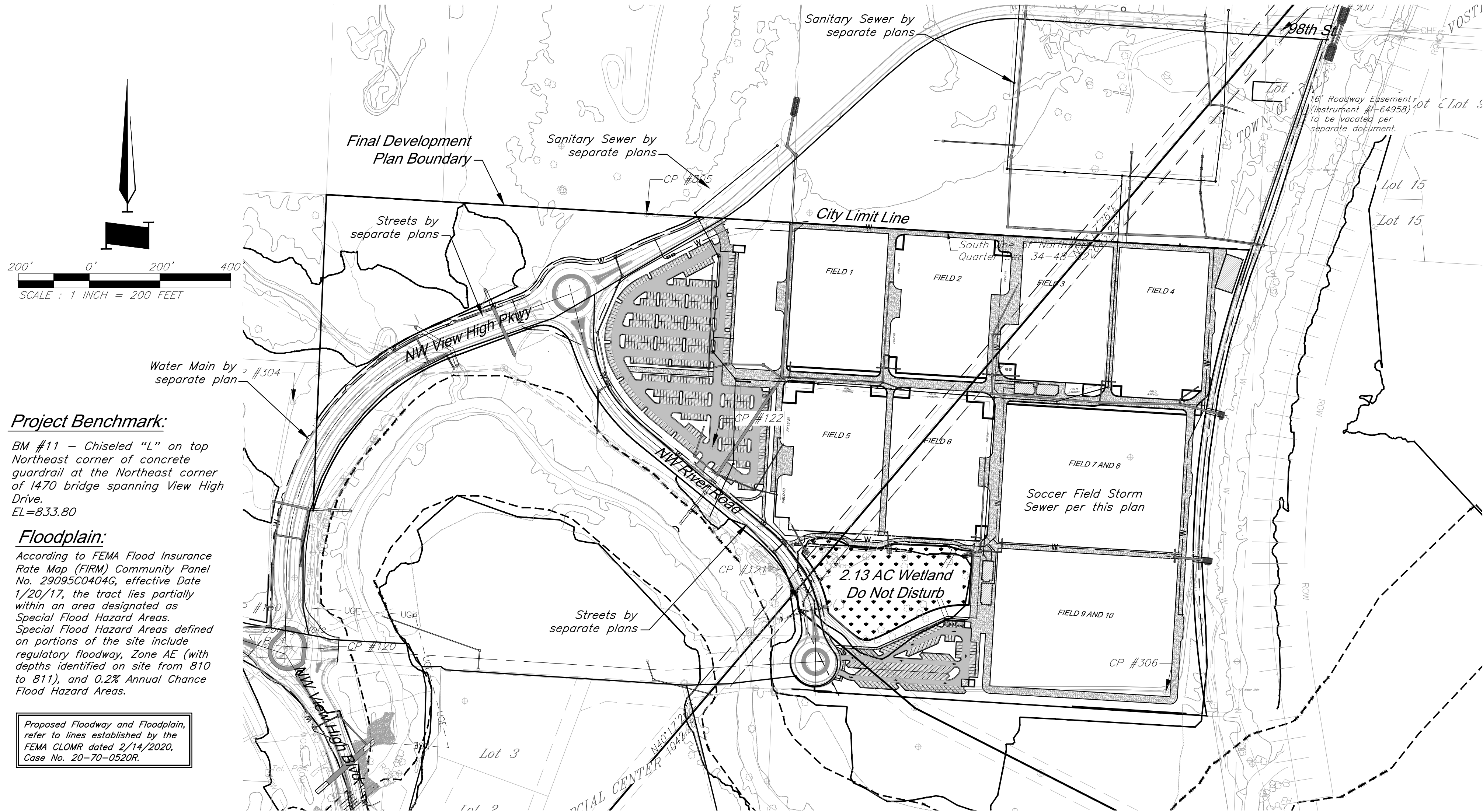


Architect: 00212, Professional Engineer: 000133, Professional Land Surveyor: 0000059
G:\12720\Civil_3D\Production Drawings\field storm plans\1272000020.dwg Layout: 1 General Layout -- Tuesday, April 28, 2020, 1:35pm -- Copyright 2020, George Butler Associates, Inc.
THE PROFESSIONAL WHOLE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY FOR WHAT APPEARS ON THIS PAGE AND DISCLAIMS RESPONSIBILITY FOR WHAT APPEARS ON THIS PAGE. ANY OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR PERTAINING TO THE PROJECT TO WHICH THIS PAGE REFERS.

PARAGON STAR SOCCER COMPLEX FIELD STORM SEWER



Project Benchmark:

BM #11 - Chiseled "L" on top Northeast corner of concrete guardrail at the Northeast corner of 1470 bridge spanning View High Drive.
EL=833.80

Floodplain:

According to FEMA Flood Insurance Rate Map (FIRM) Community Panel No. 29095C0404G, effective Date 1/20/17, the tract lies partially within an area designated as Special Flood Hazard Areas. Special Flood Hazard Areas defined on portions of the site include regulatory floodway, Zone AE (with depths identified on site from 810 to 811), and 0.2% Annual Chance Flood Hazard Areas.

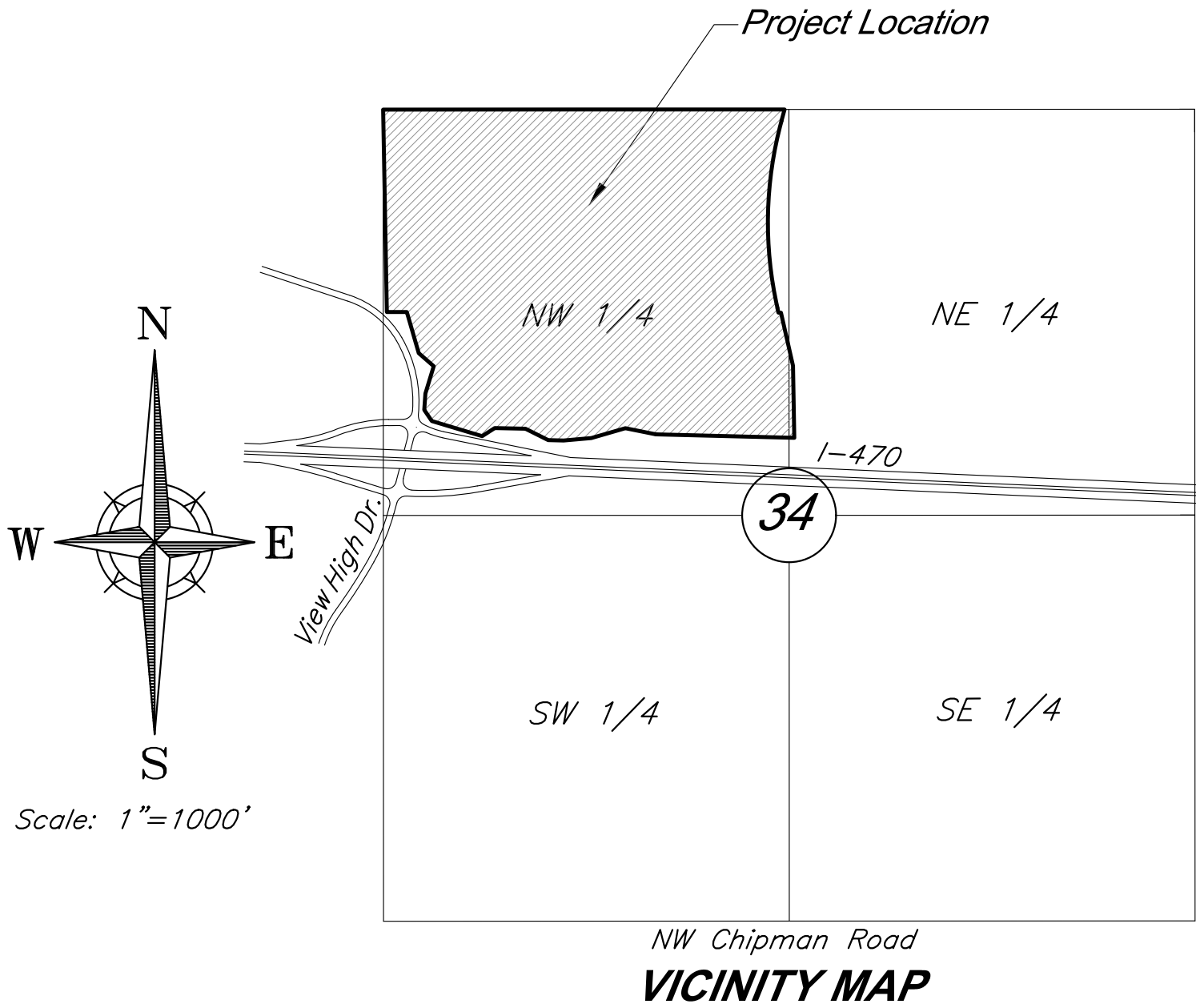
Proposed Floodway and Floodplain, refer to lines established by the FEMA CLOMR dated 2/14/2020, Case No. 20-70-0520R.

Boundary Description:

All that part of the Northwest Quarter of Section 34, Township 48 North, Range 32 West, of the 5th P.M., and all of GRAHAM COMMERCIAL CENTER, a subdivision in the in the City of Lee's Summit, Jackson County, Missouri, being more particularly described as follows:

BEGINNING at the Northwest corner of said Northwest Quarter of Section 34; thence South 86°33'45" East, along the North line of said Northwest Quarter, a distance of 2611.91 feet, to a point on the Westerly Right-of-Way line of Union Pacific Railroad, as now established; thence South 18°46'13" West, departing said North line, along said Westerly Right-of-Way line, a distance of 76.95 feet, to a point of curvature; thence Southwesterly and Southeasterly, continuing along said Westerly Right-of-Way line, along a curve to the left, having a radius of 2508.01 feet, and a central angle of 28°06'45", a distance of 1230.57 feet, to a point of tangency; thence South 09°20'32" East, continuing along said Westerly Right-of-Way line, a distance of 30.31 feet, to a point on the South line of the North half of said Northwest Quarter; thence South 86°26'21" East, continuing along said Westerly Right-of-Way line, and along said South line of the North half of the Northwest Quarter, a distance of 16.41 feet; thence South 09°20'32" East, departing said South line of the North half of the Northwest Quarter, continuing along said Westerly Right-of-Way line, a distance of 354.98 feet, to a point on the East line of said Northwest Quarter; thence South 02°29'17" West, continuing along said Westerly Right-of-Way line, and along said East line of the Northwest Quarter, a distance of 468.48 feet, to a point on the North Right-of-Way line of Interstate 470, as now established; thence North 85°05'37" West, departing said Westerly Right-of-Way line, along said North Right-of-Way line of Interstate 470, a distance of 899.87 feet; thence North 75°10'03" West, continuing along said North Right-of-Way line, a distance of 203.04 feet; thence South 77°15'22" West, continuing along said North Right-of-Way line, a distance of 228.93 feet, to a point on the East line of the Southwest Quarter of said Northwest Quarter, said point also being the Southeast corner of said GRAHAM COMMERCIAL CENTER; thence continuing South 77°15'22" West, continuing along said North Right-of-Way line, and along the South line of said subdivision, a distance of 1.94 feet; thence South 88°33'58" West, continuing along said North Right-of-Way line, and along said South line of said subdivision, a distance of 181.11 feet; thence North 85°01'31" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 100.18 feet; thence North 60°06'43" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 165.44 feet; thence North 85°08'16" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 199.96 feet; thence South 60°28'02" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 97.23 feet; thence North 69°50'05" West, continuing along said North Right-of-Way line, and said South line of said subdivision, a distance of 342.03 feet, to the Southwest corner of said subdivision; thence North 30°28'52" West, continuing along said North Right-of-Way line, and along the West line of said subdivision, a distance of 87.88 feet; thence North 07°21'08" East, continuing along said North Right-of-Way line and it's transition to the East Right-of-Way line of View High Drive, as now established, and said West line of said subdivision, a distance of 106.53 feet; thence North 20°25'39" East, departing said West line of said subdivision, continuing along said East Right-of-Way line of View High Drive, a distance of 185.39 feet; thence North 45°30'34" West, continuing along said East Right-of-Way line, a distance of 129.40 feet; thence North 12°40'32" West, continuing along said East Right-of-Way line, a distance of 278.96 feet, to a point on said South line of the North half of the Northwest Quarter; thence North 86°26'21" West, continuing along said East Right-of-Way line, and along said South line of the North half of the Northwest Quarter, a distance of 130.00 feet, to the Southwest corner of said North half of the Northwest Quarter; thence North 02°25'47" East, along the West line of said Northwest Quarter, a distance of 1316.45 feet, to the POINT OF BEGINNING, containing 5,217,462.56 square feet or 119.78 acres, more or less.

See Sheet C-101 for dimensioned boundary.



INDEX OF SHEETS

Sht. No.	Description
1	General Layout
2-10	Utility Plan
11-15	Storm Sewer Profiles
16-19	Drainage Map
20	Drainage Calculations
21-26	Storm Sewer Details

General Notes:

- All Construction shall conform to the City of Lee's Summit Technical Specifications in effect at the time of the City's approval date shown on the approved plans and incorporated herein by reference.
- All traffic control shall be the responsibility of the Contractor and shall be in conformance with the Manual of Uniform Traffic Control Devices (MUTCD).
- Property Corners and/or Section corners disturbed or damaged by construction activities shall be reset by a Registered Land Surveyor licensed in the state of Missouri, at the Contractor's expense.
- The Contractor shall be responsible for the restoration of the Right-of-Way and for damaged improvements such as curbs, driveways, sidewalks, street light and traffic signal junction boxes, traffic signal equipment, irrigation systems, etc. Damaged improvements shall be repaired in conformance with the latest City standards and to the City's satisfaction.
- All work shall be confined within easements and/or construction limits as shown on the plans.
- The Contractor shall, prior to the commencement of work, investigate surface and subsurface conditions to be encountered across the site and notify the Engineer if any discrepancies or changed conditions are noted.
- All trash and debris identified on site shall be properly handled and disposed of in accordance with state of Missouri regulations.
- All measurements on these plans are horizontal distances, not slope distances.
- This project will include numerous activities occurring on site including storm sewer, sanitary sewer, grading, erosion control, etc. Contractor shall coordinate his work with other contractors on site.
- Initial construction staking will be performed by GBA - Refer to Bid Documents.
- All concrete shall be KCMMB 4,000 psi.
- Oil / Gas Wells are not present on site per Missouri Department of Natural Resources.

Permitting:

- Contractor is responsible for obtaining all required permits, paying all fees, and for otherwise complying with all applicable regulations governing the work.
- No work shall be completed within the existing floodway until the CLOMR has been issued.
- The U.S. Corps of Engineers Section 404 permit has been issued for this project. All work shall adhere to the terms and conditions of this permit, including the preservation of 2.13 Acres of the existing wetland.
- All work within KCMO city limits shall adhere to KCMO Site disturbance requirements.

Erosion Control:

- The Contractor is responsible for providing erosion and sediment control BMP's to prevent sediment from reaching paved areas, storm sewer systems, drainage courses, and adjacent properties. In the event the prevention measures are not effective, the contractor shall remove any debris, silt, or mud and restore the Right-Of-Way, or adjacent properties to original or better condition.
 - Contractor shall ensure that all construction shall conform to the requirements of the Stormwater Pollution Prevention Plan (SWPPP) a copy of which shall be maintained and updated on site by the Contractor.
 - The Contractor shall sod all disturbed areas within the Public Street Right-of-Way unless otherwise noted in the plans.
 - No trees shall be damaged or removed without prior authorization from owner unless otherwise shown on this plan.
- ### Earthwork:
- Slopes shall be constructed to a maximum slope of 3:1 (Horiz:Vert) unless specifically noted otherwise in the referenced Geotechnical reports.
 - Refer to "Geotechnical Engineering Report - Paragon Star Roadways and Borrow Site" Dated December 8, 2016 along with Addendum #1 dated 1/4/17, and "Geotechnical Engineering Report - Soccer Fields" Dated July 27, 2016 prepared by Terracon Consultants, Inc. for grading recommendations and boring logs. All earthwork shall conform to the recommendations of the Reports.
 - Unless otherwise noted, all spot elevations and contours are shown to "finish" grade surface.
 - All temporary slopes and excavations should conform to Occupational Safety and Health Administration (OSHA) standards for the Construction Industry (29 CFR part 1026, subpart P).
 - Earthwork for this phase of development is intended to balance. Contractor to cut only enough fill material from the borrow source at the north end of the project as required to accomplish the fills shown on this plan set.
 - All Permanent seeded shall be dressed with 12" topsoil and permanent seed. All other disturbed areas shall be seeded with the temporary seed mix.
 - Earthwork quantities shown on the plans assume 15% shrinkage for all fill material. The Contractor shall perform the fill to achieve the grades shown on the drawings. The determination of the actual adjustment of fill required due to shrink/swell of various materials shall be the responsibility of the Contractor.

Utility:

- All Manholes, Catch Basins, Utility Valves, Meter Pits, and other utility equipment shall be adjusted or rebuilt to grade as required.
- Prior to beginning work, the Contractor shall notify all utility companies who have facilities in the vicinity of the project area of the work to be performed.

Utility Contacts

Sanitary Sewers	Mr. Jeff Thorn, PE City of Lee's Summit Water Utilities 1200 SE Hamblen Road Lee's Summit, MO 64063 email: jeff.thorn@cityofLS.net	Gas	Mr. Donnie Richards Missouri Gas Energy 7500 E 35th Terrace Kansas City, MO 64129 (816) 472-9464 Fax (816) 472-3488 email: donnie.richards@sug.com
	Mr. Jeff Shook Little Blue Valley Sewer District 21101 East 78 Highway Independence, MO 64057 (816) 285-1522 email: jshook@lbvdsd.net	Cable Television	Mr. Greg Thomas Time Warner Cable 8221 W. 119th Street Overland Park, KS 66213 (913) 643-1950 email: greg.thomas@twcable.com
	Kansas City, MO Public Works Department (816) 513-2600	Telephone	Ms. Glenda Charles AT&T 1425 Oak Street Kansas City, MO 64106 (816) 365-1669 Fax (816) 275-1109 email: gc6954@att.com
Water	Mr. Jeff Thorn, PE City of Lee's Summit Water Utilities 1200 SE Hamblen Road Lee's Summit, MO 64063 (816) 969-1922 email: jeff.thorn@cityofLS.net	Electric Service	Mr. Nathan Michael Kansas City Power & Light P.O. Box 418679 Kansas City, MO 64141 (816) 220-5210 Fax (816) 245-3623 email: Nathan.Michael@kcpl.com
	Kansas City, MO Water Services Department (816) 513-2215		
	Missouri One Call System 1-800-344-7483 (DIG-RITE)		

GBA
1981 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LANDS Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.landstudio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019040688

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

General Layout

JOB NO:

1197

DATE:

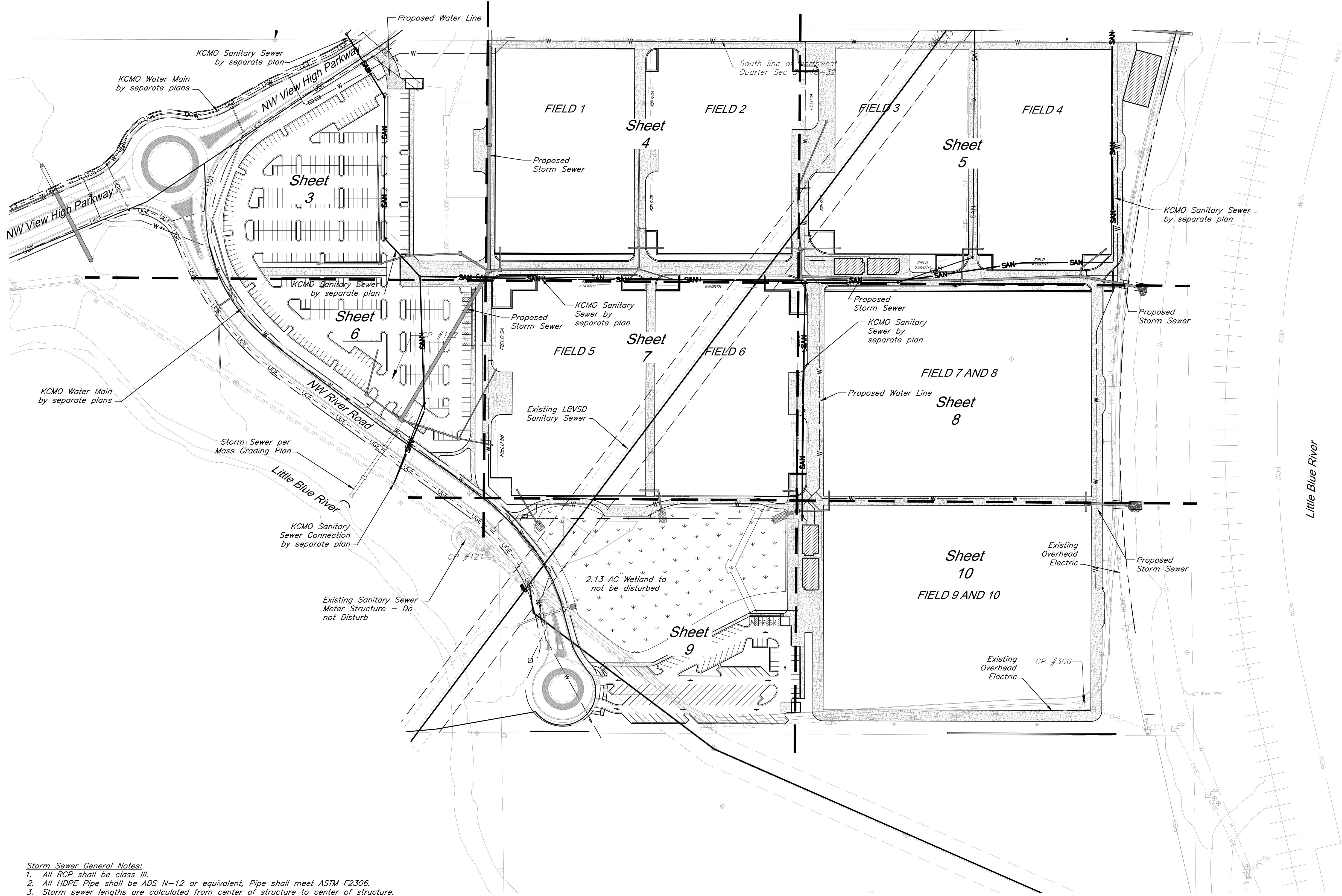
04.28.2020

SHEET NO:

1

GBA PN 12720.09

Architect: 00212, Professional Engineer: 000133, Professional Land Surveyor: 000059
G:\12720\Civil\3D\production drawings\field storm plans\1272000001.dwg Layout: 2 Utility Plan -- Tuesday April 28, 2020, 1:40pm -- Copyright 2020, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.

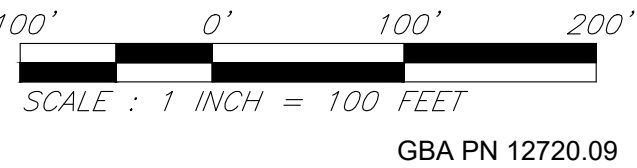


Storm Sewer General Notes:

1. All RCP shall be class III.
2. All HDPE Pipe shall be ADS N-12 or equivalent, Pipe shall meet ASTM F2306.
3. Storm sewer lengths are calculated from center of structure to center of structure.
4. All pipe connections to Inlets shall occur at center of structure wall unless specifically noted otherwise.
5. All work shall conform to City of Lee's Summit, MO standards.
6. Precast structures shall be constructed with KCMMB 4,000 psi concrete. Shop drawings shall be submitted to the Engineer for review prior to casting.
7. All in grade inlets shall match adjacent slope.
8. Drainage across the project site during construction shall be the Contractor's responsibility. Surface drainage shall be controlled to reduce or prevent the flow of surface water onto adjacent grounds. Contractor shall control downstream erosion and silting during construction. Flexibility is given to the Contractor to make minor grading revisions along roads or between building pads to improve drainage during construction, with prior approval of the engineer.
9. See Sheets 21-26 for construction details.

Utility Legend

CATV Ped	Cable TV Pedestal	W.M.	Water Meter
P.P.	Power Pole	FO	Fiber Optic Line
Guy Anchor	FP	Fire Protection Line	Gas Line
EMH	Electrical Manhole	G	Over Head Electric
Electrical Transformer	OHT	OHT	Over Head Telephone
Gas Meter	OHTV	Over Head Cable TV	Property Line
Curb Inlet	ROW	Right-of-Way Line	Existing Sanitary Sewer Line
SSMH	Sanitary Sewer Manhole	SAN	Existing Underground Electric
Sanitary Cleanout	UGT	Existing Underground Telephone	Existing Underground Cable TV
Light Pole	UGTV	Existing Water Line	Proposed Storm Sewer
Boring Hole	W	Proposed Sanitary Sewer Line	Existing Storm Sewer
Sign	Traffic Signal Post		
Telephone Pedestal	Traffic Manhole		
T.S.	Fire Hydrant		
FRMH			
F.H.			



CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.

GBA
1981 Remyer Boulevard
Lenexa, KS 66219
913.492.0400
www.gba.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 200801860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 201904088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:

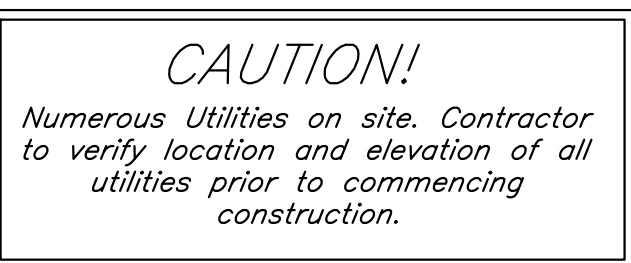


DRAWING TITLE:

Utility Plan

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA

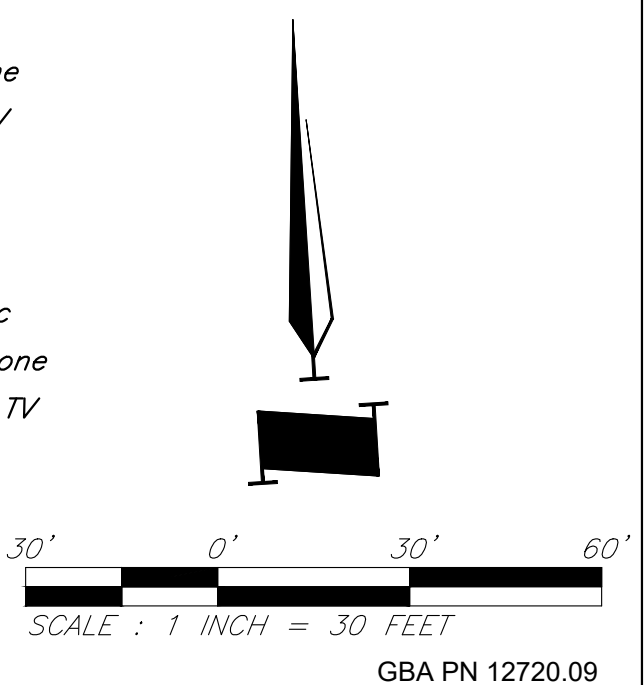
SHEET NO:



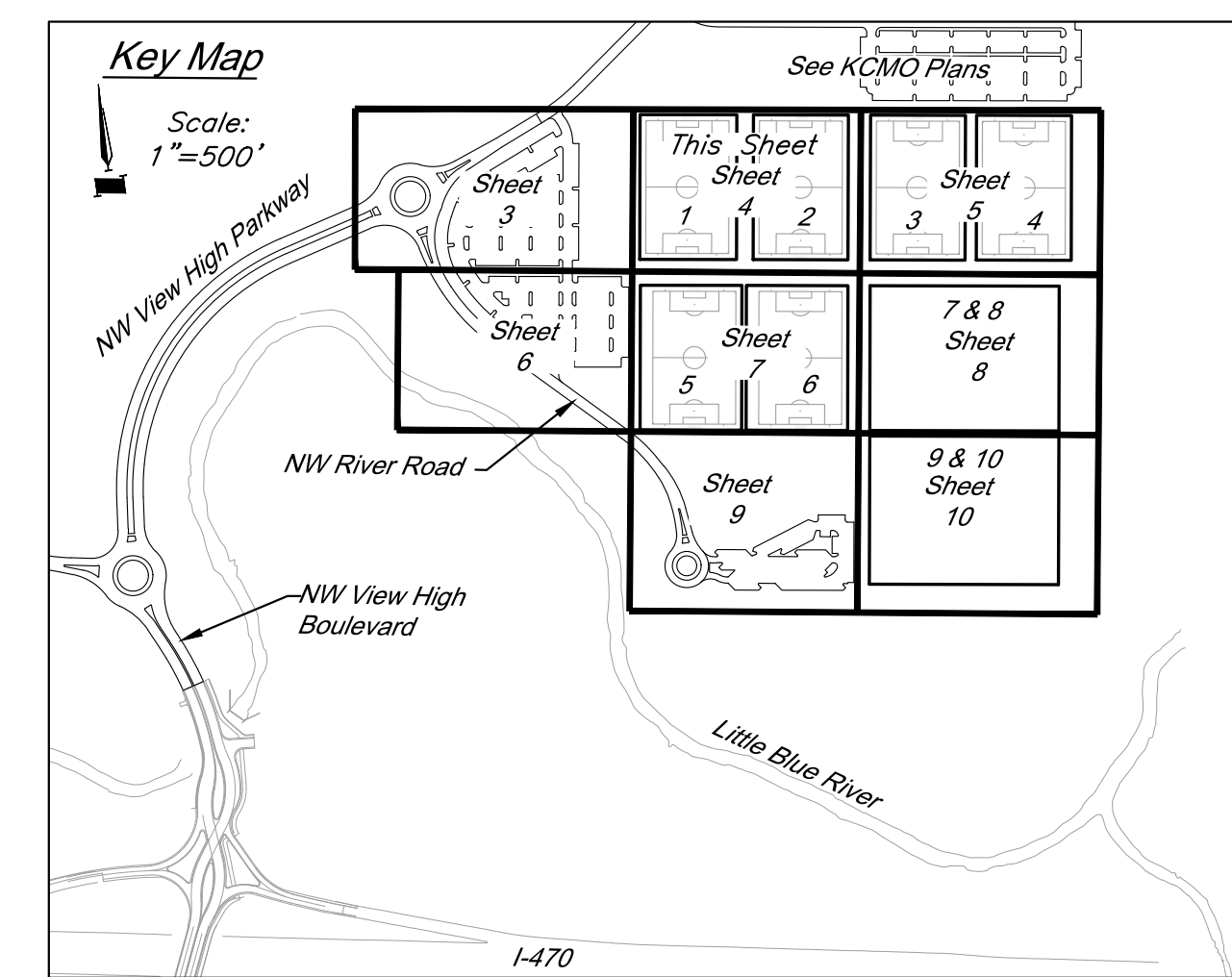
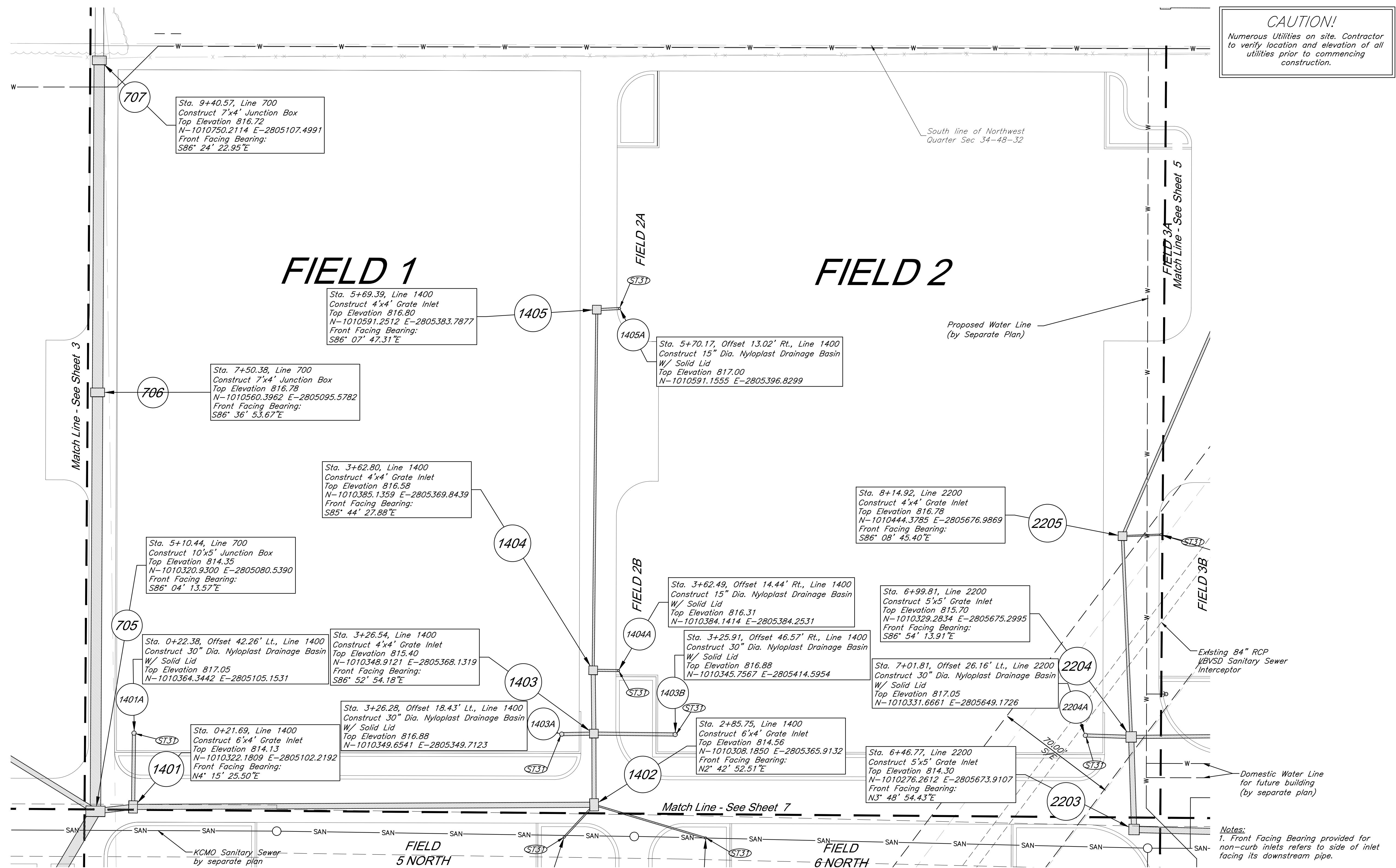
FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finkdewilliams.com
Missouri Certificate of Authority #F00453304

Field Storm Sewer Plans

3



G:\12720\Civil\3D\production drawings\field storm plans\1272000000.dwg Layout: 4 Utility Plan -- Tuesday April 28, 2020, 1:43pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000039 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS JURISDICTION TO SECTION 327.411, RSMO ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OF INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



Storm Sewer Construction Notes:
(ST3) See Soccer Complex Plans for field drainage continuation

Utility Legend	
	Existing Cable TV Pedestal
	Existing Power Pole
	Existing Guy Anchor
	Existing Electrical Manhole
	Existing Electrical Transformer
	Existing Gas Meter
	Existing Curb Inlet
	Existing Sanitary Sewer Manhole
	Existing Sanitary Cleanout
	Existing Light Pole
	Existing Boring Hole
	Existing Sign
	Existing Telephone Pedestal
	Existing Traffic Signal Post
	Existing Traffic Manhole
	Existing Fire Hydrant
	Existing Water Meter
	Existing Fiber Optic Line
	Existing Fire Protection Line
	Existing Gas Line
	Existing Over Head Electric
	Existing Over Head Telephone
	Existing Over Head Cable TV
	Property Line
	Right-of-Way Line
	Existing Sanitary Sewer Line
	Existing Underground Electric
	Existing Underground Telephone
	Existing Underground Cable TV
	Existing Water Line
	Proposed Storm Sewer
	Existing Storm Sewer
	Underdrain

GBA
1981 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7037 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex
Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081
Field Storm Sewer Plans

ISSUE:

10/17/19	City Comments
3/13/20	City Comments
4/28/20	City Comments



DRAWING TITLE:

Utility Plan

JOB NO: 1197 SCALE:

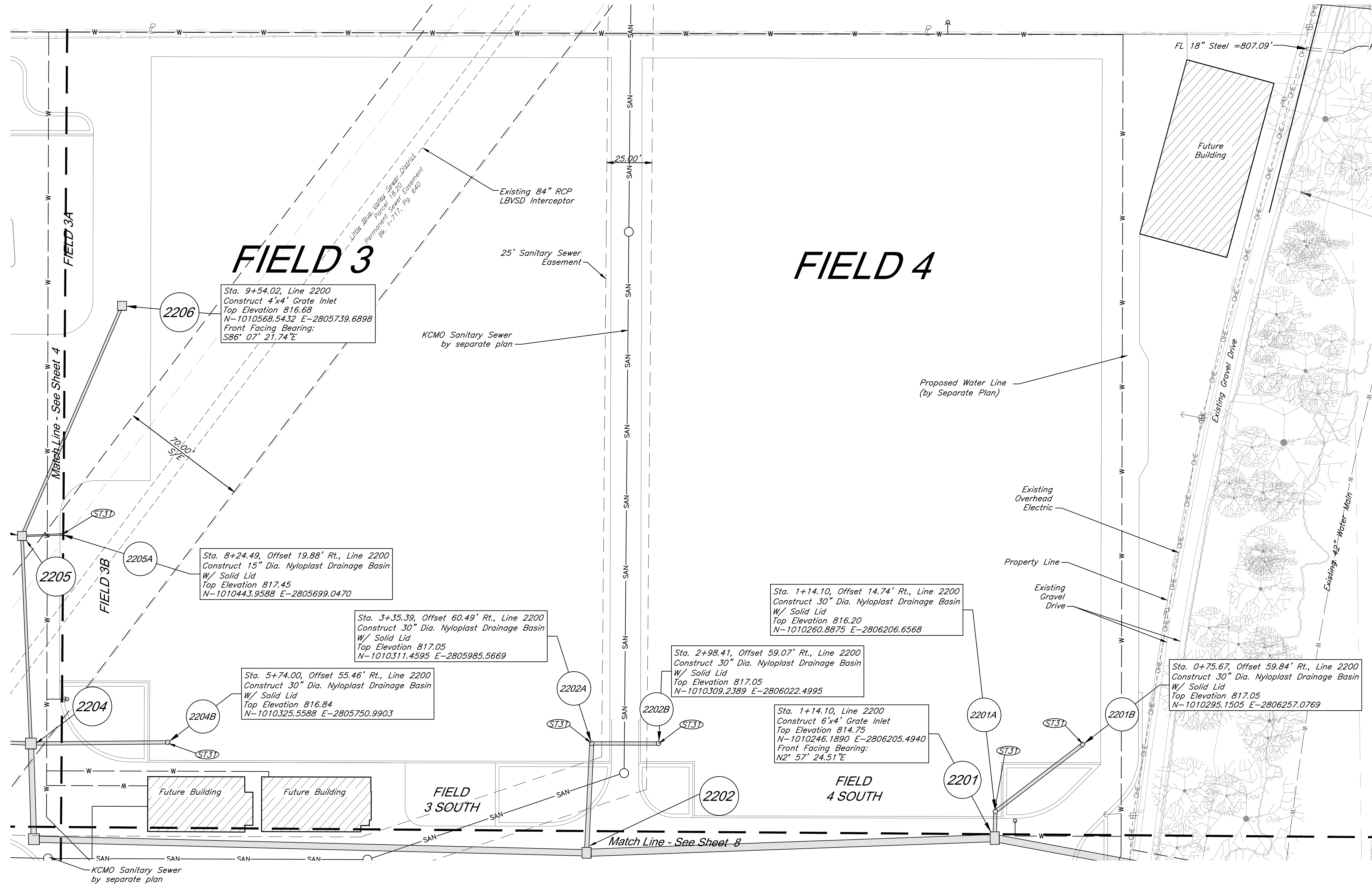
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

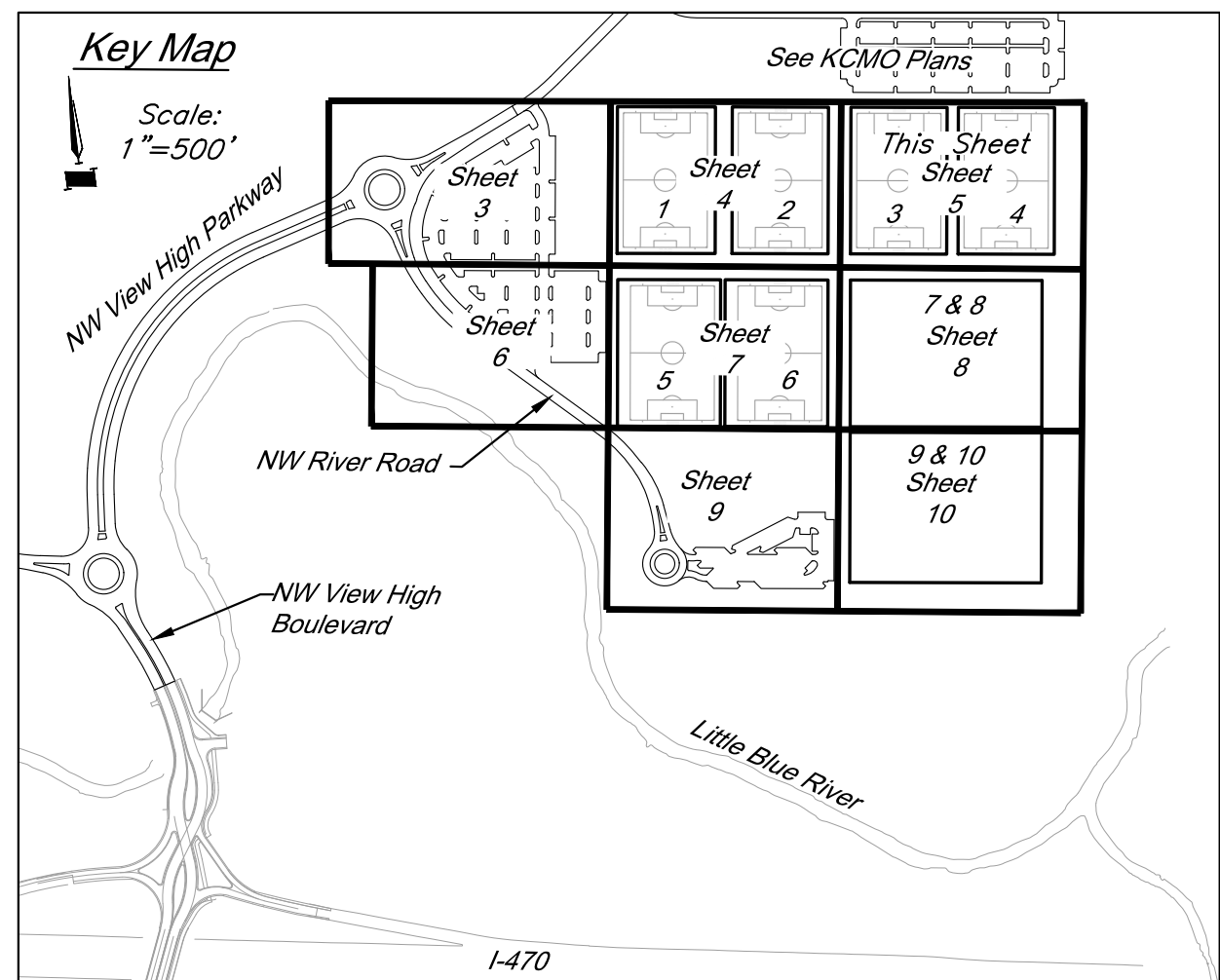
4

GBA PN 12720.09

Architect: 00212, Professional Engineer: 000133, Professional Land Surveyor: 000059
G:\12720 Civil\Production Drawings\field storm plans\1272000000.dwg Layout: 5 Utility Plan -- Tuesday April 28, 2020, 1:44pm -- Copyright 2020, George Butler Associates, Inc.
THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INFRINGING TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



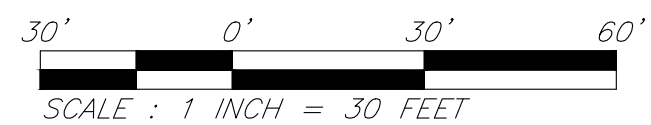
CAUTION!
Numerous Utilities on site. Contractor to verify location and elevation of all utilities prior to commencing construction.



Storm Sewer Construction Notes:
ST31 See Soccer Complex Plans for field drainage continuation

Utility Legend	
Existing Cable TV Pedestal	Existing Fiber Optic Line
Existing Power Pole	Existing Fire Protection Line
Existing Guy Anchor	Existing Gas Line
Existing Electrical Manhole	Existing Over Head Electric
Existing Electrical Transformer	Existing Over Head Telephone
Existing Gas Meter	Existing Over Head Cable TV
Existing Curb Inlet	Property Line
Existing Sanitary Sewer Manhole	Right-of-Way Line
Existing Sanitary Cleanout	Existing Sanitary Sewer Line
Existing Light Pole	Existing Underground Electric
Existing Boring Hole	Existing Underground Telephone
Existing Sign	Existing Underground Cable TV
Existing Telephone Pedestal	Existing Water Line
Existing Traffic Signal Post	Proposed Storm Sewer
Existing Traffic Manhole	Existing Storm Sewer
Existing Fire Hydrant	Underdrain

Notes:
1. Front Facing Bearing provided for non-curb inlets refers to side of inlet facing its downstream pipe.



GBA PN 12720.09

GBA
1981 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gba.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019040688

HENDERSON ENGINEERS, Inc.
6345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 005556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Utility Plan

JOB NO: 1197

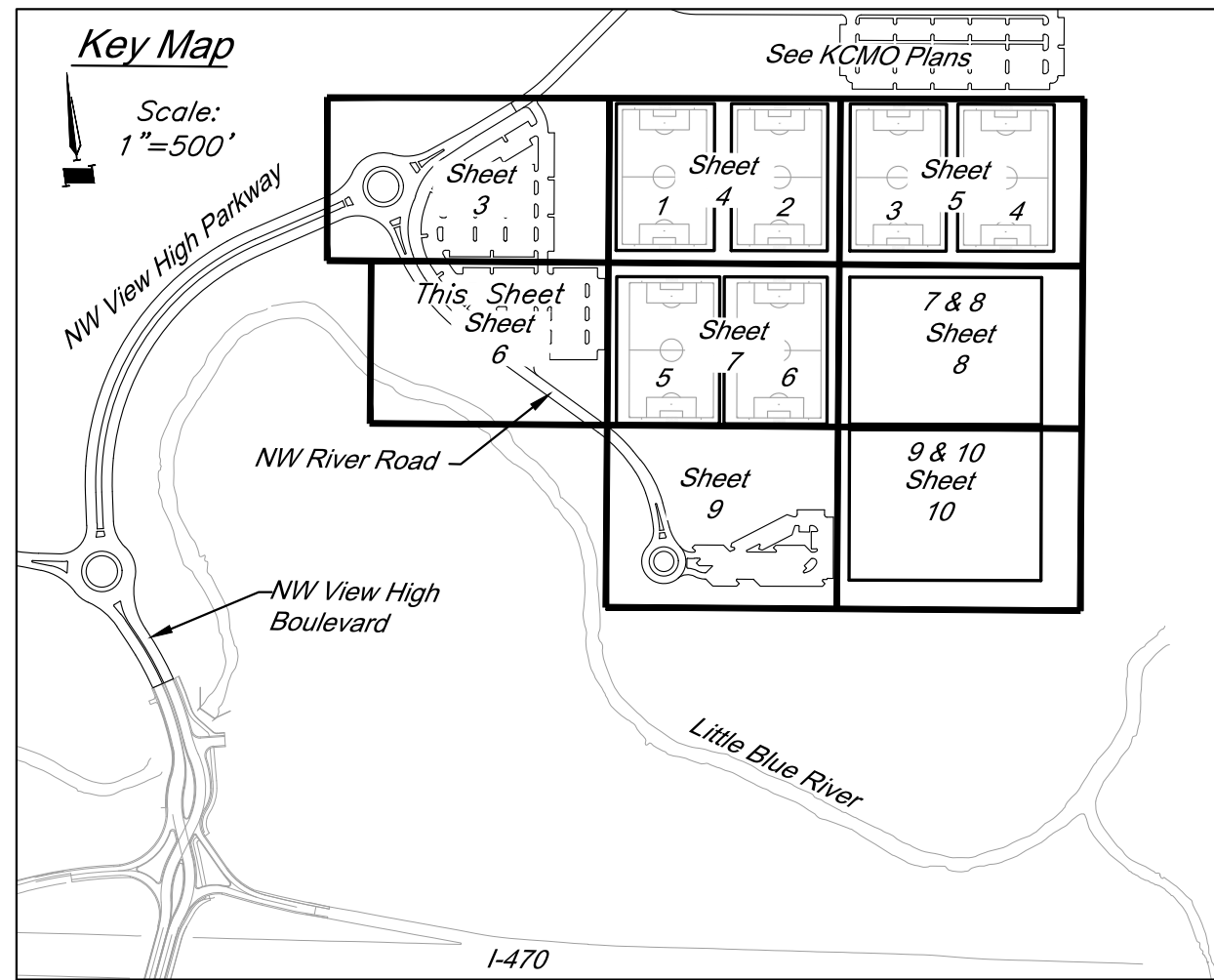
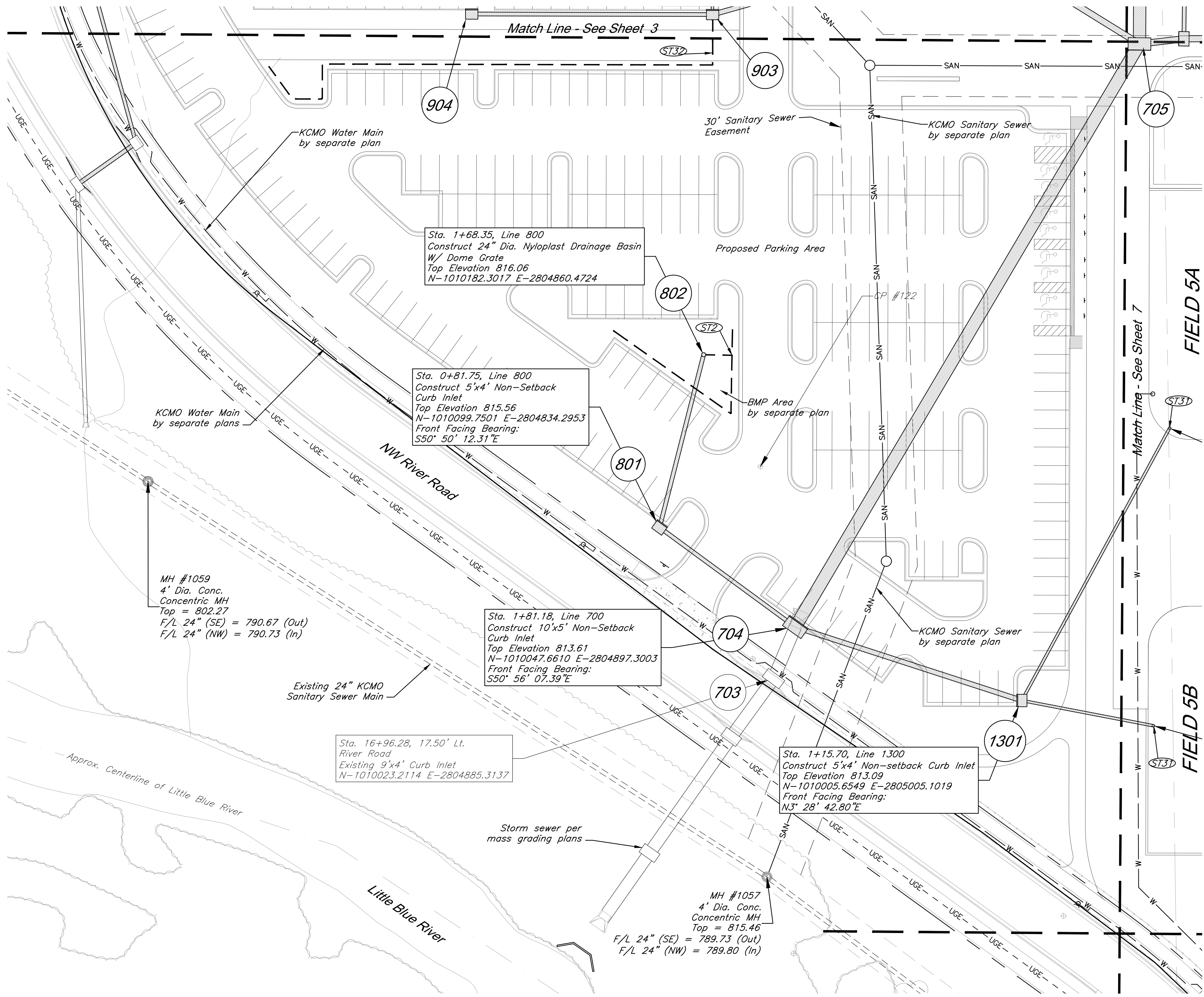
SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

5

G:\12720\Civil\3D\production drawings\field storm plans\12720C0000.dwg Layout: 6 Utility Plan -- Tuesday April 28, 2020, 1:45pm -- Copyright 2020, George Butler Associates, Inc. Architect: 00212, Professional Engineer 000133, Professional Land Surveyor 000039 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.

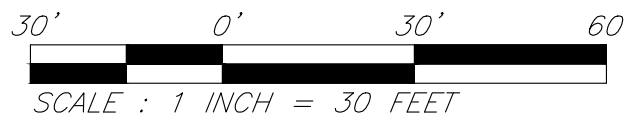


Storm Sewer Construction Notes:

- ST2** Connect Perforated 4" HDPE Underdrain to structure 802, $E=812.00$. Install 120 LF perforated 4" HDPE pipe @ min. 1% as shown. See pipe underdrain details, sheet 22.
- ST31** See Soccer Complex Plans for field drainage continuation
- ST32** Connect Perforated 4" HDPE Underdrain to structure 903, $E=812.50$. Install 262 LF perforated 4" HDPE pipe @ min. 1% as shown. See pipe underdrain details, sheet 22.

Utility Legend

	Existing Cable TV Pedestal		Existing Water Meter
	Existing Power Pole		Existing Fiber Optic Line
	Existing Guy Anchor		Existing Fire Protection Line
	Existing Electrical Manhole		Existing Gas Line
	Existing Electrical Transformer		Existing Over Head Electric
	Existing Curb Inlet		Existing Over Head Telephone
	Existing Sanitary Sewer Manhole		Existing Over Head Cable TV
	Existing Sanitary Cleanout		Property Line
	Existing Light Pole		Right-of-Way Line
	Existing Boring Hole		Existing Sanitary Sewer Line
	Existing Sign		Existing Underground Electric
	Existing Telephone Pedestal		Existing Underground Telephone
	Existing Traffic Signal Post		Existing Underground Cable TV
	Existing Traffic Manhole		Existing Water Line
	Existing Fire Hydrant		Proposed Storm Sewer
			Existing Storm Sewer
			Underdrain



GBA
7801 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019040688

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7807 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Utility Plan

JOB NO: 1197

SCALE:

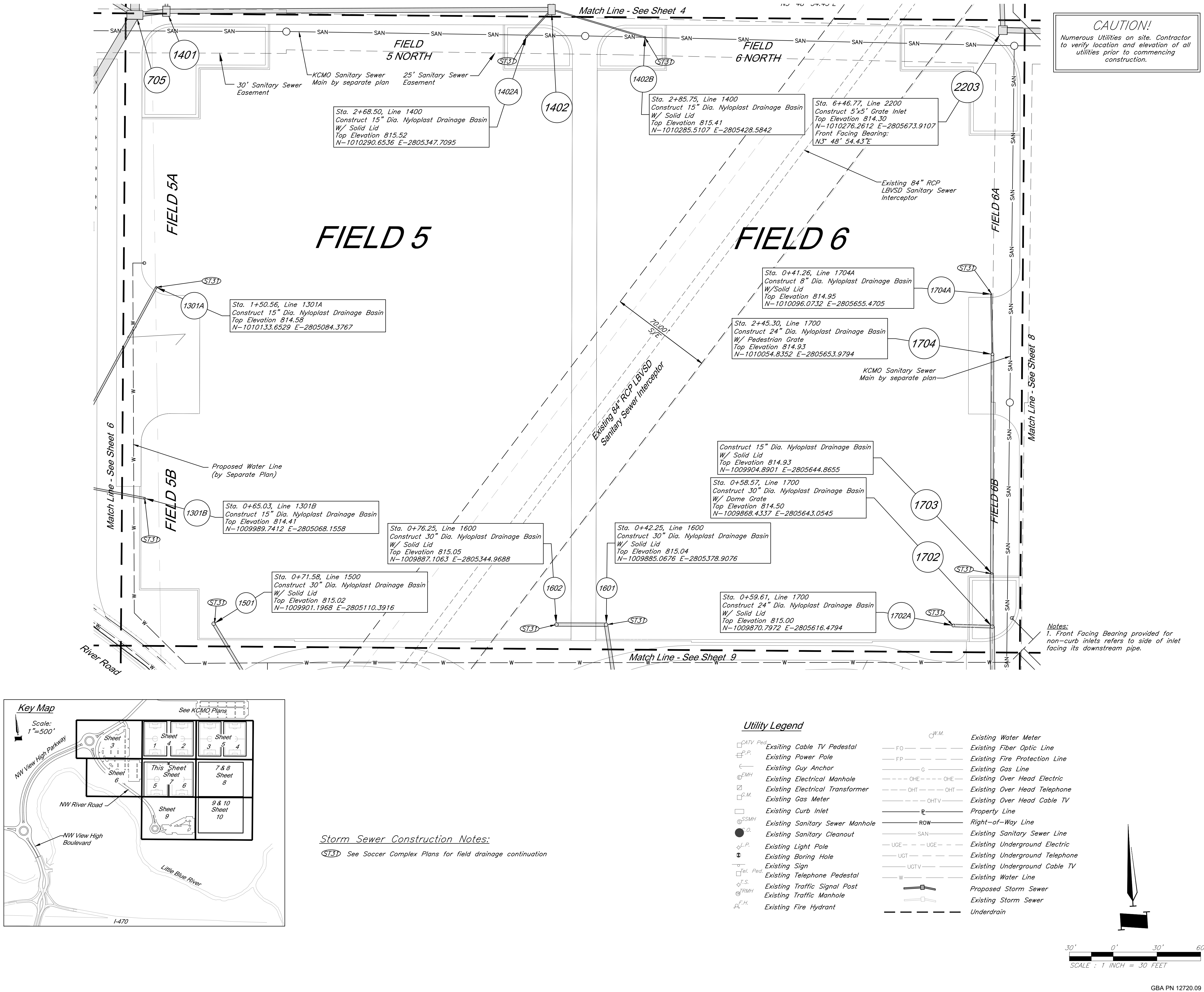
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

6

GBA PN 12720.09

G:\12720\Civil\3D\production drawings\field storm plans\1272000000.dwg Layout: 7 Utility Plan -- Tuesday April 28, 2020, 1:46pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INFRINGING TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



GBA
1981 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019040688

HENDERSON ENGINEERS, Inc.
6345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Utility Plan

JOB NO: 1197

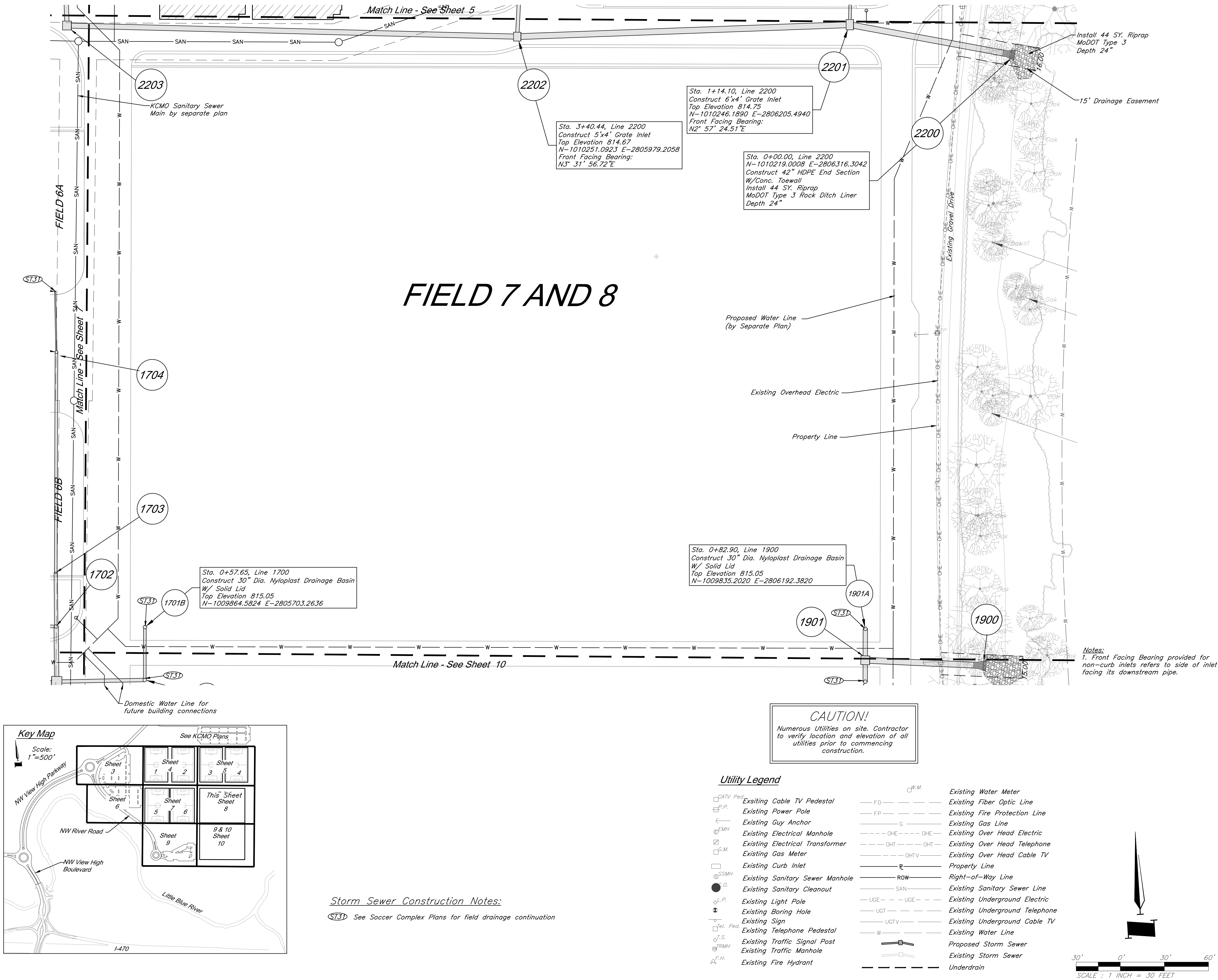
SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

7

G:\12720\Civil\3D\production drawings\field storm plans\12720C0000.dwg Layout: 8 Utility Plan -- Tuesday April 28, 2020, 1:46pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMo, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



GBA
1981 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 201904088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Utility Plan

JOB NO: 1197

SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

8

GBA PN 12720.09



FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finkewilliams.com
Missouri Certificate of Authority #F004533

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



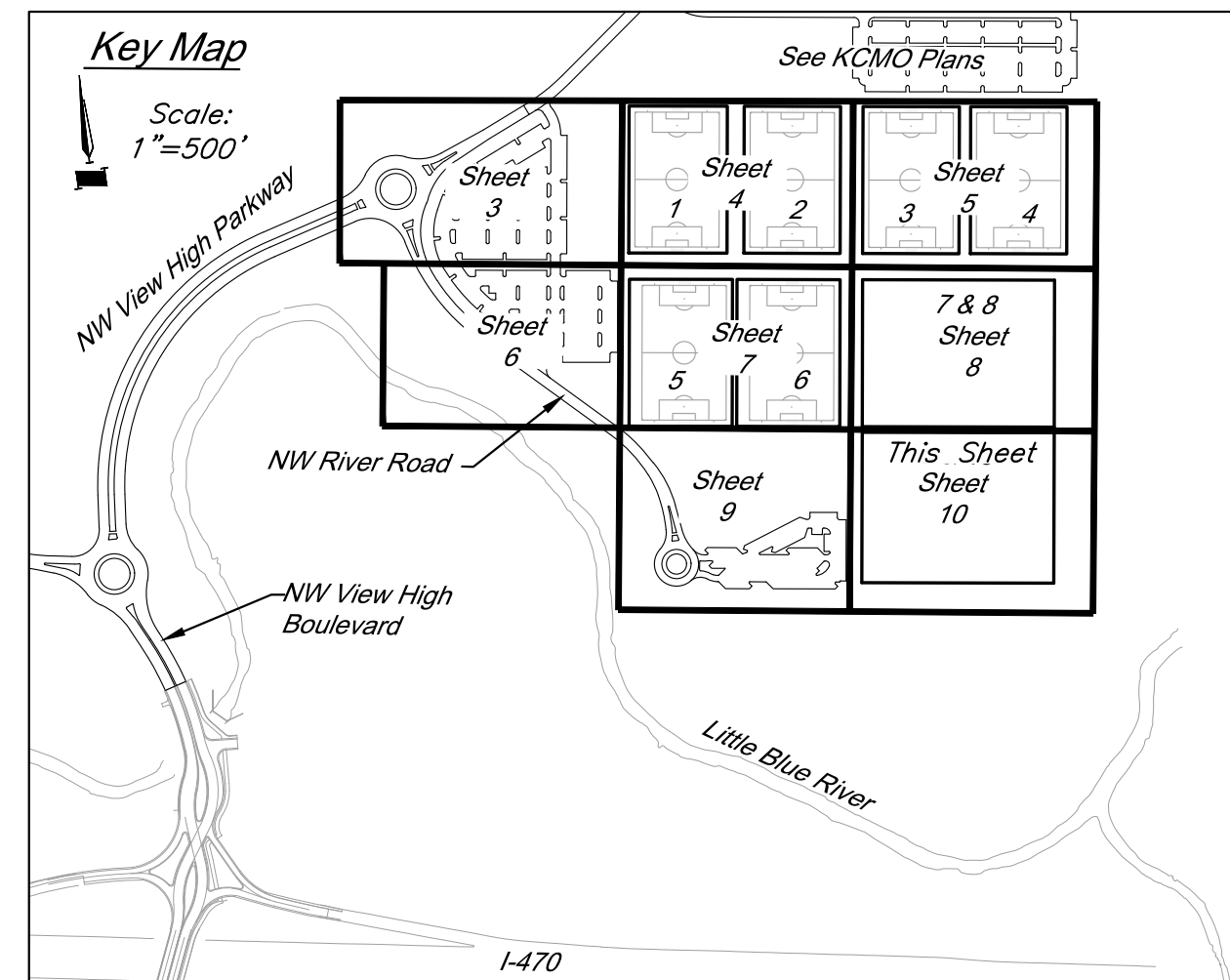
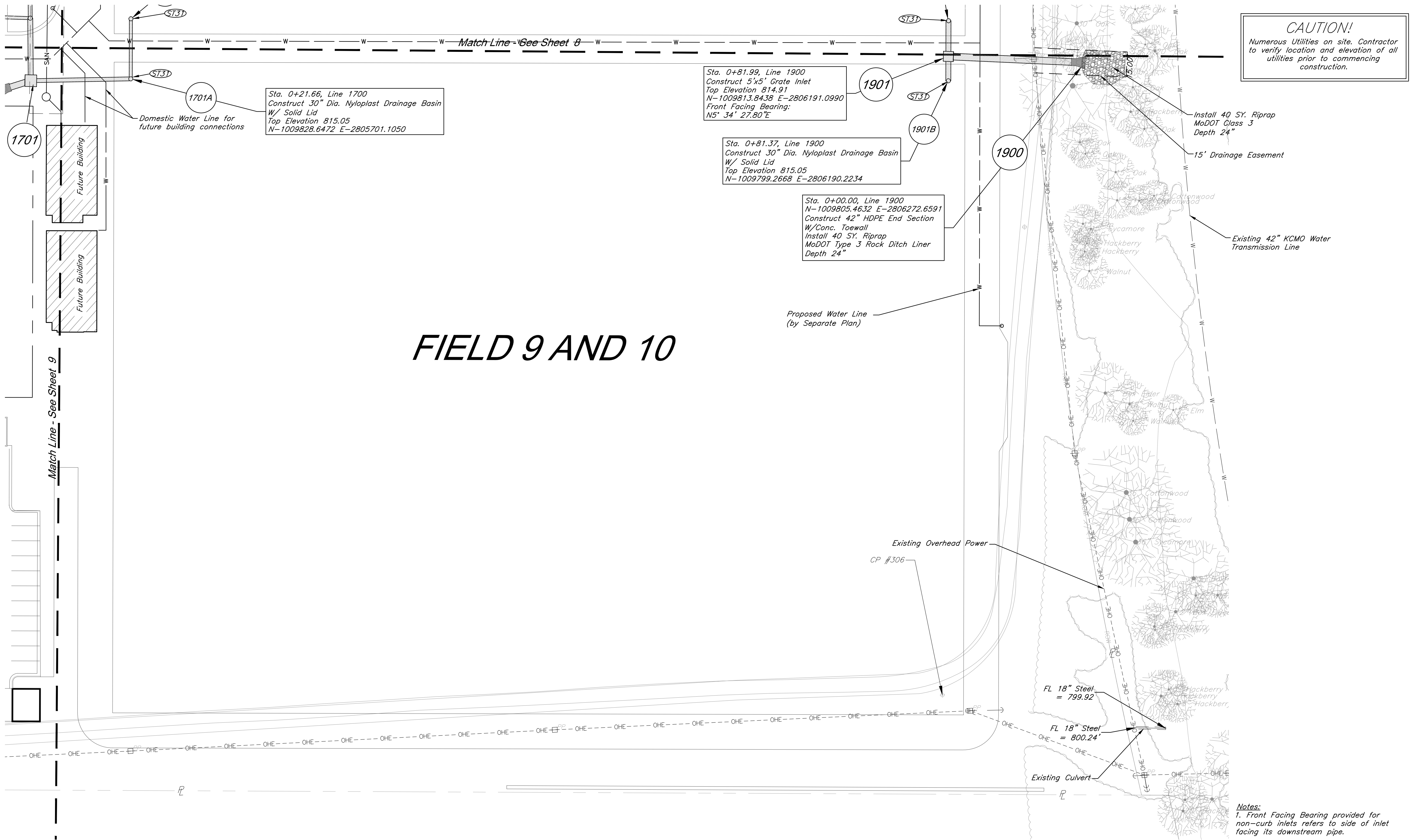
DRAWING TITLE:

Utility Plan

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO.

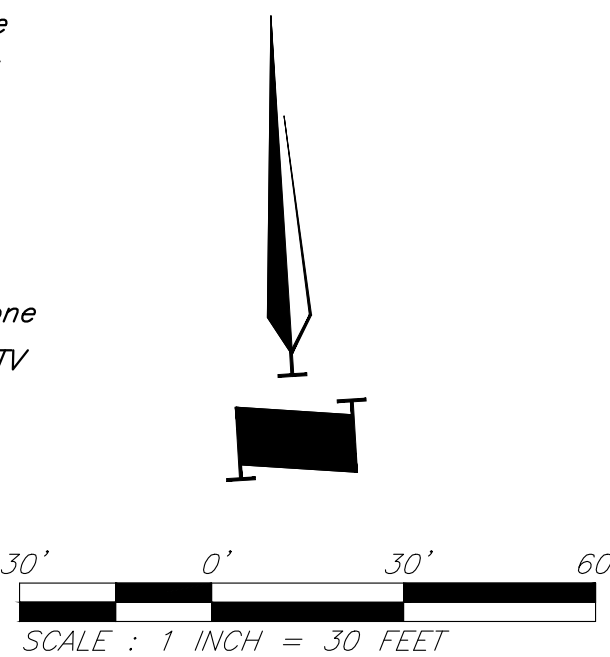
C:\12720\Civil\3D\production drawings\field storm plans\12720C0000.dwg Layout: 10 Utility Plan -- Tuesday, April 28, 2020, 1:45pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS, INSTRUCTIONS, NOT BEING SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



Storm Sewer Construction Notes:
(ST3) See Soccer Complex Plans for field drainage continuation

Utility Legend

	Existing Cable TV Pedestal		Existing Water Meter
	Existing Power Pole		Existing Fiber Optic Line
	Existing Guy Anchor		Existing Fire Protection Line
	Existing Electrical Manhole		Existing Gas Line
	Existing Electrical Transformer		Existing Over Head Electric
	Existing Gas Meter		Existing Over Head Telephone
	Existing Curb Inlet		Existing Over Head Cable TV
	Existing Sanitary Sewer Manhole		Property Line
	Existing Sanitary Cleanout		Right-of-Way Line
	Existing Light Pole		Existing Sanitary Sewer Line
	Existing Boring Hole		Existing Underground Electric
	Existing Sign		Existing Underground Telephone
	Existing Telephone Pedestal		Existing Underground Cable TV
	Existing Traffic Signal Post		Existing Water Line
	Existing Traffic Manhole		Proposed Storm Sewer
	Existing Fire Hydrant		Existing Storm Sewer
			Underdrain



GBA
1981 Remyer Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 201904068

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex
Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081
Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



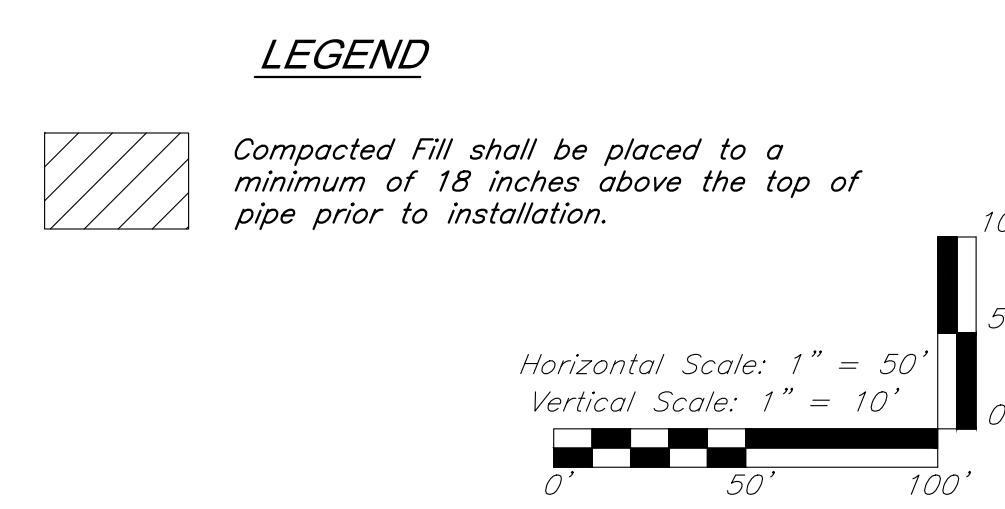
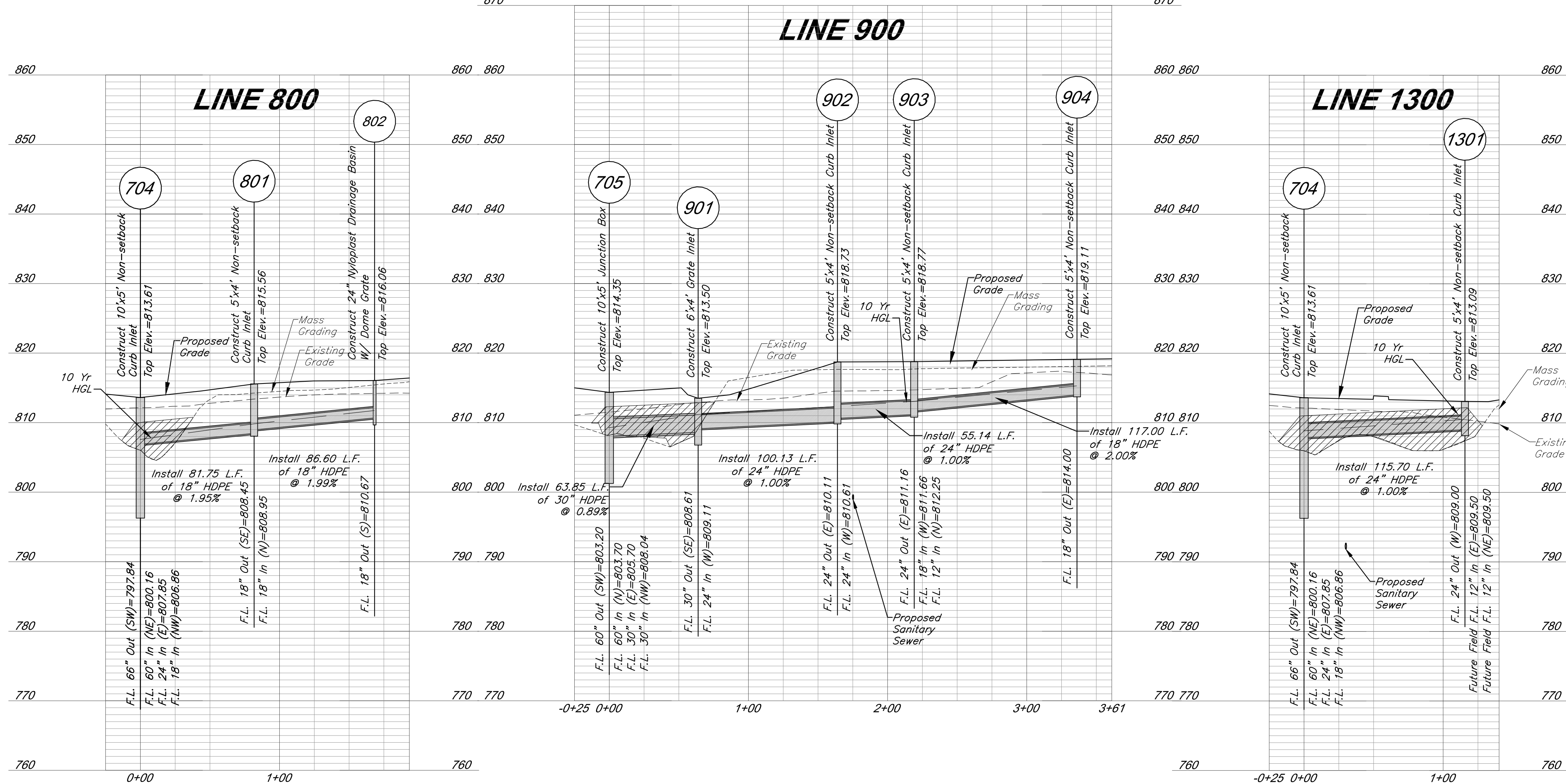
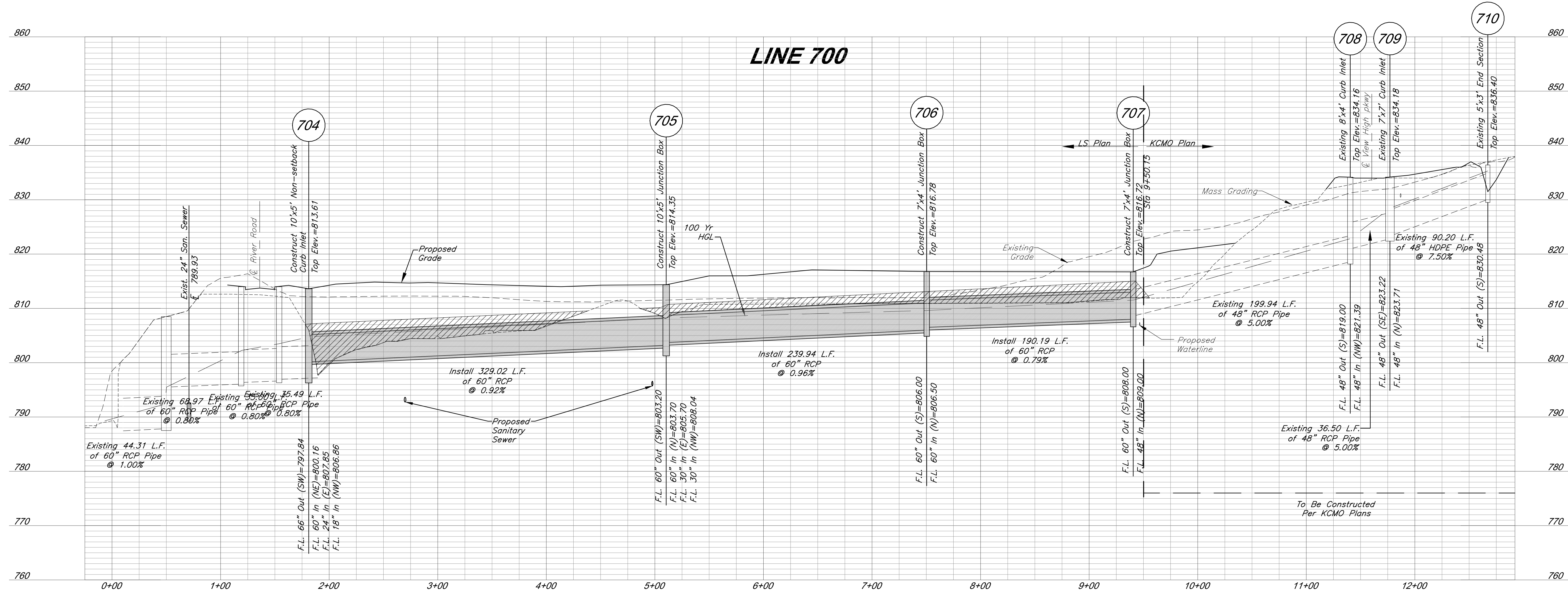
DRAWING TITLE:

Utility Plan

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

Architect: 00212, Professional Engineer: 000133, Professional Land Surveyor: 0000259
G:\12720\Civil\3D\production drawings\field storm plans\12720C1400.dwg Layout: 11 Storm Sewer Profiles Tuesday, April 28, 2020, 1:49pm
THE PROFESSIONAL WHOSE SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OF INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



GBA
7801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019040688

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKE + WILLIAMS Architecture
7801 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finkewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

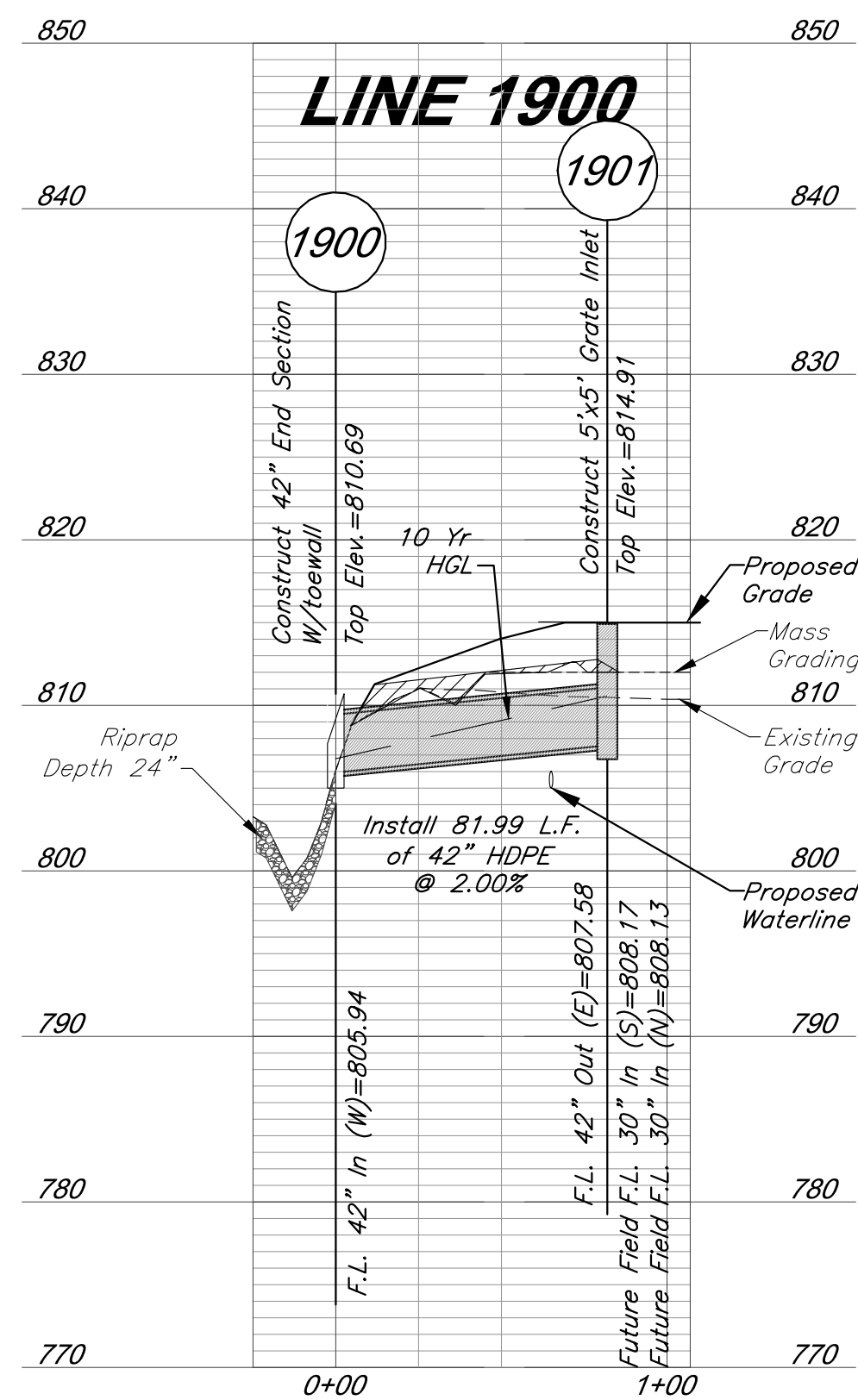
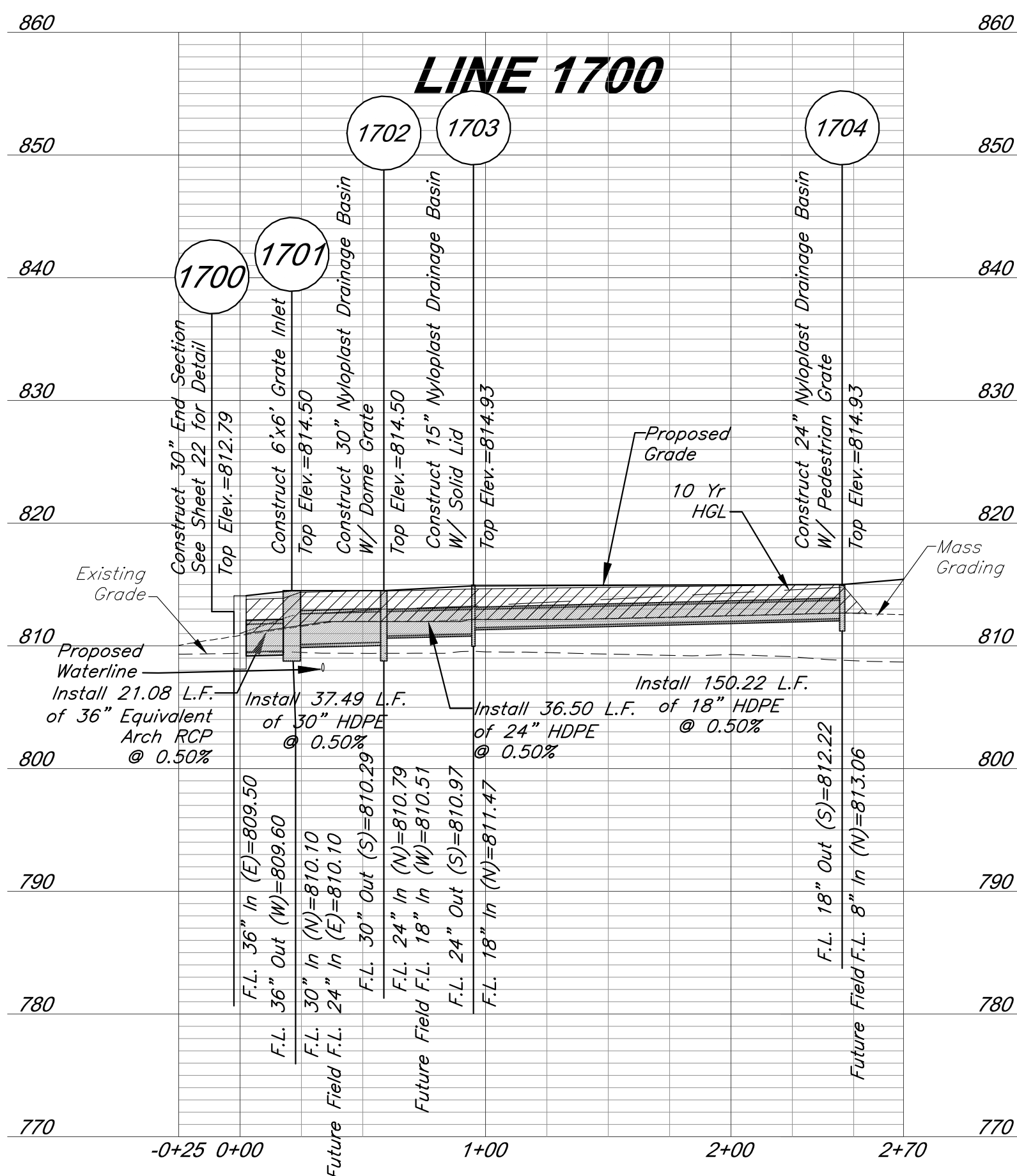
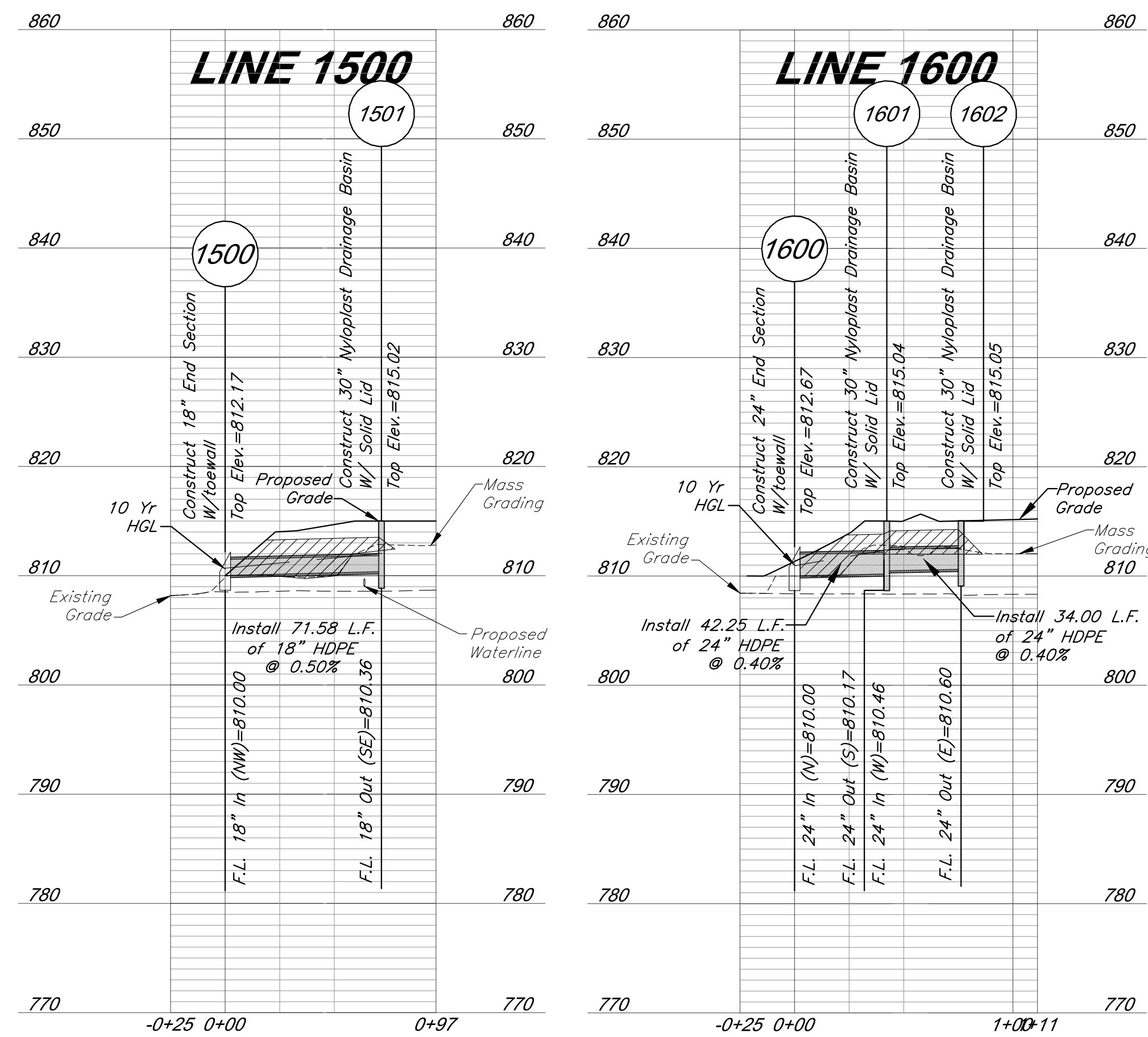
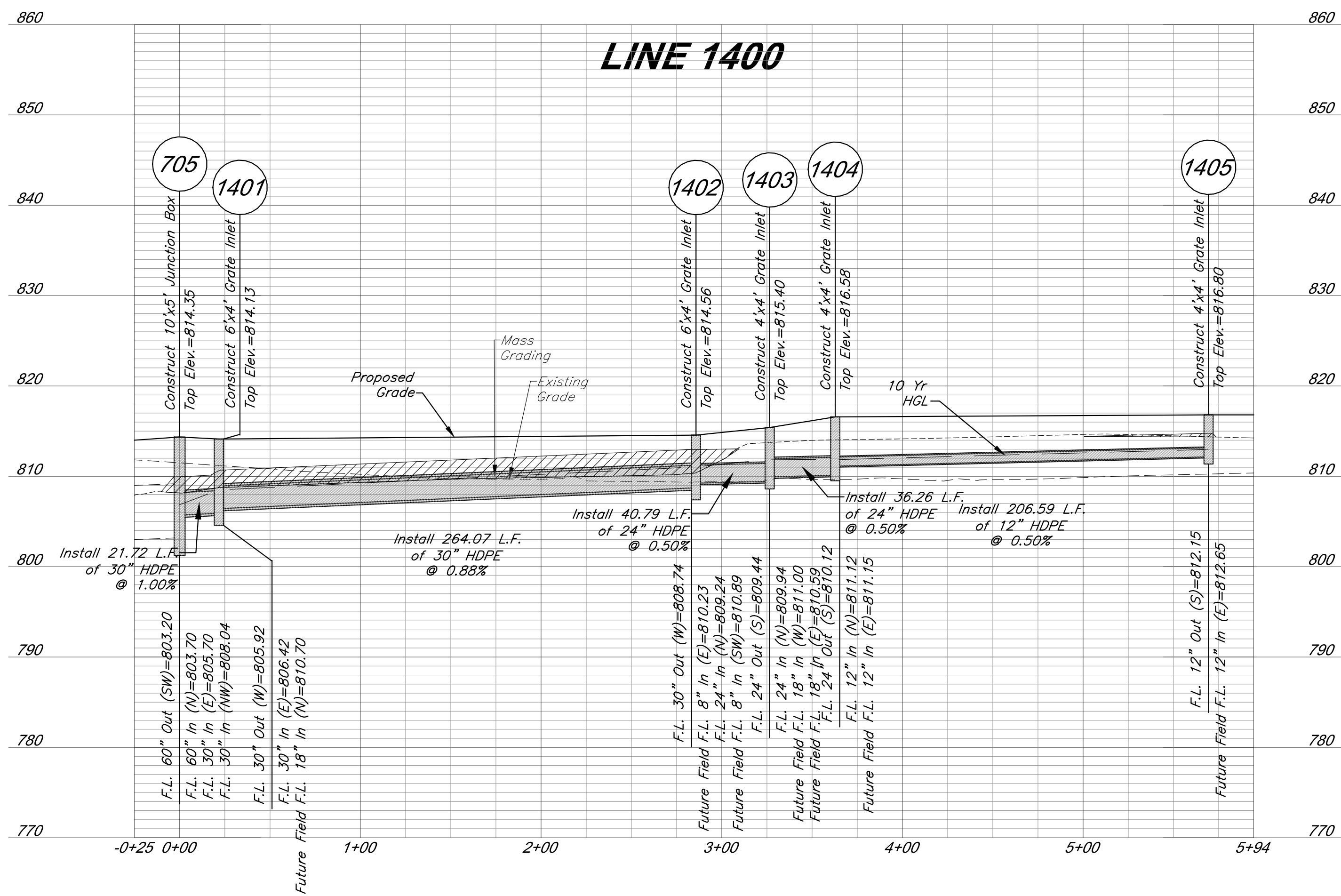
PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer Profiles

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA
SHEET NO:



LEGEND

 *Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.*

Horizontal Scale: 1" = 50'
Vertical Scale: 1" = 10'



0' 50' 100'

GBA PN 12720.09

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hel-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F0045330

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

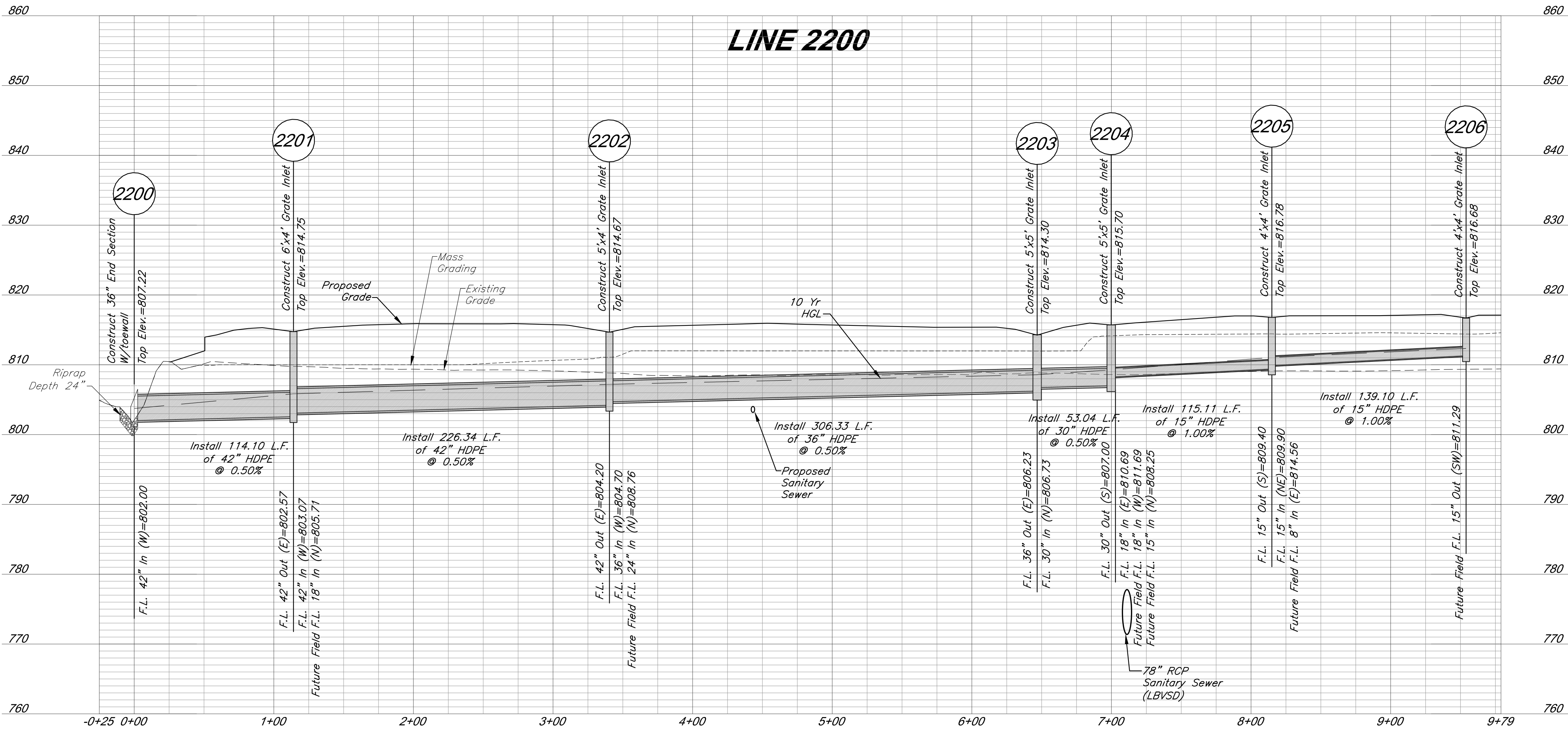
Storm Sewer Profiles

JOB NO: 1197

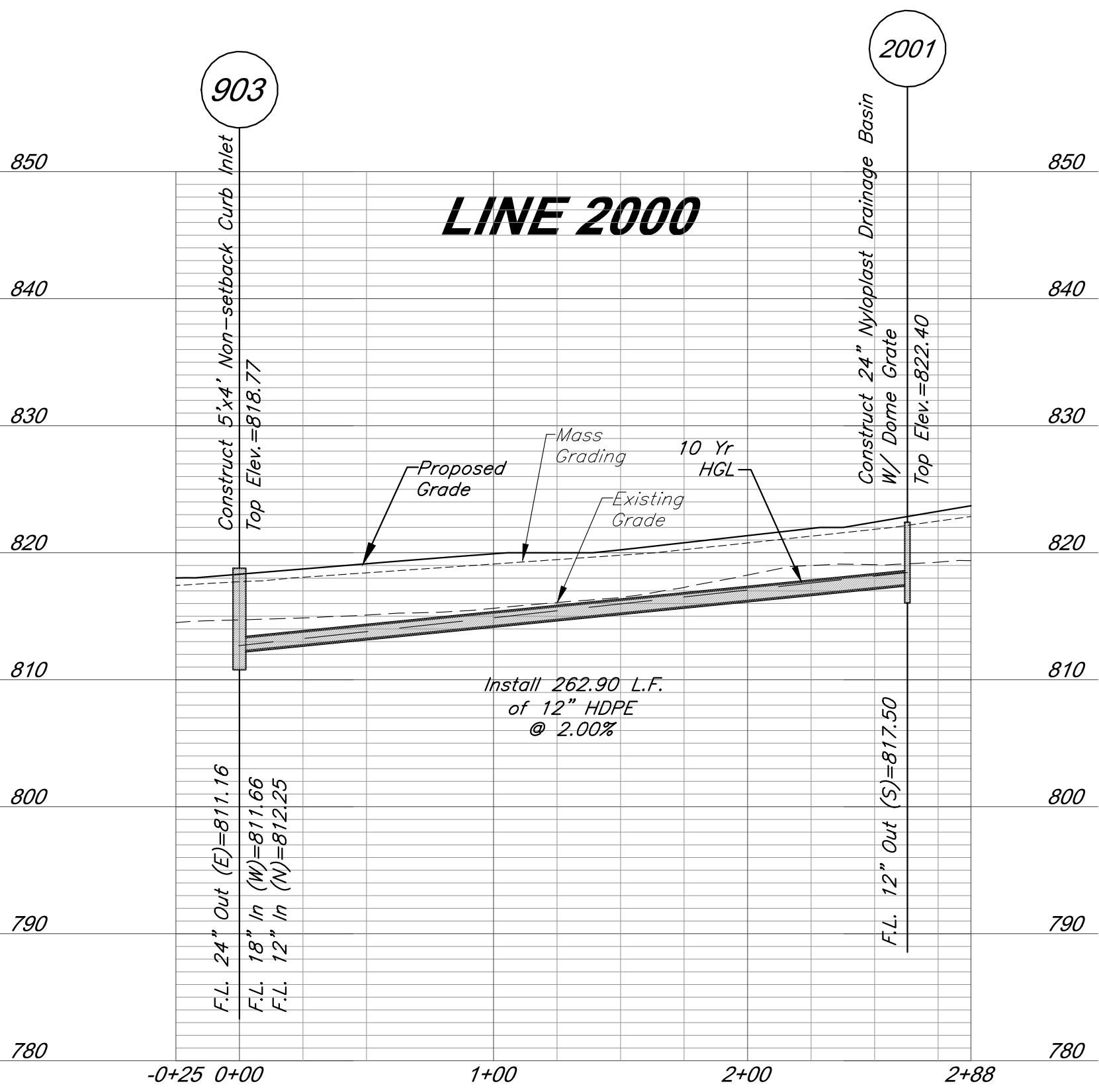
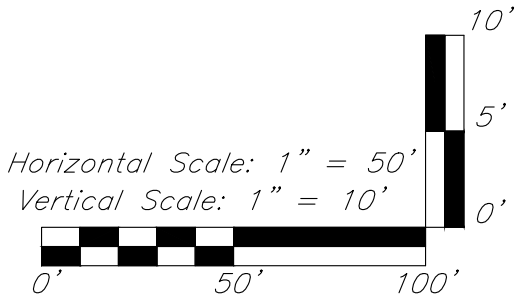
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

G:\12720\Civil 3D\production drawings\field storm plans\12720C1400.dwg Layout: 1:3 Storm Sewer Profiles --- Tuesday, April 28, 2020, 1:50pm --- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000039 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



Note: Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.



GBA
7801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7807 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer Profiles

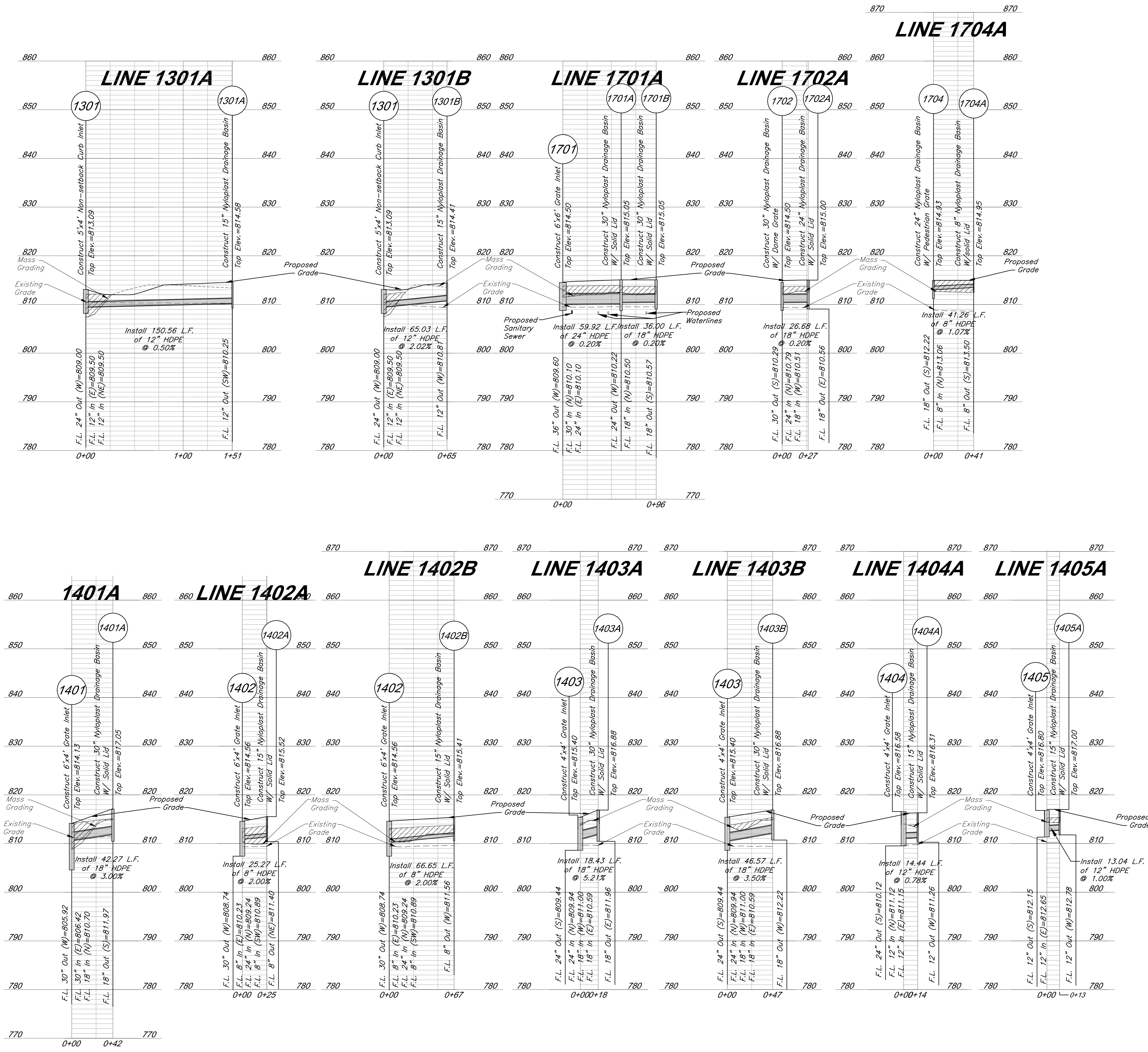
JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

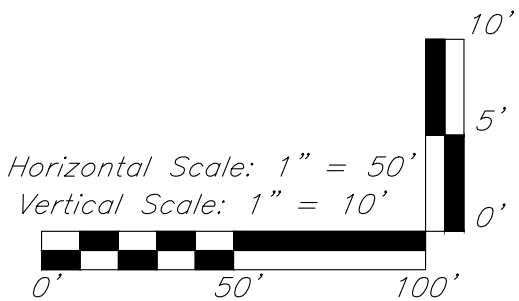
13

GBA PN 12720.09

G:\12720\Civil\3D\production drawings\field storm plans\12720C1400.dwg Layout: 14 Storm Sewer Profiles --- Tuesday, April 28, 2020, 1:50pm --- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000039
THE PROFESSIONAL WHOSE SEAL, SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. ANY PART OF THE PROJECT TO WHICH THE PAGE REFERS.



Note: Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.



GBA
7801 Remmer Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 201904068

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7807 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:

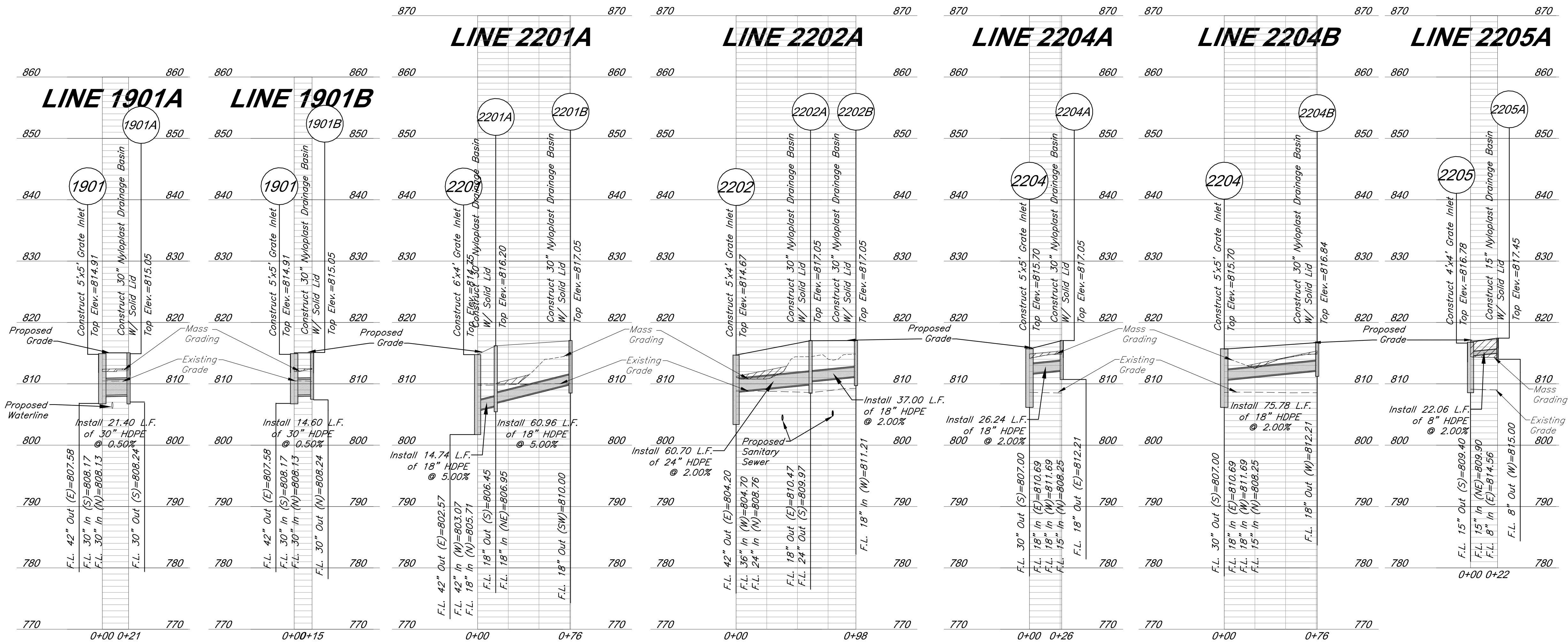


DRAWING TITLE:

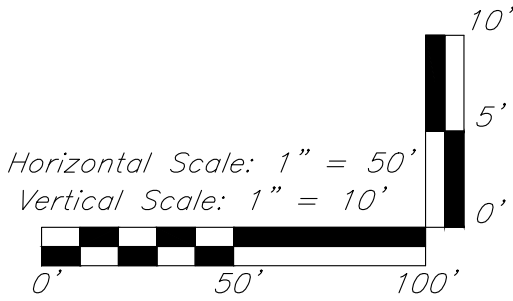
Storm Sewer Profiles

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA
SHEET NO:

G:\12720\Civil\3D\production drawings\field storm plans\12720C1400.dwg Layout: 15 Storm Sewer Profiles Tuesday, April 28, 2020, 1:50pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 0000209 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMo, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



Note: Compacted Fill shall be placed to a minimum of 18 inches above the top of pipe prior to installation.



GBA PN 12720.09

GBA
7801 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7807 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.fwilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer
Profiles

JOB NO: 1197

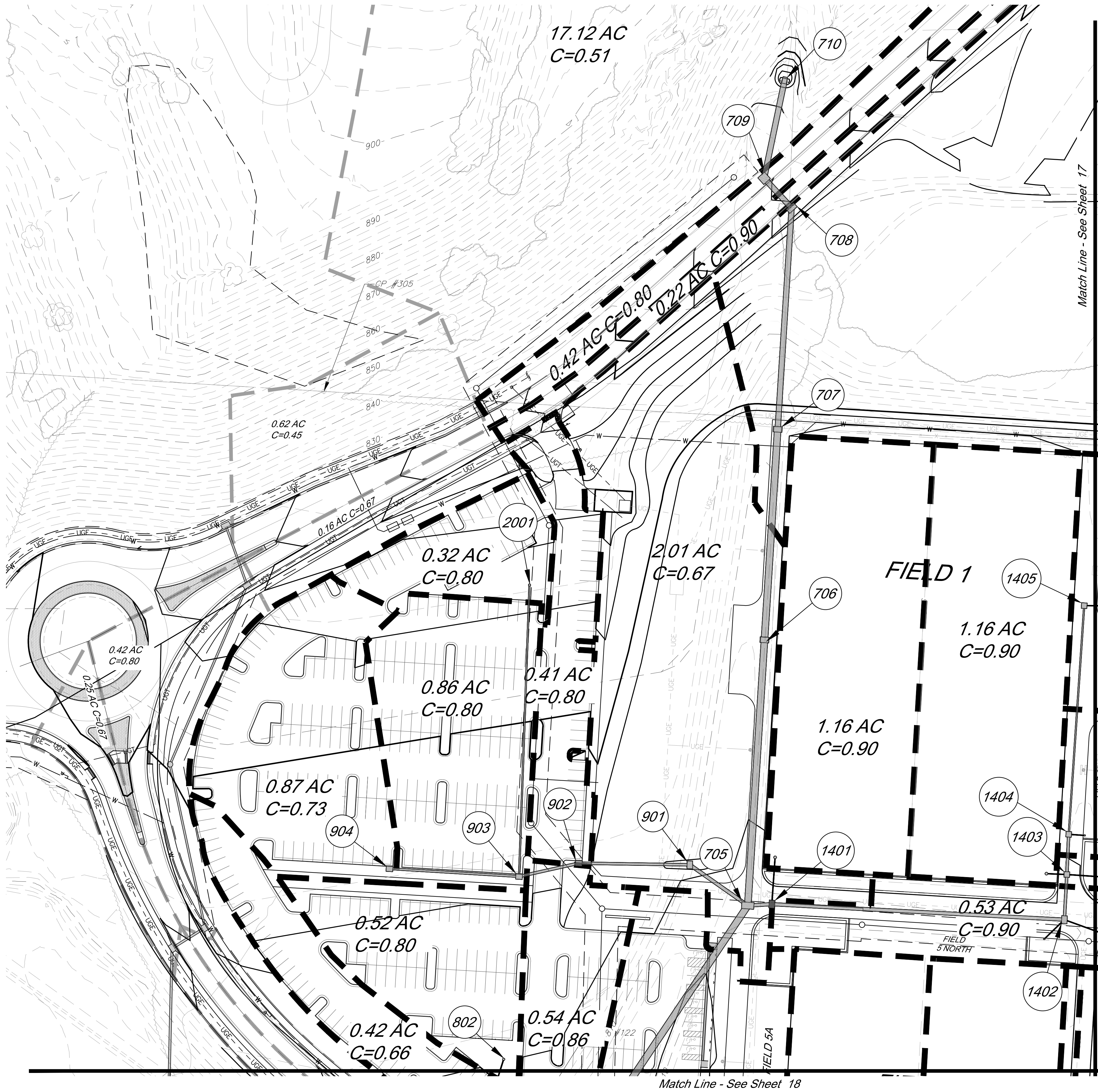
SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

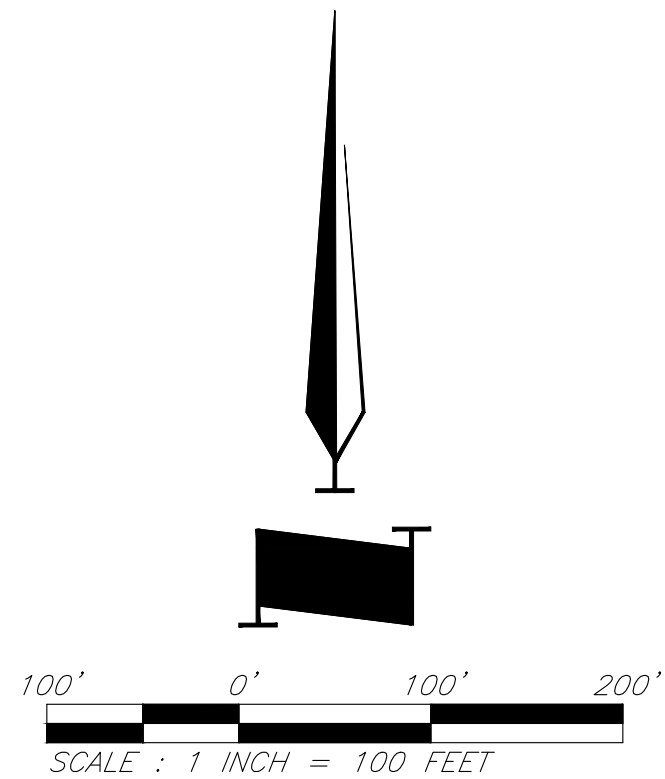
SHEET NO:

15

C:\12720\01\production drawings\field storm plans\1272002000.dwg Layout: 16 Drainage Map -- Tuesday, April 28, 2020, 1:52pm -- Copyright 2020, George Buller Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000039 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INFRINGING TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



- Legend**
- 800 Proposed Contours
 - 800 Existing Contour
 - Proposed Drainage Area
 - 0.28 Acres Drainage Area
 - Proposed Storm Sewer
 - Future Storm Sewer



GBA
7801 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7037 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Drainage Map

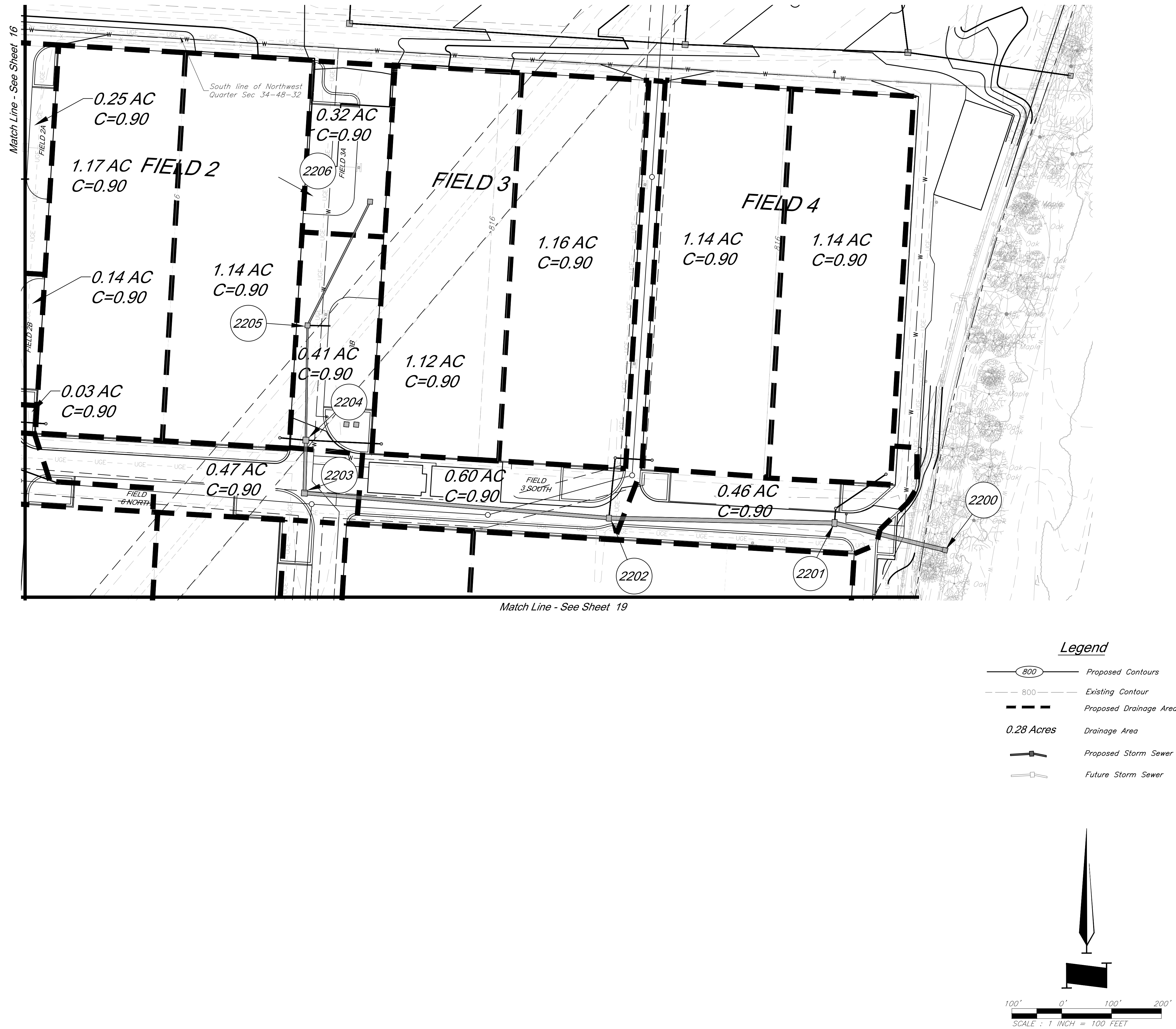
JOB NO: 1197

SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

16



GBA PN 12720.09

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finkdewilliams.com
Missouri Certificate of Authority #F0045330

PROJECT

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE

10/17/19 City Comment
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL



DRAWING TITLE

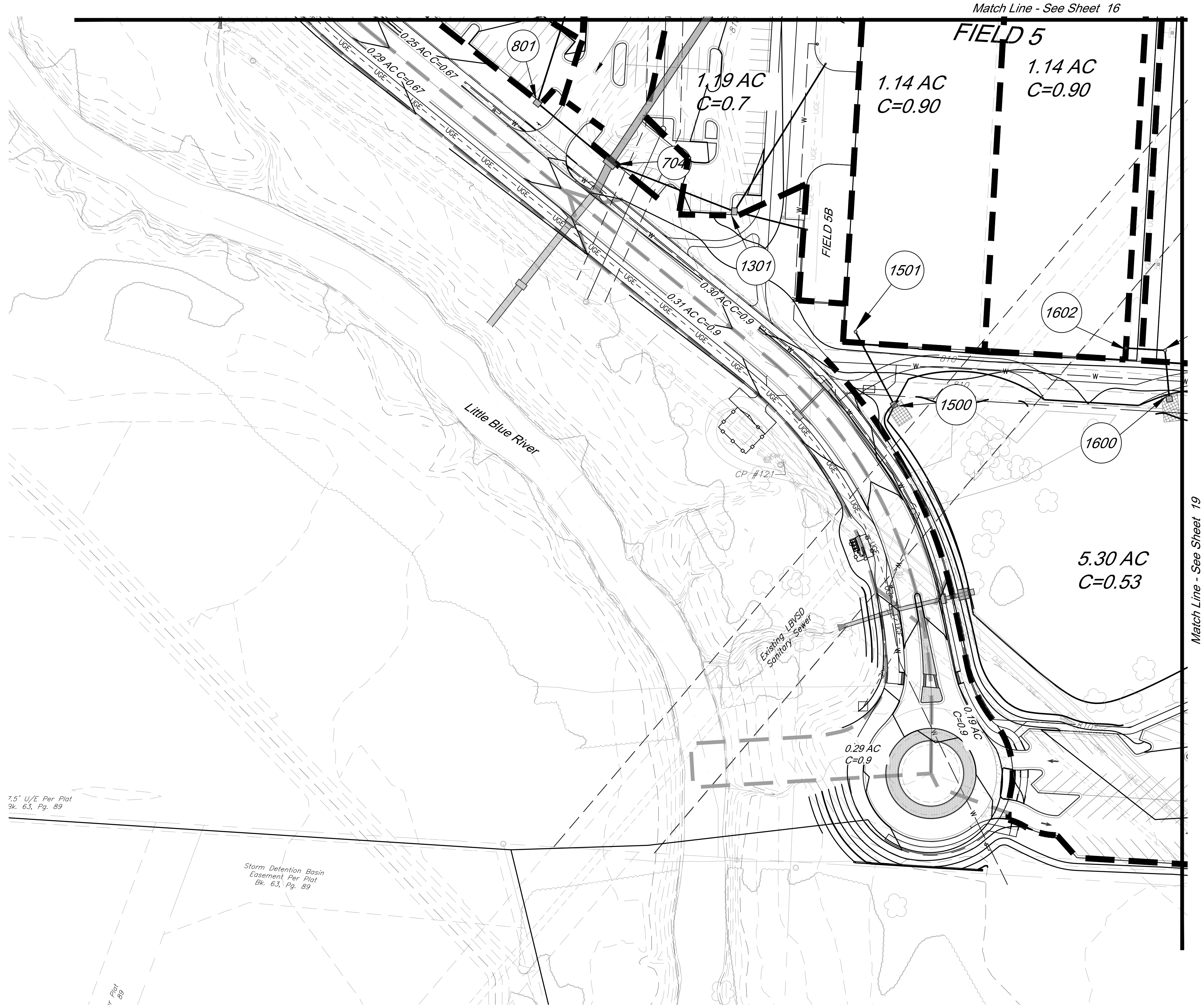
Drainage Map

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA

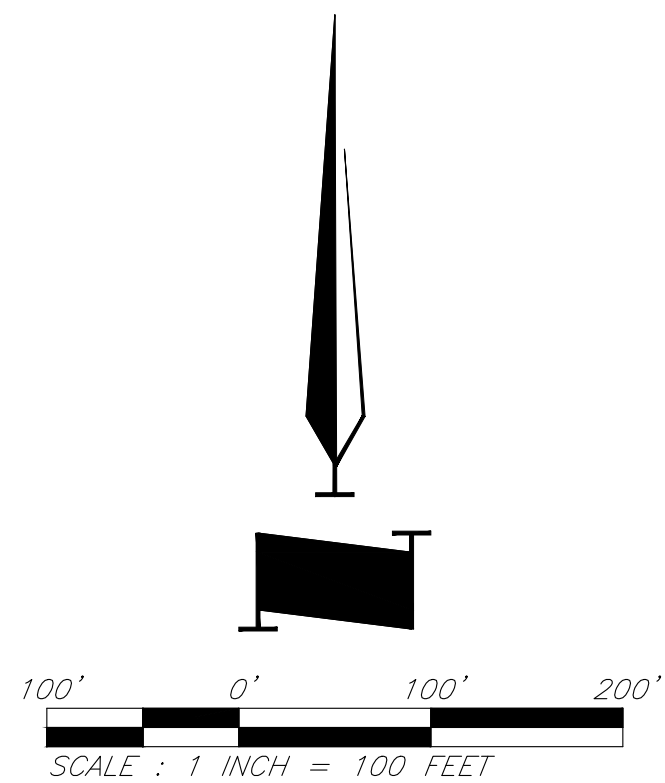
SHEET NO.

17

G:\12720\Civil_3D\production drawings\field storm plans\12720C2000.dwg Layout: 18 Drainage Map -- Tuesday, April 28, 2020, 1:53pm -- Copyright 2020, George Buller Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS PURSUANT TO SECTION 302.411, RSMO ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



- Legend**
- 800 Proposed Contours
 - 800 Existing Contour
 - Proposed Drainage Area
 - 0.28 Acres Drainage Area
 - Proposed Storm Sewer
 - Future Storm Sewer



GBA
1801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LANDS Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.landstudio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
6345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7037 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Drainage Map

JOB NO: 1197

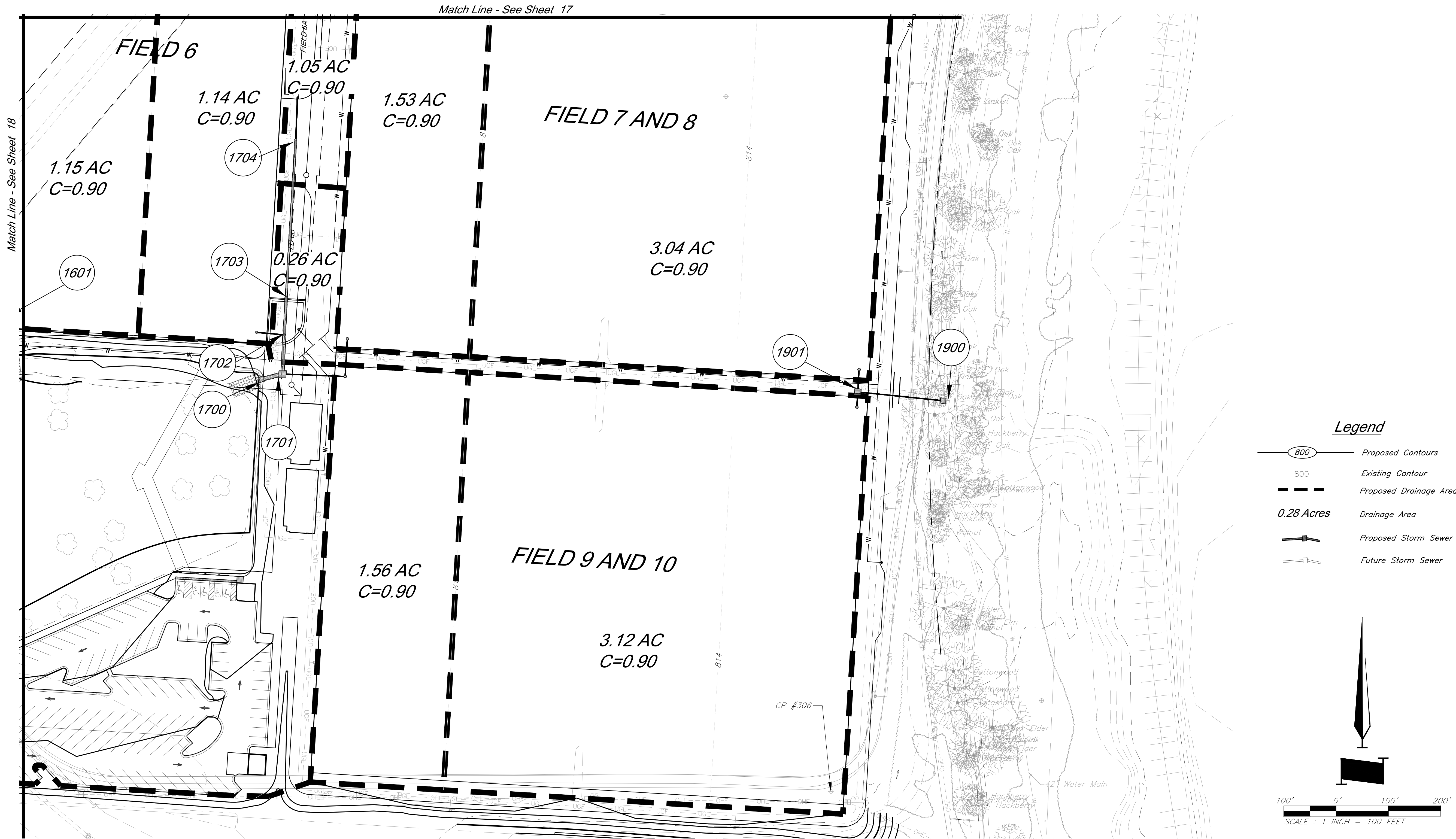
SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

18

G:\12720\Civil 3D\production drawings\field storm plans\12720C02000.dwg Layout: 19 Drainage Map -- Tuesday, April 28, 2020, 1:54pm -- Copyright 2020, George Buller Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS FURTHER TO SECTION 327.411, RSMO ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OF INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



GBA
7801 Rayner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbadeam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7037 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Drainage Map

JOB NO: 1197

SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

19

Structures		10 Year Storm										Culverts have been designed to the 100 year Storm										Pipe Design										Design Checks										Comments																																																																			
		Runoff Calculations					Area Inlet					Description					Pipe length					Pipe Slope					Pipe dia (in)					Manning's n Value					Q full (cfs)						Pipe Area, sf					V full fps					Design V fps					Hw/D					outlet head, H					HW, Inlet Control, (ft)					HW, Outlet Control, (ft)					Inlet Top Elevation					upstream flowline					downstream flowline					Invert Drop (ft)					Downstream water elevation					Hydraulic Grade Elev. (Calculated)					Hydraulic Grade (allowable)	
From	To	Direct Area (acre)	Line In (acre)	Total Area (acre)	C	K	Tc (min)	Flow Time (min)	Intensity (in/hr)	Design Q (cfs)	Area Inlet Headwater (in)	Description	Pipe length (lin ft)	Pipe Slope Slope, %	Pipe dia (in)	Manning's n Value	Q full (cfs)	Pipe Area, sf	V full fps	Design V fps	Hw/D	outlet head, H	HW, Inlet Control, (ft)	HW, Outlet Control, (ft)	Inlet Top Elevation	upstream flowline	downstream flowline	Invert Drop (ft)	Downstream water elevation	Hydraulic Grade Elev. (Calculated)	Hydraulic Grade (allowable)																																																																														
Line 700 (100 Yr)	710				0.51	1.25	18.92		6.61	72.2		End Section														N/A					835.75	836.00																																																																													
		709		17.12	0.51	1.25	18.92	0.07	6.61	72.2		HDPE	90.20	7.50	48	0.01	512.77	12.57	40.81	20.62	1.0	1.12	835.75	829.70		834.22	831.76	824.99		828.59		832.39																																																																													
	709	708	0.42		0.80	1.25	5.50		10.12	4.2		Curb Inlet																0.5		828.59		832.39																																																																													
		708		17.54	0.52	1.25	18.99	0.03	6.60	74.8		RCP	36.50	5.00	48	0.013	322.06	12.57	25.63	20.84	1.0	0.88	828.59	824.03		824.49	822.67		823.15		823.15	832.33																																																																													
	708	707	0.22		0.90	1.25	6.21		9.84	2.4		Curb Inlet																3.67		823.15		823.15	832.33																																																																												
		707		17.76	0.52	1.25	19.02	0.16	6.59	76.4		RCP	199.94	5.00	48	0.013	322.06	12.57	25.63	20.84	1.0	1.94	823.15	813.68		819.00	809.00		811.75		814.89																																																																														
	707	706	0.00		0.80	1.25	5.00		10.32	0.0		Junction Box																1		809.94		811.75	814.89																																																																												
		706		17.76	0.52	1.25	19.18	0.27	5.34	61.9		RCP	190.19	0.79	60	0.013	232.11	19.63	11.82	11.60	0.7	0.42	811.75	810.36		808.00	806.50		809.94		814.95																																																																														
	706	705	0.00		0.80	1.25	5.00		8.53	0.0		Junction Box																	0.5		809.94		814.95																																																																												
		705		17.76	0.52	1.25	19.46	0.34	6.52	75.5		RCP	239.94	0.96	60	0.013	255.87	19.63	13.03	11.60	0.8	0.72	809.94	809.10		806.00	803.70		808.38		813.02																																																																														
	705	704	0.00	8.88		0.67	1.25	5.85		9.98	0.0	Junction Box																	0.5		808.38		813.02																																																																												
		704		26.64	0.62	1.25	19.80	0.38	6.46	133.2		RCP	329.02	0.92	60	0.013	250.89	19.63	12.78	14.43	1.0	2.76	808.38	807.56		803.20	800.16		804.80		813.02																																																																														
	704	703	0.54	2.13		0.86	1.25	5.00		10.32	6.0	Curb Inlet																	2.3		804.80		812.28																																																																												
		703		29.31	0.63	1.25	20.18	0.04	6.40	147.9		RCP	35.47	0.80	60	0.013	233.57	19.63	11.90	14.78	1.1	1.31	803.45	804.80		797.84	797.31		803.49		812.15																																																																														
703	702	0.25		0.90	1.25	5.00		10.32	2.9		Curb Inlet																	0.3		803.49		812.15																																																																													
	702		29.56	0.63	1.25	20.22	0.04	6.40	149.6		RCP	35.00	0.80	60	0.013	233.57	19.63	11.90	14.80	1.1	1.34	802.68	803.49		797.01	796.73		802.16		812.15																																																																															
702	701	0.29		0.90	1.25	5.00		10.32	3.4		Curb Inlet																	0.3		802.16		812.15																																																																													
	701		29.85	0.64	1.25	20.26	0.08	6.39	151.5		RCP	68.97	0.80	60	0.013	233.57	19.63	11.90	14.84	1.1	1.62	802.16	794.60		796.43	795.88		792.97		807.15																																																																															
701	700	0.00		0.90	1.25	5.00		10.32	0.0		Junction Box																	8.63		792.97		807.15																																																																													
	700		29.56	0.64	1.25	20.26	0.05	6.39	151.5		RCP	44.31	1.00	60	0.013	261.14	19.63	13.30	14.84	1.1	1.44	792.97	790.75		787.25	786.81		789.31		789.31																																																																															
Line 700 (25 Yr)	710		17.12		0.51	1.10	18.92		5.38	51.7		End Section														N/A				833.82	836.00																																																																														
		709		17.12	0.51	1.10	18.92	0.07	5.38	51.7		HDPE	90.20	6.08	48	0.01	461.69	12.57	36.74	20.62	0.8	0.57	833.82	828.46		830.47	824.98		827.89		832.39																																																																														
	709	708	0.42		0.80	1.10	5.50		8.35	3.1		Curb Inlet																0.5		827.89		832.39																																																																													
		708		17.54	0.52	1.10	18.99	0.03	5.37	53.6		RCP	36.50	5.00	48	0.013	322.06	12.57	25.63	20.84	0.9	0.45	827.89	822.88		824.48	822.66		822.42		832.33																																																																														
	708	707	0.22		0.90	1.10	6.21		8.12	1.8		Curb Inlet																3.67		822.42		832.33																																																																													
		707		17.76	0.52	1.10	19.02	0.16	5.37	54.7		RCP	199.94	5.00	48	0.013	322.06	12.57	25.63	20.84	0.9	0.99	822.42	812.64		818.99	808.99		811.65		814.89																																																																														
	707	706	0.00		0.80	1.10	5.00		8.53	0.0		Junction Box																1		811.65		814.89																																																																													
		706		17.76	0.52	1.10	19.18	0.27	5.34	54.5		RCP	190.19	0.79	60	0.013	232.11	19.63	11.82	11.60	0.7	0.33	811.65	809.97		807.99	806.49		809.64		814.95																																																																														
	706	705	0.00		0.80	1.10	5.00		8.53	0.0		Junction Box																0.5		809.64		814.95																																																																													
		705		17.76	0.52	1.10	19.46	0.34	5.31	54.1		RCP	239.94	0.96	60	0.013	255.87	19.63	13.03	11.60	0.7	0.37	809.64	802.72		805.99	803.69		802.35		813.02																																																																														
	705	704	0.00	8.88		0.67	1.10	5.85		8.24	0.0	Junction Box																	0.5		807.48		813.02																																																																												
		704		26.64	0.62	1.10	19.80	0.38	5.26	95.4		RCP	329.02	0.92	60	0.013	250.48	19.63	12.76	14.43	0.9	1.41	807.48	803.77		803.19	800.16		802.35		812.28																																																																														
	704	703	0.54	2.13		0.86	1.10	5.00		8.53	4.4	Curb Inlet																	2.3		802.35		812.28																																																																												
		703		29.31	0.63	1.10	20.18	0.04	5.21	105.9		RCP	35.49	0.80	60	0.013	233.57	19.63	11.90	14.78	0.9	0.67	802.35	802.35		797.84	797.31		801.68		812.15																																																																														
703	702	0.25		0.90	1.10	5.00		8.53	2.1		Curb Inlet																	0.3		801.68		812.15																																																																													
	702		29.56	0.63	1.10	20.22	0.04	5.20	107.0		RCP	35.00	0.80	60	0.013	233.57	19.63	11.90	14.80	0.9	0.68	801.55	801.68		797.01	796.73		801.00		812.15																																																																															
702	701	0.29		0.90	1.10	5.00		8.53	2.1		Curb Inlet																	0.3		801.00		812.15																																																																													
	701		29.85	0.64	1.10	20.26	0.08	5.20	108.4		RCP	68.97	0.80	60	0.013	233.57	19.63	11.90	14.84	0.9	0.83	801.00	792.65		796.43	795.88		791.82		807.15																																																																															
701	700	0.00		0.90	1.10	5.00		8.53	0.0		Junction Box																	8.63		791.82		807.15																																																																													
	700		29.56	0.64	1.10	20.26	0.05	5.20	108.4		RCP	44.31	1.00	60	0.013	261.14	19.63	13.30	14.84	0.9	0.74	791.82	790.05		787.25	786.81		789.31		789.31																																																																															
Line 800	802		0.52		0.80	1.00	5.00		7.35	3.1	4.1	Nyloplast Dome Inlet														816.06				811.80	814.73																																																																														
		801		0.52	0.80	1.00	5.00	0.16	7.35	3.1		HDPE	86.60	1.99	18	0.01	19.32	1.77	10.93	9.07	0.7	0.22	811.80	810.00		810.68	808.95		809.79		814.73																																																																														
	801	704	0.42		0.66	1.00	5.50		7.20	2.0		Curb Inlet																0.5		809.79		814.23																																																																													
		704		0.94	0.74	1.00	5.16	0.13	7.30	5.1		HDPE	81.75	1.95	18	0.01	19.12	1.77	10.82	10.64	0.9	0.57	809.79	808.18		808.45	806.86		807.61		Connect to Line 700																																																																														
Line 900	904		0.87		0.73	1.00	5.00		7.35	4.7		Curb Inlet														819.11				815.28	817.78																																																																														
		903		0.87	0.73	1.00	5.00	0.24	7.35	4.7		HDPE	117.00	2.00	18	0.01	19.36	1.77	10.96	8.02	0.9	0.64	815.28	813.67		814.00	811.66		813.03		817.44																																																																														
	903	902	0.86	0.32	0.80	1.00	5.00		7.35	5.1		Curb Inlet																0.5		813.03		817.44																																																																													
		902		2.05	0.77	1.00	5.24	0.09	7.28	11.5		HDPE	55.14	1.00	24	0.01	29.49	3.14	9.39	10.17	0.9	0.56	813.03	812.94		811.16	810.61		812.38		817.40																																																																														
	902	901	0.41		0.80	1.00	5.50		7.20	2.4		Curb Inlet																0.5		812.38		817.40																																																																													
		901		2.46	0.78	1.00	5.35	0.14	7.25	13.8		HDPE	100.13	1.00	24	0.01	29.49	3.14	9.39	11.52	1.1	1.19	812.22	812.38		810.11	809.11		811.19		812.17																																																																														
	705		4.47	0.67	1.00	5.50		7.20	0.0		Grate Inlet												</																																																																																						

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hel-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F0045330

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Drainage Calculations

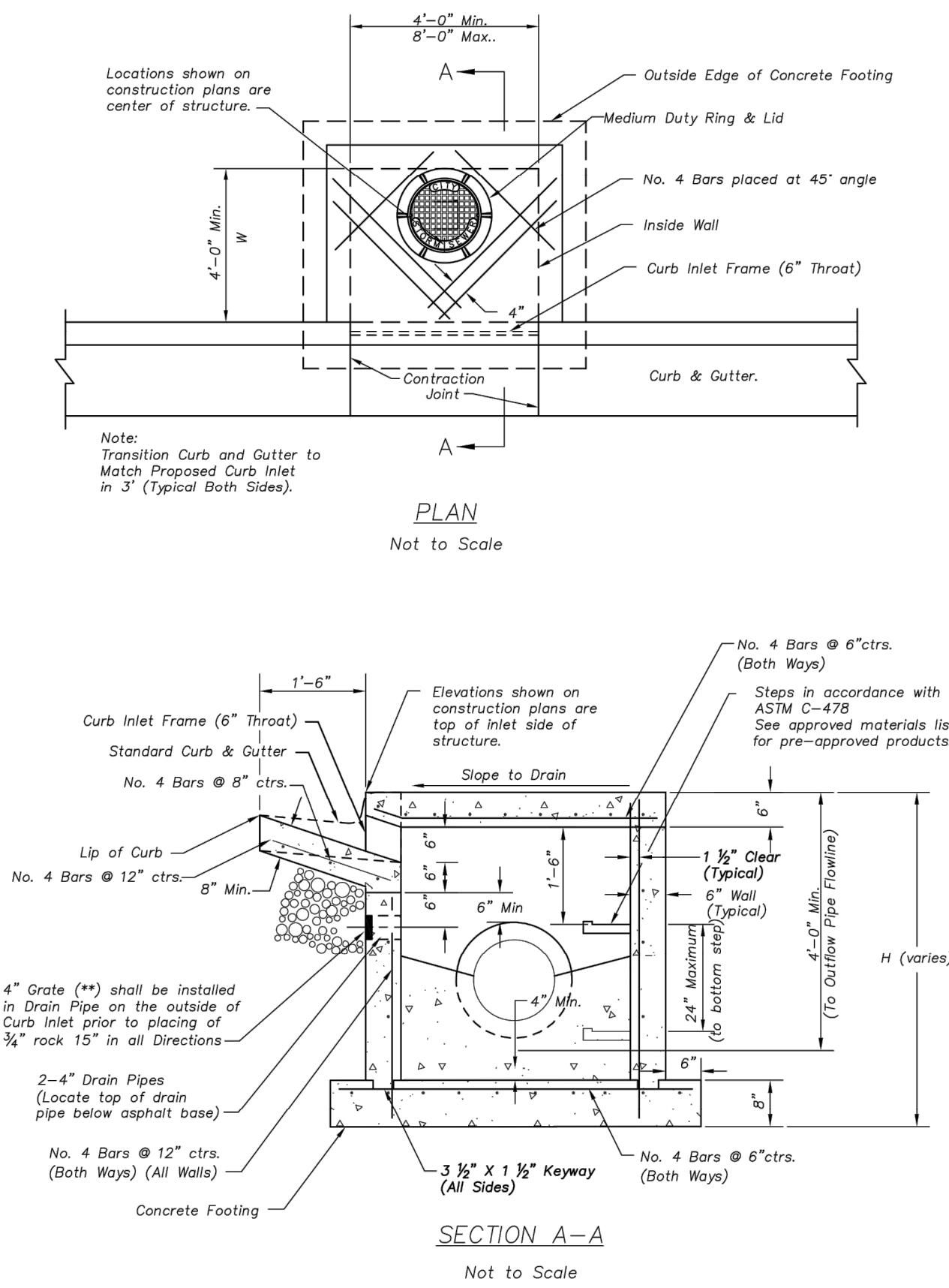
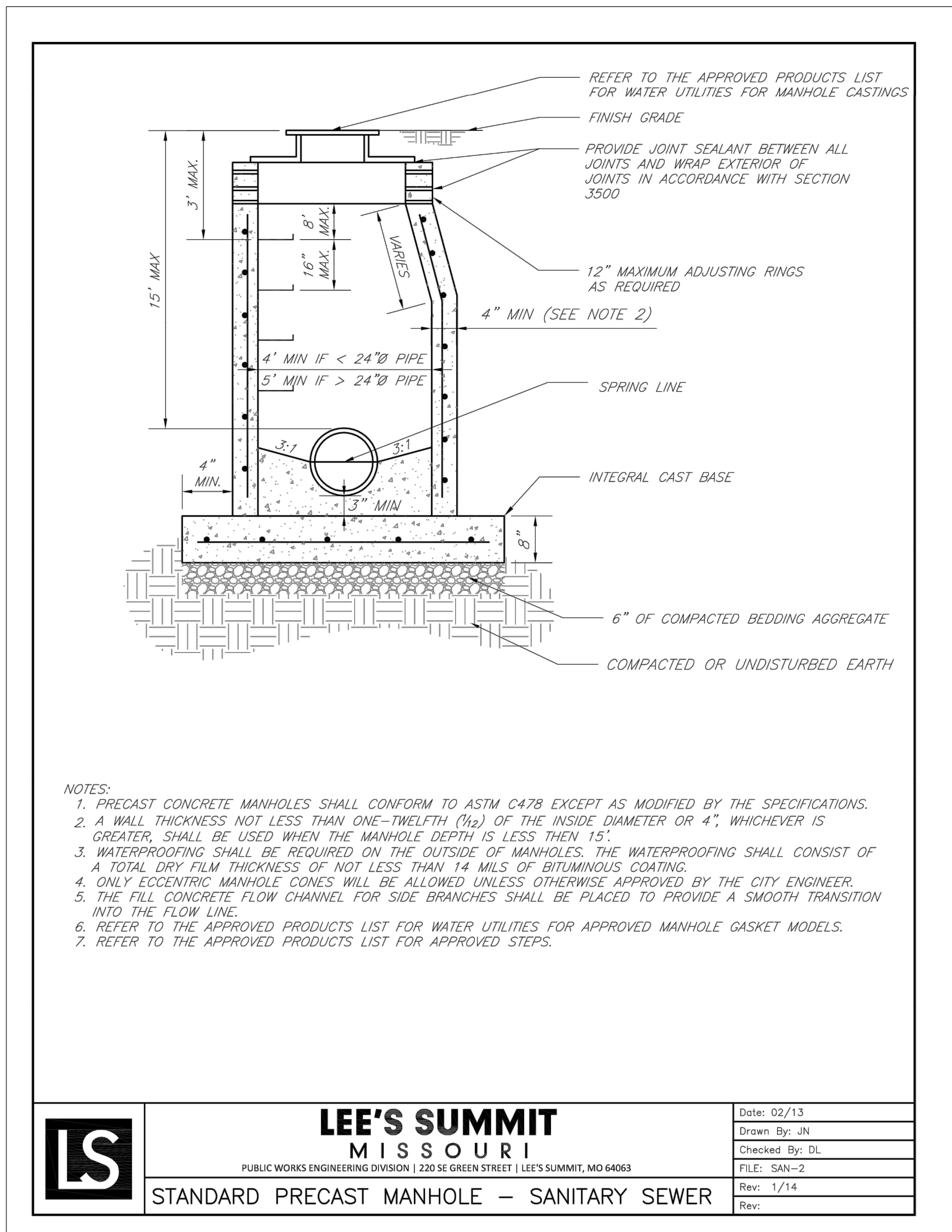
JOB NO: 1197

SCALE:

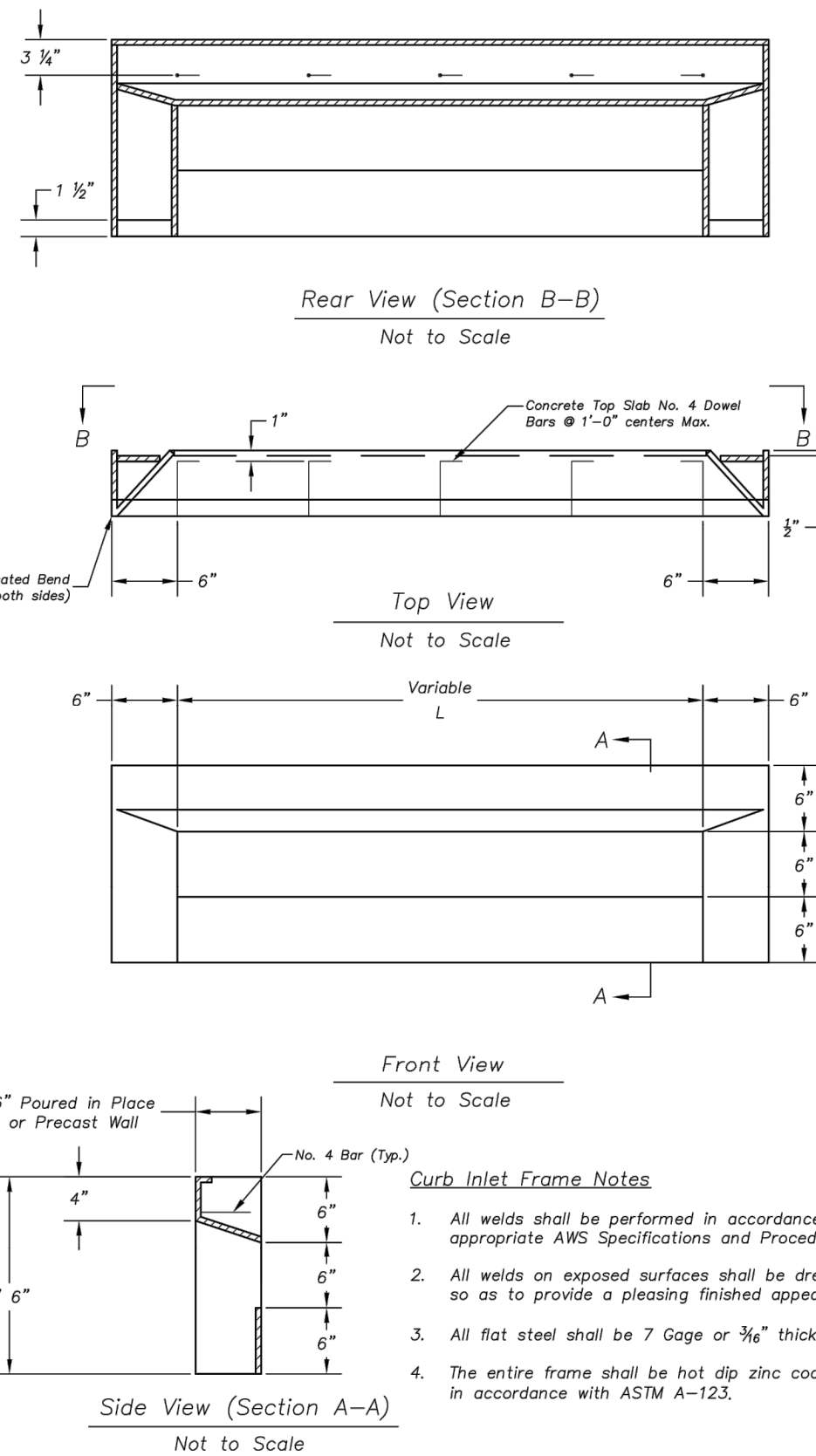
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

C:\12720\Civil\3D\production drawings\field storm plans\1272002200.dwg Tuesday April 28, 2020, 1:54pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059
THE PROFESSIONAL WHOSE SEAL SIGNATURE AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE. AND DISCLAIMS (PURSUANT TO SECTION 327.411, RSMO) ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



- Non-Setback Curb Inlet Notes**
- General
1. City of Lee's Summit Municipal Code, Design Standards, and Specifications are incorporated except as otherwise noted.
 2. All storm sewer structures shall be pre-cast or poured in place. If pre-cast structures are used for publicly financed, maintained or administered construction, the tops shall be poured in place and the wall steel shall be left exposed to a height 2' below the finish top elevation, or as directed by the City Engineer.
 3. Pre-cast shop drawings are to be approved by the City Engineer for publicly financed or administered projects. Pre-cast shop drawings for privately financed projects are to be submitted to the Engineering Services Division of the Planning and Development Services Department upon request.
 4. Do not scale these drawings for dimensions or clearances. Any questions regarding dimensions shall be brought to the attention of the City Engineer prior to construction.
 5. On-grade inlets shall conform to the street grade. Sump inlets shall be level.
 6. The first dimension listed in the construction notes is the "L" dimension. The second dimension is the "W" dimension. The concrete thickness and reinforcement shown is for boxes with ("L"=4'-4") and ("W"=4'-4") less than or equal to 20. For boxes with either of these calculations greater than 20, a special design is required.
- Concrete
7. Concrete used in this work shall be KCMMB4K, as approved by the Kansas City Metropolitan Materials Board, and shall meet the requirements of the City of Lee's Summit Municipal Code.
 8. Inlet floors shall be shaped with non-reinforced concrete inverts to provide smooth flow.
 9. Bevel all exposed edges with 3/4" triangular mounding.
- Reinforcing Steel
10. Reinforcing steel shall be new billet, minimum Grade 60 as per ASTM A615, and shall be bent cold.
 11. All dimensions relative to reinforcing steel are to centerline of bars. 2" clearance shall be provided throughout unless noted otherwise. Tolerance of +/- 1/8" shall be permitted.
 12. All lap splices not shown shall be a minimum of 40 bar diameters in length.
 13. All reinforcing steel shall be supported on fabricated steel bar supports @ 3'-0" maximum spacing.
 14. All dowels shall be accurately placed and securely tied in place prior to placement of bottom slab concrete. Sticking of dowels into fresh or partially hardened concrete will not be acceptable.
 15. The bottom slab shall be at least 24 hours old before placing sidewalk concrete. All sidewalk forms shall remain in place a minimum of 24 hours after sidewalks are poured before removal, and after removal shall be immediately treated with membrane curing compound.
 16. All curb inlet tops are to be constructed after final curb string line has been approved by the engineer and prior to curb construction or as directed by the city engineer.
 17. Pipe connections to pre-cast structures shall have a minimum of 6" of concrete around the entire pipe within 2' of the structure.
 18. Material selection and compaction requirements for backfill around structures shall be as specified in the Manual of Infrastructure Standards for Right of Way Restoration, as promulgated by the City Engineer.



GBA
7801 Raymer Boulevard
Lenexa, KS 66217
913.492.0400
www.gbaaleam.com
MO Certificate of Authority # 000133

LAND'S Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.lands3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.heng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

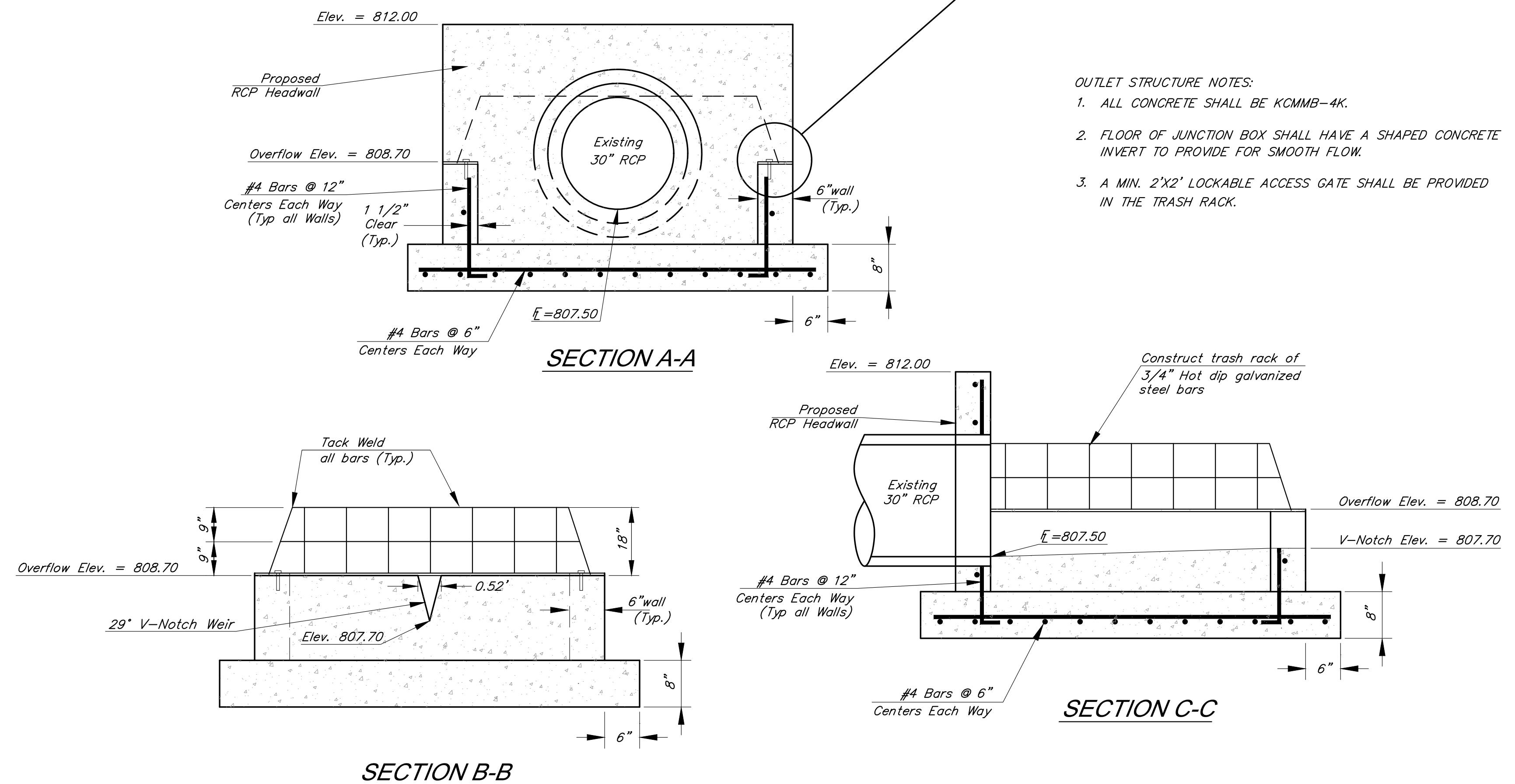
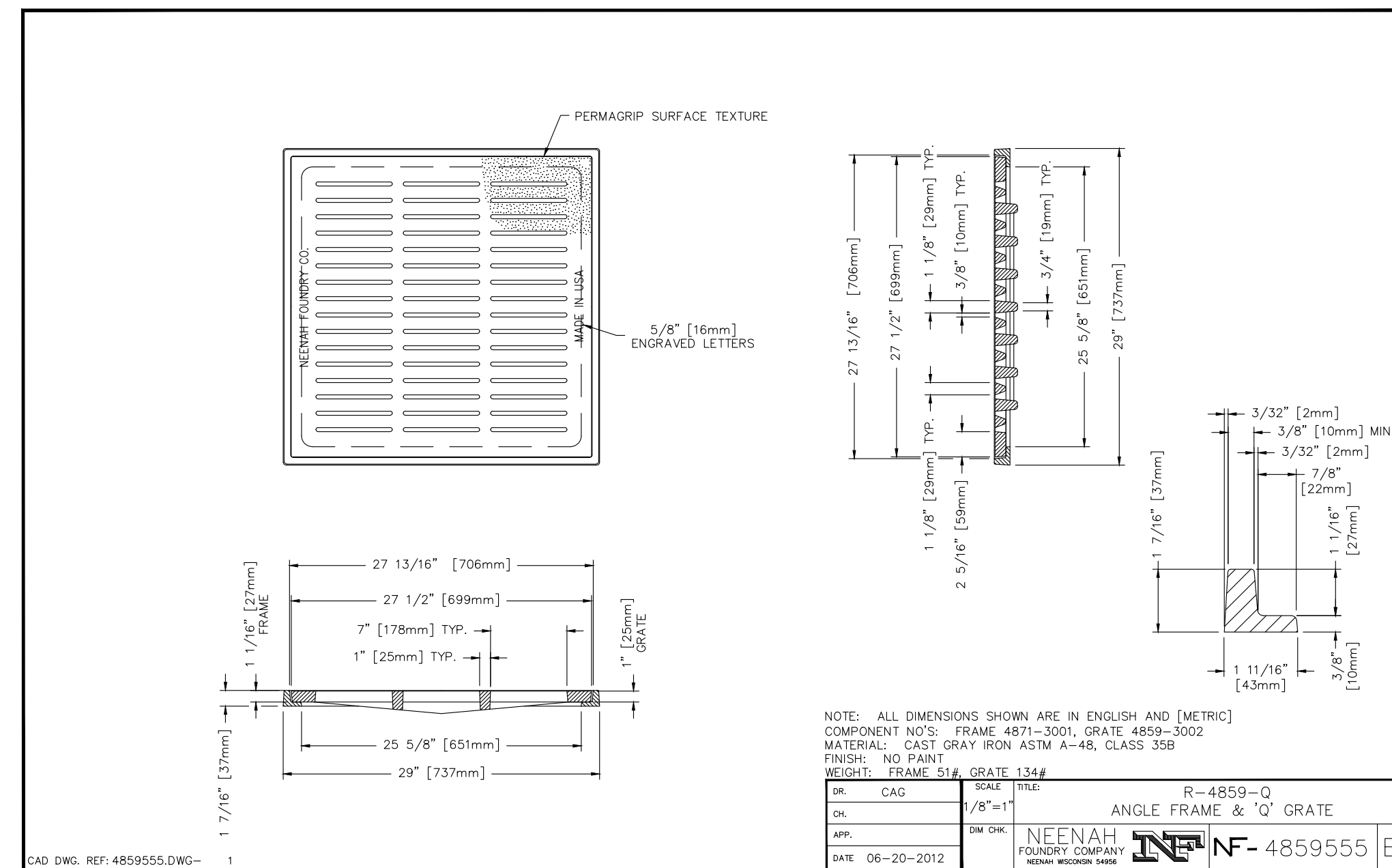
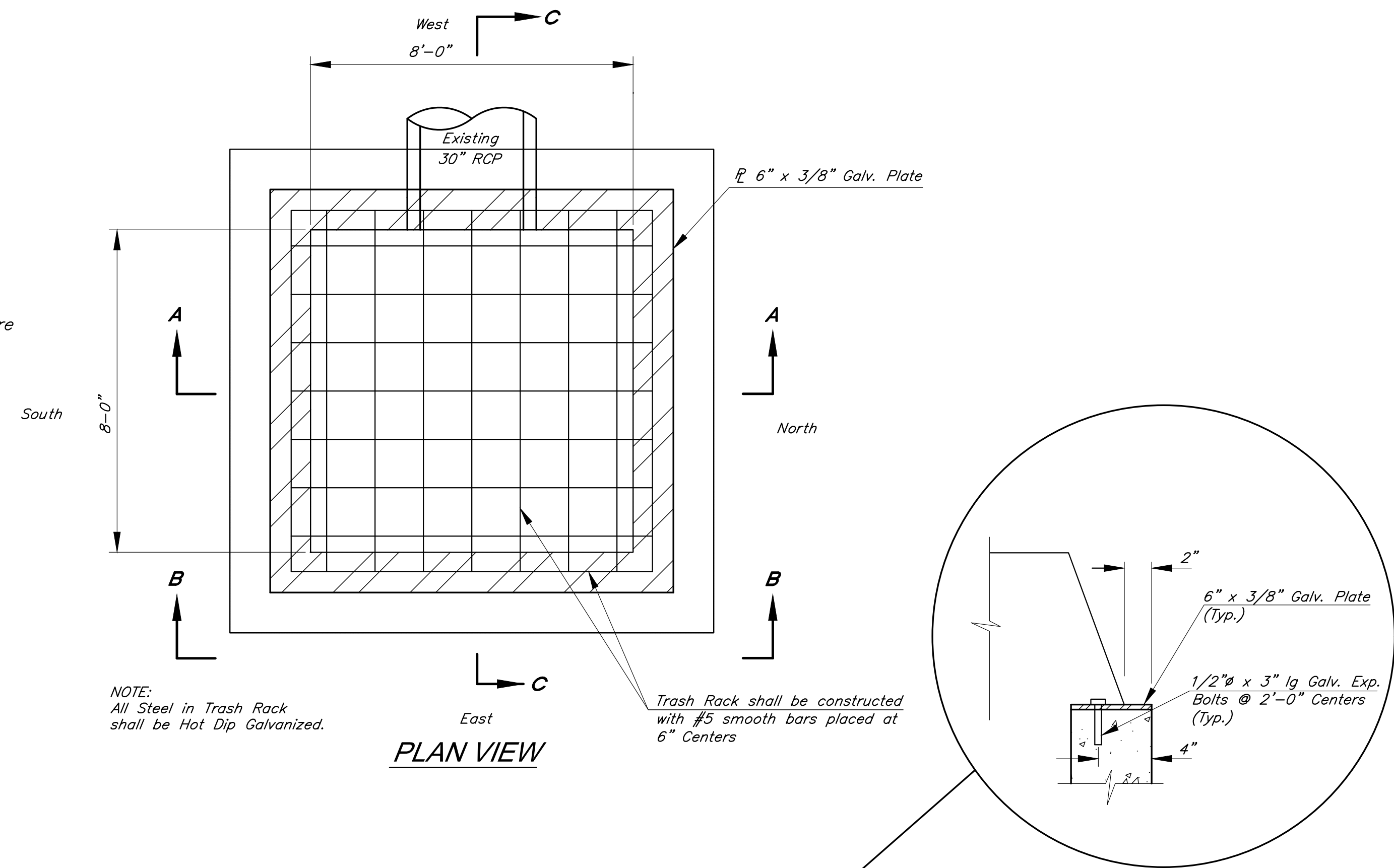
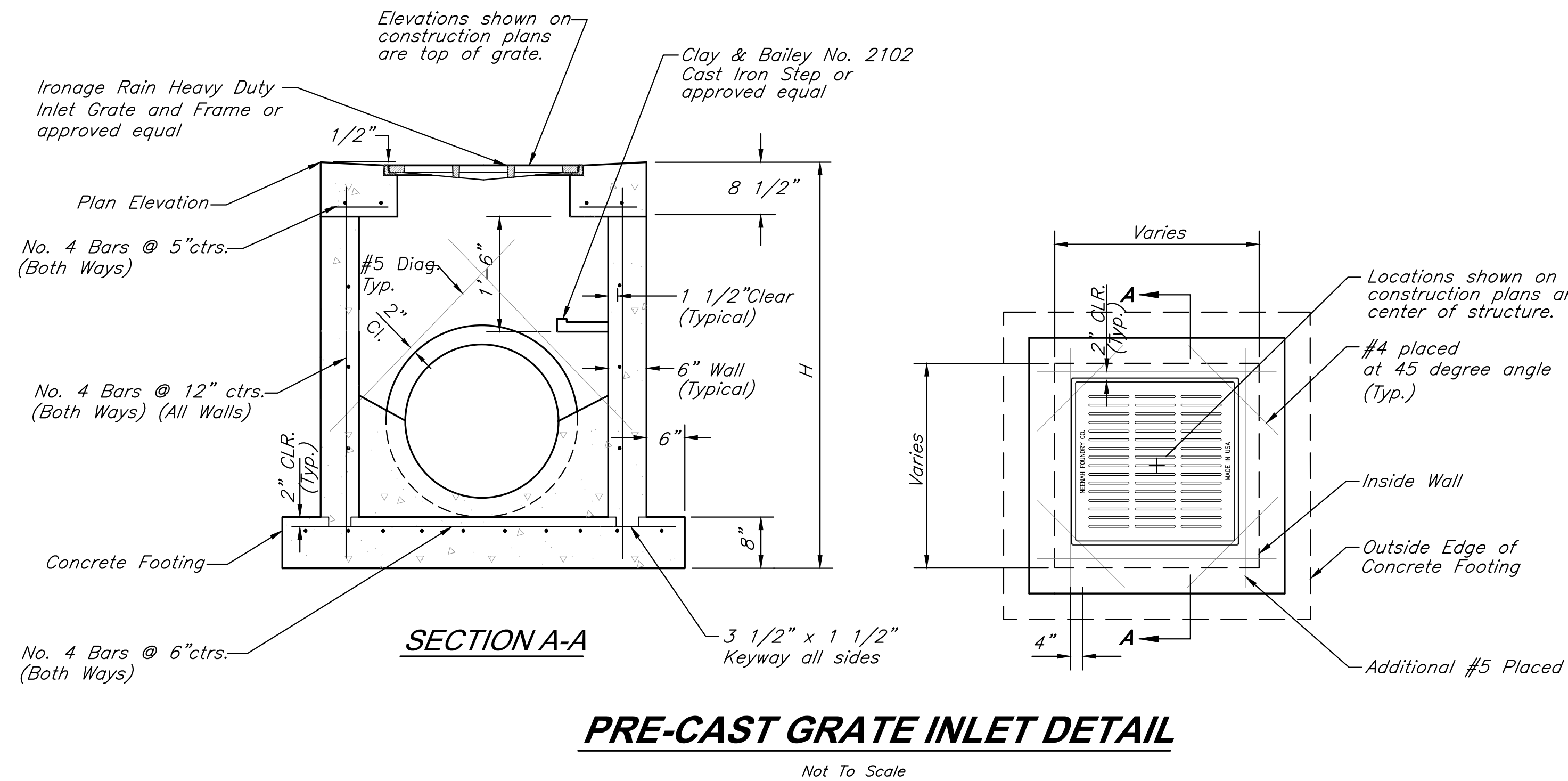
PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer
Details

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA
SHEET NO:



WETLAND OUTFLOW STRUCTURE DETAIL

Not to Scale

GBA
9801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbateam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority #2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hel-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7007 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority #F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19	City Comments
3/13/20	City Comments
4/28/20	City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer Details

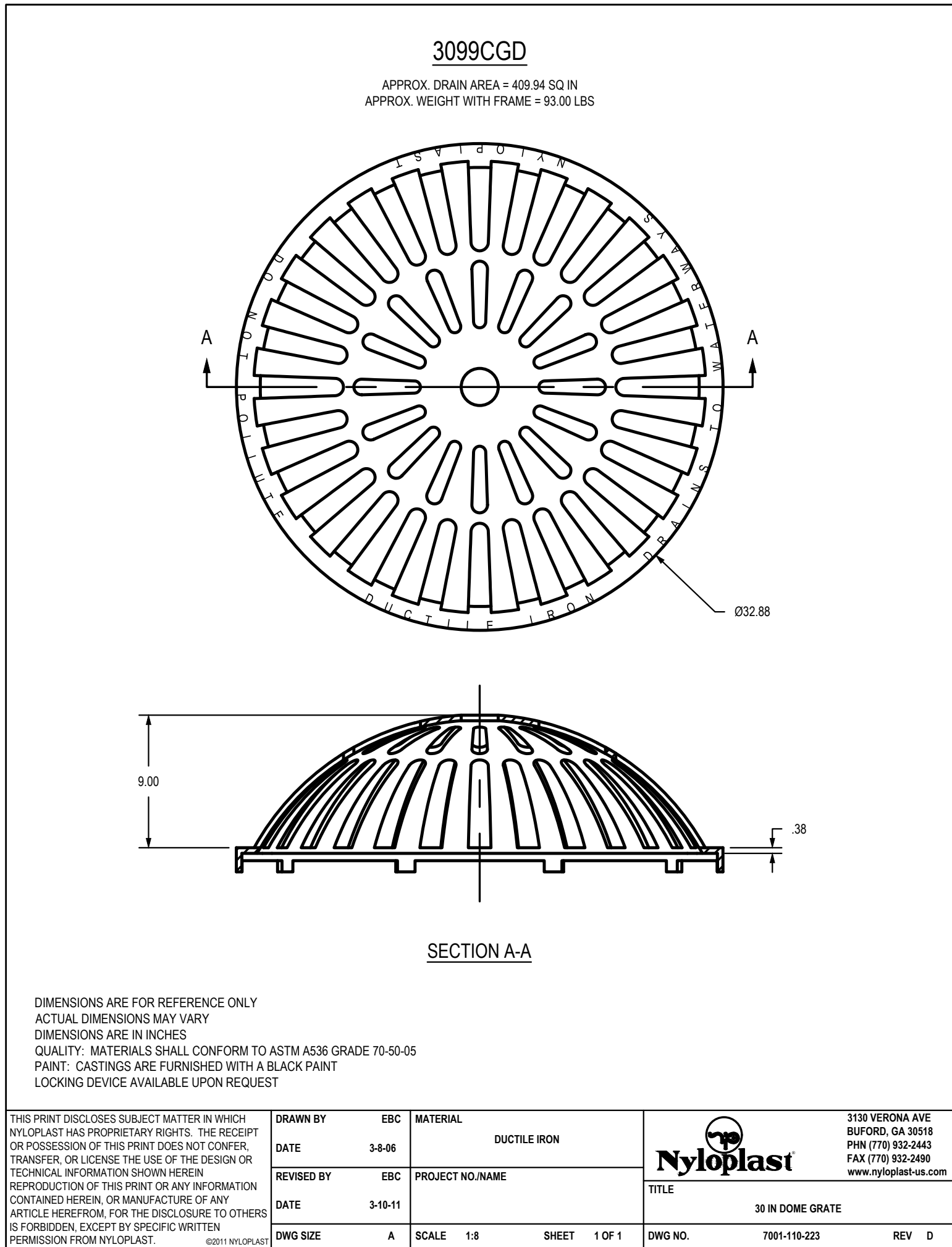
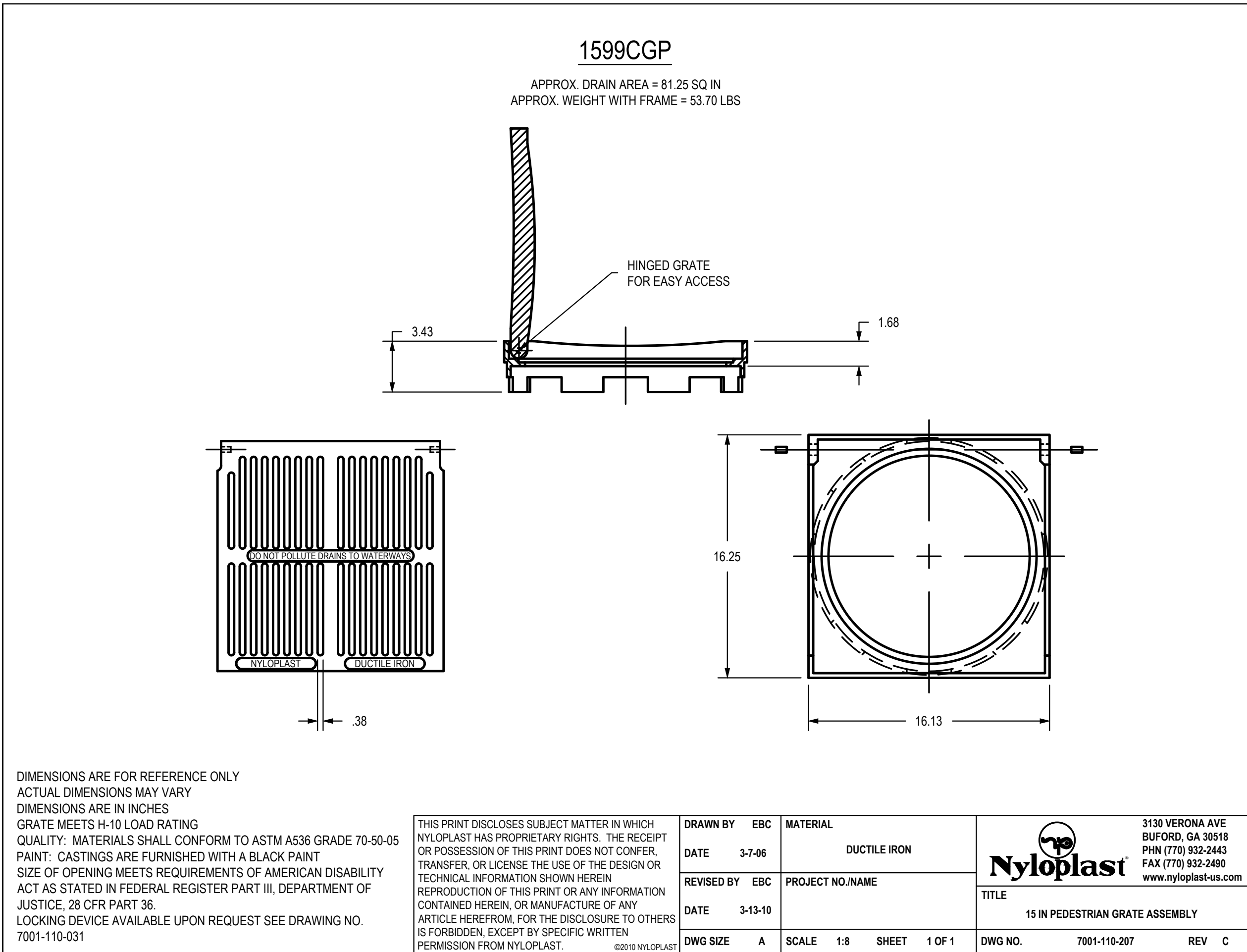
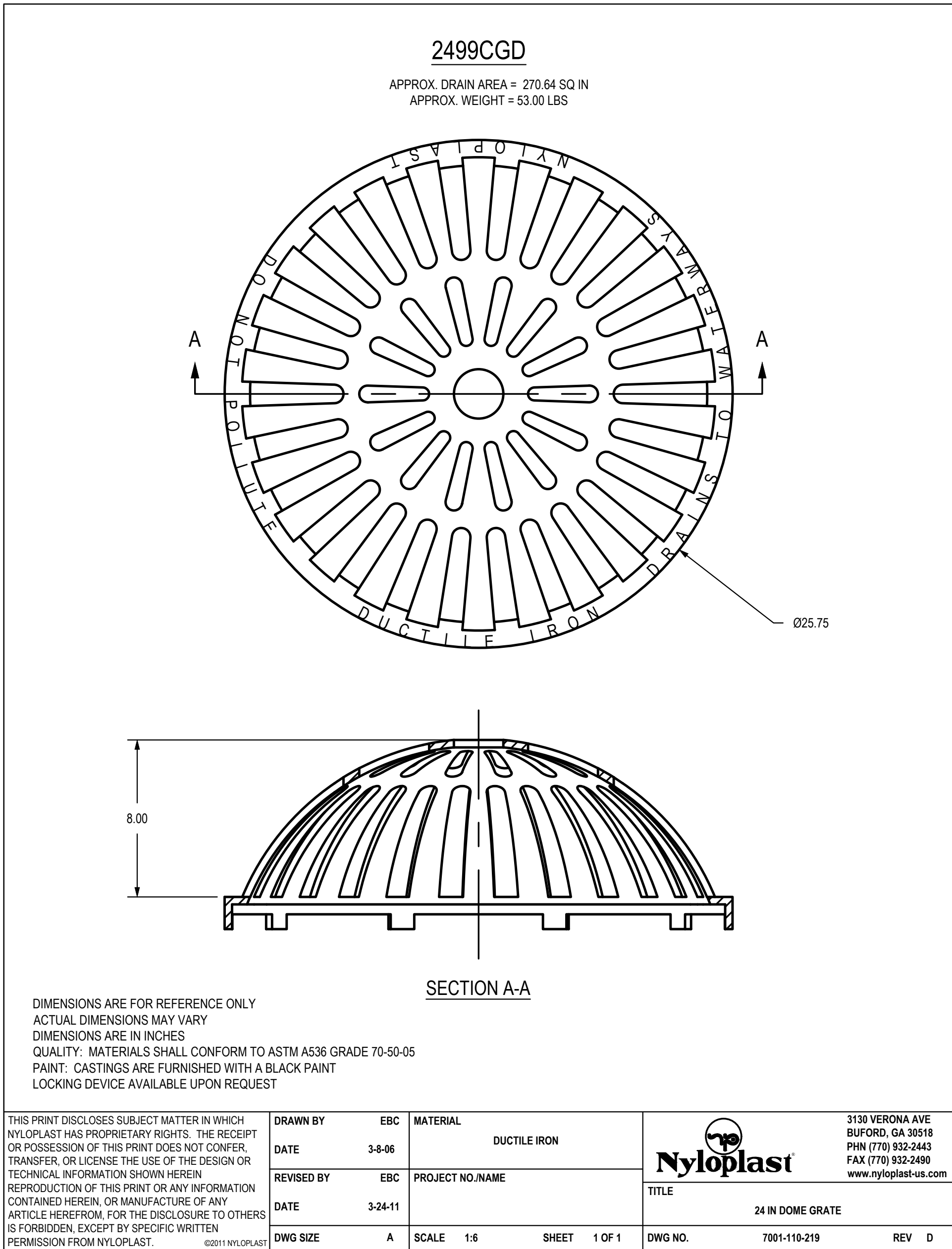
JOB NO: 1197

SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

C:\12720\Civil_3D\production drawings\field storm plans\1272002200.dwg Layout: 24 Storm Sewer Details -- Tuesday April 28, 2020, 1:55pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



GBA
19801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.hei-eng.com
Missouri Certificate of Authority # 000556

FINKE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finkewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer Details

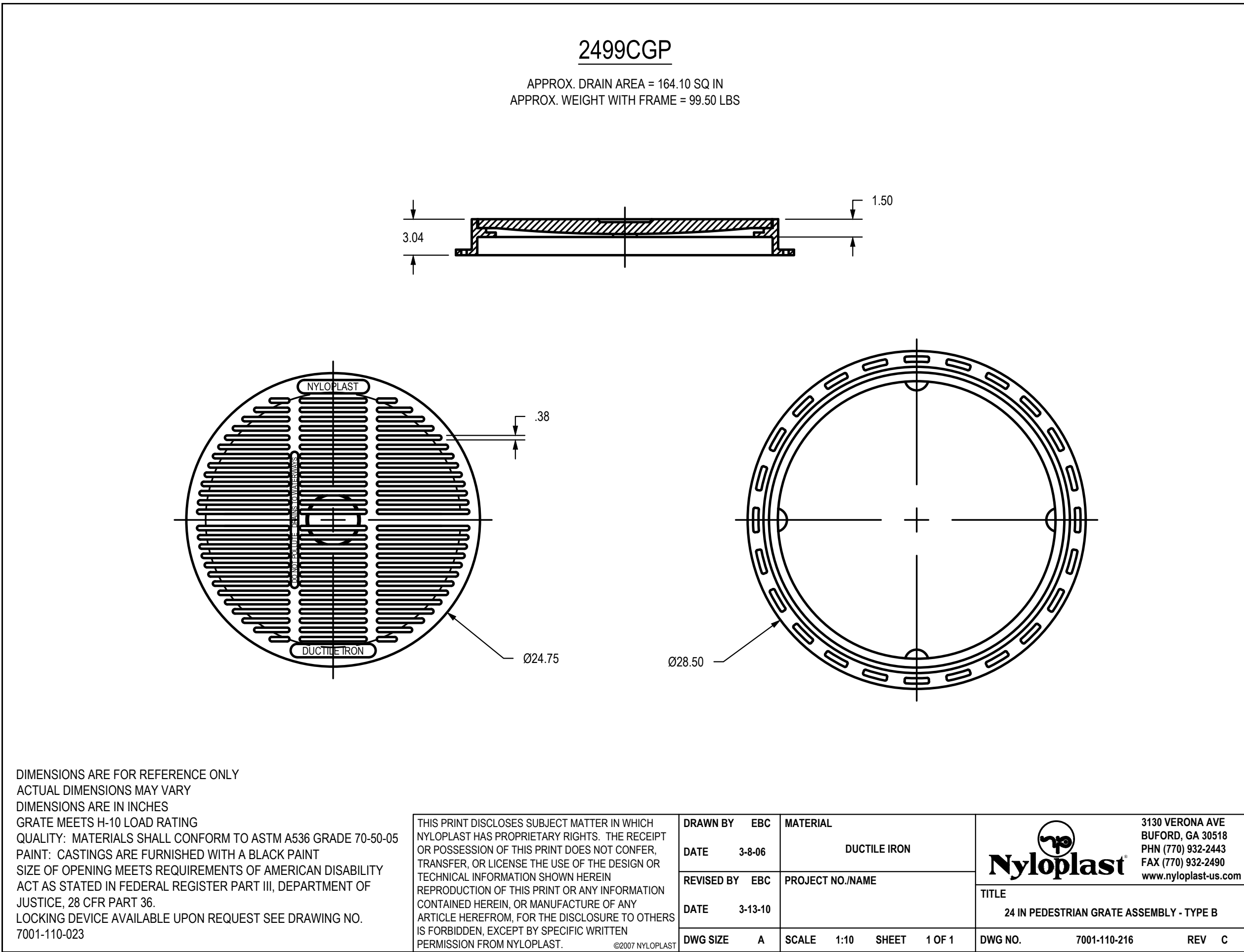
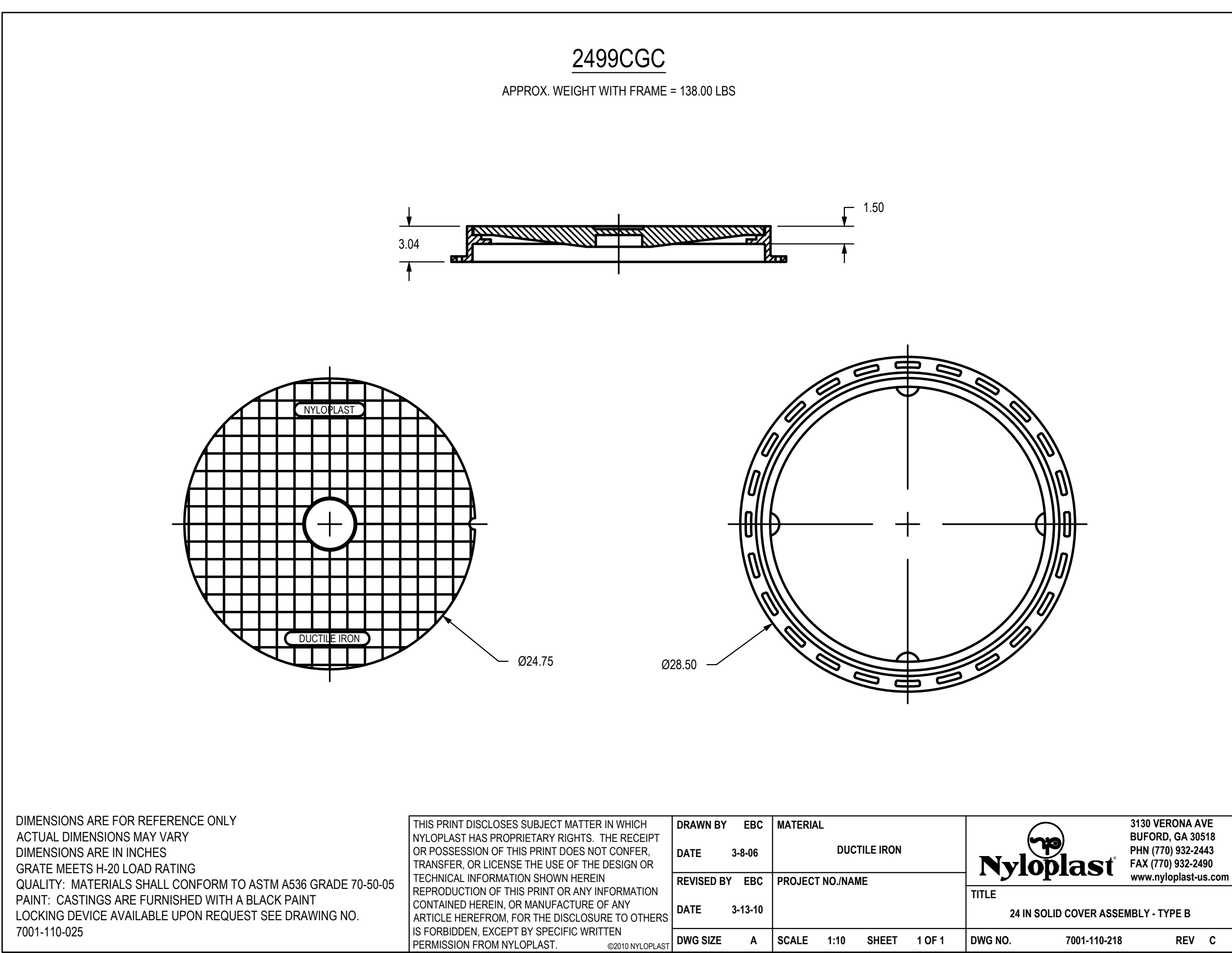
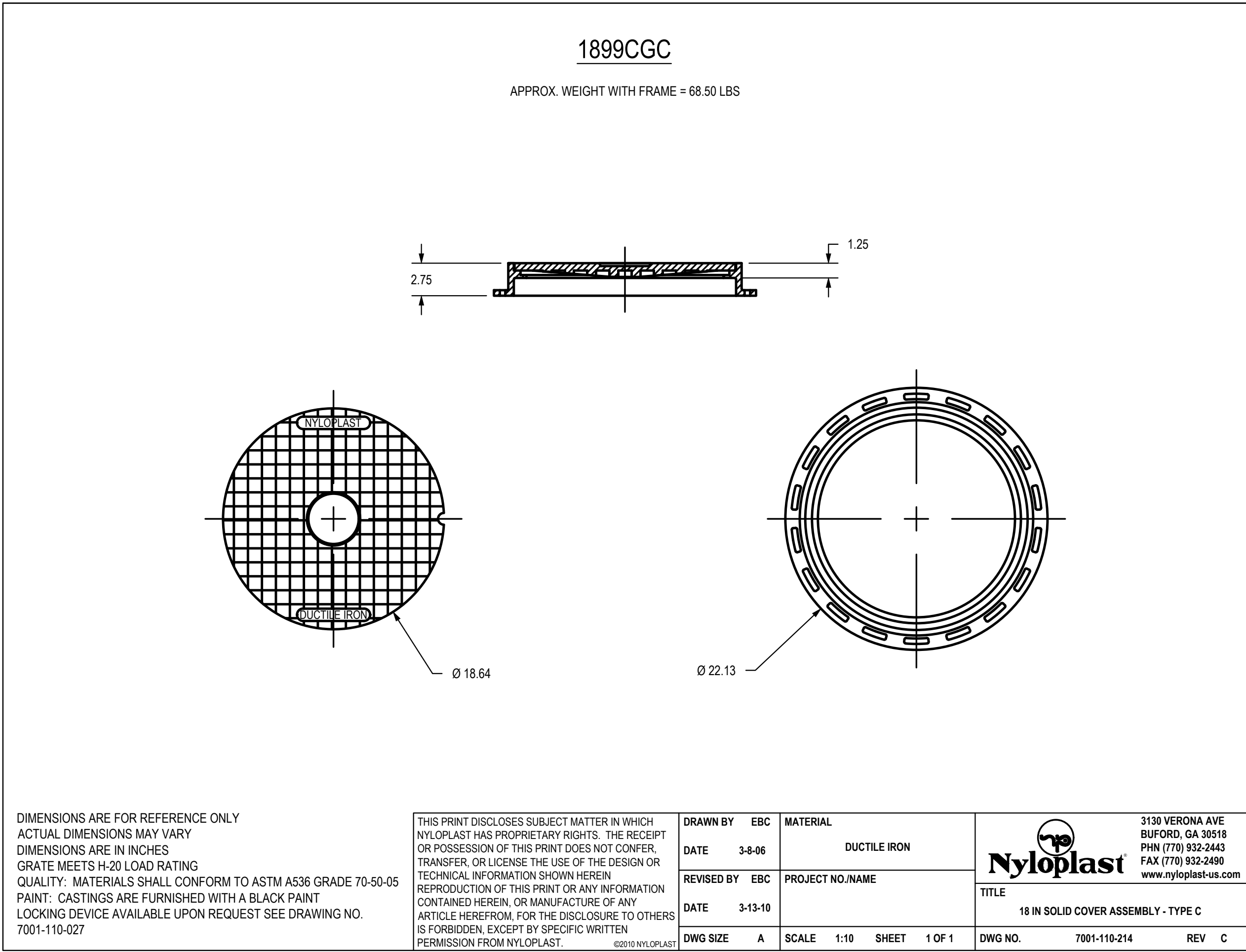
JOB NO: 1197

SCALE:

DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

G:\12720\Civil_3D\production drawings\field storm plans\12720C2200.dwg Layout: 25 Storm Sewer Details -- Tuesday April 28, 2020, 1:55pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059 THE PROFESSIONAL WHOSE SEAL SIGNATURE, AND PERSONAL SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS JURISDICTION TO SECTION 327.411, RSMO. ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INFRINGING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



GBA
1981 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7837 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.finklewilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer
1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer
Details

JOB NO: 1197

SCALE:

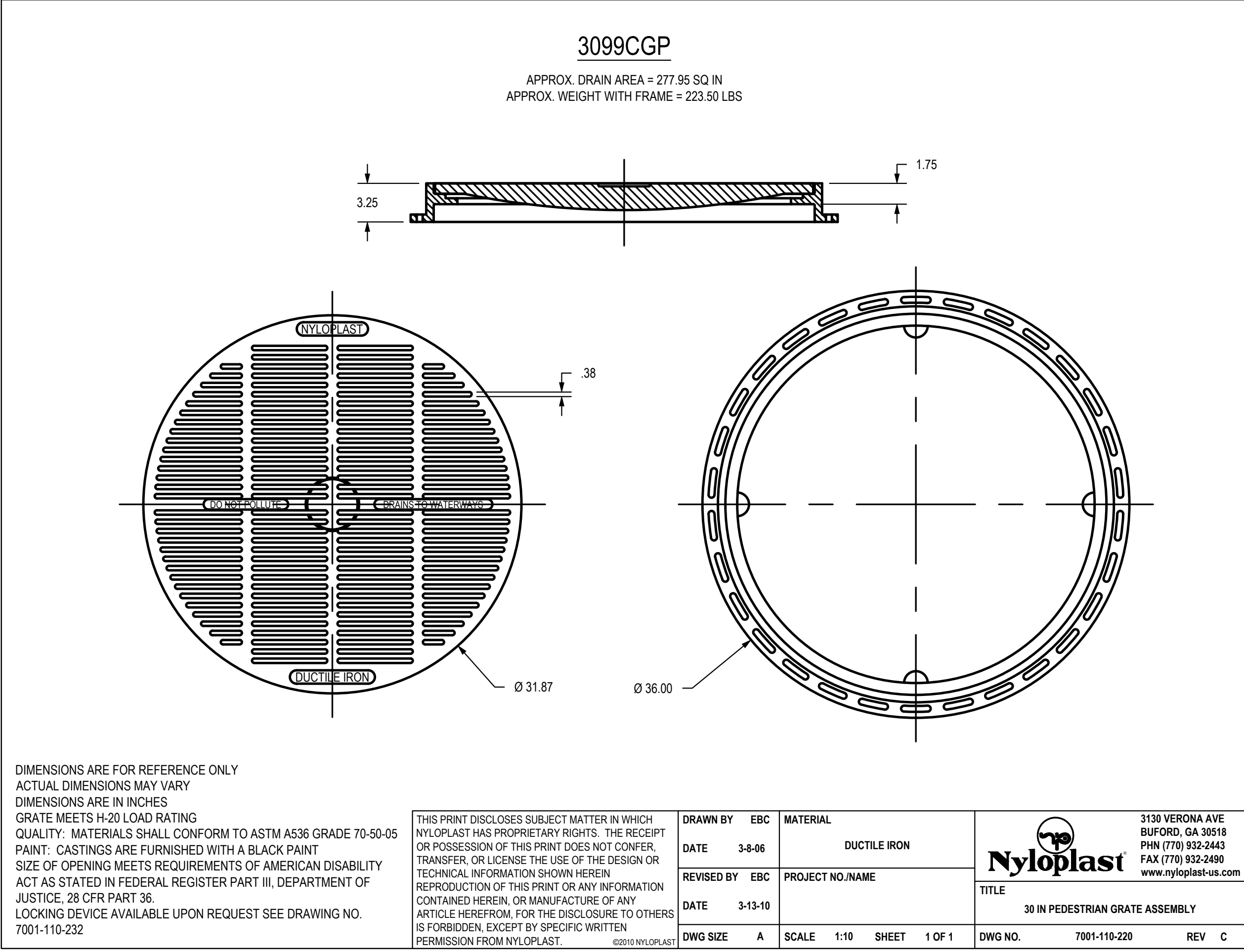
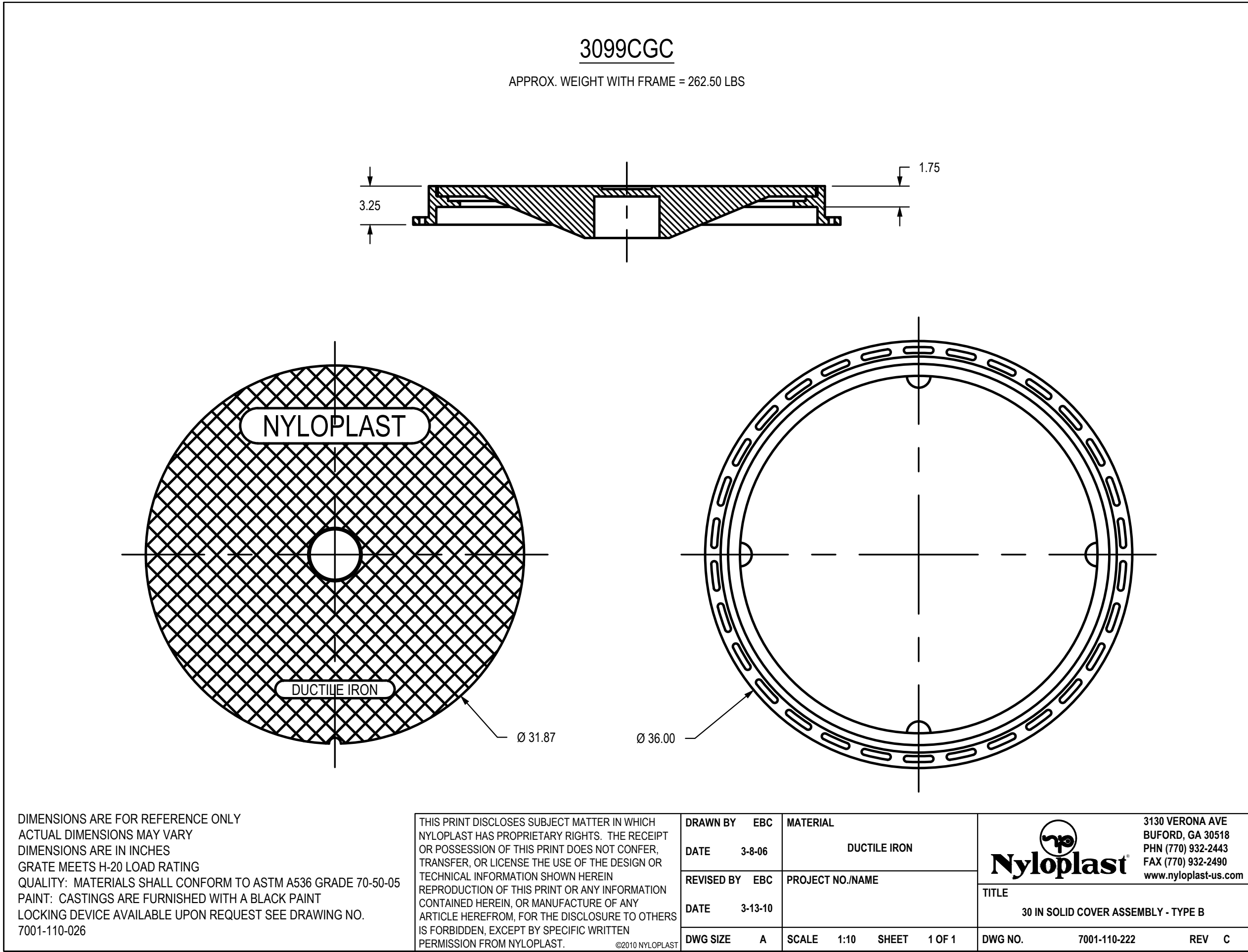
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

25

C:\12720\Civil_3D\production drawings\field storm plans\1272002200.dwg Tuesday April 28, 2020, 1:55pm -- Copyright 2020, George Butler Associates, Inc. Architect 00212, Professional Engineer 000133, Professional Land Surveyor 000059

THE PROFESSIONAL WHOSE SEAL APPEARS ON THIS PAGE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS PURSUANT TO SECTION 327.411, RSMO, ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO, OR INTENDING TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THE PAGE REFERS.



GBA
7801 Renner Boulevard
Lenexa, KS 66219
913.492.0400
www.gbaleam.com
MO Certificate of Authority # 000133

LAND3 Studio, LLC
317 SE Main
Lee's Summit, MO 64063
www.land3studio.com
MO Certificate of Authority # 2008001860

Hoerr Schaudt Landscape Architects
2100 Central Street, Suite 01C
Kansas City, MO 64108
816.510.0438
www.hoerschaudt.com
MO Certificate of Authority # 2019004088

HENDERSON ENGINEERS, Inc.
8345 Lenexa Drive
Lenexa, KS 66214
913.742.5000
www.he-eng.com
Missouri Certificate of Authority # 000556

FINKLE + WILLIAMS Architecture
7037 College Boulevard, Suite 415
Overland Park, KS 66211
913.498.1550
www.fwilliams.com
Missouri Certificate of Authority # F00453304

PROJECT:

Paragon Star Soccer Complex

Soccer Complex Storm Sewer

1401 NW View High Dr, Lee's Summit, MO 64081

Field Storm Sewer Plans

ISSUE:

10/17/19 City Comments
3/13/20 City Comments
4/28/20 City Comments

PROFESSIONAL SEAL:



DRAWING TITLE:

Storm Sewer
Details

JOB NO: 1197 SCALE:
DATE: 04.28.2020 DRAWN BY: GBA

SHEET NO:

26