

ADDENDUM NO. 1

April 21, 2025

Duneland District Playgrounds Renovations Various Locations

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated April 7, 2025 by Gibraltar Design, Inc. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 and attached Addendum No. 1 from Gibraltar Design, Inc. dated April 21, 2025 and consisting of 1 page, Specification Section 32 13 80 – Exterior Concrete and Site Equipment, and Specification Section 33 40 00 – Storm Sewage Systems.

A. SPECIFICATION SECTION 00 00 20 – TABLE OF CONTENTS

1. Add:

- a. Specification Section 32 13 80 – Exterior Concrete and Site Equipment
- b. Specification Section 33 40 00 – Storm Sewage Systems

B. SPECIFICATION SECTION 01 12 00 – MULTIPLE CONTRACT SUMMARY

Under 3.03 Bid Categories

B. BID CATEGORY NO. 01 - SITEWORK

1. Add:

- a. Specification Section 32 13 80 – Exterior Concrete and Site Equipment
- b. Specification Section 33 40 00 – Storm Sewage Systems

ADDENDUM ONE

Addendum One (AD.01) to the drawings and specifications prepared by Gibraltar Design for **Duneland District Playgrounds - Renovations** for Duneland School Corporation, Chesterton, Indiana.

All Contractors bidding on this project shall read all of the items covered below and shall comply with all of the requirements as set forth, including any necessary refinements or additions generated by this Addendum and required by the intent of the original contract documents. All Contractors shall acknowledge on their bid form that they have received this Addendum and include the appropriate content of same within their bid proposal.

SPECIFICATIONS

1. Specification Section 00 01 10

Table of Contents

A. Add the following Specification Sections to the Table of Contents:

1. 32 13 80, Exterior Concrete and Site Equipment.
2. 33 40 00, Storm Sewage Systems.

2. Specification Section 32 13 80

Exterior Concrete and Site Equipment

A. Add Specification Section 32 13 80, Exterior Concrete and Site Equipment, included in this Addendum, to the Project Manual.

3. Specification Section 33 40 00

Storm Sewage Systems

A. Add Specification Section 33 40 00, Storm Sewage Systems, included in this Addendum, to the Project Manual.

Pages 1, inclusive, and Two (2) Specification Sections and No Full-Size Drawings, constitute the total makeup of **Addendum One**.



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SECTION 32 13 80

EXTERIOR CONCRETE AND SITE EQUIPMENT

1 General

1.1 Section Includes

- A. Post bases.

1.2 Related Sections

- A. Section 31 20 00 - Earthwork.

1.3 Submittals

- A. Shop drawings and product data for signs.
- B. Shop drawings and product data for precast concrete products.
- C. Submit proposed mix design of each class of concrete to Architect/Engineer for review prior to commencement of work.
- D. For all concrete mixes using fly ash, submit the following:
 - 1. Certified letter stating that all fly ash being used meets all requirements of ASTM C618, except that the maximum loss on ignition shall be 3 percent.
 - 2. Laboratory test results for each mix being submitted.

1.4 Tests

- A. Testing and analysis will be performed under provisions of Division 1.
- B. Testing firm's ACI certified technician will take cylinders and perform slump and air entrainment tests in accordance with ACI 301.

2 Products

2.1 Concrete Materials

- A. Cement: ASTM C150 Normal Type I Air-Entraining Type IA Air-Entraining Type IIA Air-Entraining Type IIIA Portland type, gray color.
- B. Fly Ash: ASTM C618, Type C.
- C. Fine and Coarse Aggregates: ASTM C33.
- D. Water: Potable.

2.2 Form Materials

- A. Conform to ACI 301.

- B. Wood or steel form material, profiled to suit conditions.

2.3 Reinforcement

- A. Reinforcing Steel: ASTM A615; 60 ksi yield grade; deformed billet steel bars, uncoated finish.
- B. Welded Steel Wire Fabric: Plain type, ASTM A185; Deformed type, ASTM A497; in flat sheets; coiled rolls; uncoated galvanized finish.
- C. Tie Wire: Annealed steel, minimum 16 gage size.
- D. Dowels: ASTM A615; 60 ksi yield grade, plain steel, uncoated finish.
- E. Fiber Additive: Complying with ASTM C1116.
 - 1. Nylon Fibers: 100 percent virgin nylon, 3/4 inch length fiber unless otherwise noted.
 - a. FORTA NYLON as manufactured by Forta Corporation, with a dosage rate of 1.0 pounds per cubic yard of concrete.
 - b. NYCON as manufactured by Nycon, Inc., with a dosage rate of 1.0 pounds cubic yard of concrete.
 - 2. Polypropylene Fibers: 100 percent virgin collated, fibrillated, polypropylene fibers, 3/4 inch length unless otherwise noted.
 - a. FIBERMESH as manufactured by Fibermesh Co., with a dosage rate of 1.5 pounds per cubic yard of concrete.
 - b. FORTA CFP as manufactured by Forta Corporation, with a dosage rate of 1.5 pounds per cubic yard of concrete.

2.4 Accessories

- A. Curing Compound: ASTM C309.
 - 1. Kurez DR manufactured by Euclid Chemical Company.
 - 2. L&M Cure by L&M Construction Chemicals, Inc.
- B. Preformed Joint:

2.5 Admixtures

- A. Air Entrainment: ASTM C260.
- B. Chemical Admixture: ASTM C494.

2.6 Pipe Materials

- A. Reinforced Concrete Pipe: ASTM C76, Class I II III IV V with Wall Type A; B; C; mesh bar reinforcement; bell and spigot end joints.

2.7 Fill Material

- A. Coarse / Fine Aggregate: Type specified in Section 02200.

2.8 Concrete Mix

- A. General: Design mix for the least amount of water consistent with workability and finishing requirements.
- B. Mix concrete in accordance with ASTM C94.
- C. Mix Proportions:
 - 1. For concrete mixes not containing fly ash, the minimum cement content per cubic yard of concrete shall be as follows.
 - a. 6 bags (564 pounds) for 4000 psi concrete.
 - 2. Proportion the fine aggregate between a minimum of 35 percent and a maximum of 45 percent of the total aggregate weight and utilizing the maximum amount of coarse aggregate within the limits that is consistent with the desired workability.
 - 3. Coarse Aggregate: Crushed limestone.
 - 4. Air Content: 4.5 percent - 7.5 percent
 - 5. Maximum Water/Cementitious Material Ratio (W/C): 0.45.
 - 6. 28 Day Compressive Strength: 4000 psi.
 - 7. For mixes using fly ash, a maximum of 15 percent by weight of the cementitious material may be fly ash.
- D. Use accelerating admixtures in cold weather only when approved by Architect/Engineer/Construction Manager.
 - 1. Use of admixtures will not relax cold weather placement requirements.
- E. Use set-retarding admixtures during hot weather only when approved by Architect/Engineer/Construction Manager.
- F. Add air-entraining agent to concrete mix for concrete work subject to freeze/thaw cycling exposed to exterior.

3 Execution

3.1 Examination

- A. Verify that trench cut excavation base is ready to receive work, and excavations, dimensions, and elevations are as indicated on shop drawings Drawings.
- B. Beginning of installation means acceptance of existing conditions.

3.2 Preparation

- A. Hand trim excavations to required elevations.
 - 1. Correct over excavation with fill material of fine coarse aggregate lean concrete.
- B. Remove large stones or other hard matter which could impede consistent backfilling or compaction.

3.3 Forming

- A. Place and secure forms to correct location, dimension, and profile.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint fillers vertical in position, in straight lines.
 - 1. Secure to formwork during concrete placement.

3.4 Placing Concrete

- A. Place concrete in accordance with ACI 301.
- B. Hot Weather Placement: ACI 301.
- C. Cold Weather Placement: ACI 301.
- D. Ensure reinforcement, inserts, embedded parts, and formed joints are not disturbed during concrete placement.

3.5 Field Quality Control

- A. Field inspection and testing will be performed under provisions of Division 1.

3.6 Concrete Protection

- A. Immediately after placement, protect concrete under provisions of Division 1 from premature drying, excessive hot or cold temperatures, and mechanical injury.

END OF SECTION

SECTION 33 40 00

STORM SEWAGE SYSTEMS

1 General

1.1 Section Includes

- A. Storm drainage piping, fittings, and accessories.
- B. Catch basins, inlets, and yard drains.

1.2 Related Sections

- A. Section 31 20 00 - Earthwork: Trenching and Backfill.

1.3 Definitions

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- C. Fill: Soil materials used to raise existing grades.
- D. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- E. Utilities: On-site underground pipes.

1.4 Action Submittals

- A. Product Data: For each type of the following manufactured products required:
 - 1. Controlled low-strength material, either HDPE or PVC materials.

1.5 Delivery, Storage And Handling

- A. When necessary, store materials on site in advance of need.
- C. When fill materials need to be stored on site, locate stockpiles where indicated or as directed by Construction Manager.
 - 1. Separate differing materials with dividers or stockpile separately so as to prevent intermixing.
 - 2. Prevent contamination.

3. Protect stockpiles from erosion and deterioration of materials.

2 Products

2.1 Fill Materials

- A. General: Provide subbase course, base course, bedding course and all fill material as required for subsurface of playgrounds.
- B. Subbase Material: Naturally or artificially graded mixture of washed stone, #8 stone
- C. Base (Topping or drainage) Course: Naturally or artificially washed and graded mixture of natural or crushed gravel, #11 crushed stone.
- D. Bedding Course: Naturally or artificially washed and graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- E. Sand: ASTM C 33; fine aggregate, setting bed for trenches.

2.2 Drainage Materials

- A. Solid and Perforated Plastic Pipe: ASTM D3034, SDR 35, Type PSM, PolyVinyl Chloride (PVC) material; bell and spigot end joints. Approximate sizes as indicated on Drawings. Pipe is include geotextile fabric wrapping.
 1. Size: 12-inches or less in diameter shall be solid-wall pipe with a smooth interior and smooth exterior – refer to drawings for size and location.
 2. Pipe and fittings shall be homogeneous throughout and free from cracks, holes, foreign inclusions, or other injurious defects. The pipe shall be as uniform as commercially practicable in color, opacity, density and other physical properties.
 3. The pipe shall be made of PVC plastic having a cell classification of 12454 or 12364 (with a minimum tensile modulus of 500,000 PSI) as defined in ASTM D1784.
 4. The pipe shall be joined with an integral bell, bell and spigot type rubber gasketed joint. Each integral bell joint shall consist of a formed bell complete with a single rubber gasket. Gaskets shall conform to ASTM F477.
 5. All pipe shall be manufactured in lengths of no less than 10 feet or no more than 22 feet, except at junctions with structures that cannot be adjusted in location.

2.3 Flared End Section

- A. Galvanized Flared End Section: sized to fit pipe, extend 18-inch to 24-in from face of pipe.
- B. HDPE, flared, sized to fit pipe, extend 18-inch or 24-inch from face of pipe.

2.4 Catch Basins and Yard Drains (if required)

- A. Basin Lid and Frame: Two piece heavy duty cast iron construction, Neenah or approved equal, size as shown on Drawings.
- B. Plastic Catch Basin and Lid: NDS Catch Basin 12-inch and 24-inch typical sizes, with 8-inch and 12-inch pipe outlets. Refer to drawings for size.
- C. Angled Drain Grating Yard Drain: As manufactured by Holdly, Model # H-gy9, or approved equal. sized for 4-inch drain pipe connection.

3 Execution

3.1 Examination

- A. Verify that trench cut is ready to receive work, and excavations, dimensions, and elevations are as indicated on Drawings.
- B. Beginning of installation means acceptance of existing conditions.

3.2 Preparation For Storm Sewage Systems

- A. Hand trim excavations to required elevations.
 - 1. Correct over excavation with granular fill material.
- B. Remove large stones or other hard matter which could damage sewer pipe or impede consistent backfilling or compaction.

3.3 Installation - Pipe

- A. Install pipe, fittings, gaskets, and accessories in accordance with applicable codes and manufacturer's instructions.
 - 1. Seal joints watertight.
- B. Lay pipe to slope gradients noted on Drawings, beginning at the low point of a system.
- C. Install bell and spigot pipe with bell end facing upstream, and spigot end facing downstream.
- D. Increase compaction of each successive lift.
 - 1. Refer to Section 31 20 00 for backfill and compaction requirements.
 - 2. Do not displace or damage pipe when compacting.

3.4 Installation - Catch Basins and Yard Drains (if required)

- A. Form bottom of excavation clean and smooth to correct elevation.
- B. Place concrete base pad.

- C. Openings in drainage structures required for the installation of piping shall be either cast into the structure or cut with a mechanical saw or core drill.
 - 1. Breaking holes for connection to, or of, piping will not be permitted.
 - 2. Inspect structures prior to any interior grouting work.
 - 3. Any breaking or cracking discovered will be cause for rejection of the work.
- D. Size of Openings in Drainage Structures: No larger than necessary to allow a maximum of one inch clearance around the pipe.
 - 1. Sealed with masonry mortar on inside and outside of structure.
 - 2. Unless otherwise shown, install inside ends of pipe as close to flush with the inside walls of the structure as possible.
- E. Establish elevations and pipe inverts for inlets and outlets as indicated.

3.5 Field Quality Control

- A. Perform field inspection under provisions of Division 1.
- B. Variation From Specified Invert Elevation: Within 1/2 inch from engineered layout.

3.6 Protection

- A. Protect finished installation under provisions of Division 1.
- B. Protect pipe from damage or displacement until backfilling operation is in progress.

3.7 Cleaning Storm Drainage System

- A. Clear interior of piping of dirt and other superfluous material as work progresses.
 - 1. Maintain swab or drain in line and pull past each joint as it is completed.
- B. Flush lines between manholes if required to remove collected debris.
- C. Keep installed system clean and clear from debris and blockage during construction and perform a final cleaning upon completion and before acceptance of system.

END OF SECTION