CITY OF WEST DES MOINES
CITY COUNCIL MEETING COMMUNICATION

Date: August 5, 2019

ITEM: Courtyards at King's Landing (f/k/a Courtyards at Sugar Creek), Northeast corner of S. 100th Street and Stagecoach Drive– Subdivide property into 79 footprint lots, 1 street lot and 2 outlots – Caliber Iowa LLC. – PP-004322-2019

RESOLUTION: Approval of Preliminary Plat

FINANCIAL IMPACT: Undetermined

BACKGROUND: Eric Cannon of Snyder and Associates, on behalf of the applicant, Caliber Iowa, LLC. and with permission of the property owner, Sugar Creek Estates, LLC. is requesting approval of a Preliminary Plat for approximately 27 acres located at Northeast corner of S. 100th Street and Stagecoach Drive. The applicant proposes to subdivide the property into 79 footprint lots for the future development of detached townhomes, one street lot for dedication to the City, 1 outlot for area to be dedicated to the City as part of Parkland Dedication requirements and 1 outlot for the private streets, stormwater detention areas and common ground within the development. Review of the associated site plan will be brought to the Plan and Zoning Commission and City Council at an upcoming meeting after site plan and architecture details are resolved.

Plan and Zoning Commission Action:
Vote: 4-0 approval, with Commissioners Drake, Erickson, Southworth absent
Date: July 22, 2019
Motion: Adopt a resolution recommending the City Council approve the Preliminary Plat Request

OUTSTANDING ISSUES: There are no outstanding issues. The applicant has stated that they are in agreement with all of staff's recommendations and conditions. The following items of interest are noted in the attached Plan and Zoning Commission report (see Exhibit I):

- Applicant's Request
- History
- City Council Subcommittee - *Development & Planning: May 20, 2019*
- Staff Review and Comments
  - *Easternmost Access from Stagecoach Drive*
  - *Parkland Dedication*
  - *Sanitary Sewer Connection Fees*
  - *Sugar Creek Buffer and Measuring of Setback*
  - *Private Streets*
- Comprehensive Plan Consistency
- Findings
- Staff Recommendations and Conditions of Approval
- Applicant/Applicant Representative Information

RECOMMENDATION: Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, the Plan and Zoning Commission recommends the City Council approve the Courtyards at King's Landing Preliminary Plat to allow the platting of 79 footprint lots, 1 street lot, 1 outlot for area to be dedicated to the City as part of Parkland Dedication requirements and 1 outlot for the private streets, stormwater detention areas and common ground within the development, subject to the applicant meeting all City Code requirements.

Lead Staff Member: J. Bradley Munford BM

Staff Reviews:

Department Director	
Appropriations/Finance	
Legal	JDS
Agenda Acceptance	

PUBLICATION(S) (if applicable)

Published In	not requried	
Date(s) Published	n/a	
Letter sent to surrounding property owners		n/a

SUBCOMMITTEE REVIEW (if applicable)

Committee	Development & Planning		
Date Reviewed	5/20/2019		
Recommendation	Yes ☒	No ☐	Split ☐

ATTACHMENTS:

- Exhibit I - Plan and Zoning Commission Communication
  - Attachment A - Plan and Zoning Commission Resolution
    - Exhibit A - Conditions of Approval
  - Attachment B - Location Map
  - Attachment C - Preliminary Plat
- Exhibit II - City Council Resolution
  - Exhibit A - Conditions of Approval

EXHIBIT I

CITY OF WEST DES MOINES
PLAN AND ZONING COMMISSION COMMUNICATION

Meeting Date: July 22, 2019

Item: Courtyards at King's Landing, Northeast corner of S. 100th Street and Stagecoach Drive – Subdivide property into 79 footprint lots, 1 street lot and 2 outlots – Caliber Iowa LLC – PP-004322-2019

Requested Action: Recommend Approval of Preliminary Plat

Case Advisor: J. Bradley Munford

Applicant's Request: Eric Cannon of Snyder and Associates, on behalf of the applicant, Caliber Iowa, LLC. and with permission of the property owner, Sugar Creek Estates, LLC. is requesting approval of a Preliminary Plat for approximately 27 acres located at Northeast corner of S. 100th Street and Stagecoach Drive. The applicant proposes to subdivide the property into 79 footprint lots for the future development of detached townhomes, one street lot for dedication to the City, 1 outlot for area to be dedicated to the City as part of Parkland Dedication requirements and 1 outlot for the private streets, stormwater detention areas and common ground within the development. Review of the associated site plan will be brought to the Plan and Zoning Commission and City Council at an upcoming meeting after site plan and architecture details are resolved.

History: The property was annexed into the City in 2002 as a part of the Mills Civic Parkway Annexation. The Medium Density Comprehensive Plan designation was established in September of 2010. On April 15, 2019 the City Council approved a zoning request to consistency zone the property as Residential Medium Density (RM-8).

City Council Subcommittee: The Courtyards at King's Landing (fka Courtyards at Sugar Creek) was presented to Development and Planning Subcommittee as an informational item at the May 20, 2019 meeting. The Subcommittee was supportive of the development.

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 note the following:

- *Easternmost Access from Stagecoach Drive:* The narrow triangular shape of this property along with topography and existing infrastructure has made providing two points of access to the development challenging. When driving west on Stagecoach Drive, you encounter a hill that slopes down towards Sugar Creek and the recently built bridge that crosses the creek. The 800 feet on the north side of Stagecoach beginning at the west end of the bridge is the entire frontage of the applicant's property. Within these 800 feet, the site needs to provide 2 points of access that comply with the Fire Code, meet the separation distance and expected turn lane storage requirements between the two drives and provide safe sight distance for drivers accessing Stagecoach Drive from the easternmost drive within the development. The topography and proximity of the drive to the bridge make it difficult to strictly comply with code and the desired sight distance. To address this issue and eliminate the need to sprinkler more than half of the dwellings until an alternate secondary access can be provided for the development, the applicant is proposing that the easternmost access into the site be a one-way in only drive. The one-way in only drive will eliminate outbound traffic turning onto Stagecoach Drive from the intersection reducing the possibility of vehicle crashes due to limited sight distance because of the bridge. While eastbound traffic has more visibility of west-bound traffic, staff still has concerns with the accident potential, especially when Stagecoach Drive is widened in the future. Staff is comfortable with using the one-way in only drive in the interim, but recommends a condition of approval that address the maximum width of the drive and the addition of traffic control signage and road markings, as well as a condition that requires the developer execute an agreement in

conjunction with the Final Plat acknowledging an agreeing that the easternmost drive will be disconnected from Stagecoach Drive upon provision of a secondary access point to the development. Whether the balance of the drive will need to be removed will be decided by the homeowner's association and would be at the association's expense.

- *Parkland Dedication*: Per City Code, parkland dedication is required of all residential developments creating more than three new dwellings. Based on the proposed 79 dwelling units, this development is required to dedicate 1.41 acres. Additionally, per an arrangement when the Majestic Oaks development immediately to the east was platted (under the same ownership at the time), this development is required to provide their parkland dedication as well. This results in another .29 acres of dedication for a total of 1.7 acres. Sugar Creek runs along the entire eastern boundary of the development with a continuous public trail planned for along the creek and extending from the Raccoon River to the northwestern edge of the City (I-80). The developer will be dedicating to the City all the ground from the centerline of Sugar Creek to a line generally 10 feet west of the planned trail (identified as Outlot 'X' on the plat drawing). The dedication of the ground fulfills their obligations, therefore, the trail itself will be constructed by the City.

- *Sanitary Sewer Connection Fees*: As part of the Tiburon development to the north, the developer paid the Grand Avenue West Sanitary Sewer Connection Fee District per acre fee on ground being required as part of parkland dedication but was not required to pay fees for any excess parkland ground that was dedicated to the City. Consistent with that done as part of the Tiburon development, Staff recommends that this same approach be applied to the ground included in Outlot 'X' (115,003 square feet or 2.64 acres) resulting in fees being paid on 1.7 acres, but not on the balance 0.94 acres. The Grand Avenue West Sanitary Sewer Fee District per acre fee at this time is $4,940.00. It should be noted, any reduction in Water District fees would need to be negotiated directly with West Des Moines Water Works.

- *Sugar Creek Buffer and Measuring of Setback*: Some of the bends in Sugar Creek are known to experience bank erosion issues due to water volumes and velocity during heavy rains. Rather than have these areas be part of private homeowner's properties requiring individuals to figure out how to address the erosion, the City prefers these areas be located outside of the boundaries of their lots. While the ground could be retained in an outlot and maintained by a homeowner's association, ideally the City will obtain ownership thus allowing for stream bank maintenance as necessary. As outlined in a previous bullet, in conjunction with the provision of parkland dedication, the developer will be dedicating the ground immediately adjacent to the west side of the creek which will allow the City to maintain Sugar Creek banks as needed and appropriate. Since this area is located within the current plat boundaries and the development is utilizing footprint lots which does not give individual residents any rights to install amenities outside of the defined building footprint, unlike traditional single-family detached lots which have 'rear yards' for personal amenities, the applicant may use the area within outlot 'X' to fulfill the 35' rear yard setback required along the east.

- *Private Streets*: The developer is proposing private streets within the development. The City does not currently have any restrictions against the implementation of private streets. A homeowner's association will need to be established in conjunction with the recordation of the Final Plat identifying the association's responsibility for snow removal and on-going maintenance and repair of the roadways. It should be noted that the private streets do not meet City standards for right-of-way and do not accommodate the provision of sidewalks while providing minimum required driveway lengths and therefore would not be eligible in the future to be dedicated to and/or maintained by the City as a public street.

  The private street stub at the northwest corner of the development could possibly create a situation where a future public street from the west connects to the private streets within this development creating a situation in which general public traffic would be utilizing the private streets. Additionally, since the connection would likely not include a turnaround for City service vehicles. To allow for City vehicles and the general public to drive through the development to reach Stagecoach Drive.

Staff recommends a condition of approval that the applicant execute a public access easement prior to consideration of the associated Final Plat by the City Council.

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.

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 Courtyards at King's Landing Preliminary Plat to create 79 footprint lots, one street lot, one outlot for area to be dedicated to the City as part of Parkland Dedication requirements and one outlot for the private streets, stormwater detention areas and common ground within the development, subject to the applicant meeting all City Code requirements and the following conditions of approval:

1. The applicant acknowledging and agreeing that the easternmost access to Stagecoach Drive is temporary and will be disconnected from Stagecoach Drive when the planned connection to the west is completed. The applicant will need to execute a formal agreement acknowledging and agreeing to such for recordation with the Final Plat.

2. The applicant acknowledging and agreeing that the easternmost access drive off Stagecoach Drive is a one-way in only drive and shall remain as such until it is disconnected from Stagecoach

Drive. Additionally, while the drive is in use as an access from Stagecoach Drive, the developer shall restrict the drive to a maximum of 20 feet in width and install and maintain appropriate traffic control design measures acceptable to the City, as well as all pavement markings and signage in accordance with MUTCD requirements to inform drivers that the easternmost drive is a one-way in only drive. Finally, the applicant ensuring enforcement as an access-in only drive. Upon removal, the developer will need to modify signage to indicate it as a dead-end.

3. The City Council allowing all excess ground included in Outlot 'X' adjacent to Sugar Creek beyond that required as part of Parkland Dedication be exempted from payment of Grand Avenue West Sanitary Sewer Connection Fees.

4. The applicant acknowledging and agreeing to execute a public access easement that will allow City vehicles and the general public to drive through the development to access Stagecoach Drive prior to City Council consideration of the associated Final Plat.

5. The applicant acknowledging and agreeing to submit a revised preliminary plat that reflects minor revisions requested by Staff prior to City Council consideration of the preliminary plat.

6. The applicant acknowledging that prior to issuance of any building permits for buildings within The Courtyards at Kings Landing development, that the associated Final Plat must be approved by the City Council and recorded with Dallas County.

Applicant:

Caliber Iowa LLC
Nick Jensen
720 86th Street, Suite 120
West Des Moines, Iowa 50266
Nick@caliberiowa.com

Applicant Representative:

Snyder and Associates
Eric Cannon
2727 SW Snyder Blvd
Ankeny, IA 50023
Ecannon@snyder-associates.com

ATTACHMENTS:

Attachment A - Plan and Zoning Commission Resolution
Exhibit A - Conditions of Approval
Attachment B - Location Map
Attachment C - Preliminary Plat

ATTACHMENT A

RESOLUTION NO. PZC-19-059

A RESOLUTION OF THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES, RECOMMENDING TO THE CITY COUNCIL THAT IT APPROVE COURTYARDS AT KING'S LANDING PRELIMINARY PLAT TO SUBDIVIDE THE PROPERTY INTO 79 FOOTPRINT LOTS, ONE STREET LOT AND 2 OUTLOTS FOR PARKLAND DEDICATION AND PRIVATE STREETS, STORMWATER DETENTION AND COMMON AREAS WITHIN THE DEVELOPMENT.

WHEREAS, pursuant to the provisions of Title 10, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Caliber Iowa LLC, has requested approval for a Preliminary Plat (PP-004322-2019) to create 79 footprint lots, one public street lot, one outlot for parkland dedication and one outlot for private streets, stormwater detention and common areas within the development on the 24.6 acre site located at Northeast corner of S. 100th Street and Stagecoach 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 July 22, 2019, this Commission held a duly-noticed public meeting to consider the application for Courtyards at King's Landing Preliminary Plat (PP-004322-2019).

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 or as amended orally at the Plan and Zoning Commission meeting are adopted.

SECTION 2. PRELIMINARY PLAT (PP-004322-2019) to subdivide the property into 79 footprint lots, one street lot and 2 outlots, is recommended to the City Council for approval, subject to compliance with all the conditions in the staff report 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 July 22, 2019.

Erica Andersen, Chairperson
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 July 22, 2019, by the following vote:

AYES: Andersen, Costa, Crowley, Hatfield
NAYS:
ABSTENTIONS:
ABSENT: Drake, Erickson, Southworth

ATTEST:

Recording Secretary

Exhibit A
CONDITIONS OF APPROVAL

1. The applicant acknowledging and agreeing that the easternmost access to Stagecoach Drive is temporary and will be disconnected from Stagecoach Drive when the planned connection to S. Grand Prairie Parkway is completed to the west. The applicant will need to execute a formal agreement acknowledging and agreeing to such for recordation with the Final Plat.

2. The applicant acknowledging and agreeing that the easternmost access drive off Stagecoach Drive is a one-way in only drive and shall remain as such until it is disconnected from Stagecoach Drive. Additionally, while the drive is in use as an access from Stagecoach Drive, the developer shall restrict the drive to a maximum of 20 feet in width and install and maintain appropriate traffic control design measures acceptable to the City, as well as all pavement markings and signage in accordance with MUTCD requirements to inform drivers that the easternmost drive is a one-way in only drive. Finally, the applicant ensuring enforcement as an access-in only drive. Upon removal, the developer will need to modify signage to indicate it as a dead-end.

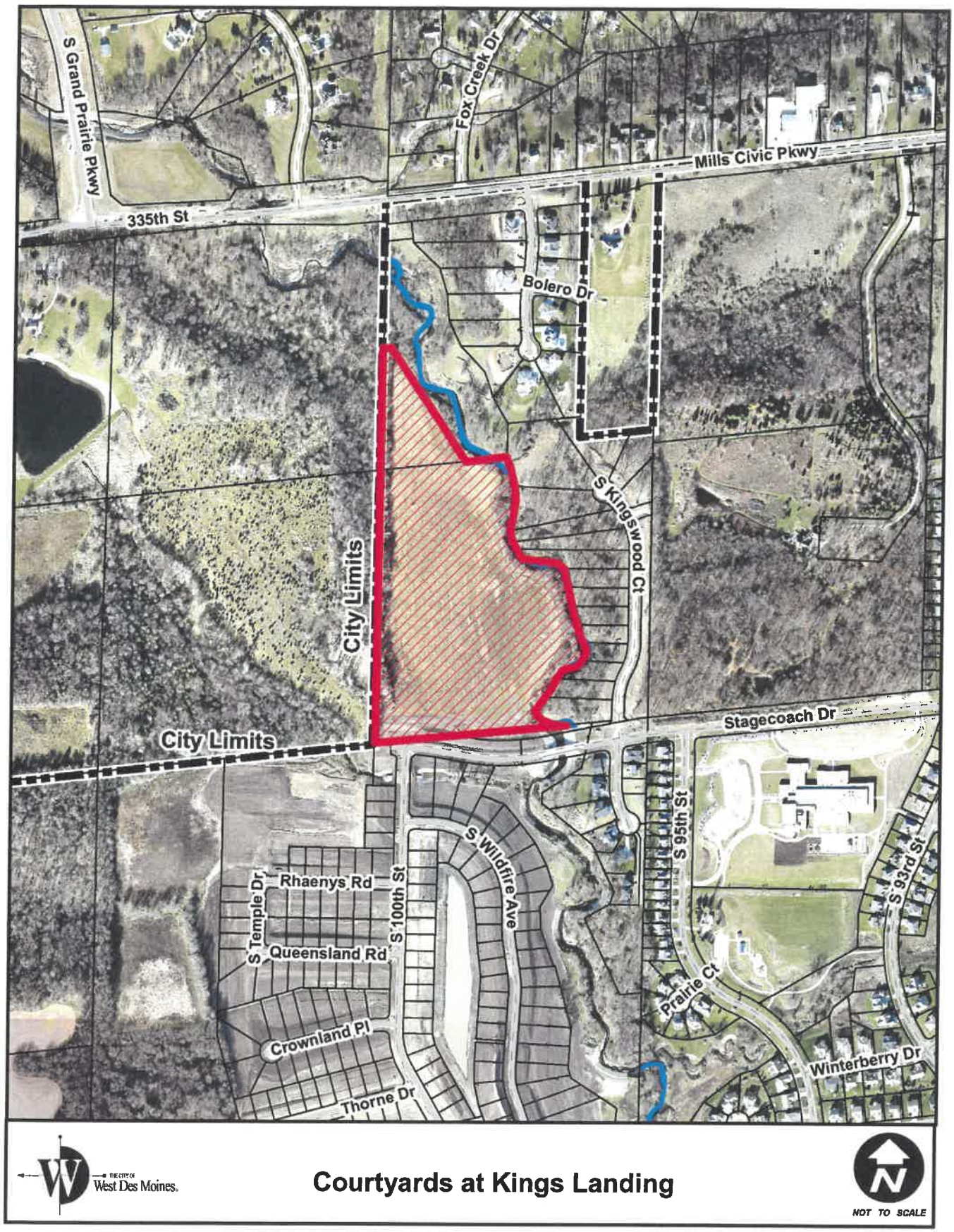
3. The City Council allowing all excess ground included in Outlot 'X' adjacent to Sugar Creek beyond that required as part of Parkland Dedication be exempted from payment of Grand Avenue West Sanitary Sewer Connection Fees.

4. The applicant acknowledging and agreeing to execute a public access easement that will allow City vehicles and the general public to drive through the development to access Stagecoach Drive prior to City Council consideration of the associated Final Plat.

5. The applicant acknowledging and agreeing to submit a revised preliminary plat that reflects minor revisions requested by Staff prior to City Council consideration of the preliminary plat.

6. The applicant acknowledging that prior to issuance of any building permits for buildings within The Courtyards at Kings Landing development, that the associated Final Plat must be approved by the City Council and recorded with Dallas County.

ATTACHMENT B



ATTACHMENT C

PRELIMINARY PLAT

FOR

COURTYARDS AT KINGS LANDING

SINGLE FAMILY RESIDENTIAL DEVELOPMENT

CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA

APPLICANT

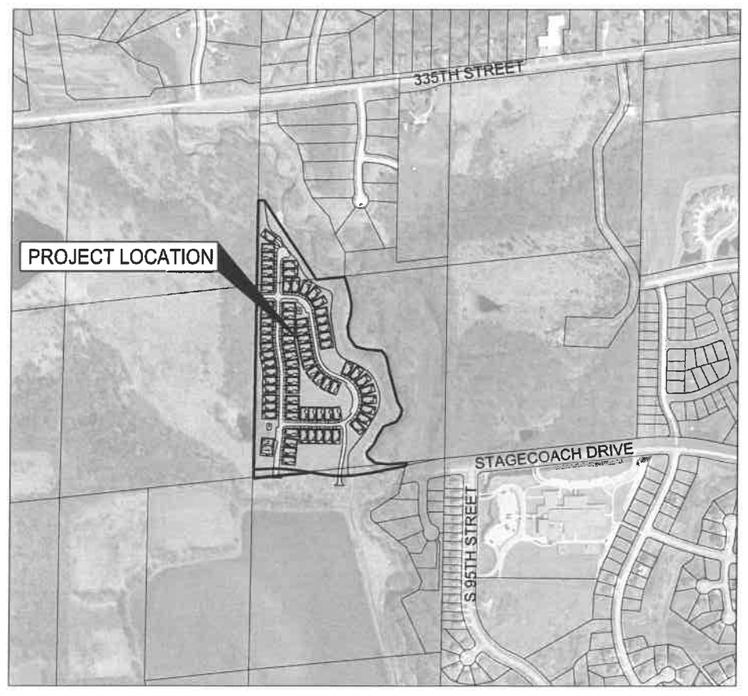
COURTYARDS AT KINGS LANDING LLC
720 S 68TH STREET SUITE 120
WEST DES MOINES, IOWA 50266
CONTACT: NICK JENSEN
PHONE: (515) 650-0530

OWNER

SUGAR CREEK ESTATES, LLC.
2400 86TH STREET, SUITE 24
DES MOINES, IA 50313
CONTACT: DEREK TEMPLE
PHONE: 515-276-3456

ENGINEER

SNYDER & ASSOCIATES, INC.
2727 SW SNYDER BLVD.
ANKENY, IOWA 50023
CONTACT: ERIC CANNON, P.E.
PHONE: (515) 964-2020



N

SCALE: 1"=1000'

VICINITY MAP

INDEX OF SHEETS

1. TITLE SHEET
2. PROJECT INFORMATION
3. OVERALL SITE LAYOUT PLAN
4. OVERALL GRADE PLAN
5-8. DIMENSION AND UTILITY PLAN
9-12. STORM SEWER PLAN
13-16. GRADING AND EROSION CONTROL PLAN
17-19. PLANTING NOTES AND DETAILS

STATE OF IOWA
LARA F. GULDENPFENNIG
LANDSCAPE ARCHITECT
NO. 668
PROFESSIONAL LANDSCAPE ARCHITECT

License Expires:
June 30, 2020

I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Professional Landscape Architect under the laws of the State of Iowa.

Lara F. Guldenpfennig, ASLA — Date

License Number 668

Pages or sheets covered by this seal:
Sheets 17-19

LICENSED PROFESSIONAL ENGINEER
ERIC D. CANNON
18954
IOWA

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

Eric D. Cannon, P.E. — Date

License Number 18954

My License Renewal Date is December 31, 2019

Pages or sheets covered by this seal:
Sheets 1-16

MARK	REVISION	DATE
2	AS PER CITY COMMENTS	6/28/19
1	AS PER CITY COMMENTS	6/11/19

Engineer: KMM | Checked By: EDC | Scale: 1"= 500
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A | Sheet 1 of 19

COURTYARDS AT KINGS LANDING

TITLE SHEET

WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 1 of 19

LEGEND

Features	Existing	Proposed
Spot Elevation	93.0	×93.0
Contour Elevation	93	93
Fence (Barbed, Field, Hog)	—x—x—	
Fence (Chain Link)		
Fence (Wood)		
Fence (Silt)		
Tree Line		
Tree Stump		
Deciduous Tree or Shrub		
Coniferous Tree or Shrub		
Communication	—C(x)—	—C—
Overhead Communication	—OC(x)—	—OC—
Fiber Optic	—FO(x)—	—FO—
Underground Electric	—E(x)—	—E—
Overhead Electric	—OE(x)—	—OE—
Gas Main with Size	—4" G(x)—	—4" G—
High Pressure Gas Main with Size	—4" HPG(x)—	—4" HPG—
Water Main with Size	—8" W(x)—	8" W
Sanitary Sewer with Size	—8" S(x)—	8" S
Duct Bank	—DUCT(x)—	
Test Hole Location for SUE w/ID	1	

(x) Denotes the survey quality service level for utilities

	Existing	Proposed
Sanitary Manhole		
Storm Sewer with Size	12" ST	12" ST
Storm Manhole		
Single Storm Sewer Intake		
Double Storm Sewer Intake		
Fire Hydrant		
Fire Hydrant on Building		
Water Main Valve		
Water Service Valve		
Well		
Utility Pole		
Guy Anchor		
Utility Pole with Light		
Utility Pole with Transformer		
Street Light		
Yard Light		
Electric Box	EB	
Electric Transformer		
Traffic Sign		
Communication Pedestal		
Communication Manhole		
Communication Handhole		
Fiber Optic Manhole		
Fiber Optic Handhole		
Gas Valve		
Gas Manhole		
Gas Apparatus		
Fence Post or Guard Post		
Underground Storage Tank	UST	
Above Ground Storage Tank	ASTD	
Sign		
Satelite Dish		
Mailbox		
Soil Boring	+	

UTILITY QUALITY SERVICE LEVELS

QUALITY LEVELS OF UTILITIES ARE SHOWN IN THE PARENTHESES WITH THE UTILITY TYPE AND WHEN APPLICABLE, SIZE. THE QUALITY LEVELS ARE BASED ON THE CI/ ASCE 38-02 STANDARD.

QUALITY LEVEL (D) INFORMATION IS DERIVED FROM EXISTING UTILITY RECORDS OR ORAL RECOLLECTIONS.

QUALITY LEVEL (C) INFORMATION IS OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION WITH QUALITY D INFORMATION.

QUALITY LEVEL (B) INFORMATION IS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

QUALITY LEVEL (A) IS HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES OBTAINED BY ACTUAL EXPOSURE OR VERIFICATION OF PREVIOUSLY EXPOSED SUBSURFACE UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED EXCEPT WHERE NOTED AS QUALITY LEVEL A.

UTILITY CONTACT INFORMATION

UTILITY CONTACT FOR MAPPING INFORMATION SHOWN AS RECEIVED FROM THE IOWA ONE CALL DESIGN REQUEST SYSTEM, TICKET NUMBER 551902360.

W1-WATER	WEST DES MOINES WATER WORKS WILLIAM MABUCE 515-222-3510 william.mabuce@wdmww.com
E1-ELECTRIC G1-GAS	MIDAMERICAN ENERGY CRAIG RANFELD 515-252-6632 MECDSMDesignLocates@midamerican.com
S-SANITARY SEWER	DES MOINES METRO WASTEWATER NICK CARTER 515-323-8135 nfcarter@dmgov.org
CLEAR PER MAP	WEST DES MOINES TRAFFIC JIM DICKINSON 515-222-3482 jim.dickinson@wdm.iowa.org
CLEAR PER MAP	CENTURYLINK TOM STURMER 720-578-8090 thomas.sturmer@centurylink.com
CLEAR PER EMAIL	MEDIACOM COMMUNICATIONS CORP PAUL MAY 515-246-2252 pmay@mediacomcc.com

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

GENERAL NOTES

A. NOTIFY UTILITY PROVIDERS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES AND COORDINATE WITH UTILITY PROVIDERS AS NECESSARY DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION, AND DEPTH OF ALL UTILITIES. PROTECT ALL UTILITY LINES AND STRUCTURES NOT SHOWN FOR REMOVAL OR MODIFICATION. ANY DAMAGES TO UTILITY ITEMS NOT SHOWN FOR REMOVAL OR MODIFICATION SHALL BE REPAIRED TO THE UTILITY OWNER'S SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.

B. LENGTH OF UTILITIES SHOWN ON PLANS ARE DIMENSIONED FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.

C. ALL TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). WHEN CONSTRUCTION ACTIVITIES OBSTRUCT PORTIONS OF THE ROADWAY, FLAGGERS SHALL BE PROVIDED. FLAGGERS SHALL CONFORM TO THE MUTCD IN APPEARANCE, EQUIPMENT AND ACTIONS.

D. CONSTRUCT MANHOLES AND APPURTENANCES AS WORK PROGRESSES. BACKFILL WITH SUITABLE MATERIAL AND COMPACT TO 95% MAXIMUM DENSITY.

E. IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY ESTIMATES AND THE DETAILED PLANS, THE DETAILED PLANS SHALL GOVERN.

F. ALL FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED AND NOTED ACCORDINGLY ON THE AS-BUILT DOCUMENTS.

G. DIMENSIONS, BUILDING LOCATION, UTILITIES AND GRADING OF THIS SITE ARE BASED ON AVAILABLE INFORMATION AT THE TIME OF DESIGN. DEVIATIONS MAY BE NECESSARY IN THE FIELD. ANY SUCH CHANGES OR CONFLICTS BETWEEN THIS PLAN AND FIELD CONDITIONS ARE TO BE REPORTED TO THE ARCHITECT/ENGINEER PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT VERIFICATION OF ALL SITE IMPROVEMENTS PRIOR TO CONSTRUCTION.

H. CONTRACTOR TO LOAD AND TRANSPORT ALL MATERIALS CONSIDERED TO BE UNDESIRABLE TO BE INCORPORATED INTO THE PROJECT TO AN APPROVED OFF-SITE WASTE SITE.

I. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE CUT OR FILLED, AS PER NPDES GENERAL PERMIT NO. 2, MAINTAIN ALL TOPSOIL ON-SITE. RESPREAD TO MINIMUM 4" DEPTH TO FINISH GRADES.

J. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AND/OR TOP OF CURB, UNLESS OTHERWISE NOTED.

K. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM NEIGHBORING STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES IN A TIMELY MANNER.

L. THE ADJUSTMENT OF ANY EXISTING UTILITY APPURTENANCES TO FINAL GRADE IS CONSIDERED INCIDENTAL TO THE SITE WORK.

M. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION CONTROL MEASURES AS NECESSARY. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING ANY EXISTING EROSION CONTROL MEASURES ON SITE AT THE TIME OF CONSTRUCTION. GRADING AND SOIL EROSION CONTROL CODE REQUIREMENTS SHALL BE MET BY CONTRACTOR. A GRADING PERMIT IS REQUIRED FOR THIS PROJECT IF GRADING BEGINS PRIOR TO APPROVAL OF THE PRELIMINARY PLAT/SITE PLAN.

N. CONTRACTOR TO COORDINATE NATURAL GAS, ELECTRICAL, TELEPHONE AND ANY OTHER FRANCHISE UTILITY SERVICES WITH UTILITY SERVICE PROVIDER, WEST DES MOINES, AND THE OWNER PRIOR TO CONSTRUCTION.

O. CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN MINIMUM 18" VERTICAL AND HORIZONTAL CLEARANCE BETWEEN UTILITIES. CONTRACTOR TO COORDINATE UTILITY ROUTING TO BUILDINGS AND VERIFY CONNECTION LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION.

P. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS, AND/OR ANY CONNECTION TO THE PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS, DSM METRO DESIGN STANDARDS AND WDM ADDENDUMS.

Q. 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 ENGINEERING SERVICES 222-3475 TO OBTAIN APPLICABLE CITY PERMITS THAT MAY BE NECESSARY. CITY APPROVAL OF THIS PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS/AGREEMENTS AND APPLICABLE PERMITS. AN EXCAVATION PERMIT IS REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY.

R. ALL WATER MAIN, SANITARY SEWER AND STORM SEWER ARE PRIVATE, UNLESS OTHERWISE NOTED.

S. ALL SIDEWALK RAMPS IN THE PUBLIC RIGHT-OF-WAY COMPLY WITH PROWAG REQUIREMENTS. ALL NEW PUBLIC PEDESTRIAN RAMPS SHALL BE AS-BUILT AND CERTIFIED BY AN IOWA LICENSED ENGINEER STATING THEY MEET PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).

T. THE PROJECT CIVIL ENGINEER SHALL PROVIDE AS-BUILT DOCUMENTATION THAT THE STORM WATER DRAINAGE SYSTEM HAS BEEN CONSTRUCTED AS DESIGNED. THE AS-BUILT SHALL BE FORWARDED TO THE CITY BEFORE ISSUANCE OF THE FINAL OCCUPANCY PERMIT, AND SHALL INCLUDE ELEVATIONS, DETENTION AND RETENTION POND CAPACITY, PIPING RESTRICTORS, AND ANY PERTINENT ASPECTS OF THE STORM WATER SYSTEM.

U. A REPORT CERTIFIED BY A THIRD-PARTY RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE CITY, SHALL BE SUBMITTED TO DOCUMENT THE THICKNESS AND STRENGTH OF THE PAVEMENT, THE SUB-GRADE COMPACTION, COMPLIANCE WITH THE METRO DESIGN STANDARDS FOR STREETS, AND THE STANDARDS LISTED IN THE WEST DES MOINES "OFF STREET PARKING ORDINANCE" FOR PRIVATE STREETS, PARKING LOTS, AND DRIVEWAYS.

V. LANE CLOSURE NOTICES MUST BE SUBMITTED TO WEST DES MOINES PUBLIC WORKS FOR APPROVAL A MINIMUM OF 48 HOURS IN ADVANCE OF CLOSURE.

W. COORDINATE STAGING AND TRAFFIC CONTROL WITH WDM EMERGENCY SERVICES.

X. STREET LOT A AND OUTLOT X ARE TO BE DEDICATED TO THE CITY OF WEST DES MOINES.

Y. ALL STREETS ARE TO BE PRIVATE.

WEST DES MOINES STANDARD NOTES

1. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
2. CONTACT BUILDING INSPECTION (515-222-3630) A MINIMUM OF 24 HOURS IN ADVANCE FOR PRIVATE UTILITY INSTALLATION INSPECTIONS. PRIVATE UTILITIES SHALL BE INSTALLED PER WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE CURRENT UNIFORM PLUMBING CODE.
3. DESIGNATED BUFFERS SHALL BE LABELED AS A "NO BUILD AREA".
4. ALL LIGHTS ARE TO BE DOWNCAST CUTOFF VARIETY. WALL PACKS ARE PROHIBITED. THE MAXIMUM ILLUMINATION ALLOWED AT THE PROPERTY LINE IS 1 FOOT-CANDLE.

WEST DES MOINES WATER WORKS STANDARD NOTES

1. ALL WATER WORK, PUBLIC OR PRIVATE, SHALL BE DONE IN ACCORDANCE WITH WEST DES MOINES WATER WORKS STANDARD SPECIFICATIONS.
2. CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS (515-222-3465) AT LEAST ONE WEEK PRIOR TO BUILDING CONSTRUCTION.
3. ANY WATER USE FROM A HYDRANT, PUBLIC OR PRIVATE, REQUIRES THE USE OF A WEST DES MOINES WATER WORKS HYDRANT METER. CALL 515-222-3465 TO RESERVE A METER.
4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE WEST DES MOINES WATER WORKS AND THE CITY'S CROSS CONNECTION CONTROL/CONTAINMENT PROVISION.
5. 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.

LEGAL DESCRIPTION

PART OF OUTLOT "Y", TIBURON, AN OFFICIAL PLAT, AND PARCEL 17-121 AS RECORDED IN BOOK 2016, PAGE 22954 OF THE DALLAS COUNTY RECORDER'S OFFICE, ALL BEING IN THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 15, TOWNSHIP 78 NORTH, RANGE 26 WEST OF THE 5TH P.M., CITY OF WEST DES MOINES, DALLAS COUNTY, IOWA, CONTAINING 27.00 AC (1,176,278 S.F.).

ZONING

RM - MEDIUM DENSITY RESIDENTIAL

COMPREHENSIVE LAND USE

EXISTING: SINGLE FAMILY RESIDENTIAL
PROPOSED: MEDIUM DENSITY RESIDENTIAL DISTRICT

FIRM DESIGNATION

THIS SITE IS WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS REFERENCED ON FLOOD INSURANCE RATE MAP (FIRM), MAP NO 19153C0315F, MAP REVISED MARCH 16, 2019

IMPERVIOUS AREA

384,069 SF TOTAL IMPERVIOUS AREA (32.4% OF SITE)

PARKING REQUIREMENTS

REQUIRED
1 SPACES PER DWELLING
79 X 1 = 79 SPACES REQUIRED
1 SPACE PER 100 SF FOR BUILDINGS DESIGNATED FOR RECREATIONAL USE
2,600 SF / 100 = 26 STALLS
1 SPACE FOR EVERY 15 DWELLING UNITS
79 UNITS / 15 = 5 STALLS
TOTAL 110 SPACES REQUIRED

PROVIDED
2 DRIVEWAY SPACES PER UNIT
79 X 2 = 158 SPACES PROVIDED
42 VISITOR PARKING STALLS PROVIDED
TOTAL 200 SPACES PROVIDED

PARKLAND DEDICATION

PARKLAND REQUIREMENT= 1.70 ACRES
PARKLAND DEDICATED= 5.04 ACRES (OUTLOT X)

CITY OF WEST DES MOINES CONTROL DATUM

CITY OF WEST DES MOINES DATUM (GEOID12A)(NAVD88 - 774.01)

WEST DES MOINES BM#087
3960 FEET WEST OF INTERSECTION OF SOUTH 88TH STREET (DALLAS COUNTY), 3 FEET NORTH OF EAST/WEST FENCE, 10 FEET EAST OF NORTH/SOUTH FENCE, ON 335TH STREET ACROSS FROM HOUSE # 3307 AND #3309.
ELEVATION=167.68

WEST DES MOINES BM#095
1.1 MILES EST OF INTERSECTION OF 88TH STREET AND 335TH STREET, (DALLAS COUNTY), TOP OF SOUTHWEST CONCRETE BRIDGE RAIL ON BRIDGE OVER FOX CREEK.
ELEVATION=107.68

BENCHMARKS

CITY OF WEST DES MOINES 1988 (NAVD88 - GEOID12A)
(ARTN DERIVED - US SURVEY FEET

BM1 ELEVATION=194.80
CITY OF WEST DES MOINES BENCHMARK #37 CONCRETE MONUMENT WITH BRASS DISK SOUTHWEST CORNER OF SITE.

CONTROL POINTS

IOWA STATE PLANE SOUTH COORDINATE SYSTEM
NAD83(2011)(EPOCH 2010.00) (ARTN DERIVED - US SURVEY FEET

CP1 N=565217.15 E=1546019.43
1/2" REBAR WITH RED SNYDER CONTROL CAP SOUTHEAST CORNER OF SITE, AS SHOWN ON SURVEY.

CP2 N=565984.37 E=1545902.36
1/2" REBAR WITH RED SNYDER CONTROL CAP CENTER OF SITE ALONG EAST TREE LINE, AS SHOWN ON SURVEY.

CP3 N=566883.34 E=1545399.45
1/2" REBAR WITH RED SNYDER CONTROL CAP NORTH CORNER OF SITE, AS SHOWN ON SURVEY.

CP4 N=566114.46 E=1545360.67
1/2" REBAR WITH RED SNYDER CONTROL CAP CENTER OF SITE ALONG WEST TREE LINE, AS SHOWN ON SURVEY.

CP5 N=565095.93 E=1545297.03
CONCRETE MONUMENT WITH BRASS DISK SOUTHWEST CORNER OF SITE, AS SHOWN ON SURVEY.

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=1'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 2 of 19

WEST DES MOINES, IA

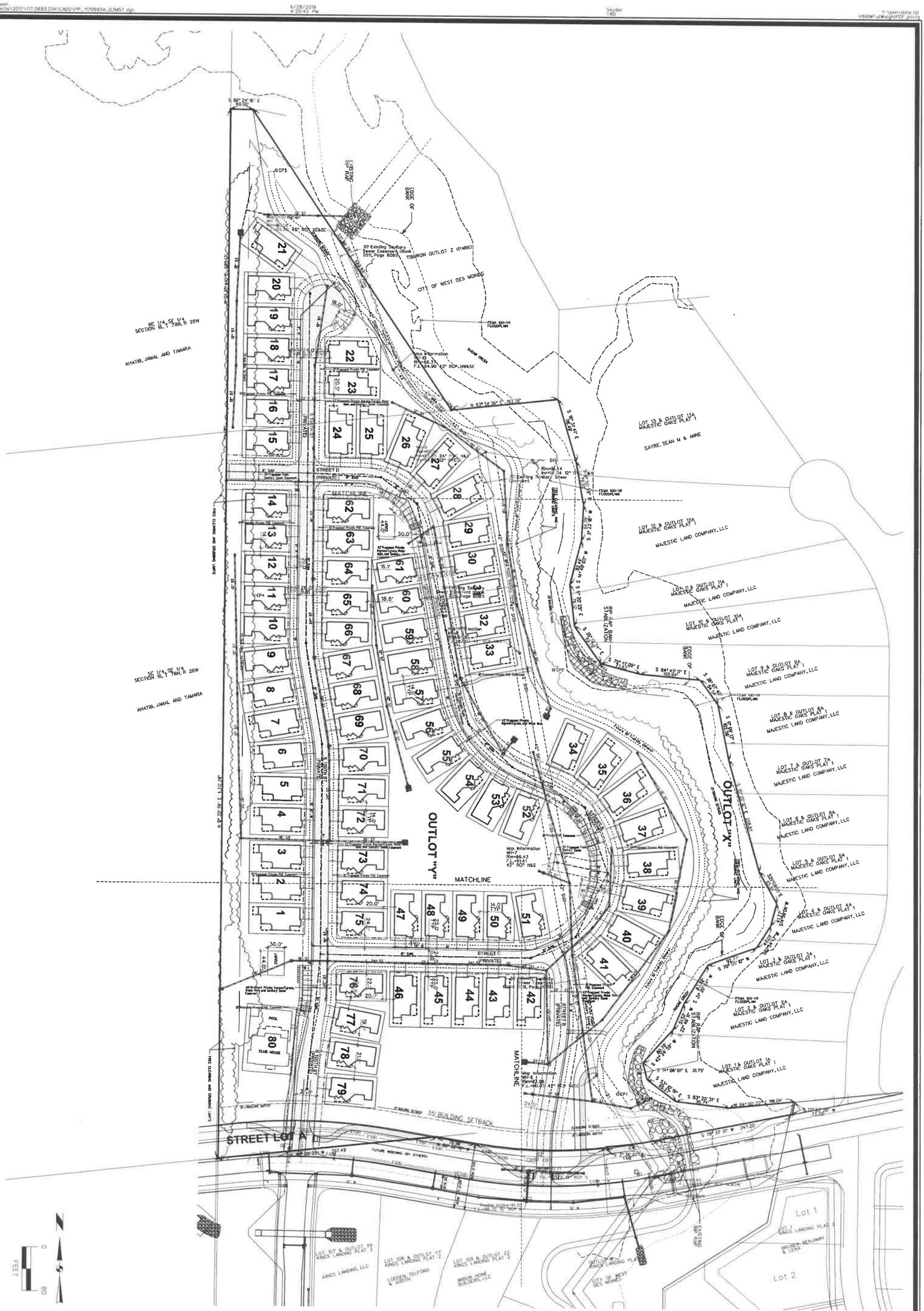
COURTYARDS AT KINGS LANDING

PROJECT INFORMATION

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A
Sheet 2 of 19



COURTYARDS AT KINGS LANDING

OVERALL SITE LAYOUT

WEST DES MOINES, IA

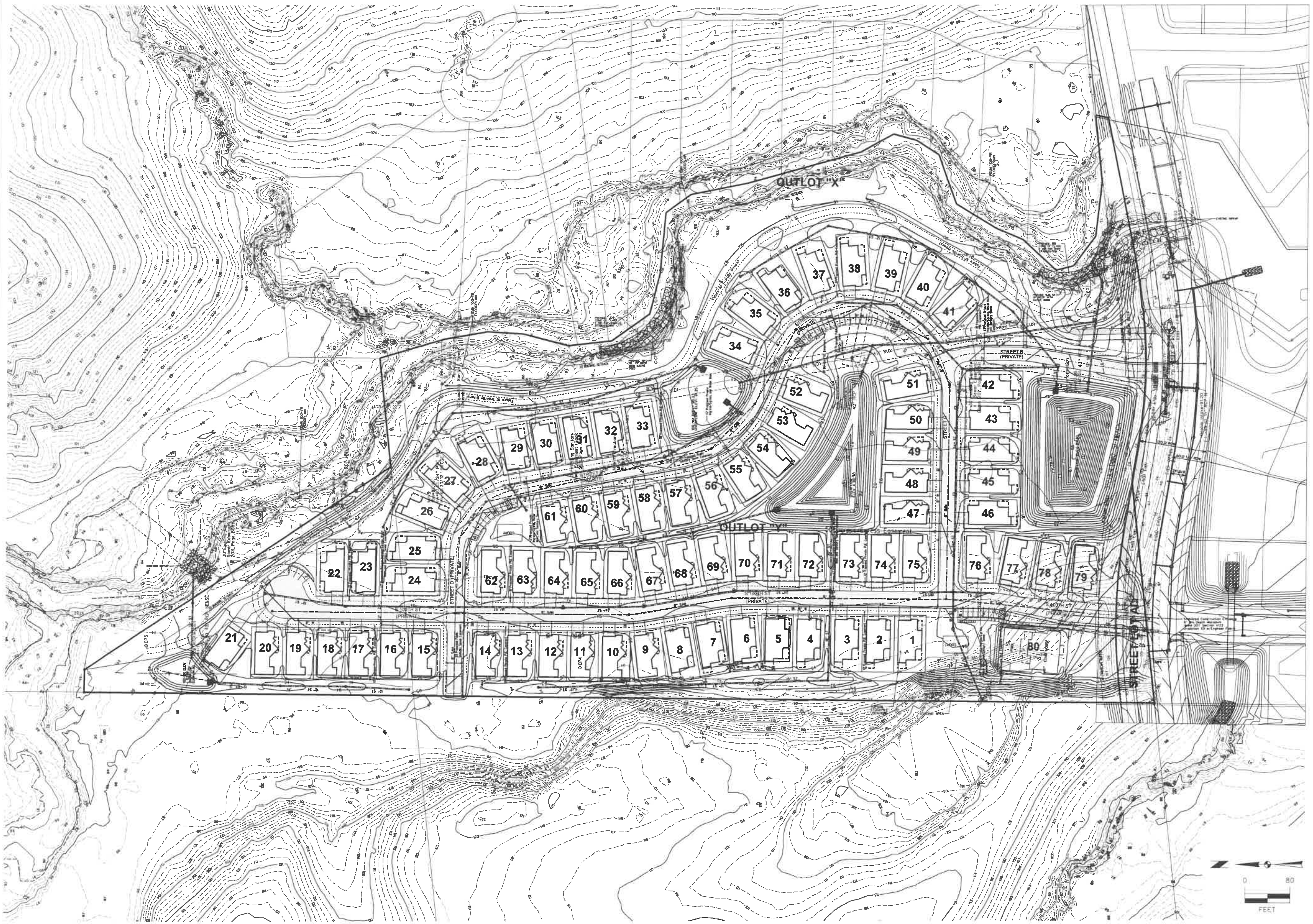
MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 80'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:

Project No: 117.0693A | Sheet 3 of 19

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

Project No: 117.0693A
Sheet 3 of 19



COURTYARDS AT KINGS LANDING

MASTER GRADE PLAN

WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 80'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:

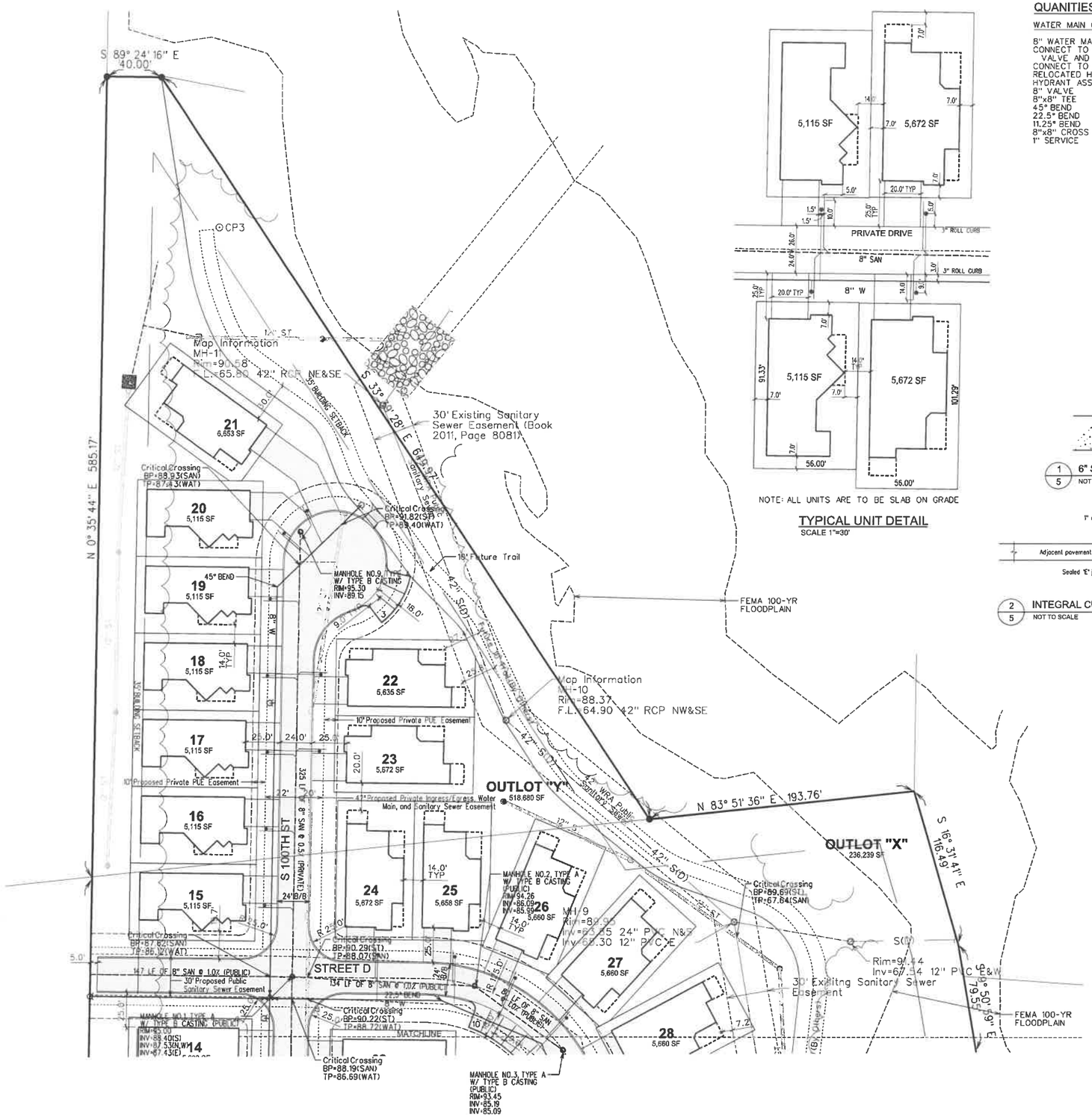
Project No: 117.0693A

Sheet 4 of 19

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 4 of 19



NOTE: ALL UNITS ARE TO BE SLAB ON GRADE

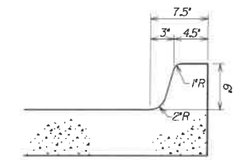
TYPICAL UNIT DETAIL

SCALE 1"=30'

QUANITIES

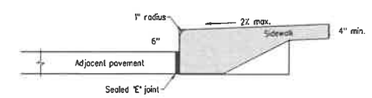
WATER MAIN (PRIVATE)

8" WATER MAIN	3832 LF.
CONNECT TO EXISTING W/TAPPING VALVE AND SLEEVE	1 EA.
CONNECT TO EXISTING	1 EA.
RELOCATED HYDRANT ASSEMBLY	1 EA.
HYDRANT ASSEMBLY	11 EA.
8" VALVE	9 EA.
8"x8" TEE	2 EA.
45° BEND	2 EA.
22.5° BEND	9 EA.
11.25° BEND	3 EA.
8"x8" CROSS	1 EA.
1" SERVICE	79 EA.



1/5 6" STANDARD CURB

NOT TO SCALE

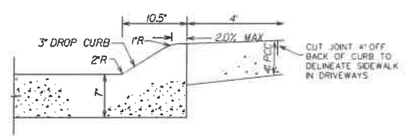


2/5 INTEGRAL CURB

NOT TO SCALE

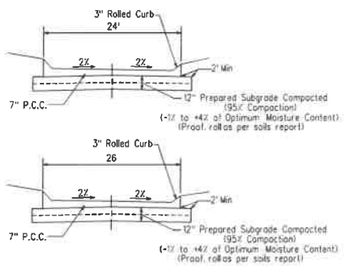
DIMENSION AND UTILITY PLAN CONSTRUCTION NOTES

1. EXISTING FEATURES. PROTECT THE FOLLOWING:
   A. EXISTING PAVEMENTS TO REMAIN.
   B. EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.
2. DEMOLITION. REMOVE AND DISPOSE OF THE FOLLOWING:
   A. PAVEMENT. REMOVE EXISTING CURB SAWCUT TO FULL DEPTH CONNECT WITH BD JOINT AS PER WEST DES MOINES DRAWING 7-18.
   B. REMOVE AND RELOCATE EXISTING UTILITIES. COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.
3. PAVEMENTS. PROVIDE THE FOLLOWING:
   A. 7" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE IN TWO 6" LIFTS COMPACTED TO 95% STANDARD PROCTOR DENSITY.
   B. 6" PCC FULL CURB.
   C. 3" PCC ROLL CURB.
   D. TAPER FROM FULL 6" CURB TO 3" ROLL CURB WHERE NOTED.
   E. PCC SIDEWALKS, 4" DEPTH PAVEMENT.
   F. PEDESTRIAN RAMP WITH A MAXIMUM SLOPE OF 8.33%.
   G. 5" DEPTH PCC DRIVEWAY.
   H. CLUSTER MAIL BOX PAD AS PER USPS SPECIFICATIONS AND REQUIREMENTS.
   I. 5" DEPTH PCC TRAIL ON 6" PREPARED SUBGRADE.
   J. INTEGRAL CURB AND 4" PCC SIDEWALK. SEE DETAIL
4. PAVEMENT MARKINGS. PROVIDE THE FOLLOWING:
   A. PAINTED PARKING STALL LINES.
   B. PAINTED STATE OF IOWA APPROVED ACCESSIBLE PARKING SYMBOL.
   C. ACCESSIBLE AISLE. 45° STRIPING AT 3' ON CENTER WHERE SHOWN.
5. SIGNAGE. PROVIDE THE FOLLOWING:
   A. PROVIDE VAN ACCESSIBLE PARKING SIGNAGE AS PER ADAAG REQUIREMENTS.
6. PRIVATE SANITARY SEWER SERVICE.
   A. PUBLIC SANITARY SEWER MAIN. SEE CONSTRUCTION DOCUMENTS FOR DETAILS.
   B. 4" SANITARY SEWER SERVICE LINE.
   C. 8" PRIVATE SANITARY SEWER MAIN.
7. PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER WEST DES MOINES WATER WORKS (WDMWW) RULES AND REGULATIONS.
   A. CONNECTION TO EXISTING 16" WATER MAIN WITH 8" TEE TAPPING VALVE AND SLEEVE.
   B. 8" PRIVATE WATER SERVICE LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
   C. HYDRANT ASSEMBLY.
   D. 1" WATER SERVICE WITH CURB STOP.
   E. 8" VALVE.
   F. REMOVE AND RELOCATE EXISTING HYDRANT ASSEMBLY.
   G. RELOCATED HYDRANT ASSEMBLY.
   H. DIRECTIONAL BORE 8" WATER MAIN.
   I. 8"x8" CROSS.
   J. 8"x8" TEE.
   K. 45° BEND.
8. COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING, METER LOCATION, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.
9. CRITICAL CROSSING. CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION.
10. COORDINATE WITH COMMUNICATION LOCAL UTILITY PROVEDER FOR MC PHONE, CABLE AND INTERNET SERVICE PRIOR TO CONSTRUCTION.
11. SEE ARCHITECTURAL PLANS FOR DETAILED POOL AND CLUBHOUSE DESIGN INFORMATION AND ELEVATIONS.



3/5 3" ROLL CURB

NOT TO SCALE



4/5 TYPICAL PRIVATE STREET CROSS SECTION

NOT TO SCALE

NOTES

1. SUBGRADE SHALL CONSIST OF A FIRM UNYIELDING CLAY (CL OR CH) OR CLASS "A" ROADSTONE BASE.
2. CONCRETE WILL HAVE THE MIX DESIGN AS SHOWN FOR STREET PAVEMENT IN THE CONSTRUCTION. PLACE TOPSOIL OVER ALL AREAS DISTURBED.
3. FINISH SHALL CONFORM TO STANDARD SPECIFICATIONS FOR SIDEWALKS AND PROVIDE FINAL BROOM FINISH.
4. CURING AS SPECIFIED FOR CONCRETE PAVEMENT IN THE STANDARD SPECIFICATIONS.
5. REBAR SHALL BE NON-EPOXY COATED STEEL, AS PER THE STANDARD SPECIFICATIONS.

0 40
FEET

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Plg:
Project No: 117.0693A | Sheet 5 of 19

COURTYARDS AT KINGS LANDING

DIMENSION AND UTILITY PLAN

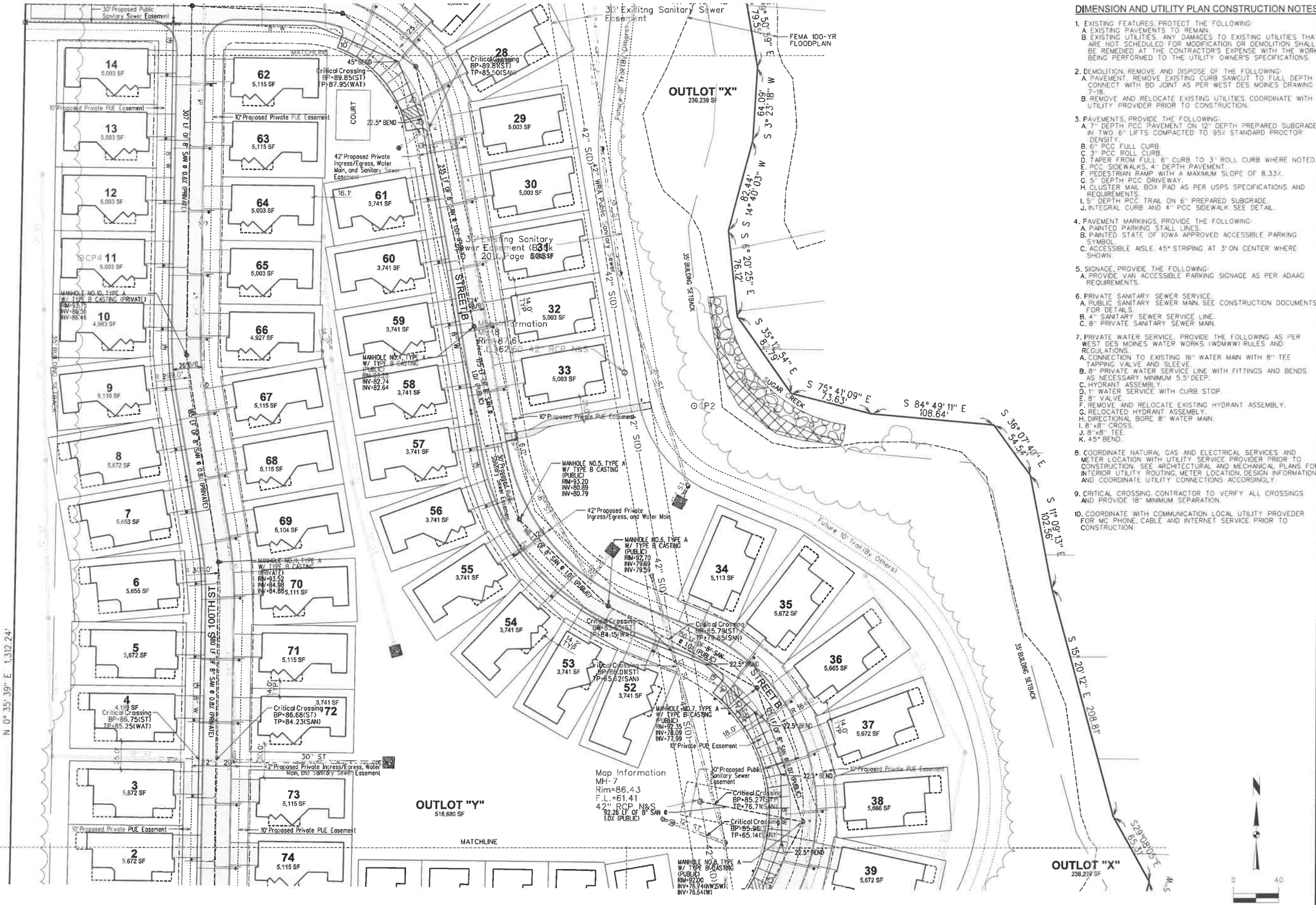
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 5 of 19



DIMENSION AND UTILITY PLAN CONSTRUCTION NOTES

1. EXISTING FEATURES, PROTECT THE FOLLOWING:
   A. EXISTING PAVEMENTS TO REMAIN.
   B. EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.

2. DEMOLITION, REMOVE AND DISPOSE OF THE FOLLOWING:
   A. PAVEMENT. REMOVE EXISTING CURB SAWCUT TO FULL DEPTH CONNECT WITH BD JOINT AS PER WEST DES MOINES DRAWING 7-18.
   B. REMOVE AND RELOCATE EXISTING UTILITIES. COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.

3. PAVEMENTS, PROVIDE THE FOLLOWING:
   A. 7" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE IN TWO 6" LIFTS COMPACTED TO 95% STANDARD PROCTOR DENSITY.
   B. 6" PCC FULL CURB.
   C. 3" PCC ROLL CURB.
   D. TAPER FROM FULL 6" CURB TO 3" ROLL CURB WHERE NOTED.
   E. PCC SIDEWALKS, 4" DEPTH PAVEMENT.
   F. PEDESTRIAN RAMP WITH A MAXIMUM SLOPE OF 8.33%.
   G. 5" DEPTH PCC DRIVEWAY.
   H. CLUSTER MAIL BOX PAD AS PER USPS SPECIFICATIONS AND REQUIREMENTS.
   I. 5" DEPTH PCC TRAIL ON 6" PREPARED SUBGRADE.
   J. INTEGRAL CURB AND 4" PCC SIDEWALK. SEE DETAIL.

4. PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
   A. PAINTED PARKING STALL LINES.
   B. PAINTED STATE OF IOWA APPROVED ACCESSIBLE PARKING SYMBOL.
   C. ACCESSIBLE AISLE, 45° STRIPING AT 3' ON CENTER WHERE SHOWN.

5. SIGNAGE, PROVIDE THE FOLLOWING:
   A. PROVIDE VAN ACCESSIBLE PARKING SIGNAGE AS PER ADAAG REQUIREMENTS.

6. PRIVATE SANITARY SEWER SERVICE.
   A. PUBLIC SANITARY SEWER MAIN. SEE CONSTRUCTION DOCUMENTS FOR DETAILS.
   B. 4" SANITARY SEWER SERVICE LINE.
   C. 8" PRIVATE SANITARY SEWER MAIN.

7. PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER WEST DES MOINES WATER WORKS (WDMWW) RULES AND REGULATIONS.
   A. CONNECTION TO EXISTING 16" WATER MAIN WITH 8" TEE TAPPING VALVE AND SLEEVE.
   B. 8" PRIVATE WATER SERVICE LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
   C. HYDRANT ASSEMBLY.
   D. 1" WATER SERVICE WITH CURB STOP.
   E. 8" VALVE.
   F. REMOVE AND RELOCATE EXISTING HYDRANT ASSEMBLY.
   G. RELOCATED HYDRANT ASSEMBLY.
   H. DIRECTIONAL BORE 8" WATER MAIN.
   I. 8"x8" CROSS.
   J. 8"x8" TEE.
   K. 45° BEND.

8. COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING, METER LOCATION, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.

9. CRITICAL CROSSING CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION.

10. COORDINATE WITH COMMUNICATION LOCAL UTILITY PROVEDER FOR MC PHONE, CABLE AND INTERNET SERVICE PRIOR TO CONSTRUCTION.

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A | Sheet 6 of 19

COURTYARDS AT KINGS LANDING

DIMENSION AND UTILITY PLAN

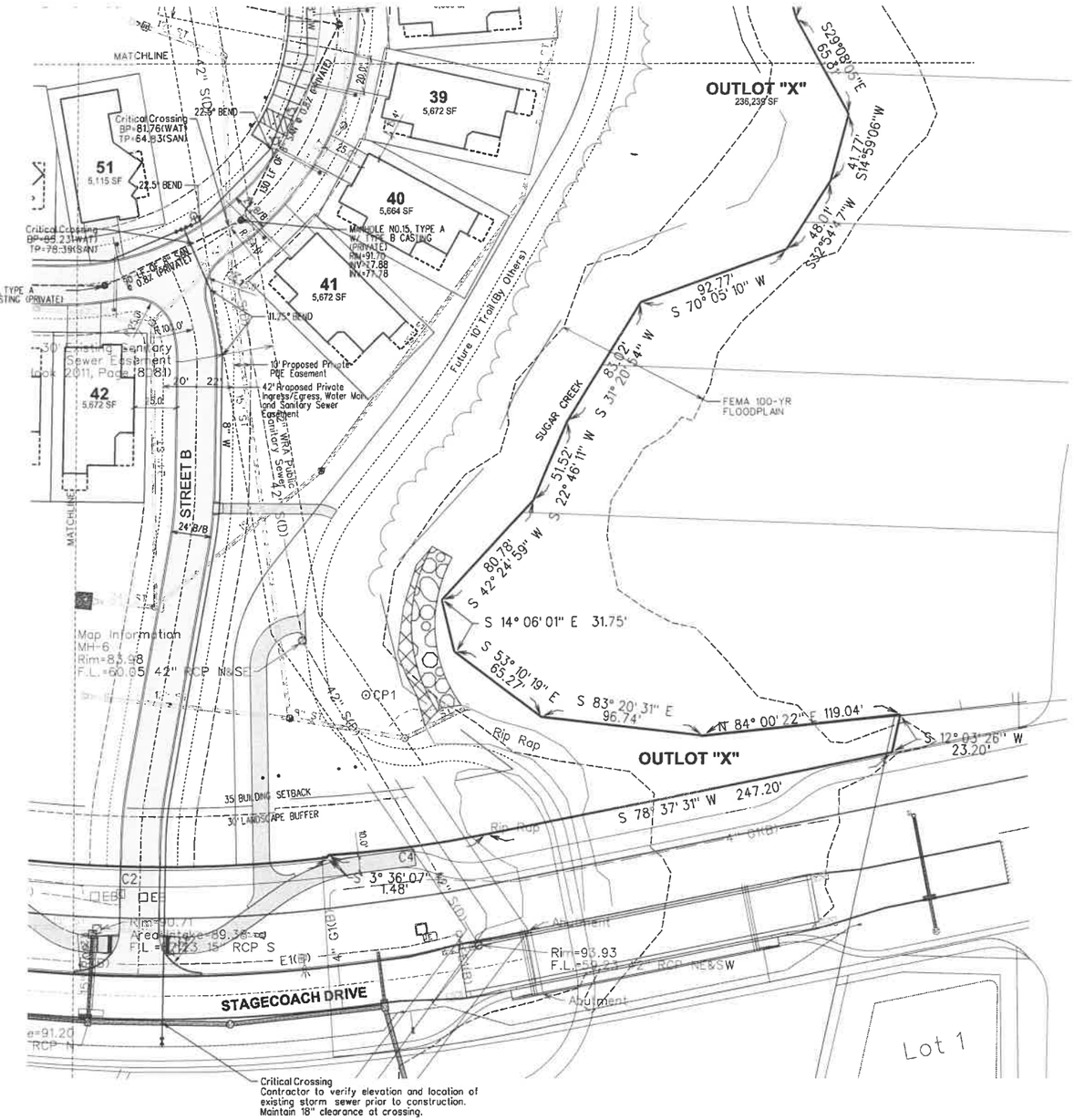
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
AINKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 6 of 19



DIMENSION AND UTILITY PLAN CONSTRUCTION NOTES

1. EXISTING FEATURES, PROTECT THE FOLLOWING:
   A. EXISTING PAVEMENTS TO REMAIN.
   B. EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.

2. DEMOLITION, REMOVE AND DISPOSE OF THE FOLLOWING:
   A. PAVEMENT. REMOVE EXISTING CURB SAWCUT TO FULL DEPTH CONNECT WITH BD JOINT AS PER WEST DES MOINES DRAWING 7-16.
   B. REMOVE AND RELOCATE EXISTING UTILITIES. COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.

3. PAVEMENTS, PROVIDE THE FOLLOWING:
   A. 7" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE IN TWO 6" LIFTS COMPACTED TO 95% STANDARD PROCTOR DENSITY.
   B. 6" PCC ROLL CURB.
   C. 3" PCC ROLL CURB.
   D. TAPER FROM FULL 6" CURB TO 3" ROLL CURB WHERE NOTED.
   E. PCC SIDEWALKS, 4" DEPTH PAVEMENT.
   F. PEDESTRIAN RAMP WITH A MAXIMUM SLOPE OF 8.33%.
   G. 5" DEPTH PCC DRIVEWAY.
   H. CLUSTER MAIL BOX PAD AS PER USPS SPECIFICATIONS AND REQUIREMENTS.
   I. 5" DEPTH PCC TRAIL ON 6" PREPARED SUBGRADE.
   J. INTEGRAL CURB AND 4" PCC SIDEWALK. SEE DETAIL.

4. PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
   A. PAINTED PARKING STALL LINES.
   B. PAINTED STATE OF IOWA APPROVED ACCESSIBLE PARKING SYMBOL.
   C. ACCESSIBLE AISLE. 45° STRIPING AT 3' ON CENTER WHERE SHOWN.

5. SIGNAGE, PROVIDE THE FOLLOWING:
   A. PROVIDE VAN ACCESSIBLE PARKING SIGNAGE AS PER ADAAG REQUIREMENTS.

6. PRIVATE SANITARY SEWER SERVICE.
   A. PUBLIC SANITARY SEWER MAIN. SEE CONSTRUCTION DOCUMENTS FOR DETAILS.
   B. 4" SANITARY SEWER SERVICE LINE.
   C. 8" PRIVATE SANITARY SEWER MAIN.

7. PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER WEST DES MOINES WATER WORKS (WDMWW) RULES AND REGULATIONS.
   A. CONNECTION TO EXISTING 16" WATER MAIN WITH 8" TEE TAPPING VALVE AND SLEEVE.
   B. 8" PRIVATE WATER SERVICE LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
   C. HYDRANT ASSEMBLY.
   D. 1" WATER SERVICE WITH CURB STOP.
   E. 8" VALVE.
   F. REMOVE AND RELOCATE EXISTING HYDRANT ASSEMBLY.
   G. RELOCATED HYDRANT ASSEMBLY.
   H. DIRECTIONAL BORE 8" WATER MAIN.
   I. 8"x8" CROSS.
   J. 8"x8" TEE.
   K. 45° BEND.

8. COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING, METER LOCATION, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.

9. CRITICAL CROSSING. CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION.

10. COORDINATE WITH COMMUNICATION LOCAL UTILITY PROVEDER FOR MC PHONE, CABLE AND INTERNET SERVICE PRIOR TO CONSTRUCTION.

11. SEE ARCHITECTURAL PLANS FOR DETAILED POOL AND CLUBHOUSE DESIGN INFORMATION AND ELEVATIONS.

0 40
FEET

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A | Sheet 7 of 19

COURTYARDS AT KINGS LANDING

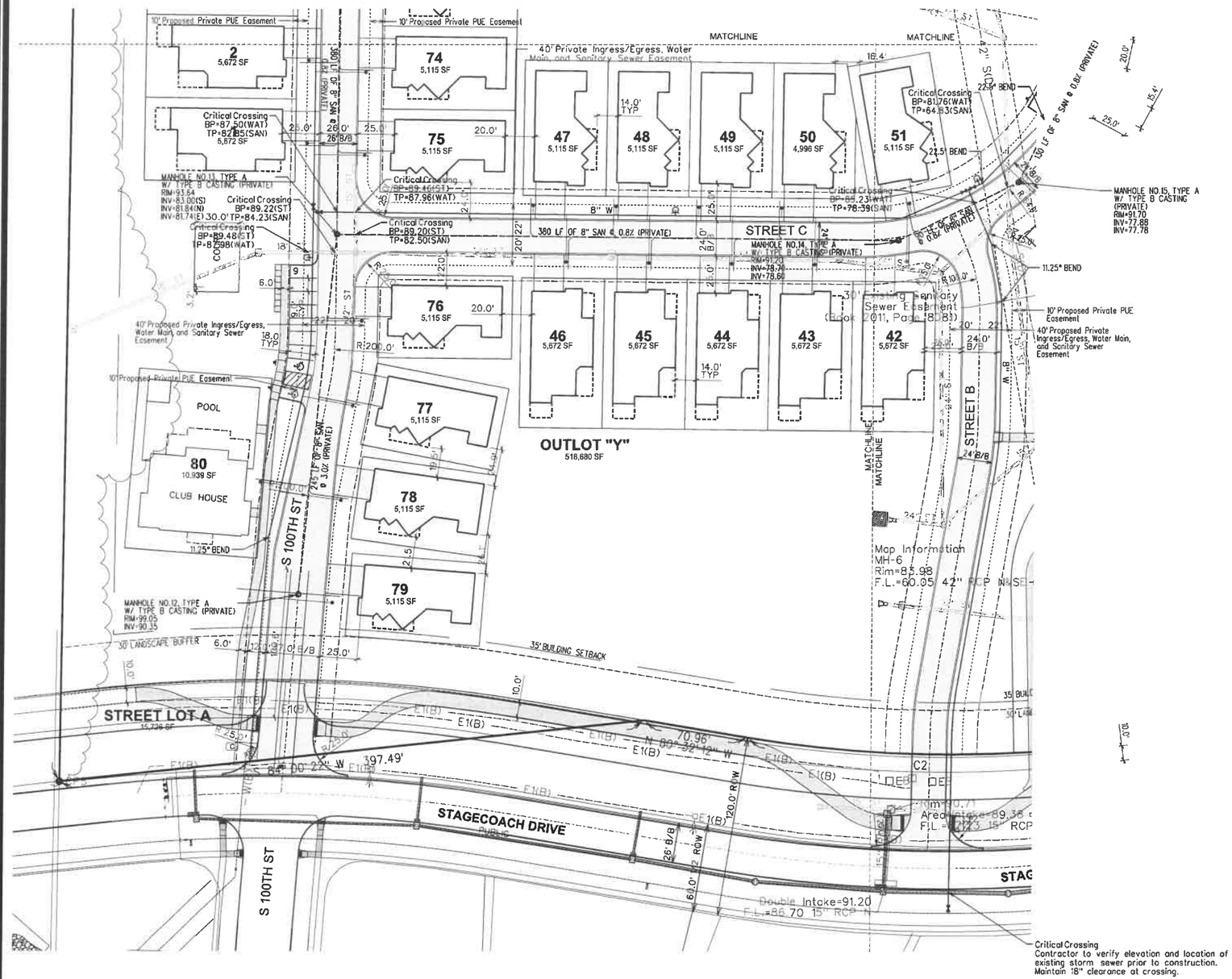
DIMENSION AND UTILITY PLAN

WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A
Sheet 7 of 19



DIMENSION AND UTILITY PLAN CONSTRUCTION NOTES

1. EXISTING FEATURES, PROTECT THE FOLLOWING:
   A. EXISTING PAVEMENTS TO REMAIN.
   B. EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.

2. DEMOLITION, REMOVE AND DISPOSE OF THE FOLLOWING:
   A. PAVEMENT. REMOVE EXISTING CURB SAWCUT TO FULL DEPTH CONNECT WITH BD JOINT AS PER WEST DES MOINES DRAWING 7-18.
   B. REMOVE AND RELOCATE EXISTING UTILITIES. COORDINATE WITH UTILITY PROVIDER PRIOR TO CONSTRUCTION.

3. PAVEMENTS, PROVIDE THE FOLLOWING:
   A. 7" DEPTH PCC PAVEMENT ON 12" DEPTH PREPARED SUBGRADE IN TWO 6" LIFTS COMPACTED TO 95% STANDARD PROCTOR DENSITY.
   B. 6" PCC FULL CURB.
   C. 3" PCC ROLL CURB.
   D. TAPER FROM FULL 6" CURB TO 3" ROLL CURB WHERE NOTED.
   E. PCC SIDEWALKS, 4" DEPTH PAVEMENT.
   F. PEDESTRIAN RAMP WITH A MAXIMUM SLOPE OF 8.33%.
   G. 5" DEPTH PCC DRIVEWAY.
   H. CLUSTER MAIL BOX PAD AS PER USPS SPECIFICATIONS AND REQUIREMENTS.
   I. 5" DEPTH PCC TRAIL ON 6" PREPARED SUBGRADE.
   J. INTEGRAL CURB AND 4" PCC SIDEWALK. SEE DETAIL.

4. PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
   A. PAINTED PARKING STALL LINES.
   B. PAINTED STATE OF IOWA APPROVED ACCESSIBLE PARKING SYMBOL.
   C. ACCESSIBLE AISLE. 45° STRIPING AT 3' ON CENTER WHERE SHOWN.

5. SIGNAGE, PROVIDE THE FOLLOWING:
   A. PROVIDE VAN ACCESSIBLE PARKING SIGNAGE AS PER ADAAG REQUIREMENTS.

6. PRIVATE SANITARY SEWER SERVICE.
   A. PUBLIC SANITARY SEWER MAIN. SEE CONSTRUCTION DOCUMENTS FOR DETAILS.
   B. 4" SANITARY SEWER SERVICE LINE.
   C. 8" PRIVATE SANITARY SEWER MAIN.

7. PRIVATE WATER SERVICE. PROVIDE THE FOLLOWING AS PER WEST DES MOINES WATER WORKS (WDMWW) RULES AND REGULATIONS.
   A. CONNECTION TO EXISTING 16" WATER MAIN WITH 8" TEE TAPPING VALVE AND SLEEVE.
   B. 8" PRIVATE WATER SERVICE LINE WITH FITTINGS AND BENDS AS NECESSARY. MINIMUM 5.5' DEEP.
   C. HYDRANT ASSEMBLY.
   D. 1" WATER SERVICE WITH CURB STOP.
   E. 8" VALVE.
   F. REMOVE AND RELOCATE EXISTING HYDRANT ASSEMBLY.
   G. RELOCATED HYDRANT ASSEMBLY.
   H. DIRECTIONAL BORE 8" WATER MAIN.
   I. 8"x8" CROSS.
   J. 8"x8" TEE.
   K. 45° BEND.

8. COORDINATE NATURAL GAS AND ELECTRICAL SERVICES AND METER LOCATION WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR INTERIOR UTILITY ROUTING, METER LOCATION, DESIGN INFORMATION AND COORDINATE UTILITY CONNECTIONS ACCORDINGLY.

9. CRITICAL CROSSING CONTRACTOR TO VERIFY ALL CROSSINGS AND PROVIDE 18" MINIMUM SEPARATION.

10. COORDINATE WITH COMMUNICATION LOCAL UTILITY PROVEDER FOR MC PHONE, CABLE AND INTERNET SERVICE PRIOR TO CONSTRUCTION.

11. SEE ARCHITECTURAL PLANS FOR DETAILED POOL AND CLUBHOUSE DESIGN INFORMATION AND ELEVATIONS.

0 40
FEET

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 8 of 19

COURTYARDS AT KINGS LANDING

DIMENSION AND UTILITY PLAN

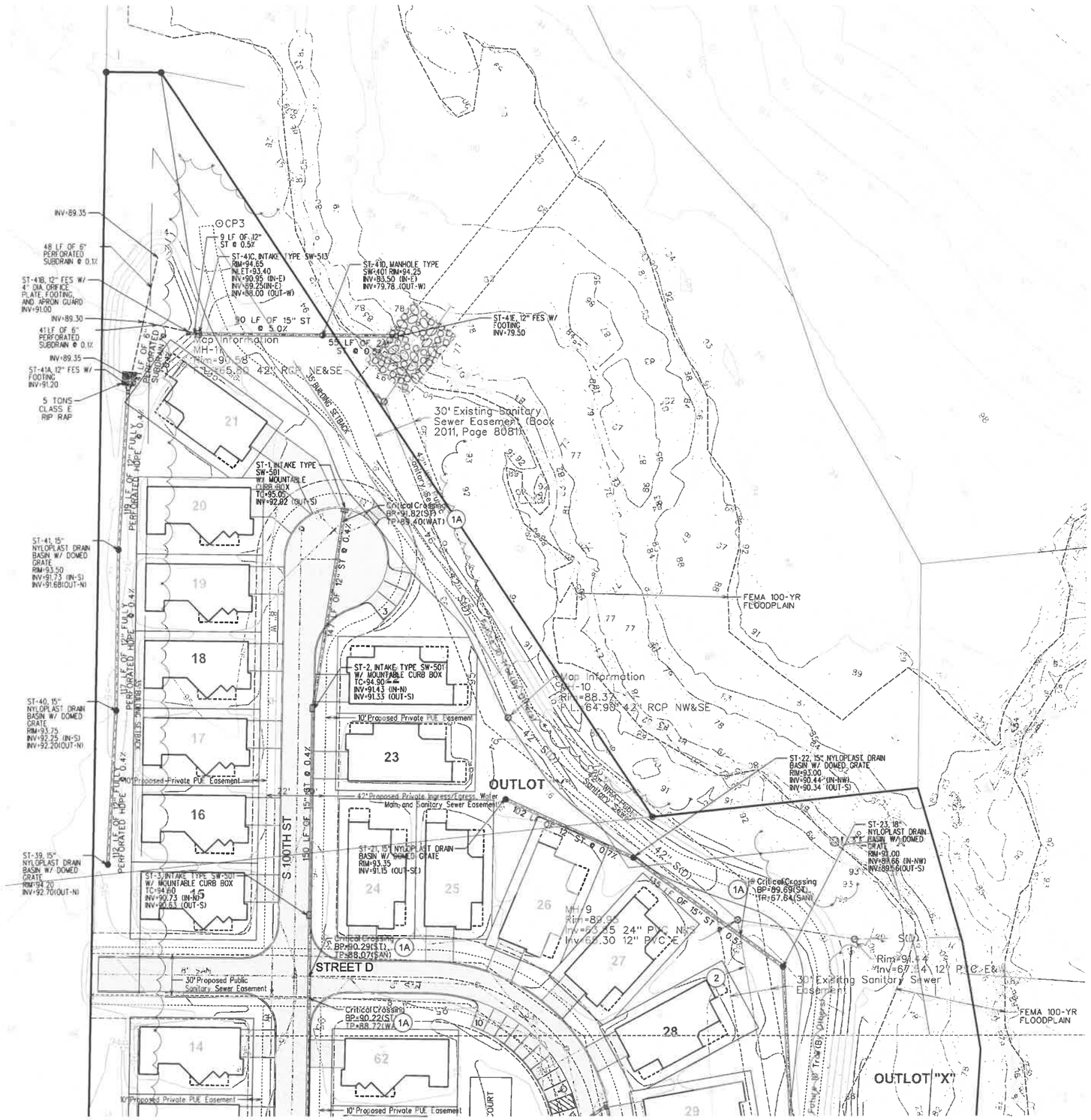
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

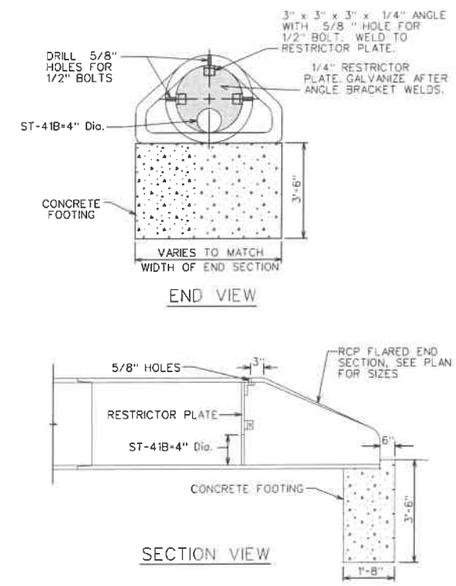
Project No: 117.0693A

Sheet 8 of 19



STORM SEWER PLAN CONSTRUCTION NOTES

1. PROVIDE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS, AS PER CITY OF WEST DES MOINES STANDARDS.
   A. CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN A MINIMUM OF 18" SEPARATION. IN LOCATIONS WHERE WATER MAIN IS TO BE PLACED BELOW SEWER, SEWER IS TO BE GASKETED JOINTS TO WITHIN 10' OF WATER MAIN CROSSINGS.
2. PROTECT EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILIY OWNER'S SPECIFICATIONS.



1/9 FLARED END SECTION CIRCULAR RESTRICTOR PLATE
NO SCALE

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A | Sheet 9 of 19

WEST DES MOINES, IA

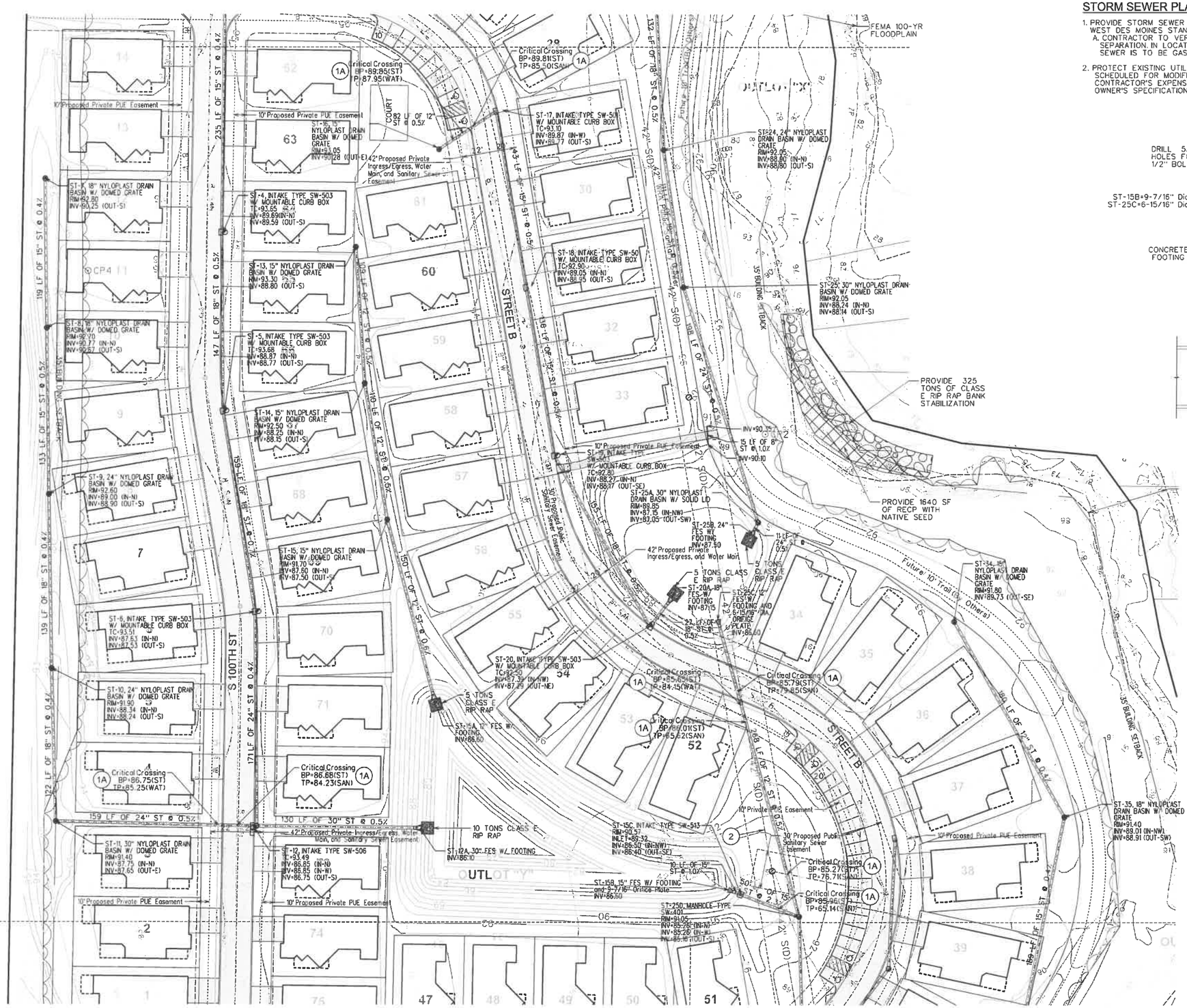
COURTYARDS AT KINGS LANDING

STORM SEWER PLAN

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

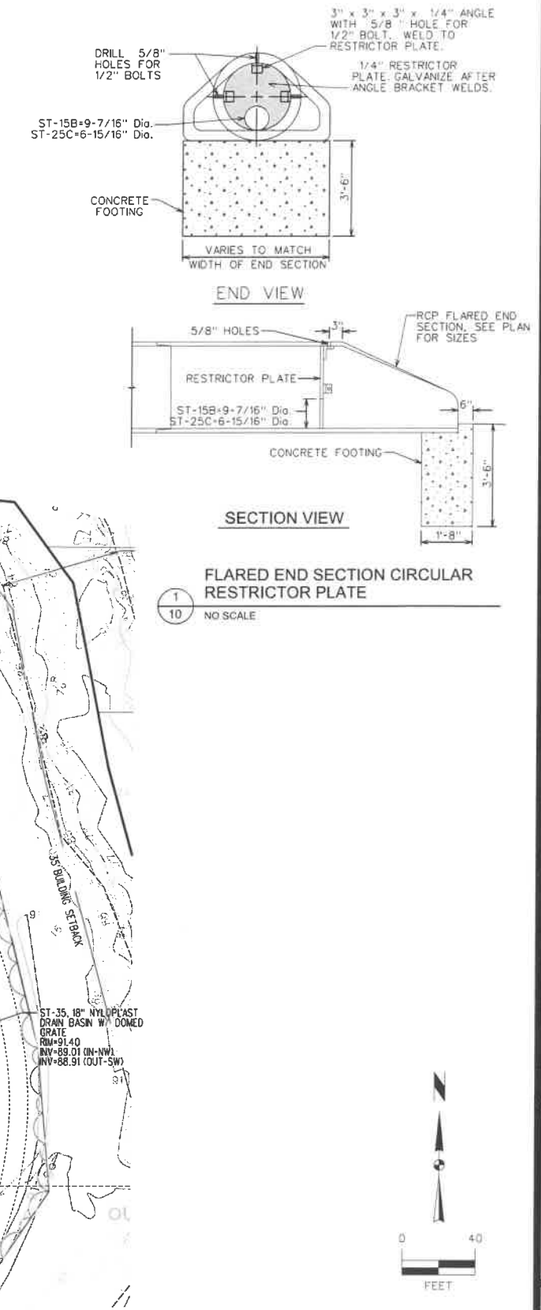
SNYDER & ASSOCIATES

Project No: 117.0693A
Sheet 9 of 19



STORM SEWER PLAN CONSTRUCTION NOTES

1. PROVIDE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS, AS PER CITY OF WEST DES MOINES STANDARDS.
   A. CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN A MINIMUM OF 18" SEPARATION. IN LOCATIONS WHERE WATER MAIN IS TO BE PLACED BELOW SEWER, SEWER IS TO BE GASKETED JOINTS TO WITHIN 10' OF WATER MAIN CROSSINGS.
2. PROTECT EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILIY OWNER'S SPECIFICATIONS.



1/10 FLARED END SECTION CIRCULAR RESTRICTOR PLATE
NO SCALE

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A | Sheet 10 of 19

COURTYARDS AT KINGS LANDING

STORM SEWER PLAN

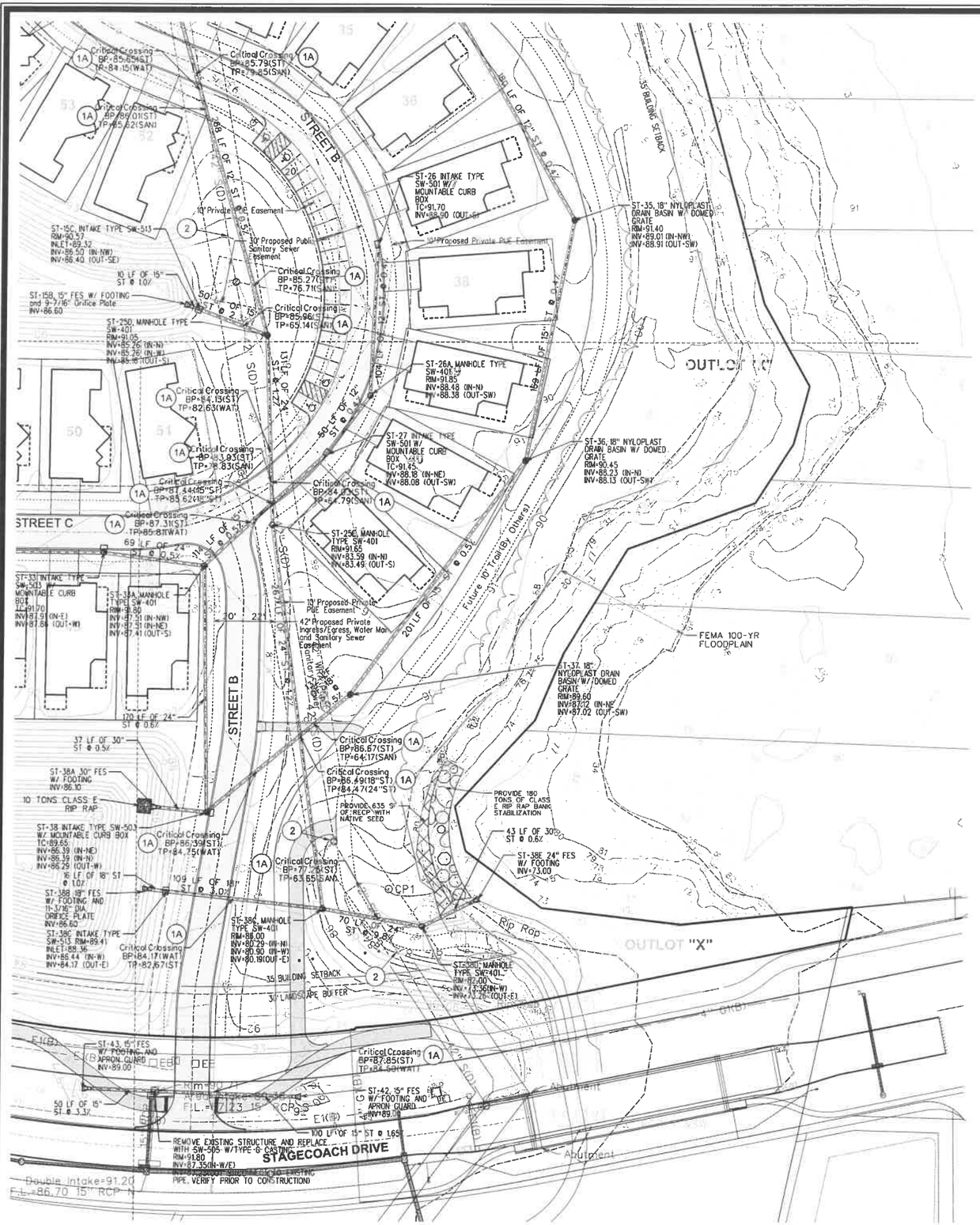
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

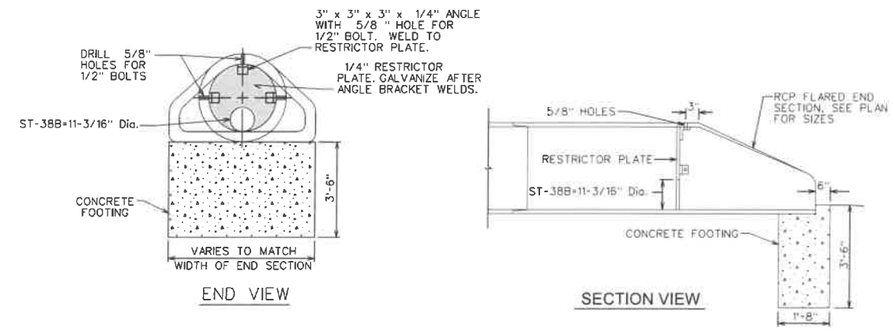
Project No: 117.0693A

Sheet 10 of 19



STORM SEWER PLAN CONSTRUCTION NOTES

1. PROVIDE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS, AS PER CITY OF WEST DES MOINES STANDARDS.
   A. CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN A MINIMUM OF 18" SEPARATION, IN LOCATIONS WHERE WATER MAIN IS TO BE PLACED BELOW SEWER. SEWER IS TO BE GASKETED JOINTS TO WITHIN 10' OF WATER MAIN CROSSINGS.
2. PROTECT EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILITY OWNER'S SPECIFICATIONS.



1/11 FLARED END SECTION CIRCULAR RESTRICTOR PLATE
NO SCALE

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/17/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 11 of 19

WEST DES MOINES, IA

COURTYARDS AT KINGS LANDING

STORM SEWER PLAN

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 11 of 19

STORM SEWER PLAN CONSTRUCTION NOTES

1. PROVIDE STORM SEWER IMPROVEMENTS AS SHOWN ON THE PLANS, AS PER CITY OF WEST DES MOINES STANDARDS.
   A. CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS AND MAINTAIN A MINIMUM OF 18" SEPARATION, IN LOCATIONS WHERE WATER MAIN IS TO BE PLACED BELOW SEWER. SEWER IS TO BE GASKETED JOINTS TO WITHIN 10' OF WATER MAIN CROSSINGS.
2. PROTECT EXISTING UTILITIES. ANY DAMAGES TO EXISTING UTILITIES THAT ARE NOT SCHEDULED FOR MODIFICATION OR DEMOLITION SHALL BE REMEDIED AT THE CONTRACTOR'S EXPENSE WITH THE WORK BEING PERFORMED TO THE UTILIY OWNER'S SPECIFICATIONS.

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 12 of 19

WEST DES MOINES, IA

COURTYARDS AT KINGS LANDING

STORM SEWER PLAN

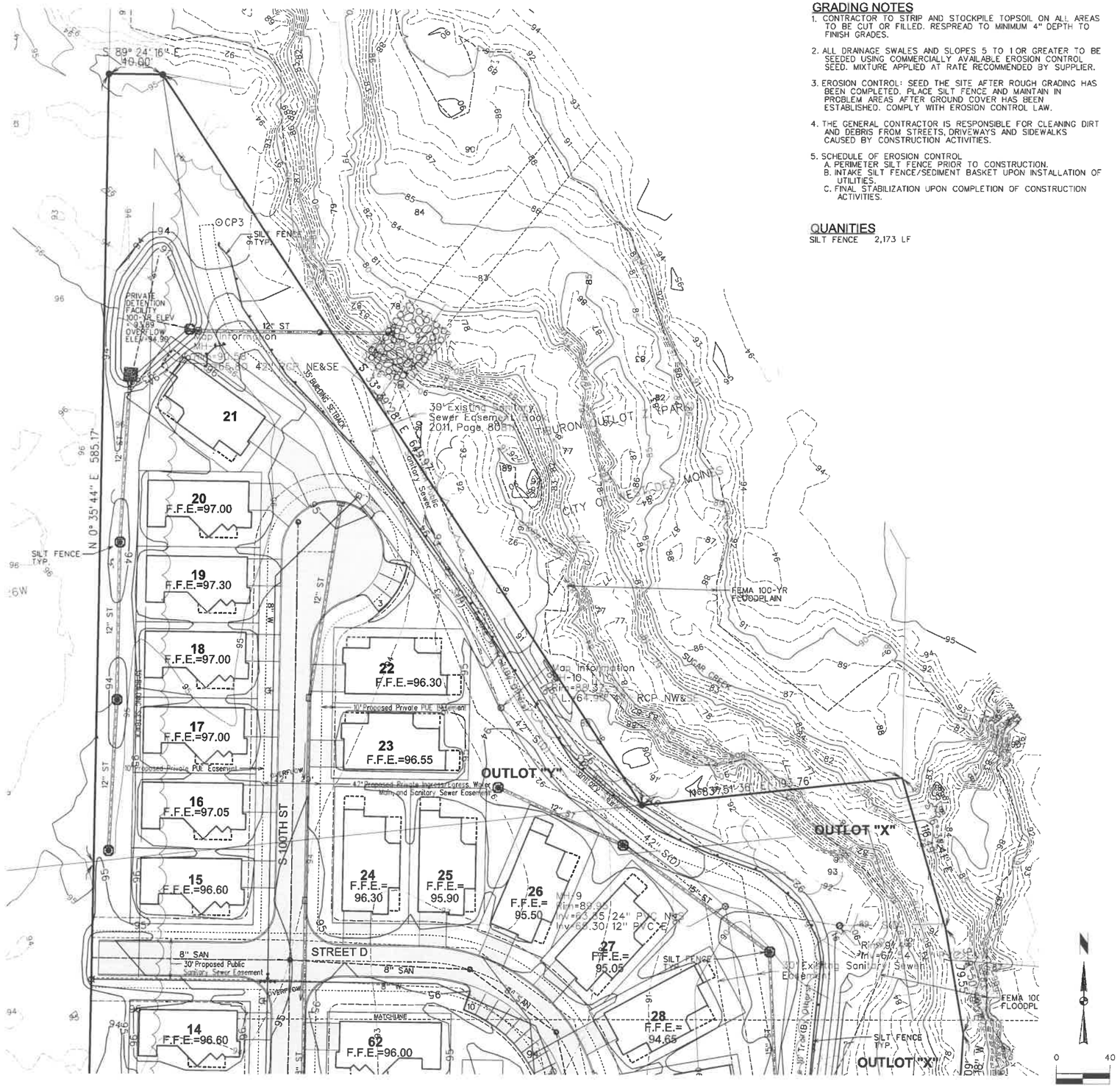
SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 12 of 19

0 40 FEET



GRADING NOTES

1. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL ON ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MINIMUM 4" DEPTH TO FINISH GRADES.
2. ALL DRAINAGE SWALES AND SLOPES 5 TO 1 OR GREATER TO BE SEEDED USING COMMERCIALLY AVAILABLE EROSION CONTROL SEED. MIXTURE APPLIED AT RATE RECOMMENDED BY SUPPLIER.
3. EROSION CONTROL: SEED THE SITE AFTER ROUGH GRADING HAS BEEN COMPLETED. PLACE SILT FENCE AND MAINTAIN IN PROBLEM AREAS AFTER GROUND COVER HAS BEEN ESTABLISHED. COMPLY WITH EROSION CONTROL LAW.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.
5. SCHEDULE OF EROSION CONTROL
   A. PERIMETER SILT FENCE PRIOR TO CONSTRUCTION.
   B. INTAKE SILT FENCE/SEDIMENT BASKET UPON INSTALLATION OF UTILITIES.
   C. FINAL STABILIZATION UPON COMPLETION OF CONSTRUCTION ACTIVITIES.

QUANITIES

SILT FENCE 2,173 LF

POLLUTION PREVENTION NOTES

A. POLLUTION PREVENTION AND EROSION PROTECTION

1. CODE COMPLIANCE: THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL POTENTIAL POLLUTION AND SOIL EROSION CONTROL REQUIREMENTS OF THE IOWA CODE, THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) NPDES PERMIT, THE U.S. CLEAN WATER ACT AND ANY LOCAL ORDINANCES. THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO PROTECT AGAINST EROSION AND POLLUTION FROM THIS PROJECT SITE AND ALL OFF-SITE BORROW OR DEPOSIT AREAS DURING PERFORMANCE OR AS A RESULT OF PERFORMANCE.
2. DAMAGE CLAIMS: THE CONTRACTOR WILL HOLD THE OWNER AND ARCHITECT / ENGINEER HARMLESS FROM ANY AND ALL CLAIMS OF ANY TYPE WHATSOEVER RESULTING FROM DAMAGES TO ADJOINING PUBLIC OR PRIVATE PROPERTY, INCLUDING REASONABLE ATTORNEY FEES INCURRED TO OWNER. FURTHER, IF THE CONTRACTOR FAILS TO TAKE NECESSARY STEPS TO PROMPTLY REMOVE EARTH SEDIMENTATION OR DEBRIS WHICH COMES ONTO ADJOINING PUBLIC OR PRIVATE PROPERTY, THE OWNER MAY, BUT NEED NOT, REMOVE SUCH ITEMS AND DEDUCT THE COST THEREOF FROM AMOUNTS DUE TO THE CONTRACTOR.

B. STORM WATER DISCHARGE PERMIT

1. THIS PROJECT REQUIRES COVERAGE UNDER THE NPDES GENERAL PERMIT NO. 2 FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, FROM THE IDNR, AS REQUIRED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLIANCE WITH AND FULFILLMENT OF ALL REQUIREMENTS OF THE NPDES GENERAL PERMIT NO. 2 AS SPECIFIED IN THE CONTRACT DOCUMENTS.
2. ALL DOCUMENTS RELATED TO THE STORM WATER DISCHARGE PERMIT, INCLUDING, BUT NOT LIMITED TO, THE NOTICE OF INTENT, PROOF OF PUBLICATIONS, DISCHARGE AUTHORIZATION LETTER, CURRENT SWPPP, SITE INSPECTION LOG, AND OTHER ITEMS, SHALL BE KEPT ON SITE AT ALL TIMES AND MUST BE PRESENTED TO ANY JURISDICTIONAL AGENCIES UPON REQUEST. FAILURE TO COMPLY WITH THE NPDES PERMIT REQUIREMENTS IS A VIOLATION OF THE CLEAN WATER ACT AND THE CODE OF IOWA.
3. A "NOTICE OF DISCONTINUATION" MUST BE FILED WITH THE IDNR UPON FINAL STABILIZATION OF THE DISTURBED SITE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES. ALL PLANS, INSPECTION REPORTS, AND OTHER DOCUMENTS MUST BE RETAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION. THE CONTRACTOR SHALL RETAIN A RECORD COPY AND PROVIDE THE ORIGINAL DOCUMENTS TO THE OWNER UPON PROJECT ACCEPTANCE AND/OR SUBMITTAL OF THE NOTICE OF DISCONTINUATION.

C. POLLUTION PREVENTION PLAN

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS A SEPARATE DOCUMENT IN ADDITION TO THESE PLAN DRAWINGS. THE CONTRACTOR SHOULD REFER TO THE SWPPP FOR ADDITIONAL REQUIREMENTS AND MODIFICATIONS TO THE POLLUTION PREVENTION PLAN MADE DURING CONSTRUCTION.
2. THE SWPPP ILLUSTRATES GENERAL MEASURES AND BEST MANAGEMENT PRACTICES (BMP) FOR COMPLIANCE WITH THE PROJECT'S NPDES PERMIT COVERAGE. ALL BMP'S AND EROSION CONTROL MEASURES REQUIRED AS A RESULT OF CONSTRUCTION ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, NOTE AND IMPLEMENT. ADDITIONAL BMP'S FROM THOSE SHOWN ON THE PLAN MAY BE REQUIRED.
3. THE SWPPP AND SITE MAP SHOULD BE EXPEDITIOUSLY REVISED TO REFLECT CONSTRUCTION PROGRESS AND CHANGES AT THE PROJECT SITE.
4. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE GENERAL PERMIT AND SWPPP, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING BMP'S UNLESS INFEASIBLE OR NOT APPLICABLE:
   a. UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHEN DISCHARGING FROM BASINS. PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATERS. DIRECT STORM WATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORM WATER INFILTRATION, AND MINIMIZE SOIL COMPACTION.
   b. INSTALL PERIMETER AND FINAL SEDIMENT CONTROL MEASURES SUCH AS SILT BARRIERS, DITCH CHECKS, DIVERSION BERMS, OR SEDIMENTATION BASINS DOWNSTREAM OF SOIL DISTURBING ACTIVITIES PRIOR TO SITE CLEARING AND GRADING OPERATIONS.
   c. PRESERVE EXISTING VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION AND LIMIT TO A MINIMUM THE TOTAL AREA DISTURBED BY CONSTRUCTION OPERATIONS AT ANY TIME.
   d. MAINTAIN ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES IN WORKING ORDER, INCLUDING CLEANING, REPAIRING, REPLACEMENT, AND SEDIMENT REMOVAL THROUGHOUT THE PERMIT PERIOD. CLEAN OR REPLACE SILT CONTROL DEVICES WHEN THE MEASURES HAVE LOST 50% OF THEIR ORIGINAL CAPACITY.
   e. INSPECT THE PROJECT AREA AND CONTROL DEVICES (BY QUALIFIED PERSONNEL ASSIGNED BY THE CONTRACTOR) EVERY SEVEN CALENDAR DAYS. RECORD THE FINDINGS OF THESE INSPECTIONS AND ANY RESULTING ACTIONS IN THE SWPPP WITH A COPY SUBMITTED WEEKLY TO THE OWNER OR ENGINEER DURING CONSTRUCTION. REVISE THE SWPPP AND IMPLEMENT ANY RECOMMENDED MEASURES WITHIN 7 DAYS.
   f. PREVENT ACCUMULATION OF EARTH AND DEBRIS FROM CONSTRUCTION ACTIVITIES ON ADJOINING PUBLIC OR PRIVATE PROPERTIES, INCLUDING STREETS, DRIVEWAYS, SIDEWALKS, DRAINAGEWAYS, OR UNDERGROUND SEWERS. REMOVE ANY ACCUMULATION OF EARTH OR DEBRIS IMMEDIATELY AND TAKE REMEDIAL ACTIONS FOR FUTURE PREVENTION.
   g. INSTALL NECESSARY CONTROL MEASURES SUCH AS SILT BARRIERS, EROSION CONTROL MATS, MULCH, DITCH CHECKS OR RIPRAP AS SOON AS AREAS REACH THEIR FINAL GRADES AND AS CONSTRUCTION OPERATIONS PROGRESS TO ENSURE CONTINUOUS RUNOFF CONTROL. PROVIDE INLET AND OUTLET CONTROL MEASURES AS SOON AS STORM SEWERS ARE INSTALLED.
   h. RESPREAD A MINIMUM OF 4 INCHES OF TOPSOIL (INCLUDING TOPSOIL FOUND IN SOD) ON ALL DISTURBED AREAS, EXCEPT WHERE PAVEMENT, BUILDINGS OR OTHER IMPROVEMENTS ARE LOCATED.
   i. STABILIZE UNDEVELOPED DISTURBED AREAS WITH MULCH, TEMPORARY SEED MIX, PERMANENT SEED MIX, SOD, OR PAVEMENT IMMEDIATELY AS SOON AS POSSIBLE UPON COMPLETION OR DELAY OF GRADING OPERATIONS. INITIATE STABILIZATION MEASURES IMMEDIATELY AFTER CONSTRUCTION ACTIVITY IS FINALLY COMPLETED OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WHICH WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
   j. COORDINATE LOCATIONS OF STAGING AREAS WITH THE OWNER AND RECORD IN THE SWPPP. UNLESS NOTED OTHERWISE, STAGING AREAS SHOULD CONTAIN THE FOLLOWING: JOB TRAILERS, FUELING / VEHICLE MAINTENANCE AREA, TEMPORARY SANITARY FACILITIES, MATERIALS STORAGE, AND CONCRETE WASHOUT FACILITY. CONTROL RUNOFF FROM STAGING AREAS WITH DIVERSION BERMS AND/OR SILT BARRIERS AND DIRECT TO A SEDIMENT BASIN OR OTHER CONTROL DEVICE WHERE POSSIBLE. CONCRETE WASHOUT MUST BE CONTAINED ONSITE.
   k. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND SITE WASTE PRIOR TO FILING OF THE "NOTICE OF DISCONTINUATION".

D. PROJECT SPECIFIC REQUIREMENTS FOR POLLUTION PREVENTION AND EROSION PROTECTION

1. RESPONSIBILITIES OF THE OWNER:
   a. SIGN NPDES CERTIFICATION STATEMENT AS PERMITEE.
   b. ALL REQUIREMENTS NOT ASSIGNED TO OTHERS.
2. RESPONSIBILITIES OF THE ENGINEER:
   a. CREATE THE INITIAL SWPPP.
   b. PUBLISH THE PUBLIC NOTICE OF STORM WATER DISCHARGE.
   c. FILE THE NOTICE OF INTENT WITH APPLICATION FEE FOR NPDES GENERAL PERMIT No. 2 COVERAGE.
   d. SUBMIT THE NOTICE OF DISCONTINUATION.
3. RESPONSIBILITIES OF THE CONTRACTOR:
   a. SIGN NPDES CERTIFICATION STATEMENT AS CO-PERMITEE AND COORDINATING CERTIFICATION OF SUBCONTRACTOR CO-PERMITEES.
   b. COMPLY WITH THE REQUIREMENTS OF THE GENERAL PERMIT No.2 AND THE SWPPP.
   c. INSTALL, MAINTAIN, AND REMOVE EROSION CONTROL AND POLLUTION PREVENTION MEASURES.
   d. WEEKLY INSPECTIONS AND CORRESPONDING RECORDS.
   e. UPDATE AND MAINTAIN THE ONSITE SWPPP.
   f. COOPERATE TO PROVIDE INFORMATION UNDER THE RESPONSIBILITY OF OTHERS.

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 40' | Field Bk: | Pg:
Technician: RMM | Date: 04/29/19 | Project No: 117.0693A

Sheet 13 of 19

COURTYARDS AT KINGS LANDING

GRADING AND EROSION CONTROL PLAN

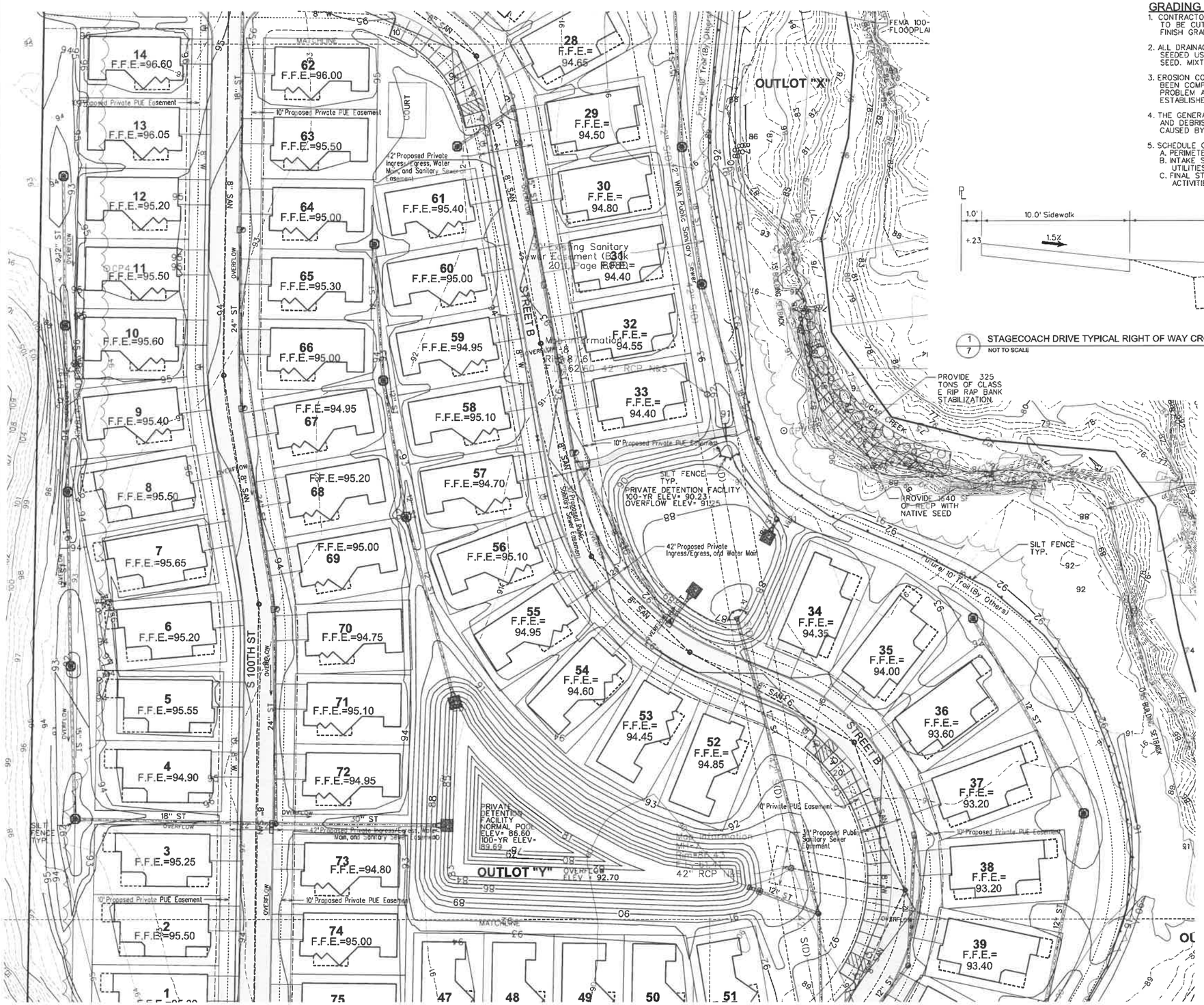
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

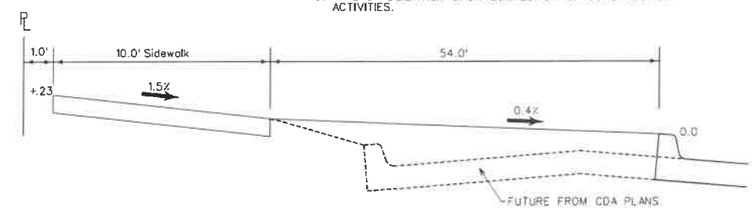
Project No: 117.0693A

Sheet 13 of 19



GRADING NOTES

1. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL ON ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MINIMUM 4" DEPTH TO FINISH GRADES.
2. ALL DRAINAGE SWALES AND SLOPES 5 TO 1 OR GREATER TO BE SEEDED USING COMMERCIALLY AVAILABLE EROSION CONTROL SEED. MIXTURE APPLIED AT RATE RECOMMENDED BY SUPPLIER.
3. EROSION CONTROL: SEED THE SITE AFTER ROUGH GRADING HAS BEEN COMPLETED. PLACE SILT FENCE AND MAINTAIN IN PROBLEM AREAS AFTER GROUND COVER HAS BEEN ESTABLISHED. COMPLY WITH EROSION CONTROL LAW.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.
5. SCHEDULE OF EROSION CONTROL
   A. PERIMETER SILT FENCE PRIOR TO CONSTRUCTION.
   B. INTAKE SILT FENCE/SEDIMENT BASKET UPON INSTALLATION OF UTILITIES.
   C. FINAL STABILIZATION UPON COMPLETION OF CONSTRUCTION ACTIVITIES.



1/7 STAGECOACH DRIVE TYPICAL RIGHT OF WAY CROSS SECTION
NOT TO SCALE

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 14 of 19

COURTYARDS AT KINGS LANDING

GRADING AND EROSION CONTROL PLAN

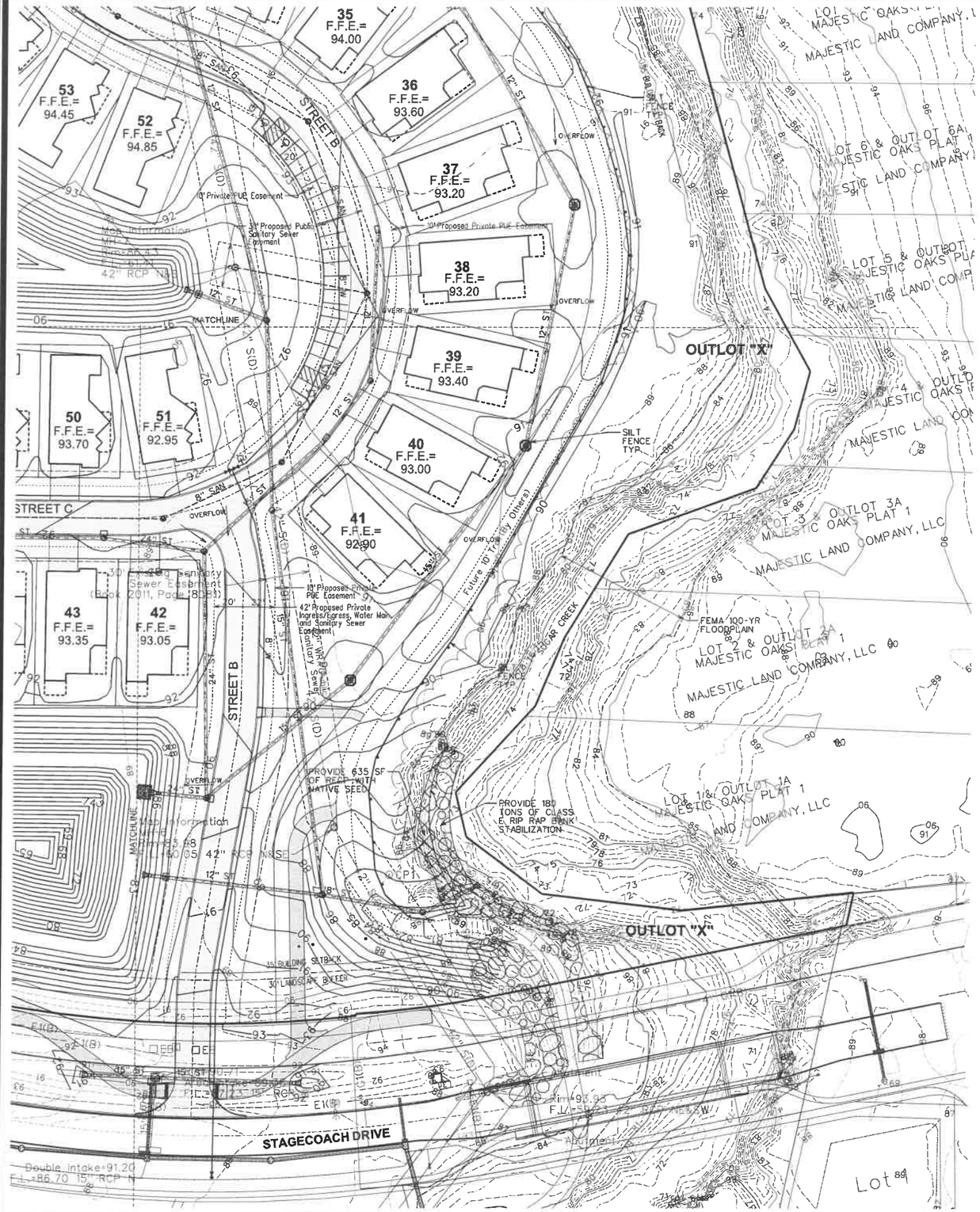
WEST DES MOINES, IA

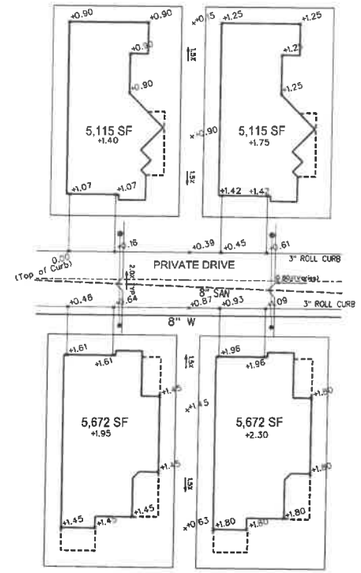
SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 14 of 19

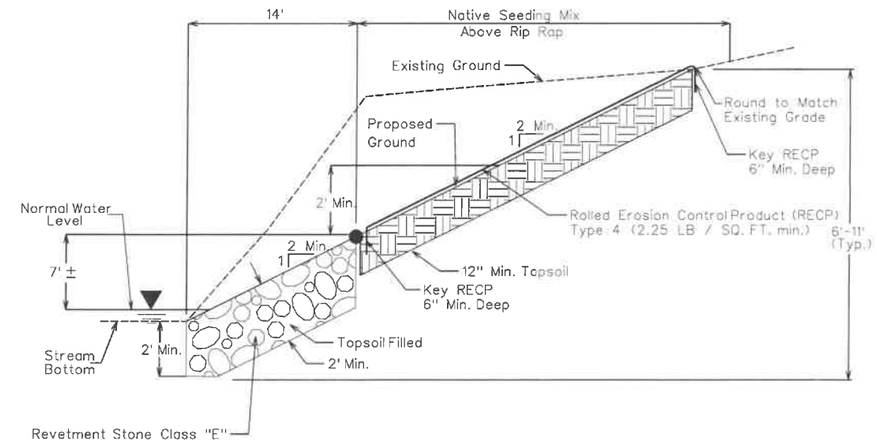




TYPICAL UNIT GRADING DETAIL
SCALE 1"=30'

GRADING NOTES

1. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL ON ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MINIMUM 4" DEPTH TO FINISH GRADES.
2. ALL DRAINAGE SWALES AND SLOPES 5 TO 1 OR GREATER TO BE SEEDED USING COMMERCIALLY AVAILABLE EROSION CONTROL SEED. MIXTURE APPLIED AT RATE RECOMMENDED BY SUPPLIER.
3. EROSION CONTROL: SEED THE SITE AFTER ROUGH GRADING HAS BEEN COMPLETED. PLACE SILT FENCE AND MAINTAIN IN PROBLEM AREAS AFTER GROUND COVER HAS BEEN ESTABLISHED. COMPLY WITH EROSION CONTROL LAW.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.
5. SCHEDULE OF EROSION CONTROL
   A. PERIMETER SILT FENCE PRIOR TO CONSTRUCTION.
   B. INTAKE SILT FENCE/SEDIMENT BASKET UPON INSTALLATION OF UTILITIES.
   C. FINAL STABILIZATION UPON COMPLETION OF CONSTRUCTION ACTIVITIES.



NOTES:

ON-SITE SALVAGED TOPSOIL IS TO BE USED, OVEREXCAVATE TO REMOVE POOR QUALITY SOIL AS NECESSARY.

PRESERVE/COMPLEMENTEXISTING REVETMENT

SEE GRADING PLAN FOR APPROXIMATE REVETMENT QUANITY EACH LOCATION

1/15 TYPICAL SECTION - ROCK TOE PROTECTION & BANK SHAPING WITHOUT BENCH
NO SCALE

0 40
FEET

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 15 of 19

COURTYARDS AT KINGS LANDING

GRADING AND EROSION CONTROL PLAN

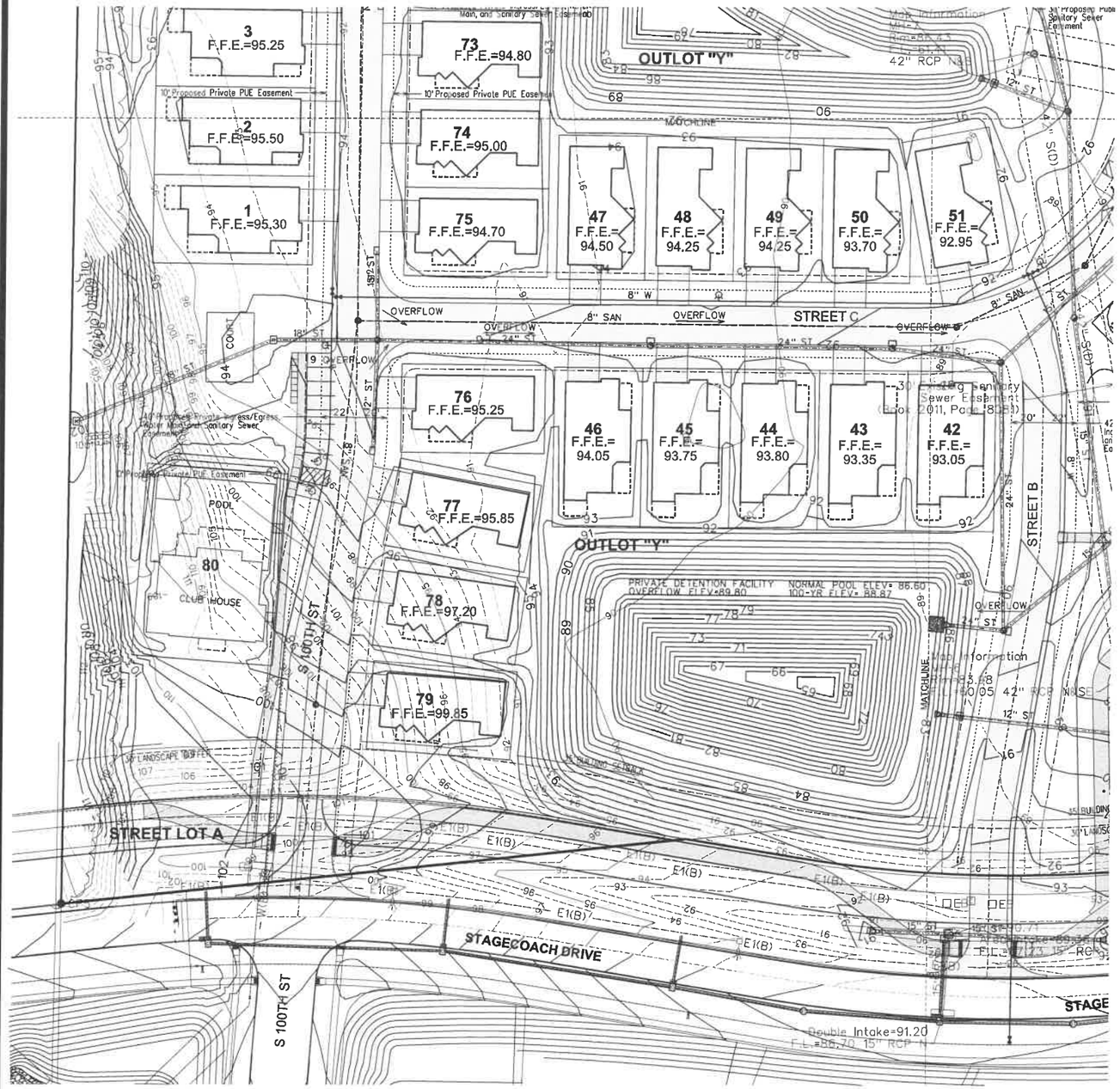
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

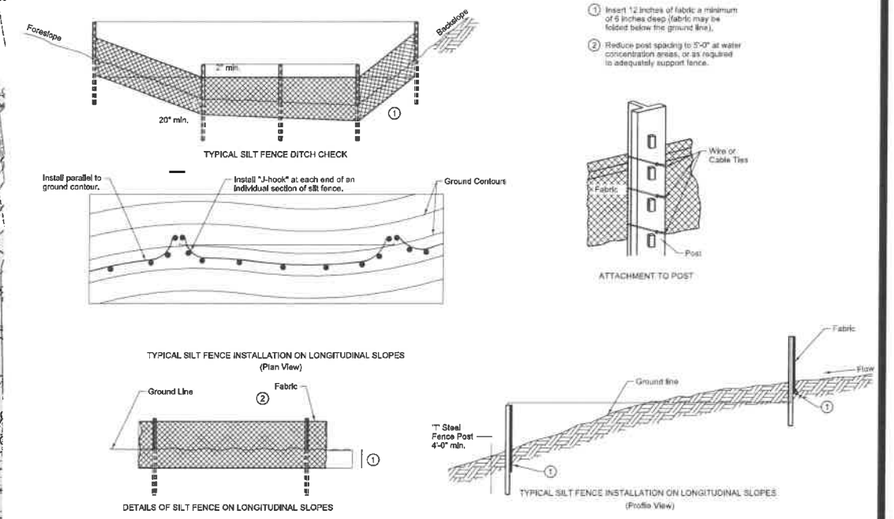
Project No: 117.0693A

Sheet 15 of 19



GRADING NOTES

1. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL ON ALL AREAS TO BE CUT OR FILLED. RESPREAD TO MINIMUM 4" DEPTH TO FINISH GRADES.
2. ALL DRAINAGE SWALES AND SLOPES 5 TO 1 OR GREATER TO BE SEEDED USING COMMERCIALLY AVAILABLE EROSION CONTROL SEED. MIXTURE APPLIED AT RATE RECOMMENDED BY SUPPLIER.
3. EROSION CONTROL: SEED THE SITE AFTER ROUGH GRADING HAS BEEN COMPLETED. PLACE SILT FENCE AND MAINTAIN IN PROBLEM AREAS AFTER GROUND COVER HAS BEEN ESTABLISHED. COMPLY WITH EROSION CONTROL LAW.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.
5. SCHEDULE OF EROSION CONTROL
   A. PERIMETER SILT FENCE PRIOR TO CONSTRUCTION.
   B. INTAKE SILT FENCE/SEDIMENT BASKET UPON INSTALLATION OF UTILITIES.
   C. FINAL STABILIZATION UPON COMPLETION OF CONSTRUCTION ACTIVITIES.



SILT FENCE

0 40
FEET

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/29/19	RMM
1	AS PER CITY COMMENTS	6/1/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A

Sheet 16 of 19

COURTYARDS AT KINGS LANDING

GRADING AND EROSION CONTROL PLAN

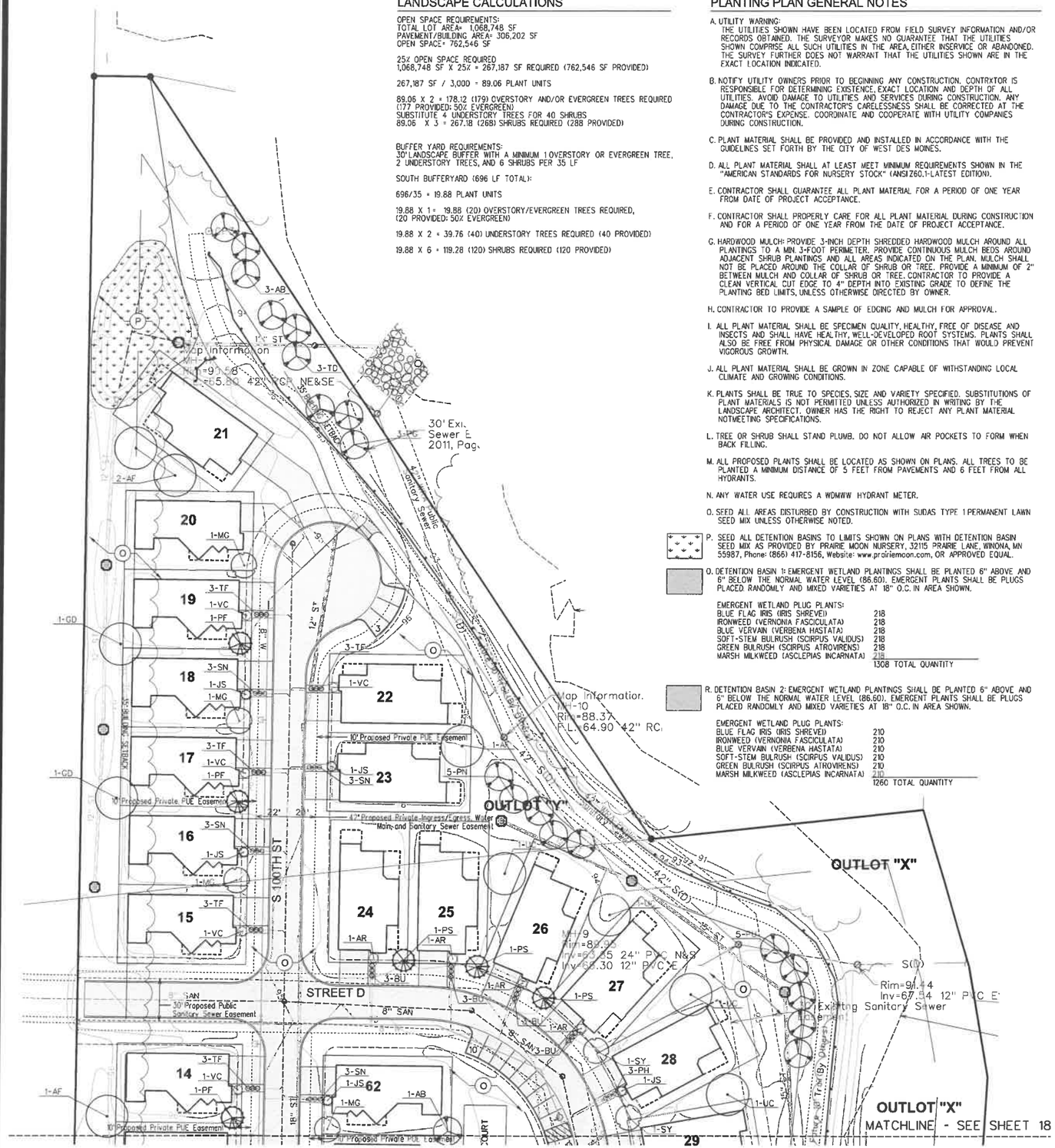
WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 16 of 19



LANDSCAPE CALCULATIONS

OPEN SPACE REQUIREMENTS:
TOTAL LOT AREA= 1,068,748 SF
PAVEMENT/BUILDING AREA= 306,202 SF
OPEN SPACE= 762,546 SF

25% OPEN SPACE REQUIRED
1,068,748 SF X 25% = 267,187 SF REQUIRED (762,546 SF PROVIDED)

267,187 SF / 3,000 = 89.06 PLANT UNITS

89.06 X 2 = 178.12 (179) OVERSTORY AND/OR EVERGREEN TREES REQUIRED
(177 PROVIDED: 50% EVERGREEN)
SUBSTITUTE 4 UNDERSTORY TREES FOR 40 SHRUBS
89.06 X 3 = 267.18 (268) SHRUBS REQUIRED (288 PROVIDED)

BUFFER YARD REQUIREMENTS:
30' LANDSCAPE BUFFER WITH A MINIMUM 1 OVERSTORY OR EVERGREEN TREE, 2 UNDERSTORY TREES, AND 6 SHRUBS PER 35 LF

SOUTH BUFFERYARD (696 LF TOTAL):

696/35 = 19.88 PLANT UNITS

19.88 X 1 = 19.88 (20) OVERSTORY/EVERGREEN TREES REQUIRED,
(20 PROVIDED: 50% EVERGREEN)

19.88 X 2 = 39.76 (40) UNDERSTORY TREES REQUIRED (40 PROVIDED)

19.88 X 6 = 119.28 (120) SHRUBS REQUIRED (120 PROVIDED)

PLANTING PLAN GENERAL NOTES

A. UTILITY WARNING:
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER INSERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

B. NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRXTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.

C. PLANT MATERIAL SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE GUIDELINES SET FORTH BY THE CITY OF WEST DES MOINES.

D. ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSIZ60.1-LATEST EDITION).

E. CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF PROJECT ACCEPTANCE.

F. CONTRACTOR SHALL PROPERLY CARE FOR ALL PLANT MATERIAL DURING CONSTRUCTION AND FOR A PERIOD OF ONE YEAR FROM THE DATE OF PROJECT ACCEPTANCE.

G. HARDWOOD MULCH: PROVIDE 3-INCH DEPTH SHREDDED HARDWOOD MULCH AROUND ALL PLANTINGS TO A MIN. 3-FOOT PERIMETER. PROVIDE CONTINUOUS MULCH BEDS AROUND ADJACENT SHRUB PLANTINGS AND ALL AREAS INDICATED ON THE PLAN. MULCH SHALL NOT BE PLACED AROUND THE COLLAR OF SHRUB OR TREE. PROVIDE A MINIMUM OF 2" BETWEEN MULCH AND COLLAR OF SHRUB OR TREE. CONTRACTOR TO PROVIDE A CLEAN VERTICAL CUT EDGE TO 4" DEPTH INTO EXISTING GRADE TO DEFINE THE PLANTING BED LIMITS, UNLESS OTHERWISE DIRECTED BY OWNER.

H. CONTRACTOR TO PROVIDE A SAMPLE OF EDGING AND MULCH FOR APPROVAL.

I. ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY, HEALTHY, FREE OF DISEASE AND INSECTS AND SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS. PLANTS SHALL ALSO BE FREE FROM PHYSICAL DAMAGE OR OTHER CONDITIONS THAT WOULD PREVENT VIGOROUS GROWTH.

J. ALL PLANT MATERIAL SHALL BE GROWN IN ZONE CAPABLE OF WITHSTANDING LOCAL CLIMATE AND GROWING CONDITIONS.

K. PLANTS SHALL BE TRUE TO SPECIES, SIZE AND VARIETY SPECIFIED. SUBSTITUTIONS OF PLANT MATERIALS IS NOT PERMITTED UNLESS AUTHORIZED IN WRITING BY THE LANDSCAPE ARCHITECT. OWNER HAS THE RIGHT TO REJECT ANY PLANT MATERIAL NOTMEETING SPECIFICATIONS.

L. TREE OR SHRUB SHALL STAND PLUMB. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACK FILLING.

M. ALL PROPOSED PLANTS SHALL BE LOCATED AS SHOWN ON PLANS. ALL TREES TO BE PLANTED A MINIMUM DISTANCE OF 5 FEET FROM PAVEMENTS AND 6 FEET FROM ALL HYDRANTS.

N. ANY WATER USE REQUIRES A WDMWW HYDRANT METER.

O. SEED ALL AREAS DISTURBED BY CONSTRUCTION WITH SUDAS TYPE 1 PERMANENT LAWN SEED MIX UNLESS OTHERWISE NOTED.

P. SEED ALL DETENTION BASINS TO LIMITS SHOWN ON PLANS WITH DETENTION BASIN SEED MIX AS PROVIDED BY PRAIRIE MOON NURSERY, 32115 PRAIRIE LANE, WINONA, MN 55987, Phone: (866) 417-8156, Website: www.prairiemoon.com, OR APPROVED EQUAL.

Q. DETENTION BASIN 1: EMERGENT WETLAND PLANTINGS SHALL BE PLANTED 6" ABOVE AND 6" BELOW THE NORMAL WATER LEVEL (86.60). EMERGENT PLANTS SHALL BE PLUGS PLACED RANDOMLY AND MIXED VARIETIES AT 18" O.C. IN AREA SHOWN.

EMERGENT WETLAND PLUG PLANTS:	
BLUE FLAG IRIS (IRIS SHREVEI)	218
IRONWEED (VERNONIA FASCICULATA)	218
BLUE VERVAIN (VERBENA HASTATA)	218
SOFT-STEM BULRUSH (SCIRPUS VALIDUS)	218
GREEN BULRUSH (SCIRPUS ATROVIRENS)	218
MARSH MILKWEED (ASCLEPIAS INCARNATA)	218
	1308 TOTAL QUANTITY

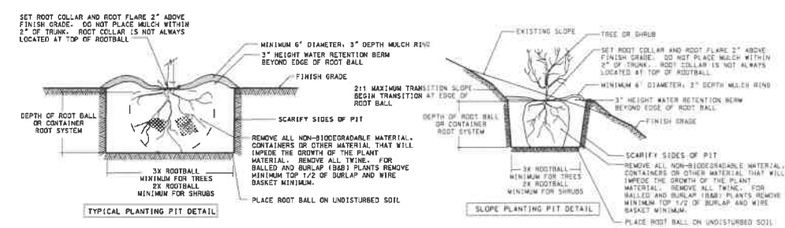
R. DETENTION BASIN 2: EMERGENT WETLAND PLANTINGS SHALL BE PLANTED 6" ABOVE AND 6" BELOW THE NORMAL WATER LEVEL (86.60). EMERGENT PLANTS SHALL BE PLUGS PLACED RANDOMLY AND MIXED VARIETIES AT 18" O.C. IN AREA SHOWN.

EMERGENT WETLAND PLUG PLANTS:	
BLUE FLAG IRIS (IRIS SHREVEI)	210
IRONWEED (VERNONIA FASCICULATA)	210
BLUE VERVAIN (VERBENA HASTATA)	210
SOFT-STEM BULRUSH (SCIRPUS VALIDUS)	210
GREEN BULRUSH (SCIRPUS ATROVIRENS)	210
MARSH MILKWEED (ASCLEPIAS INCARNATA)	210
	1260 TOTAL QUANTITY

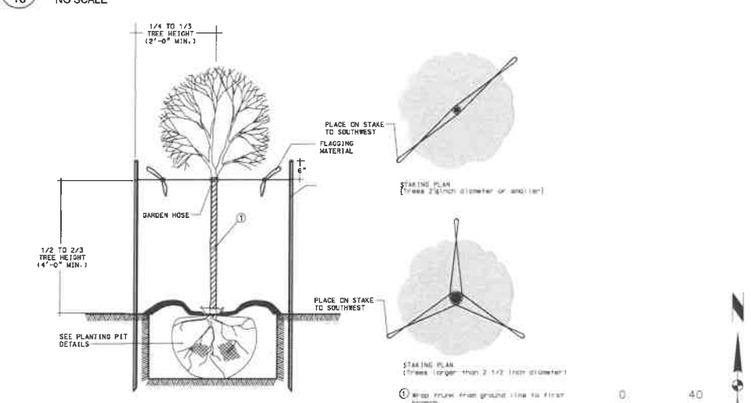
MASTER PLANT SCHEDULE (REFER TO SHEETS 17-19)

	QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE AT PLANTING	COMMENTS
EVERGREEN	11	AB	Abies balsamea	BALSAM FIR	6' HT.	B&B
	7	PG	Picea glauca 'Densata'	BLACK HILLS WHITE SPRUCE	6' HT.	B&B
	9	PP	Picea pungens f. glauca 'Fat Albert'	FAT ALBERT COLORADO SPRUCE	8' HT.	B&B
	15	PU	Picea pungens	COLORADO BLUE SPRUCE	8' HT.	B&B
	9	PS	Pinus cembra 'Algonquin Pillar'	ALGONQUIN PILLAR SWISS STONE PINE	8' HT.	B&B
	12	PF	Pinus flexilis 'Northern Blue'	VANDERWOLF'S LIMBER PINE	8' HT.	B&B
	19	PN	Pinus strobus	EASTERN WHITE PINE	8' HT.	B&B
	17	TD	Taxodium distichum 'Shawnee Brave'	SHAWNEE BRAVE BALD CYPRESS	6' HT.	B&B
OVERSTORY	5	AF	Acer rubrum 'Franksred'	RED SUNSET MAPLE	2"	B&B
	5	BN	Betula nigra 'Cully'	HERITAGE RIVER BIRCH	2"	B&B
	5	CO	Celtis occidentalis 'Prairie Pride'	PRAIRIE PRIDE HACKBERRY	2"	B&B
	5	GD	Gymnocladus dioicus 'Espresso'	ESPRESSO KENTUCKY COFFEE TREE	2"	B&B, SEEDLESS
	6	GB	Ginkgo biloba 'Autumn Gold'	AUTUMN GOLD GINKGO	2"	B&B
	7	GT	Gleditsia triacanthos var. inermis 'Skyline'	SKYLINE HONEYLOCUST	2"	B&B
	5	PL	Platanus x acerifolia 'Morton Circle'	EXCLAMATION LONDON PLANETREE	2"	B&B
	4	QB	Quercus bicolor	SWAMP WHITE OAK	2"	B&B
	5	QE	Quercus ellipsoidalis	NORTHERN PIN OAK	2"	B&B
	5	TA	Tilia americana 'Redmond'	REDMOND AMERICAN LINDEN	2"	B&B
	10	UC	Ulmus carpinifolia 'New Horizon'	NEW HORIZON ELM	2"	B&B
UNDERSTORY	24	AG	Amelanchier x grandiflora 'Autumn Brilliance'	AUTUMN BRILLANCE SERVICEBERRY	6' HT.	B&B, TREE-FORM
	11	MC	Malus 'Coralburst'	CORALBURST CRABAPPLE	6' HT.	B&B
	7	MR	Malus 'JFS-KWS' PP 14375	ROYAL RAINDROPS CRABAPPLE	6' HT.	B&B
	9	MG	Malus 'Sutyzam' PP 7062	SUGAR TYME CRABAPPLE	6' HT.	B&B
	6	PR	Prunus serrulata 'Kwanzan'	KWANZAN CHERRY TREE	8' HT.	B&B
	18	SY	Syringa reticulata 'Ivory Silk'	IVORY SILK JAPANESE TREE LILAC	8' HT.	B&B
SHRUBS	22	AR	Aronia melanocarpa 'Elata'	BLACK CHOKEBERRY	36" Ht.	CONT. (6' O.C.)
	27	AM	Aronia melanocarpa 'Morton'	IROQUOIS BEAUTY CHOKEBERRY	18" Ht.	CONT. (3.5' O.C.)
	30	BU	Buxus 'Glencoe'	CHICAGOLAND GREEN BOXWOOD	15" Ht.	CONT. (3.5' O.C.)
	25	CS	Cornus sericea 'Isanti'	ISANTI DOGWOOD	36" Ht.	CONT. (6' O.C.)
	14	FS	Forsythia x intermedia 'Mindor'	SHOW OFF FORSYTHIA	36" Ht.	CONT. (6' O.C.)
	20	JS	Juniperus chinensis 'Sea Green'	SEA GREEN JUNIPER	24" Ht.	CONT. (6' O.C.)
	42	JB	Juniperus sabina 'Blue Forest'	BLUE FOREST JUNIPER	12" Ht.	CONT. (3.5' O.C.)
	27	PO	Physocarpus opulifolius 'Little Devil'	LITTLE DEVIL NINEBARK	18" Ht.	CONT. (3.5' O.C.)
	24	PW	Physocarpus opulifolius 'Seward'	SUMMER WINE NINEBARK	36" Ht.	CONT. (6' O.C.)
	52	PH	Potentilla fruticosa 'Lundy'	HAPPY FACE POTENTILLA	18" Ht.	CONT. (3.5' O.C.)
	70	SN	Spiraea japonica 'Neon Flash'	NEON FLASH SPIREA	18" Ht.	CONT. (3.5' O.C.)
	9	SM	Syringa patula 'Miss Kim'	MISS KIM LILAC	36" Ht.	CONT. (6' O.C.)
	9	TT	Taxus x media 'Taunton'	TAUNTON YEW	24" Ht.	CONT. (6' O.C.)
	33	TF	Thuja occidentalis 'Congabe'	FIRE CHIEF ARBORVITAE	18" Ht.	CONT. (3.5' O.C.)
	15	VC	Viburnum carlesii	KOREANSPICE VIBURNUM	36" Ht.	CONT. (6' O.C.)
	10	VM	Viburnum lantana 'Mohican'	MOHICAN VIBURNUM	36" Ht.	CONT. (8' O.C.)

NOTE:
IN THE EVENT OF A DISCREPANCY BETWEEN THE QUANTITY SHOWN IN THE PLANT SCHEDULE AND THE QUANTITY SHOWN ON PLAN, THE QUANTITY SHOWN ON SCHEDULE SHALL GOVERN.



1/16 PLANTING PIT DETAILS
NO SCALE



2/16 DECIDUOUS TREE STAKING DETAIL
NO SCALE

0 40 FEET

MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM Checked By: EDC Scale: 1"=40'
Technician: RMM Date: 04/29/19 Field Bk: Pg:
Project No: 117.0693A

Sheet 17 of 19

COURTYARDS AT KINGS LANDING
WEST DES MOINES, IA
PLANTING PLAN

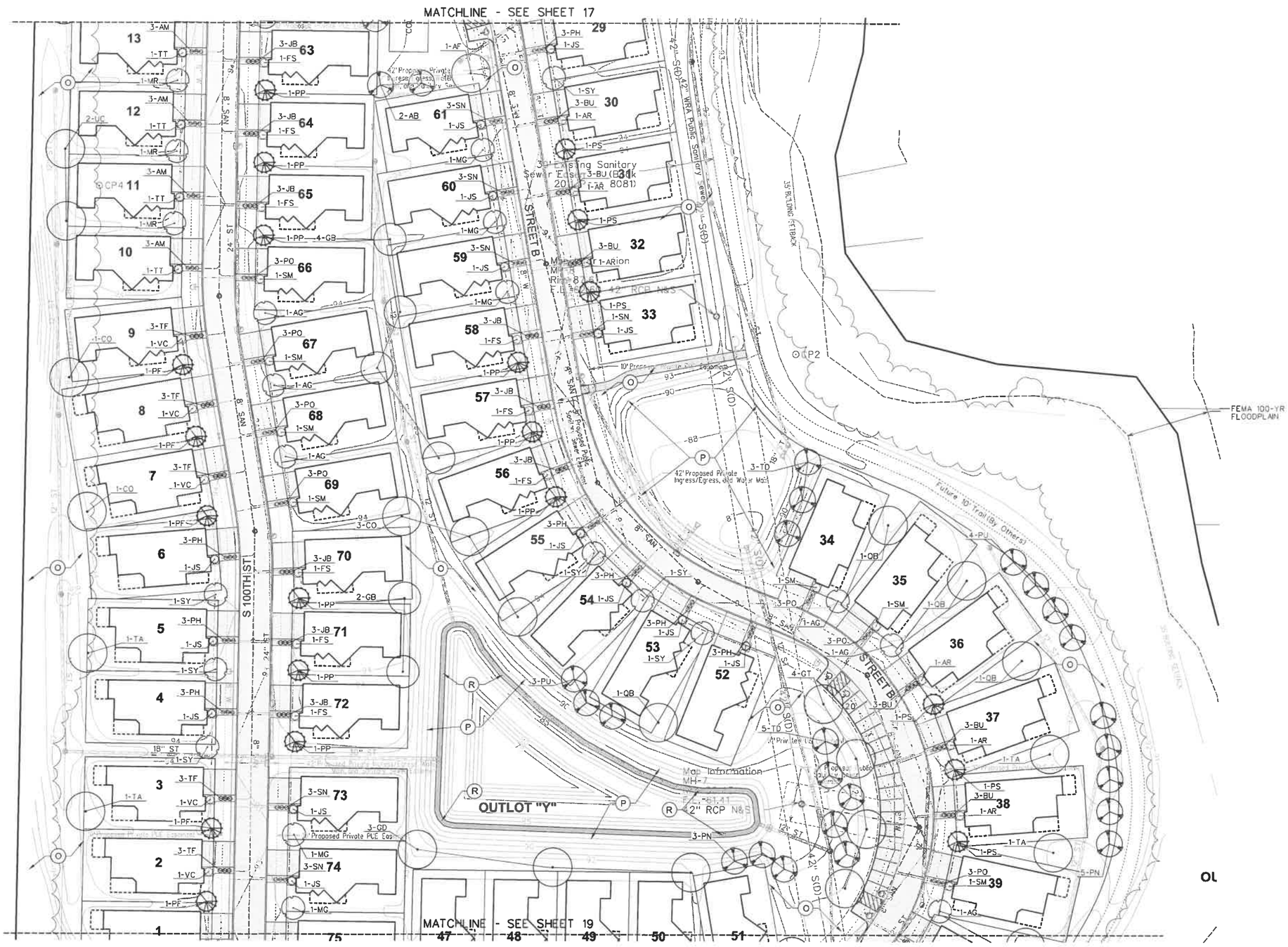
SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A
Sheet 17 of 19

PLANTING PLAN GENERAL NOTES

A. REFER TO SHEET 17 FOR PLANTING NOTES.



MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"= 40'
Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:
Project No: 117.0693A | Sheet 18 of 19

COURTYARDS AT KINGS LANDING

PLANTING PLAN

WEST DES MOINES, IA

SNYDER & ASSOCIATES, INC.
2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

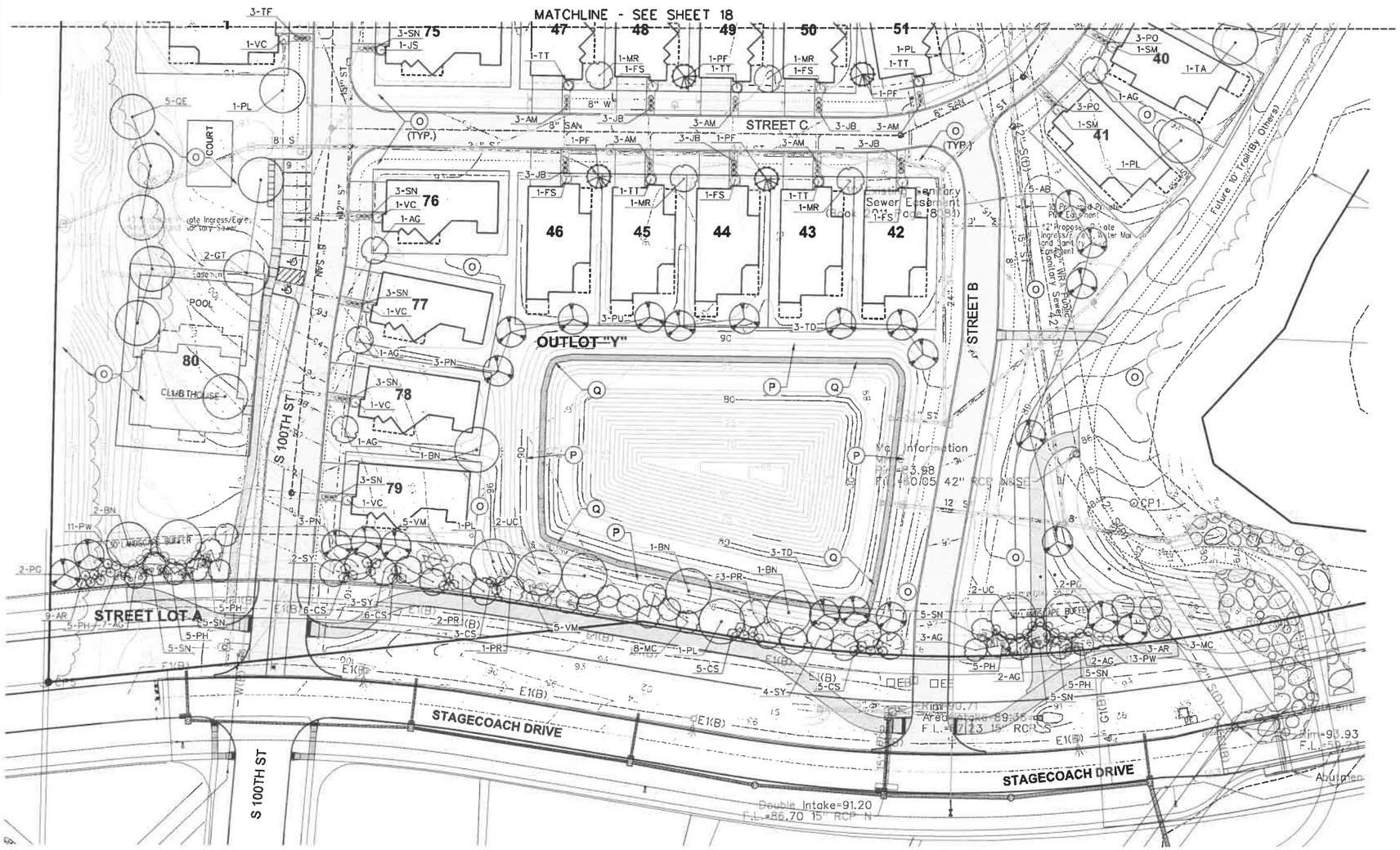
SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 18 of 19

PLANTING PLAN GENERAL NOTES

A. REFER TO SHEET 17 FOR PLANTING NOTES.



MARK	REVISION	DATE	BY
2	AS PER CITY COMMENTS	6/28/19	RMM
1	AS PER CITY COMMENTS	6/11/19	RMM

Engineer: KMM | Checked By: EDC | Scale: 1"=40'

Technician: RMM | Date: 04/29/19 | Field Bk: | Pg:

Project No: 117.0693A

Sheet 19 of 19

COURTYARDS AT KINGS LANDING

WEST DES MOINES, IA

PLANTING PLAN

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 117.0693A

Sheet 19 of 19

EXHIBIT II

Prepared by: J.B. Munford City of West Des Moines Development Services, P.O. Box 65320, West Des Moines, IA 50265-0320, 515-222-3620
When Recorded, Return to: City Clerk, City of West Des Moines, P. O. Box 65320, West Des Moines, IA 50265-0320

RESOLUTION

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF WEST DES MOINES, APPROVING THE COURTYARDS AT KING'S LANDING PRELIMINARY PLAT (PP-004322-2019) TO SUBDIVIDE THE PROPERTY INTO 79 FOOTPRINT LOTS, 1 STREET LOT AND 2 OUTLOTS FOR PARKLAND DEDICATION AND PRIVATE STREETS, STORMWATER DETENTION AND COMMON AREAS WITHIN THE DEVELOPMENT

WHEREAS, pursuant to the provisions of Title 10, Subdivision Regulations, and Title 9, Zoning Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Caliber Iowa LLC., has requested approval for a Preliminary Plat (PP-004322-2019) to create 79 footprint lots, 1 public street lot, 1 outlot for parkland dedication and 1 outlot for private streets, stormwater detention and common areas within the development on the 27 acre site located at Northeast corner of S. 100th Street and Stagecoach 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 July 22, 2019, the Plan and Zoning Commission recommended to the City Council approval of the Courtyards at King's Landing Preliminary Plat (PP-004322-2019); and

WHEREAS, on, August 5, 2019, this City Council held a duly-noticed meeting to consider the application for Courtyards at King's Landing Preliminary Plat (PP-004322-2019).

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:

SECTION 1. The finding of consistency with the Comprehensive Plan as stated in the staff report, dated August 5, 2019 or as amended orally at the City Council hearing of August 5, 2019, are adopted.

SECTION 2. Courtyards at King's Landing Preliminary Plat (PP-004322-2019) to subdivide the property to create 79 footprint lots, 1 public street lot, 1 outlot for parkland dedication and 1 outlot for private streets, stormwater detention and common areas within the development on the 27 acre site located at Northeast corner of S. 100th Street and Stagecoach Drive is approved, subject to compliance with all the conditions in the staff report, dated August 5, 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 entitlement, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on August 5, 2019.

_____
Steven K. Gaer
Mayor

ATTEST:

_____
Ryan T. Jacobson
City Clerk

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the City Council of the City of West Des Moines, Iowa, at a regular meeting held on August 5, 2019, by the following vote:

ATTEST:

_____
Ryan T. Jacobson
City Clerk

Exhibit A
CONDITIONS OF APPROVAL

1. The applicant acknowledging and agreeing that the easternmost access to Stagecoach Drive is temporary and will be disconnected from Stagecoach Drive when the planned connection to S. Grand Prairie Parkway is completed to the west. The applicant will need to execute a formal agreement acknowledging and agreeing to such for recordation with the Final Plat.

2. The applicant acknowledging and agreeing that the easternmost access drive off Stagecoach Drive is a one-way in only drive and shall remain as such until it is disconnected from Stagecoach Drive. Additionally, while the drive is in use as an access from Stagecoach Drive, the developer shall restrict the drive to a maximum of 20 feet in width and install and maintain appropriate traffic control design measures acceptable to the City, as well as all pavement markings and signage in accordance with MUTCD requirements to inform drivers that the easternmost drive is a one-way in only drive. Finally, the applicant ensuring enforcement as an access-in only drive. Upon removal, the developer will need to modify signage to indicate it as a dead-end.

3. The City Council allowing all excess ground included in Outlot 'X' adjacent to Sugar Creek beyond that required as part of Parkland Dedication be exempted from payment of Grand Avenue West Sanitary Sewer Connection Fees.

4. The applicant acknowledging and agreeing to execute a public access easement that will allow City vehicles and the general public to drive through the development to access Stagecoach Drive prior to City Council consideration of the associated Final Plat.

5. The applicant acknowledging and agreeing to submit a revised preliminary plat that reflects minor revisions requested by Staff prior to City Council consideration of the preliminary plat.

6. The applicant acknowledging that prior to issuance of any building permits for buildings within The Courtyards at Kings Landing development, that the associated Final Plat must be approved by the City Council and recorded with Dallas County.