





# **GENERAL NOTES:**

#### **APPLICABLE CODES:**

- These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2015 Edition and the 'Minimum Design Loads for Buildings and Other Structures' (ASCE/SEI 7-10).
- All material and workmanship shall be in accordance with applicable provisions of the codes specified above.
- Design is based on the current applicable building codes listed above and shall be void if the building code at the time of construction changes from the codes listed above.

## LOADS USED IN DESIGN:

A. Gravity Loading

Water:	62.4 pcf
Concrete Dead Load:	150 pcf
Live Load:	40 psf

Lateral Loading

Water:	62.4 pcf
Earth:	40 pcf

### **COORDINATION:**

- It is the responsibility of the customer/client/owner to confirm the geotechnical parameters for each proposed site. Refer to FOUNDATION notes for more information.
- The design requires that a ground water pressure to the pool shell be relieved by installation of a hydrostatic valve with main drain detail.
- The pool shall only be emptied in an approved manner under properly controlled conditions. Customer/Client/Owner to conduct regular maintenance check of the drain valve to ensure that the main drain valve does not become blocked, It is crucial that the drain valve is not blocked and is fully functioning prior to emptying pool.
- Customer/Client/Owner shall ensure the pool remains full in the event of flooding or general rise in ground water table level.
- The design assumes that the proposed site is relatively flat with a positive final grade slope away from the pool to prevent ponding of water near the pool.

## FOUNDATION:

- The client shall engage a state licensed and registered Geotechnical Engineer to determine site and soil conditions of the proposed location of the pool. The geotechnical investaigation shall provide for the following:
  - General site conditions.
  - Subsurface conditions including the presence of groundwater.
  - Recommendation for de-watering site excavation
  - Depth to suitable bearing strata
  - Earthwork recommendations including site excavatability, structural fill recommendations, fill placement specifications, subgrade preparation recommendations and compaction
  - Predicted characteristic soil movement, soil suction zone, and soil classifications.
  - Site constraints and construction considerations that may impact proposed layout, including slopes, vegetation, and existing building building foundations.
  - Lateral earth pressures.
  - Recommendations on foundation type and soil design parameters.
  - 10) Laboratory testing of the on site soil to provide data for geotechnical parameters including:
    - Moisture content
    - Atterberg limits
    - particle size distribution
    - **Expansion potential**
    - Compressibility
  - 11) Potential presence of acid sulphate soils.
  - 12) Confirm all geotechnical assumptions used in the design of the pool shell.
    - Maximum unit weight of soil = 105 pcf
    - Minimum allowable soil bearing capacity = 2,000 psf.
- Foundation excavations to be maintained in a firm dry condition. All uncontrolled fill, top soil and organic material shall be removed
- Excavation shall not extend below the line of influence extending from the existing foundations as provided by the geotechnical engineer.
- Where undisturbed structurally sound strata is not encountered the geotechnical engineer shall provide recommendations on soil improvement methods or provide suitable relocation of proposed pool site to achieve compliance with the structural and geotechnical design criteria.

#### CONCRETE:

- A. Concrete has been designed and shall be constructed in accordance with the American Concrete Institute 'Building Code Requirement Reinforced Concrete' and 'Specifications for Structural Concrete for Buildings' (ACI 318 and ACI 301) latest editions. Section 1.3"Inspection" of ACI 318 is deleted in its entirety, see 'Field Observations' paragraph. All concrete shall be of stone aggregate, unless noted otherwise.
- Concrete shall have a 28 day compressive strength of 8,000 psi with type I/II cement using a maximum aggregate size of 3/8".
- Reinforcing shall be new billet steel conform to ASTM A615, grade 60. Splices shall be contact lap splices with a minimum length of (30) bar diameters minimum.
- All hooks and bends in the reinforcement shall be in accordance with the current ACI 318.
- For the proper placement of the reinforcement provide chairs, bolsters, additional reinforcement, and accessories necessary to support the reinforcement at the positions shown on plans. Support of reinforcement on form ties, wood, brick, brickbat or other unacceptable material, will not be permitted.
- Reinforcement shall be placed so that there is a minimum concrete cover of 1-1/2".
- All concrete shall be vibrated during placement.
- Concrete finish shall be in accordance the current concrete standard ACI 301. Additional requirements include:
  - No chips over 1" in diameter.
  - No air bubbles over 3/8" in diameter.
  - No hairline cracks over 4" long
- Forms and shoring must not be removed until the shell is strong enough to support it's own weight. Cure all concrete surfaces by keeping surfaces continually wet for a minimum of 3 days and kept moist for a total of 7 days followed by a gradual drying period. Curing compounds shall not be used.
- **Quality Control** 
  - Reference standard: ACI 301 Chapters 16 and 17, in latest edition.
  - Slump tests: The contractor shall provide necessary equipment and shall make test in conformity with ASTM C143.
  - Control tests:
    - Control tests of concrete work shall be made on every unit produces or every 50 cubic yards or fraction.
    - b) Each test shall consist of four standard 6" test cylinders cast and cured in accordance with ASTM C31 and ASTM C172.
    - Sample concrete at point of placement.
    - One cylinder shall be tested at the end of 7 days after placing, two cylinders shall be tested at 28 days after placing and the remaining cylinder shall be stored until its disposition is determined by the Architect.
    - e) In general, remaining cylinder will be tested only when previous test reports indicated unsatisfactory results.
    - Tests shall be made at time control tests are taken and so stated in reports to determine slump, air content, unit weight and temperature of concrete.
    - All tests shall be made in accordance with ASTM C138 or ASTM C231



COMPAN PLUNGEPOOL

**ENGINEER:** TEA DRAWN BY: DATE: 10/07/2020 **REVISION:** DATE: Update Lifting Lugs 3/1/2021General Update 3/4/2021

Added Pile Dtl/Layout 4/27/2021

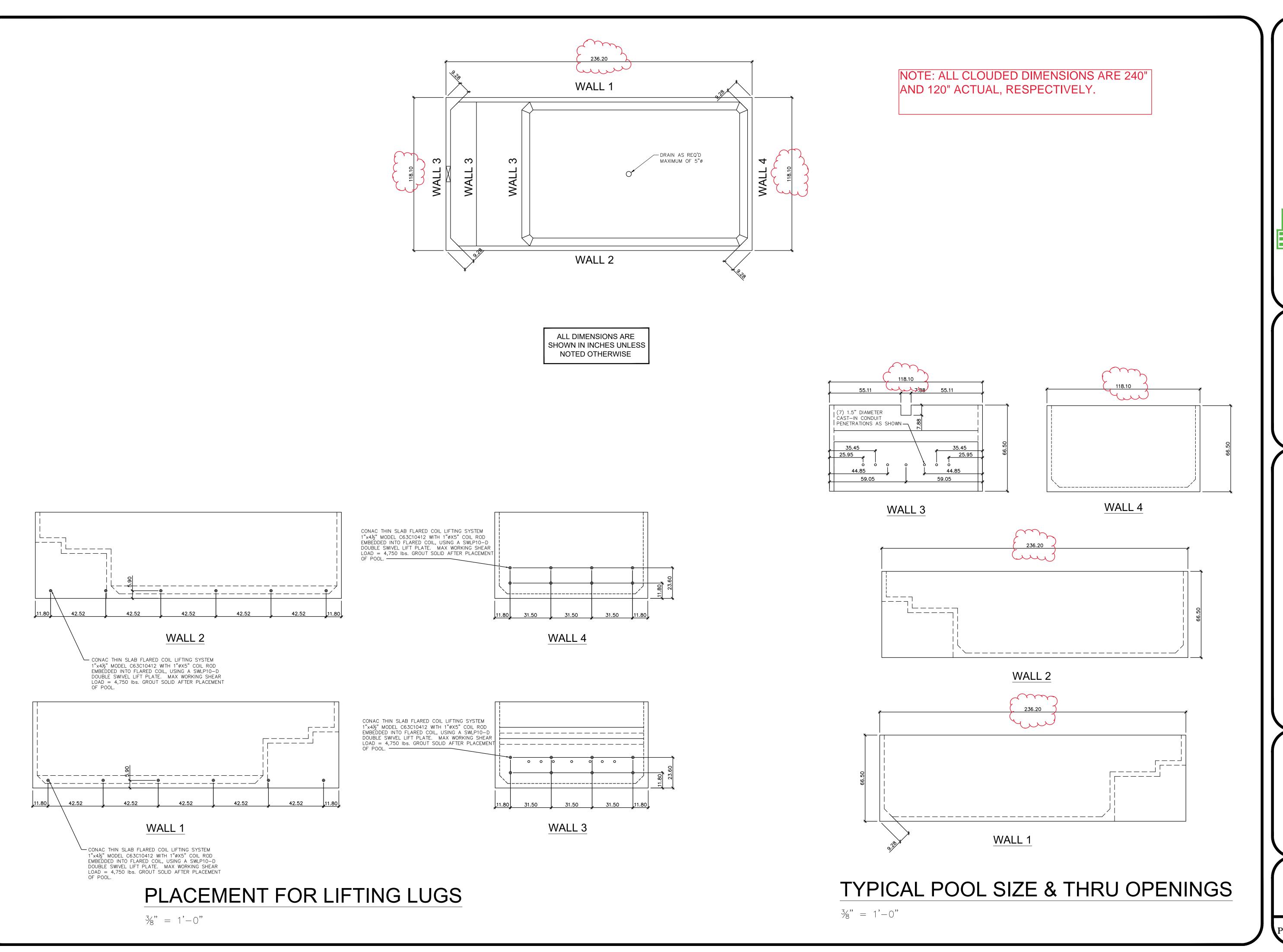
3/22/2021

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SHEET No.

General Revisions

PROJECT No. 24395

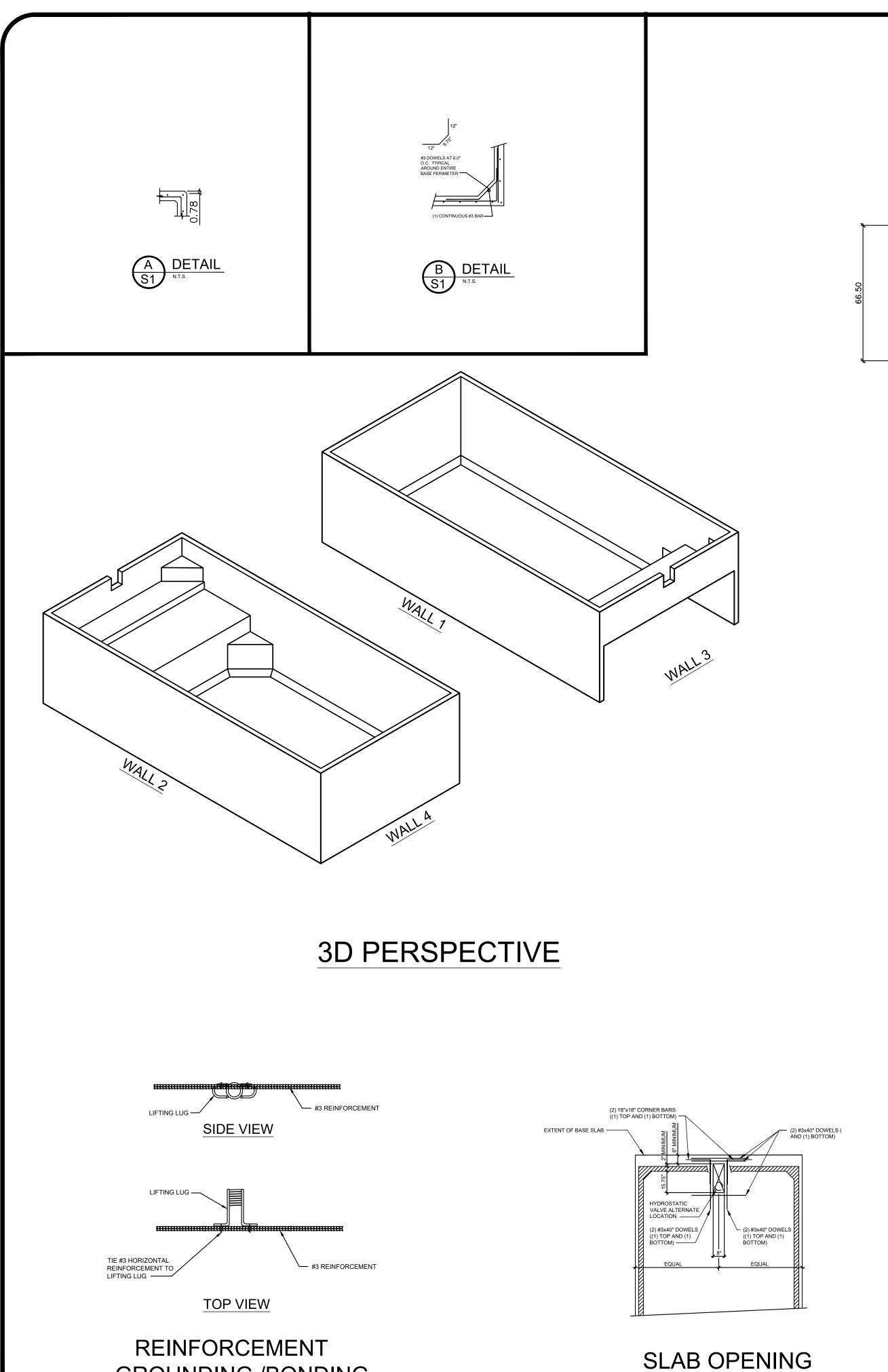


ENGINEER: DATE: 10/07/2020 REVISION:

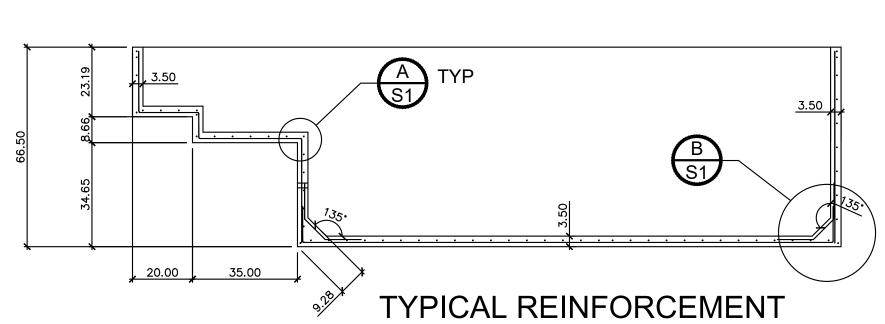
Update Lifting Lugs 3/1/2021 General Update General Revisions 3/22/2021 Added Pile Dtl/Layout 4/27/2021

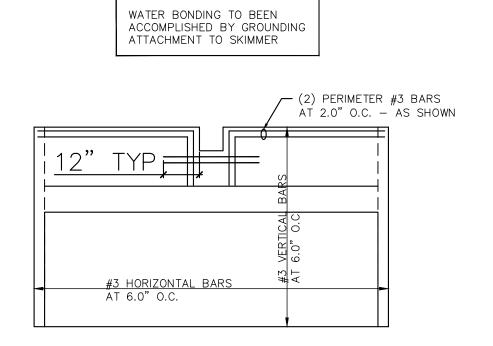
OF 4

PROJECT No. 24395



GROUNDING /BONDING



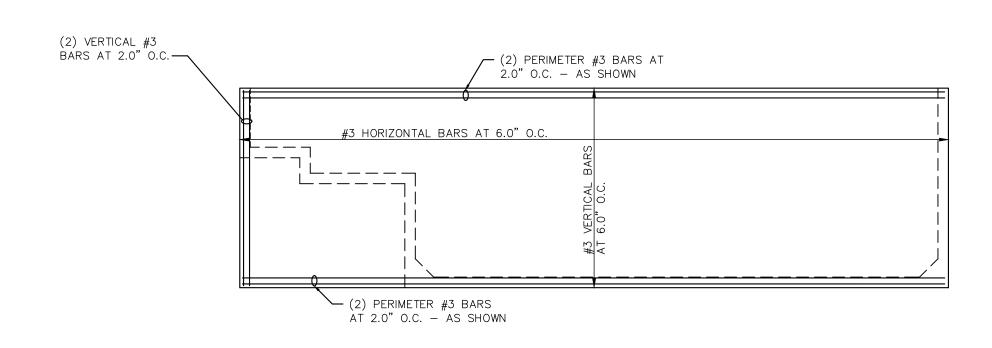


# WALL 3 REINFORCEMENT

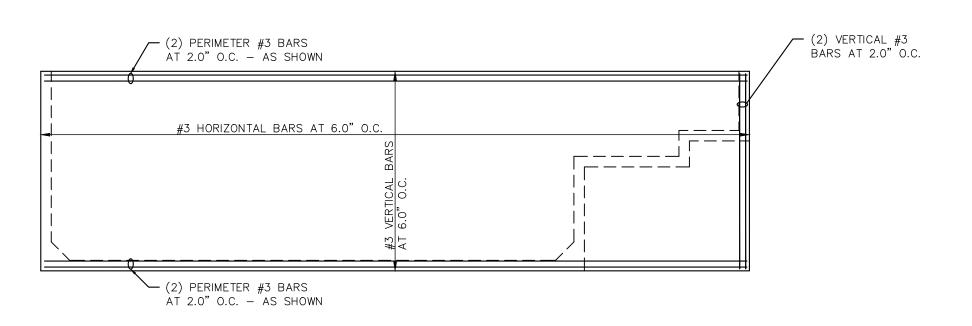
(2) PERIMETER #3 BARS AT 2.0" O.C. — AS SHOWN		
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WALL 4 REINFORCEMENT



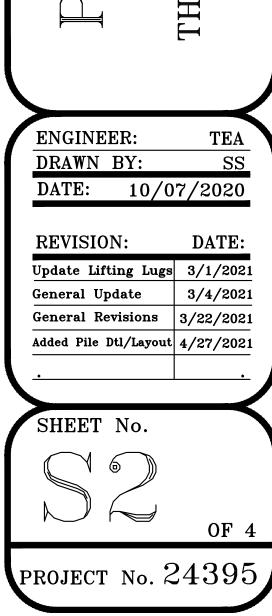
# WALL 2 REINFORCEMENT



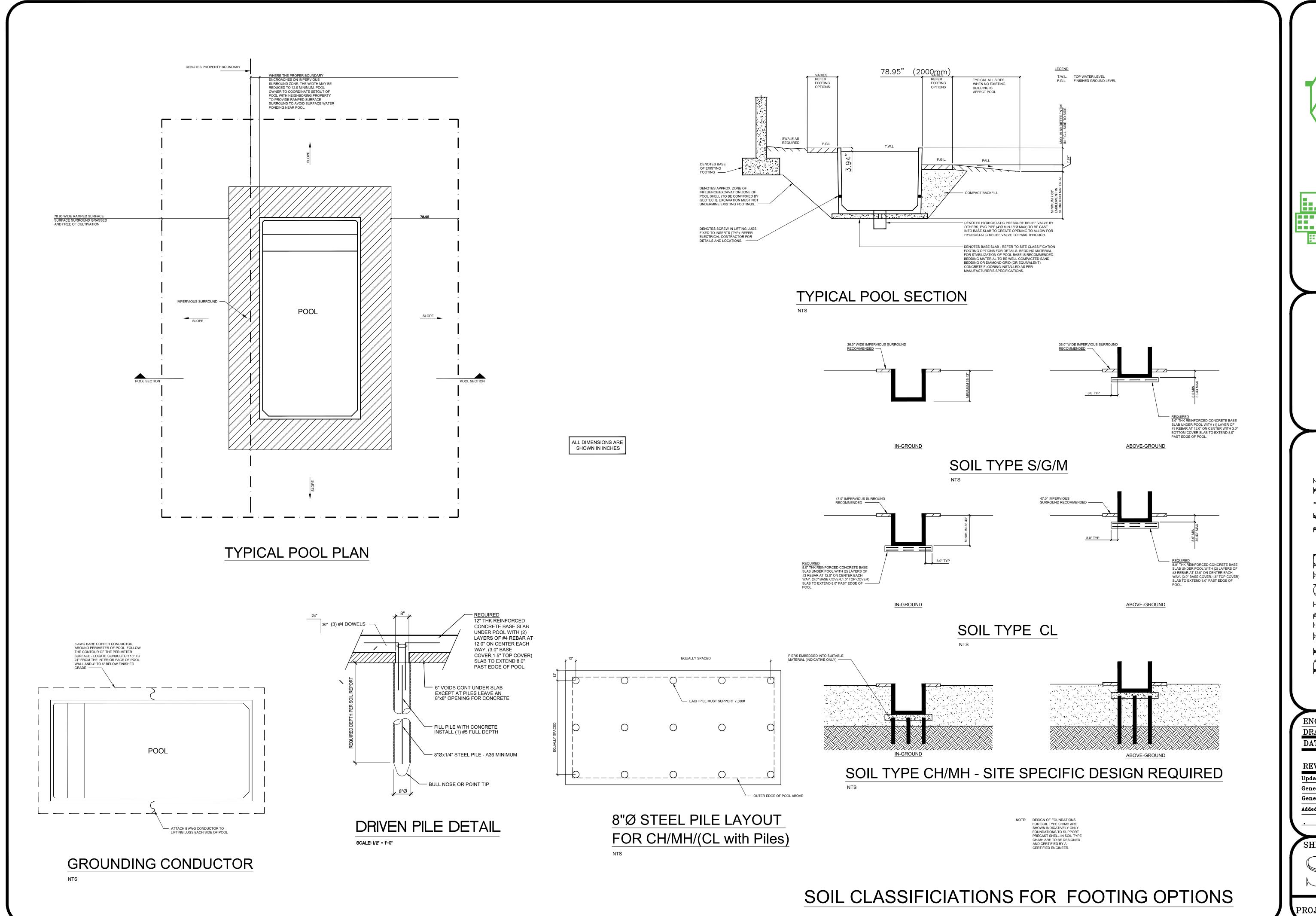
WALL 1 REINFORCEMENT

# TYPICAL REINFORCEMENT

 $\frac{3}{8}$ " = 1'-0"



PLUNGEPOOL



GREENWORKS
ENGINEERING 600 N Pearl Street
8 CONSULTING Dallas, Texas 7520
Texas Eng. Firm: 20170 (855) 349-6757

HE PLUNGEPOOL COMPANY

ENGINEER: TEA
DRAWN BY: SS
DATE: 10/07/2020

REVISION: DATE:
Update Lifting Lugs 3/1/2021

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General Update 3/4/2021
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OF 4

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