GENERAL SITE LAYOUT NOTES

1. ALL DIMENSIONS SHOWN ARE TO EDGE OF PAVEMENT, BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCHBASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL DISTURBANCES INCURRED TO ANY ADJOINING PROPERTY DUE TO CONSTRUCTION OR DEMOLITION SHALL BE RESTORED TO THE PREVIOUS CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER, MUNICIPALITY OR STATE AUTHORITY.
3. PROPERTY LINE AND RIGHT-OF-WAY MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION, IF DISTURBED, THEY SHALL BE RESET BY A LICENSED PROCESSIONAL SURVEYOR TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE.
4. PROOF ROLL ALL PAVEMENT AREAS. NOTIFY OWNER OF ANY UNACCEPTABLE AREAS.
5. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF ALL CONSTRUCTION TO THE OWNER AT THE END OF CONSTRUCTION.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF DETROIT CURRENT STANDARDS AND REGULATIONS.
7. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

SITE SPECIFIC NOTES

1. ALL RUBBISH, TRASH OR DEBRIS WILL BE CONTAINED ON SITE WITHIN THE OFFICE BUILDING OR WITHIN SITE DUMPSTER UNTIL THEIR SCHEDULED PICK-UP BY A CONTRACTED PICK-UP SERVICE.
2. NO COAL OR COKE RELATED MATERIALS, PRODUCT'S, ETC. WILL BE STORED ON SITE AT ANY TIME.

GENERAL NOTES

1. THE CONTRACTOR SHALL OBTAIN A SEPARATE RIGHT-OF-WAY PERMIT FROM THE DEPT. OF PUBLIC WORKS, CITY ENGINEERING DIVISION, PERMIT OFFICE PRIOR TO WORK PERFORMED WITHIN THE PUBLIC RIGHTS-OF-WAY.

SITE FEATURE LEGEND

- 6" CONCRETE SURFACE
- 8" REINFORCED CONCRETE SURFACE
- INDUSTRIAL HEAVY-DUTY BITUMINOUS PAVEMENT
- WEST END STREET BITUMINOUS PAVEMENT RESTORATION, SEE CITY OF DETROIT UTILITY TRENCH CONSTRUCTION PAVEMENT RESTORATION DETAIL SHEET C5
- CONCRETE CURB & GUTTER
- NEW CHAIN LINK FENCE, HEIGHT TO MATCH EXISTING

BENCHMARKS & PROJECT COORDINATE SYSTEM

BM NO.: 1 ELEVATION: 591.30
TOP OF CASTING COMBINED SEWER VAULT 102
LOCATED APPROX. 60' EAST OF EX.
FENCELINE ON WEST SIDE OF PROPERTY

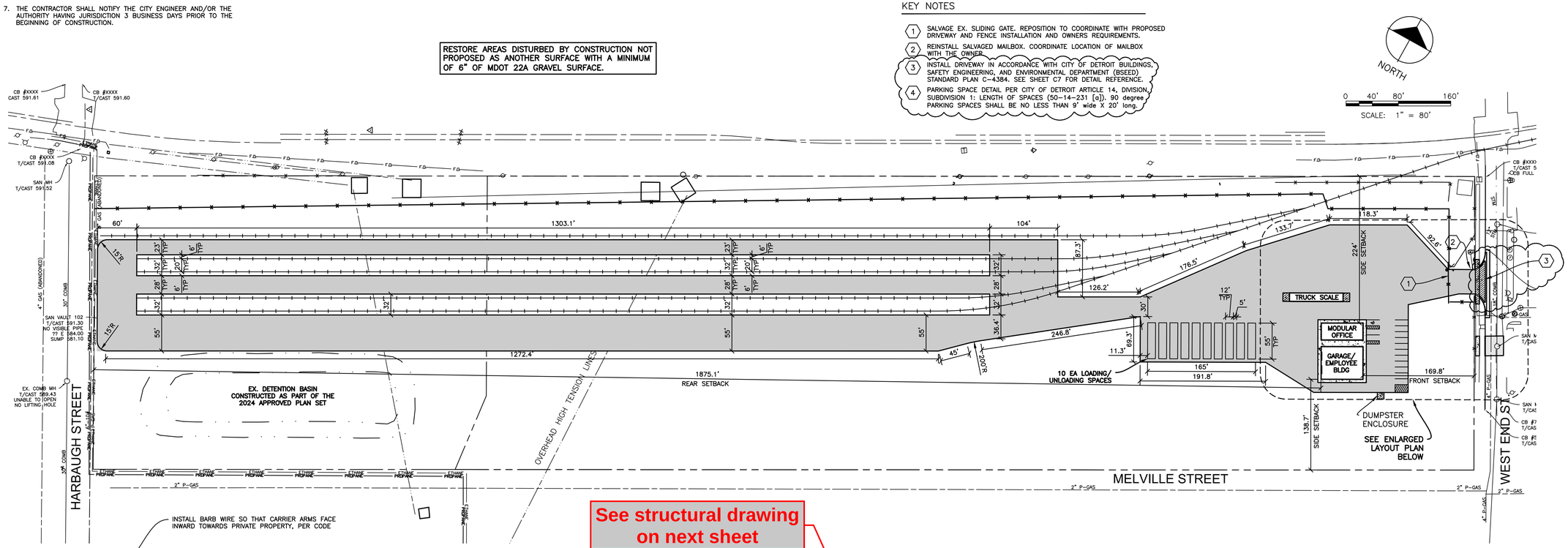
MICHIGAN STATE PLANE COORDINATE SYSTEM, MADB3 (MI GEOID 18) (GRS80), SOUTH ZONE, INTERNATIONAL FEET, GRID.

Know what's below. Call before you dig.

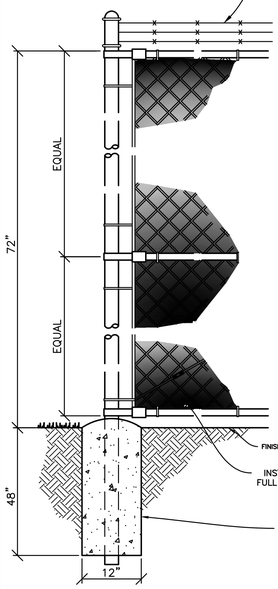
KEY NOTES

1. SALVAGE EX. SLIDING GATE. REPOSITION TO COORDINATE WITH PROPOSED DRIVEWAY AND FENCE INSTALLATION AND OWNERS REQUIREMENTS.
2. REINSTALL SALVAGED MAILBOX. COORDINATE LOCATION OF MAILBOX WITH THE OWNER.
3. INSTALL DRIVEWAY IN ACCORDANCE WITH CITY OF DETROIT BUILDINGS, SAFETY ENGINEERING, AND ENVIRONMENTAL DEPARTMENT (BSEED) STANDARD PLAN C-4384. SEE SHEET C7 FOR DETAIL REFERENCE.
4. PARKING SPACE DETAIL PER CITY OF DETROIT ARTICLE 14, DIVISION, SUBDIVISION 1: LENGTH OF SPACES (50-14-231 (a)). 90 degree PARKING SPACES SHALL BE NO LESS THAN 9' wide X 20' long.

RESTORE AREAS DISTURBED BY CONSTRUCTION NOT PROPOSED AS ANOTHER SURFACE WITH A MINIMUM OF 6" OF MDOT 22A GRAVEL SURFACE.



See structural drawing on next sheet



6' CHAIN LINK FENCE W/BARB WIRE MATERIAL SPECIFICATION NOTES:
FABRIC: 72" 9 GA. GAW (2" MESH) KT CHAIN LINK FABRIC.

TOP RAIL: 1-5/8" O.D. SCHEDULE 40 PIPE: 2.27 LBS PER FOOT TOP RAIL 21" IN LENGTH, JOINED WITH 1-5/8" GALVANIZED SLEEVE.

LINE POST: 2" O.D. SCHEDULE 40 PIPE, 2.72 LBS. PER FOOT. LINE POSTS SET 10' ON CENTER MAX. SPACING. LINE POSTS DRIVEN 48" DEPTH.

TERMINAL POST: 2-1/2" O.D. SCHEDULE 40 PIPE 3.65 LBS. PER FOOT. CONCRETE FOOTING, 12" DIA., 48" DEPTH.

BRACING: TERMINAL POSTS BRACED AND TRUSSED TO THE NEAREST LINE POST WITH 1-5/8" O.D. SCHEDULE 40 PIPE AND 3/8" GALVANIZED TRUSS ROD & TRUSS ROD TIGHTENER.

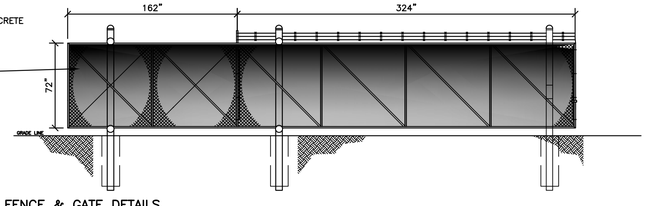
TENSION WIRE: 7 GA. 1.2 OZ. TENSION WIRE ATTACHED TO BOTTOM OF FENCE FABRIC WITH 9 GA. ALUMNIUM (Lb. OF 96) HOG RING SPACED 24" ON CENTER.

BARBED WIRE: 3 STRANDS OF 12-1/2" GA. CL3 BARB WIRE ON GALVANIZED 45 DEGREE BARB WIRE ARM. BARB WIRE ARMS TO BE PLACED INWARD OVER PRIVATE PROPERTY.

FITTINGS: REGULAR BRACE BAND AND GALVANIZED W/NUT CARRIAGE BOLD, PRESSED STEEL COMBO RAIL-END, GALVANIZED 45 DEGREE BARB WIRE ARM, PRESSED STEEL DOME CAP, 3/4" STEEL TENSION BAR, REGULAR TENSION BAND AND GALVANIZED W/NUT CARRIAGE BOLT.

TIE WIRE: 8-1/4" 9 GA. ALUMINUM TIE WIRE AND 6-1/2" 9 GA. ALUMINUM TIE WIRE SPACED 15" ON CENTER FOR LINE POSTS AND 24" ON CENTER FOR RAILS.

POST FOOTING: 2500 PSI CONCRETE



CANTILEVER GATE (MANUAL) MATERIAL SPECIFICATION NOTES:
FABRIC: 72" 9 GA. GAW (2" MESH) KT CHAIN LINK FABRIC.

BRACING: TERMINAL POSTS BRACED AND TRUSSED TO THE NEAREST LINE POST WITH 1-5/8" O.D. SCHEDULE 40 PIPE AND 3/8" GALVANIZED TRUSS ROD & TRUSS ROD TIGHTENER.

GATES: CANTILEVER GATE: FRAMEWORK OF 2" SCHEDULE 40 PIPE, 2.72 LBS. PER FOOT.

GATES BRACED AND TRUSSED AS NECESSARY. SAME FABRIC AS FENCE. BARBED WIRE INCLUDED ON ALL GATES.

GATE AND LATCH POST: CANTILEVER GATE: 4" O.D. SCHEDULE PIPE, 9.10 LBS PER FOOT. CONCRETE FOOTING: 18" DIAMETER, 48" DEPTH.

BARBED WIRE: 3 STRANDS OF 12-1/2" GA. CL3 BARB WIRE ON GALVANIZED 45 DEGREE BARB WIRE ARM.

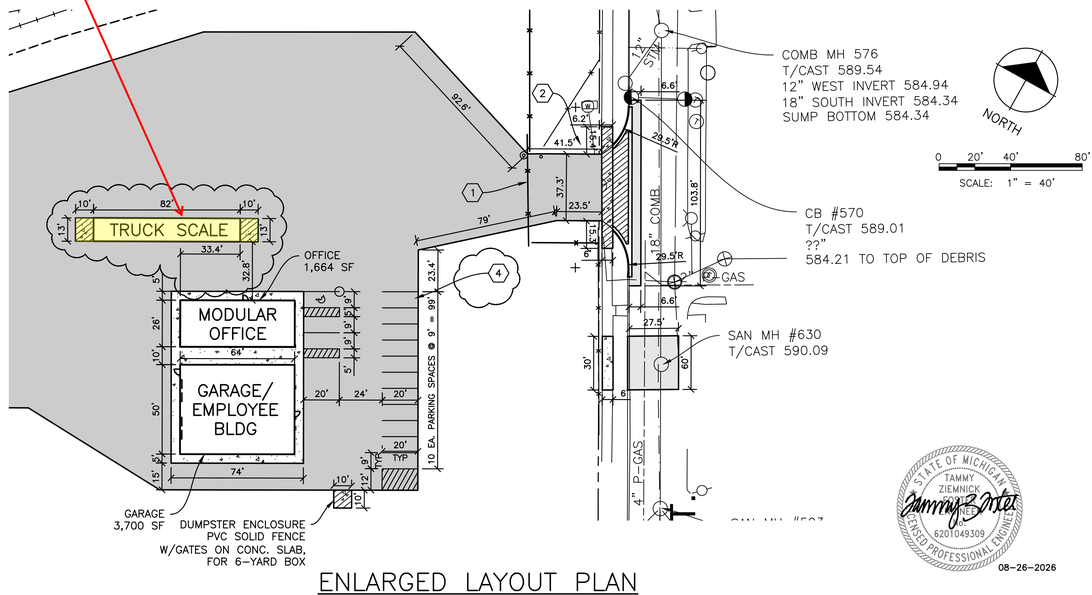
FITTINGS: REGULAR BRACE BAND AND GALVANIZED W/NUT CARRIAGE BOLD, PRESSED STEEL COMBO RAIL-END, GALVANIZED 45 DEGREE BARB WIRE ARM, PRESSED STEEL DOME CAP, 3/4" STEEL TENSION BAR, REGULAR TENSION BAND AND GALVANIZED W/NUT CARRIAGE BOLT.

TIE WIRE: 8-1/4" 9 GA. ALUMINUM TIE WIRE AND 6-1/2" 9 GA. ALUMINUM TIE WIRE SPACED 15" ON CENTER FOR LINE POSTS AND 24" ON CENTER FOR RAILS.

POST FOOTING: 2500 PSI CONCRETE

FENCE & GATE DETAILS

NO SCALE



ENLARGED LAYOUT PLAN

08-26-2026

Approved For Permit
Approved
Date: 9/21/2026
Buildings, Safety Engineering & Environmental Department
CITY OF DETROIT
Permit Number: BLD2026-00154
Approved
Reviewed for Code Compliance



LOCATION MAP
NO SCALE

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Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for other sizes.

No.	Revision	Date
3	Revised & Reissued for Regulatory Review	08.26.2026
2	Revised & Reissued for Regulatory Review	02.24.2026
1	Issued for Regulatory Review	01.282026

ZFE
ZIEMNICK FOSTER ENGINEERING, LLC
426 S. Clinton Street
Grand Ledge, MI 48837
Tel: 517.627.8068
www.zfengineering.com

Project Name

Crown Enterprises

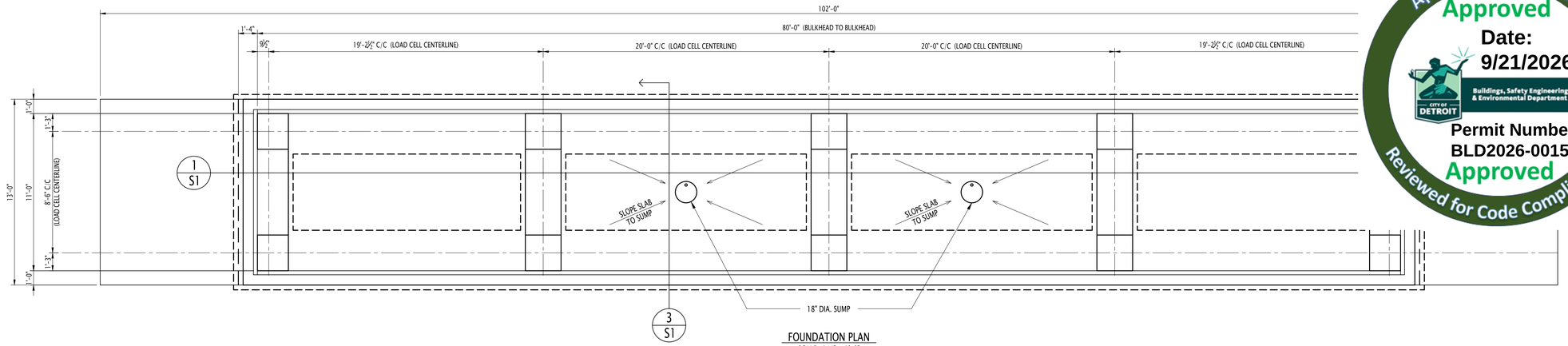
8100 Melville Street
2026 Site Development

City of Detroit, Wayne County, Michigan

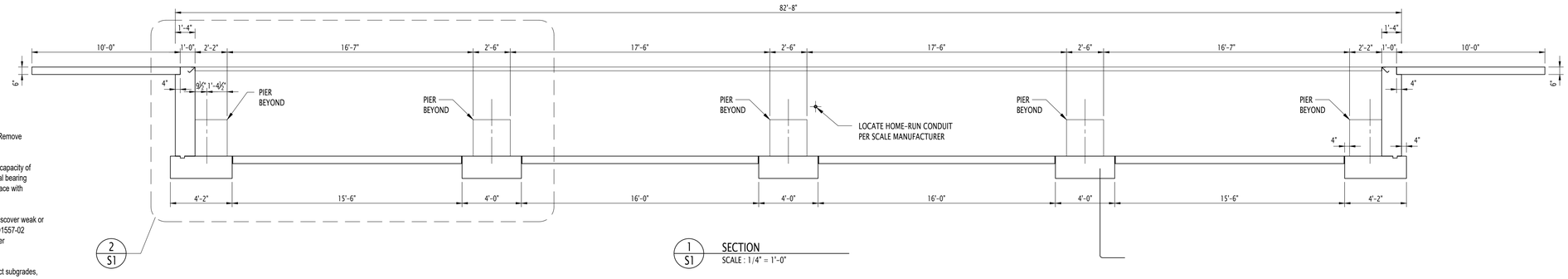
Sheet Title

SITE LAYOUT PLAN

ZFE Project Number	Sheet Number
25011	C2
Project Date 02.24.2026	
Engineer: TZF	
Checked By: JWF	



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



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

STRUCTURAL DESIGN CRITERIA

A. Basis of Design:	80'-0" x 11'-0" Concrete Deck Pit Scale (4 sections) Rice Lake Weighing Systems Rice Lake, Wisconsin
B. Truck Loading:	60,000 Pound Dual Tandem Axle (DTA)
C. Dead Load at Load Cell Mount:	15,800 Pounds
D. Live Load at Load Cell Mount:	38,900 Pounds

FOUNDATIONS AND EARTHWORK

A. Design and install temporary systems for excavation dewatering and excavation bracing as required for proper execution of The Work. Remove temporary systems after construction is completed unless indicated or approved.

B. Footings are designed to bear on undisturbed soil, compacted fill material, or controlled low strength material (CLSM) with a net bearing capacity of 3,000 psf. Engage geotechnical engineer to verify bearing capacity of soil at bottom of excavations before constructing footings. If actual bearing capacity is less than the design capacity immediately notify Owner. Increase depth of footings or overexcavate unsuitable soils and replace with compacted fill or CLSM as directed.

C. Prepare subgrade and construct building pad in accordance with geotechnical report and project specifications. Proof roll subgrade to discover weak or unsuitable soils. Place fill in maximum 8-in lifts and compact to 95% of the maximum dry density determined in accordance with ASTM D1557-02 (Modified Proctor Test). Fill under foundations and backfill in excavations shall be coarse sand, gravel, or crushed stone. Subgrade under slabs-on-grade shall be minimum 4-in. deep, crushed stone placed to a tolerance of +0-in / -3/4-in.

D. Do not construct footings or slabs on frozen soils, on frost, or in excavations containing standing water. Keep excavations dry and protect subgrades, footings, and slabs from frost heave.

E. Form sides of footings unless conditions permit vertical excavations without sloughing and caving. Do not permit top of trench footings to mushroom. Form surfaces which will be exposed to view.

F. Balance backfill on both sides of footings and foundation walls to prevent movement of foundations. Do not backfill against basement walls and earth-retaining walls until wall has attained its design strength and not before supporting floor or roof construction is in place.

CAST-IN-PLACE CONCRETE

A. Comply with the following:
1. Specifications for Structural Concrete (ACI 301).
2. Building Code Requirements for Structural Concrete (ACI 318).

B. Concrete
1. Materials

a. Cement:	ASTM C150, Type I/II
b. Normal Weight Aggregate:	ASTM C33, Class 3S
c. Air-entraining Admixture:	ASTM C260
d. Chemical Admixtures:	ASTM C494
e. Mixing Water:	ASTM C94, potable

2. Concrete Mix Requirements

a. 28-day Compressive Strength:	fc' = 4,000 psi
b. Target Air Content:	6%
c. Slump:	4 to 6-in.

C. Steel Reinforcement
1. Materials

a. Reinforcing Bars:	ASTM A615, Grade 60
b. Low Alloy Reinforcing Bars:	ASTM A706, Grade 60

2. Fabricate bent bars with minimum standard hooks.
3. Reinforcing Bar Lap Splices:
a. #4 Bar:29-in.
b. #5 Bar:35-in.
c. #6 Bar:42-in
4. Install hooked dowels in column, pier, and wall footings of same size and number as vertical bars. Lap dowels with vertical reinforcement.
5. Install corner bars equivalent in size and spacing to horizontal bars at corners and T-intersections of walls. Lap corner bars with horizontal reinforcement.
6. Place and secure reinforcement prior to casting concrete. Support bars on sufficient chairs, bolsters, standees, or other bar supports to maintain proper position of bars over entire length.
7. Do not weld reinforcement unless shown. Use low alloy reinforcing bars where welding of reinforcement is required or approved.
8. Concrete cover on reinforcement unless noted:

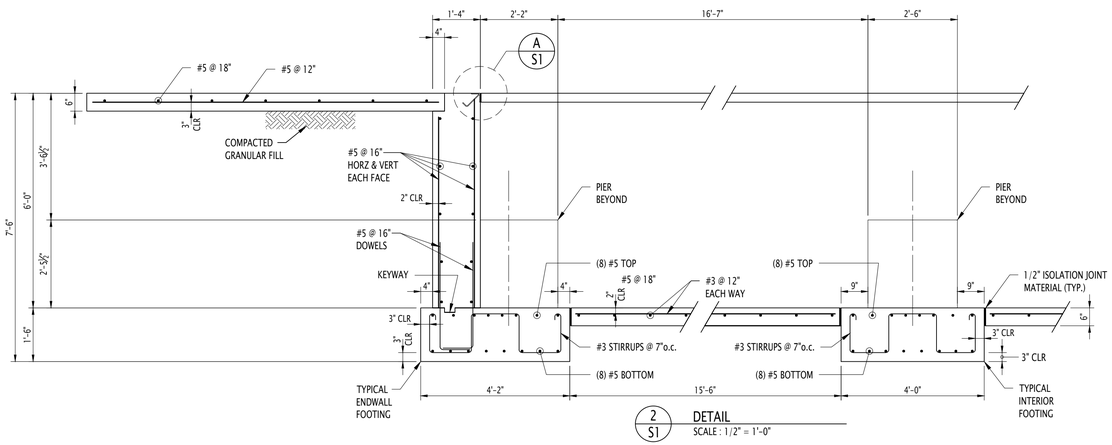
a. Concrete deposited against earth:	3-in.
b. Formed surfaces exposed to weather or earth:	1-1/2-in. for #5 and smaller. 2-in. for #6 and larger.

D. Place construction joints as shown on drawings and in locations which least impair strength of structure. Obtain written approval of engineer for construction joints not shown on drawings.

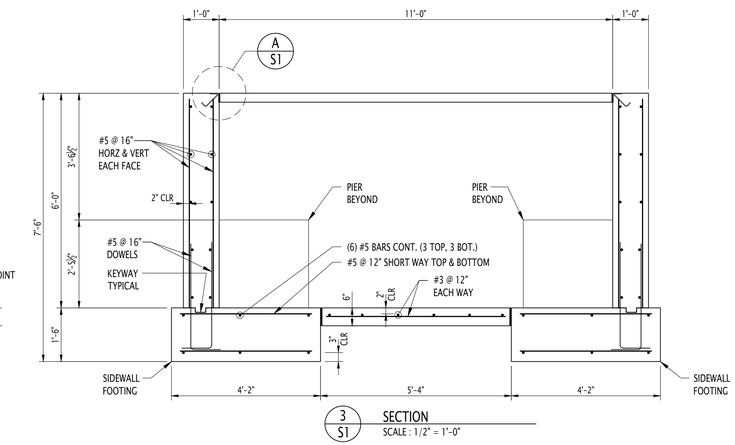
E. Chamfer exposed edges 3/4-in x 45 degrees.

F. Moist cure concrete for minimum of seven days.

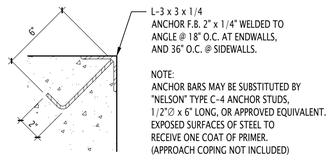
G. Where bonding fresh concrete to previously hardened concrete, remove laitance and deleterious substances and intentionally roughen existing surface to 1/4" amplitude. Apply approved bonding adhesive in accordance with Manufacturer's Printed Installation Instructions included in the product packaging.



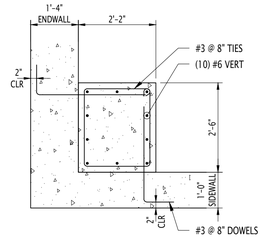
DETAIL
SCALE : 1/2" = 1'-0"



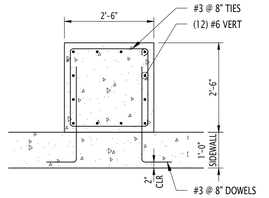
SECTION
SCALE : 1/2" = 1'-0"



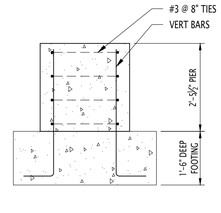
TYPICAL COPING SECTION
NOT TO SCALE



ENDWALL PIER PLAN DETAIL
SCALE : 1/2" = 1'-0"



SIDEWALL PIER PLAN DETAIL
SCALE : 1/2" = 1'-0"



PIER REINFORCING DETAIL
SCALE : 1/2" = 1'-0"

ISS.	DATE	BY	CHANGE
REVISIONS			

STATE OF MICHIGAN
MARK R. KENNEDY
ENGINEER
No. 6201035790
PROFESSIONAL ENGINEER
2026-08-20

TITLE: SCALE PIT FOUNDATION
SCALE: AS NOTED
PROJECT: TRANSFLO
8100 MELVILLE STREET
DETROIT, MI 48209
BY: MRK / JLL
DATE: 08.20.2026
PROJECT NO.: 26-14445
SHEET NO.: S1
SHEET 1 OF 1

lkl engineers ltd.
CONSULTING STRUCTURAL ENGINEERS
2735 N. HOLLAND–SYLVANIA RD. SUITE A–2 TOLEDO, OHIO 43615
(419) 578–0195 FAX (419) 578–2125 LKLengrs@lklengrs.com

Approved For Permit
Approved
Date: 9/21/2026
Buildings, Safety Engineering & Environmental Department
CITY OF DETROIT
Permit Number: BLD2026-00154
Approved
Reviewed for Code Compliance

BHC
Weighing Solutions Since 1976

Boni Hutchinson Company
51424 Pontiac Trail
Wixom, MI 48393
7345910818
cboni@bonihutchinson.com

Quote

ADDRESS
Crown Enterprises LLC
12225 Stephens Road
Warren, MI 48089
United States

SHIP TO
Crown Enterprises LLC
8100 Melville
Detroit, MI 48209
United States

QUOTE # 080626-CB
DATE 08/06/2026

JOB LOCATION
Budgetary PIT Truck Scale

ACTIVITY	QTY	RATE	AMOUNT
Rice Lake heavy capacity PT Concrete deck truck scale (Pit scale) -P/N: 51359 with (2) manholes & top access j-boxes -80ft x 11ft x 42 -200,000lb Capacity, 4-module, 5-Sections -120,000lb CLC Rating -12 year factory warranty (requires service contract with BHC) -Customer to supply all excavation, underground work, concrete	1		
Rice Lake 720i Programmable HMI Indicator/Controller p/n 101230	1		
Additional parts for independent switch to control red/green function on remote display.	1		
Rice Lake Laser Light 4" Stop/Go Remote Display p/n 167093 -Requires a pole or building to mount on. Pole can be provided for additional cost	1		
Labor for installation and calibration of new Rice Lake PT 80'x 11'truck scale. -Scale will be calibrated and placed into service with certified test weights & procedures.	1		
Crane rental estimate for unloading and installation of new scale.	1		
-Prices do NOT include freight charges or any applicable sales taxes. -Prices valid for 30 days, after which a new quote will be provided.			
Customer Responsibilities: -Provide concrete pit foundation as per manufacturers requirements (including concrete, rebar, steel coping & labor) -Provide labor & materials for pouring concrete deck of scale (concrete, rebar, labor for prep and finishing concrete) -Provide electrical runs, conduit, trenching and any additional electrical requirements for scale project -Provide structure for housing scale electrical components -Provide IT support if scale equipment is to interface with existing components			

ACTIVITY	QTY	RATE	AMOUNT
-Provide clear unobstructed access to site during regular business hours -Provide barricades and safety watch if required -Approximate lead time is 12-14 weeks from signed order/PO and 25% down payment			

SUBTOTAL
TAX
TOTAL

Accepted By

Accepted Date

SURVIVOR® PT Pit-type Truck Scale

RICE LAKE WEIGHING SYSTEMS

As of: Monday, July 6, 2026



Standard Features

- Built for pit foundations
- One 2 × 2-foot manhole opening
- Pit access to load cells
- G-Force™ mount assemblies return the scale to center without check rods or bumper bolts
- Cables completely encased in rodent-proof conduit
- Thorough finishing process includes cleaning of steel before and after welding, followed by either high solids urethane liquid paint or durable powder paint

Options

- Steel deck
- 20-pound division
- 18-inch main beams for increased pit clearance
- Surface-mounted junction box
- 3/8-, 1/2-, 1- or 2-inch steel deck plate upgrade
- Grain dump

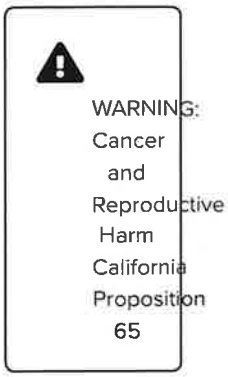
Approvals

NTEP

Measurement Canada Approved

NOM

- Stainless steel load cells
- Tapered links and radius blocks
- Stainless steel suspension hardware
- Galvanized weighbridge and suspension hardware
- Manhole integrated ladder
- Top access junction box
- Corrosion-resistant coating
- Dolly down plate
- iQUBE^{2}® and iQUBE^{3} digital diagnostic junction box
- iQUBE^{3} and 1280 Enterprise™ Series programmable weight indicator bundle
- iQUBE^{2} and 1280 Enterprise Series programmable weight indicator bundle
- iQUBE^{2} and 920i® Series programmable weight indicator bundle



Durable Truck Scale with Pit Access

The SURVIVOR PT Series truck scale features a manhole and pit access to load cells, making it a perfect solution for pit foundation applications. The durable design includes multiple wide flange I-beams and steel cross beams to minimize deflection and lengthen scale life. This NTEP certified truck scale features 8.5 inches of reinforced concrete poured in one continuous slab on-site to increase weighbridge strength.

SURVIVOR PT Series Specifications

Load Cells:
Rice Lake RL75058-LP alloy steel, Double-ended beam, 75,000-lb capacity

Mount Assemblies:
G-Force self-checking mounting system

Junction Box:
JB8SPT TuffSeal® Polycarbonate NEMA Type 4X enclosure with overlapping solid cover, stainless steel screws

Platform Size:
10- to 160-ft length
10-, 11-, 12-ft width, NTEP Certified up to 16.5 ft

Scale Profile:
42 in

Deck Thickness:
6 in

Full Scale Capacity:
Up to 270,000 lb

Concentrated Load Capacity (CLC):
120,000 lb

Dual Tandem Axle (DTA):
120,000 lb

Warranty:
Weighbridge: 5-year or 12-year limited
Parts: 5-year or 12-year limited, including lightning protection

Approvals:
NTEP 98-011, Class IIIL
Measurement Canada AM-5413

Parts

Part #	Description
10 Foot Width	
51341	Truck Scale,Pit 10x10 60 Ton SR1010-PC-60 CLC=90,000lb
72955	Truck Scale,50x10 PT C Concrete Deck SURVIVOR PT Model SR5010-PC-100 120,000lb CLC, 200,000lb Cap, 3-Section
51348	Truck Scale,80x10 PT Concrete Deck SURVIVOR PT Model SR8010-PC-100 120,000lb CLC, 200,000 Capacity 5-Section
11 Foot Width	
51358	Truck Scale,Pit 70x11 100 Ton SR7011-PC-100 CLC=120,000lb
51359	Truck Scale,Pit 80x11 100 Ton SR8011-PC-100 CLC=120,000lb
152180	TS,110x11 PT Concrete Deck SURVIVOR PT Model SR11011-PC-100 120,000lb CLC 200,000lb Capacity, 6 Section, 45-1/2in Grouted Profile, Manhole, (109ft10-1/2x10ft10-1/2)
12 Foot Width	
51369	Truck Scale,Pit 70x12 100 Ton SR7012-PC-100 CLC=120,000lb
51372	Truck Scale,Pit 100x12 100 Ton SR10012-PC-100 CLC=120,000lb

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