

**CITY OF WEST DES MOINES
PLAN AND ZONING COMMISSION COMMUNICATION**

Meeting Date: June 10, 2019

Item: Extra Space Storage, 6220 Village View Drive – Construction of a 120,000 square foot indoor storage facility – Heartland Self Storage, Iowa Inc. – OSP-003923-2018

Requested Action: Recommend Approval of Overlay District Site Plan

Case Advisor: Brian Portz, AICP *BP*

Applicant's Request: The applicant, Heartland Self Storage, Iowa Inc., is requesting approval of an Overlay District Site Plan to allow construction of a 120,000 square foot indoor self-storage facility. The building will be 3 stories above grade with the storage units contained entirely within the building. There will be one entrance garage door on the west side of the building and another garage door on the east that will be used as an exit with the circulation drive directly connecting to Village View Drive. It is intended that all material unloading will occur from within the building.

History: The Jordan Creek Business Park area was annexed into the City in 2003 as a part of the Mills Civic Parkway Annexation. The property was originally platted in 2004 as a part of Davis Estates Plat 1. In September of 2006, a Zone Change Specific Plan was approved for the property outlining the specific development regulations for the property and the other parcels within the Jordan Creek Business Park. The property was re-platted in 2007 as the Jordan Creek Business Park. In September of 2017, an amendment to the Jordan Creek Business Park Specific Plan Ordinance was approved specifically allowing for indoor storage facilities in the Jordan Creek Business Park development.

City Council Subcommittee: This item was presented to the Development & Planning City Council Subcommittee at their June 11, 2018 meeting, as an informational item only. No discussion was had and no disagreement with the proposal was expressed.

Staff Review and Comment: This request was distributed to other City departments and other agencies for their review and comment. There are no outstanding issues. Staff would summarize the following key points of interest:

- **Overlay District Site Plan Review:** Overlay District Site Plans are generally approved administratively but can be brought forward to the Plan & Zoning Commission and City Council for review if deemed appropriate by Staff based on the specific project. Staff felt that since the amendment to allow indoor storage facilities within the Jordan Creek Business Park was met with concerns by adjacent property owners, the Overlay District Site Plan request should be considered by the Plan & Zoning Commission and City Council.
- **Previous Concerns Raised by Adjoining Property Owner:** The concept plan that was submitted as part of the Specific Plan Amendment included an internal drive connection to the condominium office building immediately to the east. Interconnectivity of sites is a standard city practice as it allows patrons of one parcel alternate ways to enter and exit a site in the event the main entrance/exit to the site is blocked due to an accident or road or utility repairs. Property owners of the adjoining office building objected to the connection as they did not want vehicles from the storage facility routing through their site and having access to that business's dumpster. The applicant worked with staff, specifically the Engineering and Fire divisions to provide a second driveway to the site that tied directly to Village View Drive thus negating a connection to the adjoining property to the east. Staff is recommending a condition of approval requiring the applicant monitor the trash receptacles within the site to ensure that there is no overflow of materials in or adjacent to the receptacle.

- **Parking:** In 2016, the City Council passed a City Code amendment allowing indoor self-storage facilities in Office and Professional Commerce Park zoning districts if the architecture of the building was designed so that it looked like a regular office building from the outside and also if it could be demonstrated that the parking requirements for an office building could be met on the site in the event the building was converted to an office use in the future. The applicant has provided a site plan and parking counts showing that the proposed site could accommodate the number of parking spaces required for a 120,000 square foot building with the use of surface parking and structured parking.
- **Storm Water Management Facility Maintenance Agreement (SWMFMA):** Storm Water Management Facility Maintenance Agreements are required for all new site developments or sites that have detention facilities but have not otherwise previously executed the agreement. These agreements allow the City to enter a site to do maintenance and/or repairs on a private detention facility in the event that the facility has not been maintained by the property owner and advises who the City should bill for the maintenance/repair work. In this case, the detention for this site is located on a property north of Village View Drive that is owned by a different property owner. The applicant is in the process of obtaining the signature of that property owner on the agreement. The other property owner has indicated to staff that he will sign the agreement upon receipt. Staff recommends that the signed agreement be submitted to the City for recording prior to issuance of an occupancy permit, including temporary occupancy for the indoor storage building.

Comprehensive Plan Consistency: The project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan and the land use map of the Comprehensive Plan.

Town Center Overlay District Consistency: The proposed project has been reviewed for consistency with the Town Center Overlay District Guidelines. Based upon that review, a finding has been made that the proposed project is consistent with the Town Center Overlay District Guidelines in that the plan is consistent with the overall objective and intents of the Town Center Overlay District Guidelines.

Findings: This proposed project was distributed to various city departments for review and comment. Based upon that review, the following findings have been made on the proposed project:

1. The proposed development and use is consistent with the West Des Moines Comprehensive Plan in that the project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan.
2. The proposed development and use does assure compatibility of property uses within the zone and general area in that this project was reviewed by various City Departments for compliance with the Zoning Ordinance.
3. All applicable standards and conditions have been imposed which protects the public health, safety and welfare in that this project was reviewed by various City Departments and public agencies for compliance with the various state and local regulations. Based upon that review a finding is made that the project has been adequately conditioned to protect the health, welfare and safety of the community.
4. There is adequate on-site and off-site public infrastructure to support the proposed development in that this project was reviewed by various public agencies and City Departments and public utilities to ensure that either the petitioner will construct or the project has been conditioned to construct adequate public infrastructure to serve the development.
5. The proposed development and use has met the requirements contained in the City Code in that this project was reviewed by various City Departments and the project has complied with or has been conditioned to comply with all City Code requirements.

6. The proposed development and use is in keeping with the scale and nature of the surrounding neighborhood in that the proposed project is consistent with the zoning designation and Comprehensive Plan which designates this site as suitable for development such as that proposed by this project.

Staff Recommendation and Conditions of Approval: Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, staff recommends the Plan and Zoning Commission adopt a resolution recommending the City Council approve the Overlay District Site Plan to allow construction of a 120,000 square foot indoor storage facility, subject to the applicant meeting all City Code requirements and the following:

1. The applicant submitting to staff's satisfaction a signed and notarized Storm Water Management Facility Maintenance Agreement and provision of necessary facility as-builts and certifications before the issuance of any occupancy permit, including temporary occupancy, for the building.
2. The applicant acknowledging and agreeing that no outside storage of any materials or vehicles may occur within the site. Additionally, the applicant acknowledging and agreeing that the trash receptacles within the site will be monitored and picked up accordingly to prevent the overflow of the receptacle or placement of items outside of the receptacle in or adjacent to the enclosure.
3. The applicant acknowledging that additional parking within the site may be required to be constructed in association with any change in use from an indoor storage facility. Prior to implementation of an alternate use other than indoor storage, the appropriate development application illustrating the details of the additional parking and any other site modifications shall be submitted to the City for review and approval.

Property Owner/Applicant: Heartland Self Storage – Iowa Inc.
17620 Jones Street
Omaha, NE 68116
darylleise@icloud.com

Applicant's Representative: E & A Consulting Group, Inc.
10909 Mill Valley Road, Suite 100
Omaha, NE 68154
jthiellen@eacg.com

ATTACHMENTS:

Attachment A	-	Plan and Zoning Commission Resolution
Exhibit A	-	Conditions of Approval
Attachment B	-	Location Map
Attachment C	-	Building Elevations
Attachment D	-	Site Plans

RESOLUTION NO. PZC -19-055

A RESOLUTION OF THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES, IOWA, RECOMMENDING TO THE CITY COUNCIL THAT IT APPROVE THE EXTRA SPACE STORAGE OVERLAY DISTRICT SITE PLAN (OSP-003923-2018) FOR THAT PROPERTY LOCATED AT 6220 VILLAGE VIEW DRIVE

WHEREAS, pursuant to the provisions of Title 9, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Heartland Self Storage – Iowa Inc., has requested approval of an Overlay District Site Plan to allow the construction of a 120,000 square foot indoor storage facility and associated site improvements for that property located at 6220 Village View Drive; and

WHEREAS, studies and investigations were made, and staff reports and recommendations were submitted which is made a part of this record and herein incorporated by reference; and

WHEREAS, on June 10, 2019, this Commission held a duly-noticed meeting to consider the Extra Space Storage Overlay District Site Plan (OSP-003923-2018).

NOW, THEREFORE, THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:

SECTION 1. The findings, for approval, in the staff report, dated June 10, 2019, or as amended orally at the Plan and Zoning Commission meeting of June 10, 2019, are adopted.

SECTION 2. OVERLAY DISTRICT SITE PLAN PERMIT (OSP-003923-2018) to allow construction of a 120,000 square foot indoor storage facility is recommended to the City Council for approval, subject to compliance with all the conditions in the staff report, dated June 10, 2019, including conditions added at the meeting, and attached hereto as Exhibit “A”. Violation of any such conditions shall be grounds for revocation of the permit, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on June 10, 2019.

Erica Andersen, Chair
Plan and Zoning Commission

ATTEST:

Recording Secretary

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 June 10, 2019, by the following vote:

AYES:
NAYS:
ABSTENTIONS:
ABSENT:

ATTEST:

Recording Secretary

Exhibit A
Conditions of Approval

1. The applicant submitting to staff's satisfaction a signed and notarized Storm Water Management Facility Maintenance Agreement and provision of necessary facility as-builts and certifications before the issuance of any occupancy permit, including temporary occupancy, for the building.
2. The applicant acknowledging and agreeing that no outside storage of any materials or vehicles may occur within the site. Additionally, the applicant acknowledging and agreeing that the trash receptacles within the site will be monitored and picked up accordingly to prevent the overflow of the receptacle or placement of items outside of the receptacle in or adjacent to the enclosure.
3. The applicant acknowledging that additional parking within the site may be required to be constructed in association with any change in use from an indoor storage facility. Prior to implementation of an alternate use other than indoor storage, the appropriate development application illustrating the details of the additional parking and any other site modifications shall be submitted to the City for review and approval.



Extra Space Storage



1:3,204



Disclaimer: The City of West Des Moines makes no warranties regarding the accuracy or completeness of the data provided herein.

THIS MAP IS NOT TO BE USED FOR NAVIGATION



- Legend**
- Addresses
 - Corporate Limits
 - Parcels

COLORS



NEBULUS WHITE

MANGANESE GREY
CUSTOM COLOR

MATERIALS



ALUMINUM PANEL
RAIN SCREEN AL-13
(FOR COLOR SEE NEBULUS WHITE)



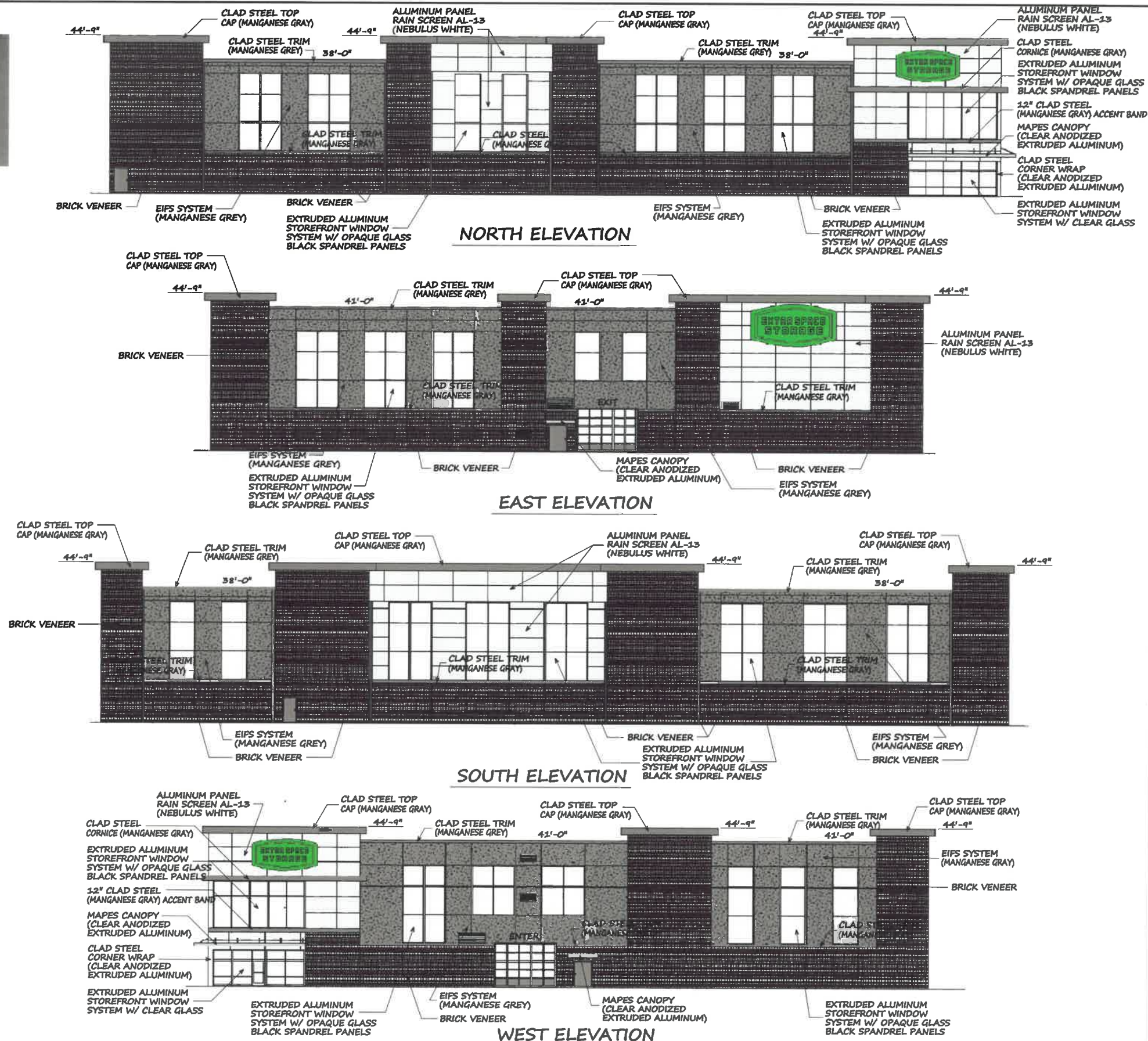
BRICK VENEER
(ENDICOTT MEDIUM IRONSPOT 46
VELOUR MODULAR) W/ GLEN GERY
#G-103 MORTAR



EIFS SYSTEM
(FOR COLOR MANGANESE GREY)

NOTE:

SIGNAGE TO BE DETERMINED. ALL
SIGNS TO MEET CITY &
EXTRA SPACE REQUIREMENTS.

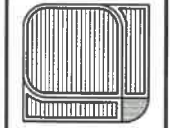


"CLIMATE CONTROL BUILDING"

PLANS FOR:
EXTRA SPACE STORAGE BUILDING
6220 VILLAGE VIEW DRIVE — WEST DES MOINES, IOWA
EXTERIOR ELEVATIONS

REV	NO.	DATE	BY	CHKD.

DESIGN ASSOCIATES, INC.
4020/331-8888
12250 WEST MAPLE ROAD
OMAHA, NEBRASKA 68154



A-1.0



OVERLAY DISTRICT SITE PLAN FOR EXTRA SPACE STORAGE - OSP-003923-2018

LOT 2, JORDAN CREEK BUSINESS PARK
WEST DES MOINES, IOWA



VICINITY MAP

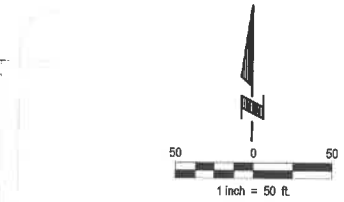
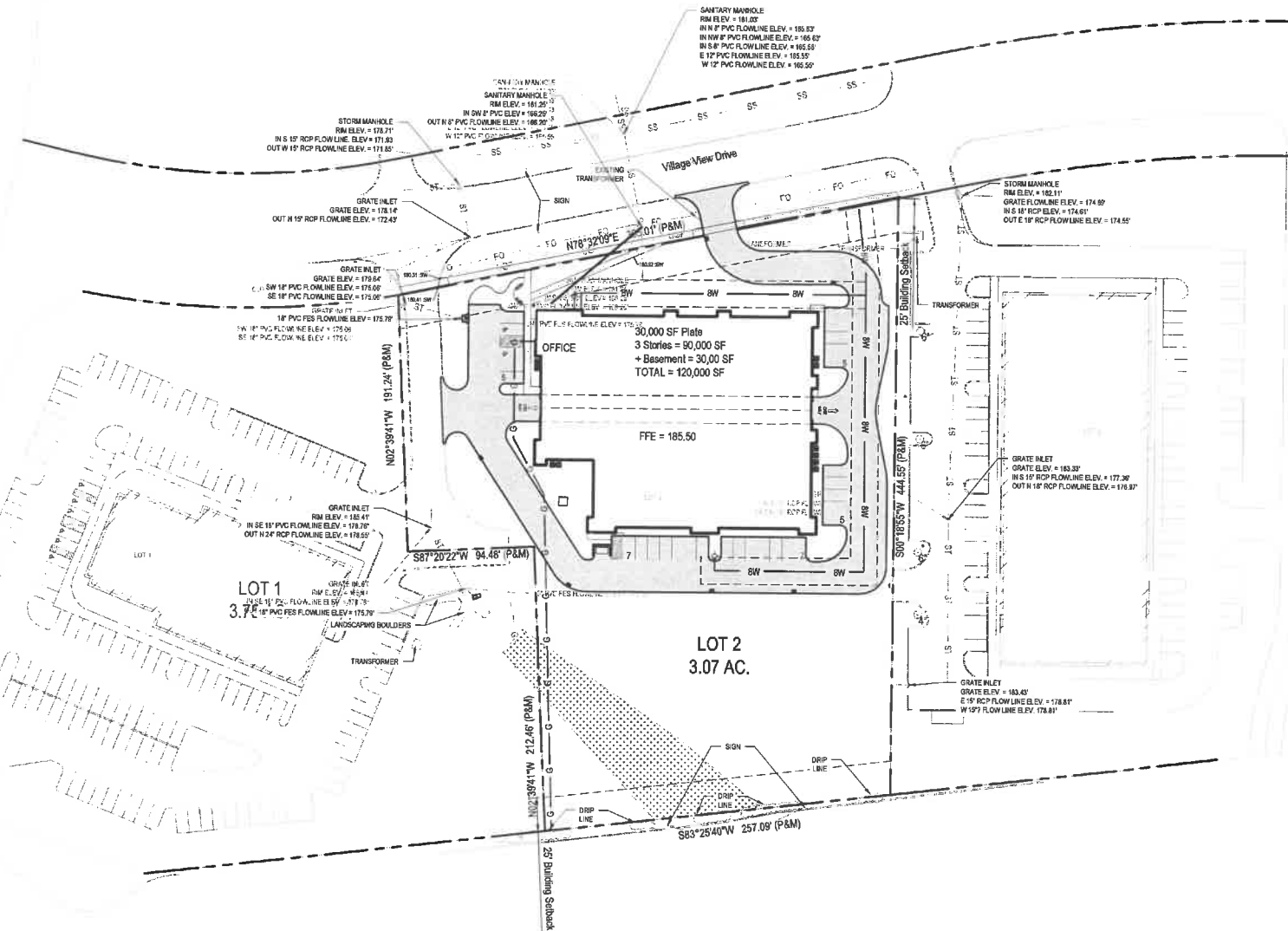
Parking Information
1 space per 10,000 SF of area devoted to storage yields a total of 12 stalls, two be ADA Compliant, as well as 400 SF of office space, 1 stall per 200 SF, for 2 additional spaces.

Total Parking Required = 14
Regular Parking Stalls = 12
HC Parking Stalls = 2
Total Parking Provided = 27

Occupied Building = 1 Office Worker during Business hours,
120,000 SF of floor space for storage.

**Impervious Area Calculation
For Proposed Development**

ATI = Total Area of Impervious Surfaces (SF = Square Feet)
= 58,035 SF
= Site Area = 3.07 Ac. = 133,937 SF
= Percent Impervious = 58,035/133,937 = 43.3%



Sheet List Table	
Sheet Number	Sheet Title
C1	COVER
C2	SITE LAYOUT & PAVING PLAN
C3	UTILITY PLAN
C4	GRADING PLAN
C5	NOTES & DETAILS
C6	NOTES & DETAILS
C7	EROSION CONTROL PLAN
C8	EROSION CONTROL PLAN NOTES & DETAILS
F1	FIRE PLAN
T1	ALTA SURVEY
T2	TOPOGRAPHIC SURVEY
L1	LANDSCAPE PLAN
L2	LANDSCAPE NOTES & DETAILS

Architect: Design Associates, Inc.
12550 W. Maple Road
Omaha, NE 68164
Contact: Ken Sorensen
ksoren@designassoc.com, T: 402-331-8989, F: 402-431-8663

Civil Engineer: E & A Consulting Group, Inc.
10909 Mill Valley Road, Suite 100
Omaha, NE 68154
Contact: David Harnisch, Jr.
dharnisch@eaag.com, T: 402-895-4700, F: 402-895-3599

Landscape Engineer: E & A Consulting Group, Inc.
10909 Mill Valley Road, Suite 100
Omaha, NE 68154
Contact: David Harnisch, Jr.
dharnisch@eaag.com, T: 402-895-4700, F: 402-895-3599

Photometrics: Design Associates, Inc.
12550 W. Maple Road
Omaha, NE 68164
Contact: Ken Sorensen
ksoren@designassoc.com, T: 402-331-8989, F: 402-431-8663

GEO Tech: Terracon
600 SW 7th Street, Suite M
Des Moines, IA 50309
Jeffrey Magner
jeff.magner@terracon.com, T: 515-244-3184

Surveyor: E & A Consulting Group, Inc.
10909 Mill Valley Road, Suite 100
Omaha, NE 68154
Contact: Eric Schaben
eschaben@eaag.com, T: 402-895-4700, F: 402-895-3599

Owner/Developer: Heartland Storage Iowa Inc.
17620 Jones Street
Omaha, NE 68118
Contact: Daryl Laise
daryl.laise@icloud.com
Call: 402-689-6814

BENCHMARK:
WDM0010 INTERSECTION OF 60TH STREET AND WISTFUL VISTA DRIVE, 150'-4" FEET NORTH ON 60TH STREET, INTERSECTION OF 60TH STREET AND BEECH TREE DRIVE, 50 FEET SOUTH ON 60TH STREET, 31 FEET WEST OF CENTERLINE OF 60TH STREET. ELEVATION = 175.99

WDM116 NORTHEAST CORNER OF INTERSECTION OF SOUTH 60TH STREET AND MILLS CIVIC PARKWAY, 18.5 FEET SOUTHEAST OF TRAFFIC SIGNAL POLE, 1.5 FEET SOUTHEAST OF FACE OF SIDEWALK, 31 FEET WEST OF FIRE HYDRANT. ELEVATION = 201.57

LEGAL DESCRIPTION
LOT 2, IN JORDAN CREEK BUSINESS PARK, AN OFFICIAL PLAN, NOW INCLUDED AND FORMING A PART OF THE CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA
SAID TRACT OF LAND CONTAINS AN AREA OF 133,937 SQUARE FEET OR 3.07 ACRES, MORE OR LESS

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.
David R. Harnisch, Jr. 5/13/2019
DAVID R. HARNISCH, JR. Date
My license renewal date is December 31, 2019.
Pages or sheets covered by this seal
Sheets C1, C2, C3, C4, C5, C6, C7, C8, F1, L1, L2

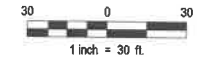


E & A CONSULTING GROUP, INC.
Engineering • Planning • Environmental & Field Services
390 North 117th Street Omaha, NE 68154
Phone: 402.895.4700 Fax: 402.895.3599
www.eaag.com 2016.596.002

PLANS FOR:
EXTRA SPACE STORAGE FACILITY
6220 VILLAGE VIEW DRIVE WEST DES MOINES, IOWA

DESIGN ASSOCIATES, INC.	DATE: 5/8/2018	DRAWN BY: DRH	SHEET NO: 2 OF 9
INC. 402/331-8989		12550 WEST MAPLE ROAD	68164
OMAHA, NEBRASKA			

C1



LEGEND

- 6" Portland Cement Concrete
- 4" Portland Cement Concrete Sidewalk
- Sawcut Full Depth and Remove Existing Pavement
- 25' Building Setback Line/Private Water Line Easement to WDDW

BUILD NOTES - LAYOUT

- 1 Paint Striping, Typical
- 2 Install Directional Arrows & Words
- 3 Install Handicapped Parking Symbol, See Details on Sheet C5
- 4 Install Access System, Contractor to Coordinate Exact Location and Type with Owner
- 5 Construct curb ramp per city of West Des Moines detail and elevations shown on Sheet C6. Saw-cut full depth and remove existing pavement as necessary to achieve ADA/PROWAG grades shown on detail. At western shared entrance should be existing curb drop per adjacent site plans.
- 6 Construct In-line Curb Ramp, See Detail on Sheet C5
- 7 Existing Transformer to Remain Undisturbed, Contractor to field adjust curb if necessary.
- 8 Proposed Storm or Sanitary Sewer Structure, Typical, Adjust to Grade as Necessary, See Sheet C3 for structure information
- 9 Plaza area, See Landscape Plan for details
- 10 Construct doweled tie-bar connection. See detail Sheet C5
- 11 Proposed Transformer Location, See Electrical Plans
- 12 Dumpster Enclosure Location, See Architectural Plans for Details
- 13 Install ADA Parking Signs, See Detail on Sheet C5
- 14 Install End of Road Marker on Lot 2 to show no continuation of stub-out road from adjacent property to East. See Detail Sheet C5
- 15 Private Water Line Easement Extents

PAVEMENT CONSTRUCTION NOTES

1. Pavement subgrade shall be prepared and compacted in accordance with Statewide Urban Design and Specifications (SUDAS).
2. Concrete for the pavement slab shall be Iowa DOT Class C or Class M air-entrained concrete in accordance with the Statewide Urban Design and Specifications (SUDAS) unless otherwise shown on plans.
3. All integral curbs shall be 6" Standard Curb in accordance with SUDAS OCC Curb Details, Figure 7010.102, unless otherwise shown on plans.
4. Water-reducing admixture shall be added to all hand-placed and finished concrete.
5. Paving widths shall be as shown on plans. All dimensions shown are edge of pavement to edge of pavement.
6. A diamond edge saw blade shall be used for cutting all required contraction and longitudinal pavement joints.
7. The CONTRACTOR shall construct, with the INSPECTORS assurance of conformity, ADA compliant curb ramps at all intersection returns where new sidewalk is constructed, as well as where existing sidewalk has been removed. Detectable Warnings shall be placed as identified in SUDAS Detail 7030.210.
8. Within one (1) hour the concrete pavement shall be cured using a white pigmented liquid membrane-forming curing compound that has been approved by the State of Iowa Department of Transportation (Iowa DOT). Apply liquid membrane-forming curing compound at the concentration and application rate recommended by the manufacturer.
9. Subgrade Preparation includes the adjustment of the subgrade under all areas to be surfaced including driveways, intersections, and the area 48 inches beyond the longitudinal edges of the pavement or the backs of curbs for proper placing of the pavement slab. The Contractor shall scarify and recompact the subgrade to a depth of one foot. The top 12" of subgrade as described shall be compacted to 90% maximum dry density as determined in accordance with the most current edition of ASTM D1557 (Modified Method) with moisture limits of -3% to +4% optimum.
10. All intersections shall be warped as directed by the Engineer in the field to ensure positive drainage.
11. Thickened Edges are required at locations where proposed paving ties into existing paving.
12. All pavement removals shall be sawcut. Pavement shall be removed in complete panels. Pavement removal limits may be adjusted in the field to match existing joints.
13. Furnish and install expansion joint material and sealers to isolate all structures abutting pavement and where otherwise identified on the plans. Iowa DOT article 4136.03.
14. All Joints shall be sealed. Joint sealant shall be in conformance with Iowa DOT Standards and Specifications, article 4136.02
15. Contractor shall provide a pavement jointing plan to Engineer (E&A) for review a minimum of 10 days prior to concrete placement.
16. Concrete Panels shall not exceed a maximum dimension of 24 times the thickness of the concrete. Panels shall be kept as square as possible. Joints shall be perpendicular to edges and radii and shall not form angles less than 45 degrees or over 225 degrees.
17. The driveway approach adjacent to Village View Dr. will need to conform to Standard Drawing 7.18 in the West Des Moines Standard Construction Specifications for Subdivisions.
18. Sidewalk design and construction shall conform with the requirements of the Public ROW Accessibility Guidelines (PROWAG), Chapter 12 of the 2013 edition of the Statewide Urban Design Standards (SUDAS) or most current edition.

SITE LAYOUT AND PAVING PLAN



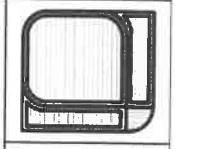
E & A CONSULTING GROUP, INC.
Engineering • Planning • Environmental & Field Services

330 North 117th Street Omaha, NE 68154
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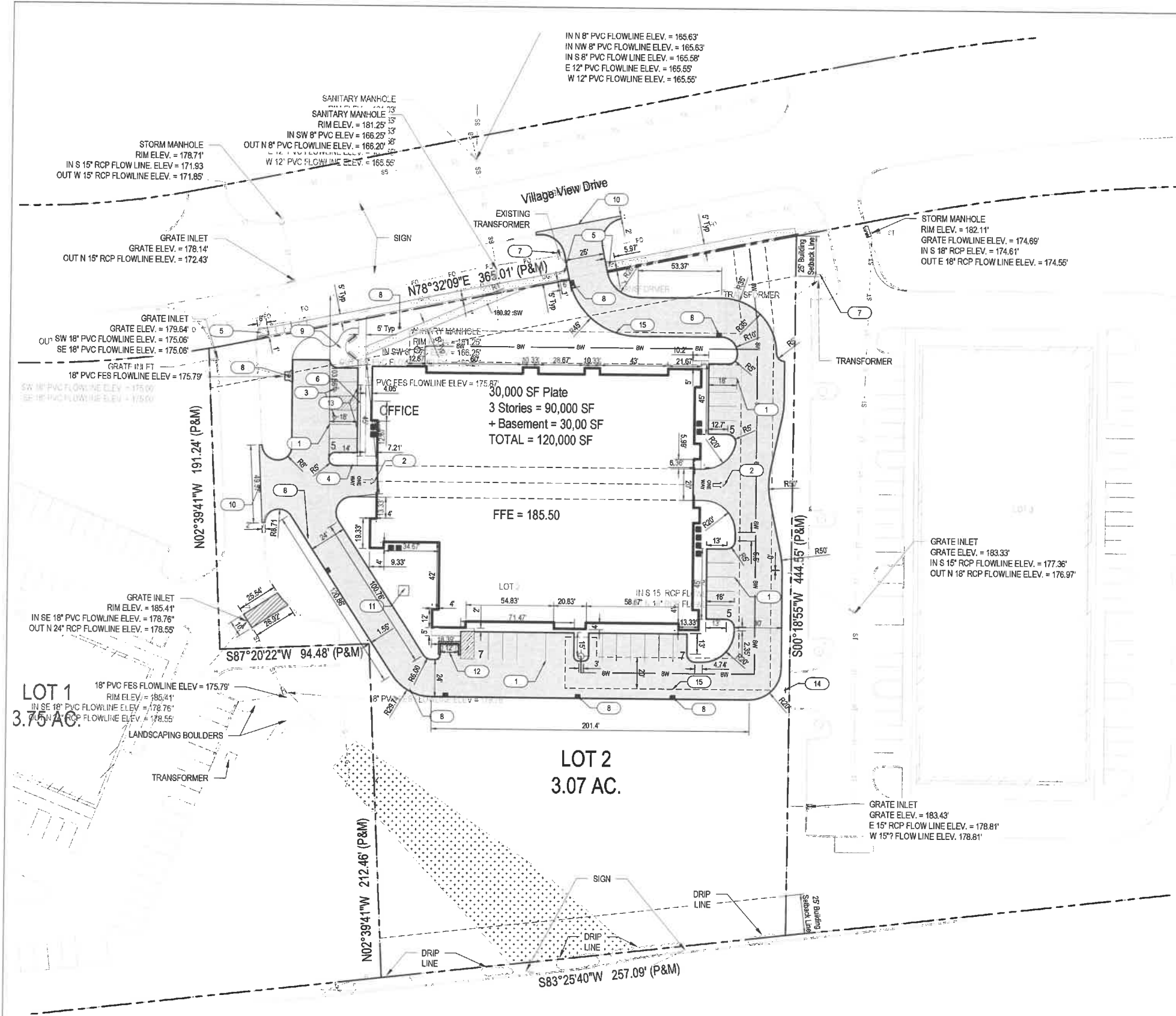
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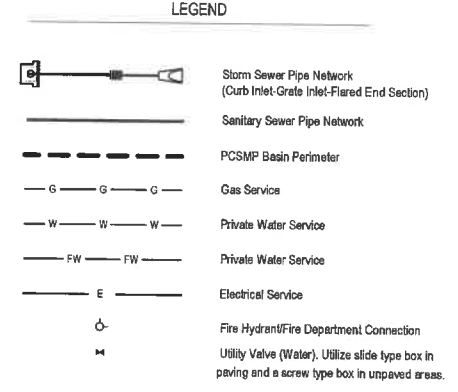
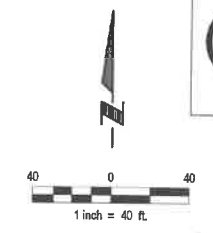
PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE
WEST DES MOINES, IOWA
 X0006

NO.	DATE	BY	DRH	REVISION
1	5/8/2016	DRH		



C2





GENERAL WATER NOTES:

- All water work, public or private, shall be done in accordance with West Des Moines Water Work 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 subcontractor(s) involved in the project.
- Contact Building Inspection (515-222-3630) a minimum of 24 hours in advance for private utility installation inspections.
- The General Contractor shall be responsible for compliance with the West Des Moines Water Works and the City's Cross Connection Control Containment Provision.
- 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 1297, 54-1998. 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.
- Water mains and service lines shall have a minimum cover of 5.5 feet.
- The horizontal distance between the sewer and water lines shall be 10 feet min. and the vertical distance shall be two feet min. the sanitary sewer shall be D.I.P. 10 feet each side of the water main when the vertical distance is less than 2 feet.
- Contractor shall maintain all valves at connection points in the fully closed position until chlorination testing and approval of proposed water lines are complete, except that said valves may be opened to fill lines for use in the chlorination process.
- Type "K" copper water service of the sizes and quantities shown, shall be constructed to all buildings shown of this development in accordance with the specifications and details shown on the plans. the contractor shall record tap and valve locations of each water service installed and provide such records to the owner upon completion of construction.
- Contractor shall field verify all potential utility line crossing conflicts. contractor shall notify engineer of conflicts and adjust horizontal and vertical alignments of proposed utilities only at the direction of the engineer.

W WATER REFERENCE NOTES

- W1 Connect to end of existing 8" Water Stub. Coordinate connection with West Des Moines Water Works. Contractor to field verify size and location of connection point.
- W2 Construct 6" Water Service Line in Accordance with WDMWW Specifications.
- W3 Fire Hydrant/Fire Department Connection. Contractor to coordinate exact configuration with plumbing contractor. Construct in Accordance with WDMWW Specifications. Shutoff valves minimum 10' away from building.
- W4 See Mechanical/ Plumbing Plans for Continuation. There are separate fire and domestic valves as called out on the plans.
- W7 Valve. Match to Line size. Contractor shall utilize slide type box in paving and a screw type box in unpaved areas.

ST STORM WATER NOTES

- ST1 Existing Ditch for Storm Water conveyance.
- ST2 Replaced depression with flared end section for overlot drainage with Curb inlet in parking lot.

SS STORM WATER NOTES

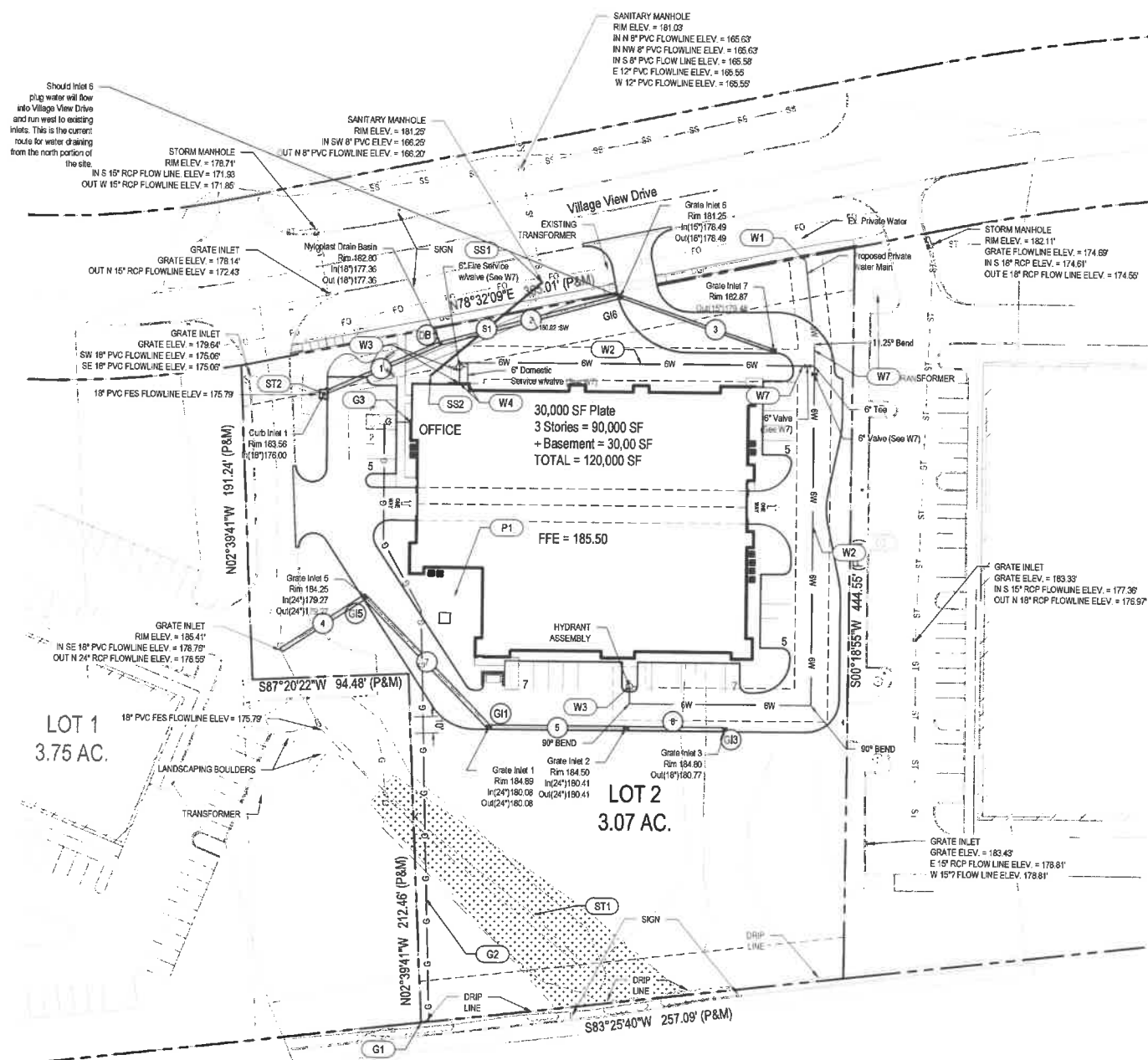
- SS1 Connect to Existing Sanitary Sewer Manhole with 6" Sanitary Sewer Service line from building. See Sanitary Sewer Construction Table this sheet.
- SS2 See Mechanical Plans for continuation.

P POWER REFERENCE NOTES

- P1 Approximate Transformer Location. Shown for reference only. Refer to Electrical Plans for transformer pad dimensions and details.

G GAS REFERENCE NOTES

- G1 Tap Existing Gas Line. Existing Gas line is rune behind stores to the south. Contractor to coordinate with local utility.
- G2 Construct approximately 390 LF of Gas Service Line. (Size of service line to be determined by Mechanical Engineering Consultant).
- G3 See Mechanical/ Plumbing Plans for Continuation.



PRIVATE WATER MAIN QUANTITIES

6" WATER SERVICE	614 LF
6" VALVE	3 EA
6" WATER MAIN	64 LF
6" TEE	1 EA
11.25" BEND	1 EA
90" BEND	2 EA
FIRE HYDRANT ASSEMBLY	2 EA

STORM SEWER BUILD TABLE

ID	START STRUCTURE	END STRUCTURE	Di	Length	Slope	Remarks
1	DB1	C1	18"	77.57	1.76%	Connect to Existing 18" Pipe (West)
2	G16	DB1	18"	112.61	1.00%	
3	G17	G16	15"	98.28	1.00%	
4	G15	G16	24"	60.16	1.20%	
5	G12	G11	24"	83.30	0.40%	
6	G13	G12	18"	60.49	0.55%	
7	G15	G11	24"	108.58	0.75%	

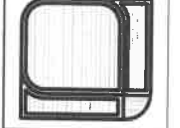
SANITARY SEWER BUILD TABLE

ID	Material	Size	Length	Slope	Remarks
S1	PVC Pipe	6"	88.15	2.00%	invert to still at 188.25, invert at 9' from building face is 188.01.

PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE
WEST DES MOINES, IOWA
 10000

JOB NO.	2016.505
DATE	5/28/2018
DRAWN BY:	DRH
CHECKED BY:	DRH
SHEET NO.	9 OF 9

DESIGN ASSOCIATES, INC.
 402-331-8888
 12550 WEST MAPLE ROAD
 OMAHA, NEBRASKA 68164



UTILITY PLAN



E & A CONSULTING GROUP, INC.
 Engineering • Planning • Environmental & Field Services

330 North 117th Street Omaha, NE 68154
 Phone: 402.655.4700 Fax: 402.655.3599
 www.eaag.com

2016.596.002

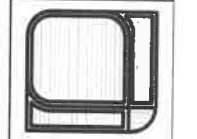
C3



PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE WEST DES MOINES, IOWA

XXXXX

NO.	DATE	BY	REVISION
1	5/8/2019	DRH	ISSUE FOR PERMIT



C4

IN N 8' PVC FLOWLINE ELEV. = 165.63'
IN NW 8' PVC FLOWLINE ELEV. = 165.63'
IN S 8' PVC FLOWLINE ELEV. = 165.58'
E 12' PVC FLOWLINE ELEV. = 165.55'
W 12' PVC FLOWLINE ELEV. = 165.55'

SANITARY MANHOLE
RIM ELEV. = 181.25'
IN SW 8' PVC ELEV. = 165.25'
OUT N 8' PVC FLOWLINE ELEV. = 166.20'

STORM MANHOLE
RIM ELEV. = 178.71'
IN S 15' RCP FLOWLINE ELEV. = 171.93'
OUT W 15' RCP FLOWLINE ELEV. = 171.85'

GRATE INLET
GRATE ELEV. = 178.14'
OUT N 15' RCP FLOWLINE ELEV. = 172.43'

GRATE INLET
GRATE ELEV. = 179.64'
SW 18' PVC FLOWLINE ELEV. = 175.06'
SE 18' PVC FLOWLINE ELEV. = 175.06'

18" PVC FES FLOWLINE ELEV. = 175.79'

GRATE INLET
RIM ELEV. = 185.41'
18" PVC FLOWLINE ELEV. = 178.76'
124" RCP FLOWLINE ELEV. = 178.55'

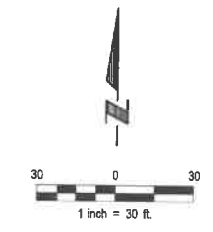
8" PVC FES FLOWLINE ELEV. = 175.79'

30,000 SF Plate
3 Stories = 90,000 SF
+ Basement = 30,000 SF
TOTAL = 120,000 SF

FFE = 185.50

LOT 2
3.07 AC.

RIGHT OF WAY GRADING NOTES
1. All sidewalk has maximum 2% cross slope. Due to grade change and that slope, required for ADA accessibility, grades in some areas of the ROW will exceed 2% outside of the sidewalk itself. See slopes arrows indicated on grading plan.



- LEGEND**
- R Ridge Line
 - Inverted Crown Line
 - SF Sil Fence
 - Existing Contours
 - Proposed Contours
 - Proposed Top of Sidewalk Spot Elevations
 - Proposed Top of Pavement Spot Elevation
 - Proposed Flow Line Spot Elevations (Add 0.5' for Top of Curb)

- GENERAL GRADING NOTES**
- The Contractor Shall have Complete Responsibility For Damage Caused by Blowing Dust from his Construction Activities.
 - Topsoil and Vegetation Shall be Stripped to a Depth of 6" to 96" in Areas to be Graded.
 - Topsoil Obtained from Shipping Operations Shall be Stockpiled in an Approved Location and Re-spread on Areas Finish Graded to Receive Topsoil.
 - Rubble and Waste Materials from site Clearing and Demolition Shall be Removed From the Site and Lawfully Disposed, Salvaged, or Recycled. Where Fence Posts are Removed, their Concrete Bases Shall be Excavated and Completely Removed. Waste Materials Shall not be Buried on Site.
 - All Fill and Backfill Shall be Low Plasticity, Cohesive Soil that are Free of Organic Material or Debris. Structural Fill Materials Shall Have a Liquid Limit Less than 45 and a Plasticity Index Less than 20. Excavated Site Soils Will Generally be Suitable for Use as Structural Fill.
 - Fill Compaction Requirements:
 - Footings Foundations. Areas to Receive Fill Shall be Scarified to a Minimum Depth of 6". Fill Shall be Placed in Lifts Not to Exceed 8" in Loose Thickness. Structural Fill Shall be Compacted to a Minimum of 95% of the Maximum Dry Density (ASTM D-698, Standard Proctor) at a Moisture Content Between -2 and +3% of Optimum.
 - All Other Locations. Areas to Receive Fill Shall be Scarified to a Minimum Depth of 6". Fill Shall be Placed in Lifts Not to Exceed 8" in Loose Thickness. Structural Fill Shall be Compacted to a Minimum of 95% of the Maximum Dry Density (ASTM D-698, Standard Proctor) at a Moisture Content Between -2 and +3% of Optimum.
 - PCC Pavements: Prepare Subgrade Below Pavements Prior to Paving Operations by Compacting Upper 9" a Minimum of 98% of the Maximum Dry Density (ASTM D 698 Standard Proctor) at a Moisture Content Between -3 and +4% of Optimum. Subgrade Preparation shall Extend a Minimum of 2 feet Beyond the Back of Curb.
 - For Sidewalks, the Upper 6" of Subgrade shall be Compacted to a Minimum of 95% of the Maximum Dry Density (ASTM D-698, Standard Proctor) at a Moisture Content Between -3 and +4% of Optimum. Sidewalk Subgrades Shall Extend at Least 6" Laterally Beyond the Edge of the New Sidewalk.
 - Backfill Soils Around Foundations, Basement Walls and Retaining Walls shall be Compacted to a Minimum of 95% of the Maximum Dry Density (ASTM D-698, Standard Proctor) at a Moisture Content Between -2% and +3% of Optimum. Granular Backfill shall Not be used Around Foundation Elements.
 - Backfill Soils in Utility Trenches shall be Compacted to a Minimum of 85% of the Maximum Dry Density at a Moisture Content Between -2% and +3% of Optimum (ASTM D698, Standard Proctor). Lift Thickness Shall be Appropriately Matched to the Equipment Used. Granular Backfill shall not be Used in Exterior Trenches. Backfill Placed Within a Zone of Subgrade Preparation Shall be Compacted to the Requirements of the Subgrade for the full Depth of the Backfill
 - Imported Material, if Required, shall be Free of Organic Matter and Debris, and shall be a Clean, Inorganic Silt or Lean Clay with a Liquid Limit Less than 45 and a Plasticity Index Less than 20. Borrow Material shall not Contain any Foreign Material with a Dimension Greater than 3".
 - Any Excess Material shall be Disposed of Off-Site at a Location Determined by the Contractor.
 - Unless Noted, all Spot Elevations Shown are Top of Curb (TC), Top of Slab (P) or Gutter (G). Contractor responsible for calculating subgrade elevation. All Spot Elevations provided on these plans are Finished Grade, Top of Pavement.
 - The Subgrade of the Floor Slab Shall be Reworked and Compacted as Structural Fill Prior to Concrete Placement. Upper 8 Inches Shall be Compacted to a Minimum of 95% of the Maximum Dry Density as a Moisture Content Between -2% and +3% of Optimum (ASTM D698, Standard Proctor).
 - If Unstable Soils Are Encountered In The Bottom of Shallow Foundations or Subgrade Areas, Implement Over Excavation and Structural Backfill.
 - Exposed Project Site Soils Shall be Stabilized as Shown in the Sediment and Erosion Control Plan and Landscaping Plan.
 - The Recommendations of the Geotechnical Report shall control in all instances where subgrade preparation, backfill and compaction are concerned. See Tracon Project No. 08175042-02.
 - 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 WDM 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 WDM Engineering Services 222-3475 to schedule any required inspections. It is important to note City approval of this plan is subject to the Applicant obtaining all necessary easements/agreements and applicable permits.

BENCHMARK:
WDM#10 INTERSECTION OF 60TH STREET AND WISTFUL VISTA DRIVE, 150' +/- FEET NORTH ON 60TH STREET, INTERSECTION OF 60TH STREET AND BEECH TREE DRIVE, 620 FEET SOUTH ON 60TH STREET, 31 FEET WEST OF CENTERLINE OF 60TH STREET. ELEVATION = 179.99
WDM#118 NORTHEAST CORNER OF INTERSECTION OF SOUTH 60TH STREET AND MILLS CIVIC PARKWAY, 18.5 FEET SOUTHEAST OF TRAFFIC SIGNAL POLE, 1.5 FEET SOUTHEAST OF FACE OF SIDEWALK, 31 FEET WEST OF FIRE HYDRANT. ELEVATION = 201.57



I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.
David R. Harnisch, Jr. 5/13/2019 Date
DAVID R. HARNISCH, JR. 22391
My license renewal date is December 31, 2019
Pages or sheets covered by this seal: Sheets C1, C2, C3, C4, C5, C6, C7, C8, E1, L1 & L2



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GRADING PLAN

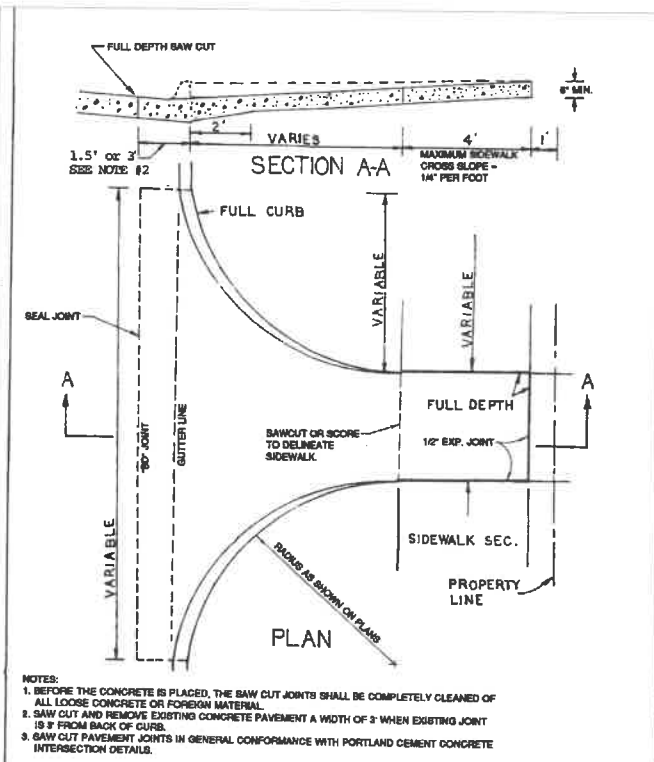
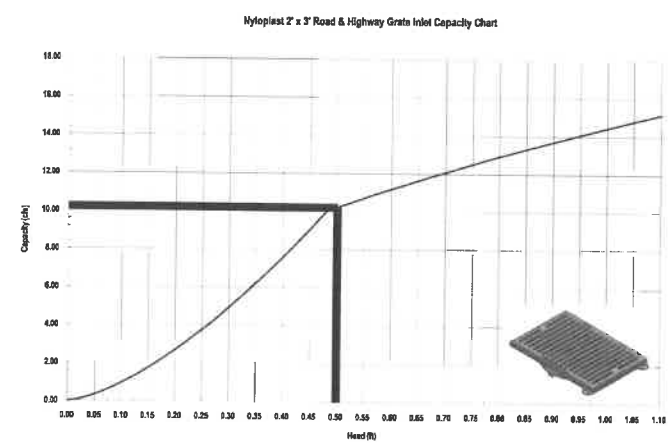
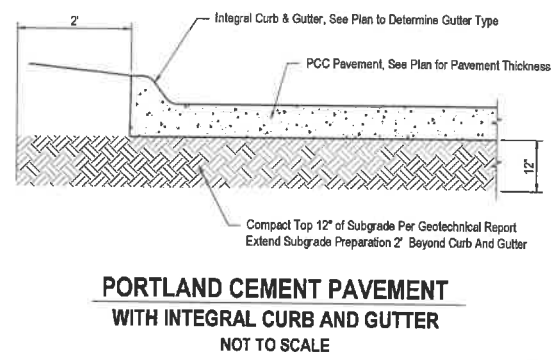
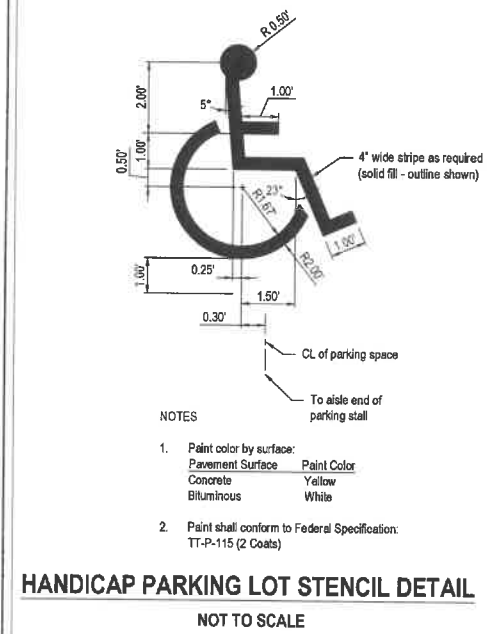
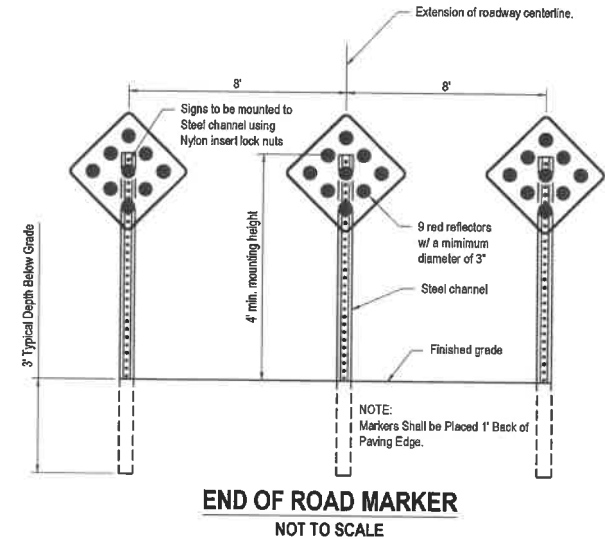
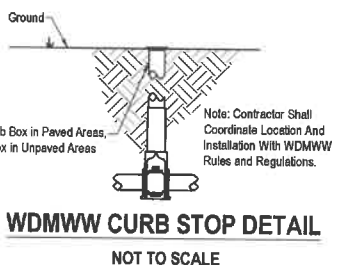
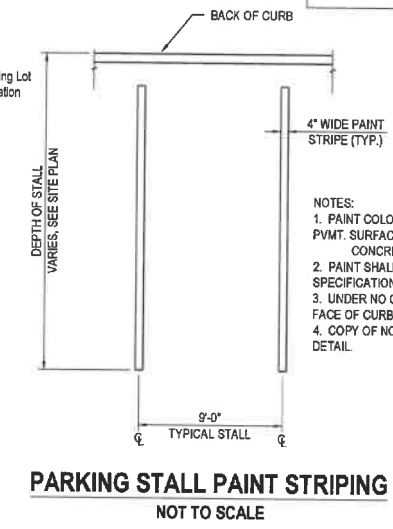
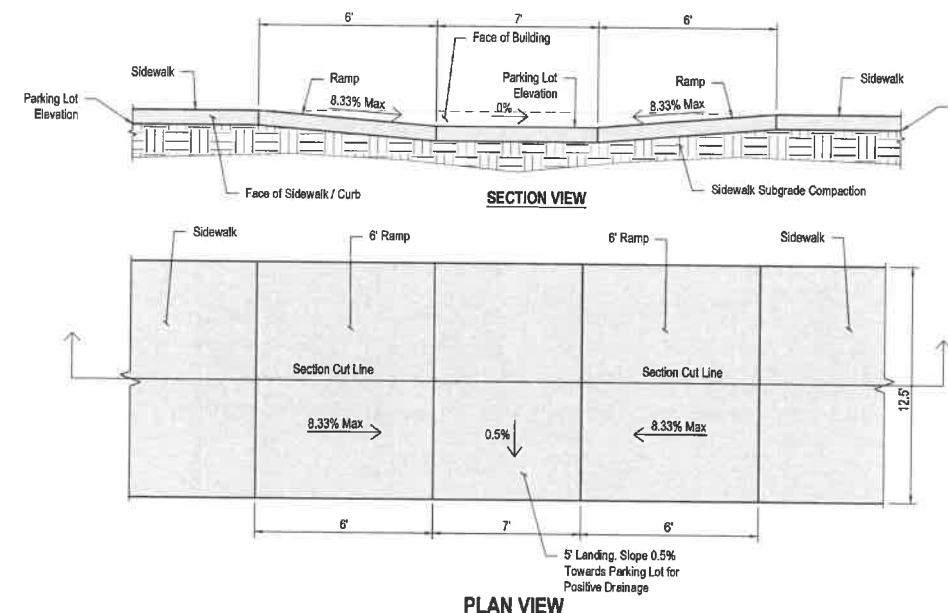
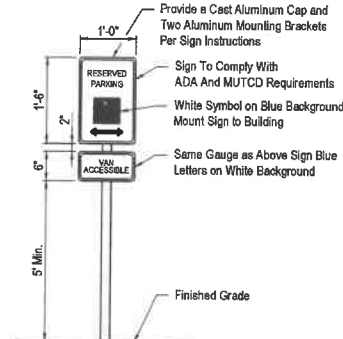


PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE — WEST DES MOINES, IOWA
 00000X

GENERAL SITE CONSTRUCTION NOTES

- The Iowa Statewide Urban Design and Specifications (SUDAS) for Public Works Construction, current edition, and any current revisions or amendments thereto and the Special Provisions for this Project shall apply and the Contractor shall perform in accord therewith for private improvements. City of West Des Moines Standard Details shall govern for all work done in the right of way.
- The Contractor shall check with the Owner for City approval of the project before starting work.
- Utilities are shown as a convenience for the Contractor. The locations of all aerial and underground utility facilities may not be indicated in these plans. Underground utilities, whether indicated or not, will be located and flagged by the utility companies at the Contractor's request. No excavation will be permitted in the area of the underground utilities until all facilities have been located and identified to the satisfaction of all parties and then only with extreme care to avoid any possibility of damages to the facilities.
- Erosion control improvements shall be constructed on this site, including inlet protection, silt fencing and a construction entrance. The Contractor shall be responsible for prompt reconstruction of any erosion control improvements disturbed by his operations. All disturbed erosion control improvements shall be fully reconstructed at the end of each working day prior to leaving the site. Separate payment will not be made for reconstruction of any erosion control improvements. Positive drainage in all work areas shall be maintained in the condition the construction site was in prior to Contractor's arrival.
- 4' sidewalk shall be jointed in 4x4' panels.
- The 6 inch (Solid Wall) sanitary sewer pipe may be ABS (SDR 23.5), PVC (SDR 23.5), or VCP.
- The following storm sewer pipe materials may be used:
 - Reinforced Concrete Pipe (RCP), conforming to ASTM C76 (Class III unless otherwise indicated). Materials and installation shall conform to City of Omaha Standard Specifications.
 - PVC pipe with smooth interior and corrugated exterior, such as Contech A-2000, or equal. Pipe and fittings shall conform to ASTM F949. Installation shall conform to ASTM D 2321. Gasketed joints shall be used, and shall show no leakage when tested in accordance with ASTM D 3212.
 - PVC pipe, SDR -35, in accordance with ASTM D 3034. Installation shall conform to ASTM D 2321. Gasketed joints shall be used, and shall show no leakage when tested in accordance with ASTM D 3212.
 - Polyethylene pipe, with smooth interior and corrugated exterior, such as ADS N-12, Hancor HI-Q, or equal. Pipe and fittings shall conform to AASHTO M-252 and M-294. Installation shall conform to ASTM D 2321. Joints shall be made with split couplings, corrugated to engage the pipe corrugations, and shall engage a minimum of 2 corrugations on each side of the pipe joint. A neoprene gasket, per the manufacturer's recommendations, shall be used for all joints to ensure a soil-tight connection. Class IV soils shall not be used for bedding or backfill of N-12 pipe.
- Backfill soils in utility trenches, around foundations, basement walls, and retaining walls shall be compacted to a minimum of 95% of the maximum dry density (ASTM D-698, Standard Proctor) at a moisture content between -3% and +4% of the optimum. Lift thickness shall be appropriately matched to the type of compaction equipment used.
- Standard Details are available from the City of West Des Moines Public Works Department. These details from City of West Des Moines shall govern for all work in the right of way, specifically WDM Standard Detail 7.18 for the driveway approach. See that detail this sheet, which shall apply to entrances in the ROW.
- The following Standard Plates on file at SUDAS govern for private improvements:

ITEMS	SUDAS FIGURE / DETAIL	REVISION DATE
Joint Details	7010.101	04/19/2016
Concrete Curb Details	7010.102	04/15/2014
Manhole Boxouts in PCC Pavement	7010.103	04/19/2016
PCC Pavement Jointing	7010.901	10/16/2016
Curb Ramp Outside of Intersection Radius	7030.206	10/16/2016
Concrete Driveway, Type "A"	7030.101	10/20/2015
General Features of an Accessible Sidewalk	7030.204	10/20/2015
General Sidewalk and Curb Ramp Details	7030.205	10/20/2015
Special Pipe Connections For Storm Sewer	4020.211	10/16/2012
Sanitary Sewer Service Stub	4010.201	04/21/2009
Castings for Sanitary Sewer Manholes	6010.601	04/21/2015
Circular Sanitary Sewer	6010.301	10/21/2014

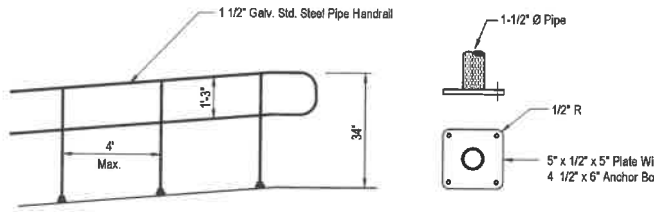
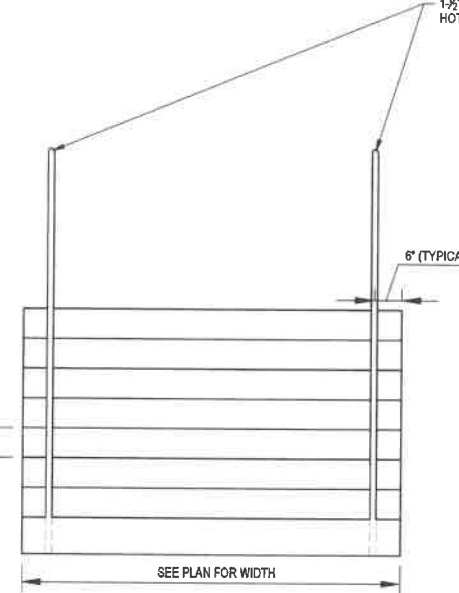
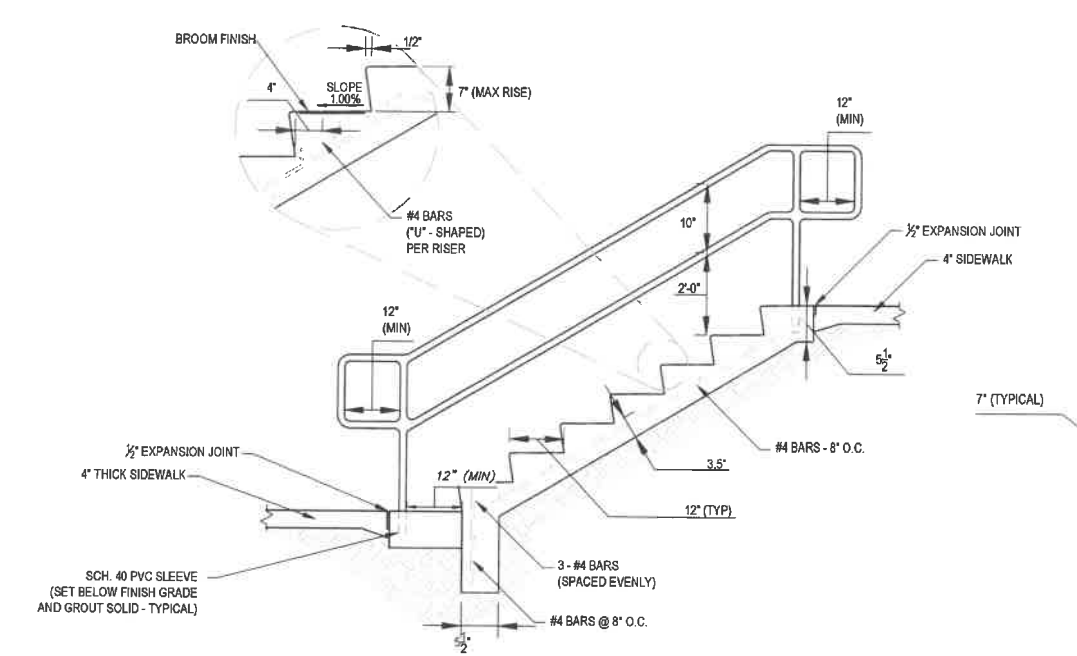


CITY OF WEST DES MOINES
 "CROSSROADS OF THE INTERNET"
 REVISION: 3-94
 DWG. NO. 7.18



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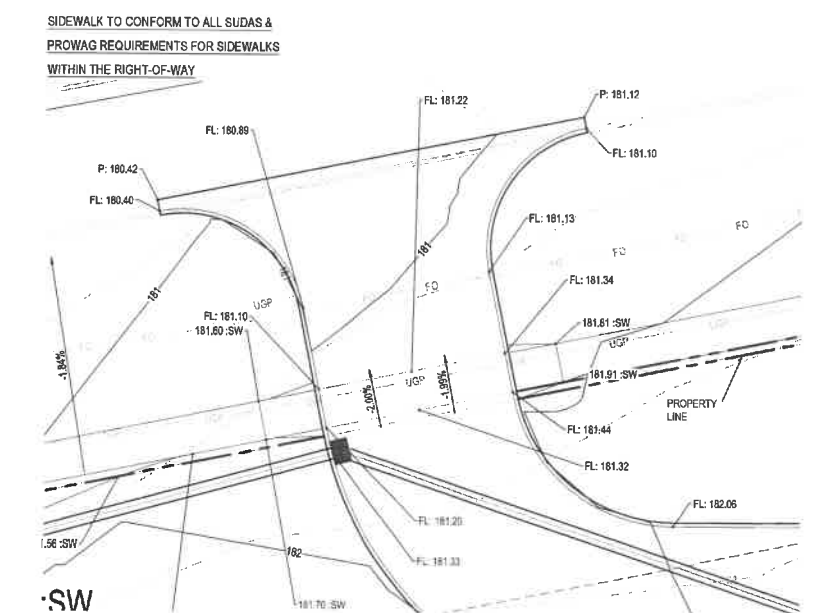
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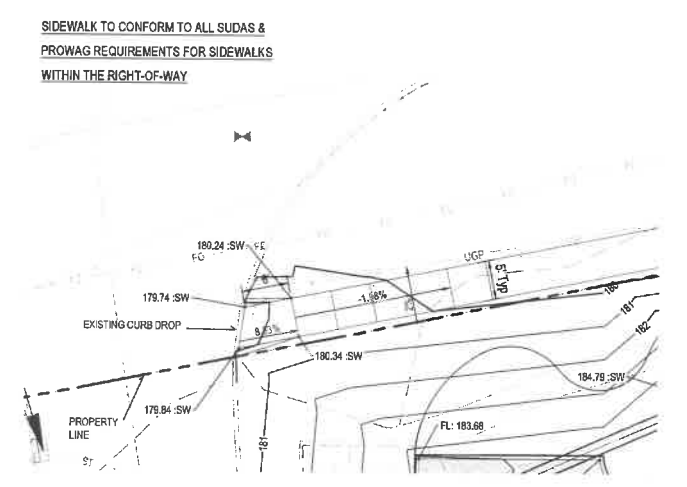
PROFILE VIEW

CONCRETE STAIR DETAIL
NO SCALE

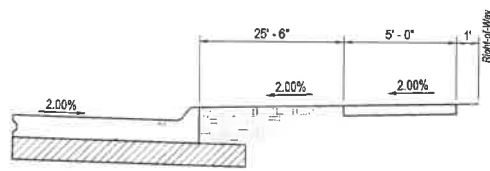
HANDRAIL DETAIL
NOT TO SCALE



EAST ENTRANCE DRIVE OFF VILLAGE VIEW DRIVE -
SW & SE CORNERS OF INTERSECTION
1"=10' SCALE



ENTRANCE DRIVE OFF VILLAGE VIEW DRIVE -
SE CORNER OF INTERSECTION
1"=10' SCALE

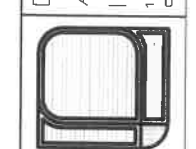


TYPICAL R.O.W. GRADING SECTION
NOT TO SCALE

PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE — WEST DES MOINES, IOWA

REVISION	JOB NO.	DATE	DRAWN BY:
		5/8/2018	DRH

DESIGN ASSOCIATES, INC.
402/331-8888
12550 WEST MAPLE ROAD
OMAHA, NEBRASKA 68164



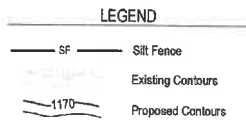
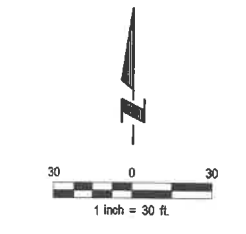
DETAILS 1



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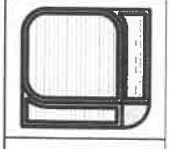
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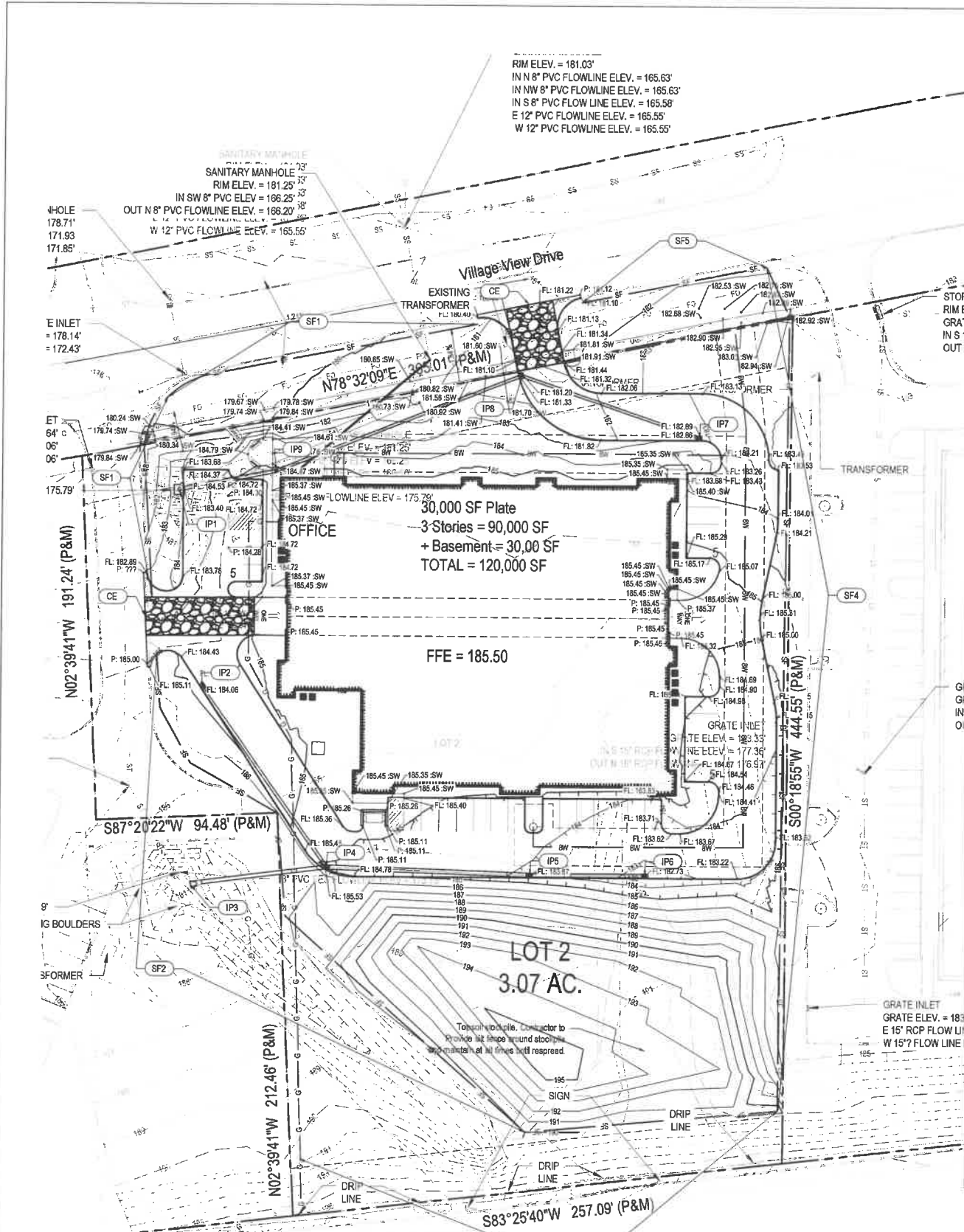
PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE
WEST DES MOINES, IOWA

Table with columns: REVISION, JOB NO., DATE, DRAWN BY, SHEET NO., and C7 OF C8. Contains one revision entry.

DESIGN ASSOCIATES, INC.
4023/381-8585 DRH
12950 WEST MAPLE ROAD
OMAHA, NEBRASKA 68164



C7



Stormwater Reports form containing permit information for HEARTLAND SELF STORAGE FACILITY - CONSTRUCTION. Includes sections for Facility Info, Location Info, Payment Info, and Primary Contact Info.

NO SEDIMENT & EROSION CONTROL REFERENCE NOTES

- CONSTRUCT STONE CONSTRUCTION ENTRANCE
INSTALL SILT FENCE
INSTALL INLET PROTECTION
INSTALL CONCRETE WASHOUT AREA
SWPPP NOTES

Professional Engineer seal for David R. Harnisch, Jr., License No. 22301, State of Iowa, dated 5/13/2019.



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330 North 117th Street, Omaha, NE 68154

MAINTENANCE SCHEDULE:

The following Maintenance Schedule has been provided. The INSPECTOR must perform the Inspections. The OPERATOR/CONTRACTOR must perform all needed maintenance. Furthermore, all erosion control features requiring maintenance may not be listed below. The OPERATOR/CONTRACTOR and INSPECTOR must perform their respective duties on all BMP's that are not listed below as well.

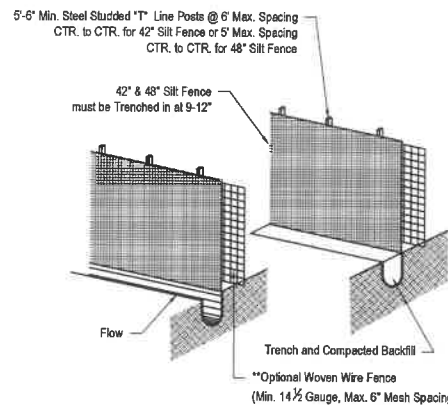
- Construction Entrance** - The entrance shall be maintained in a condition which will prevent tracking or flow of sediment onto public rights-of-way. This may require periodic top dressing with additional stone or the washing and reworking of existing stone as conditions demand and repair and/or cleanout of any structures used to trap sediment. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. The use of water trucks to remove materials dropped, washed, or tracked onto roadways will not be permitted under any circumstances.
- Silt Fence** - The maintenance measures are as follows: (2.1) silt fences shall be inspected immediately after each rainfall and at least daily during prolonged rainfall, any required repairs shall be made immediately; (2.2) close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting; (2.3) should the fabric on a silt fence decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly; (2.4) sediment deposits must be removed when the level of deposition reaches approximately one-half the height of the barrier; and (2.5) any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform to the existing grade, prepared and seeded.
- Storm Drain Inlet Protection** - The maintenance measures are as follows: (3.1) structures shall be inspected after each rain and repairs made as necessary and (3.2) structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.
- Temporary Diversion Dike** - The measure shall be inspected after every storm and repairs made to the dike, flow channel, outlet or sediment trapping facility, as necessary. Once every two weeks, whether a storm event has occurred or not, the measure shall be inspected and repairs made if needed. Damages caused by construction traffic or other activity must be repaired before the end of each working day.
- Temporary Fill Diversion** - Since the practice is temporary and under most situations will be covered the next working day. The maintenance required should be low. If the practice is to remain in use for more than one day, an inspection shall be made at the end of each work day and repairs made to the measure if needed. The OPERATOR/CONTRACTOR should avoid the placement of any material over the structure while it is in use. Construction traffic should not be permitted to cross the diversion.
- Temporary Sediment Trap** - The maintenance measures are as follows: (6.1) sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one half the design volume of the wet storage, sediment removal from the basin shall be deposited in a suitable area and in such a manner that it will not erode and cause sedimentation problems; (6.2) filter stone shall be regularly checked to ensure that filtration performance is maintained, stone choked with sediment shall be removed and cleaned or replaced; and (6.3) the structure should be checked regularly to ensure that it is structurally sound and has not been damaged by erosion or construction equipment, the height of the stone outlet should be checked to ensure that its center is at least 1 foot below the top of the embankment.
- Temporary Seeding** - Areas which fail to establish vegetative cover adequate to prevent soil erosion will be re-seeded as soon as such areas are identified. Control weeds by mowing.
- Permanent Seeding** - The maintenance measures are as follows: (9.1) in general, a stand of vegetation cannot be determined to be fully established until it has been maintained for one full year after planting; (9.2) new seedlings shall be supplied with adequate moisture, supply water as needed, especially late in the season, in abnormally hot or dry conditions, or on adverse sites, water applications shall be controlled to prevent excessive runoff; (9.3) inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season, if possible; (9.3a) if stand is inadequate for erosion control, over seed and fertilize using half of the rates originally specified; (9.3b) if stand is 60% damaged, re-establish following seedbed and seeding recommendations; (9.3c) if stand has less than 40% cover, re-evaluate choice of plant materials and quantities of time and fertilizer, the soil must be tested to determine if acidity or nutrient imbalances are responsible, re-establish the stand following seedbed and seeding recommendations.
- Mulching** - All mulches and soil coverings should be inspected periodically (particularly after rainstorms) to check for erosion. Where erosion is observed in mulched areas, additional mulch should be applied. Nets and mats should be inspected after rainstorms for dislocation or failure. If washouts or breakage occur, reinstall netting or matting as necessary after repairing damage to the slope or ditch. Inspections should take place until grasses are firmly established. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface, repair as needed.
- Soil Stabilization Blankets & Matting** - All soil stabilization blankets and matting should be inspected periodically following installation, particularly after rainstorms to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until which time they become permanently stabilized, at that time an annual inspection should be adequate.
- Street Cleaning/Washing** - The maintenance measures are as follows: (12.1) evaluate access points daily for sediment tracking; (12.2) when tracked or spilled sediment is found on paved surfaces, it will be removed daily, during times of heavy track-out such as during rains, cleaning may be done several times throughout the day; (12.3) unknown spills or objects will not be mixed with the sediment; and (12.4) if sediment is mixed with other pollutants, it will be disposed of properly at an authorized landfill.

GENERAL NOTES

- All OPERATORS/CONTRACTORS must confirm with the APPLICANT that any and all applicable governmental approvals have been received prior to the start of work.
- Any revisions to this SWPPP Plan shall be in conformance with Iowa DNR NPDES General Permit#2 Part IV.D.A.B.
- BMP's may not be removed without INSPECTOR and applicable government approval.
- The APPLICANT, INSPECTOR, and CONTRACTORS/OPERATORS must adhere to all Good Housekeeping BMP's presented within the SUDAS Specifications. Good Housekeeping BMP's focus on keeping the work site clean and orderly while handling materials and waste in a manner that eliminates the potential for pollutant runoff. Good Housekeeping BMP's such as Sanitary Waste Management, Solid Waste Management, Material Delivery & Storage, Street Cleaning/Sweeping, and Vehicle & Equipment Fueling must be addressed when applicable.
- The SWPPP documents (e.g., IDNR-NPDES, SWPPP-SM, SWPPP-N, etc.) are essential and a requirement in one part is as binding as though occurring in all. The SWPPP documents are complementary. The documents describe and provide the complete SWPPP. The APPLICANT, INSPECTOR, and CONTRACTORS/OPERATORS may not take advantage of any apparent SWPPP errors or omissions. The INSPECTOR shall notify the APPLICANT, DESIGNER, and CONTRACTORS/OPERATORS promptly of any omissions or errors. The APPLICANT shall instruct the DESIGNER to make any corrections necessary to fulfill the overall intent of the SWPPP Documents (e.g., Grading Permit Modification Form). In the case of a discrepancy between parts of the SWPPP documents, the most stringent requirement shall rule.

CONSTRUCTION ACTIVITIES & SCHEDULING

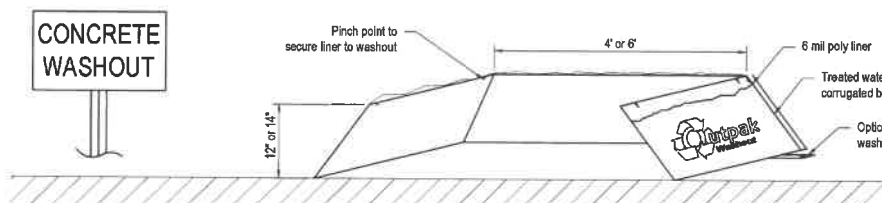
ACTIVITY	SCHEDULE
Install all BMP's needed and associated with the Grading Phase such as stabilized construction entrances, silt basins, riser pipes, outlet pipes, silt traps, silt fence, diversions, terraces, etcetera.	Prior to any stripping of existing vegetation or grading.
Proceed with stripping of existing vegetation and grading in accordance with the grading plan, while disturbing no more than is necessary.	After installing all BMP's needed and associated with the Grading Phase. Furthermore, INSPECTOR approval must be obtained before the start of any stripping of existing vegetation or grading.
Proceed with infrastructure installation.	Infrastructure installation must occur prior to any lot development.
Implement the installation of Temporary Seeding, Permanent Seeding, and/or Mulching.	Stabilization measures must be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
Implement the installation all BMP's needed and associated with the Building Phase.	Building Phase BMP's must be installed concurrently with lot development.
Proceed with removal of BMP's.	BMP's may not be removed until each impacted drainage basin has been fully developed. Full development shall mean installation of pavement, buildings, and utilities, landscaping, and fully established permanent seeding. Furthermore, INSPECTOR approval must be obtained before the removal of any BMP's.



NOTES

- Acceptable silt fence specifications- AOS (#20 - 50 Sieve), Water Flow Rate (50 gpm/ sq. ft. - 125 gpm/ sq.ft), Tensile Strength (Grab) - (Min. 120 Warp or greater and Elongation (5-25%).
- On each new run of silt fence spray paint the beginning of the run with 0+00 and spray paint the end with the date of installation and LF of the run.
- Silt fence should be securely fastened to each steel support post or to woven wire which is in turn attached to the steel fence posts. A minimum of 3 ties are required for each post. To be located in the top 12\"/>

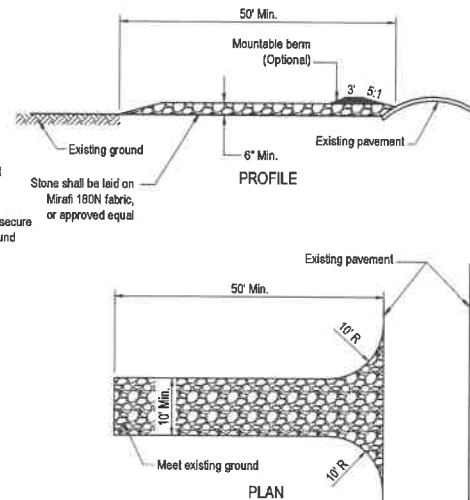
SILT FENCE NOT TO SCALE



NOTES:

- The concrete washout area shall be installed prior to any concrete placement on this project. Install washout area on a level surface. Use Output Disposable Concrete Washout or approved equal.
- Signs shall be placed as necessary to clearly indicate the location of the concrete washout.
- The concrete washout area will be replaced as necessary to maintain capacity for waste concrete and other liquid waste.
- Washout residue shall be removed from the site and disposed of at an approved waste site.
- Do not mix excess amounts of fresh concrete or cement on-site.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not dump excess concrete in non-designated dumping areas.
- Locate washout area at least 50' (15 meters) from storm drains, open ditches, or waterbodies.
- Wash out wastes into the Output Washout as shown where the concrete can set, be broken up, and then disposed of properly.

CONCRETE WASHOUT NOT TO SCALE



NOTES

- The stone size shall be 2\"/>

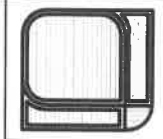
STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE



PLANS FOR:
EXTRA SPACE STORAGE FACILITY
6220 VILLAGE VIEW DRIVE
WEST DES MOINES, IOWA

REVISION	DATE	BY
	5/8/2018	DRH

DESIGN ASSOCIATES, INC.
402/331-8889
12550 WEST MAPLE ROAD
DWAYNE, NEBRASKA 68664



C8

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

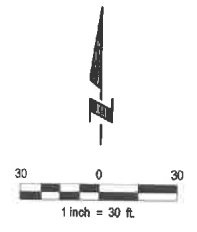
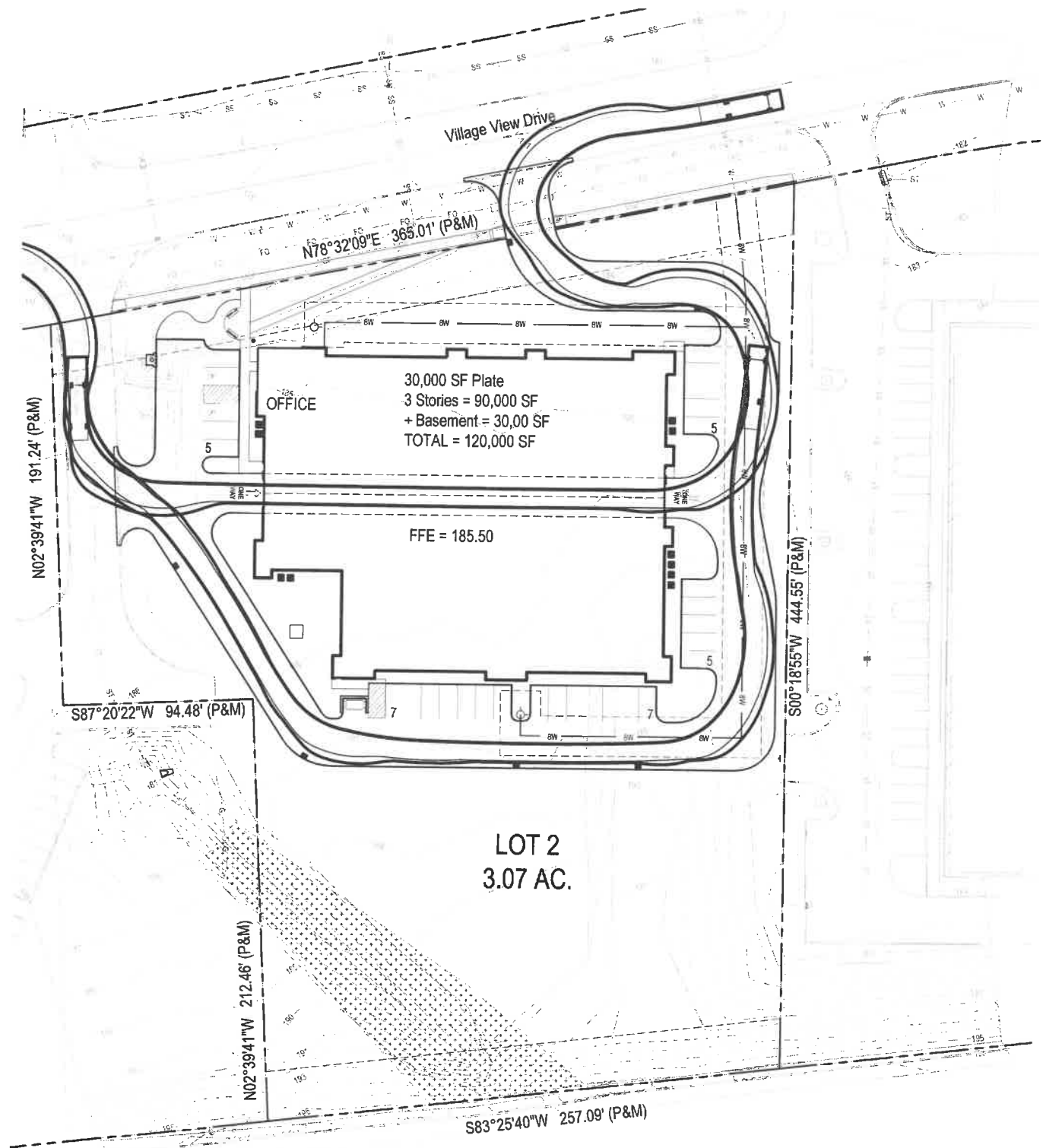
DAVID R. HARNISCH, JR.
22301
Date: 5/13/2019
My license renewal date is December 31, 2019.

Pages or sheets covered by this seal:
Sheets C1, C2, C3, C4, C5, C6, C7, C8, F1, L1 & L2

EROSION CONTROL PLAN NOTES & DETAILS

E & A CONSULTING GROUP, INC.
Engineering • Planning • Environmental & Field Services

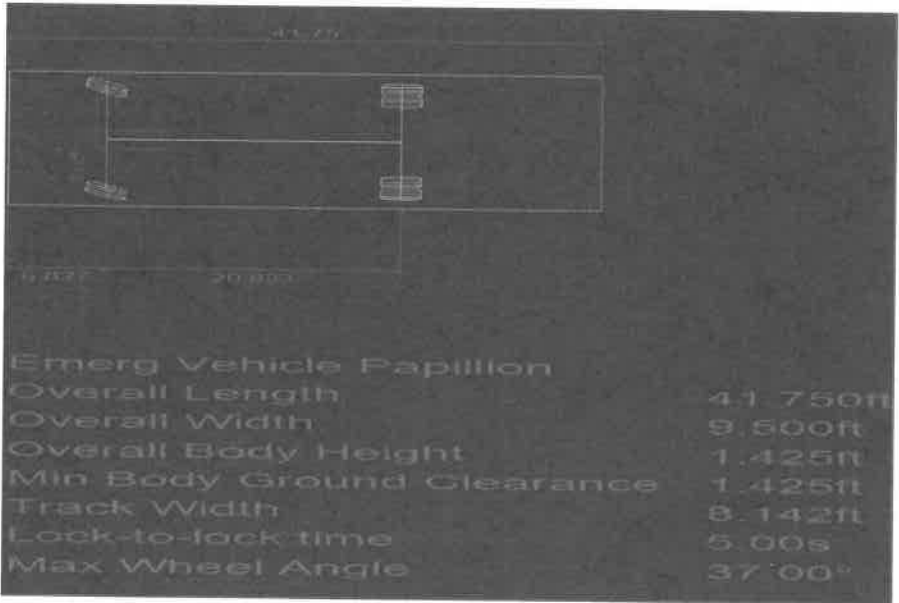
330 North 117th Street Omaha, NE 68154
Phone: 402.895.4700 Fax: 402.895.3569
www.eagroup.com 2016.596.002



Fire Hydrant/Fire Department Connection
Utility Valve (Water)



VICINITY MAP



FIRE TRUCK TURNING MOVEMENTS



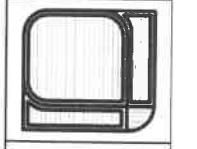
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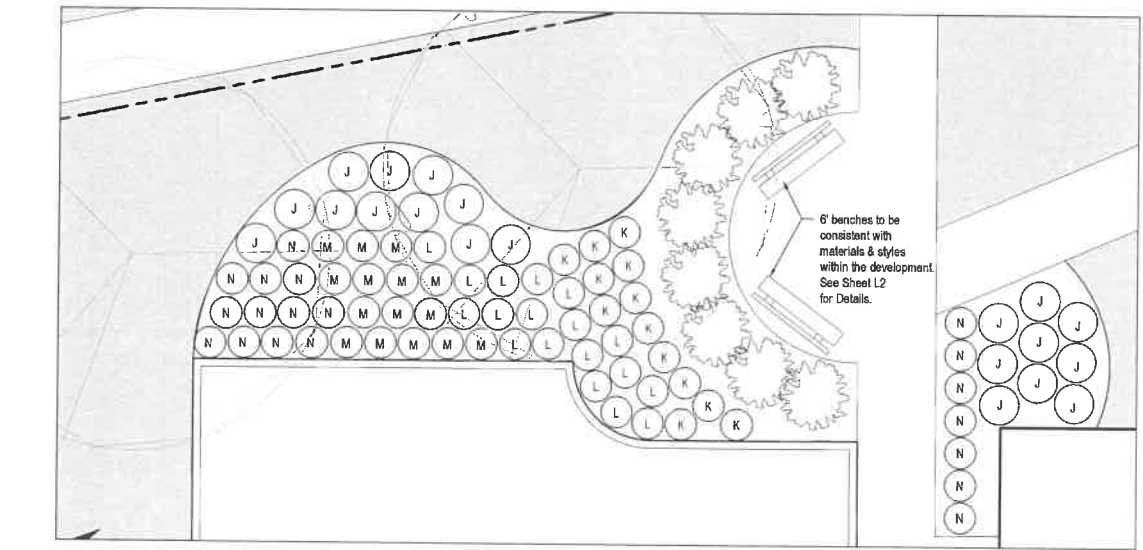
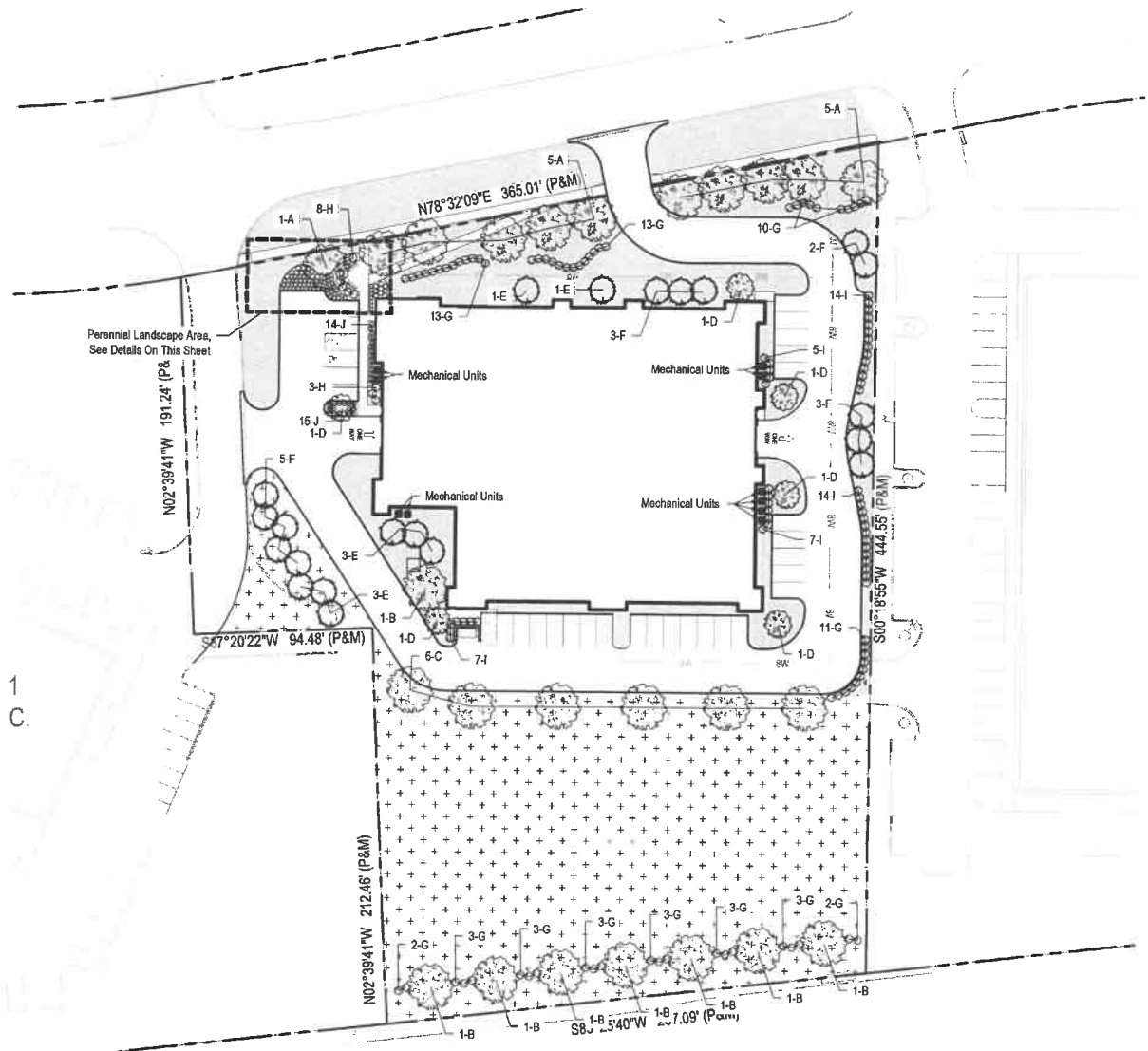
PLANS FOR:
EXTRA SPACE STORAGE FACILITY
3220 VILLAGE VIEW DRIVE — WEST DES MOINES, IOWA

REVISION	16.505
DATE	5/8/2018
DRAWN BY	DRH
SHEET NO	17 OF 17

DESIGN ASSOCIATES, INC.
402/331-8888
12550 WEST MAPLE ROAD
OMAHA, NEBRASKA 68154



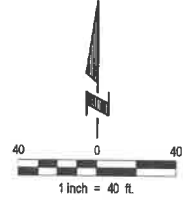
F1



PERENNIAL LANDSCAPE AREA
SCALE: 1" = 5'



VICINITY MAP



PLANT SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	TYPE
A	11	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	2"-2.5"	B&B
B	8	Quercus rubrum	Red Oak	2"-2.5"	B&B
C	6	Acer freemanii 'Jeffersred'	Autumn Blaze Maple	3"-3.5"	B&B
D	6	Tilia cordata 'Greenspire'	Greenspire Linden	2"-2.5"	B&B
E	8	Pinus flexilis 'Vanderwolf Pyramid'	Vanderwolf Pine	7'-8'	B&B
F	13	Picea pungens 'Glauca'	Colorado Blue Spruce	7'-8'	B&B
G	69	Euonymus alatus compactus	Dwarf Burning Bush	3 Gal.	Cont.
H	11	Comus stolonifera 'Farrow'	Arctic Fire Red Twig Dogwood	3 Gal.	Cont.
I	47	Juniperus scopulorum 'Skyrocket'	Skyrocket Juniper	6'-7'	Cont.
J	36	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	2 Gal.	Cont.
K	13	Nepeta racemosa 'Blue Wonder'	Blue Wonder Catmint	2 Gal.	Cont.
L	18	Sedum 'Autumn Joy'	Autumn Joy Sedum	2 Gal.	Cont.
M	15	Hemerocallis 'Eenie Weenie'	Eenie Weenie Daylily	2 Gal.	Cont.
N	19	Salvia nemorosa 'Marcus'	Marcus Salvia	2 Gal.	Cont.

- NOTES:**
- 29,450 SF - Areas to be installed with sod & irrigation. See this sheet for details.
 - 47,375 SF - Areas to be installed with seed & straw matting. See this sheet for details.

- TREE NOTES:**
- Landscape contractor must coordinate with all utilities and general contractor to field verify all utility locations that may conflict with all proposed tree planting locations on the project site. Adjustments shall be made as necessary to ensure trees are not on top of utility lines.

083-05-I: PUD #63 LANDSCAPING & SCREENING REGULATIONS

Buffers: Required = 7 trees & 21 shrubs (South property line)
Provided = 7 trees & 22 shrubs (South property line)

Open Space: Required = 18 trees & 27 shrubs
Provided = 34 trees & 46 shrubs

Streetscape: Required = 11 trees & 33 shrubs
Provided = 11 trees & 36 shrubs & 625 SF of perennial & ornamental grass planting beds at plaza area & entrance walk from street.

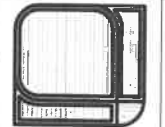
SITE OPEN SPACE CALCULATIONS

Total Area of Site = 133,937 SF	Total Area of Site = 133,937 SF
Total Paved Area Required = 107,150 SF (80%)	Total Paved Area Provided = 58,035 SF (43%)
Total Open Space Required = 26,787 SF (20%)	Total Open Space Provided = 75,902 SF (57%)

PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE — WEST DES MOINES, IOWA

REVISION	DATE	BY

DESIGN ASSOCIATES, INC.
 402/331-8888
 12550 WEST MAPLE ROAD
 DMAH4, NEBRASKA 68184



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2016.696.002

L1

LANDSCAPE NOTES:

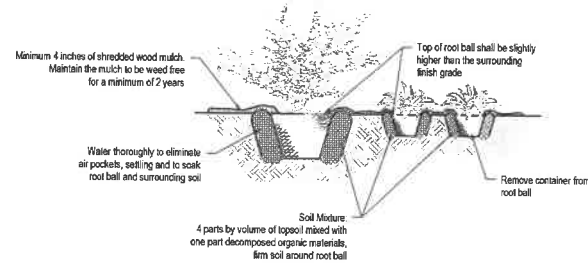
1. Locate and verify the location of all underground utilities prior to the start of any construction. Care should be taken not to disturb any existing utilities during construction. Any damage to utilities or other improvements caused by the Contractor will be repaired at no cost to the Owner.
2. All plant material shall be of good quality and sizes shall meet required size specifications.
3. All plants are to be watered in immediately after planting and then watered once a week for a period of two months from time of planting.
4. All plant material shall be guaranteed to be in a live and healthy growing condition for two full growing seasons (trees) and one full growing season (perennials & shrubs) after final project acceptance or shall be replaced free of charge with the same grade and species including labor.
5. Verify all dimensions and conditions prior to starting construction. The location of plant material is critical and shall be installed as indicated on plans. Field adjustments may be necessary based on field conditions (i.e., root ball and drop inlet conflict). All adjustments must be approved by the landscape architect.
6. The Landscape Contractor shall remove all construction debris and materials injurious to plant growth from planting pits and beds prior to backfilling with planting mix. All planting areas shall be free of weeds and debris prior to any work.
7. Provide locally available shredded hardwood mulch on all trees and in all planting beds to a 3-4 inch minimum depth unless otherwise noted. Mulch ring to extend 1'-0" minimum beyond planting pit. Minor site grading to be included if needed.
8. All trees are to be staked for a period of not less than one year from time of planting.
9. Contractor to coordinate work with other amenities contractors.

IRRIGATION NOTES:

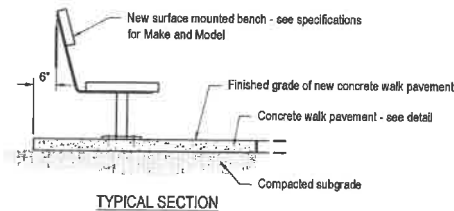
1. Irrigation bid to include meter pit and city utility fees.
2. Irrigation meter to be located inside the building. Contact WDMW Customer Service for estimated fees - 515.222.3460
3. Irrigation controller to be mounted in a steel utility box with hasp for pad lock.
4. Irrigation system to be guaranteed for 1 year. Written guarantee to be supplied prior to final payment.
5. Irrigation contractor responsible to winterize system one time.
6. Irrigation contractor to furnish as built drawing of the system and catalogue cuts of the installed equipment prior to final payment.
7. Irrigation contractor to provide owner and engineer an irrigation plan shop drawing and equipment catalog cuts for approval prior to installation.
8. Contractor to irrigate all sodded areas and coordinate work with other amenities contractors.

SEEDING NOTES:

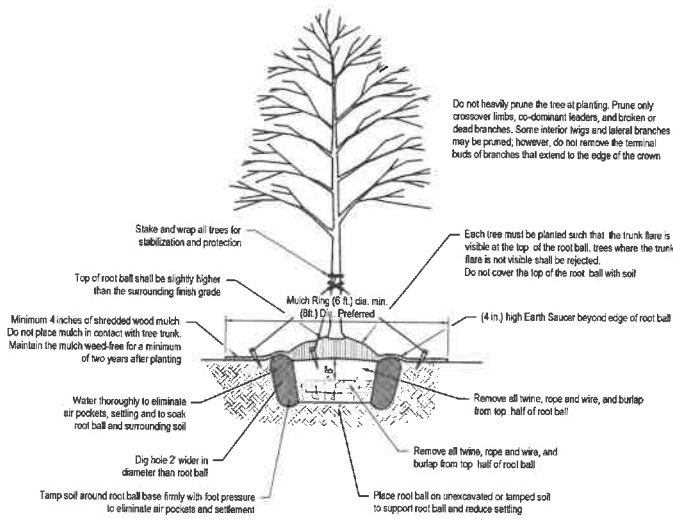
1. Super Turf II seed to be installed as per United Seeds Inc. specifications along with straw matting.
2. Contractor to coordinate work with other amenities contractors.



SHRUB & PERENNIAL PLANTING DETAIL
NOT TO SCALE



BENCH - SURFACE MOUNTED
NOT TO SCALE



TREE PLANTING DETAIL - B & B TREE
NOT TO SCALE

SODDING NOTES:

1. The contractor shall notify the architect at least forty-eight hours in advance of the time he intends to begin sodding and shall not proceed with such work until permission to do so have been granted. No frozen sod shall be placed. No sodding shall be done on frozen earth.
2. Care shall be exercised at all times to retain the native soil on the roots of the sod during the process of transplanting. Dumping from vehicles will not be permitted. The sod shall be planted within eighteen (18) hours from the time it is harvested unless it is tightly rolled or stored roots-to-roots in a satisfactory manner. All sod in stacks shall be kept moist and shall be protected from exposure to the sun and from freezing. No storage longer than three (3) days will be permitted. Sod which becomes dried out or does not meet the specifications will be rejected.
3. There shall be a minimum of six inches, after tamping, of topsoil under all sod. Excavations or trenching shall be made to a sufficient depth below the finished grade of the sod to accommodate the depth of topsoil as specified and the thickness of sod as specified. Fertilizer shall be applied at a rate to provide 100 pounds of nitrogen per acre unless fertilizer has been applied under another item in this contract to the topsoil in the sod bed. Fertilizer applied under this item shall be incorporated with the topsoil to a depth of at least two inches before the sod is laid, unless otherwise specified or approved. Incorporation shall be accomplished by disking, harrowing, drilling, raking or other approved means.
4. The soil on which the sod is laid shall be reasonably moist and shall be watered, if so directed. The sod shall be laid smoothly, edge to edge, and all openings shall be plugged with sod. Immediately after the sod is laid, it shall be pressed firmly into contact with the soil bed by tamping, rolling, or by other approved methods so as to eliminate all air pockets, provide true and even surfaces, insure knitting and protect all exposed sod edges but without displacement of the sod or deformation of the surface of the sodded areas and watered at the rate of five gallons per square yard of sodded area unless otherwise directed.
5. The contractor shall take care of the sodded areas until all work on the entire contract has been completed, and sod has been mowed twice and then accepted. Such care shall consist of providing protection against traffic by approved warning signs or barricades and the mowing of grass to the height of two inches when the growth attains a maximum height of four inches.
6. Sod shall also be watered. When the sod is watered, sufficient water shall be applied to wet the sod at least two inches deep in the sod bed. Watering shall be done in a manner which will not cause erosion or other damage to the finished surfaces. Any surfaces which become gutted or otherwise damaged shall be repaired to reestablish the grade and conditions of the soil prior to sodding and shall then be re-fertilized and re-sodded as specified under this item.
7. In drainage ways or slopes, the sod shall be laid with their longest dimensions parallel to the contours. Such sodding shall begin at the base of slopes or grades and the sodding progress in continuous parallel rows working upward. Vertical joints between such sodding shall be staggered. All sod shall be laid to the grades specified and the grades formed with special care at the junction of drainage ways.
8. Sod shall be held in place by stakes in all drainage ways, on all slopes steeper than 4:1 and elsewhere where specified or as directed. Pegging shall be done immediately after tamping. At least one stake shall be driven through each sod to be staked, and the stakes shall not be more than two feet apart. Stakes shall have their flat sides against the slope and be driven flush. Stakes for pegging sod shall be of wood, approximately one inch by two inches and of sufficient length to penetrate the sod, the topsoil and to a minimum depth of two inches of subsoil.
9. The contractor shall keep all sodded areas thoroughly watered for a period of thirty (30) calendar days after the initial laying and as often as required thereafter until sod has been fully established (two mowings) and accepted by the engineer and owner. A WDMW permit meter is required for any temporary irrigation. Contractor to use temporary irrigation for the watering of the sod. Contractor to supply all necessary hoses, fittings and sprinklers for all watering needs.
10. All sod must be fully established (two mowings) and growing at the time of inspection and acceptance.

OWNER MAINTENANCE NOTES:

1. Maintain deciduous tree canopies at least 7 feet above the ground.
2. Keep shrubs trimmed to less than 3 feet except where privacy or environmental noise mitigation is a primary concern.



VICINITY MAP

PLANS FOR:
EXTRA SPACE STORAGE FACILITY
4220 VILLAGE VIEW DRIVE — WEST DES MOINES, IOWA
XXXX

REVISION	DATE	DRAWN BY	SHEET NO.

DESIGN ASSOCIATES, INC.
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