#### STAFF REPORT

#### CONCERNING APPLICATION FOR A

#### CERTIFICATE OF APPROPRIATENESS

Date: 15 January 2019

**Application Number:** 2019-0108

**Property Location:** Leeper Park

Architectural Style/Date/Architect or Builder: Planned landscape/1897/City superintendent Herman Beyer;

Landscape Architect George Kessler

**Property Owner:** City of South Bend, Venues Parks & Arts

**Landmark or District Designation:** Local Landscape Landmark, Ordinance #8734-96 and National Register of

Historic Places, 6/15/2000

**Rating:** N/A

**DESCRIPTION OF STRUCTURE/ SITE:** Leeper Park is the first planned public park in South Bend located north of downtown and the medical district. Leeper Park is oriented east/west at the St. Joseph River, divided into three sections, East, Central, and West, by Michigan Street and Lafayette Boulevard. The Eastern section was originally established for the Water Works with the first construction on site being a network of thirty, six-inch artesian wells. "The first land condemned for the future Leeper Park, in June of 1895, was meant to provide a second artesian well field and pumping facility for the lively industries and town population which was growing along the south bend of the St. Joseph River." City superintendent Herman Beyer first influenced the design including curvilinear paths, plantings, and water features. The 1911-1915 Parks and Boulevard system and the Leeper Park Plan, designed by celebrated planner and landscape architect George Kessler, embodied early twentieth century ideals grounded in the City Beautiful movement, connecting parks and boulevards as planned elements of a coordinated city plan. Kessler's Plan for Leeper Park included both formal and informal design elements, adopting existing park features of the Beyer era through a skillful remodel. The association of the park sections with different uses was a result of Kessler's planning; the West section was deemed for active recreation, the Central section as passive recreation, and the Eastern Section was adopted for its function as a Water Works but also boasts a number of recreation-related features. While the Kessler Plan guided Leeper Park development for the next decade, documentary evidence appears that only some elements of the Kessler design were actually installed.<sup>3</sup> Sensitive extensions of Kessler's Plan continued into the 1920s and 1930s and included Works Progress Administration funded labor for several projects.<sup>4</sup>

Leeper Park East features include: the North Pumping Station, the water reservoir, multiple water well pumps, Ziegler Performing Center with fixed bench seating, signage for the former Garden of Fragrance, the Navarre Cabin, the foundation of the former Powell House, a non-functioning Comfort Station, a swing set/slide, the Sunken (Rose) Garden, the island, and the Works Progress Administration retaining wall and a bridge to the island.

Leeper Park Central features include: West Lagoon (Duck Pond), concrete stairs on embankment, a well house, the Edward B. Reynolds fountain, Lavender Labyrinth, memorials including trees, stones, and plaques.

Leeper Park West features include: backdrop of the former baseball diamond, tennis courts, a recreation building, a parking lot, an odor garden, and raised vegetable gardens with adjoining paths.

<sup>&</sup>lt;sup>1</sup> <u>Leeper Park Cultural Landscape Report</u>, prepared by Westerly Group for the Historic Preservation Commission of South Bend and St. Joseph County, May 1998.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> Malcolm Cairns, ASLA. "Leeper Park Historic District." National Register of Historic Places Inventory/Nomination Form, NR-1411. South Bend, St. Joseph County, Indiana, June 15, 2000.

#### **ALTERATIONS:**

#### **Throughout**

RMEs and COAs for tree trimming, removal, and installation have been approved under the guidance of the City Forester.

RMEs and COAs for sidewalks have been approved.

#### **Leeper Park East**

RME 2017-0410 approved "This permit covers only Phase I of the project - drilling a pilot well. Phase II (drilling the actual well and trenching in the piping) will require a separate COA."

COA 2017-0306 approved installation of new stage and new audience seating, landscape beautification and lighting for stage, new benches with concrete pad closer to stage.

RME 2016-1013 approved removal of brush and planting of willow tree near Rose Garden.

- The Sunken (Rose) Garden with reflecting pool and statuaries were removed in the 1960s. RME 2017-1012 approved installation of two small concrete pads with two benches adjacent to Rose Garden. Benches to match those approved through COA 2015-0302A. COA 2017-0228 approved installation of 8' wide crushed limestone walkway connecting the Michigan Street sidewalk with the Sunken Garden, bounded by two, 42" wide flower beds, and irrigation system for entire garden. COA 2015-1002 approved "Within an existing concrete curb (that will remain), the landscaping bed will be enhanced to mimic the reflecting pool formerly within its boundary. New flower beds will be defined using new soil, compost and plantings. A walkway of crushed limestone will pass through the beds. Additional half circle beds will be added to the north and south of the concrete curb. The "three-fates" statues will be repaired pro-bono by a local artist, and then placed into the center of the "pool" bed, where they were originally, in the same back-to-back-to back style; and the one remaining "cherub" will be nearby, on a footing. That "cherub" will be duplicated from the original, and the new statue also placed nearby in the "pool" bed." COA 2015-0504A approved restoration of Rose Garden and gravel path system by volunteers.
- COA 2015-0908 approved "Bartlett Street Roundabout Project Description (114-032b). Project to construct a roundabout at Bartlett and Michigan Street approved per all diagrams and documents submitted. Encroachment to Leeper Park East will be limited to 0.57 acres and all trees removed will be replaced within the park."
- The Garden of Fragrance no longer exists, but the signage remains. RME 2015-0422 approved "Rebuild/restack low retaining wall currently located in Leeper Park next to Garden for the Blind. Matching flagstone has been donated by Knepp Sand and Stone and Old Fort Building Supply; and follows material estimate made by a representative of the SB Parks Department. The restacking of the flagstone wall will also require digging away the dirt around loose blocks and backfilling afterwards."
- COA 2011-1103A approved "Replace the existing lift station on the south side of the North Pumping Station driveway and relocate it to the north side of the driveway. Screen the new location with landscaping and plantings. Rehabilitate the Garden of Fragrance Braille marker and boulder monument and install new sidewalks and decorative paving. All per diagrams, plans and plant palette submitted and approved."

Wading Pool was filled in and the pergola removed, 1970s.

Circa 1862 vernacular Powell House

Navarre Cabin moved to Leeper Park, 1904; relocated, 1916; relocated again to present site, 1954.

Zoo closed, and structures used for animals were demolished, 1913.

#### **Leeper Park Central**

COA 2017-0213B approved "Addition to Leeper Park of a garden labyrinth, 40'-0" diameter center, 80'-0" diameter outer circle per submitted plans. Includes removal and replacement of existing trees specified in plans; removal of DAR memorial tree NOT PERMITTED."

COA 2013-0519 approved "Install a climber and merry-go-round at Leeper Park playground. (Replaces old pieces which were removed.)"

The Mall/Formal Garden, an elongated adaptation of the Kessler design survived well into the 1960s. The Garden and pedestrian walks became grown over, 1980s.

Tennis courts moved from Central to Eastern section, 1916.

1905 Bugbee Fountain removed, unknown date.

1907-08 East Lagoon (Lily Pond) became stagnant and was removed along with the rustic wooden bridge, unknown date.

1907-08 West Lagoon (Duck Pond) was extensively remodeled including a change in configuration from a naturalized shape to a near oval, 1980s and 1990s. The covered shelter and chain link fence are not original. Only remnants of a path system were recorded by WPA, 1938.

1910 Reynold's horse watering trough, relocated from downtown South Bend, 1937.

Fill added and installation of double flight of concrete steps along west bank of West Lagoon, 1916. Carriage drives redesigned, unknown date.

#### **Leeper Park West**

- COA 2015-0302A approved "Create a Garden in four sections totaling about 3000 sf including all plants; include an 8 foot wide ADA standard concrete sidewalk-initially 500 feet long; one monument circle and 2 flanking garden observation/education pads to be added per diagram submitted. Install 8 +/- historic lights of the style of Leeper Park East to be installed along the 8 foot wide walk: 1 on each side of the 3 bump outs along the walk, 1 close to Lafayette and 1 close to the northwest corner end of the current phase of the walkway. 8 +/- durable quality public benches; 4+/- umbrella tables near tennis court; opportunities for public art along the garden walk. Subject to approval by the Parks Board. All the garden plant and vegetable plant options to be agreed upon by Parks Department/Board, Madison School and HPC Staff to conform to the Standards and Guidelines adopted for Leeper Park. Abstain from planting fruit trees at this time."
- COA 2008-0306 approved installation of an "Odor Garden" with blower piping and underground odor control bed to treat sewer gas. Surface odor control bed planted as flower garden. Area will be restored to grass if and when the system is taken out of service.
- COA 2007-0605B approved "Renovation of Tennis Courts, Pavement and Fence replacement, expansion of Court pavement approximately 20' to South; removal of 17 trees in the South per Brent Thompson and replace with 12 Cypress per Brent Thompson. Plant to the north of the fence 5 deciduous trees."

A parking lot south of the Tennis Center was added during the Madison School renovation along with lighting without COA, 1998.

The 1936 WPA shelter house was replaced with the present recreation building, 1970. Fill added for installation of Riverside Drive, 1910 and 1938.

<u>APPLICATION ITEMS:</u> "Replacement of a drinking water well and associated piping. Work will include drilling the well, construction of the well pump pedestal (matching the other wells in Leeper Park well field) and trenching in the piping. This work will also include the abandonment of the existing well that is being replaced."

**<u>DESCRIPTION OF PROPOSED PROJECT:</u>** The work proposed is an extension of the original pilot well, RME 2017-0410. See documents provided with application.

#### 1. Remove abandoned Well #1

The existing well located just west of the non-functional restrooms (Comfort Station) was not built correctly and has been underperforming for years. All three-dimensional portions of the structure and pipe will be removed and backfilled. Arborvitae used to disguise well will be removed. Location will be reseeded with new grass.

#### 2. Install new well

Installation of the new well will restore the capacity to the City of South Bend's water treatment abilities. This location was determined using setback requirements that dictate well locations (ie: 50' setback from sanitary sewers, setback for parking lots, setback from other wells, etc.). The pilot well approved with RME 2017-0410 was deemed successful. The only alternate location is north of the existing well, in the proximity of the Navarre Cabin, and would cause the well to battle for the same water which would result in the two collectively unable to pull as much water out of the aquifer as is needed.

The design and layout of the new well will be the same as the three existing wells in the wellfield with a raised concrete base, aluminum ladder, and decorative fencing.

#### STANDARDS AND GUIDELINES:

#### 9.0 LANDSCAPES – STANDARDS AND CRITERIA FOR LEEPER PARK

#### 9.1 Introduction

- 1. In these guidelines the verb Should indicates a recommended course of action; the verb Shall indicates those actions which are specifically required to preserve and protect significant architectural elements.
- 2. The intent of these standards and criteria is to preserve the overall character and appearance of Leeper Park including its spatial organization, topography, vegetation, circulation and features.
- 3. The standards and criteria acknowledge that there will be changes to the landscape and are intended to make the change sensitive to the historic character of the landscape.
- 4. Each property will be separately studied to determine if a later addition(s) and/or alteration(s) can, or should, be removed.
- 5. Since it is not possible to provide one general guideline, the following factors that will be considered in determining whether a later addition(s) and/or alteration(s) can, or should, be removed include:
  - a. Compatibility with the original property's integrity in scale, materials, and character.
  - b. Historic association with the property.
  - c. Quality in design and execution of the addition/alteration.
  - d. Functional usefulness.
- 6. Recreational facilities which exist should be allowed to remain as long as they serve substantial community functions. In some cases these features can be redesigned to be more compatible with the overall landscape.
- 7. Additions to existing recreational facilities shall not be allowed unless such additions make the facilities more compatible with the overall landscape.
- 8. The development of additional facilities for active recreation or single purpose uses for limited user groups shall not be allowed.
- 9. Proposals for special activities and events which cause significant impacts or require permanent or even semi-permanent (seasonal) structures or facilities shall not be permitted.
- 10. The Historic Preservation Commission of South Bend and St. Joseph County recommends that the work proposed to the landscape be executed with the guidance of landscape professional with expertise with historic landscapes.
- 11. The land, streets, island(s), street lighting, park lighting, topography, vistas, vegetation, architectural elements, structures, spatial organization, street furniture, sewer covers, electrical and water vault and/or manholes covers, parking areas are subject to the terms of the landscape guidelines herein stated.
- 12. Items under Historic Preservation review include but are not limited to the following:

#### 9.2 Spatial Organization (includes, Views, Vistas, Landscape Spaces, etc.)

Refer to Sections 9.3, 9.4, 9.5, 9.6, 9.7 and 9.8 for additional Standards and Criteria that may apply.

- 1. Views and vistas are among the most important aspects of a landscape, therefore, they should be maintained and preserved.
- 2. All views, vistas, landscape spaces located in the eastern section and central section of Leeper Park shall be preserved. All views, vistas, landscape spaces located north and east and west of a line designated as the northern fence of the tennis courts located in the western section of Leeper Park shall also be preserved. This shall include the island(s) located in the St. Joseph River and the slough which lies between the island(s) and the mainland. All views, vistas, and landscape spaces shall also include the entirety of the riverbank as well as the area lying between the roadway of Riverside Drive up to and including the riverbank and cut stone wall along the riverbank.
- 3. Original or later contributing special organizational features shall be retained in their existing configuration and shall be maintained through proper drainage, access and erosion control, pruning and removal of invasive vegetation or otherwise using recognized horticultural and soil management practices.
- 4. Alteration of existing or addition of new spatial organizational features will be considered if they do not alter the basic concept of the historic landscape design.
- 5. Deteriorated or missing spatial organizational features shall be replaced with features that match the original in form, shape, color and texture.
- 6. When replacement of features is necessary, it should be based on physical or documentary evidence.
- 7. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.
- 8. Important visual connections between spaces within the landscape shall be retained by maintaining vegetation, circulation and topography features which contribute to those visual relationships.
- 9. The historic spatial and functional relationship of circulation systems, water features and structures shall be preserved by maintaining the massing of adjacent vegetation, vistas, or other associated features.
- 10. Maintenance of removal or, and additions of vegetation materials and elements should consider maintaining existing or intended vistas and spaces, screening intrusions, creating new spaces where appropriate and maintaining defined areas of shade and sun.
- 11. The form and shape of individual spaces and their associated vertical element shall be retained in order to preserve the historic relationships of the landscape. Examples include the relationship between open fields and hedgerows or the width and length of an allee.
- 12. Moving or demolishing historic structures that would alter spatial and visual relationships in the landscape shall not be allowed.
- 13. Construction of new structures that would alter historic spatial and visual relationships in the landscape shall not be allowed.
- 14. Intrusive views or new construction may be screened with compatible fencing or plant material so long as the screening would not detract from the historic character of the landscape.
- 9.3 Topography (includes the Shape, Slope, Elevation, Contour of landforms and Ground Plane, etc.) Refer to Sections 9.2, 9.4, 9.5, 9.8, 9.9 and 9.10 for additional Standard and Criteria that may apply.

- 1. All locations and items listed in 9.2.2 shall also apply to this section and shall be preserved.
- 2. Original or later contributing topographical features shall be retained in their existing configuration and shall be maintained through proper drainage, access and erosion control, and recognized soil management practices.
- 3. Alteration of existing or addition to new topographical features will be considered if they do not later the basic concept of the historic landscape design.
- 4. Natural features (e.g. rock outcroppings) which are integrated into the landscape shall be treated as part of the overall design and shall be retained.
- 5. Deteriorated or missing materials or features shall be replaced with materials that match the original in form, shape, color and texture.
- 6. When replacement of materials or features is necessary, it should be based on physical or documentary evidence.
- 7. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.
- 8. Whenever appropriate, plant materials, rather than structural materials should be used to solve erosion problems. Repair of WPA island and slough stone construction projects is strongly encouraged.
- 9.4 Vegetation (includes Trees, Shrubs, Ground Covers, Hedges, Allees, Fields, Forests, Planting Beds, etc.)

Refer to Sections 9.2, 9.3, 9.5, 9.7, 9.8, 9.9, and 9.10 for additional Standards and Criteria that may apply.

- 1. Refer to Section 9.2.2 for items within this section which shall be preserved. Also included in this section shall be the diverse variety of trees, shrubs, bushes and other vegetation which may or may not be indigenous to this region. List of such types of vegetation can be in lists and inventories which were published in the annual reports of both the City of South Bend and the South Bend Park Commissions from the years 1910 to 1940.
- 2. Original or later contributing vegetation materials and features shall be retained in their existing configuration and shall be maintained through proper horticultural management practices.
- 3. Alteration of existing or addition of new vegetation materials and features will be considered if they do not alter the basic concept of the historic landscape design.
- 4. Deteriorated or missing materials or features shall be replaced with materials that match the original in form, shape, color and texture
- 5. When replacement of vegetation materials or features is necessary, it should be based on physical or documentary evidence.
- 6. If using the same vegetation material is not technically or economically feasible, then compatible substitute vegetation materials may be considered if they convey the same growth habit, form, foliage and bloom characteristics as the historic plant.
- 7. Existing vegetation material shall be retained unless it is part of a later non-compatible design or is volunteer vegetation inconsistent with the original design.
- 8. Consideration for removal of existing healthy vegetation materials and features will be given when it is in conflict with the original design intent of the landscape, such as when an important vista has become overgrown or when plants have grown out of scale with their intended purpose.
- Maintenance of, removal of, and additions of vegetation materials and features should consider maintaining existing or intended
  vistas and spaces, screening intrusions, creating new spaces where appropriate and maintaining defined areas of shade and sun.
- 10. Invasive vegetation shall be removed whenever technically feasible and shall be replaced with appropriate vegetation consistent with the original design of the park and with current factors such as security, ecological conditions, and wildlife management practices.
- 11. Hazardous plants or portions of plants should be removed promptly.
- 12. Plants with diseases that are difficult or not practical to control or cure should be removed promptly to prevent their infection of other plants.
- 13. Mutilated or distorted plants should be removed.
- 14. Plant replacements should be added on a schedule that will insure a continuity in the landscape design.
- 15. Existing vegetation shall be protected adjacent construction activities by fencing the root system prior to the start of construction.
- 16. Future plantings of the main floral garden in the central section of the park shall be guided by the design of the main floral garden as laid out by George Kessler in 1912.
- 9.5 Circulation (includes Roads, Paths, Parkways, Drives, Trials, Walks, etc.)

Refer to Sections 9.2, 9.5, 9.6, 9.8, 9.9 and 9.10 for additional Standards and Criteria that may apply.

- 1. The following shall be preserved: Riverside Drive, Lafayette Boulevard, Park Lane (Foote Street), Bartlett Street, the Alleyway east of Michigan Street running north from Bartlett Street, all sidewalks, curbs, pathways around the duck pond (west lagoon), stairways, pathways in and around the Sunken Garden, and the footbridge from the mainland to the island. Alteration or addition of Roads, Paths, Parkways, Trails, Walks, etc. shall be based upon physical or historical documentation of these items as they existed from 1910 to 1940.
- 2. Original or later contributing layouts of walks, roads, and paved areas shall be maintained.
- 3. Alteration of existing or addition of new circulation layouts will be considered if it can be shown that better site circulation is necessary, and that the alteration does not alter the basic concept of the historic landscape design.
- 4. When replacement of circulation layouts is necessary, it should be based on physical or documentary evidence.
- 5. Original or later contributing circulation materials and features shall be retained and, if necessary, repaired by patching, piecing-in or reinforcing the material or feature using recognized preservation methods.
- 6. Deteriorated or missing circulation materials and features shall be replaced with materials that match the original in size, shape, color, profile, form, texture, and detail of installation.
- 7. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.

- 8. Alteration of existing or addition of new circulation materials and features will be considered if they do not alter the basic concept of the historic landscape design.
- 9. Consideration will be given to an alternate paving material if it can be shown that its properties will improve the original or later contributing design concept.
- 10. When replacement of circulation materials or features is necessary, it should be based on physical or documentary evidence.
- 11. Consideration for removal of existing circulation systems and features will be given when it is in conflict with the original design intent of the landscape or when they are no longer appropriate to their intended purposes.
- 12. No vehicles unless of or approved by the South Bend Parks Department shall be permitted on any part of the park surface at any time. Vehicles of American Electric Power and/or other vehicles of the City of South Bend, shall use predetermined routes to and from their destination, when said travel would cause them to cross any area of the park which is not paved and designed for vehicular traffic. Any damage caused by any vehicle, shall be repaired immediately to look as it did prior to said damage.
- 13. Encroachment of vehicles off the paved roadway of any area of the park shall not be permitted. Areas now used for vehicular parking which are not part of the historical design of that park shall be removed.
- 14. Construction of any type within the park shall be done so as not to disturb any feature of the park. Sheets of plywood or other approved material may need to be laid upon the surface of the park prior to construction equipment. Repairs which must match the original historic design concept shall be made in any and all circumstances of damage.

9.6 Water Features (includes Fountains, Pools, Irrigation Systems, Ponds, Rivers, etc.)

Refer to Sections 9.11 B, C, and D regarding treatment of materials and features; and Sections 9.2, 9.3, 9.4, 9.5, 9.7, 9.8 and 9.10 for additional Standards and Criteria that may apply.

- 1. Features which shall be preserved include: the duck pond (West Lagoon), the water pond in the Sunken Garden, the slough between the island and the mainland, all drinking fountains, pump houses, manhole covers, drainage grates, horse and dog fountain and path of the St. Joseph River in relation to the park.
- 2. Original or later contributing water features shall be retained and maintained.
- 3. Existing water courses or bodies should not be altered. Consideration will be given to proposals that improve site drainage, improve water quality, enhance the landscape design or improve wildlife habitat.
- 4. Alteration of existing or addition of new water features will be considered if they do not alter the basic concept of the historic landscape design.
- 5. When placement of water features and their materials are necessary, it should be based on physical or documentary evidence.
- 6. Original or later contributing water feature materials shall be retained and, if necessary, repaired by patching, piecing in, consolidating or reinforcing the material using recognized preservation methods.
- 7. Deteriorated or missing water feature materials shall be replaced with materials that match the original in size, shape, color, profile, form, texture, and detail of installation.
- 8. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.
- 9. Alteration of existing or addition of new water features will be considered if they do not alter the basic concept of the historic landscape design.
- 10. When appropriate from an ecological perspective, dredging of waterways shall be permitted as a means of retaining historic waterways.
- 11. All wetlands shall be preserved.
- 12. All shorelines of water courses or bodies shall be protected from erosion in a manner in keeping with the basic concept of the landscape design.
- 13. Consideration for removal of existing water features will be given when it is in conflict with the original design intent of the landscape or when they are no longer appropriate to their intended purposes.
- 14. Some areas of Leeper Park are utilized for the pumping of water for the City of South Bend, and there exists both within the park and the St. Joseph River and on the island(s) wells, well-houses and other water supply entities. Repairs that may be necessary to existing services, or additions to existing services, or the sinking or additional new wells; all such work, installations and/or repairs shall return the disturbed areas(s) of the park, island(s) and the St. Joseph River to conditions of the park as in that time period 1912 to 1940. Any new installations of any type may be considered if the alteration does not alter the basic concept of the historic landscape design.

9.7 Furnishings and Objects (includes Benches, Lights, Signs, Drinking Fountains, Trash Receptacles, Fences, Tree Grates, Flagpoles, Sculpture, Monuments, Memorials, Planters, Urns, etc.)

Refer to Sections 9.11 B, C and D regarding treatment of materials and features; and Sections 9.2, 9.3, 9.4, 9.5, 9.6, 9.8, 9.9 and 9.10 for additional Standards and Criteria that may apply.

- 1. All items listed herein shall be preserved:
  - a. The Duck Pond (West Lagoon), including the Island in the lagoon, the Walls, Curbing, Fence, and Shelter House.
  - b. The Stone and Plaque of the DAR, with related Tulip and Gingko Trees.
  - c. The Concrete Stairway leading west southwesterly from the Duck Pond (West Lagoon).
  - d. The High Embankment on the west-southwest side of the Duck Pond (West Lagoon).
  - e. The Pump Houses, number 2 and 3.
  - f. The Edward B. Reynolds Horse and Dog Watering Fountain.
  - g. The Drinking Fountain in the south east portion of the central section of the park.
  - h. The central section of the park, the area of the large Floral Garden and Pathways as designed by George Kessler in 1912.
  - i. All Sidewalks on Lafayette Boulevard, Riverside Drive, Park Lane (Foote Street), Bartlett Street and Michigan Street.

- j. The Retaining Wall on the western boundary of the western section of the park.
- The Wall comprised of Cut Stone, which extended west-northwest and east-southeast from the southern approach of the Leeper Park Bridge.
- 1. The Log Cabin known as the Navarre House, and the footings of the cabin/house which was burned down.
- m. All Drinking Fountains located in the eastern section of the park and/or on the island(s).
- n. The Sunken Garden on the eastern section of the park, along with all the Vegetation, Pathways, Stairs and the Fountain and Statues.
- o. The WPA walls and Sloughs(s) in the eastern section of the park and the adjoining St. Joseph River.
- p. All Park Benches.
- q. All Manhole Covers, Sewer Covers and Grates, and all Electrical Underground Vault and/or Raceway Covers.
- r. The north/south alleyway east of Michigan Street, running north from Bartlett Street which used to run between Lot 'A' and Lots 13, 14, 15, 16, 17, 18, 19 and part of 20 of the Rockstroh Addition.
- s. All Plaques, Monuments, Sculptures, Memorials, Planters, Urns, Curbings, Roadways, Marker Stones, Sundials, Well-Head Covers, Fences, Trellises, Pergolas, Pathways, and Trees.
- 2. Original or later contributing furnishings and objects, shall be retained and, if necessary, repaired by patching, piecing in, consolidating or reinforcing the material using recognized preservation methods.
- 3. Deteriorated or missing furnishings and objects, materials, elements, features and details shall be replaced with materials that match the original in material, size, shape, color, profiles, form, texture, configuration and detail of installation.
- 4. Alteration of existing or addition of new furnishings and objects will be considered if they do not alter the basic concept of the historic landscape design.
- 5. When replacement of furnishings and objects and their materials is necessary, it should be based on physical or documentary evidence.
- 6. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.
- Existing memorials, statues, monuments and fountains shall be carefully preserved and restored where necessary, maintaining the
  integrity of the original material and design. The work shall be coordinated with the Historic Preservation Commission of South
  Bend and St. Joseph County.
- 8. New furnishings and objects should be designed using vandal resistant standards.
- 9. Location of signs shall be guided by a master plan.
- 10. Signs shall conform to a simple sign system.
- 11. Existing non-conforming signs should be removed.
- 12. All new monuments and fountains shall be placed so that they conform to and with the original historic landscape design of the park and park system.

9.8 Structures (includes Walls, Terraces, Arbors, Gazebos, Follies, Playground Equipment, Picnic Shelters, Plazas, Greenhouse, Steps, Bridges, Dams, Buildings, etc.)

Refer to Sections 9.11 B and D regarding treatment of materials and features; and sections 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.9 and 9.10 for additional Standards and Criteria that may apply.

- 1. The general intent is to preserve the original or later contributing structures that enhance the historic landscape.
- 2. Refer to Sections 9.2.2 and 9.7.1 of structures, elements and materials that need to be preserved such as wall, terraces, arbors, gazebos, follies, playground equipment, picnic shelters, plazas, greenhouses, steps, bridges, dams, building, etc. which shall be preserved.
- 3. Original or later contributing structures, shall be retained and, if necessary, repaired by patching, piecing in, consolidating or reinforcing the material using recognized preservation methods.
- 4. Deteriorated or missing structures, materials, elements, features and details shall be replaced with materials that match the original in material, size, shape, color, profiles, form, texture, configuration and detail of installation.
- 5. When replacement of structures is necessary, it should be based on physical or documentary evidence.
- 6. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.
- 7. New addition/alterations to the landscape (such as: parking lots, comfort stations, buildings, etc.) shall be as unobtrusive as possible and preserve and original or later contributing landscape features.
- 8. Removal of non-historic structures from the existing landscape is encouraged.
- 9. Structures shall be protected from arson and other acts of vandalism through proper monitoring procedures and methods such as; permanent installation of smoke detectors, alarms, or other security systems, or temporarily boarding up windows and openings.
- 10. No building(s) shall be erected in the central section of the park; the western section of the park, north of the northern fence to the tennis courts; the eastern section of the park, west of the rear set-back of the north Pumping Station, or in the area north and east of the Log Cabin.

#### 9.9 Archeology

Refer to Section 9.11 B and C, and D regarding treatment and materials. Refer to Sections 9.3, 9.4, 9.5, 9.6, 9.7 and 9.8 for additional Standards and Criteria that may apply.

- 1. The landscape should be surveyed for potential archeological sites prior to the beginning of any construction project.
- 2. Known Archeological site(s) shall be protected during any construction project.
- 3. Disturbance of the terrain within the landscape shall be kept to a minimum so as not to disturb any unknown archeological materials.
- 4. All planning, any necessary site investigation, or data recovery shall be conducted by professional archeologist.

#### 9.10 Accessibility

Refer to Sections 9.11 B, C and D regarding treatment of materials. Refer to Sections 9.3, 9.4, 9.5, 9.6, 9.7, and 9.8 for additional Standards and Criteria that may apply.

- 1. A three-step approach is recommended to identify and implement accessibility modification that will protect the integrity and historic character of the property.
  - a. Review the historical significance of the property and identify character-defining features;
  - b. Assess the property's existing and required level of accessibility;
  - c. Evaluate accessibility options within a preservation context.
- 2. Because of the complex nature of accessibility, the Historic Preservation Commission will review proposals on a case by case basis. The Commission recommend consulting with the following document which is available from the Commission office: U.S. Department of the Interior, National Park Service, Cultural Resources, Preservation Assistance Division; Preservation Brief 32, "Making Historic Properties Accessible" by Thomas C. Jester and Sharon C. Park, AIA.

#### 9.11 Architectural Materials

#### A. General

The Historic Preservation Commission of South Bend and St. Joseph County recommend that work proposed to the materials outlined in Sections B, C, and D be executed with the guidance of a professional building material conservator.

- 1. Removal of the speakers atop Pump House Number 3 is encouraged.
- B. Masonry (Brick, Stone, Terra Cotta, Concrete, Stucco, and Mortar)
  - 1. [intentionally left blank]
  - 2. Original or later contributing masonry materials, feature, details, surfaces and ornamentation shall be retained and, if necessary, repaired by patching, piecing-in, or consolidating the masonry using recognize preservation methods.
  - 3. Deteriorated or missing masonry materials, features, details, surfaces and ornamentation shall be replaced with material and elements which match the original in material, color, texture, size, shape, profile and detail of installation.
  - 4. When replacement of materials or elements is necessary, it should be based on physical or documentary evidence.
  - 5. If using the same material is not technically or economically feasible, then compatible substitute materials may be considered.
  - 6. Original mortar shall be retained.
  - 7. Deteriorating mortar shall be carefully removed by hand-raking the joints.
  - 8. Use of mechanical saws and hammers shall not be allowed.
  - Repointing mortar shall duplicate the original mortar in strength, composition, color, texture, joint size, joint profile and method of application.
  - 10. Sample panels of raking the joints and repointing shall be reviewed and approved by the staff of the Historic Preservation Commission of South Bend and St. Joseph County.
  - 11. Cleaning of masonry is discouraged and should be performed only when necessary to halt determination.
  - 12. If the building is to be cleaned, the mildest method possible shall be used.
  - 13. A test patch of the cleaning method(s) shall be reviewed and approved on site by staff of the Historic Preservation Commission of South Bend and St. Joseph County. Test patches should always be carried out well in advance of cleaning (including exposure to all seasons if possible.)
  - 14. Sandblasting (wet or dry), wire brushing, or similar abrasive cleaning methods shall not be permitted. Doing so changes the visual quality of the material and accelerates deterioration.
  - 15. Waterproofing or water repellant are strongly discouraged. These treatments are generally not effective in preserving masonry and can cause permanent damage. The Commission does recognize that in extraordinary circumstances their use may be required to solve a specific problem. Samples of any proposed treatment shall be reviewed by the Commission before application.
  - 16. In general, painting masonry surfaces shall not be allowed. Painting masonry surfaces will be considered only when there is documentary evidence that this treatment was used at some point in the history of the property.

#### C. Wood

- 1. [intentionally left blank]
- 2. Original or later contributing wood surfaces, features, details and ornamentation shall be retained and, if necessary, repaired by patching, piecing-in, consolidating or reinforcing the wood using recognized preservation methods.
- 3. Deteriorated or missing wood surfaces, features, details and ornamentation shall be replaced with material and elements which match the original in material, color, texture, size, shape, profile and detail of installation.
- 4. When replacement of materials or elements is necessary, it should be based on physical or documentary evidence.
- 5. If using the same materials or elements is necessary, it should be based on physical or documentary evidence.
- 6. Cleaning of wooden elements shall use the mildest method possible.
- 7. Paint removal should be considered only where there is a paint surface deterioration and as part of an overall maintenance appropriate protective coatings. Coatings such as paints help protect the wood from moisture and ultraviolet light and stripping the wood bare will expose the surface to the effects of weathering.

- 8. Damage or deteriorated paint should be removed to the next sound layer using the mildest method possible.
- 9. Propane or butane torches, sandblasting, water blasting, or other abrasive cleaning and/or paint removal methods shall not be permitted. Doing so changes the visual quality of the wood and accelerates deterioration.
- 10. Repainting should be based on paint serration studies. If an adequate record does not exist repainting shall be done with the colors that are appropriate to the style and period of the building.

#### D. Architectural Metals (Cast Iron, Steel, Pressed Tin, Copper, Aluminum, and Zinc)

- 1. All metal materials, features, details and ornamentation of the buildings in the park shall be preserved. This also includes all metal parts of all fountains, monuments, memorials, plaques, street lights, drinking fountains, etc.
- 2. Original or later contributing metal materials, features, details, and ornamentation shall be retained and, if necessary repaired by patching, splicing or reinforcing the metal using recognized preservation methods.
- 3. Deteriorated or missing metal materials, features, details and ornamentation shall be replaced with material and elements which match the original in material, color, texture, size, shape, profile and detail of installation.
- 4. When replacement of materials or elements is necessary, it should be based on physical evidence or documentary evidence.
- 5. If using the same material is not technically or economically feasible then compatible substitute materials may be considered.
- 6. Cleaning of metal elements either to remove corrosion or deteriorated paint shall use the mildest method possible.
- 7. Abrasive cleaning methods, such as low pressure dry grit blasting, may be allowed as long as it does not abrade or damage the surface.
- 8. A test patch of the cleaning method(s) shall be reviewed and approved on site by staff of the Historic Preservation Commission of South Bend and St. Joseph County. Test patches should always be carried out well in advance of cleaning (including exposure to all seasons if possible.)
- 9. Cleaning to remove corrosion and paint removal should be considered only where there is deterioration and as part of an overall maintenance program which involved repainting or applying other appropriate protective coatings. Paint or other coatings help retard the corrosion rate of the metal. Leaving the metal base will expose the surface to accelerated corrosion.
- 10. Repainting should be based on paint seriation studies. If an adequate record does not exist repainting shall be done with colors that are appropriate to the style a and period of the building.

The Landscapes- Specific Standard and Criteria was financed in part with funds from the National Park Service, U.S. Department of the Interior, through the Massachusetts Historical Commission, Secretary of State, Michael Joseph Connolly, Chairman, and adopted for use by the Historic Preservation Commission of South Bend and St. Joseph County, Indiana, by permission of the Environment Department, City of Boston, Massachusetts, by Michael A. Cannizzo, Staff Architect, 1996.

#### **SITE VISIT REPORT:** N/A

**STAFF RECOMMENDATION:** Staff recommends approval of the project with a condition that consideration is given to screening the well with compatible plant material.

Elicia Feasel Historic Preservation Administrator



Diagram 1 - Satellite imagery from 2017



Diagram 2 - Location of Well



Diagram 3 - Location of Well showing pilot well



Diagram 4 - Well design same as other Leeper Park examples shown here



#### HISTORIC PRESERVATION COMMISSION

OF SOUTH BEND AND ST. JOSEPH COUNTY

County—City Building, South Bend, IN 46601 http://www.southbendin.gov/government/department/community-investment

Phone: 574/235.9371 Email: hpcsbsjc@southbendin.gov

Fax: 574/235.9021

Elizabeth Hertel, Vice President Acting President

A Certified Local Government of the National Park Service

Elicia Feasel, Historic Preservation

Administrator

#### APPLICATION FOR A — CERTIFICATE OF APPROPRIATENESS

OFFICE USE ONLY>>>>> DO NOT COMPLETE ANY ENTRIES CONTAINED IN THIS BOX							
Date Received: Application Number:							
Past Reviews: YES (Date of Last Review) NO							
Staff Approval authorized by:							
Historic Preservation Commission Review Date:							
Local Landmark Local Historic District (Name)							
National Landmark National Register District (Name)							
Certificate Of Appropriateness:  Denied Sent To Committee Approved and issued:							
Address of Property for proposed work: 820 N Michigan Street, South Bend, IN 46601							
(Street Number—Street Name—City—Zip)							
Name of Property Owner(s): City of South Bend Phone #:							
Address of Property Owner(s): 820 N Michigan Street, South Bend, IN 46601							
(Street Number—Street Name—City—Zip)							
Name of Contractor(s): Contractor TBD following Bidding  Phone #:							
Contractor Company Name:							
Address of Contractor Company:							
(Street Number—Street Name—City—Zip)							
Current Use of Building: Drinking Water Treatment							
(Single Family—Multi-Family—Commercial—Government—Industrial—Vacant—etc.)							
Type of Building Construction: Concrete (matching several other existing wells) with underground utilities							
(Wood Frame—Brick—Stone—Steel—Concrete—Other)							
Proposed Work: (more than one Landscape New Replacement (not in-kind) Demolition							
Description of Proposed Work:							
Replacement of a drinking water well and associated piping. Work will include drilling the well, construction of the well pump pedestal (matching the other wells in the Leeper Park well field) and trenching in the piping. This work will also include the abandonment of the existing well that is being replaced.							
Owner e-mail: agreek@southbendin.gov and/or Contractor e-mail:							
x Ollned and/or X							
Signature of Owner Signature of Contractor							

By signing this application I agree to abide by all local regulations related to project and to obtain a Building Department Permit, if applicable.

# TO ENSURE YOUR APPLICATION CAN BE PROCESSED IN A TIMELY MATTER WITHOUT DELAY, PLEASE INCLUDE THE FOLLOWING DOCUMENTATION WHEN APPROPRIATE:

X	Certificate of Appropriateness application
X	Written description of the project (materials to be used, scale, dimensions, construction methods, alterations, etc.)
X	tions, etc.)
$\boxtimes$	Materials to be used (Supplemented with manufactures' brochures and specifications)
***************************************	Site Plan showing existing buildings & structures and proposed project (for new construction, additions,
_	paths, terraces, patios, fences)
$\boxtimes$	
	Photographs
$\boxtimes$	
	Blueprints/Drawings
	Application fee - \$20.00

# CITY OF SOUTH BEND, INDIANA DEPARTMENT OF PUBLIC WORKS

**PROJECT** 

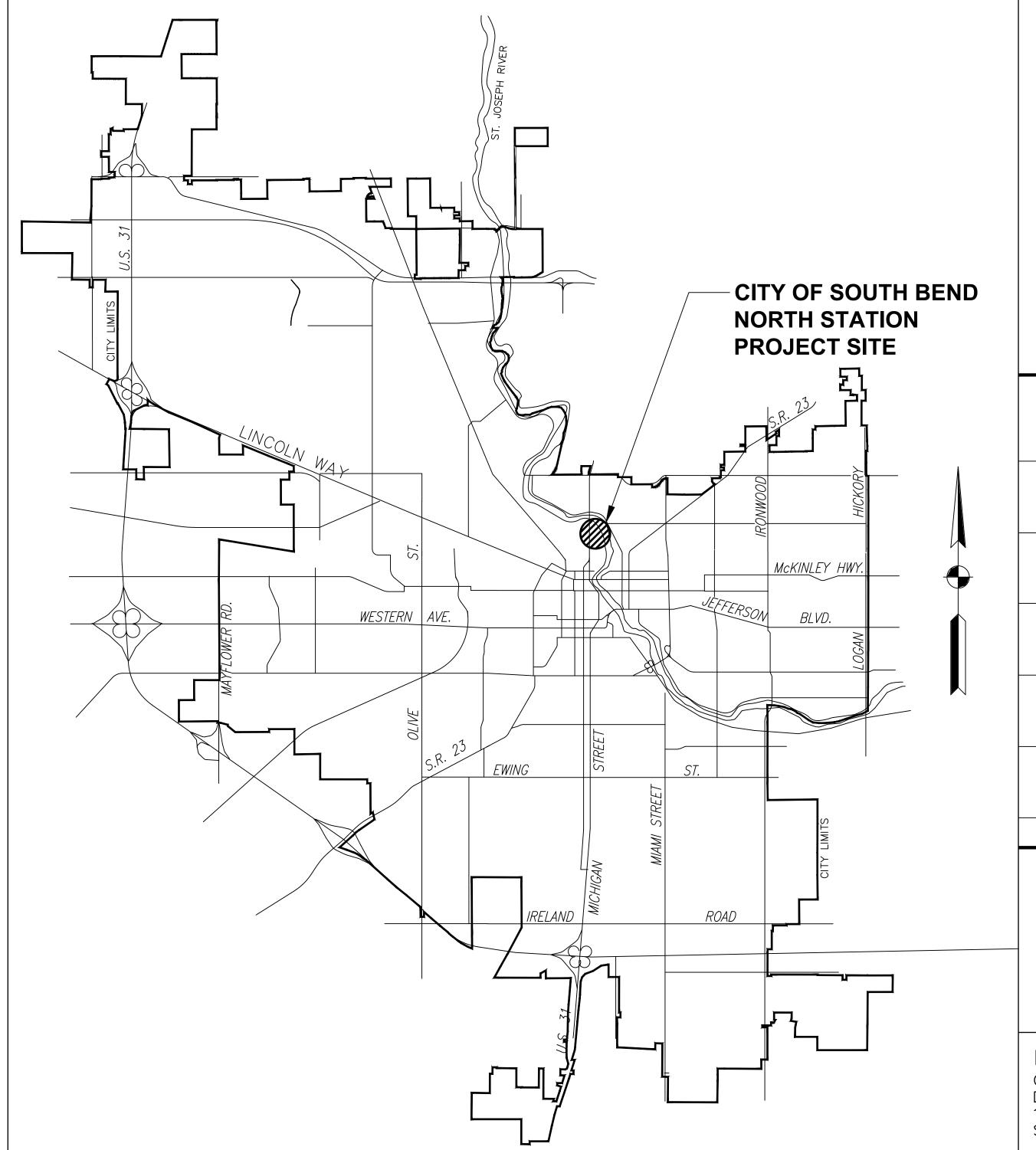
□ SEWER

■ WATER

□ TRAFFIC

□ STREET

□ OTHER



# WELL NO. 1 REPLACEMENT

NORTH STATION PROJECT NO. 117-031R JANUARY 2019

APPROVED BY BOARD OF PUBLIC WORKS			RECOMMENDATIONS OF CITY STAFF		
		DATE			DATE
GARY A. GILOT, P.E.	PRESIDENT		BECCA PLANTZ	DESIGN AND ADMINISTRATION	
ELIZABETH A. MARADIK	MEMBER		KARA M. BOYLES, PHD, PE	CITY ENGINEER	
THERESE J. DORAU	MEMBER		AL GREEK	DIRECTOR OF UTILITIES	
LAURA O'SULLIVAN	MEMBER		TOY VILLA	CONSTRUCTION	
SUSANNA M. FRITZBERG	MEMBER				
			***************************************		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

# INDEX OF DRAWINGS

- G-1 TITLE, LOCATION PLAN, INDEX OF DRAWINGS C-1 DEMOLITION AND MODIFIED SITE PLAN
- C-2 PLAN AND SECTION
- C-3 DETAILS SHEET 1 OF 2 C-4 DETAILS - SHEET 2 OF 2
- C + DETAILS SHEET 2 C

PLANS PREPARED FOR:
CITY OF SOUTH BEND
DEPARTMENT OF PUBLIC WORKS
1316 COUNTY — CITY BUILDING
SOUTH BEND, IN 46601

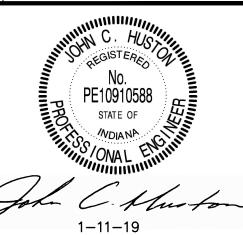
PLANS PREPARED BY:
ARCADIS U.S., INC.
150 WEST MARKET STREET
SUITE 728
INDIANAPOLIS, IN 46204



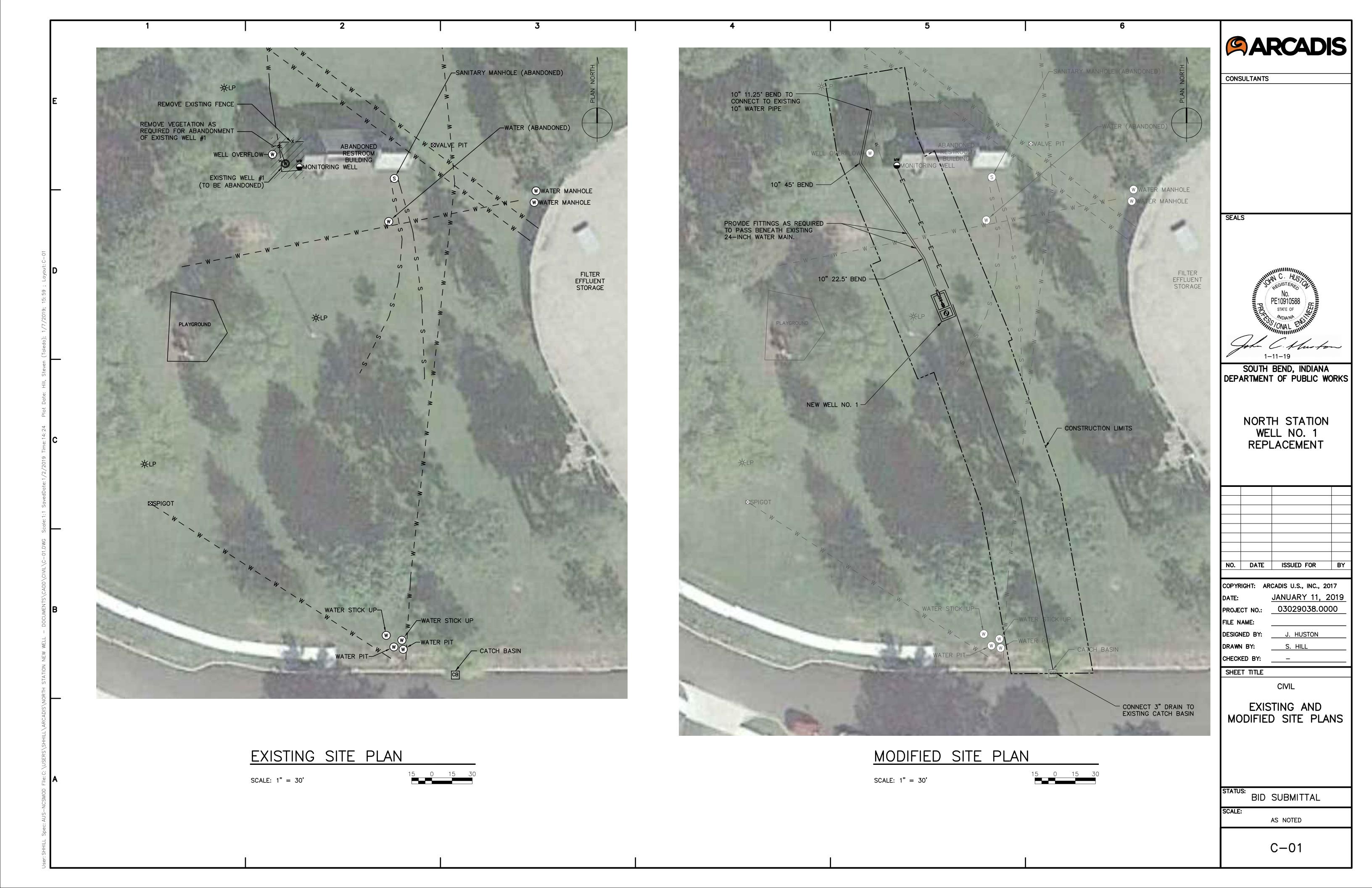
No. 11100564

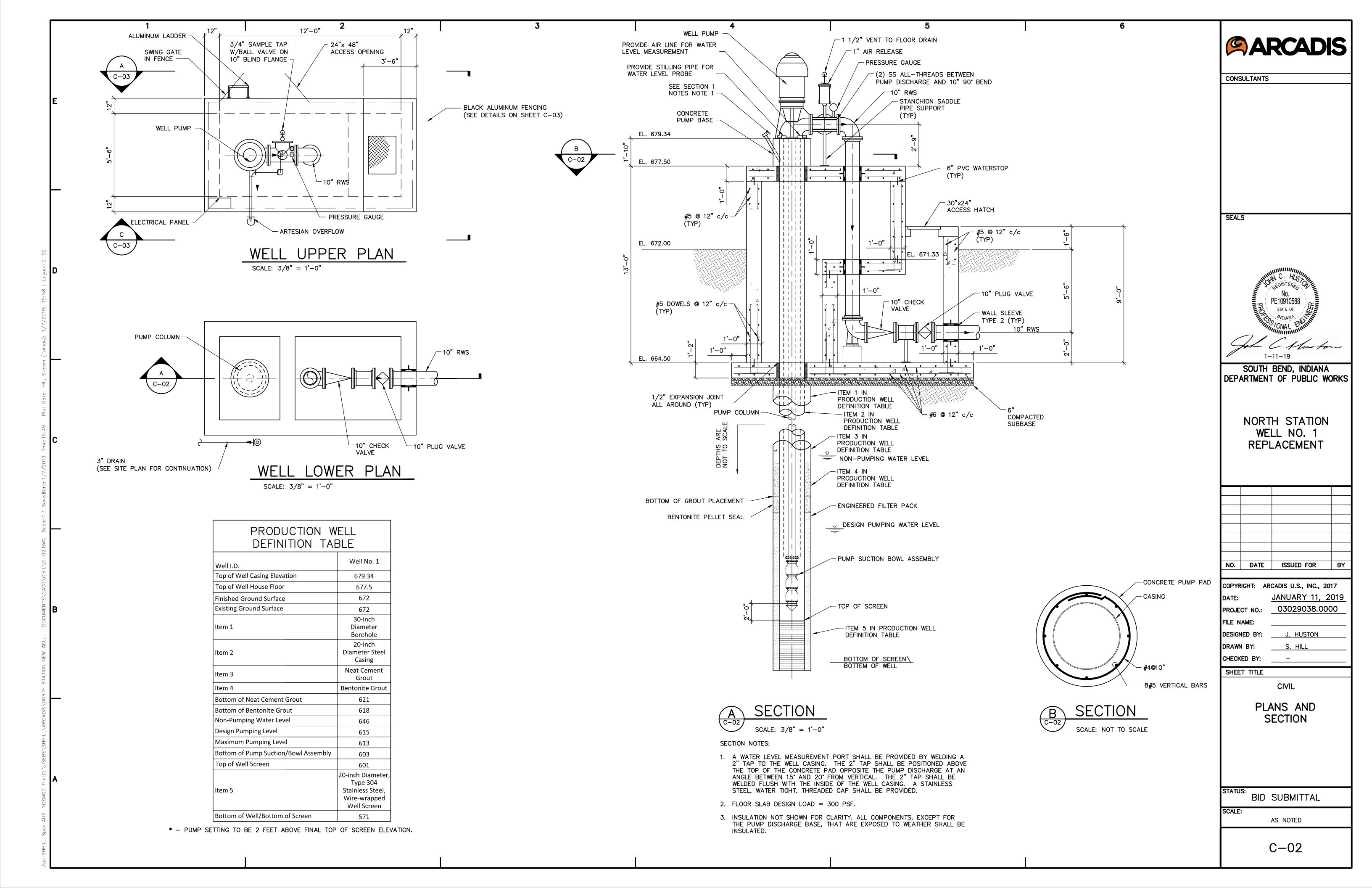
James Steed

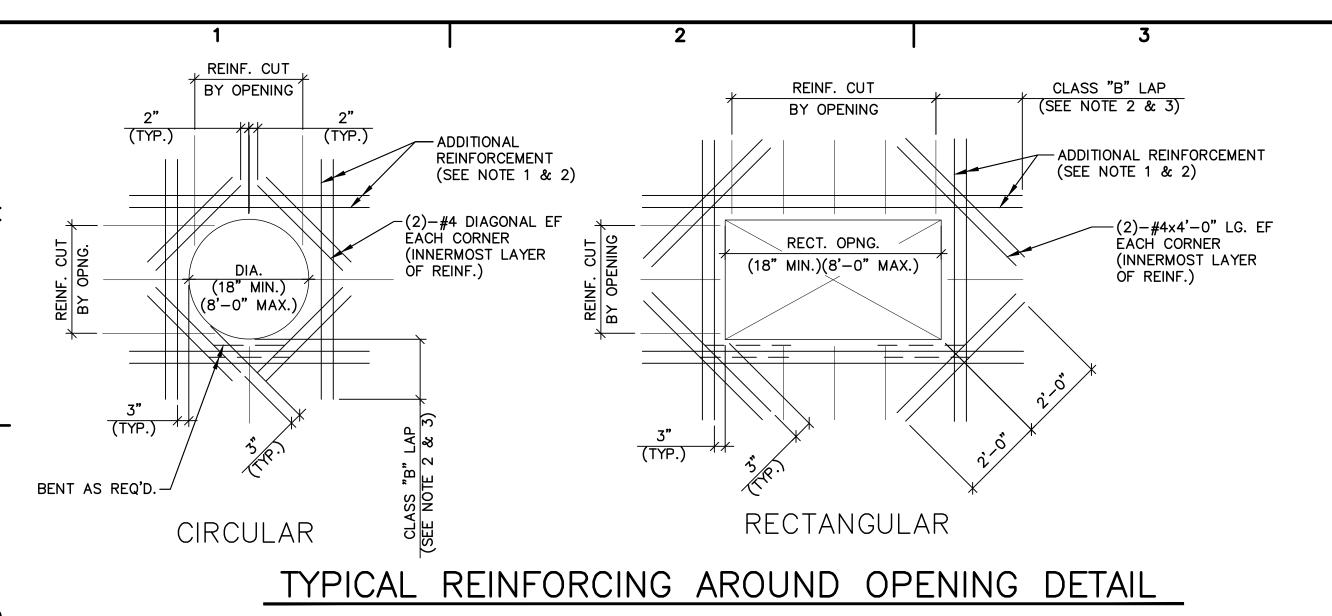
STANDARD DRAWINGS



SHEET 1 OF 5







#### NOTES:

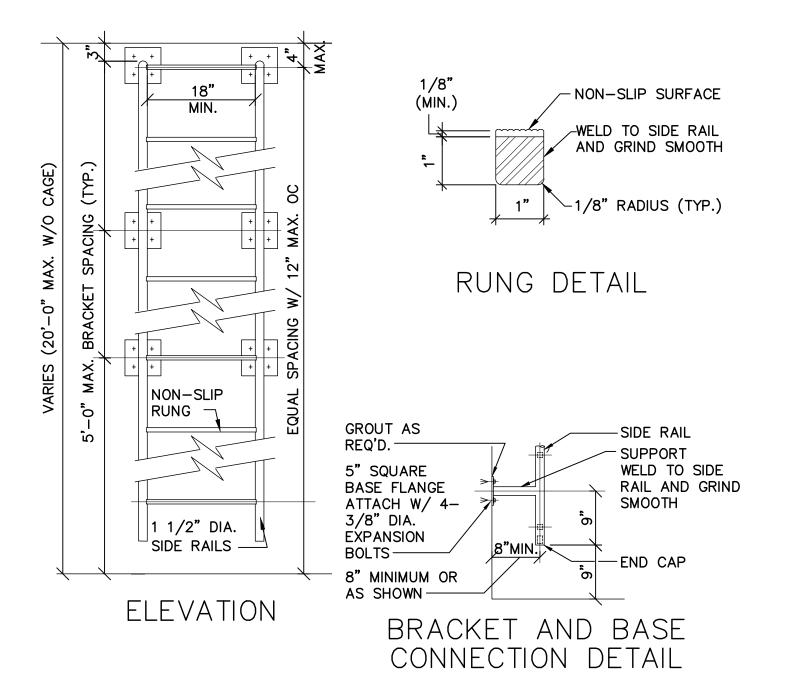
- 1. PROVIDE ADDITIONAL REINFORCEMENT AT ALL OPENINGS, ACCESS HATCHES, PIPE PENETRATIONS, ETC. EQUAL IN AREA TO THE TYPICAL REINFORCEMENT CUT BY OPENING IN EACH DIRECTION. ADDITIONAL REINFORCEMENT TO MATCH SIZE OF TYPICAL REINFORCEMENT (MIN. 2 BARS ES AND EF) AND PLACED BETWEEN TYPICAL REINFORCEMENT @3" SPACING ON EACH SIDE OF OPENING.
- 2. PROVIDE MATCHING DOWELS WHERE REQUIRED TO PROVIDE CLASS "B" LAP WITH ADDITIONAL REINFORCEMENT. (WHERE LAPPING OF ADDITIONAL REINFORCEMENT FROM ADJACENT OPENINGS OCCUR, ADDITIONAL REINFORCEMENT SHALL BE COMBINED.
- 3. IF A WALL OR BEAM IS ADJACENT TO THE OPENING, THE ADDITIONAL REINFORCEMENT ON THAT SIDE OF THE OPENING CAN BE OMITTED.



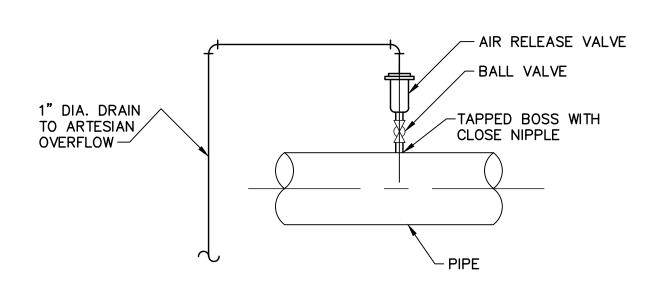
# FENCING AND RAILING DETAIL

#### FENCING NOTES:

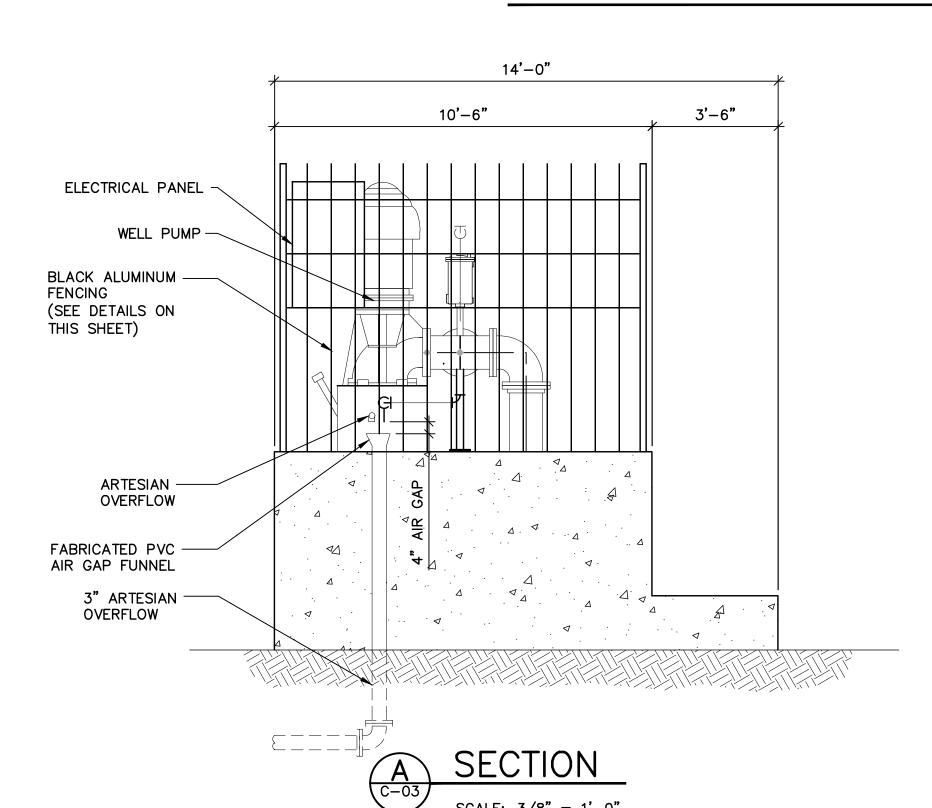
- 1. PROVIDE 60" MINIMUM DECORATIVE FENCING MATCHING EXISTING WELL LOCATION IN LEEPER PARK.
- 2. PROVIDE LOCKING MECHANISM FOR BOTH GATES MATCHING EXISTING GATE LOCKS.
- 3. POST SIZES SHALL BE AS DETERMINED BY MANUFACTURER TO MEET IBC SECTION 1607.8 REQUIREMENTS FOR LOADS ON HANDRAILS, GUARDS, GRAB BARS."

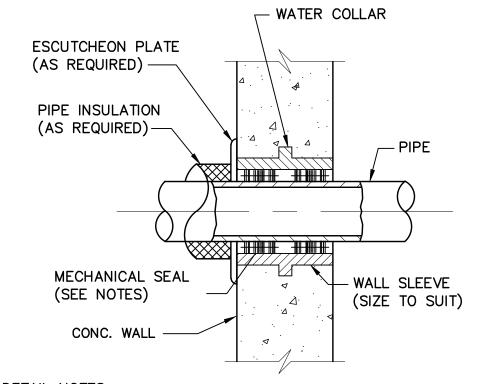


# ALUMINUM LADDER DETAILS



# TYPICAL AIR RELEASE VALVE DETAIL

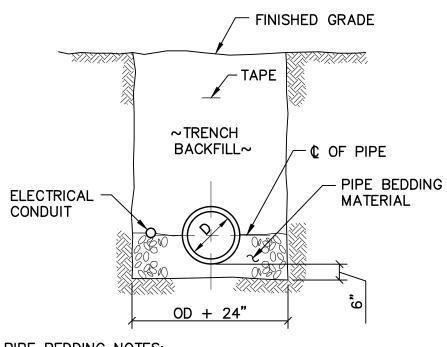




#### DETAIL NOTES:

- 1. TYPE 1: CONC. WALL MECHANICAL SEAL REQUIRED ON ONE FACE TYPE 2: CONC. WALL MECHANICAL SEAL REQUIRED ON BOTH FACES TYPE 3: CMU WALL MECHANICAL SEAL REQUIRED ON ONE FACE TYPE 4: CMU WALL MECHANICAL SEAL REQUIRED ON BOTH FACES
- 2. PROVIDE FIRE RATED MECHANICAL SEALS AS REQUIRED.

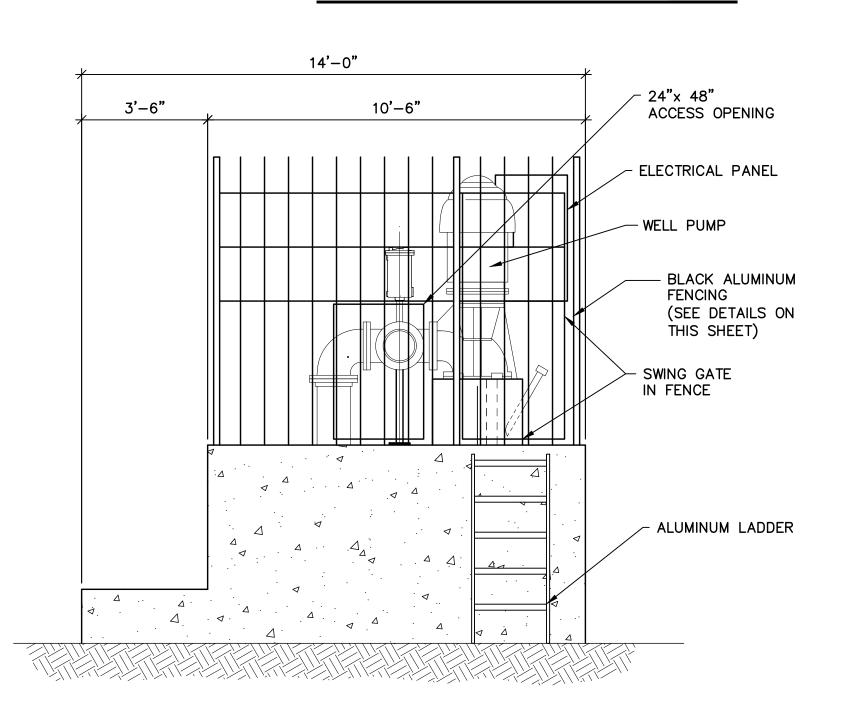
# TYPICAL WALL SLEEVE DETAILS



#### PIPE BEDDING NOTES:

- 1. WIDTH OF TRENCH IS MEASURED ONE FOOT ABOVE TOP OF PIPE. TRENCH MAY BE WIDER ABOVE THIS POINT.
- 2. ALL TRENCH WIDTHS SHOWN ARE MAXIMUM DIMENSIONS.

# PIPE BEDDING DETAIL

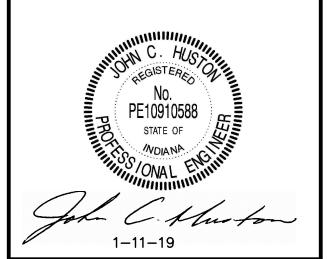






CONSULTANTS

CEALC



SOUTH BEND, INDIANA
DEPARTMENT OF PUBLIC WORKS

NORTH STATION WELL NO. 1 REPLACEMENT

NO. DATE ISSUED FOR BY

COPYRIGHT: ARCADIS U.S., INC., 2017

DATE: JANUARY 11, 2019

PROJECT NO.: 03029038.0000

FILE NAME:

DESIGNED BY: J. HUSTON

DRAWN BY: S. HILL

CHECKED BY: —

SHEET TITLE

CIVIL

DETAILS SHEET 1 OF 2

STATUS: BID SUBMITTAL

ALE: AS NOTED

C - 03

CONNECTION

CODED NOTES:

- NEW MOTOR CONTROLLER WILL BE INSTALLED IN EXISTING MCC BY CITY.
- EXISTING POWER WIRE AND CONDUIT FROM STARTER TO EXISTING WELL SITE TO BE REUSED.
- NEW 100 HP WELL PUMP PROVIDED IN THIS CONTRACT.
- PROVIDE 3#3/0, 1#6G, 2"C FROM EXISTING WELL SITE TO NEW WELL PUMP. WIRE SHALL BE TYPE XHHW-2." CONDUIT SHALL BE SCH80 PVC. CONDUITS SHALL BE ROUTED IN SAME TRENCH AS PUMP DISCHARGE PIPE. NEW WIRES SHALL BE SPLICED TO EXISTING WIRES WITHIN PULL BOX TO EXTEND POWER TO NEW LOCATION.
- PROVIDE IN-GROUND PULL BOX AS SPLICE POINT BETWEEN NEW AND EXISTING CONDUIT AND WIRE. BOX SHALL BE PRECAST CONCRETE OR HDPE, MINIMUM SIZE OF 24" BY 24" WITH 18" DEPTH (OR AS REQUIRED), OPEN BOTTOM WITH BOLTED OR LOCKING COVER. PROVIDE 4" OF WASHED GRAVEL IN BOTTOM OF BOX.
- WIRE SPLICES #10 AND SMALLER: CLOSED END CONNECTORS SHALL BE DESIGNED TO JOIN TWO TO FOUR WIRES. THE CLOSED END SHALL HAVE A CRIMP CONNECTION. THE TUBING SHALL HAVE AN ACTIVE ADHESIVE THAT SEALS AROUND THE WIRES AND PREVENTS PULLOUT. NATIONAL STANDARD PARTS ASSOCIATES (NSPA) HL8 OR EQUAL.
- WIRE SPLICES LARGER THAN #10: SPLICES SHALL BE WATERPROOF. COMPRESSION TYPE SPLICES SHALL BE WATERPROOFED BY SEALANT-FILLED, THICK WALL, HEAT SHRINKABLE, THERMOSETTING TUBING OR BY POURING THERMOSETTING RESIN INTO MOLD THAT SURROUNDS THE JOINED CONDUCTOR. SPLICES SHALL BE SUITABLY SIZED FOR CABLE, RATED 90 DEGREES C, AND 600 VOLTS
- 8. PROVIDE 5#12,1#12G,1"C FROM PULLBOX TO NEW WELL SITE. WIRES SHALL BE TYPE XHHW-2. CONDUIT SHALL BE SCH80 PVC. CONDUITS SHALL BE ROUTED IN TRENCH. NEW WIRES SHALL BE SPLICED TO EXISTING WIRES WITHIN IN-GROUND PULLBOX TO EXTEND KEY SWITCH FUNCTION TO NEW LOCATION.
- PROVIDE 6"X6'X6" (MINIMUM DIMENSIONS) NEMA 4X STAINLESS STEEL ENCLOSURE TO HOUSE KEY SELECTOR SWITCH. CONTACTS AND CONFIGURATION OF KEY SWITCH SHALL MATCH EXISTING KEY SWITCH AT EXISTING PUMP. KEY SWITCH ENCLOSURE SHALL BE STRUT MOUNTED INSIDE FENCED AREA WITH PUMP.
- (10) EXISTING INSTRUMENTION PROBES, RADIO PANEL AND SOLAR PANEL SHALL BE RELOCATED FROM EXISTING WELL TO NEW WELL. PROBES, WIRING AND CONTROL PANEL SHALL BE CAREFULLY REMOVED AND STORED FOR RECONNECTION AND REUSE AT THE NEW SITE. PROVIDE 10 FOOT 2" RGS CONDUIT TO SERVE AS A MAST FOR MOUNTING OF SOLAR PANEL ALONG SOUTH SIDE OF PUMP. ORIENT PANEL TO SAME AS CURRENTLY INSTALLED. PROVIDE STRUT MOUNTING OF PANEL INSIDE FENCED AREA AT NEW WELL SITE. PANEL SHALL TRANSMIT INFORMATION TO EXISTING RECEIVING UNIT IN NEARBY BUILDING AS IT DOES FROM ITS CURRENT LOCATION.

**ARCADIS** 

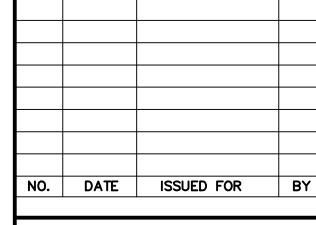
CONSULTANTS

**SEALS** 



SOUTH BEND, INDIANA DEPARTMENT OF PUBLIC WORKS

> NORTH STATION WELL NO. 1 **REPLACEMENT**



COPYRIGHT: ARCADIS U.S., INC., 2017 JANUARY 11, 2019 PROJECT NO.: 03029038.0000

FILE NAME: DESIGNED BY: J. HUSTON DRAWN BY: S. HILL

SHEET TITLE

CHECKED BY:

CIVIL

**DETAILS** SHEET 2 OF 2

BID SUBMITTAL

AS NOTED

C - 04

EQUIPMENT — 4" MIN (UON) NON-SHRINK #4@12" (EW) 6" MIN (UON) #4@12" FOR PADS EXCEEDING 12" THK. \_ #4@12" AROUND SLEEVE PAD (SEE NOTE 3) (WHERE REQD) ANCHOR BOLTS SIZE AND LOCATION DEPEND UPON EQUIPMENT FURNISHED (SEE NOTE 3)

WIDTH TO PROVIDE A MINIMUM EDGE DISTANCE OF 5

ALL FACES OF SUPPORT PEDESTAL. PROVIDE:

2. PROVIDE #5 REINFORCING BARS EQUALLY DISTRIBUTED ON

8-#5 BARS FOR A BASE WIDTH LESS THAN 16 INCHES.

8-#6 BARS FOR A BASE WIDTH OF 16 INCHES BUT NOT

8-#7 BARS FOR A BASE WIDTH OF 20 INCHES OR

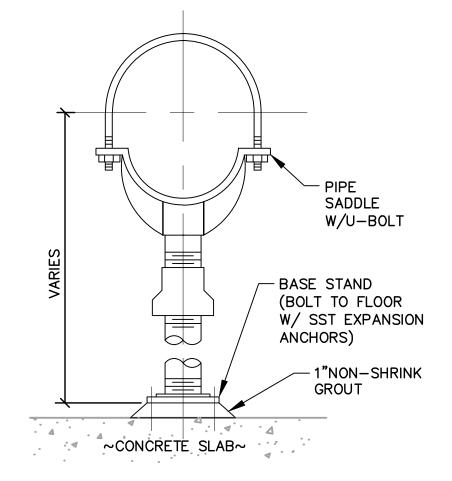
3. ANCHOR BOLT SIZE PER PIPE SUPPORT REQUIREMENT.

INCHES ON ALL ANCHOR BOLTS.

LESS THAN 20 INCHES.

## TYPICAL EQUIPMENT SUPPORT PAD DETAIL

- 1. PROVIDE TYP 6" MINIMUM CONCRETE SUPPORT PAD FOR ALL EQUIPMENT UNLESS OTHERWISE NOTED.
- 2. COORDINATE LOCATION AND SIZE OF PADS WITH OTHER DRAWINGS
- AND MANUFACTURERS CERTIFIED DRAWINGS. 3. FOR EXISTING SLABS, DRILL HOLE DIAMETER AND DEPTH IN EXISTING SLAB PER MANUFACTURER'S REQUIREMENTS FOR
- ADHESIVE ANCHORAGE SYSTEM USED. 4. SEE ELECTRICAL EQUIPMENT PAD DETAIL FOR OTHER SPECIFIC ELECTRICAL EQUIPMENT PAD REQUIREMENTS AND EMBEDDED ITEMS.



REMOVE TOP OF -

STRUCTURE DOWN TO JOINT AS SHOWN

STANCHION SADDLE PIPE SUPPORT DETAIL





- REMOVE EXISTING

PIPING AND ALL

**APPURTANENCES** 

### NOTES:

- 1. AFTER REMOVAL OF EXISTING PIPE AND TOP PORTION OF THE STRUCTURE (AS INDICATED), BACKFILL REMAINING PORTION OF STRUCTURE WITH #8 STONE.
- 2. USE CAUTION WHEN DEMOLISHING VALVE VAULT ADJACENT TO EXISTING STRUCTURE (TO REMAIN).

EXISTING WELL #1 VALVE VAULT **ABANDONMENT** 

