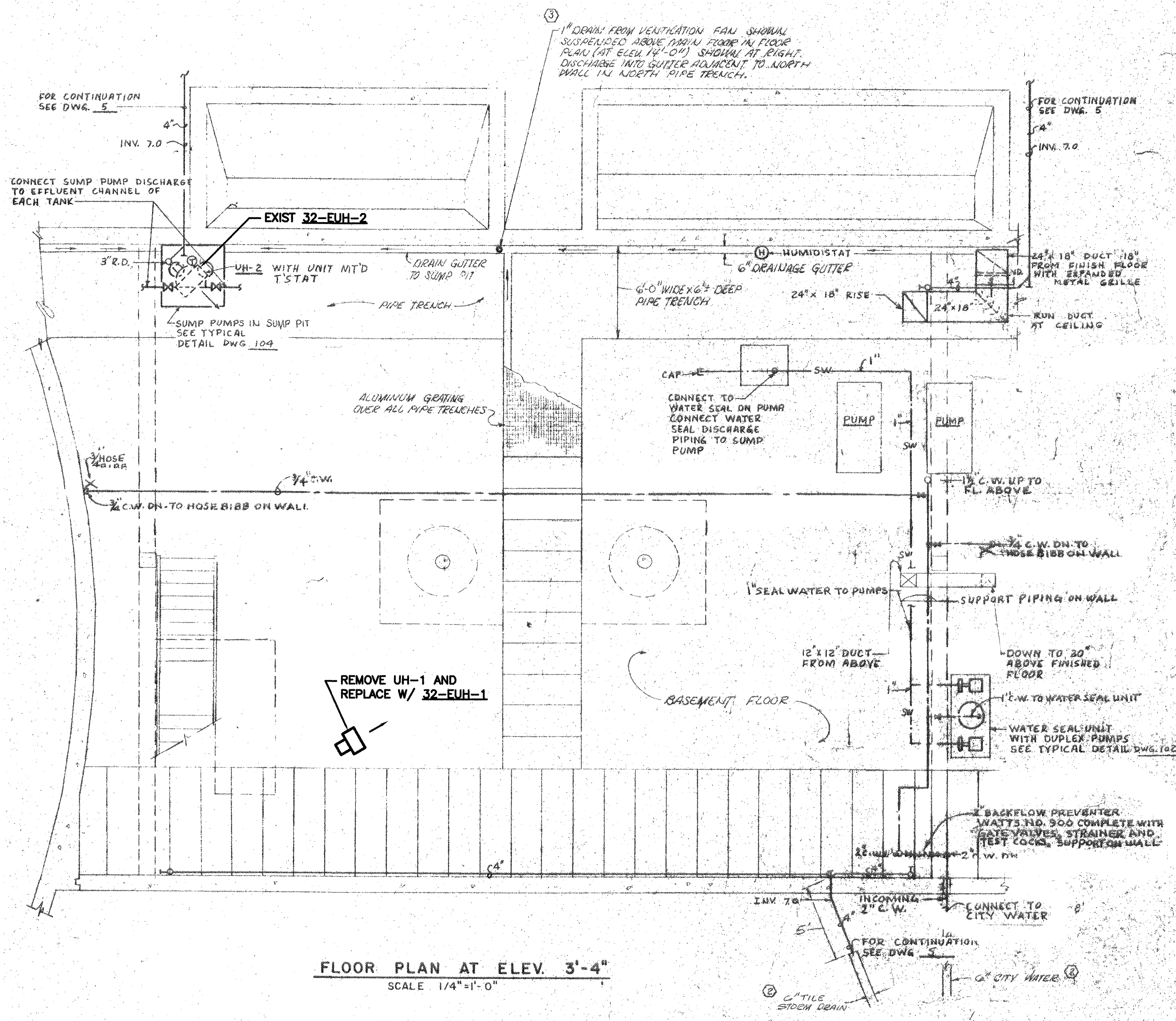
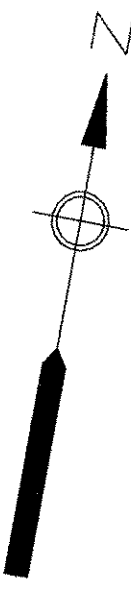
1

2

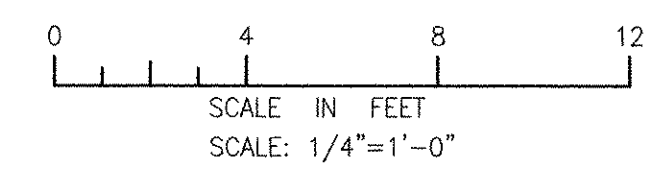
3

4

5



FLOOR PLAN AT ELEV. 3'-4"
SCALE 1/4"=1'-0"



ANSI D - 24-Oct-12
 PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\M-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:08:49 PM
 PLOT DATE: Friday, October 26, 2012 2:52:29 PM

REVISIONS	
MARK	DESCRIPTION
1	10/19/12 AC MADE BY CHECKED REVISED FOR RECORD DRAWINGS

AECOM

RECORD DRAWINGS

ALAN J. GREEN
 REGISTERED ENGINEER
 PROFESSIONAL MECHANICAL

AECOM USA, INC.
 ONE WAKEFIELD WAY, D180
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

RAS PUMP STATION - LOWER LEVEL - PLAN

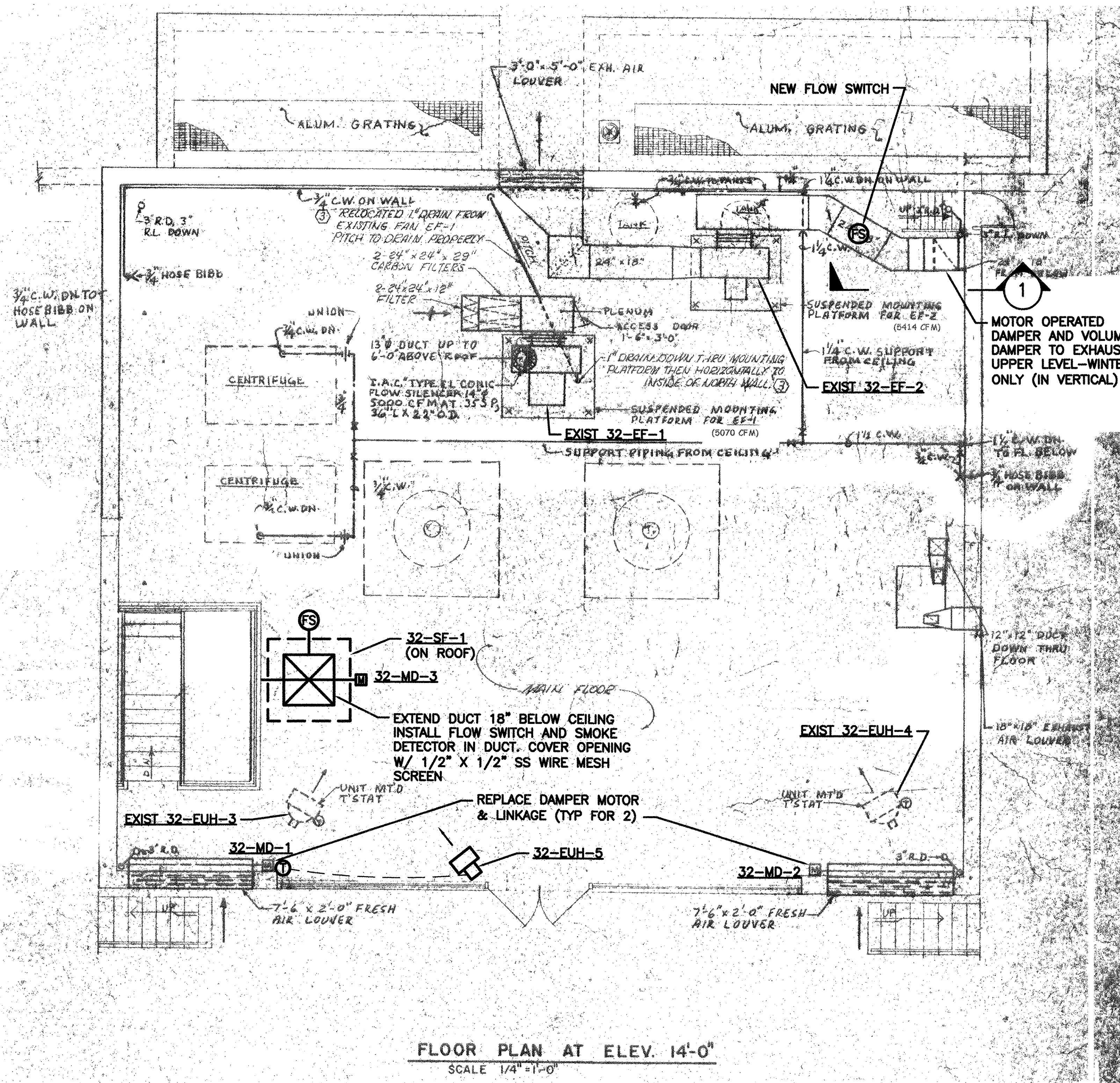
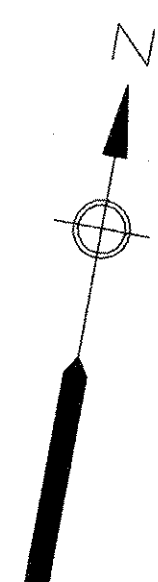
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	32 M-101
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

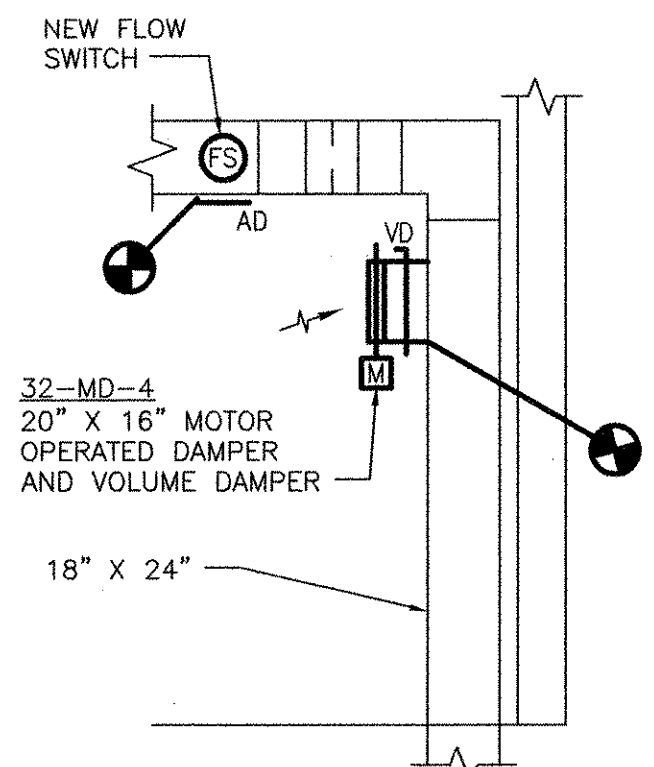
32 M-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\DP-3\SHEETS\M-32-M-102.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:08:19 PM
 PLOT DATE: Friday, October 26, 2012 2:52:35 PM

ANSI D - 24-01-12

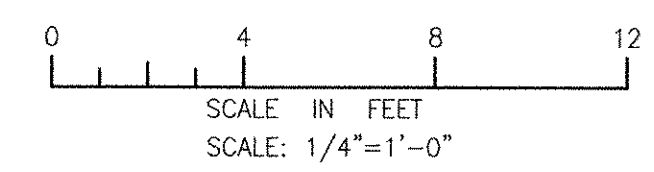


FLOOR PLAN AT ELEV. 14'-0"
 SCALE 1/4"=1'-0"



NOTE:
 WINTER OPERATION
 1. 32-MD-4 - FOR WINTER OPERATION ONLY. BALANCE TO EXHAUST 3,000 CFM FROM UPPER LEVEL AND 2,400 CFM FROM LOWER LEVEL.

SECTION 1
 SCALE: 1/4"=1'-0"



MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

AECOM USA, INC.
 ONE
 WAREFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 000000000-0-24-12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

RAS PUMP STATION - UPPER LEVEL - PLAN

HVAC

PROJECT NO:	60148648
CAD DWG FILE:	32-M-102
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

32 M-102

1

2

3

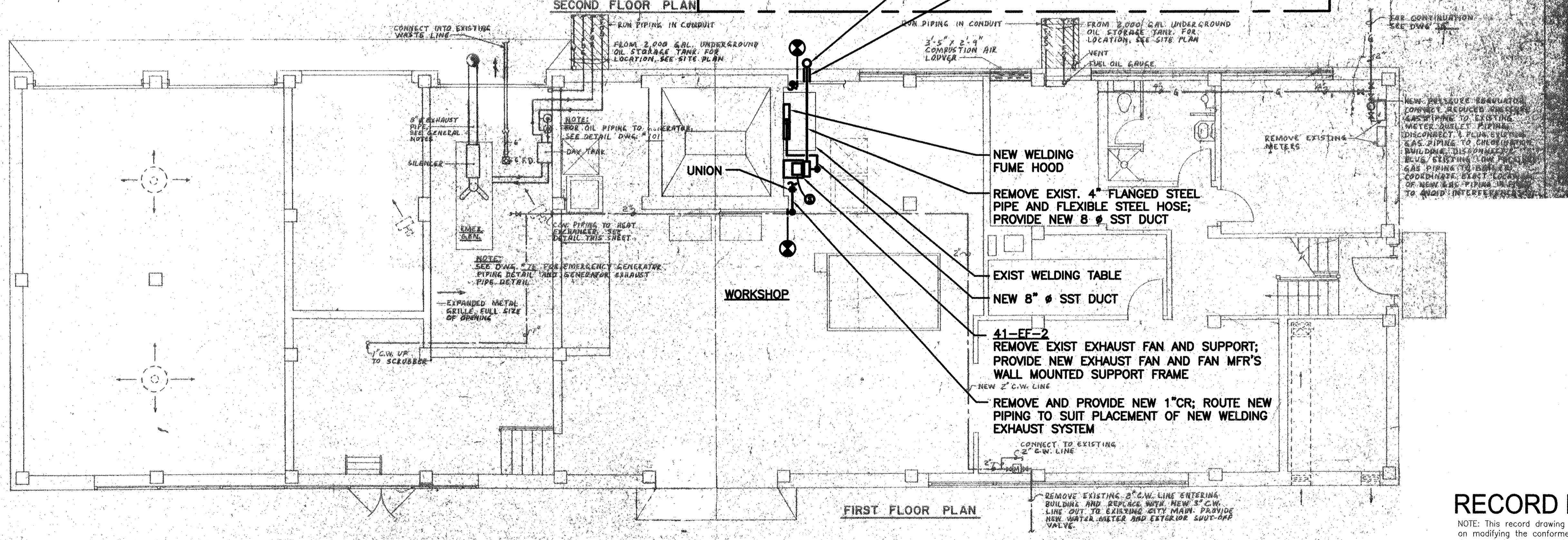
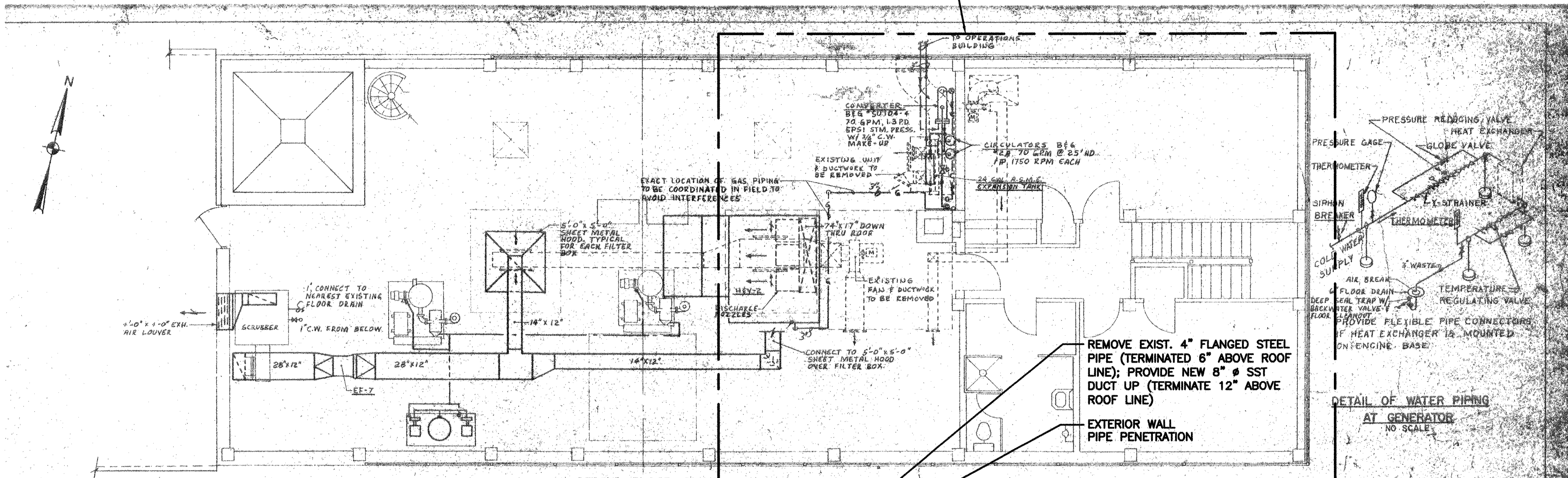
4

5

NOTES:

1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.

FOR NEW WORK, SEE PART PLAN ON SHEET 41 M-102



MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

AECOM

RECORD DRAWINGS

ALAN J. GREEN
No. 0279
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

10/19/12

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**ADMINISTRATION BUILDING
FIRST & SECOND FLOOR PLANS**

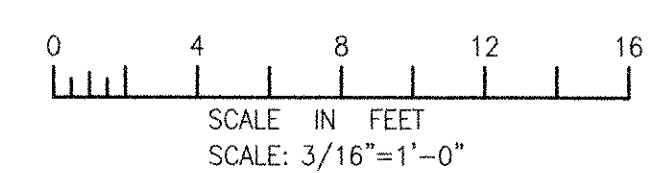
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	41 M-101
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	3/16"=1'-0"

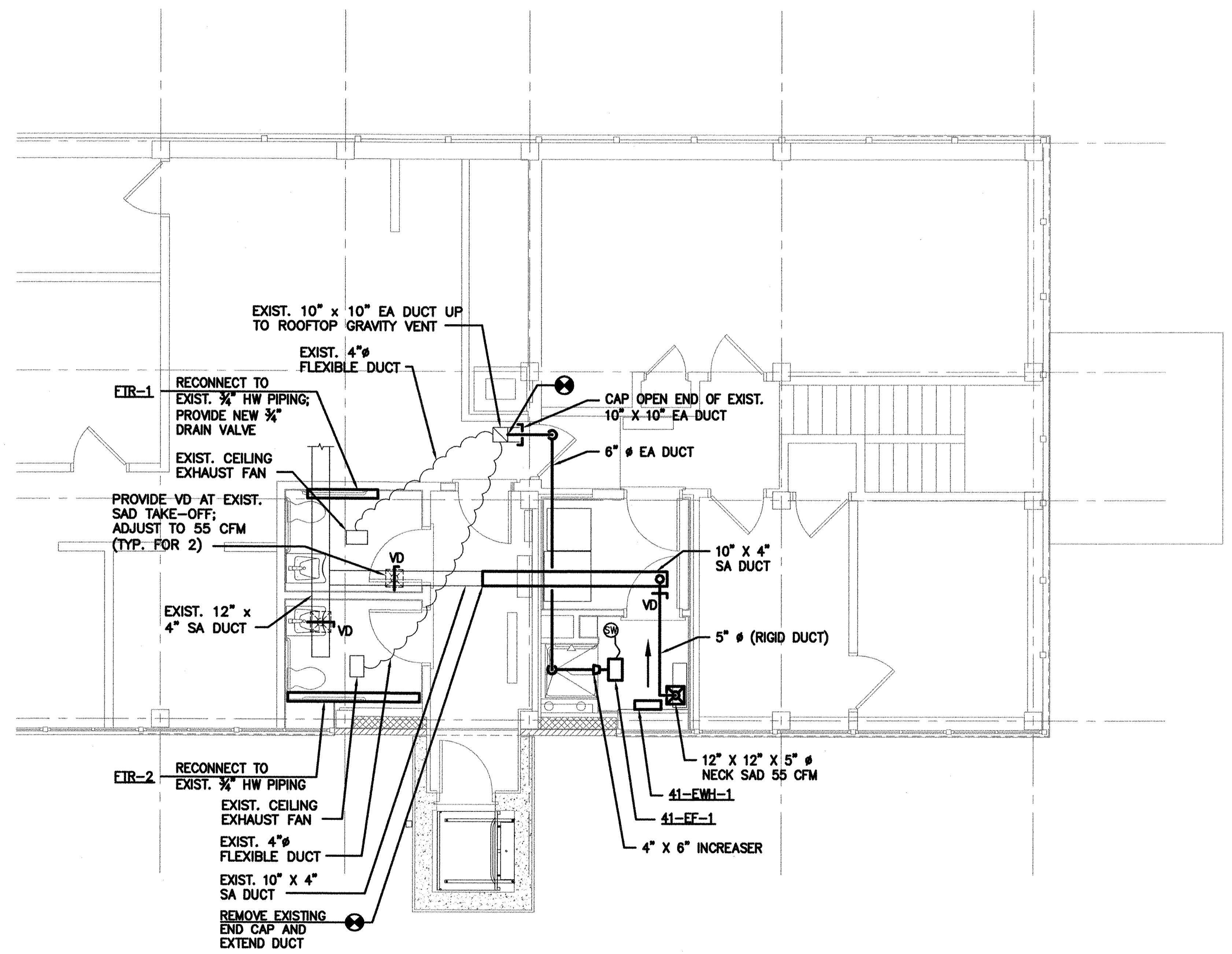
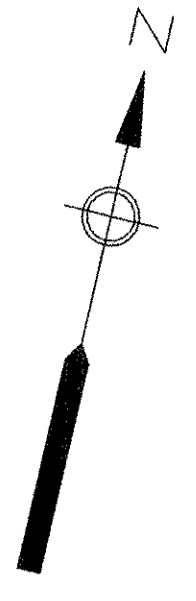
41 M-101

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-4\41 SHEETS\MV41 M-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:31:12 PM
 PLOT DATE: Friday, October 26, 2012 2:52:41 PM
 ANSI D - 24-Oct-12



SECOND FLOOR - PART PLAN
SCALE: 1/4"=1'-0"

NOTES:

1. FOR HVAC DEMOLITION WORK IN TOILET ROOMS AREA, SEE SHEET 41 PD-102.
2. CEILING EXHAUST FANS AND SAD'S SHALL BE CENTERED IN SUSPENDED ACOUSTIC CEILING TILE.
3. RE-TRIM ALL FLEXIBLE DUCTS AS REQUIRED. FLEXIBLE DUCT SHALL BE PULLED TAUT AND HAVE NO KINKS; NUMBER OF TURNS SHALL NOT EXCEED EQUIVALENT OF ONE 90 DEGREE ELBOW.
4. PERFORM FTR WORK DURING NON HEATING SEASON.

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBS\VP-A\SHEETS\M41 M-102.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:30:48 PM
 PLOT DATE: Friday, October 26, 2012 2:52:45 PM
 ANS D - 24-Oct-12

MARK	DATE	MADE BY	CHECKED	AC	DESCRIPTION
1	10/19/12	B5			REVISED FOR RECORD DRAWINGS

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

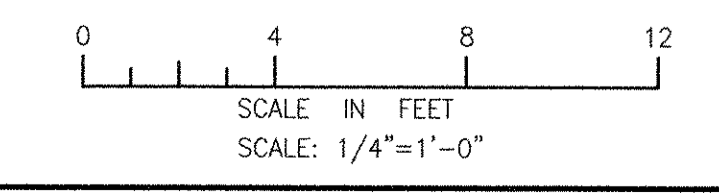
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
ADMINISTRATION BUILDING
PART PLAN
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	41 M-102
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

41 M-102

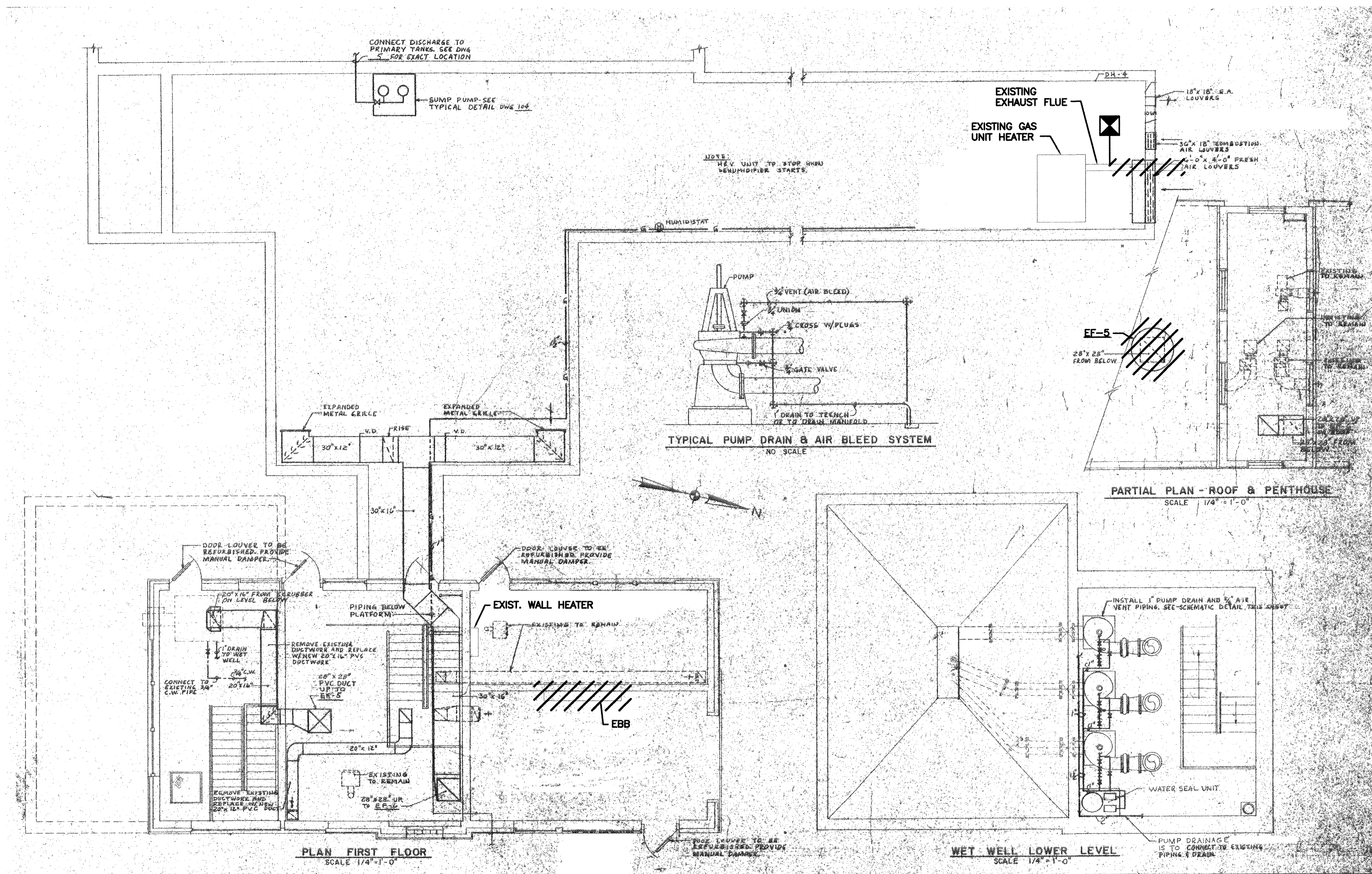
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



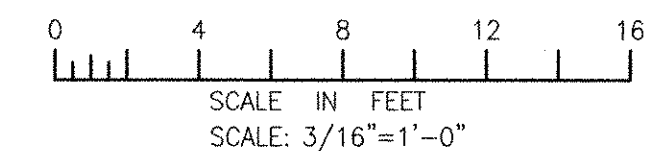
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\42 MD-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:28:53 PM
 PLOT DATE: Friday, October 26, 2012 2:52:50 PM

ANSI D - 24-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	AC	REVISIONS
1	10/19/12	BS	AC		REVISED FOR RECORD DRAWINGS DESCRIPTION

ACOM USA, INC. ORIGINATOR
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

RAW SEWAGE INFLUENT PUMP STATION - DEMOLITION

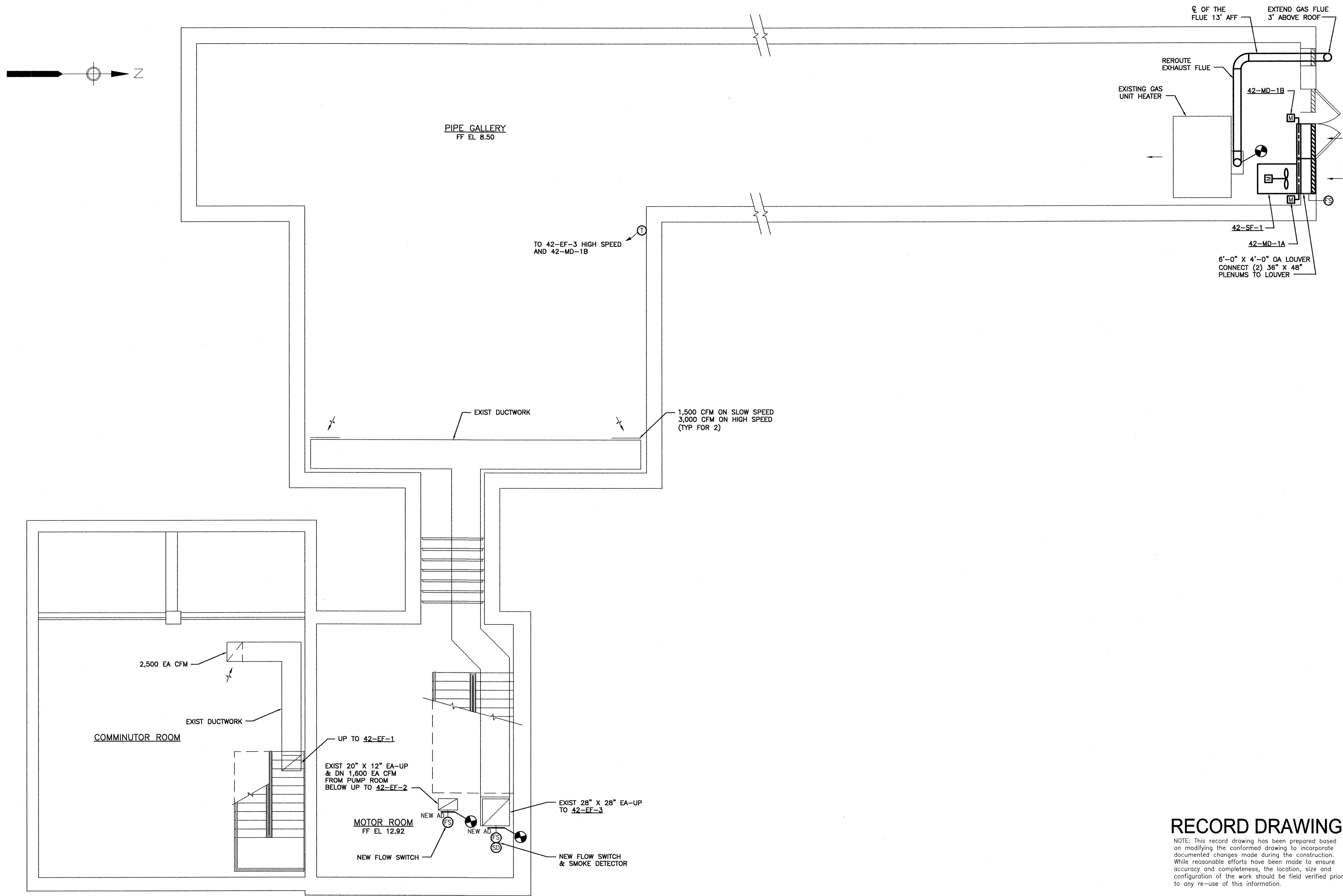
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	42 MD-101
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	3/16"=1'-0"

42 MD-101

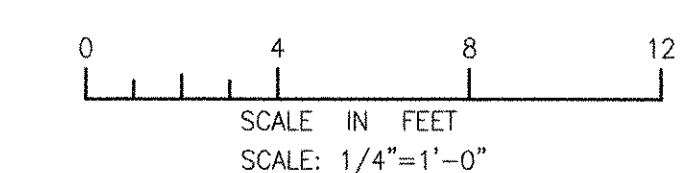
PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DBO\DP-A\SHEETS\M-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:30:26 PM
 PLOT DATE: Friday, October 26, 2012 2:52:54 PM

ANSI D - 24-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	AC	REVISIONS
1	10/19/12	BS	AC		REVISED FOR RECORD DRAWINGS

ACOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

ALAN J. GREEN
 No. 8279
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

**RAW SEWAGE INFLUENT PUMP STATION
 LOWER LEVEL**

HVAC

PROJECT NO:	60148648
CAD DWG FILE:	42 M-101
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

42 M-101

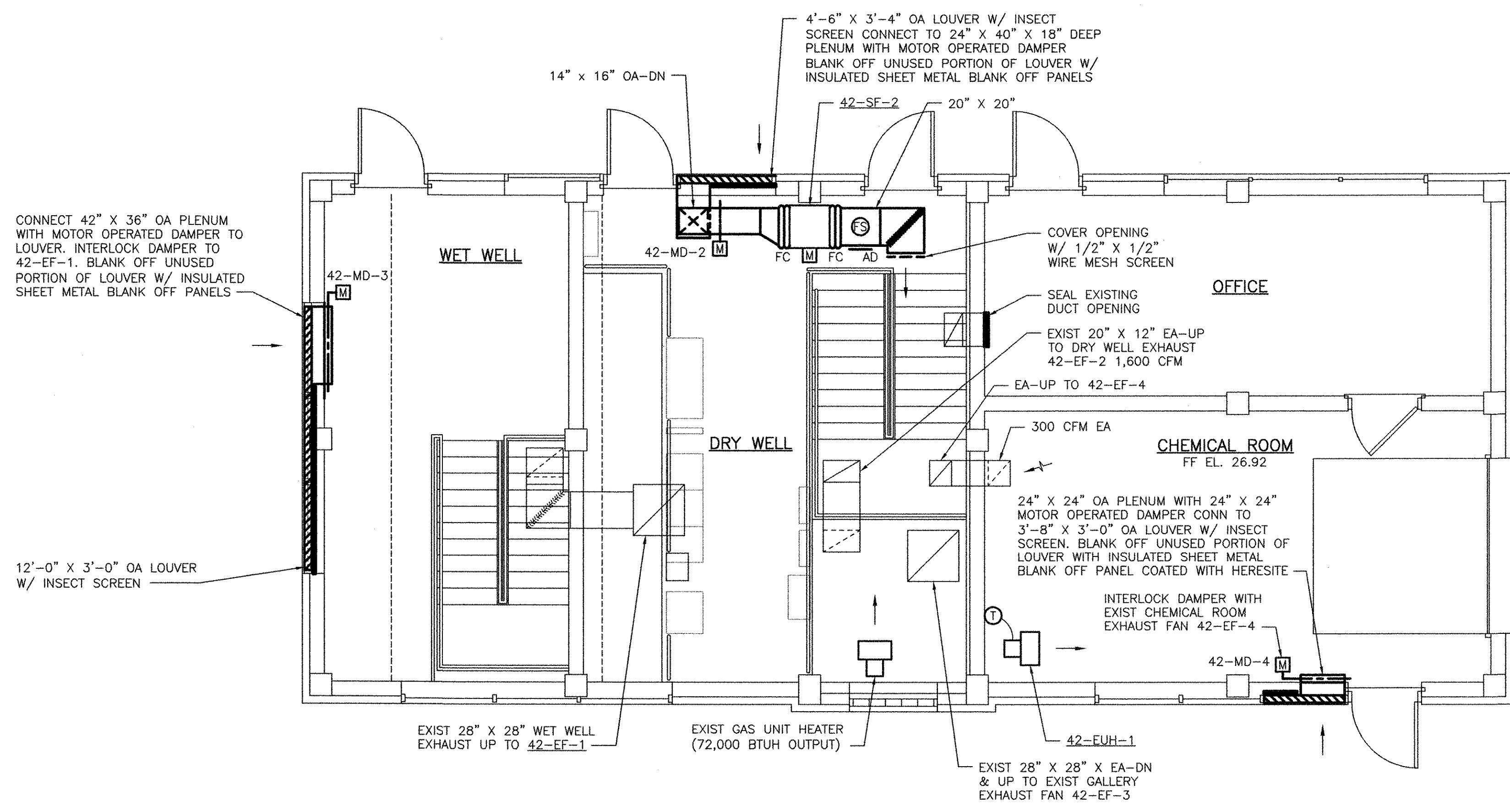
1

2

3

4

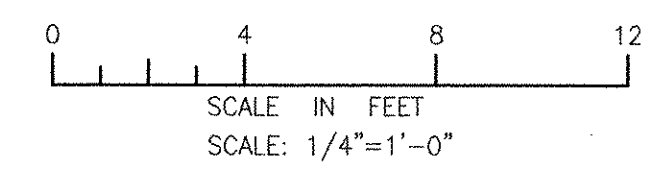
5



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\M-102.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:30:00 PM
 PLOT DATE: Friday, October 26, 2012 2:52:57 PM
 ANSI D - 24-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



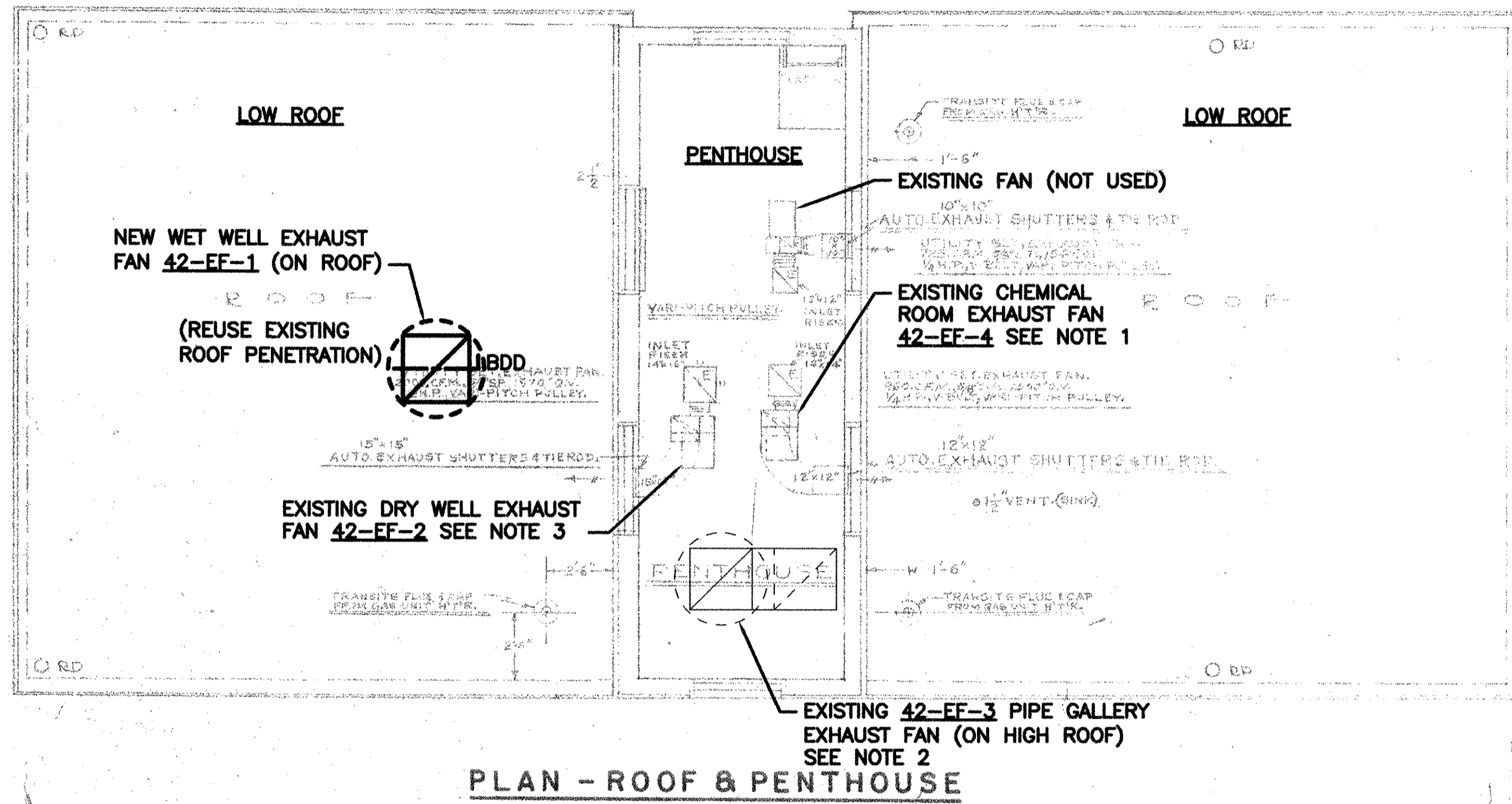
MARK	DATE	MADE BY	CHECKED	AC	REVISIONS
1	10/19/12	B5	AC		REVISED FOR RECORD DRAWINGS

AECOM USA, INC. ONE WAKEFIELD WAY, 01880 WAKEFIELD, MA 01880
 PHONE (781) 246-5200
RECORD DRAWINGS

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
**RAW SEWAGE INFLUENT PUMP STATION
 UPPER LEVEL**
 HVAC

PROJECT NO:	60148648
CAD DWG FILE:	42 M-102
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
42 M-102	



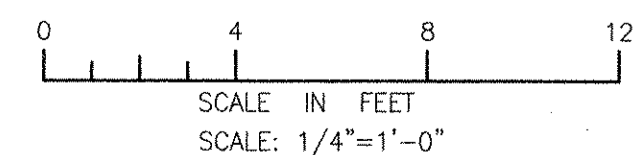
NOTES:

1. REBALANCE EXISTING DRY WELL EXHAUST FAN 42-EF-2 TO 1,600 CFM.
2. EXISTING PIPE GALLERY EXHAUST FAN 42-EF-3 SHALL BE BALANCED TO 6,000 CFM HIGH SPEED AND 2,900 CFM LOW SPEED. VFD BY ELECTRICAL. BALANCING CONTRACTOR TO PROVIDE RPM FOR BOTH SPEEDS TO ELECTRICAL CONTRACTOR.
3. REBALANCE CHEMICAL ROOM EXHAUST FAN 42-EF-4 TO 300 CFM.
4. EXISTING FANS ON THIS SHEET HAVE BEEN RENUMBERED.

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\M-103.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:29:24 PM
 PLOT DATE: Friday, October 26, 2012 2:53:01 PM
 ANSI D - 24-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

AECOM USA, INC.
 100 STATE STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

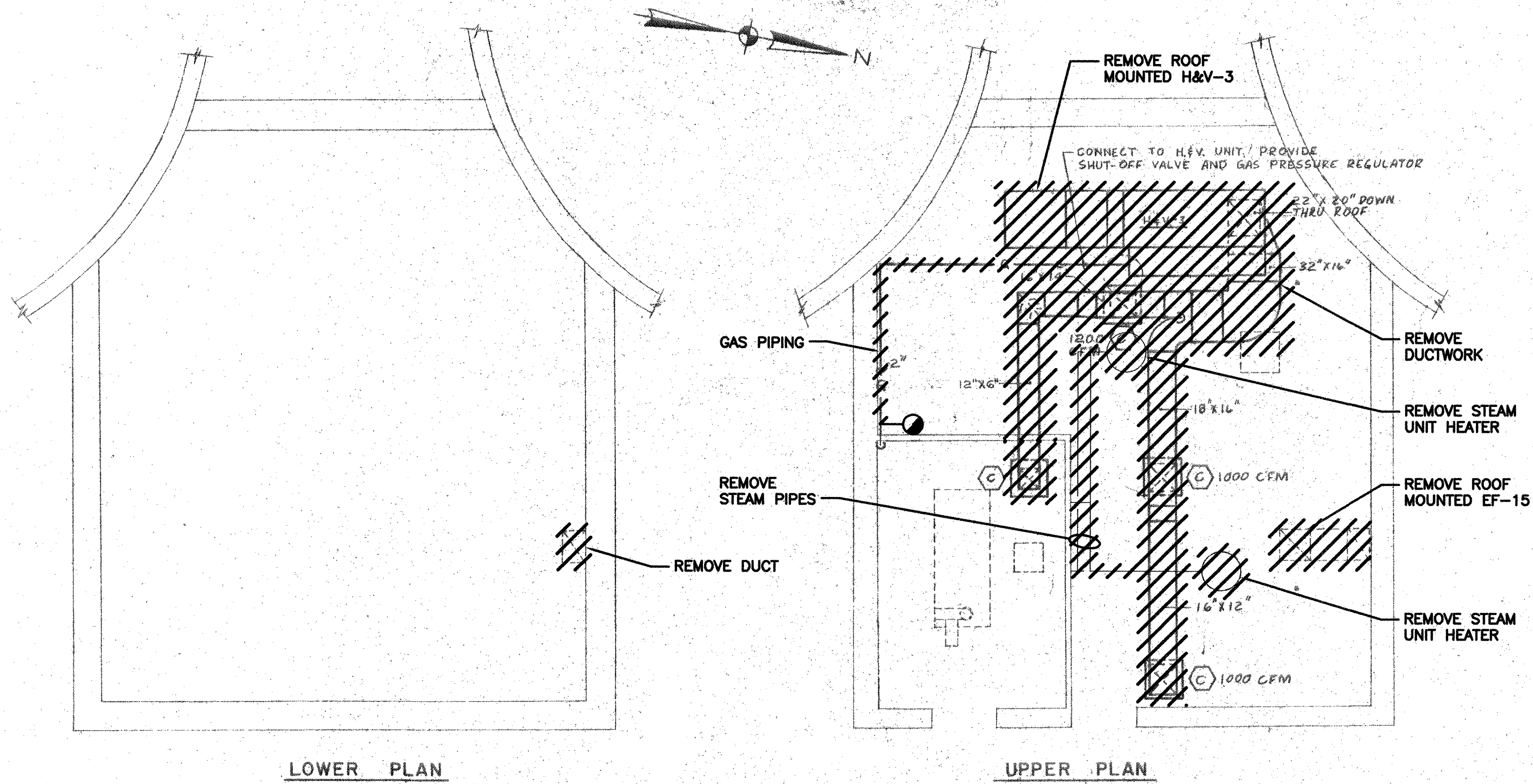


ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 10085
 Exp. 10-21-12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
**RAW SEWAGE INFLUENT PUMP STATION -
 PENTHOUSE & ROOF - PLAN**
 HVAC

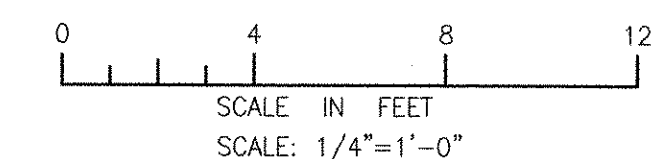
PROJECT NO: 60148648
 CAD DWG FILE: 42 M-103
 DESIGNED BY: A. CASAWANT
 DRAWN BY: B. SANTOSUOSSO
 DEPT CHECK: C. GALLIGAN
 PROJ CHECK: S. THIBAULT
 DATE: OCTOBER 2012
 SCALE: 1/4"=1'-0"

42 M-103



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

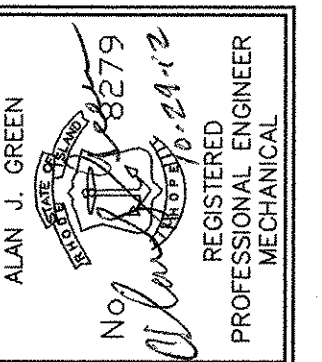


REVISIONS			
MARK	DATE	MADE BY	DESCRIPTION
1	10/19/12	BS AC	REVISED FOR RECORD DRAWINGS

AECOM USA, INC.
 100 WATER STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

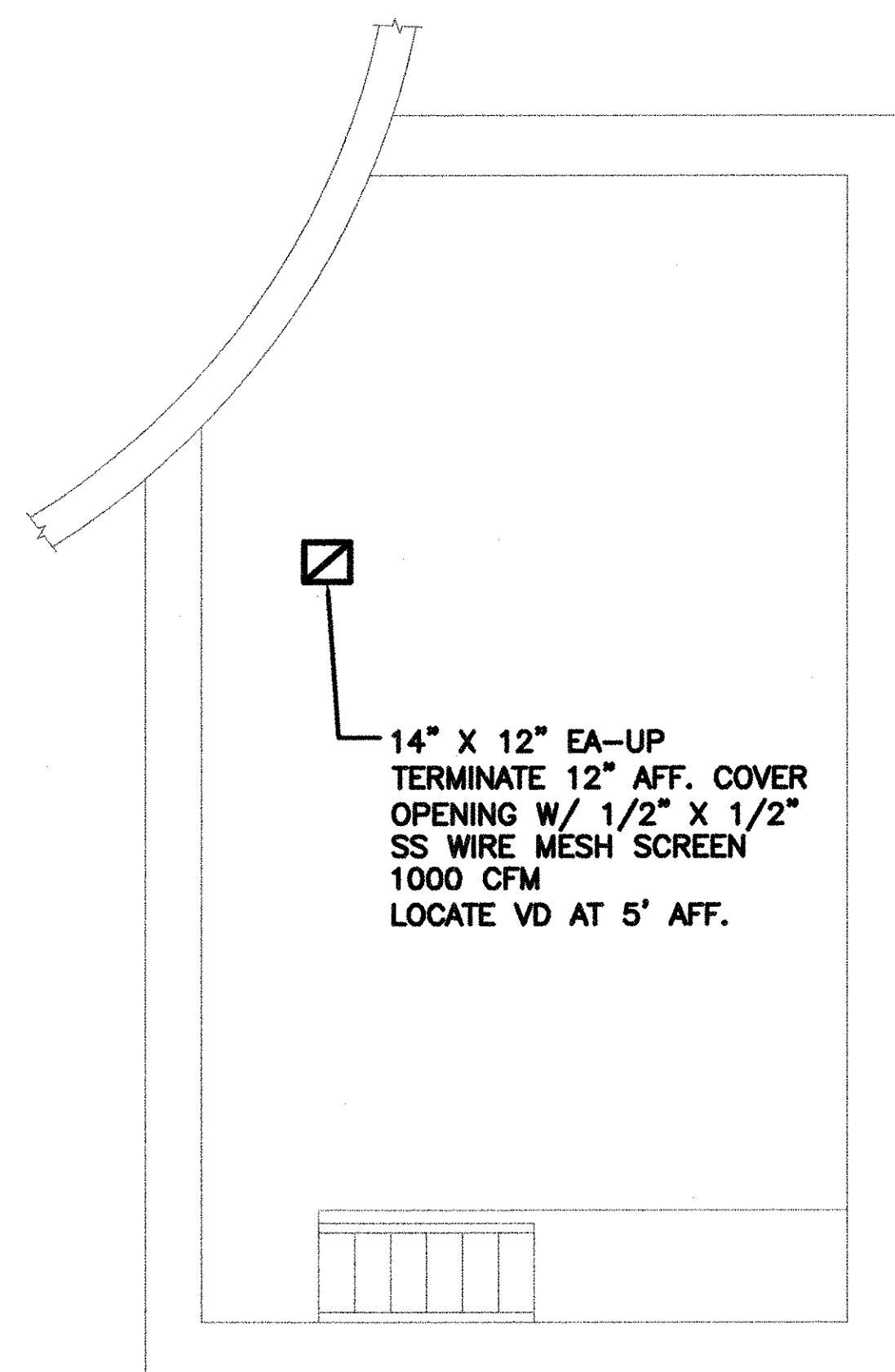
SLUDGE DIGESTER BUILDING - DEMOLITION

HVAC

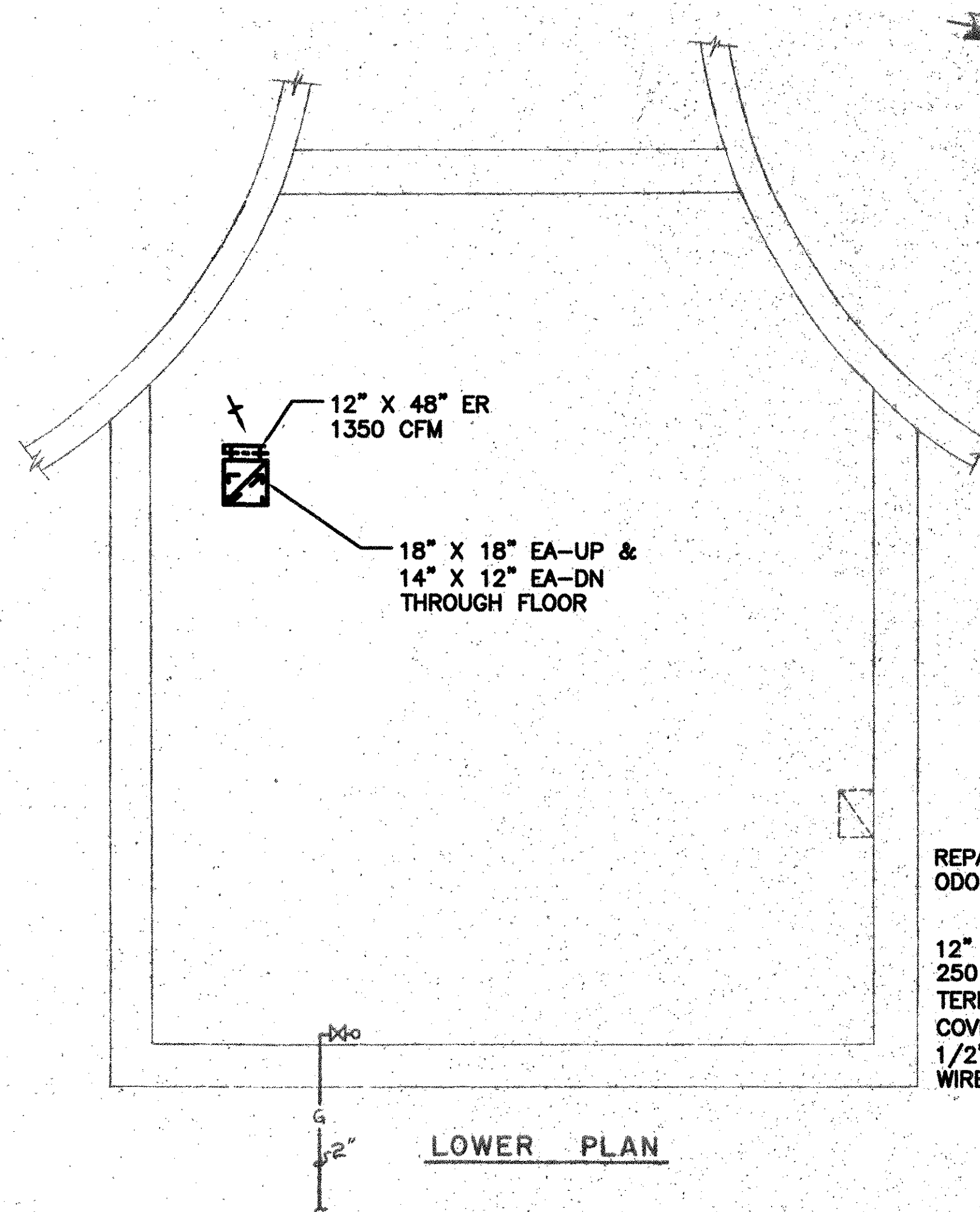
PROJECT NO:	60148648
CAD DWG FILE:	43 MD-101
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

43 MD-101

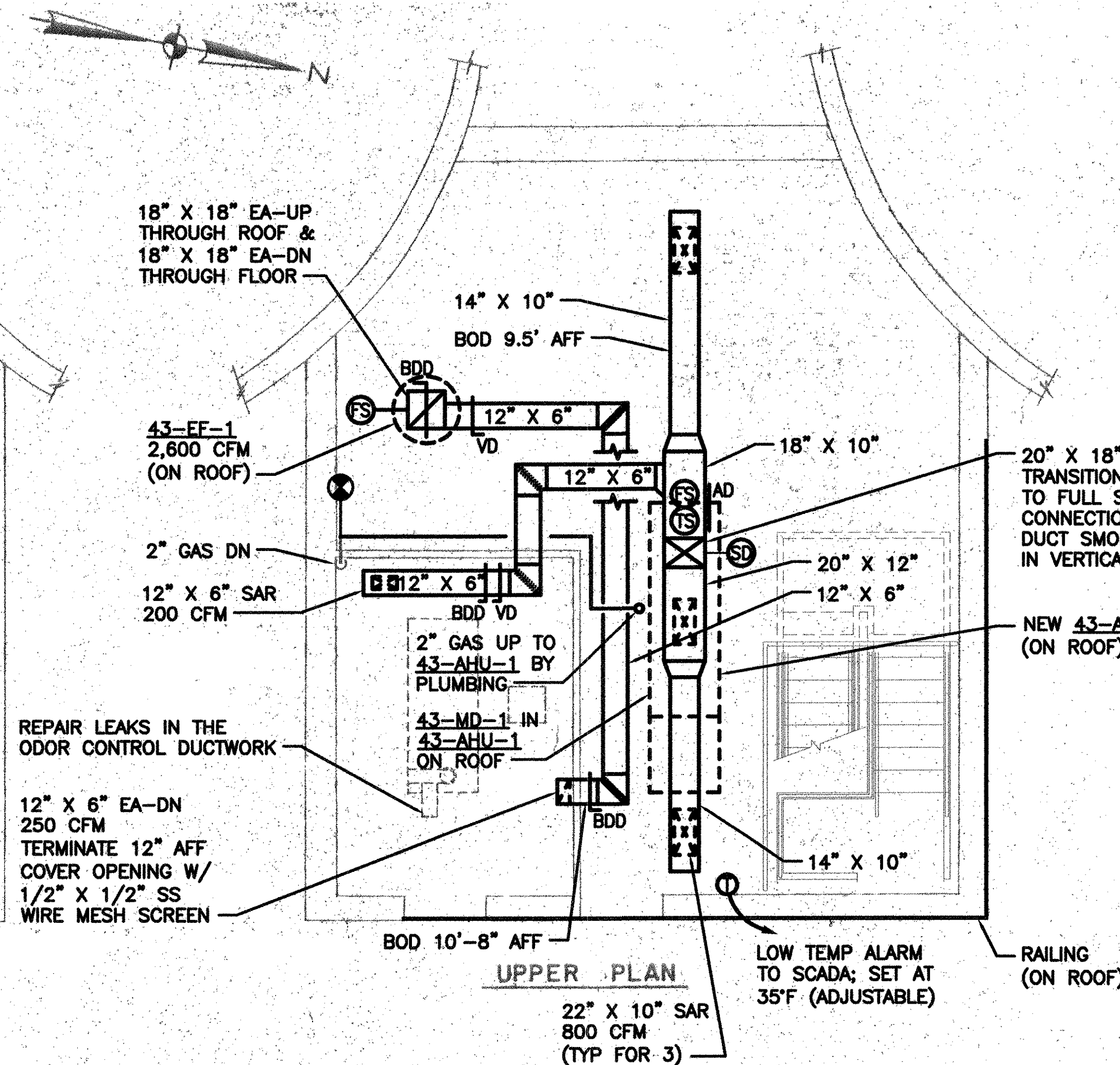
PATH/FILENAME: P:\6048648 - EAST PROVIDENCE DBO\DP-4\SHETS\M-101.DWG
 PLOT DATE: Friday, October 26, 2012 2:53:15 PM
 LAST UPDATE: Wednesday, October 24, 2012 12:27:38 PM
 ANSI D - 24-Oct-12



BASEMENT LEVEL
(LOWEST)



LOWER PLAN



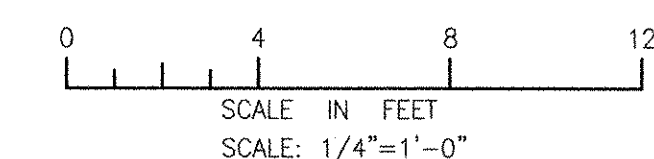
UPPER PLAN

NOTES:

1. MODIFY EXISTING ROOF OPENING AND DUCTWORK TO ACCOMMODATE NEW 43-EF-1 AND NEW BACKDRAFT DAMPER. PROVIDE ADAPTER CURB TO TRANSITION FROM EXISTING ROOF OPENING (APPROX 21" X 21") TO NEW FAN.
2. LOCATE SAFETY GUARD RAIL WHERE 43-AHU-1 AND 43-EF-1 ARE LOCATED WITHIN 10' OF THE ROOF EDGE. REFER TO ARCHITECTURAL DRAWINGS.
3. 43-AHU-1, ON THE ROOF, MUST BE LOCATED AWAY FROM THE TANKS A MINIMUM OF 10 FT.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

AECOM USA, INC.
 ONE WAVERLEY DRIVE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 10-21-14

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

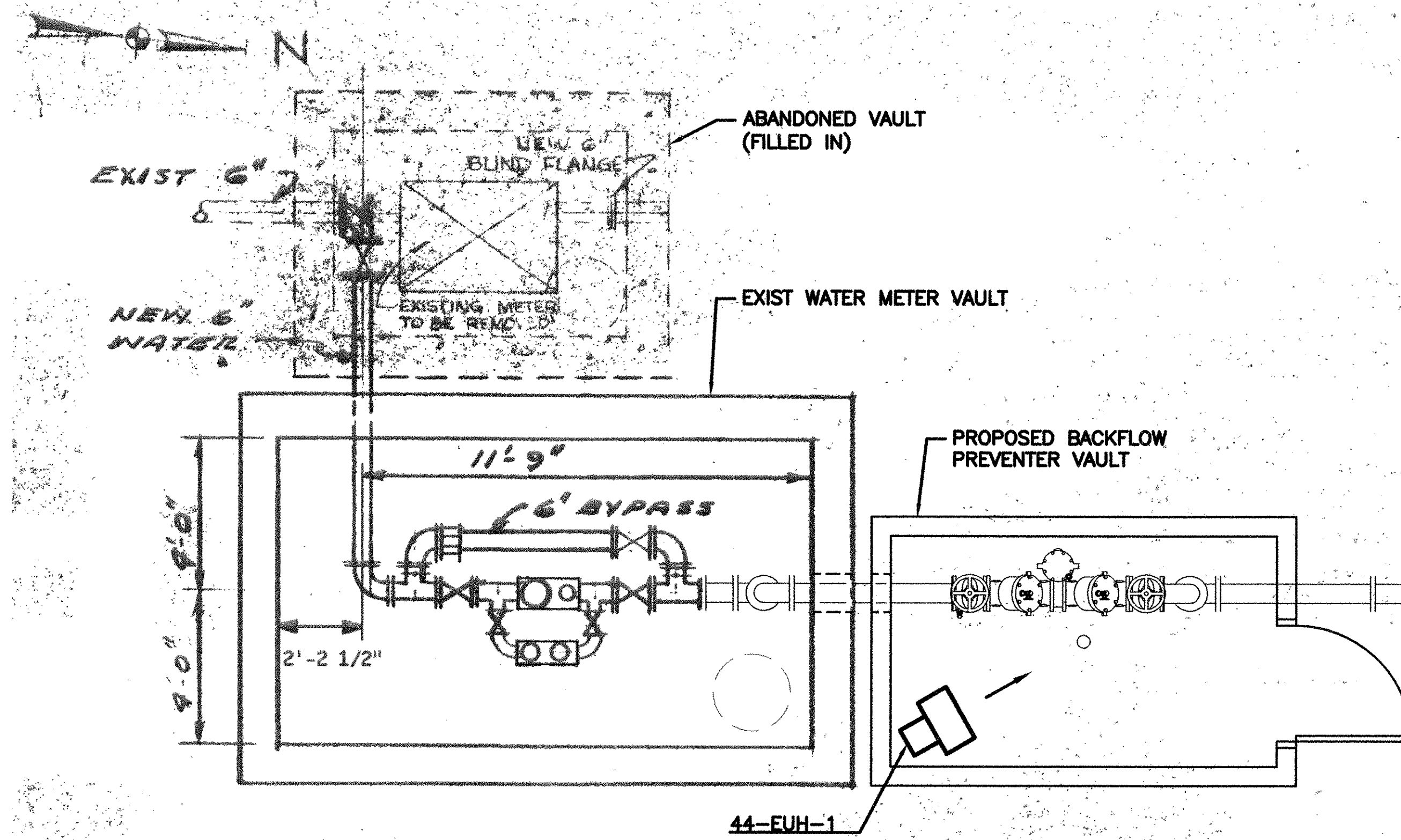
SLUDGE DIGESTER BUILDING - PLAN

HVAC

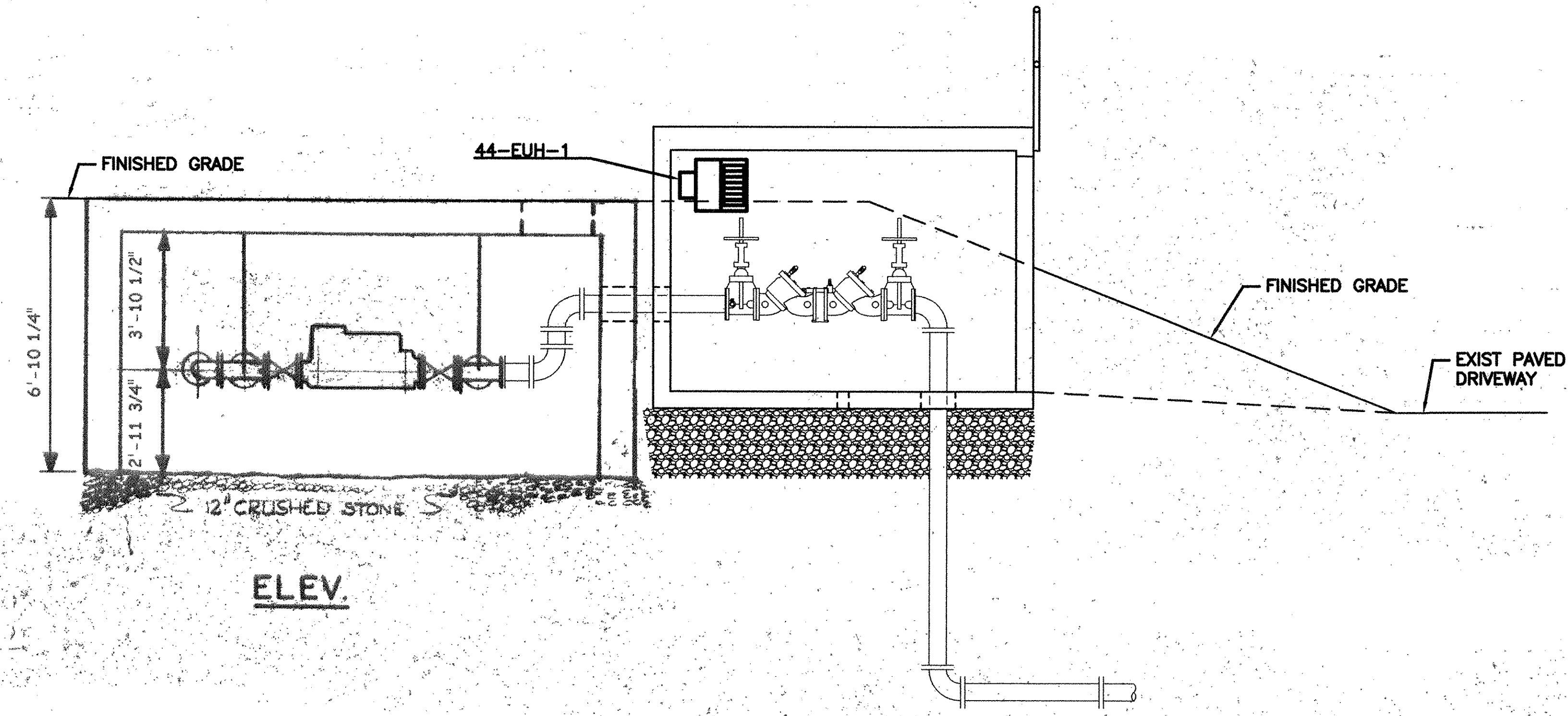
PROJECT NO:	60148648
CAD DWG FILE:	43 M-101
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"
43 M-101	

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\44 M-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:21:09 PM
 PLOT DATE: Friday, October 26, 2012 2:53:21 PM

ANSI D - 24-Oct-12



PLAN



ELEV.

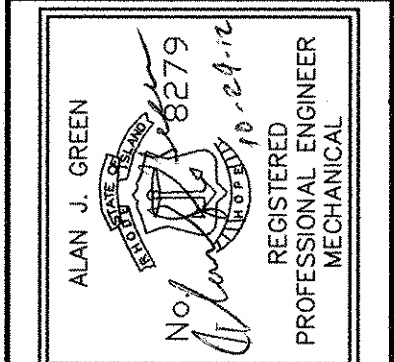
NOTES:

- EXISTING WATER METER VAULT LAYOUT AND PIPING SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.
- SEE SHEET 44 P-101 FOR WORK BY ALL OTHER TRADES.

AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WASHINGTON, DC 20004
 PHONE (703) 246-5200

AECOM

RECORD DRAWINGS



CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

MASTER BACKFLOW PREVENTER VAULT

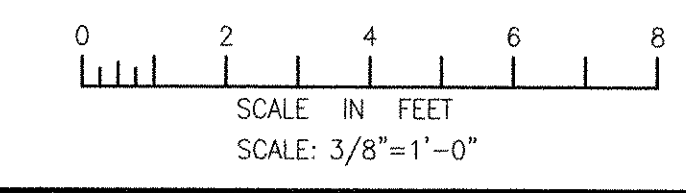
HVAC

PROJECT NO:	60148648
CAD DWG FILE:	44 M-101
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	3/8"=1'-0"

44 M-101

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	AC	DESCRIPTION
1	10/19/12	BS	AC		REVISED FOR RECORD DRAWINGS

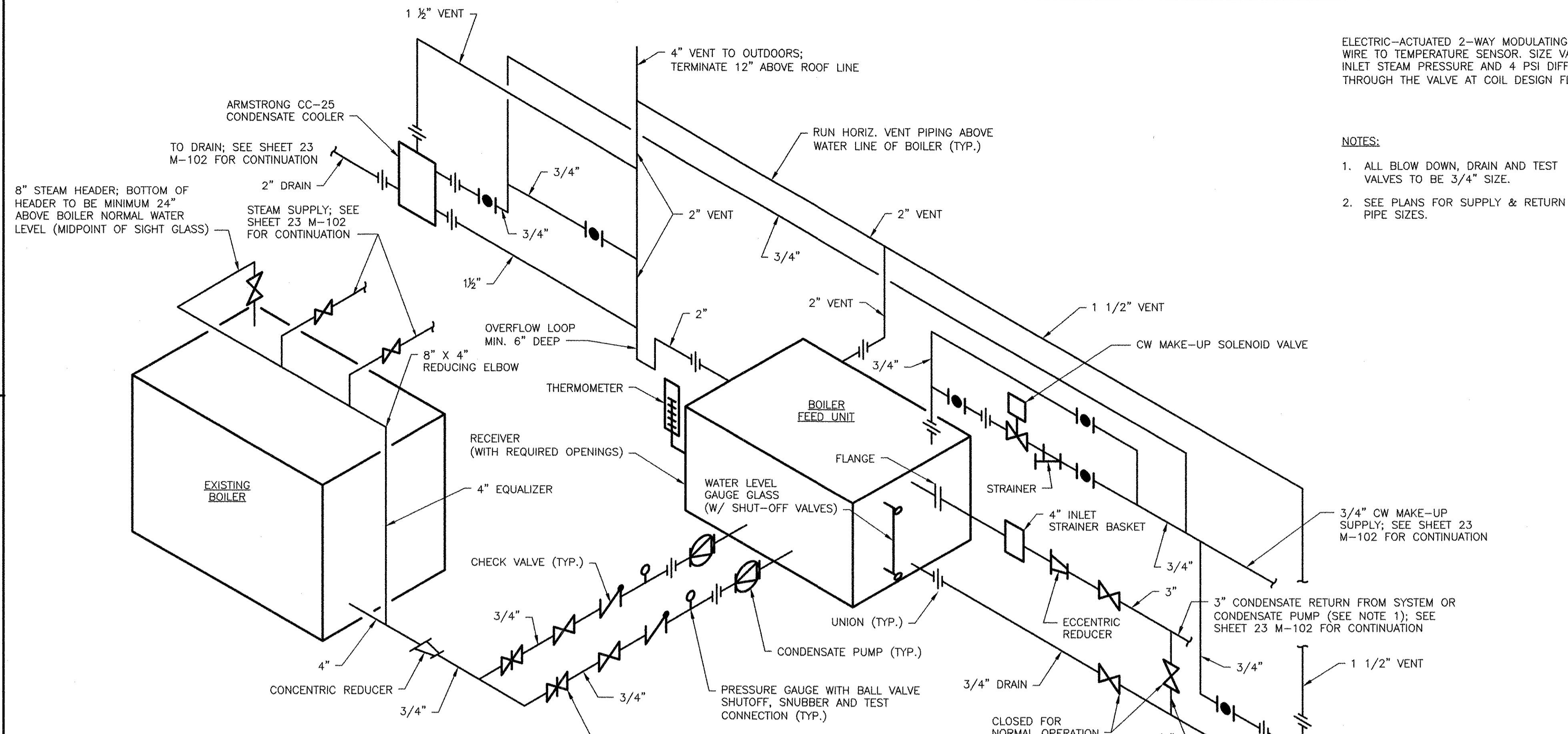
1

2

3

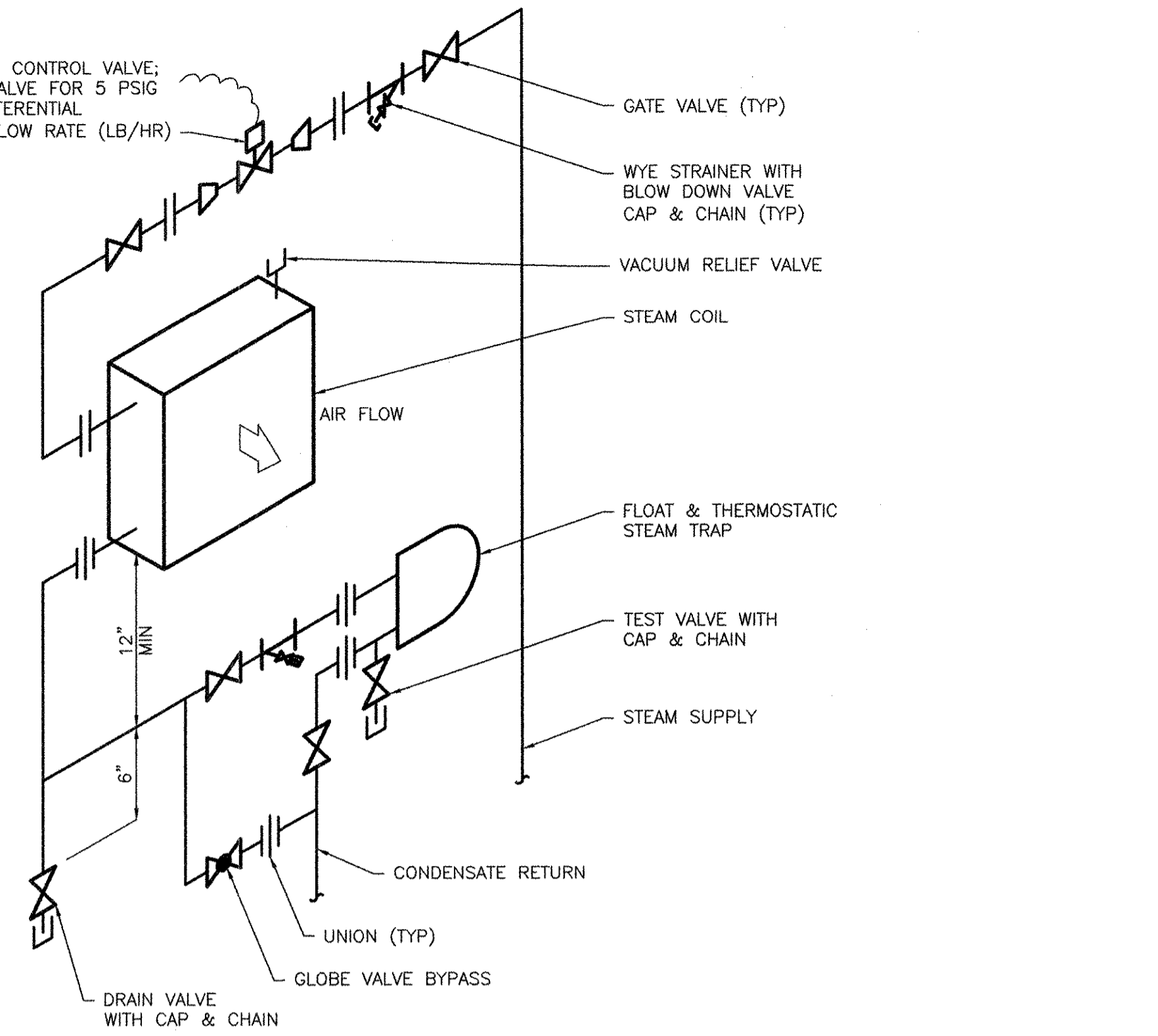
4

5

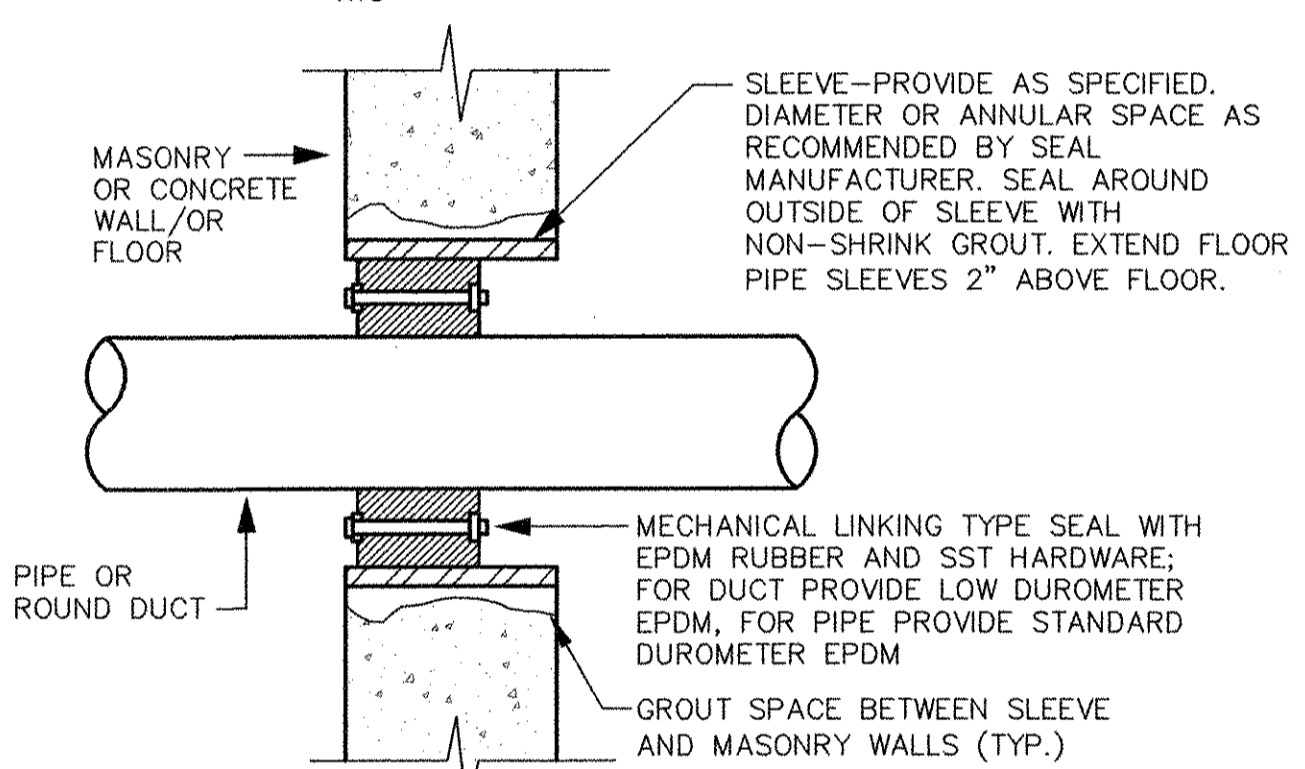


ELECTRIC-ACTUATED 2-WAY MODULATING CONTROL VALVE; WIRE TO TEMPERATURE SENSOR. SIZE VALVE FOR 5 PSIG INLET STEAM PRESSURE AND 4 PSI DIFFERENTIAL THROUGH THE VALVE AT COIL DESIGN FLOW RATE (LB/HR)

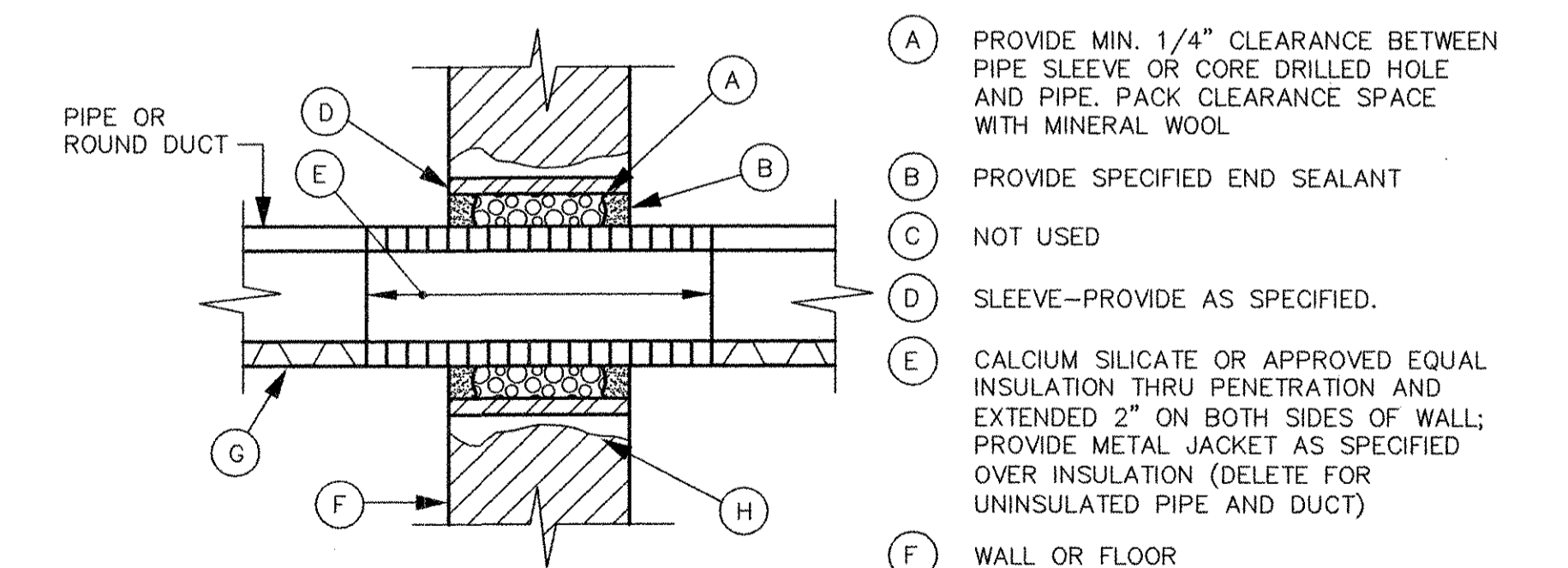
- NOTES:
1. ALL BLOW DOWN, DRAIN AND TEST VALVES TO BE 3/4" SIZE.
 2. SEE PLANS FOR SUPPLY & RETURN PIPE SIZES.



STEAM COIL PIPING DETAIL



EXTERIOR WALL/FLOOR PIPE PENETRATION DETAIL



INTERIOR WALL/FLOOR PIPE PENETRATION DETAIL

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED BY	REVISIONS	
				DESCRIPTION	REASON
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS	

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 ONE WAKEFIELD MA 01880
 PHONE (781) 246-5200

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 120575
 Exp. 06/24/12

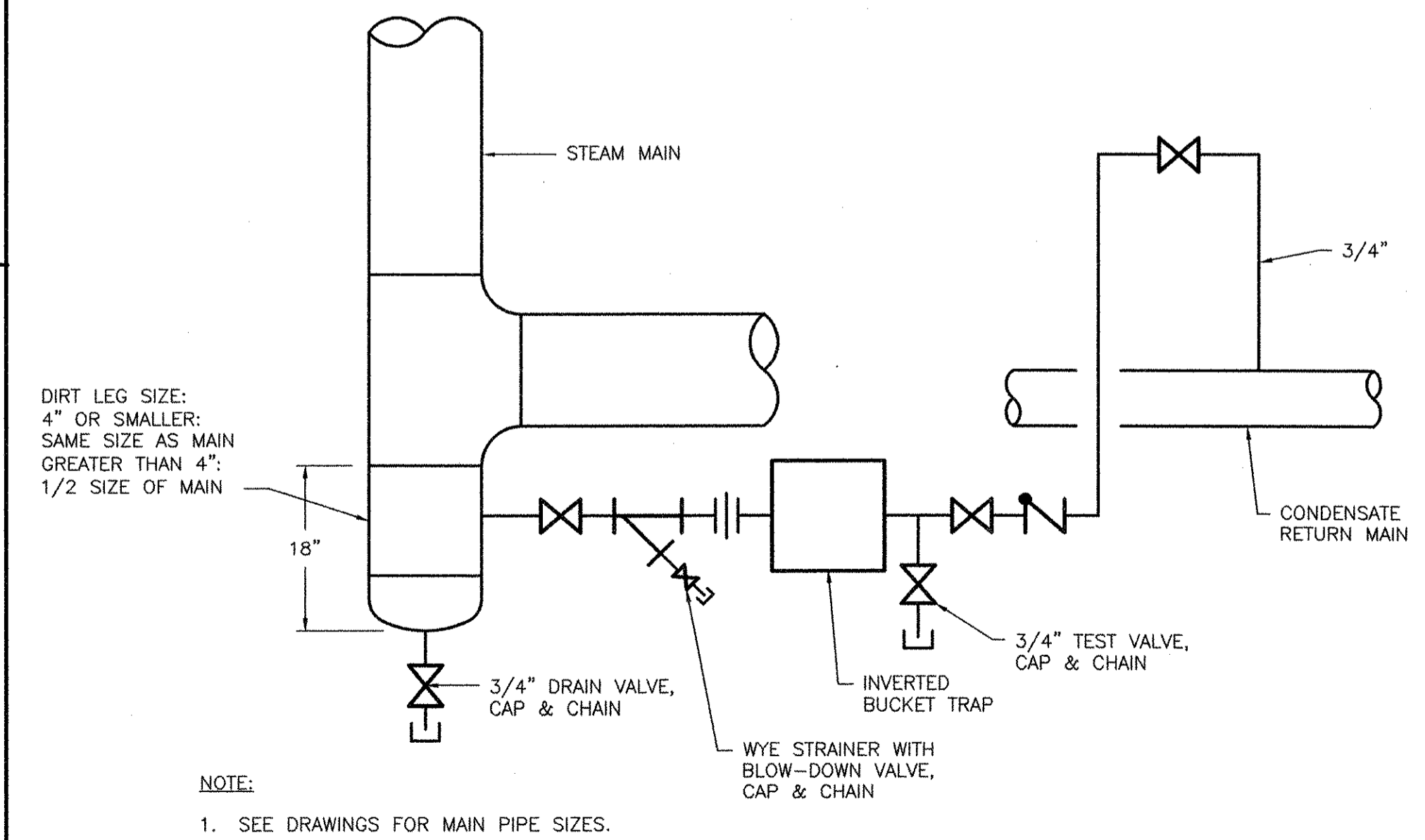
CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
 DETAILS I
 HVAC

PROJECT NO: 60148648
 CAD DWG FILE: 99 M-001
 DESIGNED BY: A. GREEN
 DRAWN BY: B. SANTOSUOSSO
 DEPT CHECK: C. GALLIGAN
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

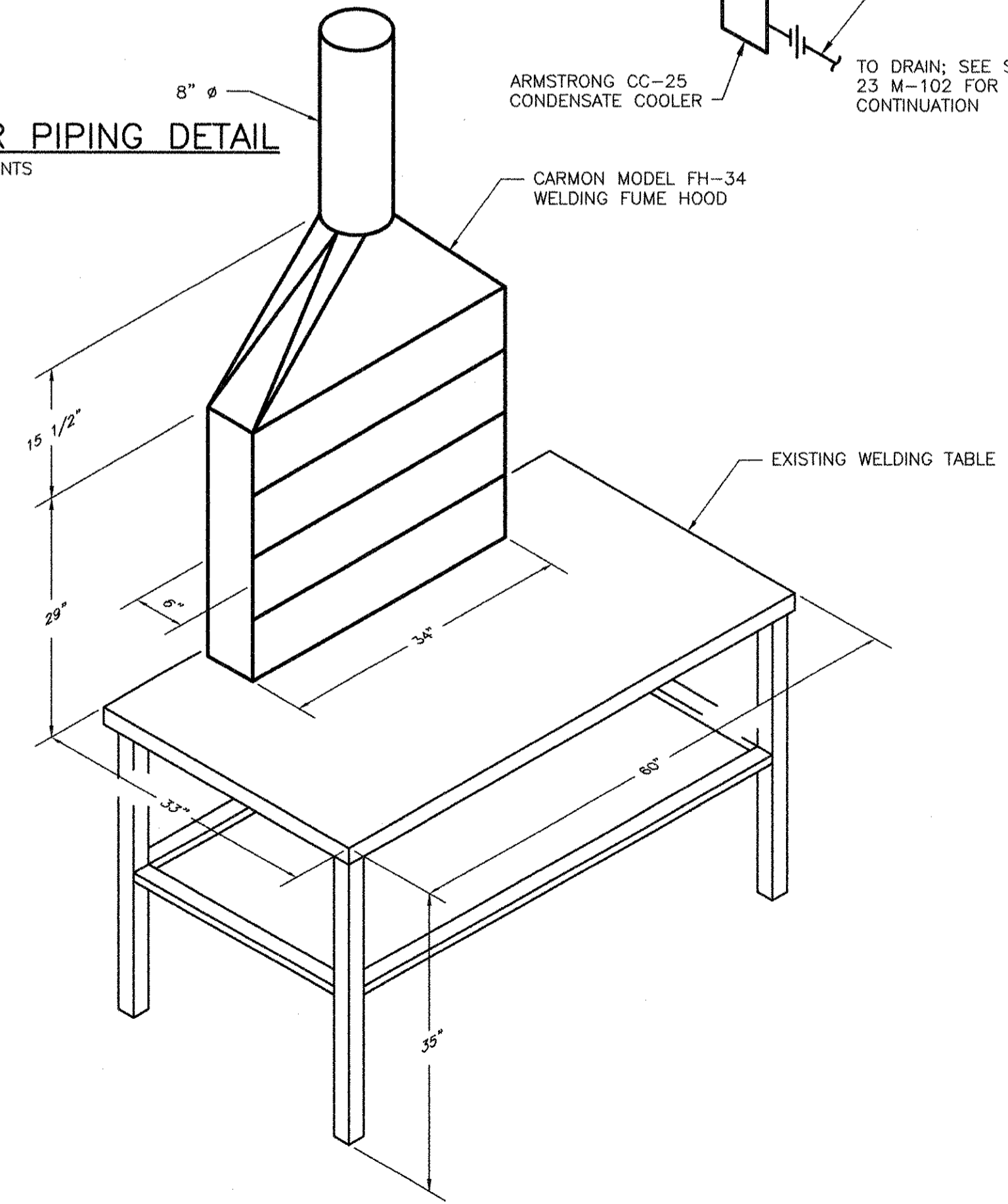
99 M-001

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON\99 M-001.DWG
 LAST UPDATE: Wednesday, October 24, 2012 11:45:02 AM
 PLOT DATE: Friday, October 26, 2012 2:53:28 PM
 ANSI D - 24-Oct-12

- NOTE:
1. IF CONDENSATE IS GRAVITY RETURN, SUFFICIENT VERTICAL PIPE RISE (STATIC HEAD) SHALL BE AVAILABLE TO THE BOILER FEED UNIT TANK INLET.
 2. MAKE CW MAKE-UP CONNECTIONS DOWNSTREAM OF EXISTING CHEMICAL FEED CONTROLLER IN EXISTING 3/4" CW MAKE-UP LINE.
 3. PROVIDE PUMP CONTROLLER ASSEMBLY (LOW AND HIGH BOILER WATER LEVEL CONTROLS) ON BOILER AND WIRE TO BOILER FEED UNIT CONTROL PANEL. PROVIDE LOW WATER BURNER CUTOFF, AND HIGH WATER AND LOW WATER ALARMS ON BOILER AND WIRE TO BOILER FEED UNIT CONTROL PANEL. WIRE BOILER FEED UNIT MAKE-UP FLOAT/SOLENOID VALVE TO BOILER FEED UNIT CONTROL PANEL. PROVIDE ALL OTHER FIELD CONTROL WIRING AND DEVICES REQUIRED BY THE BOILER FEED UNIT MFR. RUN ALL CONTROL WIRING IN CONDUIT.
 4. SET CONDENSATE COOLERS FOR 135 DEGREE F DISCHARGE.



STEAM MAIN DRIP PIPING DETAIL



STEAM BOILER PIPING DETAIL

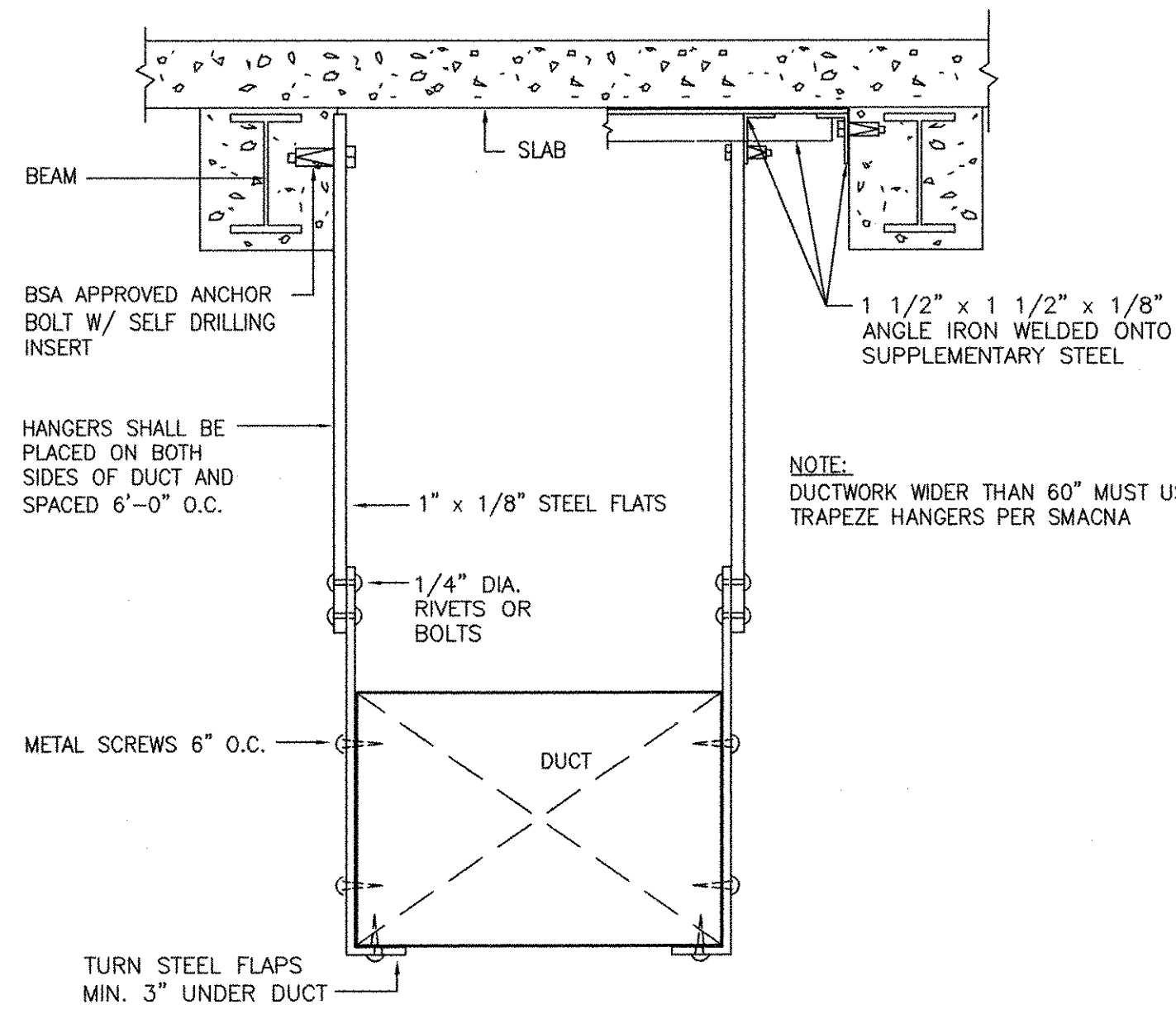
1

2

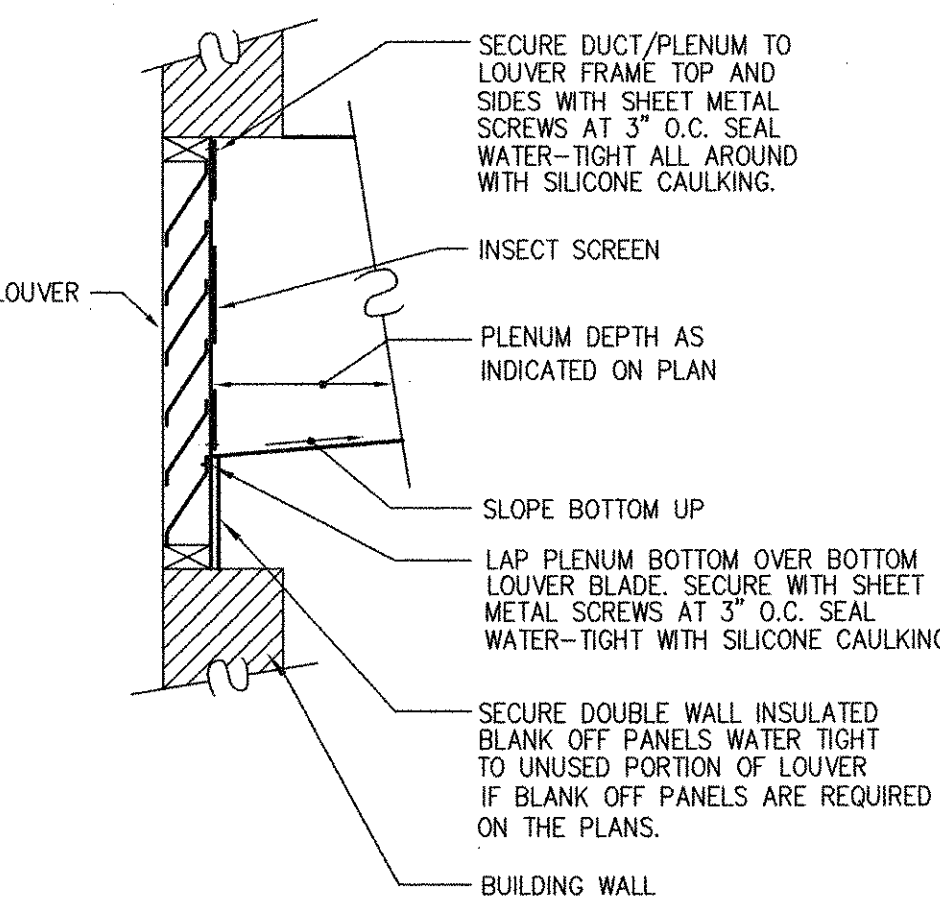
3

4

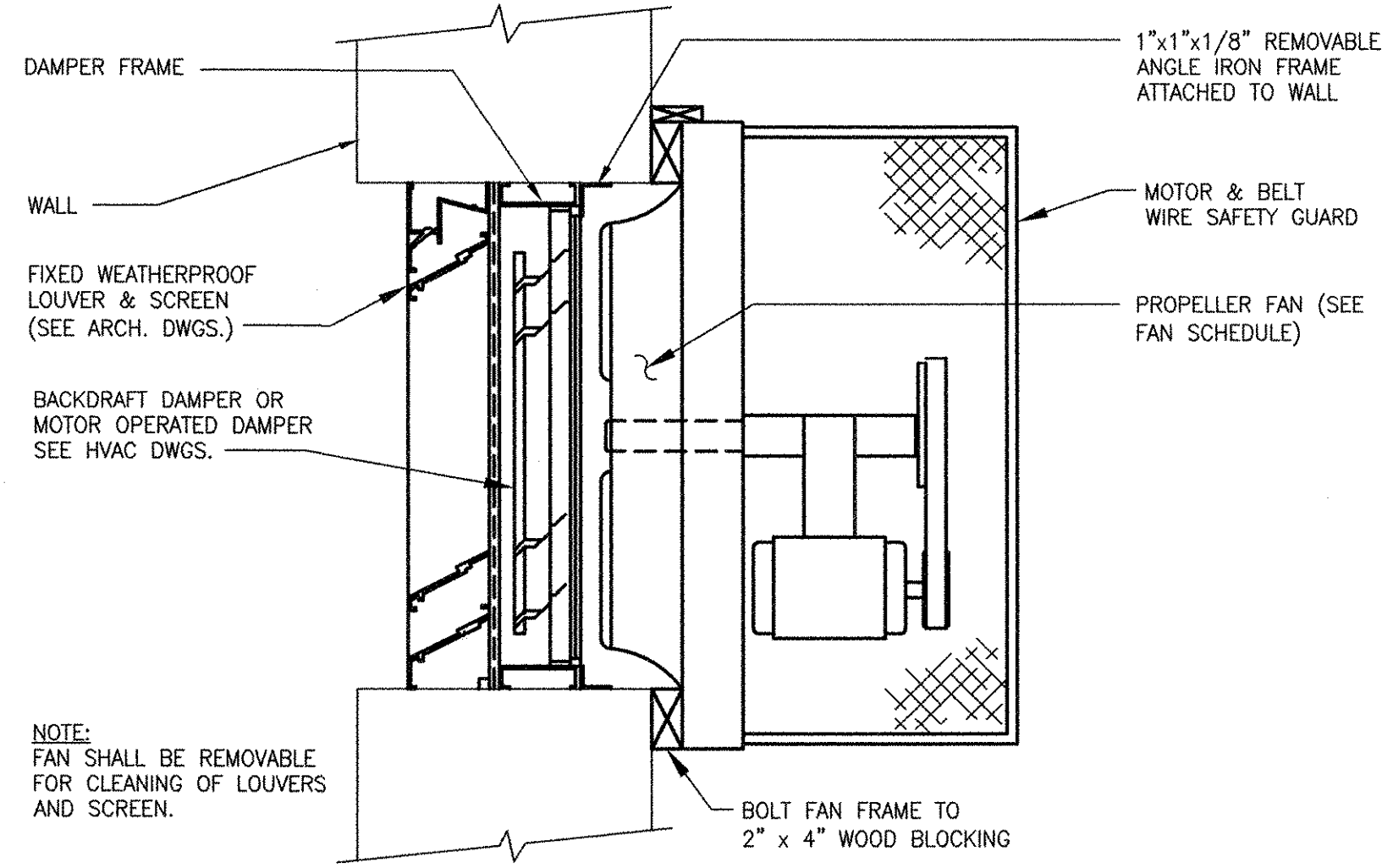
5



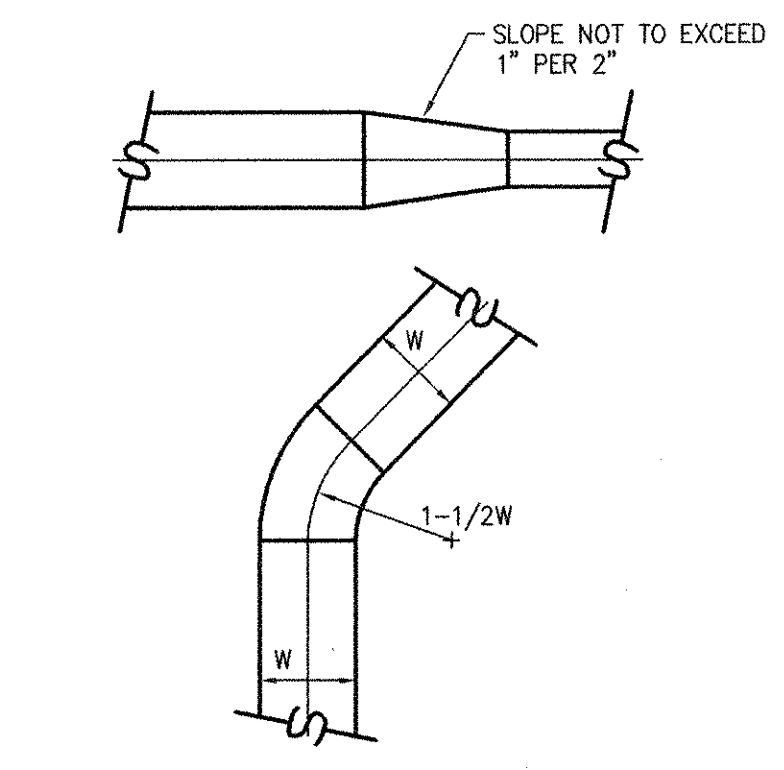
DUCTWORK STRAP HANGER 60" WIDTH MAX.
NTS



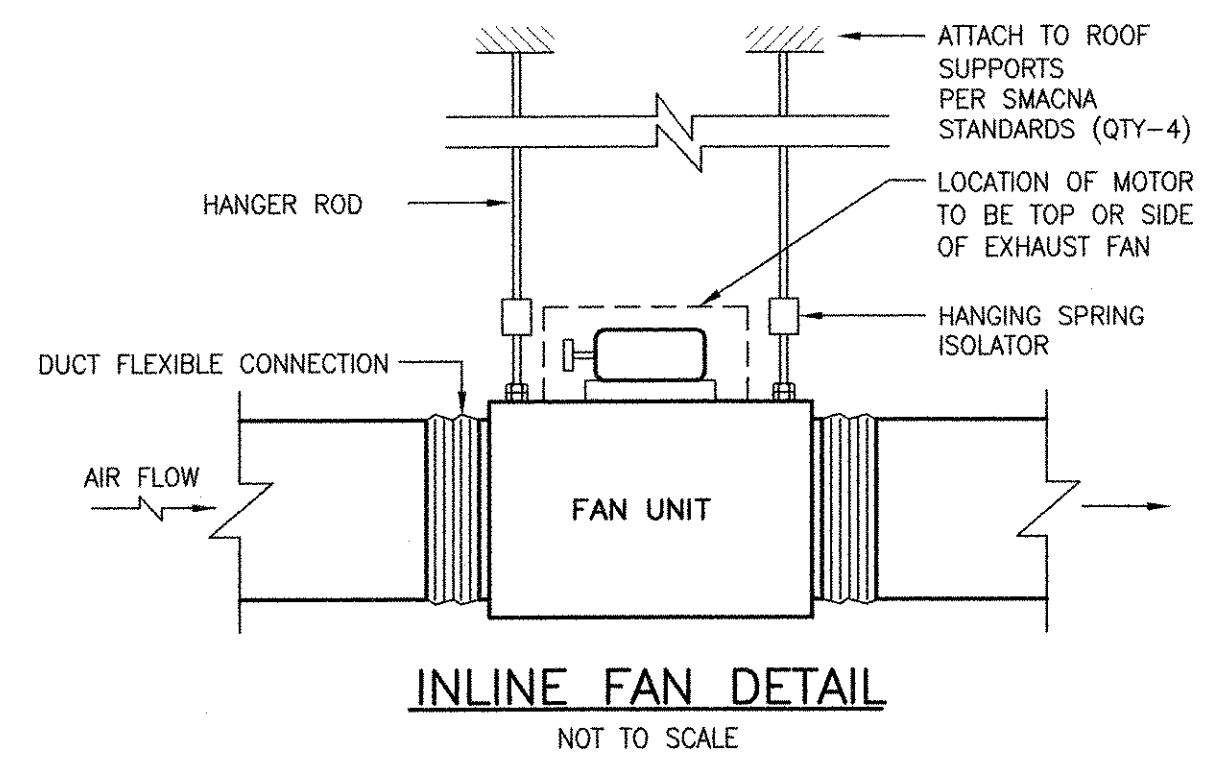
LOUVER - PLENUM / DUCT CONNECTION DETAIL
NTS



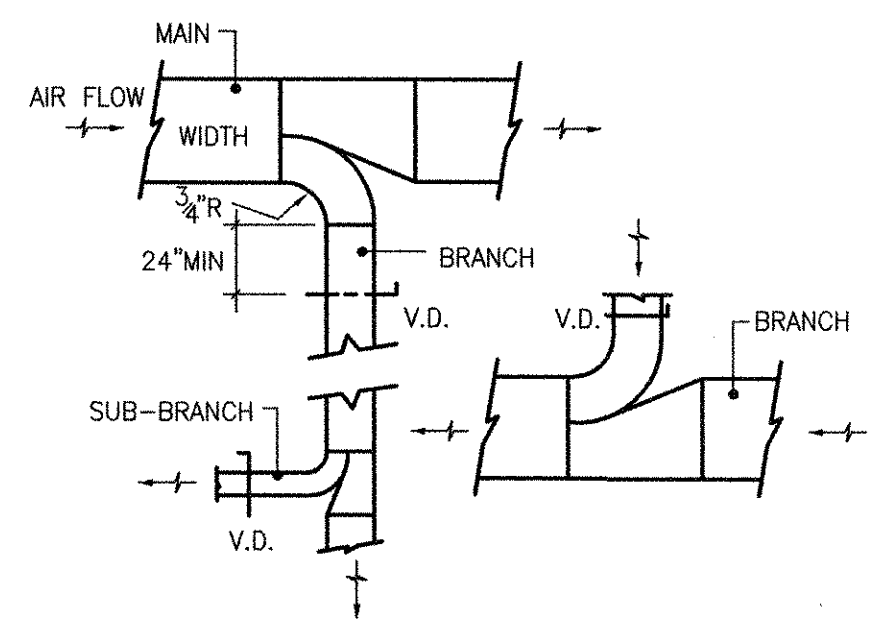
WALL MOUNTED PROPELLER FAN
NTS



CONSTRUCTION OF TRANSITION AND 45° ELBOWS
NTS

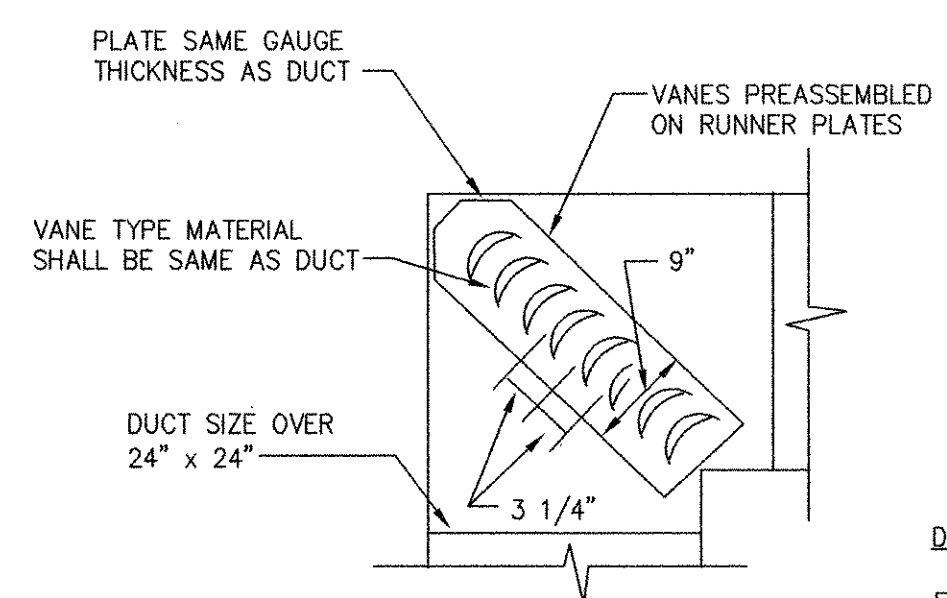


INLINE FAN DETAIL
NOT TO SCALE

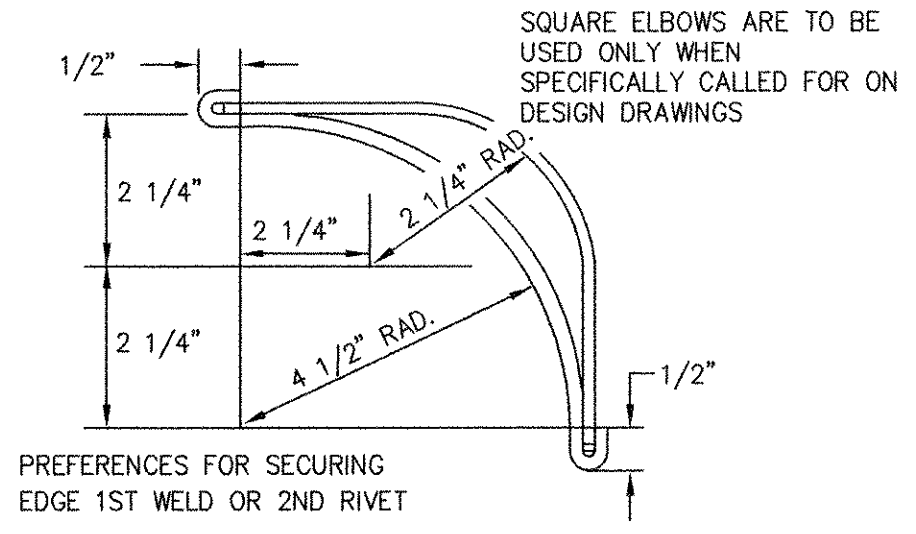


- NOTES:
1. PROVIDE VOLUME DAMPERS AT ALL BRANCH CONNECTIONS SERVING SUPPLY, RETURN AND EXHAUST AIR MAINS.
 2. PROVIDE VOLUME DAMPERS AT EACH SUB-BRANCH CONNECTIONS SERVING RETURN AND EXHAUST AIR BRANCHES.
 3. PROVIDE VOLUME DAMPER AT EACH SUPPLY AIR SUB-BRANCH CONNECTION & SUBSEQUENT SUB-BRANCH CONNECTIONS.
 4. VOLUME DAMPERS AT DUCTS OVER 2 SQ.FT. SHALL BE OF THE OPPOSED BLADE TYPE UNLESS OTHERWISE NOTED.

DUCT BRANCH AND SUB-BRANCH CONNECTIONS
NTS

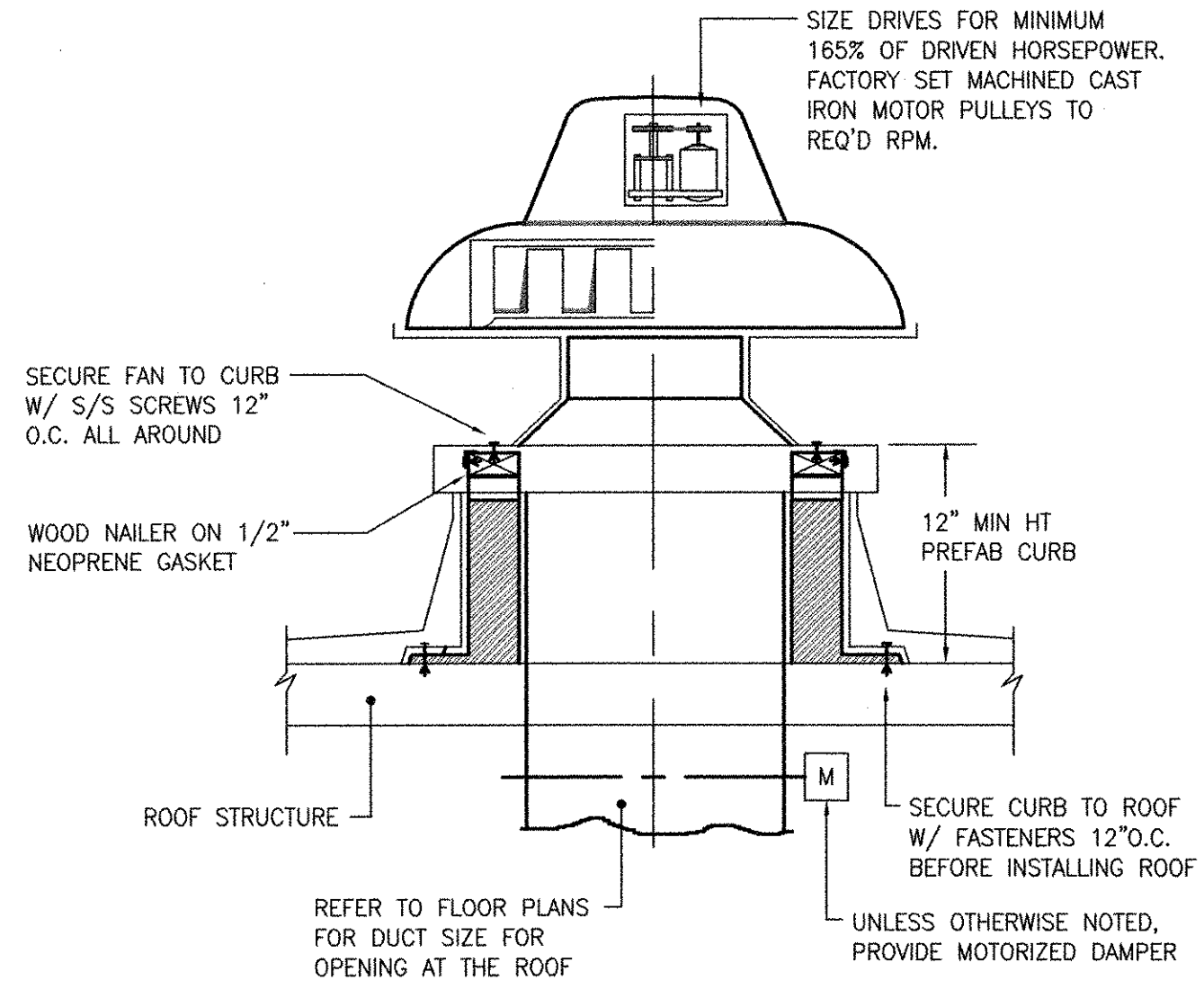


TURNING VANE DETAIL
NTS

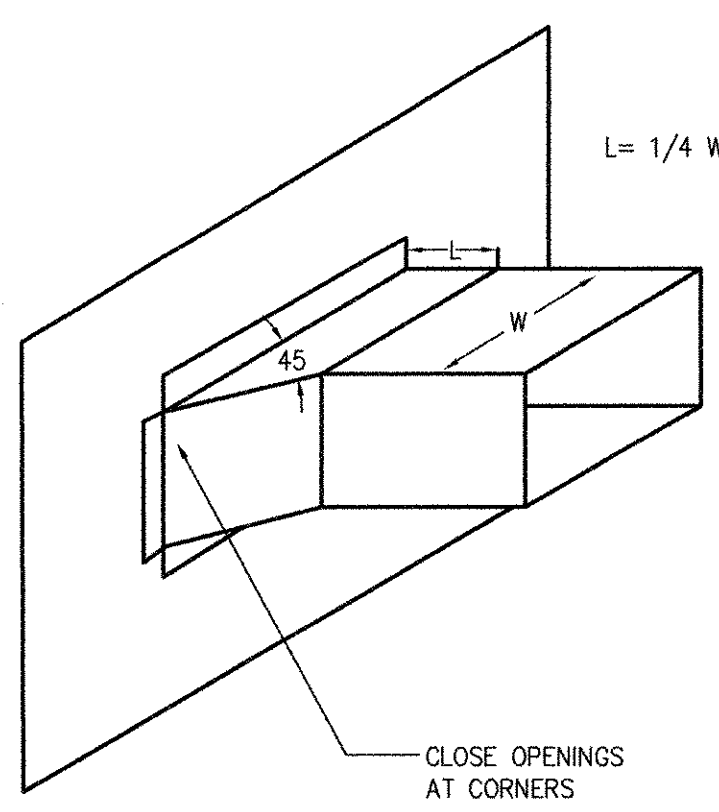


DOUBLE THICKNESS VANES
FOR USE IN DUCTS GREATER THAN 24" x 24" IN SIZE. USE SAME GAUGE AS DUCT BUT NOT TO EXCEED 20 GAUGE.

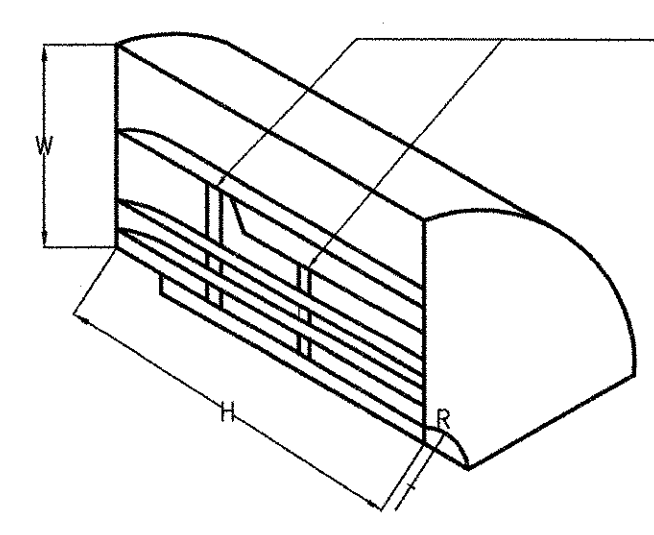
NOTES:
PROVIDE 1 STAY FOR DUCTS 72" TO 120" WIDE & 2 STAYS AT 1/3 POINTS FOR 120" & ABOVE.



ROOF EXHAUST FAN
NTS



45° BRANCH CONNECTION
NTS



CONSTRUCTION OF RADIUS ELBOWS
NTS

ELBOW DEPTH H REQUIRED	NUMBER OF TIE RODS
0"-12"	NONE
13"-20"	1
21"-48"	2
49"-64"	3
65"-80"	4

REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	AC
1	MARK	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

AECOM
RECORD DRAWINGS

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

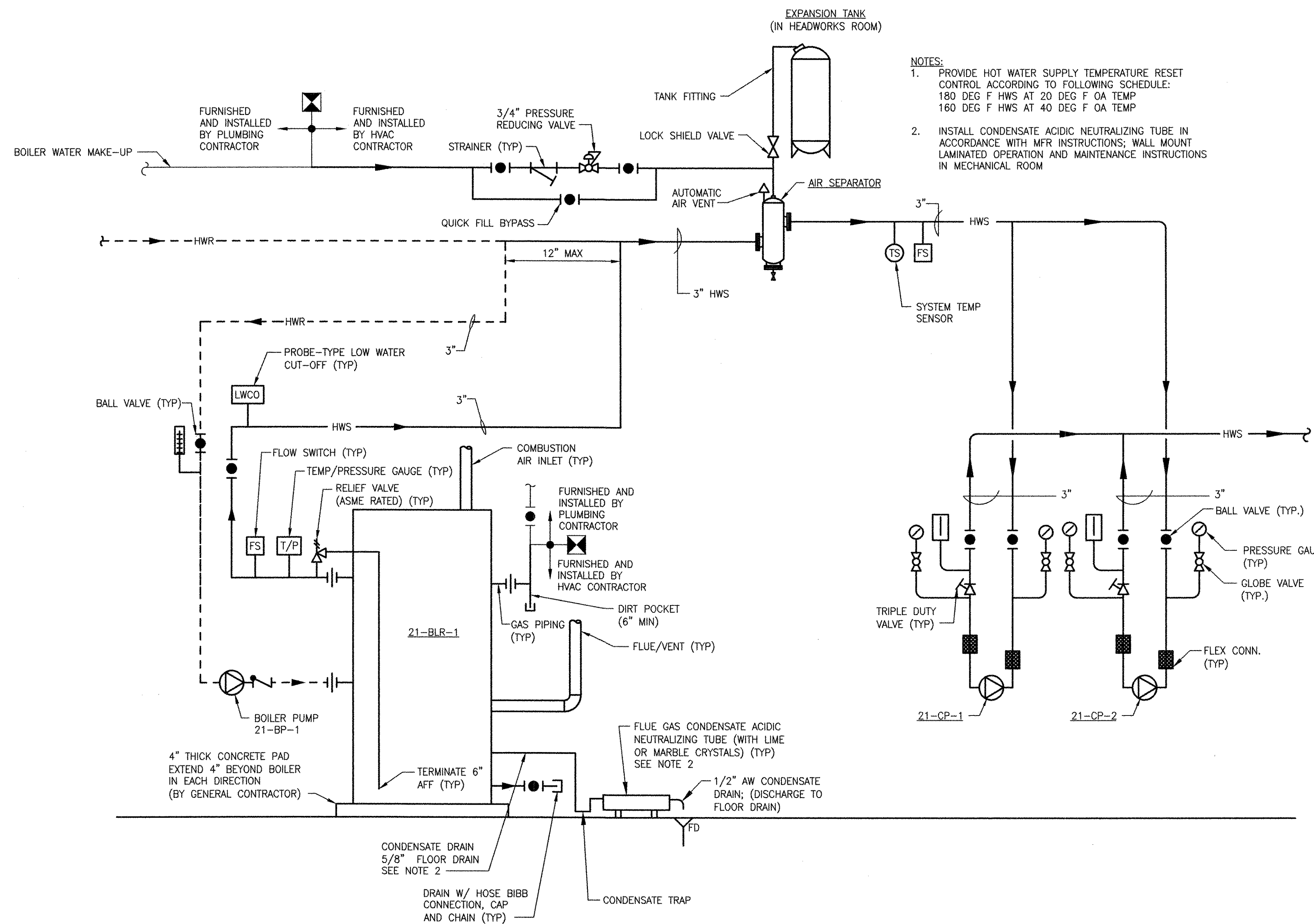
CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS
DETAILS II
HVAC

RECORD DRAWING
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	99 M-002
DESIGNED BY:	A. CASAVANT
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

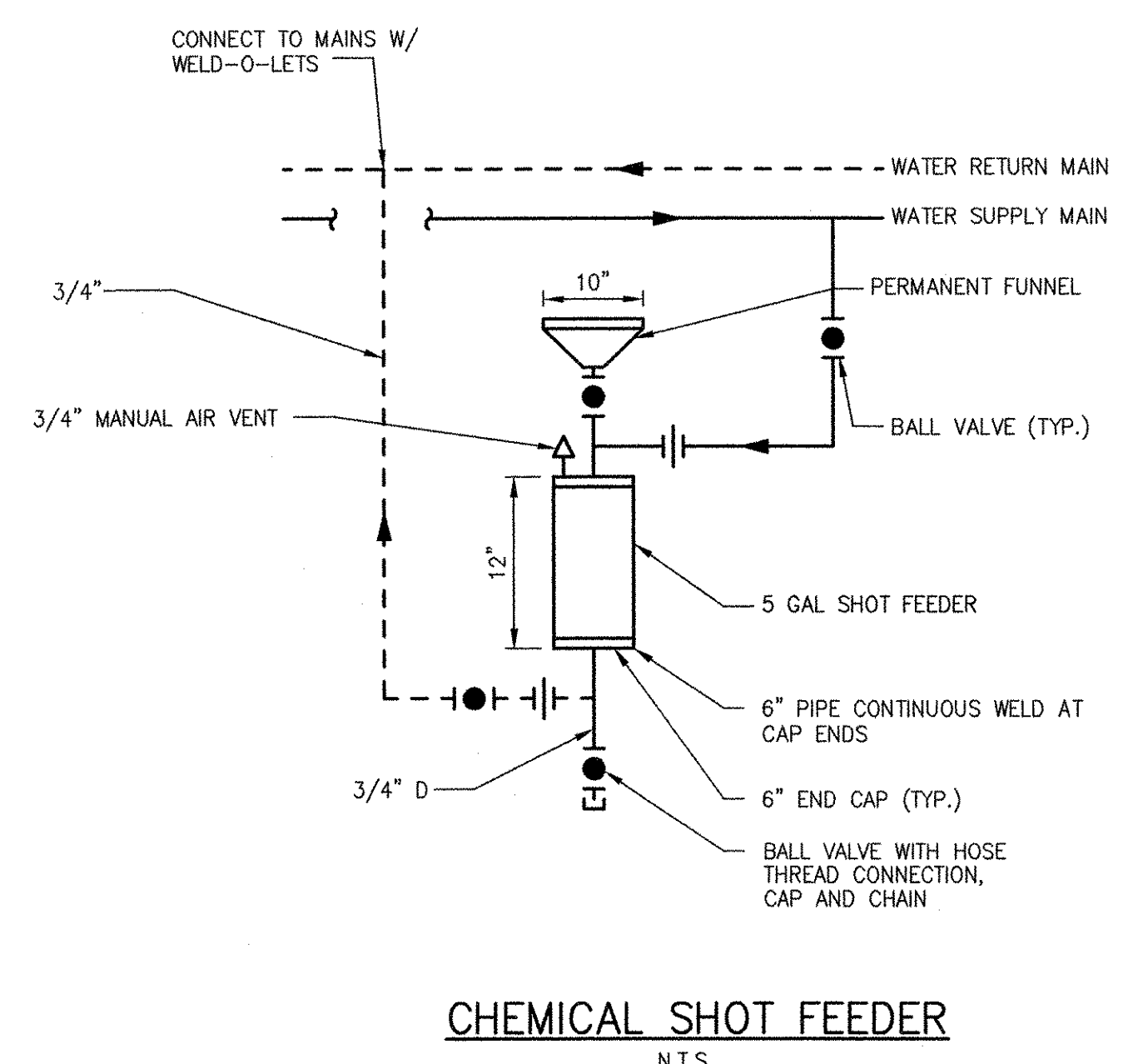
99 M-002

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\COMMON\SHETS\99 M-002.DWG
LAST UPDATE: Wednesday, October 24, 2012 11:44:30 AM
PLOT DATE: Friday, October 26, 2012 2:53:30 PM
ANSI D - 24-Oct-12



NOTES:

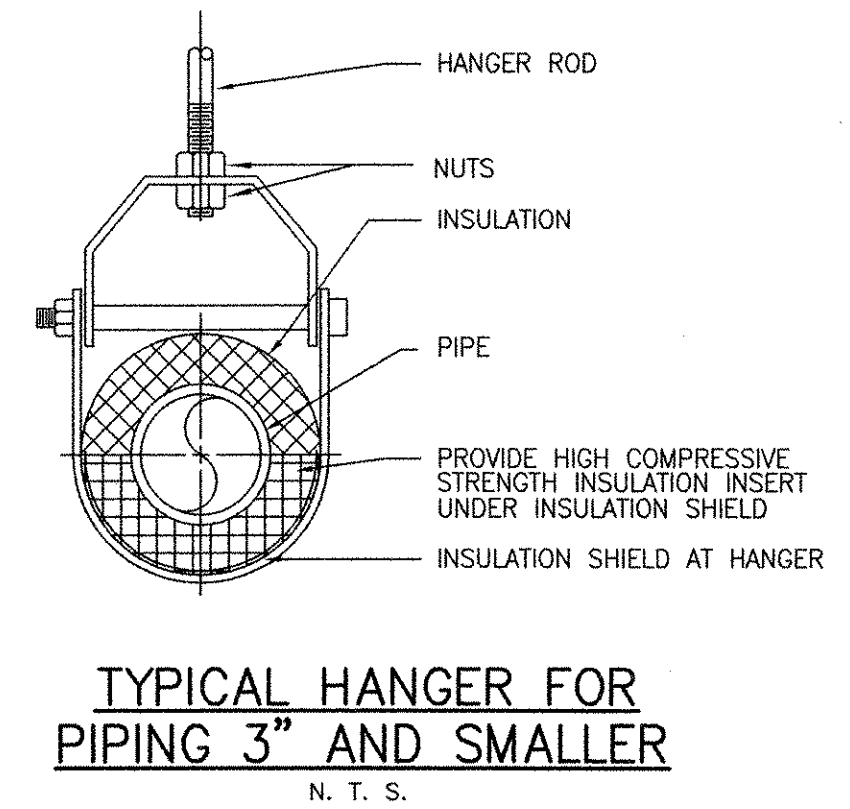
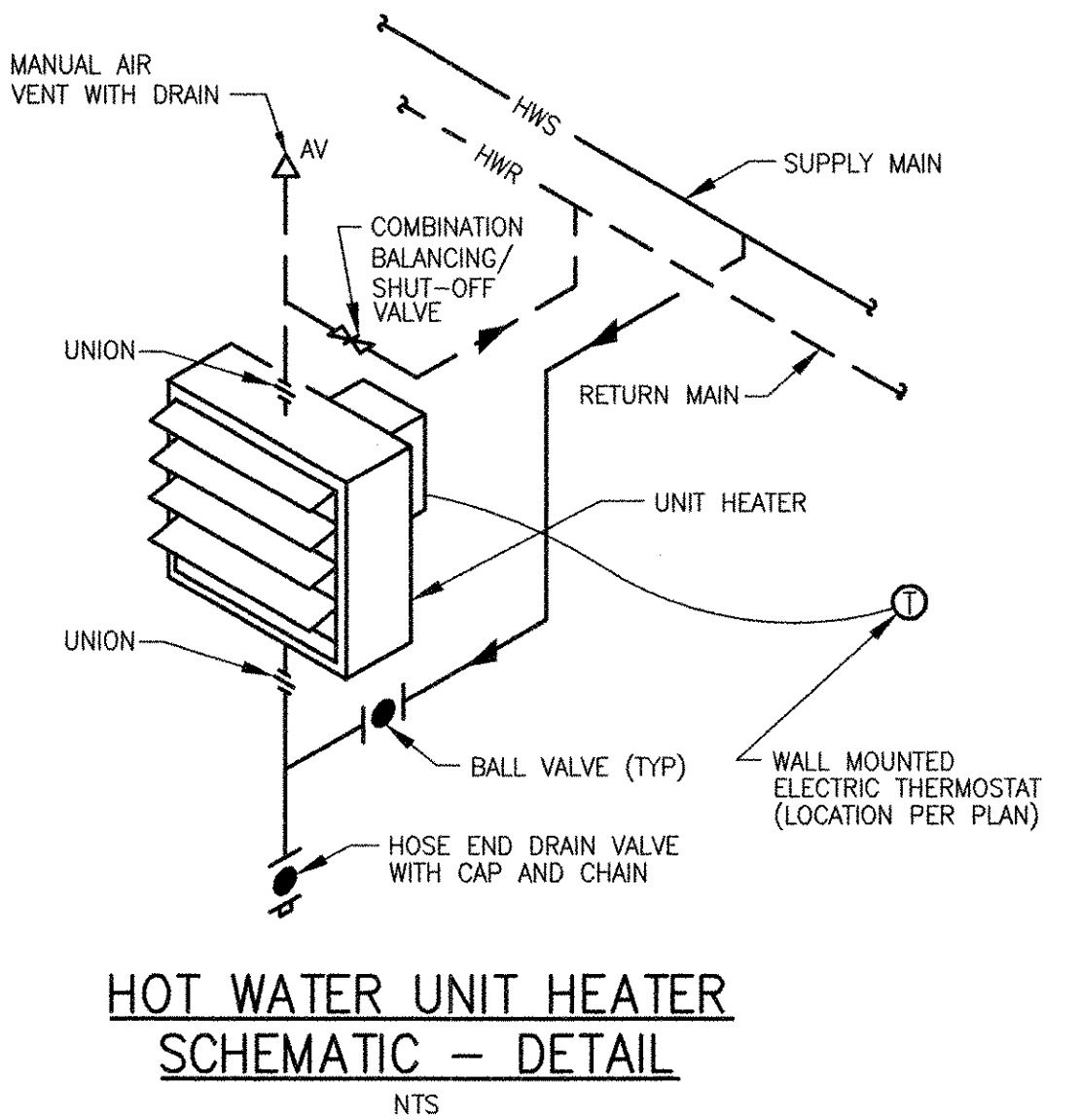
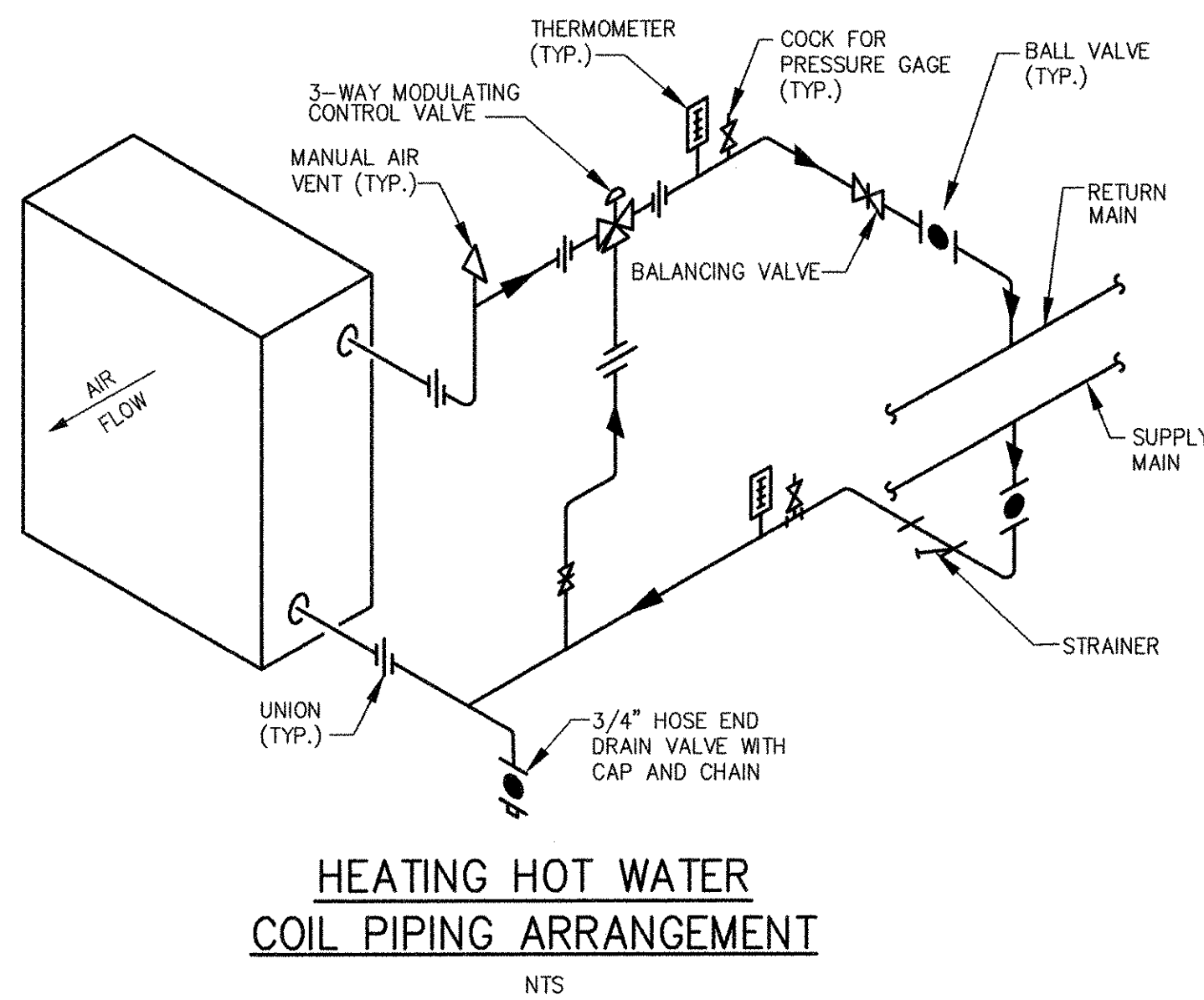
- PROVIDE HOT WATER SUPPLY TEMPERATURE RESET CONTROL ACCORDING TO FOLLOWING SCHEDULE:
180 DEG F HWS AT 20 DEG F OA TEMP
160 DEG F HWS AT 40 DEG F OA TEMP
- INSTALL CONDENSATE ACIDIC NEUTRALIZING TUBE IN ACCORDANCE WITH MFR INSTRUCTIONS; WALL MOUNT LAMINATED OPERATION AND MAINTENANCE INSTRUCTIONS IN MECHANICAL ROOM



MAXIMUM PIPE/TUBING SUPPORT SPACING, FEET

NOM. SIZE	THRU 3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
PIPE	7 FT.	7	7	9	10	11	12
TUBING	5 FT.	6	7	8	8	9	10

NOTES:
1. FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	BS	AC	REVISED FOR RECORD DRAWINGS

ACCOM USA, INC.
ONE WAKEFIELD MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
No. 8279

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

DETAILS III
HVAC

PROJECT NO: 60148648
CAD DWG FILE: 99 M-003
DESIGNED BY: ----
DRAWN BY: ----
DEPT CHECK: ----
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: NONE

99 M-003

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE (BBO)\COMMON SHEETS\99 M-003.DWG
LAST UPDATE: Wednesday, October 24, 2012 11:53:55 AM
PLOT DATE: Friday, October 26, 2012 2:53:33 PM
ANSI D - 24-Oct-12

LEGEND

Table with 2 columns: Symbol and Description. Includes entries for NEW WORK, EXISTING WORK, NG (Natural Gas), S (Sanitary), TP (Trap Primer Line), W (Waste), D (Drain), V (Vent), W1 (Potable Water), W2 (Service Water), HW1 (Hot Water), TW1 (Tempered Water), FW (Fire Water), and various valves and fixtures.

ELECTRIC WATER HEATER SCHEDULE table with columns: DESIGNATION, MFR & MODEL, LOCATION, STORAGE CAPACITY (GALS.), RECOVERY 100 DEG. RISE--GPH, INPUT (KW), VOLT, PHASE, REMARKS. Row 1: 21-EWH-1, A.O. SMITH DEN-80, HEADWORKS SAMPLE ROOM, 80, 49, 12, 460, 3, SIMULTANEOUS DUAL ELEMENT OPERATION (2) 6000 WATT ELEMENTS.

*SELECTION BASED ON A.O. SMITH; A.O. SMITH, RHEEM OR BRADFORD-WHITE ARE ACCEPTABLE MANUFACTURERS

ELECTRIC TANKLESS WATER HEATER SCHEDULE table with columns: DESIGNATION, MFR & MODEL, LOCATION, FLOW (GPM), TEMPERATURE RISE (F), KW, VOLTS, PHASE, REMARKS. Row 1: 11-EWH-1, EEMAX SP4208, WATCHEMOKET PUMP STATION, 0.5, 56, 4.1, 208, 1, ---

PLUMBING FIXTURE SCHEDULE table with columns: TAG NUMBER, FIXTURE, SOIL OR WASTE, VENT, COLD WATER W1, COLD WATER W2, HOT WATER HW1, TEMPERED WATER TW1, REMARKS. Rows include P-1 (Water Closet), P-1H (Handicapped Water Closet), P-2 (Lavatory), P-2H (Handicapped Lavatory), P-3H (Handicapped Shower), P-4 (Hose Bibb), P-5 (Emergency Shower and Eye/Face Wash), P-6 (Emergency Shower), P-7 (Emergency Eyewash).

* SIZE AS INDICATED ON PLANS

- 1 20 GPM FLOW CONTROL VALVE
2 ALARM HORN/BLINKING LIGHT PACKAGE IN NEMA 4X ENCLOSURE; DOUBLE POLE DOUBLE THROW FLOW SWITCH WITH AUXILIARY CONTACTS FOR REMOTE SIGNALING

ABBREVIATIONS

Table of abbreviations with 3 columns: Abbreviation, Full Name, Abbreviation, Full Name, Abbreviation, Full Name. Includes ABD (Abandoned), AD (Access Door), AFF (Above Finished Floor), AFG (Above Finished Grade), ARCH (Architectural), AVTR (Acid Vent Through Roof), AV (Acid Vent), AW (Acid Waste), CA (Compressed Air), CFH (Cubic Feet Per Hour), CHWR (Chilled Water Return), CHWS (Chilled Water Supply), CL (Center Line), CO (Cleanout), CW (Cold Water), DCBFP (Double Check Back Flow Preventer), DEG (Degree), DN (Down), DWH (Domestic Water Heater), EFF (Efficiency), ELEV (Elevation), EWH (Electric Water Heater), EXIST (Existing), FFE (Finished Floor Elevation), FT (Foot, Feet), GAL (Gallons), GC (General Contract), GPH (Gallons Per Hour), GPM (Gallons Per Minute), HP (Horsepower), HW (Hot Water), IE (Invert Elevation), IN. WC (Inches Water Column), LPG (Liquefied Petroleum Gas (Propane)), MAX (Maximum), MBH (Thousand British Thermal Units), MFR (Manufacturer), MIN (Minimum), NC (Normally Closed), NG (Natural Gas), NTS (Not to Scale), OD (Overflow Drain), ORD (Overflow Roof Drain), P (Plumbing Fixture), PDI (Plumbing & Drainage Institute), PEX (Cross-linked Polyethylene), PLBG (Plumbing), PRV (Pressure Reducing Valve), PSIG (Pounds Per Square Inch (Gauge)), PWD (Philadelphia Water Department), RD (Roof Drain), RPBFP (Reduced Pressure Principle Backflow Preventer), SAN (Sanitary), SCADA (Supervisory Control and Data Acquisition), SP (Sump Pump), SPD (Sump Pump Discharge), SST (Stainless Steel), ST (Storm), TP (Trap Primer), TWR (Tempered Water Return), V (Vent), VTR (Vent Through Roof), W (Waste), WCO (Wall Cleanout), WHA (Water Hammer Arrestor).

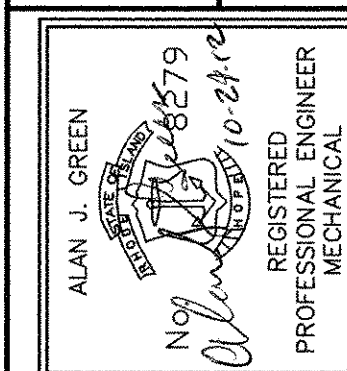
GENERAL NOTES:

- 1. THE DRAWINGS ARE DIAGRAMMATIC ONLY TO SHOW THE SCOPE OF THE WORK INVOLVED. ANY WORK INSTALLED CONTRARY TO OR WITHOUT APPROVAL SHALL BE SUBJECT TO CHANGE. DO NOT SCALE DRAWINGS FOR FABRICATION PURPOSES.
2. PERFORM ALL WORK IN STRICT ACCORDANCE WITH LAWS, REGULATIONS, AND STANDARDS OF LOCAL, STATE AND FEDERAL GOVERNMENTS.
3. GIVE ALL NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES HAVING JURISDICTION AS REQUIRED TO PERFORM WORK.
4. COOPERATE AND COORDINATE WITH OTHER TRADES IN EXECUTING THE WORK. PERFORM WORK SO THAT PROGRESS OF ENTIRE PROJECT SHALL NOT BE DELAYED. PROVIDE INFORMATION TO OTHER TRADES AS REQUESTED. OBTAIN FINAL ROUGHING DIMENSIONS AS REQUIRED TO COMPLETE WORK.
5. PERFORM WORK REQUIRED SO AS TO PROVIDE PROPER ACCESS TO MATERIAL AND EQUIPMENT REQUIRING INSPECTION, MAINTENANCE OR SERVICE.
6. PIPING AND EQUIPMENT LAYOUT SHOWN IS DIAGRAMMATIC, LOCATION SHALL BE DETERMINED IN FIELD.
7. SUBMIT SHOP DRAWINGS AND PRODUCT INFORMATION. NO WORK SHALL PROCEED WITHOUT WRITTEN APPROVAL ON EACH ITEM SCHEDULED, SPECIFIED OR SHOWN ON PLAN.
8. ALL EQUIPMENT SHALL BE AS SHOWN ON EQUIPMENT SCHEDULES.

PLUMBING NOTES:

- 1. PIPING AND ACCESSORIES
A. PIPING SHALL FOLLOW THE GENERAL ROUTING INDICATED ON DRAWINGS. COORDINATE LOCATION WITH ALL OTHER PIPING, DUCTWORK, AND EQUIPMENT.
B. PROVIDE UNIONS IN CONNECTIONS TO EQUIPMENT FOR REPAIRS AND/OR REPLACEMENT. LOCATE BETWEEN SHUTOFF VALVES AND EQUIPMENT.
C. ALL SHUT-OFF VALVES AND WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS.
D. PROVIDE PROPER DRAINAGE FOR ALL PIPING SYSTEMS. PITCH DOWN ALL HORIZONTAL SANITARY DRAIN PIPING MIN. 1/4 INCH PER FOOT. PITCH DOWN ALL HORIZONTAL STORM DRAIN PIPING MIN 1/8 INCH PER FOOT.
E. PROVIDE SEISMIC RESTRAINTS FOR PIPING AND EQUIPMENT WHERE REQUIRED BY THE BUILDING CODE.
F. MAINTAIN MAXIMUM HEADROOM. SEE FLOOR PLANS FOR PIPE ROUTING REQUIREMENTS AND ELEVATIONS.
G. PROVIDE FIRE STOP MATERIAL WHERE PIPING PENETRATES FIRE RATED WALLS.
H. VERIFY PLUMBING FIXTURE ROUGH-INS PRIOR TO START OF WORK.
I. PROVIDE ALL COLD WATER LINES AND HOT WATER LINES TO PLUMBING FIXTURES, EQUIPMENT AND ELECTRIC TRAP PRIMERS WITH ISOLATION VALVES.
J. INSTALL WATER HAMMER ARRESTORS (WHA) PER PDI REQUIREMENTS WHERE INDICATED ON DRAWINGS.
K. NO PORTION OF THE SANITARY DRAIN-WASTE-VENT SYSTEM INSTALLED UNDERGROUND SHALL BE LESS THAN TWO INCHES IN DIAMETER.
L. SANITARY PLUMBING VENTS THROUGH ROOF SHALL BE TERMINATED MINIMUM 12 INCHES ABOVE ROOF.
M. WITH EXCEPTION OF TRAP PRIMER PIPING, RUN ALL BURIED PIPING BENEATH, NOT IN, CONCRETE FLOOR SLABS. BURIED TRAP PRIMER PIPING SHALL BE RUN THROUGH MIDDLE 1/3 OF CONCRETE FLOOR SLAB AND SLEEVED IN POLYETHYLENE TUBING.
N. NO PLUMBING PIPING SHALL BE PERMITTED IN ELECTRICAL ROOMS; NO NATURAL GAS PIPING SHALL BE PERMITTED IN ELECTRICAL ROOMS.
2. INSULATION
A. INSULATE ALL NEW COLD WATER (W1)(W2) PIPING, HOT WATER (HW1) PIPING, CHILLED WATER PIPING, ROOF DRAIN BODIES, AND HORIZONTAL RUNS OF ROOF DRAIN PIPING.
3. ELECTRICAL ENCLOSURES
A. ENCLOSURES SHALL MEAN ELECTRICAL EQUIPMENT ENCLOSURES AND ASSOCIATED CONDUIT.
B. ENCLOSURES SHALL BE NEMA 1 UNLESS OTHERWISE INDICATED.
4. NATURAL GAS PIPING WORK
A. SEE THE MECHANICAL DRAWINGS FOR INDOOR NATURAL GAS PIPING WORK.

AECOM USA, INC. ONE WAVERLEY PLACE WASHINGTON, DC 20004 PHONE (781) 246-5200



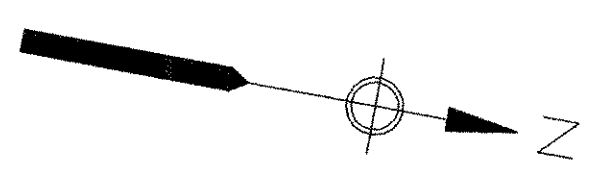
CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS

SCHEDULES, NOTES, LEGEND & ABBREVIATIONS PLUMBING

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

Table with project details: PROJECT NO: 60148648, CAD DWG FILE: 00 P-001, DESIGNED BY: A. GREEN, DRAWN BY: B. SANTOSUSSO, DEPT CHECK: C. GALLIGAN, PROJ CHECK: S. THIBAUT, DATE: OCTOBER 2012, SCALE: NONE, 00 P-001



NOTES:

- 1. AT ROOF DRAIN (RD) OUTLETS, START DRAIN PIPING AS TIGHT TO ROOF AS POSSIBLE AND PITCH DOWN PIPING UNIFORMLY PER PLUMBING NOTES ON SHEET 00 P-001.

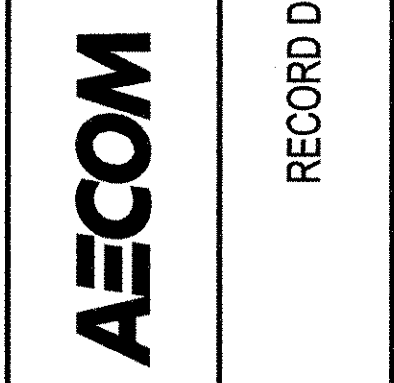
CHEMICAL ROOM FIRE SUPPRESSION SPRINKLER SYSTEM SPECIFICATIONS

- 1. WATER FLOW SWITCH: VIKING MODEL VSR-S, NEMA 4 ENCLOSURE
- 2. RISER CHECK VALVE: VIKING MODEL K-1 WITH TRIM PACKAGE (PIPED PRESSURE GAUGE AND DRAIN VALVE).
- 3. INSPECTOR'S TEST VALVE: POTTER-ROEMER MODEL 6167
- 4. SPRINKLER HEADS: UL LISTED AND FM APPROVED, STANDARD RESPONSE, STANDARD COVERAGE, UPRIGHT STYLE, UNPAINTED WAX COATED, 165 DEGREE F RELEASE, 3/4" ORIFICE, 8.0 K-FACTOR. MOUNT SPRINKLER DEFLECTORS 1" TO 6" BELOW CEILING.
- 5. FIRE WATER PIPE AND FITTINGS: SCHEDULE 40 BLACK STEEL PIPE, ASTM A53, TYPE E, F OR S, GRADE A OR B. THREADED FITTINGS, CAST IRON, CLASS 125, BLACK, ASME B 16.4, OR MALLEABLE IRON, CLASS 150, BLACK, ASME B 16.3. FLANGED FITTINGS, CAST IRON, SHORT BODY, CLASS 175. FLANGE BOLTS SHALL BE HEXAGON HEAD MACHINE BOLTS WITH HEAVY FINISHED HEXAGON HEAD NUTS, AND WASHERS, CADMIUM PLATED. PIPE SHALL BE PRE-OXIDIZED WITH A SUITABLE PROTECTIVE COATING.

MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	BJS	AFG	REVISED FOR RECORD DRAWINGS

RECORD DRAWINGS

ACOM USA, INC. ONE WAKEFIELD MA 01880 PHONE (781) 246-5200

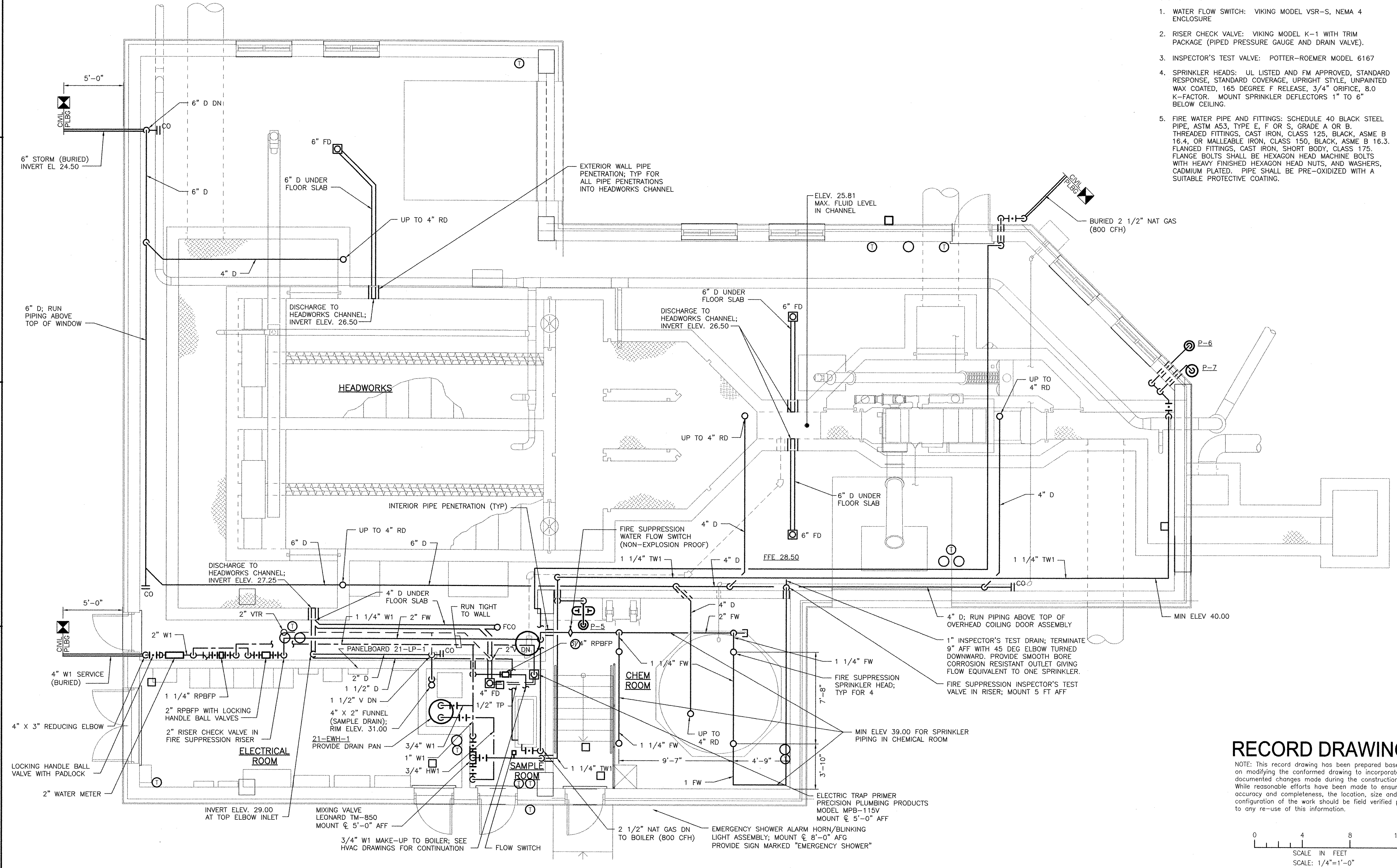


CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
**HEADWORKS BUILDING
GRADE LEVEL PLAN**
PLUMBING

PROJECT NO:	60148648
CAD DWG FILE:	21 P-101
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

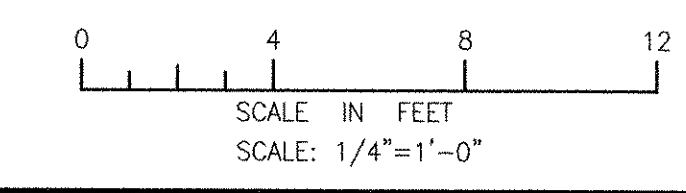
21 P-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\3 SHEETS\21 P-101.DWG
LAST UPDATE: Wednesday, October 24, 2012 12:37:27 PM
PLOT DATE: Friday, October 26, 2012 2:55:48 PM
ANSI D - 24-Oct-12

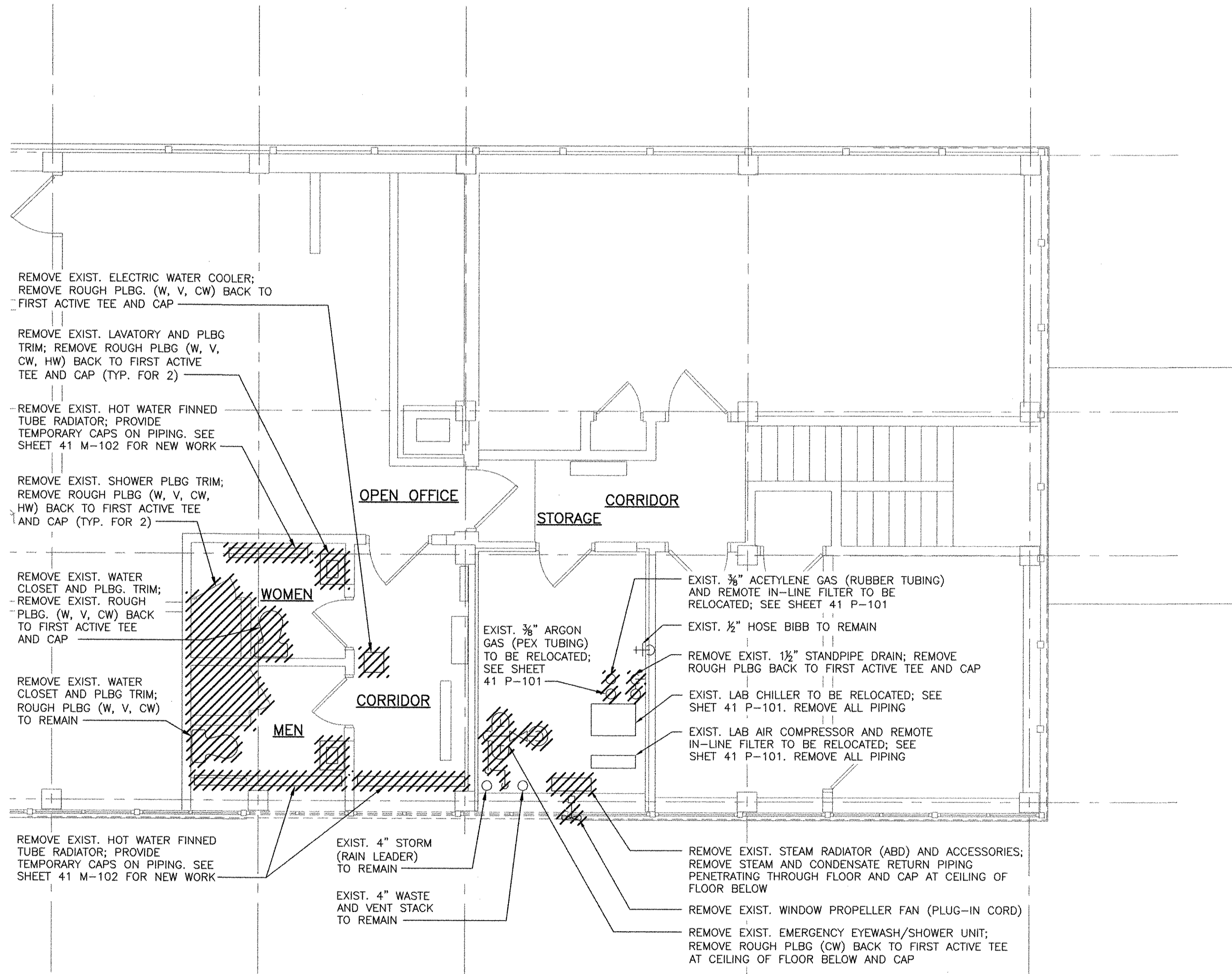
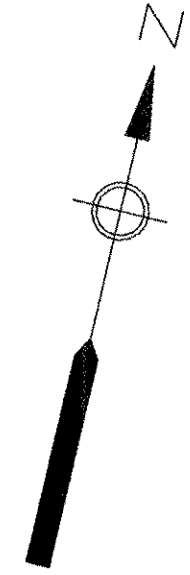


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



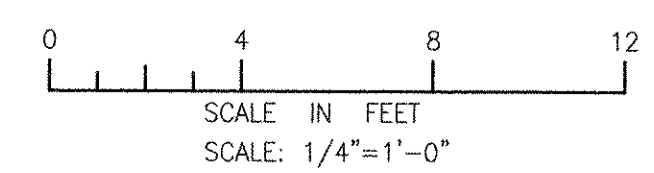
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DRG\DP-A\SHEETS\41 PD-102.DWG
LAST UPDATE: Wednesday, October 24, 2012 12:40:25 PM
ANSI D - 24-Oct-12



SECOND FLOOR - PART PLAN
1/4"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



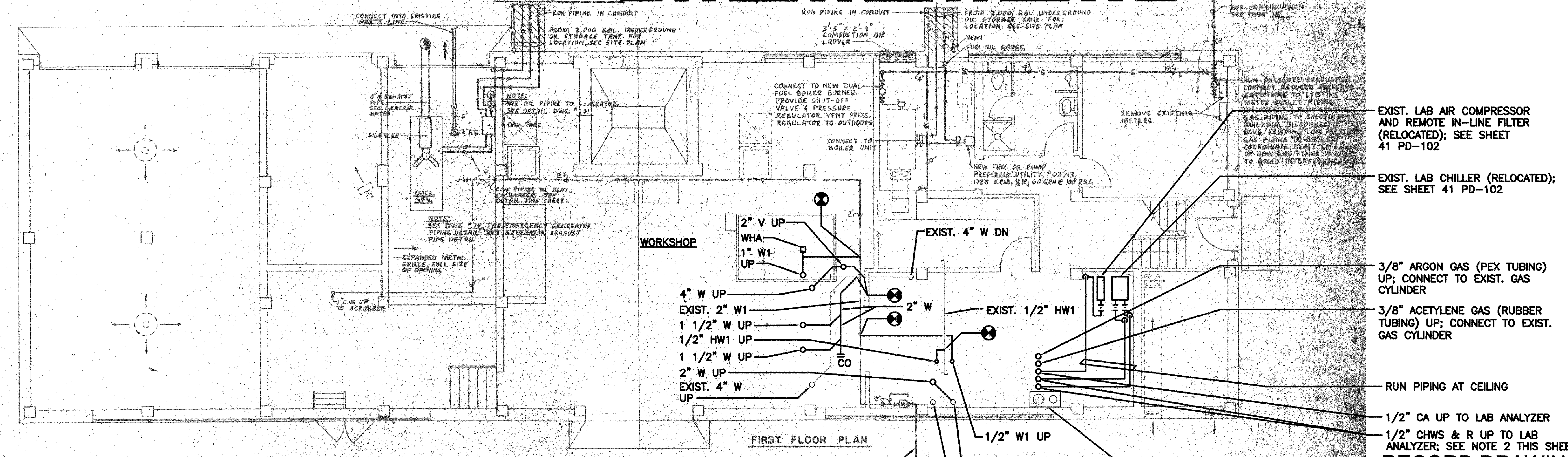
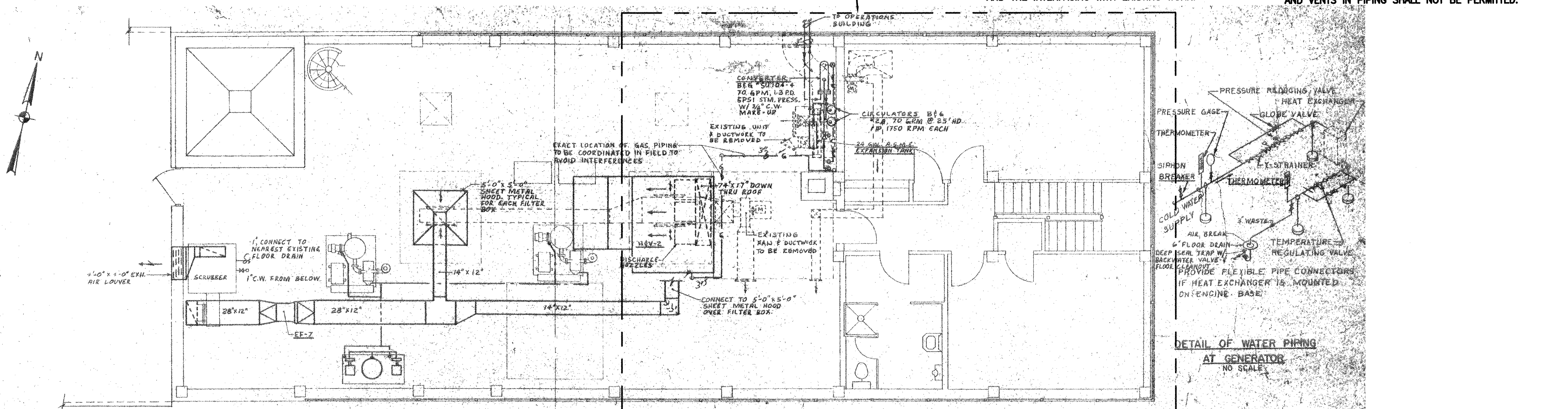
REVISIONS	
MARK	DATE
1	10/19/12
AFG	MADE BY
BJS	CHECKED
REVISIONS	DESCRIPTION
RECORD DRAWINGS	
AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200	
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4 ADMINISTRATION BUILDING PART PLAN - DEMOLITION PLUMBING	
PROJECT NO:	60148648
CAD DWG FILE:	41 PD-102
DESIGNED BY:	----
DRAWN BY:	----
DEPT CHECK:	----
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED
41 PD-102	

NOTES:

1. BUILDING ROOM LAYOUT AND SYSTEMS SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.

2. CHWS & R PIPING SHALL BE PITCHED DOWN TOWARDS LAB CHILLER MIN. 1/4" PER FOOT WITHOUT INTERMEDIATE HIGH POINTS BETWEEN LAB ANALYZER (SEE SHEET 41 P-102) AND CHILLER. AIR POCKETS AND VENTS IN PIPING SHALL NOT BE PERMITTED.

SEE PART PLANS ON SHEETS 41 PD-102 AND 41 P-102



REVISIONS	DATE	MARK	DESCRIPTION
1	10/19/12	BIS	MADE BY CHECKED
		AFG	REVISED FOR RECORD DRAWINGS

RECORD DRAWINGS

AECOM

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL

NO. 10-2112

10-2112

10-2112

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

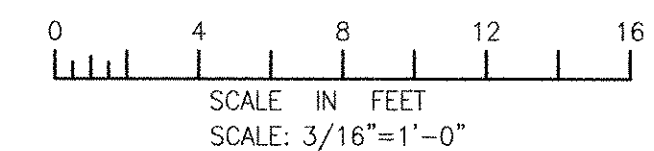
ADMINISTRATION BUILDING
FIRST & SECOND FLOOR PLANS

PLUMBING

PROJECT NO: 60148648
CAD DWG FILE: 41 P-101
DESIGNED BY: A. GREEN
DRAWN BY: B. SANTOSUOSSO
DEPT CHECK: C. GALLIGAN
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: 3/16"=1'-0"

41 P-101

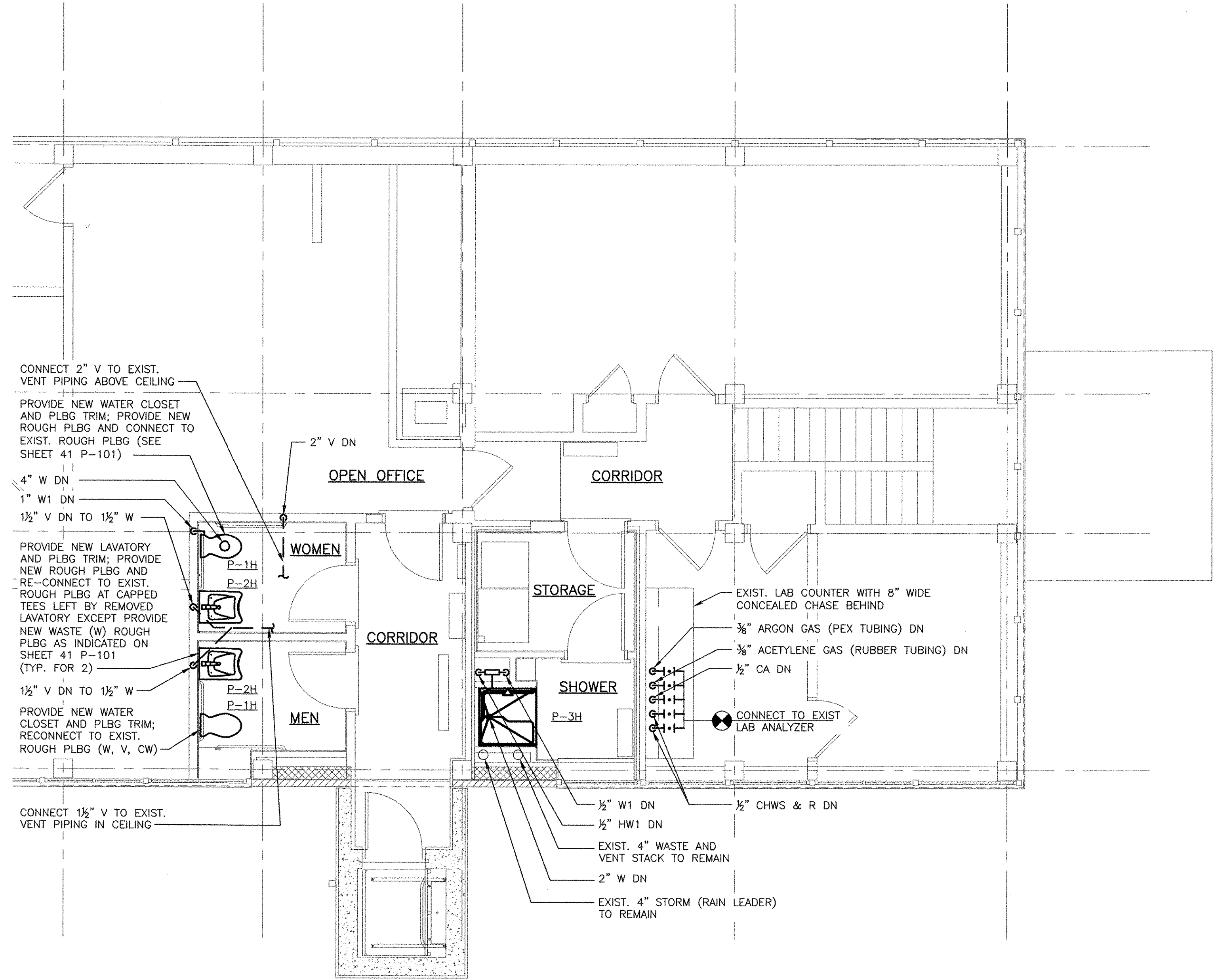
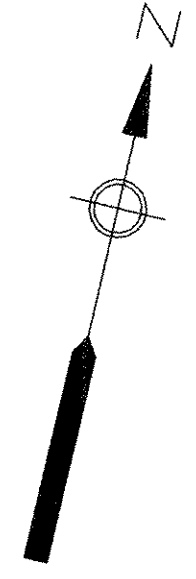
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\41 P-101.DWG
LAST UPDATE: Wednesday, October 24, 2012 12:41:49 PM
ANSI D - 24-Oct-12

P:\16148648 - EAST PROVIDENCE DRUGS\UP-A\SHEETS\41 P-102.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:41:07 PM
 PLOT DATE: Friday, October 26, 2012 2:56:07 PM

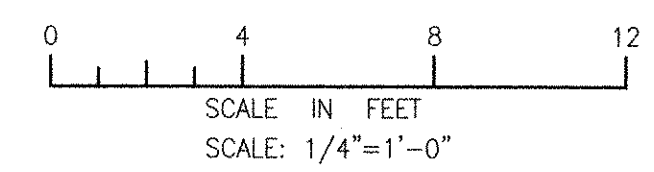
ANSI D - 24-Oct-12



SECOND FLOOR - PART PLAN
 1/4"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	BJS	AFG	REVISED FOR RECORD DRAWINGS

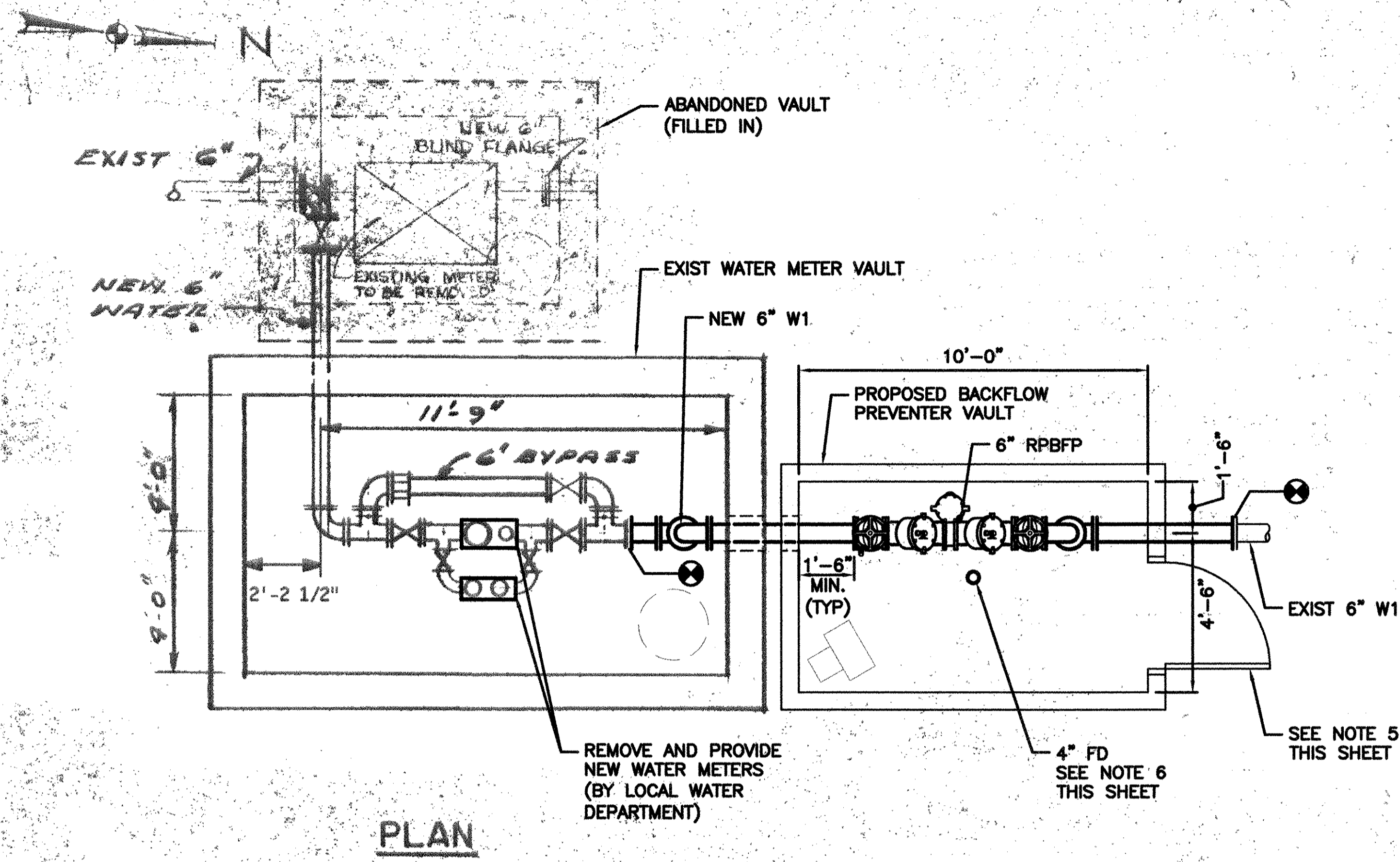
AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WEST WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

ALAN J. GREEN
 No. 8279
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
ADMINISTRATION BUILDING
PART PLAN
 PLUMBING

PROJECT NO:	60148648
CAD DWG FILE:	41 P-102
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	1/4"=1'-0"

41 P-102



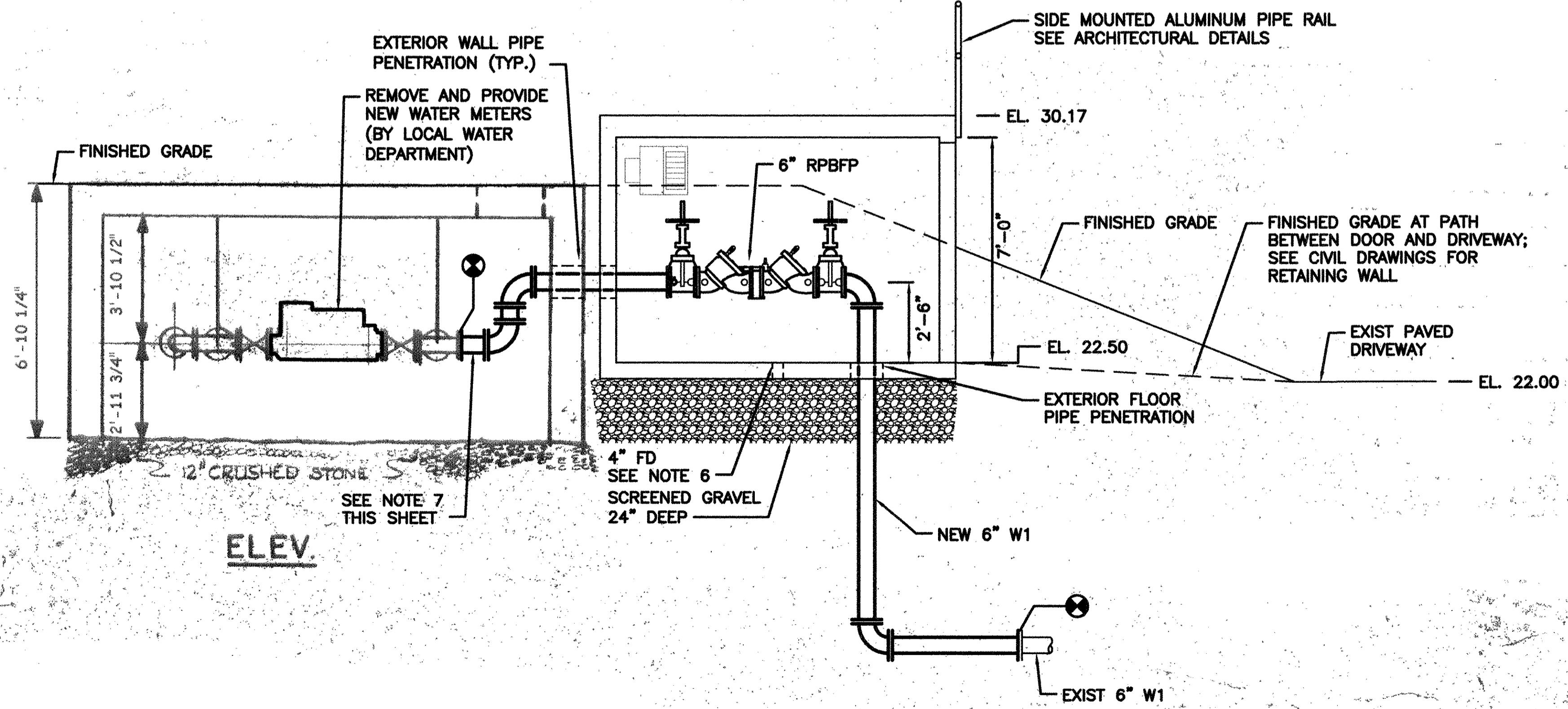
NOTES:

- EXISTING WATER METER VAULT LAYOUT AND PIPING SHOWN ON THE DRAWING BACKGROUND ARE NOT INDICATIVE OF PRESENT EXISTING CONDITIONS. THIS DRAWING IS INTENDED TO CONVEY ONLY THE NEW WORK REQUIRED AND THE INTERFACING WITH EXISTING WORK.
- SEE SECTION 03420 FOR PRECAST VAULT.
- SEE SECTION 05500 FOR SIDE MOUNTED ALUMINUM PIPE RAIL.
- SEE SECTION 02223 FOR SCREENED GRAVEL.
- FOR DOOR TYPE SEE DOOR 4401A IN ARCHITECTURAL DOOR SCHEDULE.
- FLOOR DRAIN TO BE FITTED INTO PRECAST FLOOR. PROVIDE JOSAM 30304-Z CAST IRON FLOOR DRAIN BODY WITH TYPE 5A STAINLESS STEEL ADJUSTABLE STRAINER. INSTALL PER MANUFACTURER INSTRUCTIONS.
- PROVIDE MIN 2X PIPE DIAMETER STRAIGHT PIPE LENGTH DOWNSTREAM OF WATER METERS.

MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	BJS	AFG	REVISED FOR RECORD DRAWINGS

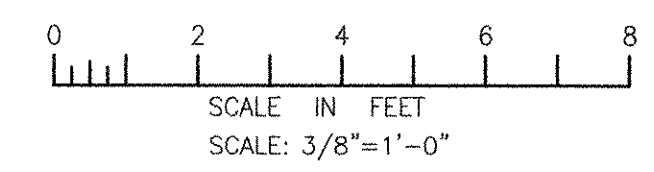
AECOM
 RIDEM ORDER OF APPROVAL SUBMITTAL
 NOT FOR CONSTRUCTION

ALAN J. GREEN
 REGISTERED PROFESSIONAL ENGINEER
 MECHANICAL
 No. 00279
 10-21-14



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



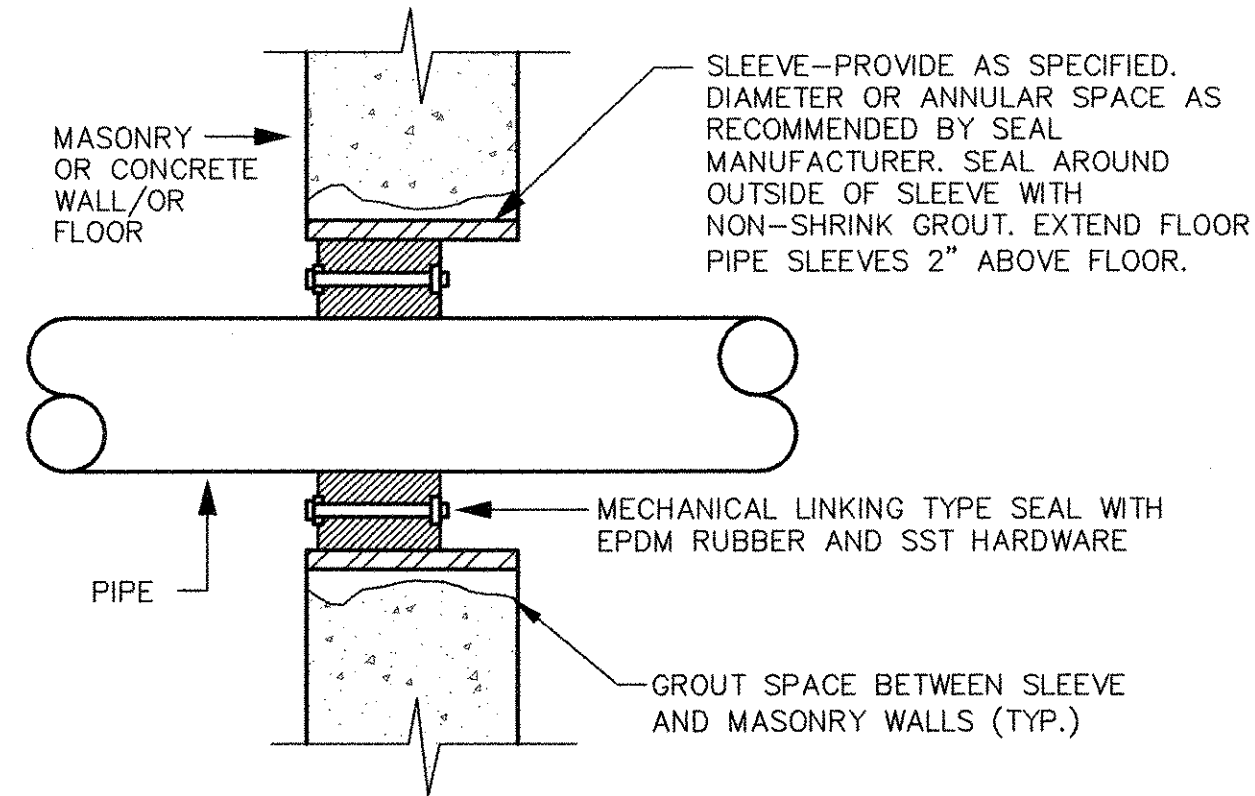
PATH/FILENAME: P:\6048848 - EAST PROVIDENCE DBO\DP-4\SHEETS\44 P-101.DWG
 LAST UPDATE: Wednesday, October 24, 2012 12:39:27 PM
 PLOT DATE: Friday, October 26, 2012 2:56:12 PM
 ANSI D - 24-Oct-12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

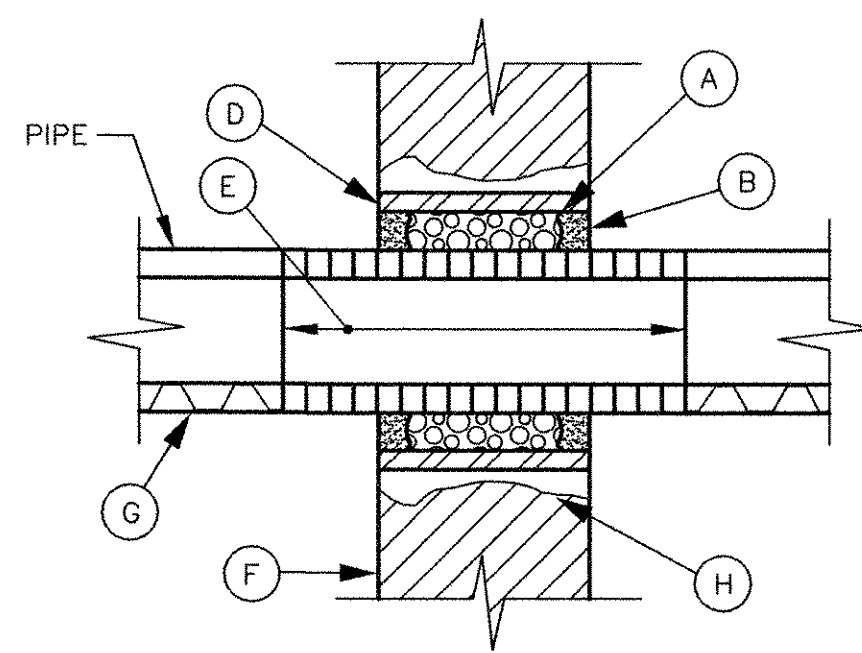
MASTER BACKFLOW PREVENTER VAULT
 PLUMBING

PROJECT NO:	60148648
CAD DWG FILE:	44 P-101
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	3/8"=1'-0"

44 P-101

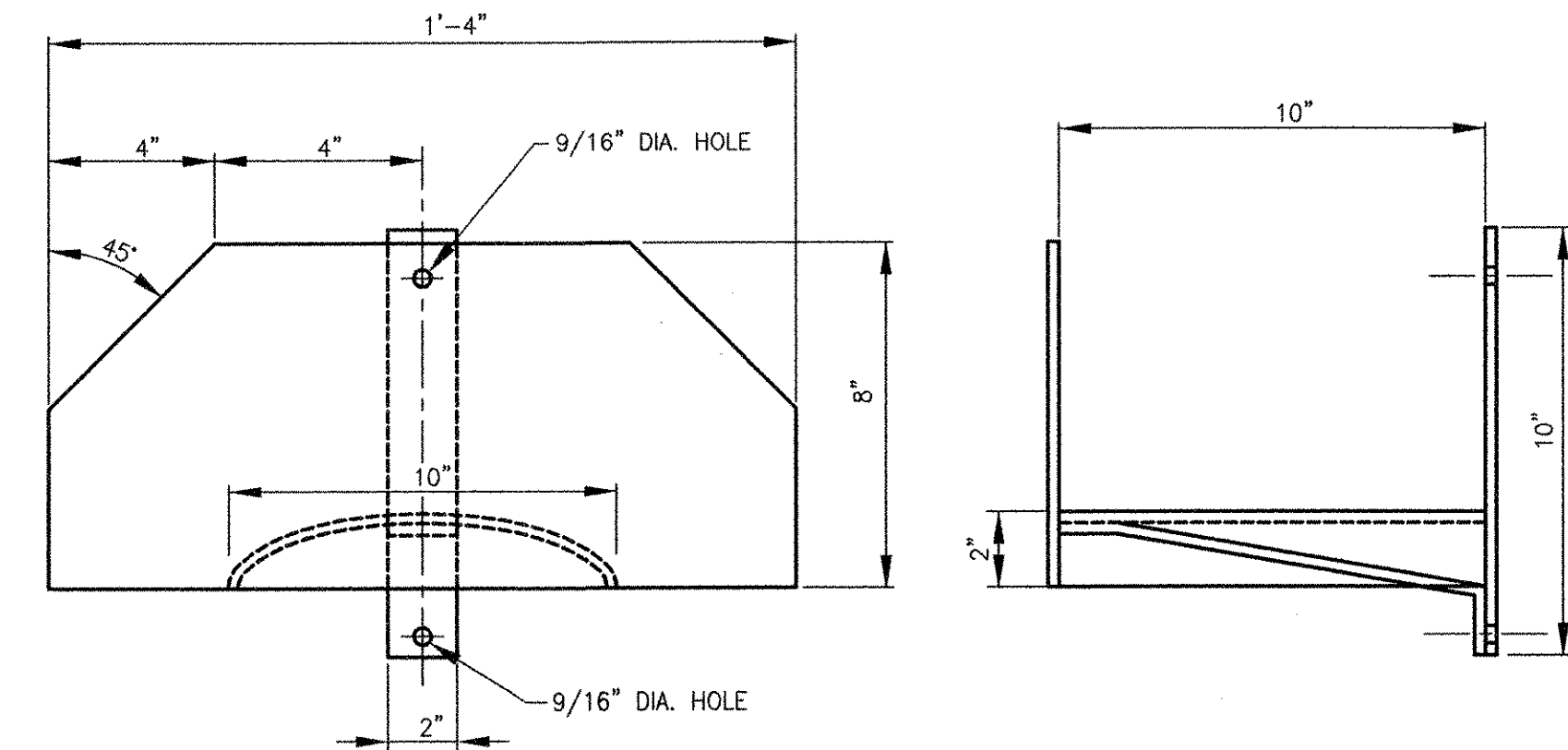


EXTERIOR WALL/FLOOR PIPE PENETRATION DETAIL
NTS

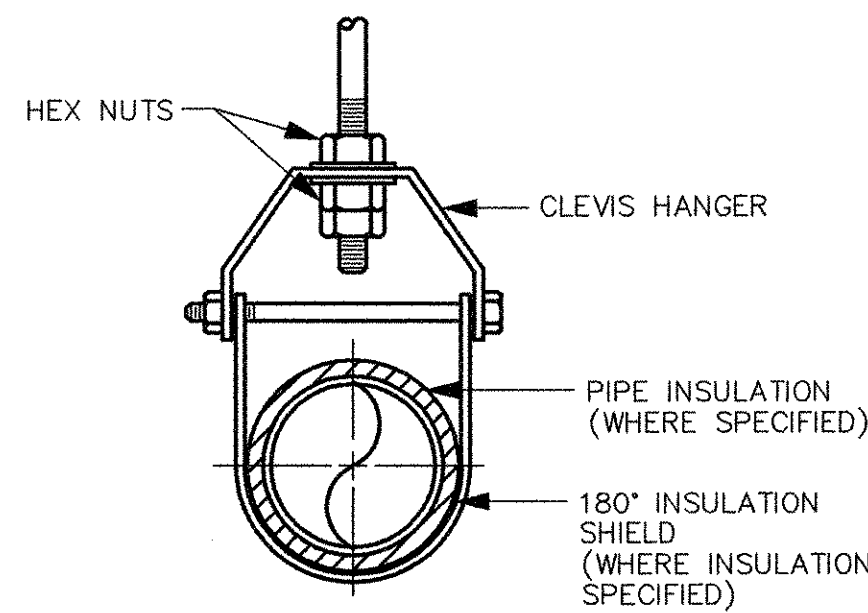


INTERIOR WALL/FLOOR PIPE PENETRATION DETAIL
(NOT FOR WATER TIGHT CONSTRUCTION)
NTS

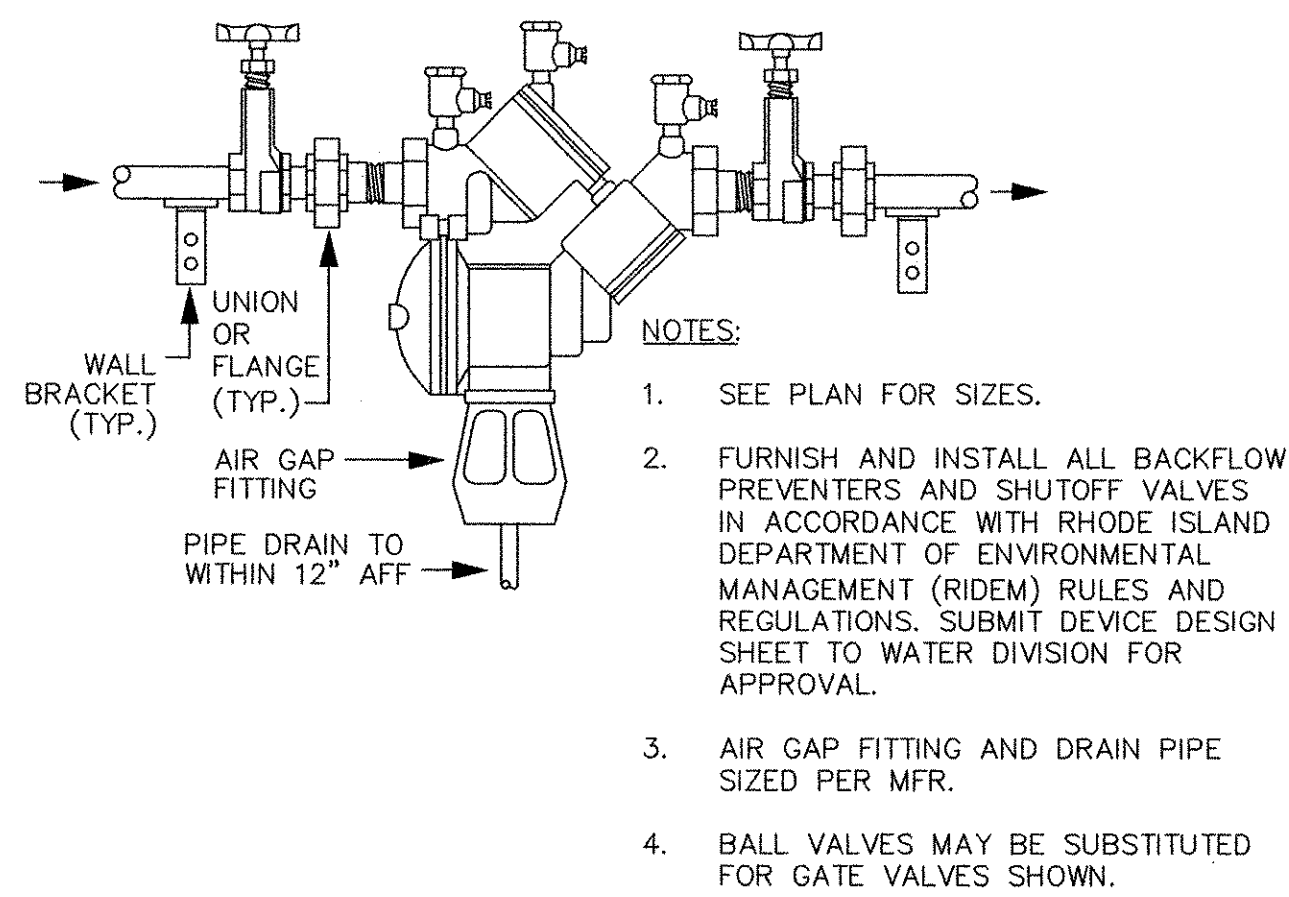
- (A) PROVIDE MIN. 1/4" CLEARANCE BETWEEN PIPE SLEEVE OR CORE DRILLED HOLE AND PIPE. PACK CLEARANCE SPACE WITH MINERAL WOOL
- (B) PROVIDE SPECIFIED END SEALANT
- (C) NOT USED
- (D) SLEEVE—PROVIDE AS SPECIFIED.
- (E) CALCIUM SILICATE OR APPROVED EQUAL INSULATION THRU PENETRATION AND EXTENDED 2" ON BOTH SIDES OF WALL; PROVIDE METAL JACKET AS SPECIFIED OVER INSULATION (DELETE FOR UNINSULATED PIPE)
- (F) WALL OR FLOOR
- (G) SPECIFIED INSULATION (DELETE FOR UNINSULATED PIPE)
- (H) GROUT SPACE BETWEEN SLEEVE AND MASONRY WALLS



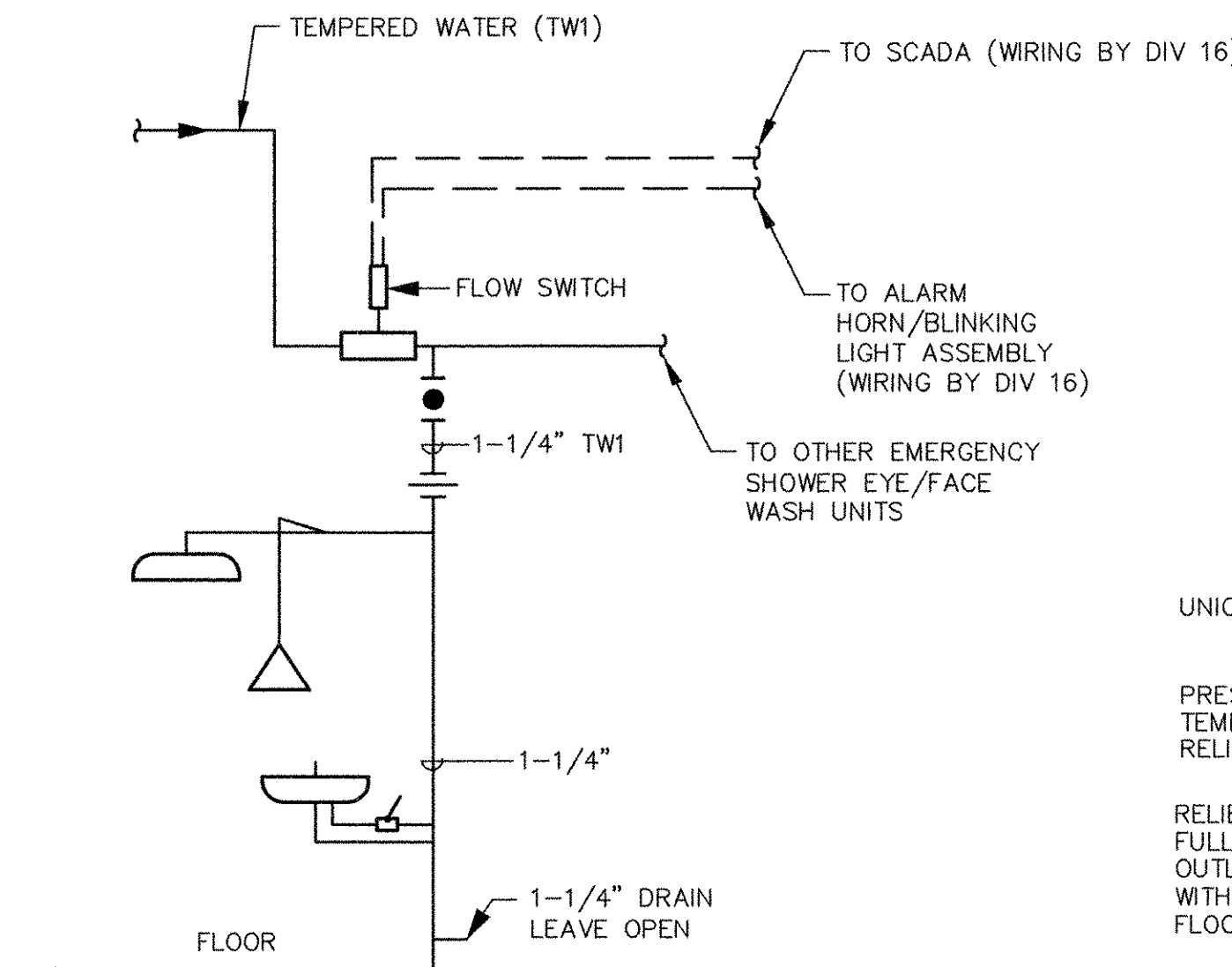
HOSE RACK DETAIL
NTS



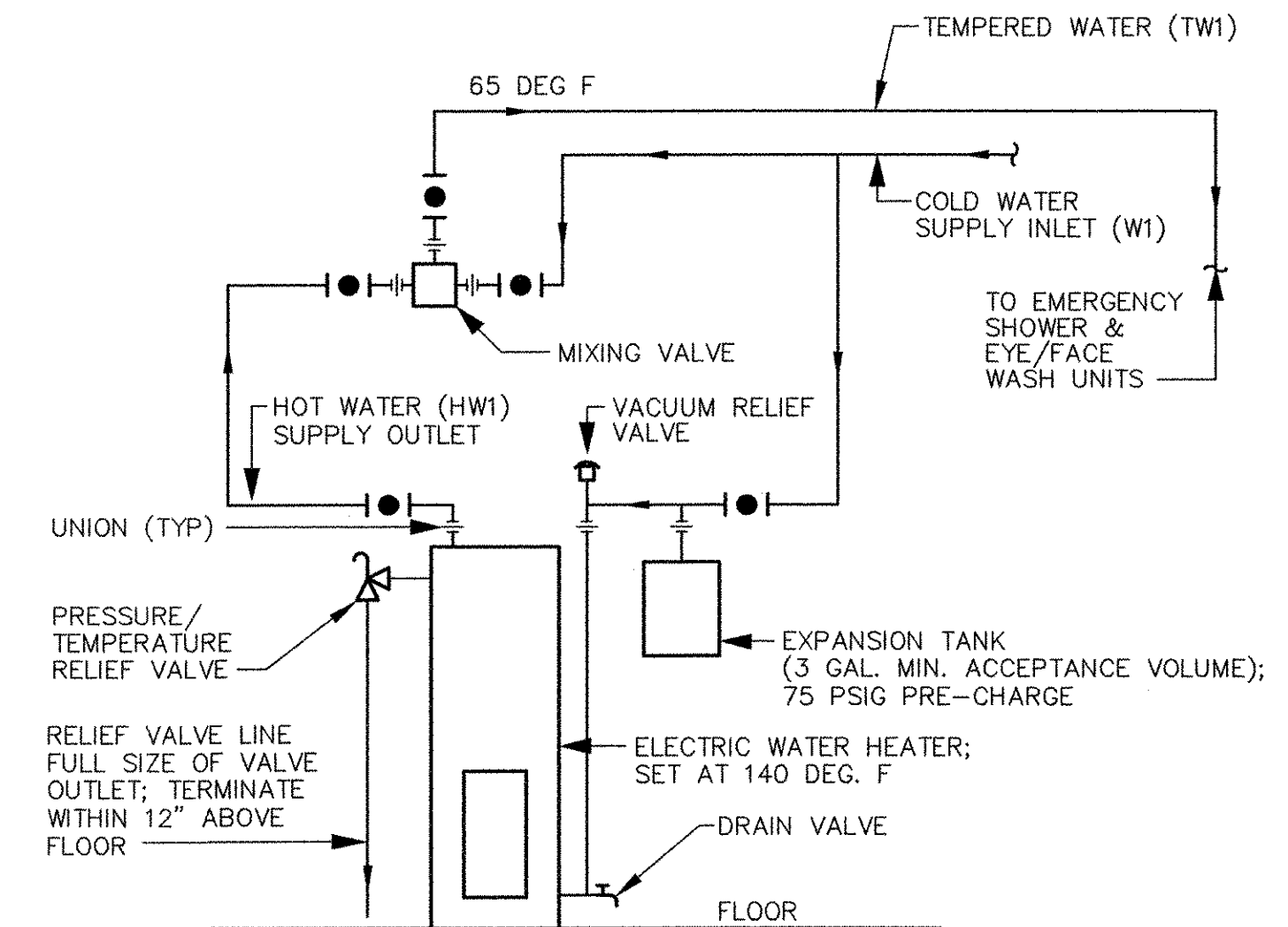
TYPICAL PIPE SUPPORT DETAIL
NTS



REDUCED PRESSURE BACKFLOW PREVENTER DETAIL
NTS



EMERGENCY EYE/FACE WASH & SHOWER PIPING DETAIL
NTS



WATER PIPING SCHEMATIC
ELECTRIC WATER HEATER DETAIL
NTS

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	99 P-001
DESIGNED BY:	A. GREEN
DRAWN BY:	B. SANTOSUOSSO
DEPT CHECK:	C. GALLIGAN
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 P-001

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

DETAILS
PLUMBING

AECOM USA, INC.
100 STATE STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

ALAN J. GREEN
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
No. 10279
10/19/12

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	BJS	AFG	REVISED FOR RECORD DRAWINGS

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DEW\COMMON SHEETS\00 DI-001.DWG
 LAST UPDATE: Thursday, October 25, 2012 8:14:02 AM
 PLOT DATE: Thursday, October 25, 2012 8:15:05 AM

ANSI D - 25-Oct-12

INSTRUMENT TYPE IDENTIFICATION LETTERS

THIS TABLE APPLIES ONLY TO THE FUNCTIONAL IDENTIFICATION OF INSTRUMENTS

FIRST LETTER	SUCCEEDING LETTERS			
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION
A	ANALYSIS	ANALOG	ALARM	USER'S CHOICE
B	BURNER FLAME		USER'S CHOICE	USER'S CHOICE
C	CONDUCTIVITY (ELECTRICAL)			CONTROL
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL OR DIGITAL		
E	VOLTAGE (EMF)		PRIMARY ELEMENT	
F	FLOW RATE	RATIO (FRACTION)		
G	GAGING (DIMENSIONAL)		GLASS	
H	HAND (MANUALLY INITIATED)			HIGH
I	CURRENT (ELECTRICAL)		INDICATE OR INPUT	
J	POWER	SCAN		CONTROL STATION
K	TIME OR TIME SCHEDULE			
L	LEVEL		LIGHT (PILOT)	LOW
M	MOISTURE OR HUMIDITY			MIDDLE OR INTERMEDIATE
N	USER'S CHOICE		USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE (RESTRICTION)	
P	PRESSURE OR VACUUM		POINT (TEST CONNECTION)	
Q	QUANTITY OR EVENT	INTEGRATE OR TOTALIZE		
R	RADIOACTIVITY	RELIEF	RECORD OR PRINT	
S	SPEED OR FREQUENCY	SAFETY		SWITCH
T	TEMPERATURE			TRANSMIT
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION			VALVE, DAMPER OR LOUVER
W	WEIGHT OR FORCE		WELL	
X	UNCLASSIFIED		UNCLASSIFIED	UNCLASSIFIED
Y	USER'S CHOICE			RELAY OR COMPUTE
Z	POSITION			DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT

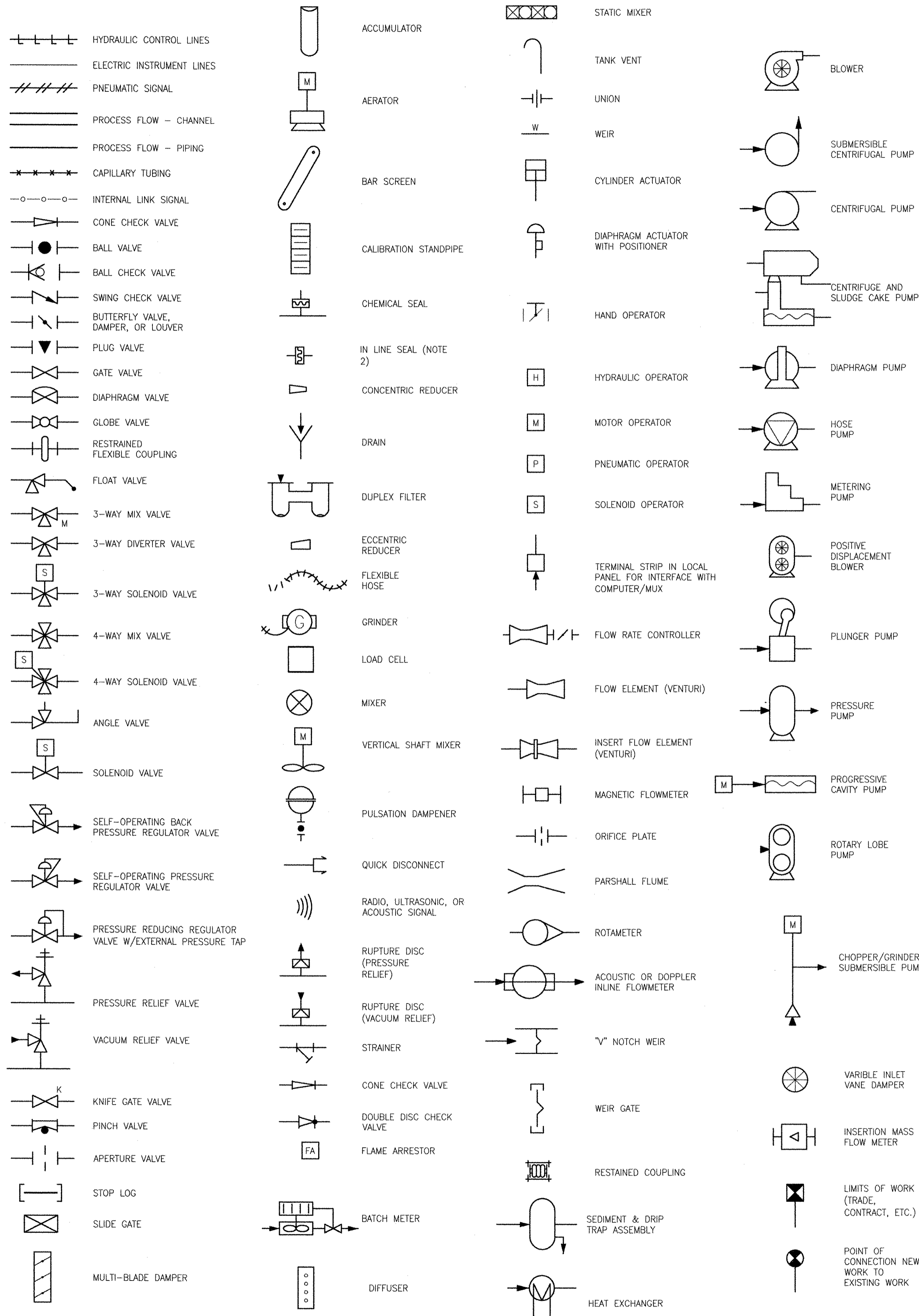
MISCELLANEOUS ABBREVIATIONS

I/P CURRENT TO PNEUMATIC CONVERTER	GBT GRAVITY BELT THICKENER
E/I VOLTAGE TO CURRENT CONVERTER	DO DISSOLVED OXYGEN
Σ ADD OR TOTALIZE	H2S HYDROGEN SULFIDE
√ SQUARE ROOT	O2 OXYGEN
X MULTIPLY	pH HYDROGEN ION CONCENTRATION
○ DIVIDE	LP LOCAL PANEL
> HIGH SELECT	VFD VARIABLE FREQUENCY DRIVE
MV MEASURED VARIABLE	△ DIFFERENCE
< LOW SELECT	I/O INPUT/OUTPUT
S.P. SET POINT	ER ELECTRICAL ROOM
PLC PROGRAMMABLE LOGIC CONTROLLER	LEL LOWER EXPLOSIVE LIMIT
f(x) CHARACTERISTIC	DW DEWATERING
P PROPORTIONAL CONTROL MODE	OC ODOR CONTROL
D DERIVATIVE	WW WASTE WATER
I INTEGRAL CONTROL MODE	

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

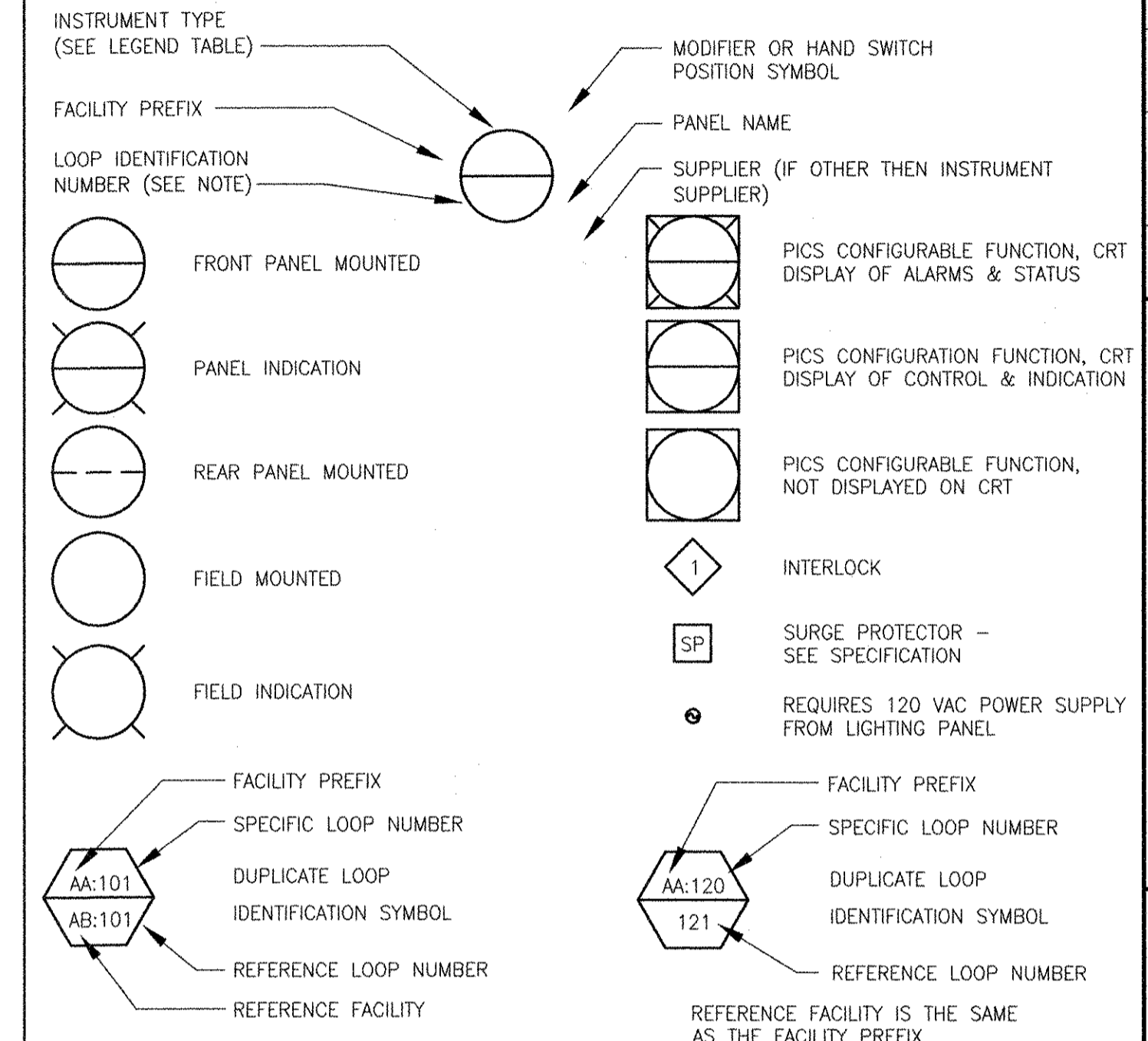
SYMBOLS



GENERAL NOTES

- WHEN "U" IS USED AS SUCCEEDING LETTER, IT MEANS THAT THE ANALOG INPUT SIGNAL NEEDS TO BE DISPLAYED, RECORDED, TOTALIZED (FOR FLOW) AND BE SET WITH HIGH, HIGH-HIGH, LOW, LOW-LOW LIMITS.
- INSTRUMENT SUFFIX:
 NUMERIC SUFFIXES IDENTIFY INSTRUMENTS WITH DIFFERENT FUNCTIONS (E.G., A L/R AND A O/S/C SWITCH) ARE PRECEDED BY - (E.G., HS-102-1, AND HS-102-2)
 ALPHABETIC SUFFIXES IDENTIFY MULTIPLE OCCURRENCES OF INSTRUMENTS WITH THE SAME FUNCTION (E.G., TWO L/R SWITCHES FOR DIFFERENT MOTORS IN SAME PANEL (E.G. HS-103-1A, HS-103-2A))

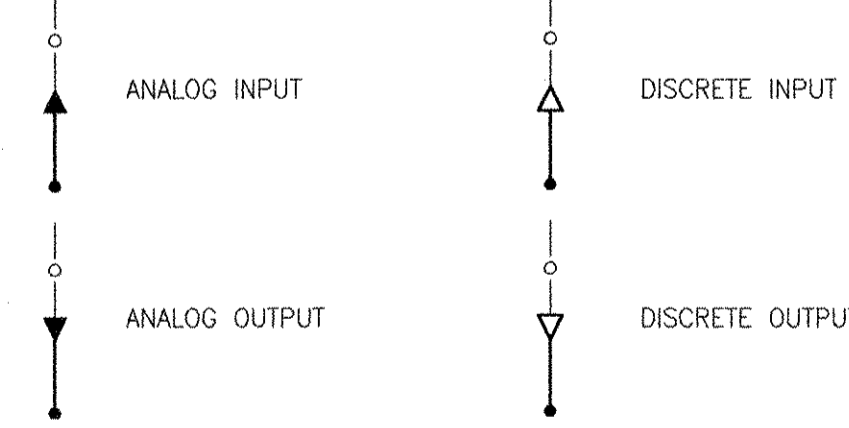
INSTRUMENT SYMBOLS



SUPPLIERS

ALL INSTRUMENTS ARE SPECIFIED BY INSTRUMENTS UNLESS INDICATED BY:
 (E) SPECIFIED BY ELECTRICAL (X) EXISTING
 (M) SPECIFIED BY MECHANICAL (H) SPECIFIED BY HVAC
 (F) FURNISHED WITH EQUIPMENT (P) SPECIFIED BY PLUMBING
 CONTRACTOR SHALL PROVIDE ALL INSTRUMENTS AS SPECIFIED ON DATA SHEETS ATTACHED TO SPECIFICATION SECTION 13300

PLC OR DCS INPUT/OUTPUT SYMBOLS



HAND SWITCH POSITION SYMBOLS

(UNLABELLED SWITCHES ARE TO BE ON-OFF)

A AUTOMATIC	F/R FORWARD/REVERSE
C CLOSE	L/R LOCAL/REMOTE
F FAST OR FORWARD	HOR HAND-OFF-REMOTE
H HAND	HOA HAND-OFF-AUTO
J JOG	P/M/A PUMPING-MIXING-AUTO
L LOCAL	OSC OPEN/STOP/CLOSE
M MANUAL	FSR FORWARD/STOP/REVERSE
O OPEN OR OFF	TSM THRU/STOP/MIX
R RUN OR REMOTE	OSF OFF/SLOW/FAST
S/S/C START/STOP/CLEAR	OTC OPEN/TRAVEL/CLOSE
E/S EMERGENCY STOP	ROA RUN/OFF/AUTO
SBY STANDBY	

RECORD DRAWINGS

AECOM
 10/19/12
 DATE
 1
 MARK

YASSER A. RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 9430
 9430

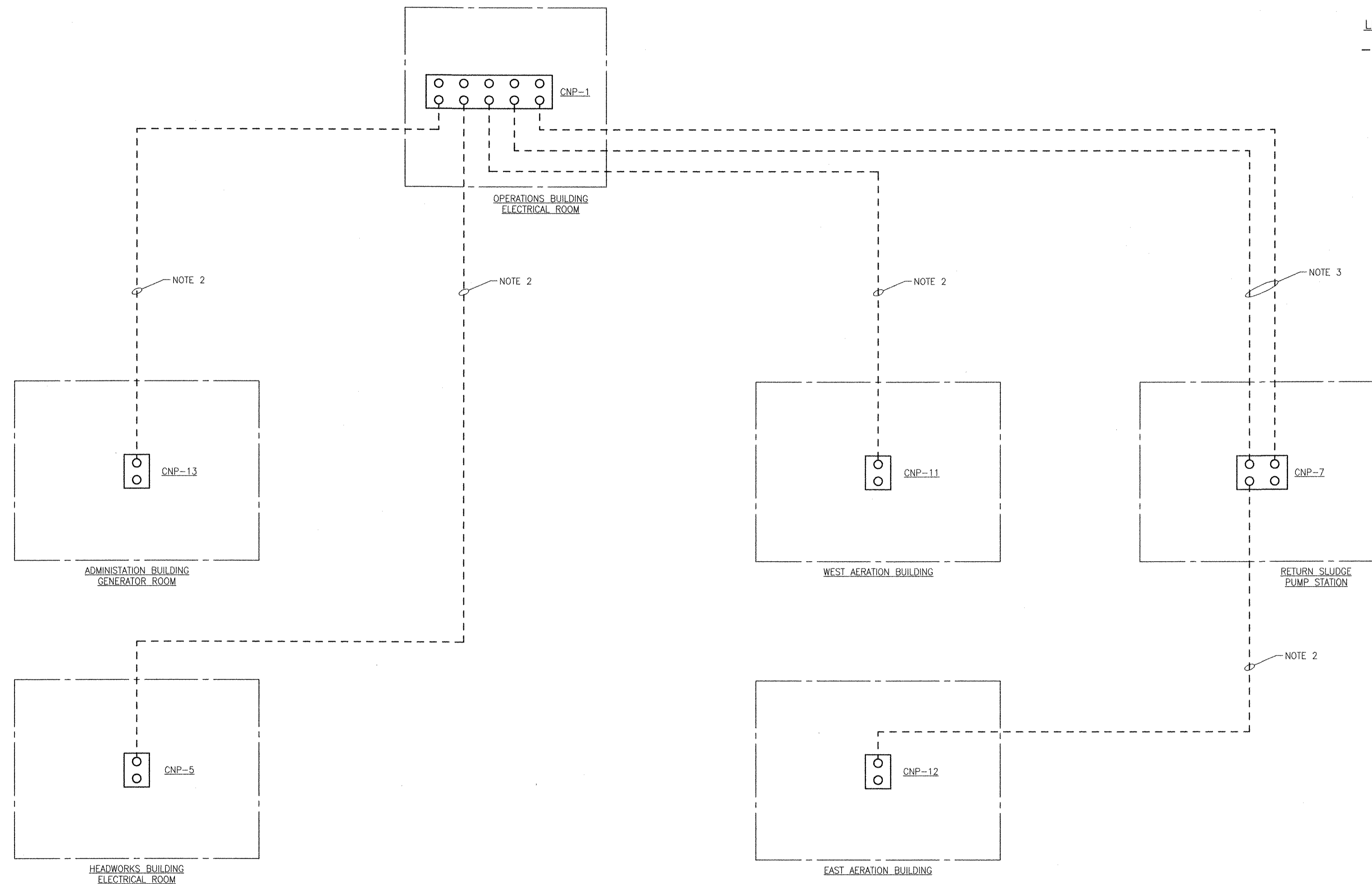
CITY OF EAST PROVIDENCE, RHODE ISLAND
**WASTEWATER SYSTEM IMPROVEMENTS
 INSTRUMENTATION LEGEND AND GENERAL
 NOTES**
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	00 DI-001
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

00 DI-001

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEP\COMMON SHEETS\0100_DI-601.DWG
 LAST UPDATE: Monday, October 08, 2012 2:58:07 PM
 PLOT DATE: Thursday, October 25, 2012 8:15:05 AM

ANSI D - 8-Oct-12



- NOTES:
1. DETAILED REQUIREMENTS FOR FIBER OPTIC CABLE NETWORK, REFER TO SECTION 13304.
 2. ONE FIBER OPTIC CABLE WITH 12 FIBERS.
 3. ONE FIBER OPTIC CABLE WITH 24 FIBERS.

LEGEND
 - - - - - FIBER MEDIA

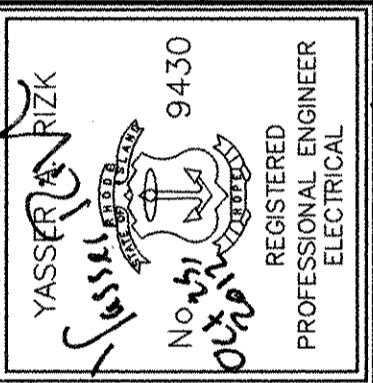
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	00 DI-601
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 DI-601

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
**FIBER OPTIC CABLE ROUTING FOR PLANT
 SCADA SYSTEM**
 INSTRUMENTATION

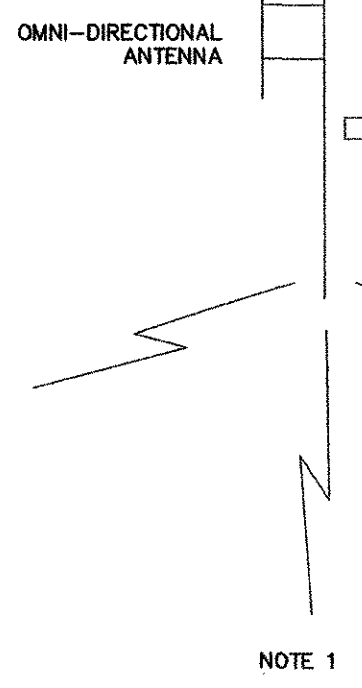
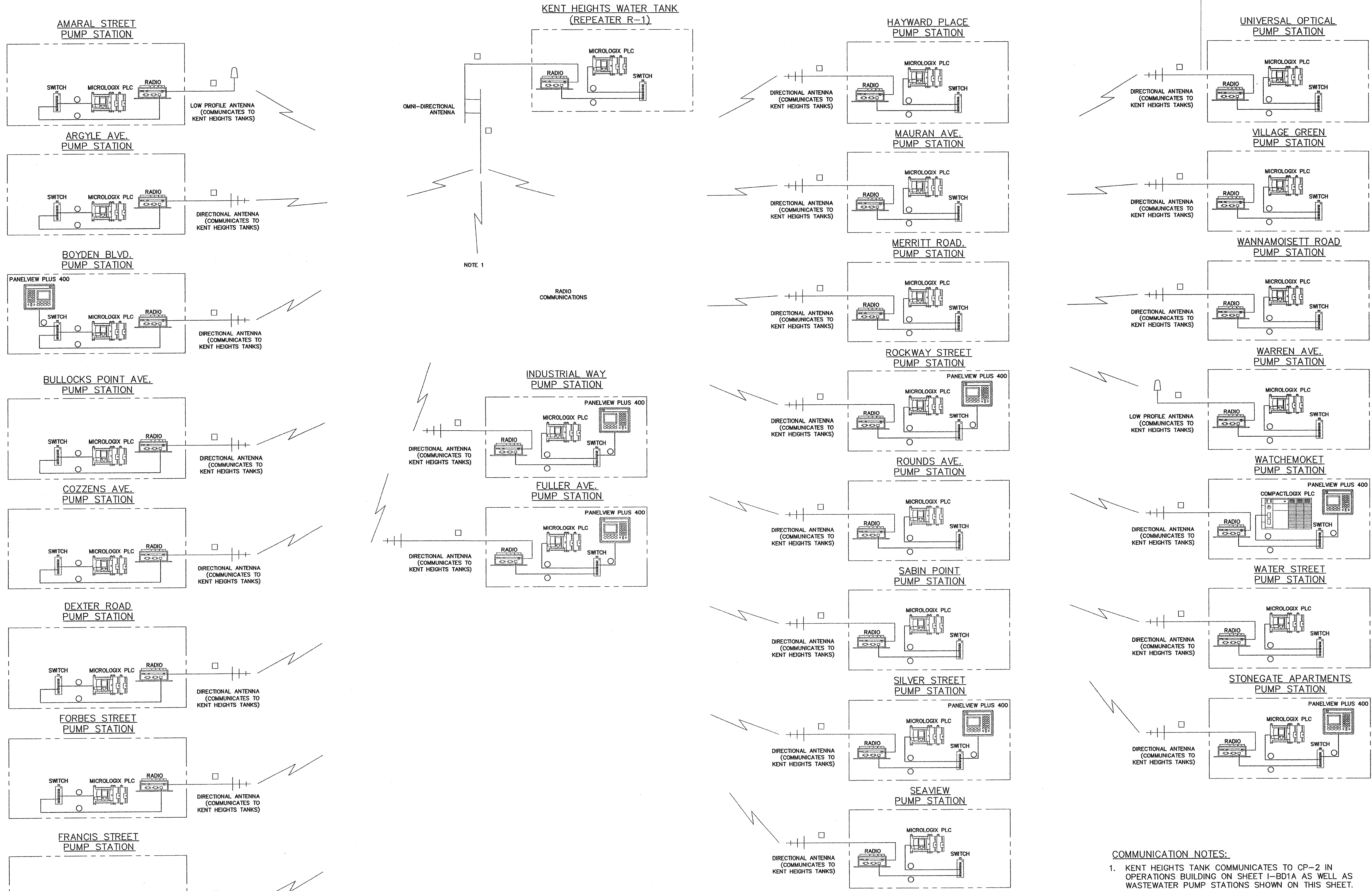


AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

MARK	DATE	MADE BY	YR	DESCRIPTION
1	10/19/12	MS		REVISED FOR RECORD DRAWING

D:\Dedham\Projects\222632_2\ECOM - East Providence Wastewater SCADA\Wp\SCADA Drawings\Block Diagram\222632-IBD2A-1005.dwg, Oct 25, 2012, 5:22pm



NOTE 1
RADIO COMMUNICATIONS

COMMUNICATION NOTES:
1. KENT HEIGHTS TANK COMMUNICATES TO CP-2 IN OPERATIONS BUILDING ON SHEET I-BD1A AS WELL AS WASTEWATER PUMP STATIONS SHOWN ON THIS SHEET.

LEGEND	
◆	RS-232 COMMUNICATIONS
○	CAT6 (CABLE) ETHERNET COMMUNICATIONS
□	RADIO COMMUNICATIONS

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

WASTEWATER PUMP STATIONS SCADA SYSTEM NETWORK ARCHITECTURE

EAST PROVIDENCE, RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS
RDEM ORDER OF APPROVAL SUBMITTAL
NOT FOR CONSTRUCTION

JOB NO.: 222632.00
DATE: APRIL, 2010
SCALE:
SHEET: OF

I-BD2A

980 Washington Street
Dedham, Massachusetts
800.446.5518 | www.woodardcurran.com

WOODARD & CURRAN
LEROY E. HENDRICKS, JR.
REGISTERED PROFESSIONAL ELECTRICAL ENGINEER
No. 8522

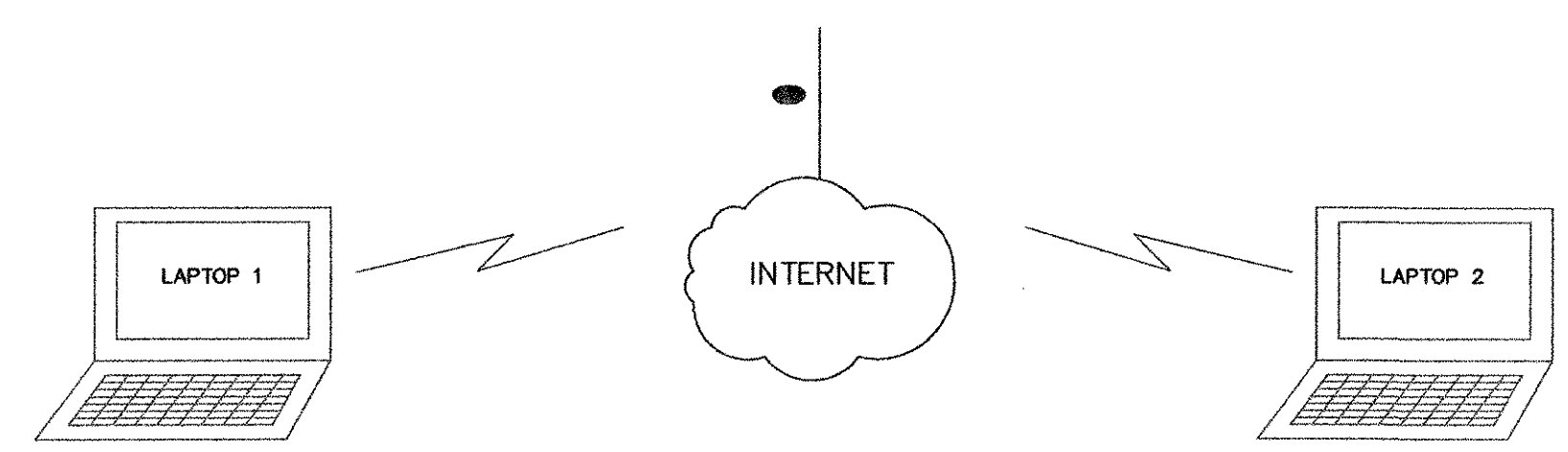
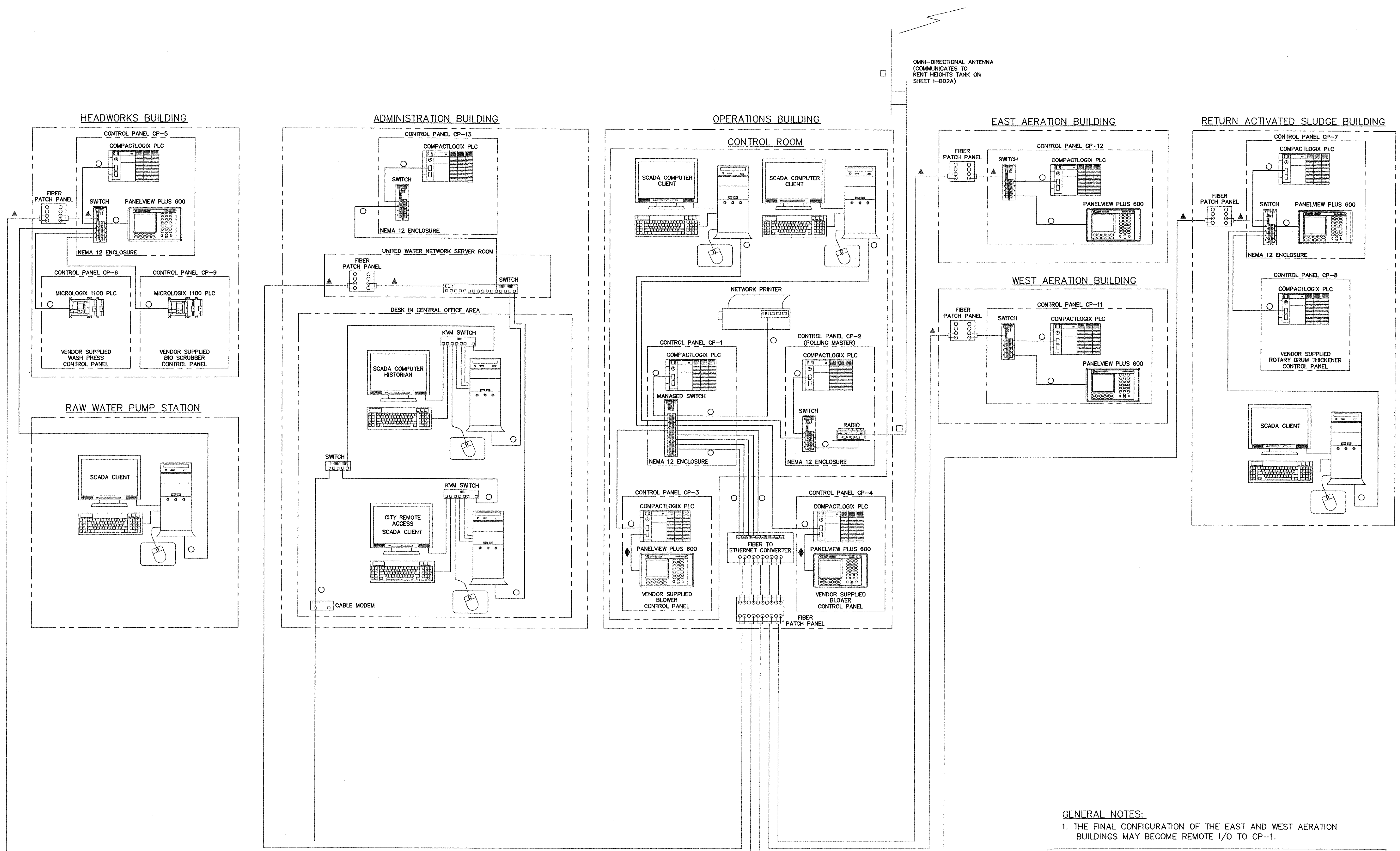
REV	DESCRIPTION	DATE
B	100% DESIGN SUBMITTAL	03/11
A	50% DESIGN SUBMITTAL	06/10

DESIGNED BY: LK
CHECKED BY: LK
DRAWN BY: CB
222632-IBD2A-1005.dwg

THIS DOCUMENT IS THE PROPERTY OF WOODARD & CURRAN INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN PERMISSION IS PROHIBITED.

COMMITMENT & INTEGRITY DRIVE RESULTS

\\Desham\Projects\222632_AECOM - East Providence Wastewater SCADA\Drawings\Bldg Diagram\222632-IBD1A-ALT-100K.dwg, Oct 25, 2012 - 5:22pm



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

- GENERAL NOTES:**
- THE FINAL CONFIGURATION OF THE EAST AND WEST AERATION BUILDINGS MAY BECOME REMOTE I/O TO CP-1.

LEGEND	
◆	RS-232 COMMUNICATIONS
▲	FIBER OPTIC COMMUNICATIONS
●	INTERNET COMMUNICATIONS
□	RADIO COMMUNICATIONS
○	CAT6 (CABLE) ETHERNET COMMUNICATIONS

WASTEWATER TREATMENT PLANT SCADA SYSTEM NETWORK ARCHITECTURE

EAST PROVIDENCE, RHODE ISLAND
DEPARTMENT OF PUBLIC WORKS

RIDEEM ORDER OF APPROVAL SUBMITTAL
NOT FOR CONSTRUCTION

JOB NO.: 222632.00
DATE: AUGUST, 2009
SCALE:
SHEET: OF

I-BD1A

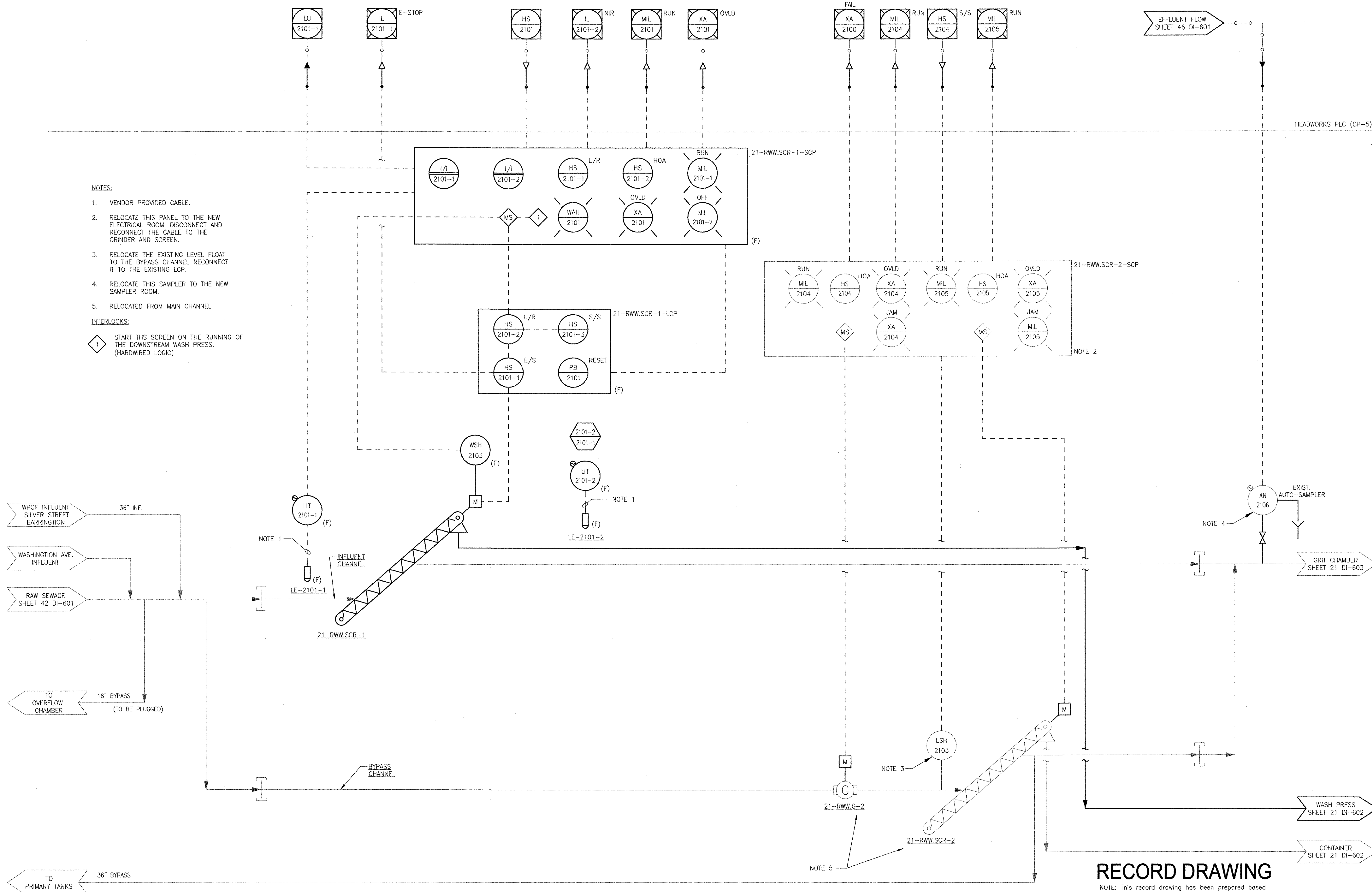
LEROY E. KENDRICKS, JR.
No. 8522
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

REV	DESCRIPTION	DATE	CHECKED BY	DESIGNED BY	DRAWN BY
B	100% DESIGN SUBMITTAL	03/11	LK	LK	LK
A	50% DESIGN SUBMITTAL	05/10	LK	LK	LK

880 Washington Street
Dedham, Massachusetts
800.446.5518 | www.woodardcurran.com

**WOODARD
& CURRAN**
COMMITMENT & INTEGRITY DRIVE RESULTS

ANSI D - 8-Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\VA\21 DI-601.DWG
 LAST UPDATE: Monday, October 08, 2012 2:50:09 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:16 AM



NOTES:

1. VENDOR PROVIDED CABLE.
2. RELOCATE THIS PANEL TO THE NEW ELECTRICAL ROOM. DISCONNECT AND RECONNECT THE CABLE TO THE GRINDER AND SCREEN.
3. RELOCATE THE EXISTING LEVEL FLOAT TO THE BYPASS CHANNEL RECONNECT IT TO THE EXISTING LCP.
4. RELOCATE THIS SAMPLER TO THE NEW SAMPLER ROOM.
5. RELOCATED FROM MAIN CHANNEL

INTERLOCKS:

- 1 START THIS SCREEN ON THE RUNNING OF THE DOWNSTREAM WASH PRESS. (HARDWIRED LOGIC)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	YR
1	REVISED FOR RECORD DRAWING	10/19/12	MS		

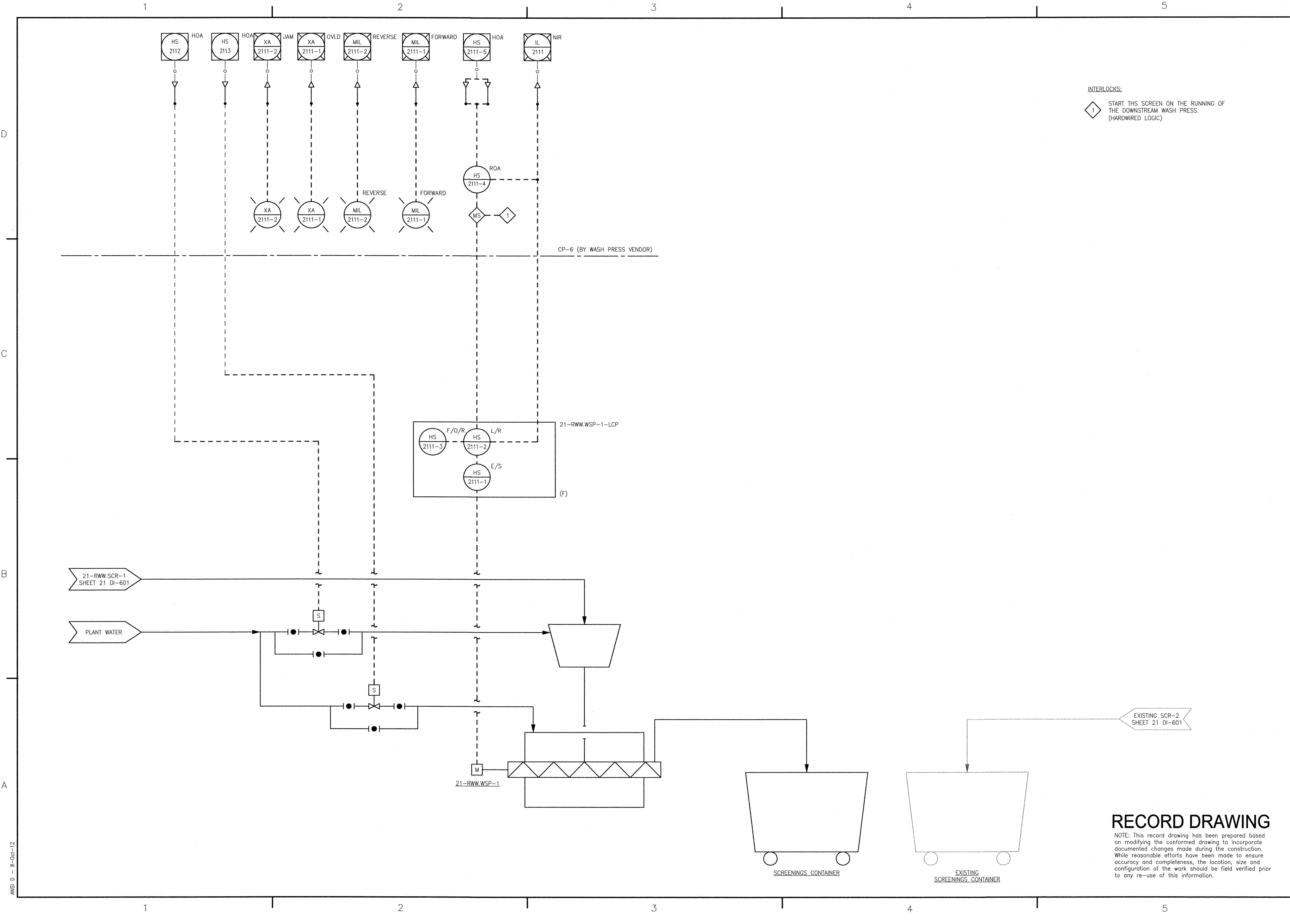
AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON ST., 10TH FLOOR
 WASHINGTON, MA 01880
 PHONE (781) 246-5200

REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 15,943
 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING SCREENS P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-601
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
21 DI-601	

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DRUG-2\SHEETS\A21 DI-602.DWG
 LAST UPDATE: Monday, October 08, 2012 2:59:33 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:18 AM
 ANSI D - 8-061-12

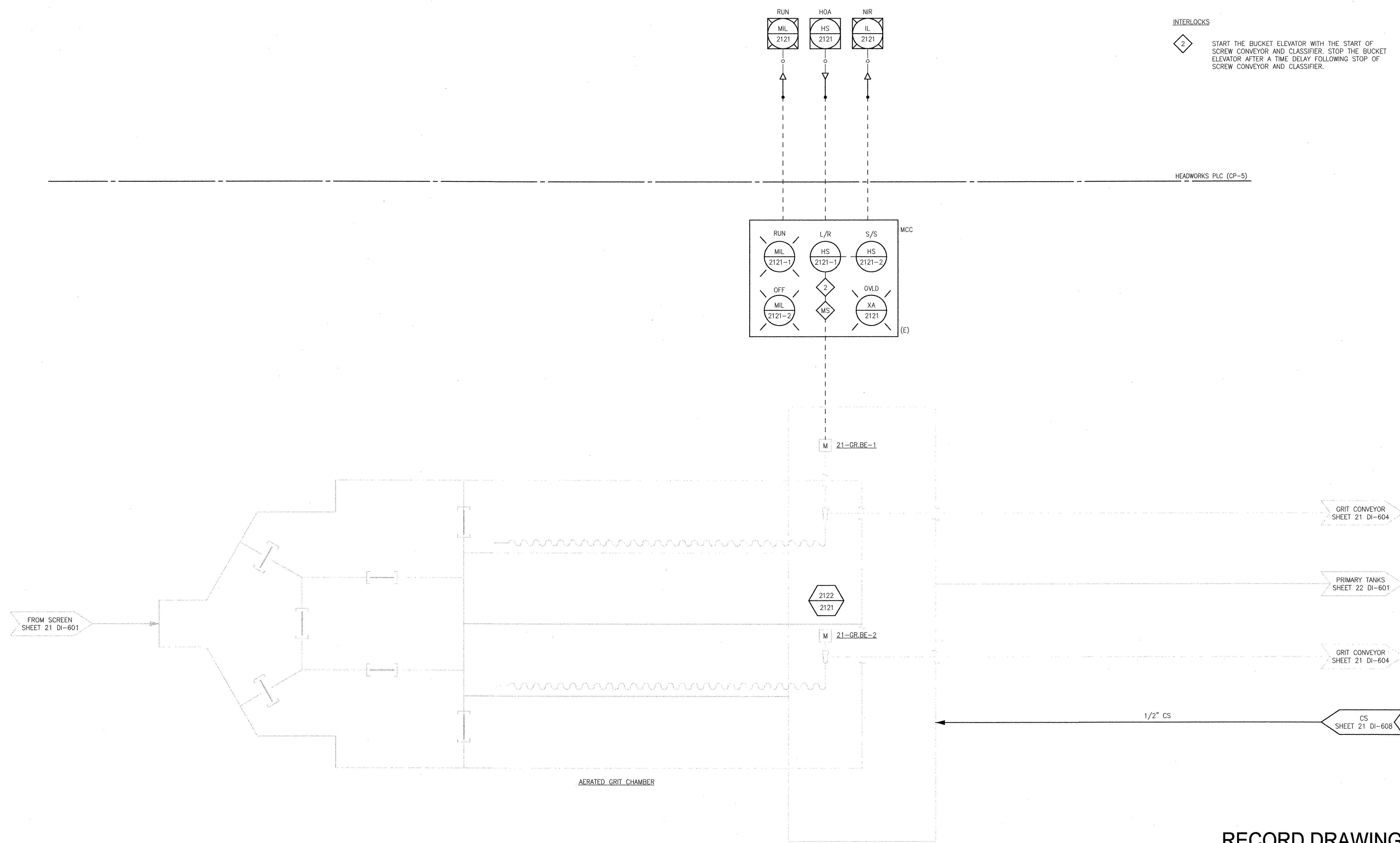


RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. 100 WASHINGTON STREET WAKEFIELD, MA 01880 PHONE (781) 246-5000		RECORD DRAWINGS											
		CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 HEADWORKS BUILDING WASH PRESS P&ID INSTRUMENTATION											
PROJECT NO: 60148648 CAD DWG FILE: 21 DI-602	DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT	DATE: OCTOBER 2012 SCALE: NONE	REVISIONS <table border="1"> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </table>	MARK	DATE	MS	YR	DESCRIPTION	1	10/19/12			REVISED FOR RECORD DRAWING
MARK	DATE	MS	YR	DESCRIPTION									
1	10/19/12			REVISED FOR RECORD DRAWING									

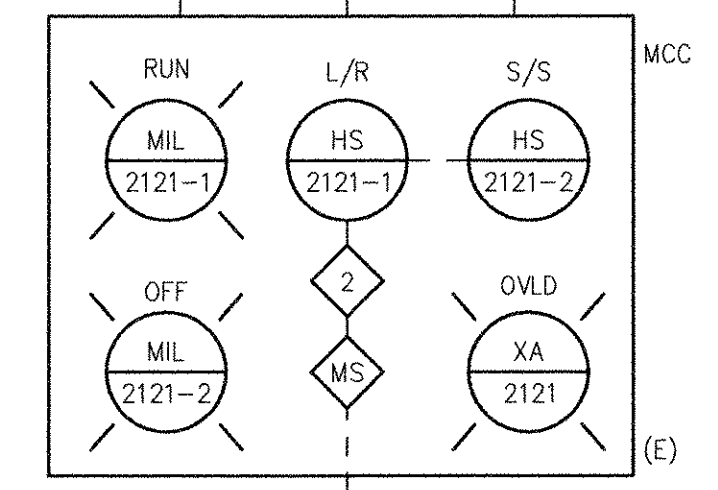
21 DI-602

ANSI D - 8-Oct-12
 PATH/FILENAME: P:\6018648 - EAST PROVIDENCE DEP\UP-2\SHEETS\DI\21 DI-603.DWG
 LAST UPDATE: Monday, October 08, 2012 2:59:47 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:20 AM



INTERLOCKS
 2 START THE BUCKET ELEVATOR WITH THE START OF SCREW CONVEYOR AND CLASSIFIER. STOP THE BUCKET ELEVATOR AFTER A TIME DELAY FOLLOWING STOP OF SCREW CONVEYOR AND CLASSIFIER.

HEADWORKS PLC (CP-5)



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS			
MARK	DATE	MS	YR
1	10/19/12	MS	YR
			REVISOR
			DESCRIPTION
			REVISOR
			DESCRIPTION

AECOM
 AECOM USA, INC.
 100 WATER STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

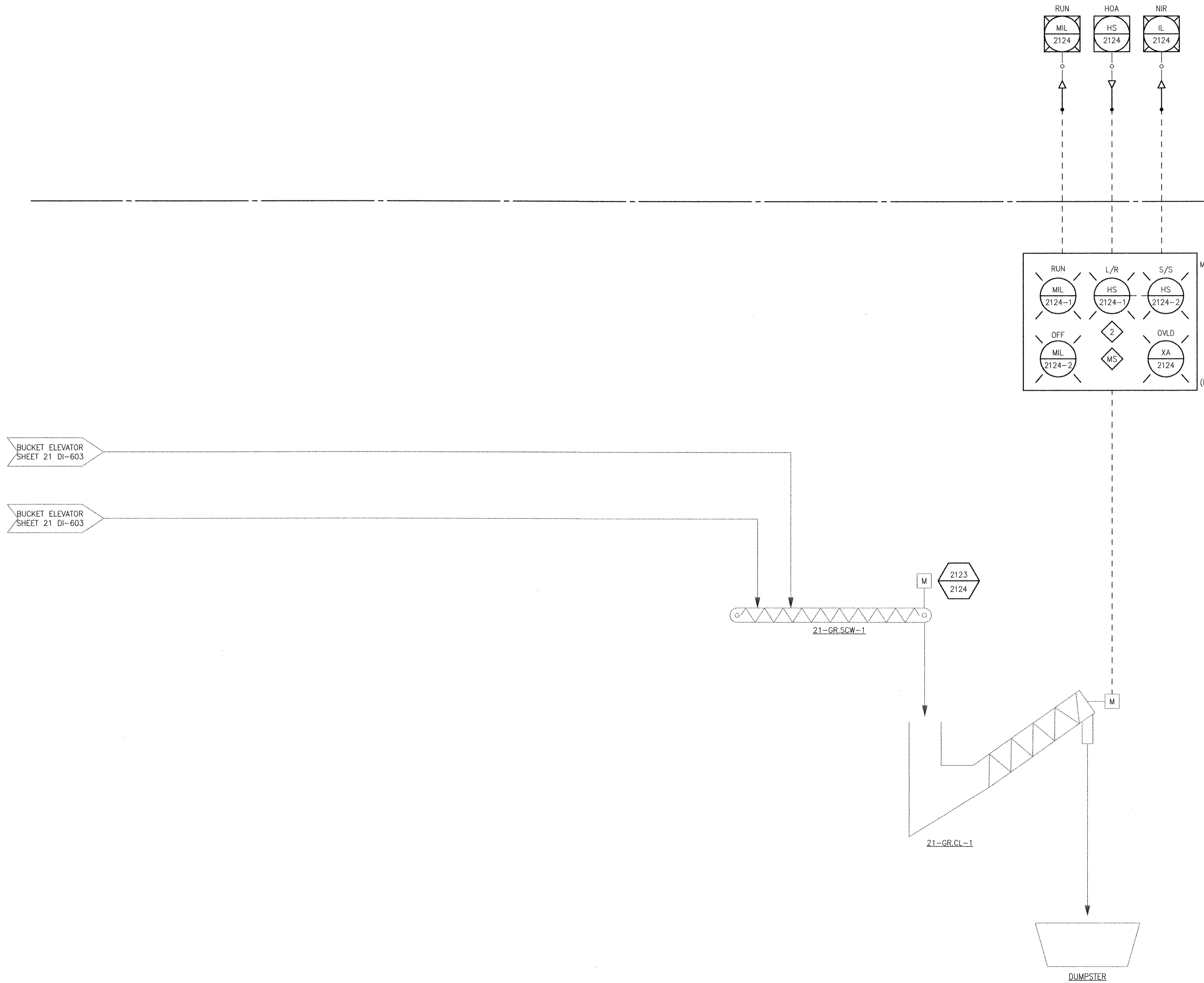
YASSER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 9430
 01/21/12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING GRIT CHAMBER P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-603
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

21 DI-603

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DRY\OP-2\SHEETS\DA\21 DI-604.DWG
 LAST UPDATE: Monday, October 08, 2012 3:00:01 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:22 AM
 ANSI D - 8-Oct-12



INTERLOCKS
 2 START THE BUCKET ELEVATOR WITH THE START OF SCREW CONVEYOR AND CLASSIFIER. STOP THE BUCKET ELEVATOR AFTER A TIME DELAY FOLLOWING STOP OF SCREW CONVEYOR AND CLASSIFIER.

REVISIONS			
MARK	DATE	MS	YR
1	10/19/12	MS	YR
REVISOR: REVISOR FOR RECORD DRAWING			
DESCRIPTION			

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. OFFICE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

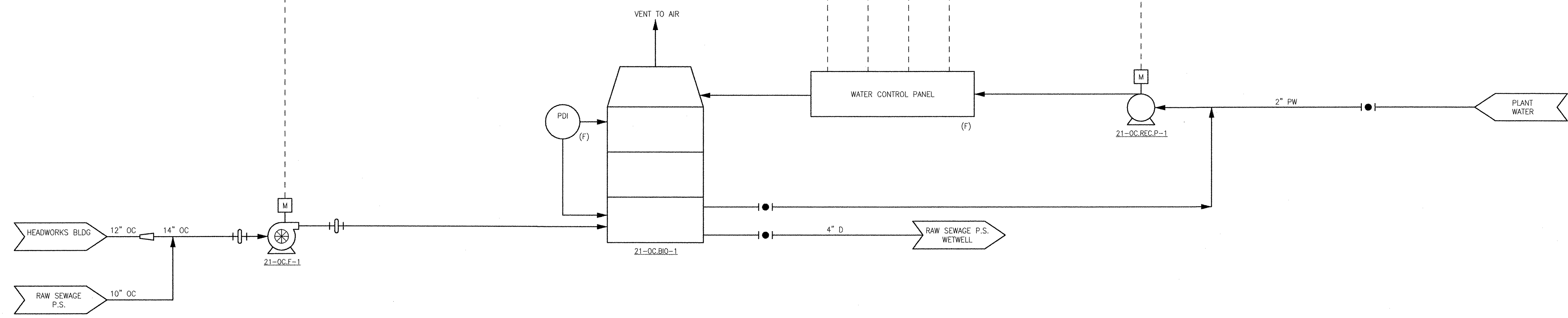
YASSER A. NIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 51892
 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING GRIT CLASSIFIER P&ID
 INSTRUMENTATION

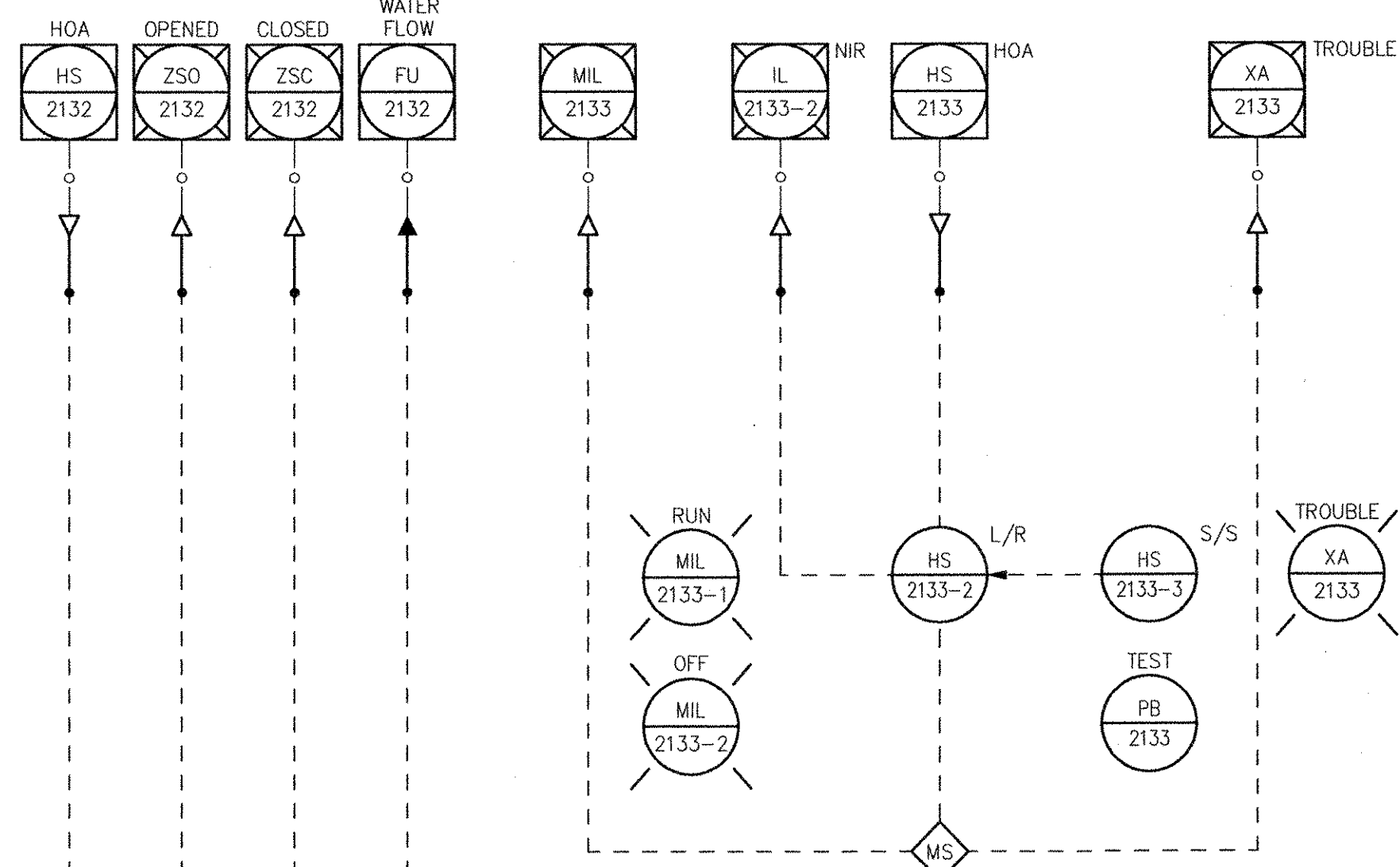
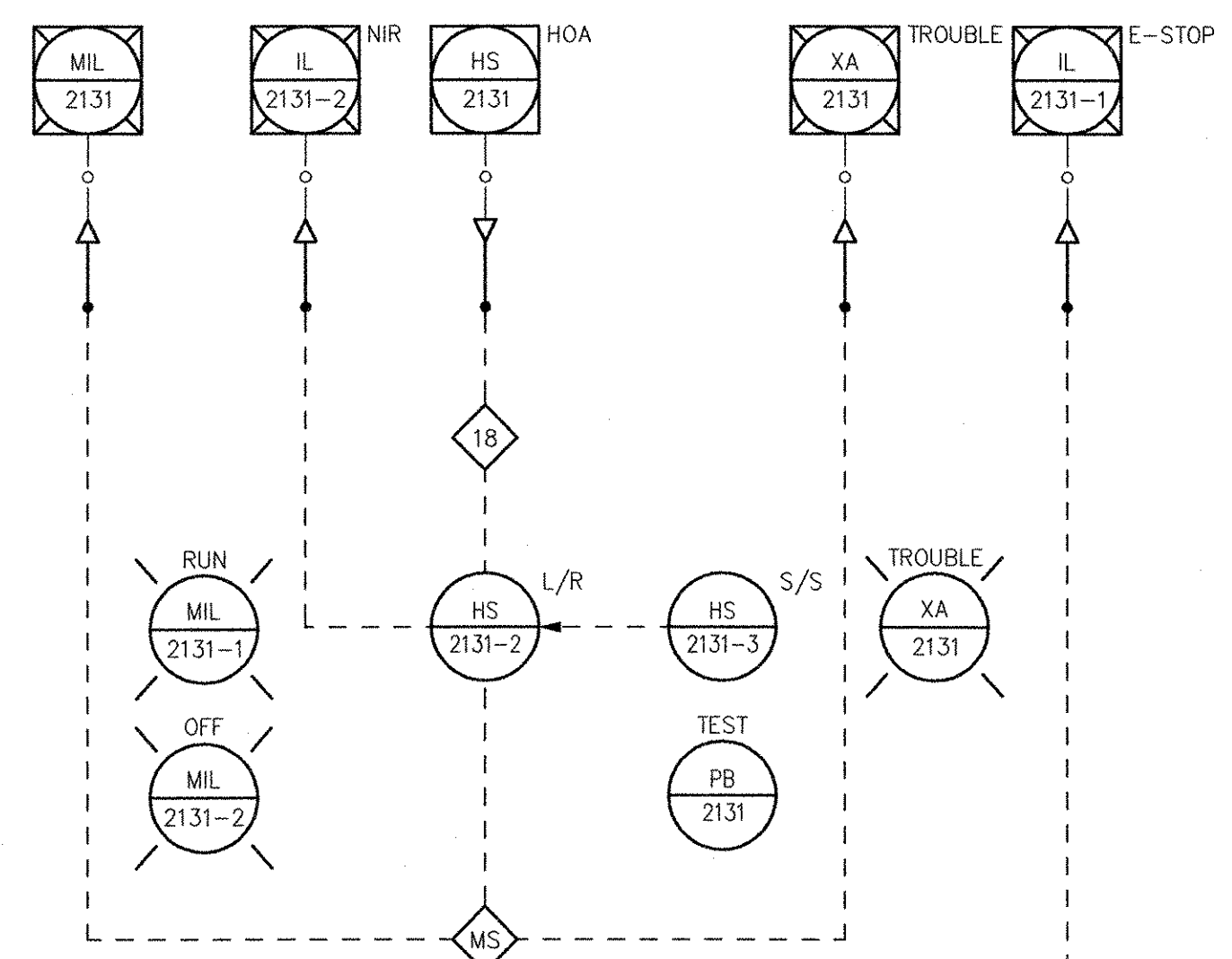
PROJECT NO:	60148648
CAD DWG FILE:	21 DI-604
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE
21 DI-604	

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEV\OP-2\SHETS\21 DI-605.DWG
 LAST UPDATE: Tuesday, October 23, 2012 8:32:21 AM
 PLOT DATE: Thursday, October 25, 2012 8:17:24 AM
 ANSI D - 23-Oct-12



INTERLOCKS:
 18 STOP THE ODOR CONTROL FAN IF SMOKE IS DETECTED IN THE DUCT OR THE AIR FLOW IS LOW IN THE DUCT (SOFTWARE LOGIC).



REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSEY & ASSOCIATES
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 NO. 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING ODOR CONTROL P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-605
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

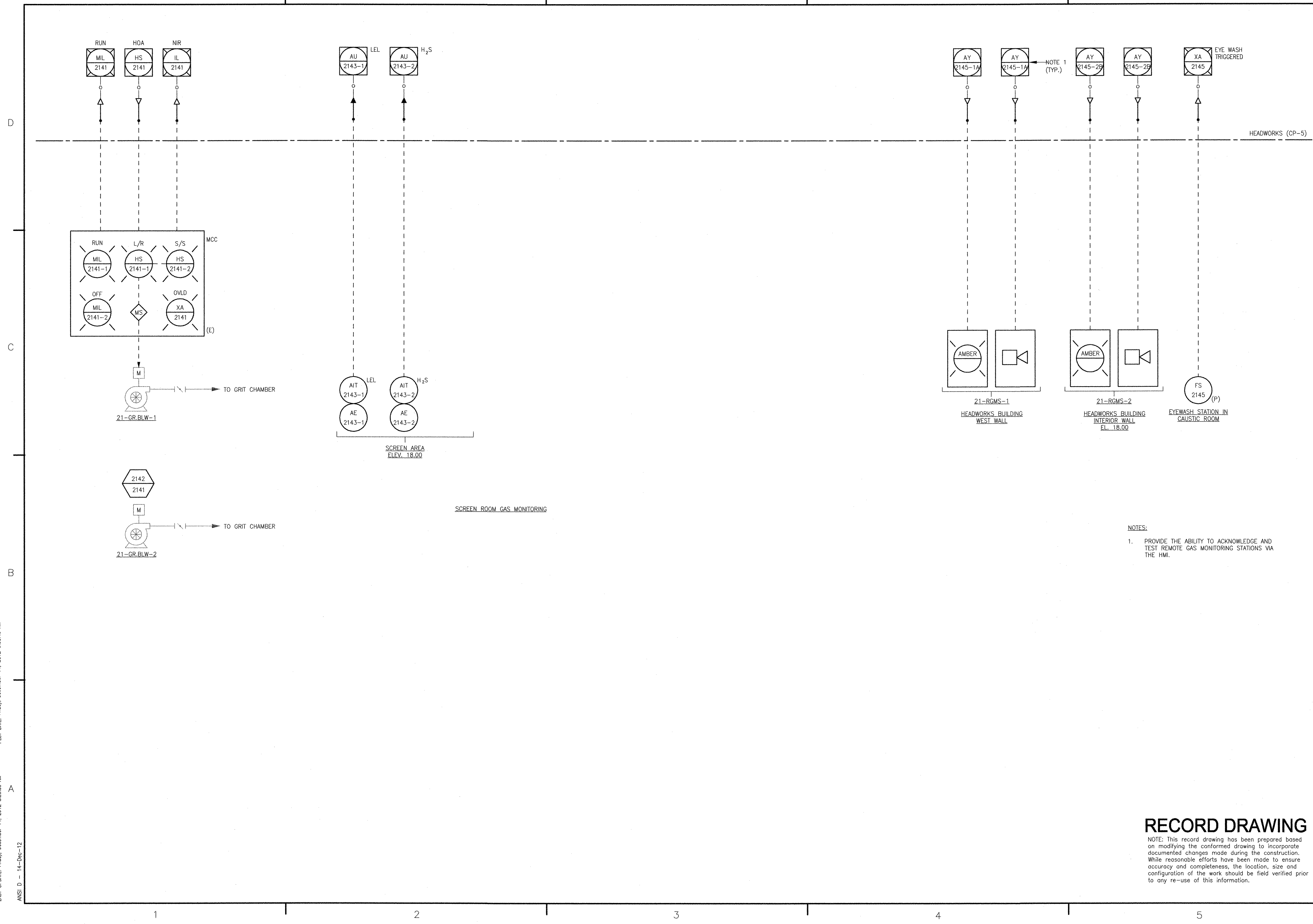
21 DI-605

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\01-21 DI-606.DWG
 LAST UPDATE: Friday, December 14, 2012 8:29:33 AM PLOT DATE: Friday, December 14, 2012 9:38:49 AM

ANSI D - 14-Dec-12



NOTES:
 1. PROVIDE THE ABILITY TO ACKNOWLEDGE AND TEST REMOTE GAS MONITORING STATIONS VIA THE HMI.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
2	REVIS FOR RECORD DRAWING
1	REVIS GAS MONITORING SYSTEM

AECOM
 AECOM USA, INC.
 100 WATER STREET
 WASHINGTON, DC 20004
 PHONE (703) 246-6200

RECORD DRAWINGS

YASSER
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING MISCELLANEOUS P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-606
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

21 DI-606

PATH/FILENAME: F:\0148648 - EAST PROVIDENCE DRG\OP-2\SHEETS\DI-21 DI-607.DWG
 LAST UPDATE: Monday, October 08, 2012 3:01:21 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:28 AM

ANSI D - 8-Oct-12

D

C

B

A

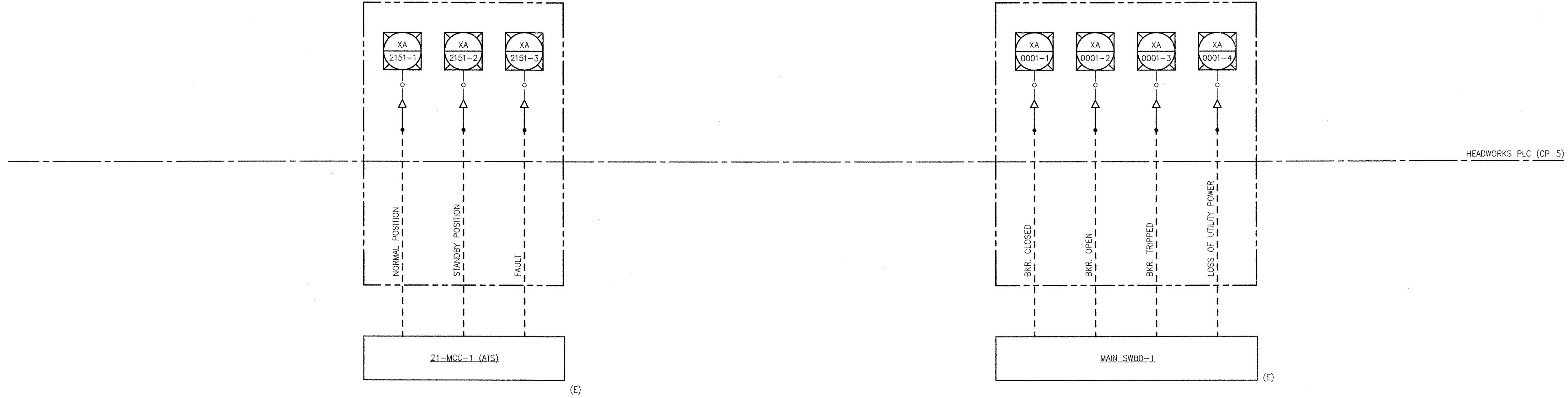
1

2

3

4

5



RECORD DRAWING

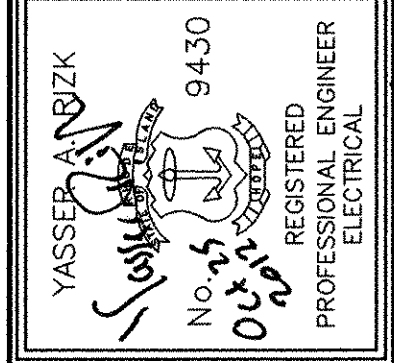
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-607
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 DI-607

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

**HEADWORKS BUILDING ELECTRICAL SIGNALS
 P&ID
 INSTRUMENTATION**



AECOM USA, INC.
 100 STATE STREET
 WAKEFIELD, MA 01880
 PHONE (781) 248-5200

RECORD DRAWINGS

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING
				DESCRIPTION

D

C

B

A

1

2

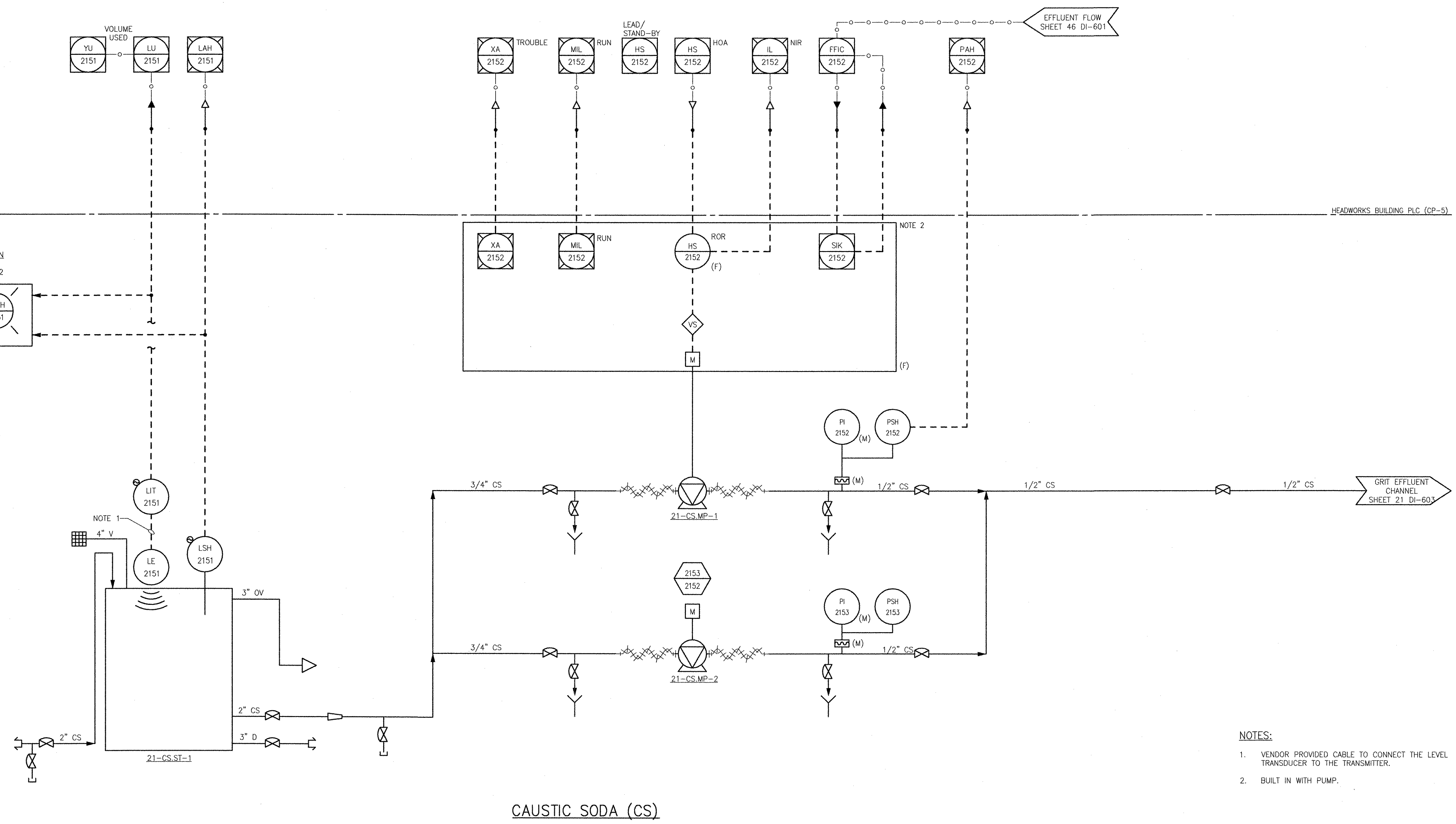
3

4

5

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DB\OP-2\SHETS\DI\21 DI-608.DWG
 LAST UPDATE: Friday, December 21, 2012 9:26:59 AM
 PLOT DATE: Friday, December 21, 2012 9:27:35 AM

ANSI D - 21-Dec-12



CAUSTIC SODA (CS)

NOTES:

- VENDOR PROVIDED CABLE TO CONNECT THE LEVEL TRANSDUCER TO THE TRANSMITTER.
- BUILT IN WITH PUMP.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISOR FOR RECORD DRAWING
	DATE
	MADE BY
	YR
	YR

ACCOM USA, INC. CORP.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

YASSER RIZK
 No. 94,30
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

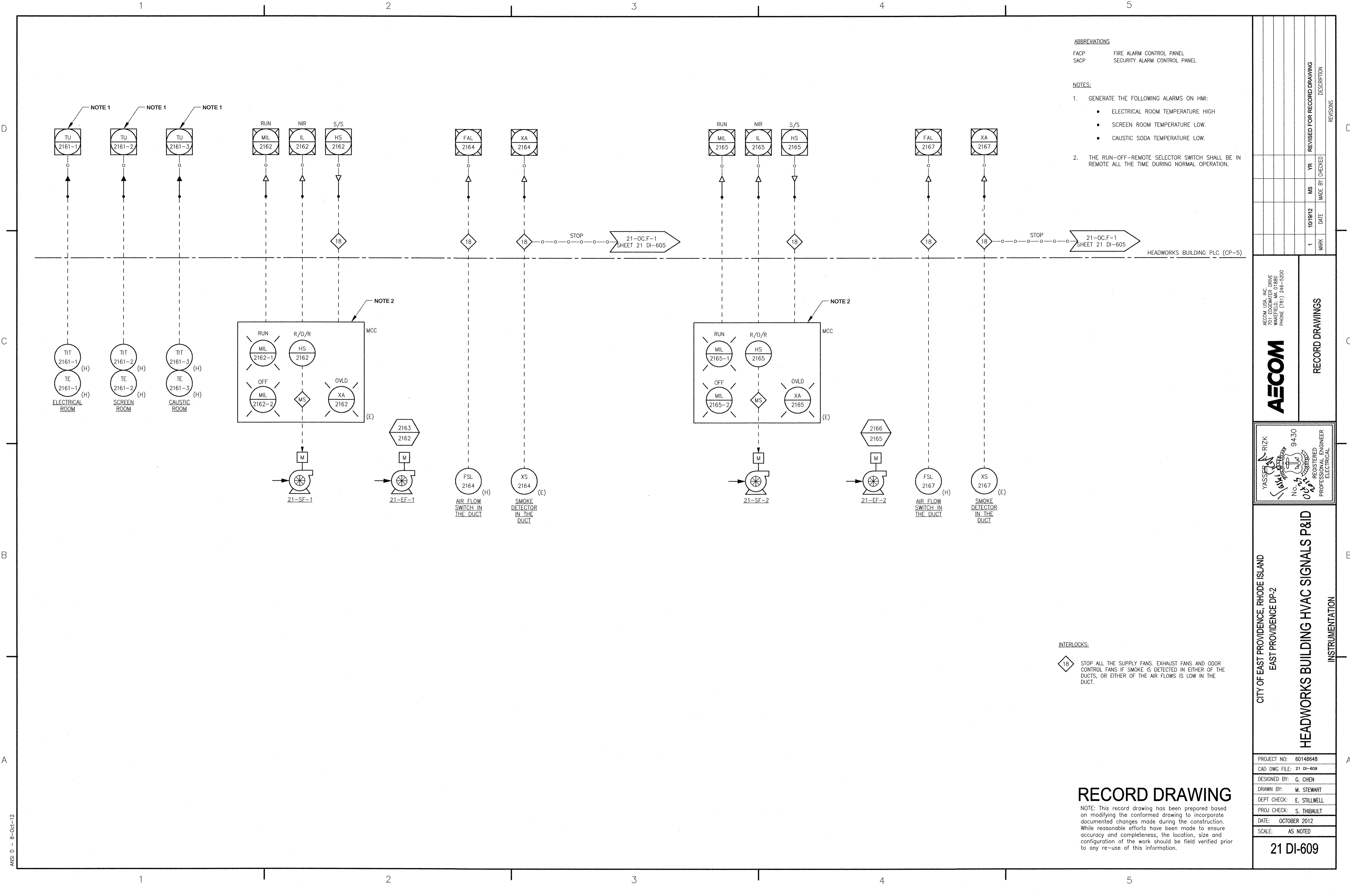
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

HEADWORKS BUILDING CAUSTIC SODA SYSTEM P&ID INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-608
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 DI-608

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DEVELOP-2\SHEETS\21 DI-605.DWG
 LAST UPDATE: Monday, October 08, 2012 3:08:50 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:32 AM
 ANSI D - 8-Oct-12



ABBREVIATIONS
 FACP FIRE ALARM CONTROL PANEL
 SACP SECURITY ALARM CONTROL PANEL

- NOTES:**
- GENERATE THE FOLLOWING ALARMS ON HMI:
 - ELECTRICAL ROOM TEMPERATURE HIGH
 - SCREEN ROOM TEMPERATURE LOW.
 - CAUSTIC SODA TEMPERATURE LOW.
 - THE RUN-OFF-REMOTE SELECTOR SWITCH SHALL BE IN REMOTE ALL THE TIME DURING NORMAL OPERATION.

INTERLOCKS:

18 STOP ALL THE SUPPLY FANS, EXHAUST FANS AND ODOR CONTROL FANS IF SMOKE IS DETECTED IN EITHER OF THE DUCTS, OR EITHER OF THE AIR FLOWS IS LOW IN THE DUCT.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
10/19/12	DATE
MS	MADE BY
YR	CHECKED

AECOM
 AECOM USA, INC. 1000
 WASHINGTON ST. 01880
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER A. RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 9430
 08/01/08

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

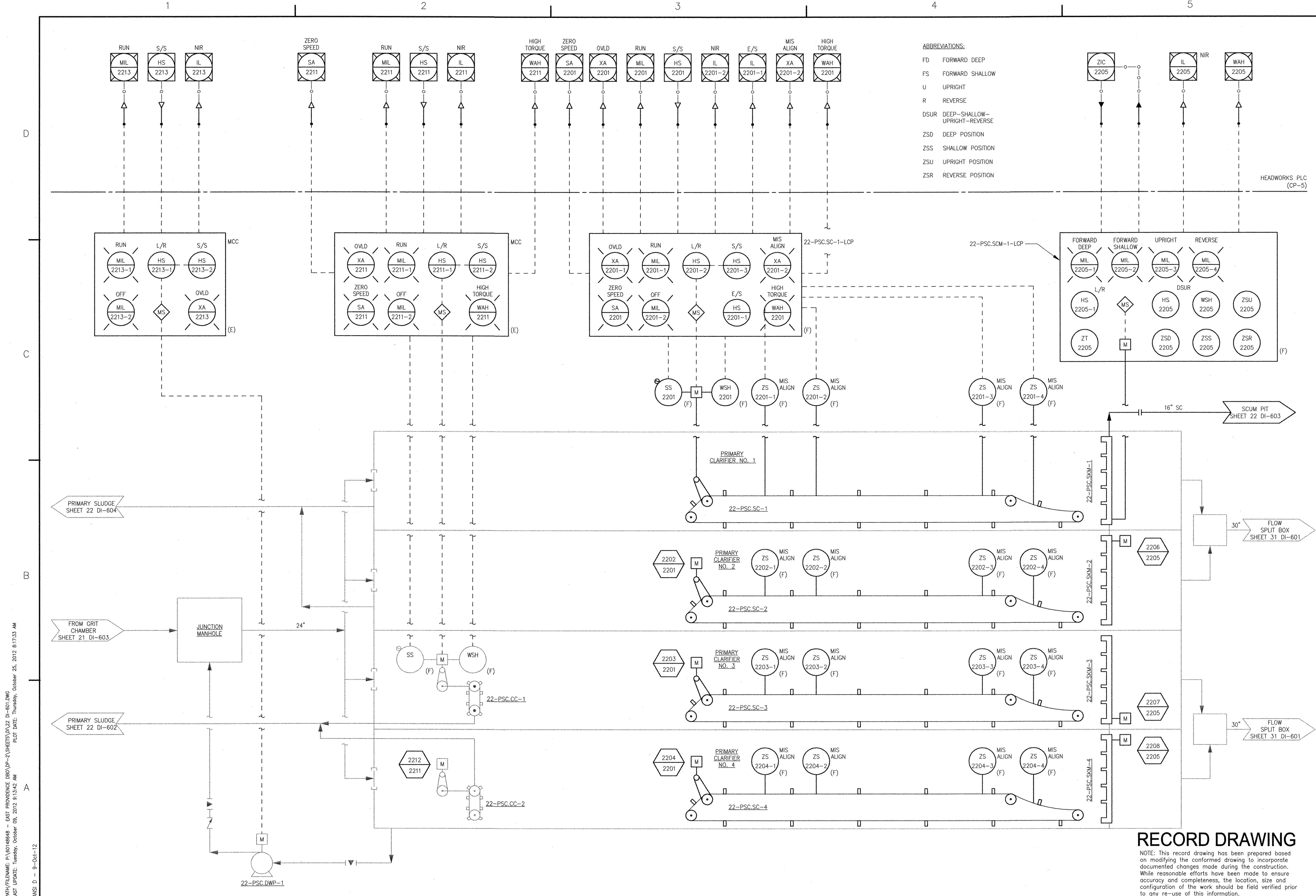
HEADWORKS BUILDING HVAC SIGNALS P&ID

INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	21 DI-609
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED
21 DI-609	

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



- ABBREVIATIONS:
- FD FORWARD DEEP
 - FS FORWARD SHALLOW
 - U UPRIGHT
 - R REVERSE
 - DSUR DEEP-SHALLOW-UPRIGHT-REVERSE
 - ZSD DEEP POSITION
 - ZSS SHALLOW POSITION
 - ZSU UPRIGHT POSITION
 - ZSR REVERSE POSITION

REVISIONS	DESCRIPTION	YR	MS	DATE	MARK
1	REVISED FOR RECORD DRAWING			10/19/12	

AECOM

AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSEM HIZK
 No. 95
 09/12/09
 9430

REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS PROCESS & INSTRUMENTATION DIAGRAM
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	22 DI-601
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

22 DI-601

RECORD DRAWING

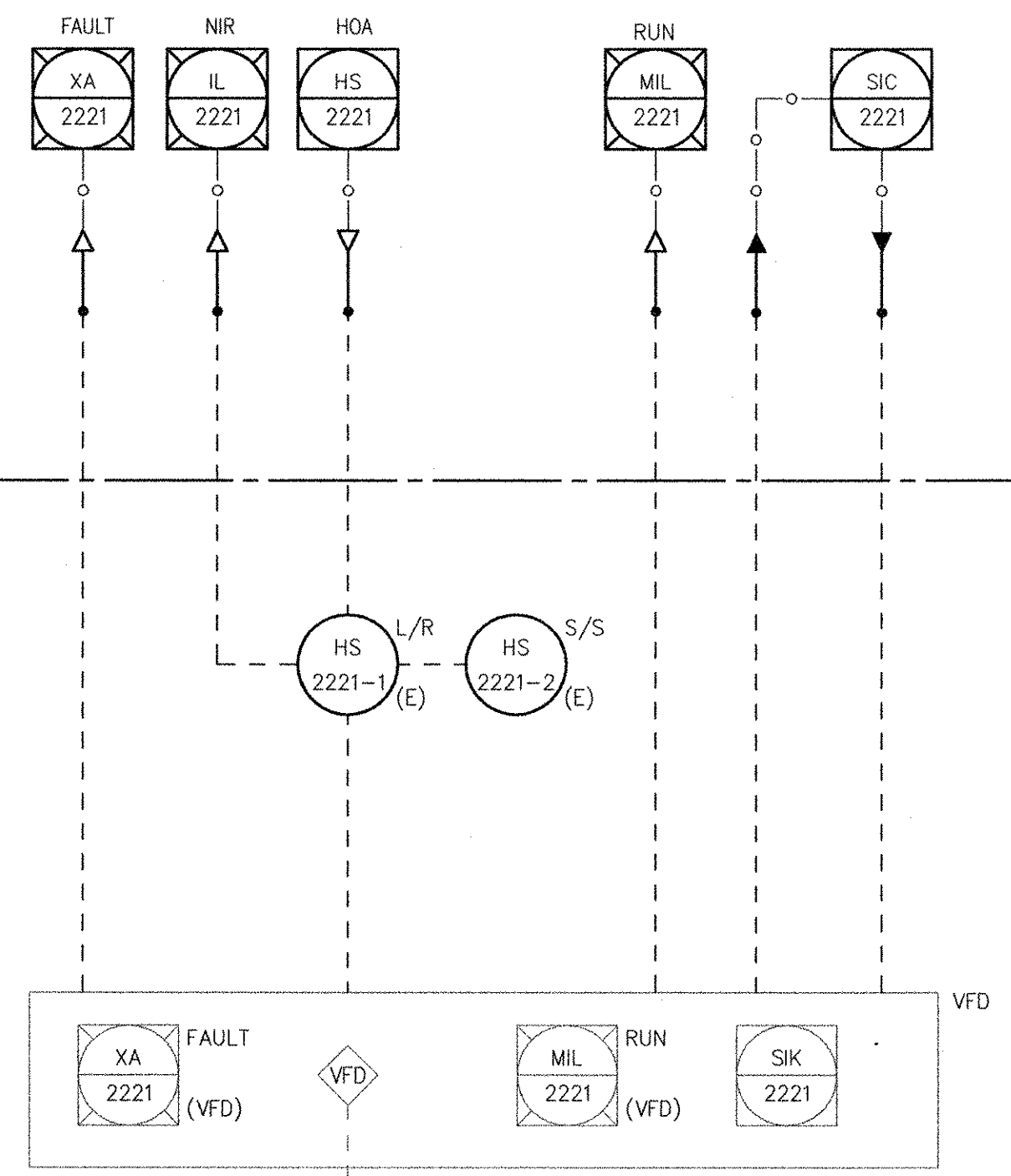
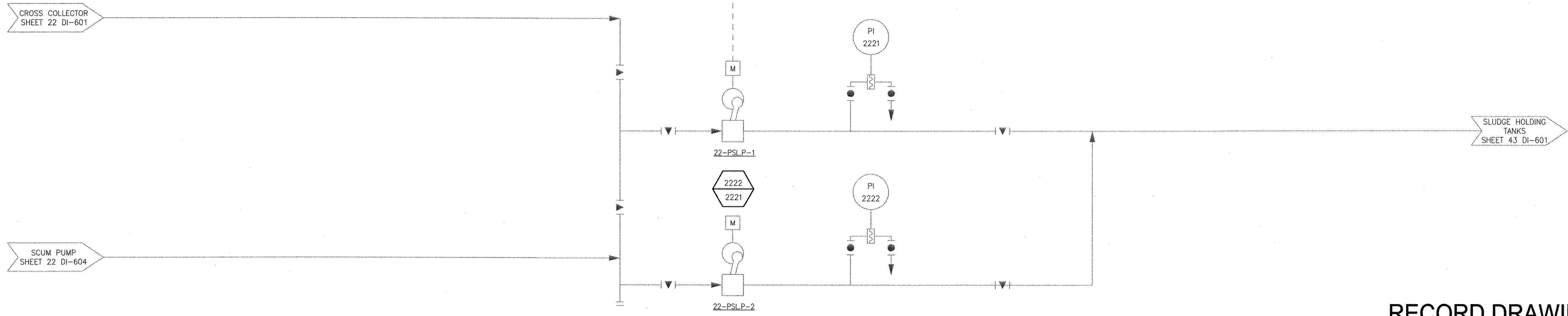
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 9-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\22 DI-601.DWG
 LAST UPDATE: Tuesday, October 09, 2012 8:13:42 AM
 PLOT DATE: Thursday, October 25, 2012 8:17:33 AM

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DRIP\01-21\SHEETS\DI\22 DI-602.DWG
 LAST UPDATE: Monday, October 08, 2012 3:10:32 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:35 AM

ANSI D - 8-Oct-12



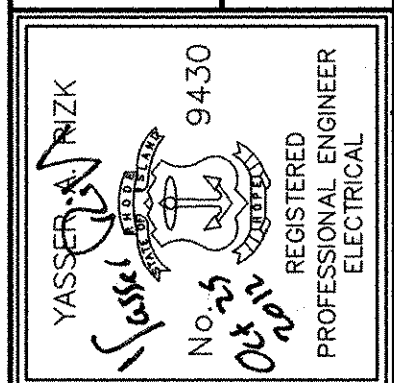
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	22 DI-602
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 DI-602

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS PRIMARY SLUDGE PUMPS P&ID INSTRUMENTATION

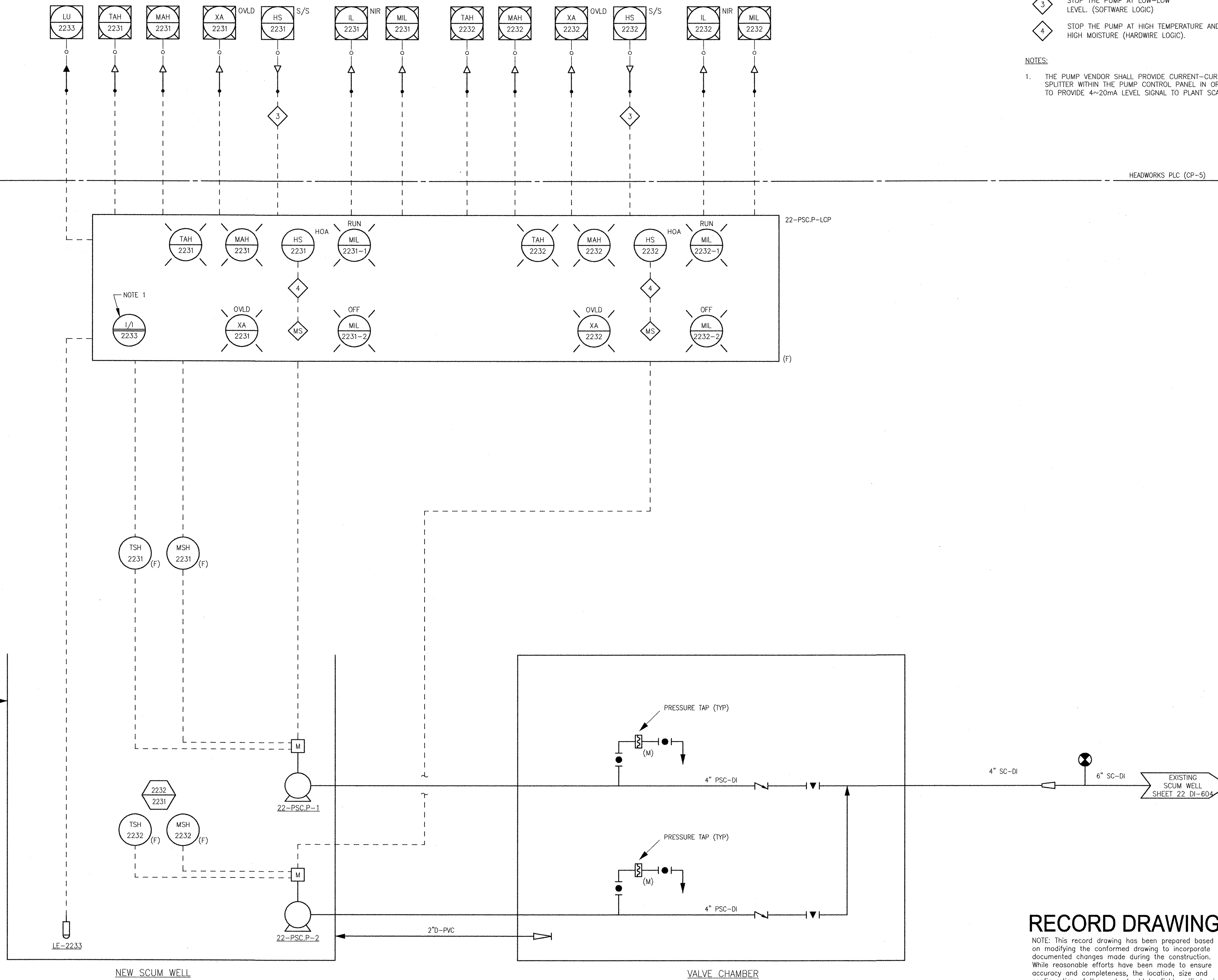


AECOM
 AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

MARK	DATE	MS MADE BY	YR CHECKED	DESCRIPTION
1	10/19/12			REVISED FOR RECORD DRAWING

PATH/FILENAME: F:\0148648 - EAST PROVIDENCE (R0)\01-2\SHEETS\01-22 DI-603.DWG
 LAST UPDATE: Monday, October 08, 2012 3:10:43 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:37 AM
 ANSI D - 8-Oct-12



INTERLOCKS
 3 STOP THE PUMP AT LOW-LOW LEVEL. (SOFTWARE LOGIC)
 4 STOP THE PUMP AT HIGH TEMPERATURE AND HIGH MOISTURE (HARDWIRE LOGIC).

NOTES:
 1. THE PUMP VENDOR SHALL PROVIDE CURRENT-CURRENT SPLITTER WITHIN THE PUMP CONTROL PANEL IN ORDER TO PROVIDE 4~20ma LEVEL SIGNAL TO PLANT SCADA.

HEADWORKS PLC (CP-5)

22-PSC.P-LCP

(F)

NEW SCUM WELL

VALVE CHAMBER

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. ONE COLLEGE
 WAKEFIELD, MA 01880
 PHONE (781) 246-6200

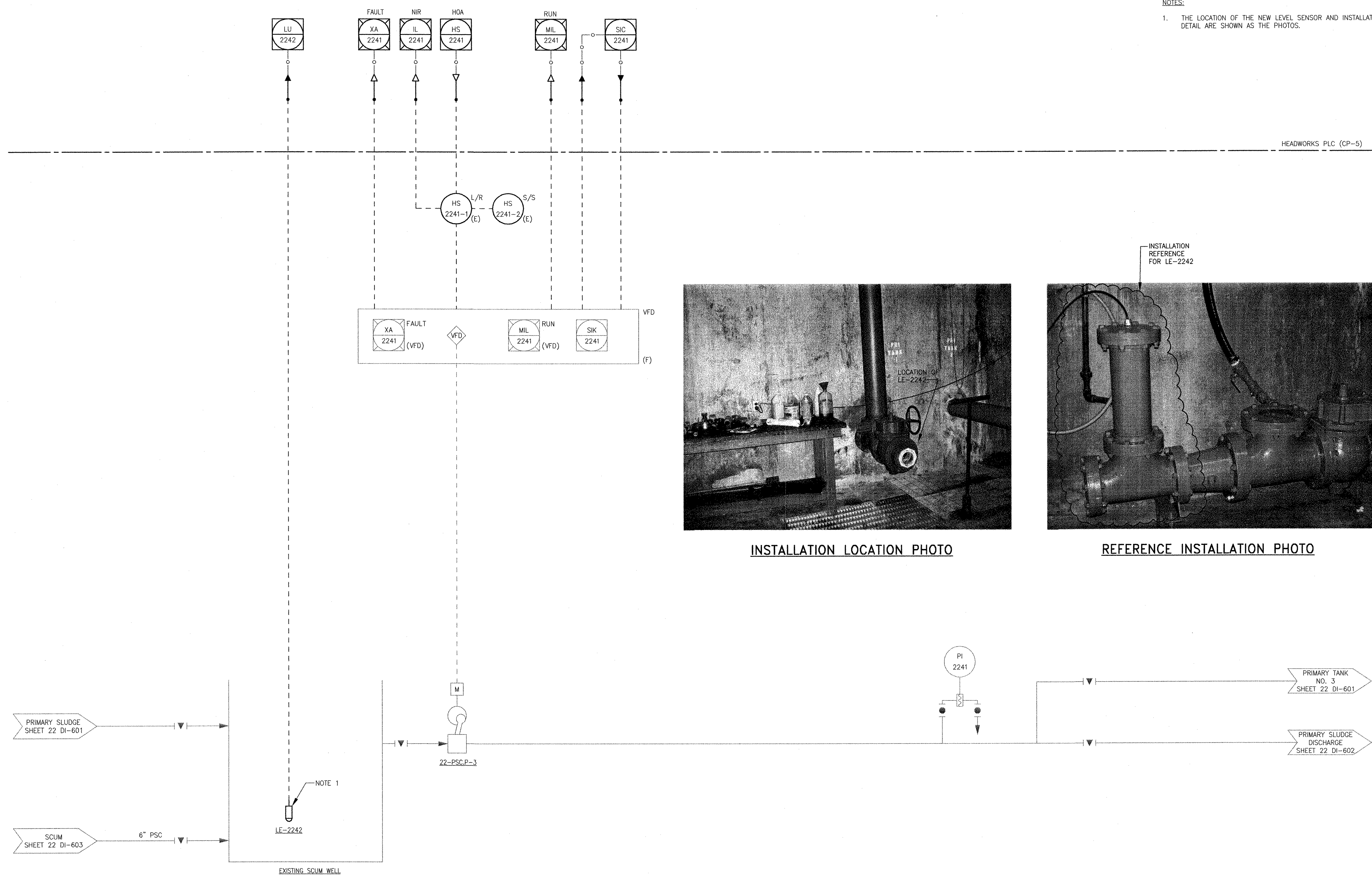
YASSER RIZK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS NEW SCUM PUMPS
 P&ID
 INSTRUMENTATION

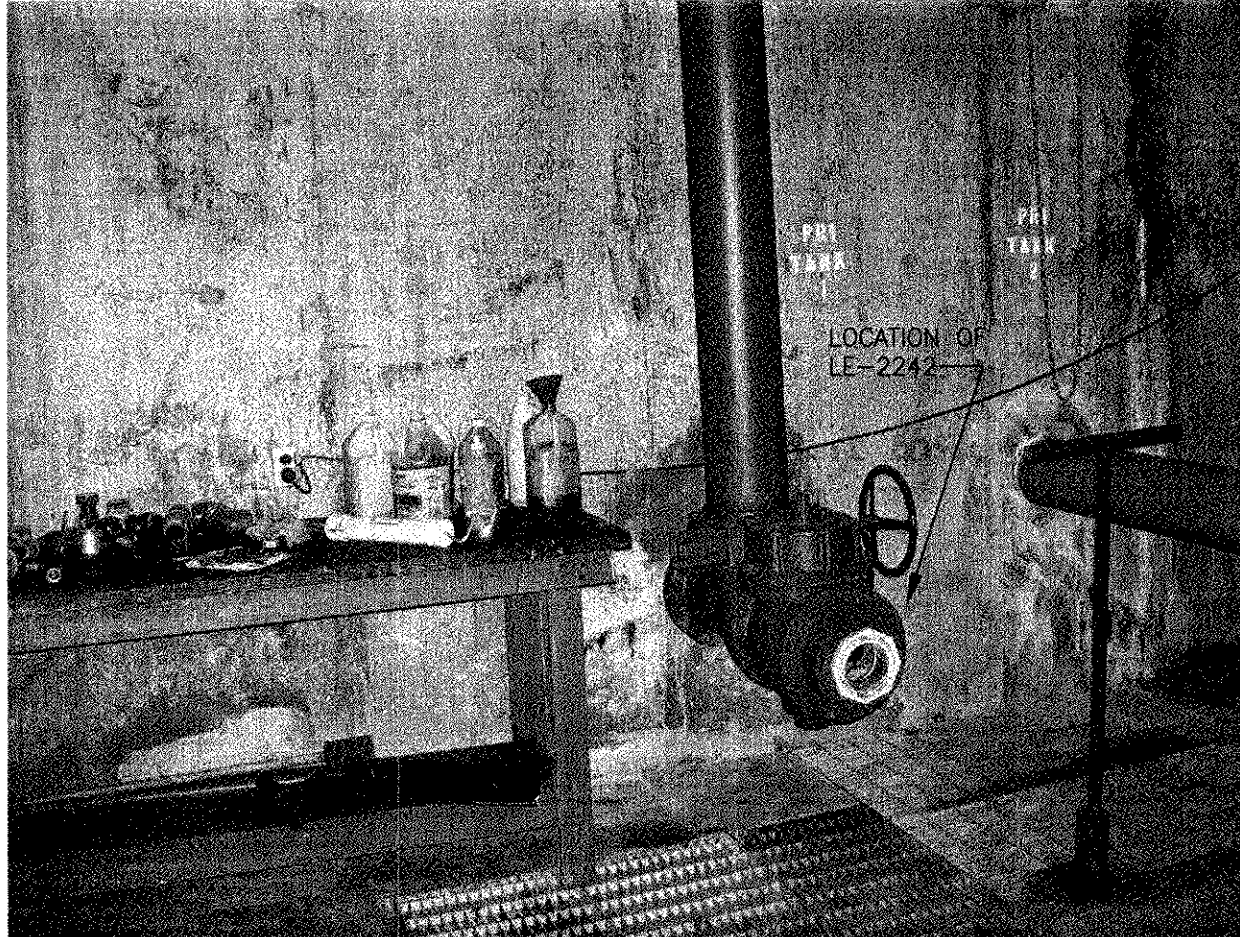
PROJECT NO:	60148648
CAD DWG FILE:	22 DI-603
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 DI-603

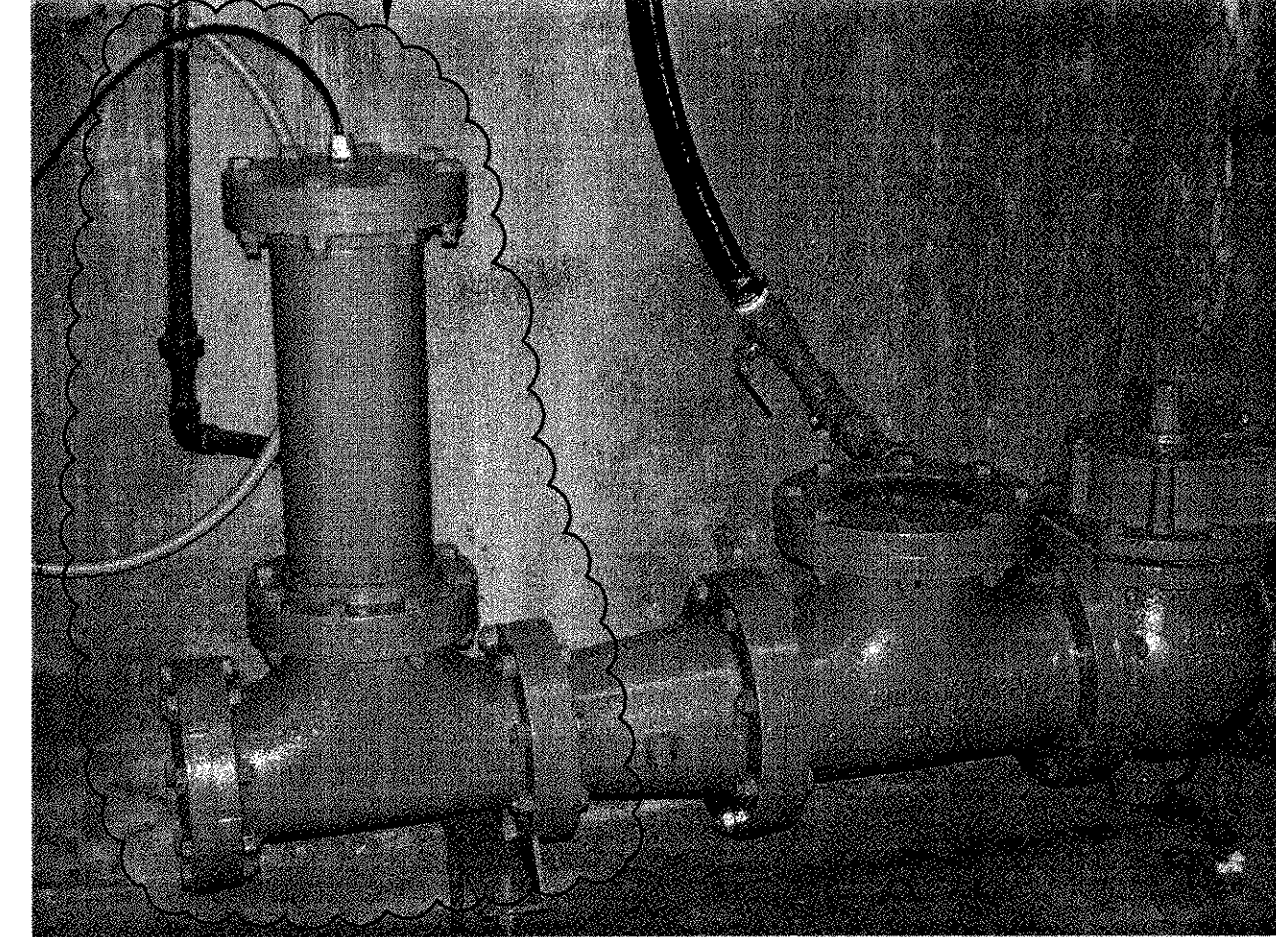
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\22 DI-604.DWG
 LAST UPDATE: Friday, December 14, 2012 8:23:18 AM
 PLOT DATE: Friday, December 14, 2012 9:38:50 AM
 ANST D - 14-Dec-12



NOTES:
 1. THE LOCATION OF THE NEW LEVEL SENSOR AND INSTALLATION DETAIL ARE SHOWN AS THE PHOTOS.



INSTALLATION LOCATION PHOTO



REFERENCE INSTALLATION PHOTO

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MS	YR	REVISIONS
1	12/11/12			REVISED FOR RECORD DRAWING DESCRIPTION

AECOM
 AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER AZIZ
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

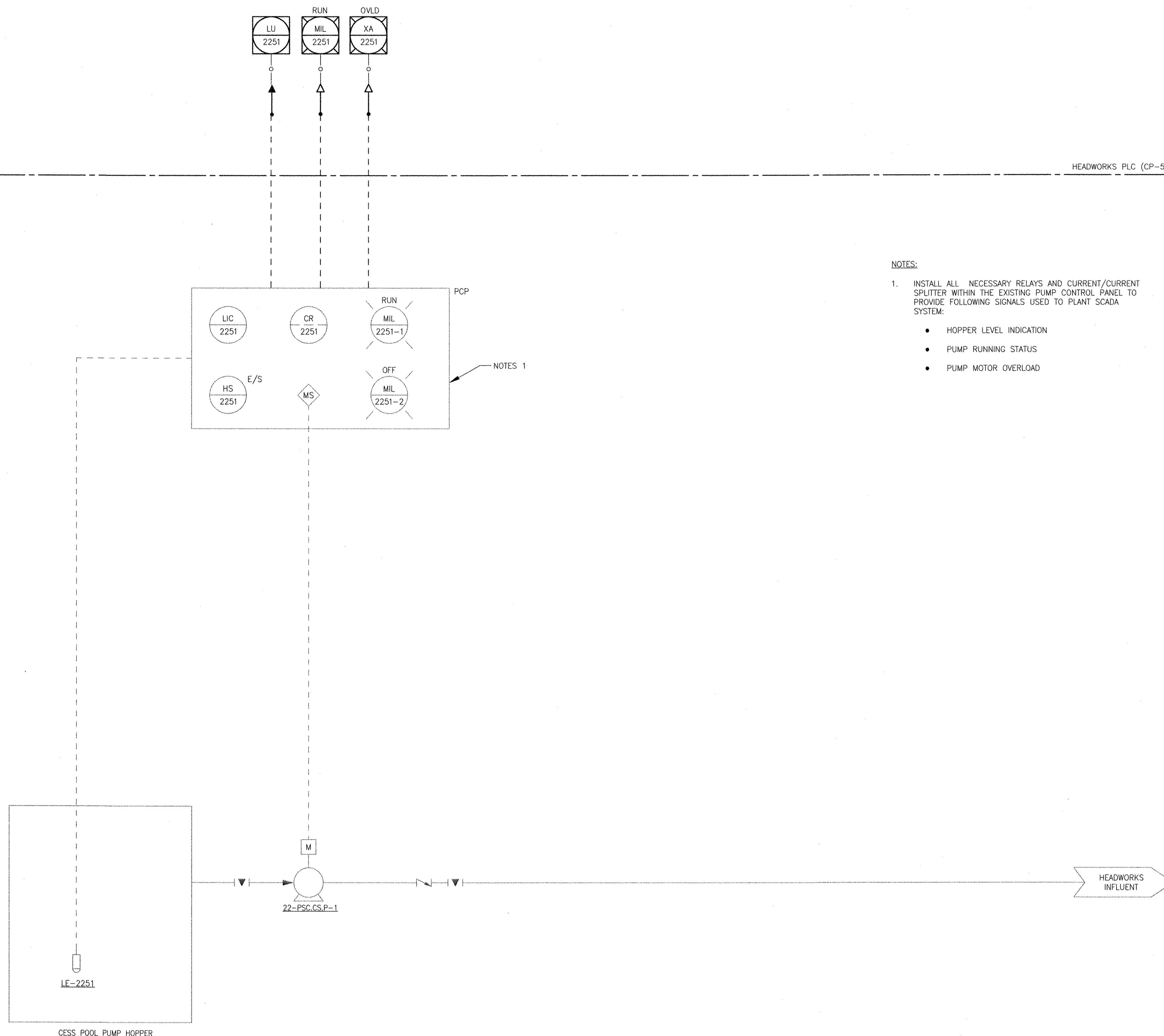
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
PRIMARY SETTLING TANKS EXISTING SCUM PUMP P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	22 DI-604
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 DI-604

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DEV\OP-2\1\SHEETS\1\22 DI-605.DWG
 LAST UPDATE: Monday, October 08, 2012 3:11:11 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:42 AM

ANSI D - 8-Oct-12



- NOTES:
- INSTALL ALL NECESSARY RELAYS AND CURRENT/CURRENT SPLITTER WITHIN THE EXISTING PUMP CONTROL PANEL TO PROVIDE FOLLOWING SIGNALS USED TO PLANT SCADA SYSTEM:
 - HOPPER LEVEL INDICATION
 - PUMP RUNNING STATUS
 - PUMP MOTOR OVERLOAD

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER NAZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 2201
 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

PRIMARY SETTLING TANKS CESS POOL PUMP CONTROL P&ID INSTRUMENTATION

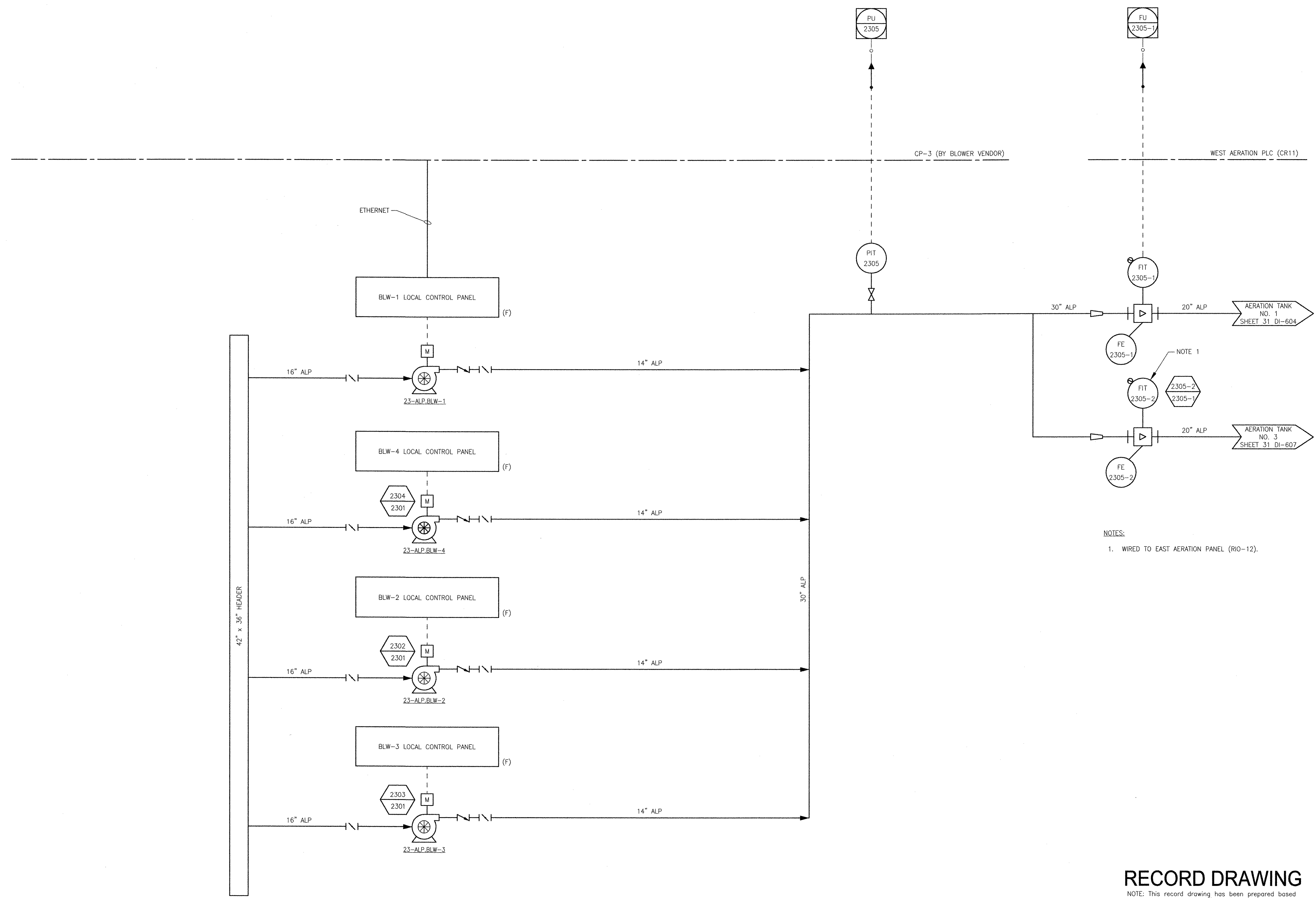
PROJECT NO:	60148648
CAD DWG FILE:	22 DI-605
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 DI-605

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DBO\OP-2\SHEETS\23 DI-601.DWG
 LAST UPDATE: Tuesday, October 23, 2012 8:32:27 AM
 PLOT DATE: Thursday, October 25, 2012 8:17:43 AM
 ANSI D - 23-Oct-12



NOTES:
 1. WIRED TO EAST AERATION PANEL (RIO-12).

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION
1	10/19/12	MS	GC	REVISED FOR RECORD DRAWING
	11/01/10	MS	GC	ADDENDUM 1

AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-8200

AECOM

RECORD DRAWINGS

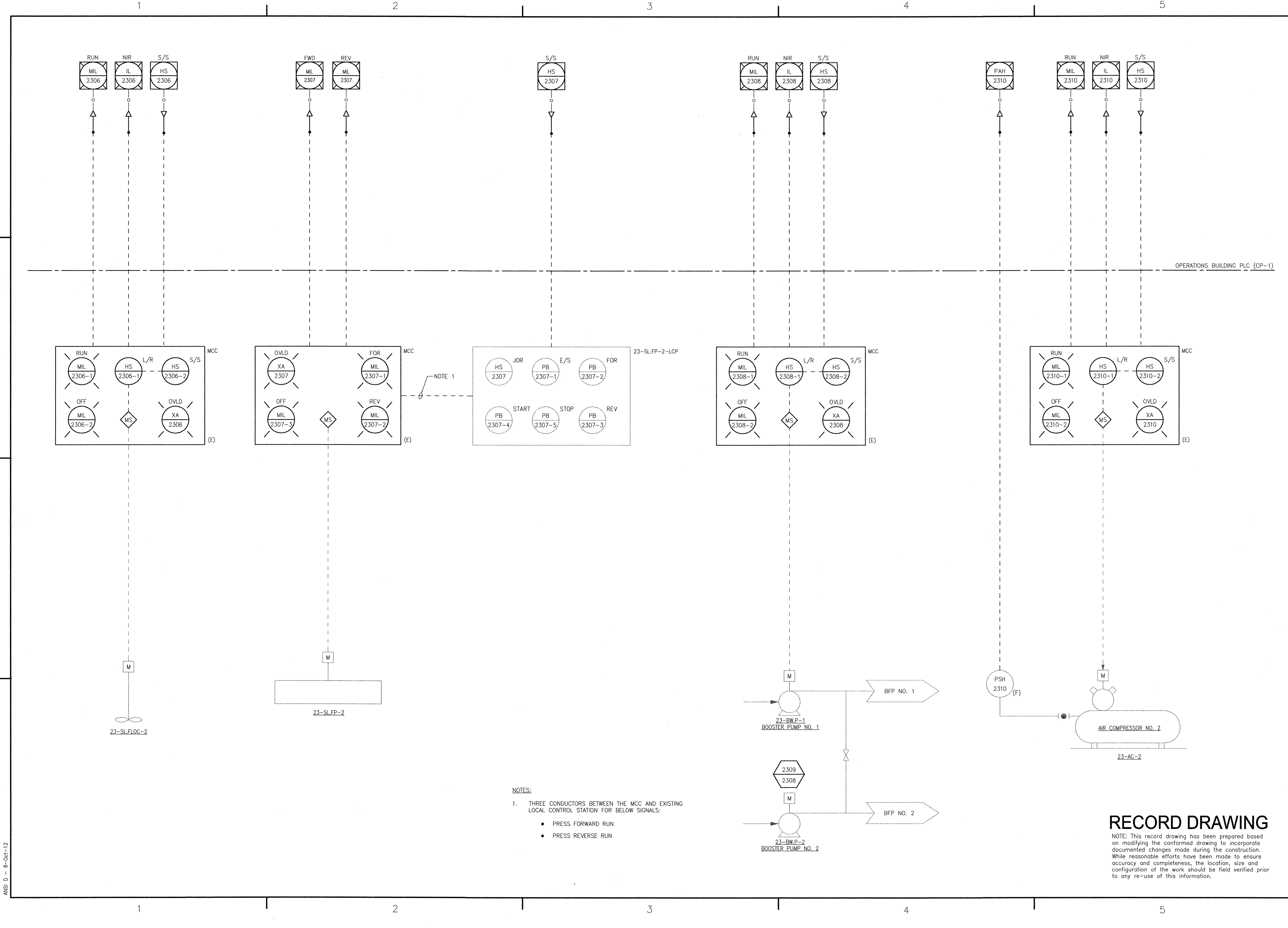
YASSER RIZK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING BLOWERS P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	23 DI-601
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 DI-601

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BROU) DP-2\3 SHEETS\31-23 DI-602.DWG
 LAST UPDATE: Monday, October 08, 2012 3:11:33 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:45 AM
 ANSI D - 8-Oct-12



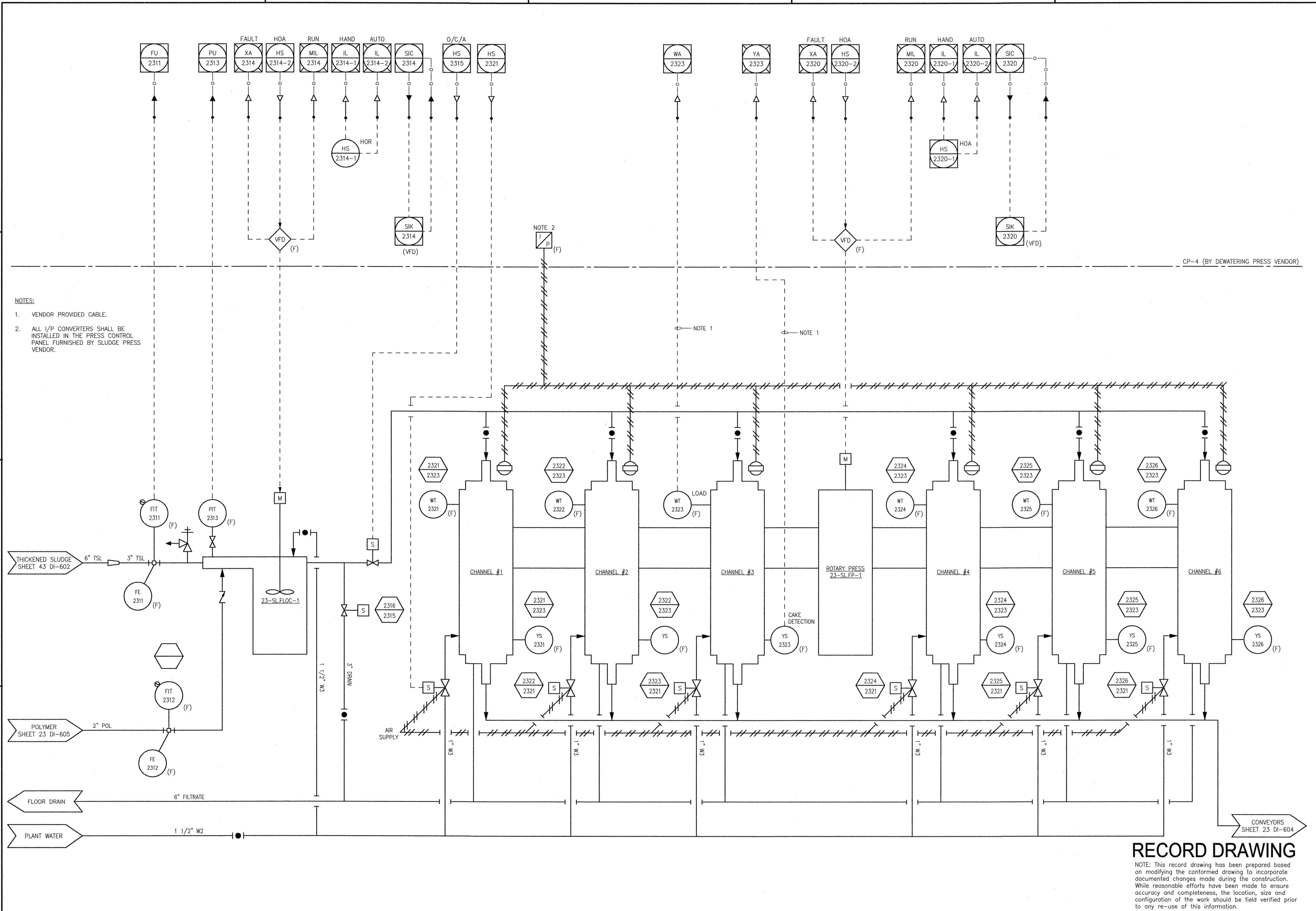
- NOTES:
- THREE CONDUCTORS BETWEEN THE MCC AND EXISTING LOCAL CONTROL STATION FOR BELOW SIGNALS:
 - PRESS FORWARD RUN
 - PRESS REVERSE RUN

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2		PROJECT NO: 60148648 CAD DWG FILE: 23 DI-602	
OPERATIONS BUILDING EXISTING BELT FILTER PRESS P&ID INSTRUMENTATION		DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED	
AECOM AECOM USA, INC. 1000 WAKEFIELD, MA 01880 PHONE (781) 246-5000		RECORD DRAWINGS	
YASSER M. NITZK REGISTERED PROFESSIONAL ENGINEER ELECTRICAL No. 9530 01/21/04 94.50		REVISED FOR RECORD DRAWING	
MARK		DATE	MADE BY / CHECKED
1		10/19/12	MS
			YR
			DESCRIPTION

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DRYOP-2\SHEETS\DI-603.DWG
 LAST UPDATE: Monday, October 08, 2012 3:11:55 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:47 AM
 ANSI D - 8-Oct-12



NOTES:
 1. VENDOR PROVIDED CABLE.
 2. ALL I/P CONVERTERS SHALL BE INSTALLED IN THE PRESS CONTROL PANEL FURNISHED BY SLUDGE PRESS VENDOR.

NOTE 2

NOTE 1

NOTE 1

CP-4 (BY DEWATERING PRESS VENDOR)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. OFFICE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5000

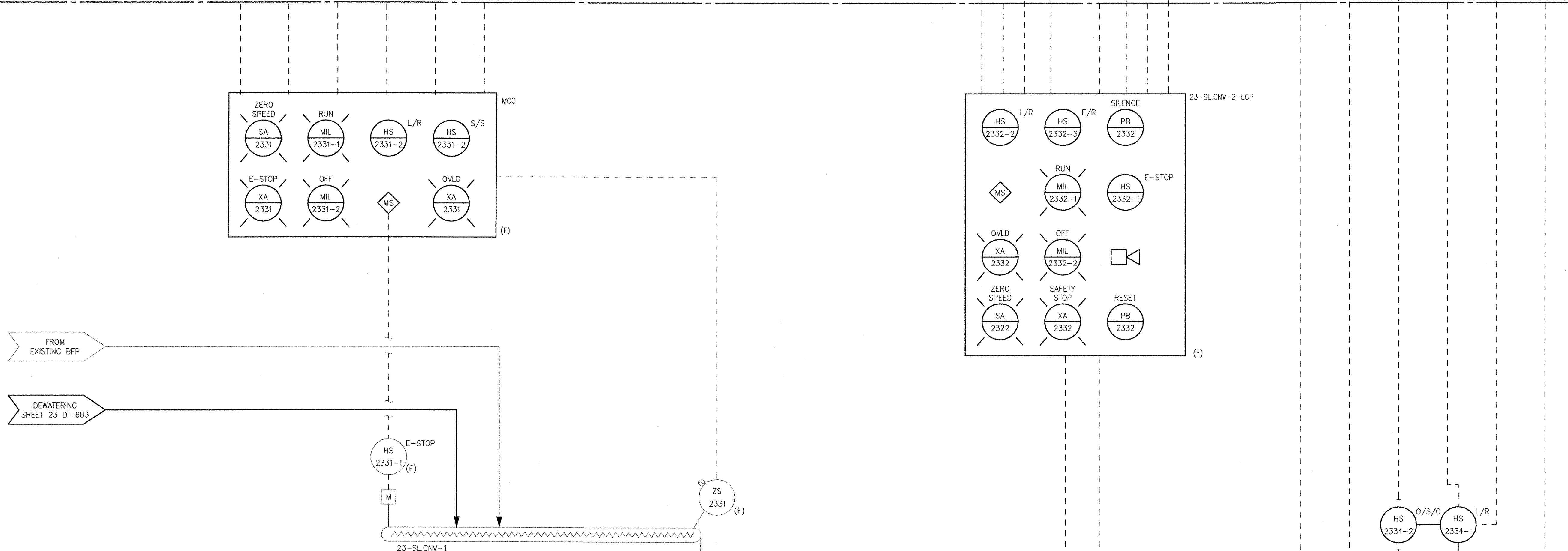
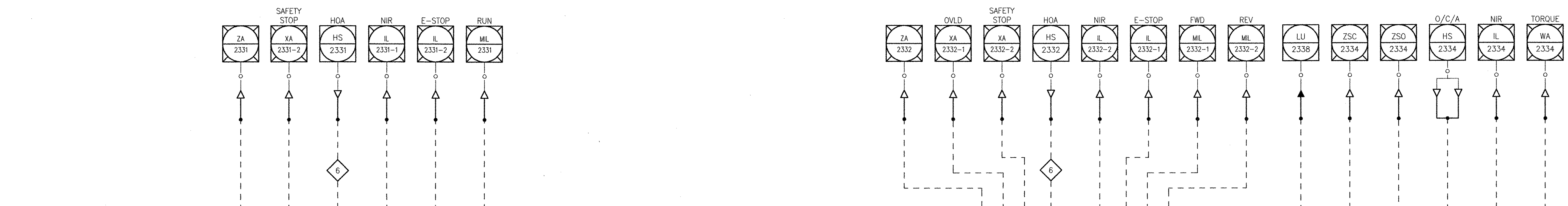
YASER AL-ARIZK
 No. 23 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING DEWATERING PRESS
 P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	23 DI-603
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 DI-603

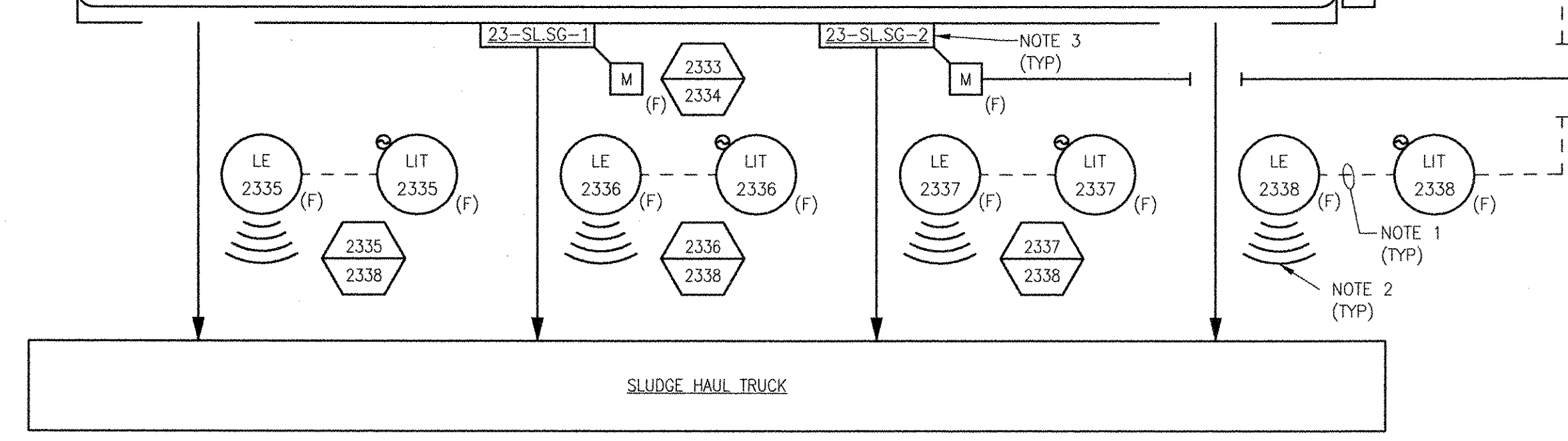
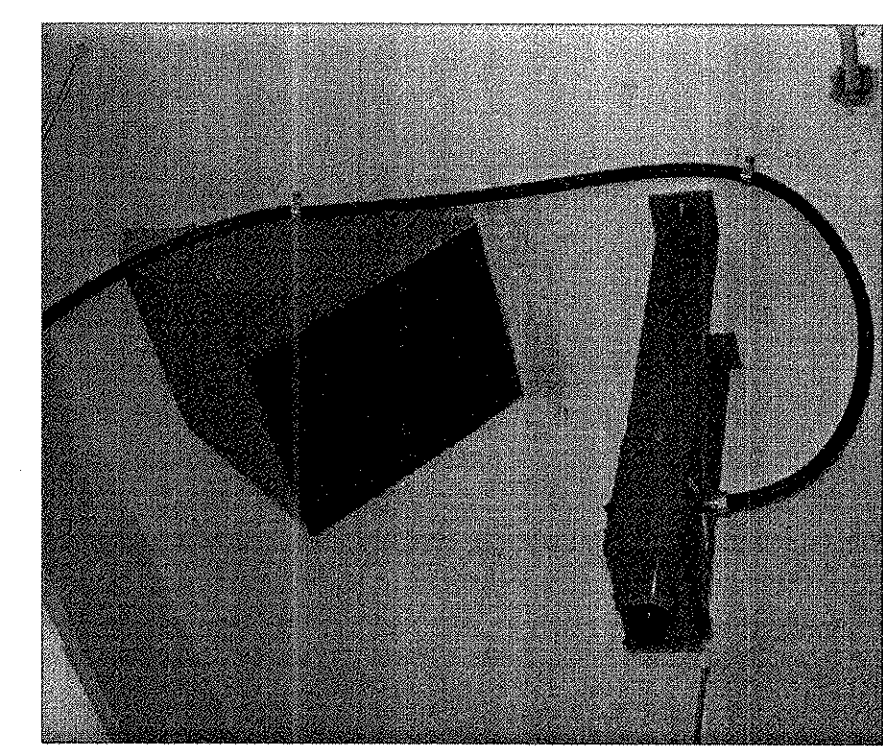
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEP\OP-2\SHEETS\VA\23 DI-604.DWG
 PLOT DATE: Thursday, October 25, 2012 8:17:49 AM
 LAST UPDATE: Monday, October 08, 2012 3:12:12 PM
 ANSI D - 8-Oct-12



INTERLOCKS:

6 SHUTDOWN CNV-2 X MINUTES AFTER THE SHUT DOWN OF CNV-1 AND PRESSES. START CNV-2 BEFORE THE START OF CNV-1 AND PRESSES.

- NOTES:**
- VENDOR PROVIDED CABLE.
 - THE GENERAL CONTRACTOR SHALL INSTALL THE LEVEL TRANSDUCERS IN ACCORDANCE WITH THE PHOTOGRAPH, VENDOR'S INSTRUCTIONS AND THE FOLLOWING:
 - THE TRANSDUCER SHALL BE INSTALLED DIRECTLY ABOVE THE TOP OF THE SLUDGE PILE.
 - THE FALLING SLUDGE FROM THE GATE SHALL NOT CUT THE BEAM OF THE TRANSDUCER AND CREATE FALSE LEVELS.
 - PROVIDE THE INSTALLATION DETAIL DRAWING OF THE TRANSDUCER.
 - SEE SECTION 14549 FOR THE OPERATION OF THE SLIDE GATES.

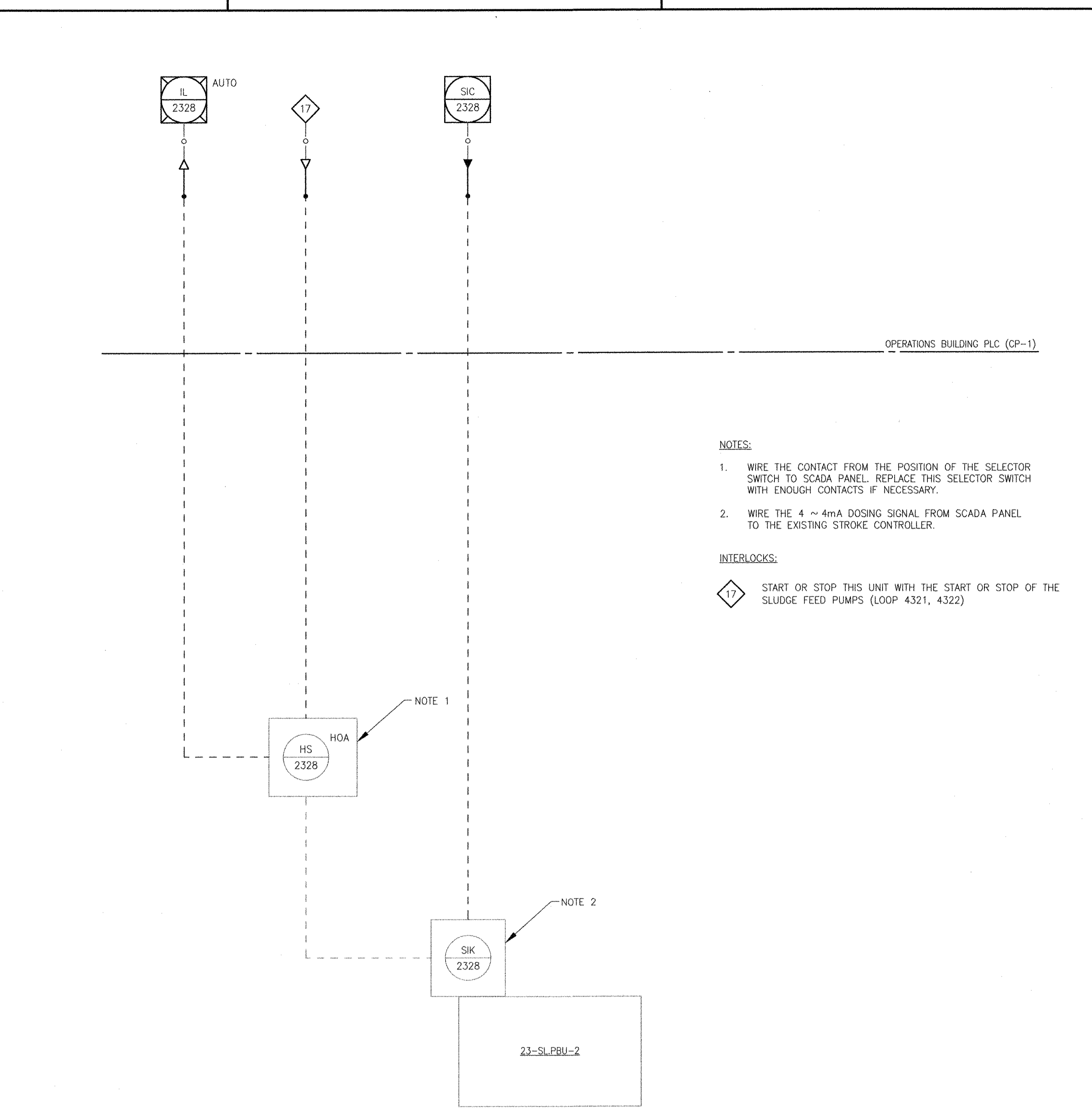
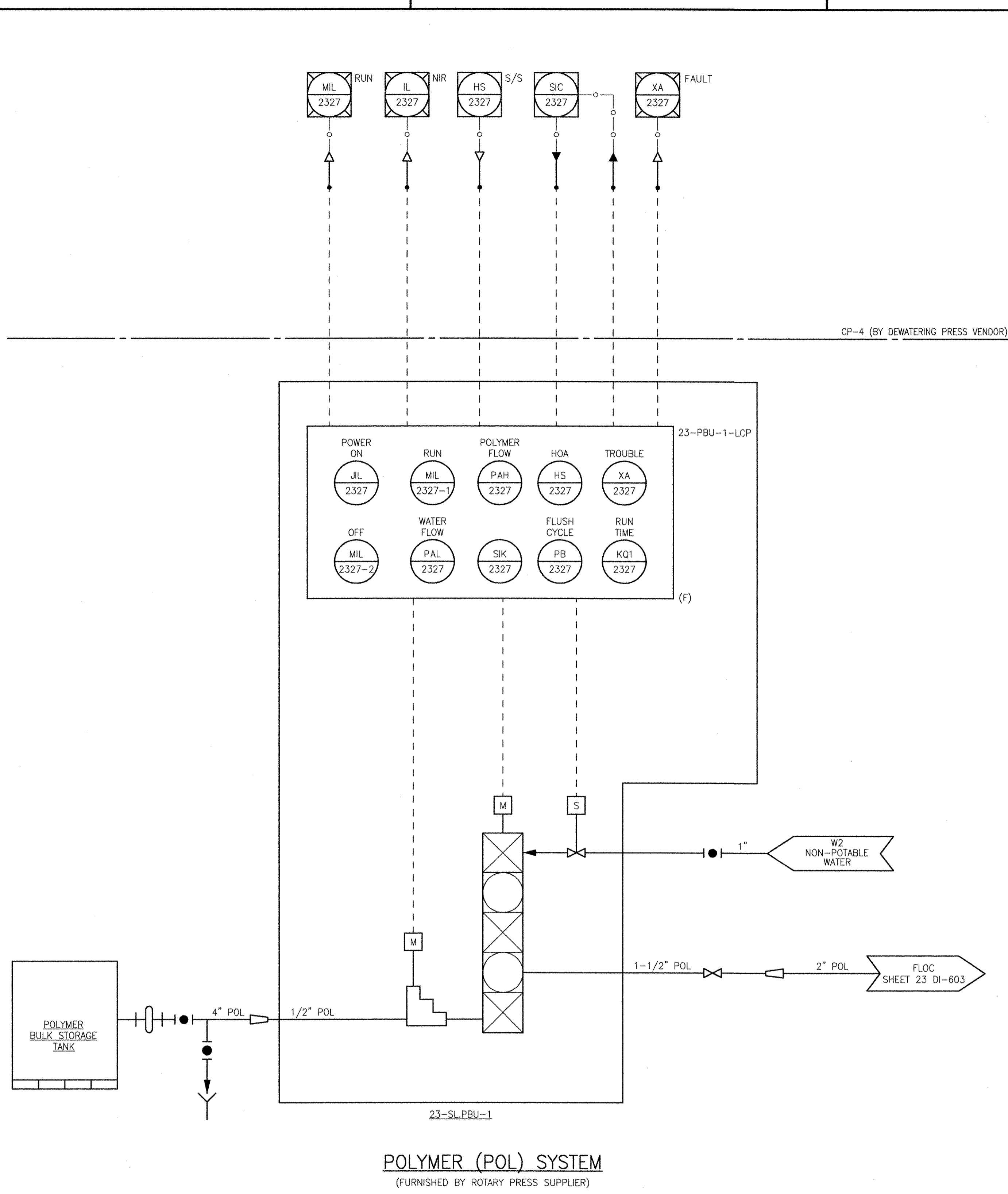


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 246-6200		RECORD DRAWINGS	
YASSI RIZK No. 025 REGISTERED PROFESSIONAL ENGINEER ELECTRICAL		9430	
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 OPERATIONS BUILDING SLUDGE CONVEYORS P&ID INSTRUMENTATION			
PROJECT NO:	60148648	MARK	1
CAD DWG FILE:	23 DI-604	DATE	10/19/12
DESIGNED BY:	G. CHEN	MS	MADE BY
DRAWN BY:	M. STEWART	YR	REVISOR
DEPT CHECK:	E. STILLWELL	REVISIONS	
PROJ CHECK:	S. THIBAUT	DESCRIPTION	
DATE:	OCTOBER 2012		
SCALE:	AS NOTED		
23 DI-604			

ANSI D - 8-Oct-12
 PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DBP\UP-2\SHEETS\DI\23 DI-605.DWG
 LAST UPDATE: Monday, October 08, 2012 3:12:26 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:51 AM



NOTES:

1. WIRE THE CONTACT FROM THE POSITION OF THE SELECTOR SWITCH TO SCADA PANEL. REPLACE THIS SELECTOR SWITCH WITH ENOUGH CONTACTS IF NECESSARY.
2. WIRE THE 4 ~ 4mA DOSING SIGNAL FROM SCADA PANEL TO THE EXISTING STROKE CONTROLLER.

INTERLOCKS:

- 17 START OR STOP THIS UNIT WITH THE START OR STOP OF THE SLUDGE FEED PUMPS (LOOP 4321, 4322)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MS	YR	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 100 EDGEMOOR DRIVE
 WASHINGTON, DC 20001
 PHONE (781) 248-5000

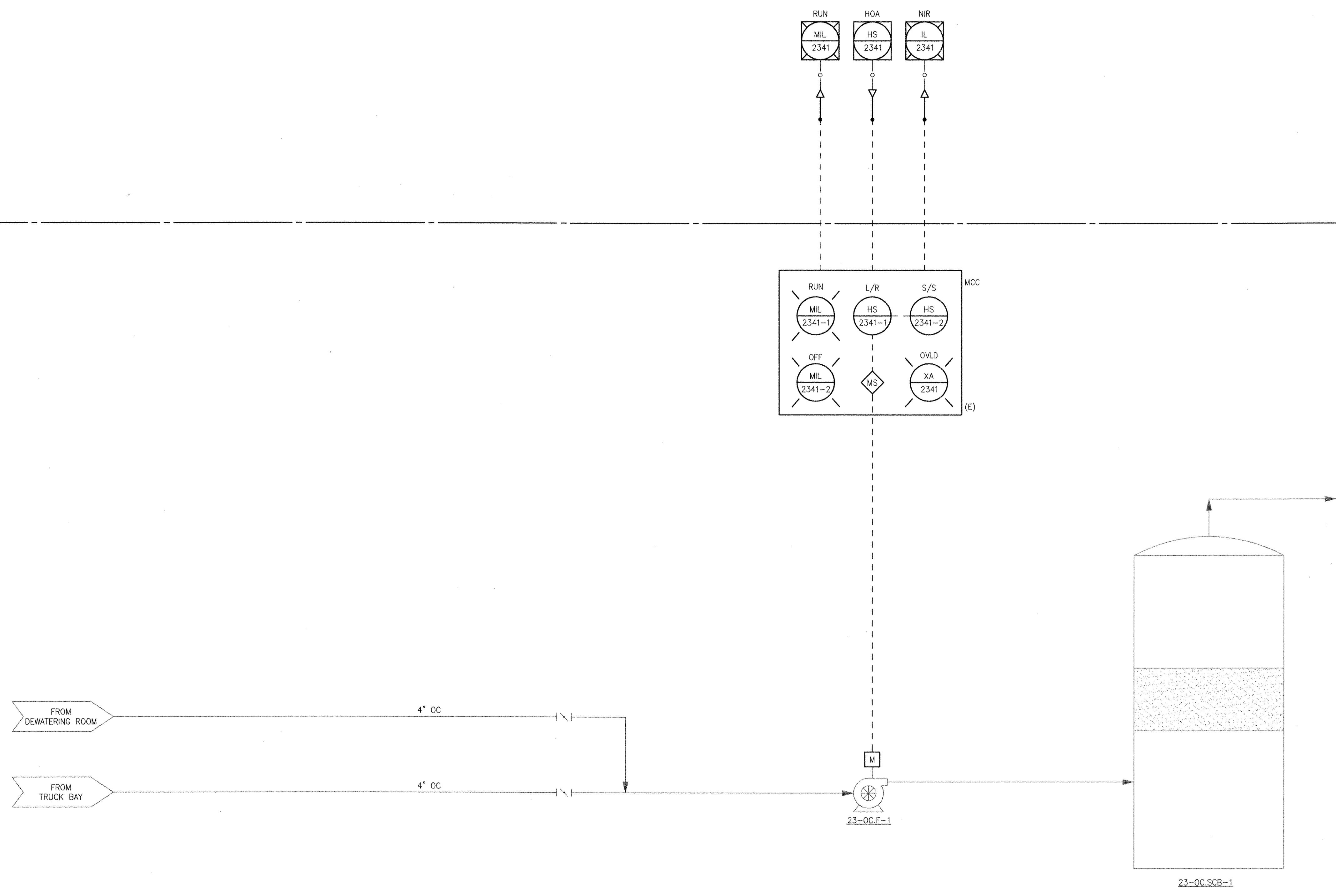
YASSER HAZEK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 05 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING POLYMER SYSTEM
 P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	23 DI-605
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 DI-605

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (B0)\DP-2\SHEETS\IN23 DI-606.DWG
 LAST UPDATE: Monday, October 08, 2012 3:12:41 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:53 AM
 ANSI D - 8-Oct-12



RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO: 60148648
 CAD DWG FILE: 23 DI-606
 DESIGNED BY: G. CHEN
 DRAWN BY: M. STEWART
 DEPT CHECK: E. STILLWELL
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

23 DI-606

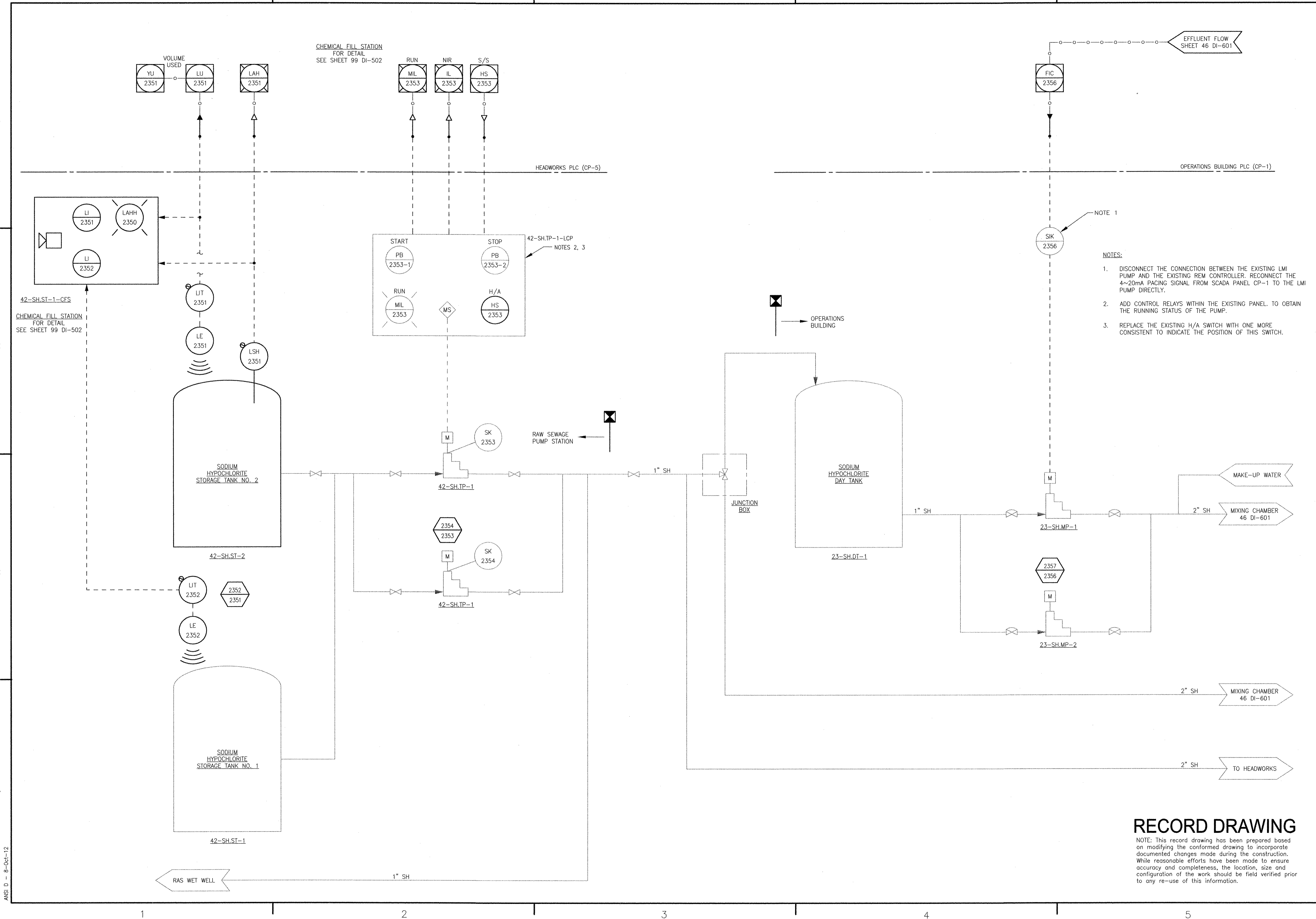
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING ODOR CONTROL SYSTEM P&ID
 INSTRUMENTATION

YASSIR A. RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 02100000000000000000
 9/4/30

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

MARK	DATE	MS	YR	REVISIONS
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
				DESCRIPTION

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DPO)\OP-2\SHEETS\03 DI-607.DWG
 LAST UPDATE: Monday, October 08, 2012 3:25:51 PM PLOT DATE: Thursday, October 25, 2012 8:17:55 AM
 ANSI D - 8-Oct-12



- NOTE 1
- NOTES:
- DISCONNECT THE CONNECTION BETWEEN THE EXISTING LMI PUMP AND THE EXISTING REM CONTROLLER. RECONNECT THE 4~20mA PACING SIGNAL FROM SCADA PANEL CP-1 TO THE LMI PUMP DIRECTLY.
 - ADD CONTROL RELAYS WITHIN THE EXISTING PANEL TO OBTAIN THE RUNNING STATUS OF THE PUMP.
 - REPLACE THE EXISTING H/A SWITCH WITH ONE MORE CONSISTENT TO INDICATE THE POSITION OF THIS SWITCH.

REVISIONS			
NO.	DATE	MADE BY	DESCRIPTION
1	10/19/12	MS	REVISED FOR RECORD DRAWING

AECOM USA, INC. 10000 WALKERFIELD DRIVE WALKERFIELD, MD 21150 PHONE (781) 248-6200
AECOM
 RECORD DRAWINGS
 YASER N. RIZK No. 9430 REGISTERED PROFESSIONAL ENGINEER ELECTRICAL
 CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2
OPERATIONS BUILDING SODIUM HYPOCHLORITE SYSTEM INSTRUMENTATION
 PROJECT NO: 60148648
 CAD DWG FILE: 23 DI-607
 DESIGNED BY: G. CHEN
 DRAWN BY: M. STEWART
 DEPT CHECK: E. STILLWELL
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED
23 DI-607

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

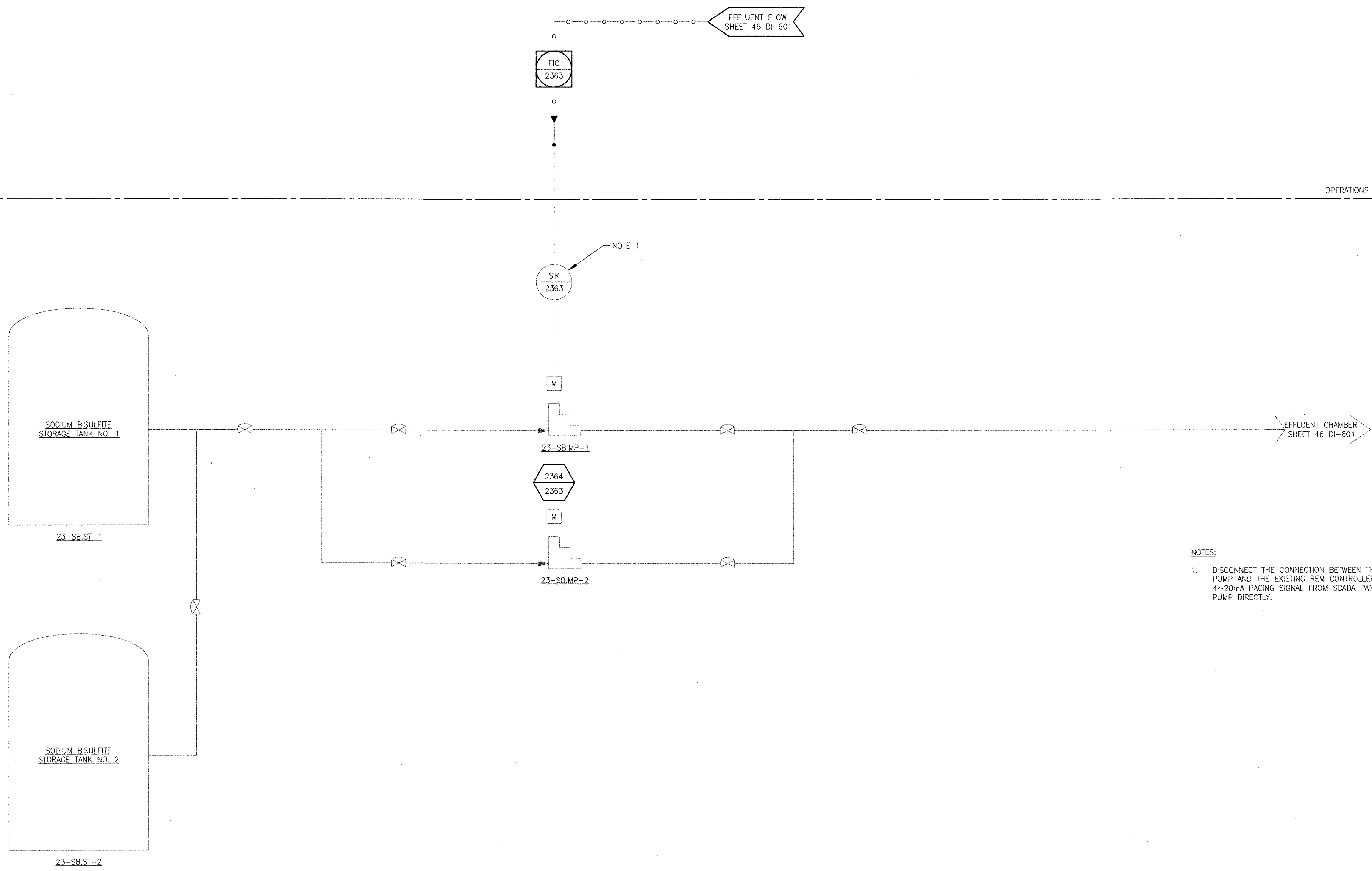
1

2

3

4

5



OPERATIONS BUILDING PLC (CP-1)

NOTE 1

- NOTES:
- DISCONNECT THE CONNECTION BETWEEN THE EXISTING LMI PUMP AND THE EXISTING REM CONTROLLER. RECONNECT THE 4~20mA PACING SIGNAL FROM SCADA PANEL CP-1 TO THE LMI PUMP DIRECTLY.

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DRUGS\2\SHEETS\23 DI-608.DWG
 LAST UPDATE: Monday, October 08, 2012 3:13:01 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:56 AM
 ANSI D - 8-Oct-12

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MS	MS	REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 STATE STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSER A. RIZK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**OPERATIONS BUILDING SODIUM BISULFITE
 SYSTEM P&ID
 INSTRUMENTATION**

PROJECT NO:	60148648
CAD DWG FILE:	23 DI-608
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

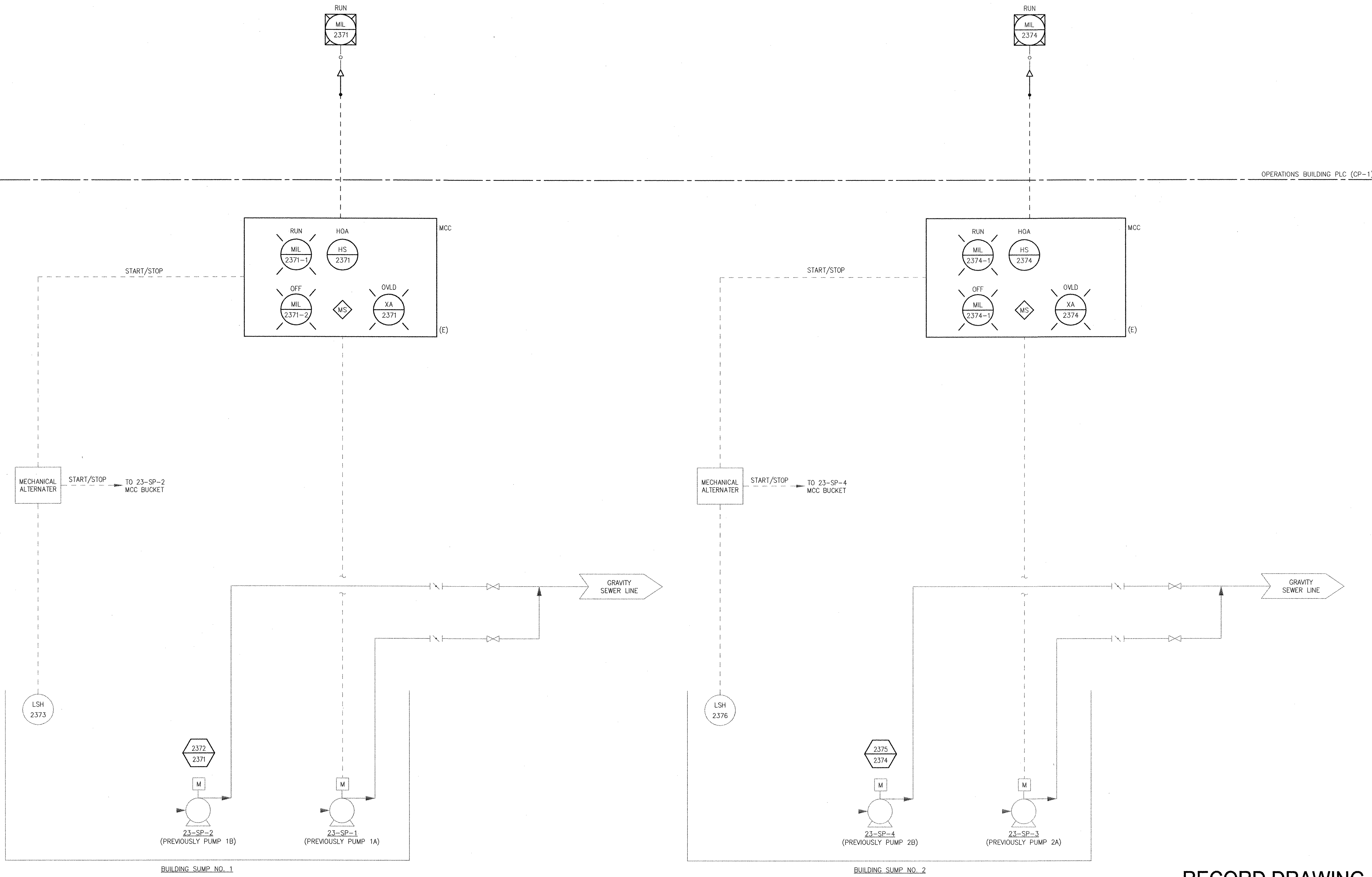
23 DI-608

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DRUG\UP-2\SHEETS\DI-23 DI-609.DWG
 LAST UPDATE: Monday, October 08, 2012 3:13:10 PM
 PLOT DATE: Thursday, October 25, 2012 8:17:58 AM

ANSI D - 8-Oct-12



OPERATIONS BUILDING PLC (CP-1)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS			
MARK	DATE	MS	YR
1	10/19/12	MS	12

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. 1000
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

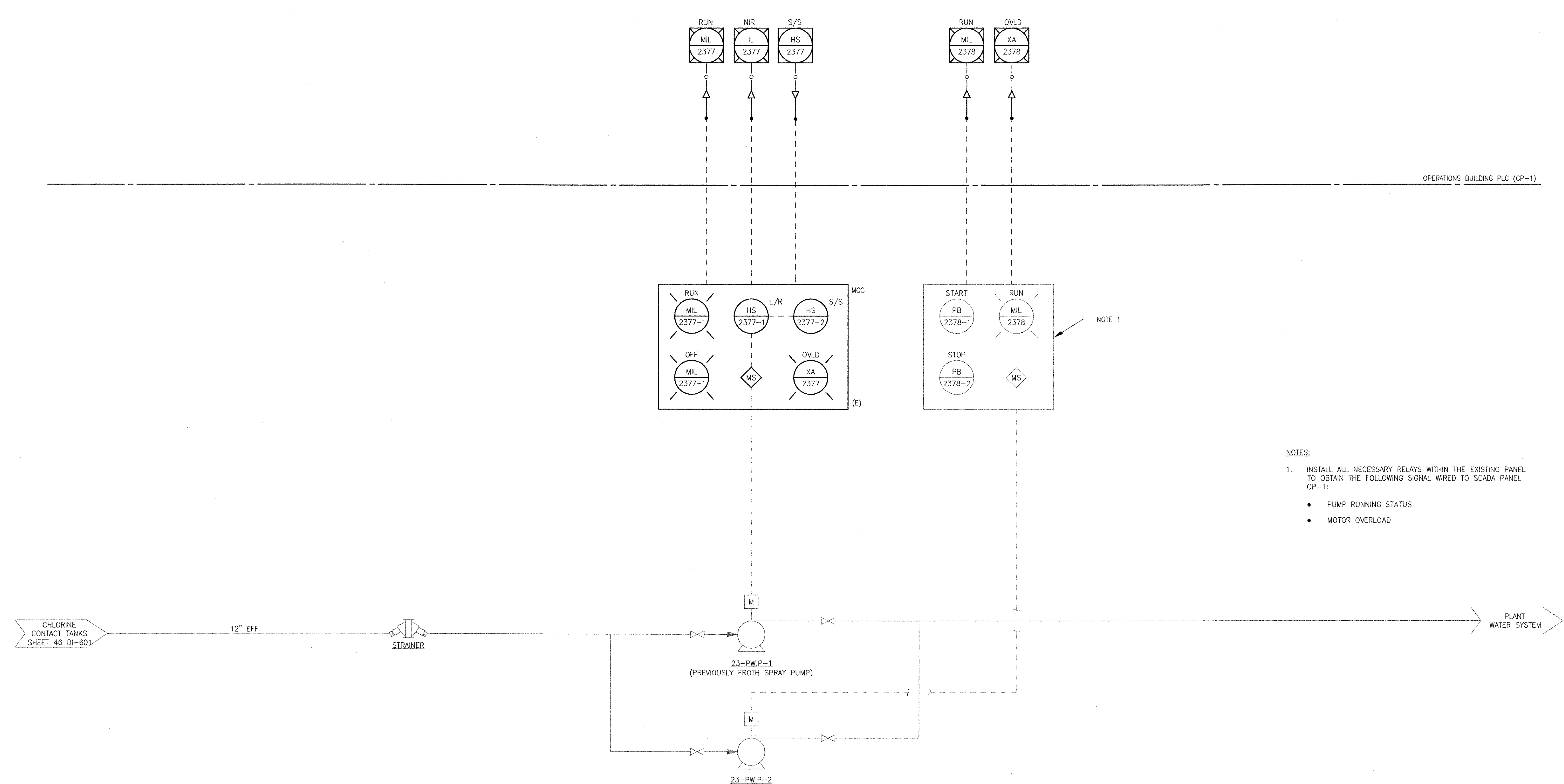
YASSER M. YASSER
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING SUMP PUMP P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	23 DI-609
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 DI-609

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DRUG UP-2\SHEETS\DI-610.DWG
 LAST UPDATE: Monday, October 08, 2012 3:13:18 PM PLOT DATE: Thursday, October 25, 2012 8:18:00 AM
 ANSI D - 8-Oct-12



OPERATIONS BUILDING PLC (CP-1)

NOTES:

- INSTALL ALL NECESSARY RELAYS WITHIN THE EXISTING PANEL TO OBTAIN THE FOLLOWING SIGNAL WIRED TO SCADA PANEL CP-1:
 - PUMP RUNNING STATUS
 - MOTOR OVERLOAD

NOTE 1

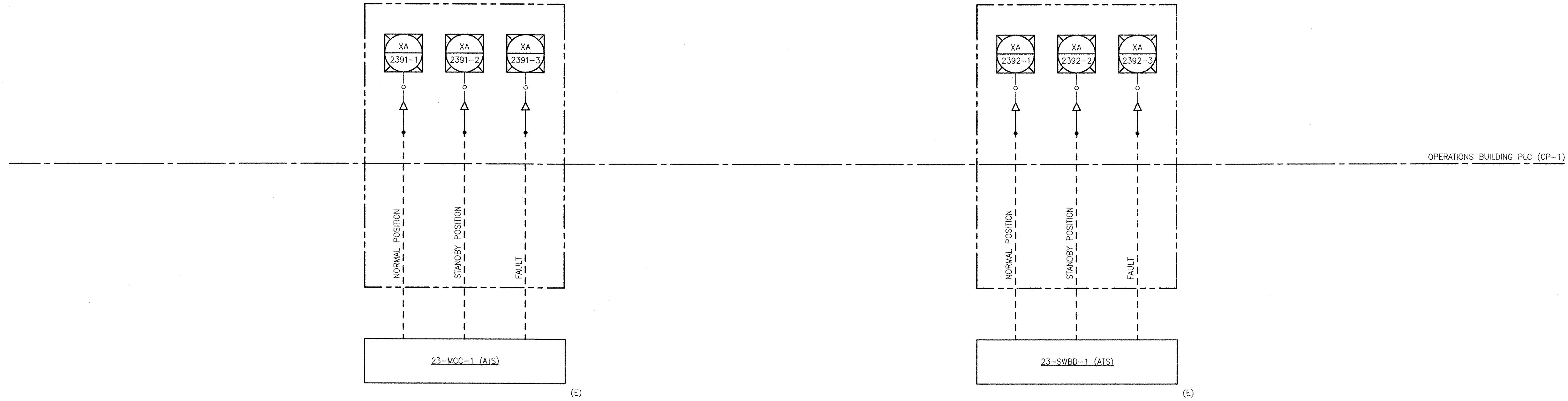
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

<p>PROJECT NO: 60148648 CAD DWG FILE: 23 DI-610 DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED</p>		<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 OPERATIONS BUILDING PLANT WATER PUMPS P&ID INSTRUMENTATION</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MS	YR	DESCRIPTION	1	10/19/12			REVISED FOR RECORD DRAWING
MARK	DATE	MS	YR	DESCRIPTION											
1	10/19/12			REVISED FOR RECORD DRAWING											
<p>AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 246-5000</p>		<p>AECOM</p>		<p>RECORD DRAWINGS</p>											
<p>YASSER A. RIZK REGISTERED PROFESSIONAL ENGINEER ELECTRICAL No. 65 9/4/30</p>		<p>23 DI-610</p>													

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DR\UP-2\SHEETS\DI-23 DI-611.DWG
 LAST UPDATE: Monday, October 08, 2012 3:13:30 PM PLOT DATE: Thursday, October 25, 2012 8:18:01 AM

ANSI D - 8-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

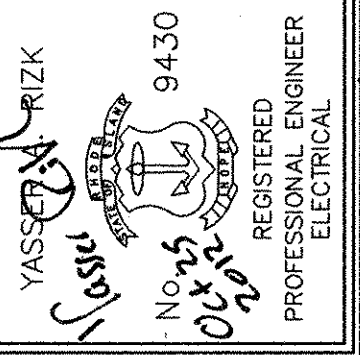
PROJECT NO: 60148648
 CAD DWS FILE: 23 DI-611
 DESIGNED BY: G. CHEN
 DRAWN BY: M. STEWART
 DEPT CHECK: E. STILLWELL
 PROJ CHECK: S. THIBAUT

DATE: OCTOBER 2012
 SCALE: AS NOTED

23 DI-611

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

OPERATIONS BUILDING ELECTRICAL SIGNALS
 P&ID
 INSTRUMENTATION



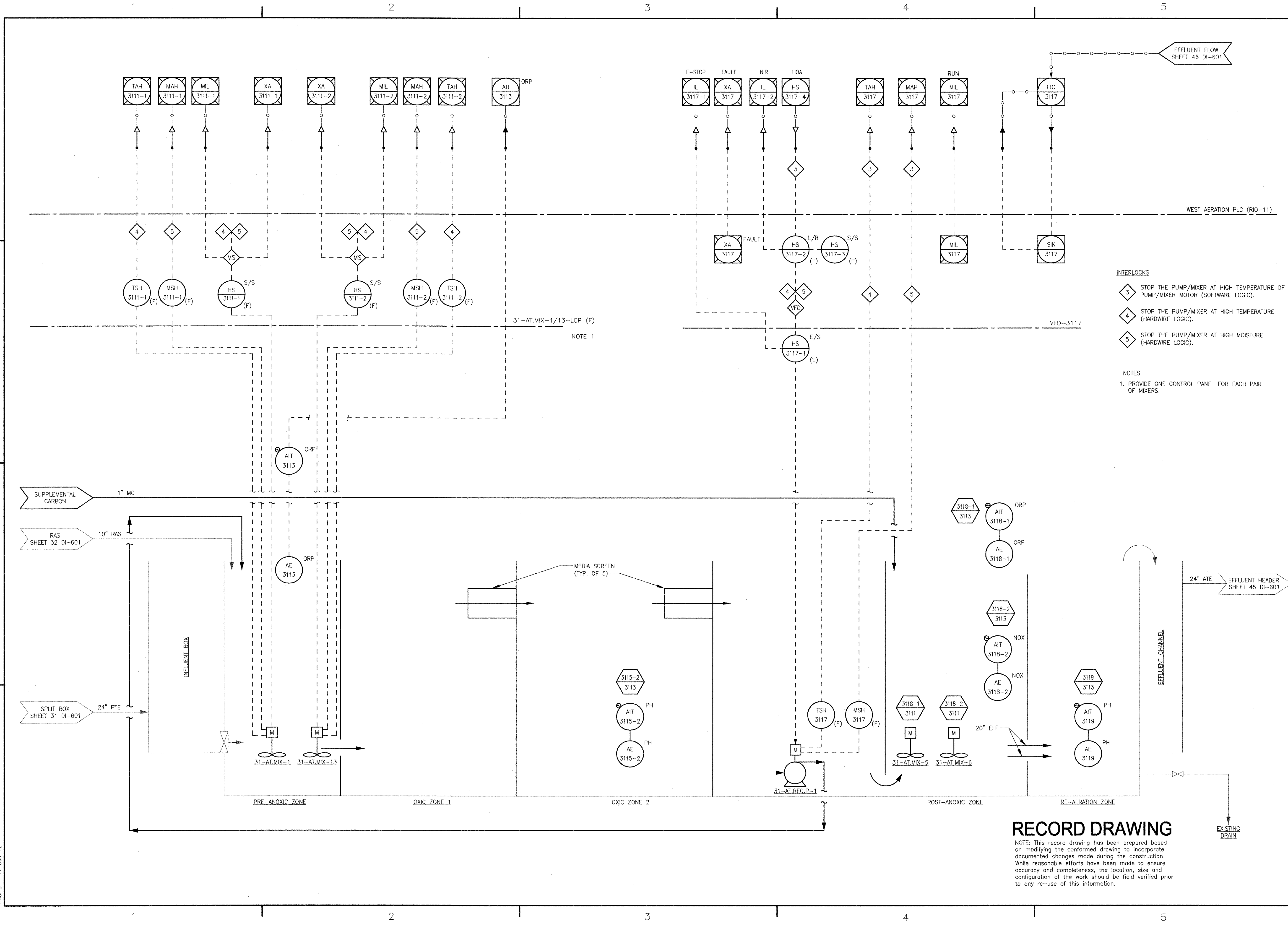
AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200



RECORD DRAWINGS

MARK	DATE	MS	YR	REVISIONS
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\UP-3\SHEETS\031 DI-601.DWG
 LAST UPDATE: Friday, December 14, 2012 9:43:24 AM
 ANSI D - 14-Dec-12



EFFLUENT FLOW SHEET 46 DI-601

WEST AERATION PLC (RIO-11)

31-AT.MIX-1/13-LCP (F)
NOTE 1

VFD-3117

- INTERLOCKS**
- 3 STOP THE PUMP/MIXER AT HIGH TEMPERATURE OF PUMP/MIXER MOTOR (SOFTWARE LOGIC).
 - 4 STOP THE PUMP/MIXER AT HIGH TEMPERATURE (HARDWARE LOGIC).
 - 5 STOP THE PUMP/MIXER AT HIGH MOISTURE (HARDWARE LOGIC).
- NOTES**
1. PROVIDE ONE CONTROL PANEL FOR EACH PAIR OF MIXERS.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION	REVISIONS
2	12/11/12	MS	YR	REVISED FOR RECORD DRAWING	
1	5/16/11	ST	MS	REVISED MIXER CONTROL PANELS	
	11/01/10	MS	GC	ADDENDUM 1	

AECOM USA, INC.
 701 EDgewater Drive
 Bedford, MA 01730
 PHONE (781) 246-8000

AECOM

RECORD DRAWINGS

YASSEER ANWAR
 No. 14
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

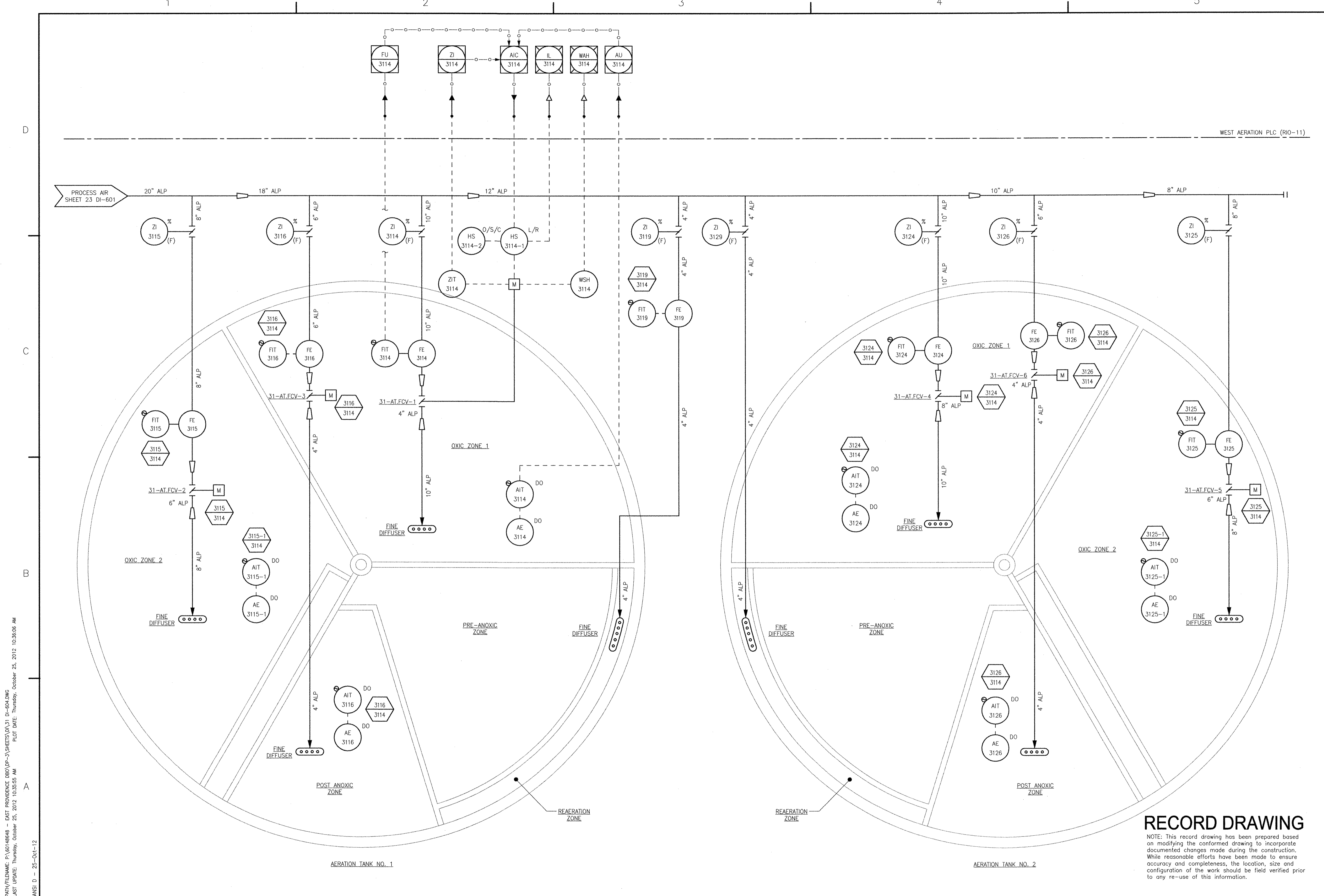
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
AERATION TANK NO. 1 P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	31 DI-602
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 DI-602

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



ANSI D - 25-04-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BDD)\DP-3\SHEETS\01\31 DI-604.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:35:55 AM
 PLOT DATE: Thursday, October 25, 2012 10:36:06 AM

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	11/15/11	DA	YR	REVISED LOOP NUMBERING
	11/01/10	MS	GC	ADDENDUM 1

AECOM
 AECOM USA, INC.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER ARIZK
 No. 9430
 Registered Professional Engineer
 Electrical

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

AERATION TANKS NO. 1 AND 2 DO CONTROL

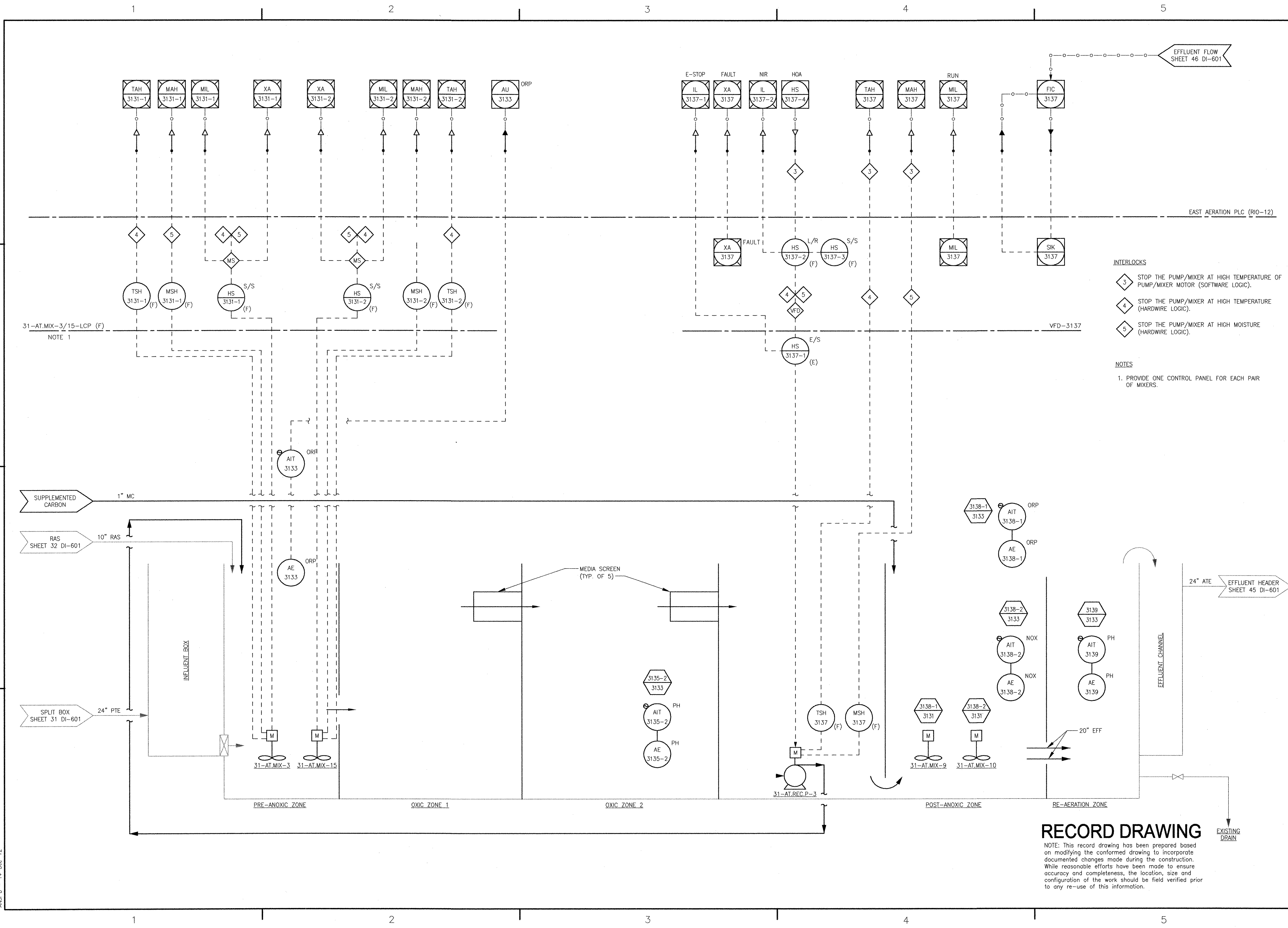
P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	31 DI-604
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 DI-604

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

P&ID/INSTRUMENTATION - EAST PROVIDENCE (REV'D) DP-3 SHEETS (V.13) - DI-605.DWG
 PLOT DATE: Friday, December 14, 2012 9:46:10 AM
 LAST UPDATE: Friday, December 14, 2012 9:44:23 AM
 ANSII D - 14-DEC-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS		DESCRIPTION	
NO.	DATE	BY	DESCRIPTION
3	12/11/12	MS	REVISED FOR RECORD DRAWING
2	11/15/11	DA	ADDED PH, NOX, ORP INSTRUMENTS
1	5/16/11	ST	REVISED MIXER CONTROL PANELS
	11/01/10	GC	ADDENDUM 1

 AECOM USA, INC. 701 EDGEWATER DRIVE EAST PROVIDENCE, RI 02914 PHONE (981) 249-9200	RECORD DRAWINGS
-------------------------------------------------------------------------------------------------	------------------------

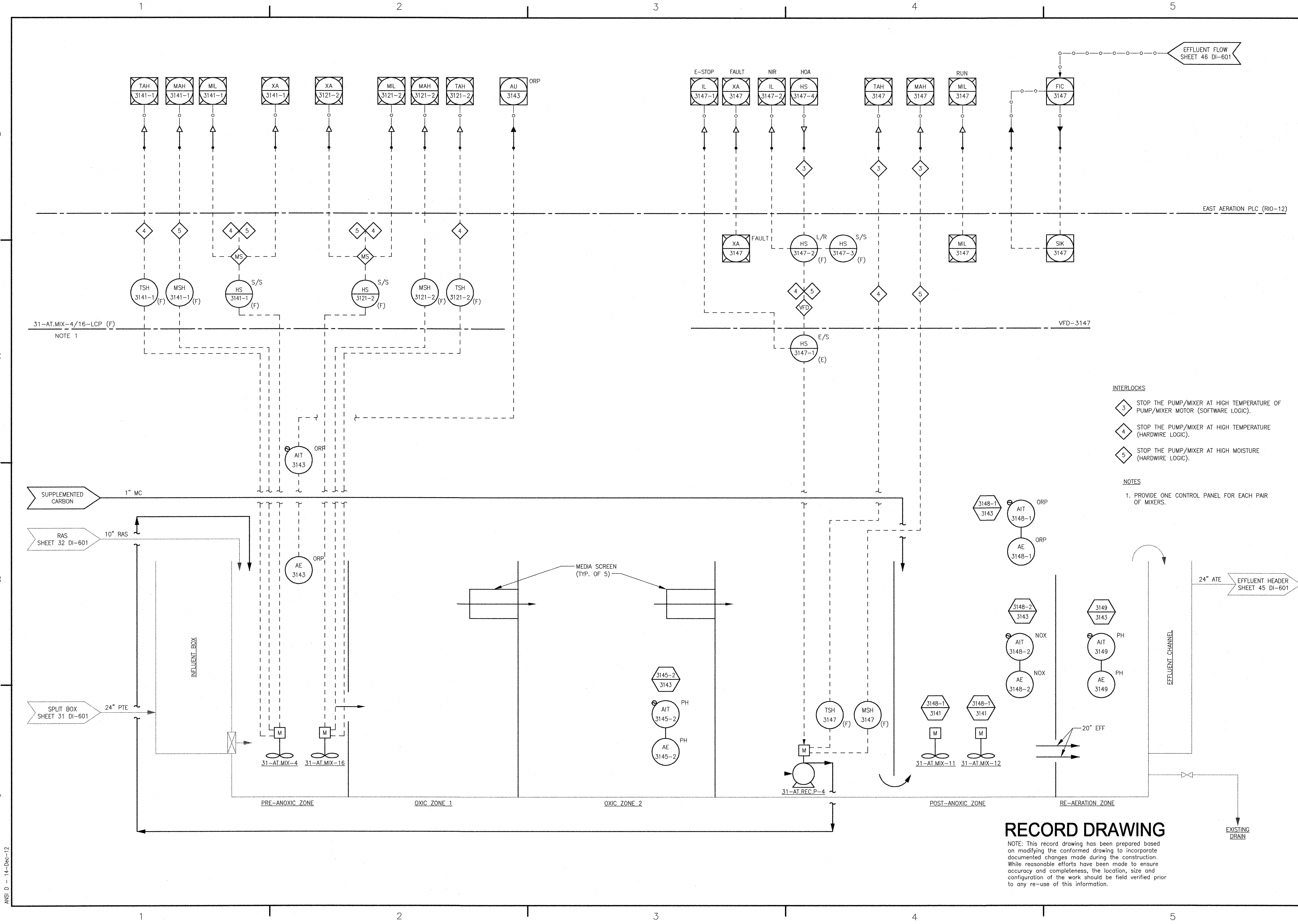
	YASSER R. RIZK REGISTERED PROFESSIONAL ENGINEER ELECTRICAL
--	-------------------------------------------------------------------------

CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3	AERATION TANK NO. 3 P&ID INSTRUMENTATION
---------------------------------------------------------------	--------------------------------------------------------

PROJECT NO:	60148648
CAD DWG FILE:	31 DI-605
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 DI-605

P:\HW\F\ENR\PA\60148648 - EAST PROVIDENCE DP-3 SHEETS\031 DI-606.DWG
 PLOT DATE: Friday, December 14, 2012 9:46:11 AM
 LAST UPDATE: Friday, December 14, 2012 9:44:53 AM



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

- INTERLOCKS**
- 3 STOP THE PUMP/MIXER AT HIGH TEMPERATURE OF PUMP/MIXER MOTOR (SOFTWARE LOGIC).
 - 4 STOP THE PUMP/MIXER AT HIGH TEMPERATURE (HARDWARE LOGIC).
 - 5 STOP THE PUMP/MIXER AT HIGH MOISTURE (HARDWARE LOGIC).
- NOTES**
- PROVIDE ONE CONTROL PANEL FOR EACH PAIR OF MIXERS.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
3	12/11/12	MS	MS	REVISED FOR RECORD DRAWING
4	11/15/11	DA	YR	ADDED PH, NOX, ORP INSTRUMENTS
5	5/16/11	ST	YR	REVISED MIXER CONTROL PANELS
6	11/01/10	MS	GC	ADDENDUM 1

AECOM
 AECOM USA, INC.
 101 EDgewater Drive
 Littleton, CO 80120
 PHONE (781) 248-8200

RECORD DRAWINGS

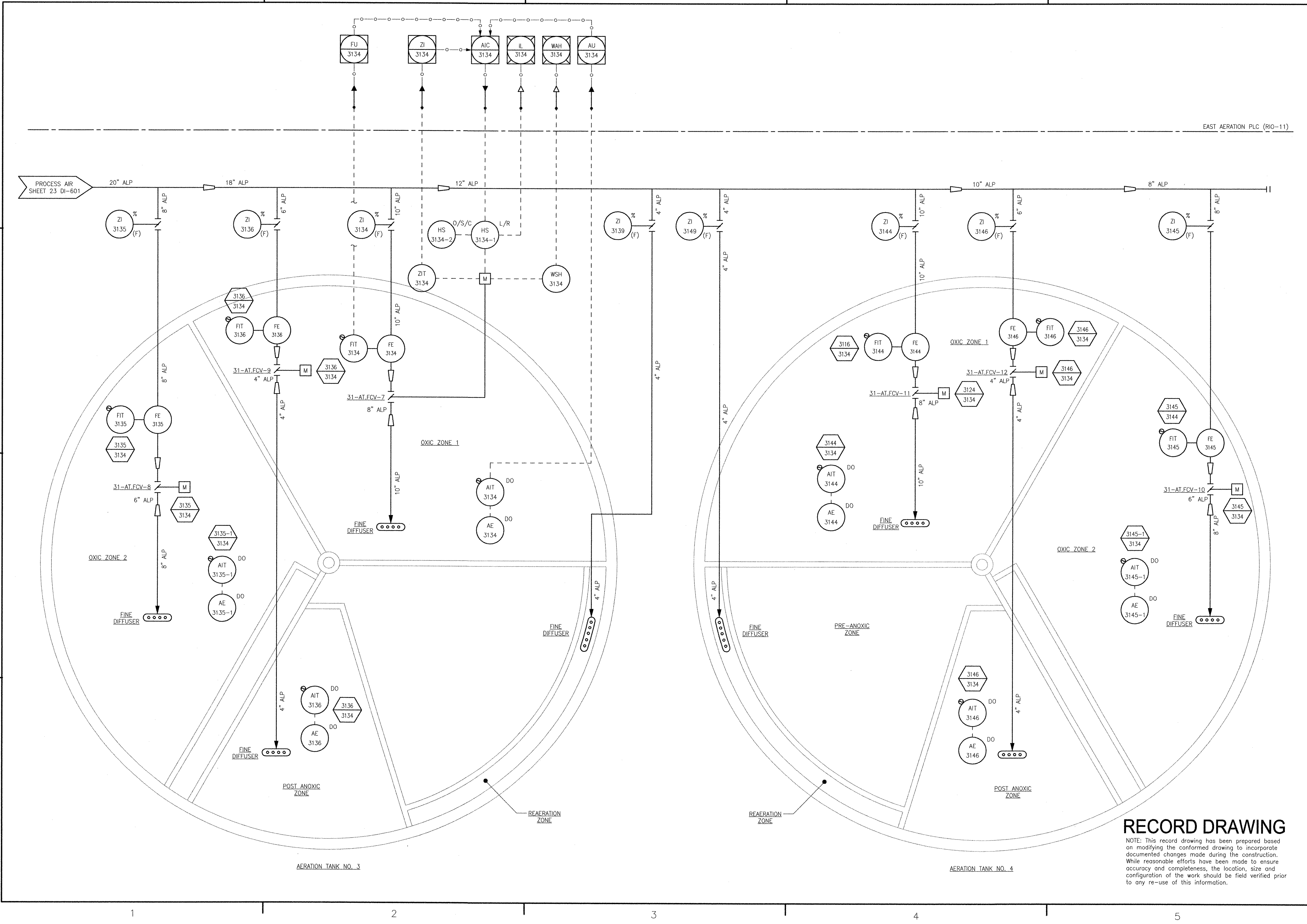
YASSER A. YAZK
 No. 1112
 Dec 12 94-30
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
AERATION TANK NO. 4 P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	31 DI-606
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 DI-606

PAI/FILENAME: P:\60148648 - EAST PROVIDENCE DRG\DP-3\SHEETS\01_31_DI-607.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:39:04 AM
 PLOT DATE: Thursday, October 25, 2012 10:39:15 AM
 ANSI D - 25-Oct-12



RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. 100 WASHINGTON STREET WALLENDALE, MA 01955 PHONE (781) 246-5200		RECORD DRAWINGS	
YASSER AL-RIZZIK No. 95 REGISTERED PROFESSIONAL ENGINEER ELECTRICAL		94-30	
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3			
AERATION TANKS NO. 3 & 4 DO CONTROL P&ID			
INSTRUMENTATION			
PROJECT NO:	60148648	DESIGNED BY:	G. CHEN
CAD DWG FILE:	31 DI-607	DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL	PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012	SCALE:	AS NOTED
31 DI-607		REVISIONS	
MARK	DATE	MADE BY	CHECKED
2	10/19/12	MS	YR
	11/15/11	DA	YR
	11/01/10	MS	GC
		ADDENDUM	1
		REVIS	FOR RECORD DRAWING

1

2

3

4

5

D

C

B

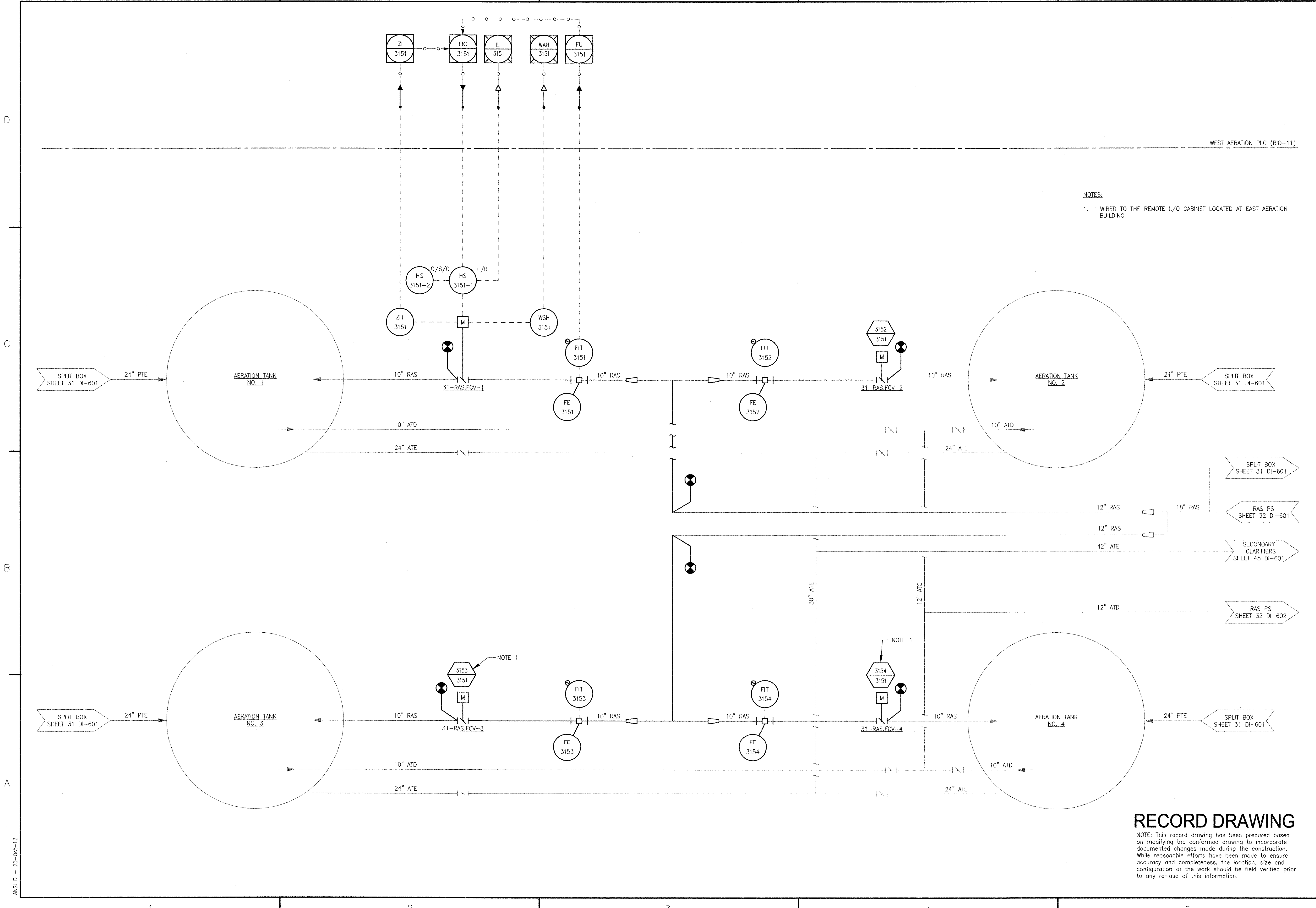
A

D

C

B

A



WEST AERATION PLC (RIO-11)

NOTES:
 1. WIRED TO THE REMOTE I/O CABINET LOCATED AT EAST AERATION BUILDING.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
	DATE
	MADE BY
	YR

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 45
 9-4-30

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
AERATION TANKS SLUDGE SYSTEM
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	31 DI-608
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 DI-608

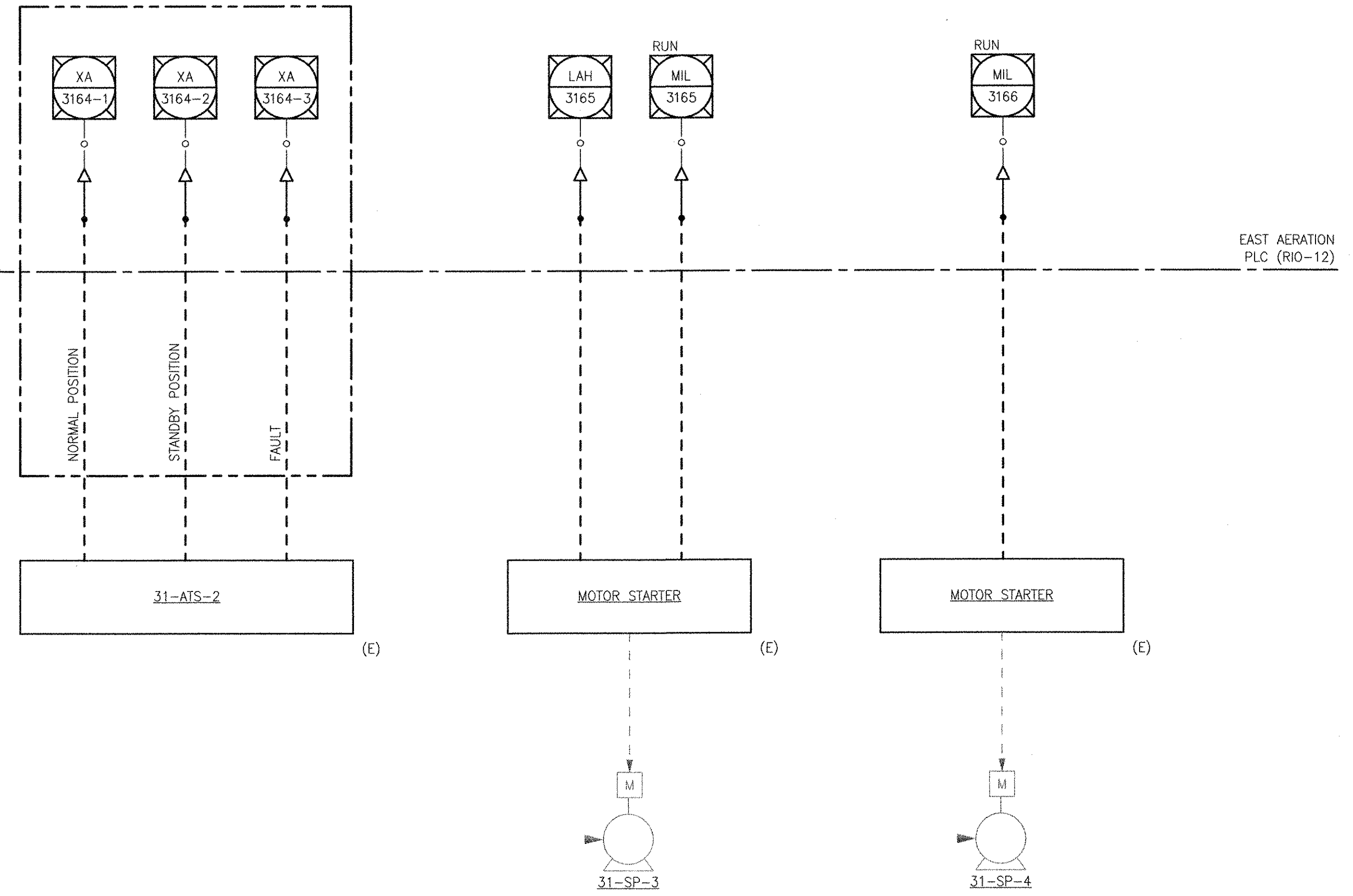
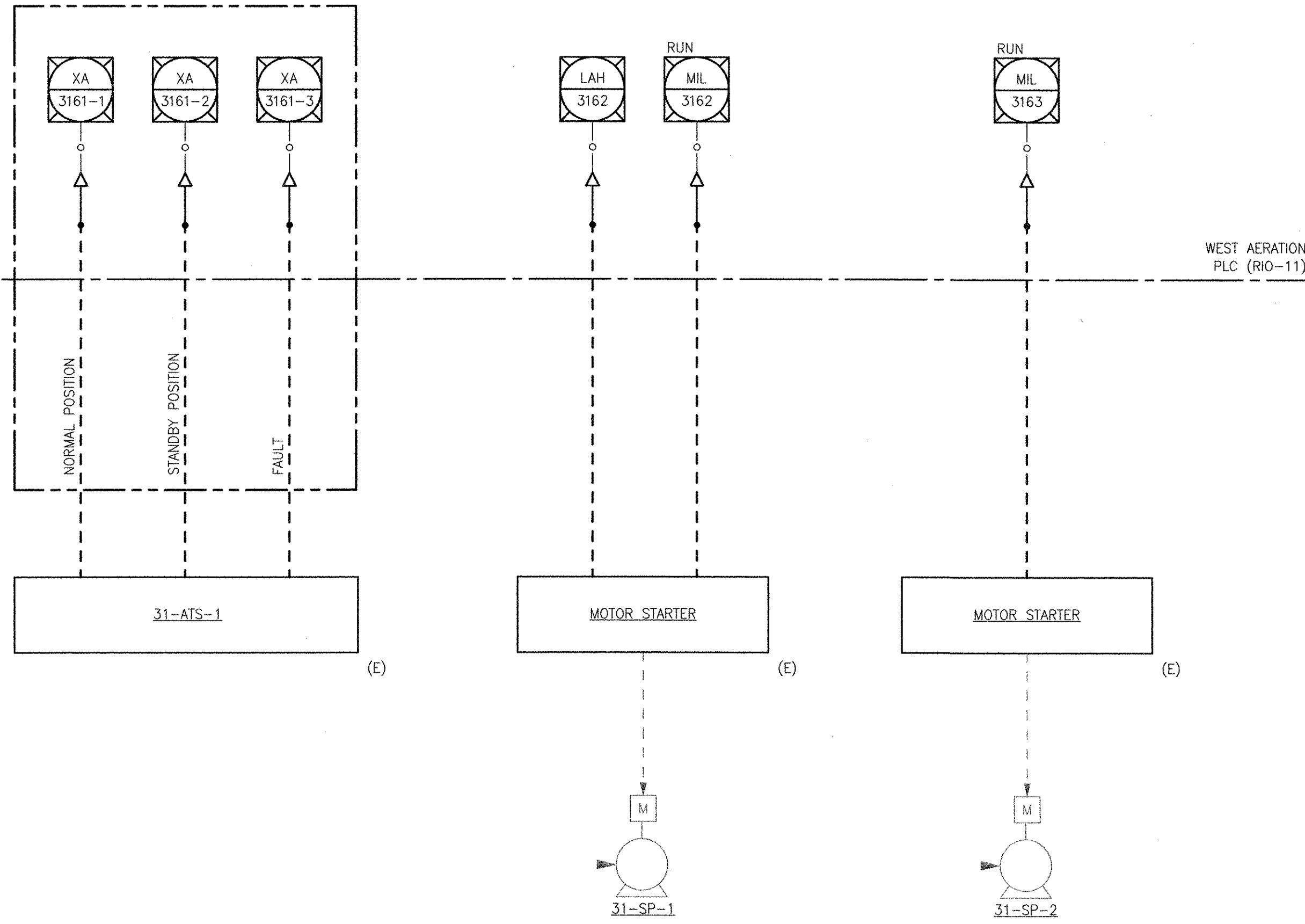
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DROV\DP-3\SHEETS\DI\31 DI-608.DWG
 LAST UPDATE: Tuesday, October 23, 2012 9:46:52 AM
 PLOT DATE: Thursday, October 25, 2012 8:19:39 AM
 ANS D - 23-Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEP\01-3\SHEETS\DI\31 DI-609.DWG
 LAST UPDATE: Monday, October 08, 2012 3:19:11 PM
 PLOT DATE: Thursday, October 25, 2012 8:19:41 AM

ANSI D - 8-Oct-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

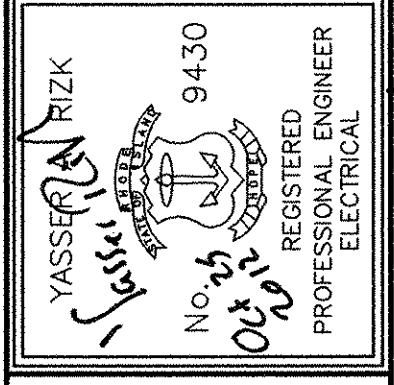
PROJECT NO:	60148648
CAD DWG FILE:	31 DI-609
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAULT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 DI-609

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

AERATION TANKS MISCELLANEOUS P&ID

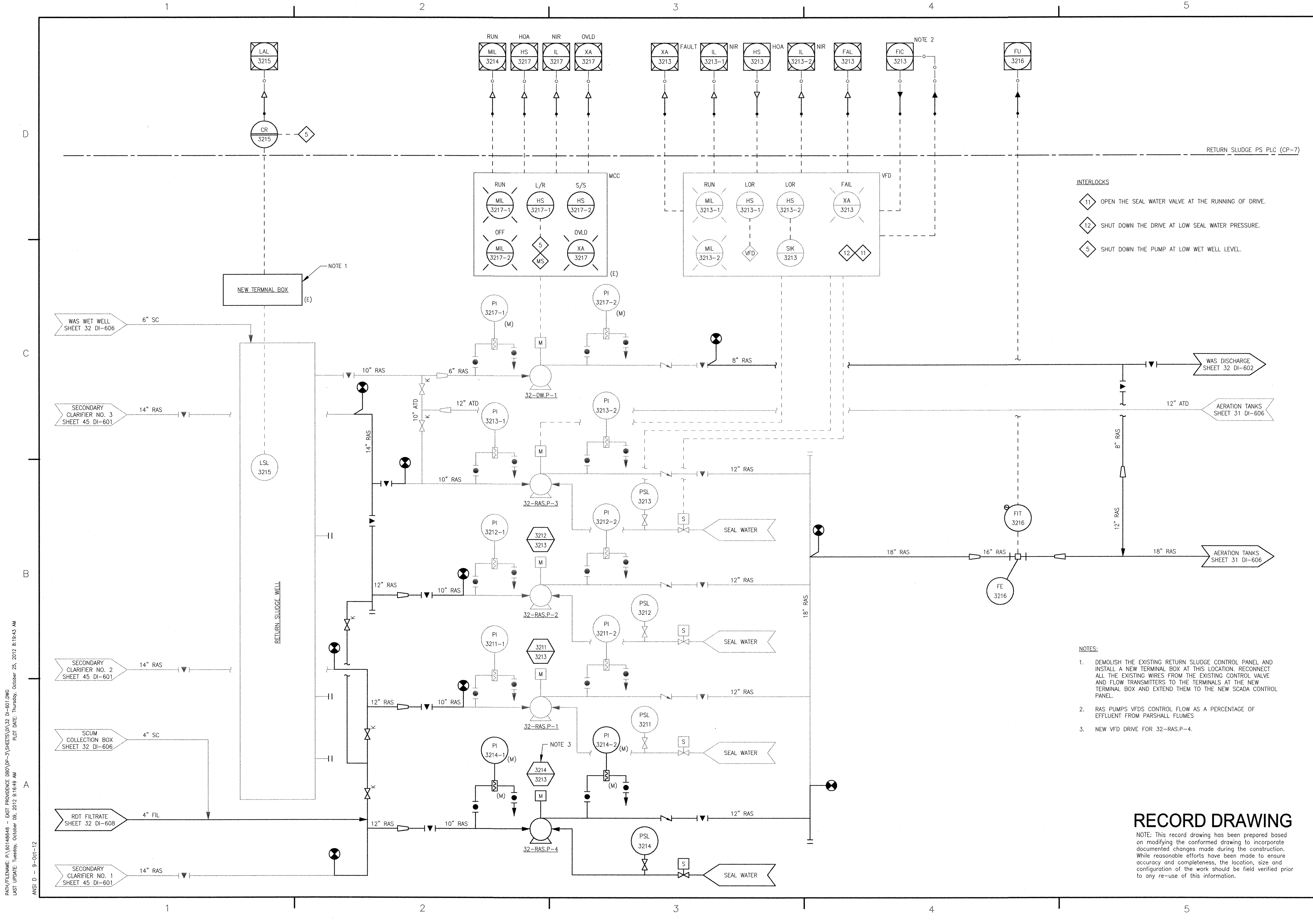
INSTRUMENTATION



AECOM USA, INC.
 100 STATE STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

MARK	DATE	MS	YR	REVISIONS
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
		MADE BY	CHECKED	DESCRIPTION



1
2
3
4
5

D
C
B
A

ANSI D - 9-01-12
 PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DEP\DP-3\SHEETS\32 DI-601.DWG
 LAST UPDATE: Tuesday, October 09, 2012 8:16:49 AM
 PLOT DATE: Thursday, October 25, 2012 8:19:43 AM

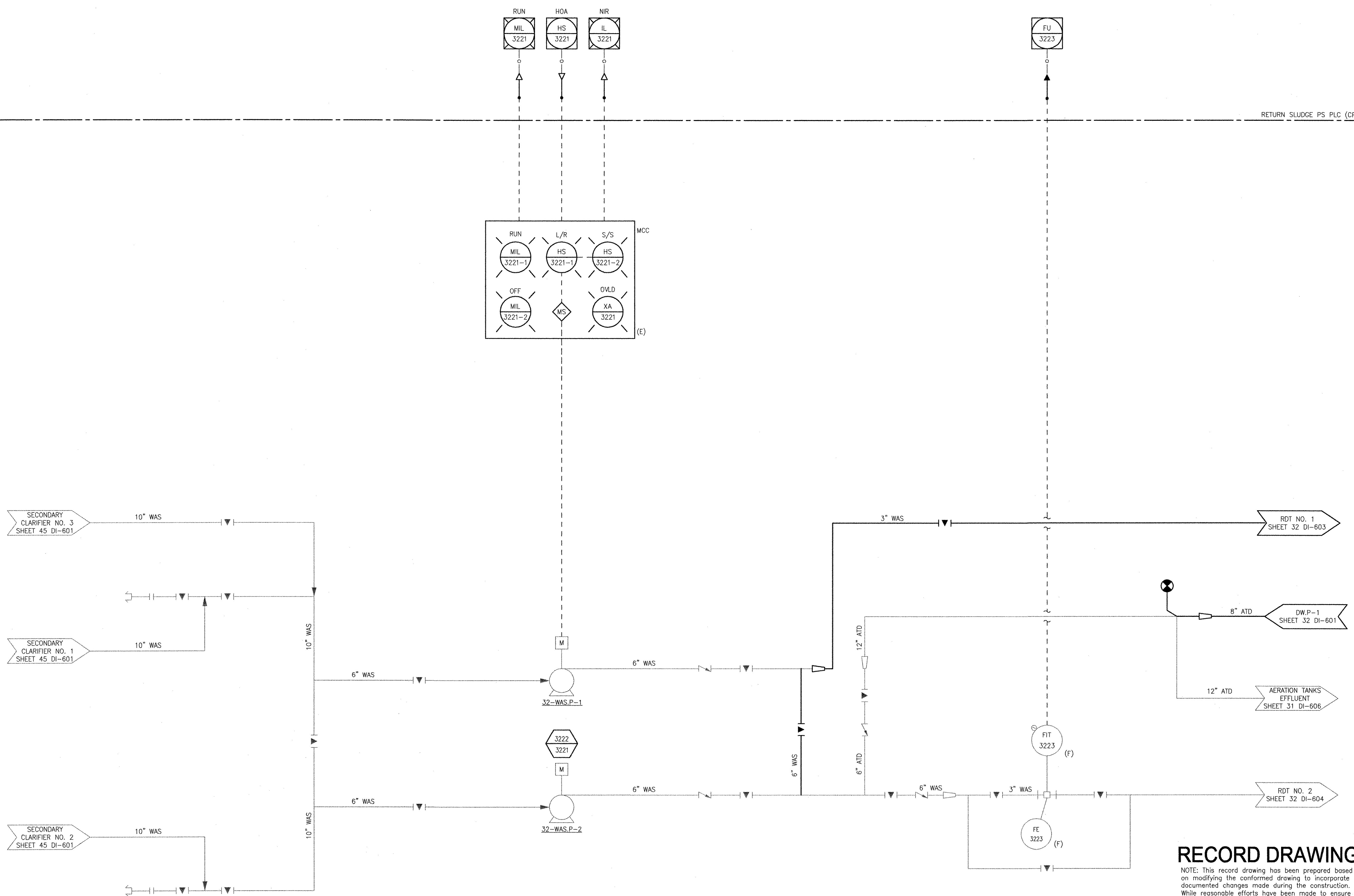
- INTERLOCKS
- 11 OPEN THE SEAL WATER VALVE AT THE RUNNING OF DRIVE.
 - 12 SHUT DOWN THE DRIVE AT LOW SEAL WATER PRESSURE.
 - 5 SHUT DOWN THE PUMP AT LOW WET WELL LEVEL.

- NOTES:
1. DEMOLISH THE EXISTING RETURN SLUDGE CONTROL PANEL AND INSTALL A NEW TERMINAL BOX AT THIS LOCATION. RECONNECT ALL THE EXISTING WIRES FROM THE EXISTING CONTROL VALVE AND FLOW TRANSMITTERS TO THE TERMINALS AT THE NEW TERMINAL BOX AND EXTEND THEM TO THE NEW SCADA CONTROL PANEL.
 2. RAS PUMPS VFDs CONTROL FLOW AS A PERCENTAGE OF EFFLUENT FROM PARSHALL FLUMES
 3. NEW VFD DRIVE FOR 32-RAS.P-4.

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

 RECORD DRAWINGS													
AECOM USA, INC. 100 WATER STREET WAKEFIELD, MA 01880 PHONE (781) 244-5200	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>11/2/2010</td> <td>MADE BY (CHECKED)</td> </tr> <tr> <td></td> <td>10/19/12</td> <td>MS ST</td> </tr> <tr> <td></td> <td></td> <td>YR GC</td> </tr> </tbody> </table>	MARK	DATE	DESCRIPTION	1	11/2/2010	MADE BY (CHECKED)		10/19/12	MS ST			YR GC
MARK	DATE	DESCRIPTION											
1	11/2/2010	MADE BY (CHECKED)											
	10/19/12	MS ST											
		YR GC											
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3 RAS PUMP STATION RETURN SLUDGE PUMPS P&ID INSTRUMENTATION													
PROJECT NO: 60148648 CAD DWG FILE: 32 DI-601 DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED													
32 DI-601													

P&ID FILENAME: P:\01\6648 - EAST PROVIDENCE DEP\01-3\SHEETS\32 DI-602.DWG
 LAST UPDATE: Friday, December 14, 2012 9:45:25 AM
 PLOT DATE: Friday, December 14, 2012 9:46:11 AM
 ANS I D - 14-Dec-12

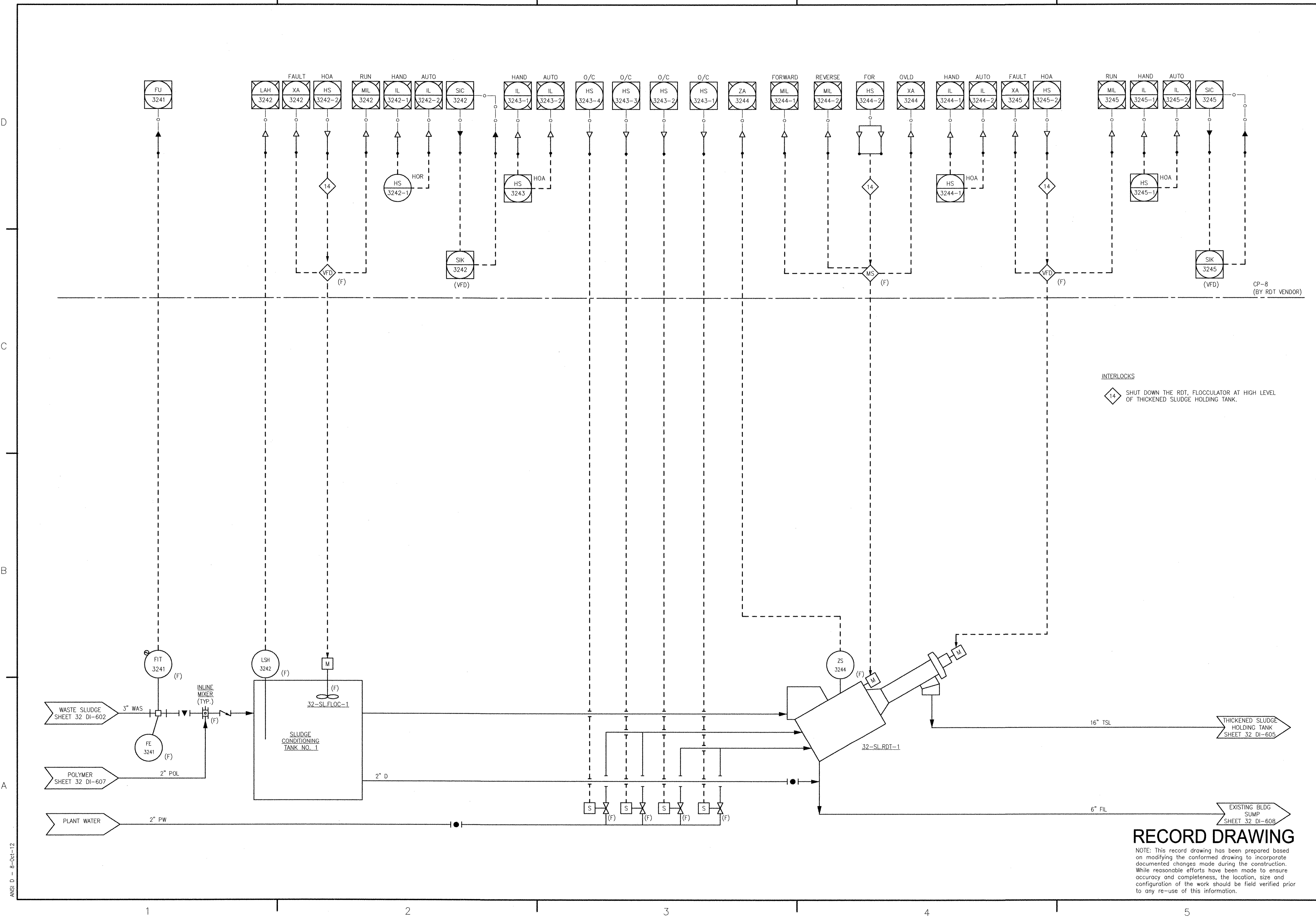


RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM		RECORD DRAWINGS																
AECOM USA, INC. 701 EDGEWATER DRIVE WASHINGTON, DC 20001 PHONE (703) 416-5000		PROJECT NO. 60148648 CAD DWG FILE: 32 DI-602 DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED																
		32 DI-602																
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3 RAS PUMP STATION WAS PUMPS P&ID INSTRUMENTATION		REVISIONS <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MADE BY</th> <th>CHECKED BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>11/01/2010</td> <td>MS</td> <td>GC</td> <td>ADDITION 1</td> </tr> <tr> <td></td> <td>12/11/12</td> <td>MS</td> <td>GC</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION	1	11/01/2010	MS	GC	ADDITION 1		12/11/12	MS	GC	REVISED FOR RECORD DRAWING
MARK	DATE	MADE BY	CHECKED BY	DESCRIPTION														
1	11/01/2010	MS	GC	ADDITION 1														
	12/11/12	MS	GC	REVISED FOR RECORD DRAWING														

ANSI D - 8-OCT-12
 PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DRY-3\SHEETS\32 DI-603.DWG
 LAST UPDATE: Monday, October 08, 2012 3:17:48 PM
 PLOT DATE: Thursday, October 25, 2012 8:19:47 AM



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING

YR	MS	DATE	MADE BY	CHECKED BY
	10/19/12			

AECOM
 AECOM USA, INC.
 600 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSEIN RIZK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

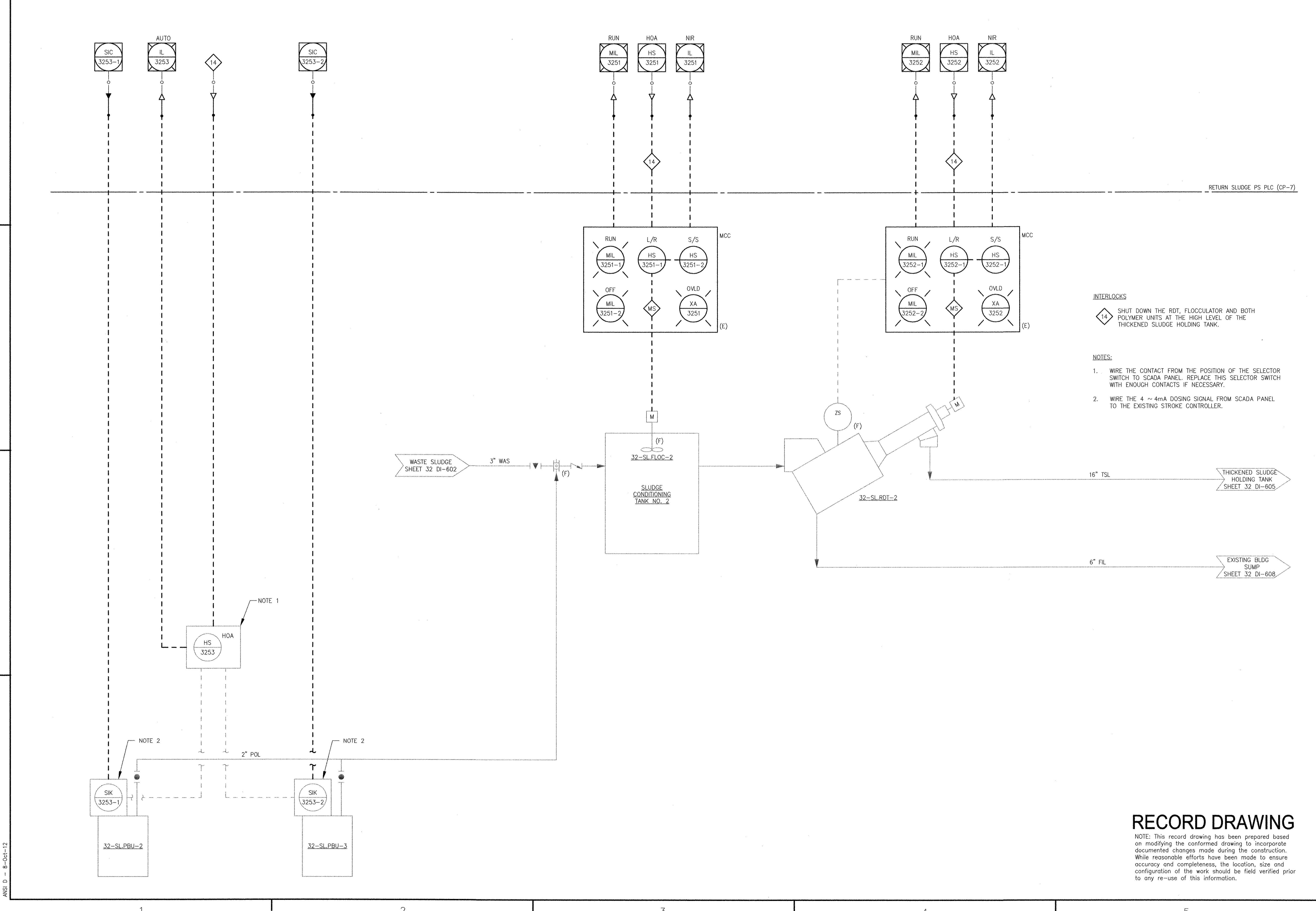
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
RAS PUMP STATION SLUDGE THICKENING
 P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	32 DI-603
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DI-603

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\DI-32 DI-604.DWG
 LAST UPDATE: Monday, October 08, 2012 3:17:18 PM
 PLOT DATE: Thursday, October 25, 2012 8:19:49 AM

ANSI D - 8-Oct-12



INTERLOCKS

I4 SHUT DOWN THE RDT, FLOCCULATOR AND BOTH POLYMER UNITS AT THE HIGH LEVEL OF THE THICKENED SLUDGE HOLDING TANK.

NOTES:

1. WIRE THE CONTACT FROM THE POSITION OF THE SELECTOR SWITCH TO SCADA PANEL. REPLACE THIS SELECTOR SWITCH WITH ENOUGH CONTACTS IF NECESSARY.
2. WIRE THE 4 ~ 4mA DOSING SIGNAL FROM SCADA PANEL TO THE EXISTING STROKE CONTROLLER.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

7000 US 1, INC.
 7000 US 1, WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSIR M. ZAK
 No. 9450
 REGISTERED PROFESSIONAL ELECTRICAL ENGINEER

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

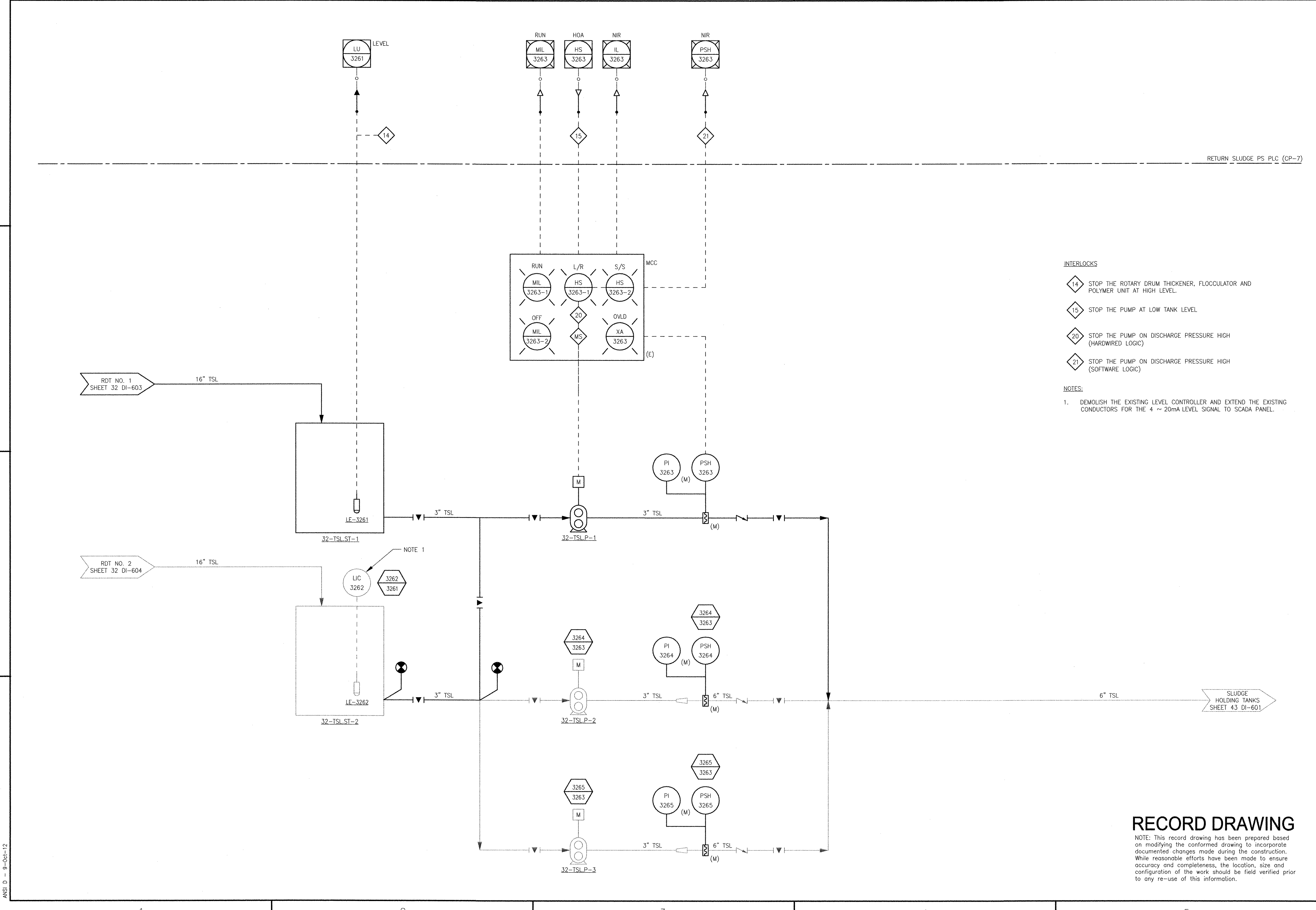
RAS PUMP STATION EXISTING THICKENING

P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	32 DI-604
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DI-604

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DRY\DP-3\SHEETS\DI\32 DI-605.DWG
 PLOT DATE: Thursday, October 25, 2012 8:19:51 AM
 LAST UPDATE: Tuesday, October 09, 2012 9:40:40 AM
 ANSI D - 9-Oct-12



INTERLOCKS

- 14 STOP THE ROTARY DRUM THICKENER, FLOCCULATOR AND POLYMER UNIT AT HIGH LEVEL.
- 15 STOP THE PUMP AT LOW TANK LEVEL
- 20 STOP THE PUMP ON DISCHARGE PRESSURE HIGH (HARDWIRED LOGIC)
- 21 STOP THE PUMP ON DISCHARGE PRESSURE HIGH (SOFTWARE LOGIC)

NOTES:

1. DEMOLISH THE EXISTING LEVEL CONTROLLER AND EXTEND THE EXISTING CONDUCTORS FOR THE 4 ~ 20mA LEVEL SIGNAL TO SCADA PANEL.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
YR	MADE BY (CHECKED)
MS	DATE
10/19/12	

AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 244-5200

AECOM

RECORD DRAWINGS

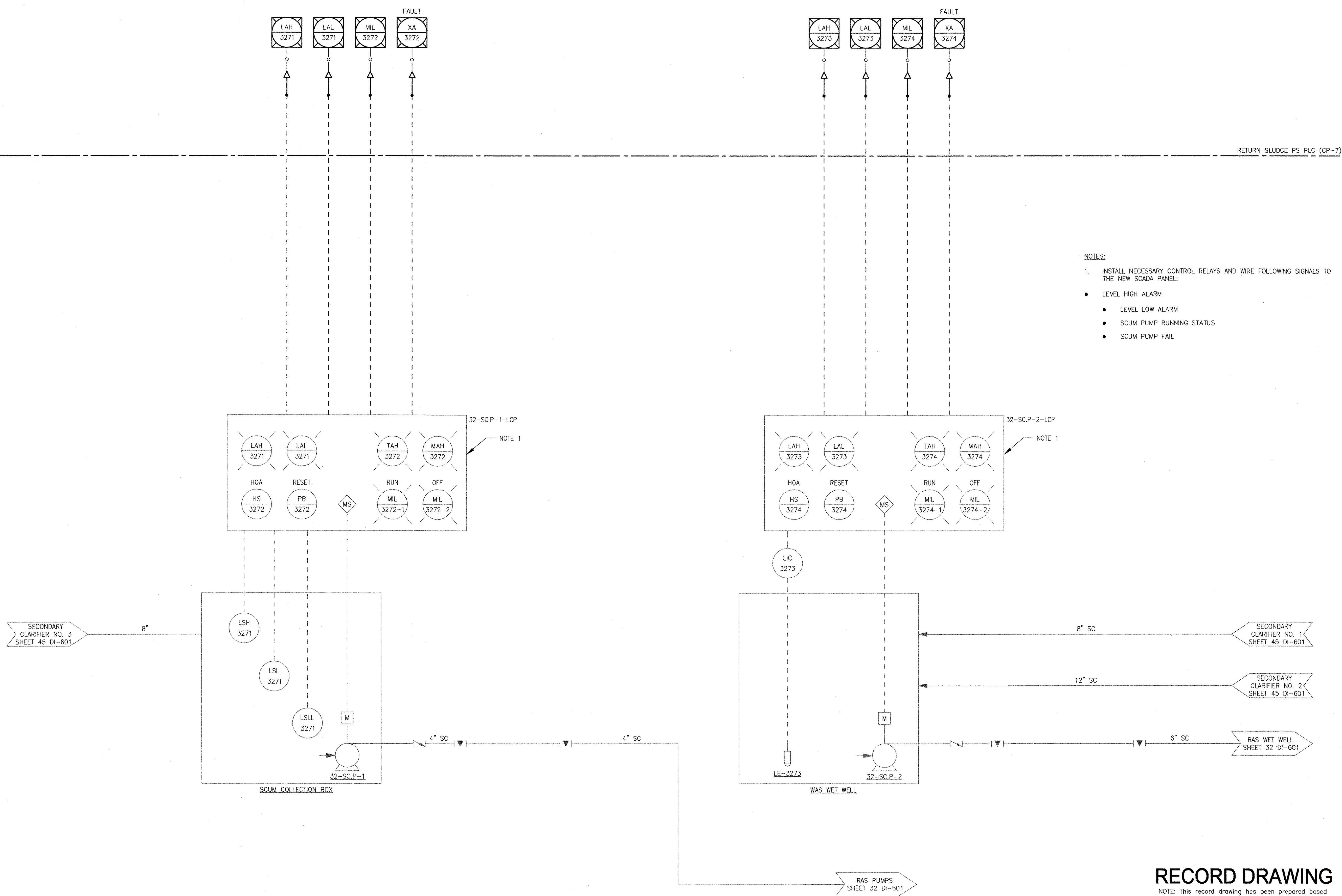
YASSER M. AZK
 REGISTERED ENGINEER
 ELECTRICAL
 No. 9430
 9/4/30

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**RAS PUMP STATION THICKENED SLUDGE
 TRANSFER P&ID**
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	32 DI-605
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DI-605

PATH/FILENAME: P:\6148648 - EAST PROVIDENCE DP-3\SHEETS\32 DI-606.DWG
 LAST UPDATE: Friday, December 14, 2012 8:36:31 AM
 PLOT DATE: Friday, December 14, 2012 9:46:12 AM
 ANSI D - 14-Dec-12



- NOTES:**
- INSTALL NECESSARY CONTROL RELAYS AND WIRE FOLLOWING SIGNALS TO THE NEW SCADA PANEL:
- LEVEL HIGH ALARM
 - LEVEL LOW ALARM
 - SCUM PUMP RUNNING STATUS
 - SCUM PUMP FAIL

MARK	DATE	MADE BY	CHECKED	YR	DESCRIPTION
1	12/11/12	MS	YR		REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 701 EDGEWATER DRIVE
 WILMINGTON, MA 01897
 PHONE (781) 246-8200

RECORD DRAWINGS

YASSEER A. ARK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

RAS PUMP STATION SCUM SYSTEM P&ID

INSTRUMENTATION

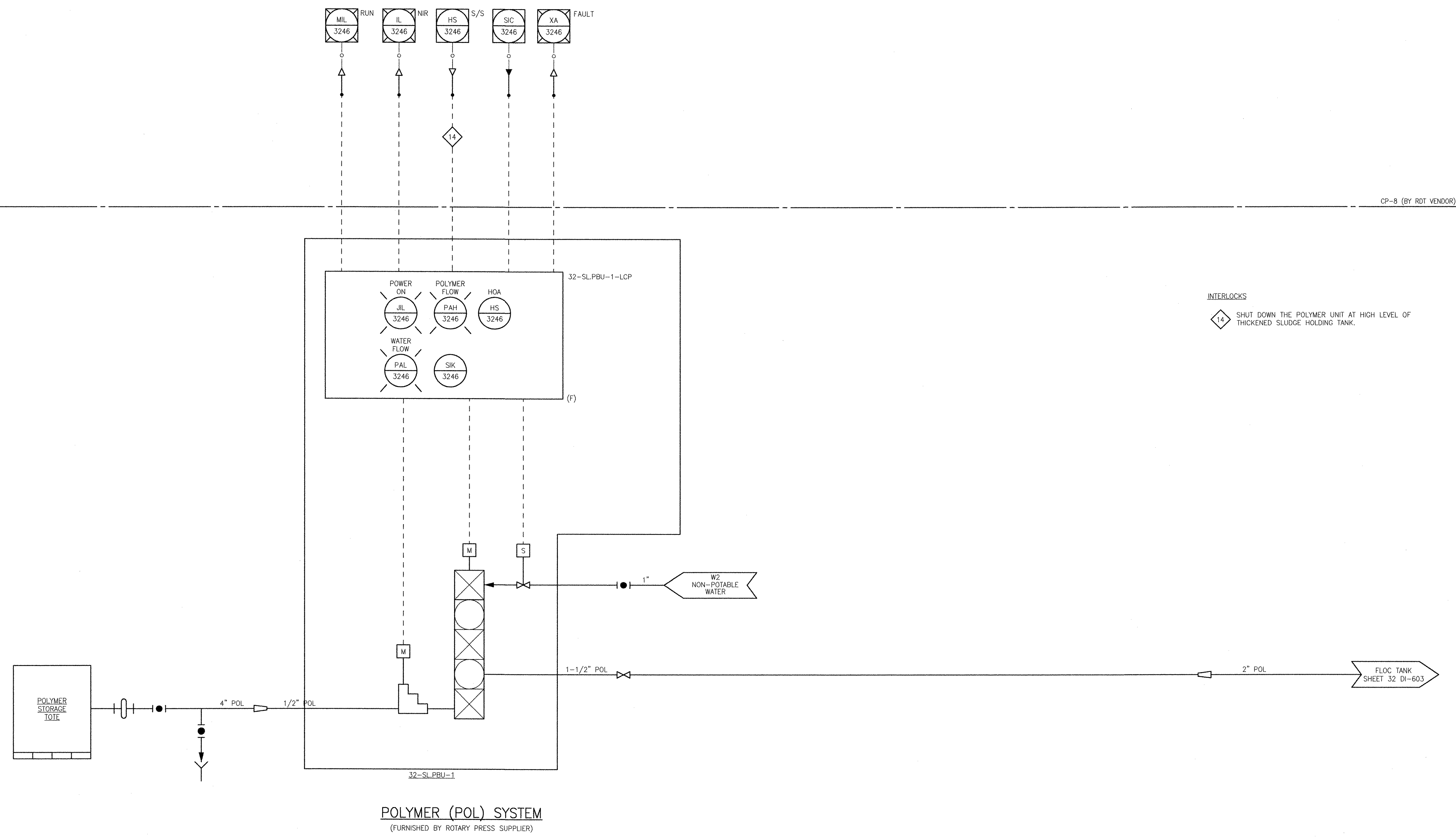
PROJECT NO:	60148648
CAD DWG FILE:	32 DI-606
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DI-606

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\UP-3\SHEETS\32 DI-607.DWG
 LAST UPDATE: Tuesday, October 09, 2012 9:53:05 AM
 PLOT DATE: Thursday, October 25, 2012 8:19:54 AM
 ANSI D - 9-Oct-12



CP-8 (BY RDT VENDOR)

INTERLOCKS
 14 SHUT DOWN THE POLYMER UNIT AT HIGH LEVEL OF THICKENED SLUDGE HOLDING TANK.

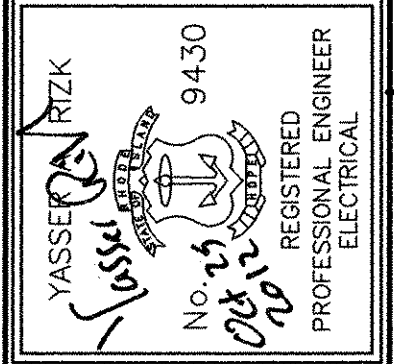
POLYMER (POL) SYSTEM
 (FURNISHED BY ROTARY PRESS SUPPLIER)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	YR	DESCRIPTION
1	10/19/12	MS	REVISOR FOR RECORD DRAWING

AECOM USA, INC.
 700 WATER STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

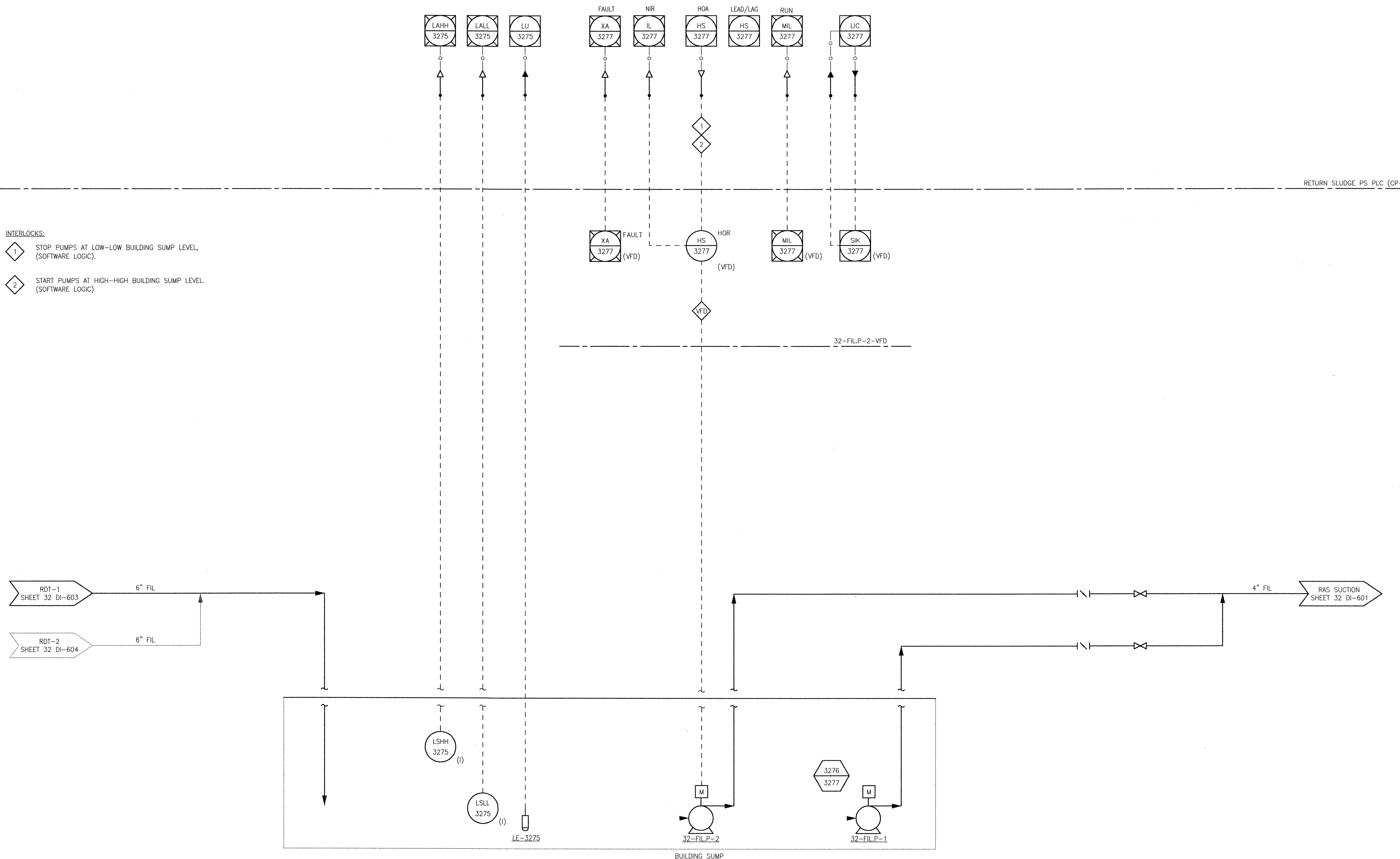


CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
RAS PUMP STATION POLYMER SYSTEM P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	32 DI-607
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DI-607

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\DI-32 DI-608.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:34:01 AM
 PLOT DATE: Thursday, October 25, 2012 10:34:10 AM
 ANSI D - 25-Oct-12



INTERLOCKS:
 1 STOP PUMPS AT LOW-LOW BUILDING SUMP LEVEL, (SOFTWARE LOGIC).
 2 START PUMPS AT HIGH-HIGH BUILDING SUMP LEVEL, (SOFTWARE LOGIC).

RETURN SLUDGE PS PLC (CP-7)

32-FIL.P-2-VFD

REVISIONS	
NO.	DESCRIPTION
2	REVISOR: MS DATE: 10/19/12 CHECKED: DA DATE: 5/16/11
1	REVISOR: MS DATE: 10/19/12 CHECKED: DA DATE: 5/16/11

AECOM
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200
RECORD DRAWINGS

YASSIN ARIZK
 No. 45
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**RAS PUMP STATION BUILDING
 SUMP-FILTRATE P&ID**
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	32 DI-608
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

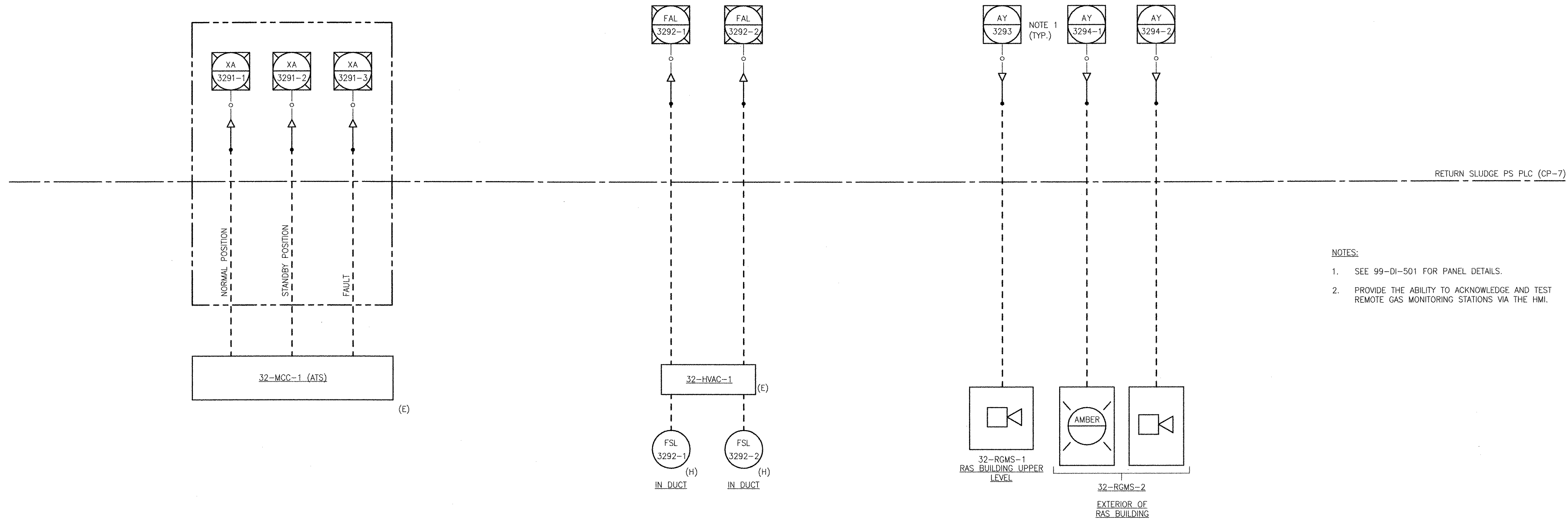
32 DI-608

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\32 DI-609.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:34:28 AM
 PLOT DATE: Thursday, October 25, 2012 10:34:36 AM

ANSI D - 25-Oct-12



- NOTES:
- SEE 99-DI-501 FOR PANEL DETAILS.
 - PROVIDE THE ABILITY TO ACKNOWLEDGE AND TEST REMOTE GAS MONITORING STATIONS VIA THE HMI.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/9/12	MS	YR	REVISED FOR RECORD DRAWING
	8/9/11	DA	YR	REVISED GAS MONITORING SYSTEM

AECOM
 AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSEEN RIZK
 No. 15 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

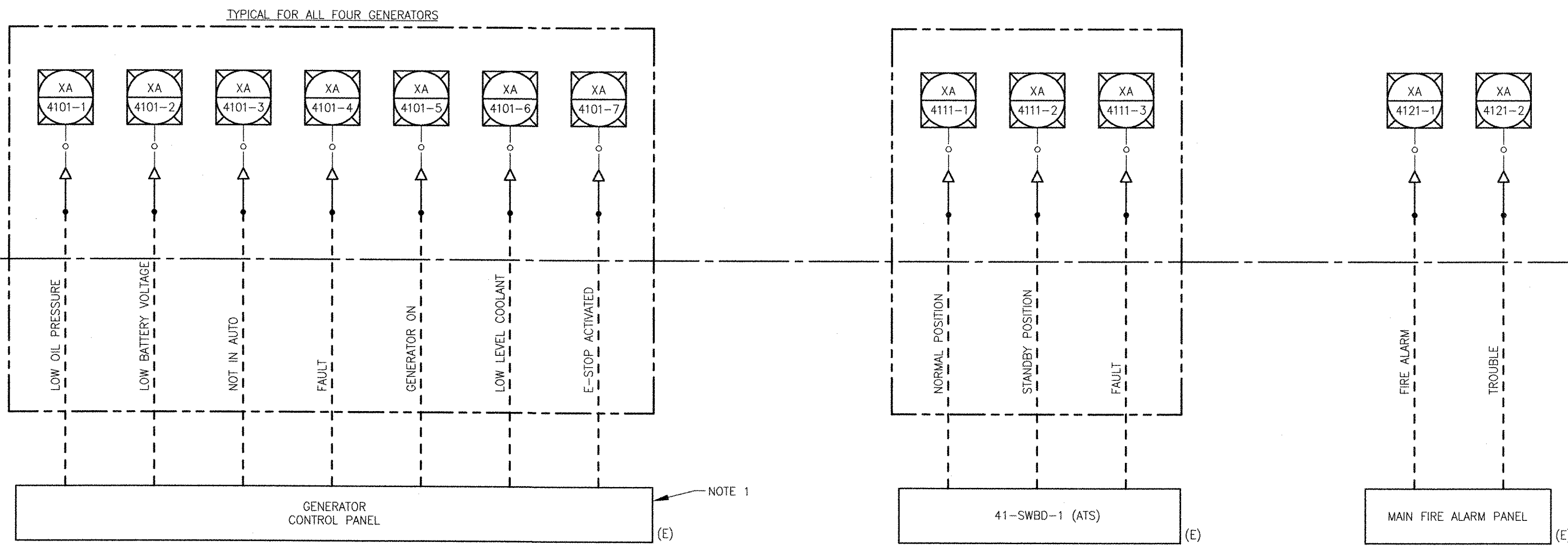
RAS PUMP STATION MISCELLANEOUS P&ID

INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	32 DI-609
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 DI-609

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BRO)\DP-4\SHEETS\DI-601.DWG
 LAST UPDATE: Monday, October 08, 2012 3:30:08 PM
 PLOT DATE: Thursday, October 25, 2012 8:19:59 AM
 ANSI D - 8 - Oct-12



GENERATORS

TAG	DESCRIPTION	LOOP NUMBER	PLC PANEL
41-GEN-1	GENERATOR #1	4101	RIO-13
41-GEN-2	GENERATOR #2	4102	RIO-13
23-GEN-1	GENERATOR #3	4103	CP-1 (NOTE 2)

- NOTES:
1. THE CONTROL PANELS FOR GENERATOR NO. 1 AND NO. 2 ARE EXISTING, THE CONTROL PANELS FOR GENERATOR NO. 3 IS NEW.
 2. WIRE THE I/O OF NEW GENERATOR 23-GEN-1 TO OPERATIONS BUILDING PLC, CP-1.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 701 LEDGEMAN DRIVE
 WILMINGTON, MA 01897
 PHONE (781) 246-8200

YASSER ANZAK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

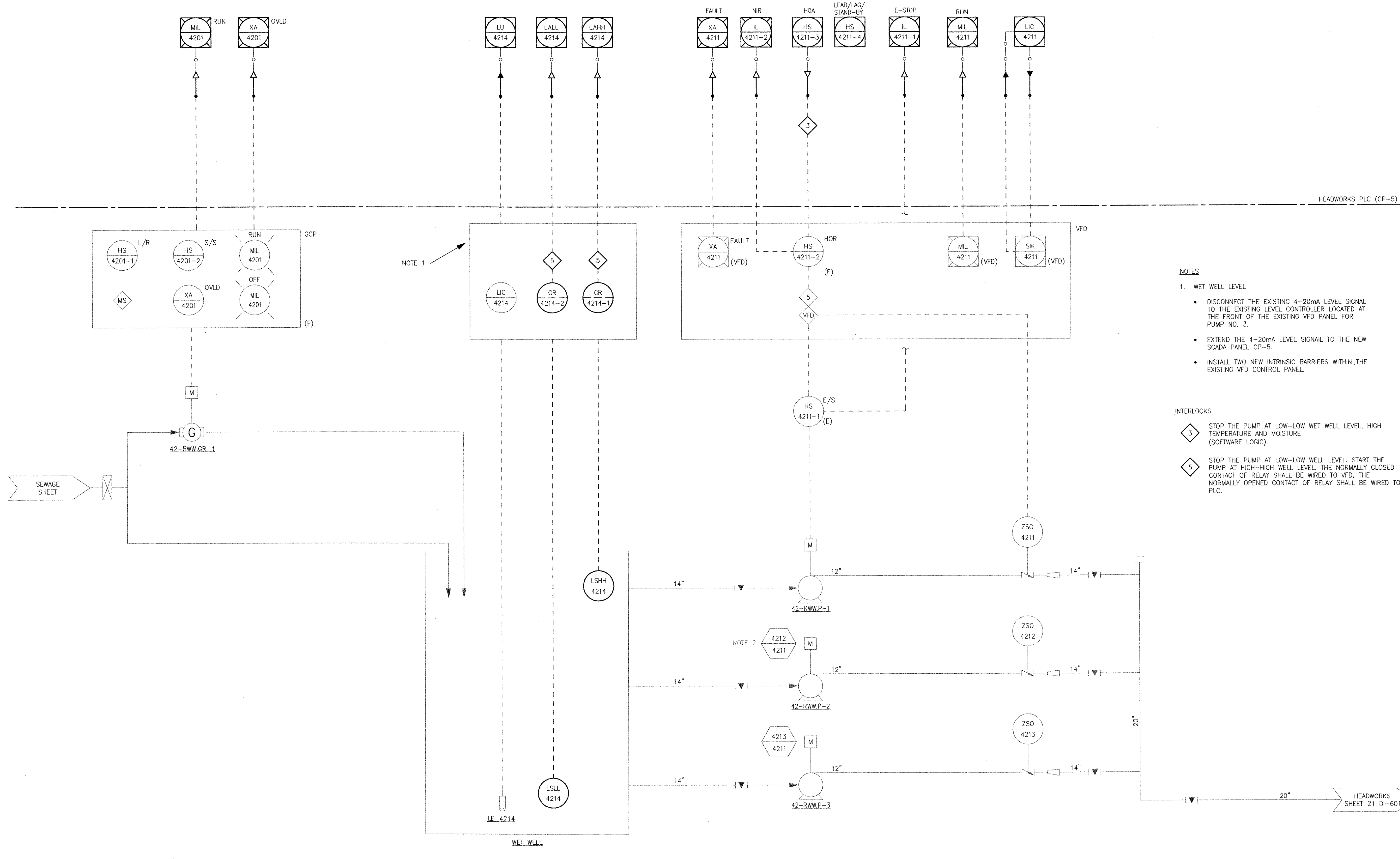
GENERATOR SCADA SIGNALS

INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	41 DI-601
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 DI-601

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DB)\OP-4\SHEETS\VA2 DI-601 RAW SEWAGE PUMP STATION PUMP CONTROL P&ID.DWG
 PLOT DATE: Thursday, October 25, 2012 9:02:01 AM
 LAST UPDATE: Thursday, October 25, 2012 9:01:50 AM
 ANSI D - 25-Oct-12



- NOTES**
- WET WELL LEVEL
 - DISCONNECT THE EXISTING 4-20mA LEVEL SIGNAL TO THE EXISTING LEVEL CONTROLLER LOCATED AT THE FRONT OF THE EXISTING VFD PANEL FOR PUMP NO. 3.
 - EXTEND THE 4-20mA LEVEL SIGNAL TO THE NEW SCADA PANEL CP-5.
 - INSTALL TWO NEW INTRINSIC BARRIERS WITHIN THE EXISTING VFD CONTROL PANEL.
- INTERLOCKS**
- 3 STOP THE PUMP AT LOW-LOW WET WELL LEVEL, HIGH TEMPERATURE AND MOISTURE (SOFTWARE LOGIC).
 - 5 STOP THE PUMP AT LOW-LOW WET WELL LEVEL. START THE PUMP AT HIGH-HIGH WET WELL LEVEL. THE NORMALLY CLOSED CONTACT OF RELAY SHALL BE WIRED TO VFD, THE NORMALLY OPENED CONTACT OF RELAY SHALL BE WIRED TO PLC.

RECORD DRAWING
 NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. ONE WASHINGTON DRIVE WAKEFIELD, MA 01880 PHONE (781) 246-5200		RECORD DRAWINGS																				
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4 RAW SEWAGE PUMP STATION PUMP CONTROL P&ID INSTRUMENTATION																						
PROJECT NO: 60148648 CAD DWG FILE: 42 DI-601 DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED	REVISIONS <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td>MS</td> <td>YR</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>	MARK	DATE	MS	YR	DESCRIPTION	1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING	REVISIONS <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td>MS</td> <td>YR</td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>	MARK	DATE	MS	YR	DESCRIPTION	1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
MARK	DATE	MS	YR	DESCRIPTION																		
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING																		
MARK	DATE	MS	YR	DESCRIPTION																		
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING																		

PATH: \\F:\PROJECTS\42- DI-602\DWG - EAST PROVIDENCE (DBO)\DP-4\SHEETS\DI-602.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:32:31 AM
 PLOT DATE: Thursday, October 25, 2012 10:32:41 AM

ANSI D - 25-Oct-12

D

C

B

A

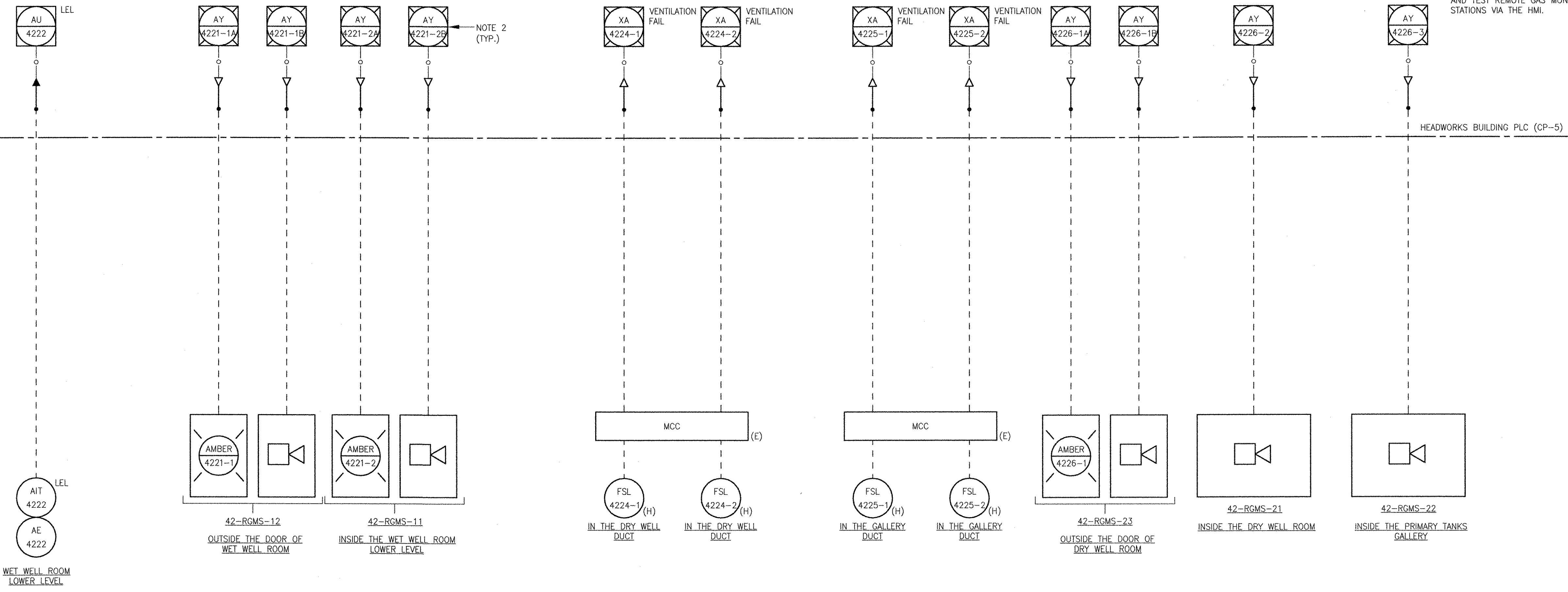
1

2

3

4

5



- NOTES:
- SEE 99-DI-501 FOR PANEL DETAILS
 - PROVIDE THE ABILITY TO ACKNOWLEDGE AND TEST REMOTE GAS MONITORING STATIONS VIA THE HMI.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	8/9/11	DA	YR	REVISED GAS MONITORING SYSTEM

AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

YASSER ANZK
 No. 25
 94-30
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
RAW SEWAGE PUMP STATION
MISCELLANEOUS P&ID
 INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	42 DI-602
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

42 DI-602

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

1

2

3

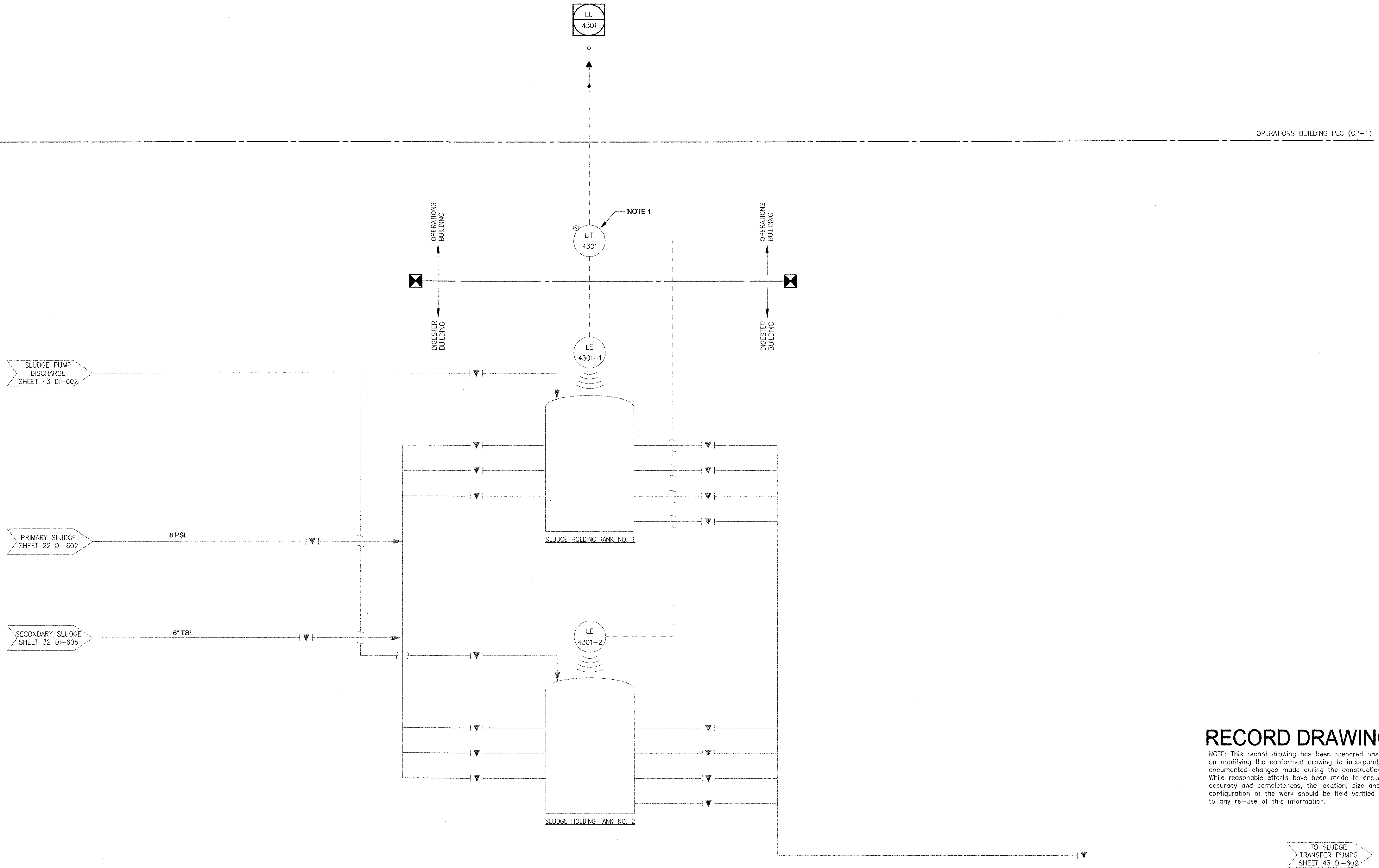
4

5

NOTES:

- 1. THIS LEVEL TRANSMITTER IS CURRENTLY INSTALLED AT THE EXISTING CONTROL PANEL LOCATED AT THE CONTROL ROOM OF OPERATIONS BUILDING. RELOCATE THIS LEVEL TRANSMITTER FROM THE CONTROL ROOM TO THE SLUDGE PRESS ROOM.

OPERATIONS BUILDING PLC (CP-1)



SLUDGE PUMP DISCHARGE SHEET 43 DI-602

PRIMARY SLUDGE SHEET 22 DI-602

SECONDARY SLUDGE SHEET 32 DI-605

SLUDGE HOLDING TANK NO. 1

SLUDGE HOLDING TANK NO. 2

TO SLUDGE TRANSFER PUMPS SHEET 43 DI-602

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSER A. NIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 05 9430
 10/20/12

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
SLUDGE DIGESTER BUILDING SLUDGE HOLDING TANK P&ID INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	43 DI-601
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

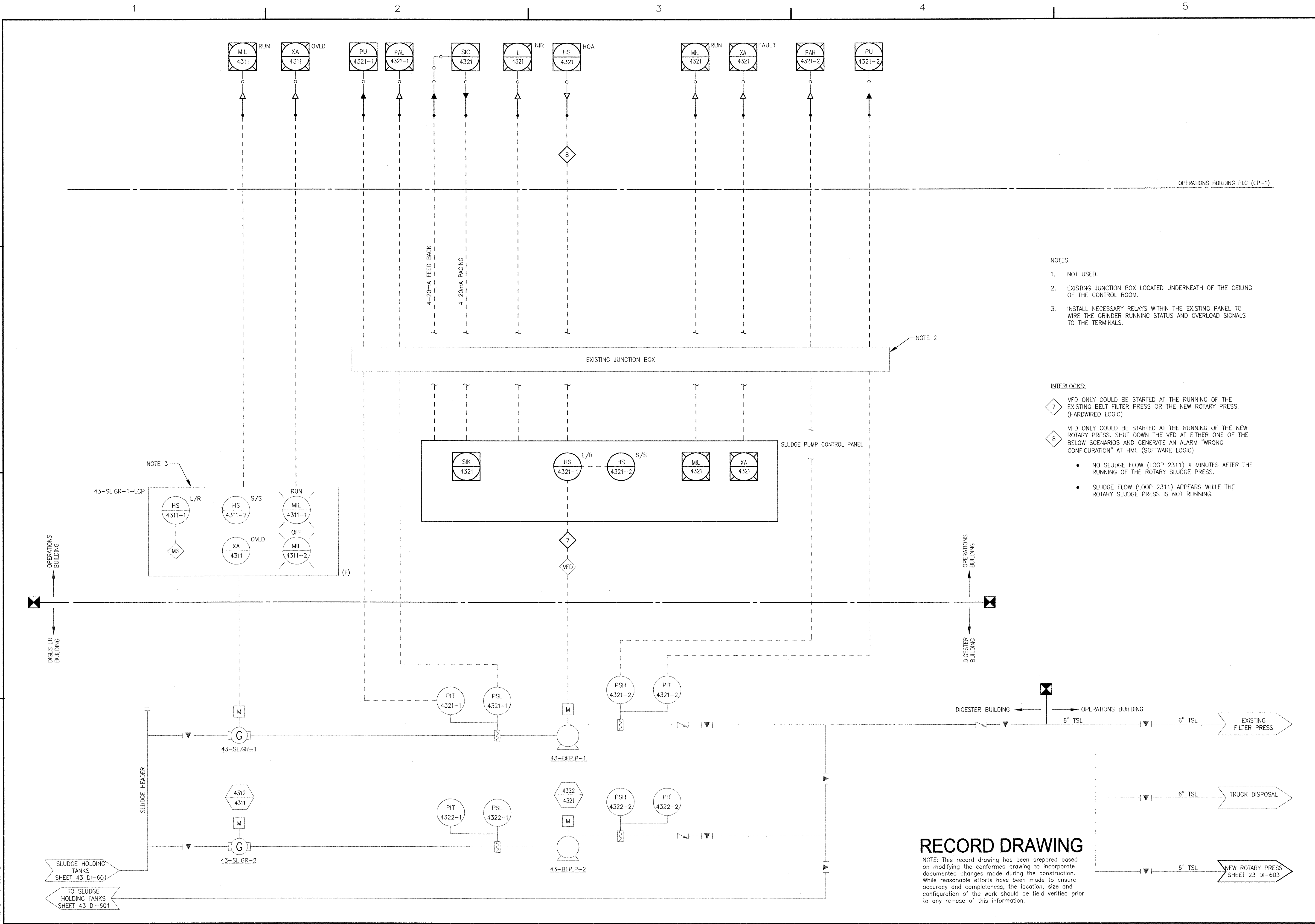
43 DI-601

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEP\UP-4\SHEETS\DI\43 DI-601.DWG
 LAST UPDATE: Monday, October 08, 2012 3:29:22 PM
 PLOT DATE: Thursday, October 25, 2012 8:20:05 AM
 ANSI D - 8-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\OP-A\SHEETS\DI\43 DI-602.DWG
 LAST UPDATE: Tuesday, October 08, 2012 10:13:47 AM PLOT DATE: Thursday, October 25, 2012 8:20:07 AM
 ANSI D - 9-Oct-12



NOTES:

- NOT USED.
- EXISTING JUNCTION BOX LOCATED UNDERNEATH OF THE CEILING OF THE CONTROL ROOM.
- INSTALL NECESSARY RELAYS WITHIN THE EXISTING PANEL TO WIRE THE GRINDER RUNNING STATUS AND OVERLOAD SIGNALS TO THE TERMINALS.

INTERLOCKS:

7 VFD ONLY COULD BE STARTED AT THE RUNNING OF THE EXISTING BELT FILTER PRESS OR THE NEW ROTARY PRESS. (HARDWIRED LOGIC)

8 VFD ONLY COULD BE STARTED AT THE RUNNING OF THE NEW ROTARY PRESS. SHUT DOWN THE VFD AT EITHER ONE OF THE BELOW SCENARIOS AND GENERATE AN ALARM "WRONG CONFIGURATION" AT HMI. (SOFTWARE LOGIC)

- NO SLUDGE FLOW (LOOP 2311) X MINUTES AFTER THE RUNNING OF THE ROTARY SLUDGE PRESS.
- SLUDGE FLOW (LOOP 2311) APPEARS WHILE THE ROTARY SLUDGE PRESS IS NOT RUNNING.

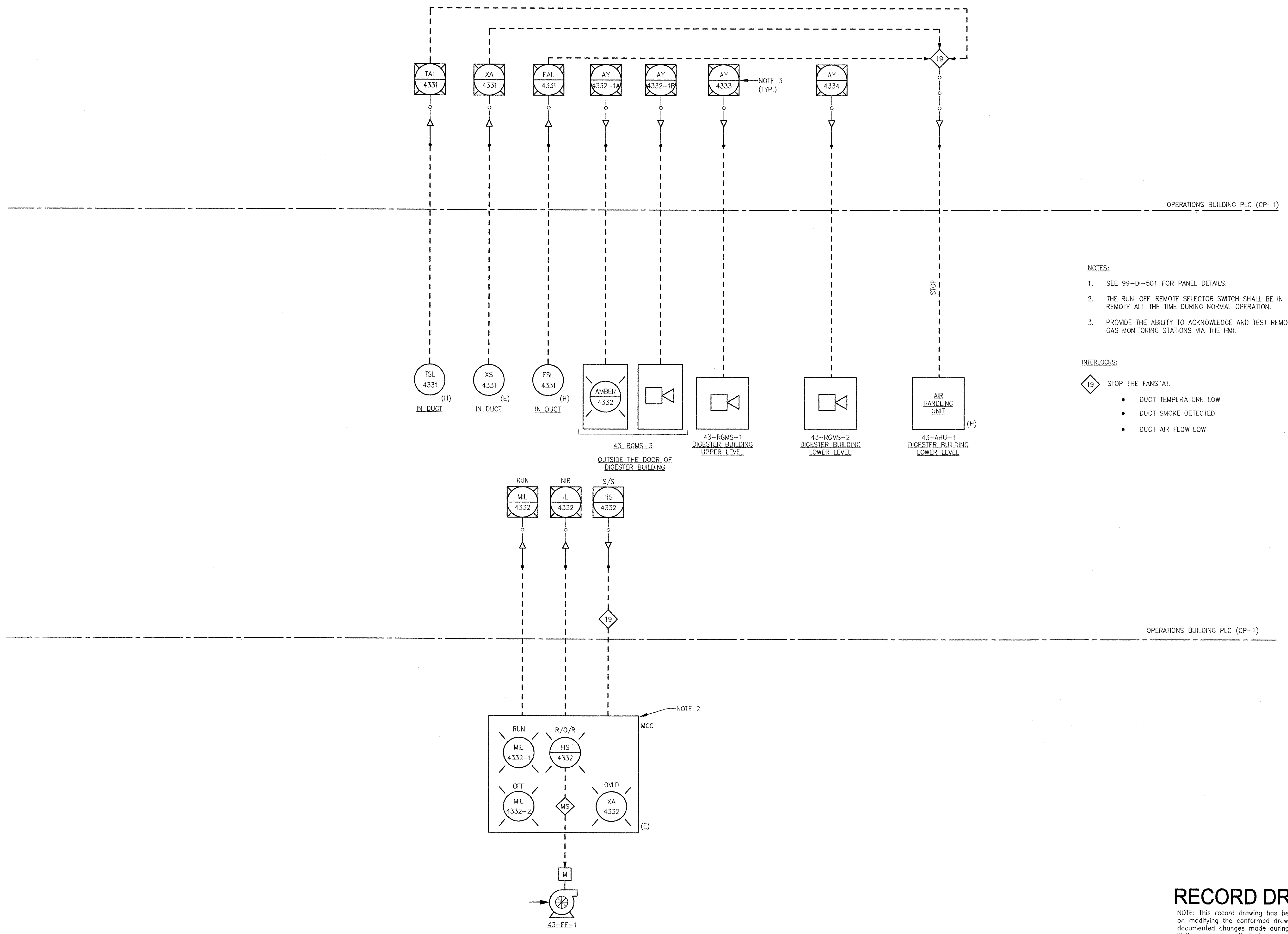
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. 100 WASHINGTON STREET WAREHOUSES, DEPT. 0100 PHOENIX, AZ 85004 PHONE (781) 246-5200		RECORD DRAWINGS														
AECOM																
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4 SLUDGE DIGESTER BUILDING SLUDGE FEED PUMPS P&ID INSTRUMENTATION																
PROJECT NO: 60148648 CAD DWG FILE: 43 DI-602 DESIGNED BY: G. CHEN DRAWN BY: M. STEWART DEPT CHECK: E. STILLWELL PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED																
43 DI-602																
<table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>MADE BY</th> <th>CHECKED</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MS	YR	MADE BY	CHECKED	DESCRIPTION	1	10/19/12					REVISED FOR RECORD DRAWING	REVISIONS
MARK	DATE	MS	YR	MADE BY	CHECKED	DESCRIPTION										
1	10/19/12					REVISED FOR RECORD DRAWING										

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DRG\OP-A\SHEETS\43 DI-603.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:32:53 AM
 PLOT DATE: Thursday, October 25, 2012 10:33:05 AM

ANSI D - 25-Oct-12



NOTES:

- SEE 99-DI-501 FOR PANEL DETAILS.
- THE RUN-OFF-REMOTE SELECTOR SWITCH SHALL BE IN REMOTE ALL THE TIME DURING NORMAL OPERATION.
- PROVIDE THE ABILITY TO ACKNOWLEDGE AND TEST REMOTE GAS MONITORING STATIONS VIA THE HMI.

INTERLOCKS:

19 STOP THE FANS AT:

- DUCT TEMPERATURE LOW
- DUCT SMOKE DETECTED
- DUCT AIR FLOW LOW

RECORD DRAWING

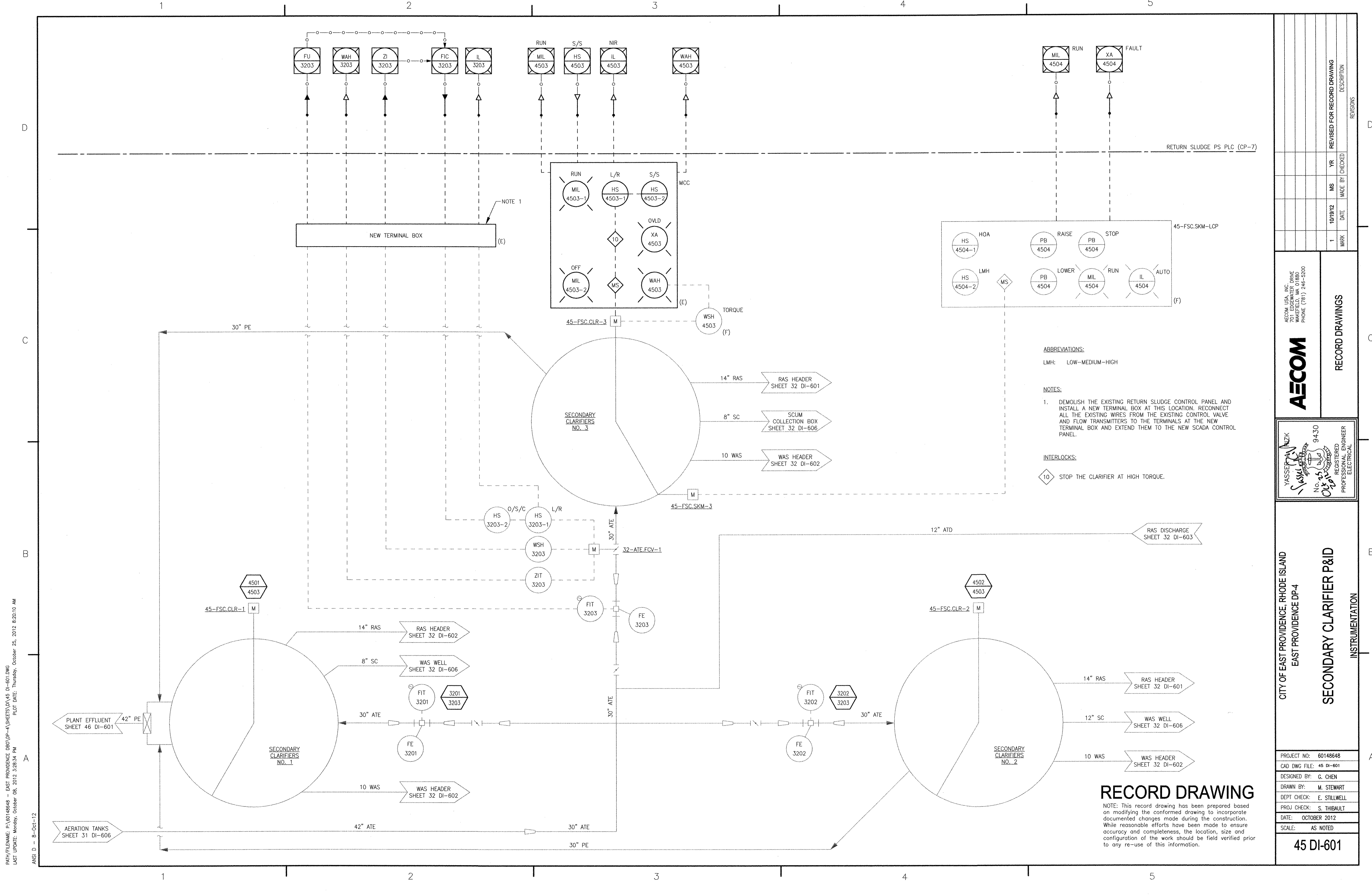
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO: 60148648	
CAD DWG FILE: 43 DI-603	
DESIGNED BY: G. CHEN	
DRAWN BY: M. STEWART	
DEPT CHECK: E. STILLWELL	
PROJ CHECK: S. THIBAUT	
DATE: OCTOBER 2012	
SCALE: AS NOTED	
43 DI-603	

CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4	
SLUDGE DIGESTER BUILDING MISCELLANEOUS INSTRUMENTATION	

AECOM AECOM USA, INC. ONE AECOM DRIVE WAKEFIELD, MA 01880 PHONE (781) 248-5000	
RECORD DRAWINGS	

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	8/9/11	DA	YR	REVISED GAS MONITORING SYSTEM



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\UP-4\SHEETS\045 DI-601.DWG
 PLOT DATE: Thursday, October 25, 2012 8:20:10 AM
 LAST UPDATE: Monday, October 08, 2012 3:28:34 PM
 ANSI D - 8-Oct-12

ABBREVIATIONS:
 LMH: LOW-MEDIUM-HIGH

NOTES:
 1. DEMOLISH THE EXISTING RETURN SLUDGE CONTROL PANEL AND INSTALL A NEW TERMINAL BOX AT THIS LOCATION. RECONNECT ALL THE EXISTING WIRES FROM THE EXISTING CONTROL VALVE AND FLOW TRANSMITTERS TO THE TERMINALS AT THE NEW TERMINAL BOX AND EXTEND THEM TO THE NEW SCADA CONTROL PANEL.

INTERLOCKS:
 10 STOP THE CLARIFIER AT HIGH TORQUE.

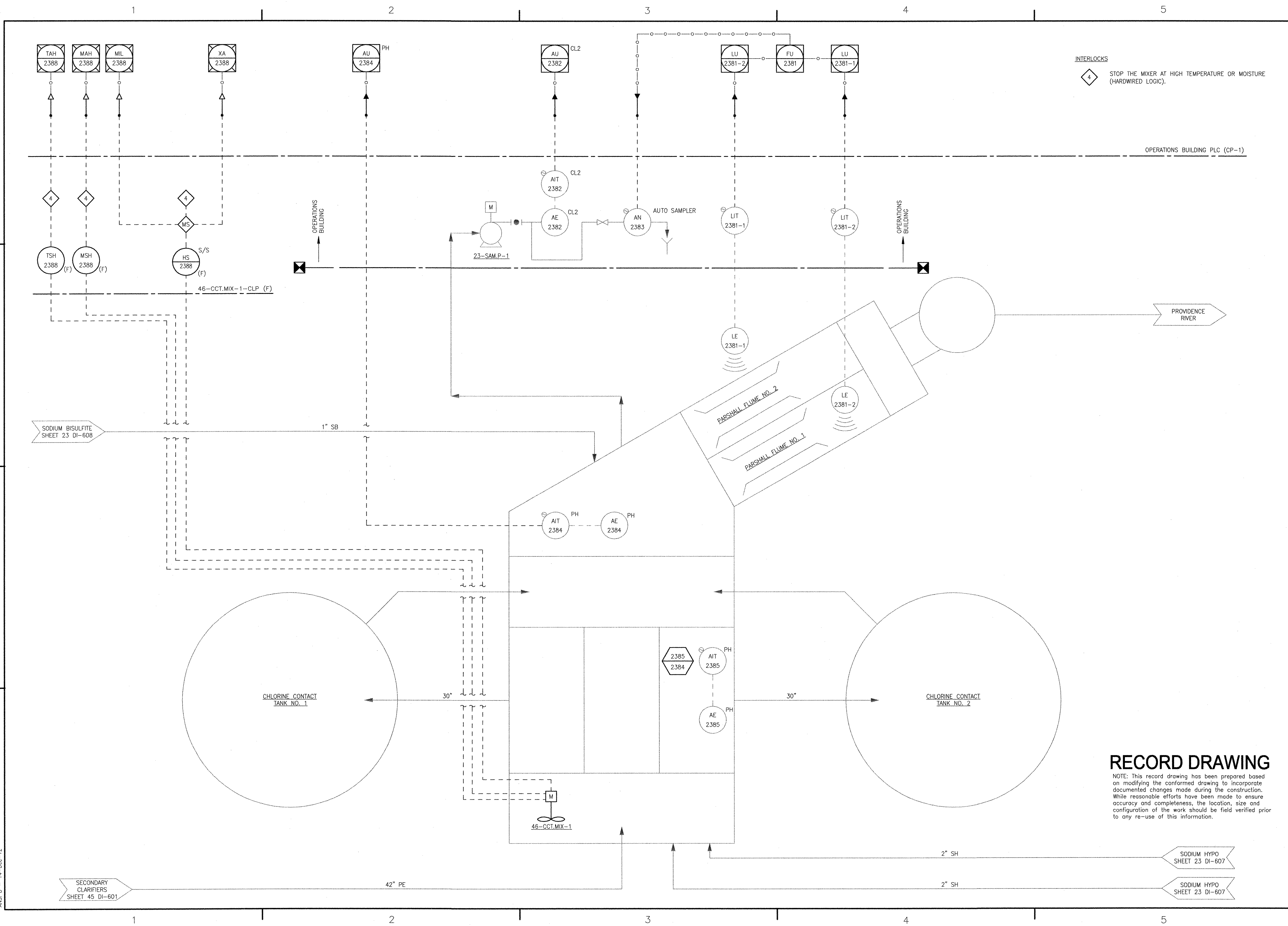
RECORD DRAWING

NOTE: This record has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

 AECOM <small>AECOM USA, INC. 100 WASHINGTON ST. WAKEFIELD, MA 01880 PHONE (781) 246-5200</small>	RECORD DRAWINGS	 YASSER AL-NAZKI <small>REGISTERED PROFESSIONAL ENGINEER ELECTRICAL</small>																
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-4 SECONDARY CLARIFIER P&ID INSTRUMENTATION																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>PROJECT NO:</td> <td>60148648</td> </tr> <tr> <td>CAD DWG FILE:</td> <td>45 DI-601</td> </tr> <tr> <td>DESIGNED BY:</td> <td>G. CHEN</td> </tr> <tr> <td>DRAWN BY:</td> <td>M. STEWART</td> </tr> <tr> <td>DEPT CHECK:</td> <td>E. STILLWELL</td> </tr> <tr> <td>PROJ CHECK:</td> <td>S. THIBAUT</td> </tr> <tr> <td>DATE:</td> <td>OCTOBER 2012</td> </tr> <tr> <td>SCALE:</td> <td>AS NOTED</td> </tr> </table>			PROJECT NO:	60148648	CAD DWG FILE:	45 DI-601	DESIGNED BY:	G. CHEN	DRAWN BY:	M. STEWART	DEPT CHECK:	E. STILLWELL	PROJ CHECK:	S. THIBAUT	DATE:	OCTOBER 2012	SCALE:	AS NOTED
PROJECT NO:	60148648																	
CAD DWG FILE:	45 DI-601																	
DESIGNED BY:	G. CHEN																	
DRAWN BY:	M. STEWART																	
DEPT CHECK:	E. STILLWELL																	
PROJ CHECK:	S. THIBAUT																	
DATE:	OCTOBER 2012																	
SCALE:	AS NOTED																	
45 DI-601																		

MARK	DATE	MS	YR	REVISION DESCRIPTION
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING

PATH/FILENAME: P:\0148648 - EAST PROVIDENCE DSD\CP-A\SHEETS\046 DI-601.DWG
 LAST UPDATE: Friday, December 14, 2012 8:37:32 AM
 PLOT DATE: Friday, December 14, 2012 9:47:44 AM
 ANSI D - 14-Dec-12



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	12/11/12	MS	YR	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 701 EDgewater Drive
 WASHINGTON, MA 01880
 PHONE (781) 246-2300

RECORD DRAWINGS

YASSER AZIZ
 No. 14
 Dec 12
 94.30
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

CHLORINE CONTACT TANKS P&ID
 INSTRUMENTATION

PROJECT NO: 60148648
 CAD DWG FILE: 46 DI-601
 DESIGNED BY: G. CHEN
 DRAWN BY: M. STEWART
 DEPT CHECK: E. STILLWELL
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

46 DI-601

LEGEND:

- 1 LOCATION SHOWN ON PLAN
- 2 AT GAS ANALYZER AI-DO RELAY
- 3 AT/TO SCADA
- 4 AT ATC PANEL

NOTC NORMALLY OPEN, TIMED CLOSING WHEN ENERGIZED

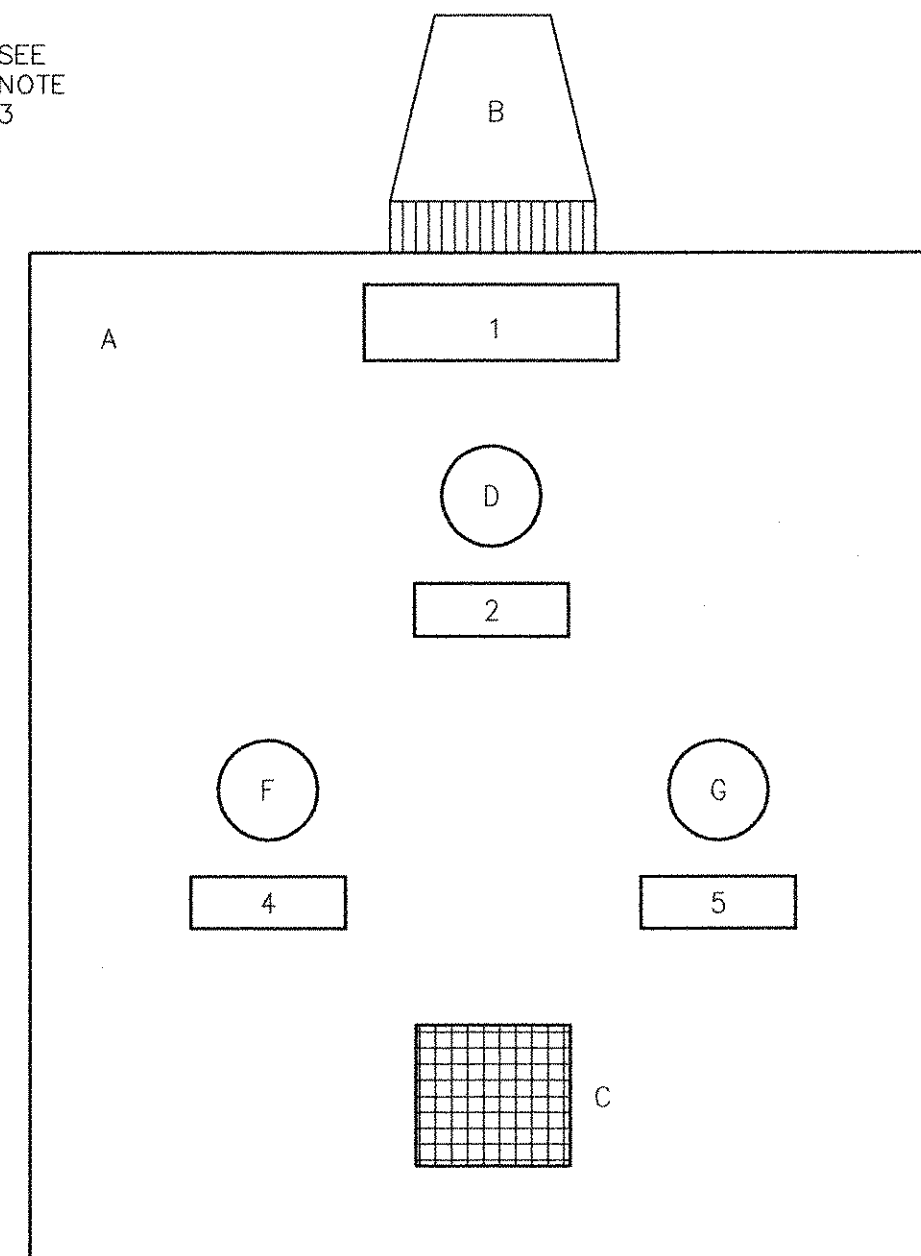
STP SHIELDED TWISTED PAIR (CABLE)

NOTES:

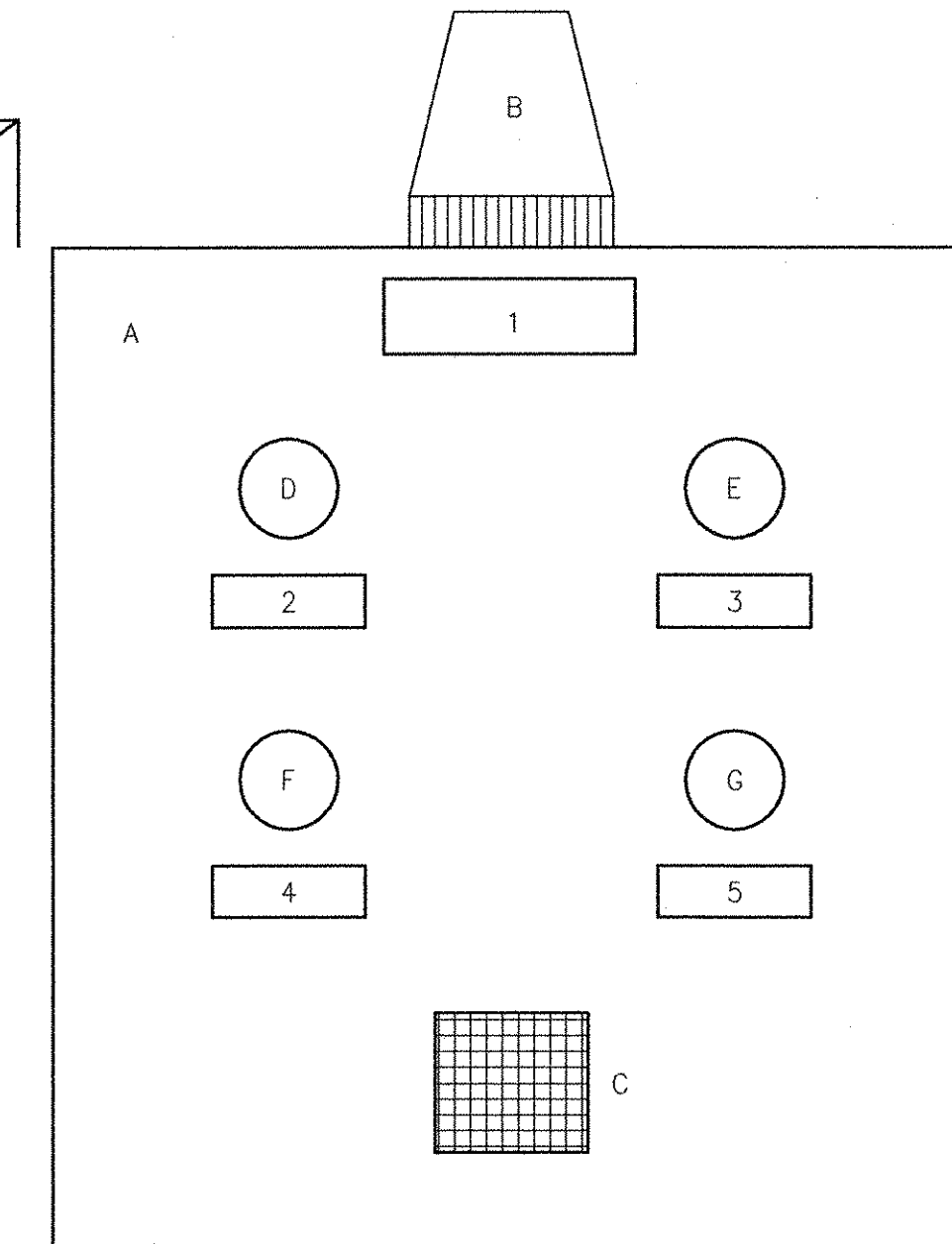
- 1. CONNECT SILENCING SWITCHES IN SERIES.
- 2. QUANTITY OF AIT'S ARE SHOWN ON "I" SHEETS, MISCELLANEOUS DETAILS.
- 3. QUANTITY OF RELAYS CORRESPONDS TO QUANTITY OF AIT'S
- 4. AT LAST RGMS, CONNECT POINT "A" TO POINT "B."

ITEM	MAIN	REMOTE	DESCRIPTION	VENDOR	MODEL
A	X	X	PANEL	-	BASED ON AREA CLASSIFICATION (SEE ELECTRICAL)
B	X	X	BEACON	EDWARDS SIGNALING	104ST SERIES ADAPTABLEACON STROBES NEMA 4X
C	X	X	HORN	EDWARDS SIGNAL	ADAPTAHORN VIBRATION HORN 876 & 877 SERIES NEMA 4X
D	X	X	GAS ALARM LED	ALLEN BRADLEY	800T SERIES 30.5MM 120 VAC LED (RED)
E	X	X	VENTILATION ALARM LED	ALLEN BRADLEY	800T SERIES 30.5MM 120 VAC LED (YELLOW)
F	X	X	SILENCE HORN PUSH BUTTON (MOMENTARY CONTACTS)	ALLEN BRADLEY	800T SERIES 30.5MM NEMA TYPE
G	X	X	TEST PUSH BUTTON (MOMENTARY CONTACTS)	ALLEN BRADLEY	800T SERIES 30.5MM NEMA TYPE

GAS MONITORING STATION



FRONT VIEW
GAS MONITORING STATION



FRONT VIEW
GAS & VENTILATION STATION

NAME PLATE LEGEND:

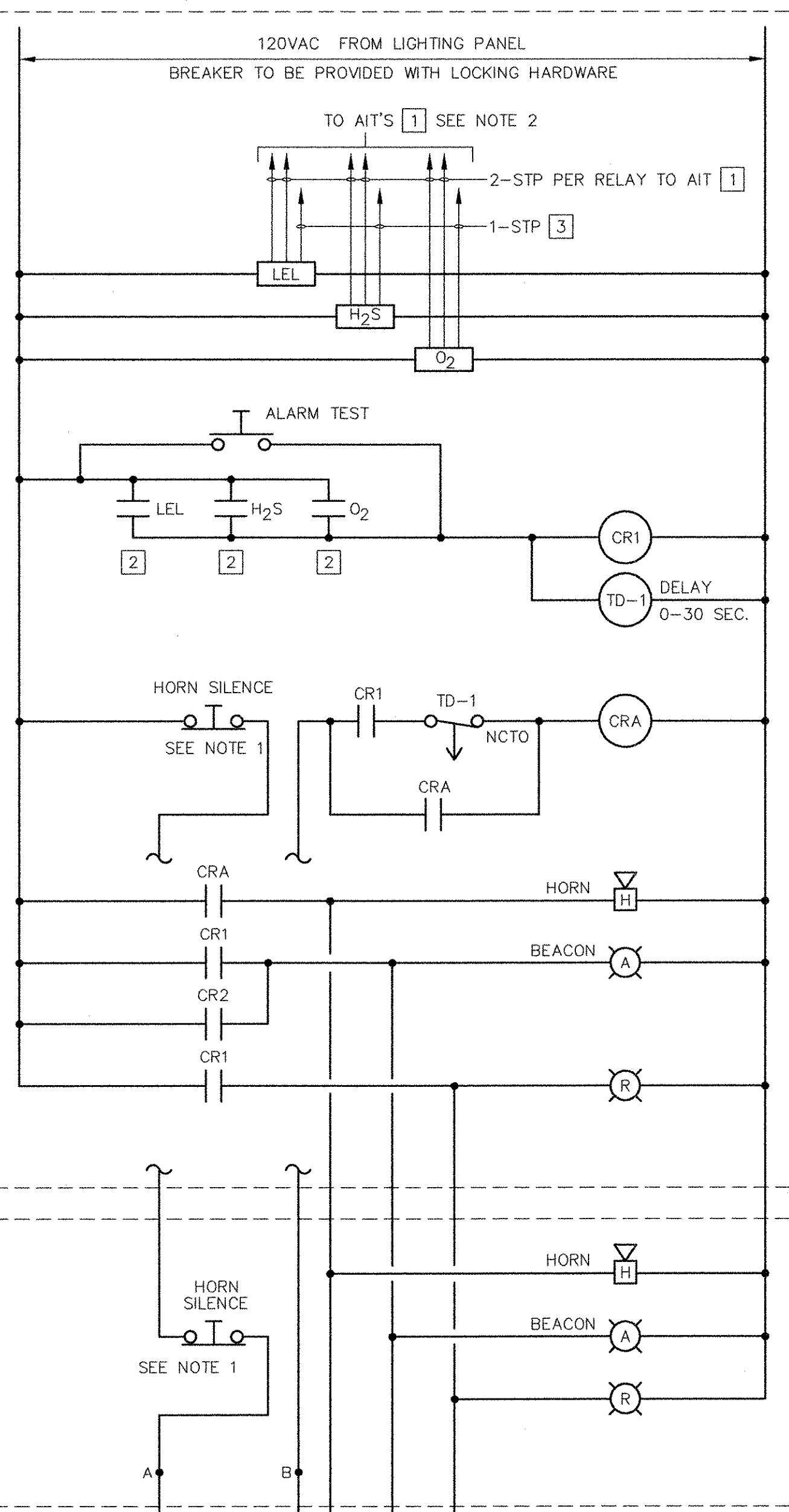
- 1. GAS ALARM PANEL
- 2. "LEAVE AREA-DANGEROUS GAS"
- 3. "LOSS OF VENTILATION"
- 4. "SILENCE HORN"
- 5. "BEACON & HORN TEST SWITCH"

GAS & VENTILATION STATION SCHEDULE

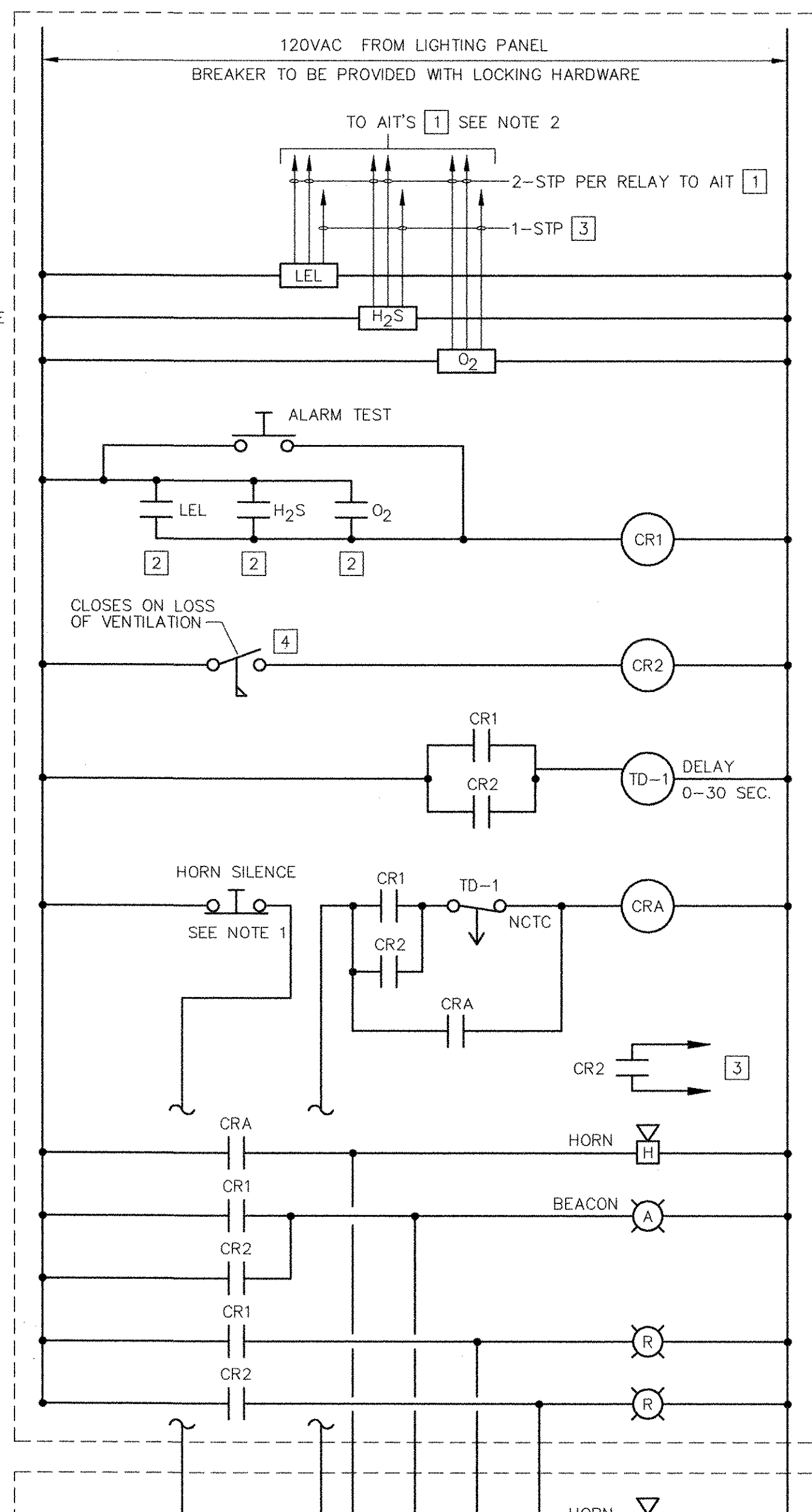
ITEM	DESCRIPTION	PANEL NUMBER
1.	MASTER GMS	53-MGMS, 54-MGMS
2.	REMOTE GMS	32-RGMS-1, 2; 42-RGMS-21, 22, 23; 43-RGMS-1, 2, 3; 53-RGMS-1, 2; 54-RGMS-21, 22, 23;

GAS MONITORING STATION SCHEDULE

ITEM	DESCRIPTION	PANEL NUMBER
1.	MASTER GMS	
2.	REMOTE GMS	11-RGMS-1, 2, 3; 21-RGMS-1, 2; 42-RGMS-11, 12



GAS MONITORING STATION
WIRING DIAGRAM



GAS & VENTILATION STATION
WIRING DIAGRAM

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING DESCRIPTION

AECOM USA, INC.
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

YASSEER AL-RIZK
No. 05 9430
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

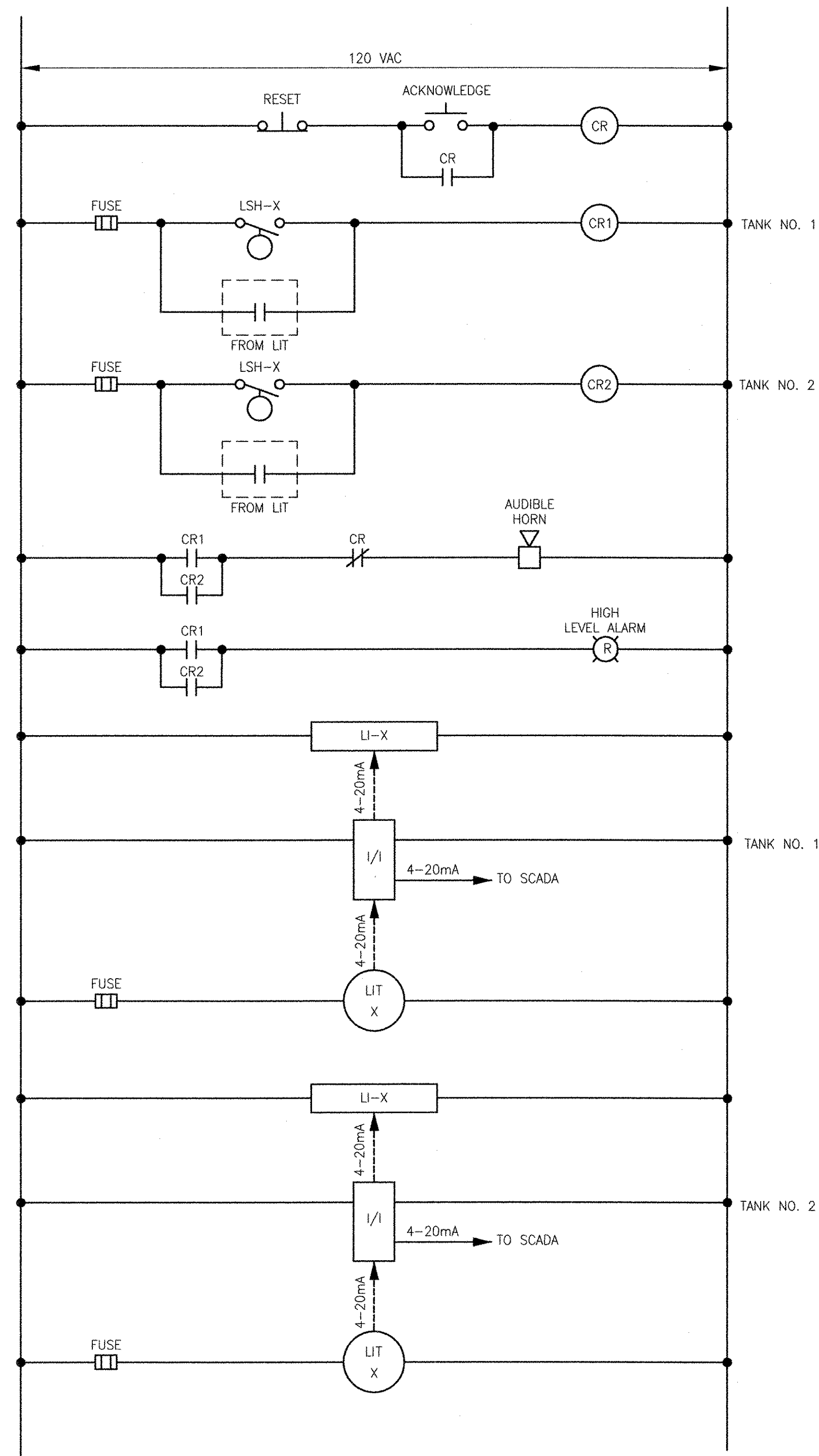
GAS MONITORING & VENTILATION STATION

INSTRUMENTATION

PROJECT NO:	60148648
CAD DWG FILE:	99 DI-501
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

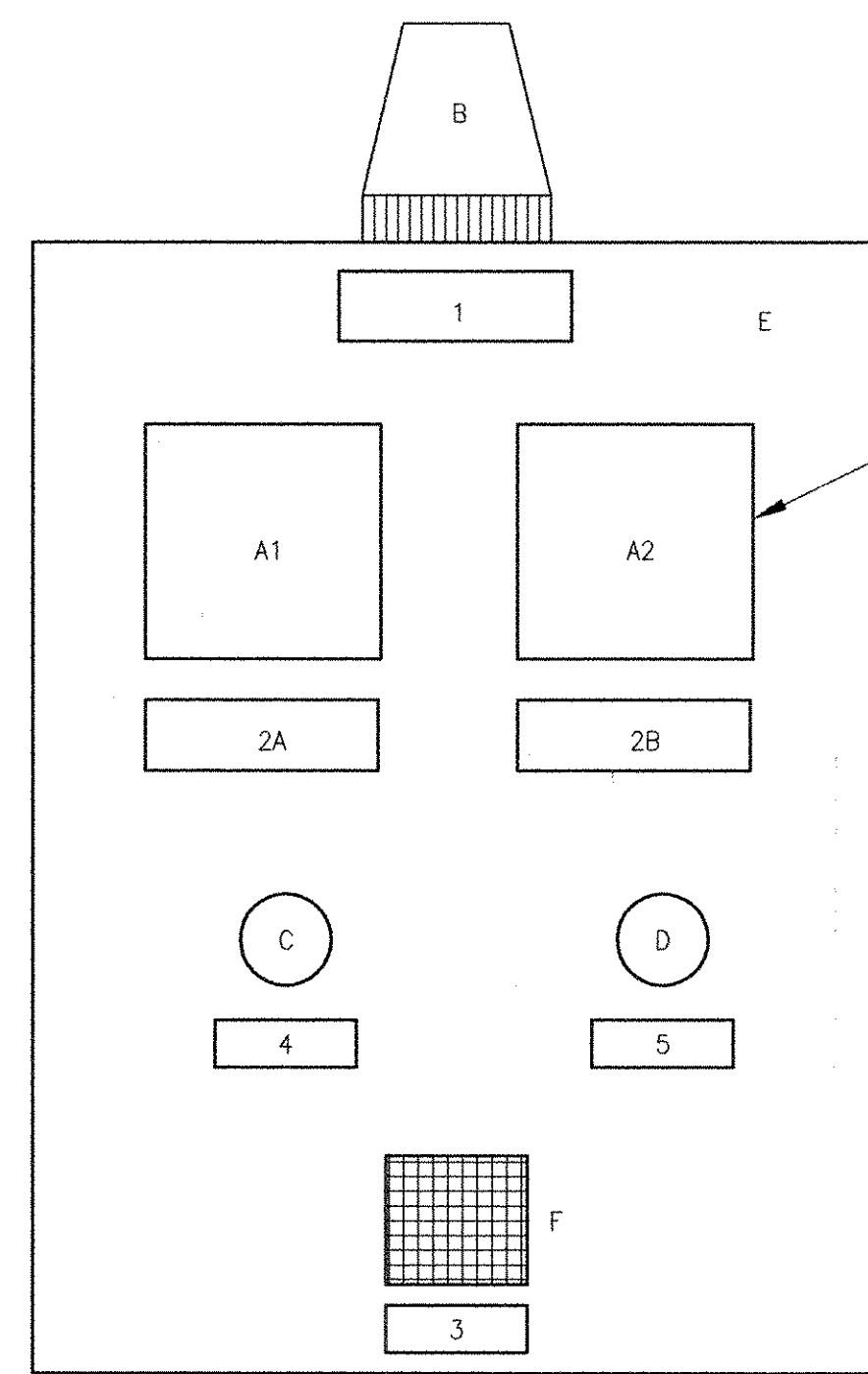
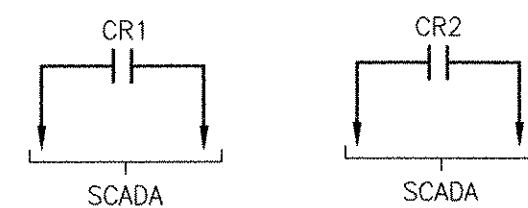
99 DI-501

P:\1\FILENAME: P:\0148648 - EAST PROVIDENCE WWS\COMMON\0148648-DI-501.DWG
 LAST UPDATE: Wednesday, October 24, 2012 8:47:26 AM
 PLOT DATE: Thursday, October 25, 2012 8:15:06 AM
 ANSI D - 24-Oct-12



CHEMICAL FILL STATION

- NOTES:**
1. LOOP NUMBERS REFER TO OTHER P&I DRAWINGS.
 2. ONLY ONE TANK LEVEL INDICATOR FOR PANEL 21-CS.ST-CFS.



NOTE 2

NAME PLATE LEGEND:

1. FILL PANEL
2. TANK LEVEL
3. HIGH ALARM
4. RESET
5. ACKNOWLEDGE

FILL STATION

ITEM	DESCRIPTION	VENDOR	MODEL
A.	LEVEL INDICATOR	PR ELECTRONICS	5714C (WITH 4~20MA OUTPUT)
B.	BEACON	FEDERAL SIGNAL	LPI-120VAC-RED
C.	RESET PUSH BUTTON	SQUARE D	9001-SKR1U
D.	ACKNOWLEDGE PUSH BUTTON	SQUARE D	9001-SKR1U
E.	304 SS PANEL 16x20x6 MINIMUM	HOFFMAN	CSD20166
F.	HORN	FEDERAL SIGNAL	350TR

FILL STATION PANEL SCHEDULE

ITEM	DESCRIPTION	PANEL NUMBERS
A	CAUSTIC SODA (CS)	21-CS.ST-CFS
B	SODIUM HYPO (SH)	42-SH.ST-CFS

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

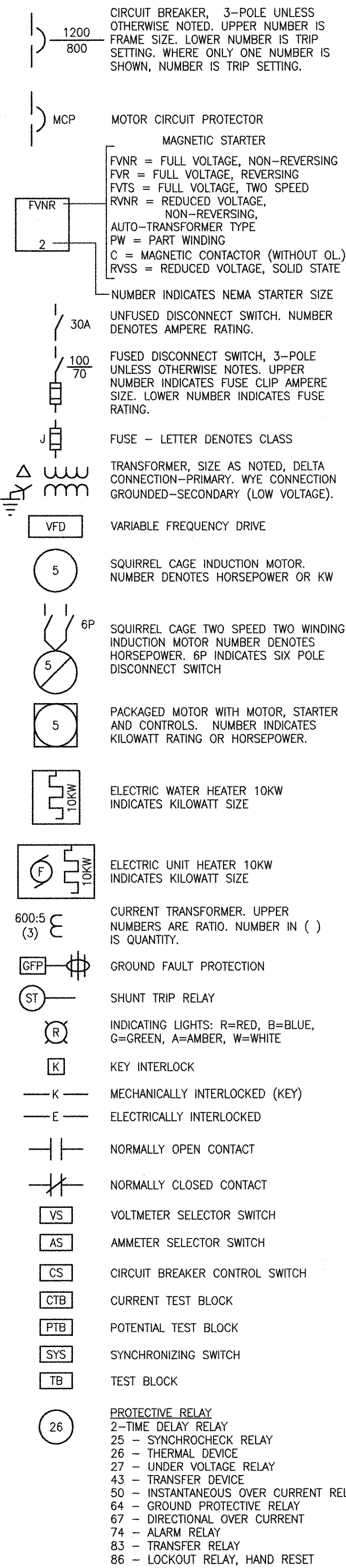
YASSEER M. YASSER
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

**CHEMICAL FILL & TRANSFER STATION
 DETAILS
 INSTRUMENTATION**

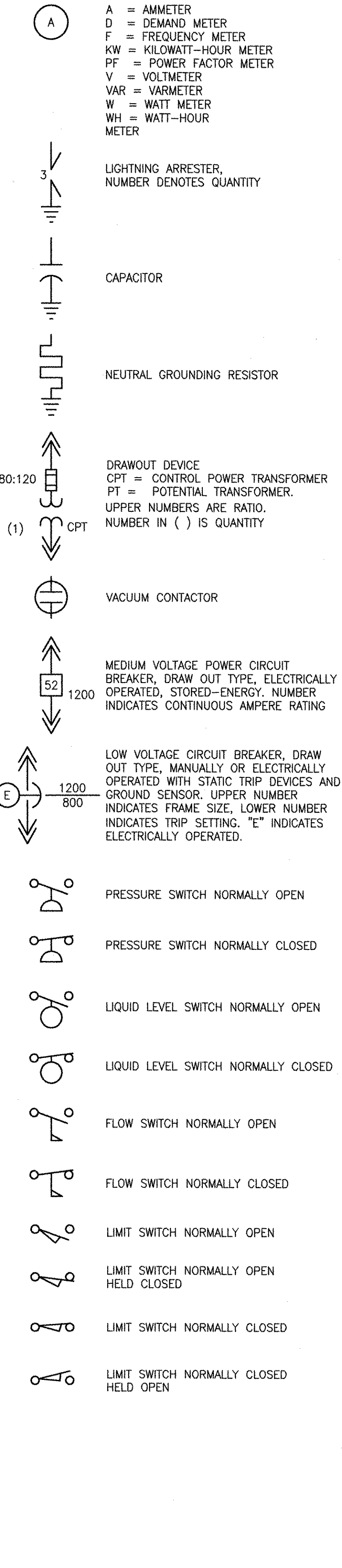
PROJECT NO:	60148648
CAD DWG FILE:	99 DI-502
DESIGNED BY:	G. CHEN
DRAWN BY:	M. STEWART
DEPT CHECK:	E. STILLWELL
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

99 DI-502

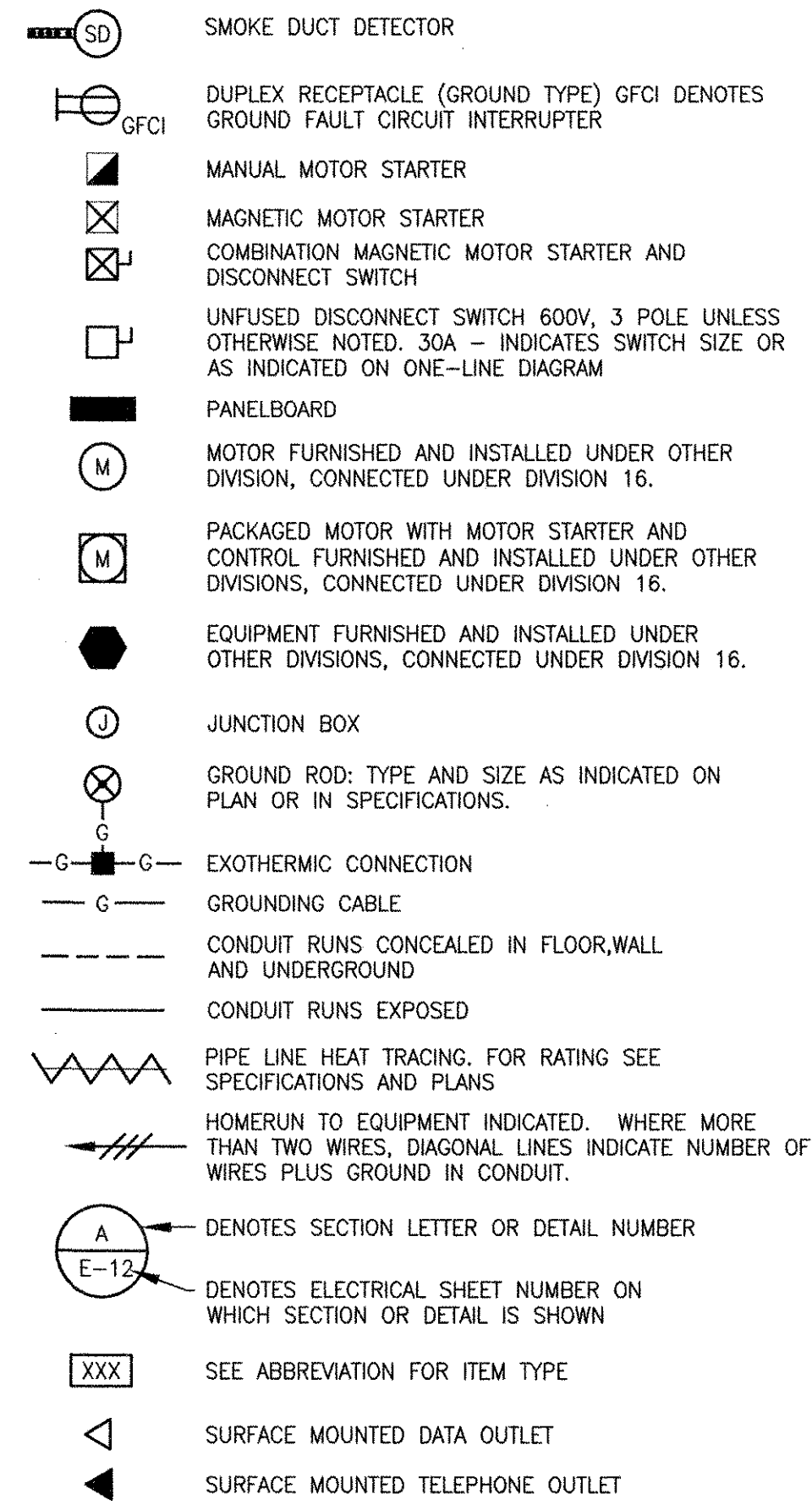
DIAGRAMS



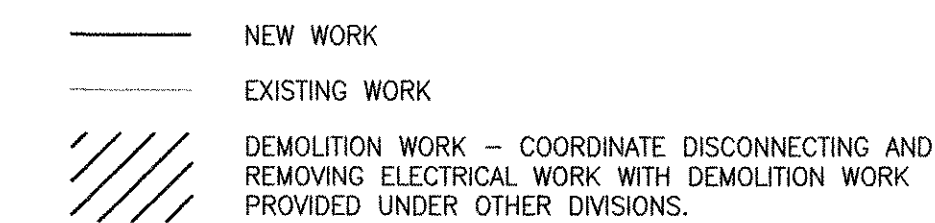
DIAGRAMS



PLANS



LEGEND:



ABBREVIATIONS

- AA AUTOMATIC ALTERNATOR
- AFF ABOVE FINISH FLOOR
- AHU AIR HANDLING UNIT
- AL ALARM
- AN ANNUNCIATOR
- ATS AUTOMATIC TRANSFER SWITCH
- BTD BEARING TEMPERATURE DETECTOR
- BTS BEARING TEMPERATURE SWITCH
- CES CONVEYOR EMERGENCY STOP SWITCH
- CLF CURRENT LIMITING FUSE
- CLS CENTRIFUGAL LIMIT SWITCH
- CMS COMBINATION MOTOR STARTER
- CPT CONTROL POWER TRANSFORMER
- CR CONTROL RELAY
- CS CONTROL SWITCH
- DB DOORBELL
- EF EXHAUST FAN
- EHH ELECTRICAL HAND HOLE
- EL ELEVATION
- EMH ELECTRICAL MANHOLE
- EOV ELECTRICALLY OPERATED VALVE
- ES EMERGENCY STOP SWITCH (MAINTAINED CONTACT) (PROVIDE DEVICE THAT CAN BE LOCKED IN THE OFF POSITION)
- EUH ELECTRIC UNIT HEATER
- EWC ELECTRIC WATER COOLER
- FAA FIRE ALARM ANNUNCIATOR PANEL
- FACP FIRE ALARM CONTROL PANEL
- FANM FIRE ALARM NETWORK MODULE
- FC FLOW CONTROLLER
- FOH FAN-OFF-HEATER
- FS SPRINKLER SYSTEM FLOW SWITCH
- FSL FIRE ALARM STATUS LIGHT
- FIS IONIZATION SMOKE DETECTOR STATUS STATION
- FSR FORWARD-STOP-REVERSE
- FTC FIRE FIGHTER'S TELEPHONE STORAGE CABINET
- GFCI GROUND FAULT PROTECTION
- GFP GROUND FAULT PROTECTION
- GSC GROUNDED SERVICE CONDUCTOR
- GSCT GROUND SENSING CURRENT TRANSFORMER
- G GROUND
- HA HAND-AUTOMATIC
- HH HAND HOLE
- HOA HAND-OFF-AUTOMATIC
- HP HORSEPOWER
- HTR MOTOR HEATER
- HWT HIGH WATER TEMPERATURE SWITCH
- ISB INTRINSICALLY SAFE BARRIER
- KP KEY PAD
- KS KEY SWITCH
- KW KILOWATT
- LOR LOCAL-OFF-REMOTE
- LR LOCAL-REMOTE
- LS LIMIT SWITCH
- MH MANHOLE
- MCC MOTOR CONTROL CENTER
- MCP MOTOR CIRCUIT PROTECTOR
- MOV MOTOR OPERATED VALVE
- MSD MOISTURE SENSING DETECTOR
- NIR NOT IN REMOTE
- NO NORMALLY OPEN
- NC NORMALLY CLOSED
- OC OPEN-CLOSE

ABBREVIATIONS

- OL'S MOTOR OVERLOADS
- OO ON-OFF
- OSC OPEN-STOP-CLOSE
- PLC PROCESS LOGIC CONTROLLER
- ROA RUN-OFF-AUTOMATIC
- ROR RUN-OFF-REMOTE
- SAA SECURITY ALARM ANNUNCIATOR PANEL
- SCP SECURITY CONTROL PANEL
- SCR SILICON CONTROL RECTIFIER
- SEL SELECTOR SWITCH
- SF SLOW-FAST
- SFS SLOW-FAST-STOP
- SH SPACE HEATER
- SOFA SLOW-OFF-FAST-AUTOMATIC
- SPF SHEAR PIN FAILURE CONTACT
- SQ SEQUENCE SELECTOR SWITCH
- SS START-STOP
- SV SOLENOID VALVE
- SW SWITCH
- T THERMOSTAT
- TC TIMED CLOSE
- T/C THERMOCOUPLE
- TD TIME DELAY RELAY
- TG TACHOMETER GENERATOR
- TO TIMED OPEN
- TI TIMER
- TQ TORQUE ALARM SWITCH
- TR TRANSFORMER
- TS TEMPERATURE SENSOR
- TTC TELEPHONE TERMINAL CABINET
- TYP TYPICAL
- VFD VARIABLE FREQUENCY DRIVE
- VIS VIBRATION SWITCH
- VPS VACUUM PRESSURE SWITCH
- W DENOTES WATERTIGHT EQUIPMENT
- WP DENOTES WEATHERPROOF EQUIPMENT
- XFMR TRANSFORMER
- XP DENOTES EXPLOSION PROOF EQUIPMENT
- XST EXISTING
- ZSS ZERO SPEED SWITCH
- LIT LEVEL INSTRUMENT TRANSMITTER
- PS PRESSURE SWITCH
- LSH LIMIT SWITCH HIGH
- LSL LIMIT SWITCH LOW
- LSHH LIMIT SWITCH HIGH-HIGH
- FE FLOW ELEMENT
- FIT FLOW INSTRUMENT TRANSMITTER
- O2 OXYGEN MONITOR
- LEL LOWER EXPLOSIVE LIMIT MONITOR
- H2S HYDROGEN SULFIDE MONITOR

GENERAL NOTES

1. CONDUIT INSTALLATIONS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS.
2. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE OWNER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
3. SWITCHES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. RECEPTACLES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED, EXCEPT RECEPTACLES IN OFFICES OR AREAS WITH SUSPENDED CEILINGS SHALL BE MOUNTED 1'-6" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
4. SURFACE MOUNTED PANELS AND PANEL BOARDS, SHALL BE MOUNTED TO MAINTAIN A 1/4" AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.
5. PROVIDE CONDUIT AND WIRE FOR ALL SURGE PROTECTION DEVICES AT INSTRUMENTS AND INSTRUMENTATION PANELS. SURGE PROTECTION DEVICES TO BE PROVIDED BY DIVISION 13 SUPPLIER. INSTALLATION OF INSTRUMENTATION AND ACCESSORIES BY DIVISION 13 CONTRACTOR.
6. ITEMS SHALL BE PROVIDED WITH NEMA ENCLOSURE AS INDICATED ON THE ENVIRONMENTAL CLASSIFICATION TABLE ON SHEET 00 E-604.
7. SWITCHGEAR AND MCC COMPARTMENT DESIGNATIONS AS INDICATED BELOW:
BLANK: NOT INTENDED FOR USE, PLATE ONLY.
SPACE: CONTAINS NECESSARY BUS AND HARDWARE FOR FUTURE ADDITION OF BREAKERS OR STARTERS WITHIN SIZE RANGE SHOWN
SPARE: CONTAINS A COMPLETE BREAKER OR STARTER INSTALLED, SIZE AS INDICATED AVAILABLE FOR FUTURE USE.
8. ALL SWITCHES, RECEPTACLES AND EQUIPMENT SHALL COMPLY WITH THE LATEST VERSION OF THE ADA (AMERICANS WITH DISABILITIES ACT).

CONSTRUCTION NOTES

1. PRIOR TO CONSTRUCTION OF NEW DUCT BANKS, FIELD VERIFY PROPOSED ROUTING AND EXISTING UNDERGROUND UTILITIES.
2. THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM AT THE WWP SHALL REMAIN IN SERVICE UNTIL THE NEW DISTRIBUTION SYSTEM HAS BEEN INSTALLED AND ENERGIZED. BOTH EXISTING AND NEW ELECTRICAL SYSTEMS WILL BE ENERGIZED AT THE SAME TIME. TRANSFER LOADS ONE AT A TIME TO THE NEW ELECTRICAL SYSTEM. ONCE LOADS HAVE BEEN TRANSFERRED AND PROVEN OPERATIONAL, DEMOLITION OF THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM SHALL BEGIN.

DEMOLITION NOTES

1. IN ADDITION TO DEMOLITION WORK INDICATED ON THE ELECTRICAL DRAWINGS, DISCONNECT EXISTING ELECTRICALLY POWERED EQUIPMENT INDICATED AS DEMOLITION WORK ON DRAWINGS OF OTHER DIVISIONS/DESIGN DISCIPLINES. DISCONNECT AND REMOVE MOTORS, CONTROL PANELS AND ASSOCIATED DEVICES. REMOVE WIRING BACK TO MCC, PANELS AND/OR SWITCHBOARD UNLESS OTHERWISE INDICATED. CUT AND CAP CONDUIT AND ABANDON IN PLACE.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC.
100 EAST PROVIDENCE DRIVE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 25 22 9430
01/23/2012

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

SYMBOLS, LEGEND AND GENERAL NOTES

ELECTRICAL

PROJECT NO:	80148648
CAD DWG FILE:	00 E-001
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	NONE

00 E-001

PATH: \\FLENMEE\PI\60148648 - EAST PROVIDENCE (DB)\COMMON\SHETS\00 E-001.DWG
LAST UPDATE: Monday, October 08, 2012 2:52:19 PM
ANSI D - 8-Oct-12

1
2
3
4
5

D
C
B
A

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBD\COMMON SHEETS\E-101.DWG
 LAST UPDATE: Friday, October 05, 2012 9:14:12 AM
 PLOT DATE: Thursday, October 25, 2012 9:20:17 AM
 ANS D - 5-Oct-12

NOTES
 1. UTILIZE EXISTING DUCTBANK FOR NEW CABLES. REFER TO SHEET 00 E-102 FOR DUCTBANK DETAILS.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MADE BY	CHECKED	YR	REVISED FOR	DESCRIPTION
1	10/19/12	MS				

AECOM USA, INC.
 100 WASHINGTON ST., 9TH FLOOR
 WAREHOUSES, 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

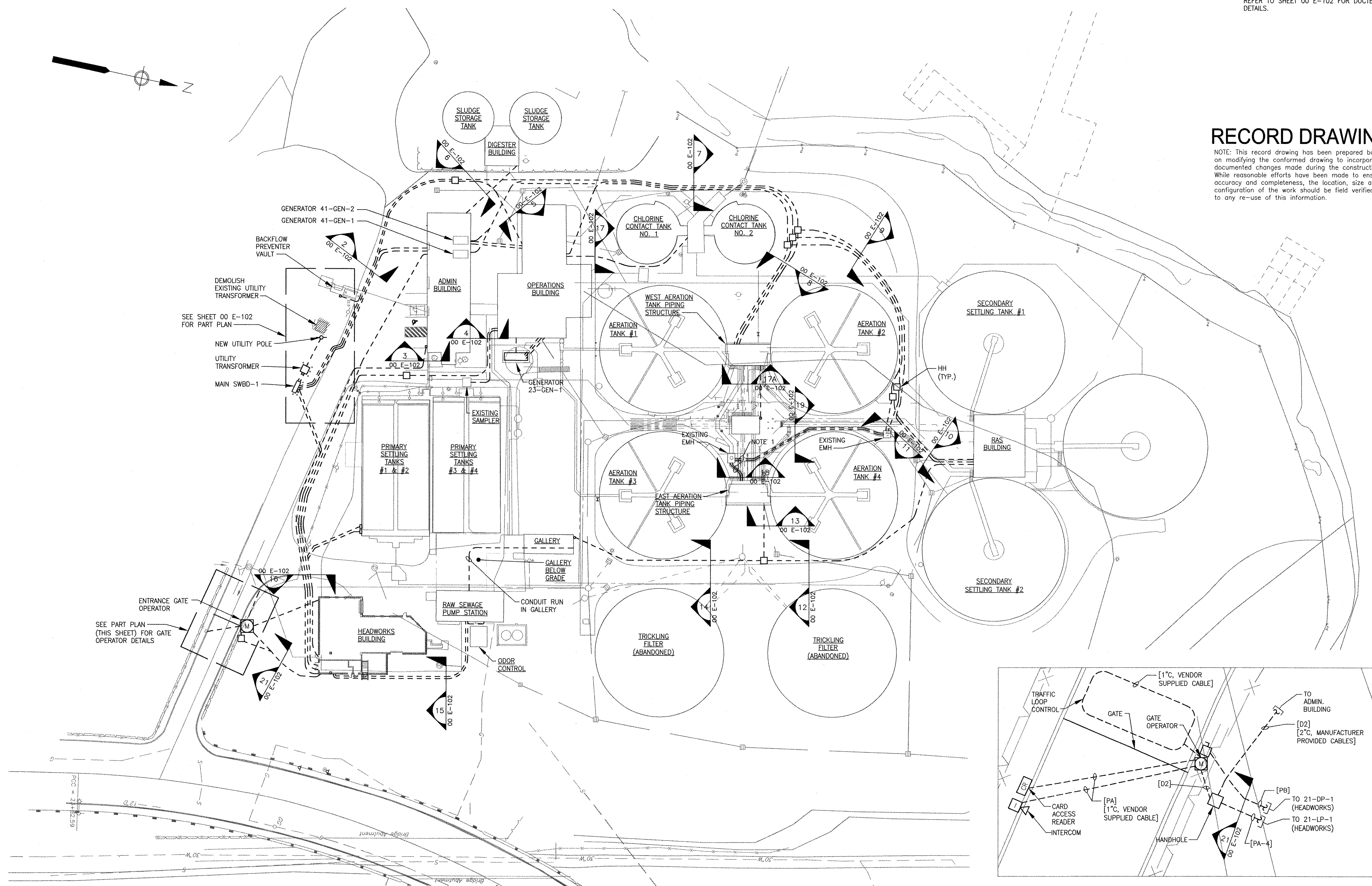
YASSER RIZK
 No. 25
 02/25/2012
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

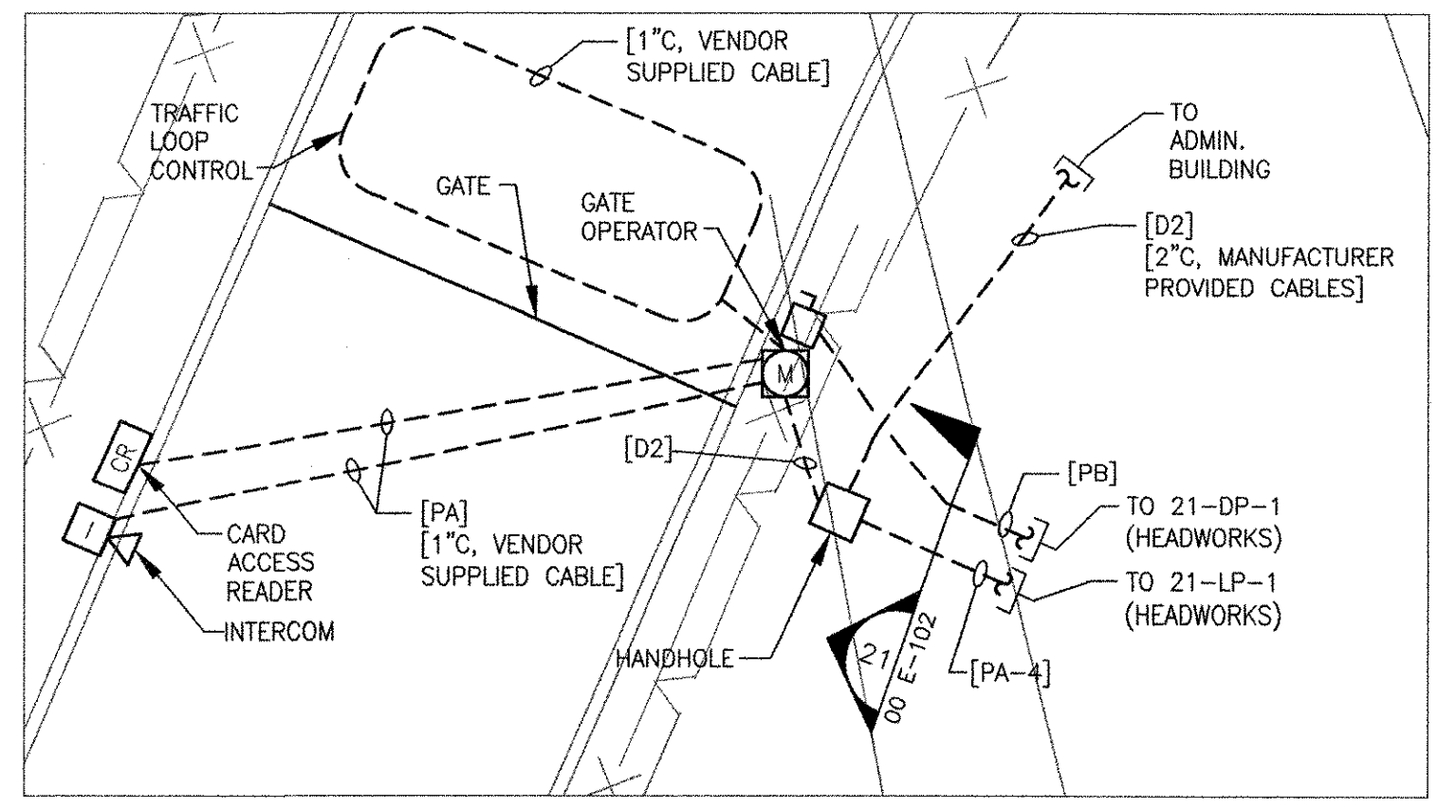
WWTP ELECTRICAL SITE PLAN
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	00 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 E-101



ELECTRICAL SITE PLAN
 SCALE: 1"=40'-0"



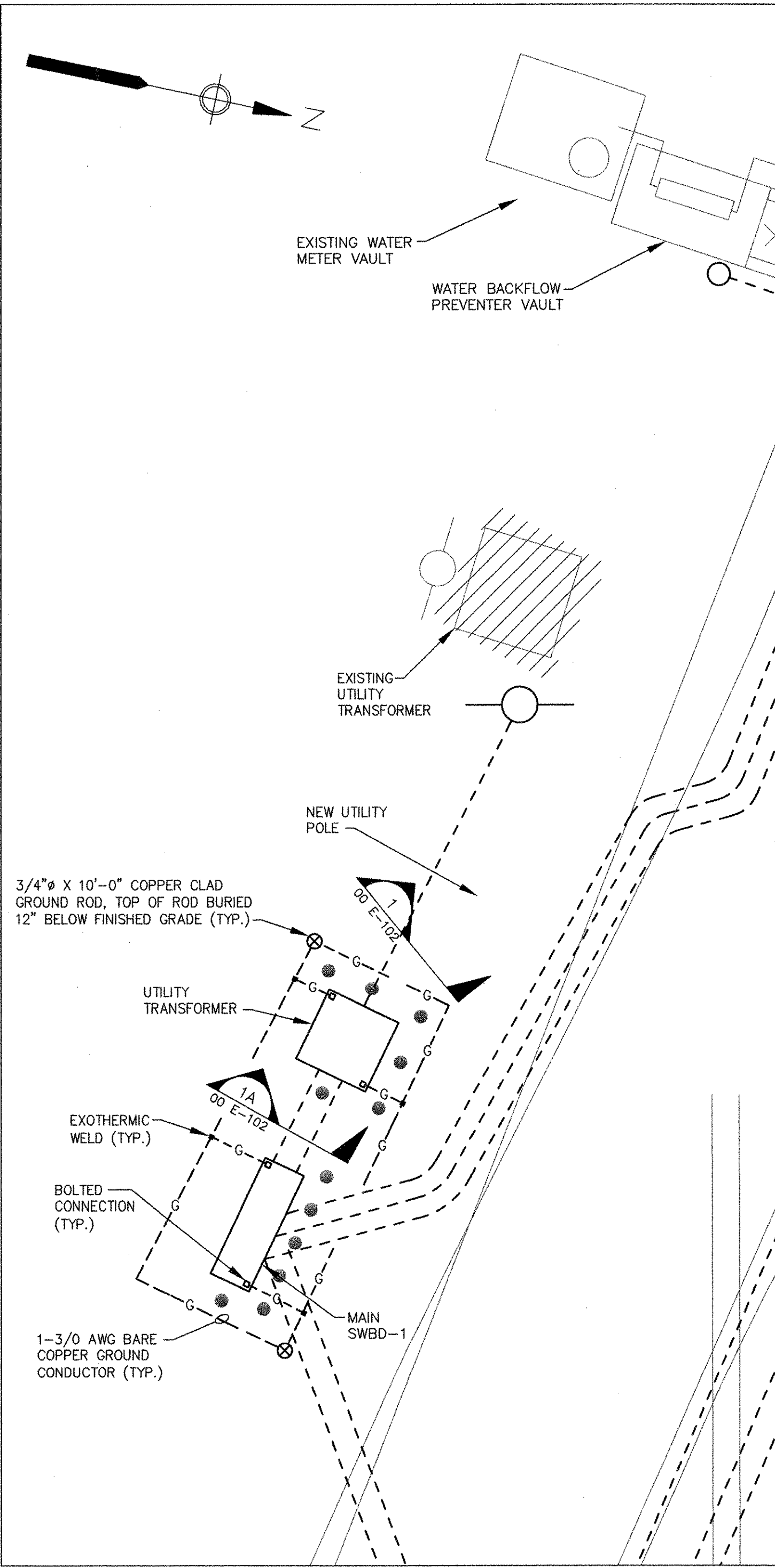
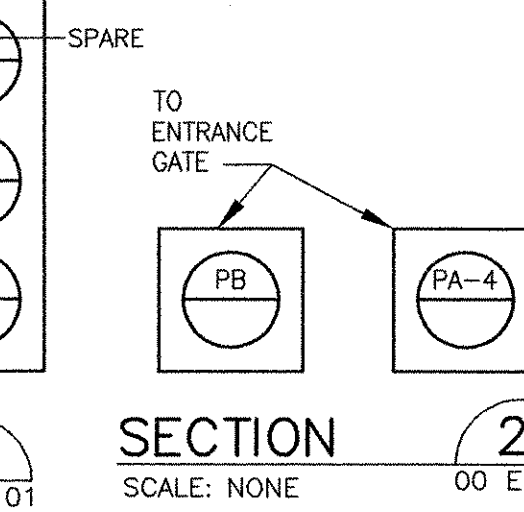
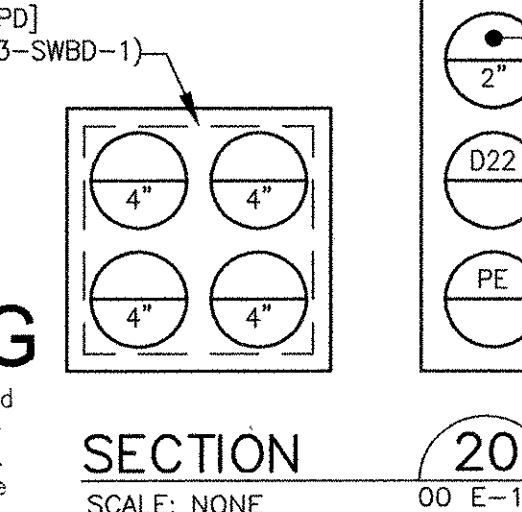
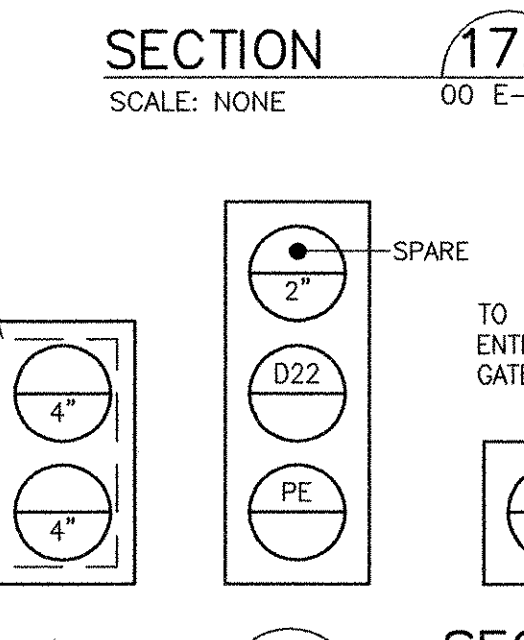
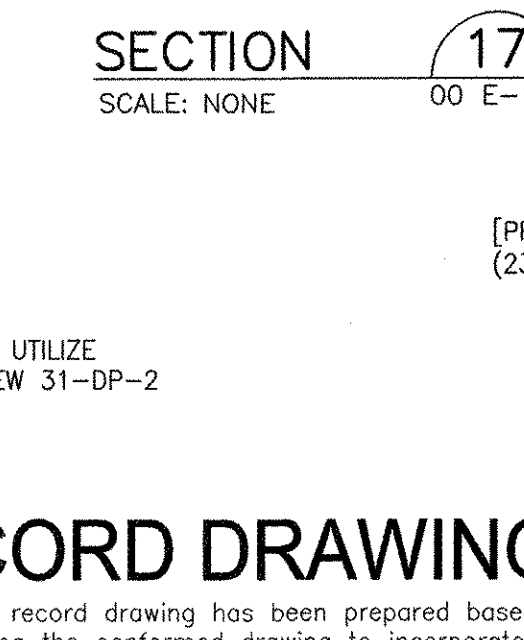
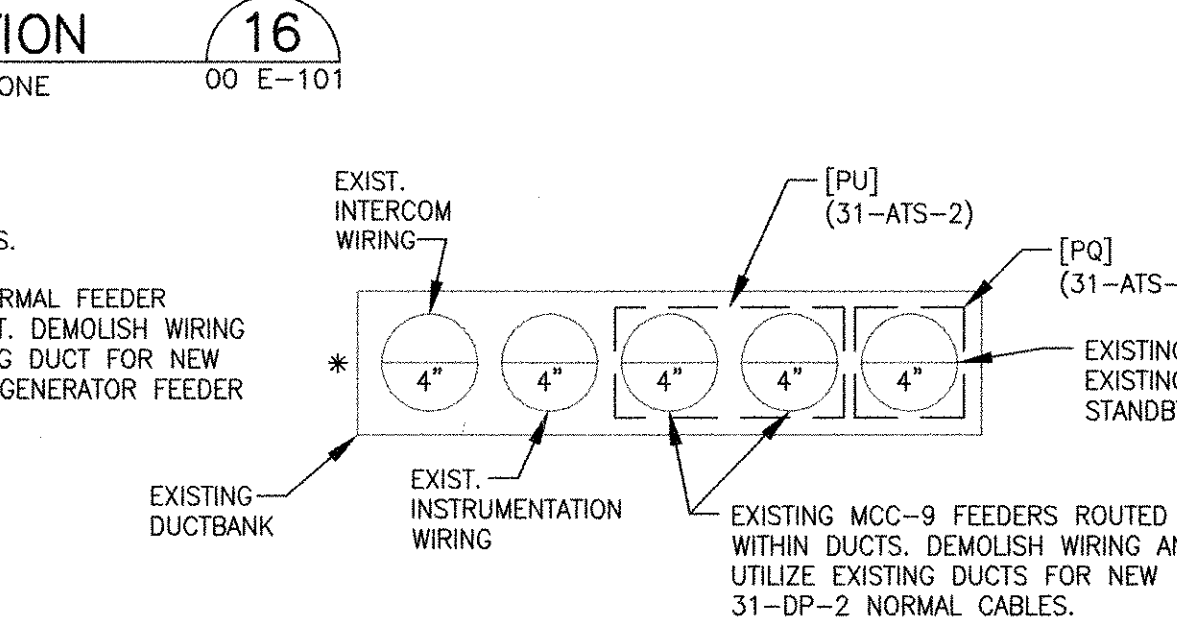
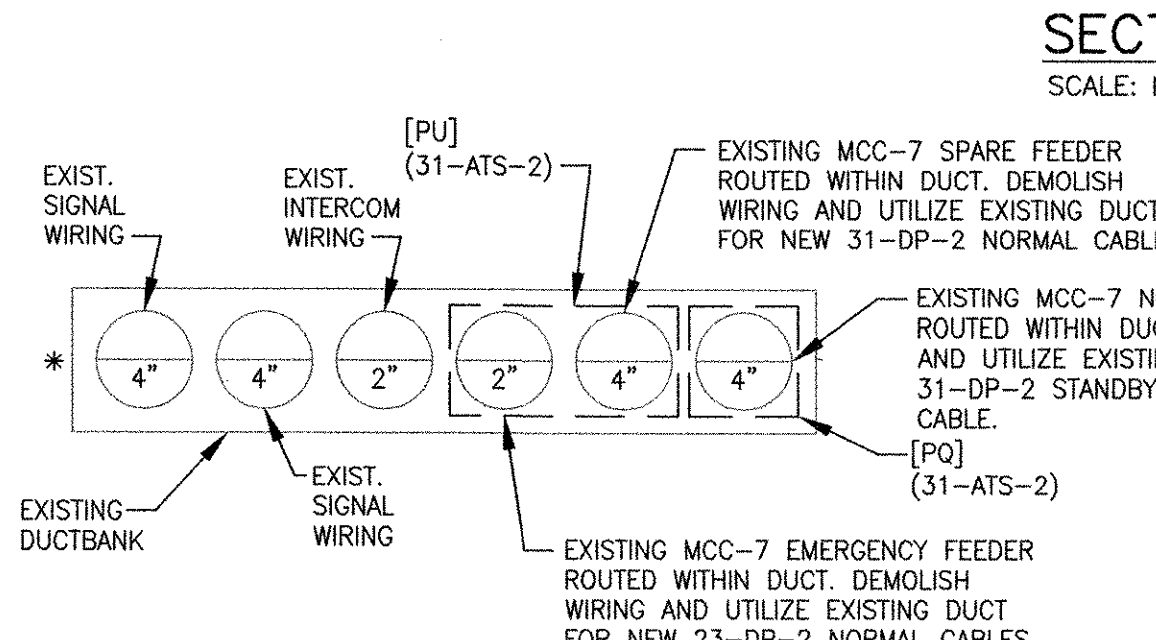
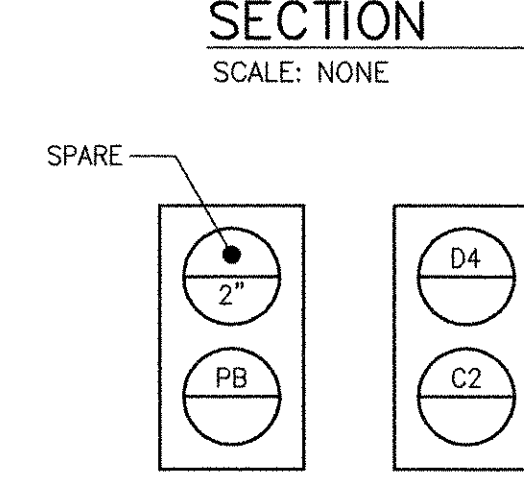
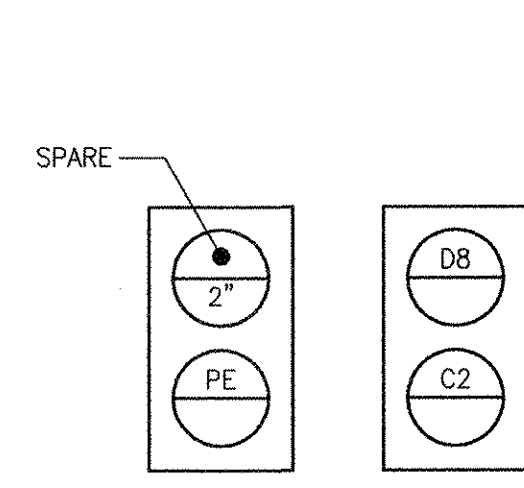
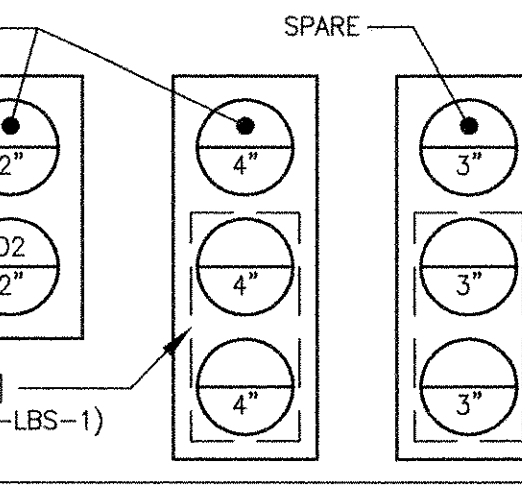
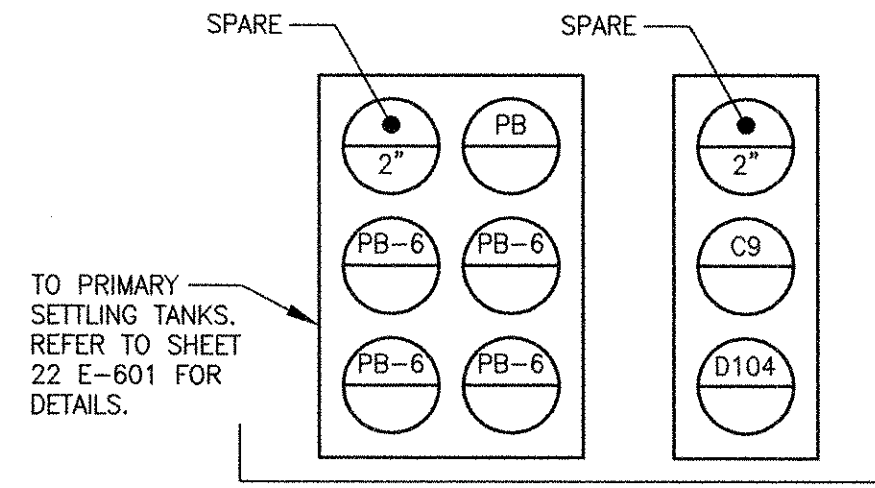
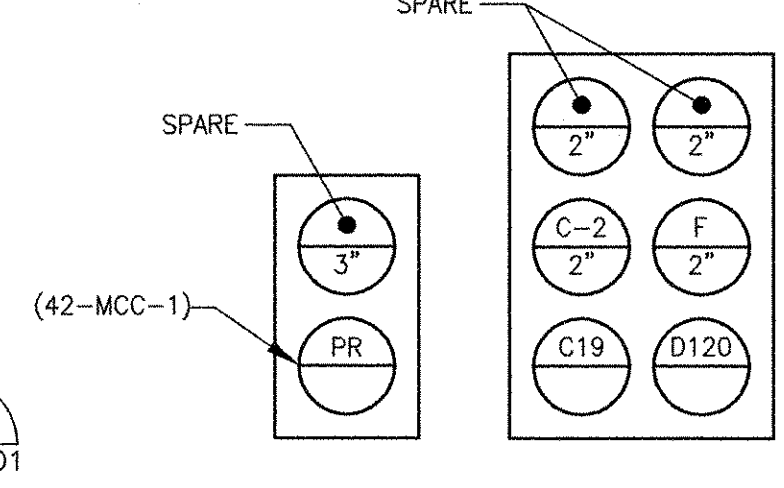
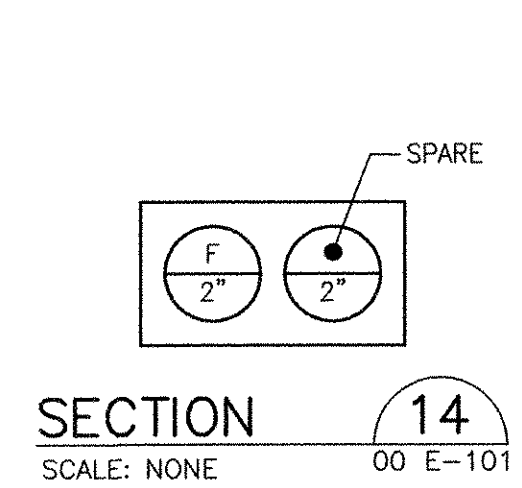
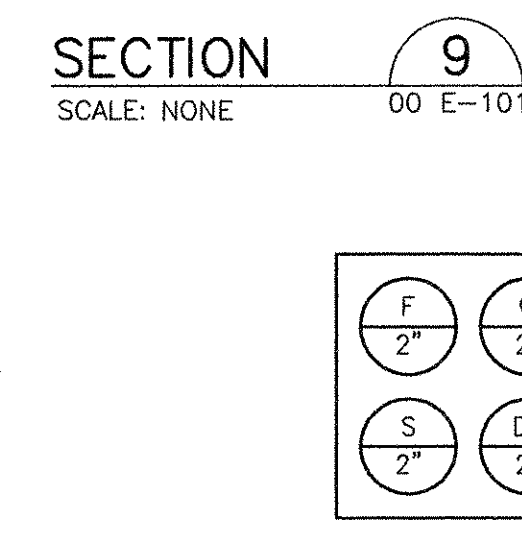
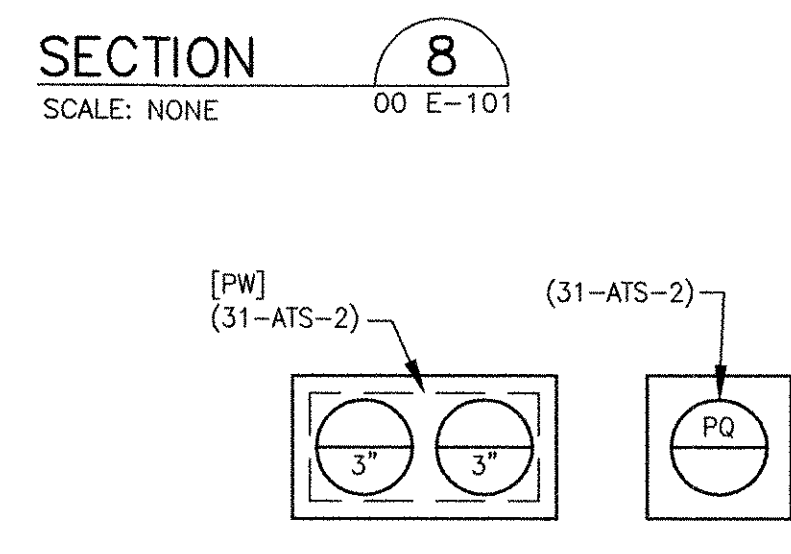
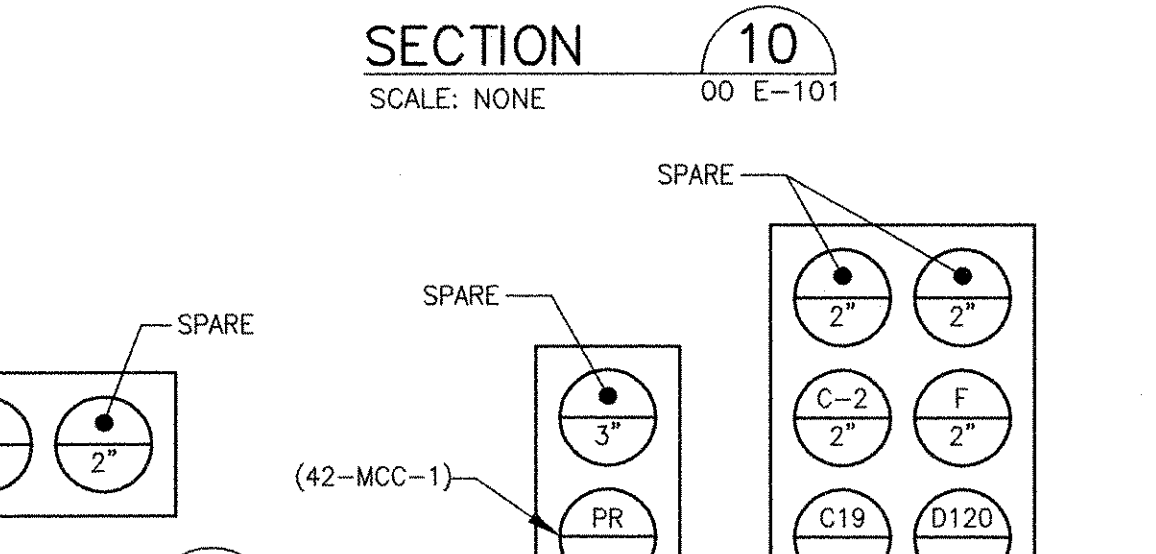
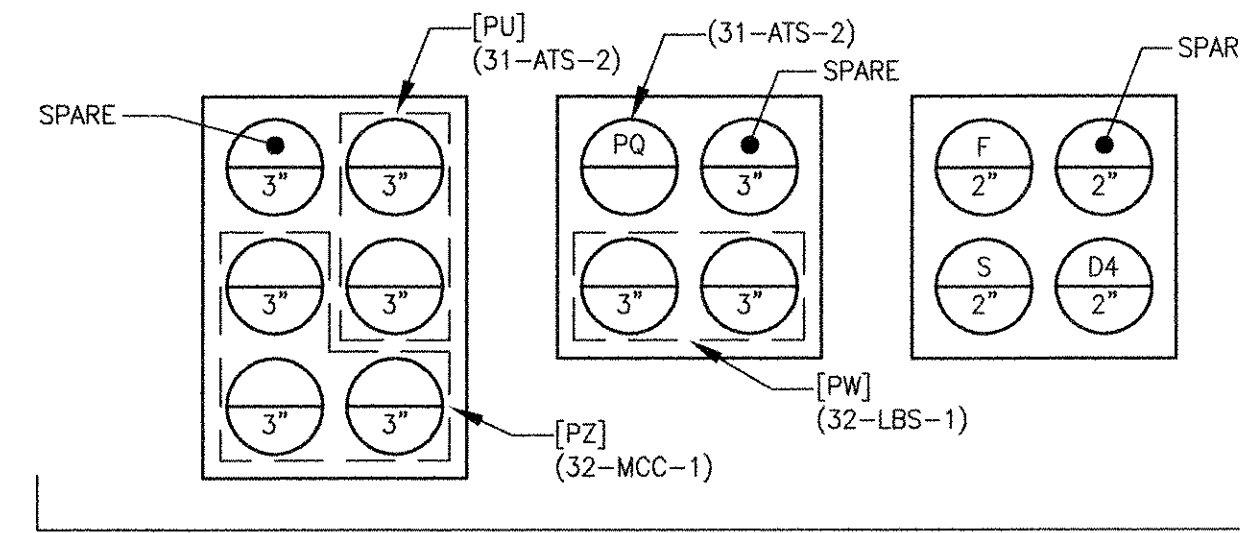
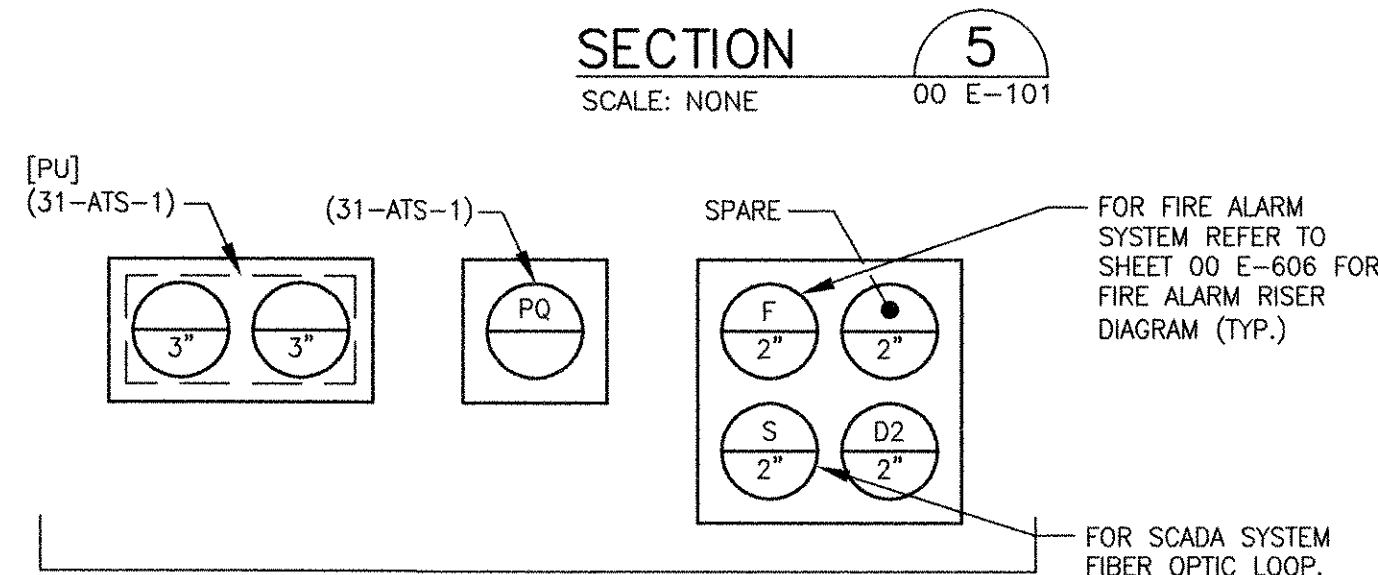
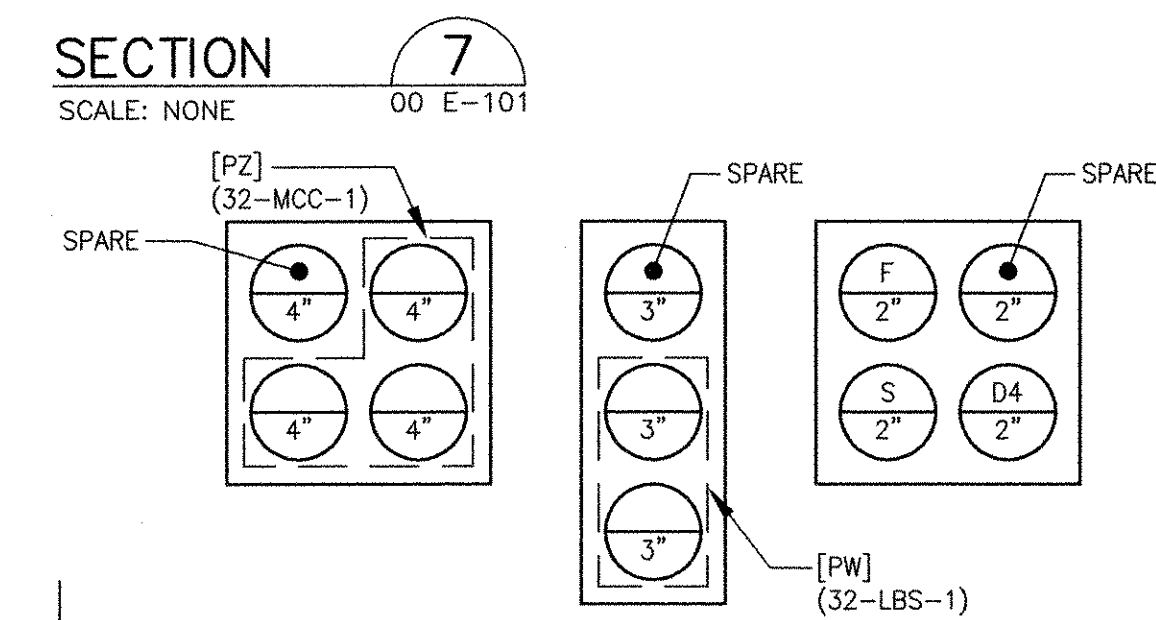
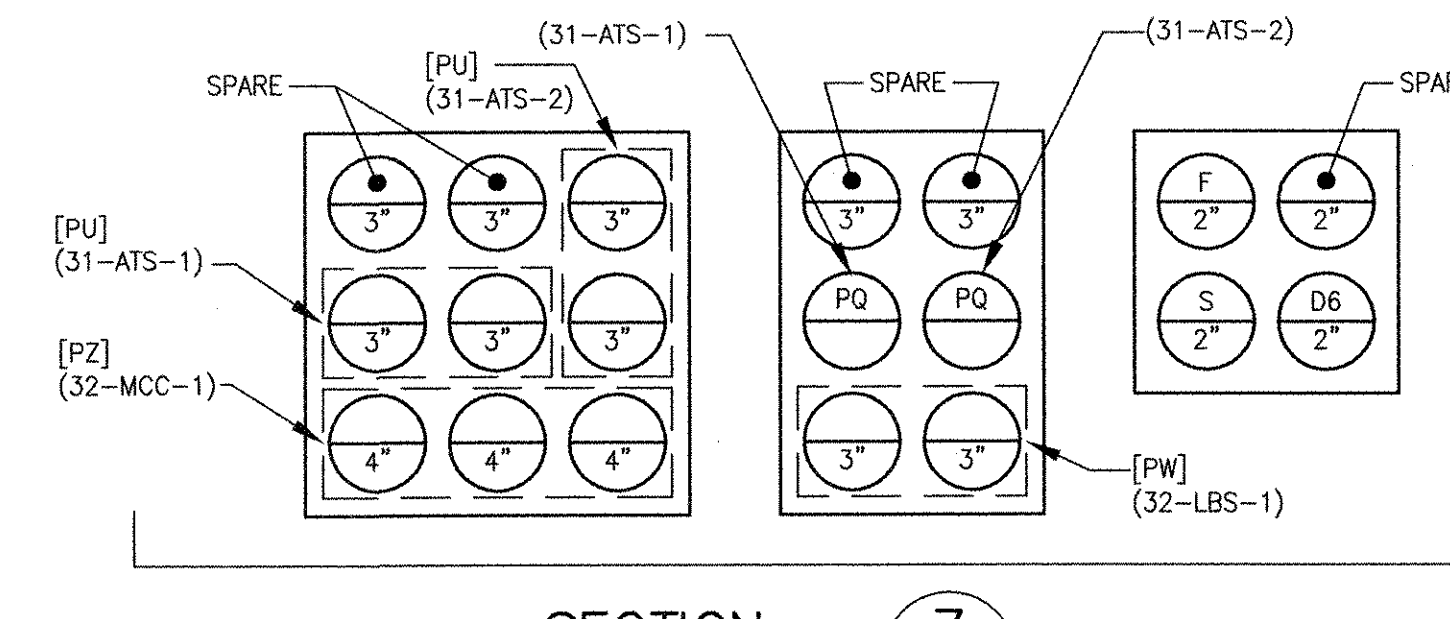
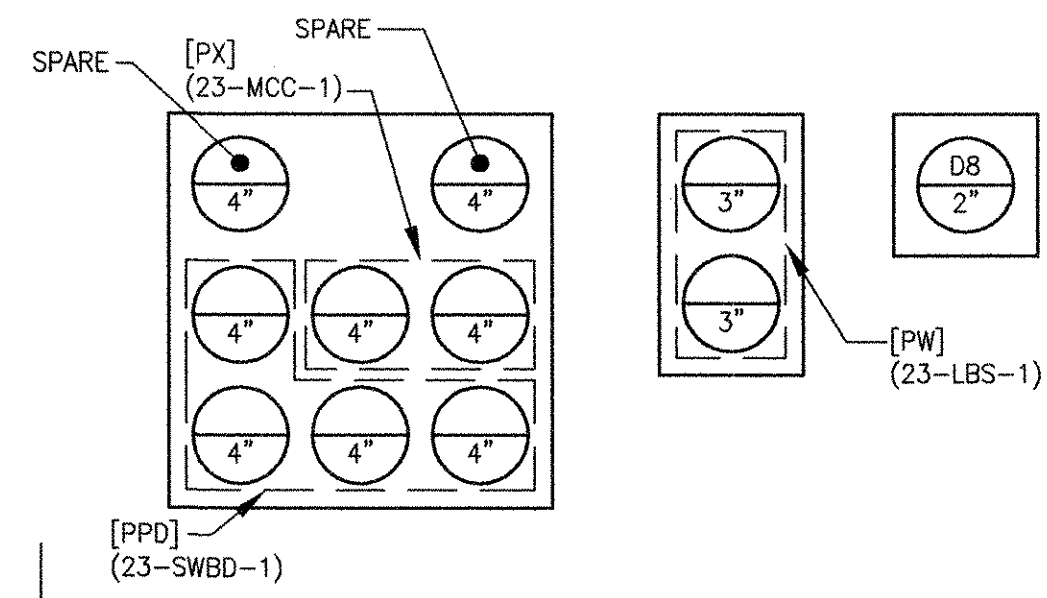
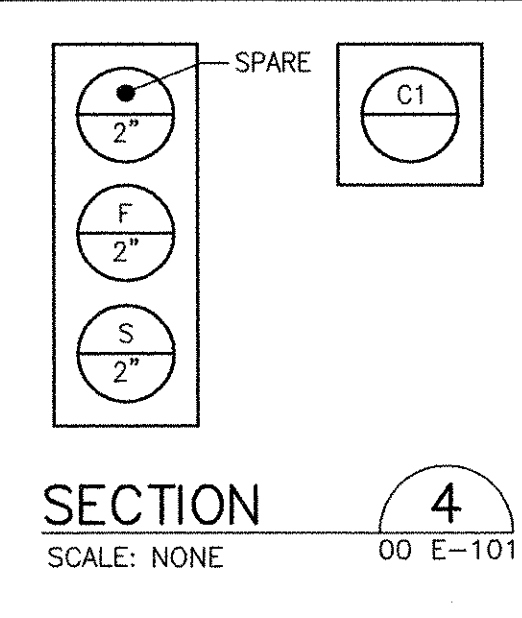
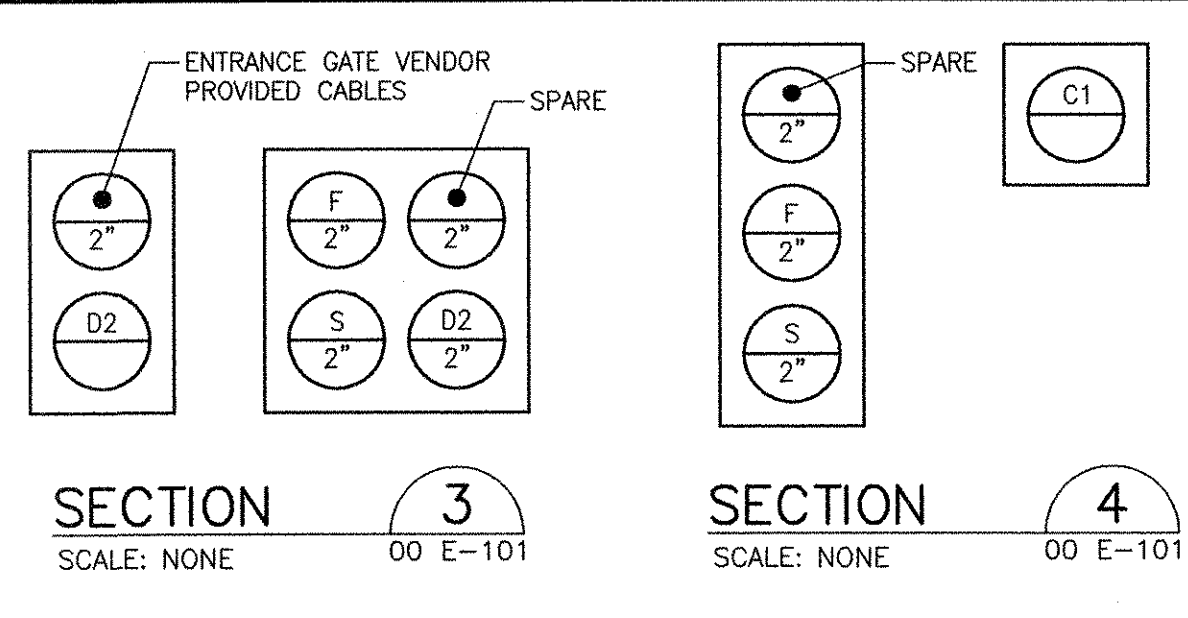
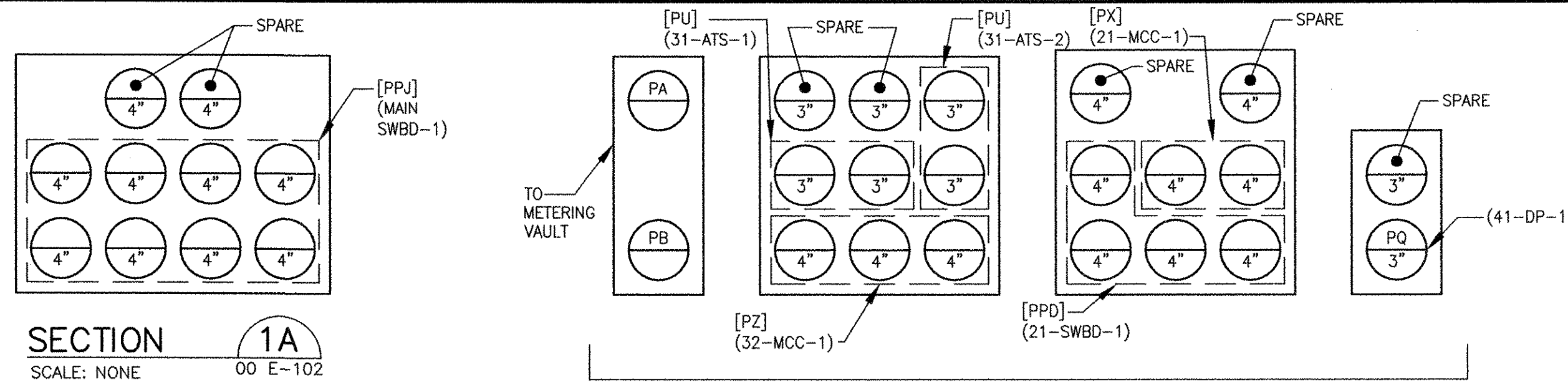
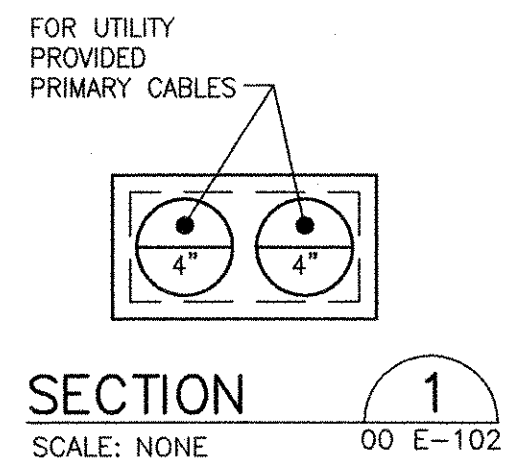
ENTRANCE GATE OPERATOR PART PLAN
 SCALE: 1/8"=1'-0"



1
2
3
4
5

NOTES

- CONDUIT SIZE INDICATED WITHIN DUCTBANK SECTIONS TAKE PRIORITY OVER THE CONDUIT AND WIRE SCHEDULE.
- FOR WIRE WITHIN EACH DUCT, REFER TO THE CONDUIT AND WIRE SCHEDULE ON SHEET 00 E-603 FOR DETAILS.



REVISIONS	DATE	MADE BY	CHECKED	YR	MS	DESCRIPTION
1	10/19/12					REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS
AECOM USA, INC.
100 WASHINGTON STREET
WALFELD, MA 01880
PHONE (781) 246-5200

REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
YASSER RIZK
No. 25
02/11/05
94-30

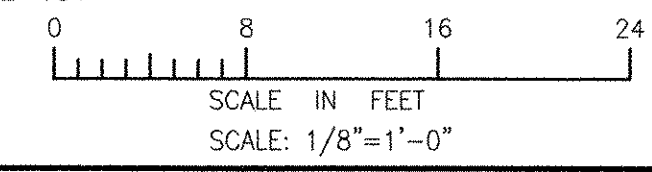
CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS
WWTP PARTIAL SITE PLAN AND
DUCTBANK SECTIONS
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	00 E-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 E-102

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conforming drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\0148648 - EAST PROVIDENCE (BIO)\COMMON SHEETS\00 E-102.DWG
 PLOT DATE: Thursday, October 25, 2012 9:20:26 AM
 LAST UPDATE: Friday, October 05, 2012 9:13:41 AM
 ANSI D - 5-Oct-12

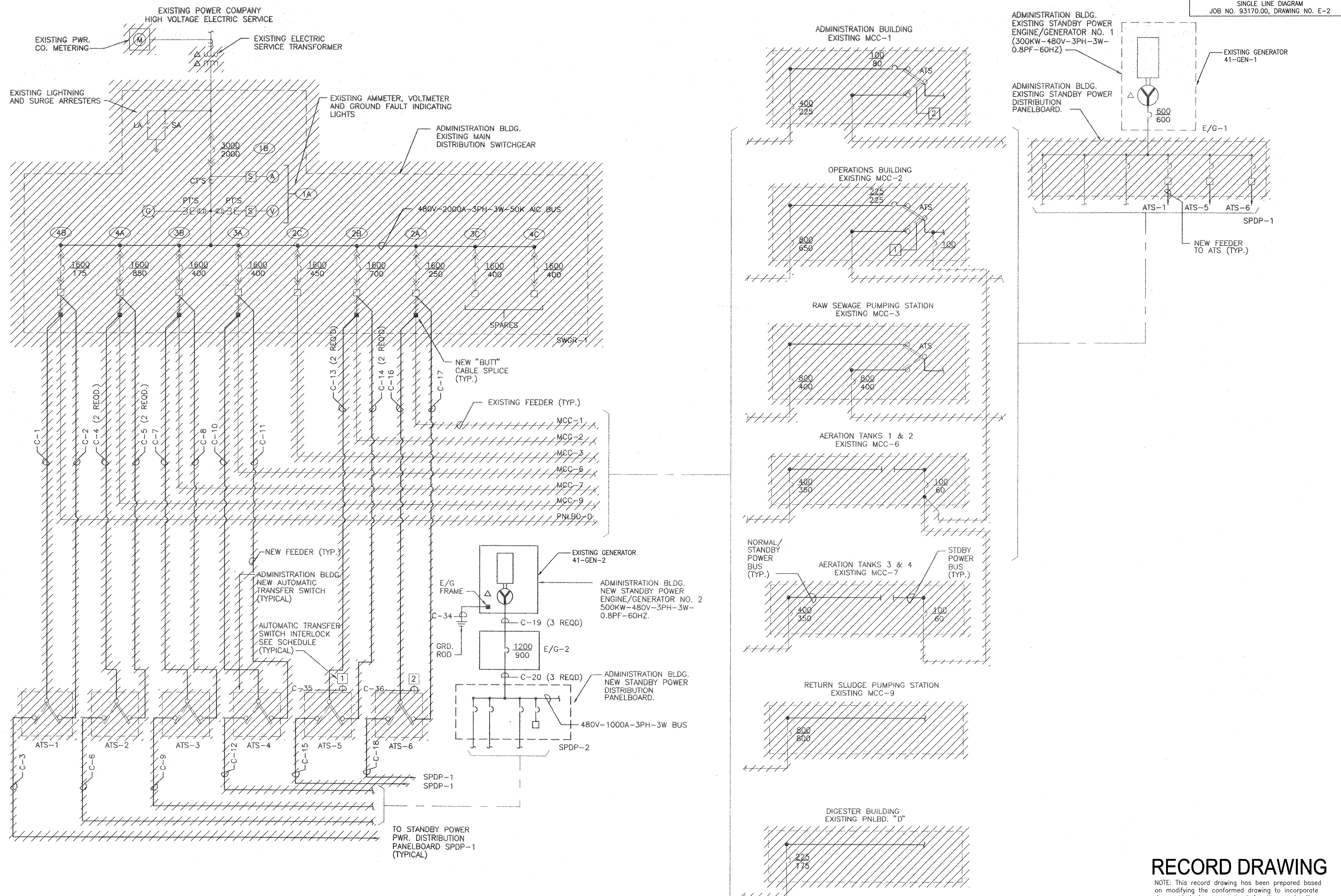
1 2 3 4 5

D
C
B
A

ANSI D - 5 - Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DDG\COMMON SHEETS\A.00 E-601.DWG
 LAST UPDATE: Friday, October 05, 2012 9:13:11 AM
 PLOT DATE: Thursday, October 25, 2012 9:20:29 AM

BASED ON UNIVERSAL ENGINEERING CORPORATION
 DATED 03/23/94
 ELECTRICAL POWER DISTRIBUTION SYSTEM
 SINGLE LINE DIAGRAM
 JOB NO. 93170.00, DRAWING NO. E-2



REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	YR
1	REVISED FOR RECORD DRAWING	10/19/12			

AECOM

AECOM USA, INC.
 100 WASHINGTON ST., SUITE 2000
 WASHINGTON, MA 01886
 PHONE (781) 246-5500

RECORD DRAWINGS

YASSEER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 9430
 02/20/07

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

**WWTP EXISTING ONE-LINE DIAGRAM
 DEMOLITION**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	00 E-601
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 E-601

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\COMMON SHEETS\A00 E-603.DWG
 LAST UPDATE: Friday, October 05, 2012 9:12:29 AM
 PLOT DATE: Thursday, October 25, 2012 9:20:34 AM
 ANSI D - 5-Oct-12

CONDUIT AND WIRING SCHEDULE

POWER WIRING:

- [PA] 3/4"C, 2-12 AWG, 1-12 AWG (G)
- [PA-4] 1"C, 4-12 AWG, 1-12 AWG (G)
- [PA-8] 1"C, 8-14 AWG, 1-12 AWG (G)
- [PB] 3/4"C, 3-12 AWG, 1-12 AWG (G)
- [PB-4] 3/4"C, 4-12 AWG, 1-12 AWG (G)
- [PB-6] 1"C, 6-12 AWG, 1-12 AWG (G)
- [PC] 3/4"C, 3-10 AWG, 1-10 AWG (G)
- [PC-2] 3/4"C, 2-10 AWG, 1-10 AWG (G)
- [PD] 3/4"C, 3-8 AWG, 1-10 AWG (G)
- [PD-1] 1"C, 3-8 AWG, 1-10 AWG (G)
- [PD-2] 1"C, 2-8 AWG, 1-10 AWG (G)
- [PE] 3/4"C, 3-6 AWG, 1-10 AWG (G)
- [PE-2] 3/4"C, 2-6 AWG, 1-10 AWG (G)
- [PE-4] 1"C, 4-6 AWG, 1-10 AWG (G)
- [PF] 1"C, 3-4 AWG, 1-10 AWG (G)
- [PG] 1"C, 3-4 AWG, 1-8 AWG (G)
- [PG-4] 1 1/2"C, 4-4 AWG, 1-8 AWG (G)
- [PH] 1 1/4"C, 3-2 AWG, 1-8 AWG (G)
- [PH-4] 1 1/2"C, 4-2 AWG, 1-8 AWG (G)
- [PJ] 1 1/2"C, 3-1 AWG, 1-8 AWG (G)
- [PJ-4] 1 1/2"C, 4-1 AWG, 1-8 AWG (G)
- [PK] 1 1/2"C, 3-1 AWG, 1-6 AWG (G)
- [PK-4] 1 1/2"C, 4-1 AWG, 1-6 AWG (G)
- [PL] 1 1/2"C, 3-1/0 AWG, 1-6 AWG (G)
- [PM] 1 1/2"C, 3-2/0 AWG, 1-6 AWG (G)
- [PM-2] 2"C, 4-2/0 AWG, 1-6 AWG (G)
- [PN] 2"C, 3-3/0 AWG, 1-6 AWG (G)
- [PN-1] 2"C, 3-3/0 AWG, 3/0 AWG (N), 1-6 AWG (G)
- [PP] 2"C, 3-4/0 AWG, 1-4 AWG (G)
- [PQ] 2 1/2"C, 3-250 KCM, 1-4 AWG (G)
- [PQ-2] 2 1/2"C, 4-250 KCM, 1-4 AWG (G)
- [PR] 3"C, 3-350 KCM, 1-4 AWG (G)
- [PS] 3"C, 3-350 KCM, 1-2 AWG (G)
- [PT] 3"C, 3-500 KCM, 1-2 AWG (G)
- [PU] TWO SETS OF 2"C, 3-3/0 AWG, 1-2 AWG (G)
- [PV] TWO SETS OF 2"C, 3-4/0 AWG, 1-2 AWG (G)
- [PW] TWO SETS OF 2"C, 3-250 KCM, 1-2 AWG (G)
- [PX] TWO SETS OF 3"C, 3-350 KCM, 1-1 AWG (G)
- [PY] TWO SETS OF 4"C, 3-500 KCM, 1-1/0 AWG (G)
- [PZ] THREE SETS OF 3"C, 3-350 KCM, 1-1/0 AWG (G)
- [PPA] THREE SETS OF 3"C, 3-350 KCM, 1-2/0 AWG (G)
- [PPB] THREE SETS OF 4"C, 3-500 KCM, 1-2/0 AWG (G)
- [PPC] THREE SETS OF 4"C, 3-500 KCM, 1-3/0 AWG (G)
- [PPD] FOUR SETS OF 3"C, 3-350 KCM, 1-3/0 AWG (G)
- [PPD-1] FOUR SETS OF 4"C, 4-350 KCM, 1-4/0 AWG (G)
- [PPJ] EIGHT SETS OF 4"C, 4-500 KCM, 1-500 KCM (G)
- [PPL] ELEVEN SETS OF 4"C, 4-500 KCM, 1-500 KCM (G)

NOTE: ALL CONDUIT SIZING BASED ON THWN/THHN TYPE CABLE.

DISCRETE WIRING:

- [D2] 3/4"C, 2-14 AWG, 1-14 AWG (G)
- [D3] 3/4"C, 3-14 AWG, 1-14 AWG (G)
- [D4] 3/4"C, 4-14 AWG, 1-14 AWG (G)
- [D5] 3/4"C, 5-14 AWG, 1-14 AWG (G)
- [D6] 3/4"C, 6-14 AWG, 1-14 AWG (G)
- [D7] 3/4"C, 7-14 AWG, 1-14 AWG (G)
- [D8] 3/4"C, 8-14 AWG, 1-14 AWG (G)
- [D9] 3/4"C, 9-14 AWG, 1-14 AWG (G)
- [D10] 3/4"C, 10-14 AWG, 1-14 AWG (G)
- [D11] 3/4"C, 11-14 AWG, 1-14 AWG (G)
- [D12] 3/4"C, 12-14 AWG, 1-14 AWG (G)
- [D13] 3/4"C, 13-14 AWG, 1-14 AWG (G)
- [D14] 3/4"C, 14-14 AWG, 1-14 AWG (G)
- [D15] 3/4"C, 15-14 AWG, 1-14 AWG (G)
- [D16] 3/4"C, 16-14 AWG, 1-14 AWG (G)
- [D17] 3/4"C, 17-14 AWG, 1-14 AWG (G)
- [D18] 3/4"C, 18-14 AWG, 1-14 AWG (G)
- [D19] 3/4"C, 19-14 AWG, 1-14 AWG (G)
- [D20] 3/4"C, 20-14 AWG, 1-14 AWG (G)
- [D21] 1"C, 21-14 AWG, 1-14 AWG (G)
- [D22] 1"C, 22-14 AWG, 1-14 AWG (G)
- [D23] 1"C, 23-14 AWG, 1-14 AWG (G)
- [D24] 1"C, 24-14 AWG, 1-14 AWG (G)
- [D25] 1"C, 25-14 AWG, 1-14 AWG (G)
- [D26] 1"C, 26-14 AWG, 1-14 AWG (G)
- [D27] 1"C, 27-14 AWG, 1-14 AWG (G)
- [D28] 1"C, 28-14 AWG, 1-14 AWG (G)
- [D29] 1"C, 29-14 AWG, 1-14 AWG (G)
- [D30] 1"C, 30-14 AWG, 1-14 AWG (G)
- [D32] 1 1/2"C, 32-14 AWG, 1-14 AWG (G)
- [D34] 1 1/2"C, 34-14 AWG, 1-14 AWG (G)
- [D40] 1 1/2"C, 40-14 AWG, 1-14 AWG (G)
- [D50] 1 1/2"C, 50-14 AWG, 1-14 AWG (G)
- [D60] 1 1/2"C, 60-14 AWG, 1-14 AWG (G)
- [D70] 1 1/2"C, 70-14 AWG, 1-14 AWG (G)
- [D80] 2"C, 80-14 AWG, 1-14 AWG (G)
- [D90] 2"C, 90-14 AWG, 1-14 AWG (G)
- [D100] 3"C, 100-14 AWG, 1-14 AWG (G)
- [D104] 3"C, 104-14 AWG, 1-14 AWG (G)
- [D120] 3"C, 120-14 AWG, 1-14 AWG (G)

SIGNAL WIRING:

- [C] 1"C, CAT 5E
- [C-2] 1"C, 2-CAT 5E
- [C1] 3/4"C, 1-TSP 16 AWG
- [C2] 1"C, 2-TSP 16 AWG
- [C3] 1"C, 3-TSP 16 AWG
- [C4] 1 1/2"C, 4-TSP 16 AWG
- [C5] 1 1/2"C, 5-TSP 16 AWG
- [C6] 1 1/2"C, 6-TSP 16 AWG
- [C7] 1 1/2"C, 7-TSP 16 AWG
- [C8] 1 1/2"C, 8-TSP 16 AWG
- [C9] 2"C, 9-TSP 16 AWG
- [C10] 2"C, 10-TSP 16 AWG
- [C11] 2"C, 11-TSP 16 AWG
- [C12] 2"C, 12-TSP 16 AWG
- [C13] 2"C, 13-TSP 16 AWG
- [C19] 2 1/2"C, 19-TSP 16 AWG

GROUND WIRING:

NOTE: ALL G-SERIES WIRING SHALL BE CONNECTED TO GROUNDING BUS BAR LOCATED IN THE ELECTRICAL ROOM UNLESS OTHERWISE INDICATED. INSTALL IN PVC CONDUIT.

- [G1] 3/4"C, 1-12 AWG (G)
- [G2] 3/4"C, 1-10 AWG (G)
- [G3] 3/4"C, 1-8 AWG (G)
- [G4] 3/4"C, 1-6 AWG (G)
- [G5] 1"C, 1-4 AWG (G)
- [G6] 1"C, 1-2 AWG (G)
- [G7] 1"C, 1-1/0 AWG (G)
- [G8] 1"C, 1-2/0 AWG (G)
- [G9] 1 1/2"C, 1-3/0 AWG (G)
- [G10] 1 1/2"C, 1-4/0 AWG (G)
- [G11] 1 1/2"C, 1-250 KCM (G)
- [G12] 2"C, 1-350 KCM (G)
- [G13] 2"C, 1-500 KCM (G)

FIRE LOOP WIRING:

[F] FIRE ALARM LOOP CONDUIT AND WIRE. REFER TO SHEET 00 E-606 FOR FIRE ALARM SYSTEM RISER DIAGRAM.

SCADA FIBER OPTIC LOOP WIRING:

[S] SCADA FIBER OPTIC LOOP CONDUIT AND WIRE. REFER TO SHEET 00 E-607 FOR FIBER OPTIC LOOP RISER DIAGRAM.

MARK	DATE	MADE BY	CHECKED	REVISIONS
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WATER STREET
 WILMINGTON, DE 19801
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER RIZK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

CONDUIT AND WIRE SCHEDULE
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	00 E-603
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 E-603

RECORD DRAWING

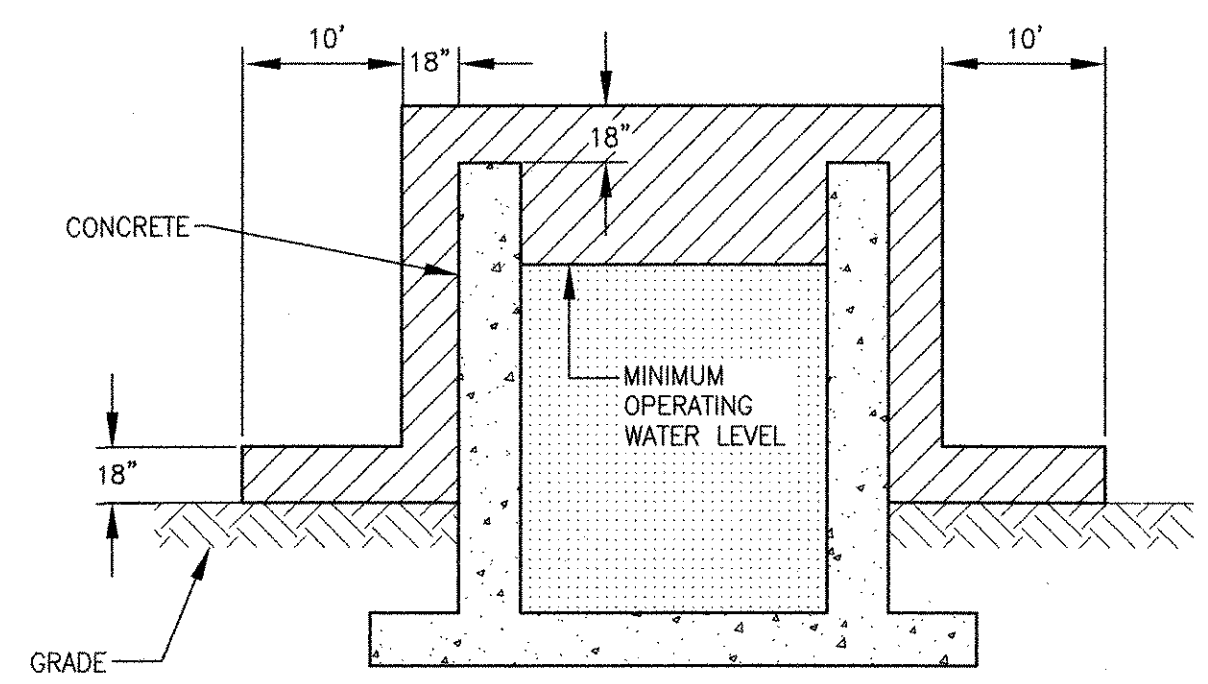
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ENVIRONMENTAL CLASSIFICATIONS*							
LOCATION	NEMA TYPE				HAZARDOUS CLASS I, GROUP D		REMARKS
	1	3R	4	4X	12	DIV. 1	
HEADWORKS BUILDING - 21							
HEADWORKS AREA (2101)						X	
ELECTRICAL ROOM (2103)	X						
SAMPLING ROOM (2102)			X				
HEADWORKS ODOR CONTROL - 21							
ODOR CONTROL						X	R10
PRIMARY SETTLING TANKS - 22							
PRIMARY SETTLING TANKS						X	R4
ODOR CONTROL						X	R10
OPERATIONS BUILDING - 23							
BLOWER ROOM					X		
ELECTRICAL ROOM	X						
PUMP ROOM			X				
GARAGE				X			
CONTROL ROOM	X						
SLUDGE DEWATERING ROOM			X				
TRUCK BAY					X		
BOILER ROOM					X		
LUNCH ROOM	X						
LOCKER ROOM	X						
TOILET/SHOWER	X						
WEST AERATION BUILDING - 31							
LOWER LEVEL					X		
UPPER LEVEL					X		
EAST AERATION BUILDING - 31							
LOWER LEVEL					X		
UPPER LEVEL					X		
WEST AND EAST AERATION TANKS - 31							
AERATION TANKS			X				
RAS PUMP STATION - 32							
LOWER LEVEL					X		
UPPER LEVEL					X		
ADMINISTRATION BUILDING - 41							
VESTIBULE	X						
FRONT STAIRS/HALLWAY	X						
LABORATORY NO. 1				X			
LABORATORY NO. 2				X			
OFFICE NO. 1	X						
OFFICE NO. 2	X						
OFFICE NO. 3	X						
OFFICE NO. 4	X						
MAINTENANCE SHOP				X			
MEN'S ROOM FIRST FLOOR	X						
WOMEN'S ROOM FIRST FLOOR	X						
MEN'S ROOM SECOND FLOOR	X						
WOMEN'S ROOM SECOND FLOOR	X						
OPEN OFFICE AREA	X						
RECEPTION AREA CLOSET	X						
CONFERENCE ROOM	X						
STAIR/KITCHENETTE	X						
LUNCH ROOM	X						
REFRIGERATOR ROOM	X						
STORAGE ROOM NO. 2	X						
ADMIN/OPS WALKWAY	X						
BOILER ROOM					X		
STORAGE ROOM NO. 3	X						
GENERATOR ROOM (41-GEN-1)					X		
GENERATOR ROOM (41-GEN-2)					X		
TRUCK BAY					X		
OFFICE NO. 5	X						
RAW SEWAGE PUMP STATION - 42							
PENTHOUSE					X		
ELECTRICAL ROOM					X		
OFFICE					X		

ENVIRONMENTAL CLASSIFICATIONS*							
LOCATION	NEMA TYPE				HAZARDOUS CLASS I, GROUP D		REMARKS
	1	3R	4	4X	12	DIV. 1	
CHEMICAL ROOM							
MOTOR ROOM					X		
WET WELL						X	
GALLERY							
PUMP ROOM				X			
DIGESTER BUILDING - 43							
ODOR CONTROL ROOM			X			X	R10
HEATER ROOM					X		
PUMP ROOM					X		
PIPE GALLERY					X		
SLUDGE STORAGE TANKS						X	R9
SCUM PUMP STATION							
WET WELL						X	
VALVE CHAMBER							X
OUTDOORS							
OUTDOORS***			X				R2
WATCHEMOKET PUMP STATION - 11							
SCREENINGS ROOM LOWER (1101)						X	
WET WELL (1103)						X	
STAIR						X	
SCREENINGS ROOM UPPER (1108)						X	
ELECTRICAL ROOM (1106)	X						
WORKSHOP (1104)					X		
TOILET (1105)	X						
ODOR CONTROL						X	R10
BOYDEN PUMP STATION - 12							
ELECTRICAL ROOM	X						
WET WELL						X	
VALVE CHAMBER							X
HYDRAULIC PINCH VALVE CHAMBER						X	
ODOR CONTROL						X	R10
ROCKWAY PUMP STATION - 54							
MOTOR ROOM					X		
PUMP ROOM					X		
DRY WELL					X		
WET WELL						X	
SILVER STREET PUMP STATION - 53							
ELECTRICAL ROOM					X		
VFD ROOM					X		
MOTOR ROOM					X		
PUMP ROOM					X		
WET WELL						X	
ARGYLE PUMP STATION - 55							
GENERATOR ROOM					X		
DRY WELL					X		
ROUNDS PUMP STATION - 56							
GENERATOR ROOM					X		
DRY WELL					X		

* PROVIDE EQUIPMENT AND INSTALLATION TO COMPLY WITH AREA CLASSIFICATION REQUIREMENTS.
 ** WHERE NEC ALLOWS (AT BOXES WITH NO SPARKING DEVICES AND ASSOCIATED FITTINGS AND JOINTS) NEMA TYPE 4X BOXES, FITTINGS, AND JOINTS MAY BE USED INSTEAD OF CLASS 1, DIVISION 2 EQUIPMENT.
 *** UNLESS OTHERWISE COVERED ABOVE.
 R1 = NOT USED.
 R2 = OUTDOORS ARE AREAS NOT ENCLOSED BY WALLS AND CEILING.
 R4 = DIVISION 2 EXTENDS A) 18 INCHES ABOVE AND BEYOND EXTERIOR TANK WALL AND B) 18 INCHES ABOVE GRADE AND 10 FEET BEYOND EXTERIOR TANK WALL.
 R5 = DIVISION 1 A) INSIDE CHAMBER AND B) EXTENDS FOR A 3 FEET ENVELOPE AROUND COVER'S HIGHEST POINT.
 R6 = DIVISION 2 EXTENDS 15 FEET ABOVE AND BEYOND DIVISION 1 ELEVATION TO DISTANCE OF 5 FEET BEYOND EXTERIOR TANK WALL.
 R7 = EQUIPMENT AND INSTALLATION SHALL BE SUITABLE FOR OUTDOOR LOCATIONS.
 R8 = DIVISION 1—PITS OR TRENCHES BELOW GRADE WHERE METHANOL MAY SPILL
 DIVISION 1—EXTENDS 3 FEET FROM VENT OPENINGS
 DIVISION 2—EXTENDS 2 FEET BEYOND DIVISION 1 BOUNDARIES OF VENT OPENINGS

ENVIRONMENTAL CLASSIFICATIONS*							
LOCATION	NEMA TYPE				HAZARDOUS CLASS I, GROUP D		REMARKS
	1	3R	4	4X	12	DIV. 1	
R9 = WITHIN 10 FT ENVELOPE AROUND EQUIPMENT AND OPEN CHANNELS. AREA BEYOND THE ENVELOPE IS NEMA-4X							
R10 = AREA WITHIN 3 FT OF LEAKAGE SOURCE SUCH AS FANS, DAMPERS, FLEXIBLE CONNECTIONS, FLANGES, PRESSURIZED UNWELDED DUCT WORK AND ODOR CONTROL VESSELS. AREA BEYOND 3 FT IS NEMA-4X							
R11 = CLASS 1 DIVISION 1 - INSIDE TANK CLASS 1 DIVISION 1 - 3 FT RADIUS FROM VENT OR OPENING CLASS 1 DIVISION 2 - EXTENDS 2 FT BEYOND DIVISION 1 BOUNDARIES OF VENT/OPENING CLASS 1 DIVISION 2 - 18 IN. VERTICALLY ABOVE OPENINGS, EXTENDING 3 FT HORIZONTALLY. AREA BEYOND IS NEMA-4X							



CLASS 1, DIVISION 2 AREA
 CLASS 1, DIVISION 1 AREA
 UNCLASSIFIED

PRIMARY SETTLING TANKS
 CLASSIFICATION DETAIL
 N.T.S.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	DESCRIPTION	YR	MADE BY	CHECKED
1	MARK	10/19/12	MS	

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. ONE
 WASHINGTON DRIVE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

REGISTERED PROFESSIONAL ENGINEER ELECTRICAL
 YASSER RIZK
 No. 95
 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS
SCHEDULES I
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	00 E-604
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

00 E-604

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBA\COMMON\SHETS\00 E-604.DWG
 LAST UPDATE: Friday, October 05, 2012 9:20:38 AM
 PLOT DATE: Thursday, October 25, 2012 9:20:38 AM
 ANSI D - 5-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (R0)\COMMON SHEETS\E-605.DWG
 LAST UPDATE: Friday, October 05, 2012 9:10:21 AM
 PLOT DATE: Thursday, October 25, 2012 9:20:41 AM
 ANSI D - 5-Oct-12

EAST PROVIDENCE WWTP EMERGENCY LIGHTING FIXTURES SCHEDULE							
BUILDING/ROOM NAME	EMERGENCY BATTERY UNIT			REMOTE HEAD	EXIT SIGN		
	TYPE EU1	TYPE EU2	TYPE EU3		TYPE FA1	TYPE FB1	TYPE FC1
ADMINISTRATION BUILDING							
VESTIBULE							
FRONT STAIRS/HALLWAY	1					1	
LABORATORY NO. 1			1				
LABORATORY NO. 2			1				
OFFICE NO. 1				1			
CORRIDOR 4124	1			1			
MENS ROOM SECOND FLOOR 4128				1			
WOMENS ROOM SECOND FLOOR 4125				1			
STORAGE 4122	1						
SHOWER 4123							
OPEN OFFICE AREA/RECEPTIONIST AREA	1					1	
CLOSET NEAR RECEPTIONS AREA	1						
CONFERENCE ROOM	1					1	
STORAGE ROOM UPSTAIRS NEAR LUNCH RM							
STAIR/KITCHENETTE	1						
LUNCH ROOM				1			
OFFICE NO. 2	1						
OFFICE NO. 3	1						
OFFICE NO. 4	1						
STORAGE ROOM	1						
ADMIN./OPER. BLDG. WALKWAY	1					1	
CHAIR LIFT							
HOT WATER TANK ROOM	1						
STORAGE 100 FIRST FLOOR	1						
GENERATOR ROOM 102							
GENERATOR ROOM 103							
EQUIPMENT ROOM 104							
MAINTENANCE SHOP			2	1			2
GARAGE	1			1			
BATHROOM FIRST FLOOR	1						
STORAGE 101 FIRST FLOOR	1						
MATERIAL STORAGE AREA FIRST FLOOR	1						
OFFICE NO. 5 FIRST FLOOR	1					1	
ABOVE EXTERIOR DOORS				3			
OPERATIONS BUILDING							
BLOWER ROOM EL. 3.0'			1				1
ELECTRICAL ROOM EL. 3.0'	1					1	
PUMP ROOM EL. 3.0'			1	1			
GARAGE EL. 18.0'			1	1			2
STAIR	1					1	
CONTROL ROOM 2301 EL. 18.0'	1						
SLUDGE DEWATERING ROOM EL. 18.0'			1	3			3
TRUCK BAY EL. 18.0'			1	1			2
BOILER ROOM EL. 18.0'			1				
LUNCH ROOM EL. 35.0'	1					1	
LOCKER ROOM EL. 35.0'	1						
TOILET/SHOWER EL. 35.0'	1						
ABOVE EXTERIOR DOORS				2			
RAW SEWAGE PUMP STATION							
WET WELL		1					1
PUMP ROOM			1	1			2
ELECTRICAL ROOM/MOTOR/MONORAIL RM			1	1			1
OFFICE			1				2
CHLORINE ROOM				1			1
PENTHOUSE				1			1
ABOVE EXTERIOR DOORS				2			
PRIMARY TANK GALLERY							
PUMP AREA/GALLERY			1	1			2
ABOVE EXTERIOR DOOR				1			
HEADWORKS							
HEADWORKS 2101		1		1			2
SAMPLE ROOM 2102			1				1
ELECTRICAL ROOM 2103	1					1	
CHEMICAL ROOM 2104			1				1
ABOVE EXTERIOR DOOR (NOTE 1)				2			
DIGESTER CONTROL BUILDING							
ODOR CONTROL ROOM		1					1
UPPER LEVEL ROOM			1				1
PUMP ROOM			1				1
PIPE GALLERY				1			
ABOVE EXTERIOR DOOR				1			
WEST AERATION BUILDING							
LOWER FLOOR				1			
UPPER FLOOR			1				2
ABOVE EXTERIOR DOORS				2			
EAST AERATION BUILDING							
LOWER FLOOR				1			
UPPER FLOOR			1				2
ABOVE EXTERIOR DOORS				2			
RETURN SLUDGE PUMP STATION							
LOWER FLOOR				1			1
UPPER FLOOR		1		1			2
ABOVE EXTERIOR DOOR				1			
TOTAL	26	4	20	40	9	7	27

LUMINAIRE SCHEDULE							
LUMINAIRE		LAMP		VOLTAGE	MANUFACTURER AND BASE MODEL NUMBER		REMARKS AND OPTIONS
TYPE	MTG	TYPE	WATTS				
BA1	PEND/CEILING	T-8	3-17	120	HOLOPHANE SERIES HT	OR EQUAL	HEAVY-DUTY, 2'-0" X 2'-0", COLD ROLLED STEEL HOUSING, GLOSS WHITE BAKED ENAMEL FINISH, STATIC AIR HOUSING, FLUSH STEEL DOOR, GENERAL ELECTRONIC BALLAST, ACRYLIC LENS
BA2	PEND/CEILING	T-8	3-17	120	LITHONIA SERIES 2PM3N	OR EQUAL	HEAVY-DUTY, 2'-0" X 2'-0", COLD ROLLED STEEL HOUSING, DIFFUSE SILVER REFLECTOR, STATIC AIR HOUSING, GRID TRIM TYPE 3 CELL LOUVER, FLUSH STEEL DOOR, GENERAL ELECTRONIC BALLAST.
BM1	WALL	HPS	2-32	120	HOLOPHANE SERIES HES	OR EQUAL	HEAVY-DUTY REINFORCED POLYESTER FIBERGLASS ENCLOSURE, ACRYLIC LENS, WHITE PAINTED STEEL REFLECTOR, WET LOCATION, GENERAL ELECTRONIC BALLAST.
DD1	PEND	HALOGEN	1-150	120	CROUSE-HINDS SERIES EVLS	OR EQUAL	HEAVY-DUTY, CLASS I, DIVISION 1 RATED, COPPER FREE ALUMINUM HOUSING, STAINLESS STEEL WIRE GUARD, GLASS GLOBE, HIGH POWER FACTOR TRANSFORMER WITH SYMMETRIC REFLECTOR.
DD2	WALL	HALOGEN	1-70	120	CROUSE-HINDS SERIES EVLS	OR EQUAL	HEAVY-DUTY, CLASS I, DIVISION 1 RATED, COPPER FREE ALUMINUM HOUSING, STAINLESS STEEL WIRE GUARD, GLASS GLOBE, HIGH POWER FACTOR TRANSFORMER WITH SYMMETRIC REFLECTOR.
DL1	CEILING	COMPACT FLUOR.	2-13DTT	120	LITHONIA SERIES LF6N	OR EQUAL	HEAVY-DUTY, COMPACT FLUORESCENT DOWNLIGHTING, BLACK BAFFLE NARROW FLANGE DIFFUSE UPPER REFLECTOR.
DL2	CEILING	COMPACT FLUOR.	2-13DTT	120	LITHONIA SERIES LF6N	OR EQUAL	HEAVY-DUTY, COMPACT FLUORESCENT DOWNLIGHTING, TEMPERED BLACK BAFFLE GLASS LENS NARROW FLANGE, WET LOCATION LISTED.
EU1	WALL	HALOGEN	2-12	120	HOLOPHANE SERIES CORTEZ A1	OR EQUAL	EMERGENCY LIGHTING UNIT, INJECTION-MOLDED THERMOPLASTIC ENCLOSURE, TWO ROUND PAR 36 12 WATT HEADS, NICKEL-CADIUM BATTERY, SELF-DIAGNOSTICS, TIME DELAY, AUDIBLE FAILURE INDICATION.
EU2	WALL	HALOGEN	2-12	120	CROUSE-HINDS SERIES ELPS	OR EQUAL	HEAVY-DUTY, CLASS I, DIVISION 1 RATED, COPPER FREE ALUMINUM HOUSING, TWO 12 WATT HALOGEN HEADS, NICKEL-CADIUM BATTERY, TIME DELAY.
EU3	WALL	HALOGEN	2-8	120	HOLOPHANE SERIES DESOTO M50	OR EQUAL	EMERGENCY LIGHTING UNIT, FIBERGLASS REINFORCED POLYESTER ENCLOSURE, TWO ROUND PAR 36, 8 WATT HEADS, NICKEL-CADIUM BATTERY.
EM1	WALL	HALOGEN	1-70	120	LITHONIA SERIES TWAC	OR EQUAL	CUT-OFF MINI WALL-PACK, CORROSION-RESISTANT DIE-CAST ALUMINUM REAR HOUSING, POLYCARBONATE FRONT COVER, WIRE GUARD, DARK BRONZE FINISH, WET LOCATION, PHOTO-CELL.
FA1	PEND/WALL	LED	-	120	HOLOPHANE SERIES MAGGELLAN QT	OR EQUAL	EXIT SIGN, INJECTION-MOLDED THERMOPLASTIC ENCLOSURE, SINGLE FACE, RED LETTERS, WHITE BACKGROUND, NICKEL-CADIUM BATTERY, SELF-DIAGNOSTICS WITH AUDIBLE ALARM
FB1	WALL	HALOGEN	2-25	120	CROUSE-HINDS SERIES EXL	OR EQUAL	HEAVY-DUTY, CLASS I, DIVISION 1, EXIT SIGN, COPPER FREE ALUMINUM HOUSING, GLASS SIGN PANEL, SINGLE FACE, RED LETTERS, WHITE BACKGROUND, NICKEL-CADIUM BATTERY, BATTERY CHARGING INDICATOR LIGHT.
FC1	PEND/WALL	LED	-	120	HOLOPHANE SERIES DELEON NM	OR EQUAL	EXIT SIGN, FIBERGLASS REINFORCED POLYESTER ENCLOSURE, SINGLE FACE, RED LETTERS, GRAY BACKGROUND, NICKEL-CADIUM BATTERY.
MA1	WALL	T-8	-	120	LITHONIA SERIES WP	OR EQUAL	WALL MOUNTED, FORMED STEEL ENCLOSURE, ACRYLIC DIFFUSER, WHITE POLYESTER PAINT FINISH, GENERAL ELECTRONIC BALLAST.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NOTES

- PROVIDE A CLASS I, DIV 1, GROUP D REMOTE HEAD ABOVE EACH EXTERIOR DOOR AT ROOM HEADWORKS 2101.
- DETERMINE FINAL LOCATION OF LIGHTING FIXTURES IN THE FIELD AND CONFIRM LOCATIONS WITH ENGINEER DURING CONSTRUCTION.

NO.	DATE	MADE BY	CHECKED	YR	REVISIONS
1	10/01/12				REVISED FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 100 WASHINGTON ST., SUITE 2000
 WAKEFIELD, MA 01880
 PHONE: (781) 246-5200

REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

No. 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 WASTEWATER SYSTEM IMPROVEMENTS

SCHEDULES II

ELECTRICAL

PROJECT NO: 60148648
 CAD DWG FILE: 00 E-605
 DESIGNED BY: D. ASPESI
 DRAWN BY: M. STEWART
 DEPT CHECK: Y. RIZK
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

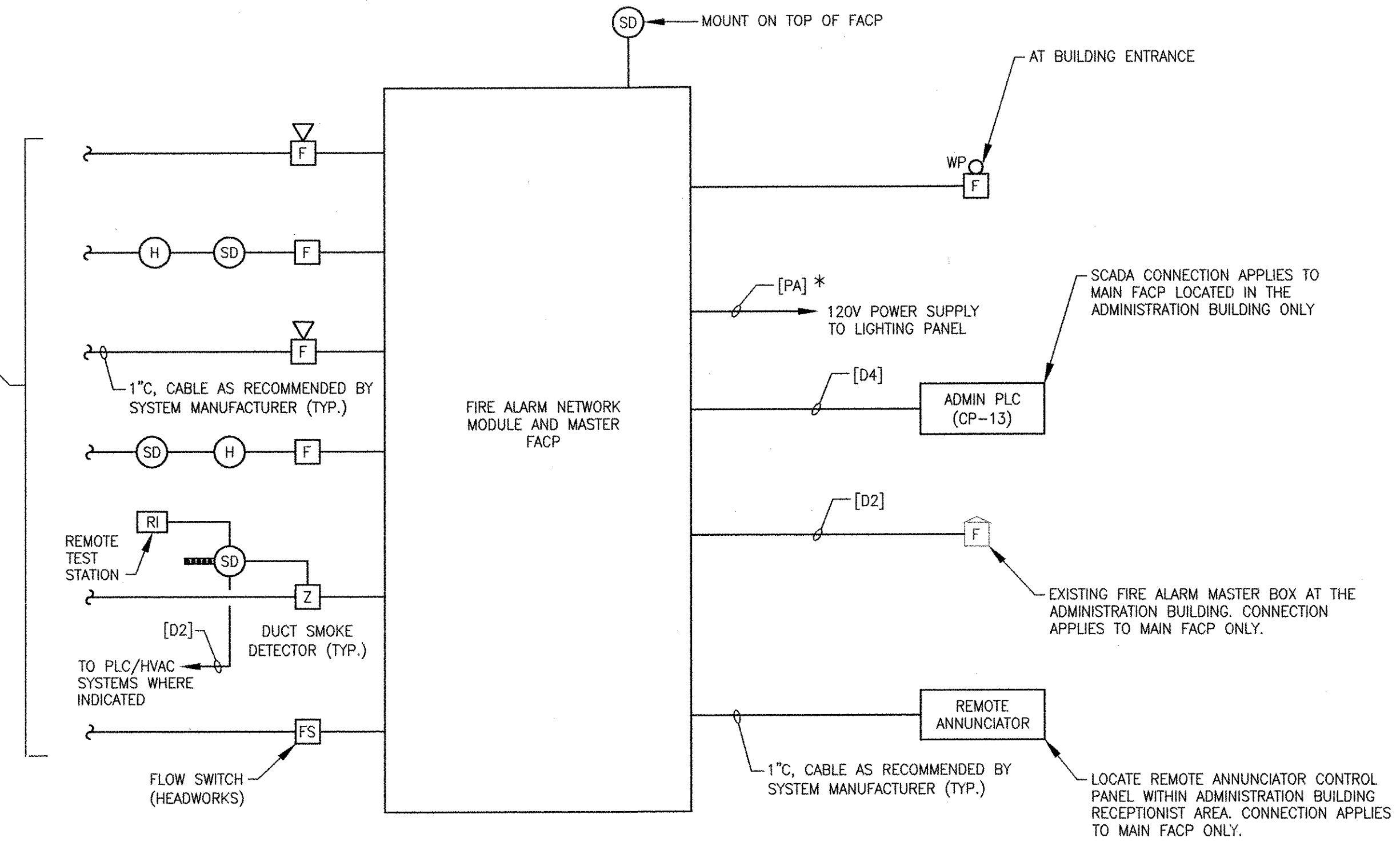
00 E-605

EAST PROVIDENCE WWTP MASTER FIRE ALARM SYSTEM SCHEDULE

BUILDING/ROOM NAME	MASTER FACP	FANM	SMOKE DETECTOR	HEAT DETECTOR	PULL STATION	ALARM HORN & LIGHT	ALARM STROBE	* DUCT SMOKE DETECTOR
ADMINISTRATION BUILDING								
VESTIBULE	1		1		1			
FRONT STAIR/HALLWAY			1			1		
LABORATORY NO. 1			1					
LABORATORY NO. 2			1					
OFFICE NO. 1			1					
CORRIDOR 4124			1					
MEN'S ROOM SECOND FLOOR 4126			1					
WOMEN'S ROOM SECOND FLOOR 4125			1					
STORAGE 4122			1					
SHOWER 4123			1					
OPEN OFFICE AREA/RECEPTIONS AREA			3			2		
CLOSET NEAR RECEPTIONS AREA			1					
CONFERENCE ROOM			1			1		
STORAGE ROOM UPSTAIRS NEAR LUNCH RM			1					
STAIR/KITCHENETTE			1					
LUNCH ROOM			1					
OFFICE NO. 2			1					
OFFICE NO. 3			1					
OFFICE NO. 4			1					
STORAGE ROOM			1					
ADMIN./OPER. BLDG. WALKWAY			1					
CHAIR LIFT			1					
HOT WATER TANK ROOM				1	1			
STORAGE 100 FIRST FLOOR			1					
GENERATOR ROOM 102			1	1	1	1		
GENERATOR ROOM 103			1	1	1	1		
EQUIPMENT ROOM 104			1	1	1	1		
MAINTENANCE SHOP			3			2		
GARAGE			1	1		1		
BATHROOM FIRST FLOOR			1					
STORAGE 101 FIRST FLOOR				1				
MATERIAL STORAGE AREA FIRST FLOOR				1				
OFFICE NO. 5 FIRST FLOOR			1	1	1	1		
OUTSIDE BUILDING ENTRANCE							1	
OPERATIONS BUILDING								
BLOWER ROOM EL. 3.0'				4	1	1		
ELECTRICAL ROOM EL. 3.0'			1			1		
PUMP ROOM EL. 3.0'				3		1		
GARAGE EL. 18.0'				1		1		
STAIR			1		1	1		
CONTROL ROOM 2301 EL. 18.0'			1			1		
SLUDGE DEWATERING ROOM EL. 18.0'		1		2	2	1		1
TRUCK BAY EL. 18.0'				1	1	1		
BOILER ROOM EL. 18.0'				1				
LUNCH ROOM EL. 35.0'			1			1		
LOCKER ROOM EL. 35.0'			1					
TOILET/SHOWER EL. 35.0'			1			1		
OUTSIDE BUILDING ENTRANCE							1	
RAW SEWAGE PUMP STATION								
WET WELL				2		1		
PUMP ROOM			2		2	2		
ELECTRICAL ROOM/MOTOR/MONORAIL RM		1		2	1	1		
OFFICE			1					
CHLORINE ROOM				1	1	1		
PENTHOUSE				1				
OUTSIDE BUILDING ENTRANCE							1	
PRIMARY TANK GALLERY								
PUMP AREA/GALLERY				2	1	2		1
OUTSIDE BUILDING ENTRANCE							1	
HEADWORKS								
HEADWORKS 2101				4	3	2		2
SAMPLE ROOM 2102				1	1			
ELECTRICAL ROOM 2103		1	2		2	1		
CHEMICAL ROOM 2104			1	1	1	1		
OUTSIDE BUILDING ENTRANCE							1	
DIGESTER CONTROL BUILDING								
ODOR CONTROL ROOM			1		1	1		
UPPER LEVEL ROOM		1		2	1	1		1
PUMP ROOM				2		1		
PIPE GALLERY				1				
OUTSIDE BUILDING ENTRANCE							1	
WEST AERATION BUILDING								
LOWER FLOOR								
UPPER FLOOR		1		1	1	1		
OUTSIDE BUILDING ENTRANCE							1	
EAST AERATION BUILDING								
LOWER FLOOR								
UPPER FLOOR		1		1	1	1		
OUTSIDE BUILDING ENTRANCE							1	
RETURN SLUDGE PUMP STATION								
LOWER FLOOR				2		2		
UPPER FLOOR		1		2	1	1		1
OUTSIDE BUILDING ENTRANCE							1	

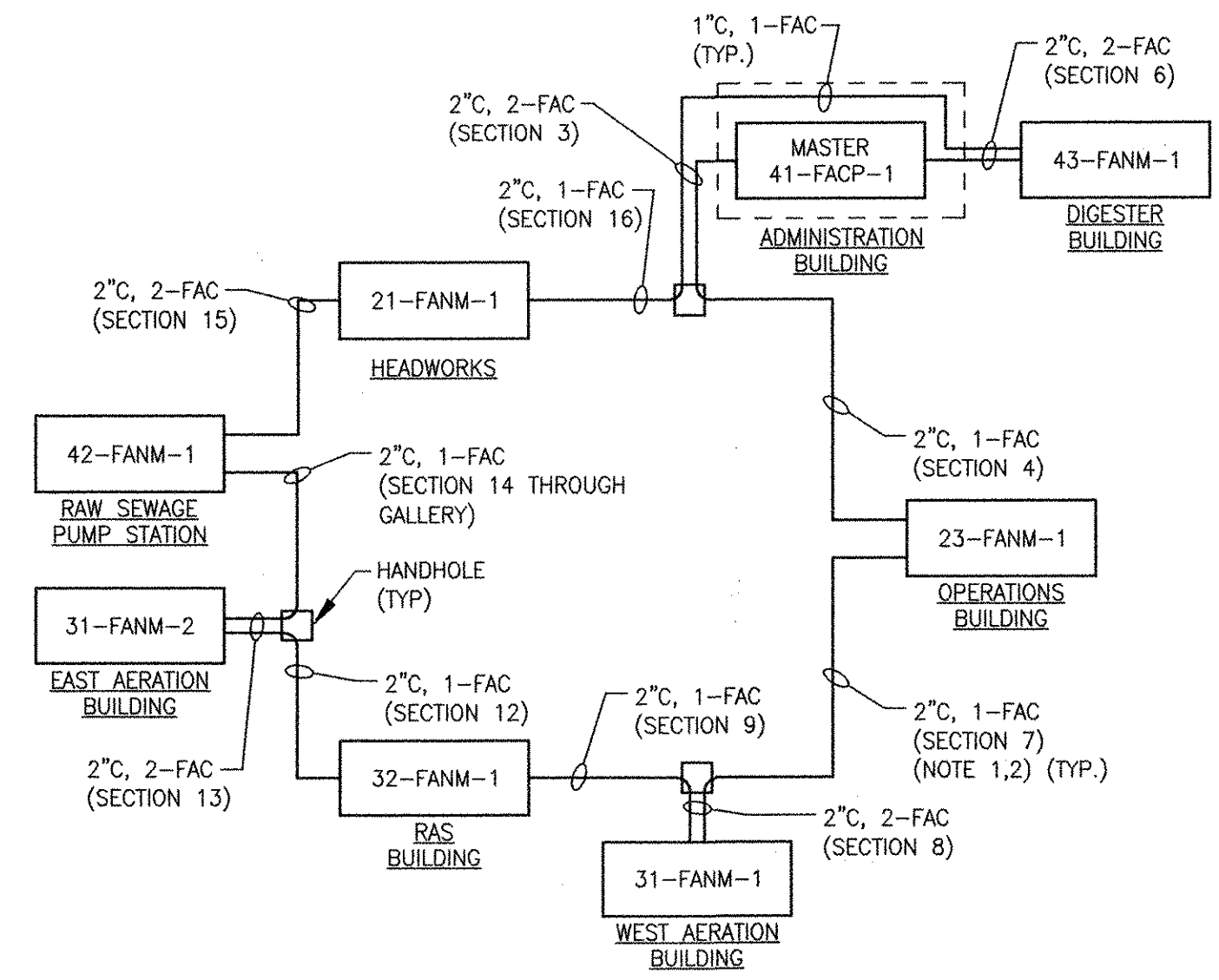
* REFER TO HVAC DRAWINGS FOR DUCT SMOKE DETECTOR LOCATIONS

FOR LOCATION AND QUANTITY OF FIRE ALARM DEVICES FOR EACH BUILDING, REFER TO THE FIRE ALARM DEVICE SCHEDULE (THIS SHEET)



WWTP TYPICAL BUILDING FIRE ALARM RISER DIAGRAM

(TYPICAL FOR ALL BUILDINGS FANM PANELS AND MAIN FACP) NOT TO SCALE * LABEL CONDUIT "FIRE PANEL POWER SUPPLY"



WWTP FIRE ALARM SYSTEM COMMUNICATION LOOP

NOT TO SCALE

- NOTES
- FIRE ALARM CABLE (FAC) AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER
 - SECTIONS INDICATED ABOVE REFER TO DUCTBANKS. REFER TO SHEETS 00 E-101 AND 00 E-102 FOR DUCTBANK ROUTING AND SECTION DETAILS.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	YR
1	REVISED FOR RECORD DRAWING	10/09/12	MS		

AECOM
 AECOM USA, INC.
 100 EAST WASHINGTON STREET
 WASHINGTON, MA 01890
 PHONE (781) 246-5200

RECORD DRAWINGS

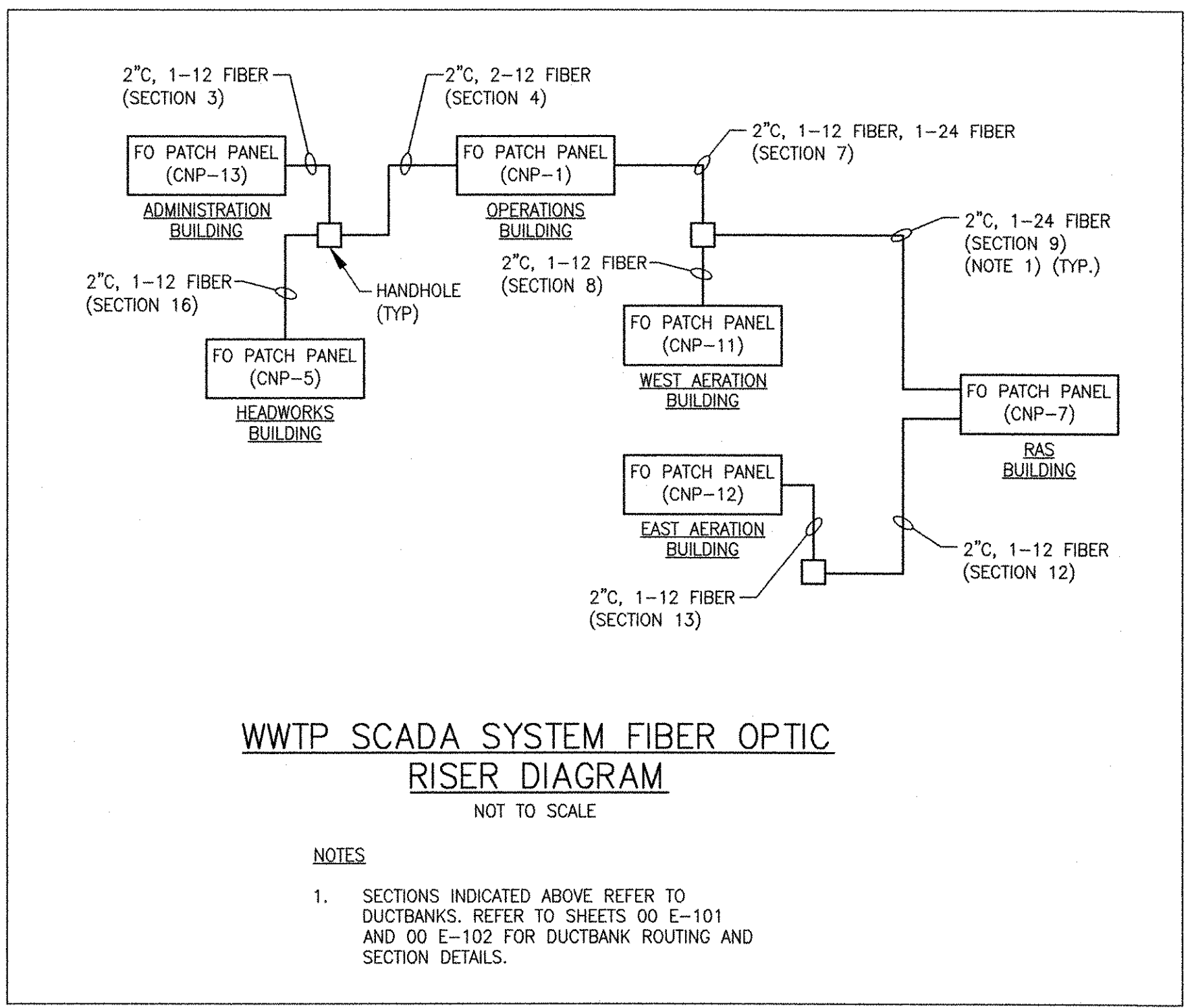
REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 95-000000-94-30
 YASSER RIZK

CITY OF EAST PROVIDENCE RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS
FIRE ALARM SYSTEM SCHEDULES AND RISER DIAGRAMS
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	00 E-606
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

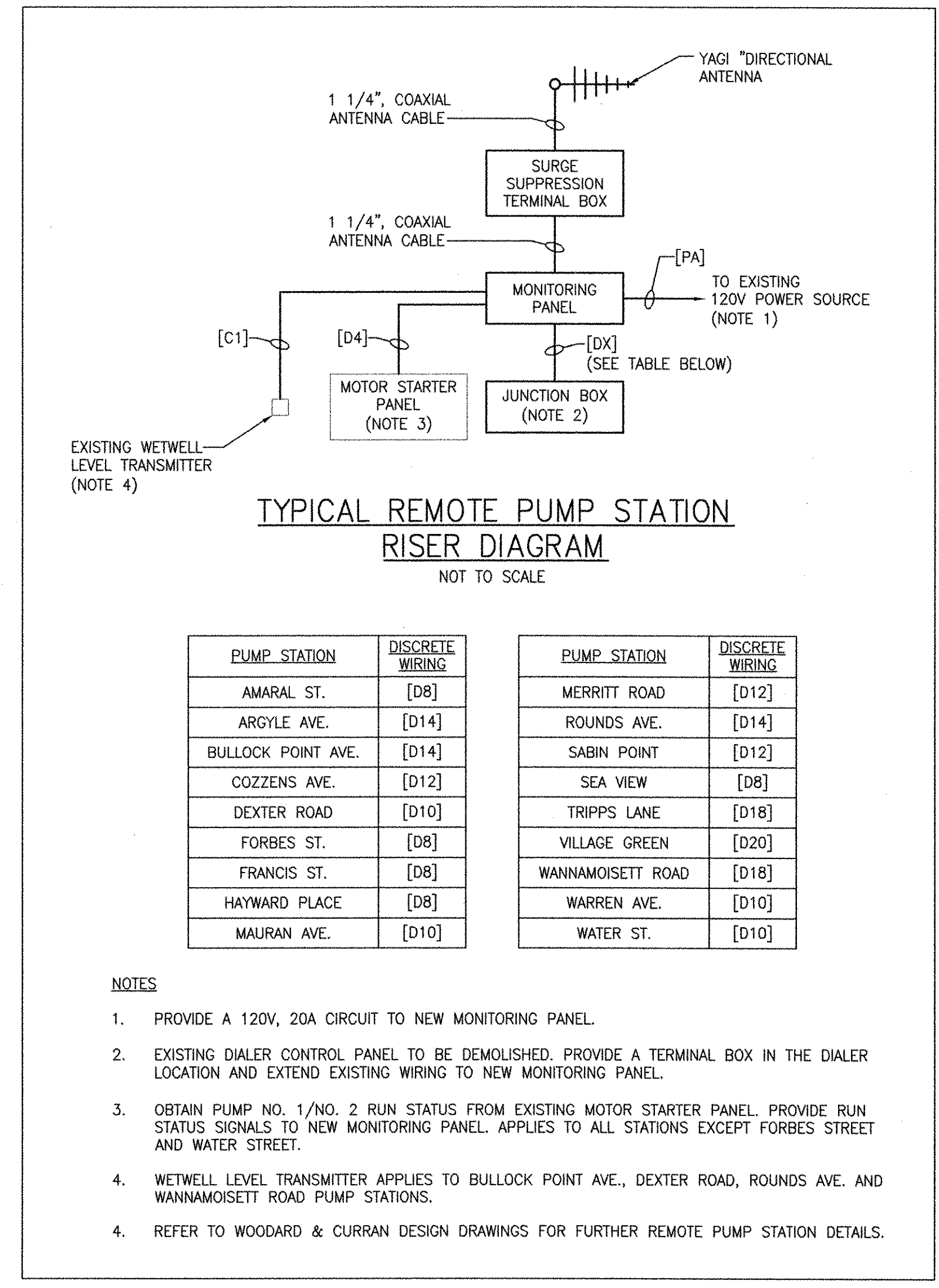
00 E-606

PATH: F:\60148648 - EAST PROVIDENCE (BIO)\COMMON SHEETS\00 E-606.DWG
 PLOT DATE: Thursday, October 25, 2012 9:20:43 AM
 LAST UPDATE: Friday, October 05, 2012 9:09:43 AM
 ANSI D - 5 - Oct-12



WWTP SCADA SYSTEM FIBER OPTIC RISER DIAGRAM
NOT TO SCALE

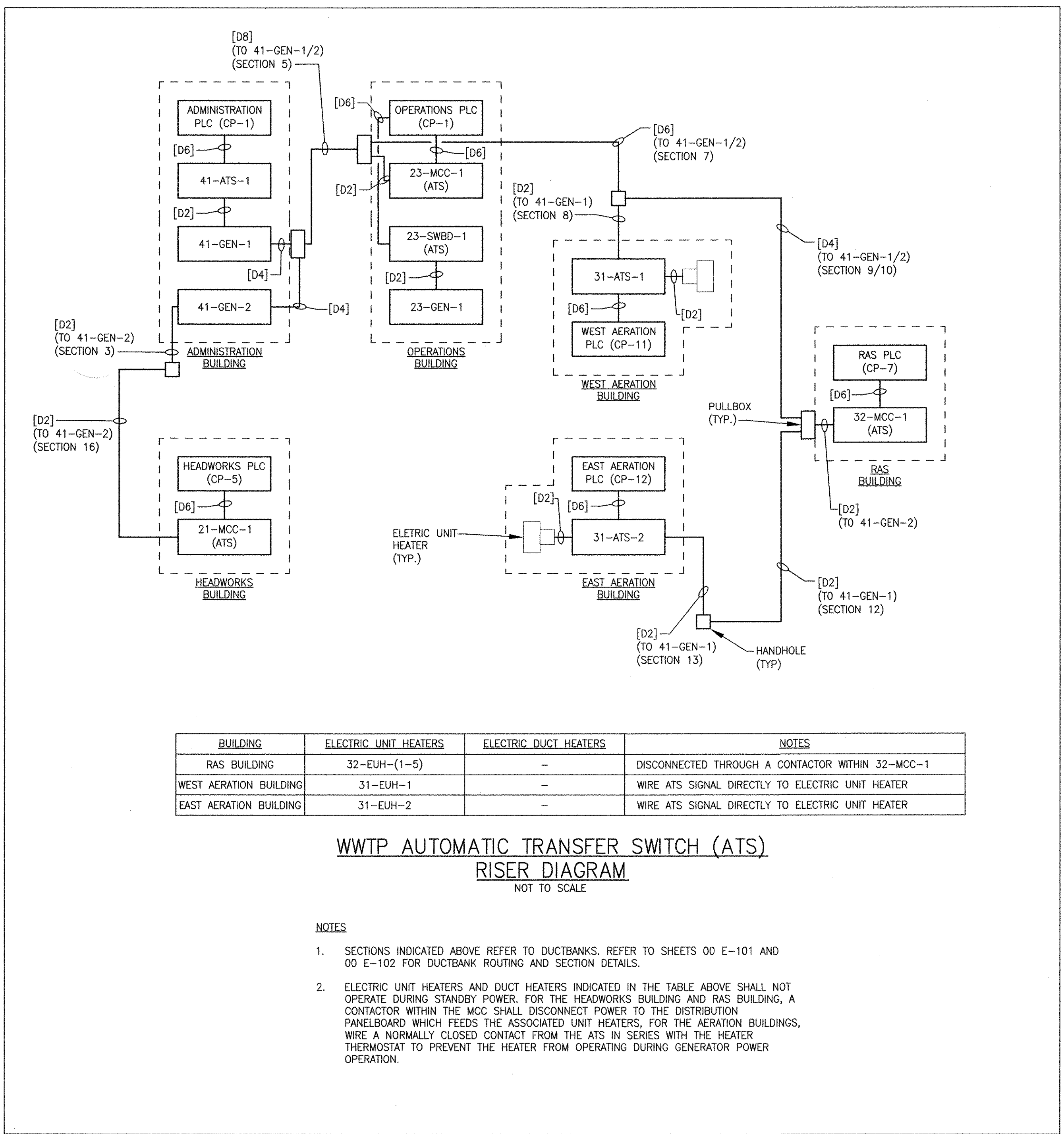
- NOTES**
- SECTIONS INDICATED ABOVE REFER TO DUCTBANKS. REFER TO SHEETS 00 E-101 AND 00 E-102 FOR DUCTBANK ROUTING AND SECTION DETAILS.



TYPICAL REMOTE PUMP STATION RISER DIAGRAM
NOT TO SCALE

PUMP STATION	DISCRETE WIRING	PUMP STATION	DISCRETE WIRING
AMARAL ST.	[D8]	MERRITT ROAD	[D12]
ARGYLE AVE.	[D14]	ROUNDS AVE.	[D14]
BULLOCK POINT AVE.	[D14]	SABIN POINT	[D12]
COZZENS AVE.	[D12]	SEA VIEW	[D8]
DEXTER ROAD	[D10]	TRIPPS LANE	[D18]
FORBES ST.	[D8]	VILLAGE GREEN	[D20]
FRANCIS ST.	[D8]	WANNAMOISSETT ROAD	[D18]
HAYWARD PLACE	[D8]	WARREN AVE.	[D10]
MAURAN AVE.	[D10]	WATER ST.	[D10]

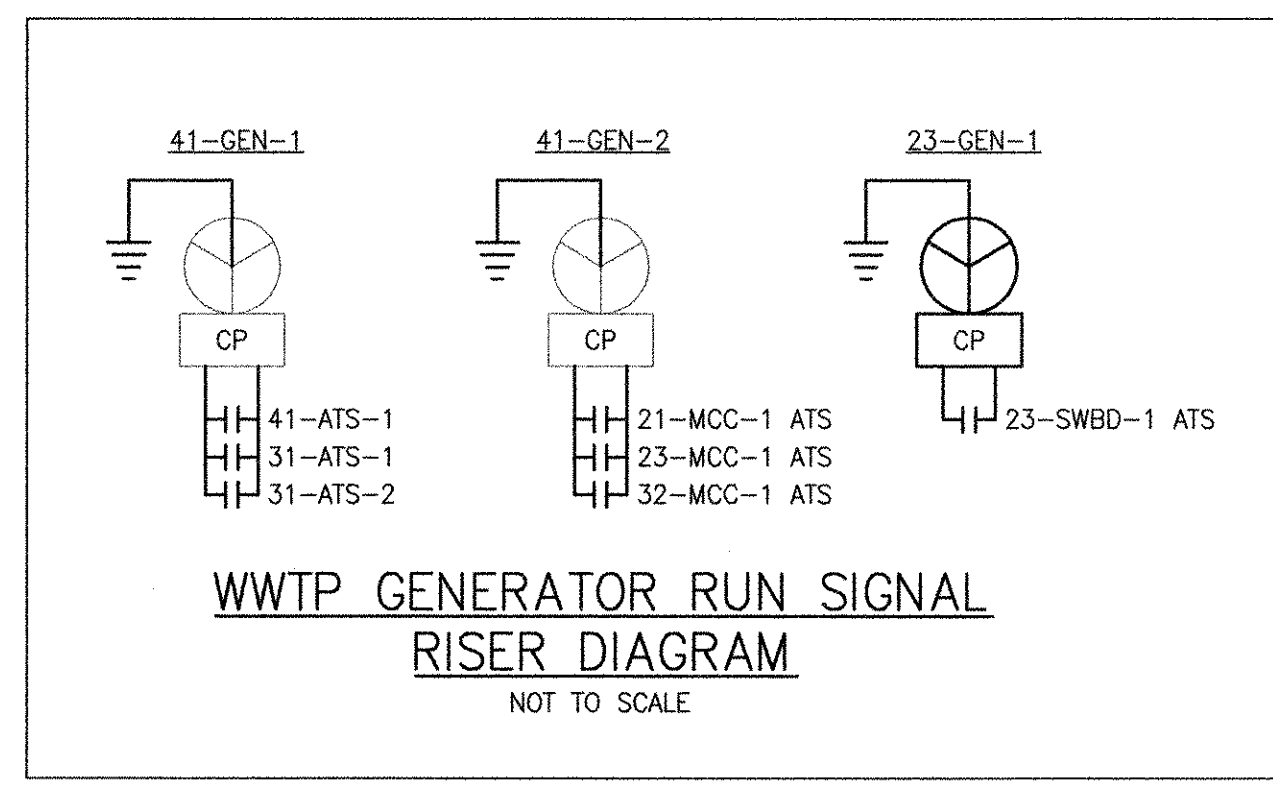
- NOTES**
- PROVIDE A 120V, 20A CIRCUIT TO NEW MONITORING PANEL.
 - EXISTING DIALER CONTROL PANEL TO BE DEMOLISHED. PROVIDE A TERMINAL BOX IN THE DIALER LOCATION AND EXTEND EXISTING WIRING TO NEW MONITORING PANEL.
 - OBTAIN PUMP NO. 1/NO. 2 RUN STATUS FROM EXISTING MOTOR STARTER PANEL. PROVIDE RUN STATUS SIGNALS TO NEW MONITORING PANEL. APPLIES TO ALL STATIONS EXCEPT FORBES STREET AND WATER STREET.
 - WETWELL LEVEL TRANSMITTER APPLIES TO BULLOCK POINT AVE., DEXTER ROAD, ROUNDS AVE. AND WANNAMOISSETT ROAD PUMP STATIONS.
 - REFER TO WOODARD & CURRAN DESIGN DRAWINGS FOR FURTHER REMOTE PUMP STATION DETAILS.



BUILDING	ELECTRIC UNIT HEATERS	ELECTRIC DUCT HEATERS	NOTES
RAS BUILDING	32-EUH-(1-5)	-	DISCONNECTED THROUGH A CONTACTOR WITHIN 32-MCC-1
WEST AERATION BUILDING	31-EUH-1	-	WIRE ATS SIGNAL DIRECTLY TO ELECTRIC UNIT HEATER
EAST AERATION BUILDING	31-EUH-2	-	WIRE ATS SIGNAL DIRECTLY TO ELECTRIC UNIT HEATER

WWTP AUTOMATIC TRANSFER SWITCH (ATS) RISER DIAGRAM
NOT TO SCALE

- NOTES**
- SECTIONS INDICATED ABOVE REFER TO DUCTBANKS. REFER TO SHEETS 00 E-101 AND 00 E-102 FOR DUCTBANK ROUTING AND SECTION DETAILS.
 - ELECTRIC UNIT HEATERS AND DUCT HEATERS INDICATED IN THE TABLE ABOVE SHALL NOT OPERATE DURING STANDBY POWER. FOR THE HEADWORKS BUILDING AND RAS BUILDING, A CONTACTOR WITHIN THE MCC SHALL DISCONNECT POWER TO THE DISTRIBUTION PANELBOARD WHICH FEEDS THE ASSOCIATED UNIT HEATERS, FOR THE AERATION BUILDINGS, WIRE A NORMALLY CLOSED CONTACT FROM THE ATS IN SERIES WITH THE HEATER THERMOSTAT TO PREVENT THE HEATER FROM OPERATING DURING GENERATOR POWER OPERATION.



WWTP GENERATOR RUN SIGNAL RISER DIAGRAM
NOT TO SCALE

REVISIONS	DESCRIPTION	YR	MADE BY	CHECKED
1	REVISED FOR RECORD DRAWING	10/19/12	MS	YR

AECOM

RECORD DRAWINGS

ACCOM USA, INC. ONE WAKEFIELD MA 01880 PHONE (781) 246-5200

YASSER YASSER
No. 25
02/10/12
9430
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
WASTEWATER SYSTEM IMPROVEMENTS

SYSTEM RISER DIAGRAMS

ELECTRICAL

PROJECT NO: 60148648
CAD DWG FILE: 00 E-607

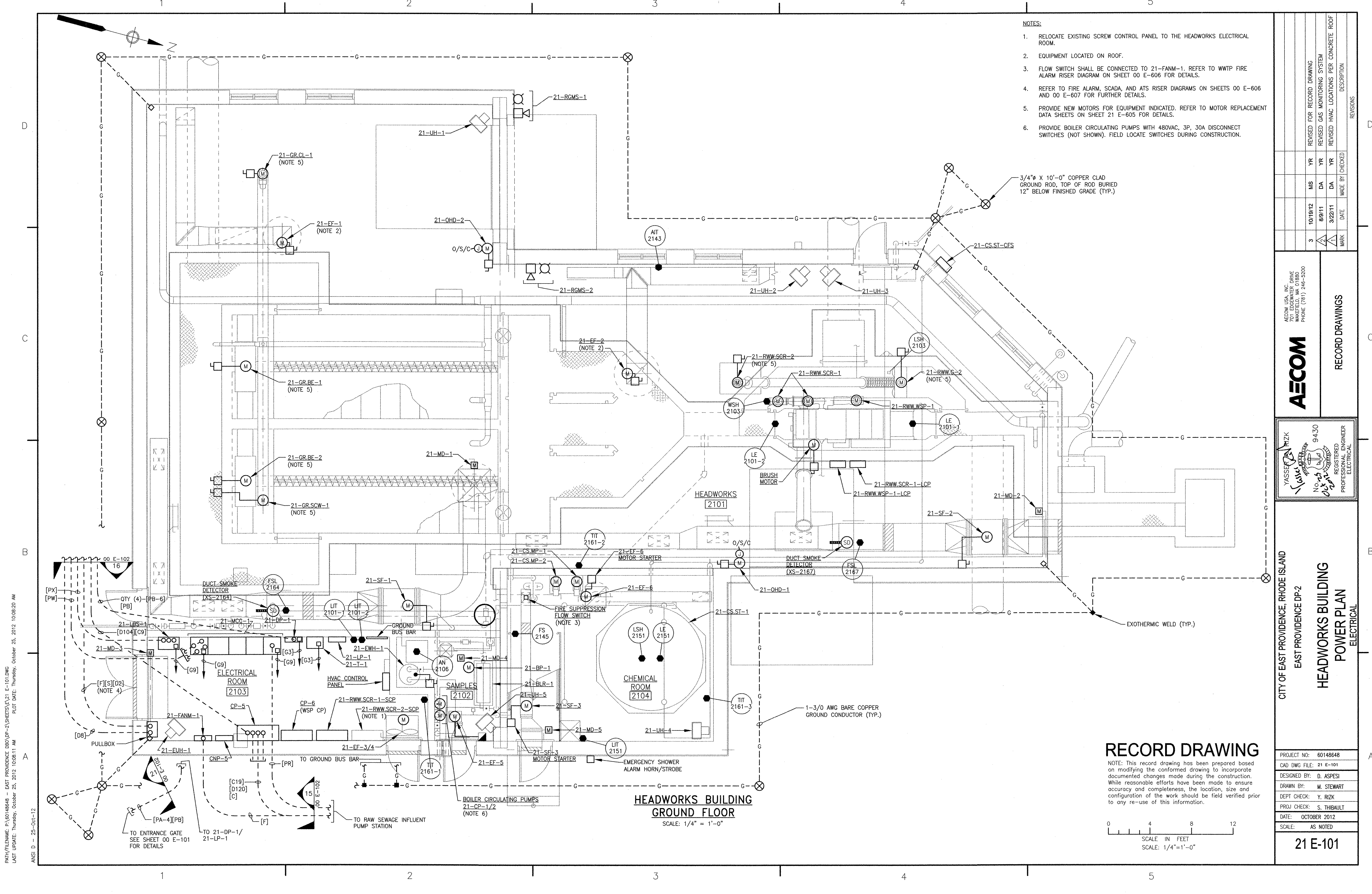
DESIGNED BY: D. ASPESI
DRAWN BY: M. STEWART
DEPT CHECK: Y. RIZK
PROJ CHECK: S. THIBAUT
DATE: OCTOBER 2012
SCALE: AS NOTED

00 E-607

PATH/FILENAME: F:\0148648 - EAST PROVIDENCE DBO\COMMON SHEETS\00 E-607.DWG
LAST UPDATE: Friday, October 05, 2012 8:58:26 AM
PLOT DATE: Thursday, October 25, 2012 9:20:46 AM
ANSI D - 5 - Oct-12

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



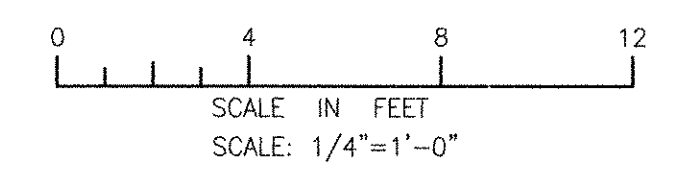
- NOTES:**
1. RELOCATE EXISTING SCREW CONTROL PANEL TO THE HEADWORKS ELECTRICAL ROOM.
 2. EQUIPMENT LOCATED ON ROOF.
 3. FLOW SWITCH SHALL BE CONNECTED TO 21-FANM-1. REFER TO WWTP FIRE ALARM RISER DIAGRAM ON SHEET 00 E-606 FOR DETAILS.
 4. REFER TO FIRE ALARM, SCADA, AND ATS RISER DIAGRAMS ON SHEETS 00 E-606 AND 00 E-607 FOR FURTHER DETAILS.
 5. PROVIDE NEW MOTORS FOR EQUIPMENT INDICATED. REFER TO MOTOR REPLACEMENT DATA SHEETS ON SHEET 21 E-605 FOR DETAILS.
 6. PROVIDE BOILER CIRCULATING PUMPS WITH 480VAC, 3P, 30A DISCONNECT SWITCHES (NOT SHOWN). FIELD LOCATE SWITCHES DURING CONSTRUCTION.

3/4" X 10'-0" COPPER CLAD GROUND ROD, TOP OF ROD BURIED 12" BELOW FINISHED GRADE (TYP.)

**HEADWORKS BUILDING
GROUND FLOOR**
SCALE: 1/4" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHEETS\21 E-101.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:08:11 AM
 PLOT DATE: Thursday, October 25, 2012 10:08:20 AM
 ANSI D - 25-Oct-12

		REVISIONS YR MS DA YR 10/19/12 MS 8/9/11 DA 3/22/11 YR MARK DATE MADE BY CHECKED DESCRIPTION	
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 HEADWORKS BUILDING POWER PLAN ELECTRICAL		YASSER RIZK REGISTERED PROFESSIONAL ENGINEER ELECTRICAL No. 025094 9430	
PROJECT NO: 60148648 CAD DWG FILE: 21 E-101 DESIGNED BY: D. ASPESI DRAWN BY: M. STEWART DEPT CHECK: Y. RIZK PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED		21 E-101	

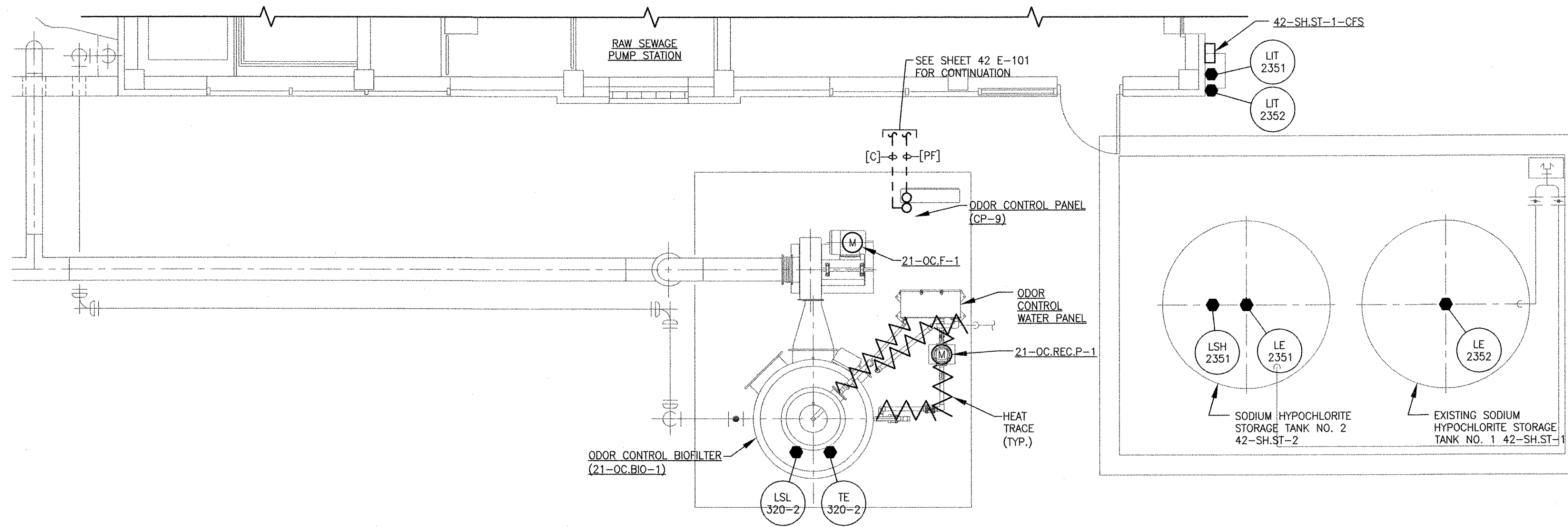
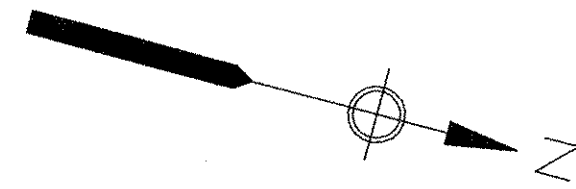
1

2

3

4

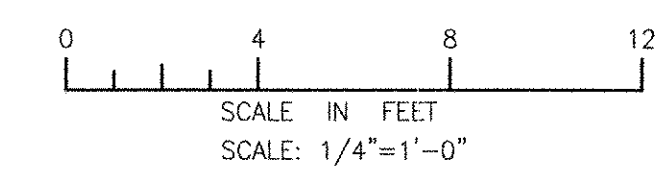
5



**HEADWORKS ODOR CONTROL
POWER PLAN**
SCALE: 1/4" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MS	YR	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5500

RECORD DRAWINGS

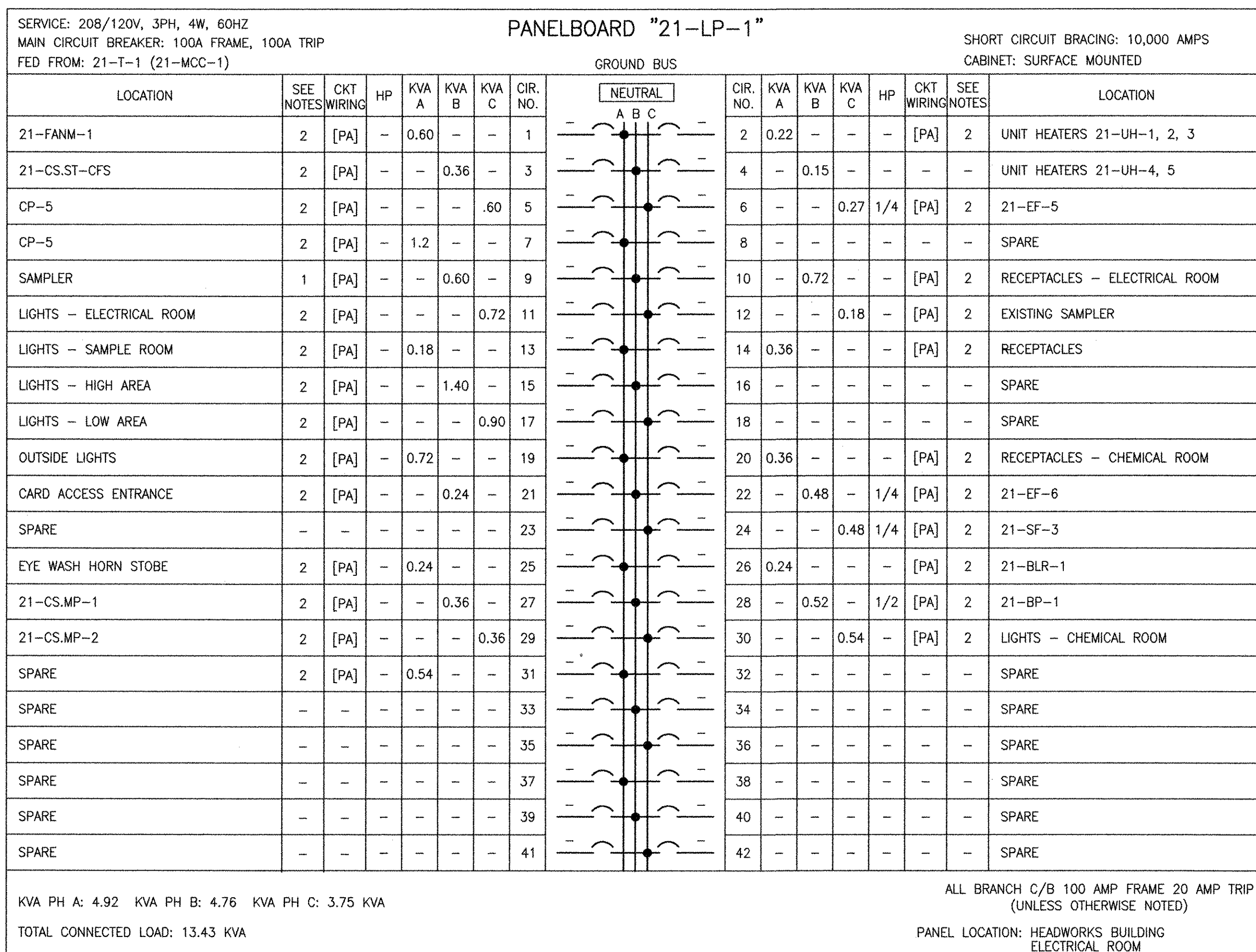
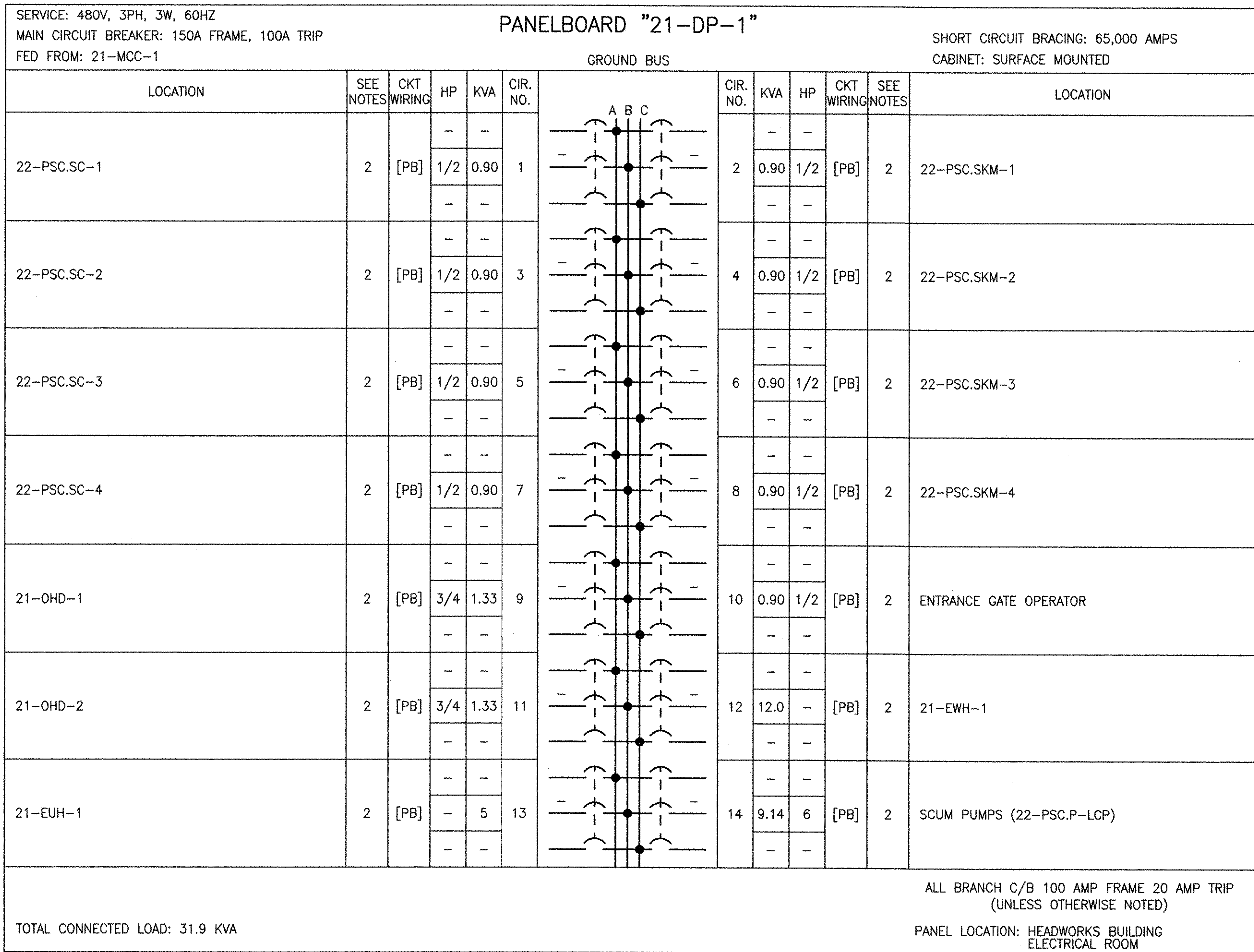
YASSER (RANK)
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 9430
01/20/08

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
HEADWORKS BUILDING ODOR CONTROL POWER PLAN
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	21 E-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

21 E-102

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE (RPO)\DP-2\21 SHEETS\21 E-102.DWG
LAST UPDATE: Monday, October 01, 2012 8:05:45 AM
PLOT DATE: Thursday, October 25, 2012 9:18:13 AM
ANSI D - 1 - Oct-12



ROOM OR SPACE NAME	LIGHTING SYSTEM							SWITCHES	RECEPTACLES	REMARKS	
	BA1	BA2	BM1	DD1	DD2	DL1	DL2				EM1
HEADWORKS 2101				8	10				3	2	1,2
SAMPLE ROOM 2102			2						1	1	3
ELECTRICAL ROOM 2103			8						2	4	4
CHEMICAL ROOM 2104			6						1	2	6
ABOVE EXTERIOR DOORS								3			5,7

- R1: MOUNT FIXTURES 15'-0" AFF IN THE HIGH CEILING PORTION OF THE HEADWORKS AREA.
- R2: MOUNT FIXTURES 10'-0" AFF IN THE LOW CEILING PORTION OF THE HEADWORKS AREA.
- R3: MOUNT FIXTURES 8'-0" AFF
- R4: MOUNT FIXTURES 10'-0" AFF
- R5: MOUNT FIXTURES 1'-0" ABOVE EXTERIOR DOORS
- R6: MOUNT FIXTURES 9'-0" AFF IN THE CAUSTIC AREA
- R7: LOCATE FIXTURES ABOVE ELECTRICAL ROOM EXTERIOR DOORS.

REVISIONS	DESCRIPTION
1	REVISED FOR RECORD DRAWING

RECORD DRAWINGS

10/19/12
 DATE
 MS
 MADE BY
 YR
 CHECKED

AECOM

YASSER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 No. 9430
 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
HEADWORKS BUILDING
SCHEDULES
 ELECTRICAL

PROJECT NO: 60148648
 CAD DWG FILE: 21 E-602
 DESIGNED BY: D. ASPESI
 DRAWN BY: M. STEWART
 DEPT CHECK: Y. RIZK
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

21 E-602

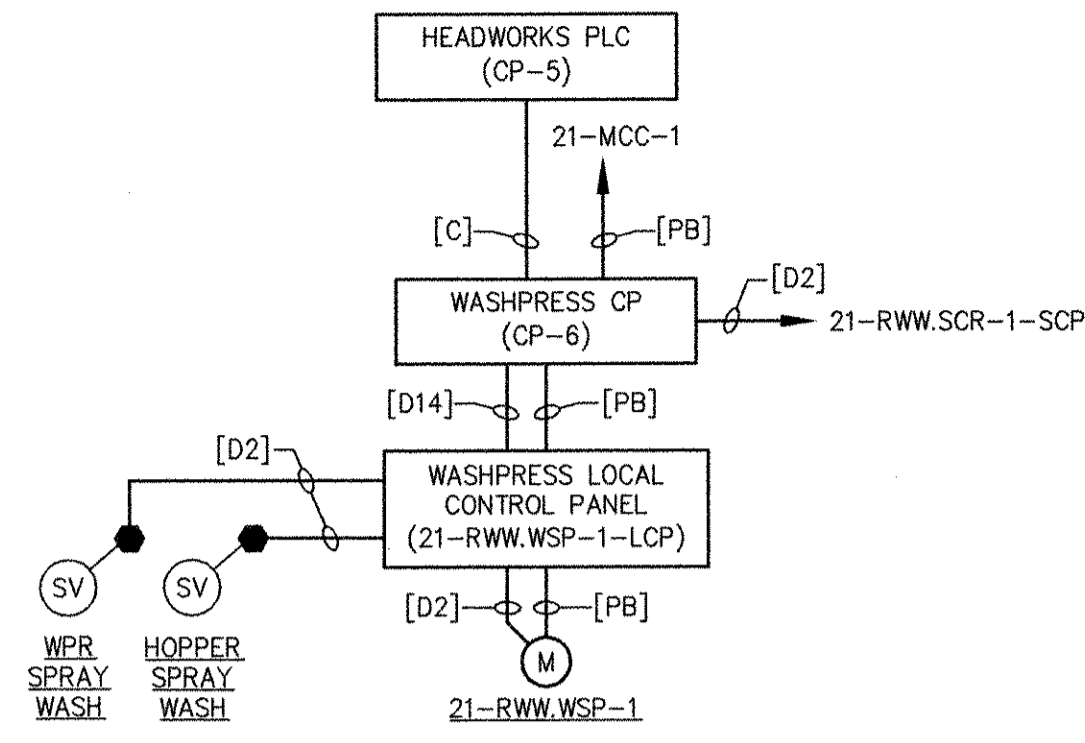
RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

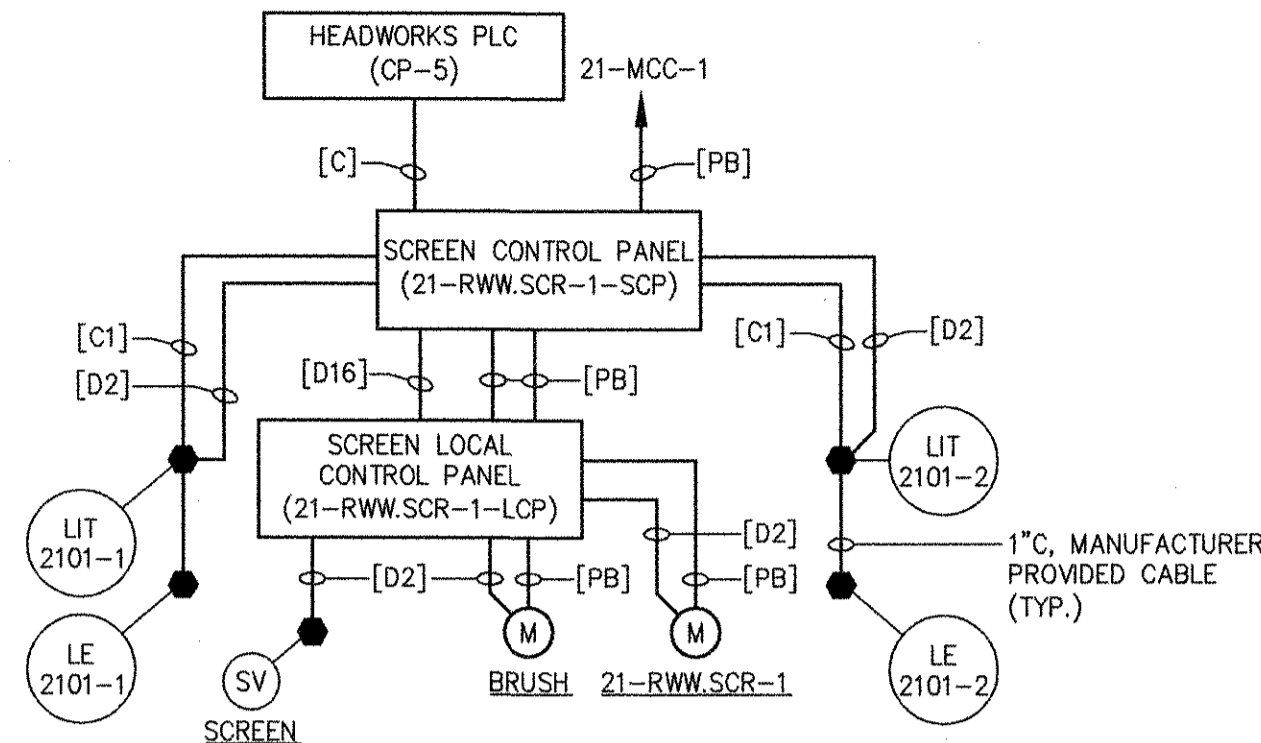
- NOTES:
- EXISTING EQUIPMENT
 - NEW EQUIPMENT

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\A\SCHEDULES\21 E-602.DWG
 LAST UPDATE: Wednesday, October 03, 2012 11:23:51 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:20 AM
 ANSI D - 3-Oct-12

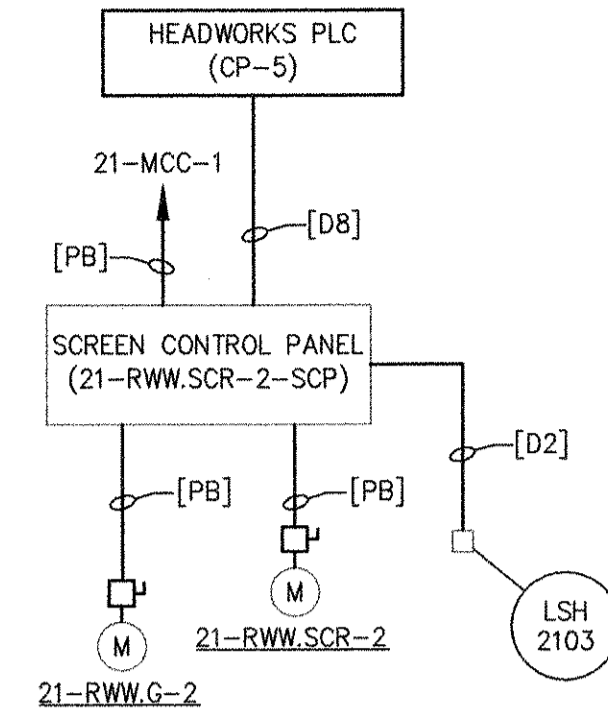
NOTES
1. REFER TO SHEET 42 E-602 FOR CONDUIT ROUTING DETAILS.



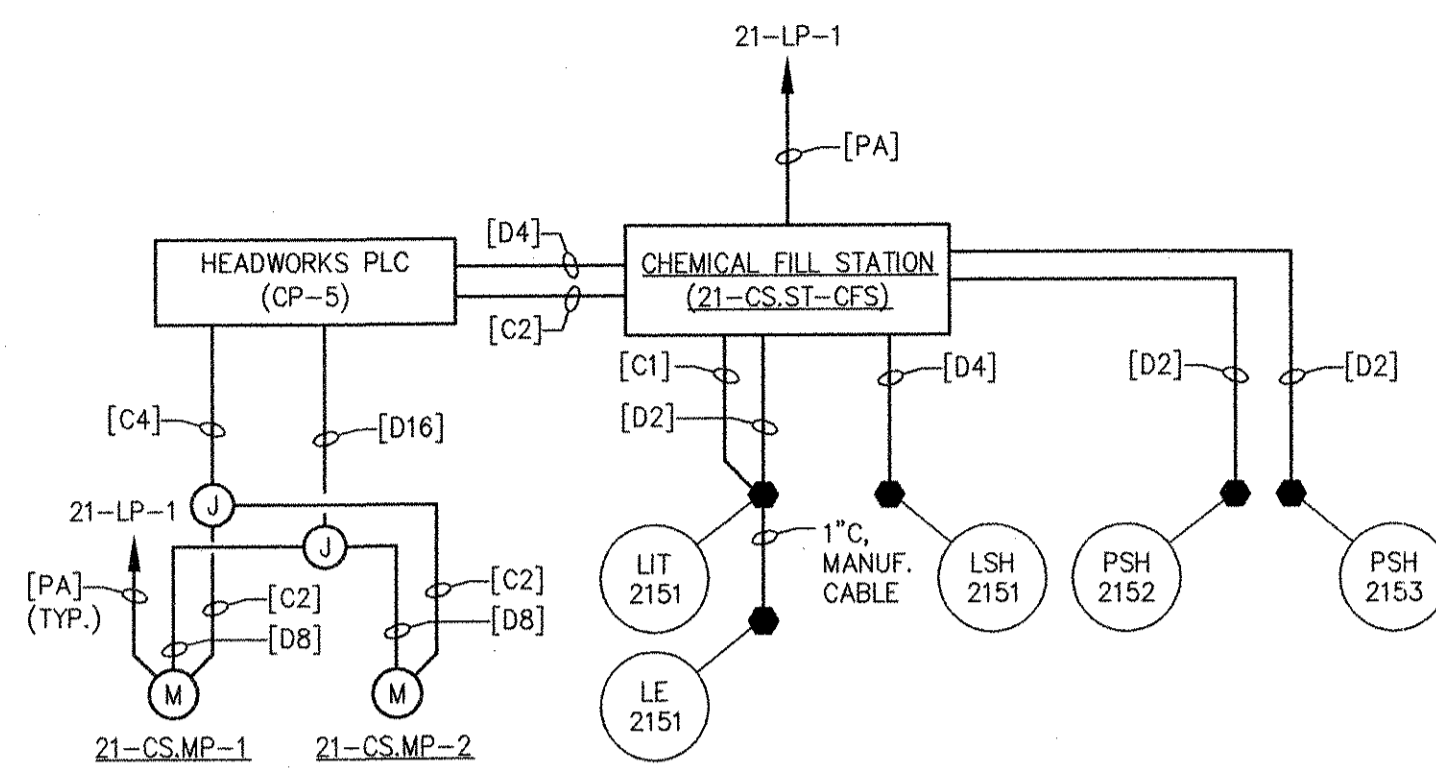
WASHPRESS 21-RWW.WSP-1
RISER DIAGRAM



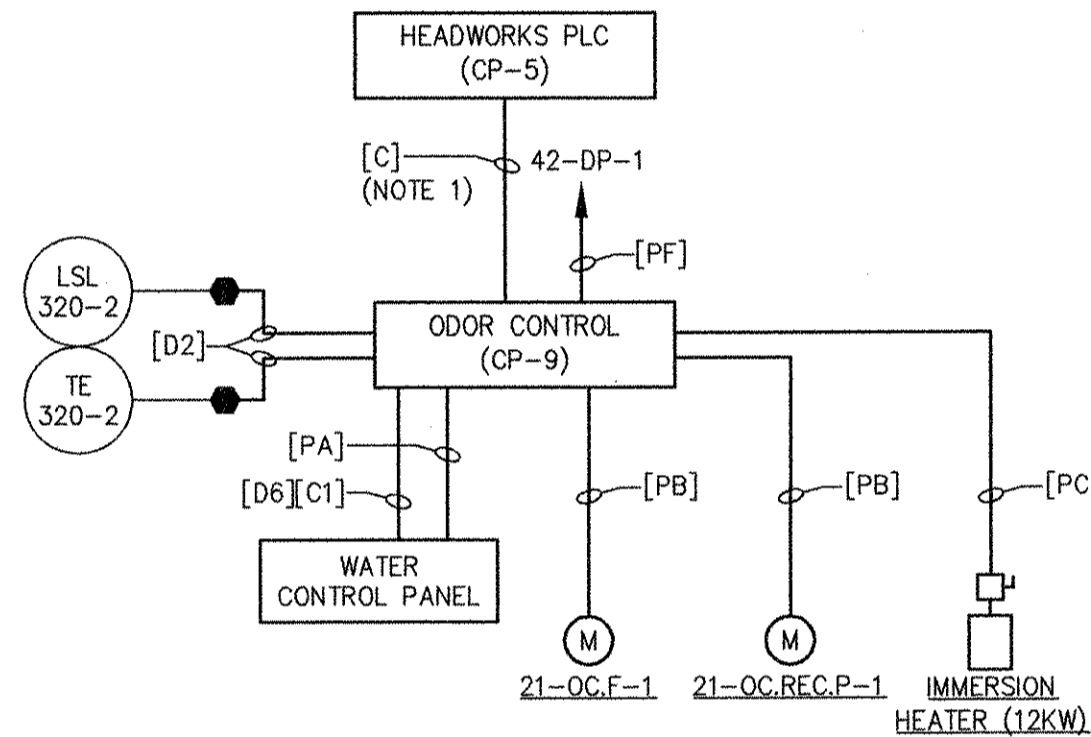
FINE SCREEN 21-RWW.SCR-1
RISER DIAGRAM



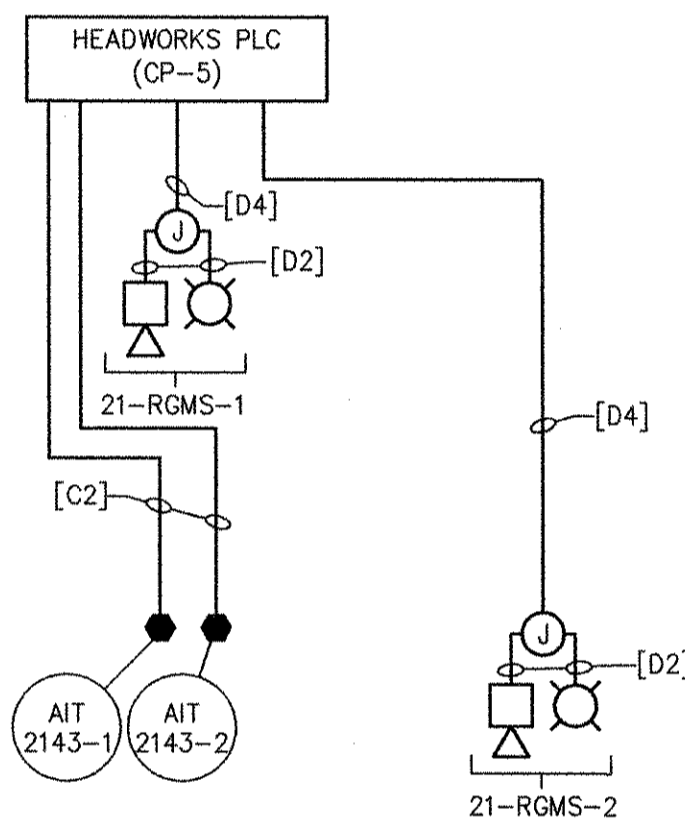
FINE SCREEN 21-RWW.SCR-2
RISER DIAGRAM



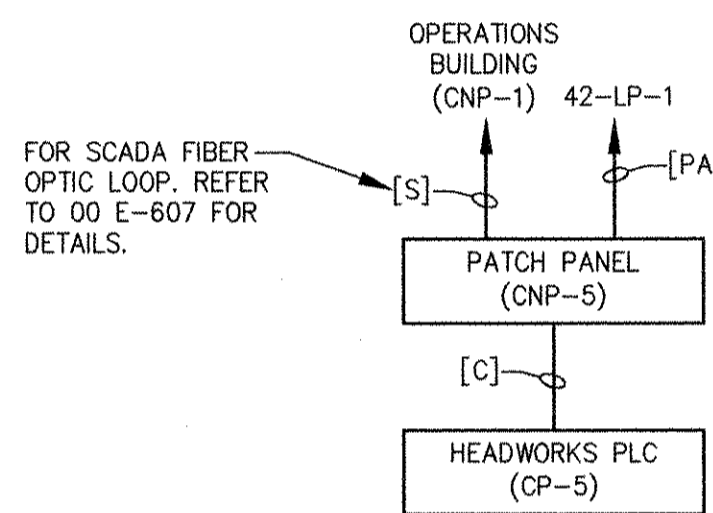
CAUSTIC SODA METERING PUMPS
RISER DIAGRAM



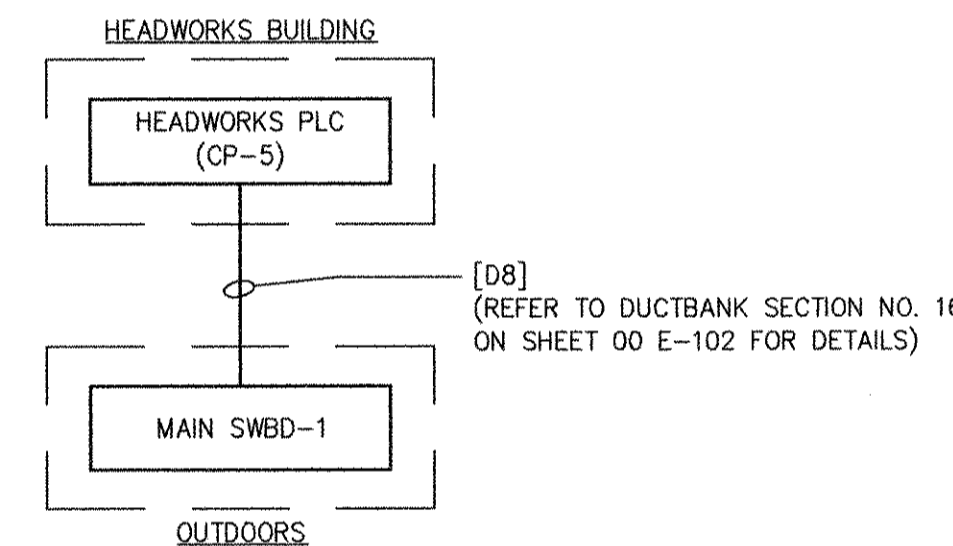
HEADWORKS ODOR CONTROL
RISER DIAGRAM



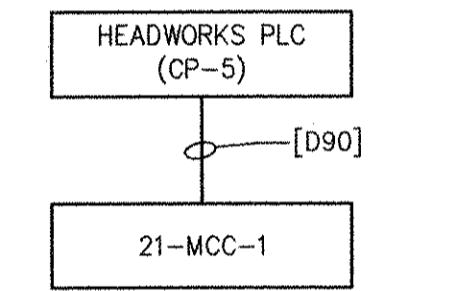
HEADWORKS GAS MONITORING
RISER DIAGRAM



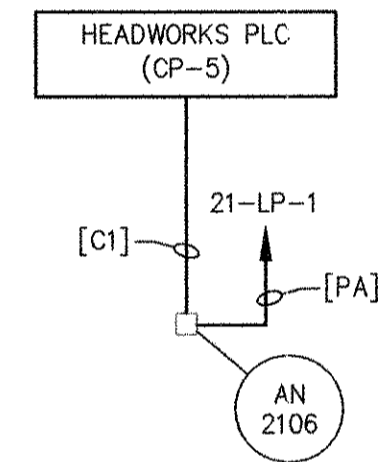
PATCH PANEL CNP-5
RISER DIAGRAM



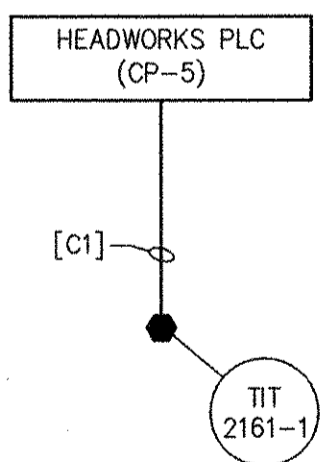
MAIN SWBD-1 STATUS
RISER DIAGRAM



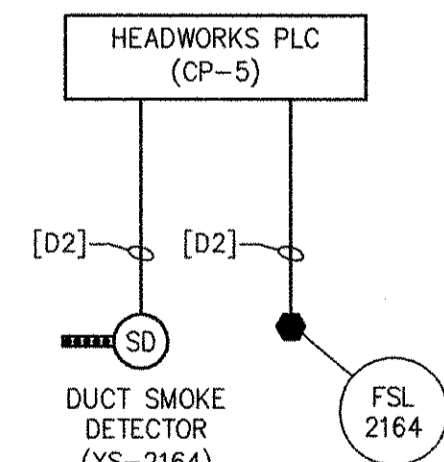
21-MCC-1 CONTROL
RISER DIAGRAM



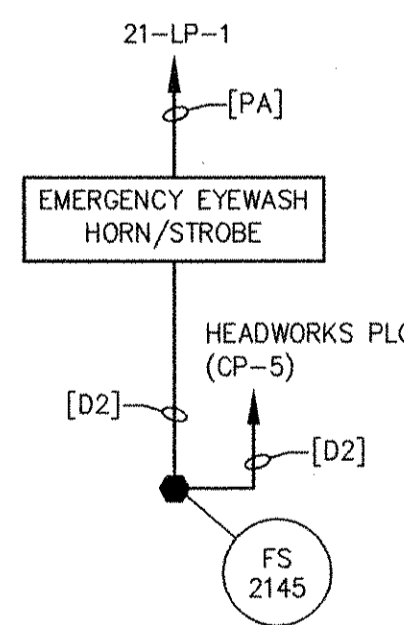
SAMPLER AN-2106
RISER DIAGRAM



TEMPERATURE SENSOR TIT-2161-1
RISER DIAGRAM
(TYPICAL FOR TEMPERATURE SENSOR TIT-2161-2, TIT-2161-3)



TYPICAL HVAC ALARM
RISER DIAGRAM
(TYPICAL FOR FLOW SWITCH FSL-2167 AND DUCT SMOKE DETECTOR XS-2167)



EMERGENCY EYEWASH HORN/STROBE
RISER DIAGRAM

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-2\SHEETS\A21 E-603.DWG
LAST UPDATE: Thursday, October 25, 2012 10:08:48 AM
ANSI D - 25-Oct-12

Table with columns: REVISIONS, DATE, MADE BY, CHECKED, DESCRIPTION. Includes revision 3 dated 10/19/12 by MS, revision 2 dated 8/9/11 by DA, and revision 1 dated 3/21/11 by YR.

AECOM logo and company information: AECOM USA, INC. WAKEFIELD, MA 01880. PHONE (781) 246-5200. RECORD DRAWINGS.

Professional Engineer seal for YASSER RIZK, No. 9430, State of Rhode Island.

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
HEADWORKS BUILDING
RISER DIAGRAMS
ELECTRICAL

Project information table: PROJECT NO: 60148648, CAD DWG FILE: 21 E-603, DESIGNED BY: D. ASPESI, DRAWN BY: M. STEWART, DEPT CHECK: Y. RIZK, PROJ CHECK: S. THIBAUT, DATE: OCTOBER 2012, SCALE: AS NOTED, 21 E-603.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP\DP-2\SHEETS\A.21 E-605.DWG
 LAST UPDATE: Monday, October 01, 2012 8:02:45 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:27 AM

ANSI D - 1-Oct-12

EQUIPMENT: 21-RWW.G-2
LOCATION: HEADWORKS BUILDING
DRAWING: 21 E-101
VOLTAGE: 480V/3PH
HP: 5 HP
RPM: 1725 RPM
FRAME: 184TC
SERVICE FACTOR: 1.15
DUTY: CONTINUOUS
ENCLOSURE: EXPLOSION-PROOF (CLASS I, DIV 1 GROUP D)

EQUIPMENT: 21-GL.CL-1
LOCATION: HEADWORKS BUILDING
DRAWING: 21 E-101
VOLTAGE: 480V/3PH
HP: 1 HP
RPM: 1150 RPM
FRAME: 145TC
SERVICE FACTOR: 1.15
DUTY: CONTINUOUS
ENCLOSURE: EXPLOSION-PROOF (CLASS I, DIV 1 GROUP D)

EQUIPMENT: 21-RWW.SCR-2
LOCATION: HEADWORKS BUILDING
DRAWING: 21 E-101
VOLTAGE: 480V/3PH
HP: 2 HP
RPM: 1725 RPM
FRAME: 145TC
SERVICE FACTOR: 1.15
DUTY: CONTINUOUS
ENCLOSURE: EXPLOSION-PROOF (CLASS I, DIV 1 GROUP D)

EQUIPMENT: 21-GR.BE-1
LOCATION: HEADWORKS BUILDING
DRAWING: 21 E-101
VOLTAGE: 480V/3PH
HP: 1.5 HP
RPM: 1800 RPM
FRAME: 182T-33
SERVICE FACTOR: 1.15
DUTY: CONTINUOUS
ENCLOSURE: EXPLOSION-PROOF (CLASS I, DIV 1 GROUP D)

EQUIPMENT: 21-GR.SCW-1
LOCATION: HEADWORKS BUILDING
DRAWING: 21 E-101
VOLTAGE: 480V/3PH
HP: 1.5 HP
RPM: 1740 RPM
FRAME: 145TC
SERVICE FACTOR: 1.15
DUTY: CONTINUOUS
ENCLOSURE: EXPLOSION-PROOF (CLASS I, DIV 1 GROUP D)

EQUIPMENT: 21-GR.BE-2
LOCATION: HEADWORKS BUILDING
DRAWING: 21 E-101
VOLTAGE: 480V/3PH
HP: 1.5 HP
RPM: 1800 RPM
FRAME: 184TC
SERVICE FACTOR: 1.15
DUTY: CONTINUOUS
ENCLOSURE: EXPLOSION-PROOF (CLASS I, DIV 1 GROUP D)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

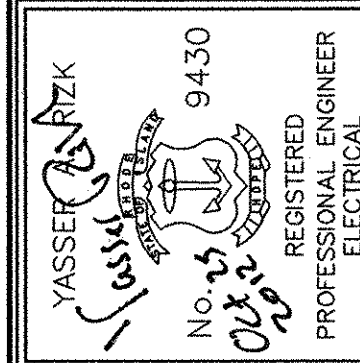
PROJECT NO: 60148648
 CAD DWG FILE: 21 E-605
 DESIGNED BY: D. ASPESI
 DRAWN BY: D. ASPESI
 DEPT CHECK: Y. RIZK
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED

21 E-605

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

HEADWORKS BUILDING REPLACEMENT MOTOR DATA SHEETS

ELECTRICAL



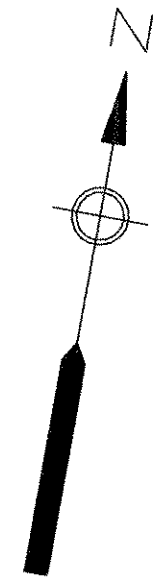
AECOM
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAREHOUSES, MA 01890
 PHONE (781) 246-5200

RECORD DRAWINGS

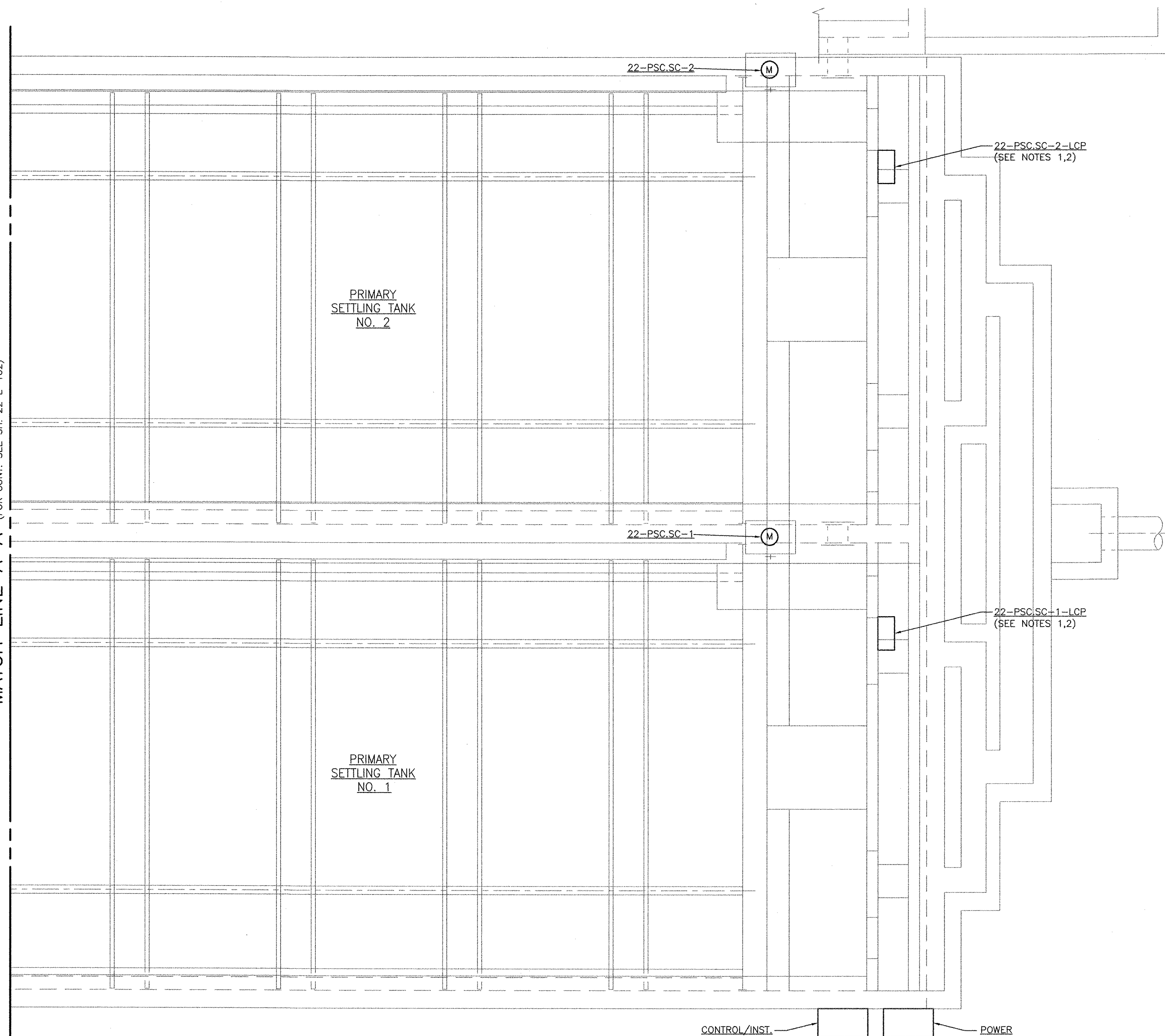
MARK	DATE	MADE BY	CHECKED	DESCRIPTION
1	10/19/12	MS	YR	REVISED FOR RECORD DRAWING

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO) DP-2 SHEETS\22 E-101.DWG
 LAST UPDATE: Monday, October 01, 2012 8:02:14 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:30 AM

ANSI D - 1-10-12



MATCH LINE A-A (FOR CONT. SEE SH. 22 E-102)



**PRIMARY SETTLING TANK NO. 1/NO. 2
 MODIFICATIONS PLAN I**

SCALE: 1/4" = 1'-0"

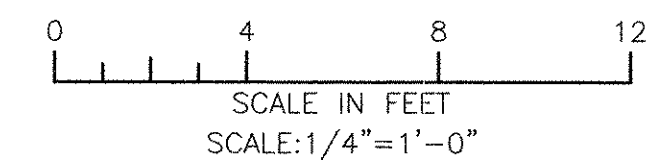
CONTROL/INST.
 PULL BOX
 (NOTE 1,2)

POWER
 PULL BOX
 (NOTE 1,2)

FOR CONTINUATION
 SEE SHEET 00 E-102

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NOTES

- REFER TO SETTLING TANK RISER DIAGRAM ON SHEET 22 E-601 FOR DETAILS.
- MOUNT A MINIMUM OF 18" ABOVE TANK TO BE INSTALLED OUTSIDE OF THE CLASSIFIED AREA. REFER TO DRAWING 00 E-604 FOR PRIMARY SETTLING TANK CLASSIFICATION DETAIL.

REVISIONS			
MARK	DATE	MADE BY	DESCRIPTION
1	10/19/12	MS	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER RIZK
 No. 23
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

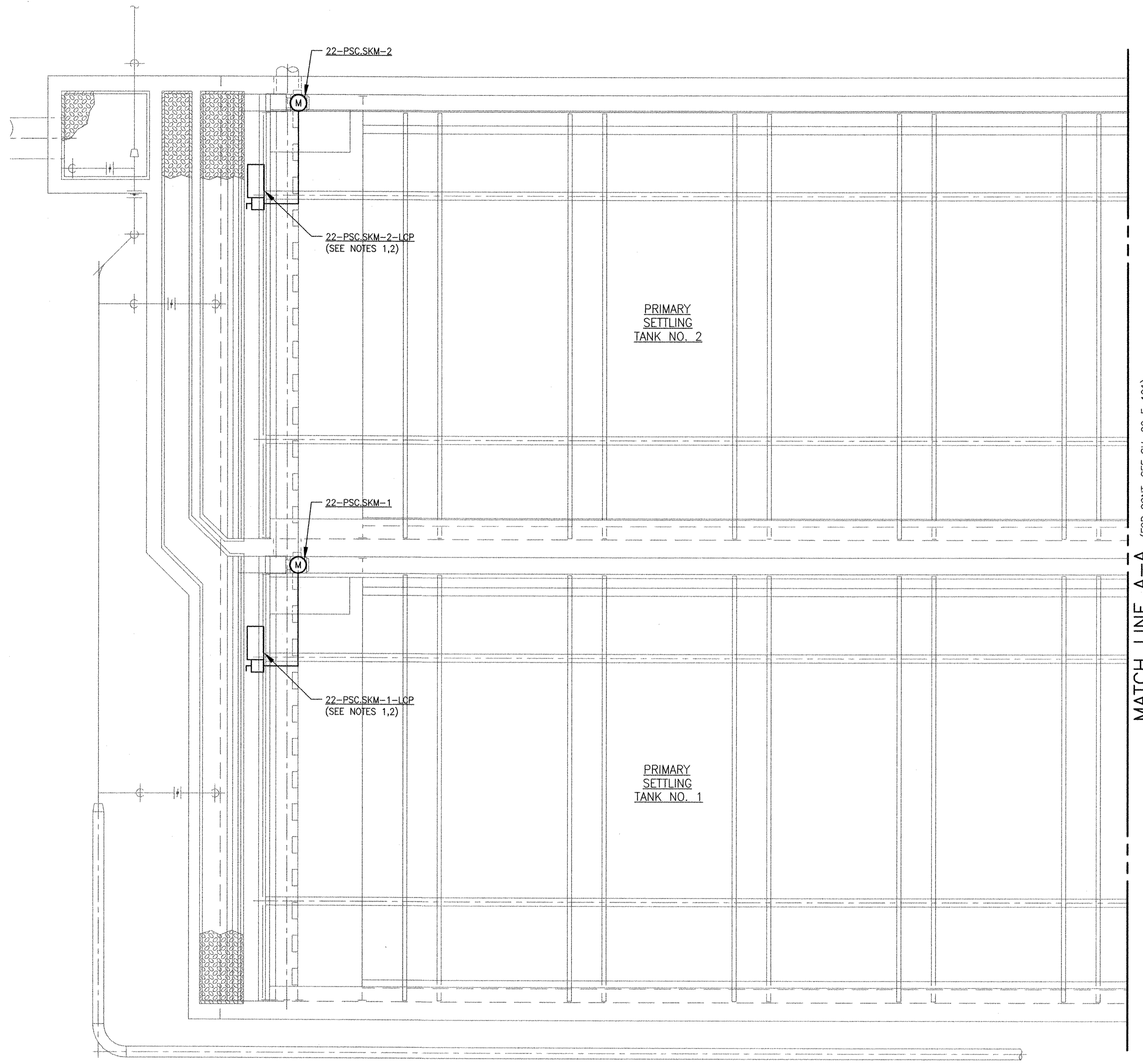
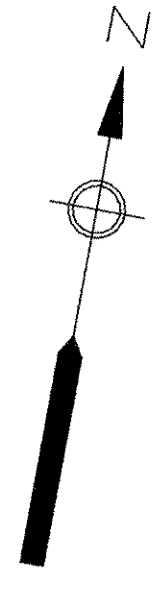
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 1 & 2
 UPPER LEVEL PLAN I**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	22 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 E-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-2\SHETS\22 E-102.DWG
 LAST UPDATE: Monday, October 01, 2012 8:01:44 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:32 AM

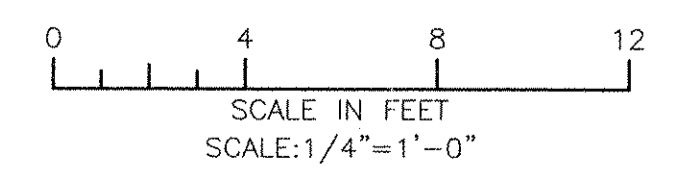
ANSI D - 1-Oct-12



**PRIMARY SETTLING TANKNO. 1/NO. 2
 MODIFICATIONS PLAN II**

RECORD DRAWING

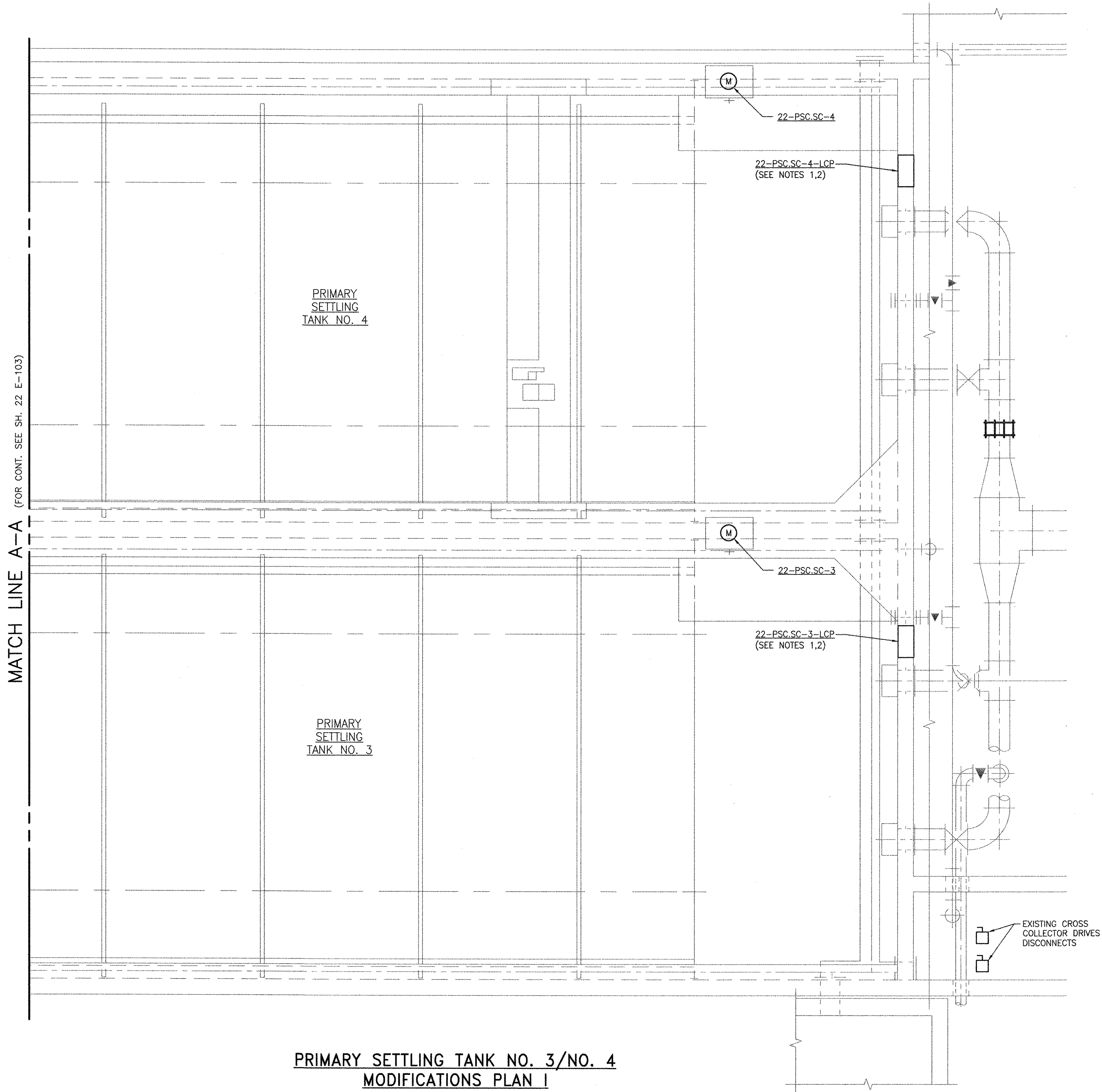
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



		AECOM USA, INC. 100 WASHINGTON STREET WAKEFIELD, MA 01880 PHONE: (781) 246-5200													
RECORD DRAWINGS		REVISIONS <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>REVISOR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MS	YR	REVISOR	DESCRIPTION	1	10/19/12				REVISED FOR RECORD DRAWING
MARK	DATE	MS	YR	REVISOR	DESCRIPTION										
1	10/19/12				REVISED FOR RECORD DRAWING										
		CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2 PRIMARY SETTLING TANKS 1 & 2 UPPER LEVEL PLAN II ELECTRICAL													
PROJECT NO: 60148648 CAD DWG FILE: 22 E-102 DESIGNED BY: D. ASPESI DRAWN BY: M. STEWART DEPT CHECK: Y. RIZK PROJ CHECK: S. THIBAUT DATE: OCTOBER 2012 SCALE: AS NOTED		22 E-102													

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DR\UP-2\SHEETS\E-103.DWG
 LAST UPDATE: Monday, October 01, 2012 8:27:09 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:35 AM

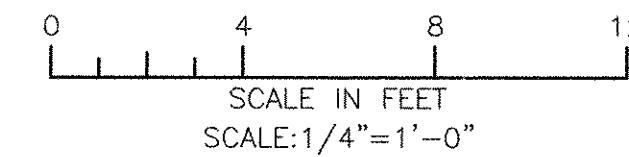
ANSI D - 1-Oct-12



**PRIMARY SETTLING TANK NO. 3/NO. 4
 MODIFICATIONS PLAN I**

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MS	YR	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
 RECORD DRAWINGS
 AECOM USA, INC. ONE
 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5000

YASSER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 No. 9430
 Electrical

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 3 & 4
 UPPER LEVEL PLAN I**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	22 E-103
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 E-103

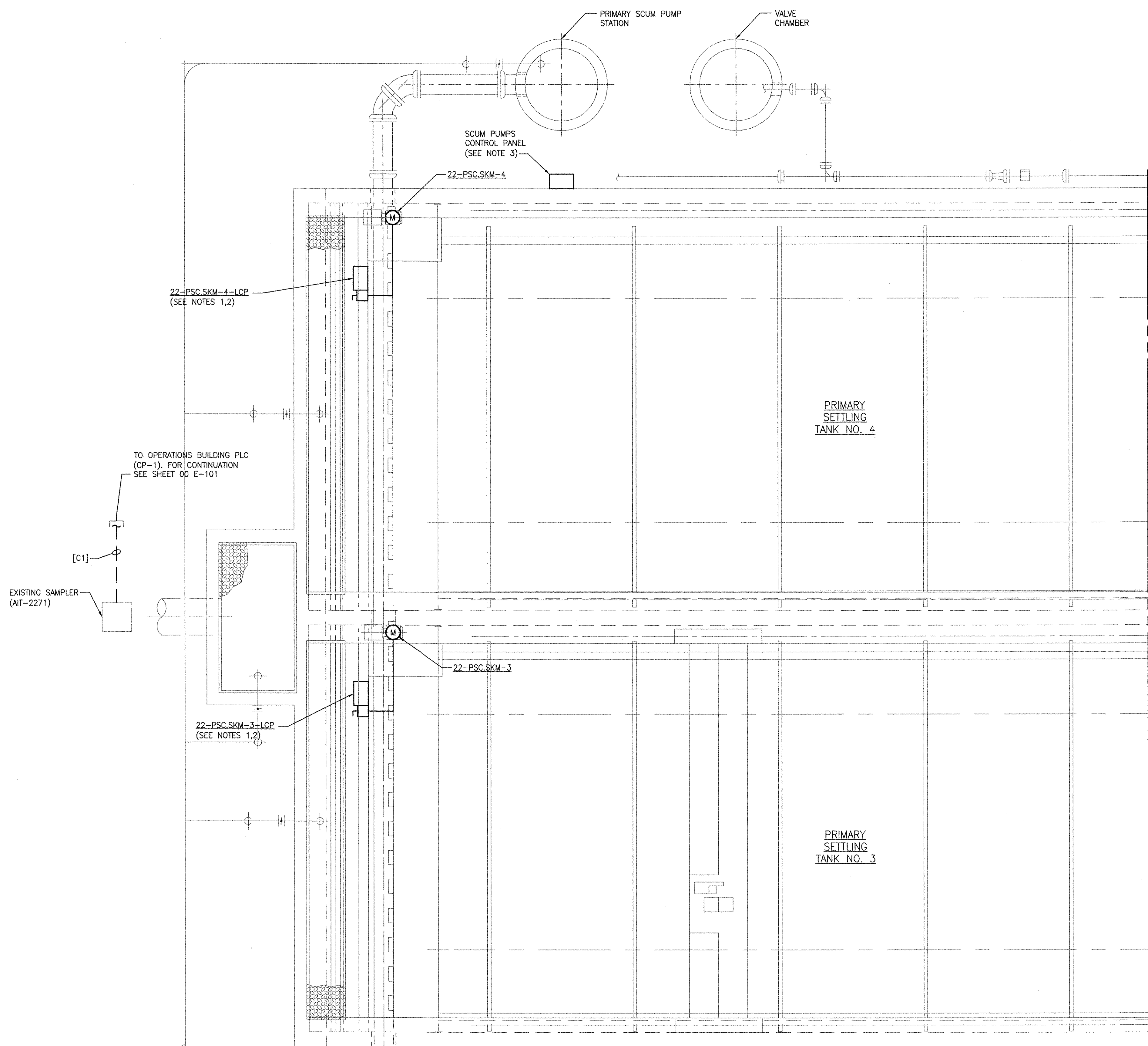
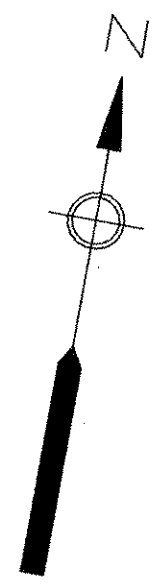
1

2

3

4

5

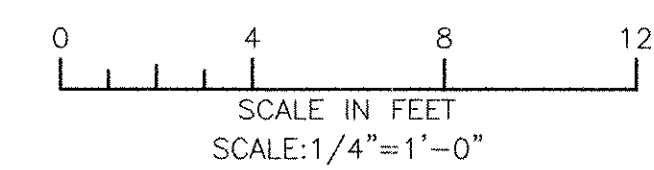


**PRIMARY SETTLING TANK NO. 3/NO. 4
MODIFICATIONS PLAN II**

MATCH LINE A-A (FOR CONT. SEE SH. 22 E-103)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\6048648 - EAST PROVIDENCE DEB\DP-2\SHETS\22 E-104.DWG
 LAST UPDATE: Monday, October 01, 2012 8:29:12 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:38 AM
 ANSI D - 1-Oct-12

MARK	DATE	MADE BY	CHECKED	YR	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/18/12					

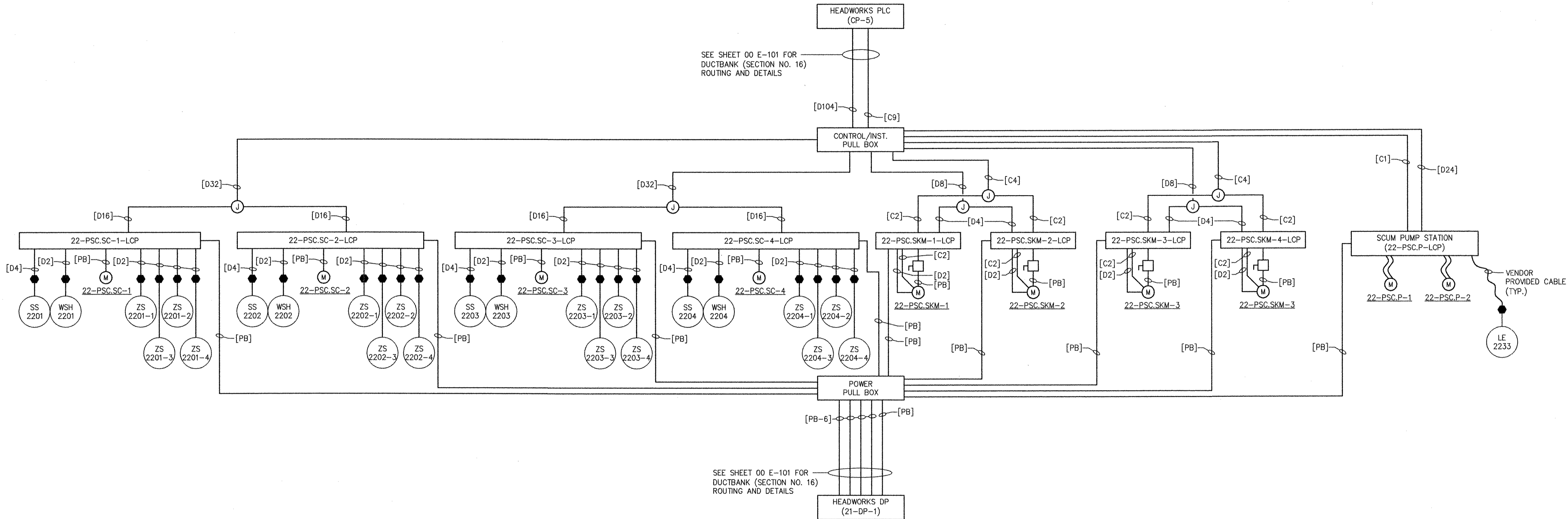
AECOM
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200
RECORD DRAWINGS

YASSEER RIZK
 No. 25
 08/25/12
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
**PRIMARY SETTLING TANKS 3 & 4
 UPPER LEVEL PLAN II**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	22 E-104
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 E-104



**PRIMARY SETTLING TANKS
RISER DIAGRAM**

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM

AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

RECORD DRAWINGS

YASSER RIZK
No. 25
94-30
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2

**PRIMARY SETTLING TANKS
RISER DIAGRAM**

ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	22 E-601
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

22 E-601

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 1 - Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DP)\DP-2\2\SHEETS\22 E-601.DWG
LAST UPDATE: Monday, October 01, 2012 8:52:27 AM
PLOT DATE: Thursday, October 25, 2012 9:18:40 AM

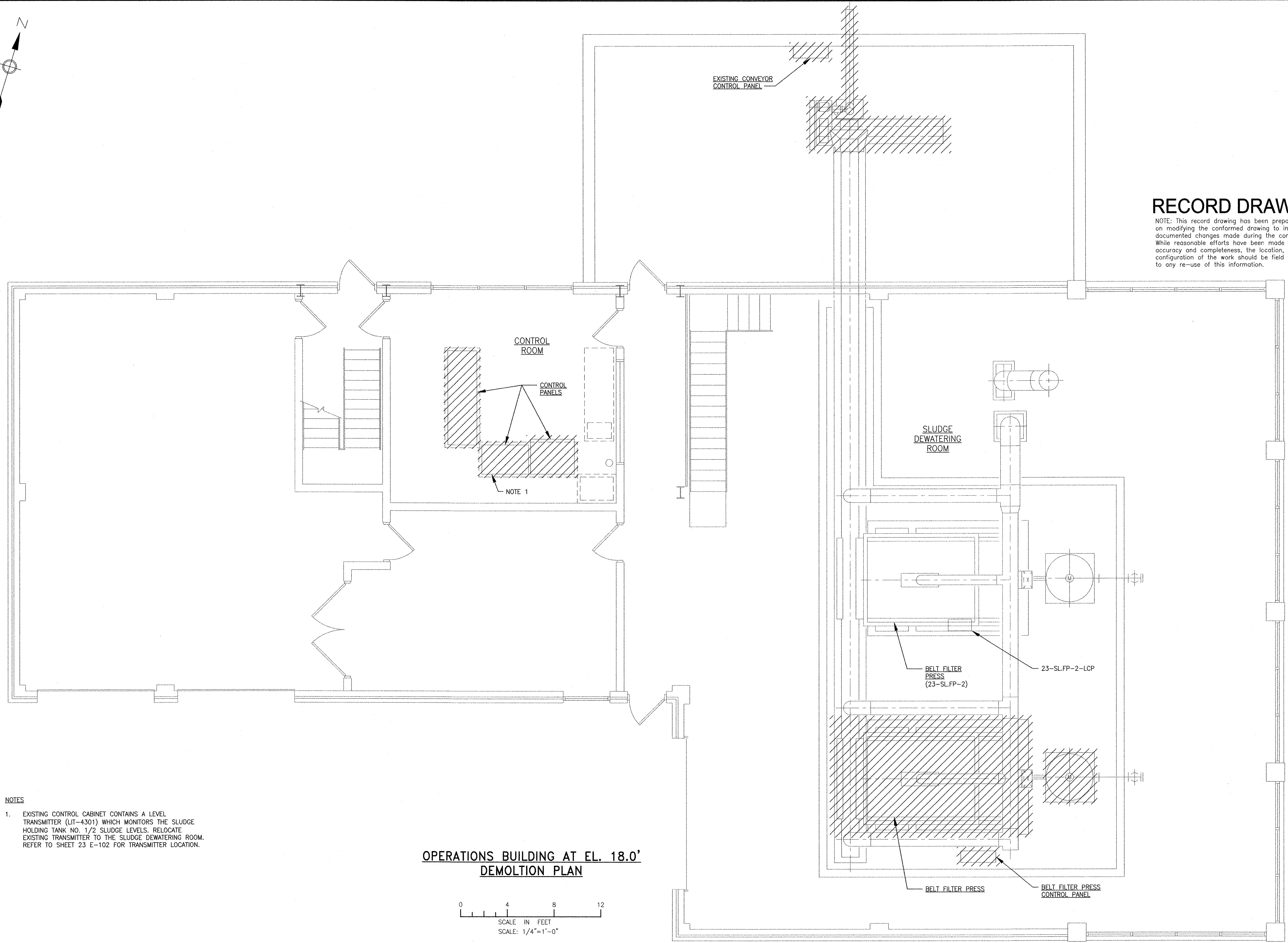
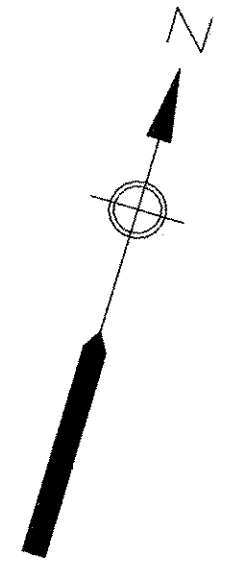
1

2

3

4

5



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING
				DESCRIPTION

AECOM
 AECOM USA, INC.
 100 EAST WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSE RIZK
 No. 25 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

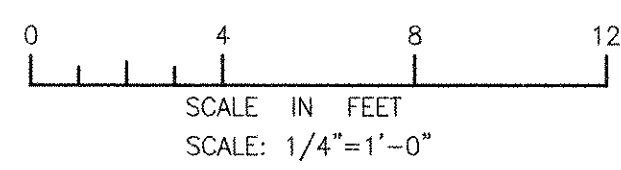
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
OPERATIONS BUILDING AT EL. 18.0'
DEMOLITION PLAN
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	23 ED-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ. CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 ED-102

- NOTES**
- EXISTING CONTROL CABINET CONTAINS A LEVEL TRANSMITTER (LIT-4301) WHICH MONITORS THE SLUDGE HOLDING TANK NO. 1/2 SLUDGE LEVELS. RELOCATE EXISTING TRANSMITTER TO THE SLUDGE DEWATERING ROOM. REFER TO SHEET 23 E-102 FOR TRANSMITTER LOCATION.

OPERATIONS BUILDING AT EL. 18.0' DEMOLITION PLAN



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEMO\DP-2\SHEETS\23 ED-102.DWG
 LAST UPDATE: Monday, October 01, 2012 8:34:43 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:03 AM
 ANSI D - 1-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO)\DP-2\SHEETS\23 E-101.DWG
 LAST UPDATE: Tuesday, October 23, 2012 8:05:27 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:43 AM
 ANSI D - 23-OCT-12

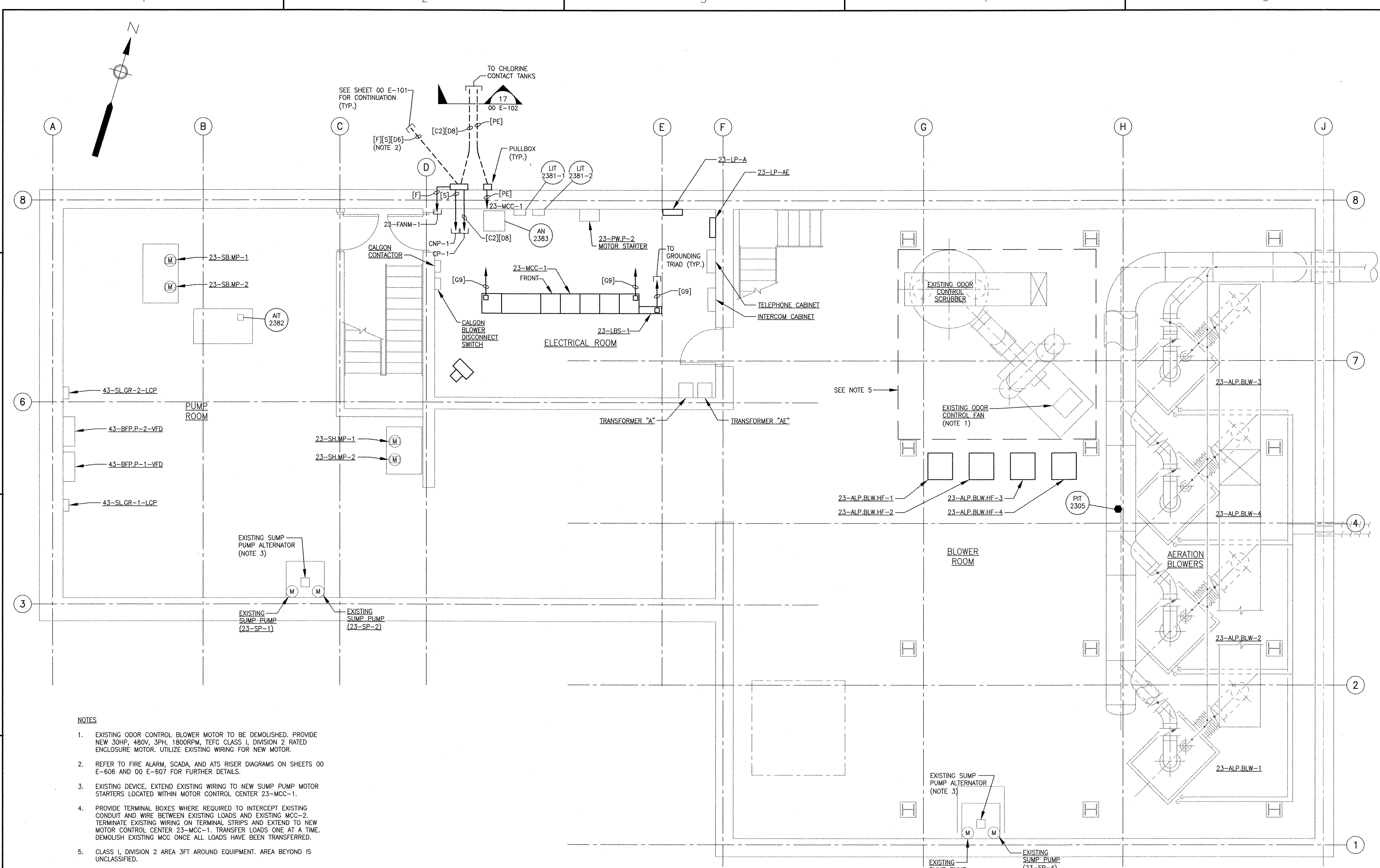
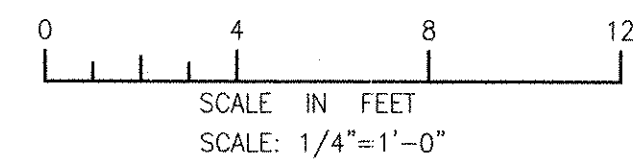
NOTES

- EXISTING ODOR CONTROL BLOWER MOTOR TO BE DEMOLISHED. PROVIDE NEW 30HP, 480V, 3PH, 1800RPM, TEFC CLASS I, DIVISION 2 RATED ENCLOSURE MOTOR. UTILIZE EXISTING WIRING FOR NEW MOTOR.
- REFER TO FIRE ALARM, SCADA, AND ATS RISER DIAGRAMS ON SHEETS 00 E-606 AND 00 E-607 FOR FURTHER DETAILS.
- EXISTING DEVICE. EXTEND EXISTING WIRING TO NEW SUMP PUMP MOTOR STARTERS LOCATED WITHIN MOTOR CONTROL CENTER 23-MCC-1.
- PROVIDE TERMINAL BOXES WHERE REQUIRED TO INTERCEPT EXISTING CONDUIT AND WIRE BETWEEN EXISTING LOADS AND EXISTING MCC-2. TERMINATE EXISTING WIRING ON TERMINAL STRIPS AND EXTEND TO NEW MOTOR CONTROL CENTER 23-MCC-1. TRANSFER LOADS ONE AT A TIME. DEMOLISH EXISTING MCC ONCE ALL LOADS HAVE BEEN TRANSFERRED.
- CLASS I, DIVISION 2 AREA 3FT AROUND EQUIPMENT. AREA BEYOND IS UNCLASSIFIED.

**OPERATIONS BUILDING AT EL. 3.0'
 MODIFICATIONS PLAN**

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



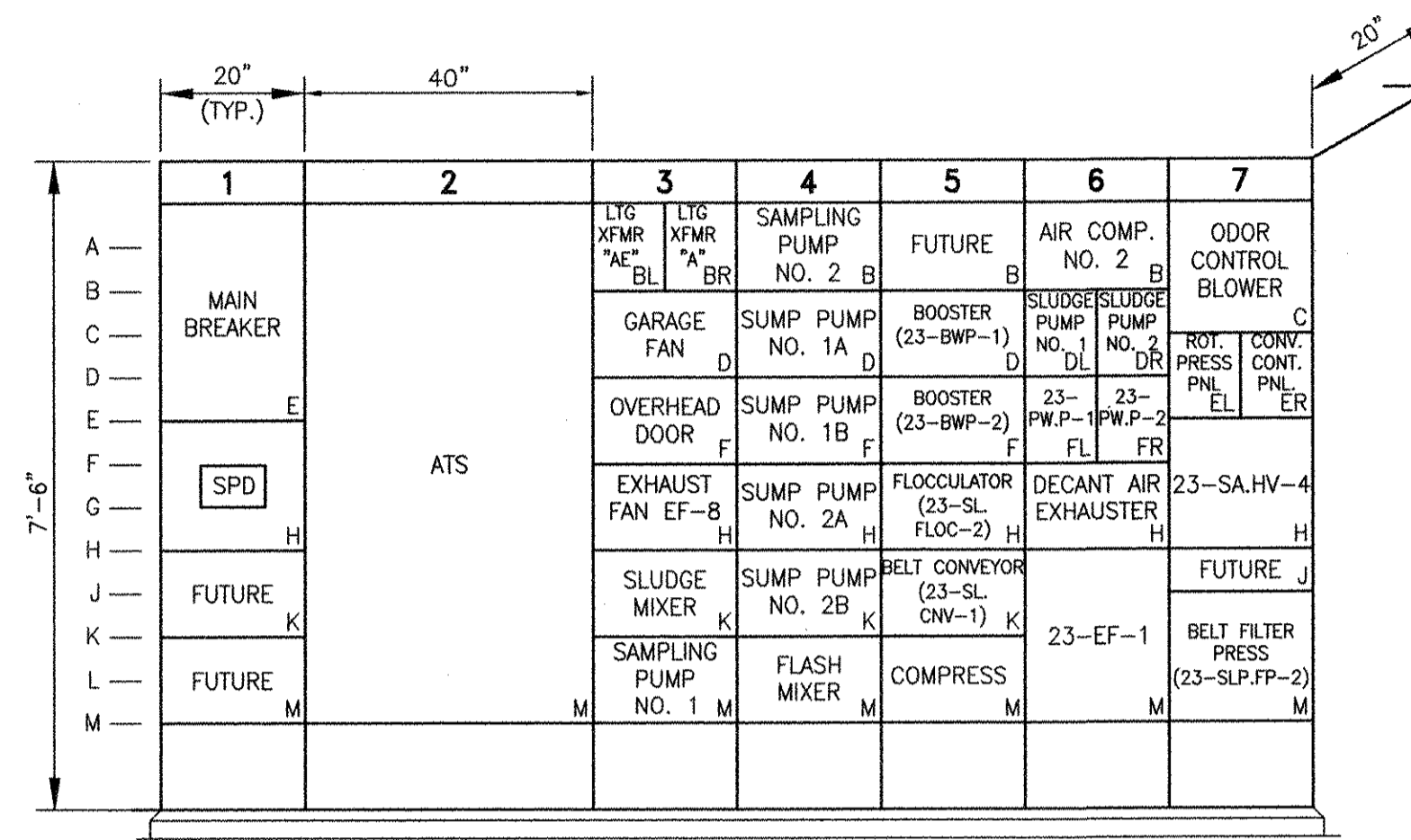
<p>AECOM AECOM USA, INC. 100 WASHINGTON STREET WAKEFIELD, MA 01880 PHONE (781) 246-5200</p>		<p>RECORD DRAWINGS</p>													
<p>YASSER ALKHALIL No. 25333 94-30 REGISTERED PROFESSIONAL ENGINEER ELECTRICAL</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>MARK</th> <th>DATE</th> <th>MS</th> <th>YR</th> <th>REVISOR</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>10/19/12</td> <td></td> <td></td> <td></td> <td>REVISED FOR RECORD DRAWING</td> </tr> </tbody> </table>		MARK	DATE	MS	YR	REVISOR	DESCRIPTION	1	10/19/12				REVISED FOR RECORD DRAWING
MARK	DATE	MS	YR	REVISOR	DESCRIPTION										
1	10/19/12				REVISED FOR RECORD DRAWING										
<p>CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-2</p>															
<p>OPERATIONS BUILDING AT EL. 3.0' MODIFICATIONS PLAN ELECTRICAL</p>															
<p>PROJECT NO: 60148648 CAD DWG FILE: 23 E-101</p>		<p>DESIGNED BY: D. ASPESI DRAWN BY: M. STEWART DEPT CHECK: Y. RIZK PROJ CHECK: S. THIBAUT</p>													
<p>DATE: OCTOBER 2012 SCALE: AS NOTED</p>		<p>23 E-101</p>													

23-MCC-1 - LOAD SCHEDULE						
480 VOLTS, 600A, 3 PHASE, 3 WIRE, 65KAIC						
MAIN: 600 AMPS CB			LOCATION: OPERATIONS BUILDING			
ATS: 600 AMPS, 3 PH, 3 WIRE			ENCLOSURE: NEMA 1			SPD
CKT WIRING	EQUIPMENT DESCRIPTION (I & C LOOP)	EQPT RATING	MCC DEVICES			SEE NOTES
			CONTACTOR SIZE	STARTER TYPE	PILOT CONTROL DEVICE	
PF	LIGHTING TRANSFORMER AE (TO 23-LP-AE)	30 KVA	-	-	-	60A 1
PH	LIGHTING TRANSFORMER A (TO 23-LP-A)	45 KVA	-	-	-	90A 1
PB	GARAGE FAN (EST.)	5 HP	1	FVNR	HOA	- 1
PB	OVERHEAD DOOR (EST.)	1/2 HP	1	FVNR	-	- 1
PB	EXHAUST FAN 8	1 HP	1	FVNR	HOA	- 1
PB	SLUDGE MIXER (EST.)	1 HP	1	FVNR	HOA	- 1
PB	SPARE		1	FVNR	HOA	-
PB	SAMPLING PUMP NO. 2	1 HP	1	FVNR	HOA	- 1
PB	SUMP PUMP 1A (23-SP-1)	3 HP	1	FVNR	HOA	- 1
PB	SUMP PUMP 1B (23-SP-2)	3 HP	1	FVNR	HOA	- 1
PB	SUMP PUMP 2A (23-SP-3)	3 HP	1	FVNR	HOA	- 1
PB	SUMP PUMP 2B (23-SP-4)	3 HP	1	FVNR	HOA	- 1
PD	FLASH MIXER (46-CCT.MIX-1)	20 HP	-	-	-	40A 2
PB	BELT FILTER PRESS (23-SL.FP-2)	5 HP	1	FVNR	HOA	- 1
PB	FLOCCULATOR (23-SL.FLOC-2)	1 HP	1	FVNR	HOA	- 1
PB	BELT CONVEYOR (23-SL.CNV-1)	5 HP	1	FVNR	HOA	- 1
PB	AIR COMPRESSOR NO. 2 (EST.)	10 HP	1	FVNR	HOA	- 1
PE	BOOSTER PUMP (23-BWP-1)	25 HP	2	FVNR	HOA	- 1
PE	BOOSTER PUMP (23-BWP-2)	25 HP	2	FVNR	HOA	- 1
PE	SLUDGE PUMP (43-BFP.P-1)	25 HP	-	-	-	55A 1
PE	SLUDGE PUMP (43-BFP.P-2)	25 HP	-	-	-	55A 1
PG	PLANT WATER (23-PW.P-2) (SOFT START)	40 HP	-	-	-	70A 1
PG	PLANT WATER (23-PW.P-1)	40 HP	-	-	-	70A 1
PB	DECANT AIR EXHAUSTER	5 HP	1	FVNR	HOA	- 1
PB	COMPRESSOR (EST.)	5 HP	1	FVNR	HOA	- 1
PB	23-SA.HV-4	5 HP	1	FVNR	HOA	- 2
PE	ROTARY PRESS CONTROL PANEL (CP-4)	22 HP	-	-	-	50A 2
PB	CONVEYOR CP (23-SL.CNV-2-LCP)	2 HP	-	-	-	20A 2
PB	23-EF-1	5 HP	1	FVNR	HOA	- 2
PG	ODOR CONTROL BLOWER (23-OC.F-1)	40 HP	3	FVNR	HOA	- 1
PB	23-EUH-1 UNIT HEATER	7.5 KW	-	-	-	- 2
PB	PLANT WATER STRAINER	1/4 HP	1	FVNR	HOA	- 2
PB	EUH-9		-	-	-	- 1

NOTES
 1. EXISTING EQUIPMENT
 2. NEW EQUIPMENT

23-SWBD-1 - LOAD SCHEDULE				
480 VOLTS, 1200A, 3 PHASE, 3 WIRE, 65KAIC				
MAIN: 1200 AMPS CB			LOCATION: OPERATIONS BUILDING	
ATS: 1200 AMPS, 3 PH, 3 WIRE			ENCLOSURE: NEMA 1	
CKT WIRING	EQUIPMENT DESCRIPTION (I & C LOOP)	EQPT RATING	CIRCUIT BREAKER	SEE NOTES
PU	AERATION BLOWER (23-ALP.BLW-2)	300 HP	400A	1
PU	AERATION BLOWER (23-ALP.BLW-3)	300 HP	400A	1
PU	AERATION BLOWER (23-ALP.BLW-4)	300 HP	400A	1

NOTES
 1. NEW EQUIPMENT



23-MCC-1 ELEVATION
 SCALE: 1/2"=1'-0"

REVISIONS	DESCRIPTION	DATE	BY	CHECKED	MS	YR	REVISED FOR RECORD DRAWING
1		10/19/12					

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON ST
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSER RIZK
 No. 25
 025 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
 OPERATIONS BUILDING - SINGLE LINE
 DIAGRAMS AND ELEVATIONS
 ELECTRICAL

PROJECT NO: 60148648
 CAD DWG FILE: 23 E-601
 DESIGNED BY: D. ASPESI
 DRAWN BY: M. STEWART
 DEPT CHECK: Y. RIZK
 PROJ CHECK: S. THIBAUT
 DATE: OCTOBER 2012
 SCALE: AS NOTED
23 E-601

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BDO)\DP-2\SHETS\23 E-601.DWG
 LAST UPDATE: Wednesday, October 03, 2012 8:06:23 AM
 PLOT DATE: Thursday, October 25, 2012 9:18:55 AM
 ANSI D - 3- Oct-12

SERVICE: 208/120V, 3PH, 4W, 60HZ
 MAIN CIRCUIT BREAKER: 150A FRAME, 150A TRIP
 FED FROM: TRANSFORMER A (23-MCC-1)

PANELBOARD "23-LP-A"

SHORT CIRCUIT BRACING: 10,000 AMPS
 CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA A	KVA B	KVA C	CIR. NO.	GROUND BUS			CIR. NO.	KVA A	KVA B	KVA C	HP	CKT WIRING	SEE NOTES	LOCATION
								NEUTRAL	A	B								
YARD LIGHTS	-	-	-	-	-	-	1	-	-	-	2	3.12	-	-	-	[PE]	2	23-GEN-1
YARD LIGHTS	-	-	-	-	-	-	3	-	-	-	4	-	3.12	-	-	-	-	-
YARD LIGHTS	-	-	-	-	-	-	5	-	-	-	6	-	-	.24	-	[PA]	2	RECEPTACLE @ SA-HV-4
23-DACCU	2	[PC]	-	2.6	-	-	7	-	-	-	8	-	-	-	-	-	-	OUTSIDE SAMPLER
23-DACCU	2	[PC]	-	-	2.6	-	9	-	-	-	10	-	-	-	-	-	-	NEW POLY BLEND UNIT
23-DACCU	2	[PC]	-	-	-	2.6	11	-	-	-	12	-	-	-	-	-	-	EXISTING POLY BLEND UNIT
23-DACCU	2	[PC]	-	2.6	-	-	13	-	-	-	14	-	-	-	-	-	-	LIGHTS - GARAGE
RECEPTACLE - LOWER LEVEL	-	-	-	-	-	-	15	-	-	-	16	-	-	-	-	-	-	YARD RECEPTACLES, TIME CLOCK
CIRCULATOR PUMP PANEL	-	-	-	-	-	-	17	-	-	-	18	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	19	-	-	-	20	-	-	-	-	-	-	RECEPTACLE - UPPER LEVEL
LIGHTS - BOILER ROOM	-	-	-	-	-	-	21	-	-	-	22	-	-	-	-	-	-	EF-11, FA-3
EF-10	-	-	-	-	-	-	23	-	-	-	24	-	-	-	-	-	-	RECEPTACLE, WATER COOLER - UPPER LEVEL
BOILER	-	-	-	-	-	-	25	-	-	-	26	-	-	-	-	-	-	RECEPTACLE - GROUND LEVEL
BOILER	-	-	-	-	-	-	27	-	-	-	28	-	.12	-	-	[PA]	2	23-TC-1, RECEPTACLE - LOWER LEVEL
RANGE	-	-	-	-	-	-	29	-	-	-	30	-	-	-	-	-	-	RECEPTACLE - LOWER LEVEL
BOILER CONTROLS	-	-	-	-	-	-	31	-	-	-	32	-	-	-	-	-	-	LIGHTS - PRESS ROOM
SEAL WATER PANEL	-	-	-	-	-	-	33	-	-	-	34	-	-	-	-	-	-	LIGHTS - PRESS ROOM
ELECTRICAL ROOM LIGHTS	-	-	-	-	-	-	35	-	-	-	36	-	-	-	-	-	-	LIGHTS/RECEPTACLES PUMP ROOM
LUNCH ROOM HEAT	-	-	-	-	-	-	37	-	-	-	38	-	-	-	-	-	-	RECEPTACLE - LOWER LEVEL
LUNCH ROOM HEAT	-	-	-	-	-	-	39	-	-	-	40	-	-	-	-	-	-	LIGHTS - PUMP ROOM
DECHLOR. PUMPS	-	-	-	-	-	-	41	-	-	-	42	-	-	-	-	-	-	DECHLOR. PUMP

KVA PH A: KVA PH B: KVA PH C: ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: SEE NOTE 4 PANEL LOCATION: OPERATIONS BUILDING ELECTRICAL ROOM

SERVICE: 208/120V, 3PH, 4W, 60HZ
 MAIN CIRCUIT BREAKER: 100A FRAME, 100A TRIP
 FED FROM: TRANSFORMER AE (23-MCC-1)

PANELBOARD "23-LP-AE"

SHORT CIRCUIT BRACING: 10,000 AMPS
 CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA A	KVA B	KVA C	CIR. NO.	GROUND BUS			CIR. NO.	KVA A	KVA B	KVA C	HP	CKT WIRING	SEE NOTES	LOCATION
								NEUTRAL	A	B								
23-FANM-1	2	[PA]	-	0.60	-	-	1	-	-	-	2	0.60	-	-	-	[PA]	2	CP-1
LIGHTS/RECEPTACLE - TRUCK BAY	-	-	-	-	-	-	3	-	-	-	4	-	1.20	-	-	[PA]	2	CP-1
BLOWER CP	2	[PA]	-	-	-	0.60	5	-	-	-	6	-	-	0.60	-	[PA]	2	CP-2
CONTROL ROOM LIGHTS	2	[PA]	-	0.45	-	-	7	-	-	-	8	-	-	-	-	-	-	BREAKROOM LIGHTS
SPARE	-	-	-	-	-	-	9	-	-	-	10	-	-	-	-	-	-	CATWALK LIGHTS
HEAT - LOCKER ROOM	-	-	-	-	-	-	11	-	-	-	12	-	-	-	-	-	-	UH-8, UH-9
HEAT - LOCKER ROOM	-	-	-	-	-	-	13	-	-	-	14	-	-	-	-	-	-	RECEPTACLE - PRESS ROOM
UNIT HEATERS - 10, 11	-	-	-	-	-	-	15	-	-	-	16	-	-	-	-	-	-	GARAGE LIGHTS
DECHLOR. PUMP	-	-	-	-	-	-	17	-	-	-	18	-	-	-	-	-	-	SPARE
EFFLUENT FLOW METER	-	-	-	-	-	-	19	-	-	-	20	-	-	-	-	-	-	WATER HEATER
FEED TO CONTROL ROOM TROUGH	-	-	-	-	-	-	21	-	-	-	22	-	-	-	-	-	-	WATER HEATER
UH-14, ROOFTOP LIGHTS	-	-	-	-	-	-	23	-	-	-	24	-	-	-	-	-	-	N. FLUME FLOW METER
WALL PACKS - BLOWER ROOM	-	-	-	-	-	-	25	-	-	-	26	-	-	-	-	-	-	S. FLUME FLOW METER
SPARE	-	-	-	-	-	-	27	-	-	-	28	-	-	-	-	-	-	CHEM. PUMP PANEL
SPARE	-	-	-	-	-	-	29	-	-	-	30	-	-	-	-	-	-	FINAL EFFLUENT SAMPLER
SPARE	-	-	-	-	-	-	31	-	-	-	32	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	33	-	-	-	34	-	-	-	-	-	-	UH-12, UH-13
ELECTRIC ROOM LIGHTS	-	-	-	-	-	-	35	-	-	-	36	-	-	-	-	-	-	PRESS ROOM BENCH RECEPTACLE
RECEPTACLE - CONSOLE CONTROL ROOM	2	[PA]	0.72	-	-	-	37	-	-	-	38	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	39	-	-	-	40	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	41	-	-	-	42	-	-	-	-	-	-	SPARE

KVA PH A: KVA PH B: KVA PH C: ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: SEE NOTE 4 PANEL LOCATION: OPERATIONS BUILDING ELECTRICAL ROOM

ROOM OR SPACE NAME	LIGHTING SYSTEM							SWITCHES	RECEPTACLES	
	LUMINAIRE TYPE									
	BA1	BA2	BM1	DD1	DD2	DL1	DL2	EM1		
CONTROL ROOM 2301 *									1	4

* PROVIDE TWO 120VAC LIGHTING CIRCUITS FOR THE CONTROL ROOM. LIGHTING FIXTURES SHALL BE CIRCUITED IN AN ALTERNATING FASHION. REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT DETAILS.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NOTES:

- EXISTING EQUIPMENT
- NEW EQUIPMENT
- PROVIDE CIRCUIT BREAKERS WITHIN PANELBOARDS 23-LP-A AND 23-LP-AE TO FEED EXISTING EQUIPMENT FED FROM THE EXISTING PANELBOARDS WITHIN MCC-2. REFER TO NOTE 1 ON SHEET 23 ED-101 FOR FURTHER DETAILS.
- TOTAL CONNECTED LOAD TO BE DETERMINED DURING CONSTRUCTION ONCE EXISTING LOADS HAVE BEEN TRANSFERRED TO NEW PANELBOARDS.
- EXISTING LOADS TO BE VERIFIED AND SCHEDULED DURING CONSTRUCTION.

NO.	DATE	BY	DESCRIPTION
1	10/19/12	MS	REVISION FOR RECORD DRAWING

AECOM

RECORD DRAWINGS

AECOM USA, INC.
 ONE WASHINGTON AVENUE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

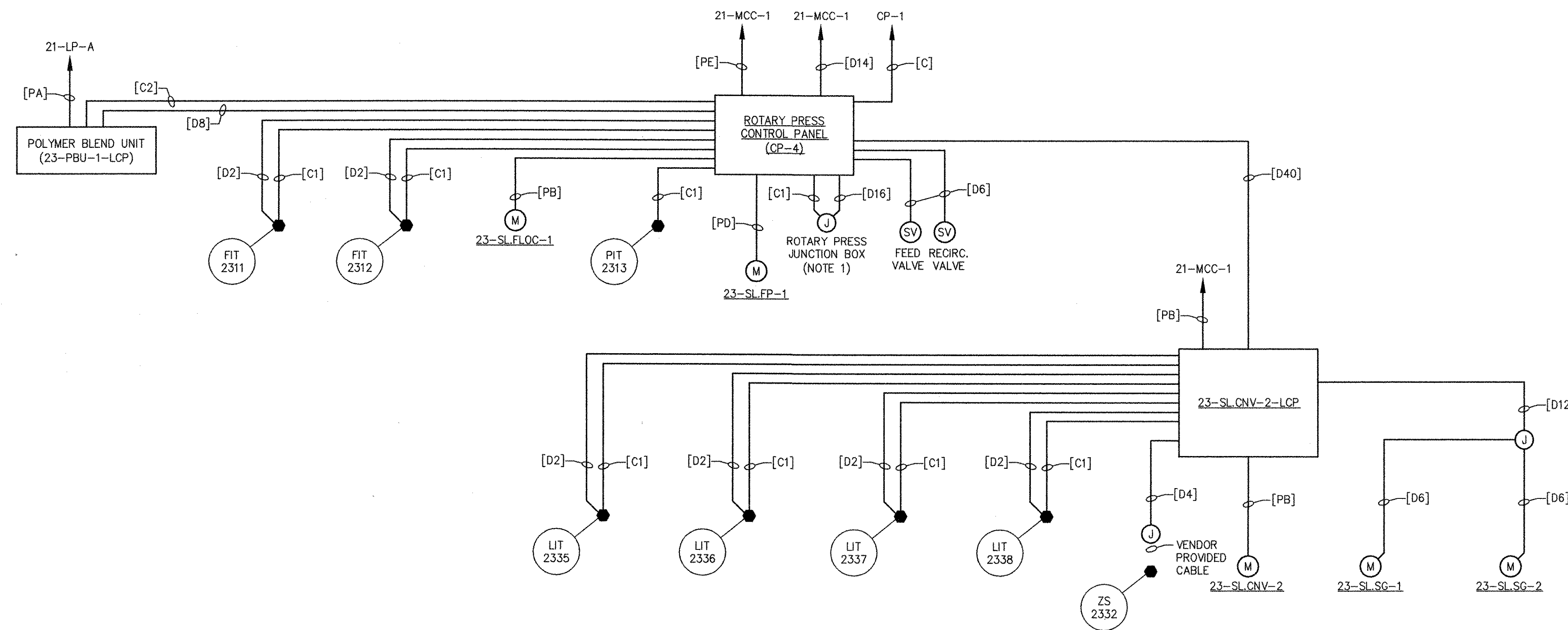
YASSEER RIZK
 No. 23 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2
 OPERATIONS BUILDING
 SCHEDULES
 ELECTRICAL

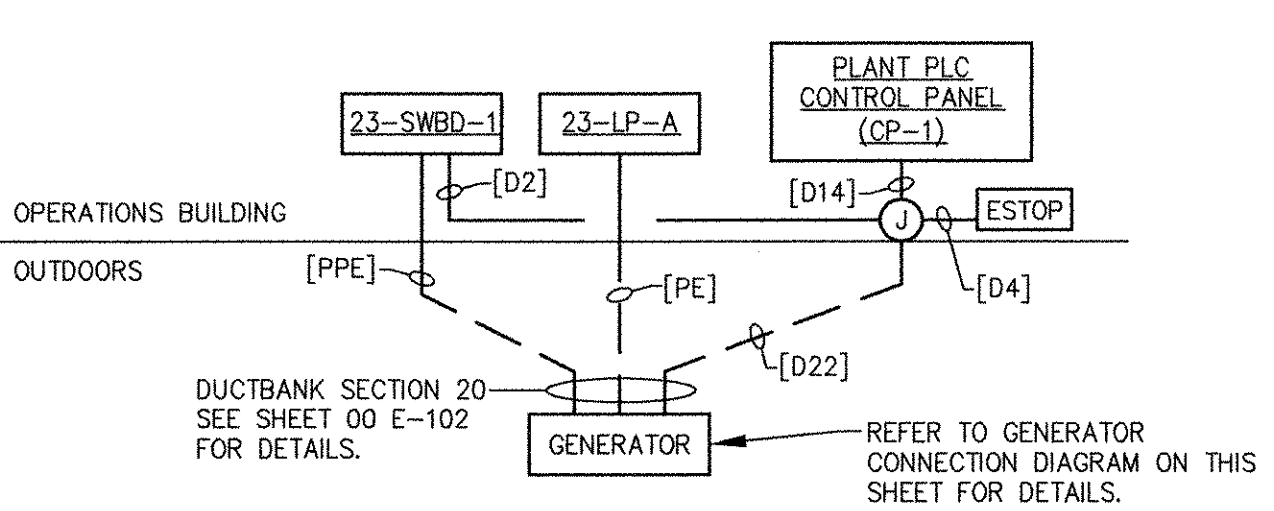
PROJECT NO:	60148648
CAD DWG FILE:	23 E-602
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 E-602

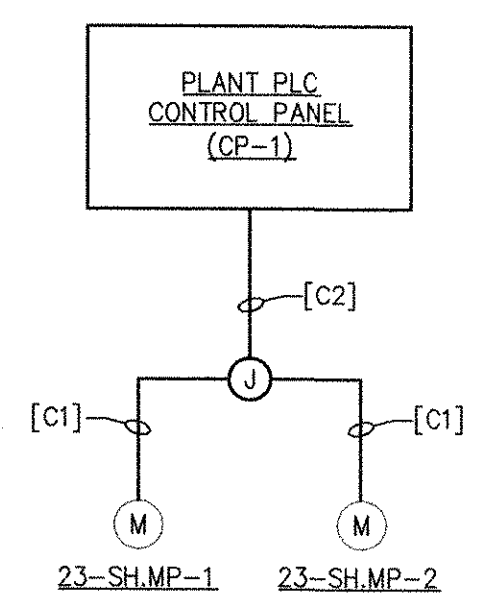
ANSI D - 1-10-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BO) (DP-2)\SHEETS\EV23 E-603.DWG
 LAST UPDATE: Monday, October 01, 2012 8:30:25 AM
 PLOT DATE: Thursday, October 25, 2012 9:19:01 AM



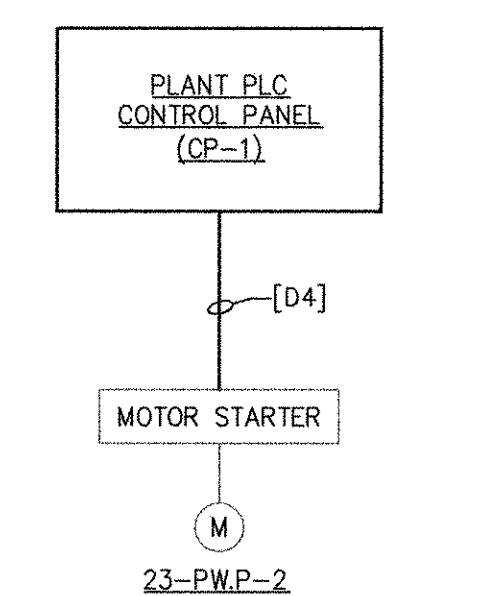
ROTARY PRESS SYSTEM RISER DIAGRAM



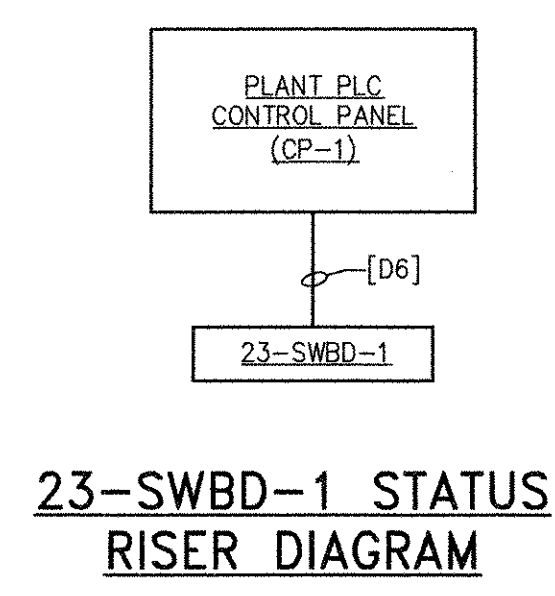
GENERATOR 23-GEN-1 RISER DIAGRAM



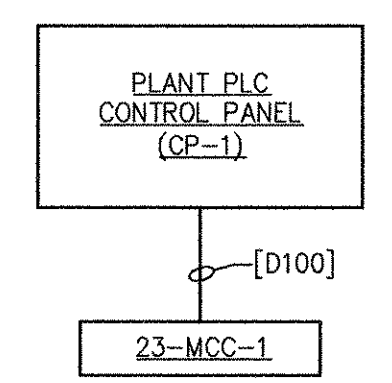
SODIUM HYPOCHLORITE METERING PUMPS RISER DIAGRAM
 (TYPICAL FOR 23-SB.MP-1, 23-SB.MP-2)



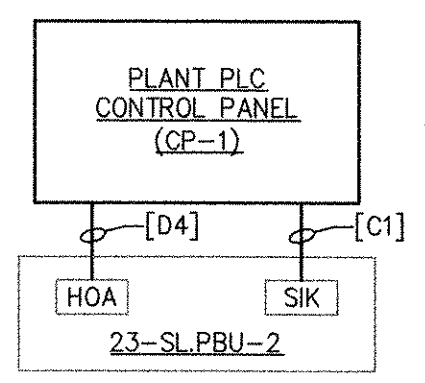
PLANT WATER PUMP 23-PW.P-2 RISER DIAGRAM



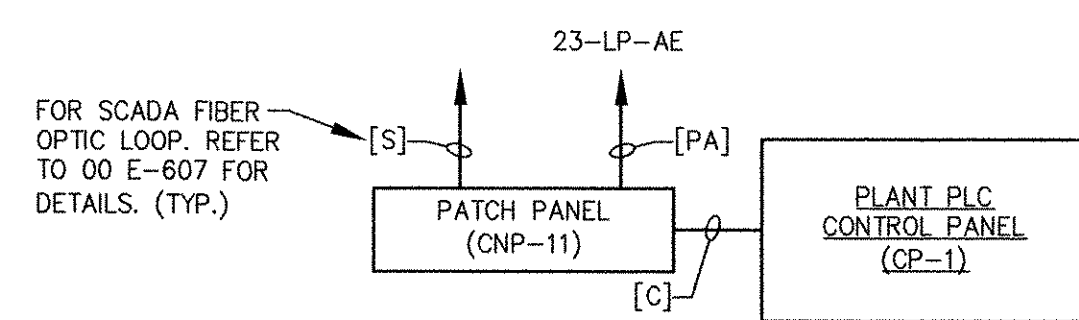
23-SWBD-1 STATUS RISER DIAGRAM



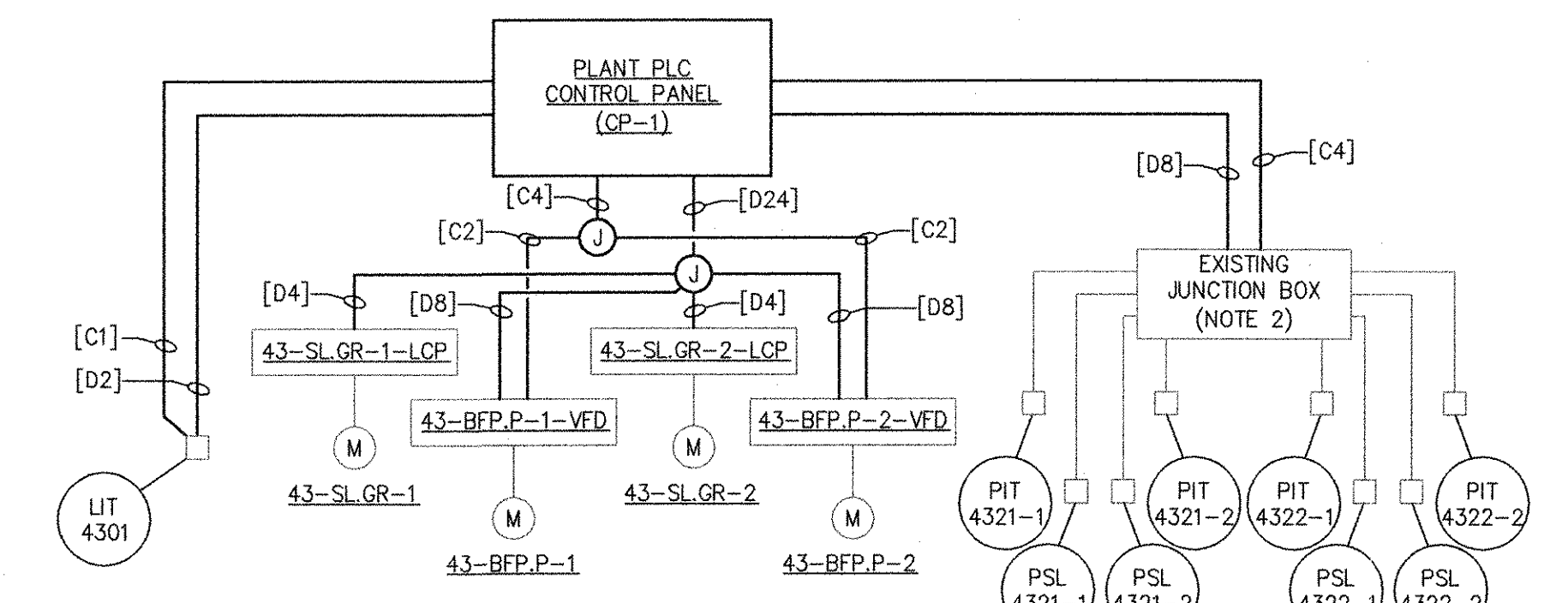
23-MCC-1 CONTROL RISER DIAGRAM



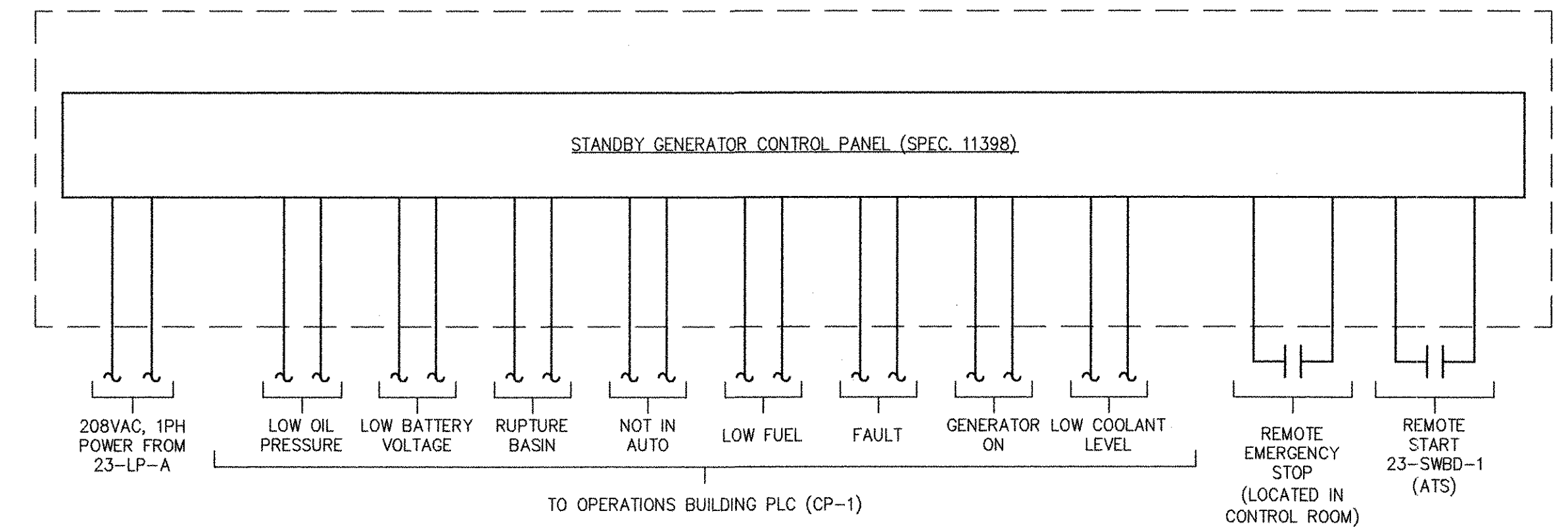
EXISTING POLYMER BLEND UNIT 23-SL.PBU-2 RISER DIAGRAM



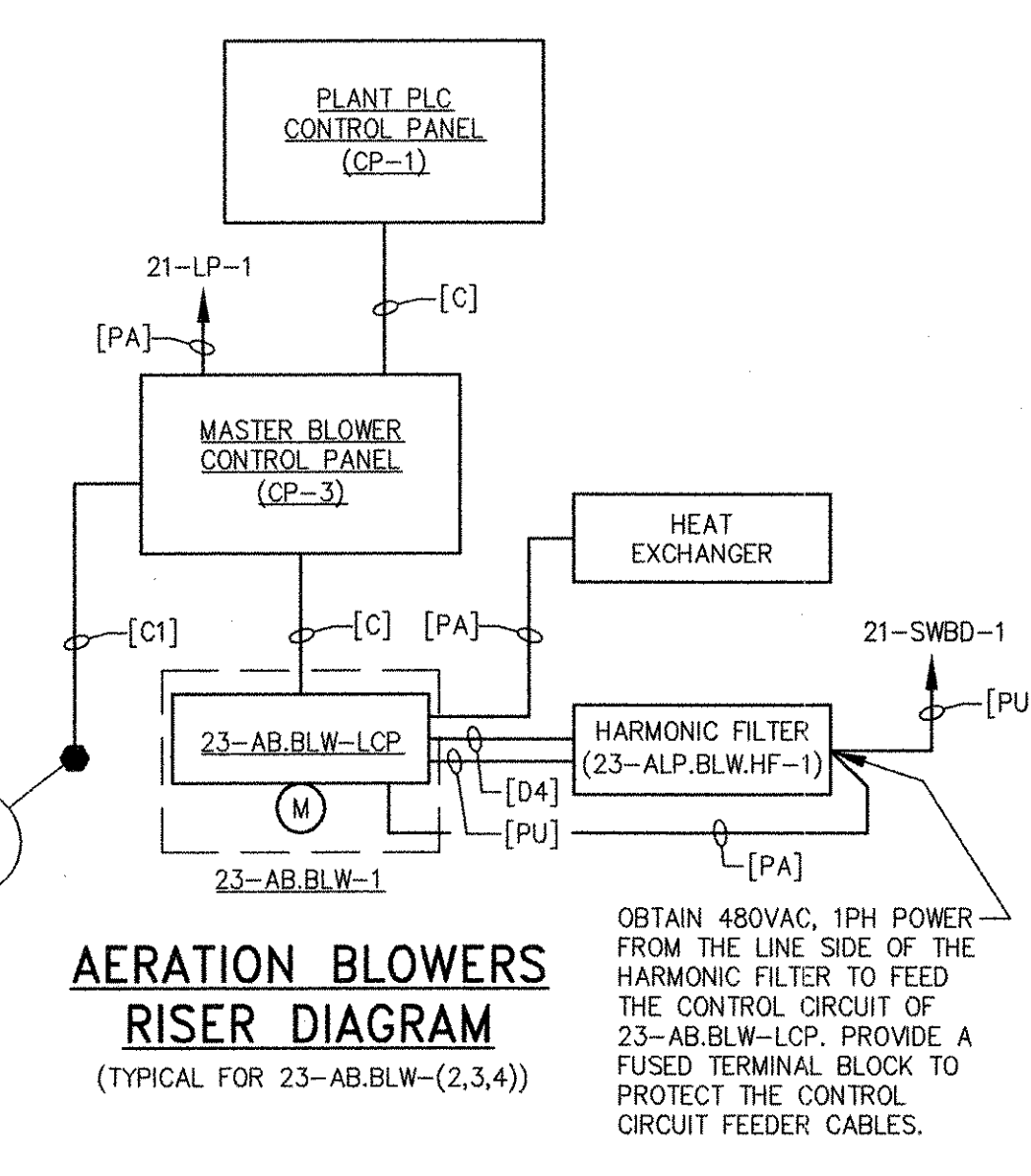
PATCH PANEL CNP-1 RISER DIAGRAM



SLUDGE PUMPS RISER DIAGRAM



GENERATOR 23-GEN-1 CONNECTION DIAGRAM
 N.T.S.



AERATION BLOWERS RISER DIAGRAM
 (TYPICAL FOR 23-AB.BLW-(2,3,4))

- NOTES**
- JUNCTION BOX PROVIDED BY VENDOR. LOCATED AT ROTARY PRESS.
 - EXISTING JUNCTION BOX MOUNTED TO THE ELECTRICAL ROOM CEILING. EXTEND WIRING TO CP-1 AS INDICATED.

OBTAIN 480VAC, 1PH POWER FROM THE LINE SIDE OF THE HARMONIC FILTER TO FEED THE CONTROL CIRCUIT OF 23-AB.BLW-LCP. PROVIDE A FUSED TERMINAL BLOCK TO PROTECT THE CONTROL CIRCUIT FEEDER CABLES.

REVISIONS	DATE	BY	DESCRIPTION
3	10/19/12	MS	REVISED FOR RECORD DRAWING
2	7/11/11	DA	REVISED AERATION BLOWER CONTROL CIRCUIT
1	3/21/11	DA	ROTARY PRESS REVISIONS PER SUBMITTAL

AECOM

RECORD DRAWINGS

YASSER RIZK
 No. 25
 08/25/2012
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

94-30

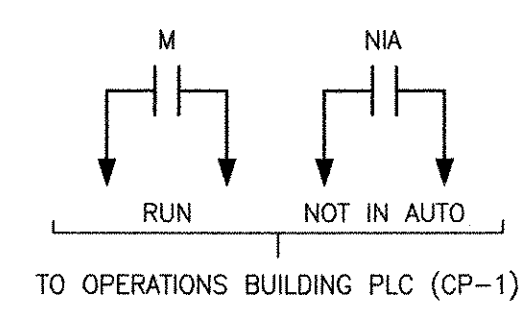
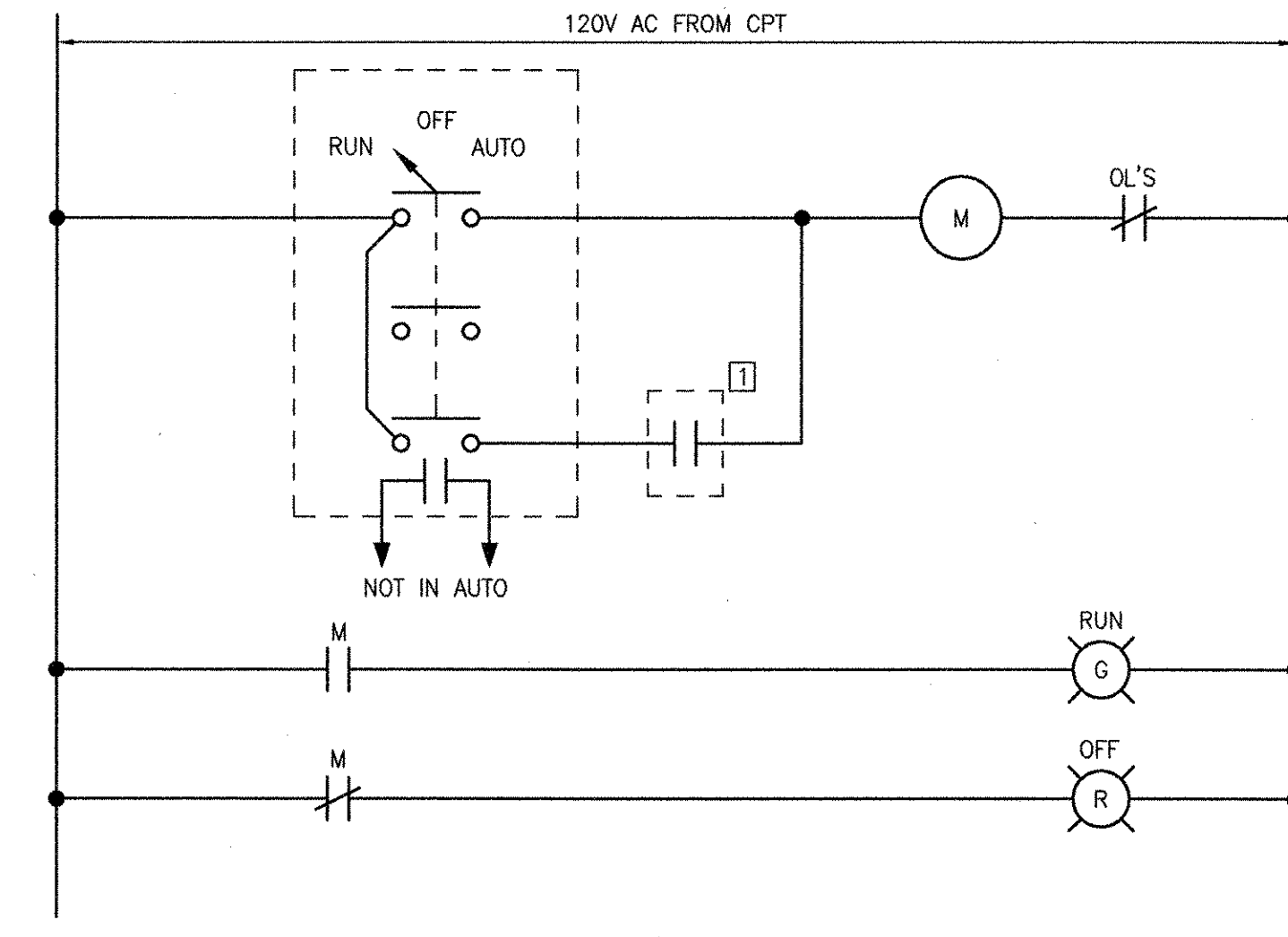
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-2

OPERATIONS BUILDING RISER DIAGRAM

ELECTRICAL

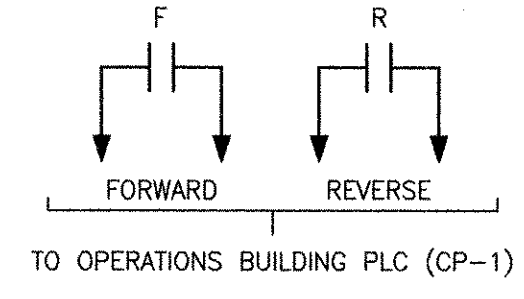
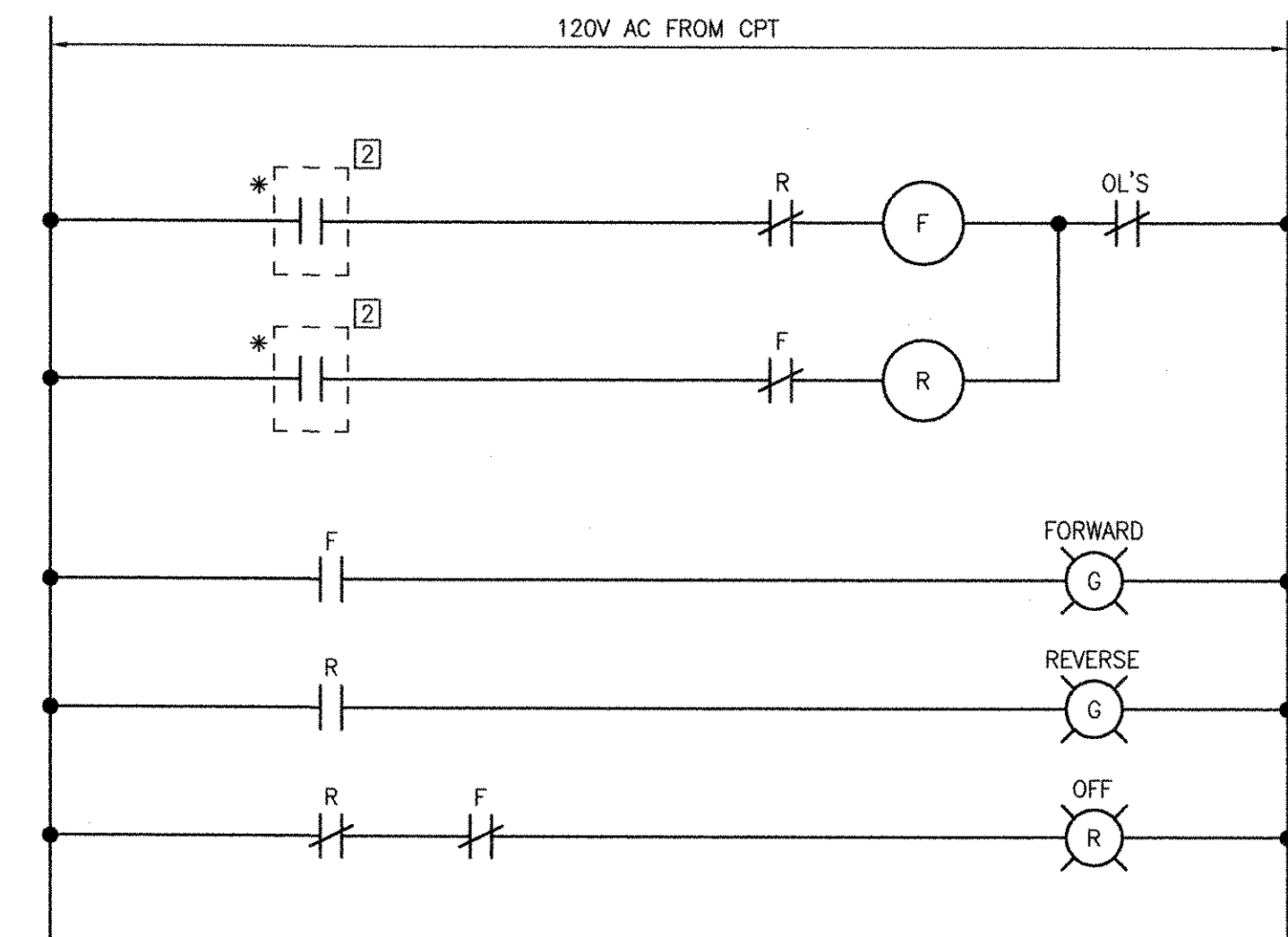
PROJECT NO:	60148648
CAD DWG FILE:	23 E-603
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 E-603



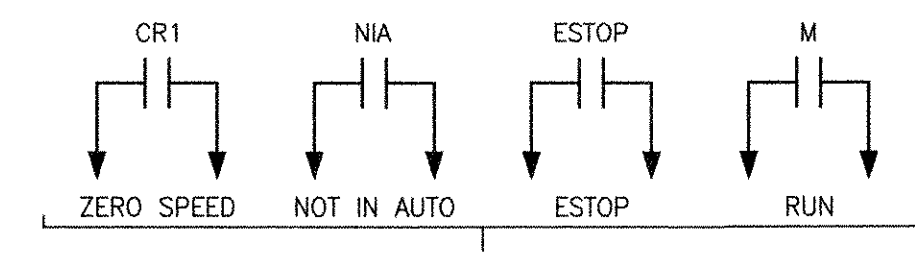
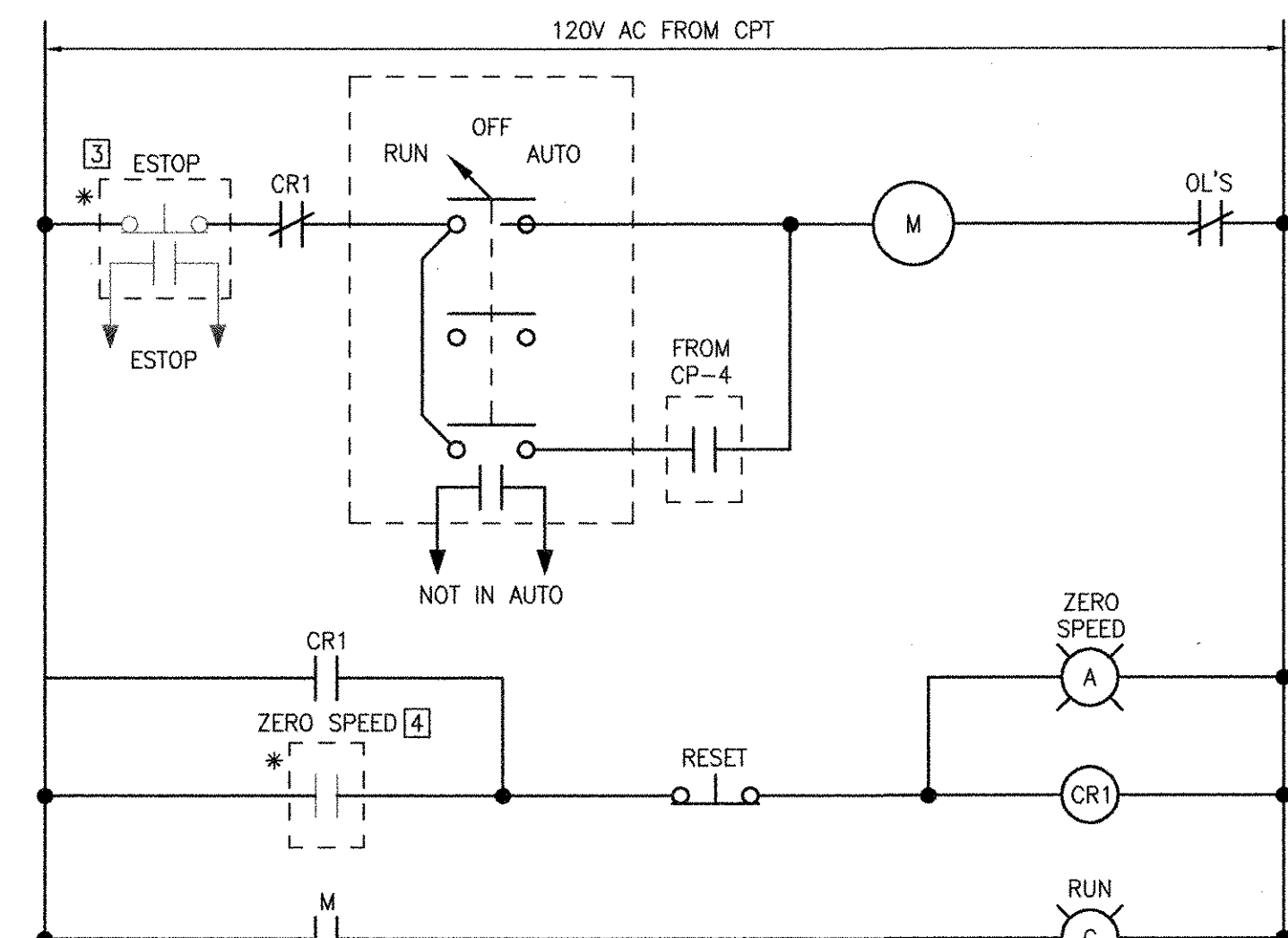
TYPICAL EQUIPMENT STARTER WIRING DIAGRAM

(TYPICAL FOR 23-SL.FLOC-2, 23-BW.P-1, 23-BW.P-2, SLUDGE MIXER, SAMPLING PUMP NO. 1, SAMPLING PUMP NO. 2, COMPRESSOR, GARAGE FAN, EXHAUST FAN 8, DECANT AIR EXHAUSTER)
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



BELT FILTER PRESS 23-SL.FP-2 WIRING DIAGRAM

(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



CONVEYOR 23-SL.CNV-1 WIRING DIAGRAM

(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)

- LEGEND:**
- [1] FROM OPERATIONS BUILDING PLC (CP-1)
 - [2] FORWARD/REVERSE RUN CONTACTS FROM 23-SL.FP-2-LCP
 - [3] FROM HS-2331-1
 - [4] FROM ZS-2331
 - [5] FROM EXISTING ALTERNATOR. EXTEND EXISTING WIRING TO NEW MOTOR STARTER.
 - [6] FROM ODOR CONTROL FAN 23-OC.F-1. INTERLOCK 23-SA.HV-4 WITH ODOR CONTROL FAN.
 - [7] FROM DUCT SMOKE DETECTOR WITHIN 23-SA.HV-4 DUCT. REFER TO HVAC DRAWINGS FOR DEVICE LOCATION.
 - [8] FROM FREEZE/STAT LOCATED AT VENTILATION UNIT 23-SA.HV-4
 - [9] FROM MOTOR OPERATED DAMPER 23-MD-3 END LIMIT SWITCH. WHEN THE DAMPER IS CONFIRMED OPEN, THE FAN SHALL START.
 - [10] FROM MOTOR OPERATED DAMPERS 23-MD-1 AND 23-MD-2. WHEN BOTH DAMPERS ARE CONFIRMED OPEN, THE FAN SHALL START.
- * ROUTE A [D2] CONDUIT BETWEEN THE MOTOR STARTER AND EACH DEVICE INDICATED. REFER TO THE ELECTRICAL/HVAC DRAWINGS FOR LOCATIONS.

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

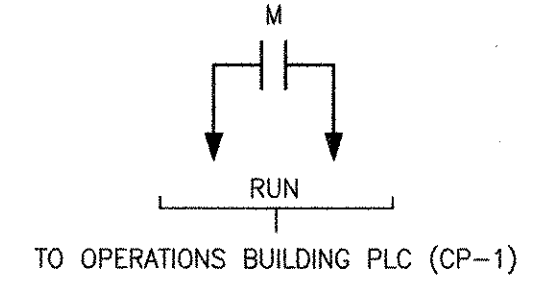
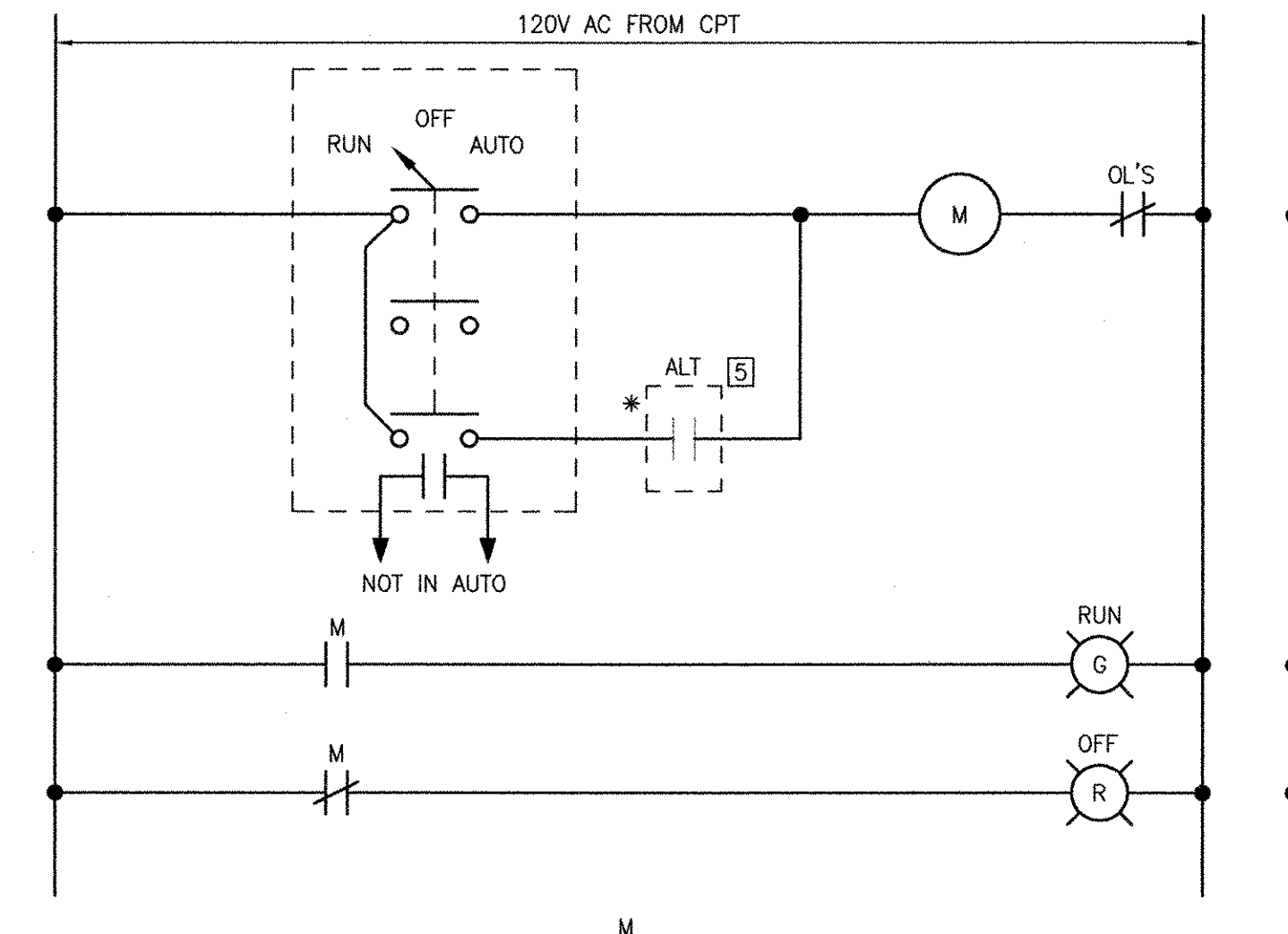
MARK	DATE	MS	YR	REVISIONS
1	10/19/12			REVISED FOR RECORD DRAWING

AECOM
RECORD DRAWINGS

YASSIR RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 23-015
94-30

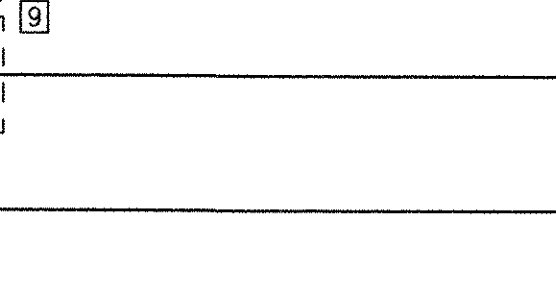
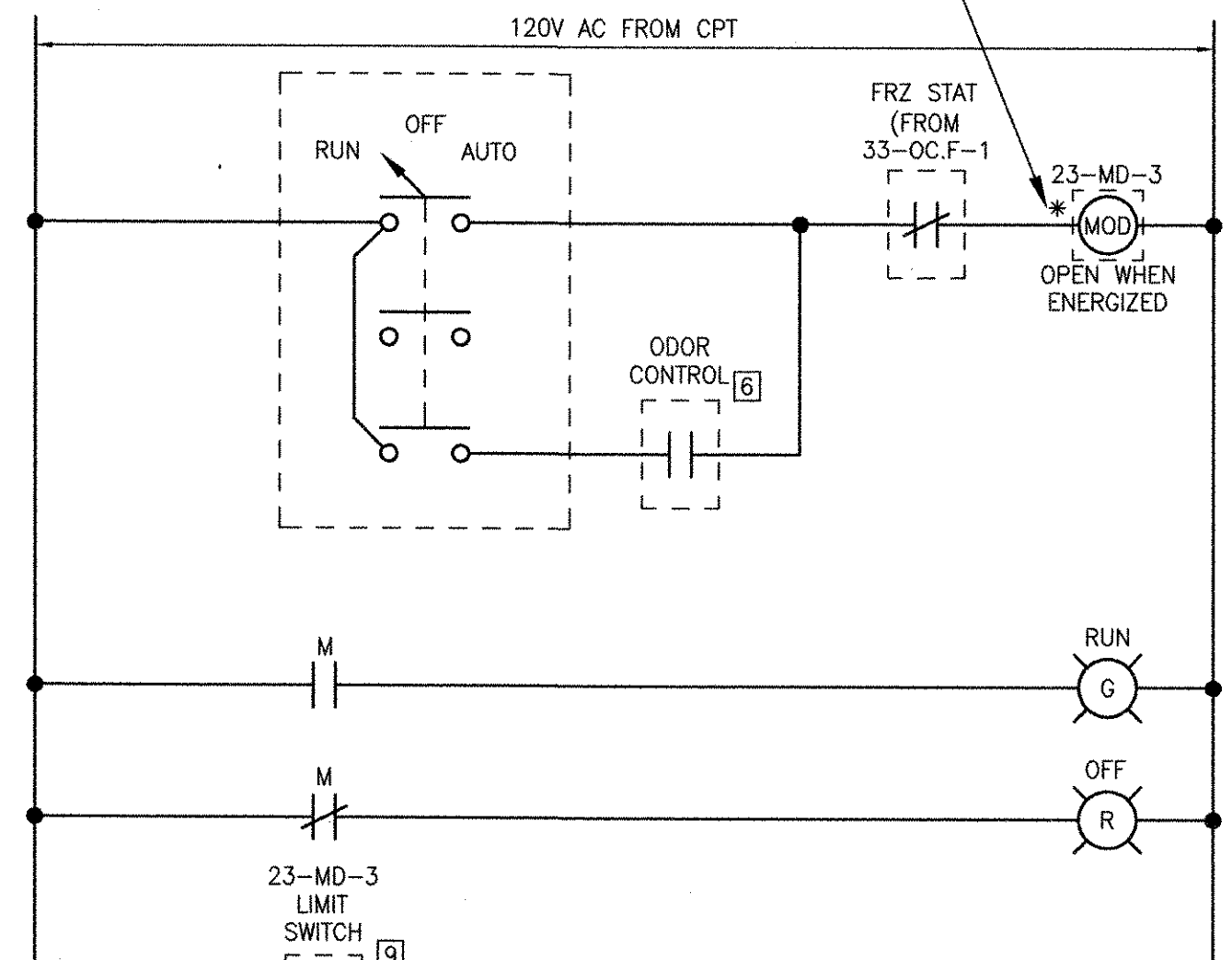
AECOM USA, INC.
150 WASHINGTON ST.
WAKEFIELD, MA 01880
PHONE (781) 246-5200

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DR\VP-A\SHEETS\EV23 E-605.DWG
LAST UPDATE: Monday, October 01, 2012 8:30:00 AM
PLOT DATE: Thursday, October 25, 2012 9:19:03 AM
ANSI D - 1-10-12



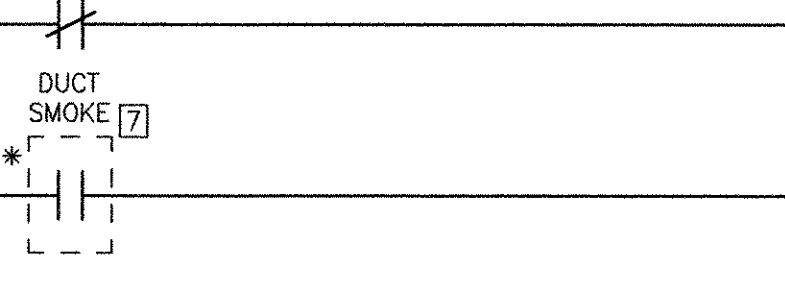
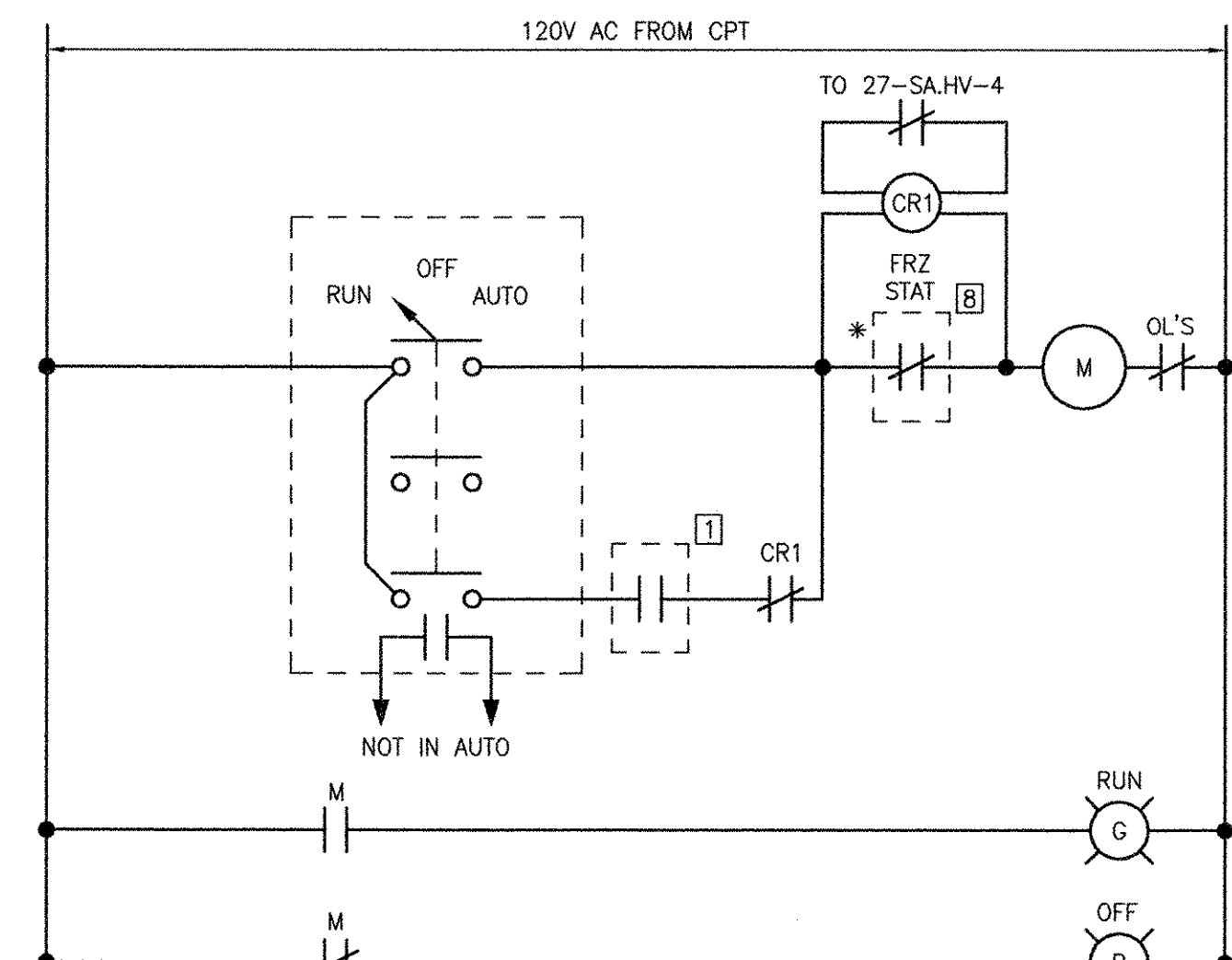
SUMP PUMP 23-SP-1 STARTER WIRING DIAGRAM

(TYPICAL FOR 23-SP-2, 23-SP-3, 23-SP-4)
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



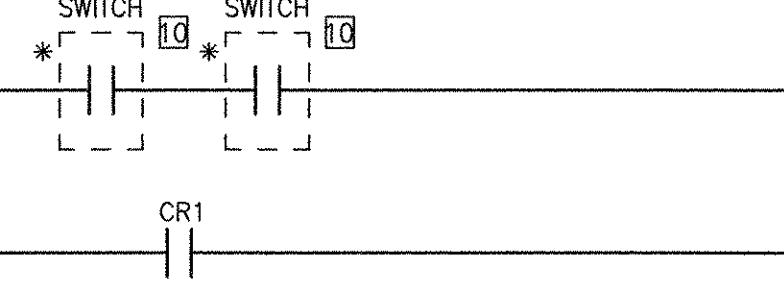
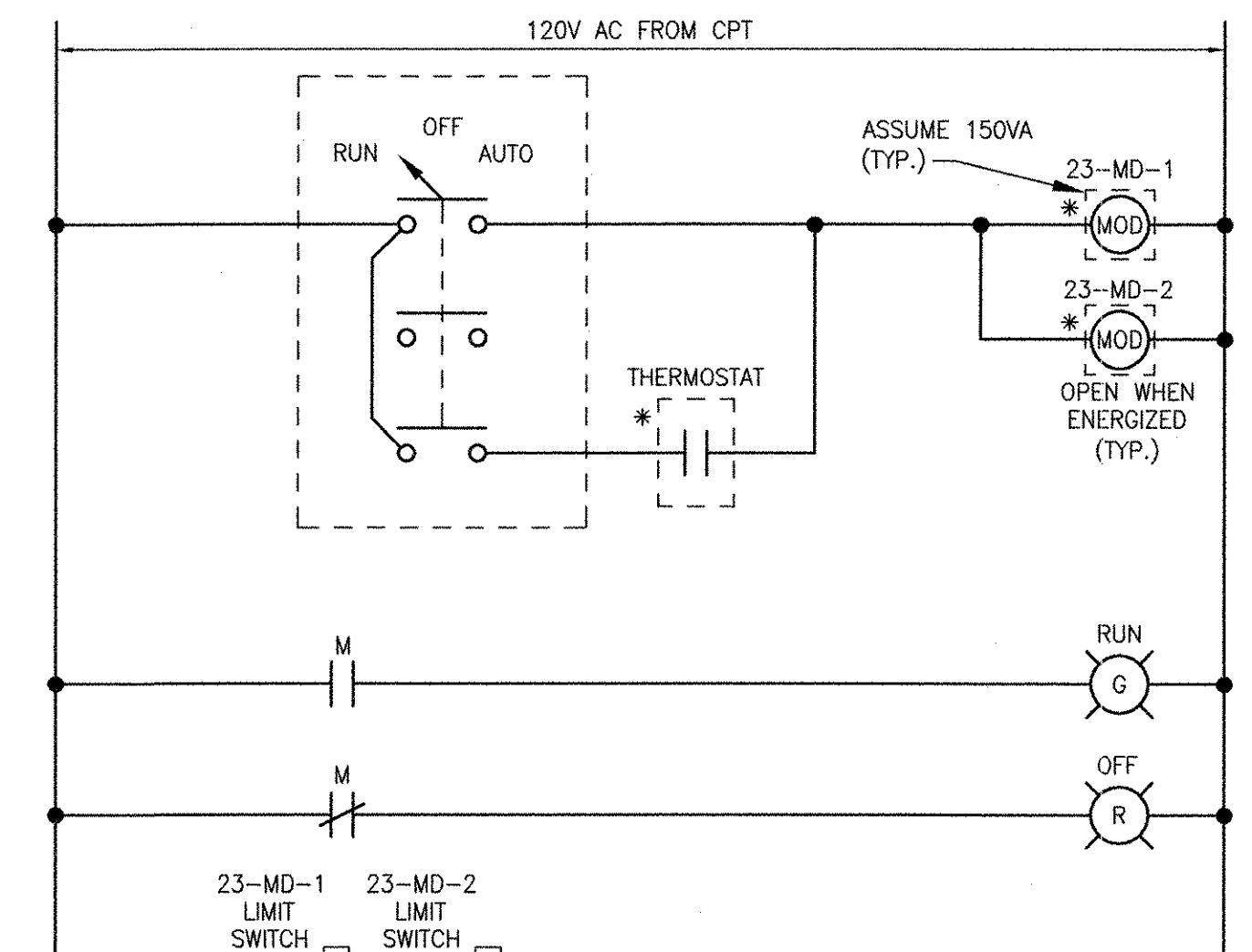
VENTILATION SYSTEM 23-SA.HV-4 STARTER WIRING DIAGRAM

(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



ODOR CONTROL FAN 23-OC.F-1 STARTER WIRING DIAGRAM

(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



EXHAUST FAN 23-EF-1 STARTER WIRING DIAGRAM

(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-2
OPERATIONS BUILDING WIRING DIAGRAMS
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	23 E-605
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

23 E-604

NOTES

- EXISTING PANELBOARD "C" LOCATED WITH EXISTING MCC-6 TO BE DEMOLISHED. EXTEND WIRING FOR ASSOCIATED 208/120VAC LOADS TO NEW PANELBOARD 32-LP-1. PROVIDE NEW PANELBOARD WITH CIRCUIT BREAKERS FOR EACH EXISTING LOAD. CIRCUIT BREAKERS SHALL MATCH EXISTING TRIP SETTINGS.
- EXISTING PANELBOARD "D" LOCATED WITH EXISTING MCC-7 TO BE DEMOLISHED. EXTEND WIRING FOR ASSOCIATED 208/120VAC LOADS TO NEW PANELBOARD 32-LP-2. PROVIDE NEW PANELBOARD WITH CIRCUIT BREAKERS FOR EACH EXISTING LOAD. CIRCUIT BREAKERS SHALL MATCH EXISTING TRIP SETTINGS.

MARK	DATE	MADE BY	CHECKED	YR	MS	REVISIONS
1	10/19/12					REVISED FOR RECORD DRAWING DESCRIPTION

AECOM
AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5500

RECORD DRAWINGS

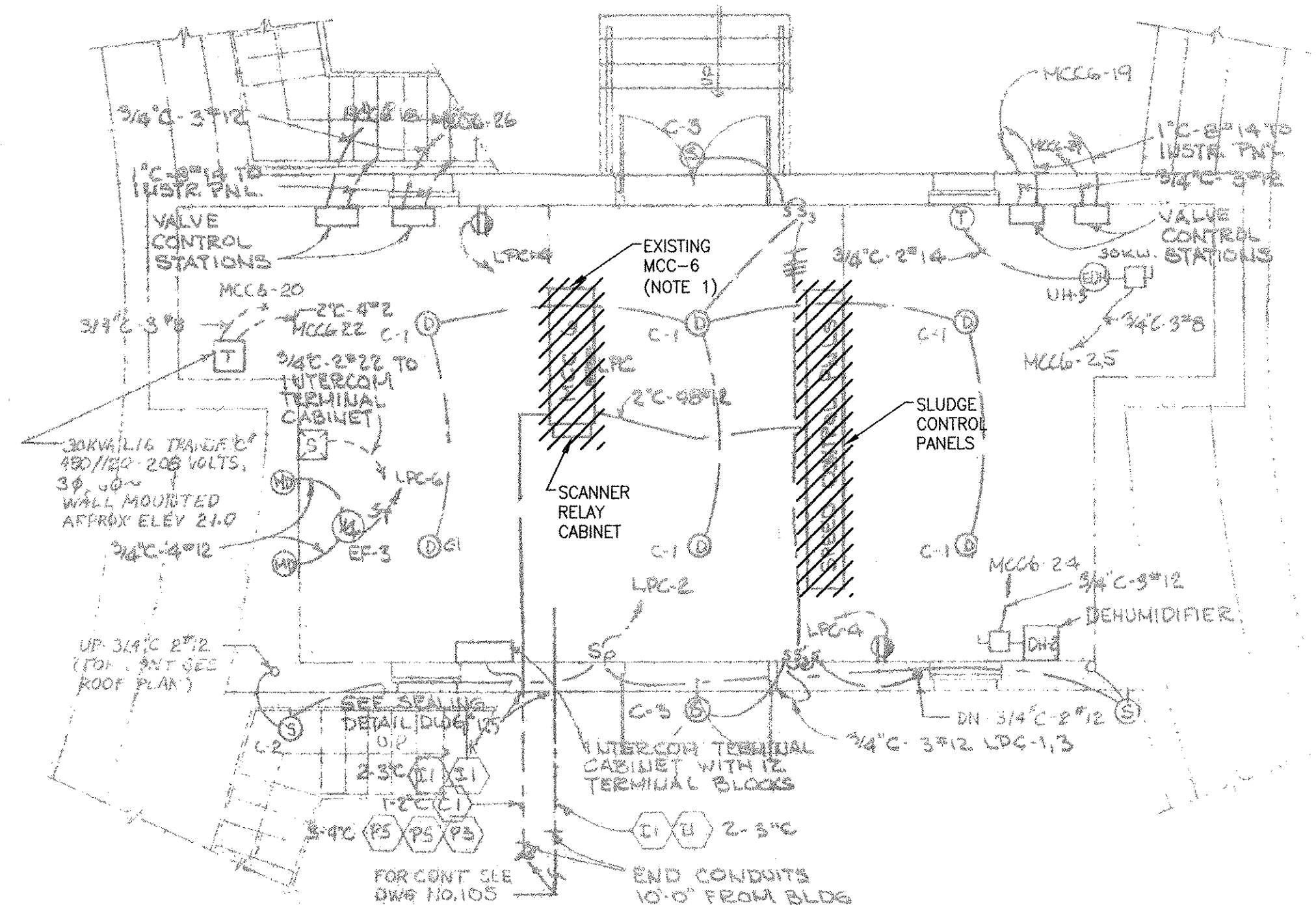
YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 45
01022

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3

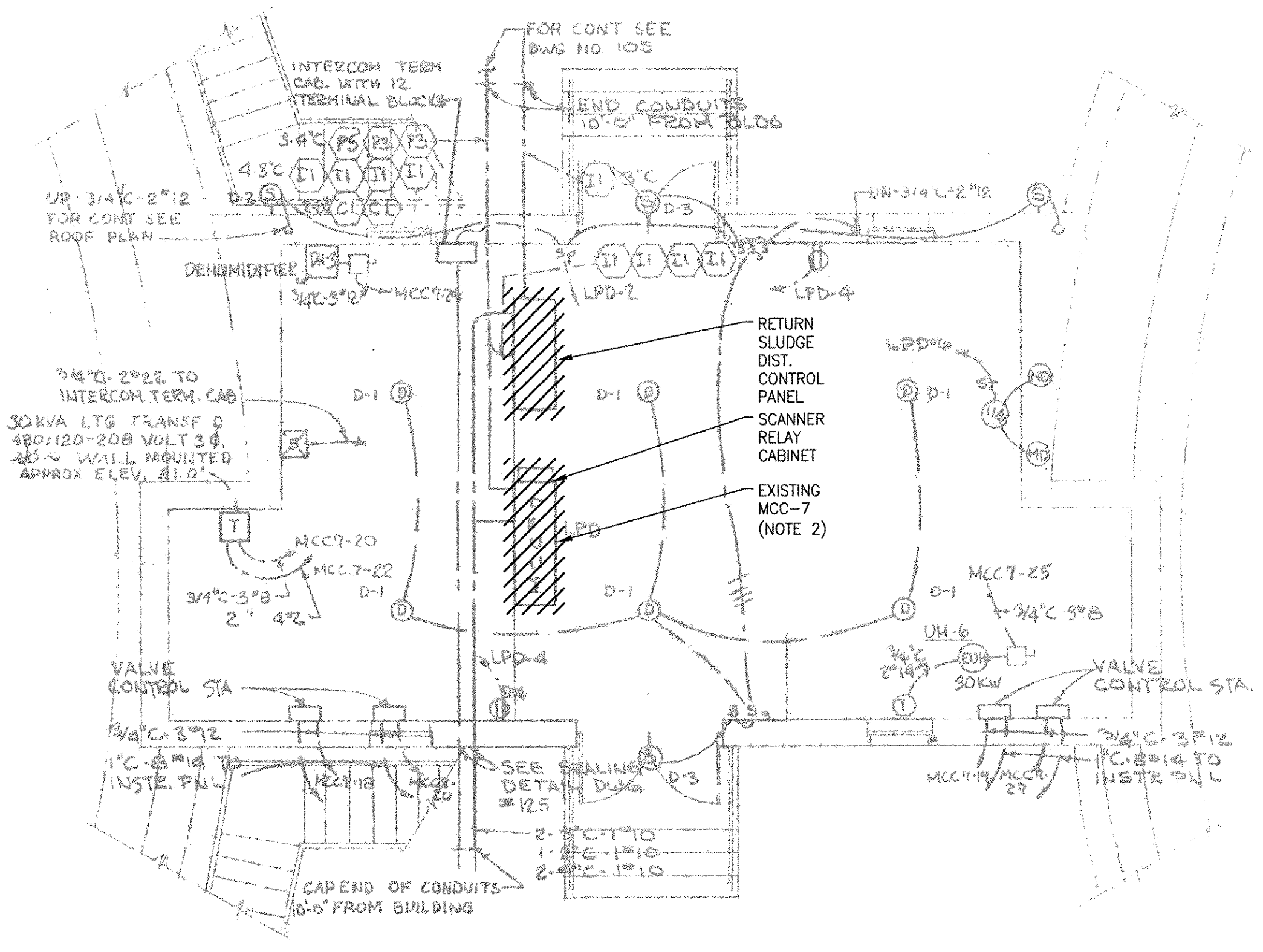
WEST AND EAST AERATION BUILD. AT EL. 14.0'
DEMOLITION PLAN
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	31 ED-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

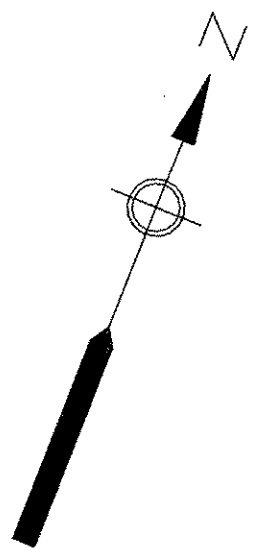
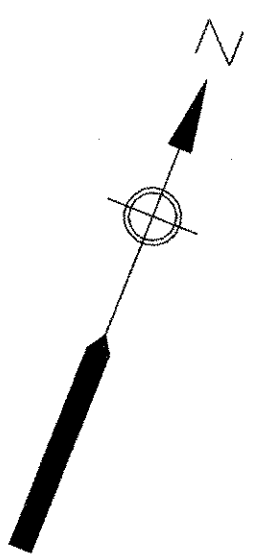
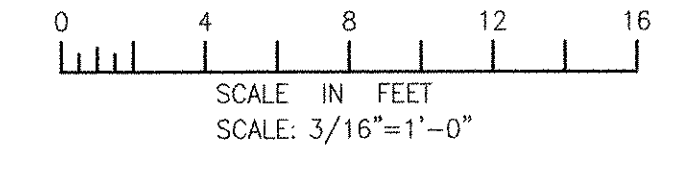
31 ED-101



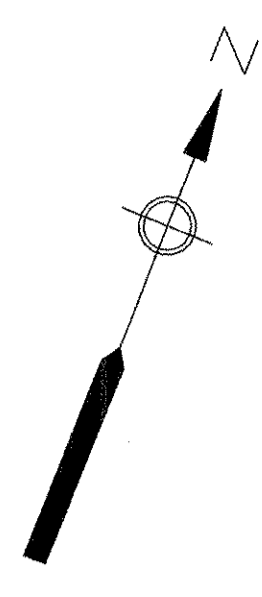
WEST AERATION BUILDING AT EL. 14.0'
DEMOLITION PLAN
SCALE: 3/16" = 1'-0"



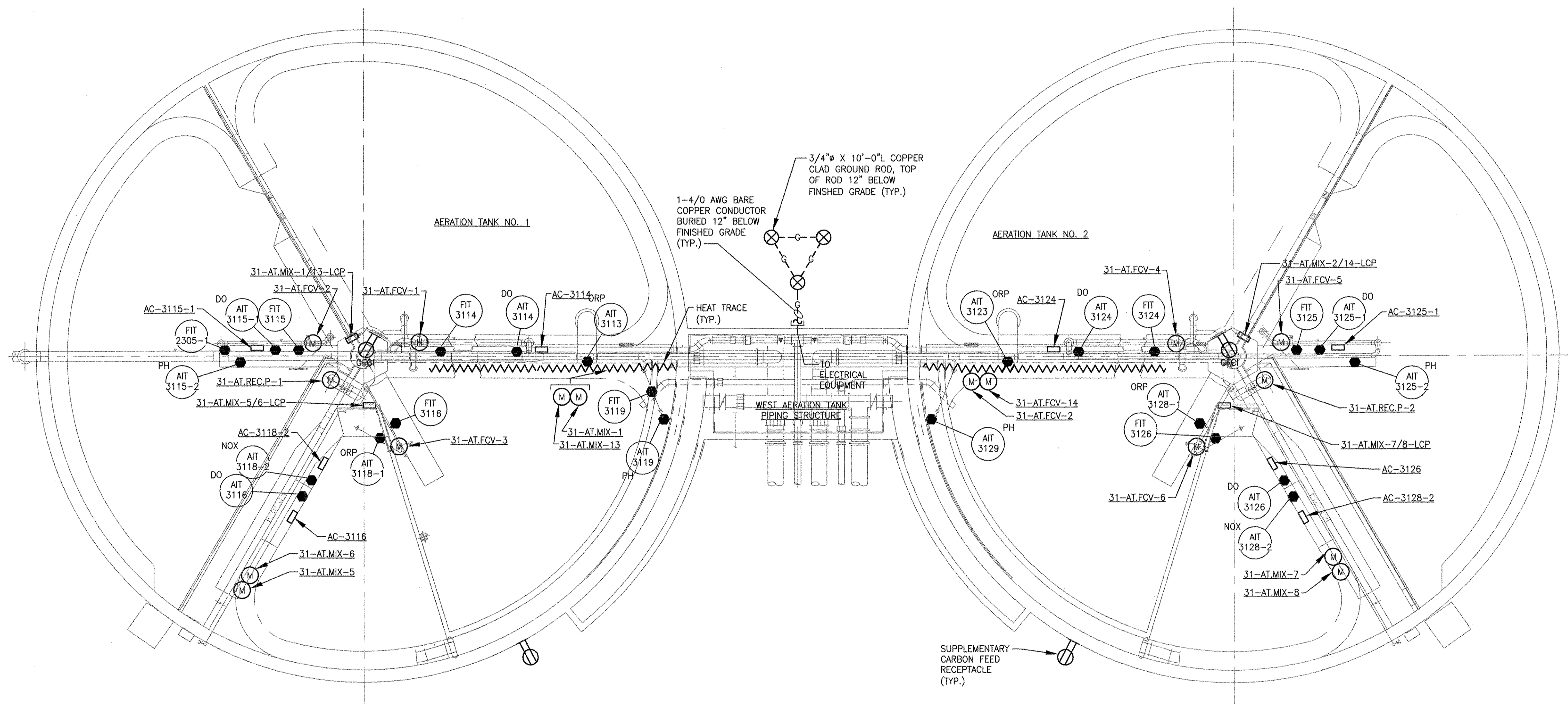
EAST AERATION BUILDING AT EL. 14.0'
DEMOLITION PLAN
SCALE: 3/16" = 1'-0"



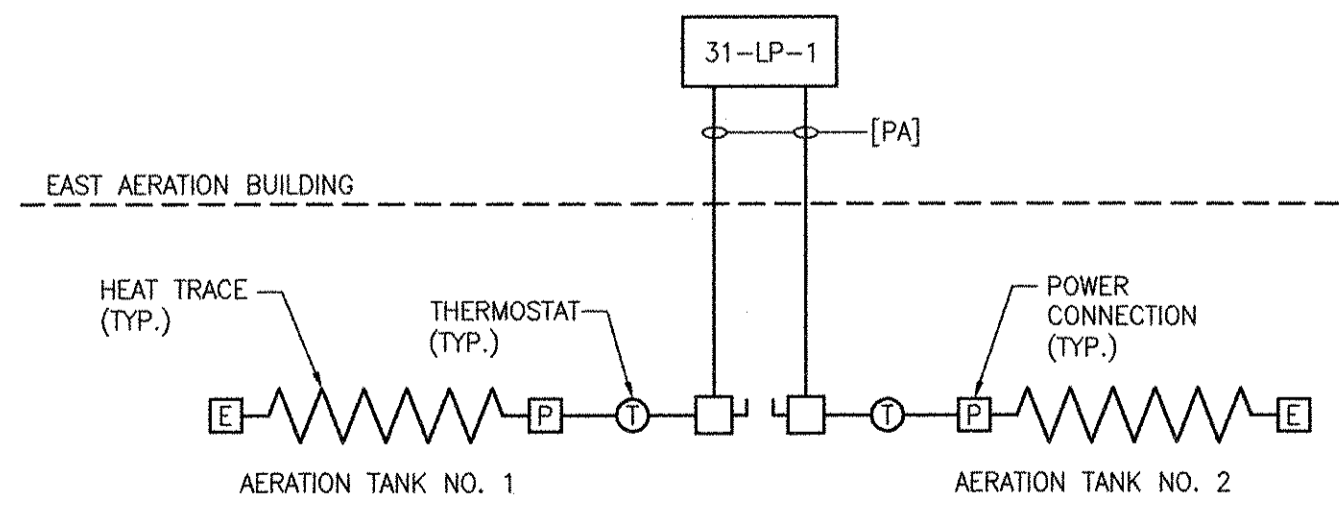
ANSI D - 3-Oct-12
LAST UPDATE: Wednesday, October 03, 2012 1:54:57 PM
PLOT DATE: Thursday, October 25, 2012 9:05:37 AM
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-3\SHEETS\31 ED-101.DWG



NOTES
 1. REFER TO DRAWING 31 E-603 FOR AERATION TANKS RISER DIAGRAM. WHERE EQUIPMENT IS INDICATED ON THE RISER DIAGRAM TO BE PROVIDED WITH A DISCONNECT SWITCH OR ESTOP, MOUNT EQUIPMENT TO RAILINGS AND SUPPORT AS REQUIRED.



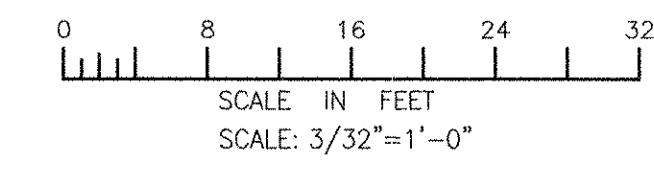
AERATION TANK NO. 1 AND 2 POWER PLAN
 (SIMILAR FOR AERATION TANK NO. 3, NO. 4)



HEAT TRACING RISER DIAGRAM
 (SIMILAR FOR AERATION TANK NO. 3/NO. 4)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	REVISIONS
3	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
2	11/15/11	DA	YR	REVISED INSTRUMENTS AND TANK LAYOUTS
1	5/16/11	DA	YR	REVISED MIXER CONTROL PANELS

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 ONE WASHINGTON STREET
 WASHINGTON, MA 01890
 PHONE (781) 246-5200

YASSER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 25 94-30
 O.K.A. 02/24/2012

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
AERATION TANKS NO. 1 & NO. 2
POWER PLAN
 ELECTRICAL

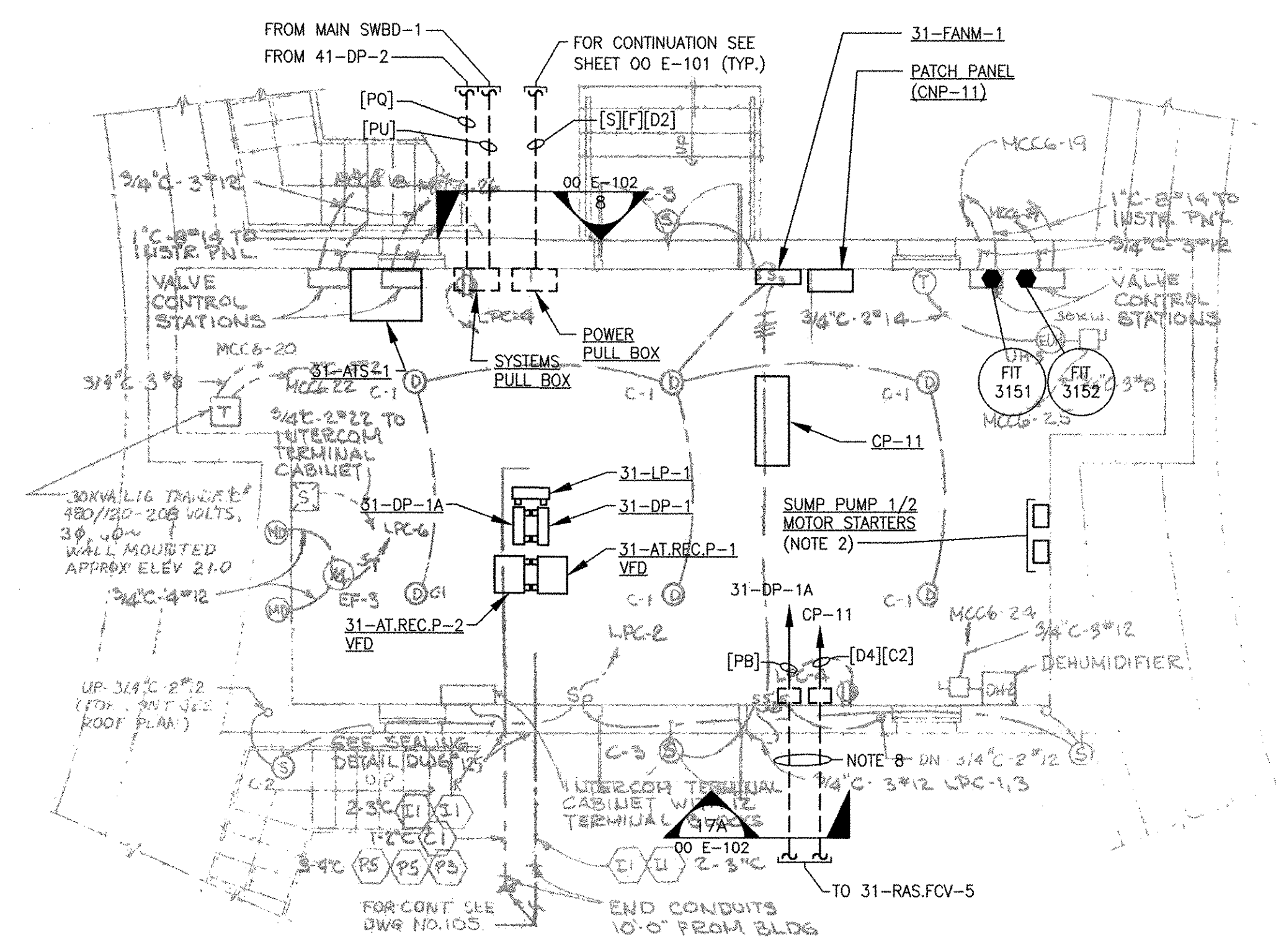
PROJECT NO:	60148648
CAD DWG FILE:	31 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 E-101

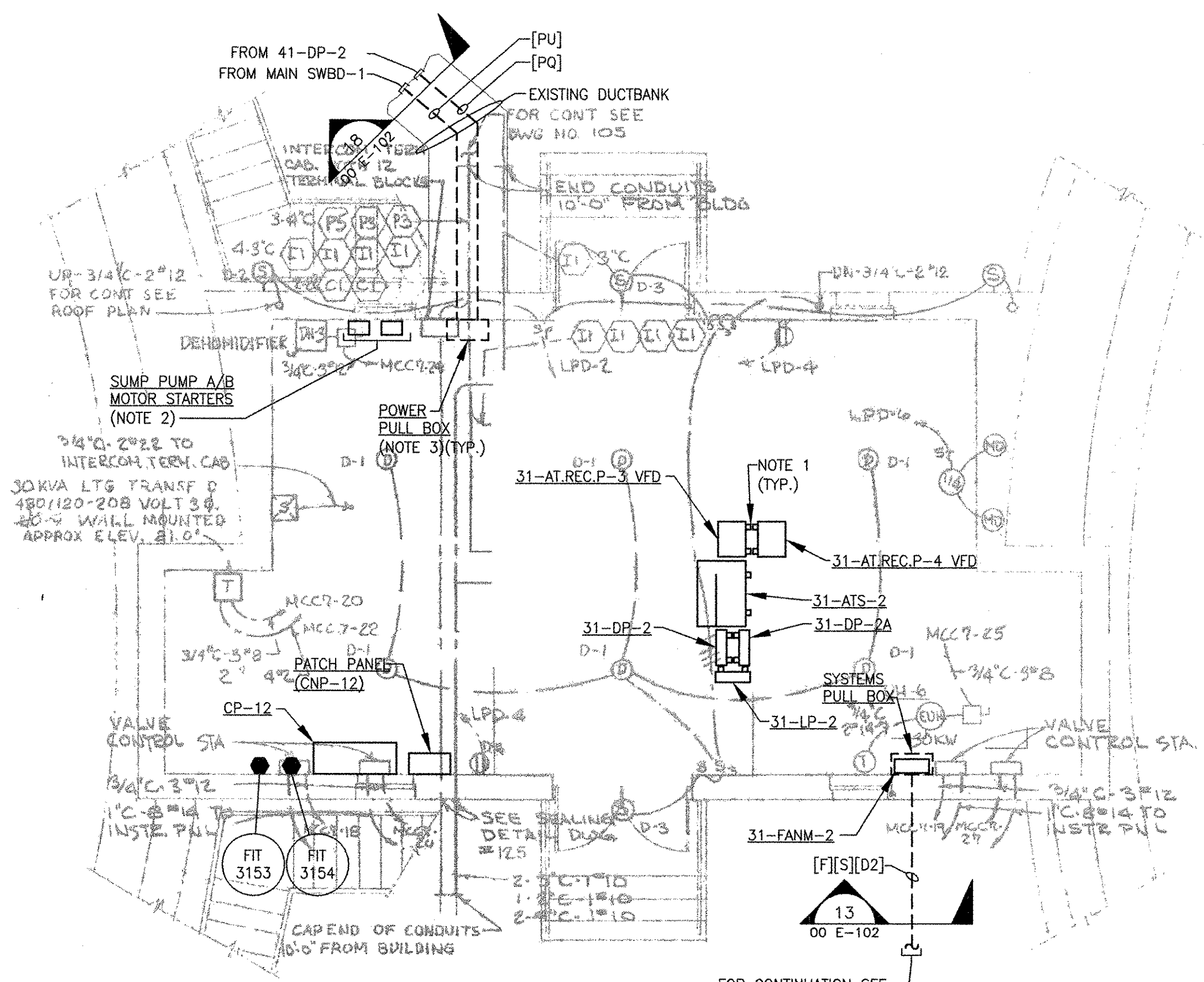
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-3\SHEETS\31 E-101.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:23:41 AM
 PLOT DATE: Thursday, October 25, 2012 10:23:50 AM
 ANSI D - 25-Oct-12

ANSI D - 23-Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DRG\DP-3\SHEETS\31 E-102.DWG
 LAST UPDATE: Tuesday, October 23, 2012 8:09:08 AM
 PLOT DATE: Thursday, October 25, 2012 9:09:45 AM

BASED ON CE MAGUIRE, INC.
 AS BUILT 2/5/79 -
 AERATION TANK STRUCTURES ELECTRICAL
 POWER & LIGHTING PLANS
 C.A.M. NO. 1349, DRAWING NO. 110



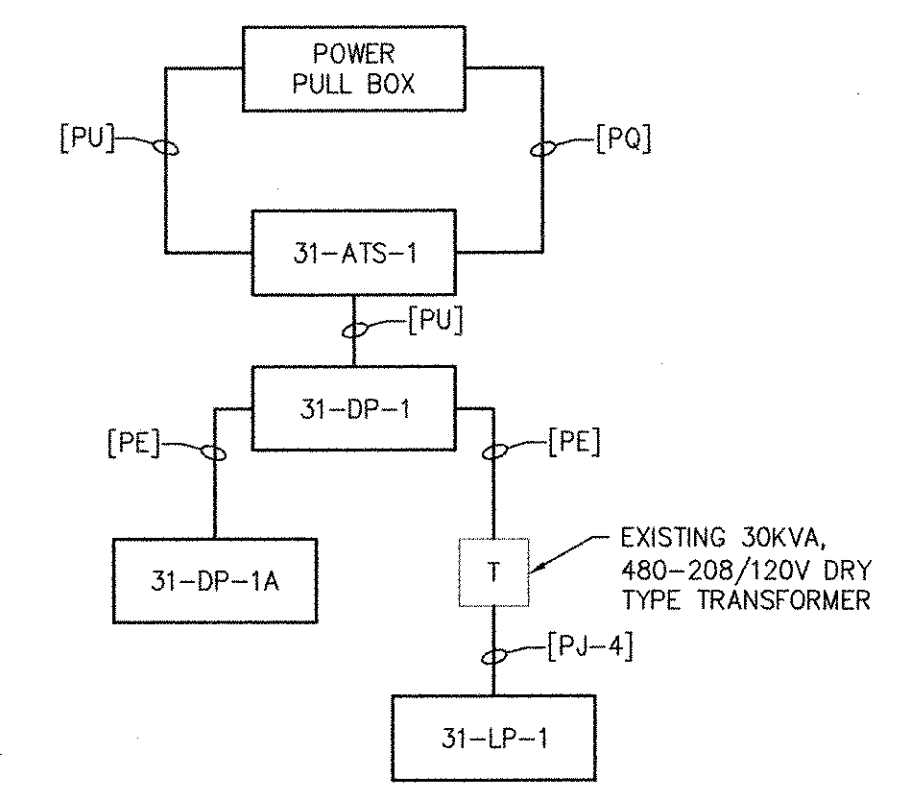
**WEST AERATION BUILDING AT EL. 14.00
 MODIFICATIONS PLAN**
 SCALE: 3/16" = 1'-0"



**EAST AERATION BUILDING AT EL. 14.0'
 MODIFICATIONS PLAN**
 SCALE: 3/16" = 1'-0"

NOTES:

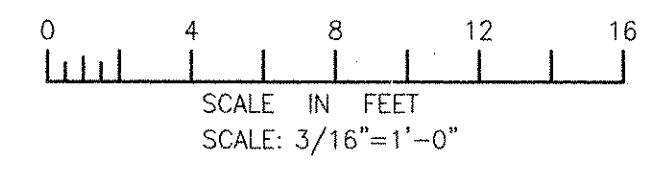
1. MOUNT EQUIPMENT INDICATED ON UNISTRUT SUPPORT SYSTEM.
2. EXISTING SUMP PUMPS ARE NO LONGER IN OPERATION. PROVIDE MOTOR STARTERS WHERE INDICATED FOR FUTURE SUMP PUMPS. STARTERS SHALL BE 480V, SIZE 1, FVWR IN A NEMA 12 ENCLOSURE WITH A HAND/OFF/AUTO SELECTOR SWITCH. WALL MOUNT STARTERS WHERE INDICATED.
3. MOUNT PULL BOXES TO CEILING BELOW. REFER TO RISER DIAGRAM (THIS SHEET) FOR DETAILS.
4. DASHED LINES INDICATES CONDUIT TO BE ROUTED ALONG CEILING BELOW.
5. ROUTE A [G6] GROUND WIRE TO ATS 31-ATS-1/2 AND DISTRIBUTION PANELBOARDS 31-DP-1/2. GROUND WIRES SHALL BE BOLTED TO EQUIPMENT AND CONNECTED DIRECTLY TO THE GROUNDING TRIAD. REFER TO SHEET 00 E-603 FOR CONDUIT AND WIRE DETAILS.
6. FOR [S] CONDUITS, REFER TO SHEET 00 E-607 FOR FIBER OPTIC LOOP RISER DIAGRAM. FOR [F] CONDUITS, REFER TO SHEET 00 E-606 FOR FIRE ALARM LOOP RISER DIAGRAM.
7. PROVIDE TERMINAL BOXES BELOW EXISTING MOTOR CONTROL CENTERS AND INTERCEPT EXISTING CONDUIT AND WIRE. TERMINATE EXISTING WIRING ON TERMINAL STRIPS AND EXTEND TO NEW PANELBOARDS AS REQUIRED. TRANSFER ONE LOAD AT A TIME TO THE NEW ELECTRICAL SYSTEM. ONCE ALL LOADS HAVE BEEN TRANSFERRED, THE EXISTING MOTOR CONTROL CENTERS SHALL BE DEMOLISHED.
8. COORDINATE DUCT BANK ROUTING WITH EXISTING UTILITIES.



**WEST AERATION BUILDING
 POWER DISTRIBUTION
 RISER DIAGRAM**
 (SIMILAR FOR EAST AERATION BUILDING)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	YR
1	REVISED FOR RECORD DRAWING	10/19/12	MS		

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 ONE WAKEFIELD WAY, SUITE 200
 WAKEFIELD, MA 01880
 PHONE (781) 246-5500

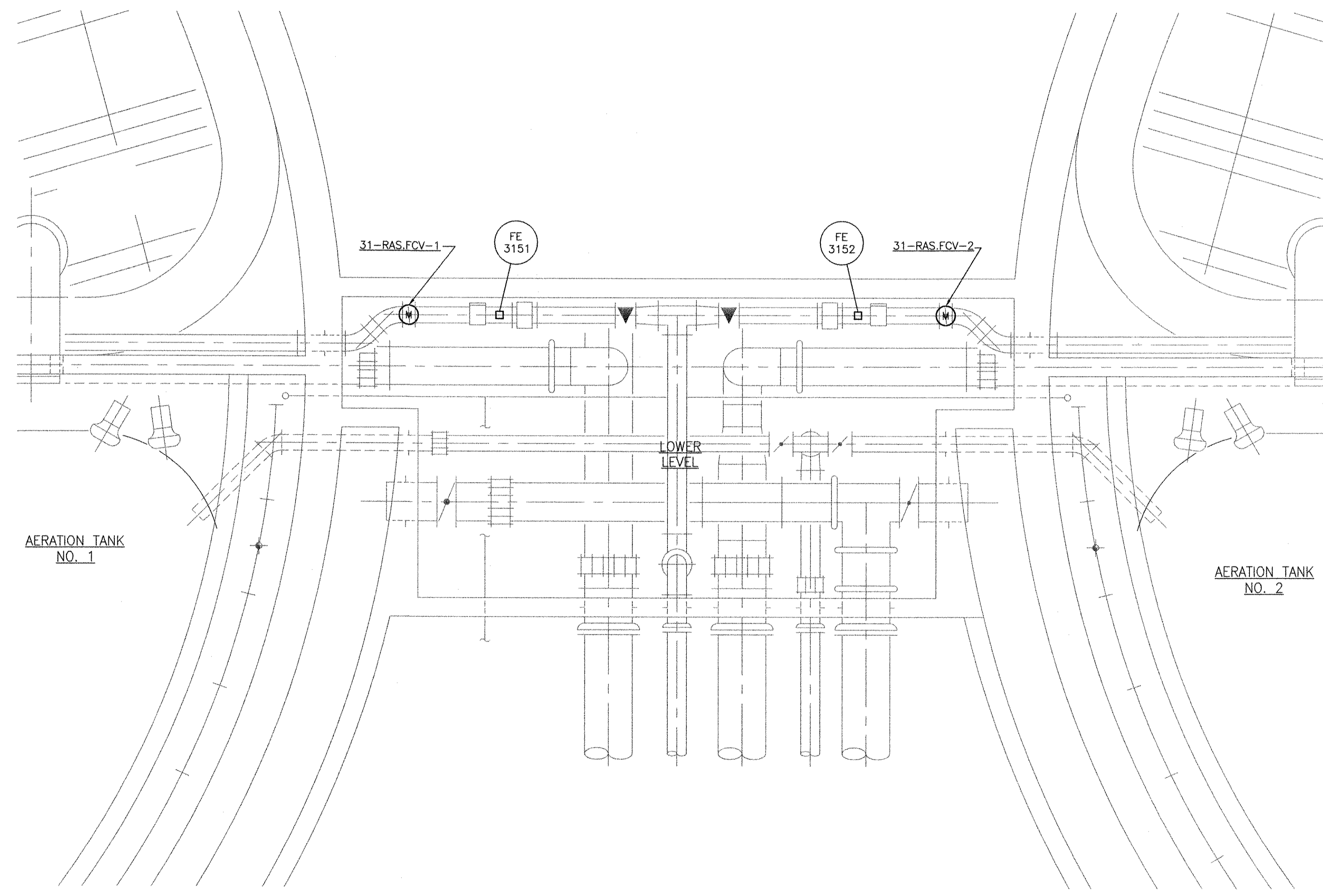
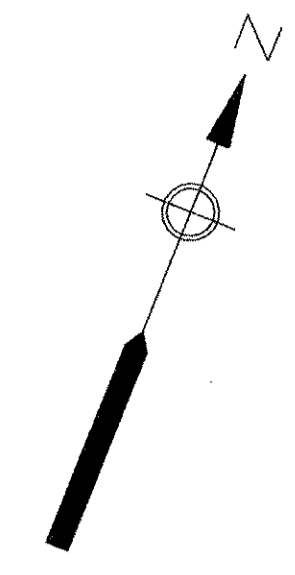
YASSER HASSAN
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**WEST AND EAST AERATION BUILD. AT EL. 14.0'
 MODIFICATIONS PLAN**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	31 E-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 E-102

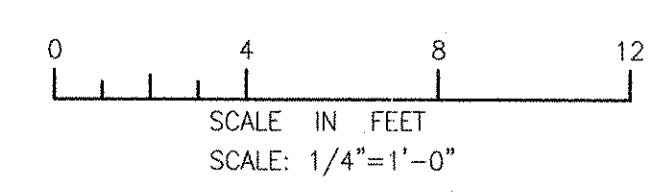
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\31 E-103.DWG
 LAST UPDATE: Monday, October 01, 2012 9:02:13 AM
 PLOT DATE: Thursday, October 25, 2012 9:09:48 AM
 ANSI D - 1-10-12



WEST AERATION BUILDING AT EL. 1.24'
MODIFICATIONS PLAN
 (TYPICAL FOR EAST AERATION BUILDING)
 SCALE: 1/4" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MS	YR	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS

YASSER RIZK
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 2594
 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**WEST AERATION BUILDING LOWER LEVEL
 MODIFICATIONS PLAN**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	31 E-103
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ. CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 E-103

SERVICE: 480V, 3PH, 3W, 60HZ
MAIN CIRCUIT BREAKER: 400A. FRAME, 300A TRIP

PANELBOARD "31-DP-1"

SHORT CIRCUIT BRACING: 65,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA	CIR. NO.	GROUND BUS			CIR. NO.	KVA	HP	CKT WIRING	SEE NOTES	LOCATION
						A	B	C						
LIGHTING TRANSFORMER (TO 31-LP-1)	1	[PE]	-	30.0	1	50A	-	-	2	20.0	-	[PD]	1	31-EUH-1
31-AT.REC.P-1	2	[PC]	8.3	16	3	30A	-	-	4	16	8.3	[PC]	2	31-AT.REC.P-2
31-AT.MIX-1/3	2	[PB]	8.0	12.6	5	-	-	-	6	12.6	8.0	[PB]	2	31-AT.MIX-2/14
31-AT.MIX-5/6	2	[PB]	8.0	12.6	7	-	-	-	8	-	-	-	-	SPARE
31-AT.MIX-7/8	2	[PB]	8.0	12.6	9	-	-	-	10	-	-	-	-	DEHUMIDIFIER
SPARE	-	-	-	-	11	-	-	-	12	-	-	-	-	SPARE
31-DP-1A	2	[PE]	-	8.1	13	50A	-	-	14	-	-	-	-	SPACE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP
(UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: 126.78 KVA

PANEL LOCATION: WEST AERATION BUILDING

SERVICE: 208/120V, 3PH, 4W, 60HZ
MAIN CIRCUIT BREAKER: 100A FRAME, 100A TRIP
FED FROM: 31-DP-1

PANELBOARD "31-LP-1"

SHORT CIRCUIT BRACING: 10,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA A	KVA B	KVA C	CIR. NO.	GROUND BUS			CIR. NO.	KVA A	KVA B	KVA C	HP	CKT WIRING	SEE NOTES	LOCATION
								NEUTRAL	A	B								
FIRE ALARM	2	[PA]	-	0.60	-	-	1	-	-	-	2	0.36	-	-	[PA]	2	CARBON FEED GFCI	
CP-11	2	[PA]	-	0.60	-	-	3	-	-	-	4	-	0.36	-	[PA]	2	CARBON FEED GFCI	
CP-11	2	[PA]	-	-	-	1.2	5	-	-	-	6	-	-	0.50	[PA]	2	HEAT TRACE T-1	
LIGHTS - UPPER LEVEL	-	-	-	-	-	-	7	-	-	-	8	0.50	-	-	[PA]	2	HEAT TRACE T-2	
LIGHTS - LOWER LEVEL	-	-	-	-	-	-	9	-	-	-	10	-	0.25	-	[PA]	2	RECEPTACLE - CONTACT TANK	
SPARES TO JB - LOWER LEVEL	-	-	-	-	-	-	11	-	-	-	12	-	-	-	-	-	RECEPTACLE - TANK 1	
RECEPTABLES	-	-	-	-	-	-	13	-	-	-	14	-	-	-	-	-	RECEPTABLES	
SPLITTER BOX, RECEPTACLE, LIGHTS	-	-	-	-	-	-	15	-	-	-	16	-	-	-	-	-	EXHAUST FAN/DAMPER MOTORS	
SPARE	-	-	-	-	-	-	17	-	-	-	18	-	-	0.25	[PA]	2	RECEPTACLE - TANK 2	
SPARE	-	-	-	-	-	-	19	-	-	-	20	-	-	-	-	-	HEAT TRACE 31-RAS.FCV-5	
SPARE	-	-	-	-	-	-	21	-	-	-	22	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	23	-	-	-	24	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	25	-	-	-	26	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	27	-	-	-	28	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	29	-	-	-	30	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	31	-	-	-	32	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	33	-	-	-	34	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	35	-	-	-	36	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	37	-	-	-	38	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	39	-	-	-	40	-	-	-	-	-	EXISTING	
SPARE	-	-	-	-	-	-	41	-	-	-	42	-	-	-	-	-	EXISTING	

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP
(UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: SEE NOTE 4

PANEL LOCATION: WEST AERATION BUILDING

SERVICE: 480V, 3PH, 3W, 60HZ
MAIN LUGS ONLY
FED FROM: 31-DP-1

PANELBOARD "31-DP-1A"

SHORT CIRCUIT BRACING: 65,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA	CIR. NO.	GROUND BUS			CIR. NO.	KVA	HP	CKT WIRING	SEE NOTES	LOCATION
						A	B	C						
31-AT.FCV-1	2	[PB]	1/2	0.9	1	-	-	-	2	0.9	1/2	[PB]	2	31-AT.FCV-2
31-AT.FCV-3	2	[PB]	1/2	0.9	3	-	-	-	4	0.9	1/2	[PB]	2	31-AT.FCV-4
31-AT.FCV-5	2	[PB]	1/2	0.9	5	-	-	-	6	0.9	1/2	[PB]	2	31-AT.FCV-6
31-RAS.FCV-1	2	[PB]	1/4	0.2	7	-	-	-	8	0.2	1/4	[PB]	2	31-RAS.FCV-2
31-RAS.FCV-5	2	[PB]	1/4	0.2	9	-	-	-	10	-	-	[PB]	1	FUTURE SUMP PUMP - 1
FUTURE SUMP PUMP - 2	1	[PB]	-	-	11	-	-	-	12	-	-	-	-	SPARE
SPARE	-	-	-	-	13	-	-	-	14	-	-	-	-	SPARE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP
(UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: 8.1 KVA

PANEL LOCATION: WEST AERATION BUILDING

* GFCI 30mA TRIP

RECORD DRAWING


NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NOTES:


- EXISTING EQUIPMENT
- NEW EQUIPMENT
- PROVIDE CIRCUIT BREAKERS TO FEED EXISTING EQUIPMENT. REFER TO NOTE 1 ON SHEET 31 ED-101 FOR FURTHER DETAILS.
- TOTAL CONNECTED LOAD TO BE DETERMINED DURING CONSTRUCTION ONCE EXISTING LOADS HAVE BEEN TRANSFERRED TO NEW PANELBOARD 31-LP-1.
- ELECTRIC UNIT HEATER 31-EUH-1 SHALL NOT OPERATE DURING STANDBY POWER. REFER TO SHEET 00 E-607 FOR FURTHER DETAILS.
- EXISTING LOADS TO BE VERIFIED AND SCHEDULED DURING CONSTRUCTION.

PATH/FILENAME: F:\60148648 - EAST PROVIDENCE (060)DP-31 SHEETS\31 E-601.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:21:57 AM
 PLOT DATE: Thursday, October 25, 2012 10:22:06 AM
 ANSI D - 25-Oct-12

NO.	DATE	BY	DESCRIPTION
3	10/19/12	MS	REVISED FOR RECORD DRAWING
2	11/15/11	DA	ADDED INST. AIR COMPRESS AND RECEPTACLE
1	5/16/11	DA	REVISED MIXER CONTROL PANELS


 AECOM USA, INC.
 100 WATER STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

RECORD DRAWINGS


 YASSER RIZK
 No. 95115
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
AERATION TANKS
PANELBOARD SCHEDULES I
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	31 E-601
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 E-601

SERVICE: 480V, 3PH, 3W, 60HZ
MAIN CIRCUIT BREAKER: 400A FRAME, 300A TRIP

PANELBOARD "31-DP-2"

SHORT CIRCUIT BRACING: 65,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA	CIR. NO.	GROUND BUS	CIR. NO.	KVA	HP	CKT WIRING	SEE NOTES	LOCATION
LP PANEL TRANSFORMER	1	[PE]	-	30.0	1	50A	2	20.0	-	[PD]	1	31-EUH-2
31-AT.REC.P-3	2	[PC]	8.3	16	3	30A	4	16	8.3	[PC]	2	31-AT.REC.P-4
31-AT.MIX-3/15	2	[PB]	8.0	12.6	5	-	6	12.6	8.0	[PB]	2	31-AT.MIX-4/16
31-AT.MIX-9/10	2	[PB]	8.0	12.6	7	-	8	-	-	-	-	SPARE
31-AT.MIX-11/12	2	[PB]	8.0	12.6	9	-	10	-	-	-	-	SPARE
SPARE	-	-	-	-	11	-	12	-	-	-	-	SPARE
31-DP-2A	2	[PE]	-	7.2	13	50A	14	-	-	-	-	SPACE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)
PANEL LOCATION: EAST AERATION BUILDING

TOTAL CONNECTED LOAD: 125.88 KVA

SERVICE: 480V, 3PH, 3W, 60HZ
MAIN LUGS ONLY
FED FROM: 31-DP-2

PANELBOARD "31-DP-2A"

SHORT CIRCUIT BRACING: 65,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA	CIR. NO.	GROUND BUS	CIR. NO.	KVA	HP	CKT WIRING	SEE NOTES	LOCATION
31-AT.FCV-7	2	[PB]	1/2	0.9	1	-	2	0.9	1/2	[PB]	2	31-AT.FCV-8
31-AT.FCV-9	2	[PB]	1/2	0.9	3	-	4	0.9	1/2	[PB]	2	31-AT.FCV-10
31-AT.FCV-11	2	[PB]	1/2	0.9	5	-	6	0.9	1/2	[PB]	2	31-AT.FCV-12
31-RAS.FCV-3	2	[PB]	1/4	0.2	7	-	8	0.2	1/4	[PB]	2	31-RAS.FCV-4
SUMP PUMP A (FUTURE)	1	[PB]	-	-	9	-	10	-	-	[PB]	1	SUMP PUMP B (FUTURE)
SPACE	-	-	-	-	11	-	12	-	-	-	-	SPACE
SPACE	-	-	-	-	13	-	14	-	-	-	-	SPACE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)
PANEL LOCATION: EAST AERATION BUILDING

TOTAL CONNECTED LOAD: 7.2 KVA

SERVICE: 208/120V, 3PH, 4W, 60HZ
MAIN CIRCUIT BREAKER: 100A FRAME, 100A TRIP
FED FROM: 31-DP-2

PANELBOARD "31-LP-2"

SHORT CIRCUIT BRACING: 10,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA A	KVA B	KVA C	CIR. NO.	GROUND BUS	CIR. NO.	KVA A	KVA B	KVA C	HP	CKT WIRING	SEE NOTES	LOCATION
FIRE ALARM PANEL	2	[PA]	-	0.60	-	-	1	NEUTRAL	2	0.36	-	-	-	[PA]	2	CARBON FEED GFCI
SPARE	-	-	-	-	-	-	3	-	4	-	0.36	-	-	[PA]	2	CARBON FEED GFCI
CP-12	2	[PA]	-	-	-	0.60	5	-	6	-	-	.50	-	[PA]	2	TANK 3 HEAT TRACE
CP-12	2	[PA]	-	1.2	-	-	7	-	8	.50	-	-	-	[PA]	2	TANK 4 HEAT TRACE
LIGHTS	-	-	-	-	-	-	9	-	10	-	-	-	-	-	-	SPARE
LIGHTS	-	-	-	-	-	-	11	-	12	-	-	-	-	-	-	SPARE
EXHAUST FAN	-	-	-	-	-	-	13	-	14	-	-	-	-	-	-	SPARE
RECEPTACLE PANEL	2	[PA]	-	-	0.18	-	15	-	16	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	17	-	18	-	-	-	-	-	-	SPARE
TANK NO. 3 GFCI	2	[PA]	-	.25	-	-	19	-	20	-	-	-	-	-	-	SPARE
TANK NO. 4 GFCI	2	[PA]	-	.25	-	-	21	-	22	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	23	-	24	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	25	-	26	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	27	-	28	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	29	-	30	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	31	-	32	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	33	-	34	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	35	-	36	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	37	-	38	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	39	-	40	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	41	-	42	-	-	-	-	-	-	SPARE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)
PANEL LOCATION: EAST AERATION BUILDING

KVA PH A: KVA PH B: KVA PH C:
TOTAL CONNECTED LOAD: SEE NOTE 4

* GFCI 30mA TRIP

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NOTES

- EXISTING EQUIPMENT.
- NEW EQUIPMENT.
- PROVIDE CIRCUIT BREAKERS TO FEED EXISTING EQUIPMENT. REFER TO NOTE 2 ON SHEET 31 ED-101 FOR FURTHER DETAILS.
- TOTAL CONNECTED LOAD TO BE DETERMINED DURING CONSTRUCTION ONCE EXISTING LOADS HAVE BEEN TRANSFERRED TO NEW PANELBOARD 31-LP-2.
- ELECTRIC UNIT HEATER 31-EUH-2 SHALL NOT OPERATE DURING STANDBY POWER. REFER TO SHEET 00 E-607 FOR FURTHER DETAILS.
- EXISTING LOADS TO BE VERIFIED AND SCHEDULED DURING CONSTRUCTION.

NO.	DATE	BY	DESCRIPTION
3	10/18/12	MS	REVISED FOR RECORD DRAWING
2	11/15/11	DA	ADDED INST. AIR COMPRESS AND RECEPTACLE
1	5/16/11	DA	REVISED MIXER CONTROL PANELS

AECOM
AECOM USA, INC.
NEW BRIDGE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

RECORD DRAWINGS

YASSER RIZK
No. 25
08/10/12
94-30
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3

**AERATION TANKS
PANELBOARD SCHEDULES II**

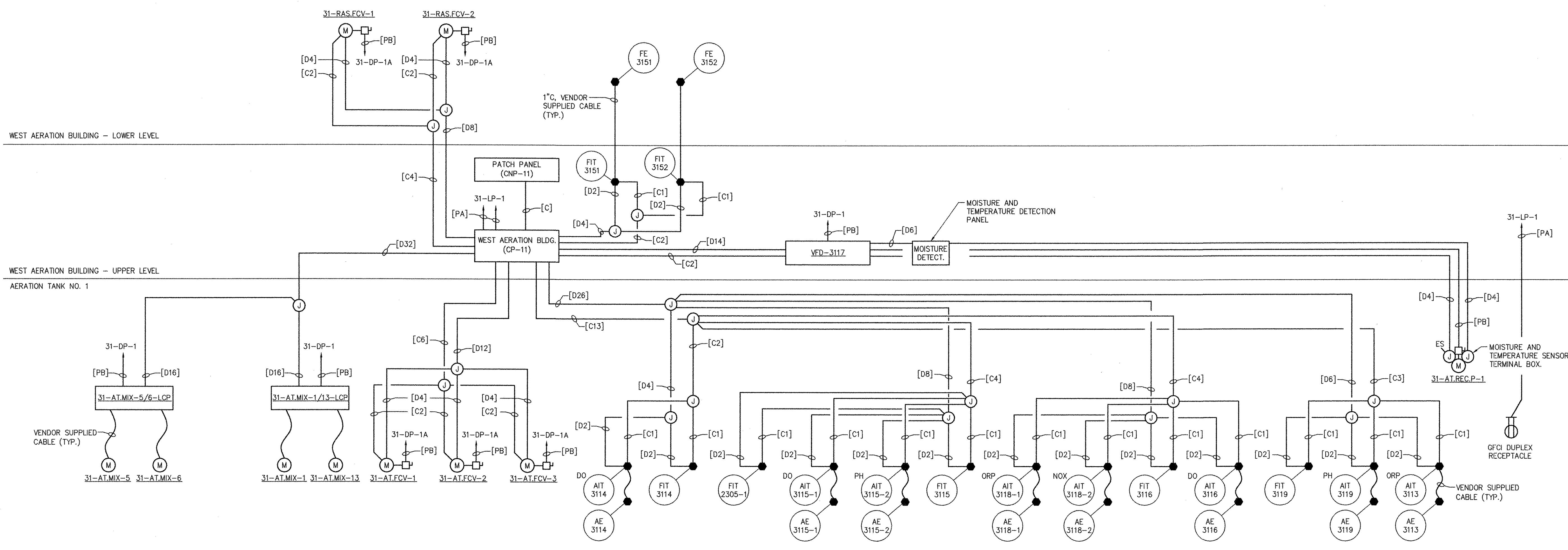
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	31 E-602
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

31 E-602

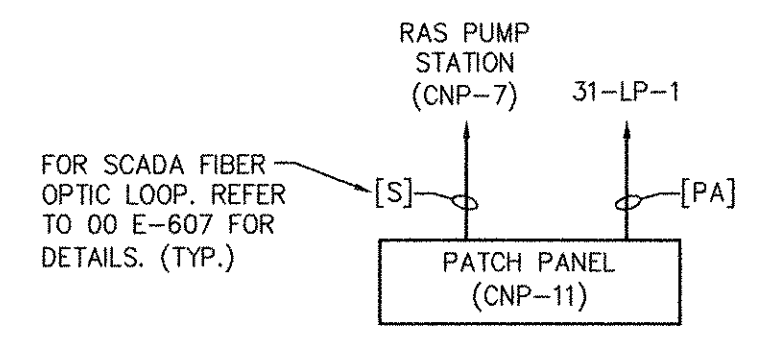
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP3\UP-3\SHEETS\31 E-602.DWG
LAST UPDATE: Thursday, October 25, 2012 10:22:31 AM
PLOT DATE: Thursday, October 25, 2012 10:22:41 AM
ANSI D - 25-Oct-12

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DBO)\DP-3\SHEETS\31 E-603.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:23:11 AM
 PLOT DATE: Thursday, October 25, 2012 10:23:21 AM
 ANS D - 25-Oct-12

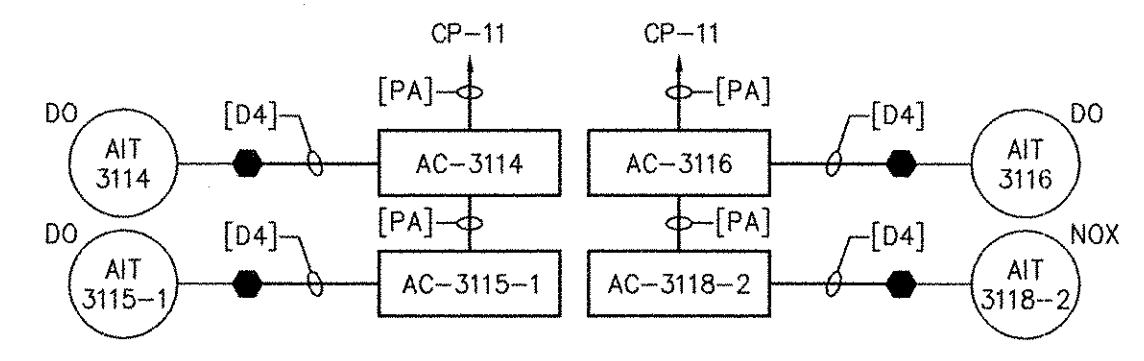


AERATION TANK	MIXERS	VALVES	INSTRUMENTS													RECIRC. PUMP	DIST. PANELBOARD	CP	CNP	
NO. 1	31-AT.MIX-(1,5,6,13)	31-AT.FCV-(1-3), 31-RAS.FCV-1	AIT-3113	AIT-3114	FIT-3114	AIT-3115-1	AIT-3115-2	FIT-3115	AIT-3116	FIT-3116	AIT-3118-1	AIT-3118-2	AIT-3119	FIT-3119	FIT-3151	FIT-2305-1	31-AT.REC.P-1	31-DP-1/1A	CP-11	CNP-11
NO. 2	31-AT.MIX-(2,7,8,14)	31-AT.FCV-(4-6), 31-RAS.FCV-2	AIT-3123	AIT-3124	FIT-3124	AIT-3125-1	AIT-3125-2	FIT-3125	AIT-3126	FIT-3126	AIT-3128-1	AIT-3128-2	AIT-3129	-	FIT-3152	-	31-AT.REC.P-2	31-DP-1/1A	CP-11	CNP-11
NO. 3	31-AT.MIX-(3,9,10,15)	31-AT.FCV-(7-9), 31-RAS.FCV-3	AIT-3133	AIT-3134	FIT-3134	AIT-3135-1	AIT-3135-2	FIT-3135	AIT-3136	FIT-3136	AIT-3138-1	AIT-3138-2	AIT-3139	-	FIT-3153	FIT-2305-2	31-AT.REC.P-3	31-DP-2/2A	CP-12	CNP-12
NO. 4	31-AT.MIX-(4,11,12,16)	31-AT.FCV-(10-12), 31-RAS.FCV-4	AIT-3143	AIT-3144	FIT-3144	AIT-3145-1	AIT-3145-2	FIT-3145	AIT-3146	FIT-3146	AIT-3148-1	AIT-3148-2	AIT-3149	-	FIT-3154	-	31-AT.REC.P-4	31-DP-2/2A	CP-12	CNP-12

WEST AERATION BUILDING - AERATION TANK NO. 1
SYSTEMS RISER DIAGRAM
 (SIMILAR FOR AERATION TANKS NO. 2, NO. 3, NO. 4)



PATCH PANEL CNP-11
RISER DIAGRAM
 (SIMILAR FOR PATCH PANEL CNP-12)



AERATION TANK NO. 1
INSTRUMENT AIR COMPRESSOR
RISER DIAGRAM
 (SIMILAR FOR AERATION TANKS NO. 2, NO. 3, NO. 4)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC. 100 WASHINGTON ST., SUITE 200 WALFIELD, MA 01880 PHONE (781) 246-5200		RECORD DRAWINGS	
CITY OF EAST PROVIDENCE, RHODE ISLAND EAST PROVIDENCE DP-3 AERATION TANKS RISER DIAGRAMS ELECTRICAL			
PROJECT NO:	60148648	DESIGNED BY:	D. ASPESI
CAD DWG FILE:	31 E-603	DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RZK	PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012	SCALE:	AS NOTED
31 E-603			

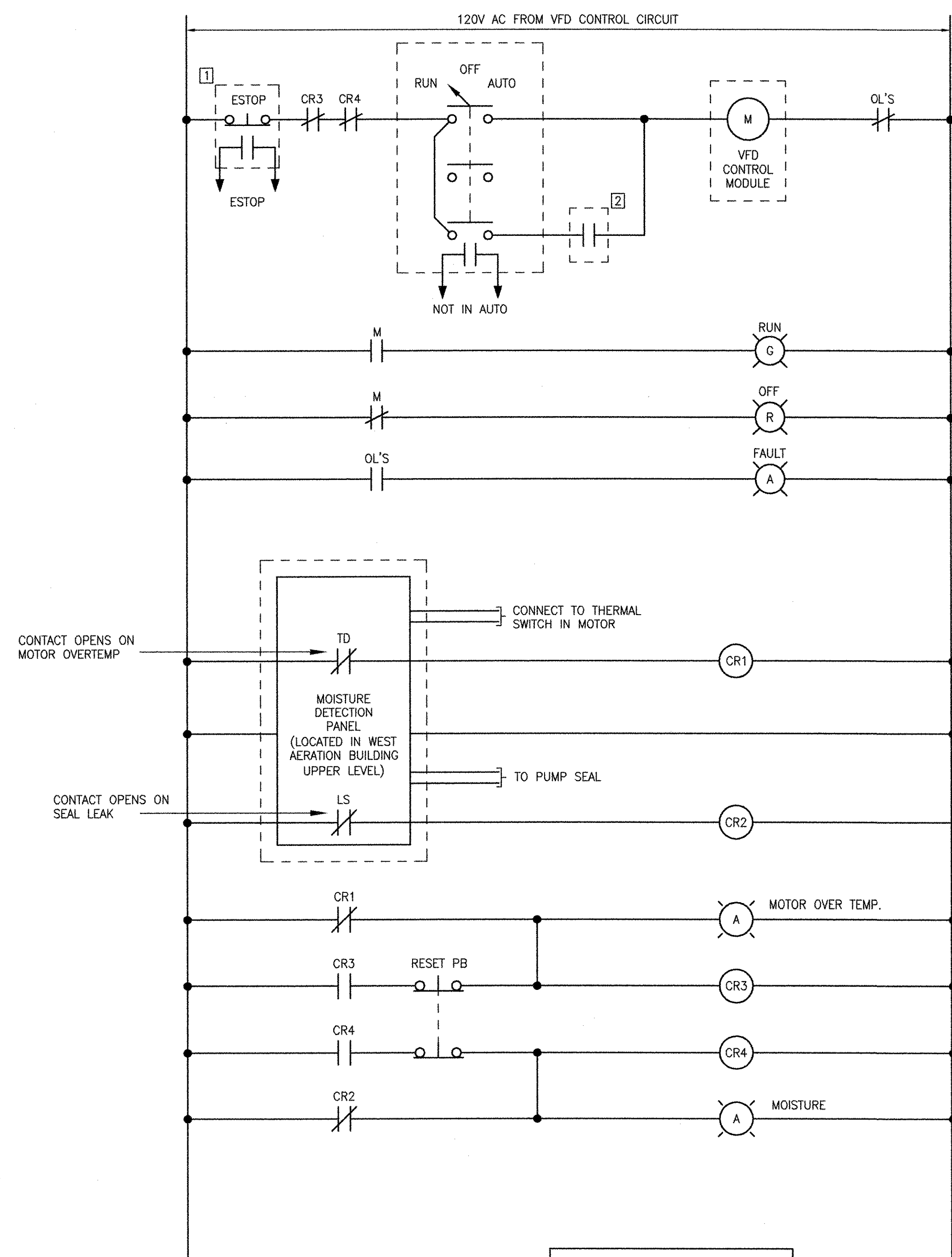
1

2

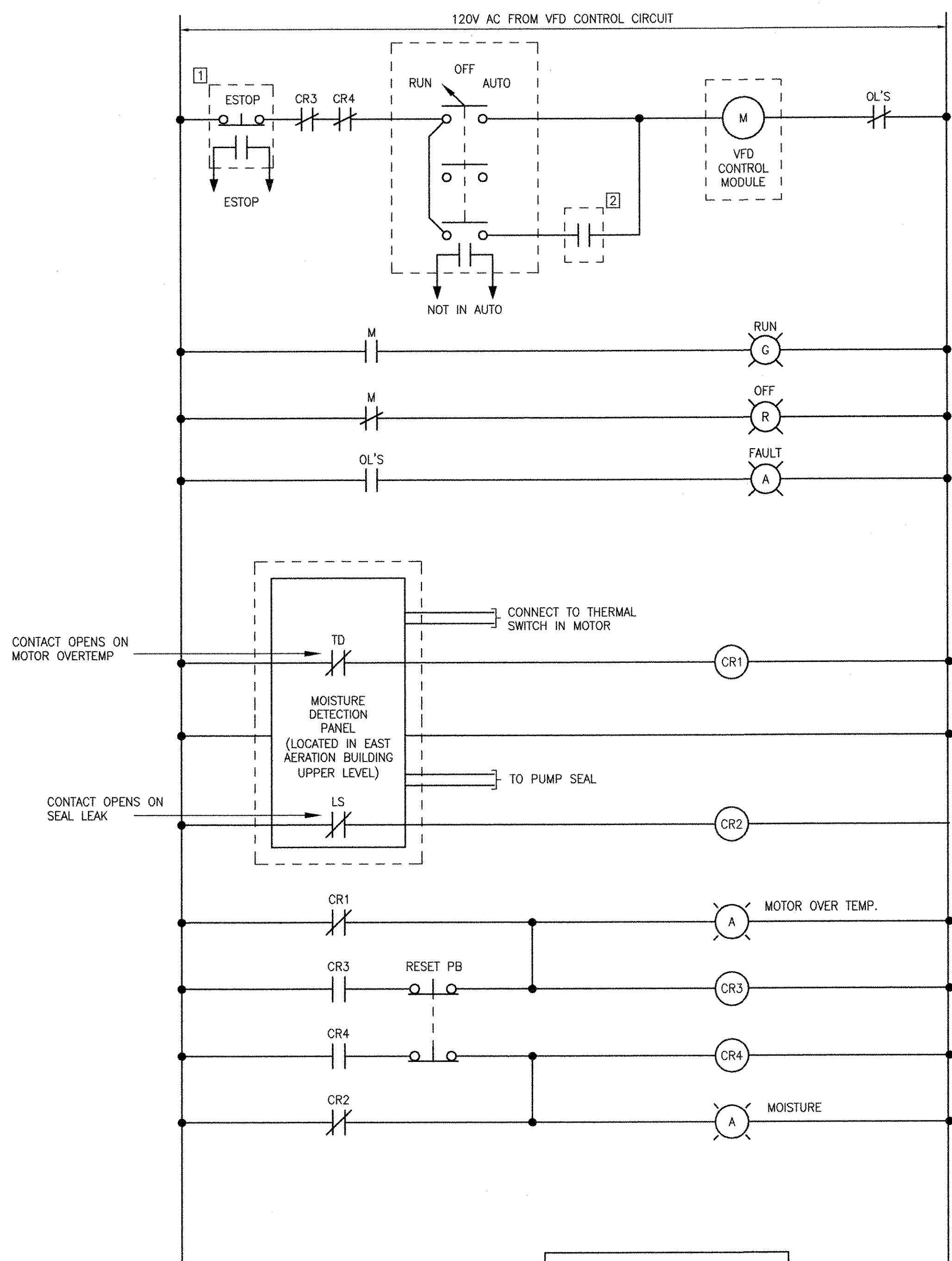
3

4

5



**RECIRCULATION PUMP 31-AT.REC.P-1
VFD WIRING DIAGRAM**
(TYPICAL FOR 31-AT.REC.P-2)
(ALL COMPONENTS LOCATED AT VFD UNLESS OTHERWISE NOTED)



**RECIRCULATION PUMP 31-AT.REC.P-3
VFD WIRING DIAGRAM**
(TYPICAL FOR 31-AT.REC.P-4)
(ALL COMPONENTS LOCATED AT VFD UNLESS OTHERWISE NOTED)

- LEGEND:**
- 1 LOCATED AT EQUIPMENT
 - 2 FROM WEST AERATION PLC (CP-11)
 - 3 FROM EAST AERATION PLC (CP-12)

MARK	DATE	MS	YR	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM
AECOM USA, INC.
100 WASHINGTON ST.
WAKEFIELD, MA 01880
PHONE (781) 246-5200

RECORD DRAWINGS

YASSER RIZK
No. 9430
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

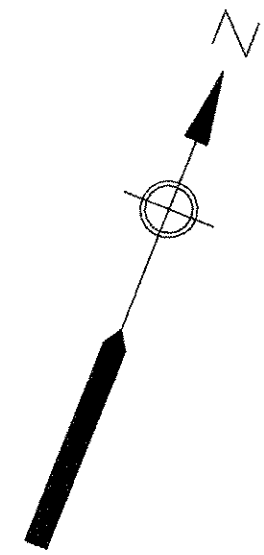
CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3
**AERATION TANKS
WIRING DIAGRAMS**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	31 E-604
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

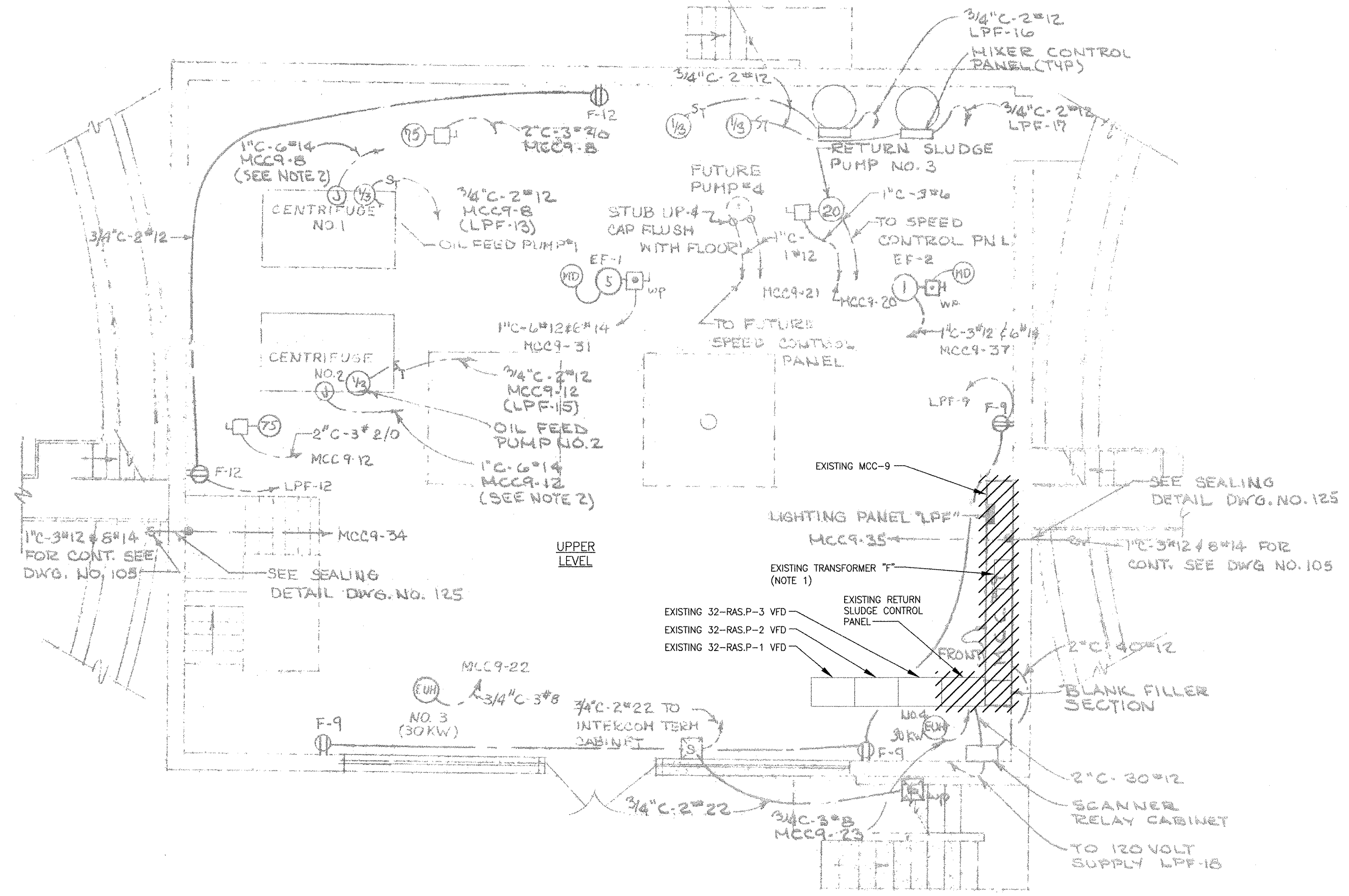
31 E-604

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DEP\CP-3\SHEETS\31 E-604.DWG
LAST UPDATE: Monday, October 01, 2012 8:00:17 AM
PLOT DATE: Thursday, October 25, 2012 9:06:55 AM
ANSI D - 1-10-12

RECORD DRAWING
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



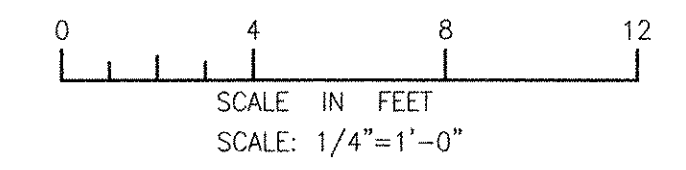
- NOTES:**
- DEMOLISH EXISTING TRANSFORMER LOCATED ABOVE MCC-9.
 - EXISTING PANELBOARD "F" LOCATED WITHIN EXISTING MCC-9 TO BE DEMOLISHED. EXTEND WIRING FOR ASSOCIATED 208/120VAC LOADS TO NEW PANELBOARD 32-LP-1. PROVIDE NEW PANELBOARD WITH CIRCUIT BREAKERS FOR EACH EXISTING LOAD. CIRCUIT BREAKERS SHALL MATCH EXISTING TRIP SETTINGS.



RAS PUMP STATION AT EL. 14.0'
DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MS	YR	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM
RECORD DRAWINGS

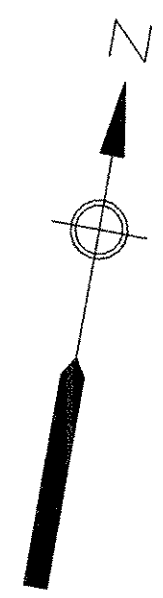
AECOM USA, INC.
100 WASHINGTON ST., SUITE 2000
WAKEFIELD, MA 01880
PHONE (781) 246-5200

YASSER A. RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 9430
Exp. 12/31/12

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3
**RAS PUMP STATION UPPER LEVEL
DEMOLITION**
ELECTRICAL

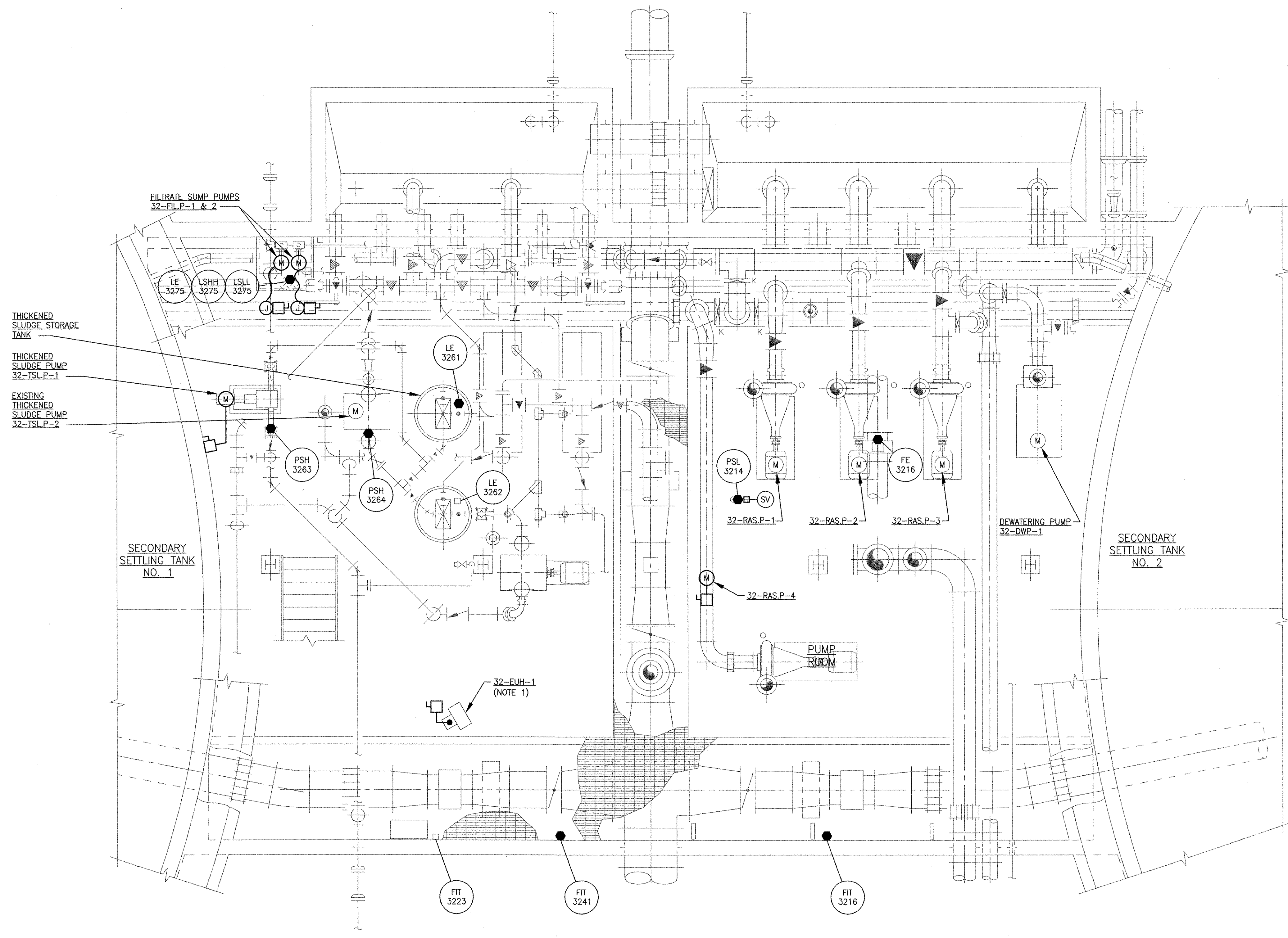
PROJECT NO:	60148648
CAD DWG FILE:	32 ED-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 ED-101



NOTES

- EXISTING ELECTRIC UNIT HEATER EUH-1 TO BE REPLACED WITH 32-EUH-1. UTILIZE EXISTING WIRING FOR NEW UNIT HEATER.

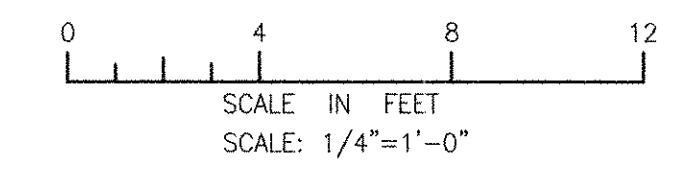


**RAS PUMP STATION BUILDING PLAN AT ELEV. 3.33
MODIFICATIONS PLAN**

SCALE: 1/4" = 1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



ANSI D - 25-Oct-12
 PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-3\SHEETS\32 E-101.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:19:56 AM
 PLOT DATE: Thursday, October 25, 2012 10:20:05 AM

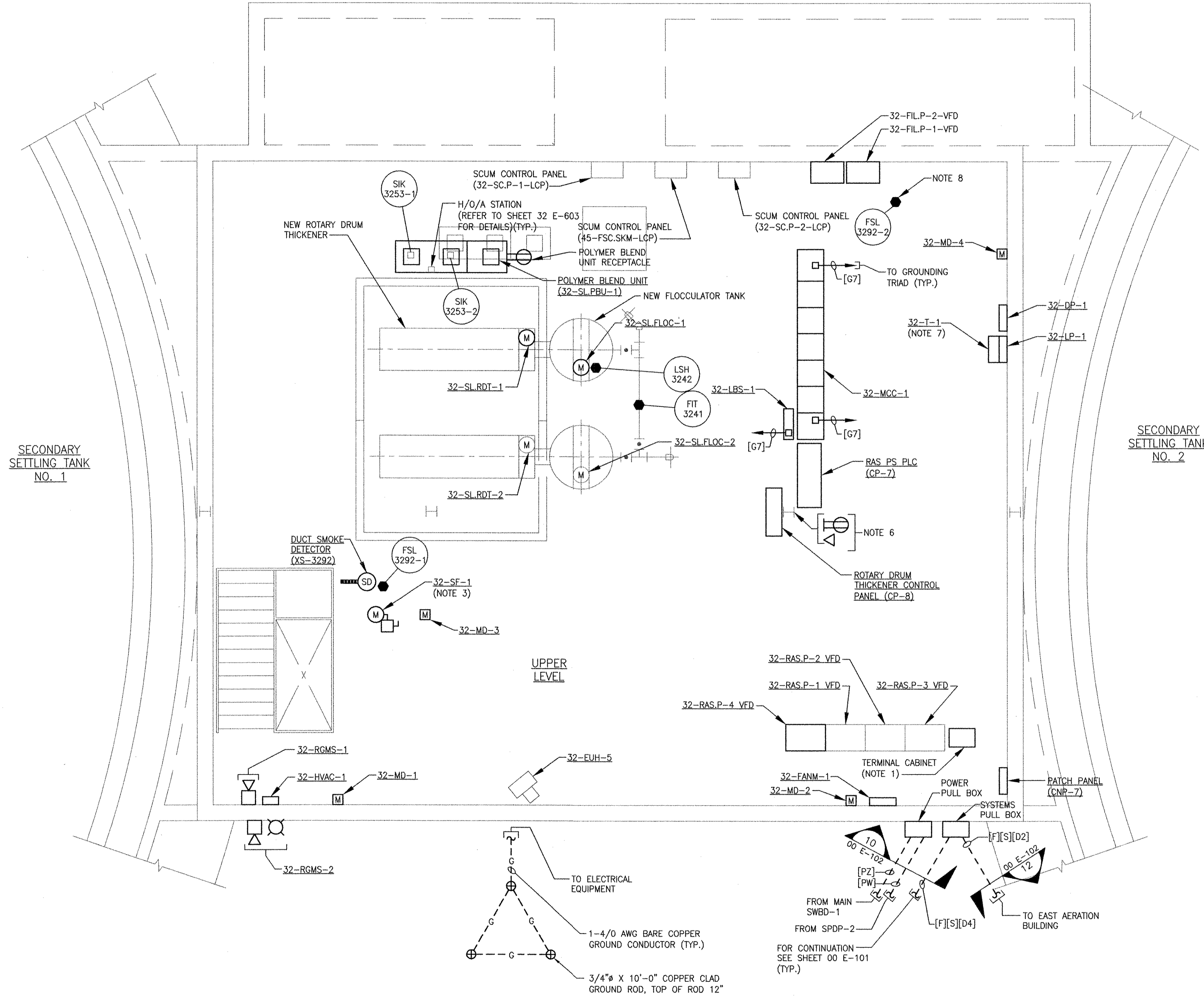
MARK	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	MS	DA	REVISED FOR RECORD DRAWING
1	5/16/11	DA	DA	FILTRATE PUMP REVISIONS

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

YASSER RIZK
 No. 95
 08-20-2009
 94-30
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

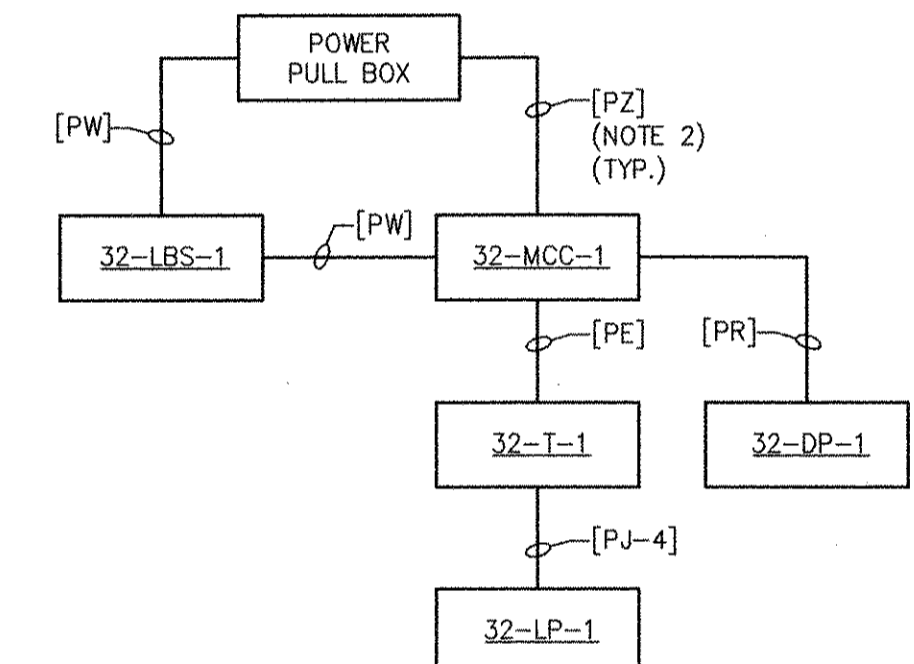
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**RAS PUMP STATION LOWER LEVEL
 MODIFICATIONS**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	32 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED
32 E-101	



**RAS PUMP STATION BUILDING PLAN AT ELEV. 14.00
MODIFICATIONS PLAN**
SCALE: 1/4" = 1'-0"

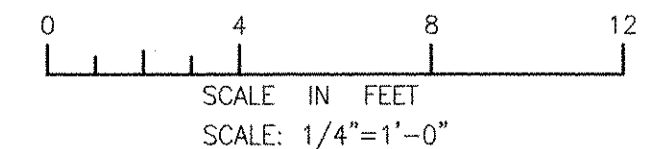
- NOTES:**
1. PROVIDE TERMINAL BOX WHERE INDICATED. TERMINATE EXISTING CONTROL/SIGNAL WIRING ON TERMINAL STRIPS AND EXTEND TO NEW RAS PUMP STATION PLC (CP-7) AS NEEDED.
 2. ROUTE CONDUITS ALONG CEILING IN THE LOWER LEVEL.
 3. EQUIPMENT MOUNTED ON ROOF.
 4. NOT USED
 5. PROVIDE TERMINAL BOXES WHERE REQUIRED TO INTERCEPT EXISTING CONDUIT AND WIRE BETWEEN EXISTING LOADS AND EXISTING MCC-9. TERMINATE EXISTING WIRING ON TERMINAL STRIPS AND EXTEND TO NEW MOTOR CONTROL CENTER 32-MCC-1. TRANSFER LOADS ONE AT A TIME. DEMOLISH EXISTING MCC ONCE ALL LOADS HAVE BEEN TRANSFERRED.
 6. PROVIDE A DATA CONNECTION AND 120V DUPLEX RECEPTACLE WHERE INDICATED FOR A NEW COMPUTER WORKSTATION. ROUTE A [C] CONDUIT BETWEEN DATA OUTLET AND CONTROL PANEL CP-7. ROUTE A [PA] CONDUIT BETWEEN DUPLEX RECEPTACLE AND PANELBOARD 32-LP-1.
 7. MOUNT TRANSFORMER 32-T-1 ABOVE PANELBOARD 32-LP-1.
 8. FLOW SWITCH LOCATED IN DUCT. REFER TO HVAC DRAWINGS FOR DETAILS.



**RAS PUMP STATION
POWER DISTRIBUTION
RISER DIAGRAM**

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	BY	DESCRIPTION
3	10/19/12	MS	REVISED FOR RECORD DRAWING
	8/9/11	DA	GAS MONITORING SYSTEM REVISIONS
	5/16/11	DA	FILTRATE PUMP REVISIONS
		MMR	MADE BY CHECKED
			REVISIONS

AECOM
AECOM USA, INC. ONE WAKEFIELD WAY, 01880 WAKEFIELD, MA 01880
PHONE (781) 246-5200

RECORD DRAWINGS

REGISTERED PROFESSIONAL ENGINEER ELECTRICAL
No. 9500
YASSER RIZK
9430

**CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3
RAS PUMP STATION UPPER LEVEL
MODIFICATIONS
ELECTRICAL**

PROJECT NO:	60148648
CAD DWG FILE:	32 E-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 E-102

PATH: \\F:\E\60148648 - EAST PROVIDENCE (DPO) DP-3\3\SHEETS\32 E-102.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:20:29 AM
 PLOT DATE: Thursday, October 25, 2012 10:20:38 AM
 ANSI D - 25-Oct-12

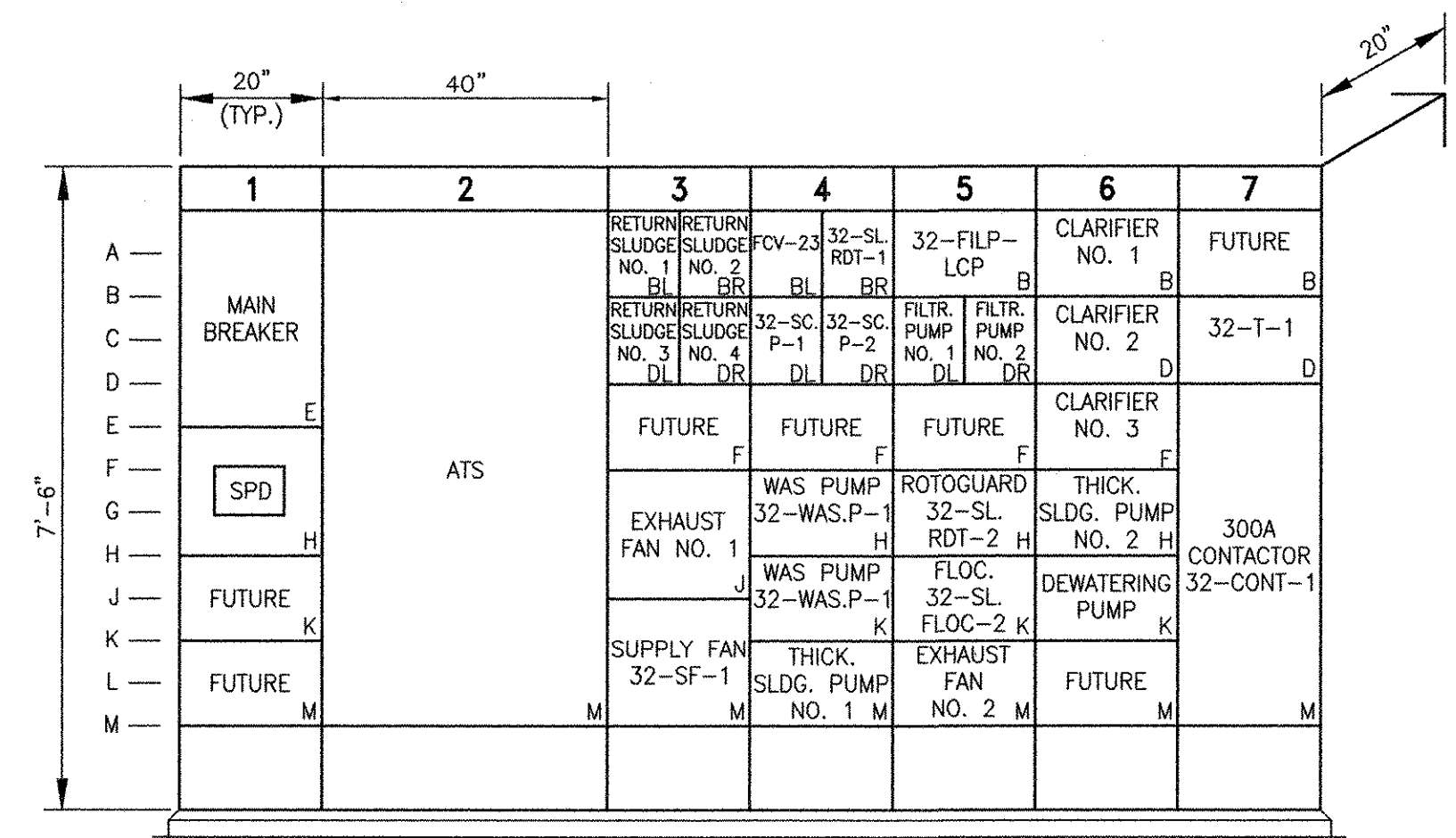
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DRB\DRP-3\SHEETS\32 E-601.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:21:03 AM
 PLOT DATE: Thursday, October 25, 2012 10:21:12 AM

ANSI D - 25-Oct-12

32-MCC-1 - LOAD SCHEDULE						
MAIN: 800 AMPS CB			LOCATION: RAS PUMP STATION			
ATS: 800 AMPS, 3 PH, 3 WIRE			ENCLOSURE: NEMA 12			
						SPD
CKT WIRING	EQUIPMENT DESCRIPTION (I & C LOOP)	EQPT RATING	MCC DEVICES			SEE NOTES
			CONTACTOR SIZE	STARTER TYPE	PILOT CONTROL DEVICE	
PJ	RETURN SLUDGE VFD (32-RAS.P-1)	50 HP	-	-	-	100A 1
PJ	RETURN SLUDGE VFD (32-RAS.P-2)	50 HP	-	-	-	100A 1
PJ	RETURN SLUDGE VFD (32-RAS.P-3)	50 HP	-	-	-	100A 1
PJ	RETURN SLUDGE VFD (32-RAS.P-4)	50 HP	-	-	-	100A 2
PC	DEWATERING PUMP (32-DW.P-1)	15 HP	2	FVNR	HOA	- 1
PB	FCV-23	1/2 HP	-	-	-	20A 1
PB	SCUM PUMP (32-SC.P-1)	2 HP	-	-	-	20A 1
PB	SCUM PUMP (32-SC.P-2)	2 HP	-	-	-	20A 1
PB	WAS PUMP (32-WAS.P-1)	5 HP	1	FVNR	HOA	- 1
PB	WAS PUMP (32-WAS.P-2)	5 HP	1	FVNR	HOA	- 1
PB	THICKENED SLUDGE PUMP (32-TSL.P-2)	10 HP	1	FVNR	HOA	- 1
PB	EXHAUST FAN NO. 1 (32-EF-1)	5 HP	1	FVNR	HOA	- 1
PB	ROTO GUARD (32-SL.RDT-2)	5 HP	1	FVNR	HOA	- 1
PB	FLOC TANK (32-SL.FLOC-2)	1 HP	1	FVNR	HOA	- 1
PB	EXHAUST FAN NO. 2 (32-EF-2)	1 HP	1	FVNR	HOA	- 1
PB	CLARIFIER NO. 1 (45-FSC.CLR-1)	1/2 HP	1	FVNR	HOA	- 1
PB	CLARIFIER NO. 2 (45-FSC.CLR-2)	1/2 HP	1	FVNR	HOA	- 1
PB	CLARIFIER NO. 3 (45-FSC.CLR-3)	1/2 HP	1	FVNR	HOA	- 1
PB	FILTRATE PUMP NO. 1 (32-FIL.P-1)	2 HP	-	-	-	20A 2
PB	FILTRATE PUMP NO. 2 (32-FIL.P-2)	2 HP	-	-	-	20A 2
PB	ROTARY DRUM THICKENER (32-SL.RDT-1)	1 HP	-	-	-	20A 2
PB	THICKENED SLUDGE PUMP (32-TSL.P-1)	5 HP	1	FVNR	HOA	- 2
PB	SUPPLY FAN (32-SF-1)	1 1/2 HP	1	FVNR	HOA	- 2
PF	TRANSFORMER 32-T-1 (TO 32-LP-1)	30 KVA	-	-	-	60A 2
PR	CONTACTOR 32-CONT-1 (TO 32-DP-1) *	300A	6	-	-	- 2

NOTES
 1. EXISTING EQUIPMENT
 2. NEW EQUIPMENT

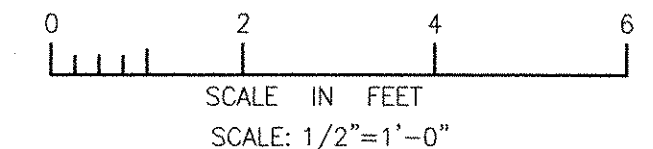
* CONTACTOR 32-CONT-1 FEEDS DISTRIBUTION PANELBOARD 32-DP-1. A NORMALLY CLOSED CONTACT FROM THE ATS SHALL OPEN THE CONTACTOR AND DISCONNECT POWER TO 32-DP-1 DURING STANDBY GENERATOR POWER.



32-MCC-1 ELEVATION
 SCALE: 1/2"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY	CHECKED	REVISIONS
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	5/16/11	DA	YR	FILTRATE PUMP REVISIONS

AECOM USA, INC.
 100 WASHINGTON STREET
 WAKEFIELD, MA 01880
 PHONE (781) 246-5000

AECOM

RECORD DRAWINGS

YASSER RIZK
 No. 25
 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3

**RAS PUMP STATION - 32-MCC-1
 SCHEDULE AND ELEVATION**

ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	32 E-601
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

32 E-601

SERVICE: 480V, 3PH, 3W, 60HZ MAIN CIRCUIT BREAKER: 300A FRAME, 300A TRIP FED FROM: 32-MCC-1 (32-CONT-1)		PANELBOARD "32-DP-1"										SHORT CIRCUIT BRACING: 65,000 AMPS CABINET: SURFACE MOUNTED		
LOCATION	SEE NOTES	CKT WIRING	HP	KVA	CIR. NO.	GROUND BUS			CIR. NO.	KVA	HP	CKT WIRING	SEE NOTES	LOCATION
						A	B	C						
UNIT HEATER NO. 1 (32-EUH-1)	2	[PE]	-	30.0	1	50A			2	30.0	-	[PE]	1	UNIT HEATER NO. 2 (32-EUH-2)
UNIT HEATER NO. 3 (32-EUH-3)	2	[PE]	-	30.0	3	50A			4	30.0	-	[PE]	1	UNIT HEATER NO. 4 (32-EUH-4)
32-EUH-5	2	[PF]	-	35.0	5	60A			6	-	-	-	-	SPACE
SPACE	-	-	-	-	7				8	-	-	-	-	SPACE
SPACE	-	-	-	-	9				10	-	-	-	-	SPACE
SPACE	-	-	-	-	11				12	-	-	-	-	SPACE
SPACE	-	-	-	-	13				14	-	-	-	-	SPACE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)
TOTAL CONNECTED LOAD: 155.0 KVA
PANEL LOCATION: RAS PUMP STATION UPPER LEVEL

SERVICE: 208/120V, 3PH, 4W, 60HZ MAIN CIRCUIT BREAKER: 100A FRAME, 100A TRIP FED FROM: 32-T-1 (32-MCC-1)		PANELBOARD "32-LP-1"										SHORT CIRCUIT BRACING: 10,000 AMPS CABINET: SURFACE MOUNTED						
LOCATION	SEE NOTES	CKT WIRING	HP	KVA A	KVA B	KVA C	CIR. NO.	GROUND BUS			CIR. NO.	KVA A	KVA B	KVA C	HP	CKT WIRING	SEE NOTES	LOCATION
								NEUTRAL										
								A	B	C								
FIRE ALARM	2	[PA]	-	.60	-	-	1				2	-	-	-	-	-	-	LIGHTS/RECEPTACLE - CLARIFIER 2
CP-7	2	[PA]	-	.60	-	-	3				4	-	-	-	-	-	-	HOT WATER HEATER
RECEPTACLE - NORTH WALL	-	-	-	-	-	-	5				6	-	-	-	-	-	-	LIGHTS/RECEPTACLE - CLARIFIER 3
LIGHTS/RECEPTACLE - CLARIFIER 3	-	-	-	-	-	-	7				8	1.32	-	-	-	[PA]	2	EXISTING POLY BLEND UNIT
EXISTING TANK & GREASE PUMP	-	-	-	-	-	-	9				10	-	-	-	-	-	-	RECEPTACLE - POLY BLEND UNIT
RECEPTACLES - SOUTH WALL	-	-	-	-	-	-	11				12	-	-	-	-	-	-	LIGHTING - LOWER LEVEL
LIGHTS/RECEPTACLE - CLARIFIER 1	-	-	-	-	-	-	13				14	-	-	-	-	-	-	LIGHTING - UPPER LEVEL
HVAC PANEL	-	-	-	-	-	-	15				16	-	-	-	-	-	-	MGMS
FLOW METER EXISTING	-	-	-	-	-	-	17				18	-	-	-	-	-	-	RECEPTACLES - LOWER LEVEL
DATA RECEPTACLE	-	-	-	-	-	-	19				20	1.8	-	-	-	[PA]	2	CP-7
SPARE	-	-	-	-	-	-	21				22	-	-	-	-	-	-	EXISTING SEAL WATER CP
SPARE	-	-	-	-	-	-	23				24	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	25				26	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	27				28	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	29				30	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	31				32	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	33				34	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	35				36	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	37				38	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	39				40	-	-	-	-	-	-	SPARE
SPARE	-	-	-	-	-	-	41				42	-	-	-	-	-	-	SPARE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)
TOTAL CONNECTED LOAD: SEE NOTE 4
PANEL LOCATION: RAS PUMP STATION UPPER LEVEL

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

NOTES

- EXISTING EQUIPMENT
- NEW EQUIPMENT
- PROVIDE CIRCUIT BREAKERS TO FEED EXISTING EQUIPMENT. REFER TO NOTE 2 ON SHEET 32 ED-101 FOR FURTHER DETAILS.
- TOTAL CONNECTED LOAD TO BE DETERMINED DURING CONSTRUCTION ONCE EXISTING LOADS HAVE BEEN TRANSFERRED TO NEW PANELBOARD 32-LP-1.
- EXISTING LOADS TO BE VERIFIED AND SCHEDULED DURING CONSTRUCTION.

REVISIONS	DESCRIPTION	DATE	BY	CHECKED
1	MARK	10/19/12	MS	YR

AECOM

RECORD DRAWINGS

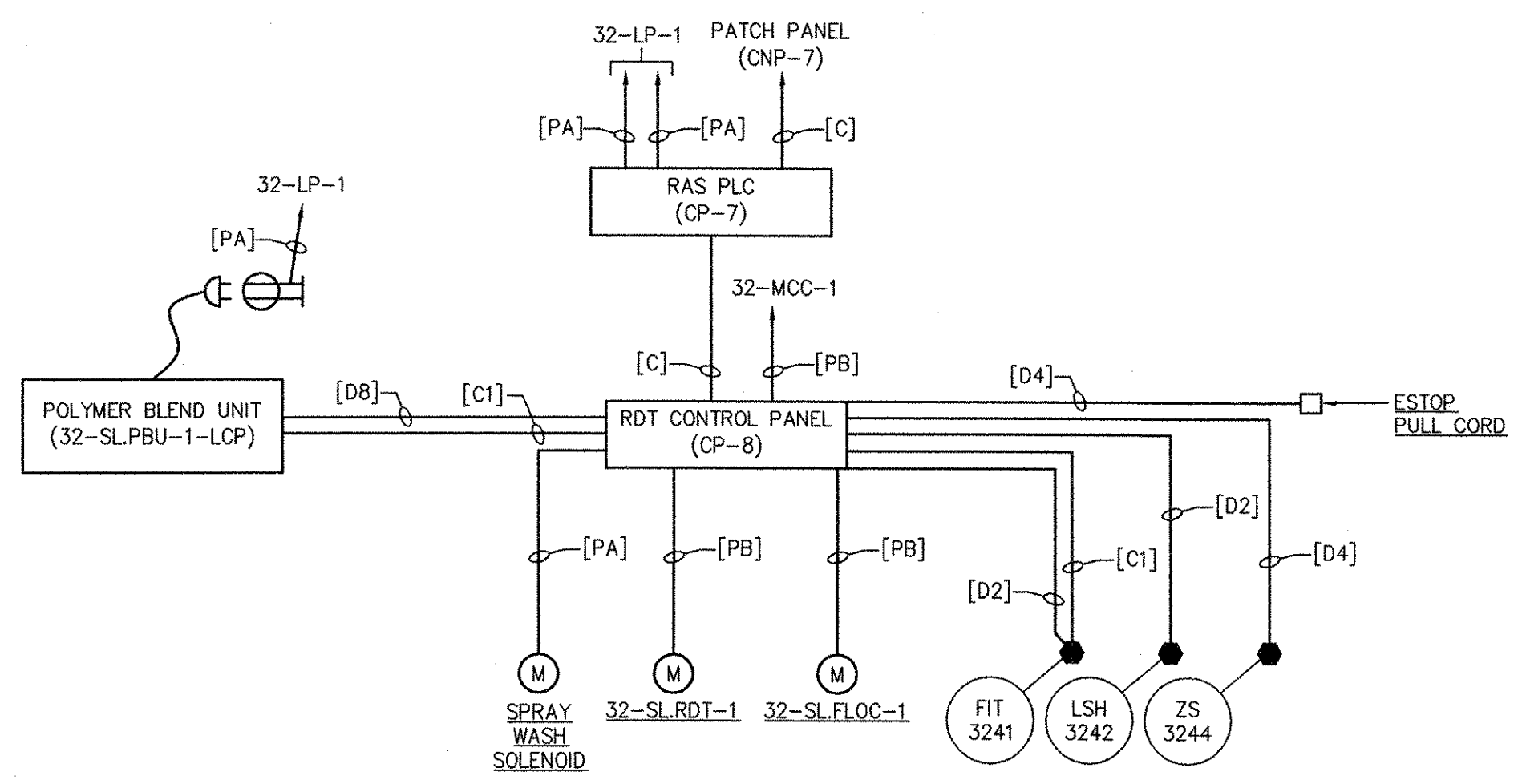
AECOM USA, INC.
100 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 95
Exp. 12/31/14
9430

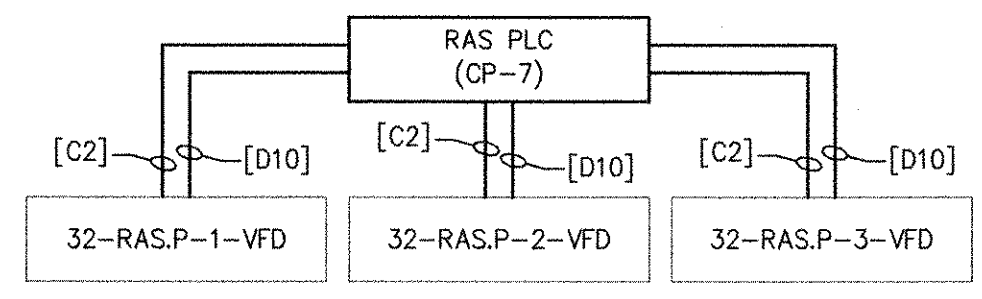
CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3
**RAS PUMP STATION
PANELBOARD SCHEDULES**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	32 E-602
DESIGNED BY:	D. ASPESI
DRAWN BY:	D. ASPESI
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED
32 E-602	

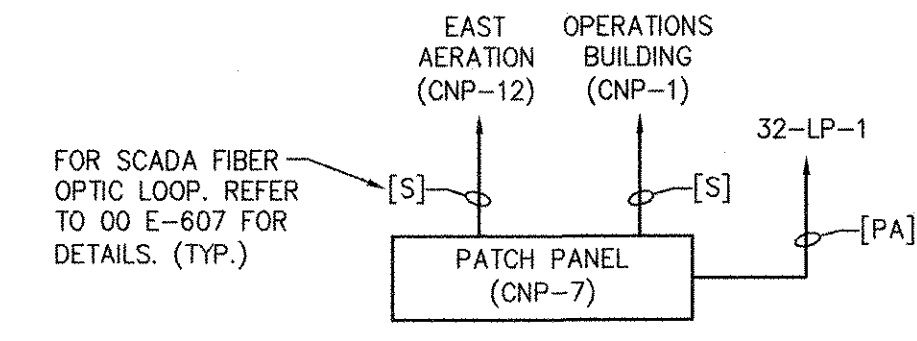
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP03-DP-3\SHEETS\32 E-602.DWG
 LAST UPDATE: Wednesday, October 03, 2012 1:05:57 PM
 PLOT DATE: Thursday, October 25, 2012 9:10:10 AM
 ANSI D - 3-10-12



**ROTARY DRUM THICKENER SYSTEM
RISER DIAGRAM**

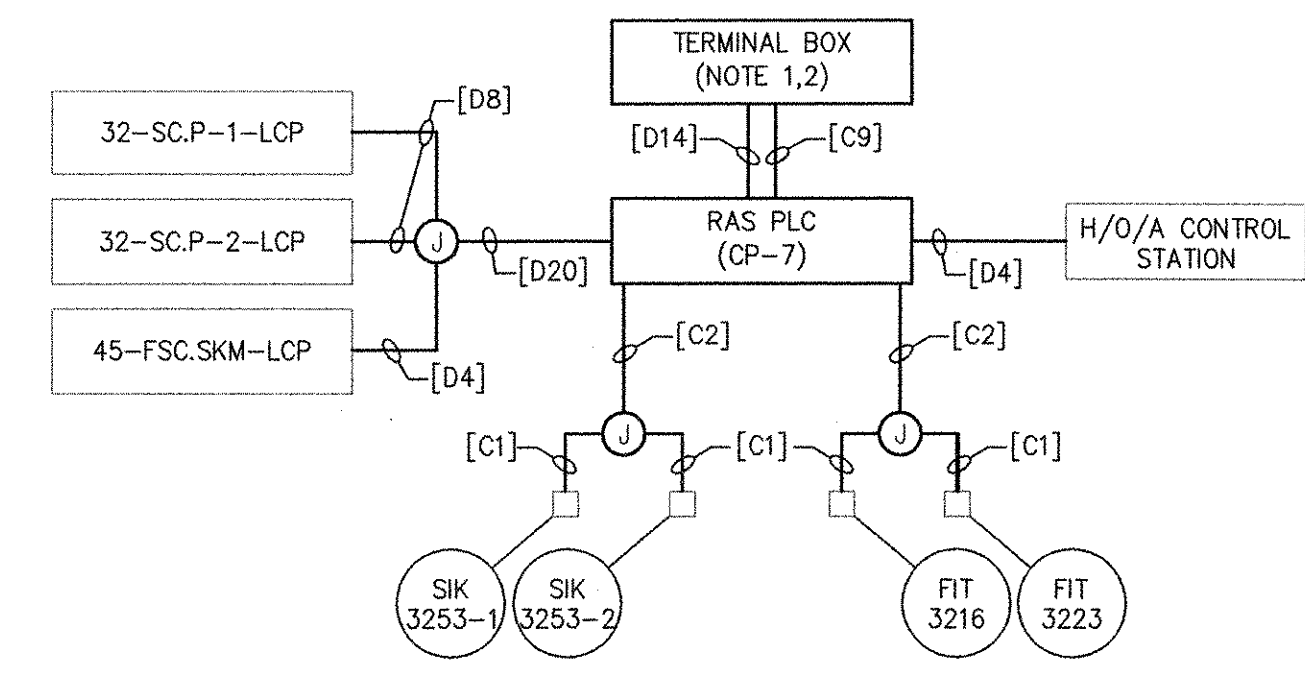


**EXISTING RETURN ACTIVATED SLUDGE VFD
RISER DIAGRAM**

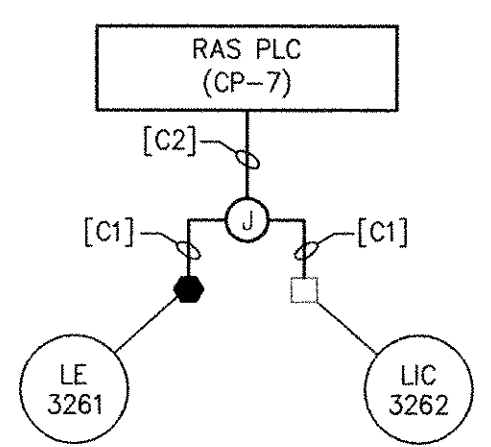


**PATCH PANEL CNP-7
RISER DIAGRAM**

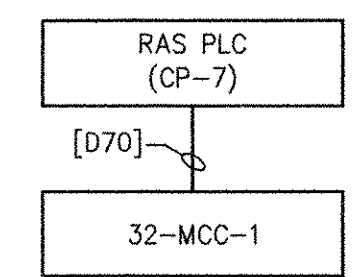
- NOTES**
- REFER TO SHEET 32 E-102 FOR TERMINAL BOX LOCATION AND DETAILS.
 - REFER TO INSTRUMENTATION DRAWINGS FOR SIGNALS WHICH SHALL BE EXTENDED TO THE RAS PLC (CP-7).



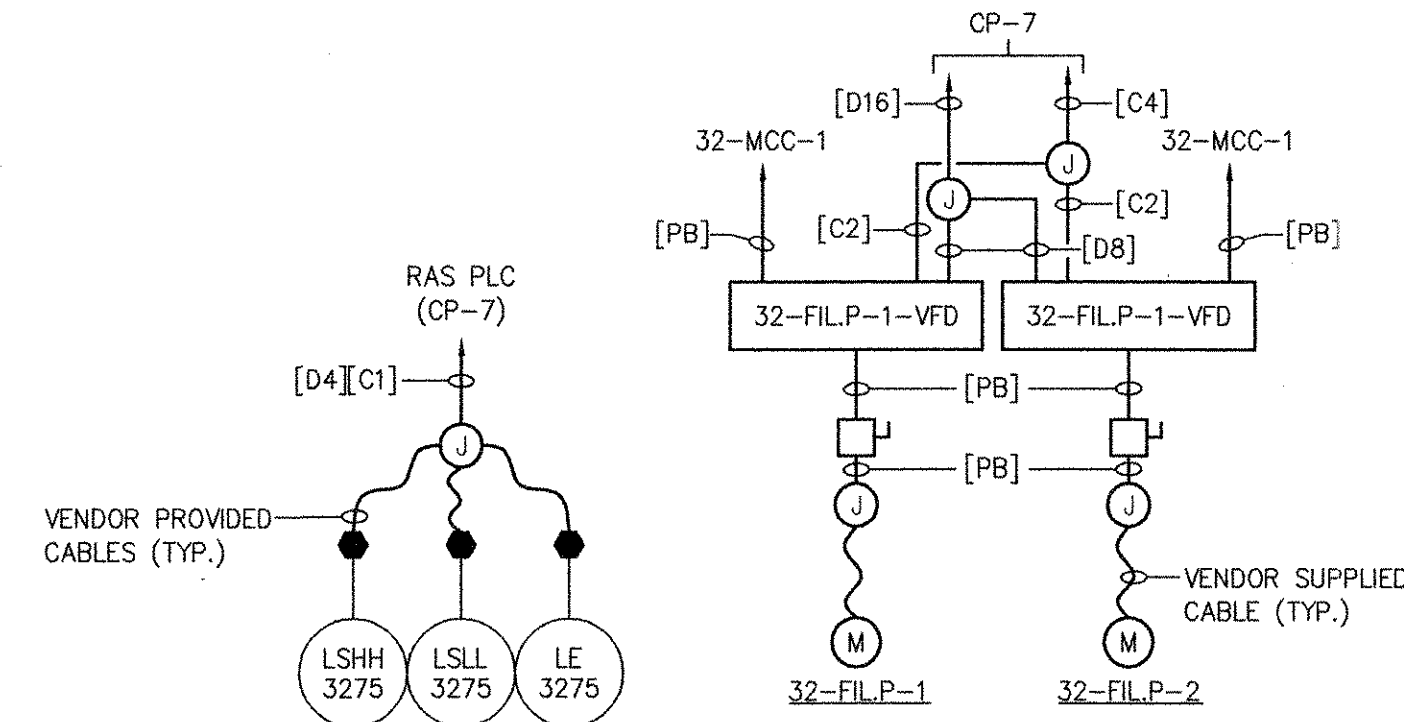
**MISC. SYSTEMS
RISER DIAGRAM**



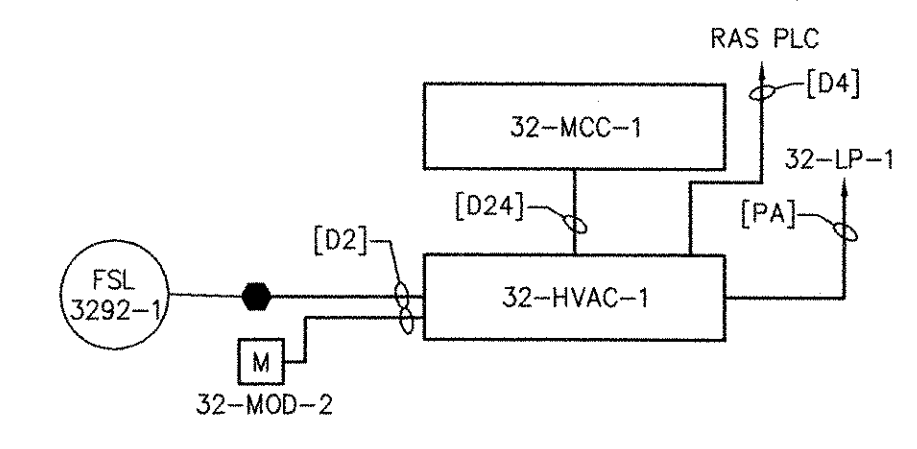
**THICKENED SLUDGE STORAGE TANKS
RISER DIAGRAM**



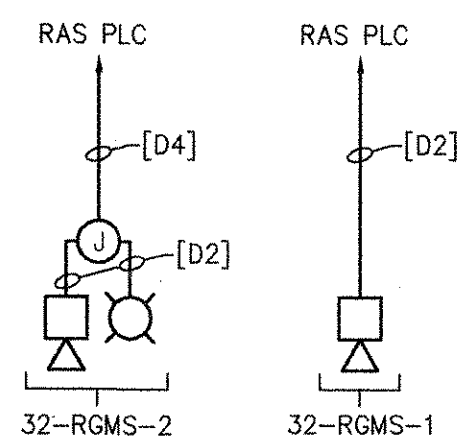
**MOTOR CONTROL CENTER 32-MCC-1
RISER DIAGRAM**



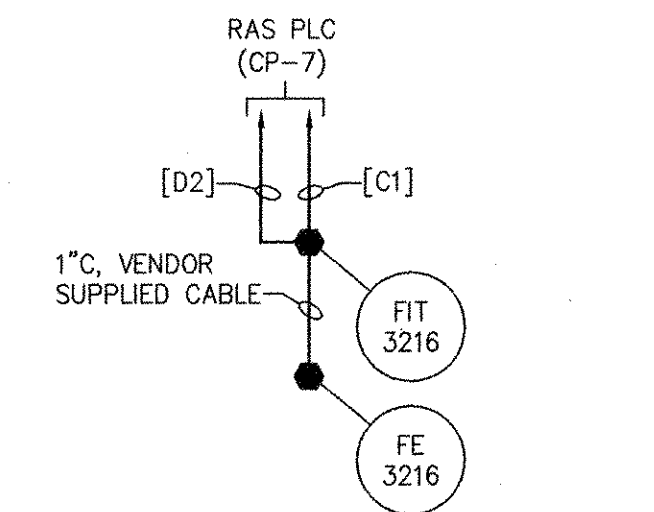
**FILTRATE PUMPS SYSTEM
RISER DIAGRAM**



**HVAC CONTROL PANEL 32-HVAC-1
RISER DIAGRAM**
(TYPICAL FOR 32-MOD-4 AND FSL-3292-2)



**RAS PUMP 32-RAS.P-4
RISER DIAGRAM**



**FLOW METER FE/FIT-3216
RISER DIAGRAM**

REVISIONS	DATE	MARK	MADE BY	CHECKED	DESCRIPTION
3	10/19/12	MS	YR	REVISOR	REVISED FOR RECORD DRAWING
2	8/9/11	DA	YR	REVISOR	REVISED GAS MONITORING SYSTEM
1	5/16/11	DA	YR	REVISOR	REVISED MIXER CONTROL PANELS

AECOM
RECORD DRAWINGS

AECOM USA, INC.
100 EAST WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

YASSIR ANBIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 05 9430
01/2012

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3
**RAS PUMP STATION
RISER DIAGRAMS**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	32 E-603
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

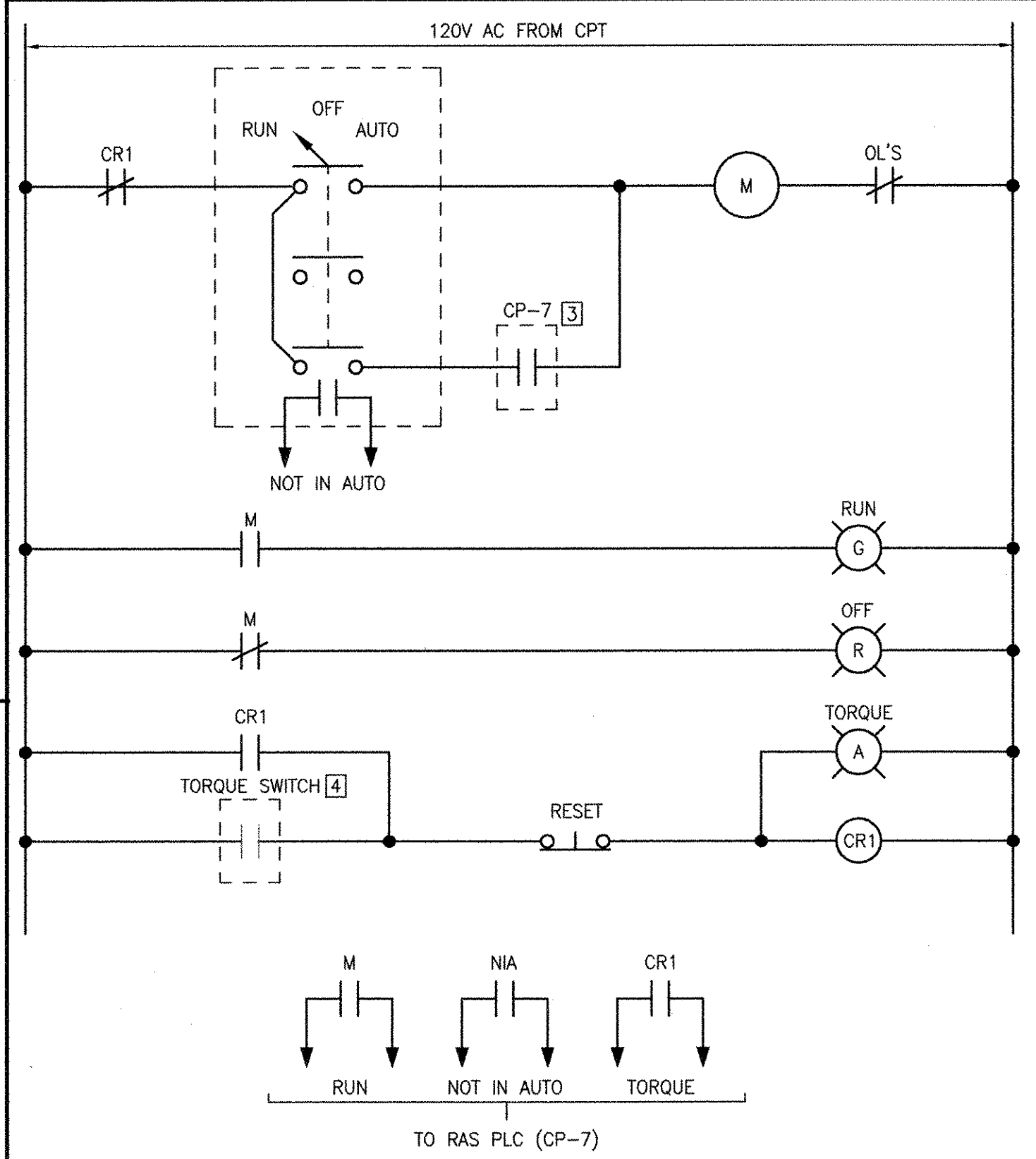
32 E-603

RECORD DRAWING

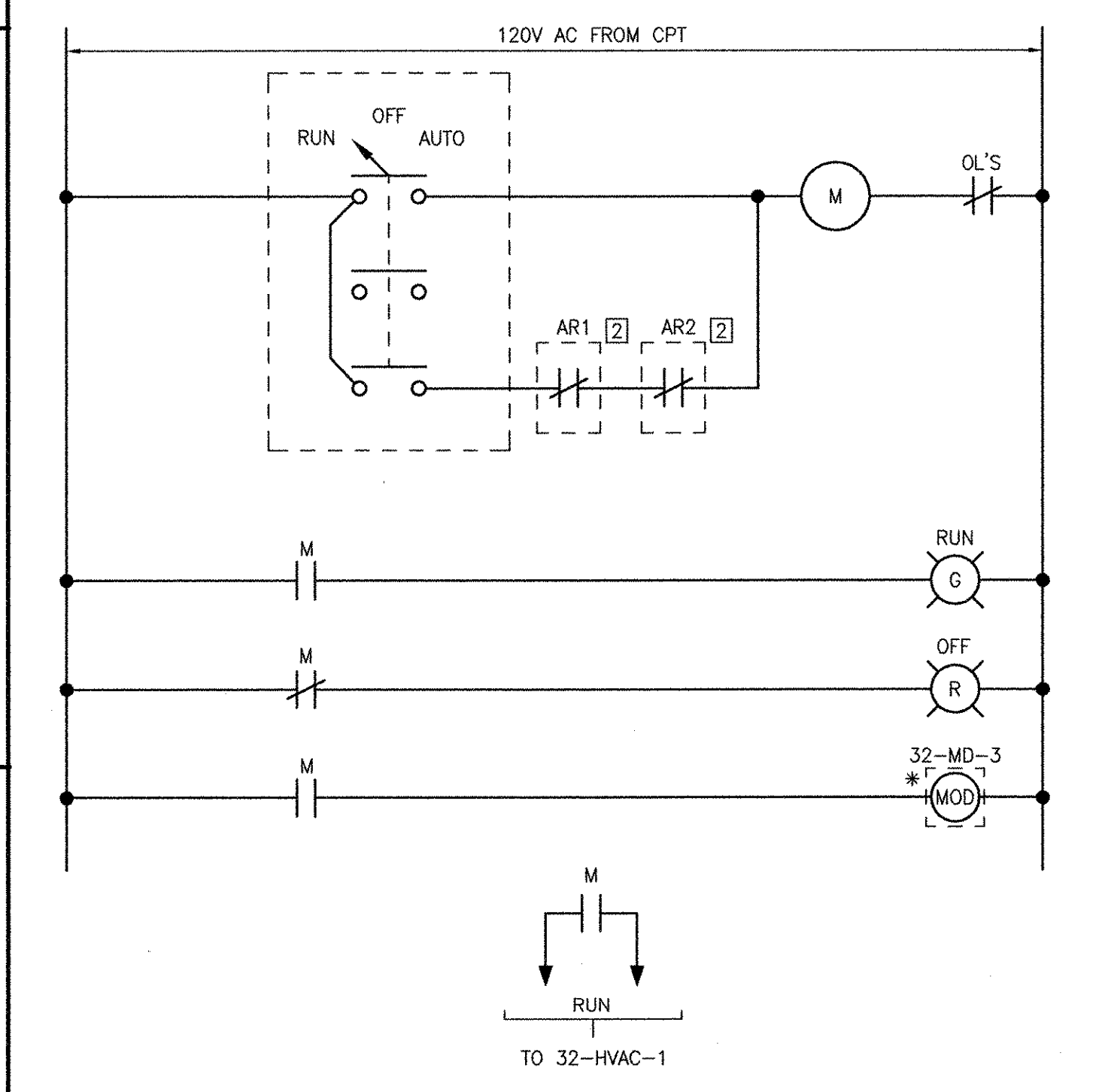
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP-3\32 E-603.DWG
LAST UPDATE: Thursday, October 25, 2012 10:19:20 AM
PLOT DATE: Thursday, October 25, 2012 10:19:30 AM
ANSI D - 25-Oct-12

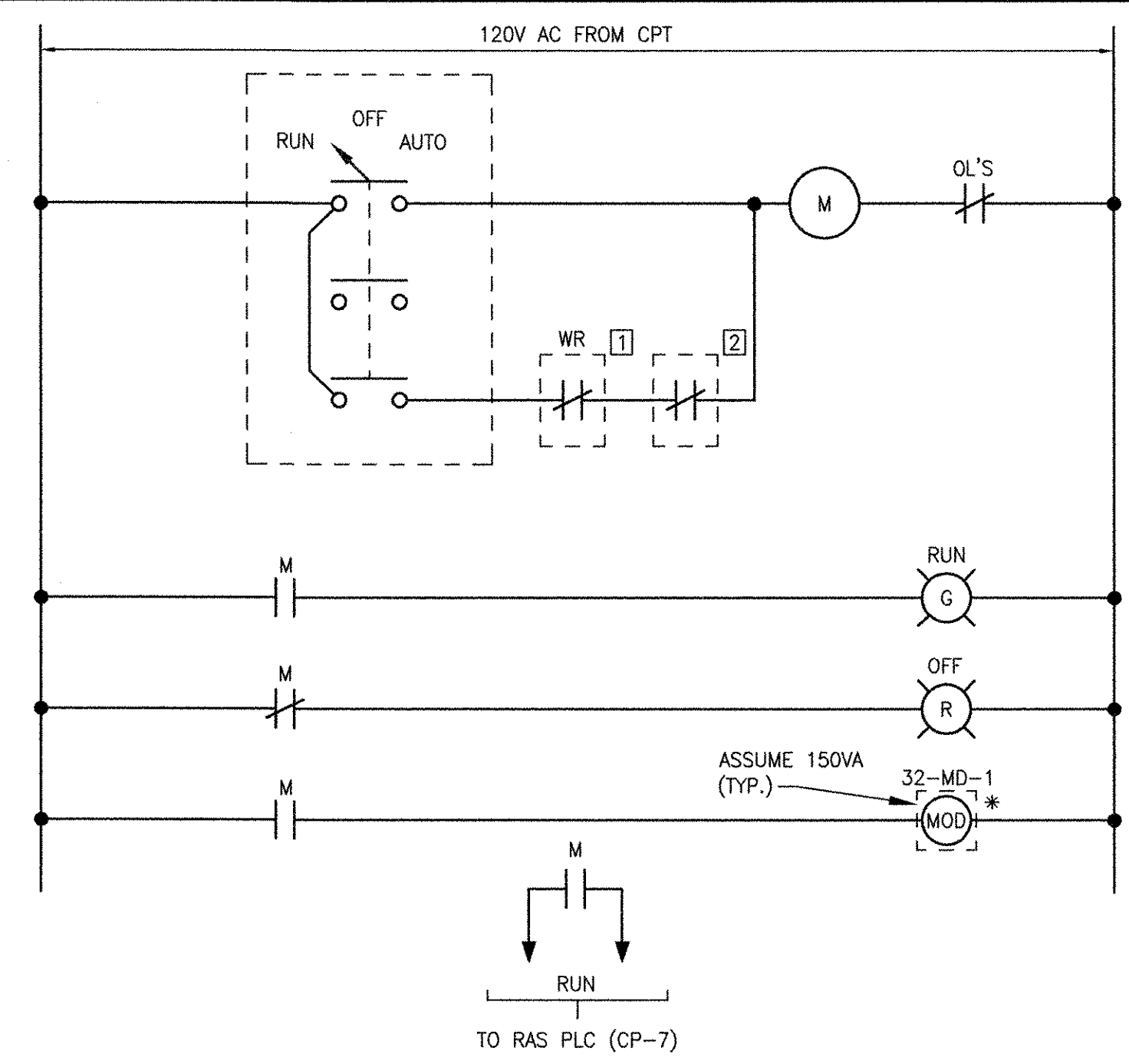
PATH/FILENAME: P:\6048648 - EAST PROVIDENCE DBO\DP-3\SHEETS\32 E-604.DWG
 LAST UPDATE: Monday, October 01, 2012 2:34:45 PM
 PLOT DATE: Thursday, October 25, 2012 9:10:14 AM
 ANSI D - 1-10-12



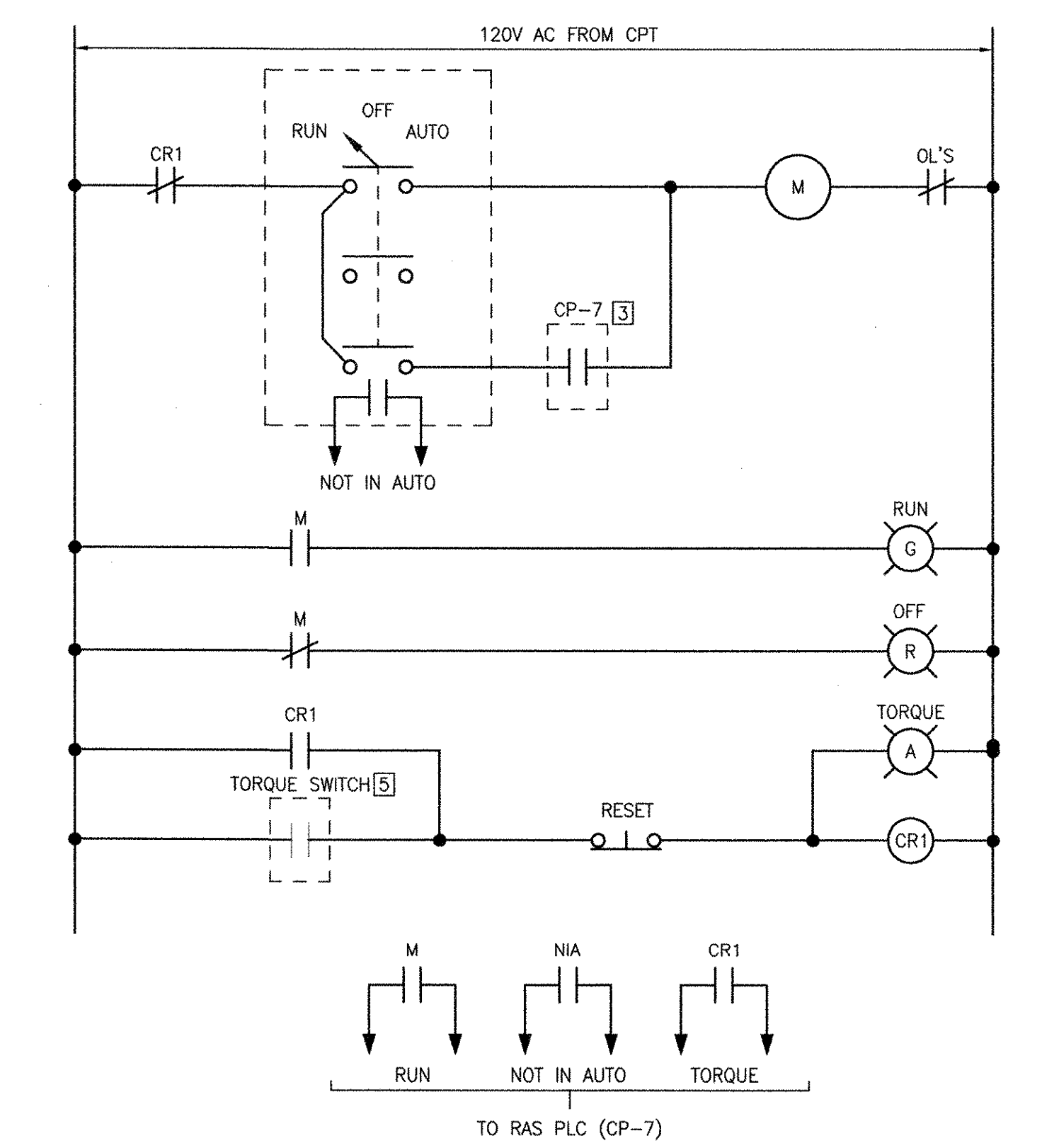
**SECONDARY CLARIFIER 45-FSC.CLR-1
 STARTER WIRING DIAGRAM**
 (TYPICAL FOR 45-FSC.CLR-2, 45-FSC.CLR-3)
 (ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



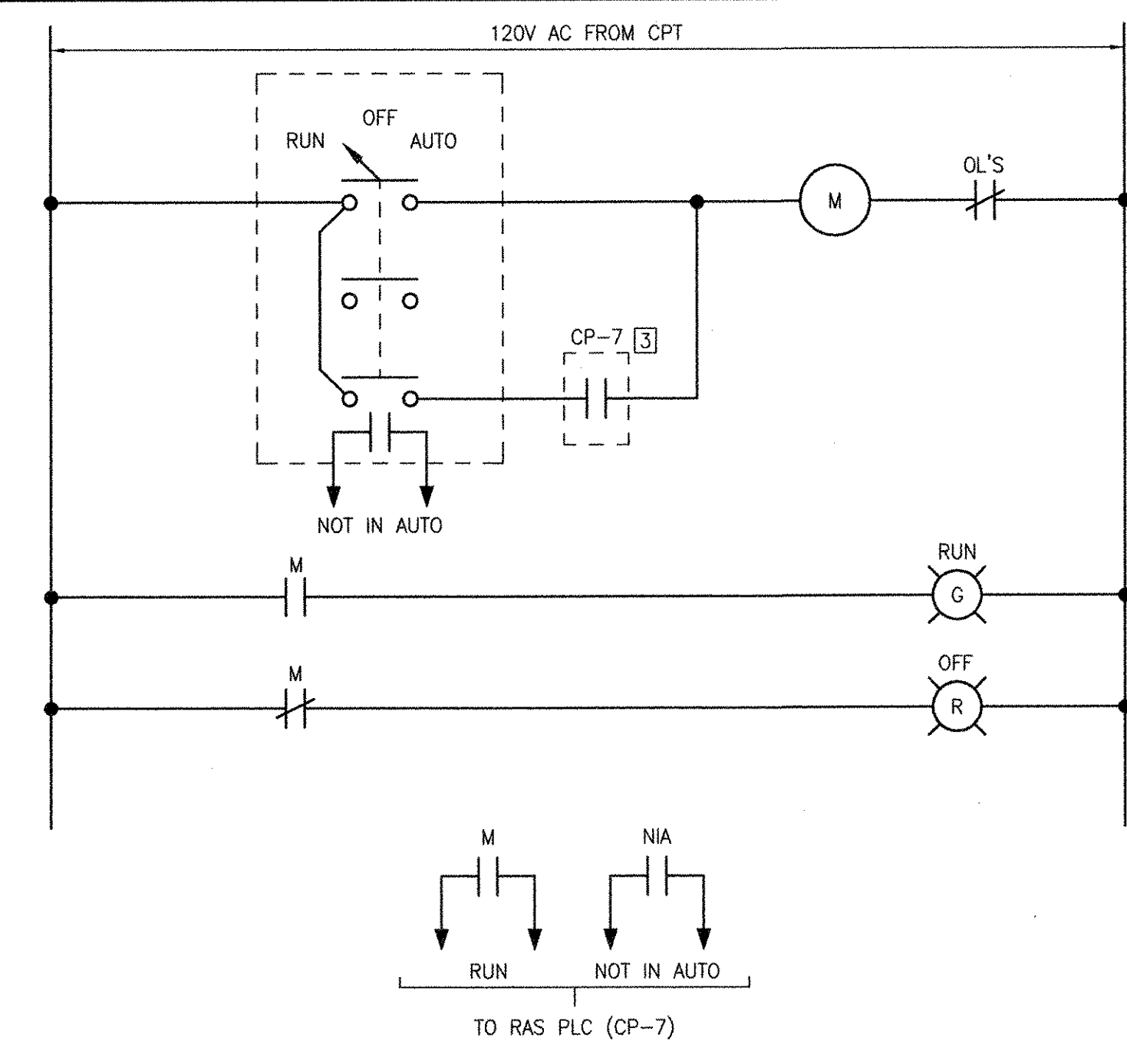
**SUPPLY FAN 32-SF-1
 STARTER WIRING DIAGRAM**
 (TYPICAL FOR EXHAUST FAN 32-EF-2 WITHOUT AN INTERLOCKING MOTORIZED DAMPER)
 (ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



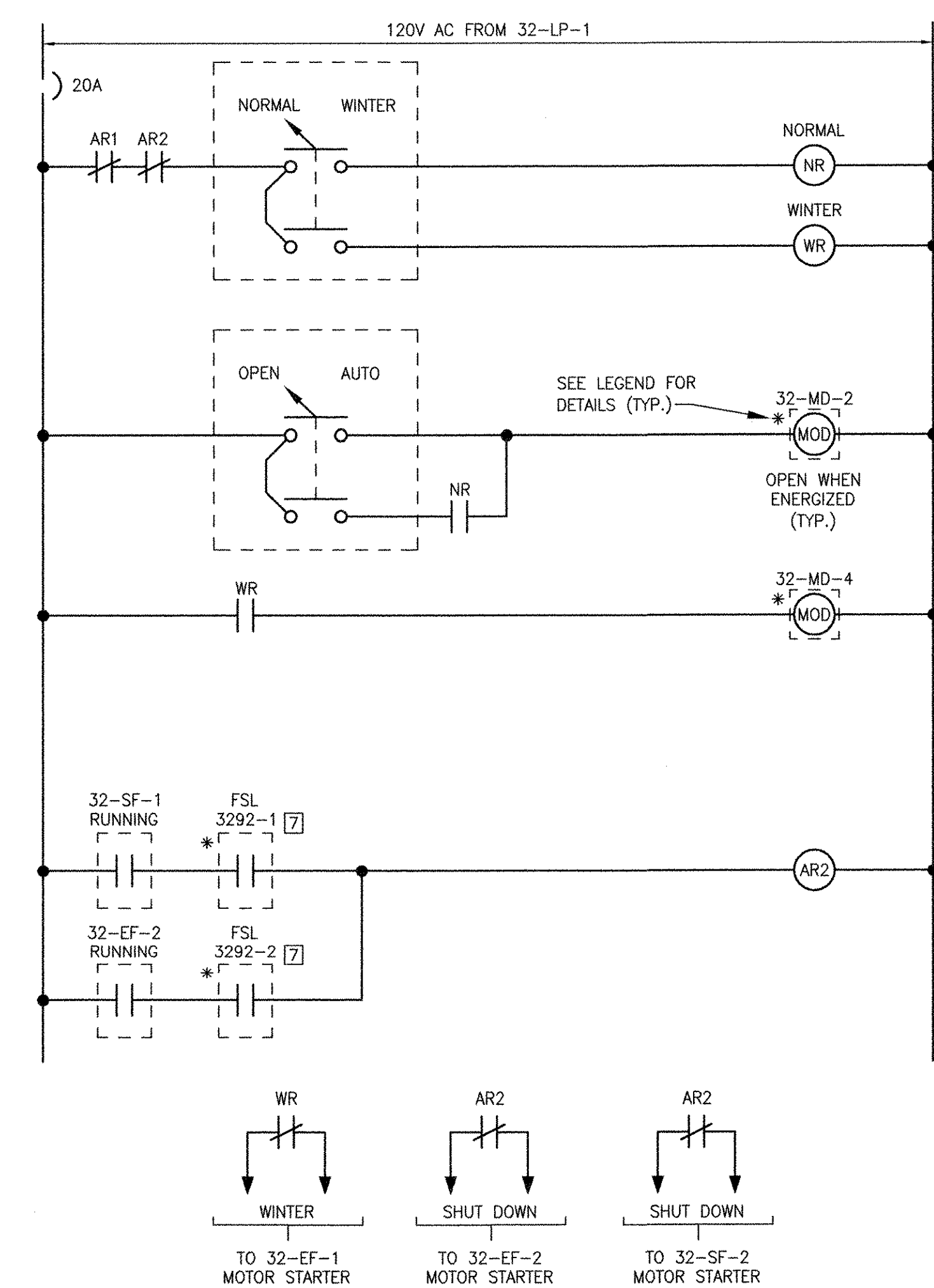
**EXHAUST FAN 32-EF-1
 STARTER WIRING DIAGRAM**
 (ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



**ROTARY DRUM THICKENER 32-SL.RDT-2
 STARTER WIRING DIAGRAM**
 (ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



**PROCESS EQUIPMENT
 STARTER WIRING DIAGRAM**
 (TYPICAL FOR 32-DW.P-1, 32-WAS.P-1, 32-WAS.P-2, 32-SL.FLOC-2)
 (ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



**HVAC CONTROL PANEL 32-HVAC-1
 WIRING DIAGRAM**

- LEGEND:**
- 1 FROM HVAC CONTROL PANEL 32-HVAC-1 (WINTER MODE)
 - 2 FROM HVAC CONTROL PANEL 32-HVAC-1 (SHUT DOWN)
 - 3 FROM RAS PLC (CP-7)
 - 4 FROM EXISTING TORQUE SWITCH. EXTEND WIRING FROM NEW TERMINATION BOX. REFER TO SHEET 32 E-102 FOR DETAILS.
 - 5 FROM EXISTING TORQUE SWITCH LOCATED AT EQUIPMENT. EXTEND EXISTING WIRING TO NEW MOTOR STARTER.
 - 6 FROM DUCT SMOKE DETECTOR.
 - 7 FROM DIFFERENTIAL FLOW SWITCH.
- * ROUTE A [D2] CONDUIT BETWEEN THE MOTOR STARTER/PANEL AND EACH DEVICE INDICATED. REFER TO THE ELECTRICAL/HVAC DRAWINGS FOR LOCATIONS.

REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC. ONE WASHINGTON SQUARE WASHINGTON, DC 20004
 WASHINGTON, DC 20004
 PHONE (781) 246-5500

RECORD DRAWINGS

REGISTERED PROFESSIONAL ENGINEER ELECTRICAL
 No. 9450
 94-50
 REGISTERED PROFESSIONAL ENGINEER ELECTRICAL

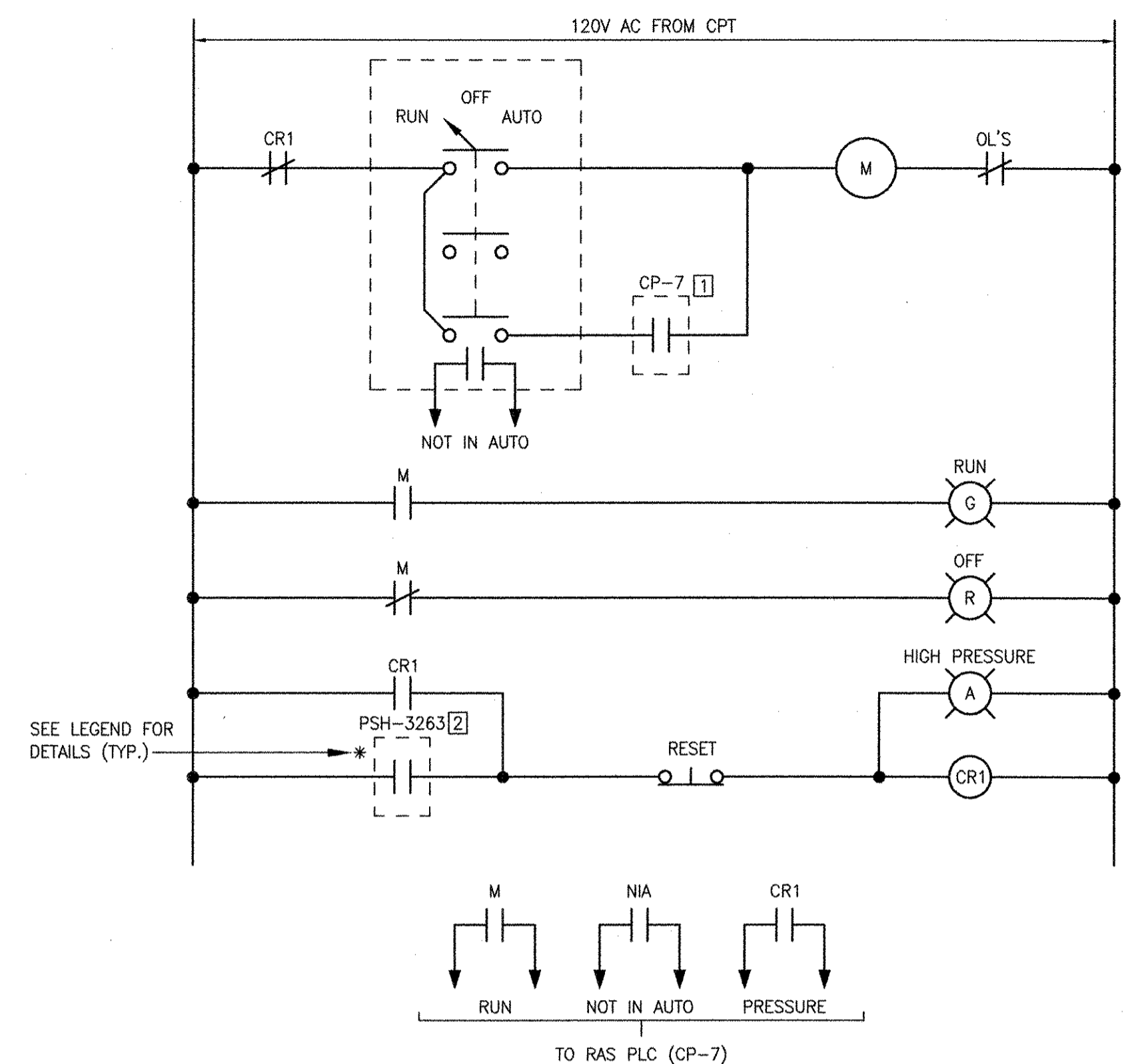
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**RAS PUMP STATION
 WIRING DIAGRAMS I**
 ELECTRICAL

RECORD DRAWING

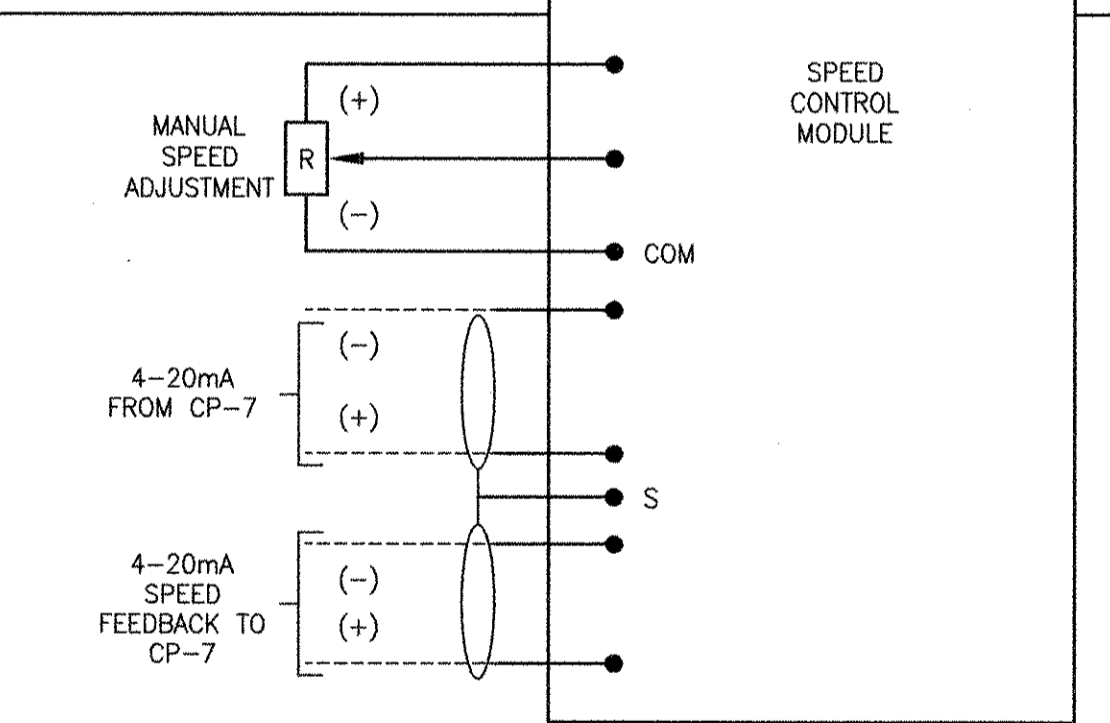
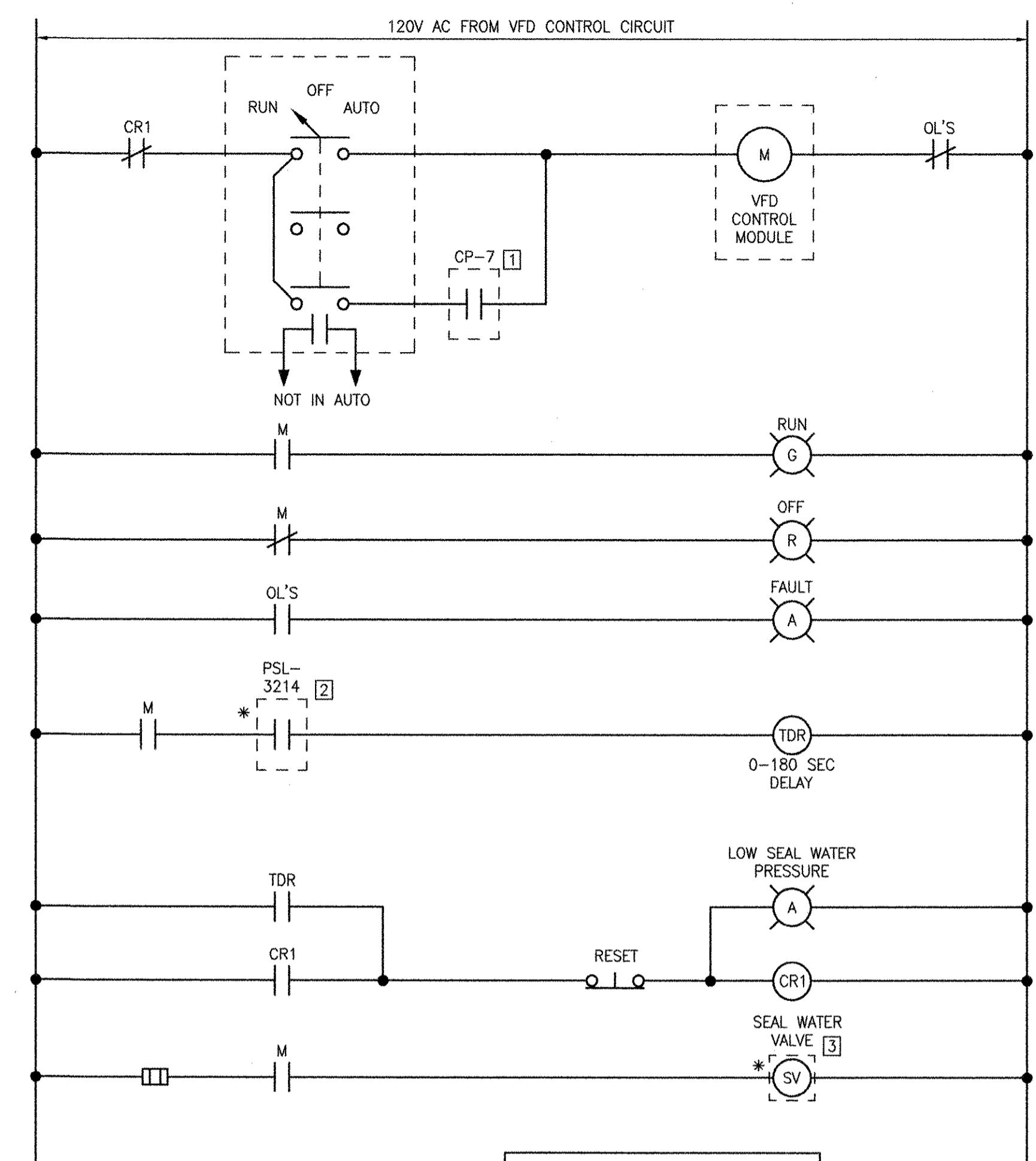
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PROJECT NO:	60148648
CAD DWG FILE:	32 E-604
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

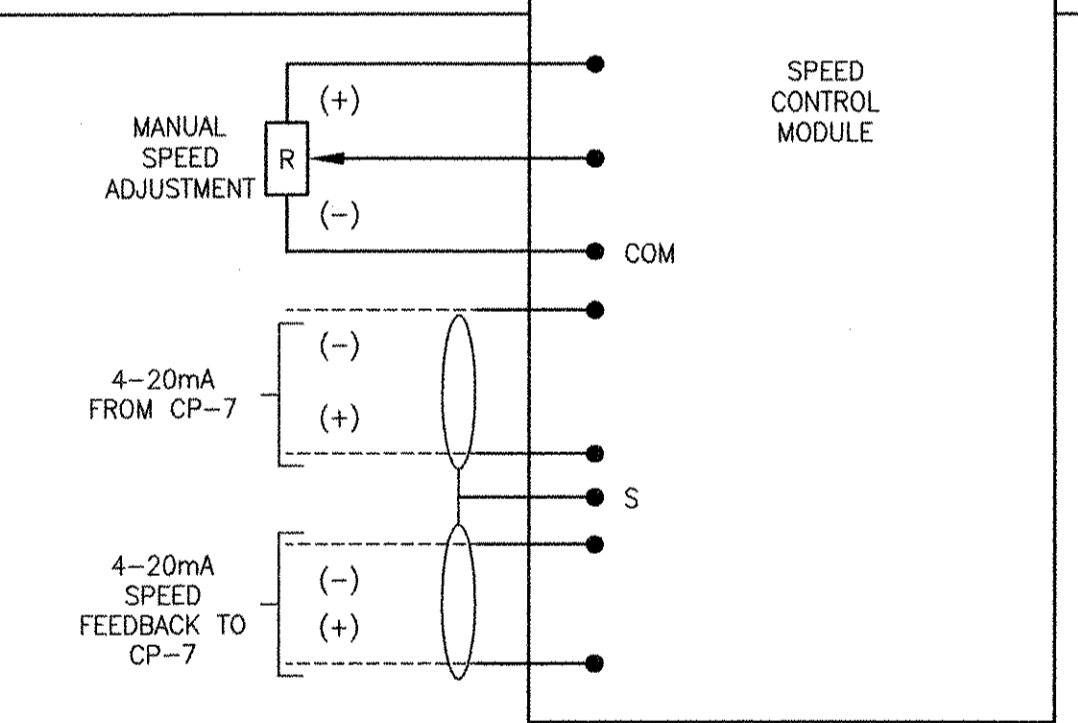
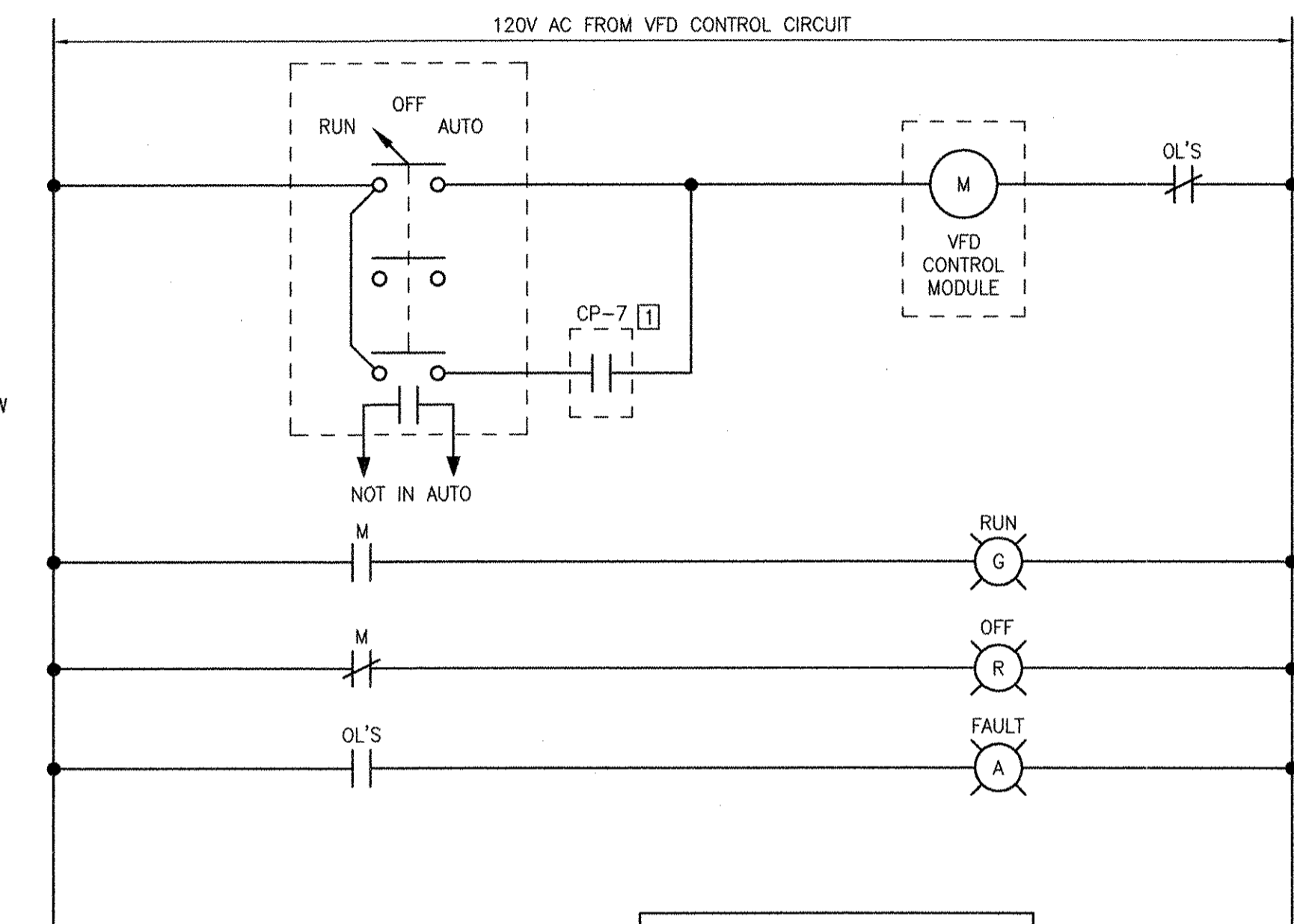
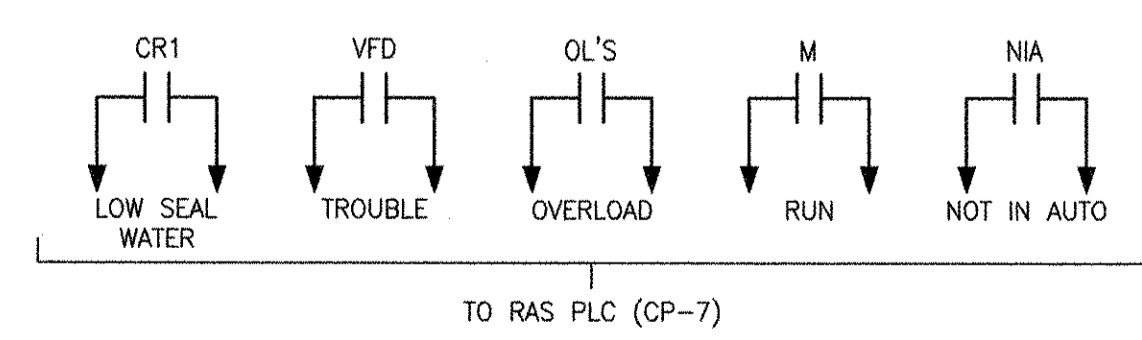
32 E-604



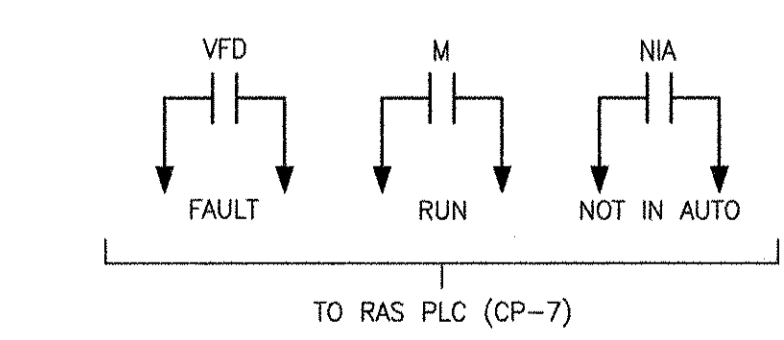
**THICKENED SLUDGE PUMP 32-TSL.P-2
STARTER WIRING DIAGRAM**
(TYPICAL FOR 32-TSL.P-1 AND PSH-3264)
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



**RAS PUMP 32-RAS.P-4
VFD WIRING DIAGRAM**
(ALL COMPONENTS LOCATED AT VFD UNLESS OTHERWISE NOTED)



**FILTRATE PUMP 32-FIL.P-1
VFD WIRING DIAGRAM**
(SIMILAR FOR 32-FIL.P-2)
(ALL COMPONENTS LOCATED AT VFD UNLESS OTHERWISE NOTED)



LEGEND:

1 FROM RAS PUMP STATION PLC (CP-7)

2 FROM PRESSURE SWITCH LOCATED AT EQUIPMENT

3 SEAL WATER VALVE LOCATED AT EQUIPMENT.

* ROUTE A [D2] CONDUIT BETWEEN THE MOTOR STARTER AND EACH DEVICE INDICATED. REFER TO THE ELECTRICAL DRAWINGS FOR LOCATIONS.

REVISIONS	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
1	5/16/11	DA	YR	REVISED MIXER CONTROL PANELS

AECOM USA, INC.
100 WASHINGTON ST.
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 9450
01/20/08

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-3

**RAS PUMP STATION
WIRING DIAGRAMS II**

ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	32 E-605
DESIGNED BY:	D. ASPESI
DRAWN BY:	D. ASPESI
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

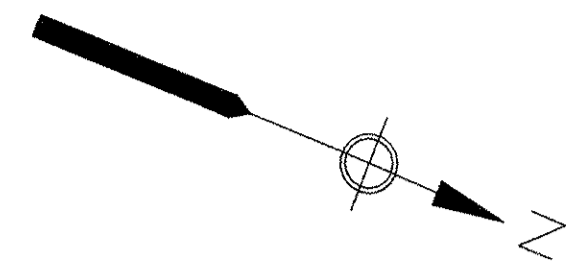
32 E-605

RECORD DRAWING

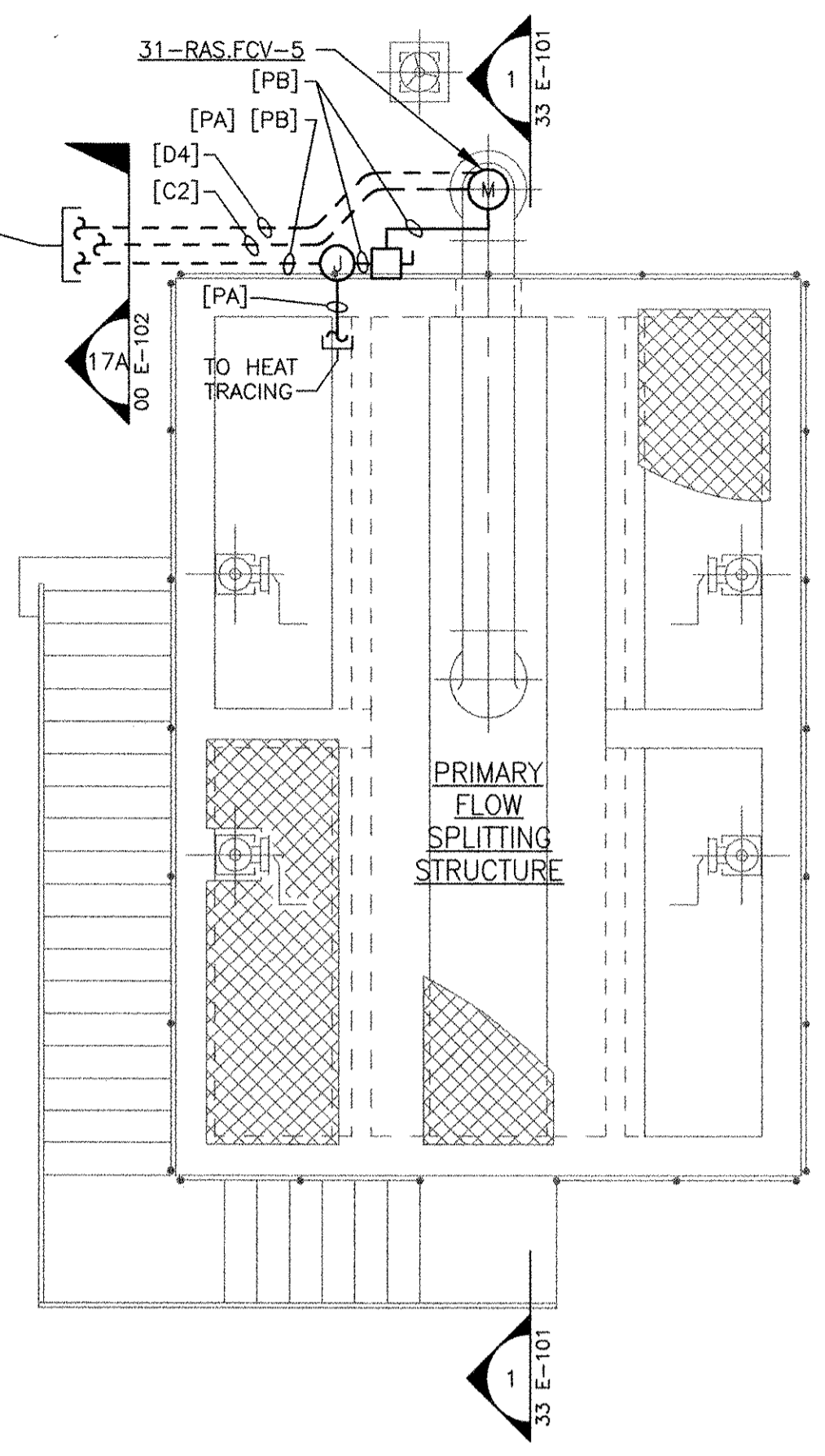
NOTE: This record drawing has been prepared based on modifying the confirmed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP0\DP-3\SHEETS\32 E-605.DWG
LAST UPDATE: Thursday, October 25, 2012 10:18:53 AM
PLOT DATE: Thursday, October 25, 2012 10:19:03 AM
ANSI D - 25-OCT-12

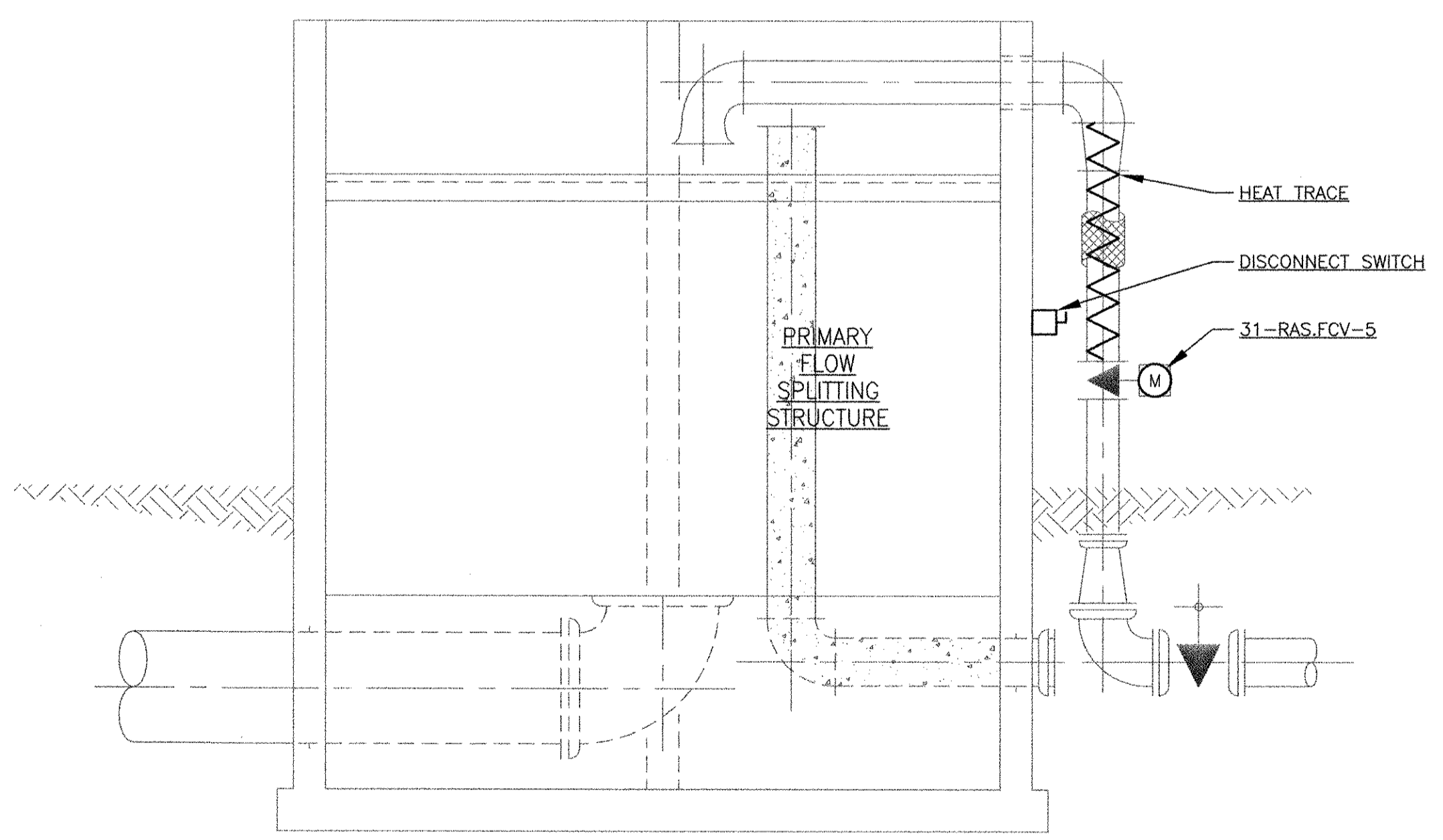
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DRUG\DP-3\SHEETS\A33 E-101.DWG
 LAST UPDATE: Monday, October 01, 2012 2:51:35 PM
 PLOT DATE: Thursday, October 25, 2012 9:10:20 AM
 ANSI D - 1-10-12



TO WEST AERATION BUILDING SEE SHEET 31 E-102 FOR CONTINUATION



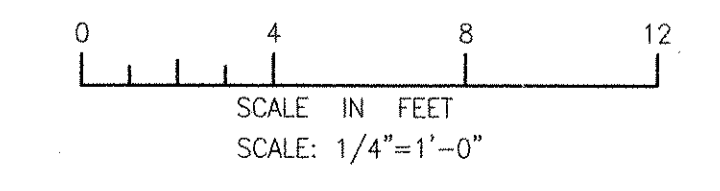
**PRIMARY FLOW SPLITTING STRUCTURE
 POWER PLAN**
 SCALE: 1/4" = 1'-0"



SECTION 1
 SCALE: 1/4" = 1'-0" 33 E-101

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



REVISIONS			
MARK	DATE	MADE BY	CHECKED
1	10/18/12	MS	YR

AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WATER STREET
 WAKEFIELD, MA 01880
 PHONE (781) 248-5200

YASSET RIZK
 No. 9430
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-3
**PRIMARY FLOW SPLITTER STRUCTURE
 POWER PLAN**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	33 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	D. ASPESI
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

33 E-101

BASED ON UNIVERSAL ENGINEERING CORPORATION
DATED 03/23/94 -
ELECTRICAL ADMINISTRATION BUILDING GROUND FLOOR
PLANS & DETAILS
JOB NO. 93170.00, DRAWING NO. E-3

- NOTES
- EXISTING PANELBOARD "G" LOCATED WITHIN EXISTING MCC-1 TO BE DEMOLISHED. EXTEND WIRING FOR ASSOCIATED 208/120VAC LOADS TO NEW PANELBOARD 41-LP-1. PROVIDE NEW PANELBOARD WITH CIRCUIT BREAKERS FOR EACH EXISTING LOAD. CIRCUIT BREAKERS SHALL MATCH EXISTING RATINGS.

MARK	DATE	MS	YR	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM USA, INC.
100 WATER STREET
WALTON MA 01886
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

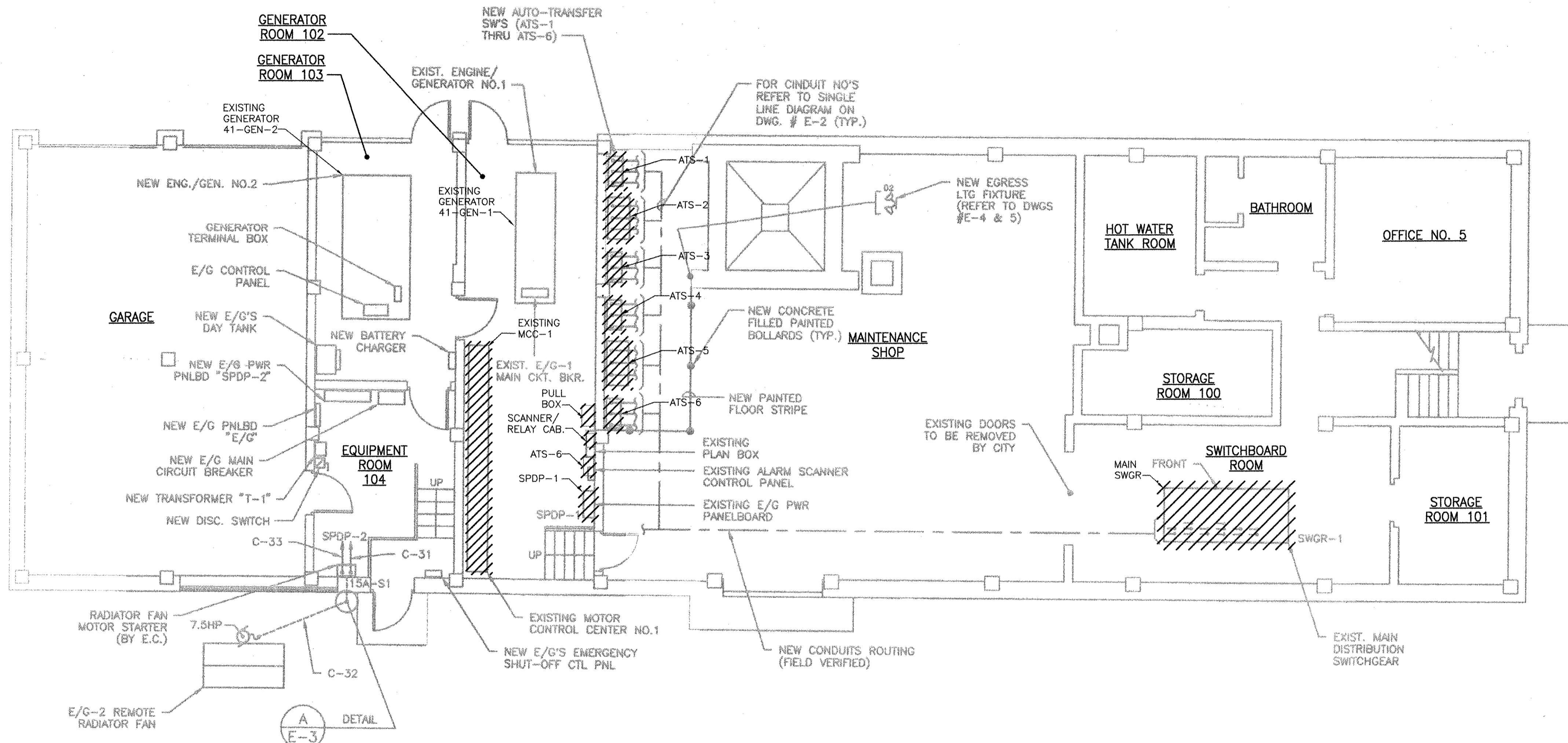
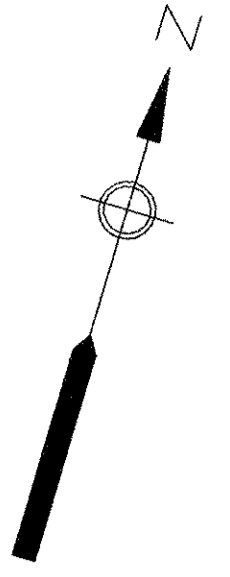
YASSEER RIZK
No. 9430
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**ADMINISTRATION BUILDING - GROUND FLOOR
DEMOLITION PLAN**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	41 ED-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

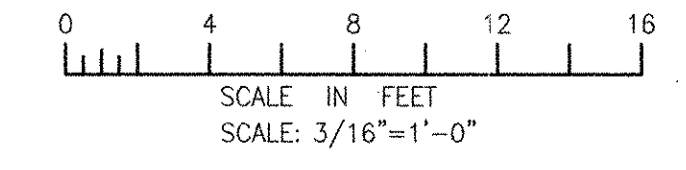
41 ED-101



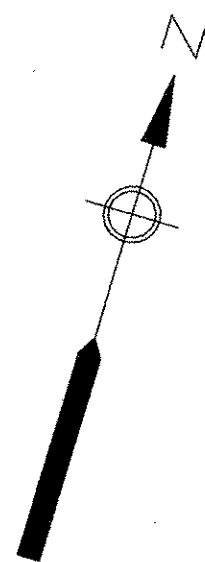
**ADMINISTRATION BUILDING - GROUND FLOOR
DEMOLITION PLAN**
SCALE: 3/16"=1'-0"

RECORD DRAWING

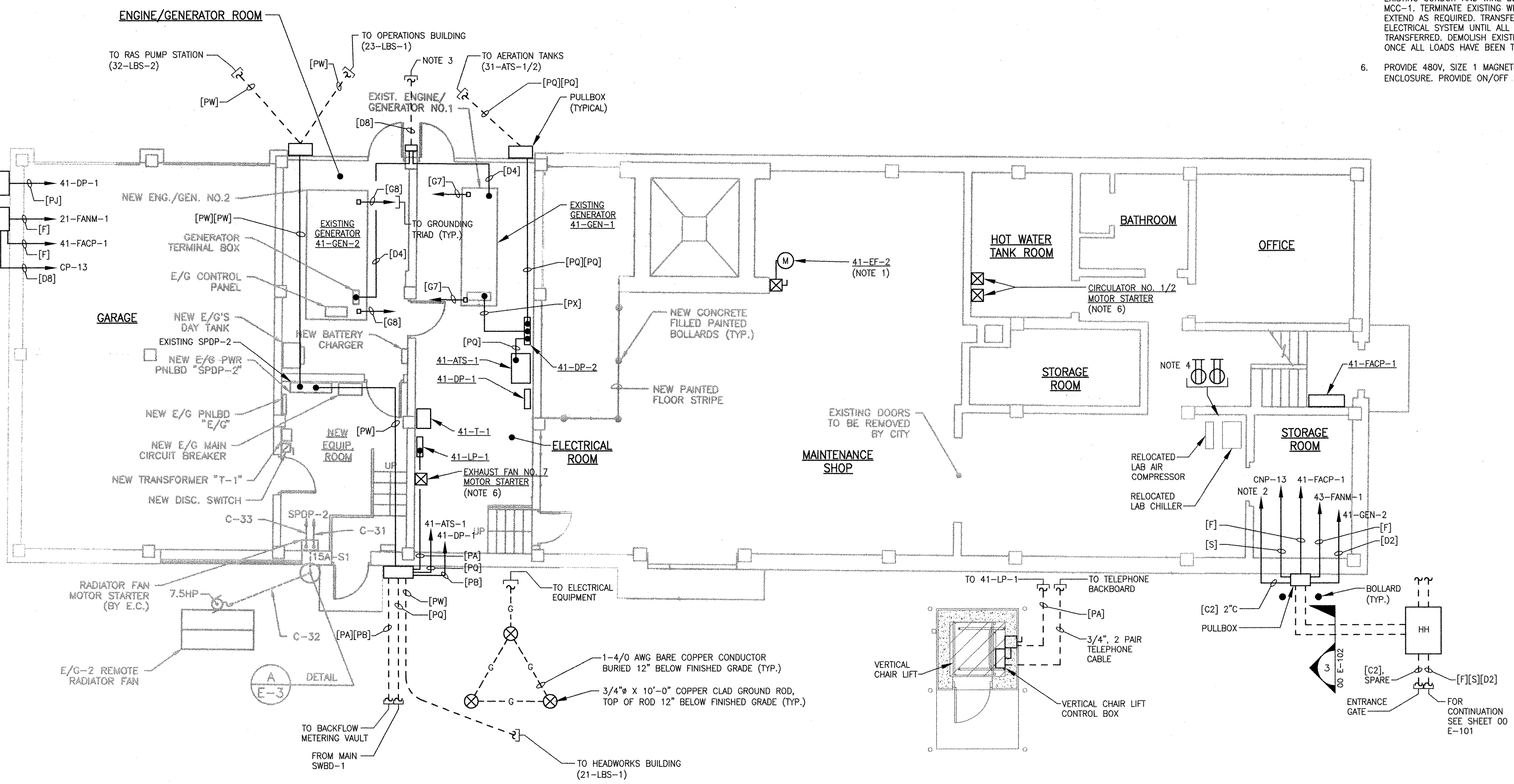
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BOD)\DP-4\SHEETS\41 ED-101.DWG
LAST UPDATE: Wednesday, October 03, 2012 1:32:11 PM
PLOT DATE: Thursday, October 25, 2012 9:07:23 AM
ANSI D - 3-Oct-12



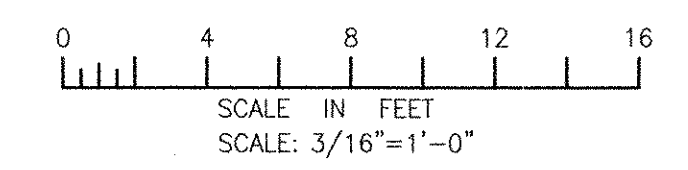
- NOTES
1. PROVIDE 480V, SIZE 1 COMBINATION MAGNETIC MOTOR STARTER WITH DISCONNECT SWITCH IN NEMA 12 ENCLOSURE. PROVIDE ON/OFF SELECTOR SWITCH.
 2. ROUTE CONDUITS TO GATE ENTRANCE CONTROL STATION LOCATED IN ADMINISTRATION BUILDING RECEPTIONIST AREA.
 3. REFER TO ATS SYSTEM RISER DIAGRAM ON SHEET 00 E-607 FOR FURTHER DETAILS.
 4. PROVIDE TWO 120VAC, 20A DUPLEX RECEPTACLES. ONE RECEPTACLE SHALL BE DEDICATED TO THE RELOCATED LAB AIR COMPRESSOR, ONE RECEPTACLE TO BE DEDICATED TO THE RELOCATED LAB CHILLER.
 5. PROVIDE TERMINAL BOXES WHERE REQUIRED TO INTERCEPT EXISTING CONDUIT AND WIRE BETWEEN EXISTING LOADS AND MCC-1. TERMINATE EXISTING WIRING ON TERMINAL STRIPS AND EXTEND AS REQUIRED. TRANSFER ONE LOAD AT A TIME TO NEW ELECTRICAL SYSTEM UNTIL ALL LOADS HAVE BEEN TRANSFERRED. DEMOLISH EXISTING MOTOR CONTROL CENTER ONCE ALL LOADS HAVE BEEN TRANSFERRED.
 6. PROVIDE 480V, SIZE 1 MAGNETIC MOTOR STARTER IN NEMA 12 ENCLOSURE. PROVIDE ON/OFF SELECTOR SWITCH.



**ADMINISTRATION BUILDING - GROUND FLOOR
MODIFICATIONS PLAN**
SCALE: 3/16"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



REVISIONS	
MARK	DESCRIPTION
1	REVISED FOR RECORD DRAWING
10/19/12	DATE
MS	MADE BY
YR	CHECKED

AECOM
RECORD DRAWINGS
AECOM USA, INC.
100 WASHINGTON DRIVE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

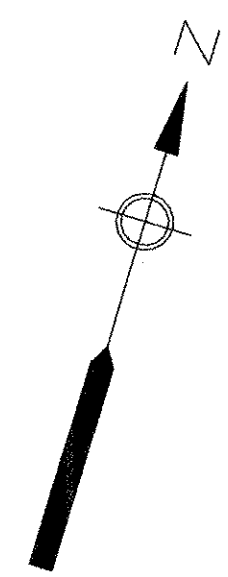
YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 25, 94-30
01/25/12

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
**ADMINISTRATION BUILDING
POWER PLAN I**
ELECTRICAL

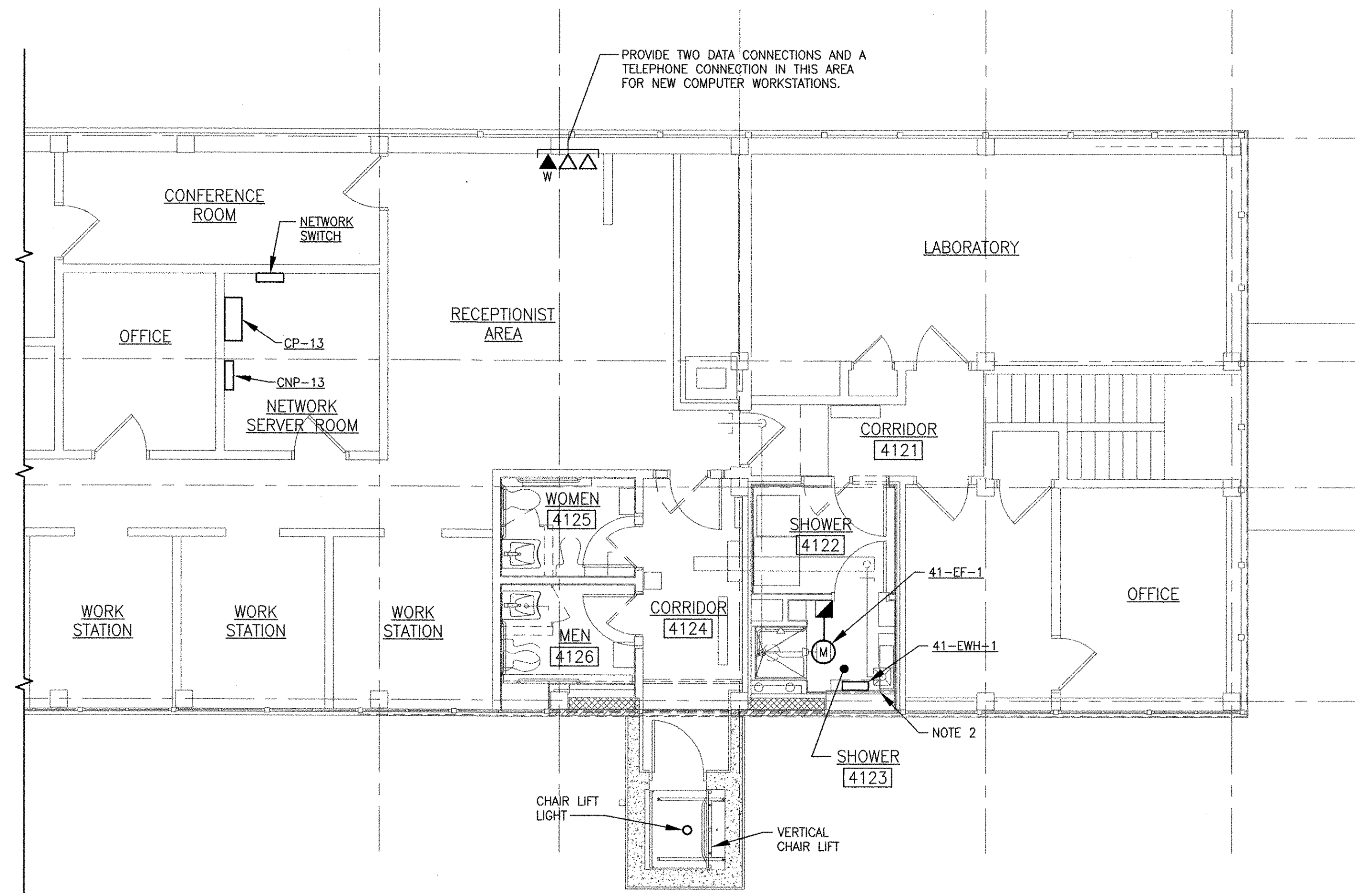
PROJECT NO:	60148648
CAD DWG FILE:	41 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 E-101

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DP04\41 E-101.DWG
LAST UPDATE: Tuesday, October 02, 2012 12:28:14 PM
ANSI D - 2-Oct-12



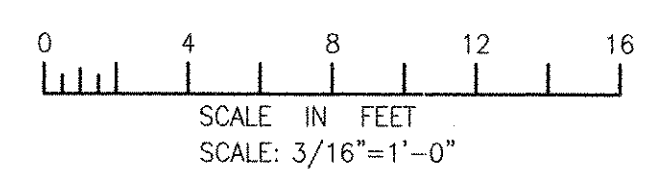
- NOTES**
- LOCATE GATE ENTRANCE CONTROLS AT RECEPTIONIST DESK. COORDINATE FINAL LOCATION WITH THE CLIENT.
 - DEMOLISH EXISTING RECEPTACLE AND ASSOCIATED CONDUIT AND WIRE IN THIS LOCATION.
 - THE ROOF ON THE ADMINISTRATION BUILDING WILL BE REPLACED UNDER THIS CONTRACT. REMOVE THE EXISTING LIGHTING PROTECTION SYSTEM AND REINSTALL ONCE NEW ROOF HAS BEEN INSTALLED.



**ADMINISTRATION BUILDING - UPPER FLOOR
MODIFICATIONS PLAN**
SCALE: 3/16"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MADE BY (CHECKED)	YR	MS	REVISIONS
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
AECOM USA, INC.
100 WASHINGTON ST.
WALLENDALE, MA 01980
PHONE (781) 246-5300

RECORD DRAWINGS

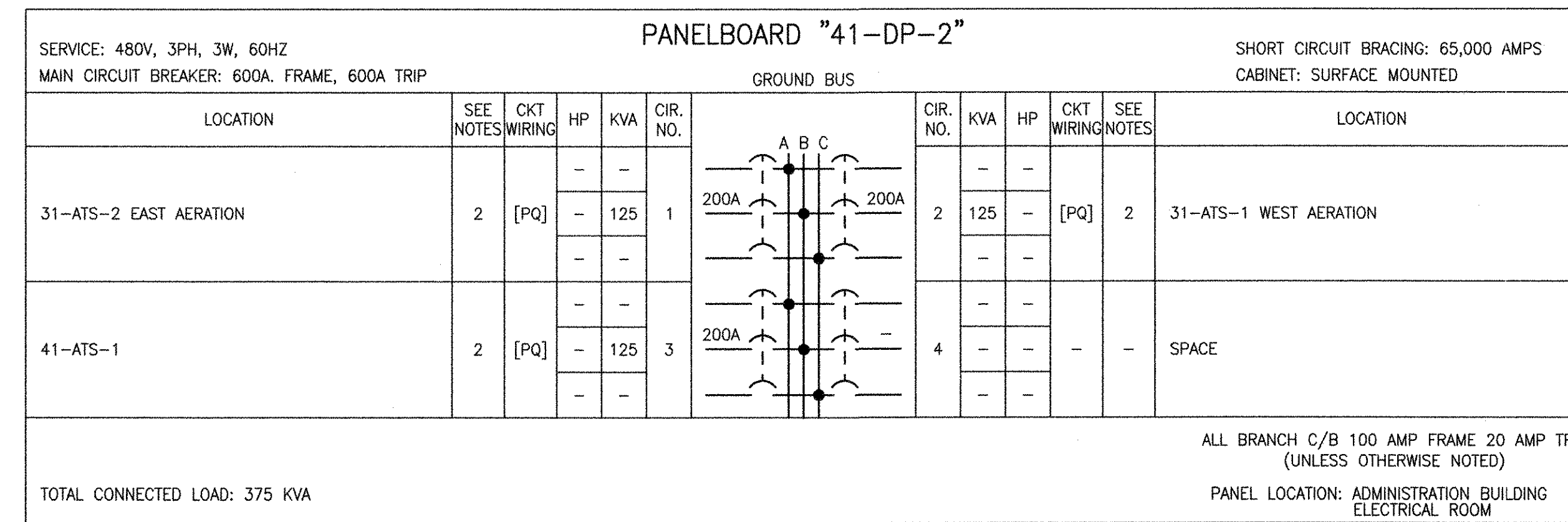
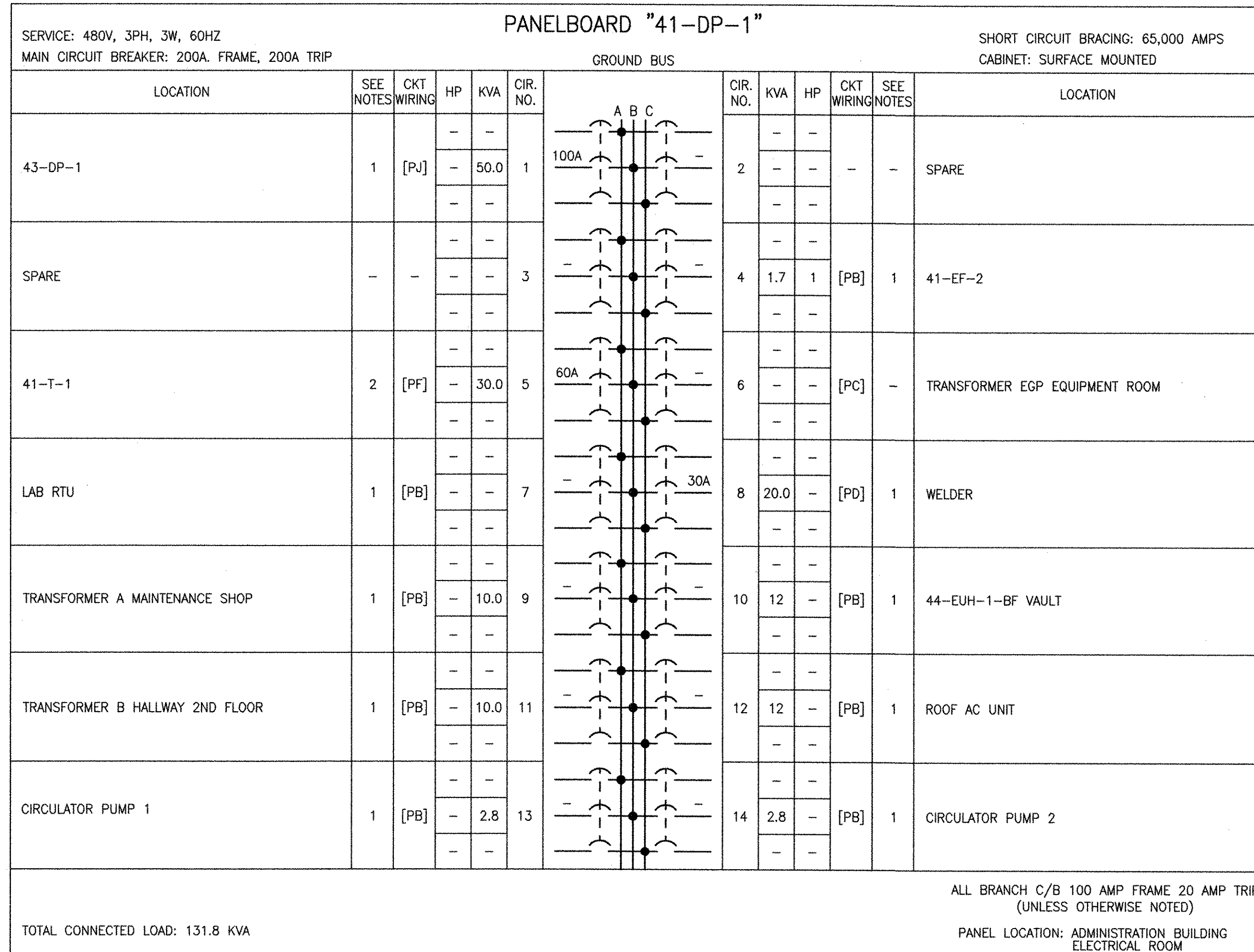
YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 9430
Exp. 12/31/15

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4
**ADMINISTRATION BUILDING
POWER PLAN II**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	41 E-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

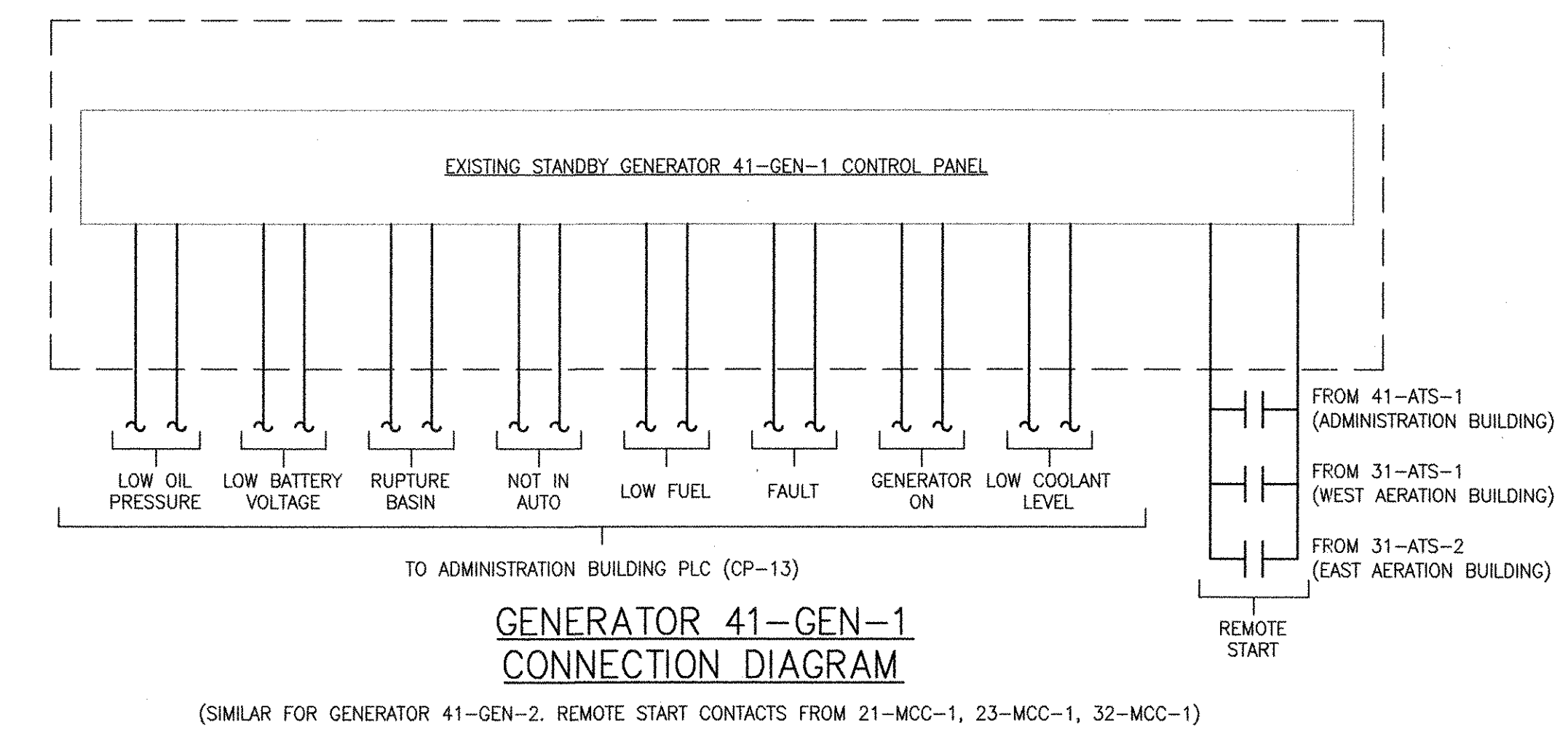
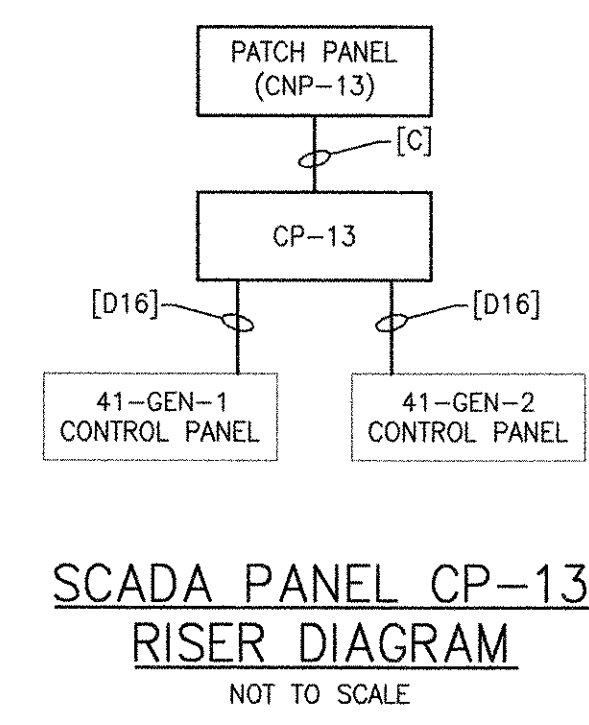
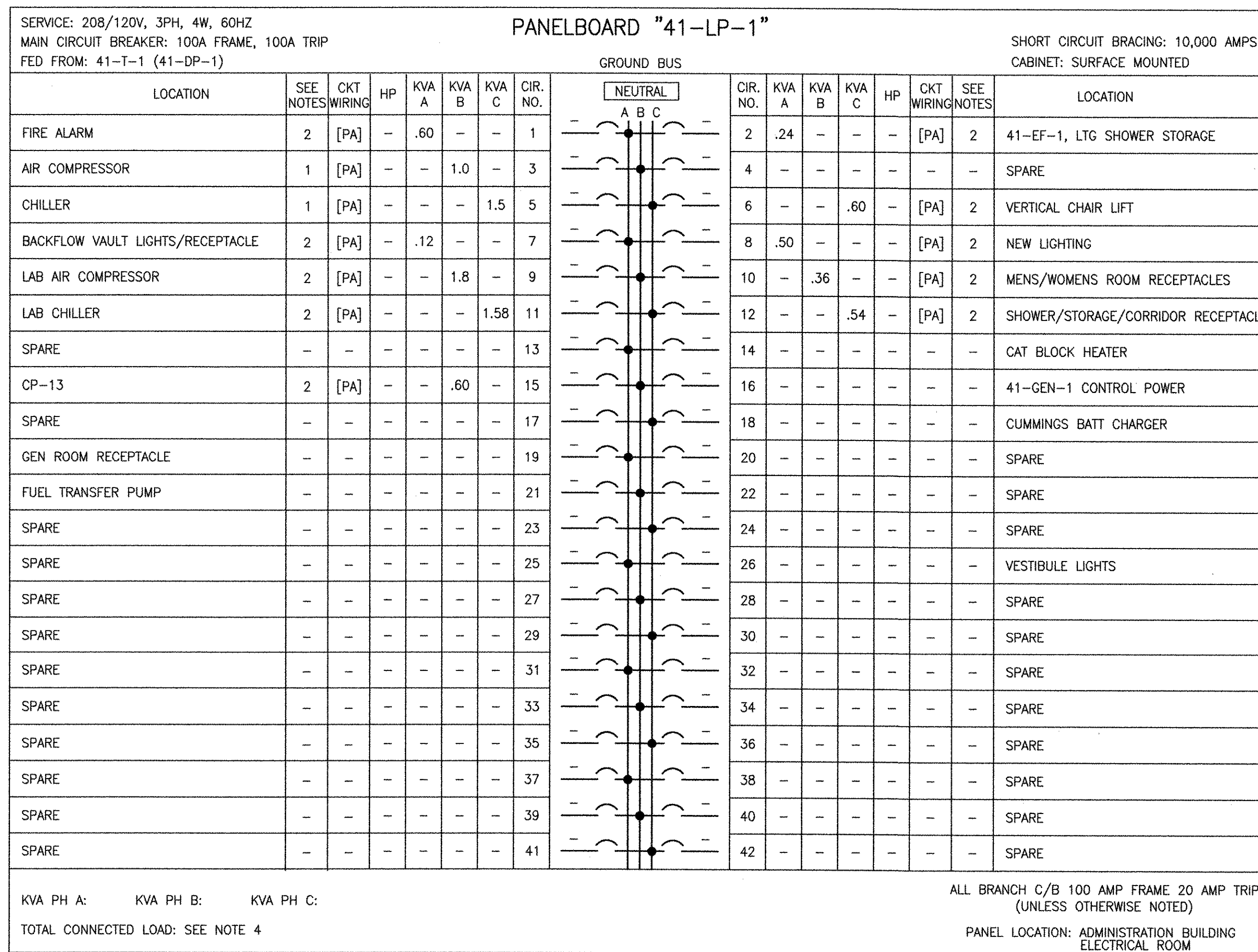
41 E-102

PATY/FILENAME: P:\60148648 - EAST PROVIDENCE DP-4\DP-4\SHEETS\41 E-102.DWG
LAST UPDATE: Tuesday, October 02, 2012 3:32:25 PM
ANSI D - 2-Oct-12



ROOM OR SPACE NAME	LIGHTING SYSTEM							SWITCHES	RECEPTACLES	
	LUMINAIRE TYPE									
	BA1	BA2	BM1	DD1	DD2	DL1	DL2	EMI		
WOMENS ROOM 4125	1								1	1
MENS ROOM 4126	1								1	1
CHAIR LIFT EXTERIOR ENTRANCE								1		
AREA IN FRONT OF CHAIR LIFT SECOND FLOOR						1				
CORRIDOR 4124			2						1	1
STORAGE 4122		2							1	1
SHOWER 4123	1								1	1
SHOWER STALL							1			1

- REFER TO ARCHITECTURAL DRAWINGS FOR LIGHTING FIXTURE LAYOUTS.



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

- NOTES:
- EXISTING EQUIPMENT.
 - NEW EQUIPMENT.
 - PROVIDE CIRCUIT BREAKERS WITHIN PANELBOARD 42-LP-1 TO FEED EXISTING EQUIPMENT FED FROM EXISTING PANELBOARD "G". REFER TO NOTE 1 ON SHEET 41 ED-101 FOR FURTHER DETAILS.
 - TOTAL CONNECTED LOAD TO BE DETERMINED DURING CONSTRUCTION ONCE EXISTING LOADS HAVE BEEN TRANSFERRED TO NEW PANELBOARD 42-LP-1.
 - EXISTING LOADS TO BE VERIFIED AND SCHEDULED DURING CONSTRUCTION.

REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	YR	REVISED FOR RECORD DRAWING
1	MARK	10/19/12	MS			

AECOM

RECORD DRAWINGS

AECOM USA, INC.
100 WATER STREET
MADEIRA HEIGHTS, MA 02148
PHONE (781) 246-5200

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 95 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

ADMINISTRATION BUILDING SCHEDULES AND RISER DIAGRAMS

ELECTRICAL

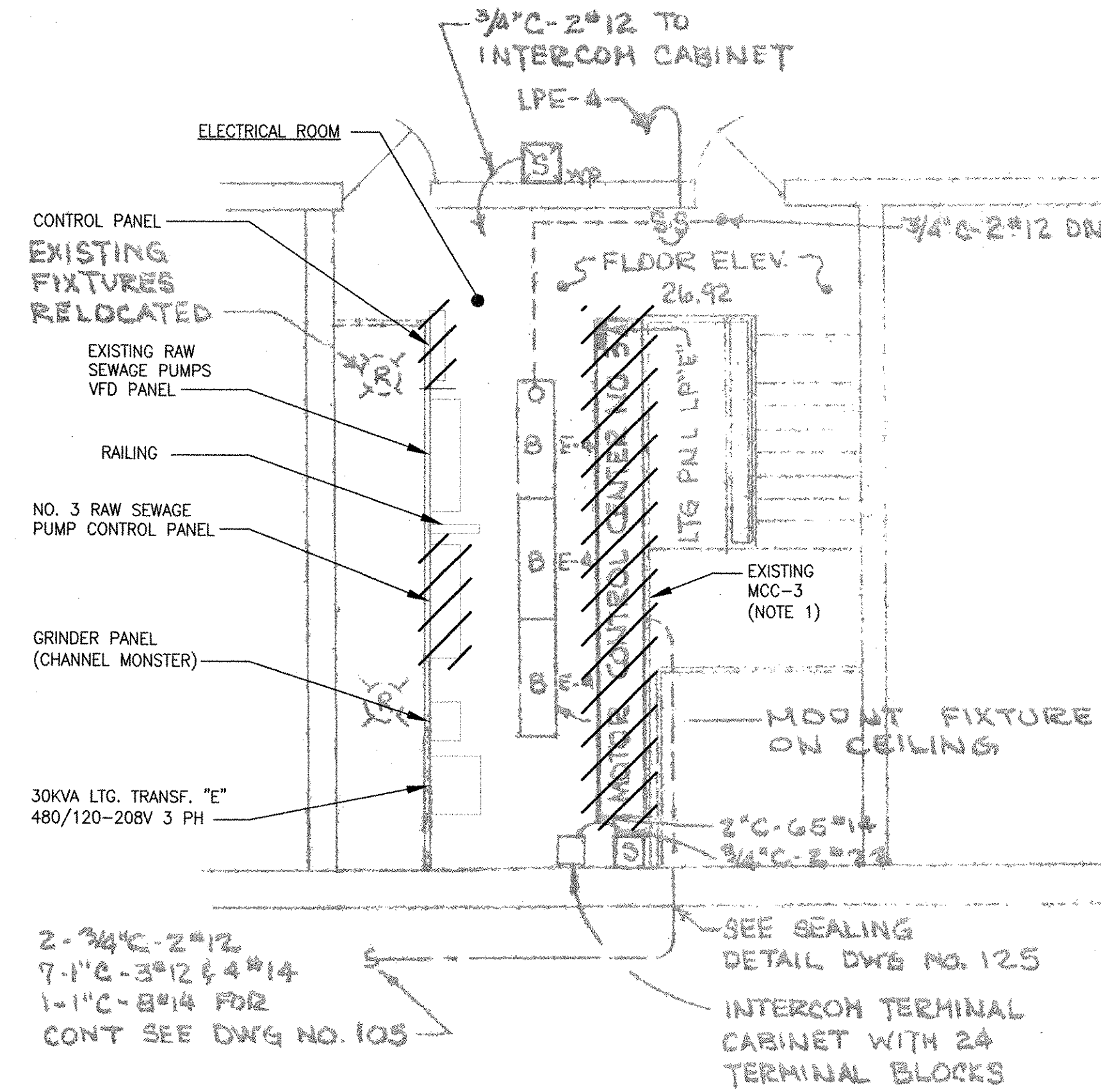
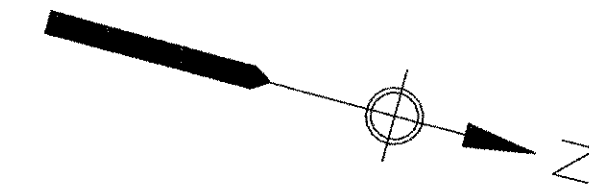
PROJECT NO:	60148648
CAD DWG FILE:	41 E-601
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

41 E-601

PATH: FILENAME: P:\60148648 - EAST PROVIDENCE DP-4\60148648-4\SHEETS\41 E-601.DWG
LAST UPDATE: Wednesday, October 03, 2012 1:16:30 PM
PLOT DATE: Thursday, October 25, 2012 9:07:36 AM
ANSI D - 3-Oct-12

NOTES

- EXISTING PANELBOARD "E" LOCATED WITHIN EXISTING MCC-3 TO BE DEMOLISHED. EXTEND WIRING FOR ASSOCIATED 208/120VAC LOADS TO NEW PANELBOARD 42-LP-1. PROVIDE NEW PANELBOARD WITH CIRCUIT BREAKERS FOR EACH EXISTING LOAD. CIRCUIT BREAKERS SHALL MATCH EXISTING TRIP SETTINGS.

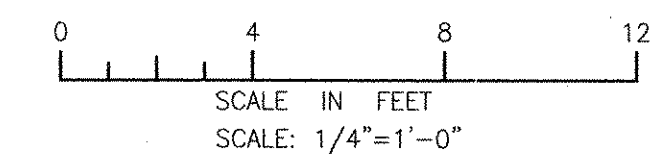


RAW SEWAGE INFLUENT PUMP STATION AT EL. 26.92'
DEMOLITION PART PLAN

SCALE: 1/4"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



MARK	DATE	MS	YR	REVISION FOR RECORD DRAWING	DESCRIPTION
1	10/19/12				

AECOM USA, INC.
100 WATER STREET
WALLETON, ONTARIO
PHONE (781) 246-5300

AECOM

RECORD DRAWINGS

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 9430
City of Providence

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**RAW SEWAGE INFLUENT PUMP STATION
DEMOLITION PLAN**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	42 ED-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

42 ED-101

PATH: \\FLENNER\F\60148648 - EAST PROVIDENCE (RPO)\DP-4\SHETS\EV2 ED-101.DWG
LAST UPDATE: Monday, October 01, 2012 9:11:05 AM
PLOT DATE: Thursday, October 25, 2012 9:07:39 AM
ANSI D - 1 - Oct-12

BASED ON CE MAGUIRE, INC.
AS-BUILT 2/5/79 -
ELECTRICAL POWER & LIGHTING PLANS
C.A.M. NO. 1349, DRAWING NO. 108

REVISIONS	DATE	MADE BY	CHECKED	DESCRIPTION
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	8/9/11	DA	YR	REVISED GAS MONITORING SYSTEM

AECOM

RECORD DRAWINGS

ACOM USA, INC.
100 WATER STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

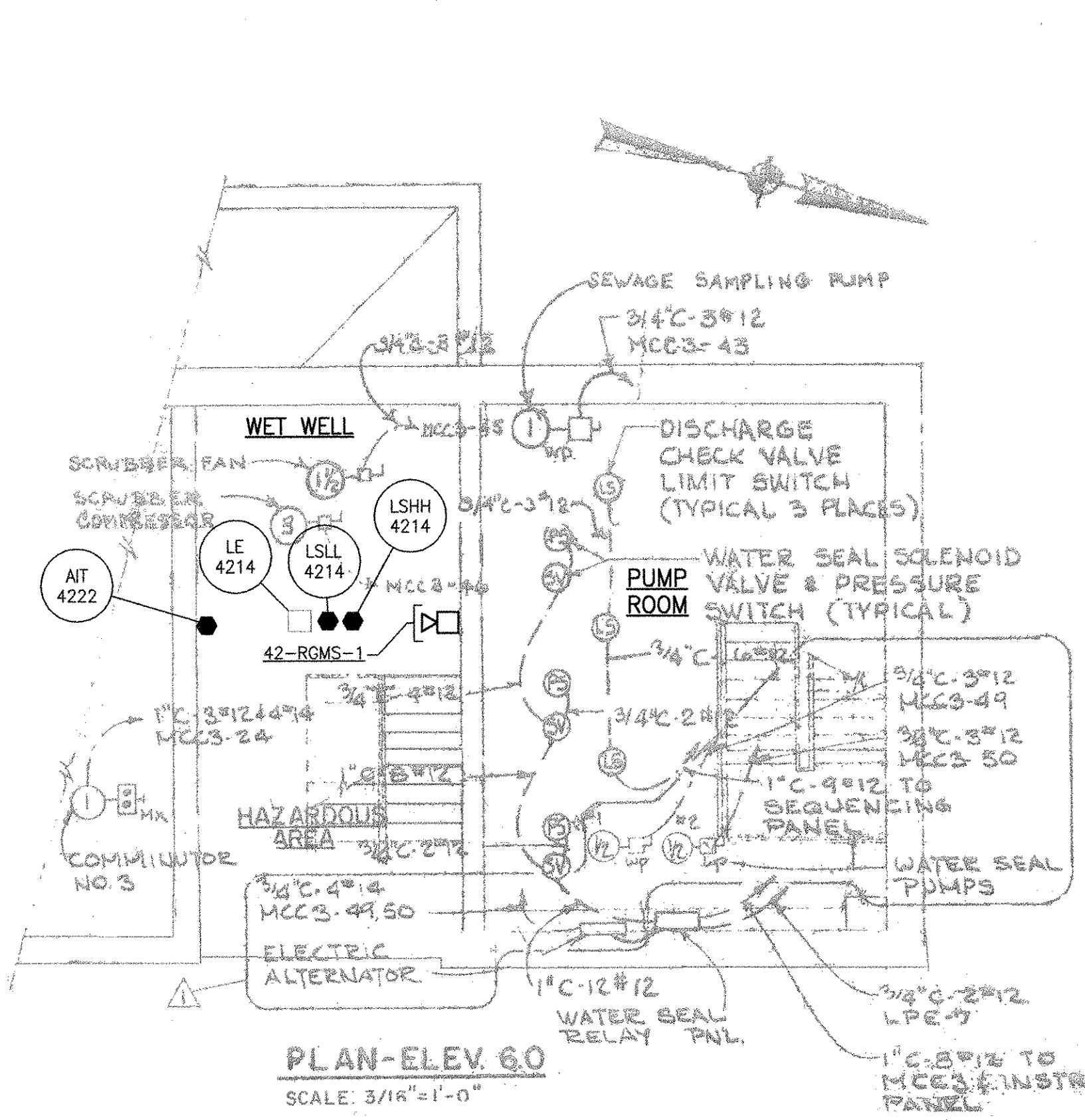
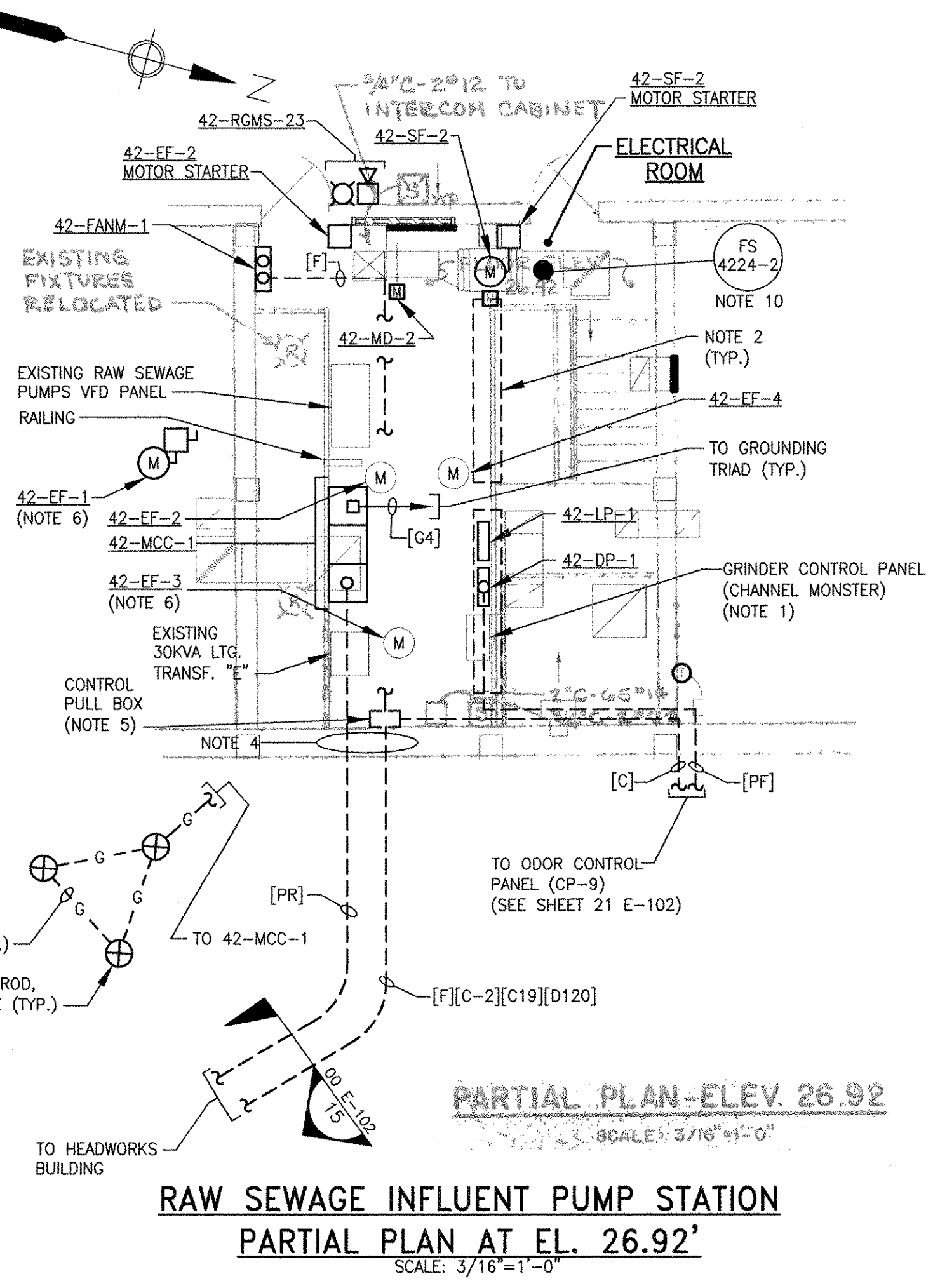
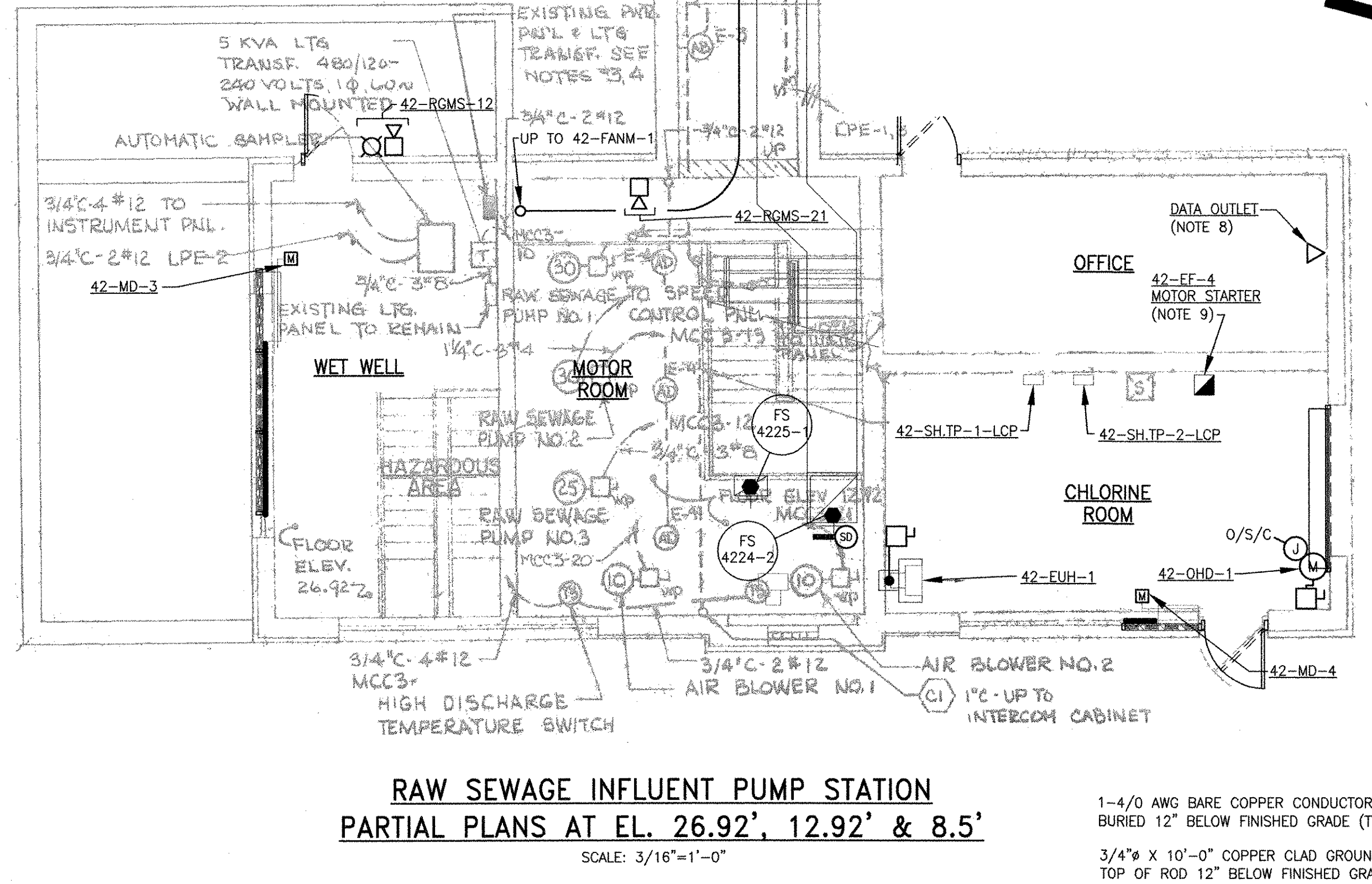
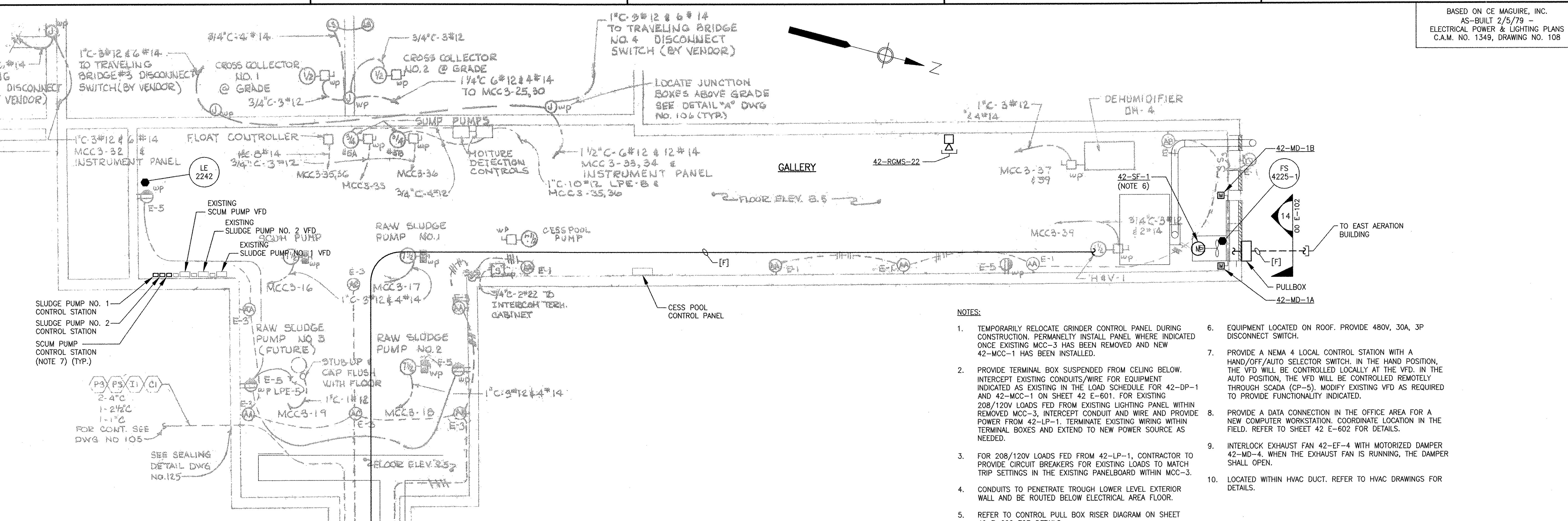
YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
NO. 05 9430
02/21/07

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**RAW SEWAGE INFLUENT PUMP STATION
POWER PLANS
ELECTRICAL**

PROJECT NO:	60148648
CAD DWG FILE:	42 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

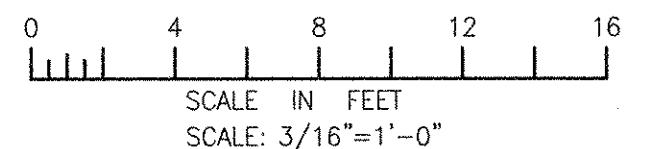
42 E-101



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

ANSI D - 25-04-12
PLOT FILENAME: P:\60148648 - EAST PROVIDENCE DP-4 SHEETS\42 E-101.DWG
LAST UPDATE: Thursday, October 25, 2012 10:58:31 AM
PLOT DATE: Thursday, October 25, 2012 10:58:42 AM



SERVICE: 480V, 3PH, 3W, 60HZ
MAIN LUGS ONLY, 300A PANEL
FED FROM: 42-MCC-1

PANELBOARD "42-DP-1"

SHORT CIRCUIT BRACING: 65,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA	CIR. NO.	GROUND BUS			CIR. NO.	KVA	HP	CKT WIRING	SEE NOTES	LOCATION
						A	B	C						
LIGHTING TRANSFORMER "E" (TO 42-LP-1)	1	[PF]	-	30.0	1	60A			2	5.0	-	[PB]	1	LIGHTING TRANSFORMER
CHANNEL MONSTER (42-RWW.GR-1) (EST.)	1	[PB]	3	3.9	3				4	9.1	7.5	[PB]	1	SLUDGE PUMP NO. 1 (VFD) (22-PSLP-1)
SLUDGE PUMP NO. 2 (VFD) (22-PSLP-2)	1	[PB]	7.5	9.1	5				6	9.1	7.5	[PB]	1	SCUM PUMP (VFD) (22-PSC.P-3)
CESS POOL (22-PSC.CS.P-1)	1	[PB]	5	6.3	7				8	79.8	3-25	[PK]	1	RAW SEWAGE VFD PANEL
ODOR CONTROL PANEL (CP-9) (21-OC.BIO-1)	2	[PF]	4	20.7	9	60A			10	15	-	[PC]	2	42-EUH-1
42-OHD-1	2	[PB]	3/4	1.3	11				12	-	-	-	-	SPARE
SPARE	-	-	-	-	13				14	-	-	-	-	SPARE

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: 189.3 KVA

PANEL LOCATION: RAW SEWAGE INFLUENT PUMP STATION ELECTRICAL ROOM

SERVICE: 208/120V, 3PH, 4W, 60HZ
MAIN CIRCUIT BREAKER: 100A FRAME, 100A TRIP
FED FROM: 42-DP-1

PANELBOARD "42-LP-1"

SHORT CIRCUIT BRACING: 10,000 AMPS
CABINET: SURFACE MOUNTED

LOCATION	SEE NOTES	CKT WIRING	HP	KVA A	KVA B	KVA C	CIR. NO.	GROUND BUS			CIR. NO.	KVA A	KVA B	KVA C	HP	CKT WIRING	SEE NOTES	LOCATION
								NEUTRAL	A	B								
42-FANM-1	2	[PA]	-	.60	-	-	1				2	0.36	-	-	[PA]	2	42-SH.ST-1-CFS	
42-MGMS-1	2	[PA]	-	.24	-	-	3				4	-	.50	-	[PA]	2	ODOR CONTROL HEAT TRACE	
42-MGMS-2	2	[PA]	-	.24	-	-	5				6	-	-	-	-	-	EXISTING	
SUPPLY FAN 42-SF-2	2	[PA]	1/3	.36	-	-	7				8	-	-	-	-	-	EXISTING	
EXHAUST FAN 42-EF-2	1	[PA]	-	.36	-	-	9				10	-	-	-	-	-	EXISTING	
EXHAUST FAN 42-EF-4	1	[PA]	-	.36	-	-	11				12	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	13				14	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	15				16	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	17				18	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	19				20	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	21				22	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	23				24	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	25				26	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	27				28	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	29				30	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	31				32	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	33				34	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	35				36	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	37				38	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	39				40	-	-	-	-	-	EXISTING	
EXISTING	-	-	-	-	-	-	41				42	-	-	-	-	-	EXISTING	

ALL BRANCH C/B 100 AMP FRAME 20 AMP TRIP (UNLESS OTHERWISE NOTED)

TOTAL CONNECTED LOAD: SEE NOTE 4

PANEL LOCATION: RAW SEWAGE INFLUENT PUMP STATION ELECTRICAL ROOM

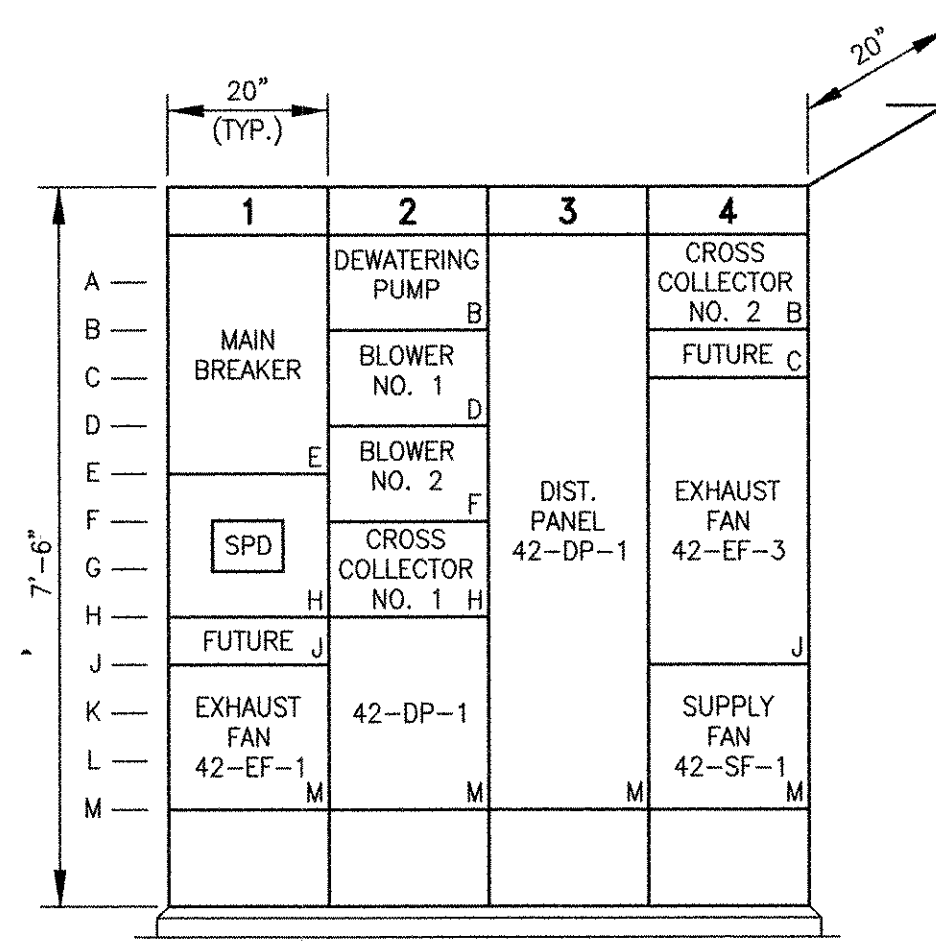
* GFCl 30mA TRIP

42-MCC-1 - LOAD SCHEDULE
480 VOLTS, 600A, 3 PHASE, 3 WIRE, 65KAIC

MAIN: 300 AMPS CB LOCATION: RAW SEWAGE INFLUENT PS ELECTRICAL ROOM
ENCLOSURE: NEMA 12 SPD

CKT WIRING	EQUIPMENT DESCRIPTION	EQPT RATING	MCC DEVICES				SEE NOTES
			CONTACTOR SIZE	STARTER TYPE	PILOT CONTROL DEVICE	CB ONLY	
PB	DEWATERING PUMP (22-PSC.DWP-1)	1/2 HP	1	FVNR	HOA	-	1
PB	BLOWER NO. 1	10 HP	1	FVNR	HOA	-	1
PB	BLOWER NO. 2	10 HP	1	FVNR	HOA	-	1
PB	CROSS COLLECTOR NO. 1 (22-PSC.CC-1)	1/2 HP	1	FVNR	HOA	-	1
PB	CROSS COLLECTOR NO. 2 (22-PSC.CC-2)	1/2 HP	1	FVNR	HOA	-	1
PB	EXHAUST FAN 42-EF-1	1 HP	1	FVNR	HOA	-	2
PB	EXHAUST FAN 42-EF-3	1 HP	-	VFD	HOA	-	1
PB	SUPPLY FAN 42-SF-1	1/2 HP	1	FVNR	HOA	-	2
PR	42-DP-1	-	-	-	-	300A	2

NOTES:
1. EXISTING EQUIPMENT.
2. NEW EQUIPMENT



RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

- NOTES:
- EXISTING EQUIPMENT
 - NEW EQUIPMENT
 - PROVIDE CIRCUIT BREAKERS WITHIN 42-LP-1 TO FEED EXISTING EQUIPMENT. REFER TO NOTE 1 ON SHEET 42 ED-101 FOR FURTHER DETAILS.
 - TOTAL CONNECTED LOAD TO BE DETERMINED DURING CONSTRUCTION ONCE EXISTING LOADS HAVE BEEN TRANSFERRED TO NEW PANELBOARD 42-LP-1.
 - EXISTING LOADS TO BE VERIFIED AND SCHEDULED DURING CONSTRUCTION.

REVISIONS	DESCRIPTION	DATE	BY	CHECKED	YR	MS	MARK
1		10/19/12					

AECOM

RECORD DRAWINGS

AECOM USA, INC.
100 WATER STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
NO. 9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**RAW SEWAGE INFLUENT PUMP STATION
SCHEDULES**

ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	42 E-601
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

42 E-601

PATH: FILENAME: P:\60148648 - EAST PROVIDENCE DP-4\SHEETS\42 E-601.DWG
 LAST UPDATE: Tuesday, October 02, 2012 2:21:28 PM
 PLOT DATE: Thursday, October 25, 2012 9:07:48 AM
 ANSI D - 2 - Oct-12

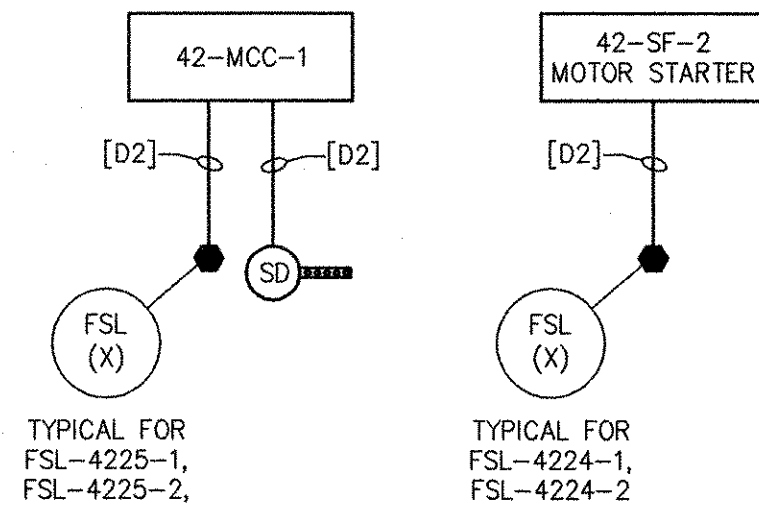
1

2

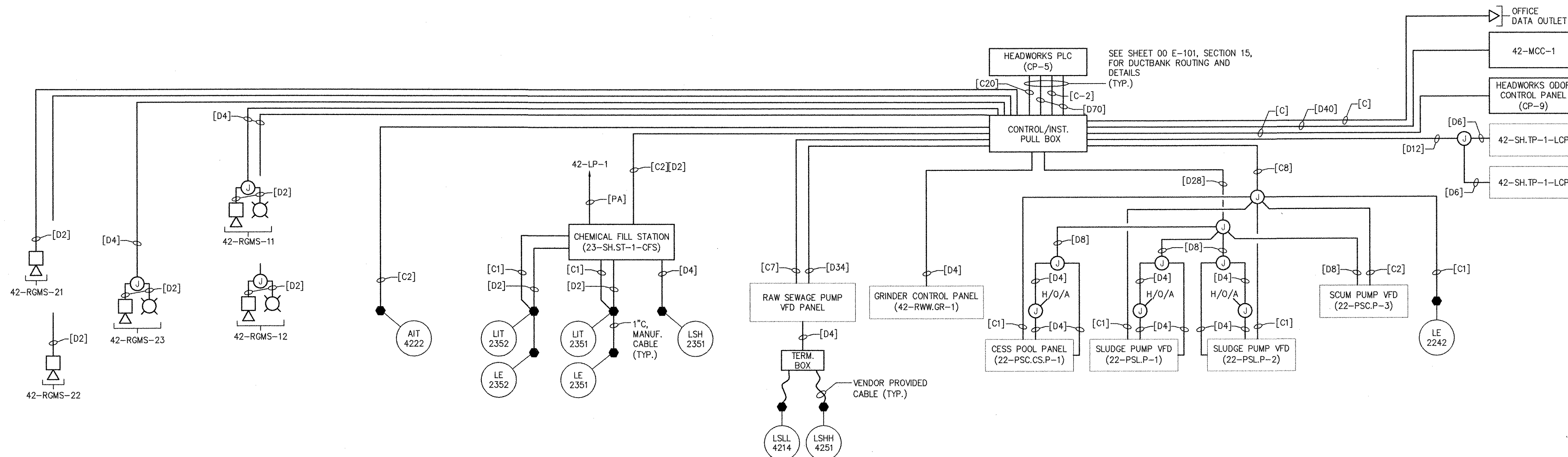
3

4

5



**RAW SEWAGE INFLUENT PUMP STATION
HVAC CONTROLS RISER DIAGRAM**



**RAW SEWAGE INFLUENT PUMP STATION
RISER DIAGRAM**

MARK	DATE	MADE BY	CHECKED	REVISIONS
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	8/9/11	DA	YR	GAS MONITORING SYSTEM REVISIONS

AECOM USA, INC.
300 WASHINGTON STREET
WAKEFIELD, MA 01880
PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

YASSER RIZK
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. 45,643
9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**RAW SEWAGE INFLUENT PUMP STATION
RISER DIAGRAM**

ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	42 E-602
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

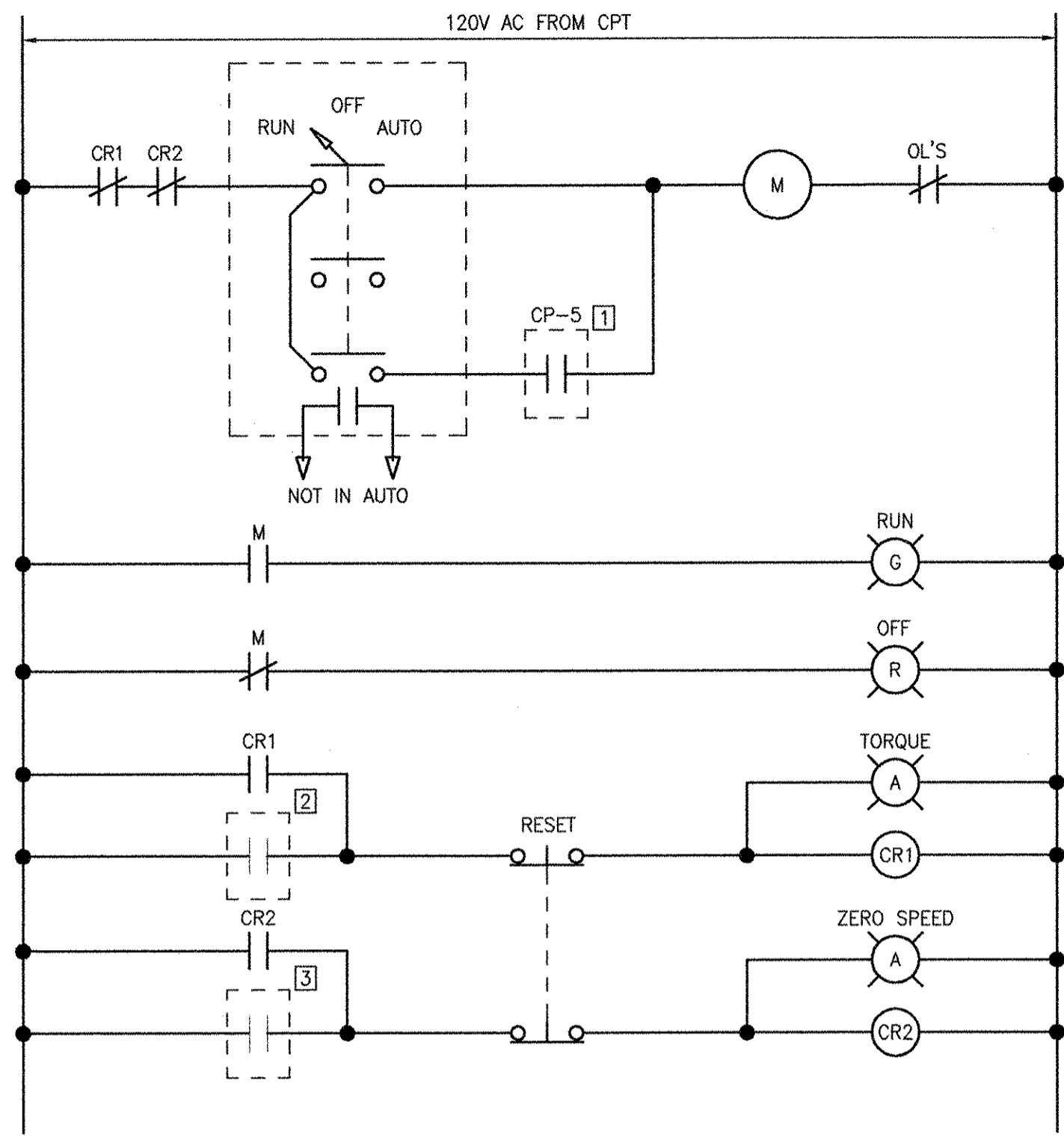
42 E-602

RECORD DRAWING

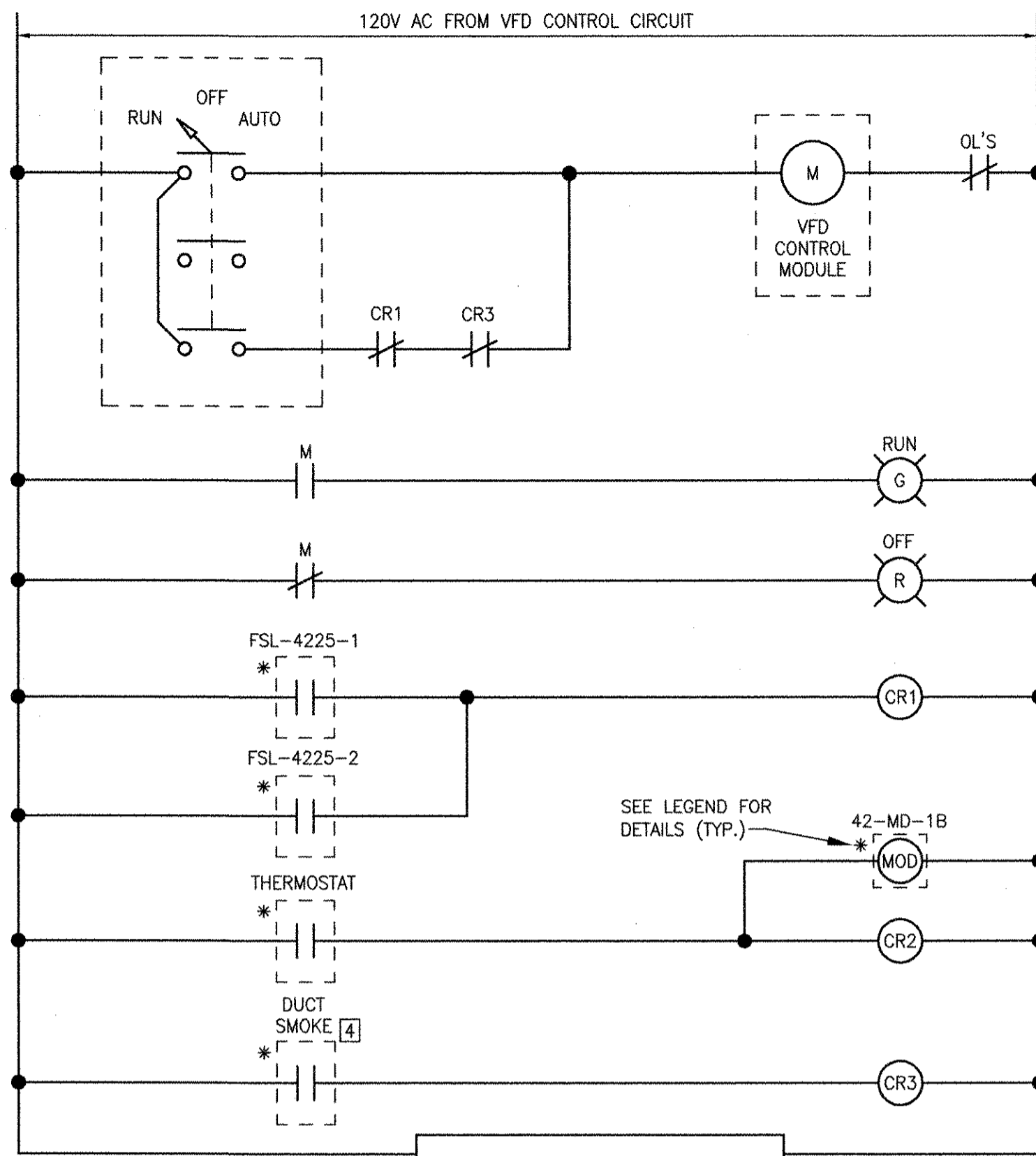
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

PATH: I:\PROJECTS\60148648 - EAST PROVIDENCE DP-4\SHEETS\42 E-602.DWG
LAST UPDATE: Thursday, October 25, 2012 10:18:02 AM
PLOT DATE: Thursday, October 25, 2012 10:18:12 AM

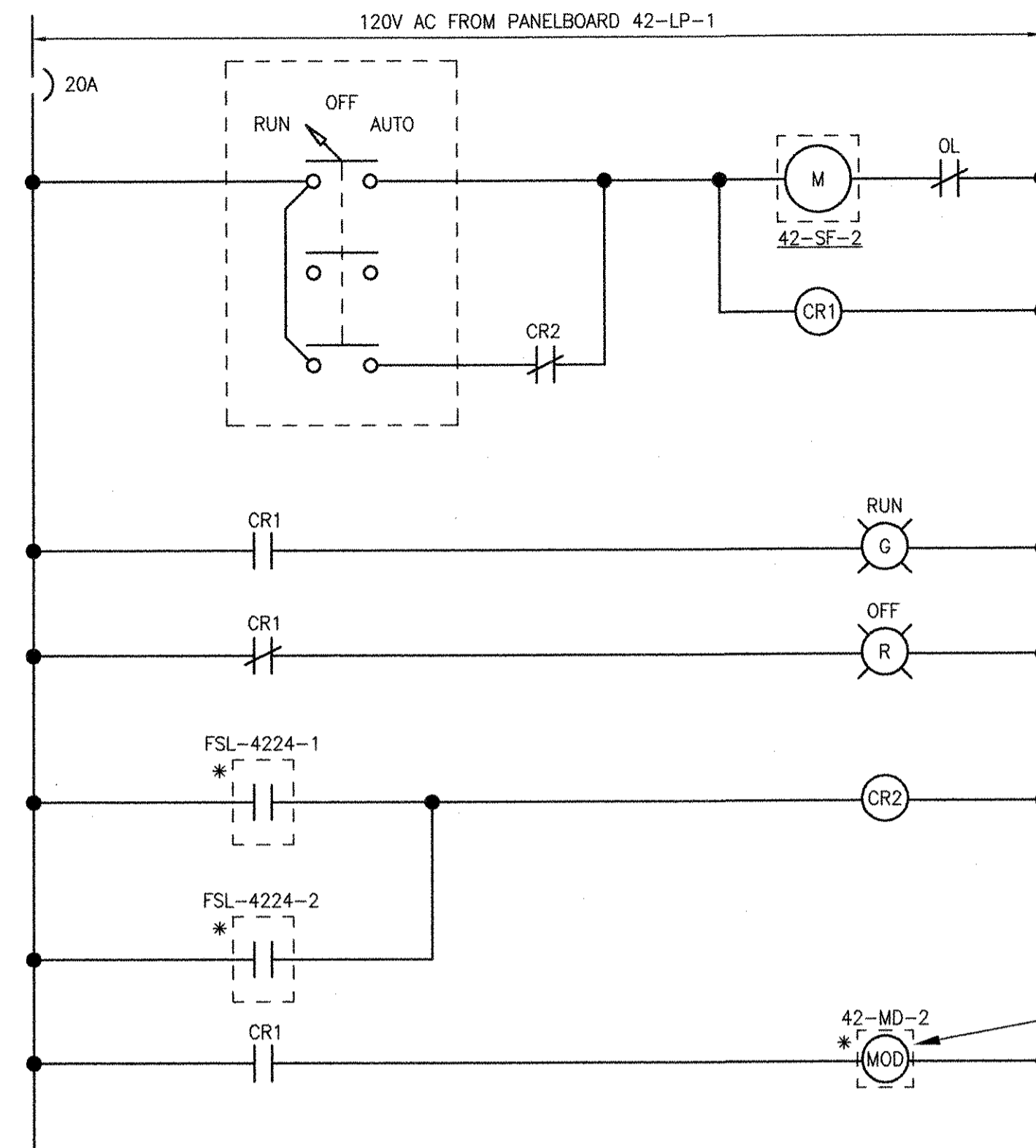
ANSI D - 25-041-12



**CROSS COLLECTOR 22-PSC.CC-1
WIRING DIAGRAM**
(TYPICAL FOR 22-PSC.CC-2)
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)



**EXHAUST FAN 42-EF-3
VFD WIRING DIAGRAM**
(ALL COMPONENTS LOCATED AT VFD UNLESS OTHERWISE NOTED)



**SUPPLY FAN 42-SF-2
STARTER WIRING DIAGRAM**
(ALL COMPONENTS LOCATED AT MOTOR STARTER UNLESS OTHERWISE NOTED)

LEGEND:

- 1 FROM HEADWORKS PLC (CP-5)
- 2 FROM EXISTING TORQUE SWITCH (NOTE 1)
- 3 FROM EXISTING ZERO SPEED SWITCH (NOTE 1)
- 4 FROM DUCT SMOKE DETECTOR. REFER TO DRAWING 42 E-101 FOR LOCATION.
- 5 FROM SUPPLY FAN 42-SF-2
- 6 VFD EXHAUST FAN 42-EF-3 VFD LOCATED WITHIN 42-MCC-1

NOTES:

- 1. FIELD VERIFY ZERO SPEED AND TORQUE SWITCHES ARE INSTALLED FOR THE EXISTING CROSS COLLECTORS. IF THESE DEVICES DO NOT EXIST, MODIFY THE WIRING DIAGRAMS TO REMOVE THE ZERO SPEED AND HIGH TORQUE ALARMS.

* ROUTE A [D2] CONDUIT BETWEEN THE MOTOR STARTER AND EACH DEVICE INDICATED. REFER TO THE ELECTRICAL/HVAC DRAWINGS FOR LOCATIONS.

ASSUME 150VA (TYP.)

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

AECOM USA, INC.
100 WASHINGTON ST.
WAKEFIELD, MA 01880
PHONE (781) 246-5500



YASSEY RIZK
No. 95
02/10/2012
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
EAST PROVIDENCE DP-4

**RAW SEWAGE INFLUENT PUMP STATION
WIRING DIAGRAMS**
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	42 E-603
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

42 E-603

PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (DPO)\DP-4\SHEETS\42 E-603.DWG
LAST UPDATE: Monday, October 01, 2012 9:08:18 AM
PLOT DATE: Thursday, October 25, 2012 9:07:53 AM
ANSI D - 1-10-12

**PROCESS EQUIPMENT
STARTER WIRING DIAGRAM "A"**
(TYPICAL FOR 22-PSC.DWP-1, BLOWER NO. 1, BLOWER NO. 2)
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)

**EXHAUST FAN 42-EF-2
STARTER WIRING DIAGRAM**
(ALL COMPONENTS LOCATED AT MOTOR STARTER UNLESS OTHERWISE NOTED)

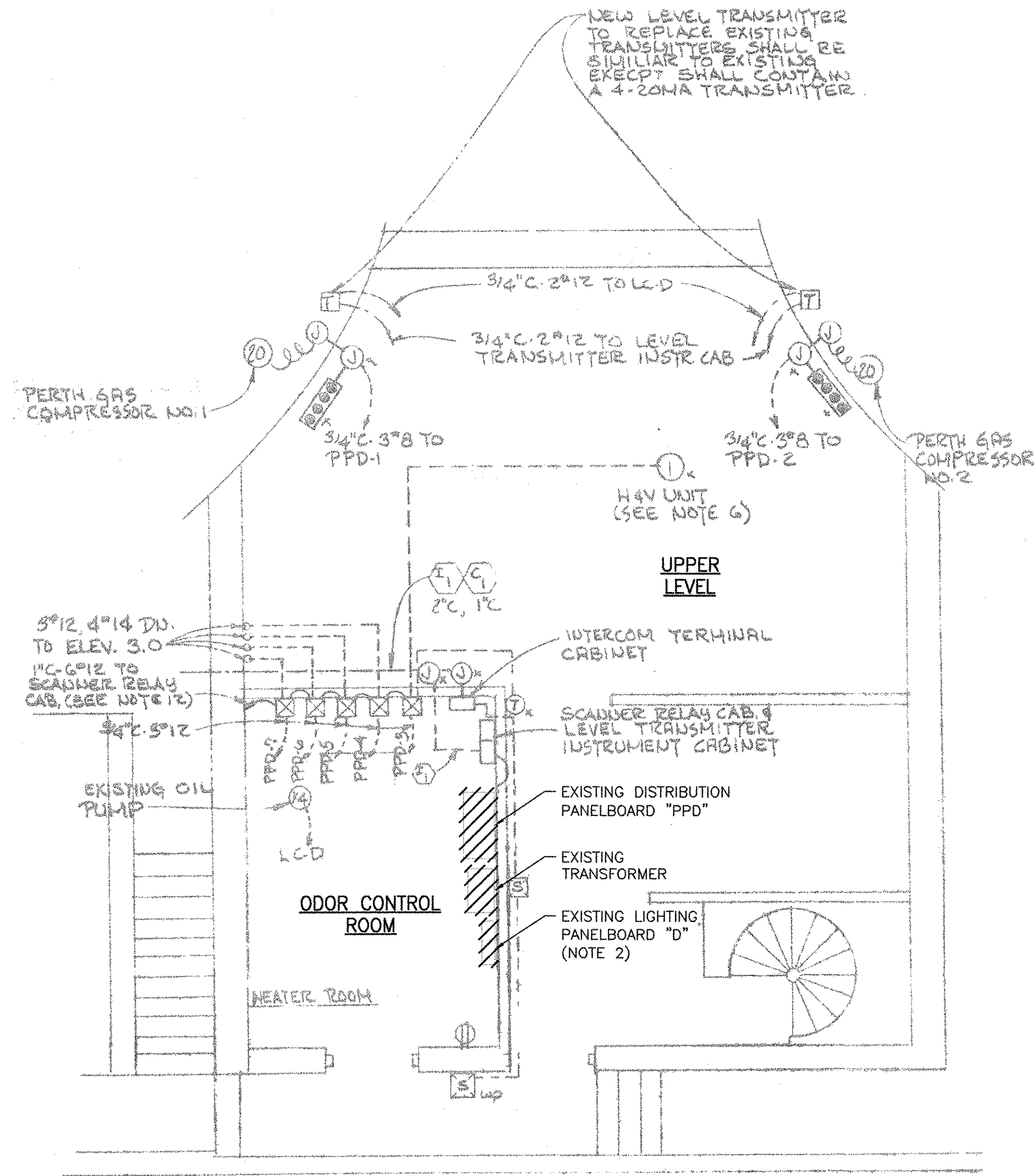
**EXHAUST FAN 42-EF-1
STARTER WIRING DIAGRAM**
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)

**SUPPLY FAN 42-SF-1
STARTER WIRING DIAGRAM**
(ALL COMPONENTS LOCATED AT MCC UNLESS OTHERWISE NOTED)

BASED ON CE MAGUIRE, INC.
 AS-BUILT 2/5/79 -
 ELECTRICAL POWER PLANS
 C.A.M. NO. 1349, DRAWING NO. 117-A

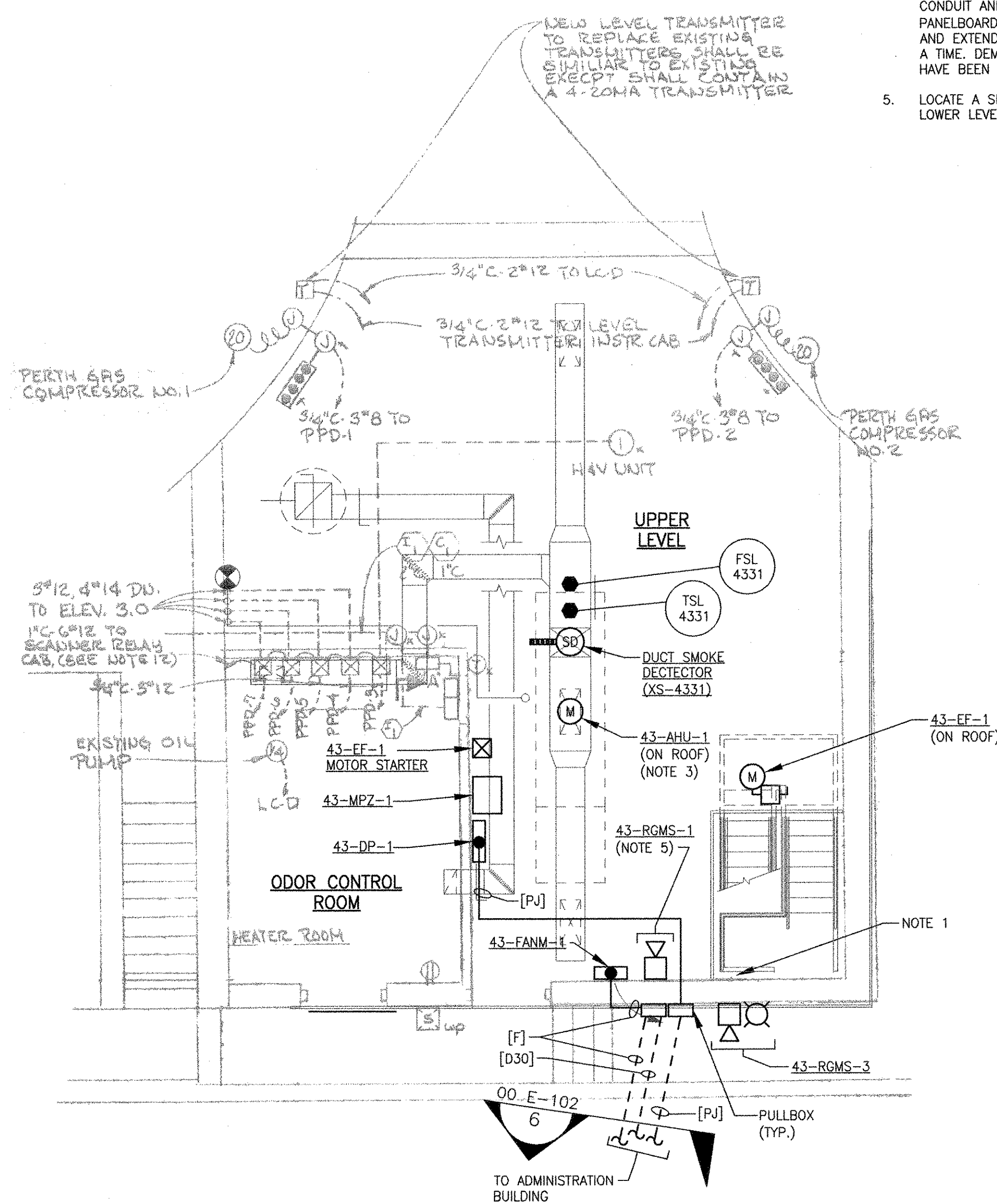
NOTES

1. RELOCATE ALL CONDUIT, WIRE AND ELECTRICAL DEVICES ASSOCIATED WITH GRINDERS AND SLUDGE PUMPS ROUTED ALONG WALL WHERE NEW STAIR CASE WILL BE INSTALLED.
2. EXISTING PANELBOARD "D" TO BE DEMOLISHED. EXTEND WIRING FOR ASSOCIATED 208/120VAC LOADS TO NEW PANELBOARD 43-MPZ-1. PROVIDE PANELBOARD WITH CIRCUIT BREAKERS FOR EACH EXISTING LOAD. CIRCUIT BREAKERS SHALL MATCH EXISTING TRIP SETTINGS.
3. DISCONNECT SWITCH AND CONVENIENCE RECEPTACLE PROVIDED WITH EQUIPMENT. PROVIDE A 120V, 20A CIRCUIT FROM PANELBOARD 43-LP-1 FOR THE RECEPTACLE.
4. PROVIDE TERMINAL BOXES WHERE REQUIRED TO INTERCEPT EXISTING CONDUIT AND WIRE BETWEEN EXISTING LOADS AND EXISTING PANELBOARD "PPD". TERMINATE EXISTING WIRING ON TERMINAL STRIPS AND EXTEND TO NEW PANELBOARD 43-DP-1. TRANSFER LOADS ONE AT A TIME. DEMOLISH EXISTING DISTRIBUTION PANELBOARD ONCE ALL LOADS HAVE BEEN TRANSFERRED.
5. LOCATE A SECOND REMOTE GAS MONITORING PANEL 43-RGMS-2 IN THE LOWER LEVEL. REFER TO SHEET 43 E-601 FOR RISER DIAGRAM.



**DIGESTER STORAGE TANK
 DEMOLITION PLAN AT EL. 21.50'**

SCALE: 1/4"=1'-0"

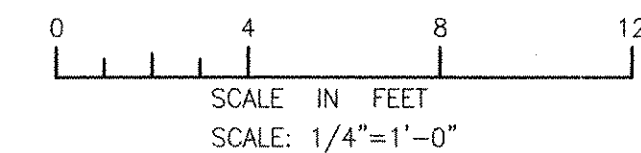


**DIGESTER STORAGE TANK
 MODIFICATION PLAN AT EL. 21.50'**

SCALE: 1/4"=1'-0"

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



NO.	DATE	BY	CHECKED	DESCRIPTION
2	10/19/12	MS	YR	REVISED FOR RECORD DRAWING
	8/9/11	DA	YR	REVISED GAS MONITORING SYSTEM

AECOM USA, INC.
 ONE WASHINGTON SQUARE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

AECOM

RECORD DRAWINGS

REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

9430

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4

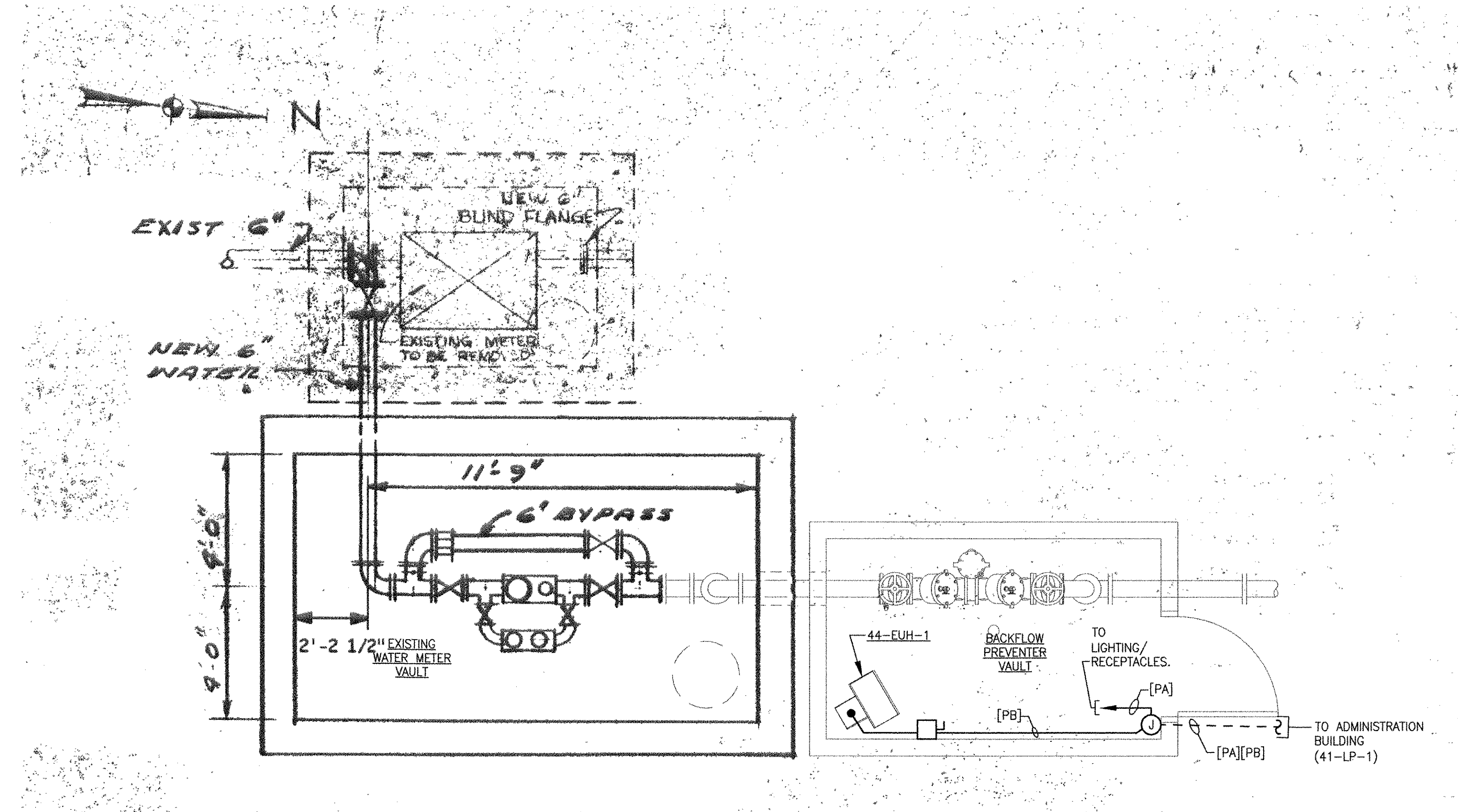
**SLUDGE DIGESTER BUILDING
 MODIFICATION PLANS**

ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	43 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

43 E-101

PATH: \\F:\60148648 - EAST PROVIDENCE (BRO, DP-4) SHEETS\43 E-101.DWG
 LAST UPDATE: Thursday, October 25, 2012 10:17:23 AM
 PLOT DATE: Thursday, October 25, 2012 10:17:34 AM
 ANSI D - 25-Oct-12

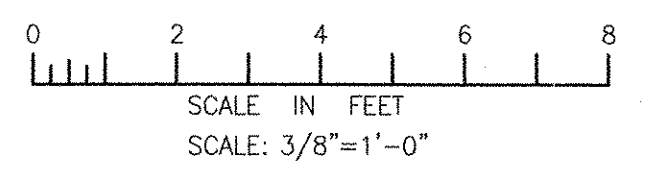


**MASTER BACKFLOW PREVENTER VAULT
POWER PLAN**
SCALE: 3/8"=1'-0"

ROOM OR SPACE NAME	LIGHTING SYSTEM													SWITCHES	RECEPTACLES	
	LUMINAIRE TYPE															
	BA1	BA2	BM1	DD1	DD2	DL1	DL2	EU1	EU2	EU3	EM1	FA1	FB1	FC1		
BACKFLOW PREVENTER VAULT			1								1				1	1

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



PATH/FILENAME: P:\60148648 - EAST PROVIDENCE DBO\DP-4\SHETS\VE-4 E-101.DWG
 LAST UPDATE: Monday, October 01, 2012 9:07:24 AM
 PLOT DATE: Thursday, October 25, 2012 9:08:03 AM
 ANSI D - 1- Oct-12

MARK	DATE	MADE BY	CHECKED	YR	DESCRIPTION
1	10/19/12	MS	YR		REVISED FOR RECORD DRAWING

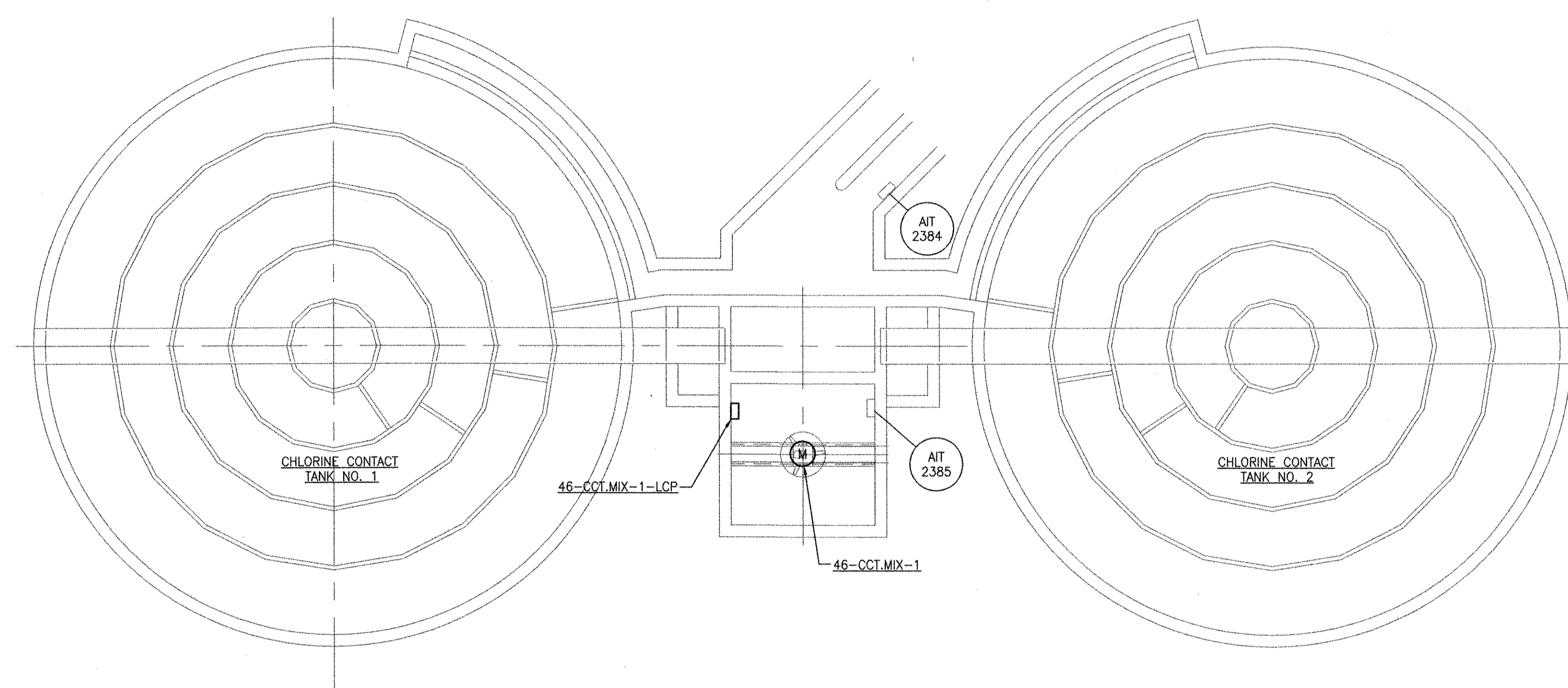
AECOM
 RECORD DRAWINGS
 AECOM USA, INC.
 100 WASHINGTON ST.
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL
 No. 25
 08/25/94
 94-30

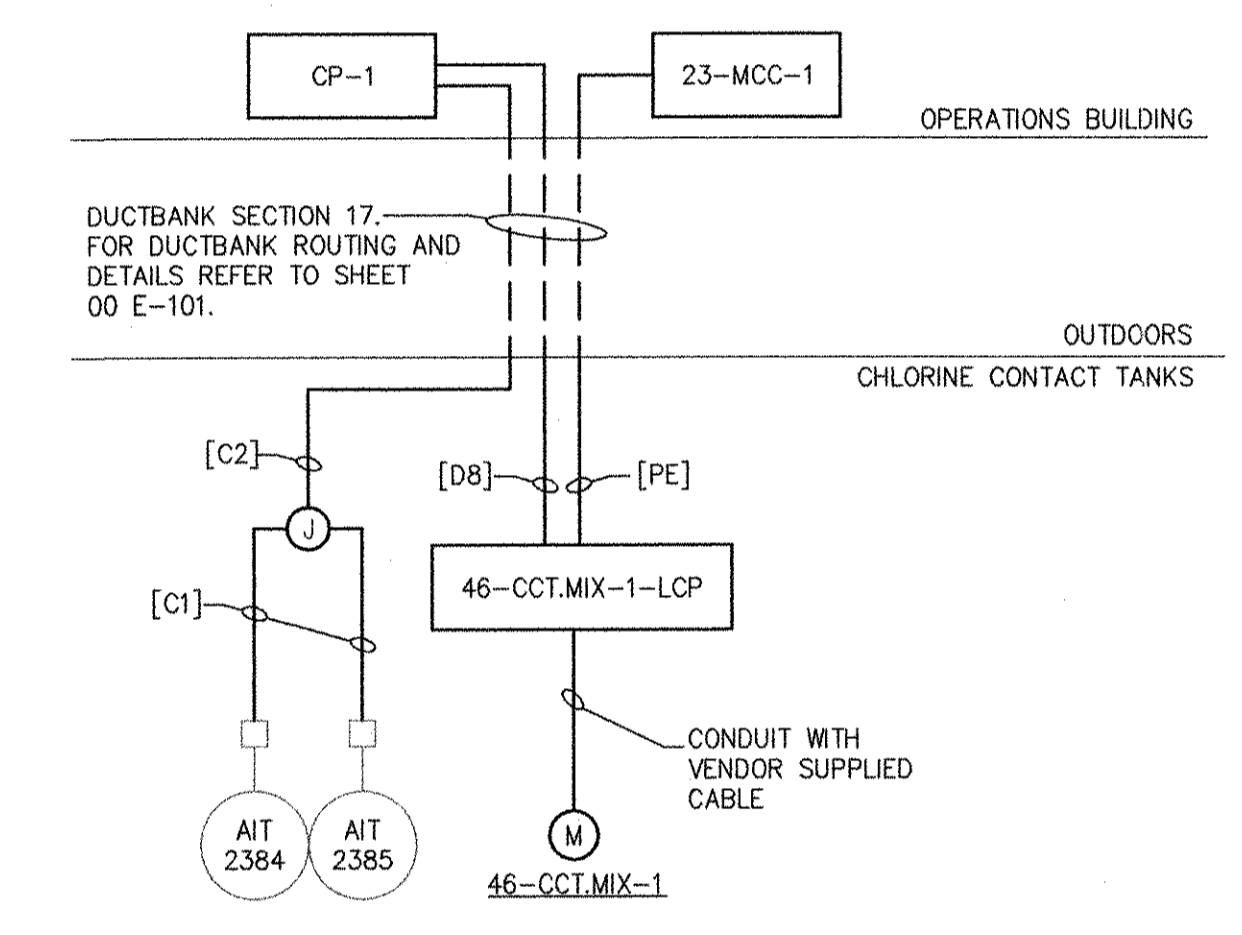
CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
**MASTER BACKFLOW PREVENTER VAULT
POWER PLAN**
 ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	44 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

44 E-101



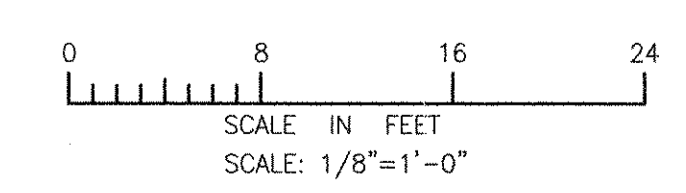
**CHLORINE CONTACT TANKS
POWER PLAN**
SCALE: 1/8"=1'-0"



**CHLORINE CONTACT TANKS
RISER DAIGRAM**
SCALE: NONE

RECORD DRAWING

NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.



ANSI D - 2-Oct-12
 PATH/FILENAME: F:\60148648 - EAST PROVIDENCE DBO\DP-4\SHEETS\44E E-101.DWG
 LAST UPDATE: Tuesday, October 02, 2012 12:30:33 PM
 PLOT DATE: Thursday, October 25, 2012 9:08:06 AM

MARK	DATE	MS	YR	REVISOR	DESCRIPTION
1	10/19/12				REVISED FOR RECORD DRAWING

AECOM
 AECOM USA, INC.
 100 WASHINGTON DRIVE
 WAKEFIELD, MA 01880
 PHONE (781) 246-5200

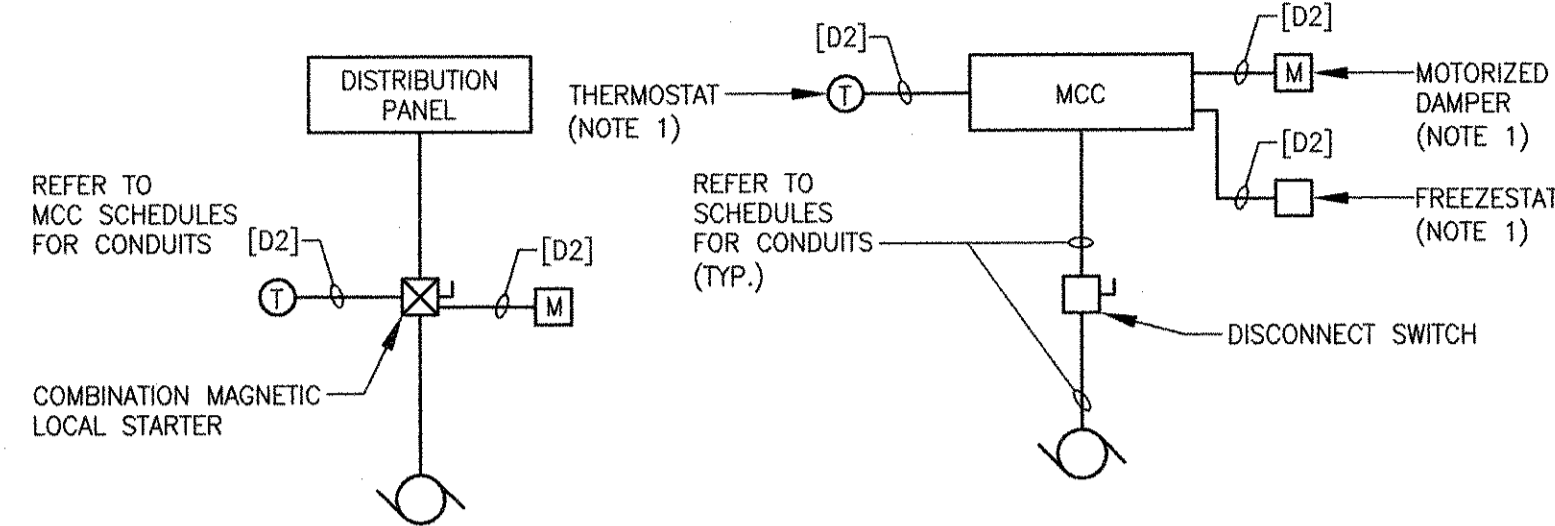
RECORD DRAWINGS

YASSER RIZK
 No. 95
 94-50
 REGISTERED PROFESSIONAL ENGINEER
 ELECTRICAL

CITY OF EAST PROVIDENCE, RHODE ISLAND
 EAST PROVIDENCE DP-4
**CHLORINE CONTACT TANKS
POWER PLAN**
 ELECTRICAL

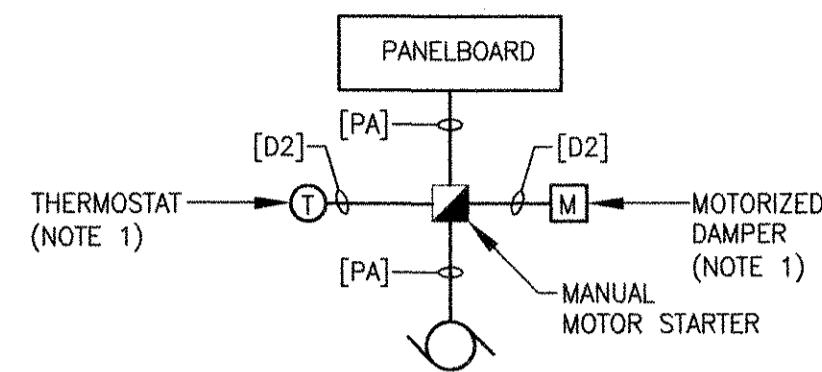
PROJECT NO:	60148648
CAD DWG FILE:	46 E-101
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

46 E-101



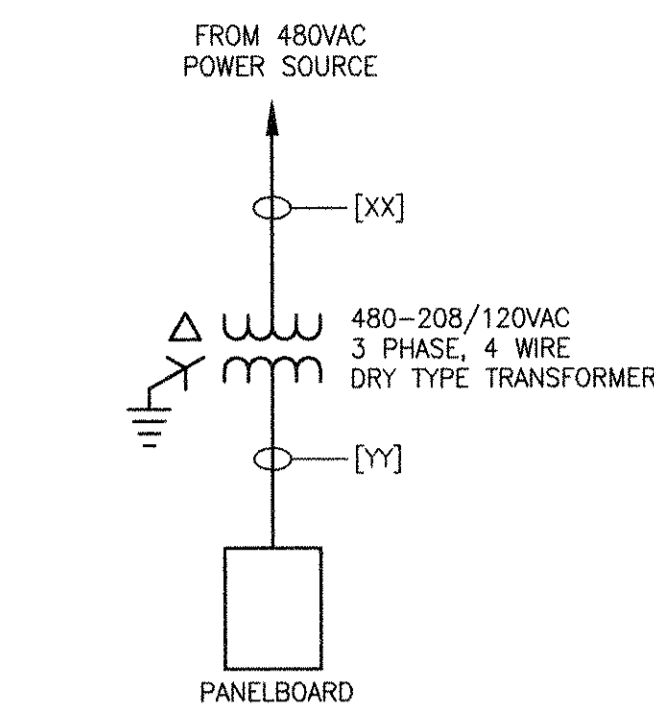
TYPICAL THREE PHASE EXHAUST/SUPPLY FAN

1. WHERE INDICATED, REFER TO ELECTRICAL AND HVAC DRAWINGS FOR DETAILS.



SINGLE PHASE EXHAUST/SUPPLY FAN FED FROM A LOCAL MANUAL STARTER AND A PANELBOARD

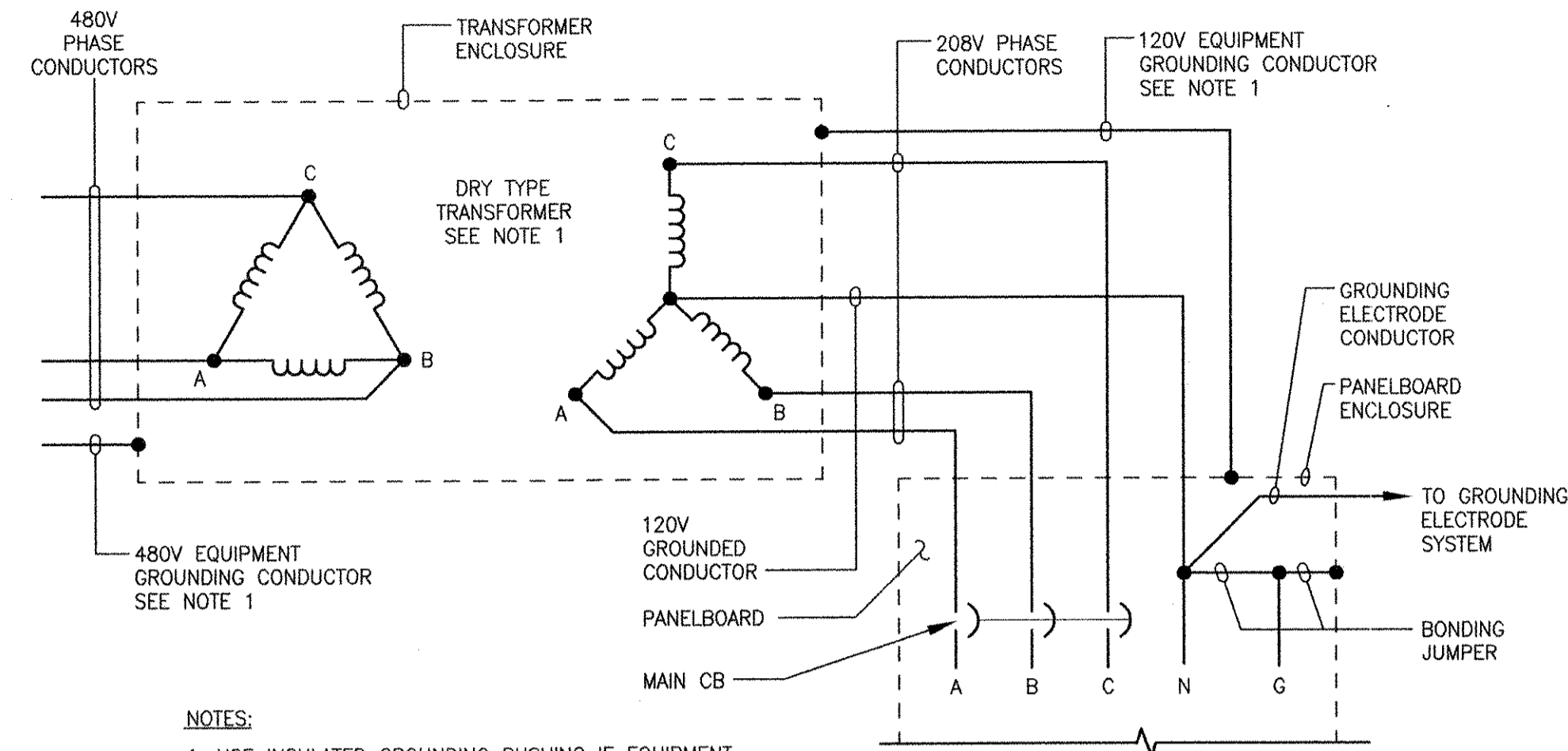
1. WHERE INDICATED, REFER TO ELECTRICAL AND HVAC DRAWINGS FOR DETAILS.



TRANSFORMER KVA	PRIMARY [XX]	SECONDARY [YY]
5 KVA	PB	PB-4
10 KVA	PB	PE-4
15 KVA	PC	PG-4
30 KVA	PE	PK-4
45 KVA	PH	PM-2

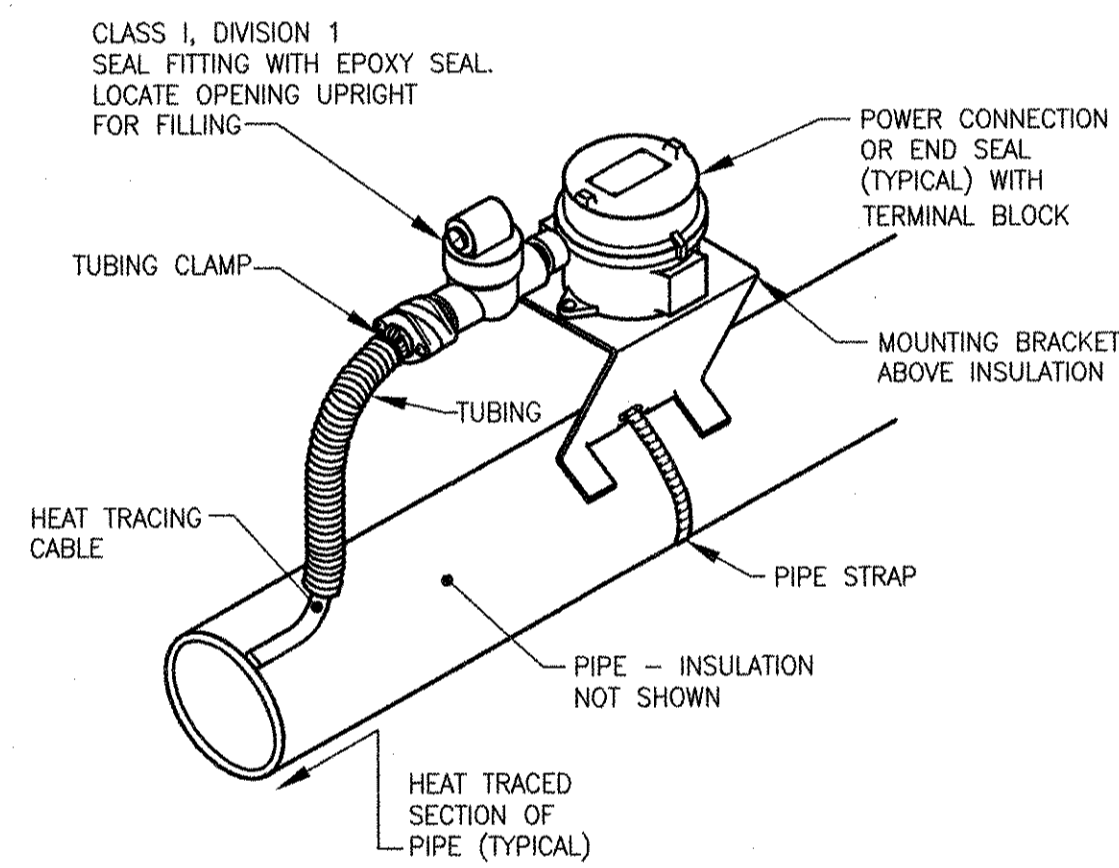
480-208/120VAC DRY-TYPE TRANSFORMER WIRING DETAIL

REFER TO MCC AND PANELBOARD SCHEDULES FOR DETAILS

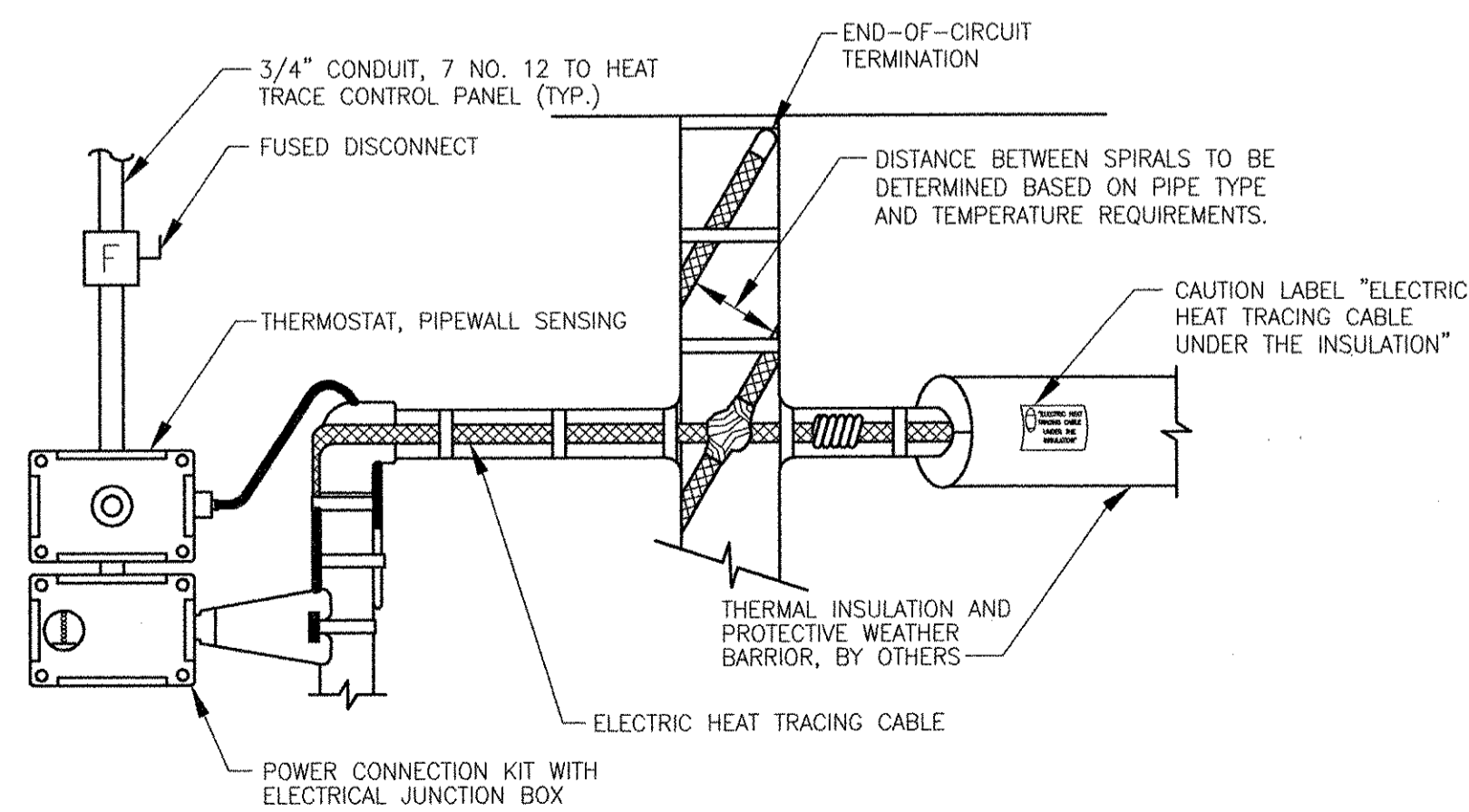


NOTES:
1. USE INSULATED GROUNDING BUSHING IF EQUIPMENT GROUNDING CONDUCTOR IS A WIRE.

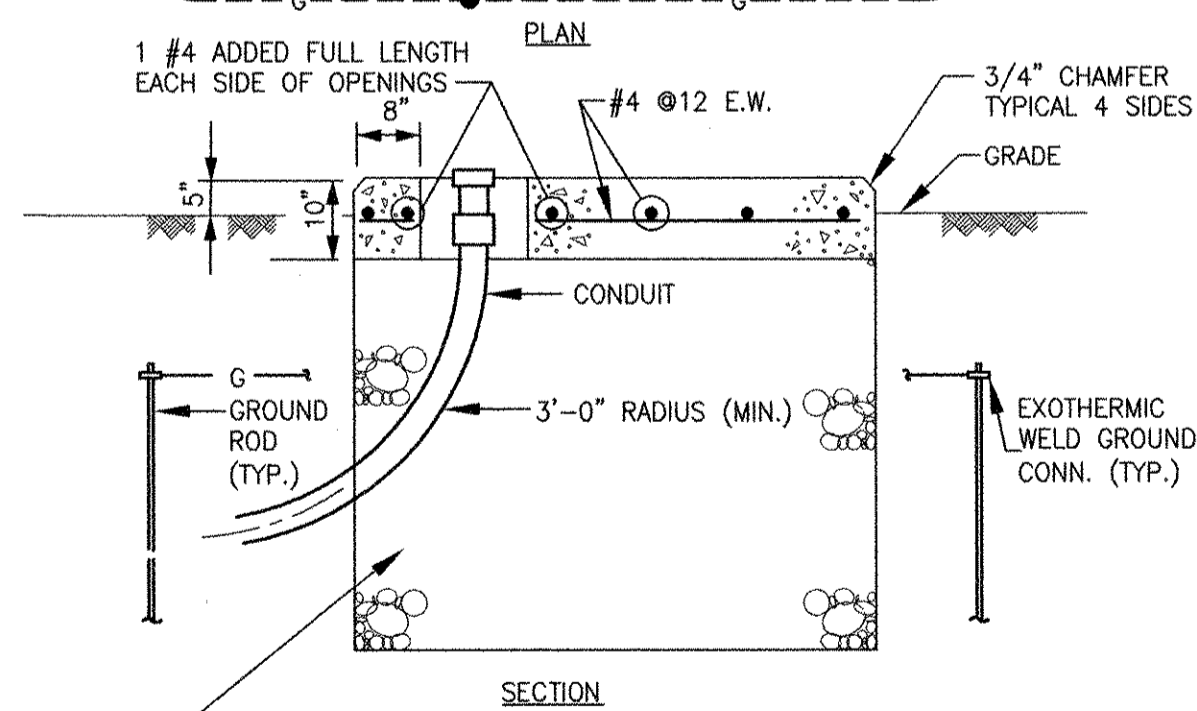
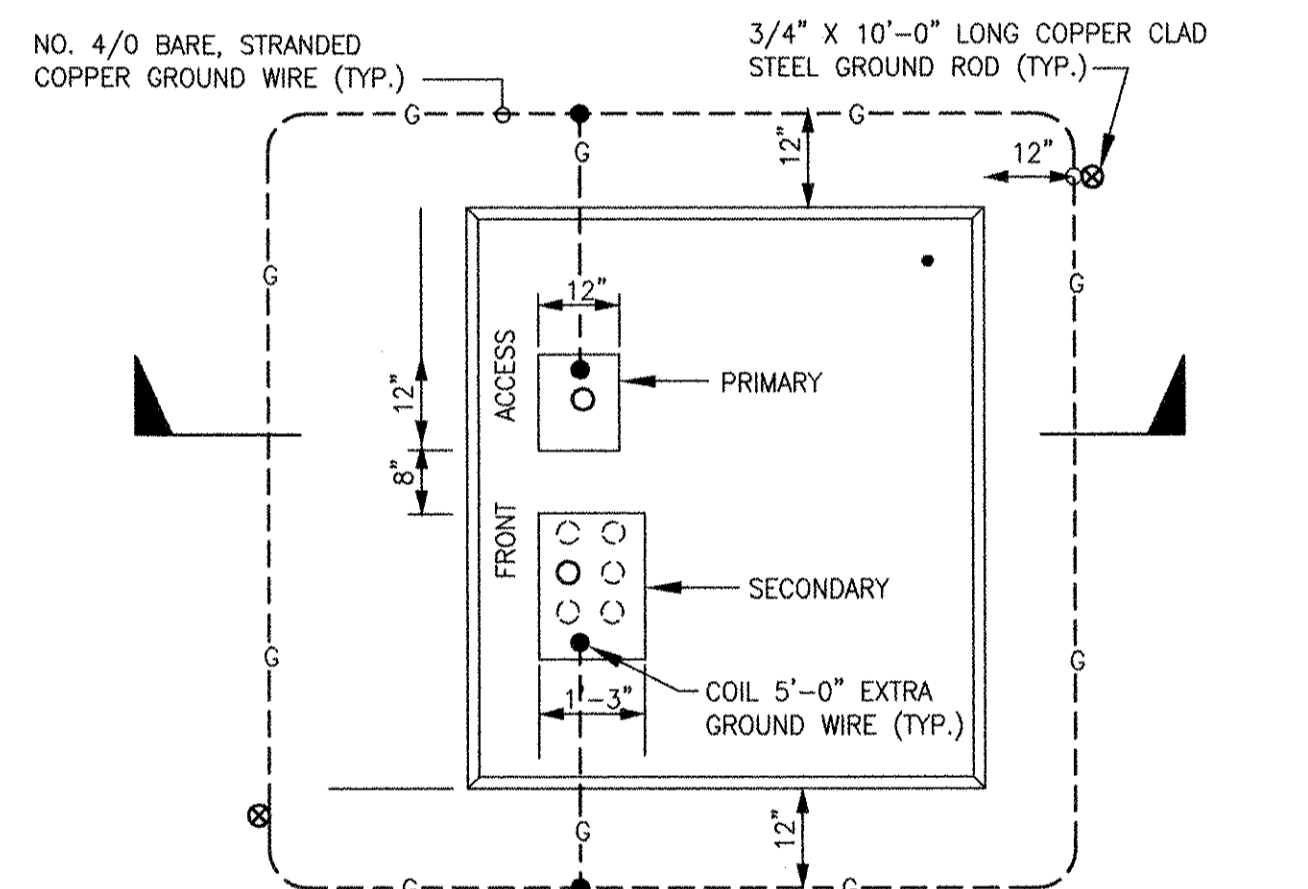
ELEMENTARY CONNECTION DIAGRAM FOR 480-208Y/120V TRANSFORMER AND 208Y/120V PANELBOARD



HAZARDOUS LOCATION CLASS I, DIVISION 1 HEAT TRACE TERMINATION
N.T.S.

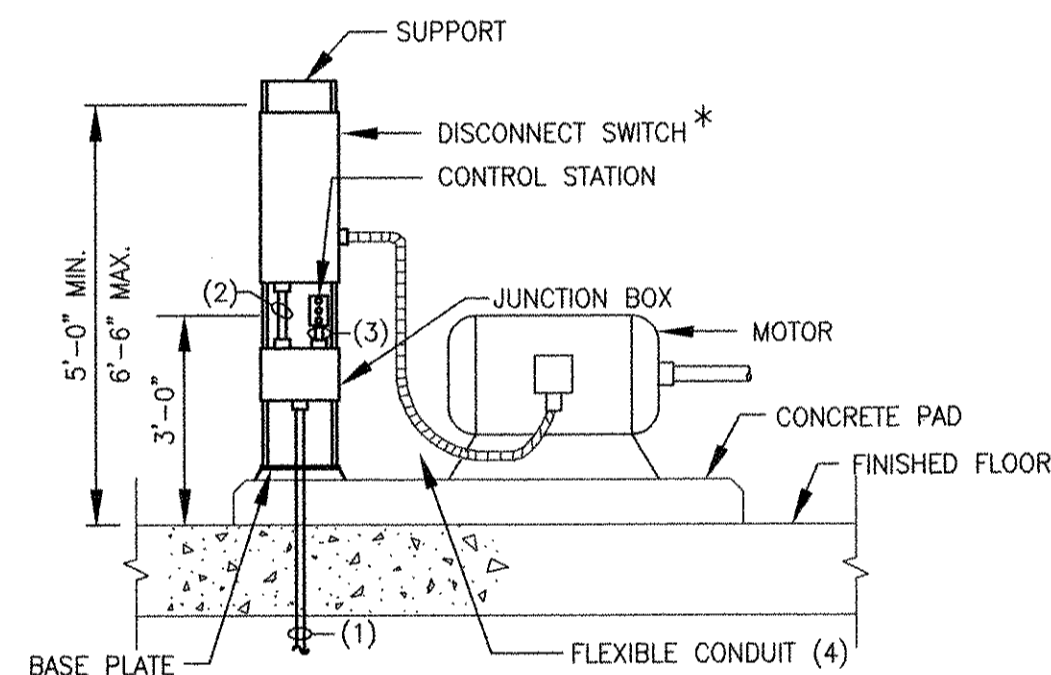


PIPE HEAT TRACING SYSTEM
N.T.S.

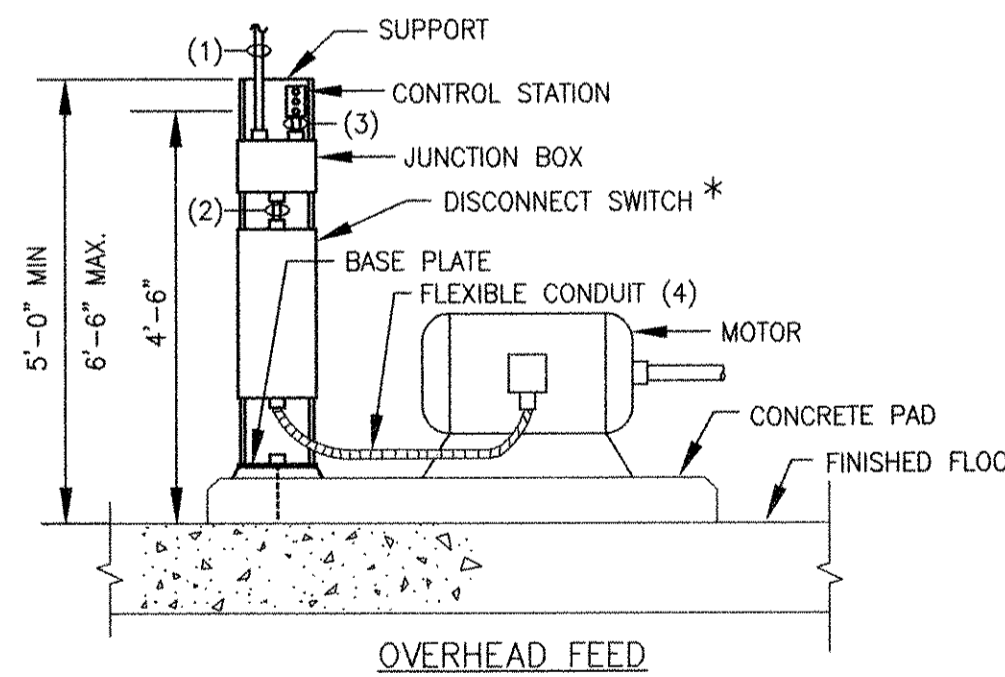


PROVIDE 4'-0" (SIX 8" LAYERS) OF FREE DRAINING NON-FROST SUSCEPTIBLE GRANULAR MATERIAL CONTAINING NOT MORE THAN 5% (BY WEIGHT) PASSING NO. 200 SIEVE. EACH LAYER SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY.
(3 PHASE TRANSFORMER-15KV MAX., 750-2500KVA, 480/277V.)

PAD-MOUNTED TRANSFORMER FOUNDATION (750-2500KVA)
N.T.S.



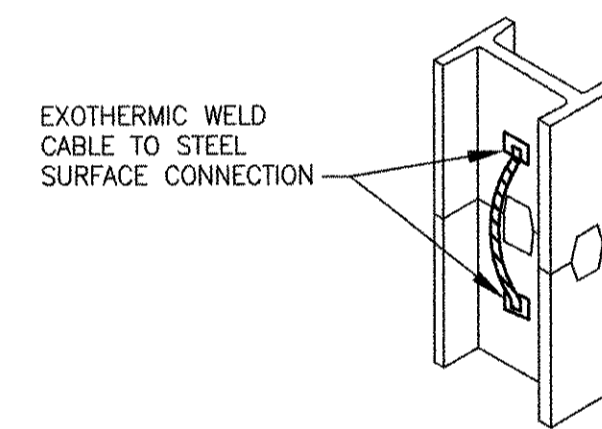
UNDERFLOOR FEED



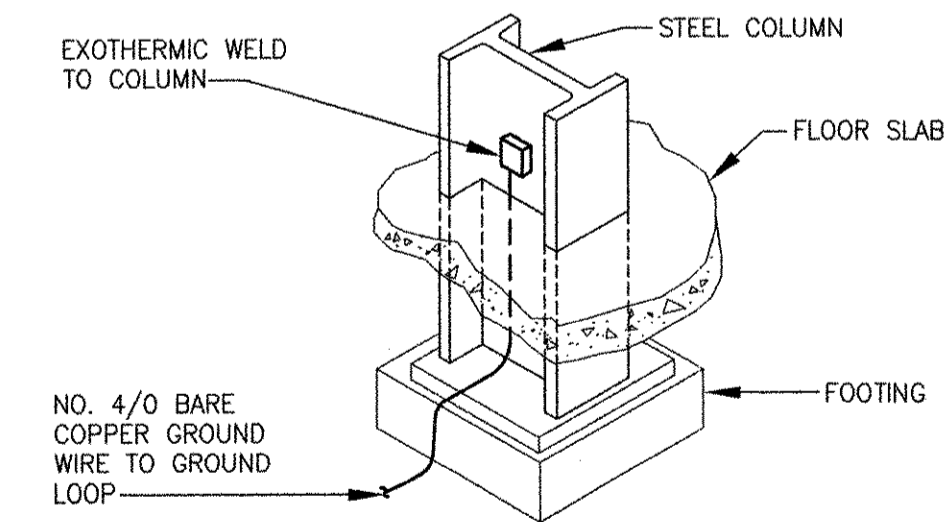
MOTOR CONNECTIONS

N.T.S.

- LEGEND:
- SEE SINGLE LINE SCHEDULES FOR CONDUIT AND WIRE SCHEDULE FOR SIZE AND QUANTITY OF WIRE.
 - SAME SIZE CONDUIT WITH THE POWER WIRES AS SHOWN ON SCHEDULE. (WHEN SWITCH IS PROVIDED WITH AUXILIARY CONTACTS, PROVIDE ADDITIONAL 2-14 AWG).
 - MINIMUM 3/4" C, WITH CONTROL (AWG #14) WIRES SHOWN ON SCHEDULE.
 - FLEXIBLE CONDUIT WITH SAME SIZE CONDUIT AND POWER WIRES SHOWN ON SCHEDULE.
- * WHEN THERE'S NO DISCONNECT SWITCH INSTALLED, INSTALL FLEXIBLE CONDUIT (ITEM NO. 4) FROM MOTOR TO JUNCTION BOX SHOWN AND DELETE ITEM NO. 2.



TYPICAL BONDING AT COLUMN SPICE PLATES



GROUNDING FOR STEEL COLUMN
N.T.S.

REVISIONS	DESCRIPTION	DATE	MADE BY	CHECKED	YR
1	MARK	10/19/12			

AECOM
RECORD DRAWINGS
ACOM USA, INC. - BRIDGE
WAKEFIELD, MA 01880
PHONE (781) 246-5200

REGISTERED PROFESSIONAL ENGINEER ELECTRICAL
YASSEER RIZK
No. 9430
02/20/12

CITY OF EAST PROVIDENCE, RHODE ISLAND WASTEWATER SYSTEM IMPROVEMENTS
DETAILS II
ELECTRICAL

PROJECT NO:	60148648
CAD DWG FILE:	99 E-102
DESIGNED BY:	D. ASPESI
DRAWN BY:	M. STEWART
DEPT CHECK:	Y. RIZK
PROJ CHECK:	S. THIBAUT
DATE:	OCTOBER 2012
SCALE:	AS NOTED

RECORD DRAWING
NOTE: This record drawing has been prepared based on modifying the conformed drawing to incorporate documented changes made during the construction. While reasonable efforts have been made to ensure accuracy and completeness, the location, size and configuration of the work should be field verified prior to any re-use of this information.

99 E-102

ANSI D - 5-Oct-12
PATH/FILENAME: P:\60148648 - EAST PROVIDENCE (BBO)\COMMON\SHETS\99 E-102.DWG
LAST UPDATE: Friday, October 05, 2012 8:58:33 AM
PLOT DATE: Thursday, October 25, 2012 9:20:03 AM