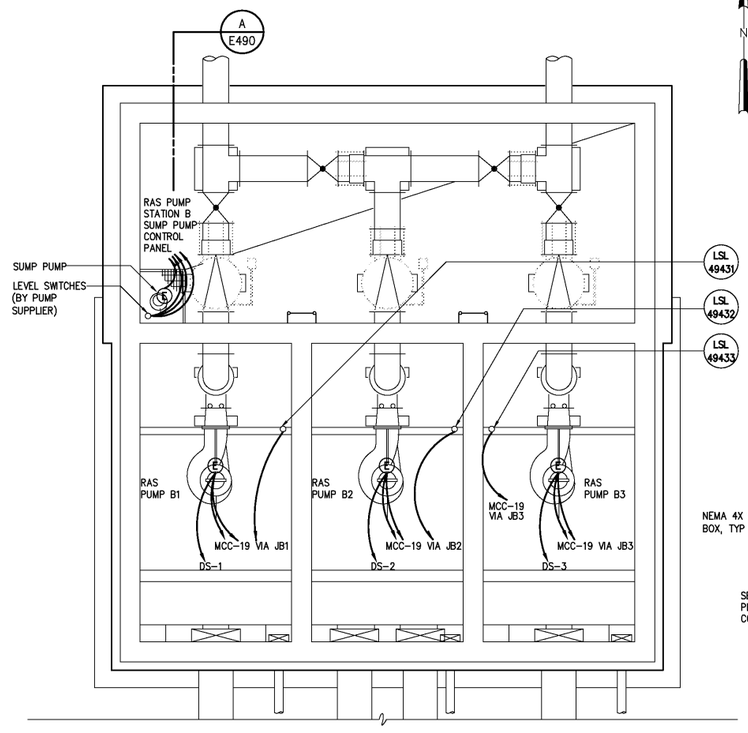
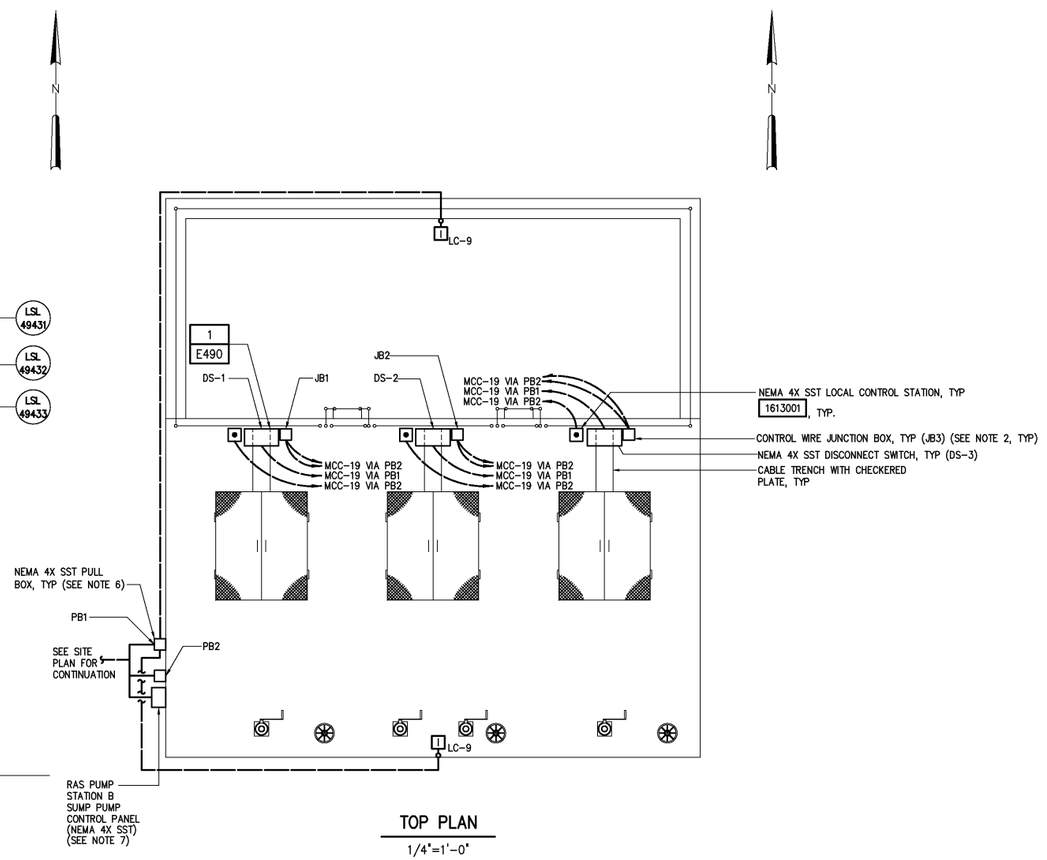


A
E490

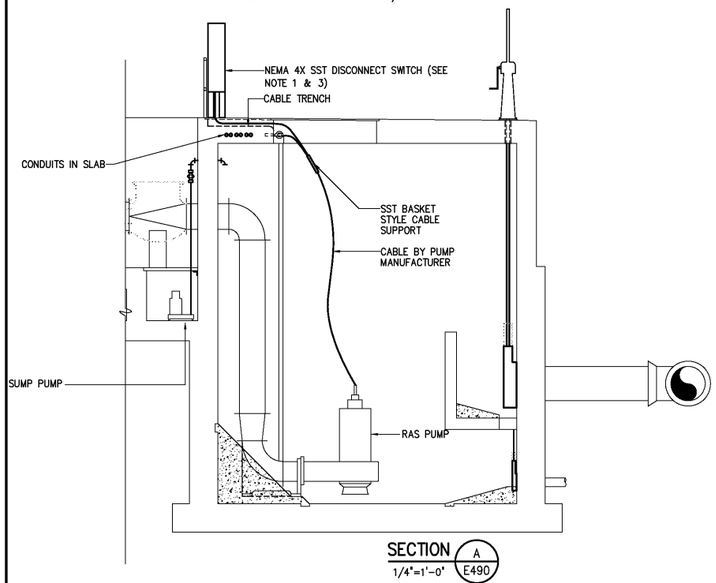
BOTTOM PLAN

1/4"=1'-0"



TOP PLAN

1/4"=1'-0"

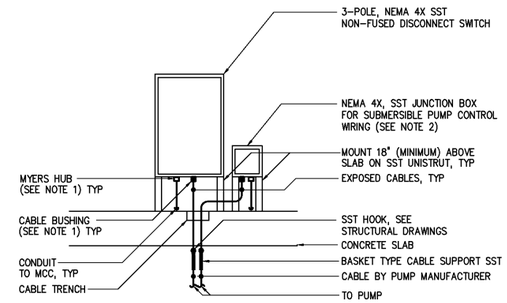


SECTION A/E490

1/4"=1'-0"

NOTES:

1. THE CONTRACTOR SHALL COORDINATE THE SIZE AND QUANTITY OF SUBMERSIBLE POWER AND CONTROL CABLE REQUIRED WITH THE SUBMERSIBLE PUMP MANUFACTURER. THE CONTRACTOR SHALL FURNISH AND INSTALL CABLE BUSHINGS AS NECESSARY AT THE POINTS WHERE THE SUBMERSIBLE PUMP CABLES ENTER THE DISCONNECT SWITCHES AND JUNCTION BOXES TO MAINTAIN NEMA 4X INTEGRITY. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLE SUPPORTS, CONDUIT, ETC.. AS REQUIRED TO SUPPORT AND INSTALL ALL CABLE BY THE PUMP MANUFACTURER. THE OPENINGS IN THE DISCONNECT SWITCHES SHALL BE SIZED SO THAT THE CABLES AND THEIR TERMINATIONS MAY BE COMPLETELY REMOVED FROM THE DISCONNECT SWITCH ASSEMBLY.
2. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEMA 4X, SST JUNCTION BOX WITH A TERMINAL STRIP INSIDE FOR TERMINATION OF THE SUBMERSIBLE PUMP CONTROL WIRING. THE CONTRACTOR SHALL COORDINATE TERMINAL STRIP SIZE WITH WITH THE PUMP SUPPLIER AND THE WIRING REQUIREMENTS INDICATED IN THE CONTRACT DRAWINGS. THE TERMINAL STRIP SHALL CONTAIN AT LEAST 25% SPARE TERMINALS.
3. THE CONTROL WIRE JUNCTION BOX IS NOT SHOWN IN SECTION-A FOR CLARITY. THE CONTROL WIRE AND CABLE TO EACH CONTROL WIRE JUNCTION BOX SHALL BE INSTALLED SIMILAR TO THE WIRE AND CABLE SHOWN IN SECTION-A.
4. THE CONTRACTOR SHALL ROUTE THE CABLE FROM THE SUBMERSIBLE PUMPS TO THE NEMA 4X SST DISCONNECT SWITCHES AND CONTROL WIRE JUNCTION BOXES PER DETAIL 1/E490 ON THIS SHEET.
5. THE CONTRACTOR SHALL COORDINATE THE NUMBER OF TERMINATIONS REQUIRED ON THE LOAD SIDE OF THE DISCONNECT SWITCH TO TERMINATE THE CONDUCTORS SUPPLIED WITH THE SUBMERSIBLE PUMPS. THE DISCONNECT SWITCH MAY NEED TO BE FURNISHED WITH A LUG KIT TO PROPERLY TERMINATE THE CONDUCTORS SUPPLIED WITH THE SUBMERSIBLE PUMPS. ANY MODIFICATIONS TO THE DISCONNECT SWITCHES SHALL NOT VIOLATE THE MINIMUM BENDING RADIUS OF THE SUBMERSIBLE PUMP CONDUCTORS AS REQUIRED BY THE NEC.
6. PULL BOX PB1 SHALL BE RESERVED FOR POWER WIRING ONLY. PULL BOX PB2 SHALL BE RESERVED FOR CONTROL WIRING ONLY.
7. THE CONTRACTOR SHALL MOUNT THE SUMP PUMP CONTROL PANEL 36" ABOVE GRADE ON 2" STAINLESS STEEL UNISTRUT.



SUBMERSIBLE PUMP CONNECTION

DETAIL 1 / NTS E490

NO.	ISSUED FOR	DATE	BY
3	AS BUILT	OCT 2007	RLT
2	CONSTRUCTION	MAR 2004	RLT
1	REGULATORY APPROVAL	NOV 2003	RLT

DESIGNED BRL
DRAWN BRL
CHECKED
PROJ. ENGR. DAN
APPROVED

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649

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CITY OF ROANOKE
VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT
PROCESS TRAIN IMPROVEMENTS

RAS PUMP STATION B
ELECTRICAL
PLANS AND SECTION

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE MARCH 2004
H & S JOB NUMBER 30788B
CONTRACT NUMBER B
DRAWING NUMBER E490

PLOT DATE 03/15/04 4:33pm FILE= N:\30788\307888\ELEC\e490 by BLISK XREF=307888\misc\307886b, 490\vrp-pb, 490\vrp-pl, 490\vrp-s01,