

CITY OF WEST DES MOINES STAFF REPORT COMMUNICATION

MEETING DATE: February 22, 2021

ITEM: Grand Ridge Plat 1, West end of Grand Ridge Drive – Approve Preliminary Plat to create seven (7) lots for Single-Family development, 1 outlot and 1 street lot – The Lowry Company LLC – PP-004540-2019

RESOLUTION: Approval of Preliminary Plat

Background: Ed Arp with Civil Engineering Consultants, on behalf of the applicant and property owner, The Lowry Company LLC, request approval of a Preliminary Plat for the approximately 19-acre property generally located at the west end of Grand Ridge Drive. The applicant proposes to subdivide the property into seven (7) lots for development of single-family estate homes, 1 outlot for future development and 1 street lot for dedication to the City.

Staff Review & Comment:

- Financial Impact: Undetermined
- History: This property is the remaining parcel of what was known as the Boone Farm. The property was zoned to the Grand Ridge Planned Unit Development in July 2019.
- Development Aspects: The 2019 adopted PUD provided that the following:
 - Lots 1 and 2 may be a minimum of 30,000sf which is smaller than the typical RE-1A requirement of a minimum of 40,000sf which is required for the other lots. With a smaller lot size, the square footage of all detached accessory structures shall be limited to a collective maximum of 1,000 gross square feet which is consistent with residential zoning districts with smaller lot sizes.
 - Setbacks for lots 1, 2 and 7 have been reduced from a 50' front and rear yard setback to 35' due to the topography, desire to minimize the impact on existing trees which affected the street placement and to minimize the dead-end length of the cul-de-sac.
 - This PUD does include tree removal mitigation language which requires the replacement with 1" caliper of tree for every 1" dbh (diameter at breast height) of tree removed.
- Condition(s) of Approval: No conditions of approval.
- Traffic Analysis Findings: With the proposed land uses, the site is expected to generate less traffic than previously estimated. Due to the dead-ending of Grand Ridge Dr in a cul-de-sac versus connecting through the site to the west end of Cherrywood Drive, the following impacts may arise:
 - If the intersection of S 50th Street and Grand Ridge Drive is blocked for any reason (e.g., crash, emergency, road maintenance/construction, or special event), there will no other way for seven existing businesses and the proposed new homes within the subdivision to get to or from S 50th Street.
 - A long dead-end would create a longer travel distance for people to travel short distances to see neighbors to the north. This would encourage more automobile use rather than traveling by foot/bike for these short trips.
 - A long dead-end may create issues for emergency services access.

Without Grand Ridge Drive connecting to Cherrywood Drive, these streets would not function as collector streets since they would not connect to a roadway of equal or higher classification. In this case, all of Grand Ridge Drive and a portion of Cherrywood Drive would need to be changed from minor collector streets to local streets on the Ultimate Streets Map and currently adopted Comprehensive Plan Land Use Map.

See following D&P Subcommittee discussion.

- **City Council Subcommittee:** On June 25, 2018, a discussion on connecting Grand Ridge Drive and Cherrywood Drive was had with the Development and Planning Subcommittee. It was indicated that previous development concepts explored were unable to make a connection due to topographic issues increasing the cost of infrastructure. The connection would require approximately a ¼ of road and a culvert to cross a drainage area. An option to make a secondary connection to Grand Avenue to the south was discussed but deemed unlikely also due to topography and the need to work with the DOT on property acquisition and access control due to spacing from the interstate. The Fire Marshal indicated that while not ideal, he can make the cul-de-sac option work with for single-family estate with the addition of a bump-out at the turn north and sprinklering of the homes. The Subcommittee indicated agreement with the development with a cul-de-sac versus requiring a roadway connect Grand Ridge Drive and Cherrywood Drive.
- **Plat Validity:** Per City Code, the associated Final Plat must be presented to the City Council for approval within twelve (12) months of the approval of this Preliminary Plat if surety is being posted for Public Improvements; or, within eighteen (18) months if Public Improvements are being constructed prior to Final Plat consideration. It is the responsibility of the developer to be aware of these deadlines and request an extension of the Preliminary Plat approval prior to the Preliminary Plat expiration date.

Outstanding Issues: There are no outstanding issues.

Recommendation: Approve the Grand Ridge Plat 1 Preliminary Plat, subject to the applicant meeting all City Code.

Lead Staff Member: Kara Tragesser, AICP

Approval Meeting Dates:

Plan & Zoning Commission	February 22, 2021
City Council	

Staff Report Reviews

Plan & Zoning Commission	<input checked="" type="checkbox"/> Development Coordinator	<input type="checkbox"/> Legal Department
City Council	<input type="checkbox"/> Director	<input type="checkbox"/> Legal Department
	<input type="checkbox"/> Appropriations/Finance	<input type="checkbox"/> Agenda Acceptance

Publications (if applicable)

Published In	Des Moines Register Community Section	
Date(s) Published	P&Z	n/a
	City Council	n/a
Date(s) of Mailed Notices	P&Z	n/a
	City Council	n/a

Subcommittee Review (if applicable)

Committee	Development & Planning		
Date Reviewed	June 25, 2018		
Recommendation	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Split <input type="checkbox"/>

Location Map



A RESOLUTION OF THE PLAN AND ZONING COMMISSION
NO. PZC-21-009

WHEREAS, pursuant to the provisions of Title 9, of the West Des Moines Municipal Code, the applicant and property owner, The Lowry Company LLC, has requested approval of a Preliminary Plat for that 19-acre property generally located at west end of Grand Ridge Drive to subdivide the property into seven (7) lots for development of Residential Estate (RE-1A) lots and one (1) street lot for dedication to the City; and

WHEREAS, the Preliminary Plat complies with Iowa Code Chapters 354 and 414, the comprehensive plan and city code.

NOW, THEREFORE, the Plan and Zoning Commission of the City of West Des Moines recommends that City Council approve the Grand Ridge Plat 1 Preliminary Plat (PP-004540-2019), subject to compliance with all the conditions of approval as stated in the staff report, including conditions added at the meeting, and attached hereto as Exhibit "A", if applicable.

PASSED AND ADOPTED on February 22, 2021.

Erica Andersen, Chair
Plan and Zoning Commission

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Plan and Zoning Commission of the City of West Des Moines, Iowa, at a regular meeting held on February 22, 2021, by the following vote:

AYES:
NAYS:
ABSTENTIONS:
ABSENT:

ATTEST:

Recording Secretary

PRELIMINARY PLAT GRAND RIDGE PLAT | WEST DES MOINES, IOWA

PLANS INCLUDED ARE FOR ILLUSTRATIVE PURPOSES ONLY - APPROVED PLANS ON FILE WITH THE CITY

OWNER / DEVELOPER: THE LOWRY COMPANY, L.L.C., 36539 MEADOWBROOK CIRCLE, CUMMING, IOWA 50061 ATTN: BILL LOWRY, 36539 MEADOWBROOK CIRCLE, CUMMING, IOWA 50061

SHEET INDEX	
SHEET #	SHEET TITLE
1	COVER
2	GEOMETRIC PLAN
3	GRADINGS & UTILITY PLAN

COMPREHENSIVE LAND USE

EXISTING: LOW DENSITY RESIDENTIAL
PROPOSED: SINGLE FAMILY RESIDENTIAL (SF)

LAND AREA

18.46 ACRES

ZONING

EXISTING: GRAND RIDGE PUD (RE-1A)
PROPOSED: GRAND RIDGE PUD (RE-1A)

SETBACKS:

FRONT YARD = 35' FOR LOTS 1, 2, 7, & 10
FRONT YARD = 50' FOR LOTS 3-6, 8, & 9
REAR YARD = 35' FOR LOTS 1, 2, 7, & 10
REAR YARD = 50' FOR LOTS 3-6, 8, & 9
SIDE YARD = 20' MIN. (40' MIN. BOTH SIDES)

LEGAL DESCRIPTIONS

THE SOUTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 14, TOWNSHIP 18 NORTH, RANGE 25 WEST OF THE 5TH P.M. POLK COUNTY, IOWA, LYING NORTH OF THE CENTERLINE OF GRAND AVENUE AS IT PRESENTLY EXISTS, EXCEPT THAT PART LYING WEST OF INTERSTATE NO. 35 AND EXCEPT THOSE PARTS CONVEYED TO THE STATE OF IOWA BY WARRANTY DEEDS RECORDED IN BOOK 3005, PAGE 441 AND BOOK 18752, PAGE 407 IN THE OFFICE OF THE POLK COUNTY RECORDER, POLK COUNTY, IOWA AND THE EAST 35 FEET OF THE SOUTH 1/2 SE 1/4 OF SECTION 14, TOWNSHIP 18 NORTH, RANGE 25 WEST OF THE 5TH P.M. EXCEPT THE SOUTH 140 FEET, WEST DES MOINES, POLK COUNTY, IOWA THAT IS ALL MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SE CORNER OF QUAIL COVE PLAT I, AN OFFICIAL PLAT RECORDED IN BOOK 4044, PAGE 204 AT THE POLK COUNTY RECORDER'S OFFICE SAID SE CORNER ALSO BEING ON THE WEST LINE OF QUAIL RIDGE PARK, AN OFFICIAL PLAT RECORDED IN BOOK 1886, PAGE 14 AT THE POLK COUNTY RECORDER'S OFFICE; THENCE S00°28'57"E 652.81 FEET ALONG A LINE THAT COINCIDES THE WEST LINE OF SAID QUAIL RIDGE PARK AND THE WEST LINE OF QUAIL MEADOWS WEST, AN OFFICIAL PLAT RECORDED IN BOOK 3006, PAGE 121 AT THE POLK COUNTY RECORDER'S OFFICE, TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF GRAND AVENUE AS IT IS PRESENTLY ESTABLISHED; THENCE S94°44'15"W 403.36 FEET ALONG SAID NORTH RIGHT-OF-WAY LINE TO A POINT; THENCE S08°59'54"W 323.71 FEET ALONG SAID NORTH RIGHT-OF-WAY LINE TO A POINT; THENCE S04°58'23"W 350.61 FEET ALONG SAID NORTH RIGHT-OF-WAY LINE TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF US INTERSTATE I-35; THENCE N47°44'29"W 587.13 FEET ALONG SAID EAST RIGHT-OF-WAY LINE TO A POINT; THENCE N18°56'47"W 522.63 FEET ALONG THE SAID EAST RIGHT-OF-WAY LINE AS ESTABLISHED IN THE ACQUISITION PLAT RECORDED IN BOOK 18752, PAGE 407 AT THE POLK COUNTY RECORDER'S OFFICE; THENCE N22°54'10"W 100 FEET ALONG SAID EAST RIGHT-OF-WAY LINE AS ESTABLISHED IN THE ACQUISITION PLAT RECORDED IN BOOK 1886, PAGE 14 AT THE POLK COUNTY RECORDER'S OFFICE TO THE POINT ON THE SOUTH LINE OF SAID QUAIL COVE PLAT I; THENCE N04°41'28"E 1049.06 FEET ALONG SAID SOUTH LINE OF QUAIL COVE PLAT I TO THE POINT OF BEGINNING AND CONTAINING 18.46 ACRES MORE OR LESS.

PROPERTY OWNER:

THE LOWRY COMPANY, L.L.C.
36539 MEADOWBROOK CIRCLE
CUMMING, IOWA 50061

CONTACT: BILL LOWRY
36539 MEADOWBROOK CIRCLE
CUMMING, IOWA 50061
PHONE: (515) 491-0127

UTILITIES

SANITARY SEWER: WEST DES MOINES METROPOLITAN SEWAGE TREATMENT PLANT
WATER: WEST DES MOINES WATER WORKS

**** ALL UTILITIES SHOWN ARE PUBLIC **
UNLESS NOTED OTHERWISE**

NOTES

- ALL WATER WORK, PUBLIC OR PRIVATE, SHALL BE DONE IN ACCORDANCE WITH WEST DES MOINES WATER WORKS STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS AT LEAST ONE WEEK PRIOR TO BUILDING CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTORS INVOLVED IN THE PROJECT.
- CONTACT BUILDING INSPECTION (515-222-3630) A MINIMUM OF 24 HOURS IN ADVANCE FOR PRIVATE UTILITY INSTALLATION INSPECTIONS.
- ALL CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS, DSM METRO DESIGN STANDARDS AND DSM ADDENDUMS.
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE DSM ENGINEERING SERVICES SEN MCALISTER 222-3475 TO SCHEDULE ANY REQUIRED INSPECTIONS, ROM EXCAVATION PERMITS CAN BE OBTAINED AT ENGINEERING SERVICES, CITY HALL SUITE 2E, 222-3475. IT IS IMPORTANT TO NOTE CITY APPROVAL OF THIS PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS/AGREEMENTS AND APPLICABLE PERMITS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE WITH THE WEST DES MOINES WATER WORKS AND THE CITY'S CROSS CONNECTION CONTROL/CONTAINMENT PROVISIONS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF AN APPROVED BACKFLOW PREVENTION ASSEMBLY(IES) FOR CONTAINMENT IN ALL NEW CONSTRUCTION. BACKFLOW PREVENTION TO BE INSTALLED PER CITY ORDINANCE 1291, 54-1918. CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS, RALPH RENTERIA, ENGINEERING TECHNICIAN (515-222-3465) A MINIMUM OF 24 HOURS AFTER INSTALLATION AND TESTING OF ALL BACKFLOW DEVICES TO SCHEDULE FINAL INSPECTION.
- WORK REQUIRING ENTERING AND LEAVING THE SITE OVER COUNTY ROADWAYS INCLUDING MATERIAL DELIVERY AND MOVEMENT OF EQUIPMENT SHALL NOT BE PERMITTED DURING PERIODS WHEN THE GROUND IS EXCEPTIONALLY SOFT AND WET AND EROSION BY VEHICLE IS A CERTAINTY.
- DRIVEMAYS ON CORNER LOTS WILL BE NO CLOSER THAN 25' TO THE END OF THE RADIUS OF AN INTERSECTING STREET.
- PRIOR TO CONSTRUCTION OF ANY PUBLIC IMPROVEMENTS ASSOCIATED WITH THIS SUBDIVISION, CONSTRUCTION PLANS FOR SAID IMPROVEMENTS NEED TO BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
- A STORMWATER MAINTENANCE EASEMENT WILL BE PREPARED FOR ALL DETENTION FACILITIES. THE CITY WILL MAINTAIN THE PUBLIC STRUCTURES WITHIN THE RIGHT-OF-WAY. THE PRIVATE OUTLET STRUCTURES WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
- ALL PROPOSED RIPRAP SHALL BE CLASS 'E'.
- ALL CONNECTIONS TO PUBLIC SEWERS SHALL BE CORE DRILLED.
- SIDEWALK DESIGN AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE PUBLIC ROW ACCESSIBILITY GUIDELINE (PROWAG), CHAPTER 12 OF THE 2018 EDITION OF THE STATEWIDE URBAN DESIGN STANDARDS (SUDAS) IS THE MOST CURRENT DESIGN REFERENCE MATERIAL AVAILABLE FOR CONSTRUCTION OF PUBLIC SIDEWALKS IN IOWA.
- ALL HOMES ON THE EXTENSION OF GRAND RIDGE DRIVE WILL NEED TO HAVE FIRE SPRINKLER SYSTEMS AS THE ROAD EXCEEDS THE MAXIMUM LENGTH FOR CEAD END STREETS. THE HOMES AT THE END OF CHERRYWOOD DRIVE ONLY WILL REQUIRE SPRINKLER SYSTEMS IF THEY EQUAL OR EXCEED 8,000 SQ. FT., INCLUDING THE GARAGE AREA.
- ALL WATER SERVICES SHALL BE 2-INCH IN SIZE.

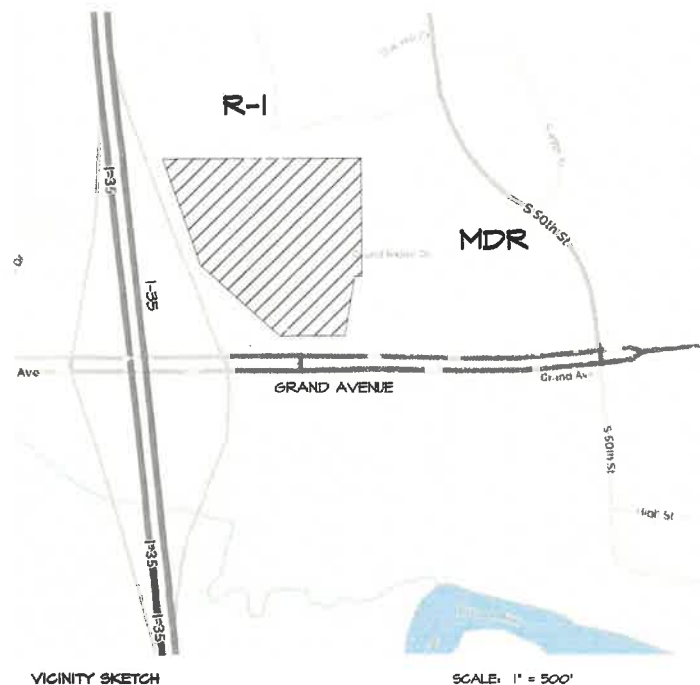
TREE PRESERVATION

EXISTING TREE COVER ON THE SITE SHALL BE PROTECTED AND ANY LOSS MITIGATED. REMOVAL OF TREES IS PERMITTED FOR DISEASED, DEAD, DAMAGED, OR OF A SPECIES NOT COMMONLY RECOGNIZED AS BEING DESIRABLE. FOR ALL OTHER TREES REMOVED ONE INCH OF OVERSTORY TREE SHALL BE PROVIDED FOR EVERY INCH OF CALIPER AT BREAST HEIGHT OF REMOVED TREES, AT THE TIME OF BUILDING PERMIT APPLICATION FOR EACH TREE TO BE REMOVED SHALL BE INDICATED AND DOCUMENTATION FROM A CERTIFIED ARBORIST OR ASLA LICENSED LANDSCAPE PROFESSIONAL, INDICATING THE REASON FOR TREE REMOVAL AND WHETHER REPLACEMENT IS REQUIRED SHALL BE PROVIDED TO THE DEVELOPMENT SERVICES DEPARTMENT OF THE CITY. TREE REPLACEMENT SHALL OCCUR PRIOR TO ISSUANCE OF A FINAL OCCUPANCY PERMIT FOR THE HOME.

- TREES SHALL NOT BE PLANTED CLOSER THAN 5 FEET (5') TO A SIDEWALK AS MEASURED FROM THE CENTER OF THE TREE.
- NO VEGETATION WHICH OBSTRUCTS VISIBILITY SHALL BE LOCATED WITHIN THE SITE TRIANGLE OF INTERSECTING STREETS AND PRIVATE DRIVES, INCLUDING RESIDENTIAL DRIVEMAYS.

GENERAL LEGEND

PROPOSED	EXISTING
--- PLAT BOUNDARY	○ LOT LINE
--- SECTION LINE	○ SANITARY/STORM MANHOLE
--- LOT LINE	○ WATER VALVE
--- CENTERLINE	○ FIRE HYDRANT
--- EASEMENT LINE	○ STORM SEWER SINGLE INTAKE
--- FLARED END SECTION	○ STORM SEWER DOUBLE INTAKE
○ TYPE SN-501 STORM INTAKE	○ STORM SEWER ROUND INTAKE
○ TYPE SN-502 STORM INTAKE	○ FLARED END SECTION
○ TYPE SN-503 STORM INTAKE	○ DECIDUOUS TREE
○ TYPE SN-504 STORM INTAKE	○ CONIFEROUS TREE
○ TYPE SN-505 STORM INTAKE	○ SHRUB
○ TYPE SN-506 STORM INTAKE	○ POWER POLE
○ TYPE SN-511 STORM INTAKE	○ STREET LIGHT
○ TYPE SN-512 STORM INTAKE	○ GUY ANCHOR
○ TYPE SN-513 STORM INTAKE	○ ELECTRIC TRANSFORMER
○ TYPE SN-401 STORM MANHOLE	○ GAS METER
○ TYPE SN-402 STORM MANHOLE	○ TELEPHONE RISER
○ TYPE SN-403 STORM MANHOLE	○ SIGN
○ TYPE SN-301 SANITARY MANHOLE	○ CATV
○ TYPE SN-302 SANITARY MANHOLE	○ UNDERGROUND TELEVISION
○ TYPE SN-304 SANITARY MANHOLE	○ USE
○ STORM/SANITARY CLEANOUT	○ UNDERGROUND ELECTRIC
○ WATER VALVE	○ UNDERGROUND GAS
○ FIRE HYDRANT ASSEMBLY	○ USE
○ BLOW-OFF HYDRANT	○ UNDERGROUND FIBER OPTIC
○ DETECTABLE WARNING PANEL	○ UST
○ SANITARY SEWER WITH SIZE	○ UNDERGROUND TELEPHONE
○ SANITARY SERVICE	○ OHM
○ STORM SEWER WITH SIZE	○ OVERHEAD ELECTRIC
○ STORM SERVICE	○ SANITARY SEWER WITH SIZE
○ WATER SEWER WITH SIZE	○ SANITARY SEWER WITH SIZE
○ WATER SERVICE	○ STORM SEWER WITH SIZE
○ PROPOSED CONTOUR	○ WATER MAIN WITH SIZE
○ SILT FENCE	○ EXISTING CONTOUR
○ FIRE PROTECTION FENCE	○ TREE LINE
○ RIP RAP	○ BUILDING SETBACK LINE
○ ADDRESS	○ PUBLIC UTILITY EASEMENT
○ INLET FILTERS OR INLET SOCKS	○ M.O.E.
○ 100 YR-ELEV	○ MINIMUM OPENING ELEVATION
	○ TREE REMOVAL AREA
	○ DECIDUOUS TREE TO BE REMOVED
	○ CONIFEROUS TREE TO BE REMOVED
	○ SHRUB TO BE REMOVED
	○ DIVERSION DITCH



BENCHMARK

CITY OF WEST DES MOINES NETWORK POINT #044
3400 BLOCK OF GRAND AVENUE, 14 FEET NORTH OF THE CENTERLINE OF GRAND AVENUE, 46 FEET WEST OF THE WEST SIDE OF THE WEST DES MOINES LIFT STATION (3421 GRAND AVENUE), 10 FEET EAST OF THE NORTH/SOUTH FENCE LINE.
CITY OF WEST DES MOINES DATUM = 65.13
USGS DATUM = 820.14

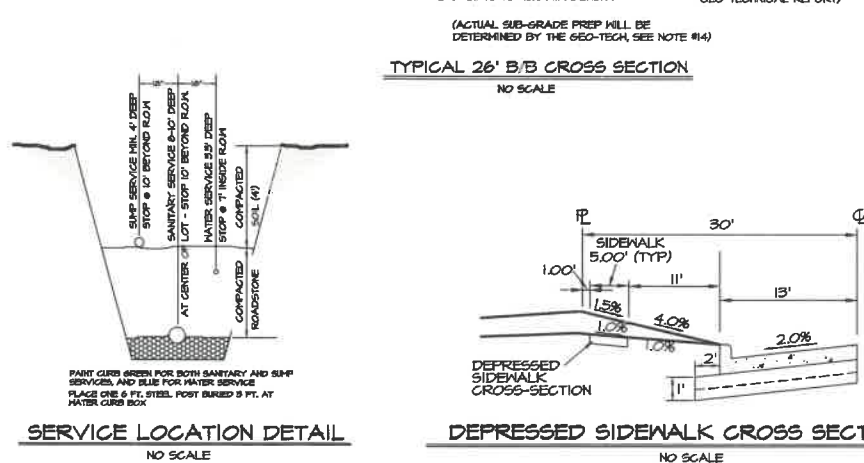
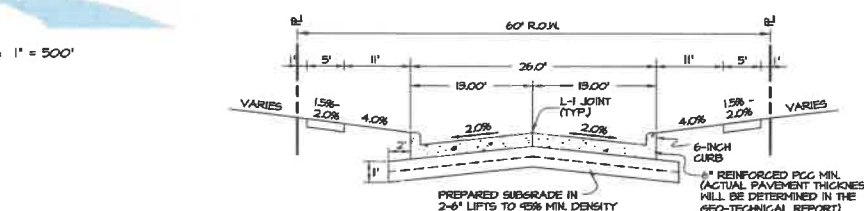
CITY OF WEST DES MOINES NETWORK POINT #131
NORTHWEST CORNER OF BOONEVILLE ROAD AND GRAND AVENUE, 46 FEET NORTH OF CENTERLINE OF GRAND AVENUE AND 58 FEET WEST OF CENTERLINE OF BOONEVILLE ROAD.
CITY OF WEST DES MOINES DATUM = 66.44
USGS DATUM = 840.43

CITY OF WEST DES MOINES NETWORK POINT - US66 D 042- STANDARD USC & 65
DISK STAMPED "G 115 1850"
NORTHING: 560161.0628ft Easting: 1864391.5366ft
Orthometric Height: 859.0809ft Ellipsoid Height: 737.0316ft Geoid12A
Latitude: N41°32'13.88112" Longitude: W89°45'34.74784"
Mapping Angle: -0°10'16" Combination Scale Factor: 0.999930583
Monument Type: A standard benchmark disk stamped "G 115 1850" and set in the top of a round concrete monument.
CITY OF WEST DES MOINES DATUM = 65.07
USGS DATUM = 829.08

HORIZONTAL CONTROL

Point Name: US65 D Network Point ID: I16
Designation: N69 1st order vertical control station "G 155" PID: M40493
Northing: 560161.0628ft Easting: 1864391.5366ft
Orthometric Height: 859.0809ft Ellipsoid Height: 737.0316ft Geoid12A
Latitude: N41°32'13.88112" Longitude: W89°45'34.74784"
Mapping Angle: -0°10'16" Combination Scale Factor: 0.999930583
Monument Type: A standard benchmark disk stamped "G 115 1850" and set in the top of a round concrete monument.

Point Name: US65 C Network Point ID: I15
Designation: N66 1st order vertical control station "855" PID: M40421
Northing: 560246.4828ft Easting: 1556430.9469ft
Orthometric Height: 855.0709ft Ellipsoid Height: 733.3169ft Geoid12A
Latitude: N41°32'14.38291" Longitude: W89°45'24.29427"
Mapping Angle: -0°12'07" Combination Scale Factor: 0.999930583
Monument Type: A US65 survey disk stamped "ELEV 854.803" and set in the top of the west end of the north headwall of a concrete culvert.



CONSTRUCTION SCHEDULE

FALL 2020	- CLEARING, ROUGH GRADING, SILT FENCE, SEDIMENT BASINS & TEMPORARY SEEDING
WINTER 2020	- UTILITY CONSTRUCTION
SPRING 2021	- PAVING
SUMMER	- FINAL GRADINGS/SEEDING

CERTIFICATIONS

**PRELIMINARY
(NOT APPROVED)**

**PRELIMINARY
(NOT APPROVED)**

Civil Eng
2400 86th Street
515.276.4884 . F

CEC

DATE	REVISIONS	COMMENTS
12/16/2020	1	
11/02/2020	2	
09/23/2020	3	
	4	
	5	
	6	

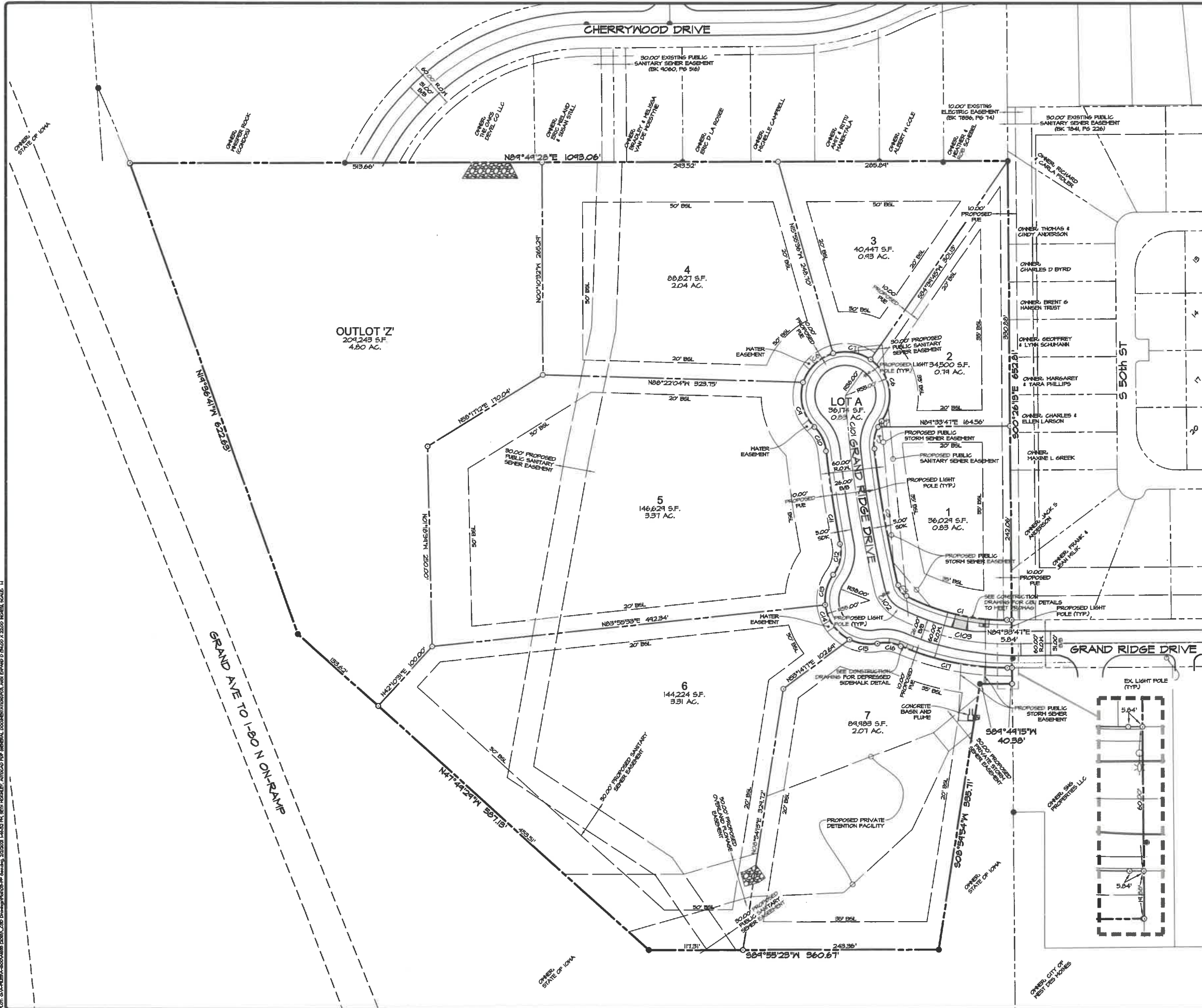
DATE OF SURVEY: 05/23/2018
DESIGNED BY: EHA
DRAWN BY: CH

GRAND RIDGE PLAT I
WEST DES MOINES, IOWA

COVER

SHEET 1 OF 3

A-1653

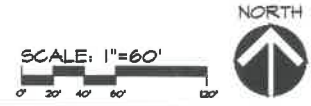


CENTERLINE CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C101	9°24'16"	1500.00'	246.21'	129.58'	249.43'	S08°21'36"E
C102	50°00'29"	50.00'	43.64'	23.32'	42.27'	S81°44'28"E
C103	27°41'28"	300.00'	144.99'	73.44'	143.58'	S76°35'24"E

CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C1	27°41'28"	270.00'	130.41'	66.55'	124.22'	S76°35'24"E
C2	44°40'20"	20.00'	17.34'	4.26'	16.80'	S87°54'35"E
C3	6°44'44"	1470.00'	173.07'	86.83'	172.91'	S04°42'03"E
C4	31°56'32"	50.00'	21.87'	14.31'	21.52'	S04°38'35"W
C5	40°43'50"	55.00'	37.10'	24.51'	34.06'	S04°58'20"E
C6	40°43'50"	55.00'	37.10'	24.51'	34.06'	S04°58'20"E
C7	50°39'21"	55.00'	40.56'	25.94'	41.00'	S00°31'56"E
C8	56°28'07"	55.00'	54.21'	29.53'	52.04'	N45°50'20"E
C9	62°54'44"	55.00'	60.34'	33.65'	51.40'	N3°51'05"W
C10	34°07'06"	50.00'	34.14'	17.16'	33.48'	N25°44'54"W
C11	4°23'45"	1530.00'	117.38'	58.72'	117.33'	N08°23'13"W
C12	46°06'42"	50.00'	40.24'	21.28'	34.16'	N12°28'15"E
C13	41°36'03"	55.00'	34.43'	20.84'	34.06'	N14°43'35"E
C14	57°14'26"	55.00'	54.45'	30.01'	52.64'	N84°41'40"W
C15	37°03'18"	55.00'	35.57'	18.43'	34.93'	N81°50'32"W
C16	38°48'20"	50.00'	24.46'	15.17'	24.03'	N83°24'31"W
C17	23°44'21"	330.00'	157.21'	64.61'	136.22'	N78°31'32"W



Civil Engineering Consultants, Inc.
 2400 86th Street, Unit 12, Des Moines, Iowa 50322
 515.276.4884 Fax: 515.276.7084 mail@cecinc.com

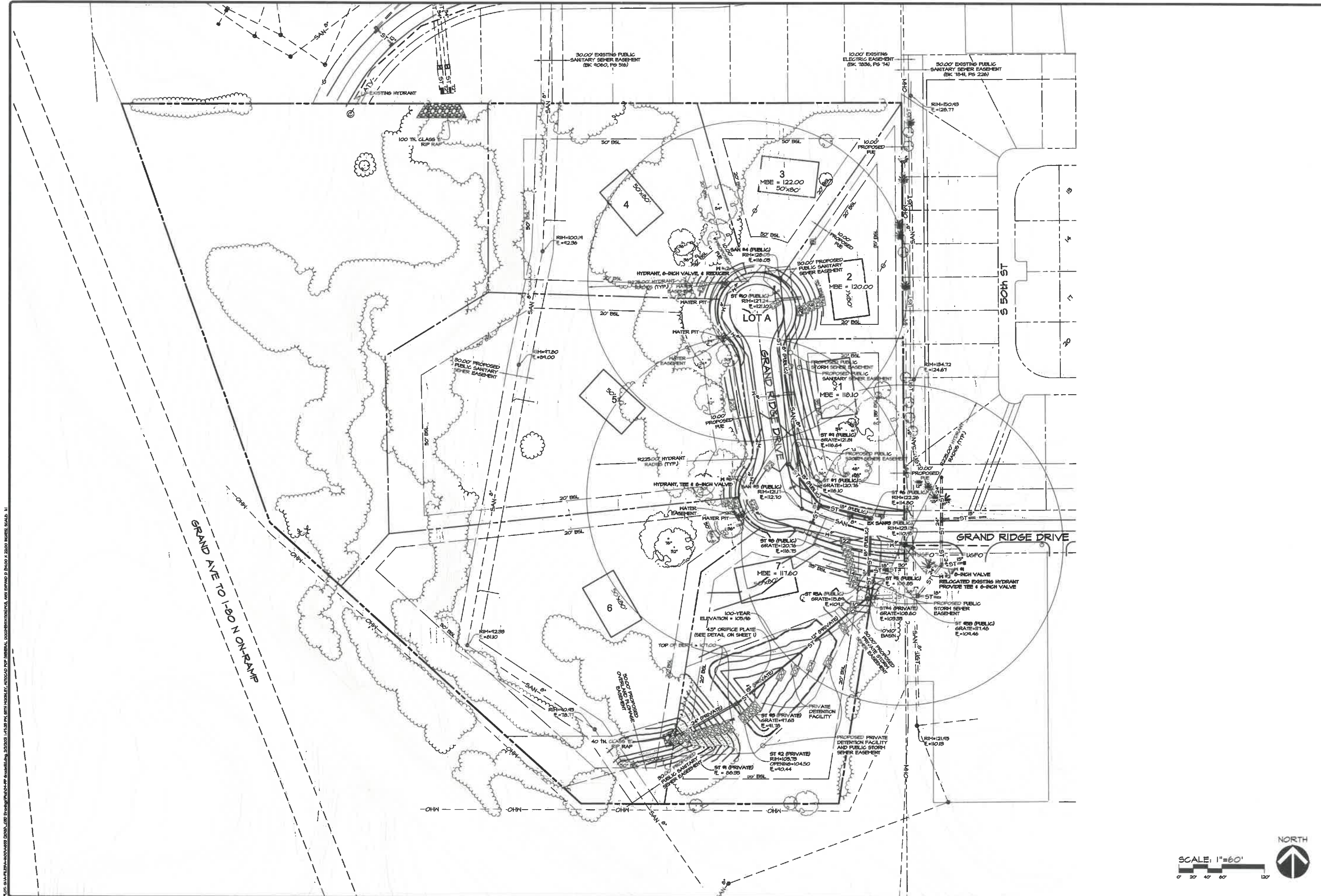
CEC

DATE	REVISIONS	COMMENTS
12/16/2020	1	
11/07/2020	2	
09/22/2020	3	
DATE OF SURVEY	09/23/2018	
DESIGNED BY	EHA	
DRAWN BY	CM	

GRAND RIDGE FLAT 1
 WEST DES MOINES, IOWA
GEOMETRIC PLAN

9
 2
 3

A-1659



PLOT: 04/11/2011 10:00:00 AM 1163 10118 C:\DWG\Projects\1163\10118.dwg
 FILE: 04/11/2011 10:00:00 AM 1163 10118 C:\DWG\Projects\1163\10118.dwg
 USER: JAMES.MCMILLAN
 TITLE: GRAND RIDGE PLAT 1 WEST DES MOINES, IOWA
 PROJECT: GRAND RIDGE PLAT 1 WEST DES MOINES, IOWA
 SHEET: GRADING & UTILITY PLAN
 DATE: 04/11/2011 10:00:00 AM
 TIME: 10:00:00 AM
 SCALE: 1"=60'
 DRAWN BY: JAMES.MCMILLAN
 CHECKED BY: JAMES.MCMILLAN
 APPROVED BY: JAMES.MCMILLAN

GRAND RIDGE PLAT 1 WEST DES MOINES, IOWA GRADING & UTILITY PLAN	
DATE:	12/16/2020
REVISIONS:	1 2 3 4 5 6
COMMENTS:	
DATE OF SURVEY:	05/29/2014
DESIGNED BY:	EHA
DRAWN BY:	CM


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