



NORTH CHARLESTON SEWER DISTRICT

PURCHASING DEPARTMENT

Purchasing Manager: Kimberly Caver, P.O. Box 63009 or 7225 Stall Road (BLDG C), North Charleston, SC 29419
PHONE: (843) 764-2653

TO: All Prospective Offerors
FROM: Kimberly Caver, Purchasing Manager
RFP TITLE: Turkey Creek Pump Station Upgrade

ADDENDUM NUMBER 1 – April 17, 2025 – 4 PAGES

Acknowledge receipt of this addendum by inserting its number and date in the space provided on the BID FORM, Section 00 41 00 Page 2, for receipt of Addenda. Failure to do so may subject Bidder as non-responsive. This addendum should be attached to and become part of the Contract Documents.

Attachments to this Addendum:

- 1. Pre-bid Meeting Minutes
- 2. Pre-bid Meeting Sign-in Sheet
- 3. Updated Plan Sheets C102, D101, D102, D501, D502, D503, E001, E002, E003, E004, E010, E101, E102, E201, E202, and E203
- 4. Approved Sherwin Williams coating systems sheet

Questions/Clarifications:

- The Turkey Creek PS flows provided in the Bypass Pumping Requirements on Sheet C101
 of the bid set plans are correct. The flows provided on the pre-bid meeting agenda are
 incorrect. They have been corrected in the attached pre-bid meeting minutes.
- 2. Is the contractor responsible for purchasing the new SCADA system from Inframark?

Yes, the contractor shall purchase the SCADA system Inframark and have them install it. Also, Inframark will need to coordinate the installation of the SCADA system in the pump control panel.

3. Is the new fiberglass grating required over the wet well channels?

No, the existing fiberglass grating will be reinstalled over the influent channels.

- 4. Is there any water proofing needed on the concrete exterior of the pump station?
 - No. Water proofing is not required on the concrete exterior of the pump station.
- 5. Is a delegated design required for the new electrical room walls?

No, the electrical room walls are designed and laid out in sheets S201 with details on sheet S251, the contractor should follow this design from Rickborn & Associates. Section 09 90 00 - Paint and Coatings of the specifications outlines interior and exterior painting for the electrical room wall.

6. Is there a reason why we are not using aluminum bar screens in the channels?

NCSD has elected to use stainless steel bar screens due to the corrosive environment that the screens are being exposed to.

7. What controls and power will need to be connected temporarily for the permanent stand by diesel bypass pump

None. The temporary bypass pumps should be able to convey all the peak flow to the station, and the diesel bypass pump will not be utilized while the station is on bypass.

- 8. Does the owner have a manufacturer, make, or model number preference for the exterior 316 stainless ladder?
 - There is not a specific ladder manufacturer or model number for the stainless steel ladder. The key requirement is that the ladder meet the specified requirements indicated in Detail 3/S352.
- 9. Should the exterior 316 ladder be coated color safety yellow
 - It is not necessary to paint the ladder.
- 10. Chain link fence surrounding the pump station to be 8ft tall, correct?
 - That is correct
- 11. New handrails around the pump station to be side mounted to match existing design correct?
 - Yes, handrails will be side mounted to match existing design. Plans have also been updated to include removable handrails along entire section along monorail door.
- 12. The detailed schedule of values, line 50 state "relocate existing generator". The station is to receive a new generator, where is the location for the existing generator?

 The existing generator on site shall be relocated to NCSD's Stall Road warehouse facility located at 7255 Stall Road, North Charleston, SC 29406. The contractor shall be responsible for loading, transporting, and unloading the generator.

The following changes are made to the Contract Documents:

Plans:

- 1. Sheets C102, D101, D102, D501, D502, D503, E001, E002, E003, E004, E010, E101, E102, E201, E202, and E203 have been updated. Replace these sheets with the updated sheets provided in this addendum.
- 2. Sheet G000 COVER SHEET: **DELETE** Sheet S001 STATEMENT OF SPECIAL INSPECTIONS from the SHEET INDEX. This sheet is not included with the plan set.

Specifications:

- Section 05 50 00 Miscellaneous Metals, pages 5-7, heading 2.01 MATERIALS, **DELETE** the following paragraphs: E. ALUMINUM GRATING, F. FIBERGLASS GRATING, and I. ALUMINUM LADDERS.
- Section 09 90 00 Paint and Coatings, page 5, heading 2.02 COATING SYSTEMS,
 REVISE the title of paragraph B. to "B. Interior CMU Walls (Electrical Room CMU Walls).
- Section 09 90 00 Paint and Coatings, page 5, heading 2.02 COATING SYSTEMS, page 7, paragraph 2.02, REVISE paragraph G. Channel Drop Pipe second and third coat systems as follows:

Second Coat: Apply Tnemec Series 141 Epoxoline at 4.0 - 6.0 dry mils. Color shall be 33GR Gray. Allow coat to dry overnight, minimum of 12 hours.

<u>Third Coat:</u> Apply Tnemec Series 73 Endura-Shield at 2.0 - 3.0 dry mils. Color shall be 33GR Gray. Allow coat to dry overnight, minimum of 12 hours.

Note: Channel drop pipe to be prepped and lined on both the inside and the outside of the pipe

 Section 09 90 00 – Paint and Coatings, page 5, heading 2.02 COATING SYSTEMS, page 7, paragraph 2.02, REVISE paragraph H. Exposed Ductile Iron Pipe second and third coat systems as follows:

Second Coat: Apply Tnemec Series 141 Epoxoline at 4.0 - 6.0 dry mils. Allow coat to dry overnight, minimum of 12 hours.

<u>Third Coat:</u> Apply Tnemec Series 73 Endura-Shield at 2.0 - 3.0 dry mils. Color shall be 33GR Gray. Allow coat to dry overnight, minimum of 12 hours.

Note: Flanges and fittings shall be shop primed with Tnemec Series 66-111 Epoxoline Primer at 3.0-4.0 dry mils. These surfaces shall then be touched up in the field and receive application of the three coat system listed above in 2.1.A.6. (a. through d.).

5.	Section 09 90 00 – Paint and Coatings, page 8, heading 2.02 COATING SYSTEMS, ADD the following paragraph K.:
	K. Interior Cast Concrete Walls (Pump Room Concrete Walls) Surface Preparation: SSPC-SP13/NACE 6 Surface Preparation of Concrete, ICRI 3. The surface must be clean and dry.
	<u>1st Coat:</u> Waterborne Modified Polyamine Epoxy @ 0.7 – 1.5 dry mils. (performance equal to Tnemec Sereis 151 Elasto-Grip)
	$ \underline{2^{\text{nd}} \text{ Coat}} $: Waterborne Acrylic Epoxy applied at $4.0 - 6.0$ dry mils. (performance equal to Tnemec Series 288 Enviro-Pox)
	3rd Coat: Waterborne Acrylic Epoxy applied at 4.0 – 6.0 dry mils. (performance equal to Tnemec Series 288 Enviro-Pox)
6.	Section 09 90 00 – Paint and Coatings: Sherwin Williams has been included as an approved manufacturer of coatings for this project. Their approved coating systems are attached to this addendum.





3955 Faber Place Dr. Suite 300 North Charleston, SC 29405 Tel: 843.881.9804

MEETING MINUTES

Date: April 9, 2025

Subject: Turkey Creek Pump Station Upgrade Project: Pre-bid and Site Visit

Meeting Attendees:

Contractors North Charleston Sewer District Weston & Sampson

See attached sign-in sheet

General Discussion:

- 1. Introductions / Contacts
 - a. North Charleston Sewer District
 - i. Brian Graham (Primary Contact)
 Deputy Director, Capital Projects
 <u>brian.graham@ncsd.sc.gov</u>
 (843) 764-2662 (Office)
 (843) 469-6334 (Mobile)
 - i. Joe Arnold

Deputy Director, Capital Projects

Joe.arnold@ncsd.sc.gov

(843) 764-3072 ext. 2431

(843) 302-4360 (Mobile)

iii. Kimberly CaverPurchasing Manager<u>Kimberly.caver@ncsd.sc.gov</u>(843) 764 – 2653

- b. Weston & Sampson
 - Walt Fletcher (Primary Contact)
 Team Leader
 fletcher.walter@wseinc.com
 (843) 352-6473
 - ii. Kipling GearhartEngineer of Record, Regional Managergearhartk@wseinc.com(843) 972-4766

iii. Josh WetmoreCivil DesignerWetmore.Joshua@wseinc.com(854) 258-5385

2. Sign-In Sheet

3. Comments / Questions

- a. All questions during the prebid are informal and will not be part of an addendum that is sent out or part of the contract documents.
- b. Please email formal questions prior to 5:00 pm on April 24, 2025.
 - i. Questions should be sent to the NCSD purchasing department at purchasing@ncsd.sc.gov
- c. Questions and responses will be provided in writing via addendum posted on the NCSD purchasing website
- d. Addenda items will become a part of the issued for construction contract documents

4. Contract Document Location and Availability

- a. Plans, specifications, addendums, supplemental information, owner provided material purchase orders, and other relevant information are available on the NCSD purchasing website: https://ncsd.sc.gov/current-bid-opportunities/
- It is the responsibility of the contractor to periodically check the purchasing website for issued addendums

5. Project Timeline

- a. Bidding
 - i. Advertised March 25th, 2025
 - ii. Pre-Bid Meeting April 9th, 2025
 - iii. Deadline for questions April 24th, 2025 at 5:00 PM
 - iv. Final Addendum will be issued by 5:00 PM on April 28th, 2025
 - v. Bid Opening May 1st, 2025
 - Please be sure to acknowledge addendums and include bonds & insurance
 - 2) Provide required licensing information
- b. Construction Timeline (approximate)
 - i. Notice of Award May 13, 2025



- ii. PreCon Meeting May / June 2025
- iii. Notice to Proceed June/July 2025
- iv. Subs. Completion (210 calendar days)
- v. Final Completion (240 calendar days)

6. Project Overview

- a. Location
 - i. Turkey Creek PS 1900 Hawthorne Dr, N. Charleston, SC 29406
- b. Background
 - i. Station was built in the 1970s
 - ii. No major upgrade since originally constructed
 - iii. NCSD partially rehabilitated the wet well lining system in 2016
 - iv. 2 stories wet side / dry side
 - v. Triplex station "pass through" station; min. storage time
 - vi. Pump Station capacity:
 - 1) Avg Daily Flow 5,000 GPM
 - 2) Peak Flow 13,000 GPM
- c. Project summary (see contract documents for comprehensive scope)
 - Rehabilitate or replace aging components and systems of the pump station
 - ii. Exterior site improvements:
 - 1) Replace site fencing
 - 2) Replace asphalt pavement
 - 3) Add driveway access to genset and permanent diesel pump
 - 4) Replace handrails
 - 5) Replace sidewalk around building
 - 6) New genset slab and platform
 - iii. Replace station exterior brick veneer and roof access ladder
 - iv. New roof hatch over the channel grinder in the influent area and associated roof improvements and beam for removal
 - v. Install new Owner provided grinder and new Contractor provided bar screens in influent channels
 - vi. Remove existing first floor pump opening curbing and install hatches
 - vii. New isolated and environmentally controlled electrical room on first floor



- viii. Station to be placed on bypass and wet well to be cleaned and lining to be repaired as required—if full rehab is required, this will be completed at a later date
- ix. Existing 140 Hp Sulzer pumps will be removed, transported, stored, and reinstalled in accordance with manufacturer's instructions (see Appendix A of specs)
- x. Some of the pump station piping will be replaced;
 - Existing 20-IN discharge header piping to remain downstream of plug valves;
 - 2) Existing 24-IN suction piping through the wet well wall to remain
 - 3) All piping (new and existing) to be painted
- xi. Valves (Owner provided) to be replaced
- xii. Pump bases to be replaced
- xiii. All of the station potable water piping (including the exterior piping from the meter) to be replaced and new fixtures to be installed
- xiv. New sink and instantaneous water heater to be installed
- xv. Interior drain piping to be replaced
- xvi. Interior station ventilation system improvements including new supply and exhaust fans and associated duct work
- xvii. New mini-split system for electrical room
- xviii. Electrical improvements:
 - Install new Owner provided diesel genset, load bank connection cabinet, and ATS
 - Install new Owner provided VFD, RVSS, and associated cabinets
 - 3) Replace conductors and associated conduit
 - 4) Install Owner provided pump control instruments
 - 5) Install Owner provided distribution panel and PLC control panel
 - 6) Exterior lighting



7. Owner Provided Items

a. Table on Sheet G001

OWNER PROVIDED MATERIAL LIST						
ITEM	QUANTITY					
GENERATOR AND ALUMINUM PLATFORM	1					
24" KNIFE GATE VALVES	3					
20" CHECK VALVES	3					
20" PLUG VALVES	3					
AIR RELEASE VALVE	1					
CHANNEL GRINDER	1					
VFD'S, RVSS AND CABINETRY	3					
SUMP PUMP	1					
SUMP PUMP CONTROL PANEL	1					
LEVEL TRANSDUCERS AND LEVEL PROBE	1					
EXTERIOR ENCLOSED CIRCUIT BREAKER	1					
PORTABLE GENERATOR CONNECTION	1					
AUTOMATIC TRANSFER SWITCH	1					
DISTRIBUTION PANEL	1					
PANELBOARD	1					
PLC CONTROL PANEL	1					

b. Lifting Beam for roof opening (Sheet S301) provided by NCSD

8. Addenda

- a. Interpretations of notes and plans must be requested prior to deadline for questions
- b. Direct questions to NCSD Purchasing.
- c. Contractors will be responsible for periodically checking the NCSD purchasing website for addendums. The final addendum will be published by 5:00 PM on April 28th, 2025

9. Bid Form

- a. Lump sum
- b. Additional cost information
 - Bypass pumping cost



- ii. Wetwell cleaning cost
- iii. Wetwell rehabilitation cost

10. Final Reminders

- a. Bids should be provided in a signed & sealed envelope containing bonds, insurance, qualifications, completed bid form and schedule of values
- b. Please ensure receipt of all addendums are acknowledged in the bid form



North Charleston Sewer District

Optional Pre-Bid Sign-In Sheet

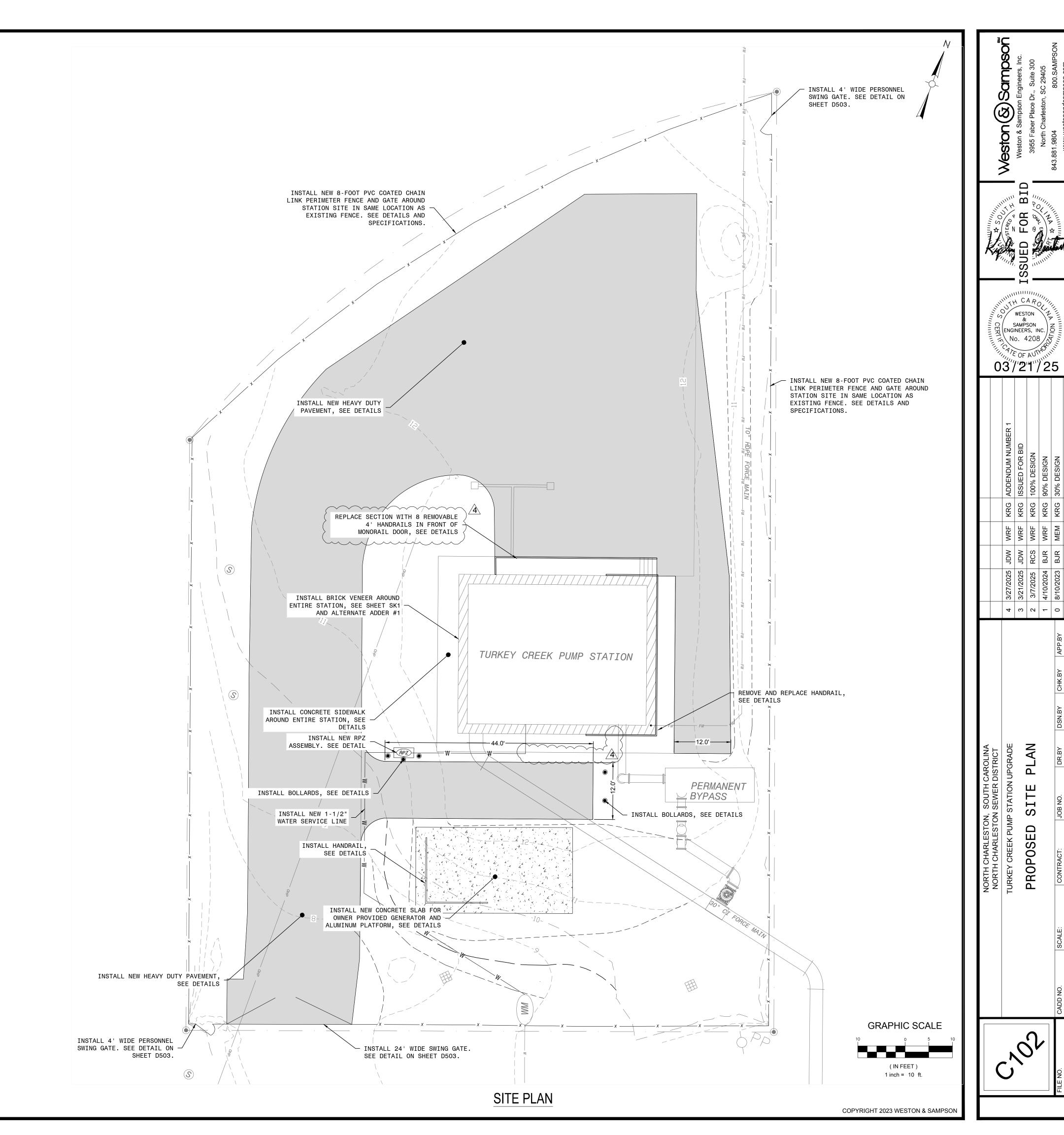
Project: Turkey Creek Pump Station Upgrade	Time: Tuesday, April 9, 2025, 1:30 PM
Facilitator: Walt Fletcher (Weston & Sampson)	Place: 1900 Hawthorne Drive, North Charleston, SC 29406

Company Name	Company Representative Name	Email Address & Phone Number
Chembion Environmental	Frank Buck	Frankjbuck@1998@gmial.com – 843-532-7535
Gatch Electrical	Bryan Eddings	Beddings @gatchelectical.com – 843-730-3293
WxTite Dale Jenkins		Djenkins1@wxtite.com – 843-696-6785
Triad	Frank Smolar	Frank.smolar@triad-engineering.com – 843-416-1112
Triad	Paul Kassouf	Paul.dassouf@triad-engineering.com
Chembion Environmental	Time Nickel	tnickel@chembian.com – 843-345-9395
Fortis Environmental	Steve Evans	steve@fortisenv.com – 843-964-4928
Bohicket Construction	Chris Pinelli	chrisp@bohicket.org – 843-534-9698

Company Name	Company Representative Name	Email Address & Phone Number			
Sunbelt Rentals	Andrew Health/James Ballard	Andew.heatlh@sunbeltrentals.com/james.ballard@sunbeltrentals.com 843-408-3699			
Metro Electric	Bradon Stone	bsone@metroelectic.net – 843-860-6719			
Mersino	Reed Waterbury	Reed.waterbury@mersion.com – 843-822-3272			
Mersino	Billy Williams				
DWG	Ethan Locey	elocey@dwginc.com			

NOTES:

- 1. CONTRACTOR SHALL CLEAN AND PAINT ALL VERTICAL CONCRETE SURFACES ON EXTERIOR OF STATION, AS WELL AS ALL EXTERIOR EXPOSED STATION PIPING, IN ACCORDANCE WITH SPECIFICATION SECTION 099000.
- 2. CONTRACTOR SHALL TOPSOIL, GRADE, AND SEED ALL DISTURBED AREAS UPON COMPLETION OF SOIL DISTURBING ACTIVITIES.
- 3. CONTRACTOR SHALL INSTALL SILT FENCE OR OTHER SEDIMENT & EROSION CONTROL MEASURES AS REQUIRED TO CONTAIN SOILS DISTURBED FROM CONSTRUCTION ACTIVITIES TO THE PROJECT AREA.



SIT

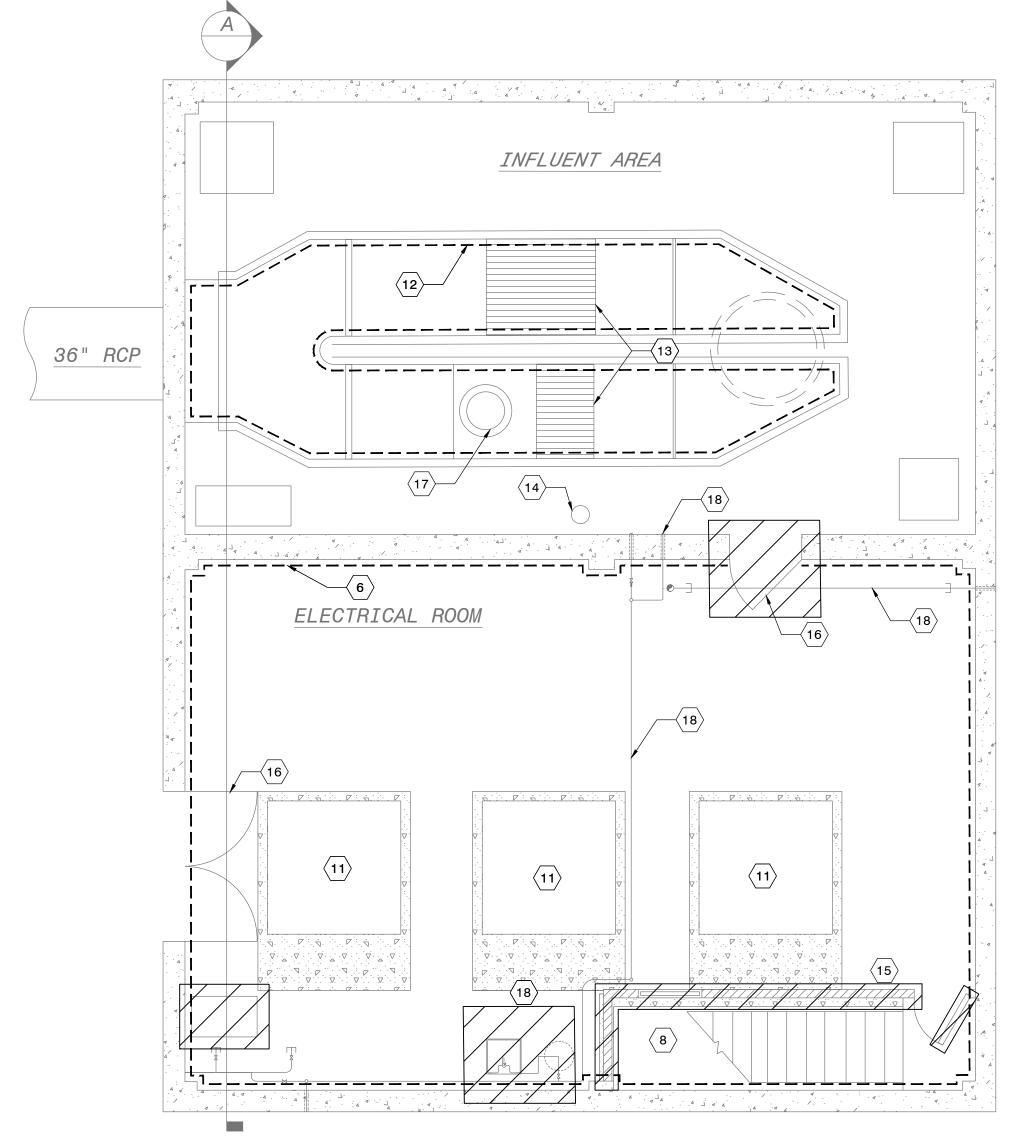
PROPOSED

NOTES:

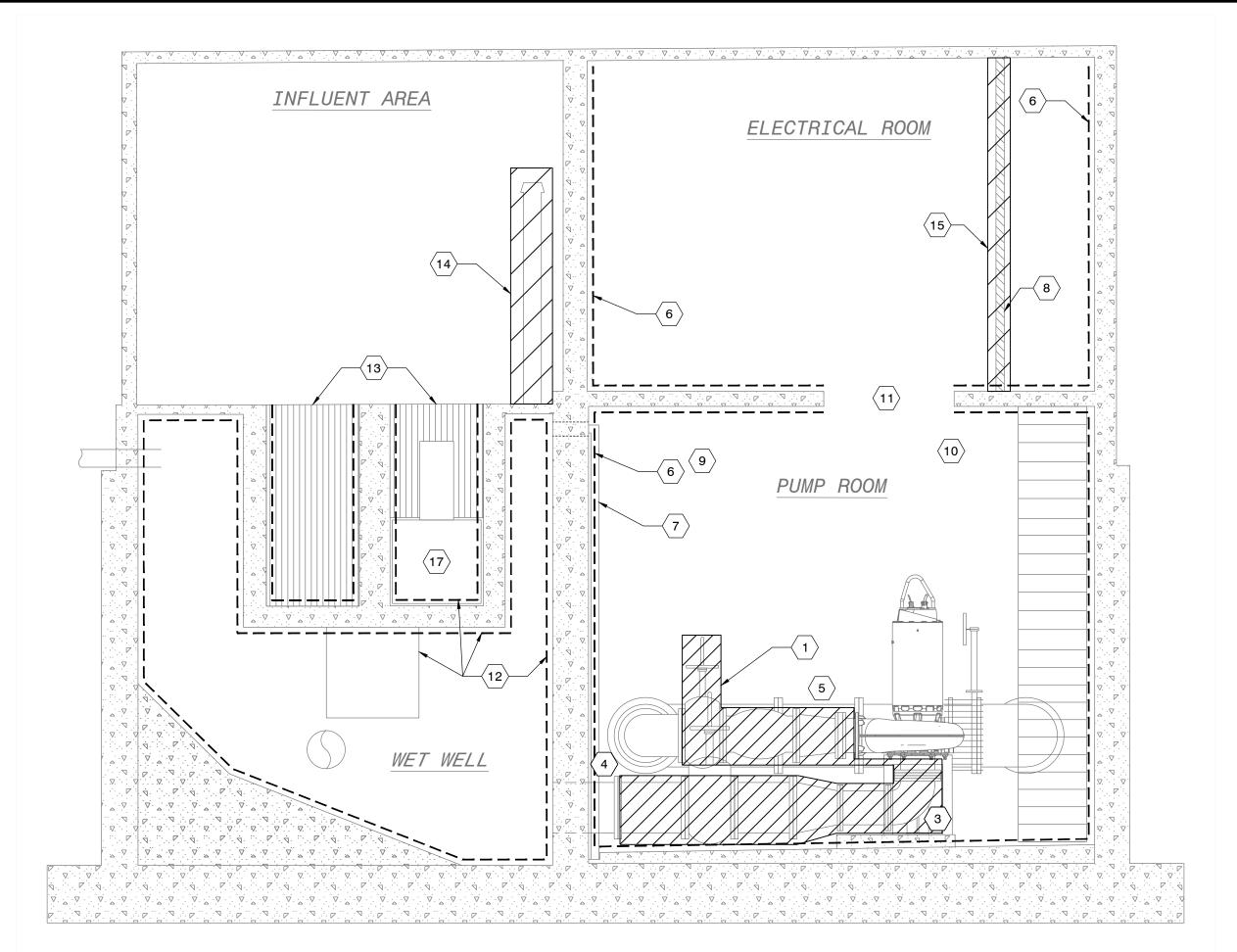
- 1. ALL SLUDGE (SOLIDS, GRIT, FOG, DEBRIS, ETC.) INSIDE OF WETWELL SHALL BE DECANTED AND REMOVED PRIOR TO PROCEEDING WITH WETWELL REHABILITATION. CONTRACTOR SHALL ASSUME A TOTAL OF 44 CUBIC YARDS OF SLUDGE IN THE WETWELL. IF IT APPEARS THAT THERE IS MORE THAN 44 CUBIC YARDS OF MATERIAL UPON DE-WATERING OF WETWELLS, CONTRACTOR SHALL NOTIFY THE OWNER & ENGINEER IMMEDIATELY.
- 2. CONTRACTOR SHALL REMOVE ALL CONDUIT, PIPING, AND HARDWARE ON ALL FLOORS, WALLS, AND CEILINGS THAT NO LONGER SERVES A FUNCTIONAL PURPOSE.

KEYNOTES:

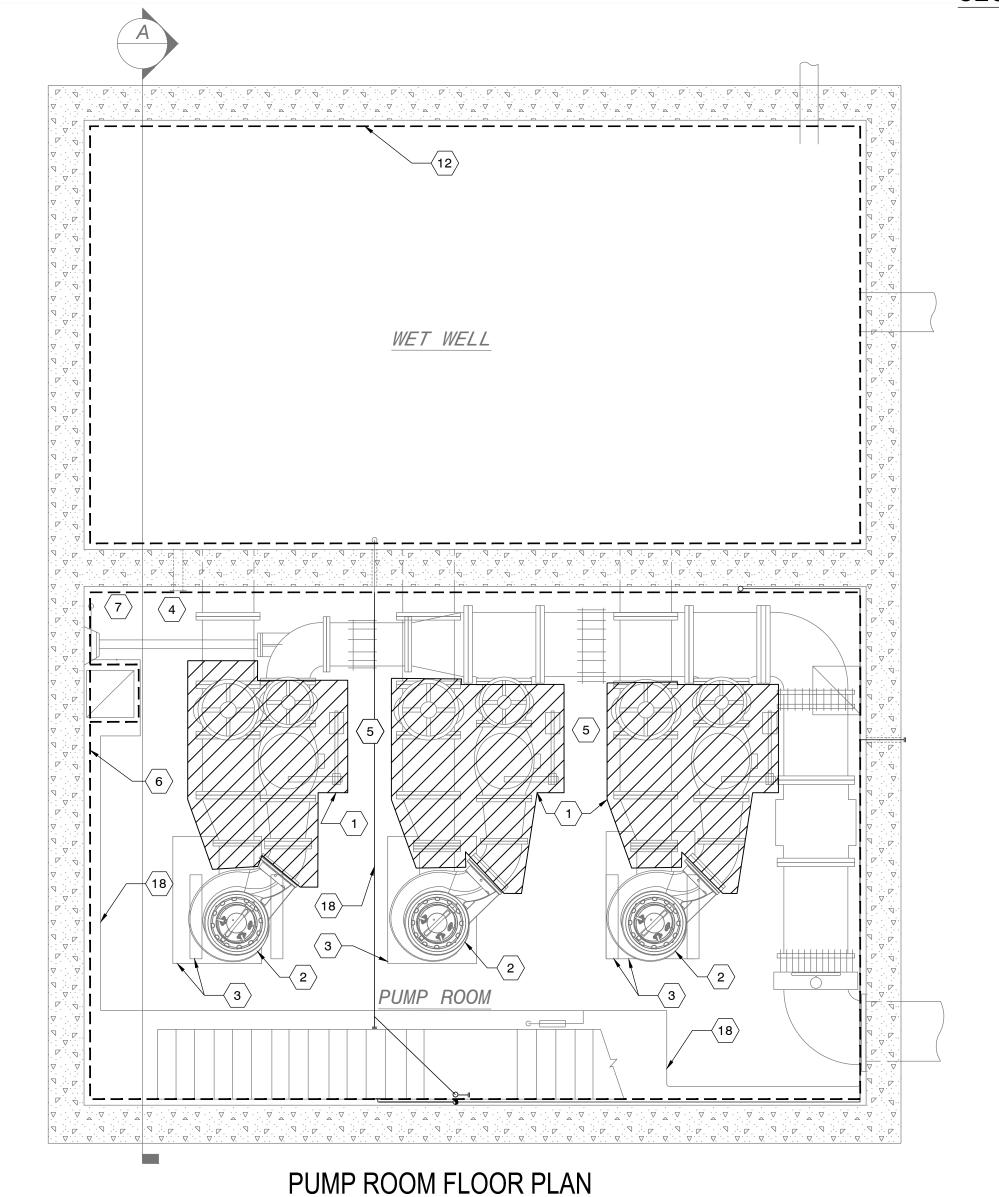
- 1. REMOVE EXISTING 24" SUCTION AND 20" DISCHARGE LEGS (3X EACH). ON SUCTION PIPING, REMOVE GATE VALVES, COUPLINGS, REDUCERS, 90° BENDS, AND ANY FILLER FLANGES. ON DISCHARGE PIPING, REMOVE GATE VALVES, SPOOL PIECES, CHECK VALVES, 45° BENDS, AND ANY FILLER FLANGES. EXISTING 24" PENETRATIONS THROUGH WETWELL WALL, AS WELL AS ALL HEADER PIPING, SHALL REMAIN.
- 2. REMOVE, CLEAN, AND TEMPORARILY STORE (3X) PUMPS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS UNTIL RE-INSTALLATION. WHILE REMOVED, NCSD WILL REPLACE THE IMPELLER IN PUMP #2.
- 3. REMOVE ALL PUMP SUPPORTS AND CONCRETE HOUSEKEEPING PADS.
- 4. REMOVE EXISTING TRANSDUCER PIPING FROM FIRST FLANGE ON PIPE EXITING THE WALL TO THE END OF THE PIPING. DO NOT REMOVE OR INTERFERE WITH TRANSDUCER PIPING INSIDE THE WALL. SEE DETAILS—INSTALL 3" BLIND FLANGE ON THE FIRST FLANGE ON THE PIPE EXITING THE WALL.
- 5. REMOVE ALL METAL PIPE SUPPORTS IN THE PUMP ROOM, INCLUDING THOSE UNDER PROPOSED PIPING AND EXISTING PIPING THAT IS TO REMAIN.
- 6. SAND BLAST OFF ALL PAINT COATINGS ON CONCRETE WALLS AND CEILINGS INSIDE OF THE PUMP STATION AND RETURN TO CONCRETE FINISH. PRESSURE WASH ALL CONCRETE FLOORS CLEAN. EXISTING COATING ON CMU WALLS IN THE ELECTRICAL ROOM CONTAINS ABESTOS. SEE THE REPORT IN THE APPENDICES OF THE SPECIFICATIONS. THIS COATING SHALL NOT BE REMOVED OR DISTURBED.
- 7. REMOVE EXISTING SUMP PUMP AND PIPING FROM PUMP TO DISCHARGE POINT.
- 8. REMOVE OLD WATER LINES IN STAIRWELL.
- 9. FILL VOIDS FROM OLD GENERATOR CONDUITS WITH NON-SHRINK GROUT. REPAIR PATCHES SHALL BE WATER-TIGHT.
- 10. FILL VOID SPACE FROM OLD 12" PIPE PENETRATION WITH NON-SHRINK GROUT. REPAIR PATCH SHALL BE WATER-TIGHT.
- 11. REMOVE METAL PLATES AND CONCRETE CURBING AROUND THE FLOOR OPENINGS. SEE SHEET S200 FOR DETAILS.
- 12. REMOVE DAMAGED, DELAMINATED, OR COMPROMISED SECTIONS OF LINING FROM THE INFLUENT CHANNEL AND WETWELL SURFACES. REFER
 TO THE "WETWELL REHABILITATION NOTES" ON SHEET GOO1.
- 13. REMOVE EXISTING BAR SCREENS (2X) IN EAST AND WEST CHANNEL, ASSOCIATED HARDWARE, AND ANY LOOSE/UNSTABLE MATERIAL.
- 14. REMOVE WETWELL VENT PIPING. FILL RESULTANT VOID WITH NON-SHRINK GROUT.
- 15. REMOVE EXISTING WALL IN ITS ENTIRETY.
- 16. REMOVE EXISTING DOORS AND REPLACE WITH NEW SST DOORS. EXISTING HANDRAIL AROUND STAIRWELL TO REMAIN.
- 17. REMOVE EXISTING GRINDER, ALL RELATED HYDRAULIC HOSES AND RELATED HYDRAULIC UNIT.
- 18. REMOVE EXISTING SINK, WATER HEATER, WATER SUPPLY LINES, DRAINS, BACK FLOW PREVENTER, HANGARS, AND HOSE SPIGOTS.

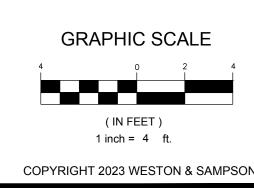


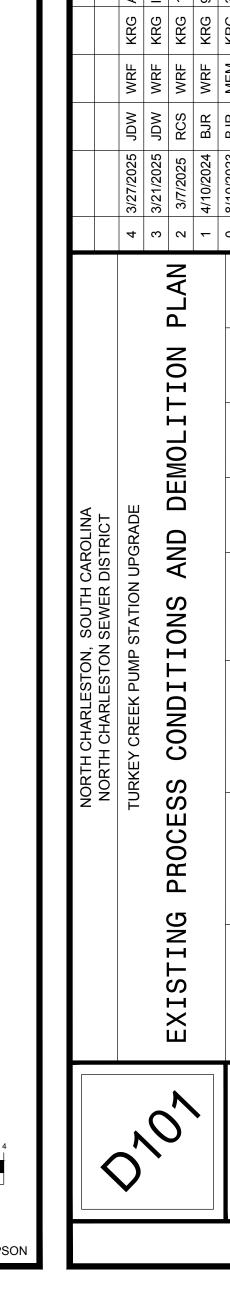
INFLUENT ROOM AND ELECTRICAL ROOM FLOOR PLAN



SECTION A







WESTON

SAMPSON

03//211/25

RENGINEERS, INC. No. 4208

NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY PIPING DIMENSIONS.

KEYNOTES:

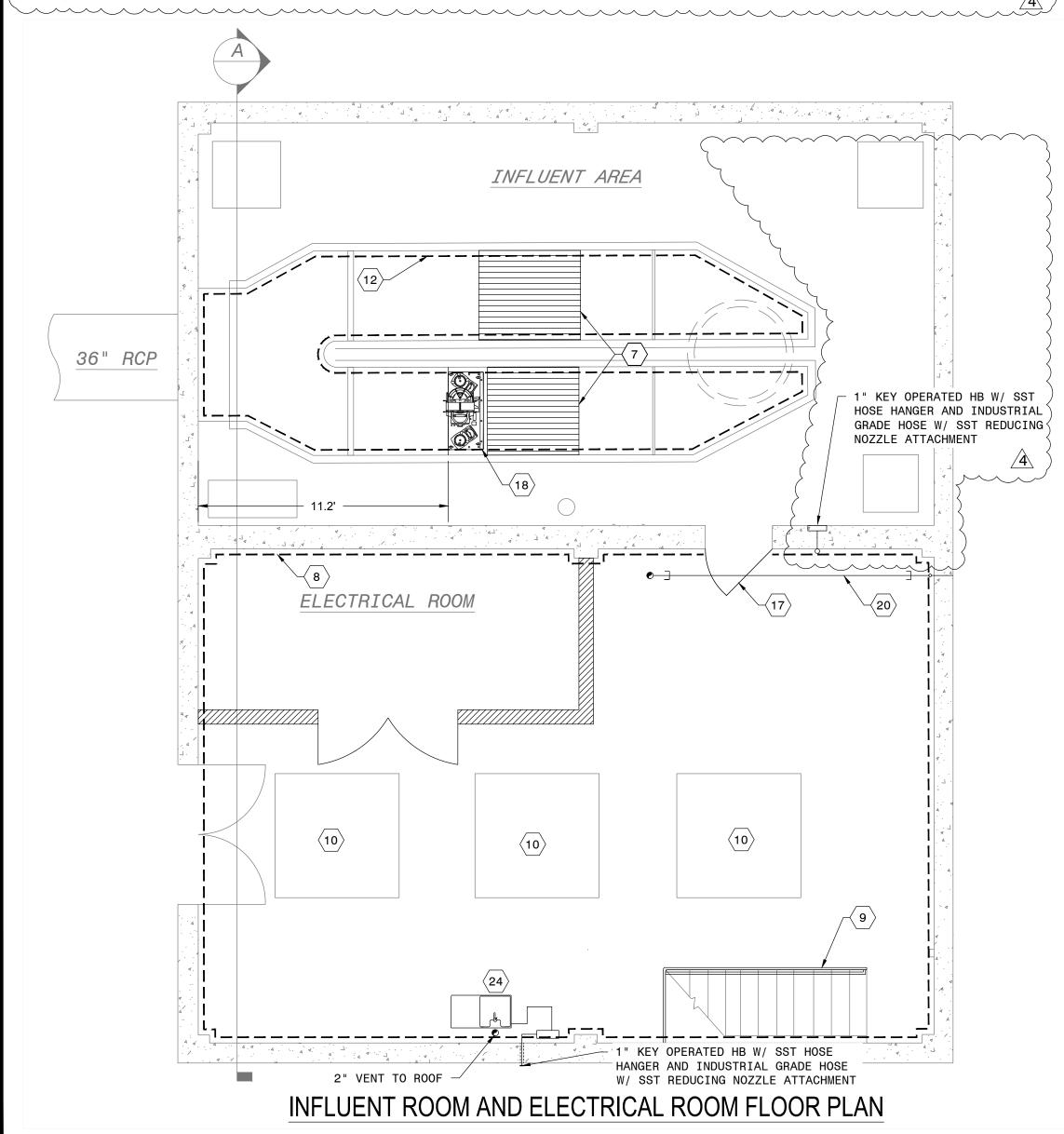
- 1. INSTALL NEW 24" SUCTION AND 20" DISCHARGE LEGS FOR EACH PUMP (3X). NEW PLUG VALVES SHALL BE INSTALLED SUCH THAT THE SEAT END OF THE VALVE FACES TOWARDS THE DISCHARGE MANIFOLD PIPING FOR THE VALVES ON THE DISCHARGE SIDE OF THE PUMPS
- 2. RE-INSTALL EXISTING PUMPS.
- 3. INSTALL (6X, 2 FOR EACH PUMP) CONCRETE PUMP SUPPORT PIERS. SEE DETAILS.
- 5. INSTALL NEW 3" SCHEDULE 80 PVC SUMP PUMP PIPING FROM EXISTING SUM PUMP TO THE WETWELL. PIPING SHALL BE CORED THROUGH THE WETWELL WALL AT THE EXISTING SUMP PUMP PIPING PENETRATION WITH A DOUBLE LINK SEAL. SUPPORT THE PIPE EVERY 5' WITH STAINLESS STEEL UNI-STRUT BRACKETS.

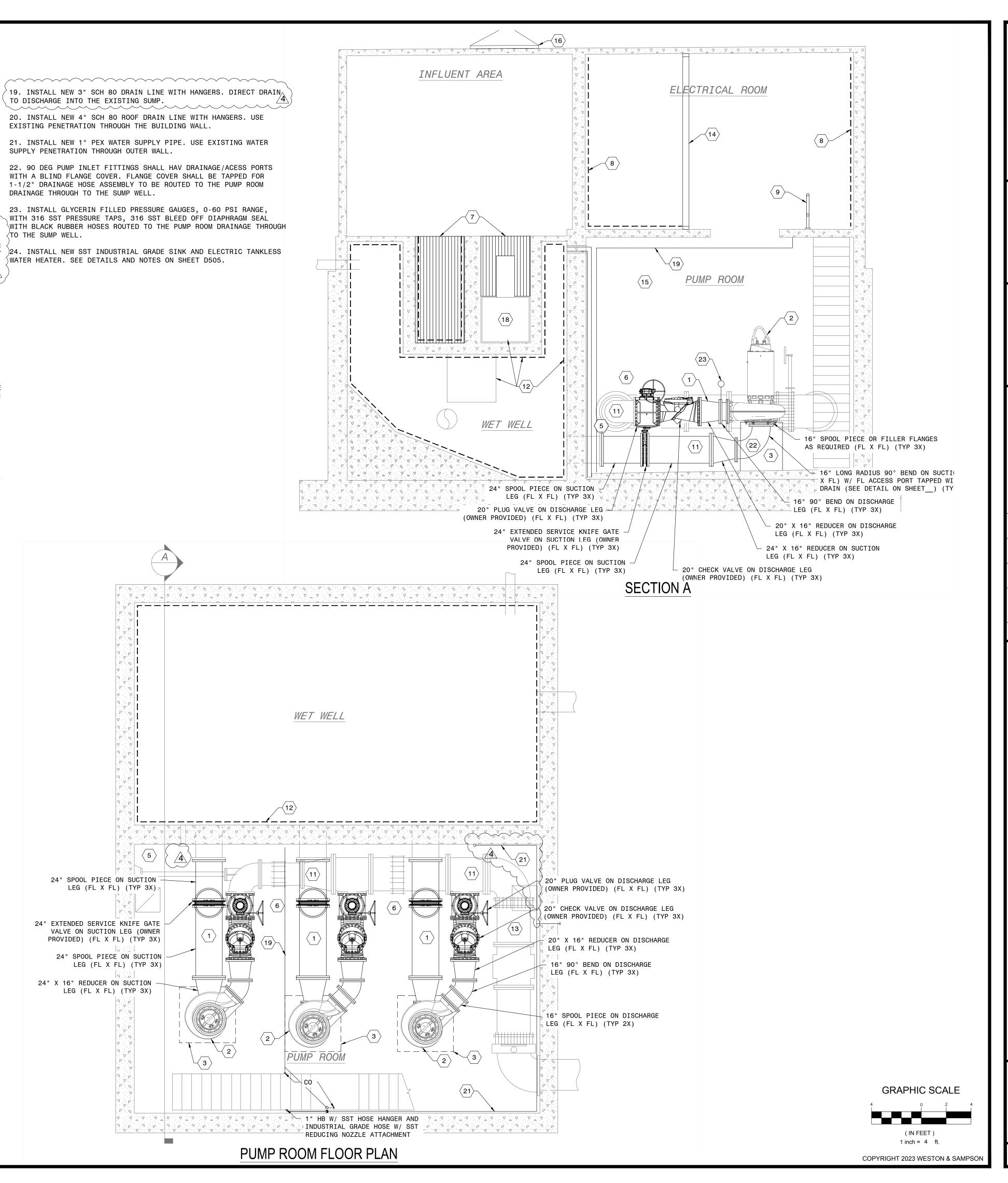
4. CONNECT NEW 316 SST PRESSURE TRANSDUCER PIPING TO EXISTING 3" LEVEL CONTROL PIPING INTO WET WELL. INSTALL NEW OWNER PROVIDED PRESSURE

- 6. INSTALL (3X) FORMED CONCRETE PIPE SUPPORTS UNDER KNIFE GATE VALVES ON PUMP SUCTION LEGS. INSTALL NEW COURSE THREADED STAINLESS STEEL PIPE SUPPORTS UNDER NEW SUCTION AND DISCHARGE LEGS, AS WELL AS EXISTING HEADER PIPING.
- 7. AFTER REHABILITATION OF CHANNEL AND WETWELL, INSTALL NEW STAINLESS STEEL BAR SCREENS IN BOTH THE EAST AND WEST CHANNELS. THE FULL
 CHANNEL BAR SCREEN IN THE EAST CHANNEL WILL ATTACH TO THE BOTTOM OF THE CHANNEL AND WILL BE FLUSH WITH THE GRATING COVERING THE CHANNEL.
 THE OVER SCREEN FOR THE WEST CHANNEL WILL BE INSTALLED DOWNSTREAM OF THE NEW GRINDER. THERE SHOULD BE A 1/4-1/2" GAP BETWEEN THE GRINDER
 AND THE SCREEN TO ALLOW THE GRINDER TO BE REMOVED WITHOUT REMOVING THE SCREEN. THE CHANNEL DIMENSIONS ARE APPROXIMATELY 4 FT WIDE X 8 FT
 TALL, AND THE DOWNSTREAM SIDE OF THE GRINDER IS APPROXIMATELY 39" TALL. CONTRACTOR SHALL TAKE FIELD MEASUREMENTS TO CONFIRM DIMENSIONS
 BEFORE ORDERING THE SCREENS. SEE DETAIL OF SCREENS ON SHEET D501. INSTALL ANCHOR BOLTS REQUIRED FOR MOUNTING THE NEW SCREENS PRIOR TO
 REHABILITATION OF THE CHANNEL
- 8. PAINT ELECTRICAL ROOM, STAIRWELL CMU WALLS, AND NEWLY ENCLOSED ELECTRICAL ROOM FLOOR IN ACCORDANCE WITH SPECIFICATION SECTION 09 90 00.
- 9. INSTALL NEW ALUMINUM HANDRAILS ON TOP FLOOR AROUND STAIRWELL.
- 10. INSTALL NEW FLUSH SST HATCHES PER SHEET S200

TRANSDUCER. SEE DETAIL ON SHEET D502.

- 11. ALL EXPOSED STATION DUCTILE IRON PIPING (NEW AND EXISTING, INTERIOR AND EXTERIOR) AND PUMP SUPPORTS SHALL BE PAINTED PER SPECIFICATION SECTION 33 34 00. THIS INCLUDES THE PUMP SKIRT BASE. EXPOSED STAINLESS STEEL SHALL NOT BE PAINTED.
- 12. CONTRACTOR SHALL PERFORM POINT REPAIRS ON ALL DAMAGED, DE-LAMINATED, OR COMPROMISED AREAS OF THE LEVEL A / LEVEL C LINING IN ACCORDANCE WITH SPECIFICATION SECTION 03 01 30.16. THIS INCLUDES REMOVAL OF UNSOUND MATERIAL, CONCRETE REPAIR, (MIN 1" CEMENTITIOUS LINING (LEVEL A), AND 125 MILS EPOXY COATING APPLICATION. COATING IS NOT NEEDED IN THE BOTTOM 5 FEET OF THE WETWELL.CONTRACTOR SHALL ASSUME 500 SQUARE FEET OF REPAIR (20% OF THE SURFACE AREA IN THE INFLUENT CHANNELS AND WETWELL). CLEAN AND COAT DROP PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 09 90 00.
- 13. FURNISH AND INSTALL NEW IN LINE CERABAR PRESSURE TRANSDUCER AND TAP WITH DIAPHRAGM ISOLATOR ON DISCHARGE HEADER PIPE. SEE DETAILS
- 14. CONTRACTOR SHALL INSTALL NEW ELECTRICAL ROOM WALLS, SEE STRUCTURAL DETAIL SHEET. ALL SURFACES SHALL BE PRIMED AND COATED IN ACCORDANCE WITH THE PROJECT SPECIFICATION SECTION 09 90 00.
- 15. SEAL EXISTING GENERATOR CONDUIT PENETRATIONS WITH INJECTABLE CHEMICAL GROUT.
- 16. INSTALL ROOF HATCH OVER EXISTING GRINDER IN CHANNEL. SEE SHEETS \$300 AND \$301 FOR DETAILS. CONTRACTOR TO VERIFY LOCATION IN THE FIELD \$0 THAT THE HATCH IS CENTERED OVER THE GRINDER.
- 17. INSTALL NEW STAINLESS STEEL DOORS AS MANUFACTURED BY PS INDUSTRIES, MODEL SWGS, OR APPROVED EQUAL.
- 18. INSTALL NEW OWNER PROVIDED GRINDER WITH ADAPTER PLATE, INCLUDING NEW AC CONTROLLER TYING INTO NEW MCC PANEL. INSTALL ANCHOR BOLTS
 REQUIRED FOR MOUNTING THE NEW GRINDER PRIOR TO REHABILITATION OF THE CHANNEL





CAR,

WESTON

SAMPSON 铝 ENGINEERS, INC.

√ No. 4208 /

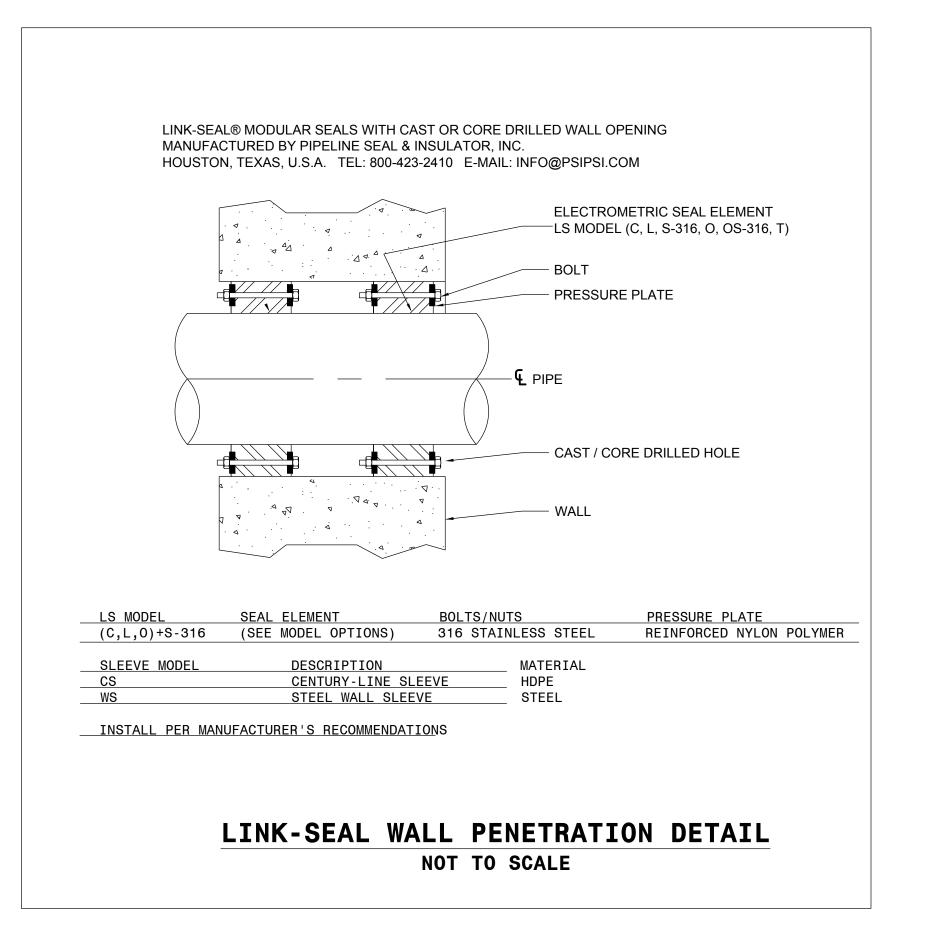
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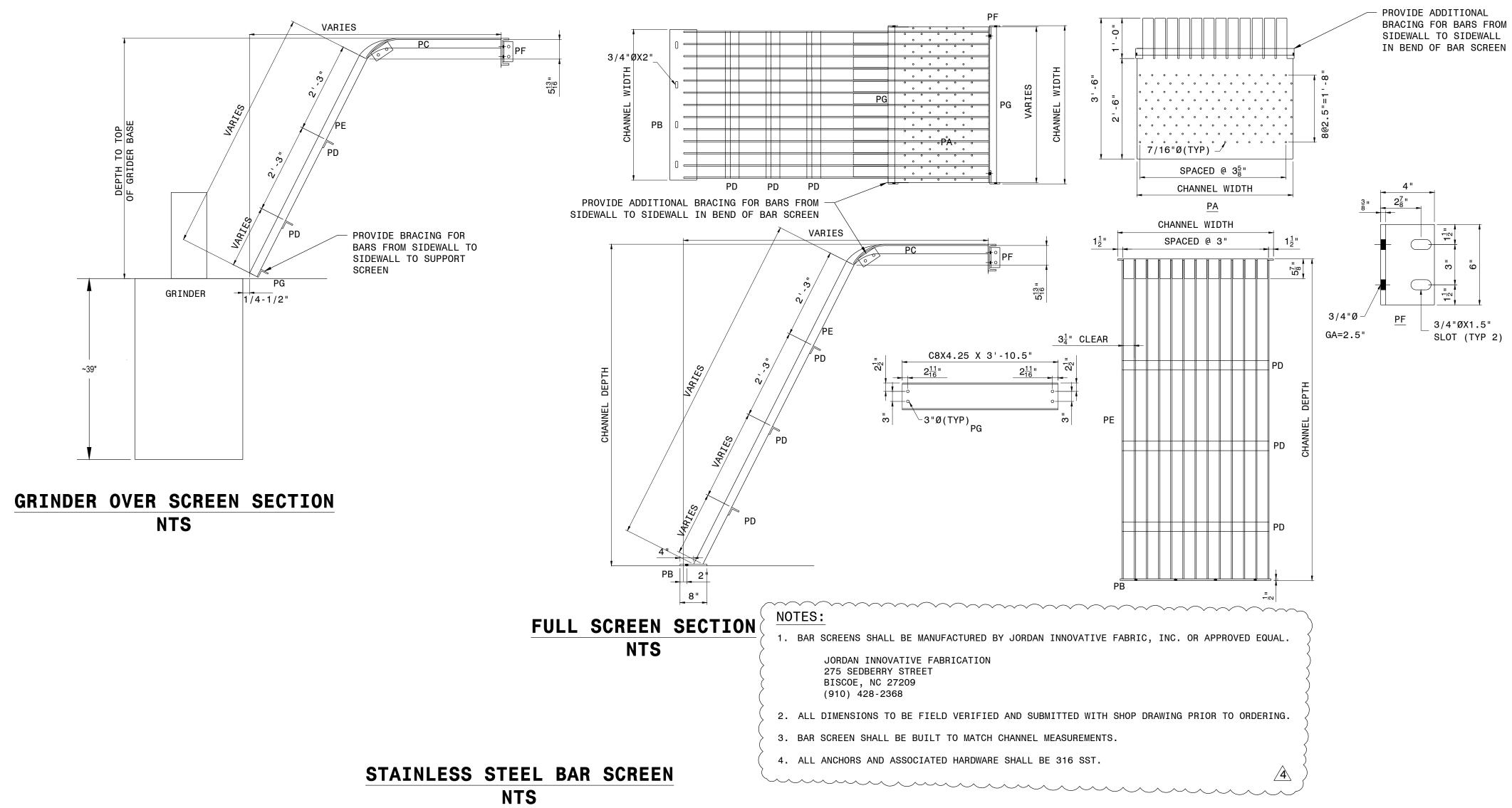
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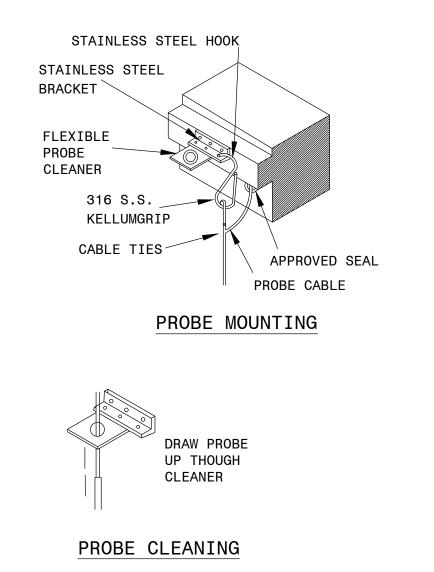
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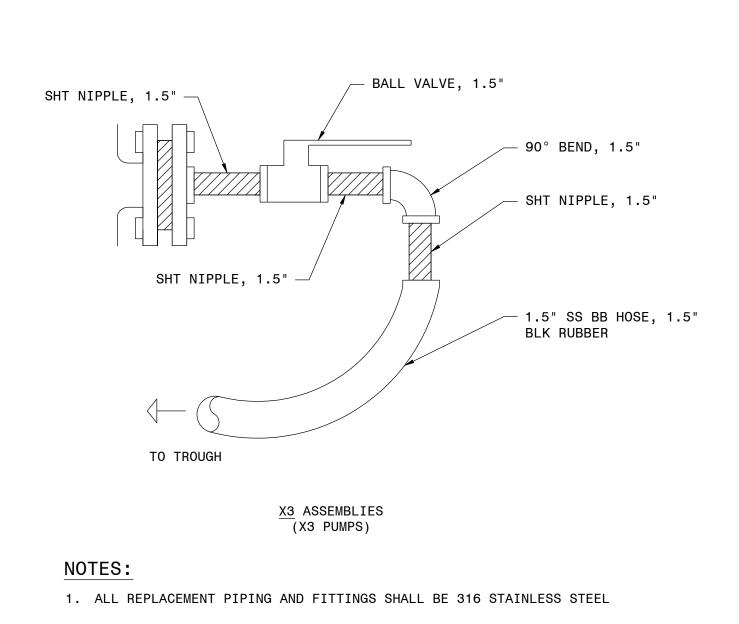
ROP



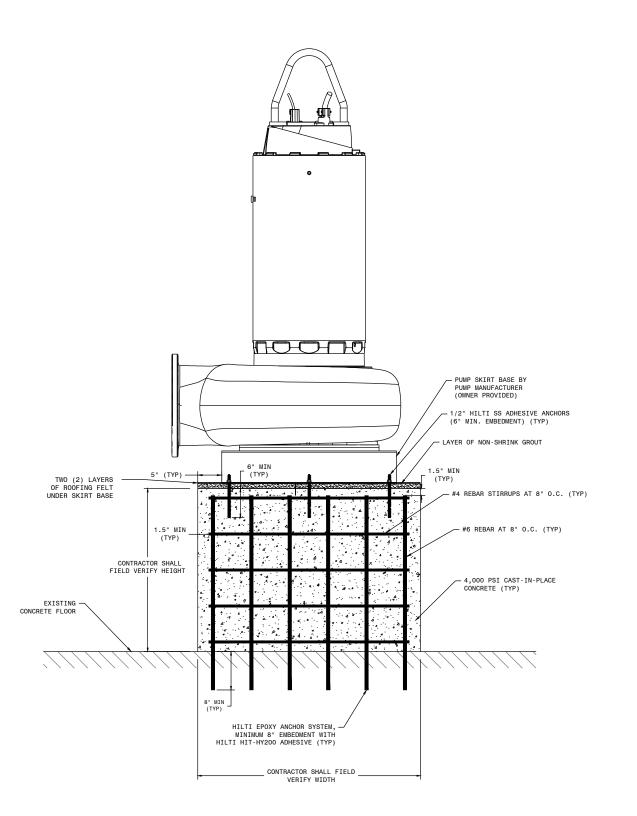




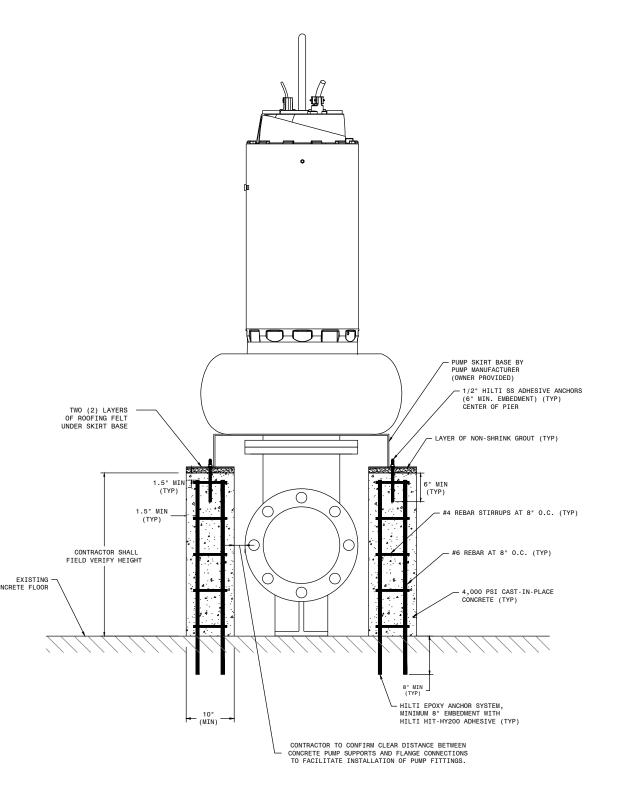
WETWELL PROBE MOUNTING DIAGRAM NTS



PUMP SUCTION INLET ACCESS PORT DRAINAGE
HOSE ASSEMBLY
NTS



PUMP SUPPORT BASE NTS



PUMP SUPPORT BASE - SECTION A
NTS

PILE NO.

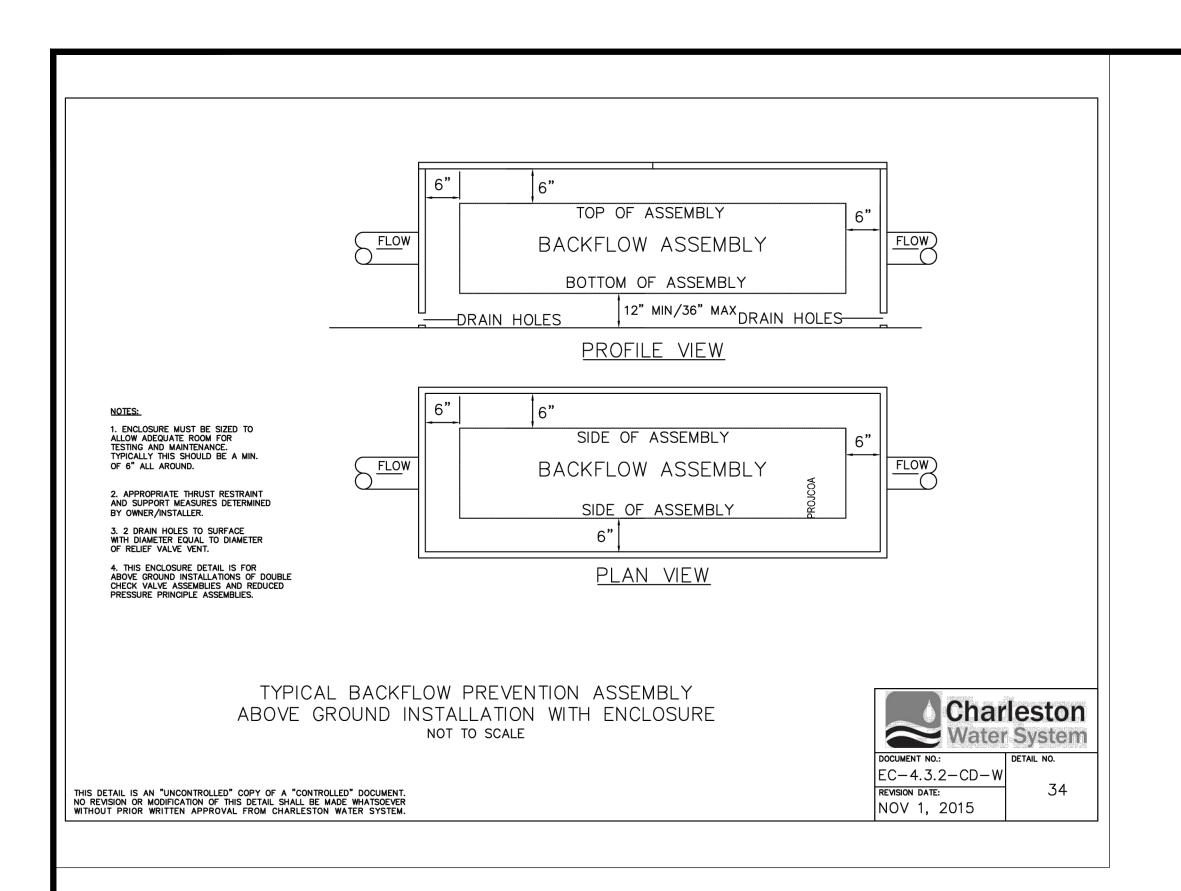
DETAIL

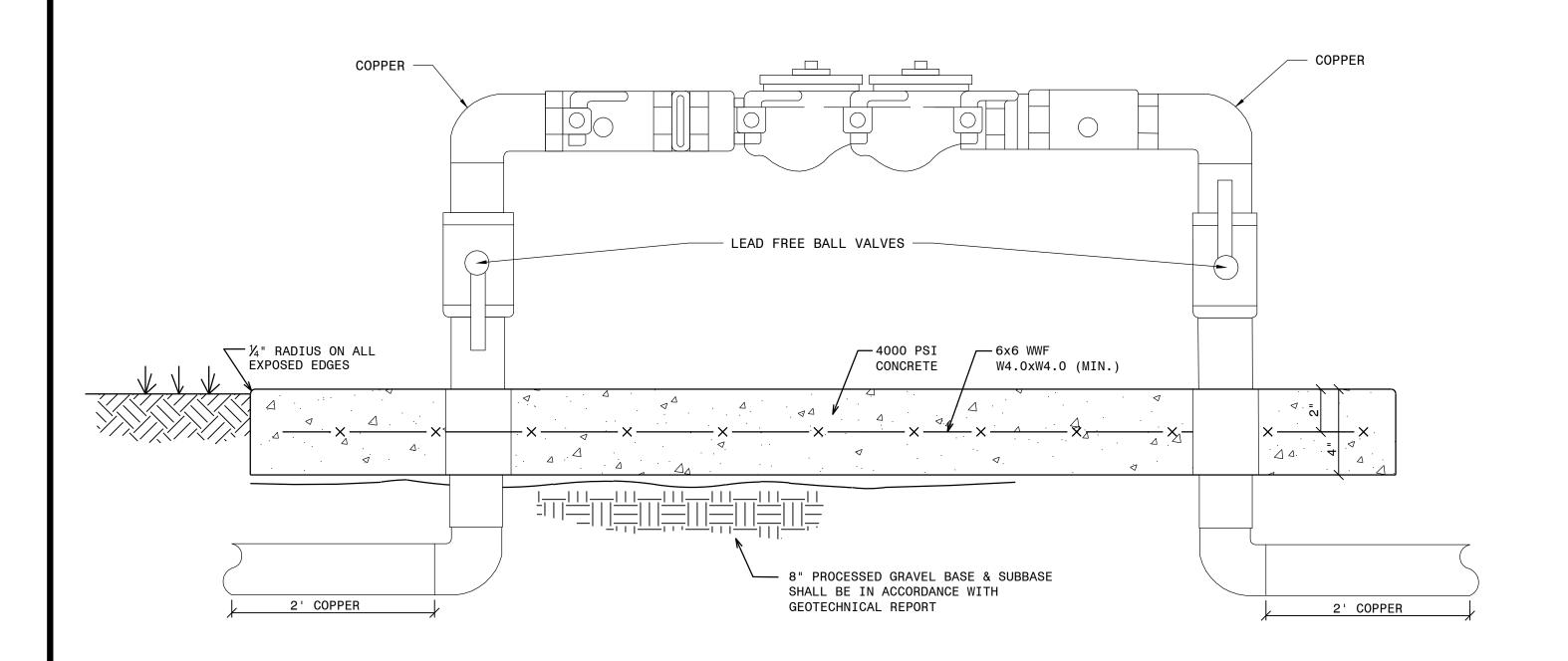
PROCESS

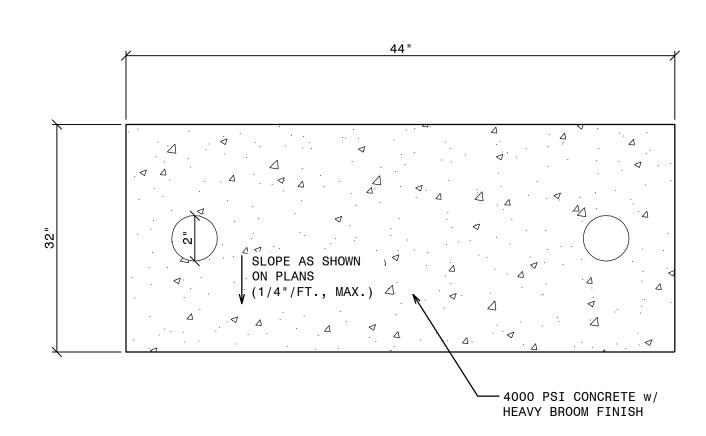
SAMPSON ENGINEERS, INC.

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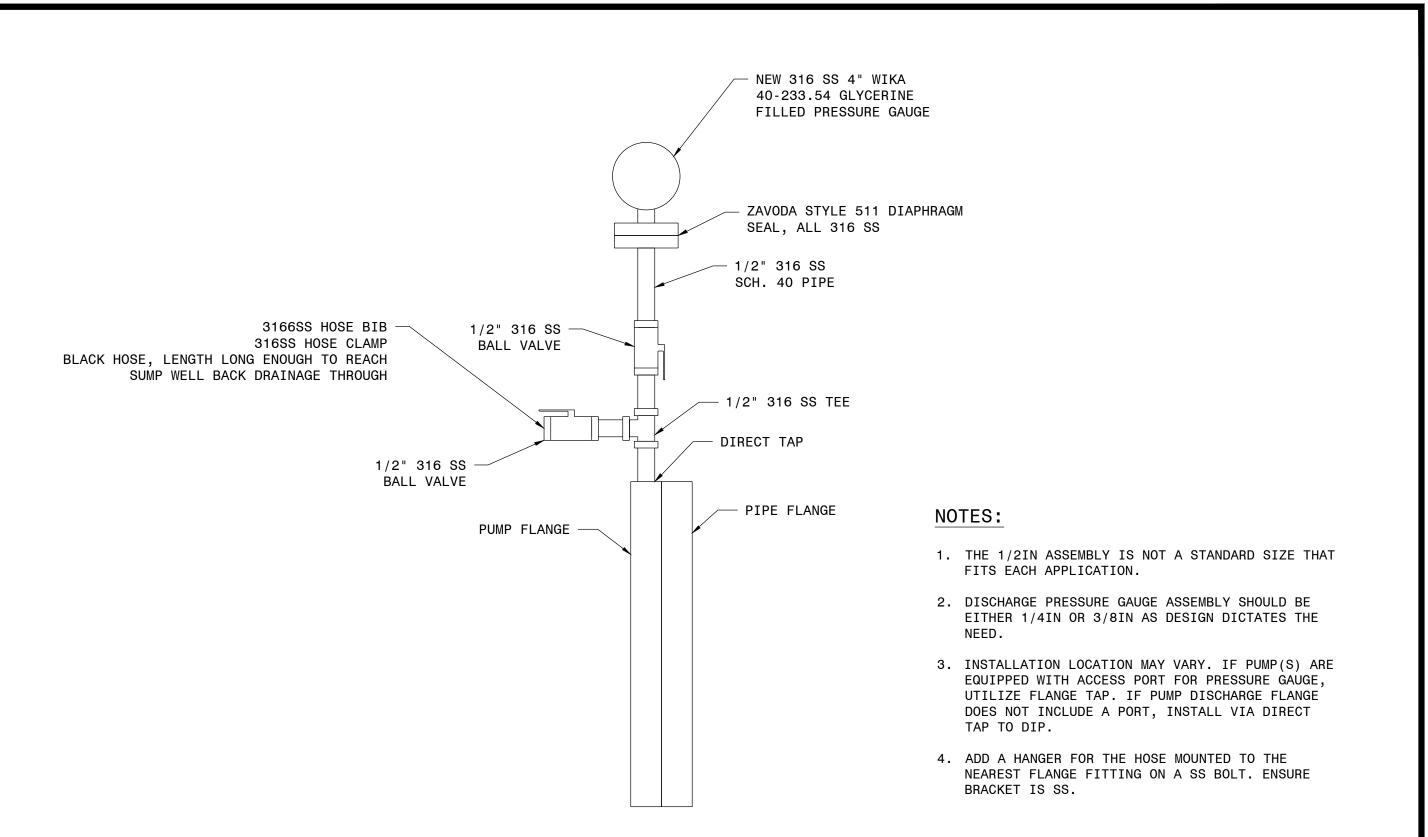
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REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY DETAIL NTS



CARO

SAMPSON ENGINEERS, INC.

No. 4208

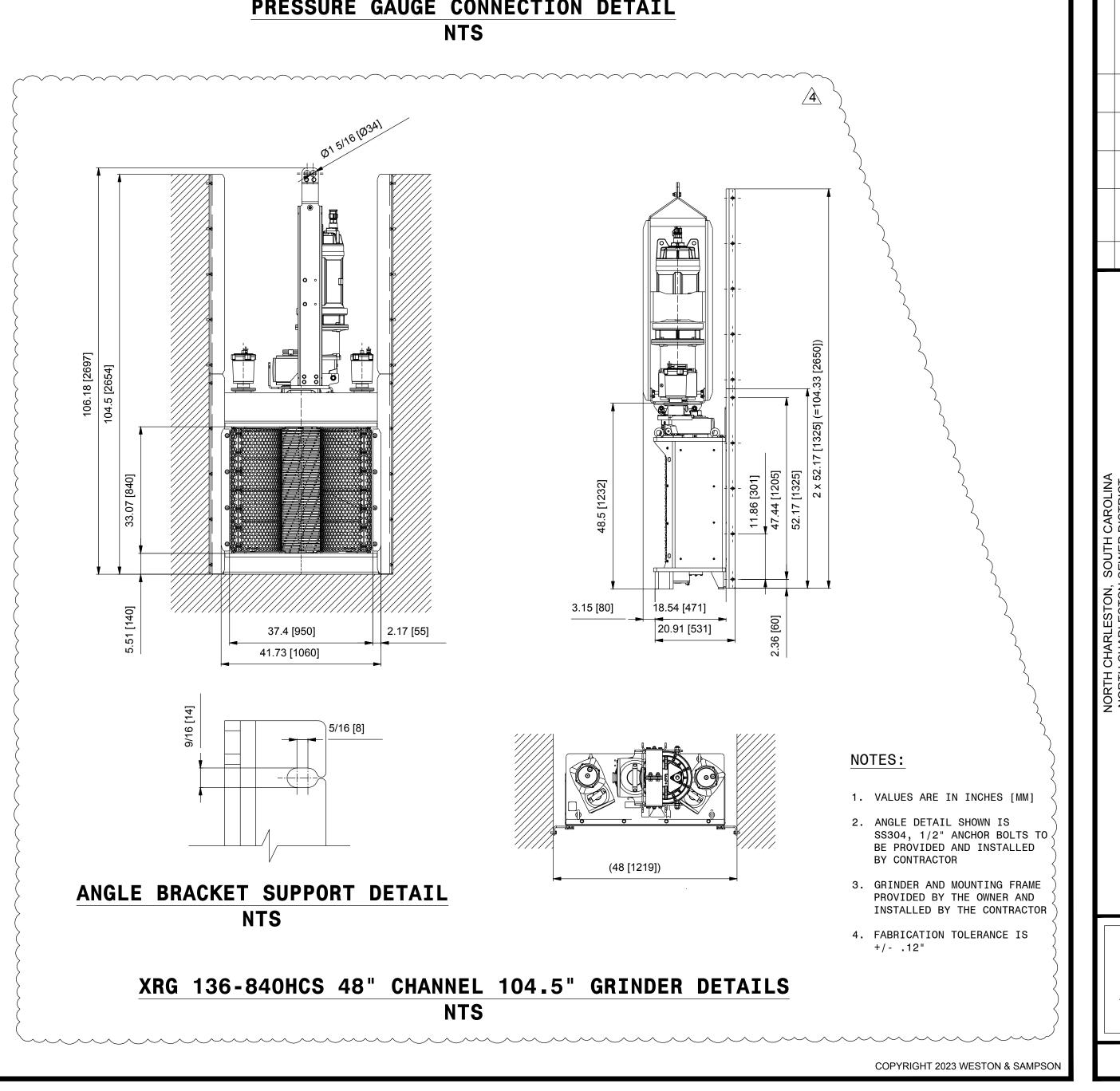
03"/"2"1") 25

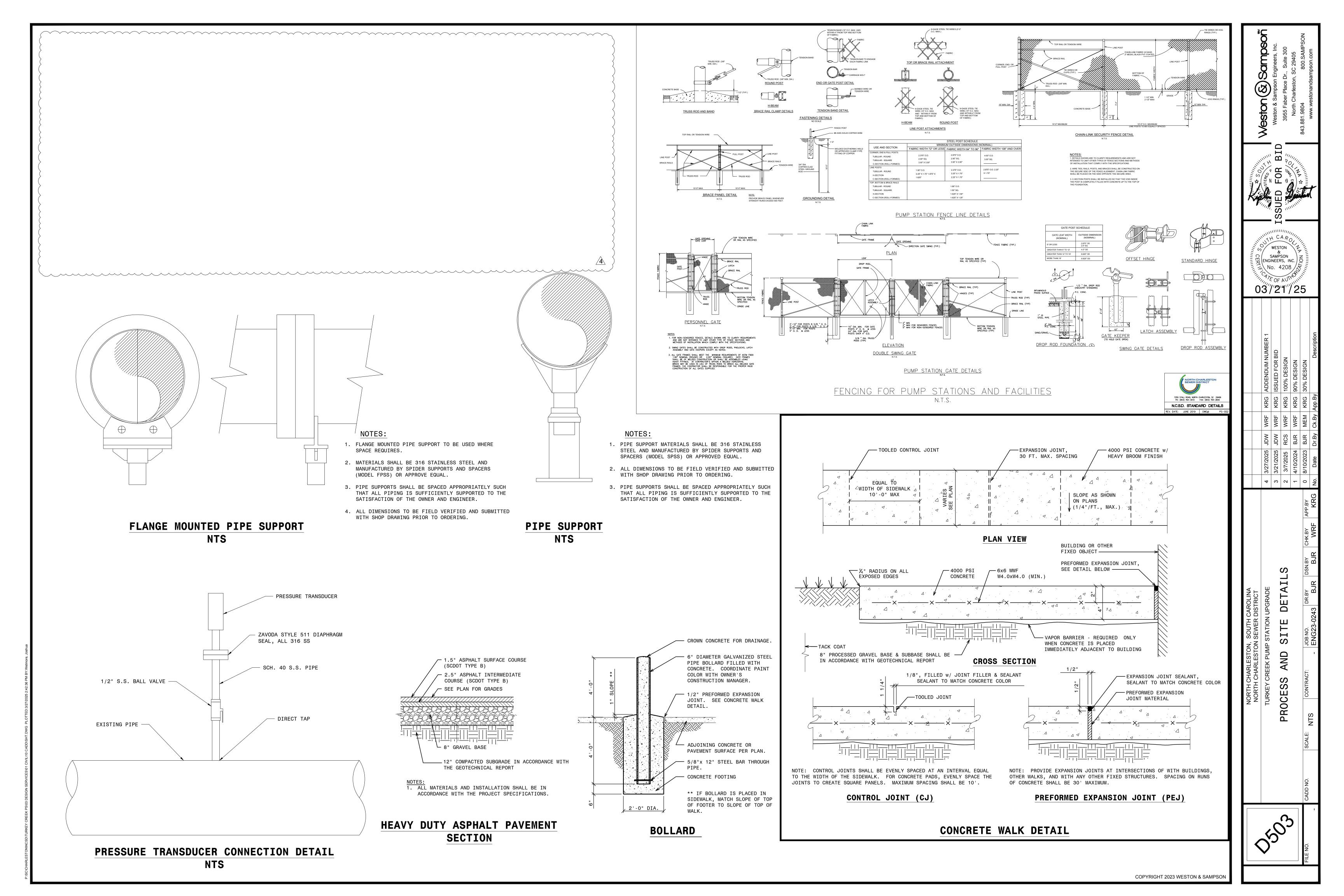
DETAILS

PROCESS

WESTON

PRESSURE GAUGE CONNECTION DETAIL





ELECTRICAL SYSTEMS SEISMIC REQUIREMENTS

PER IBC-2021/ASCE 7-16

- A. PER THE 2021 INTERNATIONAL BUILDING CODE, MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND COMPONENTS, INCLUDING THEIR SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-16.
- B. EXTERIOR EQUIPMENT (INCLUDING ROOF CURBS, RAILS, SUPPORTS) EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST THE WIND PRESSURES DETERMINED IN ACCORDANCE WITH CHAPTER 26 TO 29 OF ASCE 7-16.
- C. WHERE DESIGN FOR SEISMIC AND WIND LOADS IS REQUIRED, THE MORE DEMANDING FORCE MUST BE USED.
- D. REFERENCE THE STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC DESIGN CATEGORY, WIND SPEEDS, ETC.
- E. USE THE TABLE BELOW TO DETERMINE SEISMIC RESTRAINT REQUIREMENTS FOR EACH COMPONENT.
- F. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL REGISTERED IN THE STATE THE JOB IS LOCATED. SUBMITTALS MUST INCLUDE STAMPED AND SIGNED DRAWINGS AND CALCULATIONS.
- G. WHERE SEISMIC RESTRAINT IS REQUIRED, HOUSEKEEPING PADS NEEDED FOR THE INSTALLATION OF EQUIPMENT UNDER THIS CONTRACT MUST BE DESIGNED BY THE SEISMIC ENGINEER. DO NOT POUR ANY HOUSEKEEPING PADS PRIOR TO THE RECEIPT OF THE APPROVED
- H. SEISMIC RESTRAINTS FOR DUCTWORK, PIPING, CONDUIT, CABLE TRAYS AND BUS DUCT MUST BE SHOWN ON LAYOUT DRAWINGS SHOWING SPECIFIC RESTRAINT LOCATIONS ALONG WITH ACCOMPANYING DETAILS AND CALCULATIONS.

ELECTRICAL COMPONENT IMPORTANCE FACTOR (Ip) DESIGNATION

Ip = 1.0	lp = 1.5
	ALL ASSOCIATED ELECTRICAL WORK

SEISMIC DESIGN CATEGORIES D.E.F

	COMP	ONENT IMPO	ORTANCE FACTOR (Ip)				
	1.0		1.5				
COMPONENT IDENTIFICATION	SEISMIC RESTRAINT REQUIREMENT	NOTES	SEISMIC RESTRAINT REQUIREMENT				
ROOF MOUNTED	RESTRAIN ALL	1	RESTRAIN ALL	-			
FLOOR MOUNTED	RESTRAIN ALL	1,2	RESTRAIN ALL	-			
WALL MOUNTED COMPONENT SUPPORTS	RESTRAIN ALL	1,2	RESTRAIN ALL	-			
	RESTRAIN ALL	1	RESTRAIN ALL	-			
SUSPENDED EQUIPMENT	USPENDED EQUIPMENT RESTRAIN ALL SINGLE CONDUIT RESTRAIN IF ≥ 2.5"		RESTRAIN ALL	-			
SINGLE CONDUIT			RESTRAIN IF ≥ 2.5"	3			
CABLE TRAY/BUS DUCT TRAPEZED CONDUIT	DO NOT DELETE ON TRAPEZE > 2.5" RESTRAIN IF TOTAL WEIGHT OF SUSPENDED COMPONENT > 10 LBS/FT	3	RESTRAIN IF ANY CONDUIT ON TRAPEZE ≥ 2.5" RESTRAIN IF TOTAL WEIGHT OF SUSPENDED COMPONENT > 10 LBS/FT	3			
COMPONENT CERTIFICATION	NOT REQUIRED	-	REQUIRED	5			
PENDANT, LAY-IN AND CAN LIGHTS	REQUIRED	4	REQUIRED	4			

NOTES:

- EQUIPMENT 20 LBS. OR LESS IS EXEMPT IF THE COMPONENT IS POSITIVELY ATTACHED TO THE STRUCTURE AND FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.
- RESTRAINTS ARE NOT REQUIRED IF THE COMPONENT WEIGHS 400 LBS. OR LESS, IS MOUNTED WITH THE CENTER MASS AT 4' OR LESS ABOVE A FLOOR, IS POSITIVELY ATTACHED TO THE STRUCTURE, AND HAS FLEXIBLE CONNECTIONS BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.
- RESTRAINT IS NOT REQUIRED IF THE CONDUIT IS SUPPORTED BY HANGERS AND EACH HANGER IN THE RUN IS 12" IN. OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE. WHERE PIPES ARE SUPPORTED ON A TRAPEZE, THE TRAPEZE SHALL BE SUPPORTED BY HANGERS HAVING A LENGTH OF 12" IN. OR LESS. WHERE ROD HANGERS ARE USED, THEY SHALL BE EQUIPPED WITH SWIVELS, EYE NUTS OR OTHER DEVICES TO PREVENT BENDING IN THE ROD.
- 4. $\,$ THE RESTRAINT OF PENDANT, LAY-IN AND CAN LIGHTS IS ADDRESSED IN ASTM C636 AND E580.
- 5. COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY ENGINEER OF RECORD.

BOXES AND COVERS SHALL BE GREEN IN COLOR.

BASIS OF DESIGN IS QUAZITE PG STYLE HANDHOLES.

* PROVIDE TWO (2) PENTA-SOCKET LUG WRENCHES TO OWNER.

ALL HANDHOLES SHALL BE UL LISTED TO MEET ANSI 77 REQUIREMENTS.

* DIMENSIONS INDICATED IN SCHEDULES INDICATES THE MINIMUM. **BOX COVER** LOGO **HEAD BOLT** (TYP.) <u>PLAN VIEW</u> PROVIDE CONCRETE 6" DEEP AND 6" WIDE FINISHED GRADE -EARTH (TYPICAL) 1" SLOPE AWAY FROM **EXCAVATE 12" BÉLOW** HANDHOLE. PROVIDE HANDHOLE AND PROVIDE THE FOLLOWING FOR DRAINAGE: 8" OF GRAVEL/CRUSHED ROCK.

SECTION

HANDHOLE DETAIL

NOT TO SCALE

BROOM FINISH

MOUSEHOLES-

(TYPICAL).

GENERAL NOTES

- 1. ALL 20 AMP BRANCH CIRCUIT WIRING SHALL BE #12 AWG UNLESS NOTED OTHERWISE. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE
- 2. BRANCH CIRCUIT ROUTING SHALL COMPLY WITH DETAILS ON DRAWINGS AND SHALL BE COORDINATED WITH THE WORK OF OTHER
- 4. AREAS OF WORK EXIST FOR THIS PROJECT WHICH WERE NOT ACCESSIBLE OR HAD LIMITED ACCESS DURING DESIGN. AS SUCH, CONTRACTOR SHALL VERIFY ALL UTILITIES IN AREA OF WORK BEFORE DEMOLITION OF ANY SERVICE. ANY ELECTRICAL COMPONENTS NOT SHOWN SHALL BE IDENTIFIED AND THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED AS SOON AS POSSIBLE. WHERE INFORMATION SHOWN ON THESE DRAWINGS CONFLICTS WITH VERIFIED FIELD CONDITIONS, IT SHALL BE BROUGHT TO THE ATTENTION
- 5. ALL EQUIPMENT TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIALS UNTIL RELEASED BY THE OWNER'S PROJECT MANAGER. MATERIALS THAT THE OWNER'S PROJECT MANAGER CHOOSES TO RETAIN SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION DESIGNATED BY THE PROJECT MANAGER. ALL OTHER MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
- 6. FEEDER CONDUITS, BRANCH CIRCUITS AND CABLE TRAY ROUTING SHALL COMPLY WITH DETAILS ON DRAWINGS AND SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES BEFORE AND DURING CONSTRUCTION. COORDINATE THE ROUTING OF UNDERGROUND CONDUCTORS/CONDUITS WITH STRUCTURAL FOOTINGS OF BUILDING. FEEDER CONDUITS AND BRANCH CIRCUITS
- SHALL BE ROUTED OVERHEAD UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE ARCHITECT AND ENGINEER. 7. UNLESS SPECIFICALLY LISTED FOR A CLASS 1 DIVISION 1 APPLICATION. ALL ELECTRICAL DEVICES OR COMPONENTS SHALL BE LOCATED
- 8. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE PROVIDED WITH NEMA 4X 316 STAINLESS STEEL ENCLOSURES, UNLESS OTHERWISE

GENERAL POWER NOTES

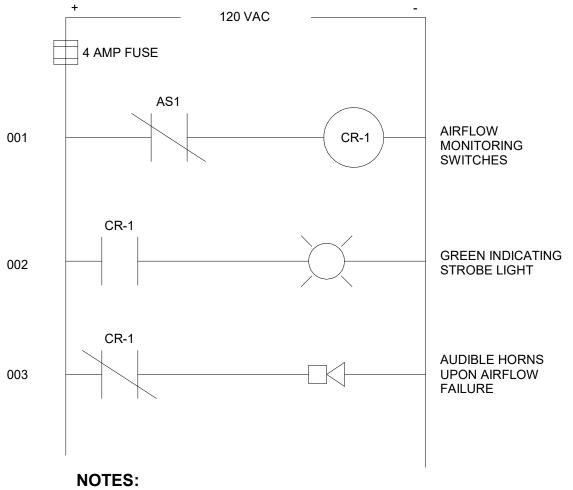
- 1. COORDINATE WITH THE UTILITY COMPANY TO PROVIDE A METER ON SERVICE. METER SHALL BE LOCATED PER UTILITY COMPANY
- 2. THE GROUND ROD CLUSTER FOR THE SERVICE GROUND SHALL CONSIST OF THREE 3/4" X 10'-0" COPPER CLAD STEEL GROUND RODS. THEY SHALL BE DRIVEN IN A TRIANGULAR CONFIGURATION APPROXIMATELY 20' APART AND INTERCONNECTED IN DELTA WITH A BARE COPPER CONDUCTOR. REFER TO ONE-LINE DIAGRAM FOR GROUNDING ELECTRODE CONDUCTOR SIZE. TOPS OF THE RODS SHALL BE 12" BELOW FINISHED GRADE. CONNECTION TO THE RODS SHALL BE WITH EXOTHERMIC WELDS.

GROUNDING NOTES

- 1. ALL BELOW GRADE AND EXTERIOR ABOVE GRADE GROUND CONNECTIONS SHALL BE EXOTHERMIC WELDS OR COMPRESSION TYPE CONNECTORS. ALL BELOW GRADE GROUND CONNECTIONS SHALL BE INSPECTED BY NCSD BEFORE BURIAL.
- CONDUCTORS OUTSIDE OR NEAR WET WELL SHALL BE INSULATED.
- 3. ALL RACKS AND EQUIPMENT ENCLOSURES SHALL BE GROUNDED WITH A CONNECTION TO THE EQUIPMENT GROUNDING SYSTEM VIA

CONTROLS NOTES

- 1. SEAL ALL CONDUITS ENTERING TO PREVENT MOISTURE OR AIR FLOW INTO OR FROM THE CONTROLS ENCLOSURE.
- 8. ALL CONTROL WIRING SHALL BE NEATLY GROUPED IN THE PANDUIT PLASTIC WIRE TROUGHS EXCEPT WIRING FROM THE BACK PLATE
- MOUNTED COMPONENTS SHALL HAVE ENGRAVED 3-PLY LAMINATED PLASTIC W/ WHITE LETTERS ON BLACK BACKGROUND AMEPLATES. VOLTAGE, PHASES, AND FREQUENCY LABELS SHALL BE WHITE LETTER ON RED BACKGROUND.



- PROVIDE ALL ENCLOSURES, RELAYS, WIRING ETC. FOR ALARM SYSTEM. INSTALL COMPONENTS IN A NEMA 1 BOX.
- SYSTEM SHALL MONITOR CONTINUOUS AIR FLOW.
- INDICATING LIGHT SHALL FLASH UNDER NORMAL OPERATION. HORN SHALL SOUND UPON INADEQUATE AIR
- PROVIDE SYSTEM WITH SPARE DRY CONTACT FOR FUTURE CONNECTION TO STATION SCADA

AIR FLOW MONITORING DETAIL

NOT TO SCALE E001

- TRADES BEFORE AND DURING CONSTRUCTION.
- 3. INSTALLATION SHALL BE PER NFPA 70 2020 (NATIONAL ELECTRICAL CODE) AND NFPA 820 2016 EDITION.

- OUTSIDE THE WET WELL AND BEYOND A 3'-0" RADIUS OUTSIDE WET WELL VENTS PER NFPA 70 2020 AND NFPA 820 2016.
- 9. LABEL ALL DISCONNECTS, JUNCTION BOXES, MOTOR STARTERS, CONTROL CABINETS, TRANSFORMERS, PANELS, ATS UNITS AND
- 10. SEAL ALL CONDUITS ENTERING OR LEAVING THE ELECTRICAL BUILDING WITH DUCT SEAL.

ABOVE FINISHED GRADE AHU AIR HANDLING UNIT AIRFLOW MONITORING SWITCH

REQUIREMENTS. ALL COSTS ASSOCIATED WITH THE UTILITY SERVICE (PAD, PRIMARY CONDUIT, METER, PERMITTING, ETC.) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

- 2. PROTECT THE GROUND CONDUCTOR FROM DAMAGE. INSTALL ALL EXPOSED GROUND CONDUCTORS IN PVC CONDUIT. GROUND
- THE GROUND BUS BAR.
- 4. INSTALL ALL SITE GROUND WIRES A MINIMUM OF 3' BELOW GRADE.

PUMP POWER JUNCTION BOX KILOWATTS MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER MINIMUM

- 2. CONTROL SEQUENCE SHALL BE DESIGNED SO THAT THE CONTROL PANEL AND VFD'S FUNCTION AUTOMATICALLY AFTER A POWER FAILURE AND A MANUAL RESET IS NOT NECESSARY.
- TO THE DOOR SHALL BE DONE IN SEPARATE BUNDLED HARNESS FOR PERMANENT CONTROL, VOLTMETER, AND AMMETER CIRCUITS. 9. ALL CONTROL WIRES SHALL HAVE A WRAPAROUND WIRE IDENTIFICATION NUMBER AT BOTH ENDS. ALL CONTROL PANEL DOOR-

MSWBD MAIN SWITCHBOARD NATIONAL ELECTRICAL CODE NON-FUSED DISCONNECT SWITCH ON CENTER OUTPUT CIRCUIT BREAKER OVERLOAD RIGID ALUMINUM CONDUIT REDUCED ENERGY LET THROUGH SWITCH ROOF TOP UNIT SURGE PROTECTION DEVICE SOFT START SHIELDED TWISTED PAIR STP TYPICAL UNLESS NOTED OTHERWISE UNSHIELDED TWISTED PAIR

ELECTRICAL CODES & STANDARDS (WITH ALL SOUTH CAROLINA MODIFICATIONS)

ELECTRICAL SYMBOL LEGEND

HH

SYMBOL

SYMBOL DESCRIPTION

 $\circ_{_{\mathbf{G}}}$

AFF

FDS

~GFCt\

STROBE LIGHT (WALL MOUNTED)

DUCT MOUNTED SMOKE DETECTOR

ELECTRICAL EQUIPMENT

GROUND ROD

EXISTING

FRAME AMPERAGE

TRIP AMPERAGE

BOTTOM OF DEVICE

CONTROL RELAY

GATE ACTUATOR

GROUND BUSBAR

MOTOR STARTER

HANDHOLE

EXHAUST FAN

ABOVE FINISHED FLOOR

STRIP LIGHT FIXTURE

WALL PACK LIGHT FIXTURE

CEILING MOUNTED LIGHT FIXTURE

ELECTRICAL ABBREVIATIONS

AUTOMATIC TRANSFER SWITCH BELOW FINISHED GRADE

COMMUNICATIONS BACKBOARD

ENCLOSED CIRCUIT BREAKER

FUSED DISCONNECT SWITCH

GENERATOR ANNUCIATOR PANEL

PUMP CONTROLS JUNCTION BOX

VARIABLE FREQUENCY DRIVE

WATER HEATER WEATHERPROOF

TRANSFORMER

GROUND-FAULT CIRCUIT-INTERRUPTING

JUNCTION BOX

DESCRIPTION

SSO HIGH LEVEL ALARM LIGHT (WALL MOUNTED)

SYMBOL DESCRIPTION

AUDIBLE ALARM HORN

TRANSFORMER

HANDHOLE

JUNCTION BOX (WALL MOUNTED)

JUNCTION BOX (CEILING MOUNTED)

WALL MOUNTED LIGHT FIXTURE

EMERGENCY STOP PUSH BUTTON

LINE LEGEND

EXISTING TO REMAIN

NEW CONSTRUCTION

DEMOLISH

DESCRIPTION

DISCONNECT SWITCH (FUSIBLE OR NON-FUSIBLE)

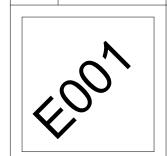
CODE	DESCRIPTION
IBC (2021)	INTERNATIONAL BUILDING CODE
NFPA 70 (2020)	NATIONAL ELECTRICAL CODE
NFPA 820 (2016)	STANDARD FOR FIRE PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES
14177 628 (2816)	OTHER TRANSPORT IN COLUMN TENT THE COLUMN TENT THE COLUMN TENT TO THE COLUMN TENT THE COLUMN T

OWNER PROVIDED MATERIA	AL LIST
ITEM	QUANTITY
GENERATOR WITH ALUMINUM PLATFORM	1
24" KNIFE GATE VALVES	3
20" CHECK VALVES	3
20" PLUG VALVES	3
AIR RELEASE VALVE	1
CHANNEL GRINDER	1
VFD'S,RVSS AND CABINETRY	3
SUMP PUMP	1
SUMP PUMP CONTROL PANEL	1
LEVEL TRANSDUCERS AND LEVEL PROBE	1
EXTERIOR ENCLOSED CIRCUIT BREAKER	1
PORTABLE GENERATOR CONNECTION	1
AUTOMATIC TRANSFER SWITCH	1
DISTRIBUTION PANEL	1
PLC CONTROL PANEL	1









			LIGHT FIXTURE SC	HEDULE				,		
		FIXTURE SPECIFICATIONS			LAMPING		ELECT	RICAL		
				LAMP	TOTAL	COLOR	LOAD			
TYPE	FIXTURE DESCRIPTION	MANUFACTURER	CAT.#	TYPE	LUMENS	TEMP.	(VA)	VOLTS	FIXTURE MOUNTING	NOTES
S1	EXPLOSION PROOF DOWNLIGHT	EMERSON	CMLED-W-40-3-N-G-5-BU	LED	11600	4000 K	91	120 V	WALL, SURFACE	1
S2	EXPLOSION PROOF DOWNLIGHT	EMERSON	CMLED-C-40-3-N-G-5-BU	LED	11600	4000 K	91	120 V	CEILING, SURFACE	1
W1	WALLPACK	LITHONIA	TWH LED 10C 40K T3M MVOLT P DBLXD	LED	3375	4000 K	39	120 V	WALL, SURFACE	1, 3
W1E	EMERGENCY WALLPACK	LITHONIA	TWH LED 10C 40K T3M MVOLT PE ELCW DBLXD	LED	3375	4000 K	39	120 V	WALL, SURFACE	1, 2, 3

LIGHT FIXTURE SCHEDULE NOTES:

ACCEPTABLE ALTERNATE MAUFACTURERS: COOPER, WILLIAMS, PHILLIPS, COLUMBIA
 PROVIDE FIXTURE WITH INTEGRAL BATTERY PACK.
 PROVIDE FIXTURE WITH INTEGRAL PHOTOCELL.

	DISTRIBU	JTION PANEL	BOARD SCHED	DULE
	NAME: DPTC	VOLTS: 4	80/277 Wye	A.I.C. RATING : 42,000
	LOCATION: GRADE LEVEL	PHASES: 3		MAINS RATING: 1200 A
	SOURCE: UTILITY VIA ECB	WIRES: 4		MAINS TYPE: MAIN LUG ONLY
	MOUNTING: SURFACE	ENCLOSURE: T	YPE 12	
CKT NO.	CIRCUIT DESCRIPTION	POLES	TRIP RATING	LOAD
1	PANELBOARD "HTC"	3	150 A	50607
2	P-1 DRIVE CABINET	3	250 A	147000
3	P-2 DRIVE CABINET	3	250 A	147000
4	P-3 DRIVE CABINET	3	250 A	147000
5	SPARE	3	250 A	0
6	PREPARED SPACE	3	250 A	0
7	PREPARED SPACE	3	250 A	0
				491583
				591 A

				PANELB	OARD SC	HEDULE					
PANEL NAME: HTC LOCATION: SOURCE: DPTC MOUNTING: SURFACE				VOLTS: 480/277 Wye PHASES: 3 WIRES: 4 ENCLOSURE: TYPE 1				A.I.C. RATING: 42,000 MAINS RATING: 150 A MAINS TYPE: MAIN LUGS ONLY			
CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	Α	В	С	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1				3330 VA / 330 VA						2	
3	UNIT HEATER*	20 A	3		3330 VA / 330 VA		3	15 A	HOIST *	4	
5						3330 VA / 330 VA	1			6	
7				2070 VA / 440 VA						8	
9	SUMP PUMP *	15 A	3		2070 VA / 440 VA		3	20 A	SF-1	10	
11	1					2070 VA / 440 VA				12	
13				0 VA / 2110 VA						14	
15	SPARE	50 A	3		0 VA / 2110 VA		3	15 A	GRINDER	16	
17						0 VA / 2110 VA				18	
19				330 VA / 0 VA						20	
21	PLC POWER	20 A	3		330 VA / 0 VA		3	20 A	SPARE	22	
23						330 VA / 0 VA				24	
25	TR-LTC	80 A	2	5110 VA / 10000 VA			1	50 A	WH	26	
27	TIX-LTC	00 A			6710 VA / 170 VA					28	
29						350 VA / 170 VA	3	15 A	GA - 1	30	
31	EF-1	20 A	3	350 VA / 170 VA						32	
33					350 VA / 170 VA					34	
35	SPARE	20 A	1			0 VA / 170 VA	3	15 A	GA - 2	36	
37	SPARE	20 A	1	0 VA / 170 VA						38	
39	SPARE	20 A	1		0 VA / 170 VA					40	
41	SPARE	20 A	1			0 VA / 170 VA	3	15 A	GA - 3	42	
43	SPARE	20 A	1	0 VA / 170 VA						44	
45	SPARE	20 A	1		0 VA / 170 VA					46	
47	PREPARED SPACE		1			0 VA / 170 VA	3	15 A	GA - 4	48	
49	PREPARED SPACE		1	0 VA / 170 VA						50	
51	PREPARED SPACE		1		0 VA / 0 VA		1		PREPARED SPACE	52	
53	PREPARED SPACE		1			0 VA / 0 VA	1		PREPARED SPACE	54	
55	PREPARED SPACE		1	0 VA / 0 VA			1		PREPARED SPACE	56	
57	PREPARED SPACE		1		0 VA / 0 VA		1		PREPARED SPACE	58	
59	PREPARED SPACE		1			0 VA / 0 VA	1		PREPARED SPACE	60	
		TOTAL PHAS		24680 VA	16308 VA	9627 VA	_				
	тот	AL PHASE C	JRRENT:	93 A	63 A	35 A					
				TOTAL COMMEST	PANEL TOTALS						
				TOTAL CONNECT OTAL CONNECTED C	ED LOAD: 50607 VA						

LIGHT FIXTURE PLAN KEY

SHADING INDICATES EMERGENCY FIXTURE SUPPLIED WITH EMERGENCY BATTERY BACKUP.

A1 = UPPERCASE LETTER / NUMBER INDICATE FIXTURE TYPE d = LOWERCASE LETTER INDICATES SWITCH IDENTIFICATION

NL = INDICATES NON-SWITCHED "NIGHT LIGHT" A:2 = DESIGNATES PANEL NAME: CIRCUIT NUMBER

ALL EMERGENCY FIXTURES INDICATED ON PLANCONTAIN EMERGENCY BATTERY BACKUP. ALL EMERGENCY BACKUP FIXTURES REQUIRE AN EXTRA CONSTANT POWER CONDUCTOR TO BE CONNECTED TO THE EMERGENCY BACKUP FOR CHARGING. THIS CONDUCTOR MUST NOT BE CONTROLLED BY ANY LIGHTING SYSTEM OR HAVE POWER INTERRUPTED AT ANY TIME.

PANEL NAME: LTC LOCATION: SOURCE: TR-LTC MOUNTING: Surface				VOLTS: 120/240 Single PHASES: 1 WIRES: 3 ENCLOSURE: Type 1			A.I.C. RATING: 10,000 MAINS RATING: 150 A MAINS TYPE: MAIN CIRCUIT BREAKER			
CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	Α	В	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1	SPARE	20 A	1	0 VA / 0 VA		1	20 A	EMERGENCY STANDBY *	2	
3	INTERIOR RECEPTACLES *	20 A	1		1440 VA / 0 VA	1	20 A	LIGHTING *	4	
5	EXTERIOR RECEPTACLES *	20 A	1	1440 VA / 0 VA		1	20 A	EXTERIOR LIGHTING *	6	
$\sqrt{2}$	INTERIOR RECEPTACLES*	20A~	71		1440 VA / 0 VA	1	20 A	SPARE	8	
9	SSO HIGH LEVEL ALARMS	20 A	1	500 VA / 0 VA		1	20 A	AIR FLOW MONITORING**	10	
~11V~	GENERATOR LOAD CENTER	60 A	my		2400 VA / 0 VA	1	20 A	SPARE	12	
13	GENERATOR LOAD CENTER	00 A	2	2400 VA / 0 VA		1	20 A	SPARE	14	
15	ROOF RECEPTACLE	20 A	1		180 VA / 0 VA	1	20 A	SPARE	16	
17 19	SPARE	20 A	2	0 VA / 1460 VA	0 VA / 1460 VA	2	20 A	CU-1, AH-1	18 20	
21	SPARE	20 A	1	0 VA / 0 VA		1	20 A	SPARE	22	
23	SPARE	20 A	1		0 VA / 0 VA	1	20 A	SPARE	24	
25	SPARE	20 A	1	0 VA / 0 VA		1		PREPARED SPACE	26	
27	PREPARED SPACE		1		0 VA / 0 VA	1		PREPARED SPACE	28	
29	PREPARED SPACE		1	0 VA / 0 VA		1		PREPARED SPACE	30	
31	PREPARED SPACE		1		0 VA / 0 VA	1		PREPARED SPACE	32	
33	PREPARED SPACE		1	0 VA / 0 VA		1		PREPARED SPACE	34	
35	PREPARED SPACE		1		0 VA / 0 VA	1		PREPARED SPACE	36	
37	PREPARED SPACE		1	0 VA / 0 VA		1		PREPARED SPACE	38	
39	PREPARED SPACE		1		0 VA / 0 VA	1		PREPARED SPACE	40	
41	PREPARED SPACE		1	0 VA / 0 VA		1		PREPARED SPACE	42	
		TOTAL PHA	ASE LOAD:	5601 VA	6711 VA			1	I	
	TOT	AL PHASE	CURRENT:	47 A	56 A	1				

TOTAL CONNECTED CURRENT: 49 A

PANEL SCHEDULE NOTES

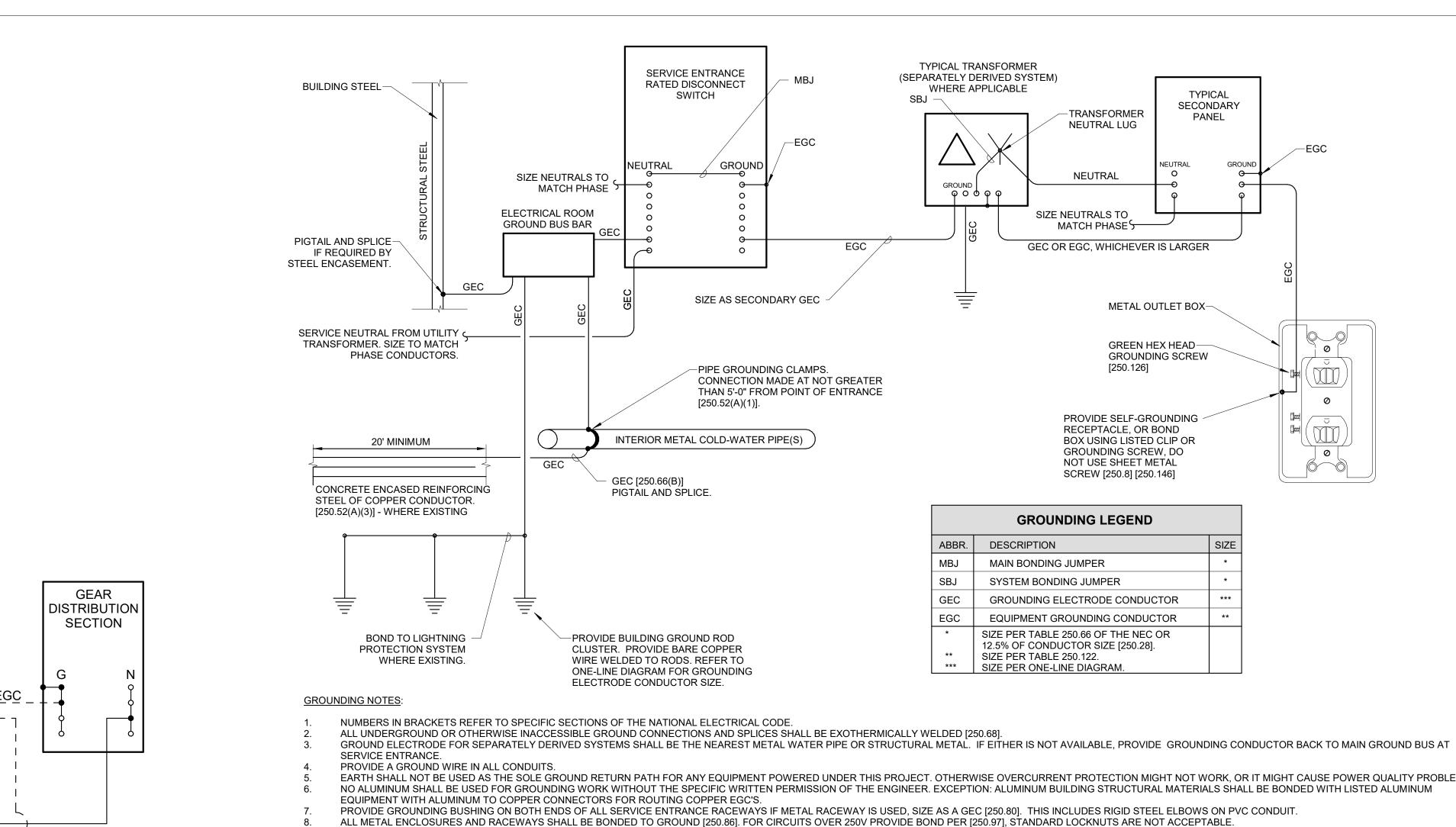
- INDICATES TO CONNECT EXTENDED EXISTING CIRCUIT PREVIOUSLY FED FROM DEMOLISHED MOTOR CONTROL CENTER.
 INDICATES TO PROVIDE RED LOCKABLE CIRCUIT BREAKER LOCKED IN THE ON POSITION.





	3/2	2	90B	ERT.		2.	5
		ADDENDUM #1	ISSUED FOR BID	100% DESIGN	90% DESIGN	30% DESIGN	Description
		BSB	BSB	BSB	BSB	BSB	App.By
		BSB	BSB	BSB	BSB	BSB	r. By Ck. By App.By
		E.	IR.	l. I.	:RL	K	r. By





FOR LIGHTNING PROTECTION SYSTEM, PROVIDE LIGHTNING PROTECTION GROUND RODS LOOPED TOGETHER WITH COPPER CABLE, OTHERWISE BONDING CONDUCTOR WILL ONLY CONNECT TO ONE DOWN CONDUCTOR ROD. VERIFY

-TOP SOIL & SOD

GRADE

-UNDERGROUND ELECTRICAL WARNING TAPE

-COMPACT PER CIVIL SPECIFICATIONS

-COMPACT PER CIVIL SPECIFICATIONS

-3" SAND BEDDING COMPACT PER CIVIL SPECIFICATIONS

GENERATOR GROUNDING DETAIL

UTILITY

DISCONNECT

GEC 🕁

E003 NOT TO SCALE

— – – – GROUND CONDUCTOR

GROUND

ELECTRODE

CONDUCTOR

NEUTRAL CONDUCTOR

NEUTRAL TO GROUND

UTILITY

TRANSFORMER

BONDING JUMPER

SWITCHED

CARRYING

CONDUCTORS

SOLID

EGC SUPPLY SIDE

BONDING JUMPER

NEUTRAL

- - - - -

CURRENT

EMERGENCY

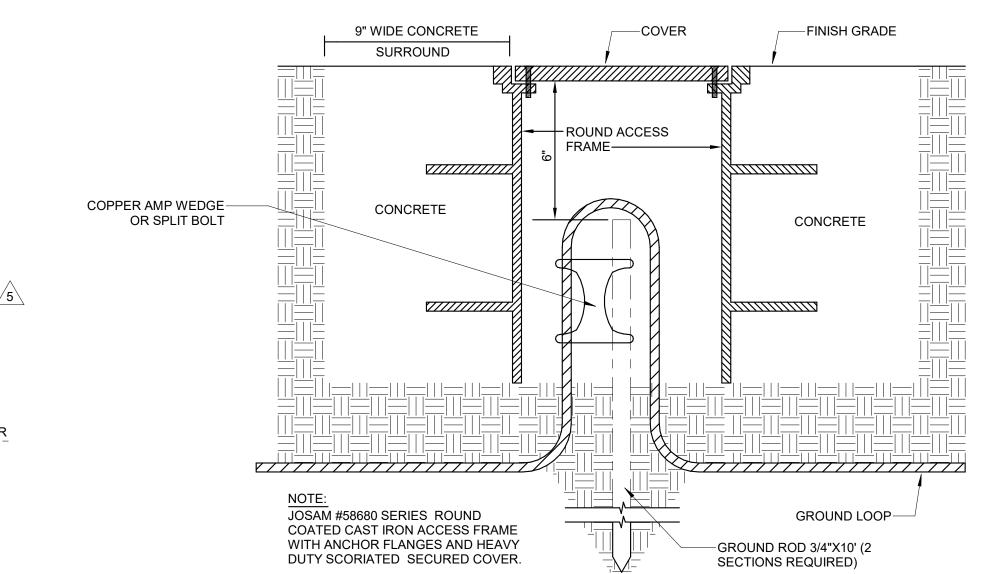
GENERATOR

GROUNDING DETAIL E003 NOT TO SCALE

PROVIDE EGC CONNECTED TO ANY JUNCTION BOX WHERE SPLICE IS MADE [250.148].

PROVIDE BOND TO EXPOSED METAL ON ALL MOTORS, PUMPS, AND LIGHTING FIXTURES PER [250.112].

THAT LIGHTNING PROTECTION DOWN CONDUCTORS ARE BONDED TO LOCAL GROUNDED METAL TO PREVENT FLASHOVER.





CONDUIT (TYP)-

48" MIN.

EMPLOYEE OWNED

NORTH CHARLESTON, SOUTH CAROLINA NORTH CHARLESTON SEWER DISTRICT

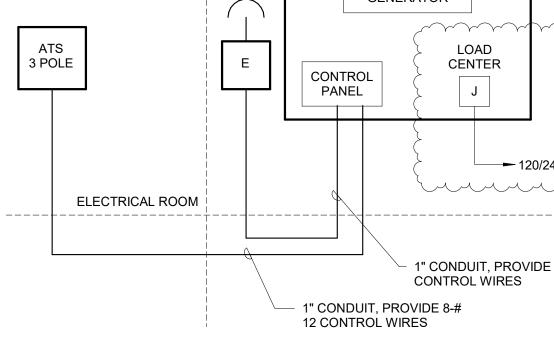
DWG, INC. CONSULTING **ENGINEERS**

No.C03649

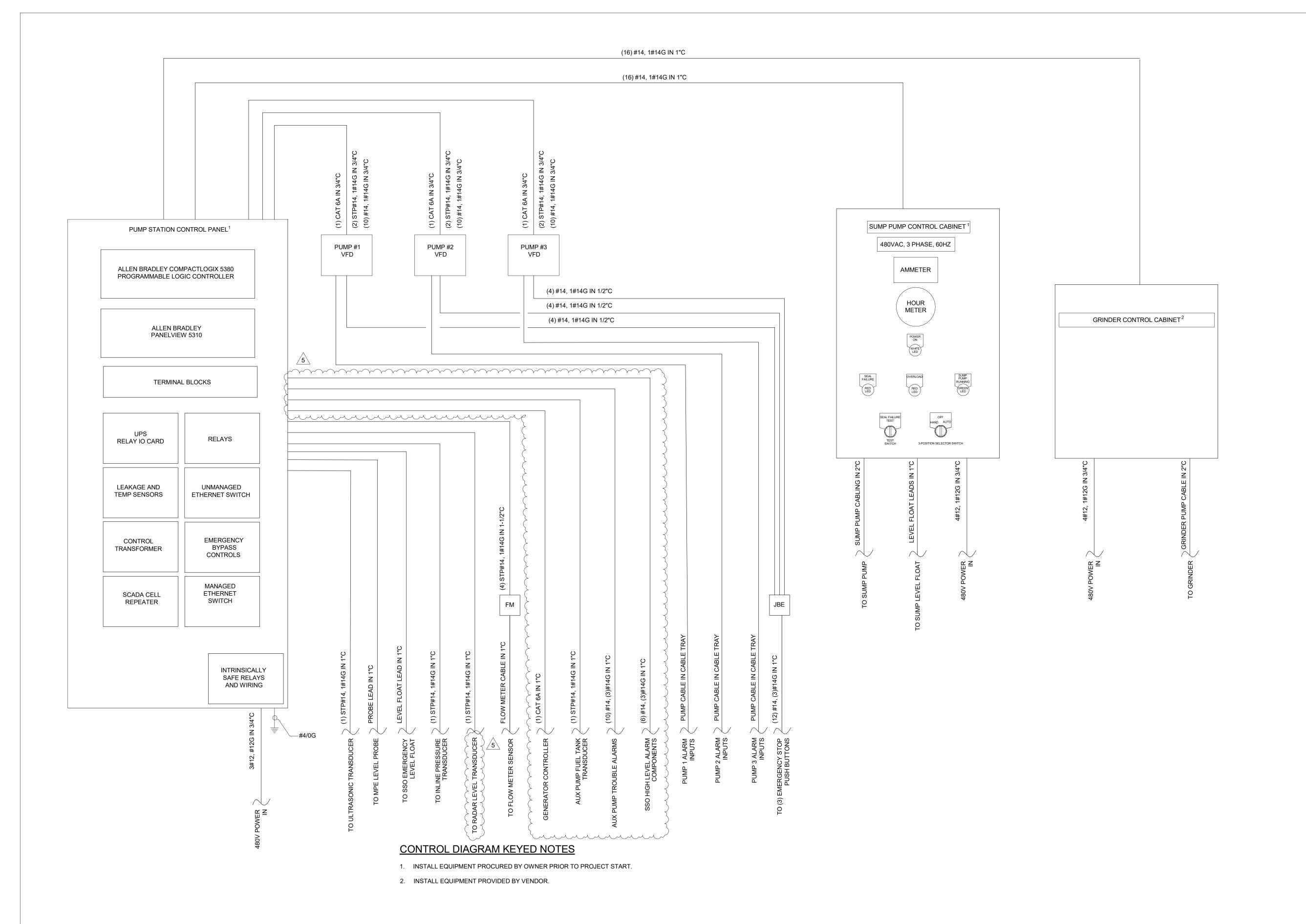
GENERATOR CONTROLS DETAIL E003 NOT TO SCALE

- BUILDING MOUNTED E-STOP WITHIN SIGHT OF GENERATOR **GENERATOR** ATS 3 POLE CENTER CONTROL PANEL ELECTRICAL ROOM **EXTERIOR** - 1" CONDUIT, PROVIDE 2-#14 CONTROL WIRES





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CONSULTING ENGINEERS
EMPLOYEE OWNED

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DWG, INC. CONSULTING ENGINEERS

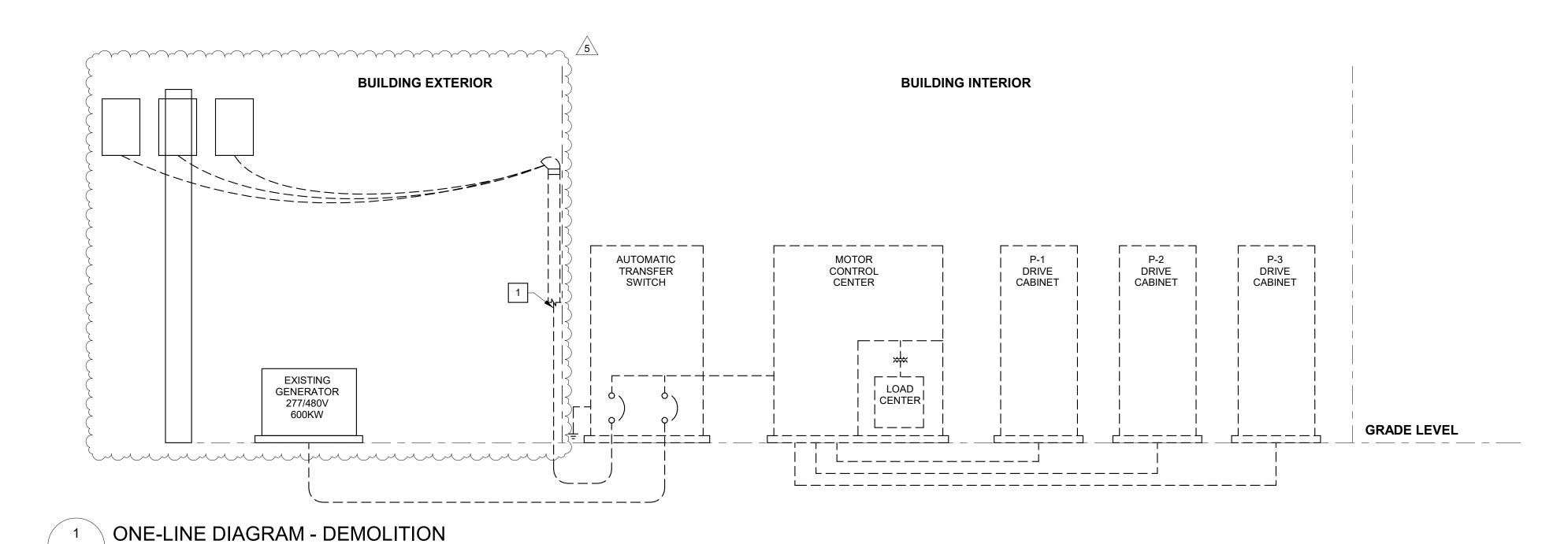
TURKEY CREEK CONTROLS DETAIL

E004 NOT TO SCALE

ONE-LINE DEMOLITION KEYED NOTES:

DEMOLISH CONDUIT, WIRE, WEATHERHEAD AND OTHER EQUIPMEN

ASSOCIATED WITH EXISTING ELECTRICAL SERVICE.



1. CONTRACTOR SHALL COORDINATE DISCONNECTION AND INSTALLATION OF METER ON BUILDING WITH UTILITY COMPANY. CONTRACTOR SHALL INSTALL PER REQUIREMENTS OF UTILITY COMPANY.

ELECTRICAL SERVICE GENERAL NOTES:

- 2. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED ELECTRICAL COMPONENTS TO MAKE UTILITY CONNECTION IN ACCORDANCE WITH UTILITY COMPANY'S REQUIREMENTS. UTILITY COMPANY SHALL INSPECT WORK PRIOR TO PROVIDING CONNECTION TO UTILITY SERVICE TRANSFORMER.
- 3. SERVICE DISCONNECTS SHALL BE PROPERLY LABELED IN ACCORDANCE WITH UTILITY REQUIREMENTS. UTILITY COMPANY SHALL NOT PROVIDE CONNECTION TO SERVICES WITHOUT PROPER IDENTIFICATION.

ELECTRICAL SERVICE KEYED NOTES:

- 1 INSTALL OWNER PROVIDED EQUIPMENT.
- 2 WIRING SHALL BE 1000V RATED, XHHW.

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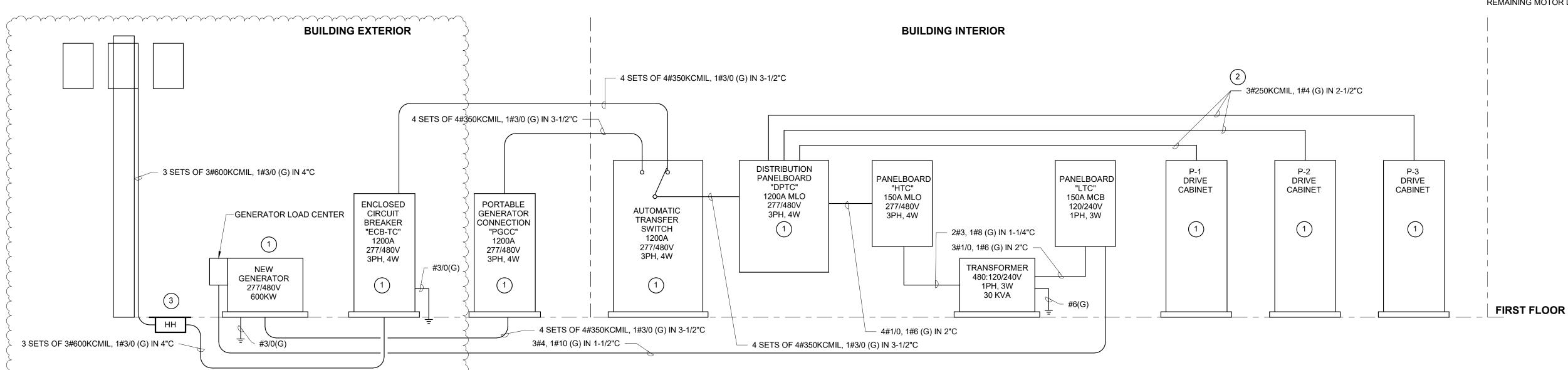
PROVIDE TIER 22 HANDHOLE, QUAZITE OR EQUAL FOR NEW ELECTRICAL SERVICE ROUTING.

PUMP STATION LOAD SUMMA								
LOAD	HP/KVA	PHASE	CURRENT*					
PUMP #1	150/150	3	180 A					
PUMP #2	150/150	3	180 A					
PUMP #3	150/150	3	180 A					
OTHER	-/50	3	61 A					
TOTAL	500 KVA							
CONNECT	@ 480V	613 A						
TOTAL	DIVERSIFIE	D KVA	538 KVA					

* CURRENT REPRESENTED IS FULL LOAD AMPS

**DIVERSIFIED LOAD CALCULATED AS 125% OF LARGEST MOTOR LOAD PLUS 100% OF ALL REMAINING MOTOR LOADS.

DIVERSIFIED AMPS @ 480V** 660 A



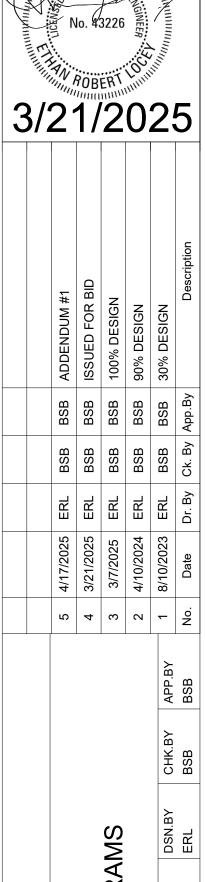
ONE-LINE DIAGRAM - RENOVATION

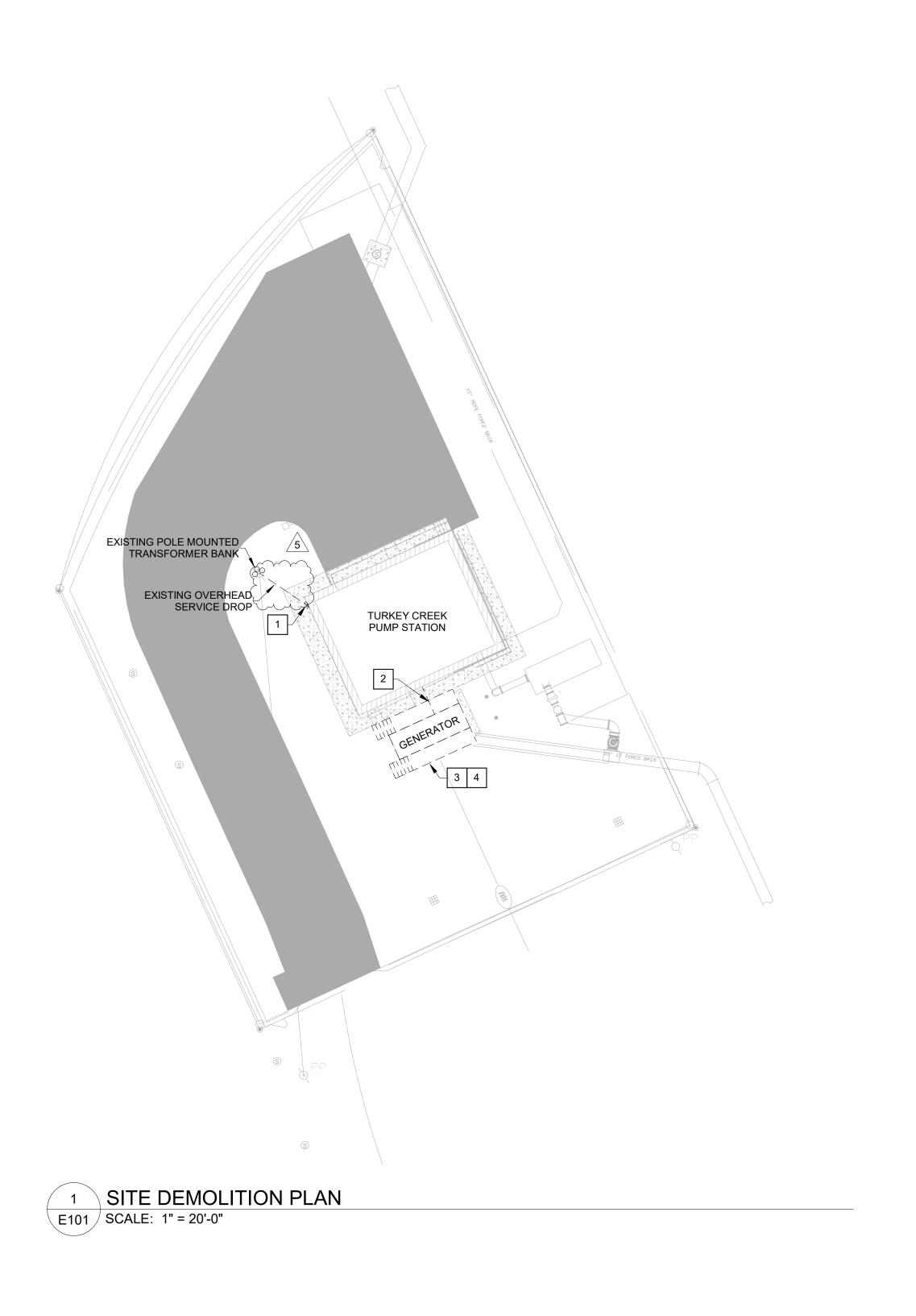
E010 NOT TO SCALE











GENERAL NOTES

DEMOLITION KEYED NOTES

DEMOLISH EXISTING SERVICE CONDUITS FOR MODIFICATION DURING RENOVATION. DEMOLISH REMAINING CONDUIT AND WIRE TO TRANSFER SWITCH IN ITS ENTIRETY. WHERE DEMOLISHED CONDUIT PENETRATES DRYWELL WALL AND FLOOR, PATCH PENETRATIONS TO MATCH EXISTING FINISH.

2 DEMOLISH FEEDER AND CONTROL CONDUIT AND WIRE TO TRANSFER SWITCH IN ITS ENTIRETY.

3 DEMOLISH WOODEN WALKING PLATFORM AROUND EXISTING TO REMAIN GENERATOR IN ITS ENTIRETY.

4 DEMOLISH GENERATOR IN ITS ENTIRETY.







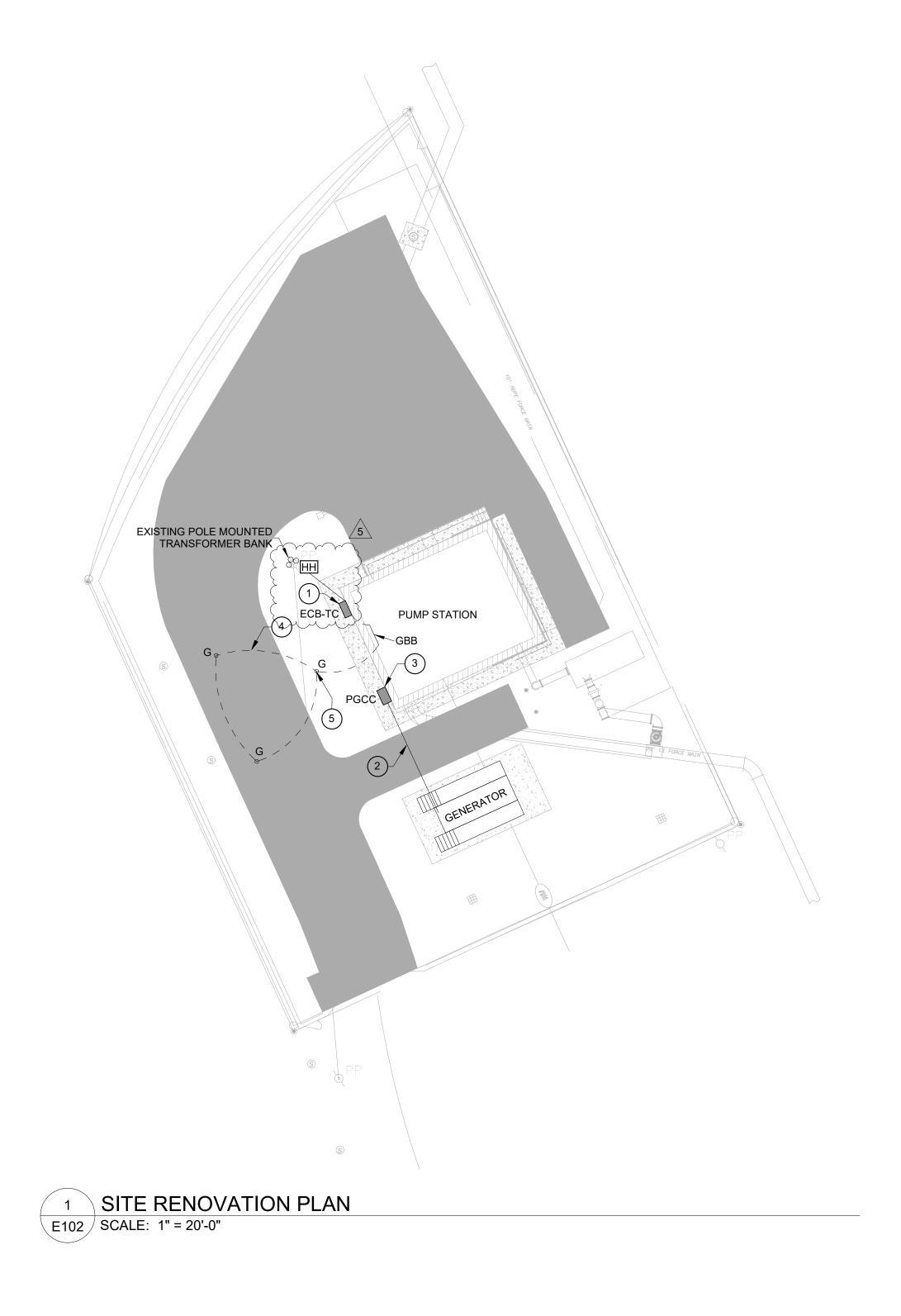
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	ADDENDUM #1	ISSUED FOR BID	100% DESIGN	90% DESIGN	30% DESIGN	Description
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	BSB	BSB	BSB	BSB	BSB	Dr. By Ck. By App.By
	ERL	ERL	ERL	ERL	ERL	Dr. By
	17/2025	21/2025	/7/2025	10/2024	10/2023	Date

DEMOLITION SITE PLAN

JOB NO. DR.BY DSN.BY CHK.BY

ELECTRICAL DEMOLITION UPGI SCALE: CONTRACT: JOB NO.

Sabb cabb



GENERAL NOTES

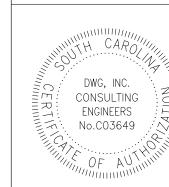
RENOVATION KEYED NOTES

- INSTALL EXTERIOR ENCLOSED CIRCUIT BREAKER ON CONCRETE HOUSEKEEPING PAD. COORDINATE RELOCATION OF METER WITH UTILITY IF REQUIRED.
- INSTALL NEW GENERATOR. PROVIDE NEW UNDERGROUND CONDUIT FOR GENERATOR OUTPUT FEEDER, ATS START/STOP CONTROLS, GENERATOR FUEL TANK LEVEL AND GENERATOR LOAD CENTER.

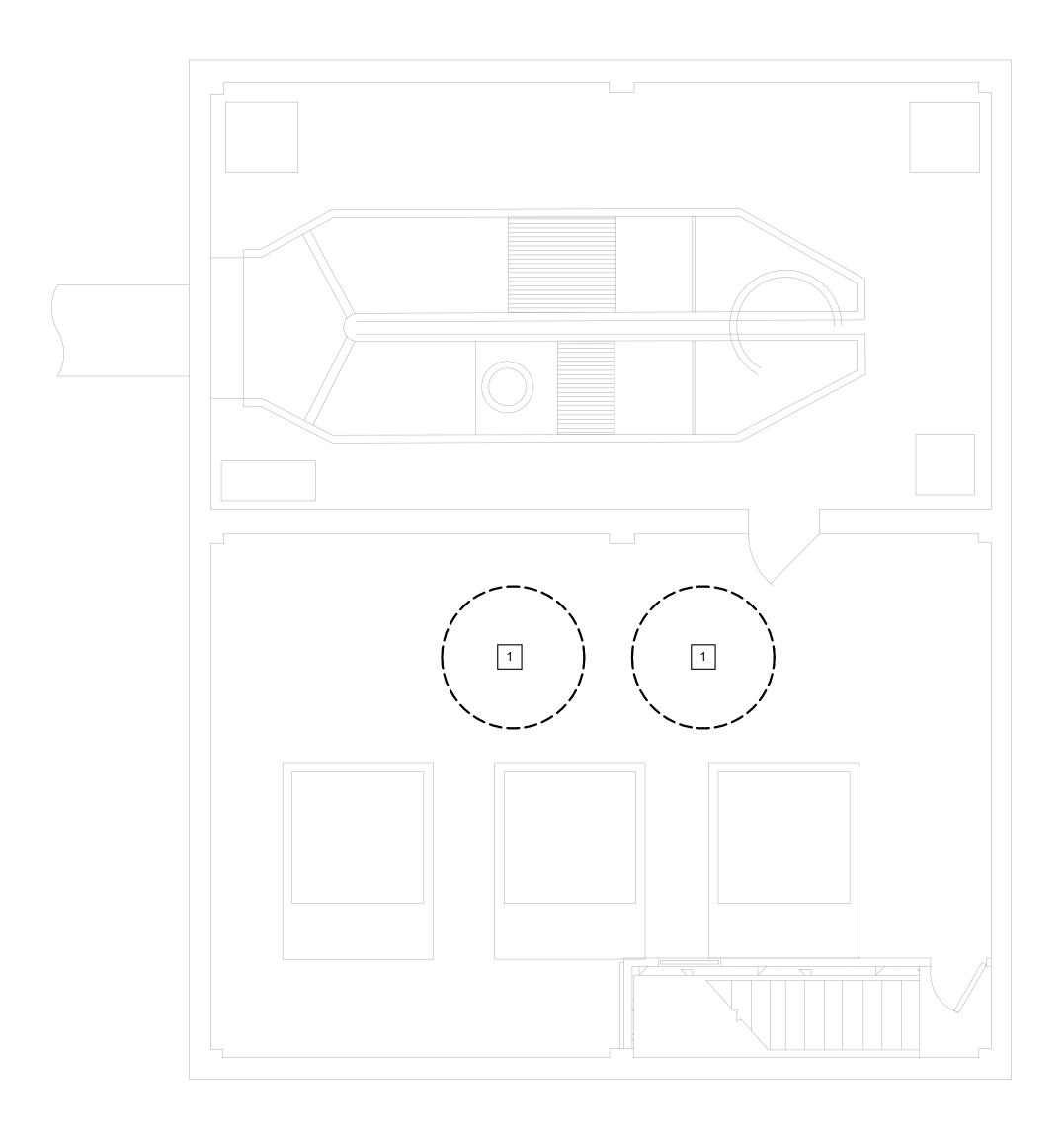
- PROVIDE GROUND ROD CLUSTER FOR THE SERVICE GROUND IN THIS BULDING. GROUND CLUSTER SHALL CONSIST OF THREE 3/4" X 10'-0" COPPER CLAD STEEL GROUND RODS. THEY SHALL BE DRIVEN IN A TRIANGULAR CONFIGURATION APPROXIMATELY 20' APART AND INTERCONNECTED IN DELTA WITH A BARE COPPER CONDUCTOR. TOPS OF THE RODS SHALL BE 12" BELOW FINISHED GRADE. CONNECTION TO THE RODS SHALL BE WITH EXOTHERMIC WELDS.
- 5 PROVIDE GROUND ROD WITH GROUND ROD TEST WELL.



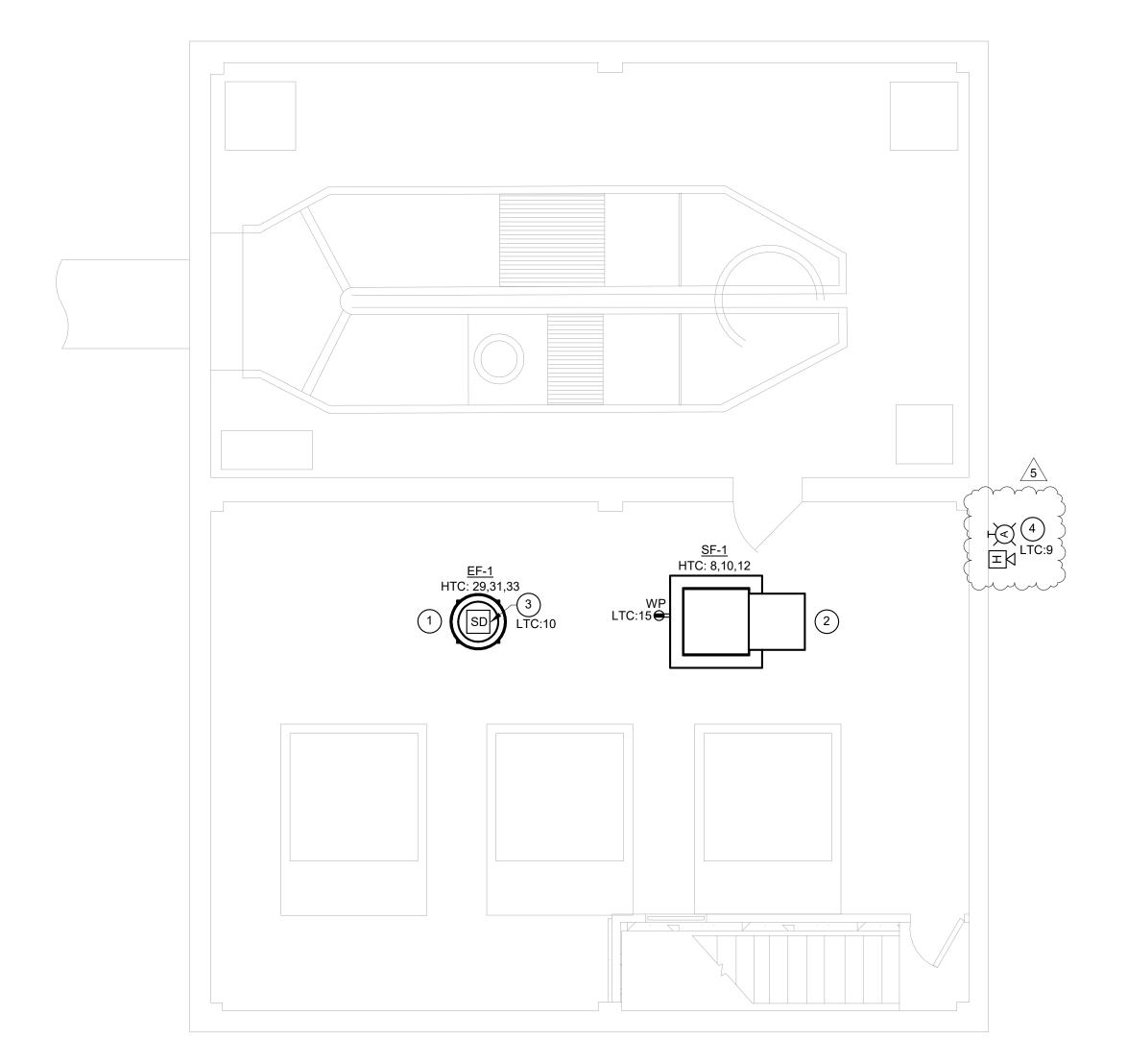




No. \$3226 ROBERT NO. \$3										
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		ERL	ERL	ERL	ERL	<u> </u>	LIL	Dr. By		
		4/17/2025	3/21/2025	3/7/2025	4/10/2024	8/10/2023		Date		
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						-	APP.BY			
							CHK.BY	BSB		







² ELECTRICAL ROOF PLAN E201 | SCALE: 1/4" = 1'-0"

DEMOLITION KEYED NOTES

1 DEMOLISH CIRCUIT SERVING DEMOLISHED MECHANICAL EQUIPMENT IN IT'S ENTIRETY.

RENOVATION KEYED NOTES

PROVIDE 2#12, 1#12G IN 3/4"C TO 30AMP, 1-PHASE, NEMA 4X STAINLESS STEEL COMBINATION MOTOR STARTER/NON-FUSED DISCONNECT. PROVIDE DISCONNECT WITH (1) NO AND (1) NC CONTACT. CONNECT FAN TO CIRCUIT INDICATED. BOND EQUIPMENT TO EXISTING LIGHTNING PROTECTION SYSTEM.

PROVIDE 3#12, 1#12G IN 3/4"C TO 30AMP, 1-PHASE, NEMA 4X STAINLESS STEEL COMBINATION MOTOR STARTER/NON-FUSED DISCONNECT. PROVIDE DISCONNECT WITH (1) NO AND (1) NC CONTACT AND INTEGRAL CONTROL TRANSFORMER. CONNECT FAN TO CIRCUIT INDICATED. BOND EQUIPMENT TO EXISTING LIGHTNING PROTECTION SYSTEM

PROVIDE 120V LINE VOLTAGE SINGLE STATION DUCT MOUNTED SMOKE DETECTOR CONNECTED TO CIRCUIT INDICATED. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR. SMOKE DETECTOR SHALL TRIP MOTOR STATTERS FOR EF-1 AND SF-1 WHEN IN ALARM STATE. DUCT DETECTOR SHALL BE A MINIMUM OF SIX DUCT WIDTHS FROM BENDS AND INLETS.

INSTALL SSO HIGH LEVEL FLOAT HORN AND INDICATING LIGHT PROVIDED BY OWNER. CONNECT TO BRANCH CIRCUIT INDICATED. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.

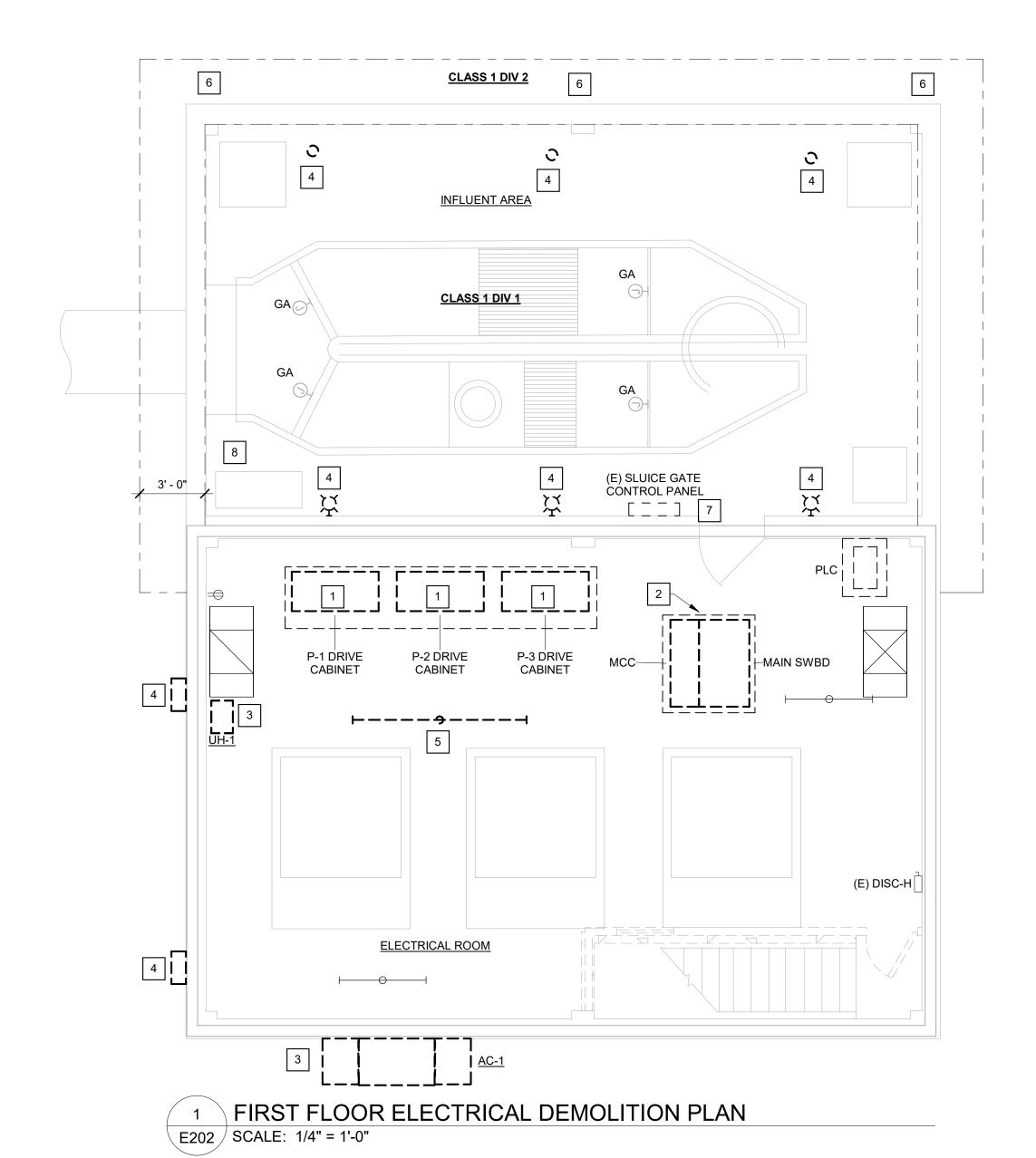
> EMPLOYEE OWNED COPYRIGHT 2025 WESTON & SAMPSON

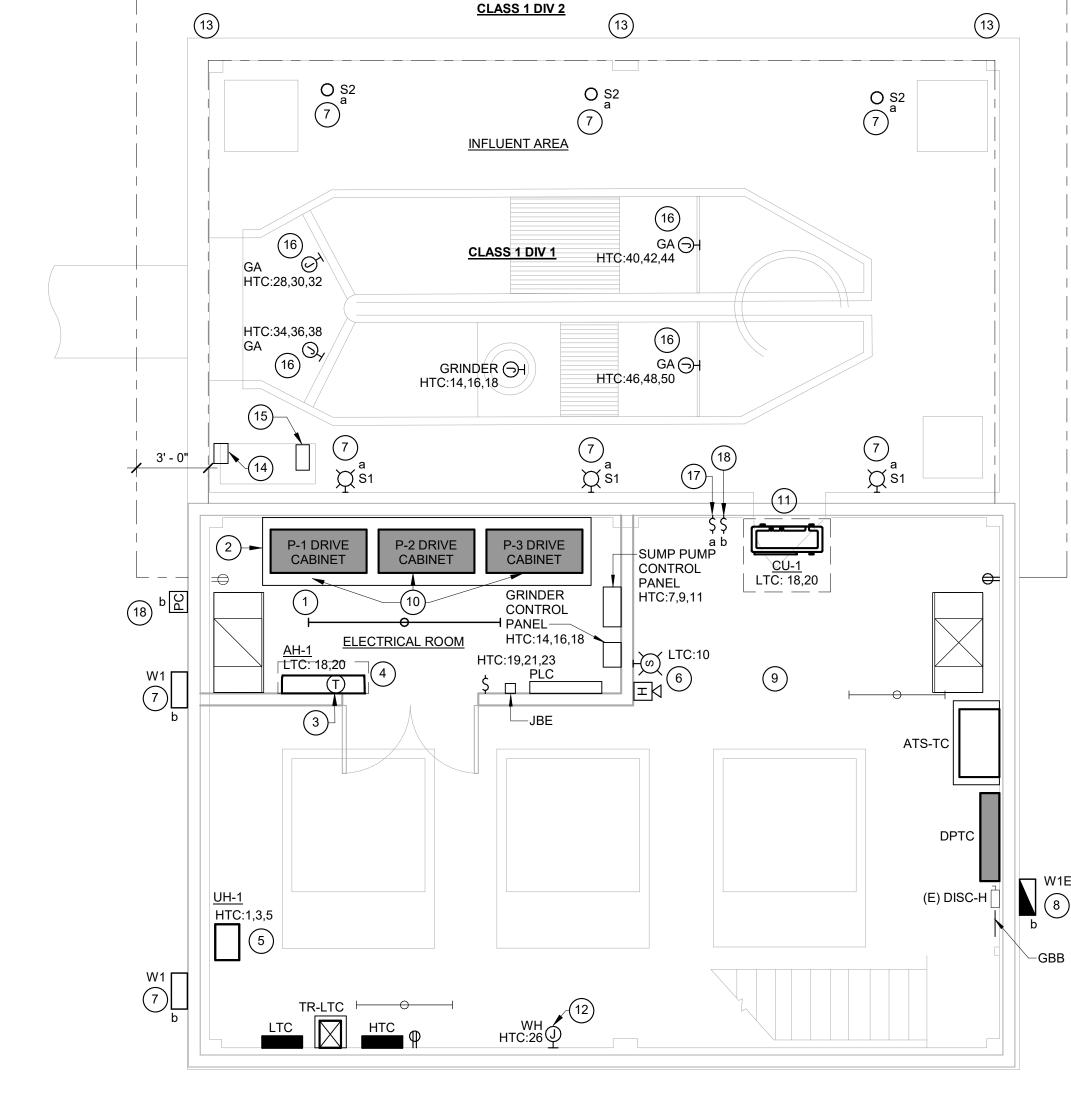




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	BSB	BSB	BSB	BSB	BSB	Dr. By Ck. By App.By				
	ERL	ERL	ERL	ERL	ERL	Dr. By				
	4/17/2025	3/21/2025	3/7/2025	4/10/2024	8/10/2023	Date				
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					K.BY	~				

GENERAL NOTES





FIRST FLOOR ELECTRICAL RENOVATION PLAN E202 SCALE: 1/4" = 1'-0"

DEMOLITION KEYED NOTES

- DEMOLISH EXISTING PUMP DRIVE CABINETS AND ASSOCIATED HOUSEKEEPING PAD.
 DISCONNECT PUMP CABLING AND RETAIN FOR REUSE DURING RENOVATION. PATCH FLOOR PENETRATIONS TO MATCH EXISTING FINISH.
- 2 DEMOLISH SERVICE ENTRANCE COMBINATION SWITCHBOARD/TRANSFER SWITCH, MOTOR ☐ CONTROL CENTER AND ASSOCIATED HOUSEKEEPING PAD. RETAIN ALL CIRCUITS SERVED FROM MOTOR CONTROL CENTER FOR EXTENSION DURING RENOVATION, UNLESS OTHERWISE NOTED FOR DEMOLITION.
- 3 DEMOLISH CIRCUIT SERVING MECHANICAL EQUIPMENT IN ITS ENTIRETY.
- 4 DEMOLISH LIGHT FIXTURE. RETAIN CIRCUIT FOR REUSE DURING RENOVATION.
- DEMOLISH LIGHT FIXTURE. SAVE FIXTURE AND RETAIN CIRCUIT FOR REUSE DURING
- 6 DEMOLISH CORRODED LIGHTNING PROTECTION DOWN LEADS.
- 7 DEMOLISH PANELBOARD AND ASSOCIATED BRANCH CIRCUITS IN THEIR ENTIRETY. 8 DEMOLISH EXISTING LEVEL PROBE AND ASSOCIATED CABLING IN ITS ENTIRETY.

RENOVATION KEYED NOTES

WITH MECHANICAL CONTRACTOR.

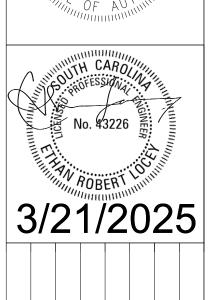
- 1 INSTALL LIGHT FIXTURE SAVED DURING DEMOLITION. CONNECT TO EXISTING CIRCUIT. EXTEND CONDUIT AND WIRE AS NEEDED. MATCH EXISTING SUSPENSION HEIGHT. CONNECT TO NEW LIGHTING CONTROLS AS SHOWN. PROVIDE REMOTE INVERTER BODINE ELI OR EQUIVALENT FOR
- (2) INSTALL NEW PUMP DRIVE CABINETS. PROVIDE WITH NEW CONCRETE HOUSEKEEPING PAD. PROVE (2) 4" SLEEVES THROUGH FLOOR UNDER EACH CABINET. SEAL WITH DUCT SEAL.
- 3 PROVIDE 1/2" CONDUIT TO AIR HANDLING UNIT FROM THERMOSTAT FOR MECHANICAL CONTROL
- INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT. PROVIDE 3/4" CONDUIT TO CONDENSING UNIT FOR CONTROL WIRING. PROVIDE WITH TOGGLE SWITCH DISCONNECT.
- PROVIDE 3#12, 1#12G IN 3/4"C TO 20AMP, 3-PHASE, NEMA 1 STAINLESS NON FUSED DISCONNECT FROM PANELBOARD "HTC" PROVIDE FINAL CONNECTION TO RELOCATED EQUIPMENT.
- 6 PROVIDE GREEN COLOR STROBE INDICATING LIGHT AND AUDIBLE ALARM HORN FOR AIR FLOW MONITORING SYSTEM. COORDINATE CONNECTION TO AIR FLOW SENSORS IN EF-1 AND SF-1
- 7 CONNECT NEW FIXTURE TO EXISTING LIGHTING CIRCUIT RETAINED DURING DEMOLITION. MATCH EXISTING MOUNTING HEIGHT OF DEMOLISHED FIXTURE.
- 8 CONNECT NEW FIXTURE TO EXISTING EXTERIOR LIGHTING CIRCUIT. EXTEND CONDUIT AND WIRE AS REQUIRED. MATCH EXISTING MOUNTING HEIGHT OF SIMILAR FIXTURES.
- 9 APPROXIMATE LOCATION OF CIRCUITS RETAINED DURING DEMOLITION. PROVIDE CEILING MOUNTED SPLICE BOXES ADEQUATELY SIZED FOR NUMBER OF ENTERING CONDUITS AND SPLICES. PROVIDE SEPARATE SPLICE BOXES FOR 120/208V AND 277/480V CIRCUITS.
- PROVIDE HEAVY DUTY EYEBOLTS ADEQUATELY SECURED IN STUCTURE ABOVE. PROVIDE (1) 1/2 TON RATCHETING CHAIN HOIST. PROVIDE KELLUM GRIPS FOR EACH PUMP CABLE, ADEQUATELY SIZED FOR CABLE FOR USE IN PULLING CABLES.

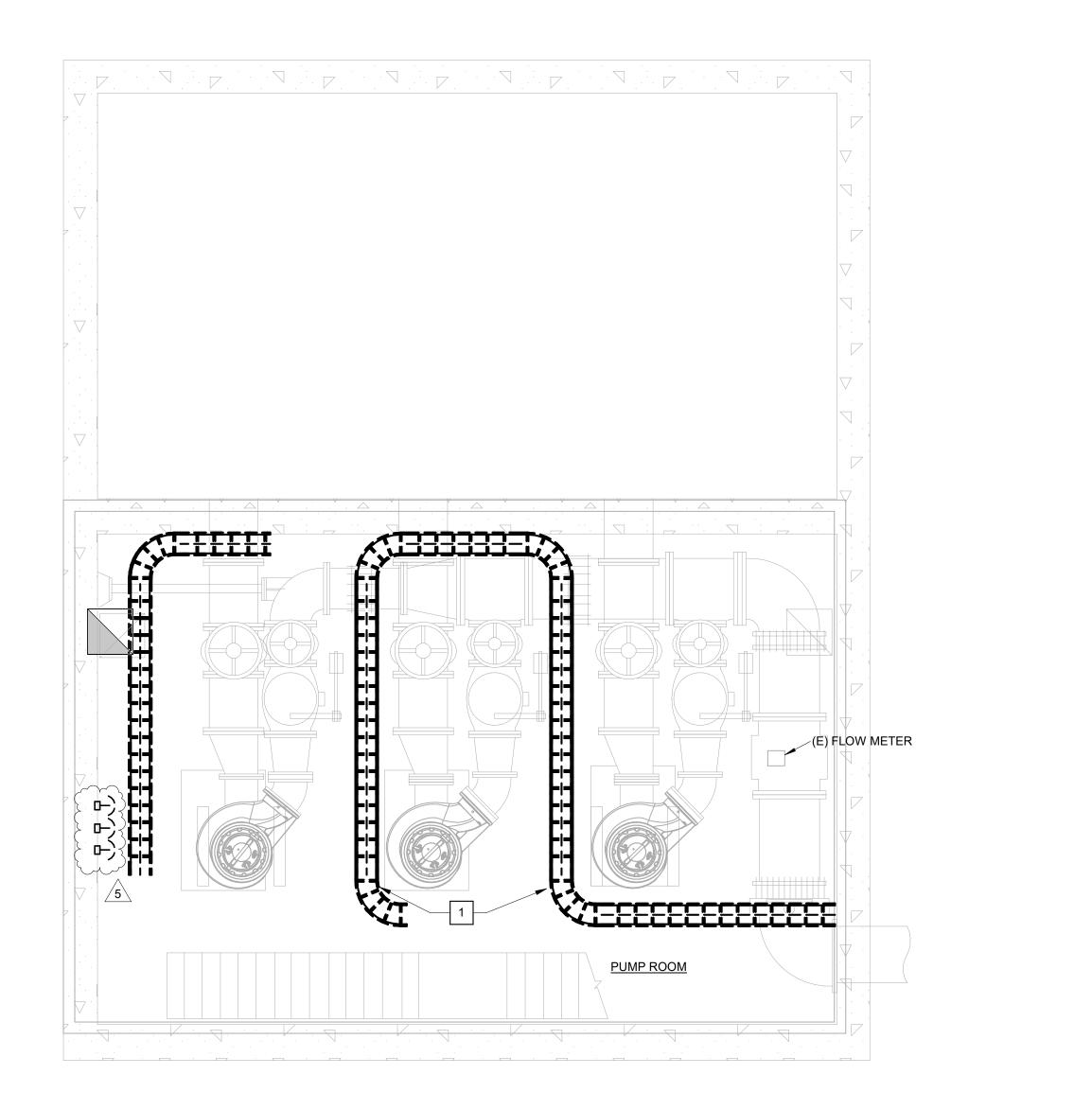
- PROVIDE 2#12, 1#12(G) IN 3/4"C TO 1-PHASE, 30AMP, NEMA 1 NON-FUSED DISCONNECT. PROVIDE FINAL CONNECTION TO EQUIPMENT. MOUNT DISCONNECT NEAR DEVICE.
- 12) PROVIDE 2#6, 1#10G IN 1"C TO INSTANTANEOUS WATER HEATER FROM CIRCUIT INDICATED.
- PROVIDE NEW LIGHTNING PROTECTION DOWN LEADS. RE-CERTIFY SYSTEM PER NFPA 780 FOR A MASTER LABELED UL LIGHTNING PROTECTION SYSTEM UPON COMPLETION.
- 14) INSTALL OWNER PROVIDED UNTRASONIC LEVEL TRANSDUCER. PROVIDE 316SS MOUNTING BRACKET.
- (15) INSTALL OWNER PROVIDED LEVEL PROBE.
- PROVIDE 4#12,1#12(G) IN 3/4"C TO 3-PHASE GATE ACTUATORS. PROVIDE FINAL CONNECTION TO EQUIPMENT.
- 17) PROVIDE SWITCH WITH PILOT LIGHT. SWITCH SHALL CONTROL LIGHT FIXTURES ON INDICATED SWITCH LEG DESIGNATED BY LOWERCASE LETTER. LABEL SWITCH ACCORDINGLY.
- 18) PROVIDE A PHOTOCELL AND ELECTRICALLY HELD CONTACTOR FOR CONTROL OF EXTERIOR LIGHTS ON INDICATED SWITCH LEG DESIGNATED BY LOWERCASE LETTER. SWITCH SHALL OVERRIDE LIGHTS OFF. LABEL SWITCH ACCORDINGLY.



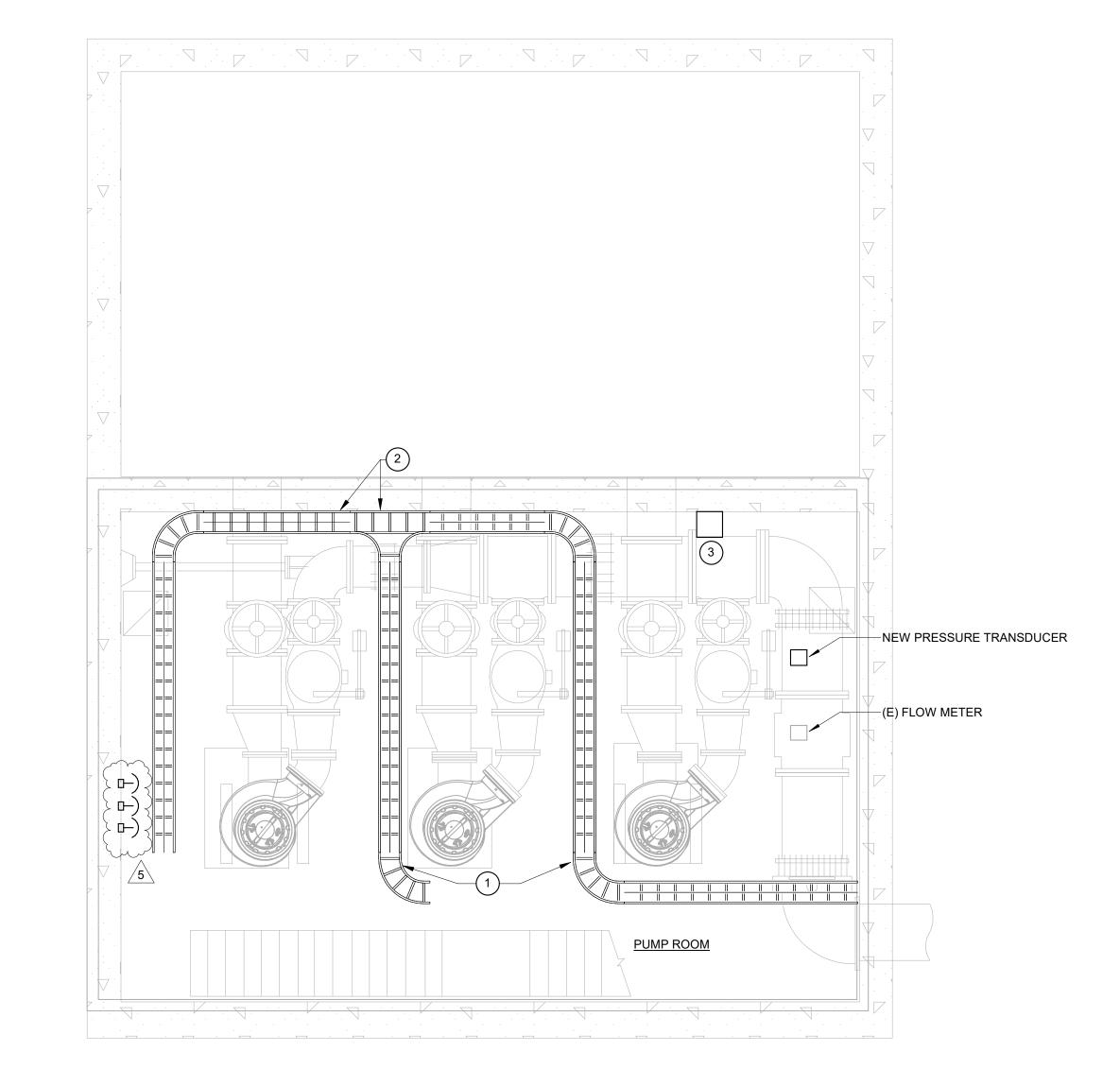








1 PUMP LEVEL ELECTRICAL DEMOLITION PLAN E203 SCALE: 1/4" = 1'-0"



PUMP LEVEL ELECTRICAL PLAN E203 | SCALE: 1/4" = 1'-0"

GENERAL NOTES

DEMOLITION KEYED NOTES

DEMOLISH CABLE TRAY IN THIS SPACE. PROTECT AND SAVE ALL CABLE TRAY FOR REUSE DURING RENOVATION. COIL AND PROTECT EXISTING TO REMAIN PUMP CABLING.

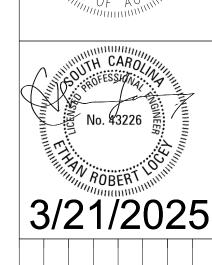
RENOVATION KEYED NOTES

- 1 INSTALL CABLE TRAY STORED DURING RENOVATION. PROVIDE NEW AND ADDITIONAL COMPONENTS FOR CABLE TRAY AS REQUIRED FOR INSTALLATION AND SUPPORT. SUSPEND AND SEISMICALLY BRACE CABLE TRAY FROM CEILING. MOUNT BOTTOM OF CABLE TRAY AT 10'-0" AWAY FROM FINISHED FLOOR. ROUTE EXISTING TO REMAIN PUMP CABLE IN CABLE TO NEW DRIVE CABINET LOCATION. PROVIDE NEW WATERFALL STYLE ATTACHEMENTS FOR PUMP CABLING EXITING CABLE TRAY.
- PROVIDE NEW LADDER CABLE TRAY SECTIONS AND FITTING AS REQUIRED TO MAKE CABLE TRAY CONTINOUS. MATCH EXISTING DEPTH AND WIDTH OF RELOCATED CABLE TRAY.
- 3 PROVIDE CONNECTION TO THROUGH WALL PRESSURE SENSOR.

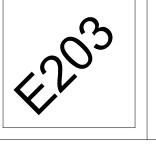








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	BSB	BSB	BSB	BSB	BSB	Dr. By Ck. By App.By
	ERL	ERL	ERL	ERL	ERL	Dr. By
	4/17/2025	3/21/2025	3/7/2025	4/10/2024	8/10/2023 ERL	Date
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Section 2.02 Exterior Concrete

Concrete Masonry

1st Coat: LX03V0100 - LXN CONDITION CLR

- Location: A. Painting of Exterior Walls Notes: Surface Prep: SSPC-13 Apply at 200-300 Square feet per gallon.

2nd Coat: CF11W0051 - CNFLX XL SMTH EW

- Location: A. Painting of Exterior Walls Notes: Apply at 6.0 to 7.5 Mils DFT.

3rd Coat: CF11W0051 - CNFLX XL SMTH EW

- Location: A. Painting of Exterior Walls Notes: Apply at 6.0 to 7.5 Mils DFT.

Section 2.02 Interior Concrete

Concrete Masonry

1st Coat: B42W00150 - PI HD BLOCK FILLER

Location: B. Interior CMU and Cast Concrete Walls (Interior Walls)
 Notes: Surface Prep SSPC-13
 Apply at 8.0 to 10.0 mils DFT

2nd Coat: B73W00311 - Pro Industrial Waterbased Epoxy Gloss (Part A) Extra White / Tint Base

Location: B. Interior CMU and Cast Concrete Walls (Interior Walls)
 Notes: Apply at 4.0 to 4.9 Mils DFT.

3rd Coat: B73W00311 - Pro Industrial Waterbased Epoxy Gloss (Part A) Extra White / Tint Base

Location: B. Interior CMU and Cast Concrete Walls (Interior Walls)
 Notes: Apply at 4.0 to 4.9 Mils DFT.

Section 2.02 Concrete Floors

Concrete Masonry

1st Coat: GP3831A01 - RSFLR MVB CLR A

Location: C. Concrete Floors (New Electrical Room)
 Notes: Surface Prep SSPC 13
 Apply at 17.0 to 22.0 Mils DFT

2nd Coat: GP3760A01 - RSFLR 3760 CLR A

- Location: C. Concrete Floors (New Electrical Room)

Notes: Apply at 10.0 to 12.0 mils DFT

3rd Coat: GP4640A01 - RSTLE HPSSDSHTS A

- Location: C. Concrete Floors (New Electrical Room) Notes: Apply at 2.9 mils or 500 square feet per gallon

Section 2.02 Outside Concrete Floors



Concrete Masonry

Prime Coat: GP3831A01 - RSFLR MVB CLR A

Location: D. Concrete Floors (For the Upper Floor Outside the New Electrical Room)
 Notes: Surface Prep SSPC 13 CSP 5
 Apply at 17.0 to 22.0 mils DFT

Cove: GPDFCVRA1 - RSFLR CVRZ CLR A

 Location: D. Concrete Floors (For the Upper Floor Outside the New Electrical Room)
 Notes: 4"Cove
 Resuflor Cove Rez

Body Coat: GP3760A01 - RSFLR 3760 CLR A

Location: D. Concrete Floors (For the Upper Floor Outside the New Electrical Room)
 Notes: Apply at 160 square feet gallon
 Broadcoats 5310-08 20/40 mesh sand @.5 lbs per square foot

Grout Coat: GP3760A01 - RSFLR 3760 CLR A

Location: D. Concrete Floors (For the Upper Floor Outside the New Electrical Room)
 Notes: Apply at 15 mils DFT

Finish Coat: GP4640A01 - RSTLE HPSSDSHTS A

- Location: D. Concrete Floors (For the Upper Floor Outside the New Electrical Room)

Notes: Apply at 535 square ft/gallon

Section 2.02 Exposed Steel

Steel/Ferrous Metal

1st Coat: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White

- Location: E. Exposed Steel Notes: Surface Prep-SSPC-SP3 Apply at 4.0 to 6.0 mils DFT

2nd Coat: B65W01411 - AC7700 GL WHTBS A

- Location: E. Exposed Steel Notes: Apply at 2.0 to 4.0 Mils DFT Apply at 4.0 to 6.0 mils DFT

Section 2.02 Exterior Wood

Wood - Exterior

1st Coat: Y24W08020 - Exterior Oil-Based Wood Primer White

- Location: F. Exterior Wood

Notes: Apply at 350-400 Square Feet Per Gallon

2nd Coat: K34W00251 - Duration® Gloss Exterior Latex Coating Extra White

 Location: F. Exterior Wood Notes: Apply at 2.0 to 2.4 mils DFT

3rd Coat: K34W00251 - Duration® Gloss Exterior Latex Coating Extra White

 Location: F. Exterior Wood Notes: Apply at 2.0 to 2.4 mils DFT

Section 2.02 Channel Drop Pipe



Ductile Iron Pipe

1st Coat: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White

- Location: G. Channel Drop Pipe Notes: SSPC-6 Surface Prep Apply at 4.0 to 6.0 Mils DFT

2nd Coat: B65W01411 - AC7700 GL WHTBS A

- Location: G. Channel Drop Pipe Notes: Apply at 2.0 to 3.0 Mils DFT

3rd Coat: B65T00105 - Diamond-Clad® Clear Coat Urethane Gloss Clear Part A Clear Part A

- Location: G. Channel Drop Pipe Notes: Apply at 1.0 to 2.0 Mils DFT

Section 2.02 Exposed Ductile Iron Pipe

Ductile Iron Pipe

1st Coat: B58W00610 - Macropoxy® 646 Fast Cure Epoxy Part A Mill White

- Location: H. Exposed Ductile Iron Pipe

Notes: Surface Prep SSPC-6 Apply at 4.0 to 6.0 mils DFT

2nd Coat: B65W01411 - AC7700 GL WHTBS A

 Location: H. Exposed Ductile Iron Pipe Notes: Apply at 2.0 to 3.0 Mils DFT

3rd Coat: B65T00105 - Diamond-Clad® Clear Coat Urethane Gloss Clear Part A Clear Part A

 Location: H. Exposed Ductile Iron Pipe Notes: Apply at 1.0 to 2.0 mils DFT

Section 2.02 I. Wood

Wood - Interior

1st Coat: B51W00450 - Multi-Purpose Interior/Exterior Latex Primer White

- Location: I. Wood

Notes: Surface Prep Clean and Dry Apply at 400 Square feet per gallon

2nd Coat: B73W00311 - Pro Industrial Waterbased Epoxy Gloss (Part A) Extra White / Tint Base

- Location: I. Wood

Notes: Apply at 4.0 to 4.9 Mils DFT

3rd Coat: B73W00311 - Pro Industrial Waterbased Epoxy Gloss (Part A) Extra White / Tint Base

- Location: I. Wood

Notes: Apply at 4.0 to 4.9 Mils DFT

Section 2.02 J Interior Drywall

Drywall

1st Coat: B51W00450 - Multi-Purpose Interior/Exterior Latex Primer White

- Location: J. Interior Drywall

Notes: Apply at 350-400 Square feet per gallon.



2nd Coat: B73W00311 - Pro Industrial Waterbased Epoxy Gloss (Part A) Extra White / Tint Base - Location: J. Interior Drywall

Notes: Apply at 4.0 to 4.9 Mils DFT

3rd Coat: B73W00311 - Pro Industrial Waterbased Epoxy Gloss (Part A) Extra White / Tint Base

- Location: J. Interior Drywall Notes: Apply at 4.0 to 4.9 Mils DFT



Reference Pages



Loxon®

Acrylic Conditioner

LX03W0100 Guide Coat White, LX03V0100 Clear



CHARACTERISTICS

Loxon Acrylic Conditioner is a 100% acrylic emulsion conditioner that will penetrate and seal interior and exterior surfaces and bond light chalk to the surface. With excellent alkali and efflorescence resistance, this sealer allows new concrete, stucco, and other cementitious surfaces to be coated prior to a 30-day cure, and will adhere to new or existing concrete with a pH of 6 to 13.

For use on these surfaces:

Concrete, Concrete Block, Brick, Stucco, Fiber Cement Siding, Plaster, Mortar, EIFS Exterior Wall Cladding

Color: Guide Coat White & Clear

Coverage sq.ft. per gallon 200-300

Do not build a surface glaze.

Drying Schedule 77° F @ 50% RH:

Drying and recoat times are temperature, humidity and film thickness dependent.

Touch: 30 minutes
Tack free: 1 hour
Recoat: 3 hours

Tinting with CCE only:

Requires ColorCast Ecotoner colorant for tinting. If desired, up to 1 oz per gallon of ColorCast Ecotoner colorant can be used to approximate the topcoat color. Check color before use.

Clear LX03V0100

V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs.per gallon
As per 40 CFR 59.406

Volume Solids: $15 \pm 2\%$ Weight Solids: $17 \pm 2\%$ Weight per Gallon:8.43 lbFlash Point:N/AVehicle Type:Proprietary
AcrylicShelf Life:36 months, unopened

Guide Coat White LX03W0100 V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs.per gallon

Volume Solids: $17 \pm 2\%$ Weight Solids: $24 \pm 2\%$ Weight per Gallon: 8.92 lbFlash Point: N/A

Vehicle Type:Proprietary AcrylicShelf Life:36 months, unopenedWVP Perms (US):27.55 grains/(hr ft² in Hg)

COMPLIANCE
As of 09/23/2021, Complies with:

OTC Yes **OTC Phase II** Yes S.C.A.Q.M.D. Yes CARR Yes CARB SCM 2007 Yes CARB SCM 2020 Yes Canada Yes LEED® v4 & v4.1 Emissions Yes LEED® v4 & v4.1 V.O.C. Yes **EPD-NSF® Certified** Yes

APPLICATION

MIR-Manufacturer Inventory

Temperature:

MPI®

minimum 50°F

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: No reduction necessary

Airless Spray:

 Pressure
 700-1000 p.s.i.

 Tip
 .015-.019 inch

 Brush
 Use a nylon/polyester or foom brush

or foam brush.

Nο

N.A.

Roller Cover Use a 3/8 to 3/4 inch

nap synthetic cover.

If the surface requires a full bodied prime/block filler coat rather than a thin penetrating sealer, use Loxon Concrete & Masonry Primer or Loxon Acrylic Block Surfacer.

Apply at temperatures above 50°F. When the air temperature is at 50°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 50°F and at least 5°F above the dew point.

Do not apply if the surface temperature is below 50°F, when rain is expected within 3 hours, or when the relative humidity is 90% or more.

Do not paint in direct sun or on a hot surface.

Do not reduce.

APPLICATION TIPS

Do not build a surface glaze.

Do not apply to a damp surface.

Do not apply over heavy chalk.

For maximum resistance to efflorescence, you must topcoat with one of the Loxon Masonry Finishes.

On exterior applications, Loxon Acrylic Conditioner must be topcoated within 7 days or the surface may need to be re-cleaned.

RECOMMENDED SYSTEMS

Masonry, Concrete, Stucco, Block, 1 coat Loxon Acrylic Conditioner 2 coats Appropriate topcoat

Fiber Cement Siding, EIFS:

1 coat Loxon Acrylic Conditioner 2 coats Appropriate topcoat

Previously Painted:

1 coat Loxon Acrylic Conditioner 2 coats Appropriate topcoat

Recommended Architectural Topcoats:

Loxon Masonry Coatings ConFlex Masonry Coatings A-100 Exterior Latex

Duration Exterior & Duration Home Interior

Emerald Exterior & Interior SuperPaint Exterior & Interior ProMar Interior

Loxon®

Acrylic Conditioner

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

New and Previously Painted:

Remove all surface contamination (peeling paint, heavy chalk, efflorescence, laitance, concrete dust, etc.) by washing or pressure washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Masonry, Concrete, Stucco:

All new surfaces must cure for at least 7 days. Remove all form release and curing agents. Pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair cracks, voids, and other holes with an appropriate patching compound or sealant.

Concrete and mortar must be cured at least 7 days at 75°F. Moisture content must be 15% or lower. On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Fill bugholes, air pockets and other voids with an elastomeric patch or sealant.

Plaster

Must be cured, usually 30 days, and hard. If painting cannot wait, allow the surface to dry 7 days (within a pH range of 6 to 13) and prime with Loxon Acrylic Conditioner. **Do not build a surface glaze**. If the surface requires a full bodied prime coat rather than a thin penetrating sealer, use Loxon Concrete & Masonry Primer. Soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of water. Repeat until the surface is hard, rinse with water and allow to dry before painting.

Brick

Must be free of dirt, loose and excess mortar, and foreign material. All brick should be allowed to weather for at least one year followed by wire brushing to remove efflorescence. Treat the bare brick with one coat of Loxon Acrylic Conditioner.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

CAUTIONS

For interior or exterior use.

Protect from freezing.

Not for use on floors

Before using, carefully read **CAUTIONS** on label.

CRYSTALLINE SILICA: Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 09/23/2021 LX03W0100 17 00 HOTW 09/23/2021 LX03V0100 13 00 FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

ConFlex™ XL

Smooth High Build Acrylic Coating

CF11W0051 Extra White, CF11W0053 Deep Base, CF11T0054 Ultradeep Base



CHARACTERISTICS

ConFlex XL High Build Acrylic Coating is an elastomeric coating that provides excellent flexibility, durability, and weather resistance. This product will protect against wind-driven rain when used on tilt-up, precast, or poured-in-place concrete, CMU, brick, and stucco.

Color: Most Colors

2 coat system, brush, roller, or spray applied, coverage per coat:

Wet mils: 13.0-16.0 Dry mils: 6.0-7.5

1 coat system, spray applied, coverage per coat: 50-60 sq. ft. per gallon

Wet mils: 26.0-32.0 Dry mils: 12.0-15.0

Can be applied up to 40 mils wet.

Coverage will vary with the substrate and the texture

Drying Schedule @ 50% RH:

Touch: 4 hours
Recoat: 24 hours
Drying time is temperature, humidity, and film thickness dependent.

Finish: 0-10 units @ 85°

Tinting with CCE only:

Baseoz.per
gallonStrengthExtra White0-6SherColorDeep Base2-12SherColorUltradeep Base10-12SherColor

Extra White CF11W0051

(may vary by color)

V.O.C. (less exempt solvents):

less than 50 grams per litre;0.42 lbs. per gallon As per 40 CFR 59.406

Volume Solids: $46 \pm 2\%$ Weight Solids: $62 \pm 2\%$ Weight per Gallon:11.58 lbFlash Point:NAVehicle Type:100% AcrylicShelf Life:36 months, unopened

Mildew Resistant:

This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

COMPLIANCE

As of 04/29/2020, Complies with:

OTC	Yes
OTC Phase II	Yes
SCAQMD	Yes
CARB	Yes
CARB SCM 2007	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	N/A
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	N/A
MIR-Manufacturer Inventory	N/A
MPI [®]	Yes

APPLICATION

Temperature:

Apply between 50°-100°F

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: Do not reduce

Airless Spray:

Pressure 2300 p.s.i.
Tip .021 inch

Brush: nylon-polyester

Roller Cover: ½ to 1½ inch nap
synthetic cover.

Avoid over-brushing or rapid rolling, which causes air bubbles.

The substrate and its condition will determine the application procedure.

Considerations to minimize pinholes:

- 2 coat application with overnight drying between coats
- Spray application with backrolling
- Power rolling

APPLICATION TIPS

Sealing and Patching:

After cleaning the masonry surface thoroughly, prime any bare surface with Loxon Concrete & Masonry Primer, apply an elastomeric patch or sealant if needed, allow to dry, then topcoat.

To improve the performance consider:

- Use caution when preparing the substrate to create a uniform surface.
- Patch cracks, crevices, and openings with an elastomeric patch or sealant
- Stripe coat all inside and outside corners and edges with 1 coat of ConFlex XL HIgh Build Coating Smooth.

The depth of the opening should be 1/2 the width of the joint, with a maximum depth of 1/2". In deep openings, the depth of the Sealant should be controlled with a closed cell, "non-gassing" type backer rod. The backer rod should be about 1/8" wider than the opening.

RECOMMENDED SYSTEMS

A minimum total dry film thickness of 12 - 15 mils of topcoat and a surface with 10 or less pinholes per square foot is required for a waterproofing system.

New Construction

Concrete & Stucco:

- 1 coat Loxon Concrete and Masonry Primer
- 1-2 coats ConFlex XL High Build Coating

Concrete Block, CMU, Split-face Block:

1-2 coats ConFlex Block Filler

or

- 1-2 coats Loxon Acrylic Block Surfacer
- 2 coats ConFlex XL High Build Coating (2 coats recommended due to the typical porosity of these surfaces)

Previously Coated:

After power washing, apply 1 coat of Loxon Conditioner to tie any residual chalk to the surface.

- 1 coat Loxon Acrylic Conditioner (if needed)
- 1-2 coats ConFlex XL High Build Coating

ConFlex™ XL

Smooth High Build Acrylic Coating

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Seal stains from water, smoke, ink, pencil, grease, etc. with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Masonry, Concrete, CMU, Stucco: Remove all dirt, dust, mildew, loose particles, laitance, foreign material, peeling and defective coatings, chalk, form release agents, moisture curing membranes, etc. All new surfaces must be cured according to the supplier's recommendations—usually about 30 days. If painting cannot wait 30 days, allow the surface to cure 7 days at 75°F and prime to surface with Loxon Concrete & Masonry Primer or Loxon Block Surfacer to fill Block, and CMU.

On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern.

Allow the surface to dry thoroughly.

Concrete and mortar must be dry and cured at least 30 days and a pH of less than 10 to apply this product directly. Fill bugholes, air pockets, cracks, and other voids with an elastomeric patch or sealant. Rough surfaces can be filled to provide a smooth surface.

To repair openings and cracks:

No greater than 1/32" wide:

Apply one coat of Loxon Acrylic Primer and follow with 1 or 2 coats of ConFlex XL High Build Coating.

From 1/32" up to 1/16" wide:

Bridge over voids and small cracks up to 1/16" wide with an elastomeric patch or sealant. The product must be feathered to zero at the edges using a brush, knife, or trowel, to prevent the repaired area from telegraphing through the subsequent finishes. Do not apply more than 1/4" in depth in one application.

From 1/16" to 3/8" wide:

Cracks and voids between 1/16" and 3/8" wide should be opened to a sound surface. Flush out the opening to remove all dust. If dust is still evident, seal the surface with Loxon Conditioner to bind the dust to the surface.

Fill the opening with an elastomeric patch or sealant; provide a small crest over the opening to allow for shrinkage. The product must be feathered to zero at the edges using a brush, knife, or trowel, to prevent the repaired area from telegraphing through the subsequent finishes. Do not apply more than 1/4" in depth in one application. Allow this to cure 24 hours.

SURFACE PREPARATION

Mildew: Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

PHYSICAL PROPERTIES

Extra White CF11W0051

(may vary by base)

Wind-Driven Rain Test1:

Method: ASTM D6904-03
Result: Pass

Water Vapor Permeance²:

Method: ASTM D1653 14 day cure @ 77°F & 50% RH

16.9 US perms

Elongation³:

Result:

Method: ASTM D2370, 14 day cure @

77°F & 50% RH

Result: 250%

Tensile Strength³:

Method: ASTM D2370, 14 day cure @

77°F & 50% RH

Result: 215 p.s.i.

Flexibility:

Method: ASTM D522 , Method A

Result: Pass

Mildew Resistance :

Method: ASTM D3273/D3274

Result: Pass

Low Temperature Flexibility:

Method: ASTM D522 - Method B @ 10°F

Result: Pass

¹ 1 coat Loxon Primer at 3.2 mils D.F.T.

2 coats ConFlex XL Smooth at 6.0-7.5 mils D.F.T.-per coat

² 1 coat ConFlex XL Smooth at 5.9 mils D.F.T.

³ 1 coat ConFlex XL Smooth at 6.4 mils D.F.T.

CAUTIONS

For exterior use only.

Protect from freezing.

Not for use on horizontal surfaces (floors, roofs, decks, etc.) where water will collect.

Not for use on overhead horizontal surfaces (under sides of balconies, soffits, etc.)

Not for use below grade. Will not withstand hydrostatic pressure.

Before using, carefully read **CAUTIONS** on label.

CRYSTALLINE SILICA, ZINC: Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 04/29/2020 CF11W0051 30 48 FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS.

Pro Industrial™ Heavy Duty Block Filler

B42W00150 White



CHARACTERISTICS

Pro Industrial Heavy Duty Block Filler is a commercial strength block filler formulated for precast concrete, concrete block, and cinder block, and is suitable for both interior and exterior applications.

- **Excellent Filling Properties**
- Good Hiding
- Topcoat with high performance coatings such as epoxies and urethanes
- Applies by Brush, Roller or Spray
- Interior-Exterior
- Suitable for use in USDA inspected facilities

Color: White

Coverage:

16.0-21.0 Wet mils: 8.0-10.5 Dry mils: 75-100 Coverage sq.ft. per gallon

Approximate spreading rates are calculated on volume solids and do not include any application loss. Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of

Drying Schedule @ 50% RH, 16 mils wet: temperature and humidity dependent

@ 77°F Touch: 2 hours Recoat: itself 1 hour Recoat: with water borne: 18 hours Recoat: with solvent borne: 72 hours Drying time is temperature, humidity, and film

Finish: Flat

White B42W00150

V.O.C. (less exempt solvents):

thickness dependent.

Shelf Life:

less than 50 grams per litre; 0.42 lbs. per gallon

As per 40 CFR 59.406

36 months, unopened

Volume Solids: 50 ± 2% Weight Solids: 70 ± 2% 13.99 lb Weight per Gallon: Flash Point: Vehicle Type: Acrylic Latex

COMPLIANCE As of 06/02/2021, Complies with:

OTC Yes **OTC Phase II** Yes S.C.A.Q.M.D. Yes **CARB** Yes CARB SCM 2007 Yes CARB SCM 2020 Yes Canada Yes LEED® v4 & v4.1 Emissions Yes LEED® v4 & v4.1 V.O.C. Yes **EPD-NSF® Certified** Yes MIR-Manufacturer Inventory Yes **MPI®**

APPLICATION

Temperature:

minimum-maximum 50°-95°F

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: No reduction necessary

Airless Spray:

2300 p.s.i. Pressure 3/8 inch I.D. .019-.028 inch Hose Tip **Brush** Nvlon-polvester Backroll with 3/4 to 11/4 **Roller Cover**

inch synthetic cover

Stir thoroughly with a paddle or Jiffy Mixer before using. Apply paint at the recommended film thickness and spreading rate as indicated. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, over thinning, climatic conditions, and excessive film build. Excessive reduction of material can affect film build, appearance, and adhesion.

For repairing exterior cracks, bugholes, air pockets, and voids use an elastomeric patch or seal.

Make sure material is forced into pores and bugholes in order to provide a pinhole free surface.

Do not use below grade as a hydrostatic waterproofer or in immersion service.

Rolling will provide a textured finish. Squeegee will provide a smoother finish.

For better filling results, apply by airless spray and immediately back roll.

Must be topcoated for exterior use. Do not apply over existing coatings. Do not apply to damp or wet

APPLICATION TIPS

Heavy Duty Block Filler is ready-to-spray (airless) and does not require thinning. Mix material thoroughly to a uniform consistency with power agitation and apply by brush, roller, or spray. Follow by squeegee, trowel, or roller, being careful to force material into pores in order to produce a relatively smooth surface. In wet areas, a smooth continuous pinhole-free appearance is necessary for proper protection before topcoating. Two coats will provide the most uniform surface.

RECOMMENDED SYSTEMS

Concrete, Masonry, Cement

1 coat Pro Industrial Heavy Duty Block Filler 2 coats Appropriate topcoat

CMU. Block. Split-face Block:

1 coat Pro Industrial Heavy Duty Block Filler 2 coats Appropriate topcoat

Recommended Architectural Topcoats:

A-100® Exterior Latex Loxon® Masonry Coatings SuperPaint®Exterior Duration® Exterior Emerald® Exterior Emerald® Interior Duration Home® ProClassic® Interior

ProMar® Interior SuperPaint® Interior

Recommended Industrial Topcoats:

Acrolon® 218 Polyurethane Hi-Solids Polyurethane Pro Industrial™ Series Epolon® II Multi-Mil Epoxy Industrial Enamels Macropoxy® HS Epoxy Macropoxy® 646 Steel Master® 9500 Silicone Alkyd Tile-Clad® HS Epoxy Water Based Catalyzed Epoxy

The systems listed above are representative of the product's use, other systems may be appropriate.

For exterior use, Pro Industrial Heavy Duty Block Filler must be topcoated within 14 days to prevent degradation due to weathering.

Pro Industrial™

Heavy Duty Block Filler

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion. Masonry surfaces must be dry before priming. Moisture content must be 15% or lower, and the pH between 6 and 9. If the pH is greater than 9, use Loxon Acrylic Block Surfacer in place of Pro Industrial Heavy Duty Block Filler.

Concrete-Masonry:

New: For surface preparation, refer to SSPC-SP13,NACE 6, or ICRI No. 310.2, CSP 1-3. Surface must be clean, dry, sound, and offer sufficient profile to achieve adequate adhesion. Minimum substrate cure is 28 days at 75°F (24°C). Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 6.0 and 9.0. Allow to dry thoroughly prior to coating.

Old: For surface preparation, refer to SSPC-SP13, NACE 6, or ICRI No. 310.2, CSP 1-3. Surface preparation is done in much the same manner as new concrete; however, if the concrete is contaminated with oils, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release agents, hardeners, etc. must be removed by sandblasting, shotblasting, mechanical scarification, or suitable chemical means. Do not apply to smooth, slick surfaces, existing coatings or peeling may result. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

PHYSICAL PROPERTIES

Do not paint on wet surfaces.

B42W00150

Water Vapor Permeance (US): 67.96 perms
Method: ASTM D1653 grains/(hr ft2 in Hg)

CAUTIONS

Protect from freezing.

Before using, carefully read **CAUTIONS** on label.

CRYSTALLINE SILICA: Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room. or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 06/02/2021 B42W00150 19 10

FRC

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with a compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS.

Pro Industrial[™]

Water Based Catalyzed Epoxy

B73-300 Series (Part A), B73V00300 (Part B)

CHARACTERISTICS

Pro Industrial Water Based Catalyzed Epoxy is an interior-exterior two component polyamine epoxy topcoat. Designed for use in commercial and industrial application.

Features:

- Provides excellent corrosion resistance
- Abrasion resistant
- Chemical resistant
- Early moisture resistant
- Good adhesion to concrete, metal, or primed substrates
- Suitable for use in USDA inspected facilities

For use on properly prepared: Steel, Galvanized, Aluminum, Concrete and Masonry, Wood and Drywall and Previously Painted.

Finish: 90+ @ 60° Gloss 15-25+ @ 85° Eg-Shel Most Colors Color:

Recommended Spreading Rate per coat:

Wet mils: Drv mils: 2.0-4.9 Coverage: 134-328 sq. ft. per gallon Theoretical Coverage: 657 sq. ft. per gallon @ 1 mil dry

Approximate spreading rates are calculated on volume solids and do not include any application loss. Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 7.0 mils wet, @ 50% RH: Drying and recoat times are temperature, humidity, and film thickness dependent.

•	@50°F	@77°F	@100°F
To touch	1 hr.	45 min.	25 min.
To handle	5 hrs.	4 hrs.	2 hrs.
Minimum recoat	8 hrs.	6 hrs.	3 hrs.
Maximum recoat*	30 days	30 days	30 days
To Cure	7 days	7 days	7 days
Pot Life	8 hrs.	5.5 hrs.	3.5 hrs.
Sweat-In Time		none	required
Mix Ratio	2 compor	nents, preme	asured 4:1
*If maximum recoat time recoating.	e is exceede	d, abrade su	urface before

Tinting with CCE only: at 100% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Extra White B73W00311/B73V00300

(may vary by color)

V.O.C. (less exempt solvents): As Mixed less than 50 grams per litre; 0.42 lbs. per gallon

As per 40 CFR 59.406 Volume Solids: 39 ±2% Weight Solids: 50 ±2% 9.97 lbs Weight per Gallon: Flash Point: N.A.

Polyamine Epoxy Vehicle Type: Shelf Life: Part A: 24 months

Part B: 36 months

COMPLIANCE

As of 2/13/2025, Complies with:

OTC	Yes
OTC Phase II	Yes
S.C.A.Q.M.D.	Yes
CARB	Yes
CARB SCM 2007	Yes
CARB SCM 2020	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	Yes
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	Yes
MIR-Manufacturer Inventory	Yes
MPI [®] #115, 115 X-Green [™] , 254,	254 X-Green™

APPLICATION

Temperature:

minimum 50°F 100°F maximum air, surface and material

At least 5°F above dew point 85% maximum

Relative humidity: The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Water Reducer:

Airless Spray:

2000 p.s.i. Pressure ¼ inch I.D. Hose .015-.017 inch Tip

Filter 60 mesh As needed up to 10% by volume Reduction: Brush: Nylon-polyester **Roller Cover:** 3/8 inch woven solvent resistant core

If specific application equipment is listed above, equivalent equipment may be substituted.

Apply paint at the recommended film thickness and spreading rate as indicated. Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness, or porosity of the surface, skill, and various surface irregularities, material loss during mixing, spillage, over thinning, climatic conditions, and excessive film build.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine four parts by volume of Par A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Re-stir before using. If reducer is used, add only after both components have been thoroughly mixed together. Do not apply the material beyond recommended pot life. Do not mix previously catalyzed material with new.

Stripe coat crevices, welds, and sharp angles to prevent early failure in these areas. When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle. No painting should be done immediately after a rain or during foggy

All epoxies will chalk and fade when un-topcoated in exterior environments. Apply appropriate topcoat if aesthetics are required.

Not suitable for floor or roofing applications.

SPECIFICATIONS

Steel and Galvanizing:

1 coat Pro Industrial Pro-Cryl Primer 2 coats Pro Industrial Water Based Epoxy

(For high performance aesthetics exterior:)

1 coat Pro Industrial Pro-Cryl Primer 1 coat Pro Industrial Water Based Epoxy 1-2 coats Pro Industrial Water Base Acrolon 100

Aluminum:

1 coat Pro Industrial Pro-Cryl Primer 2 coats Pro Industrial Water Based Epoxy

(For high performance aesthetics exterior:)

1 coat Pro Industrial Pro-Cryl Primer 1 coat Pro Industrial Water Based Epoxy 1-2 coats Pro Industrial Water Base Acrolon 100

Concrete and Masonry:

1-2 coats Filler-Surfacer as required to fill voids and provide a continuous surface

Suitable surfacers Interior-Exterior are:

Loxon Acrylic Block Surfacer. Pro Industrial Heavy Duty Block Filler, Kem Cati-Coat HS Epoxy Filler, Cement-Plex 875. 2 coats Pro Industrial Water Based Epoxy

(For high performance aesthetics exterior:)

1-2 coats Filler-Surfacer as required to fill voids and provide a continuous surface 1 coat Pro Industrial Water Based Epoxy 1-2 coats Pro Industrial Water Base Acrolon 100

Concrete and Masonry Smooth:

2 coats Pro Industrial Water Based Epoxy

(For high performance aesthetics exterior:)

1 coat Pro Industrial Water Based Epoxy 1-2 coats Pro Industrial Water Base Acrolon 100

1 coat ProMar 200 Zero V.O.C. Primer 1-2 coats Pro Industrial Water Based Epoxy

Wood, Interior:

1 coat Premium Wall & Wood Primer 2 coats Pro Industrial Water Based Epoxy

The systems listed above are representative of the product's use. Other systems may be appropriate.

Pro Industrial[™]

Water Based Catalyzed Epoxy

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting: US -. National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

When cleaning the surface per SSPC-SP1, use only an emulsifying industrial detergent, followed by water to rinse. Do not use hydrocarbon solvents for cleaning.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Iron & Steel - Minimum surface preparation is Power Tool Clean per SSPC-SP3. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1 (recommended preparation is Steam Cleaning). For better performance, use Commercial Blast Cleaning per SSPC-SP6-NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel within 8 hours or before flash rústing occurs.

Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1. Prime the area the same day as cleaning.

Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP16 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2. Prime the area the same day as cleaned.

Concrete Block - Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 50°F (10°C) before filling. Use Pro industrial Heavy Duty Block Filler or Loxon Acrylic Block Surfacer. The filler must be thoroughly dry before

Masonry - All masonry must be free of dirt, oil, grease, loose paint, mortar, masonry dust, etc. Clean per SSPC-SP13/Nace 6/ ICRI No. 310.2R, CSP 1-3. Poured, troweled, or tilt-up concrete, plaster, mortar, etc. must be thoroughly cured at least 30 days at 75°F. Form release compounds and curing membranes must be removed by brush blasting. Brick must be allowed to weather for one year prior to surface preparation and painting. Prime the area the same day as cleaned. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.

Wood - Surface must be clean, dry, and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile.

SURFACE PREPARATION

Previously Painted Surface - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Mildew - Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

Drywall - Fill cracks and holes with patching paste/spackle and sand smooth. Joint compounds must be cured and sanded smooth. Remove all sanding dust. Prime the area the same day as cleaned.

PERFORMANCE

Extra White B73W00361/B73V00300 System Tested: (unless otherwise indicated)

Surface Preparation SSPC-SP6

ish: 1 coat Kem Bond HS @ 3.0 mils D.F.T. 1 coat Pro Industrial Water Based Catalyzed Epoxy @ 3.7 D.F.T. 7 day cure

Abrasion Resistance:

ASTM D4060, CS17 wheel, 1000 cycles, 500 g load Method: 32.5 mg loss Result:

Adhesion:

ASTM D4541 Method: Result: 1059 p.s.i.

Scrub Resistance:

Based on Method: **ASTM D2486** Result: 8000 cycles

Dry Heat Resistance:

Method: **ASTM D2485** Result: 250°F

Pencil Hardness:

Methanol - Pass

ASTM D3363 Method: Result:

Water Vapor Permeance (US):

Method: ASTM D1653, Test Method B, Condition A
Result: 12.12 grains/(hr ft² in Hg) Gloss 10.04 grains/(hr ft2 in Hg) Eg-Shel

Chemical Resistance Rating: Extra White B73W00361/B73V00300

(1 hour direct exposure to dry film incidental contact)

10% Hydrochloric Acid - Pass 25% Sodium Hydroxide - Pass Mineral Spirits - Pass Motor Oil – Pass Methyl Alcohol – Pass Aliphatic Hydrocarbon Solvent - Pass 70% Isopropanol - Pass

SAFETY PRECAUTIONS

Before using, carefully read **CAUTIONS** on label.

Refer to the Safety Data Sheets (SDS) before use.

FOR PROFESSIONAL USE ONLY.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm clean water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

HOTW 2/13/2025	B73W311/B73V300	21	00
HOTW 2/13/2025	B73W313/B73V300	17	00
HOTW 2/13/2025	B73T304/B73V300	19	00
HOTW 2/13/2025 HOTW 2/13/2025 HOTW 2/13/2025 FRC, SP	B73W361/B73V300 B73W363/B73V300 B73T364/B73V300	18 10 12	00 00 00

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS



RESUPRIME™ MVB MOISTURE VAPOR BARRIER

PART A GP3831A01 GP3831B01 PART B

CLEAR HARDENER

Revised: May 14, 2024

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUPRIME MVB is a two-part 100% solid epoxy moisture mitigation barrier. It is a moisture tolerant and VOC-compliant product that limits alkalinity and the transmission of moisture through concrete slabs. Resuprime MVB features a rapid curing time for faster job completion. It allows the direct bond of most industrial coatings, floor leveling products and most adhesive systems. Resuprime MVB is a 1 to 1 mix ratio that simplifies the application application.

12-Mil (0.30 mm) System: On concrete that is at least 28 days old: Withstands concrete moisture up to 85% in-situ relative humidity per ASTM F2170.

17-Mil (0.43 mm) System: On concrete that is at least 28 days old: Withstands concrete moisture up to 100% in-situ relative humidity per ASTM F2170.

22-Mil (0.56 mm) System: On concrete that is between 7 and less than 28 days old and cured enough to be properly prepped: Withstands concrete moisture up to 100% in-situ relative humidity per ASTM F2170.

Advantages:

LEED® v4 - Indoor Air Quality credits available.
- Meets requirements per CDPH-CA Section 01350 Stander Method for the Testing and Evaluation of Volatile dard Organic

Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.

Fast cure

Same day cover

 Resists imprinting
 0.05 perm rating
 Superior bond to dry surfaces VOC-compliant

• Superior bond to dry
Compatible with most floor covering systems

One coat application

Direct bond of floor coverings and toppings

GENERAL INFORMATION

LIMITATIONS: WARRANTY WILL NOT APPLY.

Do not apply to new concrete slabs until at least 7 days old. Colors CANNOT be used in Resuprime MVB. Resuprime MVB is not a wear surface or topping, it must be tobcoated.

4. Do not apply over a slab while experiencing hydraulic

by Not apply to Resuprime MVB installed over concrete with ASR (Alkali Silica reaction).

MVER may fluctuate within slab areas and can have installed over concrete with a seasonal variations. 5.

Do not apply over existing coatings, sealer or floor coverings. Do not apply to concrete slabs with less than 3500 psi compressive strength. (Consult Sherwin-Williams Technical Services.)

Protect the area to be treated from strong sunlight, wind

or drafts during application.

10. Acid etching and diamond grinding should not be used as a method of preparation.

Cannot be sprayed. DO NOT FREEZE.

13. Functioning vapor barrier is required for use.

ORDERING INFORMATION

Packaging:

Part A: 1 gallon (3.78L) containers, 5 gallon (18.9L)

filled pails, 55 gallon (208L) filled drums

1 gallon (3.78L) containers, 5 gallon (18.9L) Part B:

filled pails, 55 gallon (208L) filled drums

PRODUCT CHARACTERISTICS

Volume Solids: 99.77%, mixed (ASTM D1475) Weight Solids: 99.81%, mixed (ASTM D1475)

Mix Ratio: 1:1 by volume

VOC (EPA Method 24): <100 g/L; 0.83 lb/gal, mixed

Recommended :	<u>Spreadi</u>	<u>ng Rate p</u>	<u>er coat:</u>	
	Mini	mum	Maxi	imum
Wet mils (microns)	12.0	(300)	22.0	(550)
~Coverage sq ft/gal (m²/L):	72	(1.77)	133	(3.26)
	•	,	•	•

Drying Schedule:					
	@ 65°F				
Tack Free Time:	8 hours	6.5 hours	5 hours	4 hours	3 hours
Dry Hard:	11 hours	9 hours	7 hours	6 hours	4 hours
To Recoat:	Maximum: up to 24 hours for all conditions				

Shelf Life: 12 months, unopened Store indoors at 65°F (18°C) to 90°F (32°C)

Performance Characteristics

Test Name	Test Method	Results*
Adhesion to Concrete	ASTM D7234	350 psi (2.41 MPa)
Compressive Strength	ASTM D695	11,880 psi (81.93 MPa)
Percent Elongation	ASTM D2370	8%
Shore D Hardness	ASTM D2240	90 @ 0 sec / 73 @ 15 sec
Tensile Strength	ASTM D2370	9,100 psi (62.76 MPa)
Water Absorption (24-hour immersion, resin only)	ASTM D570	1.17%
Water Vapor Transmission (net perms)	ASTM E96	0.05 (17 mils)

*Results are based on conditions at 70°F (21°C)



RESUPRIME™ MVB MOISTURE VAPOR BARRIER

PART A PART B GP3831A01 GP3831B01 CLEAR HARDENER

Revised: May 14, 2024

PRODUCT INFORMATION

SURFACE PREPARATION

CHECK THE CONCRETE: Concrete must be structurally sound. Concrete can be less than 28 days old.

CHECK FOR MOISTURE:

12-Mil System: In-situ relative humidity testing per ASTM F2170 is required for warranty. Readings can be up to 85% relative internal concrete humidity.

17-Mil & 22-Mil Systems: Readings can be up to 100% relative internal concrete humidity.

Test methods can be purchased at www.astm.org or follow instructions from the suppliers of this test.

NOTE: Although moisture testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts. Functioning vapor barrier is required for use.

CHECK THE TEMPERATURE AND HUMIDITY: The ambient and surface temperature must be between 60°F (15.6°C) and 90°F (32.2°C) at the time of application, and temperatures should not rise above this range during application or while the material is curing. Ambient relative humidity percentage should not exceed 80% at the time of application.

APPLICATION EQUIPMENT

- Protective clothing
 Roller assembly (18")
- Respirator
 Shed Resistant, Short Nap Rollers
- Jiffy mixer blade
 Tape
- Film gauges
- Slow speed drill (500 rpm or less)
- Rubber squeegees (flat and 3/16" (4.78 mm) notched)
- Soccer Cleats (soft spikes) or spiked shoes (without sharp point

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

PREPARATION

CONCRETE: Repair and leveling layers containing latex or other components generally prevent absorption and proper bond and should be removed. Surface must be shot blasted to achieve a surface profile of ICRI CSP 3-5 (Int. Concrete Repair Inst.) Grinding or acid etching is not permitted, nor chemical remediation of any adhesive residues.

ENSURE POROSITY: Surface must be clean, completely free of dust, dirt, paint, sealer or any contaminant which might interfere with penetration or bond. Do not apply to floors which have sealers or bond breakers applied unless completely removed. Quick tests to help determine clean, open and absorptive concrete uses water drops. This easy test is particularly important if cores were not pulled and tested. If dime size water drops placed at several locations on prepared floor do not readily absorb into concrete within 30 seconds or beads up, surface is not sufficiently absorptive. In all cases, thorough vacuuming (with dust containment filter) is needed before application. Cleaning with pressure washer may be advisable in some cases. Leveling should be done on top of Resuprime MVB with suitable repair materials.

JOINTS: Expansion (cold or construction) joints should be left intact. Resuprime MVB is not warranted against structural movement at expansion joints. To help reduce moisture emissions through expansion joints, coat the walls and bottom of the cleaned joint with Resuprime MVB. Once allowed to dry, an expansion joint cover or an elastomeric sealant may be used. For concrete slabs over 6 months old, sawcut (control) joints and cracks should be filled by pouring Resuprime MVB full depth or to ¾ of joint depth. If filling to ¾ depth pour silica quartz into Resuprime MVB to create a mortar. Sweep away excess sand and proceed with Resuprime MVB installation.

APPLICATION INSTRUCTIONS

COVERAGE RATES: Apply the balance of Resuprime MVB needed to achieve the desired total thickness. It is important that the coverage rates are consistent. Very rough or porous concrete may require a heavier application. Adjust the rate as needed.

One gallon (3.78 litres) of Resuprime MVB will cover: 133 ft² (2.4 m²) @ 12 mils (0.30 mm) wet/dry film 94 ft² (8.7 m²) @ 17 mils (0.43 mm) wet/dry film 72 ft² (6.7 m²) @ 22 mils (0.56 mm) wet/dry film

PART A. For larger unit sizes, pour out 2 gallons (7.56 litres) Part A into a measuring container. Then, pour this measured Part A into a 5-gallon mixing pail.

ADD RESUPRIME MVB PART B TO PART A (1:1 VOLUME RATIO). For larger unit sizes, pour out 2 gallons (7.56 litres) Part B into a measuring container that is separate from the one used with the Part A. Then, add the measured Part B to the Part A already in the mixing pail.

MIX FOR 4 MINUTES using a Jiffy mixer blade and slow-speed drill to produce a streak free, homogenous product. Care must be taken to mix all the product and avoid any action that might entrap air such as high-speed drill mixing. DO NOT THIN the product.

APPROXIMATE WORK TIME (minutes) - °F (°C): 65 (18.3) 70 (21.1) 75 (23.9) 80 (26.7) 90 (32.2) 45 32 20 16 12



RESUPRIME™ MVB MOISTURE VAPOR BARRIER

PART A PART B GP3831A01 GP3831B01 CLEAR HARDENER

Revised: May 14, 2024

PRODUCT INFORMATION

APPLICATION INSTRUCTIONS (CONT'D)

 $\operatorname{IMMEDIATELY}$ POUR ALL OF THE MIXED MATERIAL onto the floor in a single bead.

PUSH THE SQUEEGEE at an even speed and down pressure. The squeegee should be pushed to apply the targeted amount. NOTE: Use of a notched squeegee will make it easier to apply a thicker coat.

Immediately after the Resuprime MVB is applied and there is room to roll, a second person will BACKROLL THE MATERIAL with a short nap roller to a smooth and uniform appearance. NOTE: Finish backrolling as soon as possible.

APPLICATION OF OTHER COATINGS:

First, thoroughly check Resuprime MVB for any fisheyes or pinholes which would be a weak point in the membrane. Grind these areas and clean off residue. Make sure the surface is dry. Then, reapply Resuprime MVB to these areas

APPROXIMATE CURE TIME (hours) - °F (°C): 65 (18.3) 70 (21.1) 75 (23.9) 80 (26.7) 90 (32.2) 11 9 7 6 4

Sherwin-Williams epoxies bond to Resuprime MVB if coated within 24 hours. Resuprime MVB must be cured (hard) enough so spikes worn to apply epoxy or other recoat activities do not damage Resuprime MVB.

If you want to apply coatings other than Sherwin-Williams epoxies (polyaspartics and urethanes), it will require sanding with 120 grit paper. Because of this you will need to apply an additional 2 mils of Resuprime MVB, during the initial application. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating. Tack rag to remove fine dust if needed.

Since Resuprime MVB cannot be pigmented, we recommend 6-8 mils (0.15-0.20 mm) of tinted HPF epoxy to set the proper background color for a Sherwin-Williams urethane. (See appropriate product documentation for application instructions.) The exact thickness will vary depending on the hide/color of the system.

MAINTENANCE

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new HPF floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish.

Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface.

Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap.

Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass between the tire and the floor coating can prevent discoloration.

Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

TINTING

Do not tint.

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



Part A PART B

GP3760A01 GP3760B01

CLEAR HARDENER

Revised: July 12, 2024

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUFLOR MPE is a neutral, two-component, high solids epoxy. Applied at 3 mils (76.2 microns) for priming or up to 30 mils (762 microns) (1/32 inch) as a build coat. Slurry option is available (instructions at end of document) for thicker applications. Colors are optional.

Advantages:

- LEED® v4 Indoor Air Quality credits available meets requirements per CDPH-CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.
- · Seals concrete, protecting against dirt and spills
- · Cleans easily, saving detergent, labor and water
- Complies with SCAQMD VOC regulations <100 g/L

TYPICAL USES

- Stand-alone coating (a finish coat of urethane is recommended)
- Seed coat for full broadcast flake and quartz floors
- · Resin for epoxy mortar system
- · Use as a concrete primer before applying another epoxy or
- Use as a random crack filler when combined with thickening agents
- Level floor after mechanical prep

GENERAL INFORMATION

Colors: Use colorants at a rate of one unit per 3-gallon (11.34 litres) mix of Resuflor MPE. Standard Colorants--White, Yellow and Light Gray will not impart total hide. Use these colorants at a rate of two units per 3-gallon (11.34 litres) mix. Similar colorants also may not hide as well. Refer to Color Selection Guide or consult Sherwin-Williams Technical Support. (White and Light Gray are only recommended if topcoating with a non-yellowing urethane. Due to possible color inconsistencies, Battleship Gray and Medium Gray colorants are only recommended if topcoated.)

LIMITATIONS:

Colors: Multiple coats may be needed to achieve complete hide in lighter systems. UV/Light Stability: This product is not light stable and will yellow/amber over time. Contamination (Fisheyes): Products may fisheye if oil, silicones, mold release agents or other contaminants are present

ORDERING INFORMATION

Packaging:

Part A: 2 gallons (7.56L) in a 5 gallon (18.9L) pail,

5 gallon (18.9L) filled pails, 55 gallon (208L) filled

Part B: 1 gallon (3.78L) containers, 5 gallon (18.9L)

filled pails, 55 gallon (208L) filled drums

PRODUCT CHARACTERISTICS

Color: Clear

Volume Solids: 95.27%, mixed (ASTM D1475) Weight Solids: 95.45%, mixed (ASTM D1475)

Mix Ratio: 2:1 by volume VOC (ASTM D3960): 49 g/L; 0.41 lb/gal

Recommended Spreading Rate per coat: Minimum **Maximum** Wet mils (microns) 3.0 (75)30.0 (750)53 535 ~Coverage sq ft/gal (m²/L): (1.3)(13.1)

Drying Schedule:

@ @ @ @ 65°F/18°C 70°F/21°C 75°F/24°C 80°F/27°C 90°F/32°C

18 hours 10.5 hours 9.5 hours 7.5 hours 5.5 hours Tack Free:

Dry Hard (able to be sanded): 24 hours 20 hours 16 hours 12 hours 8 hours Foot Traffic: 24 hours 24 hours 24 hours 24 hours Recoat Window: Maximum: Up to 24 hours for all conditions

Shelf Life: 12 months, unopened

Store indoors at 65°F (18°C) to 90°F (32°C)

PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results*
Abrasion Resistance	ASTM D4060, CS-17 wheel, 1000gm load, 1000 cycles	83.1 mg loss
Adhesion to Concrete	ASTM D7234	>480 psi (3.3 MPa) (max psi machine can register)
Coefficient of Friction	ASTM D2047	0.42
Compressive Strength	ASTM D695	13,500 psi (93.079 MPa)
Percent Elongation	ASTM D2370	5
Shore D Hardness	ASTM D2240	80-85 @ 0 sec; 75-80 @ 15 sec
Tensile Strength	ASTM D2370	8,000 psi (55,158 MPa)

^{*}results are based on conditions at 77°F (25°C)



PART A PART B

GP3760A01 GP3760B01

CLEAR HARDENER

Revised: July 12, 2024

PRODUCT INFORMATION

SURFACE PREPARATION

CHECK THE TEMPERATURE AND HUMIDITY: Floor temperature and materials should be between 65°F (18°C) and 85°F (29°C). Humidity must be less than 70% or the result may be a hazy appearance. DO NOT coat unless floor temperature is more than five degrees over the current, local dew point.

CHECK THE CONCRETE: Concrete must be structurally sound and free of curing membrane, paint or other sealer. If you suspect that the concrete has been previously sealed, call your Sherwin-Williams representative for further instructions.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. In-situ relative humidity testing is recommended. Readings must be below 75% relative internal concrete humidity. Test methods can be purchased at www.astm.org, see F2170, or follow manufacturer's instructions. If moisture issues are present, the use of a moisture mitigationsystem may be a consideration. Consult your Sherwin-Williams representative for further information / instructions.

NOTE: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

APPLICATION EQUIPMENT

• Roller assembly (18") 80 grit sandpaperSpiked shoes

· Slow speed drill (500 rpm or less)

- Protective clothing
- Jiffy® mixer blade
- 100 grit sandpaper

- 60 grit sandpaper
 60 grit sandpaper
 18-24" flat rubber squeegee
 18-24" notched rubber squeegee
 3/8" medium nap roller (shed resistant)

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

PREPARATION

Ensure concrete is free of dirt, grease, oil or other contaminants. Certain types of contaminant may interfere with coating adhesion and cause fisheyes or defect in the coating. Scrub with detergent, rinse with clean water, and allow to fully dry.

CONCRETE PREPARATION OPTIONS FOR THIN TO MEDIUM FILM APPLICATIONS (25 MILS (0.63 MM) MAXIMUM): Diamond Grind: (results of diamond grinding may vary depending on technique and the hardness of the concrete. Additional mils may be required). Sweep to remove large debris and vacuum to remove fine

Light Blast: Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust.

CONCRETE PREPARATION OPTIONS FOR THICK-FILM APPLICATIONS

Steel Shot Blast: Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust. Scarify: Sweep to remove large debris and vacuum to remove fine dust.

FILLING JOINTS: Depending on the preference of the facility owner, joints may or may not be filled. If the joints are filled, non-moving joints, i.e. contraction or control joints, can be hard filled with thickened epoxy or with a semi-rigid joint filler such as Resuflor 3580. Construction joints less than one inch wide may also be filled with Resuflor 3580. Isolation or expansion joints must be filled with a flexible material designed for this purpose. Coating applied over filled joints may crack if there is concrete movement.

APPLICATION INSTRUCTIONS (PRIMER COAT)

PRIMER COAT:

A thin coat of primer will wet out concrete, help seal off concrete pores and minimize outgassing bubbles. Apply a tight coat of primer with a clean, flexible squeegee. Backrolling is not recommended. There should be no mil build over the high spots of the concrete.

COVERAGE RATE will depend upon coating thickness. Much of this will soak into porous concrete. One gallon (3.78 litres) of Resuflor MPE will

535 ft2 (49.70 m2) @ 3 mils (0.08 mm) wet/dry film 400 ft2 (37.16 m2) @ 4 mils (0.10 mm) wet/dry film 321 ft2 (29.82 m2) @ 5 mils (0.13 mm) wet/dry film

PREMIX PART A using a Jiffy mixer blade and slow speed drill. (This is required for both 3-gallon (11.34 litres) and full-filled 5-gallon (18.9 litres) units.) For full-filled 5 gallon pails (18.9 litres), pour out 2 gallons (7.56 litres) into a measuring container. Then, pour the measured Part A into a mixing pail.

COLORS: Premix Sherwin-Williams Colorants to ensure uniform color. Colorant is added to the Part A and mixed using a Jiffy® mixer blade and slow speed drill. NOTE: When using colorant in the bulk units, add the colorant to the Part A that has been measured into the "mixing pail".

PREMIX Resuflor MPE PART B by rapidly tipping the pail end-over-end several (approximately 6) times. ADD Resuflor MPE PART B TO PART A (3 GALLONS / 11.34 LITRES TOTAL MIX). For full-filled 5-gallon pails (18.9 litres), pour out 1 gallon (3.78 litres) Part B into a measuring container Part B to the Part A already in the mixing pail. POTLIFE: Mix only enough material which can be applied within the work time (time between the addition of Part B to Part A and the completion of all application actions). Check the following chart for work times at various temperatures. For smaller quantities, use 2 parts A to 1 part B by volume.

APPROXIMATE WORK TIME (minutes) - °F (°C): 65 (18.3) 70 (21.1) 75 (23.9) 80 (26.7) 90 (32.2) 40 30 25 20 15

MIX FOR 2 MINUTES using a Jiffy mixer blade and slow speed drill. (Failure to do so could result in lower/diminished coating properties.)

IMMEDIATELY POUR ALL OF THE MIXED MATERIAL onto the floor in a single bead.

PUSH THE FLAT SQUEEGEE at an even speed with sufficient down pressure to apply the thinnest coat.

START THE SECOND AND REMAINING PASSES by pushing material parallel to the first stroke. Hold the bead of material near the center of the bar. NOTE: Resuflor MPE applied thin may "bridge" holes and cracks momentarily before soaking in-make sure the previously squeegeed area is overlapped (halfway). NOTE: The use of spiked shoes will allow freedom of movement on the wet floor.

TO REDUCE OUTGASSING BUBBLES, it is best to wait until the primer has set up enough to walk on before applying a build coat of Resuflor MPE. The primer does not need to be sanded if coated within 24 hours at floor temperatures 65°F-90°F (18°C-32°C).

If primer is not coated within 24 hours, it must be sanded with 60 grit paper. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating.



PART A PART B GP3760A01 GP3760B01 CLEAR HARDENER

Revised: July 12, 2024

PRODUCT INFORMATION

APPLICATION INSTRUCTIONS (CONT'D)

BUILD COAT (if required):

COVERAGE RATE will depend upon required thickness. One gallon (3.78 litres) of Resuflor MPE will cover: 160 ft2 (14.86 m2) @ 10 mils (0.25 mm) wet/dry film 107 ft2 (9.94 m2) @ 15 mils (0.38 mm) wet/dry film 80 ft2 (7.43 m2) @ 20 mils (0.51 mm) wet/dry film

NOTE: Total Resuflor MPE (prime and build coat) should not exceed 35 mils (0.89 mm).

REPEAT STEPS used for mixing and spreading of the primer coat. A notched squeegee can be used to increase the thickness applied.

*1/16" notched squeegee to apply 10-15 mils (0.25-0.38 mm) *1/8" notched squeegee to apply 15-20 mils (0.38-0.51 mm)

*1/4" notched squeegee to apply more than 20 mils (0.51 mm) *These guidelines were arrived at by using new squeegees on smooth concrete with little applied pressure. The application rate is affected by worn squeegees, applied pressure and texture of the concrete.

Immediately after the Resuflor MPE is applied and there is room to roll, a second person will BACKROLL THE MATERIAL with a 3/8" roller to a smooth and uniform appearance. NOTE: Get off the Resuflor MPE as soon as possible.

ALLOW COATING TO CURE 24 hours at 75°F (24°C) before opening to light traffic. Allow more time at low temperatures or for heavier traffic. Full coating properties take 14 days to develop.

SANDING REQUIRED:

Resuflor MPE must be thoroughly sanded if applying Resutile 4641 (see chart below).

APPROXIMATE SAND TIME (hours) - °F (°C): 65 (18.3) 70 (21.1) 75 (23.9) 80 (26.7) 90 (32.2) 24 20 16 12 8

Resuflor MPE must also be sanded if applying other Sherwin-Williams urethanes after 24 hours. Use 80 grit sandpaper except for Resutile 4641, WearGuard™-240 Gloss and Sherwin-Williams CRU-use 100 grit sandpaper. The use of more aggressive paper will introduce deep grooves that will not be covered by a single, thin coat of urethane; swirl marks will be particularly evident if the topcoat is glossy. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating and tack rag to remove fine dust.

APPLICATION INSTRUCTIONS (CONT'D)

OPTIONAL SLURRY:

NOTE: If a slurry application is desired, follow instructions below. A primer coat will reduce the risk of outgassing bubbles and is strongly recommended for porous concrete. See Application - Primer Coat section.

COVERAGE RATE of Resuflor MPE Slurry will depend upon required thickness. One mix will cover approximately: 80 ft2 (7.4 m2) @ 70 mils (1.78 mm) wet/dry film 40 ft2 (3.7 m2) @ 125 mils (3.18 mm) wet/dry film

PREMIX RESUFLOR MPE PART A using a Jiffy mixer blade. Pour out 1 gallon (3.78 litres) into a measuring container. Then, POUR THE MEASURED PART A INTO THE MIXING TOTE. Begin mixing.

PREMIX RESUFLOR MPE PART B. Pour out 0.50 gallons (1.89 litres) Part B into a measuring container that is separate from the one used with the Part A. Then, ADD THE MEASURED PART B TO THE PART A already in the mixing tote.

MIX FOR 1 MINUTE or until thoroughly blended using a Jiffy mixer blade and slow speed drill.

POUR ONE GALLON (3.78 LITRES) OF #190 SILICA FLOUR into the mixing tote. Mix until uniform (approximately one minute). The resin needs to completely wet out the Part C.

COLORS: ADD 1/2 pint of pigment per batch.

ADD ONE GALLON (3.78 LITRES) OF #60 MESH FINE SILICA SAND into the mixing tote. Mix until uniform (approximately one minute). The resin needs to completely wet out the sand.

POTLIFE AT 75°F: Mix only enough material, which can be raked, troweled and porcupine rolled in a 15-minute period.

POUR THE MIXED MATERIAL onto floor.

GAUGE RAKE/NOTCH TROWEL material over desired area.

USE HAND TROWELS to finish along edges and drains.

USE PORCUPINE ROLLER to release any entrained air as well as work resins to the surface. This will help remove gauge rake marks and level material.

ALLOW COATING TO DRY 24 HOURS at 75°F (24°C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.

APPLICATION OF ADDITIONAL COATINGS: If Resuflor MPE is being topcoated with a Sherwin-Williams urethane except Resutile HPS 100 at floor temperatures of 65-90°F (18-32°C), it does not need to be sanded if applied within 24 hours. NOTE: This is a Sherwin-Williams solution only, DO NOT try this with competitive epoxies.



PART A PART B GP3760A01 GP3760B01 CLEAR HARDENER

Revised: July 12, 2024

PRODUCT INFORMATION

CHEMICAL RESISTANCE			
Reagent	1 Day	7 Days	
Hydrochloric Acid 10%	E	E	
Hydrochloric Acid 30% (Muriatic)	E	G	
Nitric Acid 10%	E	G	
Phosphoric Acid 50%	F	G	
Sulfuric Acid 37% (Battery Acid)	G	G	
Acetic Acid 10%	G	F	
Citric Acid 10%	G	G	
Oleic Acid	G	F	
Ammonia Hydroxide 10%	E	E	
Sodium Hydroxide 50%	E	E	
Ethylene Glycol (Antifreeze)	E	G	
Isopropyl Alcohol	F	Р	
Methanol	F	F	
D-Limonene	G	G	
JP-4 Jet Fuel	E	E	
Gasoline	G	G	
Mineral Spirits	E	E	
Xylene	F	F	
Methylene Chloride	Р	Р	
MEK	Р	Р	
PMA	F	F	
Ammonium Nitrate 20%	E	E	
Brake Fluid	F	F	
Bleach	E	E	
Motor Oil (SAE 30)	E	E	
Skydrol® 500B	F	F	
Skydrol® LD4	F	F	
Sodium Chloride 20%	E	E	
1% Tide® Laundry Soap	E	E	
10% Trisodium Phosphate	Е	Е	

ASTM D1308 Test Method 3.1.1 spot test, covered. Results are based on 1-day and 7-day. Coating cured 2 weeks prior to testing.

- E Excellent (no adverse effect) Recommended
- G Good (limited adverse effect) Use for short-term exposure only
- F Fair (moderate adverse effect) Not recommended
- P Poor (unsatisfactory) Little or no resistance to chemical

*only adverse effect was staining

NOTE: Reduced chemical resistance and staining is possible in pigmented versions of the system

MAINTENANCE

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new Sherwin-Williams floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish. Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface. Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap. Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration. Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

TINTING

Only tint with HPF Universal Colorants. Do not tint with GIS colorants. Use one pint of colorant per 3-gallon mix of Resuflor MPE for most colors, and two pints per 3-gallon mix of Resuflor MPE for White, Bright Yellow, Light Gray, and Rotunda Red.

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



RESUTILE™ HPS 100/SDS/HTS 100

RESUTILE HPS 100: pages 1-3 **RESUTILE SDS: pages 4-6** RESUTILE HTS 100: pages 7-9

GP4640A01 Part A PART B GP4640B01

CLEAR HARDENER

Revised: March 7, 2025

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUTILE HPS 100 is a clear, high solids, two-component, aliphatic, moisture-cure urethane applied over an epoxy primer or used to recoat an existing epoxy or urethane floor, wall or ceiling.

Advantages:

- LEED® v4 Indoor Air Quality credits available meets requirements per CDPH-CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.
- · Designed to withstand industrial traffic
- · Light stable, high-gloss finish provides superior light reflectivity
- Resists Skydrol®, jet fuels and other industrial chemicals
- Low VOC (7 g/L). (Complies with SCAQMD VOC regulations.)

TYPICAL USES

- Hangar floor
- Automotive manufacturing
- Mechanical room
- Assembly / Production
- Packaging
- Clean room / lab

GENERAL INFORMATION

Use colorants at a rate of one unit per 1-gallon (3.78 litres) of Resutile HPS 100. Standard colorants: White, Yellow and Sandy Beige will not impart total hide. Similar colorants also may not hide as well.

LIMITATIONS:

Contamination (Fisheyes): Product may fisheye if oil, silicones, mold release agents or other contaminants are present.

Chemical Resistance / Staining: Reduced chemical resistance and staining is possible in pigmented versions of the system.

ORDERING INFORMATION

~1 gallon (3.8L) mix:

Part A: 0.74 gallons (2.8L) in a gallon (3.8L) can Part B: 0.20 gallons (0.8L) in a quart (0.9L) can

~2 gallon (7.6L) mix:

Part A: 1.48 gallons (5.6L) in a 5 gallon (18.9L) pail Part B: 0.40 gallons (1.5L) in a 0.5 gallon (1.9L) can

PRODUCT CHARACTERISTICS

Color: Clear

Mix Ratio: 1:1 by unit

Volume Solids: 91.60%, mixed (ASTM D2369) Weight Solids: 91.34%, mixed (ASTM D2369)

VOC (ASTM D3960): <100 g/L; 0.8 lb/gal

Recommended S	Spreadi	ing Rate po	er coat:	
	Mini	imum	Max	imum
Wet mils (microns)	3.2	(80)	3.2	(80)
Dry mils (microns)	2.9	(73)	2.9	(73)
~Coverage sq ft/gal (m²/L):	500	(12.3)	500	(12.3)

Drying Schedule:

@ @ @ @ @ 60°F/16°C 60°F/16°C 75°F/24°C 90°F/32°C 90°F/32°C 20% RH 80% RH 13% RH 20% RH 80% RH

Tack Free: 12-16 hours 12-16 hours 6.5 hours 3.5 hours 1.5 hours Foot Traffic: 24 hours 24 hours 24 hours 24 hours Recoat Window: Maximum: Up to 24 hours for all conditions

Shelf Life:

12 months, unopened Store indoors at 65°F (18°C) to 90°F (32°C)

PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results*
Abrasion Resistance	ASTM D4060, CS-17 wheel, 1000gm load, 1000 cycles	14.9 mg loss
Coefficient of Friction	ASTM D2047	0.61
Elongation	ASTM D2370	6%
Flammability	ASTM D635	182 mm/min
Koenig Hardness, 3 Mil Film (resin only)	ASTM D4366	171.3
Tensile Strength	ASTM D2370	6,250 psi
Water Absorption, 24- hour immersion	ASTM D570	1.81%
Wet Static Coefficient of Friction, BOT 3000	ANSI/NFSI B101.1	0.99

*results are based on conditions at 77°F (25°C)



RESUTILE™ HPS 100/SDS/HTS 100

RESUTILE HPS 100: pages 1-3 RESUTILE SDS: pages 4-6 RESUTILE HTS 100: pages 7-9

PART A GP4640A01 PART B GP4640B01 CLEAR HARDENER

Revised: March 7, 2025

PRODUCT INFORMATION

SURFACE PREPARATION

CHECK THE TEMPERATURE AND HUMIDITY: Floor temperature and materials should be between 65°F (18°C) and 90°F (32°C). Humidity must be less than 80%. DO NOT coat unless floor temperature is more than five degrees over the current, local dew point.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. In-situ relative humidity testing is recommended. Readings must be below 75% relative internal concrete humidity. Test methods can be purchased at www. astm.org, see F2170, or follow manufacturer's instructions. If moisture issues are present, the use of a moisture mitigation system may be a consideration. Consult your Sherwin-Williams representative for further information / instructions.

NOTE: Although moisture testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination. Additional testing may be necessary to determine the vapor barrier and any contamination.

APPLICATION EQUIPMENT

- Protective clothing
- Jiffy® mixer blade
- Application tray
- Disc machine
- Roller assembly (18")
- Medium (3/8") nap roller
- 100 grit sandpaper
- · Slow speed drill (500 rpm or less)

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

APPLICATION INSTRUCTIONS

Recoat: Resutile HPS 100 may be used to coat over an existing epoxy or urethane in sound condition. Detergent scrub and rinse with clean water to remove surface dirt, grease, oil and contaminants. Floor must be sanded thoroughly with 100 girt paper prior to recoating. The use of more aggressive paper will introduce deep grooves that will not be covered by a single, thin coat of urethane; swirl marks will be particularly evident if the topcoat is glossy. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating.

Resutile HPS 100 must be applied over a Sherwin-Williams' 100% solids epoxy primer. Epoxy must be thoroughly sanded and cleaned prior to application of Resutile HPS 100.

Premix Part A for 3 minutes using a Jiffy mixer blade with slow speed drill. Pot Life: Mix only enough material which can be used in a two-hour period. Note: Once opened, this material cannot be resealed for later use.

Colors: Premix Sherwin-Williams colorants before adding to Resutile HPS 100 to ensure uniform color. Add colorant to Resutile HPS 100 Part A.

Add Part B while mixing. Mix for 3 minutes using a Jiffy mixer blade and slow speed drill. Pour into application tray.

Apply Resutile HPS 100 at the rate of 500 sq. ft./gallon (46.45 m2/3.78 litres) with a 3/8" nap roller. For proper appearance and development of physical properties, it is crucial that material is not applied above or below this rate. Dip the roller in the coating and lightly roll out excess in the application tray. Apply two 8-10 foot (2.4-3.0 meters) long paths on the concrete, making one stroke left to right and one right to left. Rewet the roller and apply two more paths adjacent to the first pair. Rewet roller and apply a third pair adjacent to the second.

Spread the material evenly with V-shaped cross passes.

Make sure the floor has just enough coating to cover evenly. Excess material could cause the floor to blister, especially in high humidity. Insufficient material will cause the floor to look non-uniform.

Level the area with straight passes that cross the initial material paths. These final strokes will reduce roller marks. If the appearance is not satisfactory, reroll the area.

Allow coating to dry 24 hours at 75°F (24° C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.



Revised: March 7, 2025

RESUTILE™ HPS 100/SDS/HTS 100

RESUTILE HPS 100: pages 1-3 **RESUTILE SDS: pages 4-6** RESUTILE HTS 100: pages 7-9

GP4640A01 Part A PART B GP4640B01

CLEAR HARDENER

PRODUCT INFORMATION

CHEMICAL RESISTANCE			
Reagent	1 Day	7 Days	
Hydrochloric Acid 10%	E	E	
Hydrochloric Acid 30% (Muriatic)	E	E	
Nitric Acid 10%	G	Р	
Phosphoric Acid 50%	G	G	
Sulfuric Acid 37% (Battery Acid)	Е	G	
Acetic Acid 10%	E	E	
Citric Acid 10%	E	E	
Oleic Acid	E	E	
Ammonia Hydroxide 10%	E	E	
Sodium Hydroxide 50%	E	E	
Ethylene Glycol (Antifreeze)	Е	Е	
Isopropyl Alcohol	G	G	
Methanol	G	F	
D-Limonene	E	E	
JP-4 Jet Fuel	E	E	
Gasoline	E	E	
Mineral Spirits	E	E	
Xylene	E	E	
Methylene Chloride	Р	Р	
MEK	F	F	
РМА	E	G	
Ammonium Nitrate 20%	E	E	
Brake Fluid	E	E	
Bleach	E	E	
Motor Oil (SAE 30)	E	E	
Skydrol® 500B	Е	E	
Skydrol® LD4	Е	E	
Sodium Chloride 20%	Е	E	
1% Tide® Laundry Soap	E	E	
10% Trisodium Phosphate	Е	E	
Coffee	Е	E	
Coke®	Е	E	
Ketchup	Е	E	
Mustard	G*	G*	
Red Wine	Е	G*	
3M™ DuraPrep™	G*	F	
Purdue Betadine Solution	G*	G*	

ASTM D1308 Test Method 3.1.1 spot test, covered. Results are based on 1-day and 7-day. Coating cured 2 weeks prior to testing.

- E Excellent (no adverse effect) Recommended G Good (limited adverse effect) Use for short-term exposure only
- F Fair (moderate adverse effect) Not recommended P Poor (unsatisfactory) Little or no resistance to chemical

NOTE: Reduced chemical resistance and staining is possible in pigmented versions of the system

MAINTENANCE

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new Sherwin-Williams floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish. Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface. Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap. Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration. Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

TINTING

Only tint with HPF Universal Colorants. Do not tint with GIS colorants. Use two pints of colorant per ~1.88 gallon mix of Parts

Standard colorants: White, Bright Yellow, Rotunda Red and Sandy Beige will not impart total hide. Similar colorants also may not hide as well.

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

^{*}only adverse effect was staining



RESUTILE™ SDS

GP4640A01 Part A PART B GP4640B01 PART C GP4621C01

CLEAR **HARDENER** AGGREGATE

Revised: March 7, 2025

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUTILE SDS is a light-stable urethane that contains a conductive filler to yield static dissipative properties. This coating has a satin appearance for long-lasting durability.

- Electrostatic discharge control meets ANSI/ESD S20.20-2007 for resistance <1x109 ohms and <100 volts Body Voltage Generation
- LEED® v4 Indoor Air Quality credits available meets requirements per CDPH-CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.
- Reduced solvent means less evaporation and less waste
- Low odor can be applied during normal business hours
- Complies with SCAQMD VOC regulations

TYPICAL USES

- Manufacturing / Automotive manufacturing
- Electric Assembly / Production
- Packaging
- Avionics
- Clean Room / Lab
- Warehouse / Distribution

GENERAL INFORMATION

Use the same color in the epoxy and Resutile SDS. White is not recommended for this system.

Colors in Epoxy: Use colorants at a rate of one unit per 3-gallon (11.34 liters) mix. Standard Colorants - Yellow and Light Gray will not impart total hide. Use these colorants at a rate of two units per 3-gallon (11.34 liters) mix. Similar colorants also may not hide as well.

Colors in Resutile SDS: Use Colorants at a rate of one-half unit per 1-gallon (3.78 liters) mix.

Colors: The use of color is recommended in Resutile SDS. DO NOT USE White.

Hide: The topcoat must be applied over a pigmented primer or existing coating of similar color to obtain color hide in Resutile SDS. The resulting system color will be closer to the primer.

Contamination (Fisheyes): Product may fisheye if oil, silicones, mold release agents or other contaminants are present.

Chemical Resistance / Staining: Reduced chemical resistance and staining is possible in pigmented versions of the system.

Resutile SDS will have a slight gray hue and could change the appearance of decorative flooring.

ORDERING INFORMATION

~1 gallon (3.8L) mix:

Part A: 0.74 gallons (2.8L) in a gallon (3.8L) can Part B: 0.20 gallons (0.8L) in a quart (0.9L) can Part C: 3.31 lbs. (1.5kg) in a 2 gallon (7.6L) can

~2 gallon (7.6L) mix:

Part A: 1.48 gallons (5.6L) in a 5 gallon (18.9L) pail Part B: 0.40 gallons (1.5L) in a 0.5 gallon (1.9L) can Part C: 6.62 lbs. (3kg) in a 2 gallon (7.6L) can

PRODUCT CHARACTERISTICS

Color: Grayish Clear (when mixed) **Volume Solids:** 92.49%, mixed (ASTM D2369) Weight Solids: 93.67%, mixed (ASTM D2369)

Mix Ratio: 1:1:1 by unit (see Ordering Information)

VOC (ASTM D3960): <100 g/L; 0.8 lb/gal

Recommended Spreading Rate per coat: Minimum **Maximum** Wet mils (microns) 3.0 (75)3.0 (75)~Coverage sq ft/gal (m²/L): 600 (14.7)600 (14.7)

Drying Schedule:

60°F/16°C 60°F/16°C 75°F/24°C 90°F/32°C 90°F/32°C 20% RH 80% RH 13% RH 20% RH 80% RH

Tack Free: 12-16 hours 12-16 hours 6.5 hours 3.5 hours 1.5 hours Foot Traffic: 24 hours 24 hours 24 hours 24 hours Recoat Window: Maximum: Up to 24 hours for all conditions

Shelf Life:

12 months, unopened Store indoors at 65°F (18°C) to 90°F (32°C)

Performance Characteristics

Test Name	Test Method	Results*
Abrasion Resistance	ASTM D4060, CS-17 wheel, 1000gm load, 1000 cycles	38 mg loss
Body Voltage Generation	ANSI/ESD STM 97.2 (ANSI/ESD S20.20 - Method 2)	12 volts with ESD shoes ; 32 volts with heel straps
Body Voltage Decay (with ESD shoes or heel straps)	AATCC 134- 1979 (modified)	1,000 volts to <10 volts in <1.0 second
Coefficient of Friction	ASTM D2047	0.50
Flammability (topcoat resin)	ASTM D635	182 mm/min
Koenig Hardness, 3 Mil Film (resin only)	ASTM D4366	171.3
Resistance to Ground in Combination with a Person	ANSI/ESD STM 97.1 (ANSI/ESD S20.20 - Method 1)	<3.5 x 10 ⁷ ohms (ESD shoes or heel straps)
Surface Resistance Point to Point / Point to Ground	ESD Assoc. ANSI/ESD STM 7.1-2013	1x10 ⁵ ohms to 1x10 ⁹ ohms
Water Absorption, 24-hour immersion	ASTM D570	1.81%
Wet Static Coefficient of Friction, BOT 3000	ANSI/NFSI B101.1	0.95

*results are based on conditions at 77°F (25°C)



RESUTILE™ SDS

GP4640A01 Part A PART B GP4640B01 GP4621C01

CLEAR **HARDENER** AGGREGATE

Revised: March 7, 2025

PRODUCT INFORMATION

SURFACE PREPARATION

CHECK THE TEMPERATURE AND HUMIDITY: Floor temperature and materials should be between 65°F (18°C) and 80°F (27°C). Humidity must be less than 70%. DO NOT coat unless floor temperature is more than five degrees over the current, local dew point.

CHECK THE CONCRETE: Concrete must be structurally sound and free of curing membrane, paint and/or other sealer. If you suspect that the concrete has been previously sealed, call your Sherwin-Williams representative for further instructions.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. In-situ relative humidity testing is recommended. Readings must be below 75% relative internal concrete humidity. Test methods can be purchased at www. astm.org, see F2170, or follow manufacturer's instructions. If moisture issues are present, the use of a moisture mitigation system may be a consideration. Consult your Sherwin-Williams répresentative for further information / instructions.

NOTE: Although moisture testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination. Additional testing may be necessary to determine the vapor barrier and any contamination.

APPLICATION EQUIPMENT

- Protective clothing
- Jiffy® mixer blade
- Application tray
- Spiked shoes
- Disc machine
- Roller assembly (18")
- 3/8" medium náp`rollér (18")
- 80 grit sandpaper
- 60 grit sandpaper
- Slow speed drill (500 rpm or less)
- 18-24" flat rubber squeegee
- 18-24" 1/16" notched rubber squeegee

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

PREPARATION

Detergent scrub and rinse with clean water to remove surface dirt, grease, oil and contaminants.

THICK FILM APPLICATIONS (25 mils / 0.64 mm): Steel Shot Blast: Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust. Diamond Grind: Sweep to remove large debris and vacuum to remove fine dust.

JOINTS: Depending on the preference of the facility owner, joints may or may not be filled. If the joints are filled, non-moving joints, i.e. contraction or control joints, can be hard filled with thickened, 100% solids epoxy or with a semi-rigid joint filler such as Resuflor 3580. Construction joints less than one inch wide may also be filled with Resuflor 3580. Isolation or expansion joints must be filled with a flexible material designed for this purpose.

APPLICATION INSTRUCTIONS

RESUTILE SDS MUST BE APPLIED OVER A SHERWIN-WILLIAMS 100% SOLIDS EPOXY PRIMER. (See appropriate epoxy product bulletin for application instructions.)

AT LEAST 8 MILS OF AN EPOXY BUILD COAT ON TOP OF THE EP-OXY PRIMER ARE RECOMMENDED FOR COMPLETE HIDE. (See appropriate epoxy product bulletin for application instructions.)

If Resutile SDS is the primary ground, then a grounding system that meets the customer's specifications needs to be connected to the common ground of the facility. If copper tape is used, install the copper tape on the insulator coat, underneath the Resutile SDS.

PREMIX PART A USING A JIFFY® MIXER BLADE with slow speed drill. POT LIFE: Mix only enough material which can be used within 30 minutes. NOTE: Once opened, this material cannot be resealed for later use.

CONTINUE TO MIX AND ADD PART B. MIX FOR 1 MINUTE using a Jiffy® mixer blade and slow speed drill.

POUR MIXED PARTS A/B INTO PART C while mixing. NOTE: The Part C is not blended—DO NOT SPLIT MIX OR PRODUCT MAY NOT MEET PERFORMANCE SPECIFICATIONS.

MIX FOR 3 MINUTES using a Jiffy® mixer blade and slow speed drill. Move the blade up and down the sides of the pail and across the bottom to ensure contents are thoroughly mixed so no dry filler remains.

COLORS: Use colorants at a rate of one-half unit per 1-gallon (3.78 litres) of Resutile SDS. Premix Sherwin-Williams Colorant before adding to the combined Parts A/B/C to ensure uniform color. Add colorant to combined Parts A/B/C and mix using a Jiffy mixer blade and slow speed drill. Mix until well blended. Pour into application tray.

APPLY Resutile SDS at the rate of 600 ft2/gallon (55.7 m2/3.78 L) with a 3/8" (10 mm) nap roller. For proper appearance and development of physical properties, it is crucial that material is not applied above or below this rate. Material applied at a lower application rate will tend to foam at higher humidities and temperatures. Dip the roller in the coating and lightly roll out excess in the application tray. Apply material in an area no wider than 10 feet (3.0 meters). One dip should cover about 45 sq. ft. (4.2 m2).

SPREAD THE MATERIAL evenly with V-shaped cross passes.

MAKE SURE THE FLOOR HAS JUST ENOUGH COATING TO COVER EVENLY. Excess material could cause the floor to blister, especially in high humidity and will show more roller marks. Insufficient material will cause the floor to look non-uniform. If you cannot see the grit texture, the material is too thick.

LEVEL THE AREA with straight passes that cross the initial material paths. These final strokes will reduce roller marks. If the appearance is not satisfactory, reroll the area.

REMIX THE MATERIAL in the tray occasionally (with the roller) to prevent settling of the Part C (filler).

NOTE: This product cannot be finish rolled by a separate individual. Late finish rolling may introduce foam in the coating especially at higher humidities and temperatures.

ALLOW COATING TO DRY 24 HOURS at 75°F (24°C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.



Revised: March 7, 2025

RESUTILE™ SDS

GP4640A01 Part A PART B GP4640B01 GP4621C01

CLEAR HARDENER AGGREGATE

PRODUCT INFORMATION

CHEMICAL R	RESISTANCE	E
Reagent	1 Day	7 Days
Hydrochloric Acid 10%	Е	Е
Hydrochloric Acid 30% (Muriatic)	E	F
Nitric Acid 10%	E	Е
Phosphoric Acid 50%	F	F
Sulfuric Acid 37% (Battery Acid)	E	E
Acetic Acid 10%	E	Е
Citric Acid 10%	E	Е
Oleic Acid	E	E
Ammonia Hydroxide 10%	E	E
Sodium Hydroxide 50%	E	E
Ethylene Glycol Antifreeze)	E	E
sopropyl Alcohol	E	Е
Methanol	Р	Р
D-Limonene	F	F
JP-4 Jet Fuel	E	E
Gasoline	E	F
Mineral Spirits	E	E
Kylene	E	E
Methylene Chloride	Р	Р
MEK	F	F
РМА	E	E
Ammonium Nitrate 20%	E	E
Brake Fluid	E	Е
Bleach	E	E
Motor Oil (SAE 30)	E	E
Skydrol® 500B	E	E
Skydrol® LD4	E	Е
Sodium Chloride 20%	E	E
1% Tide® Laundry Soap	E	Е
10% Trisodium Phosphate	E	E
Coffee	E	E
Coke®	E	Е
Ketchup	E	Е
Mustard	G*	G*
Red Wine	E	G*
3M™ DuraPrep™	G*	F
Purdue Betadine Solution	G*	G*

ASTM D1308 Test Method 3.1.1 spot test, covered. Results are based on 1-day and 7-day. Coating cured 2 weeks prior to testing.

- E Excellent (no adverse effect) Recommended G Good (limited adverse effect) Use for short-term
- exposure only
 F Fair (moderate adverse effect) Not recommended
 P Poor (unsatisfactory) Little or no resistance to chemical

NOTE: Reduced chemical resistance and staining is possible in pigmented versions of the system

MAINTENANCE

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new Sherwin-Williams floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish. Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface. Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap. Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration. Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

TINTING

Only tint with HPF Universal Colorants. Do not tint with GIS colorants. Use one pint of colorant per ~2.10 gallon kit of Parts

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

^{*}only adverse effect was staining



RESUTILE™ HTS 100 SATIN URETHANE TOPCOAT

PART A GP4640A01 PART B GP4640B01 PART C GP4640C01 CLEAR HARDENER AGGREGATE

Revised: March 7, 2025

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUTILE HTS 100 is a clear, high solids, three-component, aliphatic, moisture-cure urethane applied over an epoxy primer or used to recoat an existing epoxy or urethane floor.

Advantages:

- LEED® v4 Indoor Air Quality credits available meets requirements per CDPH-CA Section 01350 Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental chambers Version 1.2.
- Lasts twice as long as standard urethanes; up to four times as long as standard epoxies
- · Light stable, satin finish maintains fresh look in traffic aisles
- Resists Skydrol®, jet fuels and other industrial chemicals
- Low VOC (6 g/L). (Complies with SCAQMD VOC regulations.)

TYPICAL USES

- Hangar Floor
- · Automotive manufacturing
- · Mechanical Room
- · Assembly / Production
- Packaging
- Clean Room / Lab

GENERAL INFORMATION

Use colorants at a rate of one unit per 1-gallon (3.78 litres) of Resutile HTS 100. Standard colorants: White, Yellow Sandy Beige will not impart total hide. Similar colorants also may not hide as well.

LIMITATIONS:

Contamination (Fisheyes): Product may fisheye if oil, silicones, mold release agents or other contaminants are present.

Chemical Resistance / Staining: Reduced chemical resistance and staining is possible in pigmented versions of the system.

ORDERING INFORMATION

~1 gallon (3.8L) mix:

Part A: 0.74 gallons (2.8L) in a gallon (3.8L) can Part B: 0.20 gallons (0.8L) in a quart (0.9L) can Part C: 4.04 lbs. (1.8kg) in a quart (0.9L) can

~2 gallon (7.6L) mix:

Part A: 1.48 gallons (5.6L) in a 5 gallon (18.9L) pail Part B: 0.40 gallons (1.5L) in a 0.5 gallon (1.9L) can Part C: 8.08 lbs. (3.7kg) in a 2 gallon (7.6L) can

~5 gallon (18.9L) mix:

Part A: 3.7 gallons (14L) in a 5 gallon (18.9L) pail Part B: 1 gallon (3.8L) in a gallon (3.8L) can Part C: 20.18 lbs. (9.2kg) in a 2 gallon (7.6L) can

PRODUCT CHARACTERISTICS

Color: Clear

Mix Ratio: 1:1:1 by unit (see Ordering Information)

Volume Solids: 91.60%, mixed (ASTM D2369)
Weight Solids: 91.34%, mixed (ASTM D2369)

VOC (ASTM D3960): <100 g/L ; 0.8 lb/gal

Recommended Spreading Rate per coat:				
	Mini	imum	Max	imum
Dry mils (microns)	3.0	(75)	3.0	(75)
~Coverage sq ft/gal (m²/L):	500	(12.3)	500	(12.3)

Drying Schedule:

@ @ @ @ @ @ @ @ @ 60°F/16°C 60°F/16°C 75°F/24°C 90°F/32°C 90°F/32°C 20% RH 80% RH 13% RH 20% RH 80% RH 12-16 hours 12-16 hours 6.5 hours 3.5 hours 1.5 hours Foot Traffic: 24 hours 24 hours 24 hours 24 hours 24 hours Recoat Window: Maximum: Up to 24 hours for all conditions

Shelf Life: 12 months, unopened

Store indoors at 65°F (18°C) to 90°F (32°C)

PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results*
Abrasion Resistance	ASTM D4060, CS-17 wheel, 1000gm load, 1000 cycles	11.7 mg loss
Coefficient of Friction	ASTM D2047	0.61
Elongation	ASTM D2370	6%
Flammability	ASTM D635	182 mm/min
Koenig Hardness, 3 Mil Film (resin only)	ASTM D4366	171.3
Tensile Strength (resin only)	ASTM D2370	6,250 psi
Water Absorption, 24- hour immersion	ASTM C413	0.2% weight increase
Wet Static Coefficient of Friction, BOT 3000	ANSI/NFSI B101.1	0.94

*results are based on conditions at 77°F (25°C)



RESUTILE™ HTS 100 SATIN URETHANE TOPCOAT

PART A GP4640A01 PART B GP4640B01 PART C GP4640C01 CLEAR HARDENER AGGREGATE

Revised: March 7, 2025

PRODUCT INFORMATION

SURFACE PREPARATION

CHECK THE TEMPERATURE AND HUMIDITY: Floor temperature and materials should be between 65°F (18°C) and 90°F (32°C). Humidity must be less than 80%. DO NOT coat unless floor temperature is more than five degrees over the current, local dew point.

CHECK FOR MOISTURE: Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. In-situ relative humidity testing is recommended. Readings must be below 75% relative internal concrete humidity. Test methods can be purchased at www. astm.org, see F2170, or follow manufacturer's instructions. If moisture issues are present, the use of a moisture mitigation system may be a consideration. Consult your Sherwin-Williams representative for further information / instructions.

NOTE: Although moisture testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination. Additional testing may be necessary to determine the vapor barrier and any contamination.

APPLICATION EQUIPMENT

- Protective clothing
- Jiffy® mixer blade
- Application tray
- Disc machine
- Disc machine
- Roller assembly (18")
- Medium (3/8") nap roller
- 60 grit sandpaper
- 80 grit sandpaper
- Slow speed drill (500 rpm or less)

ASSEMBLE EQUIPMENT: Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

APPLICATION INSTRUCTIONS

Recoat: Resutile HTS 100 may be used to coat over an existing epoxy or urethane in sound condition. Detergent scrub and rinse with clean water to remove surface dirt, grease, oil and contaminants. Floor must be sanded thoroughly with 80 grit paper/60 grit screen prior to recoating. If sanding a high wear urethane, use 60 grit paper as the filler in high wear urethanes will wear down the paper very quickly. Change the paper every 200 sq. ft. (18.6 m2) so abrasive stays sharp. We recommend thorough sanding with a swing-type buffer so that multiple scratch marks cause an obvious gloss loss on all areas (depressions will remain shiny), and the floor is uniformly dulled. The ability to see individual scratch marks is an indication that sanding is not adequate. Scrub with detergent and rinse with clean water before coating.

Resutile HTS 100 must be applied over a Sherwin-Williams' 100% solids epoxy primer.

Premix Part A for 3 minutes using a Jiffy mixer blade with slow speed drill. Pot Life: Mix only enough material which can be used in a two-hour period. Note: Once opened, this material cannot be resealed for later use.

Colors: Premix Sherwin-Williams colorant before adding to Resutile HTS 100 to ensure uniform color. Add colorant to Resutile HTS 100 Part A and mix using a Jiffy mixer blade and slow speed drill. Use colorants at a rate of one unit per 1-gallon (3.78 litres) unit of Resutile HTS 100.

Pour Part C into Part A while mixing. Continue to mix and add Part B. Mix for 3 minutes using a Jiffy mixer blade and slow speed drill. Pour into application tray.

Apply Resutile HTS 100 at the rate of 500 sq. ft./gallon (46.45 m2/3.78 litres) with a 3/8" nap roller. For proper appearance and development of physical properties, it is crucial that material is not applied above or below this rate. Dip the roller in the coating and lightly roll out excess in the application tray. Apply two 8-10 foot (2.4-3.0 meters) long paths on the concrete, making one stroke left to right and one right to left. Rewet the roller and apply two more paths adjacent to the first pair. Rewet roller and apply a third pair adjacent to the second.

Spread the material evenly with V-shaped cross passes.

Make sure the floor has just enough coating to cover evenly. Excess material could cause the floor to blister, especially in high humidity. Insufficient material will cause the floor to look non-uniform.

Level the area with straight passes that cross the initial material paths. These final strokes will reduce roller marks. If the appearance is not satisfactory, reroll the area.

Remix the material in the tray occasionally (with the roller) to prevent settling of the Part C (filler).

NOTE: When multiple applicators are used to apply material, inconsistencies between areas may result. To ensure a more uniform finish, an individual outfitted with spike shoes may finish by pushing or pulling a roller across all applicator areas.

Allow coating to dry 24 hours at 75°F (24°C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.



Revised: March 7, 2025

RESUTILE™ HTS 100 SATIN URETHANE TOPCOAT

PART A GP4640A01 PART B GP4640B01 PART C GP4640C01

CLEAR HARDENER AGGREGATE

PRODUCT INFORMATION

CHEMICAL RESISTANCE		
Reagent	1 Day	7 Days
Hydrochloric Acid 10%	E	E
Hydrochloric Acid 30% (Muriatic)	E	E
Nitric Acid 10%	E	E
Phosphoric Acid 50%	E	G
Sulfuric Acid 37% (Battery Acid)	E	E
Acetic Acid 10%	E	E
Citric Acid 10%	E	E
Dleic Acid	E	E
Ammonia Hydroxide 10%	E	E
Sodium Hydroxide 50%	E	Е
thylene Glycol Antifreeze)	E	E
sopropyl Alcohol	E	E
Methanol	E	E
D-Limonene	E	E
IP-4 Jet Fuel	E	E
Gasoline	E	E
/lineral Spirits	E	E
(ylene	E	E
Methylene Chloride	Р	Р
MEK	E	E
PMA	E	E
Ammonium Nitrate 20%	E	E
Brake Fluid	E	E
Bleach	E	Е
Motor Oil (SAE 30)	E	Е
Skydrol® 500B	E	Е
Skydrol® LD4	E	E
Sodium Chloride 20%	E	Е
1% Tide® Laundry Soap	E	Е
0% Trisodium Phosphate	E	E
Coffee	E	E
Coke®	E	Е
Ketchup	E	E
Mustard	G*	G*
Red Wine	E	G*
3M™ DuraPrep™	G*	F
Purdue Betadine Solution	G*	G*

ASTM D1308 Test Method 3.1.1 spot test, covered. Results are based on 1-day and 7-day. Coating cured 2 weeks prior to testing.

- E Excellent (no adverse effect) Recommended G Good (limited adverse effect) Use for short-term exposure only
- F Fair (moderate adverse effect) Not recommended P Poor (unsatisfactory) Little or no resistance to chemical

NOTE: Reduced chemical resistance and staining is possible in pigmented versions of the system

MAINTENANCE

Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).

Care: Proper maintenance will increase the life and help maintain the appearance of your new Sherwin-Williams floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish. Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.

Caution: Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface. Do not drop heavy or pointed items on the floor as this may cause chipping or concrete popouts in the case of a weak cap. Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration. Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

Repair: Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

TINTING

Only tint with HPF Universal Colorants. Do not tint with GIS colorants. Use two pints of colorant per small kit (~2.12 gallon mix). Use five pints of colorant per large kit (~5.30 gallon mix).

Standard colorants: White, Bright Yellow, Rotunda Red and Sandy Beige will not impart total hide. Similar colorants also may not hide as well.

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

^{*}only adverse effect was staining



RESUFLOR™ COVE REZ

PART A GPDFCVR SERIES
PART B GPDFCVRB1 STANDARD HARDENER
PART B GPDFCVRB2 FAST HARDENER

Revised: March 13, 2025

PRODUCT INFORMATION

PRODUCT DESCRIPTION

RESUFLOR COVE REZ is specifically designed for vertical applications where extra sag resistance is required. Upon mixing, the viscosity drops significantly which makes mixing and handling easy. However, when the mixing blade is removed the viscosity rises once again. This added viscosity makes cove work easier and more efficient.

BENEFITS

- · Low Odor
- Coves Close Up Tighter
- Versatile Usage
- Concrete Repair
- Good Chemical Resistance
- · Tenacious Bonding Quality
- · Non-toxic, USDA compliant

LIMITATIONS

This product is best suited for application in temperatures between 60°F and 90°F. Substrate must be clean, sound, and dry. Don't leave a heavy topcoat on cove base, pull excess sealer off with squeegee. If not removed, a milky white haze will remain on cove base.

PRODUCT CHARACTERISTICS

Colors: Available in a variety of colors including

custom colors.

VOC: <50 g/L

Mix Ratio: 2A:1B by volume

Cured Film Thickness: 16 mils at 100 sq. ft./gallon spread rate

Drying Schedule:

@ 70°F (21°C)

Cure time, touch dry: 4-6 hours

Drying time is temperature, humidity, and film thickness dependent.

Pot life: 20-25 minutes

Shelf Life: 6 months, unopened.

TYPICAL USES

This formula was developed specifically for installing cove and may be used in all phases of that process. (Prime coat, Base coat, and Topcoat) The product can be used as a patching material for hairline cracks, sawcuts and spalled areas. It can also be used for minor patching to level an area.

PERFORMANCE CHARACTERISTICS **Test Name Test Method** Results Abrasion Resistance ASTM D4060. 30 mg loss CS-17 wheel, 1000 GM load, 1,000 cycles **Bond Strength to** ACI-403 Concrete fails before loss of bond Concrete ASTM D695 17.5-19,000 psi Compressive Strength **Elevated Temperature** MIL D-3134 No slip or flow Flame Spread / NFPA-ASTM E84 Class A **Flammability** ASTM D635 Self extinguishing Flexural Strength ASTM D790 18-19,000 psi Hardness (Shore D) **ASTM D2240** 75-80 ASTM D256 **Izod Impact** 0.50 ft. lb./in. notch Salt Spray Resistance 25% No effect after 100 solution at 90°F hours Tensile Strenath ASTM D638 12-13.000 psi Thermal Shock MIL F-52505. No cracking or loss 50 cycles of of adhesion immérsion in chilled & boiling water Water Absorption ASTM D570 0.04%



RESUFLOR™ COVE REZ

PART A GPDFCVR
PART B GPDFCVRB1
PART B GPDFCVRB2

SERIES STANDARD HARDENER FAST HARDENER

Revised: March 13, 2025

PRODUCT INFORMATION

SURFACE PREPARATION

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Please refer to the master Surface Preparation Guide on our website for more information.

APPLICATION

Prime the wall with a light coat of the mixed resin and hardener. Next, trowel up a mixture of 1 qt. Resuflor Cove Rez resin to 1 pt. Resuflor Cove Rez hardener to 25 lbs course sand, or quartz broadcast. When that has cured, use a brush to topcoat. Be sure to remove any excess material with a squeegee. This should be done by pulling the material down to the bottom of the cove radius, then back up to the top edge of the cove. Do not apply on broadcast quartz floors. Because the surface is not smooth, the finish will appear white. Topcoat smooth troweled surfaces only. Resuflor Cove Rez is typically applied at 200-250 linear feet per gallon.

ORDERING INFORMATION

Available in 1-gallon cans and 5-gallon pails.

SPECIAL PURPOSE FORMULATIONS

Fast Hardener: for quick turnaround time in room temperature areas. Should not be used as a topcoat hardener due to yellowing and problems bonding to performance topcoats.

Standard Hardener: for most applications, it is a high quality cycloaliphatic amine hardener, non-blushing, good chemical resistance.

SAFETY

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

DISCLAIMER

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WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

PRODUCT DATA SHEET



Revised: September 10, 2024

PRODUCT DESCRIPTION

MACROPOXY 646 Fast Cure Epoxy Mastic is a high solids, high build, fast drying, polyamide epoxy designed to protect steel and concrete in industrial exposures. Ideal for maintenance painting and fabrication shop applications. The high solids content ensures adequate protection of sharp edges, corners, and welds. This product can be applied directly to marginally prepared steel surfaces.

INTENDED USES

- Recommended for marine applications, refineries, offshore platforms, fabrication shops, chemical plants, tank exteriors, power plants, water treatment plants, and mining and minerals industry
- Factory ground formulas are available for subsea/immersion service. For a full list of shades please consult Sherwin-Williams

PRODUCT DATA

Finish: Semi-Gloss Mill White, Black and a wide range of colors available through tinting Colors: **Volume Solids:** 72% ± 2%, mixed, Mill White

VOC (mixed): <250 g/L; 2.08 lb/gal Mix Ratio: 1:1 by volume

Typical Thickness:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	7.0 (175)	13.5 (338)
Dry mils (microns)	5.0 * (125)	10.0 (250)
~Coverage sq ft/gal (m²/L)	115 (2.9)	230 (5.8)
Theoretical coverage sq ft/qal	4450 (00.0)	

1152 (28.2) (m²/L) @ 1 mil / 25 microns dft

*May be applied at 3.0-10.0 mils (75-250 microns) dft as an intermediate in a multicoat system.

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Shelf Life:

36 months, unopened Store indoors at 40°F (4.5°C) to 110°F (43°C)

Flash Point: 91°F (33°C), TCC, mixed

Reducer/Clean Up1:VOC Restricted Areas (<250 g/L): use Reducer #111 or Oxsol 100

12.9 \pm 0.2 lb/gal ; 1.55 Kg/L, mixed, may vary by color Weight:

¹Other areas (<340 g/L): use Reducer #111, Oxsol 100, Reducer #15, Reducer #58, or MEK up to 10%. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

	Average Drying Tim	es @ 7.0 mils	(175 microns) wet:
--	--------------------	---------------	--------------	--------

	35°F (1.7°C)	77°F (25°C)	100°F (38°C)
	50% RH	50% RH	50% RH
Touch:	4-5 hours	2 hours	1.5 hours
Handle:	48 hours	8 hours	4.5 hours
Recoat:			

48 hours 8 hours 4.5 hours minimum: 1 year 1 year 1 year maximum: Cure to service: atmospheric: 10 days 7 days 4 days

immersion: 14 days 7 days 4 days Average Drying Times as intermediate @ 5.0 mils

(125 microns) wet:

1 hour 1 hour Touch: 3 hours Handle: 48 hours 4 hours 2 hours Recoat:

minimum: 16 hours 4 hours 2 hours maximum: 1 year 1 year 1 year

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent. Paint temperature must be 40°F (4.5°C) minimum.

2 hours Pot Life: 10 hours 4 hours Sweat-in-time: 30 minutes 30 minutes 15 minutes

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Minimum recommended surface preparation:
Iron & Steel:

Atmospheric: SSPC-SP2/3/ ISO8501-1:2007 St 2 or SSPC-SP WJ-3 / NACE WJ-3L Immersion: SSPC-SP10 / NACE 2/ ISO8501-1:2007 Sa 2.5, 2-3 mil (50-75 micron) profile or SSPC-SP WJ-2/NACE WJ-2L

Atmospheric: SSPC-SP16, 1 mil (25 micron) profile Stainless Steel:

Aluminum & Galvanizing:

SSPC-SP1. If surface has not be weathered for more than 6 months, follow SSPC-SP1 then SSPC-SP16. For fire proofing projects, consult a Sherwin-Williams representative for surface preparation requirements.

Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R CSP 1-3 Immersion: SSPC-SP13/NACE 6-4.3.1 Concrete & Masonry:

Ductile Iron Pipe:

Atmospheric: NAPF 500-03-03 Power Tool Cleaning Buried & Immersion: NAPF 500-03-04 Abrasive Blast Cleaning Cast Ductile Iron Fittings: NAPF 500-03-05 Abrasive Blast Cleaning



Protective & Marine Coatings

PRODUCT DATA SHEET



MACROPOXY® 646

FAST CURE EPOXY MASTIC

APPLICATION

Reduction...... As needed up to 10% by volume

Conventional Spray*

Gun	DeVilbiss MBC-510
Fluid TipAir Nozzle	E
Air Nozzle	704
Atomization Pressure	60-65 nsi (4 1-4 5 ha

Atomization Pressure...... 60-65 psi (4.1-4.5 bar) Fluid Pressure................ 10-20 psi (0.7-1.4 bar)

Brush* BrushNylon/Polyester or Natural Bristle

Plural Component Spray Acceptable

*Reduction¹................VOC Restricted Areas (<250 g/L): use Reducer #111 or Oxsol 100

¹Other areas (<340 g/L); use Reducer #111, Oxsol 100, or Reducer #15 up to 10%. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

If specific application equipment is not listed above, equivalent equipment may be substituted.

RECOMMENDED SYSTEMS

Dry Filr	n Thickness / ct.	<u>Mils</u>	(Microns)
	Ductile Iron, Immersion & Atm Macropoxy 646	ospheric 5.0-10.0	(125-250)
Steel, 0 1 Ct. 1 Ct.	Drganic Zinc Primer, Atmospher Zinc Clad IV (85) Macropoxy 646	ric 3.0-5.0 5.0-10.0	(75-125) (125-250)
Steel, I 1 Ct. 1 Ct.	norganic Zinc Primer, Atmosph Zinc Clad II (85) Macropoxy 646	eric 2.0-4.0 5.0-10.0	(50-100) (125-250)
Steel, 0 1 Ct. 1 Ct. 1 Ct.	Macropoxy 646 ′	3.0-5.0 3.0-10.0 2.0-4.0	(75-125) (75-250) (50-100)
Steel, I 1 Ct. 1 Ct. 1 Ct.	norganic Zinc/Epoxy/Urethane [*] Zinc Clad II (85) Macropoxy 646 Acrolon 7300	Topcoat 2.0-4.0 3.0-10.0 2.0-4.0	(50-100) (75-250) (50-100)
1 Ct.	Prganic Zinc/Epoxy/Polysiloxane Zinc Clad IV (85) Macropoxy 646 . Sher-Loxane 800	Topcoat, A 6 3.0-5.0 3.0-10.0 4.0-6.0	tmospheric (75-125) (75-250) (100-150)

Steel: Norsok M501 System 7B/Subsea 2 Cts. Macropoxy 646 7.0

Concrete/Masonry, Smooth, Immersion & Atmospheric 2 Cts. Macropoxy 646 5.0-10.0 (125-(125-250) 2 Cts. Macropoxy 646

The systems listed above are representative of the product's use, other systems may be appropriate.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

APPLICATION CONDITIONS

Temperature:

Air: 35°F (1.7°C) minimum, 120°F (49°C) maximum Surface*: 35°F (1.7°C) minimum, 250°F (120°C) maximum Material: 40°F (4.5°C) minimum At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

*Application to surfaces above 120°F (49°C) is not recommended in VOC Restricted Areas (≤250 g/L). When spraying a surface above 120°F (49°C) in other areas (>250 g/L), please consult with your Sherwin-Williams representative. representative

APPROVALS

Suitable for use in USDA inspected facilities
Acceptable for use in Canadian Food Processing facilities,
categories: D1, D2, D3 (Confirm acceptance of specific part
numbers/rexes with your SW Sales Representative)
Conforms to AWWA D102 OCS #5
Conforms to MPI # 108
This product meets specific design requirements for non-safety
related nuclear plant applications in Level II, III and Balance of
Plant, and DOE nuclear facilities
Meets Class A requirements for Slip Coefficient, 0.36 @ 6 mils /
150 microns dft (Mill White only)
Approved intermediate for NEPCOAT System B
Approved to Norsok M501 system 7B (limited colors)
ISO 12944:2018 approved for C2 to CX

- ISO 12944:2018 approved for C2 to CX

ADDITIONAL NOTES

Tint Part A with GIC colorants at 150% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Tinting is not recommended for immersion service.

Can be used as a metalizing sealer. Consult your Sherwin-Williams Representative regarding Product Bullentin: "Sealers for Thermal Spray Metalizing

Quick-Kick Epoxy Accelerator is acceptable for use. See data page for details.

Acceptable for concrete floors.

Application to surfaces above 120°F (49°C) is not recommended in VOC Restricted Areas (≤250 g/L). When spraying a surface above 120°F (49°C) in other areas (>250 g/L), please consult with your Sherwin-Williams representative. Spray apply only. Product will produce an orange peel appearance when applied at elevated temperatures.

Topcoating: It is recommended to apply a thinned-down, low wet film thickness mist coat over zinc rich primers to help avoid outgassing. Allow it to tack up and seal the surface. Then apply a full wet film thickness coat as directed.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine one part by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated prior to application. Re-stir before using

HEALTH AND SAFETY

Refer to the SDS sheet before use.

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(175)



Protective Marine **Coatings**

ACROLON™ 7700 THIN FILM ACRYLIC POLYURETHANE

PART A PART A PART B B65-1400 B65-1450 B65V1400

GLOSS SERIES SEMI-GLOSS SERIES HARDENER

Revised: February 20, 2025

PRODUCT INFORMATION

1504-1

PRODUCT DESCRIPTION

ACROLON 7700 is a high solids, acrylic, polyurethane coating that is used as a durable finish coat over high performance anticorrosion systems. This aliphatic polyurethane has excellent resistance to atmospheric exposures and maintains gloss and color, even in highly corrosive environments. Available in most regions globally.

PRODUCT CHARACTERISTICS

High Gloss and Semi-Gloss Finish:

Colors: White, Ultradeep Base, Chromatic Yellow, Safety Red and Safety Black.

Wide range of additional colors available.

Volume Solids: 65% ± 2%, mixed

<340 g/L; 2.8 lb/gal, mixed VOC (EPA Method 24):

Mix Ratio: 4:1 by volume

Recommended Spreading Rate per coat:			
Minimum Max		Maximum	
Wet mils (microns)	3.1 (77)	8.0 (200)	
Dry mils (microns)	2.0 (50)	5.2 (130)	
~Coverage sq ft/gal (m²/L)	261 (6.4)	522 (12.8)	

Theoretical coverage sq ft/gal 1043 (26.7)

(m²/L) @ 1 mil / 25 microns dft NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance

Drying Schedule:

40°F (4.5°C) 59°F (10°C) 77°F (25°C) 100°F (38°C)

To touch: 5 hours 3 hours 1 hour 40 minutes To handle: 12 hours 10 hours 4 hours 2 hours

To recoat:

minimum: 4 hours maximum: 60 days

Pot life: 2.5 hours 2.5 hours 2.5 hours 2.5 hours

Pot life is dependent upon temperature and mass.

Sweat-in-time: none required

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

Shelf Life: Part A: 36 months, unopened

Part B: 24 months, unopened

Store indoors at 40°F (4.5°C) to 100°F (38°C).

Flash Point: Part A: 91°F (33°C), PMCC

Part B: 83°F (28°C), PMCC

Use High Solids Compliant Thinner #1 (R7K111) Reducer*:

up to 10% by volume.

Clean Up**: Use High Solids Compliant Thinner #1 (R7K111).

*For VOC areas >340 g/L: use Reducer #58 or High Solids Compliant Thinner #1 (R7K111) up to 10% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

**For VOC areas >25 g/L or >3%: use OXSOL 100, High Solids Compliant Thinner #1 (R7K111), MEK, or Xylene. Choose a solvent that is compliant in your area. Confirm compliance with state and local air quality rules before use.

RECOMMENDED USES

For use over prepared substrates in industrial environments:

- Steel structures
- Refineries
- Process equipment
- Tank exteriors
- Marine applications: topsides, decks and superstructures
- Onshore and offshore applications
- Water and Wastewater assets; elevated water tanks
- Bridge and highway structures
- Power plants
- Acceptable for use in high performance architectural applications
- ISO 12944 Parts 6 Onshore (C2-C5 Environments)
- Meets SSPC Paint 36

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10/NACE 2

System Tested*:

1 ct. Macropoxy 4600 @ 10.0-13.0 mils dft (250-325 microns) 1 ct. Acrolon 7700 @ 2.0-3.0 mils dft (50-75 microns) *unless otherwise noted below

diffess of let wise floted below			
Test Name	Test Method	Results	
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load		
Adhesion	ASTM D4541	2100 psi	
Corrosion Weathering	ASTM D5894, 27 cycles, 9072 hours	Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 for rusting	
Direct Impact Resistance	ASTM D2794	32 in. lbs.	
Dry Heat Resistance	ASTM D2485, Method A	200°F (93°C) continuous. 250°F (121°C) intermittent	
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes, 3mm	
Humidity Resistance	ASTM D4585, 100°F (38°C), 1500 hours	Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 for rusting	
Pencil Hardness	ASTM D3363	НВ	
Salt Fog Resistance	ASTM B117, 1,000 hours	Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 for rusting	



ACROLON™ 7700 THIN FILM ACRYLIC POLYURETHANE

PART A PART A B65-1400 B65-1450 B65V1400

GLOSS SERIES SEMI-GLOSS SERIES HARDENER

Revised: February 20, 2025

PRODUCT INFORMATION

/ ct.

(50-100)

1504-1

TEGOMMENDED	OIOILI	10
	Dry Film	Thickness / c
	Mils	(Microns)

RECOMMENDED SYSTEMS

Steel, Organic Zinc/Urethane 1 ct. Zinc Clad 4100 3.0-5.0 (75-125)1 ct. Acrolon 7700 2.0-4.0 (50-100)

Steel, Epoxy/Urethane Macropoxy 4600 5.0-10.0 (125-250)1 ct. Acrolon 7700 1 ct. 3.0-10.0 (75-250)

Steel, Epoxy/Urethane Macropoxy 646 Fast Cure 5.0-10.0 (125-250)1 ct. 1 ct. Acrolon 7700 2.0-4.0 (50-100)

Steel, Inorganic Zinc/Epoxy/Urethane 1 ct. Zinc Clad 2500 2.0-4.0 (50-100)Macropoxy 4600 5.0-10.0 1 ct. (125-250)Acrolon 7700 1 ct. 2.0-4.0 (50-100)

Steel, 1K Organic Zinc/Urethane Corothane I GalvaPac 1K 1 ct. Zinc Primer 3.0-4.0 (75-100)Acrolon 7700 2.0-4.0 (50-100)1 ct.

Concrete/Masonry, Epoxy/Urethane 1 ct. Kem Cati-Coat HS 10.0-20.0 (250-500)2.0-4.0

Aluminum/Galvanizing, Water-Based Primer/Urethane

1 ct.

Acrolon 7700

Pro Industrial DTM Wash 1 ct. Primer 0.7 - 1.3(18-33)1 ct. Acrolon 7700 2.0-4.0 (50-100)

NOTE: 2 coats of Acrolon 7700 may be required with certain deep colors.

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

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SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

*Iron & Steel: SSPC-SP6/NACE 3, 2 mil (50 micron) profile

SSPC-SP1 SSPC-SP1 *Aluminum: *Galvanizing:

SSPC-SP13/NACE 6, or ICRI No. 310.2R, *Concrete & Masonry:

CSP 1-3

*primer required

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	SSPC	NACE
White Metal		Sa 3	SP 5	1
Near White Metal Commercial Blast		Sa 2.5 Sa 2	SP 10 SP 6	2
Brush-Off Blast		Sa 1	ŠP Ž	4
Hand Tool Cleaning	Rusted Pitted & Rusted	C St 2 D St 2	SP 2 SP 2	-
Power Tool Cleaning			SP 3	-
rower roor cleaning	Pitted & Rusted	D St 3	SP 3	-

TINTING

Tint Part A with GIC colorants at 100% tint strength. Five minutes minimum mixing with a mechanical shaker is required for complete mixing of color. Chromatic Yellow base must be tinted for proper coverage and hide.

APPLICATION CONDITIONS

Temperature (air, surface, material):

40°F (4.5°C) minimum, 120°F (49°C) maximum At least 5°F (2.8°C) above dew point.

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

1 gallon (3.8L) mix Packaging: 5 gallon (18.9L) mix Part A: 0.80 gallons (3L) 4 gallons (15.1L) Part B: 0.20 gallons (0.8L) 1 gallon (3.8L)

11.6 ± 0.2 lb/gal; 1.4 Kg/L, mixed Weight:

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

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WARRANTY

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ACROLONTM 7700 THIN FILM ACRYLIC POLYURETHANE

PART A PART A PART B B65-1400 B65-1450 B65V1400 GLOSS SERIES SEMI-GLOSS SERIES HARDENER

Revised: February 20, 2025

APPLICATION BULLETIN

1504-1

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Aluminum

Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

Galvanized Steel

Allow to weather a minimum of six months prior to coating. Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned. Primer required.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable: ASTM D4258 Standard Practice for Cleaning Concrete. ASTM D4259 Standard Practice for Abrading Concrete. ASTM D4260 Standard Practice for Etching Concrete. ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete. SSPC-SP 13/Nace 6 Surface Preparation of Concrete. ICRI No. 310.2R Concrete Surface Preparation.

Surface Preparation Standards				
	Condition of Surface	ISO 8501-1 BS7079:A1	SSPC	NACE
White Metal Near White Metal Commercial Blast Brush-Off Blast		Sa 3 Sa 2.5 Sa 2 Sa 1	SP 5 SP 10 SP 6 SP 7	1 2 3 4
Hand Tool Cleaning	Rusted Pitted & Rusted	C St 2 D St 2	SP 2 SP 2	- -
Power Tool Cleaning	Rusted Pitted & Rusted	C St 3 D St 3	SP 3 SP 3	-

APPLICATION CONDITIONS

Temperature (air, surface, material): 40°F (4.5°C) minimum, 120°F (49°C) maximum At least 5°F (2.8°C) above dew point.

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer*	Use High Solids Compliant Thinner
	#1 (R7K111) up to 10% by volume.
Clean Up**	Use High Solids Compliant Thinner
•	#1 (R7K111).

*For VOC areas >340 g/L: use Reducer #58 or High Solids Compliant Thinner #1 (R7K111) up to 10% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

**For VOC areas >25 g/L, or >3%: use OXSOL 100, High Solids Compliant Thinner #1 (R7K111), MEK, or Xylene. Choose a solvent that is compliant in your area. Confirm compliance with state and local air quality rules before use.

	pray

Pressure	2500-2800 psi minimum (172-193 par)
Tip	013"017" (0.33-0.43 mm)

Conventional Spray

Atomization Pressure.	50 psi (3.4 bar)
Fluid Pressure	10 psi (0.7 bar)
Fluid Nozzle	67ss or equivalent
Air Cap	67PB or equivalent
Needle	
Reduction	see above

Brush

Brush	Bristle	9
Note: Required film t	thickness may not be	e achieved in one coat

Roller

Cover3/8" woven with solvent resistant cor	Cover	3/8" woven	with solvent	resistant core
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If specific application equipment is not listed above, equivalent equipment may be substituted.



ACROLONTM 7700 THIN FILM ACRYLIC POLYURETHANE

PART A PART A PART B B65-1400 B65-1450 B65V1400 GLOSS SERIES SEMI-GLOSS SERIES HARDENER

Revised: February 20, 2025

APPLICATION BULLETIN

1504-1

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with power agitation. Make certain no pigment remains on the bottom of the can. Then combine 4 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with power agitation. If reducer solvent is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:			
	Minimum	Maximum	
Wet mils (microns)	3.1 (77)	8.0 (200)	
Dry mils (microns)	2.0 (50)	5.2 (130)	
~Coverage sq ft/gal (m²/L)	261 (6.4)	522 (12.8)	
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1043 (26.7	7)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule:

40°F (4.5°C) 59°F (10°C) 77°F (25°C) 100°F (38°C)

To touch: 5 hours 3 hours 1 hour 40 minutes
To handle: 12 hours 10 hours 4 hours 2 hours

To recoat:

minimum:4 hoursmaximum:60 days

Pot life: 2.5 hours 2.5 hours 2.5 hours

Pot life is dependent upon temperature and mass.

Sweat-in-time: none required

If maximum recoat time is exceeded, abrade surface before recoating.

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

If maximum recoat time is exceeded, a light abrasion may be necessary to roughen the surface to promote adhesion before recoating.

Chromatic Yellow base must be tinted for proper coverage and hide

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

CLEAN UP INSTRUCTIONS

VOC Restricted Areas (≤25 g/L, or ≤3%): use OXSOL 100 or High Solids Compliant Thinner #1 (R7K111).Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

Exterior Oil-Based

Wood Primer

Y24W08020 (US) Y24WQ8820 (Canada)

SHERWIN WILLIAMS.

CHARACTERISTICS

Exterior Oil-Based Wood Primer is designed for blocking tannin, water, and other stains on exterior wood, manufactured siding, hardboard, rought sawn siding, and trim as a spot primer or overall primer.

- Penetrates and seals bare wood for strong adhesion and a lasting finish.
- Blocks stains from water, wood tannins and knots.
- · Resists Mildew

For use on these surfaces:

- Pine
- Fir
- Cedar
- Redwood
- Oak
- Maple
- Ash
- Hardboard
- Primed Metal
- Previously Painted Surfaces

Color: White

Coverage: 350-400 sq. ft. per gallon 4 mils wet, 2.3 mils dry

Drying and recoat times are temperature, humidity, and film thickness dependent.

Drying Time, @ 50% RH:

 @ 35-45°F
 @ 45°F+

 Touch:
 4-8 hours
 2-4 hours

 Recoat:
 24-48 hours
 24 hours

Finish: 0-18 units @ 85°

Tinting: Requires Blend-A-Color Toner for tinting. For best topcoat color development, use the recommended "P"-shade primer. If desired, up to 4 oz per gallon of Blend-A-Color Toner can be used to approximate the topcioat color. Check color before use.

White Y24W08020

V.O.C. (less exempt solvents):

318 grams per litre; 2.65 lbs. per gallon As per 40 CFR 59.406

Volume Solids: 59 ±2%
Weight Solids: 77 ±2%
Weight per Gallon: 11.39 lbs
Flash Point: 115°F PMCC
Vehicle Type: Alkyd
Shelf Life: 36 months, unopened

Mildew Resistant

This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

COMPLIANCE

As of 08/15/2024, Complies with:

OTC	Yes
OTC Phase II	No
S.C.A.Q.M.D.	No
CARB	No
CARB SCM 2007	No
CARB SCM 2020	No
Canada	Yes
LEED® v4 & v4.1 Emissions	No
LEED® v4 & v4.1 V.O.C.	No
EPD-NSF® Certified	No
MIR-Manufacturer Inventory	No
MPI [®]	Yes

APPLICATION

Apply at temperatures above 35°F (1.6°C)

Do not reduce for stain blocking or in restricted areas.

No reduction needed.

Brush:

Use a natural bristle brush.

Roller:

Use a 3/8 to 3/4 inch nap synthetic roller cover.

For specific brushes and rollers, please refer to our Brush and Roller Guide on sherwin.williams.com.

Spray - Airless:

Pressure 2000 p.s.i. Tip .019-.021 inch

APPLICATION TIPS

When spot priming on some surfaces, a nonuniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.

For exterior exposure, this primer must be topcoated within 14 days with architectural latex or oil finishes.

SPECIFICATIONS

1 coat Exterior Oil-Based Wood Primer 2 coats Appropriate Exterior topcoat

Recommended Architectural Topcoats:

A100® Exterior
All Surface Enamel
Duration® Exterior
Emerald® Exterior
Resilience® Exterior
SuperPaint® Exterior
WoodScapes® Solid Stain

For exterior exposure, this primer must be topcoated within 14 days with architectural latex or oil finishes.

Exterior Oil-Based

Wood Primer

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline 1-800-424-LEAD or log on www.epa.gov/lead or by contacting your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand glossy surfaces dull. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Seal stains from water, smoke, ink, pencil, grease, etc. with an appropriate primer sealer.

Caulking:

Fill gaps between windows, doors, trim and other through-wall openings with the appropriate caulk after priming the surface. Allow proper drying time before application of the primer.

Wood, Composition Board:

Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. Spot prime knots and sap streaks.

On woods that present potential tannin bleeding, such as redwood and cedar, Exterior Oil-Based Wood Primer can be used. Care must be taken to determine if tannins will be activated by the solvent in the coating. To test for bleeding, coat a 4 foot by 4 foot section with the primer. If no bleeding is evident within 4 hours, proceed with complete priming. If bleeding occurs, it may be the result of solvent soluable tannin within the wood. In that case, use Exteror Latex Wood Primer.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

CAUTIONS

For exterior use only.

Non-photochemically reactive.

Not of use on horizontal surfaces, such as a roof, deck, or floor, or where water may collect.

Before using, carefully read **CAUTIONS on label**.

DANGER! HARMFUL OR FATAL IF SWALLOWED. COMBUSTIBLE! VAPOR HARMFUL. IRRITATES EYES, SKIN AND RESPIRATORY TRACT. ALIPHATIC HYDROCARBONS CRYSTALLINE SILICA Contents are COMBUSTIBLE. Keep away from heat and open flame. VAPOR HARMFUL. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG **OVEREXPOSURE.** Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 08/15/2024 Y24W08020 39 318 FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with compliant compatible solvent. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

Duration®

Exterior Acrylic Gloss

K34-Series

SHERWIN WILLIAMS.

CHARACTERISTICS

Duration® Exterior Latex Coating is the result of advances in acrylic technology. **Duration** uses PermaLast® technology to provide you with the most durable and longest lasting coating available for protecting the outside of your home.

VinylSafe™ paint colors allow you the freedom to choose from 100 color options, including a limited selection of darker colors formulated to resist warping or buckling when applied to a sound, stable vinyl substrate.

- Self-priming One Coat Protection
- Low temperature application down to 35° F.
- Easy application
- · Excellent durability and hiding
- · Resists Blistering and Peeling

Color: Most Colors

Coverage: 250-300 sq. ft. per gallon @ 5.3-6.4 mils wet, 2.0-2.4 mils dry, up to 7.0 mils wet: 2.6 mils dry

Drying Time, @ 50% RH:

	@35-45°F	@45°F+
Touch:	2 Hours	1 Hour
Recoat:	24-48 Hours	4 Hours
Drying and	recoat times are tempe	erature, humidity, and
film thickne	ss denendent	-

Finish: 35-45 units @ 60°

Tinting with CCE only:

oz. per gallon	Strength
0-7	SherColor
4-14	SherColor
10-14	SherColor
4-14	SherColor
	gallon 0-7 4-14 10-14

Extra White K34W00251

(may vary by color)

V.O.C.(less exempt solvents):

Less than 50 grams per litre; 0.42 lbs. per gallon As per 40 CFR 59.406

Volume Solids: $37 \pm 2\%$ Weight Solids: $50 \pm 2\%$ Weight per Gallon:10.15 lbsFlash Point:N.A.Vehicle Type:AcrylicShelf Life:36 months, unopenedWVP Perms (US)16.03 gains (hr ft² in Hg)

Mildew Resistant

This coating contains agents which inhibit the growth of mildew on the surface of this coating film.

COMPLIANCE

As of 11/01/2024, Complies with:

ОТС	Yes
OTC Phase II	Yes
S.C.A.Q.M.D.	Yes
CARB	Yes
CARBSCM 2007	Yes
CARB SCM 2020	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	N/A
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	Yes
MIR-Manufacturer Inventory	Yes
MPI [®]	Yes

APPLICATION

When the air temperature is at 35°F (1.7°C), substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 35°F (1.7°C) and at least 5° above the dew point. Avoid using if rain or snow is expected within 2-3 hours.

Do not apply at air or surface temperatures below 35°F (1.7°C) or when air or surface temperatures may drop below 35°F (1.7°C) within 48 hours.

No reduction needed.

Brush:

Use a nylon-polyester brush such as Purdy® Clearcut® Elite™

Roller:

Use a high quality 3/8-3/4 inch nap synthetic roller cover such as Purdy® Marathon®

For additional specific brushes and roller cover recommendations, please refer to our Brush and Roller Guide on the Sherwin-Williams website.

Spray - Airless:

Pressure	2000 p.s.i.
Tip	.015019 inch

APPLICATION TIPS

Make sure product is completely agitated (mechanically or manually) before use.

Thoroughly follow the recommended surface preparations. Most coating failures are due to inadequate surface preparation or application. Thorough surface preparation will help provide long term protection with **Duration** coating. On repaint work, apply one coat of **Duration** coating: on bare surfaces, apply two coats of **Duration**, allowing 4 hours drying between coats.

Do not paint in direct sun. Apply at temperatures above 35°F. During application at temperatures above 80°F, **Duration** sets up quickly. Some adjustment in your painting approach may be required. Paint from a dry area into the adjoining wet coating area. Dries to touch in 1 hour and is ready for service overnight.

On large expanses of metal siding, the air, surface, and material temperatures must be 50°F or higher.

SPECIFICATIONS

Duration Exterior Acrylic Latex is self-priming on most surfaces, Apply 2 coats on new, bare substrates or 1 coat for repaint.

Use on these properly prepared surfaces: Aluminum & Aluminum Siding¹

Galvanized Steel¹

Concrete Block

Split face Block

Cement Composition Siding/Panels

Stucco

Concrete

Plywood

Wood

*Vinyl Siding

Surfaces with a pH greater than 9 must be primed with a high pH-resistant coating such as Loxon Concrete & Masonry Primer.

Standard latex primers cannot be used below 50°F. See specific primer label for that product's application limitations.

Concrete masonry units (CMU) - Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 50°F (10°C) before filling. Use Loxon Acrylic Block Surfacer. The filler must be thoroughly dry before topcoating.

Knots and some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. If applied to these bare woods, the first coat of **DURATION** may show some staining, but it will be trapped in the first coat. A second coat will uniform the appearance. If staining persists, spot prime severe areas with 1 coat of Exterior Oil-Based Wood Primer prior to using **DURATION**.

¹ On large expanses of metal siding, the air, surface, and material temperatures must be 50°F (10°C) or higher.

Duration®

Exterior Acrylic Gloss

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Aluminum and Galvanized Steel:

Wash to remove any oil, grease, or other surface contamination. All corrosion must be removed with sandpaper, wire brush, or other abrading method.

Cement Composition Siding/Panels:

Remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, and peeling or defective coatings. Allow the surface to dry thoroughly. If the surface is new, test it for pH, if the pH is higher than 9, prime with Loxon Concrete & Masonry Primer. After power washing, previously painted masonry may still have a powdery surface that should be sealed with Loxon Conditioner and then apply 1 coat of **Duration**. **Caulking**:

Gaps between windows, doors, trim, and other through-wall openings can be filled with the appropriate caulk after priming the surface. Allow proper drying tine before application of the finish.

Concrete, Masonry, Cement, Block:

All new surfaces must be cured according to the supplier's recommendations—usually about 30 days. Remove all form release and curing agents. Rough surfaces should be filled to provide a smooth surface. If painting cannot wait 30 days, allow the surface to cure 7 days and prime the surface with Loxon Concrete & Masonry Primer. Cracks, voids, and other holes should be repaired with an elastomeric patch or sealant. Concrete masonry units (CMU):

Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 50°F (10°C) before filling. Use Loxon Acrylic Block Surfacer. The filler must be thoroughly dry before topcoating.

Composition Board/Hardboard:

Because of the potential for wax bleeding out of the substrate, apply 1 coat of Exterior Oil-Based Wood Primer and then topcoat.

Stucco:

Remove any loose stucco, efflorescence, or laitance. Allow new stucco to cure at least 30 days before painting. If painting cannot wait 30 days, allow the surface to dry 7 days and prime with Loxon Concrete & Masonry Primer. Repair cracks, voids, and other holes with an elastomeric patch or sealant.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

Previously Painted Surfaces:

Spot prime bare areas with **Duration**, wait 4 hours, and paint the entire surface. Some specific surfaces require specialized treatment.

Steel:

Rust and mill scale must be removed using sandpaper, wire brush, or other abrading method. Bare steel must be primed with a corrosion resistant primer such as All Surface Enamel Primer the same day as cleaned.

Unpainted Surfaces:

Duration can be used as a self-priming coating on many bare surfaces. When used this way, the first coat of **Duration** acts like a coat of primer and the second coat provides the final appearance and performance.

*Vinyl or other PVC Building Products:

Clean the surface thoroughly by scrubbing with warm, soapy water. Rinse thoroughly. If needed prime with appropriate white primer. Do not paint vinyl with any color darker than the original color or having a Light Reflective Value (LRV) of less than 56 unless VinylSafe® Colors are used. If VinylSafe colors are not used the vinyl may warp. Follow all painting guidelines of the vinyl manufacturer when painting. Only paint properly installed vinyl siding. Deviating from the manufacturer's painting guidelines may cause the warranty to be voided.

Wood, Plywood, Composition Board:

Sand any exposed wood to a fresh surface. Patch all holes and imperfections with a wood filler or putty and sand smooth. All patched areas must be primed.

Knots and some woods, such as redwood and cedar, contain a high amount of tannin, a colored wood extract. If applied to these bare woods, the first coat of **Duration** may show some staining, but it will be trapped in the first coat. A second coat will uniform the appearance. If staining persists, spot prime severe areas with 1 coat of Exterior Oil-Based Wood Primer prior to using **Duration**.

CAUTIONS

For exterior use only.
Protect from freezing.
Non-Photochemically reactive.
Not for use on floors

Before using, carefully read **CAUTIONS on label**.

CRYSTALLINE SILICA ZINC: Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 11/01/2024 K34W00251 27 45 **SP, FR**

CLEANUP INFORMATION

Clean spills, spatters, hands, and tools immediately after use with soap and warm clean water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.



DIAMOND-CLAD® CLEAR COAT URETHANE

Part A PART A PART B PART C **CLEAR - GLOSS CLEAR - SEMI-GLOSS** HARDENER CATALYST

B65T115 B65V105 B65C105

Revised: January 14, 2025

PRODUCT INFORMATION

5.40

PRODUCT DESCRIPTION

DIAMOND-CLAD CLEAR COAT URETHANE is a three component, graffiti resistant, acrylic polyurethane clear coat that enhances the finish and weathering properties of newly applied aliphatic urethane coatings. It exhibits excellent graffiti résistance and ease of application by brush or roller.

Designed to be applied within the recoat window of the respective Sherwin-Williams aliphatic urethane.

- Extends the service life and exterior weathering properties of urethane coatings. Enhances the color and gloss of urethane coatings.
- Outstanding application properties

PRODUCT CHARACTERISTICS

Gloss or Semi-Gloss Finish:

Color:

67% ± 2%, mixed, Gloss 66% ± 2%, mixed, Semi-Gloss Volume Solids:

Weight Solids: 73% ± 2%, mixed

VOC (EPA Method 24): <340 g/L; 2.8 lb/gal, mixed

8:4:1; 3 premeasured components Mix Ratio:

0.81 gallons (3.06L) mixed

Recommended Spreading Rate per coat: Minimum Maximum Wet mils (microns) **1.5** 40 3.0 75 Dry mils (microns) 1.0 25 2.0 50 ~Coverage sq ft/gal (m²/L) **545** 13.3 1090 26.6 Theoretical coverage sq ft/gal **1088** 26.0 (m²/L) @ 1 mil / 25 microns dft

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 2.0 mils wet (50 microns):				
	@ 40°F/4.5°C	@ 77°F/25°C	@ 100°F/38°C	
		50% RH		
To touch:	2 hours	30 minutes	20 minutes	
To handle:	12 hours	3 hours	1.5 hours	
To recoat with	itself, if requi	red:		
minimum:	12 hours	3 hours	1.5 hours	
maximum:	7 days	7 days	7 days	
To cure:	7 days	7 days	7 days	
Pot Life:	2 hours	1 hour	30 minutes	
Sweat-in-Time:		None		

If maximum recoat time is exceeded, abrade surface before recoating Drying time is temperature, humidity, and film thickness dependent.

Shelf Life: Part A (gloss) - 12 months, unopened

Part A (semi-gloss) - 24 months, unopened

Part B - 12 months, unopened Part C - 12 months, unopened

Store indoors at 40°F (4.5°C) to 100°F (38°C)

Flash Point: 98°F (37°C) PMCC, mixed

Reducer/Clean Up: R7K216 or R6K30

RECOMMENDED USES

- For exterior use over newly applied aliphatic urethane coatings in industrial environments
- To enhance urethane coatings by providing extended weathering properties
- Use where graffiti resistance is important
- Use on:
 - Water tanks
- Storage tank exteriors
- Bridges
- **Pipelines** Refineries
- Wastewater facilities
- Amuseument parks
- Commercial buildings
- Corporate logos/signs
- Acceptable for use in high performance architectural applications.
- Suitable for use in USDA inspected facilities

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10/NACE 2

System Tested*:

1st ct: Epolon II Multi-Mil Epoxy @ 2-4 mils (50-100 microns) dft

2nd ct: Poly-Lon HP @ 2-4 mils (50-100 microns) dft 3rd ct: Diamond-Clad Clear Coat @ 1-2 mils (25-50 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resis- tance (semi-gloss)	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	55 mg loss
Accelerated Weath- ering (gloss)	ASTM D4587, QUV-A, 10,000 hours	100% gloss retention
Adhesion (gloss)	ASTM D4541	1250 psi
Corrosion Weather- ing (gloss)	ASTM D5894, 9 cycles, 3000 hours	Passes, no blistering, cracking, rusting, or delamination
Direct Impact Resistance (semi-gloss)	ASTM D2794	120 in lb
Dry Heat Resistance	ASTM D2485	200°F (93°C)
Exterior Exposure	5 years at 45° South	No blistering, crack- ing, or chalking; 85% gloss retention, <4 MacAdam unit color change
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Graffiti Resistance	Graffiti materials applied - epoxy ester spray, acrylic spray, alkyd spray, ballpoint pen ink, crayon, lipstick	All materials were removed easily and completely with either xylene or MEK
Pencil Hardness (gloss)	ASTM D3363	НВ
Salt Fog Resistance (gloss)	ASTM B117, 3000 hours	Passes, no blistering or rusting
Diamond-Clad meets	the performance requir	ements of SSPC Pain

No. 36, Level 3.



DIAMOND-CLAD® CLEAR COAT URETHANE

CLEAR - GLOSS Part A PART A **CLEAR - SEMI-GLOSS** PART B HARDENER PART C CATALYST

B65T115 B65V105 B65C105

Revised: January 14, 2025

PRODUCT INFORMATION

5.40

RECOMMENDED SYSTEMS

Apply Diamond-Clad Clear Coat Urethane @ 1.0 - 2.0 mils (25-50 microns) dft/ct over the following Sherwin-Williams aliphatic

Aliphatic Urethane	coat within
Acrolon 218 HS Acrylic Polyurethane	30 days
Corothane I Aliphatic Finish Coat	7 days
Corothane II Polyurethane	14 days
Envirolastic 940 LV	90 days
Fluorokem HS 100	45 days
Hi-Solids Polyurethane	14 days
Hi-Solids Polyurethane 250	30 days
Poly-Lon HP Polyurethane	48 hours
SherThane 2K Urethane	14 days

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Refer to data page of the urethane to be topcoated.

Surface Preparation Standards					
	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal Near White Metal Commercial Blast Brush-Off Blast		Sa 3 Sa 2.5 Sa 2 Sa 1	Sa 3 Sa 2.5 Sa 2 Sa 1	SP 5 SP 10 SP 6 SP 7	1 2 3 4
Hand Tool Cleaning	Rusted Pitted & Rusted	C St 2 D St 2	C St 2 D St 2	SP 2 SP 2	-
Power Tool Cleaning	Rusted Pitted & Rusted	C St 3 D St 3	C St 3 D St 3	SP 3 SP 3	

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 40°F (4.5°C) minimum, 120°F (49°C)

maximum

(air, surface, and material) At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 0.81 gallons (3.06L) mixed

2 quarts (1.89L) in a 1 gallon (3.78L) Part A

container

1 quart (0.94L) Part B

Part C 8 oz (0.23L) container

8.74 ± 0.2 lb/gal; 1.05 Kg/L, mixed Weight:

SAFETY PRECAUTIONS

Refer to the SDS sheet before use

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED. STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.



DIAMOND-CLAD® CLEAR COAT URETHANE

PART A PART A PART B PART C CLEAR - GLOSS CLEAR - SEMI-GLOSS HARDENER CATALYST B65T105 B65T115 B65V105 B65C105

Revised: January 14, 2025

APPLICATION BULLETIN

5.40

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

General Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure good adhesion.

Refer to data page of the respective aliphatic urethane coating to be topcoated.

Aliphatic Urethane	coat within
Acrolon 218 HS Acrylic Polyurethane	30 days
Corothane I Aliphatic Finish Coat	7 days
Corothane II Polyurethane	14 days
Envirolastic 940 LV	90 days
Fluorokem HS 100	45 days
Hi-Solids Polyurethane	14 days
Hi-Solids Polyurethane 250	30 days
Poly-Lon HP Polyurethane	48 hours
SherThane 2K Urethane	14 days

APPLICATION CONDITIONS

Temperature:

40°F (4.5°C) minimum, 120°F (49°C)

maximum

(air, surface, and material)

At least 5°F (2.8°C) above dew point

Relative humidity:

APPLICATION EQUIPMENT

85% maximum

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up:Reducer R7K216 or

Reducer R/K216 of

Do not add reducer solvent more than 30 minutes after mixing material together.

Brush

Brush.....Natural Bristle

Reduction*As needed up to 7% by volume

Roller

HVLP

SATA NR 2000 HVLP Spray gun/gravity feed 1.4 mm set aircap, needle, nozzle 40 psi air pressure

*Other areas (<420 g/L): Reducer R7K216 or Reducer R6K30 up to 10% by volume. Choose a reducer that is compliant in your area. Confirm compliance with state and local air quality rules before use.

If specific application equipment is not listed above, equivalent equipment may be substituted.

Surface Preparation Standards					
	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal Near White Metal Commercial Blast Brush-Off Blast		Sa 3 Sa 2.5 Sa 2	Sa 3 Sa 2.5 Sa 2	SP 5 SP 10 SP 6	1 2 3
Hand Tool Cleaning	Rusted Pitted & Rusted	Sa 1 C St 2 D St 2	Sa 1 C St 2 D St 2	SP 7 SP 2 SP 2	4 - -
Power Tool Cleaning	Rusted Pitted & Rusted	C St 3 D St 3	C St 3 D St 3	SP 3 SP 3	-



DIAMOND-CLAD®CLEAR COAT URETHANE

PART A
PART A
PART B
PART C

CLEAR - GLOSS CLEAR - SEMI-GLOSS HARDENER CATALYST B65T105 B65T115 B65V105 B65C105

Revised: January 14, 2025

APPLICATION BULLETIN

5.40

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Combine 8 parts by volume of Part A with 1 part by volume of Part C. Mix thoroughly. Then add 4 parts by volume of Part B to the mixture and mix thoroughly with low speed power agitation. Do not shake. All components are premeasured.

If reducer solvent is used, add only after all components have been thoroughly mixed. Add within 30 minutes of mixing components together.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	1.5 40	3.0 75
Dry mils (microns)	1.0 25	2.0 50
~Coverage sq ft/gal (m²/L)	545 13.3	1090 26.6
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1088 26.0	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 2.0 mils wet (50 microns):

	@ 40°F/4.5°C	@ 77°F/25°C	@ 100°F/38°C
		50% RH	
To touch:	2 hours	30 minutes	20 minutes
To handle:	12 hours	3 hours	1.5 hours
To recoat with	itself, if requi	red:	
minimum:	12 hours	3 hours	1.5 hours
maximum:	7 days	7 days	7 days
To cure:	7 days	7 days	7 days
Pot Life:	2 hours	1 hour	30 minutes
Sweat-in-Time:		None	

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer R7K216 or Reducer R6K30. Clean tools immediately after use with Reducer R7K216 or Reducer R6K30. Follow manufacturer's safety recommendations when using any solvent.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

PERFORMANCE TIPS

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

Allow to dry one week before checking adhesion.

Temperatures above 77°F (25°C) will shorten pot life.

Hot Weather Applications. When air, surface, and/or material temperature is above 85°F (29°C), the amount of B65C105 catalyst may be reduced up to 20% for every 5°F (2.8°C) over 85°F (29°C).

Do not add reducer solvent more than 30 minutes after mixing material together.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Multi-Purpose

Interior-Exterior Latex Primer-Sealer

B51-450 Series

COMPLIANCE

As of 7/28/2023, Complies with:

Yes
Yes

APPLICATION

When the air temperature is at 35°F, substrates may be colder; prior to painting, check to be sure the air, surface and material temperature is above 35°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 2-3 hours. Air and surface temperatures must not drop below 35°F for 48 hours after application.

Do not reduce for stain blocking.

Brush:

Use a nylon-polyester brush.

Roller:

Use a 3/8 inch nap soft woven cover.

For specific brushes and rollers, please refer to our Brush and Roller Guide on sherwin-williams.com

Spray - Airless:

Pressure 2000 p.s.i. Tip .015-.021 inch

APPLICATION TIPS

For best topcoat color development, use a recommended "P"-shade primer. Check color before use

When spot priming on some surfaces, a nonuniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.

For optimal performance, this primer must be topcoated with a latex, alkyd-oil, water-based epoxy, or solvent based epoxy coating on architectural applications.

For exterior exposure, this primer must be topcoated within 14 days with architectural latex or oil finishes.

General Priming: Multi-Purpose Interior-Exterior Latex Primer-Sealer can be topcoated in 1 hour in non-stain blocking applications.

CHARACTERISTICS

Multi-Purpose Interior-Exterior Latex Primer-Sealer:

- Assures uniform appearance of topcoats
- · Fast Dry
- Apply at temperatures down to 35°F
- Assures adhesion of the topcoat to slick, glossy surfaces
- Seals out solvent sensitive stains tar, solvent based markers, etc.
- Seals minor dried water stains and tannin
- Provides easy "slip" for positioning wallpaper
- Passes ASTM D3273/3274

Use on interior:

- Ceiling Tiles Paneling Wall Laminate
- Cured Plaster Drywall Varnished Woodwork
- Kitchen Cabinets Čeramic Wall Tile
- Under Wallcovering

Use on Interior and Exterior:

- Wood Aluminum Galvanized Metal
- Previously Painted Surfaces PVC Piping
- Drywall Concrete and Masonry Many Plastics
- Glossy Surfaces Fiberglass Copper
- Glazed Block

Color: White & Deep Base For best color development, use the recommended "p"-

For best color development, use the recommended "p' shade primer. Check color before use.

Coverage: 400 sq. ft. per gallon @ 4 mils wet;1.4 mils dry

Drying Time, @ 77° F, 50% RH:

Touch: 30 minutes
Recoat as a primer: 1 hour
Recoat as a stain sealer: 4 hours
Recoat to apply wallcovering: 2 hours
Drying and recoat times are temperature, humidity, and film thickness dependent.

Finish: 3-13 units @ 85°

Tinting with CCE Only:

Baseoz. per gallonStrengthWhite0-4SherColorDeep Base4-12SherColor

White B51W00450

(may vary by color)

V.O.C. (less exempt solvents):

Less than 50 grams per litre; 0.42 lbs. per gallon As per 40 CFR 59.406

Volume Solids: $35 \pm 2\%$ Weight Solids: $52 \pm 2\%$

Weight per Gallon: 10.89 lbs
Flash Point: N.A.

Vehicle Type: Styrenate Acrylic Latex Shelf Life: 36 months, unopened WVP Perms (US): 23.09 grains/(hr ft² in Hg)



continued on back

SPECIFICATIONS

1 coat Multi-Purpose Interior-Exterior Latex Primer-Sealer

2 coats appropriate topcoat

Recommended Architectural Topcoats:

All Surface Enamels
A-100® Exterior Latex
Duration® Exterior & Duration Home® Interior
Emerald® Exterior & Interior
Emerald® Urethan Trim Enamel
SuperPaint® Exterior & Interior
ProClassic® Interior Enamels
ProMar® Interior

Recommended Architectural Topcoats:

Pro Industrial™ Acrylic Coating
Pro Industrial™ Pre-Cat Epoxy
Pro Industrial™ Pre-Cat Urethane
Pro Industrial™ Waterbased Catalyzed Epoxy

Multi-Purpose

Interior-Exterior Latex Primer-Sealer

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE. ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline 1-800-424-LEAD or loa on www.epa.gov/lead.

Remove all surface contamination by washing with a appropriate cleaner, rinse thoroughly and allow to dry. Scrape and sand peeled or checked paint to a sound surface. Sand Glossy surfaces dull. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Special recommendations:

After priming stained surfaces, allow to dry 4 hours, test a small area for bleeding by applying the topcoat before painting the entire project. If the stain bleeds through, apply a second coast of primer, and allow to dry overnight and retest before topcoating. For a complete primer outside, use appropriate exterior primers.

On hard, sick, glossy or otherwise hard to paint surfaces, after preparing the surface, apply a test area of this primer, allow to dry properly and test for adhesion.

Caulking:

Fill gaps between walls, ceiling, crown moldings, and other with the appropriate caulk after priming the surface

Drywall:

Fill cracks and nail holes with patching pastespackle and sand smooth. Joint compounds must be cured and sanded smooth. Remove all sanding dust.

Fire restoration work:

Thoroughly clean the surface before applying to smoke-stained areas. Apply one or two coats of Multi-Purpose Latex Primer/Sealer and test a small area for bleeding before painting the entire surface.

Always check for compatibility and adhesion to the surface by applying a test patch of 2-3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

Tile:

Laminate, ceramic, and plastic tiles, and similar glossy surfaces, must be free of all oil, grease, and soap residue. Do not use this product in areas subject to excessive water, e.g.: in showers, around sinks, on counter tops.

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

Plaster:

Bare plaster must be cured, usually 30 days, and hard. If panting cannot wait, allow the surface to dry 7 days and prime with Loxon Concrete and Masonry Primer. Soft, porous, or powdery plaster should be treated with a solution of 1 pint household vinegar to 1 gallon of clean water. Repeat until the surface is hard, rinse with clear water and allow to dry.

When used as a primer under wallcovering: After the wallcovering has been applied and the adhesive has dried and cured, wait at least 21 days before removing the wallcovering to avoid damage to the drywall.

Wood Exterior:

Sand any exposed, weathered wood to a fresh surface. Replace any deteriorated wood. On woods that present potential tannin bleeding, such as redwood and cedar, Multi-Purpose Latex can be used. Care must be taken to determine if tannins will be activated by the water in the coating. To test for bleeding, coat a 4 foot by 4 foot section with the primer. If no bleeding is evident within 4 hours, proceed with complete priming. If bleeding occurs, use Exterior Oil-Based Wood Primer.

For a complete whole house primer outside, use Exterior Latex Wood Primer or Exterior Oil-Based Wood Primer.

CAUTIONS

Protect from freezing. Non-Photochemically reactive.

Before using, carefully read **CAUTIONS on label**.

CRYSTALLINE SILICA Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 7/28/2023 B51W00450 41 00

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and clean warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

Loxon®

Concrete and Masonry Primer-Sealer

US LX02W0050. Canada LX02WQ050 White

CHARACTERISTICS

Loxon Concrete & Masonry Primer-Sealer is an acrylic coating specifically engineered for interior and exterior, above grade, masonry surfaces requiring a high-performance primer. It is highly alkali and efflorescence resistant and can be applied to a surface with a pH of 6 to 13.

Loxon Concrete and Masonry Primer-Sealer: Seals and adheres to concrete, brick, stucco and

Conditions porous masonry surfaces.

Use on above grade masonry surfaces for a long-

Apply to masonry and concrete surfaces that are at least 7 days old.

Prevents harm to subsequent coatings by alkalies in the substrate.

For use on these surfaces:

Concrete, Concrete Block, Brick, Stucco, EIFS Fiber Cement Siding, Plaster, Mortar, Exterior Wall Cladding, Tilt-Up/Pre-Cast Concrete

0-10 units @ 85° Finish: Color: White

Coverage:

Wet mils: 5.3-8.0 Dry mils: 2.1-3.2 Coverage: 200-320 sq. ft. per gallon Coverage on porous & rough stucco 80 square feet per

Coverage (thin-mil primer application to new construction tilt-up/precast concrete):

Wet mils: 2.7-4.0 1.1-1.6 Dry mils: Coverage: 400-600 sq. ft. per gallon

Drying Schedule 77°F @ 50% RH:

To touch 4 hours To recoat 24 hours Air and surface temperatures must not drop below 40°F

for 48 hours after application. Drying and recoat times are temperature, humidity, and

film thickness dependent.

Tinting with CCE only:

For best topcoat color development, use the recommended "P"-shade primer. If desired, up to 4 oz. per gallon of ColorCast Ecotoners can be used to approximate the topcoat color. Check color before use.

Extra White LX02W0050

V.O.C. (less exempt solvents):

less than 50 grams per litre; 0.42 lbs. per gallon As per 40 CFR 59.406

40 ±2% Volume Solids: Weight Solids: 55 ±2% Weight per Gallon: 10.92 lbs Flash Point: N.A. Vehicle Type: Acrylic

Shelf Life:

36 months, unopened

COMPLIANCE

As of 07/19/2023, Complies with:

OIC	Yes
OTC Phase II	Yes
S.C.A.Q.M.D.	Yes
CARB	Yes
CARB SCM 2007	Yes
CARB SCM 2020	Yes
Canada	Yes
LEED® v4 & v4.1 Emissions	Yes
LEED® v4 & v4.1 V.O.C.	Yes
EPD-NSF® Certified	Yes
MIR-Product Lens Certified	Yes
MPI [®]	Yes

APPLICATION

Temperature:

minimum 40°F The following is a guide. Changes in pressures

and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer: No reduction necessary

Airless Spray: 2000-2700 p.s.i. Pressure .19 inch Tip Brush: nylon-polyester Roller Cover: 1/2 to 11/2 inch nap synthetic cover

Spray and back roll on porous & rough stucco to achieve required film build and a pin-hole free surface.

For porous block, a coat of Loxon Acrylic Block Surfacer is required to achieve a pinhole free surface

Apply at temperatures above 40°F. When the air temperature is at 40°F, substrates may be colder; prior to painting, check to be sure the air, surface, and material temperature are above 40°F and at least 5°F above the dew point. Avoid using if rain or snow is expected within 4-6 hours.

Do not apply at air or surface temperatures below 40°F or when air or surface temperatures may drop below 40°F within 48 hours.

For best performance results, avoid painting in direct sun or painting substrates with elevated surface temperatures.

Do not reduce.

May be applied to damp but not to wet surfaces.

APPLICATION TIPS

Apply paint at the recommended film thickness and spreading rate as indicated on the page. Application of coating below minimum recommended spreading rate may adversely affect the coating systems performance.

When spot priming on some surfaces, a nonuniform appearance of the final coat may result, due to differences in holdout between primed and unprimed areas. To avoid this, prime the entire surface rather than spot priming.

For optimal performance, this primer-sealer must be topcoated with a latex, alkyd-oil, water-based epoxy, or solvent based epoxy coating on architectural applications.

For exterior use, this primer-sealer must be topcoated within 14 days to prevent degradation due to weathering.

RECOMMENDED SYSTEMS

Concrete, Masonry, Cement:

1 coat Loxon Concrete & Masonry Primer 2 coats Appropriate Topcoat

Stucco, Fiber Cement Siding, EIFS:

1 coat Loxon Concrete & Masonry Primer 2 coats Appropriate Topcoat

Recommended Architectural Topcoats:

A-100 Exterior Latex **Duration Exterior & Duration Home Interior Emerald Exterior & Interior Loxon Masonry Coatings** SuperPaint Exterior & Interior ProClassic Interior ProMar Interior

Recommended Industrial Topcoats:

Industrial Enamels Pro Industrial Series Water Based Catalyzed Epoxy

Industrial finishes have been tested for architectural applications only. Loxon Concrete and Masonry Primer has not been tested in environments subject to chemical attack. Any recommendations for use in such areas must follow a thorough evaluation of the effects of the environment on the Loxon Concrete and Masonry Primer and topcoat system.

Loxon®

Concrete and Masonry Primer-Sealer

SURFACE PREPARATION

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting: US - National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead; Canada - your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer-sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Masonry, Concrete, Stucco:

All new surfaces must cure for at least 7 days. Remove all form release and curing agents. Pressure clean to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair cracks, voids, and other holes with an appropriate patching compound or sealant.

Concrete and mortar must be cured at least 7 days at 75°F. Moisture content must be 15% or lower. On tilt-up and poured-in-place concrete, commercial detergents and sandblasting may be necessary to remove sealers, release compounds, and to provide an anchor pattern. Fill bugholes, air pockets and other voids with an acrylic elastomeric patch or sealant.

Caulking:

Fill gaps between walls, ceilings, crown moldings, and other trim with the appropriate caulk after priming the surface

SURFACE PREPARATION

Mildew:

Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts clean water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach-water solution.

PHYSICAL PROPERTIES

Do not paint on wet surfaces.

LX02W0050

Water Vapor Permeance (US):

Method: ASTM D1653 (grains/(hr ft2 in Hg) Result: 25.79 perms

Flexibility:
Method:
Method:
ASTM D522
Method B, 180° bend, 1/8 inch mandrel

esult[.]

Alkali Resistance:

Method:
Result:
ASTM D1308
Pass

Mildew Resistance:

Method: ASTM D3273/D3274
Result: Pass

Efflorescence:

Method: ASTM D7072-04 Result: Pass (None)

Wind-Driven Rain Test:

Method: ASTM D6904-03 Result: Pass

SAFETY PRECAUTIONS

For interior or exterior use.

Protect from freezing.

Do not apply at temperatures below 40°F. Air and surface temperatures must not drop below 40°F for 48 hours after application.

Before using, carefully read **CAUTIONS** on label.

ZINC Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

HOTW 07/19/2023 LX02W0050 50 46 FRC, SP

CLEANUP INFORMATION

Clean spills, spatters, hands and tools immediately after use with soap and warm clean water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.