CITY OF WEST DES MOINES STAFF REPORT COMMUNICATION

Meeting Date: June 14, 2021

ITEM: Wendy's, 225 & 301 Grand Avenue – Approve Site Plan to allow construction of a 2,500 square foot fast food restaurant – King Enterprises – SP-005129-2021

Resolution: Approval of Site Plan

<u>Background</u>: Robin Ersfeldt with Watermark Engineering Resources, Ltd, on behalf of the applicant, King Enterprises, and property owners, the City of West Des Moines and Wendy's West Maple, LLC, request approval of the Site Plan for the approximately 1-acre property located at 225 & 301 Grand Avenue. The applicant proposes to demolish the existing Wendy's Restaurant on the site to construct a new 2,500 square foot restaurant with associated site improvements. The City is a co-applicant to this site plan as the City's Legal Department is still working on getting the property ownership transferred to Wendy's West Maple, LLC.

Staff Review & Comment:

• <u>Financial Impact</u>: The City has purchased the former Rassy's Bike Shop building and land at 301 Grand Avenue, have undertaken demolition of the building and proper disconnection of utilities, and are committed to conveying said property to Wendy's in exchange for the street right-of-way necessary to accommodate the widening of Grand Avenue and the construction of a public access road on the east side of the existing Wendy's site at 225 Grand Avenue. The City has also committed to purchasing a portion of the existing Wendy's site at 225 Grand Avenue in coordination with the planned Wendy's redevelopment.

Key Development Aspects:

- Access: The existing access driveways to the Wendy's site will be removed with the Grand Avenue reconstruction project. Access to the redeveloped site will be via a new north/south public roadway that will be constructed on the east side of the Wendy's property. A second access point will be located on the north side of the site and will be accessed by a newly constructed east/west public roadway north of the Wendy's property.
- Streetscape: The Grand Avenue Redevelopment Plan identifies the streetscape intent for the Val-Gate district and includes vegetation, furniture, and ornamental stone wall screening elements as illustrated in the Grand Avenue Redevelopment Plan. This streetscape is intended to provide desired green to the City, reinforce a district identity, provide visual screening of parking and other negative site elements, bring human scale to adjoining buildings and provide traffic calming benefits. This landscaped edge with hardscape elements or 'streetscape' will be provided along Grand Avenue. A Streetscape and Utility Easement has been prepared for the Wendy's owner's signature. A condition of approval is recommended requiring the Streetscape and Utility Easement be executed prior to any occupancy, including temporary occupancy, being issued for the new Wendy's building.
- Lot Tie Agreement: Since the Wendy's property (225 Grand Avenue) and the former Rassy's property (301 Grand Avenue) will both be utilized for the redevelopment of the Wendy's restaurant; the two properties will need to be tied together. A lot tie agreement has

been prepared for the Wendy's owner's signature once they are the owners of both properties. A condition of approval is recommended requiring the lot tie agreement be executed prior to any occupancy, including temporary occupancy, being issued for the new Wendy's building.

- Traffic Impact Study Findings: A traffic impact study was conducted in February 2021. Including this proposed Wendy's, this area of the Val-Gate development is expected to generate less traffic overall than previously planned and there is no additional loading onto the planned roadways. With the widening of Grand Avenue, several of the current driveways into businesses will be combined or eliminated to reduce the high number of conflict points and improve traffic flow/safety. To facilitate access to and movement between businesses, a backage road has been constructed connecting 1st Street to 4th Street. A north-south roadway will also be constructed by the City to connect Grand Avenue to this backage road. The Wendy's site is planned to have an eastern access onto this north/south internal street and a northern access onto the east/west internal street. Both accesses are expected to operate with acceptable levels of service. However, due to the short spacing on the north/south internal street between the east/west internal street and the eastern access, exiting drivers may have difficulty making a left-turn out of the driveway and immediately turning right onto the east/west internal street. Moving the driveway farther south on the north/south internal street may cause worse issues related to entering traffic spilling back onto Grand Avenue or issues related to the drive-thru queue spilling back onto the north/south internal street. Instead, moving this driveway to the east/west internal street should be considered. After discussing with the developer, the developer prefers to not change the proposed layout of the site.
- <u>Developer Responsibilities</u>: The developer is responsible for all the costs associated with the development of this site.
- <u>Vesting of Entitlement</u>: Per City Code, entitlement (approval to construct or implement) shall remain in effect so long as substantial site work has progressed beyond grading and completion of structural foundations and twenty-five percent (25%) of the total building area has occurred above grade within twenty-four (24) months of the effective date of the approval, unless a greater time period is authorized at time of the original entitlement, or by approval of an extension of the original entitlement. It is the responsibility of the developer to be aware of this deadline and request an extension of the approval prior to the expiration date.

Outstanding Issues: There are no outstanding issues.

Plan and Zoning Commission Action:

Date:

Vote:

Recommendation:

Recommendation: Approve the Site Plan request, subject to the applicant meeting all City Code requirements, and the following conditions of approval:

- 1. Applicant acknowledging and executing a lot tie agreement prior to any occupancy permits, including temporary occupancy permits, being issued for the Wendy's building.
- 2. Applicant acknowledging and executing a Streetscape and Utility Easement prior to any occupancy, including temporary occupancy, being issued for the Wendy's building.

Lead Staff Member: Brian Portz

Approval Meeting Dates:

Plan and Zoning Commission	June 14, 2021
City Council	

Staff Report Reviews:

Plan & Zoning Commission	☑ Development Coordinator (or)☑ Director	⊠ Legal Department
City Council	□ Director	□ Legal Department
	☐ Appropriations/Finance	□ Agenda Acceptance

Publications (if applicable)

. 45110411011	o (ii applicable)
Published	Des Moines Register
In:	Community Section
Date(s) Published	n/a
Date(s) of Mailed Notices	n/a

Council Subcommittee Review (if applicable)

Subcommittee	Development & Planning					
Date Reviewed	3/15/21	3/15/21				
Recommendation	⊠ Yes	□No	□ Split			

Location Map



FINAL ENGINEERING PLANS

Plans included are for illustrative purposes only.

Approve plans on file with

Approve plans or the City. Nerays - WEST DES MOINES, IA

225 GRAND AVENUE CITY OF WEST DES MOINES POLK COUNTY, IOWA

	INDEX													
	CIVIL ENGINEERING PLANS						REVISIONS							
	IVIL ENGINEERING PLANS	1	2	3	4	5	6	7						
C-1	COVER SHEET	X		X	X			П						
C-1.1	DEMOLITION PLAN													
C-2	GEOMETRIC PLAN	X	X		X	X								
C-3	GRADING PLAN													
C-4	ACCESSIBLE ROUTE GRADES AND DETAILS	X	X											
C-5	UTILITY PLAN		X											
C-6	SOIL EROSION CONTROL PLAN													
C-7	SOIL EROSION CONTROL DETAILS AND SPECS													
C-8	PROJECT DETAILS													
C-9	PROJECT DETAILS				X									
C-10	PROJECT DETAILS	X	X											
C-11	PROJECT SPECIFICATIONS													
S	SUPPORTING DOCUMENTS		REVISIONS											
		-	2	3	4	5	6	7						
1 of 1	TOPOGRAPHIC SURVEY	X	-	L				Н						
L-1	LANDSCAPE PLAN	X	Х		L			Ш						
1 of 1	PHOTOMETRIC PLAN							Ш						

LOCATION MAP Windsor Grand A SITE LOCATION 225 Grand Moines THE WEST 150,00 FEET OF LOT 6. EXCEPT THE FAST 64 00 FEET AND THE SOUTH 10 00 FEET THEREOF AND FORMING A PART OF THE CITY OF WEST DES MOINES, POLK COUNTY, IOWA, CONTAINING: (33.073

LEGEND **EXISTING** DESCRIPTION PROPOSED STORM MANHOLE SANITARY MANHOLE VALVE VAULT FIRE HYDRANT FLARED END SECTION ----STORM SEWER INTAKE PRET HONOMINE PLATED BID SECTION ELECTRICAL POWER POLE OVERHEAD TRAFFIC SIGNAL TRAFFIC SIGNAL MANHOLE OVERHEAD ELECTRIC WIRES TRAISFORMER PAD ELECTRIC WIRES TRAISFORMER PAD TELEPHONE MANHOLE CARLE TELEFICINE PEDESTAL COMMONWEALTH EDISON MANI B/BOX LIGHT POLE SIGN BOLLARD POLE GAS MANGER ELECTRIC MANGER TELEPHONE MANGER TELEPHONE MANGER WATER MAIN ELECTRIC LINE CABLE TV LINE CABLE TV LINE SANITARY SEWER STORM SEWER GUY POLE CONIFEROUS TREE W/DIAMETEI CONIFEROUS TREE W/DIAMETEI CONIFEROUS TREE W/DIAMETEI WATER VALVE STORM SEWER FLARED END SECTION SANITARY SEWER MANHOLE STORM SEWER MANHOLE FIRE HYDRANT **ĕ**-⊠ 0 RECORDED PLATTED. PUBLIC UTILITY EASEMEN P.U.F. PROPERTY BOUNDARY LINE LOT UNI STORM SEWER WATER LINE WOOD FENCE CHAIN LINK FENCE METAL GUARDRAIL UNDERGROUND CABLE TELEVISION CONCRETE SURFACE UNDERGROUND TELEPHONE CONTOUR LINE PAVEMENT ELEVATION MATCH EXISTING ELEVATION FLOW LINE ELEVATION TOP OF CURB ELEVATION RIM ELEVATION HMA PAVING OVERLAND OVERELOW DIRECTION INLET PROTECTION INLET BASKET FILTER

SITE DATA

LOT INFORMATION
LOT AREA = 33,073 S.F. (0.76 AC.)
BUILDING AREA = 2,584 S.F.
BUILDING AREA EXCLUDING WALK-IN COOLER = 2,271 S.F.

EX. COMP. LAND USE DESIGNATION = VAL GATE DISTRICT EX. ZONING DESIGNATION = CMC - COMMUNITY COMMERCIAL EX. LAND USE = CMC - COMMUNITY COMMERCIAL

. COMP. LAND USE DESIGNATION = VAL GATE DISTRICT ZONING DESIGNATION = CMC-COMMUNITY COMMERCIAL LAND USE = CMC - COMMUNITY COMMERCIAL

EXISTING IMPERVIOUS AREA = 31,790 S.F. (0.73 AC.) (96%) EXISTING PERVIOUS AREA = 1,283 S.F. (0.03 AC.) (4%)

PROPOSED IMPERVIOUS AREA = 25,493 S.F. (0.59 AC.) (77%) PROPOSED PERVIOUS AREA = 7,580 S.F. (0.17 AC.) (23%)

PERCENT OPEN SPACE REQUIRED PER PUD = 15% PERCENT OPEN SPACE PROVIDED = 23%

ON SITE PARKING DATA

REQUIRED PARKING = 15 PER 1,000 S.F. OF GFA = (2.271/1000)*12 = 28 SPACES

PROVIDED PARKING REGULAR SPACES

BENCHMARK

CITY BENCHMARKS PUBLISHED AT -

https://www.wdm.iowa.gov/home/showpublisheddocument?id=18724

- CITY OF WDM BM# 079 INTERSECTION OF 8TH STREET AND ASWORTH ROAD. NORTHWEST CORNER OF INTERSECTION. 90.5 FEET WEST OF CENTERLINE OF 8TH STREET, 32.3 FEET NORTH OF CENTERLINE OF ASHWORTH ROAD, BETWEEN THE SIDEWALK AND BACK OF CURB. 2.7 FEET NORTH OF NORTH BACK OF CURB. WDM STANDARD BENCHMARK WDM DATUM
- CITY OF WDM BM# 049 INTERSECTION OF 4TH STREET AND VINE STREET, NORTHEAST CORNER OF INTERSECTION, 50 FEET EAST OF THE CENTERLINE OF 4TH STREET, 50 FEET NORTH OF THE CENTERLINE OF VINE STREET, STANDARD BENCHMARK, WDM DATUM 38.38

LOCAL BENCHMARKS

- BM #1 1ST FIRE HYDRANT EAST OF THE SITE, SOUTH OF WEST DRIVEWAY FOR WEST BANK ON THE SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW, N=576657.35 E=1584307.39 ELEV=42.04
- 2. BM #2 1ST FIRE HYDRANT SOUTH OF THE RASSY'S BIKE SHOP BUILDING, SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW. N=576657.00 E=1583967.42 ELEV=44.70



PAGES OR SHEETS COVERED BY THIS SEAL: C-1 THROUGH C-11

CASE NUMBER SP-005129-2021

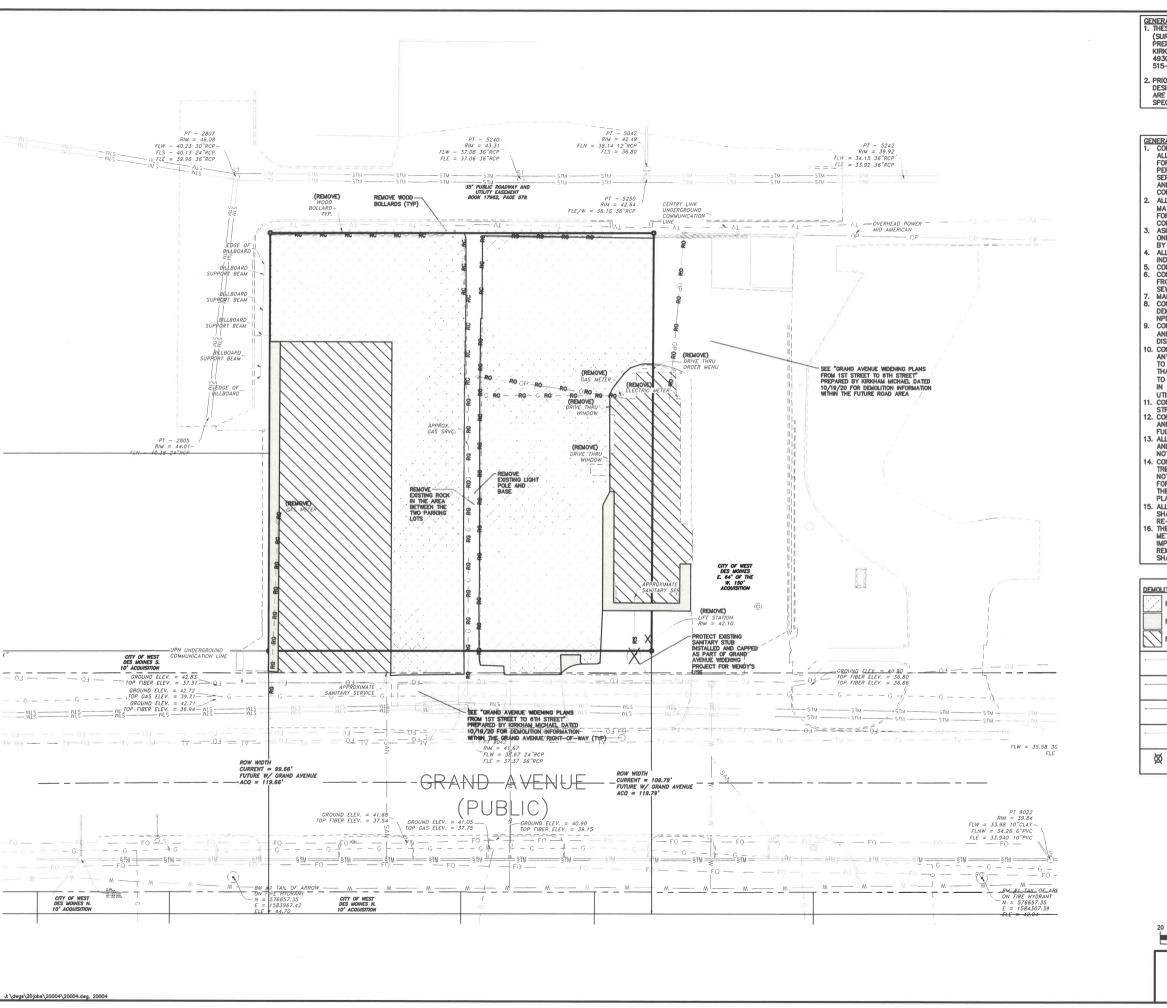
COVER SHEET

Prepared By:

5 4 3 2 1 NO.

Prepared For

1-800-292-8989



GENERAL NOTES:

1. THESE PLANS ARE BASED ON THE TOPOGRAPHIC SURVEY
(SURVEY PROJECT #2102615 DATED 02/23/2021) 4930 114TH STREET, URBANDALE, IA 50322 515-270-0848

PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY IF STOCKPILES WILL BE ALLOWED ON SITE. COORDINATE WITH PROJECT MANAGER FOR THE PLACEMENT OF MATERIAL STOCKPILES IF PERMITTED. ALL MATERIALS ARE TO BE STOCKPILED SEPARATELY FOR USE IN PREPARING THE BUILDING PAD AND PAVEMENT SUB-BASE IF APPROVED BY TESTING COMPANY AS SUPPLIED BY THE OWNER.

2. ALL CONCRETE TO BE PULVERIZED TO 3" MAXIMUM PIECES. MATERIALS MAY BE STOCKPILED (SEPARATELY) AND LISED.

ALL CONCRETE TO BE PULVERIZED TO 3" MAXIMUM PIECES. MATERIALS MAY BE STOCKPILED (SEPARATELY) AND USED FOR BACKFILL AT A LATER DATE IF APPROVED BY TESTING COMPANY AS SUPPLIED BY THE OWNER.

ASPHALT MILLINGS MAY BE USED IN UNDERCUT AREAS ONLY IF THEIR GRADATION EQUALS CA.—6 AND IF APPROVED BY TESTING COMPANY AS SUPPLIED BY THE OWNER.

ALL EXISTING UTILLITIES ARE TO BE REMOVED WHERE INDICATED. CONTRACTOR TO COORDINATE WITH ALL UTILLTY COMPANIES. CONTRACTOR IS TO TAKE CARE IN LIMITING MATERIALS FROM ENTERING THE STORM EXISTING STORM AND SANITARY SEWERS.

FROM ENTERING THE STORM EXISTING STORM AND SANITARY SEWERS.

7. MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION.

8. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION INCLUDING, BUT NOT LIMITED TO POLIC COUNTY, MPDES, CITY OF WEST DES MOINES.

9. CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO BIDDING AND SHALL INFORM OWNER/ENGINEER OF ANY DISCREPANCIES.

10. CONTRACTOR TO CONTACT OWNER/ENGINEER TO DISCUSS ANY QUESTIONS OR DISCREPANCIES FOUND ON SITE PRIOR TO ANY CONSTRUCTION. EXISTING UTILITIES ENCOUNTERED THAT ARE NOT SHOWN ON THIS PLAN SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER/OWNER IMMEDIATELY IN ORDER TO MAKE A GLOSION. PROVIDE ITEMIZED FEE FOR UTILITY REMOVAL (LINEAL FOOT) IN BID.

IN ORDER TO MAKE A DECISION. PROVIDE ITEMIZED FEE FOR UTILITY REMOVAL (LINEAL FOOT) IN BID.

11. CONTRACTOR SHALL REMOVE ALL ABOVE GROUND STRUCTURES TO GRADE.

12. CONTRACTOR SHALL REMOVE ALL FOOTINGS, FOUNDATIONS, AND BELOW GRADE CONCRETE OR OTHER OBSTRUCTIONS TO FULL DEPTH.

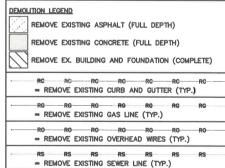
13. ALL SANITARY AND WATER SERVICES SHALL BE REMOVED AND CAPPED AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.

AND CAPPED AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.

14. CONTRACTOR SHALL REFERENCE LANDSCAPE PLAN AND/OR TREE PRESERVATION PLAN FOR ALL PLANT MATERIAL. NOTES SHOWN ON THIS PLAN REGARDING LANDSCAPING ARE FOR REFERENCE ONLY, DETAILED INFORMATION REGARDING THE EXISTING PLANT MATERIALS IS SHOWN ON THOSE PLANS AND SHALL BE FOLLOWED.

15. ALL ITEMS LABELED "PROTECT" SHALL BE PROTECTED AND SHALL NOT BE REMOVED OR ALTERED AS THEY ARE TO BE RE-USED IN THE PROPOSED DEVELOPMENT.

16. THE PLAN IS NOT INTENDED TO DICTATE MEANS AND METHODS, BUT RATHER CLARIFY WHICH EXISTING IMPROVEMENTS SHALL BE PROTECTED AND WHICH SHALL BE REMOVED OR ABANDONED AND THE EXTENT TO WHICH THEY SHALL BE REMOVED OR ABANDONED.

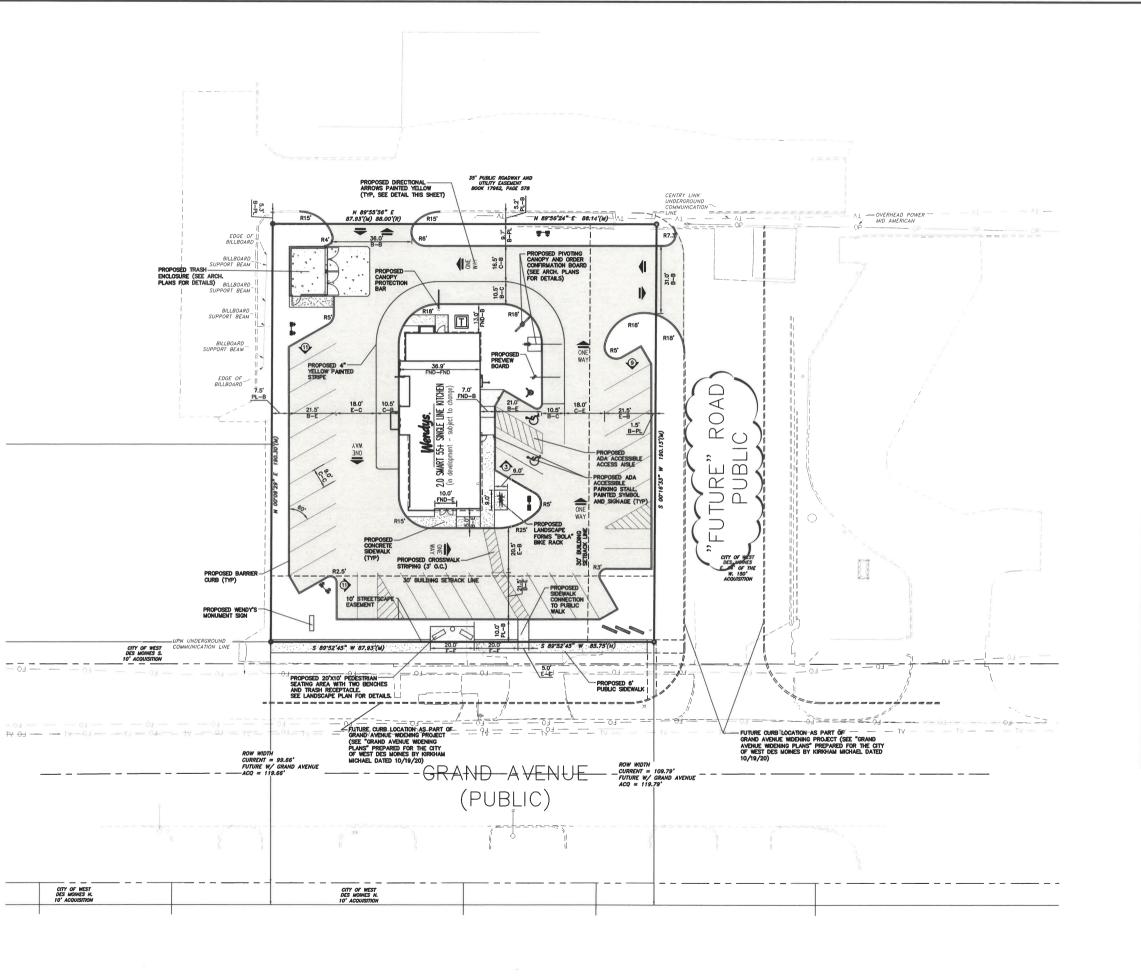


X = REMOVE EXISTING OBJECT (UTILITY POLES, GUY WIRES LIGHTS, MANHOLES, SIGNS, ETC.) (TYP.)



DEMOLITION PLAN

0 - 0 E 4 D Prepared For: Enterprises uglas, Suite 1101 oort, IL 61032 King E 50 W Doug Freepo Prepared By: Crmark Congineering



J: \dwgs\20jobs\20004\20004.dwg, 20004

GENERAL NOTES:

1. THESE PLANS ARE BASED ON THE TOPOGRAPHIC SURVEY
(SURVEY PROJECT #2102615 DATED 02/23/2021)
PREPARED BY:

KIRKHAM MICHAEL 4930 114TH STREET, URBANDALE, IA 50322 515–270–0848

PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

SITE DATA

LOT INFORMATION

LOT AREA BUILDING AREA = 33,073 S.F. (0.76 AC.) = 2,584 S.F.

EX. COMP. LAND USE DESIGNATION = VAL GATE DISTRICT EX. ZONING DESIGNATION = CMC - COMMUNITY COMMERCIAL EX. LAND USE = CMC - COMMUNITY COMMERCIAL

PROP. COMP. LAND USE DESIGNATION = VAL GATE DISTRICT PROP. ZONING DESIGNATION = CMC-COMMUNITY COMMERCIAL PROP. LAND USE = CMC - COMMUNITY COMMERCIAL

ON SITE PARKING DATA

REGULAR SPACES
ADA ACCESSIBLE SPACES
TOTAL SPACES

GEOMETRIC PLAN NOTES:

1. PROPOSED IMPROVEMENTS ARE PARALLEL AND PERPENDICULAR TO THE SOUTHERN PROPERTY LINE.

2. ALL RADIUS DIMENSIONS ARE TO BACK OF CURB.

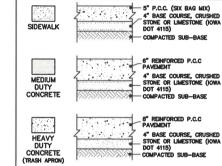
3. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.

3. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS 4. ALL STRIPING TO BE DOUBLE COATED 4" YELLOW PAINT UNLESS OTHERWISE NOTED. 5. WHERE PEDESTRIANS HAVE TO CROSS A TAPERING RAMP OR CURB RAMP THE FACE AND TOP OF CURB ARE TO BE PAINTED USING YELLOW, SLIP RESISTANT PAINT.

DIMENSION LEGEND

F	*	FACE	FNC	=	FENCE
FND	=	FOUNDATION	R	=	RADIUS
8	=	BACK	С	=	CENTER
Ε	=	EDGE	PL	=	PROPERTY LINE

PAVEMENT LEGEND



- NOTES:

 1. REFERENCE IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) FOR BINDER & SURFACE COURSES AND AGGREGATE BASE COURSE.

 2. SEE PROJECT SPECIFICATIONS FOR SUB—BASE AND BASE COURSE COMPACTION.

 3. ALL CONCRETE FLATWORK TO INCLUDE A JOINTING PATTERN SUBMITTAL TO THE CONSTRUCTION MANAGER. CONTRACTOR TO STAY AS CLOSE TO 9'x9' SQUARE PANELS IN LARGE CONCRETE FLATWORK AREAS AS POSSIBLE.

 4. FOR SIDEWALKS, PROVIDE TOOLED JOINTS AT 5' O.C., CONTRACTION JOINTS AT 15' O.C., EXPANSION JOINTS AT 45' O.C.
- 45° O.C.
 PROVIDE AN EXPANSION JOINT ADJACENT TO ALL
 STRUCTURES. THESE JOINTS SHOULD BE SEALED WITH A
 TOOL—FINISHED SILICONE SEALANT PER I.D.O.T. STANDARD.



GEOMETRIC PLAN

Crmark Congineering

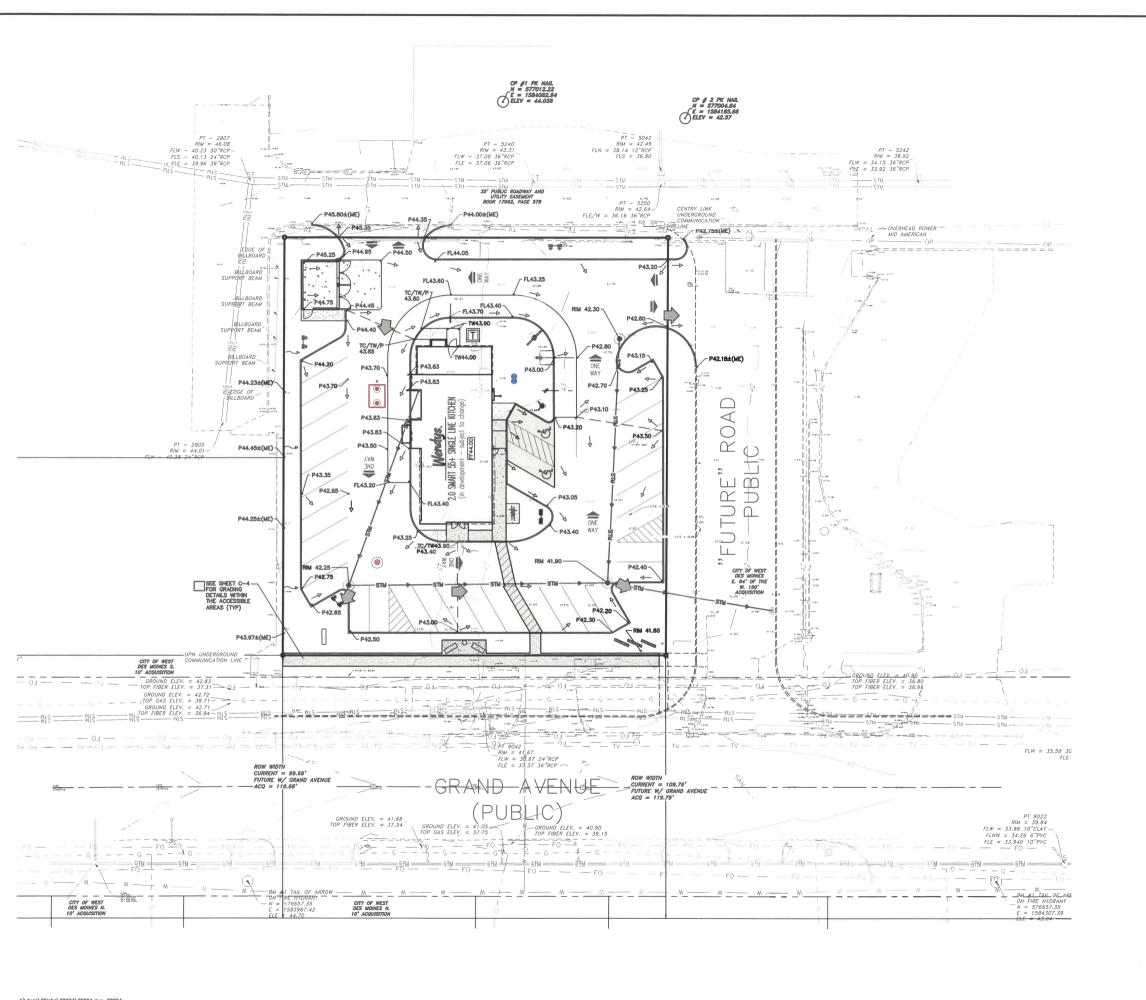
REVISIONS
COTY OF WEST DES MOINES

N - 2 & 4 &

erprises s, Suite 1101 IL 61032 DES MOINES

Prepared By:

Prepared For:



GENERAL NOTES:

1. THESE PLANS ARE BASED ON THE TOPOGRAPHIC SURVEY . HESE PLANS ARE BASED ON THE TOPOGRAPHIC S (SURVEY PROJECT #2102615 DATED 02/23/2021) PREPARED BY: KIRKHAM MICHAEL 4930 114TH STREET, URBANDALE, IA 50322 515−270−0848

2. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

CITY BENCHMARKS PUBLISHED AT

https://www.wdm.iowa.gov/home/showpubli NAVD 88 DATUM

- CITY OF WDM BM# 079 INTERSECTION OF 8TH STREET AND ASWORTH ROAD. NORTHWEST CORNER OF INTERSECTION. 90.5 FEET WEST OF CENTERLINE OF 8TH STREET, 32.3 FEET NORTH OF CENTERLINE OF ASHWORTH ROAD, BETWEEN THE SIDEWALK AND BACK OF CURB. 2.7 FEET NORTH OF NORTH BACK OF CURB. WDM STANDARD BENCHMARK WDM DATUM 108.07 FEET.

 CITY OF WDM BM# 049 INTERSECTION OF 4TH STREET AND VINE
- STREET, NORTHEAST CORNER OF INTERSECTION, 50 FEET EAST OF THE CENTERLINE OF 4TH STREET, 50 FEET NORTH OF THE CENTERLINE OF VINE STREET, STANDARD BENCHMARK, WDM DATUM 38.38 FEET.

- LOCAL BENCHMARKS

 1. BM #1 1ST FIRE HYDRANT EAST OF THE SITE, SOUTH OF WEST
 DRIVEWAY FOR WEST BANK ON THE SOUTH SIDE OF GRAND
 AYENUE, TAIL OF ARROW, N=576657.35

 E=1584307.3 E=1584307 39 ELEV=42.04 BM #2 1ST FIRE HYDRANT SOUTH OF THE RASSY'S BIKE SHOP
- BUILDING, SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW. N=576657.00 E=1583967.42 ELEV=44.70

- GRADING PLAN NOTES:

 1. UNLESS OTHERWISE SPECIFIED, TOP OF CURB (TC) AND/OR TOP OF WALK ELEVATIONS ARE 0.5' HIGHER THAN THE ADJACENT FLOW LINE (FL) OR PAVEMENT (P) ELEVATIONS. 2. IN ALL LOCATIONS WHERE ELEVATIONS ARE SHOWN AS ±, THE ELEVATION HAS BEEN DETERMINED BASED ON INTERPOLATED GRADES FROM THE SURVEY. CONTRACTOR IS TO VERIFY THESE GRADES PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS WITHIN THE PROXIMITY OF THESE INTERPOLATED GRADES AND REPORT THEM TO THE DESIGN ENGINEER FOR VERIFICATION OF PROPOSED SLOPES PRIOR TO INSTALLATION OF PROPOSED IMPROVEMENTS. DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS. DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS. DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS ASSED ON THESE ± GRADES WITHOUT CONFIRMATION OF EXISTING ELEVATIONS AT TIME OF CONSTRUCTION.

 3. PANING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED
- CUNIFIRMATION OF EXISTING ELEVATIONS AT TIME OF CONSTRUCTION.

 3. PAVING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED IN SUCH A WAY THAT IT WILL BLOCK THE FLOW OF WATER AWAY FROM THE BUILDING INCLUDING BUT NOT LIMITED TO WEEP HOLES, WICKS, DRAINAGE SCUPPERS OR PIPES, AND LANDSCAPING.

 4. ALL RETAINING AND/OR DECORATIVE LANDSCAPE WALLS OR CURBS SHOWN ON THIS PLAN, INCLUDING DETAILS AND SECTIONS, ARE TO ILLUSTRATE GENERAL LOCATION, LENGTH, AND HEIGHT. STRUCTURAL DESIGN, INCLUDING PROPER DRAINAGE, TIE—BACKS, AND SHORING AS WELL AS CONSTRUCTION MEANS ARE NOT ADDRESSED AS PART OF THESE PLANS. A STRUCTURAL ENGINEER SHOULD BE ENGAGED BY THE GENERAL CONTRACTOR AS THEY DEEM NECESSARY. WATERMARK ENGINEERING RESOURCES ASSUMES NO LIABILITY FOR THE DESIGN OR CONSTRUCTION OF ANY STRUCTURAL ELEMENT.

NO - 2 & 4 9 Prepared For:

1101

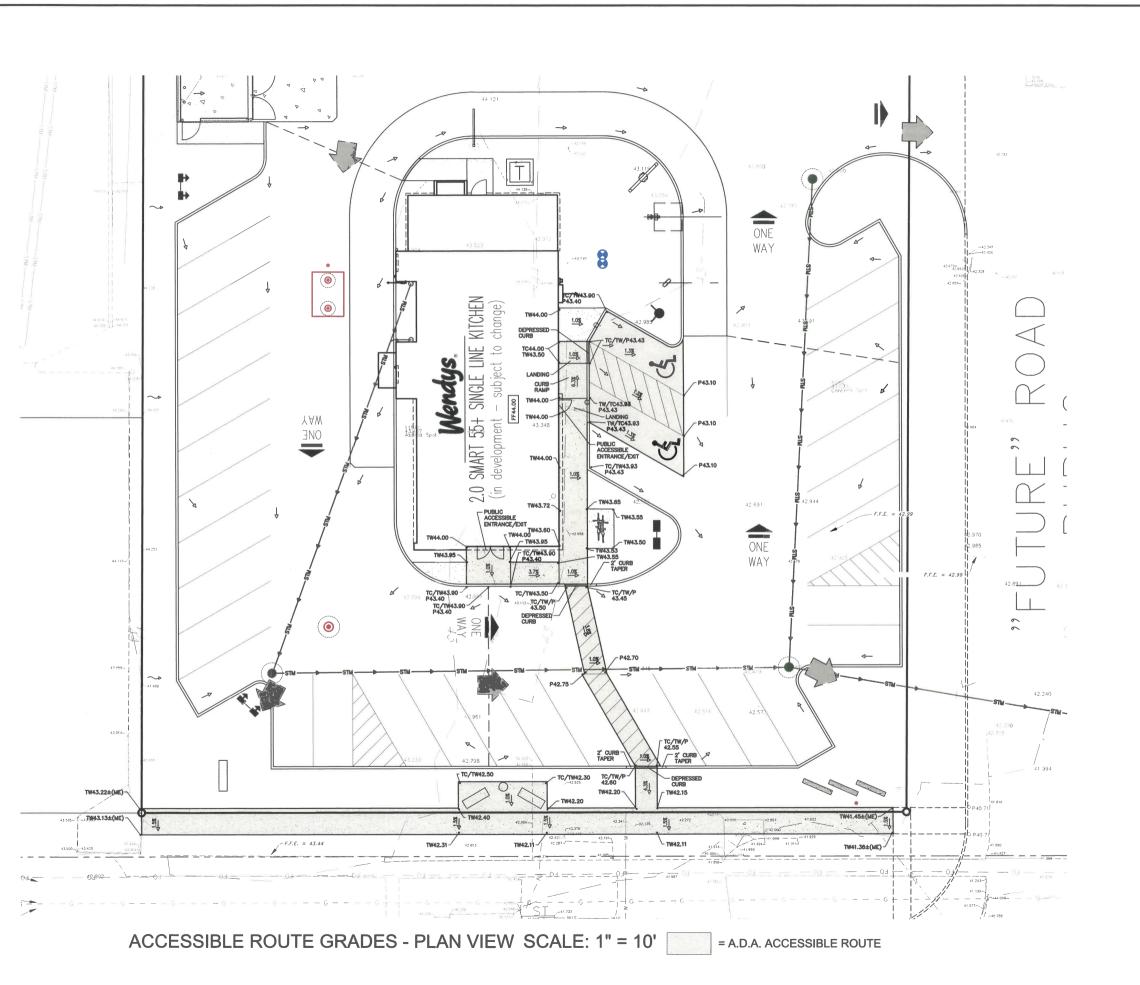
20 Wendy's.

Prepared By:

rmark ngineering

GRADING PLAN

C-3



GENERAL NOTES:

1. THESE PLANS ARE BASED ON THE TOPOGRAPHIC SURVEY (SURVEY PROJECT #2102615 DATED 02/23/2021) PREPARED BY: FIRE D 1: KIRKHAM MICHAEL 4930 114TH STREET, URBANDALE, IA 50322 515-270-0848

PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

CITY BENCHMARKS PUBLISHED AT https://www.wdm.iowa.gov/home/showpNAVD 88 DATUM

- CITY OF WDM BM# 079 INTERSECTION OF 8TH STREET AND ASWORTH ROAD. NORTHWEST CORNER OF INTERSECTION. 90.5 FEET WEST OF CENTERLINE OF 8TH STREET, 32.3 FEET NORTH OF CENTERLINE OF ASHWORTH ROAD, RETWEEN THE SIDEWALK AND
- CENTERLINE OF ASHWORTH ROAD, BETWEEN THE SIDEWALK AND BACK OF CURB, 2.7 FEET NORTH OF NORTH BACK OF CURB, WDM STANDARD BENCHMARK WDM DATUM 108.07 FEET. CITY OF WDM 8MH 409 I NITERSECTION OF 4TH STREET AND VINE STREET, NORTHEAST CORNER OF INTERSECTION, 50 FEET EAST OF THE CENTERLINE OF 4TH STREET, 50 FEET NORTH OF THE CENTERLINE OF 4TH STREET, 50 FEET NORTH OF THE CENTERLINE OF VINE STREET, STANDARD BENCHMARK, WDM

- BM #1157 FIRE HYDRANT EAST OF THE SITE, SOUTH OF WEST DRIVEWAY FOR WEST BANK ON THE SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW, N=576657.35 E=1584307.3
- AVENUE, IAIL OF ARKOW, N=5/6557.35 E=1584307. ELEV=42.04

 BM #2 1ST FIRE HYDRANT SOUTH OF THE RASSY'S BIKE SHOP

 BUILDING, SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW.
 N=576657.00 E=1583967.42 ELEV=44.70

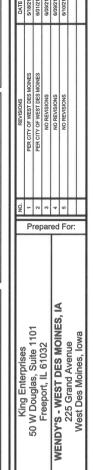
- GRADING PLAN NOTES:

 1. UNILESS OTHERWISE SPECIFIED, TOP OF CURB (TC) AND/OR TOP OF WALK ELEVATIONS ARE 0.5' HIGHER THAN THE ADJACENT FLOW LINE (F.L) OR PAVEMENT (P) ELEVATIONS.

 2. IN ALL LOCATIONS WHERE ELEVATIONS ARE SHOWN AS ±, THE ELEVATION HAS BEEN DETERMINED BASED ON INTERPOLATED GRADES FROM THE SURVEY. CONTRACTOR IS TO VERIFY THESE GRADES PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS WITHIN THE PROXIMITY OF THESE INTERPOLATED GRADES AND REPORT THEM TO THE DESIGN ENGINEER FOR VERIFICATION OF PROPOSED SLOPES PRIOR TO INSTALLATION OF PROPOSED IMPROVEMENTS. DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS ABSED ON THESE TO SLOPES OF PROPOSED IMPROVEMENTS DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS DESIGN TO CONSTRUCTION.

 3. PAVING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED IN SUCH A WAY THAT IT WILL BLOCK THE FLOW OF WATER AWAY FROM THE BUILDING INCUDING BUT NOT LIMITED TO WEEP HOLES, WICKS, DRAINAGE SCUPPERS OR PIPES, AND LANDSCAPING.
- LANDSCAPING.

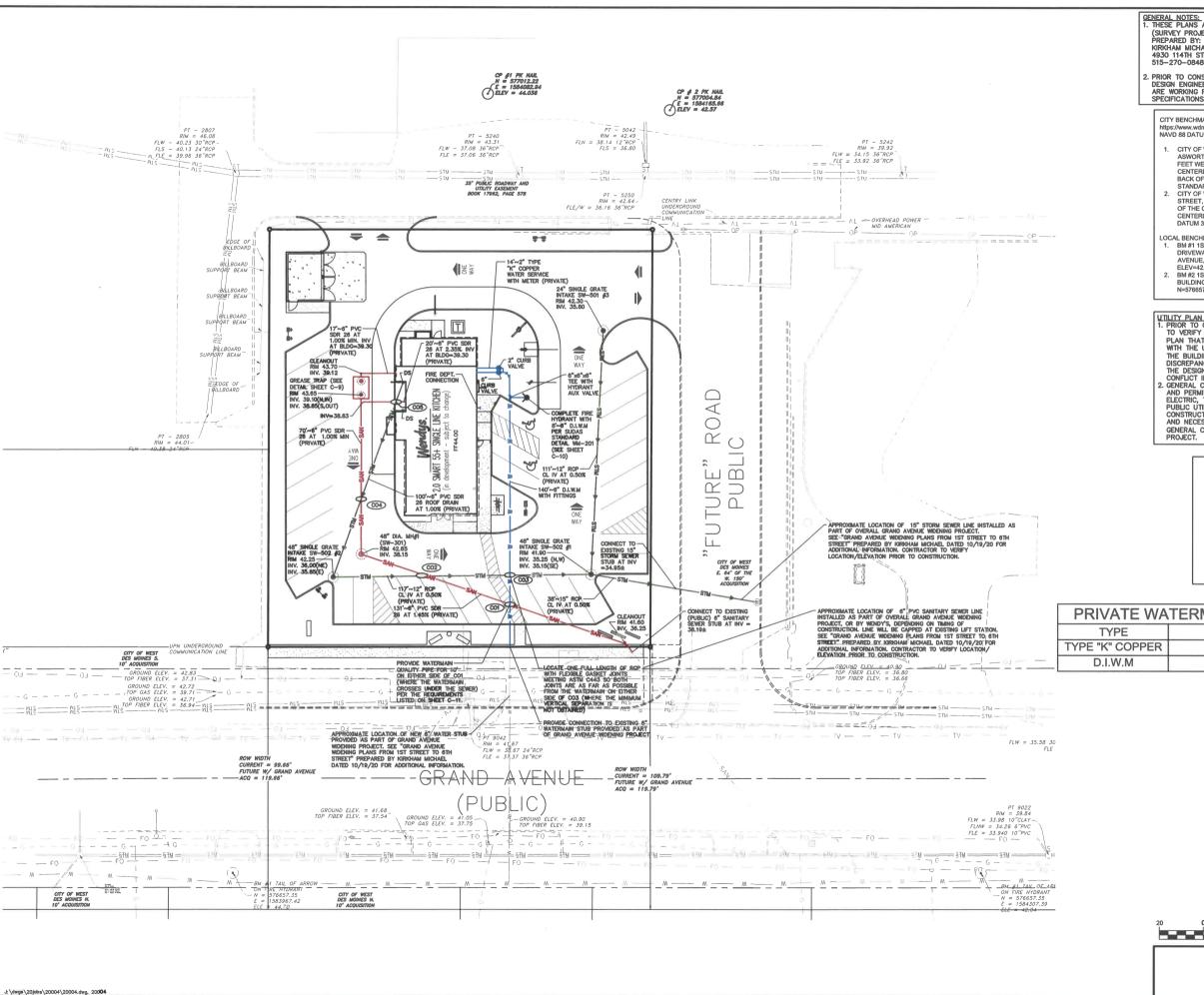
 6. ALL RETAINING AND/OR DECORATIVE LANDSCAPE WALLS OR CURBS SHOWN ON THIS PLAN, INCLUDING DETAILS AND SECTIONS, ARE TO ILLUSTRATE GENERAL LOCATION, LENGTH, AND HEIGHT. STRUCTURAL DESIGN, INCLUDING PROPER DRAINAGE, TIE-BACKS, AND SHORING AS WELL AS CONSTRUCTION MEANS ARE NOT ADDRESSED AS PART OF THESE PLANS. A STRUCTURAL ENGINEER SHOULD BE ENGAGED BY THE GENERAL CONTRACTOR AS THEY DEEM NECESSARY, WATERMARK ENGINEERING RESOURCES ASSUMES NO LIABILITY FOR THE DESIGN OR CONSTRUCTION OF ANY STRUCTURAL ELEMENT.



Srmark Dugineering

Prepared By:

ACCESSIBLE ROUTE **GRADES AND DETAILS**



GENERAL NOTES:

1. THESE PLANS ARE BASED ON THE TOPOGRAPHIC SURVEY . THESE PLANS ARE BASED ON THE TOPOGRAPHIC S (SURVEY PROJECT #2102615 DATED 02/23/2021) PREPARED BY: KIRKHAM MICHAEL 4930 114TH STREET, URBANDALE, IA 50322 515−270−0848

2. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

CITY BENCHMARKS PUBLISHED AT -

https://www.wdm.iowa.gov/home/showpublishe NAVD 88 DATUM

- CITY OF WDM BM# 079 INTERSECTION OF 8TH STREET AND ASWORTH ROAD, NORTHWEST CORNER OF INTERSECTION, 90.5 FEET WEST OF CENTERLINE OF 8TH STREET, 32.3 FEET NORTH OF CENTERLINE OF ASHWORTH ROAD, BETWEEN THE SIDEWALK AND
- CENTERLINE OF ASHWORTH ROAD, BETWEEN THE SIDEWALK AND BACK OF CURB, 2.7 FEET NORTH OF NORTH BACK OF CURB. WDM STANDARD BENCHMARK WDM DATUM 108.07 FEET.
 CITY OF WDM BM# 049 INTERSECTION OF 4TH STREET AND VINE STREET, NORTHEAST CORNER OF INTERSECTION, 50 FEET EAST OF THE CENTERLINE OF 4TH STREET, 50 FEET NORTH OF THE CENTERLINE OF VINE STREET, STANDARD BENCHMARK, WDM DATUM 38.38 FEET.

LOCAL BENCHMARKS

- BM #1 1ST FIRE HYDRANT EAST OF THE SITE. SOUTH OF WEST DRIVEWAY FOR WEST BANK ON THE SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW, N=576657.35 E=1584307.39
- BM #2 1ST FIRE HYDRANT SOUTH OF THE RASSY'S BIKE SHOP BUILDING, SOUTH SIDE OF GRAND AVENUE, TAIL OF ARROW. N=576657.00 E=1583967.42 ELEV=44.70

UTILITY PLAN NOTES:

1. PRIOR TO CONSTRUCTION OF ANY UTILITIES, CONTRACTOR IS TO VERIFY THAT THE PROPOSED UTILITIES SHOWN ON THIS PLAN THAT ENTER THE PROPOSED BUILDING(S) CORRESPOND WITH THE UTILITIES ON THE PLUMBING PLANS AS THEY EXIT THE BUILDING(S). CONTRACTOR TO REPORT IN WRITING ANY DISCREPANCIES IN SIZE, LOCATION, OR INVERT ELEVATION TO THE DESIGN ENGINEER IMMEDIATELY FOR RESOLUTION OF THE CONFLICT IN WRITING.

2. GENERAL CONTRACTOR TO COORDINATE THE INSTALLATION AND PERMITTING OF THE PUBLIC UTILITIES, SUCH AS GAS, ELECTRIC, TELEPHONE, CABLE AND FIBER OPTICS, WITH THE PUBLIC UTILITY COMPANIES AND ARCHITECT PRIOR TO CONSTRUCTION. THE INSTALLATION OF THE PUBLIC UTILITIES AND RECESSARY SLEEVING TO BE INCLUDED AS PART OF GENERAL CONTRACTOR'S SCOPE OF WORK FOR THIS PROJECT.

UTILITY CROSSINGS

- 6" SANITARY B/P = 36.84 6" WATERMAIN T/P = 35.04
- ©3 6" WATERMAIN B/P = 37.20 12" STM T/P = 36.60
- ©4 6" SANITARY B/P = 37.65 6" ROOF DRAIN T/P = 37.10
- 6" SANITARY B/P = 38.97 6" ROOF DRAIN T/P = 37.56

PRIVATE WATERMAIN QUANTITY TABLE

	1 = 1 (11) (11 (0,0) (1	111111111111111111111111111111111111111
TYPE	SIZE	QUANTITY
TYPE "K" COPPER	2"	14 L.F.
D.I.W.M	6"	140 L.F.

Chrark Christing Christing Resources

UTILITY PLAN

C-5

N + 2 8 4 9

prises Suite 1101 . 61032

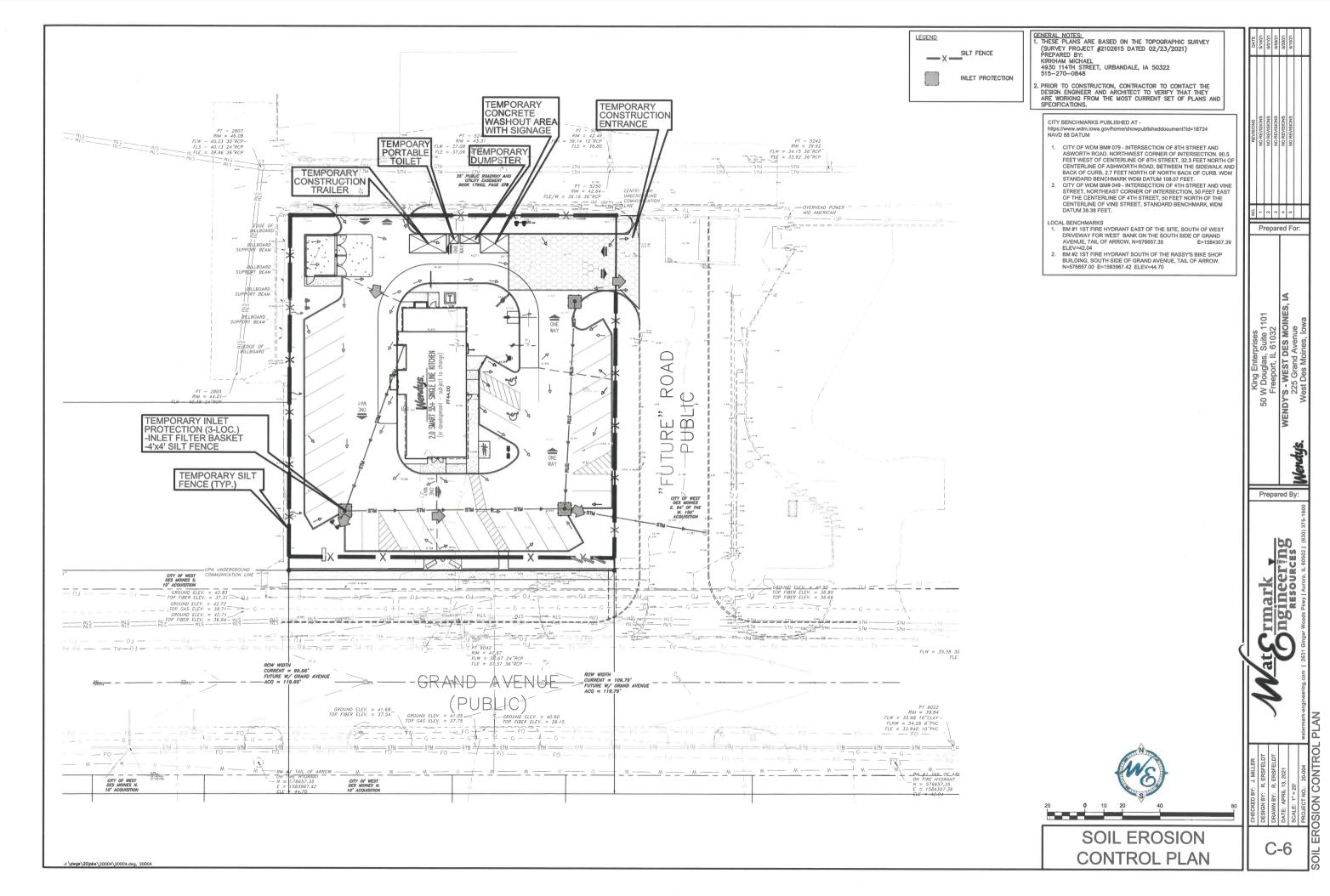
20

King Ente W Douglas, Freeport, II "S - WEST I 225 Grand Vest Des Mo

Wendy's.

Prepared By:

Prepared For:



PART 9 - SURFACE RESTORATION

5. SEEDING

- GENERAL
- GRADING
- MULCHING PREPARATION OF SEED BED
- 4. FERTILIZER
- PAVEMENT REPLACEMENT

1. GENERAL

- The work under these Specifications include incidental grading, preparation of seedbed fertilization, planting of seed, mulching, sodding, and watering of sod.
- dates shall be between August 10th and September 30th. Legumes shall only be seeded during Spring planting season before April 15th
- The Contractor and Subdivider are responsible for complying with all Local. State, and Federal regulations regarding erosion control and clean water regulations.
- D Restore parking areas in existing right-of-way to similar or better condition than existed prior
- Sod all areas disturbed in manicured yards
- Seed all other areas

2. GRADING

- Erosion & Drainage. The Contractor shall be responsible for incidental grading on site to climinate erosion gulles and ruts, and shall provide proper cross section for drainage as directed by City Engineer.
- B Fill Material: If extra earthwork fill is needed, the Contractor shall provide fill to conform times and grades as shown on plans

Areas Accessible to Machinery: Areas accessible to field machinery shall be thoroughly worked to a depth of not less than three niches (3"). The soil shall be brought to a loose, friable condition, and shall be picked free of rocks and concrete chunks in excess of one inch

PART 9 - SURFACE RESTORATION

- 1") drameter where weed growth has developed extensively, the use of a dock will be all ordisk these weeds into the ground if the weeds can be completely exerced by the meti-
- Areas basecessible to Machinery. Areas unocessible to field machinery shall be prepared by band to a depth of not less than one and one half inches $(1-D_{\rm e}^2)$. The soil shall be brought a boose friable condition.

- Rate of Fertilizer: Fertilizer shall be spread uniformly at a rate of 650 pounds per acre of 15-15-15 commercial fertilizer or equivalent per acre. All areas sceded shall be fertilized.

5. SEEDING

A. Lawn Seed Mixture. Unless otherwise specified the recommended lawn seed mixture shall be the following:

Kentucky Blue Grass Perennial Rye Grass

44 lbs. per acre 7 lbs. per acre

Temporary Seed Mixture: Apply as soon as practical following grading operation. The

20 lbs. per acre 15 lbs. per acre 15 lbs. per acre Rye Grass - Annual Rye Grass - Perennial Fescue - Kentucky - 31 10 lbs per acre

1. Crownvetch: Where specified on steep slopes the following seed mixture shall be used

9 - 2

PART 9 - SURFACE RESTORATION

Budstoot Trefoil (Empire) Annual Rye Grass

- maximum and convector seed small consolated who the type specified for a period of time exceeding one half (½) hour. Seed which is not sown within eight (8) hours after modulation shall be reinoculated prior to use. Crownvetch and Birdsfoot Trefoil shall be other legumes shall be inoculated at two (2) times the rate specified by the manufacture
- Special Handling: All Crownvetch seed shall be treated with a non-mercurial fungicide seventy-five percent (75%) concentration or equivalent at the rate of one (1) per one hundred (100) pounds of seed. All crownvetch seed shall be treated with an approved sticking agent to be applied prior to application of the inoculate and fungicide
- Time of Application: Crownvetch seed shall be applied only in the Spring. The
 crownvetch seeding shall be considered the final operation of seeding, fertilizing and
 mulching. Crownvetch shall be applied within twenty-four (24) hours after completion
- D. Method of Seeding on areas accessible to field machinery, all grasses and legume seed shall be sown with a broadcast seedier or hydrautic seeder on areas inaccessible to field machinery, use or hand-cyclone seeders will be permitted.
- Covering and Compaction of Grasses and Legumes sowing of grasses and legumes shall be followed by not less than one (1) complete rolling with a cultipacker or approved equipment. Where the compaction equipment will not operate satisfactorily, the seeded area shall be
- Guarantee: if less than fifty percent (50%) of seed fails to become established and survive to the next season in any given area three (3) square feet or larger, the Contractor shall be responsible for preparing the seed bed as specified in Section 3 and overseeding at the rate specified in Section 5A

- Mulch all seeded areas as soon as seed is applied.
- B Material & Rate: Mulch material shall be out straw or equivalent, applied at a rate of two (2)

9 - 3

STRUCTURES.

HOLD PRE-CONSTRUCTION MEETING TO DISCUSS THE STORM WATER POLLUTION PLAN WITH ENGINEER, ALL CONTRACTORS AND JURISDICTIONAL INSPECTION AGENCIES.

CLEAR AND GRUB THE SITE.

START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.

BEGIN GRADING OPERATIONS FOR THE SITE.

TEMPORARILY SEED DENUDED AREAS.

INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.

INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES.

2. PREPARE SITE FOR PAVING.

3. PAVE SITE.

13. PAVE SITE.

14. INSTALL INLET PROTECTION DEVICES.

15. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.

16. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY

CONSTRUCTION SEQUENCE:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.

2. PREPARE TEMPORARY PARKING AND STORAGE AREA.

3. CONSTRUCT THE SILT FENCES ON THE SITE.

4. INSTALL INLET PROTECTION AROUND ALL EXISTING STORM SEWER

PART 9 - SURFACE RESTORATION

- Material Sod material shall be a good commercial grade of sod, predominantly contributed Blue Grass and Fescue. The sod shall be free of noxious and other weeds

8. PAVEMENT REPLACEMENT

- C Break up and remove existing concrete or asphalt pavement through use of pneumatic hammer or other suitable equipment; do not damage remaining pavement, remove pavement to existing joint when required to maintain joint spacing greater than two feet (2) and when required by
- Provide temporary granular surfacing on streets and driveways immediately following completion of backfill.
- 1 Should weather condition or traffic preclude the option of immediately installing the permanent repairs, temporary measures may be taken upon approval of the City Engineer.

Application of Mulch - With exception to Crownweigh, the midching shall be the final operation of seeding. The midch shall be evenly and uniformly distributed and anchored into the soil. Anchor midch into soil by means of dull blades or disc.

- Watering Sod: The sod shall be watered within one (1) hour after placement and shall receive enough water to thoroughly soak sod plus sodbed. Sod shall theremafter be watered every other day for at least a two (2) week period.
- D. Guarantee: If fifty percent (50%) of sod fails to survive until next seeding season, the Contractor shall be responsible for resolding or overseeding with the specified lawn seed mixture.

- A This section describes work to replace existing pavement removed or damaged during construction, comply with applicable requirements of Concrete Pavement: equal or exceed the before construction condition and City Standards.
- B. Saw cut edges of removal with saw, concrete cutter, or other equipment which will producted edge, cut pavement full depth.

9 - 4

GEOTEXTILE METAL OR WOOD POST OR STAKE DIRECTION OF RUNOFF FLOW FRAME AND GRATE PER DETAIL

STONE SIZE - IDOT COARSE AGGREGATE GRADATIONS: CA-1, CA-2, CA-3 OR CA-4.

CA-3 OR CA-4.

2. HICKNESS - NOT LESS THAN EIGHT (8) INCHES.

3. PILTER FABRIC - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACED OF STONE, GEOTEXTHE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL CLASS I, II OR IV IN THE ILLINOIS URBAN MANUAL STONE PLACEMENT - THE STONES IN THE ENTRANCE SHALL BE PLACED ACCORDING TO ILLINOIS URBAN MANUAL CONSTRUCTION SPECIFICATION 2E

(ROCKFILL). PLACEMENT WILL BE BY METHOD 1 AND COMPACTION WILL BE CLASS III.

5. MAINTENANCE — THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, PORPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

6. WASHING — WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STRAILZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHS, WATERCOURSES, OR SURFACE WATERS INCLUDING WETLANDS.

7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

(ROCKFILL). PLACEMENT WILL BE BY METHOD 1 AND COMPACTION WILL BE CLASS III.

PAVEMENT

EXISTING GROUND

FENCE POST

- NOTES:

 1. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS—SECTIONAL AREA OF 3.0 SQ. IN.

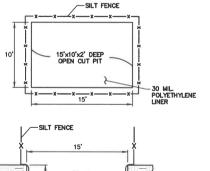
 2. STEEL POSTS SHALL BE STANDARD T AND U SECTIONS WEIGHING NOT LESS THAN 1.33 POUNDS FER LINEAR FOOT OR OTHER STEEL POSTS HAVING EQUIVILENT STRENGTH AND BENDING RESISTANCE.

 3. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 (GEOTEXTILE) TABLE 1 OR 2, CLASS I IN THE ILLINOIS URBAN MANUAL, CURRENT EDITION. THE FABRIC SHALL HAVE AN AOS OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN MATERIAL MATERIAL.

 4. STAKES ARE TO BE PLACED A MAXIMUM OF 3 FEET APART.

 5. JOINTS IN GEOTEXTILE FABRIC ARE TO BE MADE AT STAKES

INLET PROTECTION

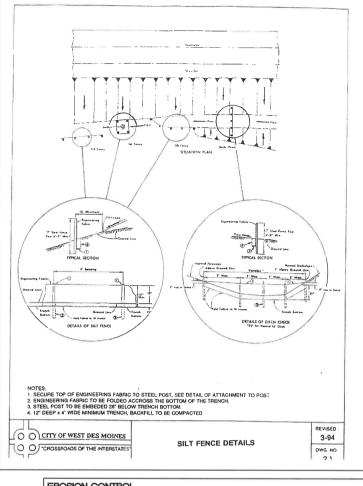


730 MIL. POLYETHYLENE LINER

NOTES:

1) OPTIONAL USE OF A PORTABLE CONCRETE WASHOUT CONTAINER IS ACCEPTABLE WITH 30 MIL POLYETHYLENE LINER. 2) CONCRETE WASHOUT SHOULD BE CONTAINED AT ALL TIMES. WASHOUT MATERIAL SHOULD NOT BE ALLOWED TO ENTER WASHOUT MATERIAL SHOULD NOT BE ALLOWED TO ENTER WASHOUT MATERIAL SHOULD NOT BE ALLOWED TO ENTER WASHOUT MEDICAL SHOULD BE DISPOSED OF PROPERTY AND THE LOCATION OF THE WASHOUT SHOULD BE DISPOSED OF PROPERTY AND THE LOCATION OF THE WASHOUT SHOULD BE DISSIGNATED WITH PROPER SIGNAGE. FAILURE TO COMPLY COULD BESTUT IN AN INCREDIBLE OF MACKCAMULIAUSE (ANY). COULD RESULT IN AN INCIDENCE OF NONCOMPLIANCE (ION).

CONCRETE WASHOUT AREA DETAIL



EROSION CONTROL

1. CONTRACTOR IS TO FOLLOW THE REQUIREMENTS OF THE "IOWA CONSTRUCTION SITE EROSION CONTROL MANUAL" CURRENT EDITION AND THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).

2. SOIL EROSION CONTROL SYSTEMS SHALL BE CONSTRUCTED AS SHOWN ON THE SOIL

SOIL EROSION CONTROL SYSTEMS SHALL BE CONSTRUCTED AS SHOWN ON THE SOIL EROSION CONTROL PLANS AND/OR AS SPECIFIED BY THE DESIGN ENGINEER, VILLAGE ENGINEER, APPOINTED SWPPP INSPECTOR, OR MUNICIPAL INSPECTOR. PERIMETER EROSION BARRIER SHALL BE PLACED IN A MANNER THAT WILL INTERCEPT WATER BORNE SILT AND PREVENT IT FROM LEAVING THE AREA OF CONSTRUCTION. ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE WITH THE ENDS EXTENDING UPSLOPE. THE MAXIMUM SPACING OF POSTS SHALL BE AS INDICATED ON THE CITY OF WEST DES MOINES SILT FENCE DETAIL SPACING MAY NEED TO BE ADJUSTED SO THAT POSTS ARE LOCATED IN LOW AREAS WHERE WATER MAY POND. THE FILTER FABRIC AND WIRE SUPPORT, IF USED, MUST BE SECURELY FASTENED TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST ONE INCH LONG OR TE WRES (10 GAGE MINIMUM). THE FABRIC STAPLES OR WIRED

UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST ONE INCH LONG OR THE WIRES (10 GAGE MINIMUM). THE FABRIC SHALL NOT BE STAPLED OR WIRED TO THE MIRE SUPPORT OR TO EXISTING TREES.

INLET FILTERS SHALL BE CONSTRUCTED OF A REPLACEABLE REINFORCED FILTER BAG SUSPENDED FROM A RETAINER RING OR FRAME. INLET FILTER SYSTEMS SHALL BE THE CATCH—ALL WITH OVERFLOW, AS FURNISHED BY MARATHON MATERIALS INC., OR PRE—APPROVED EQUAL CARE SHOULD BE TAKEN WHEN MAINTAINING OR REMOVING THIS FILTER FABRIC BAG TO NOT ALLOW THE PREVIOUSLY TRAPPED DEBRIS TO ENTER THE STORM SEWER SYSTEM

FILTER FABRIC BAG TO NOT ALLOW THE PREVIOUSLY TRAPPED DEBRIS TO ENTER THE STORM SEWER SYSTEM.

THE BED FOR RIP RAP SHALL BE TRIMMED AND SHAPED TO ALLOW THE FINISHED SURFACE TO CONFORM TO THE LINES SPECIFIED. AT THE TOE OF THE SLOPE, THE RIP RAP SHALL COMMENCE ON A CONTINUATION OF THE SLOPE AFTER EXCAVATION TO ACCOMMODATE THE FULL DEPTH OF FABRIC, BEDDING LAYER, AND RIP RAP SPECIFIED. FILTER FABRIC IS REQUIRED UNDER STONE RIP RAP GRADATION 4, 5, 6 AND 7 FOR ALL USES, AND UNDER CONCRETE BLOCK, BROKEN CONCRETE, AND STONE OR BROKEN CONCRETE DUMPED RIP RAP WHAPH USED FOR SOIL EROSION PROTECTION.

STREETS ARE TO BE CLEARED OF DEBRIS, AND SWEPT CLEAN OF SILT AND MUD DAILY. SOIL EROSION CONTROL MEASURES ARE TO BE CHECKED BY QUALIFIED PERSONNEL AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL AND REPAIRED IF NECESSARY.

STORM THAT IS U.S INCHES OR GREATER OR EQUIVALENT SNOWFALL AND REPAIRED IF NECESSARY.

9. ALL EROSION CONTROL PROTECTION SHALL BE KEPT IN PLACE UNTIL THE GROUND HAS BEEN STABILIZED AND THE PAVEMENT HAS BEEN INSTALLED.

10. ANY DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE STOPPED (PERMANENTLY OR TEMPERARILY) FOR 7 DAYS, MUST BE STABILIZED IN ACCORDANCE WITH NPDES REQUIREMENTS.

11. BUILT UP SEDIMENT SHALL BE REMOVED FROM THE SILT FENCE WHEN IT HAS REACHED ONE— THIRD THE HEIGHT OF THE FENCE.

12. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, ETC., TO SEE IF FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND THAT THE FENCE POSTS ARE SECURELY IN THE GROUND.

13. THE SEDIMENT BASIN, IF PRESENT, SHALL BE INSPECTED FOR DEPTH OF SEDIMENT AT LEAST ONCE A WEEK, BUILD UP SEDIMENT SHALL BE REMOVED WHEN IT REACHES 25 PERCENT OF THE DESIGN CAPACITY.

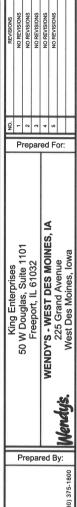
14. CONTRACTOR TO COMPLY WITH FINAL STABILIZATION AND TERMINATION REQUIREMENTS OF THE SWPPP.

14. CONTRACTOR TO COMPLY WITH FINAL STABILIZATION AND TERMINATION REQUIREMENTS
OF THE SWPPP.

15. AT A MINIMUM, SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE
INSTALLED IN THE LOCATIONS SHOWN ON THE PHASE I AND PHASE II SOIL EROSION
CONTROL PLANS. THEY SHALL ALSO BE INSTALLED ANYWHERE THAT THEY ARE NEEDED
DURING CONSTRUCTION IN ORDER TO PREVENT EROSION AND SEDIMENT FROM BEING

CARRIED DOWN STREAM. THIS IS THE GENERAL CONTRACTOR'S RESPONSIBILITY AND SHALL BE INSTALLED, RELOCATED, MAINTAINED, ETC. AS DIRECTED BY THE APPOINTED SWPPP INSPECTOR. ERGSION CONTROL INSTALLATION AND MAINTENANCE IS TO BE A PART OF THE CONTRACT AND IS NOT AN EXTRA TO THE OWNER.

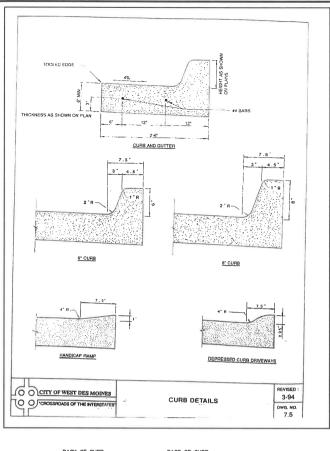
SOIL EROSION CONTROL **DETAILS AND SPECS**

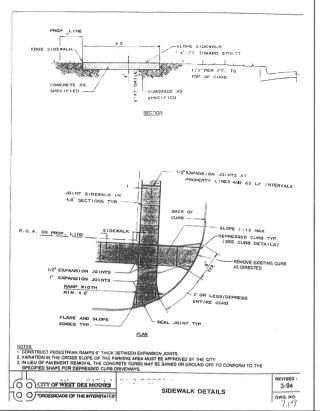


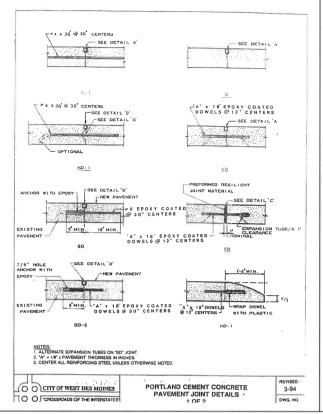
tormark Congineering DETAILS AND

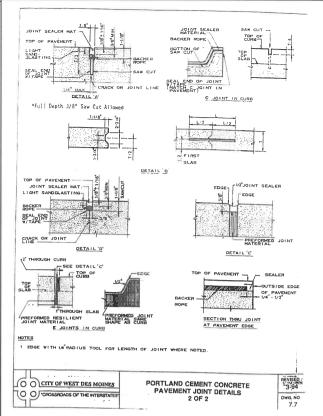
C-7

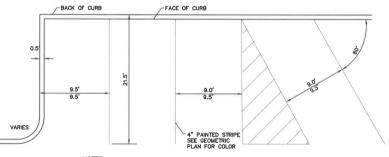
J: \dwgs\20jobs\20004\20004.dwg, 20004





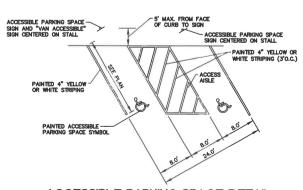






PARKING STALLS ARE 9' APART, STARTING FROM FACE OF CURB TO THE CENTERLINE OF THE PAINTED STRIPE.
 FACE OF CURB DIMENSION IS 6" FROM BACK OF CURB.

PARKING STALLS WITH BARRIER CURB (TYP.)



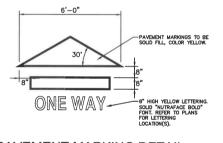
ACCESSIBLE PARKING SPACE DETAIL FOR CAR AND VAN

- . STRIPING COLOR TO BE APPROVED BY THE LOCAL JURISDICTION.

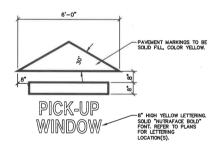
 AN ACCESS AISLE MAY BE SHARED WITH A MAXMUM OF TWO (2) ACCESSIBLE PARINING SPACES.

 WHERE A SINGLE PARKING STALL IS USED, IT IS PREFERED THAT THE ACCESS AUSLE BE LOCATED ON THE PASSENGER SIDE OF THE VEHICLE.

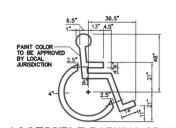
 PARKING STALL AND ACCESS AUSLE WIDTHS ARE MEASURED FROM CENTER OF STRIPE TO CENTER OF STRIPE.



PAVEMENT MARKING DETAIL

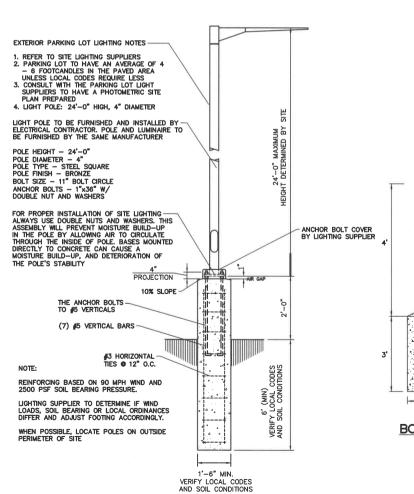


PAVEMENT MARKING DETAIL

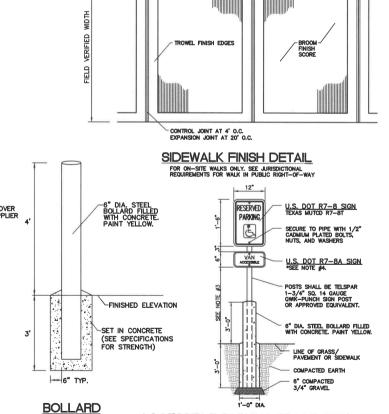


ACCESSIBLE PARKING SPACE SYMBOL

1. SYMBOL IS CENTERED ON WIDTH OF PARKING STALL AND EVEN WITH THE END OF THE STALL.



EXTERIOR LIGHT POLE DETAIL



ACCESSIBLE PARKING SPACE SIGN DETAIL

WHERE A FINE IS ESTABLISHED BY A MUNICIPALITY BY ORDINANCE IN ACCORDANCE WITH THE STATUTES, THE ACTUAL AMOUNT OF THE FINE SHOULD BE SHOWN ON A SIGN MEASURING 12'96". THIS PLATE MAY DE MOUNTED DIRECTLY BELOW THE R7-8 SIGN.
 ONE IN EVERY SIX ACCESSIBLE SPACES, BUT NOT LESS THAN ONE, SHALL BE DESIGNATED "VAN ACCESSIBLE".

THE LOWEST BOTTOM EDGE OF THE LOWEST REQUIRED SIGN SHALL BE MOUNTED AT 60° ABOVE FINISHED GRADE.

PROJECT DETAILS

C-8

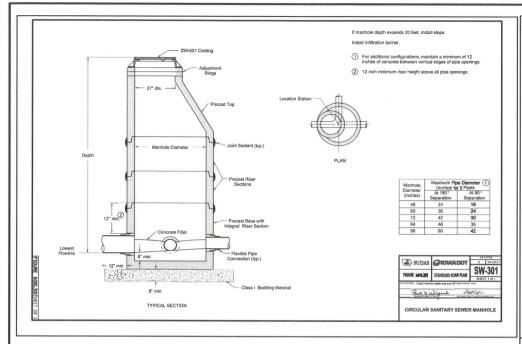
δ. - s ω 4 m

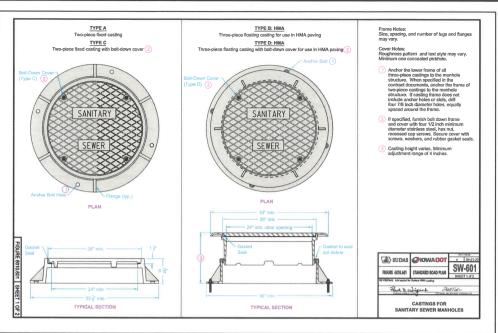
Prepared For:

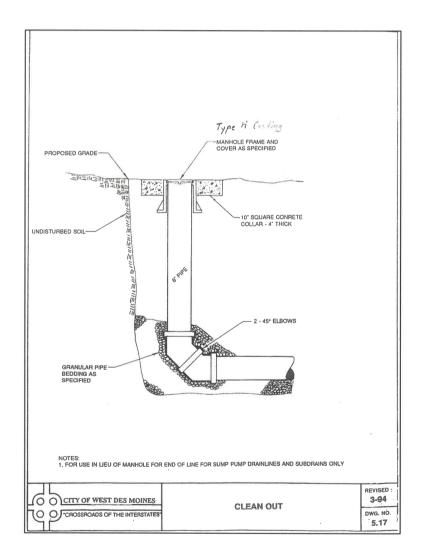
King Enterprises
50 W Douglas, Suite 1101
Freeport, IL 61032
NDYS - WEST DES MOINES, IV
West Des Nation

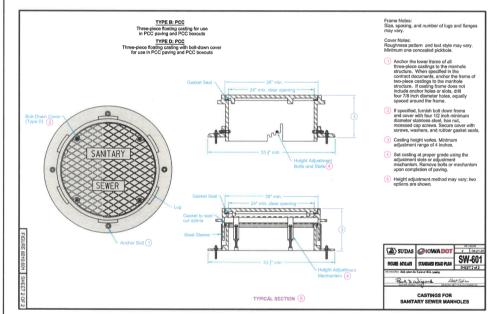
Prepared By:

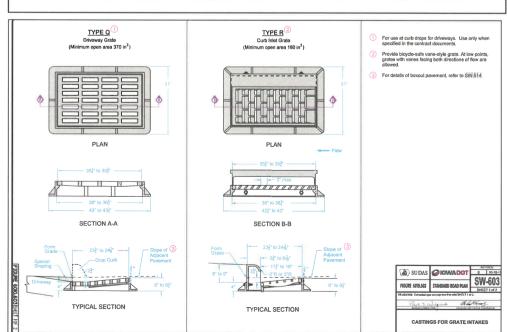
Crmark Congineering

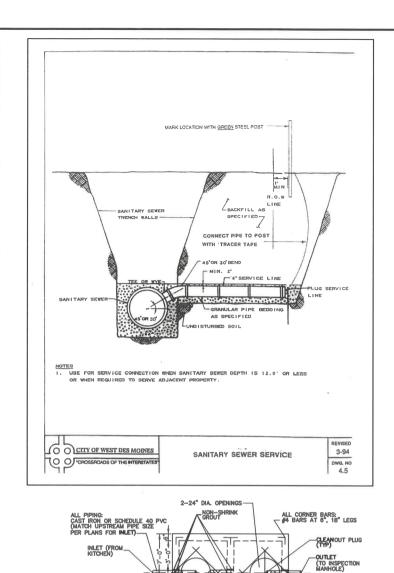


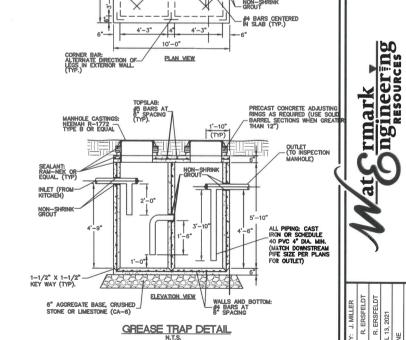












PROJECT DETAILS

PROJECT NO.: 20-00

J: \dwgs\20jobs\20004\20004.dwg, 20004

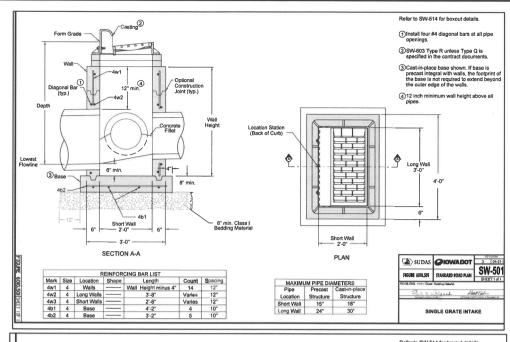
C-9

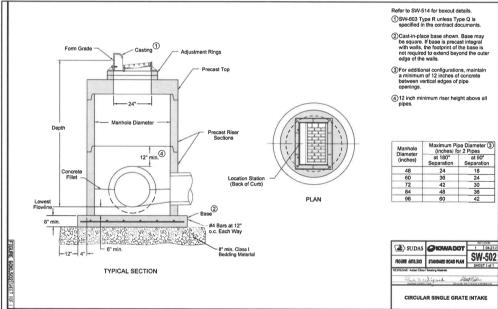
Prepared For:

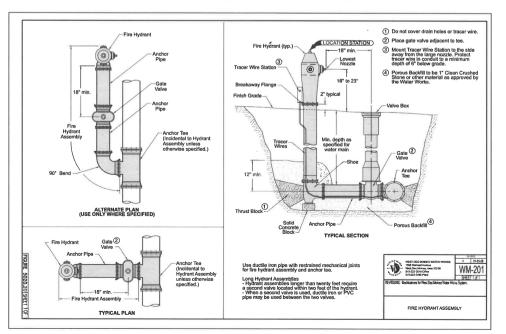
1101

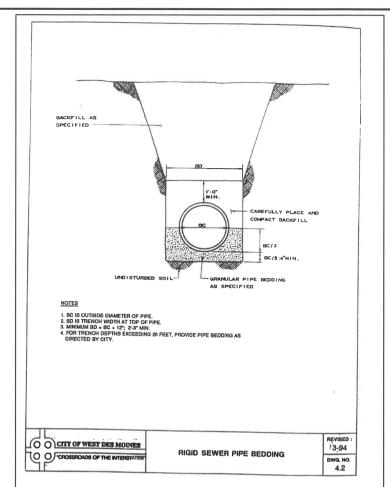
20

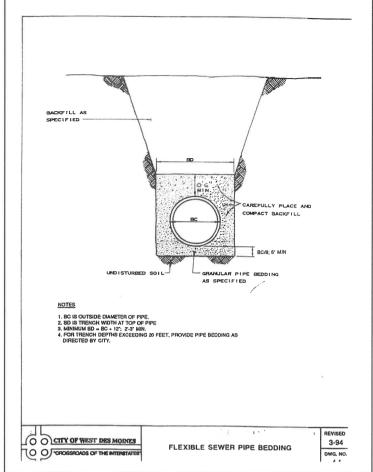
Prepared By:

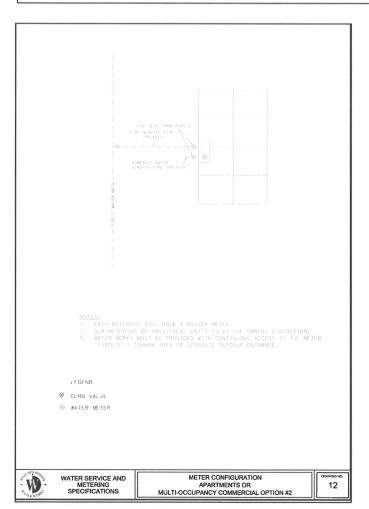


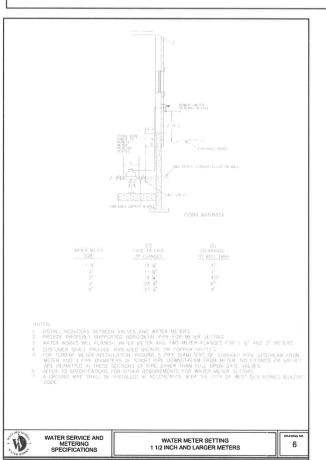


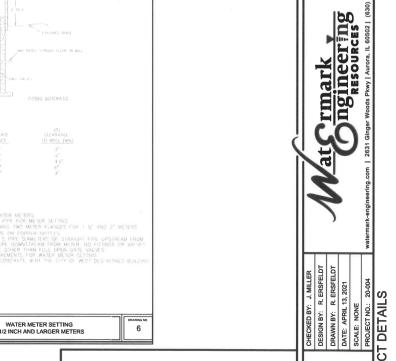












PROJECT DETAILS

C-10

N - 8 8 4 8

s 1101 32

King Emit 50 W Douglas Freeport, I WENDY'S - WEST 225 Grand West Des MA

Prepared By:

PROJECT SPECIFICATIONS

- CONTRACTOR IS TO FOLLOW ALL ORDINANCES AND REQUIREMENTS OF THE STATE, COMMUNITY, LOCAL DISTRICTS AND THE U.S. ACCESS BOARD. ALL PROPOSED MIPROVEMENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE "JOWA STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION" AS WELL AS "IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS" CURRENT EDITIONS.
- 2. THE CONTRACTOR SHALL INDEMNIFY WATERMARK ENGINEERING RESOURCES. LTD (THE DESIGN ENGINEER), ARCHITECT AND OWNER, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONDUCTING WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, SPECIFICATIONS, AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THIS
- SPECIFICATIONS, AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THIS DEVELOPMENT.

 THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS THAT ARE REQUIRED BY THE LOCAL AGENCIES.

 PRIOR TO BID AND PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSPECT THE SITE TO VERIFY THAT THERE ARE NO DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL CONDITIONS AT THE SITE. IF ANY DISCREPANCIES ARE FOUND, AT ANY TIME BEFORE OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN
- BEFORE OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY (BEFORE ANY ADDITIONAL IMPROVEMENTS ARE INSTALLED) IN ORDER TO OBTAIN WRITTEN CONFIRMATION BY THE DESIGN ENGINEER AS TO ANY REVISIONS THAT MAY NEED TO BE MADE TO THE PLANS.
 PRIOR TO CONSTRUCTION, CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.
 THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION, AND ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION 2 WORKING DAYS PRIOR TO THE START
- AFFECTED BY THE PROPOSED CONSTRUCTION 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE APPROPRIATE CONSTRUCTION INSPECTIONS. THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS, THE CONTRACTOR MUST CALL "IOWA ONE CALL" FOR THE LOCATION AND STAKING OF EXISTING UNDERGROUND
- UTILITIES (GAS, ELECTRIC, TELEPHONE) AT 1-800-292-8989, 48 HOURS PRIOR TO
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS PER THE MUNICIPALITY AND/OR ANY OTHER AGENCY REQUIREMENTS. ANY CHANGES TO THE DRAWINGS MUST BE REPORTED TO THE DESIGN ENGINEER BEFORE WORK
- PROGRESSES.

 10. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY.
 ALL QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE VERIFIED PRIOR TO CONSTRUCTION. IF DISCREPANCIES OCCUR, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER IMMEDIATELY AND NO WORK IS TO BE DONE UNTIL APPROVED BY THE DESIGN ENGINEER.
 ANY RESTORATION NEEDED BECAUSE OF CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
 TRENCH BACKFILL MATERIAL, CRUSHED STONE OR LIMESTONE (CA-6) IS REQUIRED LINDER AND MITHIN TWO FEET (2) OF SIDEWALKS AND PAYED APPAS THIS BACKFILL
- UNDER AND WITHIN TWO FEET (2') OF SIDEWALKS AND PAVED AREAS. THIS BACKFILL
- UNIDER AND WITHIN TWO FEET (2") OF SIDEWALKS AND PAVED AREAS. THIS BACKFILL
 SHALL BE IN SIX INCH (6") LIFTS AND COMPACTED TO 95% STANDARD PROCTOR.

 14. CONTRACTOR IS TO PROVIDE ALL TEMPORARY SIGNAGE AS REQUIRED BY THE ILLINOIS
 DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.

 15. ALL EXISTING DRAIN TILES THAT ARE ENCOUNTERED ARE TO BE RESTORED TO THEIR
 ORIGINAL CONDITION OR REPOLUTED TO THE PROPOSED STORM SEWER SYSTEM.

 16. RESTORATION OF EXISTING RIGHT—OF—WAYS IS TO BE COMPLETED WITH FOUR INCH
- (4") MINIMUM TOPSOIL AND SALT TOLERANT SOD UNLESS OTHERWISE NOTED.

 17. THE WATER SYSTEM CANNOT BE SHUT DOWN WITHOUT CONSENT BY THE OWNER OF
- 18. ALL FRAME ADJUSTMENTS SHALL BE MADE WITH PRE-CAST CONCRETE RINGS
- 18. ALL FRAME ADJUSTMENTS SHALL BE MADE WITH PRE-CAST CONCRETE RINGS CONFORMING TO ASTM C-39 AND CANNOT EXCECT THELYE INCHES (12").

 19. FRAMES SHALL BE SET WITH EZ STIKB (OR EQUAL) MATERIAL TO PREVENT LEAKAGE. 20. THE REINFORCED CONCRETE SECTIONS SHALL BE LAID IN MORTAR, SEALED WITH EXTERNAL SEALING BANDS, OR SEALED USING MASTIC JOINT SEALER. WHEN MASTIC JOINT SEALER IS USED, THE MATERIAL SHALL COMPLETELY FILL THE JOINT AFTER THE UNITS HAVE BEEN BROUGHT TOGETHER.
 21. STEPS IN STRUCTURES SHALL BE MADE OF COPOLYMER POLYPROPYLENE PLASTIC WITH CONTINUOUS ONE HALF INCH (1/2") GRADE SIXTY (60) STEEL REINFORCEMENT, STEP PSI-PF, AS MANUFACTURED BY M.A. INDUSTRIES, INC., OR APPROVED EQUAL STEPS TO BE SBACED SIXTERE INCHES (13") NON-CORNER.
- SIEP PSI-PF, AS MANUFACTURED BY M.A. INDUSTRIES, INC., OR APPROVED EQUAL.
 SIEPS TO BE SPACED SIXTEEN INCHES (16") ON-CENTER.

 22. ALL INSTRUMENTS ARE TO BE PROPERLY CALIBRATED PRIOR TO CONSTRUCTION USE.

 23. ALL PARKING LOT LIGHT POLES ARE TO BE CONSTRUCTED AT THE INTERSECTION OF PARKING LOT STRIPING OR IN LANDSCAPE AREAS WITH A MINIMUM OF 2" CLEARANCE BETWEEN THE BACK OF CURB AND THE EDGE OF THE PARKING LOT LIGHT BASE UNLESS OTHERWISE SPECIFIED.

 24. GENERAL CONTRACTOR TO BECOME FAMILIAR WITH AND APPLY THE ADA MINIMAL
- REQUIREMENTS AND REPORT TO ARCHITECT/DESIGN ENGINEER ANY DISCREPANCIES BEFORE CONSTRUCTION. THIS INCLUDES, BUT NOT LIMITED TO, TRANSITIONS TO
- XISTING CONDITIONS
- EXISTING CONDITIONS.

 25. CONSTRUCTION MEANS, METHODS AND JOB SITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR.

 26. PAVING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED IN SUCH A WAY THAT IT WILL BLOCK THE FLOW OF WATER AWAY FROM THE BUILDING INCLUDING BUT NOT LIMITED TO WEEP HOLES, WICKS, DRAINAGE SCUPPERS OR PIPES, AND LANDSCAPE.

PAVEMENT

- ALL PAVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING REFERENCES AS THEY APPLY: IOWA STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION AND SUPPLEMENTAL DOCUMENTS, LATEST EDITION; IOWA DEPARTMENT OF TRANSPORTATION CONSTRUCTION MANUAL, LATEST EDITION; SUDAS STANDARD SPECIFICATIONS, LATEST EDITION.

 ALL BASE COURSE AND SUB-BASE AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS LISTED ABOVE. BEFORE THE BASE COURSE MATERIALS ARE INSTALLED, THE SUB-BASE SHALL BE PROOF-ROLLED TO THE SANTSACTION OF THE ENGINEER, HIS AGENT, AND/OR THE SOILS ENGINEER. COMPACTION AND DENSITY TESTS SHALL BE TAKEN AT THE OWNER'S OPTION.

 ALL CONCRETE TO BE MINIMUM 3000 PSI, SALT TOLERANT, CLASS C MIX WITH A SPRAY ON SEALER.
- ON SEALER.
- ON SEALER.

 EXPANSION AND CONTRACTION JOINTS SHALL BE TOOL FINISHED.

 BINDER COURSE TO BE PLACED WHEN TEMPERATURE IS AT LEAST 40°F AND RISING.
 SURFACE COURSE TO BE PLACED WHEN TEMPERATURE IS AT LEAST 45°F AND RISING.
 ALL PROPOSED PAVEMENT, SIDEWALKS, AND CURBS ARE TO BE CONSTRUCTED TO WITHIN
 A TOLERANCE OF 0.05° OF THE PROPOSED ELEVATIONS EXCEPT IN THE ACCESSIBLE
 STALLS OR ACCESSIBLE ROUTES.

 PRIOR TO SEAL COATING, ALL ASPHALT AREAS ARE TO BE CLEAN AND DRY, ALL LOSE
 MATERIALS ARE TO BE REMOVED. ALL GREASE TO BE FILLED PER IOWA DOT STANDARDS. ALL PAINTED STRIPPING TO BE MODIFIED SHALL BE
 FILLED PER IOWA DOT STANDARDS. ALL PAINTED STRIPPING TO BE MODIFIED SHALL BE
 FILLED PER IOWA DOT STANDARDS. ALL PAINTED STRIPPING TO BE MODIFIED SHALL BE
 FILLED PER IOWA DOT STANDARDS. ALL PAINTED STRIPPING TO BE MODIFIED SHALL BE
 FILLED PER IOWA DOT STANDARDS. ALL PAINTED STRIPPING TO BE MODIFIED SHALL BE "BLACKED OUT" WITH BLACK PAINT (1 COAT MINIMUM, 2 COATS IF NECESSARY), ALL AREAS THAT ARE ADJACENT TO THE SEAL COATED AREA ARE TO BE MASKED (I.E. SIDEWALKS, CONCRETE SURFACES, BRICK SURFACES, GUTTERS, CATCHBASINS/INLETS, ETC.) PRIOR TO SEAL COATING TO BE APPLIED. AIR TEMPERATURE TO BE 50F AND RISING. APPLICATION SEAL CUAINING TO BE APPLIED. AIR TEMPERATURE TO BE 50°F AND RISING, APPLICATION RATE TO BE SUCH THAT ALL SURFACES OF THE ASPHALT BEING COATED IS THOROUGHLY COVERED IN ONE COAT. SPRAYING IS NOT ALLOWED, ALL SEAL COATING SHOULD BE APPLIED BY SQUEEGEE OR BRUSHES. THE BITUMINOUS SEAL COATING MATERIAL SHOULD NOT BE ALLOWED TO ENTER STORM SEWERS AND SHOULD BE ALLOWED TO DRY AT LEAST 18 HOURS PRIOR TO VEHICULAR USE. CRACK FILLER AND SEAL COATING MATERIALS ARE TO BE FREE OF COAL TAR.

GRADING

FLEMENTS.

DETAIL).

- 1. GEOTECHNICAL REPORTS AS PREPARED BY OWNER (OR REPRESENTATIVE) SHALL BE
- GEOTECHNICAL REPORTS AS PREPARED BY OWNER (OR REPRESENTATIVE) SHALL BE REFERRED TO PRIOR TO EARTH MOVING AND/OR UTILITY CONSTRUCTION. UNSTABLE SOIL SHALL BE REMOVED OR STABILIZED.

 CONTRACTOR IS TO MAINTAIN A POSITIVE DRAINAGE PATTERN AT THE END OF EACH DAY. CARE SHOULD BE TAKEN TO INSURE THAT DRAINAGE IS NOT REROUTED OR BLOCKED IN A WAY THAT MAY BE INJURIOUS TO ADJACENT LAND. THE SUB—BASE BELOW STRUCTURES, PAVEMENTS OR NEW STRUCTURAL FILL SHALL BE PROOF ROLLED. IF SOIL RUTS, PUMPS, DEFLECTS EXCESSIVELY OR EXHIBITS EXCESSIVE MOVEMENT OR MOISTURE, THEN THE UNSTABLE SOIL SHALL BE UNDERCUT AND REPLACED WITH STRUCTURAL FILL OR DISCING AND DRYING TO NEAR OPTIMUM MOISTURE SO SOIL CAN BE PROPERLY COMPACTED. THIS PROCESS IS TO BE OBSERVED BY A GEOTECHNICAL ENGINEER.
- OBSERVED BY A GEOTECHNICAL ENGINEER.

 ALL FILLS SHALL BE PLACED IN 8" LIFTS COMPACTED TO A MINIMUM OF 98%
 STANDARD LABORATORY DENSITY PER ASTM D898 UNDER AND WITHIN INFLUENCE OF
 THE BUILDING, A MINIMUM OF 95% STANDARD LABORATORY DENSITY PER ASTM D698
 UNDER AND WITHIN THE INFLUENCE OF ALL OTHER IMPERVIOUS AREAS, AND A MINIMUM OF 90% STANDARD LABORATORY DENSITY PER ASTM D698 IN ALL ANDSCAPE AREAS
- EROSION CONTROL SHALL BE PROVIDED PRIOR TO ANY DISTURBANCES. SEE EROSION
- EROSION CONTROL SHALL BE PROVIDED PRIOR TO ANY DISTORBANCES. SEE ER CONTROL PLANS FOR ADDITIONAL SPECIFICATIONS AND DETAILS. PROVIDE TOPSOIL RESPREAD PER THE FOLLOWING UNLESS OTHERWISE NOTED: A. 4" MINIMUM IN GRASS OR SOD AREAS.
- B. 6" MINIMUM IN PLANTING AREAS.
- C. 12" MINIMUM IN LANDSCAPE ISLANDS.

 8. ALL TOPSOIL TO BE FRIABLE (NOT COHESIVE), WEED FREE, AND FREE OF ROCKS, LARGE ROOTS AND UNNATURAL DEBRIS.

 9. ALL GRADING IS TO BE CONSTRUCTED TO WITHIN A TOLERANCE OF 0.10' OF THE
- PROPOSED ELEVATIONS. SEE PAVEMENT SPECIFICATIONS FOR PAVEMENT TO FRANCES.

"AMERICANS WITH DISABILITIES ACT" (ADA) MINIMAL REQUIRMENTS:

1. GENERAL CONTRACTOR TO BECOME FAMILIAR WITH AND APPLY THE ADA MINIMAL

2. ACCESSIBLE ROUTES ON AN ACCESSIBLE SITE AND FOR ANY NEW SITE IMPROVEMENTS SHALL BE PROVIDED TO SERVE ALL ACCESSIBLE SPACES OR

3. THE MINIMUM CLEAR WIDTH OF AN ACCESSIBLE ROUTE PER CODE IS 36".
4. EACH ACCESSIBLE PARKING SPACE IS TO BE:

REQUIREMENTS AND REPORT TO ARCHITECT/ENGINEER ANY DISCREPANCIES REFORE

EACH ACCESSIBLE PARKING STAGE IS TO E...
4.1. <u>CAR:</u>
A MINIMUM OF 192" WIDE, CONSISTING OF A 96" WIDE ACCESS AISLE AND A 96" WIDE PARKING SPACE, UNLESS OTHERWISE NOTED. (SEE DETAIL). THE ACCESS AISLE SHALL BE PERMITTED TO BE PLACED ON EITHER SIDE OF THE PARKING SPACE. SEE DETAIL FOR REQUIRED DEPTH.

OF THE PARKING SPACE. SEE DETAIL FOR REQUIRED DEPTH.

4.2 VAN:
A MINIMUM OF 192" WIDE, CONSISTING OF A 96" WIDE ACCESS AISLE AND A 96" WIDE PARKING SPACE, UNLESS OTHERWISE NOTED (SEE DETAIL). WHEN VAN ACCESSIBLE PARKING SPACES ARE ANGLED, THE ACCESS AISLE SHALL BE LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACE. SEE DETAIL FOR DEPOLITION DETAIL.

REQUIRED DEPTH.

5. ACCESSIBLE PARKING SPACES ARE TO BE LOCATED AS CLOSE TO THE ACCESSIBLE BUILDING ENTRANCE AS POSSIBLE AND SHALL BE IDENTIFIED WITH A SIGN.

6. RAMPS MUST NOT EXTEND OUT FROM THE CURB INTO THE ACCESS AISLE OF ANY

ACCESSIBLE PARKING SPACE.
TWO 90 DEGREE ACCESSIBLE PARKING SPACES MAY SHARE AN ACCESS AISLE.

8. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM

USING 4" WIDE DOUBLE LAYER OF HIGH QUALITY YELLOW PAINT, UNLESS OTHERWISE NOTED.

10. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED A SLOPE

11. EACH ACCESSIBLE PARKING SPACE SHALL HAVE AN IDENTIFICATION SIGN (SEE

DELIVIL).

RAMPS

12. AN ACCESSIBLE ROUTE WITH A RUNNING SLOPE GREATER THAN 1:20 (5.00%) IS A RAMP AND SHALL COMPLY WITH THE RAMP REQUIREMENTS.

13. AN ACCESSIBLE ROUTE MAY CROSS OPEN PAVEMENT OR FOLLOW A RAMP AS REQUIRED BY SITE—SPECIFIC CONDITIONS. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE MAY CROSS OPEN PAVEMENT OF FOLLOW A RAMP AS REQUIRED BY SITE—SPECIFIC CONDITIONS. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE ADDRESS OPEN DALEMENT MIST NOT EXCEED 1:20 (5.00%), WITH A CROSS

REQUITE ACROSS OPEN PAVEMENT MUST NOT EXCEED 1:20 (5.00%), WITH A CROSS SLOPE NOT EXCEEDING 1:50 (2.00%). SLOPES EXCEEDING 1:20 (5.00%), BUT LESS THAN 1:12 (8.33%), CONSTITUTE RAMPS AND MUST CONFORM TO THE

REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURRS, LANDINGS, RISE AND RUN

LIMITS, ETC.) AS DETAILED ON THE CIVIL AND ARCHITECTURAL PLANS. NO RAMP SHALL HAVE A RUNNING SLOPE EXCEEDING 1:12 (8.33%), NOR HAVE A CROSS

SLOPE EXCEEDING 1:50 (2.00%).

14. THE GENERAL CONTRACTOR/CONTRACTOR SHALL MEASURE THE SUBGRADE AND ACROSS FORMS PRIOR TO INSTALLATION OF ASPHALT OR CONCRETE IMPROVEMENTS TO ASSURE THE FINAL IMPROVEMENTS WILL MEET THESE MINIMAL ADA REQUIREMENTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE CIVIL ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.

<u>CURB RAMPS</u>
15. A CURB RAMP SHALL BE PROVIDED WHEREVER AN ACCESSIBLE ROUTE CROSSES A

17. IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP OR WHERE IT IS NOT PROTECTED BY HANDRAILS, OR GUARDRAILS, IT SHALL HAVE

16. CURB RAMPS HAVE A MAXIMUM SLOPE OF 1:12 (8.33%) AND DO NOT REQUIRE

FLARED SIDES; THE MAXIMUM SLOPE OF THE FLARE SHALL BE 1:12 (8,33%).

OF 1:50 (2.00%) IN ANY DIRECTION.

SLOPE EXCEEDING 1:50 (2.00%).

(SEE DETAIL)

9. ALL ADA PARKING STALLS, ACCESS AISLES AND CROSSWALKS SHALL BE STRIPED

STORM SEWER SPECIFICATIONS

- ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM C-76 SPECIFICATIONS, MINIMUM CLASS III. WALL B. TONGUE AND GROOVE JOINTS. MACHINED ENDS. USE MINIMUM CLASS III, WALL B, TORGUE AND GROUVE JUINTS, MACHINED ENDS. USE ASTM C-443 "O-RING" JOINTS WHEN WATER MAIN QUALITY JOINTS ARE REQUIRED. ALL PLASTIC PIPE SHALL BE P.V.C. WITH SDR26 WALL THICKNESS AND CONFORM TO ASTM D-3034 OR ASTM F 679 SPECIFICATIONS WITH ASTM D-3212 GASKET TYPE
- JOINTS. ALL WATERMAIN QUALITY PLASTIC PIPE SHALL BE CONSTRUCTED OF WATERMAIN MATERIALS MEETING BOTH A MINIMUM PRESSURE RATING OF 150 PSI AND THE REQUIRIEMENTS OF SECTION 8.2 AND 8.4 OF THE "IOWA STANDARDS FOR WATER SUPPLY DISTRIBUTION SYSTEMS" (SUDAS SPECIFICATIONS SECTION 5010, 2.01), P.V. CONFORMING AWAY STANDARD GOO. JOINTING SHALL BE PUSH-ON JOINT TYPE. ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH
- ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-UN JOINTS SHALL COMPLY WITH AWAY COO. ALL STRUCTURE LIDS SHALL BE IMPRINTED "STORM".

 ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48,

 ALL SEWERS ARE TO BE INSTALLED FROM THE DOWNSTREAM END UPSTREAM. IF ANY CONFLICTS OR INFORMATION INCONSISTENT WITH SITE CONDITIONS ARE ENCOUNTERED, THE DESIGN ENGINEER IS TO BE CONTACTED PRIOR TO THE INSTALLATION OF
- ANYTHING.

 6. IN PAVED AREAS, ALL FRAMES AND LIDS SHALL BE: NEENAH R-2050 OR R-2502 WITH TYPE D GRATE AT LOW POINTS; OR NEENAH R-3281-A IN CURB AND GUTTER; OR NEENAH R-1550-A WITH SOLID LID, UNLESS OTHERWISE SPECIFIED.

 7. IN NON-PAVED AREAS, ALL FRAMES AND LIDS SHALL BE: NEENAH R-2090 OR R-2060 WITH TYPE B GRATE AT LOW POINTS; OR NEENAH R-1550-A WITH SOLID LID. LINI ESS OTHERWISE SPECIFIED.
- ALL DOWNSPOLITS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWED
- 9. ALL FLARED END SECTIONS (FES) ARE TO BE INSTALLED WITH TRASH GRATES.

NOTE:

THE WEST DES MOINES WATER WORKS SPECIFICATIONS SHOULD BE REFERENCED FOR ALL UTILITY SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THOSE SPECIFICATIONS AND THE SPECS LISTED ON THIS SHEET. THE WEST **DES MOINES WATER WORKS** STANDARD SPECIFICATIONS SHALL GOVERN.

SANITARY SEWER SPECIFICATIONS

- 1. ALL SANITARY SEWER PIPE SHALL BE EXTRA STRENGTH V.C.P. CONFORMING TO ASTM C-700 SPECIFICATIONS WITH ASTM C-425 JOINTS; OR D.I.P., MIN. CLASS 52, CONFORMING TO ASWA C151 WITH AWWA C111 JOINTS; OR P.V.C. PIPE CONFORMING TO ASTM D-304 SPECIFICATIONS, SDR26 WALL THICKNESS AND ASTM D-3212 AND F 477 GASKET TYPE JOINTS OR ASTM D-2855 SOLVENT WELDED JOINTS.

 2. ALL WATERMAIN QUALITY PLASTIC PIPE SHALL BE CONSTRUCTED OF WATERMAIN MATERIALS MEETING BOTH A MINIMUM PRESSURE RATING OF 150 PSI AND THE REQUIREMENTS OF SECTION 8.2 AND 8.4 OF THE "JOWA STANDARDS FOR WATER SLIPBLY DISTRIBUTION SYSTEMS" (SLIDAS SPECIFICATIONS SECTIONS 670 AND THE RECOVER.
- SUPPLY DISTRIBUTION SYSTEMS" (SUDAS SPECIFICATIONS SECTION 5010, 2.01), P.V.C. CONFORMING AWWA STANDARD COOD. JOINTING SHALL BE PUSH-ON JOINT TYPE. ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH AWWA C900. DEFLECTION OF POLYVINYL CHLORIDE (PVC) PIPE SHALL NOT EXCEED 5.0% OF THE "BASE I.D." (INTERNAL DIAMETER) OF THE PIPE. "BASE I.D." SHALL BE CALCULATED IN ACCORDANCE WITH THE FOLLOWING:
 - AVG ID = AVG OD 2(1.06)T
 TOLERANCE PACKAGE = (A^2 + B^2 + C^2)^(1/2)

 - B = CXCESS WALL THICKNESS TOLERANCE = 0.06T
 C = OUT-OF-ROUNDNESS TOLERANCE = 0.015 (AVG OD)
 - T = MINIMUM WALL THICKNESS (ASTM D-3034)
 BASE ID = AVG ID TOLERANCE PACKAGE

DEFLECTION OF COMPOSITE PIPE ("TRUSS" PIPE) SHALL NOT EXCEED 3.0% OF THE AVERAGE INSIDE DIAMETER (ID) OF THE PIPE IN ACCORDANCE WITH ASTM D-2680. THE PIPE LINE SHALL BE TESTED FOR EXCESS DEFLECTING BY PULLING A "GO - NO GO" MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. THE MANDREL SHALL BE SIZED IN ACCORDANCE WITH SECTION 31—1.11C (4), AND AS SPECIFIED IN THE SPECIAL PROVISIONS. A "DEFLECTOMETER" MAY ALSO BE USED TO CHECK AND THE SPECIAL PROVISIONS. A "DEFLECTIONETER" MAY ALSO BE USED TO CHECK AND RECORD DEFLECTION. WHENEVER POSSIBLE AND PRACTICAL, THE TESTING SHALL INITIATE AT THE DOWNSTREAM LINES AND PROCEED TOWARDS THE UPSTREAM LINES. WHERE THE DEFLECTION IS FOUND TO BE IN EXCESS OF ALLOWABLE TESTING LIMITS, THE CONTRACTOR SHALL EXCAVATE TO THE POINT OF EXCESS DEFLECTION AND CAREFULLY COMPACT AROUND THE POINT WHERE EXCESS DEFLECTION WAS FOUND. THE LINE SHALL THEN BE RETESTED FOR DEFLECTION. HOWEVER, SHOULD AFTER THE INITIAL TESTING THE DEFLECTED PIPE FAIL TO RETURN TO THE ORIGINAL SIZE (INSIDE

INFILITATION OR EXPILITATION SHALL BE REPLACED.
INFILITATION OR EXPILITATION SHALL NOT EXCEED 100 GALLONS PER TWENTY—FOUR
(24) HOURS PER MILE PER INCH-DAMETER OF THE SEWER PIPE, FOR ANY SECTION
OF THE SYSTEM AND AT ANY TIME DURING ITS SERVICE LIFE. TESTING IS REQUIRED PER THE "IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS" CURRENT EDITION.
LEAKAGE TESTING FOR MANHOLES FOR WATER TIGHTNESS SHALL BE DONE IN

- ACCORDANCE WITH ASTM C969-94--"STANDARD PRACTICE FOR INFLITATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS: MORTARS: MASONRY (1996)(NO LATER EDITIONS OR AMENDMENTS) OR ASTM C1244-93 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE PRESSURE (VACUUM) TEST", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996)(NO LATER EDITIONS OR AMENDMENTS) PRIOR TO PLACING INTO SERVICE

- PLACING INTO SERVICE.

 6. ALL STRUCTURE LIDS SHALL BE IMPRINTED "SANITARY".

 7. ALL WATERTIGHT FRAMES AND LIDS SHALL BE NEENAH R—1916—C. ALL OTHER FRAMES AND LIDS SHALL BE NEENAH R—150—A WITH A CONCEALED PICK HOLE.

 8. ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A—48.

 9. ALL SEWERS ARE TO BE INSTALLED FROM THE DOWNSTREAM END UPSTREAM. IF ANY CONFLICTS ARE ENCOUNTERED, THE DESIGN ENGINEER IS TO BE CONTACTED PRIOR TO TO THE INSTALLATION OF ANY PIPE.

 10. FOR A DROP CONNECTION, THE DIAMETER OF THE DROP PIPE SHALL PREFERABLY BE LARGER THAN, OR OF THE SAME DIAMETER AS, THE ENTERING SEWER. THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE SMALLER THAN THE DIAMETER OF THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE SMALLER THAN THE DIAMETER OF THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE STALLER SERVER BY MORE THAN TWO NOMINAL DIAMETERS, PROVIDED THAT THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE SET THAN EIGHT INCHES (8").
- (8"). 11. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER. 12. ALL SANITARY SEWER BEDDING SHALL BE IN ACCORDANCE WITH THE TRENCH DETAIL AS INCLUDED IN THE PLANS.

WATER MAIN SPECIFICATIONS

- HORIZONTAL SEPARATION

 A. WATER MAINS AND SEWERS: WATER MAINS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.

 B. WATER MAINS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE OR
- SEWER SERVICE CONNECTION WHEN:
- i) Local conditions prevent a lateral separation of ten feet;
 ii) The Water main invert is at least eighteen inches (18") above the crown of the sewer; and
- II) THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE
- TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO GIVE SIDE OF THE SEWER.

 BOTH THE WATER MAIN AND SEWER PIPE SHALL BE CONSTRUCTED OF PUSH JOINT OR MECHANICAL JOINT DUCTILE IRON PIPE, PRESSURE PIPE, PRESTRESSED CONCRETE PIPE, OR PVC DR18 PIPE WITH AWWA C-900 JOINTS, MEETING THE REQUIREMENTS OF DIVISION 5 OF THE SUDAS STANDARD SPECIFICATIONS, WHEN CONTROL OF THE STANDARD SPECIFICATIONS, WHEN CONTROL OF THE SHALL BE IT IS IMPOSSIBLE TO MEET (A) OR (B) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE
- 2 VERTICAL SEPARATION
- VERTICAL SEPARATION

 A WATER MAIN SHALL BE LAID SO THAT ITS INVERT IS EIGHTEEN INCHES (18")

 ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS
 STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE
 VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER
 MAIN LOCATED WITHIN TEN FEET HORIZONTALLY OF ANY SEWER OR DRAIN
 CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE
 SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
 B. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF PUSH JOINT OR
 MCCHANICAL JOINT DUCTILE PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE
 MEETING THE REQUIREMENTS OF DIVISION 5 OF THE SUDAS STANDARD
 SPECIFICATIONS, AND CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE
 CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE
 SEWER DRAIN LINE IS AT LEAST TEN FEET (10") WHEN:

 1) IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS
- i) IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A) ABOVE; OR

 II) THE WATER MAIN PASSES UNDER A SEWER OR DRAIN.
- II) THE WATER MAIN PASSES UNDER A SEWER OF DRAIN.

 C. A VERTICAL SEPARATION OF EIGHTEEN INCHES (18") BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATER MAIN.

 WATER MAINS AND SERVICES SHALL BE CONSTRUCTED SO THAT THE MINIMUM DEPTH IS FIVE AND ONE HALF FEET (5 1/2") MEASURED FROM FINISHED GRADE TO THE TOP OF THE GIBER UNITED CONTENTS OF SECTIOED AND ORD ADDRAIN DRAIN FOR THE FORMER.
- OF THE PIPE, UNLESS OTHERWISE SPECIFIED AND/OR APPROVED BY THE REVIEW
- ENGINEER.

 A. ALL WATER MAIN FITTINGS MAY OR MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE INCLUDED IN THE COST OF THE WATER MAIN ITSELF FOR BIDDING PURPOSES. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 52 CEMENT LINED CONFORMING TO AWWA C151 AND AWWA C104 WITH AWWA C111 JOINTS, OR TYPE "K" COPPER PIPE WITH SWEATED JOINTS COMPLYING WITH ASTM B 88.

 5. FIRE HYDRANTS SHALL MEET AWWA C-502 AND BE TRAVERSE CITY IRON WORKS,
- FIRE HTURANTS SHALL MEET AWWA C-SUZ AND BE TRAVERSE CITY IRON WORKS, EAST JORDAN 5 BR, OR APPROVED EQUAL, WITH FIVE AND ONE QUARTER INCH (5 1/4")VALVE OPENING, TWO TWO AND ONE HALF INCH (2 1/2") HOSE NOZZLES AND ONE FIVE INCH (5") PUMPER NOZZLE. FIRE HYDRANT SHALL BE EQUIPPED WITH AN AUXILIARY RESILENT SALL GATE VALVE COMPLETE WITH ROADWAY BOX, TYLER, 6850 SERIES, ITEM 668-S. FIRE HYDRANTS MUST HAVE THEIR DISCHARGE AT LEAST 18 INCHES BUT NOT MORE THAN TWENTY-THREE INCHES (23") FROM THE SURFACE OF THE ADJACENT GROUND.
- HYDRANTS SHALL BE INSTALLED NO CLOSER THAN THREE FEET (3') NOR FURTHER THAN EIGHT FEET (8') FROM THE BACK OF CURB OR EDGE OF PAVEMENT TO THE FIVE INCH (5") STEAMER NUT. NO BARRIERS, TREES, SHRUBS, WALLS OR OTHER OBSTACLES WHICH MAY HIDE OR IMPEDE THE USE OF A FIRE HYDRANT SHALL BINSTALLED, MAINTAINED, CONSTRUCTED, OR ENLARGED, WITHIN FORTY-EIGHT INCH (48") OF A HYDRANT.
- (48") OF A HYDRANT.

 ALL STRUCTURE LIDS SHALL BE IMPRINTED "WATER".

 ALL WATERTIGHT FRAMES AND LIDS SHALL BE NEENAH R-1916-C. ALL OTHER FRAMES AND LIDS SHALL BE NEENAH R-1550-A WITH A CONCEALED PICK HOLE.

 ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48.

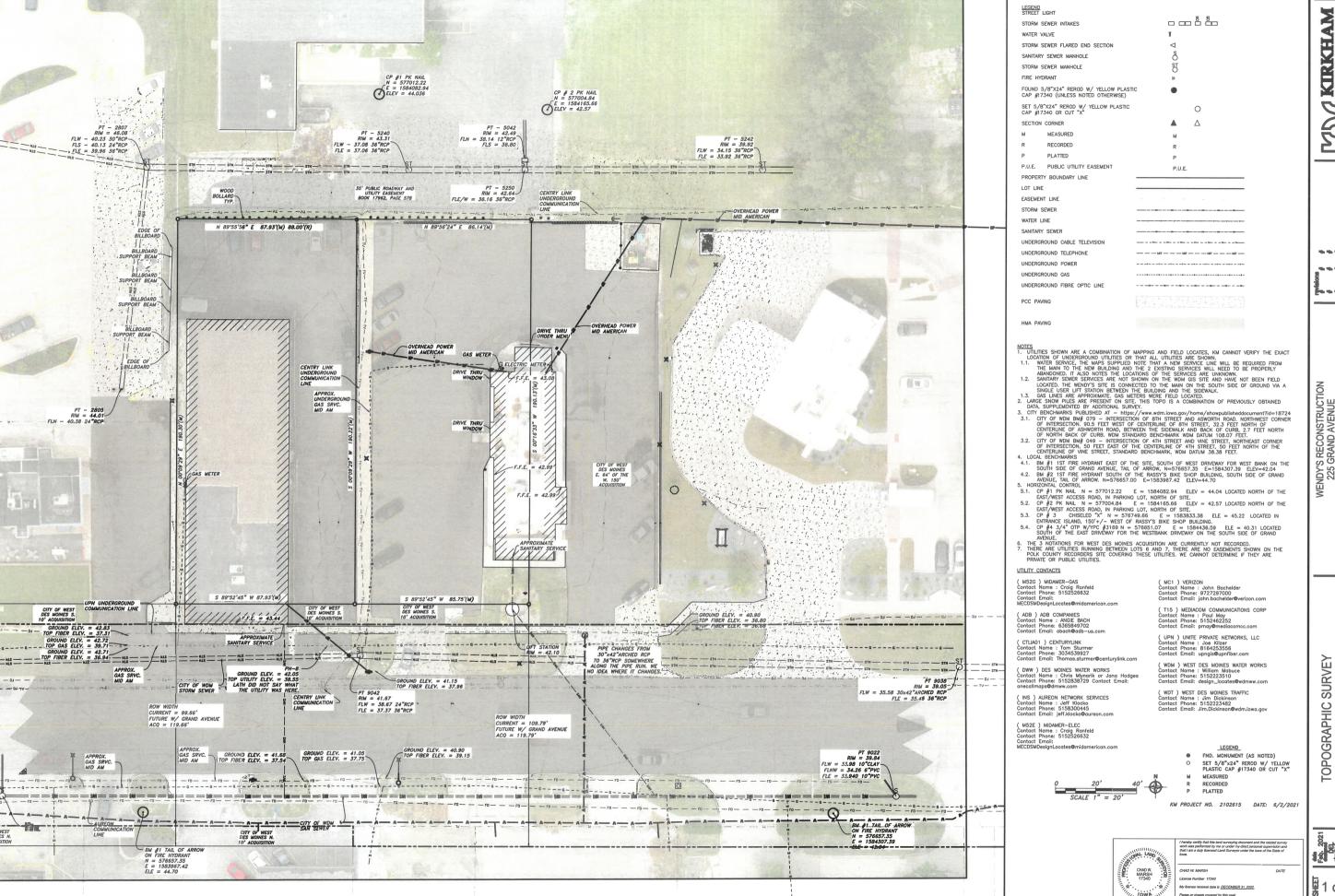
 BEFORE BEING PLACED INTO SERVICE, ALL NEW MAINS AND REPAIRED PORTIONS OF, OR EXTENSIONS TO EXISTING MAINS SHALL BE CHLORINATED SO THAT THE INITIAL CHLORINE RESIDUAL IS NOT LESS THAN FIFTY (50) mg/L AND THAT A CHLORINE RESIDUAL OF NOT LESS THAN TWENTY-FIVE (25) mg/L REMAINS IN THE WATER AFTER STANDING TWENTY-FOUR (24) HOURS IN THE PIPE.

PROJECT SPECIFICATIONS

0 + 0 w 4 w Prepared For 10 King Enterprises
V W Douglas, Suite 110
Freeport, IL 61032
r's - WEST DES MOIN
225 Grand Avenue 20

rmark vingineering

Prepared By:

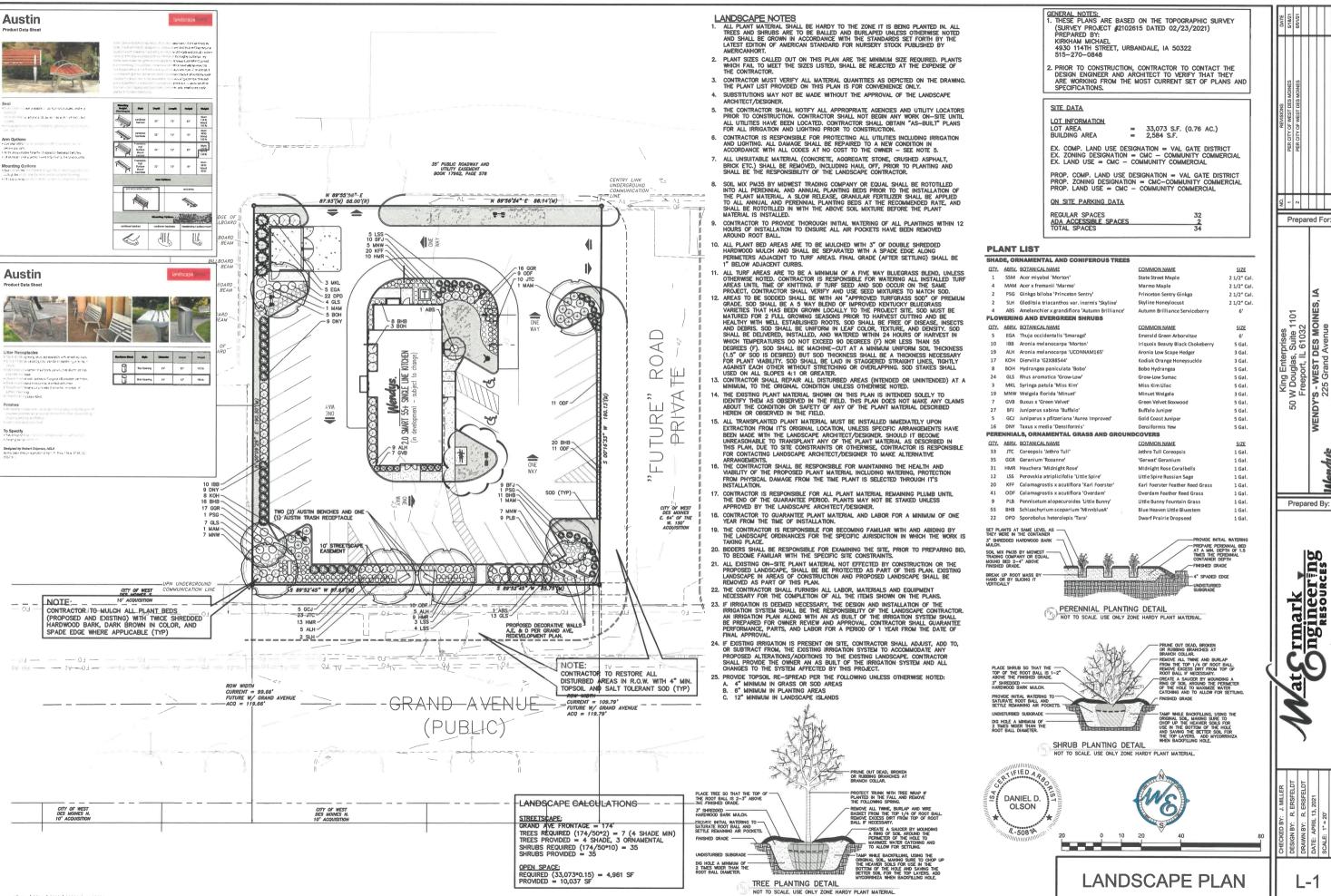


KIRKHAM

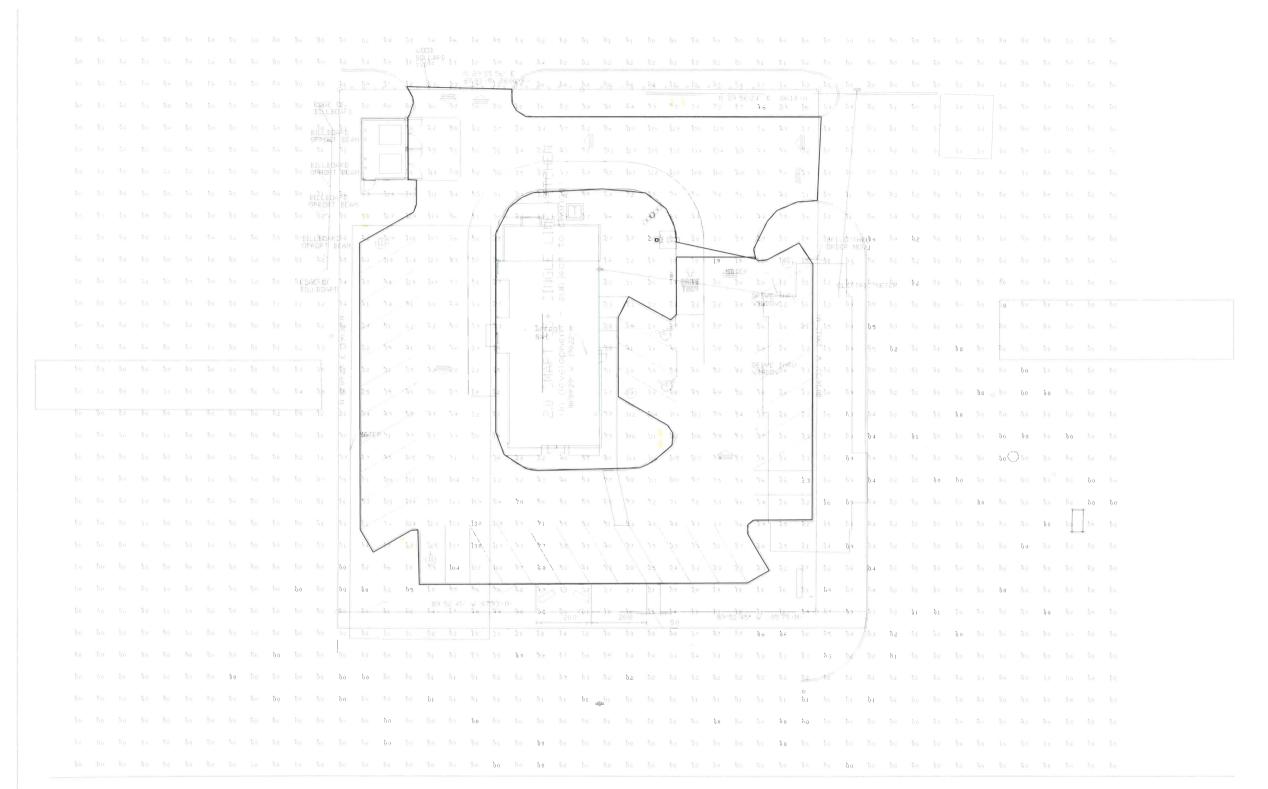
WENDY'S RECONSTRUCTION 225 GRAND AVENUE WEST DES MOINES, IOWA



뛽1 of



L-1





Oty	Label	Arrongement	Description		UDF		Air Lum Lumens	Arr Wotts
3	A	D180° SPTD	CLM-LED-30L-SIL-50-70CP1-IL-:DFT-L, DFT-F-DISUPOT-22 POLE+21 BACE	1.000	1.000	1.000	40054	464
1	Ū	D180	SLM-LED-30L-SIL-5W-40-700FI-D180-22' FOLE+8' BASE	1.000	1 000	1.000	63474	464







225 Grand Ave West Des Moines, IA

















05.18.2021

A RESOLUTION OF THE PLAN AND ZONING COMMISSION NO. PZC-21-47

WHEREAS, pursuant to the provisions of Title 9, Zoning of the West Des Moines Municipal Code, the applicant, King Enterprises, and property owners, the City of West Des Moines and Wendy's West Maple, LLC, request approval of a Site Plan for property generally located at 225 & 301 Grand Avenue as depicted on the location map included in the staff report. The applicant requests approval to construct a 2,500 square foot Wendy's restaurant and associated site improvements; and

WHEREAS, the Site Plan request complies with the findings stated in the applicable provisions of Title 9, the Comprehensive Plan and City Code.

NOW THEREFORE, the Plan and Zoning Commission of the City of West Des Moines recommends the City Council approve the Site Plan (SP-005129-2021), subject to compliance with all the conditions of approval as stated in the staff report, including conditions added at the meeting, and attached hereto as Exhibit "A", if applicable.

Erica Andersen, Chair

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 on <u>June 14, 2021</u>, by the following vote:

Plan and Zoning Commission

AYES:

NAYS:

ABSTENTIONS:

PASSED AND ADOPTED on June 14, 2021.

ABSENT:

ATTEST:

Recording Secretary