Grimes Planning and Zoning Commission

Grimes Community Complex
410 SE Main Street, Room 202
Grimes, Iowa 50111
Phone | 515.986.4050
www.grimesiowa.gov

Mission Statement
The mission of Grimes City Government is to provide excellent/exceptional city services and facilities in a financially responsible and community-friendly manner through a high performing city team that result in adding value to resident's lives.

Commission Members | Scott Almeida, Adam Bunge, Russ Lickteig, Craig Patterson, Courtney Strutt Todd
Council Liaison | Andrew Borcherding

Planning and Zoning Commission July 5, 2023 @ 5:30 p.m.
In Person at Grimes Community Complex, 410 SE Main Street, Room 202

Any person wishing to speak at the meeting will need to attend in person. Below is the Zoom information for those who wish to listen in on the meeting only.

Join Zoom Meeting
https://us06web.zoom.us/j/87038393420?pwd=K0FQM0RyZ2RSQWlhQkFXR3hOUEhqUT09

Meeting ID: 870 3839 3420

Passcode: 1234

GENERAL AGENDA ITEMS

1. Call to Order
2. Roll Call: Scott Almeida, Adam Bunge, Russ Lickteig, Craig Patterson, Courtney Strutt Todd, Council Liaison Andrew Borcherding
3. Approval of the Agenda
4. Approval of the Previous Minutes

PUBLIC AGENDA ITEMS

1. Hope Commercial Plat 6 Preliminary Plat
2. Hope District Apartments Site Plan
3. Grimes Ground Storage Reservoir Site Plan

REPORTS

1. Department Update
2. Council Liaison Update
3. Old Business
4. New Business

ADJOURNMENT

101 NE Harvey Street, Grimes, Iowa 50111 | P: 515.986.3036

This meeting of the Grimes Planning and Zoning Commission was called to order Monday, June 5, 2023 at 5:30 P.M.

Roll Call: Present: Scott Almeida, Russ Lickteig, Craig Patterson, Courtney Strutt-Todd, Adam Bunge

Staff: Alex Pfaltzgraff, Evann Martin, Molly Mannel, Rachel Greving

Absent: Council Liaison: Andrew Borcherding

A. <u>GENERAL AGENDA ITEMS</u>

1. APPROVAL OF THE AGENDA

Motion by Strutt-Todd, Second by Patterson, to approve the agenda
Roll Call: Ayes-All; Nays-0 Motion passes: 5-0

2. APPROVAL OF THE MINUTES

Motion by Strutt-Todd, Second by Lickteig, to approve the minutes from the May 2, 2023 meeting
Roll call: Ayes-All: Nays-0 Motion passes: 5-0

B. <u>PUBLIC AGENDA ITEMS</u>

Inspiring Dance Site Plan

Staff member Mannel presents the details of the project. The proposed site plan is located at the southeast corner of SE Destination Drive and SE 3rd Street. It includes more than the allowed parking spaces, and this was justified by how little of parking is available at the current location during pick-up and drop-off of students. Staff recommends approval.

The Commission asked if the site plan being proposed is the same as the previous site plan for this property. Staff explained that it has similarities, but it is not exactly the same.

Motion by Strutt-Todd, Second by Patterson to approve Inspiring Dance Site Plan
Roll Call: Aye-All Nay-0 **Motion Passes 5-0**

Destination Ridge Plat 7 Final Plat

Staff member Martin presents the details of the plat. Lot one of the plat will be for the Inspiring Dance site plan, and the rest will remain as an outlot until new development comes along. SE 3rd Street will continue through to merge with Grenville Drive in Johnston.

Motion by Lickteig, Second by Strutt-Todd to approve Destination Ridge Plat 7 Final Plat
Roll Call: Aye-All Nay-0 **Motion Passes 5-0**

Town of Grimes Plat 2 Final Plat

Staff member Martin presents the details of the plat. The property is vacant and currently owned by the City of Grimes. The final plat proposed would combine the three existing lots into one lot.

The Commission discussed the proposal and asked questions of staff pertaining to possible future development of the plat.

Motion by Lickteig, Second by Bunge to approve Town of Grimes Plat 2 Final Plat
Roll Call: Aye-All Nay-0 **Motion Passes 5-0**

Grimes Plex Site Plan Amendment

Staff member Martin presents the details of the project amendment which includes field lighting.

The Commission asked questions about the field lighting, parking lot lighting, and about time limits that will be set for use of the fields. Staff answered all questions.

Leroy Edge of 900 NE 12th Street commented that what he is seeing for parking lot lighting looks acceptable. Staff explained that all the lighting for parking and the field will be on a timer.

Motion by Strutt-Todd, Second by Lickteig to approve Grimes Plex Site Plan Amendment
Roll Call: Aye-All Nay-0 **Motion Passes 5-0**

C. **PUBLIC FORUM – None**
D. **REPORTS**
   1. **Department Update – Staff provided an update on development and capital projects around the City.**
   2. **Council Liaison Update – N/A**
   3. **Old Business – N/A**
   4. **New Business – N/A**
   5. Next meeting July 3, 2023

Meeting is adjourned at 6:10 p.m.

_____

Chairperson Signature

_____

Clerk Signature

Planning & Zoning Staff Report

CITY OF GRIMES

DATE

July 5, 2023

PROJECT NAME

Hope Commercial Plat 6

Preliminary Plat

APPLICANT

Hope K Farms

REQUESTED ACTION

Approve preliminary plat to subdivide the property for commercial and residential development and public street

LOCATION

South of NE Beaverbrooke Blvd, west of NE Gateway Drive and east of NE Heritage Drive

ZONING

R-4

Hope Commercial PUD

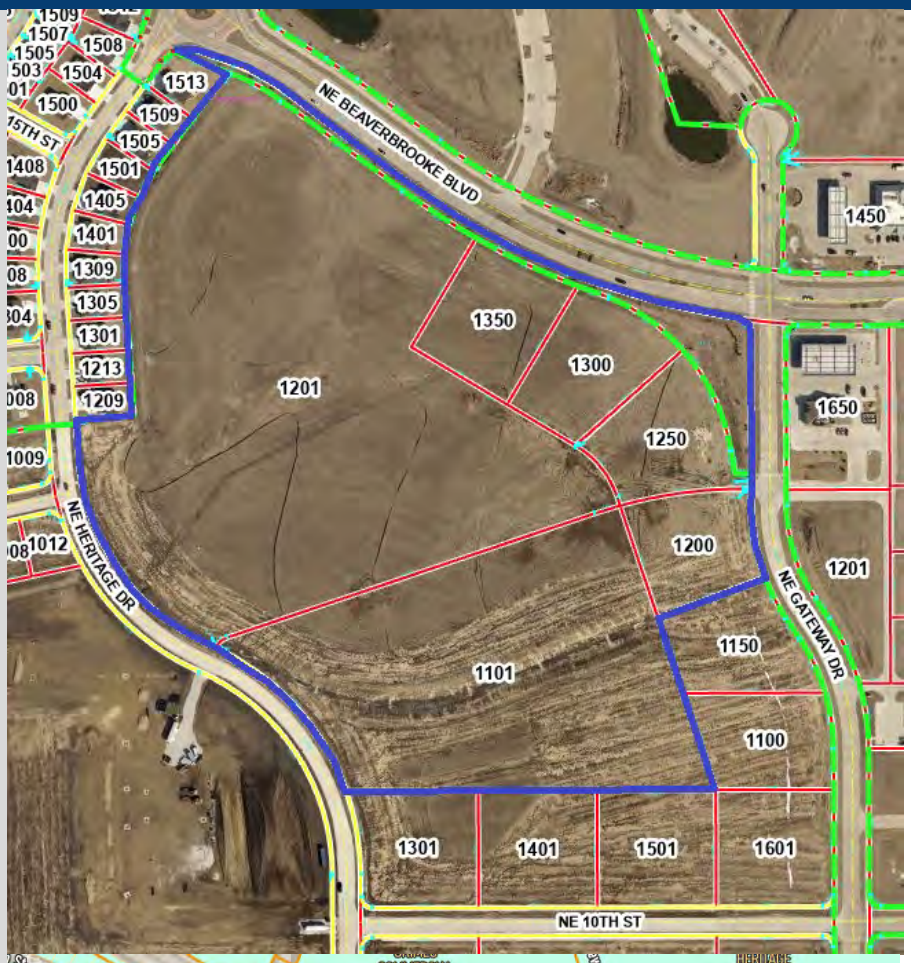
PLANNER

Evann Martin

emartin@grimesiowa.gov

515-985-4050

Location Map



Zoning Map



Relation to Comprehensive & Neighborhood Plans

LAND USES & ZONING			
Location	**Existing Land Use**	**Land Use Plan Designation**	**Current Zoning**
Subject Site	Vacant	Mixed Use/Commercial	R-4
North	Commercial	High Density Residential	R-4
South	Vacant	Commercial	R-4
East	Commercial/Vacant	Commercial	R-4
West	Single-Family	Low Density Residential	R-4

PARKS

The Parks and Trails Master Plan planned for a trail connection from NE Gateway Drive to the west to connect with the trail along Lions Park. The preliminary plat shows a trail on the north side of NE 12th Street which will align partially with the Master Plan. The trail will not continue west to connect to the Lions Park trail due to the Grimes Plex. However, trail is existing along NE Heritage Drive, around the basin, and down to E 1st Street which ultimately provides a connection to the Lion Park trail. Sidewalks along NE 12th Street and NE Park Street can also connect patrons to the trail along Lions Park.

Parkland dedication for Hope Commercial Plat 6 was satisfied with the large regional detention basin and surrounding trail. No additional parkland is required for the proposed preliminary plat.



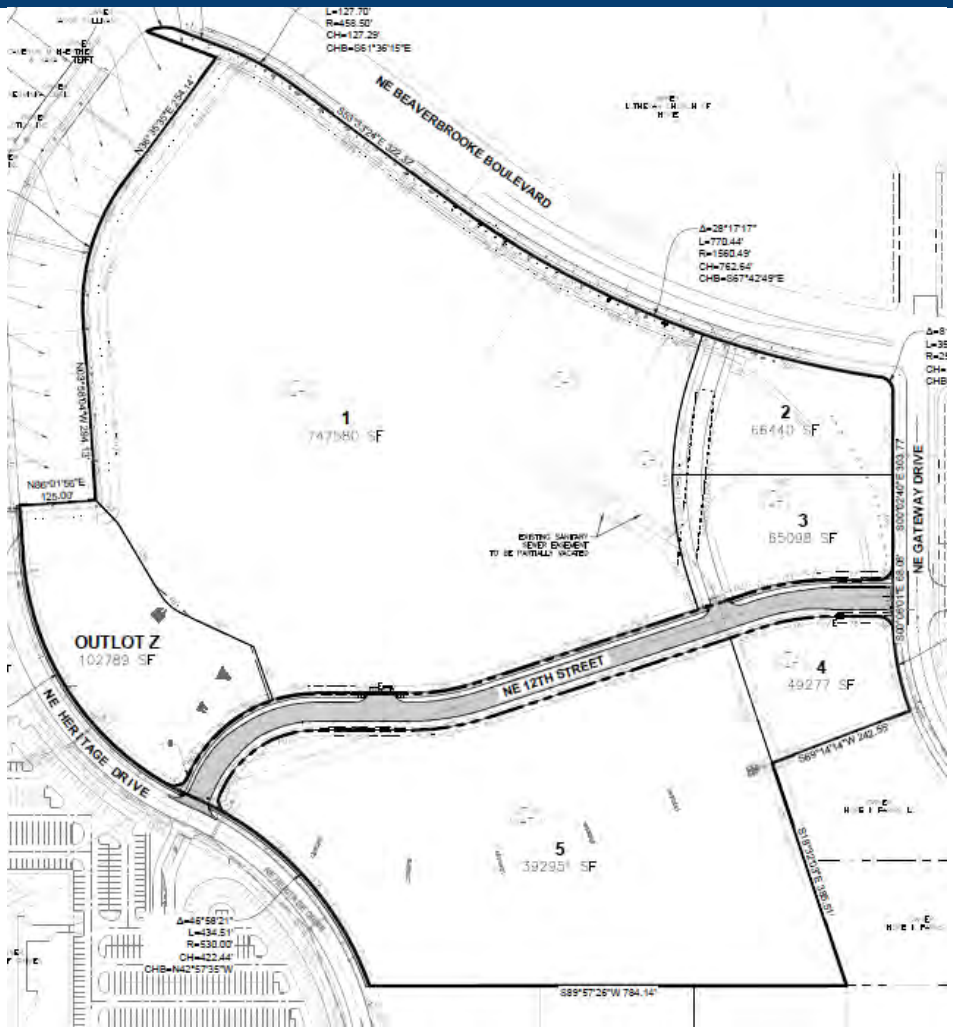
Future Land Use Map

Relation to Studies & Legal

RELATION TO STUDIES

The City hired Snyder & Associates to complete a traffic study of the Hope Commercial District which identified several roadway improvements throughout the development. The City was able to incorporate some of the improvements into the construction drawings including turn lanes on NE 10th Street and NE Heritage Drive and planning multiple access locations for the Grimes Plex. Staff has started the design process for improvements to the NE Gateway and E 1st Street intersection as identified in the traffic study which includes widening Gateway at the intersection and providing additional turn lanes.

Staff has started working with Snyder & Associates regarding future improvements to the NE Gateway Drive and Beaverbrooke Blvd intersection. The improvements have not been determined at this time. However, right-of-way dedication may be required to complete the improvements. Staff will continue to work with Snyder and provide necessary information to the applicant as the project moves forward.



Legal

The plat is part of the Hope Commercial PUD and the associated development agreement which identifies development standards and required public improvements.

The plat includes the construction of NE 12th Street connecting from NE Heritage Drive to NE Gateway Drive as required in the development agreement. Right-of-way will be dedicated to the City for the public street.

The existing PUE identified in Hope Commercial Plat 4 along the north edge of the development will be relocated to better suit the new proposed development and lot lines. The easement vacation has been approved through Council and a new easement will be established and approved through Council in the future.

Plat Layout & Utilities

ACCESS

Access will be provided via NE 12th Street and a private street connecting from NE 12th Street to NE Beaverbrooke Blvd.

All driveways will be located off of NE 12th Street or the private street, with the exception of Lot 1 which will have a right-in/right-out access on NE Beaverbrooke Blvd.

PLAT LAYOUT

Five development lots are proposed, with one outlot for the detention basin and street lot for NE 12th Street. The applicant may decide to combine Lot 2 & 3 to allow construct of a retail strip center. There would be no issues with the change as the plat would be principally the same as the layout shown.



SANITARY

Sanitary is existing south of NE 12th Street. A portion of existing sanitary sewer north of NE 12th Street will be removed due to the new proposed lot layout and new sewer will be extended to serve the commercial lots along NE Gateway Drive. Services will be provided to each development lot.

WATER

Water will be constructed on the south side of NE 12th Street and services will be stubbed to each development lot.

STORM WATER

Two private basins will be constructed on the west side of the plat.

LANDSCAPING

The existing landscaping along NE Beaverbrooke Blvd will remain in place. Additional landscaping will be provided with site plans.

Conclusion

STAFF RECOMMENDATION

Staff recommends approval of Hope Commercial Plat 6 Preliminary Plat.

Conclusion

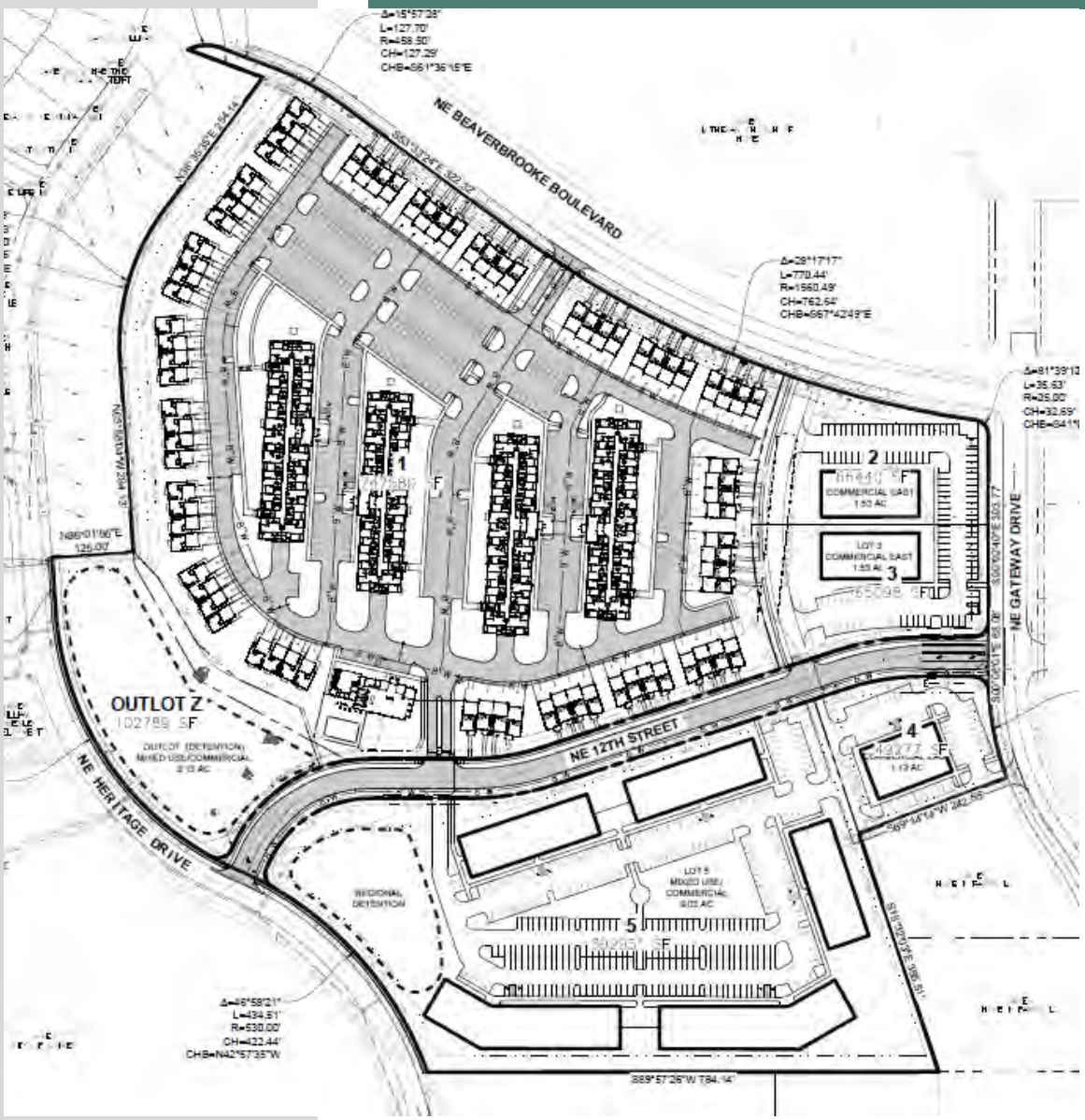
The plat proposes 5 development lots, one outlot for detention, and street lot for NE 12th Street.

A private street will be constructed with the commercial development on Lot 2 and 3.

A new public utility easement will be established along NE Beaverbrooke Blvd in the future.

The plat is consistent with the Hope Commercial PUD development agreement.

The applicant may adjust the plat to combine Lots 2 & 3 for a retail strip center which would not cause any issues for the plat.



Development Services
410 SE Main St, Suite 102
Grimes, IA 50111
(515)986-4050
www.grimesiowa.gov

~~May 24, 2023~~
~~June 13, 2023~~
June 30, 2023

Civil Design Advantage
Attn: Josh Trygstad
4121 NW Urbandale Drive
Urbandale, IA 50322

RE: Hope Commercial Plat 6 Preliminary Plat

Dear Mr. Trygstad:

The Development Services Department is in receipt of a proposed Preliminary Plat for the Hope District Apartments. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

~~1. Move water to the southside of NE 12th Street and add water services to Lots 4 & 5.~~

~~2. Move storm sewer to the north side of the street.~~

1. How are you planning to convey water from the existing single family, particularly the lot located at 1209 NE Heritage Drive, in the overland flowage easement to the proposed basin? There is an existing drainage issue at 1209 NE Heritage Drive in the overland flowage easement and the easement not draining properly. Provide spot elevations to ensure the receiving grades correspond to the as-built provided. In order for the single-family lot to have 2% grade, the south property line needs to be at least 938.4 as shown in the as-built provided. The Hope Apartments site plan needs to provide a grade at 938.4 or lower. The single-family lot will regrade their own property.

~~3. Who is going to be responsible for maintaining Outlot Z?~~

4. The west property line of Lot 2 & 3 is odd. The property owners will have to cross the street to maintain their property. In addition, the sidewalks from the townhomes cross into Lot 2 & 3. Can the property line shift to line up with the sidewalk? This looks better but we still have concerns with the maintenance of the area west of the sidewalk which would still be the responsibility of the commercial property. The sidewalk connections from the townhomes also cross into the commercial property.

Will there be an ingress/egress or sidewalk easement granted to Lot 1? With the final plat, the easement documents will need to provide details regarding access, ownership, and maintenance.

5. Has MEC provided feedback on moving the PUE to the private drive instead of out to the intersection of Gateway and Beaverbrooke? This would avoid conflicts with future intersection improvements. Staff will need to know what is occurring with the easement and receive the appropriate exhibits by June 19th to continue the easement vacation process and meet Council deadlines. Please provide PUE layout when available.

Sheet 1:

~~1. Update Note 2. Should just be one lot.~~

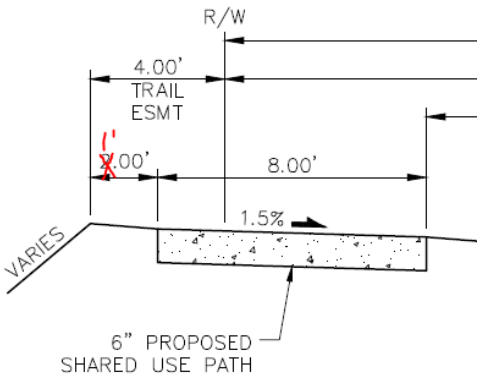
~~2. Remove C-2 zoning and Transportation Overlay reference.~~

Sheet 2:

~~1. Pavement thickness to be 8" in 37' wide section. No CD baskets on 7" pavement~~

~~2. Adjust typical to 31' B-B.~~

~~3. Move 8 ft sidewalk 1 ft from the edge of the trail easement.~~



Sheet 3:

1. Update basin property dimensions to account for adjustments made for pool/patio area.

Sheet 5:

1. Existing sanitary sewer will be under water in lot 5 detention basin. Please move the basin out of the sanitary easement. Staff does not want the sanitary under the basin. This will cause issues in the event the sanitary requires maintenance. Please shift the basin outside the easement. Shift permanent pool outside of the sanitary easement.

Sheet 6:

~~1. The existing sanitary to serve Lot 20-22 will need to be removed if not used.~~

~~2. Provide sanitary sewer to lot 2.~~

~~3. What happens to existing storm intakes that will be in basins? Please remove the storm all the way to the structure and patch the wall.~~

~~4. Label sanitary and water stub locations for all lots.~~

~~5. Line up the driveway in Lot 5 with Lot 1.~~

~~6. Remove parking spaces shown off of the private drive.~~

Stormwater Management Plan

1. Pond 2B:
    a. At the 930.50' elevation, was the surface area from both ponds used? One of the ponds has a permanent pool elevation of 931.00, and storage cannot be counted below 931.00 within this pond.
    b. Update orifice C length and slope.

Preliminary Plat

1. Provide forebays and emergency overflow weir on both ponds.

NOTE** MAKE SURE TO SHOW OUTLET STRUCTURE INFORMATION FOR THE NORTHERN HALF OF POND 2B ON THE SITE PLAN OR CD.**

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: May 31, 2023
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: TBD July 2023 at 5:30

COUNCIL MEETING: July 25, 2023 at 5:30

Please feel free to contact me at emartin@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

Evann Martin
Assistant Planner

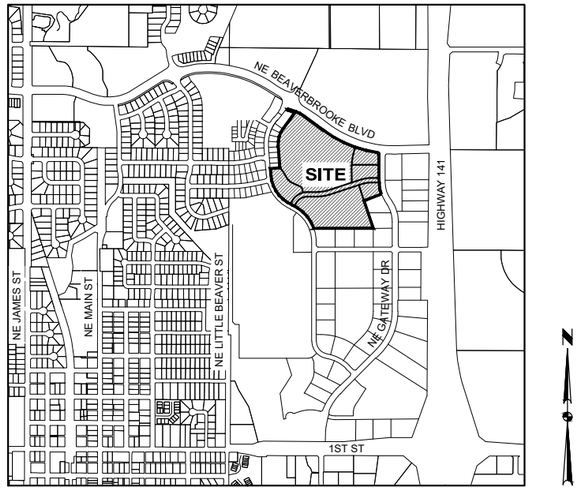
PRELIMINARY PLAT FOR:

HOPE COMMERCIAL PLAT 6

GRIMES, IOWA

VICINITY MAP

1"=500'



GRIMES, IOWA

PRELIMINARY PLAT DESCRIPTION

LOTS 18 THROUGH 23, HOPE COMMERCIAL PLAT 4, AN OFFICIAL PLAT AND OUTLOT 'T', HERITAGE AT GRIMES PLAT 2, AN OFFICIAL PLAT, ALL IN THE CITY OF GRIMES, POLK COUNTY, IOWA.

GENERAL LEGEND

PROPOSED		EXISTING	
SECTION LINE		SANITARY MANHOLE	S
CENTER LINE		WATER VALVE BOX	
RIGHT OF WAY	R/W	FIRE HYDRANT	
PERMANENT EASEMENT	P/E	WATER CURB STOP	CS
TEMPORARY EASEMENT	T/E	WELL	WELL
TYPE SW-501 STORM INTAKE		STORM SEWER MANHOLE	ST
TYPE SW-502 STORM INTAKE		STORM SEWER SINGLE INTAKE	
TYPE SW-503 STORM INTAKE		STORM SEWER DOUBLE INTAKE	
TYPE SW-505 STORM INTAKE		FLARED END SECTION	
TYPE SW-506 STORM INTAKE		DECIDUOUS TREE	
TYPE SW-512 STORM INTAKE	ST	CONIFEROUS TREE	
TYPE SW-513 STORM INTAKE	ST	DECIDUOUS SHRUB	
TYPE SW-401 STORM MANHOLE	ST	CONIFEROUS SHRUB	
TYPE SW-402 STORM MANHOLE	ST	ELECTRIC POWER POLE	
FLARED END SECTION		GUY ANCHOR	
TYPE SW-301 SANITARY MANHOLE	S	STREET LIGHT	
STORM/SANITARY CLEANOUT		POWER POLE W/ TRANSFORMER	
WATER VALVE		UTILITY POLE W/ LIGHT	
FIRE HYDRANT ASSEMBLY		ELECTRIC BOX	E
SIGN		ELECTRIC TRANSFORMER	E
DETECTABLE WARNING PANEL		ELECTRIC MANHOLE OR VAULT	E
WATER CURB STOP		TRAFFIC SIGN	
STORM SEWER STRUCTURE NO.	ST-10	TELEPHONE JUNCTION BOX	T
STORM SEWER PIPE NO.	L-10	TELEPHONE MANHOLE/VAULT	T
SANITARY SEWER STRUCTURE NO.	S-10	TELEPHONE POLE	
SANITARY SEWER PIPE NO.	P-10	GAS VALVE BOX	G
SANITARY SEWER		CABLE TV JUNCTION BOX	TV
SANITARY SERVICE	S	CABLE TV MANHOLE/VAULT	TV
STORM SEWER		MAIL BOX	M
STORM SERVICE	ST	BENCHMARK	BM
WATERMAIN WITH SIZE	8"W	SOIL BORING	SB
WATER SERVICE	W	UNDERGROUND TV CABLE	TV
SAWCUT (FULL DEPTH)		GAS MAIN	G
SILT FENCE		FIBER OPTIC	FO
USE AS CONSTRUCTED	(UAC)	UNDERGROUND TELEPHONE	T
MINIMUM PROTECTION ELEVATION	MPE	OVERHEAD ELECTRIC	OE
		UNDERGROUND ELECTRIC	E
		FIELD TILE	TILE
		SANITARY SEWER WITH SIZE	8"S
		STORM SEWER WITH SIZE	15"ST
		WATER MAIN WITH SIZE	8"W

OWNER

HOPE K FARMS LLC
1548 S 45TH ST
WEST DES MOINES, IA 50265-5765
CONTACT: REZA KARGARZADEH
EMAIL: RKARGARZ@EPCMFG.COM

ENGINEER/ SURVEYOR

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PH. (515) 369-4400
FX. (515) 369-4410
CONTACT: JOSH TRYGSTAD
EMAIL: JOSHT@CDA-ENG.COM

DATE OF SURVEY

02/14/2020

NOTES:

1. PROPOSED SPEED LIMIT ON NE GATEWAY DRIVE IS 35 MPH.
2. STREET LOT A TO BE DEDICATED TO THE CITY OF GRIMES.

FEMA FLOOD NOTE:

POLK COUNTY, PANEL 160 OF 555
MAP NUMBER= 19153C0160F
EFFECTIVE DATE= FEBRUARY 1, 2019

CONSTRUCTION SCHEDULE

ANTICIPATED START DATE = SUMMER 2023
ANTICIPATED COMPLETION = FALL 2023

ZONING

ZONING: R-4 HOPE COMMERCIAL PUD
(PLANNED UNIT DEVELOPMENT)

OPEN SPACE NOTE

THE TOTAL LAND AREA DEVOTED TO OPEN SPACE AND LANDSCAPING SHALL NOT BE LESS THAN THE SPECIFIED PERCENTAGE OF THE GROSS LAND AREA INCLUDED IN THE BUILDING LOT. SUCH OPEN SPACE SHALL BE MAINTAINED AS GRASSED AND LANDSCAPED AREA AND SHALL NOT INCLUDE ACCESS DRIVES, PARKING AREAS, STRUCTURES OR BUILDINGS, EXCEPT ORNAMENTAL STRUCTURES INCLUDED AS PART OF THE LANDSCAPING THEME

BENCHMARKS

BURY BOLT ON HYDRANT @ SE CORNER OF HWY 44 & SE GATEWAY DRIVE
ELEVATION=940.44

CITY BENCHMARK G6J-012
CAP BOLT ON HYDRANT @ SW CORNER 5TH ST & NORTH LITTLE BEAVER DR.
ELEVATION=926.02

CITY BENCHMARK G6N-004
CAP BOLT ON FIRE HYDRANT AT THE SOUTHWEST CORNER OF NORTH 4TH STREET AND NORTH LITTLE BEAVER DRIVE
ELEVATION=927.36

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

REFER TO GEOTECHNICAL EXPLORATION REPORT NO. 08195021-03 PREPARED BY TERRACON CONSULTANTS, INC. FOR GEOTECHNICAL REQUIREMENTS.

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE, URBANDALE, IOWA 50322
PH: (515) 369-4400 Fax: (515) 369-4410

PROJECT NO. 2205.357

REVISIONS / DATE
THIRD SUBMITTAL 06/20/2023
SECOND SUBMITTAL 05/30/2023
FIRST SUBMITTAL 05/09/2023

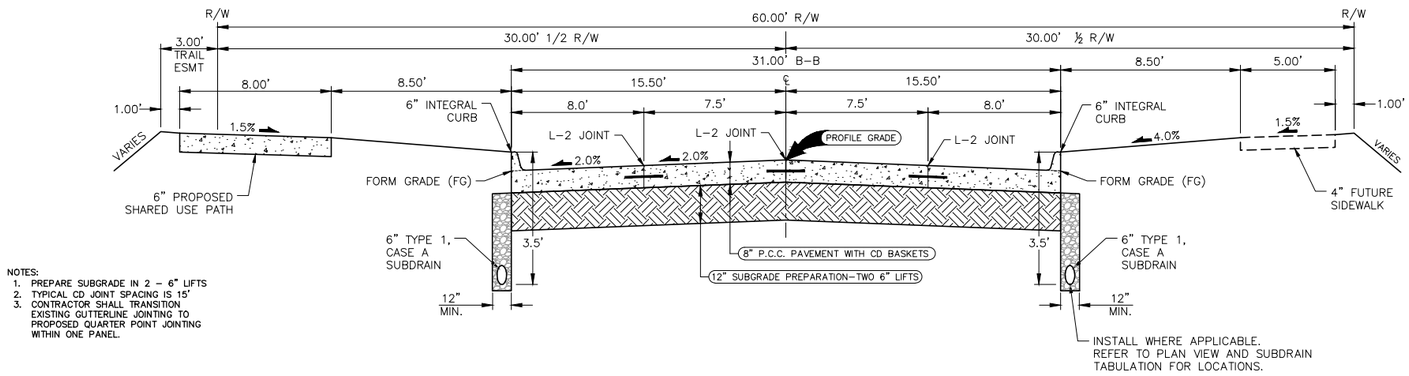
4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400
ENGINEER: JAT TECH:

CIVIL DESIGN ADVANTAGE

HOPE COMMERCIAL PLAT 6
PRELIMINARY PLAT
GRIMES, IOWA

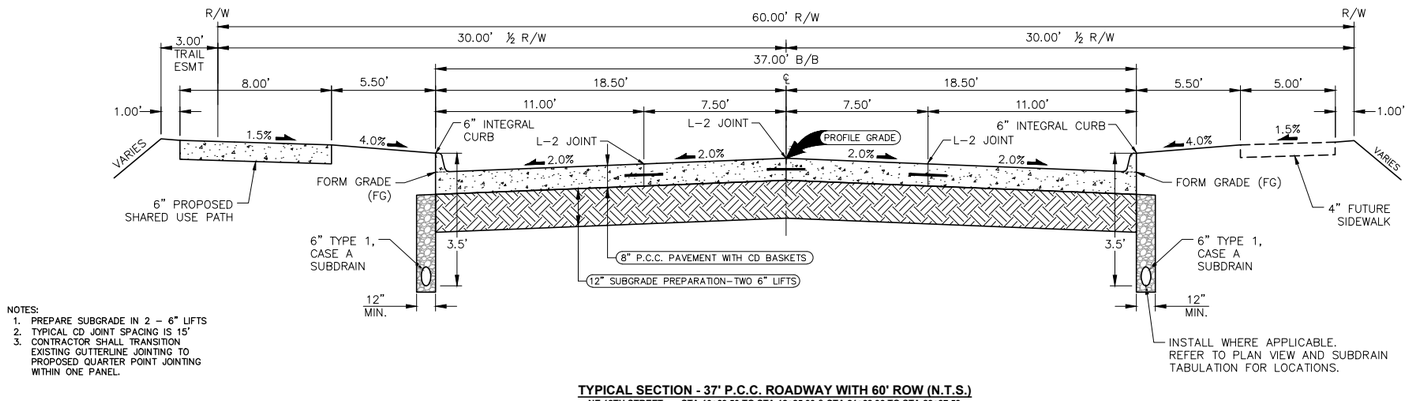
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NOTES:
1. PREPARE SUBGRADE IN 2 – 6" LIFTS
2. TYPICAL CD JOINT SPACING IS 15'
3. CONTRACTOR SHALL TRANSITION EXISTING GUTTERLINE JOINTING TO PROPOSED QUARTER POINT JOINTING WITHIN ONE PANEL.

TYPICAL SECTION - 31' P.C.C. ROADWAY WITH 60' ROW (N.T.S.)
NE 12TH STREET - STA 12+25.00 TO 21+68.96



NOTES:
1. PREPARE SUBGRADE IN 2 – 6" LIFTS
2. TYPICAL CD JOINT SPACING IS 15'
3. CONTRACTOR SHALL TRANSITION EXISTING GUTTERLINE JOINTING TO PROPOSED QUARTER POINT JOINTING WITHIN ONE PANEL.

TYPICAL SECTION - 37' P.C.C. ROADWAY WITH 60' ROW (N.T.S.)
NE 12TH STREET - STA 10+63.50 TO STA 12+25.00 & STA 21+68.96 TO STA 23+37.59

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

ENGINEER: JAT | TECH:

REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
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CIVIL DESIGN ADVANTAGE

HOPE COMMERCIAL PLAT 6

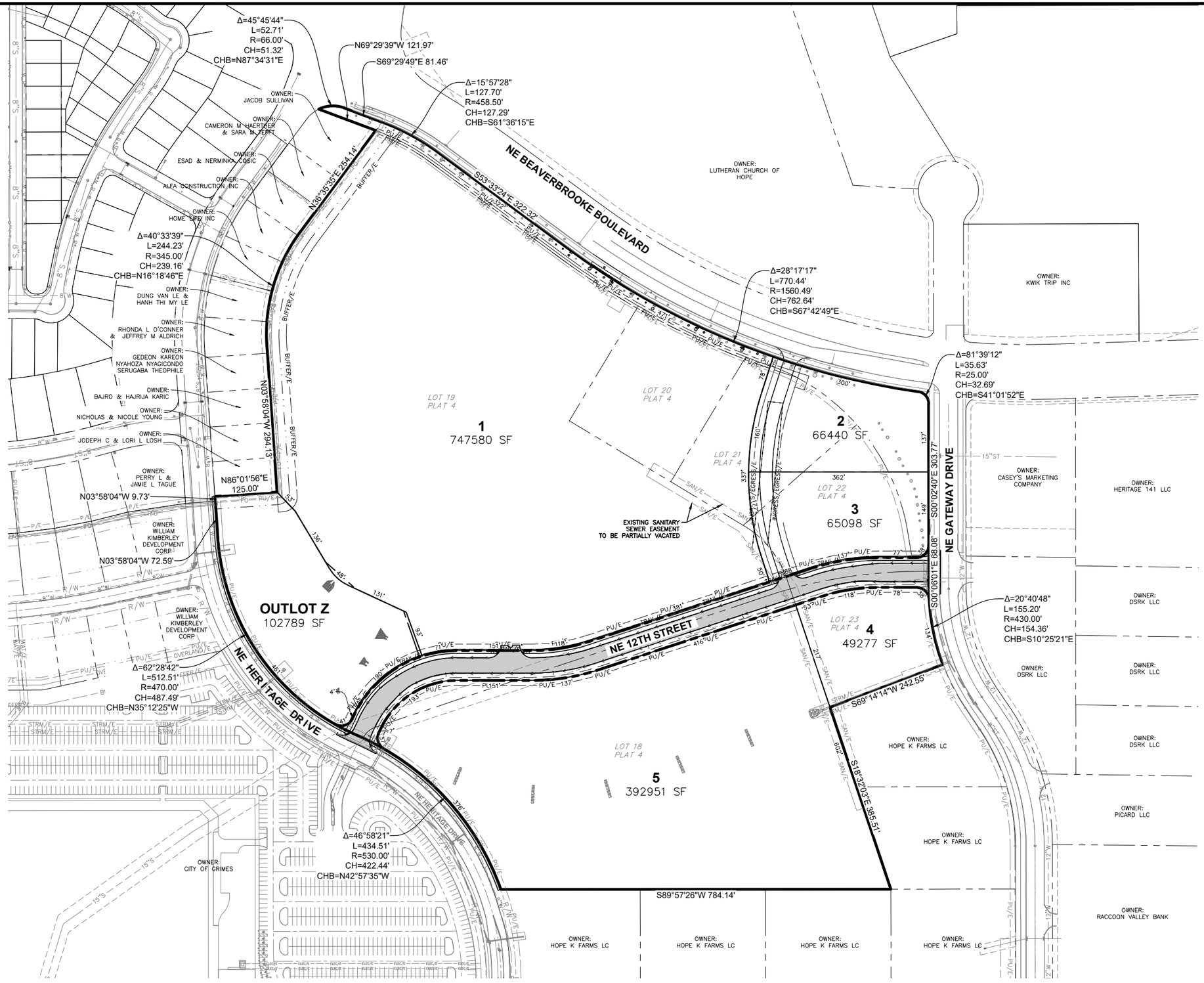
PRELIMINARY PLAT

GRIMES, IOWA

2/6

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SECOND SUBMITTAL	05/30/2023
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4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

ENGINEER: JAT | TECH:

CIVIL DESIGN ADVANTAGE

HOPE COMMERCIAL PLAT 6

PRELIMINARY PLAT

GRIMES, IOWA

3/6

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4 of 6

HOPE COMMERCIAL PLAT 6

PRELIMINARY PLAT

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE

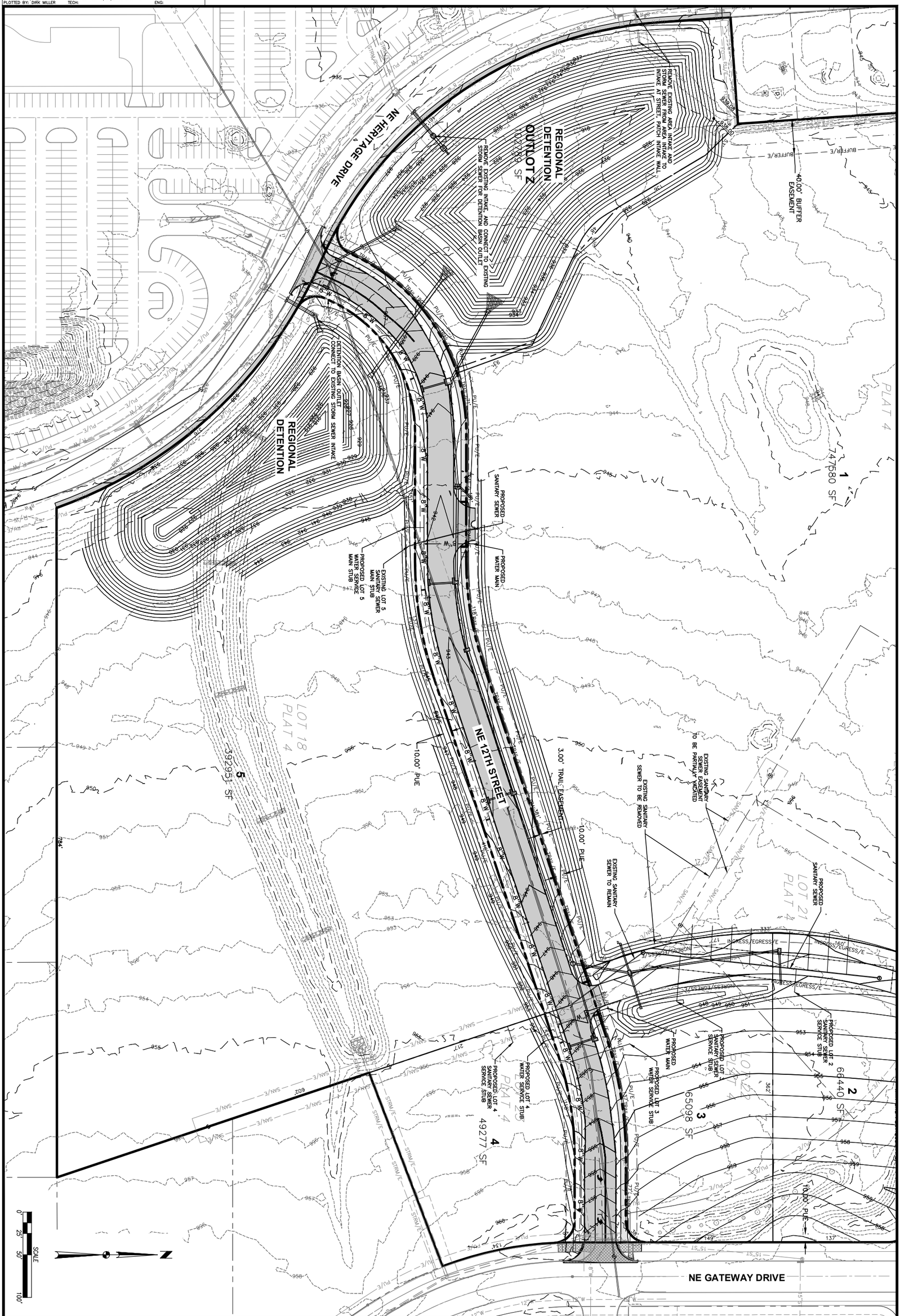
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TECH:

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HOPE COMMERCIAL PLAT 6

PRELIMINARY PLAT

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

ENGINEER: JAT

TECH:

REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
SECOND SUBMITTAL	05/30/2023
FIRST SUBMITTAL	05/09/2023

5
6
2205.357

FILE: H:\2022\2205357\DWG\PRELIMINARY PLAT\2205357-PRELIMINARY PLAT.DWG
FILE DATE: 6/20/23 DATE PLOTTED: 6/20/2023 5:07 PM COMMENT:
PLOTTED BY: DIRK MILLER TECH: ENG:



HOPE COMMERCIAL PLAT 6

PRELIMINARY PLAT

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE

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URBANDALE, IA 50322
PHONE: (515) 369-4400

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6 OF 6 | 2205.357

Planning & Zoning Staff Report

CITY OF GRIMES

DATE

July 5, 2023

PROJECT NAME

Hope District Apartments

Site Plan

APPLICANT

Hope K Farms

REQUESTED ACTION

Approve site plan for town-homes and apartments

LOCATION

South of NE Beaverbrooke Blvd, west of NE Gateway Drive and east of NE Heritage Drive

ZONING

R-4

Hope Commercial PUD

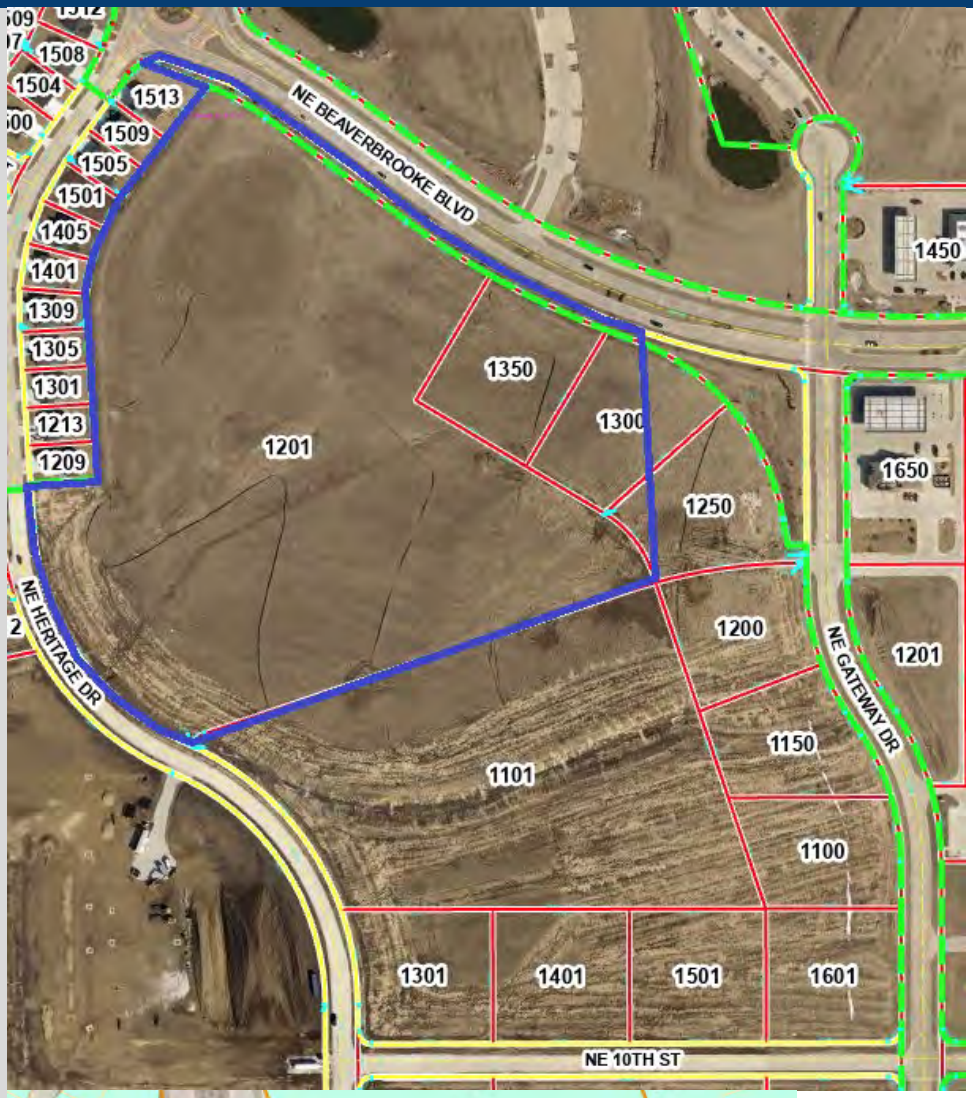
PLANNER

Evann Martin

emartin@grimesiowa.gov

515-985-4050

Location Map

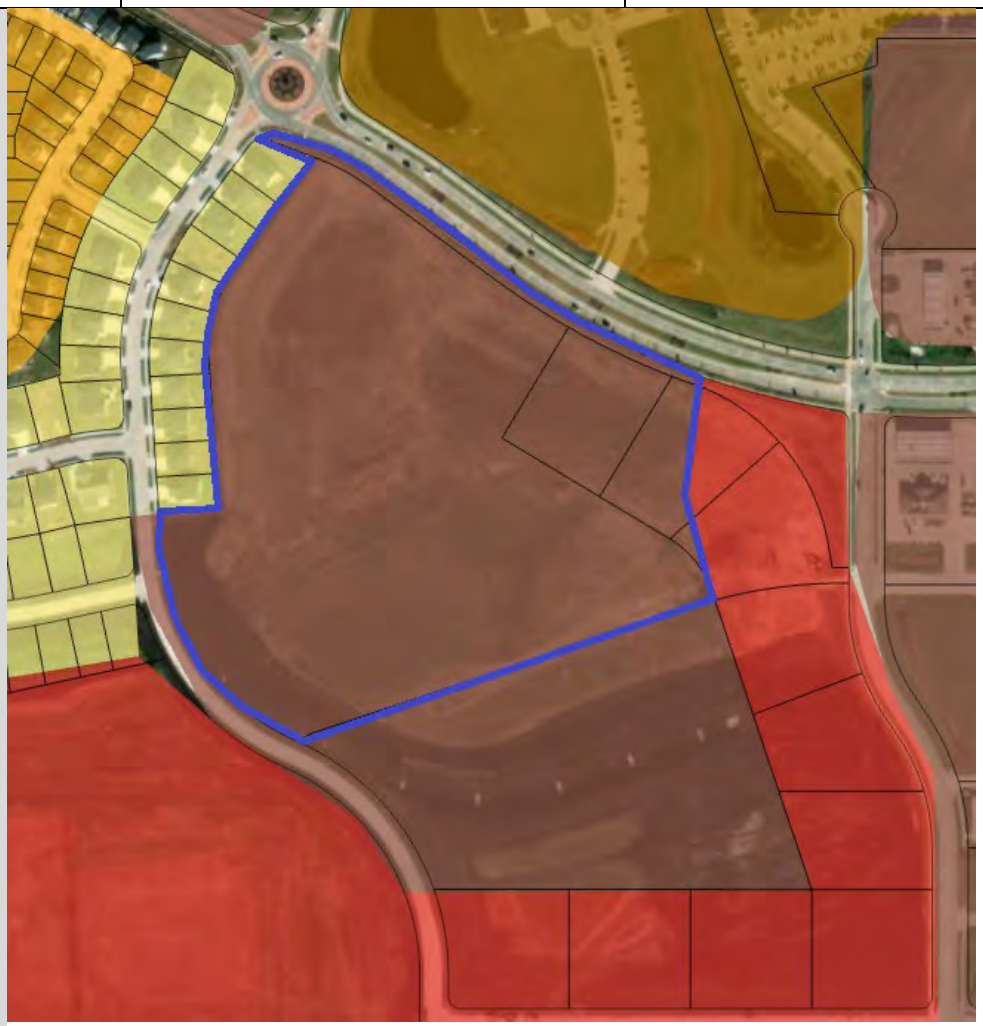


Zoning Map



Relation to Comprehensive & Neighborhood Plans

LAND USES & ZONING			
Location	**Existing Land Use**	**Land Use Plan Designation**	**Current Zoning**
Subject Site	Vacant	Mixed Use	R-4
North	Institutional	High Density Residential	R-4
South	Vacant	Mixed Use	R-4
East	Vacant/Commercial	Commercial	R-4
West	Single-Family	Low Density Residential	R-4



Future Land Use Map

PARKS

The Parks and Trails Master Plan planned for a trail connection from NE Gateway Drive to the west to connect with the trail along Lions Park. The preliminary plat shows a trail on the north side of NE 12th Street which will align partially with the Master Plan. The trail will not continue west to connect to the Lions Park trail due to the Grimes Plex. However, trail is existing along NE Heritage Drive, around the basin, and down to E 1st Street which ultimately provides a connection to the Lion Park trail. Sidewalks along NE 12th Street and NE Park Street can also connect patrons to the trail along Lions Park.

Parkland dedication for Hope Commercial Plat 6 was satisfied with the large regional detention basin and surrounding trail. No additional parkland is required for the proposed preliminary plat.

Relation to Studies & Legal

RELATION TO STUDIES

The City hired Snyder & Associates to complete a traffic study of the Hope Commercial District which identified several roadway improvements throughout the development. The City was able to incorporate some of the improvements into the construction drawings including turn lanes on NE 10th Street and NE Heritage Drive and planning multiple access locations for the Grimes Plex. Staff has started the design process for improvements to the NE Gateway and E 1st Street intersection as identified in the traffic study which includes widening Gateway at the intersection and providing additional turn lanes.

Staff has started working with Snyder & Associates regarding future improvements to the NE Gateway Drive and Beaverbrooke Blvd intersection. The improvements have not been determined at this time. However, right-of-way dedication may be required to complete the improvements. Staff will continue to work with Snyder and provide necessary information to the applicant as the project moves forward.



Legal

The site plan is part of the Hope Commercial PUD and the associated development agreement which identifies required development standards.

Site Layout

ACCESS

Access will be provided via a full access driveway off of NE 12th St and a RI/RO access off of NE Beaverbrooke Blvd. Sidewalks will be provided along all public streets and the private street. Trail will be provided along the north side of NE 12th St. All units facing out to the street will provide private sidewalk connections from the front door to the sidewalk.

AMENITIES

The development will be fully fenced and gated.

A Clubhouse will be provided with gym and pool for residents.

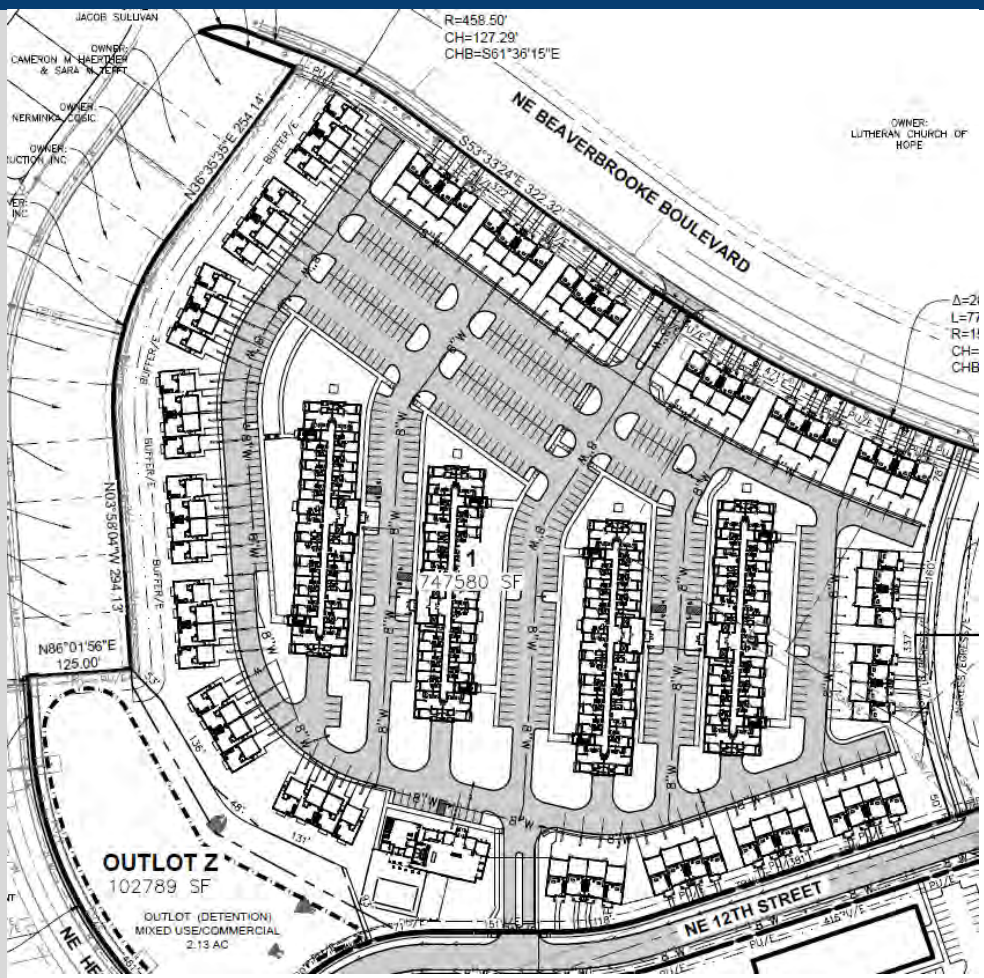
Trash for the multi-family buildings will be provided via trash shoots and dumpsters will be stored in the underground parking areas.

LIGHTING

Lighting details have been provided at this time. However, parking lot and building lighting will be provided.

COVERED PARKING

The PUD requires that 50% of the multi-family units have a covered parking space. Underground parking is proposed to satisfy the covered parking requirement. At least 40 spaces will be provided for each building to meet requirements.



Parking Calculation Table

Required	Proposed
Multi-Family 1.5 spaces / unit	480 spaces
Townhomes 2-car attached garage and 2-car driveway	160 garage spaces 160 driveway spaces
Visitor Parking—Townhomes 1 space / 5 units	50 spaces

Utilities & Landscaping

SANITARY & WATER

Sanitary and water will connect off of NE 12th St.

All utilities will be private.

STORM WATER

A private detention basin will be provided on the west side of the property.

LANDSCAPING

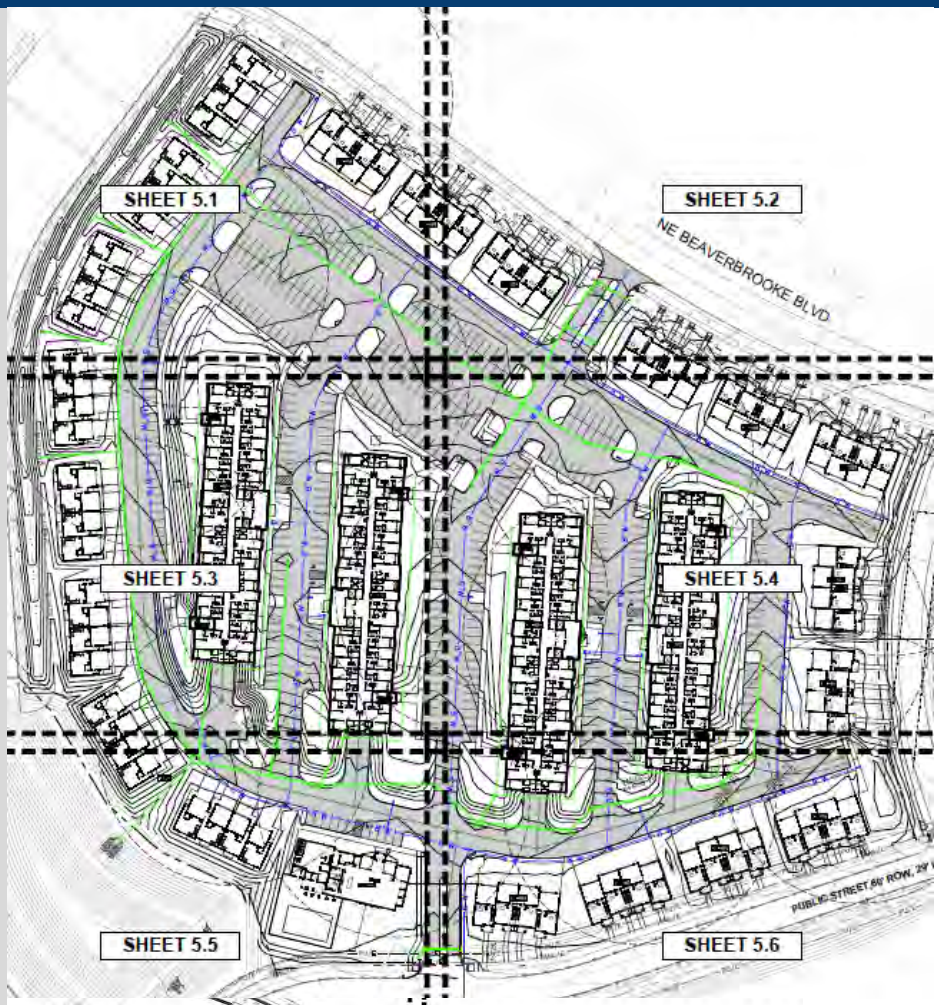
A 30' landscape buffer will be provided along the west property line to provided separation from the existing single-family.

All townhome units facing the public street will provide foundation plantings.

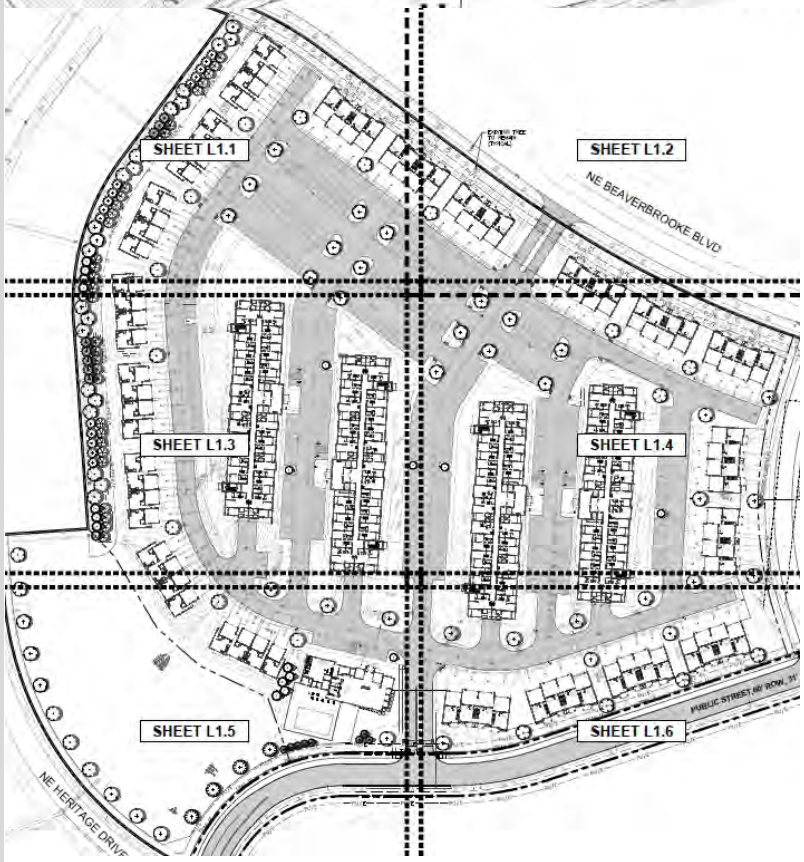
Trees will be provided within parking lot islands and along the street frontages.

The existing berm and landscape plantings along NE Beaverbrooke Blvd will remain in place.

Utilities Map



Landscaping Plan



Architecture

BUILDING ELEVATIONS

Apartment Buildings

The multi-family buildings will be 4 stories in height and utilize vertical and horizontal siding, Hardie architectural panel, brick, and stone. The main entrance feature includes a large glazed wall and arched roof line. All above-ground units will provide balconies and ground units will have patios. The underground parking garage entrances will be located on the south sides of the buildings.



4 SCHEMATIC - FRONT ELEVATION
SCALE: 1/8" = 1'-0"



Townhome Buildings

The buildings utilize vertical and horizontal siding, Hardie architectural panel, brick, and stone. The front façade elevation for the interior units needs to be revised to provide 30% masonry as required by the PUD.



Two elevation packages will be provided to ensure there is variation between the buildings and to meet PUD requirements.

Units along street frontage will have front porches facing the street and garages in the rear.

Clubhouse

The clubhouse is constructed of utilize vertical and horizontal siding, brick, and stone to match the multi-family and townhome buildings.



LIGHTING

Lighting details yet to be provided. All fixtures will be decorative.



Conclusion

STAFF RECOMMENDATION

Staff recommends approval of the Hope District Apartments Site Plan.

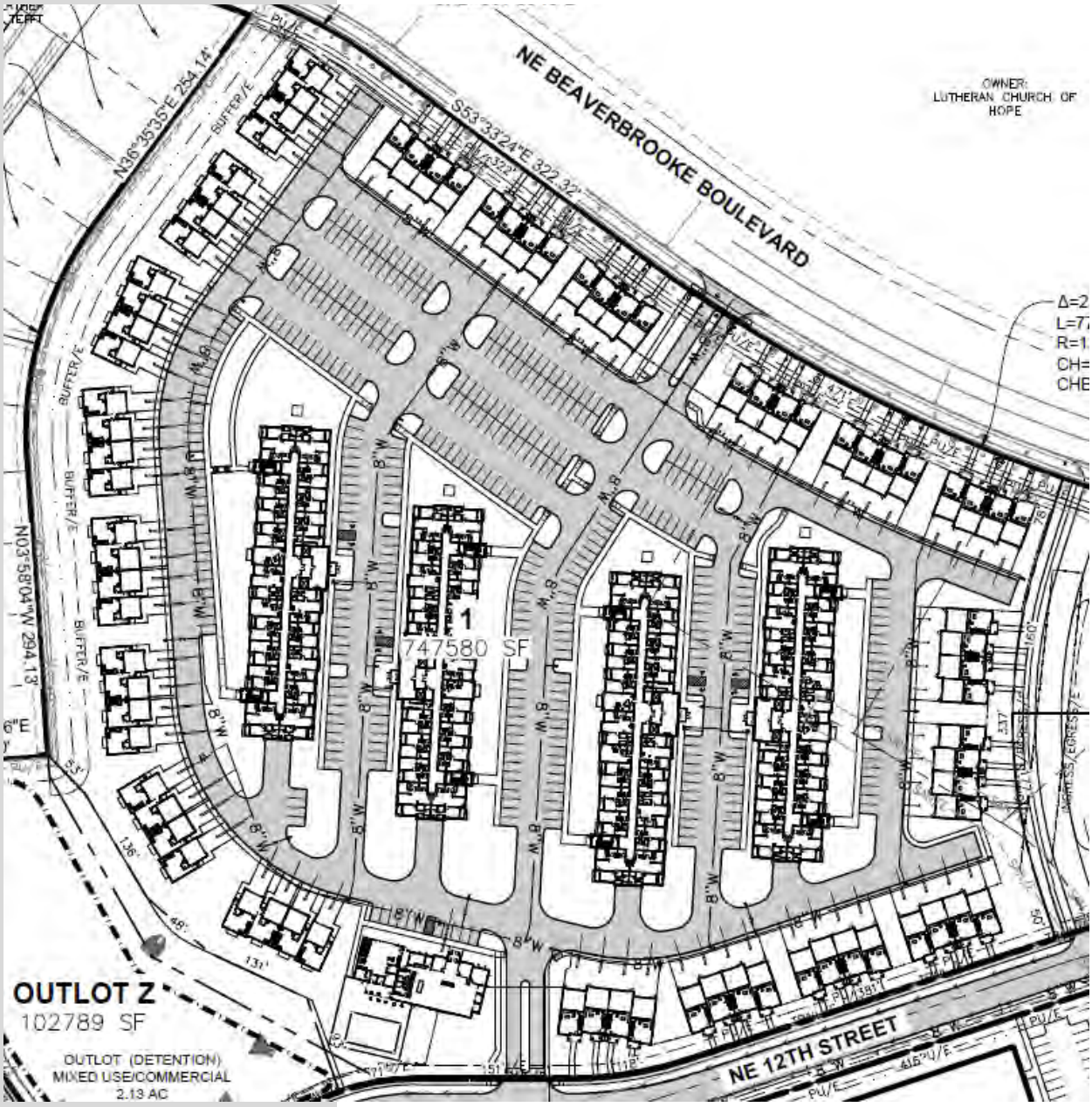
Conclusion

The site plan includes 4 multi-family buildings, 20 townhome buildings, and clubhouse for a total of 400 dwelling units.

The development will be entirely private and will be gated.

Many site details are missing at this time such as fencing, railings, lighting, and mailboxes. However, these details should not principally change the site plan layout.

The front façade elevation for the interior units needs to be revised to provide 30% masonry as required by the PUD.



Development Services
410 SE Main St, Suite 102
Grimes, IA 50111
(515)986-4050
www.grimesiowa.gov

~~May 24, 2023~~
June 13, 2023

Civil Design Advantage
Attn: Josh Trygstad
4121 NW Urbandale Drive
Urbandale, IA 50322

RE: Hope District Apartment

Dear Mr. Trygstad:

The Development Services Department is in receipt of a proposed Site Plan for the Hope District Apartments. Based on the review of the provided submittal materials, staff have the following comments:

General Comments:

1. ~~Address notes from Preliminary Plat review.~~

2. ~~Provide IDNR permits for sanitary and water.~~

3. Provide geotechnical report. The Geotech report we have for Hope Commercial Plat 4 does not cover this area. Is there another report? Please provide report.

4. ~~Project as-builts required at completion of project.~~

5. ~~Provide quantities tab. Please provide for private utilities.~~

6. ~~Switch watermain to the south side of the public street and storm sewer to the north side of the street.~~

7. ~~Sanitary and water will be private.~~

8. ~~Update Utility colors to fit APWA Uniform Color Code.~~

9. ~~Remove hydrant coverage from Grading Plan, Erosion Control Plan, and Landscape Plan~~

10. ~~Will the turning radi allow for large vehicles?~~

~~11. Include stabilization/seeding plan.~~

12. Include Filled out SWPPP checklist when submitting the SWPPP. Attached. Please provide.

13. Label all critical crossings. Please label.

14. Need a gate detail, including any sort of access control pedestal. Please provide.

15. How will trash be handled for the townhomes and clubhouse? Please label the trash storage location and provide screening details for clubhouse.

16. Accommodation for recycling will be required for all rental units. How? Will dumpsters be provided, or will there be an internal recycling shoot? Nothing has been shown in the preliminary building plans. Staff suggests looking into this now to ensure appropriate accommodation can be made. If dumpster enclosures need to be provided in the parking lot, we will need to make sure they are incorporated into the site plan now.

~~17. Need to develop a grading plan with slopes that can be maintained and mowed. Nothing over 4:1.~~

18. Need a parking plan detail for the underground parking. Does the door open automatically or with key card/pin code? Provide detail for access control pedestal. Staff verifying building plans.

~~19. Provide public improvements drawings.~~

~~20. Streetlight at the new entrance off NE Beaverbrooke needs to be relocated.~~

~~21. Need building elevations.~~

22. Need lighting plan. Please provide.

23. Need all the site details. Please provide details for fencing, gates, enclosures, railings, stairs, mailbox, non-typical utility details, signage, bike racks, etc.

~~24. Provide complete utilities plan.~~

~~25. How are the units along the N-S road between the MU and CM area served with sanitary?~~

~~26. How will the utilities be provided to the townhome units? Individual services?~~

~~27. Townhomes buildings 8000 sf or larger will require sprinklers. Area include all floors, basements, and garages.~~

28. Provide ramp grading details. Please provide. Details not provided.

29. How do the rear yards of the SF units to the west outlet into the basin? Provide spot elevations to ensure the receiving grades correspond to the as-built provided. In order for the single-family lot to have 2% grade, the south property line needs to be at least 938.4 as shown in the as-built provided. The Hope Apartments site plan needs to provide a grade at 938.4 or lower. The single-family lot will regrade their own property.



~~30. Do you anticipate signage? If so, show on plans and detail.~~

~~31. Staff is evaluating if a third access point is needed for emergency response.~~

~~32. Where are the mechanicals for the units to be located? Please confirm location for multi-family units.~~

33. Need details for mailboxes. Please provide.

34. How will the pedestrian access points interact with the fence? Will gates be provided? Label gate locations and widths.

~~35. Label slopes on swale areas. Adjust slopes to 2% minimum or provide subdrain and details.~~

~~36. Provide stair details. Please provide.~~

37. Staff has concerns about the ground floor units and steep slopes. Addressing the grade issues as noted above will help to mitigate this. If no resolution, they may need to consider railing. The walk-out units at the west multi-family building do not have a flat graded area outside of their unit. Staff has concerns that the area is unusable and safety concerns. We've seen incidents in town where residents have fallen down sloped areas like this. Provide a note on the site plan showing the locations and note to refer to architectural plans.

~~38. Site plan shows 3 sets of doors for multi-family units, while floorplans show 2, please update.~~

~~39. Need spot elevations for all townhome sidewalks to public sidewalks. Please provide stair details.~~

40. Provide a construction phasing plan. Please provide.

41. Staff recommends providing bike parking accommodations. Label locations and provide detail. Bike storage not shown in preliminary underground parking plan.

42. Have transformer locations been coordinated with Mid Am? Locations will need to be approved and site plan updated prior to installation.

43. Provide ADA parking grades, slopes, and cross slopes.

44. Construction schedule says completion is Fall 2023, please update the timeline to approximately reflect phasing plan.

45. Separate NPDES permit will be required. Provide SWPPP.

Cover Sheet:

~~1. Update the building height to 4 stories for multi-family and 3 stories for townhomes.~~

2. Update required townhome parking to match the townhome provided parking counts (160 standard and 160 covered). Each unit has 2-car garage and two car driveway (4 spaces per unit). Update townhome required parking to match townhome provided parking.

TOWNHOMES:		
	GARAGE (2 PER UNIT):	160 SPACES
	DRIVEWAY (2 PER UNIT):	160 SPACES
		320 SPACES

3. Provide visitor parking calculations for townhomes and multi-family. Update required townhome visitor parking to 1/5 units (80/5=16). Update required apartment visitor parking calculation 1/5 units (320/5=64).

Sheet 2:

1. ~~Update City of Grimes Standard Notes.~~

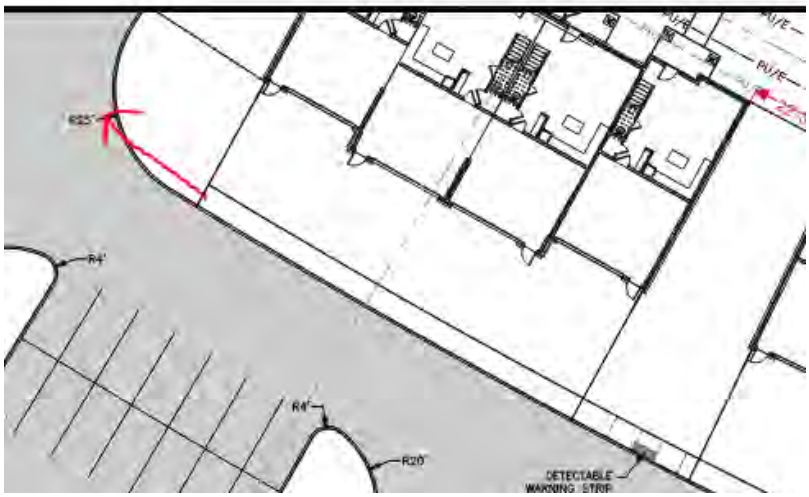
2. ~~Show sidewalk and trail along the public streets.~~

Sheet 2.3:

1. ~~The 5 parking spaces in the driveway into the underground garage doesn't seem practical.~~

Sheet 2.4:

1. ~~Please provide ramp to location below to provide connection to/from the public sidewalk.~~



Sheet 2.5:

1. ~~Shift the pool/patio 5' from the property line.~~

Sheet 3:

1. ~~Add to pavement thickness note 8" in ROW.~~

2. Provide forebays within ponds.

3. Provide emergency overflow on ponds.

Sheet 3.1:

1. Provide spot elevations, slopes, cross slopes for stairs and sidewalk on the west side of the west building.

Sheet 3.3

1. Provide spot elevations, slopes, cross slopes for stairs and sidewalk on the west side of the west building.

Sheet 11-16:

1. ~~Landscaping will need to be shifted out of the bottom of the swale along the west property line.~~

Sheet C4.0:

1. ~~How will the parking lot drain?~~

2. ~~Include sediment controls.~~

    a. ~~Perimeter~~
    b. ~~Pond outlet~~
    c. ~~Pond~~
    d. ~~Stockpile and protection~~
    e. ~~Intakes~~
        i. ~~Interior~~
        ii. ~~exterior~~
    f. ~~Overland flowage~~

3. ~~All slopes 3:1 or greater will need RECP installed with stabilization measures.~~

4. ~~Include Staging Area & construction entrance.~~

5. ~~Include stockpile locations.~~

~~6. Include temporary and final stabilization quantities.~~

~~7. Label all discharge points.~~

~~8. Update sheet numbers to reflect proper sheets. (Erosion and Sediment Control Plan is on 4.0 and sections should be 4.1-4.9 instead of 5.1-5.9)~~

~~9. Include sediment controls around all area intakes~~

~~10. Include perimeter controls on all perimeters.~~

~~11. Include controls to protect basins.~~

~~12. Include outlet protection at all basins.~~

Sheet 4.1-4.9:

1. Change symbology for the controls to stand out from other details. Hard to see ditch checks.

2. Include standpipes in pond outlets and standpipe details.

3. Provide forebays within ponds.

4. Provide emergency overflow on each pond.

Sheet C5.0:

1. The apartment buildings and the clubhouse shall have a Knox Box installed near the front entrance to the building per Section 506.1 of the City of Grimes Fire Code. Knox box will also be required for the gates. Label knox box locations for the gates. Locations not added.

2. ~~The plans do not depict fire department connections for the apartment buildings nor the clubhouse. They will be required as the buildings will need to be sprinklered.~~

3. ~~The hydrant spacing does not meet the requirements of Section 507.5.1 of the City of Grimes Fire Code. Staff is verifying hydrant coverage.~~

4. ~~The East apartment building does not have any hydrants within 150 feet of the East side of it.~~

5. ~~Parking is not permitted in front of fire hydrants per Section 507.5.4 of the City of Grimes Fire Code.~~

6. ~~Please adjust drive aisle widths to 26' width for outriggers.~~

7. ~~For aerial apparatus access, the building needs to be between 15 and 30 feet from the access road on at least one side. It looks like the buildings are about 40 feet or so away from the access road on both sides. The issue here would be difficulty for our 75-foot ladder to reach the roof. Please shift the building to one side to be within 30 feet.~~

8. ~~Due to the grade from the parking lot to the top of the building, ensure that ladder access can be provided.~~

Sheet L1.0:

9. ~~Demonstrate that the existing landscaping along Beaverbrooke meets the PUD requirements.~~

10. ~~Including foundation plantings for all units and clubhouse. For units along Beaverbrooke and NE 12th St, please provide some foundation landscaping to provide uniformity along the public street. If no plantings are provided some units may choose to install plantings while others may not. Some plantings would help provide consistency.~~

11. ~~Need additional landscaping around multi-family units.~~

12. ~~All areas to be sodded.~~

13. ~~Landscaping along NE Heritage should be outside of the fence.~~

Townhomes Architecture:

1. Is the Hardie panel included in the siding or masonry calculation? Please separate the material calculations by each material. Please update the legend to include Hardie panel in the siding calculations.

NORTH (LEFT)		
Elev Calcs_Glazing	352 SF	9.7%
Elev Calcs_Masonry/Stone	1,082 SF	29.7%
Elev Calcs_Siding /Hardie panel	2,213 SF	60.7%
	3,647 SF	100.0%

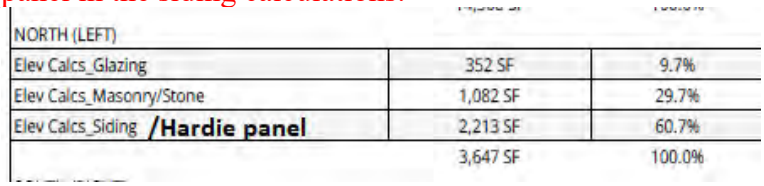
2. The PUD requires the townhomes groups to provide variation. Staff recommends 2 or 3 façade options. The façade options need to provide a different design/theme by modifying a minimum of two of the following: façade materials/colors, roofline, pitches, dormers, porch location, location/proportion/style of garage doors. The elevations need to incorporate another change to meet the PUD requirements.

3. Provide a plan labeling what elevation will be provided for each building in the development.

4. Please revise the interior townhome elevations to provide 30% masonry on the front facade.

Multi-Family Architecture:

1. Is the Hardie panel included in the siding or masonry calculation? Please separate the material calculations by each material. Please update the legend to include Hardie panel in the siding calculations.



NORTH (LEFT)		
Elev Calcs_Glazing	352 SF	9.7%
Elev Calcs_Masonry/Stone	1,082 SF	29.7%
Elev Calcs_Siding /Hardie panel	2,213 SF	60.7%
	3,647 SF	100.0%

Clubhouse Architecture:

~~1. Provide elevations for review.~~

SWMP:

1. SWMP is in review. The construction drawings were needed to complete the review. Comments will be provided.

2. Please provide a separate Master SWMP for the PP and either provide separate SWMP for CDs and site plan or combine SWMP for CD and site plan. Preference would be to have three separate SWMPs to be consistent with other projects in town. The Master SWMP that was originally submitted addressed requirements so a final signed Master SWMP could be provided.

Please provide a letter addressing all comments on this comment letter and/or state what was modified on the site plan to address said comments.

SITE PLAN SUBMITTAL SCHEDULE:

SUBMITTAL DATE: May 31, 2023
(1 PDF of Site plan with Elevation Plan included)

PLANNING & ZONING: July 5, 2023 at 5:30

COUNCIL MEETING: July 25, 2023 at 5:30

Please feel free to contact me at emartin@grimesiowa.gov or at (515) 986-4050 if you have any questions or need additional information.

Sincerely,

Evann Martin
Assistant Planner

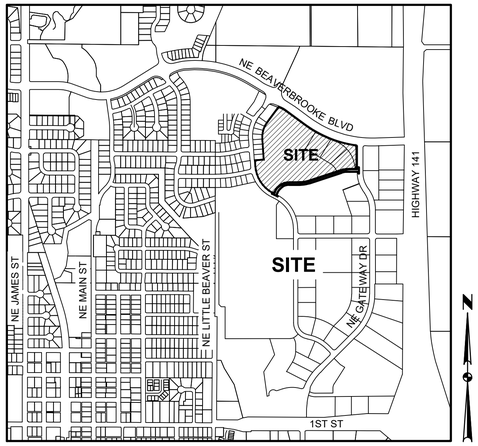
SITE PLAN FOR:

HOPE DISTRICT APARTMENTS

GRIMES, IOWA

VICINITY MAP

1"=500'



GRIMES, IOWA

OWNER/APPLICANT

HOPE K FARMS LLC
1548 S 45TH ST
WEST DES MOINES, IA 50265-5765
CONTACT: REZA KARGARZADEH
EMAIL: RKARGARZ@EPCMFG.COM

CIVIL ENGINEER

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PH. (515) 369-4400
FX. (515) 369-4410
CONTACT: JOSH TRYGSTAD
EMAIL: JOSHT@CDA-ENG.COM

SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC
CONTACT: MIKE BROONER
4121 NW URBANDALE DRIVE
URBANDALE, IOWA 50322
PH. (515) 369-4400
FX. (515) 369-4410

DATE OF SURVEY

02/14/2020

BENCHMARKS

BURY BOLT ON HYDRANT @ SE CORNER OF HWY 44 & SE GATEWAY DRIVE
ELEVATION=940.44

CITY BENCHMARK G6J-012
CAP BOLT ON HYDRANT @ SW CORNER 5TH ST & NORTH LITTLE BEAVER DR.
ELEVATION=926.02

CITY BENCHMARK G6N-004
CAP BOLT ON FIRE HYDRANT AT THE SOUTHWEST CORNER OF NORTH 4TH STREET AND NORTH LITTLE BEAVER DRIVE
ELEVATION=927.36

SUBMITTAL DATES

FIRST SUBMITTAL:	05/09/2023
SECOND SUBMITTAL:	05/30/2023
THIRD SUBMITTAL:	06/20/2023

PROPERTY DESCRIPTION

LOTS 18 THROUGH 23, HOPE COMMERCIAL PLAT 4, AN OFFICIAL PLAT AND OUTLOT 'T', HERITAGE AT GRIMES PLAT 2, AN OFFICIAL PLAT, ALL IN THE CITY OF GRIMES, POLK COUNTY, IOWA.

ZONING

R-4 HOPE COMMERCIAL PUD
(PLANNED UNIT DEVELOPMENT)

DEVELOPMENT SUMMARY

LOT AREA: 17.23 ACRES (750,539 SF)

SETBACKS:

FRONT YARD:	25' BEAVERBROOKE DRIVE
FRONT YARD:	0' HERITAGE DRIVE
REAR YARD:	25'
SIDE YARD:	10' (EXTERNAL)
SIDE YARD:	0' (INTERNAL)

PARKING: 10' FROM ROW. 5' FROM INTERNAL LOT LINE UNLESS A SHARED DRIVE IS PROVIDED

BUILDING HEIGHT: THE MAXIMUM HEIGHT OF ANY STANDALONE MULTIFAMILY BUILDING SHALL BE FOUR (4) STORIES AND TOWNHOMES SHALL BE THREE (3) STORIES ABOVE GRADE, FIFTY-FIVE (55-FEET) FEET.

PARKING SUMMARY

REQUIRED	
APARTMENTS (1 PER UNIT):	320 SPACES
COVERED PARKING (0.5 PER UNIT):	160 SPACES
VISITOR PARKING (NOT APPLICABLE)	0 SPACES
	480 SPACES
TOWNHOMES (2 PER UNIT):	160 SPACES
VISITOR PARKING (1 PER 5 UNITS):	50 SPACES
SITE GRAND TOTAL:	690 SPACES
PROVIDED	
APARTMENTS:	
STANDARD SURFACE LEVEL:	403 SPACES
ACCESSIBLE SURFACE LEVEL:	9 SPACES
STANDARD UNDERGROUND:	160 SPACES
ACCESSIBLE UNDERGROUND:	4 SPACES
	576 SPACES
TOWNHOMES:	
GARAGE (2 PER UNIT):	160 SPACES
DRIVEWAY (2 PER UNIT):	160 SPACES
	320 SPACES
SITE GRAND TOTAL:	896 SPACES
UNIT COUNT	
APARTMENTS:	320 UNITS
TOWNHOMES:	80 UNITS
ACCESSIBLE SPACES SUMMARY	
UNDERGROUND SPACES PROVIDED PER APARTMENT BUILDING:	41 SPACES
ACCESSIBLE SPACES REQUIRED PER UND. SPACES:	1 SPACE
TOTAL SITE UNDERGROUND ACCESSIBLE SPACES REQUIRED:	4 SPACES
TOTAL UNDERGROUND ACCESSIBLE SPACES PROVIDED:	4 SPACES
TOTAL SURFACE LEVEL SPACES PROVIDED:	412 SPACES
TOTAL ACCESSIBLE SPACES REQUIRED:	9 SPACES
TOTAL ACCESSIBLE SPACES PROVIDED:	9 SPACES

CONSTRUCTION SCHEDULE

ANTICIPATED START DATE = SUMMER 2023
ANTICIPATED COMPLETION = FALL 2023

FLOOD ZONE CLASSIFICATION

SUBJECT PROPERTY IS LOCATED IN ZONE 'A' AS SHOWN ON THE FLOOD INSURANCE RATE MAPS FOR THE CITY OF GRIMES, POLK COUNTY, IOWA, COMMUNITY PANEL 160 OF 555 MAP NUMBER 19153C0160F WITH A REVISION DATE OF FEBRUARY 1, 2019.

NOTE:
FLOODPLAIN PERMIT IS REQUIRED.

INDEX OF SHEETS

NO.	DESCRIPTION
C0.0	COVER SHEET
C1.0	TOPOGRAPHIC SURVEY/DEMOLITION PLAN
C2.0-C2.6	DIMENSION PLAN
C3.0-C3.6	GRADING PLAN
C3.6A-C3.6C	GRADING PLAN DETAILS
C4.0-C4.9	EROSION AND SEDIMENT CONTROL PLAN
C5.0-C5.6	UTILITY PLAN
C5.6A-C5.6C	UTILITY PLAN DETAILS
L1.0-L1.6	LANDSCAPE PLAN
C6.0	DETAILS

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE, URBANDALE, IOWA 50322
PH: (515) 369-4400 Fax: (515) 369-4410

PROJECT NO. 2205.357

GENERAL LEGEND

PROPOSED

PROPERTY BOUNDARY	
PROJECT LIMITS	
GRADING LIMITS	
SECTION LINE	
CENTER LINE	
RIGHT OF WAY	R/W
BUILDING SETBACK	
PERMANENT EASEMENT	P/E
TEMPORARY EASEMENT	T/E
TYPE SW-501 STORM INTAKE	
TYPE SW-502 STORM INTAKE	
TYPE SW-503 STORM INTAKE	
TYPE SW-505 STORM INTAKE	
TYPE SW-506 STORM INTAKE	
TYPE SW-512 STORM INTAKE	
TYPE SW-513 STORM INTAKE	
TYPE SW-401 STORM MANHOLE	
TYPE SW-402 STORM MANHOLE	
FLARED END SECTION	
TYPE SW-301 SANITARY MANHOLE	
STORM/SANITARY CLEANOUT	
WATER VALVE	
FIRE HYDRANT ASSEMBLY	
SIGN	
DETECTABLE WARNING PANEL	
WATER CURB STOP	
SANITARY SEWER	
SANITARY SERVICE	S
STORM SEWER	
STORM SERVICE	ST
WATERMAIN WITH SIZE	8"W
WATER SERVICE	W
SAWCUT (FULL DEPTH)	
SILT FENCE	
USE AS CONSTRUCTED	(UAC)
MINIMUM PROTECTION ELEVATION	MPE
TOP OF WALL	TW
FINISH GRADE AT WALL	FGW
FORM GRADE	FG
TOP OF CURB	TC
FINISH GRADE AT HYDRANT	FGH
FIELD LIGHTS (BY OTHERS)	o
LIGHT POLES (REFER TO ELEC. PLAN)	

EXISTING

SANITARY MANHOLE	S
WATER VALVE BOX	W
FIRE HYDRANT	
WATER CURB STOP	CS
WELL	WELL
STORM SEWER MANHOLE	ST
STORM SEWER SINGLE INTAKE	
STORM SEWER DOUBLE INTAKE	
FLARED END SECTION	
DECIDUOUS TREE	
CONIFEROUS TREE	
DECIDUOUS SHRUB	
CONIFEROUS SHRUB	
ELECTRIC POWER POLE	
GUY ANCHOR	
STREET LIGHT	
POWER POLE W/ TRANSFORMER	
UTILITY POLE W/ LIGHT	
ELECTRIC BOX	E
ELECTRIC TRANSFORMER	E
ELECTRIC MANHOLE OR VAULT	E
TRAFFIC SIGN	
TELEPHONE JUNCTION BOX	T
TELEPHONE MANHOLE/VAULT	T
TELEPHONE POLE	
GAS VALVE BOX	GV
CABLE TV JUNCTION BOX	TV
CABLE TV MANHOLE/VAULT	TV
MAIL BOX	M
BENCHMARK	BM
SOIL BORING	SB
UNDERGROUND TV CABLE	TV
GAS MAIN	G
FIBER OPTIC	FO
UNDERGROUND TELEPHONE	T
OVERHEAD ELECTRIC	OE
UNDERGROUND ELECTRIC	E
FIELD TILE	TILE
SANITARY SEWER W/ SIZE	8"S
STORM SEWER W/ SIZE	15"ST
WATER MAIN W/ SIZE	8"W

THE CONTRACTOR IS REQUIRED TO COORDINATE ALL WORK WITH OTHER CONSTRUCTION PROJECTS IN THE VICINITY. INCLUDING ADJACENT PROPERTY OWNERS PRIVATE CONTRACTORS AND ADDITIONAL BID PACKAGES ASSOCIATED WITH THE HOPE COMMERCIAL PLAT 6 PROJECT.

REFER TO TERRACON GEOTECHNICAL ENGINEERING REPORT NO. 08195021-03 FOR GEOTECHNICAL REQUIREMENTS.

ALL CONSTRUCTION MATERIALS, DUMPSTERS, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC R.O.W.

THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2 AND CITY OF GRIMES GRADING PERMIT. THE CONTRACTOR SHALL APPLY FOR THE IOWA NPDES PERMIT #2. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

THE 2023 EDITION OF THE SUDAS STANDARD SPECIFICATIONS, THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

JOSHUA TRYGSTAD
19228
LICENSED PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

JOSHUA TRYGSTAD, P.E. DATE
LICENSE NUMBER 19228
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024
PAGES OR SHEETS COVERED BY THIS SEAL:
SHEETS C0.0-C6.0

HOPE DISTRICT APARTMENTS - 2205.357

FILE: H:\2022\2205357\DWG\2205357-SITE COVER.DWG
PLT DATE: 6/20/23 DATE PLOTTED: 6/20/2023 4:35 PM COMMENT: ENG
PLOTTED BY: TYLER CHAPP TEM:



DEMOLITION NOTES

1. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER OR ENGINEER AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
2. PRIOR TO DEMOLITION, CONTRACTOR SHALL NOTIFY IN WRITING (48 HRS NOTICE) THE FOLLOWING:
   A. CITY
   B. APPROPRIATE UTILITY COMPANIES
   C. OWNER
   D. CIVIL DESIGN ADVANTAGE
   E. ARCHITECT
3. DO NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE NOTED. COORDINATE REMOVAL OR ABANDONMENT OF ALL UTILITIES WITH THE APPROPRIATE UTILITY SUPPLIER AND REGULATORY AGENCIES.
4. PROTECT EXISTING UTILITIES THAT ARE TO REMAIN. THE LOCATIONS OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
5. BACKFILL ALL EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DRY DENSITY AND MOISTURE RANGE OF OPTIMUM MOISTURE TO 4% ABOVE OPTIMUM MOISTURE. TESTING OF BACKFILL TO BE BY A GEOTECHNICAL ENGINEER EMPLOYED BY THE OWNER. IN THE EVENT OF A TEST FAILURE, ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR.
6. FIELD VERIFY EXISTING GRADES AND LOCATION OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE FEATURES PRIOR TO DEMOLITION AND IMMEDIATELY INFORM THE ENGINEER AND/OR OWNER OF ANY DISCREPANCIES.
7. DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ABANDON IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT.
8. ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OF OFFSITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
9. CONSTRUCTION LIMITS SHALL BE CONFINED TO THE SITE BOUNDARY AS NOTED. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.

TRAFFIC CONTROL NOTES

1. ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY R.O.W. OR LANE CLOSURES.
2. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
4. THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
5. SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES.
6. THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
7. ALL SIGNING AND LANE STRIPING WILL NEED TO COMPLY WITH MUTCD. MAINTENANCE AND REPLACEMENT OF THE SIGNING AND STRIPING WILL BE THE RESPONSIBILITY OF THE APPLICANT.

SCALE
0' 40' 80' 160'

REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
SECOND SUBMITTAL	05/30/2023
FIRST SUBMITTAL	05/08/2023

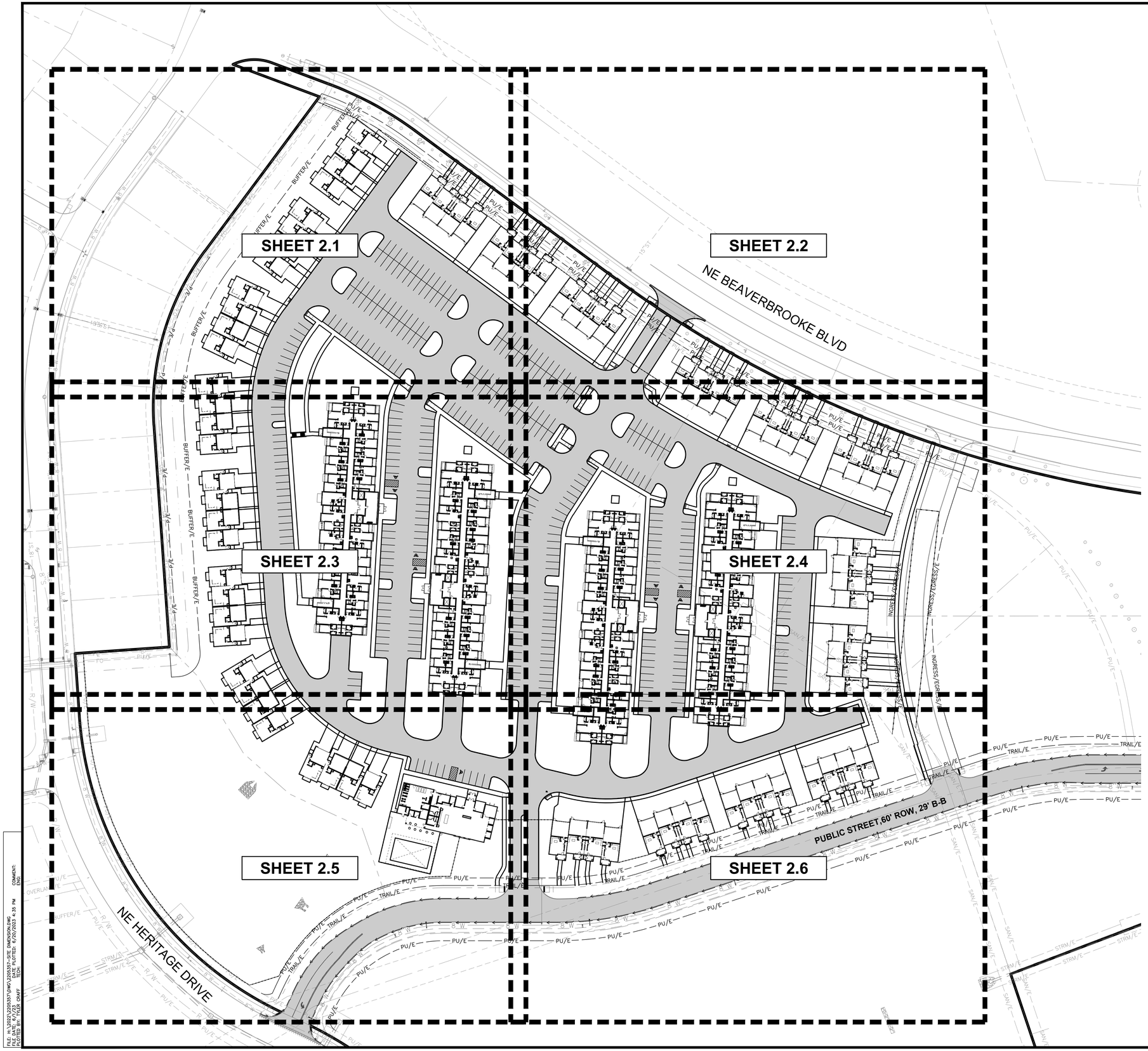
4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400
ENGINEER: TECH:
CIVIL DESIGN ADVANTAGE

HOPE DISTRICT APARTMENTS
TOPOGRAPHIC SURVEY/DEMOLITION PLAN
GRIMES, IOWA

C1.0

2205357

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PLOTTED BY: HEIDI CROFT
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PAVEMENT NOTES

1. ALL PAVEMENT WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH SUDAS STANDARDS SPECIFICATIONS.
2. SIDEWALKS, DRIVEWAYS, DRIVE LANES WITHIN PARKING AND PARKING SPACES SHALL BE CLASS C PORTLAND CEMENT CONCRETE (P.C.C.) COARSE AGGREGATE FOR P.C.C. CONSTRUCTION SHALL BE CLASS 3 DURABILITY.
3. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
4. PAVEMENT THICKNESS:

SIDEWALKS	4" P.C.C.
SHARED USE PATH	5" P.C.C.
TRAIL	6" P.C.C.
SIDEWALK RAMPS	6" P.C.C.
STANDARD DUTY PAVING	6" P.C.C.
MEDIUM DUTY PAVING	7" P.C.C.
HEAVY DUTY PAVING/TRASH ENCLOSURE	8" P.C.C.
HEAVY DUTY PAVING/ WITHIN R.O.W.	8" P.C.C.

SIGN LEGEND

01 ACCESSIBLE PARKING SIGN (R7-8)

02 VAN ACCESSIBLE PARKING SIGN (R7-8A)

03 STOP SIGN (R1-1)

GENERAL NOTES

1. THE 2023 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
2. ALL WORK SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
3. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
4. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
5. ONE WEEK PRIOR TO CONSTRUCTION WITHIN CITY R.O.W. OR ANY CONNECTION TO PUBLIC SEWERS CONTRACTOR SHALL NOTIFY THE CITY'S CONSTRUCTION DIVISION.
6. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY'S STANDARDS.
7. ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
9. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
10. REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY.
11. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
12. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
13. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
14. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
15. THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
16. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
17. CONCRETE REMOVAL FOR DRIVEWAY APPROACHES SHALL BE REMOVED TO THE NEAREST TRANSVERSE JOINT. CONTRACTOR SHALL VERIFY REMOVAL LIMITS WITH CITY'S CONSTRUCTION INSPECTOR PRIOR TO ANY CONCRETE REMOVAL.
18. ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACTOR BID.

CITY OF GRIMES STANDARD NOTES FOR PUBLIC IMPROVEMENTS

GENERAL NOTES:

A. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT VERSION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) FOR PUBLIC IMPROVEMENTS ON THE DATE OF APPROVAL AND THE CITY OF GRIMES SUPPLEMENTAL SPECIFICATIONS.
B. A PRECONSTRUCTION MEETING IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THIS MEETING. CONTACT THE CITY OF GRIMES BUILDING DIVISION (515.986.4050).
C. ALL PERMITS (IDNR, NPDES, IDOT, ARMY CORP., ETC.) SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
D. PROVIDE THE CITY OF GRIMES WITH RECORD DRAWINGS (AS-BUILTS) OF ALL IMPROVEMENTS AND EASEMENTS AS PER CITY COMMERCIAL AS-BUILT POLICY.
E. THE RECORD DRAWINGS SHOULD INCLUDE A CERTIFIED GRADING SHEET AND AS-BUILT PLANS OF ALL STORMWATER MANAGEMENT FACILITIES ON SITE WITH A CERTIFICATION STATEMENT SIGNED BY THE DESIGN ENGINEER INDICATING THAT THE FACILITIES WERE CONSTRUCTED AS DESIGNED.
F. RECORD DRAWINGS TO INCLUDE ONE ELECTRONIC FILE IN .DWG AND .PDF FILE EXTENSIONS.
G. TYPICAL BUILDING SERVICE LAYOUT TO REFLECT THE CITY'S SERVICE ORDER FROM LEFT TO RIGHT FACING THE LOT SANITARY, WATER, SUMP. MARK THE ENDS OF SERVICES WITH A STEEL FENCE POST AND PAINT GREEN FOR SANITARY, BLUE FOR WATER, AND WHITE FOR STORM. MARK THE ENDS OF SANITARY AND SUMP WITH A 2 X 4 FROM END OF PIPE TO 2' ABOVE GRADE.
H. A KNOX BOX IS REQUIRED BY THE FIRE DEPARTMENT.
I. ALL SITE LIGHTING SHALL NOT SPILL ONTO ADJACENT PROPERTIES OR RIGHTS-OF-WAY.
J. PROVIDE A 4-YEAR MAINTENANCE BOND FOR ALL PUBLIC IMPROVEMENTS (UTILITY, PAVING, SUBGRADE) WITH AN ITEMIZED COST BREAKDOWN.

SANITARY SEWER NOTES:

A. THE CONTRACTOR IS REQUIRED TO PLACE A TEMPORARY PLUG IN THE EXISTING DOWNSTREAM SANITARY SEWER MANHOLE PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL REMOVE THE PLUG FOLLOWING APPROVAL OF CONSTRUCTION BY THE CITY OF GRIMES.
B. SANITARY GRAVITY PIPE MATERIAL SHALL BE PVC SDR 26 OR TRUSS (8' TO 15').
C. SANITARY GRAVITY SERVICE PIPE MATERIAL SHALL BE PVC SDR 23.5 (4' TO 6').
D. ALL SANITARY SEWER MANHOLES SHALL HAVE STEPS.
E. ALL SANITARY SEWER MANHOLES CASTINGS SHALL BE SEALED WITH HEAT SHRINK SLEEVES.
F. ALL SANITARY SEWER MANHOLE CASTINGS LOCATED WITHIN PAVEMENT SHALL BE TYPE B:PCC W/ADJUSTING MECHANISM.
G. SANITARY SEWER CLEANING & TELEVISING SHALL BE COMPLETED PRIOR TO PAVING. RUN SUFFICIENT DYED WATER THROUGH PIPE PRIOR TO TELEVISING. PROVIDE THE VIDEO AND INSPECTION REPORT TO THE CITY ENGINEERING DIVISION.

WATER MAIN NOTES:

A. ALL FIRE HYDRANTS SHALL BE AMERICAN FLOW CONTROL-WATEROUS PACER WB-67-250, MUELLER SUPER CENTURION 250 (3-WAY A-423), OR CLOW MEDALLION F-2545. ALL HYDRANTS SHALL HAVE THE FOLLOWING: 6" MJ SHOE, 2-1/2" HOSE NOZZLE, 4-1/2" STEAMER NOZZLE, NST THREADS, PENTAGON OPERATING NUT, CHAIN ON CAP, OPEN LEFT, 5-1/2' BURY, AND FACTORY PAINTED RED. THE MINIMUM SPOOL PIPE LENGTH FROM AUXILIARY VALVE TO HYDRANT SHOE SHALL BE 2.0'.
B. ALL HYDRANTS WILL IMMEDIATELY BE COVERED WITH A BLACK PLASTIC BAG (OR EQUIVALENT) ONCE THE HYDRANT IS INSTALLED. THE CITY OF GRIMES WILL NOTIFY THE CONTRACTOR WHEN THE BAGS CAN BE REMOVED.
C. A TRACER WIRE RECEPTACLE SHALL BE INSTALLED AT EACH HYDRANT, AA MANUFACTURING TRACER WIRE RECEPTACLE MODEL TW-1B-2.
D. ALL VALVES SHALL BE RESILIENT WEDGE GATE VALVES.
E. WATER SERVICE SHALL BE 1-INCH MINIMUM TYPE K COPPER.
F. THE CITY OF GRIMES SHALL DO THE FILLING OF THE WATER MAIN.
G. NEW WATER MAIN SHALL BE PRESSURE TESTED AND CHLORINATED BY THE CONTRACTOR. THE BACTERIA TEST AND SUBMITTAL OF TEST TO LAB SHALL BE DONE BY THE CONTRACTOR AND RESULTS PROVIDED TO THE CITY OF GRIMES ENGINEERING DIVISION. ALL TESTS AND SAMPLING TO BE WITNESSED BY THE CITY ENGINEERING DIVISION. IF THE TEST DOES NOT PASS, THE CONTRACTOR WILL BE REQUIRED TO PAY FOR ALL THE WATER USED TO REPEAT THE TEST.
H. ALL WATERMAIN FITTINGS TO BE RESTRAINED JOINT, MEGA-LUG OR APPROVED EQUAL.
I. ALL DEAD-END WATER MAINS TO HAVE TEMPORARY BLOWOFF HYDRANTS.

STORM SEWER NOTES:

A. ALL STORM SEWER IN THE ROW SHALL BE RCP, UNLESS OTHERWISE APPROVED BY THE CITY.
B. ALL FLARED END SECTIONS SHALL HAVE FOOTINGS AND APRON GRATES. THE LAST 3 PIPE SECTIONS AND THE FLARED END SECTION ON ALL STORM SEWERS SHALL BE TIED. ALL STORM SEWER JOINTS SHALL BE WRAPPED WITH ENGINEERING FABRIC UNLESS OTHERWISE DIRECTED.
C. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY FIELD TILE DAMAGED DURING CONSTRUCTION. THE TILE SHOULD BE DIRECTED TO PUBLIC STORM SEWER IF POSSIBLE. THE CONTRACTOR SHALL RECORD THE ELEVATION AND LOCATION OF ALL TILES AND INCLUDE ON RECORD DRAWINGS.
D. PUBLIC STORM SEWER CLEANING & TELEVISING SHALL BE COMPLETED PRIOR TO PAVING. RUN SUFFICIENT DYED WATER THROUGH PIPE PRIOR TO TELEVISING. PROVIDE THE VIDEO AND INSPECTION REPORT TO THE CITY ENGINEERING DIVISION.
E. USE O RING GASKETS ON STORM SEWERS CROSSING OVER WATERMAIN PER IDNR REQUIREMENT.

SCALE
0' 30' 60' 120'

FILE: J:\2022\2205357\DWG\2205357-SITE DIMENSION.DWG
FILE DATE: 6/1/23
PLOTTED BY: TYLER GRAFF
DATE PLOTTED: 6/20/2023 4:35 PM
TECH:
COMMENT:
ENGR:

REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
SECOND SUBMITTAL	05/30/2023
FIRST SUBMITTAL	05/08/2023

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

ENGINEER: TECH:

CIVIL DESIGN ADVANTAGE

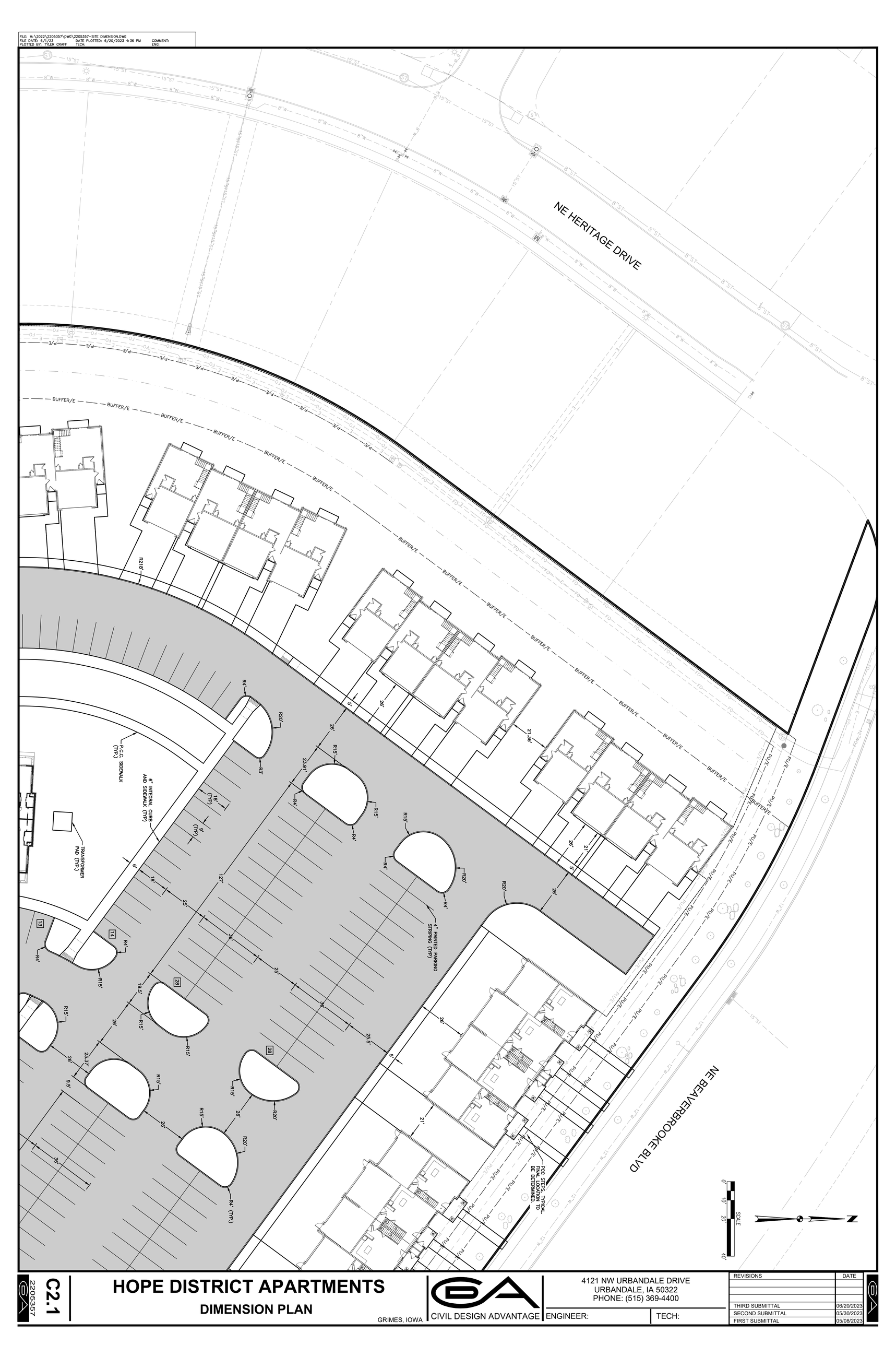
HOPE DISTRICT APARTMENTS

DIMENSION PLAN - OVERALL

GRIMES, IOWA

C2.0

2205357



HOPE DISTRICT APARTMENTS

DIMENSION PLAN

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

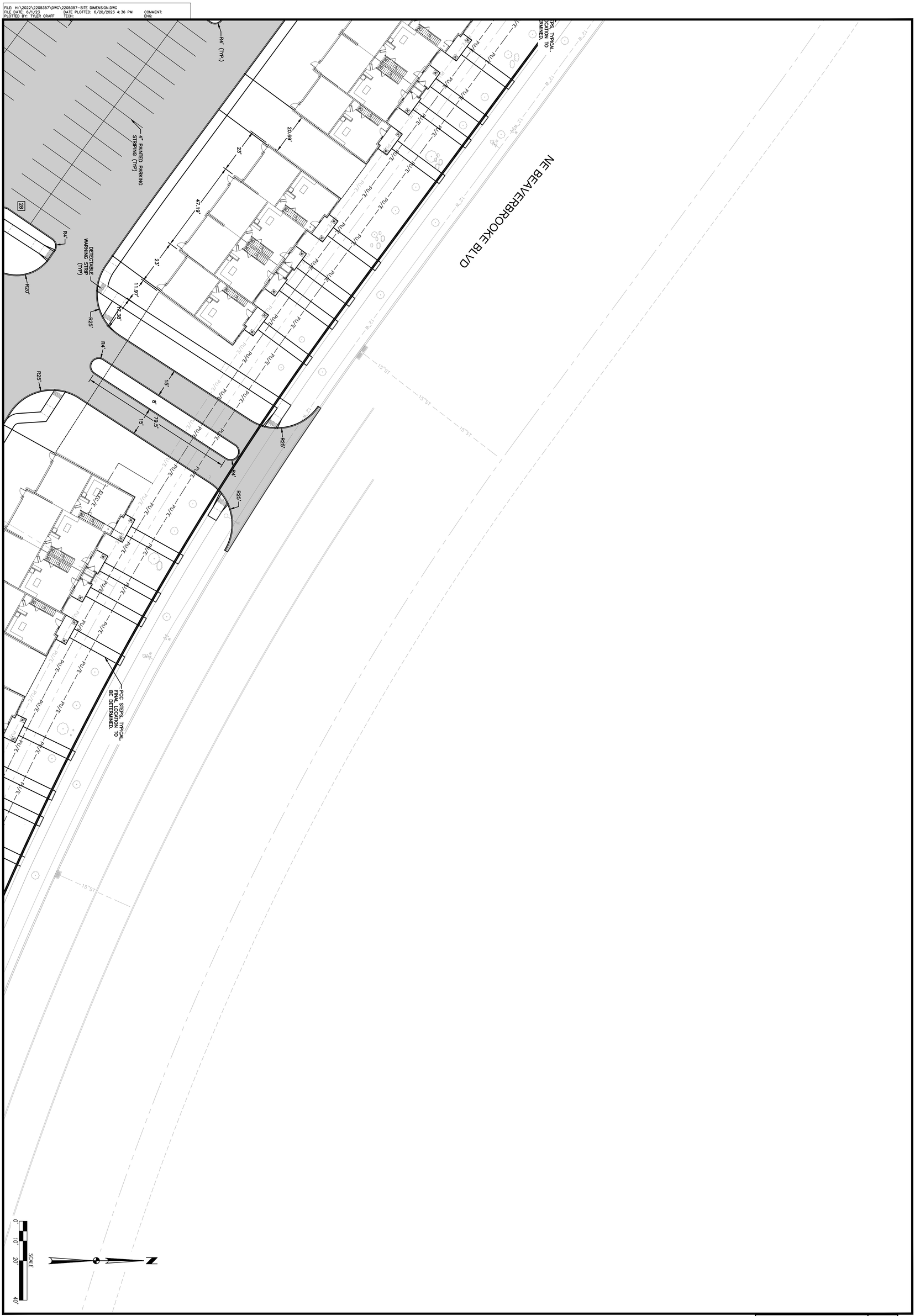
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REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
SECOND SUBMITTAL	05/30/2023
FIRST SUBMITTAL	05/08/2023

C2.1

2205357



HOPE DISTRICT APARTMENTS

DIMENSION PLAN

GRIMES, IOWA

C2.2

2205357

CIVIL DESIGN ADVANTAGE

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

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REVISIONS	DATE
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FIRST SUBMITTAL	05/08/2023



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HOPE DISTRICT APARTMENTS

DIMENSION PLAN

GRIMES, IOWA

C2.3

2205357

CIVIL DESIGN ADVANTAGE

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

ENGINEER:

TECH:

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FIRST SUBMITTAL	05/08/2023



HOPE DISTRICT APARTMENTS

DIMENSION PLAN

GRIMES, IOWA

C2.4

2205357

CIVIL DESIGN ADVANTAGE

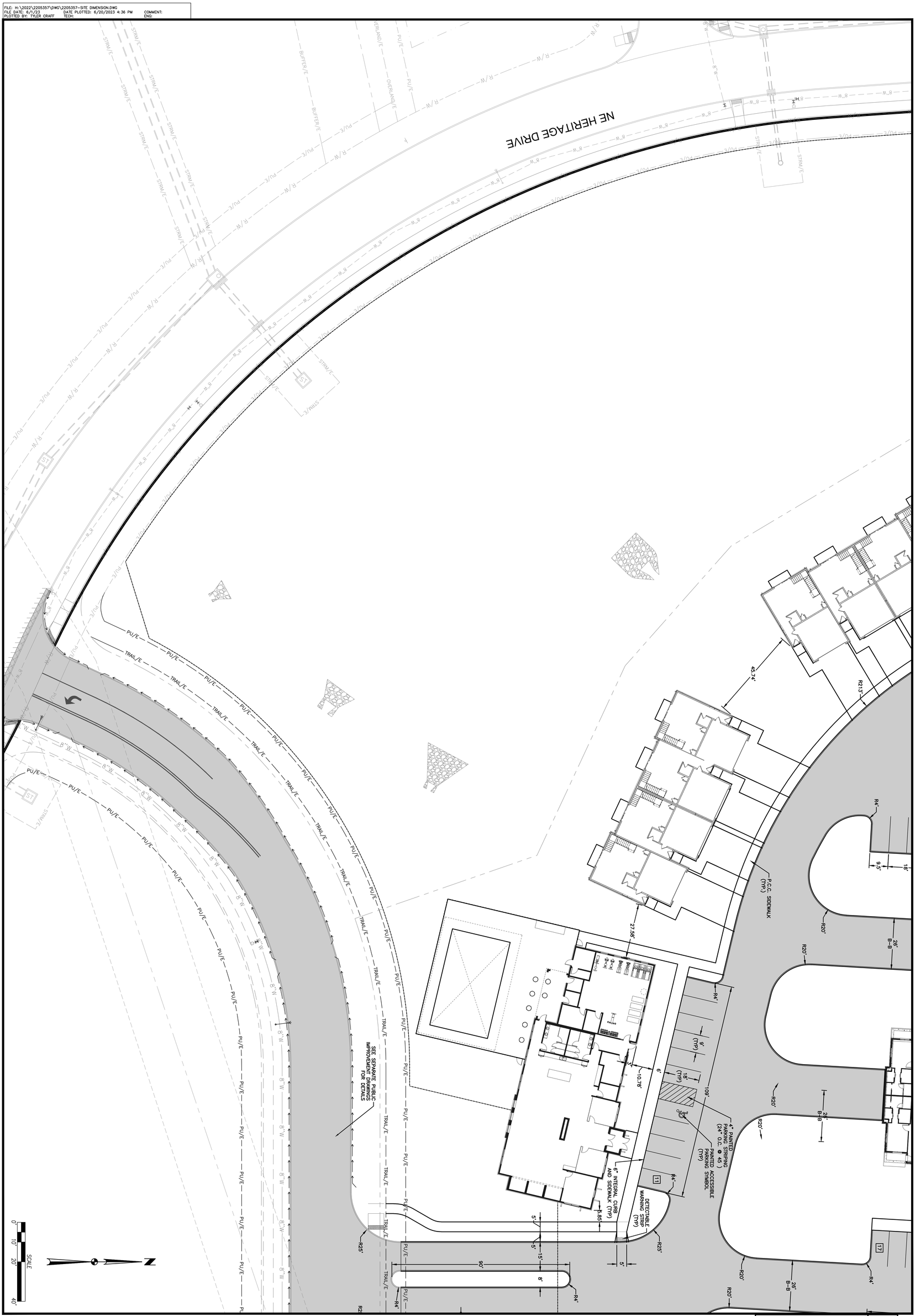
4121 NW URBANDALE DRIVE
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HOPE DISTRICT APARTMENTS

DIMENSION PLAN

GRIMES, IOWA

C2.5

2205357

CIVIL DESIGN ADVANTAGE

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URBANDALE, IA 50322
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HOPE DISTRICT APARTMENTS

DIMENSION PLAN

GRIMES, IOWA

C2.6

2205357

CIVIL DESIGN ADVANTAGE

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GRADING NOTES

1. PRIOR TO ANY GRADING, A COPY OF THE NPDES PERMIT SHALL BE PROVIDED TO THE CITY OF GRIMES' BUILDING DIVISION.
2. THE PROJECT REQUIRES AN IOWA NPDES PERMIT #2 AND CITY OF GRIMES GRADING PERMIT. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.
3. CONTRACTOR SHALL STRIP ALL DELETERIOUS MATERIAL. THE TOP 6" OF TOPSOIL IS TO BE STOCKPILED AND RESPREAD AFTER GRADING IS COMPLETE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SUITABLE TOPSOIL STOCKPILE SITE.
4. EXCAVATION SHALL BE IN ACCORDANCE WITH THE 2020 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY OF GRIMES SUPPLEMENTALS, IF APPLICABLE.
5. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
6. ALL SPOT ELEVATIONS ARE FORM GRADE (FG) OR TOP OF FINISHED SURFACES UNLESS OTHERWISE NOTED.
7. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS.
8. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
9. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
11. REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
12. FINAL FINISH GRADING TO BE APPROVED BY THE ARCHITECT AND CIVIL ENGINEER. MATCH EXISTING GRADES AT THE INTERFACE OF NEW AND EXISTING GRADES OR PAVING.
13. SIDEWALKS:
    MAINTAIN 1% MINIMUM AND 5% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 2.0% MAXIMUM TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAW CUT JOINTS AS SOON AS CONCRETE HAS SET. SAW CUTS TO BE 1/8" TO 1/4" WIDE; DEPTH: LONGITUDINAL T/3, TRANSVERSE T/4.
14. EXISTING TOPO FOR THIS AREA WAS TAKEN FROM PROPOSED CONTOURS FOR THE HOPE COMMERCIAL PLAT 1 & HOPE COMMERCIAL PLAT 2. TIE-IN POINTS MAY VARY BASED ON CONSTRUCTED ELEVATIONS.

SHEET 3.1

SHEET 3.2

SHEET 3.3

SHEET 3.4

SHEET 3.5

SHEET 3.6

NE BEAVERBROOKE BLVD

NE HERITAGE DRIVE

PUBLIC STREET 60' ROW, 31' B-B

N

SCALE
0' 30' 60' 120'

REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
SECOND SUBMITTAL	05/30/2023
FIRST SUBMITTAL	05/08/2023

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400

ENGINEER: TECH:

CIVIL DESIGN ADVANTAGE

HOPE DISTRICT APARTMENTS

GRADING PLAN - OVERALL

GRIMES, IOWA

C3.0

2205357

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HOPE DISTRICT APARTMENTS

GRADING PLAN

GRIMES, IOWA

C3.1

2205357

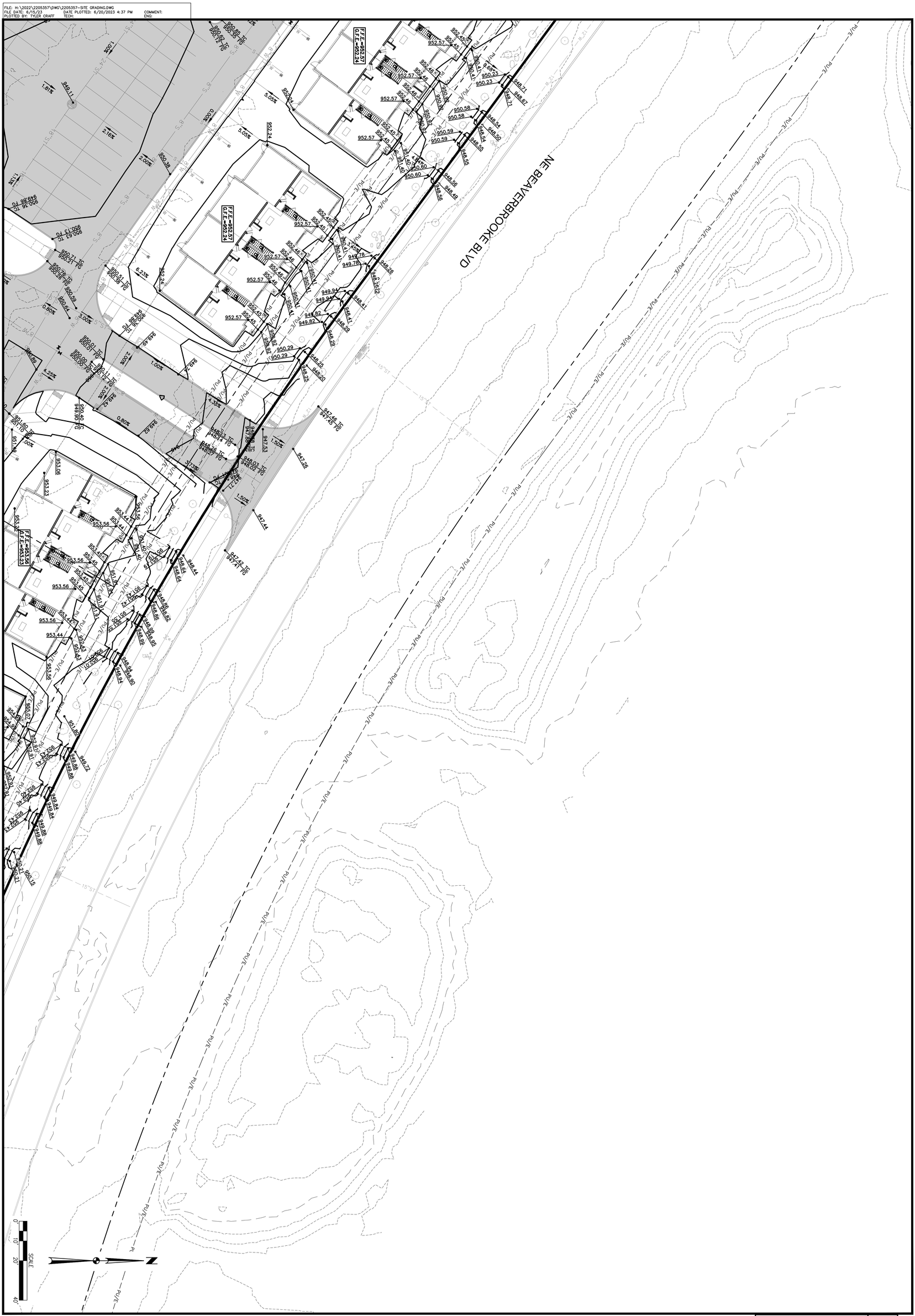
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HOPE DISTRICT APARTMENTS

GRADING PLAN

GRIMES, IOWA

C3.2

2205357

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HOPE DISTRICT APARTMENTS

GRADING PLAN

GRIMES, IOWA

C3.3

2205357

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HOPE DISTRICT APARTMENTS

GRADING PLAN

GRIMES, IOWA

C3.4

2205357

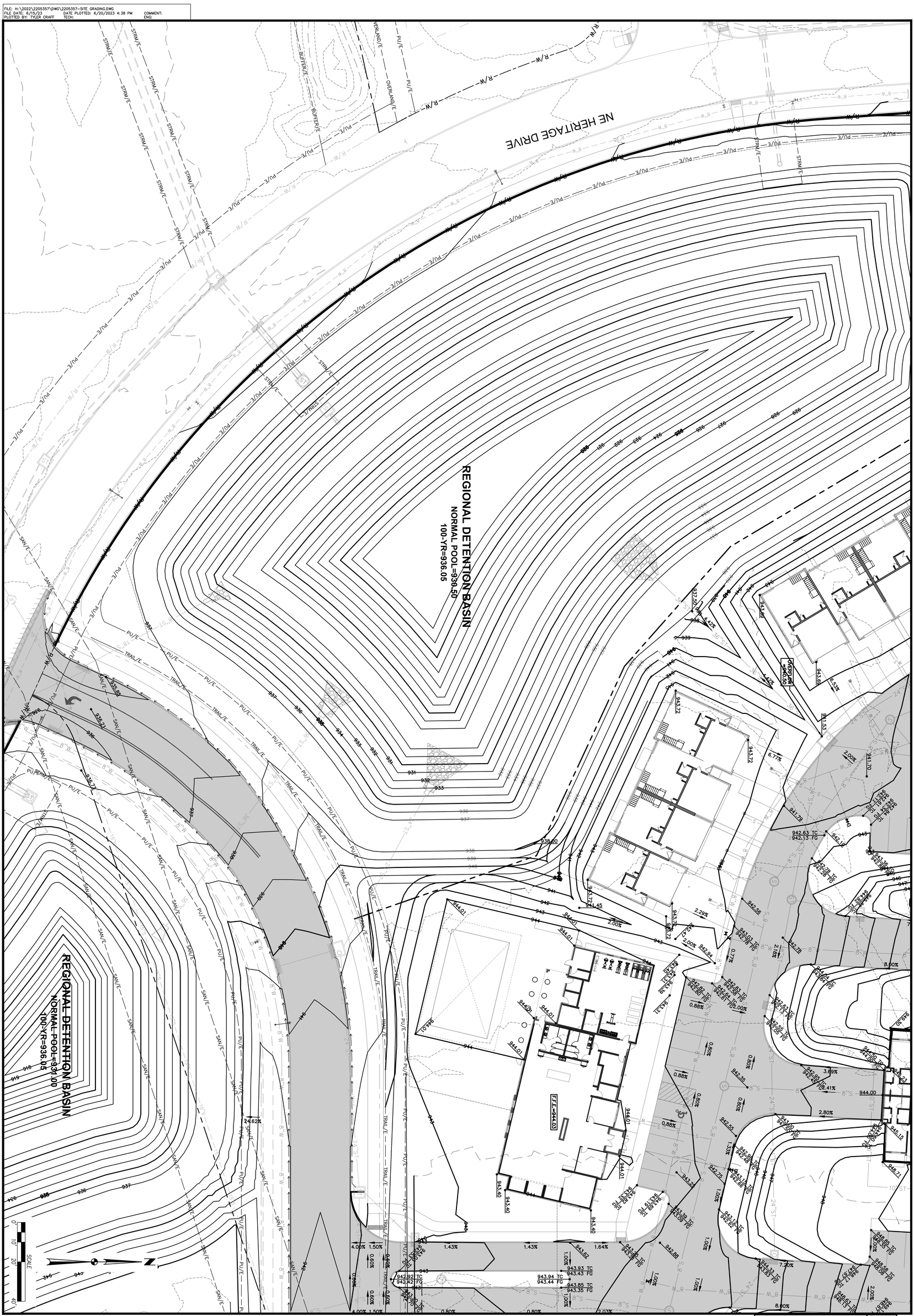
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NE HERITAGE DRIVE
REGIONAL DETENTION BASIN
NORMAL POOL=938.50
100-YR=936.05
REGIONAL DETENTION BASIN
NORMAL POOL=931.00
100-YR=936.05
F.F.E.=944.00
F.F.E.=944.00
F.F.E.=944.00



HOPE DISTRICT APARTMENTS

GRADING PLAN

GRIMES, IOWA

C3.6

2205357

CIVIL DESIGN ADVANTAGE

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
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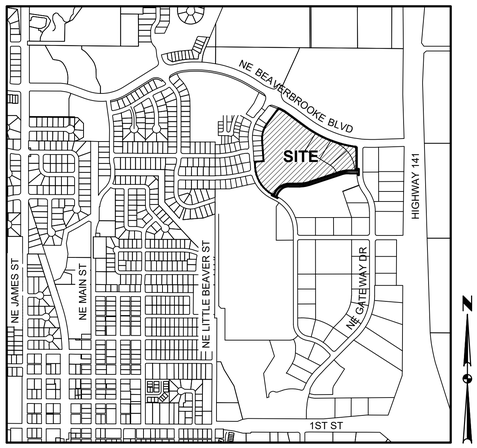
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HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

VICINITY MAP

1"=500'



GRIMES, IOWA

STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	8,149
2	FILTER SOCK	LF	210
3	SILT FENCE CHECK DAMS	LF	1,025
4	SEEDING, FERTILIZING, AND MULCHING	AC	17
5	INLET PROTECTION DEVICES	EA	45
6	CONCRETE WASHOUT	EA	1
7	CLASS E RIP-RAP	TON	79

NOTES:

1. IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENT.
2. DISTURBED AREAS SHALL BE TEMPORARILY SEEDED OR MULCHED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
3. STORM SEWERS AND DRAINAGE WAYS SHALL BE PROTECTED FROM CONCRETE SLURRY PRODUCED BY SAWCUTTING AND CONCRETE GRINDING.

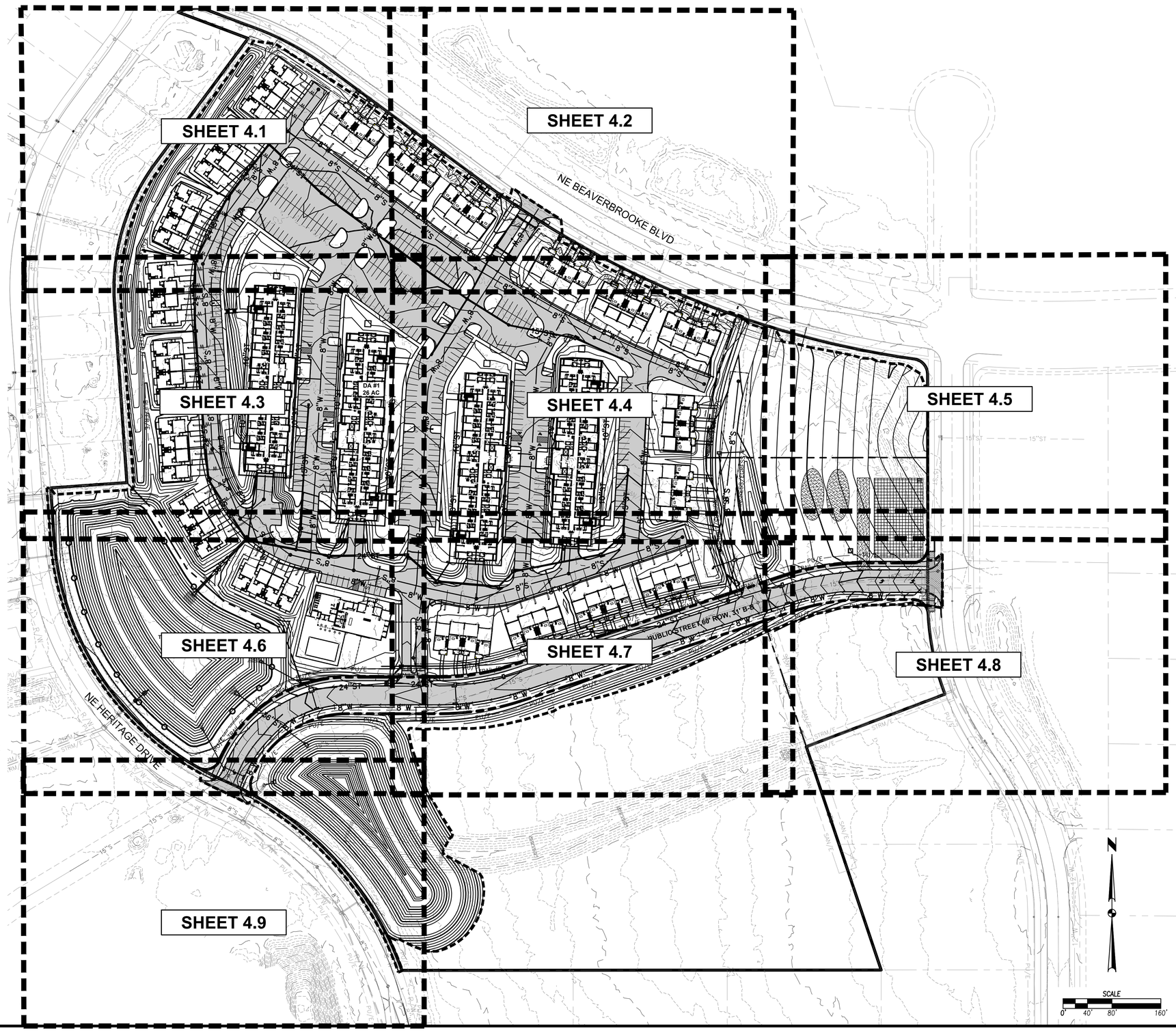
DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO AN UNNAMED TRIBUTARY OF LITTLE BEAVER CREEK ±1,300 FT

TOTAL AREA DISTURBED TO DISCHARGE POINT	26 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	93,600 CU FT
VOLUME PROVIDED IN FILTER SOCK (210 LF @ 2.0 CU FT/LF OF SOCK)	420 CU FT
VOLUME PROVIDED IN SILT FENCE (8,149 LF @ 4.5 CU FT/LF OF FENCE)	36,670 CU FT
VOLUME PROVIDED IN SILT FENCE CHECK DAM (1,025 LF @ 4.5 CU FT/LF OF FENCE)	4,612 CU FT
VOLUME PROVIDED IN EX. POND #1	282,419 CU FT
TOTAL VOLUME PROVIDED	324,121 CU FT

SWPPP LEGEND

DRAINAGE ARROW	X.XX %	AREA TO BE SEEDED	
GRADING LIMITS		UNDISTURBED AREA	
FILTER SOCK		RIP-RAP	
SILT FENCE		GRAVEL ENTRANCE	
SILT FENCE CHECK DAM		STAGING AREA	
TEMPORARY STANDPIPE		EXISTING POND	TSB #
INLET PROTECTION			
CONCRETE WASHOUT PIT			



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CIVIL DESIGN ADVANTAGE

HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN - OVERALL

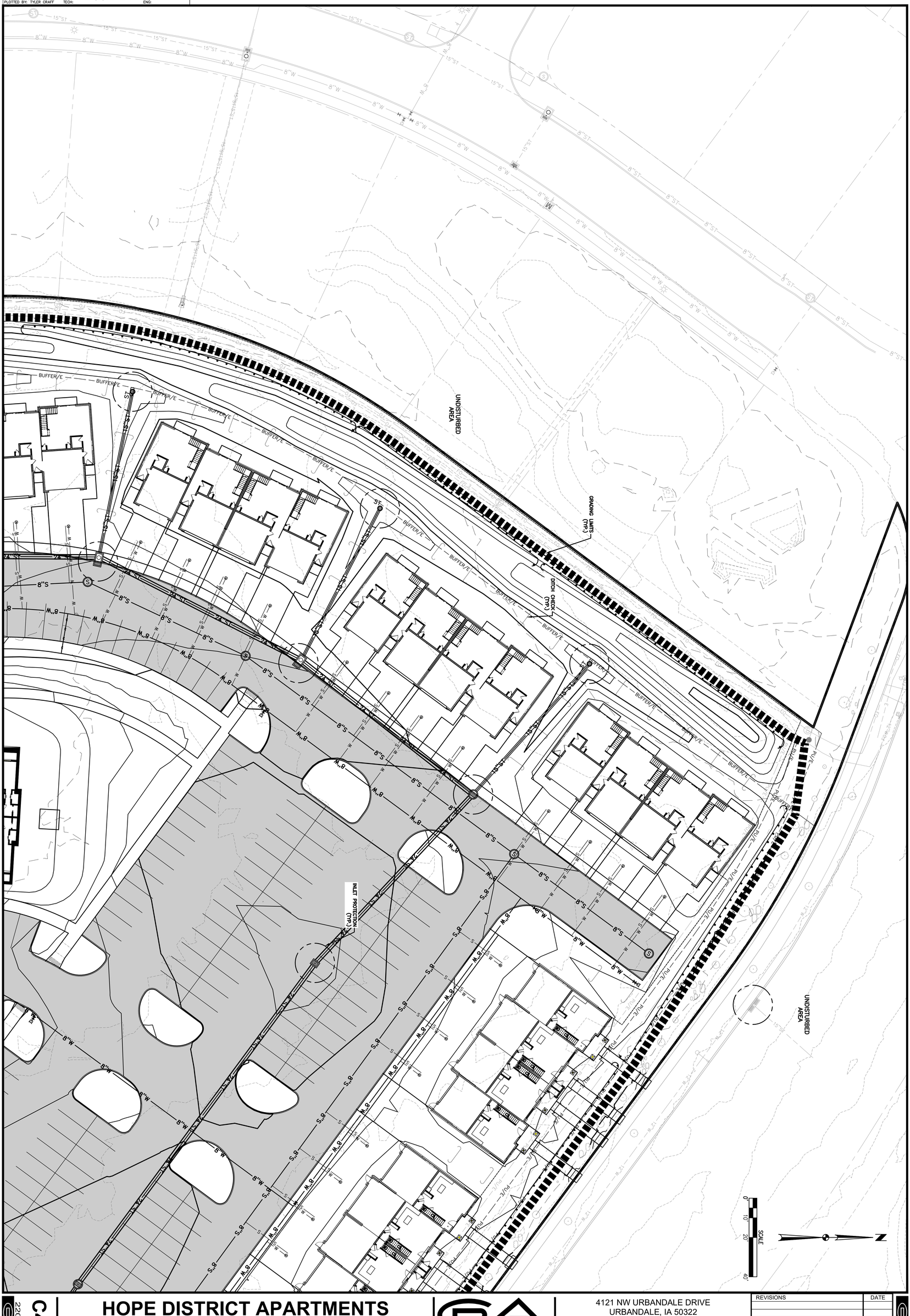
GRIMES, IOWA

C4.0

2205357

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2205357

C4.1

HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE
4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
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UNDISTURBED AREA

NE BEAVERBROOKE BLVD

GRADING LIMITS (TYP.)

DITCH CHECK (TYP.)

INLET PROTECTION (TYP.)

SILT FENCE (TYP.)

UNDISTURBED AREA

SCALE
0' 10' 20' 40'

HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

C4.2

2205357

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CIVIL DESIGN ADVANTAGE

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HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

C4.3

2205357

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HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

C4.4

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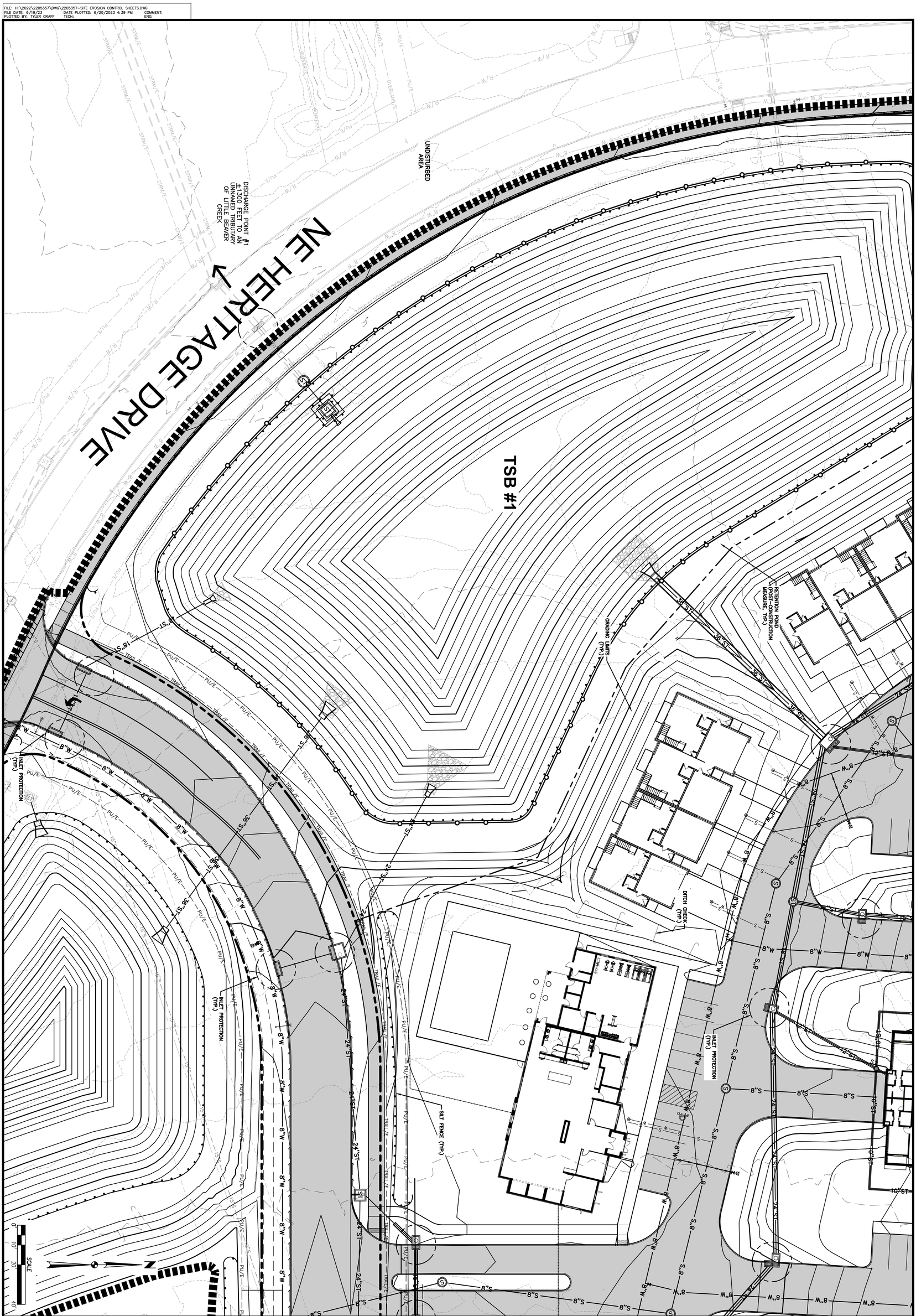
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HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

C4.6

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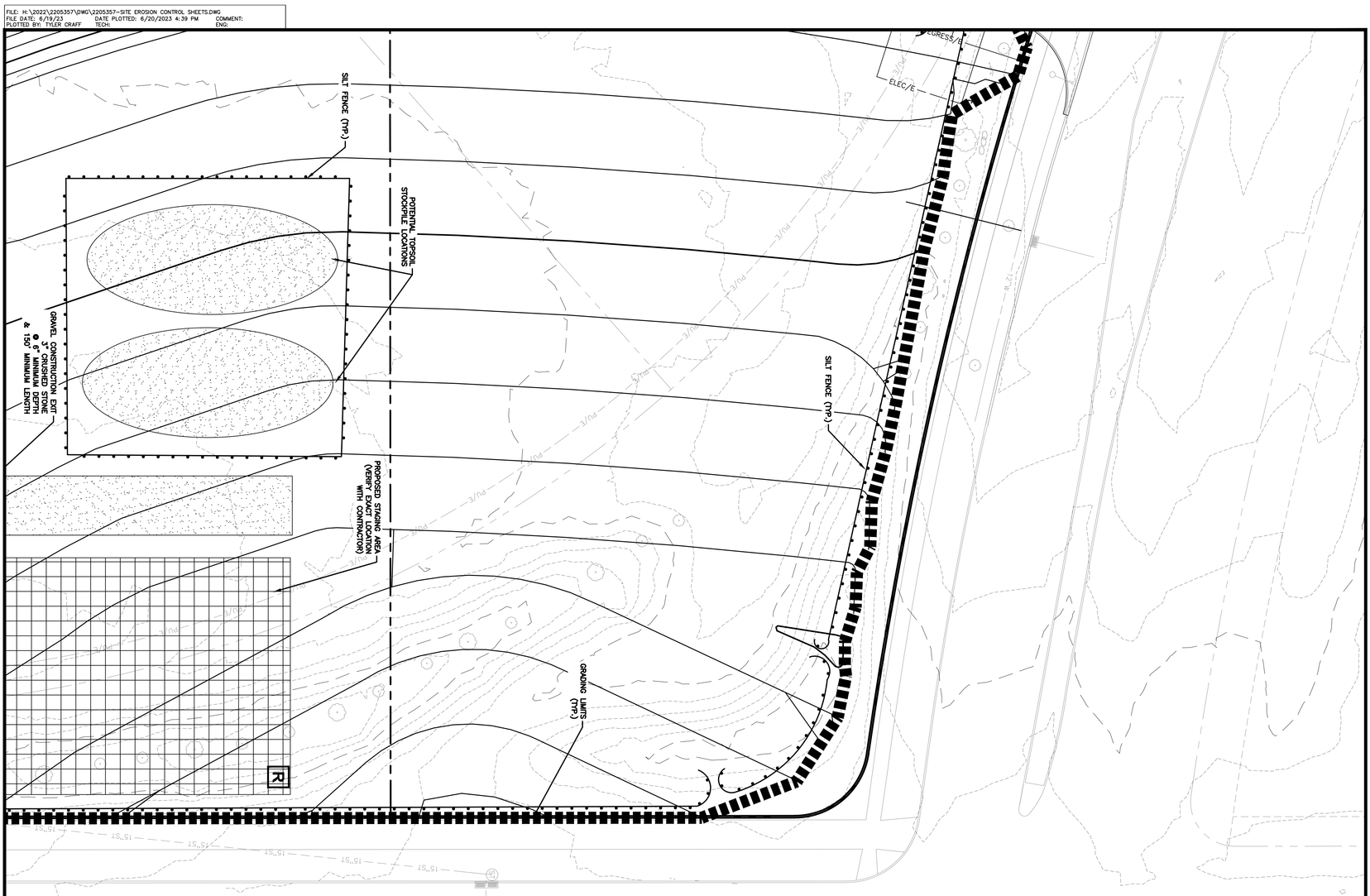
4121 NW URBANDALE DRIVE
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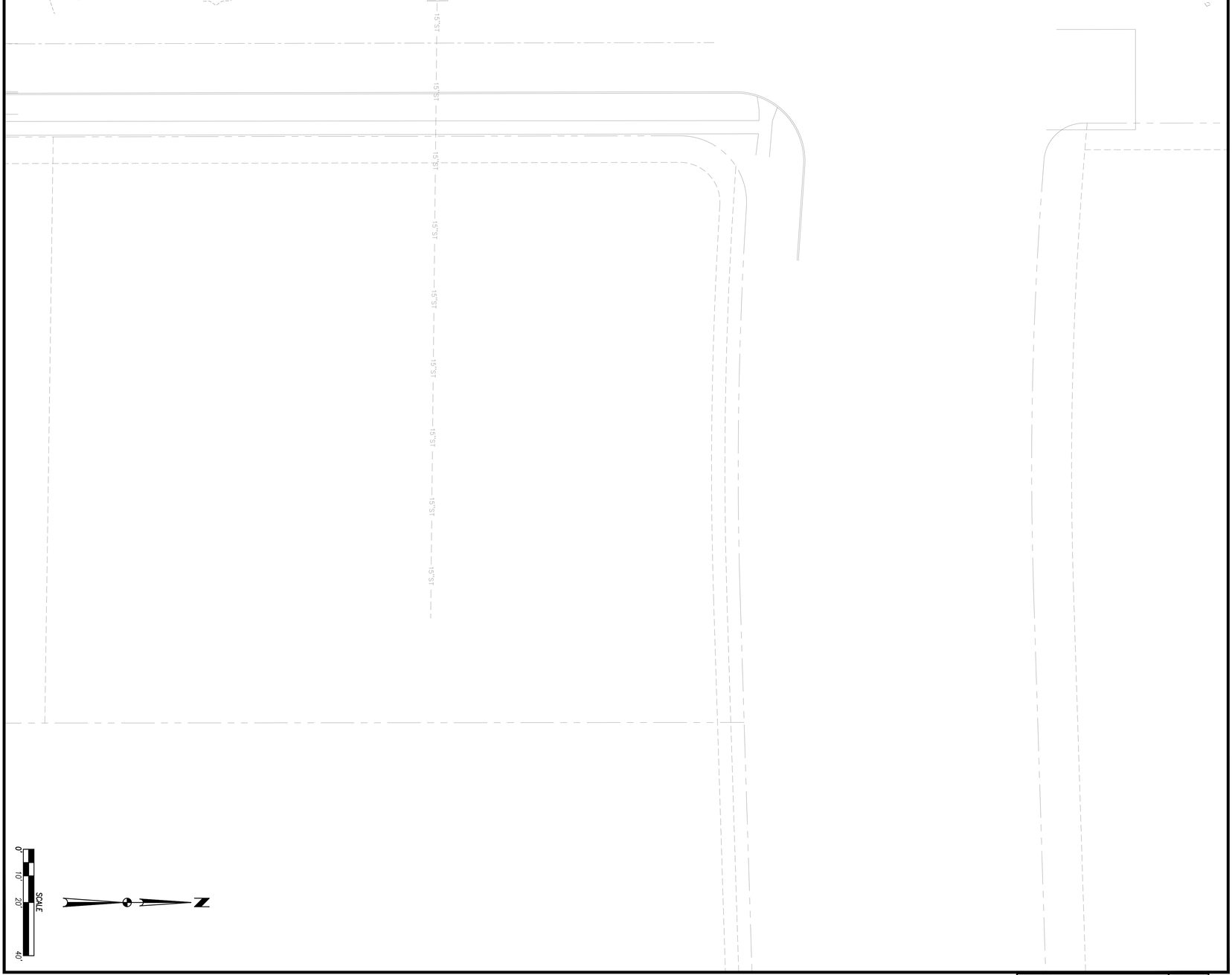
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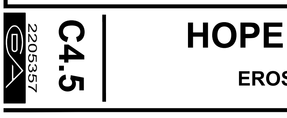
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HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

C4.5

2205357

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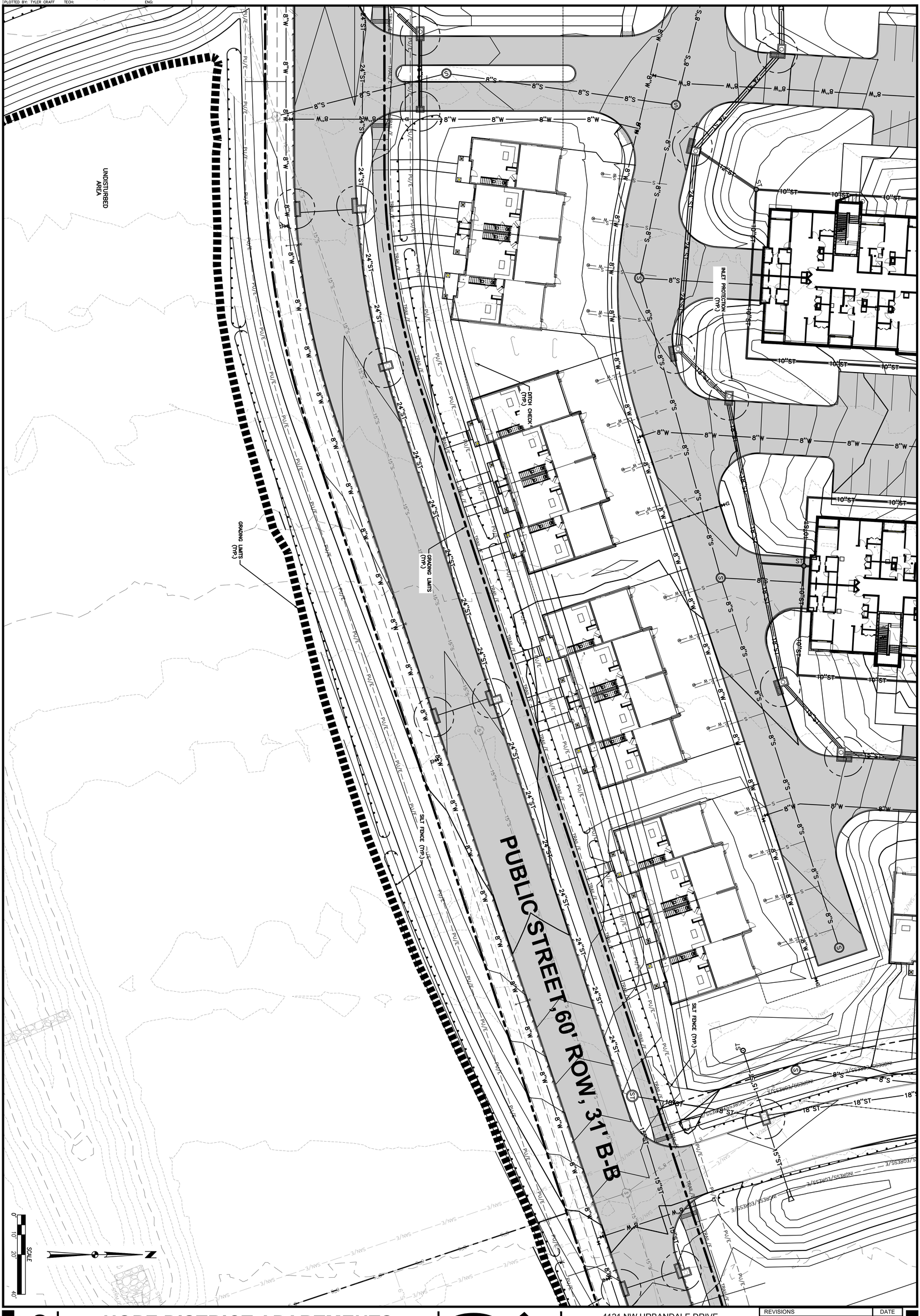
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HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

C4.7

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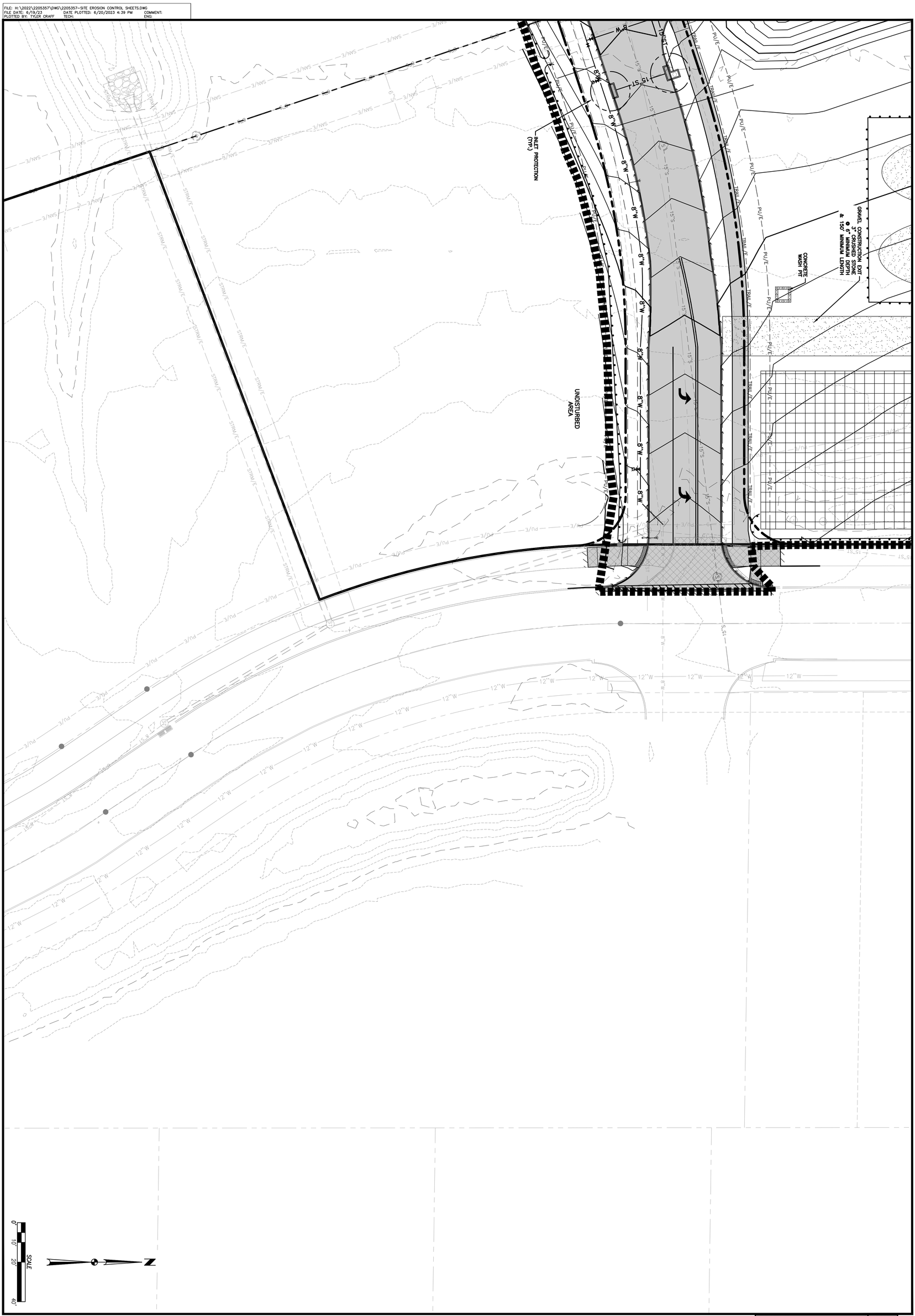
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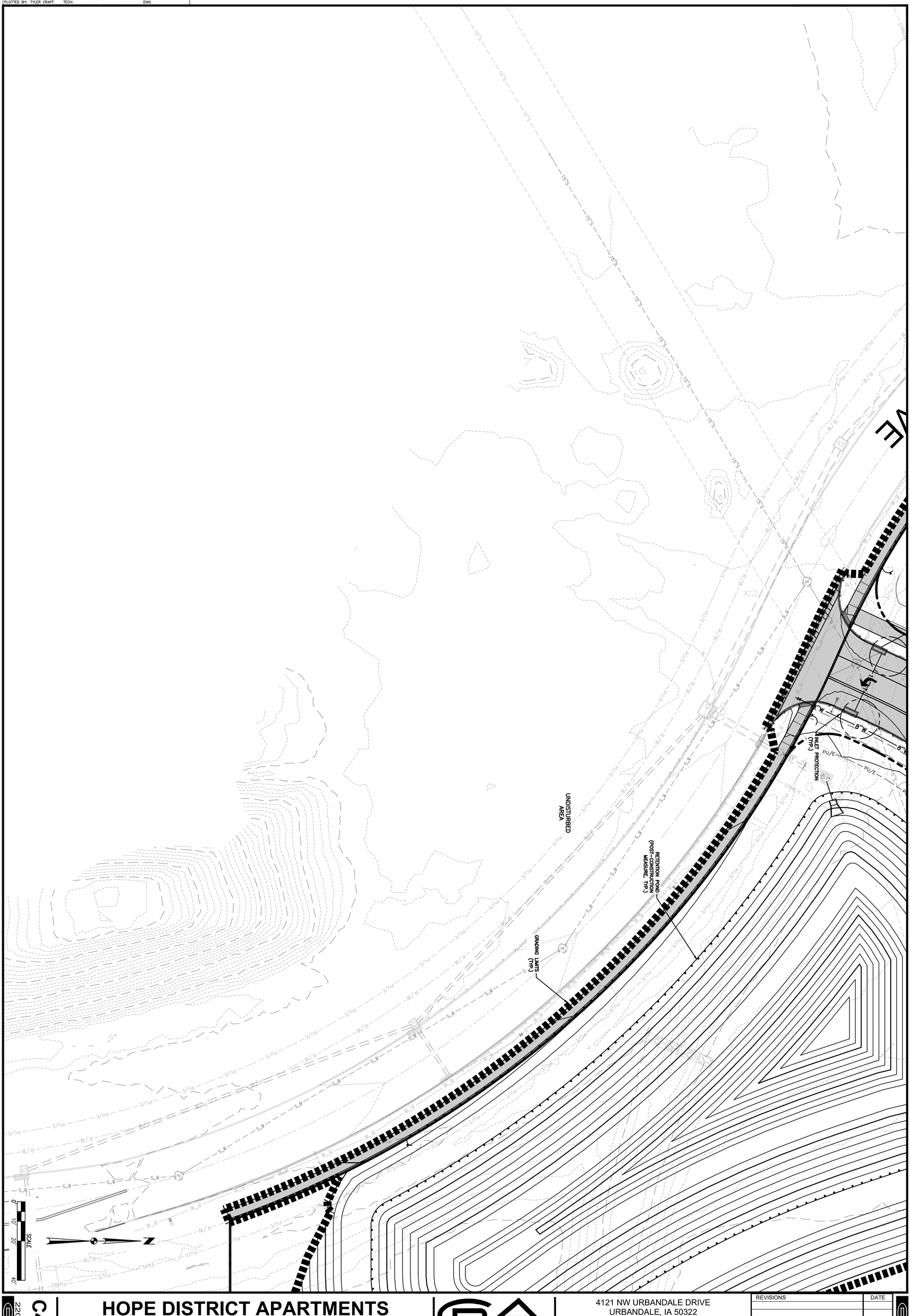
EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

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C4.9

HOPE DISTRICT APARTMENTS

EROSION AND SEDIMENT CONTROL PLAN

GRIMES, IOWA

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ENGINEER:
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UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR UTILITY SERVICE SIZES AND EXACT LOCATIONS. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
4. BACKFILL ALL UTILITY TRENCHES ACCORDING TO THE 2023 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY OF GRIMES SUPPLEMENTALS. MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATERMAINS.
5. ALL UTILITIES SHALL BE STUBBED TO 5 FEET FROM BUILDINGS. REFER TO MEP PLANS FOR DESIGN FROM 5' OUTSIDE OF BUILDING FACE.
6. ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES.
7. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY'S PLUMBING CODE.
8. 18" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN.
9. MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER MAINS.
10. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-8989 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
11. ALL WATERMAIN WORK, PUBLIC OR PRIVATE SHALL BE DONE IN ACCORDANCE WITH THE 2023 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
13. OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE RETENTION FACILITIES AND PRIVATE UTILITIES. PERIODIC MAINTENANCE AND CLEANING OF STORM AND SANITARY SEWER MAY BE NECESSARY.
14. CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS AND OTHER MATERIAL INTO NEW AND EXISTING SEWER SYSTEMS. SHOULD ANY CONTAMINATION OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AT NO COST TO THE OWNER. INSTALL SILT FENCE AT ALL PERMANENT STORM SEWER INLETS.
15. ALL MANHOLE CASTINGS IN 5" P.C.C. PAVEMENT SHALL BE BOXED OUT PER FIGURE 7010.103.
16. ALL SANITARY SEWER, STORM SEWER, AND WATER IMPROVEMENTS ARE PRIVATE UNLESS OTHERWISE NOTED.

ESTIMATED PROJECT QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
SANITARY		
SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 8" DIA	LF	2685
SANITARY SEWER SERVICE, 4" DIA	EA	72
SANITARY MANHOLE, TYPE SW-301, 48" DIA	EA	17
STORM		
STORM SEWER, TRENCHED, HDPE, 10" DIA	LF	2753
STORM SEWER, TRENCHED, HDPE, 12" DIA	LF	194
STORM SEWER, TRENCHED, HDPE, 15" DIA	LF	338
STORM SEWER, TRENCHED, HDPE, 18" DIA	LF	34
STORM SEWER, TRENCHED, RCP, 15" DIA	LF	947
STORM SEWER, TRENCHED, RCP, 18" DIA	LF	360
STORM SEWER, TRENCHED, RCP, 24" DIA	LF	1365
STORM SEWER, TRENCHED, RCP, 36" DIA	LF	125
PIPE APRON, RCP, 36" DIA	EA	1
FOOTING FOR CONCRETE PIPE APRON, RCP, 36" DIA	EA	1
PIPE APRON GUARD	EA	1
STORM CLEANOUT	EA	8
STORM MANHOLE, TYPE SW-401, 48" DIA	EA	2
INTAKE, HDPE, 24" DIA	EA	8
INTAKE, TYPE SW-501	EA	7
INTAKE, TYPE SW-502, 48" DIA.	EA	1
INTAKE, MODIFIED TYPE SW-502, 48" DIA	EA	1
INTAKE, TYPE SW-503	EA	9
INTAKE, TYPE SW-506	EA	6
INTAKE, MODIFIED TYPE SW-506	EA	1
INTAKE, TYPE SW-511	EA	3
WATER		
WATER MAIN, TRENCHED, PVC, 8" DIA	LF	4692
WATER SERVICE STUB, 1" DIA	EA	80
WATER SERVICE STUB, 6" DIA	EA	4
VALVE, 8" DIA	EA	15
FIRE HYDRANT ASSEMBLY	EA	15

N

SCALE
0' 30' 60' 120'

REVISIONS	DATE
THIRD SUBMITTAL	06/20/2023
SECOND SUBMITTAL	05/30/2023
FIRST SUBMITTAL	05/08/2023

4121 NW URBANDALE DRIVE
URBANDALE, IA 50322
PHONE: (515) 369-4400
ENGINEER: TECH:

CIVIL DESIGN ADVANTAGE

HOPE DISTRICT APARTMENTS

UTILITY PLAN - OVERALL

GRIMES, IOWA

C5.0

2205357

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FILE DATE: 6/20/2023
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HOPE DISTRICT APARTMENTS

UTILITY PLAN

GRIMES, IOWA

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CIVIL DESIGN ADVANTAGE
GRIMES, IOWA

HOPE DISTRICT APARTMENTS

UTILITY PLAN

C5.2

2205357



C5.3

2205357

HOPE DISTRICT APARTMENTS

UTILITY PLAN

GRIMES, IOWA

CIVIL DESIGN ADVANTAGE

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HOPE DISTRICT APARTMENTS

UTILITY PLAN

GRIMES, IOWA

C5.4

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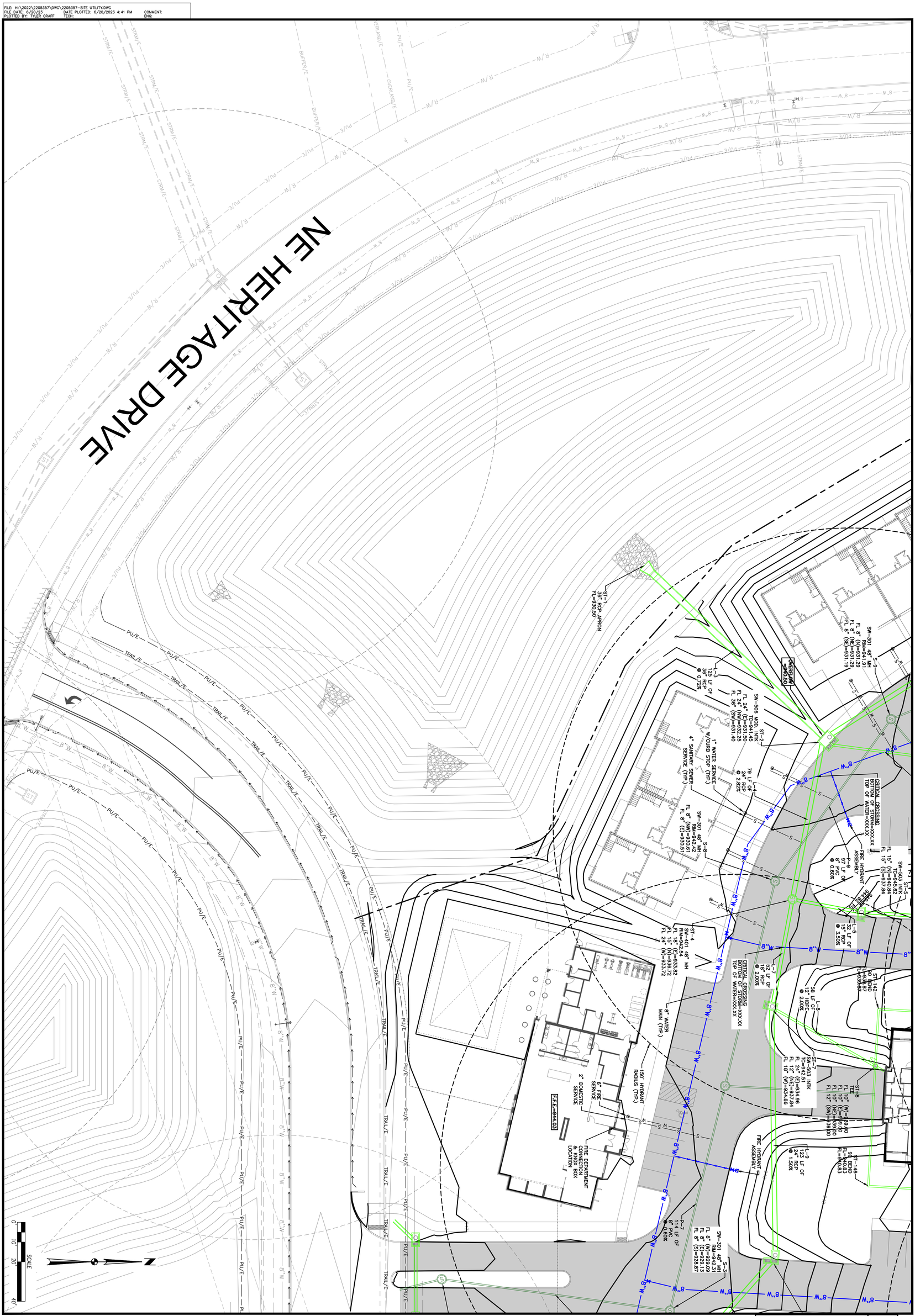
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HOPE DISTRICT APARTMENTS

UTILITY PLAN

GRIMES, IOWA

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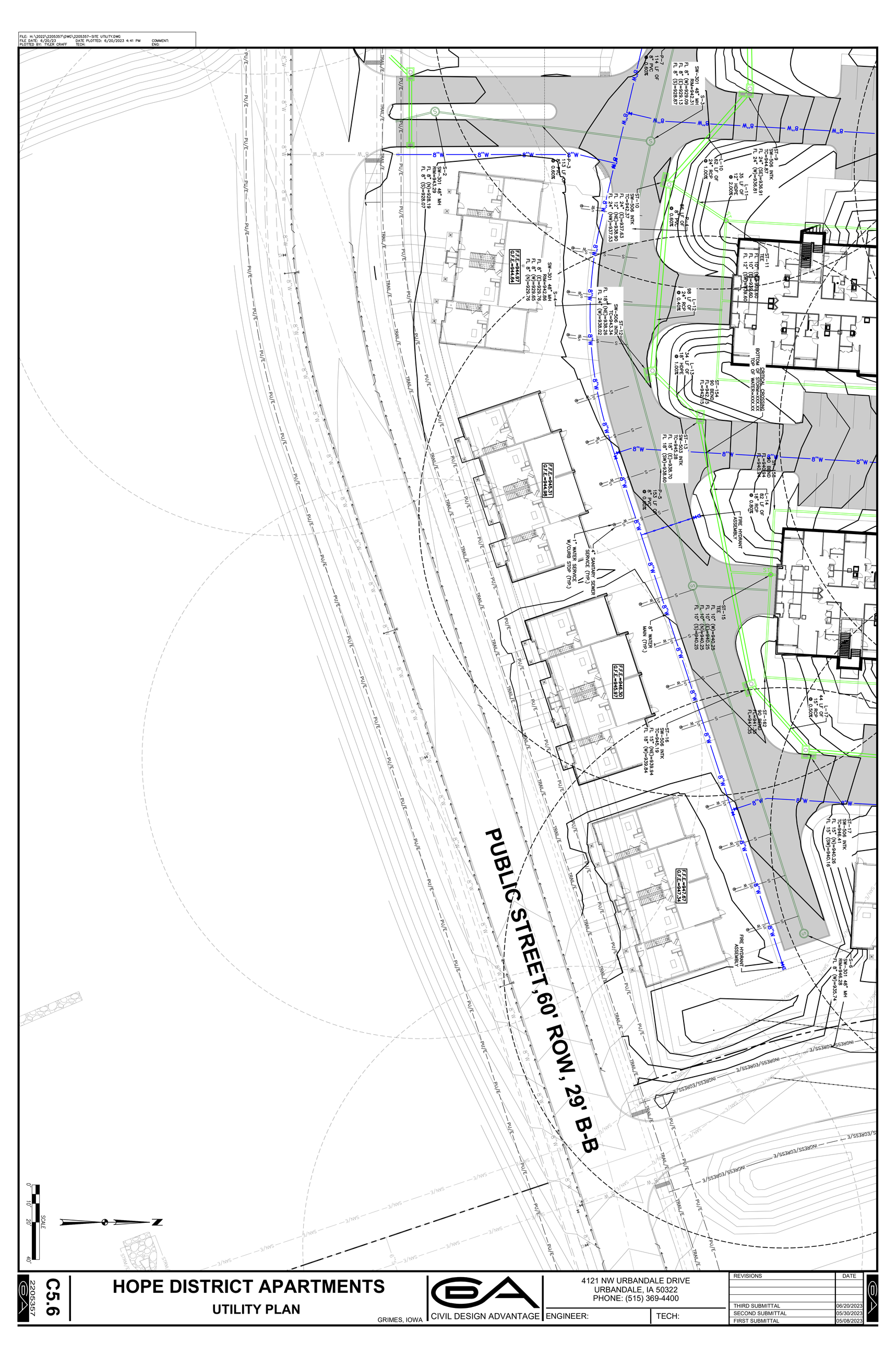
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HOPE DISTRICT APARTMENTS

UTILITY PLAN

GRIMES, IOWA

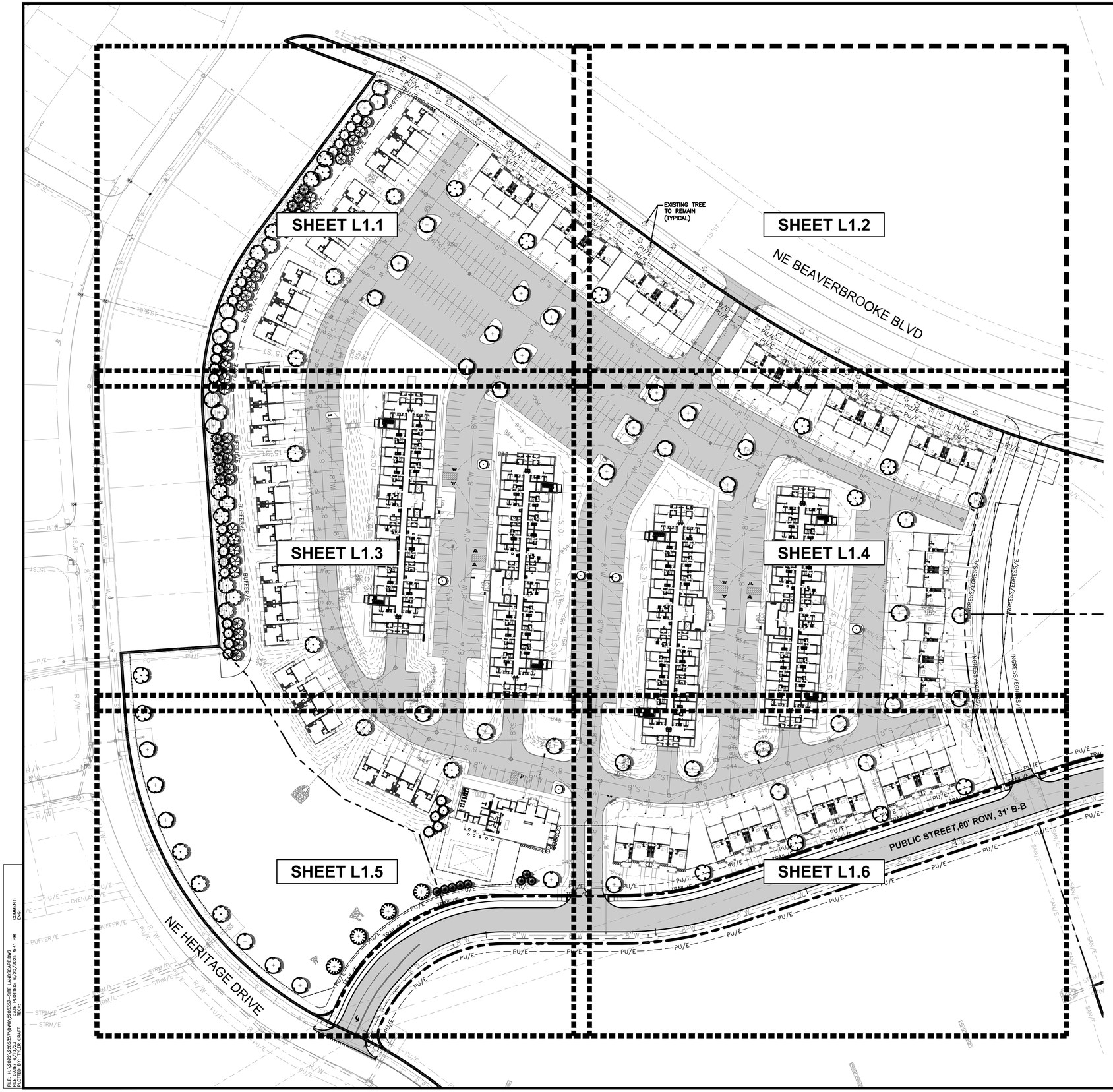
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LANDSCAPE NOTES

1. LOCATE ALL UTILITIES BEFORE ANY PLANTING BEGINS.
2. THE 2022 EDITION OF THE SUDAS STANDARD SPECIFICATIONS AND ALL CITY SUPPLEMENTALS, IF APPLICABLE, SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
3. TYPE, SIZE, AND QUALITY OF PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z60.1
4. ALL PLANT MATERIAL SHALL BE HEALTHY SPECIMENS WITHOUT DEFORMITIES, VOIDS AND OPEN SPACES, WITH WELL DEVELOPED BRANCH AND ROOT SYSTEMS; TRUE TO HEIGHT, SHAPE AND CHARACTER OF GROWTH OF THE SPECIES OR VARIETY.
5. SOD ALL DISTURBED AREAS.
6. BACKFILL TO TOP OF CURB. (MINUS 1 1/2" FOR SOD, IF REQ.)
7. WEED PREVENTER (PRE-EMERGENT) SHALL BE SPREAD OVER SOIL AFTER PLANTING AND BEFORE MULCHING IN ALL PLANTING BEDS PER MANUFACTURER'S RECOMMENDATIONS.
8. SHREDDED HARDWOOD MULCH SHALL BE PLACED AROUND ALL TREES, SHRUBS AND IN ALL PLANTING BEDS TO A (MIN) DEPTH OF 3".
9. ALL EDGING SHALL BE SPADE CUT EDGE.
10. PLANT QUANTITIES ARE SHOWN FOR INFORMATION ONLY, THE DRAWING SHALL PREVAIL IF ANY CONFLICTS ARISE.
11. ALL DEBRIS SPILLED IN THE PUBLIC R.O.W. SHALL BE PICKED UP BY THE CONTRACTOR AT THE END OF EACH WORK DAY.
12. CONTRACTOR SHALL WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INSTALLATION.
13. CONTRACTOR SHALL PROVIDE IRRIGATION DESIGN TO OWNER, IF REQUESTED, FOR APPROVAL.

LANDSCAPE REQUIREMENTS

AREAS

LOT	=	751,545 SF (17.25 ACRES)
OUTLOT	=	92,948 SF (2.18 ACRES)
TOTAL	=	844,493 SF (19.39 ACRES)

OPEN SPACE

OPEN SPACE REQUIRED: = 168,899 SF (20%)

OPEN SPACE LANDSCAPE REQUIREMENT

1 TREES PER 1,000 SF OF REQUIRED OPEN SPACE

REQUIRED: 169 TREES

PROVIDED

PROPOSED: 174 TREES, 99 SHRUBS, 90 PERRENIALS

EXISTING: 52 TREES

226 TOTAL (INCLUDING BUFFER & STREET TREES)*

STREET FRONTAGE NE BEAVERBROOKE BLVD (921 LF)

1 TREE REQUIRED FOR EVERY 50 FEET OF LOT FRONTAGE

REQUIRED: 19 TREES

PROVIDED: 52 TREES EXISTING TO REMAIN

STREET FRONTAGE NE HERITAGE DRIVE BLVD (544 LF)

1 TREE REQUIRED FOR EVERY 50 FEET OF LOT FRONTAGE

REQUIRED: 11 TREES

PROVIDED: 11 TREES

STREET FRONTAGE FUTURE STREET (872 LF)

1 TREE REQUIRED FOR EVERY 50 FEET OF LOT FRONTAGE

REQUIRED: 18 TREES

PROVIDED: 18 TREES

30' BUFFER (814 LF)

1 OVERSTORY, 2 UNDERSTORY & 2 EVERGREENS PER 50 LF.

REQUIRED: 17 OVERSTORY TREES, 34 UNDERSTORY TREES, 34 EVERGREEN TREES

PROVIDED: 21 OVERSTORY TREES, 34 UNDERSTORY TREES, 34 EVERGREEN TREES

*NOTE

REQUIRED STREET TREES AND BUFFER TREES COUNT TOWARDS REQUIRED OPEN SPACE TREES

PLANT SCHEDULE				
EVERGREEN TREES	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
AC	10	White Fir	Abies concolor	B&B, 6' HEIGHT
PC	15	Blue Spruce	Picea pungens 'Colorado Green'	B&B, 6' HEIGHT
PF	8	Pyramidal White Pine	Pinus strobus 'Fastigiata'	B&B, 6' HEIGHT
PG	14	Colorado Blue Spruce	Picea pungens 'Glauca'	B&B, 6' HEIGHT
ORNAMENTAL TREES	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
MP	15	Prairifire Crab Apple	Malus x 'Prairifire'	B&B, 6' HEIGHT
MS	19	Spring Snow Crab Apple	Malus x 'Spring Snow'	B&B, 6' HEIGHT
OVERSTORY TREES	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
AA	17	Autumn Blaze Red Maple	Acer rubrum 'Autumn Blaze'	B&B, 8" HEIGHT
AR	4	Red Maple	Acer rubrum	B&B, 8" HEIGHT
BF	6	Dakota Pinnacle® Asian White Birch	Betula platyphylla 'Fargo'	B&B, 8" HEIGHT
GS	22	Skyline Honey Locust	Gleditsia triacanthos 'Skyline'	B&B, 8" HEIGHT
QB	18	Swamp White Oak	Quercus bicolor	B&B, 8" HEIGHT
QR	26	Red Oak	Quercus rubra	B&B, 8" HEIGHT
SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
BW	86	Wintergreen Boxwood	Buxus microphylla 'Wintergreen'	18" HEIGHT
EC	3	Compact Burning Bush	Euonymus alatus 'Compactus'	24" HEIGHT
JS	6	Spartan Juniper	Juniperus chinensis 'Spartan'	36" HEIGHT
RR	4	Fine Line Buckthorn	Rhamnus frangula 'Fine Line'	36" HEIGHT
PERENNIALS	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
CK	42	Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 GAL.
HO	48	Stella de Oro Daylily	Hemerocallis x 'Stella de Oro'	1 GAL

SCALE 0' 30' 60' 120'

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CIVIL DESIGN ADVANTAGE
GRIMES, IOWA

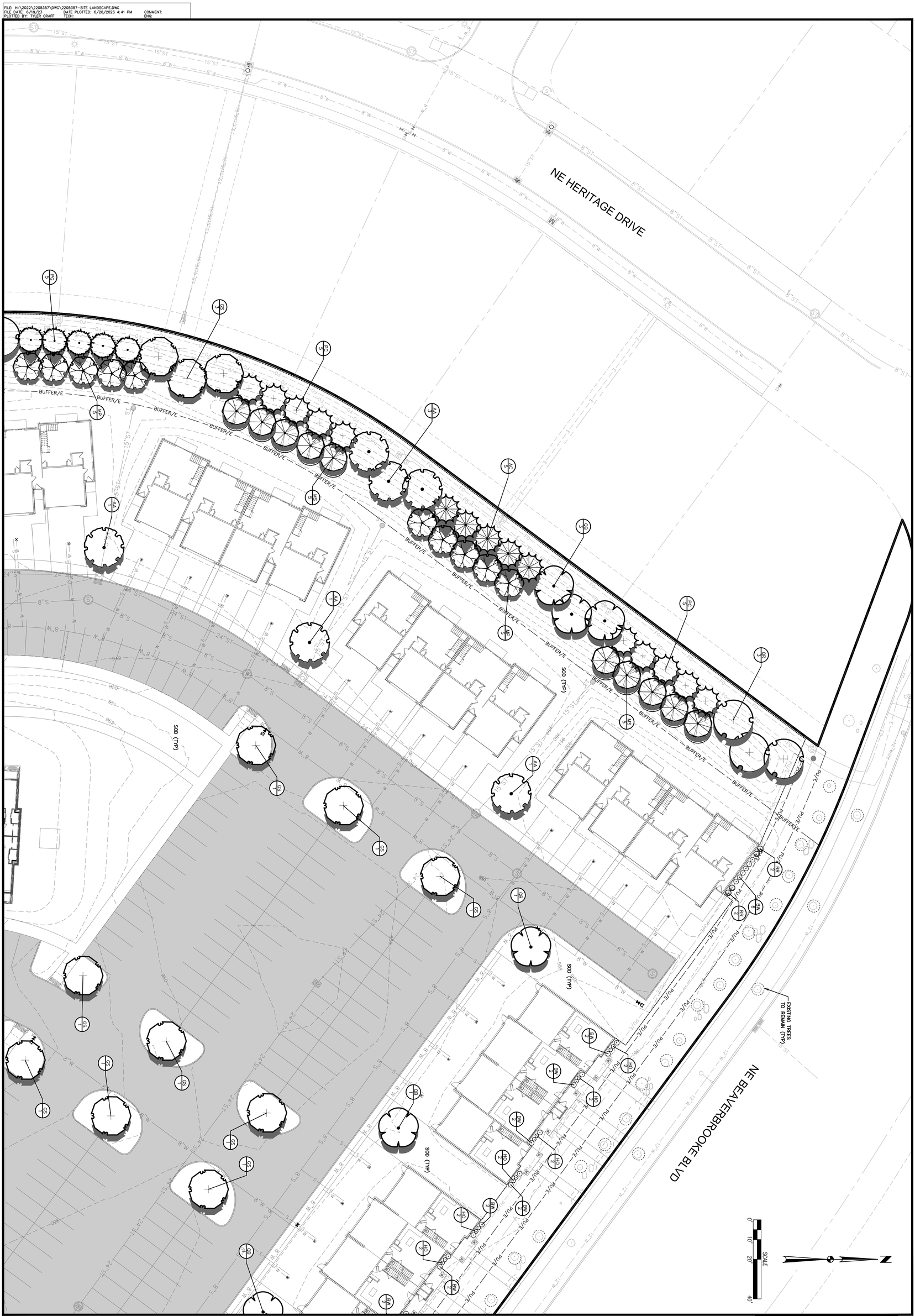
HOPE DISTRICT APARTMENTS

LANDSCAPE PLAN - OVERALL

L1.0

2205357

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LANDSCAPE PLAN

GRIMES, IOWA

L1.1

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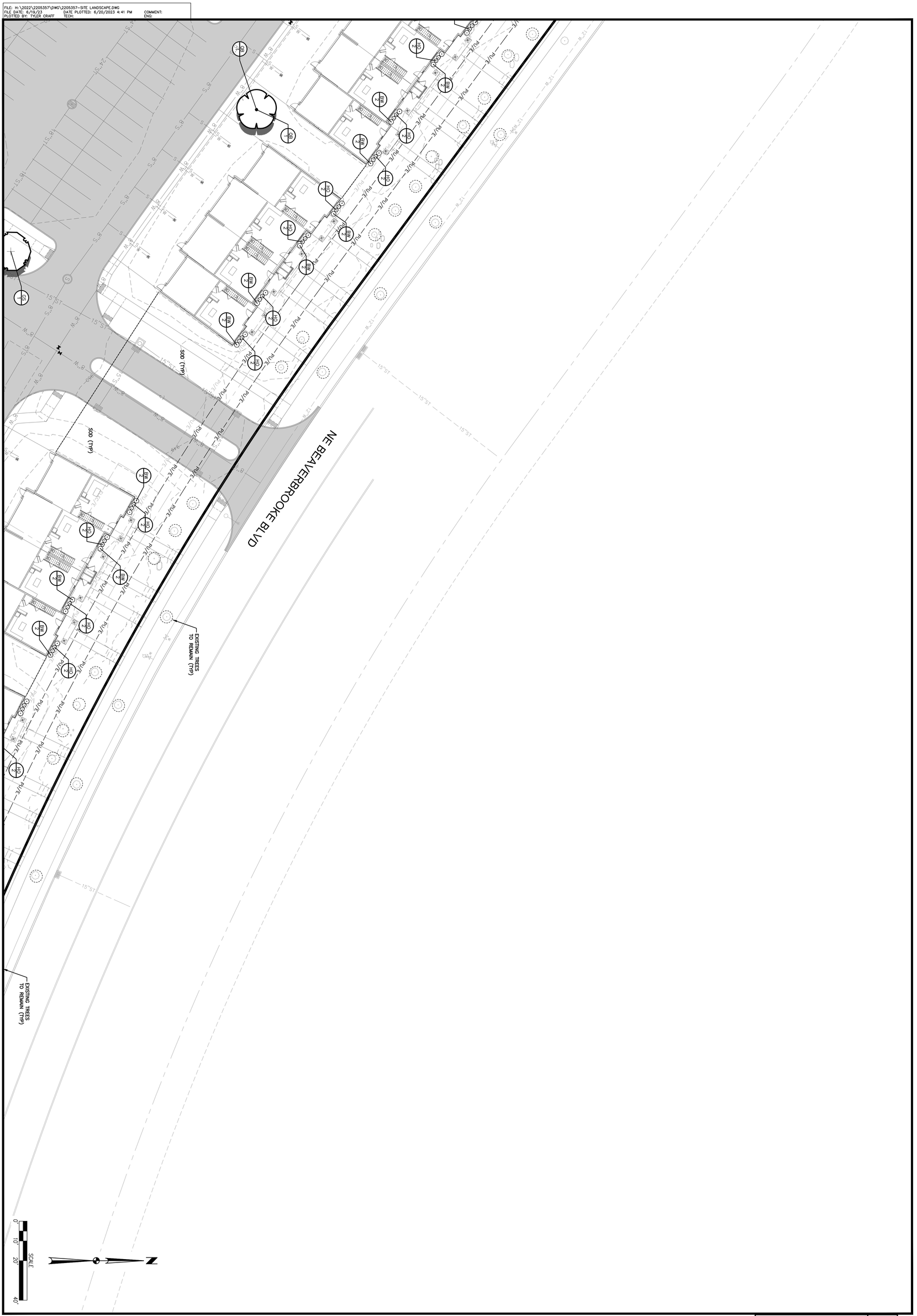
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HOPE DISTRICT APARTMENTS

LANDSCAPE PLAN

GRIMES, IOWA

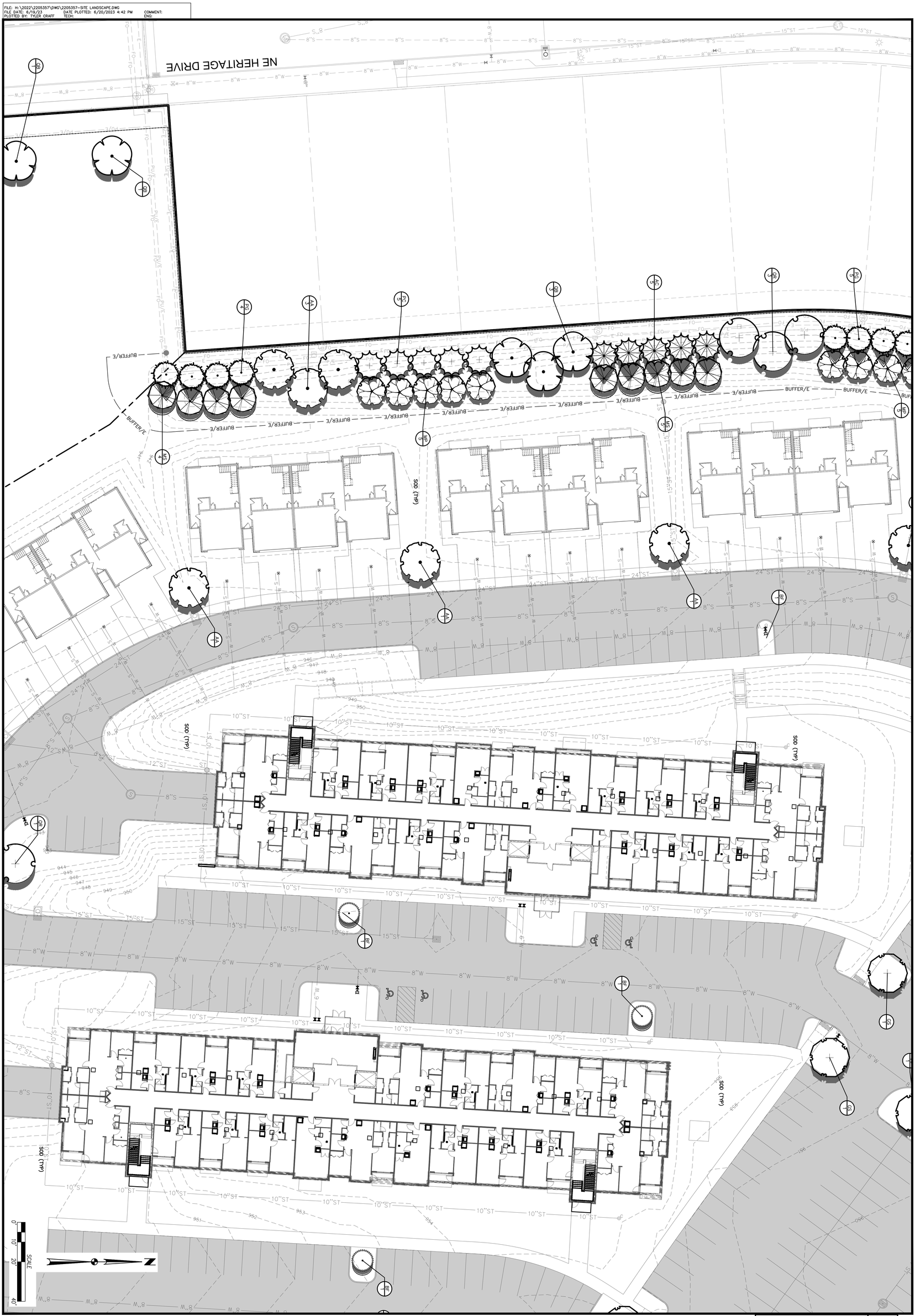
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CIVIL DESIGN ADVANTAGE
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HOPE DISTRICT APARTMENTS

LANDSCAPE PLAN

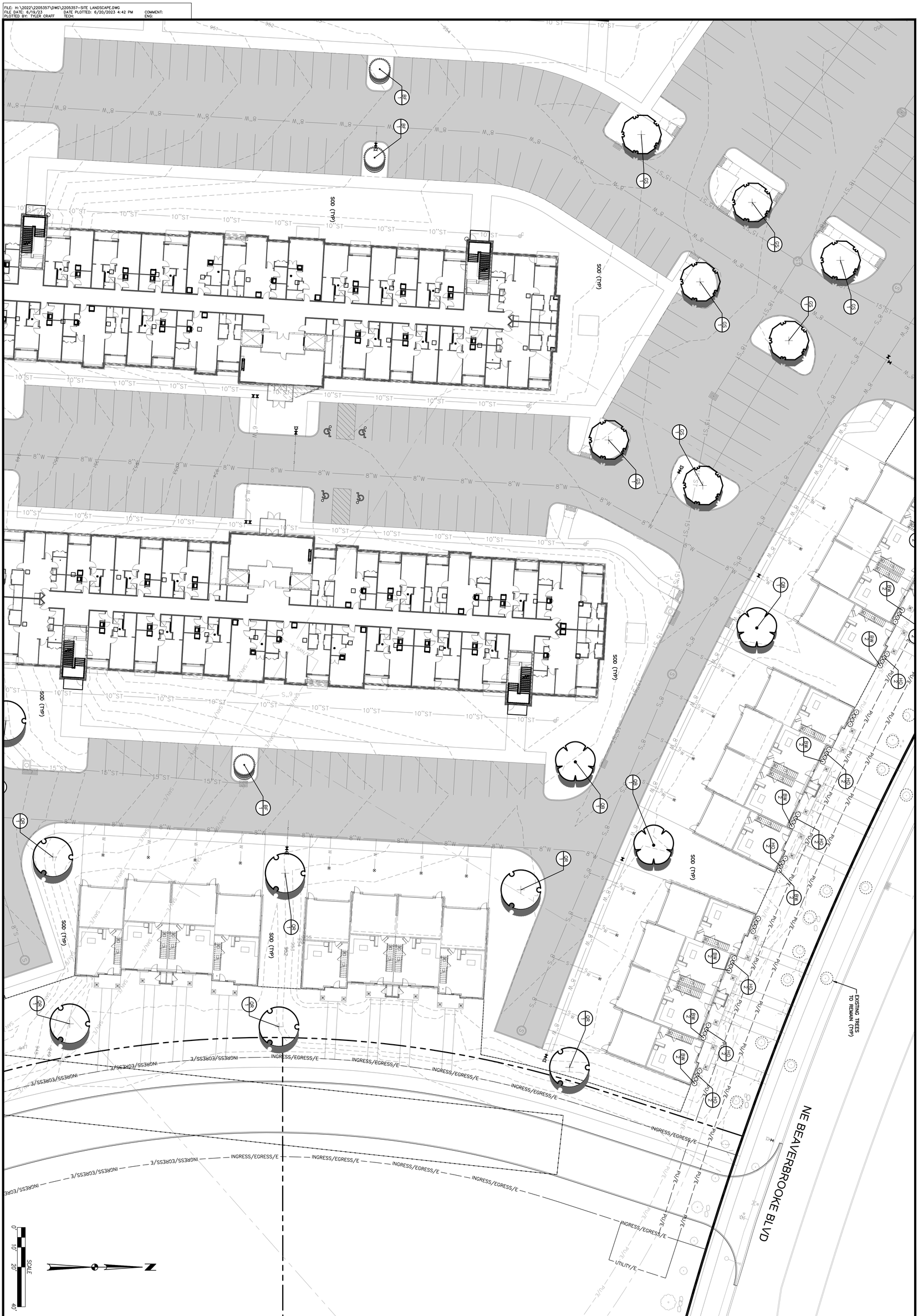
GRIMES, IOWA

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HOPE DISTRICT APARTMENTS

LANDSCAPE PLAN

GRIMES, IOWA

L1.4

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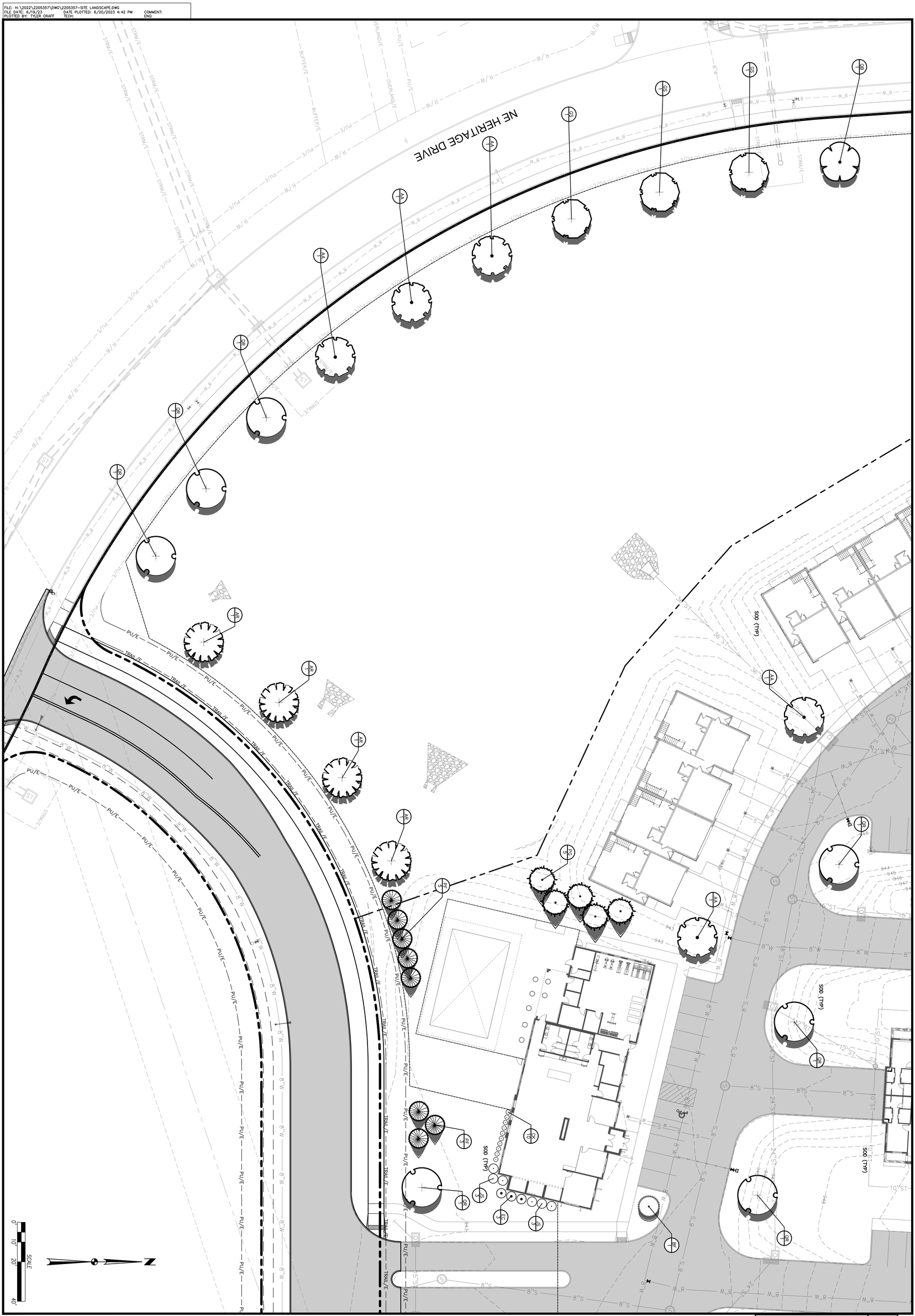
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GRIMES, IOWA

L1.5

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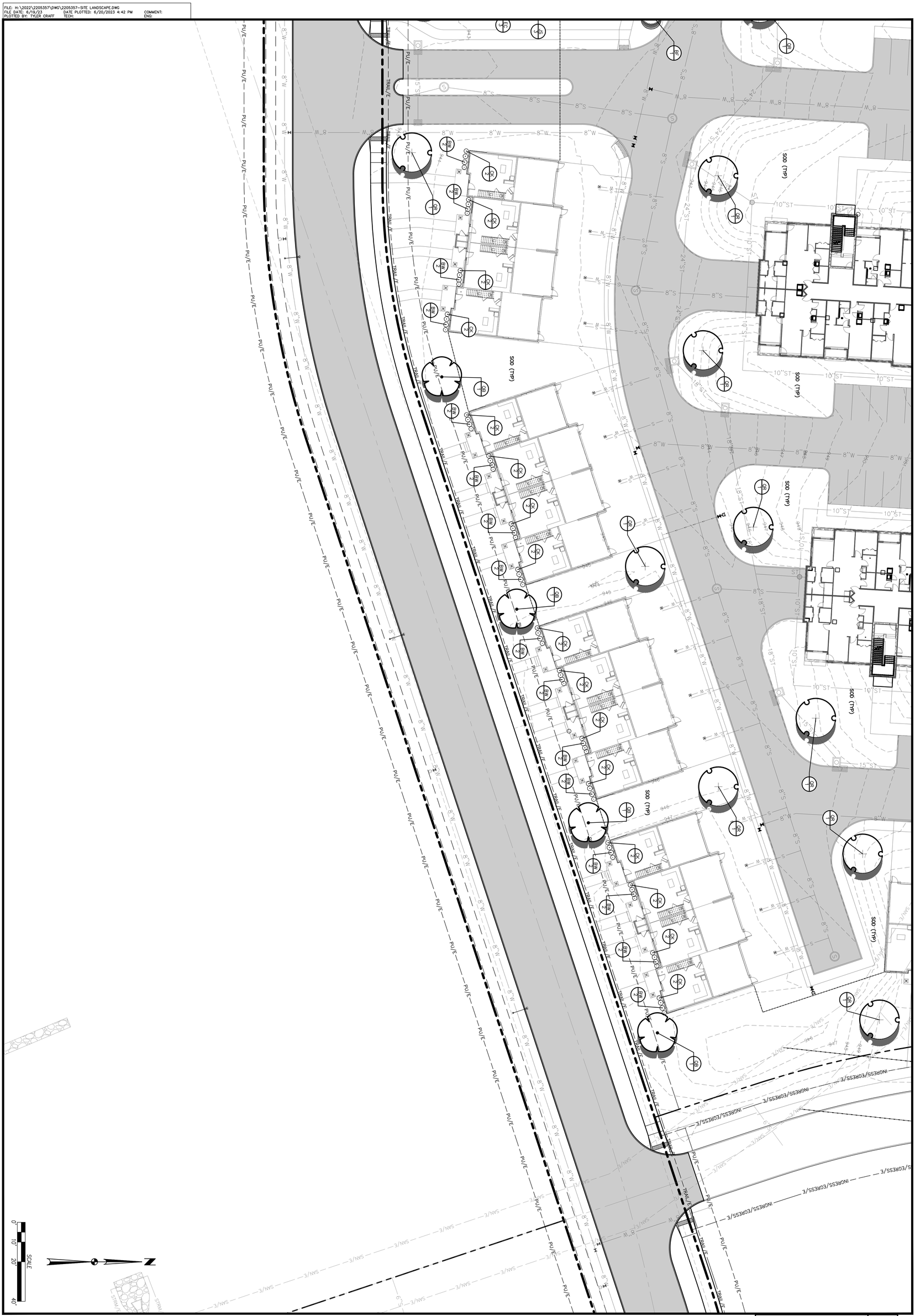
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HOPE DISTRICT APARTMENTS

LANDSCAPE PLAN

GRIMES, IOWA

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NOTE: GRADES DEPICTED FOR DIAGRAMATTIC AND REPRESENTATIONAL PURPOSES ONLY. CIVIL ELEMENTS INCLUDING BUT NOT LIMITED TO GRADING, SIDEWALKS, PAVING ARE STILL IN DEVELOPMENT



1 SCHEMATIC - FRONT ELEVATION

SCALE: 3/32" = 1'-0"

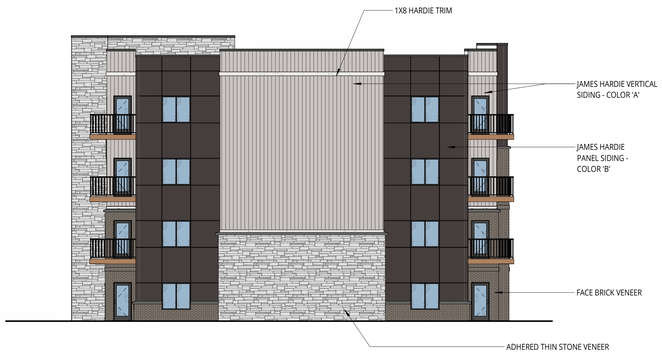


2 SCHEMATIC - REAR ELEVATION

SCALE: 3/32" = 1'-0"

CODE - ELEVATION MATERIAL PERCENTAGES (OVERALL)

ELEVATION	WALL AREA	% OF TOTAL
EAST (FRONT)		
Elev Calcs_Canopy/Louver	23 SF	0.2%
Elev Calcs_Glazing	3,627 SF	24.9%
Elev Calcs_Masonry/Stone	4,149 SF	28.5%
Elev Calcs_Siding	6,770 SF	46.5%
	14,568 SF	100.0%
NORTH (LEFT)		
Elev Calcs_Glazing	352 SF	9.7%
Elev Calcs_Masonry/Stone	1,082 SF	29.7%
Elev Calcs_Siding	2,213 SF	60.7%
	3,647 SF	100.0%
SOUTH (RIGHT)		
Elev Calcs_Canopy/Louver	50 SF	1.2%
Elev Calcs_Glazing	354 SF	8.7%
Elev Calcs_Masonry/Stone	1,497 SF	36.7%
Elev Calcs_Siding	2,179 SF	53.4%
	4,080 SF	100.0%
WEST (BACK)		
Elev Calcs_Glazing	3,429 SF	22.8%
Elev Calcs_Masonry/Stone	4,528 SF	30.1%
Elev Calcs_Siding	7,088 SF	47.1%
	15,045 SF	100.0%



3 SCHEMATIC - NORTH ELEVATION

SCALE: 3/32" = 1'-0"



4 SCHEMATIC - SOUTH ELEVATION

SCALE: 3/32" = 1'-0"



5 MAIN ENTRY PERSPECTIVE

SCALE:

PROPERTY OF

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STUDIO ARCHITECTURE || INTERIORS
509 East Scenic Valley Ave.
Indianola, Iowa 50125
p: 515.961.5386
f: 515.961.0468
www.downingconstruct.com
www.downingplanroom.com

HOPE DISTRICT APARTMENTS

TBD
GRIMES, IA 50111

DESIGN DEVELOPMENT PLAN(S) - NOT FOR CONSTRUCTION

DISCOVER/ ANALYZE | DEVELOP | COMMIT | DELIVER

DRAWN BY: **Precon. Team**

ORIGINAL CONSTRUCTION DOCUMENT
TBD

REVISIONS

PLAN NO. = **90-163**

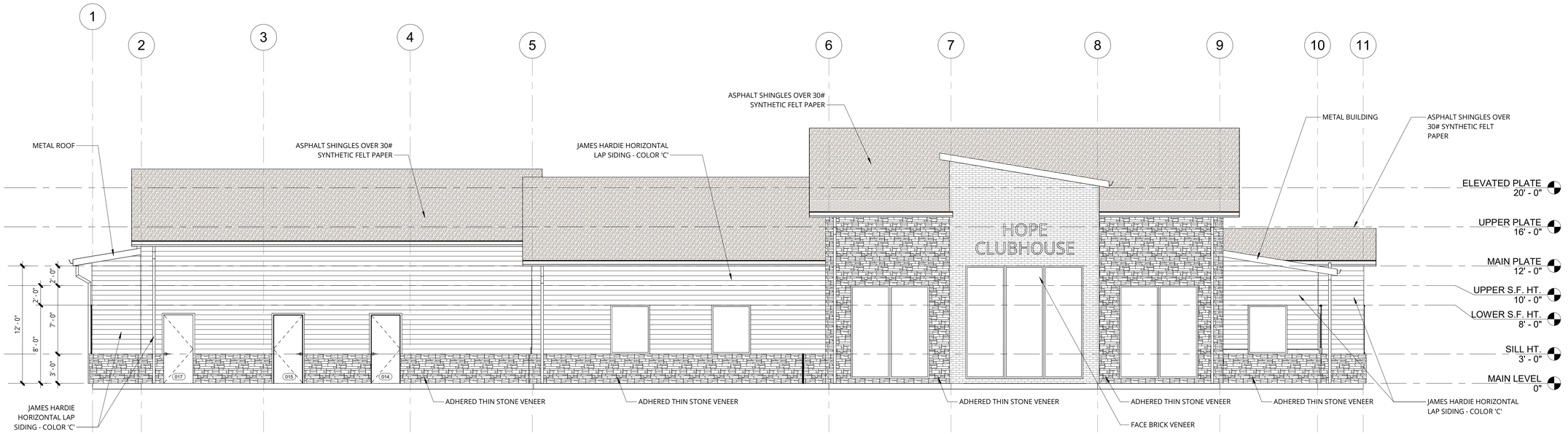
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SCHEMATIC EXTERIOR ELEVATIONS

SHEET NO.

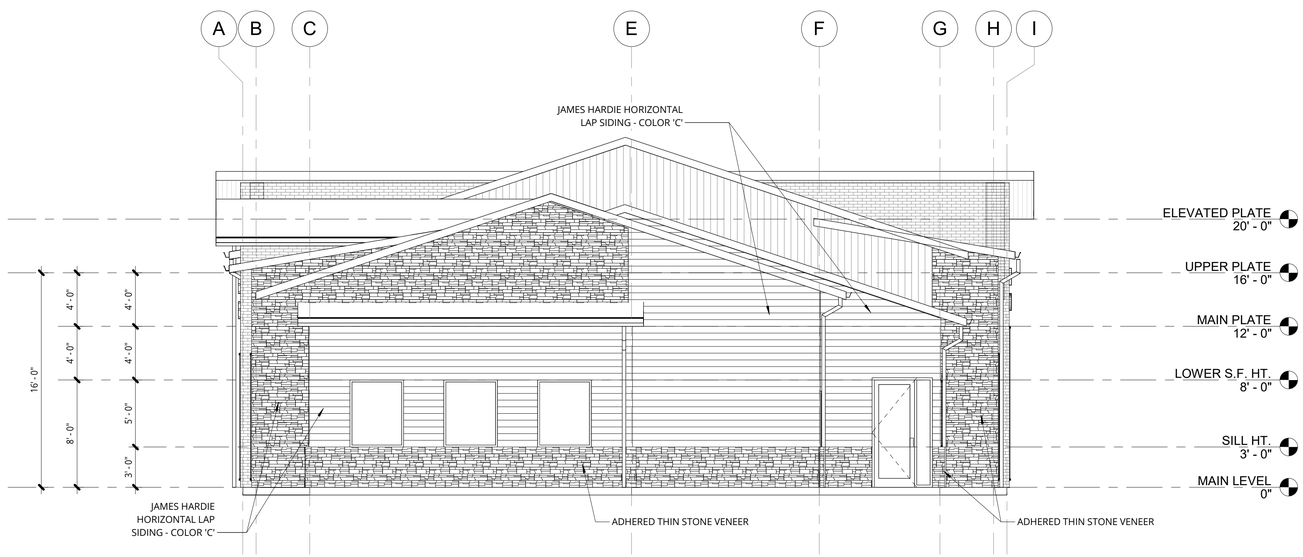
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1 SOUTH ELEVATION

SCALE: 3/16" = 1'-0"



2 WEST ELEVATION

SCALE: 3/16" = 1'-0"

✻ Emergency Egress
One sash of this group must comply with governing fire and building codes.

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HOPE DISTRICT - CLUBHOUSE
TBD
GRIMES, IA 50111

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DRAWN BY: **Precon. Team**

ORIGINAL CONSTRUCTION DOCUMENT
TBD

REVISIONS

06/20/2023 - DD CHECK
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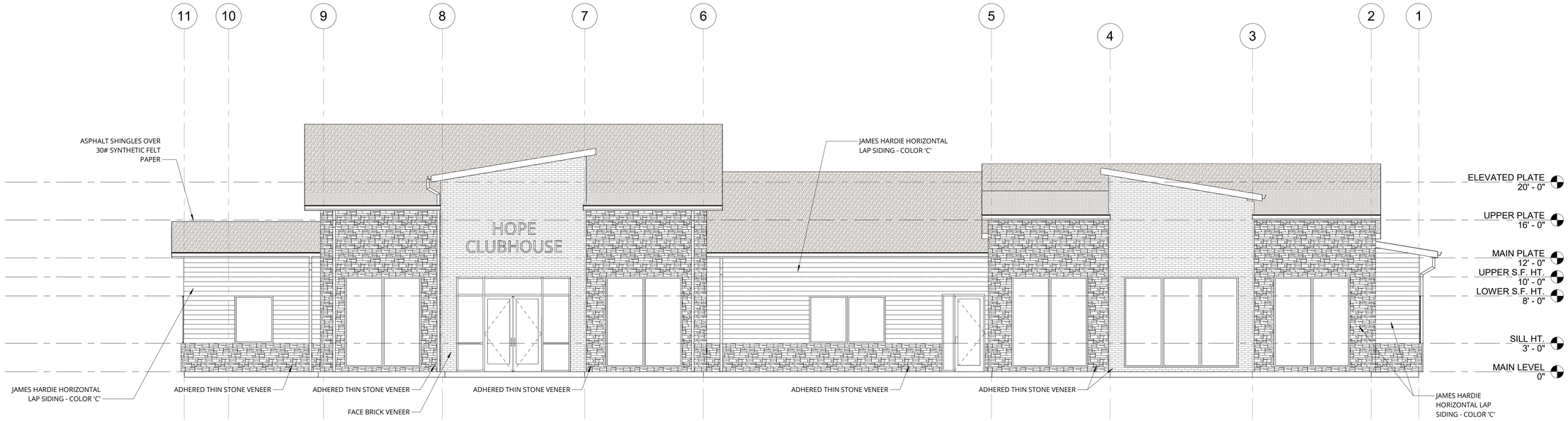
PLAN NO. = **90-155**

DWG. LIST

EXTERIOR ELEVATIONS

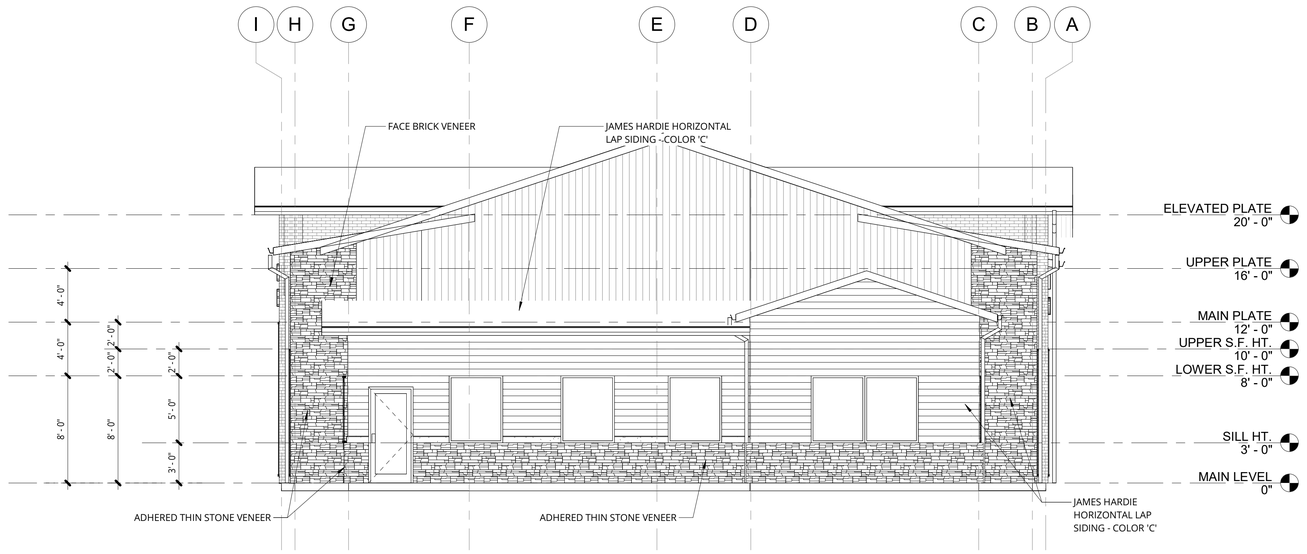
SHEET NO.

A-200



1 NORTH ELEVATION

SCALE: 3/16" = 1'-0"



2 EAST ELEVATION

SCALE: 3/16" = 1'-0"

* Emergency Egress
One sash of this group must comply with governing fire and building codes.

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p: 515.961.5386
f: 515.961.0468
www.downingconstruct.com
www.downingplanroom.com

HOPE DISTRICT - CLUBHOUSE
TBD
GRIMES, IA 50111

DESIGN DEVELOPMENT PLAN(S) - NOT FOR CONSTRUCTION

DISCOVER/ ANALYZE | DESIGN DEVELOP | COMMIT | DELIVER

DRAWN BY: **Precon. Team**

ORIGINAL CONSTRUCTION DOCUMENT
TBD

REVISIONS

06/20/2023 - DD CHECK
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PLAN NO. = **90-155**

DWG. LIST

EXTERIOR ELEVATIONS

SHEET NO.

A-201



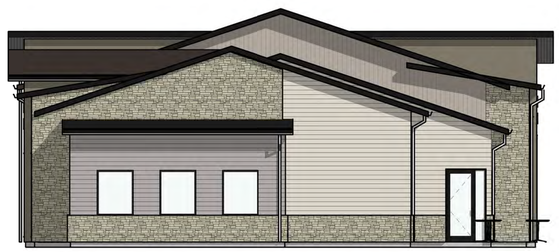
1 COLOR - NORTH ELEVATION

SCALE: 1/8" = 1'-0"



2 COLOR - SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



3 COLOR - WEST ELEVATION

SCALE: 1/8" = 1'-0"



4 COLOR - EAST ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL PERCENTAGES

NORTH FACADE

MATERIAL	AREA	PERCENTAGE
BRICK VENEER	393 SF	19%
STONE	689 SF	33%
SIDING	373 SF	18%
GLAZING	635 SF	30%
TOTAL	2,090 SF	100%

EAST FACADE

MATERIAL	AREA	PERCENTAGE
BRICK VENEER	62 SF	5%
STONE	280 SF	25%
SIDING	662 SF	59%
GLAZING	124 SF	11%
TOTAL	1,128 SF	100%

SOUTH FACADE

MATERIAL	AREA	PERCENTAGE
BRICK VENEER	191 SF	10%
STONE	534 SF	28%
SIDING	823 SF	43%
GLAZING	350 SF	19%
TOTAL	1,898 SF	100%

WEST FACADE

MATERIAL	AREA	PERCENTAGE
BRICK VENEER	107 SF	10%
STONE	395 SF	35%
SIDING	560 SF	50%
GLAZING	60 SF	5%
TOTAL	1,122 SF	100%

EXTERIOR MATERIAL SELECTIONS

NOTE:
THESE SELECTIONS ARE PROVIDED TO SHOW "COLOR INTENT".

FINAL SELECTIONS CAN/ OR WILL BE MADE BY THE OWNER AS THIS PROJECT PROGRESSES.

ROOFING: SHINGLES
CERTAINTEED
- LANDMARK PRO
  - MAX DEF
    - SHENANDOAH

ROOFING: FASCIA & SOFFIT PANELS
ROLEX or SIMILAR
- SHELL
  - INCLUDES:
    - VISIBLE FLASHINGS

ROOFING: GUTTER & DOWNSPOUTS
ROLEX or SIMILAR
- SHELL

HARDIEPANEL SIDING
JAMES HARDIE
- PAINT COLOR
  - SHERWIN WILLIAMS
    - SW7674
      - PEPPERCORN
        - PAINT GARAGE DOOR TO MATCH

VERTICAL BOARD-N-BATTEN
JAMES HARDIE
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  - SHERWIN WILLIAMS
    - SW7024
      - FUNCTIONAL GRAY

HARDIEPLANK LAP SIDING
JAMES HARDIE
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    - SW9165
      - GOSSAMER VEIL

HARDIETRIM
JAMES HARDIE
- PAINT COLOR
  - SHERWIN WILLIAMS
    - SW7551
      - GREEK VILLA

LIMESTONE BANDING @ BRICK VENEER
HEBRON BRICK
- COLOR: MATCH BRICK
  - T.B.D.

BRICK MASONRY VENEER
HEBRON BRICK
- SIZE: MODULAR
  - SLATE GRAY

LIMESTONE BANDING/ WINDOW SILL TRIM
CORONADO STONE PRODUCTS
- COLOR: MATCH LIMESTONE

CULTURED STONE VENEER
CORONADO STONE PRODUCTS
- CUT: SAWTOOTH LEDGE
  - COLOR: CHALK

WINDOW CLAD EXTERIOR FINISH
PELLA IMPERVIA
- BLACK
  - INCLUDES:
    - VISIBLE FLASHINGS
      V.E. OPTION: 250 SERIES (SEE A-200 FOR EGRESS SIZING CHANGES)

POST STAIN COLOR
SHERWIN WILLIAMS
- STAIN COLOR: GRAY SKY
  - DB 2115

STOREFRONT
KAWNEER OR SIMILAR
- ANODIZED BLACK
  - INCLUDES:
    - VISIBLE FLASHINGS

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DRAWN BY: **Precon. Team**

ORIGINAL CONSTRUCTION DOCUMENT
TBD

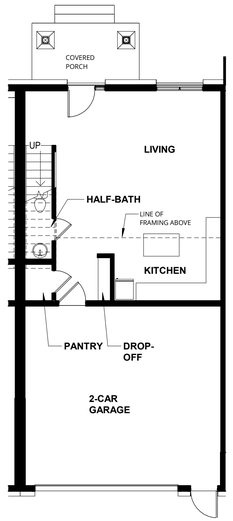
REVISIONS

06/20/2023 - DD CHECK
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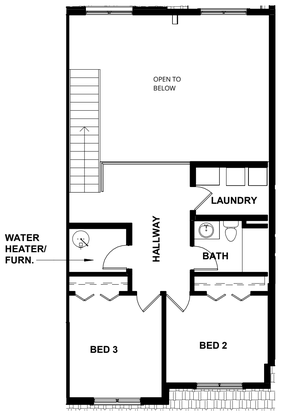
PLAN NO. = **90-155**

DWG. LIST
COLOR EXTERIOR ELEVATIONS

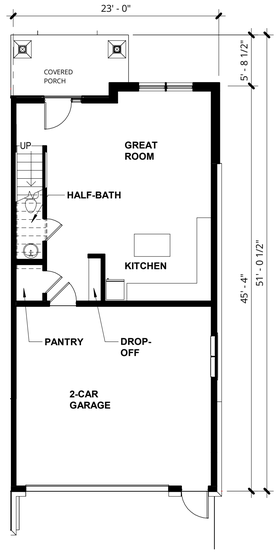
SHEET NO.
A-202



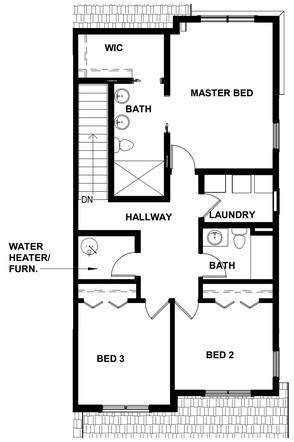
7 **SD - 2 BR MAIN LEVEL**
SCALE: 1/8" = 1'-0"



8 **SD - 2 BR SECOND LEVEL**
SCALE: 1/8" = 1'-0"



9 **SD - 3 BR MAIN LEVEL**
SCALE: 1/8" = 1'-0"



10 **SD - 3 BR SECOND LEVEL**
SCALE: 1/8" = 1'-0"



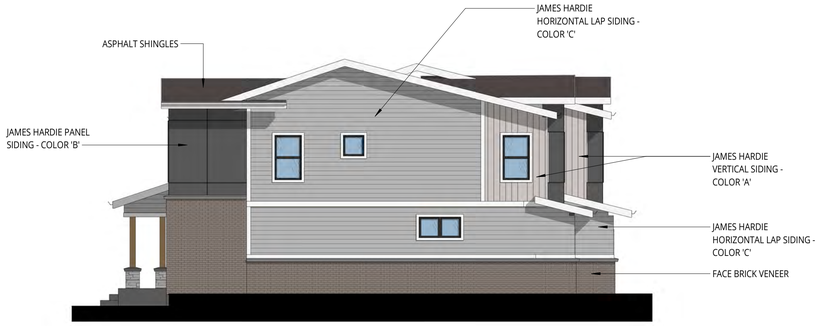
5 **3D PERSPECTIVE - REAR**
SCALE:



6 **3D PERSPECTIVE - FRONT**
SCALE:

Area Schedule (Gross Building)	
Name	**Area**
MAIN LEVEL	4,510 SF
SECOND LEVEL	3,241 SF
	7,750 SF

CODE - ELEVATION MATERIAL PERCENTAGES (OVERALL)		
ELEVATION	WALL AREA	% OF TOTAL
FRONT		
Elev Calcs_Glazing	244 SF	16.4%
Elev Calcs_Masonry/Stone	64 SF	4.3%
Elev Calcs_Siding	1,178 SF	79.3%
	1,485 SF	100.0%
LEFT		
Elev Calcs_Glazing	46 SF	4.5%
Elev Calcs_Masonry/Stone	253 SF	24.9%
Elev Calcs_Siding	720 SF	70.6%
	1,019 SF	100.0%
REAR		
Elev Calcs_Glazing	363 SF	20.7%
Elev Calcs_Masonry/Stone	535 SF	30.5%
Elev Calcs_Siding	854 SF	48.7%
	1,752 SF	100.0%
RIGHT		
Elev Calcs_Glazing	46 SF	4.5%
Elev Calcs_Masonry/Stone	253 SF	24.9%
Elev Calcs_Siding	720 SF	70.6%
	1,019 SF	100.0%



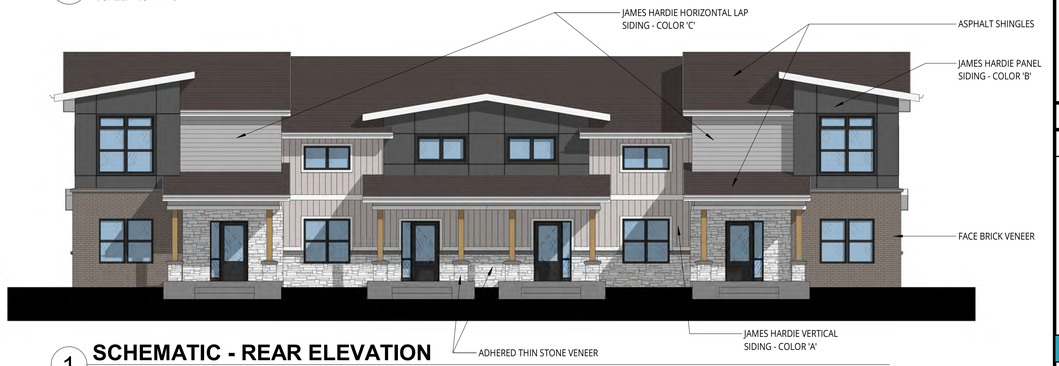
3 **SCHEMATIC - RIGHT ELEVATION**
SCALE: 1/8" = 1'-0"



2 **SCHEMATIC - LEFT ELEVATION**
SCALE: 1/8" = 1'-0"



4 **SCHEMATIC - FRONT ELEVATION**
SCALE: 1/8" = 1'-0"



1 **SCHEMATIC - REAR ELEVATION**
SCALE: 1/8" = 1'-0"

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HOPE DISTRICT TOWNHOMES - PLAN 1B

TBD
GRIMES, IA 50111

DESIGN DEVELOPMENT PLAN(S) - NOT FOR CONSTRUCTION

DISCOVER/ ANALYZE | DESIGN DEVELOPMENT | DEVELOP | COMMIT | DELIVER

DRAWN BY: **Precon. Team**

ORIGINAL CONSTRUCTION DOCUMENT
TBD

REVISIONS

PLAN NO. = **90-163**

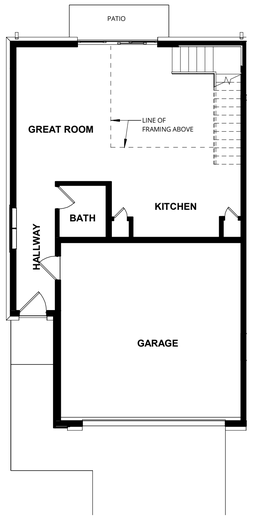
DWG. LIST

SCHEMATIC ELEVATIONS

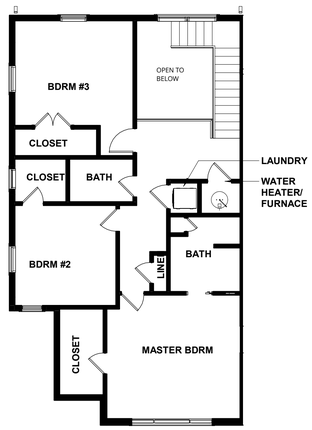
SHEET NO.

SD-200

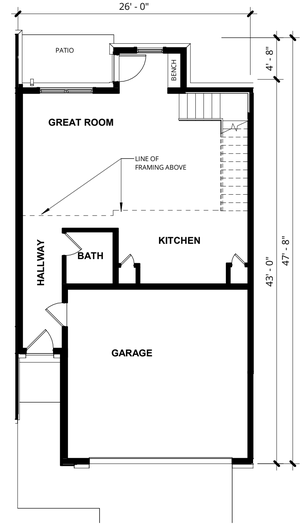
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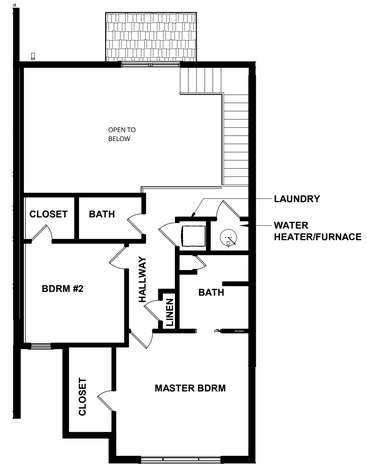
7 SD - 3 BR MAIN LEVEL
SCALE: 1/8" = 1'-0"



8 SD - 3 BR SECOND LEVEL
SCALE: 1/8" = 1'-0"



9 SD - 2 BR MAIN LEVEL
SCALE: 1/8" = 1'-0"



10 SD - 2 BR SECOND LEVEL
SCALE: 1/8" = 1'-0"



5 3D PERSPECTIVE - REAR
SCALE:



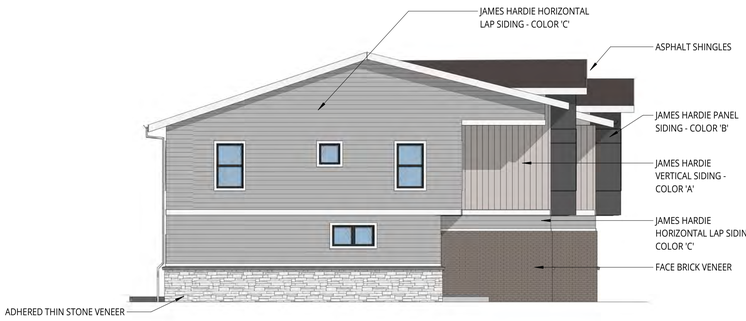
6 3D PERSPECTIVE - FRONT
SCALE:

Area Schedule (Gross Building)

Name	Area
MAIN LEVEL	4,501 SF
SECOND LEVEL	3,422 SF
	7,923 SF

CODE - ELEVATION MATERIAL PERCENTAGES (OVERALL)

ELEVATION	WALL AREA	% OF TOTAL
FRONT		
Elev Calcs_Glazing	389 SF	16.3%
Elev Calcs_Masonry/Stone	145 SF	6.1%
Elev Calcs_Siding	1,851 SF	77.6%
	2,385 SF	100.0%
LEFT		
Elev Calcs_Glazing	46 SF	4.3%
Elev Calcs_Masonry/Stone	223 SF	20.9%
Elev Calcs_Siding	801 SF	74.8%
	1,071 SF	100.0%
REAR		
Elev Calcs_Glazing	329 SF	16.8%
Elev Calcs_Masonry/Stone	320 SF	16.3%
Elev Calcs_Siding	1,316 SF	67.0%
	1,964 SF	100.0%
RIGHT		
Elev Calcs_Glazing	46 SF	4.3%
Elev Calcs_Masonry/Stone	223 SF	20.9%
Elev Calcs_Siding	801 SF	74.8%
	1,071 SF	100.0%



3 SCHEMATIC - RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



4 SCHEMATIC - FRONT ELEVATION
SCALE: 1/8" = 1'-0"



2 SCHEMATIC - LEFT ELEVATION
SCALE: 1/8" = 1'-0"



1 SCHEMATIC - REAR ELEVATION
SCALE: 1/8" = 1'-0"

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HOPE DISTRICT TOWNHOMES - PLAN 1A

TBD
GRIMES, IA 50111

SCHEMATIC DESIGN PLAN(S) - NOT FOR CONSTRUCTION

DISCOVER/ ANALYZE | DEVELOP | COMMIT | DELIVER

DRAWN BY: **Precon. Team**

ORIGINAL CONSTRUCTION DOCUMENT
TBD

REVISIONS

PLAN NO. = **90-163**

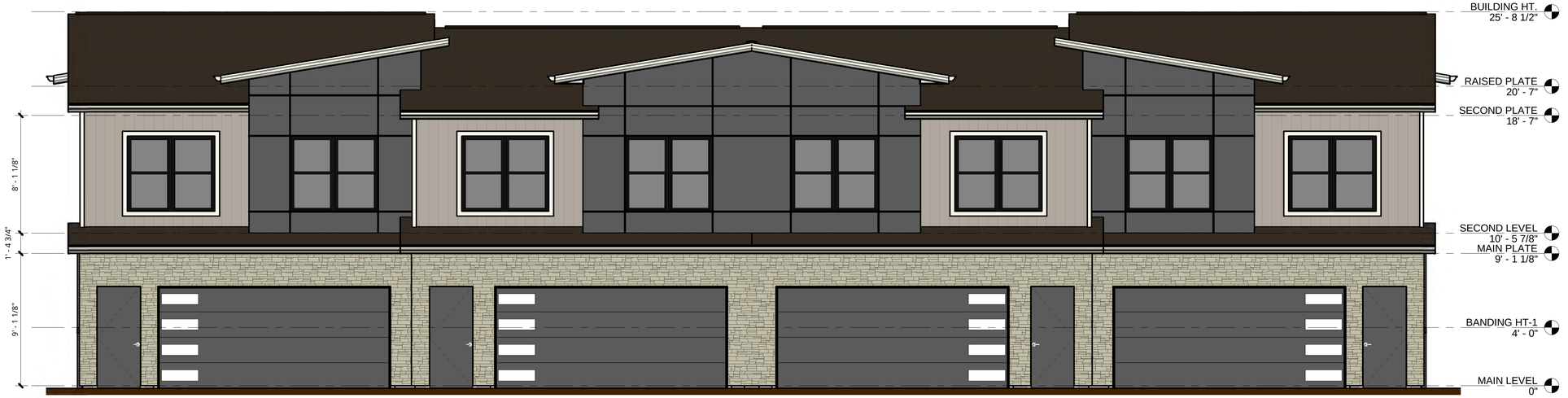
DWG. LIST

SCHEMATIC ELEVATIONS

SHEET NO.

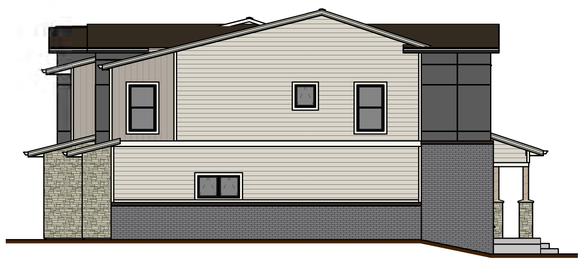
SD-200

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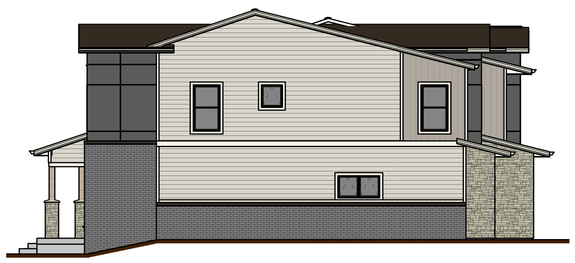
1 COLOR - FRONT ELEVATION

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



4 COLOR - RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



3 COLOR - LEFT ELEVATION

SCALE: 1/8" = 1'-0"



2 COLOR - REAR ELEVATION

SCALE: 1/8" = 1'-0"

PROPERTY OF D STUDIO

EXTERIOR MATERIAL SELECTIONS

NOTE:
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ROOFING: SHINGLES
CERTAINTEED
- LANDMARK PRO
  - MAX DEF
    - SHENANDOAH

ROOFING: FASCIA & SOFFIT PANELS
ROLEX or SIMILAR
- SHELL
  - INCLUDES:
    - VISIBLE FLASHINGS

ROOFING: GUTTER & DOWNSPOUTS
ROLEX or SIMILAR
- SHELL

HARDIEPANEL SIDING
JAMES HARDIE
- PAINT COLOR
  - SHERWIN WILLIAMS
    - SW7674
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      - GREEK VILLA

METAL BRICK CAP/ Z-FLASHING
ROLEX
- COLOR: MOCHA

BRICK MASONRY VENEER
HEBRON BRICK
- SIZE: MODULAR
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LIMESTONE BANDING/ WINDOW SILL TRIM
CORONADO STONE PRODUCTS
- COLOR: MATCH LIMESTONE

CULTURED STONE VENEER
CORONADO STONE PRODUCTS
- CUT: SAWTOOTH LEDGE
  - COLOR: CHALK

WINDOW CLAD EXTERIOR FINISH
PELLA IMPERVIA
- BLACK
  - INCLUDES:
    - VISIBLE FLASHINGS

V.E. OPTION: 250 SERIES
(SEE A-200 FOR EGRESS SIZING CHANGES)

POST STAIN COLOR
SHERWIN WILLIAMS
- STAIN COLOR: GRAY SKY
  - DB 2115

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Hope District Townhomes - Plan 1B

Street Address - TBD
Grimes, Iowa 50111

DESIGN DEVELOPMENT PLAN(S) - NOT FOR CONSTRUCTION

DISCOVER/ ANALYZE | DEVELOP | COMMIT | DELIVER

DRAWN BY: **CGL**

ORIGINAL CONSTRUCTION DOCUMENT
--/--/----

REVISIONS

06/09/2023 - DD Set
06/13/2023 - DD Set
--/--/----
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--/--/----
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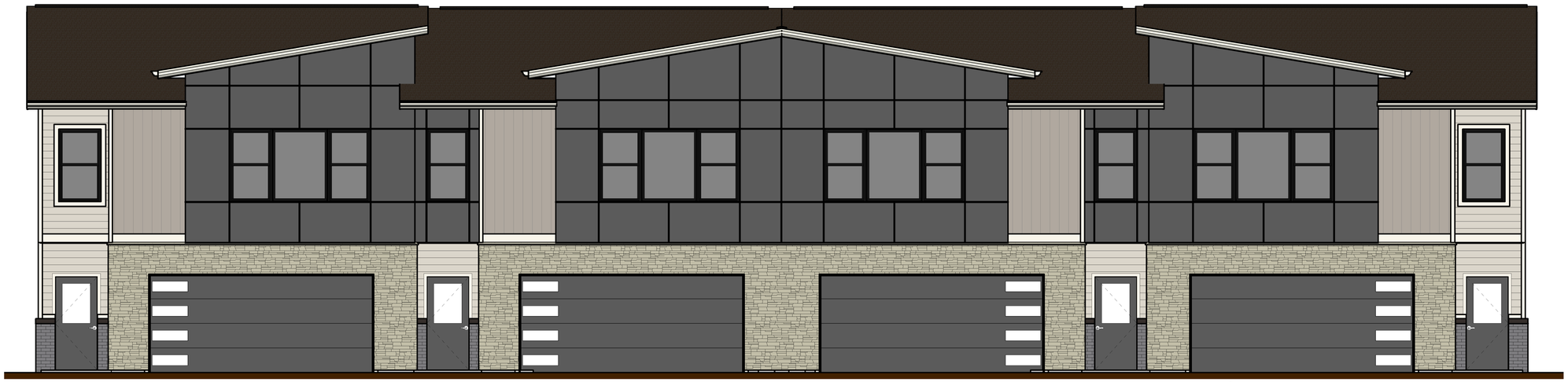
PLAN NO. = **90-163**

DWG. LIST

COLOR EXTERIOR ELEVATIONS

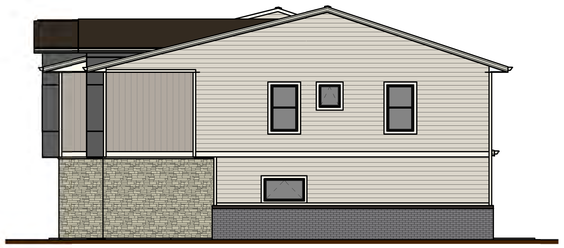
SHEET NO.

A-202



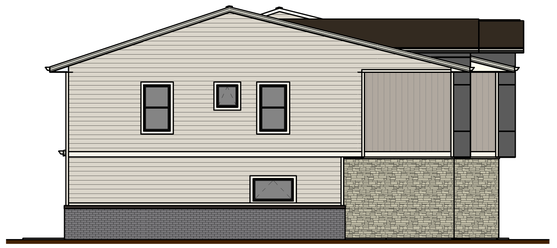
1 COLOR - FRONT ELEVATION

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



4 COLOR - RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



3 COLOR - LEFT ELEVATION

SCALE: 1/8" = 1'-0"



2 COLOR - REAR ELEVATION

SCALE: 1/8" = 1'-0"

PROPERTY OF D STUDIO

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ROOFING: FASCIA & SOFFIT PANELS
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- SHELL
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HARDIEPLANK LAP SIDING
JAMES HARDIE
- PAINT COLOR
  - SHERWIN WILLIAMS
    - SW9165
      - GOSSAMER VEIL

HARDIETRIM
JAMES HARDIE
- PAINT COLOR
  - SHERWIN WILLIAMS
    - SW7551
      - GREEK VILLA

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ROLEX
- COLOR: MOCHA

BRICK MASONRY VENEER
HEBRON BRICK
- SIZE: MODULAR
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CORONADO STONE PRODUCTS
- COLOR: MATCH LIMESTONE

CULTURED STONE VENEER
CORONADO STONE PRODUCTS
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SHERWIN WILLIAMS
- STAIN COLOR: GRAY SKY
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p: 515.961.5386
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www.downingconstruct.com
www.downingplanroom.com

Hope District Townhomes - Plan 1A

Street Address - TBD
Grimes, Iowa 50111

DISCOVER/ ANALYZE | DESIGN DEVELOPMENT PLAN(S) - NOT FOR CONSTRUCTION | DEVELOP | COMMIT | DELIVER

DRAWN BY: **CGL**

ORIGINAL CONSTRUCTION DOCUMENT
--/--/----

REVISIONS

06/09/2023 - DD Set
06/13/2023 - DD Set
06/20/2023 - DD Pricing Set
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PLAN NO. = **90-163**

DWG. LIST

COLOR EXTERIOR ELEVATIONS

SHEET NO.

A-202

Planning & Zoning Staff Report

CITY OF GRIMES

DATE

July 5, 2023

PROJECT NAME

Grimes Ground Storage Reservoir Site Plan

APPLICANT

City of Grimes

REQUESTED ACTION

Approval of new ground storage reservoir

LOCATION

1850 NE Park Drive

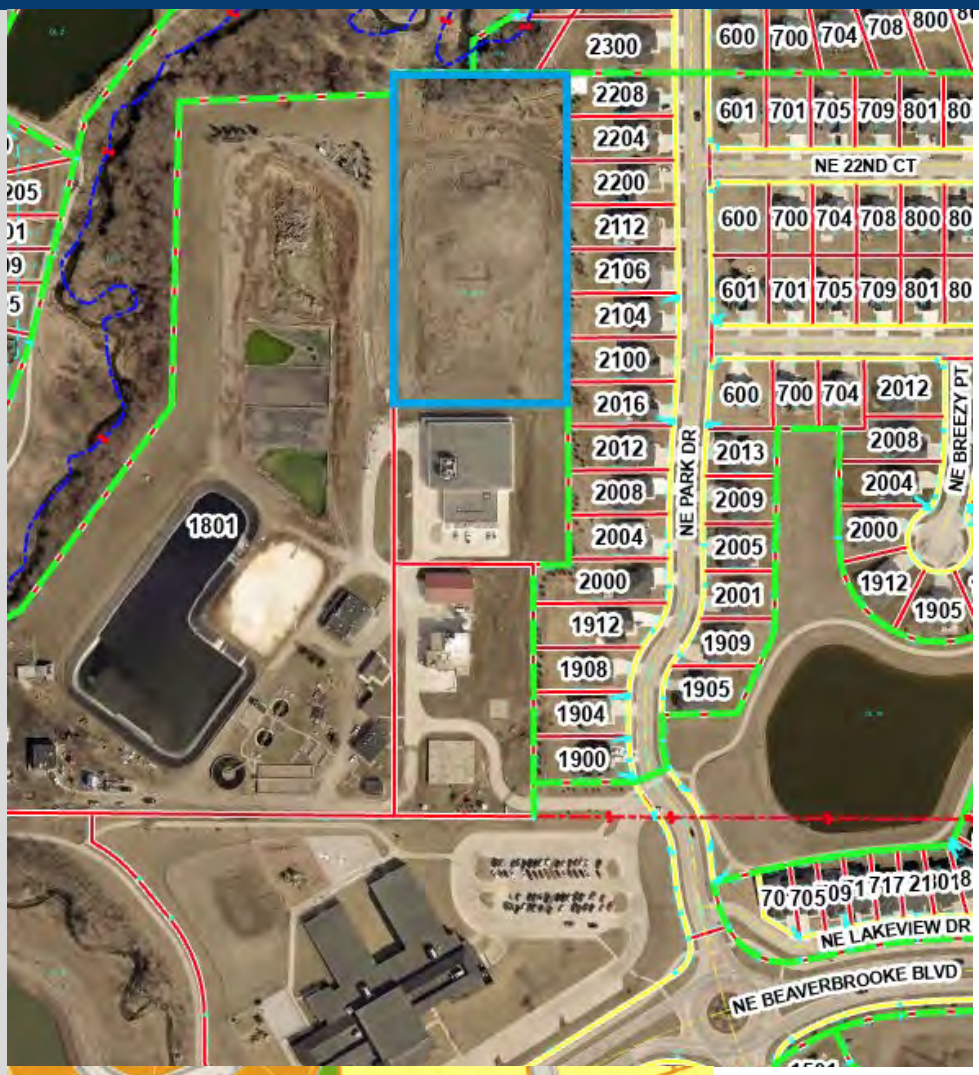
ZONING

R-4

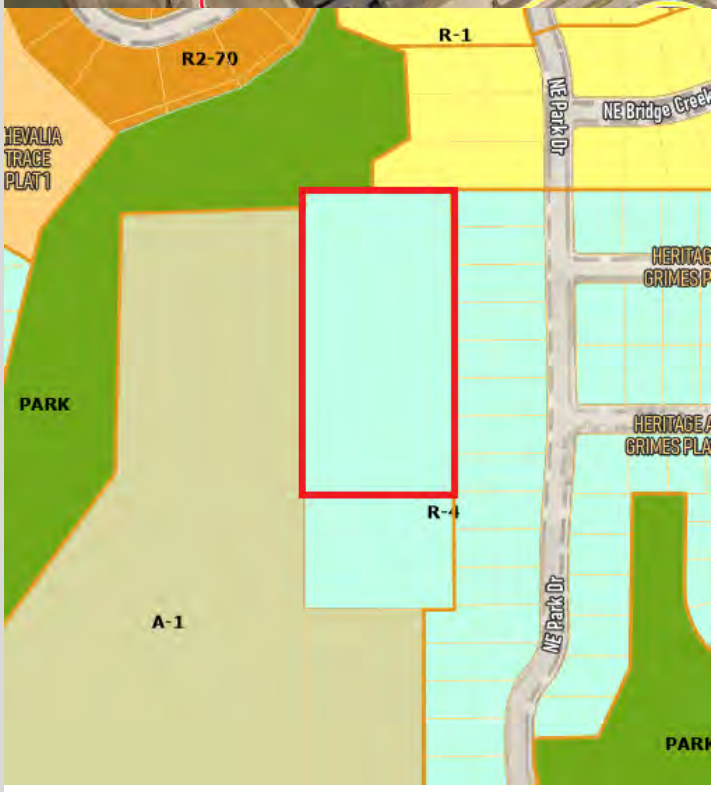
PLANNER

Alex Pfaltzgraff
apfaltzgraff@grimesiowa.gov
515-986-4050

Location Map



Zoning Map



Relation to Comprehensive & Neighborhood Plans

LAND USES & ZONING			
Location	**Existing Land Use**	**Land Use Plan Designation**	**Current Zoning**
Subject Site	Water Treatment Plant/Vacant	Utility	R-4
North	Single-Family/Greenway	Low Density Residential/Greenway	R-1
South	Water & Sanitary Treatment Plant	Utility	R-4/A-1
East	Single-Family	Low Density Residential	R-4
West	Sanitary Treatment Plant	Utility	A-1

PARKS

The Parks and Trails Master Plan does not anticipate any parks or trails on this property.

No parkland dedication is required since this is a non-residential project.



Future Land Use Map

Relation to Studies & Legal

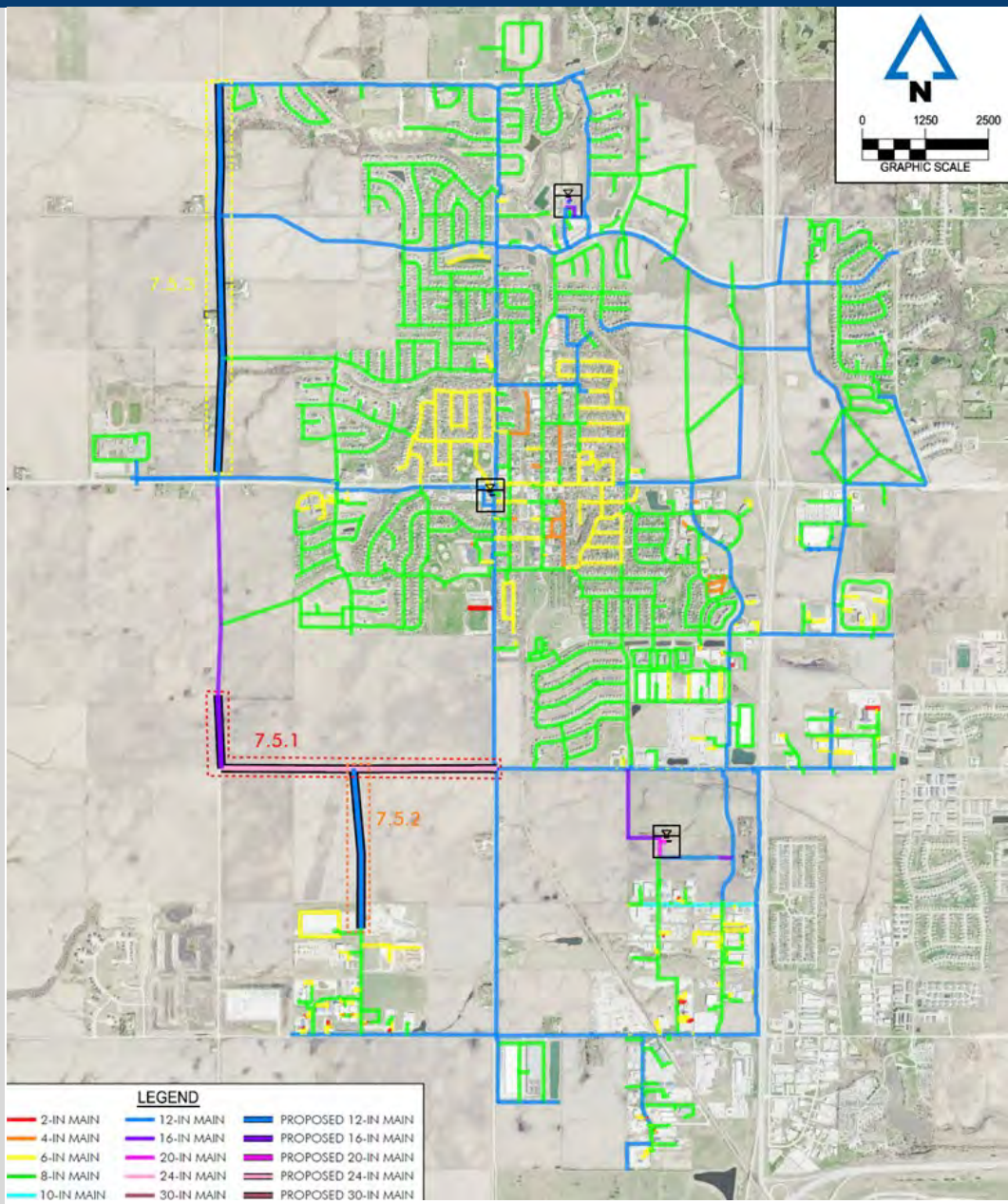
RELATION TO STUDIES

McClure Engineering completed a water system study for the City which identifies several project phases. Phase 1A of the water study includes water main extension improvements along SW 19th Street and County Line Road, water tower, and a ground storage reservoir (GSR).

The water tower on SE 25th Street was completed in 2021. Water main construction along 19th St and County Line will occur in 2023/2024. The GSR will begin construction in 2023.

The water treatment plant currently has one 16" water main connection to distribute water out to the rest of the City. As part of the GSR project, a new 30" water main will be constructed to provide an additional connection.

The GSR will store 2 million gallons of drinking water. The City currently has the ability to store 400,000 gallons of drinking water in the existing clear well on site. Upon completion of the GSR, the City will have capacity to store enough drinking water to cover one day of water demand.



Site Layout

ACCESS

A driveway connection will be constructed from the existing pavement at the water treatment plant to the GSR.

WATER MAIN

Three water main extensions will be constructed from the existing mains at the water treatment plant and connect to the GSR.

STORM WATER

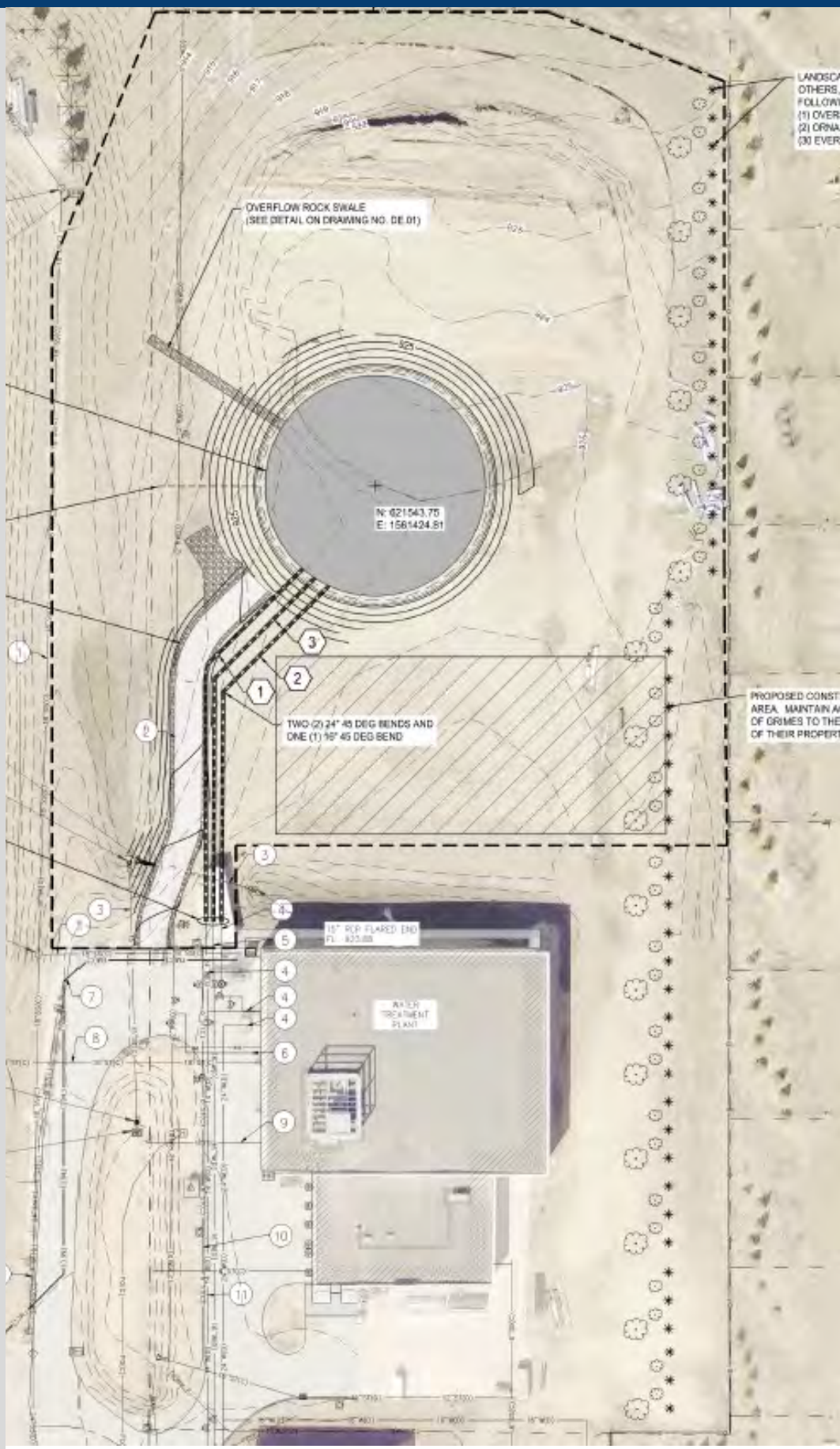
No storm water improvements are contemplated for this project.

LANDSCAPING

There is an existing berm and landscape buffer located on the single-family lots to the east which provides a good level of screening today. However, additional landscape buffer plantings will be installed on the east side of the water treatment site to provide additional screening. The buffer will be planted with 1 overstory tree, 2 ornamental trees, and 3 evergreen trees for every 30 linear feet.

LIGHTING

No additional site lighting is proposed, nor is the GSR planned to have lighting.



Architecture

GSR ELEVATIONS

The exact elevation of the GSR have not been determined at this time. Because the project will be bid out, the contractor who is awarded the project will need to design the project which will include the exterior elevations.

The City has included an allowance within the project to include architectural features such as brick columns and banding. The intent is to have the GSR match or be similar to the design of the existing water treatment.

A few examples are provided below.

NEIGHBORHOOD RELATION

As part of the design of the GSR, the City asked the design engineer to prepare a site line analysis to evaluate view points from the existing single family neighborhood to the east. This analysis is provided below for reference. Based upon the analysis, staff feels comfortable that the additional landscaping and architectural features will compliment the existing site improvements and neighborhood features.

The GSR will stand a total height of 35-feet, and is approximately 120-feet in diameter. The top will include a dome and vent cap.

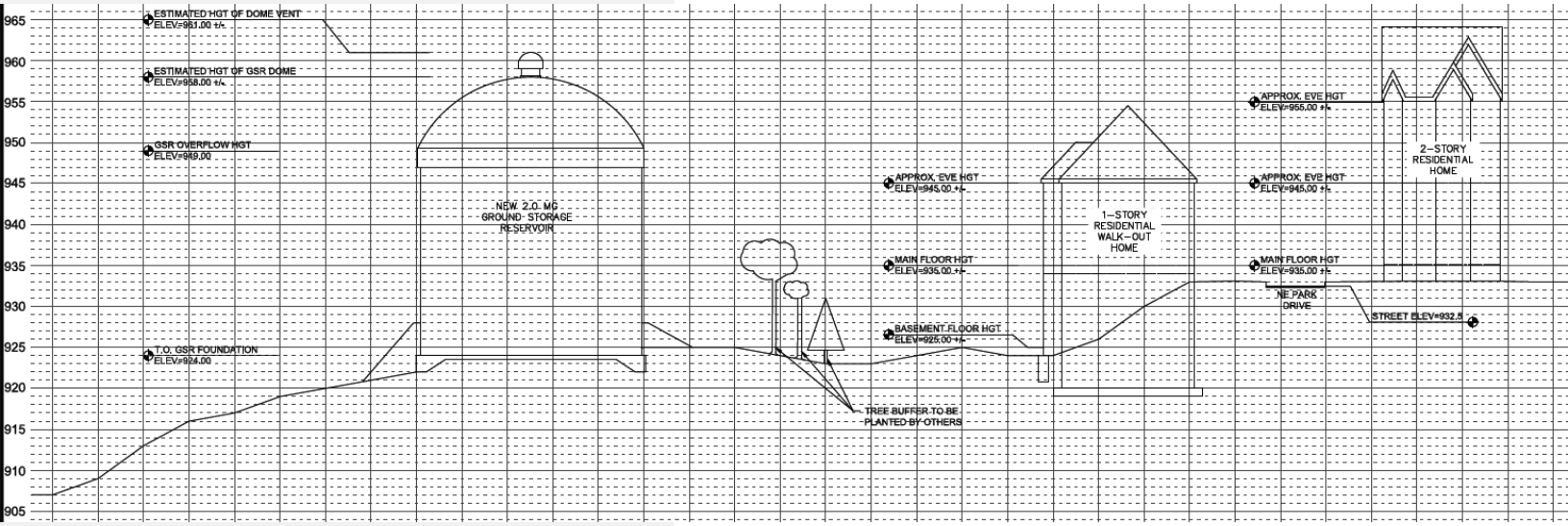


Existing Water Treatment Plant Building









Conclusion

STAFF RECOMMENDATION

Staff recommend approval of the Grimes Ground Storage Reservoir Site Plan.

Conclusion

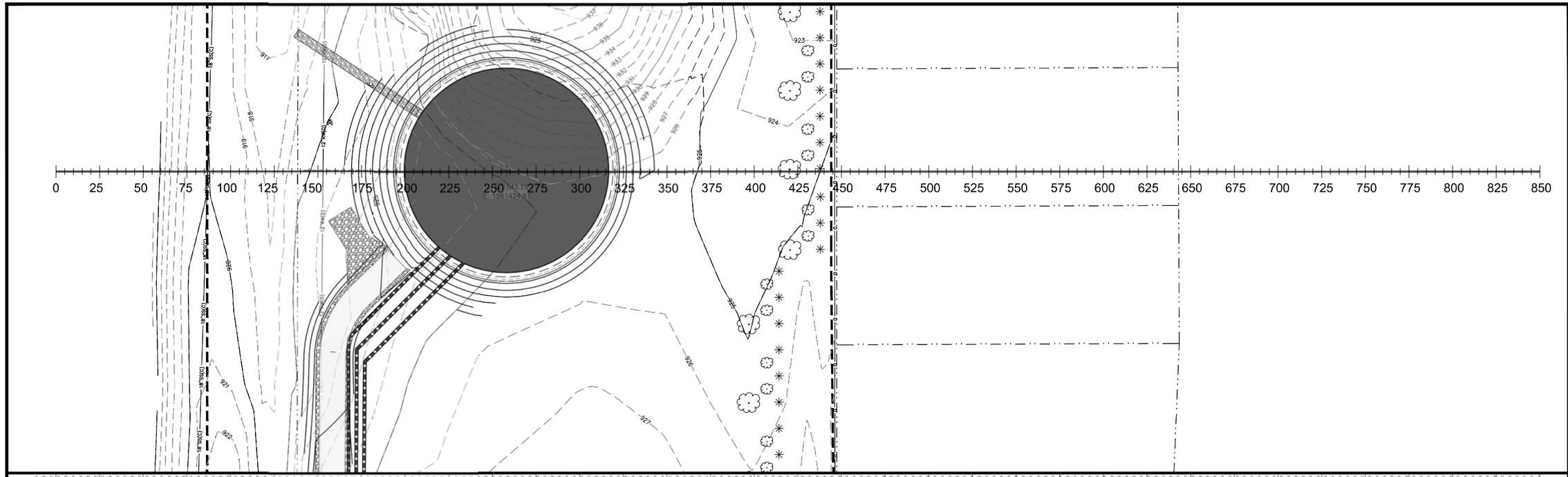
The Water Systems Study identified the GSR as a needed improvement in Phase 1A of the water systems plan.

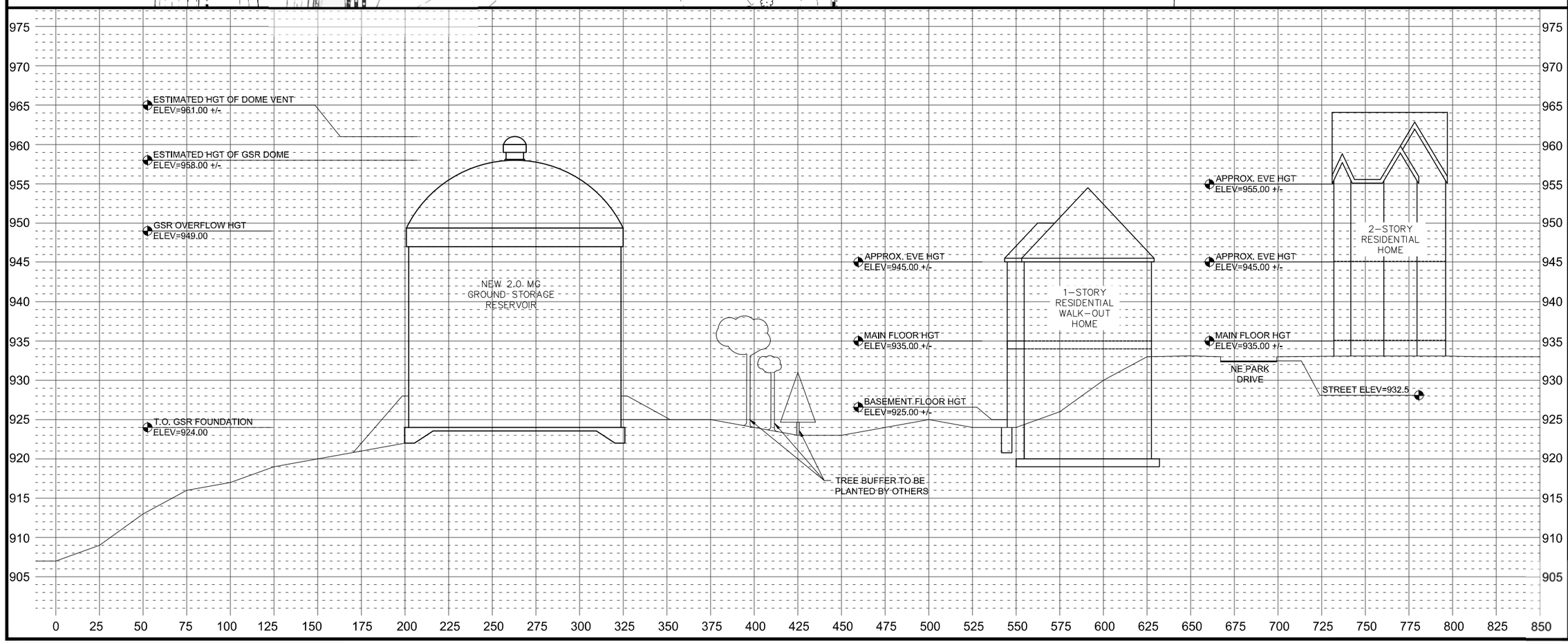
Upon completion of the GSR, the City will have the capacity to store one day of drinking water demand within the GSR and existing clear well.

Landscape buffering will provide screening and architectural features will be added to the GSR to enhance views of the project from the neighboring single-family development.

Existing Landscape Berm & Buffer







McCLURE™
1360 NW 121 St. Street
Clive, Iowa 50325
P 515-964-1229
F 515-964-2370
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Cedar Rapids,IA | Fort Dodge,IA
North Liberty,IA | Sioux City,IA
Macon,MO | Columbia,MO
North Kansas City,MO
Lenexa, KS

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IOWA CERTIFICATE OF AUTHORITY NO. 26887

N

0 15 30 60

SCALE: 1" = 30' (FULL SIZE)
SCALE 1" = 60' (HALF SIZE)

REVISIONS

PROJECT INFO
211186-040

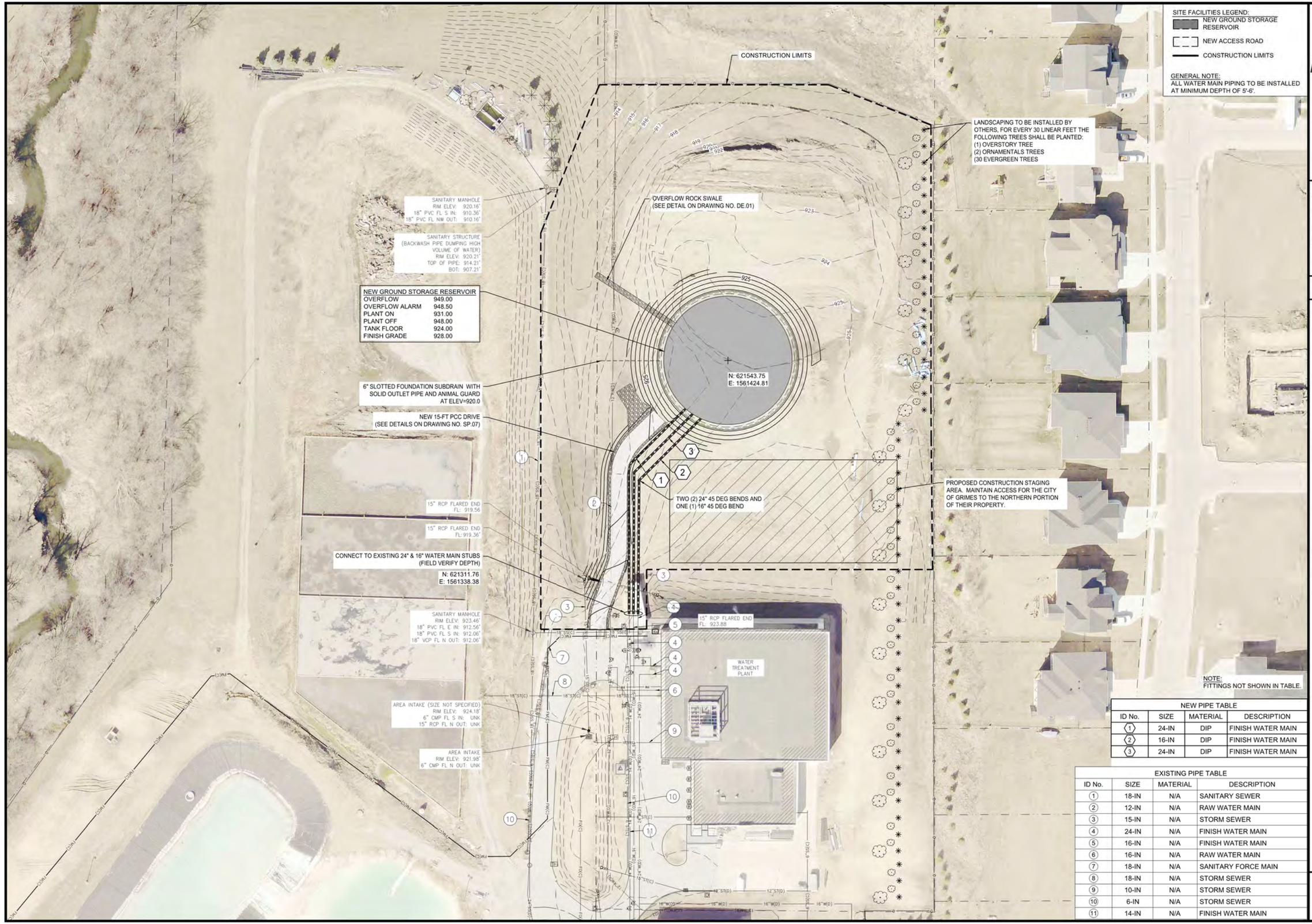
ENGINEER	DRAWN BY	CHECKED BY
DPW	JCF	MPW

GRIMES PHASE 1A
WATER SYSTEM IMPROVEMENTS
NEW GROUND STORAGE RESERVOIR

TOPOGRAPHICAL ELEVATION SECTION

P:\211186-040\04-DRAWINGS\05-PLANS\GN.08.DWG - 2023-6-22

DRAWING NO. GN.08
SHEET NO. 08 / 26



SITE FACILITIES LEGEND:
- NEW GROUND STORAGE RESERVOIR
- NEW ACCESS ROAD
- CONSTRUCTION LIMITS

GENERAL NOTE:
ALL WATER MAIN PIPING TO BE INSTALLED AT MINIMUM DEPTH OF 5'-6'.

NEW PIPE TABLE			
ID No.	SIZE	MATERIAL	DESCRIPTION
1	24-IN	DIP	FINISH WATER MAIN
2	16-IN	DIP	FINISH WATER MAIN
3	24-IN	DIP	FINISH WATER MAIN

EXISTING PIPE TABLE			
ID No.	SIZE	MATERIAL	DESCRIPTION
1	18-IN	N/A	SANITARY SEWER
2	12-IN	N/A	RAW WATER MAIN
3	15-IN	N/A	STORM SEWER
4	24-IN	N/A	FINISH WATER MAIN
5	16-IN	N/A	FINISH WATER MAIN
6	16-IN	N/A	RAW WATER MAIN
7	18-IN	N/A	SANITARY FORCE MAIN
8	18-IN	N/A	STORM SEWER
9	10-IN	N/A	STORM SEWER
10	6-IN	N/A	STORM SEWER
11	14-IN	N/A	FINISH WATER MAIN

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N

0 20 40 80

SCALE: 1" = 40' (FULL SIZE)
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REVISIONS

PROJECT INFO
211186-040

ENGINEER	DRAWN BY	CHECKED BY
DPW	JCF	MPW

GRIMES PHASE 1A WATER SYSTEM IMPROVEMENTS NEW GROUND STORAGE RESERVOIR

OVERALL SITE AND PIPING PLAN

P:\211186-040\04-DRAWINGS\05-PLANS\SP.02.DWG - 2023-6-22

DRAWING NO. SP.02
SHEET NO. 10 / 26



